wwPDB EM Map/Model Validation Report (i)

Apr 10, 2016 – 01:57 PM BST

PDB ID	:	4BON
EMDB ID:	:	EMD-2378
Title	:	The structure and super-organization of acetylcholine receptor-rapsyn complexes class B
Authors	:	Zuber, B.; Unwin, N.
Deposited on	:	2013-05-21
Resolution	:	40.00 Å(reported)
Based on PDB ID	:	2BG9

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.
For rigid body fitted models, validation errors reported here could
stem from errors in the original structure(s) used in the fitting.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
http://wwpdb.org/validation/2016/EMValidationReportHelp

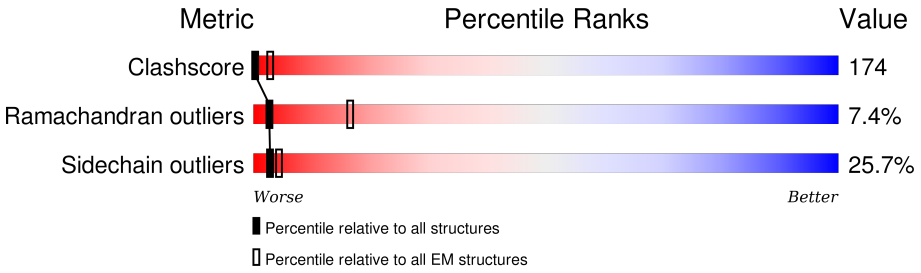
MolProbity	:	4.02b-467
Mogul	:	unknown
Percentile statistics	:	20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP)	:	trunk27241

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 40.00 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)	EM structures (#Entries)
Clashscore	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the 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%

Mol	Chain	Length	Quality of chain
1	A	461	6% 51% 20% • 20%
1	D	461	7% 51% 21% • 20%
2	B	493	5% 50% 19% • 25%
3	C	522	7% 43% 19% • 29%
4	E	505	6% 47% 18% • 27%

2 Entry composition

There are 4 unique types of molecules in this entry. The entry contains 14924 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 ACETYLCHOLINE RECEPTOR SUBUNIT ALPHA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	370	Total	C	N	O	S	0	0
			2991	1954	478	540	19		
1	D	370	Total	C	N	O	S	0	0
			2991	1954	478	540	19		

- Molecule 2 is a protein called ACETYLCHOLINE RECEPTOR BETA SUBUNIT.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	370	Total	C	N	O	S	0	0
			2972	1938	465	554	15		

- Molecule 3 is a protein called ACETYLCHOLINE RECEPTOR DELTA SUBUNIT.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	370	Total	C	N	O	S	0	1
			2983	1944	489	536	14		

- Molecule 4 is a protein called ACETYLCHOLINE RECEPTOR GAMMA SUBUNIT.

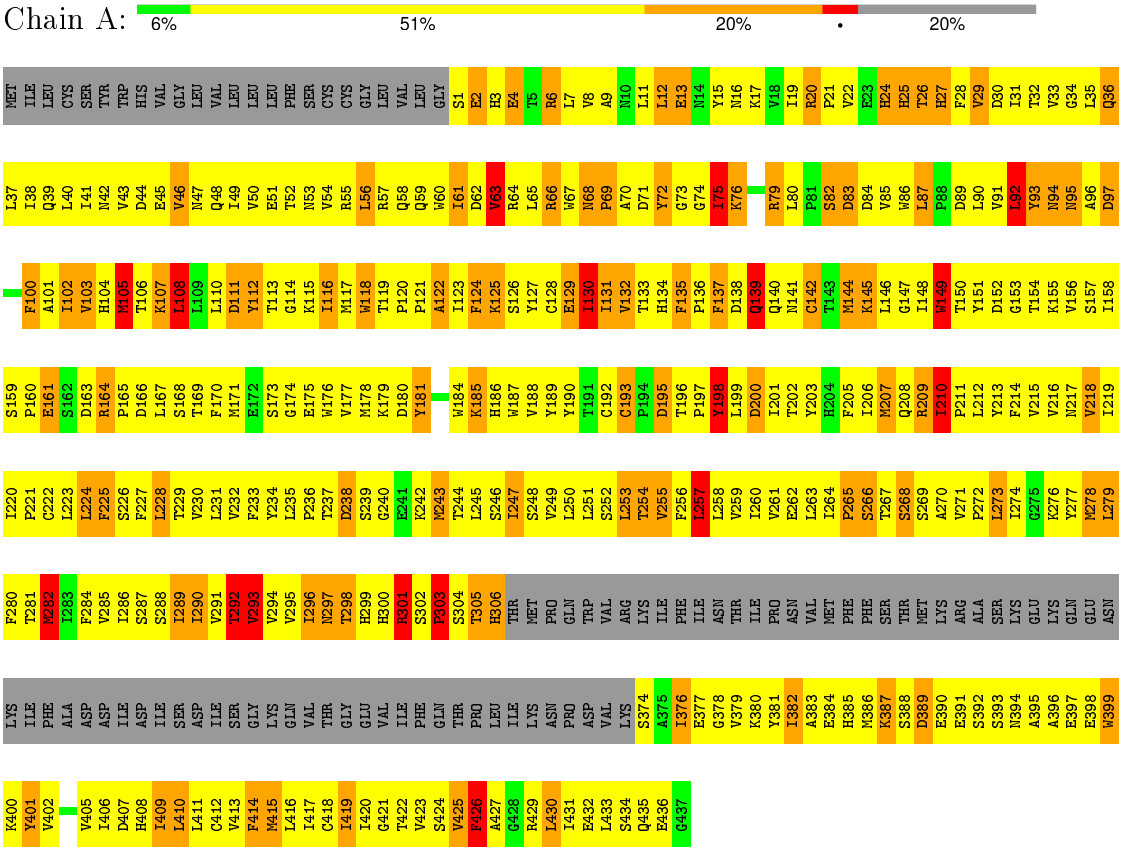
Mol	Chain	Residues	Atoms					AltConf	Trace
4	E	371	Total	C	N	O	S	0	1
			2987	1948	478	551	10		

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. 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. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

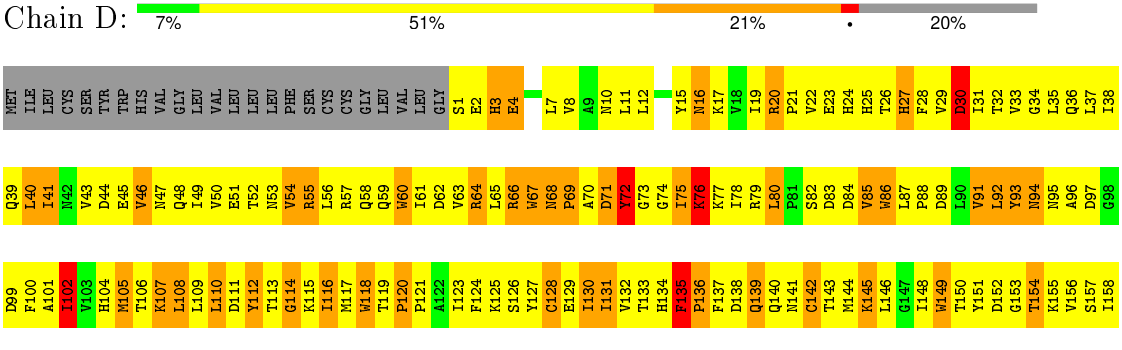
- Molecule 1: ACETYLCHOLINE RECEPTOR SUBUNIT ALPHA

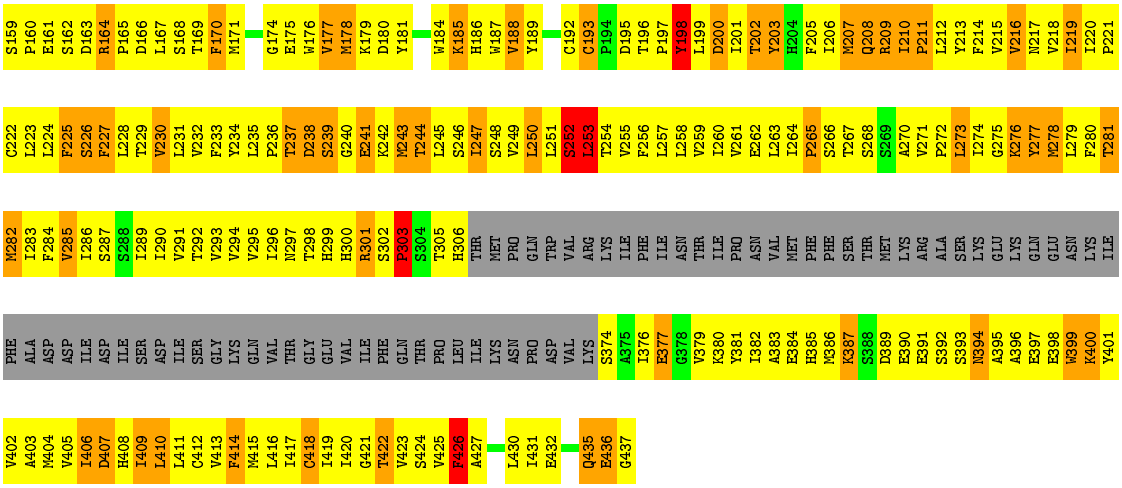
Chain A:



- Molecule 1: ACETYLCHOLINE RECEPTOR SUBUNIT ALPHA

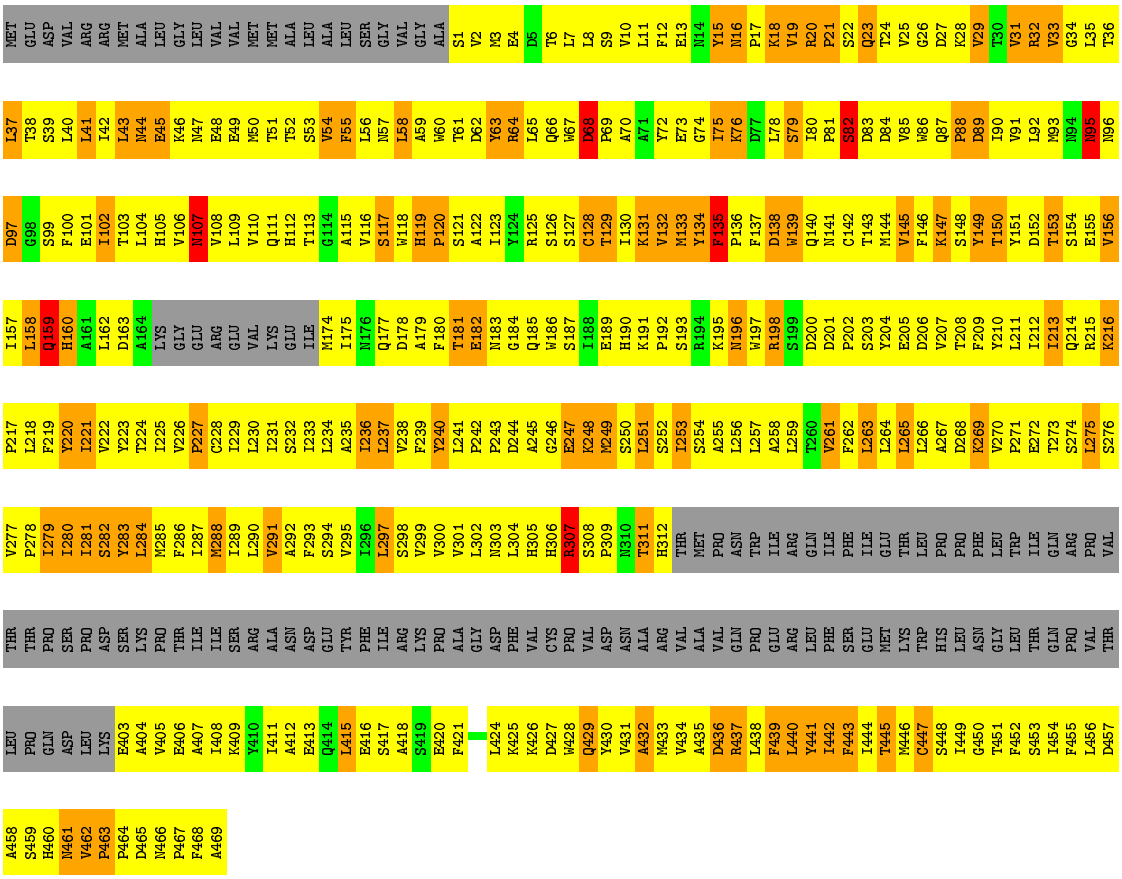
Chain D:





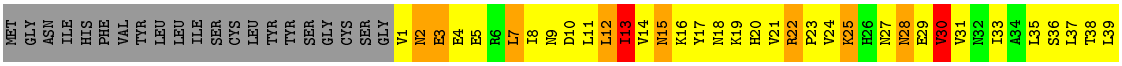
• Molecule 2: ACETYLCHOLINE RECEPTOR BETA SUBUNIT

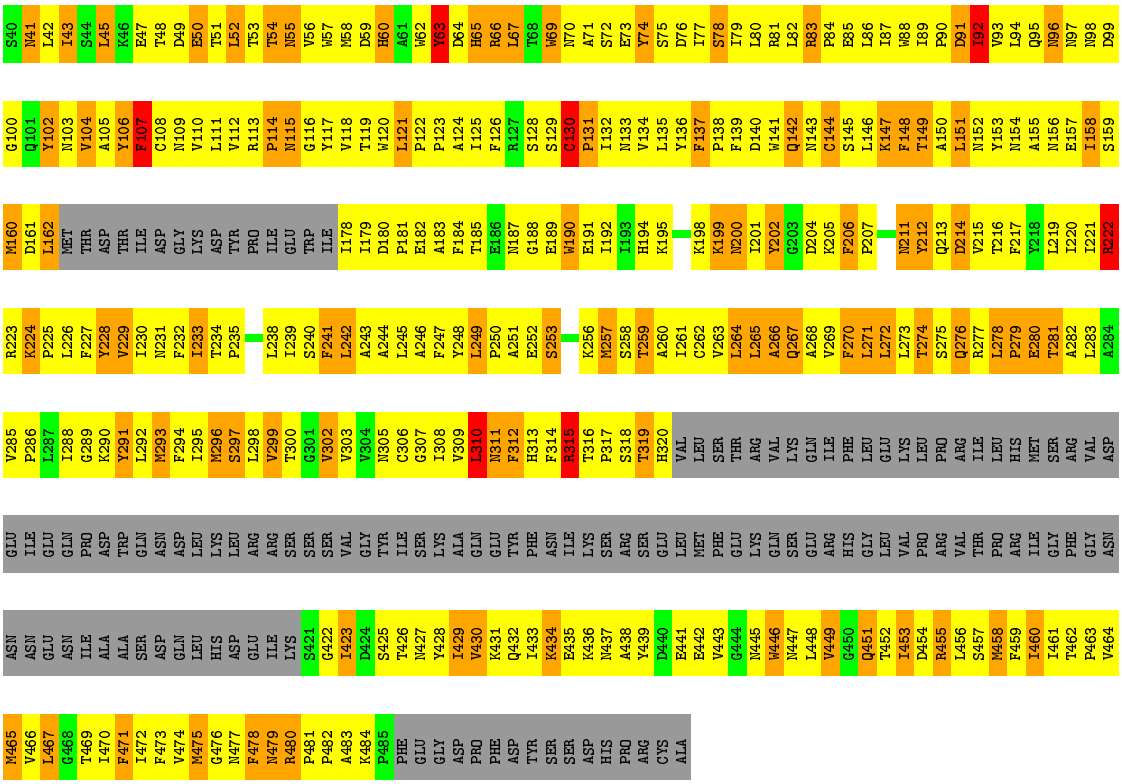
Chain B: 5% 50% 19% • 25%



• Molecule 3: ACETYLCHOLINE RECEPTOR DELTA SUBUNIT

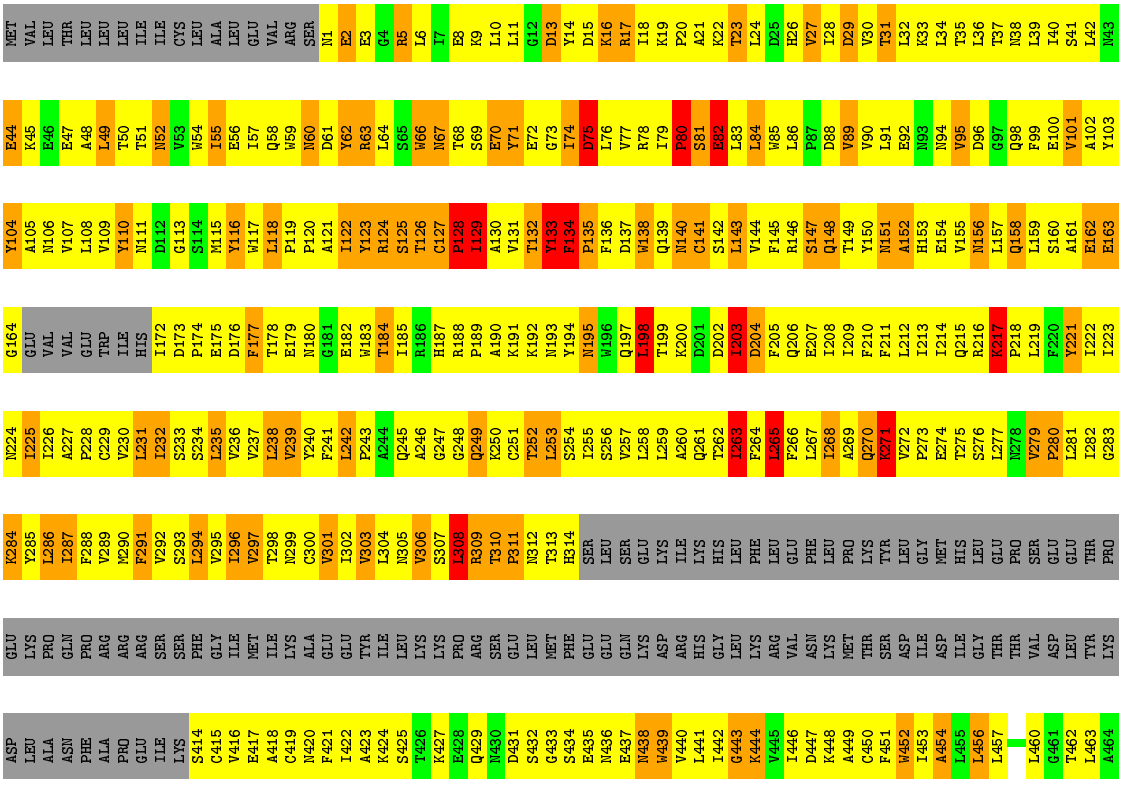
Chain C: 7% 43% 19% • 29%





• Molecule 4: ACETYLCHOLINE RECEPTOR GAMMA SUBUNIT

Chain E: 6% 47% 18% 27%




I465
F466
G469
H470
L471
N472
Q473
V474
P475
E476
F477
PRO
PHE
PRO
GLY
ASP
PRO
ARG
LYS
TYR
VAL
PRO

4 Experimental information (i)

Property	Value	Source
Reconstruction method	TOMOGRAPHY	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	Not provided	Depositor
Resolution determination method	Not provided	Depositor
CTF correction method	Not provided	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	3000	Depositor
Maximum defocus (nm)	6000	Depositor
Magnification	69000	Depositor
Image detector	GATAN US4000	Depositor

5 Model quality

5.1 Standard geometry

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >2	RMSZ	#$\|Z\|$ >2
1	A	0.72	3/3069 (0.1%)	1.03	10/4186 (0.2%)
1	D	0.74	2/3069 (0.1%)	1.01	6/4186 (0.1%)
2	B	0.76	2/3048 (0.1%)	0.99	4/4162 (0.1%)
3	C	0.74	2/3059 (0.1%)	1.03	9/4175 (0.2%)
4	E	0.73	6/3057 (0.2%)	1.01	9/4174 (0.2%)
All	All	0.74	15/15302 (0.1%)	1.01	38/20883 (0.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	D	0	2
3	C	0	2
All	All	0	4

All (15) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	129	THR	C-N	-8.42	1.14	1.34
1	A	118	TRP	CB-CG	7.92	1.64	1.50
1	D	208	GLN	C-N	7.56	1.51	1.34
4	E	8	GLU	CB-CG	6.52	1.64	1.52
3	C	265	LEU	C-N	6.19	1.48	1.34
3	C	130	CYS	C-N	6.02	1.45	1.34
1	A	222	CYS	CB-SG	-5.88	1.72	1.81
4	E	8	GLU	CG-CD	5.61	1.60	1.51
4	E	126	THR	C-N	-5.33	1.21	1.34
4	E	311	PRO	N-CD	5.33	1.55	1.47
4	E	306	VAL	C-N	-5.27	1.22	1.34
2	B	159	GLN	C-N	5.13	1.45	1.34
1	D	140	GLN	C-N	-5.10	1.22	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	E	134	PHE	C-N	5.06	1.43	1.34
1	A	122	ALA	C-N	-5.04	1.22	1.34

All (38) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	C	266	ALA	N-CA-CB	10.39	124.65	110.10
4	E	198	LEU	CA-CB-CG	7.20	131.86	115.30
3	C	315	ARG	NE-CZ-NH2	7.16	123.88	120.30
1	A	209	ARG	NE-CZ-NH2	7.10	123.85	120.30
4	E	263	ILE	CG1-CB-CG2	-6.67	96.73	111.40
3	C	92	ILE	O-C-N	6.42	132.97	122.70
1	D	209	ARG	NE-CZ-NH2	6.39	123.50	120.30
4	E	265	LEU	CA-CB-CG	6.32	129.84	115.30
3	C	190	TRP	O-C-N	6.30	132.78	122.70
1	D	253	LEU	CA-CB-CG	6.09	129.30	115.30
1	A	253	LEU	CA-CB-CG	6.04	129.19	115.30
1	A	149	TRP	CA-CB-CG	5.99	125.08	113.70
2	B	159	GLN	O-C-N	5.92	132.17	122.70
4	E	203	ILE	N-CA-C	-5.81	95.31	111.00
4	E	443	GLY	N-CA-C	5.79	127.59	113.10
3	C	67	LEU	CA-CB-CG	5.73	128.48	115.30
2	B	44	ASN	N-CA-C	-5.73	95.54	111.00
1	D	178	MET	CG-SD-CE	5.66	109.26	100.20
3	C	281	THR	O-C-N	5.60	131.66	122.70
4	E	238	LEU	N-CA-C	-5.51	96.13	111.00
1	D	410	LEU	CA-CB-CG	5.47	127.89	115.30
1	A	301	ARG	N-CA-C	5.45	125.71	111.00
1	D	128	CYS	CA-CB-SG	5.44	123.79	114.00
1	A	257	LEU	CB-CG-CD1	-5.43	101.78	111.00
2	B	297	LEU	CA-CB-CG	-5.41	102.86	115.30
4	E	141	CYS	CA-CB-SG	5.35	123.63	114.00
3	C	151	LEU	CA-CB-CG	5.29	127.47	115.30
1	D	102	ILE	CG1-CB-CG2	-5.29	99.77	111.40
1	A	92	LEU	CA-CB-CG	5.24	127.36	115.30
2	B	441	TYR	N-CA-C	-5.17	97.04	111.00
3	C	222	ARG	NE-CZ-NH1	5.14	122.87	120.30
3	C	190	TRP	CA-C-N	-5.13	105.90	117.20
1	A	108	LEU	CA-CB-CG	5.13	127.09	115.30
1	A	411	LEU	CA-CB-CG	5.12	127.08	115.30
4	E	308	LEU	CA-CB-CG	5.11	127.04	115.30
1	A	228	LEU	CA-CB-CG	5.10	127.04	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	E	134	PHE	C-N-CD	5.06	139.03	128.40
1	A	130	ILE	N-CA-C	-5.01	97.47	111.00

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	C	63	TYR	Sidechain
3	C	74	TYR	Sidechain
1	D	277	TYR	Sidechain
1	D	72	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	2991	0	3005	1066	0
1	D	2991	0	3006	1057	0
2	B	2972	0	2953	1081	0
3	C	2983	0	2987	1155	0
4	E	2987	0	2994	1100	0
All	All	14924	0	14945	5204	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 174.

All (5204) 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)
4:E:183:TRP:CB	4:E:216:ARG:HG2	1.33	1.56
2:B:134:TYR:CE1	2:B:213:ILE:HG13	1.44	1.49
1:A:167:LEU:HD12	1:A:178:MET:CB	1.43	1.46
1:A:167:LEU:CD1	1:A:178:MET:HB2	1.46	1.44
3:C:316:THR:CG2	3:C:447:ASN:HB3	1.53	1.36
3:C:316:THR:CG2	3:C:317:PRO:HD2	1.53	1.35

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:148:PHE:HB2	3:C:215:VAL:CG2	1.56	1.31
1:D:261:VAL:O	1:D:265:PRO:HD2	1.22	1.30
4:E:284:LYS:N	4:E:284:LYS:HE3	1.47	1.29
4:E:135:PRO:HG2	4:E:137:ASP:O	1.32	1.28
2:B:141:ASN:ND2	2:B:212:ILE:HG12	1.48	1.28
3:C:162:LEU:HD11	3:C:217:PHE:CE1	1.69	1.26
1:D:45:GLU:HG2	1:D:272:PRO:CG	1.63	1.26
4:E:183:TRP:HB3	4:E:216:ARG:CG	1.64	1.26
2:B:47:ASN:O	2:B:48:GLU:HG2	1.36	1.25
4:E:44:GLU:HG3	4:E:129:ILE:CG1	1.68	1.23
4:E:182:GLU:HB2	4:E:216:ARG:NH2	1.55	1.21
1:A:251:LEU:HD22	4:E:260:ALA:CB	1.69	1.21
1:D:64:ARG:HA	1:D:66:ARG:NH1	1.55	1.21
3:C:447:ASN:O	3:C:449:VAL:HG23	1.38	1.21
3:C:189:GLU:O	3:C:223:ARG:HG3	1.40	1.20
2:B:258:ALA:CB	3:C:265:LEU:HD22	1.72	1.20
1:D:92:LEU:HB3	1:D:95:ASN:HB2	1.22	1.19
1:A:41:ILE:HD11	1:A:51:GLU:OE1	1.43	1.19
3:C:445:ASN:HA	3:C:448:LEU:HG	1.22	1.19
1:D:255:VAL:O	1:D:259:VAL:HG23	1.41	1.19
1:D:35:LEU:CD1	1:D:54:VAL:HG11	1.70	1.18
4:E:132:THR:O	4:E:135:PRO:HD3	1.43	1.18
4:E:195:ASN:H	4:E:204:ASP:HB3	1.07	1.18
1:A:187:TRP:CZ2	1:A:196:THR:HG23	1.80	1.17
2:B:95:ASN:HB3	2:B:126:SER:HB2	1.27	1.17
2:B:425:LYS:HA	2:B:428:TRP:CD1	1.78	1.17
2:B:230:LEU:HA	2:B:233:ILE:HG13	1.19	1.17
4:E:241:PHE:HA	4:E:450:CYS:SG	1.84	1.17
3:C:311:ASN:O	3:C:315:ARG:HB3	1.45	1.17
1:A:134:HIS:C	1:A:136:PRO:HD2	1.64	1.16
4:E:59:TRP:C	4:E:60:ASN:HD22	1.49	1.15
3:C:97:ASN:ND2	3:C:146:LEU:HG	1.59	1.15
1:D:167:LEU:HD11	1:D:178:MET:HB3	1.21	1.15
4:E:44:GLU:CG	4:E:129:ILE:HB	1.74	1.15
1:D:102:ILE:HG13	4:E:98:GLN:NE2	1.59	1.15
4:E:311:PRO:HD2	4:E:440:VAL:HG13	1.24	1.15
1:D:135:PHE:HB2	1:D:209:ARG:HB3	1.24	1.15
1:A:137:PHE:O	1:A:435:GLN:HG3	1.44	1.15
4:E:236:VAL:HA	4:E:239:VAL:CG2	1.77	1.15
4:E:249:GLN:NE2	4:E:250:LYS:HE3	1.61	1.14
1:A:235:LEU:HD11	1:A:242:LYS:HE3	1.23	1.14

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:183:TRP:CB	4:E:216:ARG:CG	2.22	1.14
4:E:172:ILE:HG13	4:E:174:PRO:HD2	1.30	1.14
1:A:130:ILE:HD13	1:A:131:ILE:N	1.61	1.14
4:E:183:TRP:HB2	4:E:216:ARG:HG2	1.29	1.14
2:B:279:ILE:HG22	2:B:280:ILE:H	0.97	1.14
1:A:107:LYS:CE	2:B:150:THR:HG22	1.77	1.13
3:C:309:VAL:O	3:C:313:HIS:HB3	1.48	1.13
4:E:262:THR:OG1	4:E:265:LEU:HD12	1.48	1.13
4:E:44:GLU:HG3	4:E:129:ILE:CB	1.78	1.13
3:C:273:LEU:HA	3:C:276:GLN:HG2	1.17	1.13
4:E:91:LEU:HD13	4:E:145:PHE:HB3	1.20	1.13
1:D:250:LEU:HD13	1:D:296:ILE:HD13	1.31	1.12
1:D:43:VAL:HG13	1:D:49:ILE:O	1.48	1.12
4:E:107:VAL:HG13	4:E:117:TRP:HB2	1.25	1.12
1:D:145:LYS:CG	1:D:202:THR:HG23	1.78	1.12
1:A:165:PRO:HG2	1:A:168:SER:HB3	1.28	1.12
1:D:17:LYS:HG2	1:D:84:ASP:HA	1.26	1.12
2:B:134:TYR:CE1	2:B:213:ILE:CG1	2.33	1.12
2:B:37:LEU:HD23	2:B:179:ALA:HB3	1.26	1.12
4:E:271:LYS:HB2	4:E:271:LYS:HZ3	1.13	1.11
1:A:57:ARG:HA	1:A:119:THR:HG22	1.20	1.11
3:C:230:ILE:HG13	3:C:231:ASN:HD22	1.15	1.11
2:B:258:ALA:HB2	3:C:265:LEU:HD13	1.31	1.11
4:E:135:PRO:HB2	4:E:137:ASP:OD1	1.49	1.10
1:A:148:ILE:HD11	1:A:156:VAL:HG13	1.31	1.10
2:B:46:LYS:CB	2:B:278:PRO:HD2	1.81	1.10
1:D:45:GLU:HG2	1:D:272:PRO:HG2	1.25	1.10
2:B:160:HIS:NE2	2:B:207:VAL:HG11	1.66	1.10
4:E:44:GLU:HA	4:E:129:ILE:CD1	1.82	1.10
1:A:107:LYS:HE3	2:B:150:THR:O	1.52	1.10
1:A:145:LYS:HG3	1:A:202:THR:HG22	1.27	1.10
3:C:142:GLN:HG3	3:C:143:ASN:H	0.95	1.10
1:A:118:TRP:CD1	1:A:120:PRO:HD3	1.85	1.09
2:B:248:LYS:HD3	2:B:252:SER:HB3	1.11	1.09
3:C:77:ILE:CD1	3:C:80:LEU:HD13	1.82	1.09
1:D:296:ILE:HA	1:D:299:HIS:HB2	1.32	1.09
4:E:265:LEU:HD21	4:E:296:ILE:HD11	1.18	1.09
4:E:236:VAL:CA	4:E:239:VAL:HG23	1.83	1.09
1:D:167:LEU:HD11	1:D:178:MET:CB	1.83	1.09
4:E:20:PRO:HG2	4:E:28:ILE:HD12	1.35	1.09
1:A:251:LEU:HD13	4:E:260:ALA:HB2	1.30	1.09

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:134:TYR:H	2:B:279:ILE:HG12	1.17	1.09
1:D:35:LEU:HD23	1:D:164:ARG:HH12	1.09	1.09
4:E:47:GLU:HA	4:E:129:ILE:HD11	1.24	1.09
1:A:296:ILE:HA	1:A:299:HIS:HB2	1.28	1.09
1:A:38:ILE:O	1:A:39:GLN:HG3	1.50	1.09
2:B:223:TYR:O	2:B:227:PRO:HD3	1.50	1.09
2:B:306:HIS:HA	2:B:312:HIS:O	1.50	1.09
2:B:153:THR:HB	2:B:204:TYR:HB2	1.18	1.09
1:A:130:ILE:HD13	1:A:131:ILE:H	0.97	1.09
1:D:253:LEU:HD23	1:D:254:THR:N	1.68	1.08
2:B:46:LYS:HB2	2:B:278:PRO:HD2	1.16	1.08
1:D:65:LEU:HD23	1:D:110:LEU:HD22	1.35	1.08
4:E:249:GLN:HE22	4:E:250:LYS:HE3	1.01	1.08
4:E:242:LEU:HD11	4:E:253:LEU:HD21	1.35	1.08
1:D:145:LYS:C	1:D:146:LEU:HD12	1.74	1.08
3:C:190:TRP:CB	3:C:223:ARG:HB2	1.84	1.08
1:D:89:ASP:OD2	1:D:150:THR:HG22	1.53	1.08
1:A:20:ARG:HH11	1:A:20:ARG:CG	1.64	1.08
3:C:434:LYS:HD3	3:C:435:GLU:HG3	1.10	1.08
1:D:20:ARG:HH11	1:D:20:ARG:CG	1.66	1.08
1:A:137:PHE:CE1	1:A:210:ILE:HD12	1.88	1.08
3:C:316:THR:HG21	3:C:447:ASN:HB3	1.16	1.08
3:C:69:TRP:HZ2	3:C:112:VAL:HG11	1.12	1.07
4:E:236:VAL:HA	4:E:239:VAL:HG23	1.12	1.07
3:C:154:ASN:HB3	3:C:211:ASN:HB3	1.36	1.07
3:C:190:TRP:CD1	3:C:221:ILE:HD12	1.88	1.07
2:B:406:GLU:HA	2:B:409:LYS:HD2	1.30	1.07
1:D:145:LYS:HG3	1:D:202:THR:CG2	1.84	1.07
2:B:189:GLU:HG3	2:B:468:PHE:HB3	1.28	1.07
4:E:233:SER:O	4:E:237:VAL:HG23	1.54	1.07
3:C:246:ALA:O	3:C:250:PRO:HD3	1.55	1.07
3:C:60:HIS:CD2	3:C:92:ILE:HD13	1.89	1.07
3:C:93:VAL:HG11	3:C:151:LEU:HD13	1.25	1.06
1:A:38:ILE:CD1	1:A:55:ARG:HG3	1.84	1.06
3:C:316:THR:HG22	3:C:317:PRO:HD2	1.10	1.06
4:E:189:PRO:HD2	4:E:211:PHE:HB2	1.08	1.06
2:B:216:LYS:HE3	2:B:216:LYS:H	1.05	1.06
3:C:227:PHE:O	3:C:230:ILE:HG12	1.54	1.06
3:C:45:LEU:HD12	3:C:190:TRP:CE3	1.91	1.06
1:D:35:LEU:CG	1:D:54:VAL:HG11	1.84	1.06
2:B:134:TYR:HE1	2:B:213:ILE:CG1	1.68	1.06

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:318:SER:HB2	3:C:447:ASN:HD22	1.18	1.06
1:D:261:VAL:HA	1:D:264:ILE:HD12	1.08	1.06
1:D:29:VAL:HG12	1:D:60:TRP:CD1	1.90	1.06
2:B:9:SER:HA	2:B:12:PHE:CE1	1.90	1.06
3:C:69:TRP:HB3	3:C:73:GLU:HB2	1.38	1.05
1:A:63:VAL:O	1:A:66:ARG:HD2	1.56	1.05
4:E:94:ASN:HD22	4:E:125:SER:HB2	1.17	1.05
2:B:272:GLU:HA	2:B:275:LEU:HG	1.34	1.05
3:C:159:SER:HA	3:C:213:GLN:HG3	1.34	1.05
4:E:67:ASN:N	4:E:67:ASN:HD22	1.53	1.05
4:E:246:ALA:HB1	4:E:250:LYS:HG3	1.39	1.05
4:E:75:ASP:HB3	4:E:110:TYR:CE1	1.92	1.05
1:A:235:LEU:HA	2:B:306:HIS:CD2	1.92	1.05
4:E:183:TRP:HB3	4:E:216:ARG:HG2	1.05	1.05
2:B:409:LYS:HB3	3:C:426:THR:HG21	1.35	1.05
1:A:87:LEU:H	1:A:87:LEU:HD22	1.13	1.04
1:D:216:VAL:O	1:D:220:ILE:HG13	1.57	1.04
1:A:277:TYR:HA	1:A:280:PHE:CZ	1.92	1.04
3:C:251:ALA:CB	3:C:453:ILE:HD11	1.85	1.04
3:C:87:ILE:HD12	3:C:110:VAL:HB	1.07	1.04
1:D:131:ILE:HG13	1:D:133:THR:H	1.17	1.04
1:D:38:ILE:HA	1:D:169:THR:HG21	1.36	1.04
4:E:183:TRP:HB3	4:E:216:ARG:CD	1.87	1.04
3:C:130:CYS:SG	3:C:146:LEU:HD11	1.97	1.04
3:C:307:GLY:HA2	3:C:310:LEU:HD23	1.38	1.04
1:A:20:ARG:HH11	1:A:20:ARG:HG2	0.88	1.04
1:A:38:ILE:HD11	1:A:55:ARG:CG	1.87	1.04
3:C:271:LEU:HD11	3:C:303:VAL:HG22	1.04	1.04
1:A:79:ARG:CD	1:A:107:LYS:HD2	1.88	1.04
2:B:23:GLN:N	2:B:23:GLN:HE21	1.56	1.04
1:D:104:HIS:O	1:D:105:MET:SD	2.16	1.04
2:B:92:LEU:H	2:B:96:ASN:HB2	1.19	1.03
1:D:137:PHE:HB3	1:D:435:GLN:CG	1.87	1.03
1:D:137:PHE:HB3	1:D:435:GLN:CB	1.88	1.03
1:D:235:LEU:HD13	1:D:242:LYS:HE3	1.37	1.03
1:A:89:ASP:OD2	1:A:150:THR:HG22	1.58	1.03
2:B:37:LEU:HB3	2:B:179:ALA:HB3	1.37	1.03
2:B:269:LYS:HE3	2:B:270:VAL:CG2	1.86	1.03
2:B:443:PHE:O	2:B:447:CYS:SG	2.17	1.03
3:C:271:LEU:HD11	3:C:303:VAL:CG2	1.87	1.03
1:D:35:LEU:HG	1:D:54:VAL:HG11	1.41	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:20:ARG:HD3	2:B:20:ARG:H	1.21	1.03
4:E:27:VAL:HG12	4:E:153:HIS:C	1.78	1.03
3:C:18:ASN:CB	3:C:21:VAL:HB	1.89	1.03
4:E:470:HIS:NE2	4:E:474:VAL:HG23	1.74	1.03
1:A:121:PRO:HB2	2:B:149:TYR:CZ	1.93	1.03
1:D:187:TRP:CZ2	1:D:189:TYR:HB3	1.94	1.03
1:D:379:VAL:HA	1:D:382:ILE:HG13	1.37	1.03
1:D:7:LEU:HD13	1:D:70:ALA:HB1	1.41	1.03
2:B:37:LEU:HD23	2:B:179:ALA:CB	1.89	1.02
2:B:37:LEU:HA	2:B:54:VAL:HG12	1.06	1.02
2:B:56:LEU:CD2	2:B:103:THR:HG23	1.88	1.02
2:B:92:LEU:H	2:B:96:ASN:CB	1.72	1.02
1:D:104:HIS:C	1:D:105:MET:SD	2.38	1.02
3:C:102:TYR:HD1	3:C:102:TYR:O	1.43	1.02
2:B:238:VAL:HG13	2:B:248:LYS:NZ	1.75	1.02
1:A:252:SER:O	1:A:256:PHE:CD1	2.12	1.01
2:B:279:ILE:HG22	2:B:280:ILE:HD13	1.41	1.01
3:C:13:ILE:HD13	3:C:82:LEU:HD11	1.40	1.01
3:C:159:SER:HA	3:C:213:GLN:CG	1.89	1.01
3:C:316:THR:CG2	3:C:317:PRO:CD	2.37	1.01
2:B:68:ASP:HB3	2:B:69:PRO:CD	1.90	1.01
1:A:244:THR:O	1:A:247:ILE:HG22	1.59	1.01
4:E:56:GLU:HA	4:E:118:LEU:HG	1.41	1.01
1:A:304:SER:HB2	1:A:397:GLU:HG2	1.40	1.01
2:B:37:LEU:CD2	2:B:179:ALA:HB3	1.91	1.01
3:C:12:LEU:HD12	3:C:16:LYS:HG2	1.39	1.01
3:C:37:LEU:HB2	3:C:217:PHE:CE2	1.94	1.01
1:D:263:LEU:O	1:D:267:THR:HG22	1.59	1.01
1:D:412:CYS:O	1:D:416:LEU:HD23	1.60	1.01
4:E:27:VAL:HG12	4:E:154:GLU:CA	1.91	1.01
1:A:64:ARG:HA	1:A:66:ARG:HH11	1.22	1.01
2:B:224:THR:C	2:B:227:PRO:HD2	1.81	1.01
3:C:97:ASN:HB3	3:C:128:SER:HB3	1.42	1.01
3:C:30:VAL:HG22	3:C:158:ILE:N	1.76	1.01
1:D:43:VAL:HG22	1:D:50:VAL:HA	1.37	1.01
2:B:160:HIS:H	2:B:195:LYS:HZ3	1.08	1.01
3:C:266:ALA:O	3:C:270:PHE:CD1	2.14	1.01
1:D:432:GLU:HG2	1:D:435:GLN:NE2	1.74	1.01
4:E:129:ILE:HG22	4:E:133:TYR:CD2	1.96	1.01
1:D:20:ARG:HH11	1:D:20:ARG:HG2	0.87	1.01
4:E:470:HIS:NE2	4:E:474:VAL:CG2	2.24	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:248:LYS:CD	2:B:252:SER:HB3	1.90	1.00
4:E:224:ASN:O	4:E:228:PRO:HG3	1.60	1.00
1:A:274:ILE:HG12	1:A:277:TYR:CE1	1.96	1.00
2:B:279:ILE:HG22	2:B:280:ILE:N	1.74	1.00
1:A:20:ARG:HG2	1:A:20:ARG:NH1	1.67	1.00
3:C:273:LEU:HA	3:C:276:GLN:CG	1.92	1.00
2:B:130:ILE:HB	2:B:134:TYR:CD2	1.97	1.00
4:E:182:GLU:CB	4:E:216:ARG:HH21	1.73	1.00
2:B:405:VAL:O	2:B:408:ILE:HG22	1.60	1.00
3:C:271:LEU:CD1	3:C:303:VAL:HG22	1.92	1.00
3:C:316:THR:HG23	3:C:317:PRO:HD2	1.40	1.00
3:C:434:LYS:HD3	3:C:435:GLU:CG	1.92	1.00
1:D:106:THR:HG22	1:D:107:LYS:H	1.27	1.00
3:C:241:PHE:O	3:C:245:LEU:HG	1.59	1.00
3:C:65:HIS:H	3:C:65:HIS:CD2	1.72	1.00
4:E:28:ILE:HD11	4:E:60:ASN:O	1.61	1.00
1:D:170:PHE:HE2	1:D:176:TRP:NE1	1.59	0.99
1:A:41:ILE:HD11	1:A:51:GLU:CD	1.81	0.99
2:B:24:THR:HG22	2:B:25:VAL:H	1.26	0.99
1:D:35:LEU:HD23	1:D:164:ARG:NH1	1.77	0.99
1:A:303:PRO:HB2	1:A:400:LYS:HD3	1.44	0.99
2:B:438:LEU:HA	2:B:441:TYR:HB3	1.41	0.99
3:C:312:PHE:CE1	3:C:456:LEU:HD13	1.96	0.99
4:E:211:PHE:C	4:E:212:LEU:HD12	1.83	0.99
4:E:149:THR:HG23	4:E:150:TYR:H	1.25	0.99
4:E:250:LYS:HA	4:E:253:LEU:HB3	1.44	0.99
1:A:41:ILE:CD1	1:A:51:GLU:OE1	2.11	0.99
2:B:409:LYS:HD3	3:C:426:THR:OG1	1.63	0.99
2:B:254:SER:O	3:C:265:LEU:HD11	1.62	0.99
4:E:27:VAL:HG12	4:E:154:GLU:N	1.77	0.99
2:B:216:LYS:HD2	2:B:216:LYS:O	1.61	0.99
3:C:312:PHE:CZ	3:C:456:LEU:HD22	1.98	0.99
3:C:74:TYR:CD1	3:C:114:PRO:HB2	1.98	0.99
1:D:292:THR:HA	1:D:295:VAL:HG22	1.40	0.99
4:E:44:GLU:HA	4:E:129:ILE:HD12	1.41	0.99
4:E:47:GLU:HG2	4:E:129:ILE:HG12	1.43	0.99
1:A:274:ILE:HG12	1:A:277:TYR:CD1	1.98	0.98
3:C:472:ILE:HA	3:C:475:MET:HB3	1.44	0.98
4:E:59:TRP:HH2	4:E:107:VAL:HG11	1.25	0.98
4:E:152:ALA:HB3	4:E:204:ASP:O	1.61	0.98
4:E:34:LEU:HD12	4:E:210:PHE:CE2	1.98	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:95:ASN:HD21	1:D:128:CYS:HB3	1.24	0.98
3:C:66:ARG:HH11	3:C:66:ARG:HG2	1.28	0.98
2:B:230:LEU:CA	2:B:233:ILE:HG13	1.92	0.98
2:B:37:LEU:CA	2:B:54:VAL:HG12	1.93	0.98
3:C:52:LEU:HD21	3:C:130:CYS:HB2	1.45	0.98
1:D:187:TRP:HB2	1:D:199:LEU:HD23	1.45	0.98
2:B:133:MET:HA	2:B:279:ILE:HG23	1.46	0.98
4:E:304:LEU:O	4:E:308:LEU:HB2	1.63	0.98
2:B:56:LEU:HD22	2:B:103:THR:HG23	1.43	0.98
1:D:62:ASP:HB3	1:D:65:LEU:HD13	1.44	0.98
4:E:470:HIS:CE1	4:E:474:VAL:HG23	1.98	0.98
1:A:419:ILE:O	1:A:423:VAL:HG23	1.61	0.98
3:C:316:THR:HG22	3:C:317:PRO:CD	1.93	0.98
2:B:281:ILE:HG22	2:B:285:MET:N	1.79	0.98
3:C:74:TYR:HD1	3:C:114:PRO:HB2	1.29	0.98
1:A:107:LYS:CE	2:B:150:THR:O	2.12	0.98
3:C:115:ASN:HD22	3:C:115:ASN:H	1.04	0.98
1:A:251:LEU:HD22	4:E:260:ALA:HB1	1.42	0.98
1:D:229:THR:O	1:D:232:VAL:HB	1.64	0.98
4:E:255:ILE:HD11	4:E:304:LEU:HD13	1.46	0.98
1:D:20:ARG:NH1	1:D:20:ARG:HG2	1.65	0.97
2:B:131:LYS:HD3	2:B:132:VAL:H	1.27	0.97
3:C:149:THR:HG21	3:C:214:ASP:HB3	1.46	0.97
4:E:44:GLU:OE2	4:E:133:TYR:CD2	2.17	0.97
1:A:107:LYS:HE2	2:B:150:THR:HG22	1.01	0.97
3:C:102:TYR:CE1	3:C:106:TYR:HB3	1.99	0.97
2:B:267:ALA:O	2:B:271:PRO:HD3	1.63	0.97
3:C:299:VAL:O	3:C:303:VAL:HG23	1.65	0.97
1:D:48:GLN:HB3	1:D:130:ILE:CD1	1.94	0.97
1:A:89:ASP:O	1:A:149:TRP:HB3	1.65	0.97
4:E:90:VAL:HG22	4:E:95:VAL:HG11	1.44	0.97
1:D:160:PRO:HD3	1:D:185:LYS:HB3	1.42	0.97
4:E:235:LEU:HA	4:E:238:LEU:HG	1.44	0.97
1:A:261:VAL:O	1:A:265:PRO:HD3	1.63	0.97
2:B:92:LEU:N	2:B:96:ASN:HB2	1.79	0.97
1:D:48:GLN:HB3	1:D:130:ILE:HD12	0.98	0.97
3:C:69:TRP:HZ2	3:C:112:VAL:CG1	1.78	0.97
3:C:60:HIS:HB3	3:C:62:TRP:HZ3	1.28	0.97
3:C:97:ASN:OD1	3:C:128:SER:HB2	1.63	0.97
4:E:189:PRO:HD2	4:E:211:PHE:CB	1.94	0.97
1:D:48:GLN:CB	1:D:130:ILE:HD12	1.94	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:212:ILE:HD13	2:B:469:ALA:HA	1.44	0.96
3:C:149:THR:CG2	3:C:214:ASP:HB3	1.95	0.96
1:D:300:HIS:HA	1:D:306:HIS:O	1.65	0.96
1:D:47:ASN:O	1:D:48:GLN:HG2	1.66	0.96
1:D:32:THR:HB	1:D:59:GLN:HB3	1.43	0.96
1:A:133:THR:HA	1:A:274:ILE:HG22	1.47	0.96
1:A:64:ARG:HA	1:A:66:ARG:NH1	1.79	0.96
4:E:47:GLU:HA	4:E:129:ILE:CD1	1.95	0.96
2:B:230:LEU:HA	2:B:233:ILE:CG1	1.95	0.96
2:B:160:HIS:H	2:B:195:LYS:NZ	1.63	0.96
3:C:312:PHE:HE1	3:C:456:LEU:HD13	1.28	0.96
1:D:203:TYR:HD1	1:D:203:TYR:N	1.64	0.96
4:E:19:LYS:NZ	4:E:154:GLU:CB	2.27	0.96
1:A:189:TYR:HA	1:A:197:PRO:HD2	1.48	0.96
3:C:69:TRP:CZ2	3:C:112:VAL:HG11	2.00	0.96
3:C:142:GLN:HG3	3:C:143:ASN:N	1.80	0.96
1:D:249:VAL:HG13	4:E:259:LEU:HD21	1.45	0.96
4:E:19:LYS:NZ	4:E:154:GLU:HB3	1.80	0.96
1:A:108:LEU:HD13	1:A:118:TRP:HB2	1.47	0.96
3:C:245:LEU:O	3:C:249:LEU:HD13	1.63	0.96
1:A:3:HIS:O	1:A:7:LEU:HG	1.65	0.96
1:A:79:ARG:HD2	1:A:107:LYS:HD2	1.48	0.96
1:A:303:PRO:HB2	1:A:400:LYS:CD	1.95	0.96
2:B:269:LYS:HE3	2:B:270:VAL:HG22	1.47	0.95
3:C:48:THR:N	3:C:286:PRO:HD3	1.80	0.95
1:A:131:ILE:HD11	1:A:140:GLN:HG2	1.49	0.95
1:A:38:ILE:O	1:A:39:GLN:CG	2.15	0.95
3:C:122:PRO:HB2	3:C:123:PRO:HD2	1.43	0.95
4:E:36:LEU:CD1	4:E:173:ASP:OD1	2.12	0.95
4:E:188:ARG:HD2	4:E:211:PHE:O	1.65	0.95
4:E:67:ASN:H	4:E:67:ASN:HD22	1.01	0.95
1:D:109:LEU:O	1:D:116:ILE:HG22	1.65	0.95
2:B:56:LEU:O	2:B:120:PRO:HD2	1.64	0.95
2:B:141:ASN:ND2	2:B:212:ILE:CG1	2.28	0.95
2:B:220:TYR:CE2	3:C:279:PRO:HB2	2.00	0.95
3:C:249:LEU:N	3:C:250:PRO:HD2	1.81	0.95
1:D:110:LEU:HD12	1:D:111:ASP:H	1.28	0.95
1:A:43:VAL:HG22	1:A:50:VAL:HG22	1.47	0.95
3:C:29:GLU:O	3:C:156:ASN:HA	1.64	0.95
1:D:421:GLY:O	1:D:425:VAL:HG23	1.66	0.95
3:C:131:PRO:HG2	3:C:144:CYS:HA	1.49	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:121:PRO:HB2	2:B:149:TYR:CE2	2.02	0.95
1:A:416:LEU:O	1:A:419:ILE:HG22	1.66	0.95
2:B:308:SER:HB2	2:B:311:THR:HG22	1.47	0.95
1:D:261:VAL:O	1:D:265:PRO:CD	2.14	0.95
1:D:49:ILE:HG21	1:D:125:LYS:NZ	1.82	0.95
4:E:44:GLU:HG3	4:E:129:ILE:HG13	1.46	0.95
2:B:160:HIS:HB2	2:B:195:LYS:CE	1.96	0.95
1:D:282:MET:HG3	1:D:286:ILE:HD11	1.49	0.95
1:A:101:ALA:HB3	1:A:123:ILE:O	1.66	0.94
2:B:37:LEU:HA	2:B:54:VAL:CG1	1.95	0.94
3:C:316:THR:HG21	3:C:447:ASN:CB	1.97	0.94
4:E:27:VAL:CG1	4:E:153:HIS:C	2.35	0.94
1:A:107:LYS:HE2	2:B:150:THR:CG2	1.96	0.94
2:B:224:THR:O	2:B:227:PRO:HD2	1.66	0.94
2:B:68:ASP:HB3	2:B:69:PRO:HD3	1.44	0.94
1:A:187:TRP:CH2	1:A:189:TYR:HB3	2.02	0.94
1:A:227:PHE:HA	1:A:230:VAL:HB	1.49	0.94
1:D:416:LEU:HA	1:D:419:ILE:CG1	1.98	0.94
4:E:91:LEU:CD1	4:E:145:PHE:HB3	1.97	0.94
1:D:137:PHE:HB3	1:D:435:GLN:HB2	1.49	0.94
4:E:39:LEU:HD23	4:E:183:TRP:HZ2	1.32	0.94
4:E:250:LYS:HB3	4:E:253:LEU:HD23	1.49	0.94
1:D:102:ILE:HG13	4:E:98:GLN:HE22	1.25	0.94
3:C:113:ARG:HD2	3:C:117:TYR:HB3	1.50	0.94
2:B:440:LEU:O	2:B:443:PHE:HB3	1.68	0.94
2:B:45:GLU:CD	2:B:279:ILE:HD11	1.88	0.94
4:E:235:LEU:HD11	4:E:257:VAL:HG11	1.47	0.94
3:C:87:ILE:HD12	3:C:110:VAL:CB	1.98	0.94
3:C:9:ASN:O	3:C:12:LEU:HG	1.68	0.94
1:D:134:HIS:CE1	1:D:209:ARG:HD3	2.03	0.94
1:D:187:TRP:CZ3	1:D:189:TYR:CD2	2.56	0.94
1:D:296:ILE:HA	1:D:299:HIS:CB	1.96	0.94
1:D:7:LEU:O	1:D:11:LEU:HG	1.67	0.94
4:E:191:LYS:H	4:E:209:ILE:HG23	1.30	0.94
1:A:229:THR:O	1:A:233:PHE:CD1	2.21	0.94
3:C:148:PHE:HB2	3:C:215:VAL:HG21	1.47	0.94
1:D:45:GLU:CG	1:D:272:PRO:HG2	1.97	0.94
1:D:391:GLU:HA	1:D:394:ASN:OD1	1.68	0.94
1:A:38:ILE:HD11	1:A:55:ARG:HG3	0.96	0.93
3:C:38:THR:CG2	3:C:57:TRP:CE3	2.51	0.93
4:E:35:THR:HG23	4:E:175:GLU:OE1	1.68	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:36:LEU:CD2	4:E:51:THR:HG21	1.98	0.93
2:B:279:ILE:CG2	2:B:280:ILE:H	1.81	0.93
2:B:141:ASN:HD21	2:B:212:ILE:HG12	1.16	0.93
1:D:64:ARG:HA	1:D:66:ARG:HH11	1.16	0.93
3:C:18:ASN:HB3	3:C:21:VAL:HB	1.49	0.93
4:E:185:ILE:HG12	4:E:214:ILE:CG2	1.99	0.93
4:E:247:GLY:H	4:E:250:LYS:HZ1	0.96	0.93
1:A:129:GLU:O	1:A:142:CYS:SG	2.27	0.93
2:B:46:LYS:HB2	2:B:278:PRO:CD	1.99	0.93
4:E:110:TYR:HD1	4:E:111:ASN:H	1.09	0.93
1:A:135:PHE:N	1:A:136:PRO:CD	2.31	0.93
1:A:406:ILE:HA	1:A:409:ILE:HD11	1.49	0.93
4:E:195:ASN:HB3	4:E:205:PHE:H	1.32	0.93
4:E:226:ILE:O	4:E:230:VAL:HG23	1.66	0.93
1:D:78:ILE:HD12	1:D:78:ILE:O	1.67	0.93
1:A:242:LYS:HD3	2:B:312:HIS:ND1	1.82	0.93
1:D:187:TRP:CZ3	1:D:189:TYR:HD2	1.86	0.93
3:C:83:ARG:HB3	3:C:84:PRO:HD2	1.51	0.92
1:D:78:ILE:HD11	1:D:110:LEU:HG	1.51	0.92
1:A:136:PRO:HA	1:A:277:TYR:OH	1.69	0.92
1:D:110:LEU:HD12	1:D:111:ASP:N	1.83	0.92
1:A:238:ASP:HB3	2:B:306:HIS:CE1	2.03	0.92
3:C:141:TRP:CZ3	3:C:223:ARG:HB3	2.04	0.92
3:C:162:LEU:HD11	3:C:217:PHE:HE1	1.02	0.92
3:C:93:VAL:CG1	3:C:151:LEU:HD13	1.98	0.92
4:E:414:SER:N	4:E:416:VAL:HG13	1.84	0.92
3:C:37:LEU:HB2	3:C:217:PHE:HE2	1.31	0.92
3:C:42:LEU:HG	3:C:54:THR:HG23	1.51	0.92
1:D:167:LEU:CG	1:D:178:MET:HB2	1.98	0.92
1:A:41:ILE:CG1	1:A:51:GLU:HB3	1.99	0.92
1:D:132:VAL:HB	1:D:274:ILE:HA	1.51	0.92
1:A:229:THR:HA	1:A:232:VAL:HB	1.51	0.92
1:D:53:ASN:HB2	1:D:123:ILE:HG12	1.51	0.92
1:A:292:THR:HA	1:A:296:ILE:HD11	1.52	0.92
2:B:223:TYR:O	2:B:226:VAL:HG22	1.70	0.92
3:C:463:PRO:HA	3:C:466:VAL:HG23	1.50	0.92
3:C:94:LEU:HB2	3:C:98:ASN:HB2	1.51	0.92
1:A:145:LYS:HG3	1:A:202:THR:CG2	2.00	0.92
4:E:140:ASN:C	4:E:140:ASN:HD22	1.72	0.92
2:B:288:MET:O	2:B:291:VAL:HG12	1.69	0.92
2:B:95:ASN:HA	2:B:127:SER:H	1.34	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:245:LEU:HD21	4:E:255:ILE:HG13	1.52	0.92
4:E:135:PRO:CG	4:E:137:ASP:O	2.18	0.92
1:A:217:ASN:O	1:A:221:PRO:HD3	1.69	0.91
3:C:65:HIS:HD2	3:C:65:HIS:H	1.14	0.91
1:D:261:VAL:CA	1:D:264:ILE:HD12	1.99	0.91
3:C:229:VAL:O	3:C:233:ILE:HG12	1.70	0.91
1:D:38:ILE:CA	1:D:169:THR:HG21	1.99	0.91
1:D:94:ASN:HD22	1:D:94:ASN:C	1.72	0.91
1:D:7:LEU:CD1	1:D:70:ALA:HB1	2.00	0.91
2:B:241:LEU:HG	2:B:248:LYS:HB2	1.52	0.91
1:D:135:PHE:CB	1:D:209:ARG:HB3	2.00	0.91
1:D:31:ILE:HG22	1:D:158:ILE:HG23	1.52	0.91
3:C:434:LYS:CD	3:C:435:GLU:HG3	2.00	0.91
1:A:149:TRP:CH2	4:E:120:PRO:HD3	2.05	0.91
3:C:148:PHE:HB2	3:C:215:VAL:HG22	1.48	0.91
3:C:42:LEU:HD22	3:C:190:TRP:CH2	2.05	0.91
3:C:162:LEU:CD1	3:C:217:PHE:HE1	1.83	0.91
1:D:131:ILE:HD11	1:D:133:THR:HB	1.52	0.91
4:E:305:ASN:HA	4:E:308:LEU:HD12	1.52	0.91
1:A:292:THR:CA	1:A:296:ILE:HD11	1.99	0.91
1:A:298:THR:HA	1:A:301:ARG:HB3	1.52	0.91
1:A:41:ILE:HD11	1:A:51:GLU:HB3	1.50	0.91
3:C:162:LEU:HD21	3:C:217:PHE:HZ	1.36	0.91
1:D:187:TRP:CD1	1:D:197:PRO:O	2.24	0.91
3:C:144:CYS:SG	3:C:146:LEU:HD11	2.10	0.91
3:C:162:LEU:HB2	3:C:199:LYS:HB3	1.52	0.91
1:D:118:TRP:HE1	1:D:120:PRO:HB3	1.33	0.91
4:E:44:GLU:HG3	4:E:129:ILE:HB	1.38	0.91
4:E:174:PRO:HA	4:E:177:PHE:HB3	1.53	0.91
4:E:91:LEU:HB2	4:E:95:VAL:HG23	1.49	0.91
1:A:380:LYS:HB3	2:B:408:ILE:HD13	1.53	0.91
1:A:136:PRO:HG3	1:A:274:ILE:CG2	1.99	0.91
1:A:59:GLN:HE22	1:A:117:MET:CG	1.83	0.91
1:D:263:LEU:HD11	4:E:266:PHE:CZ	2.04	0.91
3:C:278:LEU:C	3:C:278:LEU:HD12	1.90	0.91
1:D:40:LEU:HD13	1:D:52:THR:HB	1.52	0.91
3:C:263:VAL:HG13	1:D:251:LEU:HD21	1.53	0.91
3:C:67:LEU:HB3	3:C:116:GLY:HA2	1.54	0.90
4:E:247:GLY:H	4:E:250:LYS:NZ	1.67	0.90
2:B:160:HIS:HB2	2:B:195:LYS:HE2	1.52	0.90
3:C:145:SER:C	3:C:146:LEU:HD12	1.90	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:67:LEU:HD21	3:C:112:VAL:HG13	1.52	0.90
4:E:59:TRP:CH2	4:E:107:VAL:HG11	2.06	0.90
1:A:274:ILE:CG1	1:A:277:TYR:CD1	2.55	0.90
3:C:192:ILE:HD12	3:C:219:LEU:HD11	1.53	0.90
2:B:9:SER:HA	2:B:12:PHE:CD1	2.05	0.90
3:C:38:THR:CG2	3:C:57:TRP:HE3	1.85	0.90
1:D:416:LEU:HA	1:D:419:ILE:HG13	1.53	0.90
1:D:92:LEU:HD13	1:D:146:LEU:HG	1.53	0.90
4:E:436:ASN:HA	4:E:439:TRP:HE1	1.34	0.90
2:B:131:LYS:HB3	2:B:133:MET:HG3	1.53	0.90
3:C:143:ASN:OD1	3:C:220:ILE:HB	1.70	0.90
3:C:195:LYS:HE3	3:C:217:PHE:HB3	1.53	0.90
1:D:187:TRP:CH2	1:D:189:TYR:HB3	2.07	0.90
1:A:89:ASP:HB2	1:A:149:TRP:CD1	2.07	0.90
1:D:28:PHE:HD2	1:D:157:SER:HB3	1.36	0.90
1:D:41:ILE:HD12	1:D:51:GLU:O	1.72	0.90
4:E:129:ILE:HA	4:E:133:TYR:HB2	1.53	0.90
4:E:182:GLU:HB2	4:E:216:ARG:HH21	0.78	0.90
4:E:235:LEU:HD11	4:E:257:VAL:CG1	2.01	0.90
1:A:142:CYS:HB2	1:A:205:PHE:HB2	1.53	0.90
3:C:266:ALA:HB1	3:C:270:PHE:CZ	2.07	0.90
4:E:195:ASN:N	4:E:204:ASP:HB3	1.86	0.90
1:A:187:TRP:CE2	1:A:196:THR:HG23	2.05	0.90
1:A:279:LEU:HA	1:A:282:MET:HB2	1.52	0.90
4:E:71:TYR:HD1	4:E:111:ASN:HB2	1.36	0.90
2:B:152:ASP:HB3	2:B:203:SER:HB3	1.54	0.89
1:A:256:PHE:CE1	2:B:261:VAL:HG23	2.07	0.89
3:C:312:PHE:HZ	3:C:456:LEU:HD22	1.34	0.89
3:C:58:MET:SD	3:C:92:ILE:CD1	2.59	0.89
1:D:253:LEU:HD23	1:D:254:THR:H	1.29	0.89
2:B:409:LYS:HB3	3:C:426:THR:CG2	2.00	0.89
2:B:144:MET:CE	2:B:191:LYS:HE3	2.02	0.89
3:C:132:ILE:O	3:C:136:TYR:HB2	1.70	0.89
1:D:250:LEU:HA	1:D:253:LEU:HD22	1.54	0.89
2:B:75:ILE:CD1	2:B:78:LEU:HD13	2.01	0.89
1:A:252:SER:HB3	2:B:257:LEU:HD13	1.52	0.89
3:C:316:THR:HG22	3:C:447:ASN:HB3	1.52	0.89
4:E:31:THR:O	4:E:32:LEU:HD23	1.72	0.89
2:B:279:ILE:CG2	2:B:280:ILE:HD13	2.02	0.89
3:C:142:GLN:CG	3:C:143:ASN:H	1.77	0.89
3:C:13:ILE:O	3:C:17:TYR:HB3	1.73	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:173:ASP:OD2	4:E:212:LEU:HD23	1.69	0.89
1:D:170:PHE:CE2	1:D:176:TRP:NE1	2.40	0.89
4:E:36:LEU:HD23	4:E:51:THR:HG21	1.55	0.89
4:E:472:ASN:O	4:E:476:GLU:HG3	1.70	0.89
1:A:265:PRO:HA	1:A:268:SER:HB3	1.53	0.89
1:A:250:LEU:HD11	1:A:296:ILE:HG21	1.52	0.89
4:E:59:TRP:HH2	4:E:107:VAL:CG1	1.84	0.89
4:E:242:LEU:CD1	4:E:253:LEU:HD21	2.02	0.89
4:E:195:ASN:HB3	4:E:205:PHE:N	1.87	0.89
4:E:142:SER:OG	4:E:209:ILE:HD11	1.72	0.89
4:E:222:ILE:O	4:E:226:ILE:HG13	1.71	0.89
1:A:87:LEU:HD22	1:A:87:LEU:N	1.88	0.89
2:B:131:LYS:CD	2:B:132:VAL:H	1.85	0.89
3:C:452:THR:O	3:C:455:ARG:HG2	1.73	0.89
1:A:224:LEU:HG	1:A:225:PHE:N	1.88	0.88
2:B:458:ALA:O	2:B:462:VAL:HG23	1.74	0.88
2:B:48:GLU:HB2	2:B:128:CYS:O	1.73	0.88
3:C:110:VAL:HG13	3:C:120:TRP:HB2	1.52	0.88
1:D:55:ARG:HA	1:D:120:PRO:O	1.71	0.88
3:C:439:TYR:O	3:C:443:VAL:HG23	1.73	0.88
1:A:221:PRO:HA	1:A:224:LEU:HB3	1.53	0.88
3:C:162:LEU:HD21	3:C:217:PHE:CZ	2.07	0.88
1:D:239:SER:O	1:D:242:LYS:HG2	1.72	0.88
1:D:283:ILE:HA	1:D:286:ILE:HD12	1.53	0.88
4:E:132:THR:O	4:E:134:PHE:N	2.05	0.88
1:D:303:PRO:HD2	1:D:400:LYS:HD3	1.54	0.88
2:B:135:PHE:HB2	2:B:279:ILE:HD13	1.55	0.88
3:C:475:MET:O	3:C:478:PHE:CE1	2.26	0.88
1:D:227:PHE:O	1:D:230:VAL:HG12	1.74	0.88
1:D:287:SER:HA	1:D:290:ILE:CD1	2.01	0.88
4:E:141:CYS:HB3	4:E:212:LEU:HB2	1.54	0.88
2:B:226:VAL:HG22	2:B:227:PRO:HD3	1.56	0.88
2:B:436:ASP:O	2:B:440:LEU:HD12	1.73	0.88
3:C:251:ALA:HB2	3:C:453:ILE:HD11	1.53	0.88
3:C:453:ILE:HG23	3:C:454:ASP:N	1.87	0.88
4:E:99:PHE:HB3	4:E:102:ALA:HB3	1.55	0.88
4:E:284:LYS:O	4:E:287:ILE:HG23	1.72	0.88
1:A:33:VAL:CG2	1:A:158:ILE:HG12	2.03	0.88
1:A:278:MET:O	1:A:281:THR:HG22	1.73	0.88
3:C:273:LEU:CA	3:C:276:GLN:HG2	2.03	0.88
3:C:302:VAL:O	3:C:306:CYS:SG	2.32	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:42:LEU:HG	3:C:54:THR:CG2	2.04	0.88
4:E:152:ALA:H	4:E:205:PHE:HD1	1.18	0.88
1:D:245:LEU:CD2	4:E:255:ILE:HG21	2.04	0.88
1:D:238:ASP:HB3	4:E:308:LEU:CD2	2.03	0.88
1:A:274:ILE:CG1	1:A:277:TYR:HD1	1.87	0.88
2:B:131:LYS:NZ	2:B:132:VAL:HB	1.88	0.88
2:B:307:ARG:O	2:B:307:ARG:HG2	1.70	0.88
3:C:111:LEU:HB3	3:C:119:THR:OG1	1.74	0.88
3:C:38:THR:HG22	3:C:57:TRP:CE3	2.08	0.88
1:D:203:TYR:CD1	1:D:203:TYR:N	2.34	0.88
4:E:31:THR:HB	4:E:58:GLN:HB2	1.56	0.88
1:D:17:LYS:CG	1:D:84:ASP:HA	2.04	0.88
2:B:90:ILE:HG23	2:B:147:LYS:H	1.38	0.88
2:B:216:LYS:HE3	2:B:216:LYS:N	1.87	0.88
4:E:1:ASN:HD22	4:E:69:SER:N	1.72	0.88
1:A:251:LEU:HD22	4:E:260:ALA:HB3	1.52	0.88
1:D:259:VAL:HG13	1:D:262:GLU:OE1	1.73	0.88
4:E:44:GLU:OE2	4:E:133:TYR:HD2	1.55	0.88
3:C:69:TRP:CE3	3:C:73:GLU:HB3	2.09	0.88
1:A:230:VAL:HG13	1:A:414:PHE:HZ	1.39	0.87
2:B:258:ALA:HB3	3:C:265:LEU:HD22	1.56	0.87
1:A:298:THR:HG23	1:A:301:ARG:HD3	1.56	0.87
2:B:131:LYS:HD3	2:B:132:VAL:N	1.88	0.87
1:A:252:SER:OG	2:B:257:LEU:HD22	1.73	0.87
3:C:230:ILE:CG1	3:C:231:ASN:HD22	1.88	0.87
1:A:134:HIS:C	1:A:136:PRO:CD	2.42	0.87
1:A:235:LEU:HA	2:B:306:HIS:NE2	1.89	0.87
3:C:80:LEU:O	3:C:112:VAL:HB	1.75	0.87
4:E:311:PRO:HG2	4:E:440:VAL:HG22	1.57	0.87
1:A:131:ILE:HD11	1:A:140:GLN:CG	2.04	0.87
2:B:256:LEU:CD2	2:B:298:SER:HB2	2.04	0.87
4:E:94:ASN:HB3	4:E:125:SER:HB3	1.56	0.87
1:D:189:TYR:HA	1:D:197:PRO:HD2	1.54	0.87
1:D:261:VAL:HA	1:D:264:ILE:CD1	2.02	0.87
4:E:107:VAL:HG13	4:E:117:TRP:CB	2.05	0.87
3:C:7:LEU:HD23	3:C:10:ASP:HB2	1.54	0.87
3:C:180:ASP:N	3:C:195:LYS:HG2	1.89	0.87
2:B:407:ALA:O	2:B:411:ILE:HG13	1.74	0.87
1:A:145:LYS:C	1:A:146:LEU:HD12	1.95	0.87
1:A:388:SER:O	1:A:391:GLU:HB3	1.75	0.87
1:A:59:GLN:NE2	1:A:117:MET:SD	2.48	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:274:SER:O	2:B:278:PRO:HD3	1.74	0.87
3:C:472:ILE:HB	3:C:475:MET:SD	2.15	0.87
4:E:91:LEU:HD13	4:E:145:PHE:CB	2.03	0.87
1:A:41:ILE:CD1	1:A:51:GLU:HB3	2.04	0.87
2:B:142:CYS:O	2:B:210:TYR:HD1	1.57	0.87
1:D:37:LEU:HD12	1:D:53:ASN:O	1.75	0.87
4:E:172:ILE:HG13	4:E:174:PRO:CD	2.03	0.87
2:B:23:GLN:NE2	2:B:23:GLN:N	2.21	0.87
3:C:475:MET:HG2	3:C:476:GLY:N	1.89	0.87
4:E:19:LYS:HZ2	4:E:154:GLU:HB3	1.39	0.87
1:D:379:VAL:HA	1:D:382:ILE:CG1	2.05	0.87
1:A:192:CYS:SG	1:A:193:CYS:N	2.47	0.86
1:A:426:PHE:HD1	1:A:427:ALA:N	1.71	0.86
3:C:159:SER:CA	3:C:213:GLN:HG3	2.04	0.86
1:D:89:ASP:O	1:D:149:TRP:HB3	1.74	0.86
3:C:148:PHE:CB	3:C:215:VAL:CG2	2.48	0.86
4:E:189:PRO:CD	4:E:211:PHE:HB2	2.00	0.86
4:E:283:GLY:O	4:E:287:ILE:HG22	1.74	0.86
3:C:93:VAL:HG11	3:C:151:LEU:CD1	2.05	0.86
4:E:178:THR:HG22	4:E:180:ASN:H	1.40	0.86
1:A:45:GLU:HB2	1:A:209:ARG:NH1	1.90	0.86
2:B:459:SER:O	2:B:463:PRO:HD2	1.73	0.86
3:C:155:ALA:HB2	3:C:211:ASN:HA	1.56	0.86
3:C:58:MET:SD	3:C:92:ILE:HD11	2.15	0.86
1:D:259:VAL:HA	1:D:262:GLU:CD	1.96	0.86
2:B:421:PHE:HA	2:B:424:LEU:HB2	1.56	0.86
1:D:78:ILE:HD12	1:D:110:LEU:HB3	1.56	0.86
4:E:311:PRO:HD2	4:E:440:VAL:CG1	2.04	0.86
2:B:409:LYS:CB	3:C:426:THR:HG21	2.05	0.86
2:B:23:GLN:H	2:B:23:GLN:NE2	1.74	0.86
3:C:251:ALA:HB1	3:C:453:ILE:HD11	1.56	0.86
3:C:97:ASN:HD21	3:C:146:LEU:HG	1.34	0.86
1:D:236:PRO:HB3	1:D:299:HIS:HE2	1.40	0.86
1:A:41:ILE:HD11	1:A:51:GLU:CB	2.04	0.86
2:B:201:ASP:OD1	2:B:202:PRO:HD2	1.75	0.86
2:B:141:ASN:HA	2:B:211:LEU:O	1.74	0.86
1:A:245:LEU:HD13	2:B:250:SER:HB2	1.55	0.86
2:B:272:GLU:HA	2:B:275:LEU:CG	2.06	0.86
1:D:187:TRP:HB2	1:D:199:LEU:CD2	2.05	0.86
1:D:137:PHE:CB	1:D:435:GLN:HB2	2.03	0.86
3:C:311:ASN:O	3:C:315:ARG:CB	2.24	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:45:GLU:O	1:D:130:ILE:HG13	1.75	0.86
1:D:166:ASP:HB2	1:D:181:TYR:CB	2.05	0.86
4:E:240:TYR:CD2	4:E:453:ILE:HG12	2.11	0.86
1:D:160:PRO:HD3	1:D:185:LYS:CB	2.06	0.86
1:D:419:ILE:O	1:D:423:VAL:HG23	1.76	0.86
1:D:46:VAL:HG22	1:D:271:VAL:HA	1.55	0.85
4:E:44:GLU:O	4:E:129:ILE:HG13	1.75	0.85
2:B:238:VAL:HG13	2:B:248:LYS:HZ1	1.36	0.85
1:A:149:TRP:CZ2	4:E:120:PRO:HD3	2.12	0.85
1:A:35:LEU:HD21	1:A:37:LEU:HD23	1.58	0.85
1:D:419:ILE:HD12	1:D:420:ILE:N	1.91	0.85
4:E:149:THR:HG23	4:E:150:TYR:N	1.89	0.85
3:C:12:LEU:HD12	3:C:16:LYS:CG	2.06	0.85
4:E:433:GLY:O	4:E:436:ASN:HB2	1.76	0.85
1:A:188:VAL:O	1:A:197:PRO:HB2	1.76	0.85
1:A:15:TYR:OH	1:A:84:ASP:HB3	1.76	0.85
3:C:38:THR:OG1	3:C:178:ILE:HD13	1.76	0.85
3:C:63:TYR:CE1	3:C:116:GLY:HA3	2.11	0.85
1:A:107:LYS:C	1:A:108:LEU:HD23	1.96	0.85
1:A:397:GLU:O	1:A:400:LYS:HB2	1.76	0.85
1:A:57:ARG:HD3	1:A:161:GLU:HG2	1.57	0.85
3:C:56:VAL:HG13	3:C:126:PHE:HE2	1.42	0.85
3:C:69:TRP:HB3	3:C:73:GLU:CB	2.05	0.85
1:A:16:ASN:HB2	1:A:19:ILE:HD12	1.59	0.85
4:E:122:ILE:H	4:E:122:ILE:HD13	1.38	0.85
4:E:268:ILE:HG13	4:E:269:ALA:N	1.91	0.85
1:A:148:ILE:HD11	1:A:156:VAL:CG1	2.05	0.85
1:D:257:LEU:HD12	1:D:258:LEU:N	1.92	0.85
1:D:17:LYS:HG2	1:D:84:ASP:CA	2.04	0.85
1:D:107:LYS:NZ	4:E:149:THR:HA	1.91	0.85
2:B:198:ARG:HG3	2:B:198:ARG:HH11	1.41	0.85
2:B:226:VAL:CG2	2:B:227:PRO:HD3	2.07	0.85
4:E:246:ALA:HB1	4:E:250:LYS:CG	2.07	0.85
1:D:252:SER:CB	4:E:259:LEU:HD22	2.07	0.85
2:B:152:ASP:HB3	2:B:203:SER:CB	2.06	0.85
3:C:241:PHE:CZ	1:D:293:VAL:HG22	2.12	0.85
1:D:30:ASP:O	1:D:60:TRP:HB2	1.74	0.85
1:D:432:GLU:HG2	1:D:435:GLN:HE21	1.40	0.85
1:A:128:CYS:HB3	1:A:144:MET:CE	2.07	0.84
1:A:43:VAL:HG13	1:A:50:VAL:HG22	1.59	0.84
1:A:87:LEU:H	1:A:87:LEU:CD2	1.89	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:229:THR:HA	1:D:232:VAL:CG2	2.07	0.84
4:E:110:TYR:HD1	4:E:111:ASN:N	1.74	0.84
3:C:180:ASP:H	3:C:195:LYS:CB	1.90	0.84
1:D:245:LEU:HD21	4:E:255:ILE:HG21	1.57	0.84
1:D:86:TRP:CD2	1:D:86:TRP:O	2.30	0.84
4:E:148:GLN:HE21	4:E:148:GLN:HA	1.42	0.84
3:C:289:GLY:O	3:C:293:MET:HE2	1.77	0.84
3:C:35:LEU:HD22	3:C:215:VAL:HG11	1.59	0.84
1:D:284:PHE:CE2	1:D:424:SER:HB3	2.12	0.84
4:E:216:ARG:O	4:E:217:LYS:CG	2.25	0.84
4:E:262:THR:CB	4:E:265:LEU:HD12	2.06	0.84
2:B:132:VAL:O	2:B:279:ILE:HG23	1.77	0.84
2:B:91:VAL:HA	2:B:96:ASN:ND2	1.91	0.84
3:C:30:VAL:HG11	3:C:159:SER:CB	2.07	0.84
3:C:83:ARG:O	3:C:87:ILE:HG13	1.78	0.84
1:D:167:LEU:CD1	1:D:178:MET:CB	2.54	0.84
4:E:197:GLN:HG2	4:E:198:LEU:H	1.41	0.84
1:A:148:ILE:CG2	1:A:198:TYR:HB2	2.06	0.84
2:B:144:MET:HE3	2:B:191:LYS:HE3	1.57	0.84
3:C:102:TYR:CD1	3:C:102:TYR:O	2.28	0.84
3:C:31:VAL:HG11	3:C:88:TRP:HH2	1.40	0.84
1:D:146:LEU:HD13	1:D:203:TYR:CE1	2.12	0.84
1:D:418:CYS:O	1:D:422:THR:HB	1.77	0.84
4:E:261:GLN:HE22	4:E:296:ILE:CD1	1.90	0.84
1:A:56:LEU:O	1:A:119:THR:HA	1.78	0.84
4:E:127:CYS:SG	4:E:143:LEU:HG	2.16	0.84
4:E:283:GLY:C	4:E:284:LYS:HE3	1.97	0.84
1:D:377:GLU:HB2	4:E:415:CYS:HB2	1.59	0.84
1:A:394:ASN:OD1	1:A:395:ALA:N	2.11	0.84
3:C:65:HIS:N	3:C:65:HIS:CD2	2.45	0.84
1:D:134:HIS:HE1	1:D:209:ARG:CD	1.91	0.84
1:A:251:LEU:CD2	4:E:260:ALA:CB	2.54	0.84
1:A:255:VAL:O	1:A:259:VAL:HG23	1.78	0.84
2:B:81:PRO:HA	2:B:107:ASN:HA	1.60	0.84
1:D:239:SER:HB3	4:E:314:HIS:HB2	1.60	0.84
4:E:6:LEU:HD12	4:E:69:SER:OG	1.78	0.84
1:A:43:VAL:CG2	1:A:50:VAL:HG22	2.07	0.84
2:B:218:LEU:O	2:B:219:PHE:CD1	2.31	0.84
3:C:33:ILE:O	3:C:160:MET:HA	1.77	0.84
1:D:214:PHE:O	1:D:218:VAL:HG23	1.78	0.84
1:D:239:SER:HB2	1:D:242:LYS:HE2	1.60	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:258:ALA:HB2	3:C:265:LEU:CD1	2.08	0.84
4:E:135:PRO:CB	4:E:137:ASP:OD1	2.25	0.84
4:E:187:HIS:CE1	4:E:189:PRO:HG3	2.12	0.84
2:B:31:VAL:HG12	2:B:158:LEU:HD21	1.60	0.83
2:B:442:ILE:O	2:B:446:MET:HG2	1.76	0.83
3:C:12:LEU:HB2	3:C:16:LYS:HG2	1.57	0.83
1:D:87:LEU:HD12	1:D:88:PRO:HD2	1.60	0.83
1:A:90:LEU:CD1	1:A:100:PHE:HE2	1.90	0.83
2:B:261:VAL:HG12	2:B:262:PHE:HD1	1.41	0.83
3:C:19:LYS:HD2	3:C:19:LYS:O	1.77	0.83
3:C:312:PHE:HE1	3:C:456:LEU:CD1	1.92	0.83
4:E:32:LEU:O	4:E:33:LYS:HG3	1.78	0.83
1:A:274:ILE:HG13	1:A:277:TYR:HD1	1.42	0.83
1:A:304:SER:H	1:A:400:LYS:HD3	1.43	0.83
1:A:137:PHE:CG	1:A:435:GLN:NE2	2.46	0.83
2:B:258:ALA:HB1	3:C:265:LEU:HD22	1.60	0.83
1:D:134:HIS:HE1	1:D:209:ARG:HD3	1.40	0.83
4:E:187:HIS:ND1	4:E:189:PRO:HG3	1.92	0.83
4:E:44:GLU:CG	4:E:129:ILE:CB	2.46	0.83
1:D:68:ASN:HB2	1:D:69:PRO:CD	2.07	0.83
3:C:67:LEU:HD12	3:C:116:GLY:CA	2.08	0.83
4:E:292:VAL:O	4:E:296:ILE:HG23	1.78	0.83
1:A:190:TYR:HB2	1:A:192:CYS:SG	2.17	0.83
1:A:133:THR:HA	1:A:274:ILE:CG2	2.08	0.83
2:B:90:ILE:HG23	2:B:147:LYS:N	1.92	0.83
3:C:87:ILE:CD1	3:C:110:VAL:HB	2.03	0.83
4:E:238:LEU:C	4:E:242:LEU:HD23	1.97	0.83
4:E:20:PRO:HB3	4:E:61:ASP:CG	1.99	0.83
3:C:276:GLN:O	3:C:279:PRO:HD2	1.78	0.83
1:D:224:LEU:HD21	4:E:297:VAL:HG11	1.57	0.83
2:B:11:LEU:O	2:B:15:TYR:HB3	1.78	0.83
1:A:422:THR:O	1:A:425:VAL:HG12	1.78	0.83
2:B:33:VAL:HG21	2:B:158:LEU:HD13	1.61	0.83
2:B:35:LEU:HD22	2:B:56:LEU:HA	1.61	0.83
4:E:432:SER:O	4:E:435:GLU:HB2	1.78	0.83
4:E:45:LYS:HD3	4:E:277:LEU:O	1.79	0.83
1:D:303:PRO:HG2	1:D:400:LYS:HZ3	1.41	0.83
1:D:148:ILE:HG12	1:D:151:TYR:HB2	1.58	0.83
1:A:130:ILE:CD1	1:A:131:ILE:N	2.42	0.83
1:A:135:PHE:HB3	1:A:273:LEU:HA	1.60	0.83
2:B:92:LEU:HG	2:B:96:ASN:HB2	1.59	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:47:GLU:O	3:C:132:ILE:HG21	1.79	0.83
3:C:316:THR:CG2	3:C:447:ASN:CB	2.49	0.83
3:C:461:ILE:O	3:C:464:VAL:HG12	1.78	0.83
1:D:37:LEU:H	1:D:164:ARG:NH2	1.76	0.83
4:E:107:VAL:CG1	4:E:117:TRP:HB2	2.08	0.83
4:E:250:LYS:HD2	4:E:253:LEU:HD22	1.59	0.83
4:E:265:LEU:O	4:E:268:ILE:HG23	1.78	0.83
2:B:247:GLU:O	2:B:249:MET:SD	2.37	0.83
3:C:316:THR:HG23	3:C:317:PRO:CD	2.06	0.83
4:E:431:ASP:O	4:E:435:GLU:HG3	1.79	0.83
3:C:230:ILE:HG13	3:C:231:ASN:ND2	1.92	0.83
2:B:9:SER:HA	2:B:12:PHE:HE1	1.41	0.83
1:A:226:SER:O	1:A:230:VAL:HG23	1.77	0.83
3:C:273:LEU:HD23	3:C:276:GLN:CB	2.08	0.83
4:E:39:LEU:HD23	4:E:183:TRP:CZ2	2.13	0.83
1:A:108:LEU:HB3	1:A:117:MET:O	1.79	0.82
2:B:297:LEU:HD12	2:B:445:THR:HG21	1.61	0.82
3:C:18:ASN:HB2	3:C:21:VAL:HB	1.57	0.82
4:E:261:GLN:HE22	4:E:296:ILE:HD11	1.43	0.82
1:D:380:LYS:HE3	4:E:415:CYS:SG	2.19	0.82
4:E:242:LEU:HD11	4:E:253:LEU:CD2	2.09	0.82
4:E:271:LYS:NZ	4:E:271:LYS:HB2	1.91	0.82
2:B:75:ILE:O	2:B:75:ILE:HG13	1.79	0.82
2:B:189:GLU:O	2:B:190:HIS:CD2	2.31	0.82
3:C:478:PHE:O	3:C:482:PRO:HD3	1.77	0.82
2:B:7:LEU:O	2:B:11:LEU:HD23	1.79	0.82
2:B:160:HIS:CE1	2:B:207:VAL:HG11	2.15	0.82
2:B:258:ALA:CB	3:C:265:LEU:CD2	2.57	0.82
3:C:476:GLY:HA2	3:C:479:ASN:HB3	1.60	0.82
1:D:201:ILE:O	1:D:203:TYR:HE1	1.62	0.82
1:D:255:VAL:O	1:D:259:VAL:CG2	2.27	0.82
1:D:92:LEU:HB2	1:D:96:ALA:N	1.94	0.82
1:A:79:ARG:HD3	1:A:107:LYS:HD2	1.62	0.82
1:A:245:LEU:CD2	2:B:250:SER:HA	2.09	0.82
1:D:405:VAL:O	1:D:409:ILE:HG23	1.80	0.82
1:A:235:LEU:HD21	1:A:242:LYS:HG3	1.58	0.82
3:C:113:ARG:HD2	3:C:117:TYR:CB	2.09	0.82
3:C:180:ASP:H	3:C:195:LYS:HB3	1.43	0.82
3:C:47:GLU:HG2	3:C:286:PRO:CD	2.09	0.82
1:D:92:LEU:CB	1:D:95:ASN:HB2	2.08	0.82
3:C:56:VAL:HG13	3:C:126:PHE:CE2	2.14	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:278:LEU:C	3:C:278:LEU:CD1	2.48	0.82
3:C:307:GLY:O	3:C:310:LEU:HB2	1.80	0.82
1:A:67:TRP:CG	1:A:71:ASP:HB3	2.15	0.82
2:B:109:LEU:HB3	2:B:117:SER:HB2	1.62	0.82
3:C:122:PRO:CB	3:C:123:PRO:HD2	2.09	0.82
3:C:305:ASN:HA	3:C:308:ILE:HB	1.59	0.82
1:D:166:ASP:HB2	1:D:181:TYR:HB2	1.61	0.82
4:E:102:ALA:HB2	4:E:121:ALA:HB2	1.62	0.82
1:A:414:PHE:HA	1:A:417:ILE:HD12	1.61	0.82
2:B:160:HIS:HE2	2:B:207:VAL:HG11	1.45	0.82
1:D:376:ILE:O	1:D:380:LYS:HG3	1.79	0.82
1:A:257:LEU:CD1	1:A:285:VAL:HG23	2.10	0.82
3:C:31:VAL:HG11	3:C:88:TRP:CH2	2.15	0.82
1:A:382:ILE:O	1:A:386:MET:HG2	1.80	0.82
1:A:281:THR:O	1:A:285:VAL:HG12	1.79	0.81
1:A:79:ARG:HH11	1:A:107:LYS:NZ	1.78	0.81
2:B:261:VAL:HG12	2:B:262:PHE:CD1	2.15	0.81
3:C:475:MET:O	3:C:478:PHE:CD1	2.33	0.81
4:E:89:VAL:HG23	4:E:99:PHE:CZ	2.15	0.81
4:E:444:LYS:O	4:E:448:LYS:HG2	1.79	0.81
3:C:279:PRO:HA	3:C:282:ALA:HB3	1.62	0.81
4:E:191:LYS:H	4:E:209:ILE:CG2	1.93	0.81
4:E:235:LEU:O	4:E:235:LEU:HD12	1.80	0.81
1:A:303:PRO:HB2	1:A:400:LYS:CE	2.10	0.81
4:E:44:GLU:CD	4:E:129:ILE:HB	2.01	0.81
4:E:184:THR:N	4:E:215:GLN:O	2.13	0.81
1:A:108:LEU:CD1	1:A:118:TRP:HB2	2.09	0.81
1:A:235:LEU:N	1:A:236:PRO:HD2	1.95	0.81
1:A:233:PHE:O	1:A:236:PRO:HG2	1.80	0.81
1:A:245:LEU:HD22	2:B:250:SER:HA	1.62	0.81
1:D:130:ILE:HD13	1:D:131:ILE:H	1.45	0.81
4:E:183:TRP:CA	4:E:216:ARG:HG2	2.08	0.81
4:E:6:LEU:HD13	4:E:67:ASN:ND2	1.95	0.81
1:D:377:GLU:HA	1:D:380:LYS:HD2	1.60	0.81
1:D:107:LYS:CE	4:E:149:THR:HA	2.10	0.81
2:B:31:VAL:HG12	2:B:158:LEU:CD2	2.11	0.81
2:B:35:LEU:HD22	2:B:55:PHE:O	1.80	0.81
2:B:37:LEU:CB	2:B:179:ALA:HB3	2.11	0.81
1:A:300:HIS:HA	1:A:306:HIS:O	1.79	0.81
1:A:417:ILE:HA	1:A:420:ILE:HG12	1.60	0.81
1:D:167:LEU:HG	1:D:178:MET:HB2	1.63	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:240:GLY:O	1:D:243:MET:SD	2.38	0.81
1:D:292:THR:HA	1:D:295:VAL:CG2	2.10	0.81
1:D:78:ILE:CD1	1:D:110:LEU:HB3	2.09	0.81
2:B:254:SER:O	3:C:265:LEU:CD1	2.27	0.81
1:D:242:LYS:HD2	1:D:245:LEU:HD13	1.61	0.81
1:D:29:VAL:CG1	1:D:60:TRP:HE1	1.93	0.81
1:D:209:ARG:CG	1:D:210:ILE:H	1.93	0.81
1:D:35:LEU:HD11	1:D:54:VAL:HG11	1.58	0.81
1:A:305:THR:HB	1:A:401:TYR:HB3	1.63	0.81
2:B:269:LYS:HE3	2:B:270:VAL:HG23	1.62	0.81
1:D:250:LEU:HD13	1:D:296:ILE:CD1	2.10	0.81
4:E:216:ARG:O	4:E:217:LYS:HG3	1.81	0.81
4:E:35:THR:HB	4:E:54:TRP:HE3	1.45	0.81
4:E:148:GLN:NE2	4:E:148:GLN:HA	1.92	0.81
1:D:165:PRO:HG2	1:D:168:SER:HB3	1.63	0.81
2:B:272:GLU:CA	2:B:275:LEU:HG	2.11	0.81
3:C:42:LEU:HA	3:C:54:THR:HG22	1.60	0.81
1:D:407:ASP:OD1	1:D:408:HIS:HD2	1.63	0.81
1:A:160:PRO:HG3	1:A:185:LYS:HB3	1.61	0.81
1:A:254:THR:O	1:A:258:LEU:HG	1.81	0.81
3:C:305:ASN:O	3:C:308:ILE:HG22	1.80	0.81
1:D:264:ILE:HB	1:D:265:PRO:HD3	1.63	0.81
1:A:378:GLY:O	1:A:382:ILE:HG12	1.79	0.81
3:C:110:VAL:CG1	3:C:120:TRP:HB2	2.10	0.80
1:D:35:LEU:HG	1:D:54:VAL:CG1	2.10	0.80
4:E:20:PRO:HG2	4:E:28:ILE:CD1	2.09	0.80
4:E:436:ASN:HA	4:E:439:TRP:NE1	1.95	0.80
1:A:189:TYR:HA	1:A:197:PRO:CD	2.12	0.80
2:B:223:TYR:O	2:B:227:PRO:CD	2.29	0.80
1:D:287:SER:HA	1:D:290:ILE:HG12	1.62	0.80
1:A:66:ARG:HD3	1:A:66:ARG:N	1.95	0.80
1:A:135:PHE:CD1	1:A:273:LEU:HB2	2.17	0.80
1:A:291:VAL:HG12	1:A:295:VAL:HG21	1.62	0.80
1:D:231:LEU:O	1:D:235:LEU:HG	1.80	0.80
1:D:236:PRO:HB2	1:D:406:ILE:HG12	1.63	0.80
4:E:19:LYS:NZ	4:E:154:GLU:HB2	1.94	0.80
3:C:427:ASN:HA	3:C:430:VAL:HG23	1.62	0.80
1:A:1:SER:N	1:A:4:GLU:HB2	1.96	0.80
1:D:298:THR:CG2	1:D:301:ARG:HD3	2.11	0.80
4:E:2:GLU:HA	4:E:5:ARG:HG3	1.62	0.80
1:A:235:LEU:HD11	1:A:242:LYS:CE	2.10	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:265:LEU:O	2:B:268:ASP:HB2	1.81	0.80
4:E:138:TRP:CZ2	4:E:215:GLN:HB2	2.16	0.80
4:E:144:VAL:HA	4:E:208:ILE:O	1.80	0.80
4:E:276:SER:HB3	4:E:281:LEU:HD13	1.62	0.80
4:E:237:VAL:HG13	4:E:453:ILE:HD11	1.63	0.80
4:E:55:ILE:HG13	4:E:57:ILE:HG13	1.63	0.80
1:A:175:GLU:O	1:A:211:PRO:HD3	1.81	0.80
2:B:119:HIS:N	2:B:119:HIS:CD2	2.48	0.80
2:B:47:ASN:O	2:B:48:GLU:CG	2.27	0.80
3:C:130:CYS:SG	3:C:131:PRO:HD2	2.20	0.80
4:E:152:ALA:H	4:E:205:PHE:HA	1.47	0.80
3:C:438:ALA:HA	3:C:441:GLU:CD	2.01	0.80
1:D:107:LYS:HE3	4:E:149:THR:HA	1.64	0.80
3:C:7:LEU:HA	3:C:10:ASP:OD2	1.81	0.80
3:C:12:LEU:CD1	3:C:16:LYS:HG2	2.11	0.80
1:D:102:ILE:CG1	4:E:98:GLN:NE2	2.41	0.80
1:A:276:LYS:HD2	1:A:276:LYS:H	1.46	0.80
2:B:107:ASN:HB2	3:C:152:ASN:ND2	1.97	0.80
2:B:435:ALA:O	2:B:439:PHE:HB3	1.82	0.80
2:B:88:PRO:HB2	2:B:90:ILE:HG13	1.64	0.80
3:C:244:ALA:O	3:C:248:TYR:CD2	2.35	0.80
1:D:250:LEU:O	1:D:254:THR:HG22	1.82	0.80
4:E:148:GLN:CA	4:E:148:GLN:HE21	1.95	0.80
1:A:131:ILE:HD11	1:A:140:GLN:CD	2.02	0.80
1:A:148:ILE:CD1	1:A:156:VAL:HG13	2.12	0.80
1:A:250:LEU:CD1	1:A:296:ILE:HG21	2.10	0.80
2:B:226:VAL:HB	2:B:230:LEU:CD1	2.12	0.80
3:C:106:TYR:O	3:C:106:TYR:HD1	1.65	0.80
3:C:190:TRP:HB3	3:C:223:ARG:HB2	1.63	0.80
1:D:28:PHE:CD2	1:D:157:SER:HB3	2.17	0.80
4:E:91:LEU:H	4:E:95:VAL:CG2	1.95	0.80
1:A:136:PRO:HG3	1:A:274:ILE:HG23	1.64	0.79
1:A:41:ILE:CD1	1:A:51:GLU:CD	2.50	0.79
3:C:89:ILE:HB	3:C:120:TRP:CZ3	2.16	0.79
1:D:256:PHE:HE2	4:E:262:THR:HG22	1.47	0.79
2:B:67:TRP:HB2	2:B:72:TYR:HB2	1.64	0.79
1:A:139:GLN:HB2	1:A:207:MET:O	1.82	0.79
1:A:305:THR:HG21	1:A:401:TYR:CD1	2.17	0.79
2:B:131:LYS:HZ2	2:B:132:VAL:HB	1.44	0.79
2:B:241:LEU:HD21	2:B:251:LEU:HD21	1.63	0.79
3:C:160:MET:H	3:C:213:GLN:HB2	1.45	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:245:LEU:HD11	4:E:255:ILE:HG13	1.62	0.79
1:A:3:HIS:C	1:A:7:LEU:HG	2.03	0.79
2:B:198:ARG:HH11	2:B:198:ARG:CG	1.95	0.79
1:A:167:LEU:HA	1:A:170:PHE:HB2	1.62	0.79
2:B:28:LYS:HG2	2:B:154:SER:O	1.82	0.79
1:A:238:ASP:HB3	2:B:306:HIS:HE1	1.45	0.79
3:C:77:ILE:HG13	3:C:77:ILE:O	1.82	0.79
1:A:286:ILE:O	1:A:289:ILE:HB	1.81	0.79
1:A:35:LEU:HD21	1:A:37:LEU:CD2	2.12	0.79
1:A:41:ILE:HG13	1:A:42:ASN:N	1.97	0.79
3:C:155:ALA:CB	3:C:211:ASN:HA	2.12	0.79
4:E:241:PHE:CA	4:E:450:CYS:SG	2.70	0.79
1:A:6:ARG:HB2	1:A:6:ARG:NH1	1.98	0.79
1:A:179:LYS:HE2	1:A:208:GLN:CD	2.02	0.79
3:C:2:ASN:ND2	3:C:71:ALA:HB3	1.97	0.79
3:C:4:GLU:HB3	3:C:72:SER:HB2	1.65	0.79
4:E:249:GLN:HE22	4:E:250:LYS:CE	1.91	0.79
1:D:29:VAL:CG1	1:D:60:TRP:NE1	2.45	0.79
1:D:29:VAL:HG12	1:D:60:TRP:HD1	1.44	0.79
1:D:252:SER:HB2	4:E:259:LEU:HD22	1.63	0.79
4:E:141:CYS:SG	4:E:143:LEU:HD11	2.23	0.79
4:E:34:LEU:HB2	4:E:210:PHE:HZ	1.48	0.79
1:A:294:VAL:HG13	1:A:295:VAL:N	1.98	0.79
1:A:419:ILE:HD13	1:A:423:VAL:CG2	2.13	0.79
1:D:201:ILE:HG22	1:D:203:TYR:CE1	2.17	0.79
4:E:267:LEU:HD12	4:E:270:GLN:OE1	1.82	0.79
4:E:1:ASN:ND2	4:E:69:SER:N	2.29	0.79
4:E:91:LEU:HB2	4:E:95:VAL:H	1.48	0.79
2:B:405:VAL:HG12	2:B:409:LYS:HZ3	1.45	0.79
1:A:291:VAL:O	1:A:295:VAL:HG23	1.82	0.79
2:B:100:PHE:HB2	2:B:103:THR:CB	2.13	0.79
2:B:197:TRP:CD1	2:B:204:TYR:HB3	2.17	0.79
2:B:226:VAL:O	2:B:230:LEU:HG	1.82	0.79
2:B:271:PRO:O	2:B:275:LEU:HG	1.83	0.79
3:C:97:ASN:HB3	3:C:128:SER:CB	2.11	0.79
3:C:179:ILE:HG22	3:C:182:GLU:HB2	1.65	0.79
2:B:133:MET:CA	2:B:279:ILE:HG23	2.13	0.79
3:C:78:SER:O	3:C:79:ILE:HD12	1.82	0.79
3:C:43:ILE:H	3:C:43:ILE:HD12	1.46	0.79
3:C:154:ASN:HB3	3:C:211:ASN:CB	2.11	0.79
3:C:318:SER:HB2	3:C:447:ASN:ND2	1.97	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:30:ASP:OD1	1:D:30:ASP:N	2.12	0.79
3:C:426:THR:O	3:C:429:ILE:HG13	1.81	0.79
2:B:89:ASP:OD1	2:B:151:TYR:HD1	1.65	0.78
3:C:77:ILE:HD11	3:C:80:LEU:HD13	1.63	0.78
1:A:167:LEU:HD12	1:A:178:MET:CG	2.14	0.78
1:A:296:ILE:HA	1:A:299:HIS:CB	2.10	0.78
1:A:420:ILE:HG13	1:A:421:GLY:N	1.96	0.78
1:D:135:PHE:CG	1:D:210:ILE:HG12	2.18	0.78
1:D:222:CYS:O	1:D:225:PHE:CD1	2.36	0.78
1:D:102:ILE:HG22	1:D:102:ILE:O	1.82	0.78
4:E:474:VAL:HB	4:E:475:PRO:HD3	1.64	0.78
3:C:469:THR:O	3:C:473:PHE:HB2	1.83	0.78
1:D:284:PHE:O	1:D:287:SER:HB3	1.82	0.78
4:E:191:LYS:O	4:E:209:ILE:HG22	1.82	0.78
1:A:54:VAL:CG2	1:A:122:ALA:HB3	2.14	0.78
2:B:306:HIS:O	2:B:306:HIS:ND1	2.17	0.78
3:C:279:PRO:O	3:C:282:ALA:HB3	1.82	0.78
1:D:132:VAL:O	1:D:274:ILE:N	2.16	0.78
1:D:141:ASN:HA	1:D:205:PHE:O	1.84	0.78
1:D:264:ILE:HB	1:D:265:PRO:CD	2.12	0.78
4:E:262:THR:HA	4:E:265:LEU:HB2	1.64	0.78
4:E:271:LYS:C	4:E:273:PRO:HD2	2.03	0.78
4:E:1:ASN:HD22	4:E:69:SER:HB3	1.47	0.78
1:A:106:THR:HG22	1:A:107:LYS:H	1.49	0.78
1:A:406:ILE:HA	1:A:409:ILE:CD1	2.14	0.78
3:C:13:ILE:HB	3:C:86:LEU:HD22	1.66	0.78
2:B:107:ASN:HB2	3:C:152:ASN:HD21	1.48	0.78
1:D:170:PHE:HE2	1:D:176:TRP:CD1	2.02	0.78
1:D:203:TYR:H	1:D:203:TYR:HD1	1.29	0.78
1:D:276:LYS:H	1:D:276:LYS:HD2	1.48	0.78
1:A:52:THR:O	1:A:123:ILE:HG13	1.83	0.78
1:A:129:GLU:OE2	1:A:140:GLN:CG	2.32	0.78
1:A:255:VAL:CG2	4:E:264:PHE:CE1	2.66	0.78
2:B:445:THR:O	2:B:449:ILE:HG12	1.84	0.78
1:D:35:LEU:CD1	1:D:54:VAL:CG1	2.57	0.78
4:E:162:GLU:HG2	4:E:190:ALA:O	1.84	0.78
4:E:76:LEU:HD21	4:E:108:LEU:HD11	1.66	0.78
1:D:137:PHE:O	1:D:435:GLN:HG3	1.83	0.78
1:A:218:VAL:O	1:A:221:PRO:HD2	1.82	0.78
2:B:232:SER:O	2:B:236:ILE:HG22	1.84	0.78
3:C:471:PHE:CD1	3:C:471:PHE:C	2.56	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:138:ASP:O	1:D:139:GLN:HG2	1.84	0.78
1:A:273:LEU:HD23	1:A:273:LEU:O	1.84	0.78
1:A:413:VAL:O	1:A:417:ILE:HG13	1.83	0.78
1:A:43:VAL:HG22	1:A:50:VAL:HG13	1.63	0.78
1:D:56:LEU:N	1:D:120:PRO:HD2	1.98	0.78
1:D:131:ILE:HG13	1:D:133:THR:N	1.97	0.78
3:C:263:VAL:HA	1:D:251:LEU:HD11	1.66	0.78
2:B:134:TYR:HE1	2:B:213:ILE:HG13	1.02	0.78
3:C:13:ILE:HG21	3:C:86:LEU:HB3	1.66	0.78
1:D:145:LYS:HG3	1:D:202:THR:HG23	0.88	0.78
1:D:189:TYR:HA	1:D:197:PRO:CD	2.13	0.78
4:E:177:PHE:CZ	4:E:184:THR:HA	2.19	0.78
4:E:60:ASN:HD22	4:E:60:ASN:N	1.81	0.78
4:E:67:ASN:N	4:E:67:ASN:ND2	2.25	0.78
1:A:432:GLU:HG3	1:A:436:GLU:OE2	1.84	0.77
2:B:226:VAL:HB	2:B:230:LEU:HD11	1.64	0.77
3:C:153:TYR:HB2	3:C:158:ILE:HB	1.65	0.77
4:E:284:LYS:HE3	4:E:284:LYS:CA	2.14	0.77
2:B:55:PHE:HD1	2:B:55:PHE:N	1.82	0.77
2:B:244:ASP:HB3	3:C:314:PHE:HE1	1.49	0.77
1:D:167:LEU:CD1	1:D:178:MET:HB3	2.11	0.77
4:E:94:ASN:CG	4:E:143:LEU:HD23	2.05	0.77
4:E:99:PHE:HB3	4:E:102:ALA:CB	2.14	0.77
2:B:405:VAL:HG12	2:B:409:LYS:NZ	1.98	0.77
2:B:135:PHE:HB2	2:B:279:ILE:CD1	2.14	0.77
2:B:45:GLU:HA	2:B:130:ILE:HD12	1.66	0.77
3:C:279:PRO:HA	3:C:282:ALA:CB	2.14	0.77
3:C:38:THR:HG21	3:C:57:TRP:CE3	2.19	0.77
2:B:21:PRO:HG2	2:B:60:TRP:HE1	1.48	0.77
3:C:453:ILE:CG2	3:C:454:ASP:H	1.98	0.77
1:D:287:SER:HA	1:D:290:ILE:CG1	2.15	0.77
4:E:71:TYR:HD1	4:E:111:ASN:CB	1.97	0.77
1:D:29:VAL:CG1	1:D:60:TRP:CD1	2.68	0.77
2:B:236:ILE:O	2:B:240:TYR:HB2	1.84	0.77
1:A:251:LEU:CD1	4:E:260:ALA:HB2	2.13	0.77
4:E:293:SER:O	4:E:296:ILE:HG12	1.84	0.77
3:C:230:ILE:HG13	3:C:231:ASN:N	1.99	0.77
1:A:243:MET:HE3	1:A:244:THR:HG22	1.65	0.77
4:E:183:TRP:HA	4:E:216:ARG:HA	1.66	0.77
4:E:27:VAL:HG12	4:E:153:HIS:O	1.84	0.77
1:D:68:ASN:HB2	1:D:69:PRO:HD3	1.66	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:266:LEU:O	2:B:270:VAL:HG23	1.84	0.77
3:C:190:TRP:HD1	3:C:221:ILE:HD12	1.48	0.77
3:C:60:HIS:NE2	3:C:92:ILE:HG21	2.00	0.77
1:A:426:PHE:CD1	1:A:427:ALA:N	2.53	0.77
2:B:192:PRO:HD2	2:B:210:TYR:CB	2.15	0.77
1:D:61:ILE:HA	1:D:116:ILE:HD11	1.66	0.77
1:A:242:LYS:HD2	1:A:245:LEU:HD23	1.66	0.77
4:E:266:PHE:HD1	4:E:269:ALA:HB3	1.49	0.77
4:E:26:HIS:CG	4:E:26:HIS:O	2.37	0.77
4:E:39:LEU:HD12	4:E:49:LEU:HD13	1.65	0.77
1:A:380:LYS:CB	2:B:408:ILE:HD13	2.15	0.77
1:D:376:ILE:C	1:D:380:LYS:HE2	2.05	0.77
2:B:40:LEU:HD23	2:B:52:THR:OG1	1.86	0.76
3:C:113:ARG:HB3	3:C:114:PRO:HD2	1.67	0.76
3:C:306:CYS:O	3:C:309:VAL:HB	1.85	0.76
1:D:169:THR:HG22	1:D:169:THR:O	1.83	0.76
4:E:133:TYR:CE1	4:E:139:GLN:O	2.37	0.76
4:E:152:ALA:HA	4:E:155:VAL:O	1.85	0.76
4:E:227:ALA:N	4:E:228:PRO:HD2	1.99	0.76
4:E:36:LEU:HD12	4:E:173:ASP:OD1	1.86	0.76
2:B:425:LYS:HA	2:B:428:TRP:HD1	1.44	0.76
1:D:62:ASP:HB3	1:D:65:LEU:CD1	2.15	0.76
1:D:160:PRO:CD	1:D:185:LYS:HB3	2.15	0.76
2:B:256:LEU:HD21	2:B:298:SER:HB2	1.66	0.76
2:B:92:LEU:HA	2:B:145:VAL:O	1.84	0.76
3:C:155:ALA:N	3:C:211:ASN:HA	2.00	0.76
1:A:233:PHE:CZ	1:A:417:ILE:HD11	2.21	0.76
3:C:471:PHE:HD1	3:C:471:PHE:C	1.88	0.76
2:B:291:VAL:HG12	2:B:292:ALA:H	1.47	0.76
1:A:240:GLY:O	1:A:306:HIS:HE1	1.67	0.76
2:B:37:LEU:HB3	2:B:179:ALA:CB	2.14	0.76
3:C:103:ASN:ND2	3:C:106:TYR:CE2	2.53	0.76
1:D:95:ASN:ND2	1:D:128:CYS:HB3	1.98	0.76
1:D:149:TRP:CE2	1:D:150:THR:HB	2.21	0.76
4:E:19:LYS:HZ2	4:E:154:GLU:CB	1.95	0.76
4:E:470:HIS:NE2	4:E:474:VAL:HG21	1.98	0.76
1:A:423:VAL:O	1:A:426:PHE:HB3	1.85	0.76
1:A:43:VAL:CG1	1:A:50:VAL:HG22	2.15	0.76
3:C:58:MET:O	3:C:58:MET:HG2	1.85	0.76
1:D:1:SER:N	1:D:4:GLU:HB2	2.00	0.76
2:B:134:TYR:N	2:B:279:ILE:HG12	1.98	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:453:ILE:HG23	3:C:454:ASP:H	1.47	0.76
1:D:292:THR:CA	1:D:295:VAL:HG22	2.16	0.76
4:E:45:LYS:HB3	4:E:280:PRO:HA	1.67	0.76
4:E:453:ILE:HD12	4:E:454:ALA:N	2.00	0.76
2:B:68:ASP:O	2:B:72:TYR:HB3	1.84	0.76
3:C:248:TYR:C	3:C:250:PRO:HD2	2.05	0.76
3:C:3:GLU:HG2	3:C:3:GLU:O	1.86	0.76
3:C:470:ILE:O	3:C:474:VAL:HG23	1.84	0.76
1:D:187:TRP:CH2	1:D:189:TYR:CD2	2.73	0.76
1:D:295:VAL:O	1:D:299:HIS:N	2.19	0.76
1:D:38:ILE:HA	1:D:169:THR:CG2	2.14	0.76
4:E:449:ALA:HA	4:E:452:TRP:CD1	2.21	0.76
2:B:408:ILE:HG23	2:B:409:LYS:N	1.99	0.76
3:C:60:HIS:NE2	3:C:92:ILE:HD13	2.01	0.76
1:D:416:LEU:CA	1:D:419:ILE:HG13	2.16	0.76
1:D:228:LEU:HD21	4:E:258:LEU:HD21	1.66	0.76
4:E:71:TYR:CD1	4:E:111:ASN:HB2	2.20	0.76
3:C:431:LYS:O	3:C:434:LYS:HB3	1.86	0.76
1:A:160:PRO:HG2	1:A:185:LYS:NZ	2.01	0.76
3:C:204:ASP:OD1	3:C:205:LYS:NZ	2.18	0.76
1:A:261:VAL:O	1:A:265:PRO:CD	2.34	0.76
1:A:230:VAL:HG22	1:A:414:PHE:CE1	2.20	0.76
2:B:147:LYS:HG3	2:B:148:SER:N	2.00	0.76
2:B:247:GLU:C	2:B:249:MET:HG3	2.05	0.76
3:C:216:THR:C	3:C:217:PHE:HD1	1.89	0.76
3:C:50:GLU:HB3	3:C:132:ILE:HB	1.67	0.76
3:C:78:SER:C	3:C:79:ILE:HD12	2.06	0.76
1:D:178:MET:SD	1:D:207:MET:HB3	2.25	0.76
1:D:49:ILE:HD12	1:D:125:LYS:HE3	1.66	0.76
4:E:267:LEU:O	4:E:270:GLN:HG3	1.86	0.76
4:E:59:TRP:C	4:E:60:ASN:ND2	2.35	0.76
1:D:65:LEU:HD23	1:D:110:LEU:CD2	2.14	0.76
1:D:376:ILE:HG22	1:D:380:LYS:NZ	2.00	0.76
3:C:190:TRP:HB2	3:C:223:ARG:HB2	1.67	0.76
1:D:130:ILE:HB	1:D:134:HIS:CD2	2.20	0.76
1:D:92:LEU:HD13	1:D:146:LEU:CG	2.16	0.76
1:A:212:LEU:HA	1:A:215:VAL:HG23	1.68	0.76
1:A:230:VAL:HG13	1:A:414:PHE:CZ	2.21	0.75
2:B:45:GLU:OE1	2:B:279:ILE:HD11	1.86	0.75
2:B:251:LEU:HD13	3:C:261:ILE:HG21	1.66	0.75
3:C:263:VAL:O	3:C:267:GLN:HG2	1.85	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:449:VAL:HG12	3:C:452:THR:HG21	1.68	0.75
3:C:47:GLU:HG2	3:C:286:PRO:CG	2.16	0.75
4:E:59:TRP:HE1	4:E:84:LEU:HD23	1.51	0.75
3:C:120:TRP:CD1	3:C:122:PRO:HD3	2.20	0.75
1:A:229:THR:CA	1:A:232:VAL:HB	2.17	0.75
2:B:235:ALA:HB1	2:B:239:PHE:CE2	2.21	0.75
1:D:243:MET:O	1:D:246:SER:HB3	1.86	0.75
4:E:52:ASN:HD21	4:E:120:PRO:HB2	1.52	0.75
3:C:438:ALA:HA	3:C:441:GLU:OE1	1.86	0.75
1:A:62:ASP:OD1	1:A:64:ARG:HB2	1.87	0.75
1:D:137:PHE:HB3	1:D:435:GLN:CD	2.07	0.75
1:A:212:LEU:HA	1:A:215:VAL:CG2	2.16	0.75
3:C:35:LEU:HD12	3:C:60:HIS:NE2	2.02	0.75
1:A:209:ARG:CG	1:A:210:ILE:H	1.96	0.75
1:A:41:ILE:O	1:A:42:ASN:CG	2.24	0.75
2:B:191:LYS:HE2	2:B:209:PHE:HB3	1.68	0.75
3:C:47:GLU:HG2	3:C:286:PRO:HD2	1.68	0.75
4:E:128:PRO:O	4:E:129:ILE:HG12	1.87	0.75
1:A:380:LYS:O	1:A:384:GLU:HB2	1.87	0.75
2:B:287:ILE:HA	2:B:290:LEU:HD12	1.66	0.75
2:B:450:GLY:O	2:B:454:ILE:HG13	1.85	0.75
1:D:188:VAL:O	1:D:197:PRO:HB2	1.86	0.75
4:E:163:GLU:CD	4:E:163:GLU:N	2.39	0.75
2:B:291:VAL:CG1	2:B:292:ALA:N	2.48	0.75
1:A:118:TRP:CD1	1:A:120:PRO:CD	2.67	0.75
1:A:235:LEU:CD1	1:A:242:LYS:HE3	2.10	0.75
1:A:279:LEU:HD13	1:A:282:MET:CB	2.17	0.75
3:C:141:TRP:CB	3:C:222:ARG:HA	2.16	0.75
3:C:17:TYR:CZ	3:C:19:LYS:HA	2.21	0.75
3:C:180:ASP:HB2	3:C:195:LYS:HB2	1.68	0.75
3:C:216:THR:O	3:C:217:PHE:HD1	1.70	0.75
3:C:278:LEU:HD12	3:C:278:LEU:O	1.86	0.75
3:C:280:GLU:HG3	3:C:281:THR:N	2.00	0.75
1:D:170:PHE:CZ	1:D:171:MET:O	2.40	0.75
4:E:144:VAL:HG12	4:E:209:ILE:HA	1.67	0.75
1:A:36:GLN:HA	1:A:164:ARG:NH2	2.01	0.75
2:B:132:VAL:HG12	2:B:279:ILE:HA	1.67	0.75
3:C:249:LEU:N	3:C:250:PRO:CD	2.50	0.75
1:D:419:ILE:HD12	1:D:420:ILE:HG23	1.67	0.75
1:D:46:VAL:CA	1:D:272:PRO:HD3	2.16	0.75
1:A:257:LEU:HD13	1:A:285:VAL:HG23	1.65	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:293:VAL:O	1:A:297:ASN:HB3	1.87	0.75
3:C:199:LYS:HZ2	3:C:199:LYS:C	1.90	0.75
2:B:244:ASP:HB3	3:C:314:PHE:CE1	2.21	0.75
3:C:35:LEU:HD12	3:C:92:ILE:HG21	1.67	0.75
1:D:56:LEU:HD23	1:D:56:LEU:N	2.02	0.75
1:D:92:LEU:N	1:D:92:LEU:HD22	2.00	0.75
4:E:250:LYS:CA	4:E:253:LEU:HB3	2.16	0.75
4:E:284:LYS:N	4:E:284:LYS:CE	2.40	0.75
2:B:10:VAL:HG13	2:B:11:LEU:HD22	1.69	0.75
4:E:422:ILE:O	4:E:425:SER:HB3	1.86	0.75
2:B:232:SER:HA	2:B:235:ALA:HB3	1.67	0.74
1:A:145:LYS:HZ2	1:A:202:THR:HG23	1.50	0.74
2:B:240:TYR:O	2:B:244:ASP:HB2	1.87	0.74
3:C:37:LEU:HD12	3:C:217:PHE:CD2	2.22	0.74
3:C:266:ALA:O	3:C:270:PHE:CE1	2.40	0.74
1:D:46:VAL:HG21	1:D:270:ALA:O	1.87	0.74
4:E:117:TRP:NE1	4:E:119:PRO:HD3	2.01	0.74
4:E:305:ASN:HA	4:E:308:LEU:CD1	2.17	0.74
1:A:66:ARG:HD3	1:A:66:ARG:H	1.51	0.74
1:A:37:LEU:CD2	1:A:54:VAL:HG12	2.18	0.74
3:C:463:PRO:HA	3:C:466:VAL:CG2	2.17	0.74
1:D:290:ILE:O	1:D:293:VAL:HB	1.87	0.74
1:D:298:THR:HG22	1:D:301:ARG:HD3	1.70	0.74
4:E:185:ILE:HG12	4:E:214:ILE:HG22	1.67	0.74
4:E:275:THR:O	4:E:279:VAL:HG23	1.88	0.74
1:A:379:VAL:HA	1:A:382:ILE:HD11	1.70	0.74
1:A:432:GLU:O	1:A:436:GLU:HG3	1.88	0.74
3:C:104:VAL:HA	3:C:106:TYR:CE1	2.22	0.74
3:C:244:ALA:O	3:C:248:TYR:HD2	1.69	0.74
1:D:166:ASP:OD1	1:D:205:PHE:CE2	2.40	0.74
1:D:413:VAL:HG12	1:D:417:ILE:HG13	1.69	0.74
4:E:107:VAL:HG12	4:E:108:LEU:H	1.51	0.74
1:D:10:ASN:OD1	1:D:11:LEU:HD23	1.86	0.74
1:A:107:LYS:O	1:A:108:LEU:HD23	1.87	0.74
1:A:133:THR:HG22	1:A:133:THR:O	1.86	0.74
1:A:186:HIS:CE1	1:A:187:TRP:O	2.40	0.74
2:B:136:PRO:HD3	2:B:280:ILE:HD11	1.70	0.74
3:C:131:PRO:HG3	3:C:145:SER:H	1.51	0.74
2:B:80:ILE:HA	3:C:20:HIS:HE1	1.51	0.74
3:C:300:THR:HA	3:C:303:VAL:CG2	2.17	0.74
1:D:135:PHE:CD2	1:D:210:ILE:HG12	2.21	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:90:VAL:HA	4:E:99:PHE:HE1	1.51	0.74
1:D:135:PHE:HB2	1:D:209:ARG:CB	2.13	0.74
4:E:59:TRP:CZ2	4:E:115:MET:HB3	2.23	0.74
1:A:262:GLU:O	1:A:265:PRO:HD2	1.86	0.74
3:C:90:PRO:HD2	3:C:120:TRP:CZ3	2.22	0.74
4:E:86:LEU:HD13	4:E:103:TYR:CE1	2.22	0.74
4:E:291:PHE:O	4:E:295:VAL:HG23	1.87	0.74
1:A:229:THR:O	1:A:233:PHE:HD1	1.70	0.74
2:B:142:CYS:SG	2:B:143:THR:N	2.61	0.74
3:C:48:THR:CA	3:C:286:PRO:HD3	2.16	0.74
2:B:92:LEU:HD12	2:B:95:ASN:HB2	1.69	0.74
3:C:449:VAL:HG12	3:C:452:THR:CG2	2.17	0.74
3:C:81:ARG:CZ	3:C:111:LEU:HD13	2.17	0.74
1:D:249:VAL:HA	1:D:252:SER:HB3	1.68	0.74
1:D:92:LEU:H	1:D:92:LEU:CD2	1.99	0.74
4:E:194:TYR:HA	4:E:206:GLN:HG2	1.70	0.74
1:A:132:VAL:O	1:A:274:ILE:HG22	1.88	0.74
3:C:269:VAL:HA	3:C:272:LEU:HD11	1.69	0.74
4:E:140:ASN:HD21	4:E:211:PHE:HA	1.53	0.74
4:E:240:TYR:CD2	4:E:453:ILE:CG1	2.71	0.74
4:E:44:GLU:HB3	4:E:280:PRO:HB3	1.68	0.74
4:E:38:ASN:O	4:E:51:THR:HA	1.87	0.74
1:A:1:SER:H3	1:A:4:GLU:HB2	1.52	0.74
4:E:416:VAL:HG22	4:E:417:GLU:N	2.03	0.74
3:C:60:HIS:CD2	3:C:92:ILE:CD1	2.70	0.73
2:B:416:GLU:CD	3:C:433:ILE:HD13	2.09	0.73
1:A:166:ASP:OD2	1:A:178:MET:HE1	1.88	0.73
1:A:56:LEU:HD22	1:A:58:GLN:HG3	1.70	0.73
3:C:1:VAL:O	3:C:3:GLU:N	2.20	0.73
3:C:141:TRP:CH2	3:C:223:ARG:HB3	2.23	0.73
1:D:187:TRP:HZ2	1:D:196:THR:HA	1.53	0.73
1:D:291:VAL:HG11	1:D:413:VAL:HG11	1.70	0.73
1:D:419:ILE:CD1	1:D:420:ILE:HG23	2.18	0.73
4:E:163:GLU:H	4:E:163:GLU:CD	1.91	0.73
4:E:235:LEU:CA	4:E:238:LEU:HG	2.15	0.73
4:E:262:THR:OG1	4:E:265:LEU:CD1	2.33	0.73
4:E:44:GLU:HA	4:E:129:ILE:HD11	1.68	0.73
1:D:102:ILE:HG13	4:E:98:GLN:HE21	1.53	0.73
1:D:32:THR:CB	1:D:59:GLN:HB3	2.17	0.73
3:C:42:LEU:HD22	3:C:190:TRP:HH2	1.49	0.73
3:C:223:ARG:HG2	3:C:224:LYS:N	2.03	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:275:SER:O	3:C:279:PRO:HD3	1.88	0.73
3:C:300:THR:HA	3:C:303:VAL:HG23	1.70	0.73
3:C:42:LEU:HD22	3:C:190:TRP:CZ2	2.23	0.73
3:C:474:VAL:HA	3:C:477:ASN:OD1	1.88	0.73
3:C:478:PHE:C	3:C:478:PHE:HD1	1.91	0.73
4:E:152:ALA:N	4:E:205:PHE:HD1	1.85	0.73
1:D:377:GLU:HB2	4:E:415:CYS:CB	2.17	0.73
2:B:75:ILE:HD13	2:B:78:LEU:HD13	1.70	0.73
4:E:100:GLU:HB2	4:E:122:ILE:CD1	2.17	0.73
1:A:89:ASP:HB2	1:A:149:TRP:HD1	1.48	0.73
2:B:92:LEU:HD22	2:B:146:PHE:CD1	2.22	0.73
3:C:309:VAL:O	3:C:313:HIS:CB	2.31	0.73
3:C:35:LEU:HD22	3:C:215:VAL:HG21	1.70	0.73
3:C:475:MET:HA	3:C:478:PHE:CZ	2.23	0.73
3:C:253:SER:CB	1:D:306:HIS:HB3	2.19	0.73
1:D:45:GLU:HG2	1:D:272:PRO:HG3	1.67	0.73
4:E:27:VAL:HG12	4:E:154:GLU:HA	1.67	0.73
4:E:159:LEU:HD11	4:E:208:ILE:HG23	1.68	0.73
4:E:36:LEU:HD13	4:E:173:ASP:OD1	1.87	0.73
2:B:133:MET:HA	2:B:279:ILE:CG2	2.18	0.73
3:C:58:MET:HE1	3:C:105:ALA:O	1.88	0.73
1:D:142:CYS:SG	1:D:144:MET:HG3	2.28	0.73
1:D:228:LEU:O	1:D:232:VAL:HG23	1.88	0.73
1:D:35:LEU:HD11	1:D:54:VAL:HG21	1.71	0.73
1:A:136:PRO:HA	1:A:277:TYR:CZ	2.24	0.73
2:B:227:PRO:O	2:B:231:ILE:HG12	1.88	0.73
2:B:233:ILE:O	2:B:237:LEU:HB2	1.87	0.73
1:A:249:VAL:HG23	2:B:257:LEU:HD21	1.70	0.73
3:C:67:LEU:HD12	3:C:116:GLY:HA2	1.70	0.73
1:D:56:LEU:HB2	1:D:120:PRO:CG	2.19	0.73
1:A:306:HIS:HB2	4:E:250:LYS:HZ3	1.54	0.73
1:A:292:THR:O	1:A:296:ILE:HG12	1.88	0.73
1:A:401:TYR:CD1	1:A:401:TYR:O	2.42	0.73
3:C:103:ASN:ND2	3:C:106:TYR:HE2	1.86	0.73
3:C:311:ASN:O	3:C:315:ARG:N	2.20	0.73
1:D:411:LEU:O	1:D:415:MET:HG3	1.89	0.73
4:E:217:LYS:HE3	4:E:217:LYS:O	1.88	0.73
1:D:63:VAL:O	1:D:66:ARG:HD3	1.89	0.73
1:D:20:ARG:HG3	1:D:22:VAL:HG23	1.70	0.73
2:B:145:VAL:HG12	2:B:206:ASP:HB2	1.71	0.73
2:B:459:SER:O	2:B:463:PRO:CD	2.36	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:55:PHE:CD1	2:B:55:PHE:N	2.51	0.73
3:C:97:ASN:ND2	3:C:146:LEU:CG	2.48	0.73
4:E:132:THR:C	4:E:135:PRO:HD3	2.08	0.73
1:A:93:TYR:OH	1:A:200:ASP:HB3	1.89	0.73
1:A:56:LEU:HD23	1:A:57:ARG:N	2.04	0.73
3:C:42:LEU:HD13	3:C:190:TRP:HZ2	1.54	0.73
1:D:40:LEU:CD1	1:D:52:THR:HB	2.19	0.73
1:D:106:THR:HG22	1:D:107:LYS:N	2.02	0.73
1:A:52:THR:O	1:A:123:ILE:HA	1.89	0.73
2:B:256:LEU:HD22	2:B:298:SER:HB2	1.70	0.73
3:C:7:LEU:HD13	3:C:73:GLU:OE1	1.89	0.73
1:D:252:SER:O	1:D:255:VAL:HG12	1.88	0.73
4:E:247:GLY:N	4:E:250:LYS:HZ1	1.81	0.73
1:D:3:HIS:O	1:D:7:LEU:HG	1.89	0.73
2:B:129:THR:O	2:B:129:THR:HG23	1.89	0.72
2:B:136:PRO:HB3	2:B:280:ILE:HD11	1.68	0.72
3:C:266:ALA:HB3	1:D:251:LEU:HD22	1.69	0.72
1:D:170:PHE:CE1	1:D:171:MET:O	2.42	0.72
1:D:238:ASP:HB3	4:E:308:LEU:HD23	1.70	0.72
1:D:78:ILE:HD11	1:D:110:LEU:CG	2.19	0.72
1:A:376:ILE:HG23	1:A:380:LYS:NZ	2.04	0.72
2:B:284:LEU:HD23	2:B:287:ILE:HD11	1.69	0.72
2:B:95:ASN:CB	2:B:126:SER:HB2	2.15	0.72
2:B:135:PHE:CB	2:B:279:ILE:HD13	2.18	0.72
2:B:33:VAL:HG22	2:B:158:LEU:HD22	1.70	0.72
2:B:253:ILE:HG12	2:B:302:LEU:HD11	1.71	0.72
1:D:192:CYS:SG	1:D:193:CYS:N	2.62	0.72
3:C:148:PHE:HB2	3:C:215:VAL:HG23	1.66	0.72
3:C:296:MET:CE	3:C:296:MET:HA	2.19	0.72
3:C:463:PRO:CA	3:C:466:VAL:HG23	2.19	0.72
4:E:261:GLN:HE21	4:E:265:LEU:HG	1.54	0.72
4:E:197:GLN:HG2	4:E:198:LEU:N	2.03	0.72
1:A:249:VAL:HG13	1:A:253:LEU:HD23	1.70	0.72
2:B:89:ASP:OD1	2:B:151:TYR:CD1	2.42	0.72
3:C:201:ILE:O	3:C:202:TYR:CG	2.42	0.72
3:C:90:PRO:HD2	3:C:120:TRP:CE3	2.24	0.72
2:B:297:LEU:CD1	2:B:445:THR:HG21	2.19	0.72
2:B:60:TRP:CH2	2:B:85:VAL:HG21	2.25	0.72
4:E:132:THR:O	4:E:135:PRO:CD	2.31	0.72
1:A:380:LYS:HD3	2:B:408:ILE:HB	1.72	0.72
2:B:7:LEU:HD13	2:B:68:ASP:HB2	1.71	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:94:LEU:CB	3:C:98:ASN:HB2	2.19	0.72
1:A:201:ILE:HG21	1:A:203:TYR:HE1	1.54	0.72
1:A:245:LEU:HG	2:B:253:ILE:HG21	1.71	0.72
3:C:115:ASN:ND2	3:C:115:ASN:H	1.85	0.72
3:C:278:LEU:CD1	3:C:278:LEU:O	2.37	0.72
3:C:453:ILE:CG2	3:C:454:ASP:N	2.51	0.72
3:C:69:TRP:HE3	3:C:73:GLU:HB3	1.55	0.72
1:D:257:LEU:HD12	1:D:257:LEU:C	2.10	0.72
4:E:184:THR:O	4:E:215:GLN:N	2.22	0.72
4:E:282:ILE:O	4:E:286:LEU:HD12	1.88	0.72
1:D:107:LYS:HD3	1:D:107:LYS:N	2.05	0.72
1:A:39:GLN:O	1:A:53:ASN:HB2	1.88	0.72
3:C:434:LYS:CE	3:C:435:GLU:HG2	2.20	0.72
3:C:59:ASP:OD1	3:C:121:LEU:HD13	1.88	0.72
1:A:37:LEU:HA	1:A:53:ASN:O	1.89	0.72
1:A:90:LEU:HD13	1:A:100:PHE:HE2	1.51	0.72
2:B:100:PHE:CD2	2:B:103:THR:HB	2.24	0.72
2:B:56:LEU:HD21	2:B:103:THR:HG23	1.72	0.72
1:D:236:PRO:HB3	1:D:299:HIS:NE2	2.05	0.72
1:D:228:LEU:HD23	1:D:249:VAL:HG11	1.71	0.72
2:B:416:GLU:OE2	3:C:433:ILE:HD13	1.88	0.72
4:E:416:VAL:CG2	4:E:417:GLU:N	2.53	0.72
1:A:240:GLY:O	1:A:306:HIS:CE1	2.42	0.72
2:B:144:MET:CE	2:B:211:LEU:HD21	2.19	0.72
2:B:218:LEU:HD13	2:B:221:ILE:HD11	1.71	0.72
4:E:289:VAL:O	4:E:293:SER:HB3	1.90	0.72
2:B:108:VAL:HG13	2:B:118:TRP:HB2	1.70	0.71
2:B:95:ASN:HA	2:B:127:SER:N	2.03	0.71
3:C:200:ASN:ND2	3:C:201:ILE:H	1.88	0.71
3:C:445:ASN:HA	3:C:448:LEU:CG	2.12	0.71
1:D:249:VAL:O	1:D:253:LEU:HB3	1.90	0.71
1:D:43:VAL:CG1	1:D:49:ILE:O	2.35	0.71
4:E:152:ALA:HB2	4:E:206:GLN:H	1.55	0.71
4:E:27:VAL:CG1	4:E:154:GLU:N	2.52	0.71
4:E:195:ASN:CB	4:E:205:PHE:H	2.02	0.71
4:E:222:ILE:HG23	4:E:223:ILE:H	1.55	0.71
4:E:454:ALA:O	4:E:457:LEU:HB3	1.90	0.71
1:A:43:VAL:HG13	1:A:50:VAL:CG2	2.20	0.71
2:B:48:GLU:HA	2:B:130:ILE:HG12	1.72	0.71
3:C:19:LYS:NZ	3:C:88:TRP:HD1	1.88	0.71
3:C:162:LEU:CD1	3:C:217:PHE:CE1	2.61	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:243:ALA:O	3:C:246:ALA:HB3	1.89	0.71
3:C:259:THR:O	3:C:262:CYS:SG	2.43	0.71
1:A:131:ILE:CD1	1:A:140:GLN:HG2	2.21	0.71
1:A:149:TRP:HH2	4:E:119:PRO:HA	1.54	0.71
1:A:43:VAL:HG22	1:A:50:VAL:CG2	2.18	0.71
3:C:241:PHE:HA	3:C:244:ALA:HB3	1.72	0.71
1:D:157:SER:HA	1:D:199:LEU:HD12	1.72	0.71
1:D:253:LEU:CD2	1:D:254:THR:N	2.52	0.71
3:C:269:VAL:HG13	3:C:270:PHE:CD1	2.24	0.71
3:C:305:ASN:O	3:C:309:VAL:HG23	1.90	0.71
3:C:478:PHE:C	3:C:478:PHE:CD1	2.64	0.71
3:C:60:HIS:HB3	3:C:62:TRP:CZ3	2.20	0.71
1:D:245:LEU:HD21	4:E:255:ILE:CG2	2.20	0.71
1:D:40:LEU:HD22	1:D:52:THR:OG1	1.90	0.71
4:E:183:TRP:HB3	4:E:216:ARG:NE	2.04	0.71
4:E:309:ARG:NH2	4:E:446:ILE:HG13	2.05	0.71
3:C:426:THR:O	3:C:429:ILE:CG1	2.38	0.71
1:A:187:TRP:HZ2	1:A:196:THR:HG23	1.52	0.71
1:A:207:MET:HE2	1:A:207:MET:H	1.55	0.71
1:D:131:ILE:HD11	1:D:133:THR:CB	2.20	0.71
1:D:286:ILE:O	1:D:290:ILE:HG23	1.89	0.71
4:E:209:ILE:HG12	4:E:211:PHE:HE1	1.55	0.71
3:C:115:ASN:N	3:C:115:ASN:HD22	1.74	0.71
3:C:462:THR:O	3:C:466:VAL:HG23	1.90	0.71
1:D:130:ILE:HB	1:D:134:HIS:HB2	1.73	0.71
1:D:95:ASN:HD21	1:D:128:CYS:CB	1.99	0.71
4:E:103:TYR:C	4:E:104:TYR:CD1	2.64	0.71
1:A:137:PHE:CD1	1:A:210:ILE:HD12	2.26	0.71
1:A:221:PRO:CA	1:A:224:LEU:HB3	2.21	0.71
2:B:131:LYS:HB3	2:B:133:MET:CG	2.20	0.71
2:B:20:ARG:CD	2:B:20:ARG:H	2.03	0.71
2:B:134:TYR:CD1	2:B:213:ILE:HG13	2.20	0.71
2:B:241:LEU:N	2:B:242:PRO:HD2	2.06	0.71
3:C:180:ASP:N	3:C:181:PRO:HD2	2.05	0.71
4:E:236:VAL:C	4:E:239:VAL:HG23	2.10	0.71
1:A:64:ARG:CA	1:A:66:ARG:HH11	2.02	0.71
2:B:283:TYR:O	2:B:287:ILE:HG23	1.89	0.71
1:A:31:ILE:CG1	1:A:60:TRP:HB3	2.21	0.71
2:B:278:PRO:O	2:B:279:ILE:HG13	1.91	0.71
3:C:70:ASN:O	3:C:74:TYR:HB3	1.91	0.71
1:D:415:MET:O	1:D:419:ILE:HG23	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:235:LEU:CD2	4:E:308:LEU:HG	2.21	0.71
4:E:94:ASN:ND2	4:E:143:LEU:HD23	2.06	0.71
1:D:15:TYR:C	1:D:16:ASN:ND2	2.44	0.71
1:A:145:LYS:NZ	1:A:202:THR:CG2	2.54	0.71
2:B:251:LEU:HD12	2:B:251:LEU:O	1.91	0.71
1:D:45:GLU:O	1:D:272:PRO:HG3	1.90	0.71
4:E:10:LEU:O	4:E:14:TYR:N	2.23	0.71
4:E:28:ILE:HG21	4:E:85:TRP:CZ3	2.25	0.71
4:E:149:THR:CG2	4:E:150:TYR:H	2.03	0.71
2:B:269:LYS:HD2	2:B:270:VAL:N	2.06	0.71
3:C:30:VAL:HG11	3:C:159:SER:N	2.05	0.71
3:C:463:PRO:O	3:C:467:LEU:HD23	1.90	0.71
3:C:58:MET:SD	3:C:92:ILE:HD12	2.30	0.71
1:D:201:ILE:O	1:D:203:TYR:CE1	2.44	0.71
1:D:229:THR:HA	1:D:232:VAL:HG23	1.73	0.71
1:D:239:SER:CB	4:E:314:HIS:HB2	2.21	0.71
1:D:287:SER:O	1:D:290:ILE:HG12	1.91	0.71
1:D:92:LEU:N	1:D:92:LEU:CD2	2.53	0.71
4:E:173:ASP:N	4:E:174:PRO:HD2	2.06	0.71
1:A:243:MET:HG2	1:A:244:THR:H	1.56	0.70
1:A:244:THR:O	1:A:247:ILE:CG2	2.36	0.70
1:A:413:VAL:HG13	1:A:416:LEU:HD23	1.72	0.70
3:C:102:TYR:HE1	3:C:106:TYR:HB3	1.54	0.70
3:C:180:ASP:OD2	3:C:219:LEU:HD22	1.91	0.70
1:D:149:TRP:CG	1:D:150:THR:N	2.59	0.70
1:D:292:THR:O	1:D:296:ILE:HG12	1.91	0.70
4:E:42:LEU:HD22	4:E:183:TRP:CZ2	2.26	0.70
4:E:34:LEU:HB2	4:E:210:PHE:CZ	2.25	0.70
4:E:311:PRO:CG	4:E:440:VAL:HG22	2.20	0.70
1:D:377:GLU:HA	1:D:380:LYS:CD	2.20	0.70
1:D:396:ALA:O	1:D:399:TRP:HB2	1.90	0.70
1:A:95:ASN:HA	1:A:127:TYR:HB3	1.73	0.70
1:A:35:LEU:C	1:A:35:LEU:HD23	2.11	0.70
2:B:95:ASN:CA	2:B:127:SER:H	2.03	0.70
2:B:60:TRP:HH2	2:B:85:VAL:HG21	1.55	0.70
3:C:162:LEU:H	3:C:199:LYS:HG2	1.55	0.70
3:C:299:VAL:O	3:C:302:VAL:HG23	1.91	0.70
4:E:55:ILE:CG2	4:E:119:PRO:HG2	2.21	0.70
4:E:63:ARG:HH11	4:E:63:ARG:HB2	1.56	0.70
2:B:290:LEU:HD11	2:B:453:SER:CB	2.21	0.70
4:E:251:CYS:SG	4:E:252:THR:N	2.64	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:175:GLU:OE1	1:A:175:GLU:HA	1.89	0.70
1:A:299:HIS:O	1:A:306:HIS:O	2.09	0.70
2:B:195:LYS:HA	2:B:207:VAL:HG13	1.73	0.70
2:B:449:ILE:HA	2:B:452:PHE:CD2	2.27	0.70
1:D:195:ASP:OD1	1:D:196:THR:N	2.24	0.70
1:D:244:THR:HG23	1:D:245:LEU:N	2.06	0.70
4:E:110:TYR:CD1	4:E:111:ASN:N	2.55	0.70
1:A:148:ILE:HG22	1:A:198:TYR:HB2	1.71	0.70
1:A:247:ILE:CG2	1:A:248:SER:N	2.53	0.70
1:A:17:LYS:NZ	1:A:83:ASP:HB3	2.05	0.70
1:D:146:LEU:HD22	1:D:203:TYR:CZ	2.26	0.70
1:D:92:LEU:HD21	1:D:124:PHE:CZ	2.26	0.70
4:E:32:LEU:HD12	4:E:157:LEU:HD13	1.71	0.70
4:E:265:LEU:CD2	4:E:296:ILE:HD11	2.11	0.70
4:E:32:LEU:HD12	4:E:208:ILE:HD11	1.72	0.70
4:E:10:LEU:HD13	4:E:64:LEU:CD2	2.21	0.70
2:B:291:VAL:HG12	2:B:292:ALA:N	2.06	0.70
1:A:4:GLU:HA	1:A:7:LEU:CD1	2.22	0.70
1:D:303:PRO:HB2	1:D:400:LYS:HZ2	1.57	0.70
1:A:80:LEU:HD12	1:A:80:LEU:O	1.92	0.70
1:A:251:LEU:HD13	4:E:260:ALA:CB	2.15	0.70
2:B:153:THR:CB	2:B:204:TYR:HB2	2.10	0.70
2:B:264:LEU:O	2:B:267:ALA:HB3	1.92	0.70
3:C:33:ILE:HG22	3:C:160:MET:SD	2.31	0.70
3:C:481:PRO:O	3:C:484:LYS:HB3	1.92	0.70
3:C:69:TRP:CB	3:C:73:GLU:HB2	2.18	0.70
3:C:77:ILE:HD12	3:C:80:LEU:HD13	1.71	0.70
4:E:59:TRP:CD2	4:E:115:MET:HB2	2.26	0.70
4:E:67:ASN:ND2	4:E:67:ASN:H	1.84	0.70
2:B:254:SER:C	3:C:265:LEU:HD11	2.12	0.70
4:E:47:GLU:O	4:E:126:THR:HG23	1.92	0.70
2:B:135:PHE:N	2:B:279:ILE:HD13	2.07	0.70
2:B:132:VAL:HG12	2:B:279:ILE:CA	2.22	0.70
3:C:130:CYS:SG	3:C:146:LEU:CD1	2.78	0.70
3:C:190:TRP:CA	3:C:223:ARG:HB2	2.21	0.70
2:B:421:PHE:CA	2:B:424:LEU:HB2	2.19	0.70
1:A:141:ASN:HA	1:A:205:PHE:O	1.91	0.70
1:A:296:ILE:CA	1:A:299:HIS:HB2	2.17	0.70
1:A:93:TYR:CD2	1:A:145:LYS:HB3	2.27	0.70
1:D:408:HIS:O	1:D:412:CYS:SG	2.50	0.70
4:E:147:SER:O	4:E:205:PHE:HE2	1.74	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:42:LEU:HD22	4:E:183:TRP:CE2	2.26	0.70
4:E:62:TYR:HD1	4:E:62:TYR:C	1.94	0.70
2:B:75:ILE:HD11	2:B:78:LEU:HB2	1.73	0.70
1:A:136:PRO:HB2	1:A:138:ASP:OD1	1.92	0.70
1:A:233:PHE:O	1:A:236:PRO:CG	2.40	0.70
2:B:160:HIS:CB	2:B:195:LYS:HE2	2.22	0.70
2:B:460:HIS:O	2:B:464:PRO:HG2	1.92	0.70
1:D:214:PHE:CE1	1:D:267:THR:HG21	2.27	0.70
1:D:287:SER:O	1:D:291:VAL:HG23	1.90	0.70
4:E:238:LEU:O	4:E:242:LEU:HB3	1.90	0.70
4:E:30:VAL:O	4:E:158:GLN:HG3	1.91	0.70
1:A:209:ARG:C	1:A:210:ILE:HG13	2.12	0.70
2:B:132:VAL:CG1	2:B:279:ILE:HA	2.21	0.70
3:C:50:GLU:O	3:C:129:SER:HA	1.90	0.70
3:C:282:ALA:O	3:C:285:VAL:O	2.09	0.70
1:D:37:LEU:H	1:D:164:ARG:HH22	1.40	0.70
4:E:140:ASN:HD22	4:E:141:CYS:N	1.89	0.70
4:E:241:PHE:CE1	4:E:450:CYS:HB3	2.26	0.70
1:D:63:VAL:O	1:D:66:ARG:CD	2.39	0.70
4:E:70:GLU:OE1	4:E:70:GLU:HA	1.92	0.70
1:A:230:VAL:HG22	1:A:414:PHE:CZ	2.27	0.69
1:A:294:VAL:CG1	1:A:295:VAL:N	2.55	0.69
1:A:410:LEU:HD13	1:A:414:PHE:HD2	1.56	0.69
2:B:308:SER:CB	2:B:311:THR:HG22	2.22	0.69
3:C:62:TRP:CZ2	3:C:88:TRP:O	2.44	0.69
1:A:76:LYS:HG3	1:A:112:TYR:CE2	2.27	0.69
3:C:33:ILE:HG12	3:C:62:TRP:HB3	1.72	0.69
1:D:236:PRO:HB2	1:D:406:ILE:CG1	2.23	0.69
1:D:48:GLN:HB2	1:D:128:CYS:O	1.93	0.69
3:C:230:ILE:CG1	3:C:231:ASN:H	2.05	0.69
1:A:166:ASP:OD2	1:A:178:MET:CE	2.40	0.69
2:B:100:PHE:HB2	2:B:103:THR:HB	1.74	0.69
2:B:118:TRP:CD1	2:B:120:PRO:HD3	2.26	0.69
3:C:201:ILE:O	3:C:202:TYR:CD1	2.45	0.69
3:C:457:SER:O	3:C:461:ILE:HG13	1.92	0.69
1:D:243:MET:H	1:D:243:MET:HE2	1.57	0.69
4:E:44:GLU:CA	4:E:129:ILE:HD12	2.20	0.69
2:B:416:GLU:OE1	3:C:433:ILE:HD13	1.92	0.69
1:D:137:PHE:CA	1:D:435:GLN:HG3	2.22	0.69
1:D:303:PRO:HD2	1:D:400:LYS:CD	2.22	0.69
1:A:136:PRO:HG3	1:A:274:ILE:HG21	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:408:HIS:O	1:D:412:CYS:N	2.24	0.69
1:D:94:ASN:C	1:D:94:ASN:ND2	2.46	0.69
4:E:239:VAL:HG12	4:E:254:SER:OG	1.92	0.69
4:E:10:LEU:HD11	4:E:63:ARG:O	1.93	0.69
2:B:281:ILE:N	2:B:281:ILE:HD12	2.07	0.69
2:B:284:LEU:HA	2:B:287:ILE:HG13	1.72	0.69
1:A:41:ILE:HD11	1:A:51:GLU:CG	2.20	0.69
3:C:455:ARG:O	3:C:459:PHE:HD1	1.73	0.69
1:D:38:ILE:HD11	4:E:199:THR:HG21	1.74	0.69
2:B:444:ILE:HG23	2:B:445:THR:N	2.08	0.69
3:C:91:ASP:OD1	3:C:153:TYR:HE1	1.76	0.69
3:C:160:MET:H	3:C:213:GLN:CB	2.04	0.69
3:C:160:MET:H	3:C:213:GLN:CG	2.05	0.69
3:C:42:LEU:CD2	3:C:190:TRP:CH2	2.76	0.69
2:B:47:ASN:HB2	2:B:49:GLU:CD	2.13	0.69
4:E:27:VAL:CG1	4:E:153:HIS:O	2.40	0.69
1:D:245:LEU:CD2	4:E:255:ILE:HG13	2.23	0.69
2:B:72:TYR:HD1	2:B:112:HIS:HB2	1.57	0.69
2:B:4:GLU:OE1	2:B:8:LEU:HG	1.91	0.69
1:D:1:SER:H3	1:D:4:GLU:HB2	1.56	0.69
1:A:242:LYS:HB2	1:A:245:LEU:CB	2.23	0.69
2:B:160:HIS:NE2	2:B:209:PHE:HE1	1.90	0.69
2:B:40:LEU:HD13	2:B:41:LEU:N	2.07	0.69
4:E:140:ASN:C	4:E:140:ASN:ND2	2.45	0.69
1:A:187:TRP:CH2	1:A:189:TYR:CB	2.75	0.69
1:A:305:THR:HG1	1:A:400:LYS:HB2	1.58	0.69
1:D:178:MET:HA	1:D:207:MET:CB	2.23	0.69
1:D:293:VAL:O	1:D:297:ASN:HB2	1.93	0.69
1:D:37:LEU:HD11	1:D:52:THR:OG1	1.93	0.69
1:D:111:ASP:OD2	1:D:115:LYS:HD3	1.92	0.69
1:D:60:TRP:CZ3	1:D:116:ILE:HG13	2.27	0.69
2:B:281:ILE:HG22	2:B:285:MET:CA	2.22	0.69
1:A:4:GLU:HA	1:A:7:LEU:HD12	1.73	0.69
3:C:204:ASP:OD1	3:C:205:LYS:HD3	1.92	0.69
2:B:185:GLN:HB3	2:B:217:PRO:HB3	1.74	0.69
2:B:144:MET:HE1	2:B:211:LEU:HD21	1.75	0.69
2:B:58:LEU:HD11	2:B:118:TRP:HE3	1.58	0.69
3:C:199:LYS:NZ	3:C:199:LYS:O	2.26	0.69
3:C:30:VAL:HG11	3:C:159:SER:HB2	1.75	0.69
1:D:252:SER:HB2	4:E:259:LEU:HD13	1.73	0.69
1:D:253:LEU:HD23	1:D:254:THR:CA	2.22	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:250:LEU:CD1	1:D:296:ILE:HD13	2.17	0.69
4:E:44:GLU:CD	4:E:133:TYR:HD2	1.96	0.69
4:E:122:ILE:O	4:E:122:ILE:HG12	1.90	0.69
1:A:410:LEU:O	1:A:414:PHE:HB2	1.93	0.69
2:B:104:LEU:HD12	2:B:118:TRP:HH2	1.57	0.69
2:B:136:PRO:HD3	2:B:279:ILE:HG21	1.75	0.69
3:C:201:ILE:HD12	3:C:213:GLN:OE1	1.93	0.69
4:E:47:GLU:CA	4:E:129:ILE:HD11	2.15	0.69
4:E:173:ASP:OD2	4:E:212:LEU:CD2	2.41	0.69
1:D:60:TRP:CH2	1:D:86:TRP:CZ3	2.81	0.69
3:C:93:VAL:HG21	3:C:151:LEU:HD13	1.73	0.69
1:A:141:ASN:HB3	1:A:206:ILE:HG13	1.75	0.68
1:A:60:TRP:HE1	1:A:116:ILE:HD12	1.57	0.68
2:B:128:CYS:SG	2:B:144:MET:HG2	2.33	0.68
2:B:175:ILE:HG12	2:B:177:GLN:H	1.56	0.68
2:B:160:HIS:NE2	2:B:209:PHE:CE1	2.61	0.68
2:B:26:GLY:O	2:B:28:LYS:HE3	1.93	0.68
3:C:69:TRP:CZ2	3:C:112:VAL:CG1	2.69	0.68
3:C:273:LEU:HD23	3:C:276:GLN:HB2	1.73	0.68
1:D:280:PHE:HB3	1:D:284:PHE:CZ	2.29	0.68
1:D:46:VAL:HA	1:D:272:PRO:HD3	1.73	0.68
1:D:15:TYR:C	1:D:16:ASN:HD22	1.97	0.68
2:B:281:ILE:H	2:B:281:ILE:HD12	1.59	0.68
2:B:75:ILE:HD11	2:B:78:LEU:HD13	1.74	0.68
1:A:35:LEU:HD13	1:A:203:TYR:OH	1.92	0.68
1:D:253:LEU:CD2	1:D:254:THR:H	2.05	0.68
4:E:185:ILE:HG12	4:E:214:ILE:HG21	1.75	0.68
4:E:239:VAL:N	4:E:242:LEU:HD23	2.07	0.68
1:D:68:ASN:CB	1:D:69:PRO:CD	2.71	0.68
1:A:243:MET:HG2	1:A:244:THR:N	2.08	0.68
1:A:260:ILE:O	1:A:264:ILE:HG23	1.93	0.68
2:B:28:LYS:HB3	2:B:156:VAL:N	2.07	0.68
2:B:444:ILE:HG23	2:B:445:THR:H	1.57	0.68
1:D:236:PRO:HA	1:D:240:GLY:HA2	1.74	0.68
4:E:103:TYR:CG	4:E:104:TYR:N	2.58	0.68
4:E:224:ASN:O	4:E:228:PRO:CG	2.40	0.68
4:E:306:VAL:O	4:E:309:ARG:HG3	1.93	0.68
4:E:313:THR:O	4:E:314:HIS:ND1	2.26	0.68
2:B:7:LEU:O	2:B:10:VAL:HG12	1.94	0.68
1:A:107:LYS:NZ	2:B:151:TYR:HA	2.09	0.68
3:C:263:VAL:O	3:C:267:GLN:CG	2.41	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:95:ASN:OD1	1:D:144:MET:HG2	1.93	0.68
1:D:250:LEU:CA	1:D:253:LEU:HD22	2.22	0.68
4:E:261:GLN:HE21	4:E:265:LEU:CG	2.07	0.68
2:B:15:TYR:CD1	2:B:15:TYR:O	2.47	0.68
1:A:54:VAL:HG23	1:A:122:ALA:HB3	1.75	0.68
2:B:48:GLU:HA	2:B:130:ILE:CG1	2.24	0.68
1:D:46:VAL:HG22	1:D:272:PRO:HD3	1.74	0.68
4:E:62:TYR:C	4:E:62:TYR:CD1	2.67	0.68
4:E:59:TRP:HZ2	4:E:84:LEU:HD22	1.58	0.68
1:D:80:LEU:HD22	1:D:110:LEU:HD23	1.74	0.68
1:A:384:GLU:OE2	1:A:387:LYS:HE2	1.93	0.68
1:A:265:PRO:CD	1:A:266:SER:H	2.07	0.68
2:B:247:GLU:HA	2:B:249:MET:HG3	1.76	0.68
3:C:266:ALA:CB	1:D:251:LEU:HD13	2.23	0.68
1:A:291:VAL:HG12	1:A:295:VAL:CG2	2.24	0.68
1:A:245:LEU:HD21	2:B:253:ILE:HB	1.74	0.68
3:C:263:VAL:CA	1:D:251:LEU:HD11	2.24	0.68
1:D:56:LEU:CA	1:D:120:PRO:HD2	2.23	0.68
4:E:134:PHE:N	4:E:135:PRO:CD	2.55	0.68
1:A:16:ASN:HB2	1:A:19:ILE:CD1	2.23	0.68
1:A:235:LEU:HD21	1:A:242:LYS:CG	2.24	0.68
1:A:121:PRO:CB	2:B:149:TYR:CZ	2.74	0.68
3:C:136:TYR:HD1	3:C:142:GLN:HB3	1.58	0.68
1:D:419:ILE:O	1:D:422:THR:HG22	1.91	0.68
4:E:214:ILE:HD12	4:E:214:ILE:C	2.14	0.68
4:E:75:ASP:HB3	4:E:110:TYR:HE1	1.52	0.68
3:C:225:PRO:HG2	3:C:228:TYR:CD1	2.29	0.68
1:A:277:TYR:HA	1:A:280:PHE:CE1	2.28	0.68
2:B:145:VAL:HA	2:B:207:VAL:O	1.93	0.68
2:B:216:LYS:CE	2:B:216:LYS:H	1.96	0.68
2:B:21:PRO:HG2	2:B:60:TRP:NE1	2.09	0.68
2:B:280:ILE:H	2:B:280:ILE:HD13	1.59	0.68
3:C:8:ILE:HD11	3:C:69:TRP:HZ3	1.59	0.68
1:D:49:ILE:HG21	1:D:125:LYS:HZ2	1.58	0.68
4:E:297:VAL:O	4:E:301:VAL:HG22	1.92	0.68
4:E:453:ILE:O	4:E:457:LEU:N	2.27	0.68
1:A:155:LYS:HG3	4:E:78:ARG:HE	1.59	0.68
1:A:6:ARG:HB2	1:A:6:ARG:HH11	1.57	0.68
2:B:111:GLN:HB2	2:B:115:ALA:HB3	1.75	0.68
1:A:265:PRO:CA	1:A:268:SER:HB3	2.23	0.68
2:B:439:PHE:HA	2:B:442:ILE:HB	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:80:LEU:O	3:C:112:VAL:CB	2.42	0.68
1:D:412:CYS:HA	1:D:415:MET:HE1	1.76	0.68
1:A:67:TRP:CD1	1:A:71:ASP:CG	2.68	0.68
1:D:107:LYS:HZ1	4:E:149:THR:HA	1.58	0.68
4:E:416:VAL:HG22	4:E:417:GLU:H	1.59	0.68
1:A:302:SER:O	4:E:245:GLN:O	2.12	0.67
3:C:220:ILE:O	3:C:220:ILE:HG13	1.94	0.67
3:C:77:ILE:HD11	3:C:80:LEU:HB2	1.74	0.67
1:D:118:TRP:NE1	1:D:120:PRO:HB3	2.09	0.67
4:E:1:ASN:O	4:E:69:SER:HB3	1.95	0.67
4:E:184:THR:O	4:E:214:ILE:HB	1.94	0.67
1:A:20:ARG:HG3	1:A:22:VAL:CG2	2.24	0.67
2:B:75:ILE:CD1	2:B:78:LEU:HB2	2.24	0.67
3:C:293:MET:O	3:C:297:SER:HB3	1.93	0.67
3:C:36:SER:HB3	3:C:59:ASP:CB	2.24	0.67
1:A:72:TYR:CD1	1:A:72:TYR:C	2.67	0.67
3:C:113:ARG:CD	3:C:117:TYR:HB3	2.21	0.67
3:C:141:TRP:HB2	3:C:222:ARG:HA	1.76	0.67
3:C:259:THR:O	3:C:263:VAL:HG23	1.94	0.67
3:C:69:TRP:HB2	3:C:74:TYR:N	2.09	0.67
4:E:44:GLU:OE1	4:E:129:ILE:HG21	1.94	0.67
1:D:66:ARG:O	1:D:67:TRP:CE3	2.46	0.67
3:C:204:ASP:H	3:C:207:PRO:HG2	1.59	0.67
2:B:104:LEU:HA	2:B:118:TRP:HH2	1.58	0.67
2:B:43:LEU:HB3	2:B:215:ARG:HH12	1.58	0.67
2:B:33:VAL:HG11	2:B:158:LEU:HD11	1.76	0.67
2:B:52:THR:HG22	2:B:53:SER:H	1.59	0.67
1:D:38:ILE:C	1:D:169:THR:HG21	2.14	0.67
3:C:93:VAL:CB	3:C:151:LEU:HD13	2.24	0.67
1:A:108:LEU:HD22	1:A:118:TRP:HA	1.77	0.67
1:A:217:ASN:O	1:A:221:PRO:CD	2.42	0.67
1:A:227:PHE:CA	1:A:230:VAL:HB	2.22	0.67
2:B:152:ASP:CB	2:B:203:SER:HB3	2.23	0.67
2:B:460:HIS:O	2:B:464:PRO:CG	2.43	0.67
3:C:132:ILE:HG13	3:C:136:TYR:CD2	2.30	0.67
3:C:63:TYR:HE1	3:C:116:GLY:HA3	1.55	0.67
1:D:45:GLU:HG2	1:D:272:PRO:CD	2.24	0.67
4:E:44:GLU:HG3	4:E:129:ILE:CD1	2.24	0.67
3:C:443:VAL:HA	3:C:446:TRP:CD1	2.29	0.67
1:A:134:HIS:CA	1:A:136:PRO:HD2	2.25	0.67
1:A:135:PHE:N	1:A:136:PRO:HD3	2.09	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:244:ASP:CB	3:C:314:PHE:HE1	2.08	0.67
2:B:136:PRO:CD	2:B:280:ILE:HD11	2.25	0.67
3:C:181:PRO:HD3	3:C:192:ILE:HG21	1.75	0.67
4:E:235:LEU:CD1	4:E:257:VAL:HG11	2.24	0.67
1:D:7:LEU:HA	1:D:10:ASN:ND2	2.08	0.67
1:D:427:ALA:O	1:D:431:ILE:HG13	1.94	0.67
1:A:391:GLU:O	1:A:394:ASN:CG	2.33	0.67
3:C:253:SER:OG	1:D:306:HIS:HB3	1.94	0.67
1:D:212:LEU:O	1:D:216:VAL:HG23	1.94	0.67
4:E:302:ILE:O	4:E:306:VAL:HG23	1.93	0.67
4:E:240:TYR:O	4:E:450:CYS:SG	2.53	0.67
3:C:51:THR:HA	3:C:128:SER:O	1.94	0.67
3:C:179:ILE:HG13	3:C:181:PRO:HD2	1.76	0.67
4:E:174:PRO:HA	4:E:177:PHE:CB	2.24	0.67
4:E:242:LEU:N	4:E:243:PRO:HD2	2.10	0.67
2:B:135:PHE:HB2	2:B:279:ILE:HB	1.77	0.67
3:C:110:VAL:HG13	3:C:120:TRP:CB	2.24	0.67
3:C:478:PHE:HD1	3:C:479:ASN:N	1.92	0.67
2:B:416:GLU:OE2	3:C:433:ILE:HG21	1.95	0.67
1:A:108:LEU:HD13	1:A:118:TRP:CB	2.24	0.67
1:A:243:MET:HB3	1:A:306:HIS:CE1	2.30	0.67
1:A:35:LEU:HD23	1:A:36:GLN:N	2.09	0.67
2:B:251:LEU:HD13	3:C:261:ILE:CG2	2.25	0.67
3:C:230:ILE:CG1	3:C:231:ASN:N	2.57	0.67
1:A:135:PHE:CD1	1:A:273:LEU:CB	2.77	0.67
2:B:92:LEU:CG	2:B:96:ASN:HB2	2.25	0.67
4:E:151:ASN:O	4:E:153:HIS:N	2.25	0.67
4:E:273:PRO:HG2	4:E:274:GLU:H	1.59	0.67
1:D:29:VAL:HG23	1:D:155:LYS:O	1.95	0.67
1:A:128:CYS:HB3	1:A:144:MET:SD	2.35	0.66
1:A:145:LYS:HZ2	1:A:202:THR:CG2	2.08	0.66
1:A:255:VAL:HG23	1:A:258:LEU:HD12	1.76	0.66
1:A:292:THR:HA	1:A:296:ILE:CD1	2.24	0.66
2:B:130:ILE:HD12	2:B:134:TYR:CE2	2.30	0.66
2:B:58:LEU:CD1	2:B:118:TRP:HB3	2.25	0.66
3:C:19:LYS:CD	3:C:19:LYS:O	2.43	0.66
3:C:269:VAL:HG13	3:C:270:PHE:HD1	1.60	0.66
1:D:236:PRO:HA	1:D:240:GLY:CA	2.24	0.66
1:D:242:LYS:O	1:D:245:LEU:HB3	1.96	0.66
4:E:211:PHE:O	4:E:212:LEU:HD12	1.93	0.66
4:E:39:LEU:CD1	4:E:49:LEU:HD13	2.24	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:92:ILE:HA	3:C:149:THR:O	1.95	0.66
1:D:130:ILE:HB	1:D:134:HIS:CG	2.30	0.66
1:D:212:LEU:O	1:D:216:VAL:CG2	2.42	0.66
4:E:94:ASN:ND2	4:E:125:SER:HB2	2.01	0.66
3:C:233:ILE:HD13	3:C:233:ILE:N	2.08	0.66
1:D:111:ASP:OD2	1:D:115:LYS:HB3	1.95	0.66
2:B:136:PRO:HG2	2:B:139:TRP:HA	1.75	0.66
2:B:306:HIS:ND1	2:B:306:HIS:C	2.48	0.66
3:C:445:ASN:OD1	3:C:448:LEU:HD11	1.95	0.66
4:E:231:LEU:HG	4:E:232:ILE:N	2.03	0.66
2:B:29:VAL:O	2:B:156:VAL:HG23	1.95	0.66
2:B:37:LEU:HD23	2:B:179:ALA:C	2.14	0.66
2:B:306:HIS:HD1	2:B:306:HIS:C	1.99	0.66
2:B:58:LEU:HD11	2:B:118:TRP:CE3	2.31	0.66
1:D:100:PHE:HA	1:D:124:PHE:HB3	1.78	0.66
1:D:144:MET:O	1:D:203:TYR:CD1	2.48	0.66
4:E:92:GLU:HB3	4:E:144:VAL:HG23	1.76	0.66
4:E:240:TYR:CD1	4:E:303:VAL:HG21	2.30	0.66
4:E:253:LEU:HG	4:E:254:SER:N	2.10	0.66
1:D:235:LEU:HD22	4:E:308:LEU:HG	1.77	0.66
4:E:36:LEU:CD1	4:E:173:ASP:CG	2.64	0.66
1:A:17:LYS:HE3	1:A:84:ASP:HA	1.77	0.66
2:B:212:ILE:HD13	2:B:469:ALA:CA	2.25	0.66
3:C:143:ASN:OD1	3:C:220:ILE:CB	2.41	0.66
3:C:223:ARG:O	3:C:224:LYS:HG3	1.95	0.66
1:D:177:VAL:O	1:D:207:MET:HB2	1.94	0.66
4:E:59:TRP:CE2	4:E:115:MET:HB2	2.30	0.66
4:E:266:PHE:CD1	4:E:269:ALA:HB3	2.30	0.66
3:C:66:ARG:HH11	3:C:66:ARG:CG	2.05	0.66
3:C:289:GLY:O	3:C:293:MET:CE	2.43	0.66
1:A:46:VAL:HG21	1:A:269:SER:O	1.95	0.66
2:B:220:TYR:HB3	2:B:223:TYR:CE2	2.31	0.66
3:C:131:PRO:CG	3:C:144:CYS:HA	2.25	0.66
3:C:31:VAL:HG21	3:C:88:TRP:HZ3	1.61	0.66
3:C:452:THR:O	3:C:456:LEU:HG	1.95	0.66
1:D:49:ILE:HG21	1:D:125:LYS:HZ1	1.59	0.66
1:D:97:ASP:O	1:D:97:ASP:OD1	2.13	0.66
1:D:41:ILE:HG12	4:E:96:ASP:OD2	1.94	0.66
1:D:21:PRO:HG3	1:D:60:TRP:CZ2	2.30	0.66
4:E:100:GLU:HB2	4:E:122:ILE:HD11	1.76	0.66
1:A:90:LEU:HD12	1:A:100:PHE:HE2	1.61	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:45:GLU:O	1:A:130:ILE:HG13	1.95	0.66
2:B:145:VAL:CG1	2:B:206:ASP:HB2	2.26	0.66
3:C:199:LYS:HD2	3:C:200:ASN:N	2.11	0.66
4:E:173:ASP:HB2	4:E:188:ARG:HH11	1.59	0.66
4:E:188:ARG:NH2	4:E:210:PHE:CD2	2.62	0.66
1:A:419:ILE:CG2	1:A:420:ILE:H	2.08	0.66
2:B:438:LEU:O	2:B:442:ILE:N	2.29	0.66
2:B:45:GLU:HA	2:B:130:ILE:CD1	2.25	0.66
2:B:92:LEU:HG	2:B:96:ASN:CB	2.24	0.66
3:C:253:SER:HB2	1:D:306:HIS:HB3	1.78	0.66
1:D:145:LYS:O	1:D:146:LEU:HD12	1.94	0.66
1:D:249:VAL:HG13	4:E:259:LEU:CD2	2.25	0.66
1:D:45:GLU:C	1:D:272:PRO:HG3	2.16	0.66
4:E:183:TRP:HB2	4:E:216:ARG:CG	2.06	0.66
4:E:1:ASN:ND2	4:E:69:SER:HB3	2.11	0.66
1:A:118:TRP:NE1	1:A:120:PRO:HG3	2.10	0.66
1:A:282:MET:O	1:A:286:ILE:HG13	1.95	0.66
2:B:143:THR:HG23	2:B:208:THR:HG23	1.77	0.66
3:C:12:LEU:HB3	3:C:15:ASN:HB3	1.78	0.66
4:E:136:PHE:CE1	4:E:285:TYR:OH	2.42	0.66
4:E:151:ASN:HA	4:E:205:PHE:HB2	1.77	0.66
1:A:72:TYR:HB2	1:A:112:TYR:HA	1.78	0.66
1:D:72:TYR:C	1:D:72:TYR:CD1	2.66	0.66
2:B:241:LEU:HD21	2:B:251:LEU:HD11	1.78	0.66
3:C:8:ILE:HD12	3:C:11:LEU:HD12	1.78	0.66
3:C:67:LEU:HD21	3:C:112:VAL:CG1	2.25	0.66
1:D:43:VAL:HG22	1:D:50:VAL:CA	2.19	0.66
1:D:40:LEU:HD22	1:D:52:THR:HG1	1.60	0.66
4:E:272:VAL:HA	4:E:275:THR:OG1	1.96	0.66
4:E:276:SER:O	4:E:279:VAL:O	2.14	0.66
1:A:57:ARG:HA	1:A:119:THR:CG2	2.12	0.65
2:B:45:GLU:CD	2:B:279:ILE:CD1	2.63	0.65
3:C:39:LEU:O	3:C:183:ALA:HB3	1.96	0.65
4:E:32:LEU:CD1	4:E:157:LEU:HD13	2.24	0.65
1:A:129:GLU:OE2	1:A:140:GLN:HG3	1.95	0.65
1:A:303:PRO:HB2	1:A:400:LYS:HE2	1.79	0.65
2:B:142:CYS:O	2:B:210:TYR:HA	1.96	0.65
2:B:132:VAL:C	2:B:279:ILE:HG23	2.16	0.65
2:B:311:THR:O	2:B:312:HIS:HB3	1.95	0.65
4:E:52:ASN:HA	4:E:121:ALA:O	1.96	0.65
4:E:188:ARG:CD	4:E:211:PHE:O	2.43	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:147:GLY:HA2	1:A:158:ILE:HG21	1.78	0.65
1:A:224:LEU:CG	1:A:225:PHE:N	2.58	0.65
2:B:90:ILE:HA	2:B:148:SER:HA	1.77	0.65
2:B:241:LEU:HG	2:B:248:LYS:CB	2.23	0.65
3:C:30:VAL:CG2	3:C:158:ILE:N	2.55	0.65
3:C:273:LEU:HD23	3:C:276:GLN:CG	2.25	0.65
2:B:220:TYR:CE2	3:C:279:PRO:CB	2.77	0.65
1:D:26:THR:HG22	1:D:27:HIS:H	1.61	0.65
4:E:110:TYR:HE1	4:E:111:ASN:ND2	1.94	0.65
4:E:146:ARG:NH1	4:E:205:PHE:HB3	2.11	0.65
4:E:138:TRP:CE2	4:E:215:GLN:HB2	2.32	0.65
4:E:89:VAL:O	4:E:90:VAL:HG23	1.95	0.65
1:A:377:GLU:HA	1:A:380:LYS:HE2	1.78	0.65
1:D:382:ILE:O	1:D:385:HIS:HB3	1.96	0.65
1:A:79:ARG:HH11	1:A:107:LYS:HZ2	1.42	0.65
2:B:91:VAL:HG11	2:B:149:TYR:CD1	2.30	0.65
3:C:191:GLU:CG	3:C:222:ARG:HB3	2.26	0.65
1:D:166:ASP:HB2	1:D:181:TYR:CG	2.31	0.65
1:D:283:ILE:CA	1:D:286:ILE:HD12	2.26	0.65
4:E:45:LYS:CD	4:E:277:LEU:O	2.43	0.65
3:C:429:ILE:HG13	3:C:430:VAL:N	2.12	0.65
2:B:415:LEU:HD13	2:B:415:LEU:C	2.16	0.65
1:A:149:TRP:CH2	4:E:119:PRO:HA	2.31	0.65
2:B:238:VAL:CG1	2:B:248:LYS:HZ1	2.08	0.65
2:B:32:ARG:HE	2:B:59:ALA:C	2.00	0.65
3:C:455:ARG:HD2	3:C:455:ARG:H	1.61	0.65
1:D:298:THR:HA	1:D:301:ARG:HB3	1.76	0.65
1:D:79:ARG:HH12	4:E:154:GLU:CD	2.00	0.65
4:E:242:LEU:HD12	4:E:246:ALA:HB2	1.77	0.65
4:E:35:THR:HB	4:E:54:TRP:CE3	2.29	0.65
1:D:303:PRO:CD	1:D:400:LYS:HD3	2.26	0.65
3:C:206:PHE:N	3:C:207:PRO:HD2	2.11	0.65
2:B:233:ILE:O	2:B:237:LEU:HD22	1.97	0.65
1:D:56:LEU:O	1:D:120:PRO:CD	2.44	0.65
4:E:1:ASN:ND2	4:E:68:THR:HB	2.12	0.65
4:E:23:THR:CG2	4:E:24:LEU:H	2.10	0.65
4:E:446:ILE:HG22	4:E:447:ASP:N	2.11	0.65
1:A:187:TRP:CZ2	1:A:189:TYR:HB3	2.31	0.65
1:A:290:ILE:O	1:A:293:VAL:HG12	1.95	0.65
1:A:292:THR:CB	1:A:296:ILE:HD11	2.26	0.65
1:A:54:VAL:HG22	1:A:122:ALA:HB3	1.79	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:238:ASP:O	2:B:309:PRO:HA	1.96	0.65
3:C:12:LEU:CB	3:C:16:LYS:HG2	2.27	0.65
3:C:263:VAL:HA	1:D:251:LEU:CD1	2.26	0.65
3:C:474:VAL:HA	3:C:477:ASN:CG	2.16	0.65
1:D:171:MET:HG2	1:D:174:GLY:N	2.12	0.65
4:E:265:LEU:HD21	4:E:296:ILE:CD1	2.11	0.65
1:D:17:LYS:HE3	1:D:83:ASP:O	1.96	0.65
1:A:32:THR:HG23	1:A:159:SER:O	1.97	0.65
1:A:151:TYR:HB2	1:A:156:VAL:CG1	2.27	0.65
1:A:58:GLN:HB3	1:A:60:TRP:CZ3	2.31	0.65
1:D:181:TYR:HE1	1:D:203:TYR:HB3	1.62	0.65
1:D:287:SER:CA	1:D:290:ILE:HG12	2.27	0.65
4:E:294:LEU:HA	4:E:297:VAL:HG23	1.76	0.65
1:D:426:PHE:CG	1:D:427:ALA:N	2.65	0.65
1:D:215:VAL:O	1:D:219:ILE:HG23	1.97	0.65
4:E:83:LEU:N	4:E:83:LEU:HD22	2.12	0.65
1:D:97:ASP:HB2	1:D:127:TYR:HB2	1.78	0.65
2:B:409:LYS:HE2	3:C:423:ILE:HA	1.79	0.65
1:D:137:PHE:CB	1:D:435:GLN:CG	2.71	0.65
2:B:285:MET:O	2:B:288:MET:HB3	1.97	0.65
1:A:228:LEU:HD13	1:A:249:VAL:HG21	1.78	0.65
1:A:259:VAL:O	1:A:263:LEU:HG	1.97	0.65
1:A:413:VAL:O	1:A:416:LEU:HB3	1.97	0.65
2:B:245:ALA:O	2:B:248:LYS:HB3	1.97	0.65
2:B:438:LEU:HD23	2:B:441:TYR:CB	2.27	0.65
3:C:7:LEU:HD11	3:C:70:ASN:HD22	1.61	0.65
3:C:33:ILE:HD11	3:C:88:TRP:CH2	2.31	0.65
1:D:35:LEU:CD2	1:D:164:ARG:HH12	1.98	0.65
1:D:171:MET:SD	1:D:174:GLY:HA2	2.36	0.65
1:D:412:CYS:O	1:D:415:MET:HE2	1.96	0.65
4:E:89:VAL:HG23	4:E:99:PHE:CE1	2.32	0.65
1:D:57:ARG:HA	1:D:119:THR:HG22	1.78	0.65
2:B:406:GLU:O	2:B:409:LYS:HB2	1.96	0.65
1:D:379:VAL:HG22	1:D:382:ILE:CD1	2.27	0.65
4:E:178:THR:CG2	4:E:180:ASN:H	2.10	0.65
1:A:250:LEU:HD21	1:A:296:ILE:HD12	1.79	0.64
3:C:29:GLU:O	3:C:30:VAL:HG23	1.97	0.64
3:C:305:ASN:OD1	3:C:308:ILE:HG21	1.96	0.64
1:D:141:ASN:HB3	1:D:206:ILE:CD1	2.27	0.64
1:D:167:LEU:CD2	1:D:178:MET:HB2	2.26	0.64
1:D:195:ASP:O	1:D:197:PRO:HD3	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:172:ILE:HD12	4:E:188:ARG:HB3	1.79	0.64
4:E:29:ASP:N	4:E:29:ASP:OD1	2.28	0.64
4:E:240:TYR:HD2	4:E:453:ILE:HD13	1.62	0.64
4:E:178:THR:HG22	4:E:180:ASN:N	2.12	0.64
4:E:82:GLU:C	4:E:83:LEU:HD22	2.17	0.64
2:B:141:ASN:HD21	2:B:212:ILE:CG1	2.01	0.64
1:D:130:ILE:HD13	1:D:131:ILE:N	2.13	0.64
1:D:242:LYS:HD2	1:D:245:LEU:CD1	2.27	0.64
1:D:38:ILE:HG22	1:D:38:ILE:O	1.97	0.64
1:D:379:VAL:HG22	1:D:382:ILE:HD12	1.79	0.64
1:A:195:ASP:O	1:A:197:PRO:HD3	1.97	0.64
1:A:229:THR:HA	1:A:232:VAL:CB	2.24	0.64
1:A:408:HIS:O	1:A:412:CYS:SG	2.55	0.64
1:A:52:THR:C	1:A:123:ILE:HG13	2.16	0.64
1:A:15:TYR:OH	1:A:84:ASP:O	2.14	0.64
2:B:247:GLU:CA	2:B:249:MET:HG3	2.27	0.64
2:B:272:GLU:HA	2:B:275:LEU:CD1	2.26	0.64
3:C:302:VAL:C	3:C:306:CYS:HG	2.00	0.64
3:C:33:ILE:CG2	3:C:160:MET:SD	2.85	0.64
4:E:236:VAL:O	4:E:239:VAL:HG23	1.97	0.64
4:E:23:THR:CG2	4:E:24:LEU:N	2.60	0.64
3:C:228:TYR:CD1	3:C:229:VAL:N	2.65	0.64
4:E:444:LYS:HE3	4:E:444:LYS:HA	1.80	0.64
1:A:31:ILE:HG13	1:A:60:TRP:HB3	1.80	0.64
2:B:108:VAL:HG22	2:B:118:TRP:CG	2.31	0.64
2:B:138:ASP:OD1	2:B:464:PRO:HB2	1.97	0.64
2:B:81:PRO:HD2	3:C:20:HIS:CE1	2.32	0.64
3:C:472:ILE:CA	3:C:475:MET:HB3	2.26	0.64
3:C:51:THR:C	3:C:52:LEU:HD13	2.18	0.64
4:E:113:GLY:O	4:E:115:MET:SD	2.55	0.64
4:E:299:ASN:HA	4:E:302:ILE:HB	1.79	0.64
1:D:15:TYR:CE2	1:D:84:ASP:HB3	2.32	0.64
2:B:408:ILE:CG2	2:B:409:LYS:N	2.59	0.64
1:D:395:ALA:O	1:D:398:GLU:HG2	1.96	0.64
2:B:24:THR:HG22	2:B:25:VAL:HG23	1.78	0.64
1:A:274:ILE:HG13	1:A:274:ILE:O	1.97	0.64
2:B:89:ASP:OD1	2:B:148:SER:HB2	1.98	0.64
2:B:38:THR:HG22	2:B:55:PHE:HE1	1.62	0.64
2:B:85:VAL:O	2:B:87:GLN:HG3	1.98	0.64
3:C:19:LYS:HZ2	3:C:88:TRP:HD1	1.44	0.64
1:D:130:ILE:O	1:D:134:HIS:HB2	1.96	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:167:LEU:CD1	1:D:178:MET:HB2	2.21	0.64
4:E:191:LYS:HB2	4:E:209:ILE:HG21	1.79	0.64
1:D:263:LEU:HD11	4:E:266:PHE:CE2	2.33	0.64
4:E:293:SER:O	4:E:297:VAL:HG23	1.97	0.64
4:E:453:ILE:O	4:E:457:LEU:HB2	1.97	0.64
1:A:255:VAL:HG21	4:E:264:PHE:CE1	2.33	0.64
1:A:34:GLY:CA	1:A:57:ARG:HG2	2.28	0.64
2:B:107:ASN:HD22	3:C:152:ASN:ND2	1.96	0.64
2:B:181:THR:HG23	2:B:184:GLY:N	2.12	0.64
3:C:7:LEU:HD22	3:C:73:GLU:OE1	1.98	0.64
4:E:136:PHE:CZ	4:E:217:LYS:HD2	2.33	0.64
4:E:246:ALA:CB	4:E:250:LYS:HG3	2.24	0.64
1:D:76:LYS:HE3	1:D:112:TYR:CE2	2.32	0.64
1:A:383:ALA:O	1:A:387:LYS:HG2	1.97	0.64
1:A:129:GLU:OE2	1:A:140:GLN:HG2	1.98	0.64
1:A:419:ILE:CG2	1:A:420:ILE:N	2.61	0.64
1:D:408:HIS:HB3	1:D:412:CYS:SG	2.38	0.64
1:D:16:ASN:HD22	1:D:16:ASN:N	1.95	0.64
4:E:414:SER:N	4:E:416:VAL:CG1	2.60	0.64
1:D:303:PRO:HB2	1:D:400:LYS:NZ	2.13	0.64
1:A:142:CYS:CB	1:A:205:PHE:HB2	2.28	0.64
2:B:237:LEU:O	2:B:241:LEU:N	2.29	0.64
1:A:252:SER:CB	2:B:257:LEU:HD13	2.25	0.64
3:C:30:VAL:HG13	3:C:31:VAL:N	2.13	0.64
1:D:291:VAL:O	1:D:295:VAL:HG13	1.98	0.64
1:D:37:LEU:CD1	1:D:54:VAL:HG13	2.28	0.64
4:E:173:ASP:CG	4:E:185:ILE:HD13	2.18	0.64
4:E:261:GLN:NE2	4:E:296:ILE:HD11	2.13	0.64
2:B:70:ALA:O	2:B:74:GLY:HA3	1.97	0.64
4:E:474:VAL:CB	4:E:475:PRO:HD3	2.28	0.64
1:A:145:LYS:NZ	1:A:202:THR:HG23	2.13	0.64
1:A:228:LEU:O	1:A:232:VAL:N	2.30	0.64
2:B:191:LYS:CE	2:B:209:PHE:HB3	2.28	0.64
2:B:212:ILE:O	2:B:212:ILE:HG22	1.98	0.64
3:C:123:PRO:HD3	1:D:149:TRP:CH2	2.33	0.64
4:E:129:ILE:CG2	4:E:133:TYR:CD2	2.78	0.64
4:E:1:ASN:HD22	4:E:69:SER:CB	2.11	0.64
2:B:406:GLU:HA	2:B:409:LYS:CD	2.18	0.64
1:A:170:PHE:HE1	1:A:176:TRP:NE1	1.95	0.64
2:B:119:HIS:HD2	2:B:119:HIS:N	1.95	0.64
2:B:156:VAL:HG22	2:B:157:ILE:N	2.12	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:192:PRO:HD2	2:B:210:TYR:HB2	1.81	0.64
2:B:297:LEU:O	2:B:301:VAL:HG22	1.97	0.64
3:C:102:TYR:HD1	3:C:102:TYR:C	2.01	0.64
3:C:266:ALA:HB3	1:D:251:LEU:HD13	1.78	0.64
4:E:279:VAL:HG12	4:E:280:PRO:HD2	1.80	0.64
1:A:201:ILE:CG2	1:A:203:TYR:HE1	2.12	0.63
2:B:256:LEU:HD12	2:B:302:LEU:HD22	1.80	0.63
2:B:93:MET:HB2	2:B:145:VAL:CG2	2.28	0.63
4:E:44:GLU:CD	4:E:129:ILE:CB	2.66	0.63
2:B:281:ILE:HG22	2:B:285:MET:H	1.58	0.63
1:D:56:LEU:C	1:D:120:PRO:HD2	2.18	0.63
4:E:240:TYR:HD2	4:E:453:ILE:CD1	2.11	0.63
2:B:24:THR:HG22	2:B:25:VAL:N	2.07	0.63
1:D:32:THR:HB	1:D:59:GLN:CB	2.24	0.63
4:E:2:GLU:CA	4:E:5:ARG:HG3	2.28	0.63
2:B:245:ALA:O	2:B:248:LYS:N	2.29	0.63
2:B:46:LYS:NZ	2:B:275:LEU:O	2.24	0.63
4:E:270:GLN:C	4:E:273:PRO:HD2	2.18	0.63
4:E:298:THR:O	4:E:302:ILE:HG13	1.99	0.63
4:E:435:GLU:HB3	4:E:439:TRP:CZ2	2.33	0.63
1:D:17:LYS:HE3	1:D:83:ASP:C	2.18	0.63
1:A:389:ASP:O	1:A:392:SER:HB3	1.99	0.63
1:A:118:TRP:HD1	1:A:120:PRO:HD3	1.56	0.63
1:A:135:PHE:CD1	1:A:135:PHE:O	2.52	0.63
1:A:249:VAL:CG2	2:B:257:LEU:HD21	2.28	0.63
1:A:251:LEU:CD2	4:E:260:ALA:HB3	2.24	0.63
2:B:181:THR:CG2	2:B:184:GLY:N	2.60	0.63
2:B:192:PRO:HD2	2:B:210:TYR:O	1.99	0.63
2:B:439:PHE:CA	2:B:442:ILE:HB	2.29	0.63
3:C:257:MET:O	3:C:261:ILE:HG12	1.98	0.63
2:B:220:TYR:CZ	3:C:279:PRO:HB2	2.32	0.63
3:C:42:LEU:O	3:C:185:THR:OG1	2.14	0.63
3:C:478:PHE:CD1	3:C:479:ASN:N	2.66	0.63
1:D:294:VAL:O	1:D:298:THR:N	2.27	0.63
4:E:1:ASN:ND2	4:E:69:SER:H	1.96	0.63
1:A:377:GLU:HG2	2:B:404:ALA:HB1	1.81	0.63
1:D:379:VAL:HA	1:D:382:ILE:CD1	2.28	0.63
1:D:1:SER:O	1:D:3:HIS:N	2.32	0.63
4:E:463:LEU:HD12	4:E:463:LEU:O	1.98	0.63
1:A:128:CYS:HB3	1:A:144:MET:HE1	1.80	0.63
1:A:287:SER:HA	1:A:290:ILE:HG13	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:147:LYS:NZ	2:B:205:GLU:OE2	2.29	0.63
2:B:441:TYR:HA	2:B:444:ILE:HG22	1.79	0.63
2:B:447:CYS:O	2:B:451:THR:HG22	1.98	0.63
3:C:81:ARG:NH1	3:C:111:LEU:HB2	2.13	0.63
1:D:410:LEU:O	1:D:414:PHE:N	2.31	0.63
4:E:235:LEU:C	4:E:235:LEU:HD12	2.16	0.63
1:A:176:TRP:HB3	1:A:209:ARG:HD2	1.80	0.63
1:A:43:VAL:HG22	1:A:50:VAL:CG1	2.28	0.63
3:C:77:ILE:CD1	3:C:80:LEU:HB2	2.29	0.63
1:D:282:MET:O	1:D:286:ILE:HG13	1.98	0.63
1:A:282:MET:O	1:A:285:VAL:HG12	1.99	0.63
1:A:34:GLY:HA3	1:A:57:ARG:HG2	1.80	0.63
1:A:419:ILE:C	1:A:423:VAL:HG23	2.18	0.63
3:C:42:LEU:CD1	3:C:190:TRP:HZ2	2.12	0.63
1:D:167:LEU:HD11	1:D:178:MET:HB2	1.76	0.63
4:E:19:LYS:HZ1	4:E:154:GLU:HB3	1.61	0.63
4:E:292:VAL:O	4:E:296:ILE:CG2	2.45	0.63
1:A:158:ILE:O	1:A:199:LEU:HB2	1.97	0.63
1:A:274:ILE:HG12	1:A:277:TYR:HE1	1.61	0.63
2:B:45:GLU:HG3	2:B:134:TYR:HB3	1.79	0.63
3:C:95:GLN:OE1	3:C:147:LYS:HB3	1.98	0.63
1:D:226:SER:O	1:D:230:VAL:HB	1.99	0.63
4:E:78:ARG:HD3	4:E:108:LEU:HD12	1.78	0.63
4:E:94:ASN:HB3	4:E:125:SER:CB	2.27	0.63
3:C:228:TYR:HD1	3:C:229:VAL:H	1.47	0.63
1:D:137:PHE:C	1:D:435:GLN:HG3	2.18	0.63
1:A:133:THR:O	1:A:136:PRO:HG2	1.99	0.63
1:A:227:PHE:HA	1:A:230:VAL:CB	2.28	0.63
1:A:95:ASN:O	1:A:96:ALA:HB3	1.99	0.63
2:B:153:THR:HG23	2:B:156:VAL:O	1.98	0.63
3:C:52:LEU:CD2	3:C:130:CYS:HB2	2.25	0.63
3:C:180:ASP:N	3:C:195:LYS:CG	2.59	0.63
3:C:269:VAL:HA	3:C:272:LEU:CD1	2.29	0.63
1:D:167:LEU:HA	1:D:170:PHE:HB3	1.80	0.63
4:E:34:LEU:HD12	4:E:210:PHE:HE2	1.59	0.63
4:E:435:GLU:O	4:E:438:ASN:HB3	1.97	0.63
4:E:62:TYR:HD1	4:E:62:TYR:O	1.82	0.63
1:A:20:ARG:O	1:A:22:VAL:HG23	1.97	0.63
1:A:186:HIS:ND1	1:A:187:TRP:N	2.47	0.62
1:A:409:ILE:HA	1:A:412:CYS:HB2	1.80	0.62
2:B:160:HIS:HE2	2:B:209:PHE:HE1	1.36	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:92:LEU:HD13	2:B:146:PHE:CE1	2.33	0.62
3:C:260:ALA:CB	3:C:313:HIS:CE1	2.82	0.62
1:D:240:GLY:C	1:D:242:LYS:H	2.02	0.62
1:D:419:ILE:HD12	1:D:420:ILE:CG2	2.29	0.62
4:E:240:TYR:HD2	4:E:453:ILE:CG1	2.12	0.62
1:A:279:LEU:HD13	1:A:282:MET:HB3	1.79	0.62
1:A:38:ILE:C	1:A:39:GLN:HG3	2.18	0.62
1:A:432:GLU:OE1	1:A:435:GLN:NE2	2.33	0.62
2:B:229:ILE:O	2:B:232:SER:HB2	1.98	0.62
3:C:247:PHE:O	3:C:250:PRO:CG	2.47	0.62
1:D:230:VAL:HG22	1:D:234:TYR:CE1	2.34	0.62
1:D:410:LEU:O	1:D:414:PHE:CB	2.47	0.62
4:E:94:ASN:O	4:E:125:SER:HA	1.98	0.62
4:E:260:ALA:O	4:E:264:PHE:CD1	2.51	0.62
1:A:255:VAL:HG23	4:E:264:PHE:CE1	2.34	0.62
1:A:146:LEU:HD12	1:A:146:LEU:N	2.14	0.62
1:A:171:MET:SD	1:A:173:SER:HB3	2.39	0.62
2:B:439:PHE:CD1	2:B:439:PHE:O	2.53	0.62
2:B:462:VAL:HB	2:B:463:PRO:HD3	1.81	0.62
4:E:108:LEU:O	4:E:115:MET:HA	1.98	0.62
4:E:140:ASN:OD1	4:E:211:PHE:HB3	1.99	0.62
4:E:144:VAL:HG12	4:E:209:ILE:CA	2.29	0.62
1:D:432:GLU:O	1:D:436:GLU:CG	2.47	0.62
2:B:104:LEU:HD12	2:B:118:TRP:CH2	2.34	0.62
2:B:132:VAL:O	2:B:279:ILE:HA	1.99	0.62
3:C:144:CYS:N	3:C:219:LEU:O	2.30	0.62
1:D:170:PHE:CE2	1:D:176:TRP:CD1	2.86	0.62
1:D:135:PHE:O	1:D:210:ILE:HG13	2.00	0.62
4:E:14:TYR:CD2	4:E:16:LYS:NZ	2.66	0.62
2:B:1:SER:O	2:B:3:MET:N	2.33	0.62
2:B:287:ILE:HA	2:B:290:LEU:CD1	2.29	0.62
1:A:2:GLU:O	1:A:2:GLU:HG3	1.99	0.62
3:C:43:ILE:N	3:C:43:ILE:HD12	2.15	0.62
1:A:34:GLY:HA3	1:A:57:ARG:CD	2.28	0.62
2:B:230:LEU:HA	2:B:233:ILE:CD1	2.29	0.62
3:C:296:MET:HA	3:C:296:MET:HE2	1.79	0.62
3:C:49:ASP:C	3:C:50:GLU:HG3	2.20	0.62
1:D:27:HIS:O	1:D:28:PHE:HB2	1.99	0.62
1:D:35:LEU:HD12	1:D:54:VAL:HG11	1.74	0.62
1:A:20:ARG:O	1:A:22:VAL:N	2.31	0.62
3:C:266:ALA:HB2	1:D:251:LEU:HB3	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:266:ALA:O	3:C:270:PHE:CG	2.53	0.62
3:C:2:ASN:HB3	3:C:72:SER:HB3	1.81	0.62
1:D:45:GLU:OE2	1:D:135:PHE:HB3	2.00	0.62
4:E:103:TYR:C	4:E:104:TYR:HD1	2.02	0.62
4:E:172:ILE:HA	4:E:188:ARG:HB3	1.81	0.62
4:E:182:GLU:O	4:E:218:PRO:HD2	2.00	0.62
4:E:273:PRO:HG2	4:E:274:GLU:N	2.13	0.62
1:A:155:LYS:HE3	4:E:76:LEU:HB3	1.80	0.62
1:A:382:ILE:O	1:A:386:MET:CE	2.47	0.62
2:B:283:TYR:HA	2:B:286:PHE:CZ	2.34	0.62
1:A:208:GLN:OE1	1:A:435:GLN:HG2	1.98	0.62
1:A:234:TYR:CG	1:A:410:LEU:HD21	2.35	0.62
2:B:40:LEU:HB2	2:B:52:THR:HG23	1.82	0.62
2:B:434:VAL:CG1	2:B:438:LEU:HD12	2.29	0.62
3:C:106:TYR:C	3:C:107:PHE:HD1	2.01	0.62
3:C:241:PHE:O	3:C:245:LEU:CG	2.44	0.62
4:E:143:LEU:HD12	4:E:143:LEU:H	1.64	0.62
4:E:133:TYR:OH	4:E:214:ILE:HG13	1.99	0.62
2:B:287:ILE:HA	2:B:290:LEU:HB2	1.81	0.62
1:A:229:THR:O	1:A:232:VAL:HB	1.99	0.62
2:B:233:ILE:C	2:B:237:LEU:HD22	2.19	0.62
2:B:297:LEU:O	2:B:297:LEU:HD23	1.99	0.62
3:C:190:TRP:CD1	3:C:221:ILE:CD1	2.75	0.62
3:C:199:LYS:HZ3	3:C:200:ASN:HA	1.63	0.62
3:C:312:PHE:HZ	3:C:456:LEU:CD2	2.08	0.62
2:B:218:LEU:CD1	2:B:221:ILE:HD11	2.28	0.62
3:C:141:TRP:CG	3:C:222:ARG:HA	2.34	0.62
1:D:167:LEU:HD21	1:D:178:MET:HB2	1.82	0.62
1:D:264:ILE:CB	1:D:265:PRO:HD3	2.29	0.62
4:E:235:LEU:O	4:E:238:LEU:HB2	1.99	0.62
1:D:102:ILE:CD1	4:E:98:GLN:HE21	2.12	0.62
2:B:34:GLY:C	2:B:35:LEU:HD23	2.20	0.62
3:C:160:MET:N	3:C:213:GLN:HB2	2.15	0.62
3:C:35:LEU:HD21	3:C:37:LEU:CD2	2.30	0.62
3:C:7:LEU:O	3:C:10:ASP:HB2	1.99	0.62
1:D:135:PHE:C	1:D:135:PHE:CD1	2.71	0.62
1:D:178:MET:SD	1:D:207:MET:CB	2.87	0.62
1:D:264:ILE:CB	1:D:265:PRO:CD	2.78	0.62
1:D:135:PHE:CE1	1:D:273:LEU:HB2	2.35	0.62
4:E:147:SER:O	4:E:205:PHE:CE2	2.52	0.62
3:C:234:THR:N	3:C:235:PRO:HD2	2.15	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:67:TRP:CD1	1:A:71:ASP:HB3	2.34	0.62
1:A:431:ILE:HG22	1:A:431:ILE:O	1.98	0.62
2:B:189:GLU:O	2:B:190:HIS:CG	2.52	0.61
2:B:35:LEU:CD2	2:B:56:LEU:HA	2.31	0.61
3:C:295:ILE:O	3:C:299:VAL:HG23	2.00	0.61
4:E:68:THR:HG23	4:E:72:GLU:OE1	2.00	0.61
3:C:425:SER:O	3:C:429:ILE:HG23	2.00	0.61
1:A:110:LEU:HD11	1:A:114:GLY:HA2	1.82	0.61
2:B:253:ILE:HD13	2:B:302:LEU:HD21	1.81	0.61
3:C:181:PRO:HD3	3:C:192:ILE:CG2	2.31	0.61
3:C:223:ARG:CG	3:C:224:LYS:N	2.62	0.61
3:C:50:GLU:HA	3:C:132:ILE:HD13	1.82	0.61
4:E:138:TRP:CH2	4:E:215:GLN:HG3	2.35	0.61
4:E:162:GLU:CG	4:E:190:ALA:O	2.48	0.61
2:B:420:GLU:O	2:B:424:LEU:N	2.32	0.61
1:D:382:ILE:O	1:D:386:MET:HG2	2.01	0.61
1:A:280:PHE:O	1:A:284:PHE:CG	2.53	0.61
2:B:136:PRO:CB	2:B:280:ILE:HD11	2.30	0.61
3:C:312:PHE:CZ	3:C:456:LEU:CD2	2.81	0.61
3:C:480:ARG:N	3:C:481:PRO:HD2	2.15	0.61
3:C:33:ILE:HD11	3:C:88:TRP:CZ3	2.34	0.61
1:D:130:ILE:HB	1:D:134:HIS:CB	2.30	0.61
1:D:89:ASP:OD2	1:D:149:TRP:CD1	2.54	0.61
1:D:186:HIS:CE1	1:D:187:TRP:O	2.53	0.61
1:D:298:THR:HG23	1:D:301:ARG:HD3	1.80	0.61
4:E:117:TRP:CD1	4:E:119:PRO:HD3	2.35	0.61
4:E:50:THR:HA	4:E:123:TYR:O	2.00	0.61
4:E:237:VAL:HG13	4:E:453:ILE:CD1	2.28	0.61
1:D:80:LEU:O	1:D:108:LEU:HB3	2.00	0.61
4:E:462:THR:O	4:E:466:PHE:HB3	2.00	0.61
2:B:162:LEU:HB2	2:B:174:MET:N	2.15	0.61
1:A:35:LEU:O	1:A:164:ARG:CZ	2.49	0.61
2:B:242:PRO:HD3	2:B:248:LYS:HE3	1.81	0.61
2:B:301:VAL:O	2:B:304:LEU:HB3	2.01	0.61
3:C:52:LEU:HD23	3:C:128:SER:OG	1.99	0.61
4:E:23:THR:HG22	4:E:24:LEU:N	2.15	0.61
4:E:255:ILE:HD11	4:E:304:LEU:CD1	2.28	0.61
4:E:303:VAL:O	4:E:307:SER:N	2.30	0.61
1:A:376:ILE:HG23	1:A:380:LYS:CE	2.30	0.61
1:D:379:VAL:HG13	1:D:382:ILE:HD12	1.81	0.61
2:B:289:ILE:HG22	2:B:293:PHE:CZ	2.35	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:418:ALA:HA	4:E:421:PHE:CD2	2.36	0.61
2:B:109:LEU:HB3	2:B:117:SER:CB	2.30	0.61
2:B:235:ALA:C	2:B:239:PHE:CE2	2.74	0.61
3:C:12:LEU:HB2	3:C:16:LYS:CG	2.29	0.61
1:D:199:LEU:C	1:D:200:ASP:OD1	2.38	0.61
4:E:32:LEU:HA	4:E:56:GLU:O	2.01	0.61
1:D:112:TYR:HD1	1:D:113:THR:H	1.47	0.61
2:B:130:ILE:HD12	2:B:134:TYR:CD2	2.35	0.61
3:C:11:LEU:O	3:C:16:LYS:HB2	2.01	0.61
3:C:108:CYS:HB3	3:C:122:PRO:HG3	1.81	0.61
3:C:288:ILE:HD11	3:C:290:LYS:HE3	1.83	0.61
3:C:63:TYR:HA	3:C:117:TYR:HA	1.83	0.61
1:D:36:GLN:HE21	1:D:38:ILE:HG13	1.65	0.61
1:D:233:PHE:HD1	1:D:409:ILE:HD12	1.64	0.61
4:E:136:PHE:CD1	4:E:285:TYR:OH	2.48	0.61
4:E:152:ALA:N	4:E:205:PHE:HA	2.15	0.61
4:E:437:GLU:O	4:E:441:LEU:HG	2.01	0.61
4:E:470:HIS:CE1	4:E:474:VAL:CG2	2.75	0.61
1:A:216:VAL:HG13	1:A:220:ILE:HD11	1.82	0.61
1:A:247:ILE:HG23	1:A:248:SER:N	2.16	0.61
1:A:408:HIS:O	1:A:412:CYS:N	2.33	0.61
1:A:89:ASP:O	1:A:89:ASP:OD1	2.18	0.61
2:B:242:PRO:HG2	2:B:243:PRO:HD2	1.83	0.61
2:B:246:GLY:C	2:B:248:LYS:H	2.02	0.61
2:B:463:PRO:HB2	2:B:464:PRO:HD3	1.81	0.61
3:C:276:GLN:C	3:C:279:PRO:HD2	2.21	0.61
3:C:33:ILE:HG12	3:C:62:TRP:CB	2.30	0.61
3:C:38:THR:CG2	3:C:57:TRP:CZ3	2.83	0.61
3:C:58:MET:HG3	3:C:92:ILE:HD12	1.82	0.61
1:D:135:PHE:CZ	1:D:273:LEU:HB3	2.35	0.61
2:B:9:SER:CA	2:B:12:PHE:CE1	2.78	0.61
2:B:37:LEU:HD23	2:B:179:ALA:O	2.00	0.61
2:B:258:ALA:O	2:B:262:PHE:CD1	2.54	0.61
2:B:443:PHE:C	2:B:447:CYS:HG	2.02	0.61
3:C:180:ASP:CB	3:C:219:LEU:HD13	2.31	0.61
3:C:77:ILE:CD1	3:C:80:LEU:CD1	2.72	0.61
1:D:37:LEU:HD13	1:D:54:VAL:HG13	1.82	0.61
4:E:172:ILE:CG2	4:E:174:PRO:HG2	2.30	0.61
4:E:262:THR:CA	4:E:265:LEU:HB2	2.31	0.61
4:E:310:THR:OG1	4:E:313:THR:CG2	2.48	0.61
1:D:15:TYR:HE2	1:D:84:ASP:HB3	1.66	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:380:LYS:HB3	2:B:408:ILE:CD1	2.27	0.61
2:B:147:LYS:HG3	2:B:148:SER:H	1.65	0.61
2:B:97:ASP:OD2	2:B:127:SER:HB2	1.99	0.61
3:C:147:LYS:HE2	3:C:216:THR:HG23	1.82	0.61
3:C:141:TRP:CH2	3:C:223:ARG:HD3	2.35	0.61
4:E:213:ILE:O	4:E:213:ILE:HG23	2.01	0.61
4:E:41:SER:O	4:E:49:LEU:HA	2.00	0.61
1:A:124:PHE:C	1:A:124:PHE:CD1	2.73	0.61
1:A:48:GLN:OE1	1:A:130:ILE:HD12	2.00	0.61
1:D:225:PHE:O	1:D:229:THR:HG23	2.01	0.61
4:E:279:VAL:HB	4:E:280:PRO:HD2	1.83	0.61
4:E:456:LEU:O	4:E:456:LEU:HD22	2.00	0.61
3:C:232:PHE:C	3:C:235:PRO:HD2	2.21	0.61
2:B:409:LYS:CG	3:C:426:THR:HG21	2.30	0.61
2:B:409:LYS:O	2:B:412:ALA:HB3	2.01	0.61
1:A:100:PHE:HB3	1:A:103:VAL:CG2	2.30	0.60
2:B:189:GLU:CG	2:B:468:PHE:HB3	2.18	0.60
1:D:416:LEU:C	1:D:419:ILE:HG13	2.20	0.60
4:E:162:GLU:N	4:E:163:GLU:OE2	2.29	0.60
4:E:146:ARG:HB3	4:E:207:GLU:HA	1.83	0.60
4:E:223:ILE:HA	4:E:226:ILE:HB	1.82	0.60
4:E:266:PHE:CD1	4:E:266:PHE:O	2.54	0.60
4:E:31:THR:CB	4:E:58:GLN:HB2	2.30	0.60
1:D:67:TRP:CD1	1:D:71:ASP:CG	2.75	0.60
1:A:227:PHE:O	1:A:231:LEU:HG	2.00	0.60
1:A:300:HIS:CA	1:A:306:HIS:O	2.47	0.60
2:B:46:LYS:HG3	2:B:278:PRO:CG	2.31	0.60
3:C:111:LEU:HB3	3:C:119:THR:HG1	1.65	0.60
3:C:42:LEU:CD2	3:C:190:TRP:HH2	2.13	0.60
1:D:238:ASP:HB3	4:E:308:LEU:HD22	1.81	0.60
1:D:280:PHE:CD1	1:D:280:PHE:N	2.67	0.60
1:D:38:ILE:CD1	4:E:199:THR:HG21	2.30	0.60
2:B:290:LEU:HD11	2:B:453:SER:OG	2.01	0.60
1:A:106:THR:HG22	1:A:107:LYS:N	2.16	0.60
2:B:241:LEU:HD13	3:C:314:PHE:CE2	2.37	0.60
2:B:28:LYS:HE2	2:B:154:SER:O	2.00	0.60
2:B:462:VAL:O	2:B:465:ASP:OD1	2.18	0.60
4:E:279:VAL:CG1	4:E:280:PRO:HD2	2.32	0.60
4:E:441:LEU:HD12	4:E:441:LEU:C	2.21	0.60
2:B:46:LYS:CG	2:B:278:PRO:HD2	2.31	0.60
3:C:17:TYR:CE1	3:C:18:ASN:O	2.54	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:305:ASN:O	3:C:309:VAL:N	2.32	0.60
4:E:247:GLY:N	4:E:250:LYS:HG3	2.16	0.60
1:D:245:LEU:CD1	4:E:255:ILE:HG13	2.30	0.60
1:A:61:ILE:HG22	1:A:115:LYS:HA	1.84	0.60
1:A:187:TRP:HE1	1:A:196:THR:HG22	1.67	0.60
1:A:157:SER:HB2	1:A:199:LEU:CD1	2.30	0.60
2:B:135:PHE:H	2:B:279:ILE:HG21	1.64	0.60
3:C:191:GLU:N	3:C:222:ARG:O	2.24	0.60
3:C:253:SER:O	3:C:256:LYS:HG3	2.02	0.60
3:C:270:PHE:CD1	3:C:270:PHE:N	2.66	0.60
3:C:312:PHE:O	3:C:315:ARG:HD2	2.02	0.60
4:E:309:ARG:HD2	4:E:310:THR:N	2.16	0.60
3:C:230:ILE:HG13	3:C:231:ASN:H	1.63	0.60
2:B:67:TRP:CB	2:B:72:TYR:HB2	2.31	0.60
1:A:160:PRO:HG2	1:A:185:LYS:HZ1	1.66	0.60
3:C:206:PHE:CD1	3:C:206:PHE:C	2.74	0.60
4:E:66:TRP:CD1	4:E:66:TRP:N	2.70	0.60
1:A:76:LYS:HG3	1:A:112:TYR:CD2	2.35	0.60
2:B:163:ASP:HB3	2:B:193:SER:OG	2.01	0.60
1:A:284:PHE:CZ	1:A:424:SER:HB3	2.37	0.60
1:A:36:GLN:OE1	1:A:37:LEU:C	2.40	0.60
1:A:31:ILE:HG12	1:A:60:TRP:HB3	1.84	0.60
2:B:104:LEU:HA	2:B:118:TRP:CH2	2.35	0.60
2:B:87:GLN:HB3	2:B:104:LEU:HD11	1.84	0.60
2:B:181:THR:HG23	2:B:183:ASN:N	2.16	0.60
2:B:249:MET:CE	2:B:250:SER:HB3	2.31	0.60
3:C:161:ASP:OD1	3:C:199:LYS:HD3	2.01	0.60
3:C:55:ASN:HA	3:C:124:ALA:O	2.01	0.60
3:C:58:MET:CG	3:C:92:ILE:HD12	2.31	0.60
4:E:262:THR:HA	4:E:265:LEU:CB	2.31	0.60
1:A:130:ILE:O	1:A:131:ILE:O	2.19	0.60
1:A:223:LEU:O	1:A:226:SER:HB2	2.02	0.60
2:B:88:PRO:HB2	2:B:90:ILE:CG1	2.30	0.60
3:C:3:GLU:OE1	3:C:7:LEU:HD12	2.01	0.60
1:D:187:TRP:CB	1:D:199:LEU:HD23	2.26	0.60
1:D:237:THR:OG1	1:D:406:ILE:CG2	2.50	0.60
1:D:26:THR:HG22	1:D:27:HIS:N	2.17	0.60
4:E:222:ILE:HG23	4:E:223:ILE:N	2.16	0.60
1:D:387:LYS:O	1:D:391:GLU:HG3	2.02	0.60
1:A:1:SER:O	1:A:3:HIS:N	2.34	0.60
1:A:94:ASN:C	1:A:94:ASN:HD22	2.05	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:54:VAL:O	2:B:121:SER:HA	2.02	0.60
3:C:278:LEU:HD11	3:C:292:LEU:HD21	1.84	0.60
3:C:91:ASP:OD1	3:C:153:TYR:CE1	2.54	0.60
1:D:247:ILE:HG22	1:D:248:SER:N	2.16	0.60
4:E:59:TRP:CZ2	4:E:115:MET:CB	2.84	0.60
4:E:100:GLU:OE2	4:E:122:ILE:O	2.19	0.60
3:C:36:SER:HB3	3:C:59:ASP:HB3	1.82	0.60
2:B:100:PHE:HB2	2:B:103:THR:OG1	2.02	0.60
2:B:431:VAL:O	2:B:432:ALA:HB3	2.02	0.60
3:C:84:PRO:HG2	3:C:85:GLU:OE1	2.02	0.60
1:D:298:THR:O	1:D:301:ARG:HB3	2.02	0.60
3:C:206:PHE:CD1	3:C:206:PHE:O	2.55	0.60
2:B:200:ASP:O	2:B:200:ASP:OD1	2.19	0.60
1:A:107:LYS:HZ1	2:B:151:TYR:HA	1.66	0.60
1:A:117:MET:CE	1:A:119:THR:HG21	2.32	0.60
1:A:131:ILE:CD1	1:A:133:THR:HB	2.32	0.60
1:A:227:PHE:O	1:A:231:LEU:N	2.34	0.60
1:A:136:PRO:HA	1:A:277:TYR:CE1	2.37	0.60
1:A:284:PHE:CE2	1:A:424:SER:HB3	2.37	0.60
2:B:39:SER:HA	2:B:179:ALA:O	2.01	0.60
2:B:307:ARG:NH1	2:B:434:VAL:HG21	2.16	0.60
3:C:190:TRP:HA	3:C:223:ARG:HB2	1.82	0.60
3:C:318:SER:CB	3:C:447:ASN:HD22	2.04	0.60
2:B:68:ASP:CB	2:B:69:PRO:CD	2.74	0.60
1:D:184:TRP:HE3	1:D:185:LYS:O	1.84	0.60
1:D:384:GLU:HG2	4:E:422:ILE:HD12	1.84	0.60
1:A:413:VAL:O	1:A:417:ILE:N	2.31	0.59
2:B:297:LEU:HD23	2:B:301:VAL:HG13	1.83	0.59
2:B:304:LEU:O	2:B:304:LEU:HD23	2.02	0.59
3:C:102:TYR:CD1	3:C:102:TYR:C	2.73	0.59
3:C:162:LEU:HD12	3:C:199:LYS:N	2.16	0.59
3:C:30:VAL:HG22	3:C:158:ILE:H	1.66	0.59
3:C:42:LEU:O	3:C:185:THR:CB	2.50	0.59
3:C:319:THR:OG1	3:C:448:LEU:HD23	2.02	0.59
1:D:242:LYS:HB2	1:D:245:LEU:CD1	2.31	0.59
1:D:416:LEU:HA	1:D:419:ILE:HG12	1.80	0.59
1:A:28:PHE:CD1	1:A:153:GLY:O	2.55	0.59
1:A:419:ILE:HG23	1:A:420:ILE:N	2.15	0.59
3:C:215:VAL:HG23	3:C:215:VAL:O	2.02	0.59
1:D:187:TRP:NE1	1:D:197:PRO:O	2.35	0.59
1:D:250:LEU:HD22	1:D:292:THR:OG1	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:263:VAL:N	1:D:251:LEU:HD11	2.17	0.59
1:D:260:ILE:HG22	1:D:264:ILE:HD11	1.84	0.59
4:E:138:TRP:HH2	4:E:215:GLN:HE21	1.48	0.59
4:E:49:LEU:O	4:E:124:ARG:HD2	2.01	0.59
3:C:426:THR:HA	3:C:429:ILE:CG2	2.32	0.59
3:C:434:LYS:CD	3:C:435:GLU:CG	2.70	0.59
2:B:426:LYS:HB3	2:B:430:TYR:CE2	2.38	0.59
1:A:156:VAL:CG2	1:A:157:SER:N	2.66	0.59
1:A:258:LEU:O	1:A:261:VAL:HB	2.01	0.59
2:B:87:GLN:CB	2:B:104:LEU:HD11	2.31	0.59
2:B:160:HIS:HE2	2:B:207:VAL:CG1	2.13	0.59
2:B:249:MET:O	2:B:252:SER:OG	2.21	0.59
2:B:36:THR:O	2:B:55:PHE:CD1	2.56	0.59
2:B:43:LEU:HB3	2:B:215:ARG:NH1	2.16	0.59
1:D:189:TYR:CA	1:D:197:PRO:HD2	2.31	0.59
1:D:220:ILE:N	1:D:221:PRO:HD2	2.17	0.59
1:D:410:LEU:O	1:D:414:PHE:HB2	2.02	0.59
1:D:56:LEU:O	1:D:120:PRO:HD2	2.02	0.59
4:E:86:LEU:HD13	4:E:103:TYR:HE1	1.63	0.59
4:E:34:LEU:HD12	4:E:210:PHE:CZ	2.38	0.59
4:E:6:LEU:HD13	4:E:67:ASN:CG	2.23	0.59
2:B:9:SER:O	2:B:13:GLU:HG3	2.02	0.59
1:A:430:LEU:O	1:A:433:LEU:HB3	2.01	0.59
1:A:136:PRO:CB	1:A:138:ASP:OD1	2.50	0.59
1:A:419:ILE:HD13	1:A:423:VAL:HG21	1.84	0.59
2:B:439:PHE:O	2:B:442:ILE:HG22	2.03	0.59
3:C:222:ARG:HH21	3:C:223:ARG:C	2.06	0.59
3:C:2:ASN:HD22	3:C:71:ALA:HB3	1.67	0.59
3:C:451:GLN:O	3:C:455:ARG:NH1	2.34	0.59
4:E:159:LEU:CD1	4:E:208:ILE:HG23	2.32	0.59
2:B:69:PRO:O	2:B:74:GLY:N	2.35	0.59
2:B:198:ARG:CG	2:B:198:ARG:NH1	2.59	0.59
1:A:255:VAL:HB	4:E:264:PHE:CZ	2.37	0.59
1:A:252:SER:O	1:A:256:PHE:CE1	2.55	0.59
2:B:92:LEU:HB2	2:B:96:ASN:N	2.18	0.59
3:C:35:LEU:CD2	3:C:215:VAL:HG11	2.31	0.59
3:C:270:PHE:N	3:C:270:PHE:HD1	2.00	0.59
3:C:291:TYR:CD1	3:C:291:TYR:N	2.71	0.59
3:C:62:TRP:HZ2	3:C:88:TRP:O	1.85	0.59
4:E:78:ARG:CD	4:E:108:LEU:HD12	2.33	0.59
1:D:245:LEU:HD11	4:E:255:ILE:CG1	2.29	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:37:THR:OG1	4:E:54:TRP:CZ3	2.55	0.59
1:D:109:LEU:HD12	1:D:117:MET:HB3	1.85	0.59
2:B:9:SER:O	2:B:12:PHE:CD1	2.56	0.59
4:E:66:TRP:CE3	4:E:70:GLU:HG2	2.37	0.59
1:A:12:LEU:HG	1:A:13:GLU:N	2.17	0.59
1:A:257:LEU:O	1:A:260:ILE:HG22	2.01	0.59
1:A:292:THR:HG22	1:A:296:ILE:HD11	1.85	0.59
1:A:415:MET:O	1:A:419:ILE:HB	2.03	0.59
1:A:41:ILE:HG12	1:A:51:GLU:HB3	1.81	0.59
1:A:34:GLY:HA3	1:A:57:ARG:CG	2.32	0.59
2:B:251:LEU:C	2:B:251:LEU:HD12	2.23	0.59
3:C:247:PHE:C	3:C:250:PRO:CD	2.70	0.59
3:C:58:MET:HE3	3:C:122:PRO:HD2	1.85	0.59
1:D:56:LEU:O	1:D:120:PRO:HD3	2.03	0.59
1:D:291:VAL:HG12	1:D:295:VAL:HG11	1.83	0.59
4:E:138:TRP:CH2	4:E:215:GLN:CG	2.84	0.59
4:E:232:ILE:HG22	4:E:233:SER:N	2.18	0.59
4:E:250:LYS:HB3	4:E:253:LEU:CD2	2.30	0.59
1:D:432:GLU:O	1:D:436:GLU:HG3	2.02	0.59
1:A:156:VAL:HG22	1:A:157:SER:N	2.18	0.59
2:B:92:LEU:HD22	2:B:146:PHE:CG	2.37	0.59
2:B:95:ASN:O	2:B:96:ASN:C	2.40	0.59
3:C:38:THR:HG21	3:C:57:TRP:CZ3	2.36	0.59
4:E:19:LYS:HZ1	4:E:154:GLU:CB	2.11	0.59
4:E:177:PHE:CE2	4:E:184:THR:HA	2.38	0.59
4:E:228:PRO:HA	4:E:231:LEU:HD23	1.85	0.59
2:B:285:MET:O	2:B:289:ILE:HG12	2.03	0.59
2:B:290:LEU:HD21	2:B:453:SER:OG	2.02	0.59
1:A:242:LYS:CD	2:B:312:HIS:ND1	2.62	0.59
2:B:62:ASP:C	2:B:64:ARG:H	2.05	0.59
3:C:155:ALA:HB2	3:C:211:ASN:CA	2.28	0.59
3:C:159:SER:HA	3:C:213:GLN:HG2	1.80	0.59
3:C:291:TYR:N	3:C:291:TYR:HD1	2.00	0.59
1:D:144:MET:HE3	1:D:205:PHE:CE1	2.38	0.59
1:D:250:LEU:CD2	1:D:292:THR:OG1	2.51	0.59
4:E:102:ALA:HB2	4:E:121:ALA:CB	2.33	0.59
1:D:60:TRP:CZ2	1:D:86:TRP:CZ3	2.90	0.59
1:D:74:GLY:O	1:D:75:ILE:HG23	2.02	0.59
1:A:226:SER:O	1:A:230:VAL:N	2.34	0.59
1:A:56:LEU:HD12	1:A:90:LEU:HD13	1.83	0.59
2:B:249:MET:SD	2:B:250:SER:N	2.69	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:260:ALA:HB3	3:C:313:HIS:CE1	2.37	0.59
3:C:279:PRO:CA	3:C:282:ALA:HB3	2.33	0.59
2:B:247:GLU:OE1	3:C:320:HIS:CD2	2.56	0.59
1:D:293:VAL:O	1:D:297:ASN:ND2	2.36	0.59
4:E:78:ARG:HD3	4:E:108:LEU:CD1	2.32	0.59
4:E:279:VAL:CB	4:E:280:PRO:HD2	2.33	0.59
3:C:93:VAL:CG2	3:C:151:LEU:HD13	2.32	0.59
2:B:38:THR:OG1	2:B:39:SER:N	2.35	0.59
3:C:105:ALA:HA	3:C:122:PRO:HG2	1.84	0.59
3:C:464:VAL:CG1	3:C:465:MET:N	2.66	0.59
3:C:49:ASP:O	3:C:50:GLU:HG3	2.03	0.59
4:E:78:ARG:CD	4:E:108:LEU:CD1	2.81	0.59
1:A:306:HIS:HB2	4:E:250:LYS:NZ	2.18	0.59
2:B:425:LYS:CA	2:B:428:TRP:CD1	2.71	0.59
3:C:435:GLU:O	3:C:438:ALA:HB3	2.02	0.59
1:D:223:LEU:C	1:D:223:LEU:HD23	2.22	0.59
1:A:29:VAL:HB	1:A:31:ILE:HD12	1.85	0.58
1:A:29:VAL:HB	1:A:31:ILE:CD1	2.33	0.58
3:C:139:PHE:CE2	3:C:291:TYR:OH	2.56	0.58
1:D:43:VAL:CG1	1:D:50:VAL:HG22	2.33	0.58
4:E:239:VAL:CG1	4:E:254:SER:OG	2.51	0.58
4:E:296:ILE:CG1	4:E:297:VAL:N	2.66	0.58
4:E:34:LEU:CD2	4:E:55:ILE:HA	2.33	0.58
3:C:426:THR:CA	3:C:429:ILE:HG23	2.32	0.58
1:D:432:GLU:CG	1:D:435:GLN:NE2	2.59	0.58
1:D:7:LEU:HA	1:D:10:ASN:HD21	1.67	0.58
1:A:171:MET:CG	1:A:173:SER:H	2.16	0.58
1:A:261:VAL:O	1:A:265:PRO:CG	2.51	0.58
1:A:265:PRO:O	1:A:269:SER:N	2.33	0.58
1:A:37:LEU:HD23	1:A:54:VAL:HG12	1.85	0.58
1:A:57:ARG:HD3	1:A:161:GLU:CG	2.29	0.58
2:B:175:ILE:HG23	2:B:178:ASP:N	2.18	0.58
3:C:7:LEU:HD11	3:C:70:ASN:ND2	2.18	0.58
4:E:55:ILE:HG22	4:E:119:PRO:O	2.03	0.58
4:E:59:TRP:CZ2	4:E:84:LEU:HD22	2.38	0.58
1:D:114:GLY:O	1:D:116:ILE:HG23	2.03	0.58
1:D:29:VAL:HG11	1:D:60:TRP:HE1	1.67	0.58
1:A:137:PHE:CE1	1:A:210:ILE:CD1	2.77	0.58
2:B:65:LEU:HD23	2:B:110:VAL:HG11	1.84	0.58
2:B:101:GLU:HB2	2:B:123:ILE:HG22	1.84	0.58
2:B:279:ILE:HG22	2:B:280:ILE:CD1	2.25	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:40:LEU:C	2:B:40:LEU:HD13	2.24	0.58
2:B:431:VAL:O	2:B:432:ALA:CB	2.52	0.58
3:C:241:PHE:C	3:C:241:PHE:CD1	2.76	0.58
1:D:89:ASP:CB	1:D:149:TRP:HD1	2.16	0.58
1:D:228:LEU:HD23	1:D:249:VAL:CG1	2.32	0.58
1:D:407:ASP:OD1	1:D:408:HIS:CD2	2.51	0.58
4:E:133:TYR:CZ	4:E:214:ILE:HG13	2.38	0.58
4:E:227:ALA:N	4:E:228:PRO:CD	2.66	0.58
4:E:296:ILE:HG13	4:E:297:VAL:N	2.17	0.58
1:A:380:LYS:HE3	2:B:405:VAL:HA	1.84	0.58
1:A:93:TYR:CG	1:A:145:LYS:HB3	2.38	0.58
1:A:305:THR:OG1	1:A:400:LYS:HB2	2.04	0.58
1:A:93:TYR:CZ	1:A:198:TYR:CE2	2.91	0.58
3:C:180:ASP:N	3:C:195:LYS:CB	2.66	0.58
3:C:476:GLY:O	3:C:480:ARG:HG3	2.04	0.58
1:D:110:LEU:HA	1:D:116:ILE:HG22	1.84	0.58
2:B:66:GLN:HG3	2:B:113:THR:HA	1.85	0.58
1:A:242:LYS:HB2	1:A:245:LEU:HB2	1.85	0.58
1:A:416:LEU:C	1:A:419:ILE:HG22	2.23	0.58
2:B:102:ILE:HB	2:B:121:SER:O	2.03	0.58
2:B:20:ARG:N	2:B:20:ARG:HD3	2.02	0.58
2:B:247:GLU:OE1	3:C:320:HIS:NE2	2.36	0.58
2:B:37:LEU:HD23	2:B:179:ALA:CA	2.32	0.58
2:B:88:PRO:O	2:B:90:ILE:N	2.34	0.58
1:D:157:SER:HB2	1:D:199:LEU:CD1	2.34	0.58
4:E:10:LEU:HD13	4:E:64:LEU:HD23	1.86	0.58
4:E:47:GLU:HG2	4:E:128:PRO:O	2.03	0.58
4:E:172:ILE:CG1	4:E:174:PRO:HD2	2.21	0.58
4:E:227:ALA:H	4:E:228:PRO:HD2	1.66	0.58
4:E:272:VAL:N	4:E:273:PRO:HD2	2.18	0.58
4:E:241:PHE:CD1	4:E:450:CYS:HB3	2.39	0.58
4:E:449:ALA:O	4:E:452:TRP:HB2	2.04	0.58
4:E:59:TRP:N	4:E:59:TRP:CE3	2.71	0.58
1:D:86:TRP:CG	1:D:86:TRP:O	2.57	0.58
3:C:93:VAL:HB	3:C:151:LEU:HD22	1.85	0.58
3:C:93:VAL:HB	3:C:151:LEU:HB2	1.85	0.58
1:A:79:ARG:NH1	1:A:107:LYS:NZ	2.50	0.58
2:B:91:VAL:HA	2:B:96:ASN:CG	2.23	0.58
3:C:180:ASP:HB2	3:C:195:LYS:CB	2.33	0.58
3:C:243:ALA:HA	3:C:246:ALA:HB2	1.86	0.58
4:E:31:THR:HA	4:E:158:GLN:HG3	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:145:PHE:O	4:E:208:ILE:HD12	2.02	0.58
4:E:246:ALA:CB	4:E:250:LYS:HZ2	2.17	0.58
1:A:90:LEU:HD12	1:A:100:PHE:CE2	2.39	0.58
1:A:41:ILE:HG13	1:A:42:ASN:H	1.69	0.58
1:A:45:GLU:HG2	1:A:272:PRO:CG	2.33	0.58
1:A:58:GLN:NE2	1:A:90:LEU:HD11	2.19	0.58
1:A:15:TYR:HE2	1:A:84:ASP:OD2	1.87	0.58
2:B:253:ILE:CD1	2:B:302:LEU:HD21	2.33	0.58
3:C:74:TYR:CE1	3:C:114:PRO:HB2	2.39	0.58
3:C:162:LEU:N	3:C:199:LYS:HG2	2.18	0.58
3:C:247:PHE:C	3:C:250:PRO:HD2	2.24	0.58
2:B:258:ALA:CB	3:C:265:LEU:HD13	2.20	0.58
1:D:176:TRP:HB3	1:D:209:ARG:HD2	1.84	0.58
1:D:245:LEU:HD23	4:E:255:ILE:HG21	1.84	0.58
4:E:273:PRO:O	4:E:277:LEU:HG	2.04	0.58
1:D:66:ARG:HD3	1:D:66:ARG:H	1.68	0.58
1:D:21:PRO:HB3	1:D:62:ASP:OD2	2.03	0.58
2:B:406:GLU:HG2	2:B:409:LYS:HD2	1.85	0.58
3:C:423:ILE:HD12	1:D:376:ILE:HG13	1.86	0.58
2:B:287:ILE:CA	2:B:290:LEU:HD12	2.34	0.58
1:A:244:THR:O	1:A:247:ILE:N	2.37	0.58
1:A:249:VAL:HG12	1:A:250:LEU:N	2.18	0.58
1:A:391:GLU:O	1:A:394:ASN:ND2	2.36	0.58
1:A:34:GLY:HA3	1:A:57:ARG:HD3	1.85	0.58
2:B:134:TYR:HB3	2:B:279:ILE:HD11	1.86	0.58
2:B:91:VAL:C	2:B:92:LEU:HD23	2.24	0.58
3:C:242:LEU:HD21	3:C:263:VAL:HG11	1.84	0.58
1:D:245:LEU:HD21	4:E:255:ILE:CG1	2.30	0.58
1:D:246:SER:O	1:D:250:LEU:HD12	2.04	0.58
1:D:47:ASN:O	1:D:48:GLN:CG	2.47	0.58
4:E:456:LEU:HD22	4:E:460:LEU:HG	1.84	0.58
1:D:102:ILE:CG1	4:E:98:GLN:HE21	2.12	0.58
1:D:383:ALA:HA	1:D:386:MET:HG2	1.86	0.58
1:D:20:ARG:NH1	1:D:20:ARG:CG	2.38	0.58
1:D:305:THR:HG1	1:D:401:TYR:HD2	1.45	0.58
1:A:416:LEU:O	1:A:420:ILE:HG23	2.04	0.58
2:B:259:LEU:HD23	2:B:263:LEU:HD12	1.86	0.58
2:B:92:LEU:CB	2:B:96:ASN:HB2	2.33	0.58
3:C:308:ILE:HG22	3:C:309:VAL:N	2.19	0.58
2:B:3:MET:O	2:B:6:THR:HB	2.04	0.58
1:A:417:ILE:HA	1:A:420:ILE:CG1	2.32	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:59:ALA:HA	2:B:116:VAL:O	2.03	0.58
3:C:220:ILE:O	3:C:220:ILE:CG1	2.51	0.58
3:C:222:ARG:NH2	3:C:223:ARG:C	2.57	0.58
3:C:13:ILE:CD1	3:C:82:LEU:HD11	2.26	0.58
4:E:86:LEU:CD1	4:E:103:TYR:OH	2.52	0.58
4:E:212:LEU:HD12	4:E:212:LEU:N	2.18	0.58
4:E:138:TRP:CH2	4:E:215:GLN:NE2	2.72	0.58
4:E:59:TRP:CE2	4:E:115:MET:CB	2.87	0.58
1:A:376:ILE:O	1:A:380:LYS:HG3	2.04	0.58
2:B:430:TYR:O	2:B:430:TYR:HD1	1.86	0.58
1:A:79:ARG:HH11	1:A:107:LYS:HZ1	1.52	0.57
1:A:106:THR:HG23	2:B:150:THR:HG23	1.86	0.57
2:B:241:LEU:CD2	2:B:251:LEU:HD11	2.33	0.57
3:C:97:ASN:CG	3:C:128:SER:HB2	2.24	0.57
3:C:263:VAL:HG13	1:D:251:LEU:CD2	2.32	0.57
3:C:42:LEU:CD2	3:C:190:TRP:CZ2	2.86	0.57
1:D:179:LYS:HB2	1:D:206:ILE:HG22	1.85	0.57
1:D:178:MET:HA	1:D:207:MET:HB2	1.85	0.57
1:D:45:GLU:CG	1:D:272:PRO:CG	2.57	0.57
4:E:127:CYS:O	4:E:128:PRO:O	2.22	0.57
4:E:34:LEU:HD23	4:E:55:ILE:HA	1.85	0.57
1:A:20:ARG:CG	1:A:20:ARG:NH1	2.37	0.57
1:A:133:THR:O	1:A:140:GLN:HB2	2.04	0.57
1:A:301:ARG:HH11	1:A:301:ARG:HG2	1.69	0.57
2:B:187:SER:N	2:B:214:GLN:O	2.37	0.57
2:B:241:LEU:HD13	3:C:314:PHE:CZ	2.39	0.57
3:C:7:LEU:CD1	3:C:70:ASN:HB2	2.34	0.57
4:E:101:VAL:O	4:E:101:VAL:HG12	2.04	0.57
4:E:284:LYS:CE	4:E:284:LYS:CA	2.82	0.57
1:A:379:VAL:O	1:A:382:ILE:HG13	2.04	0.57
1:D:303:PRO:CD	1:D:400:LYS:CD	2.82	0.57
2:B:182:GLU:H	2:B:182:GLU:CD	2.06	0.57
3:C:25:LYS:HG3	3:C:25:LYS:O	2.04	0.57
1:A:399:TRP:HA	1:A:399:TRP:CE3	2.39	0.57
1:A:235:LEU:N	1:A:236:PRO:CD	2.67	0.57
1:A:234:TYR:CD2	1:A:410:LEU:HD21	2.39	0.57
2:B:101:GLU:OE1	2:B:123:ILE:HG21	2.04	0.57
3:C:242:LEU:O	3:C:246:ALA:N	2.34	0.57
4:E:62:TYR:O	4:E:62:TYR:CD1	2.57	0.57
1:D:377:GLU:N	1:D:380:LYS:HE2	2.19	0.57
1:A:26:THR:O	1:A:28:PHE:N	2.37	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:136:PRO:CA	1:A:277:TYR:OH	2.48	0.57
3:C:45:LEU:CD1	3:C:190:TRP:CE3	2.77	0.57
3:C:195:LYS:CE	3:C:217:PHE:HB3	2.32	0.57
1:D:130:ILE:CB	1:D:134:HIS:HB2	2.33	0.57
1:D:412:CYS:HA	1:D:415:MET:CE	2.33	0.57
4:E:135:PRO:C	4:E:136:PHE:HD1	2.08	0.57
4:E:162:GLU:CB	4:E:190:ALA:O	2.52	0.57
1:D:61:ILE:HA	1:D:116:ILE:CD1	2.35	0.57
1:A:384:GLU:HA	1:A:387:LYS:HG3	1.86	0.57
1:A:35:LEU:CD1	1:A:203:TYR:OH	2.52	0.57
1:A:225:PHE:C	1:A:225:PHE:CD1	2.78	0.57
1:A:280:PHE:HB3	1:A:284:PHE:CE2	2.39	0.57
1:A:401:TYR:O	1:A:401:TYR:CG	2.57	0.57
1:A:245:LEU:HG	2:B:253:ILE:CG2	2.33	0.57
2:B:132:VAL:O	2:B:279:ILE:CG2	2.49	0.57
2:B:438:LEU:O	2:B:442:ILE:CD1	2.53	0.57
3:C:11:LEU:O	3:C:13:ILE:N	2.38	0.57
3:C:141:TRP:CZ2	3:C:223:ARG:O	2.58	0.57
3:C:30:VAL:CG1	3:C:31:VAL:N	2.67	0.57
3:C:451:GLN:O	3:C:455:ARG:HD3	2.04	0.57
4:E:27:VAL:HG11	4:E:152:ALA:O	2.04	0.57
4:E:472:ASN:O	4:E:476:GLU:CG	2.46	0.57
1:A:380:LYS:CA	2:B:408:ILE:HD13	2.34	0.57
1:A:380:LYS:HA	2:B:408:ILE:HD13	1.86	0.57
1:D:105:MET:HG2	1:D:105:MET:O	2.05	0.57
3:C:66:ARG:NH1	3:C:66:ARG:HG2	2.08	0.57
4:E:417:GLU:HA	4:E:420:ASN:HB2	1.86	0.57
1:A:6:ARG:CB	1:A:6:ARG:HH11	2.16	0.57
1:A:163:ASP:C	1:A:164:ARG:HG3	2.25	0.57
1:A:37:LEU:O	1:A:169:THR:HG21	2.04	0.57
1:A:252:SER:OG	2:B:257:LEU:CD2	2.48	0.57
2:B:452:PHE:O	2:B:456:LEU:HD23	2.04	0.57
3:C:77:ILE:HD11	3:C:80:LEU:CD1	2.35	0.57
1:D:146:LEU:HD12	1:D:146:LEU:N	2.19	0.57
1:D:187:TRP:CH2	1:D:189:TYR:CB	2.86	0.57
4:E:162:GLU:H	4:E:163:GLU:CD	2.06	0.57
2:B:409:LYS:HE2	3:C:423:ILE:HG22	1.86	0.57
3:C:426:THR:C	3:C:429:ILE:HG23	2.25	0.57
1:A:218:VAL:HG13	1:A:219:ILE:N	2.18	0.57
1:A:218:VAL:C	1:A:221:PRO:HD2	2.24	0.57
2:B:152:ASP:CB	2:B:203:SER:CB	2.82	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:192:ILE:HD13	3:C:221:ILE:CG2	2.35	0.57
3:C:148:PHE:CB	3:C:215:VAL:HG22	2.26	0.57
3:C:180:ASP:CG	3:C:219:LEU:HD22	2.24	0.57
1:D:284:PHE:CE2	1:D:424:SER:CB	2.86	0.57
1:D:94:ASN:HD22	1:D:95:ASN:N	2.02	0.57
4:E:62:TYR:C	4:E:64:LEU:H	2.07	0.57
4:E:91:LEU:CB	4:E:95:VAL:H	2.16	0.57
1:D:102:ILE:CD1	4:E:98:GLN:NE2	2.67	0.57
4:E:80:PRO:HB2	4:E:83:LEU:HD23	1.86	0.57
4:E:80:PRO:O	4:E:83:LEU:HB2	2.03	0.57
2:B:177:GLN:HA	2:B:180:PHE:HB2	1.86	0.57
2:B:258:ALA:HB3	3:C:265:LEU:CD2	2.28	0.57
2:B:262:PHE:N	2:B:262:PHE:CD1	2.72	0.57
3:C:56:VAL:HG22	3:C:124:ALA:HB3	1.87	0.57
3:C:81:ARG:NH1	3:C:111:LEU:HD13	2.19	0.57
1:D:35:LEU:HB3	1:D:164:ARG:NH1	2.20	0.57
1:D:36:GLN:C	1:D:54:VAL:HG12	2.24	0.57
4:E:99:PHE:CZ	4:E:123:TYR:CE2	2.93	0.57
4:E:453:ILE:HD12	4:E:453:ILE:C	2.24	0.57
1:D:109:LEU:O	1:D:116:ILE:CG2	2.48	0.57
4:E:122:ILE:HD13	4:E:122:ILE:N	2.16	0.57
1:A:266:SER:O	1:A:270:ALA:N	2.38	0.57
1:A:419:ILE:O	1:A:423:VAL:N	2.38	0.57
2:B:245:ALA:HB1	3:C:320:HIS:HD2	1.70	0.57
3:C:107:PHE:O	3:C:107:PHE:CG	2.58	0.57
3:C:138:PRO:O	3:C:141:TRP:CD1	2.58	0.57
3:C:37:LEU:O	3:C:178:ILE:HD12	2.05	0.57
1:D:257:LEU:HA	1:D:260:ILE:CG1	2.34	0.57
1:D:95:ASN:HA	1:D:127:TYR:O	2.05	0.57
2:B:404:ALA:O	2:B:407:ALA:HB3	2.05	0.57
4:E:444:LYS:CE	4:E:444:LYS:HA	2.35	0.57
1:A:36:GLN:HA	1:A:164:ARG:HH21	1.70	0.57
1:A:148:ILE:HG21	1:A:198:TYR:HB2	1.86	0.57
1:A:36:GLN:OE1	1:A:36:GLN:C	2.43	0.57
1:A:413:VAL:HA	1:A:416:LEU:CB	2.35	0.57
2:B:45:GLU:HG3	2:B:134:TYR:CB	2.35	0.57
3:C:62:TRP:HH2	3:C:120:TRP:HB3	1.70	0.57
1:D:280:PHE:O	1:D:284:PHE:CD1	2.56	0.57
4:E:452:TRP:HE3	4:E:452:TRP:HA	1.70	0.57
4:E:74:ILE:O	4:E:74:ILE:HG12	2.04	0.57
1:A:50:VAL:HG12	1:A:52:THR:HG23	1.85	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:136:PRO:HG2	2:B:139:TRP:CA	2.35	0.56
2:B:85:VAL:HG12	2:B:86:TRP:N	2.18	0.56
3:C:146:LEU:HD12	3:C:146:LEU:N	2.19	0.56
2:B:251:LEU:HD22	3:C:261:ILE:HG13	1.86	0.56
3:C:71:ALA:O	3:C:76:ASP:N	2.38	0.56
1:D:225:PHE:HD1	1:D:226:SER:N	2.03	0.56
3:C:266:ALA:CB	1:D:251:LEU:HB3	2.35	0.56
4:E:151:ASN:HA	4:E:205:PHE:CG	2.41	0.56
4:E:49:LEU:HD12	4:E:50:THR:N	2.19	0.56
3:C:228:TYR:O	3:C:232:PHE:HB2	2.04	0.56
4:E:13:ASP:OD1	4:E:13:ASP:C	2.43	0.56
1:A:230:VAL:CG1	1:A:414:PHE:HZ	2.15	0.56
2:B:95:ASN:HB3	2:B:126:SER:CB	2.18	0.56
3:C:63:TYR:CE1	3:C:115:ASN:O	2.58	0.56
3:C:162:LEU:HB2	3:C:199:LYS:CB	2.31	0.56
3:C:464:VAL:HG13	3:C:465:MET:N	2.19	0.56
3:C:52:LEU:N	3:C:52:LEU:HD22	2.20	0.56
3:C:56:VAL:CG2	3:C:124:ALA:HB3	2.34	0.56
3:C:259:THR:OG1	1:D:244:THR:OG1	2.16	0.56
1:D:56:LEU:HD11	1:D:100:PHE:CE2	2.40	0.56
4:E:27:VAL:HB	4:E:154:GLU:O	2.05	0.56
1:A:425:VAL:O	1:A:429:ARG:HG2	2.05	0.56
3:C:206:PHE:N	3:C:207:PRO:CD	2.68	0.56
1:D:426:PHE:HE1	1:D:430:LEU:HD12	1.70	0.56
1:A:137:PHE:N	1:A:277:TYR:OH	2.38	0.56
2:B:160:HIS:N	2:B:195:LYS:HZ3	1.91	0.56
2:B:217:PRO:HB2	2:B:219:PHE:CE2	2.39	0.56
2:B:272:GLU:HG3	2:B:275:LEU:HD12	1.87	0.56
2:B:136:PRO:HD3	2:B:280:ILE:CD1	2.36	0.56
2:B:92:LEU:HD12	2:B:96:ASN:H	1.70	0.56
3:C:31:VAL:HG13	3:C:33:ILE:HG13	1.87	0.56
1:D:31:ILE:HB	1:D:157:SER:O	2.05	0.56
4:E:142:SER:HG	4:E:209:ILE:HD11	1.69	0.56
4:E:269:ALA:O	4:E:273:PRO:HG3	2.04	0.56
1:A:298:THR:O	1:A:301:ARG:HG2	2.06	0.56
3:C:296:MET:CE	3:C:299:VAL:HG21	2.35	0.56
3:C:42:LEU:HA	3:C:54:THR:CG2	2.33	0.56
1:D:157:SER:CA	1:D:199:LEU:HD12	2.35	0.56
1:D:222:CYS:SG	1:D:225:PHE:CZ	2.93	0.56
4:E:136:PHE:HA	4:E:138:TRP:CZ3	2.41	0.56
4:E:177:PHE:HB2	4:E:185:ILE:HD12	1.86	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:233:SER:HB2	4:E:457:LEU:HD11	1.88	0.56
4:E:438:ASN:O	4:E:442:ILE:HG12	2.05	0.56
2:B:418:ALA:HA	2:B:421:PHE:CE2	2.40	0.56
3:C:235:PRO:O	3:C:239:ILE:HB	2.05	0.56
1:A:2:GLU:O	1:A:7:LEU:HD21	2.05	0.56
1:A:45:GLU:CD	1:A:134:HIS:HD1	2.09	0.56
2:B:192:PRO:HB2	2:B:210:TYR:HB2	1.87	0.56
2:B:187:SER:OG	2:B:216:LYS:HE2	2.05	0.56
2:B:40:LEU:HA	2:B:52:THR:HG23	1.87	0.56
3:C:162:LEU:HD12	3:C:198:LYS:C	2.26	0.56
3:C:185:THR:CG2	3:C:187:ASN:H	2.18	0.56
3:C:272:LEU:O	3:C:275:SER:OG	2.23	0.56
1:D:171:MET:SD	1:D:174:GLY:CA	2.94	0.56
1:D:209:ARG:CG	1:D:210:ILE:N	2.67	0.56
4:E:44:GLU:CA	4:E:129:ILE:CD1	2.72	0.56
4:E:234:SER:O	4:E:238:LEU:N	2.38	0.56
4:E:441:LEU:CD1	4:E:441:LEU:O	2.54	0.56
1:D:137:PHE:HB2	1:D:435:GLN:HB2	1.87	0.56
1:A:144:MET:HB2	1:A:203:TYR:HB2	1.87	0.56
1:A:57:ARG:NH1	1:A:161:GLU:OE2	2.37	0.56
1:A:234:TYR:CZ	1:A:410:LEU:HD11	2.40	0.56
2:B:65:LEU:HD23	2:B:110:VAL:CG1	2.36	0.56
2:B:130:ILE:HB	2:B:134:TYR:CE2	2.39	0.56
2:B:131:LYS:HB3	2:B:133:MET:SD	2.44	0.56
2:B:156:VAL:CG2	2:B:157:ILE:N	2.69	0.56
2:B:300:VAL:O	2:B:304:LEU:N	2.39	0.56
3:C:109:ASN:OD1	3:C:109:ASN:C	2.44	0.56
3:C:12:LEU:HD12	3:C:16:LYS:HE3	1.86	0.56
1:D:250:LEU:O	1:D:253:LEU:HD22	2.06	0.56
4:E:303:VAL:HA	4:E:306:VAL:HB	1.87	0.56
4:E:303:VAL:O	4:E:306:VAL:HB	2.05	0.56
1:A:390:GLU:O	1:A:393:SER:OG	2.21	0.56
4:E:417:GLU:O	4:E:421:PHE:CG	2.58	0.56
1:A:28:PHE:CG	1:A:153:GLY:O	2.58	0.56
1:A:189:TYR:CA	1:A:197:PRO:HD2	2.29	0.56
2:B:108:VAL:HG13	2:B:117:SER:O	2.04	0.56
2:B:132:VAL:HG12	2:B:279:ILE:C	2.26	0.56
2:B:53:SER:HB3	3:C:99:ASP:OD1	2.05	0.56
1:D:167:LEU:CG	1:D:178:MET:CB	2.77	0.56
1:D:38:ILE:O	1:D:39:GLN:HG3	2.06	0.56
4:E:173:ASP:N	4:E:174:PRO:CD	2.68	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:310:THR:HB	4:E:313:THR:HG22	1.88	0.56
4:E:313:THR:O	4:E:314:HIS:CG	2.58	0.56
4:E:136:PHE:CD2	4:E:472:ASN:HA	2.41	0.56
4:E:47:GLU:OE2	4:E:130:ALA:HB2	2.06	0.56
4:E:84:LEU:O	4:E:86:LEU:HG	2.05	0.56
3:C:231:ASN:O	3:C:235:PRO:HD3	2.06	0.56
2:B:283:TYR:H	2:B:283:TYR:HD1	1.54	0.56
1:A:54:VAL:N	1:A:122:ALA:O	2.32	0.56
1:A:420:ILE:CG1	1:A:421:GLY:N	2.68	0.56
1:A:50:VAL:HG12	1:A:52:THR:CG2	2.36	0.56
1:A:245:LEU:HD21	2:B:250:SER:HA	1.86	0.56
1:D:289:ILE:O	1:D:293:VAL:HG23	2.06	0.56
4:E:450:CYS:O	4:E:453:ILE:HG13	2.05	0.56
4:E:452:TRP:CE3	4:E:452:TRP:HA	2.41	0.56
1:D:106:THR:CG2	1:D:107:LYS:H	2.09	0.56
2:B:284:LEU:HA	2:B:287:ILE:CG1	2.34	0.56
1:D:305:THR:HG22	1:D:400:LYS:HB3	1.88	0.56
1:A:167:LEU:HD23	1:A:167:LEU:O	2.06	0.56
1:A:175:GLU:OE1	1:A:211:PRO:HG3	2.06	0.56
1:A:262:GLU:C	1:A:265:PRO:HD2	2.26	0.56
1:A:265:PRO:O	1:A:268:SER:HB3	2.06	0.56
1:A:265:PRO:HD2	1:A:266:SER:H	1.70	0.56
1:A:17:LYS:HZ1	1:A:83:ASP:HB3	1.68	0.56
2:B:101:GLU:C	2:B:102:ILE:HG13	2.25	0.56
2:B:269:LYS:HD2	2:B:269:LYS:C	2.25	0.56
3:C:241:PHE:O	3:C:245:LEU:N	2.27	0.56
3:C:310:LEU:O	3:C:314:PHE:CD2	2.59	0.56
3:C:460:ILE:O	3:C:463:PRO:HG2	2.06	0.56
3:C:298:LEU:CD2	3:C:467:LEU:HD12	2.34	0.56
1:D:49:ILE:CD1	1:D:125:LYS:HE3	2.36	0.56
1:D:135:PHE:CA	1:D:209:ARG:HB3	2.35	0.56
1:D:198:TYR:HD1	1:D:198:TYR:N	2.03	0.56
1:A:187:TRP:NE1	1:A:196:THR:CG2	2.69	0.56
1:A:200:ASP:N	1:A:200:ASP:OD1	2.39	0.56
1:A:243:MET:CG	1:A:306:HIS:ND1	2.69	0.56
1:A:295:VAL:O	1:A:299:HIS:HB2	2.06	0.56
1:A:97:ASP:HB2	1:A:127:TYR:HB2	1.88	0.56
2:B:226:VAL:HG23	2:B:227:PRO:HD3	1.88	0.56
2:B:247:GLU:CD	3:C:320:HIS:NE2	2.59	0.56
2:B:304:LEU:C	2:B:304:LEU:HD23	2.26	0.56
3:C:219:LEU:HD11	3:C:221:ILE:HG22	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:274:THR:HG22	3:C:275:SER:N	2.21	0.56
3:C:282:ALA:O	3:C:285:VAL:N	2.27	0.56
1:D:134:HIS:HE1	1:D:209:ARG:HD2	1.69	0.56
1:D:177:VAL:HG12	1:D:208:GLN:HG2	1.88	0.56
1:D:235:LEU:O	1:D:239:SER:N	2.31	0.56
1:D:91:VAL:HG22	1:D:96:ALA:HB2	1.87	0.56
4:E:75:ASP:CB	4:E:110:TYR:CE1	2.79	0.56
4:E:138:TRP:CE3	4:E:215:GLN:HA	2.40	0.56
1:D:67:TRP:CD1	1:D:71:ASP:HB3	2.41	0.56
3:C:289:GLY:C	3:C:293:MET:HE2	2.26	0.56
2:B:238:VAL:HG13	2:B:248:LYS:HZ2	1.66	0.56
2:B:248:LYS:HD3	2:B:252:SER:CB	2.07	0.56
2:B:455:PHE:O	2:B:458:ALA:HB3	2.05	0.56
3:C:67:LEU:CB	3:C:116:GLY:HA2	2.33	0.56
3:C:180:ASP:N	3:C:181:PRO:CD	2.69	0.56
3:C:80:LEU:O	3:C:112:VAL:CG2	2.54	0.56
4:E:129:ILE:HG22	4:E:133:TYR:HD2	1.66	0.56
1:D:101:ALA:O	1:D:102:ILE:HB	2.06	0.56
4:E:311:PRO:CD	4:E:440:VAL:HG13	2.16	0.56
1:A:130:ILE:HD13	1:A:130:ILE:H	1.71	0.55
1:A:303:PRO:CB	1:A:400:LYS:HE2	2.36	0.55
2:B:93:MET:HG3	2:B:206:ASP:OD2	2.06	0.55
2:B:440:LEU:HA	2:B:443:PHE:CB	2.36	0.55
3:C:17:TYR:CE2	3:C:19:LYS:HA	2.41	0.55
3:C:201:ILE:HB	3:C:213:GLN:OE1	2.06	0.55
3:C:154:ASN:CB	3:C:211:ASN:CB	2.81	0.55
3:C:50:GLU:CB	3:C:132:ILE:HB	2.35	0.55
4:E:103:TYR:CD2	4:E:104:TYR:CD1	2.95	0.55
4:E:262:THR:HA	4:E:265:LEU:CG	2.35	0.55
4:E:438:ASN:OD1	4:E:442:ILE:HD11	2.06	0.55
1:D:21:PRO:HB3	1:D:62:ASP:CG	2.26	0.55
4:E:469:GLY:O	4:E:473:GLN:HB2	2.06	0.55
1:A:105:MET:HG2	1:A:105:MET:O	2.06	0.55
1:A:132:VAL:O	1:A:274:ILE:HA	2.05	0.55
1:A:248:SER:C	2:B:257:LEU:HD11	2.26	0.55
3:C:180:ASP:H	3:C:181:PRO:HD2	1.71	0.55
3:C:221:ILE:HG13	3:C:222:ARG:N	2.20	0.55
3:C:240:SER:O	3:C:244:ALA:N	2.37	0.55
3:C:67:LEU:HD11	3:C:113:ARG:O	2.05	0.55
4:E:238:LEU:O	4:E:242:LEU:CB	2.54	0.55
1:D:64:ARG:CA	1:D:66:ARG:HH11	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:281:ILE:CD1	2:B:281:ILE:H	2.18	0.55
1:D:303:PRO:CB	1:D:400:LYS:HZ2	2.19	0.55
3:C:204:ASP:O	3:C:207:PRO:HG2	2.05	0.55
4:E:81:SER:C	4:E:83:LEU:H	2.09	0.55
1:A:163:ASP:OD1	1:A:164:ARG:N	2.39	0.55
1:A:175:GLU:N	1:A:176:TRP:CE3	2.74	0.55
1:A:285:VAL:HG13	1:A:286:ILE:N	2.21	0.55
1:A:420:ILE:HG13	1:A:421:GLY:H	1.72	0.55
1:A:93:TYR:CZ	1:A:200:ASP:HB3	2.40	0.55
2:B:218:LEU:C	2:B:219:PHE:CD1	2.80	0.55
2:B:46:LYS:CG	2:B:278:PRO:CD	2.84	0.55
3:C:110:VAL:HG22	3:C:120:TRP:CG	2.42	0.55
3:C:20:HIS:CG	3:C:20:HIS:O	2.58	0.55
3:C:216:THR:C	3:C:217:PHE:CD1	2.77	0.55
3:C:245:LEU:HB3	3:C:249:LEU:HD11	1.88	0.55
3:C:260:ALA:HB3	3:C:313:HIS:NE2	2.22	0.55
3:C:33:ILE:HD12	3:C:158:ILE:HD11	1.88	0.55
3:C:475:MET:HA	3:C:478:PHE:CE2	2.40	0.55
1:D:254:THR:HG23	1:D:255:VAL:N	2.22	0.55
1:D:291:VAL:HG12	1:D:295:VAL:CG1	2.37	0.55
1:D:52:THR:OG1	1:D:53:ASN:N	2.39	0.55
4:E:22:LYS:HG3	4:E:23:THR:N	2.21	0.55
3:C:426:THR:HA	3:C:429:ILE:HG23	1.87	0.55
3:C:429:ILE:CG1	3:C:430:VAL:N	2.69	0.55
1:A:399:TRP:HA	1:A:399:TRP:HE3	1.72	0.55
1:A:48:GLN:HB2	1:A:130:ILE:HG23	1.89	0.55
1:A:291:VAL:O	1:A:294:VAL:HG12	2.06	0.55
3:C:161:ASP:HA	3:C:199:LYS:HG2	1.89	0.55
3:C:199:LYS:NZ	3:C:199:LYS:C	2.58	0.55
3:C:311:ASN:O	3:C:315:ARG:CA	2.54	0.55
3:C:454:ASP:O	3:C:458:MET:N	2.40	0.55
1:D:27:HIS:O	1:D:28:PHE:CB	2.50	0.55
4:E:56:GLU:CA	4:E:118:LEU:HG	2.28	0.55
4:E:246:ALA:HB1	4:E:250:LYS:HZ2	1.71	0.55
1:D:16:ASN:N	1:D:16:ASN:ND2	2.52	0.55
3:C:434:LYS:CG	3:C:435:GLU:N	2.67	0.55
1:A:61:ILE:CG2	1:A:115:LYS:HA	2.36	0.55
1:D:137:PHE:CB	1:D:435:GLN:CB	2.69	0.55
1:D:32:THR:HG21	1:D:59:GLN:HE21	1.70	0.55
1:A:261:VAL:O	1:A:265:PRO:HG3	2.06	0.55
2:B:226:VAL:CG2	2:B:227:PRO:CD	2.84	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:438:LEU:HD22	2:B:441:TYR:CD2	2.41	0.55
2:B:50:MET:HB3	2:B:126:SER:OG	2.06	0.55
3:C:480:ARG:C	3:C:482:PRO:HD2	2.26	0.55
1:D:209:ARG:HG2	1:D:210:ILE:H	1.71	0.55
4:E:262:THR:CG2	4:E:265:LEU:HD12	2.37	0.55
4:E:270:GLN:O	4:E:273:PRO:CG	2.54	0.55
2:B:10:VAL:O	2:B:13:GLU:HB2	2.06	0.55
1:D:305:THR:CG2	1:D:400:LYS:HB3	2.35	0.55
1:A:262:GLU:HG2	4:E:271:LYS:HZ1	1.72	0.55
1:A:137:PHE:C	1:A:435:GLN:HG3	2.21	0.55
2:B:186:TRP:HA	2:B:215:ARG:HA	1.87	0.55
2:B:232:SER:O	2:B:236:ILE:N	2.38	0.55
3:C:35:LEU:HD22	3:C:215:VAL:CG1	2.32	0.55
3:C:147:LYS:HE2	3:C:216:THR:CG2	2.37	0.55
3:C:272:LEU:O	3:C:276:GLN:HG2	2.06	0.55
4:E:246:ALA:CA	4:E:250:LYS:HZ2	2.19	0.55
1:A:306:HIS:CB	4:E:250:LYS:NZ	2.69	0.55
2:B:284:LEU:O	2:B:288:MET:CB	2.54	0.55
2:B:75:ILE:O	2:B:75:ILE:CG1	2.49	0.55
1:A:151:TYR:HB2	1:A:156:VAL:HG13	1.88	0.55
2:B:262:PHE:N	2:B:262:PHE:HD1	2.04	0.55
2:B:441:TYR:CA	2:B:444:ILE:HG22	2.36	0.55
2:B:458:ALA:O	2:B:462:VAL:CG2	2.51	0.55
2:B:40:LEU:HD22	2:B:51:THR:O	2.06	0.55
3:C:188:GLY:HA3	3:C:190:TRP:CZ3	2.42	0.55
3:C:288:ILE:HD13	3:C:290:LYS:HD2	1.87	0.55
1:D:287:SER:HA	1:D:290:ILE:HD13	1.86	0.55
1:D:37:LEU:CB	1:D:54:VAL:HG13	2.36	0.55
4:E:113:GLY:C	4:E:115:MET:SD	2.85	0.55
4:E:235:LEU:HD11	4:E:257:VAL:HG13	1.85	0.55
1:D:17:LYS:CD	1:D:84:ASP:HA	2.37	0.55
1:D:377:GLU:HA	1:D:380:LYS:CE	2.37	0.55
1:D:390:GLU:O	1:D:393:SER:HB2	2.07	0.55
1:D:305:THR:CB	1:D:401:TYR:HD2	2.19	0.55
1:A:262:GLU:HG2	4:E:271:LYS:NZ	2.22	0.55
1:A:35:LEU:C	1:A:35:LEU:CD2	2.75	0.55
1:A:41:ILE:HG12	1:A:51:GLU:O	2.07	0.55
2:B:306:HIS:CA	2:B:312:HIS:O	2.40	0.55
3:C:37:LEU:HD12	3:C:217:PHE:CE2	2.42	0.55
2:B:220:TYR:HE2	3:C:279:PRO:HB2	1.65	0.55
1:D:26:THR:CG2	1:D:27:HIS:H	2.20	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:409:ILE:HG13	1:D:410:LEU:N	2.22	0.55
1:A:74:GLY:O	1:A:75:ILE:HG23	2.07	0.55
2:B:108:VAL:HG12	2:B:109:LEU:N	2.22	0.55
2:B:16:ASN:OD1	2:B:18:LYS:NZ	2.23	0.55
2:B:40:LEU:CB	2:B:52:THR:HG23	2.37	0.55
2:B:32:ARG:HH21	2:B:60:TRP:C	2.10	0.55
3:C:247:PHE:O	3:C:250:PRO:HG3	2.07	0.55
3:C:258:SER:O	3:C:261:ILE:HB	2.07	0.55
3:C:7:LEU:HD13	3:C:73:GLU:CD	2.27	0.55
1:D:230:VAL:HG22	1:D:234:TYR:HE1	1.72	0.55
1:D:46:VAL:CB	1:D:272:PRO:HD3	2.37	0.55
4:E:128:PRO:C	4:E:129:ILE:HG23	2.27	0.55
4:E:19:LYS:HG3	4:E:20:PRO:HD2	1.89	0.55
4:E:235:LEU:HA	4:E:238:LEU:CG	2.30	0.55
1:A:160:PRO:HG3	1:A:185:LYS:HE2	1.89	0.55
1:A:201:ILE:CG2	1:A:203:TYR:CE1	2.90	0.55
1:A:218:VAL:CG1	1:A:219:ILE:N	2.69	0.55
1:A:276:LYS:HD2	1:A:276:LYS:N	2.19	0.55
1:A:304:SER:N	1:A:400:LYS:HD3	2.18	0.55
1:A:89:ASP:OD2	1:A:151:TYR:CE2	2.60	0.55
2:B:241:LEU:CD1	3:C:314:PHE:CD1	2.89	0.55
2:B:132:VAL:C	2:B:279:ILE:HA	2.28	0.55
3:C:114:PRO:HG2	3:C:115:ASN:N	2.21	0.55
3:C:58:MET:CE	3:C:122:PRO:HD2	2.36	0.55
3:C:39:LEU:O	3:C:183:ALA:CB	2.55	0.55
3:C:449:VAL:O	3:C:452:THR:HG22	2.06	0.55
1:D:141:ASN:HB3	1:D:206:ILE:HG12	1.89	0.55
4:E:161:ALA:HA	4:E:163:GLU:OE2	2.07	0.55
4:E:47:GLU:O	4:E:126:THR:HA	2.07	0.55
1:D:66:ARG:N	1:D:66:ARG:HD3	2.22	0.55
1:D:395:ALA:O	1:D:399:TRP:CD2	2.60	0.55
1:A:67:TRP:CB	1:A:71:ASP:HB3	2.37	0.55
1:D:303:PRO:HG2	1:D:400:LYS:NZ	2.20	0.55
1:A:59:GLN:NE2	1:A:117:MET:CG	2.62	0.54
1:A:33:VAL:HG22	1:A:158:ILE:HG12	1.86	0.54
2:B:440:LEU:C	2:B:443:PHE:HB3	2.26	0.54
1:D:242:LYS:CD	1:D:245:LEU:HD13	2.35	0.54
4:E:127:CYS:SG	4:E:143:LEU:CG	2.94	0.54
4:E:189:PRO:HB2	4:E:211:PHE:CD2	2.41	0.54
4:E:241:PHE:C	4:E:243:PRO:HD2	2.27	0.54
4:E:247:GLY:N	4:E:250:LYS:NZ	2.45	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:101:ALA:O	1:D:102:ILE:HD13	2.06	0.54
4:E:149:THR:CG2	4:E:150:TYR:N	2.61	0.54
1:D:68:ASN:HB2	1:D:69:PRO:HD2	1.86	0.54
1:A:117:MET:CG	1:A:119:THR:HG23	2.37	0.54
1:A:132:VAL:O	1:A:274:ILE:CG2	2.55	0.54
1:A:134:HIS:HE1	1:A:209:ARG:HD2	1.72	0.54
1:A:237:THR:OG1	1:A:407:ASP:OD1	2.20	0.54
1:A:93:TYR:CD1	1:A:93:TYR:N	2.75	0.54
2:B:32:ARG:HG3	2:B:59:ALA:O	2.06	0.54
3:C:180:ASP:CB	3:C:195:LYS:HB2	2.37	0.54
3:C:31:VAL:HG13	3:C:31:VAL:O	2.06	0.54
3:C:41:ASN:ND2	3:C:185:THR:OG1	2.39	0.54
1:D:132:VAL:C	1:D:274:ILE:HG23	2.28	0.54
1:D:186:HIS:CG	1:D:187:TRP:N	2.74	0.54
1:D:226:SER:HA	1:D:229:THR:OG1	2.07	0.54
1:D:135:PHE:CZ	1:D:273:LEU:CB	2.90	0.54
1:D:233:PHE:HB3	1:D:410:LEU:HB3	1.90	0.54
4:E:27:VAL:HB	4:E:154:GLU:C	2.27	0.54
1:D:107:LYS:HD3	1:D:107:LYS:H	1.71	0.54
2:B:426:LYS:HB3	2:B:430:TYR:CZ	2.42	0.54
1:A:279:LEU:CD1	1:A:282:MET:HB3	2.37	0.54
2:B:241:LEU:HD23	2:B:248:LYS:HE2	1.87	0.54
2:B:45:GLU:OE1	2:B:279:ILE:CD1	2.54	0.54
3:C:95:GLN:HB2	3:C:147:LYS:O	2.06	0.54
3:C:13:ILE:CG2	3:C:82:LEU:HD21	2.37	0.54
1:D:43:VAL:CG2	1:D:50:VAL:HG13	2.37	0.54
3:C:429:ILE:HD12	3:C:429:ILE:C	2.27	0.54
2:B:67:TRP:HB2	2:B:72:TYR:CB	2.36	0.54
3:C:36:SER:HB3	3:C:59:ASP:HB2	1.88	0.54
1:A:76:LYS:HE3	1:A:112:TYR:CE2	2.42	0.54
4:E:473:GLN:O	4:E:473:GLN:OE1	2.26	0.54
1:A:107:LYS:O	1:A:108:LEU:CD2	2.54	0.54
1:A:242:LYS:HB2	1:A:245:LEU:HB3	1.88	0.54
1:A:294:VAL:CG1	1:A:295:VAL:H	2.19	0.54
1:A:37:LEU:H	1:A:164:ARG:HH22	1.55	0.54
2:B:160:HIS:CG	2:B:195:LYS:HE2	2.43	0.54
2:B:267:ALA:O	2:B:271:PRO:CD	2.46	0.54
2:B:269:LYS:O	2:B:273:THR:HG23	2.08	0.54
3:C:256:LYS:HB3	3:C:259:THR:CG2	2.37	0.54
3:C:83:ARG:HB3	3:C:84:PRO:CD	2.31	0.54
1:D:131:ILE:CG1	1:D:133:THR:H	2.05	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:184:THR:CG2	4:E:215:GLN:HG2	2.37	0.54
4:E:74:ILE:C	4:E:76:LEU:H	2.10	0.54
3:C:434:LYS:NZ	3:C:435:GLU:HG2	2.22	0.54
2:B:68:ASP:N	2:B:72:TYR:HB3	2.22	0.54
3:C:443:VAL:HA	3:C:446:TRP:HD1	1.73	0.54
1:D:401:TYR:O	1:D:401:TYR:CD1	2.61	0.54
2:B:101:GLU:OE1	2:B:123:ILE:CG2	2.55	0.54
2:B:246:GLY:C	2:B:248:LYS:N	2.60	0.54
3:C:466:VAL:O	3:C:470:ILE:HG12	2.08	0.54
3:C:481:PRO:N	3:C:482:PRO:HD2	2.22	0.54
1:D:38:ILE:O	1:D:169:THR:HG21	2.08	0.54
4:E:101:VAL:O	4:E:119:PRO:HB2	2.07	0.54
4:E:26:HIS:O	4:E:27:VAL:O	2.25	0.54
4:E:37:THR:OG1	4:E:54:TRP:CE3	2.60	0.54
1:D:65:LEU:CD2	1:D:110:LEU:HD22	2.23	0.54
2:B:11:LEU:HD22	2:B:11:LEU:N	2.22	0.54
1:D:3:HIS:HB3	1:D:7:LEU:HG	1.88	0.54
2:B:281:ILE:O	2:B:284:LEU:N	2.41	0.54
1:A:418:CYS:O	1:A:422:THR:HB	2.06	0.54
1:A:177:VAL:O	1:A:207:MET:HB2	2.08	0.54
1:A:408:HIS:C	1:A:412:CYS:SG	2.86	0.54
3:C:452:THR:CA	3:C:455:ARG:HD3	2.38	0.54
1:D:141:ASN:HB3	1:D:206:ILE:HD11	1.89	0.54
1:D:233:PHE:O	1:D:236:PRO:HG2	2.08	0.54
1:D:95:ASN:ND2	1:D:127:TYR:C	2.61	0.54
4:E:151:ASN:HA	4:E:205:PHE:CB	2.36	0.54
4:E:172:ILE:HG21	4:E:174:PRO:HG2	1.88	0.54
4:E:239:VAL:HA	4:E:242:LEU:HD23	1.90	0.54
4:E:258:LEU:HD12	4:E:300:CYS:SG	2.48	0.54
3:C:228:TYR:CD1	3:C:229:VAL:HG22	2.43	0.54
3:C:426:THR:O	3:C:429:ILE:HG23	2.07	0.54
1:A:25:HIS:CG	1:A:25:HIS:O	2.61	0.54
1:A:301:ARG:HH12	1:A:406:ILE:HD11	1.73	0.54
2:B:451:THR:HA	2:B:454:ILE:HD12	1.90	0.54
2:B:88:PRO:HB2	2:B:90:ILE:CD1	2.38	0.54
3:C:160:MET:N	3:C:213:GLN:HG3	2.23	0.54
3:C:8:ILE:CD1	3:C:69:TRP:HZ3	2.19	0.54
1:D:250:LEU:O	1:D:253:LEU:CD2	2.56	0.54
1:D:45:GLU:OE2	1:D:272:PRO:O	2.26	0.54
4:E:135:PRO:CG	4:E:137:ASP:OD1	2.56	0.54
4:E:172:ILE:HG23	4:E:175:GLU:N	2.21	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:143:LEU:HD12	4:E:210:PHE:O	2.06	0.54
4:E:248:GLY:C	4:E:250:LYS:H	2.11	0.54
2:B:409:LYS:CE	3:C:423:ILE:HG22	2.37	0.54
1:D:137:PHE:HB3	1:D:435:GLN:HG3	1.86	0.54
1:D:184:TRP:CE3	1:D:185:LYS:O	2.60	0.54
1:D:223:LEU:HD23	1:D:223:LEU:O	2.07	0.54
1:A:274:ILE:CG1	1:A:277:TYR:CE1	2.80	0.54
2:B:241:LEU:HD13	3:C:314:PHE:CD2	2.43	0.54
1:D:295:VAL:O	1:D:299:HIS:HB2	2.07	0.54
4:E:99:PHE:CB	4:E:102:ALA:HB3	2.33	0.54
4:E:136:PHE:HD2	4:E:472:ASN:HA	1.72	0.54
1:D:399:TRP:HA	1:D:399:TRP:CE3	2.43	0.54
3:C:93:VAL:HG21	3:C:151:LEU:CD1	2.37	0.54
4:E:419:CYS:HA	4:E:422:ILE:HG12	1.90	0.54
1:A:265:PRO:CD	1:A:266:SER:N	2.71	0.54
2:B:235:ALA:O	2:B:239:PHE:CD2	2.61	0.54
2:B:239:PHE:N	2:B:239:PHE:CD1	2.76	0.54
3:C:180:ASP:HB2	3:C:195:LYS:CG	2.38	0.54
3:C:65:HIS:HD2	3:C:65:HIS:N	1.90	0.54
1:D:406:ILE:O	1:D:410:LEU:HD23	2.07	0.54
1:D:43:VAL:HG11	1:D:50:VAL:HG22	1.90	0.54
4:E:104:TYR:CD1	4:E:104:TYR:N	2.76	0.54
4:E:143:LEU:HD12	4:E:143:LEU:N	2.23	0.54
1:A:64:ARG:CA	1:A:66:ARG:NH1	2.63	0.54
4:E:100:GLU:HB2	4:E:122:ILE:HG12	1.89	0.54
1:A:221:PRO:C	1:A:224:LEU:HB3	2.29	0.54
2:B:135:PHE:H	2:B:136:PRO:CD	2.21	0.54
2:B:196:ASN:OD1	2:B:197:TRP:N	2.41	0.54
2:B:226:VAL:O	2:B:230:LEU:CG	2.53	0.54
2:B:227:PRO:C	2:B:231:ILE:HG12	2.27	0.54
2:B:432:ALA:O	2:B:436:ASP:CG	2.46	0.54
3:C:67:LEU:HD12	3:C:116:GLY:N	2.22	0.54
3:C:12:LEU:HD12	3:C:16:LYS:CD	2.37	0.54
3:C:274:THR:HA	3:C:277:ARG:HH11	1.73	0.54
4:E:261:GLN:HE22	4:E:296:ILE:HD12	1.69	0.54
4:E:441:LEU:O	4:E:441:LEU:HD12	2.08	0.54
4:E:95:VAL:HG22	4:E:123:TYR:CE2	2.42	0.54
3:C:59:ASP:OD1	3:C:121:LEU:CD1	2.55	0.54
1:A:43:VAL:CB	1:A:50:VAL:HG22	2.38	0.53
2:B:196:ASN:O	2:B:197:TRP:CD1	2.61	0.53
2:B:298:SER:HA	2:B:301:VAL:CG2	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:110:VAL:HG12	3:C:111:LEU:N	2.23	0.53
3:C:131:PRO:CG	3:C:145:SER:H	2.17	0.53
3:C:30:VAL:HG23	3:C:156:ASN:CA	2.38	0.53
3:C:64:ASP:O	3:C:67:LEU:HB3	2.08	0.53
1:D:163:ASP:OD1	1:D:164:ARG:N	2.41	0.53
1:D:420:ILE:HA	1:D:423:VAL:CG2	2.39	0.53
4:E:48:ALA:HA	4:E:125:SER:O	2.08	0.53
4:E:183:TRP:HB2	4:E:215:GLN:O	2.08	0.53
4:E:191:LYS:N	4:E:209:ILE:CG2	2.70	0.53
4:E:238:LEU:O	4:E:242:LEU:N	2.38	0.53
1:A:7:LEU:HD22	1:A:70:ALA:HB1	1.90	0.53
1:A:433:LEU:HD12	1:A:433:LEU:O	2.08	0.53
1:A:213:TYR:CG	1:A:214:PHE:N	2.76	0.53
1:A:95:ASN:OD1	1:A:144:MET:SD	2.66	0.53
1:A:285:VAL:HG13	1:A:286:ILE:HG13	1.91	0.53
1:A:54:VAL:O	1:A:122:ALA:N	2.40	0.53
3:C:16:LYS:HE2	3:C:16:LYS:HA	1.90	0.53
3:C:308:ILE:CG2	3:C:309:VAL:N	2.71	0.53
3:C:451:GLN:O	3:C:455:ARG:CZ	2.56	0.53
3:C:452:THR:HA	3:C:455:ARG:HD3	1.89	0.53
1:D:209:ARG:HG3	1:D:210:ILE:H	1.72	0.53
1:D:241:GLU:C	1:D:243:MET:CE	2.77	0.53
1:D:276:LYS:O	1:D:280:PHE:CE1	2.61	0.53
1:D:31:ILE:O	1:D:158:ILE:HA	2.08	0.53
1:D:53:ASN:HD21	1:D:121:PRO:C	2.11	0.53
4:E:284:LYS:HA	4:E:287:ILE:CG2	2.37	0.53
3:C:434:LYS:CE	3:C:435:GLU:CG	2.86	0.53
2:B:69:PRO:HG2	2:B:70:ALA:H	1.73	0.53
2:B:75:ILE:HG22	3:C:27:ASN:HB3	1.89	0.53
1:A:100:PHE:CD2	1:A:103:VAL:HG21	2.43	0.53
1:A:297:ASN:O	1:A:301:ARG:N	2.40	0.53
2:B:95:ASN:CB	2:B:127:SER:H	2.21	0.53
2:B:45:GLU:CG	2:B:279:ILE:HD11	2.37	0.53
3:C:53:THR:HA	3:C:126:PHE:O	2.07	0.53
1:D:135:PHE:HD1	1:D:135:PHE:C	2.12	0.53
4:E:191:LYS:HB2	4:E:209:ILE:CG2	2.38	0.53
4:E:281:LEU:HD11	4:E:286:LEU:HD11	1.91	0.53
4:E:81:SER:OG	4:E:82:GLU:N	2.39	0.53
1:D:8:VAL:O	1:D:12:LEU:HD13	2.08	0.53
1:A:171:MET:HG3	1:A:173:SER:H	1.73	0.53
2:B:137:PHE:CZ	2:B:461:ASN:OD1	2.62	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:230:LEU:C	2:B:233:ILE:HG13	2.29	0.53
3:C:13:ILE:HG23	3:C:82:LEU:HD21	1.89	0.53
3:C:29:GLU:O	3:C:155:ALA:O	2.26	0.53
3:C:192:ILE:CD1	3:C:221:ILE:CG2	2.86	0.53
1:D:144:MET:CE	1:D:205:PHE:CE1	2.92	0.53
1:D:245:LEU:O	1:D:249:VAL:HG23	2.09	0.53
4:E:33:LYS:NZ	4:E:160:SER:OG	2.38	0.53
4:E:23:THR:HG23	4:E:24:LEU:H	1.74	0.53
1:D:393:SER:O	1:D:396:ALA:HB3	2.07	0.53
1:A:7:LEU:O	1:A:11:LEU:HG	2.08	0.53
1:A:17:LYS:HZ2	1:A:83:ASP:HB3	1.72	0.53
1:A:37:LEU:HD22	1:A:54:VAL:HG12	1.90	0.53
2:B:256:LEU:HD12	2:B:302:LEU:HD13	1.89	0.53
2:B:37:LEU:HD12	2:B:54:VAL:HG11	1.90	0.53
3:C:474:VAL:HA	3:C:477:ASN:ND2	2.23	0.53
1:D:46:VAL:CG2	1:D:272:PRO:HD3	2.38	0.53
4:E:1:ASN:HD22	4:E:69:SER:CA	2.22	0.53
4:E:90:VAL:HA	4:E:99:PHE:CE1	2.39	0.53
1:D:60:TRP:HZ3	1:D:116:ILE:HG13	1.71	0.53
4:E:100:GLU:OE2	4:E:122:ILE:HG12	2.08	0.53
1:A:250:LEU:CD2	1:A:292:THR:HG22	2.39	0.53
1:A:295:VAL:O	1:A:299:HIS:N	2.37	0.53
1:A:36:GLN:O	1:A:38:ILE:HD12	2.07	0.53
3:C:106:TYR:CD1	3:C:107:PHE:CE1	2.96	0.53
1:D:257:LEU:HA	1:D:260:ILE:HG13	1.90	0.53
4:E:267:LEU:HA	4:E:270:GLN:CG	2.38	0.53
4:E:55:ILE:HG21	4:E:119:PRO:HG2	1.88	0.53
4:E:61:ASP:OD1	4:E:63:ARG:CB	2.57	0.53
3:C:431:LYS:HE2	1:D:382:ILE:CD1	2.38	0.53
1:D:104:HIS:HB2	1:D:105:MET:SD	2.49	0.53
1:A:171:MET:HG2	1:A:174:GLY:N	2.23	0.53
1:A:187:TRP:HD1	1:A:199:LEU:HD23	1.73	0.53
1:A:419:ILE:HG22	1:A:420:ILE:H	1.74	0.53
2:B:28:LYS:CG	2:B:154:SER:O	2.54	0.53
2:B:241:LEU:CG	2:B:248:LYS:HE2	2.38	0.53
2:B:459:SER:C	2:B:463:PRO:HD2	2.29	0.53
3:C:120:TRP:NE1	3:C:122:PRO:HD3	2.23	0.53
3:C:312:PHE:CE1	3:C:456:LEU:CD1	2.74	0.53
3:C:42:LEU:CG	3:C:54:THR:CG2	2.84	0.53
1:D:245:LEU:CG	4:E:255:ILE:HG13	2.38	0.53
4:E:44:GLU:CG	4:E:129:ILE:HD12	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:453:ILE:HA	4:E:456:LEU:HD12	1.91	0.53
1:D:137:PHE:HB3	1:D:435:GLN:NE2	2.24	0.53
1:D:303:PRO:CB	1:D:400:LYS:NZ	2.72	0.53
4:E:444:LYS:HD2	4:E:444:LYS:N	2.23	0.53
1:A:243:MET:CE	1:A:244:THR:HG22	2.34	0.53
2:B:242:PRO:HG2	2:B:243:PRO:CD	2.38	0.53
2:B:272:GLU:O	2:B:275:LEU:HB2	2.09	0.53
2:B:297:LEU:O	2:B:301:VAL:HG13	2.09	0.53
2:B:95:ASN:HB3	2:B:127:SER:H	1.73	0.53
3:C:181:PRO:HA	3:C:184:PHE:HB2	1.90	0.53
3:C:155:ALA:H	3:C:211:ASN:HA	1.71	0.53
3:C:139:PHE:O	3:C:222:ARG:CG	2.56	0.53
3:C:42:LEU:CA	3:C:54:THR:HG22	2.35	0.53
1:D:56:LEU:HB2	1:D:120:PRO:CD	2.39	0.53
4:E:104:TYR:HD1	4:E:104:TYR:N	2.07	0.53
4:E:172:ILE:HG13	4:E:174:PRO:CG	2.39	0.53
4:E:271:LYS:CB	4:E:271:LYS:HZ3	2.00	0.53
1:D:242:LYS:NZ	4:E:304:LEU:HD11	2.23	0.53
4:E:436:ASN:CA	4:E:439:TRP:HE1	2.15	0.53
4:E:71:TYR:CG	4:E:72:GLU:N	2.76	0.53
1:D:106:THR:HG23	1:D:107:LYS:HE2	1.89	0.53
1:D:198:TYR:CD1	1:D:198:TYR:N	2.73	0.53
1:A:209:ARG:HG3	1:A:210:ILE:H	1.72	0.53
1:A:416:LEU:O	1:A:420:ILE:N	2.36	0.53
2:B:135:PHE:N	2:B:136:PRO:CD	2.71	0.53
3:C:262:CYS:SG	3:C:263:VAL:N	2.82	0.53
3:C:47:GLU:CG	3:C:286:PRO:HD2	2.38	0.53
3:C:67:LEU:CD1	3:C:116:GLY:HA2	2.38	0.53
4:E:103:TYR:HB3	4:E:104:TYR:CD1	2.44	0.53
4:E:127:CYS:SG	4:E:128:PRO:HD2	2.49	0.53
4:E:162:GLU:HA	4:E:190:ALA:H	1.73	0.53
4:E:157:LEU:CD1	4:E:208:ILE:HD11	2.38	0.53
4:E:74:ILE:HD13	4:E:74:ILE:N	2.24	0.53
1:D:161:GLU:HG3	1:D:162:SER:N	2.24	0.53
4:E:418:ALA:HA	4:E:421:PHE:HD2	1.73	0.53
4:E:100:GLU:HB2	4:E:122:ILE:CG1	2.39	0.53
2:B:105:HIS:O	2:B:105:HIS:CG	2.61	0.53
1:A:190:TYR:HH	1:A:198:TYR:HE1	1.57	0.53
1:A:397:GLU:HA	1:A:400:LYS:HD2	1.91	0.53
1:A:405:VAL:HA	1:A:408:HIS:ND1	2.24	0.53
1:A:46:VAL:HG23	1:A:271:VAL:CA	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:56:LEU:HB2	2:B:120:PRO:HG2	1.89	0.53
2:B:130:ILE:HG21	2:B:134:TYR:CE2	2.44	0.53
2:B:22:SER:HB3	2:B:29:VAL:HG22	1.91	0.53
2:B:451:THR:HA	2:B:454:ILE:HB	1.91	0.53
3:C:314:PHE:HA	3:C:320:HIS:O	2.09	0.53
1:D:253:LEU:HD23	1:D:254:THR:HB	1.91	0.53
1:D:37:LEU:CA	1:D:54:VAL:HG13	2.39	0.53
4:E:138:TRP:HB3	4:E:214:ILE:O	2.09	0.53
4:E:267:LEU:HD12	4:E:270:GLN:CD	2.30	0.53
1:A:62:ASP:C	1:A:64:ARG:H	2.11	0.53
1:A:426:PHE:C	1:A:426:PHE:CD1	2.82	0.52
2:B:37:LEU:CG	2:B:179:ALA:HB3	2.38	0.52
2:B:439:PHE:C	2:B:442:ILE:HB	2.29	0.52
2:B:31:VAL:HG21	2:B:86:TRP:HZ3	1.72	0.52
3:C:110:VAL:CG2	3:C:120:TRP:HB2	2.39	0.52
3:C:113:ARG:HD2	3:C:117:TYR:HB2	1.91	0.52
1:D:252:SER:HB2	4:E:259:LEU:CD2	2.36	0.52
1:D:260:ILE:HA	1:D:263:LEU:HD12	1.91	0.52
4:E:183:TRP:HB2	4:E:214:ILE:HD13	1.90	0.52
4:E:250:LYS:O	4:E:253:LEU:HB3	2.08	0.52
1:D:263:LEU:HD21	4:E:266:PHE:HZ	1.74	0.52
1:D:102:ILE:CG2	1:D:102:ILE:O	2.56	0.52
1:D:115:LYS:HG2	1:D:116:ILE:N	2.23	0.52
1:A:384:GLU:HA	1:A:387:LYS:CG	2.39	0.52
2:B:287:ILE:C	2:B:287:ILE:HD12	2.29	0.52
1:A:286:ILE:HA	1:A:289:ILE:HB	1.90	0.52
1:A:305:THR:CB	1:A:401:TYR:HB3	2.37	0.52
2:B:312:HIS:O	2:B:312:HIS:CG	2.63	0.52
3:C:60:HIS:HE1	3:C:160:MET:CE	2.21	0.52
1:D:37:LEU:HD13	1:D:54:VAL:HG22	1.91	0.52
1:D:301:ARG:NH2	1:D:405:VAL:HB	2.23	0.52
4:E:71:TYR:HD1	4:E:111:ASN:CG	2.11	0.52
4:E:228:PRO:O	4:E:232:ILE:HB	2.10	0.52
1:A:258:LEU:HD11	4:E:264:PHE:CD2	2.44	0.52
1:D:432:GLU:HG2	1:D:435:GLN:HE22	1.70	0.52
2:B:281:ILE:O	2:B:282:SER:C	2.47	0.52
4:E:425:SER:O	4:E:429:GLN:N	2.25	0.52
1:A:90:LEU:O	1:A:91:VAL:HG23	2.08	0.52
2:B:132:VAL:O	2:B:279:ILE:CA	2.57	0.52
2:B:252:SER:O	2:B:255:ALA:HB3	2.09	0.52
2:B:295:VAL:O	2:B:299:VAL:HG23	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:467:PRO:O	2:B:469:ALA:N	2.41	0.52
2:B:58:LEU:HD11	2:B:118:TRP:HB3	1.91	0.52
3:C:300:THR:CA	3:C:303:VAL:HG23	2.37	0.52
3:C:317:PRO:HD2	3:C:447:ASN:HB3	1.92	0.52
3:C:60:HIS:ND1	3:C:90:PRO:HG2	2.24	0.52
1:D:276:LYS:HA	1:D:279:LEU:HD12	1.90	0.52
4:E:184:THR:HG23	4:E:215:GLN:C	2.30	0.52
4:E:272:VAL:N	4:E:273:PRO:CD	2.72	0.52
1:D:63:VAL:HG22	1:D:66:ARG:HD2	1.91	0.52
1:D:67:TRP:CD1	1:D:71:ASP:CB	2.93	0.52
2:B:11:LEU:CD2	2:B:11:LEU:N	2.72	0.52
2:B:21:PRO:HA	2:B:64:ARG:HD2	1.92	0.52
2:B:261:VAL:O	2:B:265:LEU:HG	2.09	0.52
3:C:52:LEU:HD21	3:C:130:CYS:CB	2.29	0.52
3:C:79:ILE:HG23	3:C:111:LEU:HD11	1.90	0.52
3:C:96:ASN:OD1	3:C:97:ASN:ND2	2.42	0.52
1:D:244:THR:CG2	1:D:245:LEU:N	2.72	0.52
1:D:91:VAL:HG22	1:D:96:ALA:CB	2.39	0.52
4:E:129:ILE:CG2	4:E:133:TYR:HD2	2.22	0.52
4:E:156:ASN:ND2	4:E:206:GLN:OE1	2.41	0.52
4:E:239:VAL:CA	4:E:242:LEU:HD23	2.39	0.52
4:E:34:LEU:HA	4:E:54:TRP:O	2.09	0.52
1:D:101:ALA:C	1:D:102:ILE:HD12	2.30	0.52
3:C:427:ASN:HA	3:C:430:VAL:CG2	2.34	0.52
1:A:287:SER:O	1:A:291:VAL:HG23	2.09	0.52
1:A:417:ILE:CA	1:A:420:ILE:HG12	2.37	0.52
3:C:256:LYS:HB3	3:C:259:THR:HG22	1.92	0.52
2:B:255:ALA:HA	3:C:265:LEU:HD21	1.90	0.52
4:E:228:PRO:O	4:E:232:ILE:N	2.38	0.52
1:A:306:HIS:CB	4:E:250:LYS:HZ3	2.19	0.52
1:D:387:LYS:HD2	1:D:390:GLU:OE2	2.10	0.52
1:D:426:PHE:CE1	1:D:430:LEU:HD12	2.45	0.52
1:A:101:ALA:C	1:A:102:ILE:HG13	2.29	0.52
2:B:129:THR:C	2:B:131:LYS:N	2.57	0.52
2:B:86:TRP:CH2	2:B:156:VAL:HG21	2.45	0.52
3:C:110:VAL:HG22	3:C:120:TRP:HB2	1.91	0.52
3:C:248:TYR:OH	3:C:461:ILE:HG12	2.09	0.52
1:D:82:SER:HB3	1:D:118:TRP:CZ3	2.44	0.52
1:D:53:ASN:HD22	1:D:123:ILE:HG13	1.75	0.52
1:D:33:VAL:HG13	1:D:201:ILE:CD1	2.39	0.52
1:D:252:SER:CB	4:E:259:LEU:CD2	2.85	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:92:LEU:H	1:D:92:LEU:HD23	1.73	0.52
4:E:35:THR:CB	4:E:54:TRP:HE3	2.18	0.52
4:E:62:TYR:C	4:E:64:LEU:N	2.62	0.52
1:D:78:ILE:CD1	1:D:110:LEU:CB	2.86	0.52
1:A:379:VAL:HA	1:A:382:ILE:CD1	2.38	0.52
1:A:174:GLY:HA2	1:A:176:TRP:CZ3	2.45	0.52
1:A:416:LEU:HA	1:A:419:ILE:HG22	1.91	0.52
2:B:279:ILE:CG2	2:B:280:ILE:N	2.48	0.52
2:B:93:MET:HG3	2:B:206:ASP:CG	2.30	0.52
3:C:122:PRO:CB	3:C:123:PRO:CD	2.87	0.52
3:C:63:TYR:O	3:C:65:HIS:CD2	2.62	0.52
1:D:227:PHE:CD1	1:D:231:LEU:HG	2.44	0.52
4:E:143:LEU:O	4:E:210:PHE:HB2	2.10	0.52
4:E:447:ASP:O	4:E:450:CYS:HB2	2.10	0.52
4:E:60:ASN:N	4:E:60:ASN:ND2	2.49	0.52
2:B:7:LEU:CD1	2:B:68:ASP:HB2	2.39	0.52
1:A:67:TRP:CD1	1:A:71:ASP:OD1	2.62	0.52
1:D:432:GLU:O	1:D:436:GLU:OE2	2.27	0.52
1:A:102:ILE:HG21	2:B:149:TYR:HD2	1.75	0.52
1:A:135:PHE:CZ	1:A:210:ILE:HG12	2.45	0.52
1:A:413:VAL:HG12	1:A:417:ILE:HG13	1.92	0.52
2:B:108:VAL:CG1	2:B:117:SER:O	2.58	0.52
2:B:262:PHE:HA	2:B:265:LEU:HD12	1.92	0.52
3:C:87:ILE:HG21	3:C:110:VAL:HG11	1.91	0.52
3:C:160:MET:N	3:C:213:GLN:CG	2.72	0.52
3:C:264:LEU:HD11	3:C:306:CYS:O	2.09	0.52
4:E:75:ASP:HB3	4:E:111:ASN:ND2	2.24	0.52
1:D:63:VAL:O	1:D:66:ARG:HD2	2.10	0.52
3:C:434:LYS:HE2	3:C:435:GLU:HG2	1.92	0.52
3:C:204:ASP:C	3:C:207:PRO:HD2	2.29	0.52
1:A:305:THR:HG21	1:A:401:TYR:CG	2.45	0.52
2:B:242:PRO:HA	2:B:248:LYS:HG2	1.90	0.52
2:B:298:SER:O	2:B:301:VAL:CG2	2.58	0.52
2:B:54:VAL:C	2:B:55:PHE:HD1	2.13	0.52
2:B:81:PRO:HD2	3:C:20:HIS:ND1	2.25	0.52
3:C:194:HIS:ND1	3:C:195:LYS:N	2.51	0.52
3:C:155:ALA:CA	3:C:211:ASN:HA	2.40	0.52
3:C:45:LEU:HB2	3:C:190:TRP:CZ3	2.45	0.52
1:D:267:THR:O	1:D:271:VAL:N	2.42	0.52
1:D:27:HIS:ND1	1:D:27:HIS:N	2.57	0.52
1:A:24:HIS:CD2	1:A:24:HIS:N	2.76	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:187:TRP:CZ2	1:A:196:THR:CG2	2.73	0.52
2:B:33:VAL:HG13	2:B:158:LEU:HD21	1.92	0.52
3:C:30:VAL:CG2	3:C:158:ILE:H	2.21	0.52
3:C:319:THR:OG1	3:C:448:LEU:HA	2.10	0.52
3:C:48:THR:HA	3:C:286:PRO:HB3	1.91	0.52
3:C:90:PRO:HD2	3:C:120:TRP:HZ3	1.73	0.52
1:D:89:ASP:HB2	1:D:149:TRP:HD1	1.75	0.52
1:D:243:MET:HE2	1:D:243:MET:N	2.24	0.52
1:D:28:PHE:CD1	1:D:28:PHE:N	2.76	0.52
1:D:35:LEU:HD11	1:D:54:VAL:CG1	2.36	0.52
4:E:39:LEU:CD2	4:E:183:TRP:HZ2	2.16	0.52
4:E:36:LEU:HD12	4:E:173:ASP:CG	2.29	0.52
4:E:453:ILE:CD1	4:E:454:ALA:N	2.72	0.52
1:A:20:ARG:HG3	1:A:22:VAL:HG22	1.90	0.52
1:A:67:TRP:NE1	1:A:71:ASP:CG	2.63	0.52
1:D:302:SER:HB3	1:D:400:LYS:HG2	1.91	0.52
1:A:156:VAL:CG2	1:A:157:SER:H	2.23	0.51
1:A:179:LYS:CE	1:A:208:GLN:CD	2.76	0.51
1:A:227:PHE:O	1:A:230:VAL:HB	2.11	0.51
1:A:303:PRO:CB	1:A:400:LYS:CE	2.86	0.51
2:B:220:TYR:HD2	2:B:223:TYR:HH	1.58	0.51
3:C:12:LEU:CG	3:C:16:LYS:HG2	2.40	0.51
2:B:80:ILE:HG23	3:C:20:HIS:CE1	2.45	0.51
3:C:256:LYS:CB	3:C:259:THR:HG22	2.40	0.51
3:C:39:LEU:N	3:C:39:LEU:HD12	2.25	0.51
1:D:257:LEU:HA	1:D:260:ILE:HB	1.93	0.51
1:D:298:THR:CA	1:D:301:ARG:HB3	2.40	0.51
4:E:136:PHE:CZ	4:E:217:LYS:CD	2.92	0.51
4:E:184:THR:HG23	4:E:215:GLN:HG2	1.91	0.51
1:D:390:GLU:O	1:D:394:ASN:ND2	2.43	0.51
1:D:1:SER:H2	1:D:4:GLU:HB2	1.76	0.51
1:D:278:MET:SD	1:D:281:THR:OG1	2.56	0.51
1:A:225:PHE:HD1	1:A:229:THR:HG1	1.58	0.51
1:A:265:PRO:CG	1:A:266:SER:N	2.73	0.51
3:C:12:LEU:O	3:C:14:VAL:N	2.43	0.51
3:C:462:THR:O	3:C:465:MET:HB3	2.10	0.51
1:D:233:PHE:HD1	1:D:409:ILE:CD1	2.24	0.51
1:D:252:SER:OG	4:E:259:LEU:HD22	2.09	0.51
1:D:411:LEU:O	1:D:415:MET:CG	2.56	0.51
4:E:261:GLN:NE2	4:E:265:LEU:HG	2.24	0.51
1:D:305:THR:HB	1:D:401:TYR:HD2	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:431:ILE:HD12	1:A:431:ILE:N	2.25	0.51
1:A:137:PHE:CD1	1:A:435:GLN:NE2	2.79	0.51
1:A:239:SER:OG	2:B:312:HIS:HA	2.10	0.51
2:B:271:PRO:O	2:B:275:LEU:CG	2.55	0.51
2:B:440:LEU:HA	2:B:443:PHE:HB3	1.92	0.51
3:C:54:THR:O	3:C:126:PHE:CD2	2.63	0.51
3:C:18:ASN:O	3:C:21:VAL:O	2.28	0.51
1:D:230:VAL:O	1:D:234:TYR:HD1	1.93	0.51
1:D:35:LEU:HD12	1:D:54:VAL:CG1	2.36	0.51
4:E:229:CYS:O	4:E:233:SER:N	2.30	0.51
2:B:421:PHE:O	2:B:425:LYS:N	2.42	0.51
1:D:101:ALA:C	1:D:102:ILE:CD1	2.78	0.51
1:A:135:PHE:HB3	1:A:272:PRO:O	2.09	0.51
1:A:285:VAL:CG1	1:A:286:ILE:N	2.74	0.51
1:A:48:GLN:HB2	1:A:128:CYS:O	2.09	0.51
1:A:56:LEU:HD23	1:A:57:ARG:H	1.76	0.51
2:B:106:VAL:HG13	2:B:107:ASN:N	2.24	0.51
2:B:181:THR:HG23	2:B:183:ASN:H	1.74	0.51
2:B:32:ARG:NE	2:B:59:ALA:O	2.44	0.51
3:C:279:PRO:C	3:C:282:ALA:HB3	2.30	0.51
1:D:243:MET:CE	1:D:243:MET:H	2.22	0.51
1:D:298:THR:O	1:D:301:ARG:CB	2.58	0.51
1:D:46:VAL:HG22	1:D:272:PRO:CD	2.39	0.51
1:D:65:LEU:CD2	1:D:110:LEU:HD13	2.41	0.51
1:D:302:SER:HB2	1:D:305:THR:HG23	1.92	0.51
1:A:184:TRP:CE3	1:A:185:LYS:O	2.63	0.51
1:A:26:THR:O	1:A:28:PHE:CD1	2.64	0.51
1:A:195:ASP:C	1:A:195:ASP:OD1	2.48	0.51
1:A:265:PRO:HG2	1:A:266:SER:N	2.25	0.51
2:B:238:VAL:O	2:B:242:PRO:HD3	2.10	0.51
3:C:37:LEU:HD21	3:C:148:PHE:CD2	2.45	0.51
2:B:183:ASN:HB2	3:C:50:GLU:OE2	2.09	0.51
1:D:130:ILE:C	1:D:134:HIS:HB2	2.31	0.51
1:D:135:PHE:CD1	1:D:210:ILE:HD11	2.45	0.51
1:D:187:TRP:HD1	1:D:197:PRO:O	1.85	0.51
1:D:295:VAL:HG23	1:D:296:ILE:N	2.26	0.51
1:D:36:GLN:HG3	1:D:55:ARG:HG3	1.93	0.51
4:E:140:ASN:HD21	4:E:211:PHE:CA	2.21	0.51
4:E:240:TYR:CE1	4:E:303:VAL:HG21	2.44	0.51
1:D:85:VAL:HG23	1:D:108:LEU:CD1	2.40	0.51
2:B:68:ASP:O	2:B:72:TYR:CD2	2.64	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:282:SER:O	2:B:286:PHE:CD2	2.62	0.51
2:B:287:ILE:O	2:B:291:VAL:N	2.43	0.51
1:A:385:HIS:C	1:A:385:HIS:HD1	2.14	0.51
2:B:227:PRO:O	2:B:231:ILE:CG1	2.59	0.51
2:B:234:LEU:HA	2:B:237:LEU:HD23	1.92	0.51
2:B:26:GLY:O	2:B:28:LYS:CE	2.59	0.51
2:B:38:THR:HG22	2:B:55:PHE:CE1	2.45	0.51
3:C:149:THR:OG1	3:C:150:ALA:N	2.44	0.51
3:C:303:VAL:HA	3:C:306:CYS:SG	2.51	0.51
3:C:449:VAL:HG12	3:C:452:THR:CB	2.41	0.51
3:C:7:LEU:HD11	3:C:70:ASN:HB2	1.92	0.51
4:E:138:TRP:HB2	4:E:213:ILE:HG12	1.91	0.51
4:E:240:TYR:CE2	4:E:453:ILE:HG21	2.45	0.51
4:E:266:PHE:HA	4:E:269:ALA:HB3	1.92	0.51
4:E:59:TRP:NE1	4:E:84:LEU:HD23	2.23	0.51
1:D:376:ILE:HG22	1:D:380:LYS:HZ3	1.73	0.51
2:B:68:ASP:HA	2:B:72:TYR:CD2	2.46	0.51
2:B:72:TYR:O	2:B:76:LYS:HG2	2.11	0.51
1:A:381:TYR:CD1	1:A:381:TYR:N	2.78	0.51
3:C:56:VAL:CG1	3:C:126:PHE:HE2	2.21	0.51
3:C:278:LEU:HD13	3:C:278:LEU:O	2.10	0.51
3:C:2:ASN:ND2	3:C:71:ALA:CB	2.72	0.51
1:D:118:TRP:CD1	1:D:118:TRP:C	2.83	0.51
1:D:287:SER:C	1:D:290:ILE:HG12	2.31	0.51
1:D:422:THR:HA	1:D:425:VAL:HB	1.93	0.51
4:E:140:ASN:ND2	4:E:212:LEU:H	2.08	0.51
4:E:173:ASP:CB	4:E:188:ARG:HH11	2.22	0.51
2:B:162:LEU:C	2:B:174:MET:N	2.64	0.51
1:A:166:ASP:HB2	1:A:181:TYR:CG	2.46	0.51
1:A:87:LEU:HB3	1:A:118:TRP:CZ3	2.45	0.51
2:B:132:VAL:CG1	2:B:279:ILE:CA	2.87	0.51
2:B:241:LEU:N	2:B:242:PRO:CD	2.74	0.51
2:B:444:ILE:CG2	2:B:445:THR:H	2.22	0.51
3:C:212:TYR:O	3:C:212:TYR:CD1	2.64	0.51
3:C:141:TRP:HH2	3:C:223:ARG:HD3	1.74	0.51
3:C:478:PHE:O	3:C:482:PRO:CD	2.54	0.51
1:D:46:VAL:HA	1:D:272:PRO:CD	2.39	0.51
1:A:67:TRP:CD1	1:A:71:ASP:CB	2.93	0.51
1:A:167:LEU:HA	1:A:170:PHE:CB	2.36	0.51
1:A:187:TRP:HZ2	1:A:196:THR:HA	1.75	0.51
1:A:264:ILE:N	1:A:265:PRO:CD	2.73	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:35:LEU:HD13	1:A:203:TYR:CE2	2.46	0.51
2:B:60:TRP:CH2	2:B:85:VAL:HG11	2.46	0.51
3:C:141:TRP:HB2	3:C:221:ILE:O	2.11	0.51
3:C:306:CYS:HA	3:C:309:VAL:HB	1.93	0.51
1:D:33:VAL:HG12	1:D:158:ILE:HG22	1.93	0.51
1:D:133:THR:HA	1:D:274:ILE:HG23	1.92	0.51
4:E:128:PRO:HD2	4:E:141:CYS:HA	1.91	0.51
4:E:174:PRO:HD3	4:E:185:ILE:HG21	1.91	0.51
4:E:55:ILE:HG13	4:E:55:ILE:O	2.11	0.51
1:D:379:VAL:HG12	1:D:379:VAL:O	2.10	0.51
1:D:107:LYS:H	1:D:107:LYS:CD	2.24	0.51
2:B:129:THR:HG22	2:B:142:CYS:SG	2.51	0.51
2:B:234:LEU:HA	2:B:237:LEU:CD2	2.41	0.51
2:B:298:SER:O	2:B:301:VAL:HG23	2.11	0.51
2:B:438:LEU:CA	2:B:441:TYR:HB3	2.29	0.51
2:B:60:TRP:CZ2	2:B:85:VAL:HG11	2.46	0.51
3:C:317:PRO:HG2	3:C:447:ASN:ND2	2.26	0.51
3:C:481:PRO:HG2	3:C:482:PRO:HD3	1.92	0.51
3:C:77:ILE:C	3:C:79:ILE:H	2.13	0.51
1:D:227:PHE:C	1:D:227:PHE:CD1	2.84	0.51
4:E:242:LEU:N	4:E:243:PRO:CD	2.73	0.51
4:E:294:LEU:HA	4:E:297:VAL:CG2	2.40	0.51
1:D:86:TRP:CE3	1:D:86:TRP:O	2.63	0.51
1:A:382:ILE:O	1:A:386:MET:HE3	2.09	0.51
3:C:422:GLY:O	3:C:425:SER:HB2	2.11	0.51
3:C:134:VAL:O	3:C:134:VAL:HG12	2.11	0.51
1:A:235:LEU:HA	2:B:306:HIS:HD2	1.67	0.50
1:A:285:VAL:O	1:A:288:SER:HB3	2.11	0.50
1:A:301:ARG:HG3	1:A:301:ARG:O	2.11	0.50
2:B:108:VAL:CG1	2:B:118:TRP:HB2	2.40	0.50
2:B:130:ILE:CB	2:B:134:TYR:CD2	2.84	0.50
2:B:45:GLU:OE2	2:B:277:VAL:HB	2.10	0.50
2:B:92:LEU:CD1	2:B:95:ASN:HB2	2.40	0.50
3:C:296:MET:CE	3:C:296:MET:CA	2.87	0.50
1:D:201:ILE:CG2	1:D:203:TYR:CE1	2.93	0.50
4:E:152:ALA:N	4:E:205:PHE:CD1	2.70	0.50
4:E:303:VAL:HG12	4:E:304:LEU:N	2.26	0.50
4:E:306:VAL:O	4:E:309:ARG:NH1	2.43	0.50
2:B:287:ILE:O	2:B:291:VAL:HB	2.10	0.50
1:A:100:PHE:HB3	1:A:103:VAL:HG21	1.92	0.50
1:A:124:PHE:C	1:A:124:PHE:HD1	2.13	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:209:ARG:CG	1:A:210:ILE:N	2.69	0.50
1:A:280:PHE:O	1:A:284:PHE:CD1	2.64	0.50
1:A:292:THR:C	1:A:296:ILE:HG12	2.31	0.50
1:A:89:ASP:OD2	1:A:150:THR:CG2	2.45	0.50
1:A:90:LEU:HD13	1:A:100:PHE:CE2	2.41	0.50
2:B:451:THR:O	2:B:455:PHE:HB2	2.10	0.50
3:C:33:ILE:O	3:C:159:SER:O	2.30	0.50
3:C:77:ILE:O	3:C:77:ILE:CG1	2.54	0.50
1:D:275:GLY:O	1:D:277:TYR:N	2.44	0.50
4:E:138:TRP:HB2	4:E:213:ILE:CG1	2.41	0.50
4:E:173:ASP:H	4:E:188:ARG:HB2	1.75	0.50
4:E:195:ASN:HB3	4:E:204:ASP:HA	1.92	0.50
1:D:7:LEU:HD11	1:D:70:ALA:HB1	1.90	0.50
4:E:81:SER:O	4:E:83:LEU:N	2.44	0.50
1:A:130:ILE:C	1:A:131:ILE:O	2.49	0.50
1:A:35:LEU:HD13	1:A:203:TYR:CZ	2.47	0.50
1:A:397:GLU:HA	1:A:400:LYS:CD	2.42	0.50
1:A:413:VAL:HA	1:A:416:LEU:HB2	1.93	0.50
1:A:416:LEU:O	1:A:420:ILE:HG12	2.11	0.50
2:B:136:PRO:O	2:B:139:TRP:N	2.43	0.50
2:B:46:LYS:HD2	2:B:278:PRO:HD3	1.93	0.50
3:C:111:LEU:CB	3:C:119:THR:OG1	2.55	0.50
3:C:37:LEU:O	3:C:178:ILE:HG21	2.12	0.50
3:C:276:GLN:OE1	3:C:276:GLN:N	2.45	0.50
3:C:299:VAL:C	3:C:303:VAL:HG23	2.31	0.50
1:D:242:LYS:HB2	1:D:245:LEU:CB	2.42	0.50
1:D:298:THR:O	1:D:301:ARG:CG	2.60	0.50
4:E:14:TYR:HD2	4:E:16:LYS:NZ	2.09	0.50
4:E:255:ILE:CD1	4:E:304:LEU:HD22	2.41	0.50
1:D:220:ILE:HG21	4:E:294:LEU:HD11	1.94	0.50
4:E:436:ASN:HA	4:E:439:TRP:CD1	2.46	0.50
4:E:31:THR:N	4:E:58:GLN:O	2.38	0.50
1:A:133:THR:O	1:A:133:THR:CG2	2.57	0.50
1:A:228:LEU:HD13	1:A:249:VAL:CG2	2.42	0.50
1:A:45:GLU:OE2	1:A:135:PHE:HB2	2.12	0.50
1:A:54:VAL:HG22	1:A:122:ALA:CB	2.41	0.50
2:B:129:THR:N	2:B:142:CYS:SG	2.84	0.50
2:B:92:LEU:HD22	2:B:146:PHE:HA	1.94	0.50
2:B:147:LYS:CG	2:B:148:SER:N	2.71	0.50
2:B:27:ASP:C	2:B:28:LYS:HD2	2.31	0.50
2:B:438:LEU:O	2:B:442:ILE:HB	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:459:SER:HA	2:B:463:PRO:HG2	1.93	0.50
3:C:305:ASN:HA	3:C:308:ILE:CB	2.35	0.50
3:C:2:ASN:O	3:C:72:SER:HB3	2.11	0.50
4:E:217:LYS:O	4:E:219:LEU:N	2.44	0.50
1:D:17:LYS:CE	1:D:84:ASP:HA	2.41	0.50
2:B:408:ILE:CG2	2:B:409:LYS:H	2.23	0.50
1:D:376:ILE:O	1:D:380:LYS:HE2	2.11	0.50
1:D:392:SER:O	1:D:395:ALA:HB3	2.11	0.50
2:B:9:SER:HA	2:B:12:PHE:HD1	1.71	0.50
2:B:286:PHE:HA	2:B:289:ILE:HG12	1.93	0.50
1:A:135:PHE:CZ	1:A:210:ILE:HG23	2.47	0.50
1:A:262:GLU:O	1:A:265:PRO:CD	2.58	0.50
1:A:304:SER:OG	1:A:400:LYS:NZ	2.44	0.50
2:B:130:ILE:CD1	2:B:134:TYR:CE2	2.95	0.50
2:B:241:LEU:HD13	3:C:314:PHE:CE1	2.47	0.50
2:B:256:LEU:HD11	2:B:298:SER:O	2.11	0.50
2:B:306:HIS:O	2:B:308:SER:N	2.44	0.50
2:B:311:THR:O	2:B:312:HIS:CB	2.60	0.50
2:B:431:VAL:HG23	2:B:433:MET:H	1.77	0.50
2:B:438:LEU:O	2:B:442:ILE:HD12	2.12	0.50
2:B:459:SER:O	2:B:463:PRO:HB2	2.11	0.50
3:C:153:TYR:CB	3:C:158:ILE:HB	2.39	0.50
3:C:149:THR:HB	3:C:214:ASP:HA	1.94	0.50
3:C:3:GLU:O	3:C:3:GLU:CG	2.59	0.50
1:D:51:GLU:HG3	1:D:125:LYS:HG3	1.93	0.50
1:D:53:ASN:HD22	1:D:123:ILE:CG1	2.25	0.50
4:E:110:TYR:CE1	4:E:111:ASN:ND2	2.76	0.50
4:E:44:GLU:CD	4:E:129:ILE:CG2	2.80	0.50
4:E:191:LYS:HB3	4:E:193:ASN:HD21	1.76	0.50
4:E:449:ALA:HA	4:E:452:TRP:CG	2.46	0.50
1:A:199:LEU:C	1:A:200:ASP:OD1	2.49	0.50
2:B:131:LYS:HZ3	2:B:132:VAL:HB	1.75	0.50
2:B:135:PHE:N	2:B:136:PRO:HD2	2.26	0.50
2:B:17:PRO:HG2	2:B:18:LYS:H	1.77	0.50
2:B:255:ALA:O	2:B:259:LEU:N	2.34	0.50
2:B:32:ARG:HH21	2:B:60:TRP:CA	2.24	0.50
3:C:467:LEU:HA	3:C:470:ILE:HB	1.92	0.50
3:C:481:PRO:N	3:C:482:PRO:CD	2.75	0.50
1:D:186:HIS:CG	1:D:187:TRP:H	2.30	0.50
1:D:145:LYS:NZ	1:D:200:ASP:OD2	2.43	0.50
1:D:414:PHE:O	1:D:418:CYS:HB2	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:182:GLU:N	4:E:183:TRP:CE3	2.79	0.50
4:E:217:LYS:N	4:E:218:PRO:CD	2.74	0.50
4:E:38:ASN:O	4:E:51:THR:CA	2.56	0.50
4:E:91:LEU:H	4:E:95:VAL:HG21	1.74	0.50
1:A:376:ILE:HG23	1:A:380:LYS:HE2	1.94	0.50
3:C:429:ILE:HG13	3:C:430:VAL:H	1.75	0.50
1:D:396:ALA:HA	1:D:399:TRP:CD1	2.46	0.50
1:A:63:VAL:O	1:A:66:ARG:CD	2.46	0.50
1:A:394:ASN:O	1:A:398:GLU:HG3	2.11	0.50
2:B:129:THR:C	2:B:131:LYS:H	2.13	0.50
2:B:306:HIS:O	2:B:312:HIS:C	2.50	0.50
3:C:106:TYR:CD1	3:C:107:PHE:HE1	2.29	0.50
3:C:39:LEU:HD21	3:C:180:ASP:OD1	2.12	0.50
3:C:70:ASN:O	3:C:74:TYR:N	2.42	0.50
1:D:280:PHE:HB3	1:D:284:PHE:CE2	2.46	0.50
1:D:296:ILE:HA	1:D:299:HIS:HB3	1.88	0.50
4:E:59:TRP:CH2	4:E:107:VAL:CG1	2.75	0.50
4:E:145:PHE:CZ	4:E:208:ILE:HD13	2.46	0.50
4:E:250:LYS:C	4:E:253:LEU:HB3	2.32	0.50
4:E:302:ILE:O	4:E:306:VAL:N	2.44	0.50
4:E:38:ASN:O	4:E:51:THR:HG23	2.12	0.50
2:B:67:TRP:C	2:B:72:TYR:HB2	2.32	0.50
1:A:292:THR:CG2	1:A:296:ILE:HD11	2.41	0.50
2:B:40:LEU:CA	2:B:52:THR:HG23	2.41	0.50
3:C:106:TYR:O	3:C:106:TYR:CD1	2.56	0.50
3:C:33:ILE:HD12	3:C:158:ILE:CD1	2.42	0.50
3:C:30:VAL:HG22	3:C:157:GLU:C	2.30	0.50
3:C:245:LEU:HD13	1:D:297:ASN:OD1	2.11	0.50
4:E:172:ILE:HG23	4:E:175:GLU:H	1.77	0.50
4:E:146:ARG:HD2	4:E:205:PHE:CD2	2.47	0.50
1:D:101:ALA:O	1:D:102:ILE:CD1	2.60	0.50
1:D:75:ILE:HG13	1:D:78:ILE:CG2	2.42	0.50
1:A:20:ARG:HG3	1:A:22:VAL:HG23	1.94	0.50
3:C:289:GLY:O	3:C:293:MET:SD	2.70	0.50
1:A:160:PRO:CG	1:A:185:LYS:NZ	2.74	0.50
1:A:264:ILE:O	1:A:267:THR:HB	2.12	0.50
1:A:292:THR:CA	1:A:296:ILE:CD1	2.81	0.50
1:A:38:ILE:HD12	1:A:38:ILE:N	2.27	0.50
2:B:51:THR:OG1	2:B:125:ARG:NH1	2.45	0.50
2:B:133:MET:HB2	2:B:140:GLN:HG3	1.93	0.50
2:B:147:LYS:HB2	2:B:206:ASP:HA	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:48:GLU:HG3	2:B:48:GLU:O	2.12	0.50
2:B:53:SER:C	2:B:54:VAL:HG13	2.32	0.50
3:C:11:LEU:C	3:C:13:ILE:N	2.64	0.50
3:C:144:CYS:SG	3:C:146:LEU:CD1	2.94	0.50
3:C:469:THR:O	3:C:473:PHE:CB	2.58	0.50
3:C:83:ARG:HB3	3:C:85:GLU:OE1	2.11	0.50
1:D:167:LEU:HG	1:D:178:MET:CB	2.38	0.50
1:D:227:PHE:C	1:D:227:PHE:HD1	2.15	0.50
1:D:112:TYR:HD1	1:D:113:THR:N	2.09	0.50
2:B:9:SER:CA	2:B:12:PHE:HE1	2.18	0.50
4:E:79:ILE:CG1	4:E:80:PRO:HD2	2.41	0.50
1:A:167:LEU:HD12	1:A:178:MET:HB2	0.59	0.49
1:A:296:ILE:HD13	1:A:296:ILE:N	2.27	0.49
3:C:104:VAL:O	3:C:123:PRO:HG2	2.11	0.49
3:C:137:PHE:CE1	3:C:288:ILE:HG22	2.46	0.49
3:C:35:LEU:HD21	3:C:37:LEU:HD21	1.93	0.49
1:D:296:ILE:HG22	1:D:299:HIS:ND1	2.27	0.49
1:D:405:VAL:O	1:D:405:VAL:HG12	2.12	0.49
4:E:293:SER:O	4:E:297:VAL:CG2	2.59	0.49
1:D:75:ILE:O	1:D:76:LYS:C	2.50	0.49
1:A:239:SER:CB	2:B:312:HIS:HA	2.42	0.49
1:A:410:LEU:CD1	1:A:414:PHE:HD2	2.25	0.49
1:A:56:LEU:CD2	1:A:57:ARG:N	2.73	0.49
1:A:94:ASN:ND2	1:A:94:ASN:C	2.65	0.49
2:B:247:GLU:C	2:B:249:MET:N	2.65	0.49
2:B:45:GLU:OE2	2:B:277:VAL:O	2.29	0.49
2:B:308:SER:HB2	2:B:312:HIS:H	1.77	0.49
2:B:438:LEU:HA	2:B:441:TYR:CB	2.29	0.49
2:B:444:ILE:CG2	2:B:445:THR:N	2.75	0.49
3:C:275:SER:O	3:C:278:LEU:HB3	2.12	0.49
3:C:274:THR:HA	3:C:277:ARG:HD2	1.94	0.49
3:C:469:THR:O	3:C:473:PHE:N	2.43	0.49
3:C:58:MET:HE1	3:C:120:TRP:CZ2	2.47	0.49
4:E:134:PHE:CD2	4:E:280:PRO:HG2	2.46	0.49
4:E:264:PHE:N	4:E:264:PHE:HD1	2.09	0.49
4:E:262:THR:HG1	4:E:265:LEU:HD12	1.72	0.49
4:E:76:LEU:HD23	4:E:77:VAL:N	2.27	0.49
1:D:389:ASP:O	1:D:393:SER:OG	2.22	0.49
4:E:2:GLU:HA	4:E:5:ARG:CG	2.38	0.49
1:A:48:GLN:HB3	1:A:130:ILE:HD12	1.93	0.49
1:A:285:VAL:CG1	1:A:286:ILE:HG13	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:249:MET:HE2	2:B:250:SER:HB3	1.94	0.49
3:C:241:PHE:CZ	1:D:293:VAL:CG2	2.92	0.49
3:C:72:SER:HA	3:C:76:ASP:HB2	1.93	0.49
1:D:214:PHE:HA	1:D:217:ASN:OD1	2.12	0.49
1:D:229:THR:HA	1:D:232:VAL:HG21	1.92	0.49
1:D:229:THR:O	1:D:233:PHE:CD2	2.65	0.49
4:E:116:TYR:HD1	4:E:117:TRP:N	2.10	0.49
4:E:195:ASN:HB3	4:E:204:ASP:CA	2.42	0.49
1:A:62:ASP:HB3	1:A:65:LEU:CD1	2.41	0.49
1:A:221:PRO:HA	1:A:224:LEU:CB	2.36	0.49
2:B:274:SER:O	2:B:276:SER:N	2.46	0.49
3:C:184:PHE:HE1	3:C:190:TRP:CE2	2.30	0.49
1:D:144:MET:O	1:D:203:TYR:HD1	1.93	0.49
1:D:178:MET:HA	1:D:207:MET:HB3	1.94	0.49
4:E:103:TYR:CB	4:E:104:TYR:HD1	2.25	0.49
4:E:19:LYS:HZ3	4:E:154:GLU:HB2	1.73	0.49
4:E:159:LEU:HD21	4:E:208:ILE:HG23	1.93	0.49
4:E:219:LEU:HB3	4:E:222:ILE:HB	1.95	0.49
4:E:239:VAL:O	4:E:243:PRO:HD3	2.13	0.49
4:E:264:PHE:CD1	4:E:264:PHE:N	2.79	0.49
4:E:40:ILE:HB	4:E:50:THR:HB	1.95	0.49
2:B:10:VAL:CG1	2:B:11:LEU:HD22	2.40	0.49
2:B:15:TYR:HD1	2:B:15:TYR:O	1.92	0.49
1:A:381:TYR:HD1	1:A:381:TYR:N	2.09	0.49
1:A:60:TRP:HH2	1:A:118:TRP:HE3	1.61	0.49
1:A:146:LEU:HD22	1:A:203:TYR:CZ	2.47	0.49
1:A:177:VAL:HG12	1:A:208:GLN:O	2.13	0.49
1:A:305:THR:O	1:A:306:HIS:CB	2.61	0.49
1:A:243:MET:HB3	1:A:306:HIS:ND1	2.27	0.49
1:A:46:VAL:HG23	1:A:271:VAL:HA	1.94	0.49
1:A:82:SER:O	1:A:84:ASP:N	2.46	0.49
2:B:181:THR:HG23	2:B:184:GLY:H	1.78	0.49
2:B:233:ILE:O	2:B:237:LEU:CB	2.60	0.49
2:B:47:ASN:C	2:B:48:GLU:HG2	2.25	0.49
3:C:67:LEU:O	3:C:67:LEU:HD13	2.13	0.49
1:D:242:LYS:N	1:D:243:MET:HE2	2.27	0.49
1:D:133:THR:CA	1:D:274:ILE:HG23	2.42	0.49
1:D:56:LEU:HB2	1:D:120:PRO:HG3	1.94	0.49
4:E:75:ASP:O	4:E:110:TYR:CD1	2.65	0.49
4:E:36:LEU:N	4:E:175:GLU:OE2	2.42	0.49
4:E:1:ASN:C	4:E:3:GLU:H	2.14	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:294:LEU:CA	4:E:297:VAL:HG23	2.41	0.49
4:E:91:LEU:H	4:E:95:VAL:CB	2.25	0.49
1:A:75:ILE:O	1:A:76:LYS:C	2.51	0.49
1:A:207:MET:H	1:A:207:MET:CE	2.25	0.49
1:A:221:PRO:CB	1:A:224:LEU:HD23	2.42	0.49
2:B:226:VAL:O	2:B:230:LEU:N	2.30	0.49
3:C:9:ASN:C	3:C:12:LEU:HG	2.32	0.49
3:C:64:ASP:HB3	3:C:67:LEU:CB	2.42	0.49
1:D:291:VAL:O	1:D:295:VAL:HG22	2.13	0.49
4:E:11:LEU:HA	4:E:14:TYR:HB2	1.94	0.49
4:E:271:LYS:NZ	4:E:271:LYS:CB	2.61	0.49
4:E:304:LEU:HD12	4:E:307:SER:OG	2.12	0.49
1:A:376:ILE:O	1:A:379:VAL:HB	2.13	0.49
1:A:67:TRP:CG	1:A:71:ASP:CB	2.90	0.49
1:D:303:PRO:CG	1:D:400:LYS:HZ3	2.19	0.49
4:E:131:VAL:HG12	4:E:131:VAL:O	2.12	0.49
1:A:151:TYR:CB	1:A:156:VAL:CG1	2.90	0.49
2:B:142:CYS:O	2:B:210:TYR:CD1	2.49	0.49
2:B:258:ALA:HB2	3:C:265:LEU:CG	2.43	0.49
2:B:438:LEU:HD23	2:B:441:TYR:HB3	1.94	0.49
2:B:465:ASP:C	2:B:467:PRO:HD2	2.33	0.49
3:C:30:VAL:HG11	3:C:159:SER:HB3	1.93	0.49
3:C:58:MET:CG	3:C:92:ILE:CD1	2.90	0.49
1:D:51:GLU:HA	1:D:124:PHE:O	2.12	0.49
1:D:227:PHE:O	1:D:227:PHE:HD1	1.94	0.49
1:D:242:LYS:HB2	1:D:245:LEU:HD12	1.94	0.49
1:D:266:SER:O	1:D:270:ALA:HB2	2.12	0.49
4:E:145:PHE:CD1	4:E:208:ILE:HB	2.48	0.49
4:E:216:ARG:O	4:E:217:LYS:HG2	2.12	0.49
4:E:272:VAL:O	4:E:272:VAL:HG22	2.12	0.49
1:D:238:ASP:CB	4:E:308:LEU:CD2	2.84	0.49
4:E:30:VAL:O	4:E:158:GLN:CG	2.60	0.49
4:E:6:LEU:CD2	4:E:67:ASN:OD1	2.60	0.49
3:C:226:LEU:H	3:C:227:PHE:HD1	1.59	0.49
3:C:227:PHE:HA	3:C:230:ILE:HG23	1.95	0.49
1:A:76:LYS:HE3	1:A:112:TYR:CZ	2.48	0.49
1:A:148:ILE:CG2	1:A:198:TYR:CB	2.88	0.49
1:A:145:LYS:HZ3	1:A:202:THR:HG21	1.78	0.49
1:A:207:MET:O	1:A:207:MET:HE3	2.13	0.49
1:A:305:THR:O	1:A:306:HIS:CG	2.65	0.49
2:B:118:TRP:C	2:B:119:HIS:CD2	2.86	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:256:PHE:HE1	2:B:261:VAL:HG23	1.72	0.49
3:C:180:ASP:OD2	3:C:219:LEU:CD2	2.61	0.49
3:C:49:ASP:C	3:C:50:GLU:CG	2.81	0.49
3:C:4:GLU:HA	3:C:72:SER:OG	2.11	0.49
1:A:134:HIS:O	1:A:136:PRO:HD2	2.09	0.49
1:A:150:THR:HG23	1:A:151:TYR:CE1	2.47	0.49
1:A:223:LEU:HA	1:A:226:SER:OG	2.13	0.49
1:A:50:VAL:CG1	1:A:52:THR:CG2	2.91	0.49
2:B:97:ASP:N	2:B:125:ARG:O	2.45	0.49
2:B:235:ALA:HB1	2:B:239:PHE:HE2	1.73	0.49
2:B:235:ALA:HB1	2:B:239:PHE:CZ	2.47	0.49
2:B:28:LYS:CB	2:B:156:VAL:N	2.76	0.49
3:C:180:ASP:HB3	3:C:219:LEU:HD13	1.95	0.49
3:C:459:PHE:O	3:C:463:PRO:HG3	2.13	0.49
3:C:480:ARG:H	3:C:481:PRO:HD2	1.78	0.49
3:C:63:TYR:HD1	3:C:64:ASP:N	2.10	0.49
1:D:240:GLY:C	1:D:242:LYS:N	2.64	0.49
1:D:283:ILE:N	1:D:286:ILE:HD12	2.27	0.49
3:C:241:PHE:HZ	1:D:293:VAL:HG22	1.72	0.49
1:D:38:ILE:CG2	1:D:38:ILE:O	2.59	0.49
4:E:44:GLU:OE2	4:E:133:TYR:HB3	2.13	0.49
3:C:234:THR:N	3:C:235:PRO:CD	2.75	0.49
4:E:471:LEU:HD12	4:E:471:LEU:O	2.13	0.49
1:A:91:VAL:HB	1:A:149:TRP:HB2	1.95	0.49
1:A:166:ASP:HB3	1:A:178:MET:CE	2.43	0.49
1:A:250:LEU:HD13	1:A:296:ILE:HG21	1.95	0.49
1:A:56:LEU:CD1	1:A:90:LEU:HD13	2.42	0.49
3:C:12:LEU:CD1	3:C:16:LYS:HE3	2.43	0.49
3:C:188:GLY:CA	3:C:190:TRP:CZ3	2.96	0.49
3:C:317:PRO:HG2	3:C:447:ASN:CG	2.32	0.49
1:D:130:ILE:CA	1:D:134:HIS:HB2	2.43	0.49
1:D:186:HIS:ND1	1:D:187:TRP:N	2.57	0.49
1:D:253:LEU:HD23	1:D:254:THR:CB	2.42	0.49
1:D:92:LEU:CD2	1:D:124:PHE:CZ	2.95	0.49
4:E:188:ARG:NH2	4:E:210:PHE:CE2	2.80	0.49
4:E:200:LYS:O	4:E:200:LYS:HG3	2.12	0.49
1:A:251:LEU:CD1	4:E:260:ALA:CB	2.86	0.49
4:E:273:PRO:CG	4:E:274:GLU:N	2.76	0.49
4:E:94:ASN:HA	4:E:126:THR:H	1.78	0.49
1:D:385:HIS:O	1:D:389:ASP:OD1	2.31	0.49
1:A:67:TRP:HB3	1:A:71:ASP:HB3	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:128:CYS:CB	1:A:144:MET:CE	2.87	0.48
1:A:187:TRP:NE1	1:A:196:THR:HG22	2.28	0.48
1:A:262:GLU:C	1:A:265:PRO:CD	2.81	0.48
1:A:137:PHE:CD1	1:A:435:GLN:CD	2.86	0.48
2:B:253:ILE:CG1	2:B:302:LEU:HD11	2.41	0.48
3:C:136:TYR:CD1	3:C:142:GLN:HB3	2.43	0.48
3:C:185:THR:HG22	3:C:187:ASN:H	1.78	0.48
3:C:180:ASP:HB2	3:C:195:LYS:HD3	1.95	0.48
3:C:242:LEU:HD21	3:C:263:VAL:CG1	2.43	0.48
1:D:33:VAL:HG13	1:D:201:ILE:HD12	1.94	0.48
4:E:109:VAL:HG22	4:E:115:MET:HE3	1.93	0.48
4:E:172:ILE:CG2	4:E:175:GLU:N	2.75	0.48
4:E:151:ASN:HA	4:E:205:PHE:CD1	2.48	0.48
4:E:228:PRO:O	4:E:231:LEU:HD23	2.13	0.48
1:D:65:LEU:HB3	1:D:110:LEU:CD1	2.43	0.48
1:D:65:LEU:HB3	1:D:110:LEU:HD11	1.94	0.48
3:C:431:LYS:C	3:C:434:LYS:HB3	2.33	0.48
4:E:79:ILE:HG12	4:E:80:PRO:HD2	1.95	0.48
1:A:130:ILE:O	1:A:134:HIS:HB2	2.13	0.48
1:A:229:THR:C	1:A:232:VAL:HB	2.34	0.48
1:A:38:ILE:H	1:A:38:ILE:HD12	1.76	0.48
1:A:31:ILE:HA	1:A:59:GLN:O	2.13	0.48
2:B:147:LYS:CG	2:B:148:SER:H	2.26	0.48
2:B:192:PRO:CD	2:B:210:TYR:HB2	2.42	0.48
3:C:110:VAL:HG22	3:C:120:TRP:CD1	2.48	0.48
3:C:97:ASN:CB	3:C:128:SER:CB	2.86	0.48
3:C:195:LYS:O	3:C:195:LYS:HG3	2.13	0.48
3:C:190:TRP:HA	3:C:223:ARG:CB	2.43	0.48
3:C:268:ALA:O	3:C:272:LEU:HG	2.13	0.48
1:D:38:ILE:O	1:D:169:THR:CG2	2.61	0.48
4:E:270:GLN:C	4:E:273:PRO:CD	2.81	0.48
4:E:59:TRP:CH2	4:E:115:MET:HB3	2.48	0.48
2:B:453:SER:O	2:B:457:ASP:OD1	2.31	0.48
1:A:33:VAL:HG23	1:A:158:ILE:HG12	1.89	0.48
1:A:166:ASP:N	1:A:181:TYR:CD1	2.81	0.48
1:A:186:HIS:HE1	1:A:187:TRP:O	1.96	0.48
1:A:58:GLN:HE21	1:A:90:LEU:HD21	1.78	0.48
2:B:261:VAL:CG1	2:B:262:PHE:N	2.76	0.48
2:B:93:MET:HB2	2:B:145:VAL:HG23	1.96	0.48
3:C:149:THR:HG22	3:C:214:ASP:HB3	1.87	0.48
3:C:296:MET:HE3	3:C:296:MET:HA	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:302:VAL:O	3:C:306:CYS:N	2.46	0.48
3:C:318:SER:CB	3:C:447:ASN:ND2	2.72	0.48
3:C:78:SER:O	3:C:79:ILE:CD1	2.55	0.48
1:D:187:TRP:CZ2	1:D:196:THR:HG23	2.48	0.48
4:E:78:ARG:NH1	4:E:108:LEU:HD13	2.28	0.48
4:E:85:TRP:CZ2	4:E:155:VAL:HG22	2.48	0.48
4:E:90:VAL:HG13	4:E:95:VAL:HB	1.94	0.48
4:E:287:ILE:O	4:E:291:PHE:CD2	2.66	0.48
2:B:416:GLU:OE2	3:C:433:ILE:CG2	2.60	0.48
2:B:10:VAL:HG13	2:B:11:LEU:N	2.29	0.48
1:A:155:LYS:CE	4:E:76:LEU:HD13	2.42	0.48
1:A:155:LYS:HE2	4:E:76:LEU:HD13	1.95	0.48
1:A:187:TRP:CZ3	1:A:189:TYR:HB3	2.46	0.48
1:A:245:LEU:CD2	2:B:253:ILE:HB	2.41	0.48
2:B:160:HIS:NE2	2:B:207:VAL:CG1	2.57	0.48
2:B:28:LYS:CE	2:B:154:SER:O	2.60	0.48
3:C:181:PRO:HA	3:C:184:PHE:CB	2.43	0.48
3:C:143:ASN:OD1	3:C:220:ILE:CG2	2.61	0.48
3:C:38:THR:HG22	3:C:57:TRP:CZ3	2.48	0.48
4:E:103:TYR:CD2	4:E:104:TYR:HD1	2.30	0.48
4:E:123:TYR:N	4:E:123:TYR:CD1	2.81	0.48
4:E:269:ALA:O	4:E:273:PRO:CG	2.62	0.48
2:B:68:ASP:HA	2:B:72:TYR:HD2	1.79	0.48
1:D:106:THR:CG2	1:D:107:LYS:HE2	2.43	0.48
2:B:286:PHE:HD1	2:B:290:LEU:CD1	2.26	0.48
2:B:286:PHE:HD1	2:B:290:LEU:HD12	1.78	0.48
1:A:31:ILE:HG23	1:A:60:TRP:HE3	1.78	0.48
1:A:46:VAL:N	1:A:272:PRO:HD3	2.29	0.48
2:B:45:GLU:HB2	2:B:134:TYR:CD2	2.48	0.48
2:B:256:LEU:CD1	2:B:302:LEU:HD22	2.43	0.48
1:A:227:PHE:HZ	2:B:303:ASN:HD22	1.62	0.48
2:B:440:LEU:CA	2:B:443:PHE:HB3	2.43	0.48
3:C:110:VAL:HG13	3:C:120:TRP:CA	2.42	0.48
3:C:113:ARG:HB2	3:C:117:TYR:O	2.13	0.48
3:C:50:GLU:HA	3:C:132:ILE:CD1	2.43	0.48
3:C:132:ILE:HA	3:C:136:TYR:CG	2.48	0.48
1:D:89:ASP:CG	1:D:149:TRP:HB3	2.33	0.48
1:A:212:LEU:C	1:A:215:VAL:HG23	2.33	0.48
4:E:83:LEU:CD2	4:E:83:LEU:N	2.76	0.48
1:A:396:ALA:O	1:A:399:TRP:HB2	2.13	0.48
1:A:186:HIS:ND1	1:A:187:TRP:O	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:187:TRP:CE2	1:A:196:THR:CG2	2.88	0.48
1:A:230:VAL:HA	1:A:233:PHE:CD1	2.49	0.48
1:A:229:THR:HA	1:A:232:VAL:CG2	2.44	0.48
1:A:252:SER:O	1:A:256:PHE:CG	2.63	0.48
2:B:131:LYS:CG	2:B:132:VAL:H	2.25	0.48
3:C:35:LEU:CD2	3:C:37:LEU:HG	2.44	0.48
3:C:447:ASN:O	3:C:449:VAL:CG2	2.33	0.48
3:C:58:MET:O	3:C:58:MET:CG	2.57	0.48
4:E:59:TRP:CE3	4:E:115:MET:HB2	2.48	0.48
4:E:246:ALA:HA	4:E:250:LYS:NZ	2.29	0.48
4:E:58:GLN:CA	4:E:59:TRP:HE3	2.27	0.48
4:E:58:GLN:C	4:E:59:TRP:HE3	2.17	0.48
1:D:21:PRO:HG3	1:D:60:TRP:HZ2	1.78	0.48
4:E:100:GLU:CD	4:E:122:ILE:HG12	2.34	0.48
3:C:59:ASP:HA	3:C:121:LEU:CB	2.44	0.48
1:A:276:LYS:CD	1:A:276:LYS:H	2.22	0.48
1:A:90:LEU:CD1	1:A:100:PHE:CE2	2.82	0.48
1:A:252:SER:CB	2:B:257:LEU:HD22	2.43	0.48
2:B:261:VAL:HG12	2:B:262:PHE:N	2.29	0.48
3:C:132:ILE:HG22	3:C:133:ASN:N	2.28	0.48
3:C:191:GLU:HG2	3:C:222:ARG:O	2.14	0.48
1:D:89:ASP:CG	1:D:149:TRP:CD1	2.87	0.48
1:D:230:VAL:HA	1:D:233:PHE:HD2	1.78	0.48
4:E:133:TYR:C	4:E:135:PRO:HD2	2.34	0.48
4:E:172:ILE:HG23	4:E:174:PRO:CD	2.43	0.48
4:E:30:VAL:O	4:E:157:LEU:HA	2.13	0.48
1:A:2:GLU:O	1:A:2:GLU:CG	2.61	0.48
1:A:136:PRO:CG	1:A:274:ILE:HG23	2.39	0.48
1:A:85:VAL:O	1:A:87:LEU:HD13	2.14	0.48
2:B:153:THR:HB	2:B:204:TYR:CB	2.13	0.48
2:B:186:TRP:HB3	2:B:215:ARG:CB	2.43	0.48
2:B:241:LEU:HD12	3:C:314:PHE:CD1	2.48	0.48
2:B:299:VAL:O	2:B:302:LEU:HB3	2.14	0.48
3:C:12:LEU:O	3:C:13:ILE:C	2.51	0.48
3:C:39:LEU:CD2	3:C:180:ASP:OD1	2.62	0.48
3:C:479:ASN:C	3:C:479:ASN:ND2	2.67	0.48
1:D:167:LEU:N	1:D:167:LEU:HD12	2.28	0.48
4:E:265:LEU:C	4:E:268:ILE:HG23	2.34	0.48
4:E:59:TRP:N	4:E:59:TRP:HE3	2.12	0.48
1:D:65:LEU:HD23	1:D:110:LEU:HD13	1.95	0.48
2:B:409:LYS:O	2:B:413:GLU:N	2.40	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:399:TRP:HE3	1:D:399:TRP:HA	1.79	0.48
2:B:10:VAL:CG1	2:B:11:LEU:CD2	2.91	0.48
3:C:204:ASP:OD1	3:C:205:LYS:CD	2.61	0.48
1:A:284:PHE:N	1:A:284:PHE:CD1	2.82	0.48
1:A:243:MET:HG3	1:A:306:HIS:ND1	2.28	0.48
1:A:413:VAL:HA	1:A:416:LEU:HB3	1.95	0.48
1:A:48:GLN:CB	1:A:130:ILE:HG23	2.43	0.48
1:A:93:TYR:HD1	1:A:93:TYR:N	2.11	0.48
2:B:216:LYS:CD	2:B:216:LYS:O	2.50	0.48
2:B:224:THR:O	2:B:227:PRO:CD	2.49	0.48
2:B:227:PRO:O	2:B:228:CYS:C	2.51	0.48
1:D:420:ILE:HA	1:D:423:VAL:HB	1.96	0.48
1:D:49:ILE:HG21	1:D:125:LYS:CE	2.43	0.48
4:E:183:TRP:HA	4:E:216:ARG:HG2	1.95	0.48
4:E:6:LEU:CD1	4:E:67:ASN:CG	2.82	0.48
1:A:1:SER:H2	1:A:4:GLU:HB2	1.76	0.48
3:C:205:LYS:HD3	3:C:205:LYS:H	1.79	0.48
1:A:94:ASN:O	1:A:127:TYR:HD2	1.96	0.48
1:A:233:PHE:HE2	1:A:413:VAL:HB	1.78	0.48
2:B:211:LEU:HB3	2:B:213:ILE:CG2	2.43	0.48
2:B:235:ALA:O	2:B:239:PHE:CG	2.67	0.48
2:B:261:VAL:CG1	2:B:262:PHE:HD1	2.19	0.48
3:C:135:LEU:N	3:C:135:LEU:HD22	2.29	0.48
3:C:139:PHE:O	3:C:222:ARG:HG2	2.14	0.48
1:D:56:LEU:H	1:D:120:PRO:HD2	1.73	0.48
1:D:187:TRP:CH2	1:D:189:TYR:CG	3.02	0.48
1:D:239:SER:HB2	1:D:242:LYS:CE	2.37	0.48
1:D:256:PHE:O	1:D:260:ILE:HG13	2.14	0.48
4:E:91:LEU:CB	4:E:95:VAL:HG23	2.32	0.48
3:C:425:SER:O	3:C:429:ILE:CG2	2.60	0.48
2:B:11:LEU:H	2:B:11:LEU:CD2	2.27	0.48
1:A:60:TRP:NE1	1:A:116:ILE:HD12	2.28	0.47
1:A:133:THR:C	1:A:136:PRO:CD	2.82	0.47
1:A:247:ILE:HG13	4:E:253:LEU:HD12	1.96	0.47
1:A:398:GLU:C	1:A:400:LYS:H	2.16	0.47
1:A:50:VAL:HG12	1:A:51:GLU:N	2.29	0.47
2:B:53:SER:HA	2:B:122:ALA:O	2.13	0.47
2:B:62:ASP:C	2:B:64:ARG:N	2.67	0.47
3:C:264:LEU:HA	3:C:267:GLN:HG3	1.96	0.47
3:C:465:MET:O	3:C:469:THR:HB	2.14	0.47
3:C:69:TRP:HD1	3:C:114:PRO:O	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:233:PHE:CD1	1:D:409:ILE:HD12	2.45	0.47
1:D:236:PRO:HD3	1:D:299:HIS:CE1	2.49	0.47
4:E:207:GLU:C	4:E:208:ILE:HG13	2.32	0.47
1:D:154:THR:O	1:D:155:LYS:HD3	2.14	0.47
1:D:395:ALA:O	1:D:399:TRP:CG	2.67	0.47
2:B:4:GLU:OE2	2:B:70:ALA:HB3	2.14	0.47
1:A:2:GLU:O	1:A:7:LEU:HD11	2.14	0.47
1:A:129:GLU:HG2	1:A:130:ILE:N	2.29	0.47
1:A:148:ILE:CD1	1:A:156:VAL:HG22	2.44	0.47
2:B:101:GLU:CD	2:B:123:ILE:CG2	2.82	0.47
3:C:141:TRP:CE2	3:C:223:ARG:O	2.67	0.47
3:C:476:GLY:O	3:C:480:ARG:CG	2.62	0.47
1:D:37:LEU:O	1:D:169:THR:HB	2.14	0.47
1:D:417:ILE:HA	1:D:420:ILE:HG12	1.96	0.47
4:E:436:ASN:CA	4:E:439:TRP:NE1	2.72	0.47
2:B:112:HIS:CD2	2:B:113:THR:HG23	2.49	0.47
1:D:303:PRO:N	1:D:400:LYS:HD2	2.29	0.47
1:A:160:PRO:HG2	1:A:185:LYS:HZ3	1.76	0.47
4:E:88:ASP:CG	4:E:88:ASP:O	2.52	0.47
1:A:267:THR:O	1:A:271:VAL:HG22	2.15	0.47
1:A:38:ILE:O	1:A:39:GLN:HG2	2.11	0.47
1:A:420:ILE:O	1:A:424:SER:N	2.41	0.47
1:A:46:VAL:CA	1:A:272:PRO:HD3	2.44	0.47
1:A:82:SER:O	1:A:85:VAL:N	2.43	0.47
2:B:130:ILE:O	2:B:131:LYS:O	2.32	0.47
2:B:241:LEU:CD2	2:B:248:LYS:HE2	2.45	0.47
2:B:21:PRO:CG	2:B:60:TRP:HE1	2.22	0.47
2:B:82:SER:OG	2:B:108:VAL:HG21	2.15	0.47
3:C:35:LEU:HD22	3:C:215:VAL:CG2	2.40	0.47
2:B:251:LEU:CD1	3:C:261:ILE:HG21	2.40	0.47
1:D:189:TYR:HA	1:D:197:PRO:CG	2.44	0.47
1:D:257:LEU:CD1	1:D:257:LEU:C	2.82	0.47
1:D:259:VAL:CG1	1:D:262:GLU:OE1	2.55	0.47
1:D:43:VAL:HG21	1:D:50:VAL:HG13	1.96	0.47
4:E:238:LEU:C	4:E:242:LEU:HB3	2.34	0.47
4:E:86:LEU:HD13	4:E:103:TYR:CZ	2.49	0.47
1:D:101:ALA:O	1:D:102:ILE:CB	2.62	0.47
3:C:427:ASN:CA	3:C:430:VAL:HG23	2.38	0.47
1:D:32:THR:O	1:D:58:GLN:HA	2.13	0.47
1:A:212:LEU:HA	1:A:215:VAL:HG21	1.94	0.47
1:D:219:ILE:HD12	1:D:219:ILE:C	2.35	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:69:TRP:CB	3:C:73:GLU:CB	2.87	0.47
1:D:130:ILE:H	1:D:130:ILE:HD13	1.77	0.47
1:D:37:LEU:CD1	1:D:54:VAL:HG22	2.43	0.47
1:D:238:ASP:CB	4:E:308:LEU:HD22	2.44	0.47
2:B:421:PHE:HA	2:B:424:LEU:HD12	1.96	0.47
1:D:376:ILE:HG22	1:D:380:LYS:HZ1	1.78	0.47
1:A:422:THR:C	1:A:425:VAL:HG12	2.33	0.47
1:A:175:GLU:O	1:A:209:ARG:HG3	2.14	0.47
1:A:397:GLU:HA	1:A:400:LYS:HG3	1.96	0.47
1:A:137:PHE:CD2	1:A:435:GLN:NE2	2.82	0.47
2:B:118:TRP:C	2:B:119:HIS:HD2	2.18	0.47
2:B:234:LEU:HA	2:B:237:LEU:HB2	1.96	0.47
2:B:35:LEU:N	2:B:35:LEU:HD23	2.27	0.47
2:B:31:VAL:HG21	2:B:86:TRP:CZ3	2.50	0.47
3:C:148:PHE:N	3:C:148:PHE:CD1	2.83	0.47
3:C:241:PHE:CD1	3:C:242:LEU:N	2.82	0.47
3:C:471:PHE:O	3:C:474:VAL:N	2.47	0.47
1:D:135:PHE:CG	1:D:210:ILE:CG1	2.95	0.47
4:E:240:TYR:O	4:E:243:PRO:CG	2.62	0.47
4:E:270:GLN:O	4:E:273:PRO:HD2	2.15	0.47
4:E:35:THR:HG23	4:E:175:GLU:CD	2.30	0.47
3:C:429:ILE:HG13	3:C:430:VAL:HG22	1.96	0.47
3:C:427:ASN:O	3:C:431:LYS:HG3	2.15	0.47
1:D:19:ILE:HG22	1:D:20:ARG:N	2.29	0.47
3:C:204:ASP:OD1	3:C:205:LYS:CE	2.62	0.47
1:A:27:HIS:C	1:A:28:PHE:CG	2.87	0.47
1:A:171:MET:HG2	1:A:173:SER:H	1.79	0.47
1:A:227:PHE:HZ	2:B:303:ASN:ND2	2.12	0.47
1:A:257:LEU:CD1	1:A:285:VAL:CG2	2.86	0.47
1:A:391:GLU:O	1:A:394:ASN:OD1	2.33	0.47
1:A:43:VAL:HG12	1:A:44:ASP:N	2.29	0.47
1:A:52:THR:O	1:A:123:ILE:CG1	2.58	0.47
2:B:55:PHE:HA	2:B:121:SER:HA	1.96	0.47
2:B:89:ASP:OD2	2:B:150:THR:N	2.47	0.47
2:B:184:GLY:C	2:B:186:TRP:H	2.17	0.47
2:B:187:SER:O	2:B:214:GLN:O	2.32	0.47
2:B:197:TRP:CB	2:B:204:TYR:HD1	2.27	0.47
2:B:241:LEU:HG	2:B:248:LYS:HE2	1.96	0.47
2:B:135:PHE:CA	2:B:279:ILE:HD13	2.44	0.47
3:C:113:ARG:HB3	3:C:114:PRO:CD	2.40	0.47
3:C:148:PHE:O	3:C:215:VAL:HG22	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:192:ILE:CD1	3:C:221:ILE:HG21	2.44	0.47
1:D:141:ASN:HB3	1:D:206:ILE:CG1	2.44	0.47
1:D:244:THR:HG23	1:D:245:LEU:H	1.76	0.47
1:D:407:ASP:OD1	1:D:408:HIS:N	2.47	0.47
1:D:45:GLU:OE2	1:D:135:PHE:CD2	2.68	0.47
4:E:162:GLU:OE1	4:E:191:LYS:HG3	2.15	0.47
4:E:209:ILE:HG12	4:E:211:PHE:CE1	2.43	0.47
4:E:61:ASP:OD1	4:E:63:ARG:HB3	2.15	0.47
1:D:17:LYS:HG2	1:D:84:ASP:C	2.34	0.47
2:B:6:THR:O	2:B:9:SER:OG	2.27	0.47
2:B:284:LEU:O	2:B:288:MET:HB2	2.15	0.47
1:D:159:SER:HB3	1:D:160:PRO:HD2	1.96	0.47
3:C:98:ASN:C	3:C:100:GLY:H	2.17	0.47
2:B:415:LEU:C	2:B:415:LEU:CD1	2.82	0.47
1:A:47:ASN:O	1:A:48:GLN:HG2	2.14	0.47
2:B:226:VAL:HB	2:B:230:LEU:CG	2.45	0.47
2:B:448:SER:HB3	2:B:452:PHE:CZ	2.49	0.47
2:B:92:LEU:CA	2:B:96:ASN:HB2	2.43	0.47
3:C:106:TYR:CE1	3:C:107:PHE:HE1	2.32	0.47
2:B:241:LEU:CD1	3:C:314:PHE:CE1	2.98	0.47
3:C:452:THR:CG2	3:C:453:ILE:N	2.77	0.47
3:C:63:TYR:CZ	3:C:115:ASN:O	2.68	0.47
1:D:135:PHE:O	1:D:210:ILE:CG1	2.63	0.47
1:D:276:LYS:HA	1:D:279:LEU:CD1	2.45	0.47
1:D:35:LEU:HD11	1:D:54:VAL:CG2	2.43	0.47
1:D:40:LEU:HD22	1:D:52:THR:CB	2.44	0.47
1:A:247:ILE:CG1	4:E:253:LEU:HD12	2.44	0.47
4:E:10:LEU:HD22	4:E:64:LEU:HD21	1.97	0.47
1:A:244:THR:HG23	1:A:245:LEU:N	2.29	0.47
1:A:41:ILE:CG2	1:A:123:ILE:HD11	2.45	0.47
2:B:144:MET:O	2:B:209:PHE:CD2	2.68	0.47
2:B:466:ASN:C	2:B:468:PHE:H	2.18	0.47
3:C:106:TYR:C	3:C:107:PHE:CD1	2.85	0.47
3:C:111:LEU:O	3:C:118:VAL:HG13	2.15	0.47
3:C:17:TYR:CD1	3:C:18:ASN:N	2.83	0.47
1:D:419:ILE:HA	1:D:422:THR:HG22	1.96	0.47
1:D:41:ILE:HG21	4:E:96:ASP:OD2	2.14	0.47
4:E:10:LEU:HD13	4:E:64:LEU:HD21	1.95	0.47
4:E:434:SER:HA	4:E:437:GLU:HG2	1.96	0.47
2:B:72:TYR:CD1	2:B:112:HIS:HB2	2.45	0.47
2:B:10:VAL:CG1	2:B:11:LEU:N	2.76	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:9:SER:C	2:B:13:GLU:HG3	2.35	0.47
3:C:293:MET:O	3:C:297:SER:N	2.41	0.47
1:A:212:LEU:O	1:A:215:VAL:HG23	2.15	0.47
4:E:17:ARG:CD	4:E:17:ARG:H	2.27	0.47
1:A:134:HIS:CD2	1:A:207:MET:HE3	2.49	0.47
1:A:44:ASP:O	1:A:48:GLN:N	2.47	0.47
1:A:87:LEU:N	1:A:87:LEU:CD2	2.59	0.47
2:B:137:PHE:HB2	2:B:464:PRO:HG2	1.97	0.47
2:B:21:PRO:HB2	2:B:29:VAL:HG11	1.96	0.47
2:B:271:PRO:O	2:B:275:LEU:CD2	2.63	0.47
2:B:31:VAL:HG12	2:B:158:LEU:HD23	1.92	0.47
1:D:135:PHE:CE1	1:D:273:LEU:CB	2.97	0.47
1:D:231:LEU:HD22	1:D:235:LEU:HD21	1.97	0.47
1:D:293:VAL:O	1:D:297:ASN:CB	2.61	0.47
1:D:44:ASP:OD1	1:D:46:VAL:HG23	2.15	0.47
4:E:163:GLU:O	4:E:164:GLY:C	2.53	0.47
4:E:232:ILE:O	4:E:236:VAL:HG22	2.14	0.47
4:E:273:PRO:CG	4:E:274:GLU:H	2.24	0.47
1:A:212:LEU:CA	1:A:215:VAL:HG23	2.40	0.47
1:A:221:PRO:CA	1:A:224:LEU:HD23	2.45	0.47
1:A:132:VAL:O	1:A:274:ILE:CA	2.63	0.47
1:A:304:SER:H	1:A:400:LYS:CD	2.20	0.47
1:A:245:LEU:HD11	2:B:250:SER:O	2.15	0.47
3:C:114:PRO:HG2	3:C:115:ASN:H	1.80	0.47
1:D:404:MET:O	1:D:407:ASP:OD1	2.33	0.47
4:E:155:VAL:CG1	4:E:205:PHE:HE1	2.28	0.47
4:E:173:ASP:H	4:E:174:PRO:HD2	1.77	0.47
4:E:240:TYR:C	4:E:450:CYS:SG	2.93	0.47
4:E:272:VAL:O	4:E:275:THR:HB	2.15	0.47
4:E:307:SER:O	4:E:314:HIS:O	2.33	0.47
4:E:44:GLU:HG3	4:E:129:ILE:HD12	1.96	0.47
2:B:68:ASP:O	2:B:72:TYR:HD2	1.98	0.47
1:D:3:HIS:HB3	1:D:7:LEU:CD2	2.44	0.47
3:C:94:LEU:HB2	3:C:98:ASN:CB	2.33	0.47
1:A:28:PHE:CD1	1:A:154:THR:HA	2.50	0.47
1:A:229:THR:O	1:A:233:PHE:CE1	2.67	0.47
1:A:255:VAL:HA	1:A:258:LEU:HD12	1.96	0.47
1:A:291:VAL:CG1	1:A:295:VAL:CG2	2.91	0.47
2:B:136:PRO:HG2	2:B:139:TRP:N	2.30	0.47
2:B:298:SER:C	2:B:301:VAL:HG22	2.35	0.47
3:C:241:PHE:C	3:C:241:PHE:HD1	2.17	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:7:LEU:O	3:C:10:ASP:N	2.48	0.47
1:D:135:PHE:O	1:D:210:ILE:CD1	2.62	0.47
1:D:221:PRO:O	1:D:225:PHE:HB3	2.15	0.47
1:D:408:HIS:O	1:D:412:CYS:CB	2.63	0.47
1:D:36:GLN:N	1:D:54:VAL:HG12	2.29	0.47
1:D:92:LEU:HG	1:D:124:PHE:CE1	2.50	0.47
4:E:136:PHE:O	4:E:138:TRP:CZ2	2.68	0.47
4:E:138:TRP:CZ2	4:E:215:GLN:CB	2.93	0.47
4:E:55:ILE:HG13	4:E:57:ILE:CG1	2.41	0.47
4:E:59:TRP:HE1	4:E:84:LEU:CD2	2.25	0.47
3:C:429:ILE:O	3:C:433:ILE:HG13	2.15	0.47
2:B:112:HIS:CG	2:B:113:THR:N	2.83	0.47
2:B:9:SER:CA	2:B:12:PHE:CD1	2.89	0.47
1:A:108:LEU:CD2	1:A:118:TRP:CD1	2.98	0.46
1:A:108:LEU:HD21	1:A:118:TRP:CD1	2.49	0.46
1:A:207:MET:O	1:A:207:MET:CE	2.63	0.46
1:A:432:GLU:HG3	1:A:436:GLU:CD	2.34	0.46
2:B:247:GLU:O	2:B:249:MET:HG3	2.15	0.46
3:C:54:THR:OG1	3:C:126:PHE:CE1	2.65	0.46
3:C:37:LEU:O	3:C:178:ILE:CD1	2.63	0.46
3:C:54:THR:O	3:C:126:PHE:CE2	2.68	0.46
1:D:187:TRP:HB2	1:D:199:LEU:HD21	1.93	0.46
1:D:241:GLU:C	1:D:243:MET:HE2	2.35	0.46
1:D:280:PHE:O	1:D:284:PHE:CG	2.68	0.46
1:D:299:HIS:O	1:D:306:HIS:O	2.33	0.46
1:D:416:LEU:O	1:D:420:ILE:HG23	2.14	0.46
4:E:162:GLU:HB3	4:E:191:LYS:HD3	1.96	0.46
4:E:174:PRO:HD3	4:E:185:ILE:CG2	2.45	0.46
4:E:200:LYS:O	4:E:200:LYS:CG	2.63	0.46
4:E:22:LYS:CG	4:E:23:THR:N	2.78	0.46
4:E:304:LEU:HA	4:E:307:SER:OG	2.14	0.46
4:E:309:ARG:CD	4:E:310:THR:HG23	2.45	0.46
2:B:406:GLU:CA	2:B:409:LYS:HD2	2.22	0.46
1:A:66:ARG:O	1:A:67:TRP:CE3	2.68	0.46
1:A:244:THR:O	1:A:247:ILE:CB	2.63	0.46
1:A:281:THR:HG23	1:A:282:MET:N	2.30	0.46
3:C:22:ARG:HA	3:C:23:PRO:HD2	1.83	0.46
3:C:274:THR:CG2	3:C:275:SER:N	2.76	0.46
3:C:7:LEU:CD1	3:C:70:ASN:HD22	2.26	0.46
1:D:235:LEU:CD2	4:E:308:LEU:CG	2.93	0.46
4:E:86:LEU:HD13	4:E:103:TYR:OH	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:219:LEU:CB	4:E:222:ILE:HB	2.45	0.46
4:E:219:LEU:HD23	4:E:221:TYR:CE2	2.51	0.46
4:E:239:VAL:HA	4:E:242:LEU:CD2	2.45	0.46
4:E:310:THR:CB	4:E:313:THR:HG22	2.45	0.46
4:E:32:LEU:HD12	4:E:208:ILE:CD1	2.44	0.46
4:E:472:ASN:ND2	4:E:472:ASN:O	2.49	0.46
4:E:20:PRO:CB	4:E:61:ASP:CG	2.78	0.46
1:D:76:LYS:HE2	1:D:76:LYS:HB3	1.58	0.46
3:C:437:ASN:O	3:C:441:GLU:HG3	2.16	0.46
1:D:137:PHE:CB	1:D:435:GLN:HG3	2.41	0.46
1:D:3:HIS:O	1:D:7:LEU:N	2.45	0.46
1:A:286:ILE:O	1:A:289:ILE:CB	2.57	0.46
1:A:92:LEU:N	1:A:92:LEU:CD2	2.79	0.46
2:B:143:THR:CG2	2:B:145:VAL:HG22	2.45	0.46
2:B:147:LYS:HZ2	2:B:205:GLU:HA	1.79	0.46
2:B:133:MET:N	2:B:279:ILE:HG23	2.30	0.46
3:C:137:PHE:C	3:C:137:PHE:CD1	2.89	0.46
3:C:279:PRO:O	3:C:283:LEU:N	2.42	0.46
3:C:28:ASN:HB2	3:C:29:GLU:H	1.52	0.46
3:C:48:THR:OG1	3:C:285:VAL:CA	2.62	0.46
3:C:4:GLU:HG3	3:C:5:GLU:N	2.31	0.46
1:D:254:THR:OG1	1:D:258:LEU:CD1	2.63	0.46
1:A:62:ASP:HB3	1:A:65:LEU:HD12	1.97	0.46
1:D:305:THR:OG1	1:D:401:TYR:HB3	2.15	0.46
1:D:305:THR:OG1	1:D:401:TYR:HD2	1.96	0.46
1:A:51:GLU:HA	1:A:124:PHE:O	2.15	0.46
2:B:146:PHE:O	2:B:147:LYS:HB2	2.15	0.46
2:B:46:LYS:CD	2:B:275:LEU:O	2.64	0.46
3:C:90:PRO:HD2	3:C:120:TRP:HE3	1.78	0.46
1:D:268:SER:OG	1:D:273:LEU:HD21	2.15	0.46
4:E:195:ASN:O	4:E:204:ASP:OD1	2.34	0.46
4:E:262:THR:HG23	4:E:265:LEU:HD12	1.97	0.46
3:C:233:ILE:C	3:C:235:PRO:HD2	2.36	0.46
1:A:387:LYS:O	1:A:390:GLU:HG3	2.16	0.46
2:B:7:LEU:CD1	2:B:69:PRO:HD2	2.45	0.46
1:A:3:HIS:O	1:A:7:LEU:N	2.38	0.46
3:C:436:LYS:O	3:C:439:TYR:HB2	2.15	0.46
1:A:426:PHE:HD1	1:A:427:ALA:CA	2.28	0.46
2:B:130:ILE:CB	2:B:134:TYR:CE2	2.99	0.46
2:B:86:TRP:HD1	2:B:151:TYR:CZ	2.33	0.46
2:B:192:PRO:HD2	2:B:210:TYR:HB3	1.94	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:20:ARG:O	2:B:22:SER:N	2.46	0.46
2:B:441:TYR:O	2:B:444:ILE:HG22	2.16	0.46
2:B:439:PHE:O	2:B:442:ILE:CG2	2.63	0.46
2:B:60:TRP:CG	2:B:61:THR:N	2.83	0.46
3:C:63:TYR:CD1	3:C:116:GLY:HA3	2.50	0.46
3:C:37:LEU:HD11	3:C:148:PHE:CG	2.51	0.46
3:C:245:LEU:O	3:C:249:LEU:N	2.39	0.46
3:C:279:PRO:HA	3:C:282:ALA:HB2	1.94	0.46
3:C:455:ARG:CD	3:C:455:ARG:H	2.23	0.46
1:D:222:CYS:SG	1:D:225:PHE:CE1	3.05	0.46
1:D:36:GLN:O	1:D:54:VAL:HA	2.14	0.46
4:E:261:GLN:HG3	4:E:262:THR:N	2.29	0.46
1:D:78:ILE:C	1:D:78:ILE:HD12	2.35	0.46
2:B:90:ILE:HA	2:B:147:LYS:C	2.35	0.46
2:B:180:PHE:CE1	2:B:181:THR:O	2.68	0.46
2:B:16:ASN:OD1	2:B:18:LYS:CD	2.63	0.46
2:B:134:TYR:CD1	2:B:213:ILE:CG1	2.89	0.46
2:B:253:ILE:CD1	2:B:302:LEU:HD11	2.45	0.46
3:C:238:LEU:HA	3:C:241:PHE:CD2	2.51	0.46
3:C:447:ASN:O	3:C:448:LEU:C	2.54	0.46
1:D:227:PHE:HE1	1:D:231:LEU:HD21	1.80	0.46
4:E:55:ILE:HG23	4:E:119:PRO:HD2	1.96	0.46
1:D:302:SER:HB3	1:D:400:LYS:CG	2.45	0.46
1:A:27:HIS:O	1:A:28:PHE:CB	2.61	0.46
1:A:128:CYS:SG	1:A:144:MET:HE2	2.56	0.46
1:A:131:ILE:C	1:A:133:THR:H	2.18	0.46
1:A:301:ARG:HH22	1:A:406:ILE:HD11	1.80	0.46
2:B:211:LEU:HB3	2:B:213:ILE:HG22	1.98	0.46
2:B:185:GLN:C	2:B:216:LYS:HZ2	2.18	0.46
2:B:235:ALA:C	2:B:239:PHE:CD2	2.89	0.46
3:C:37:LEU:CB	3:C:217:PHE:CE2	2.85	0.46
1:D:166:ASP:OD2	1:D:205:PHE:CD2	2.69	0.46
1:D:291:VAL:O	1:D:295:VAL:N	2.40	0.46
1:D:38:ILE:C	1:D:169:THR:CG2	2.84	0.46
4:E:279:VAL:HB	4:E:280:PRO:CD	2.43	0.46
4:E:1:ASN:C	4:E:3:GLU:N	2.68	0.46
1:A:80:LEU:C	1:A:80:LEU:HD12	2.35	0.46
1:A:130:ILE:O	1:A:134:HIS:CB	2.64	0.46
1:A:227:PHE:CZ	2:B:303:ASN:ND2	2.84	0.46
1:A:249:VAL:CG1	1:A:253:LEU:HD23	2.44	0.46
2:B:41:LEU:HA	2:B:41:LEU:HD22	1.66	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:143:ASN:HA	3:C:220:ILE:HA	1.98	0.46
3:C:249:LEU:N	3:C:249:LEU:CD1	2.79	0.46
3:C:271:LEU:C	3:C:271:LEU:HD23	2.36	0.46
3:C:35:LEU:HD12	3:C:92:ILE:CG2	2.42	0.46
1:D:217:ASN:O	1:D:221:PRO:CD	2.63	0.46
4:E:103:TYR:HD2	4:E:104:TYR:CD1	2.32	0.46
4:E:237:VAL:HA	4:E:240:TYR:HB2	1.97	0.46
4:E:453:ILE:HD12	4:E:454:ALA:CA	2.46	0.46
4:E:472:ASN:ND2	4:E:476:GLU:HG3	2.31	0.46
1:D:374:SER:O	1:D:377:GLU:HB3	2.16	0.46
1:A:79:ARG:NH1	1:A:107:LYS:HZ2	2.09	0.46
1:A:277:TYR:O	1:A:280:PHE:CG	2.69	0.46
2:B:196:ASN:C	2:B:197:TRP:CG	2.89	0.46
2:B:196:ASN:C	2:B:196:ASN:OD1	2.52	0.46
2:B:47:ASN:HB2	2:B:49:GLU:OE1	2.16	0.46
3:C:108:CYS:SG	3:C:109:ASN:N	2.89	0.46
3:C:22:ARG:NE	3:C:153:TYR:CE2	2.84	0.46
3:C:219:LEU:HG	3:C:221:ILE:HG23	1.98	0.46
3:C:279:PRO:HG2	3:C:280:GLU:N	2.30	0.46
1:D:146:LEU:HD22	1:D:203:TYR:OH	2.16	0.46
1:D:285:VAL:C	1:D:287:SER:N	2.65	0.46
4:E:132:THR:C	4:E:134:PHE:H	2.10	0.46
4:E:172:ILE:HG22	4:E:175:GLU:HB3	1.98	0.46
4:E:22:LYS:HE2	4:E:26:HIS:HB3	1.97	0.46
3:C:94:LEU:N	3:C:94:LEU:HD23	2.31	0.46
1:A:45:GLU:OE1	1:A:209:ARG:HD3	2.15	0.46
2:B:101:GLU:CD	2:B:123:ILE:HG22	2.37	0.46
3:C:245:LEU:C	3:C:249:LEU:HD13	2.30	0.46
3:C:262:CYS:SG	1:D:251:LEU:HD11	2.56	0.46
3:C:275:SER:O	3:C:279:PRO:CD	2.59	0.46
3:C:82:LEU:O	3:C:87:ILE:HG13	2.16	0.46
4:E:56:GLU:HB2	4:E:118:LEU:HD11	1.98	0.46
2:B:409:LYS:HD3	3:C:426:THR:CB	2.44	0.46
1:A:382:ILE:HD12	4:E:424:LYS:NZ	2.31	0.46
1:D:426:PHE:CE1	1:D:430:LEU:CD1	2.99	0.46
1:A:136:PRO:C	1:A:277:TYR:OH	2.55	0.45
1:A:89:ASP:CG	1:A:150:THR:H	2.20	0.45
1:A:171:MET:HG2	1:A:173:SER:N	2.31	0.45
1:A:234:TYR:CE2	1:A:410:LEU:HD11	2.51	0.45
1:A:46:VAL:HA	1:A:272:PRO:HD3	1.97	0.45
2:B:136:PRO:CG	2:B:280:ILE:HD11	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:144:MET:CE	2:B:191:LYS:CE	2.85	0.45
2:B:38:THR:O	2:B:179:ALA:HB1	2.15	0.45
2:B:220:TYR:CB	2:B:223:TYR:CE2	2.97	0.45
2:B:248:LYS:HE2	2:B:248:LYS:HB2	1.79	0.45
2:B:256:LEU:HD22	2:B:298:SER:CB	2.43	0.45
2:B:462:VAL:CB	2:B:463:PRO:HD3	2.46	0.45
2:B:82:SER:C	2:B:84:ASP:H	2.17	0.45
2:B:88:PRO:C	2:B:90:ILE:N	2.68	0.45
3:C:181:PRO:CD	3:C:192:ILE:HG21	2.45	0.45
3:C:278:LEU:N	3:C:279:PRO:HD2	2.31	0.45
3:C:290:LYS:O	3:C:294:PHE:CE2	2.69	0.45
3:C:307:GLY:HA2	3:C:310:LEU:CD2	2.26	0.45
3:C:449:VAL:HG12	3:C:452:THR:HB	1.97	0.45
3:C:80:LEU:O	3:C:112:VAL:HG23	2.16	0.45
3:C:84:PRO:HG2	3:C:85:GLU:CD	2.37	0.45
1:D:415:MET:O	1:D:419:ILE:N	2.49	0.45
4:E:103:TYR:CD2	4:E:104:TYR:N	2.83	0.45
4:E:271:LYS:N	4:E:273:PRO:HD2	2.31	0.45
1:D:29:VAL:HG11	1:D:60:TRP:NE1	2.27	0.45
2:B:406:GLU:HG2	2:B:409:LYS:CD	2.46	0.45
1:A:104:HIS:HB2	1:A:105:MET:SD	2.56	0.45
3:C:125:ILE:O	3:C:125:ILE:HG22	2.16	0.45
1:A:131:ILE:HG13	1:A:133:THR:HB	1.97	0.45
1:A:187:TRP:HE1	1:A:196:THR:CG2	2.28	0.45
1:A:242:LYS:HA	1:A:243:MET:HE2	1.97	0.45
1:A:255:VAL:HG23	4:E:264:PHE:CD1	2.51	0.45
1:A:263:LEU:HD23	1:A:263:LEU:N	2.31	0.45
2:B:226:VAL:HG23	2:B:227:PRO:CD	2.46	0.45
3:C:292:LEU:HD23	3:C:295:ILE:HD12	1.98	0.45
3:C:481:PRO:HA	3:C:484:LYS:NZ	2.31	0.45
3:C:83:ARG:CB	3:C:84:PRO:HD2	2.33	0.45
3:C:82:LEU:O	3:C:87:ILE:HD11	2.16	0.45
1:D:48:GLN:HB2	1:D:130:ILE:HG23	1.98	0.45
4:E:173:ASP:H	4:E:188:ARG:CB	2.29	0.45
4:E:19:LYS:CG	4:E:20:PRO:HD2	2.45	0.45
1:A:247:ILE:HG12	4:E:253:LEU:CD1	2.47	0.45
3:C:205:LYS:N	3:C:205:LYS:HD3	2.31	0.45
1:A:104:HIS:C	1:A:105:MET:SD	2.95	0.45
2:B:429:GLN:HE21	2:B:429:GLN:HA	1.81	0.45
2:B:437:ARG:HD2	2:B:437:ARG:HA	1.68	0.45
1:A:135:PHE:O	1:A:135:PHE:CG	2.70	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:255:VAL:CG2	1:A:258:LEU:HD12	2.45	0.45
1:A:407:ASP:O	1:A:410:LEU:HB3	2.16	0.45
2:B:138:ASP:HA	2:B:467:PRO:HG2	1.99	0.45
2:B:311:THR:HG22	2:B:312:HIS:N	2.31	0.45
2:B:456:LEU:HA	2:B:459:SER:OG	2.17	0.45
3:C:137:PHE:H	3:C:138:PRO:CD	2.29	0.45
3:C:306:CYS:C	3:C:309:VAL:HB	2.37	0.45
3:C:449:VAL:CG1	3:C:452:THR:HG21	2.42	0.45
3:C:123:PRO:HD3	1:D:149:TRP:CZ2	2.52	0.45
4:E:151:ASN:CA	4:E:205:PHE:HB2	2.46	0.45
4:E:276:SER:CB	4:E:281:LEU:HD13	2.41	0.45
4:E:74:ILE:HD13	4:E:74:ILE:H	1.81	0.45
4:E:91:LEU:H	4:E:95:VAL:HB	1.81	0.45
1:D:57:ARG:HG3	1:D:117:MET:SD	2.56	0.45
1:A:110:LEU:CD1	1:A:114:GLY:HA2	2.46	0.45
4:E:100:GLU:HG3	4:E:122:ILE:O	2.16	0.45
2:B:430:TYR:CD1	2:B:430:TYR:O	2.66	0.45
1:A:170:PHE:HE1	1:A:176:TRP:CD1	2.34	0.45
1:A:219:ILE:CG2	1:A:219:ILE:O	2.64	0.45
1:A:247:ILE:HG22	1:A:248:SER:H	1.81	0.45
2:B:45:GLU:OE1	2:B:134:TYR:HB3	2.17	0.45
2:B:31:VAL:CG1	2:B:158:LEU:HD21	2.39	0.45
2:B:177:GLN:HA	2:B:180:PHE:CB	2.46	0.45
2:B:226:VAL:O	2:B:230:LEU:CB	2.64	0.45
3:C:257:MET:CE	3:C:320:HIS:O	2.64	0.45
1:D:94:ASN:O	1:D:127:TYR:O	2.34	0.45
1:D:149:TRP:CD2	1:D:150:THR:N	2.84	0.45
1:D:37:LEU:N	1:D:164:ARG:HH22	2.11	0.45
1:D:229:THR:C	1:D:232:VAL:HB	2.34	0.45
1:D:242:LYS:HB2	1:D:245:LEU:HB2	1.98	0.45
1:D:257:LEU:HA	1:D:260:ILE:CB	2.46	0.45
1:D:36:GLN:NE2	1:D:38:ILE:CG1	2.80	0.45
4:E:225:ILE:O	4:E:228:PRO:HG2	2.17	0.45
4:E:232:ILE:CG2	4:E:233:SER:N	2.79	0.45
1:A:385:HIS:ND1	1:A:385:HIS:C	2.70	0.45
1:A:129:GLU:CD	1:A:140:GLN:HG2	2.36	0.45
2:B:134:TYR:C	2:B:279:ILE:HD13	2.36	0.45
2:B:144:MET:HB2	2:B:209:PHE:HB2	1.98	0.45
2:B:203:SER:O	2:B:205:GLU:HG2	2.16	0.45
2:B:450:GLY:O	2:B:454:ILE:CG1	2.59	0.45
2:B:46:LYS:HG3	2:B:278:PRO:CD	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:85:VAL:CG1	2:B:86:TRP:N	2.80	0.45
3:C:106:TYR:O	3:C:107:PHE:CD1	2.70	0.45
3:C:137:PHE:CE1	3:C:288:ILE:CG2	2.99	0.45
1:D:241:GLU:C	1:D:243:MET:HE1	2.36	0.45
1:D:413:VAL:HG12	1:D:417:ILE:CG1	2.44	0.45
4:E:240:TYR:C	4:E:243:PRO:HD2	2.36	0.45
4:E:241:PHE:CG	4:E:450:CYS:SG	3.09	0.45
4:E:451:PHE:HA	4:E:454:ALA:HB3	1.98	0.45
4:E:91:LEU:HD13	4:E:145:PHE:CA	2.47	0.45
1:A:208:GLN:OE1	1:A:435:GLN:CG	2.63	0.45
1:A:226:SER:O	1:A:230:VAL:CG2	2.56	0.45
1:A:300:HIS:O	1:A:302:SER:N	2.46	0.45
1:A:298:THR:CA	1:A:301:ARG:HB3	2.36	0.45
2:B:218:LEU:HD13	2:B:221:ILE:CD1	2.43	0.45
2:B:220:TYR:N	2:B:220:TYR:CD1	2.84	0.45
3:C:141:TRP:CH2	3:C:223:ARG:CB	2.98	0.45
3:C:33:ILE:HD12	3:C:158:ILE:HG12	1.99	0.45
3:C:306:CYS:CA	3:C:309:VAL:HB	2.47	0.45
3:C:462:THR:O	3:C:466:VAL:CG2	2.61	0.45
3:C:471:PHE:CD1	3:C:472:ILE:N	2.84	0.45
1:D:252:SER:OG	1:D:253:LEU:N	2.48	0.45
1:D:257:LEU:C	1:D:260:ILE:H	2.19	0.45
1:D:273:LEU:HD23	1:D:273:LEU:O	2.17	0.45
1:D:33:VAL:HB	1:D:158:ILE:HG21	1.99	0.45
1:D:53:ASN:ND2	1:D:121:PRO:O	2.50	0.45
4:E:156:ASN:HD22	4:E:156:ASN:HA	1.50	0.45
4:E:270:GLN:HA	4:E:273:PRO:HG3	1.97	0.45
4:E:453:ILE:O	4:E:457:LEU:CB	2.64	0.45
3:C:434:LYS:HG2	3:C:435:GLU:N	2.29	0.45
2:B:234:LEU:CA	2:B:237:LEU:HB2	2.46	0.45
2:B:268:ASP:O	2:B:271:PRO:HD2	2.16	0.45
2:B:435:ALA:O	2:B:439:PHE:CB	2.59	0.45
3:C:180:ASP:CG	3:C:219:LEU:HD13	2.37	0.45
1:D:89:ASP:HB2	1:D:149:TRP:CD1	2.51	0.45
1:D:298:THR:O	1:D:301:ARG:HG2	2.17	0.45
1:D:414:PHE:HE1	1:D:418:CYS:HG	1.60	0.45
1:D:37:LEU:HB2	1:D:54:VAL:HG13	1.99	0.45
1:D:92:LEU:HB2	1:D:96:ALA:CA	2.46	0.45
3:C:204:ASP:CG	3:C:205:LYS:H	2.20	0.45
1:A:130:ILE:HD13	1:A:130:ILE:N	2.29	0.45
1:A:259:VAL:HG13	1:A:262:GLU:OE1	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:236:PRO:HB3	1:A:299:HIS:CE1	2.52	0.45
2:B:236:ILE:HA	2:B:239:PHE:CD2	2.52	0.45
2:B:60:TRP:CD1	2:B:61:THR:N	2.85	0.45
1:D:227:PHE:CE1	1:D:231:LEU:HG	2.52	0.45
1:D:37:LEU:HD13	1:D:54:VAL:CG1	2.47	0.45
4:E:99:PHE:CZ	4:E:123:TYR:HE2	2.34	0.45
4:E:28:ILE:HG12	4:E:29:ASP:N	2.32	0.45
3:C:230:ILE:HG12	3:C:231:ASN:H	1.81	0.45
1:D:80:LEU:HD22	1:D:110:LEU:CD2	2.44	0.45
2:B:7:LEU:O	2:B:8:LEU:C	2.55	0.45
1:A:62:ASP:O	1:A:64:ARG:N	2.49	0.45
1:A:431:ILE:CG2	1:A:431:ILE:O	2.63	0.45
1:A:102:ILE:HG22	1:A:102:ILE:O	2.16	0.45
1:A:179:LYS:HB2	1:A:206:ILE:HG22	1.99	0.45
1:A:285:VAL:HG13	1:A:286:ILE:CG1	2.47	0.45
1:A:289:ILE:O	1:A:292:THR:OG1	2.34	0.45
2:B:145:VAL:HG13	2:B:208:THR:HA	1.99	0.45
2:B:38:THR:HG23	2:B:54:VAL:HA	1.99	0.45
2:B:62:ASP:OD1	2:B:65:LEU:N	2.49	0.45
2:B:82:SER:HB3	2:B:83:ASP:H	1.51	0.45
3:C:132:ILE:C	3:C:136:TYR:HB2	2.34	0.45
1:D:146:LEU:N	1:D:146:LEU:CD1	2.80	0.45
4:E:95:VAL:HG22	4:E:123:TYR:CD2	2.52	0.45
1:A:387:LYS:H	1:A:387:LYS:HG2	1.44	0.45
2:B:409:LYS:NZ	3:C:423:ILE:HG22	2.31	0.45
2:B:291:VAL:HG13	2:B:292:ALA:N	2.32	0.45
1:D:32:THR:HB	1:D:59:GLN:O	2.17	0.45
3:C:59:ASP:OD1	3:C:121:LEU:HB2	2.16	0.45
1:A:201:ILE:HG22	1:A:203:TYR:CE1	2.52	0.45
1:A:46:VAL:HG12	1:A:47:ASN:N	2.31	0.45
2:B:91:VAL:N	2:B:147:LYS:O	2.29	0.45
2:B:258:ALA:HB2	3:C:265:LEU:CD2	2.44	0.45
1:D:413:VAL:O	1:D:417:ILE:N	2.45	0.45
1:D:47:ASN:C	1:D:48:GLN:HG2	2.32	0.45
4:E:54:TRP:C	4:E:118:LEU:HD21	2.37	0.45
4:E:44:GLU:HG2	4:E:129:ILE:HB	1.86	0.45
4:E:313:THR:C	4:E:314:HIS:ND1	2.69	0.45
4:E:89:VAL:CG2	4:E:99:PHE:CZ	2.95	0.45
1:A:130:ILE:CG1	1:A:131:ILE:N	2.79	0.44
1:A:256:PHE:CD1	1:A:256:PHE:N	2.85	0.44
1:A:261:VAL:C	1:A:265:PRO:HD3	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:241:LEU:HD21	2:B:251:LEU:CD2	2.43	0.44
3:C:189:GLU:O	3:C:223:ARG:CG	2.35	0.44
3:C:273:LEU:O	3:C:277:ARG:HD2	2.17	0.44
3:C:77:ILE:HD11	3:C:80:LEU:CG	2.47	0.44
1:D:31:ILE:CG2	1:D:158:ILE:HG23	2.37	0.44
1:D:170:PHE:CD1	1:D:170:PHE:C	2.89	0.44
1:D:213:TYR:O	1:D:216:VAL:HG23	2.16	0.44
1:D:252:SER:HB2	4:E:259:LEU:CD1	2.42	0.44
1:D:274:ILE:HG13	1:D:277:TYR:CD2	2.52	0.44
1:D:419:ILE:HD11	1:D:420:ILE:HG23	1.94	0.44
1:D:46:VAL:HA	1:D:272:PRO:CG	2.47	0.44
4:E:28:ILE:CD1	4:E:60:ASN:O	2.51	0.44
4:E:74:ILE:HG12	4:E:76:LEU:O	2.17	0.44
1:A:137:PHE:CD1	1:A:435:GLN:OE1	2.70	0.44
1:A:147:GLY:HA2	1:A:158:ILE:HD13	1.98	0.44
1:A:176:TRP:HD1	1:A:207:MET:HG3	1.82	0.44
1:A:265:PRO:C	1:A:268:SER:HB3	2.36	0.44
1:A:292:THR:O	1:A:293:VAL:C	2.55	0.44
2:B:130:ILE:CG2	2:B:134:TYR:CE2	3.01	0.44
2:B:221:ILE:HA	2:B:224:THR:HB	1.98	0.44
2:B:456:LEU:O	2:B:460:HIS:N	2.38	0.44
3:C:14:VAL:HB	3:C:86:LEU:HD21	1.99	0.44
3:C:271:LEU:HD23	3:C:271:LEU:O	2.16	0.44
3:C:77:ILE:HD11	3:C:80:LEU:HD22	1.99	0.44
1:D:250:LEU:HD23	1:D:253:LEU:CD1	2.47	0.44
1:D:266:SER:O	1:D:270:ALA:CB	2.65	0.44
1:D:277:TYR:HD1	1:D:280:PHE:CE2	2.35	0.44
4:E:269:ALA:O	4:E:273:PRO:HD3	2.17	0.44
4:E:293:SER:HA	4:E:296:ILE:HG23	1.99	0.44
1:D:432:GLU:HA	1:D:435:GLN:HB3	1.99	0.44
1:D:397:GLU:HG3	1:D:401:TYR:HE2	1.82	0.44
1:A:134:HIS:CD2	1:A:207:MET:CE	3.01	0.44
1:A:416:LEU:CA	1:A:419:ILE:HG22	2.47	0.44
2:B:117:SER:CB	2:B:119:HIS:NE2	2.80	0.44
2:B:130:ILE:HD12	2:B:134:TYR:HE2	1.78	0.44
2:B:197:TRP:HB3	2:B:204:TYR:HD1	1.82	0.44
2:B:432:ALA:O	2:B:436:ASP:OD2	2.36	0.44
3:C:35:LEU:CD2	3:C:215:VAL:HG21	2.44	0.44
3:C:273:LEU:HD23	3:C:276:GLN:HG3	1.96	0.44
3:C:42:LEU:HD13	3:C:190:TRP:CZ2	2.44	0.44
3:C:77:ILE:HD11	3:C:80:LEU:CB	2.44	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:225:PHE:C	1:D:225:PHE:CD1	2.90	0.44
1:D:419:ILE:O	1:D:423:VAL:N	2.51	0.44
4:E:58:GLN:HA	4:E:59:TRP:CE3	2.53	0.44
1:A:66:ARG:HA	1:A:113:THR:O	2.18	0.44
1:A:9:ALA:O	1:A:13:GLU:HG3	2.16	0.44
1:A:138:ASP:O	1:A:139:GLN:CD	2.55	0.44
1:A:227:PHE:C	1:A:230:VAL:HB	2.36	0.44
1:A:413:VAL:HG12	1:A:417:ILE:CG1	2.47	0.44
1:A:59:GLN:HE22	1:A:117:MET:CB	2.31	0.44
2:B:181:THR:O	2:B:181:THR:CG2	2.63	0.44
3:C:42:LEU:O	3:C:185:THR:HB	2.16	0.44
2:B:129:THR:O	2:B:129:THR:CG2	2.57	0.44
2:B:235:ALA:CB	2:B:239:PHE:CE2	2.98	0.44
2:B:245:ALA:HB1	3:C:320:HIS:CD2	2.52	0.44
2:B:434:VAL:HG12	2:B:438:LEU:HD12	1.99	0.44
4:E:71:TYR:CD1	4:E:111:ASN:CG	2.91	0.44
1:D:114:GLY:O	1:D:115:LYS:C	2.56	0.44
1:D:32:THR:CB	1:D:59:GLN:O	2.66	0.44
1:A:185:LYS:HB3	1:A:185:LYS:HE2	1.75	0.44
1:A:72:TYR:C	1:A:72:TYR:HD1	2.18	0.44
1:D:72:TYR:O	1:D:72:TYR:CD1	2.71	0.44
1:A:69:PRO:HA	1:A:73:GLY:HA3	2.00	0.44
1:A:286:ILE:C	1:A:289:ILE:HB	2.37	0.44
2:B:241:LEU:HD13	3:C:314:PHE:CD1	2.53	0.44
3:C:37:LEU:HD11	3:C:148:PHE:CD1	2.52	0.44
1:D:212:LEU:O	1:D:216:VAL:HG22	2.17	0.44
4:E:128:PRO:O	4:E:129:ILE:CG1	2.60	0.44
4:E:284:LYS:C	4:E:287:ILE:HG23	2.37	0.44
4:E:311:PRO:CD	4:E:440:VAL:HG22	2.47	0.44
1:D:57:ARG:CD	1:D:161:GLU:OE1	2.66	0.44
1:D:60:TRP:CE2	1:D:86:TRP:CH2	3.05	0.44
1:A:62:ASP:C	1:A:64:ARG:N	2.71	0.44
1:D:432:GLU:C	1:D:436:GLU:OE2	2.56	0.44
2:B:289:ILE:HG22	2:B:293:PHE:CE2	2.53	0.44
2:B:75:ILE:HD12	2:B:78:LEU:HB2	1.98	0.44
1:D:305:THR:HG21	1:D:401:TYR:N	2.33	0.44
1:D:302:SER:CB	1:D:400:LYS:HG2	2.48	0.44
4:E:66:TRP:CB	4:E:70:GLU:HB3	2.47	0.44
1:A:146:LEU:HD22	1:A:203:TYR:OH	2.17	0.44
1:A:221:PRO:HB2	1:A:224:LEU:HD23	1.98	0.44
1:A:279:LEU:HD13	1:A:282:MET:HG2	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:415:MET:O	1:A:419:ILE:N	2.50	0.44
1:A:92:LEU:HB2	1:A:95:ASN:HB2	1.98	0.44
2:B:236:ILE:O	2:B:240:TYR:CB	2.62	0.44
2:B:236:ILE:O	2:B:240:TYR:N	2.51	0.44
2:B:241:LEU:HD13	3:C:314:PHE:CG	2.52	0.44
2:B:265:LEU:HA	2:B:268:ASP:OD2	2.17	0.44
2:B:311:THR:CG2	2:B:312:HIS:N	2.81	0.44
2:B:90:ILE:HA	2:B:147:LYS:O	2.17	0.44
3:C:13:ILE:O	3:C:17:TYR:CB	2.57	0.44
3:C:141:TRP:CB	3:C:221:ILE:O	2.66	0.44
3:C:245:LEU:HB3	3:C:249:LEU:CD1	2.46	0.44
3:C:7:LEU:HD12	3:C:70:ASN:HB2	1.98	0.44
1:D:178:MET:SD	1:D:207:MET:CG	3.06	0.44
1:D:221:PRO:O	1:D:225:PHE:CB	2.66	0.44
1:D:264:ILE:HB	1:D:265:PRO:HD2	1.99	0.44
4:E:21:ALA:O	4:E:22:LYS:C	2.56	0.44
4:E:279:VAL:CB	4:E:280:PRO:CD	2.96	0.44
4:E:307:SER:C	4:E:314:HIS:O	2.56	0.44
4:E:472:ASN:OD1	4:E:476:GLU:OE2	2.36	0.44
4:E:59:TRP:CZ2	4:E:84:LEU:CD2	3.01	0.44
3:C:66:ARG:NH1	3:C:66:ARG:CG	2.69	0.44
1:A:155:LYS:HA	1:A:155:LYS:HD3	1.66	0.44
1:A:223:LEU:HA	1:A:226:SER:CB	2.48	0.44
1:A:82:SER:O	1:A:83:ASP:C	2.56	0.44
2:B:100:PHE:HD2	2:B:103:THR:HB	1.78	0.44
2:B:131:LYS:C	2:B:133:MET:H	2.20	0.44
2:B:226:VAL:C	2:B:230:LEU:HG	2.37	0.44
2:B:247:GLU:O	2:B:249:MET:CG	2.66	0.44
2:B:137:PHE:C	2:B:464:PRO:O	2.56	0.44
3:C:132:ILE:HG22	3:C:133:ASN:O	2.17	0.44
3:C:162:LEU:CB	3:C:199:LYS:HB3	2.36	0.44
1:D:132:VAL:O	1:D:274:ILE:HG23	2.18	0.44
1:D:225:PHE:HD1	1:D:225:PHE:C	2.21	0.44
1:D:236:PRO:CB	1:D:299:HIS:HE2	2.21	0.44
1:D:413:VAL:HA	1:D:416:LEU:HB2	1.98	0.44
4:E:109:VAL:O	4:E:110:TYR:O	2.35	0.44
4:E:123:TYR:N	4:E:123:TYR:HD1	2.15	0.44
4:E:299:ASN:CA	4:E:302:ILE:HB	2.47	0.44
1:A:137:PHE:CG	1:A:435:GLN:CD	2.91	0.44
2:B:136:PRO:HB3	2:B:280:ILE:CD1	2.42	0.44
2:B:37:LEU:CD2	2:B:179:ALA:C	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:192:PRO:CB	2:B:210:TYR:HB2	2.48	0.44
2:B:217:PRO:CB	2:B:219:PHE:CE2	3.01	0.44
2:B:38:THR:HG1	2:B:39:SER:H	1.63	0.44
3:C:22:ARG:HG2	3:C:153:TYR:CE2	2.52	0.44
3:C:296:MET:HE3	3:C:296:MET:CA	2.48	0.44
3:C:30:VAL:HG11	3:C:159:SER:CA	2.47	0.44
1:D:277:TYR:HA	1:D:280:PHE:CZ	2.52	0.44
4:E:144:VAL:HG23	4:E:144:VAL:O	2.18	0.44
4:E:182:GLU:HA	4:E:182:GLU:OE1	2.18	0.44
4:E:199:THR:O	4:E:200:LYS:HB3	2.18	0.44
4:E:215:GLN:CG	4:E:216:ARG:N	2.81	0.44
4:E:290:MET:O	4:E:294:LEU:N	2.49	0.44
4:E:38:ASN:ND2	4:E:40:ILE:HG12	2.33	0.44
4:E:58:GLN:HA	4:E:59:TRP:HE3	1.82	0.44
4:E:283:GLY:O	4:E:287:ILE:CG2	2.59	0.44
1:D:67:TRP:CE3	1:D:67:TRP:HA	2.52	0.44
4:E:312:ASN:H	4:E:440:VAL:HG11	1.82	0.44
4:E:416:VAL:O	4:E:420:ASN:N	2.51	0.44
4:E:100:GLU:CG	4:E:122:ILE:O	2.66	0.44
1:A:249:VAL:HG13	1:A:253:LEU:CD2	2.42	0.43
1:A:45:GLU:HB2	1:A:209:ARG:HH12	1.78	0.43
2:B:46:LYS:CA	2:B:278:PRO:HD2	2.46	0.43
2:B:298:SER:CA	2:B:301:VAL:HG22	2.48	0.43
3:C:154:ASN:HA	3:C:211:ASN:HB2	1.99	0.43
3:C:9:ASN:O	3:C:12:LEU:CG	2.55	0.43
1:D:130:ILE:CD1	1:D:131:ILE:N	2.80	0.43
1:D:35:LEU:CD2	1:D:164:ARG:NH1	2.64	0.43
1:D:222:CYS:HA	1:D:225:PHE:CE1	2.53	0.43
3:C:259:THR:CB	1:D:244:THR:OG1	2.66	0.43
1:D:260:ILE:O	1:D:264:ILE:HG13	2.18	0.43
1:D:283:ILE:O	1:D:287:SER:N	2.51	0.43
1:D:38:ILE:O	1:D:39:GLN:CG	2.66	0.43
4:E:20:PRO:HB3	4:E:61:ASP:OD2	2.15	0.43
4:E:6:LEU:HD21	4:E:67:ASN:OD1	2.18	0.43
4:E:74:ILE:C	4:E:76:LEU:N	2.72	0.43
4:E:74:ILE:O	4:E:74:ILE:CG1	2.65	0.43
1:D:85:VAL:CG2	1:D:108:LEU:CD1	2.96	0.43
1:A:418:CYS:O	1:A:422:THR:CB	2.66	0.43
1:A:92:LEU:HD23	1:A:92:LEU:H	1.83	0.43
1:D:130:ILE:O	1:D:131:ILE:HG12	2.18	0.43
1:D:146:LEU:HD13	1:D:203:TYR:CD1	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:266:ALA:HB2	1:D:251:LEU:HD13	1.99	0.43
1:D:419:ILE:CD1	1:D:420:ILE:CG2	2.92	0.43
1:D:43:VAL:HG12	1:D:44:ASP:N	2.33	0.43
1:D:49:ILE:CG2	1:D:125:LYS:HE3	2.48	0.43
1:D:89:ASP:O	1:D:149:TRP:CB	2.55	0.43
4:E:288:PHE:O	4:E:292:VAL:HG23	2.19	0.43
1:D:67:TRP:CG	1:D:71:ASP:HB3	2.53	0.43
3:C:233:ILE:N	3:C:233:ILE:CD1	2.80	0.43
2:B:10:VAL:HG13	2:B:11:LEU:CD2	2.44	0.43
1:A:68:ASN:CG	1:A:69:PRO:HD2	2.38	0.43
1:A:303:PRO:CB	1:A:400:LYS:HD3	2.31	0.43
1:A:302:SER:OG	1:A:400:LYS:O	2.34	0.43
1:A:405:VAL:O	1:A:409:ILE:HG13	2.19	0.43
2:B:87:GLN:CD	2:B:104:LEU:HD11	2.38	0.43
2:B:135:PHE:HB2	2:B:279:ILE:CB	2.47	0.43
2:B:232:SER:HA	2:B:235:ALA:CB	2.42	0.43
3:C:130:CYS:O	3:C:132:ILE:HD13	2.18	0.43
3:C:15:ASN:HD22	3:C:15:ASN:C	2.22	0.43
3:C:74:TYR:O	3:C:78:SER:HA	2.18	0.43
3:C:7:LEU:HD23	3:C:10:ASP:CB	2.37	0.43
1:D:130:ILE:O	1:D:131:ILE:CG1	2.66	0.43
1:D:55:ARG:C	1:D:56:LEU:HD23	2.39	0.43
1:D:92:LEU:HD13	1:D:146:LEU:CD2	2.47	0.43
1:D:99:ASP:O	1:D:124:PHE:HB2	2.18	0.43
4:E:105:ALA:HB3	4:E:117:TRP:HE1	1.83	0.43
4:E:48:ALA:HA	4:E:126:THR:HA	2.01	0.43
4:E:236:VAL:O	4:E:240:TYR:N	2.50	0.43
4:E:305:ASN:HA	4:E:308:LEU:CB	2.48	0.43
2:B:68:ASP:O	2:B:72:TYR:CB	2.62	0.43
1:A:422:THR:HA	1:A:425:VAL:CG1	2.48	0.43
1:D:219:ILE:HD12	1:D:219:ILE:O	2.17	0.43
1:A:41:ILE:HG21	1:A:123:ILE:HD11	2.00	0.43
2:B:197:TRP:HD1	2:B:205:GLU:N	2.17	0.43
2:B:227:PRO:CA	2:B:231:ILE:HG12	2.48	0.43
3:C:148:PHE:N	3:C:148:PHE:HD1	2.17	0.43
3:C:64:ASP:HB3	3:C:67:LEU:HB3	2.01	0.43
3:C:69:TRP:HB3	3:C:73:GLU:HB3	1.98	0.43
1:D:290:ILE:HG13	1:D:291:VAL:N	2.33	0.43
1:D:33:VAL:HG22	1:D:34:GLY:N	2.32	0.43
1:D:89:ASP:CB	1:D:149:TRP:CD1	3.00	0.43
4:E:107:VAL:HG12	4:E:108:LEU:N	2.27	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:246:ALA:HA	4:E:250:LYS:HZ2	1.83	0.43
4:E:202:ASP:O	4:E:203:ILE:O	2.36	0.43
1:A:45:GLU:CD	1:A:134:HIS:ND1	2.71	0.43
1:A:57:ARG:CZ	1:A:161:GLU:CD	2.87	0.43
1:A:251:LEU:CD1	4:E:256:SER:O	2.67	0.43
1:A:279:LEU:HD13	1:A:282:MET:CG	2.49	0.43
1:A:398:GLU:C	1:A:400:LYS:N	2.70	0.43
1:A:47:ASN:O	1:A:49:ILE:HG13	2.19	0.43
2:B:106:VAL:CG1	2:B:107:ASN:N	2.81	0.43
2:B:79:SER:O	2:B:80:ILE:HG13	2.18	0.43
2:B:88:PRO:CB	2:B:90:ILE:HG13	2.43	0.43
3:C:211:ASN:O	3:C:212:TYR:C	2.56	0.43
3:C:219:LEU:CD1	3:C:221:ILE:HG22	2.48	0.43
3:C:223:ARG:O	3:C:224:LYS:CG	2.66	0.43
3:C:224:LYS:NZ	3:C:291:TYR:HE2	2.17	0.43
3:C:455:ARG:O	3:C:459:PHE:CD1	2.62	0.43
1:D:209:ARG:C	1:D:210:ILE:HG13	2.38	0.43
1:D:254:THR:OG1	1:D:258:LEU:HD13	2.18	0.43
4:E:173:ASP:OD1	4:E:173:ASP:O	2.37	0.43
4:E:261:GLN:NE2	4:E:265:LEU:HD21	2.34	0.43
1:A:110:LEU:HD12	1:A:111:ASP:N	2.34	0.43
1:A:160:PRO:HG3	1:A:185:LYS:CE	2.47	0.43
1:A:133:THR:O	1:A:136:PRO:CG	2.64	0.43
1:A:201:ILE:HG21	1:A:203:TYR:CE1	2.44	0.43
1:A:250:LEU:HD11	1:A:296:ILE:CG2	2.37	0.43
1:A:297:ASN:O	1:A:300:HIS:HB2	2.19	0.43
1:A:397:GLU:HA	1:A:400:LYS:CG	2.49	0.43
1:A:234:TYR:CD1	1:A:410:LEU:HD21	2.54	0.43
1:A:34:GLY:O	1:A:57:ARG:HG2	2.18	0.43
2:B:463:PRO:HB2	2:B:464:PRO:CD	2.45	0.43
3:C:85:GLU:N	3:C:85:GLU:OE1	2.30	0.43
1:D:220:ILE:N	1:D:221:PRO:CD	2.81	0.43
1:D:264:ILE:HA	1:D:267:THR:CG2	2.48	0.43
1:D:95:ASN:HD22	1:D:127:TYR:C	2.21	0.43
4:E:159:LEU:HD12	4:E:192:LYS:CA	2.48	0.43
4:E:250:LYS:HA	4:E:253:LEU:CB	2.31	0.43
4:E:44:GLU:HB3	4:E:280:PRO:CB	2.44	0.43
2:B:424:LEU:O	2:B:427:ASP:HB3	2.18	0.43
3:C:230:ILE:CG1	3:C:231:ASN:ND2	2.67	0.43
1:D:401:TYR:HD1	1:D:401:TYR:O	2.00	0.43
3:C:204:ASP:H	3:C:207:PRO:CG	2.27	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:384:GLU:HA	1:D:384:GLU:OE1	2.19	0.43
2:B:163:ASP:CB	2:B:193:SER:OG	2.66	0.43
1:D:93:TYR:CD1	1:D:93:TYR:N	2.86	0.43
1:A:37:LEU:H	1:A:164:ARG:NH2	2.14	0.43
1:A:405:VAL:HG23	1:A:405:VAL:O	2.19	0.43
2:B:86:TRP:HD1	2:B:151:TYR:CE2	2.37	0.43
2:B:32:ARG:CG	2:B:59:ALA:O	2.66	0.43
3:C:180:ASP:CA	3:C:195:LYS:HG2	2.49	0.43
3:C:271:LEU:C	3:C:271:LEU:CD2	2.87	0.43
3:C:29:GLU:O	3:C:30:VAL:CG2	2.66	0.43
3:C:60:HIS:CE1	3:C:160:MET:CE	3.01	0.43
4:E:9:LYS:HG3	4:E:10:LEU:N	2.34	0.43
4:E:193:ASN:O	4:E:206:GLN:HG2	2.19	0.43
4:E:26:HIS:O	4:E:27:VAL:HG22	2.18	0.43
4:E:436:ASN:O	4:E:437:GLU:C	2.57	0.43
1:D:17:LYS:HE3	1:D:84:ASP:HA	1.99	0.43
2:B:286:PHE:CE1	2:B:287:ILE:HG23	2.54	0.43
1:A:178:MET:HA	1:A:207:MET:CB	2.49	0.43
1:A:223:LEU:HA	1:A:226:SER:HB2	2.00	0.43
1:A:287:SER:C	1:A:289:ILE:N	2.71	0.43
2:B:301:VAL:O	2:B:305:HIS:N	2.49	0.43
3:C:262:CYS:C	1:D:251:LEU:HD11	2.39	0.43
3:C:316:THR:HG21	3:C:447:ASN:CA	2.48	0.43
3:C:465:MET:O	3:C:465:MET:HG2	2.18	0.43
3:C:51:THR:O	3:C:52:LEU:HD13	2.18	0.43
3:C:8:ILE:HD11	3:C:69:TRP:CZ3	2.46	0.43
3:C:95:GLN:CD	3:C:147:LYS:HB3	2.38	0.43
2:B:53:SER:CB	3:C:99:ASP:OD1	2.65	0.43
1:D:134:HIS:CE1	1:D:209:ARG:CD	2.75	0.43
1:D:136:PRO:HG3	1:D:274:ILE:HG12	2.00	0.43
1:D:229:THR:O	1:D:232:VAL:CB	2.51	0.43
4:E:138:TRP:CZ2	4:E:215:GLN:CD	2.92	0.43
4:E:242:LEU:HG	4:E:243:PRO:HD3	2.00	0.43
4:E:255:ILE:HD12	4:E:304:LEU:HD22	2.00	0.43
4:E:36:LEU:CD2	4:E:51:THR:CG2	2.85	0.43
4:E:287:ILE:O	4:E:291:PHE:HD2	2.01	0.43
1:D:60:TRP:O	1:D:116:ILE:CD1	2.66	0.43
1:A:374:SER:N	1:A:377:GLU:CD	2.72	0.43
1:D:381:TYR:O	1:D:385:HIS:HB2	2.18	0.43
1:D:435:GLN:C	1:D:437:GLY:N	2.71	0.43
1:D:400:LYS:O	1:D:402:VAL:HG23	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:76:LYS:HE3	1:A:112:TYR:OH	2.19	0.43
1:A:93:TYR:HD2	1:A:145:LYS:HD3	1.83	0.43
1:A:278:MET:CE	1:A:282:MET:CE	2.96	0.43
1:A:301:ARG:NH1	1:A:301:ARG:HG2	2.32	0.43
2:B:145:VAL:HG11	2:B:206:ASP:OD2	2.18	0.43
2:B:187:SER:HB2	2:B:214:GLN:HG3	2.00	0.43
2:B:220:TYR:C	2:B:222:VAL:N	2.72	0.43
3:C:81:ARG:HH12	3:C:111:LEU:HB2	1.83	0.43
3:C:12:LEU:HD12	3:C:16:LYS:CE	2.47	0.43
3:C:241:PHE:C	3:C:245:LEU:HG	2.34	0.43
1:D:244:THR:O	1:D:247:ILE:HB	2.19	0.43
1:D:274:ILE:HB	1:D:276:LYS:HD3	2.01	0.43
1:D:250:LEU:HD21	1:D:292:THR:OG1	2.19	0.43
1:D:411:LEU:HA	1:D:411:LEU:HD23	1.69	0.43
4:E:91:LEU:HD13	4:E:145:PHE:N	2.34	0.43
4:E:240:TYR:CD2	4:E:453:ILE:HG21	2.54	0.43
1:D:69:PRO:HA	1:D:73:GLY:HA3	2.00	0.43
4:E:463:LEU:C	4:E:463:LEU:HD12	2.38	0.43
1:A:135:PHE:CB	1:A:272:PRO:O	2.67	0.43
1:A:306:HIS:C	1:A:306:HIS:CD2	2.93	0.43
1:A:432:GLU:HG3	1:A:436:GLU:HG3	2.00	0.43
3:C:91:ASP:OD2	3:C:152:ASN:CB	2.67	0.43
3:C:194:HIS:CG	3:C:195:LYS:N	2.87	0.43
3:C:211:ASN:ND2	3:C:212:TYR:CE2	2.87	0.43
3:C:191:GLU:HG3	3:C:222:ARG:HB3	2.00	0.43
3:C:465:MET:O	3:C:469:THR:CB	2.67	0.43
3:C:472:ILE:CB	3:C:475:MET:SD	2.99	0.43
3:C:8:ILE:N	3:C:73:GLU:OE2	2.52	0.43
1:D:144:MET:HE1	1:D:205:PHE:CZ	2.53	0.43
1:D:37:LEU:N	1:D:164:ARG:NH2	2.56	0.43
1:D:301:ARG:HH21	1:D:405:VAL:HB	1.84	0.43
4:E:215:GLN:HG3	4:E:216:ARG:N	2.34	0.43
4:E:449:ALA:HA	4:E:452:TRP:HB2	2.00	0.43
1:A:379:VAL:HA	1:A:382:ILE:CG1	2.49	0.43
1:D:7:LEU:O	1:D:10:ASN:ND2	2.52	0.43
4:E:122:ILE:H	4:E:122:ILE:CD1	2.16	0.43
1:A:46:VAL:CG2	1:A:270:ALA:C	2.87	0.42
1:A:406:ILE:HG23	1:A:409:ILE:CD1	2.49	0.42
2:B:107:ASN:HD22	3:C:152:ASN:CG	2.22	0.42
2:B:33:VAL:HG11	2:B:158:LEU:CD1	2.46	0.42
2:B:466:ASN:N	2:B:467:PRO:HD2	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:91:VAL:HG22	2:B:92:LEU:N	2.33	0.42
3:C:4:GLU:CG	3:C:5:GLU:N	2.82	0.42
3:C:82:LEU:O	3:C:87:ILE:CD1	2.66	0.42
1:D:189:TYR:HA	1:D:197:PRO:HG2	2.01	0.42
1:D:264:ILE:O	1:D:267:THR:HG23	2.19	0.42
4:E:49:LEU:C	4:E:49:LEU:HD12	2.39	0.42
4:E:59:TRP:O	4:E:60:ASN:ND2	2.50	0.42
1:D:305:THR:OG1	1:D:401:TYR:CD2	2.67	0.42
1:A:129:GLU:CD	1:A:140:GLN:CG	2.88	0.42
1:A:158:ILE:CG2	1:A:158:ILE:O	2.65	0.42
1:A:243:MET:CB	1:A:306:HIS:ND1	2.82	0.42
1:A:56:LEU:CD1	1:A:90:LEU:CD1	2.96	0.42
1:A:106:THR:CG2	2:B:150:THR:HG23	2.49	0.42
2:B:227:PRO:HA	2:B:231:ILE:HG12	2.01	0.42
2:B:256:LEU:O	2:B:257:LEU:C	2.56	0.42
2:B:298:SER:HA	2:B:301:VAL:HG21	2.01	0.42
1:D:135:PHE:O	1:D:210:ILE:HD11	2.18	0.42
1:D:145:LYS:C	1:D:146:LEU:CD1	2.66	0.42
1:D:33:VAL:CG1	1:D:158:ILE:HG21	2.50	0.42
1:D:175:GLU:O	1:D:209:ARG:HG3	2.19	0.42
4:E:136:PHE:HA	4:E:138:TRP:CH2	2.54	0.42
4:E:214:ILE:HD12	4:E:215:GLN:N	2.34	0.42
4:E:456:LEU:C	4:E:456:LEU:HD13	2.40	0.42
1:A:76:LYS:CG	1:A:112:TYR:CE2	3.01	0.42
1:A:145:LYS:NZ	1:A:202:THR:HG21	2.31	0.42
1:A:276:LYS:O	1:A:280:PHE:CE1	2.72	0.42
2:B:100:PHE:CB	2:B:103:THR:HB	2.47	0.42
2:B:117:SER:HB2	2:B:119:HIS:NE2	2.34	0.42
2:B:106:VAL:HG12	2:B:118:TRP:NE1	2.34	0.42
2:B:438:LEU:CD2	2:B:441:TYR:CD2	3.02	0.42
3:C:30:VAL:HG23	3:C:156:ASN:HA	2.02	0.42
3:C:29:GLU:O	3:C:30:VAL:CB	2.68	0.42
1:D:294:VAL:O	1:D:298:THR:OG1	2.31	0.42
1:D:419:ILE:HD12	1:D:420:ILE:H	1.78	0.42
4:E:1:ASN:CG	4:E:68:THR:HB	2.39	0.42
4:E:209:ILE:CG1	4:E:211:PHE:HE1	2.28	0.42
4:E:240:TYR:CG	4:E:453:ILE:HG12	2.53	0.42
4:E:417:GLU:O	4:E:421:PHE:CD2	2.73	0.42
1:A:8:VAL:HG23	1:A:9:ALA:N	2.34	0.42
1:A:45:GLU:HG2	1:A:272:PRO:HG2	2.02	0.42
2:B:138:ASP:O	2:B:139:TRP:O	2.38	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:61:THR:CG2	2:B:63:TYR:HD1	2.32	0.42
3:C:50:GLU:HA	3:C:132:ILE:CG1	2.48	0.42
3:C:185:THR:HG23	3:C:187:ASN:H	1.83	0.42
3:C:471:PHE:O	3:C:475:MET:N	2.34	0.42
1:D:130:ILE:O	1:D:134:HIS:CB	2.66	0.42
1:D:130:ILE:CG1	1:D:131:ILE:N	2.82	0.42
1:D:31:ILE:HG21	1:D:158:ILE:HG12	2.00	0.42
1:D:187:TRP:CZ2	1:D:196:THR:HA	2.42	0.42
1:D:240:GLY:O	1:D:242:LYS:N	2.53	0.42
4:E:441:LEU:CD1	4:E:441:LEU:C	2.88	0.42
2:B:15:TYR:C	2:B:15:TYR:CD1	2.93	0.42
2:B:23:GLN:O	2:B:23:GLN:HG2	2.19	0.42
1:D:426:PHE:HE1	1:D:430:LEU:CD1	2.32	0.42
1:A:28:PHE:CE1	1:A:154:THR:HA	2.54	0.42
1:A:100:PHE:CB	1:A:103:VAL:HG21	2.50	0.42
1:A:209:ARG:HG2	1:A:210:ILE:H	1.80	0.42
2:B:160:HIS:CD2	2:B:209:PHE:HE1	2.37	0.42
2:B:234:LEU:O	2:B:238:VAL:N	2.49	0.42
3:C:148:PHE:C	3:C:149:THR:HG22	2.40	0.42
3:C:19:LYS:NZ	3:C:88:TRP:HA	2.34	0.42
3:C:252:GLU:O	3:C:253:SER:HB2	2.19	0.42
3:C:482:PRO:HG2	3:C:483:ALA:N	2.34	0.42
1:D:233:PHE:CB	1:D:410:LEU:HB3	2.49	0.42
4:E:162:GLU:HB3	4:E:190:ALA:O	2.18	0.42
4:E:238:LEU:O	4:E:242:LEU:HD23	2.17	0.42
4:E:277:LEU:H	4:E:277:LEU:HG	1.61	0.42
4:E:55:ILE:HG23	4:E:119:PRO:CD	2.49	0.42
1:D:20:ARG:O	1:D:22:VAL:N	2.49	0.42
1:A:67:TRP:CE3	1:A:67:TRP:HA	2.54	0.42
3:C:43:ILE:H	3:C:43:ILE:CD1	2.25	0.42
4:E:423:ALA:C	4:E:425:SER:N	2.72	0.42
1:A:304:SER:CB	1:A:397:GLU:HG2	2.29	0.42
2:B:100:PHE:CG	2:B:103:THR:HB	2.55	0.42
2:B:28:LYS:HG2	2:B:155:GLU:HA	2.01	0.42
2:B:81:PRO:O	2:B:82:SER:O	2.37	0.42
2:B:92:LEU:HG	2:B:96:ASN:HD22	1.85	0.42
3:C:470:ILE:HD13	3:C:470:ILE:HA	1.89	0.42
1:D:146:LEU:O	1:D:201:ILE:N	2.40	0.42
1:D:254:THR:O	1:D:258:LEU:CD1	2.68	0.42
1:D:48:GLN:O	1:D:48:GLN:HG3	2.20	0.42
4:E:116:TYR:C	4:E:116:TYR:HD1	2.22	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:209:ILE:CG1	4:E:211:PHE:CE1	3.03	0.42
4:E:30:VAL:CG2	4:E:85:TRP:CZ3	3.03	0.42
1:A:382:ILE:O	1:A:386:MET:HE2	2.18	0.42
1:D:303:PRO:CD	1:D:400:LYS:HD2	2.50	0.42
1:A:170:PHE:CE1	1:A:176:TRP:NE1	2.82	0.42
1:A:39:GLN:C	1:A:40:LEU:HD23	2.39	0.42
2:B:298:SER:HA	2:B:301:VAL:HG22	2.02	0.42
2:B:440:LEU:C	2:B:443:PHE:H	2.22	0.42
2:B:38:THR:CG2	2:B:55:PHE:HE1	2.32	0.42
3:C:148:PHE:CB	3:C:215:VAL:HG23	2.37	0.42
4:E:116:TYR:C	4:E:116:TYR:CD1	2.92	0.42
4:E:173:ASP:CG	4:E:185:ILE:CD1	2.86	0.42
2:B:409:LYS:HE2	3:C:423:ILE:CG2	2.50	0.42
1:D:3:HIS:HB3	1:D:7:LEU:CG	2.50	0.42
1:A:102:ILE:HB	1:A:121:PRO:O	2.20	0.42
1:A:133:THR:HG21	1:A:140:GLN:OE1	2.18	0.42
1:A:139:GLN:HB2	1:A:207:MET:C	2.36	0.42
1:A:190:TYR:C	1:A:192:CYS:N	2.71	0.42
2:B:128:CYS:SG	2:B:144:MET:CG	3.07	0.42
2:B:152:ASP:HA	2:B:203:SER:HB2	2.01	0.42
2:B:301:VAL:HG23	2:B:302:LEU:N	2.35	0.42
3:C:30:VAL:CG1	3:C:159:SER:CB	2.88	0.42
3:C:17:TYR:OH	3:C:19:LYS:HA	2.19	0.42
1:D:53:ASN:CB	1:D:123:ILE:HG12	2.35	0.42
1:D:40:LEU:HD11	1:D:50:VAL:CG1	2.50	0.42
4:E:123:TYR:H	4:E:123:TYR:HD1	1.68	0.42
4:E:138:TRP:HH2	4:E:215:GLN:NE2	2.11	0.42
4:E:91:LEU:HA	4:E:145:PHE:CB	2.50	0.42
4:E:265:LEU:CA	4:E:268:ILE:HG23	2.50	0.42
1:A:65:LEU:HB3	1:A:110:LEU:CD2	2.49	0.42
1:A:2:GLU:C	1:A:4:GLU:N	2.73	0.42
2:B:75:ILE:HG22	3:C:27:ASN:CB	2.50	0.42
1:A:105:MET:N	1:A:105:MET:SD	2.93	0.42
4:E:202:ASP:C	4:E:203:ILE:HG13	2.40	0.42
1:A:170:PHE:CE1	1:A:176:TRP:CD1	3.08	0.42
1:A:245:LEU:HD12	1:A:245:LEU:HA	1.76	0.42
1:A:291:VAL:CG1	1:A:295:VAL:HG21	2.40	0.42
2:B:16:ASN:HB3	2:B:19:VAL:HB	2.02	0.42
2:B:460:HIS:O	2:B:464:PRO:HD2	2.20	0.42
2:B:81:PRO:CD	3:C:20:HIS:CE1	3.00	0.42
3:C:48:THR:OG1	3:C:286:PRO:N	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:7:LEU:HD13	3:C:73:GLU:CG	2.50	0.42
1:D:92:LEU:CD1	1:D:146:LEU:HD21	2.50	0.42
1:D:247:ILE:HD13	1:D:247:ILE:HA	1.87	0.42
1:D:275:GLY:C	1:D:277:TYR:N	2.73	0.42
1:D:290:ILE:CG1	1:D:291:VAL:N	2.83	0.42
1:D:36:GLN:H	1:D:54:VAL:HG12	1.84	0.42
4:E:270:GLN:O	4:E:273:PRO:HG2	2.19	0.42
4:E:30:VAL:HG22	4:E:59:TRP:HB3	2.01	0.42
4:E:61:ASP:OD1	4:E:63:ARG:HB2	2.19	0.42
1:D:109:LEU:HB2	1:D:117:MET:H	1.85	0.42
3:C:43:ILE:N	3:C:43:ILE:CD1	2.80	0.42
1:A:278:MET:HE1	1:A:282:MET:CE	2.50	0.42
1:A:35:LEU:HD21	1:A:37:LEU:CG	2.49	0.42
1:A:406:ILE:HA	1:A:409:ILE:CG1	2.50	0.42
2:B:459:SER:O	2:B:463:PRO:CB	2.68	0.42
2:B:89:ASP:OD2	2:B:149:TYR:N	2.50	0.42
3:C:191:GLU:HG2	3:C:222:ARG:C	2.40	0.42
3:C:249:LEU:HB3	3:C:256:LYS:NZ	2.35	0.42
3:C:279:PRO:O	3:C:282:ALA:CB	2.62	0.42
3:C:60:HIS:NE2	3:C:92:ILE:CG2	2.78	0.42
3:C:3:GLU:CD	3:C:7:LEU:HB2	2.40	0.42
3:C:83:ARG:NH1	3:C:109:ASN:HB2	2.35	0.42
1:D:227:PHE:O	1:D:227:PHE:CD1	2.73	0.42
1:D:35:LEU:HD12	1:D:54:VAL:CB	2.50	0.42
1:D:40:LEU:CD1	1:D:50:VAL:HG13	2.50	0.42
4:E:212:LEU:N	4:E:212:LEU:CD1	2.82	0.42
4:E:452:TRP:O	4:E:456:LEU:HB3	2.19	0.42
1:D:75:ILE:HG13	1:D:78:ILE:HG23	2.02	0.42
3:C:98:ASN:C	3:C:100:GLY:N	2.73	0.42
1:A:133:THR:C	1:A:136:PRO:CG	2.88	0.41
1:A:152:ASP:H	4:E:78:ARG:NH2	2.17	0.41
1:A:157:SER:HB2	1:A:199:LEU:HD12	2.00	0.41
1:A:36:GLN:O	1:A:36:GLN:OE1	2.38	0.41
1:A:85:VAL:CG1	1:A:86:TRP:N	2.83	0.41
2:B:118:TRP:CA	2:B:119:HIS:HD2	2.33	0.41
2:B:44:ASN:O	2:B:130:ILE:HD11	2.19	0.41
2:B:152:ASP:CG	2:B:203:SER:HB3	2.39	0.41
3:C:104:VAL:HA	3:C:106:TYR:CD1	2.53	0.41
3:C:105:ALA:HB2	3:C:123:PRO:O	2.19	0.41
3:C:132:ILE:HG13	3:C:136:TYR:CE2	2.55	0.41
3:C:30:VAL:HG21	3:C:158:ILE:O	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:30:VAL:CG1	3:C:159:SER:HB3	2.50	0.41
3:C:1:VAL:HA	3:C:4:GLU:HG2	2.02	0.41
3:C:21:VAL:O	3:C:23:PRO:HD3	2.19	0.41
3:C:39:LEU:N	3:C:39:LEU:CD1	2.82	0.41
3:C:479:ASN:C	3:C:482:PRO:HD2	2.39	0.41
3:C:480:ARG:N	3:C:481:PRO:CD	2.83	0.41
3:C:91:ASP:OD2	3:C:153:TYR:CD1	2.73	0.41
1:D:169:THR:CG2	1:D:169:THR:O	2.56	0.41
4:E:108:LEU:CB	4:E:116:TYR:O	2.67	0.41
4:E:157:LEU:HD13	4:E:208:ILE:HD11	2.01	0.41
4:E:284:LYS:H	4:E:284:LYS:HE3	1.64	0.41
1:A:422:THR:HA	1:A:425:VAL:HG12	2.02	0.41
1:A:179:LYS:CE	1:A:208:GLN:OE1	2.67	0.41
1:A:164:ARG:NH1	1:A:181:TYR:OH	2.53	0.41
1:A:415:MET:CE	1:A:415:MET:HA	2.49	0.41
1:A:45:GLU:OE2	1:A:135:PHE:N	2.53	0.41
1:A:56:LEU:CD2	1:A:56:LEU:C	2.88	0.41
2:B:106:VAL:HG12	2:B:107:ASN:O	2.21	0.41
2:B:131:LYS:HE2	2:B:132:VAL:HG23	2.02	0.41
2:B:152:ASP:O	2:B:154:SER:N	2.53	0.41
2:B:192:PRO:CG	2:B:210:TYR:HB2	2.49	0.41
2:B:238:VAL:CA	2:B:248:LYS:HZ1	2.33	0.41
2:B:246:GLY:O	2:B:248:LYS:N	2.53	0.41
2:B:277:VAL:N	2:B:278:PRO:CD	2.84	0.41
2:B:434:VAL:HG13	2:B:438:LEU:HD12	2.00	0.41
2:B:58:LEU:HD21	2:B:118:TRP:CE3	2.55	0.41
2:B:89:ASP:OD1	2:B:89:ASP:N	2.52	0.41
3:C:58:MET:CE	3:C:105:ALA:O	2.64	0.41
3:C:462:THR:N	3:C:463:PRO:HD2	2.34	0.41
1:D:139:GLN:NE2	1:D:179:LYS:HG3	2.35	0.41
1:D:210:ILE:C	1:D:211:PRO:O	2.58	0.41
4:E:39:LEU:CD2	4:E:183:TRP:CZ2	2.94	0.41
4:E:184:THR:HG23	4:E:215:GLN:CB	2.51	0.41
1:D:129:GLU:OE1	1:D:129:GLU:HA	2.20	0.41
1:A:100:PHE:HA	1:A:100:PHE:HD1	1.70	0.41
1:A:131:ILE:HG13	1:A:133:THR:H	1.85	0.41
1:A:93:TYR:CD2	1:A:145:LYS:HD3	2.55	0.41
1:A:46:VAL:HG21	1:A:270:ALA:C	2.41	0.41
1:A:85:VAL:HG12	1:A:86:TRP:N	2.34	0.41
1:A:94:ASN:O	1:A:127:TYR:CD2	2.72	0.41
2:B:19:VAL:HG13	2:B:20:ARG:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:33:ILE:HG21	3:C:160:MET:SD	2.61	0.41
3:C:92:ILE:H	3:C:92:ILE:HG12	1.58	0.41
1:D:214:PHE:HE1	1:D:267:THR:HG21	1.81	0.41
1:D:287:SER:HA	1:D:290:ILE:HD11	1.93	0.41
4:E:27:VAL:CG1	4:E:154:GLU:CA	2.80	0.41
4:E:26:HIS:O	4:E:26:HIS:ND1	2.53	0.41
4:E:453:ILE:CG1	4:E:454:ALA:N	2.83	0.41
1:A:386:MET:HG3	4:E:427:LYS:HD3	2.03	0.41
2:B:10:VAL:HA	2:B:13:GLU:HB2	2.01	0.41
1:A:432:GLU:O	1:A:436:GLU:CG	2.63	0.41
1:A:432:GLU:HG3	1:A:436:GLU:CG	2.50	0.41
1:A:95:ASN:O	1:A:96:ALA:CB	2.66	0.41
2:B:107:ASN:HB2	3:C:152:ASN:CG	2.38	0.41
1:A:107:LYS:HZ3	2:B:151:TYR:HA	1.82	0.41
1:A:242:LYS:NZ	2:B:312:HIS:ND1	2.68	0.41
3:C:11:LEU:O	3:C:12:LEU:C	2.59	0.41
3:C:316:THR:HG23	3:C:317:PRO:HD3	1.99	0.41
3:C:69:TRP:HB2	3:C:74:TYR:CA	2.50	0.41
1:D:40:LEU:HD11	1:D:50:VAL:HG13	2.03	0.41
4:E:51:THR:O	4:E:121:ALA:O	2.38	0.41
4:E:158:GLN:O	4:E:159:LEU:HD23	2.19	0.41
4:E:212:LEU:O	4:E:214:ILE:HG23	2.19	0.41
4:E:138:TRP:CZ2	4:E:215:GLN:NE2	2.88	0.41
4:E:262:THR:HG22	4:E:262:THR:O	2.20	0.41
2:B:67:TRP:C	2:B:72:TYR:CB	2.89	0.41
1:D:436:GLU:O	1:D:437:GLY:OXT	2.38	0.41
2:B:163:ASP:HB3	2:B:193:SER:HG	1.86	0.41
1:A:117:MET:SD	1:A:119:THR:HG21	2.61	0.41
1:A:279:LEU:CA	1:A:282:MET:HB2	2.37	0.41
2:B:197:TRP:HB3	2:B:204:TYR:CD1	2.56	0.41
2:B:249:MET:HE1	2:B:250:SER:HB3	2.00	0.41
2:B:276:SER:C	2:B:277:VAL:HG13	2.41	0.41
2:B:449:ILE:HA	2:B:452:PHE:HD2	1.82	0.41
2:B:466:ASN:N	2:B:467:PRO:CD	2.83	0.41
1:D:134:HIS:C	1:D:134:HIS:ND1	2.73	0.41
1:D:292:THR:OG1	1:D:296:ILE:CD1	2.68	0.41
3:C:245:LEU:CD1	1:D:297:ASN:HD21	2.34	0.41
4:E:129:ILE:O	4:E:129:ILE:CG1	2.69	0.41
4:E:135:PRO:HB2	4:E:136:PHE:H	1.69	0.41
4:E:240:TYR:CD2	4:E:453:ILE:CB	3.04	0.41
4:E:242:LEU:HG	4:E:243:PRO:CD	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:436:ASN:O	4:E:439:TRP:CD1	2.73	0.41
4:E:313:THR:HB	4:E:441:LEU:HB3	2.02	0.41
2:B:75:ILE:CD1	2:B:78:LEU:CD1	2.87	0.41
2:B:159:GLN:HG3	2:B:159:GLN:O	2.19	0.41
1:A:187:TRP:HD1	1:A:199:LEU:CD2	2.33	0.41
1:A:235:LEU:O	1:A:239:SER:O	2.39	0.41
1:A:233:PHE:CE2	1:A:413:VAL:HB	2.56	0.41
1:A:89:ASP:OD1	1:A:149:TRP:N	2.46	0.41
2:B:138:ASP:CA	2:B:464:PRO:O	2.69	0.41
2:B:220:TYR:N	2:B:220:TYR:HD1	2.17	0.41
2:B:53:SER:O	2:B:54:VAL:HG13	2.19	0.41
3:C:62:TRP:CH2	3:C:120:TRP:HB3	2.52	0.41
3:C:154:ASN:HA	3:C:212:TYR:H	1.85	0.41
1:D:166:ASP:CG	1:D:205:PHE:CD2	2.94	0.41
1:D:254:THR:CG2	1:D:255:VAL:N	2.84	0.41
1:D:416:LEU:O	1:D:419:ILE:HG13	2.19	0.41
4:E:142:SER:OG	4:E:209:ILE:CD1	2.57	0.41
4:E:214:ILE:CD1	4:E:214:ILE:C	2.82	0.41
2:B:417:SER:HB2	2:B:421:PHE:CZ	2.56	0.41
1:A:68:ASN:ND2	1:A:69:PRO:HD2	2.35	0.41
2:B:130:ILE:CD1	2:B:134:TYR:HE2	2.33	0.41
2:B:186:TRP:HB3	2:B:215:ARG:HB2	2.03	0.41
2:B:89:ASP:O	2:B:149:TYR:N	2.54	0.41
3:C:30:VAL:CG1	3:C:159:SER:N	2.79	0.41
3:C:24:VAL:HG13	3:C:31:VAL:N	2.35	0.41
3:C:279:PRO:HG2	3:C:280:GLU:H	1.85	0.41
3:C:299:VAL:O	3:C:303:VAL:CG2	2.52	0.41
4:E:94:ASN:CA	4:E:126:THR:H	2.34	0.41
4:E:1:ASN:CG	4:E:1:ASN:O	2.58	0.41
4:E:145:PHE:O	4:E:208:ILE:CG1	2.69	0.41
4:E:276:SER:O	4:E:280:PRO:O	2.39	0.41
1:A:6:ARG:CB	1:A:6:ARG:NH1	2.76	0.41
1:A:148:ILE:HD11	1:A:156:VAL:HG22	2.02	0.41
1:A:51:GLU:HG3	1:A:125:LYS:HD2	2.02	0.41
2:B:108:VAL:CG1	2:B:109:LEU:N	2.84	0.41
2:B:192:PRO:CD	2:B:210:TYR:O	2.68	0.41
2:B:212:ILE:O	2:B:212:ILE:CG2	2.67	0.41
2:B:438:LEU:HD23	2:B:441:TYR:CG	2.56	0.41
2:B:440:LEU:HA	2:B:443:PHE:HB2	2.03	0.41
3:C:214:ASP:OD1	3:C:214:ASP:N	2.54	0.41
3:C:69:TRP:HB2	3:C:74:TYR:HB2	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:228:LEU:O	1:D:232:VAL:N	2.47	0.41
4:E:210:PHE:O	4:E:212:LEU:CD1	2.68	0.41
1:D:15:TYR:OH	1:D:84:ASP:HB3	2.20	0.41
1:A:245:LEU:O	1:A:248:SER:OG	2.24	0.41
1:A:267:THR:O	1:A:271:VAL:N	2.50	0.41
2:B:231:ILE:CG2	2:B:259:LEU:HD21	2.51	0.41
2:B:270:VAL:N	2:B:271:PRO:HD2	2.36	0.41
3:C:106:TYR:CD1	3:C:106:TYR:C	2.94	0.41
3:C:155:ALA:N	3:C:211:ASN:CA	2.79	0.41
3:C:2:ASN:O	3:C:72:SER:CB	2.67	0.41
3:C:30:VAL:CG2	3:C:157:GLU:N	2.83	0.41
4:E:86:LEU:CD1	4:E:103:TYR:CE1	3.01	0.41
4:E:47:GLU:HB3	4:E:127:CYS:O	2.21	0.41
4:E:72:GLU:O	4:E:73:GLY:C	2.57	0.41
4:E:90:VAL:CG1	4:E:91:LEU:N	2.81	0.41
1:A:146:LEU:O	1:A:201:ILE:N	2.38	0.41
3:C:256:LYS:O	3:C:260:ALA:HB2	2.21	0.41
3:C:77:ILE:O	3:C:79:ILE:N	2.54	0.41
1:D:167:LEU:HA	1:D:170:PHE:CB	2.49	0.41
1:D:407:ASP:HA	1:D:410:LEU:CD2	2.51	0.41
4:E:78:ARG:HH11	4:E:108:LEU:HD13	1.85	0.41
4:E:84:LEU:HD21	4:E:115:MET:CE	2.51	0.41
4:E:435:GLU:OE1	4:E:439:TRP:CH2	2.73	0.41
4:E:287:ILE:HG13	4:E:291:PHE:CD2	2.56	0.41
1:D:67:TRP:HE3	1:D:67:TRP:HA	1.84	0.41
4:E:475:PRO:C	4:E:477:PHE:N	2.68	0.41
3:C:446:TRP:HA	3:C:446:TRP:CE3	2.56	0.41
2:B:158:LEU:HD23	2:B:158:LEU:HA	1.52	0.41
2:B:144:MET:HE2	2:B:211:LEU:HD21	1.97	0.41
2:B:241:LEU:HB3	2:B:248:LYS:CE	2.51	0.41
2:B:439:PHE:C	2:B:439:PHE:CD1	2.93	0.41
2:B:459:SER:O	2:B:463:PRO:CG	2.68	0.41
2:B:57:ASN:HA	2:B:118:TRP:O	2.21	0.41
3:C:263:VAL:O	3:C:267:GLN:HG3	2.17	0.41
3:C:273:LEU:CD2	3:C:276:GLN:HB2	2.44	0.41
3:C:48:THR:HA	3:C:286:PRO:CG	2.51	0.41
3:C:84:PRO:HG2	3:C:85:GLU:N	2.36	0.41
1:D:264:ILE:CG2	1:D:265:PRO:HD3	2.50	0.41
4:E:175:GLU:CG	4:E:176:ASP:N	2.84	0.41
1:D:248:SER:O	4:E:259:LEU:HD11	2.21	0.41
4:E:262:THR:CA	4:E:265:LEU:HD12	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:E:289:VAL:O	4:E:293:SER:N	2.49	0.41
1:D:242:LYS:HZ2	4:E:304:LEU:HD11	1.84	0.41
3:C:426:THR:HA	3:C:429:ILE:HG21	2.01	0.41
1:D:379:VAL:HG22	1:D:382:ILE:HD11	1.98	0.41
1:D:93:TYR:HH	1:D:198:TYR:HD2	1.65	0.41
1:A:146:LEU:N	1:A:201:ILE:O	2.48	0.40
1:A:233:PHE:CB	1:A:410:LEU:HD22	2.50	0.40
2:B:86:TRP:CD1	2:B:151:TYR:CE2	3.09	0.40
3:C:192:ILE:CD1	3:C:221:ILE:HG22	2.51	0.40
3:C:216:THR:O	3:C:217:PHE:CD1	2.59	0.40
3:C:269:VAL:HG13	3:C:270:PHE:CE1	2.56	0.40
3:C:309:VAL:O	3:C:313:HIS:N	2.47	0.40
1:D:131:ILE:CD1	1:D:133:THR:CB	2.95	0.40
1:D:36:GLN:HE21	1:D:38:ILE:CG1	2.32	0.40
1:D:37:LEU:HA	1:D:54:VAL:HG13	2.02	0.40
4:E:103:TYR:HB3	4:E:104:TYR:CE1	2.56	0.40
4:E:152:ALA:CB	4:E:204:ASP:O	2.51	0.40
4:E:159:LEU:CD2	4:E:208:ILE:HG23	2.50	0.40
4:E:235:LEU:O	4:E:238:LEU:CB	2.69	0.40
4:E:266:PHE:HA	4:E:269:ALA:CB	2.51	0.40
4:E:1:ASN:O	4:E:3:GLU:N	2.54	0.40
1:A:376:ILE:HG23	1:A:380:LYS:HZ3	1.86	0.40
3:C:289:GLY:CA	3:C:293:MET:CE	2.99	0.40
1:A:137:PHE:CD1	1:A:210:ILE:CD1	3.01	0.40
1:A:34:GLY:HA3	1:A:161:GLU:HG2	2.04	0.40
1:A:416:LEU:HA	1:A:419:ILE:CG2	2.51	0.40
1:A:43:VAL:CG1	1:A:50:VAL:CG2	2.90	0.40
1:A:92:LEU:CB	1:A:95:ASN:HB2	2.51	0.40
2:B:128:CYS:O	2:B:130:ILE:N	2.55	0.40
2:B:138:ASP:N	2:B:464:PRO:O	2.54	0.40
2:B:139:TRP:CD2	2:B:214:GLN:HA	2.56	0.40
2:B:223:TYR:C	2:B:226:VAL:HG22	2.38	0.40
2:B:235:ALA:C	2:B:237:LEU:N	2.74	0.40
2:B:132:VAL:CA	2:B:279:ILE:HA	2.50	0.40
2:B:431:VAL:HG21	2:B:433:MET:HG2	2.02	0.40
3:C:106:TYR:O	3:C:107:PHE:C	2.59	0.40
3:C:122:PRO:HB2	3:C:123:PRO:CD	2.31	0.40
3:C:56:VAL:HG23	3:C:124:ALA:HB3	2.04	0.40
3:C:135:LEU:O	3:C:138:PRO:HD2	2.22	0.40
3:C:60:HIS:HE1	3:C:160:MET:SD	2.45	0.40
3:C:267:GLN:HB2	3:C:267:GLN:HE21	1.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:84:PRO:CG	3:C:85:GLU:OE1	2.68	0.40
1:D:138:ASP:C	1:D:139:GLN:HG2	2.41	0.40
1:D:28:PHE:CD2	1:D:153:GLY:O	2.74	0.40
1:D:40:LEU:O	1:D:171:MET:HE2	2.20	0.40
1:D:181:TYR:CE1	1:D:203:TYR:HB3	2.49	0.40
1:D:132:VAL:HB	1:D:273:LEU:O	2.21	0.40
1:D:411:LEU:O	1:D:415:MET:SD	2.79	0.40
4:E:59:TRP:CH2	4:E:115:MET:CB	3.04	0.40
4:E:304:LEU:C	4:E:306:VAL:N	2.75	0.40
1:D:76:LYS:HB3	1:D:77:LYS:H	1.54	0.40
4:E:474:VAL:CB	4:E:475:PRO:CD	2.99	0.40
4:E:5:ARG:H	4:E:5:ARG:HG2	1.33	0.40
4:E:263:ILE:HG21	4:E:263:ILE:HD13	1.68	0.40
1:A:148:ILE:O	1:A:148:ILE:CG2	2.69	0.40
1:A:151:TYR:CB	1:A:156:VAL:HG12	2.52	0.40
1:A:33:VAL:O	1:A:161:GLU:HB3	2.20	0.40
1:A:237:THR:HB	1:A:406:ILE:HG22	2.03	0.40
2:B:218:LEU:C	2:B:219:PHE:CG	2.94	0.40
3:C:194:HIS:HB3	3:C:220:ILE:HG12	2.03	0.40
3:C:302:VAL:C	3:C:306:CYS:SG	2.95	0.40
3:C:48:THR:HA	3:C:286:PRO:CD	2.51	0.40
3:C:52:LEU:HD21	3:C:130:CYS:H	1.86	0.40
3:C:262:CYS:SG	1:D:247:ILE:CG2	3.09	0.40
1:D:49:ILE:CD1	1:D:97:ASP:OD2	2.70	0.40
4:E:117:TRP:CE2	4:E:119:PRO:HD3	2.55	0.40
4:E:266:PHE:CZ	4:E:270:GLN:HB3	2.56	0.40
4:E:22:LYS:NZ	4:E:26:HIS:CD2	2.90	0.40
1:A:262:GLU:CG	4:E:271:LYS:HZ1	2.33	0.40
4:E:42:LEU:HA	4:E:42:LEU:HD12	1.80	0.40
1:D:85:VAL:HG13	1:D:86:TRP:N	2.36	0.40
4:E:418:ALA:O	4:E:421:PHE:HB2	2.22	0.40
1:D:303:PRO:HB2	1:D:400:LYS:CE	2.50	0.40
1:A:148:ILE:N	1:A:158:ILE:HD12	2.36	0.40
1:A:408:HIS:C	1:A:412:CYS:HG	2.25	0.40
2:B:60:TRP:CZ3	2:B:116:VAL:HB	2.57	0.40
3:C:12:LEU:HB2	3:C:16:LYS:CB	2.51	0.40
3:C:223:ARG:O	3:C:224:LYS:CB	2.68	0.40
3:C:277:ARG:NH2	1:D:262:GLU:OE2	2.53	0.40
3:C:75:SER:O	3:C:76:ASP:C	2.59	0.40
3:C:8:ILE:CD1	3:C:69:TRP:CZ3	3.02	0.40
1:D:138:ASP:C	1:D:139:GLN:CG	2.90	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:214:PHE:CZ	1:D:267:THR:HG21	2.56	0.40
4:E:75:ASP:HA	4:E:111:ASN:HB3	2.03	0.40
4:E:133:TYR:HD1	4:E:139:GLN:H	1.69	0.40
1:A:114:GLY:O	1:A:115:LYS:C	2.60	0.40
2:B:284:LEU:CA	2:B:287:ILE:HG13	2.47	0.40
2:B:111:GLN:CD	2:B:115:ALA:HB3	2.42	0.40
1:A:385:HIS:ND1	1:A:385:HIS:O	2.55	0.40
1:A:134:HIS:N	1:A:136:PRO:CD	2.84	0.40
2:B:247:GLU:CD	3:C:320:HIS:CE1	2.95	0.40
2:B:460:HIS:O	2:B:464:PRO:CD	2.70	0.40
2:B:92:LEU:N	2:B:92:LEU:HD23	2.37	0.40
3:C:219:LEU:HG	3:C:221:ILE:CG2	2.52	0.40
3:C:253:SER:OG	1:D:306:HIS:CB	2.64	0.40
3:C:264:LEU:HD11	3:C:306:CYS:C	2.41	0.40
3:C:286:PRO:O	3:C:286:PRO:HG2	2.21	0.40
3:C:310:LEU:HB3	3:C:314:PHE:HE2	1.87	0.40
3:C:48:THR:OG1	3:C:286:PRO:HD3	2.22	0.40
3:C:80:LEU:HG	3:C:81:ARG:N	2.36	0.40
3:C:84:PRO:CD	3:C:85:GLU:OE1	2.69	0.40
1:D:135:PHE:O	1:D:136:PRO:O	2.39	0.40
1:D:234:TYR:CE1	1:D:410:LEU:HD12	2.56	0.40
1:D:264:ILE:O	1:D:267:THR:CG2	2.70	0.40
1:D:135:PHE:CZ	1:D:273:LEU:HB2	2.56	0.40
1:D:416:LEU:O	1:D:420:ILE:HG12	2.22	0.40
1:D:92:LEU:CB	1:D:96:ALA:N	2.76	0.40
4:E:44:GLU:OE1	4:E:129:ILE:HD12	2.22	0.40
4:E:191:LYS:NZ	4:E:211:PHE:CZ	2.83	0.40
4:E:222:ILE:CG2	4:E:223:ILE:N	2.85	0.40
4:E:264:PHE:O	4:E:268:ILE:HG22	2.22	0.40
4:E:267:LEU:C	4:E:270:GLN:HG3	2.42	0.40
4:E:50:THR:HG23	4:E:123:TYR:O	2.22	0.40
4:E:81:SER:C	4:E:83:LEU:N	2.75	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 PDB entries followed by that with respect to all EM

entries.

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	366/461 (79%)	289 (79%)	49 (13%)	28 (8%)	1 20
1	D	366/461 (79%)	294 (80%)	41 (11%)	31 (8%)	1 18
2	B	364/493 (74%)	273 (75%)	59 (16%)	32 (9%)	1 17
3	C	364/522 (70%)	288 (79%)	58 (16%)	18 (5%)	3 31
4	E	365/505 (72%)	281 (77%)	58 (16%)	26 (7%)	1 22
All	All	1825/2442 (75%)	1425 (78%)	265 (14%)	135 (7%)	3 21

All (135) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	2	GLU
1	A	27	HIS
1	A	76	LYS
1	A	83	ASP
1	A	102	ILE
1	A	131	ILE
1	A	139	GLN
1	A	282	MET
1	A	301	ARG
2	B	2	VAL
2	B	68	ASP
2	B	82	SER
2	B	95	ASN
2	B	131	LYS
2	B	139	TRP
2	B	156	VAL
2	B	282	SER
2	B	307	ARG
2	B	432	ALA
3	C	2	ASN
3	C	13	ILE
3	C	131	PRO
3	C	212	TYR
3	C	224	LYS
3	C	253	SER
3	C	310	LEU
1	D	2	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	27	HIS
1	D	30	ASP
1	D	76	LYS
1	D	102	ILE
1	D	131	ILE
1	D	136	PRO
1	D	198	TYR
1	D	282	MET
1	D	301	ARG
4	E	27	VAL
4	E	82	GLU
4	E	110	TYR
4	E	128	PRO
4	E	133	TYR
4	E	152	ALA
4	E	217	LYS
1	A	4	GLU
1	A	63	VAL
1	A	75	ILE
1	A	93	TYR
1	A	198	TYR
1	A	426	PHE
2	B	76	LYS
2	B	99	SER
2	B	249	MET
2	B	275	LEU
2	B	279	ILE
3	C	12	LEU
3	C	30	VAL
3	C	78	SER
3	C	434	LYS
1	D	75	ILE
1	D	139	GLN
1	D	241	GLU
1	D	276	LYS
1	D	426	PHE
4	E	81	SER
4	E	95	VAL
4	E	438	ASN
4	E	443	GLY
1	A	13	GLU
1	A	21	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	26	THR
1	A	82	SER
1	A	97	ASP
1	A	105	MET
1	A	292	THR
2	B	107	ASN
3	C	107	PHE
3	C	142	GLN
3	C	257	MET
1	D	93	TYR
1	D	403	ALA
4	E	16	LYS
4	E	75	ASP
4	E	129	ILE
4	E	280	PRO
2	B	89	ASP
2	B	102	ILE
2	B	147	LYS
2	B	153	THR
2	B	247	GLU
1	D	4	GLU
1	D	24	HIS
1	D	64	ARG
1	D	436	GLU
4	E	101	VAL
4	E	135	PRO
4	E	249	GLN
4	E	265	LEU
4	E	454	ALA
1	A	210	ILE
1	A	303	PRO
2	B	21	PRO
2	B	150	THR
2	B	415	LEU
3	C	137	PHE
1	D	68	ASN
1	D	71	ASP
1	D	210	ILE
1	D	252	SER
4	E	2	GLU
4	E	132	THR
4	E	203	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	E	271	LYS
2	B	88	PRO
2	B	135	PHE
2	B	227	PRO
2	B	445	THR
1	D	239	SER
1	D	303	PRO
2	B	120	PRO
1	D	135	PHE
1	A	130	ILE
1	A	135	PHE
1	A	293	VAL
3	C	453	ILE
1	D	114	GLY
1	D	211	PRO
2	B	75	ILE
3	C	83	ARG
3	C	449	VAL
4	E	134	PHE
1	A	69	PRO
2	B	132	VAL
1	D	69	PRO
4	E	80	PRO
2	B	54	VAL

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	343/427 (80%)	248 (72%)	95 (28%)	0	4
1	D	343/427 (80%)	258 (75%)	85 (25%)	1	6
2	B	340/449 (76%)	262 (77%)	78 (23%)	1	7
3	C	335/475 (70%)	243 (72%)	92 (28%)	0	4
4	E	337/463 (73%)	250 (74%)	87 (26%)	0	5
All	All	1698/2241 (76%)	1261 (74%)	437 (26%)	3	6

All (437) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	6	ARG
1	A	12	LEU
1	A	20	ARG
1	A	24	HIS
1	A	25	HIS
1	A	29	VAL
1	A	30	ASP
1	A	36	GLN
1	A	46	VAL
1	A	56	LEU
1	A	61	ILE
1	A	63	VAL
1	A	66	ARG
1	A	68	ASN
1	A	72	TYR
1	A	75	ILE
1	A	79	ARG
1	A	87	LEU
1	A	92	LEU
1	A	94	ASN
1	A	95	ASN
1	A	100	PHE
1	A	103	VAL
1	A	105	MET
1	A	107	LYS
1	A	108	LEU
1	A	111	ASP
1	A	112	TYR
1	A	116	ILE
1	A	124	PHE
1	A	125	LYS
1	A	126	SER
1	A	129	GLU
1	A	130	ILE
1	A	132	VAL
1	A	137	PHE
1	A	139	GLN
1	A	142	CYS
1	A	144	MET
1	A	145	LYS
1	A	149	TRP
1	A	161	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	164	ARG
1	A	180	ASP
1	A	181	TYR
1	A	185	LYS
1	A	193	CYS
1	A	195	ASP
1	A	198	TYR
1	A	200	ASP
1	A	207	MET
1	A	210	ILE
1	A	218	VAL
1	A	224	LEU
1	A	225	PHE
1	A	238	ASP
1	A	243	MET
1	A	246	SER
1	A	247	ILE
1	A	254	THR
1	A	255	VAL
1	A	257	LEU
1	A	265	PRO
1	A	266	SER
1	A	268	SER
1	A	273	LEU
1	A	278	MET
1	A	279	LEU
1	A	282	MET
1	A	289	ILE
1	A	290	ILE
1	A	292	THR
1	A	293	VAL
1	A	296	ILE
1	A	297	ASN
1	A	298	THR
1	A	303	PRO
1	A	305	THR
1	A	306	HIS
1	A	376	ILE
1	A	382	ILE
1	A	387	LYS
1	A	389	ASP
1	A	399	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	401	TYR
1	A	402	VAL
1	A	409	ILE
1	A	410	LEU
1	A	414	PHE
1	A	415	MET
1	A	419	ILE
1	A	425	VAL
1	A	426	PHE
1	A	430	LEU
1	A	434	SER
2	B	15	TYR
2	B	16	ASN
2	B	18	LYS
2	B	19	VAL
2	B	20	ARG
2	B	23	GLN
2	B	29	VAL
2	B	31	VAL
2	B	32	ARG
2	B	33	VAL
2	B	37	LEU
2	B	41	LEU
2	B	42	ILE
2	B	43	LEU
2	B	45	GLU
2	B	55	PHE
2	B	58	LEU
2	B	63	TYR
2	B	64	ARG
2	B	68	ASP
2	B	73	GLU
2	B	79	SER
2	B	82	SER
2	B	95	ASN
2	B	97	ASP
2	B	107	ASN
2	B	117	SER
2	B	119	HIS
2	B	128	CYS
2	B	133	MET
2	B	134	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	135	PHE
2	B	138	ASP
2	B	145	VAL
2	B	149	TYR
2	B	158	LEU
2	B	159	GLN
2	B	160	HIS
2	B	181	THR
2	B	182	GLU
2	B	196	ASN
2	B	198	ARG
2	B	213	ILE
2	B	216	LYS
2	B	220	TYR
2	B	221	ILE
2	B	225	ILE
2	B	236	ILE
2	B	237	LEU
2	B	240	TYR
2	B	248	LYS
2	B	251	LEU
2	B	253	ILE
2	B	261	VAL
2	B	263	LEU
2	B	265	LEU
2	B	269	LYS
2	B	280	ILE
2	B	281	ILE
2	B	283	TYR
2	B	284	LEU
2	B	288	MET
2	B	291	VAL
2	B	294	SER
2	B	307	ARG
2	B	311	THR
2	B	403	GLU
2	B	429	GLN
2	B	436	ASP
2	B	437	ARG
2	B	439	PHE
2	B	440	LEU
2	B	442	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	443	PHE
2	B	447	CYS
2	B	461	ASN
2	B	462	VAL
2	B	463	PRO
3	C	3	GLU
3	C	7	LEU
3	C	13	ILE
3	C	15	ASN
3	C	22	ARG
3	C	25	LYS
3	C	28	ASN
3	C	30	VAL
3	C	41	ASN
3	C	43	ILE
3	C	45	LEU
3	C	50	GLU
3	C	52	LEU
3	C	54	THR
3	C	55	ASN
3	C	60	HIS
3	C	63	TYR
3	C	65	HIS
3	C	66	ARG
3	C	69	TRP
3	C	91	ASP
3	C	92	ILE
3	C	96	ASN
3	C	102	TYR
3	C	104	VAL
3	C	106	TYR
3	C	107	PHE
3	C	114	PRO
3	C	115	ASN
3	C	121	LEU
3	C	130	CYS
3	C	140	ASP
3	C	144	CYS
3	C	147	LYS
3	C	148	PHE
3	C	149	THR
3	C	158	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	160	MET
3	C	162	LEU
3	C	199	LYS
3	C	200	ASN
3	C	202	TYR
3	C	206	PHE
3	C	211	ASN
3	C	214	ASP
3	C	222	ARG
3	C	228	TYR
3	C	229	VAL
3	C	233	ILE
3	C	241	PHE
3	C	242	LEU
3	C	249	LEU
3	C	259	THR
3	C	264	LEU
3	C	267	GLN
3	C	270	PHE
3	C	271	LEU
3	C	272	LEU
3	C	274	THR
3	C	276	GLN
3	C	278	LEU
3	C	279	PRO
3	C	280	GLU
3	C	291	TYR
3	C	293	MET
3	C	296	MET
3	C	297	SER
3	C	299	VAL
3	C	302	VAL
3	C	310	LEU
3	C	311	ASN
3	C	312	PHE
3	C	315	ARG
3	C	319	THR
3	C	423	ILE
3	C	428	TYR
3	C	429	ILE
3	C	430	VAL
3	C	432	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	442	GLU
3	C	446	TRP
3	C	451	GLN
3	C	455	ARG
3	C	458	MET
3	C	460	ILE
3	C	465	MET
3	C	467	LEU
3	C	471	PHE
3	C	475	MET
3	C	478	PHE
3	C	479	ASN
3	C	480	ARG
1	D	3	HIS
1	D	16	ASN
1	D	20	ARG
1	D	23	GLU
1	D	25	HIS
1	D	30	ASP
1	D	40	LEU
1	D	41	ILE
1	D	46	VAL
1	D	54	VAL
1	D	55	ARG
1	D	60	TRP
1	D	66	ARG
1	D	67	TRP
1	D	72	TYR
1	D	76	LYS
1	D	80	LEU
1	D	85	VAL
1	D	86	TRP
1	D	91	VAL
1	D	92	LEU
1	D	94	ASN
1	D	105	MET
1	D	107	LYS
1	D	108	LEU
1	D	110	LEU
1	D	112	TYR
1	D	116	ILE
1	D	118	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	120	PRO
1	D	126	SER
1	D	130	ILE
1	D	135	PHE
1	D	142	CYS
1	D	143	THR
1	D	145	LYS
1	D	149	TRP
1	D	152	ASP
1	D	154	THR
1	D	156	VAL
1	D	164	ARG
1	D	170	PHE
1	D	177	VAL
1	D	180	ASP
1	D	185	LYS
1	D	188	VAL
1	D	193	CYS
1	D	198	TYR
1	D	200	ASP
1	D	202	THR
1	D	203	TYR
1	D	207	MET
1	D	216	VAL
1	D	219	ILE
1	D	225	PHE
1	D	226	SER
1	D	227	PHE
1	D	230	VAL
1	D	237	THR
1	D	238	ASP
1	D	243	MET
1	D	244	THR
1	D	247	ILE
1	D	250	LEU
1	D	252	SER
1	D	253	LEU
1	D	265	PRO
1	D	273	LEU
1	D	278	MET
1	D	281	THR
1	D	285	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	303	PRO
1	D	377	GLU
1	D	387	LYS
1	D	394	ASN
1	D	399	TRP
1	D	400	LYS
1	D	406	ILE
1	D	407	ASP
1	D	409	ILE
1	D	414	PHE
1	D	418	CYS
1	D	422	THR
1	D	426	PHE
1	D	435	GLN
4	E	5	ARG
4	E	13	ASP
4	E	15	ASP
4	E	17	ARG
4	E	18	ILE
4	E	23	THR
4	E	29	ASP
4	E	31	THR
4	E	44	GLU
4	E	49	LEU
4	E	52	ASN
4	E	55	ILE
4	E	60	ASN
4	E	62	TYR
4	E	63	ARG
4	E	66	TRP
4	E	67	ASN
4	E	70	GLU
4	E	71	TYR
4	E	74	ILE
4	E	75	ASP
4	E	80	PRO
4	E	82	GLU
4	E	84	LEU
4	E	89	VAL
4	E	104	TYR
4	E	106	ASN
4	E	116	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	E	118	LEU
4	E	122	ILE
4	E	123	TYR
4	E	124	ARG
4	E	125	SER
4	E	127	CYS
4	E	128	PRO
4	E	129	ILE
4	E	133	TYR
4	E	138	TRP
4	E	140	ASN
4	E	143	LEU
4	E	147	SER
4	E	148	GLN
4	E	151	ASN
4	E	156	ASN
4	E	158	GLN
4	E	162	GLU
4	E	163	GLU
4	E	177	PHE
4	E	179	GLU
4	E	184	THR
4	E	195	ASN
4	E	198	LEU
4	E	204	ASP
4	E	217	LYS
4	E	221	TYR
4	E	225	ILE
4	E	231	LEU
4	E	232	ILE
4	E	235	LEU
4	E	239	VAL
4	E	242	LEU
4	E	252	THR
4	E	253	LEU
4	E	263	ILE
4	E	268	ILE
4	E	270	GLN
4	E	271	LYS
4	E	279	VAL
4	E	284	LYS
4	E	286	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	E	287	ILE
4	E	291	PHE
4	E	294	LEU
4	E	296	ILE
4	E	297	VAL
4	E	301	VAL
4	E	303	VAL
4	E	308	LEU
4	E	309	ARG
4	E	310	THR
4	E	439	TRP
4	E	444	LYS
4	E	452	TRP
4	E	456	LEU
4	E	465	ILE
4	E	472	ASN
4	E	473	GLN

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

Mol	Chain	Res	Type
1	A	24	HIS
1	A	27	HIS
1	A	58	GLN
1	A	59	GLN
1	A	94	ASN
1	A	299	HIS
1	A	435	GLN
2	B	23	GLN
2	B	96	ASN
2	B	107	ASN
2	B	111	GLN
2	B	140	GLN
2	B	190	HIS
2	B	305	HIS
2	B	429	GLN
2	B	460	HIS
2	B	461	ASN
3	C	2	ASN
3	C	15	ASN
3	C	20	HIS
3	C	41	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	55	ASN
3	C	65	HIS
3	C	70	ASN
3	C	97	ASN
3	C	103	ASN
3	C	115	ASN
3	C	152	ASN
3	C	200	ASN
3	C	231	ASN
3	C	267	GLN
3	C	447	ASN
3	C	479	ASN
1	D	16	ASN
1	D	36	GLN
1	D	42	ASN
1	D	53	ASN
1	D	59	GLN
1	D	94	ASN
1	D	95	ASN
1	D	134	HIS
1	D	300	HIS
1	D	408	HIS
1	D	435	GLN
4	E	1	ASN
4	E	26	HIS
4	E	52	ASN
4	E	60	ASN
4	E	67	ASN
4	E	93	ASN
4	E	94	ASN
4	E	98	GLN
4	E	140	ASN
4	E	148	GLN
4	E	153	HIS
4	E	156	ASN
4	E	158	GLN
4	E	193	ASN
4	E	197	GLN
4	E	206	GLN
4	E	215	GLN
4	E	261	GLN
4	E	472	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

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.