Full wwPDB X-ray Structure Validation Report (i)

Jan 31, 2016 – 09:12 PM GMT

PDB ID	:	1NQT
Title	:	Crystal structure of bovine Glutamate dehydrogenase-ADP complex
Authors	:	Banerjee, S.; Schmidt, T.; Fang, J.; Stanley, C.A.; Smith, T.J.
Deposited on	:	2003-01-23
Resolution	:	3.50 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
http://wwpdb.org/validation/2016/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

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

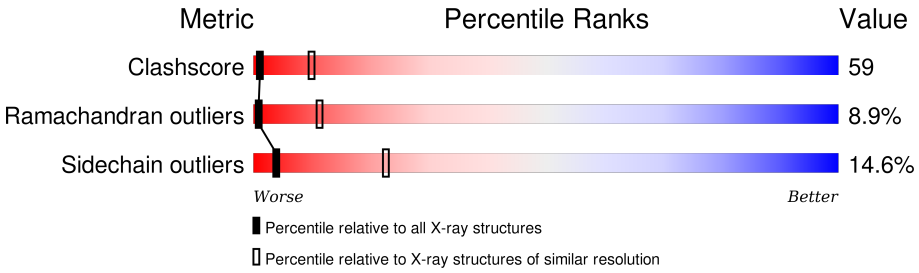
MolProbity	:	4.02b-467
Mogul	:	1.7 (RC4), CSD as536be (2015)
Xtriage (Phenix)	:	NOT EXECUTED
EDS	:	NOT EXECUTED
Percentile statistics	:	20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	trunk26865

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 3.50 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	102246	1157 (3.60-3.40)
Ramachandran outliers	100387	1120 (3.60-3.40)
Sidechain outliers	100360	1121 (3.60-3.40)

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. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	A	496	33% 54% 12%
1	B	496	34% 50% 14%
1	C	496	26% 54% 18%
1	D	496	29% 55% 15%
1	E	496	33% 49% 17%
1	F	496	36% 51% 12%
1	G	496	32% 52% 15%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	H	496	30% 55% 14%
1	I	496	31% 52% 16%
1	J	496	34% 49% 15%
1	K	496	24% 60% 15%
1	L	496	30% 54% 15%

2 Entry composition (i)

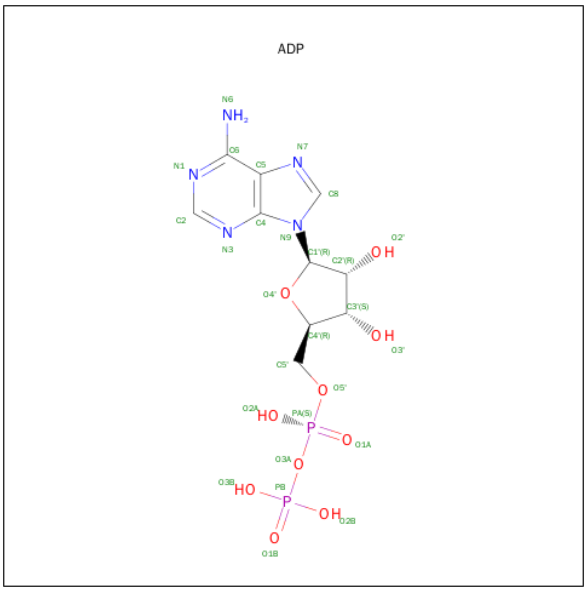
There are 2 unique types of molecules in this entry. The entry contains 46812 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Glutamate dehydrogenase 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	B	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	C	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	D	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	E	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	F	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	G	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	H	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	I	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	J	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	K	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			
1	L	496	Total	C	N	O	S	0	0	0
			3874	2450	679	726	19			

- Molecule 2 is ADENOSINE-5'-DIPHOSPHATE (three-letter code: ADP) (formula: $C_{10}H_{15}N_5O_{10}P_2$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	A	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	B	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	C	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	D	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	E	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	F	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	G	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	H	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	I	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	J	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	K	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
2	L	1	Total	C	N	O	P	0	0
			27	10	5	10	2		

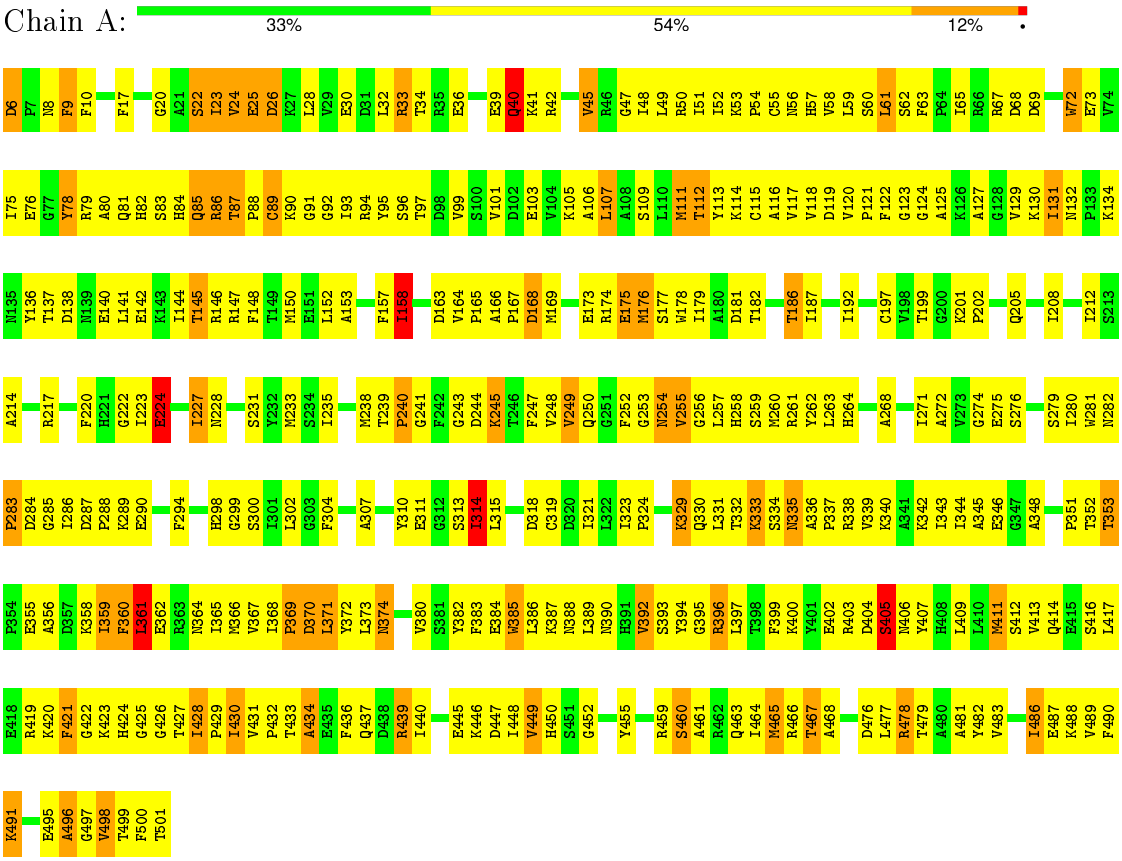
3 Residue-property plots (i)

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of 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.

Note EDS was not executed.

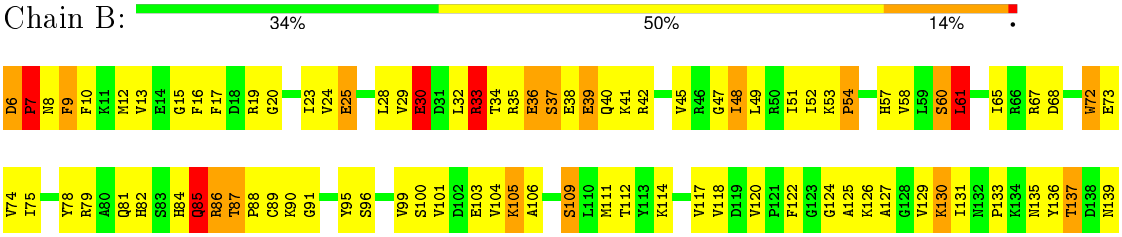
- Molecule 1: Glutamate dehydrogenase 1

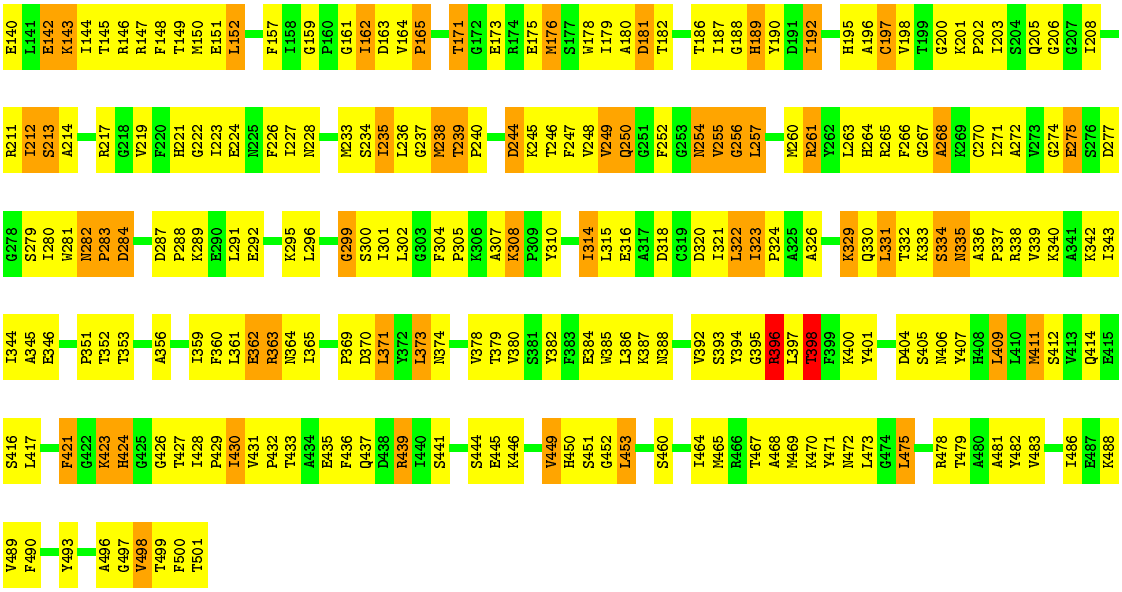
Chain A:



- Molecule 1: Glutamate dehydrogenase 1

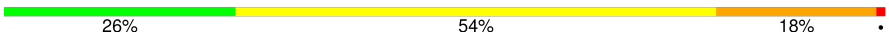
Chain B:

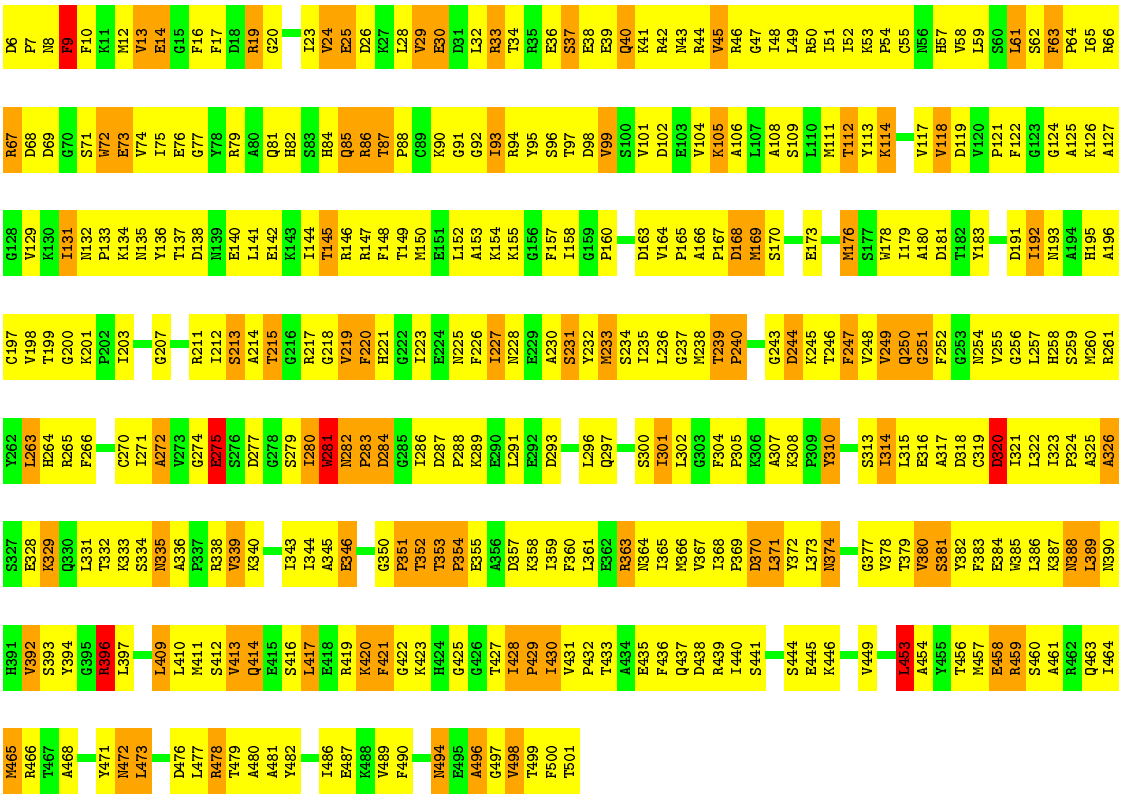




• Molecule 1: Glutamate dehydrogenase 1

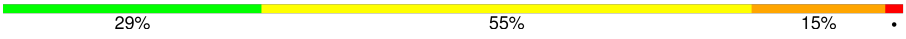
Chain C:

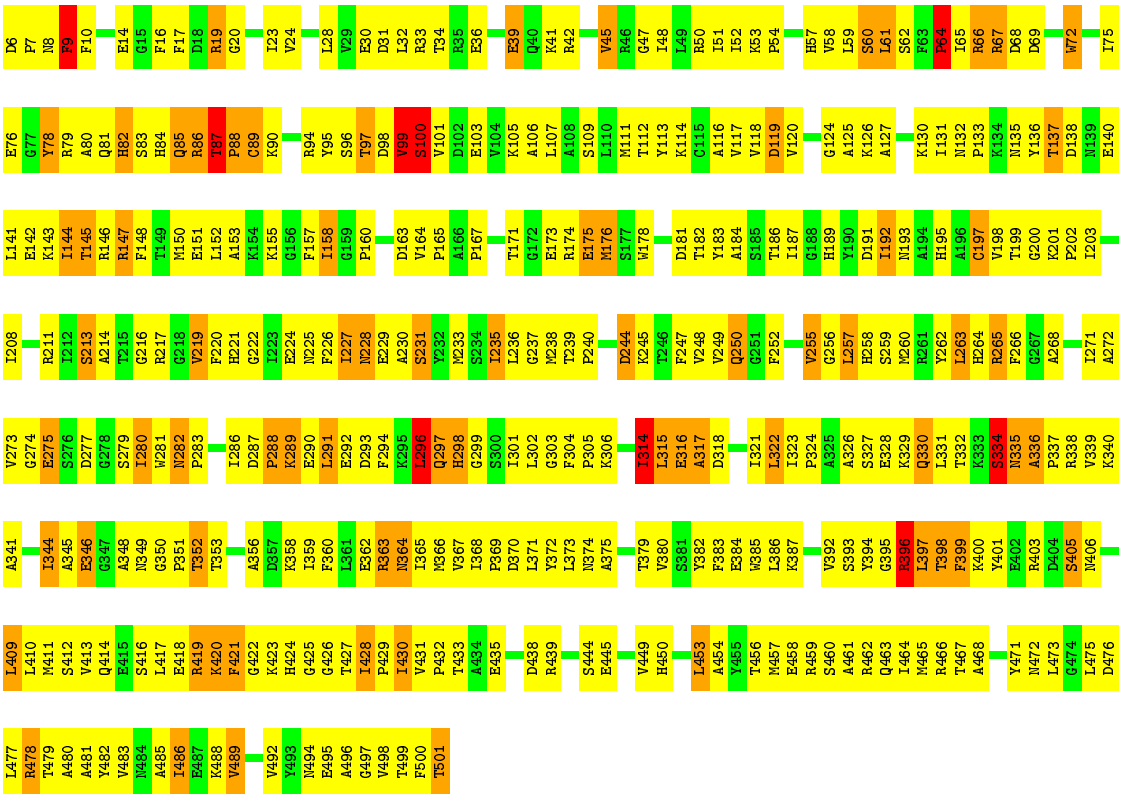




• Molecule 1: Glutamate dehydrogenase 1

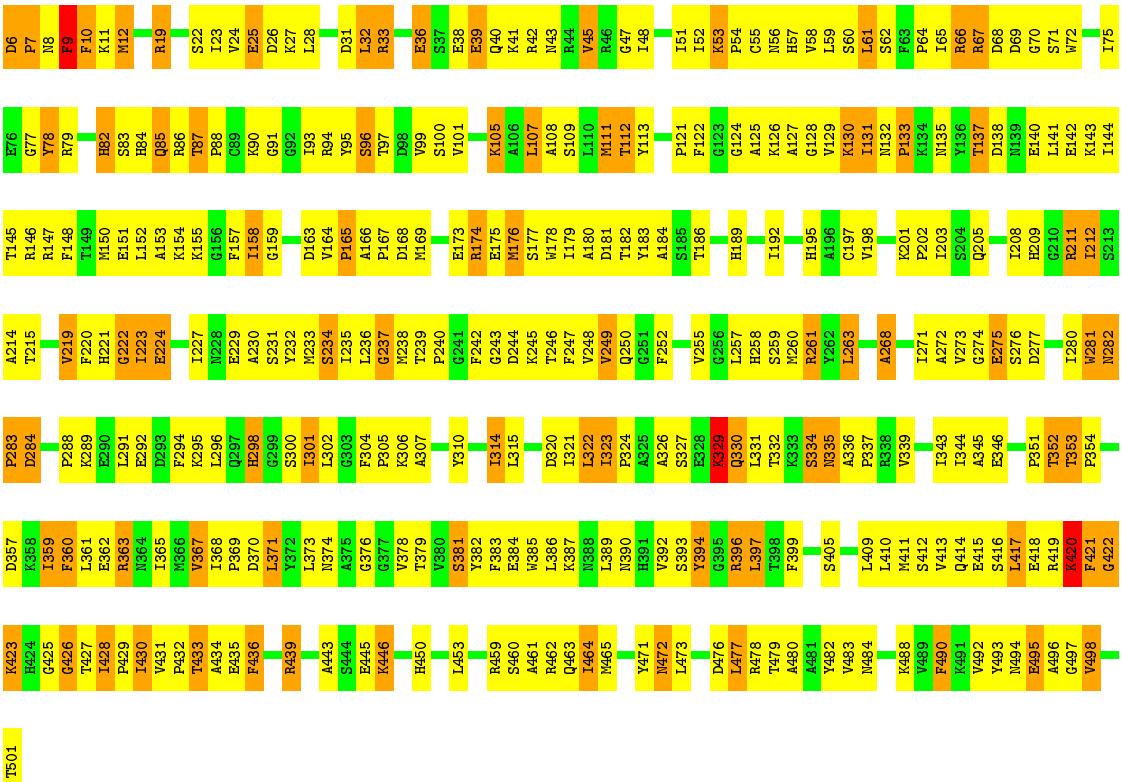
Chain D:





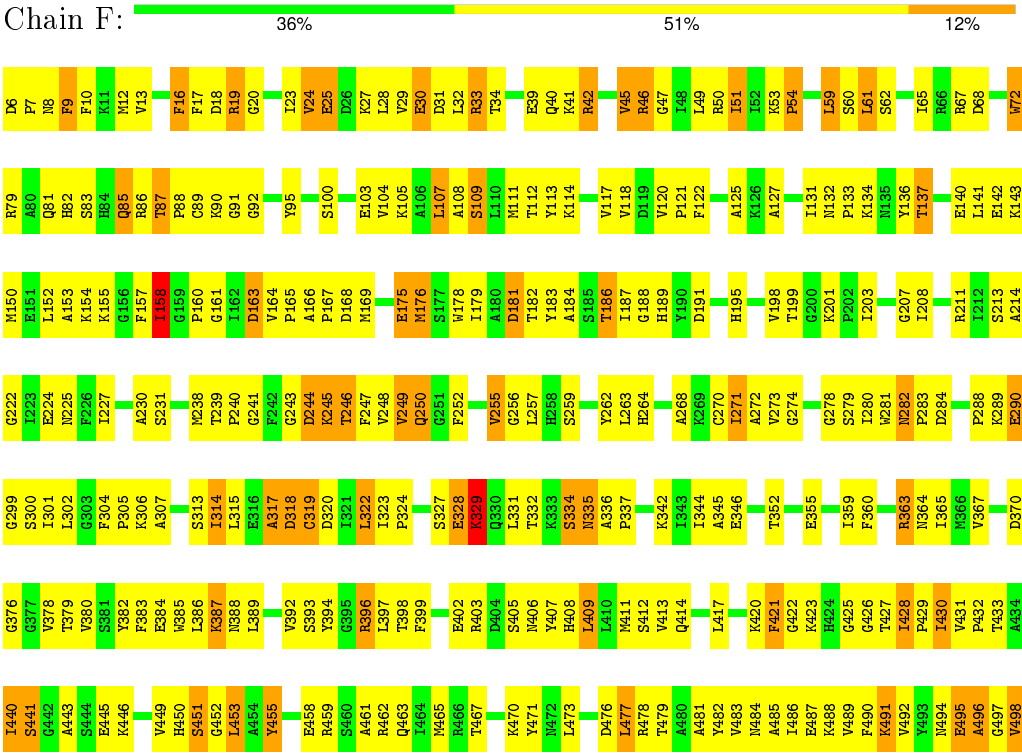
• Molecule 1: Glutamate dehydrogenase 1

Chain E:



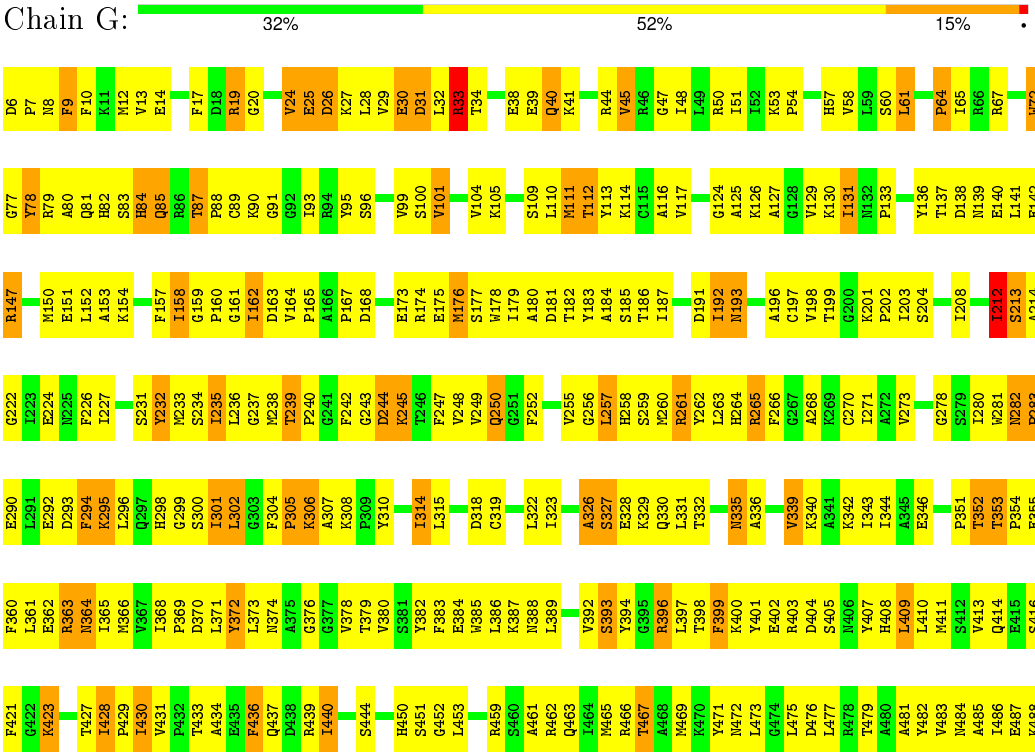
- Molecule 1: Glutamate dehydrogenase 1

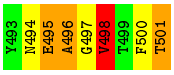
Chain F:



- Molecule 1: Glutamate dehydrogenase 1

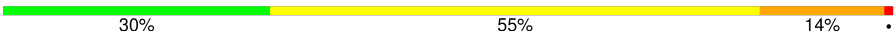
Chain G:

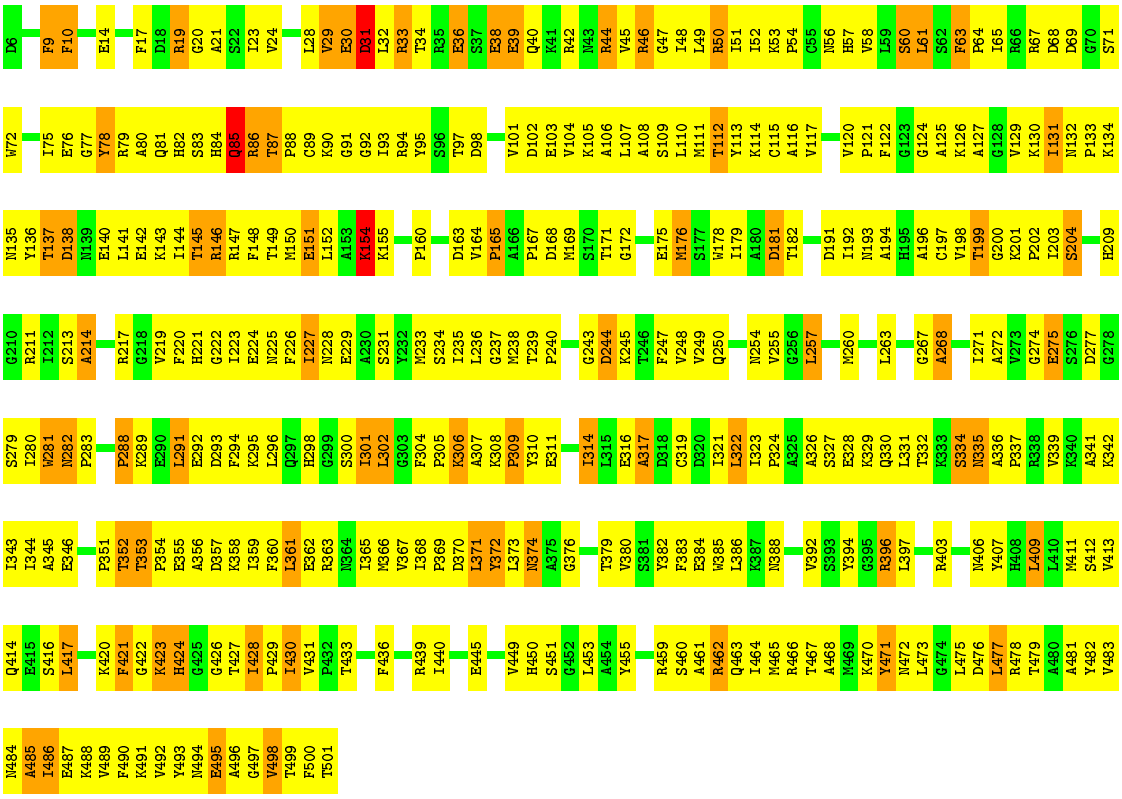




• Molecule 1: Glutamate dehydrogenase 1

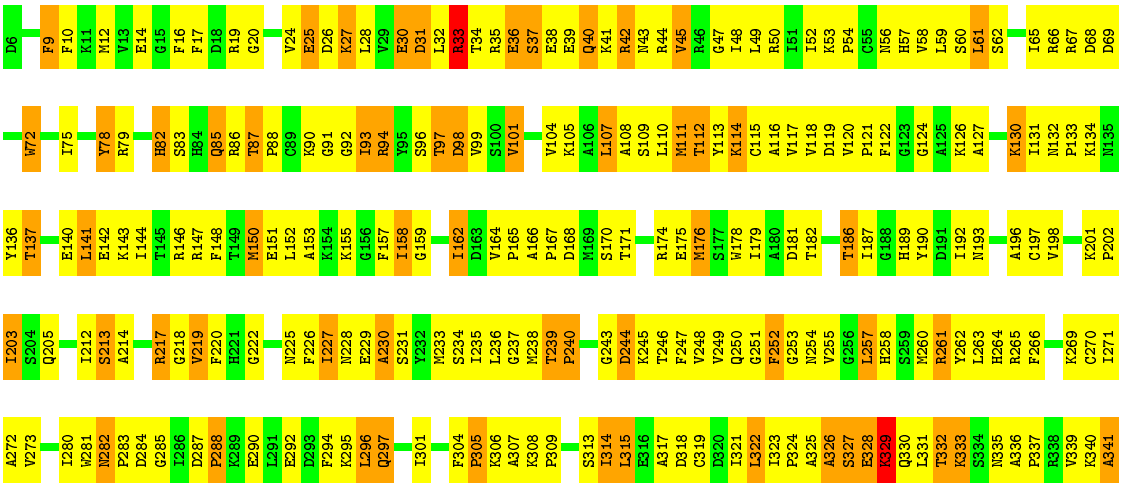
Chain H:

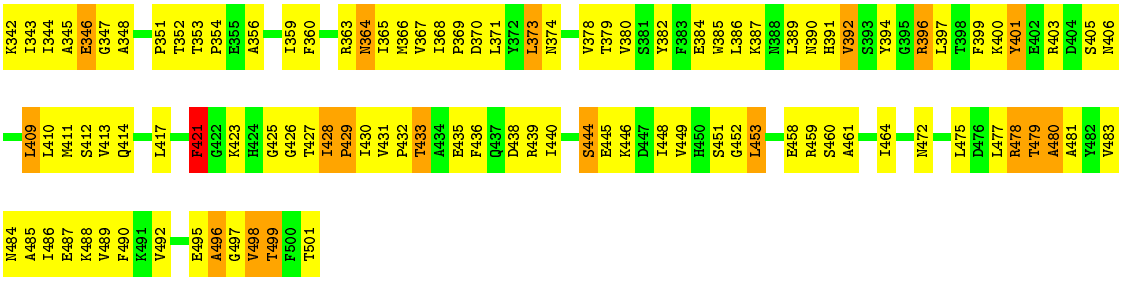




• Molecule 1: Glutamate dehydrogenase 1

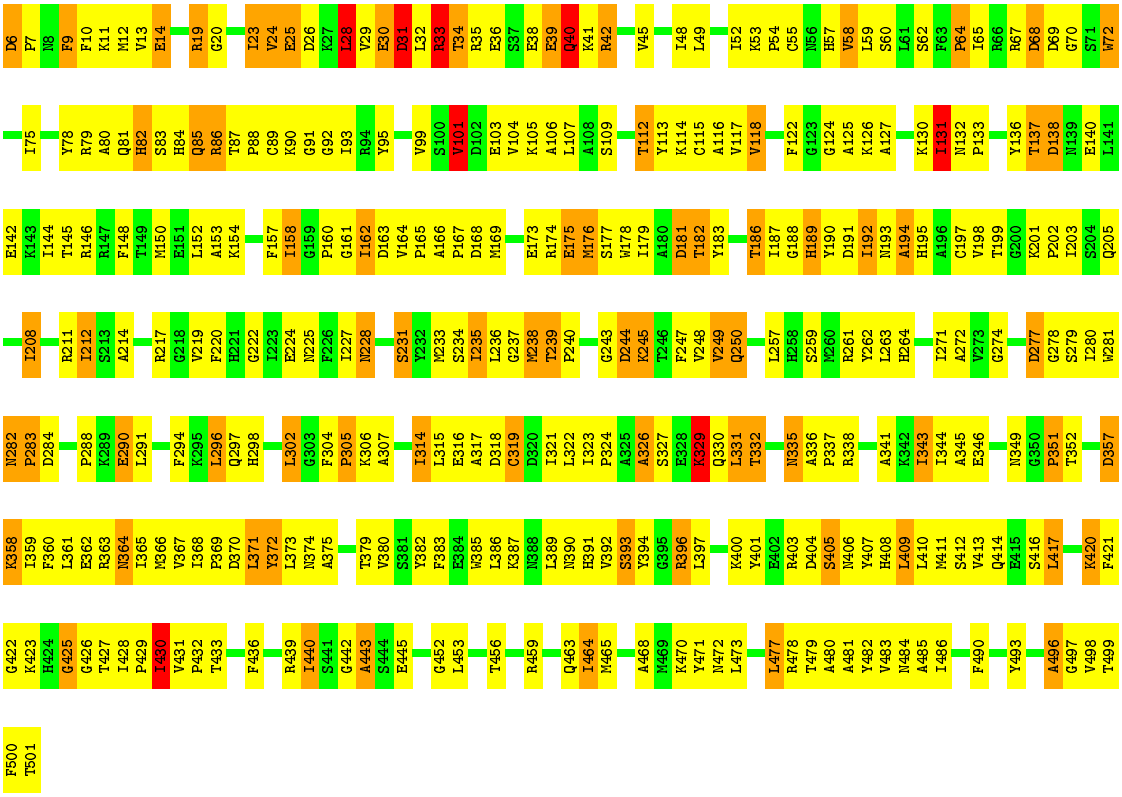
Chain I:





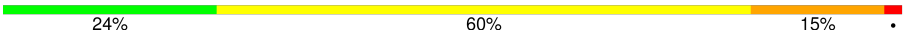
- Molecule 1: Glutamate dehydrogenase 1

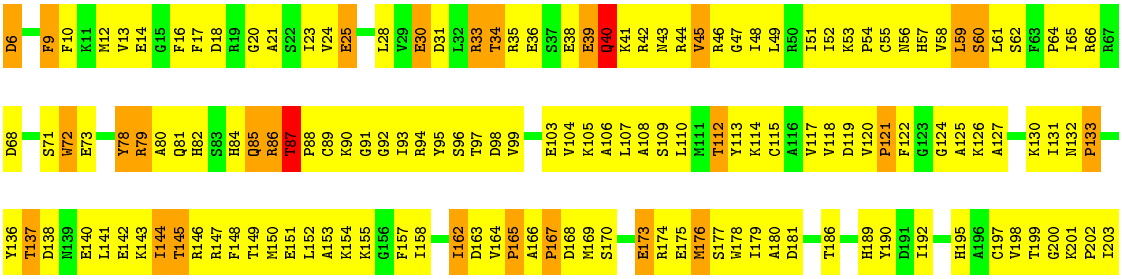
Chain J:

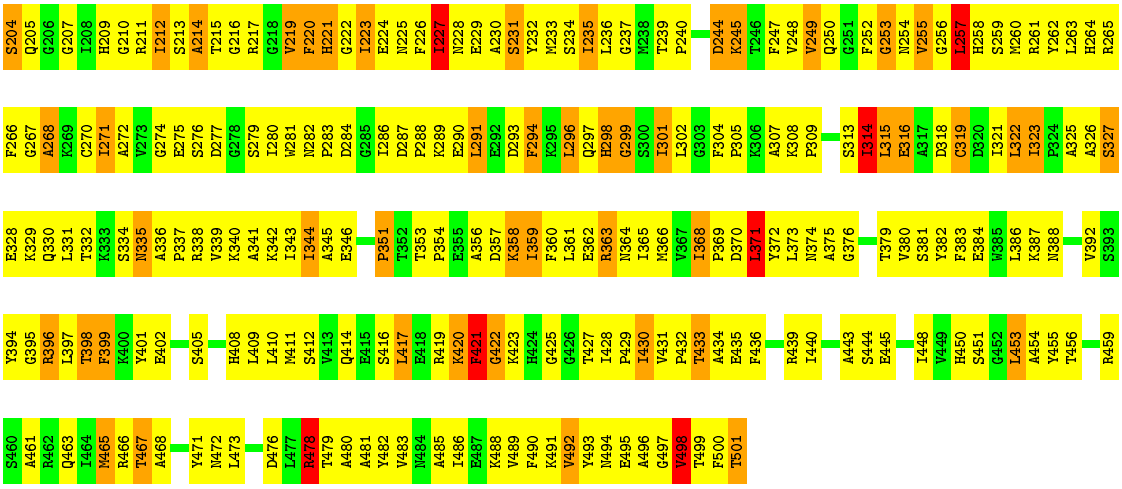


- Molecule 1: Glutamate dehydrogenase 1

Chain K:

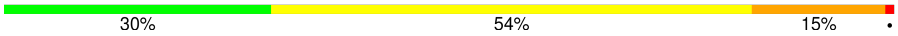


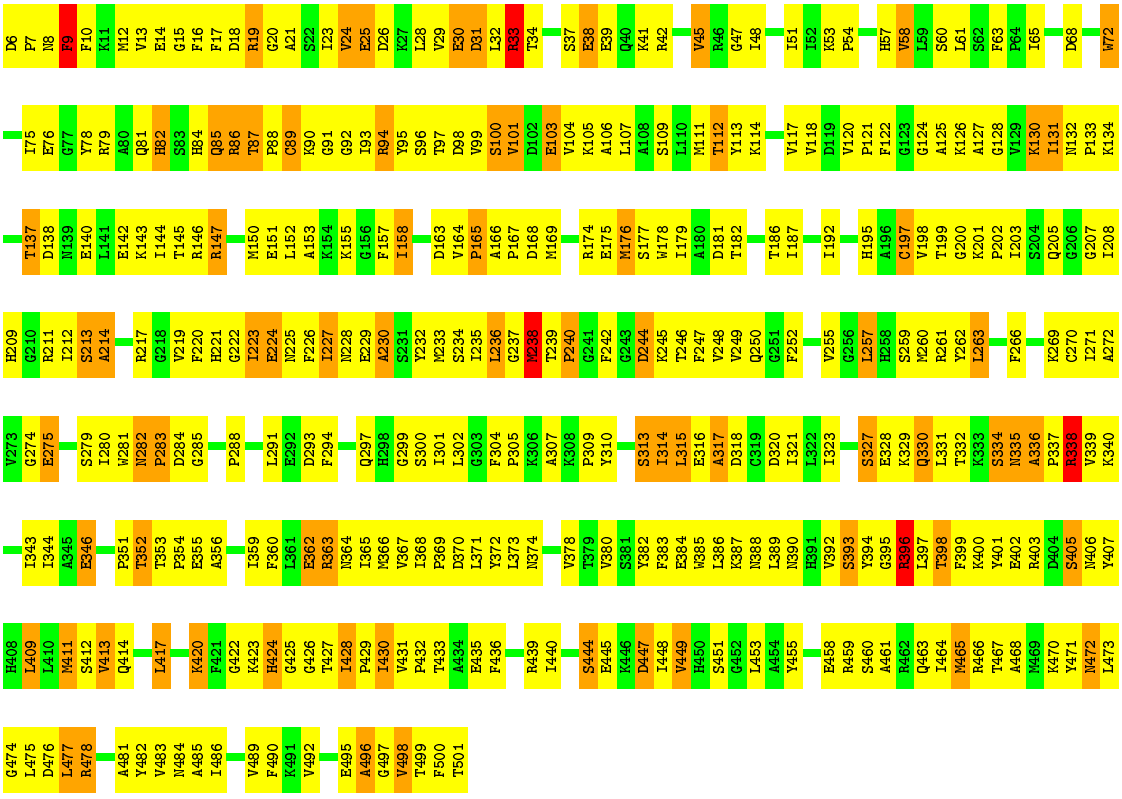




• Molecule 1: Glutamate dehydrogenase 1

Chain L:





4 Data and refinement statistics (i)

Xtriage (Phenix) and EDS were not executed - this section will therefore be incomplete.

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	96.46Å 171.93Å 439.68Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.97 – 3.50	Depositor
% Data completeness (in resolution range)	94.0 (19.97-3.50)	Depositor
R_{merge}	0.07	Depositor
R_{sym}	(Not available)	Depositor
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.207 , 0.276	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	46812	wwPDB-VP
Average B, all atoms (Å^2)	59.0	wwPDB-VP

5 Model quality

5.1 Standard geometry

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

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	0.70	1/3958 (0.0%)	0.89	2/5340 (0.0%)
1	B	0.76	1/3958 (0.0%)	0.91	2/5340 (0.0%)
1	C	0.72	1/3958 (0.0%)	0.91	2/5340 (0.0%)
1	D	0.69	2/3958 (0.1%)	0.89	4/5340 (0.1%)
1	E	0.71	0/3958	0.91	2/5340 (0.0%)
1	F	0.73	0/3958	0.89	0/5340
1	G	0.79	0/3958	0.95	2/5340 (0.0%)
1	H	0.78	1/3958 (0.0%)	0.89	1/5340 (0.0%)
1	I	0.71	1/3958 (0.0%)	0.88	1/5340 (0.0%)
1	J	0.74	1/3958 (0.0%)	0.91	1/5340 (0.0%)
1	K	0.70	0/3958	0.89	2/5340 (0.0%)
1	L	0.73	2/3958 (0.1%)	0.88	0/5340
All	All	0.73	10/47496 (0.0%)	0.90	19/64080 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	E	0	2
1	F	0	1
1	G	0	1
1	H	0	1
All	All	0	5

All (10) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	I	197	CYS	CB-SG	-7.54	1.69	1.82
1	B	197	CYS	CB-SG	-6.96	1.70	1.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	89	CYS	CB-SG	-6.15	1.71	1.82
1	C	55	CYS	CB-SG	-6.08	1.72	1.82
1	L	89	CYS	CB-SG	-5.47	1.73	1.81
1	D	197	CYS	CB-SG	-5.41	1.73	1.81
1	H	151	GLU	CG-CD	5.32	1.59	1.51
1	J	101	VAL	CA-CB	-5.24	1.43	1.54
1	L	197	CYS	CB-SG	-5.22	1.73	1.81
1	A	89	CYS	CB-SG	-5.03	1.73	1.81

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	G	245	LYS	CD-CE-NZ	7.41	128.75	111.70
1	J	296	LEU	CA-CB-CG	6.82	130.98	115.30
1	B	61	LEU	CA-CB-CG	6.37	129.94	115.30
1	D	87	THR	N-CA-C	6.27	127.92	111.00
1	H	146	ARG	NE-CZ-NH2	-6.19	117.20	120.30
1	D	235	ILE	N-CA-C	-6.12	94.48	111.00
1	A	361	LEU	CA-CB-CG	5.97	129.03	115.30
1	D	296	LEU	CA-CB-CG	5.88	128.81	115.30
1	G	239	THR	N-CA-C	-5.76	95.43	111.00
1	E	237	GLY	N-CA-C	-5.67	98.93	113.10
1	E	420	LYS	N-CA-C	-5.48	96.21	111.00
1	C	30	GLU	N-CA-C	5.45	125.72	111.00
1	K	268	ALA	N-CA-C	-5.29	96.72	111.00
1	D	489	VAL	CB-CA-C	-5.23	101.47	111.40
1	B	299	GLY	N-CA-C	5.22	126.14	113.10
1	A	87	THR	N-CA-C	5.09	124.75	111.00
1	K	299	GLY	N-CA-C	5.04	125.69	113.10
1	C	453	LEU	CA-CB-CG	5.03	126.88	115.30
1	I	322	LEU	CA-CB-CG	5.00	126.81	115.30

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	E	310	TYR	Sidechain
1	E	490	PHE	Sidechain
1	F	455	TYR	Sidechain
1	G	113	TYR	Sidechain
1	H	310	TYR	Sidechain

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3874	0	3841	456	0
1	B	3874	0	3841	464	0
1	C	3874	0	3841	527	0
1	D	3874	0	3841	499	0
1	E	3874	0	3841	437	0
1	F	3874	0	3841	420	0
1	G	3874	0	3841	453	0
1	H	3874	0	3841	481	0
1	I	3874	0	3841	509	0
1	J	3874	0	3841	446	0
1	K	3874	0	3841	569	0
1	L	3874	0	3841	508	0
2	A	27	0	12	6	0
2	B	27	0	12	5	0
2	C	27	0	12	6	0
2	D	27	0	12	5	0
2	E	27	0	12	6	0
2	F	27	0	12	3	0
2	G	27	0	12	4	0
2	H	27	0	12	2	0
2	I	27	0	12	5	0
2	J	27	0	12	3	0
2	K	27	0	12	2	0
2	L	27	0	12	4	0
All	All	46812	0	46236	5447	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 59.

All (5447) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:423:LYS:HD3	1:A:426:GLY:HA3	1.23	1.17
1:B:95:TYR:OH	1:B:145:THR:HG22	1.44	1.16
1:L:57:HIS:CD2	1:L:84:HIS:HE1	1.62	1.15

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:235:ILE:HG22	1:C:364:ASN:HD21	1.12	1.13
1:C:396:ARG:HH11	1:C:396:ARG:HG3	1.14	1.12
1:B:336:ALA:HB1	1:B:359:ILE:HG21	1.22	1.11
1:E:82:HIS:HD2	1:E:109:SER:HA	0.98	1.11
1:B:79:ARG:HD3	1:B:127:ALA:HB2	1.32	1.10
1:B:33:ARG:HB2	1:B:33:ARG:HH11	1.05	1.10
1:G:167:PRO:HG3	1:G:176:MET:SD	1.91	1.10
1:E:414:GLN:HB2	1:E:429:PRO:HD2	1.29	1.09
1:I:186:THR:HG22	1:I:187:ILE:H	1.16	1.09
1:E:314:ILE:H	1:E:314:ILE:HD13	1.16	1.09
1:G:30:GLU:HG3	1:G:31:ASP:H	0.95	1.09
1:C:335:ASN:HB2	1:C:338:ARG:HH22	1.08	1.09
1:J:212:ILE:HD12	1:J:212:ILE:H	1.16	1.08
1:B:29:VAL:HA	1:B:33:ARG:HD2	1.31	1.08
1:C:65:ILE:HD13	1:C:144:ILE:HG12	1.34	1.08
1:C:314:ILE:HD13	1:C:314:ILE:H	1.01	1.08
1:K:30:GLU:HG3	1:K:31:ASP:H	1.10	1.08
1:K:40:GLN:HA	1:K:40:GLN:HE21	1.17	1.08
1:C:87:THR:HB	1:C:88:PRO:HD3	1.36	1.07
1:L:250:GLN:HG3	1:L:315:LEU:HD11	1.32	1.07
1:B:212:ILE:HD12	1:B:212:ILE:H	1.18	1.07
1:L:33:ARG:HB2	1:L:33:ARG:NH1	1.70	1.07
1:K:20:GLY:O	1:K:24:VAL:HG23	1.55	1.07
1:I:82:HIS:CD2	1:I:112:THR:HG21	1.88	1.07
1:L:33:ARG:HH11	1:L:33:ARG:HB2	0.90	1.06
1:L:79:ARG:HD2	1:L:127:ALA:HB2	1.34	1.06
1:J:479:THR:O	1:J:483:VAL:HG23	1.52	1.06
1:L:29:VAL:O	1:L:33:ARG:HG3	1.54	1.06
1:C:52:ILE:HD13	1:C:489:VAL:HG12	1.36	1.06
1:I:323:ILE:HG22	1:I:345:ALA:HB3	1.38	1.06
1:L:118:VAL:HG23	1:L:120:VAL:HG23	1.37	1.06
1:E:82:HIS:CD2	1:E:109:SER:HA	1.90	1.05
1:H:427:THR:HG22	1:H:429:PRO:HD3	1.37	1.05
1:A:186:THR:HG22	1:A:187:ILE:H	0.96	1.05
1:C:239:THR:N	1:C:240:PRO:HD3	1.71	1.05
1:I:213:SER:HB2	1:I:217:ARG:HD2	1.37	1.05
1:B:439:ARG:HG3	1:B:439:ARG:HH11	1.16	1.04
1:B:261:ARG:HG3	1:B:261:ARG:HH11	1.22	1.04
1:L:250:GLN:HG2	1:L:314:ILE:HD11	1.40	1.04
1:K:314:ILE:H	1:K:314:ILE:HD13	1.22	1.04
1:H:332:THR:HG22	1:H:353:THR:HG21	1.35	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:45:VAL:HG23	1:J:72:TRP:HZ3	1.22	1.03
1:K:478:ARG:HG2	1:K:478:ARG:HH11	1.23	1.03
1:B:249:VAL:HB	1:B:323:ILE:HG12	1.41	1.03
1:C:429:PRO:O	1:C:431:VAL:N	1.91	1.02
1:F:396:ARG:HH11	1:F:396:ARG:HG3	1.24	1.02
1:H:314:ILE:HD13	1:H:314:ILE:H	1.20	1.01
1:A:323:ILE:HG22	1:A:345:ALA:HB3	1.42	1.01
1:D:137:THR:HG23	1:D:140:GLU:HG3	1.43	1.01
1:I:93:ILE:HG23	1:I:127:ALA:HB3	1.42	1.01
1:K:260:MET:HE3	1:K:288:PRO:HA	1.40	1.01
1:C:82:HIS:CD2	1:C:112:THR:HG21	1.95	1.01
1:B:73:GLU:HA	1:D:50:ARG:HH12	1.22	1.01
1:D:336:ALA:HB3	1:D:337:PRO:HD3	1.40	1.01
1:D:47:GLY:HA2	1:D:50:ARG:HG2	1.39	1.01
1:H:396:ARG:HH11	1:H:396:ARG:HG3	1.24	1.01
1:H:498:VAL:HG23	1:H:499:THR:H	1.25	1.00
1:D:19:ARG:HD3	1:D:23:ILE:HD11	1.43	1.00
1:J:250:GLN:HE21	1:J:326:ALA:HB3	1.27	1.00
1:F:498:VAL:HG23	1:F:499:THR:H	1.23	1.00
1:A:186:THR:CG2	1:A:187:ILE:H	1.75	1.00
1:G:30:GLU:HG3	1:G:31:ASP:N	1.74	1.00
1:D:286:ILE:HG21	1:D:291:LEU:HD12	1.42	0.99
1:D:323:ILE:HG22	1:D:345:ALA:HB3	1.43	0.99
1:A:250:GLN:HG2	1:A:314:ILE:HD11	1.43	0.99
1:F:423:LYS:HE3	1:F:426:GLY:HA3	1.44	0.99
1:D:346:GLU:HG2	1:D:351:PRO:HG2	1.44	0.99
1:E:53:LYS:HB3	1:E:54:PRO:HD3	1.45	0.99
1:I:219:VAL:HA	1:I:373:LEU:CD2	1.93	0.98
1:B:186:THR:HG22	1:B:187:ILE:HD13	1.43	0.98
1:I:72:TRP:HE1	1:L:498:VAL:HG11	1.26	0.98
1:B:137:THR:HG23	1:B:140:GLU:HG3	1.44	0.98
1:C:498:VAL:HG23	1:C:499:THR:H	1.29	0.98
1:E:65:ILE:HA	1:E:147:ARG:CZ	1.94	0.98
1:F:482:TYR:O	1:F:486:ILE:HG12	1.64	0.98
1:G:137:THR:HG22	1:G:139:ASN:H	1.24	0.98
1:L:57:HIS:CD2	1:L:84:HIS:CE1	2.53	0.97
1:C:351:PRO:HG2	1:C:352:THR:HG22	1.46	0.97
1:E:329:LYS:NZ	1:E:329:LYS:HB3	1.79	0.97
1:G:47:GLY:HA2	1:G:50:ARG:HG2	1.46	0.97
1:I:368:ILE:CG2	1:I:373:LEU:HD12	1.94	0.97
1:L:33:ARG:HH11	1:L:33:ARG:CB	1.76	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:67:ARG:HH11	1:D:67:ARG:HB3	1.25	0.97
1:G:436:PHE:O	1:G:440:ILE:HG13	1.62	0.97
1:K:107:LEU:HA	1:K:110:LEU:HD13	1.46	0.97
1:K:216:GLY:O	1:K:219:VAL:HG12	1.65	0.96
1:G:112:THR:HG22	1:G:124:GLY:HA3	1.47	0.96
1:H:9:PHE:HD1	1:H:10:PHE:H	1.03	0.96
1:L:233:MET:HE1	1:L:343:ILE:HD11	1.45	0.96
1:C:57:HIS:HD2	1:C:84:HIS:HE1	1.12	0.96
1:A:186:THR:HG22	1:A:187:ILE:N	1.80	0.96
1:G:142:GLU:HG2	1:G:146:ARG:HD2	1.46	0.96
1:L:239:THR:N	1:L:240:PRO:HD3	1.78	0.96
1:C:496:ALA:HB1	1:C:501:THR:OXT	1.65	0.96
1:L:57:HIS:HD2	1:L:84:HIS:CE1	1.83	0.95
1:C:314:ILE:H	1:C:314:ILE:CD1	1.80	0.95
1:L:313:SER:HB2	1:L:315:LEU:HD13	1.45	0.95
1:F:427:THR:HG22	1:F:429:PRO:HD3	1.46	0.95
1:G:429:PRO:O	1:G:431:VAL:N	1.98	0.95
1:I:233:MET:HE1	1:I:236:LEU:HD12	1.44	0.95
1:B:260:MET:HG2	1:B:288:PRO:HG3	1.50	0.94
1:I:37:SER:HA	1:I:42:ARG:NH1	1.82	0.94
1:G:30:GLU:CG	1:G:31:ASP:H	1.79	0.94
1:L:482:TYR:O	1:L:486:ILE:HG12	1.66	0.94
1:L:314:ILE:HD13	1:L:314:ILE:H	1.32	0.94
1:D:150:MET:SD	1:D:186:THR:HG21	2.08	0.94
1:B:33:ARG:NH1	1:B:33:ARG:HB2	1.82	0.94
1:I:186:THR:HG22	1:I:187:ILE:N	1.83	0.94
1:K:387:LYS:HE3	1:K:445:GLU:OE2	1.69	0.94
1:L:57:HIS:HD2	1:L:84:HIS:HE1	0.95	0.93
1:I:167:PRO:HG3	1:I:176:MET:SD	2.08	0.93
1:I:118:VAL:HG23	1:I:120:VAL:HG23	1.50	0.93
1:D:87:THR:HG22	1:D:88:PRO:HD3	1.50	0.93
1:G:260:MET:HG2	1:G:288:PRO:HG3	1.51	0.93
1:C:335:ASN:HB2	1:C:338:ARG:NH2	1.83	0.93
1:L:65:ILE:HD13	1:L:144:ILE:HG13	1.46	0.93
1:I:371:LEU:HD23	1:I:481:ALA:HB1	1.49	0.93
1:H:57:HIS:ND1	1:H:84:HIS:HE1	1.65	0.93
1:D:427:THR:HG22	1:D:429:PRO:HD3	1.50	0.93
1:C:360:PHE:HD1	1:C:365:ILE:HG13	1.30	0.93
1:D:275:GLU:OE1	1:D:301:ILE:HG13	1.68	0.93
1:B:227:ILE:HD12	1:B:233:MET:SD	2.08	0.92
1:H:154:LYS:HD2	1:K:189:HIS:HD2	1.35	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:219:VAL:HA	1:I:373:LEU:HD21	1.51	0.92
1:B:498:VAL:HG23	1:B:499:THR:H	1.32	0.92
1:G:41:LYS:O	1:G:44:ARG:HB3	1.70	0.92
1:F:429:PRO:O	1:F:431:VAL:N	2.01	0.92
1:F:47:GLY:HA2	1:F:50:ARG:HG2	1.52	0.92
1:K:53:LYS:HB3	1:K:54:PRO:HD3	1.50	0.92
1:G:482:TYR:O	1:G:486:ILE:HG12	1.69	0.92
1:J:432:PRO:HB3	1:J:436:PHE:HD1	1.36	0.91
1:H:82:HIS:CD2	1:H:109:SER:HA	2.05	0.91
1:A:65:ILE:HD13	1:A:144:ILE:HG12	1.53	0.91
1:F:414:GLN:OE1	1:F:428:ILE:HA	1.71	0.91
1:D:468:ALA:HA	1:D:473:LEU:HD12	1.50	0.91
1:A:260:MET:HE3	1:A:288:PRO:HA	1.52	0.91
1:K:314:ILE:N	1:K:314:ILE:HD13	1.86	0.91
1:C:314:ILE:HD13	1:C:314:ILE:N	1.86	0.91
1:D:250:GLN:HG2	1:D:314:ILE:CD1	2.01	0.91
1:F:166:ALA:HB1	1:F:167:PRO:HD2	1.51	0.91
1:K:414:GLN:HB2	1:K:429:PRO:HD2	1.51	0.91
1:I:396:ARG:HG3	1:I:396:ARG:HH11	1.33	0.90
1:G:87:THR:HB	1:G:88:PRO:HD3	1.52	0.90
1:B:24:VAL:HG22	1:B:483:VAL:HG13	1.51	0.90
1:E:176:MET:HE3	1:E:179:ILE:HD12	1.53	0.90
1:L:112:THR:HB	1:L:124:GLY:H	1.36	0.90
1:H:82:HIS:HD2	1:H:109:SER:HA	1.36	0.90
1:J:414:GLN:HG3	1:J:429:PRO:HD2	1.50	0.90
1:B:212:ILE:CD1	1:B:212:ILE:H	1.77	0.90
1:B:331:LEU:HD13	1:B:360:PHE:HZ	1.37	0.90
1:B:275:GLU:HB2	1:B:301:ILE:HD11	1.51	0.90
1:H:233:MET:HE1	1:H:236:LEU:HD12	1.52	0.90
1:J:250:GLN:NE2	1:J:326:ALA:HB3	1.86	0.90
1:L:9:PHE:HD1	1:L:10:PHE:N	1.70	0.90
1:G:29:VAL:HA	1:G:33:ARG:HD2	1.52	0.90
1:C:217:ARG:HH12	1:C:221:HIS:HE1	1.08	0.90
1:J:91:GLY:HA3	1:J:125:ALA:O	1.72	0.90
1:K:239:THR:N	1:K:240:PRO:HD3	1.87	0.90
1:D:90:LYS:HZ3	1:D:199:THR:HG23	1.37	0.90
1:C:65:ILE:HG12	1:C:75:ILE:HD11	1.54	0.90
1:L:96:SER:O	1:L:99:VAL:HG13	1.71	0.90
1:A:397:LEU:HD13	1:F:394:TYR:HE2	1.35	0.90
1:C:181:ASP:OD1	1:E:501:THR:HG23	1.72	0.90
1:G:82:HIS:CD2	1:G:112:THR:HG21	2.07	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:498:VAL:HG23	1:A:499:THR:H	1.36	0.89
1:I:313:SER:HB2	1:I:315:LEU:HD13	1.53	0.89
1:D:332:THR:HG22	1:D:353:THR:HG21	1.54	0.89
1:K:174:ARG:HG3	1:K:175:GLU:H	1.35	0.89
1:C:396:ARG:O	1:C:396:ARG:HD3	1.73	0.89
1:J:212:ILE:H	1:J:212:ILE:CD1	1.82	0.89
1:K:88:PRO:HA	1:K:162:ILE:O	1.72	0.89
1:C:280:ILE:HG22	1:C:281:TRP:H	1.35	0.89
1:A:59:LEU:CD2	1:A:61:LEU:HD21	2.01	0.89
1:K:59:LEU:HD21	1:K:61:LEU:HD21	1.54	0.89
1:K:314:ILE:H	1:K:314:ILE:CD1	1.83	0.89
1:H:331:LEU:HD22	1:H:360:PHE:HZ	1.37	0.89
1:K:40:GLN:HA	1:K:40:GLN:NE2	1.87	0.88
1:D:99:VAL:HG22	1:D:130:LYS:HD3	1.55	0.88
1:K:107:LEU:HD13	1:K:126:LYS:HE2	1.55	0.88
1:J:29:VAL:O	1:J:33:ARG:HB2	1.73	0.88
1:L:150:MET:HE1	1:L:186:THR:HG21	1.55	0.88
1:D:82:HIS:ND1	1:D:109:SER:HA	1.88	0.88
1:D:99:VAL:HG23	1:D:100:SER:N	1.86	0.88
1:G:19:ARG:NH1	1:G:479:THR:HG21	1.88	0.88
1:L:281:TRP:NE1	1:L:283:PRO:HD3	1.88	0.88
1:C:239:THR:H	1:C:240:PRO:HD3	1.38	0.88
1:G:47:GLY:O	1:G:51:ILE:HG13	1.72	0.88
1:B:429:PRO:O	1:B:431:VAL:N	2.06	0.88
1:K:30:GLU:HA	1:K:34:THR:HG23	1.54	0.88
1:G:208:ILE:HG13	1:G:387:LYS:HD2	1.56	0.88
1:A:247:PHE:HB2	1:A:321:ILE:HG22	1.53	0.88
1:H:19:ARG:HD3	1:H:23:ILE:HD11	1.56	0.88
1:K:301:ILE:HD12	1:K:302:LEU:HD12	1.56	0.88
1:F:59:LEU:HD21	1:F:61:LEU:HD21	1.54	0.88
1:H:414:GLN:OE1	1:H:430:ILE:HG12	1.74	0.88
1:H:368:ILE:HG21	1:H:373:LEU:HD13	1.56	0.88
1:D:98:ASP:N	1:D:130:LYS:HE3	1.88	0.88
1:C:280:ILE:O	1:C:281:TRP:HB2	1.72	0.88
1:B:277:ASP:HB2	1:B:302:LEU:HD11	1.54	0.88
1:A:106:ALA:O	1:A:109:SER:HB3	1.73	0.88
1:E:332:THR:HA	1:E:353:THR:CG2	2.04	0.87
1:D:186:THR:HG22	1:D:187:ILE:N	1.89	0.87
1:B:52:ILE:HD13	1:B:489:VAL:HG12	1.57	0.87
1:G:47:GLY:HA2	1:G:50:ARG:CG	2.04	0.87
1:H:346:GLU:HG2	1:H:351:PRO:HG2	1.54	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:42:ARG:O	1:J:45:VAL:HG12	1.74	0.87
1:A:479:THR:O	1:A:483:VAL:HG23	1.75	0.87
1:L:338:ARG:HB3	1:L:338:ARG:NH1	1.88	0.87
1:C:360:PHE:HB3	1:C:365:ILE:HB	1.56	0.87
1:L:9:PHE:HD1	1:L:10:PHE:H	0.89	0.87
1:B:65:ILE:HA	1:B:147:ARG:NH1	1.89	0.87
1:B:20:GLY:O	1:B:24:VAL:HG23	1.75	0.87
1:C:168:ASP:O	1:C:170:SER:N	2.07	0.87
1:L:82:HIS:CD2	1:L:112:THR:HG21	2.09	0.87
1:L:6:ASP:HB2	1:L:329:LYS:HD2	1.55	0.87
1:A:386:LEU:HD13	1:B:392:VAL:HG21	1.57	0.87
1:C:49:LEU:H	1:C:49:LEU:HD12	1.38	0.87
1:H:308:LYS:HD2	1:H:309:PRO:HD2	1.54	0.86
1:C:106:ALA:O	1:C:109:SER:HB3	1.74	0.86
1:A:186:THR:HG22	1:A:187:ILE:HG12	1.54	0.86
1:I:30:GLU:HG3	1:I:31:ASP:H	1.40	0.86
1:C:235:ILE:HG22	1:C:364:ASN:ND2	1.90	0.86
1:C:275:GLU:HB2	1:C:301:ILE:HD11	1.58	0.86
1:D:314:ILE:H	1:D:314:ILE:HD13	1.38	0.86
1:J:344:ILE:HB	1:J:367:VAL:HG22	1.58	0.86
1:D:239:THR:N	1:D:240:PRO:HD3	1.88	0.86
1:J:33:ARG:HA	1:J:33:ARG:CZ	2.06	0.86
1:C:176:MET:CE	1:C:179:ILE:HD12	2.04	0.86
1:C:387:LYS:HE3	1:C:445:GLU:OE2	1.75	0.86
1:C:79:ARG:HD2	1:C:127:ALA:HB2	1.57	0.86
1:H:291:LEU:O	1:H:291:LEU:HD12	1.76	0.85
1:L:396:ARG:HG3	1:L:396:ARG:HH11	1.38	0.85
1:G:50:ARG:HH12	1:K:73:GLU:HA	1.40	0.85
1:K:233:MET:HE1	1:K:343:ILE:HD11	1.57	0.85
1:G:212:ILE:H	1:G:212:ILE:HD12	1.38	0.85
1:F:478:ARG:HG3	1:F:478:ARG:HH11	1.38	0.85
1:E:12:MET:HE3	1:E:353:THR:HA	1.59	0.85
1:H:45:VAL:HG23	1:J:72:TRP:CZ3	2.10	0.85
1:C:19:ARG:NE	1:C:479:THR:HG21	1.91	0.85
1:H:496:ALA:HB1	1:H:501:THR:OXT	1.77	0.85
1:D:316:GLU:HA	1:D:316:GLU:OE1	1.76	0.85
1:D:186:THR:HG22	1:D:187:ILE:H	1.39	0.85
1:A:130:LYS:O	1:A:131:ILE:HD12	1.76	0.85
1:C:316:GLU:HG3	1:C:338:ARG:HH21	1.39	0.85
1:I:186:THR:CG2	1:I:187:ILE:N	2.40	0.84
1:H:429:PRO:O	1:H:431:VAL:N	2.09	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:482:TYR:O	1:B:486:ILE:HG12	1.77	0.84
1:A:55:CYS:SG	1:A:105:LYS:HG2	2.17	0.84
1:E:137:THR:HG23	1:E:140:GLU:HG3	1.59	0.84
1:B:65:ILE:HD13	1:B:144:ILE:HD11	1.60	0.84
1:F:79:ARG:HD2	1:F:127:ALA:HB2	1.58	0.84
1:A:397:LEU:HD13	1:F:394:TYR:CE2	2.11	0.84
1:K:131:ILE:HG12	1:K:136:TYR:HE2	1.42	0.84
1:K:87:THR:HB	1:K:88:PRO:HD3	1.58	0.84
1:C:338:ARG:HB3	1:C:338:ARG:NH1	1.93	0.84
1:C:93:ILE:HD11	1:C:165:PRO:HB3	1.58	0.84
1:H:500:PHE:HB3	1:L:142:GLU:OE1	1.78	0.84
1:D:501:THR:OXT	1:E:146:ARG:NH2	2.10	0.84
1:L:260:MET:HG2	1:L:288:PRO:HG3	1.59	0.84
1:L:19:ARG:O	1:L:23:ILE:HG13	1.77	0.84
1:B:255:VAL:HG13	1:B:256:GLY:H	1.42	0.84
1:A:423:LYS:CD	1:A:426:GLY:HA3	2.06	0.84
1:C:300:SER:O	1:C:302:LEU:N	2.10	0.84
1:I:131:ILE:HG23	1:I:136:TYR:CE2	2.12	0.84
1:C:233:MET:HA	1:C:236:LEU:HD12	1.58	0.84
1:I:269:LYS:HD3	1:I:285:GLY:HA3	1.59	0.83
1:I:107:LEU:HD13	1:I:126:LYS:HE3	1.60	0.83
1:K:30:GLU:HG3	1:K:31:ASP:N	1.92	0.83
1:C:52:ILE:CD1	1:C:489:VAL:HG12	2.08	0.83
1:E:33:ARG:HB2	1:E:36:GLU:OE1	1.78	0.83
1:H:36:GLU:CD	1:H:42:ARG:HH12	1.82	0.83
1:H:42:ARG:O	1:H:45:VAL:HG12	1.77	0.83
1:G:335:ASN:HD22	1:G:336:ALA:N	1.75	0.83
1:I:260:MET:HE3	1:I:288:PRO:HA	1.57	0.83
1:C:498:VAL:HG11	1:F:72:TRP:NE1	1.93	0.83
1:H:9:PHE:HD1	1:H:10:PHE:N	1.76	0.83
1:A:482:TYR:O	1:A:486:ILE:HG12	1.78	0.83
1:E:79:ARG:HH11	1:E:127:ALA:HB2	1.44	0.83
1:K:336:ALA:HB3	1:K:359:ILE:HD12	1.59	0.83
1:E:339:VAL:HG21	1:E:360:PHE:HE1	1.43	0.83
1:L:293:ASP:O	1:L:297:GLN:HG3	1.78	0.83
1:H:314:ILE:CD1	1:H:314:ILE:H	1.91	0.83
1:C:82:HIS:CG	1:C:112:THR:HG21	2.13	0.83
1:C:52:ILE:HD13	1:C:489:VAL:CG1	2.08	0.83
1:F:396:ARG:HG3	1:F:396:ARG:NH1	1.87	0.83
1:J:192:ILE:HG12	1:J:192:ILE:O	1.79	0.83
1:F:249:VAL:HG13	1:F:273:VAL:HG22	1.59	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:177:SER:OG	1:J:205:GLN:HG3	1.79	0.83
1:B:57:HIS:CE1	1:D:155:LYS:HE2	2.14	0.83
1:K:274:GLY:HA3	1:K:314:ILE:HD12	1.60	0.83
1:E:53:LYS:HB3	1:E:54:PRO:CD	2.07	0.83
1:B:212:ILE:HD12	1:B:212:ILE:N	1.93	0.82
1:B:291:LEU:HD11	1:B:301:ILE:HG22	1.61	0.82
1:E:19:ARG:HH11	1:E:19:ARG:HG3	1.44	0.82
1:E:39:GLU:HB3	1:E:41:LYS:HG3	1.59	0.82
1:J:82:HIS:CG	1:J:112:THR:HG21	2.14	0.82
1:G:192:ILE:O	1:G:192:ILE:HG12	1.78	0.82
1:I:445:GLU:O	1:I:449:VAL:HG23	1.78	0.82
1:C:414:GLN:OE1	1:C:430:ILE:HG12	1.79	0.82
1:H:247:PHE:HB3	1:H:321:ILE:HG13	1.60	0.82
1:B:396:ARG:HG3	1:B:396:ARG:HH11	1.44	0.82
1:B:414:GLN:OE1	1:B:430:ILE:HG12	1.79	0.82
1:H:321:ILE:HG22	1:H:343:ILE:HB	1.59	0.82
1:J:346:GLU:OE2	1:J:352:THR:HG22	1.80	0.82
1:J:212:ILE:HD12	1:J:212:ILE:N	1.94	0.82
1:C:57:HIS:CD2	1:C:84:HIS:HE1	1.97	0.82
1:K:346:GLU:OE1	1:K:369:PRO:HA	1.78	0.82
1:C:118:VAL:HG12	1:C:456:THR:HG22	1.62	0.82
1:D:90:LYS:NZ	1:D:199:THR:HG23	1.94	0.82
1:C:335:ASN:CB	1:C:338:ARG:HH22	1.91	0.82
1:I:236:LEU:HD22	1:I:342:LYS:HB3	1.62	0.81
1:H:501:THR:O	1:L:146:ARG:NH1	2.13	0.81
1:L:82:HIS:CG	1:L:112:THR:HG21	2.15	0.81
1:L:85:GLN:HE22	1:L:489:VAL:HG22	1.44	0.81
1:A:57:HIS:ND1	1:A:84:HIS:HE1	1.77	0.81
1:D:411:MET:HA	1:D:430:ILE:HG22	1.61	0.81
1:E:346:GLU:OE1	1:E:478:ARG:NH2	2.14	0.81
1:B:423:LYS:HG2	1:B:426:GLY:H	1.45	0.81
1:L:427:THR:C	1:L:428:ILE:HD13	2.01	0.81
1:G:82:HIS:HD2	1:G:112:THR:HG21	1.44	0.81
1:F:345:ALA:HB1	1:F:373:LEU:HD21	1.61	0.81
1:G:33:ARG:HB2	1:G:33:ARG:HH11	1.44	0.81
1:H:121:PRO:HD2	1:H:382:TYR:CE2	2.16	0.81
1:B:336:ALA:CB	1:B:359:ILE:HG21	2.08	0.81
1:C:217:ARG:HB3	1:C:217:ARG:HH11	1.43	0.81
1:C:392:VAL:HG22	1:E:386:LEU:HD22	1.61	0.81
1:F:53:LYS:HB3	1:F:54:PRO:HD3	1.63	0.81
1:J:501:THR:OXT	1:K:146:ARG:NH2	2.12	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:428:ILE:N	1:F:428:ILE:HD13	1.96	0.81
1:L:280:ILE:HG23	1:L:307:ALA:HB1	1.63	0.81
1:J:20:GLY:O	1:J:24:VAL:HG22	1.79	0.81
1:K:220:PHE:HD1	1:K:221:HIS:N	1.79	0.81
1:J:368:ILE:HG21	1:J:373:LEU:HD13	1.62	0.81
1:F:19:ARG:HD3	1:F:23:ILE:HD11	1.63	0.81
1:B:176:MET:HE3	1:B:179:ILE:HD12	1.63	0.81
1:B:439:ARG:CG	1:B:439:ARG:HH11	1.91	0.80
1:C:217:ARG:HH12	1:C:221:HIS:CE1	1.95	0.80
1:H:67:ARG:HH11	1:H:67:ARG:HB3	1.46	0.80
1:I:344:ILE:HD11	1:I:360:PHE:CE1	2.16	0.80
1:C:396:ARG:HH11	1:C:396:ARG:CG	1.92	0.80
1:J:30:GLU:HA	1:J:34:THR:HG23	1.63	0.80
1:E:6:ASP:N	1:E:7:PRO:HD3	1.96	0.80
1:A:501:THR:OG1	1:B:146:ARG:NH2	2.13	0.80
1:C:414:GLN:HB2	1:C:429:PRO:HD2	1.63	0.80
1:D:249:VAL:HG23	1:D:323:ILE:O	1.82	0.80
1:F:30:GLU:HG3	1:F:31:ASP:H	1.44	0.80
1:A:72:TRP:HE1	1:E:498:VAL:HG21	1.45	0.80
1:I:252:PHE:HE2	1:I:260:MET:HE1	1.46	0.80
1:I:159:GLY:HA3	1:I:162:ILE:HD12	1.62	0.80
1:I:96:SER:O	1:I:99:VAL:HG13	1.82	0.80
1:E:167:PRO:HG3	1:E:176:MET:SD	2.22	0.80
1:I:57:HIS:CD2	1:L:155:LYS:HE3	2.17	0.80
1:L:339:VAL:HG21	1:L:360:PHE:HE1	1.47	0.80
1:B:19:ARG:O	1:B:23:ILE:HG13	1.82	0.80
1:E:346:GLU:HG2	1:E:351:PRO:HG2	1.64	0.80
1:K:49:LEU:H	1:K:49:LEU:HD12	1.47	0.80
1:A:437:GLN:NE2	1:H:423:LYS:HG2	1.96	0.80
1:J:85:GLN:HG2	1:J:86:ARG:N	1.97	0.80
1:E:429:PRO:O	1:E:431:VAL:N	2.14	0.80
1:K:291:LEU:HD11	1:K:301:ILE:HG22	1.63	0.80
1:A:227:ILE:O	1:A:233:MET:HG3	1.82	0.80
1:K:436:PHE:O	1:K:440:ILE:HG13	1.82	0.80
1:J:336:ALA:HB3	1:J:337:PRO:HD3	1.63	0.80
1:I:72:TRP:NE1	1:L:498:VAL:HG11	1.96	0.80
1:J:500:PHE:HB3	1:K:142:GLU:OE1	1.81	0.80
1:C:39:GLU:HG2	1:C:41:LYS:HG2	1.61	0.80
1:A:429:PRO:O	1:A:431:VAL:N	2.15	0.79
1:C:411:MET:SD	1:C:430:ILE:HG21	2.22	0.79
1:J:90:LYS:HZ3	1:J:199:THR:HG23	1.46	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:21:ALA:O	1:L:24:VAL:HG23	1.83	0.79
1:K:131:ILE:HG12	1:K:136:TYR:CE2	2.17	0.79
1:C:96:SER:O	1:C:99:VAL:HG22	1.81	0.79
1:C:87:THR:CB	1:C:88:PRO:HD3	2.12	0.79
1:I:24:VAL:HG12	1:I:28:LEU:HD22	1.64	0.79
1:G:414:GLN:OE1	1:G:430:ILE:HG12	1.82	0.79
1:A:403:ARG:HG3	1:A:440:ILE:CG2	2.12	0.79
1:E:433:THR:CG2	1:E:436:PHE:HB2	2.12	0.79
2:G:502:ADP:H3'	2:G:502:ADP:O1A	1.82	0.79
1:D:227:ILE:HA	1:D:233:MET:SD	2.22	0.79
1:A:239:THR:N	1:A:240:PRO:HD3	1.95	0.79
1:B:339:VAL:HG21	1:B:360:PHE:HE1	1.47	0.79
1:C:322:LEU:HD22	1:C:323:ILE:H	1.46	0.79
1:D:250:GLN:HG2	1:D:314:ILE:HD11	1.64	0.79
1:J:150:MET:SD	1:J:186:THR:HG21	2.23	0.79
1:K:227:ILE:O	1:K:227:ILE:CG2	2.29	0.79
1:E:291:LEU:O	1:E:291:LEU:HG	1.81	0.79
1:B:346:GLU:OE1	1:B:370:ASP:N	2.15	0.79
1:C:346:GLU:HG3	1:C:368:ILE:O	1.82	0.79
1:H:220:PHE:HD2	1:H:263:LEU:HD23	1.48	0.79
1:D:67:ARG:CB	1:D:67:ARG:HH11	1.95	0.79
1:A:201:LYS:NZ	1:A:388:ASN:HD21	1.80	0.79
1:C:316:GLU:CG	1:C:338:ARG:HE	1.95	0.79
1:D:371:LEU:HD22	1:D:482:TYR:CD2	2.18	0.79
1:C:79:ARG:CD	1:C:127:ALA:HB2	2.13	0.79
1:A:91:GLY:HA3	1:A:125:ALA:O	1.82	0.79
1:C:372:TYR:CD2	1:C:464:ILE:HD11	2.18	0.79
1:D:57:HIS:HD2	1:D:84:HIS:NE2	1.81	0.79
1:G:142:GLU:HG3	1:G:178:TRP:CD2	2.17	0.79
1:A:167:PRO:HG3	1:A:176:MET:SD	2.23	0.79
1:K:227:ILE:O	1:K:227:ILE:HG23	1.82	0.79
1:G:142:GLU:OE1	1:L:500:PHE:HB3	1.82	0.78
1:K:336:ALA:CB	1:K:359:ILE:HD12	2.13	0.78
1:H:430:ILE:O	1:H:430:ILE:HG13	1.83	0.78
1:L:336:ALA:HB3	1:L:337:PRO:HD3	1.65	0.78
1:C:420:LYS:O	1:C:420:LYS:HG2	1.81	0.78
1:G:462:ARG:HB3	1:G:466:ARG:NH1	1.98	0.78
1:D:280:ILE:HD11	1:D:304:PHE:HB3	1.65	0.78
1:G:250:GLN:HG2	1:G:314:ILE:HD11	1.63	0.78
1:H:250:GLN:HG2	1:H:314:ILE:HD11	1.64	0.78
1:K:414:GLN:CB	1:K:429:PRO:HD2	2.12	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:27:LYS:O	1:G:32:LEU:HD12	1.82	0.78
1:C:192:ILE:HG12	1:C:192:ILE:O	1.83	0.78
1:I:24:VAL:CG1	1:I:28:LEU:HD22	2.14	0.78
1:J:48:ILE:O	1:J:52:ILE:HG13	1.83	0.78
1:F:40:GLN:HG3	1:F:40:GLN:O	1.83	0.78
1:A:336:ALA:HB3	1:A:337:PRO:HD3	1.66	0.78
1:A:59:LEU:HD21	1:A:61:LEU:HD21	1.65	0.78
1:L:411:MET:HA	1:L:430:ILE:HG22	1.65	0.78
1:L:201:LYS:O	1:L:211:ARG:NH1	2.17	0.78
1:L:498:VAL:HG23	1:L:499:THR:H	1.48	0.78
1:J:90:LYS:NZ	1:J:164:VAL:HG12	1.98	0.78
1:A:118:VAL:HG23	1:A:120:VAL:HG23	1.64	0.78
1:L:91:GLY:HA3	1:L:125:ALA:O	1.83	0.78
1:A:428:ILE:HG21	1:H:428:ILE:HG21	1.66	0.78
2:A:1:ADP:H3'	2:A:1:ADP:O1A	1.84	0.78
1:E:433:THR:HG23	1:E:436:PHE:HB2	1.65	0.78
1:C:360:PHE:CD1	1:C:365:ILE:HG13	2.18	0.78
1:J:90:LYS:HE2	1:J:199:THR:HG21	1.65	0.78
1:A:85:GLN:OE1	2:A:1:ADP:N1	2.17	0.78
1:H:90:LYS:HE2	1:H:199:THR:HG21	1.66	0.78
1:C:90:LYS:HZ3	1:C:164:VAL:HG12	1.49	0.78
1:J:95:TYR:OH	1:J:145:THR:HG22	1.83	0.78
1:B:52:ILE:HD13	1:B:489:VAL:CG1	2.13	0.78
1:A:500:PHE:O	1:A:501:THR:O	2.02	0.77
1:C:75:ILE:HD12	1:C:75:ILE:N	2.00	0.77
1:L:294:PHE:HA	1:L:297:GLN:NE2	1.98	0.77
1:L:33:ARG:NH1	1:L:33:ARG:CB	2.38	0.77
1:H:314:ILE:HD13	1:H:314:ILE:N	1.98	0.77
1:L:65:ILE:HD13	1:L:144:ILE:CG1	2.15	0.77
1:H:346:GLU:HG2	1:H:351:PRO:CG	2.13	0.77
1:C:57:HIS:HD2	1:C:84:HIS:CE1	1.99	0.77
1:K:48:ILE:HG13	1:K:490:PHE:HE1	1.49	0.77
1:B:137:THR:HG23	1:B:140:GLU:CG	2.14	0.77
1:H:106:ALA:O	1:H:109:SER:HB3	1.83	0.77
1:J:420:LYS:HZ2	1:J:420:LYS:HB3	1.49	0.77
1:E:414:GLN:CB	1:E:429:PRO:HD2	2.13	0.77
1:I:323:ILE:CG2	1:I:345:ALA:HB3	2.13	0.77
1:D:428:ILE:H	1:D:428:ILE:HD13	1.49	0.77
1:D:366:MET:HB2	1:D:475:LEU:HD23	1.66	0.77
1:D:387:LYS:HE3	1:D:445:GLU:OE2	1.85	0.77
1:H:91:GLY:HA3	1:H:125:ALA:O	1.85	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:9:PHE:HD1	1:I:10:PHE:H	1.30	0.77
1:B:65:ILE:HG12	1:B:75:ILE:HD11	1.64	0.77
1:D:87:THR:HG22	1:D:88:PRO:CD	2.14	0.77
1:J:414:GLN:NE2	1:J:430:ILE:HG12	1.99	0.77
1:F:95:TYR:OH	1:F:145:THR:HG22	1.83	0.77
1:B:330:GLN:O	1:B:331:LEU:HD23	1.84	0.77
1:I:37:SER:HA	1:I:42:ARG:CZ	2.14	0.77
1:A:372:TYR:CD2	1:A:464:ILE:HD11	2.20	0.77
1:K:436:PHE:CE2	1:K:440:ILE:HD11	2.19	0.77
1:A:59:LEU:HD23	1:A:61:LEU:HD21	1.67	0.77
1:G:95:TYR:OH	1:G:145:THR:HG22	1.84	0.77
1:L:68:ASP:OD2	1:L:140:GLU:HG3	1.85	0.77
1:A:52:ILE:HD13	1:A:489:VAL:HG12	1.67	0.77
1:B:45:VAL:HG13	1:B:45:VAL:O	1.84	0.77
1:C:436:PHE:O	1:C:440:ILE:HG13	1.85	0.77
1:A:24:VAL:CG1	1:A:28:LEU:HD22	2.15	0.77
1:B:176:MET:CE	1:B:179:ILE:HD12	2.15	0.77
1:B:222:GLY:HA3	1:B:373:LEU:CD1	2.15	0.77
1:B:222:GLY:HA3	1:B:373:LEU:HD13	1.65	0.77
1:L:186:THR:HG22	1:L:187:ILE:N	1.99	0.77
1:J:386:LEU:HD13	1:K:392:VAL:HG11	1.65	0.77
1:C:396:ARG:HG3	1:C:396:ARG:NH1	1.95	0.76
1:L:17:PHE:CE1	1:L:486:ILE:HD12	2.20	0.76
1:L:29:VAL:HA	1:L:33:ARG:HD2	1.67	0.76
1:K:52:ILE:HG12	1:K:493:TYR:CE2	2.20	0.76
1:D:274:GLY:O	1:D:275:GLU:HB2	1.83	0.76
1:B:336:ALA:HB1	1:B:359:ILE:CG2	2.11	0.76
1:J:32:LEU:O	1:J:33:ARG:HG2	1.86	0.76
1:I:147:ARG:CZ	1:L:499:THR:HB	2.14	0.76
1:J:7:PRO:O	1:J:329:LYS:HE2	1.86	0.76
1:C:240:PRO:HD2	1:C:245:LYS:NZ	2.00	0.76
1:A:332:THR:H	1:A:335:ASN:HD21	1.30	0.76
1:I:236:LEU:HD13	1:I:238:MET:HG3	1.67	0.76
2:D:4:ADP:O1A	2:D:4:ADP:H3'	1.85	0.76
1:B:95:TYR:HH	1:B:145:THR:HG22	1.48	0.76
1:K:220:PHE:CD1	1:K:221:HIS:N	2.53	0.76
1:J:414:GLN:HA	1:J:429:PRO:HG2	1.68	0.76
1:K:87:THR:CB	1:K:88:PRO:HD3	2.15	0.76
1:J:459:ARG:O	1:J:463:GLN:HG3	1.85	0.76
1:H:239:THR:N	1:H:240:PRO:HD3	2.00	0.76
1:G:396:ARG:HH11	1:G:396:ARG:HG3	1.49	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:44:ARG:HH11	1:H:44:ARG:CB	1.98	0.76
1:B:73:GLU:HA	1:D:50:ARG:NH1	2.01	0.76
1:A:82:HIS:ND1	1:A:109:SER:HA	2.01	0.76
1:B:65:ILE:O	1:B:65:ILE:HG13	1.83	0.76
1:I:219:VAL:HA	1:I:373:LEU:HD23	1.68	0.76
1:L:167:PRO:HG3	1:L:176:MET:HG2	1.68	0.76
1:I:146:ARG:NH2	1:K:501:THR:OXT	2.13	0.76
1:C:414:GLN:HA	1:C:429:PRO:HG2	1.68	0.76
1:I:281:TRP:CD1	1:I:283:PRO:HD3	2.21	0.76
1:D:394:TYR:HB2	1:D:445:GLU:HG3	1.67	0.76
1:B:379:THR:HG21	1:B:453:LEU:HD23	1.68	0.76
1:I:75:ILE:CG1	1:I:131:ILE:HD11	2.16	0.75
1:J:432:PRO:HB3	1:J:436:PHE:CD1	2.20	0.75
1:K:339:VAL:HG21	1:K:360:PHE:HE1	1.50	0.75
1:J:68:ASP:OD1	1:J:140:GLU:HG3	1.87	0.75
2:E:5:ADP:H3'	2:E:5:ADP:O1A	1.86	0.75
1:G:45:VAL:HG13	1:G:45:VAL:O	1.87	0.75
1:E:19:ARG:O	1:E:23:ILE:HG13	1.85	0.75
1:A:427:THR:HG22	1:A:429:PRO:HD3	1.68	0.75
1:F:20:GLY:O	1:F:24:VAL:HG22	1.86	0.75
1:D:296:LEU:HD13	1:D:297:GLN:N	2.02	0.75
1:B:65:ILE:HG12	1:B:75:ILE:CD1	2.17	0.75
1:K:286:ILE:HG21	1:K:291:LEU:HD22	1.68	0.75
1:E:370:ASP:OD1	1:E:371:LEU:N	2.19	0.75
1:G:150:MET:SD	1:G:186:THR:HG21	2.27	0.75
1:A:142:GLU:O	1:A:146:ARG:HG3	1.86	0.75
1:L:428:ILE:O	1:L:431:VAL:HG12	1.87	0.75
1:E:164:VAL:HG13	1:E:197:CYS:O	1.85	0.75
1:E:396:ARG:HG3	1:E:396:ARG:HH11	1.50	0.75
1:H:331:LEU:O	1:H:353:THR:HG23	1.86	0.75
1:I:239:THR:N	1:I:240:PRO:HD3	2.02	0.75
1:H:52:ILE:HD13	1:H:489:VAL:HG12	1.68	0.75
1:D:250:GLN:HG2	1:D:314:ILE:HD13	1.68	0.75
1:G:90:LYS:HD2	1:G:164:VAL:HB	1.66	0.75
1:C:325:ALA:O	1:C:326:ALA:HB2	1.85	0.75
1:B:315:LEU:HD11	1:B:330:GLN:HG2	1.68	0.75
1:D:20:GLY:O	1:D:24:VAL:HG23	1.87	0.75
1:L:219:VAL:HG22	1:L:373:LEU:HD21	1.68	0.75
1:C:217:ARG:HB3	1:C:217:ARG:NH1	2.02	0.75
1:J:145:THR:HG21	1:J:175:GLU:HG2	1.66	0.75
1:J:176:MET:HE3	1:J:198:VAL:HG21	1.67	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:403:ARG:HG3	1:A:440:ILE:HG22	1.68	0.75
1:A:498:VAL:HG11	1:E:72:TRP:HE1	1.52	0.75
1:B:33:ARG:CB	1:B:33:ARG:HH11	1.94	0.75
1:A:222:GLY:HA3	1:A:373:LEU:HD12	1.67	0.75
1:D:233:MET:HE1	1:D:236:LEU:HD12	1.67	0.75
1:J:82:HIS:CD2	1:J:112:THR:HG21	2.22	0.75
1:J:343:ILE:HD11	1:J:366:MET:HE2	1.66	0.75
1:J:24:VAL:HG13	1:J:483:VAL:CG1	2.17	0.74
1:K:52:ILE:HD13	1:K:489:VAL:HG12	1.69	0.74
1:C:72:TRP:NE1	1:F:498:VAL:HG11	2.02	0.74
1:A:175:GLU:HA	1:A:178:TRP:CE3	2.22	0.74
1:L:192:ILE:HG12	1:L:192:ILE:O	1.87	0.74
1:C:240:PRO:HD2	1:C:245:LYS:HZ2	1.52	0.74
1:K:360:PHE:HD1	1:K:365:ILE:HD12	1.52	0.74
1:B:53:LYS:HB3	1:B:54:PRO:HD3	1.70	0.74
1:B:148:PHE:O	1:B:152:LEU:HB2	1.88	0.74
1:E:236:LEU:HB2	1:E:238:MET:HG3	1.67	0.74
1:B:147:ARG:CZ	1:D:499:THR:OG1	2.35	0.74
1:E:314:ILE:H	1:E:314:ILE:CD1	1.97	0.74
1:H:67:ARG:HB3	1:H:67:ARG:NH1	2.01	0.74
1:K:118:VAL:HG11	1:K:375:ALA:HB1	1.68	0.74
1:I:332:THR:HG22	1:I:353:THR:HG21	1.69	0.74
1:B:501:THR:HG23	1:F:181:ASP:OD1	1.85	0.74
1:K:87:THR:HB	1:K:88:PRO:CD	2.15	0.74
1:F:145:THR:HG21	1:F:175:GLU:HG2	1.68	0.74
1:E:8:ASN:O	1:E:10:PHE:N	2.21	0.74
1:G:112:THR:HG22	1:G:124:GLY:CA	2.17	0.74
1:F:387:LYS:HE3	1:F:445:GLU:OE2	1.87	0.74
1:A:24:VAL:HG11	1:A:28:LEU:HD22	1.69	0.74
1:E:212:ILE:HG22	1:E:258:HIS:HE1	1.51	0.74
1:G:78:TYR:CE2	1:G:101:VAL:HG22	2.22	0.74
1:E:130:LYS:O	1:E:131:ILE:HD12	1.87	0.74
1:I:136:TYR:HB2	1:I:141:LEU:HD23	1.68	0.74
1:E:249:VAL:HG13	1:E:273:VAL:HG22	1.69	0.74
1:D:195:HIS:O	1:D:201:LYS:HE3	1.87	0.74
1:L:25:GLU:O	1:L:29:VAL:HG23	1.88	0.74
1:C:380:VAL:HG12	1:C:381:SER:N	2.01	0.74
1:A:332:THR:HA	1:A:353:THR:CG2	2.18	0.74
1:J:337:PRO:HA	1:J:363:ARG:HE	1.51	0.74
1:E:277:ASP:O	1:E:302:LEU:HD21	1.88	0.74
1:B:424:HIS:CD2	1:B:424:HIS:H	2.05	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:57:HIS:CD2	1:C:84:HIS:CE1	2.75	0.74
1:D:346:GLU:HG2	1:D:351:PRO:CG	2.17	0.74
1:L:177:SER:OG	1:L:205:GLN:HG3	1.87	0.74
1:C:360:PHE:CD1	1:C:365:ILE:HG21	2.23	0.73
1:K:93:ILE:HD11	1:K:165:PRO:HB3	1.70	0.73
1:J:420:LYS:HB3	1:J:420:LYS:NZ	2.03	0.73
1:K:384:GLU:O	1:K:388:ASN:ND2	2.21	0.73
1:J:239:THR:N	1:J:240:PRO:HD3	2.01	0.73
1:B:42:ARG:O	1:B:45:VAL:HG12	1.88	0.73
1:D:459:ARG:O	1:D:463:GLN:HG3	1.87	0.73
1:K:212:ILE:CD1	1:K:213:SER:H	2.00	0.73
1:H:428:ILE:O	1:H:431:VAL:HG12	1.87	0.73
1:G:17:PHE:HE2	1:G:53:LYS:HB2	1.54	0.73
1:J:150:MET:O	1:J:154:LYS:HG3	1.86	0.73
1:I:181:ASP:OD1	1:K:501:THR:OXT	2.06	0.73
1:K:219:VAL:HG11	1:K:259:SER:OG	1.88	0.73
1:I:368:ILE:HG21	1:I:373:LEU:HD12	1.70	0.73
1:G:437:GLN:HA	1:G:440:ILE:HD12	1.71	0.73
1:L:246:THR:N	1:L:320:ASP:OD2	2.22	0.73
1:G:423:LYS:HE2	1:G:423:LYS:HA	1.68	0.73
1:H:19:ARG:HH22	1:H:358:LYS:NZ	1.87	0.73
1:C:114:LYS:HE2	1:C:374:ASN:ND2	2.03	0.73
1:B:162:ILE:N	1:B:162:ILE:HD12	2.04	0.73
1:F:473:LEU:HD22	1:F:479:THR:OG1	1.88	0.73
1:B:249:VAL:HB	1:B:323:ILE:CG1	2.16	0.73
1:J:498:VAL:N	1:J:501:THR:HB	2.04	0.73
1:L:252:PHE:CE2	1:L:260:MET:HE1	2.23	0.73
1:L:321:ILE:HG22	1:L:343:ILE:CG2	2.17	0.73
1:E:19:ARG:HG3	1:E:19:ARG:NH1	2.03	0.73
1:B:217:ARG:HG2	1:B:221:HIS:HE1	1.54	0.73
1:G:34:THR:O	1:G:34:THR:HG22	1.88	0.73
1:A:146:ARG:NH2	1:F:501:THR:OXT	2.18	0.73
1:L:260:MET:CE	1:L:288:PRO:HA	2.18	0.73
1:J:112:THR:HG22	1:J:124:GLY:HA3	1.69	0.73
1:G:250:GLN:HG2	1:G:314:ILE:CD1	2.19	0.73
1:C:316:GLU:HG2	1:C:338:ARG:HE	1.54	0.73
1:E:329:LYS:HB3	1:E:329:LYS:HZ2	1.53	0.73
1:I:427:THR:HG22	1:I:429:PRO:HD3	1.71	0.73
1:F:131:ILE:HD11	1:F:136:TYR:CE2	2.23	0.73
1:H:291:LEU:HD11	1:H:301:ILE:CG2	2.18	0.73
1:L:355:GLU:O	1:L:359:ILE:HD13	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:53:LYS:HB3	1:D:54:PRO:HD3	1.71	0.73
1:D:247:PHE:CE1	1:D:263:LEU:HB3	2.23	0.73
1:B:314:ILE:HD13	1:B:314:ILE:H	1.53	0.73
1:I:79:ARG:HD2	1:I:127:ALA:HB2	1.68	0.73
1:L:93:ILE:HD11	1:L:165:PRO:HB3	1.71	0.73
1:H:332:THR:H	1:H:335:ASN:HD21	1.37	0.72
1:A:28:LEU:HD12	1:A:32:LEU:HD22	1.70	0.72
1:H:382:TYR:CE1	1:H:386:LEU:HD11	2.24	0.72
1:L:394:TYR:HB2	1:L:445:GLU:HG3	1.71	0.72
1:D:498:VAL:HG23	1:D:499:THR:H	1.55	0.72
1:K:30:GLU:HA	1:K:34:THR:CG2	2.18	0.72
1:D:286:ILE:CG2	1:D:291:LEU:HD12	2.19	0.72
1:L:17:PHE:HE1	1:L:486:ILE:HD12	1.54	0.72
1:F:9:PHE:CE1	1:F:103:GLU:HA	2.24	0.72
1:K:331:LEU:N	1:K:331:LEU:HD23	2.04	0.72
1:D:358:LYS:O	1:D:362:GLU:HG3	1.89	0.72
1:A:146:ARG:HH12	1:F:501:THR:C	1.92	0.72
1:L:366:MET:HE3	1:L:368:ILE:HD11	1.70	0.72
1:I:236:LEU:CD2	1:I:342:LYS:HB3	2.19	0.72
1:F:344:ILE:HB	1:F:367:VAL:HG22	1.71	0.72
1:H:459:ARG:O	1:H:463:GLN:HG3	1.89	0.72
1:B:332:THR:N	1:B:335:ASN:HD21	1.87	0.72
1:K:274:GLY:HA3	1:K:314:ILE:CD1	2.20	0.72
1:J:250:GLN:HB2	1:J:314:ILE:HD11	1.71	0.72
1:H:154:LYS:HD2	1:K:189:HIS:CD2	2.20	0.72
1:J:146:ARG:HG2	1:J:182:THR:OG1	1.88	0.72
1:H:90:LYS:HE2	1:H:199:THR:CG2	2.20	0.72
1:E:396:ARG:O	1:E:396:ARG:HD3	1.89	0.72
1:C:9:PHE:HD1	1:C:10:PHE:N	1.88	0.72
1:L:20:GLY:O	1:L:24:VAL:HG22	1.90	0.72
1:H:501:THR:HG23	1:L:181:ASP:OD1	1.88	0.72
1:D:250:GLN:HG3	1:D:315:LEU:HD13	1.71	0.72
1:H:223:ILE:HD12	1:H:263:LEU:HD21	1.72	0.72
1:J:234:SER:O	1:J:237:GLY:N	2.22	0.72
1:F:239:THR:N	1:F:240:PRO:HD3	2.04	0.72
1:H:154:LYS:HB3	1:K:189:HIS:NE2	2.04	0.72
2:J:502:ADP:O1A	2:J:502:ADP:H3'	1.87	0.72
1:J:305:PRO:O	1:J:307:ALA:N	2.22	0.72
1:H:24:VAL:HG23	1:H:483:VAL:HG22	1.70	0.72
1:B:471:TYR:O	1:B:473:LEU:HD23	1.89	0.72
1:K:158:ILE:HD12	1:K:165:PRO:CD	2.20	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:392:VAL:HG13	1:K:382:TYR:OH	1.90	0.72
1:C:271:ILE:O	1:C:272:ALA:HB2	1.90	0.72
1:D:137:THR:HG23	1:D:140:GLU:CG	2.20	0.72
1:H:396:ARG:NH1	1:H:396:ARG:HG3	2.00	0.72
1:E:329:LYS:HZ3	1:E:329:LYS:HB3	1.55	0.72
1:G:501:THR:OXT	1:H:181:ASP:HB3	1.90	0.72
1:L:9:PHE:O	1:L:12:MET:HB2	1.89	0.72
1:J:167:PRO:HG3	1:J:176:MET:HG2	1.69	0.72
1:A:109:SER:O	1:A:112:THR:HG23	1.90	0.72
1:H:61:LEU:HD12	1:H:77:GLY:O	1.90	0.72
1:B:323:ILE:O	1:B:323:ILE:HG13	1.89	0.72
1:F:498:VAL:HG23	1:F:499:THR:N	2.03	0.72
1:J:38:GLU:O	1:J:40:GLN:N	2.23	0.72
1:H:436:PHE:CE1	1:L:409:LEU:HD22	2.25	0.72
1:G:392:VAL:HG21	1:L:386:LEU:HD13	1.71	0.72
1:C:289:LYS:HE2	1:C:293:ASP:OD2	1.89	0.72
1:G:271:ILE:HD11	1:G:283:PRO:HA	1.72	0.72
1:H:137:THR:HG23	1:H:140:GLU:HB2	1.72	0.72
1:E:65:ILE:HA	1:E:147:ARG:NH2	2.05	0.71
1:H:280:ILE:HD12	1:H:301:ILE:HD12	1.70	0.71
1:K:68:ASP:OD2	1:K:137:THR:HG21	1.90	0.71
1:A:476:ASP:OD1	1:A:479:THR:HG23	1.90	0.71
1:G:61:LEU:HD12	1:G:77:GLY:O	1.90	0.71
1:G:495:GLU:OE1	1:H:204:SER:HB3	1.90	0.71
1:B:249:VAL:CB	1:B:323:ILE:HG12	2.18	0.71
1:D:337:PRO:HA	1:D:363:ARG:HE	1.54	0.71
1:I:42:ARG:O	1:I:45:VAL:HG12	1.90	0.71
1:G:260:MET:HE3	1:G:288:PRO:HA	1.71	0.71
1:A:90:LYS:HB2	1:A:122:PHE:CD1	2.24	0.71
1:L:360:PHE:HB3	1:L:365:ILE:HB	1.72	0.71
1:B:99:VAL:HA	1:B:103:GLU:OE2	1.90	0.71
1:I:251:GLY:O	1:I:253:GLY:N	2.23	0.71
1:I:48:ILE:HG21	1:I:490:PHE:HD1	1.54	0.71
1:L:219:VAL:HG11	1:L:259:SER:OG	1.90	0.71
1:B:501:THR:C	1:F:146:ARG:HH22	1.94	0.71
1:G:250:GLN:HA	1:G:314:ILE:HD11	1.71	0.71
1:E:153:ALA:HA	1:E:158:ILE:HG22	1.70	0.71
1:B:397:LEU:O	1:B:398:THR:HG23	1.90	0.71
1:E:246:THR:HG22	1:E:320:ASP:OD1	1.90	0.71
1:E:335:ASN:HD22	1:E:336:ALA:N	1.87	0.71
1:I:371:LEU:HD23	1:I:481:ALA:CB	2.19	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:THR:HG23	1:D:181:ASP:OD1	1.91	0.71
1:G:411:MET:HA	1:G:430:ILE:HG22	1.72	0.71
1:E:9:PHE:HD1	1:E:10:PHE:H	1.39	0.71
1:C:104:VAL:HG23	1:C:105:LYS:N	2.04	0.71
1:K:104:VAL:HG23	1:K:105:LYS:N	2.05	0.71
1:H:110:LEU:HD12	1:H:110:LEU:O	1.90	0.71
1:A:150:MET:SD	1:A:186:THR:HG21	2.31	0.71
1:C:238:MET:O	1:C:239:THR:HG22	1.90	0.71
1:H:82:HIS:CG	1:H:112:THR:HG21	2.26	0.71
1:L:9:PHE:CD1	1:L:10:PHE:N	2.50	0.71
1:C:277:ASP:CB	1:C:302:LEU:HD11	2.21	0.71
1:B:114:LYS:O	1:B:117:VAL:HB	1.89	0.71
1:C:47:GLY:HA2	1:C:50:ARG:HD3	1.72	0.71
1:L:227:ILE:O	1:L:227:ILE:HG12	1.90	0.71
1:F:19:ARG:HG3	1:F:19:ARG:HH11	1.55	0.71
1:A:499:THR:OG1	1:E:147:ARG:HD3	1.90	0.71
1:E:314:ILE:HD13	1:E:314:ILE:N	2.00	0.71
1:H:332:THR:HG22	1:H:353:THR:CG2	2.17	0.71
2:H:502:ADP:H3'	2:H:502:ADP:O1A	1.91	0.71
1:K:174:ARG:HG3	1:K:175:GLU:N	2.06	0.71
1:J:436:PHE:CD2	1:K:408:HIS:HB3	2.26	0.71
1:D:106:ALA:O	1:D:109:SER:HB3	1.91	0.71
1:E:6:ASP:N	1:E:6:ASP:OD2	2.23	0.71
1:C:257:LEU:HA	1:C:260:MET:HE2	1.71	0.71
1:C:226:PHE:CD1	1:C:366:MET:HE3	2.25	0.71
1:L:316:GLU:HB3	1:L:338:ARG:HH21	1.55	0.71
1:K:229:GLU:OE1	1:K:229:GLU:HA	1.89	0.71
1:K:173:GLU:HB2	1:K:202:PRO:HG3	1.71	0.71
1:F:315:LEU:HD23	1:F:331:LEU:CD1	2.21	0.71
1:A:53:LYS:HB3	1:A:54:PRO:HD3	1.72	0.71
1:E:257:LEU:HD11	1:E:292:GLU:OE1	1.91	0.71
1:I:332:THR:O	1:I:336:ALA:HB2	1.91	0.70
1:J:414:GLN:CG	1:J:429:PRO:HD2	2.20	0.70
1:J:331:LEU:HD22	1:J:360:PHE:CZ	2.26	0.70
1:F:250:GLN:HA	1:F:314:ILE:HD11	1.72	0.70
1:J:318:ASP:O	1:J:319:CYS:HB3	1.91	0.70
1:H:281:TRP:CD1	1:H:283:PRO:HD3	2.25	0.70
1:L:90:LYS:HB2	1:L:122:PHE:CD1	2.26	0.70
1:A:414:GLN:OE1	1:A:430:ILE:HG12	1.91	0.70
1:C:67:ARG:HD2	1:C:73:GLU:OE1	1.91	0.70
1:K:13:VAL:HG21	1:K:110:LEU:HD11	1.73	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:162:ILE:HG22	1:K:163:ASP:N	2.06	0.70
1:K:203:ILE:HD12	1:K:209:HIS:CE1	2.27	0.70
1:F:224:GLU:HA	1:F:227:ILE:HG22	1.73	0.70
1:H:104:VAL:HG23	1:H:105:LYS:N	2.06	0.70
1:C:351:PRO:HG2	1:C:352:THR:H	1.55	0.70
1:I:368:ILE:HG22	1:I:373:LEU:HD12	1.73	0.70
1:I:236:LEU:HB3	1:I:238:MET:HG2	1.73	0.70
1:A:75:ILE:HG23	1:A:131:ILE:HD13	1.74	0.70
1:E:208:ILE:HG13	1:E:445:GLU:OE2	1.91	0.70
1:B:9:PHE:HD1	1:B:10:PHE:H	1.38	0.70
1:F:274:GLY:N	1:F:314:ILE:HD12	2.05	0.70
1:C:61:LEU:HD12	1:C:77:GLY:O	1.91	0.70
1:C:437:GLN:HA	1:C:440:ILE:HD12	1.73	0.70
1:A:346:GLU:OE2	1:A:478:ARG:NH2	2.24	0.70
1:A:314:ILE:N	1:A:314:ILE:HD13	2.06	0.70
1:L:53:LYS:HB3	1:L:54:PRO:HD3	1.71	0.70
1:F:315:LEU:HD23	1:F:331:LEU:HD12	1.73	0.70
1:H:75:ILE:N	1:H:75:ILE:HD12	2.07	0.70
1:C:248:VAL:HG12	1:C:249:VAL:N	2.06	0.70
1:H:72:TRP:HE1	1:J:498:VAL:HG11	1.55	0.70
1:G:429:PRO:C	1:G:431:VAL:H	1.95	0.70
1:J:414:GLN:HE22	1:J:430:ILE:HG12	1.56	0.70
1:K:236:LEU:HA	1:K:342:LYS:NZ	2.06	0.70
1:C:392:VAL:CG2	1:E:386:LEU:HD22	2.21	0.70
1:G:492:VAL:HG21	2:G:502:ADP:C2	2.26	0.70
1:I:459:ARG:NH2	2:I:502:ADP:O3B	2.25	0.70
1:C:370:ASP:OD2	1:C:370:ASP:N	2.23	0.70
1:F:131:ILE:HD11	1:F:136:TYR:HE2	1.56	0.70
1:I:101:VAL:HG13	1:I:105:LYS:HE3	1.73	0.70
1:L:112:THR:HG22	1:L:124:GLY:HA3	1.74	0.70
1:A:163:ASP:O	1:A:165:PRO:HD3	1.90	0.70
1:A:52:ILE:CD1	1:A:489:VAL:HG12	2.21	0.70
1:C:322:LEU:HD22	1:C:323:ILE:N	2.05	0.70
1:L:250:GLN:HG3	1:L:315:LEU:CD1	2.17	0.70
1:F:478:ARG:NH1	1:F:478:ARG:HG3	2.02	0.70
1:K:250:GLN:HG2	1:K:314:ILE:HD11	1.74	0.70
1:H:471:TYR:HB2	1:H:473:LEU:HD11	1.74	0.70
1:E:86:ARG:NH1	1:E:492:VAL:CG2	2.55	0.70
1:A:498:VAL:O	1:A:501:THR:HG22	1.91	0.69
1:A:181:ASP:OD1	1:F:501:THR:HG23	1.92	0.69
1:I:38:GLU:HB2	1:I:42:ARG:HH21	1.56	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:57:HIS:CE1	1:H:84:HIS:HE1	2.09	0.69
1:A:393:SER:HB3	2:F:502:ADP:O3A	1.91	0.69
1:H:239:THR:O	1:H:239:THR:HG23	1.92	0.69
1:F:160:PRO:HG3	1:F:191:ASP:OD1	1.92	0.69
1:B:331:LEU:HD13	1:B:360:PHE:CZ	2.24	0.69
1:L:239:THR:N	1:L:240:PRO:CD	2.54	0.69
1:G:240:PRO:HG2	1:G:244:ASP:O	1.91	0.69
1:E:421:PHE:HE1	1:E:423:LYS:HG3	1.58	0.69
1:L:153:ALA:HA	1:L:158:ILE:HG22	1.73	0.69
1:C:380:VAL:O	1:C:383:PHE:N	2.22	0.69
1:D:96:SER:O	1:D:99:VAL:HG13	1.90	0.69
1:A:137:THR:HG23	1:A:140:GLU:HG3	1.73	0.69
1:B:277:ASP:HB2	1:B:302:LEU:CD1	2.21	0.69
1:G:250:GLN:CG	1:G:314:ILE:HD11	2.22	0.69
1:H:220:PHE:CD2	1:H:263:LEU:HD23	2.27	0.69
1:G:397:LEU:HD22	1:L:394:TYR:CE2	2.28	0.69
1:F:318:ASP:O	1:F:319:CYS:HB3	1.93	0.69
1:A:39:GLU:O	1:A:41:LYS:HG3	1.92	0.69
1:H:498:VAL:HG23	1:H:499:THR:N	2.03	0.69
1:F:386:LEU:O	1:F:389:LEU:N	2.25	0.69
1:B:424:HIS:CD2	1:B:424:HIS:N	2.59	0.69
2:I:502:ADP:O1A	2:I:502:ADP:H3'	1.92	0.69
1:L:471:TYR:O	1:L:473:LEU:N	2.26	0.69
1:L:250:GLN:CG	1:L:314:ILE:HD11	2.19	0.69
1:I:143:LYS:HG3	1:K:500:PHE:HE2	1.57	0.69
1:I:181:ASP:OD1	1:K:501:THR:HG23	1.93	0.69
1:A:260:MET:CE	1:A:288:PRO:HA	2.21	0.69
1:B:9:PHE:CE2	1:B:103:GLU:HG3	2.27	0.69
1:B:9:PHE:CZ	1:B:103:GLU:HG3	2.26	0.69
1:F:250:GLN:HG2	1:F:314:ILE:CD1	2.23	0.69
1:H:79:ARG:HH11	1:H:127:ALA:HB2	1.56	0.69
1:J:281:TRP:NE1	1:J:283:PRO:HD3	2.08	0.69
1:J:264:HIS:CD2	1:J:288:PRO:HD3	2.26	0.69
1:C:353:THR:HB	1:C:354:PRO:CD	2.23	0.69
1:H:300:SER:HB3	1:H:302:LEU:HD22	1.75	0.69
1:B:292:GLU:O	1:B:296:LEU:HG	1.93	0.69
1:C:284:ASP:OD2	1:C:284:ASP:N	2.25	0.69
1:C:310:TYR:C	1:C:310:TYR:CD2	2.66	0.69
1:C:19:ARG:CZ	1:C:479:THR:HG21	2.21	0.69
1:C:344:ILE:HD11	1:C:360:PHE:CE1	2.28	0.69
2:C:3:ADP:O1A	2:C:3:ADP:H3'	1.93	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:360:PHE:O	1:A:365:ILE:HB	1.91	0.69
1:I:40:GLN:O	1:I:40:GLN:HG3	1.93	0.69
1:B:239:THR:N	1:B:240:PRO:HD3	2.07	0.69
1:J:370:ASP:OD1	1:J:371:LEU:N	2.25	0.69
1:I:83:SER:OG	1:I:85:GLN:NE2	2.26	0.69
1:I:444:SER:HB2	1:I:446:LYS:HG2	1.75	0.69
1:E:95:TYR:OH	1:E:145:THR:HG22	1.93	0.69
1:B:118:VAL:HG23	1:B:120:VAL:HG23	1.75	0.69
1:K:500:PHE:CE1	1:L:500:PHE:HZ	2.09	0.69
1:J:411:MET:HA	1:J:430:ILE:CG2	2.22	0.69
1:B:57:HIS:ND1	1:D:155:LYS:HE2	2.08	0.69
1:J:331:LEU:HD22	1:J:360:PHE:HZ	1.55	0.69
1:C:101:VAL:O	1:C:104:VAL:HG22	1.93	0.69
1:F:250:GLN:HG3	1:F:315:LEU:CD1	2.23	0.69
1:F:250:GLN:HG3	1:F:315:LEU:HD11	1.74	0.69
1:B:81:GLN:HG3	1:B:157:PHE:CE1	2.27	0.69
1:K:195:HIS:O	1:K:201:LYS:HE3	1.93	0.69
1:F:104:VAL:HG23	1:F:105:LYS:N	2.06	0.69
1:E:61:LEU:N	1:E:61:LEU:HD23	2.06	0.69
1:C:240:PRO:CD	1:C:245:LYS:HZ2	2.04	0.69
1:K:346:GLU:OE2	1:K:351:PRO:HD2	1.93	0.69
1:D:249:VAL:HG23	1:D:323:ILE:HG13	1.74	0.69
1:A:280:ILE:HG23	1:A:307:ALA:HB1	1.74	0.69
1:D:114:LYS:HG3	1:D:371:LEU:O	1.92	0.69
1:H:482:TYR:O	1:H:486:ILE:HG12	1.93	0.69
2:F:502:ADP:O1A	2:F:502:ADP:H3'	1.93	0.69
1:D:192:ILE:HG12	1:D:192:ILE:O	1.92	0.69
1:E:250:GLN:HG3	1:E:315:LEU:HD11	1.75	0.69
1:L:247:PHE:CB	1:L:321:ILE:HG13	2.23	0.69
1:B:129:VAL:O	1:B:131:ILE:HG22	1.92	0.69
1:D:24:VAL:HG12	1:D:28:LEU:HD22	1.75	0.68
1:L:260:MET:HE2	1:L:288:PRO:HA	1.74	0.68
1:L:371:LEU:HD22	1:L:482:TYR:CD2	2.28	0.68
1:B:295:LYS:O	1:B:295:LYS:HG2	1.92	0.68
1:J:233:MET:HE1	1:J:236:LEU:HD12	1.74	0.68
1:G:65:ILE:HD13	1:G:144:ILE:HG12	1.75	0.68
1:L:248:VAL:HG22	1:L:271:ILE:HG22	1.76	0.68
1:H:233:MET:HE1	1:H:236:LEU:CD1	2.22	0.68
1:K:158:ILE:HG23	1:K:158:ILE:O	1.93	0.68
1:I:57:HIS:HD2	1:L:155:LYS:HE3	1.56	0.68
1:G:368:ILE:HG21	1:G:373:LEU:HD13	1.74	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:319:CYS:SG	1:C:320:ASP:N	2.65	0.68
1:E:67:ARG:NH2	1:E:135:ASN:O	2.25	0.68
1:H:147:ARG:HH11	1:H:147:ARG:HG3	1.58	0.68
1:G:409:LEU:HD13	1:L:436:PHE:CE1	2.28	0.68
1:L:314:ILE:N	1:L:314:ILE:HD13	2.08	0.68
1:K:291:LEU:CD1	1:K:301:ILE:HG22	2.23	0.68
1:J:250:GLN:OE1	1:J:330:GLN:HG2	1.93	0.68
1:F:244:ASP:OD1	1:F:245:LYS:HG3	1.93	0.68
1:B:248:VAL:HG13	1:B:272:ALA:O	1.94	0.68
1:B:271:ILE:HG13	1:B:283:PRO:HA	1.75	0.68
1:I:478:ARG:O	1:I:479:THR:C	2.30	0.68
1:A:411:MET:HG2	1:A:430:ILE:CG2	2.23	0.68
1:K:252:PHE:HB3	1:K:275:GLU:OE1	1.93	0.68
1:I:27:LYS:HG2	1:I:31:ASP:OD2	1.93	0.68
1:E:246:THR:HG22	1:E:320:ASP:CG	2.14	0.68
1:C:359:ILE:H	1:C:359:ILE:HD12	1.59	0.68
1:H:339:VAL:HG21	1:H:360:PHE:HE1	1.59	0.68
1:D:337:PRO:O	1:D:363:ARG:NH2	2.26	0.68
1:F:414:GLN:OE1	1:F:430:ILE:HG12	1.93	0.68
1:K:394:TYR:HB2	1:K:445:GLU:HG3	1.76	0.68
1:G:39:GLU:O	1:G:41:LYS:N	2.26	0.68
1:J:429:PRO:O	1:J:431:VAL:N	2.25	0.68
1:J:87:THR:HG22	1:J:88:PRO:N	2.08	0.68
1:L:217:ARG:HH11	1:L:217:ARG:HB3	1.58	0.68
1:B:196:ALA:HA	1:B:388:ASN:HD22	1.59	0.68
1:G:17:PHE:CE1	1:G:486:ILE:HD12	2.28	0.68
1:K:93:ILE:CD1	1:K:165:PRO:HB3	2.24	0.68
1:G:19:ARG:HH11	1:G:479:THR:HG21	1.57	0.68
1:A:433:THR:HG23	1:B:412:SER:OG	1.92	0.68
1:B:257:LEU:HD21	1:B:292:GLU:HG3	1.76	0.68
1:B:49:LEU:HD12	1:B:49:LEU:H	1.58	0.68
1:H:355:GLU:O	1:H:359:ILE:HD13	1.94	0.68
1:K:150:MET:O	1:K:154:LYS:HG3	1.93	0.68
1:D:213:SER:HB2	1:D:217:ARG:HD2	1.75	0.68
1:A:34:THR:O	1:A:34:THR:HG22	1.92	0.68
1:C:335:ASN:HA	1:C:338:ARG:HH12	1.59	0.68
1:C:176:MET:HG3	1:C:198:VAL:HG21	1.76	0.68
1:A:186:THR:CG2	1:A:187:ILE:HG12	2.24	0.68
1:B:261:ARG:NH1	1:B:261:ARG:HG3	2.01	0.68
1:A:24:VAL:HG12	1:A:28:LEU:HB2	1.74	0.68
1:C:49:LEU:N	1:C:49:LEU:HD12	2.08	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:346:GLU:OE2	1:B:478:ARG:NH2	2.26	0.68
1:B:424:HIS:H	1:B:424:HIS:HD2	1.41	0.68
1:J:281:TRP:CD1	1:J:283:PRO:HD3	2.29	0.68
1:C:239:THR:N	1:C:240:PRO:CD	2.45	0.68
1:I:68:ASP:OD1	1:I:140:GLU:HG3	1.93	0.68
1:I:412:SER:HA	1:K:433:THR:HG22	1.76	0.68
2:L:502:ADP:H3'	2:L:502:ADP:O1A	1.92	0.68
1:D:501:THR:C	1:E:146:ARG:HH22	1.97	0.68
1:J:33:ARG:O	1:J:35:ARG:N	2.27	0.68
1:C:239:THR:HG23	1:C:239:THR:O	1.94	0.68
1:I:75:ILE:HG13	1:I:131:ILE:HD11	1.76	0.68
1:A:417:LEU:HD11	1:F:417:LEU:CD2	2.23	0.68
1:G:260:MET:CE	1:G:288:PRO:HA	2.24	0.68
1:F:281:TRP:CZ2	1:F:283:PRO:HG3	2.29	0.68
2:K:502:ADP:O1A	2:K:502:ADP:H3'	1.93	0.68
1:C:142:GLU:OE1	1:C:178:TRP:CE2	2.46	0.68
1:C:346:GLU:C	1:C:373:LEU:HD23	2.15	0.67
1:K:478:ARG:HG2	1:K:478:ARG:NH1	1.99	0.67
1:D:403:ARG:HG2	1:D:403:ARG:HH11	1.59	0.67
1:H:274:GLY:O	1:H:301:ILE:HD11	1.94	0.67
1:J:314:ILE:N	1:J:314:ILE:HD13	2.10	0.67
1:L:16:PHE:CE2	1:L:478:ARG:HD2	2.28	0.67
1:J:436:PHE:CZ	1:J:440:ILE:HD11	2.29	0.67
1:K:239:THR:HG23	1:K:239:THR:O	1.93	0.67
1:L:316:GLU:HB3	1:L:338:ARG:NH2	2.09	0.67
1:E:432:PRO:HB3	1:E:436:PHE:CD1	2.29	0.67
1:L:167:PRO:CG	1:L:176:MET:HG2	2.23	0.67
1:C:53:LYS:HB3	1:C:54:PRO:HD3	1.76	0.67
1:K:335:ASN:HA	1:K:338:ARG:HD3	1.76	0.67
1:J:363:ARG:O	1:J:365:ILE:HG12	1.95	0.67
1:K:199:THR:HA	1:K:384:GLU:OE1	1.93	0.67
1:L:436:PHE:O	1:L:440:ILE:HG13	1.94	0.67
1:G:193:ASN:OD1	1:G:389:LEU:HD23	1.94	0.67
1:C:87:THR:HB	1:C:88:PRO:CD	2.20	0.67
1:I:227:ILE:CD1	1:I:343:ILE:HD12	2.23	0.67
1:F:142:GLU:HG3	1:F:178:TRP:CD2	2.29	0.67
1:F:246:THR:HG23	1:F:320:ASP:OD1	1.93	0.67
1:G:459:ARG:O	1:G:463:GLN:HG3	1.94	0.67
1:A:339:VAL:HG21	1:A:360:PHE:HE1	1.58	0.67
1:E:33:ARG:HH11	1:E:33:ARG:HB2	1.60	0.67
1:I:327:SER:OG	1:I:330:GLN:NE2	2.26	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:323:ILE:HG23	1:K:345:ALA:HB3	1.76	0.67
1:K:354:PRO:O	1:K:357:ASP:HB2	1.95	0.67
1:L:335:ASN:HD22	1:L:335:ASN:N	1.93	0.67
1:K:360:PHE:HB3	1:K:365:ILE:HB	1.76	0.67
1:B:175:GLU:HA	1:B:178:TRP:CE3	2.29	0.67
1:C:344:ILE:HD11	1:C:365:ILE:HG21	1.76	0.67
1:L:315:LEU:H	1:L:315:LEU:HD12	1.60	0.67
1:D:393:SER:OG	1:D:396:ARG:HB2	1.94	0.67
1:J:501:THR:OXT	1:K:181:ASP:OD1	2.12	0.67
1:H:436:PHE:CZ	1:L:409:LEU:HD22	2.29	0.67
1:E:371:LEU:HD22	1:E:482:TYR:CE2	2.30	0.67
1:H:29:VAL:O	1:H:30:GLU:O	2.12	0.67
1:G:201:LYS:NZ	1:G:388:ASN:HD21	1.93	0.67
1:I:212:ILE:HD12	1:I:212:ILE:N	2.10	0.67
1:I:386:LEU:HD13	1:J:392:VAL:HG21	1.75	0.67
1:A:348:ALA:O	1:A:351:PRO:HD3	1.94	0.67
1:K:141:LEU:O	1:K:145:THR:CG2	2.43	0.67
1:I:33:ARG:HD3	1:I:33:ARG:O	1.95	0.67
1:B:498:VAL:HG23	1:B:499:THR:N	2.08	0.67
1:C:280:ILE:HG22	1:C:281:TRP:N	2.10	0.67
1:H:121:PRO:CG	1:H:382:TYR:HE2	2.07	0.67
1:D:213:SER:HB2	1:D:217:ARG:CD	2.24	0.67
1:F:329:LYS:HZ2	1:F:329:LYS:H	1.41	0.67
1:I:217:ARG:HB3	1:I:217:ARG:HH11	1.59	0.67
1:K:52:ILE:HG12	1:K:493:TYR:HE2	1.60	0.67
1:D:99:VAL:HG23	1:D:100:SER:H	1.59	0.67
1:A:250:GLN:HG2	1:A:314:ILE:CD1	2.21	0.67
1:E:479:THR:O	1:E:483:VAL:HG23	1.94	0.67
1:K:79:ARG:HD2	1:K:127:ALA:HB2	1.77	0.67
1:D:371:LEU:HD23	1:D:481:ALA:CB	2.24	0.67
1:A:387:LYS:HE3	1:A:445:GLU:OE2	1.95	0.67
1:E:223:ILE:HD12	1:E:263:LEU:HD21	1.76	0.67
1:G:331:LEU:O	1:G:353:THR:HG23	1.94	0.67
1:B:316:GLU:OE2	1:B:338:ARG:HB3	1.95	0.67
1:A:498:VAL:HG23	1:A:499:THR:N	2.09	0.67
1:B:75:ILE:HG12	1:B:144:ILE:CD1	2.25	0.67
1:D:59:LEU:HD21	1:D:61:LEU:HD22	1.75	0.67
1:E:336:ALA:HB3	1:E:337:PRO:HD3	1.76	0.67
1:B:137:THR:CG2	1:B:140:GLU:HG3	2.24	0.67
1:D:371:LEU:HD23	1:D:481:ALA:HB1	1.77	0.67
1:A:164:VAL:HA	1:A:197:CYS:O	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:356:ALA:HB1	1:K:360:PHE:HE2	1.59	0.67
1:J:421:PHE:CD1	1:J:422:GLY:N	2.63	0.67
1:C:498:VAL:HG23	1:C:499:THR:N	2.08	0.67
1:G:17:PHE:CE2	1:G:53:LYS:HB2	2.30	0.67
1:L:219:VAL:HG22	1:L:373:LEU:CD2	2.25	0.67
1:B:394:TYR:HB2	1:B:445:GLU:HG3	1.77	0.67
1:K:360:PHE:HA	1:K:365:ILE:HG13	1.77	0.67
1:H:87:THR:HB	1:H:88:PRO:HD3	1.77	0.67
1:J:99:VAL:HG23	1:J:130:LYS:HD3	1.76	0.67
1:I:59:LEU:HB2	1:I:157:PHE:CE2	2.30	0.67
1:G:181:ASP:OD1	1:L:501:THR:HG23	1.94	0.66
1:K:411:MET:HG2	1:K:430:ILE:HG22	1.77	0.66
1:K:99:VAL:HG23	1:K:130:LYS:HG3	1.76	0.66
1:A:501:THR:OG1	1:B:181:ASP:OD1	2.12	0.66
1:B:79:ARG:HH22	1:B:165:PRO:HA	1.60	0.66
1:K:248:VAL:O	1:K:322:LEU:HD23	1.95	0.66
1:E:221:HIS:O	1:E:222:GLY:C	2.34	0.66
1:E:90:LYS:HD2	1:E:164:VAL:O	1.95	0.66
1:B:257:LEU:HD12	1:B:257:LEU:C	2.14	0.66
1:F:332:THR:N	1:F:335:ASN:HD21	1.93	0.66
1:C:410:LEU:O	1:C:413:VAL:HG23	1.95	0.66
1:J:498:VAL:HG23	1:J:499:THR:N	2.10	0.66
1:F:90:LYS:HE2	1:F:199:THR:CG2	2.25	0.66
1:H:175:GLU:O	1:H:179:ILE:HG12	1.95	0.66
1:D:453:LEU:HD23	1:D:457:MET:HG2	1.76	0.66
1:E:239:THR:HG23	1:E:239:THR:O	1.95	0.66
1:B:217:ARG:HG2	1:B:221:HIS:CE1	2.30	0.66
1:F:331:LEU:HD23	1:F:360:PHE:CZ	2.30	0.66
1:B:280:ILE:CG2	1:B:281:TRP:N	2.57	0.66
1:I:296:LEU:HD13	1:I:297:GLN:N	2.10	0.66
1:H:72:TRP:NE1	1:J:498:VAL:HG11	2.10	0.66
1:L:101:VAL:O	1:L:104:VAL:HG22	1.94	0.66
1:H:57:HIS:ND1	1:H:84:HIS:CE1	2.57	0.66
1:E:176:MET:HE3	1:E:179:ILE:CD1	2.25	0.66
1:K:59:LEU:CD2	1:K:61:LEU:HD21	2.26	0.66
1:E:238:MET:O	1:E:239:THR:C	2.33	0.66
1:J:304:PHE:CD1	1:J:305:PRO:HD2	2.30	0.66
1:G:233:MET:HE1	1:G:236:LEU:HD12	1.78	0.66
2:B:2:ADP:O1A	2:B:2:ADP:H3'	1.96	0.66
1:I:92:GLY:HA2	1:I:166:ALA:O	1.93	0.66
1:K:497:GLY:O	1:K:498:VAL:HG13	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:219:VAL:O	1:K:220:PHE:O	2.14	0.66
1:L:104:VAL:HG23	1:L:105:LYS:N	2.10	0.66
1:A:281:TRP:HD1	1:A:282:ASN:H	1.43	0.66
1:C:220:PHE:CD1	1:C:221:HIS:N	2.63	0.66
1:J:346:GLU:OE2	1:J:351:PRO:HD2	1.95	0.66
1:E:345:ALA:HB1	1:E:373:LEU:CD2	2.26	0.66
1:I:485:ALA:O	1:I:489:VAL:HG23	1.95	0.66
1:G:57:HIS:HD2	1:G:84:HIS:CE1	2.13	0.66
1:D:294:PHE:CZ	1:D:304:PHE:HA	2.29	0.66
1:F:92:GLY:HA2	1:F:166:ALA:O	1.96	0.66
1:G:212:ILE:H	1:G:212:ILE:CD1	2.00	0.66
1:A:96:SER:O	1:A:99:VAL:HG13	1.95	0.66
1:B:250:GLN:HG2	1:B:314:ILE:HD11	1.77	0.66
1:B:314:ILE:CD1	1:B:314:ILE:H	2.09	0.66
1:C:90:LYS:NZ	1:C:164:VAL:HG12	2.10	0.66
1:E:332:THR:HA	1:E:353:THR:HG21	1.78	0.66
1:H:281:TRP:NE1	1:H:283:PRO:HD3	2.11	0.66
1:K:203:ILE:HD12	1:K:209:HIS:ND1	2.11	0.66
1:L:39:GLU:CB	1:L:41:LYS:HG3	2.26	0.66
1:H:257:LEU:HD12	1:H:257:LEU:C	2.16	0.66
1:I:417:LEU:HD11	1:K:417:LEU:HD23	1.77	0.66
1:J:65:ILE:HG12	1:J:75:ILE:HD11	1.78	0.66
1:I:406:ASN:HD22	1:J:409:LEU:CD2	2.08	0.66
1:I:410:LEU:HD21	1:J:409:LEU:CD1	2.26	0.66
1:E:137:THR:HG23	1:E:140:GLU:CG	2.24	0.66
1:I:396:ARG:HD3	1:I:396:ARG:O	1.96	0.66
1:K:118:VAL:HG11	1:K:375:ALA:CB	2.26	0.66
1:A:396:ARG:HG3	1:A:396:ARG:HH11	1.60	0.66
1:D:500:PHE:HB3	1:E:142:GLU:OE2	1.95	0.66
1:E:143:LYS:NZ	1:E:147:ARG:HH21	1.94	0.66
1:F:239:THR:O	1:F:239:THR:HG23	1.96	0.66
1:I:32:LEU:O	1:I:33:ARG:CB	2.44	0.66
1:K:87:THR:CB	1:K:88:PRO:CD	2.71	0.66
1:A:20:GLY:O	1:A:24:VAL:HG23	1.96	0.66
2:A:1:ADP:O1B	1:B:396:ARG:NH1	2.29	0.66
1:C:346:GLU:O	1:C:373:LEU:HD23	1.96	0.66
1:D:316:GLU:O	1:D:317:ALA:O	2.13	0.66
1:A:274:GLY:HA3	1:A:314:ILE:HD12	1.76	0.66
1:L:223:ILE:O	1:L:227:ILE:HG22	1.96	0.66
1:A:28:LEU:HD12	1:A:32:LEU:CD2	2.26	0.66
1:A:386:LEU:CD1	1:B:392:VAL:HG21	2.26	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:263:LEU:O	1:E:268:ALA:HB3	1.95	0.66
1:K:118:VAL:HG23	1:K:120:VAL:HG23	1.78	0.66
1:C:155:LYS:NZ	1:F:81:GLN:OE1	2.26	0.66
1:I:114:LYS:HG3	1:I:371:LEU:O	1.96	0.65
1:K:17:PHE:HE2	1:K:53:LYS:HB2	1.61	0.65
1:B:471:TYR:CE2	1:B:483:VAL:HG11	2.31	0.65
1:K:153:ALA:HA	1:K:158:ILE:HG22	1.78	0.65
1:C:118:VAL:HG12	1:C:456:THR:CG2	2.26	0.65
1:L:335:ASN:N	1:L:335:ASN:ND2	2.44	0.65
1:J:81:GLN:HG2	1:J:89:CYS:SG	2.36	0.65
1:L:39:GLU:HB2	1:L:41:LYS:HG3	1.77	0.65
1:E:390:ASN:O	1:E:392:VAL:HG23	1.95	0.65
1:C:43:ASN:O	1:C:46:ARG:HG2	1.94	0.65
1:D:421:PHE:CD2	1:D:422:GLY:N	2.64	0.65
1:L:300:SER:OG	1:L:301:ILE:N	2.29	0.65
1:K:345:ALA:HB1	1:K:373:LEU:HD21	1.78	0.65
1:H:274:GLY:HA3	1:H:314:ILE:HD12	1.77	0.65
1:C:280:ILE:O	1:C:281:TRP:CB	2.44	0.65
1:L:92:GLY:HA2	1:L:166:ALA:O	1.96	0.65
1:E:86:ARG:NH1	1:E:492:VAL:HG22	2.11	0.65
1:E:246:THR:HG23	1:E:320:ASP:H	1.61	0.65
1:K:141:LEU:O	1:K:145:THR:HG23	1.96	0.65
1:H:476:ASP:OD2	1:H:479:THR:OG1	2.13	0.65
1:C:12:MET:O	1:C:16:PHE:HD1	1.80	0.65
1:C:274:GLY:O	1:C:275:GLU:HB2	1.96	0.65
1:A:201:LYS:HD3	1:A:205:GLN:O	1.96	0.65
1:G:416:SER:OG	1:L:431:VAL:HG13	1.96	0.65
1:G:250:GLN:HE21	1:G:314:ILE:CD1	2.10	0.65
1:I:337:PRO:O	1:I:363:ARG:NH2	2.29	0.65
1:D:47:GLY:HA2	1:D:50:ARG:CG	2.20	0.65
1:D:19:ARG:O	1:D:23:ILE:HG13	1.96	0.65
1:I:9:PHE:HA	1:I:12:MET:HE2	1.79	0.65
1:K:344:ILE:HD11	1:K:365:ILE:HG21	1.78	0.65
1:J:421:PHE:CE1	1:J:423:LYS:HB2	2.31	0.65
1:C:201:LYS:NZ	1:C:388:ASN:HD21	1.93	0.65
1:E:281:TRP:O	1:E:282:ASN:HB2	1.96	0.65
1:E:280:ILE:HG23	1:E:307:ALA:HB1	1.78	0.65
1:K:318:ASP:O	1:K:319:CYS:HB3	1.95	0.65
1:H:50:ARG:CZ	1:H:50:ARG:HB2	2.25	0.65
1:A:411:MET:HA	1:A:430:ILE:HG22	1.78	0.65
1:F:497:GLY:CA	1:F:501:THR:HA	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:501:THR:HG23	1:K:181:ASP:OD1	1.96	0.65
1:J:432:PRO:HA	1:K:412:SER:OG	1.96	0.65
1:A:72:TRP:NE1	1:E:498:VAL:HG21	2.12	0.65
1:A:201:LYS:HG2	1:A:384:GLU:OE1	1.97	0.65
1:F:315:LEU:HD12	1:F:315:LEU:H	1.62	0.65
1:B:386:LEU:HD13	1:F:392:VAL:HG21	1.77	0.65
1:H:260:MET:HE3	1:H:288:PRO:HA	1.77	0.65
1:B:363:ARG:O	1:B:365:ILE:HG12	1.96	0.65
1:D:414:GLN:OE1	1:D:430:ILE:HG12	1.96	0.65
1:J:497:GLY:HA3	1:J:501:THR:HA	1.78	0.65
1:H:343:ILE:HG12	1:H:366:MET:HB3	1.79	0.65
1:H:368:ILE:CG2	1:H:373:LEU:HD13	2.27	0.65
1:K:229:GLU:HG3	1:K:231:SER:OG	1.95	0.65
1:L:339:VAL:HG21	1:L:360:PHE:CE1	2.31	0.65
1:J:131:ILE:HD11	1:J:136:TYR:OH	1.97	0.65
1:E:75:ILE:HG23	1:E:131:ILE:HD13	1.78	0.65
1:C:344:ILE:HD12	1:C:367:VAL:HG22	1.77	0.65
1:D:396:ARG:HG2	1:D:396:ARG:HH11	1.62	0.65
1:G:208:ILE:HG13	1:G:387:LYS:CD	2.26	0.65
1:A:433:THR:O	1:A:436:PHE:N	2.29	0.65
1:C:420:LYS:O	1:C:420:LYS:CG	2.44	0.65
1:C:482:TYR:O	1:C:486:ILE:HG12	1.97	0.65
1:G:176:MET:CE	1:G:179:ILE:HD12	2.27	0.65
1:I:477:LEU:HD22	1:I:477:LEU:H	1.61	0.65
1:K:301:ILE:CD1	1:K:302:LEU:HD12	2.27	0.65
1:D:47:GLY:CA	1:D:50:ARG:HG2	2.21	0.65
1:E:150:MET:SD	1:E:186:THR:HG21	2.36	0.65
1:D:86:ARG:NH2	2:D:4:ADP:O4'	2.29	0.65
1:K:146:ARG:O	1:K:149:THR:N	2.29	0.65
1:C:227:ILE:O	1:C:233:MET:HG3	1.96	0.65
1:K:332:THR:O	1:K:336:ALA:HB2	1.97	0.65
1:B:423:LYS:HG2	1:B:426:GLY:N	2.11	0.65
1:G:165:PRO:O	1:G:198:VAL:HG23	1.97	0.65
1:J:259:SER:O	1:J:263:LEU:HB2	1.97	0.65
1:C:32:LEU:O	1:C:33:ARG:HB3	1.97	0.65
1:D:498:VAL:N	1:D:501:THR:HB	2.12	0.65
1:G:33:ARG:CB	1:G:33:ARG:HH11	2.10	0.65
1:C:119:ASP:OD1	2:C:3:ADP:H2'	1.97	0.65
1:K:264:HIS:O	1:K:266:PHE:N	2.29	0.65
1:L:247:PHE:HZ	1:L:260:MET:HG3	1.60	0.65
1:K:49:LEU:N	1:K:49:LEU:HD12	2.12	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:68:ASP:OD2	1:H:137:THR:HG21	1.97	0.65
1:I:406:ASN:ND2	1:J:409:LEU:HD23	2.12	0.65
1:B:75:ILE:HG12	1:B:144:ILE:HD13	1.78	0.64
1:D:396:ARG:HH11	1:D:396:ARG:CG	2.10	0.64
1:H:45:VAL:O	1:H:45:VAL:HG13	1.97	0.64
1:C:217:ARG:NH1	1:C:221:HIS:HE1	1.90	0.64
1:J:90:LYS:HZ3	1:J:164:VAL:HG12	1.62	0.64
1:F:19:ARG:O	1:F:23:ILE:HG13	1.97	0.64
1:J:332:THR:O	1:J:336:ALA:HB2	1.97	0.64
1:G:61:LEU:HD12	1:G:61:LEU:H	1.62	0.64
1:H:94:ARG:HB2	1:H:168:ASP:OD2	1.97	0.64
1:E:82:HIS:CG	1:E:112:THR:HG21	2.32	0.64
1:K:174:ARG:HG3	1:K:175:GLU:OE1	1.97	0.64
1:I:238:MET:HE1	1:I:342:LYS:HG3	1.79	0.64
1:F:250:GLN:HG2	1:F:314:ILE:HD11	1.79	0.64
1:J:387:LYS:HE3	1:J:393:SER:HA	1.80	0.64
1:C:20:GLY:O	1:C:24:VAL:HG23	1.97	0.64
1:L:294:PHE:HE2	1:L:301:ILE:C	1.99	0.64
1:A:429:PRO:C	1:A:431:VAL:H	2.01	0.64
1:L:252:PHE:HE2	1:L:260:MET:HE1	1.63	0.64
1:H:85:GLN:HG3	1:H:492:VAL:HG21	1.79	0.64
1:B:396:ARG:HG3	1:B:396:ARG:NH1	2.07	0.64
1:K:168:ASP:O	1:K:170:SER:N	2.29	0.64
1:L:42:ARG:O	1:L:45:VAL:HG12	1.97	0.64
1:B:335:ASN:HD22	1:B:336:ALA:H	1.45	0.64
1:I:37:SER:O	1:I:38:GLU:HG3	1.97	0.64
1:F:47:GLY:CA	1:F:50:ARG:HG2	2.24	0.64
1:J:181:ASP:O	1:J:182:THR:C	2.34	0.64
1:C:200:GLY:N	1:C:384:GLU:OE1	2.29	0.64
1:D:39:GLU:HB3	1:D:41:LYS:HG2	1.78	0.64
1:H:305:PRO:O	1:H:306:LYS:HB2	1.96	0.64
1:I:280:ILE:HG23	1:I:307:ALA:HB1	1.77	0.64
1:E:143:LYS:HE3	1:E:147:ARG:HH21	1.62	0.64
1:C:371:LEU:HD23	1:C:481:ALA:HB1	1.78	0.64
1:I:250:GLN:HG3	1:I:315:LEU:HD11	1.79	0.64
1:A:428:ILE:CG2	1:H:428:ILE:HG21	2.28	0.64
1:I:217:ARG:HG2	1:I:262:TYR:CE2	2.32	0.64
1:I:175:GLU:HA	1:I:178:TRP:CE3	2.32	0.64
1:D:281:TRP:O	1:D:282:ASN:HB2	1.98	0.64
1:B:497:GLY:CA	1:B:501:THR:HA	2.27	0.64
1:J:85:GLN:OE1	2:J:502:ADP:N1	2.31	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:13:VAL:HG12	1:C:14:GLU:N	2.13	0.64
1:B:250:GLN:HG2	1:B:314:ILE:CD1	2.28	0.64
1:I:75:ILE:HG12	1:I:131:ILE:HD11	1.79	0.64
1:L:414:GLN:OE1	1:L:428:ILE:HA	1.97	0.64
1:K:226:PHE:O	1:K:228:ASN:N	2.26	0.64
1:I:436:PHE:O	1:I:440:ILE:HG13	1.97	0.64
1:B:65:ILE:HD13	1:B:144:ILE:CD1	2.28	0.64
1:H:274:GLY:O	1:H:275:GLU:HB2	1.96	0.64
1:H:248:VAL:HG11	1:H:314:ILE:HB	1.80	0.64
1:A:353:THR:HG23	1:A:356:ALA:H	1.61	0.64
1:F:431:VAL:HG13	1:F:431:VAL:O	1.98	0.64
1:D:227:ILE:HD11	1:D:321:ILE:HD11	1.78	0.64
1:K:227:ILE:HD11	1:K:321:ILE:HD11	1.79	0.64
1:E:420:LYS:NZ	1:E:420:LYS:O	2.19	0.64
1:I:484:ASN:ND2	1:I:488:LYS:HE3	2.13	0.64
1:K:280:ILE:HG22	1:K:281:TRP:N	2.13	0.64
1:B:433:THR:HG23	1:F:412:SER:OG	1.97	0.64
1:E:111:MET:HB3	1:E:124:GLY:HA2	1.79	0.64
1:H:356:ALA:O	1:H:360:PHE:CD2	2.51	0.64
1:C:42:ARG:O	1:C:45:VAL:HG12	1.97	0.64
1:D:301:ILE:HD12	1:D:301:ILE:C	2.18	0.64
1:J:428:ILE:O	1:J:428:ILE:HG22	1.97	0.64
1:K:465:MET:O	1:K:468:ALA:N	2.31	0.64
1:I:148:PHE:O	1:I:152:LEU:HB2	1.98	0.64
1:J:349:ASN:OD1	1:J:374:ASN:ND2	2.31	0.64
1:C:331:LEU:HD23	1:C:335:ASN:HD21	1.61	0.64
1:C:429:PRO:C	1:C:431:VAL:H	1.94	0.64
1:A:345:ALA:HB1	1:A:373:LEU:HD21	1.80	0.64
1:K:13:VAL:HG21	1:K:110:LEU:CD1	2.28	0.64
1:L:428:ILE:HD13	1:L:428:ILE:N	2.12	0.64
1:L:176:MET:HE3	1:L:179:ILE:HD12	1.80	0.64
1:J:68:ASP:OD2	1:J:137:THR:HG21	1.97	0.64
1:J:379:THR:O	1:J:382:TYR:HB3	1.97	0.64
1:F:68:ASP:N	1:F:140:GLU:OE2	2.29	0.64
1:I:261:ARG:NH1	1:I:292:GLU:OE1	2.31	0.64
1:L:423:LYS:HG3	1:L:425:GLY:H	1.63	0.64
1:B:147:ARG:NE	1:D:499:THR:OG1	2.31	0.64
1:I:202:PRO:HD2	1:I:205:GLN:HB2	1.80	0.64
1:I:339:VAL:HG21	1:I:360:PHE:HE1	1.61	0.64
1:D:98:ASP:CA	1:D:130:LYS:HE3	2.26	0.64
1:D:314:ILE:CD1	1:D:314:ILE:H	2.11	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:33:ARG:HH12	1:F:45:VAL:HG11	1.62	0.64
1:A:65:ILE:HD13	1:A:144:ILE:CG1	2.27	0.64
1:I:501:THR:HG23	1:J:181:ASP:OD1	1.97	0.64
1:C:131:ILE:HG13	1:C:136:TYR:CE2	2.33	0.64
1:A:331:LEU:O	1:A:353:THR:HG22	1.98	0.63
1:D:360:PHE:HD1	1:D:365:ILE:HG21	1.63	0.63
1:L:239:THR:O	1:L:239:THR:HG23	1.97	0.63
1:F:414:GLN:HE22	1:F:430:ILE:CD1	2.11	0.63
1:G:281:TRP:CZ2	1:G:283:PRO:HG3	2.33	0.63
1:I:484:ASN:HD21	1:I:488:LYS:NZ	1.96	0.63
1:G:232:TYR:H	1:G:232:TYR:HD1	1.45	0.63
1:B:65:ILE:HA	1:B:147:ARG:CZ	2.28	0.63
1:I:322:LEU:HD12	1:I:344:ILE:HG23	1.79	0.63
1:I:93:ILE:HG23	1:I:127:ALA:CB	2.23	0.63
1:K:45:VAL:C	1:K:47:GLY:H	2.02	0.63
1:D:352:THR:HG23	1:D:478:ARG:NH2	2.13	0.63
1:I:238:MET:CE	1:I:342:LYS:HG3	2.28	0.63
1:B:498:VAL:HG11	1:D:72:TRP:NE1	2.13	0.63
1:E:79:ARG:NH1	1:E:127:ALA:HB2	2.12	0.63
1:G:61:LEU:HD12	1:G:61:LEU:N	2.13	0.63
1:J:101:VAL:O	1:J:104:VAL:HG22	1.98	0.63
1:E:378:VAL:HA	1:E:381:SER:OG	1.98	0.63
1:F:252:PHE:CE2	1:F:257:LEU:HB2	2.33	0.63
1:L:233:MET:HA	1:L:236:LEU:HD12	1.81	0.63
1:B:24:VAL:CG2	1:B:483:VAL:HG13	2.27	0.63
1:H:487:GLU:O	1:H:490:PHE:HB3	1.99	0.63
1:A:261:ARG:HG3	1:A:261:ARG:HH11	1.63	0.63
1:L:315:LEU:CD1	1:L:315:LEU:H	2.11	0.63
1:B:439:ARG:HG3	1:B:439:ARG:NH1	1.97	0.63
1:C:498:VAL:HG11	1:F:72:TRP:HE1	1.61	0.63
1:K:96:SER:HA	1:K:131:ILE:O	1.99	0.63
1:J:10:PHE:HD1	1:J:106:ALA:HB2	1.63	0.63
1:E:164:VAL:HG13	1:E:197:CYS:C	2.19	0.63
1:B:271:ILE:HD11	1:B:283:PRO:HG3	1.80	0.63
1:G:322:LEU:HB3	1:G:344:ILE:HD13	1.80	0.63
1:I:229:GLU:O	1:I:230:ALA:C	2.37	0.63
1:B:171:THR:HG22	1:B:175:GLU:OE2	1.99	0.63
1:K:255:VAL:HG13	1:K:256:GLY:N	2.14	0.63
1:D:249:VAL:CG2	1:D:323:ILE:HG13	2.29	0.63
1:C:217:ARG:CB	1:C:217:ARG:HH11	2.12	0.63
1:G:332:THR:H	1:G:335:ASN:HD21	1.45	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:336:ALA:O	1:L:339:VAL:HG22	1.97	0.63
1:A:437:GLN:HG2	1:H:423:LYS:HD3	1.80	0.63
1:I:414:GLN:OE1	1:I:428:ILE:HA	1.99	0.63
1:E:463:GLN:HE22	1:E:488:LYS:NZ	1.97	0.63
1:A:313:SER:O	1:A:315:LEU:N	2.32	0.63
1:L:223:ILE:CD1	1:L:263:LEU:HD21	2.29	0.63
1:E:24:VAL:CG2	1:E:483:VAL:HG13	2.28	0.63
1:G:212:ILE:HD12	1:G:212:ILE:N	2.11	0.63
1:I:78:TYR:CD2	1:I:101:VAL:HG23	2.33	0.63
1:C:310:TYR:C	1:C:310:TYR:HD2	2.02	0.63
1:D:59:LEU:HG	1:D:61:LEU:HD23	1.81	0.63
1:B:87:THR:OG1	1:B:88:PRO:CD	2.47	0.63
1:L:248:VAL:HG13	1:L:272:ALA:O	1.98	0.63
1:J:501:THR:C	1:K:146:ARG:HH22	2.01	0.63
1:B:432:PRO:HB3	1:B:436:PHE:CD1	2.34	0.63
1:C:277:ASP:HB2	1:C:302:LEU:HD11	1.81	0.63
1:J:360:PHE:HB3	1:J:365:ILE:HB	1.81	0.63
1:J:386:LEU:HD13	1:K:392:VAL:CG1	2.28	0.63
1:B:13:VAL:HA	1:B:16:PHE:HD1	1.63	0.63
1:F:252:PHE:HD1	1:F:301:ILE:HG21	1.64	0.63
1:H:217:ARG:HD2	1:H:450:HIS:CE1	2.33	0.63
1:E:94:ARG:HD2	1:E:168:ASP:OD1	1.99	0.63
1:G:30:GLU:HA	1:G:34:THR:OG1	1.98	0.63
1:L:274:GLY:O	1:L:275:GLU:HB2	1.98	0.63
1:L:121:PRO:O	1:L:122:PHE:HD2	1.80	0.63
1:D:479:THR:O	1:D:483:VAL:HG23	1.99	0.63
1:F:423:LYS:CE	1:F:426:GLY:HA3	2.25	0.63
1:G:500:PHE:HZ	1:J:500:PHE:HZ	1.46	0.63
1:G:414:GLN:CB	1:G:429:PRO:HD2	2.29	0.63
1:G:88:PRO:HA	1:G:162:ILE:O	1.98	0.63
1:E:219:VAL:HG22	1:E:373:LEU:HG	1.80	0.63
1:I:14:GLU:HG3	1:I:53:LYS:HZ2	1.63	0.63
1:I:109:SER:O	1:I:113:TYR:CD2	2.52	0.63
1:J:217:ARG:HG3	1:J:262:TYR:CE2	2.33	0.63
1:D:79:ARG:HG2	1:D:157:PHE:HB3	1.80	0.63
1:A:186:THR:CG2	1:A:187:ILE:N	2.43	0.63
1:K:85:GLN:CG	1:K:492:VAL:HG11	2.28	0.63
1:H:142:GLU:HG2	1:H:146:ARG:HD2	1.81	0.63
1:A:287:ASP:OD2	1:A:290:GLU:HG3	1.98	0.63
1:E:24:VAL:CG1	1:E:28:LEU:HD13	2.28	0.63
1:L:396:ARG:NH1	1:L:396:ARG:HG3	2.10	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:222:GLY:HA3	1:J:373:LEU:CD1	2.29	0.63
1:E:368:ILE:HG22	1:E:373:LEU:HB2	1.81	0.63
1:L:335:ASN:ND2	1:L:335:ASN:H	1.95	0.63
1:E:232:TYR:CE1	1:E:465:MET:HG2	2.33	0.63
1:D:225:ASN:ND2	1:D:458:GLU:HA	2.13	0.63
1:C:117:VAL:HG21	1:C:371:LEU:HG	1.80	0.62
1:C:176:MET:HG3	1:C:198:VAL:CG2	2.29	0.62
1:K:371:LEU:HD22	1:K:482:TYR:CE2	2.33	0.62
1:B:159:GLY:HA3	1:B:162:ILE:HD13	1.80	0.62
1:I:329:LYS:H	1:I:329:LYS:HD3	1.63	0.62
1:F:217:ARG:HG3	1:F:262:TYR:CE2	2.34	0.62
1:B:342:LYS:HA	1:B:365:ILE:HD12	1.81	0.62
1:C:176:MET:CE	1:C:176:MET:HA	2.30	0.62
1:L:321:ILE:HG22	1:L:343:ILE:HG22	1.80	0.62
1:G:414:GLN:OE1	1:G:428:ILE:HA	1.99	0.62
1:D:238:MET:HE2	1:D:238:MET:HA	1.80	0.62
1:B:453:LEU:O	1:B:453:LEU:HD22	1.99	0.62
1:H:260:MET:CE	1:H:288:PRO:HA	2.28	0.62
1:D:398:THR:O	1:D:400:LYS:N	2.32	0.62
1:B:34:THR:HG23	1:B:35:ARG:NH2	2.13	0.62
1:K:500:PHE:HE1	1:L:500:PHE:HZ	1.46	0.62
1:H:280:ILE:HD11	1:H:301:ILE:O	2.00	0.62
1:B:53:LYS:O	1:B:82:HIS:HE1	1.82	0.62
1:H:24:VAL:O	1:H:28:LEU:HB2	1.97	0.62
1:G:280:ILE:CG2	1:G:307:ALA:HB1	2.29	0.62
1:F:313:SER:HB2	1:F:315:LEU:HD13	1.80	0.62
1:F:360:PHE:HB3	1:F:365:ILE:HB	1.79	0.62
1:F:437:GLN:HG2	1:G:244:ASP:HB2	1.80	0.62
1:J:281:TRP:HZ3	1:J:317:ALA:HB1	1.64	0.62
1:B:280:ILE:HG22	1:B:281:TRP:N	2.14	0.62
1:F:403:ARG:HH21	1:G:242:PHE:HD1	1.45	0.62
1:E:75:ILE:HG23	1:E:131:ILE:CD1	2.30	0.62
1:K:248:VAL:HG22	1:K:272:ALA:H	1.64	0.62
1:J:90:LYS:CE	1:J:199:THR:HG21	2.30	0.62
1:D:371:LEU:HD22	1:D:482:TYR:CE2	2.34	0.62
1:H:321:ILE:CG2	1:H:343:ILE:HB	2.28	0.62
1:I:9:PHE:HA	1:I:12:MET:CE	2.29	0.62
1:J:386:LEU:HA	1:J:389:LEU:HD12	1.80	0.62
1:E:142:GLU:O	1:E:146:ARG:HG3	2.00	0.62
1:C:65:ILE:HD13	1:C:144:ILE:CG1	2.22	0.62
1:L:275:GLU:HG3	1:L:301:ILE:HG12	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:371:LEU:CD2	1:K:481:ALA:HB1	2.30	0.62
1:A:335:ASN:HD22	1:A:336:ALA:N	1.98	0.62
1:F:331:LEU:CB	1:F:352:THR:HG22	2.29	0.62
1:B:201:LYS:CE	1:B:388:ASN:HD21	2.11	0.62
1:K:95:TYR:OH	1:K:145:THR:HB	1.99	0.62
1:C:414:GLN:CB	1:C:429:PRO:HD2	2.30	0.62
1:A:360:PHE:HB3	1:A:365:ILE:HB	1.81	0.62
1:K:217:ARG:O	1:K:220:PHE:HB3	2.00	0.62
1:K:239:THR:N	1:K:240:PRO:CD	2.62	0.62
1:C:421:PHE:HE1	1:C:423:LYS:HB3	1.65	0.62
1:E:47:GLY:O	1:E:51:ILE:HG13	1.99	0.62
1:L:203:ILE:HD12	1:L:209:HIS:CE1	2.34	0.62
1:E:497:GLY:CA	1:E:501:THR:HA	2.29	0.62
1:K:316:GLU:HG3	1:K:338:ARG:O	1.98	0.62
1:D:492:VAL:HG21	2:D:4:ADP:H2	1.63	0.62
1:B:13:VAL:HA	1:B:16:PHE:CD1	2.35	0.62
1:F:104:VAL:CG2	1:F:105:LYS:N	2.62	0.62
1:K:467:THR:O	1:K:467:THR:HG22	2.00	0.62
1:J:53:LYS:HB3	1:J:54:PRO:HD3	1.80	0.62
1:D:476:ASP:O	1:D:477:LEU:C	2.38	0.62
1:L:61:LEU:HD12	1:L:63:PHE:HD2	1.64	0.62
1:E:95:TYR:CE2	1:E:129:VAL:HG21	2.35	0.62
1:E:78:TYR:OH	1:E:130:LYS:NZ	2.28	0.62
1:H:248:VAL:CG2	1:H:271:ILE:HG23	2.29	0.62
1:D:346:GLU:CD	1:D:478:ARG:HH22	2.03	0.62
1:K:142:GLU:O	1:K:146:ARG:HG3	2.00	0.62
1:A:24:VAL:O	1:A:25:GLU:C	2.38	0.62
1:J:368:ILE:CG2	1:J:373:LEU:HD13	2.30	0.62
1:H:58:VAL:HG22	1:H:80:ALA:CB	2.30	0.62
1:L:167:PRO:HG3	1:L:176:MET:SD	2.39	0.62
1:E:371:LEU:HD22	1:E:482:TYR:CD2	2.34	0.62
1:I:411:MET:HA	1:I:430:ILE:HG22	1.80	0.62
1:H:131:ILE:CD1	1:H:144:ILE:HD13	2.30	0.62
1:H:424:HIS:N	1:H:424:HIS:ND1	2.48	0.62
1:D:90:LYS:HD2	1:D:164:VAL:O	2.00	0.62
1:E:143:LYS:CE	1:E:147:ARG:HH21	2.12	0.62
1:C:112:THR:HB	1:C:124:GLY:H	1.65	0.62
1:K:380:VAL:O	1:K:383:PHE:N	2.33	0.62
1:J:411:MET:SD	1:J:430:ILE:HG21	2.40	0.62
1:K:81:GLN:HG3	1:K:157:PHE:HE1	1.65	0.62
1:A:371:LEU:HD22	1:A:482:TYR:CD2	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:201:LYS:CD	1:A:205:GLN:O	2.48	0.62
1:E:57:HIS:ND1	1:E:84:HIS:CE1	2.68	0.62
1:J:249:VAL:HB	1:J:323:ILE:HG23	1.81	0.62
1:I:477:LEU:O	1:I:478:ARG:O	2.18	0.62
1:C:378:VAL:O	1:C:381:SER:HB3	2.00	0.62
1:I:213:SER:CB	1:I:217:ARG:HD2	2.24	0.62
1:K:45:VAL:O	1:K:48:ILE:HG12	2.00	0.62
1:F:421:PHE:CE1	1:F:423:LYS:HD3	2.35	0.62
1:K:137:THR:OG1	1:K:140:GLU:HG3	2.00	0.62
1:F:88:PRO:HG2	1:F:122:PHE:HD2	1.64	0.62
1:J:88:PRO:HG2	1:J:122:PHE:HD2	1.65	0.62
1:A:238:MET:O	1:A:239:THR:HG22	2.00	0.62
1:C:203:ILE:HG22	2:E:5:ADP:H5'2	1.82	0.62
1:G:346:GLU:OE2	1:G:352:THR:HG23	1.99	0.62
1:F:355:GLU:O	1:F:359:ILE:HD13	2.00	0.62
1:H:201:LYS:NZ	1:H:388:ASN:HD21	1.97	0.62
1:J:30:GLU:HA	1:J:34:THR:CG2	2.29	0.61
1:D:140:GLU:O	1:D:144:ILE:HD12	2.00	0.61
1:K:219:VAL:CG1	1:K:220:PHE:N	2.62	0.61
1:D:314:ILE:N	1:D:314:ILE:HD13	2.13	0.61
1:H:370:ASP:OD2	1:H:371:LEU:N	2.32	0.61
1:J:371:LEU:HD23	1:J:481:ALA:HB1	1.80	0.61
1:C:30:GLU:O	1:C:34:THR:HB	2.00	0.61
1:C:223:ILE:HD11	1:C:345:ALA:CB	2.29	0.61
1:I:360:PHE:HB3	1:I:365:ILE:HB	1.82	0.61
1:C:281:TRP:O	1:C:282:ASN:HB2	2.00	0.61
1:I:260:MET:CE	1:I:288:PRO:HA	2.30	0.61
1:J:281:TRP:CZ3	1:J:317:ALA:HB1	2.35	0.61
1:K:6:ASP:OD2	1:K:6:ASP:C	2.38	0.61
1:B:444:SER:OG	1:B:446:LYS:HG2	2.00	0.61
1:B:332:THR:H	1:B:335:ASN:HD21	1.47	0.61
1:E:428:ILE:N	1:E:428:ILE:HD13	2.15	0.61
1:L:29:VAL:O	1:L:30:GLU:O	2.18	0.61
1:K:106:ALA:O	1:K:109:SER:HB3	2.01	0.61
1:G:371:LEU:HD23	1:G:481:ALA:HB1	1.83	0.61
1:D:117:VAL:HG21	1:D:371:LEU:HG	1.81	0.61
1:C:461:ALA:HA	1:C:464:ILE:HD12	1.81	0.61
1:E:86:ARG:HH11	1:E:492:VAL:HG21	1.64	0.61
1:C:142:GLU:HA	1:C:178:TRP:CZ3	2.34	0.61
1:C:494:ASN:HD22	1:C:494:ASN:C	2.03	0.61
1:D:90:LYS:HZ3	1:D:164:VAL:HG12	1.66	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:82:HIS:CD2	1:I:112:THR:CG2	2.76	0.61
1:K:85:GLN:HG3	1:K:492:VAL:HG11	1.80	0.61
1:D:95:TYR:OH	1:D:145:THR:HB	2.00	0.61
1:B:186:THR:HG23	1:E:186:THR:HG23	1.82	0.61
1:K:142:GLU:HG3	1:K:178:TRP:CD2	2.34	0.61
1:L:186:THR:HG22	1:L:187:ILE:H	1.65	0.61
1:A:201:LYS:NZ	1:A:388:ASN:ND2	2.48	0.61
1:E:345:ALA:HB1	1:E:373:LEU:HD21	1.83	0.61
1:E:386:LEU:HB2	1:E:394:TYR:OH	2.00	0.61
1:B:201:LYS:NZ	1:B:388:ASN:HD21	1.98	0.61
1:F:280:ILE:HD11	1:F:301:ILE:O	2.00	0.61
1:D:344:ILE:HG22	1:D:344:ILE:O	1.99	0.61
1:I:94:ARG:HG2	1:I:94:ARG:HH11	1.64	0.61
1:C:215:THR:HG23	1:C:377:GLY:HA3	1.81	0.61
1:C:338:ARG:CZ	1:C:338:ARG:HB3	2.30	0.61
1:C:498:VAL:CG2	1:C:499:THR:H	2.10	0.61
1:L:234:SER:O	1:L:236:LEU:N	2.27	0.61
1:B:234:SER:O	1:B:236:LEU:N	2.33	0.61
1:J:88:PRO:HG2	1:J:122:PHE:CD2	2.35	0.61
1:A:371:LEU:HD22	1:A:482:TYR:CE2	2.36	0.61
1:L:338:ARG:CZ	1:L:338:ARG:HB3	2.31	0.61
1:A:436:PHE:CE2	1:A:440:ILE:HD11	2.36	0.61
1:D:382:TYR:CE2	1:D:386:LEU:HD21	2.35	0.61
1:L:167:PRO:HG3	1:L:176:MET:CG	2.30	0.61
1:E:86:ARG:HH12	1:E:492:VAL:HG22	1.66	0.61
1:E:421:PHE:CE1	1:E:423:LYS:HG3	2.36	0.61
1:E:271:ILE:HD11	1:E:283:PRO:HG3	1.82	0.61
1:E:389:LEU:HD23	1:E:389:LEU:N	2.15	0.61
1:H:44:ARG:HH11	1:H:44:ARG:HB3	1.64	0.61
1:D:249:VAL:CB	1:D:323:ILE:HG13	2.31	0.61
1:B:233:MET:HE2	1:B:236:LEU:HD12	1.81	0.61
1:J:79:ARG:HG3	1:J:127:ALA:HB2	1.81	0.61
1:A:487:GLU:O	1:A:490:PHE:HB3	2.01	0.61
1:C:252:PHE:CE2	1:C:260:MET:HE1	2.35	0.61
1:A:53:LYS:HB3	1:A:54:PRO:CD	2.30	0.61
1:H:104:VAL:CG2	1:H:105:LYS:N	2.63	0.61
1:D:225:ASN:HD21	1:D:458:GLU:HA	1.65	0.61
1:L:315:LEU:HD12	1:L:315:LEU:N	2.16	0.61
1:I:213:SER:O	1:I:217:ARG:HG3	2.00	0.61
1:H:497:GLY:HA3	1:H:501:THR:HA	1.82	0.61
1:I:137:THR:HG23	1:I:140:GLU:HG3	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:371:LEU:HD21	1:K:481:ALA:HB1	1.83	0.61
1:D:411:MET:SD	1:D:430:ILE:HG21	2.41	0.61
1:D:141:LEU:O	1:D:145:THR:HG23	2.01	0.61
1:B:414:GLN:HB2	1:B:429:PRO:HD2	1.82	0.61
1:J:331:LEU:CD2	1:J:360:PHE:HZ	2.14	0.61
1:A:403:ARG:HG3	1:A:440:ILE:HG21	1.83	0.61
1:B:195:HIS:O	1:B:201:LYS:HE3	2.00	0.61
1:E:275:GLU:OE2	1:E:276:SER:N	2.33	0.61
1:F:294:PHE:CE1	1:F:298:HIS:HE1	2.18	0.61
1:A:58:VAL:HG12	1:E:60:SER:HB2	1.82	0.61
1:E:82:HIS:ND1	1:E:82:HIS:C	2.54	0.61
1:C:272:ALA:HB1	1:C:314:ILE:HG21	1.83	0.61
1:L:274:GLY:HA3	1:L:314:ILE:HD12	1.82	0.61
1:J:24:VAL:HG13	1:J:483:VAL:HG13	1.83	0.61
1:D:131:ILE:HG13	1:D:136:TYR:CE2	2.36	0.61
1:D:186:THR:CG2	1:D:187:ILE:N	2.60	0.61
1:C:146:ARG:HH22	1:E:501:THR:C	2.04	0.61
1:J:346:GLU:HG2	1:J:351:PRO:CG	2.31	0.61
1:C:392:VAL:HG22	1:E:386:LEU:CD2	2.30	0.61
1:E:239:THR:N	1:E:240:PRO:HD3	2.14	0.61
1:B:469:MET:O	1:G:308:LYS:HD2	2.00	0.61
1:E:143:LYS:NZ	1:E:147:ARG:NH2	2.49	0.61
1:B:332:THR:O	1:B:336:ALA:HB2	2.00	0.61
1:H:497:GLY:CA	1:H:501:THR:HA	2.31	0.61
1:J:497:GLY:CA	1:J:501:THR:HA	2.31	0.61
1:I:38:GLU:H	1:I:42:ARG:CZ	2.14	0.61
1:A:73:GLU:OE1	1:A:136:TYR:OH	2.17	0.61
1:B:57:HIS:ND1	1:D:155:LYS:CE	2.63	0.61
1:J:358:LYS:O	1:J:362:GLU:HG3	2.00	0.61
1:K:315:LEU:HG	1:K:331:LEU:HD21	1.83	0.61
1:D:132:ASN:HB3	1:D:135:ASN:HD22	1.65	0.61
1:F:34:THR:HG22	1:F:34:THR:O	2.01	0.61
1:E:334:SER:O	1:E:337:PRO:HD2	2.01	0.61
1:L:153:ALA:CA	1:L:158:ILE:HG22	2.31	0.61
1:C:432:PRO:HB3	1:C:436:PHE:CD1	2.35	0.61
1:D:428:ILE:H	1:D:428:ILE:CD1	2.13	0.61
1:A:346:GLU:CD	1:A:478:ARG:NH2	2.55	0.61
1:L:260:MET:CE	1:L:291:LEU:HD23	2.31	0.61
1:F:90:LYS:HE2	1:F:199:THR:HG21	1.82	0.61
1:E:208:ILE:O	1:E:208:ILE:HG23	2.00	0.61
1:J:234:SER:O	1:J:235:ILE:C	2.39	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:14:GLU:CG	1:I:53:LYS:NZ	2.64	0.61
1:J:14:GLU:HG3	1:J:53:LYS:HE2	1.82	0.61
1:B:91:GLY:HA3	1:B:125:ALA:O	2.00	0.61
1:D:79:ARG:HD2	1:D:127:ALA:HB2	1.82	0.60
1:B:439:ARG:NH2	1:F:405:SER:OG	2.32	0.60
1:H:44:ARG:NH1	1:H:44:ARG:HB3	2.16	0.60
1:G:72:TRP:HE1	1:K:498:VAL:HG11	1.66	0.60
1:K:497:GLY:HA3	1:K:501:THR:HA	1.83	0.60
1:C:497:GLY:CA	1:C:501:THR:HA	2.31	0.60
1:D:335:ASN:HD22	1:D:335:ASN:N	1.98	0.60
1:H:468:ALA:HA	1:H:473:LEU:CD1	2.31	0.60
1:F:324:PRO:HD2	1:F:345:ALA:O	2.01	0.60
1:H:423:LYS:HA	1:H:423:LYS:HE2	1.83	0.60
1:C:332:THR:HG22	1:C:353:THR:HG21	1.81	0.60
1:C:17:PHE:CE1	1:C:486:ILE:HD12	2.35	0.60
1:D:214:ALA:HB1	1:D:380:VAL:HG21	1.83	0.60
1:G:79:ARG:HG2	1:G:157:PHE:HB3	1.83	0.60
1:B:342:LYS:HA	1:B:365:ILE:CD1	2.31	0.60
1:I:201:LYS:HB2	1:I:202:PRO:CD	2.31	0.60
1:L:90:LYS:HB2	1:L:122:PHE:HD1	1.65	0.60
1:F:372:TYR:OH	1:F:461:ALA:HB2	2.01	0.60
1:H:379:THR:HG21	1:H:453:LEU:HD23	1.82	0.60
1:J:233:MET:HE2	1:J:233:MET:HA	1.83	0.60
1:C:374:ASN:CG	1:C:374:ASN:O	2.39	0.60
1:F:9:PHE:CD1	1:F:10:PHE:N	2.69	0.60
1:H:214:ALA:HB1	1:H:380:VAL:HG21	1.81	0.60
1:F:83:SER:OG	1:F:85:GLN:NE2	2.35	0.60
1:C:226:PHE:HB3	1:C:366:MET:HE1	1.83	0.60
1:I:205:GLN:NE2	1:K:495:GLU:HB2	2.17	0.60
1:C:497:GLY:O	1:C:498:VAL:HG13	2.01	0.60
1:G:117:VAL:HG11	1:G:372:TYR:HB2	1.83	0.60
1:I:42:ARG:C	1:I:44:ARG:H	2.04	0.60
1:A:281:TRP:CD1	1:A:283:PRO:HD3	2.36	0.60
1:I:87:THR:HB	1:I:88:PRO:HD3	1.83	0.60
1:I:9:PHE:HD1	1:I:10:PHE:N	1.98	0.60
1:C:355:GLU:O	1:C:359:ILE:HD12	2.01	0.60
1:H:439:ARG:HH12	1:L:405:SER:CA	2.14	0.60
1:A:499:THR:OG1	1:E:147:ARG:CD	2.49	0.60
1:K:497:GLY:CA	1:K:501:THR:HA	2.31	0.60
1:D:346:GLU:OE1	1:D:478:ARG:NH2	2.35	0.60
1:G:436:PHE:O	1:G:439:ARG:HB3	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:107:LEU:CA	1:K:110:LEU:HD13	2.28	0.60
1:K:153:ALA:HA	1:K:158:ILE:CG2	2.32	0.60
1:A:114:LYS:O	1:A:117:VAL:HB	2.01	0.60
1:G:404:ASP:O	1:G:405:SER:C	2.39	0.60
1:G:9:PHE:HD1	1:G:10:PHE:H	1.48	0.60
1:E:274:GLY:HA3	1:E:314:ILE:HD12	1.82	0.60
1:K:113:TYR:O	1:K:117:VAL:HG23	2.01	0.60
1:K:17:PHE:CE1	1:K:486:ILE:HD12	2.36	0.60
1:D:78:TYR:HE1	1:D:99:VAL:HG21	1.66	0.60
1:F:497:GLY:HA3	1:F:501:THR:HA	1.83	0.60
1:G:44:ARG:HD2	1:K:71:SER:HA	1.84	0.60
1:A:384:GLU:O	1:A:385:TRP:C	2.39	0.60
1:H:379:THR:O	1:H:382:TYR:HB3	2.01	0.60
1:J:239:THR:CG2	1:J:239:THR:O	2.49	0.60
1:I:484:ASN:HD21	1:I:488:LYS:HE3	1.66	0.60
1:G:471:TYR:O	1:G:473:LEU:N	2.34	0.60
1:C:113:TYR:O	1:C:117:VAL:HG23	2.01	0.60
1:D:322:LEU:O	1:D:324:PRO:HD3	2.02	0.60
1:L:234:SER:O	1:L:237:GLY:N	2.34	0.60
1:B:247:PHE:HZ	1:B:260:MET:HG3	1.67	0.60
1:I:118:VAL:HA	1:I:460:SER:OG	2.02	0.60
1:B:224:GLU:HA	1:B:227:ILE:HG22	1.84	0.60
1:H:321:ILE:HG22	1:H:343:ILE:CB	2.31	0.60
1:A:84:HIS:HD2	1:A:89:CYS:SG	2.25	0.60
1:E:224:GLU:O	1:E:227:ILE:HG22	2.01	0.60
1:A:52:ILE:HD13	1:A:489:VAL:CG1	2.30	0.60
1:I:382:TYR:OH	1:J:392:VAL:HG22	2.00	0.60
1:G:60:SER:HB2	1:K:58:VAL:HG13	1.81	0.60
1:H:294:PHE:CG	1:H:298:HIS:NE2	2.64	0.60
1:H:429:PRO:O	1:H:431:VAL:HG12	2.01	0.60
1:G:142:GLU:O	1:G:146:ARG:HG3	2.02	0.60
1:D:144:ILE:HG22	1:D:145:THR:N	2.16	0.60
1:L:260:MET:HE3	1:L:291:LEU:HD23	1.82	0.60
1:G:407:TYR:O	1:G:411:MET:HB2	2.01	0.60
1:L:130:LYS:O	1:L:131:ILE:HD12	2.01	0.60
1:I:427:THR:O	1:I:428:ILE:HD13	2.01	0.60
1:I:399:PHE:CE2	1:I:448:ILE:HD11	2.37	0.60
1:I:390:ASN:O	1:I:391:HIS:HB2	2.01	0.60
1:B:331:LEU:CD1	1:B:360:PHE:HZ	2.13	0.60
1:I:339:VAL:HG21	1:I:360:PHE:CE1	2.36	0.60
1:H:248:VAL:CG1	1:H:272:ALA:HB3	2.31	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:433:THR:HG23	1:E:436:PHE:H	1.65	0.60
1:C:287:ASP:OD2	1:C:289:LYS:HB3	2.02	0.60
1:G:409:LEU:HD13	1:L:436:PHE:HE1	1.64	0.60
1:J:58:VAL:HG23	1:J:80:ALA:CB	2.32	0.60
1:G:382:TYR:O	1:G:385:TRP:HB3	2.02	0.60
1:B:359:ILE:CG2	1:B:360:PHE:N	2.64	0.60
1:B:359:ILE:HG22	1:B:360:PHE:H	1.67	0.60
1:I:313:SER:HB2	1:I:315:LEU:CD1	2.30	0.60
1:I:167:PRO:CG	1:I:176:MET:SD	2.87	0.60
1:K:176:MET:CE	1:K:179:ILE:HD12	2.31	0.60
1:F:429:PRO:C	1:F:431:VAL:H	2.03	0.60
1:B:501:THR:C	1:F:146:ARG:HH12	2.04	0.60
1:A:201:LYS:HZ2	1:A:388:ASN:HD21	1.49	0.60
1:D:8:ASN:ND2	1:D:10:PHE:HB3	2.17	0.60
1:G:293:ASP:O	1:G:294:PHE:C	2.40	0.60
1:K:478:ARG:O	1:K:481:ALA:HB3	2.02	0.60
1:K:53:LYS:HB3	1:K:54:PRO:CD	2.29	0.60
1:D:336:ALA:HB3	1:D:337:PRO:CD	2.24	0.60
1:J:337:PRO:C	1:J:363:ARG:HH21	2.05	0.60
1:C:9:PHE:CD1	1:C:10:PHE:N	2.68	0.60
1:J:371:LEU:HD23	1:J:481:ALA:CB	2.32	0.60
1:I:353:THR:HB	1:I:354:PRO:CD	2.32	0.59
1:A:331:LEU:HB2	1:A:352:THR:HG22	1.84	0.59
1:A:394:TYR:HB2	1:A:445:GLU:HG3	1.84	0.59
1:H:176:MET:CE	1:H:179:ILE:HG13	2.32	0.59
1:H:155:LYS:HD2	1:J:157:PHE:CE2	2.37	0.59
1:F:141:LEU:O	1:F:145:THR:HG23	2.01	0.59
1:J:239:THR:O	1:J:239:THR:HG23	2.00	0.59
1:C:114:LYS:HE2	1:C:374:ASN:HD21	1.65	0.59
1:J:421:PHE:CD1	1:J:423:LYS:HB2	2.37	0.59
1:I:399:PHE:HB2	1:K:455:TYR:CE2	2.37	0.59
1:K:398:THR:O	1:K:399:PHE:C	2.39	0.59
1:C:59:LEU:HB2	1:C:157:PHE:CE2	2.37	0.59
1:K:94:ARG:HG2	1:K:94:ARG:HH11	1.66	0.59
1:L:244:ASP:O	1:L:245:LYS:HG3	2.02	0.59
1:B:87:THR:OG1	1:B:88:PRO:HD2	2.01	0.59
1:C:338:ARG:O	1:C:339:VAL:HG13	2.02	0.59
1:A:332:THR:HA	1:A:353:THR:HG22	1.83	0.59
1:F:414:GLN:CB	1:F:429:PRO:HD2	2.32	0.59
1:B:234:SER:O	1:B:237:GLY:N	2.35	0.59
1:A:271:ILE:HD11	1:A:283:PRO:HG3	1.83	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:59:LEU:HD21	1:F:61:LEU:CD2	2.31	0.59
1:E:219:VAL:HG11	1:E:259:SER:OG	2.02	0.59
1:G:222:GLY:HA3	1:G:373:LEU:HD12	1.84	0.59
1:G:197:CYS:SG	1:G:198:VAL:HG12	2.42	0.59
1:C:19:ARG:HG3	1:C:19:ARG:HH11	1.66	0.59
1:C:271:ILE:O	1:C:272:ALA:CB	2.50	0.59
1:C:322:LEU:C	1:C:322:LEU:HD13	2.23	0.59
1:C:328:GLU:O	1:C:329:LYS:HG2	2.02	0.59
1:C:75:ILE:CD1	1:C:75:ILE:N	2.65	0.59
1:H:414:GLN:OE1	1:H:428:ILE:HA	2.01	0.59
1:K:252:PHE:O	1:K:253:GLY:O	2.20	0.59
1:D:335:ASN:ND2	1:D:335:ASN:N	2.50	0.59
1:L:8:ASN:O	1:L:9:PHE:C	2.40	0.59
1:I:484:ASN:HD21	1:I:488:LYS:CE	2.14	0.59
1:E:87:THR:HB	1:E:88:PRO:CD	2.32	0.59
1:C:367:VAL:O	1:C:477:LEU:HB2	2.01	0.59
1:I:202:PRO:O	1:I:205:GLN:N	2.31	0.59
1:H:38:GLU:C	1:H:39:GLU:HG3	2.23	0.59
1:C:498:VAL:N	1:C:501:THR:HB	2.17	0.59
1:D:97:THR:C	1:D:130:LYS:HE3	2.22	0.59
1:L:100:SER:O	1:L:101:VAL:C	2.39	0.59
1:C:281:TRP:CH2	1:C:283:PRO:HG3	2.36	0.59
1:F:19:ARG:NH1	1:F:19:ARG:HG3	2.16	0.59
1:K:330:GLN:C	1:K:331:LEU:HD23	2.22	0.59
1:D:344:ILE:HB	1:D:367:VAL:HG22	1.84	0.59
1:C:360:PHE:HD1	1:C:365:ILE:CG1	2.10	0.59
1:I:213:SER:HB2	1:I:217:ARG:CD	2.23	0.59
1:K:323:ILE:CG2	1:K:345:ALA:HB3	2.31	0.59
1:D:67:ARG:NH1	1:D:140:GLU:OE2	2.35	0.59
1:K:9:PHE:CE1	1:K:103:GLU:HA	2.36	0.59
1:G:414:GLN:HB2	1:G:429:PRO:HD2	1.84	0.59
1:J:436:PHE:CE1	1:J:440:ILE:HD11	2.37	0.59
1:K:81:GLN:HG3	1:K:157:PHE:CE1	2.38	0.59
1:D:118:VAL:HG23	1:D:120:VAL:HG23	1.85	0.59
1:C:72:TRP:HE1	1:F:498:VAL:HG11	1.67	0.59
1:J:244:ASP:C	1:J:245:LYS:HG3	2.22	0.59
1:I:101:VAL:CG1	1:I:105:LYS:HE3	2.32	0.59
1:D:497:GLY:HA3	1:D:501:THR:HA	1.84	0.59
1:I:281:TRP:CD1	1:I:282:ASN:N	2.69	0.59
1:I:249:VAL:HG23	1:I:323:ILE:HG13	1.84	0.59
1:H:335:ASN:HD22	1:H:335:ASN:N	2.00	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:501:THR:O	1:D:146:ARG:NH2	2.34	0.59
1:C:498:VAL:HG21	1:F:72:TRP:HE1	1.67	0.59
1:J:498:VAL:HG23	1:J:499:THR:H	1.68	0.59
1:I:34:THR:O	1:I:35:ARG:HG3	2.02	0.59
1:B:239:THR:HG23	1:B:239:THR:O	2.02	0.59
1:L:429:PRO:O	1:L:431:VAL:N	2.35	0.59
1:A:437:GLN:HE22	1:H:426:GLY:HA2	1.68	0.59
1:C:453:LEU:O	1:C:457:MET:HG2	2.02	0.59
1:H:462:ARG:HB3	1:H:466:ARG:HH12	1.66	0.59
1:I:330:GLN:HA	1:I:330:GLN:OE1	2.01	0.59
1:I:17:PHE:CE2	1:I:53:LYS:HB2	2.38	0.59
1:E:87:THR:HB	1:E:88:PRO:HD3	1.84	0.59
1:E:446:LYS:HG3	1:E:450:HIS:CE1	2.37	0.59
1:L:47:GLY:O	1:L:51:ILE:HG13	2.03	0.59
1:I:318:ASP:HA	1:I:340:LYS:HG3	1.85	0.59
1:I:321:ILE:N	1:I:321:ILE:HD12	2.17	0.59
1:H:411:MET:HA	1:H:430:ILE:HG22	1.84	0.59
1:K:371:LEU:HD22	1:K:482:TYR:CD2	2.37	0.59
1:G:500:PHE:CZ	1:J:500:PHE:HZ	2.20	0.59
1:K:175:GLU:O	1:K:178:TRP:N	2.35	0.59
1:L:234:SER:C	1:L:236:LEU:H	2.04	0.59
1:F:411:MET:SD	1:F:430:ILE:HG21	2.43	0.59
1:J:195:HIS:O	1:J:201:LYS:HE2	2.03	0.59
1:L:396:ARG:O	1:L:396:ARG:HD3	2.03	0.59
1:C:277:ASP:HB3	1:C:302:LEU:HD11	1.83	0.59
1:B:369:PRO:CG	1:B:478:ARG:HA	2.32	0.59
1:F:322:LEU:HD22	1:F:322:LEU:C	2.23	0.59
1:F:322:LEU:HD22	1:F:323:ILE:N	2.17	0.59
1:J:65:ILE:HD13	1:J:144:ILE:CG1	2.33	0.59
1:F:453:LEU:O	1:F:453:LEU:HD22	2.03	0.59
1:B:142:GLU:OE2	1:B:178:TRP:NE1	2.34	0.59
1:B:33:ARG:NH1	1:B:33:ARG:CB	2.59	0.59
1:E:414:GLN:O	1:E:418:GLU:HG3	2.03	0.59
1:K:38:GLU:HG2	1:K:42:ARG:NH2	2.18	0.59
1:D:259:SER:O	1:D:263:LEU:HB2	2.03	0.59
1:I:405:SER:OG	1:K:439:ARG:NH2	2.36	0.59
1:I:94:ARG:HG2	1:I:94:ARG:NH1	2.17	0.59
1:H:69:ASP:OD1	1:H:71:SER:N	2.30	0.59
1:A:36:GLU:OE1	1:A:42:ARG:NH2	2.36	0.59
1:B:274:GLY:HA2	1:B:279:SER:HA	1.84	0.59
1:D:489:VAL:HG12	1:D:489:VAL:O	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:332:THR:CG2	1:H:353:THR:HG21	2.22	0.59
1:L:497:GLY:CA	1:L:501:THR:HA	2.33	0.59
1:D:360:PHE:CD1	1:D:365:ILE:HG21	2.36	0.59
1:B:436:PHE:CZ	1:F:409:LEU:HD22	2.38	0.59
1:E:227:ILE:HD12	1:E:233:MET:HE3	1.85	0.59
1:B:161:GLY:C	1:B:162:ILE:HD12	2.22	0.59
1:G:201:LYS:HB2	1:G:202:PRO:HD2	1.85	0.59
1:I:433:THR:HG22	1:J:412:SER:HA	1.85	0.59
1:C:286:ILE:N	1:C:286:ILE:HD12	2.18	0.59
1:I:176:MET:HE3	1:I:179:ILE:HD12	1.84	0.58
1:D:138:ASP:O	1:D:141:LEU:HB2	2.03	0.58
1:B:227:ILE:HD13	1:B:343:ILE:CD1	2.32	0.58
1:H:468:ALA:HA	1:H:473:LEU:HD13	1.84	0.58
1:D:237:GLY:O	1:D:238:MET:HE3	2.03	0.58
1:E:346:GLU:HG2	1:E:351:PRO:CG	2.32	0.58
1:L:429:PRO:C	1:L:431:VAL:H	2.07	0.58
1:I:158:ILE:HG23	1:I:158:ILE:O	2.04	0.58
1:E:439:ARG:HG2	1:E:439:ARG:O	2.03	0.58
1:A:496:ALA:C	1:A:501:THR:C	2.62	0.58
1:B:90:LYS:NZ	1:B:164:VAL:O	2.34	0.58
1:E:250:GLN:HG3	1:E:315:LEU:CD1	2.33	0.58
1:E:336:ALA:O	1:E:339:VAL:HG22	2.03	0.58
1:H:33:ARG:HB2	1:H:36:GLU:OE2	2.02	0.58
1:C:114:LYS:CE	1:C:374:ASN:HD21	2.17	0.58
1:J:281:TRP:O	1:J:282:ASN:HB2	2.03	0.58
1:J:401:TYR:O	1:J:404:ASP:HB2	2.03	0.58
1:H:376:GLY:O	1:H:380:VAL:HG23	2.03	0.58
1:F:259:SER:O	1:F:263:LEU:HB2	2.03	0.58
1:C:314:ILE:N	1:C:314:ILE:CD1	2.54	0.58
1:C:316:GLU:HG3	1:C:338:ARG:NH2	2.15	0.58
1:C:328:GLU:C	1:C:329:LYS:HG2	2.23	0.58
1:L:313:SER:CB	1:L:315:LEU:HD13	2.28	0.58
1:C:93:ILE:HD11	1:C:165:PRO:CB	2.31	0.58
1:K:12:MET:O	1:K:16:PHE:HD1	1.86	0.58
1:I:219:VAL:CA	1:I:373:LEU:HD21	2.31	0.58
1:A:281:TRP:HD1	1:A:282:ASN:N	2.01	0.58
1:K:336:ALA:HB3	1:K:337:PRO:HD3	1.84	0.58
1:H:165:PRO:O	1:H:198:VAL:HG23	2.03	0.58
1:L:356:ALA:O	1:L:360:PHE:HD2	1.86	0.58
1:G:305:PRO:O	1:G:307:ALA:N	2.36	0.58
1:G:131:ILE:HG12	1:G:136:TYR:CE2	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:244:ASP:C	1:I:245:LYS:HG3	2.23	0.58
1:K:147:ARG:HG3	1:K:147:ARG:HH11	1.66	0.58
1:I:271:ILE:HG13	1:I:283:PRO:HA	1.84	0.58
1:J:142:GLU:HG2	1:J:146:ARG:HD2	1.85	0.58
1:A:437:GLN:CD	1:H:423:LYS:HG2	2.23	0.58
1:J:81:GLN:OE1	1:J:84:HIS:HE1	1.86	0.58
1:K:467:THR:CG2	1:K:467:THR:O	2.51	0.58
1:K:473:LEU:HD13	1:K:480:ALA:HB2	1.84	0.58
1:C:24:VAL:O	1:C:25:GLU:C	2.42	0.58
1:K:94:ARG:HG2	1:K:94:ARG:NH1	2.18	0.58
1:A:498:VAL:HG11	1:E:72:TRP:NE1	2.19	0.58
1:C:396:ARG:CG	1:C:396:ARG:NH1	2.57	0.58
1:C:386:LEU:HD13	1:D:392:VAL:HG21	1.86	0.58
1:H:501:THR:C	1:L:146:ARG:HH22	2.06	0.58
1:K:117:VAL:HG21	1:K:371:LEU:HG	1.84	0.58
1:I:38:GLU:HB2	1:I:42:ARG:NH2	2.18	0.58
1:J:414:GLN:CD	1:J:430:ILE:HG12	2.24	0.58
1:J:414:GLN:NE2	1:J:430:ILE:CG2	2.67	0.58
1:F:394:TYR:HB2	1:F:445:GLU:HG3	1.85	0.58
1:I:501:THR:OXT	1:J:146:ARG:NH2	2.28	0.58
1:K:212:ILE:HD12	1:K:213:SER:H	1.69	0.58
1:F:131:ILE:CG1	1:F:136:TYR:CE2	2.86	0.58
1:C:25:GLU:O	1:C:29:VAL:HG23	2.04	0.58
1:K:280:ILE:HG22	1:K:281:TRP:H	1.68	0.58
1:A:343:ILE:HG12	1:A:366:MET:HE2	1.85	0.58
1:G:461:ALA:O	1:G:465:MET:HG3	2.04	0.58
1:D:6:ASP:O	1:D:6:ASP:OD2	2.22	0.58
1:J:173:GLU:HB2	1:J:202:PRO:HG3	1.85	0.58
1:A:289:LYS:HG3	1:A:289:LYS:O	2.04	0.58
1:D:498:VAL:HG23	1:D:499:THR:N	2.18	0.58
1:C:466:ARG:HB2	1:C:466:ARG:NH1	2.19	0.58
1:A:358:LYS:O	1:A:361:LEU:HB3	2.03	0.58
1:H:146:ARG:O	1:H:149:THR:HB	2.03	0.58
1:I:39:GLU:O	1:I:41:LYS:N	2.36	0.58
1:G:141:LEU:O	1:G:145:THR:HG23	2.04	0.58
1:H:24:VAL:CG2	1:H:483:VAL:HG22	2.32	0.58
1:F:331:LEU:HD23	1:F:360:PHE:CE2	2.39	0.58
1:G:239:THR:O	1:G:239:THR:HG23	2.03	0.58
1:I:212:ILE:HD12	1:I:212:ILE:H	1.68	0.58
1:K:226:PHE:C	1:K:228:ASN:H	2.05	0.58
1:E:460:SER:O	1:E:463:GLN:HB2	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:294:PHE:CE2	1:H:304:PHE:HA	2.39	0.58
1:C:133:PRO:O	1:C:135:ASN:N	2.37	0.58
1:F:488:LYS:O	1:F:492:VAL:HG23	2.03	0.58
1:C:40:GLN:O	1:C:40:GLN:NE2	2.32	0.58
1:D:189:HIS:CE1	1:F:154:LYS:HD3	2.39	0.58
1:I:371:LEU:CD2	1:I:481:ALA:HB1	2.30	0.58
1:A:411:MET:HG2	1:A:430:ILE:HG22	1.85	0.58
1:C:239:THR:HA	1:C:245:LYS:HZ2	1.69	0.58
1:B:24:VAL:HG12	1:B:28:LEU:HB2	1.85	0.58
1:L:85:GLN:HE21	1:L:489:VAL:HA	1.68	0.58
1:G:359:ILE:HA	1:G:362:GLU:HG3	1.85	0.58
1:I:16:PHE:O	1:I:19:ARG:HB3	2.04	0.58
1:I:370:ASP:N	1:I:370:ASP:OD2	2.36	0.58
1:L:420:LYS:HZ2	1:L:420:LYS:HB3	1.69	0.58
1:B:314:ILE:HD13	1:B:314:ILE:N	2.19	0.58
1:G:176:MET:HE3	1:G:179:ILE:HD12	1.84	0.58
1:L:330:GLN:O	1:L:331:LEU:HD23	2.04	0.58
1:I:250:GLN:CB	1:I:314:ILE:HD11	2.34	0.58
1:I:48:ILE:HG21	1:I:490:PHE:CD1	2.38	0.58
1:K:370:ASP:O	1:K:372:TYR:N	2.37	0.58
1:D:363:ARG:O	1:D:365:ILE:HG12	2.04	0.58
1:L:100:SER:O	1:L:103:GLU:HB3	2.04	0.58
1:K:416:SER:HA	1:K:419:ARG:CZ	2.33	0.58
1:J:79:ARG:HH11	1:J:127:ALA:HB2	1.69	0.58
1:G:250:GLN:HE21	1:G:314:ILE:HD13	1.67	0.58
1:J:238:MET:O	1:J:239:THR:C	2.41	0.58
1:F:160:PRO:HG2	1:F:161:GLY:H	1.69	0.58
1:K:180:ALA:HA	1:K:197:CYS:SG	2.44	0.58
1:B:7:PRO:O	1:B:329:LYS:HD3	2.03	0.58
1:G:20:GLY:O	1:G:24:VAL:HG23	2.03	0.58
1:G:339:VAL:HG21	1:G:360:PHE:HE1	1.69	0.58
1:E:428:ILE:HG22	1:E:430:ILE:HG12	1.85	0.58
1:I:111:MET:O	1:I:112:THR:C	2.42	0.58
1:A:248:VAL:O	1:A:323:ILE:HG12	2.04	0.58
1:K:260:MET:CE	1:K:288:PRO:HA	2.24	0.58
1:F:47:GLY:HA2	1:F:50:ARG:HH11	1.69	0.58
1:B:291:LEU:HD11	1:B:301:ILE:CG2	2.32	0.58
1:E:24:VAL:HG12	1:E:28:LEU:HB2	1.86	0.58
1:B:111:MET:O	1:B:112:THR:C	2.41	0.58
1:F:248:VAL:CG1	1:F:314:ILE:HG13	2.33	0.58
1:G:96:SER:HB3	1:G:99:VAL:HG13	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:413:VAL:HG22	1:L:413:VAL:HG11	1.86	0.58
1:J:335:ASN:HD22	1:J:335:ASN:C	2.07	0.58
1:B:332:THR:HG22	1:B:353:THR:HG21	1.86	0.58
1:E:327:SER:HB2	1:E:330:GLN:OE1	2.03	0.58
1:K:346:GLU:HG2	1:K:351:PRO:HG3	1.85	0.58
1:C:47:GLY:HA2	1:C:50:ARG:CD	2.34	0.58
1:A:247:PHE:CB	1:A:321:ILE:HG22	2.29	0.58
1:J:482:TYR:O	1:J:486:ILE:HG12	2.04	0.58
1:G:65:ILE:CD1	1:G:75:ILE:HD11	2.33	0.58
1:A:141:LEU:O	1:A:145:THR:HG23	2.03	0.58
1:C:64:PRO:CB	1:F:51:ILE:HD11	2.33	0.58
1:D:258:HIS:O	1:D:262:TYR:HD2	1.86	0.58
1:K:482:TYR:O	1:K:486:ILE:HG12	2.03	0.57
1:C:414:GLN:HE22	1:C:430:ILE:HD13	1.67	0.57
1:H:291:LEU:HD11	1:H:301:ILE:HG22	1.86	0.57
1:L:222:GLY:HA3	1:L:373:LEU:CD1	2.34	0.57
1:J:192:ILE:CG1	1:J:192:ILE:O	2.51	0.57
1:L:85:GLN:NE2	1:L:489:VAL:HA	2.18	0.57
1:L:359:ILE:O	1:L:363:ARG:HG2	2.03	0.57
1:J:343:ILE:HD11	1:J:366:MET:CE	2.34	0.57
1:G:232:TYR:HD1	1:G:232:TYR:N	2.02	0.57
1:H:380:VAL:HG13	1:H:449:VAL:CG1	2.34	0.57
1:J:58:VAL:HG23	1:J:80:ALA:HB2	1.85	0.57
1:L:114:LYS:NZ	1:L:374:ASN:HD22	2.03	0.57
1:K:248:VAL:CG1	1:K:272:ALA:HB3	2.34	0.57
1:K:12:MET:O	1:K:16:PHE:CD1	2.57	0.57
1:I:45:VAL:HG23	1:L:72:TRP:CZ3	2.38	0.57
1:L:103:GLU:HG2	1:L:104:VAL:N	2.16	0.57
1:B:321:ILE:HG23	1:B:343:ILE:HB	1.86	0.57
1:E:19:ARG:NH1	1:E:479:THR:HG21	2.18	0.57
1:K:158:ILE:HD12	1:K:165:PRO:HD2	1.86	0.57
1:A:55:CYS:SG	1:A:105:LYS:CG	2.90	0.57
1:I:247:PHE:CZ	1:I:270:CYS:HB2	2.38	0.57
1:E:6:ASP:N	1:E:7:PRO:CD	2.67	0.57
1:E:184:ALA:O	1:E:189:HIS:HA	2.04	0.57
1:L:229:GLU:O	1:L:230:ALA:C	2.41	0.57
1:C:112:THR:HG22	1:C:124:GLY:HA3	1.85	0.57
1:F:164:VAL:HG13	1:F:198:VAL:HA	1.86	0.57
1:K:379:THR:CG2	1:K:456:THR:HG21	2.34	0.57
1:I:497:GLY:CA	1:I:501:THR:HA	2.34	0.57
1:H:28:LEU:HA	1:H:32:LEU:HD12	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:113:TYR:O	1:F:117:VAL:HG23	2.03	0.57
1:K:137:THR:HG23	1:K:140:GLU:CD	2.24	0.57
1:K:416:SER:HA	1:K:419:ARG:NH2	2.19	0.57
1:J:182:THR:O	1:J:186:THR:OG1	2.17	0.57
1:I:56:ASN:C	1:I:57:HIS:HD1	2.07	0.57
1:L:356:ALA:O	1:L:360:PHE:CD2	2.58	0.57
1:C:225:ASN:ND2	1:C:458:GLU:HA	2.19	0.57
1:C:370:ASP:O	1:C:372:TYR:N	2.37	0.57
1:H:17:PHE:CE2	1:H:53:LYS:HB2	2.39	0.57
1:G:295:LYS:HD3	1:G:301:ILE:HG22	1.85	0.57
1:L:420:LYS:HB3	1:L:420:LYS:NZ	2.18	0.57
1:G:264:HIS:C	1:G:266:PHE:H	2.07	0.57
1:L:257:LEU:HD12	1:L:257:LEU:C	2.24	0.57
1:A:192:ILE:HG12	1:A:192:ILE:O	2.03	0.57
1:D:30:GLU:O	1:D:31:ASP:HB2	2.04	0.57
1:D:57:HIS:CD2	1:D:84:HIS:NE2	2.69	0.57
1:E:359:ILE:HG22	1:E:360:PHE:N	2.20	0.57
1:C:140:GLU:O	1:C:144:ILE:HG13	2.04	0.57
1:I:164:VAL:HG13	1:I:198:VAL:HA	1.86	0.57
1:C:164:VAL:HG13	1:C:198:VAL:HA	1.85	0.57
1:H:248:VAL:HG13	1:H:272:ALA:HB3	1.85	0.57
1:A:332:THR:N	1:A:335:ASN:HD21	2.01	0.57
1:I:495:GLU:O	1:I:496:ALA:HB2	2.04	0.57
1:E:346:GLU:CD	1:E:478:ARG:HH22	2.07	0.57
1:C:104:VAL:CG2	1:C:105:LYS:N	2.68	0.57
2:I:502:ADP:H5'2	1:J:203:ILE:CG2	2.35	0.57
1:F:436:PHE:O	1:F:439:ARG:HB3	2.03	0.57
1:H:277:ASP:CB	1:H:302:LEU:HD11	2.34	0.57
1:F:264:HIS:CD2	1:F:288:PRO:HD3	2.40	0.57
1:G:214:ALA:CB	1:G:380:VAL:HG21	2.34	0.57
1:B:322:LEU:O	1:B:324:PRO:HD3	2.05	0.57
1:B:331:LEU:CD1	1:B:360:PHE:CZ	2.87	0.57
1:B:335:ASN:HD22	1:B:336:ALA:N	2.03	0.57
1:A:332:THR:HA	1:A:353:THR:HG21	1.85	0.57
1:G:137:THR:HB	1:G:140:GLU:HG3	1.87	0.57
1:L:232:TYR:O	1:L:236:LEU:HG	2.04	0.57
1:I:238:MET:C	1:I:240:PRO:HD3	2.24	0.57
1:J:357:ASP:O	1:J:358:LYS:C	2.41	0.57
1:G:271:ILE:CD1	1:G:283:PRO:HA	2.35	0.57
1:E:173:GLU:HB2	1:E:202:PRO:HD3	1.86	0.57
1:K:247:PHE:CZ	1:K:270:CYS:HB2	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:184:ALA:O	1:F:189:HIS:HA	2.04	0.57
1:D:216:GLY:O	1:D:219:VAL:HG23	2.05	0.57
1:J:316:GLU:HG2	1:J:338:ARG:O	2.05	0.57
1:D:330:GLN:HE21	1:D:330:GLN:CA	2.17	0.57
1:E:344:ILE:HD11	1:E:360:PHE:CE1	2.40	0.57
1:C:272:ALA:HB1	1:C:314:ILE:CG2	2.35	0.57
1:C:338:ARG:HB3	1:C:338:ARG:HH11	1.65	0.57
1:I:250:GLN:HA	1:I:314:ILE:HD11	1.87	0.57
1:I:360:PHE:CD1	1:I:365:ILE:HG21	2.39	0.57
1:L:81:GLN:HG3	1:L:157:PHE:CE1	2.39	0.57
1:F:208:ILE:HD11	1:F:449:VAL:HG22	1.85	0.57
1:L:186:THR:CG2	1:L:187:ILE:H	2.18	0.57
1:B:414:GLN:CB	1:B:429:PRO:HD2	2.35	0.57
1:J:359:ILE:HA	1:J:362:GLU:HG3	1.87	0.57
1:G:248:VAL:HG12	1:G:249:VAL:N	2.19	0.57
1:E:86:ARG:NH1	1:E:492:VAL:HG21	2.19	0.57
1:F:315:LEU:CD2	1:F:331:LEU:HD12	2.35	0.57
1:C:95:TYR:CE2	1:C:129:VAL:HG21	2.40	0.57
1:C:28:LEU:HD12	1:C:32:LEU:HD23	1.86	0.57
1:L:114:LYS:NZ	1:L:374:ASN:ND2	2.53	0.57
1:F:421:PHE:CD1	1:F:423:LYS:HD3	2.40	0.57
1:G:137:THR:HG22	1:G:139:ASN:N	2.08	0.57
1:G:500:PHE:HB3	1:H:142:GLU:OE1	2.04	0.57
1:I:233:MET:HE3	1:I:343:ILE:HD11	1.86	0.57
1:I:30:GLU:HG3	1:I:31:ASP:N	2.16	0.57
1:I:34:THR:HG23	1:I:37:SER:OG	2.05	0.57
1:L:104:VAL:HG23	1:L:105:LYS:H	1.69	0.57
1:L:65:ILE:HG21	1:L:144:ILE:HG12	1.86	0.57
1:F:33:ARG:NH1	1:F:45:VAL:HG11	2.20	0.57
1:C:181:ASP:CG	1:E:501:THR:HG23	2.25	0.57
1:H:121:PRO:CD	1:H:382:TYR:CE2	2.87	0.57
1:E:273:VAL:O	1:E:273:VAL:HG12	2.04	0.57
1:L:387:LYS:HA	1:L:390:ASN:HD22	1.70	0.57
1:E:376:GLY:O	1:E:379:THR:HB	2.04	0.57
1:B:101:VAL:O	1:B:104:VAL:HG22	2.04	0.57
1:K:18:ASP:O	1:K:21:ALA:HB3	2.05	0.57
1:E:244:ASP:O	1:E:245:LYS:HG3	2.04	0.57
1:L:247:PHE:HB2	1:L:321:ILE:HG13	1.85	0.57
1:L:281:TRP:CD1	1:L:283:PRO:HD3	2.39	0.57
1:F:19:ARG:CD	1:F:23:ILE:HD11	2.33	0.57
1:B:424:HIS:N	1:B:424:HIS:HD2	2.02	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:465:MET:O	1:K:468:ALA:HB3	2.05	0.57
1:D:331:LEU:O	1:D:356:ALA:HB2	2.05	0.57
1:K:293:ASP:HB3	1:K:297:GLN:NE2	2.20	0.57
1:J:153:ALA:HA	1:J:158:ILE:HG22	1.87	0.57
1:A:414:GLN:HG3	1:A:429:PRO:HD2	1.87	0.57
1:G:371:LEU:CD2	1:G:481:ALA:HB1	2.35	0.57
1:L:112:THR:HB	1:L:124:GLY:N	2.15	0.57
1:H:52:ILE:CD1	1:H:489:VAL:HG12	2.34	0.57
1:J:337:PRO:HA	1:J:363:ARG:HH21	1.70	0.57
1:G:492:VAL:CG2	2:G:502:ADP:C2	2.87	0.57
1:E:471:TYR:O	1:E:473:LEU:N	2.38	0.57
1:F:483:VAL:O	1:F:487:GLU:HG3	2.05	0.57
1:D:165:PRO:HD2	1:D:197:CYS:O	2.05	0.56
1:A:86:ARG:NH2	2:A:1:ADP:O4'	2.38	0.56
1:K:321:ILE:HD13	1:K:343:ILE:HB	1.86	0.56
1:K:316:GLU:OE2	1:K:338:ARG:HB2	2.05	0.56
1:L:360:PHE:HD1	1:L:365:ILE:HG13	1.70	0.56
1:C:261:ARG:HG2	1:C:288:PRO:HB3	1.87	0.56
1:G:346:GLU:HG2	1:G:351:PRO:CG	2.34	0.56
1:G:467:THR:HG21	1:G:484:ASN:HB2	1.86	0.56
1:D:90:LYS:NZ	1:D:164:VAL:HG12	2.20	0.56
1:K:272:ALA:HB1	1:K:314:ILE:CG2	2.35	0.56
1:K:272:ALA:HB1	1:K:314:ILE:HG21	1.86	0.56
1:F:53:LYS:O	1:F:82:HIS:HE1	1.87	0.56
1:K:68:ASP:OD2	1:K:137:THR:CG2	2.52	0.56
1:F:89:CYS:O	1:F:163:ASP:HA	2.05	0.56
1:L:338:ARG:HH11	1:L:338:ARG:HB3	1.66	0.56
1:B:9:PHE:O	1:B:13:VAL:HG23	2.05	0.56
1:K:141:LEU:HA	1:K:144:ILE:HD12	1.86	0.56
1:G:233:MET:CE	1:G:343:ILE:HD11	2.34	0.56
1:G:232:TYR:CD1	1:G:232:TYR:N	2.73	0.56
1:A:217:ARG:HG3	1:A:262:TYR:CE2	2.40	0.56
1:A:148:PHE:O	1:A:152:LEU:HB2	2.04	0.56
1:L:330:GLN:HE21	1:L:330:GLN:HA	1.70	0.56
1:C:153:ALA:HB2	1:C:158:ILE:CG2	2.35	0.56
1:D:403:ARG:O	1:D:406:ASN:HB2	2.05	0.56
1:A:222:GLY:HA3	1:A:373:LEU:CD1	2.34	0.56
1:D:67:ARG:HH11	1:D:67:ARG:CG	2.17	0.56
1:A:416:SER:OG	1:F:429:PRO:HA	2.06	0.56
1:G:414:GLN:HB2	1:G:430:ILE:HG23	1.86	0.56
1:L:75:ILE:HG23	1:L:131:ILE:HD13	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:501:THR:H	1:J:146:ARG:NH2	2.03	0.56
1:J:106:ALA:O	1:J:109:SER:HB3	2.06	0.56
1:E:291:LEU:CG	1:E:291:LEU:O	2.50	0.56
1:E:153:ALA:CA	1:E:158:ILE:HG22	2.34	0.56
1:F:313:SER:HB2	1:F:315:LEU:CD1	2.35	0.56
1:L:217:ARG:NH1	1:L:217:ARG:HB3	2.20	0.56
1:F:328:GLU:O	1:F:329:LYS:C	2.44	0.56
1:H:87:THR:CB	1:H:88:PRO:HD3	2.36	0.56
1:I:439:ARG:HH12	1:J:404:ASP:CB	2.18	0.56
1:H:394:TYR:HE2	1:L:397:LEU:HD13	1.68	0.56
1:A:459:ARG:O	1:A:463:GLN:HG3	2.05	0.56
1:F:74:VAL:HG23	1:F:74:VAL:O	2.04	0.56
1:C:427:THR:C	1:C:428:ILE:HD13	2.25	0.56
1:L:32:LEU:O	1:L:33:ARG:CB	2.54	0.56
1:D:336:ALA:HB1	1:D:359:ILE:HG21	1.88	0.56
1:F:239:THR:O	1:F:239:THR:CG2	2.53	0.56
1:I:30:GLU:CG	1:I:31:ASP:H	2.16	0.56
1:H:82:HIS:HD2	1:H:109:SER:CA	2.15	0.56
1:F:89:CYS:HB2	1:F:163:ASP:HB2	1.86	0.56
1:D:118:VAL:HA	1:D:460:SER:OG	2.05	0.56
1:H:219:VAL:O	1:H:223:ILE:HG13	2.04	0.56
1:K:131:ILE:CG1	1:K:136:TYR:CE2	2.86	0.56
1:L:393:SER:O	1:L:394:TYR:C	2.43	0.56
1:J:371:LEU:HD13	1:J:482:TYR:CE1	2.39	0.56
1:K:65:ILE:HD13	1:K:144:ILE:HG13	1.87	0.56
1:E:280:ILE:CG2	1:E:307:ALA:HB1	2.35	0.56
1:I:14:GLU:HG3	1:I:53:LYS:NZ	2.21	0.56
1:I:325:ALA:O	1:I:326:ALA:HB2	2.06	0.56
1:F:485:ALA:O	1:F:489:VAL:HG23	2.05	0.56
1:C:69:ASP:C	1:C:69:ASP:OD2	2.44	0.56
1:F:79:ARG:HG2	1:F:157:PHE:HB3	1.88	0.56
1:L:281:TRP:HE1	1:L:283:PRO:HD3	1.66	0.56
1:B:161:GLY:H	1:B:162:ILE:HD12	1.70	0.56
1:J:9:PHE:N	1:J:9:PHE:CD2	2.72	0.56
1:G:471:TYR:O	1:G:473:LEU:CD2	2.53	0.56
1:L:346:GLU:HG2	1:L:351:PRO:CG	2.35	0.56
1:D:244:ASP:C	1:D:245:LYS:HG3	2.26	0.56
1:C:74:VAL:C	1:C:75:ILE:HD12	2.26	0.56
1:I:201:LYS:HB2	1:I:202:PRO:HD3	1.87	0.56
1:D:99:VAL:CG2	1:D:100:SER:N	2.59	0.56
1:L:260:MET:HE3	1:L:288:PRO:HA	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:498:VAL:HG11	1:D:72:TRP:HE1	1.71	0.56
1:B:497:GLY:HA3	1:B:501:THR:HA	1.87	0.56
1:I:396:ARG:CG	1:I:396:ARG:HH11	2.11	0.56
1:H:23:ILE:O	1:H:471:TYR:CE1	2.59	0.56
1:D:229:GLU:OE2	1:D:229:GLU:HA	2.04	0.56
1:K:359:ILE:O	1:K:362:GLU:HB2	2.05	0.56
1:J:222:GLY:HA3	1:J:373:LEU:HD12	1.88	0.56
1:E:208:ILE:O	1:E:208:ILE:CG2	2.53	0.56
1:G:396:ARG:NH1	1:G:396:ARG:HG3	2.17	0.56
1:K:212:ILE:HD13	1:K:213:SER:H	1.71	0.56
1:B:217:ARG:CG	1:B:221:HIS:HE1	2.18	0.56
1:G:198:VAL:O	1:G:201:LYS:CE	2.53	0.56
1:B:433:THR:HG22	1:F:412:SER:HA	1.86	0.56
1:F:403:ARG:NH1	1:F:440:ILE:HB	2.21	0.56
1:D:462:ARG:HD3	1:D:466:ARG:HH21	1.70	0.56
1:F:168:ASP:OD1	1:F:169:MET:N	2.36	0.56
1:L:269:LYS:HD2	1:L:285:GLY:HA3	1.86	0.56
1:H:403:ARG:HG2	1:H:403:ARG:HH11	1.69	0.56
1:G:104:VAL:CG2	1:G:105:LYS:N	2.68	0.56
1:G:91:GLY:HA3	1:G:125:ALA:O	2.05	0.56
1:E:315:LEU:O	1:E:339:VAL:HG12	2.05	0.56
1:C:316:GLU:HG2	1:C:338:ARG:NE	2.19	0.56
1:C:322:LEU:HD13	1:C:323:ILE:N	2.20	0.56
1:F:498:VAL:CG2	1:F:499:THR:H	2.07	0.56
1:F:414:GLN:HB2	1:F:429:PRO:HD2	1.88	0.56
1:F:414:GLN:HG3	1:F:427:THR:O	2.06	0.56
1:I:30:GLU:HG3	1:I:31:ASP:OD2	2.05	0.56
1:A:67:ARG:NH1	1:A:140:GLU:OE1	2.39	0.56
1:D:456:THR:CG2	1:E:396:ARG:HH21	2.18	0.56
1:J:104:VAL:HG23	1:J:105:LYS:N	2.20	0.56
1:F:252:PHE:HE2	1:F:257:LEU:HB2	1.70	0.56
1:F:211:ARG:O	1:F:211:ARG:HG2	2.05	0.56
1:D:429:PRO:O	1:D:431:VAL:N	2.38	0.56
1:D:372:TYR:OH	1:D:461:ALA:HB2	2.06	0.56
1:H:247:PHE:CB	1:H:321:ILE:HG13	2.31	0.56
1:E:165:PRO:C	1:E:198:VAL:HG23	2.26	0.56
1:C:354:PRO:O	1:C:357:ASP:HB2	2.05	0.56
1:K:23:ILE:HG22	1:K:471:TYR:CD1	2.40	0.56
1:A:153:ALA:HA	1:A:158:ILE:HG22	1.88	0.56
1:F:451:SER:OG	1:F:452:GLY:N	2.37	0.56
1:L:475:LEU:N	1:L:475:LEU:HD12	2.20	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:55:CYS:SG	1:K:82:HIS:HA	2.46	0.56
1:F:149:THR:OG1	1:F:179:ILE:HD13	2.06	0.56
1:C:250:GLN:HE21	1:C:314:ILE:CD1	2.19	0.56
1:L:294:PHE:CE2	1:L:301:ILE:HA	2.41	0.56
1:I:24:VAL:CG1	1:I:28:LEU:HD13	2.35	0.56
1:C:163:ASP:O	1:C:165:PRO:HD3	2.06	0.56
1:K:248:VAL:HG11	1:K:314:ILE:HB	1.88	0.56
1:H:117:VAL:HG11	1:H:372:TYR:HB2	1.87	0.56
1:A:24:VAL:HG22	1:A:483:VAL:HG13	1.87	0.56
1:K:236:LEU:HB3	1:K:342:LYS:HE3	1.87	0.56
1:L:353:THR:O	1:L:356:ALA:HB3	2.06	0.56
1:F:436:PHE:O	1:F:439:ARG:N	2.35	0.56
1:E:484:ASN:O	1:E:488:LYS:HG3	2.06	0.56
1:J:53:LYS:HB3	1:J:54:PRO:CD	2.36	0.56
1:I:400:LYS:HE2	1:I:403:ARG:HH21	1.71	0.56
1:L:294:PHE:HA	1:L:297:GLN:CD	2.26	0.56
1:I:91:GLY:HA2	1:I:111:MET:CE	2.36	0.56
1:K:53:LYS:CB	1:K:54:PRO:HD3	2.32	0.56
1:C:500:PHE:HB3	1:D:142:GLU:OE1	2.05	0.56
1:C:108:ALA:O	1:C:112:THR:HG22	2.06	0.56
1:D:346:GLU:OE2	1:D:352:THR:HG23	2.06	0.56
1:H:9:PHE:CD1	1:H:10:PHE:N	2.63	0.56
1:F:79:ARG:NH1	1:F:165:PRO:HB3	2.21	0.56
1:L:338:ARG:HH11	1:L:338:ARG:CB	2.19	0.56
1:C:233:MET:HE2	1:C:236:LEU:HD11	1.88	0.56
1:E:224:GLU:HA	1:E:227:ILE:HG22	1.88	0.56
1:D:462:ARG:CD	1:D:466:ARG:HH21	2.19	0.56
1:H:141:LEU:O	1:H:145:THR:HG23	2.06	0.56
1:D:439:ARG:NH2	1:E:405:SER:OG	2.38	0.56
1:J:324:PRO:HD2	1:J:345:ALA:O	2.06	0.56
1:H:203:ILE:HD12	1:H:209:HIS:CD2	2.40	0.56
1:C:497:GLY:HA3	1:C:501:THR:HA	1.87	0.55
1:F:153:ALA:HA	1:F:158:ILE:HG22	1.88	0.55
1:H:176:MET:HE2	1:H:179:ILE:HG13	1.87	0.55
1:J:459:ARG:NH2	2:J:502:ADP:O3B	2.39	0.55
1:G:314:ILE:HD13	1:G:314:ILE:H	1.71	0.55
1:I:431:VAL:HG13	1:I:431:VAL:O	2.06	0.55
1:D:421:PHE:HD2	1:D:422:GLY:H	1.53	0.55
1:B:336:ALA:HB3	1:B:337:PRO:HD3	1.87	0.55
1:K:38:GLU:O	1:K:40:GLN:N	2.39	0.55
1:I:282:ASN:O	1:I:282:ASN:OD1	2.24	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:363:ARG:O	1:I:365:ILE:HG12	2.06	0.55
1:I:96:SER:HA	1:I:131:ILE:O	2.06	0.55
1:H:374:ASN:O	1:H:374:ASN:ND2	2.39	0.55
1:A:460:SER:O	1:A:464:ILE:HG13	2.06	0.55
1:C:236:LEU:HD13	1:C:343:ILE:HD11	1.89	0.55
1:A:239:THR:N	1:A:240:PRO:CD	2.68	0.55
1:G:131:ILE:HD13	1:G:144:ILE:HD13	1.88	0.55
1:K:420:LYS:O	1:K:421:PHE:HB2	2.04	0.55
1:C:28:LEU:HD11	1:C:490:PHE:CD2	2.42	0.55
1:K:466:ARG:C	1:K:468:ALA:H	2.10	0.55
1:L:244:ASP:C	1:L:245:LYS:HG3	2.27	0.55
1:K:282:ASN:OD1	1:K:284:ASP:HB2	2.06	0.55
1:A:259:SER:O	1:A:263:LEU:HB2	2.06	0.55
1:G:6:ASP:OD1	1:G:6:ASP:O	2.23	0.55
1:F:282:ASN:ND2	1:F:306:LYS:O	2.38	0.55
1:I:314:ILE:H	1:I:314:ILE:HD13	1.71	0.55
1:C:417:LEU:HD11	1:E:417:LEU:HD23	1.88	0.55
1:A:368:ILE:CG2	1:A:373:LEU:HD13	2.36	0.55
1:D:17:PHE:CE1	1:D:486:ILE:HD13	2.41	0.55
1:G:214:ALA:HB2	1:G:380:VAL:HG21	1.88	0.55
1:K:258:HIS:HA	1:K:261:ARG:HB2	1.88	0.55
1:L:467:THR:O	1:L:467:THR:CG2	2.54	0.55
1:L:87:THR:OG1	1:L:88:PRO:CD	2.54	0.55
1:C:316:GLU:CG	1:C:338:ARG:HH21	2.16	0.55
1:C:164:VAL:HA	1:C:197:CYS:O	2.06	0.55
1:I:174:ARG:HG3	1:I:175:GLU:H	1.71	0.55
1:A:360:PHE:HB3	1:A:365:ILE:CG2	2.37	0.55
1:J:314:ILE:N	1:J:314:ILE:CD1	2.69	0.55
1:D:249:VAL:HB	1:D:323:ILE:HG13	1.88	0.55
1:E:476:ASP:OD2	1:E:479:THR:OG1	2.16	0.55
1:B:302:LEU:H	1:B:302:LEU:HD12	1.71	0.55
1:A:202:PRO:HD2	1:A:205:GLN:HB2	1.89	0.55
1:H:58:VAL:HG22	1:H:80:ALA:HB1	1.86	0.55
1:K:436:PHE:CZ	1:K:440:ILE:HD11	2.42	0.55
1:G:281:TRP:O	1:G:282:ASN:HB2	2.05	0.55
1:H:277:ASP:HB3	1:H:302:LEU:HD11	1.88	0.55
1:H:439:ARG:HH12	1:L:405:SER:N	2.05	0.55
1:H:319:CYS:O	1:H:341:ALA:HA	2.07	0.55
1:A:22:SER:O	1:A:23:ILE:C	2.44	0.55
1:A:285:GLY:C	1:A:286:ILE:HG13	2.25	0.55
1:J:49:LEU:HD12	1:J:49:LEU:H	1.70	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:336:ALA:O	1:I:339:VAL:HG22	2.06	0.55
1:I:24:VAL:HG22	1:I:483:VAL:HG13	1.87	0.55
1:L:163:ASP:O	1:L:165:PRO:HD3	2.07	0.55
1:J:33:ARG:NE	1:J:33:ARG:HA	2.21	0.55
1:A:427:THR:O	1:A:428:ILE:HD13	2.07	0.55
1:D:100:SER:O	1:D:103:GLU:N	2.38	0.55
1:K:107:LEU:CD1	1:K:126:LYS:HE2	2.32	0.55
1:I:234:SER:C	1:I:236:LEU:H	2.09	0.55
1:A:137:THR:CG2	1:A:140:GLU:HG3	2.37	0.55
1:A:90:LYS:HD2	1:A:164:VAL:O	2.06	0.55
1:K:96:SER:O	1:K:98:ASP:N	2.40	0.55
1:C:104:VAL:HG23	1:C:105:LYS:H	1.72	0.55
1:B:308:LYS:HE3	1:B:308:LYS:HA	1.87	0.55
1:I:305:PRO:O	1:I:307:ALA:N	2.40	0.55
1:F:114:LYS:HG3	1:F:371:LEU:O	2.06	0.55
1:J:92:GLY:HA2	1:J:166:ALA:O	2.07	0.55
1:J:456:THR:HG23	1:K:396:ARG:HH21	1.72	0.55
1:A:423:LYS:HD3	1:A:426:GLY:CA	2.16	0.55
1:C:19:ARG:HG3	1:C:19:ARG:NH1	2.21	0.55
1:L:81:GLN:HG3	1:L:157:PHE:HE1	1.72	0.55
1:C:380:VAL:CG1	1:C:381:SER:N	2.70	0.55
1:K:492:VAL:HG12	1:K:493:TYR:N	2.21	0.55
1:D:294:PHE:HZ	1:D:303:GLY:O	1.88	0.55
1:B:186:THR:HG22	1:B:187:ILE:N	2.20	0.55
1:F:158:ILE:O	1:F:158:ILE:HG23	2.06	0.55
1:E:33:ARG:HG3	1:E:33:ARG:O	2.07	0.55
1:B:161:GLY:N	1:B:162:ILE:HD12	2.21	0.55
1:C:252:PHE:HE2	1:C:260:MET:HE1	1.72	0.55
1:G:331:LEU:HD12	1:G:352:THR:HG22	1.89	0.55
1:I:153:ALA:CA	1:I:158:ILE:HG22	2.37	0.55
1:G:328:GLU:HG2	1:G:329:LYS:HG3	1.89	0.55
1:A:62:SER:OG	1:E:56:ASN:HA	2.07	0.55
1:C:91:GLY:HA3	1:C:125:ALA:O	2.07	0.55
1:I:61:LEU:N	1:I:61:LEU:HD12	2.21	0.55
1:C:248:VAL:CG1	1:C:249:VAL:N	2.69	0.55
1:I:24:VAL:HG12	1:I:28:LEU:HB2	1.87	0.55
1:A:368:ILE:HG21	1:A:373:LEU:HD13	1.88	0.55
1:K:255:VAL:HG13	1:K:256:GLY:H	1.72	0.55
1:D:335:ASN:H	1:D:335:ASN:ND2	2.04	0.55
1:H:112:THR:HB	1:H:124:GLY:H	1.72	0.55
1:J:431:VAL:HG13	1:J:431:VAL:O	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:280:ILE:HD11	1:C:301:ILE:HB	1.88	0.55
1:A:59:LEU:HD21	1:A:61:LEU:CD2	2.35	0.55
1:K:59:LEU:HB2	1:K:157:PHE:CE2	2.42	0.55
1:D:113:TYR:O	1:D:117:VAL:HG23	2.07	0.55
1:L:201:LYS:HB2	1:L:202:PRO:HD2	1.89	0.55
1:B:100:SER:OG	1:B:103:GLU:HB2	2.07	0.55
1:B:271:ILE:CD1	1:B:283:PRO:HA	2.36	0.55
1:I:153:ALA:HA	1:I:158:ILE:HG22	1.87	0.55
1:C:428:ILE:O	1:D:416:SER:HB3	2.07	0.55
1:K:245:LYS:HG3	1:K:267:GLY:O	2.06	0.55
1:D:497:GLY:CA	1:D:501:THR:HA	2.36	0.55
1:E:248:VAL:HG11	1:E:314:ILE:HB	1.89	0.55
1:G:29:VAL:CA	1:G:33:ARG:HD2	2.30	0.55
1:G:427:THR:C	1:G:428:ILE:HD13	2.27	0.55
1:E:24:VAL:O	1:E:25:GLU:C	2.46	0.55
1:A:386:LEU:HD13	1:B:392:VAL:CG2	2.33	0.55
1:H:167:PRO:HG3	1:H:176:MET:SD	2.47	0.55
1:G:408:HIS:HB3	1:L:436:PHE:CD2	2.42	0.55
1:G:259:SER:O	1:G:263:LEU:HD23	2.07	0.55
1:H:160:PRO:HG3	1:H:191:ASP:OD1	2.07	0.55
1:F:6:ASP:N	1:F:7:PRO:HD3	2.20	0.55
1:E:305:PRO:O	1:E:306:LYS:HB2	2.07	0.55
1:B:36:GLU:HG3	1:B:37:SER:N	2.20	0.55
1:I:475:LEU:C	1:I:477:LEU:HD22	2.27	0.55
1:I:479:THR:O	1:I:480:ALA:C	2.45	0.55
1:K:371:LEU:HD13	1:K:482:TYR:CE2	2.42	0.55
1:J:314:ILE:H	1:J:314:ILE:CD1	2.20	0.55
1:L:369:PRO:CD	1:L:477:LEU:HB3	2.37	0.55
1:H:111:MET:HB3	1:H:124:GLY:HA2	1.89	0.55
1:K:59:LEU:HD22	1:K:157:PHE:CD2	2.42	0.55
1:L:281:TRP:O	1:L:282:ASN:HB2	2.07	0.55
1:H:121:PRO:HG2	1:H:382:TYR:HE2	1.71	0.55
1:C:494:ASN:ND2	1:C:494:ASN:O	2.36	0.55
1:H:56:ASN:HA	1:J:62:SER:OG	2.06	0.55
1:C:358:LYS:O	1:C:361:LEU:HB2	2.06	0.55
1:D:34:THR:O	1:D:34:THR:CG2	2.55	0.55
1:D:257:LEU:C	1:D:257:LEU:HD12	2.27	0.55
1:A:58:VAL:HG23	1:A:80:ALA:HB2	1.89	0.55
1:I:151:GLU:HB3	1:L:57:HIS:HE1	1.72	0.55
1:I:281:TRP:NE1	1:I:283:PRO:HD3	2.21	0.55
1:H:52:ILE:HD13	1:H:489:VAL:CG1	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:379:THR:HG21	1:K:456:THR:HG21	1.89	0.55
1:C:114:LYS:NZ	1:C:374:ASN:HD21	2.05	0.55
1:L:213:SER:HB2	1:L:217:ARG:HD2	1.89	0.55
1:E:211:ARG:HG3	1:E:211:ARG:HH11	1.71	0.55
1:D:147:ARG:NH1	1:D:151:GLU:OE2	2.40	0.55
1:D:158:ILE:HG12	1:D:165:PRO:HG2	1.88	0.54
1:B:165:PRO:C	1:B:198:VAL:HG23	2.27	0.54
1:H:274:GLY:CA	1:H:314:ILE:HD12	2.37	0.54
1:C:45:VAL:HG23	1:F:72:TRP:CZ3	2.41	0.54
1:J:498:VAL:CG2	1:J:499:THR:H	2.19	0.54
1:F:240:PRO:O	1:G:431:VAL:HG23	2.06	0.54
1:F:45:VAL:C	1:F:47:GLY:H	2.08	0.54
1:J:161:GLY:O	1:J:162:ILE:HD12	2.06	0.54
1:I:252:PHE:CE2	1:I:260:MET:HE1	2.35	0.54
1:E:219:VAL:HA	1:E:373:LEU:CD1	2.37	0.54
1:D:296:LEU:CD1	1:D:297:GLN:N	2.69	0.54
1:D:453:LEU:CD2	1:D:457:MET:HG2	2.36	0.54
1:D:453:LEU:HD23	1:D:453:LEU:C	2.27	0.54
1:C:247:PHE:CE1	1:C:270:CYS:N	2.75	0.54
1:H:34:THR:HG22	1:H:34:THR:O	2.07	0.54
1:C:413:VAL:CG1	1:E:413:VAL:HG11	2.38	0.54
1:D:250:GLN:HE21	1:D:274:GLY:HA3	1.71	0.54
1:B:238:MET:O	1:B:239:THR:C	2.45	0.54
1:H:219:VAL:HG13	1:H:373:LEU:HD21	1.89	0.54
1:C:94:ARG:HD3	1:C:168:ASP:OD2	2.06	0.54
1:L:328:GLU:O	1:L:329:LYS:HB2	2.07	0.54
1:E:222:GLY:HA3	1:E:373:LEU:CD1	2.37	0.54
1:B:281:TRP:O	1:B:282:ASN:HB2	2.07	0.54
1:G:201:LYS:HB2	1:G:202:PRO:CD	2.37	0.54
1:F:335:ASN:HD22	1:F:336:ALA:H	1.54	0.54
1:D:30:GLU:O	1:D:30:GLU:HG3	2.07	0.54
1:A:446:LYS:HG3	1:A:450:HIS:CE1	2.42	0.54
1:E:69:ASP:OD1	1:E:71:SER:N	2.37	0.54
1:B:165:PRO:HD2	1:B:197:CYS:O	2.07	0.54
1:C:380:VAL:HG22	1:C:449:VAL:CG1	2.38	0.54
1:L:498:VAL:N	1:L:501:THR:HB	2.22	0.54
1:C:435:GLU:O	1:C:438:ASP:N	2.41	0.54
1:D:335:ASN:HA	1:D:338:ARG:HD3	1.87	0.54
1:D:24:VAL:CG1	1:D:28:LEU:HD22	2.36	0.54
1:L:247:PHE:HE2	1:L:249:VAL:CG1	2.21	0.54
1:L:65:ILE:HG12	1:L:75:ILE:HD11	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:65:ILE:HG23	1:L:75:ILE:HD13	1.88	0.54
1:H:57:HIS:CE1	1:H:84:HIS:CE1	2.94	0.54
1:C:281:TRP:O	1:C:282:ASN:CB	2.55	0.54
1:J:165:PRO:HD2	1:J:197:CYS:O	2.06	0.54
1:E:239:THR:CG2	1:E:239:THR:O	2.54	0.54
1:C:374:ASN:ND2	1:C:374:ASN:O	2.40	0.54
1:B:100:SER:O	1:B:103:GLU:HB3	2.07	0.54
1:C:142:GLU:HA	1:C:178:TRP:CE3	2.42	0.54
1:F:335:ASN:HD22	1:F:335:ASN:N	2.05	0.54
1:I:406:ASN:ND2	1:J:409:LEU:CD2	2.69	0.54
1:C:30:GLU:HA	1:C:34:THR:OG1	2.07	0.54
1:H:294:PHE:O	1:H:298:HIS:CE1	2.61	0.54
1:C:318:ASP:HA	1:C:340:LYS:HB2	1.87	0.54
1:A:496:ALA:C	1:A:501:THR:O	2.46	0.54
1:C:249:VAL:O	1:C:249:VAL:HG22	2.07	0.54
1:A:411:MET:HG2	1:A:430:ILE:HG21	1.88	0.54
1:C:239:THR:CA	1:C:245:LYS:HZ2	2.21	0.54
1:G:72:TRP:NE1	1:K:498:VAL:HG11	2.22	0.54
1:K:66:ARG:HG3	1:K:72:TRP:CE2	2.42	0.54
1:L:6:ASP:CB	1:L:329:LYS:HD2	2.34	0.54
1:K:360:PHE:CD1	1:K:365:ILE:HD12	2.37	0.54
1:G:224:GLU:O	1:G:227:ILE:HG22	2.07	0.54
1:J:104:VAL:CG2	1:J:105:LYS:N	2.70	0.54
1:G:213:SER:HB2	1:G:217:ARG:HD2	1.90	0.54
1:B:246:THR:O	1:B:320:ASP:HB2	2.08	0.54
1:C:248:VAL:HG11	1:C:314:ILE:HB	1.90	0.54
1:D:281:TRP:CD1	1:D:283:PRO:HD3	2.43	0.54
1:B:501:THR:OXT	1:F:181:ASP:CG	2.46	0.54
1:B:411:MET:HG2	1:B:430:ILE:HG22	1.89	0.54
1:J:244:ASP:CG	1:J:245:LYS:HG3	2.28	0.54
1:G:221:HIS:O	1:G:222:GLY:C	2.46	0.54
1:F:294:PHE:CE1	1:F:298:HIS:CE1	2.96	0.54
1:A:153:ALA:CA	1:A:158:ILE:HG22	2.36	0.54
1:A:22:SER:OG	1:A:23:ILE:N	2.40	0.54
1:A:496:ALA:O	1:A:501:THR:O	2.25	0.54
1:B:324:PRO:HD2	1:B:345:ALA:O	2.06	0.54
1:B:164:VAL:HA	1:B:197:CYS:O	2.08	0.54
1:H:332:THR:HA	1:H:353:THR:CG2	2.37	0.54
1:K:291:LEU:HD11	1:K:301:ILE:CG2	2.35	0.54
1:D:274:GLY:HA2	1:D:279:SER:HA	1.90	0.54
1:F:25:GLU:O	1:F:29:VAL:HG23	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:295:LYS:HA	1:B:300:SER:O	2.07	0.54
1:H:455:TYR:HB2	1:L:400:LYS:HB2	1.89	0.54
1:J:137:THR:HG22	1:J:140:GLU:OE1	2.08	0.54
1:B:162:ILE:N	1:B:162:ILE:CD1	2.71	0.54
1:B:213:SER:HB2	1:B:217:ARG:HH21	1.73	0.54
1:F:336:ALA:HB3	1:F:337:PRO:HD3	1.90	0.54
1:C:215:THR:HG23	1:C:377:GLY:CA	2.38	0.54
1:G:7:PRO:O	1:G:329:LYS:HE3	2.07	0.54
1:L:459:ARG:O	1:L:463:GLN:HG3	2.08	0.54
1:D:175:GLU:HA	1:D:178:TRP:CE3	2.43	0.54
1:F:150:MET:SD	1:F:186:THR:HG21	2.48	0.54
1:D:59:LEU:CD2	1:D:61:LEU:HD22	2.37	0.54
1:I:475:LEU:HD12	1:I:475:LEU:N	2.23	0.54
1:K:248:VAL:HG13	1:K:272:ALA:O	2.08	0.54
1:H:331:LEU:HD22	1:H:360:PHE:CZ	2.28	0.54
1:C:414:GLN:CA	1:C:429:PRO:HG2	2.37	0.54
1:D:97:THR:C	1:D:130:LYS:CE	2.76	0.54
1:G:487:GLU:O	1:G:490:PHE:HB3	2.07	0.54
1:L:247:PHE:HB3	1:L:321:ILE:HG13	1.90	0.54
1:A:417:LEU:HD11	1:F:417:LEU:HD22	1.88	0.54
1:G:87:THR:HB	1:G:88:PRO:CD	2.34	0.54
1:B:291:LEU:CD1	1:B:301:ILE:HG22	2.35	0.54
1:D:372:TYR:CD2	1:D:464:ILE:CD1	2.90	0.54
1:A:25:GLU:O	1:A:26:ASP:C	2.46	0.54
1:I:414:GLN:CG	1:I:429:PRO:HD2	2.38	0.54
1:D:53:LYS:N	1:D:54:PRO:HD2	2.23	0.54
1:G:392:VAL:HG12	1:G:393:SER:O	2.07	0.54
1:B:117:VAL:HG21	1:B:371:LEU:HG	1.88	0.54
1:F:332:THR:H	1:F:335:ASN:HD21	1.55	0.54
1:I:410:LEU:CD2	1:J:409:LEU:CD1	2.85	0.54
1:E:232:TYR:HE1	1:E:465:MET:HG2	1.72	0.54
1:H:229:GLU:HA	1:H:229:GLU:OE2	2.07	0.54
1:E:148:PHE:O	1:E:152:LEU:HB2	2.08	0.54
1:K:24:VAL:O	1:K:25:GLU:C	2.45	0.54
1:L:165:PRO:HD2	1:L:197:CYS:O	2.08	0.54
1:I:92:GLY:CA	1:I:166:ALA:O	2.56	0.54
1:C:410:LEU:HB3	1:C:430:ILE:HA	1.90	0.54
1:F:17:PHE:CE2	1:F:53:LYS:HB2	2.43	0.54
1:E:369:PRO:HG2	1:E:478:ARG:HA	1.90	0.54
1:L:411:MET:HA	1:L:430:ILE:CG2	2.35	0.54
1:B:176:MET:O	1:B:179:ILE:HB	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:394:TYR:CE2	1:L:397:LEU:HD13	2.42	0.54
1:H:289:LYS:HG2	1:H:293:ASP:OD2	2.08	0.54
1:F:225:ASN:ND2	1:F:458:GLU:HA	2.23	0.54
1:E:112:THR:HG22	1:E:124:GLY:HA3	1.89	0.54
1:I:250:GLN:HB2	1:I:314:ILE:HD11	1.89	0.54
1:A:314:ILE:N	1:A:314:ILE:CD1	2.71	0.54
1:L:367:VAL:O	1:L:367:VAL:HG23	2.07	0.54
1:H:492:VAL:HG23	1:H:493:TYR:H	1.73	0.54
1:B:19:ARG:CZ	1:B:479:THR:HG21	2.38	0.54
1:J:425:GLY:O	1:J:428:ILE:HD11	2.08	0.54
1:K:93:ILE:HD11	1:K:165:PRO:CB	2.38	0.54
1:H:114:LYS:NZ	1:H:374:ASN:HD21	2.06	0.54
1:E:33:ARG:NH1	1:E:33:ARG:HB2	2.22	0.54
1:H:90:LYS:CE	1:H:199:THR:HG21	2.35	0.54
1:C:460:SER:O	1:C:464:ILE:HG13	2.07	0.54
1:K:6:ASP:OD2	1:K:329:LYS:HE2	2.07	0.54
1:F:371:LEU:HD23	1:F:481:ALA:CB	2.38	0.54
1:A:158:ILE:HG23	1:A:158:ILE:O	2.06	0.54
1:B:181:ASP:O	1:B:182:THR:C	2.45	0.54
1:B:335:ASN:HD22	1:B:335:ASN:N	2.05	0.54
1:B:339:VAL:HG21	1:B:360:PHE:CE1	2.36	0.54
1:C:351:PRO:CG	1:C:352:THR:H	2.20	0.54
1:I:315:LEU:H	1:I:315:LEU:HD12	1.72	0.54
1:J:33:ARG:CA	1:J:33:ARG:CZ	2.84	0.54
1:K:248:VAL:HG11	1:K:272:ALA:HB3	1.89	0.54
1:K:236:LEU:O	1:K:342:LYS:HE2	2.08	0.54
1:K:336:ALA:HB3	1:K:359:ILE:CD1	2.35	0.54
1:H:65:ILE:C	1:H:65:ILE:HD12	2.29	0.54
1:I:78:TYR:CE2	1:I:101:VAL:HG23	2.43	0.54
1:C:355:GLU:O	1:C:359:ILE:CD1	2.56	0.54
1:G:9:PHE:HA	1:G:12:MET:CE	2.38	0.54
1:B:104:VAL:HG23	1:B:105:LYS:N	2.23	0.54
1:J:380:VAL:O	1:J:380:VAL:CG1	2.56	0.54
1:K:248:VAL:HG22	1:K:272:ALA:N	2.22	0.53
1:B:73:GLU:HG2	1:B:74:VAL:N	2.23	0.53
1:D:249:VAL:HB	1:D:323:ILE:CG1	2.38	0.53
1:G:17:PHE:HE1	1:G:486:ILE:HD12	1.70	0.53
1:L:247:PHE:CE2	1:L:249:VAL:HG12	2.43	0.53
1:G:90:LYS:NZ	1:G:199:THR:OG1	2.40	0.53
1:A:208:ILE:O	1:A:208:ILE:CG2	2.56	0.53
1:A:386:LEU:O	1:A:389:LEU:N	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:244:ASP:OD2	1:J:245:LYS:HG3	2.08	0.53
1:L:386:LEU:O	1:L:389:LEU:N	2.42	0.53
1:C:61:LEU:HD12	1:C:61:LEU:N	2.22	0.53
1:E:421:PHE:O	1:E:422:GLY:C	2.47	0.53
1:D:214:ALA:CB	1:D:380:VAL:HG21	2.37	0.53
1:L:219:VAL:HA	1:L:373:LEU:HD11	1.90	0.53
1:J:174:ARG:HG3	1:J:175:GLU:H	1.73	0.53
1:K:49:LEU:H	1:K:49:LEU:CD1	2.20	0.53
1:J:81:GLN:NE2	1:J:157:PHE:CD1	2.76	0.53
1:K:104:VAL:CG2	1:K:105:LYS:N	2.71	0.53
1:H:75:ILE:HD12	1:H:75:ILE:H	1.74	0.53
1:B:257:LEU:O	1:B:257:LEU:HD12	2.09	0.53
1:I:382:TYR:CE2	1:I:386:LEU:HD21	2.43	0.53
1:E:173:GLU:OE2	1:E:211:ARG:NH2	2.41	0.53
1:G:326:ALA:O	1:G:327:SER:O	2.26	0.53
1:D:260:MET:HE3	1:D:288:PRO:HA	1.89	0.53
1:D:335:ASN:O	1:D:336:ALA:C	2.47	0.53
1:D:20:GLY:HA2	1:D:23:ILE:HD12	1.90	0.53
1:D:19:ARG:NH1	1:D:479:THR:HG21	2.23	0.53
1:L:223:ILE:HD13	1:L:263:LEU:HD21	1.90	0.53
1:B:247:PHE:CE1	1:B:263:LEU:HB3	2.44	0.53
1:K:162:ILE:CG2	1:K:163:ASP:N	2.66	0.53
1:A:24:VAL:CG2	1:A:483:VAL:HG13	2.38	0.53
1:L:492:VAL:HG21	2:L:502:ADP:C2	2.43	0.53
1:J:413:VAL:O	1:J:417:LEU:HB2	2.09	0.53
1:K:417:LEU:O	1:K:420:LYS:HG3	2.09	0.53
1:G:483:VAL:HG12	1:G:484:ASN:N	2.23	0.53
1:F:263:LEU:O	1:F:268:ALA:HB3	2.07	0.53
1:D:287:ASP:OD1	1:D:288:PRO:HD2	2.08	0.53
1:A:132:ASN:OD1	1:A:134:LYS:HB2	2.09	0.53
1:L:94:ARG:O	1:L:128:GLY:HA2	2.08	0.53
1:C:499:THR:HG1	1:C:500:PHE:HD1	1.54	0.53
1:L:247:PHE:CZ	1:L:270:CYS:HB2	2.43	0.53
1:I:41:LYS:O	1:I:44:ARG:HB3	2.09	0.53
1:E:368:ILE:CG2	1:E:373:LEU:HD22	2.39	0.53
1:D:293:ASP:O	1:D:296:LEU:HB3	2.07	0.53
1:J:343:ILE:CD1	1:J:366:MET:HE2	2.36	0.53
1:I:379:THR:O	1:I:382:TYR:HB3	2.09	0.53
1:D:219:VAL:HG13	1:D:373:LEU:HD21	1.90	0.53
1:I:499:THR:HG23	1:L:147:ARG:CZ	2.38	0.53
1:H:51:ILE:HD13	1:J:64:PRO:HG3	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:49:LEU:HA	1:I:52:ILE:HG13	1.90	0.53
1:A:431:VAL:HG13	1:B:416:SER:OG	2.08	0.53
1:L:142:GLU:HG3	1:L:178:TRP:CD2	2.44	0.53
1:L:497:GLY:O	1:L:498:VAL:HG13	2.08	0.53
1:C:53:LYS:HB3	1:C:54:PRO:CD	2.37	0.53
1:D:336:ALA:CB	1:D:337:PRO:HD3	2.24	0.53
1:G:82:HIS:CD2	1:G:112:THR:CG2	2.85	0.53
1:F:88:PRO:HG2	1:F:122:PHE:CD2	2.42	0.53
1:C:168:ASP:O	1:C:169:MET:C	2.46	0.53
1:C:114:LYS:CE	1:C:374:ASN:ND2	2.71	0.53
1:F:131:ILE:CD1	1:F:136:TYR:HE2	2.22	0.53
1:K:315:LEU:HD21	1:K:330:GLN:HG3	1.89	0.53
1:F:250:GLN:HG2	1:F:314:ILE:HG12	1.89	0.53
2:I:502:ADP:H5'2	1:J:203:ILE:HG22	1.90	0.53
1:G:244:ASP:OD1	1:G:245:LYS:HG3	2.08	0.53
1:K:23:ILE:O	1:K:23:ILE:HG22	2.08	0.53
1:I:17:PHE:HE2	1:I:53:LYS:HB2	1.73	0.53
1:I:69:ASP:OD1	1:I:69:ASP:C	2.46	0.53
1:A:420:LYS:HB3	1:A:420:LYS:NZ	2.22	0.53
1:B:142:GLU:O	1:B:145:THR:N	2.42	0.53
1:E:330:GLN:HA	1:E:330:GLN:NE2	2.22	0.53
1:I:360:PHE:HD1	1:I:365:ILE:HG21	1.73	0.53
1:H:332:THR:HA	1:H:353:THR:HG23	1.89	0.53
1:L:146:ARG:NE	1:L:182:THR:OG1	2.40	0.53
1:K:17:PHE:CE2	1:K:53:LYS:HB2	2.42	0.53
1:K:252:PHE:CZ	1:K:260:MET:HE1	2.43	0.53
1:D:294:PHE:CE1	1:D:305:PRO:HD3	2.44	0.53
1:B:498:VAL:O	1:B:501:THR:HB	2.09	0.53
1:F:386:LEU:O	1:F:388:ASN:N	2.42	0.53
1:H:485:ALA:O	1:H:486:ILE:C	2.46	0.53
1:B:52:ILE:CD1	1:B:489:VAL:HG12	2.32	0.53
1:I:394:TYR:HB2	1:I:445:GLU:HG3	1.91	0.53
1:C:38:GLU:O	1:C:39:GLU:HB3	2.08	0.53
1:F:131:ILE:CD1	1:F:136:TYR:CE2	2.92	0.53
1:C:363:ARG:NH1	1:C:363:ARG:HB2	2.23	0.53
1:G:153:ALA:HA	1:G:158:ILE:HG23	1.90	0.53
1:G:7:PRO:O	1:G:329:LYS:CE	2.56	0.53
1:G:451:SER:OG	1:G:452:GLY:N	2.40	0.53
1:E:429:PRO:C	1:E:431:VAL:H	2.12	0.53
1:G:29:VAL:O	1:G:30:GLU:O	2.27	0.53
1:H:407:TYR:O	1:H:411:MET:HB2	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:234:SER:O	1:H:237:GLY:N	2.40	0.53
1:D:403:ARG:HG2	1:D:403:ARG:NH1	2.22	0.53
1:J:498:VAL:CG2	1:J:499:THR:N	2.71	0.53
1:G:252:PHE:CD2	1:G:273:VAL:HG11	2.44	0.53
1:H:84:HIS:O	1:H:85:GLN:C	2.47	0.53
1:G:39:GLU:O	1:G:41:LYS:HG3	2.09	0.53
1:F:166:ALA:HB1	1:F:167:PRO:CD	2.32	0.53
1:A:208:ILE:HG13	1:A:387:LYS:HD2	1.90	0.53
1:A:201:LYS:HZ3	1:A:388:ASN:ND2	2.07	0.53
1:H:379:THR:CG2	1:H:453:LEU:HD23	2.38	0.53
1:L:336:ALA:HB1	1:L:359:ILE:HG21	1.91	0.53
1:B:38:GLU:O	1:B:42:ARG:HD3	2.08	0.53
1:B:371:LEU:HD23	1:B:481:ALA:HB3	1.90	0.53
1:F:271:ILE:HD11	1:F:319:CYS:HB2	1.91	0.53
1:F:160:PRO:HG2	1:F:161:GLY:N	2.24	0.53
1:A:396:ARG:HD3	1:A:396:ARG:O	2.09	0.53
1:H:226:PHE:CE2	1:H:477:LEU:HD21	2.43	0.53
1:B:359:ILE:HG22	1:B:360:PHE:N	2.22	0.53
1:L:294:PHE:HE2	1:L:301:ILE:CA	2.21	0.53
1:K:478:ARG:NH1	1:K:478:ARG:CG	2.67	0.53
1:A:137:THR:OG1	1:A:140:GLU:HG3	2.08	0.53
1:I:501:THR:N	1:J:146:ARG:NH2	2.56	0.53
1:I:394:TYR:CE1	1:J:397:LEU:HD23	2.43	0.53
1:F:363:ARG:O	1:F:365:ILE:HG12	2.08	0.53
1:B:280:ILE:HD11	1:B:304:PHE:HB3	1.89	0.53
1:G:57:HIS:CD2	1:G:84:HIS:CE1	2.96	0.53
1:J:65:ILE:CG1	1:J:75:ILE:HD11	2.39	0.53
1:F:280:ILE:HD12	1:F:301:ILE:HD12	1.91	0.53
1:D:462:ARG:NE	1:D:466:ARG:HH21	2.06	0.53
1:J:224:GLU:HG2	1:J:225:ASN:N	2.24	0.53
1:A:294:PHE:CE2	1:A:298:HIS:HE1	2.26	0.53
1:H:211:ARG:CB	1:H:211:ARG:HH11	2.22	0.53
1:E:411:MET:HA	1:E:430:ILE:HG22	1.91	0.53
1:I:314:ILE:HD13	1:I:314:ILE:N	2.23	0.53
1:I:339:VAL:O	1:I:363:ARG:NH2	2.41	0.53
1:I:475:LEU:HD12	1:I:475:LEU:H	1.73	0.53
1:C:244:ASP:O	1:C:245:LYS:HD3	2.09	0.53
1:D:411:MET:HA	1:D:430:ILE:CG2	2.36	0.53
1:F:396:ARG:CG	1:F:396:ARG:NH1	2.63	0.53
1:C:109:SER:O	1:C:112:THR:HG23	2.09	0.53
1:F:420:LYS:O	1:F:421:PHE:HB2	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:38:GLU:N	1:I:42:ARG:NH2	2.56	0.53
1:G:89:CYS:N	1:G:162:ILE:O	2.42	0.53
1:A:386:LEU:O	1:A:387:LYS:C	2.47	0.53
1:L:85:GLN:HG2	1:L:86:ARG:N	2.23	0.53
1:E:9:PHE:HD1	1:E:10:PHE:N	2.03	0.53
1:K:104:VAL:HG23	1:K:105:LYS:H	1.73	0.53
1:F:280:ILE:CG2	1:F:307:ALA:HB1	2.38	0.53
1:A:45:VAL:C	1:A:47:GLY:H	2.12	0.53
1:J:115:CYS:O	1:J:116:ALA:C	2.48	0.53
1:H:460:SER:O	1:H:461:ALA:C	2.46	0.53
1:H:475:LEU:HD12	1:H:475:LEU:N	2.24	0.53
1:K:249:VAL:HG12	1:K:323:ILE:CD1	2.39	0.53
1:F:420:LYS:O	1:F:420:LYS:HG2	2.10	0.53
1:I:237:GLY:O	1:I:238:MET:HE2	2.09	0.53
1:L:100:SER:O	1:L:103:GLU:N	2.37	0.53
1:F:45:VAL:HG13	1:F:45:VAL:O	2.09	0.53
1:K:153:ALA:CA	1:K:158:ILE:CG2	2.87	0.53
1:K:59:LEU:CB	1:K:157:PHE:CE2	2.92	0.53
1:E:394:TYR:HB2	1:E:445:GLU:HG3	1.90	0.53
1:A:433:THR:O	1:A:434:ALA:C	2.47	0.53
1:K:210:GLY:HA2	1:K:212:ILE:HD11	1.91	0.53
1:G:160:PRO:HG3	1:G:191:ASP:OD1	2.09	0.53
1:F:334:SER:O	1:F:337:PRO:HD2	2.09	0.53
1:D:132:ASN:HB3	1:D:135:ASN:ND2	2.23	0.53
1:G:382:TYR:CE2	1:G:386:LEU:HD21	2.43	0.53
1:A:300:SER:HB3	1:A:302:LEU:HG	1.91	0.53
1:C:271:ILE:O	1:C:271:ILE:HG12	2.09	0.52
1:L:118:VAL:HG23	1:L:120:VAL:CG2	2.25	0.52
1:A:223:ILE:HD11	1:A:345:ALA:CB	2.39	0.52
1:D:281:TRP:HZ3	1:D:317:ALA:HB1	1.74	0.52
1:F:82:HIS:CD2	1:F:112:THR:OG1	2.62	0.52
1:A:287:ASP:HB3	1:A:290:GLU:HG3	1.90	0.52
1:E:480:ALA:O	1:E:483:VAL:HB	2.09	0.52
1:A:385:TRP:O	1:A:386:LEU:C	2.48	0.52
1:D:239:THR:O	1:D:239:THR:HG23	2.09	0.52
1:G:335:ASN:C	1:G:335:ASN:HD22	2.04	0.52
1:H:176:MET:HE2	1:H:176:MET:HA	1.91	0.52
1:J:236:LEU:HB2	1:J:238:MET:HG3	1.91	0.52
1:G:152:LEU:HD23	1:G:158:ILE:HB	1.92	0.52
1:C:17:PHE:HE1	1:C:486:ILE:HD12	1.72	0.52
1:G:364:ASN:O	1:G:365:ILE:HD13	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:433:THR:HG23	1:L:412:SER:OG	2.09	0.52
1:I:421:PHE:CD1	1:I:423:LYS:HB2	2.43	0.52
1:G:330:GLN:OE1	1:G:330:GLN:HA	2.09	0.52
1:G:265:ARG:O	1:G:265:ARG:HG2	2.08	0.52
1:C:164:VAL:HG21	1:C:385:TRP:CD1	2.44	0.52
1:C:85:GLN:OE1	2:C:3:ADP:N1	2.42	0.52
1:I:167:PRO:HD3	1:I:176:MET:HG2	1.91	0.52
1:K:48:ILE:O	1:K:52:ILE:HG13	2.08	0.52
1:K:252:PHE:CZ	1:K:260:MET:CE	2.92	0.52
1:G:82:HIS:HB3	1:G:112:THR:HG21	1.91	0.52
1:C:218:GLY:O	1:C:219:VAL:C	2.46	0.52
1:E:368:ILE:HG21	1:E:373:LEU:HD22	1.91	0.52
1:L:414:GLN:CD	1:L:430:ILE:HG23	2.29	0.52
1:E:387:LYS:HD2	1:E:445:GLU:OE2	2.09	0.52
1:B:248:VAL:HG13	1:B:272:ALA:HB3	1.92	0.52
1:A:396:ARG:HG3	1:A:396:ARG:NH1	2.25	0.52
1:F:403:ARG:HH12	1:F:441:SER:N	2.08	0.52
1:A:192:ILE:CG1	1:A:192:ILE:O	2.58	0.52
1:C:256:GLY:O	1:C:259:SER:HB2	2.09	0.52
1:D:349:ASN:HD21	1:D:374:ASN:ND2	2.08	0.52
1:I:472:ASN:CG	1:I:472:ASN:O	2.48	0.52
1:I:478:ARG:O	1:I:480:ALA:N	2.41	0.52
1:D:280:ILE:HD11	1:D:304:PHE:CB	2.37	0.52
1:I:36:GLU:O	1:I:37:SER:O	2.27	0.52
1:I:498:VAL:O	1:I:501:THR:CG2	2.58	0.52
1:A:461:ALA:O	1:A:464:ILE:HB	2.08	0.52
1:J:82:HIS:HD2	1:J:83:SER:HB2	1.74	0.52
1:B:271:ILE:CG1	1:B:283:PRO:HA	2.39	0.52
1:H:439:ARG:HH12	1:L:405:SER:HA	1.73	0.52
1:D:265:ARG:HG2	1:D:266:PHE:CD2	2.44	0.52
1:E:195:HIS:O	1:E:201:LYS:HE3	2.10	0.52
1:B:61:LEU:HD12	1:B:61:LEU:N	2.25	0.52
1:L:435:GLU:CD	1:L:435:GLU:H	2.12	0.52
1:H:332:THR:O	1:H:336:ALA:HB2	2.10	0.52
1:I:143:LYS:CG	1:K:500:PHE:HE2	2.21	0.52
1:G:501:THR:C	1:H:146:ARG:HH12	2.13	0.52
1:L:53:LYS:HB3	1:L:54:PRO:CD	2.39	0.52
1:B:239:THR:CG2	1:B:239:THR:O	2.57	0.52
1:F:79:ARG:NH2	1:F:163:ASP:OD1	2.42	0.52
1:F:90:LYS:HE2	1:F:199:THR:HG23	1.92	0.52
1:J:79:ARG:HE	1:J:163:ASP:CG	2.13	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:23:ILE:HG22	1:H:23:ILE:O	2.09	0.52
1:L:38:GLU:O	1:L:39:GLU:HB2	2.09	0.52
1:C:148:PHE:O	1:C:152:LEU:HB2	2.09	0.52
1:H:267:GLY:O	1:H:268:ALA:O	2.28	0.52
1:E:137:THR:HG23	1:E:140:GLU:CD	2.29	0.52
1:E:428:ILE:HG22	1:E:430:ILE:CG1	2.38	0.52
1:I:322:LEU:O	1:I:324:PRO:HD3	2.10	0.52
1:K:496:ALA:C	1:K:501:THR:O	2.48	0.52
1:L:259:SER:O	1:L:263:LEU:HB2	2.09	0.52
1:I:33:ARG:NH1	1:I:36:GLU:HG2	2.25	0.52
1:L:483:VAL:HG12	1:L:484:ASN:N	2.25	0.52
1:F:208:ILE:HD11	1:F:449:VAL:CG2	2.39	0.52
1:D:239:THR:N	1:D:240:PRO:CD	2.62	0.52
1:G:192:ILE:CG1	1:G:192:ILE:O	2.52	0.52
1:L:332:THR:H	1:L:335:ASN:HD21	1.57	0.52
1:E:433:THR:HG22	1:E:436:PHE:HB2	1.90	0.52
1:E:10:PHE:CD1	1:E:10:PHE:C	2.82	0.52
1:D:263:LEU:HD12	1:D:268:ALA:CB	2.40	0.52
1:B:395:GLY:O	1:B:397:LEU:N	2.42	0.52
1:I:406:ASN:HD22	1:J:409:LEU:HD21	1.75	0.52
1:J:294:PHE:CZ	1:J:298:HIS:CE1	2.97	0.52
1:A:439:ARG:HH22	1:B:404:ASP:HB2	1.75	0.52
1:D:176:MET:HG2	1:D:199:THR:O	2.10	0.52
1:C:478:ARG:O	1:C:481:ALA:N	2.37	0.52
1:I:359:ILE:HG22	1:I:360:PHE:N	2.25	0.52
1:G:497:GLY:CA	1:G:501:THR:HA	2.40	0.52
1:G:44:ARG:NH1	1:K:71:SER:HB3	2.25	0.52
1:J:90:LYS:HE2	1:J:199:THR:CG2	2.36	0.52
1:D:372:TYR:CD2	1:D:464:ILE:HD11	2.44	0.52
1:A:465:MET:O	1:A:468:ALA:N	2.36	0.52
1:K:199:THR:CA	1:K:384:GLU:OE1	2.58	0.52
1:D:192:ILE:CG1	1:D:192:ILE:O	2.56	0.52
1:B:488:LYS:HB3	2:B:2:ADP:C2	2.45	0.52
1:E:378:VAL:O	1:E:381:SER:OG	2.27	0.52
1:B:30:GLU:O	1:B:34:THR:HG22	2.10	0.52
1:I:119:ASP:HB2	1:J:396:ARG:NH2	2.24	0.52
1:I:480:ALA:O	1:I:483:VAL:HB	2.10	0.52
1:H:274:GLY:HA3	1:H:314:ILE:CD1	2.40	0.52
1:G:428:ILE:O	1:G:431:VAL:HG12	2.10	0.52
1:A:67:ARG:O	1:A:68:ASP:C	2.48	0.52
1:E:496:ALA:C	1:E:501:THR:O	2.47	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:459:ARG:NH2	2:F:502:ADP:O3B	2.30	0.52
1:G:248:VAL:HG11	1:G:314:ILE:HB	1.91	0.52
1:G:191:ASP:C	1:G:193:ASN:H	2.12	0.52
1:G:471:TYR:O	1:G:473:LEU:HD23	2.09	0.52
1:F:117:VAL:HG21	1:F:371:LEU:HG	1.92	0.52
1:L:32:LEU:O	1:L:33:ARG:HB3	2.09	0.52
1:K:370:ASP:C	1:K:372:TYR:H	2.13	0.52
1:E:150:MET:CE	1:E:186:THR:HG21	2.39	0.52
1:G:137:THR:HG22	1:G:138:ASP:N	2.25	0.52
1:F:32:LEU:O	1:F:33:ARG:HB3	2.10	0.52
1:C:146:ARG:NH2	1:E:501:THR:OXT	2.34	0.52
1:I:498:VAL:N	1:I:501:THR:HB	2.25	0.52
1:J:93:ILE:HD12	1:J:176:MET:HE1	1.92	0.52
1:C:234:SER:C	1:C:236:LEU:N	2.63	0.52
1:E:219:VAL:HA	1:E:373:LEU:HD11	1.90	0.52
1:H:120:VAL:HG22	1:H:382:TYR:CD2	2.45	0.52
1:C:397:LEU:HD21	1:E:383:PHE:CZ	2.45	0.52
1:G:248:VAL:CG1	1:G:314:ILE:HG13	2.40	0.52
1:C:252:PHE:HE2	1:C:260:MET:CE	2.23	0.52
1:C:141:LEU:O	1:C:145:THR:HG22	2.10	0.52
1:E:45:VAL:O	1:E:45:VAL:HG13	2.10	0.52
1:C:494:ASN:ND2	1:C:494:ASN:C	2.63	0.52
1:A:42:ARG:O	1:A:45:VAL:HG12	2.10	0.52
1:L:114:LYS:HZ3	1:L:374:ASN:ND2	2.07	0.52
1:J:49:LEU:HD12	1:J:49:LEU:N	2.25	0.52
1:A:95:TYR:CE2	1:A:129:VAL:HG21	2.44	0.52
1:B:142:GLU:O	1:B:144:ILE:N	2.43	0.52
1:L:248:VAL:HG11	1:L:314:ILE:HB	1.92	0.52
1:H:499:THR:HG23	1:H:500:PHE:N	2.24	0.52
1:L:142:GLU:HA	1:L:178:TRP:CE3	2.45	0.52
1:D:140:GLU:O	1:D:144:ILE:CD1	2.57	0.52
1:D:78:TYR:CD2	1:D:101:VAL:HG22	2.45	0.52
1:K:275:GLU:HG3	1:K:301:ILE:CG1	2.40	0.52
1:D:248:VAL:HG13	1:D:272:ALA:HB3	1.91	0.52
1:F:53:LYS:HB3	1:F:54:PRO:CD	2.38	0.52
1:L:221:HIS:O	1:L:222:GLY:C	2.48	0.52
1:K:89:CYS:HB3	1:K:125:ALA:HB2	1.91	0.52
1:A:9:PHE:CE1	1:A:103:GLU:HA	2.45	0.52
1:A:24:VAL:HG12	1:A:28:LEU:HD22	1.91	0.52
1:J:82:HIS:ND1	1:J:109:SER:HA	2.25	0.52
1:E:369:PRO:CG	1:E:478:ARG:HA	2.40	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:224:GLU:O	1:F:227:ILE:HG22	2.10	0.52
1:H:147:ARG:HG3	1:H:147:ARG:NH1	2.23	0.52
1:F:335:ASN:HD22	1:F:336:ALA:N	2.08	0.52
1:D:288:PRO:O	1:D:289:LYS:C	2.48	0.52
1:B:331:LEU:HB2	1:B:352:THR:HG22	1.92	0.52
1:C:226:PHE:HD1	1:C:368:ILE:CD1	2.23	0.52
1:H:336:ALA:O	1:H:339:VAL:HG22	2.09	0.52
1:I:146:ARG:HH22	1:K:501:THR:C	2.07	0.52
1:I:65:ILE:HA	1:I:147:ARG:CZ	2.39	0.52
1:K:496:ALA:O	1:K:501:THR:O	2.28	0.52
1:I:143:LYS:HG3	1:K:500:PHE:CE2	2.42	0.52
1:F:158:ILE:O	1:F:158:ILE:CG2	2.57	0.52
1:F:376:GLY:O	1:F:380:VAL:HG23	2.10	0.52
1:F:379:THR:O	1:F:382:TYR:HB3	2.10	0.52
1:A:372:TYR:CD2	1:A:464:ILE:CD1	2.93	0.52
1:K:115:CYS:HB3	1:K:120:VAL:O	2.10	0.52
1:F:331:LEU:HB2	1:F:352:THR:HG22	1.90	0.52
1:F:68:ASP:OD2	1:F:137:THR:HG21	2.10	0.52
1:D:330:GLN:HE21	1:D:330:GLN:HA	1.75	0.52
1:J:380:VAL:HG12	1:J:380:VAL:O	2.09	0.52
1:I:225:ASN:OD1	1:I:458:GLU:HA	2.10	0.52
1:G:226:PHE:CB	1:G:366:MET:HE1	2.40	0.52
1:J:168:ASP:OD1	1:J:169:MET:N	2.34	0.52
1:I:48:ILE:O	1:I:52:ILE:HG12	2.09	0.51
1:K:490:PHE:O	1:K:491:LYS:C	2.48	0.51
1:I:38:GLU:OE1	1:I:42:ARG:NH2	2.42	0.51
1:B:498:VAL:CG2	1:D:72:TRP:HZ2	2.24	0.51
1:L:12:MET:O	1:L:15:GLY:N	2.42	0.51
1:B:429:PRO:C	1:B:431:VAL:H	2.14	0.51
1:E:33:ARG:CB	1:E:33:ARG:NH1	2.73	0.51
1:G:250:GLN:CA	1:G:314:ILE:HD11	2.38	0.51
1:D:382:TYR:O	1:D:386:LEU:HG	2.10	0.51
1:A:138:ASP:O	1:A:141:LEU:HB2	2.10	0.51
1:A:449:VAL:O	1:A:450:HIS:C	2.49	0.51
1:D:289:LYS:O	1:D:292:GLU:HB3	2.10	0.51
1:A:92:GLY:HA2	1:A:166:ALA:O	2.10	0.51
1:B:460:SER:O	1:B:464:ILE:HG13	2.09	0.51
1:C:369:PRO:HD3	1:C:477:LEU:HB3	1.92	0.51
1:K:41:LYS:O	1:K:44:ARG:HB2	2.10	0.51
1:I:26:ASP:C	1:I:28:LEU:H	2.13	0.51
1:H:336:ALA:HB3	1:H:337:PRO:HD3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:36:GLU:OE2	1:H:42:ARG:NH1	2.41	0.51
1:B:234:SER:C	1:B:236:LEU:N	2.61	0.51
1:C:300:SER:C	1:C:302:LEU:H	2.12	0.51
1:C:325:ALA:O	1:C:326:ALA:CB	2.52	0.51
1:F:331:LEU:HB3	1:F:352:THR:HG22	1.91	0.51
1:G:368:ILE:CG2	1:G:373:LEU:HD13	2.40	0.51
1:K:6:ASP:OD2	1:K:6:ASP:O	2.28	0.51
1:K:395:GLY:HA2	1:K:398:THR:HG23	1.91	0.51
1:A:33:ARG:NH2	1:A:42:ARG:HD2	2.25	0.51
1:D:6:ASP:HB2	1:D:329:LYS:HD3	1.92	0.51
1:D:221:HIS:HA	1:D:224:GLU:HB3	1.92	0.51
1:F:75:ILE:HD12	1:F:144:ILE:HG12	1.92	0.51
1:E:248:VAL:HG22	1:E:272:ALA:H	1.76	0.51
1:J:30:GLU:O	1:J:32:LEU:N	2.43	0.51
1:K:51:ILE:O	1:K:54:PRO:HD2	2.10	0.51
1:A:345:ALA:HB1	1:A:373:LEU:CD2	2.41	0.51
1:K:176:MET:HE3	1:K:179:ILE:HD12	1.92	0.51
1:L:221:HIS:HA	1:L:224:GLU:HB3	1.92	0.51
1:F:142:GLU:OE2	1:F:146:ARG:NH1	2.42	0.51
1:H:151:GLU:OE1	1:J:57:HIS:CE1	2.64	0.51
1:B:40:GLN:HG3	1:B:40:GLN:O	2.10	0.51
1:H:244:ASP:C	1:H:245:LYS:HG3	2.31	0.51
1:C:246:THR:OG1	1:C:320:ASP:HB2	2.10	0.51
1:I:244:ASP:OD1	1:I:245:LYS:HE2	2.10	0.51
1:G:359:ILE:O	1:G:362:GLU:N	2.43	0.51
1:C:344:ILE:HD11	1:C:360:PHE:CD1	2.46	0.51
1:K:30:GLU:CG	1:K:31:ASP:H	1.98	0.51
1:L:274:GLY:O	1:L:275:GLU:CB	2.58	0.51
1:I:248:VAL:HG11	1:I:314:ILE:HB	1.92	0.51
1:C:176:MET:HE1	1:C:179:ILE:HD12	1.90	0.51
1:D:96:SER:O	1:D:99:VAL:CG1	2.57	0.51
1:F:498:VAL:N	1:F:501:THR:HB	2.26	0.51
1:K:163:ASP:O	1:K:165:PRO:HD3	2.10	0.51
1:H:247:PHE:CD2	1:H:263:LEU:HD12	2.46	0.51
1:A:82:HIS:CD2	1:A:82:HIS:C	2.84	0.51
1:H:243:GLY:O	1:H:244:ASP:HB3	2.10	0.51
1:C:252:PHE:CE2	1:C:260:MET:CE	2.94	0.51
1:C:67:ARG:CD	1:C:73:GLU:OE1	2.57	0.51
1:E:282:ASN:O	1:E:284:ASP:N	2.43	0.51
1:I:486:ILE:O	1:I:487:GLU:C	2.47	0.51
1:G:417:LEU:CD2	1:H:417:LEU:HD11	2.39	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:491:LYS:O	1:F:495:GLU:HB2	2.10	0.51
1:D:176:MET:HG3	1:D:198:VAL:CG2	2.40	0.51
1:B:323:ILE:CG1	1:B:323:ILE:O	2.56	0.51
1:B:87:THR:CB	1:B:88:PRO:CD	2.89	0.51
1:C:250:GLN:HG2	1:C:314:ILE:HD11	1.93	0.51
1:I:65:ILE:HG21	1:I:144:ILE:HG12	1.93	0.51
1:I:176:MET:O	1:I:179:ILE:HB	2.10	0.51
1:K:117:VAL:HG21	1:K:371:LEU:O	2.11	0.51
1:L:343:ILE:HG12	1:L:366:MET:HB3	1.93	0.51
1:L:368:ILE:HA	1:L:477:LEU:HD23	1.91	0.51
1:F:382:TYR:O	1:F:385:TRP:HB3	2.11	0.51
1:F:87:THR:OG1	1:F:88:PRO:HD3	2.10	0.51
1:A:90:LYS:HE2	1:A:164:VAL:HG12	1.93	0.51
1:H:90:LYS:HB2	1:H:122:PHE:HB3	1.92	0.51
1:A:239:THR:O	1:A:239:THR:HG23	2.09	0.51
1:C:264:HIS:CD2	1:C:288:PRO:HD3	2.46	0.51
1:F:248:VAL:CG2	1:F:271:ILE:HG13	2.41	0.51
1:G:104:VAL:HG23	1:G:105:LYS:N	2.25	0.51
1:G:7:PRO:O	1:G:329:LYS:NZ	2.39	0.51
1:J:28:LEU:HD21	1:J:490:PHE:CG	2.46	0.51
1:L:465:MET:O	1:L:468:ALA:N	2.40	0.51
1:E:60:SER:HB3	1:E:78:TYR:HD2	1.75	0.51
1:B:164:VAL:HG13	1:B:197:CYS:C	2.31	0.51
1:J:212:ILE:N	1:J:212:ILE:CD1	2.60	0.51
1:H:44:ARG:NH1	1:H:44:ARG:CB	2.70	0.51
1:L:497:GLY:HA3	1:L:501:THR:HA	1.91	0.51
1:D:428:ILE:O	1:D:428:ILE:HG12	2.11	0.51
1:A:359:ILE:O	1:A:362:GLU:N	2.43	0.51
1:G:82:HIS:HB3	1:G:112:THR:CG2	2.40	0.51
1:G:82:HIS:HD2	1:G:112:THR:CG2	2.20	0.51
1:I:38:GLU:N	1:I:42:ARG:CZ	2.73	0.51
1:L:82:HIS:ND1	1:L:109:SER:HA	2.25	0.51
1:B:497:GLY:N	1:B:501:THR:HA	2.25	0.51
1:J:181:ASP:O	1:J:183:TYR:N	2.44	0.51
1:J:42:ARG:C	1:J:45:VAL:HG12	2.31	0.51
1:B:42:ARG:HD2	1:B:42:ARG:N	2.25	0.51
1:K:118:VAL:HG23	1:K:120:VAL:CG2	2.41	0.51
1:J:281:TRP:CD1	1:J:282:ASN:N	2.79	0.51
1:G:129:VAL:O	1:G:131:ILE:N	2.43	0.51
1:K:433:THR:O	1:K:434:ALA:C	2.47	0.51
1:K:65:ILE:HD13	1:K:144:ILE:CG1	2.41	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2:ADP:H5'2	1:F:203:ILE:CG2	2.41	0.51
1:A:407:TYR:CE1	1:H:424:HIS:CE1	2.99	0.51
1:D:36:GLU:O	1:D:42:ARG:NH1	2.43	0.51
1:J:390:ASN:O	1:J:391:HIS:HB2	2.11	0.51
1:E:294:PHE:HE2	1:E:301:ILE:O	1.93	0.51
1:E:429:PRO:C	1:E:431:VAL:N	2.64	0.51
1:H:45:VAL:O	1:H:45:VAL:CG1	2.58	0.51
1:K:371:LEU:CD2	1:K:481:ALA:CB	2.88	0.51
1:L:497:GLY:N	1:L:501:THR:HA	2.25	0.51
1:G:146:ARG:NH2	1:L:501:THR:OXT	2.36	0.51
1:C:431:VAL:HG11	1:D:419:ARG:HH21	1.75	0.51
1:K:219:VAL:HG13	1:K:220:PHE:N	2.25	0.51
1:J:248:VAL:HG13	1:J:272:ALA:O	2.10	0.51
1:A:465:MET:O	1:A:466:ARG:C	2.49	0.51
1:B:255:VAL:HG13	1:B:256:GLY:N	2.20	0.51
1:C:227:ILE:HG22	1:C:228:ASN:ND2	2.26	0.51
1:B:406:ASN:O	1:B:409:LEU:HB2	2.11	0.51
1:K:118:VAL:O	1:K:118:VAL:HG23	2.10	0.51
1:G:245:LYS:HB2	1:G:268:ALA:HA	1.92	0.51
1:G:81:GLN:HG3	1:G:157:PHE:CE1	2.46	0.51
1:K:479:THR:O	1:K:483:VAL:HG23	2.10	0.51
1:B:208:ILE:HD11	1:B:449:VAL:HG22	1.91	0.51
1:K:166:ALA:HB1	1:K:167:PRO:HD2	1.93	0.51
1:D:158:ILE:HD11	1:D:197:CYS:O	2.11	0.51
1:C:478:ARG:HG2	1:C:478:ARG:HH11	1.74	0.51
1:I:96:SER:O	1:I:98:ASP:N	2.44	0.51
1:A:355:GLU:HA	1:A:358:LYS:CD	2.40	0.51
1:F:13:VAL:HG11	1:F:109:SER:OG	2.10	0.51
1:K:9:PHE:HD1	1:K:10:PHE:N	2.09	0.51
1:L:252:PHE:CZ	1:L:260:MET:HE1	2.45	0.51
1:D:274:GLY:O	1:D:275:GLU:CB	2.57	0.51
1:F:181:ASP:O	1:F:182:THR:C	2.48	0.51
1:F:118:VAL:HG23	1:F:120:VAL:HG23	1.93	0.51
1:F:459:ARG:O	1:F:463:GLN:HG3	2.10	0.51
1:C:227:ILE:HA	1:C:233:MET:SD	2.50	0.51
1:E:223:ILE:CD1	1:E:263:LEU:HD21	2.39	0.51
1:E:383:PHE:HA	1:E:386:LEU:HD12	1.93	0.51
1:C:363:ARG:CB	1:C:363:ARG:HH11	2.24	0.51
1:L:39:GLU:OE1	1:L:41:LYS:HD2	2.10	0.51
1:G:157:PHE:CE2	1:K:155:LYS:HD2	2.46	0.51
1:K:293:ASP:HB3	1:K:297:GLN:HE21	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:252:PHE:CD2	1:D:273:VAL:HG11	2.45	0.51
1:E:359:ILE:O	1:E:362:GLU:N	2.44	0.51
1:K:39:GLU:HB2	1:K:41:LYS:HG3	1.92	0.51
1:L:142:GLU:HA	1:L:178:TRP:CZ3	2.46	0.51
1:K:286:ILE:CG2	1:K:291:LEU:HD22	2.40	0.51
1:G:53:LYS:HB3	1:G:54:PRO:HD3	1.93	0.51
1:F:414:GLN:CD	1:F:430:ILE:HG12	2.31	0.51
1:F:31:ASP:O	1:F:32:LEU:HD23	2.10	0.51
1:I:497:GLY:HA3	1:I:501:THR:HA	1.92	0.51
1:A:436:PHE:CZ	1:B:409:LEU:HD22	2.46	0.51
1:L:386:LEU:O	1:L:387:LYS:C	2.49	0.51
1:C:104:VAL:CG2	1:C:105:LYS:H	2.24	0.51
1:D:213:SER:O	1:D:217:ARG:HG3	2.11	0.51
1:G:126:LYS:NZ	1:G:168:ASP:OD1	2.41	0.51
1:L:87:THR:OG1	1:L:88:PRO:HD3	2.11	0.51
1:H:461:ALA:O	1:H:464:ILE:HB	2.11	0.51
1:L:214:ALA:HB2	1:L:380:VAL:HG21	1.93	0.51
1:E:323:ILE:HG12	1:E:323:ILE:O	2.10	0.51
1:B:361:LEU:HD23	1:B:361:LEU:O	2.11	0.51
1:G:33:ARG:HH21	1:G:45:VAL:HG11	1.74	0.51
1:G:45:VAL:CG1	1:G:45:VAL:O	2.57	0.51
1:C:248:VAL:HG13	1:C:272:ALA:O	2.10	0.51
1:H:411:MET:HA	1:H:430:ILE:CG2	2.40	0.51
1:B:137:THR:HG22	1:B:140:GLU:OE1	2.11	0.51
1:G:111:MET:HB3	1:G:124:GLY:HA2	1.93	0.51
1:A:412:SER:O	1:A:413:VAL:C	2.48	0.51
1:A:416:SER:HB2	1:F:428:ILE:O	2.10	0.51
1:D:471:TYR:O	1:D:473:LEU:HG	2.11	0.51
1:B:277:ASP:OD2	1:B:300:SER:HB2	2.10	0.51
1:H:164:VAL:HG13	1:H:198:VAL:HA	1.91	0.51
1:C:96:SER:O	1:C:99:VAL:CG2	2.54	0.51
1:A:176:MET:CE	1:A:179:ILE:HD12	2.40	0.51
1:C:257:LEU:HA	1:C:260:MET:CE	2.38	0.51
1:F:248:VAL:HG13	1:F:272:ALA:O	2.11	0.51
1:L:471:TYR:HB2	1:L:473:LEU:HD12	1.93	0.51
1:B:271:ILE:O	1:B:271:ILE:HG12	2.10	0.51
1:C:32:LEU:O	1:C:33:ARG:CB	2.58	0.51
1:I:94:ARG:HD2	1:I:170:SER:OG	2.11	0.51
1:D:8:ASN:HD21	1:D:10:PHE:HB3	1.76	0.51
1:I:244:ASP:O	1:I:245:LYS:HG3	2.10	0.51
1:L:346:GLU:HG2	1:L:351:PRO:HG2	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:133:PRO:HB3	1:H:141:LEU:HD11	1.93	0.51
1:F:150:MET:CE	1:F:186:THR:HG21	2.41	0.51
1:J:294:PHE:CZ	1:J:298:HIS:HE1	2.29	0.51
1:E:294:PHE:CD1	1:E:298:HIS:CE1	2.99	0.51
1:E:175:GLU:HA	1:E:178:TRP:CE3	2.46	0.51
1:I:115:CYS:O	1:I:116:ALA:C	2.49	0.51
1:D:81:GLN:OE1	1:D:84:HIS:HE1	1.94	0.50
1:C:409:LEU:HD11	1:E:409:LEU:HB3	1.93	0.50
1:E:335:ASN:C	1:E:335:ASN:HD22	2.11	0.50
1:K:369:PRO:HB3	1:K:478:ARG:HG3	1.93	0.50
1:C:45:VAL:C	1:C:47:GLY:H	2.14	0.50
1:L:369:PRO:HD3	1:L:477:LEU:HB3	1.91	0.50
1:G:428:ILE:N	1:G:428:ILE:HD13	2.27	0.50
1:K:81:GLN:NE2	1:K:157:PHE:CD1	2.79	0.50
1:H:471:TYR:O	1:H:472:ASN:C	2.49	0.50
2:A:1:ADP:O3A	1:B:393:SER:HB3	2.12	0.50
1:B:222:GLY:HA3	1:B:373:LEU:HD11	1.91	0.50
1:F:315:LEU:HD12	1:F:315:LEU:N	2.26	0.50
1:G:322:LEU:HD22	1:G:344:ILE:HD12	1.93	0.50
1:A:148:PHE:CE2	1:A:152:LEU:HD22	2.47	0.50
1:C:324:PRO:HD2	1:C:345:ALA:O	2.11	0.50
1:C:344:ILE:CD1	1:C:365:ILE:HG21	2.39	0.50
1:D:396:ARG:CG	1:D:396:ARG:NH1	2.71	0.50
1:L:146:ARG:NH2	1:L:181:ASP:OD1	2.45	0.50
1:A:67:ARG:NE	1:A:73:GLU:OE2	2.44	0.50
1:J:198:VAL:O	1:J:201:LYS:HE3	2.11	0.50
1:H:465:MET:O	1:H:468:ALA:HB3	2.10	0.50
1:C:8:ASN:O	1:C:10:PHE:N	2.44	0.50
1:G:222:GLY:HA3	1:G:373:LEU:CD1	2.40	0.50
1:J:404:ASP:O	1:J:405:SER:C	2.50	0.50
1:C:20:GLY:O	1:C:24:VAL:CG2	2.59	0.50
1:I:229:GLU:O	1:I:231:SER:N	2.45	0.50
1:F:403:ARG:NH1	1:F:440:ILE:C	2.65	0.50
1:G:116:ALA:O	1:G:488:LYS:NZ	2.38	0.50
1:G:295:LYS:HD3	1:G:301:ILE:CG2	2.42	0.50
1:L:346:GLU:OE2	1:L:352:THR:HG23	2.11	0.50
1:F:413:VAL:HG12	1:F:413:VAL:O	2.11	0.50
1:E:142:GLU:CG	1:E:146:ARG:HD2	2.40	0.50
1:C:465:MET:O	1:C:468:ALA:N	2.35	0.50
1:I:213:SER:HB3	1:I:262:TYR:OH	2.11	0.50
1:I:175:GLU:HG3	1:I:178:TRP:CZ3	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:16:PHE:CE2	1:K:478:ARG:NH1	2.79	0.50
1:G:111:MET:HE1	1:G:378:VAL:HG21	1.94	0.50
1:G:162:ILE:HG22	1:G:163:ASP:N	2.25	0.50
1:H:117:VAL:HG21	1:H:371:LEU:HG	1.94	0.50
1:H:322:LEU:O	1:H:324:PRO:HD3	2.10	0.50
1:E:79:ARG:HH11	1:E:79:ARG:HG3	1.76	0.50
1:H:176:MET:CE	1:H:176:MET:HA	2.41	0.50
1:G:392:VAL:HG21	1:L:386:LEU:CD1	2.39	0.50
1:G:65:ILE:HD13	1:G:75:ILE:HD11	1.93	0.50
1:E:65:ILE:O	1:E:65:ILE:HG13	2.10	0.50
1:E:68:ASP:OD2	1:E:140:GLU:HG3	2.11	0.50
1:E:66:ARG:HD3	1:E:72:TRP:CH2	2.46	0.50
1:I:165:PRO:O	1:I:198:VAL:HG23	2.12	0.50
1:J:30:GLU:O	1:J:31:ASP:C	2.49	0.50
1:C:239:THR:HA	1:C:245:LYS:NZ	2.26	0.50
1:H:280:ILE:CG2	1:H:307:ALA:HB1	2.41	0.50
1:H:82:HIS:N	1:H:124:GLY:O	2.41	0.50
1:J:414:GLN:NE2	1:J:430:ILE:HG23	2.26	0.50
1:B:436:PHE:CD2	1:F:408:HIS:HB3	2.46	0.50
1:D:116:ALA:HA	2:D:4:ADP:N6	2.27	0.50
1:K:211:ARG:O	1:K:214:ALA:HB3	2.11	0.50
1:G:238:MET:O	1:G:239:THR:HG22	2.11	0.50
1:K:459:ARG:NH1	2:K:502:ADP:O3B	2.37	0.50
1:K:417:LEU:O	1:K:420:LYS:CG	2.59	0.50
1:I:53:LYS:HB3	1:I:54:PRO:HD3	1.92	0.50
1:D:287:ASP:HB3	1:D:290:GLU:HG3	1.92	0.50
1:K:476:ASP:OD2	1:K:479:THR:OG1	2.23	0.50
1:I:294:PHE:CD1	1:I:304:PHE:HD1	2.30	0.50
1:F:67:ARG:NH1	1:F:67:ARG:HG2	2.25	0.50
1:G:74:VAL:O	1:G:74:VAL:HG23	2.11	0.50
1:H:236:LEU:HB3	1:H:342:LYS:HE2	1.93	0.50
1:D:68:ASP:OD1	1:D:140:GLU:CG	2.60	0.50
1:E:24:VAL:HG22	1:E:483:VAL:HG13	1.93	0.50
1:C:234:SER:O	1:C:236:LEU:N	2.45	0.50
1:K:344:ILE:HD11	1:K:360:PHE:CD1	2.46	0.50
1:E:164:VAL:HA	1:E:197:CYS:O	2.11	0.50
1:G:271:ILE:CG1	1:G:283:PRO:HA	2.42	0.50
1:B:282:ASN:O	1:B:284:ASP:N	2.43	0.50
1:I:461:ALA:O	1:I:464:ILE:HB	2.11	0.50
1:I:409:LEU:O	1:I:413:VAL:HG23	2.11	0.50
1:K:465:MET:O	1:K:466:ARG:C	2.50	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:439:ARG:HG3	1:A:439:ARG:HH11	1.76	0.50
1:L:82:HIS:CB	1:L:112:THR:HG21	2.41	0.50
1:F:91:GLY:HA3	1:F:125:ALA:O	2.11	0.50
1:A:121:PRO:O	1:A:122:PHE:HD2	1.94	0.50
1:K:236:LEU:HA	1:K:342:LYS:HZ1	1.76	0.50
1:E:384:GLU:O	1:E:387:LYS:HB3	2.12	0.50
1:F:250:GLN:HG2	1:F:314:ILE:CG1	2.41	0.50
1:I:117:VAL:HG23	1:I:485:ALA:HB2	1.94	0.50
1:D:421:PHE:CZ	1:D:423:LYS:HB2	2.47	0.50
1:D:9:PHE:CD2	1:D:328:GLU:OE1	2.64	0.50
1:L:413:VAL:O	1:L:417:LEU:HB2	2.11	0.50
1:D:327:SER:HB2	1:D:330:GLN:OE1	2.12	0.50
1:A:390:ASN:O	1:A:392:VAL:HG23	2.11	0.50
1:D:144:ILE:H	1:D:144:ILE:HD12	1.77	0.50
1:K:175:GLU:HA	1:K:178:TRP:CE3	2.47	0.50
1:G:17:PHE:CD1	1:G:486:ILE:HD12	2.46	0.50
1:F:428:ILE:N	1:F:428:ILE:CD1	2.65	0.50
1:G:252:PHE:HE2	1:G:260:MET:HE1	1.77	0.50
1:B:321:ILE:HG23	1:B:343:ILE:CG2	2.41	0.50
1:J:414:GLN:OE1	1:J:430:ILE:HG12	2.11	0.50
1:J:346:GLU:CD	1:J:478:ARG:HH22	2.14	0.50
1:A:239:THR:H	1:A:240:PRO:HD3	1.73	0.50
1:I:439:ARG:HH12	1:J:404:ASP:HB2	1.76	0.50
1:C:28:LEU:HD21	1:C:490:PHE:CD1	2.47	0.50
1:I:14:GLU:CG	1:I:53:LYS:HZ2	2.25	0.50
1:K:147:ARG:NH1	1:K:151:GLU:OE2	2.44	0.50
1:E:107:LEU:O	1:E:108:ALA:C	2.46	0.50
1:B:249:VAL:HB	1:B:323:ILE:CD1	2.42	0.50
1:E:410:LEU:HB3	1:E:430:ILE:HA	1.92	0.50
1:C:176:MET:HG2	1:C:199:THR:O	2.10	0.50
1:F:108:ALA:O	1:F:109:SER:C	2.50	0.50
1:L:233:MET:HE1	1:L:343:ILE:CD1	2.31	0.50
1:L:75:ILE:HG23	1:L:131:ILE:CD1	2.42	0.50
1:K:153:ALA:CA	1:K:158:ILE:HG22	2.41	0.50
1:I:496:ALA:CA	1:I:501:THR:O	2.60	0.50
1:J:167:PRO:HG3	1:J:176:MET:CG	2.38	0.50
1:H:323:ILE:HG22	1:H:323:ILE:O	2.12	0.50
1:J:344:ILE:HD12	1:J:367:VAL:CG2	2.42	0.50
1:H:459:ARG:NH2	2:H:502:ADP:O3B	2.45	0.50
1:B:96:SER:O	1:B:99:VAL:HG13	2.12	0.50
1:F:407:TYR:OH	1:G:242:PHE:HA	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:328:GLU:HG3	1:K:329:LYS:HG2	1.93	0.50
1:G:226:PHE:HB3	1:G:366:MET:HE1	1.92	0.50
1:E:399:PHE:CE2	1:E:443:ALA:HB1	2.47	0.50
1:C:471:TYR:O	1:C:472:ASN:C	2.51	0.50
1:E:95:TYR:CE2	1:E:129:VAL:CG2	2.95	0.50
1:I:20:GLY:O	1:I:24:VAL:HG23	2.12	0.50
1:H:234:SER:O	1:H:236:LEU:N	2.44	0.50
1:H:353:THR:HB	1:H:354:PRO:HD2	1.93	0.50
1:K:48:ILE:HG13	1:K:490:PHE:CE1	2.39	0.50
1:D:428:ILE:CD1	1:D:428:ILE:N	2.74	0.50
1:A:346:GLU:OE1	1:A:478:ARG:NH2	2.45	0.50
1:K:219:VAL:O	1:K:220:PHE:C	2.50	0.50
1:F:207:GLY:HA2	1:F:384:GLU:OE1	2.12	0.50
1:H:165:PRO:C	1:H:198:VAL:HG23	2.32	0.50
1:A:91:GLY:O	1:A:165:PRO:HA	2.12	0.50
1:J:394:TYR:CE2	1:K:397:LEU:HD13	2.47	0.50
1:F:322:LEU:HD13	1:F:344:ILE:HG23	1.94	0.50
1:J:371:LEU:HD22	1:J:482:TYR:CD2	2.47	0.50
1:E:322:LEU:CD2	1:E:323:ILE:N	2.74	0.50
1:F:67:ARG:HG2	1:F:67:ARG:HH11	1.77	0.50
1:D:111:MET:HB3	1:D:124:GLY:HA2	1.94	0.50
1:C:328:GLU:HG3	1:C:329:LYS:NZ	2.27	0.49
1:K:346:GLU:O	1:K:373:LEU:HD23	2.12	0.49
1:B:187:ILE:N	1:B:187:ILE:HD13	2.27	0.49
1:B:252:PHE:HE2	1:B:260:MET:HE2	1.77	0.49
1:K:87:THR:O	1:K:88:PRO:C	2.50	0.49
1:C:281:TRP:HB3	1:C:308:LYS:O	2.12	0.49
1:B:255:VAL:O	1:B:256:GLY:C	2.48	0.49
1:L:403:ARG:NH1	1:L:407:TYR:HE2	2.10	0.49
1:L:201:LYS:NZ	1:L:388:ASN:HD21	2.10	0.49
1:H:462:ARG:O	1:H:463:GLN:C	2.51	0.49
1:H:61:LEU:H	1:H:61:LEU:HD12	1.77	0.49
1:C:142:GLU:HA	1:C:145:THR:HG23	1.93	0.49
1:C:388:ASN:O	1:C:390:ASN:N	2.45	0.49
1:D:398:THR:O	1:D:401:TYR:N	2.45	0.49
1:J:9:PHE:O	1:J:13:VAL:HG23	2.13	0.49
1:I:399:PHE:CZ	1:I:448:ILE:HD11	2.47	0.49
1:G:58:VAL:HG23	1:G:80:ALA:HB2	1.93	0.49
1:A:153:ALA:N	1:A:158:ILE:HG22	2.27	0.49
1:G:258:HIS:O	1:G:259:SER:C	2.49	0.49
1:F:247:PHE:CZ	1:F:270:CYS:HB2	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:497:GLY:CA	1:A:501:THR:HA	2.42	0.49
1:E:335:ASN:ND2	1:E:335:ASN:C	2.65	0.49
1:I:336:ALA:HB1	1:I:359:ILE:HG21	1.94	0.49
1:H:248:VAL:HG23	1:H:271:ILE:HG23	1.93	0.49
1:H:280:ILE:HG23	1:H:307:ALA:HB1	1.94	0.49
1:C:72:TRP:HE1	1:F:498:VAL:HG21	1.75	0.49
1:I:239:THR:O	1:I:239:THR:HG23	2.12	0.49
1:G:159:GLY:O	1:G:163:ASP:O	2.29	0.49
1:K:79:ARG:NH2	1:K:91:GLY:O	2.40	0.49
1:B:429:PRO:C	1:B:431:VAL:N	2.66	0.49
1:H:323:ILE:HG12	1:H:345:ALA:HB3	1.94	0.49
1:L:387:LYS:HD2	1:L:445:GLU:OE2	2.12	0.49
1:H:281:TRP:O	1:H:282:ASN:HB2	2.12	0.49
1:C:95:TYR:OH	1:C:145:THR:HB	2.12	0.49
1:H:394:TYR:HB2	1:H:445:GLU:HG3	1.93	0.49
1:A:257:LEU:HG	1:A:258:HIS:N	2.26	0.49
1:C:230:ALA:O	1:C:231:SER:C	2.49	0.49
1:C:226:PHE:HD1	1:C:368:ILE:HD13	1.77	0.49
1:I:339:VAL:O	1:I:339:VAL:HG23	2.12	0.49
1:J:36:GLU:O	1:J:36:GLU:CD	2.50	0.49
1:H:227:ILE:O	1:H:233:MET:HG3	2.13	0.49
1:I:142:GLU:HG2	1:I:146:ARG:HD2	1.94	0.49
1:K:222:GLY:HA3	1:K:373:LEU:CD1	2.42	0.49
1:C:436:PHE:CE1	1:D:409:LEU:HD22	2.47	0.49
1:L:481:ALA:O	1:L:484:ASN:N	2.45	0.49
1:J:403:ARG:NH1	1:J:407:TYR:CZ	2.80	0.49
1:I:212:ILE:CD1	1:I:212:ILE:H	2.25	0.49
1:I:321:ILE:CD1	1:I:321:ILE:N	2.75	0.49
1:D:462:ARG:HD3	1:D:466:ARG:NH2	2.27	0.49
1:G:278:GLY:HA3	1:G:302:LEU:HD21	1.94	0.49
1:I:271:ILE:HD11	1:I:283:PRO:HG3	1.94	0.49
1:I:72:TRP:HE1	1:L:498:VAL:CG1	2.12	0.49
1:D:75:ILE:HG23	1:D:131:ILE:HD13	1.95	0.49
1:H:148:PHE:CE1	1:H:152:LEU:HD11	2.47	0.49
1:A:90:LYS:CB	1:A:122:PHE:CD1	2.95	0.49
1:K:321:ILE:CD1	1:K:343:ILE:HB	2.42	0.49
1:C:232:TYR:O	1:C:236:LEU:HG	2.12	0.49
1:E:168:ASP:OD2	1:E:169:MET:N	2.43	0.49
1:D:258:HIS:O	1:D:262:TYR:CD2	2.66	0.49
1:A:81:GLN:OE1	1:E:155:LYS:HE3	2.12	0.49
1:L:351:PRO:C	1:L:352:THR:HG22	2.33	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:56:ASN:HA	1:E:62:SER:OG	2.12	0.49
1:L:398:THR:O	1:L:399:PHE:C	2.51	0.49
1:D:99:VAL:N	1:D:130:LYS:HE3	2.28	0.49
1:D:47:GLY:O	1:D:48:ILE:C	2.51	0.49
1:D:277:ASP:HB2	1:D:302:LEU:HD11	1.94	0.49
1:B:233:MET:HB3	1:B:238:MET:HB2	1.94	0.49
1:L:332:THR:O	1:L:336:ALA:HB2	2.12	0.49
1:F:322:LEU:HD12	1:F:344:ILE:HG12	1.94	0.49
1:J:65:ILE:HD13	1:J:144:ILE:HG12	1.95	0.49
1:J:208:ILE:HD12	1:J:387:LYS:HD2	1.94	0.49
1:H:211:ARG:NH1	1:H:211:ARG:HB3	2.27	0.49
1:J:148:PHE:O	1:J:152:LEU:HB2	2.12	0.49
1:L:107:LEU:HD13	1:L:126:LYS:HE3	1.95	0.49
1:L:89:CYS:O	1:L:163:ASP:HA	2.12	0.49
1:I:133:PRO:HA	1:I:141:LEU:HD21	1.95	0.49
1:D:98:ASP:O	1:D:99:VAL:O	2.31	0.49
1:A:142:GLU:OE2	1:A:146:ARG:NH1	2.45	0.49
1:E:494:ASN:C	1:E:496:ALA:H	2.16	0.49
1:A:59:LEU:CD2	1:A:61:LEU:CD2	2.86	0.49
1:J:343:ILE:CG1	1:J:366:MET:HE2	2.43	0.49
1:K:95:TYR:OH	1:K:145:THR:CB	2.61	0.49
1:H:257:LEU:O	1:H:260:MET:HB3	2.12	0.49
1:D:477:LEU:O	1:D:480:ALA:HB3	2.12	0.49
1:G:293:ASP:O	1:G:296:LEU:N	2.42	0.49
1:F:75:ILE:CD1	1:F:144:ILE:HG12	2.43	0.49
1:H:60:SER:HA	1:H:78:TYR:HB3	1.93	0.49
1:A:421:PHE:CE1	1:A:423:LYS:HE2	2.48	0.49
1:B:151:GLU:HB3	1:D:57:HIS:HE1	1.78	0.49
1:G:176:MET:HE3	1:G:176:MET:HA	1.95	0.49
1:E:414:GLN:HB2	1:E:429:PRO:CD	2.21	0.49
1:I:93:ILE:HD11	1:I:165:PRO:CB	2.43	0.49
1:L:499:THR:HG23	1:L:500:PHE:CD1	2.48	0.49
1:D:146:ARG:NH2	1:D:181:ASP:OD1	2.46	0.49
1:D:146:ARG:NE	1:D:182:THR:OG1	2.45	0.49
1:I:32:LEU:O	1:I:33:ARG:HB3	2.13	0.49
1:J:178:TRP:O	1:J:179:ILE:C	2.51	0.49
1:H:478:ARG:HH11	1:H:478:ARG:HG3	1.78	0.49
1:E:233:MET:HE1	1:E:343:ILE:HD11	1.94	0.49
1:H:67:ARG:CB	1:H:67:ARG:HH11	2.20	0.49
1:J:57:HIS:CE1	1:J:84:HIS:HE2	2.27	0.49
1:H:238:MET:O	1:H:239:THR:C	2.50	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:379:THR:CG2	1:B:453:LEU:HD23	2.41	0.49
1:I:212:ILE:N	1:I:212:ILE:CD1	2.76	0.49
1:H:131:ILE:HD13	1:H:144:ILE:CD1	2.43	0.49
1:A:499:THR:O	1:A:499:THR:HG22	2.13	0.49
1:D:165:PRO:O	1:D:198:VAL:HG23	2.12	0.49
1:B:356:ALA:O	1:B:360:PHE:CD2	2.65	0.49
1:E:414:GLN:OE1	1:E:428:ILE:HA	2.13	0.49
1:C:345:ALA:HB1	1:C:373:LEU:HD21	1.94	0.49
1:L:275:GLU:HG3	1:L:301:ILE:CG1	2.42	0.49
1:I:346:GLU:O	1:I:348:ALA:N	2.45	0.49
1:I:332:THR:CG2	1:I:353:THR:HG21	2.41	0.49
1:I:48:ILE:HG13	1:I:490:PHE:HE1	1.76	0.49
1:C:85:GLN:HG2	1:C:86:ARG:N	2.25	0.49
1:G:181:ASP:OD1	1:L:501:THR:OXT	2.30	0.49
1:A:249:VAL:HG22	1:A:249:VAL:O	2.13	0.49
1:K:219:VAL:HG11	1:K:259:SER:CB	2.42	0.49
1:D:47:GLY:O	1:D:50:ARG:N	2.46	0.49
1:J:496:ALA:O	1:J:501:THR:HA	2.13	0.49
1:F:411:MET:HA	1:F:430:ILE:CG2	2.43	0.49
1:F:239:THR:N	1:F:240:PRO:CD	2.75	0.49
1:J:414:GLN:CB	1:J:429:PRO:HD2	2.41	0.49
1:B:411:MET:HG2	1:B:430:ILE:CG2	2.42	0.49
1:G:208:ILE:CG1	1:G:387:LYS:HD2	2.35	0.49
1:C:234:SER:O	1:C:237:GLY:N	2.46	0.49
1:I:252:PHE:CD1	1:I:295:LYS:HD3	2.47	0.49
1:J:281:TRP:HZ3	1:J:317:ALA:CB	2.25	0.49
1:J:421:PHE:HD1	1:J:423:LYS:N	2.10	0.49
1:I:439:ARG:NH2	1:J:405:SER:HB2	2.28	0.49
1:J:14:GLU:HG3	1:J:53:LYS:CE	2.42	0.49
1:D:344:ILE:CG2	1:D:367:VAL:HG22	2.43	0.49
1:E:300:SER:OG	1:E:301:ILE:N	2.44	0.49
1:D:148:PHE:O	1:D:152:LEU:HB2	2.13	0.49
1:D:167:PRO:HB3	1:D:176:MET:SD	2.53	0.49
1:B:315:LEU:HD22	1:B:322:LEU:HD11	1.94	0.49
1:C:65:ILE:CD1	1:C:144:ILE:HG12	2.24	0.49
1:H:234:SER:C	1:H:236:LEU:N	2.66	0.49
1:H:339:VAL:HG21	1:H:360:PHE:CE1	2.45	0.49
1:K:371:LEU:O	1:K:371:LEU:HG	2.12	0.49
1:L:343:ILE:HG22	1:L:343:ILE:O	2.13	0.49
1:K:118:VAL:O	1:K:120:VAL:HG23	2.12	0.49
1:G:239:THR:O	1:G:239:THR:CG2	2.61	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:201:LYS:NZ	1:B:384:GLU:OE1	2.43	0.49
1:C:28:LEU:HD11	1:C:490:PHE:CE2	2.48	0.49
1:L:395:GLY:O	1:L:397:LEU:N	2.45	0.49
1:F:85:GLN:HE21	1:F:85:GLN:H	1.60	0.49
1:G:58:VAL:HG12	1:K:60:SER:HB2	1.94	0.49
1:E:107:LEU:HD12	1:E:126:LYS:NZ	2.27	0.49
1:J:39:GLU:O	1:J:41:LYS:N	2.44	0.49
1:D:318:ASP:HA	1:D:340:LYS:HB2	1.95	0.49
1:J:6:ASP:O	1:J:6:ASP:OD1	2.30	0.49
1:C:149:THR:OG1	1:C:179:ILE:HG12	2.12	0.49
1:D:428:ILE:HD13	1:D:428:ILE:N	2.21	0.49
1:B:68:ASP:OD1	1:B:140:GLU:HG3	2.12	0.49
1:G:48:ILE:HG21	1:G:490:PHE:CD1	2.48	0.49
1:J:496:ALA:C	1:J:501:THR:HA	2.33	0.49
1:J:163:ASP:O	1:J:165:PRO:HD3	2.13	0.49
1:A:82:HIS:CG	1:A:112:THR:HG21	2.47	0.49
1:B:48:ILE:O	1:B:52:ILE:HG13	2.13	0.49
1:B:396:ARG:HD3	1:B:396:ARG:O	2.13	0.49
1:G:335:ASN:HD22	1:G:336:ALA:H	1.59	0.49
1:H:164:VAL:CG1	1:H:198:VAL:HA	2.42	0.49
1:I:101:VAL:O	1:I:104:VAL:HG22	2.13	0.49
1:C:33:ARG:HE	1:C:33:ARG:HB2	1.41	0.49
1:G:126:LYS:HG3	1:G:127:ALA:N	2.28	0.49
1:G:419:ARG:O	1:G:420:LYS:HB2	2.12	0.49
1:E:247:PHE:HB3	1:E:321:ILE:HB	1.94	0.49
1:D:59:LEU:HB2	1:D:157:PHE:CE2	2.47	0.48
1:L:315:LEU:HD23	1:L:331:LEU:CD2	2.43	0.48
1:H:295:LYS:HD3	1:H:301:ILE:HG23	1.95	0.48
1:I:397:LEU:HD21	1:K:383:PHE:CD1	2.48	0.48
1:F:380:VAL:O	1:F:383:PHE:HB2	2.13	0.48
1:D:117:VAL:HG11	1:D:372:TYR:HB2	1.94	0.48
1:A:24:VAL:CG1	1:A:28:LEU:HB2	2.42	0.48
1:L:338:ARG:CB	1:L:338:ARG:NH1	2.67	0.48
1:I:87:THR:HG22	1:I:88:PRO:N	2.28	0.48
1:J:337:PRO:HG3	1:J:359:ILE:HG21	1.95	0.48
1:G:248:VAL:HG23	1:G:319:CYS:SG	2.52	0.48
1:D:485:ALA:O	1:D:488:LYS:N	2.45	0.48
1:H:240:PRO:HD2	1:H:244:ASP:O	2.13	0.48
1:C:264:HIS:O	1:C:266:PHE:N	2.45	0.48
1:J:318:ASP:O	1:J:319:CYS:CB	2.61	0.48
1:H:217:ARG:HD2	1:H:450:HIS:NE2	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:33:ARG:HH21	1:A:42:ARG:CZ	2.26	0.48
1:F:195:HIS:O	1:F:201:LYS:HE3	2.13	0.48
1:G:235:ILE:HA	1:G:235:ILE:HD13	1.68	0.48
1:D:89:CYS:O	1:D:163:ASP:HA	2.12	0.48
1:K:372:TYR:OH	1:K:461:ALA:HB2	2.13	0.48
1:D:406:ASN:O	1:D:409:LEU:HB2	2.13	0.48
1:D:339:VAL:HG21	1:D:360:PHE:HE1	1.78	0.48
1:G:47:GLY:CA	1:G:50:ARG:HG2	2.33	0.48
1:G:498:VAL:HG21	1:K:72:TRP:NE1	2.28	0.48
1:G:414:GLN:CB	1:G:430:ILE:HG23	2.43	0.48
1:B:497:GLY:O	1:B:498:VAL:HG13	2.14	0.48
1:C:274:GLY:O	1:C:301:ILE:CD1	2.61	0.48
1:A:86:ARG:HG2	1:A:121:PRO:HA	1.94	0.48
2:A:1:ADP:H5'2	1:B:203:ILE:HG22	1.93	0.48
1:L:403:ARG:HH11	1:L:403:ARG:HG3	1.78	0.48
1:C:201:LYS:HZ1	1:C:388:ASN:HD21	1.58	0.48
1:C:81:GLN:HG3	1:C:157:PHE:CE1	2.48	0.48
1:K:247:PHE:HD1	1:K:268:ALA:HB1	1.78	0.48
1:G:80:ALA:O	1:G:125:ALA:HA	2.13	0.48
1:G:420:LYS:O	1:G:420:LYS:CE	2.62	0.48
1:E:261:ARG:HG3	1:E:261:ARG:HH11	1.78	0.48
1:J:470:LYS:HG2	1:J:470:LYS:O	2.11	0.48
1:B:360:PHE:HB3	1:B:365:ILE:HB	1.95	0.48
1:I:91:GLY:HA2	1:I:111:MET:HE2	1.96	0.48
1:D:429:PRO:HG3	1:E:417:LEU:CD1	2.43	0.48
1:I:219:VAL:HG22	1:I:373:LEU:CD2	2.43	0.48
1:K:137:THR:HG23	1:K:140:GLU:HG3	1.94	0.48
1:G:437:GLN:HA	1:G:440:ILE:CD1	2.41	0.48
1:K:103:GLU:O	1:K:106:ALA:HB3	2.13	0.48
1:K:9:PHE:CD1	1:K:10:PHE:N	2.81	0.48
1:L:223:ILE:HD12	1:L:263:LEU:HD21	1.95	0.48
1:C:181:ASP:CG	1:E:501:THR:OXT	2.52	0.48
1:J:142:GLU:CG	1:J:146:ARG:HD2	2.43	0.48
1:H:120:VAL:HG12	1:H:120:VAL:O	2.12	0.48
1:H:121:PRO:CG	1:H:382:TYR:CE2	2.94	0.48
1:H:122:PHE:HE1	1:H:382:TYR:HA	1.77	0.48
1:A:233:MET:HA	1:A:233:MET:CE	2.43	0.48
1:K:360:PHE:HD1	1:K:365:ILE:CD1	2.23	0.48
1:I:392:VAL:HG21	1:K:386:LEU:HD13	1.96	0.48
1:G:203:ILE:HG22	2:L:502:ADP:H5'2	1.95	0.48
1:H:260:MET:HG2	1:H:288:PRO:HG3	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:189:HIS:ND1	1:F:154:LYS:HD3	2.29	0.48
1:J:115:CYS:O	1:J:118:VAL:N	2.45	0.48
1:L:138:ASP:CG	1:L:174:ARG:HH12	2.17	0.48
1:K:294:PHE:CD2	1:K:298:HIS:CE1	3.01	0.48
1:A:174:ARG:O	1:A:177:SER:HB3	2.14	0.48
1:C:150:MET:O	1:C:154:LYS:HG3	2.13	0.48
1:F:49:LEU:H	1:F:49:LEU:HD22	1.78	0.48
1:C:322:LEU:CD1	1:C:324:PRO:HG3	2.42	0.48
1:K:372:TYR:CD1	1:K:372:TYR:C	2.86	0.48
1:C:411:MET:HA	1:C:430:ILE:CG2	2.43	0.48
1:D:294:PHE:CZ	1:D:303:GLY:O	2.66	0.48
1:G:498:VAL:N	1:G:501:THR:HB	2.28	0.48
1:K:176:MET:HE2	1:K:176:MET:HA	1.94	0.48
1:G:384:GLU:O	1:G:387:LYS:HB3	2.13	0.48
1:A:486:ILE:O	1:A:490:PHE:HB2	2.14	0.48
1:A:383:PHE:O	1:A:384:GLU:C	2.51	0.48
1:D:453:LEU:O	1:D:456:THR:N	2.46	0.48
1:B:161:GLY:CA	1:B:162:ILE:HD12	2.43	0.48
1:G:346:GLU:HG2	1:G:351:PRO:HG3	1.94	0.48
1:I:58:VAL:CG1	1:L:60:SER:HB2	2.43	0.48
1:A:414:GLN:CD	1:A:430:ILE:HG23	2.34	0.48
1:K:368:ILE:HG22	1:K:373:LEU:HB2	1.96	0.48
1:L:224:GLU:HA	1:L:227:ILE:CG2	2.43	0.48
1:F:417:LEU:HD23	1:F:427:THR:HG21	1.95	0.48
1:F:24:VAL:O	1:F:25:GLU:C	2.52	0.48
1:F:90:LYS:HD2	1:F:164:VAL:O	2.13	0.48
1:F:380:VAL:HG13	1:F:449:VAL:CG1	2.43	0.48
1:E:220:PHE:C	1:E:220:PHE:CD1	2.86	0.48
1:G:304:PHE:CD1	1:G:305:PRO:HD2	2.47	0.48
1:J:282:ASN:O	1:J:284:ASP:N	2.47	0.48
1:G:160:PRO:CG	1:G:191:ASP:OD1	2.62	0.48
1:F:398:THR:O	1:F:399:PHE:C	2.50	0.48
1:K:304:PHE:CD2	1:K:305:PRO:O	2.67	0.48
1:D:107:LEU:CD1	1:D:107:LEU:N	2.75	0.48
1:B:90:LYS:HD3	1:B:122:PHE:CE1	2.49	0.48
1:J:36:GLU:O	1:J:36:GLU:OE2	2.32	0.48
1:K:346:GLU:HG2	1:K:351:PRO:CG	2.43	0.48
1:D:429:PRO:C	1:D:431:VAL:H	2.15	0.48
1:A:249:VAL:HA	1:A:323:ILE:HG13	1.96	0.48
1:C:497:GLY:N	1:C:501:THR:HA	2.29	0.48
1:B:252:PHE:CE2	1:B:260:MET:HE2	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:252:PHE:CE2	1:G:260:MET:HE1	2.48	0.48
1:G:89:CYS:O	1:G:164:VAL:N	2.46	0.48
1:I:252:PHE:CZ	1:I:257:LEU:HD13	2.48	0.48
1:A:57:HIS:HE2	1:E:151:GLU:HB3	1.78	0.48
1:D:492:VAL:HG21	2:D:4:ADP:C2	2.47	0.48
1:E:238:MET:O	1:E:239:THR:O	2.31	0.48
1:H:137:THR:O	1:H:138:ASP:C	2.51	0.48
1:C:332:THR:HG22	1:C:353:THR:CG2	2.44	0.48
1:A:94:ARG:NH1	1:A:96:SER:CB	2.77	0.48
1:I:439:ARG:HH22	1:J:405:SER:HB2	1.78	0.48
1:H:131:ILE:CD1	1:H:144:ILE:CD1	2.91	0.48
1:E:243:GLY:O	1:E:244:ASP:HB3	2.13	0.48
1:L:458:GLU:O	1:L:459:ARG:C	2.51	0.48
1:D:348:ALA:O	1:D:370:ASP:HB3	2.14	0.48
1:B:106:ALA:O	1:B:109:SER:HB3	2.13	0.48
1:B:250:GLN:CG	1:B:314:ILE:HD11	2.43	0.48
1:C:75:ILE:HG22	1:C:76:GLU:N	2.28	0.48
1:C:379:THR:O	1:C:380:VAL:C	2.49	0.48
1:H:332:THR:N	1:H:335:ASN:HD21	2.08	0.48
1:A:360:PHE:HB3	1:A:365:ILE:CB	2.43	0.48
1:D:140:GLU:O	1:D:143:LYS:HB2	2.14	0.48
1:B:234:SER:O	1:B:235:ILE:C	2.49	0.48
1:G:87:THR:CB	1:G:88:PRO:HD3	2.32	0.48
1:B:24:VAL:O	1:B:25:GLU:C	2.52	0.48
1:C:79:ARG:HD3	1:C:127:ALA:HB2	1.90	0.48
1:B:176:MET:HE1	1:B:179:ILE:HD12	1.93	0.48
1:I:88:PRO:HA	1:I:162:ILE:O	2.12	0.48
1:D:85:GLN:HG2	1:D:492:VAL:HG11	1.96	0.48
1:E:85:GLN:HG2	1:E:86:ARG:N	2.24	0.48
1:J:237:GLY:O	1:J:238:MET:HG2	2.14	0.48
1:B:217:ARG:O	1:B:221:HIS:ND1	2.39	0.48
1:I:414:GLN:HA	1:I:429:PRO:CG	2.44	0.48
1:K:467:THR:HG22	1:K:480:ALA:O	2.14	0.48
1:J:13:VAL:O	1:J:14:GLU:C	2.51	0.48
1:H:202:PRO:O	1:H:203:ILE:C	2.51	0.48
1:L:467:THR:O	1:L:467:THR:HG22	2.13	0.48
1:D:260:MET:CE	1:D:288:PRO:HA	2.44	0.48
1:A:231:SER:O	1:A:235:ILE:HG12	2.14	0.48
1:D:501:THR:HG23	1:E:181:ASP:OD1	2.13	0.48
1:E:359:ILE:O	1:E:360:PHE:C	2.51	0.48
1:K:39:GLU:O	1:K:41:LYS:N	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:90:LYS:HB2	1:I:122:PHE:HB3	1.96	0.48
1:J:24:VAL:O	1:J:25:GLU:C	2.52	0.48
1:I:249:VAL:HA	1:I:323:ILE:HG13	1.95	0.48
1:H:430:ILE:O	1:H:431:VAL:HB	2.14	0.48
1:D:137:THR:O	1:D:138:ASP:C	2.52	0.48
1:G:53:LYS:O	1:G:82:HIS:HE1	1.97	0.48
1:F:414:GLN:HE22	1:F:430:ILE:HD13	1.76	0.48
1:E:490:PHE:CZ	1:E:494:ASN:HB2	2.49	0.48
1:J:87:THR:CG2	1:J:88:PRO:N	2.77	0.48
1:G:208:ILE:HD12	1:G:387:LYS:HB2	1.95	0.48
1:G:492:VAL:CG2	2:G:502:ADP:H2	2.26	0.48
1:F:103:GLU:O	1:F:107:LEU:HD12	2.12	0.48
1:E:246:THR:HG23	1:E:246:THR:O	2.12	0.48
1:K:280:ILE:CG2	1:K:281:TRP:H	2.25	0.48
1:A:45:VAL:HG13	1:A:45:VAL:O	2.13	0.48
1:H:413:VAL:HG11	1:L:413:VAL:HG22	1.96	0.48
1:J:297:GLN:O	1:J:298:HIS:HB3	2.14	0.48
1:C:439:ARG:HH22	1:D:405:SER:HB2	1.78	0.48
1:A:498:VAL:N	1:A:501:THR:HA	2.29	0.48
1:D:501:THR:OXT	1:E:181:ASP:HB3	2.14	0.48
1:H:236:LEU:HD22	1:H:342:LYS:HE3	1.95	0.48
1:H:498:VAL:CG2	1:H:499:THR:H	2.08	0.48
1:D:432:PRO:HA	1:E:412:SER:HB3	1.96	0.48
1:A:336:ALA:HB1	1:A:359:ILE:HG21	1.96	0.48
1:D:359:ILE:HG22	1:D:360:PHE:N	2.28	0.48
1:L:238:MET:O	1:L:239:THR:HG22	2.14	0.48
1:I:238:MET:O	1:I:239:THR:C	2.51	0.48
1:A:287:ASP:HA	1:A:288:PRO:HD3	1.74	0.48
1:A:370:ASP:OD2	1:A:371:LEU:N	2.40	0.48
1:K:234:SER:O	1:K:236:LEU:N	2.47	0.48
1:J:137:THR:O	1:J:138:ASP:C	2.51	0.48
1:B:280:ILE:HG23	1:B:307:ALA:HB1	1.95	0.48
1:H:87:THR:HG22	1:H:88:PRO:CD	2.44	0.48
1:F:279:SER:O	1:F:280:ILE:HG13	2.13	0.48
1:G:9:PHE:HA	1:G:12:MET:HE2	1.95	0.48
1:A:47:GLY:O	1:A:50:ARG:N	2.46	0.48
1:C:133:PRO:C	1:C:135:ASN:H	2.17	0.48
1:L:142:GLU:O	1:L:145:THR:N	2.47	0.48
1:G:371:LEU:HD23	1:G:481:ALA:CB	2.44	0.48
1:A:65:ILE:CD1	1:A:75:ILE:HD11	2.44	0.48
1:K:339:VAL:HG21	1:K:360:PHE:CE1	2.39	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:450:HIS:O	1:D:453:LEU:HB3	2.14	0.48
1:B:371:LEU:HD23	1:B:481:ALA:CB	2.44	0.48
1:L:217:ARG:HG2	1:L:262:TYR:CE2	2.48	0.48
1:F:335:ASN:ND2	1:F:336:ALA:N	2.61	0.48
1:I:413:VAL:O	1:I:417:LEU:HB2	2.13	0.48
1:K:280:ILE:HG23	1:K:307:ALA:HB1	1.95	0.48
1:G:471:TYR:CE2	1:G:483:VAL:HG11	2.49	0.48
1:L:346:GLU:HG2	1:L:351:PRO:HD2	1.95	0.48
1:D:244:ASP:C	1:D:245:LYS:CG	2.82	0.48
1:L:226:PHE:C	1:L:228:ASN:H	2.16	0.48
1:D:200:GLY:HA2	1:D:211:ARG:HD2	1.94	0.48
1:B:437:GLN:O	1:B:441:SER:HB2	2.14	0.48
1:F:490:PHE:CZ	1:F:494:ASN:ND2	2.82	0.48
1:J:257:LEU:HD12	1:J:257:LEU:O	2.14	0.48
1:B:118:VAL:HG23	1:B:120:VAL:CG2	2.42	0.47
1:C:315:LEU:HD21	1:C:322:LEU:HD11	1.95	0.47
1:L:294:PHE:HE2	1:L:301:ILE:HA	1.77	0.47
1:I:108:ALA:O	1:I:112:THR:HG22	2.14	0.47
1:I:282:ASN:OD1	1:I:285:GLY:N	2.46	0.47
1:L:121:PRO:C	1:L:122:PHE:CD2	2.88	0.47
1:L:121:PRO:C	1:L:122:PHE:HD2	2.17	0.47
1:A:336:ALA:HB3	1:A:359:ILE:HD12	1.95	0.47
1:D:67:ARG:NH1	1:D:67:ARG:CG	2.75	0.47
1:E:150:MET:HE1	1:E:186:THR:HG21	1.95	0.47
1:F:241:GLY:O	1:G:437:GLN:OE1	2.32	0.47
1:G:411:MET:HA	1:G:430:ILE:CG2	2.41	0.47
1:D:274:GLY:HA3	1:D:314:ILE:HD12	1.96	0.47
1:J:38:GLU:H	1:J:42:ARG:HD2	1.78	0.47
1:A:25:GLU:O	1:A:28:LEU:N	2.47	0.47
1:L:396:ARG:NH1	1:L:396:ARG:CG	2.76	0.47
1:B:53:LYS:HB3	1:B:54:PRO:CD	2.42	0.47
1:A:94:ARG:NH1	1:A:96:SER:HB3	2.29	0.47
1:H:50:ARG:O	1:H:54:PRO:HD2	2.13	0.47
1:A:261:ARG:HG3	1:A:261:ARG:NH1	2.24	0.47
1:E:229:GLU:HG3	1:E:465:MET:SD	2.54	0.47
1:E:69:ASP:OD1	1:E:70:GLY:N	2.46	0.47
1:B:261:ARG:NH1	1:B:261:ARG:CG	2.67	0.47
1:H:44:ARG:HB2	1:H:44:ARG:HH11	1.75	0.47
1:E:413:VAL:O	1:E:417:LEU:HB2	2.14	0.47
1:J:248:VAL:HG22	1:J:271:ILE:HG23	1.96	0.47
1:K:140:GLU:HA	1:K:143:LYS:HD2	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:412:SER:HB3	1:F:432:PRO:HA	1.96	0.47
1:L:106:ALA:O	1:L:109:SER:HB3	2.14	0.47
1:H:90:LYS:HD2	1:H:164:VAL:O	2.14	0.47
1:L:363:ARG:HH11	1:L:363:ARG:HB3	1.79	0.47
1:J:463:GLN:HB3	1:J:484:ASN:HD21	1.79	0.47
1:E:164:VAL:HG12	1:E:198:VAL:HA	1.96	0.47
1:E:246:THR:HG23	1:E:320:ASP:N	2.29	0.47
1:C:260:MET:HG2	1:C:288:PRO:HG3	1.95	0.47
1:G:75:ILE:CD1	1:G:144:ILE:HG12	2.44	0.47
1:B:202:PRO:HD2	1:B:205:GLN:HB2	1.96	0.47
1:J:417:LEU:HD21	1:K:417:LEU:HD21	1.96	0.47
1:I:406:ASN:HD22	1:J:409:LEU:HD23	1.69	0.47
1:I:290:GLU:HB3	1:I:304:PHE:HZ	1.79	0.47
1:K:363:ARG:HB3	1:K:363:ARG:HH11	1.79	0.47
1:G:34:THR:O	1:G:34:THR:CG2	2.60	0.47
1:D:78:TYR:HE1	1:D:99:VAL:CG2	2.27	0.47
1:K:264:HIS:C	1:K:266:PHE:N	2.67	0.47
1:K:325:ALA:O	1:K:326:ALA:HB2	2.14	0.47
1:D:48:ILE:HG22	1:D:52:ILE:HD11	1.96	0.47
1:D:352:THR:HG23	1:D:478:ARG:HH22	1.79	0.47
1:B:498:VAL:HG21	1:D:72:TRP:CZ2	2.49	0.47
1:C:146:ARG:O	1:C:147:ARG:C	2.50	0.47
1:J:167:PRO:CG	1:J:176:MET:HG2	2.41	0.47
1:D:371:LEU:HD23	1:D:481:ALA:HB3	1.96	0.47
1:B:431:VAL:O	1:B:431:VAL:HG13	2.15	0.47
1:H:263:LEU:HD11	1:H:323:ILE:HD11	1.95	0.47
1:H:486:ILE:HG12	1:H:486:ILE:H	1.54	0.47
1:K:234:SER:O	1:K:237:GLY:N	2.48	0.47
1:J:346:GLU:OE2	1:J:352:THR:CG2	2.56	0.47
1:A:227:ILE:HG22	1:A:228:ASN:N	2.29	0.47
1:D:485:ALA:O	1:D:486:ILE:C	2.51	0.47
1:H:490:PHE:O	1:H:491:LYS:C	2.52	0.47
1:F:250:GLN:CG	1:F:314:ILE:HD11	2.43	0.47
1:D:398:THR:O	1:D:399:PHE:C	2.52	0.47
1:B:34:THR:HG23	1:B:35:ARG:CZ	2.44	0.47
1:A:255:VAL:HG13	1:A:256:GLY:H	1.79	0.47
1:A:116:ALA:O	1:A:488:LYS:NZ	2.40	0.47
1:G:494:ASN:O	1:G:496:ALA:N	2.41	0.47
1:A:498:VAL:O	1:A:501:THR:CG2	2.60	0.47
1:I:150:MET:SD	1:I:186:THR:HG21	2.54	0.47
1:C:226:PHE:HE2	1:C:465:MET:HG2	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:24:VAL:O	1:L:26:ASP:N	2.48	0.47
1:I:367:VAL:O	1:I:369:PRO:HD3	2.14	0.47
1:C:84:HIS:C	1:C:86:ARG:N	2.67	0.47
1:I:181:ASP:OD1	1:K:501:THR:CG2	2.62	0.47
1:K:86:ARG:HG2	1:K:121:PRO:HA	1.97	0.47
1:K:48:ILE:O	1:K:51:ILE:HB	2.14	0.47
1:F:29:VAL:O	1:F:33:ARG:HG3	2.14	0.47
1:B:275:GLU:HB2	1:B:301:ILE:CD1	2.35	0.47
1:K:158:ILE:O	1:K:158:ILE:CG2	2.61	0.47
1:L:195:HIS:O	1:L:201:LYS:HE3	2.15	0.47
1:E:236:LEU:CB	1:E:238:MET:HG3	2.40	0.47
1:I:59:LEU:CB	1:I:157:PHE:CE2	2.97	0.47
1:L:39:GLU:HB3	1:L:41:LYS:HG3	1.97	0.47
1:L:61:LEU:HD12	1:L:63:PHE:CD2	2.49	0.47
1:G:213:SER:HB2	1:G:217:ARG:CD	2.44	0.47
1:E:294:PHE:O	1:E:294:PHE:CG	2.66	0.47
1:I:226:PHE:C	1:I:228:ASN:H	2.18	0.47
1:K:405:SER:O	1:K:409:LEU:HD23	2.14	0.47
1:E:96:SER:O	1:E:99:VAL:HG13	2.15	0.47
1:L:132:ASN:OD1	1:L:134:LYS:HB2	2.14	0.47
1:J:364:ASN:H	1:J:364:ASN:HD22	1.63	0.47
1:B:359:ILE:HD12	1:B:359:ILE:HA	1.83	0.47
1:D:392:VAL:HG12	1:D:393:SER:N	2.29	0.47
1:L:142:GLU:O	1:L:143:LYS:C	2.52	0.47
1:H:274:GLY:O	1:H:275:GLU:CB	2.62	0.47
1:D:99:VAL:O	1:D:100:SER:CB	2.62	0.47
1:D:68:ASP:OD1	1:D:140:GLU:HG2	2.15	0.47
1:K:220:PHE:CD2	1:K:262:TYR:HB3	2.49	0.47
1:K:252:PHE:HZ	1:K:260:MET:CE	2.28	0.47
1:J:428:ILE:O	1:J:431:VAL:HG12	2.14	0.47
1:A:112:THR:HB	1:A:124:GLY:H	1.80	0.47
1:H:172:GLY:N	1:H:175:GLU:OE1	2.42	0.47
1:G:462:ARG:HG3	1:G:462:ARG:HH11	1.78	0.47
1:K:211:ARG:O	1:K:214:ALA:CB	2.62	0.47
1:G:60:SER:HB2	1:K:58:VAL:CG1	2.44	0.47
1:D:349:ASN:HD21	1:D:374:ASN:HD22	1.61	0.47
1:L:424:HIS:CD2	1:L:424:HIS:H	2.32	0.47
1:G:318:ASP:HA	1:G:340:LYS:HB2	1.97	0.47
1:B:147:ARG:CD	1:D:499:THR:OG1	2.63	0.47
1:E:66:ARG:HG3	1:E:72:TRP:CE2	2.49	0.47
1:H:331:LEU:HD12	1:H:352:THR:HG22	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:95:TYR:OH	1:D:145:THR:CB	2.63	0.47
1:G:13:VAL:HG11	1:G:109:SER:OG	2.14	0.47
1:L:366:MET:HE3	1:L:368:ILE:CD1	2.41	0.47
1:H:84:HIS:O	1:H:86:ARG:N	2.47	0.47
1:A:321:ILE:O	1:A:321:ILE:HG22	2.15	0.47
1:F:90:LYS:NZ	1:F:166:ALA:HB2	2.29	0.47
1:L:280:ILE:CG2	1:L:307:ALA:HB1	2.41	0.47
1:H:114:LYS:HZ1	1:H:374:ASN:HD21	1.62	0.47
1:E:273:VAL:HG11	1:E:291:LEU:HD21	1.96	0.47
1:J:383:PHE:CD2	1:J:383:PHE:N	2.80	0.47
1:E:8:ASN:ND2	1:E:10:PHE:CD2	2.82	0.47
1:C:264:HIS:ND1	1:C:264:HIS:C	2.67	0.47
1:H:302:LEU:N	1:H:302:LEU:HD13	2.29	0.47
1:G:79:ARG:HH11	1:G:127:ALA:HB2	1.78	0.47
1:H:294:PHE:CD1	1:H:298:HIS:NE2	2.76	0.47
1:H:412:SER:O	1:H:413:VAL:C	2.50	0.47
1:D:350:GLY:N	1:D:370:ASP:OD1	2.43	0.47
1:D:226:PHE:CD2	1:D:465:MET:HE2	2.49	0.47
1:J:274:GLY:HA2	1:J:279:SER:HA	1.96	0.47
1:G:257:LEU:C	1:G:257:LEU:HD12	2.34	0.47
1:D:160:PRO:HD3	1:D:183:TYR:CE2	2.50	0.47
1:E:145:THR:O	1:E:148:PHE:N	2.48	0.47
1:E:152:LEU:HA	1:E:152:LEU:HD12	1.58	0.47
1:C:62:SER:HA	1:C:75:ILE:O	2.15	0.47
1:C:48:ILE:O	1:C:52:ILE:HG13	2.13	0.47
1:D:411:MET:O	1:D:414:GLN:HB3	2.14	0.47
1:D:432:PRO:O	1:D:433:THR:C	2.51	0.47
1:A:336:ALA:O	1:A:339:VAL:HG22	2.14	0.47
1:B:72:TRP:O	1:D:50:ARG:NH1	2.48	0.47
1:D:363:ARG:O	1:D:364:ASN:C	2.53	0.47
1:D:294:PHE:CZ	1:D:305:PRO:HD3	2.50	0.47
1:D:248:VAL:HG22	1:D:271:ILE:HG23	1.96	0.47
1:D:248:VAL:HB	1:D:322:LEU:HD23	1.96	0.47
1:I:219:VAL:HG12	1:I:220:PHE:N	2.30	0.47
1:L:219:VAL:O	1:L:373:LEU:HD11	2.15	0.47
1:B:473:LEU:HD23	1:B:473:LEU:N	2.29	0.47
1:K:87:THR:OG1	1:K:88:PRO:HD3	2.13	0.47
1:J:176:MET:HE3	1:J:179:ILE:HG13	1.96	0.47
1:H:322:LEU:CD2	1:H:322:LEU:C	2.83	0.47
1:H:222:GLY:HA3	1:H:373:LEU:HD12	1.97	0.47
1:H:371:LEU:HD22	1:H:482:TYR:CD2	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:113:TYR:O	1:A:117:VAL:HG23	2.14	0.47
1:A:103:GLU:O	1:A:106:ALA:HB3	2.14	0.47
1:A:114:LYS:NZ	1:A:374:ASN:HD21	2.13	0.47
1:L:85:GLN:NE2	1:L:489:VAL:HG22	2.20	0.47
1:E:222:GLY:HA3	1:E:373:LEU:HD13	1.95	0.47
1:L:407:TYR:O	1:L:411:MET:HB2	2.14	0.47
1:H:179:ILE:HB	1:H:198:VAL:HG11	1.97	0.47
1:H:239:THR:O	1:H:239:THR:CG2	2.61	0.47
1:E:396:ARG:NH1	1:E:396:ARG:HG3	2.22	0.47
1:F:476:ASP:OD2	1:F:479:THR:CG2	2.62	0.47
1:L:386:LEU:C	1:L:390:ASN:ND2	2.68	0.47
1:B:281:TRP:CZ2	1:B:283:PRO:HG3	2.50	0.47
1:K:280:ILE:CG2	1:K:281:TRP:N	2.76	0.47
1:J:9:PHE:HA	1:J:12:MET:CE	2.45	0.47
1:J:322:LEU:HD13	1:J:323:ILE:N	2.30	0.47
1:I:243:GLY:O	1:I:245:LYS:N	2.48	0.47
1:G:58:VAL:O	1:G:58:VAL:HG13	2.14	0.47
1:E:192:ILE:O	1:E:192:ILE:HG12	2.14	0.47
1:K:235:ILE:O	1:K:235:ILE:HG22	2.14	0.47
1:I:68:ASP:OD1	1:I:140:GLU:CG	2.62	0.47
1:A:361:LEU:C	1:A:361:LEU:HD23	2.35	0.47
1:D:136:TYR:HD1	1:D:140:GLU:OE1	1.97	0.47
1:F:501:THR:OXT	1:F:501:THR:HG23	2.15	0.47
1:G:501:THR:HG23	1:H:181:ASP:OD1	2.14	0.47
1:L:238:MET:C	1:L:240:PRO:HD3	2.35	0.47
1:L:371:LEU:HD23	1:L:481:ALA:HB1	1.96	0.47
1:E:33:ARG:NH1	1:E:36:GLU:OE1	2.41	0.47
1:E:9:PHE:CD1	1:E:9:PHE:N	2.83	0.47
1:B:213:SER:CB	1:B:217:ARG:HH21	2.28	0.47
1:B:201:LYS:HG2	1:B:384:GLU:OE1	2.14	0.47
1:D:213:SER:HB2	1:D:217:ARG:NE	2.30	0.47
1:K:459:ARG:O	1:K:463:GLN:HG3	2.15	0.47
1:F:291:LEU:HD11	1:F:301:ILE:HB	1.96	0.47
1:F:264:HIS:CD2	1:F:288:PRO:CD	2.98	0.47
1:A:446:LYS:HD2	1:A:450:HIS:CE1	2.50	0.47
1:B:84:HIS:O	1:B:86:ARG:N	2.48	0.47
1:K:57:HIS:HD2	1:K:84:HIS:CE1	2.32	0.47
1:D:176:MET:HG3	1:D:198:VAL:HG21	1.95	0.47
1:E:250:GLN:OE1	1:E:330:GLN:HG2	2.15	0.47
1:E:335:ASN:ND2	1:E:336:ALA:N	2.59	0.47
1:E:339:VAL:O	1:E:363:ARG:NH2	2.47	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:335:ASN:HB2	1:C:338:ARG:CZ	2.42	0.47
1:L:314:ILE:CD1	1:L:314:ILE:H	2.04	0.47
1:I:322:LEU:HB2	1:I:341:ALA:CB	2.45	0.47
1:H:234:SER:C	1:H:236:LEU:H	2.18	0.47
1:I:174:ARG:HG3	1:I:175:GLU:N	2.29	0.47
1:J:498:VAL:CA	1:J:501:THR:HB	2.45	0.47
1:F:243:GLY:O	1:F:245:LYS:N	2.48	0.47
1:G:371:LEU:CD2	1:G:481:ALA:CB	2.92	0.47
1:A:416:SER:HB3	1:F:431:VAL:CG1	2.44	0.47
1:H:492:VAL:HG23	1:H:493:TYR:N	2.30	0.47
1:L:411:MET:HG2	1:L:430:ILE:HG21	1.96	0.47
1:F:222:GLY:HA3	1:F:373:LEU:CD1	2.45	0.47
1:A:436:PHE:CZ	1:A:440:ILE:HD11	2.50	0.47
1:B:148:PHE:CE2	1:B:152:LEU:CD2	2.98	0.47
1:J:131:ILE:HG13	1:J:136:TYR:CE2	2.50	0.47
1:H:214:ALA:CB	1:H:380:VAL:HG21	2.44	0.47
1:I:153:ALA:HB2	1:I:158:ILE:CG2	2.45	0.47
1:F:371:LEU:HD23	1:F:481:ALA:HB1	1.97	0.47
1:G:255:VAL:HG13	1:G:256:GLY:N	2.29	0.47
1:C:191:ASP:C	1:C:193:ASN:H	2.18	0.47
1:C:211:ARG:O	1:C:211:ARG:HG2	2.14	0.47
1:E:142:GLU:O	1:E:143:LYS:C	2.54	0.47
1:B:163:ASP:O	1:B:165:PRO:HD3	2.14	0.47
1:C:19:ARG:HD2	1:C:479:THR:CG2	2.45	0.47
1:C:335:ASN:CA	1:C:338:ARG:HH12	2.27	0.47
1:C:346:GLU:OE1	1:C:369:PRO:HA	2.15	0.47
1:I:250:GLN:CA	1:I:314:ILE:HD11	2.45	0.47
1:I:356:ALA:HB1	1:I:360:PHE:HE2	1.79	0.47
1:D:431:VAL:HA	1:D:432:PRO:HD3	1.54	0.47
1:F:396:ARG:O	1:F:396:ARG:HD3	2.14	0.47
1:D:316:GLU:OE1	1:D:339:VAL:HA	2.15	0.47
1:I:220:PHE:HZ	1:I:266:PHE:CD1	2.33	0.47
1:K:13:VAL:O	1:K:14:GLU:C	2.53	0.47
1:F:414:GLN:OE1	1:F:428:ILE:HG22	2.14	0.47
1:A:260:MET:HE3	1:A:288:PRO:CA	2.36	0.47
1:K:227:ILE:CD1	1:K:321:ILE:HD11	2.45	0.47
1:I:394:TYR:CE1	1:J:397:LEU:CD2	2.97	0.47
1:J:346:GLU:HG2	1:J:351:PRO:HG2	1.97	0.47
1:L:402:GLU:O	1:L:403:ARG:C	2.51	0.47
1:K:356:ALA:HB1	1:K:360:PHE:CE2	2.45	0.47
1:K:200:GLY:N	1:K:384:GLU:OE1	2.47	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:75:ILE:HG22	1:H:76:GLU:N	2.29	0.47
1:B:280:ILE:CG2	1:B:281:TRP:H	2.27	0.47
1:F:252:PHE:HD1	1:F:301:ILE:CG2	2.28	0.47
1:F:213:SER:HB2	1:F:217:ARG:HD2	1.97	0.47
1:J:322:LEU:HD13	1:J:322:LEU:C	2.35	0.47
1:A:141:LEU:HD23	1:A:141:LEU:HA	1.74	0.47
1:G:26:ASP:C	1:G:28:LEU:H	2.18	0.47
1:I:246:THR:OG1	1:I:246:THR:O	2.33	0.47
1:D:81:GLN:NE2	1:D:163:ASP:HB2	2.30	0.46
1:E:145:THR:O	1:E:148:PHE:HB3	2.15	0.46
1:L:164:VAL:HG13	1:L:198:VAL:HA	1.98	0.46
1:H:249:VAL:HG22	1:H:250:GLN:N	2.29	0.46
1:A:367:VAL:O	1:A:369:PRO:HD3	2.15	0.46
1:K:286:ILE:HG21	1:K:291:LEU:CD2	2.44	0.46
1:F:427:THR:O	1:F:429:PRO:HD3	2.15	0.46
1:I:40:GLN:O	1:I:40:GLN:CG	2.63	0.46
1:F:25:GLU:O	1:F:28:LEU:HB3	2.15	0.46
1:G:90:LYS:HD2	1:G:164:VAL:O	2.15	0.46
1:J:160:PRO:HG3	1:J:191:ASP:OD1	2.15	0.46
1:L:281:TRP:CD1	1:L:282:ASN:N	2.83	0.46
1:C:232:TYR:HB3	1:C:233:MET:HE2	1.97	0.46
1:I:252:PHE:HE2	1:I:260:MET:CE	2.23	0.46
1:J:368:ILE:HG22	1:J:373:LEU:HB2	1.96	0.46
1:E:221:HIS:O	1:E:223:ILE:N	2.48	0.46
1:D:382:TYR:O	1:D:385:TRP:HB3	2.14	0.46
1:E:158:ILE:HD13	1:E:159:GLY:N	2.30	0.46
1:I:431:VAL:CG1	1:J:416:SER:OG	2.63	0.46
1:H:28:LEU:O	1:H:32:LEU:HB2	2.15	0.46
1:H:104:VAL:CG2	1:H:105:LYS:H	2.27	0.46
1:C:359:ILE:N	1:C:359:ILE:HD12	2.28	0.46
1:I:117:VAL:HG13	1:I:464:ILE:HD11	1.96	0.46
1:L:45:VAL:O	1:L:45:VAL:HG13	2.15	0.46
1:G:9:PHE:HD1	1:G:10:PHE:N	2.13	0.46
1:E:88:PRO:HG2	1:E:122:PHE:CD2	2.49	0.46
1:I:153:ALA:N	1:I:158:ILE:HG22	2.30	0.46
1:J:153:ALA:CA	1:J:158:ILE:HG22	2.44	0.46
1:B:246:THR:O	1:B:246:THR:OG1	2.34	0.46
1:L:465:MET:O	1:L:466:ARG:C	2.53	0.46
1:D:418:GLU:C	1:D:420:LYS:H	2.18	0.46
1:E:359:ILE:O	1:E:361:LEU:N	2.48	0.46
1:C:479:THR:O	1:C:480:ALA:C	2.53	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:331:LEU:HD11	1:H:344:ILE:HD13	1.96	0.46
1:L:498:VAL:HG23	1:L:499:THR:N	2.23	0.46
1:D:67:ARG:HB3	1:D:67:ARG:NH1	2.10	0.46
1:D:341:ALA:O	1:D:365:ILE:HD12	2.16	0.46
1:A:250:GLN:HG3	1:A:315:LEU:HD13	1.96	0.46
1:K:142:GLU:HG3	1:K:178:TRP:CE2	2.50	0.46
1:D:274:GLY:CA	1:D:314:ILE:HD12	2.45	0.46
1:A:264:HIS:ND1	1:A:288:PRO:HG2	2.29	0.46
1:J:186:THR:CG2	1:L:186:THR:HG23	2.45	0.46
1:D:372:TYR:CD2	1:D:464:ILE:HD12	2.50	0.46
1:B:392:VAL:HG12	1:B:393:SER:N	2.31	0.46
1:F:248:VAL:HG23	1:F:271:ILE:HG13	1.97	0.46
1:G:75:ILE:HG23	1:G:131:ILE:HD12	1.97	0.46
1:G:471:TYR:O	1:G:473:LEU:HG	2.15	0.46
1:J:173:GLU:HB2	1:J:202:PRO:HD3	1.95	0.46
1:D:368:ILE:HG22	1:D:373:LEU:HB2	1.97	0.46
1:H:211:ARG:HH11	1:H:211:ARG:HB3	1.81	0.46
1:A:400:LYS:HB2	1:F:455:TYR:HB2	1.96	0.46
1:C:296:LEU:O	1:C:297:GLN:C	2.54	0.46
1:E:133:PRO:HA	1:E:141:LEU:HD21	1.97	0.46
1:A:395:GLY:HA3	1:A:399:PHE:CE1	2.51	0.46
1:H:200:GLY:N	1:H:384:GLU:OE1	2.48	0.46
1:B:85:GLN:HB3	1:B:85:GLN:HE21	1.46	0.46
1:E:65:ILE:HA	1:E:147:ARG:NH1	2.29	0.46
1:C:478:ARG:O	1:C:479:THR:C	2.54	0.46
1:I:478:ARG:O	1:I:481:ALA:N	2.48	0.46
1:C:459:ARG:O	1:C:463:GLN:HG3	2.15	0.46
1:K:500:PHE:CE1	1:L:500:PHE:CZ	2.98	0.46
1:A:330:GLN:C	1:A:331:LEU:HD12	2.36	0.46
1:F:244:ASP:C	1:F:245:LYS:HG2	2.35	0.46
1:G:440:ILE:H	1:G:440:ILE:HG13	1.52	0.46
1:L:117:VAL:HG11	1:L:372:TYR:HB2	1.97	0.46
1:G:414:GLN:CG	1:G:429:PRO:HD2	2.45	0.46
1:I:45:VAL:HG13	1:I:45:VAL:O	2.15	0.46
1:F:142:GLU:HG3	1:F:178:TRP:CE2	2.50	0.46
1:F:142:GLU:O	1:F:143:LYS:C	2.53	0.46
1:F:164:VAL:HG13	1:F:198:VAL:CA	2.45	0.46
1:J:193:ASN:O	1:J:194:ALA:C	2.53	0.46
1:C:234:SER:C	1:C:236:LEU:H	2.17	0.46
1:G:335:ASN:C	1:G:335:ASN:ND2	2.65	0.46
1:J:222:GLY:HA3	1:J:373:LEU:HD11	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:201:LYS:HB2	1:L:202:PRO:CD	2.45	0.46
1:D:445:GLU:O	1:D:449:VAL:HG23	2.15	0.46
1:D:488:LYS:O	1:D:492:VAL:HG23	2.15	0.46
1:F:437:GLN:O	1:F:439:ARG:N	2.48	0.46
1:C:359:ILE:O	1:C:363:ARG:HG2	2.15	0.46
1:I:412:SER:CA	1:K:433:THR:HG22	2.44	0.46
1:C:141:LEU:O	1:C:145:THR:CG2	2.64	0.46
1:G:258:HIS:HB3	1:G:262:TYR:CE2	2.50	0.46
1:A:446:LYS:HD2	1:A:450:HIS:HE1	1.80	0.46
1:E:294:PHE:CE2	1:E:304:PHE:HB2	2.50	0.46
1:B:244:ASP:OD2	1:B:245:LYS:HG3	2.14	0.46
1:B:51:ILE:HD13	1:D:64:PRO:HG3	1.96	0.46
1:B:359:ILE:O	1:B:362:GLU:N	2.48	0.46
1:I:346:GLU:C	1:I:348:ALA:H	2.18	0.46
1:C:394:TYR:HB2	1:C:445:GLU:HG3	1.97	0.46
1:H:334:SER:O	1:H:337:PRO:HD2	2.16	0.46
1:H:498:VAL:O	1:H:501:THR:HB	2.15	0.46
1:D:142:GLU:OE1	1:D:146:ARG:NH1	2.48	0.46
1:I:218:GLY:O	1:I:219:VAL:C	2.53	0.46
1:I:236:LEU:HB3	1:I:238:MET:CG	2.43	0.46
1:L:109:SER:O	1:L:113:TYR:CD2	2.69	0.46
1:H:481:ALA:O	1:H:482:TYR:C	2.51	0.46
1:A:17:PHE:CD1	1:A:113:TYR:OH	2.67	0.46
1:A:372:TYR:CD1	1:A:372:TYR:C	2.88	0.46
1:A:208:ILE:HG23	1:A:208:ILE:O	2.14	0.46
1:D:238:MET:O	1:D:239:THR:HG22	2.14	0.46
1:E:387:LYS:HE3	1:E:393:SER:HA	1.96	0.46
1:G:462:ARG:HB3	1:G:466:ARG:HH11	1.74	0.46
1:F:141:LEU:HA	1:F:141:LEU:HD23	1.77	0.46
1:J:264:HIS:HD2	1:J:288:PRO:HD3	1.76	0.46
1:B:248:VAL:CG1	1:B:272:ALA:HB3	2.45	0.46
1:C:201:LYS:HZ3	1:C:388:ASN:HD21	1.60	0.46
1:I:387:LYS:HA	1:I:390:ASN:HD22	1.81	0.46
1:A:40:GLN:C	1:A:42:ARG:H	2.17	0.46
1:G:96:SER:HB3	1:G:99:VAL:CG1	2.45	0.46
1:J:471:TYR:O	1:J:473:LEU:HD23	2.15	0.46
1:F:470:LYS:HD3	1:F:471:TYR:HE2	1.79	0.46
1:D:59:LEU:HG	1:D:61:LEU:CD2	2.46	0.46
1:C:329:LYS:HA	1:C:351:PRO:O	2.15	0.46
1:I:112:THR:H	1:I:124:GLY:HA3	1.80	0.46
1:L:90:LYS:CB	1:L:122:PHE:HD1	2.27	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:36:GLU:O	1:H:38:GLU:OE1	2.34	0.46
1:K:45:VAL:C	1:K:47:GLY:N	2.68	0.46
1:A:359:ILE:HG22	1:A:360:PHE:N	2.30	0.46
1:F:497:GLY:N	1:F:501:THR:HA	2.30	0.46
1:G:112:THR:HG22	1:G:124:GLY:N	2.30	0.46
1:I:396:ARG:HG3	1:I:396:ARG:NH1	2.13	0.46
1:F:384:GLU:O	1:F:385:TRP:C	2.53	0.46
1:L:280:ILE:HD11	1:L:304:PHE:HB3	1.97	0.46
1:G:398:THR:O	1:G:401:TYR:N	2.48	0.46
1:B:40:GLN:C	1:B:42:ARG:H	2.18	0.46
1:D:53:LYS:HB3	1:D:54:PRO:CD	2.43	0.46
1:B:111:MET:O	1:B:114:LYS:N	2.48	0.46
1:F:328:GLU:HG2	1:F:328:GLU:H	1.41	0.46
1:G:57:HIS:CD2	1:G:84:HIS:NE2	2.83	0.46
1:F:304:PHE:HA	1:F:305:PRO:HD3	1.70	0.46
1:F:305:PRO:O	1:F:306:LYS:HB2	2.15	0.46
1:D:435:GLU:O	1:D:438:ASP:HB2	2.16	0.46
1:B:192:ILE:O	1:B:192:ILE:CG1	2.63	0.46
1:C:87:THR:CB	1:C:88:PRO:CD	2.82	0.46
1:I:24:VAL:HG12	1:I:28:LEU:CD2	2.41	0.46
1:C:386:LEU:O	1:C:387:LYS:C	2.53	0.46
1:H:431:VAL:HG13	1:H:431:VAL:O	2.16	0.46
1:K:274:GLY:HA2	1:K:279:SER:HA	1.96	0.46
1:K:368:ILE:HG21	1:K:373:LEU:HD13	1.98	0.46
1:K:254:ASN:O	1:K:257:LEU:HB3	2.16	0.46
1:K:257:LEU:C	1:K:257:LEU:HD12	2.36	0.46
1:D:294:PHE:CE2	1:D:304:PHE:HA	2.51	0.46
1:L:221:HIS:CD2	1:L:224:GLU:OE1	2.68	0.46
1:B:473:LEU:HD13	1:B:479:THR:OG1	2.15	0.46
1:I:496:ALA:C	1:I:501:THR:O	2.54	0.46
1:J:142:GLU:HA	1:J:178:TRP:CE3	2.50	0.46
1:C:372:TYR:CD2	1:C:464:ILE:CD1	2.96	0.46
1:J:137:THR:O	1:J:140:GLU:N	2.49	0.46
1:C:374:ASN:ND2	1:C:374:ASN:C	2.69	0.46
1:F:224:GLU:HA	1:F:227:ILE:CG2	2.43	0.46
1:E:282:ASN:C	1:E:284:ASP:H	2.18	0.46
1:J:132:ASN:HA	1:J:133:PRO:HD3	1.62	0.46
1:E:305:PRO:O	1:E:306:LYS:CB	2.62	0.46
1:I:132:ASN:OD1	1:I:134:LYS:HB2	2.16	0.46
1:D:230:ALA:O	1:D:231:SER:C	2.53	0.46
1:D:497:GLY:C	1:D:501:THR:HB	2.36	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:330:GLN:HA	1:E:330:GLN:HE21	1.81	0.46
1:H:498:VAL:HG21	1:J:72:TRP:HE1	1.80	0.46
1:K:369:PRO:O	1:K:370:ASP:C	2.54	0.46
1:K:275:GLU:HG3	1:K:301:ILE:HG13	1.97	0.46
1:D:45:VAL:C	1:D:47:GLY:N	2.69	0.46
1:C:72:TRP:NE1	1:F:498:VAL:HG21	2.31	0.46
1:A:412:SER:OG	1:F:433:THR:HG23	2.15	0.46
1:G:90:LYS:HE2	1:G:164:VAL:CG1	2.46	0.46
1:H:165:PRO:HD2	1:H:197:CYS:O	2.16	0.46
1:E:85:GLN:HB3	1:E:85:GLN:HE21	1.33	0.46
1:H:61:LEU:N	1:H:61:LEU:HD12	2.31	0.46
1:B:129:VAL:O	1:B:130:LYS:C	2.54	0.46
1:G:221:HIS:HA	1:G:224:GLU:HB3	1.98	0.46
1:G:79:ARG:HD2	1:G:127:ALA:HB2	1.97	0.46
1:G:9:PHE:CD1	1:G:10:PHE:N	2.82	0.46
1:G:264:HIS:C	1:G:266:PHE:N	2.68	0.46
1:L:461:ALA:O	1:L:465:MET:HG3	2.16	0.46
1:B:467:THR:O	1:B:470:LYS:HB3	2.15	0.46
1:B:475:LEU:N	1:B:475:LEU:CD1	2.78	0.46
1:E:131:ILE:HG23	1:E:132:ASN:N	2.31	0.46
1:B:335:ASN:ND2	1:B:335:ASN:N	2.63	0.46
1:H:428:ILE:O	1:H:431:VAL:CG1	2.61	0.46
1:J:248:VAL:CG2	1:J:271:ILE:HG23	2.45	0.46
1:F:17:PHE:O	1:F:18:ASP:C	2.53	0.46
1:L:104:VAL:CG2	1:L:105:LYS:N	2.77	0.46
1:K:152:LEU:HD23	1:K:158:ILE:HB	1.97	0.46
1:J:87:THR:HG22	1:J:88:PRO:CD	2.45	0.46
1:A:404:ASP:O	1:A:405:SER:C	2.54	0.46
1:D:366:MET:CB	1:D:475:LEU:HD23	2.39	0.46
1:J:386:LEU:HB2	1:J:394:TYR:OH	2.16	0.46
1:K:313:SER:C	1:K:315:LEU:H	2.19	0.46
1:B:129:VAL:O	1:B:131:ILE:N	2.48	0.46
1:G:346:GLU:OE2	1:G:351:PRO:HD2	2.16	0.46
1:C:247:PHE:CE2	1:C:263:LEU:HB3	2.51	0.46
1:L:380:VAL:O	1:L:383:PHE:HB2	2.16	0.46
1:G:420:LYS:O	1:G:420:LYS:HE2	2.16	0.46
1:B:192:ILE:HG12	1:B:192:ILE:O	2.14	0.46
1:J:114:LYS:HD3	1:J:375:ALA:HA	1.98	0.46
1:L:318:ASP:OD1	1:L:340:LYS:HB3	2.15	0.46
1:F:12:MET:HG2	1:F:16:PHE:CZ	2.50	0.46
1:K:485:ALA:O	1:K:488:LYS:N	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:160:PRO:HD3	1:C:183:TYR:CE2	2.50	0.46
1:I:451:SER:OG	1:I:452:GLY:N	2.49	0.46
1:E:409:LEU:O	1:E:410:LEU:C	2.52	0.46
1:I:344:ILE:CD1	1:I:360:PHE:CE1	2.95	0.46
1:I:155:LYS:HE3	1:L:81:GLN:OE1	2.16	0.46
1:L:90:LYS:HG3	1:L:91:GLY:N	2.31	0.46
1:H:427:THR:O	1:H:428:ILE:HD13	2.16	0.46
1:I:96:SER:OG	1:I:98:ASP:OD1	2.30	0.46
1:K:17:PHE:HE1	1:K:486:ILE:HD12	1.77	0.46
1:D:96:SER:O	1:D:130:LYS:HD2	2.16	0.46
1:K:252:PHE:HZ	1:K:260:MET:HE1	1.80	0.46
1:G:114:LYS:HG3	1:G:371:LEU:O	2.16	0.46
1:J:403:ARG:HG3	1:J:440:ILE:HG22	1.96	0.46
1:A:282:ASN:O	1:A:284:ASP:N	2.38	0.46
1:F:165:PRO:O	1:F:198:VAL:HG23	2.16	0.46
1:K:148:PHE:O	1:K:152:LEU:HB2	2.15	0.46
1:H:114:LYS:HA	1:H:371:LEU:HD12	1.97	0.46
1:B:17:PHE:CE1	1:B:486:ILE:HD12	2.50	0.46
1:A:84:HIS:CD2	1:A:89:CYS:SG	3.07	0.46
1:A:433:THR:CG2	1:B:412:SER:HA	2.46	0.46
1:E:237:GLY:C	1:E:238:MET:HG2	2.36	0.46
1:C:101:VAL:HG23	1:C:102:ASP:H	1.81	0.46
1:F:436:PHE:O	1:F:437:GLN:C	2.54	0.46
1:G:238:MET:O	1:G:239:THR:O	2.33	0.46
1:L:470:LYS:HD2	1:L:471:TYR:CE2	2.51	0.46
1:D:423:LYS:HG3	1:D:424:HIS:N	2.31	0.46
1:L:423:LYS:HG2	1:L:426:GLY:CA	2.46	0.46
1:I:193:ASN:HB3	1:I:389:LEU:HD23	1.97	0.46
1:B:279:SER:HB2	1:B:310:TYR:HB3	1.97	0.46
1:D:244:ASP:O	1:D:245:LYS:CG	2.64	0.46
1:L:460:SER:O	1:L:461:ALA:C	2.51	0.46
1:H:132:ASN:HB3	1:H:135:ASN:ND2	2.31	0.46
1:C:344:ILE:CD1	1:C:360:PHE:CE1	2.97	0.46
1:L:248:VAL:HG22	1:L:271:ILE:CG2	2.44	0.46
1:J:479:THR:O	1:J:480:ALA:C	2.54	0.46
1:I:166:ALA:HA	1:I:176:MET:HE2	1.98	0.46
1:L:496:ALA:HB1	1:L:501:THR:O	2.15	0.46
1:D:417:LEU:CD2	1:E:417:LEU:HD11	2.46	0.46
1:L:234:SER:C	1:L:236:LEU:N	2.66	0.46
1:G:288:PRO:O	1:G:289:LYS:C	2.53	0.46
1:F:47:GLY:O	1:F:50:ARG:HG3	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:287:ASP:HB3	1:A:290:GLU:CG	2.46	0.46
1:C:279:SER:OG	1:C:280:ILE:N	2.49	0.46
1:J:126:LYS:HG3	1:J:127:ALA:H	1.81	0.46
1:J:90:LYS:HZ2	1:J:164:VAL:HG12	1.78	0.46
1:A:385:TRP:O	1:A:388:ASN:HB2	2.16	0.46
1:J:346:GLU:OE1	1:J:369:PRO:HA	2.16	0.46
1:F:271:ILE:HG22	1:F:283:PRO:HA	1.98	0.46
1:J:281:TRP:O	1:J:282:ASN:CB	2.63	0.46
1:G:368:ILE:HA	1:G:369:PRO:HD3	1.41	0.46
1:K:471:TYR:O	1:K:473:LEU:N	2.49	0.46
1:J:99:VAL:HG23	1:J:99:VAL:O	2.16	0.46
1:K:466:ARG:O	1:K:468:ALA:N	2.47	0.46
1:F:470:LYS:HD3	1:F:471:TYR:CE2	2.51	0.46
1:K:232:TYR:HD1	1:K:232:TYR:H	1.62	0.46
1:A:495:GLU:O	1:A:496:ALA:HB2	2.16	0.45
1:I:48:ILE:HG13	1:I:490:PHE:CE1	2.51	0.45
1:L:152:LEU:HD12	1:L:157:PHE:HB2	1.99	0.45
1:K:114:LYS:O	1:K:117:VAL:HB	2.15	0.45
1:G:72:TRP:CZ3	1:K:45:VAL:HG23	2.51	0.45
1:I:264:HIS:O	1:I:266:PHE:N	2.50	0.45
1:L:369:PRO:HG3	1:L:478:ARG:N	2.31	0.45
1:H:489:VAL:O	1:H:492:VAL:HG23	2.16	0.45
1:B:498:VAL:HG21	1:D:72:TRP:HZ2	1.81	0.45
1:K:410:LEU:HB3	1:K:430:ILE:HA	1.98	0.45
1:J:175:GLU:HA	1:J:178:TRP:CE3	2.51	0.45
1:A:57:HIS:ND1	1:A:84:HIS:CE1	2.68	0.45
1:J:337:PRO:HA	1:J:363:ARG:NE	2.23	0.45
1:E:433:THR:HG23	1:E:436:PHE:CB	2.41	0.45
1:B:369:PRO:HG3	1:B:478:ARG:HA	1.96	0.45
1:E:159:GLY:O	1:E:163:ASP:O	2.34	0.45
1:H:75:ILE:N	1:H:75:ILE:CD1	2.77	0.45
1:I:104:VAL:HG23	1:I:105:LYS:N	2.31	0.45
1:L:471:TYR:HB2	1:L:473:LEU:CD1	2.46	0.45
1:K:150:MET:HB3	1:K:150:MET:HE2	1.79	0.45
1:I:410:LEU:HD21	1:J:409:LEU:HD13	1.95	0.45
1:D:368:ILE:HA	1:D:369:PRO:HD3	1.54	0.45
1:A:157:PHE:CE2	1:E:155:LYS:HD2	2.52	0.45
1:D:244:ASP:OD1	1:D:245:LYS:N	2.49	0.45
1:A:256:GLY:O	1:A:259:SER:N	2.49	0.45
1:A:173:GLU:O	1:A:174:ARG:C	2.53	0.45
1:B:164:VAL:HG21	1:B:385:TRP:NE1	2.30	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:89:CYS:O	1:B:163:ASP:HA	2.17	0.45
1:I:202:PRO:O	1:I:203:ILE:C	2.54	0.45
1:I:91:GLY:HA2	1:I:111:MET:HE3	1.98	0.45
1:H:248:VAL:HG22	1:H:271:ILE:HG23	1.98	0.45
1:D:101:VAL:O	1:D:105:LYS:HG3	2.17	0.45
1:G:14:GLU:HG3	1:G:53:LYS:HE3	1.97	0.45
1:I:39:GLU:O	1:I:40:GLN:C	2.55	0.45
1:G:252:PHE:HD2	1:G:273:VAL:HG11	1.81	0.45
1:B:500:PHE:CE1	1:F:143:LYS:HD3	2.52	0.45
1:A:281:TRP:CD1	1:A:282:ASN:N	2.83	0.45
1:K:414:GLN:CG	1:K:429:PRO:HD2	2.46	0.45
1:H:81:GLN:HG2	1:H:163:ASP:OD2	2.16	0.45
1:G:78:TYR:CD1	1:G:78:TYR:N	2.84	0.45
1:I:382:TYR:O	1:I:386:LEU:HG	2.16	0.45
1:H:305:PRO:O	1:H:306:LYS:CB	2.61	0.45
1:I:389:LEU:O	1:I:391:HIS:CD2	2.70	0.45
1:J:58:VAL:CG2	1:J:80:ALA:HB2	2.46	0.45
1:A:33:ARG:NH2	1:A:42:ARG:CZ	2.79	0.45
1:B:449:VAL:O	1:B:450:HIS:C	2.53	0.45
1:D:203:ILE:HA	1:D:203:ILE:HD13	1.74	0.45
1:D:87:THR:CG2	1:D:88:PRO:CD	2.91	0.45
1:D:87:THR:HG22	1:D:88:PRO:CG	2.46	0.45
1:E:140:GLU:O	1:E:144:ILE:HG13	2.15	0.45
1:C:93:ILE:CD1	1:C:165:PRO:HB3	2.39	0.45
1:K:345:ALA:HB1	1:K:373:LEU:CD2	2.45	0.45
1:K:52:ILE:HD13	1:K:489:VAL:CG1	2.42	0.45
1:A:360:PHE:CD1	1:A:365:ILE:HG21	2.52	0.45
1:G:114:LYS:HA	1:G:117:VAL:HG23	1.99	0.45
1:I:31:ASP:N	1:I:31:ASP:OD2	2.49	0.45
1:L:82:HIS:HB3	1:L:112:THR:HG21	1.98	0.45
1:L:65:ILE:HG21	1:L:144:ILE:CG1	2.46	0.45
1:J:191:ASP:C	1:J:193:ASN:H	2.20	0.45
1:L:431:VAL:O	1:L:431:VAL:HG13	2.16	0.45
1:I:87:THR:CB	1:I:88:PRO:HD3	2.45	0.45
1:J:385:TRP:CE3	1:J:386:LEU:HD23	2.51	0.45
1:I:431:VAL:HG12	1:J:416:SER:OG	2.15	0.45
1:I:492:VAL:HG21	2:I:502:ADP:C2	2.51	0.45
1:K:95:TYR:O	1:K:133:PRO:HD3	2.16	0.45
1:L:269:LYS:HD2	1:L:285:GLY:CA	2.46	0.45
1:B:60:SER:C	1:B:61:LEU:HD12	2.36	0.45
1:F:132:ASN:HA	1:F:133:PRO:HD3	1.67	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:342:LYS:HA	1:G:342:LYS:HD2	1.79	0.45
1:F:397:LEU:N	1:F:397:LEU:HD12	2.30	0.45
1:I:344:ILE:HB	1:I:367:VAL:HG13	1.97	0.45
1:I:91:GLY:O	1:I:165:PRO:HA	2.16	0.45
1:A:414:GLN:CB	1:A:429:PRO:HD2	2.47	0.45
1:A:356:ALA:O	1:A:360:PHE:CD2	2.68	0.45
1:D:48:ILE:O	1:D:52:ILE:HG13	2.16	0.45
1:A:314:ILE:H	1:A:314:ILE:HD13	1.80	0.45
1:G:137:THR:HB	1:G:140:GLU:H	1.81	0.45
1:H:148:PHE:O	1:H:149:THR:C	2.55	0.45
1:I:343:ILE:HD13	1:I:366:MET:HE2	1.99	0.45
1:F:32:LEU:O	1:F:33:ARG:CB	2.64	0.45
1:B:28:LEU:HD21	1:B:490:PHE:CD2	2.51	0.45
1:I:107:LEU:O	1:I:110:LEU:HB3	2.16	0.45
1:K:332:THR:H	1:K:335:ASN:HD21	1.63	0.45
1:E:220:PHE:CD1	1:E:221:HIS:N	2.84	0.45
1:H:238:MET:C	1:H:240:PRO:HD3	2.37	0.45
1:J:282:ASN:OD1	1:J:282:ASN:C	2.54	0.45
1:H:300:SER:OG	1:H:302:LEU:HD13	2.16	0.45
1:B:281:TRP:CZ2	1:B:283:PRO:CG	2.99	0.45
1:I:417:LEU:HD21	1:J:417:LEU:HD21	1.99	0.45
1:I:328:GLU:O	1:I:329:LYS:C	2.55	0.45
1:G:6:ASP:HA	1:G:7:PRO:HD3	1.75	0.45
1:I:401:TYR:CD1	1:K:448:ILE:HD13	2.51	0.45
1:C:213:SER:HA	1:C:258:HIS:CD2	2.51	0.45
1:B:323:ILE:HA	1:B:324:PRO:HD3	1.79	0.45
1:E:410:LEU:HD13	1:E:430:ILE:C	2.36	0.45
1:K:40:GLN:CA	1:K:40:GLN:HE21	1.96	0.45
1:I:24:VAL:O	1:I:25:GLU:C	2.54	0.45
1:I:369:PRO:CG	1:I:478:ARG:HA	2.47	0.45
1:I:140:GLU:O	1:I:144:ILE:HG13	2.15	0.45
1:C:112:THR:HB	1:C:124:GLY:N	2.29	0.45
1:I:219:VAL:HG22	1:I:373:LEU:HD22	1.99	0.45
1:H:142:GLU:O	1:H:143:LYS:C	2.54	0.45
1:F:244:ASP:HB2	1:G:437:GLN:HG2	1.98	0.45
1:K:10:PHE:O	1:K:14:GLU:HG3	2.16	0.45
1:K:429:PRO:O	1:K:431:VAL:N	2.50	0.45
1:E:498:VAL:O	1:E:501:THR:CG2	2.64	0.45
1:D:229:GLU:O	1:D:233:MET:HG2	2.17	0.45
1:K:230:ALA:O	1:K:231:SER:C	2.55	0.45
1:E:223:ILE:O	1:E:224:GLU:C	2.54	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:389:LEU:HD21	1:D:192:ILE:CD1	2.46	0.45
1:C:389:LEU:HD21	1:D:192:ILE:HD11	1.99	0.45
1:B:201:LYS:HB2	1:B:202:PRO:CD	2.47	0.45
2:B:2:ADP:O3A	1:F:393:SER:HB3	2.17	0.45
1:K:421:PHE:O	1:K:422:GLY:C	2.55	0.45
1:E:462:ARG:O	1:E:463:GLN:C	2.55	0.45
1:D:331:LEU:CD1	1:D:344:ILE:HD13	2.46	0.45
1:F:453:LEU:C	1:F:453:LEU:HD22	2.36	0.45
1:D:222:GLY:HA3	1:D:373:LEU:HD12	1.98	0.45
1:L:474:GLY:C	1:L:475:LEU:HD12	2.36	0.45
1:C:471:TYR:HB2	1:C:473:LEU:HD12	1.98	0.45
1:L:448:ILE:O	1:L:449:VAL:C	2.53	0.45
1:A:329:LYS:HB2	1:A:329:LYS:HE3	1.67	0.45
1:B:336:ALA:O	1:B:339:VAL:HG22	2.17	0.45
1:C:466:ARG:HB2	1:C:466:ARG:HH11	1.82	0.45
1:J:33:ARG:HH12	1:J:36:GLU:HG3	1.81	0.45
1:C:180:ALA:HA	1:C:197:CYS:SG	2.56	0.45
1:C:382:TYR:O	1:C:386:LEU:HG	2.17	0.45
1:C:394:TYR:CE2	1:D:397:LEU:HD22	2.51	0.45
1:A:414:GLN:CG	1:A:429:PRO:HD2	2.47	0.45
1:A:182:THR:O	1:A:186:THR:HB	2.17	0.45
1:D:305:PRO:O	1:D:306:LYS:HB2	2.16	0.45
1:D:324:PRO:HD2	1:D:345:ALA:O	2.17	0.45
1:G:111:MET:HE2	1:G:111:MET:HA	1.98	0.45
1:G:431:VAL:HG13	1:G:431:VAL:O	2.16	0.45
1:A:252:PHE:H	1:A:275:GLU:HG2	1.81	0.45
1:J:57:HIS:ND1	1:J:84:HIS:NE2	2.42	0.45
1:J:337:PRO:CA	1:J:363:ARG:HH21	2.28	0.45
1:G:248:VAL:HG12	1:G:314:ILE:HG13	1.98	0.45
1:D:379:THR:O	1:D:382:TYR:HB3	2.16	0.45
1:E:8:ASN:O	1:E:11:LYS:N	2.49	0.45
1:J:243:GLY:O	1:J:245:LYS:N	2.50	0.45
1:F:342:LYS:HD3	1:F:365:ILE:HD13	1.99	0.45
1:G:153:ALA:CA	1:G:158:ILE:HG23	2.46	0.45
1:K:226:PHE:C	1:K:228:ASN:N	2.67	0.45
1:G:380:VAL:O	1:G:383:PHE:HB2	2.16	0.45
1:A:263:LEU:HD12	1:A:263:LEU:HA	1.85	0.45
1:D:265:ARG:HG2	1:D:266:PHE:CE2	2.51	0.45
1:E:182:THR:HG22	1:E:183:TYR:N	2.30	0.45
1:B:39:GLU:HB2	1:B:41:LYS:HG2	1.99	0.45
1:E:415:GLU:O	1:E:419:ARG:HG3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:46:ARG:HD3	1:F:46:ARG:O	2.17	0.45
1:E:248:VAL:HG22	1:E:272:ALA:N	2.31	0.45
1:C:335:ASN:O	1:C:338:ARG:N	2.50	0.45
1:I:47:GLY:O	1:I:48:ILE:C	2.55	0.45
1:C:149:THR:HG23	1:C:158:ILE:HD13	1.98	0.45
1:H:494:ASN:C	1:H:496:ALA:H	2.20	0.45
1:B:186:THR:HG22	1:B:187:ILE:H	1.81	0.45
1:G:82:HIS:CG	1:G:112:THR:HG21	2.48	0.45
1:I:34:THR:C	1:I:35:ARG:HG3	2.37	0.45
1:C:217:ARG:NH1	1:C:221:HIS:CE1	2.73	0.45
1:A:490:PHE:O	1:A:491:LYS:C	2.54	0.45
1:H:89:CYS:O	1:H:163:ASP:HA	2.16	0.45
1:L:334:SER:O	1:L:337:PRO:HD2	2.16	0.45
1:A:404:ASP:O	1:A:406:ASN:N	2.49	0.45
1:C:457:MET:O	1:C:458:GLU:C	2.54	0.45
1:H:244:ASP:OD2	1:H:245:LYS:HE2	2.17	0.45
1:C:393:SER:HB3	2:E:5:ADP:O3A	2.17	0.45
1:F:476:ASP:OD2	1:F:479:THR:HG23	2.17	0.45
1:H:483:VAL:HG12	1:H:484:ASN:N	2.30	0.45
1:I:101:VAL:O	1:I:105:LYS:HG3	2.16	0.45
1:J:464:ILE:HD13	1:J:481:ALA:HB2	1.99	0.45
1:K:6:ASP:CG	1:K:329:LYS:HE2	2.37	0.45
1:C:64:PRO:HB3	1:F:51:ILE:HD11	1.97	0.45
1:K:453:LEU:CD2	1:K:453:LEU:C	2.84	0.45
1:K:308:LYS:HA	1:K:309:PRO:HD3	1.72	0.45
1:L:362:GLU:OE1	1:L:362:GLU:HA	2.17	0.45
1:A:107:LEU:HA	1:A:107:LEU:HD22	1.69	0.45
1:B:147:ARG:HD3	1:D:499:THR:OG1	2.17	0.45
1:B:335:ASN:ND2	1:B:336:ALA:N	2.64	0.45
1:E:344:ILE:HB	1:E:367:VAL:HG13	1.99	0.45
2:C:3:ADP:O3A	1:D:393:SER:HB3	2.17	0.45
1:A:411:MET:HA	1:A:430:ILE:CG2	2.46	0.45
1:C:240:PRO:HD2	1:C:245:LYS:HZ3	1.81	0.45
1:K:249:VAL:HG12	1:K:323:ILE:HG13	1.98	0.45
1:A:335:ASN:HD22	1:A:336:ALA:H	1.65	0.45
1:D:47:GLY:O	1:D:51:ILE:HG13	2.17	0.45
1:D:346:GLU:OE2	1:D:352:THR:CG2	2.64	0.45
1:A:271:ILE:CD1	1:A:283:PRO:HA	2.47	0.45
1:C:221:HIS:CE1	1:C:454:ALA:HB2	2.51	0.45
1:K:91:GLY:HA3	1:K:125:ALA:O	2.16	0.45
1:J:175:GLU:HG3	1:J:178:TRP:CZ3	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:282:ASN:O	1:L:284:ASP:N	2.49	0.45
1:H:19:ARG:NH2	1:H:358:LYS:NZ	2.62	0.45
1:H:220:PHE:CD1	1:H:221:HIS:N	2.85	0.45
1:K:236:LEU:HD22	1:K:342:LYS:O	2.17	0.45
1:I:392:VAL:CG1	1:K:386:LEU:HD11	2.47	0.45
1:G:346:GLU:OE1	1:G:369:PRO:HA	2.16	0.45
1:B:282:ASN:C	1:B:282:ASN:OD1	2.55	0.45
1:C:142:GLU:CA	1:C:178:TRP:CZ3	2.99	0.45
1:G:191:ASP:O	1:G:193:ASN:N	2.39	0.45
1:F:328:GLU:HB2	1:F:329:LYS:NZ	2.31	0.45
1:H:445:GLU:O	1:H:449:VAL:HG23	2.17	0.45
1:H:294:PHE:O	1:H:298:HIS:NE2	2.49	0.45
1:C:132:ASN:O	1:C:133:PRO:C	2.55	0.45
1:E:173:GLU:O	1:E:202:PRO:HD3	2.16	0.45
1:G:328:GLU:HG2	1:G:329:LYS:HD2	1.99	0.45
1:H:34:THR:CG2	1:H:34:THR:O	2.65	0.45
1:K:450:HIS:O	1:K:453:LEU:HB3	2.17	0.45
1:A:6:ASP:N	1:A:6:ASP:OD1	2.50	0.45
1:B:197:CYS:SG	1:B:198:VAL:N	2.89	0.45
1:C:153:ALA:CA	1:C:158:ILE:HG22	2.47	0.45
1:B:261:ARG:CG	1:B:261:ARG:HH11	2.04	0.45
1:C:431:VAL:CG1	1:D:419:ARG:HH21	2.30	0.45
1:D:352:THR:CG2	1:D:478:ARG:NH2	2.79	0.45
1:B:68:ASP:OD1	1:B:140:GLU:CG	2.65	0.45
1:G:485:ALA:O	1:G:486:ILE:C	2.56	0.45
1:I:239:THR:N	1:I:240:PRO:CD	2.75	0.45
1:E:12:MET:CE	1:E:354:PRO:HD3	2.47	0.45
1:H:421:PHE:CE1	1:H:423:LYS:HB2	2.52	0.45
1:D:456:THR:HG23	1:E:396:ARG:HH21	1.82	0.45
1:G:495:GLU:OE1	1:H:204:SER:CB	2.64	0.45
1:K:203:ILE:HG21	1:K:209:HIS:CE1	2.52	0.45
1:G:239:THR:N	1:G:240:PRO:HD3	2.31	0.45
1:G:65:ILE:HD11	1:G:75:ILE:HD11	1.99	0.45
1:B:201:LYS:HE2	1:B:206:GLY:O	2.17	0.45
1:H:87:THR:HG22	1:H:88:PRO:N	2.32	0.45
1:H:47:GLY:O	1:H:50:ARG:N	2.48	0.45
1:K:399:PHE:HZ	1:K:444:SER:O	2.00	0.45
1:L:214:ALA:CB	1:L:380:VAL:HG21	2.46	0.45
1:D:59:LEU:CD2	1:D:61:LEU:CD2	2.95	0.45
1:L:274:GLY:CA	1:L:314:ILE:HD12	2.47	0.45
1:I:344:ILE:HD11	1:I:360:PHE:CD1	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:47:GLY:O	1:I:50:ARG:HB2	2.17	0.45
1:L:152:LEU:HA	1:L:152:LEU:HD12	1.77	0.45
1:L:90:LYS:HE3	1:L:199:THR:CG2	2.47	0.45
1:H:427:THR:C	1:H:428:ILE:HD13	2.37	0.45
1:I:137:THR:CG2	1:I:140:GLU:HG3	2.47	0.45
1:E:412:SER:O	1:E:413:VAL:C	2.55	0.45
1:C:501:THR:C	1:D:146:ARG:HH22	2.20	0.45
1:J:314:ILE:H	1:J:314:ILE:HD13	1.77	0.45
1:J:501:THR:OXT	1:J:501:THR:HG23	2.17	0.45
1:F:244:ASP:OD2	1:F:245:LYS:HE2	2.17	0.45
1:I:238:MET:O	1:I:240:PRO:N	2.50	0.45
1:J:167:PRO:HG3	1:J:176:MET:SD	2.57	0.45
1:H:468:ALA:O	1:H:473:LEU:HD12	2.16	0.45
1:H:247:PHE:CE2	1:H:263:LEU:HD12	2.52	0.45
1:A:386:LEU:CD1	1:B:392:VAL:CG2	2.93	0.45
1:I:257:LEU:HG	1:I:258:HIS:N	2.31	0.45
1:K:332:THR:HA	1:K:353:THR:OG1	2.17	0.45
1:F:373:LEU:HD12	1:F:373:LEU:HA	1.79	0.45
1:J:420:LYS:CB	1:J:420:LYS:NZ	2.71	0.45
1:E:83:SER:OG	1:E:85:GLN:HB3	2.17	0.45
1:B:130:LYS:O	1:B:131:ILE:HB	2.17	0.45
1:G:152:LEU:C	1:G:158:ILE:HG22	2.36	0.45
1:K:417:LEU:HA	1:K:417:LEU:HD12	1.68	0.45
1:K:318:ASP:HA	1:K:340:LYS:HB2	1.98	0.45
1:D:395:GLY:HA2	1:D:398:THR:HG23	1.99	0.45
1:B:67:ARG:NH2	1:B:136:TYR:CZ	2.85	0.45
1:C:444:SER:OG	1:C:446:LYS:HG2	2.17	0.45
1:H:46:ARG:HA	1:H:49:LEU:HD12	1.98	0.45
1:J:19:ARG:O	1:J:23:ILE:HG13	2.17	0.45
1:J:227:ILE:O	1:J:227:ILE:HG23	2.16	0.45
1:A:63:PHE:CD1	1:A:63:PHE:O	2.70	0.45
1:D:79:ARG:CD	1:D:127:ALA:HB2	2.47	0.44
1:D:383:PHE:O	1:D:384:GLU:C	2.54	0.44
1:E:143:LYS:HZ1	1:E:147:ARG:NH2	2.15	0.44
1:C:369:PRO:HG3	1:C:478:ARG:N	2.32	0.44
1:C:122:PHE:CZ	1:C:382:TYR:HD2	2.34	0.44
1:C:410:LEU:HD23	1:C:410:LEU:HA	1.69	0.44
1:C:498:VAL:HG11	1:F:72:TRP:CE2	2.51	0.44
1:K:220:PHE:HD1	1:K:221:HIS:CA	2.30	0.44
1:F:17:PHE:CE1	1:F:486:ILE:HD12	2.52	0.44
1:L:75:ILE:HG12	1:L:144:ILE:CD1	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:19:ARG:HD3	1:E:23:ILE:HD11	1.98	0.44
1:B:281:TRP:CE2	1:B:283:PRO:HD3	2.52	0.44
1:I:212:ILE:HG23	1:I:254:ASN:HD21	1.82	0.44
1:F:282:ASN:OD1	1:F:284:ASP:HB2	2.17	0.44
1:I:134:LYS:HA	1:I:134:LYS:HE3	1.99	0.44
1:A:318:ASP:HA	1:A:340:LYS:HB2	1.98	0.44
1:F:183:TYR:CE2	1:F:188:GLY:HA3	2.52	0.44
1:A:147:ARG:HG3	1:A:147:ARG:O	2.17	0.44
1:L:28:LEU:HA	1:L:28:LEU:HD12	1.85	0.44
1:K:12:MET:C	1:K:16:PHE:HD1	2.20	0.44
1:A:355:GLU:HA	1:A:358:LYS:HD2	1.99	0.44
1:K:254:ASN:HB3	1:K:255:VAL:H	1.63	0.44
1:L:367:VAL:O	1:L:477:LEU:HB2	2.16	0.44
1:G:410:LEU:HB3	1:G:430:ILE:HA	1.99	0.44
1:L:17:PHE:CE2	1:L:53:LYS:HB2	2.53	0.44
1:F:91:GLY:O	1:F:165:PRO:HA	2.16	0.44
1:K:414:GLN:OE1	1:K:430:ILE:HG12	2.16	0.44
1:G:89:CYS:O	1:G:163:ASP:HA	2.17	0.44
1:F:383:PHE:O	1:F:386:LEU:HB2	2.17	0.44
1:F:387:LYS:HG2	1:F:387:LYS:O	2.17	0.44
1:E:498:VAL:O	1:E:501:THR:HG22	2.17	0.44
1:L:200:GLY:N	1:L:384:GLU:OE1	2.50	0.44
1:J:386:LEU:CD1	1:K:392:VAL:CG1	2.94	0.44
1:D:201:LYS:HB2	1:D:202:PRO:HD2	1.99	0.44
1:D:256:GLY:O	1:D:259:SER:HB2	2.18	0.44
1:L:432:PRO:HB3	1:L:436:PHE:CD1	2.51	0.44
1:G:233:MET:HE1	1:G:343:ILE:HD11	1.98	0.44
1:K:226:PHE:HB3	1:K:366:MET:HE1	1.99	0.44
1:D:344:ILE:HG22	1:D:367:VAL:HG13	1.99	0.44
1:G:93:ILE:HA	1:G:127:ALA:HB3	1.98	0.44
1:K:454:ALA:O	1:K:455:TYR:C	2.54	0.44
1:B:450:HIS:O	1:B:451:SER:C	2.53	0.44
1:E:323:ILE:HA	1:E:324:PRO:HD2	1.48	0.44
1:G:302:LEU:HA	1:G:302:LEU:HD12	1.80	0.44
1:J:67:ARG:O	1:J:70:GLY:N	2.47	0.44
1:G:400:LYS:O	1:G:403:ARG:HB3	2.17	0.44
1:D:125:ALA:O	1:D:126:LYS:HB2	2.17	0.44
1:E:65:ILE:HD13	1:E:144:ILE:CG1	2.47	0.44
1:C:235:ILE:CG2	1:C:364:ASN:HD21	2.04	0.44
1:E:82:HIS:CG	1:E:112:THR:CG2	2.99	0.44
1:K:39:GLU:O	1:K:40:GLN:C	2.55	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:428:ILE:O	1:A:429:PRO:C	2.54	0.44
1:A:427:THR:CG2	1:A:429:PRO:HD3	2.43	0.44
1:H:360:PHE:HB3	1:H:365:ILE:HB	1.98	0.44
1:D:417:LEU:HD23	1:E:417:LEU:HD11	2.00	0.44
1:A:358:LYS:HA	1:A:361:LEU:HD13	1.99	0.44
1:A:181:ASP:OD1	1:F:501:THR:OXT	2.35	0.44
1:D:249:VAL:O	1:D:249:VAL:HG13	2.18	0.44
1:G:501:THR:OXT	1:H:181:ASP:CB	2.61	0.44
1:G:50:ARG:NH1	1:K:73:GLU:HA	2.21	0.44
1:L:233:MET:CE	1:L:236:LEU:HD11	2.47	0.44
1:J:433:THR:N	1:K:412:SER:OG	2.49	0.44
1:E:28:LEU:HD12	1:E:28:LEU:HA	1.78	0.44
1:B:407:TYR:O	1:B:411:MET:HB2	2.17	0.44
1:H:374:ASN:ND2	1:H:374:ASN:C	2.69	0.44
1:A:55:CYS:HA	1:A:82:HIS:HA	2.00	0.44
1:D:394:TYR:CE2	1:E:397:LEU:HD23	2.53	0.44
1:F:224:GLU:CA	1:F:227:ILE:HG22	2.46	0.44
1:G:346:GLU:HG2	1:G:351:PRO:HG2	1.99	0.44
1:K:99:VAL:O	1:K:130:LYS:HE3	2.17	0.44
1:K:398:THR:O	1:K:401:TYR:N	2.50	0.44
1:B:6:ASP:HB2	1:B:329:LYS:HD2	1.99	0.44
1:E:177:SER:OG	1:E:205:GLN:HG3	2.18	0.44
1:L:225:ASN:ND2	1:L:458:GLU:HA	2.32	0.44
1:B:451:SER:OG	1:B:452:GLY:N	2.51	0.44
1:H:406:ASN:HD22	1:H:406:ASN:N	2.14	0.44
1:C:476:ASP:O	1:C:477:LEU:C	2.56	0.44
1:L:26:ASP:C	1:L:28:LEU:H	2.20	0.44
1:I:269:LYS:HD3	1:I:284:ASP:O	2.17	0.44
1:I:332:THR:HB	1:I:333:LYS:H	1.55	0.44
1:C:85:GLN:OE1	1:C:489:VAL:HG22	2.18	0.44
1:H:354:PRO:HG2	1:H:355:GLU:N	2.32	0.44
1:I:96:SER:O	1:I:97:THR:C	2.56	0.44
1:A:323:ILE:HA	1:A:324:PRO:HD3	1.79	0.44
1:A:356:ALA:HB1	1:A:360:PHE:CE2	2.53	0.44
1:K:264:HIS:ND1	1:K:288:PRO:HG2	2.33	0.44
1:K:326:ALA:O	1:K:327:SER:O	2.35	0.44
1:D:337:PRO:HA	1:D:363:ARG:NE	2.28	0.44
1:J:248:VAL:HG11	1:J:314:ILE:HB	1.98	0.44
1:I:219:VAL:O	1:I:222:GLY:N	2.50	0.44
1:A:419:ARG:NH2	1:F:431:VAL:HG11	2.33	0.44
1:F:414:GLN:OE1	1:F:428:ILE:CA	2.56	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:101:VAL:O	1:L:104:VAL:CG2	2.64	0.44
1:A:247:PHE:O	1:A:271:ILE:HG22	2.17	0.44
1:C:280:ILE:CG2	1:C:281:TRP:H	2.19	0.44
1:E:12:MET:HE2	1:E:354:PRO:HD3	2.00	0.44
1:J:368:ILE:HA	1:J:369:PRO:HD3	1.47	0.44
1:L:431:VAL:HG22	1:L:431:VAL:O	2.17	0.44
1:A:78:TYR:O	1:A:127:ALA:HA	2.17	0.44
1:G:141:LEU:HD23	1:G:141:LEU:HA	1.71	0.44
1:B:379:THR:O	1:B:382:TYR:HB3	2.18	0.44
1:I:414:GLN:CB	1:I:429:PRO:HD2	2.46	0.44
1:H:28:LEU:HD21	1:H:490:PHE:CD1	2.52	0.44
1:H:30:GLU:HB3	1:H:31:ASP:H	1.32	0.44
1:H:92:GLY:O	1:H:126:LYS:HD2	2.17	0.44
1:J:423:LYS:HD2	1:J:423:LYS:HA	1.78	0.44
2:B:2:ADP:H5'2	1:F:203:ILE:HG23	1.98	0.44
1:H:131:ILE:HD13	1:H:144:ILE:HD13	2.00	0.44
1:E:271:ILE:CD1	1:E:283:PRO:HA	2.48	0.44
1:H:294:PHE:CD2	1:H:304:PHE:HD1	2.36	0.44
1:K:82:HIS:HD2	1:K:112:THR:OG1	1.99	0.44
1:E:247:PHE:CB	1:E:321:ILE:HB	2.47	0.44
1:K:57:HIS:CD2	1:K:84:HIS:CE1	3.06	0.44
1:C:321:ILE:O	1:C:321:ILE:HG22	2.18	0.44
1:B:435:GLU:H	1:B:435:GLU:CD	2.21	0.44
1:A:83:SER:O	1:A:123:GLY:HA3	2.17	0.44
1:A:423:LYS:CE	1:A:426:GLY:HA3	2.47	0.44
1:E:64:PRO:O	1:E:147:ARG:HD2	2.17	0.44
1:E:426:GLY:O	1:E:428:ILE:CD1	2.66	0.44
1:E:427:THR:O	1:E:429:PRO:HD3	2.17	0.44
1:J:25:GLU:O	1:J:29:VAL:HG23	2.17	0.44
1:A:427:THR:HG22	1:A:428:ILE:H	1.82	0.44
1:I:130:LYS:O	1:I:131:ILE:HG13	2.17	0.44
1:D:414:GLN:OE1	1:D:428:ILE:HA	2.17	0.44
1:L:96:SER:HA	1:L:131:ILE:O	2.18	0.44
1:B:227:ILE:HD13	1:B:343:ILE:HD13	1.99	0.44
1:J:431:VAL:CG1	1:K:419:ARG:HH21	2.30	0.44
1:H:324:PRO:HD2	1:H:345:ALA:O	2.17	0.44
1:L:316:GLU:O	1:L:317:ALA:C	2.56	0.44
1:C:49:LEU:H	1:C:49:LEU:CD1	2.19	0.44
1:E:38:GLU:OE2	1:E:42:ARG:HD2	2.17	0.44
1:A:437:GLN:HE22	1:H:426:GLY:CA	2.29	0.44
1:B:346:GLU:HG2	1:B:351:PRO:CG	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:256:GLY:O	1:D:259:SER:N	2.50	0.44
1:F:315:LEU:HD23	1:F:331:LEU:HD11	1.96	0.44
1:B:257:LEU:C	1:B:257:LEU:CD1	2.84	0.44
1:B:386:LEU:CD1	1:F:392:VAL:CG2	2.96	0.44
1:D:423:LYS:HG3	1:D:424:HIS:H	1.82	0.44
1:F:279:SER:C	1:F:280:ILE:HG13	2.38	0.44
1:E:459:ARG:O	1:E:463:GLN:HG3	2.17	0.44
1:A:45:VAL:O	1:A:48:ILE:HG12	2.17	0.44
1:J:173:GLU:HB2	1:J:202:PRO:CG	2.47	0.44
1:J:28:LEU:HD21	1:J:490:PHE:CD2	2.52	0.44
1:H:107:LEU:O	1:H:108:ALA:C	2.54	0.44
1:J:188:GLY:O	1:J:190:TYR:N	2.50	0.44
1:E:91:GLY:HA3	1:E:125:ALA:O	2.17	0.44
1:H:115:CYS:O	1:H:116:ALA:C	2.55	0.44
1:B:147:ARG:O	1:B:151:GLU:HG2	2.17	0.44
1:D:90:LYS:NZ	1:D:199:THR:CG2	2.75	0.44
1:B:250:GLN:CG	1:B:315:LEU:HD21	2.47	0.44
1:G:142:GLU:OE2	1:G:178:TRP:NE1	2.50	0.44
1:G:64:PRO:HG3	1:K:51:ILE:HD13	2.00	0.44
1:D:429:PRO:HA	1:E:416:SER:CB	2.47	0.44
1:D:24:VAL:HG22	1:D:483:VAL:HG13	1.99	0.44
1:E:53:LYS:CB	1:E:54:PRO:CD	2.79	0.44
1:L:369:PRO:CG	1:L:477:LEU:HB3	2.47	0.44
1:L:476:ASP:O	1:L:477:LEU:C	2.56	0.44
1:F:428:ILE:H	1:F:428:ILE:HD13	1.78	0.44
1:E:167:PRO:HG3	1:E:176:MET:CG	2.48	0.44
1:K:89:CYS:N	1:K:162:ILE:O	2.50	0.44
1:J:90:LYS:CE	1:J:199:THR:CG2	2.95	0.44
1:H:322:LEU:C	1:H:322:LEU:HD22	2.38	0.44
1:K:46:ARG:HA	1:K:49:LEU:HD13	1.99	0.44
1:E:420:LYS:O	1:E:421:PHE:HB2	2.17	0.44
1:B:304:PHE:CD1	1:B:305:PRO:HD2	2.53	0.44
1:K:318:ASP:HA	1:K:340:LYS:CB	2.47	0.44
1:D:220:PHE:HE1	1:D:224:GLU:OE1	1.99	0.44
1:H:383:PHE:O	1:H:384:GLU:C	2.54	0.44
1:A:447:ASP:O	1:A:448:ILE:C	2.55	0.44
1:K:192:ILE:O	1:K:192:ILE:HG12	2.17	0.44
1:A:101:VAL:O	1:A:101:VAL:CG1	2.64	0.44
1:C:396:ARG:O	1:C:396:ARG:CD	2.54	0.44
1:C:226:PHE:HE2	1:C:465:MET:SD	2.40	0.44
1:C:19:ARG:CD	1:C:479:THR:HG21	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:315:LEU:N	1:I:315:LEU:HD12	2.33	0.44
1:I:373:LEU:O	1:I:373:LEU:HD23	2.17	0.44
1:L:481:ALA:O	1:L:482:TYR:C	2.55	0.44
1:B:233:MET:CE	1:B:236:LEU:HD12	2.47	0.44
1:A:114:LYS:CE	1:A:374:ASN:ND2	2.81	0.44
1:G:401:TYR:CE2	1:L:439:ARG:NH2	2.86	0.44
1:B:378:VAL:O	1:B:379:THR:C	2.56	0.44
1:K:104:VAL:CG2	1:K:105:LYS:H	2.30	0.44
1:F:248:VAL:HG11	1:F:314:ILE:HB	1.98	0.44
1:A:39:GLU:O	1:A:41:LYS:N	2.51	0.44
1:G:153:ALA:CA	1:G:158:ILE:CG2	2.96	0.44
1:J:65:ILE:CD1	1:J:75:ILE:HD11	2.48	0.44
1:C:13:VAL:CG1	1:C:14:GLU:N	2.75	0.44
1:F:484:ASN:HA	1:F:487:GLU:OE1	2.17	0.44
1:L:475:LEU:CD1	1:L:475:LEU:N	2.81	0.44
1:G:147:ARG:NH1	1:G:151:GLU:CD	2.71	0.44
1:D:80:ALA:O	1:D:125:ALA:HA	2.18	0.44
1:J:465:MET:O	1:J:468:ALA:N	2.51	0.44
1:B:142:GLU:O	1:B:143:LYS:C	2.55	0.44
1:D:199:THR:HA	1:D:384:GLU:OE1	2.18	0.44
1:E:68:ASP:OD2	1:E:140:GLU:CG	2.66	0.44
1:L:300:SER:OG	1:L:302:LEU:HD13	2.17	0.44
1:C:459:ARG:CZ	2:C:3:ADP:O3B	2.65	0.44
1:L:120:VAL:HG21	1:L:378:VAL:HG12	1.99	0.44
1:I:167:PRO:HD3	1:I:176:MET:CG	2.48	0.44
1:A:223:ILE:O	1:A:224:GLU:C	2.56	0.44
1:K:255:VAL:HG13	1:K:325:ALA:HB1	2.00	0.44
1:G:497:GLY:N	1:G:501:THR:HA	2.33	0.44
1:I:30:GLU:CG	1:I:31:ASP:N	2.80	0.44
1:F:385:TRP:HA	1:F:388:ASN:HD22	1.82	0.44
1:L:280:ILE:CG2	1:L:281:TRP:N	2.80	0.44
1:A:90:LYS:HD3	1:A:122:PHE:CE1	2.53	0.44
1:L:406:ASN:O	1:L:409:LEU:HB2	2.17	0.44
1:C:392:VAL:HG13	1:E:382:TYR:OH	2.18	0.44
1:H:421:PHE:CD1	1:H:423:LYS:HB2	2.52	0.44
1:G:314:ILE:HD13	1:G:314:ILE:N	2.31	0.44
1:I:9:PHE:CD1	1:I:10:PHE:N	2.82	0.44
1:B:219:VAL:O	1:B:223:ILE:HD12	2.18	0.44
1:D:201:LYS:HB2	1:D:202:PRO:CD	2.47	0.44
1:J:280:ILE:HG23	1:J:307:ALA:CB	2.48	0.44
1:F:328:GLU:O	1:F:329:LYS:O	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:405:SER:O	1:I:409:LEU:HD23	2.17	0.44
1:K:465:MET:O	1:K:468:ALA:CB	2.65	0.44
1:I:94:ARG:CG	1:I:94:ARG:HH11	2.27	0.44
1:I:198:VAL:O	1:I:201:LYS:CE	2.66	0.44
1:I:248:VAL:HG23	1:I:319:CYS:SG	2.58	0.44
1:I:336:ALA:CB	1:I:359:ILE:HG21	2.48	0.44
1:L:79:ARG:NH1	1:L:165:PRO:HG3	2.33	0.44
1:L:90:LYS:HE2	1:L:164:VAL:HG12	2.00	0.44
1:C:90:LYS:HB2	1:C:122:PHE:CD1	2.53	0.44
1:C:90:LYS:HB2	1:C:122:PHE:HB3	1.99	0.44
1:I:217:ARG:HB3	1:I:217:ARG:NH1	2.29	0.44
1:K:481:ALA:O	1:K:482:TYR:C	2.56	0.44
1:A:336:ALA:HB3	1:A:359:ILE:CD1	2.47	0.44
1:K:277:ASP:HB3	1:K:302:LEU:HD11	2.00	0.44
1:F:111:MET:O	1:F:112:THR:C	2.56	0.44
1:H:149:THR:O	1:H:150:MET:C	2.55	0.44
1:I:227:ILE:HD11	1:I:343:ILE:HD12	1.99	0.44
1:B:227:ILE:CD1	1:B:233:MET:SD	2.96	0.44
1:A:140:GLU:O	1:A:144:ILE:HG13	2.17	0.44
1:H:368:ILE:HG22	1:H:373:LEU:HB2	2.00	0.44
1:L:439:ARG:O	1:L:439:ARG:HG2	2.16	0.44
1:E:237:GLY:O	1:E:238:MET:HG2	2.18	0.44
1:J:280:ILE:HG23	1:J:307:ALA:HB1	2.00	0.44
1:H:137:THR:HG23	1:H:140:GLU:CB	2.44	0.44
1:L:244:ASP:HB3	1:L:245:LYS:H	1.70	0.44
1:E:88:PRO:HG2	1:E:122:PHE:HD2	1.83	0.44
1:I:432:PRO:O	1:I:433:THR:C	2.56	0.44
1:D:244:ASP:O	1:D:245:LYS:HG2	2.18	0.44
1:G:328:GLU:O	1:G:329:LYS:HB2	2.18	0.44
1:D:220:PHE:C	1:D:220:PHE:CD1	2.92	0.44
1:F:65:ILE:HG21	1:F:144:ILE:HG12	2.00	0.44
1:I:308:LYS:HA	1:I:309:PRO:HD3	1.75	0.44
1:C:291:LEU:HD13	1:C:304:PHE:CD2	2.53	0.44
1:C:166:ALA:HB1	1:C:167:PRO:CD	2.48	0.44
1:D:90:LYS:HD2	1:D:90:LYS:HA	1.84	0.43
1:E:426:GLY:O	1:E:428:ILE:HD13	2.19	0.43
1:C:335:ASN:HB2	1:C:338:ARG:HH12	1.82	0.43
1:I:337:PRO:HA	1:I:363:ARG:HE	1.83	0.43
1:H:428:ILE:O	1:H:429:PRO:C	2.54	0.43
1:I:65:ILE:HA	1:I:147:ARG:NH1	2.33	0.43
1:D:410:LEU:HB3	1:D:430:ILE:HA	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:275:GLU:HB3	1:K:276:SER:H	1.64	0.43
1:C:82:HIS:CD2	1:C:112:THR:CG2	2.86	0.43
1:I:227:ILE:HG23	1:I:227:ILE:O	2.18	0.43
1:L:96:SER:C	1:L:98:ASP:H	2.22	0.43
1:J:411:MET:N	1:J:430:ILE:HG22	2.33	0.43
1:H:485:ALA:O	1:H:488:LYS:N	2.51	0.43
1:E:382:TYR:O	1:E:385:TRP:HB3	2.18	0.43
1:L:353:THR:HB	1:L:354:PRO:HD2	2.00	0.43
1:B:369:PRO:HG3	1:B:478:ARG:CA	2.48	0.43
1:D:453:LEU:O	1:D:454:ALA:C	2.57	0.43
1:K:198:VAL:HG22	1:K:199:THR:N	2.32	0.43
1:K:313:SER:O	1:K:315:LEU:N	2.51	0.43
1:L:432:PRO:C	1:L:433:THR:O	2.54	0.43
1:B:280:ILE:HG23	1:B:281:TRP:H	1.82	0.43
1:B:282:ASN:O	1:B:282:ASN:OD1	2.36	0.43
1:K:396:ARG:HH11	1:K:396:ARG:HG3	1.82	0.43
1:G:400:LYS:HB2	1:L:455:TYR:HB2	2.00	0.43
1:I:380:VAL:HG23	1:I:453:LEU:HG	2.00	0.43
1:A:500:PHE:HB3	1:B:142:GLU:OE1	2.18	0.43
1:E:60:SER:C	1:E:61:LEU:HD23	2.38	0.43
1:C:328:GLU:O	1:C:329:LYS:CG	2.65	0.43
1:I:82:HIS:HD2	1:I:112:THR:HG21	1.67	0.43
1:I:201:LYS:CB	1:I:202:PRO:CD	2.95	0.43
1:I:24:VAL:HG11	1:I:28:LEU:HD22	1.93	0.43
1:C:198:VAL:HG22	1:C:199:THR:N	2.33	0.43
1:K:85:GLN:HB2	1:K:492:VAL:HG11	2.01	0.43
1:D:62:SER:HA	1:D:75:ILE:O	2.17	0.43
1:D:65:ILE:HD13	1:D:144:ILE:CD1	2.47	0.43
1:H:396:ARG:NH1	1:H:396:ARG:CG	2.74	0.43
1:F:17:PHE:HE2	1:F:53:LYS:HB2	1.83	0.43
1:G:490:PHE:O	1:G:491:LYS:C	2.56	0.43
1:L:372:TYR:CD1	1:L:373:LEU:N	2.86	0.43
1:F:47:GLY:O	1:F:50:ARG:CG	2.66	0.43
1:K:429:PRO:C	1:K:431:VAL:H	2.21	0.43
1:F:380:VAL:HG13	1:F:449:VAL:HG13	2.01	0.43
1:E:497:GLY:HA3	1:E:501:THR:HA	1.99	0.43
1:C:274:GLY:O	1:C:275:GLU:CB	2.63	0.43
1:D:118:VAL:O	1:D:120:VAL:HG23	2.17	0.43
1:H:478:ARG:NH1	1:H:478:ARG:HG3	2.33	0.43
1:B:52:ILE:HD13	1:B:489:VAL:HG11	1.96	0.43
1:D:233:MET:O	1:D:238:MET:N	2.47	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:334:SER:OG	1:L:335:ASN:N	2.51	0.43
1:G:248:VAL:CG1	1:G:249:VAL:N	2.81	0.43
1:L:202:PRO:O	1:L:207:GLY:N	2.45	0.43
1:G:397:LEU:HD22	1:L:394:TYR:CZ	2.53	0.43
1:G:305:PRO:O	1:G:306:LYS:C	2.56	0.43
1:K:280:ILE:CG2	1:K:307:ALA:HB1	2.48	0.43
1:C:131:ILE:HA	1:C:131:ILE:HD12	1.76	0.43
1:F:217:ARG:CZ	1:F:450:HIS:CE1	3.01	0.43
1:J:12:MET:HB2	1:J:12:MET:HE3	1.86	0.43
1:K:92:GLY:HA2	1:K:166:ALA:O	2.17	0.43
1:K:363:ARG:CB	1:K:363:ARG:HH11	2.30	0.43
1:A:497:GLY:O	1:A:498:VAL:HG13	2.18	0.43
1:B:334:SER:O	1:B:337:PRO:HD2	2.17	0.43
1:E:250:GLN:HA	1:E:314:ILE:HD11	2.00	0.43
1:C:346:GLU:HB3	1:C:351:PRO:HG3	2.01	0.43
1:I:93:ILE:HD11	1:I:165:PRO:HB3	2.01	0.43
1:I:142:GLU:OE2	1:I:178:TRP:NE1	2.52	0.43
1:A:324:PRO:HD2	1:A:345:ALA:O	2.18	0.43
1:A:478:ARG:O	1:A:481:ALA:N	2.51	0.43
1:F:496:ALA:C	1:F:501:THR:O	2.57	0.43
1:H:142:GLU:HA	1:H:178:TRP:CE3	2.53	0.43
1:I:39:GLU:C	1:I:41:LYS:N	2.70	0.43
1:D:66:ARG:HD2	1:D:72:TRP:CH2	2.53	0.43
1:E:494:ASN:O	1:E:496:ALA:N	2.51	0.43
1:J:176:MET:CE	1:J:179:ILE:HG13	2.47	0.43
1:H:482:TYR:O	1:H:486:ILE:CG1	2.65	0.43
1:A:85:GLN:HE21	1:A:85:GLN:HB3	1.43	0.43
1:K:230:ALA:O	1:K:233:MET:N	2.51	0.43
1:C:227:ILE:HG22	1:C:228:ASN:HD22	1.83	0.43
1:K:43:ASN:O	1:K:46:ARG:HG2	2.18	0.43
1:K:356:ALA:O	1:K:360:PHE:HD2	2.00	0.43
1:E:86:ARG:NH2	2:E:5:ADP:O4'	2.52	0.43
1:C:251:GLY:HA3	1:C:325:ALA:O	2.17	0.43
1:G:392:VAL:CG2	1:L:386:LEU:CD1	2.97	0.43
1:F:246:THR:OG1	1:F:271:ILE:HD11	2.17	0.43
1:E:421:PHE:CD1	1:E:421:PHE:C	2.91	0.43
1:B:282:ASN:C	1:B:284:ASP:H	2.22	0.43
1:G:201:LYS:CB	1:G:202:PRO:CD	2.92	0.43
1:F:370:ASP:OD2	1:F:371:LEU:N	2.49	0.43
1:L:464:ILE:O	1:L:465:MET:C	2.56	0.43
1:E:322:LEU:HD22	1:E:323:ILE:N	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:416:SER:HA	1:C:419:ARG:NH2	2.33	0.43
1:G:261:ARG:NH1	1:G:292:GLU:OE1	2.46	0.43
1:C:459:ARG:NH2	2:C:3:ADP:O3B	2.52	0.43
1:D:413:VAL:O	1:D:417:LEU:HB2	2.19	0.43
1:A:250:GLN:HG3	1:A:315:LEU:CD1	2.48	0.43
1:F:53:LYS:CB	1:F:54:PRO:CD	2.97	0.43
1:F:53:LYS:N	1:F:54:PRO:HD2	2.32	0.43
1:G:51:ILE:HD13	1:G:498:VAL:HG11	2.00	0.43
1:K:137:THR:HG23	1:K:140:GLU:CG	2.48	0.43
1:K:175:GLU:O	1:K:176:MET:C	2.57	0.43
1:B:498:VAL:N	1:B:501:THR:HB	2.33	0.43
1:K:81:GLN:CD	1:K:157:PHE:CD1	2.92	0.43
1:B:431:VAL:HA	1:B:432:PRO:HD3	1.80	0.43
1:H:478:ARG:O	1:H:481:ALA:N	2.52	0.43
1:J:40:GLN:C	1:J:42:ARG:H	2.20	0.43
1:K:229:GLU:O	1:K:233:MET:HG2	2.17	0.43
1:J:219:VAL:HG22	1:J:373:LEU:CD2	2.48	0.43
1:L:403:ARG:O	1:L:406:ASN:HB2	2.18	0.43
1:H:164:VAL:HG12	1:H:164:VAL:O	2.18	0.43
1:B:406:ASN:O	1:B:409:LEU:N	2.49	0.43
1:L:200:GLY:HA2	1:L:211:ARG:HD2	2.00	0.43
1:E:492:VAL:HG23	2:E:5:ADP:C2	2.54	0.43
1:K:199:THR:HG22	1:K:384:GLU:HB3	1.99	0.43
1:F:317:ALA:O	1:F:318:ASP:C	2.56	0.43
1:G:83:SER:OG	1:G:85:GLN:NE2	2.51	0.43
1:C:195:HIS:O	1:C:201:LYS:HE3	2.18	0.43
1:H:294:PHE:CD2	1:H:298:HIS:NE2	2.86	0.43
1:G:104:VAL:O	1:G:105:LYS:C	2.57	0.43
1:E:141:LEU:HD12	1:E:174:ARG:NH2	2.33	0.43
1:A:498:VAL:CG2	1:A:499:THR:N	2.78	0.43
1:I:90:LYS:HB2	1:I:122:PHE:CG	2.52	0.43
1:H:414:GLN:CB	1:H:429:PRO:HD2	2.49	0.43
1:B:439:ARG:CG	1:B:439:ARG:NH1	2.61	0.43
1:A:368:ILE:HA	1:A:369:PRO:HD3	1.79	0.43
1:D:98:ASP:C	1:D:99:VAL:O	2.57	0.43
1:G:372:TYR:C	1:G:372:TYR:CD1	2.88	0.43
1:L:113:TYR:CE1	1:L:486:ILE:HD13	2.53	0.43
1:J:436:PHE:CE2	1:K:408:HIS:HB3	2.52	0.43
1:J:145:THR:CG2	1:J:175:GLU:HG2	2.44	0.43
1:J:109:SER:O	1:J:113:TYR:CD2	2.71	0.43
1:L:137:THR:H	1:L:140:GLU:HB2	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:166:ALA:HA	1:L:167:PRO:HD3	1.78	0.43
1:F:274:GLY:H	1:F:314:ILE:HD12	1.80	0.43
1:H:65:ILE:HG12	1:H:75:ILE:HD11	1.99	0.43
1:G:224:GLU:HA	1:G:227:ILE:HG22	1.99	0.43
1:H:14:GLU:O	1:H:17:PHE:HB3	2.18	0.43
1:C:81:GLN:OE1	1:F:155:LYS:HE3	2.19	0.43
1:J:173:GLU:HB2	1:J:202:PRO:CD	2.48	0.43
1:H:413:VAL:HG21	1:L:413:VAL:HG21	2.00	0.43
1:E:260:MET:HG2	1:E:288:PRO:HG3	2.01	0.43
1:B:318:ASP:HA	1:B:340:LYS:HB2	2.01	0.43
1:H:228:ASN:HD22	1:H:228:ASN:HA	1.68	0.43
1:J:69:ASP:OD1	1:J:69:ASP:C	2.57	0.43
1:E:248:VAL:CG2	1:E:272:ALA:HB3	2.48	0.43
1:C:351:PRO:HG2	1:C:352:THR:N	2.30	0.43
1:A:339:VAL:HG23	1:A:339:VAL:O	2.19	0.43
1:C:47:GLY:HA2	1:C:50:ARG:CG	2.49	0.43
1:K:264:HIS:C	1:K:266:PHE:H	2.22	0.43
1:L:233:MET:CE	1:L:236:LEU:CD1	2.96	0.43
1:D:186:THR:HG22	1:D:187:ILE:HG12	2.00	0.43
1:B:498:VAL:HG11	1:D:72:TRP:CE2	2.53	0.43
1:F:90:LYS:HZ1	1:F:166:ALA:HB2	1.83	0.43
1:F:120:VAL:HG12	1:F:122:PHE:CD1	2.54	0.43
1:J:198:VAL:HG22	1:J:199:THR:N	2.34	0.43
1:H:371:LEU:HD22	1:H:482:TYR:CE2	2.54	0.43
1:A:164:VAL:CG1	1:A:199:THR:HG23	2.48	0.43
1:K:234:SER:C	1:K:236:LEU:N	2.72	0.43
1:C:397:LEU:HD21	1:E:383:PHE:CE2	2.53	0.43
1:C:41:LYS:HA	1:C:41:LYS:HD3	1.78	0.43
1:F:40:GLN:CG	1:F:40:GLN:O	2.61	0.43
1:J:239:THR:N	1:J:240:PRO:CD	2.75	0.43
1:I:414:GLN:CD	1:I:430:ILE:HG23	2.39	0.43
1:B:112:THR:H	1:B:124:GLY:HA3	1.84	0.43
1:F:250:GLN:HG3	1:F:315:LEU:HD12	1.98	0.43
1:H:53:LYS:HB3	1:H:54:PRO:HD3	2.00	0.43
1:D:344:ILE:O	1:D:344:ILE:CG2	2.67	0.43
1:I:94:ARG:HD3	1:I:168:ASP:CG	2.39	0.43
1:F:220:PHE:HE2	1:F:263:LEU:HA	1.83	0.43
1:A:294:PHE:CE2	1:A:304:PHE:HA	2.53	0.43
1:E:322:LEU:HD23	1:E:323:ILE:N	2.34	0.43
1:D:107:LEU:HD12	1:D:107:LEU:N	2.33	0.43
1:E:252:PHE:HE2	1:E:260:MET:HE2	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:444:SER:O	1:L:447:ASP:HB2	2.18	0.43
1:H:420:LYS:HG2	1:H:420:LYS:O	2.19	0.43
1:C:366:MET:HG2	1:C:366:MET:O	2.19	0.43
1:I:315:LEU:HD23	1:I:331:LEU:CD2	2.48	0.43
1:D:141:LEU:O	1:D:145:THR:CG2	2.66	0.43
1:D:281:TRP:NE1	1:D:283:PRO:HD3	2.34	0.43
1:A:250:GLN:CG	1:A:314:ILE:HD11	2.33	0.43
1:G:67:ARG:NH1	1:G:67:ARG:HG2	2.34	0.43
1:I:343:ILE:HD13	1:I:366:MET:CE	2.49	0.43
1:L:75:ILE:HD12	1:L:75:ILE:N	2.34	0.43
1:D:301:ILE:CD1	1:D:301:ILE:C	2.85	0.43
1:A:130:LYS:O	1:A:131:ILE:CD1	2.57	0.43
1:F:158:ILE:HG12	1:F:165:PRO:CG	2.49	0.43
1:E:497:GLY:C	1:E:501:THR:HB	2.39	0.43
1:K:78:TYR:O	1:K:127:ALA:HA	2.18	0.43
1:K:59:LEU:HD22	1:K:157:PHE:HD2	1.82	0.43
1:L:304:PHE:HA	1:L:305:PRO:HD3	1.89	0.43
1:I:247:PHE:HZ	1:I:260:MET:HG3	1.83	0.43
1:L:363:ARG:CB	1:L:363:ARG:NH1	2.82	0.43
1:J:85:GLN:HE21	1:J:85:GLN:HB3	1.35	0.43
1:L:137:THR:OG1	1:L:140:GLU:CD	2.57	0.43
1:K:201:LYS:O	1:K:207:GLY:HA3	2.19	0.43
1:L:38:GLU:O	1:L:39:GLU:CB	2.67	0.43
1:K:94:ARG:CG	1:K:94:ARG:HH11	2.32	0.43
1:K:82:HIS:CD2	1:K:112:THR:OG1	2.72	0.43
1:A:62:SER:OG	1:E:55:CYS:O	2.31	0.43
1:B:449:VAL:O	1:B:452:GLY:N	2.52	0.43
1:L:132:ASN:O	1:L:134:LYS:N	2.52	0.43
1:G:453:LEU:O	1:G:453:LEU:HD23	2.17	0.43
1:D:79:ARG:NE	1:D:163:ASP:OD2	2.51	0.43
1:D:498:VAL:CG2	1:D:499:THR:H	2.28	0.43
1:C:478:ARG:HG2	1:C:478:ARG:NH1	2.33	0.43
1:I:281:TRP:HD1	1:I:282:ASN:N	2.13	0.43
1:L:164:VAL:HG21	1:L:385:TRP:NE1	2.33	0.43
1:C:164:VAL:HG11	1:C:199:THR:HG23	2.00	0.43
1:I:65:ILE:HD13	1:I:144:ILE:HG12	2.00	0.43
1:K:257:LEU:O	1:K:260:MET:HB3	2.18	0.43
1:K:110:LEU:HD12	1:K:110:LEU:N	2.34	0.43
1:B:227:ILE:HD12	1:B:227:ILE:HA	1.83	0.43
1:F:153:ALA:CA	1:F:158:ILE:HG22	2.48	0.43
1:F:87:THR:CB	1:F:88:PRO:CD	2.97	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:153:ALA:HB2	1:K:158:ILE:HG21	2.01	0.43
1:K:59:LEU:HB3	1:K:157:PHE:CE2	2.54	0.43
1:A:486:ILE:HG12	1:A:486:ILE:H	1.63	0.43
1:G:335:ASN:ND2	1:G:336:ALA:N	2.55	0.43
1:C:372:TYR:OH	1:C:461:ALA:HB2	2.18	0.43
1:E:397:LEU:HA	1:E:397:LEU:HD12	1.83	0.43
1:B:219:VAL:HA	1:B:373:LEU:CD1	2.49	0.43
1:D:53:LYS:N	1:D:54:PRO:CD	2.81	0.43
1:C:264:HIS:CD2	1:C:288:PRO:CD	3.02	0.43
1:F:248:VAL:HG12	1:F:314:ILE:HG13	1.99	0.43
1:J:264:HIS:CD2	1:J:288:PRO:CD	2.98	0.43
1:G:158:ILE:HD12	1:G:165:PRO:CD	2.48	0.43
1:E:57:HIS:ND1	1:E:84:HIS:HE1	2.15	0.43
1:H:433:THR:CG2	1:L:412:SER:HA	2.48	0.43
1:J:396:ARG:HH11	1:J:396:ARG:HG3	1.84	0.43
1:F:399:PHE:CE2	1:F:443:ALA:HB1	2.53	0.43
1:B:58:VAL:HG12	1:D:60:SER:HB2	2.01	0.43
1:K:296:LEU:HA	1:K:296:LEU:HD22	1.75	0.43
1:F:477:LEU:HD13	1:F:477:LEU:N	2.34	0.43
1:L:274:GLY:HA2	1:L:279:SER:HA	2.01	0.43
1:L:327:SER:HB3	1:L:330:GLN:OE1	2.17	0.43
1:L:24:VAL:O	1:L:25:GLU:C	2.57	0.43
1:C:176:MET:HE3	1:C:179:ILE:HD12	1.96	0.43
1:K:371:LEU:HD13	1:K:482:TYR:CZ	2.54	0.43
1:D:414:GLN:CB	1:D:429:PRO:HD2	2.48	0.43
1:H:272:ALA:HB1	1:H:314:ILE:CG2	2.49	0.43
1:A:332:THR:O	1:A:333:LYS:C	2.57	0.43
1:A:353:THR:HG23	1:A:356:ALA:CB	2.49	0.43
1:C:47:GLY:O	1:C:51:ILE:HG13	2.19	0.43
1:C:66:ARG:HD3	1:C:72:TRP:CH2	2.53	0.43
1:I:368:ILE:CB	1:I:373:LEU:HD12	2.47	0.43
1:K:107:LEU:O	1:K:108:ALA:C	2.55	0.43
1:I:38:GLU:H	1:I:42:ARG:NE	2.16	0.43
1:F:87:THR:OG1	1:F:88:PRO:CD	2.67	0.43
1:K:153:ALA:HB2	1:K:158:ILE:CG2	2.49	0.43
1:H:223:ILE:CD1	1:H:263:LEU:HD11	2.48	0.43
1:A:464:ILE:O	1:A:465:MET:C	2.56	0.43
1:C:412:SER:OG	1:E:433:THR:N	2.44	0.43
1:G:133:PRO:HB3	1:G:141:LEU:HD11	2.01	0.43
1:H:300:SER:CB	1:H:302:LEU:HD22	2.47	0.43
1:I:280:ILE:HD11	1:I:301:ILE:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:451:SER:O	1:F:452:GLY:C	2.57	0.43
1:L:464:ILE:O	1:L:465:MET:O	2.35	0.43
1:H:78:TYR:CE2	1:H:101:VAL:HG22	2.54	0.43
1:K:363:ARG:CB	1:K:363:ARG:NH1	2.82	0.43
1:A:253:GLY:O	1:A:254:ASN:C	2.56	0.43
1:E:234:SER:O	1:E:235:ILE:C	2.57	0.43
1:H:63:PHE:N	1:H:63:PHE:CD2	2.87	0.43
1:G:475:LEU:HD12	1:G:475:LEU:HA	1.87	0.43
1:F:134:LYS:HD3	1:F:134:LYS:HA	1.92	0.43
1:B:118:VAL:HA	1:B:460:SER:OG	2.19	0.43
1:C:339:VAL:HG21	1:C:360:PHE:CE1	2.54	0.43
1:A:428:ILE:N	1:A:429:PRO:HD3	2.34	0.43
1:A:431:VAL:O	1:A:431:VAL:HG13	2.19	0.43
1:K:478:ARG:O	1:K:481:ALA:CB	2.67	0.43
1:K:85:GLN:HG2	1:K:86:ARG:N	2.34	0.43
1:I:118:VAL:HG23	1:I:118:VAL:O	2.18	0.43
1:D:301:ILE:HD12	1:D:302:LEU:N	2.34	0.43
1:E:79:ARG:HD3	1:E:157:PHE:HB3	1.99	0.43
1:C:421:PHE:CE1	1:C:423:LYS:HB3	2.51	0.43
1:G:186:THR:HG22	1:G:187:ILE:N	2.34	0.43
1:L:208:ILE:HG13	1:L:445:GLU:OE1	2.19	0.43
1:J:281:TRP:HE1	1:J:283:PRO:HD3	1.80	0.43
1:K:224:GLU:O	1:K:228:ASN:HB2	2.19	0.43
1:J:39:GLU:C	1:J:41:LYS:H	2.21	0.43
1:J:39:GLU:C	1:J:41:LYS:N	2.72	0.43
1:B:226:PHE:C	1:B:228:ASN:H	2.23	0.43
1:F:462:ARG:HA	1:F:465:MET:HE2	2.01	0.43
1:C:315:LEU:HA	1:C:315:LEU:HD23	1.76	0.42
1:J:211:ARG:N	1:J:212:ILE:HD12	2.34	0.42
1:L:32:LEU:O	1:L:33:ARG:HG2	2.19	0.42
1:I:356:ALA:O	1:I:360:PHE:CD2	2.72	0.42
1:H:353:THR:CB	1:H:354:PRO:HD2	2.49	0.42
1:G:173:GLU:HG3	1:G:174:ARG:N	2.34	0.42
1:I:65:ILE:HA	1:I:147:ARG:NH2	2.34	0.42
1:L:496:ALA:CA	1:L:501:THR:O	2.67	0.42
1:D:45:VAL:C	1:D:47:GLY:H	2.22	0.42
1:H:9:PHE:CE2	1:H:103:GLU:OE2	2.72	0.42
1:H:82:HIS:ND1	1:H:83:SER:HB2	2.33	0.42
1:A:247:PHE:CZ	1:A:260:MET:HA	2.54	0.42
1:A:252:PHE:CE2	1:A:260:MET:HE2	2.54	0.42
1:E:19:ARG:CD	1:E:23:ILE:HD11	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:496:ALA:HB1	1:E:501:THR:C	2.40	0.42
1:D:118:VAL:O	1:D:119:ASP:C	2.58	0.42
1:J:55:CYS:HA	1:J:82:HIS:HA	2.01	0.42
1:E:227:ILE:HD12	1:E:233:MET:CE	2.49	0.42
1:A:406:ASN:ND2	1:B:409:LEU:HD21	2.33	0.42
1:B:284:ASP:OD2	1:B:284:ASP:N	2.52	0.42
1:L:420:LYS:CB	1:L:420:LYS:NZ	2.77	0.42
1:A:152:LEU:HG	1:A:157:PHE:O	2.18	0.42
1:H:160:PRO:HB3	1:H:196:ALA:HB3	2.01	0.42
1:A:95:TYR:CE2	1:A:129:VAL:CG2	3.02	0.42
1:E:288:PRO:O	1:E:289:LYS:C	2.54	0.42
1:B:214:ALA:HB2	1:B:380:VAL:HG21	2.00	0.42
1:C:36:GLU:O	1:C:37:SER:O	2.37	0.42
1:B:180:ALA:O	1:B:181:ASP:C	2.57	0.42
1:C:223:ILE:HD11	1:C:345:ALA:HB1	2.01	0.42
1:L:18:ASP:O	1:L:21:ALA:HB3	2.18	0.42
1:I:271:ILE:HG23	1:I:272:ALA:N	2.34	0.42
1:L:79:ARG:HH12	1:L:165:PRO:HA	1.83	0.42
1:J:25:GLU:HG2	1:J:26:ASP:N	2.33	0.42
1:H:354:PRO:HG2	1:H:355:GLU:H	1.83	0.42
1:J:496:ALA:C	1:J:501:THR:O	2.58	0.42
1:G:109:SER:OG	1:G:110:LEU:N	2.50	0.42
1:G:39:GLU:O	1:G:40:GLN:C	2.57	0.42
1:A:137:THR:HG23	1:A:140:GLU:CG	2.47	0.42
1:K:428:ILE:HG23	1:K:430:ILE:HD11	2.01	0.42
1:F:378:VAL:HG12	1:F:379:THR:N	2.34	0.42
1:J:186:THR:HG23	1:L:186:THR:HG23	2.00	0.42
1:B:411:MET:HA	1:B:430:ILE:HG22	2.00	0.42
1:E:368:ILE:HA	1:E:369:PRO:HD3	1.61	0.42
1:A:118:VAL:HG23	1:A:120:VAL:CG2	2.42	0.42
1:K:150:MET:SD	1:K:186:THR:HG21	2.59	0.42
1:L:492:VAL:HG21	2:L:502:ADP:H2	1.84	0.42
1:J:400:LYS:O	1:J:401:TYR:C	2.57	0.42
1:K:399:PHE:CE2	1:K:443:ALA:HB1	2.54	0.42
1:D:184:ALA:O	1:D:189:HIS:HA	2.19	0.42
1:F:371:LEU:HD23	1:F:481:ALA:HB3	2.00	0.42
1:G:217:ARG:CZ	1:G:450:HIS:CE1	3.03	0.42
1:F:186:THR:HB	1:F:187:ILE:H	1.33	0.42
1:B:84:HIS:C	1:B:86:ARG:N	2.71	0.42
1:C:6:ASP:HA	1:C:7:PRO:HD3	1.83	0.42
1:G:247:PHE:O	1:G:270:CYS:HA	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:278:GLY:N	1:F:302:LEU:HD11	2.34	0.42
1:C:335:ASN:HB2	1:C:338:ARG:NH1	2.35	0.42
1:I:322:LEU:CD1	1:I:344:ILE:HG23	2.47	0.42
1:K:491:LYS:HE3	1:K:491:LYS:HB2	1.78	0.42
1:K:85:GLN:CB	1:K:492:VAL:HG11	2.48	0.42
1:F:167:PRO:HB3	1:F:176:MET:SD	2.60	0.42
1:G:90:LYS:CD	1:G:164:VAL:HB	2.43	0.42
1:J:414:GLN:CA	1:J:429:PRO:HG2	2.44	0.42
1:K:239:THR:CG2	1:K:239:THR:O	2.64	0.42
1:C:280:ILE:CG2	1:C:307:ALA:HB1	2.49	0.42
1:K:81:GLN:NE2	1:K:157:PHE:HD1	2.17	0.42
1:J:117:VAL:HG11	1:J:372:TYR:HB2	2.01	0.42
1:B:423:LYS:HG2	1:B:426:GLY:CA	2.50	0.42
1:I:57:HIS:CE1	1:L:151:GLU:OE1	2.72	0.42
1:B:346:GLU:CD	1:B:478:ARG:HH22	2.16	0.42
1:C:420:LYS:O	1:C:421:PHE:HB2	2.19	0.42
1:J:383:PHE:CD1	1:K:397:LEU:HD21	2.54	0.42
1:E:371:LEU:CD2	1:E:482:TYR:CD2	3.01	0.42
1:G:359:ILE:HG22	1:G:363:ARG:HD3	2.01	0.42
1:E:177:SER:HB2	1:E:202:PRO:HD2	2.01	0.42
1:C:318:ASP:HA	1:C:340:LYS:CB	2.49	0.42
1:K:298:HIS:ND1	1:K:298:HIS:O	2.52	0.42
1:B:400:LYS:O	1:B:401:TYR:C	2.57	0.42
1:A:310:TYR:CG	1:A:311:GLU:N	2.86	0.42
1:F:255:VAL:O	1:F:256:GLY:C	2.56	0.42
1:B:267:GLY:O	1:B:268:ALA:C	2.57	0.42
1:C:23:ILE:O	1:C:23:ILE:HG22	2.18	0.42
1:E:59:LEU:HG	1:E:61:LEU:HD22	2.01	0.42
1:B:344:ILE:HD11	1:B:360:PHE:CE1	2.54	0.42
1:E:82:HIS:CD2	1:E:112:THR:HG21	2.54	0.42
1:I:182:THR:O	1:I:186:THR:HB	2.19	0.42
1:L:157:PHE:O	1:L:163:ASP:HB3	2.20	0.42
1:L:90:LYS:HE2	1:L:165:PRO:O	2.19	0.42
1:J:24:VAL:CG1	1:J:483:VAL:CG1	2.94	0.42
1:C:165:PRO:O	1:C:198:VAL:HG23	2.19	0.42
1:C:385:TRP:CE3	1:C:386:LEU:HD23	2.55	0.42
1:I:175:GLU:O	1:I:179:ILE:HG13	2.19	0.42
1:K:45:VAL:O	1:K:45:VAL:HG13	2.19	0.42
1:A:248:VAL:HG23	1:A:319:CYS:CB	2.49	0.42
1:L:103:GLU:O	1:L:106:ALA:HB3	2.19	0.42
1:B:234:SER:C	1:B:236:LEU:H	2.23	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:476:ASP:OD2	1:G:479:THR:OG1	2.34	0.42
1:A:382:TYR:CE2	1:A:386:LEU:HD21	2.54	0.42
1:G:398:THR:O	1:G:399:PHE:C	2.58	0.42
1:J:386:LEU:CD1	1:K:392:VAL:HG11	2.44	0.42
1:H:79:ARG:HH11	1:H:79:ARG:HG3	1.83	0.42
1:J:485:ALA:O	1:J:486:ILE:C	2.56	0.42
1:I:85:GLN:H	1:I:85:GLN:HE21	1.68	0.42
1:K:226:PHE:HB3	1:K:366:MET:CE	2.49	0.42
1:E:229:GLU:O	1:E:230:ALA:C	2.58	0.42
1:G:360:PHE:HB3	1:G:365:ILE:HB	2.00	0.42
1:F:67:ARG:CG	1:F:67:ARG:HH11	2.31	0.42
1:C:92:GLY:O	1:C:126:LYS:HD3	2.19	0.42
1:J:247:PHE:HB3	1:J:321:ILE:HB	2.01	0.42
1:A:49:LEU:HD12	1:A:49:LEU:H	1.84	0.42
1:D:87:THR:CG2	1:D:88:PRO:HD3	2.34	0.42
1:D:88:PRO:O	1:D:89:CYS:C	2.57	0.42
1:A:339:VAL:HG21	1:A:360:PHE:CE1	2.47	0.42
1:D:19:ARG:CD	1:D:23:ILE:HD11	2.31	0.42
1:G:82:HIS:CG	1:G:109:SER:HA	2.55	0.42
1:B:471:TYR:HE2	1:B:483:VAL:HG11	1.79	0.42
1:I:498:VAL:O	1:I:501:THR:HG22	2.19	0.42
1:I:501:THR:OXT	1:J:181:ASP:HB3	2.19	0.42
1:A:201:LYS:HD2	1:A:205:GLN:O	2.20	0.42
1:E:79:ARG:NH1	1:E:79:ARG:HG3	2.32	0.42
1:C:458:GLU:O	1:C:461:ALA:N	2.47	0.42
1:K:339:VAL:O	1:K:339:VAL:HG23	2.19	0.42
1:E:158:ILE:CD1	1:E:197:CYS:HB2	2.49	0.42
1:D:255:VAL:O	1:D:259:SER:OG	2.23	0.42
1:B:81:GLN:HG3	1:B:157:PHE:HE1	1.81	0.42
1:C:363:ARG:HH11	1:C:363:ARG:HB2	1.83	0.42
1:B:201:LYS:HA	1:B:202:PRO:HD3	1.86	0.42
1:C:24:VAL:HG11	1:C:487:GLU:HG2	2.00	0.42
1:E:460:SER:O	1:E:461:ALA:C	2.57	0.42
1:G:79:ARG:HA	1:G:126:LYS:O	2.19	0.42
1:L:374:ASN:O	1:L:374:ASN:ND2	2.52	0.42
1:H:461:ALA:O	1:H:464:ILE:N	2.52	0.42
1:A:95:TYR:HE2	1:A:129:VAL:HG21	1.84	0.42
1:G:417:LEU:HD23	1:H:417:LEU:HD11	2.00	0.42
1:G:394:TYR:CE2	1:H:397:LEU:HD22	2.54	0.42
1:J:277:ASP:HB3	1:J:302:LEU:HD22	2.01	0.42
1:H:409:LEU:HD13	1:H:409:LEU:HA	1.79	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:88:PRO:HG2	1:B:122:PHE:CD2	2.54	0.42
1:E:314:ILE:CD1	1:E:314:ILE:N	2.70	0.42
1:L:315:LEU:HD23	1:L:331:LEU:HD21	2.02	0.42
1:I:111:MET:O	1:I:114:LYS:N	2.53	0.42
1:I:315:LEU:HD23	1:I:331:LEU:HD23	2.02	0.42
1:I:477:LEU:HD22	1:I:477:LEU:N	2.30	0.42
1:G:175:GLU:HA	1:G:178:TRP:CE3	2.55	0.42
1:C:498:VAL:HG21	1:F:72:TRP:NE1	2.33	0.42
1:D:364:ASN:O	1:D:365:ILE:HD13	2.20	0.42
1:H:109:SER:O	1:H:112:THR:HG23	2.20	0.42
1:G:87:THR:HG22	1:G:161:GLY:O	2.20	0.42
1:E:93:ILE:HD12	1:E:179:ILE:HD11	2.02	0.42
1:C:146:ARG:NH2	1:E:501:THR:N	2.68	0.42
1:E:48:ILE:HG21	1:E:490:PHE:CD1	2.54	0.42
1:H:345:ALA:HB1	1:H:373:LEU:HD21	2.01	0.42
1:L:400:LYS:O	1:L:401:TYR:C	2.58	0.42
1:A:227:ILE:O	1:A:233:MET:CG	2.61	0.42
1:C:370:ASP:C	1:C:372:TYR:N	2.73	0.42
1:D:394:TYR:HB2	1:D:445:GLU:CG	2.43	0.42
1:J:235:ILE:H	1:J:235:ILE:HG12	1.59	0.42
1:I:414:GLN:OE1	1:I:430:ILE:HG12	2.20	0.42
1:G:293:ASP:O	1:G:294:PHE:O	2.37	0.42
1:F:220:PHE:CE2	1:F:263:LEU:HA	2.54	0.42
1:D:257:LEU:O	1:D:257:LEU:HD12	2.19	0.42
1:H:267:GLY:O	1:H:268:ALA:C	2.57	0.42
1:G:433:THR:O	1:G:434:ALA:C	2.57	0.42
1:E:100:SER:O	1:E:101:VAL:C	2.56	0.42
1:E:112:THR:OG1	1:E:113:TYR:N	2.53	0.42
1:K:41:LYS:O	1:K:44:ARG:CB	2.67	0.42
1:I:112:THR:HB	1:I:124:GLY:H	1.85	0.42
1:I:281:TRP:HE1	1:I:283:PRO:CG	2.33	0.42
1:K:248:VAL:HG23	1:K:271:ILE:HG23	2.00	0.42
1:K:17:PHE:CD2	1:K:53:LYS:HD2	2.55	0.42
1:K:370:ASP:C	1:K:372:TYR:N	2.72	0.42
1:K:498:VAL:N	1:K:501:THR:HB	2.35	0.42
1:H:291:LEU:C	1:H:291:LEU:HD12	2.34	0.42
1:D:316:GLU:O	1:D:317:ALA:C	2.57	0.42
1:G:53:LYS:HB3	1:G:54:PRO:CD	2.49	0.42
1:J:90:LYS:HZ3	1:J:199:THR:CG2	2.24	0.42
1:D:109:SER:O	1:D:113:TYR:CD2	2.72	0.42
1:D:372:TYR:C	1:D:372:TYR:CD1	2.93	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:332:THR:H	1:G:335:ASN:ND2	2.16	0.42
1:A:238:MET:CE	1:A:342:LYS:HG3	2.50	0.42
1:D:453:LEU:CD2	1:D:453:LEU:C	2.87	0.42
1:G:282:ASN:ND2	1:G:306:LYS:O	2.50	0.42
1:E:378:VAL:O	1:E:379:THR:C	2.57	0.42
1:J:249:VAL:HA	1:J:323:ILE:HG23	2.02	0.42
1:I:384:GLU:O	1:I:387:LYS:HB3	2.20	0.42
1:C:91:GLY:HA2	1:C:111:MET:CE	2.50	0.42
1:A:449:VAL:O	1:A:452:GLY:N	2.53	0.42
1:B:61:LEU:N	1:B:61:LEU:CD1	2.83	0.42
1:K:287:ASP:OD2	1:K:289:LYS:HB3	2.19	0.42
1:A:87:THR:HG22	1:A:88:PRO:CD	2.49	0.42
1:B:142:GLU:HG2	1:B:146:ARG:HD2	2.01	0.42
1:B:65:ILE:CG1	1:B:75:ILE:HD11	2.40	0.42
1:B:344:ILE:HD11	1:B:365:ILE:HG21	2.01	0.42
1:L:20:GLY:O	1:L:24:VAL:CG2	2.64	0.42
1:L:158:ILE:HG12	1:L:165:PRO:HG2	2.01	0.42
1:C:432:PRO:HA	1:D:412:SER:OG	2.20	0.42
1:D:99:VAL:HG13	1:D:130:LYS:CD	2.50	0.42
1:K:255:VAL:CG1	1:K:256:GLY:N	2.82	0.42
1:D:280:ILE:CG2	1:D:286:ILE:HD13	2.49	0.42
1:B:137:THR:CG2	1:B:140:GLU:CD	2.88	0.42
1:G:67:ARG:NH1	1:G:140:GLU:OE1	2.53	0.42
1:G:497:GLY:HA3	1:G:501:THR:HA	2.01	0.42
1:L:239:THR:CG2	1:L:239:THR:O	2.66	0.42
1:A:280:ILE:HG22	1:A:281:TRP:N	2.35	0.42
1:A:24:VAL:O	1:A:25:GLU:O	2.37	0.42
1:L:329:LYS:HB2	1:L:329:LYS:NZ	2.34	0.42
1:F:40:GLN:C	1:F:42:ARG:H	2.22	0.42
1:K:356:ALA:O	1:K:360:PHE:CD2	2.73	0.42
1:I:431:VAL:CG1	1:I:431:VAL:O	2.68	0.42
1:A:53:LYS:CB	1:A:54:PRO:CD	2.97	0.42
1:H:79:ARG:HG3	1:H:79:ARG:NH1	2.34	0.42
1:D:213:SER:HB2	1:D:217:ARG:HE	1.85	0.42
1:B:386:LEU:HD13	1:F:392:VAL:CG2	2.47	0.42
1:B:433:THR:CG2	1:F:412:SER:HA	2.49	0.42
1:G:301:ILE:H	1:G:301:ILE:HG23	1.52	0.42
1:D:171:THR:HG22	1:D:175:GLU:OE2	2.20	0.42
1:B:361:LEU:HD23	1:B:361:LEU:C	2.40	0.42
1:J:439:ARG:NH2	1:K:405:SER:OG	2.51	0.42
1:J:465:MET:O	1:J:468:ALA:HB3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:224:GLU:O	1:H:225:ASN:C	2.58	0.42
1:K:204:SER:HG	1:K:205:GLN:HE21	1.68	0.42
1:G:183:TYR:O	1:G:185:SER:N	2.53	0.42
1:J:477:LEU:HD12	1:J:477:LEU:HA	1.91	0.42
1:J:228:ASN:HA	1:J:228:ASN:HD22	1.57	0.42
1:H:361:LEU:HA	1:H:361:LEU:HD12	1.82	0.42
1:I:479:THR:O	1:I:483:VAL:HG23	2.19	0.42
1:C:243:GLY:O	1:C:245:LYS:N	2.53	0.42
1:K:248:VAL:HG13	1:K:272:ALA:C	2.39	0.42
1:H:227:ILE:HA	1:H:233:MET:SD	2.60	0.42
1:H:335:ASN:N	1:H:335:ASN:ND2	2.67	0.42
1:G:142:GLU:CG	1:G:146:ARG:HD2	2.33	0.42
1:I:171:THR:HB	1:I:175:GLU:OE1	2.20	0.42
1:K:499:THR:OG1	1:K:500:PHE:HD1	2.03	0.42
1:L:219:VAL:HA	1:L:373:LEU:CD1	2.49	0.42
1:I:32:LEU:O	1:I:33:ARG:HB2	2.18	0.42
1:K:430:ILE:O	1:K:432:PRO:HD3	2.20	0.42
1:A:111:MET:HB3	1:A:124:GLY:HA2	2.02	0.42
1:K:336:ALA:N	1:K:337:PRO:CD	2.83	0.42
1:E:86:ARG:HG2	1:E:121:PRO:HA	2.01	0.42
1:C:101:VAL:HG23	1:C:102:ASP:N	2.35	0.42
1:J:404:ASP:O	1:J:406:ASN:N	2.53	0.42
1:H:129:VAL:O	1:H:131:ILE:N	2.53	0.42
1:D:331:LEU:O	1:D:356:ALA:CB	2.68	0.42
1:I:433:THR:CG2	1:J:412:SER:HA	2.49	0.42
1:K:90:LYS:HB2	1:K:122:PHE:CG	2.55	0.42
1:B:104:VAL:HG23	1:B:105:LYS:H	1.85	0.42
1:J:153:ALA:HB2	1:J:158:ILE:CG2	2.50	0.42
1:H:95:TYR:CD1	1:H:171:THR:HG22	2.55	0.42
1:H:95:TYR:OH	1:H:145:THR:HG22	2.19	0.42
1:C:247:PHE:CD1	1:C:247:PHE:N	2.88	0.42
1:G:300:SER:O	1:G:302:LEU:N	2.53	0.42
1:L:13:VAL:O	1:L:14:GLU:C	2.58	0.42
1:F:39:GLU:C	1:F:41:LYS:N	2.72	0.42
1:A:8:ASN:O	1:A:10:PHE:N	2.53	0.42
1:E:295:LYS:O	1:E:295:LYS:HG3	2.20	0.42
1:G:176:MET:HE1	1:G:179:ILE:HD12	2.02	0.42
1:K:222:GLY:O	1:K:223:ILE:C	2.58	0.42
1:K:498:VAL:HG23	1:K:499:THR:H	1.85	0.42
1:L:499:THR:HG23	1:L:500:PHE:N	2.35	0.42
1:D:334:SER:HB2	1:D:335:ASN:H	1.70	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:485:ALA:O	1:L:486:ILE:C	2.58	0.42
1:H:154:LYS:HB3	1:K:189:HIS:CD2	2.54	0.42
1:H:321:ILE:HG22	1:H:343:ILE:CG2	2.50	0.42
1:K:230:ALA:O	1:K:233:MET:HB2	2.20	0.42
1:K:335:ASN:C	1:K:335:ASN:HD22	2.23	0.42
1:A:115:CYS:HB3	1:A:120:VAL:O	2.19	0.42
1:K:360:PHE:CA	1:K:365:ILE:HG13	2.49	0.42
1:B:201:LYS:HG2	1:B:201:LYS:HZ3	1.69	0.42
1:G:160:PRO:HB3	1:G:196:ALA:HB3	2.02	0.42
1:G:84:HIS:O	1:G:85:GLN:C	2.57	0.42
1:H:203:ILE:HG21	1:H:209:HIS:NE2	2.35	0.42
1:L:168:ASP:OD1	1:L:169:MET:N	2.53	0.42
1:G:177:SER:O	1:G:180:ALA:HB3	2.20	0.42
1:F:289:LYS:O	1:F:290:GLU:C	2.57	0.42
1:H:192:ILE:HG12	1:H:192:ILE:O	2.20	0.42
1:A:499:THR:HB	1:E:147:ARG:CZ	2.50	0.41
1:E:77:GLY:C	1:E:78:TYR:CG	2.93	0.41
1:E:60:SER:CB	1:E:78:TYR:HD2	2.32	0.41
1:L:120:VAL:HG13	1:L:382:TYR:HB2	2.02	0.41
1:H:274:GLY:HA2	1:H:279:SER:HA	2.02	0.41
1:C:499:THR:OG1	1:C:500:PHE:HD1	2.01	0.41
1:A:250:GLN:NE2	1:A:274:GLY:O	2.53	0.41
1:A:314:ILE:H	1:A:314:ILE:CD1	2.32	0.41
1:I:34:THR:O	1:I:34:THR:HG22	2.19	0.41
1:I:42:ARG:HG2	1:I:42:ARG:H	1.52	0.41
1:E:36:GLU:O	1:E:38:GLU:OE1	2.38	0.41
1:E:224:GLU:HA	1:E:227:ILE:CG2	2.49	0.41
1:G:401:TYR:HE2	1:L:402:GLU:OE1	2.03	0.41
1:L:344:ILE:HD11	1:L:360:PHE:CE1	2.56	0.41
1:A:79:ARG:HA	1:A:127:ALA:HA	2.02	0.41
1:F:145:THR:HG21	1:F:175:GLU:CG	2.44	0.41
1:J:329:LYS:HB3	1:J:329:LYS:HE3	1.87	0.41
1:K:360:PHE:HB3	1:K:365:ILE:CB	2.47	0.41
1:G:198:VAL:O	1:G:201:LYS:HE2	2.19	0.41
1:I:382:TYR:O	1:I:385:TRP:HB3	2.20	0.41
1:F:392:VAL:CG1	1:F:393:SER:N	2.82	0.41
1:H:93:ILE:O	1:H:168:ASP:HB2	2.20	0.41
1:G:322:LEU:HD22	1:G:344:ILE:CD1	2.50	0.41
1:G:484:ASN:O	1:G:488:LYS:HG3	2.20	0.41
1:L:346:GLU:HG2	1:L:351:PRO:CD	2.50	0.41
1:H:403:ARG:HG3	1:H:440:ILE:HG23	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:94:ARG:HG3	1:L:95:TYR:N	2.35	0.41
1:A:448:ILE:HD13	1:B:401:TYR:CD1	2.55	0.41
1:F:39:GLU:O	1:F:41:LYS:N	2.53	0.41
1:K:263:LEU:HD12	1:K:263:LEU:HA	1.64	0.41
1:H:296:LEU:HD13	1:H:296:LEU:C	2.41	0.41
1:D:90:LYS:HZ3	1:D:164:VAL:CG1	2.31	0.41
1:C:198:VAL:HG13	1:C:198:VAL:O	2.20	0.41
1:K:497:GLY:N	1:K:501:THR:HA	2.34	0.41
1:C:436:PHE:O	1:C:440:ILE:CG1	2.63	0.41
1:A:337:PRO:HD3	1:A:359:ILE:HD13	2.01	0.41
1:D:99:VAL:HG13	1:D:130:LYS:HD2	2.01	0.41
1:C:53:LYS:O	1:C:82:HIS:HE1	2.03	0.41
1:F:496:ALA:CA	1:F:501:THR:O	2.68	0.41
1:F:420:LYS:NZ	1:F:420:LYS:O	2.39	0.41
1:I:264:HIS:C	1:I:266:PHE:N	2.72	0.41
1:H:149:THR:HG21	1:H:182:THR:HB	2.02	0.41
1:L:227:ILE:HA	1:L:233:MET:SD	2.61	0.41
1:D:315:LEU:HA	1:D:315:LEU:HD12	1.87	0.41
1:H:346:GLU:HG2	1:H:351:PRO:HG3	2.00	0.41
1:A:382:TYR:O	1:A:385:TRP:HB3	2.19	0.41
1:B:387:LYS:HE3	1:B:393:SER:HA	2.02	0.41
1:B:17:PHE:CD2	1:B:53:LYS:HG3	2.55	0.41
1:C:233:MET:CE	1:C:236:LEU:HD11	2.50	0.41
1:G:416:SER:CB	1:L:429:PRO:HA	2.50	0.41
1:J:59:LEU:HB2	1:J:157:PHE:CZ	2.55	0.41
1:E:433:THR:O	1:E:434:ALA:C	2.58	0.41
1:E:257:LEU:O	1:E:257:LEU:HD12	2.20	0.41
1:F:160:PRO:CG	1:F:161:GLY:N	2.83	0.41
1:J:371:LEU:HD13	1:J:482:TYR:CZ	2.55	0.41
1:A:34:THR:O	1:A:34:THR:CG2	2.63	0.41
1:K:141:LEU:O	1:K:145:THR:HG22	2.19	0.41
1:I:439:ARG:HH12	1:J:404:ASP:HB3	1.82	0.41
1:J:406:ASN:O	1:J:409:LEU:N	2.48	0.41
1:G:24:VAL:O	1:G:25:GLU:C	2.58	0.41
1:L:465:MET:HB2	1:L:466:ARG:H	1.73	0.41
1:G:420:LYS:HB3	1:G:420:LYS:HE2	1.92	0.41
1:K:363:ARG:HB2	1:K:363:ARG:NH1	2.34	0.41
1:K:308:LYS:HG2	1:K:309:PRO:HD2	2.01	0.41
1:H:316:GLU:O	1:H:317:ALA:O	2.38	0.41
1:E:203:ILE:HG21	1:E:209:HIS:HE1	1.85	0.41
1:G:376:GLY:O	1:G:379:THR:HB	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:66:ARG:HD3	1:E:72:TRP:CZ2	2.54	0.41
1:E:330:GLN:C	1:E:331:LEU:HD12	2.40	0.41
1:C:316:GLU:HG3	1:C:338:ARG:HE	1.80	0.41
1:H:414:GLN:HB2	1:H:429:PRO:HD2	2.02	0.41
1:K:12:MET:HG2	1:K:16:PHE:HE1	1.84	0.41
1:A:352:THR:HG1	1:A:478:ARG:HH22	1.67	0.41
1:K:256:GLY:O	1:K:259:SER:HB2	2.20	0.41
1:G:111:MET:HE3	1:G:114:LYS:HD2	2.03	0.41
1:K:428:ILE:O	1:K:431:VAL:HG12	2.19	0.41
1:B:28:LEU:HD21	1:B:490:PHE:CG	2.54	0.41
1:C:219:VAL:O	1:C:220:PHE:C	2.57	0.41
1:D:109:SER:O	1:D:112:THR:HB	2.21	0.41
1:L:280:ILE:CD1	1:L:304:PHE:HB3	2.50	0.41
1:B:407:TYR:HD2	1:B:407:TYR:H	1.69	0.41
1:H:368:ILE:HA	1:H:369:PRO:HD3	1.72	0.41
1:I:56:ASN:C	1:I:57:HIS:ND1	2.73	0.41
1:A:402:GLU:O	1:A:403:ARG:C	2.59	0.41
1:E:396:ARG:HD3	1:E:396:ARG:C	2.39	0.41
1:K:210:GLY:HA2	1:K:212:ILE:CD1	2.50	0.41
1:F:131:ILE:HD12	1:F:131:ILE:HA	1.68	0.41
1:F:131:ILE:HG13	1:F:136:TYR:CE2	2.55	0.41
1:H:30:GLU:O	1:H:32:LEU:N	2.53	0.41
1:F:332:THR:O	1:F:335:ASN:ND2	2.53	0.41
1:K:358:LYS:O	1:K:361:LEU:N	2.51	0.41
1:C:63:PHE:CD2	1:C:63:PHE:N	2.88	0.41
1:E:477:LEU:HD12	1:E:477:LEU:HA	1.85	0.41
1:E:129:VAL:O	1:E:131:ILE:N	2.53	0.41
1:G:33:ARG:CG	1:G:33:ARG:HH11	2.33	0.41
1:L:271:ILE:CG2	1:L:272:ALA:N	2.83	0.41
1:B:211:ARG:N	1:B:212:ILE:HD12	2.35	0.41
1:G:146:ARG:HH12	1:L:501:THR:C	2.24	0.41
1:G:181:ASP:O	1:G:182:THR:C	2.57	0.41
1:H:249:VAL:CG2	1:H:250:GLN:N	2.82	0.41
1:A:332:THR:O	1:A:335:ASN:ND2	2.53	0.41
1:L:104:VAL:CG2	1:L:105:LYS:H	2.33	0.41
1:F:167:PRO:N	1:F:176:MET:SD	2.93	0.41
1:F:176:MET:HG2	1:F:199:THR:O	2.21	0.41
1:F:118:VAL:O	1:F:120:VAL:HG23	2.20	0.41
1:F:122:PHE:HE1	1:F:382:TYR:HA	1.85	0.41
1:E:497:GLY:N	1:E:501:THR:HA	2.35	0.41
1:G:19:ARG:HH11	1:G:19:ARG:HG3	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:304:PHE:CD1	1:L:305:PRO:HD2	2.56	0.41
1:A:466:ARG:C	1:A:468:ALA:H	2.24	0.41
1:K:353:THR:HB	1:K:354:PRO:CD	2.51	0.41
1:E:351:PRO:O	1:E:352:THR:HG23	2.21	0.41
1:F:372:TYR:CD1	1:F:373:LEU:N	2.88	0.41
1:L:353:THR:HB	1:L:354:PRO:CD	2.51	0.41
1:A:437:GLN:CG	1:H:423:LYS:HD3	2.49	0.41
1:E:434:ALA:O	1:E:435:GLU:C	2.58	0.41
1:I:428:ILE:O	1:J:416:SER:HB3	2.20	0.41
1:G:405:SER:O	1:G:408:HIS:HB2	2.19	0.41
1:I:378:VAL:O	1:I:379:THR:C	2.59	0.41
1:C:201:LYS:O	1:C:207:GLY:HA3	2.20	0.41
1:J:131:ILE:O	1:J:133:PRO:HD3	2.20	0.41
1:B:433:THR:N	1:F:412:SER:OG	2.54	0.41
1:F:403:ARG:O	1:F:406:ASN:HB2	2.20	0.41
1:G:294:PHE:O	1:G:296:LEU:N	2.53	0.41
1:A:48:ILE:O	1:A:51:ILE:HB	2.21	0.41
1:I:158:ILE:CG2	1:I:158:ILE:O	2.68	0.41
1:D:219:VAL:O	1:D:373:LEU:HD11	2.20	0.41
1:K:282:ASN:O	1:K:284:ASP:N	2.53	0.41
1:D:265:ARG:HG3	1:D:265:ARG:O	2.19	0.41
1:G:255:VAL:HG13	1:G:256:GLY:H	1.86	0.41
1:B:264:HIS:C	1:B:266:PHE:N	2.73	0.41
1:A:220:PHE:CD1	1:A:220:PHE:C	2.94	0.41
1:D:153:ALA:HA	1:D:158:ILE:HG22	2.02	0.41
1:C:16:PHE:HE2	1:C:478:ARG:HD3	1.85	0.41
1:L:297:GLN:H	1:L:297:GLN:HG3	1.64	0.41
1:C:433:THR:HG23	1:D:412:SER:OG	2.20	0.41
1:D:429:PRO:HA	1:E:416:SER:HB3	2.01	0.41
1:D:281:TRP:O	1:D:282:ASN:CB	2.66	0.41
1:G:429:PRO:HA	1:H:416:SER:CB	2.50	0.41
1:I:30:GLU:HA	1:I:34:THR:OG1	2.20	0.41
1:B:501:THR:C	1:F:146:ARG:NH2	2.69	0.41
1:H:346:GLU:CD	1:H:478:ARG:HH22	2.23	0.41
1:A:465:MET:O	1:A:468:ALA:HB3	2.19	0.41
1:B:387:LYS:HE3	1:B:445:GLU:OE2	2.21	0.41
1:D:386:LEU:O	1:D:387:LYS:C	2.58	0.41
1:I:414:GLN:OE1	1:I:429:PRO:HD2	2.21	0.41
1:H:32:LEU:HD23	1:H:32:LEU:HA	1.91	0.41
1:G:238:MET:O	1:G:239:THR:C	2.58	0.41
1:B:173:GLU:HB2	1:B:202:PRO:HG3	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:192:ILE:HG23	1:I:193:ASN:OD1	2.20	0.41
1:K:164:VAL:HA	1:K:197:CYS:O	2.21	0.41
1:K:90:LYS:HD2	1:K:164:VAL:HB	2.02	0.41
1:C:160:PRO:HD3	1:C:183:TYR:HE2	1.86	0.41
1:J:277:ASP:HB2	1:J:278:GLY:H	1.67	0.41
1:J:410:LEU:HD23	1:J:410:LEU:N	2.33	0.41
1:C:250:GLN:HE21	1:C:314:ILE:HD11	1.85	0.41
1:I:364:ASN:O	1:I:365:ILE:HD13	2.21	0.41
1:I:47:GLY:O	1:I:50:ARG:N	2.53	0.41
1:C:153:ALA:HA	1:C:158:ILE:HG22	2.02	0.41
1:K:52:ILE:CD1	1:K:489:VAL:HG12	2.46	0.41
1:C:497:GLY:O	1:C:498:VAL:CG1	2.67	0.41
1:D:281:TRP:CG	1:D:282:ASN:N	2.89	0.41
1:F:421:PHE:O	1:F:423:LYS:N	2.54	0.41
1:F:82:HIS:CG	1:F:109:SER:HA	2.55	0.41
1:F:244:ASP:CG	1:F:245:LYS:HG3	2.39	0.41
1:L:370:ASP:OD2	1:L:371:LEU:N	2.52	0.41
1:L:17:PHE:HE2	1:L:53:LYS:HB2	1.85	0.41
1:B:321:ILE:HG23	1:B:343:ILE:CB	2.49	0.41
1:K:80:ALA:O	1:K:125:ALA:HA	2.20	0.41
1:B:277:ASP:OD2	1:B:300:SER:CB	2.68	0.41
1:K:330:GLN:HB3	1:K:331:LEU:HD23	2.02	0.41
1:G:191:ASP:C	1:G:193:ASN:N	2.74	0.41
1:H:439:ARG:NH1	1:L:405:SER:HA	2.35	0.41
1:G:58:VAL:HG23	1:G:80:ALA:CB	2.50	0.41
1:J:23:ILE:H	1:J:23:ILE:HG13	1.36	0.41
1:B:58:VAL:CG1	1:D:60:SER:HB2	2.50	0.41
1:B:175:GLU:HA	1:B:178:TRP:HE3	1.79	0.41
1:C:248:VAL:HB	1:C:322:LEU:HD23	2.03	0.41
1:K:24:VAL:HG12	1:K:28:LEU:HB2	2.02	0.41
1:B:247:PHE:CZ	1:B:270:CYS:HB2	2.56	0.41
1:H:48:ILE:HG12	1:H:48:ILE:H	1.60	0.41
1:H:48:ILE:O	1:H:52:ILE:HG13	2.20	0.41
1:E:167:PRO:HG3	1:E:176:MET:HG2	2.03	0.41
1:E:28:LEU:HD21	1:E:490:PHE:CD2	2.56	0.41
1:J:93:ILE:HD11	1:J:165:PRO:HB3	2.03	0.41
1:I:247:PHE:CZ	1:I:260:MET:HA	2.55	0.41
1:I:287:ASP:HA	1:I:288:PRO:HD3	1.72	0.41
1:G:243:GLY:O	1:G:245:LYS:N	2.54	0.41
1:H:126:LYS:HD2	1:H:127:ALA:H	1.85	0.41
1:G:346:GLU:OE1	1:G:370:ASP:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:196:ALA:HB1	1:I:385:TRP:CD1	2.56	0.41
1:H:94:ARG:CB	1:H:168:ASP:OD2	2.67	0.41
1:E:461:ALA:O	1:E:462:ARG:C	2.59	0.41
1:K:147:ARG:NH1	1:K:147:ARG:HG3	2.34	0.41
1:G:258:HIS:HB3	1:G:262:TYR:HE2	1.83	0.41
1:I:58:VAL:HG13	1:L:60:SER:HB2	2.02	0.41
1:B:264:HIS:O	1:B:266:PHE:N	2.54	0.41
1:B:12:MET:O	1:B:15:GLY:N	2.54	0.41
1:H:20:GLY:O	1:H:21:ALA:C	2.59	0.41
1:D:32:LEU:HA	1:D:32:LEU:HD23	1.98	0.41
1:B:374:ASN:O	1:B:374:ASN:ND2	2.53	0.41
1:A:497:GLY:N	1:A:501:THR:C	2.73	0.41
1:D:83:SER:OG	1:D:84:HIS:N	2.54	0.41
1:E:339:VAL:CG2	1:E:360:PHE:HE1	2.25	0.41
1:L:294:PHE:CA	1:L:297:GLN:NE2	2.77	0.41
1:H:342:LYS:O	1:H:365:ILE:HG23	2.21	0.41
1:I:233:MET:CE	1:I:343:ILE:HD11	2.49	0.41
1:I:397:LEU:HD13	1:K:394:TYR:CE2	2.55	0.41
1:J:193:ASN:O	1:J:195:HIS:N	2.54	0.41
1:D:460:SER:O	1:D:464:ILE:HG13	2.21	0.41
1:A:90:LYS:CB	1:A:122:PHE:HD1	2.34	0.41
1:H:120:VAL:HG22	1:H:382:TYR:HB2	2.02	0.41
1:J:337:PRO:HA	1:J:363:ARG:NH2	2.35	0.41
1:D:296:LEU:O	1:D:298:HIS:N	2.54	0.41
1:H:300:SER:O	1:H:302:LEU:N	2.53	0.41
1:G:346:GLU:O	1:G:373:LEU:HD23	2.21	0.41
1:B:280:ILE:CD1	1:B:304:PHE:HB3	2.50	0.41
1:I:389:LEU:O	1:I:391:HIS:HD2	2.04	0.41
1:F:263:LEU:HA	1:F:263:LEU:HD12	1.92	0.41
1:L:463:GLN:O	1:L:467:THR:HB	2.21	0.41
1:D:226:PHE:O	1:D:228:ASN:N	2.54	0.41
1:B:47:GLY:O	1:B:51:ILE:HG13	2.21	0.41
1:D:191:ASP:C	1:D:193:ASN:H	2.24	0.41
1:D:173:GLU:O	1:D:174:ARG:C	2.59	0.41
1:J:290:GLU:O	1:J:291:LEU:C	2.59	0.41
1:I:435:GLU:O	1:I:438:ASP:N	2.52	0.41
1:L:34:THR:HG22	1:L:34:THR:O	2.21	0.41
1:B:95:TYR:CZ	1:B:145:THR:HG22	2.45	0.41
1:B:75:ILE:N	1:B:75:ILE:HD12	2.36	0.41
1:C:346:GLU:OE1	1:C:367:VAL:HG12	2.21	0.41
1:I:282:ASN:C	1:I:282:ASN:OD1	2.58	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:335:ASN:O	1:I:339:VAL:HG13	2.21	0.41
1:I:353:THR:HB	1:I:354:PRO:HD2	2.02	0.41
1:H:280:ILE:CD1	1:H:301:ILE:HD12	2.45	0.41
1:D:141:LEU:HD23	1:D:141:LEU:HA	1.70	0.41
1:D:67:ARG:O	1:D:68:ASP:C	2.58	0.41
1:K:256:GLY:O	1:K:257:LEU:C	2.58	0.41
1:F:497:GLY:HA3	1:F:500:PHE:O	2.20	0.41
1:B:150:MET:SD	1:B:186:THR:HG21	2.61	0.41
1:L:247:PHE:CZ	1:L:260:MET:HA	2.56	0.41
1:A:412:SER:O	1:A:413:VAL:O	2.39	0.41
1:B:501:THR:OXT	1:B:501:THR:HG23	2.21	0.41
1:I:396:ARG:HH21	1:K:456:THR:HG23	1.86	0.41
1:K:416:SER:CA	1:K:419:ARG:NH2	2.83	0.41
1:F:386:LEU:HD12	1:F:394:TYR:OH	2.21	0.41
1:C:280:ILE:CG2	1:C:281:TRP:N	2.81	0.41
1:L:280:ILE:HG22	1:L:281:TRP:N	2.36	0.41
1:H:113:TYR:O	1:H:114:LYS:C	2.59	0.41
1:H:346:GLU:OE1	1:H:478:ARG:NH2	2.49	0.41
1:H:369:PRO:CG	1:H:478:ARG:HA	2.51	0.41
1:H:370:ASP:O	1:H:372:TYR:N	2.54	0.41
1:D:227:ILE:O	1:D:227:ILE:HG23	2.21	0.41
1:I:247:PHE:CZ	1:I:260:MET:HG3	2.56	0.41
1:J:369:PRO:CG	1:J:478:ARG:HA	2.51	0.41
1:I:57:HIS:HE1	1:L:151:GLU:OE1	2.04	0.41
1:G:250:GLN:CB	1:G:314:ILE:HD11	2.51	0.41
1:J:394:TYR:HB2	1:J:445:GLU:HG3	2.02	0.41
1:E:86:ARG:HG2	1:E:121:PRO:C	2.41	0.41
1:K:212:ILE:HD12	1:K:212:ILE:N	2.36	0.41
1:H:29:VAL:HB	1:H:30:GLU:H	1.43	0.41
1:H:137:THR:H	1:H:137:THR:HG22	1.58	0.41
1:B:307:ALA:O	1:B:308:LYS:HB2	2.20	0.41
1:F:335:ASN:ND2	1:F:335:ASN:N	2.69	0.41
1:G:85:GLN:N	1:G:85:GLN:HE21	2.18	0.41
1:J:417:LEU:HD12	1:J:417:LEU:HA	1.79	0.41
1:I:148:PHE:CE2	1:I:152:LEU:HD22	2.56	0.41
1:J:9:PHE:CE1	1:J:103:GLU:HG3	2.56	0.41
1:G:294:PHE:O	1:G:295:LYS:C	2.59	0.41
1:G:355:GLU:O	1:G:359:ILE:HG13	2.21	0.41
1:J:335:ASN:ND2	1:J:335:ASN:C	2.73	0.41
1:A:119:ASP:OD2	1:A:459:ARG:NH1	2.43	0.41
1:C:439:ARG:NH2	1:D:405:SER:CB	2.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:228:ASN:HA	1:I:228:ASN:HD22	1.71	0.41
1:J:188:GLY:O	1:J:189:HIS:C	2.59	0.41
1:H:193:ASN:O	1:H:194:ALA:C	2.56	0.41
1:I:189:HIS:HD2	1:I:190:TYR:CE1	2.39	0.41
1:J:442:GLY:O	1:J:443:ALA:C	2.59	0.41
1:E:105:LYS:HB3	1:E:105:LYS:HE2	1.55	0.41
1:I:263:LEU:HD12	1:I:263:LEU:HA	1.93	0.41
1:B:189:HIS:CE1	1:E:154:LYS:HD3	2.55	0.41
1:D:501:THR:OXT	1:E:181:ASP:OD1	2.38	0.41
1:B:90:LYS:HD3	1:B:122:PHE:CD1	2.56	0.41
1:I:248:VAL:HG22	1:I:271:ILE:HG22	2.02	0.41
1:A:331:LEU:HD22	1:A:344:ILE:HD13	2.02	0.41
1:D:142:GLU:O	1:D:143:LYS:C	2.59	0.41
1:G:48:ILE:O	1:G:51:ILE:HB	2.21	0.41
1:I:397:LEU:HD21	1:K:383:PHE:CE1	2.55	0.41
1:F:29:VAL:O	1:F:33:ARG:CG	2.68	0.41
1:I:495:GLU:O	1:I:496:ALA:CB	2.67	0.41
1:J:174:ARG:HG3	1:J:175:GLU:N	2.35	0.41
1:H:357:ASP:O	1:H:358:LYS:C	2.59	0.41
1:B:254:ASN:O	1:B:255:VAL:C	2.60	0.41
1:E:32:LEU:O	1:E:33:ARG:HB3	2.21	0.41
1:L:429:PRO:C	1:L:431:VAL:N	2.73	0.41
1:H:382:TYR:O	1:H:386:LEU:HG	2.21	0.41
1:A:176:MET:HE3	1:A:179:ILE:HD12	2.02	0.41
1:J:371:LEU:HD22	1:J:482:TYR:CE2	2.55	0.41
1:B:200:GLY:H	1:B:384:GLU:CD	2.24	0.41
1:I:412:SER:OG	1:K:433:THR:HG23	2.20	0.41
1:K:463:GLN:O	1:K:467:THR:HB	2.21	0.41
1:I:410:LEU:CD2	1:J:409:LEU:HD11	2.49	0.41
1:K:90:LYS:HD3	1:K:122:PHE:CE1	2.56	0.41
1:L:374:ASN:O	1:L:374:ASN:CG	2.59	0.41
1:F:346:GLU:OE1	1:F:370:ASP:N	2.49	0.41
1:K:232:TYR:CD1	1:K:232:TYR:N	2.89	0.41
1:L:48:ILE:HG21	1:L:490:PHE:CD1	2.55	0.41
1:B:188:GLY:O	1:B:190:TYR:N	2.54	0.41
1:I:198:VAL:O	1:I:201:LYS:HE3	2.21	0.40
1:I:346:GLU:HG2	1:I:351:PRO:HG2	2.03	0.40
1:I:475:LEU:O	1:I:477:LEU:HD22	2.22	0.40
1:I:131:ILE:CD1	1:I:144:ILE:HD13	2.51	0.40
1:K:500:PHE:HE1	1:L:500:PHE:CZ	2.33	0.40
1:C:431:VAL:HA	1:C:432:PRO:HD3	1.86	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:279:SER:C	1:H:280:ILE:HG13	2.42	0.40
1:F:82:HIS:HD2	1:F:112:THR:OG1	2.03	0.40
1:K:142:GLU:O	1:K:143:LYS:C	2.58	0.40
1:G:111:MET:CE	1:G:378:VAL:HG21	2.51	0.40
1:L:247:PHE:CZ	1:L:260:MET:HG3	2.47	0.40
1:H:85:GLN:HE21	1:H:85:GLN:HB3	1.39	0.40
1:F:27:LYS:O	1:F:32:LEU:HD12	2.20	0.40
1:K:414:GLN:HG3	1:K:427:THR:O	2.21	0.40
1:K:414:GLN:OE1	1:K:428:ILE:HA	2.21	0.40
1:J:126:LYS:HG3	1:J:127:ALA:N	2.36	0.40
1:J:186:THR:HB	1:J:187:ILE:H	1.34	0.40
1:D:16:PHE:HD1	1:D:482:TYR:CZ	2.39	0.40
1:K:233:MET:CE	1:K:236:LEU:HD12	2.51	0.40
1:H:163:ASP:O	1:H:165:PRO:HD3	2.21	0.40
1:J:358:LYS:O	1:J:362:GLU:CG	2.68	0.40
1:A:79:ARG:NH2	1:A:91:GLY:O	2.53	0.40
1:J:240:PRO:HD2	1:J:244:ASP:O	2.21	0.40
1:I:392:VAL:HG11	1:K:386:LEU:HD11	2.03	0.40
1:G:61:LEU:HA	1:K:56:ASN:O	2.21	0.40
1:J:319:CYS:O	1:J:341:ALA:HA	2.21	0.40
1:H:257:LEU:O	1:H:260:MET:N	2.54	0.40
1:E:45:VAL:C	1:E:47:GLY:H	2.25	0.40
1:J:9:PHE:HA	1:J:12:MET:HE2	2.03	0.40
1:K:82:HIS:N	1:K:124:GLY:O	2.48	0.40
1:A:214:ALA:CB	1:A:380:VAL:HG21	2.51	0.40
1:L:220:PHE:C	1:L:220:PHE:CD1	2.94	0.40
1:E:145:THR:OG1	1:E:146:ARG:N	2.54	0.40
1:G:167:PRO:HG3	1:G:176:MET:CG	2.47	0.40
1:E:335:ASN:O	1:E:336:ALA:C	2.58	0.40
1:I:90:LYS:HD2	1:I:164:VAL:HB	2.03	0.40
1:J:30:GLU:CA	1:J:34:THR:HG23	2.45	0.40
1:C:164:VAL:HG22	1:C:196:ALA:O	2.21	0.40
1:A:346:GLU:OE1	1:A:369:PRO:HA	2.21	0.40
1:D:332:THR:O	1:D:336:ALA:HB2	2.20	0.40
1:J:496:ALA:HB1	1:J:501:THR:O	2.21	0.40
1:G:17:PHE:CE2	1:G:53:LYS:CB	3.02	0.40
1:I:238:MET:C	1:I:240:PRO:CD	2.89	0.40
1:E:166:ALA:CA	1:E:176:MET:HE2	2.50	0.40
1:I:497:GLY:N	1:I:501:THR:HA	2.35	0.40
1:J:90:LYS:NZ	1:J:199:THR:HG23	2.27	0.40
1:A:114:LYS:CE	1:A:374:ASN:HD21	2.33	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:374:ASN:ND2	1:A:374:ASN:C	2.73	0.40
1:H:80:ALA:O	1:H:125:ALA:HA	2.20	0.40
1:A:233:MET:HE1	1:A:233:MET:HA	2.04	0.40
1:J:244:ASP:O	1:J:245:LYS:HG3	2.21	0.40
1:F:73:GLU:OE1	1:F:136:TYR:OH	2.39	0.40
1:H:300:SER:C	1:H:302:LEU:H	2.25	0.40
1:G:9:PHE:HA	1:G:12:MET:HE3	2.02	0.40
1:D:264:HIS:O	1:D:266:PHE:N	2.54	0.40
1:G:234:SER:O	1:G:237:GLY:N	2.54	0.40
1:A:243:GLY:O	1:A:245:LYS:N	2.54	0.40
1:A:93:ILE:O	1:A:168:ASP:HB3	2.22	0.40
1:A:423:LYS:NZ	1:A:426:GLY:CA	2.84	0.40
1:A:501:THR:HG21	1:B:181:ASP:OD1	2.21	0.40
1:D:163:ASP:O	1:D:165:PRO:HD3	2.22	0.40
1:D:87:THR:HG22	1:D:88:PRO:HG3	2.04	0.40
1:E:78:TYR:OH	1:E:130:LYS:CE	2.69	0.40
1:B:250:GLN:HA	1:B:314:ILE:HD11	2.03	0.40
1:B:250:GLN:CB	1:B:314:ILE:HD11	2.51	0.40
1:B:332:THR:HB	1:B:333:LYS:H	1.66	0.40
1:L:301:ILE:H	1:L:301:ILE:HG13	1.74	0.40
1:L:279:SER:HB2	1:L:310:TYR:O	2.22	0.40
1:I:52:ILE:O	1:I:82:HIS:CE1	2.75	0.40
1:C:383:PHE:CE2	1:D:397:LEU:HD11	2.56	0.40
1:I:167:PRO:CD	1:I:176:MET:SD	3.09	0.40
1:K:86:ARG:HG2	1:K:121:PRO:C	2.41	0.40
1:K:368:ILE:HA	1:K:369:PRO:HD3	1.51	0.40
1:K:478:ARG:O	1:K:481:ALA:N	2.39	0.40
1:C:435:GLU:O	1:C:436:PHE:C	2.60	0.40
1:D:409:LEU:HA	1:D:409:LEU:HD22	1.89	0.40
1:C:82:HIS:CB	1:C:112:THR:HG21	2.50	0.40
1:A:272:ALA:HB1	1:A:314:ILE:CG2	2.51	0.40
1:A:272:ALA:HB1	1:A:314:ILE:HG21	2.04	0.40
1:G:117:VAL:HG21	1:G:371:LEU:HG	2.03	0.40
1:A:68:ASP:O	1:A:69:ASP:C	2.60	0.40
1:A:275:GLU:HB3	1:A:276:SER:H	1.69	0.40
1:E:496:ALA:O	1:E:501:THR:O	2.39	0.40
1:J:90:LYS:HD3	1:J:122:PHE:CE1	2.55	0.40
1:J:162:ILE:HG22	1:J:163:ASP:N	2.35	0.40
1:H:470:LYS:C	1:H:472:ASN:H	2.25	0.40
1:A:370:ASP:C	1:A:372:TYR:H	2.23	0.40
1:E:40:GLN:C	1:E:42:ARG:H	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:84:HIS:O	1:J:85:GLN:C	2.60	0.40
1:E:492:VAL:CG2	2:E:5:ADP:C2	3.05	0.40
1:K:213:SER:O	1:K:214:ALA:C	2.60	0.40
1:F:476:ASP:OD2	1:F:479:THR:OG1	2.22	0.40
1:D:255:VAL:O	1:D:256:GLY:C	2.57	0.40
1:F:323:ILE:HG21	1:F:323:ILE:HD13	1.79	0.40
1:F:315:LEU:H	1:F:315:LEU:CD1	2.31	0.40
1:F:328:GLU:HB2	1:F:329:LYS:HZ3	1.85	0.40
1:C:201:LYS:HZ1	1:C:388:ASN:ND2	2.18	0.40
1:K:290:GLU:HB3	1:K:304:PHE:HZ	1.86	0.40
1:A:455:TYR:HB2	1:B:400:LYS:HB2	2.03	0.40
1:G:287:ASP:HB3	1:G:290:GLU:HG3	2.03	0.40
1:L:323:ILE:O	1:L:323:ILE:HG22	2.22	0.40
1:J:220:PHE:C	1:J:220:PHE:CD1	2.93	0.40
1:C:313:SER:O	1:C:316:GLU:OE2	2.40	0.40
1:C:465:MET:O	1:C:466:ARG:C	2.58	0.40
1:H:42:ARG:C	1:H:44:ARG:N	2.75	0.40
1:G:174:ARG:HG3	1:G:175:GLU:H	1.86	0.40
1:H:250:GLN:HG2	1:H:314:ILE:CD1	2.44	0.40
1:A:359:ILE:O	1:A:361:LEU:N	2.55	0.40
1:D:96:SER:HA	1:D:131:ILE:O	2.21	0.40
1:G:67:ARG:NH1	1:G:140:GLU:OE2	2.54	0.40
1:L:239:THR:H	1:L:240:PRO:HD3	1.73	0.40
1:L:65:ILE:CD1	1:L:144:ILE:HG13	2.35	0.40
1:F:45:VAL:C	1:F:47:GLY:N	2.74	0.40
1:H:23:ILE:H	1:H:23:ILE:HG13	1.67	0.40
1:A:109:SER:O	1:A:113:TYR:CD2	2.74	0.40
1:A:117:VAL:HG21	1:A:371:LEU:HG	2.03	0.40
1:A:387:LYS:HE3	1:A:393:SER:HA	2.03	0.40
1:J:113:TYR:O	1:J:117:VAL:HG23	2.21	0.40
1:L:400:LYS:O	1:L:403:ARG:HB3	2.20	0.40
1:H:382:TYR:O	1:H:385:TRP:HB3	2.21	0.40
1:H:382:TYR:HE1	1:H:386:LEU:HD11	1.76	0.40
1:H:91:GLY:O	1:H:165:PRO:HA	2.22	0.40
1:H:67:ARG:NH2	1:H:136:TYR:CD1	2.90	0.40
1:A:432:PRO:HB3	1:A:436:PHE:CD1	2.56	0.40
1:D:366:MET:CA	1:D:475:LEU:HD23	2.52	0.40
1:H:462:ARG:CG	1:H:462:ARG:HH11	2.35	0.40
1:G:315:LEU:CD2	1:G:331:LEU:HD23	2.51	0.40
1:E:464:ILE:HG22	1:E:465:MET:N	2.36	0.40
1:G:8:ASN:O	1:G:9:PHE:C	2.59	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:294:PHE:C	1:H:298:HIS:CE1	2.95	0.40
1:L:226:PHE:CE2	1:L:465:MET:CE	3.05	0.40
1:B:467:THR:O	1:B:468:ALA:C	2.59	0.40
1:F:230:ALA:O	1:F:231:SER:C	2.58	0.40
1:D:383:PHE:N	1:D:383:PHE:CD2	2.89	0.40
1:E:52:ILE:O	1:E:82:HIS:HE1	2.04	0.40
1:B:120:VAL:HG12	1:B:122:PHE:CD1	2.56	0.40
1:E:414:GLN:HA	1:E:429:PRO:HG2	2.03	0.40
1:C:315:LEU:CD2	1:C:322:LEU:HD11	2.50	0.40
1:C:322:LEU:HD12	1:C:344:ILE:HG23	2.04	0.40
1:L:33:ARG:CZ	1:L:33:ARG:CB	2.99	0.40
1:I:319:CYS:O	1:I:341:ALA:HA	2.21	0.40
1:I:346:GLU:OE2	1:I:478:ARG:NH2	2.51	0.40
1:D:294:PHE:CG	1:D:304:PHE:HD1	2.40	0.40
1:F:53:LYS:N	1:F:54:PRO:CD	2.85	0.40
1:L:247:PHE:HE2	1:L:249:VAL:HG12	1.79	0.40
1:F:431:VAL:HA	1:F:432:PRO:HD3	1.99	0.40
1:K:383:PHE:N	1:K:383:PHE:CD2	2.87	0.40
1:G:87:THR:CB	1:G:88:PRO:CD	2.98	0.40
1:K:240:PRO:HD2	1:K:244:ASP:O	2.22	0.40
1:D:16:PHE:CD2	1:D:16:PHE:N	2.90	0.40
1:H:371:LEU:HD23	1:H:481:ALA:CB	2.52	0.40
1:J:10:PHE:O	1:J:11:LYS:C	2.60	0.40
1:A:176:MET:HE1	1:A:179:ILE:HD12	2.02	0.40
1:G:248:VAL:O	1:G:323:ILE:HG13	2.22	0.40
1:D:208:ILE:HG13	1:D:445:GLU:OE1	2.21	0.40
1:L:217:ARG:HG2	1:L:262:TYR:CZ	2.57	0.40
1:E:94:ARG:O	1:E:128:GLY:HA2	2.22	0.40
1:D:328:GLU:O	1:D:329:LYS:HG2	2.21	0.40
1:G:151:GLU:HB3	1:K:57:HIS:HE1	1.85	0.40
1:B:126:LYS:HD2	1:B:126:LYS:HA	1.91	0.40
1:E:296:LEU:HD13	1:E:296:LEU:HA	1.86	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

of similar resolution.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	494/496 (100%)	341 (69%)	109 (22%)	44 (9%)	1 11
1	B	494/496 (100%)	359 (73%)	94 (19%)	41 (8%)	1 13
1	C	494/496 (100%)	351 (71%)	82 (17%)	61 (12%)	0 6
1	D	494/496 (100%)	344 (70%)	105 (21%)	45 (9%)	1 11
1	E	494/496 (100%)	352 (71%)	100 (20%)	42 (8%)	1 13
1	F	494/496 (100%)	378 (76%)	85 (17%)	31 (6%)	2 21
1	G	494/496 (100%)	362 (73%)	94 (19%)	38 (8%)	1 14
1	H	494/496 (100%)	341 (69%)	116 (24%)	37 (8%)	1 15
1	I	494/496 (100%)	355 (72%)	89 (18%)	50 (10%)	1 9
1	J	494/496 (100%)	353 (72%)	99 (20%)	42 (8%)	1 13
1	K	494/496 (100%)	328 (66%)	113 (23%)	53 (11%)	0 8
1	L	494/496 (100%)	347 (70%)	102 (21%)	45 (9%)	1 11
All	All	5928/5952 (100%)	4211 (71%)	1188 (20%)	529 (9%)	1 11

All (529) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	9	PHE
1	A	25	GLU
1	A	26	ASP
1	A	30	GLU
1	A	33	ARG
1	A	40	GLN
1	A	158	ILE
1	A	240	PRO
1	A	314	ILE
1	A	430	ILE
1	A	496	ALA
1	A	498	VAL
1	B	30	GLU
1	B	33	ARG
1	B	37	SER
1	B	39	GLU
1	B	87	THR
1	B	255	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	283	PRO
1	B	334	SER
1	B	364	ASN
1	B	396	ARG
1	B	430	ILE
1	B	496	ALA
1	B	498	VAL
1	C	9	PHE
1	C	25	GLU
1	C	29	VAL
1	C	33	ARG
1	C	37	SER
1	C	169	MET
1	C	244	ASP
1	C	265	ARG
1	C	272	ALA
1	C	275	GLU
1	C	281	TRP
1	C	282	ASN
1	C	301	ILE
1	C	326	ALA
1	C	334	SER
1	C	371	LEU
1	C	421	PHE
1	C	430	ILE
1	C	498	VAL
1	D	99	VAL
1	D	100	SER
1	D	275	GLU
1	D	282	ASN
1	D	317	ALA
1	D	334	SER
1	D	364	ASN
1	D	399	PHE
1	D	430	ILE
1	E	7	PRO
1	E	9	PHE
1	E	26	ASP
1	E	214	ALA
1	E	329	LYS
1	E	421	PHE
1	E	423	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	430	ILE
1	E	472	ASN
1	F	9	PHE
1	F	30	GLU
1	F	33	ARG
1	F	87	THR
1	F	158	ILE
1	F	214	ALA
1	F	329	LYS
1	F	334	SER
1	F	421	PHE
1	F	430	ILE
1	F	496	ALA
1	G	30	GLU
1	G	31	ASP
1	G	33	ARG
1	G	40	GLN
1	G	130	LYS
1	G	282	ASN
1	G	306	LYS
1	G	327	SER
1	G	399	PHE
1	G	420	LYS
1	G	430	ILE
1	G	472	ASN
1	G	496	ALA
1	H	30	GLU
1	H	31	ASP
1	H	268	ALA
1	H	275	GLU
1	H	317	ALA
1	H	329	LYS
1	H	334	SER
1	H	430	ILE
1	I	33	ARG
1	I	37	SER
1	I	40	GLN
1	I	87	THR
1	I	97	THR
1	I	230	ALA
1	I	240	PRO
1	I	244	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	252	PHE
1	I	306	LYS
1	I	327	SER
1	I	329	LYS
1	I	346	GLU
1	I	478	ARG
1	I	479	THR
1	I	496	ALA
1	J	30	GLU
1	J	31	ASP
1	J	33	ARG
1	J	34	THR
1	J	39	GLU
1	J	244	ASP
1	J	430	ILE
1	K	25	GLU
1	K	30	GLU
1	K	39	GLU
1	K	87	THR
1	K	97	THR
1	K	169	MET
1	K	214	ALA
1	K	220	PHE
1	K	227	ILE
1	K	231	SER
1	K	244	ASP
1	K	253	GLY
1	K	265	ARG
1	K	327	SER
1	K	334	SER
1	K	399	PHE
1	K	421	PHE
1	K	498	VAL
1	L	9	PHE
1	L	25	GLU
1	L	30	GLU
1	L	33	ARG
1	L	87	THR
1	L	165	PRO
1	L	275	GLU
1	L	317	ALA
1	L	327	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	L	334	SER
1	L	338	ARG
1	L	346	GLU
1	L	430	ILE
1	L	465	MET
1	L	472	ASN
1	L	498	VAL
1	A	169	MET
1	A	244	ASP
1	A	255	VAL
1	A	268	ALA
1	A	299	GLY
1	A	329	LYS
1	A	334	SER
1	A	364	ASN
1	A	369	PRO
1	B	25	GLU
1	B	143	LYS
1	B	268	ALA
1	B	299	GLY
1	B	398	THR
1	B	421	PHE
1	C	87	THR
1	C	134	LYS
1	C	219	VAL
1	C	220	PHE
1	C	231	SER
1	C	254	ASN
1	C	329	LYS
1	C	389	LEU
1	C	414	GLN
1	C	422	GLY
1	C	458	GLU
1	C	478	ARG
1	C	496	ALA
1	D	33	ARG
1	D	82	HIS
1	D	119	ASP
1	D	144	ILE
1	D	231	SER
1	D	265	ARG
1	D	297	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	326	ALA
1	D	421	PHE
1	D	472	ASN
1	D	495	GLU
1	E	27	LYS
1	E	33	ARG
1	E	36	GLU
1	E	130	LYS
1	E	222	GLY
1	E	223	ILE
1	E	283	PRO
1	E	334	SER
1	E	360	PHE
1	E	371	LEU
1	E	420	LYS
1	E	422	GLY
1	E	495	GLU
1	F	387	LYS
1	F	422	GLY
1	F	498	VAL
1	G	184	ALA
1	G	192	ILE
1	G	231	SER
1	G	244	ASP
1	G	294	PHE
1	G	301	ILE
1	H	29	VAL
1	H	130	LYS
1	H	301	ILE
1	H	328	GLU
1	H	371	LEU
1	H	495	GLU
1	H	498	VAL
1	I	25	GLU
1	I	219	VAL
1	I	265	ARG
1	I	297	GLN
1	I	328	GLU
1	I	341	ALA
1	I	364	ASN
1	I	421	PHE
1	J	28	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	J	40	GLN
1	J	68	ASP
1	J	182	THR
1	J	319	CYS
1	J	364	ASN
1	J	405	SER
1	J	496	ALA
1	K	33	ARG
1	K	40	GLN
1	K	299	GLY
1	K	314	ILE
1	K	319	CYS
1	K	371	LEU
1	K	381	SER
1	K	422	GLY
1	K	467	THR
1	K	472	ASN
1	K	478	ARG
1	K	492	VAL
1	L	224	GLU
1	L	227	ILE
1	L	230	ALA
1	L	235	ILE
1	L	299	GLY
1	L	396	ARG
1	L	422	GLY
1	A	23	ILE
1	A	371	LEU
1	A	421	PHE
1	A	434	ALA
1	A	465	MET
1	A	478	ARG
1	A	491	LYS
1	B	85	GLN
1	B	109	SER
1	B	142	GLU
1	B	181	ASP
1	B	189	HIS
1	B	244	ASP
1	B	254	ASN
1	B	265	ARG
1	B	326	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	329	LYS
1	C	68	ASP
1	C	71	SER
1	C	121	PRO
1	C	240	PRO
1	C	320	ASP
1	C	351	PRO
1	C	472	ASN
1	D	64	PRO
1	D	88	PRO
1	D	244	ASP
1	D	346	GLU
1	D	396	ARG
1	D	419	ARG
1	D	425	GLY
1	D	496	ALA
1	E	87	THR
1	E	224	GLU
1	F	244	ASP
1	F	317	ALA
1	F	319	CYS
1	F	327	SER
1	F	364	ASN
1	F	438	ASP
1	F	491	LYS
1	G	25	GLU
1	G	265	ARG
1	G	299	GLY
1	G	421	PHE
1	H	10	PHE
1	H	154	LYS
1	H	165	PRO
1	H	422	GLY
1	I	36	GLU
1	I	67	ARG
1	I	288	PRO
1	I	317	ALA
1	I	480	ALA
1	I	498	VAL
1	J	189	HIS
1	J	214	ALA
1	J	231	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	J	282	ASN
1	J	283	PRO
1	J	306	LYS
1	J	315	LEU
1	J	326	ALA
1	J	329	LYS
1	J	358	LYS
1	J	371	LEU
1	J	443	ALA
1	K	36	GLU
1	K	119	ASP
1	K	221	HIS
1	K	235	ILE
1	K	257	LEU
1	K	283	PRO
1	K	341	ALA
1	K	351	PRO
1	K	364	ASN
1	K	425	GLY
1	K	465	MET
1	L	37	SER
1	L	82	HIS
1	L	133	PRO
1	L	236	LEU
1	L	283	PRO
1	L	315	LEU
1	L	449	VAL
1	L	495	GLU
1	A	254	ASN
1	A	359	ILE
1	A	405	SER
1	B	130	LYS
1	B	235	ILE
1	B	282	ASN
1	B	308	LYS
1	B	371	LEU
1	C	26	ASP
1	C	214	ALA
1	C	336	ALA
1	C	354	PRO
1	C	396	ARG
1	C	459	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	465	MET
1	D	69	ASP
1	D	288	PRO
1	D	375	ALA
1	D	453	LEU
1	D	478	ARG
1	E	12	MET
1	E	25	GLU
1	E	39	GLU
1	E	180	ALA
1	E	268	ALA
1	E	282	ASN
1	E	394	TYR
1	E	425	GLY
1	F	16	PHE
1	F	25	GLU
1	F	181	ASP
1	G	9	PHE
1	G	154	LYS
1	G	193	ASN
1	G	295	LYS
1	G	305	PRO
1	G	326	ALA
1	H	33	ARG
1	H	85	GLN
1	H	214	ALA
1	H	244	ASP
1	H	254	ASN
1	H	288	PRO
1	H	326	ALA
1	H	471	TYR
1	H	486	ILE
1	I	214	ALA
1	I	257	LEU
1	I	326	ALA
1	I	433	THR
1	J	23	ILE
1	J	25	GLU
1	J	82	HIS
1	J	181	ASP
1	J	277	ASP
1	J	425	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	62	SER
1	L	31	ASP
1	L	130	LYS
1	L	214	ALA
1	L	244	ASP
1	L	261	ARG
1	L	282	ASN
1	L	496	ALA
1	A	22	SER
1	A	283	PRO
1	A	338	ARG
1	A	360	PHE
1	A	467	THR
1	B	256	GLY
1	B	449	VAL
1	C	233	MET
1	C	251	GLY
1	C	317	ALA
1	C	339	VAL
1	C	346	GLU
1	C	388	ASN
1	C	429	PRO
1	D	7	PRO
1	D	9	PHE
1	D	39	GLU
1	D	314	ILE
1	D	336	ALA
1	E	53	LYS
1	E	67	ARG
1	E	133	PRO
1	F	290	GLU
1	F	318	ASP
1	F	374	ASN
1	F	425	GLY
1	F	437	GLN
1	G	288	PRO
1	G	364	ASN
1	G	495	GLU
1	G	498	VAL
1	H	306	LYS
1	H	421	PHE
1	H	451	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	27	LYS
1	I	82	HIS
1	I	130	LYS
1	I	315	LEU
1	J	131	ILE
1	J	192	ILE
1	J	194	ALA
1	J	290	GLU
1	J	452	GLY
1	K	430	ILE
1	L	7	PRO
1	L	238	MET
1	L	336	ALA
1	A	224	GLU
1	A	385	TRP
1	B	472	ASN
1	C	280	ILE
1	C	283	PRO
1	D	133	PRO
1	E	231	SER
1	E	326	ALA
1	E	359	ILE
1	H	309	PRO
1	H	485	ALA
1	I	150	MET
1	I	282	ASN
1	I	305	PRO
1	I	347	GLY
1	K	144	ILE
1	K	255	VAL
1	K	298	HIS
1	L	101	VAL
1	L	223	ILE
1	A	212	ILE
1	A	422	GLY
1	B	133	PRO
1	C	192	ILE
1	C	239	THR
1	D	192	ILE
1	D	219	VAL
1	D	235	ILE
1	E	165	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	426	GLY
1	G	87	THR
1	G	144	ILE
1	G	212	ILE
1	H	87	THR
1	J	235	ILE
1	J	305	PRO
1	K	121	PRO
1	K	359	ILE
1	L	240	PRO
1	B	165	PRO
1	C	350	GLY
1	C	353	THR
1	D	426	GLY
1	E	464	ILE
1	F	282	ASN
1	F	299	GLY
1	G	162	ILE
1	I	235	ILE
1	I	273	VAL
1	I	426	GLY
1	I	429	PRO
1	J	426	GLY
1	K	162	ILE
1	K	165	PRO
1	A	24	VAL
1	A	241	GLY
1	A	425	GLY
1	A	449	VAL
1	E	212	ILE
1	H	235	ILE
1	I	203	ILE
1	K	133	PRO
1	B	7	PRO
1	C	305	PRO
1	C	425	GLY
1	D	299	GLY
1	G	283	PRO
1	H	64	PRO
1	H	282	ASN
1	I	227	ILE
1	I	239	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	425	GLY
1	K	223	ILE
1	K	376	GLY
1	B	192	ILE
1	D	486	ILE
1	J	64	PRO
1	L	58	VAL

5.3.2 Protein sidechains

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	413/413 (100%)	368 (89%)	45 (11%)	8	37
1	B	413/413 (100%)	352 (85%)	61 (15%)	4	22
1	C	413/413 (100%)	348 (84%)	65 (16%)	3	19
1	D	413/413 (100%)	354 (86%)	59 (14%)	4	24
1	E	413/413 (100%)	343 (83%)	70 (17%)	2	15
1	F	413/413 (100%)	359 (87%)	54 (13%)	5	27
1	G	413/413 (100%)	354 (86%)	59 (14%)	4	24
1	H	413/413 (100%)	348 (84%)	65 (16%)	3	19
1	I	413/413 (100%)	362 (88%)	51 (12%)	6	29
1	J	413/413 (100%)	348 (84%)	65 (16%)	3	19
1	K	413/413 (100%)	346 (84%)	67 (16%)	3	17
1	L	413/413 (100%)	351 (85%)	62 (15%)	3	21
All	All	4956/4956 (100%)	4233 (85%)	723 (15%)	4	22

All (723) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	6	ASP
1	A	40	GLN
1	A	45	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	60	SER
1	A	61	LEU
1	A	72	TRP
1	A	76	GLU
1	A	78	TYR
1	A	85	GLN
1	A	86	ARG
1	A	97	THR
1	A	107	LEU
1	A	111	MET
1	A	112	THR
1	A	131	ILE
1	A	145	THR
1	A	158	ILE
1	A	168	ASP
1	A	175	GLU
1	A	176	MET
1	A	186	THR
1	A	224	GLU
1	A	227	ILE
1	A	245	LYS
1	A	249	VAL
1	A	279	SER
1	A	314	ILE
1	A	333	LYS
1	A	335	ASN
1	A	353	THR
1	A	361	LEU
1	A	370	ASP
1	A	374	ASN
1	A	392	VAL
1	A	396	ARG
1	A	405	SER
1	A	409	LEU
1	A	411	MET
1	A	424	HIS
1	A	428	ILE
1	A	439	ARG
1	A	460	SER
1	A	467	THR
1	A	477	LEU
1	A	486	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	6	ASP
1	B	7	PRO
1	B	8	ASN
1	B	9	PHE
1	B	30	GLU
1	B	32	LEU
1	B	33	ARG
1	B	36	GLU
1	B	48	ILE
1	B	54	PRO
1	B	60	SER
1	B	61	LEU
1	B	72	TRP
1	B	78	TYR
1	B	85	GLN
1	B	86	ARG
1	B	105	LYS
1	B	135	ASN
1	B	137	THR
1	B	139	ASN
1	B	149	THR
1	B	152	LEU
1	B	162	ILE
1	B	171	THR
1	B	176	MET
1	B	212	ILE
1	B	213	SER
1	B	238	MET
1	B	239	THR
1	B	249	VAL
1	B	250	GLN
1	B	257	LEU
1	B	261	ARG
1	B	275	GLU
1	B	284	ASP
1	B	287	ASP
1	B	289	LYS
1	B	314	ILE
1	B	322	LEU
1	B	323	ILE
1	B	331	LEU
1	B	335	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	362	GLU
1	B	363	ARG
1	B	373	LEU
1	B	396	ARG
1	B	398	THR
1	B	405	SER
1	B	409	LEU
1	B	411	MET
1	B	417	LEU
1	B	421	PHE
1	B	423	LYS
1	B	424	HIS
1	B	427	THR
1	B	428	ILE
1	B	439	ARG
1	B	453	LEU
1	B	465	MET
1	B	475	LEU
1	B	493	TYR
1	C	9	PHE
1	C	13	VAL
1	C	14	GLU
1	C	19	ARG
1	C	24	VAL
1	C	40	GLN
1	C	44	ARG
1	C	45	VAL
1	C	58	VAL
1	C	61	LEU
1	C	63	PHE
1	C	67	ARG
1	C	72	TRP
1	C	73	GLU
1	C	85	GLN
1	C	86	ARG
1	C	93	ILE
1	C	97	THR
1	C	98	ASP
1	C	99	VAL
1	C	105	LYS
1	C	112	THR
1	C	114	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	118	VAL
1	C	131	ILE
1	C	137	THR
1	C	138	ASP
1	C	145	THR
1	C	168	ASP
1	C	173	GLU
1	C	176	MET
1	C	212	ILE
1	C	213	SER
1	C	215	THR
1	C	227	ILE
1	C	247	PHE
1	C	249	VAL
1	C	250	GLN
1	C	255	VAL
1	C	263	LEU
1	C	275	GLU
1	C	281	TRP
1	C	284	ASP
1	C	310	TYR
1	C	314	ILE
1	C	320	ASP
1	C	333	LYS
1	C	335	ASN
1	C	352	THR
1	C	363	ARG
1	C	370	ASP
1	C	374	ASN
1	C	380	VAL
1	C	381	SER
1	C	392	VAL
1	C	396	ARG
1	C	409	LEU
1	C	413	VAL
1	C	417	LEU
1	C	420	LYS
1	C	428	ILE
1	C	441	SER
1	C	453	LEU
1	C	473	LEU
1	C	494	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	9	PHE
1	D	14	GLU
1	D	19	ARG
1	D	45	VAL
1	D	58	VAL
1	D	60	SER
1	D	61	LEU
1	D	64	PRO
1	D	66	ARG
1	D	67	ARG
1	D	72	TRP
1	D	76	GLU
1	D	78	TYR
1	D	85	GLN
1	D	86	ARG
1	D	87	THR
1	D	94	ARG
1	D	97	THR
1	D	99	VAL
1	D	100	SER
1	D	137	THR
1	D	145	THR
1	D	147	ARG
1	D	158	ILE
1	D	175	GLU
1	D	176	MET
1	D	213	SER
1	D	227	ILE
1	D	228	ASN
1	D	250	GLN
1	D	255	VAL
1	D	257	LEU
1	D	263	LEU
1	D	280	ILE
1	D	289	LYS
1	D	291	LEU
1	D	296	LEU
1	D	298	HIS
1	D	314	ILE
1	D	315	LEU
1	D	316	GLU
1	D	322	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	330	GLN
1	D	334	SER
1	D	335	ASN
1	D	344	ILE
1	D	352	THR
1	D	363	ARG
1	D	396	ARG
1	D	397	LEU
1	D	398	THR
1	D	405	SER
1	D	409	LEU
1	D	420	LYS
1	D	428	ILE
1	D	444	SER
1	D	467	THR
1	D	494	ASN
1	D	501	THR
1	E	6	ASP
1	E	9	PHE
1	E	10	PHE
1	E	19	ARG
1	E	22	SER
1	E	31	ASP
1	E	32	LEU
1	E	43	ASN
1	E	45	VAL
1	E	58	VAL
1	E	61	LEU
1	E	66	ARG
1	E	78	TYR
1	E	82	HIS
1	E	85	GLN
1	E	96	SER
1	E	97	THR
1	E	105	LYS
1	E	107	LEU
1	E	111	MET
1	E	112	THR
1	E	131	ILE
1	E	137	THR
1	E	138	ASP
1	E	158	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	174	ARG
1	E	176	MET
1	E	211	ARG
1	E	215	THR
1	E	219	VAL
1	E	234	SER
1	E	242	PHE
1	E	249	VAL
1	E	255	VAL
1	E	261	ARG
1	E	263	LEU
1	E	275	GLU
1	E	281	TRP
1	E	284	ASP
1	E	298	HIS
1	E	301	ILE
1	E	314	ILE
1	E	322	LEU
1	E	323	ILE
1	E	329	LYS
1	E	330	GLN
1	E	335	ASN
1	E	352	THR
1	E	353	THR
1	E	357	ASP
1	E	363	ARG
1	E	365	ILE
1	E	367	VAL
1	E	374	ASN
1	E	381	SER
1	E	396	ARG
1	E	397	LEU
1	E	417	LEU
1	E	420	LYS
1	E	428	ILE
1	E	433	THR
1	E	436	PHE
1	E	439	ARG
1	E	446	LYS
1	E	453	LEU
1	E	472	ASN
1	E	477	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	493	TYR
1	E	495	GLU
1	E	498	VAL
1	F	8	ASN
1	F	19	ARG
1	F	24	VAL
1	F	42	ARG
1	F	45	VAL
1	F	46	ARG
1	F	51	ILE
1	F	54	PRO
1	F	59	LEU
1	F	60	SER
1	F	61	LEU
1	F	62	SER
1	F	72	TRP
1	F	78	TYR
1	F	85	GLN
1	F	86	ARG
1	F	100	SER
1	F	107	LEU
1	F	109	SER
1	F	121	PRO
1	F	137	THR
1	F	152	LEU
1	F	158	ILE
1	F	163	ASP
1	F	175	GLU
1	F	176	MET
1	F	186	THR
1	F	238	MET
1	F	245	LYS
1	F	246	THR
1	F	249	VAL
1	F	250	GLN
1	F	255	VAL
1	F	271	ILE
1	F	300	SER
1	F	314	ILE
1	F	322	LEU
1	F	328	GLU
1	F	329	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	335	ASN
1	F	363	ARG
1	F	396	ARG
1	F	402	GLU
1	F	409	LEU
1	F	428	ILE
1	F	435	GLU
1	F	440	ILE
1	F	441	SER
1	F	446	LYS
1	F	451	SER
1	F	453	LEU
1	F	467	THR
1	F	477	LEU
1	F	495	GLU
1	G	19	ARG
1	G	24	VAL
1	G	26	ASP
1	G	33	ARG
1	G	38	GLU
1	G	45	VAL
1	G	61	LEU
1	G	64	PRO
1	G	72	TRP
1	G	76	GLU
1	G	78	TYR
1	G	84	HIS
1	G	85	GLN
1	G	100	SER
1	G	101	VAL
1	G	111	MET
1	G	112	THR
1	G	131	ILE
1	G	145	THR
1	G	147	ARG
1	G	158	ILE
1	G	176	MET
1	G	204	SER
1	G	212	ILE
1	G	213	SER
1	G	232	TYR
1	G	235	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	250	GLN
1	G	257	LEU
1	G	261	ARG
1	G	298	HIS
1	G	302	LEU
1	G	310	TYR
1	G	314	ILE
1	G	335	ASN
1	G	339	VAL
1	G	352	THR
1	G	353	THR
1	G	354	PRO
1	G	357	ASP
1	G	361	LEU
1	G	363	ARG
1	G	372	TYR
1	G	374	ASN
1	G	393	SER
1	G	396	ARG
1	G	402	GLU
1	G	409	LEU
1	G	417	LEU
1	G	423	LYS
1	G	428	ILE
1	G	436	PHE
1	G	440	ILE
1	G	444	SER
1	G	467	THR
1	G	469	MET
1	G	477	LEU
1	G	498	VAL
1	G	501	THR
1	H	9	PHE
1	H	19	ARG
1	H	31	ASP
1	H	36	GLU
1	H	38	GLU
1	H	39	GLU
1	H	40	GLN
1	H	44	ARG
1	H	46	ARG
1	H	50	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	H	60	SER
1	H	61	LEU
1	H	63	PHE
1	H	78	TYR
1	H	85	GLN
1	H	86	ARG
1	H	97	THR
1	H	98	ASP
1	H	102	ASP
1	H	112	THR
1	H	131	ILE
1	H	134	LYS
1	H	137	THR
1	H	138	ASP
1	H	145	THR
1	H	154	LYS
1	H	169	MET
1	H	176	MET
1	H	181	ASP
1	H	199	THR
1	H	204	SER
1	H	213	SER
1	H	227	ILE
1	H	231	SER
1	H	255	VAL
1	H	257	LEU
1	H	281	TRP
1	H	291	LEU
1	H	292	GLU
1	H	302	LEU
1	H	311	GLU
1	H	314	ILE
1	H	322	LEU
1	H	327	SER
1	H	330	GLN
1	H	335	ASN
1	H	352	THR
1	H	353	THR
1	H	361	LEU
1	H	362	GLU
1	H	363	ARG
1	H	367	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	H	372	TYR
1	H	374	ASN
1	H	392	VAL
1	H	396	ARG
1	H	409	LEU
1	H	417	LEU
1	H	423	LYS
1	H	424	HIS
1	H	428	ILE
1	H	462	ARG
1	H	467	THR
1	H	477	LEU
1	H	495	GLU
1	I	9	PHE
1	I	30	GLU
1	I	31	ASP
1	I	33	ARG
1	I	42	ARG
1	I	43	ASN
1	I	45	VAL
1	I	60	SER
1	I	61	LEU
1	I	62	SER
1	I	66	ARG
1	I	72	TRP
1	I	78	TYR
1	I	85	GLN
1	I	86	ARG
1	I	93	ILE
1	I	94	ARG
1	I	98	ASP
1	I	101	VAL
1	I	107	LEU
1	I	111	MET
1	I	112	THR
1	I	114	LYS
1	I	121	PRO
1	I	137	THR
1	I	141	LEU
1	I	158	ILE
1	I	162	ILE
1	I	176	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	186	THR
1	I	213	SER
1	I	217	ARG
1	I	255	VAL
1	I	261	ARG
1	I	296	LEU
1	I	314	ILE
1	I	329	LYS
1	I	332	THR
1	I	333	LYS
1	I	352	THR
1	I	373	LEU
1	I	374	ASN
1	I	392	VAL
1	I	396	ARG
1	I	401	TYR
1	I	409	LEU
1	I	421	PHE
1	I	428	ILE
1	I	444	SER
1	I	453	LEU
1	I	499	THR
1	J	6	ASP
1	J	9	PHE
1	J	14	GLU
1	J	19	ARG
1	J	24	VAL
1	J	28	LEU
1	J	31	ASP
1	J	33	ARG
1	J	40	GLN
1	J	42	ARG
1	J	58	VAL
1	J	60	SER
1	J	72	TRP
1	J	78	TYR
1	J	85	GLN
1	J	86	ARG
1	J	101	VAL
1	J	107	LEU
1	J	112	THR
1	J	118	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	J	131	ILE
1	J	137	THR
1	J	138	ASP
1	J	158	ILE
1	J	162	ILE
1	J	175	GLU
1	J	176	MET
1	J	186	THR
1	J	208	ILE
1	J	212	ILE
1	J	228	ASN
1	J	231	SER
1	J	238	MET
1	J	239	THR
1	J	245	LYS
1	J	249	VAL
1	J	250	GLN
1	J	261	ARG
1	J	296	LEU
1	J	302	LEU
1	J	314	ILE
1	J	327	SER
1	J	329	LYS
1	J	331	LEU
1	J	332	THR
1	J	335	ASN
1	J	343	ILE
1	J	351	PRO
1	J	357	ASP
1	J	361	LEU
1	J	372	TYR
1	J	393	SER
1	J	396	ARG
1	J	408	HIS
1	J	409	LEU
1	J	417	LEU
1	J	420	LYS
1	J	427	THR
1	J	430	ILE
1	J	440	ILE
1	J	453	LEU
1	J	464	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	J	472	ASN
1	J	477	LEU
1	J	493	TYR
1	K	6	ASP
1	K	9	PHE
1	K	33	ARG
1	K	34	THR
1	K	35	ARG
1	K	40	GLN
1	K	45	VAL
1	K	59	LEU
1	K	60	SER
1	K	64	PRO
1	K	72	TRP
1	K	78	TYR
1	K	79	ARG
1	K	85	GLN
1	K	86	ARG
1	K	87	THR
1	K	112	THR
1	K	132	ASN
1	K	137	THR
1	K	138	ASP
1	K	145	THR
1	K	167	PRO
1	K	173	GLU
1	K	176	MET
1	K	177	SER
1	K	190	TYR
1	K	204	SER
1	K	212	ILE
1	K	215	THR
1	K	219	VAL
1	K	225	ASN
1	K	227	ILE
1	K	245	LYS
1	K	249	VAL
1	K	257	LEU
1	K	271	ILE
1	K	291	LEU
1	K	294	PHE
1	K	296	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	301	ILE
1	K	314	ILE
1	K	315	LEU
1	K	316	GLU
1	K	322	LEU
1	K	323	ILE
1	K	335	ASN
1	K	344	ILE
1	K	358	LYS
1	K	363	ARG
1	K	368	ILE
1	K	371	LEU
1	K	374	ASN
1	K	396	ARG
1	K	398	THR
1	K	402	GLU
1	K	417	LEU
1	K	420	LYS
1	K	421	PHE
1	K	423	LYS
1	K	433	THR
1	K	435	GLU
1	K	451	SER
1	K	453	LEU
1	K	478	ARG
1	K	494	ASN
1	K	498	VAL
1	K	501	THR
1	L	9	PHE
1	L	19	ARG
1	L	24	VAL
1	L	31	ASP
1	L	33	ARG
1	L	38	GLU
1	L	45	VAL
1	L	58	VAL
1	L	72	TRP
1	L	76	GLU
1	L	78	TYR
1	L	85	GLN
1	L	86	ARG
1	L	94	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	L	97	THR
1	L	100	SER
1	L	103	GLU
1	L	111	MET
1	L	112	THR
1	L	131	ILE
1	L	137	THR
1	L	147	ARG
1	L	158	ILE
1	L	175	GLU
1	L	176	MET
1	L	212	ILE
1	L	213	SER
1	L	238	MET
1	L	242	PHE
1	L	255	VAL
1	L	257	LEU
1	L	263	LEU
1	L	266	PHE
1	L	309	PRO
1	L	313	SER
1	L	314	ILE
1	L	330	GLN
1	L	335	ASN
1	L	338	ARG
1	L	352	THR
1	L	362	GLU
1	L	363	ARG
1	L	364	ASN
1	L	392	VAL
1	L	393	SER
1	L	396	ARG
1	L	398	THR
1	L	405	SER
1	L	409	LEU
1	L	411	MET
1	L	413	VAL
1	L	417	LEU
1	L	420	LYS
1	L	424	HIS
1	L	428	ILE
1	L	444	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	L	447	ASP
1	L	451	SER
1	L	453	LEU
1	L	472	ASN
1	L	477	LEU
1	L	478	ARG

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (164) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	84	HIS
1	A	85	GLN
1	A	139	ASN
1	A	205	GLN
1	A	282	ASN
1	A	330	GLN
1	A	335	ASN
1	A	374	ASN
1	A	388	ASN
1	A	406	ASN
1	A	437	GLN
1	A	450	HIS
1	A	484	ASN
1	B	82	HIS
1	B	85	GLN
1	B	228	ASN
1	B	250	GLN
1	B	330	GLN
1	B	335	ASN
1	B	374	ASN
1	B	388	ASN
1	B	406	ASN
1	B	424	HIS
1	C	56	ASN
1	C	57	HIS
1	C	82	HIS
1	C	84	HIS
1	C	85	GLN
1	C	135	ASN
1	C	189	HIS
1	C	205	GLN
1	C	221	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	225	ASN
1	C	228	ASN
1	C	250	GLN
1	C	258	HIS
1	C	335	ASN
1	C	374	ASN
1	C	388	ASN
1	C	391	HIS
1	C	406	ASN
1	C	484	ASN
1	D	57	HIS
1	D	85	GLN
1	D	135	ASN
1	D	209	HIS
1	D	225	ASN
1	D	228	ASN
1	D	250	GLN
1	D	282	ASN
1	D	330	GLN
1	D	335	ASN
1	D	349	ASN
1	D	374	ASN
1	D	390	ASN
1	D	391	HIS
1	D	406	ASN
1	D	484	ASN
1	D	494	ASN
1	E	56	ASN
1	E	82	HIS
1	E	84	HIS
1	E	85	GLN
1	E	209	HIS
1	E	254	ASN
1	E	258	HIS
1	E	335	ASN
1	E	374	ASN
1	E	391	HIS
1	E	406	ASN
1	E	463	GLN
1	E	472	ASN
1	F	8	ASN
1	F	82	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	84	HIS
1	F	85	GLN
1	F	139	ASN
1	F	189	HIS
1	F	225	ASN
1	F	228	ASN
1	F	298	HIS
1	F	330	GLN
1	F	335	ASN
1	F	388	ASN
1	F	406	ASN
1	F	437	GLN
1	F	494	ASN
1	G	57	HIS
1	G	82	HIS
1	G	85	GLN
1	G	135	ASN
1	G	139	ASN
1	G	225	ASN
1	G	250	GLN
1	G	335	ASN
1	G	374	ASN
1	G	388	ASN
1	G	406	ASN
1	G	484	ASN
1	G	494	ASN
1	H	84	HIS
1	H	85	GLN
1	H	135	ASN
1	H	189	HIS
1	H	228	ASN
1	H	335	ASN
1	H	374	ASN
1	H	388	ASN
1	H	391	HIS
1	H	437	GLN
1	I	56	ASN
1	I	82	HIS
1	I	85	GLN
1	I	189	HIS
1	I	205	GLN
1	I	228	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	254	ASN
1	I	330	GLN
1	I	364	ASN
1	I	388	ASN
1	I	390	ASN
1	I	406	ASN
1	I	484	ASN
1	J	40	GLN
1	J	85	GLN
1	J	189	HIS
1	J	228	ASN
1	J	298	HIS
1	J	335	ASN
1	J	364	ASN
1	J	388	ASN
1	J	406	ASN
1	J	414	GLN
1	J	494	ASN
1	K	40	GLN
1	K	56	ASN
1	K	57	HIS
1	K	82	HIS
1	K	84	HIS
1	K	85	GLN
1	K	209	HIS
1	K	225	ASN
1	K	297	GLN
1	K	335	ASN
1	K	364	ASN
1	K	374	ASN
1	K	406	ASN
1	K	437	GLN
1	L	57	HIS
1	L	84	HIS
1	L	85	GLN
1	L	205	GLN
1	L	225	ASN
1	L	335	ASN
1	L	349	ASN
1	L	364	ASN
1	L	374	ASN
1	L	388	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	L	390	ASN
1	L	406	ASN
1	L	424	HIS
1	L	472	ASN
1	L	484	ASN
1	L	494	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

12 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
2	ADP	A	1	-	22,29,29	1.50	3 (13%)	27,45,45	2.43	5 (18%)
2	ADP	B	2	-	22,29,29	1.20	2 (9%)	27,45,45	2.46	4 (14%)
2	ADP	C	3	-	22,29,29	1.34	3 (13%)	27,45,45	2.38	5 (18%)
2	ADP	D	4	-	22,29,29	1.85	4 (18%)	27,45,45	2.34	4 (14%)
2	ADP	E	5	-	22,29,29	1.90	3 (13%)	27,45,45	2.50	4 (14%)
2	ADP	F	502	-	22,29,29	1.25	2 (9%)	27,45,45	2.41	5 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
2	ADP	G	502	-	22,29,29	1.64	4 (18%)	27,45,45	2.38	5 (18%)
2	ADP	H	502	-	22,29,29	1.17	2 (9%)	27,45,45	2.44	4 (14%)
2	ADP	I	502	-	22,29,29	1.19	2 (9%)	27,45,45	2.44	5 (18%)
2	ADP	J	502	-	22,29,29	1.18	2 (9%)	27,45,45	2.42	5 (18%)
2	ADP	K	502	-	22,29,29	1.24	2 (9%)	27,45,45	2.40	5 (18%)
2	ADP	L	502	-	22,29,29	1.26	2 (9%)	27,45,45	2.39	5 (18%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
2	ADP	A	1	-	-	0/12/32/32	0/3/3/3
2	ADP	B	2	-	-	0/12/32/32	0/3/3/3
2	ADP	C	3	-	-	0/12/32/32	0/3/3/3
2	ADP	D	4	-	-	0/12/32/32	0/3/3/3
2	ADP	E	5	-	-	0/12/32/32	0/3/3/3
2	ADP	F	502	-	-	0/12/32/32	0/3/3/3
2	ADP	G	502	-	-	0/12/32/32	0/3/3/3
2	ADP	H	502	-	-	0/12/32/32	0/3/3/3
2	ADP	I	502	-	-	0/12/32/32	0/3/3/3
2	ADP	J	502	-	-	0/12/32/32	0/3/3/3
2	ADP	K	502	-	-	0/12/32/32	0/3/3/3
2	ADP	L	502	-	-	0/12/32/32	0/3/3/3

All (31) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	3	ADP	C5-N7	-2.12	1.32	1.39
2	A	1	ADP	C5-N7	-2.06	1.32	1.39
2	D	4	ADP	C5-N7	-2.02	1.32	1.39
2	G	502	ADP	PA-O5'	2.03	1.68	1.59
2	G	502	ADP	C2-N3	2.03	1.35	1.32
2	I	502	ADP	PB-O2B	2.15	1.62	1.54
2	E	5	ADP	C2-N3	2.26	1.36	1.32
2	F	502	ADP	PB-O2B	2.29	1.62	1.54
2	H	502	ADP	PB-O2B	2.34	1.63	1.54
2	D	4	ADP	C5'-C4'	2.35	1.59	1.51
2	L	502	ADP	PB-O2B	2.36	1.63	1.54
2	J	502	ADP	PB-O2B	2.49	1.63	1.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	C	3	ADP	PB-O2B	2.70	1.64	1.54
2	B	2	ADP	PB-O2B	2.73	1.64	1.54
2	K	502	ADP	PB-O2B	2.75	1.64	1.54
2	A	1	ADP	O4'-C1'	2.81	1.44	1.41
2	B	2	ADP	O4'-C1'	2.96	1.44	1.41
2	I	502	ADP	O4'-C1'	3.02	1.45	1.41
2	J	502	ADP	O4'-C1'	3.07	1.45	1.41
2	H	502	ADP	O4'-C1'	3.09	1.45	1.41
2	F	502	ADP	O4'-C1'	3.20	1.45	1.41
2	K	502	ADP	O4'-C1'	3.21	1.45	1.41
2	L	502	ADP	O4'-C1'	3.48	1.45	1.41
2	G	502	ADP	O4'-C1'	3.56	1.45	1.41
2	C	3	ADP	O4'-C1'	4.07	1.46	1.41
2	D	4	ADP	PB-O2B	4.47	1.70	1.54
2	E	5	ADP	PB-O2B	4.47	1.70	1.54
2	A	1	ADP	PB-O2B	4.86	1.72	1.54
2	G	502	ADP	PB-O2B	4.99	1.72	1.54
2	D	4	ADP	O4'-C1'	5.38	1.48	1.41
2	E	5	ADP	O4'-C1'	5.99	1.48	1.41

All (56) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	2	ADP	N3-C2-N1	-10.69	120.71	128.89
2	H	502	ADP	N3-C2-N1	-10.52	120.84	128.89
2	E	5	ADP	N3-C2-N1	-10.45	120.89	128.89
2	L	502	ADP	N3-C2-N1	-10.38	120.95	128.89
2	I	502	ADP	N3-C2-N1	-10.36	120.96	128.89
2	A	1	ADP	N3-C2-N1	-10.29	121.02	128.89
2	K	502	ADP	N3-C2-N1	-10.25	121.05	128.89
2	J	502	ADP	N3-C2-N1	-10.22	121.07	128.89
2	C	3	ADP	N3-C2-N1	-10.21	121.08	128.89
2	F	502	ADP	N3-C2-N1	-10.20	121.09	128.89
2	G	502	ADP	N3-C2-N1	-10.03	121.22	128.89
2	D	4	ADP	N3-C2-N1	-9.48	121.64	128.89
2	E	5	ADP	C4'-O4'-C1'	-4.80	104.45	109.72
2	D	4	ADP	C4'-O4'-C1'	-4.75	104.50	109.72
2	A	1	ADP	C4'-O4'-C1'	-4.22	105.08	109.72
2	I	502	ADP	C4'-O4'-C1'	-4.20	105.10	109.72
2	F	502	ADP	C4'-O4'-C1'	-4.15	105.16	109.72
2	K	502	ADP	C4'-O4'-C1'	-4.01	105.31	109.72
2	J	502	ADP	C4'-O4'-C1'	-4.01	105.32	109.72

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	2	ADP	C4'-O4'-C1'	-3.94	105.39	109.72
2	G	502	ADP	C4'-O4'-C1'	-3.90	105.44	109.72
2	H	502	ADP	C4'-O4'-C1'	-3.83	105.50	109.72
2	G	502	ADP	PA-O3A-PB	-3.79	119.97	132.67
2	L	502	ADP	C4'-O4'-C1'	-3.77	105.58	109.72
2	C	3	ADP	C4'-O4'-C1'	-3.75	105.60	109.72
2	A	1	ADP	PA-O3A-PB	-3.56	120.73	132.67
2	D	4	ADP	PA-O3A-PB	-3.54	120.80	132.67
2	J	502	ADP	PA-O3A-PB	-3.41	121.25	132.67
2	E	5	ADP	PA-O3A-PB	-3.32	121.53	132.67
2	I	502	ADP	PA-O3A-PB	-3.31	121.58	132.67
2	F	502	ADP	PA-O3A-PB	-3.24	121.81	132.67
2	C	3	ADP	PA-O3A-PB	-3.15	122.09	132.67
2	K	502	ADP	PA-O3A-PB	-3.14	122.12	132.67
2	B	2	ADP	PA-O3A-PB	-3.11	122.25	132.67
2	H	502	ADP	PA-O3A-PB	-3.10	122.29	132.67
2	L	502	ADP	PA-O3A-PB	-2.80	123.28	132.67
2	J	502	ADP	C4-C5-N7	-2.52	107.16	109.48
2	F	502	ADP	C4-C5-N7	-2.22	107.44	109.48
2	A	1	ADP	C4-C5-N7	-2.16	107.49	109.48
2	K	502	ADP	C4-C5-N7	-2.13	107.52	109.48
2	G	502	ADP	C4-C5-N7	-2.10	107.55	109.48
2	C	3	ADP	C4-C5-N7	-2.02	107.62	109.48
2	I	502	ADP	C4-C5-N7	-2.02	107.62	109.48
2	L	502	ADP	C4-C5-N7	-2.02	107.62	109.48
2	A	1	ADP	O3B-PB-O1B	2.17	117.58	110.58
2	L	502	ADP	O3B-PB-O1B	2.21	117.70	110.58
2	B	2	ADP	O3B-PB-O1B	2.24	117.79	110.58
2	G	502	ADP	O3B-PB-O1B	2.30	117.99	110.58
2	D	4	ADP	O3B-PB-O1B	2.36	118.19	110.58
2	C	3	ADP	O3B-PB-O1B	2.39	118.29	110.58
2	J	502	ADP	O3B-PB-O1B	2.42	118.37	110.58
2	I	502	ADP	O3B-PB-O1B	2.44	118.42	110.58
2	K	502	ADP	O3B-PB-O1B	2.44	118.43	110.58
2	H	502	ADP	O3B-PB-O1B	2.46	118.49	110.58
2	F	502	ADP	O3B-PB-O1B	2.48	118.56	110.58
2	E	5	ADP	O3B-PB-O1B	2.53	118.73	110.58

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

12 monomers are involved in 51 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	1	ADP	6	0
2	B	2	ADP	5	0
2	C	3	ADP	6	0
2	D	4	ADP	5	0
2	E	5	ADP	6	0
2	F	502	ADP	3	0
2	G	502	ADP	4	0
2	H	502	ADP	2	0
2	I	502	ADP	5	0
2	J	502	ADP	3	0
2	K	502	ADP	2	0
2	L	502	ADP	4	0

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

EDS was not executed - this section will therefore be empty.

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

EDS was not executed - this section will therefore be empty.

6.3 Carbohydrates

EDS was not executed - this section will therefore be empty.

6.4 Ligands

EDS was not executed - this section will therefore be empty.

6.5 Other polymers

EDS was not executed - this section will therefore be empty.