wwPDB EM Map/Model Validation Report (i)

Apr 10, 2016 – 01:42 PM BST

PDB ID	:	3IYJ
EMDB ID:	:	EMD-5155
Title	:	Bovine papillomavirus type 1 outer capsid
Authors	:	Wolf, M.; Garcea, R.L.; Grigorieff, N.; Harrison, S.C.
Deposited on	:	2009-12-15
Resolution	:	4.20 Å(reported)

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

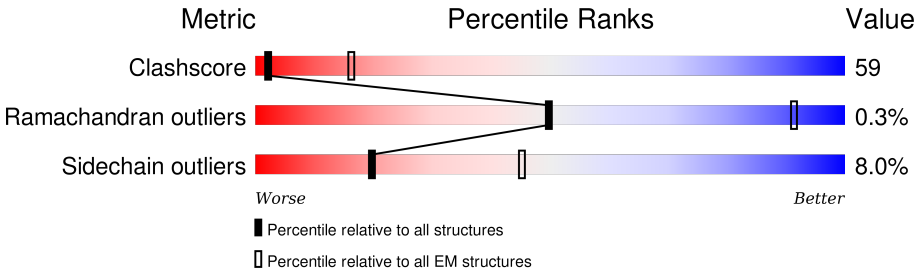
MolProbity	:	4.02b-467
Mogul	:	unknown
Percentile statistics	:	20151230.v01 (using entries in the PDB archive December 30th 2015)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP)	:	trunk27241

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 4.20 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	495	36% 57% 5% •
1	B	495	34% 55% 5% 5%
1	C	495	35% 57% 5% •
1	D	495	37% 55% 5% •
1	E	495	38% 54% 5% •
1	F	495	37% 54% • 5%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 22614 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 Major capsid protein L1.

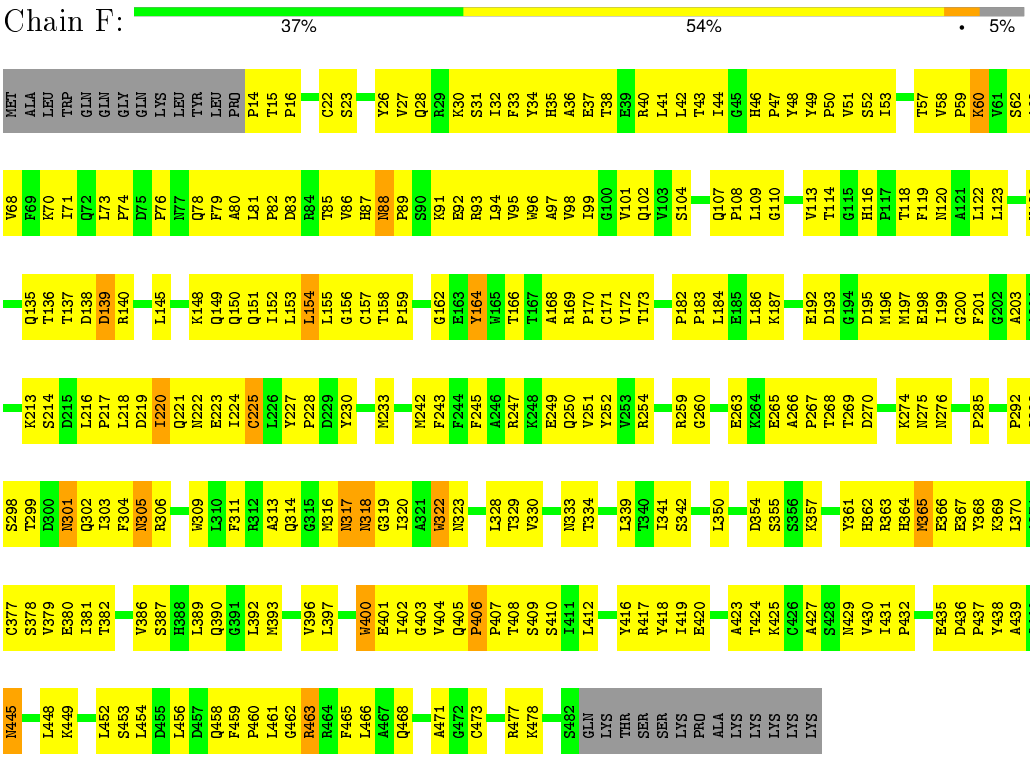
Mol	Chain	Residues	Atoms					AltConf	Trace
1	F	469	Total	C	N	O	S	0	0
			3701	2345	639	702	15		
1	A	481	Total	C	N	O	S	0	0
			3803	2414	656	718	15		
1	B	469	Total	C	N	O	S	0	0
			3701	2345	639	702	15		
1	C	481	Total	C	N	O	S	0	0
			3803	2414	656	718	15		
1	D	481	Total	C	N	O	S	0	0
			3803	2414	656	718	15		
1	E	481	Total	C	N	O	S	0	0
			3803	2414	656	718	15		

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.

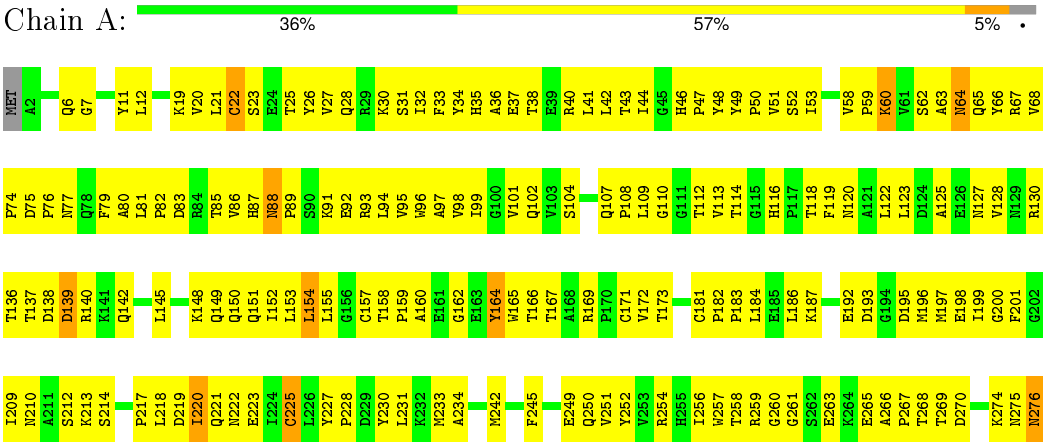
- Molecule 1: Major capsid protein L1

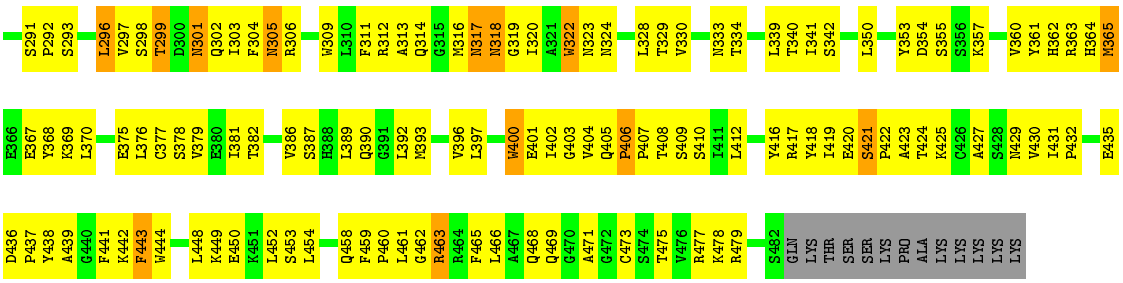
Chain F:



- Molecule 1: Major capsid protein L1

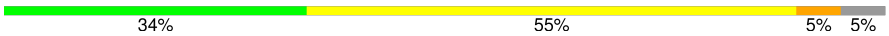
Chain A:

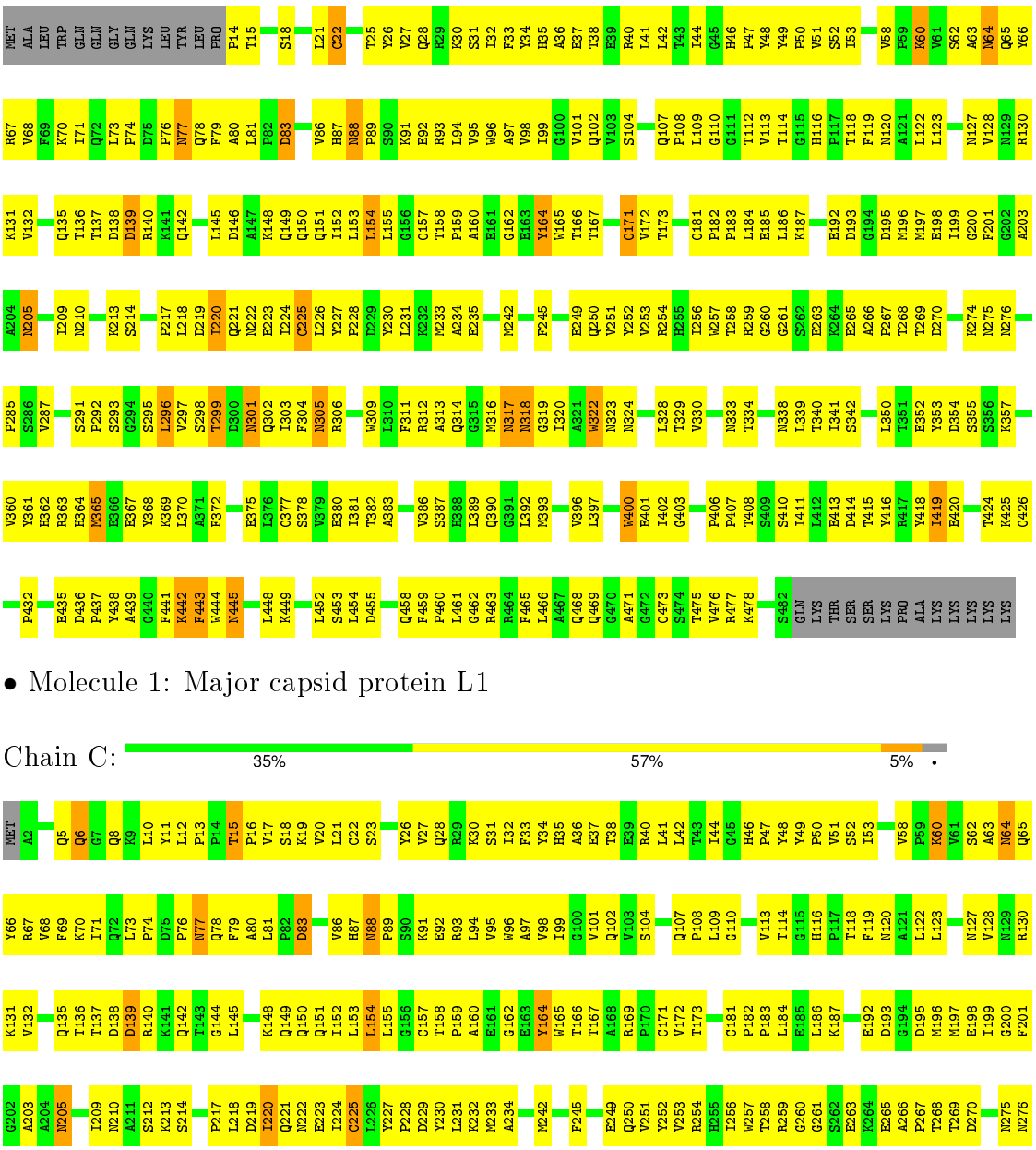




• Molecule 1: Major capsid protein L1

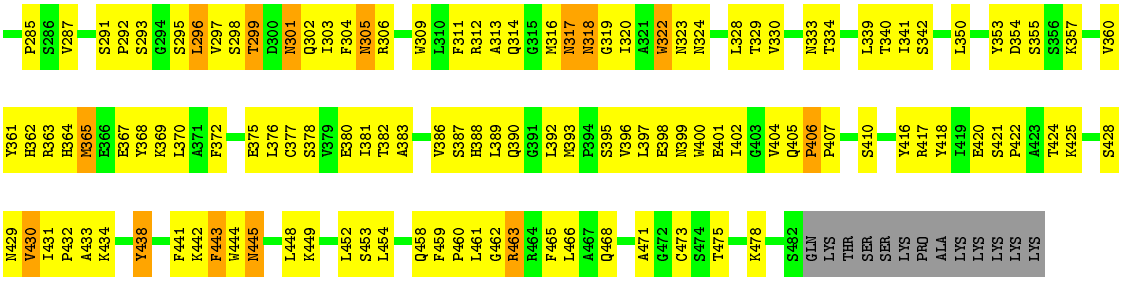
Chain B:





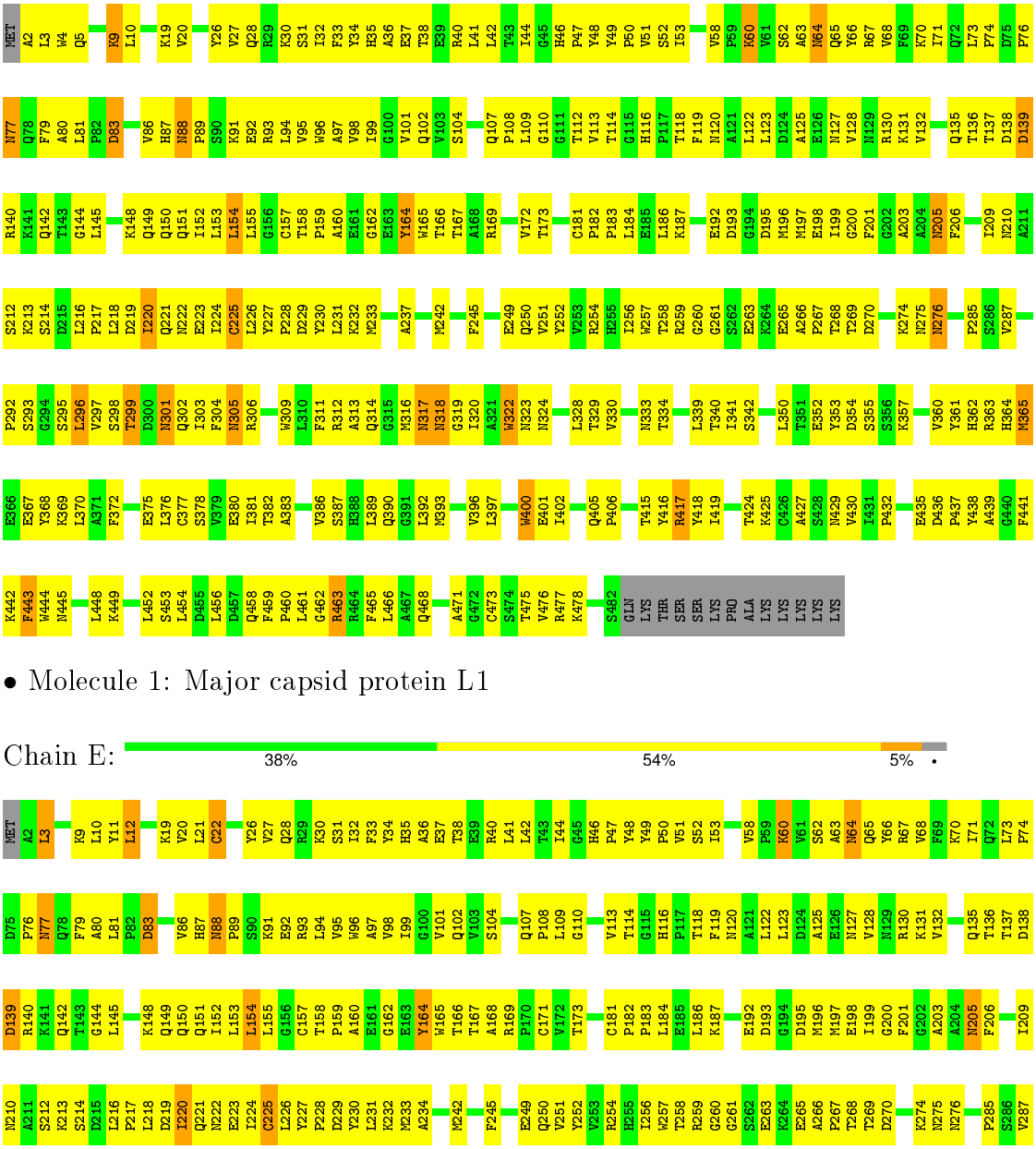
• Molecule 1: Major capsid protein L1

Chain C:



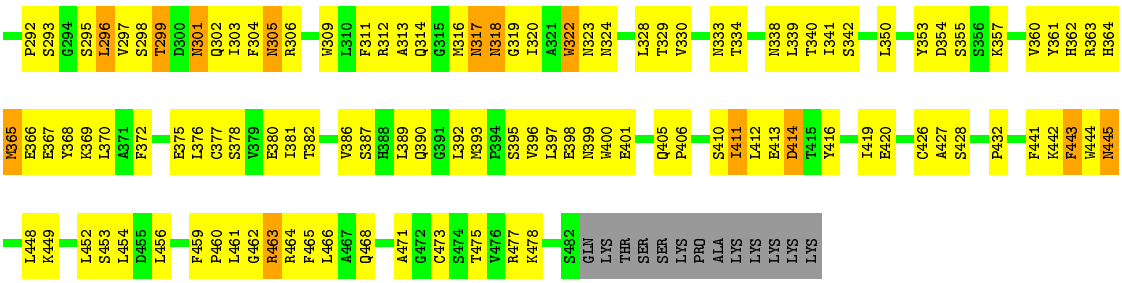
- Molecule 1: Major capsid protein L1

Chain D:



- Molecule 1: Major capsid protein L1

Chain E:


P292 S293 G294 S295 L296 V297 S298 T299 D300 N301 Q302 I303 F304 N305 R306 W309 L310 F311 R312 A313 Q314 G315 M316 N317 N318 G319 I320 A321 W322 N323 N324 L328 T329 V330 N333 T334 N338 L339 T340 I341 S342 L350 Y353 D354 S355 S356 K357 V360 Y361 H362 R363 H364
M365 E366 E367 Y368 K369 L370 A371 F372 E375 L376 C377 S378 V379 E380 I381 T382 V386 S387 H388 L389 Q390 G391 L392 M393 P394 S395 V396 L397 E398 N399 W400 E401 Q405 P406 S410 I411 L412 E413 D414 T415 Y416 I419 E420 C426 A427 S428 P432 F441 K442 F443 W444 M445
L448 K449 L452 S453 L454 D455 L456 F459 P460 L461 G462 R463 R464 F465 L466 A467 Q468 A471 G472 C473 S474 T475 V476 R477 K478 S482 GLN LYS THR SER SER LYS PRO ALA LYS LYS LYS LYS LYS

4 Experimental information (i)

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, I	Depositor
Number of images	Not provided	Depositor
Resolution determination method	Not provided	Depositor
CTF correction method	CTFILT3 WITH INDIVIDUAL PARTICLE ADJUSTMENT	Depositor
Microscope	FEI TECNAI F30	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	25.00	Depositor
Minimum defocus (nm)	1800.00	Depositor
Maximum defocus (nm)	2900.00	Depositor
Magnification	59000	Depositor
Image detector	KODAK SO163 FILM	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	0.51	0/3896	0.77	4/5296 (0.1%)
1	B	0.50	0/3790	0.74	1/5150 (0.0%)
1	C	0.50	0/3896	0.76	1/5296 (0.0%)
1	D	0.49	0/3896	0.75	1/5296 (0.0%)
1	E	0.50	0/3896	0.76	1/5296 (0.0%)
1	F	0.50	0/3790	0.74	1/5150 (0.0%)
All	All	0.50	0/23164	0.75	9/31484 (0.0%)

There are no bond length outliers.

All (9) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	7	GLY	N-CA-C	5.75	127.49	113.10
1	E	205	ASN	N-CA-C	-5.55	96.01	111.00
1	A	205	ASN	N-CA-C	-5.49	96.17	111.00
1	B	205	ASN	N-CA-C	-5.46	96.27	111.00
1	C	205	ASN	N-CA-C	-5.45	96.29	111.00
1	F	205	ASN	N-CA-C	-5.43	96.33	111.00
1	D	205	ASN	N-CA-C	-5.37	96.50	111.00
1	A	6	GLN	CB-CA-C	-5.25	99.90	110.40
1	A	421	SER	O-C-N	5.21	130.99	121.10

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of 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	3803	0	3748	536	0
1	B	3701	0	3644	464	0
1	C	3803	0	3748	525	0
1	D	3803	0	3748	448	0
1	E	3803	0	3748	451	0
1	F	3701	0	3646	486	0
All	All	22614	0	22282	2640	0

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

All (2640) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:153:LEU:CD1	1:E:330:VAL:HG22	1.43	1.47
1:B:153:LEU:CD1	1:B:330:VAL:HG22	1.43	1.46
1:D:87:HIS:CE1	1:D:94:LEU:HG	1.52	1.44
1:D:88:ASN:ND2	1:D:89:PRO:HD2	1.29	1.44
1:C:153:LEU:CD1	1:C:330:VAL:HG22	1.46	1.43
1:A:153:LEU:CD1	1:A:330:VAL:HG22	1.46	1.43
1:E:88:ASN:ND2	1:E:89:PRO:HD2	1.32	1.41
1:C:322:TRP:CZ3	1:C:400:TRP:HH2	1.37	1.41
1:D:88:ASN:HD22	1:D:89:PRO:CD	1.34	1.40
1:A:88:ASN:ND2	1:A:89:PRO:HD2	1.35	1.39
1:B:88:ASN:ND2	1:B:89:PRO:HD2	1.30	1.38
1:F:88:ASN:ND2	1:F:89:PRO:HD2	1.40	1.35
1:B:88:ASN:HD22	1:B:89:PRO:CD	1.41	1.33
1:C:88:ASN:HD22	1:C:89:PRO:CD	1.40	1.30
1:E:88:ASN:HD22	1:E:89:PRO:CD	1.47	1.27
1:F:412:LEU:HB2	1:B:235:GLU:OE1	1.27	1.27
1:C:322:TRP:CZ3	1:C:400:TRP:CH2	2.23	1.27
1:F:156:GLY:HA2	1:F:243:PHE:CD1	1.70	1.26
1:F:123:LEU:CD1	1:F:132:VAL:HG22	1.66	1.25
1:B:123:LEU:CD1	1:B:132:VAL:HG22	1.66	1.25
1:A:123:LEU:CD1	1:A:132:VAL:HG22	1.67	1.25
1:C:88:ASN:ND2	1:C:89:PRO:HD2	1.49	1.24
1:C:425:LYS:HE2	1:C:428:SER:CB	1.66	1.24
1:D:87:HIS:CE1	1:D:94:LEU:CG	2.20	1.23
1:E:123:LEU:CD1	1:E:132:VAL:HG22	1.67	1.23
1:D:123:LEU:CD1	1:D:132:VAL:HG22	1.67	1.23
1:F:153:LEU:CD1	1:F:330:VAL:HG22	1.69	1.23
1:B:296:LEU:O	1:B:296:LEU:HD12	1.39	1.22

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:123:LEU:CD1	1:C:132:VAL:HG22	1.67	1.22
1:E:87:HIS:CE1	1:E:94:LEU:HG	1.73	1.21
1:C:407:PRO:HG2	1:C:410:SER:CB	1.71	1.21
1:C:87:HIS:CE1	1:C:94:LEU:HG	1.76	1.21
1:B:436:ASP:OD1	1:B:437:PRO:HD2	1.41	1.21
1:E:3:LEU:HD12	1:E:3:LEU:O	1.41	1.21
1:A:88:ASN:HD22	1:A:89:PRO:CD	1.55	1.18
1:F:296:LEU:HD12	1:F:296:LEU:O	1.42	1.18
1:C:296:LEU:O	1:C:296:LEU:HD12	1.42	1.18
1:F:154:LEU:HD11	1:F:329:THR:CB	1.73	1.17
1:D:296:LEU:HD12	1:D:296:LEU:O	1.42	1.17
1:C:395:SER:O	1:C:398:GLU:HG2	1.44	1.17
1:F:156:GLY:HA2	1:F:243:PHE:CE1	1.80	1.16
1:E:296:LEU:O	1:E:296:LEU:HD12	1.42	1.16
1:C:393:MET:HE1	1:C:396:VAL:HB	1.29	1.15
1:B:153:LEU:CD1	1:B:330:VAL:CG2	2.24	1.14
1:A:153:LEU:CD1	1:A:330:VAL:CG2	2.25	1.14
1:E:153:LEU:CD1	1:E:330:VAL:CG2	2.25	1.14
1:C:153:LEU:CD1	1:C:330:VAL:CG2	2.26	1.14
1:F:153:LEU:HD12	1:F:330:VAL:HG22	1.21	1.13
1:C:322:TRP:HZ3	1:C:400:TRP:CH2	1.61	1.12
1:D:58:VAL:HG11	1:D:363:ARG:HH12	1.10	1.12
1:F:407:PRO:HG2	1:F:410:SER:CB	1.79	1.11
1:B:153:LEU:HD13	1:B:330:VAL:CG2	1.80	1.11
1:C:405:GLN:HB2	1:C:406:PRO:HD3	1.15	1.11
1:E:153:LEU:HD13	1:E:330:VAL:CG2	1.81	1.11
1:A:296:LEU:HD12	1:A:296:LEU:O	1.50	1.10
1:E:164:TYR:CE2	1:E:187:LYS:HB2	1.87	1.10
1:A:407:PRO:HG2	1:A:410:SER:HB2	1.34	1.10
1:D:87:HIS:HE1	1:D:94:LEU:CD1	1.65	1.10
1:A:153:LEU:HD13	1:A:330:VAL:HG22	1.12	1.09
1:C:425:LYS:HE2	1:C:428:SER:HB3	1.29	1.09
1:A:153:LEU:HD12	1:A:330:VAL:HG22	1.34	1.09
1:C:407:PRO:CG	1:C:410:SER:HB3	1.83	1.08
1:A:150:GLN:HG3	1:A:249:GLU:HB3	1.36	1.08
1:C:153:LEU:HD12	1:C:330:VAL:HG22	1.35	1.08
1:B:299:THR:HG23	1:C:249:GLU:HG2	1.35	1.08
1:C:88:ASN:HD22	1:C:89:PRO:N	1.52	1.08
1:F:156:GLY:CA	1:F:243:PHE:CE1	2.36	1.08
1:A:164:TYR:CE2	1:A:187:LYS:HB2	1.89	1.08
1:A:393:MET:HE1	1:A:396:VAL:HB	1.31	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:405:GLN:HB2	1:A:406:PRO:HD3	1.11	1.07
1:F:150:GLN:HG3	1:F:249:GLU:HB3	1.35	1.07
1:E:153:LEU:HD13	1:E:330:VAL:HG22	1.08	1.07
1:F:164:TYR:CE2	1:F:187:LYS:HB2	1.90	1.07
1:D:458:GLN:NE2	1:E:19:LYS:HB2	1.69	1.07
1:A:153:LEU:HD13	1:A:330:VAL:CG2	1.82	1.06
1:B:87:HIS:CE1	1:B:94:LEU:HG	1.89	1.06
1:F:393:MET:HE1	1:F:396:VAL:HB	1.31	1.06
1:C:153:LEU:HD13	1:C:330:VAL:HG22	1.12	1.06
1:D:87:HIS:CE1	1:D:94:LEU:CD1	2.39	1.06
1:F:92:GLU:HG2	1:F:380:GLU:HA	1.37	1.06
1:E:242:MET:HE3	1:E:314:GLN:HE22	1.20	1.06
1:B:47:PRO:HG2	1:B:48:TYR:CD1	1.90	1.06
1:C:153:LEU:HD13	1:C:330:VAL:CG2	1.83	1.06
1:B:455:ASP:HB3	1:C:19:LYS:NZ	1.69	1.06
1:C:88:ASN:HD22	1:C:89:PRO:HD2	1.04	1.06
1:F:405:GLN:HB2	1:F:406:PRO:HD3	1.12	1.05
1:A:249:GLU:HG2	1:E:299:THR:HG23	1.35	1.05
1:C:297:VAL:HG21	1:C:334:THR:HG23	1.37	1.05
1:B:153:LEU:HD12	1:B:330:VAL:HG22	1.34	1.05
1:C:150:GLN:HG3	1:C:249:GLU:HB3	1.34	1.05
1:D:393:MET:HE1	1:D:396:VAL:HB	1.34	1.05
1:F:154:LEU:HD11	1:F:329:THR:OG1	1.54	1.05
1:E:164:TYR:HE2	1:E:187:LYS:CB	1.69	1.05
1:B:92:GLU:HG2	1:B:380:GLU:HA	1.39	1.05
1:F:297:VAL:HG21	1:F:334:THR:HG23	1.37	1.05
1:A:297:VAL:HG21	1:A:334:THR:HG23	1.37	1.04
1:F:242:MET:HE3	1:F:314:GLN:HE22	1.19	1.04
1:F:88:ASN:HD22	1:F:89:PRO:CD	1.70	1.04
1:B:297:VAL:HG21	1:B:334:THR:HG23	1.37	1.04
1:B:153:LEU:HD13	1:B:330:VAL:HG22	1.08	1.03
1:C:299:THR:HG23	1:D:249:GLU:HG2	1.37	1.03
1:E:297:VAL:HG21	1:E:334:THR:HG23	1.38	1.03
1:E:150:GLN:HG3	1:E:249:GLU:HB3	1.35	1.03
1:C:386:VAL:HG13	1:C:402:ILE:HG21	1.39	1.03
1:E:153:LEU:HD12	1:E:330:VAL:HG22	1.34	1.03
1:A:405:GLN:CB	1:A:406:PRO:HD3	1.84	1.03
1:D:150:GLN:HG3	1:D:249:GLU:HB3	1.35	1.03
1:F:87:HIS:CE1	1:F:94:LEU:CD1	2.43	1.02
1:E:92:GLU:HG2	1:E:380:GLU:HA	1.37	1.02
1:E:400:TRP:O	1:E:401:GLU:HG2	1.59	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:299:THR:HG23	1:E:249:GLU:HG2	1.38	1.02
1:D:9:LYS:H	1:D:9:LYS:HD3	1.25	1.02
1:B:361:TYR:CD1	1:C:181:CYS:HB2	1.94	1.01
1:A:164:TYR:HE2	1:A:187:LYS:CB	1.73	1.01
1:A:299:THR:HG23	1:B:249:GLU:HG2	1.41	1.01
1:B:150:GLN:HG3	1:B:249:GLU:HB3	1.36	1.01
1:F:164:TYR:HE2	1:F:187:LYS:CB	1.74	1.01
1:D:297:VAL:HG21	1:D:334:THR:HG23	1.38	1.00
1:C:393:MET:CE	1:C:396:VAL:HB	1.90	1.00
1:F:405:GLN:CB	1:F:406:PRO:HD3	1.85	1.00
1:A:430:VAL:C	1:A:432:PRO:CD	2.30	1.00
1:B:242:MET:HE3	1:B:314:GLN:HE22	1.25	1.00
1:B:408:THR:HG23	1:B:411:ILE:CD1	1.92	1.00
1:F:430:VAL:C	1:F:432:PRO:CD	2.30	1.00
1:B:164:TYR:CE2	1:B:187:LYS:HB2	1.96	0.99
1:D:242:MET:HE3	1:D:314:GLN:HE22	1.24	0.99
1:B:58:VAL:HG11	1:B:363:ARG:HH12	1.24	0.99
1:F:154:LEU:O	1:F:328:LEU:HD12	1.63	0.99
1:B:393:MET:CE	1:B:396:VAL:HB	1.93	0.99
1:A:393:MET:CE	1:A:396:VAL:HB	1.92	0.99
1:C:361:TYR:CD1	1:D:181:CYS:HB2	1.97	0.99
1:B:123:LEU:HD13	1:B:132:VAL:HG22	1.45	0.98
1:B:393:MET:HE1	1:B:396:VAL:HB	1.41	0.98
1:B:393:MET:HG3	1:B:396:VAL:HG12	1.45	0.98
1:D:58:VAL:HG11	1:D:363:ARG:NH1	1.78	0.98
1:F:393:MET:CE	1:F:396:VAL:HB	1.93	0.98
1:C:92:GLU:HG2	1:C:380:GLU:HA	1.45	0.98
1:D:123:LEU:HD13	1:D:132:VAL:HG22	1.45	0.98
1:F:393:MET:HG3	1:F:396:VAL:HG12	1.45	0.98
1:A:151:GLN:HE22	1:A:302:GLN:HA	1.28	0.98
1:D:393:MET:HG3	1:D:396:VAL:HG12	1.45	0.98
1:F:154:LEU:O	1:F:154:LEU:HD12	1.65	0.97
1:D:361:TYR:CD1	1:E:181:CYS:HB2	1.99	0.97
1:D:393:MET:CE	1:D:396:VAL:HB	1.94	0.97
1:A:425:LYS:HD2	1:A:429:ASN:HD22	1.28	0.97
1:F:425:LYS:HD2	1:F:429:ASN:HD22	1.28	0.97
1:C:58:VAL:HG11	1:C:363:ARG:HH12	1.30	0.97
1:C:405:GLN:CB	1:C:406:PRO:HD3	1.92	0.96
1:A:123:LEU:HD13	1:A:132:VAL:HG22	1.45	0.96
1:C:458:GLN:NE2	1:D:19:LYS:HB2	1.78	0.96
1:B:151:GLN:HE22	1:B:302:GLN:HA	1.27	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:361:TYR:CD1	1:B:181:CYS:HB2	2.00	0.96
1:E:393:MET:HE1	1:E:396:VAL:HB	1.43	0.96
1:F:430:VAL:O	1:F:432:PRO:HD2	1.65	0.96
1:F:123:LEU:HD13	1:F:132:VAL:HG22	1.45	0.96
1:C:123:LEU:HD13	1:C:132:VAL:HG22	1.45	0.96
1:A:242:MET:HE3	1:A:314:GLN:HE22	1.27	0.96
1:E:123:LEU:HD13	1:E:132:VAL:HG22	1.45	0.96
1:F:407:PRO:HG2	1:F:410:SER:HB3	1.44	0.96
1:E:151:GLN:HE22	1:E:302:GLN:HA	1.28	0.95
1:E:164:TYR:HE2	1:E:187:LYS:HB2	1.20	0.95
1:F:151:GLN:HE22	1:F:302:GLN:HA	1.29	0.95
1:F:243:PHE:CD2	1:F:319:GLY:HA2	2.01	0.95
1:D:151:GLN:HE22	1:D:302:GLN:HA	1.30	0.95
1:A:430:VAL:O	1:A:432:PRO:HD2	1.64	0.95
1:C:393:MET:HG3	1:C:396:VAL:HG12	1.45	0.95
1:F:407:PRO:HG2	1:F:410:SER:HB2	1.46	0.95
1:F:154:LEU:CG	1:F:329:THR:HB	1.96	0.95
1:A:393:MET:HG3	1:A:396:VAL:HG12	1.45	0.95
1:F:58:VAL:HG11	1:F:363:ARG:HH12	1.31	0.95
1:D:81:LEU:HD22	1:D:86:VAL:HG11	1.48	0.95
1:C:242:MET:HE3	1:C:314:GLN:HE22	1.31	0.94
1:E:81:LEU:HD22	1:E:86:VAL:HG11	1.47	0.94
1:C:87:HIS:CE1	1:C:94:LEU:CG	2.49	0.94
1:B:81:LEU:HD22	1:B:86:VAL:HG11	1.48	0.94
1:F:87:HIS:CE1	1:F:94:LEU:HG	2.03	0.94
1:F:153:LEU:CD1	1:F:330:VAL:CG2	2.46	0.94
1:F:435:GLU:OE1	1:F:436:ASP:O	1.86	0.94
1:E:393:MET:CE	1:E:396:VAL:HB	1.97	0.93
1:F:88:ASN:ND2	1:F:89:PRO:CD	2.29	0.93
1:F:429:ASN:O	1:F:432:PRO:HD3	1.67	0.93
1:B:250:GLN:NE2	1:B:295:SER:HB3	1.82	0.93
1:E:393:MET:HG3	1:E:396:VAL:HG12	1.47	0.93
1:A:397:LEU:HB3	1:A:402:ILE:HD11	1.49	0.93
1:A:88:ASN:ND2	1:A:89:PRO:CD	2.23	0.93
1:A:136:THR:HG22	1:A:137:THR:H	1.34	0.93
1:B:455:ASP:CB	1:C:19:LYS:NZ	2.32	0.93
1:A:407:PRO:HG2	1:A:410:SER:CB	1.99	0.93
1:D:164:TYR:CE2	1:D:187:LYS:HB2	2.04	0.93
1:C:88:ASN:ND2	1:C:89:PRO:CD	2.16	0.92
1:A:435:GLU:OE1	1:A:436:ASP:O	1.86	0.92
1:C:164:TYR:CE2	1:C:187:LYS:HB2	2.03	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:429:ASN:O	1:A:432:PRO:HD3	1.67	0.92
1:F:22:CYS:SG	1:F:316:MET:HG3	2.09	0.92
1:A:87:HIS:CE1	1:A:94:LEU:HG	2.05	0.92
1:F:156:GLY:C	1:F:243:PHE:HE1	1.71	0.92
1:A:145:LEU:HD11	1:A:292:PRO:HD2	1.52	0.92
1:F:156:GLY:C	1:F:243:PHE:CE1	2.43	0.92
1:C:151:GLN:HE22	1:C:302:GLN:HA	1.32	0.92
1:C:136:THR:HG22	1:C:137:THR:H	1.35	0.92
1:B:164:TYR:HE2	1:B:187:LYS:CB	1.83	0.92
1:C:393:MET:SD	1:C:396:VAL:CG1	2.58	0.92
1:C:145:LEU:HD11	1:C:292:PRO:HD2	1.52	0.92
1:F:80:ALA:H	1:A:79:PHE:HD2	1.06	0.92
1:D:158:THR:HG22	1:D:159:PRO:HD2	1.52	0.92
1:C:158:THR:HG22	1:C:159:PRO:HD2	1.53	0.91
1:A:158:THR:HG22	1:A:159:PRO:HD2	1.52	0.91
1:F:430:VAL:C	1:F:432:PRO:HD3	1.91	0.91
1:C:431:ILE:CG2	1:C:432:PRO:HB3	2.00	0.91
1:E:136:THR:HG22	1:E:137:THR:H	1.34	0.91
1:F:136:THR:HG22	1:F:137:THR:H	1.34	0.91
1:F:79:PHE:HD2	1:A:80:ALA:H	1.19	0.91
1:D:425:LYS:HE2	1:D:427:ALA:O	1.71	0.91
1:E:88:ASN:HD22	1:E:89:PRO:HD2	0.78	0.90
1:A:393:MET:SD	1:A:396:VAL:CG1	2.59	0.90
1:F:243:PHE:CE2	1:F:319:GLY:HA2	2.06	0.90
1:F:154:LEU:HD12	1:F:329:THR:H	1.37	0.90
1:F:145:LEU:HD11	1:F:292:PRO:HD2	1.51	0.90
1:F:156:GLY:CA	1:F:243:PHE:CD1	2.51	0.90
1:F:154:LEU:CD1	1:F:329:THR:HB	2.02	0.90
1:B:136:THR:HG22	1:B:137:THR:H	1.34	0.90
1:D:393:MET:SD	1:D:396:VAL:CG1	2.60	0.90
1:A:430:VAL:C	1:A:432:PRO:HD3	1.91	0.90
1:E:87:HIS:CE1	1:E:94:LEU:CG	2.53	0.90
1:A:397:LEU:O	1:A:402:ILE:HG12	1.72	0.90
1:D:145:LEU:HD11	1:D:292:PRO:HD2	1.53	0.90
1:B:361:TYR:CE1	1:C:181:CYS:HB2	2.07	0.90
1:B:250:GLN:HE21	1:B:295:SER:HB3	1.32	0.90
1:C:46:HIS:O	1:C:60:LYS:HA	1.72	0.89
1:F:158:THR:HG22	1:F:159:PRO:HD2	1.51	0.89
1:A:430:VAL:C	1:A:432:PRO:HD2	1.91	0.89
1:B:158:THR:HG22	1:B:159:PRO:HD2	1.52	0.89
1:F:87:HIS:CE1	1:F:94:LEU:HD11	2.07	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:393:MET:SD	1:B:396:VAL:CG1	2.60	0.89
1:E:46:HIS:O	1:E:60:LYS:HA	1.72	0.89
1:E:58:VAL:HG11	1:E:363:ARG:HH12	1.36	0.89
1:A:87:HIS:CE1	1:A:94:LEU:CD1	2.56	0.89
1:E:393:MET:SD	1:E:396:VAL:CG1	2.61	0.89
1:B:408:THR:HG23	1:B:411:ILE:HD11	1.54	0.89
1:D:136:THR:HG22	1:D:137:THR:H	1.35	0.89
1:E:145:LEU:HD11	1:E:292:PRO:HD2	1.52	0.88
1:F:430:VAL:C	1:F:432:PRO:HD2	1.91	0.88
1:E:158:THR:HG22	1:E:159:PRO:HD2	1.54	0.88
1:E:250:GLN:HE21	1:E:295:SER:HB3	1.38	0.88
1:F:393:MET:SD	1:F:396:VAL:CG1	2.61	0.88
1:D:46:HIS:O	1:D:60:LYS:HA	1.72	0.88
1:A:46:HIS:O	1:A:60:LYS:HA	1.73	0.88
1:F:58:VAL:HG11	1:F:363:ARG:NH1	1.89	0.88
1:F:46:HIS:O	1:F:60:LYS:HA	1.73	0.88
1:F:123:LEU:CD1	1:F:132:VAL:CG2	2.52	0.88
1:A:123:LEU:CD1	1:A:132:VAL:CG2	2.52	0.88
1:A:249:GLU:HG2	1:E:299:THR:CG2	2.04	0.88
1:E:123:LEU:CD1	1:E:132:VAL:CG2	2.52	0.88
1:C:430:VAL:O	1:C:430:VAL:HG12	1.71	0.88
1:F:431:ILE:N	1:F:432:PRO:HD3	1.89	0.87
1:B:58:VAL:HG11	1:B:363:ARG:NH1	1.89	0.87
1:A:88:ASN:HD22	1:A:89:PRO:HD2	0.86	0.87
1:F:87:HIS:HE1	1:F:94:LEU:CD1	1.84	0.87
1:D:123:LEU:CD1	1:D:132:VAL:CG2	2.52	0.87
1:F:154:LEU:CD1	1:F:329:THR:CB	2.51	0.87
1:A:431:ILE:N	1:A:432:PRO:HD3	1.89	0.87
1:F:429:ASN:O	1:F:432:PRO:HG3	1.74	0.87
1:A:429:ASN:O	1:A:432:PRO:HG3	1.74	0.87
1:C:361:TYR:CE1	1:D:181:CYS:HB2	2.09	0.87
1:D:361:TYR:CE1	1:E:181:CYS:HB2	2.10	0.87
1:C:458:GLN:HE21	1:D:19:LYS:HB2	1.39	0.87
1:A:92:GLU:HB2	1:A:379:VAL:O	1.76	0.86
1:B:171:CYS:HB2	1:B:173:THR:HG22	1.56	0.86
1:B:299:THR:CG2	1:C:249:GLU:HG2	2.04	0.86
1:A:361:TYR:CE1	1:B:181:CYS:HB2	2.10	0.86
1:C:81:LEU:HD22	1:C:86:VAL:HG11	1.55	0.86
1:D:93:ARG:HE	1:D:402:ILE:HD11	1.40	0.86
1:C:81:LEU:HD13	1:C:86:VAL:HG11	1.56	0.86
1:C:123:LEU:CD1	1:C:132:VAL:CG2	2.52	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:92:GLU:HG2	1:D:380:GLU:HA	1.56	0.86
1:B:123:LEU:CD1	1:B:132:VAL:CG2	2.52	0.86
1:A:242:MET:CE	1:A:314:GLN:HE22	1.88	0.86
1:C:193:ASP:HB2	1:C:443:PHE:HA	1.58	0.86
1:B:193:ASP:HB2	1:B:443:PHE:HA	1.57	0.86
1:B:88:ASN:HD22	1:B:89:PRO:HD2	0.73	0.86
1:F:88:ASN:HD22	1:F:89:PRO:HD2	1.00	0.86
1:D:299:THR:CG2	1:E:249:GLU:HG2	2.05	0.86
1:B:263:GLU:CD	1:B:285:PRO:HA	1.97	0.86
1:A:193:ASP:HB2	1:A:443:PHE:HA	1.58	0.85
1:A:263:GLU:CD	1:A:285:PRO:HA	1.96	0.85
1:A:299:THR:CG2	1:B:249:GLU:HG2	2.06	0.85
1:F:437:PRO:HG2	1:F:438:TYR:CD1	2.10	0.85
1:D:193:ASP:HB2	1:D:443:PHE:HA	1.58	0.85
1:B:408:THR:CG2	1:B:411:ILE:HD12	2.05	0.85
1:A:437:PRO:HG2	1:A:438:TYR:CD1	2.10	0.85
1:E:242:MET:CE	1:E:314:GLN:HE22	1.89	0.85
1:B:455:ASP:CG	1:C:19:LYS:NZ	2.29	0.85
1:A:149:GLN:HA	1:A:333:ASN:HD21	1.42	0.85
1:F:193:ASP:HB2	1:F:443:PHE:HA	1.57	0.85
1:C:299:THR:CG2	1:D:249:GLU:HG2	2.06	0.85
1:E:58:VAL:HG11	1:E:363:ARG:NH1	1.91	0.85
1:F:87:HIS:CE1	1:F:94:LEU:CG	2.60	0.84
1:F:242:MET:HE3	1:F:314:GLN:NE2	1.92	0.84
1:F:242:MET:CE	1:F:314:GLN:HE22	1.89	0.84
1:D:87:HIS:CE1	1:D:94:LEU:HD11	2.12	0.84
1:C:263:GLU:CD	1:C:285:PRO:HA	1.98	0.84
1:E:193:ASP:HB2	1:E:443:PHE:HA	1.57	0.84
1:D:242:MET:CE	1:D:314:GLN:HE22	1.89	0.84
1:F:80:ALA:N	1:A:79:PHE:HD2	1.75	0.84
1:C:407:PRO:HG2	1:C:410:SER:HB3	0.88	0.84
1:F:149:GLN:HA	1:F:333:ASN:HD21	1.42	0.84
1:E:250:GLN:HE21	1:E:295:SER:CB	1.90	0.84
1:D:459:PHE:HB3	1:D:460:PRO:HD2	1.60	0.84
1:E:263:GLU:CD	1:E:285:PRO:HA	1.98	0.84
1:B:88:ASN:ND2	1:B:89:PRO:CD	2.16	0.84
1:D:263:GLU:CD	1:D:285:PRO:HA	1.98	0.84
1:D:250:GLN:HE21	1:D:295:SER:CB	1.89	0.84
1:A:397:LEU:HD22	1:A:402:ILE:CD1	2.08	0.83
1:C:242:MET:CE	1:C:314:GLN:HE22	1.90	0.83
1:F:263:GLU:CD	1:F:285:PRO:HA	1.98	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:250:GLN:HE21	1:C:295:SER:HB3	1.41	0.83
1:B:242:MET:CE	1:B:314:GLN:HE22	1.90	0.83
1:D:149:GLN:HA	1:D:333:ASN:HD21	1.44	0.83
1:F:250:GLN:HE21	1:F:295:SER:HB3	1.43	0.83
1:F:459:PHE:HB3	1:F:460:PRO:HD2	1.61	0.83
1:B:123:LEU:HD11	1:B:132:VAL:HG22	1.61	0.83
1:C:81:LEU:HB3	1:C:86:VAL:HG21	1.59	0.83
1:A:312:ARG:HB2	1:E:475:THR:O	1.79	0.83
1:E:88:ASN:ND2	1:E:89:PRO:CD	2.19	0.83
1:D:435:GLU:HG2	1:D:439:ALA:HB3	1.58	0.83
1:A:38:THR:HG22	1:A:448:LEU:HD21	1.61	0.83
1:A:459:PHE:HB3	1:A:460:PRO:HD2	1.60	0.83
1:B:149:GLN:HA	1:B:333:ASN:HD21	1.43	0.83
1:E:149:GLN:HA	1:E:333:ASN:HD21	1.43	0.83
1:D:38:THR:HG22	1:D:448:LEU:HD21	1.60	0.83
1:C:425:LYS:CE	1:C:428:SER:CB	2.55	0.82
1:F:158:THR:CG2	1:F:159:PRO:HD2	2.09	0.82
1:A:339:LEU:HB3	1:A:363:ARG:O	1.77	0.82
1:B:459:PHE:HB3	1:B:460:PRO:HD2	1.61	0.82
1:D:88:ASN:HD22	1:D:89:PRO:HD2	0.72	0.82
1:D:158:THR:CG2	1:D:159:PRO:HD2	2.09	0.82
1:D:250:GLN:HE21	1:D:295:SER:HB3	1.41	0.82
1:F:459:PHE:HE2	1:A:409:SER:HG	1.25	0.82
1:B:455:ASP:CG	1:C:19:LYS:HZ2	1.81	0.82
1:C:158:THR:CG2	1:C:159:PRO:HD2	2.10	0.82
1:D:80:ALA:HB2	1:E:11:TYR:HB2	1.61	0.82
1:F:412:LEU:HD23	1:A:40:ARG:HH21	1.44	0.81
1:F:122:LEU:HD11	1:F:260:GLY:HA2	1.61	0.81
1:A:122:LEU:HD11	1:A:260:GLY:HA2	1.62	0.81
1:F:57:THR:O	1:A:422:PRO:HD2	1.79	0.81
1:C:16:PRO:CD	1:C:17:VAL:H	1.90	0.81
1:F:397:LEU:HB3	1:F:402:ILE:HD11	1.61	0.81
1:C:149:GLN:HA	1:C:333:ASN:HD21	1.45	0.81
1:B:38:THR:HG22	1:B:448:LEU:HD21	1.61	0.81
1:A:123:LEU:HD11	1:A:132:VAL:HG22	1.62	0.81
1:C:87:HIS:CE1	1:C:94:LEU:CD1	2.63	0.81
1:D:458:GLN:HE21	1:E:19:LYS:HB2	1.44	0.81
1:A:158:THR:CG2	1:A:159:PRO:HD2	2.10	0.81
1:B:158:THR:CG2	1:B:159:PRO:HD2	2.09	0.81
1:E:459:PHE:HB3	1:E:460:PRO:HD2	1.60	0.81
1:C:38:THR:HG22	1:C:448:LEU:HD21	1.60	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:87:HIS:HE1	1:D:94:LEU:CG	1.76	0.81
1:F:123:LEU:HD11	1:F:132:VAL:HG22	1.62	0.81
1:C:58:VAL:HG11	1:C:363:ARG:NH1	1.95	0.81
1:D:435:GLU:CG	1:D:439:ALA:HB3	2.10	0.81
1:E:242:MET:HE3	1:E:314:GLN:NE2	1.94	0.81
1:A:136:THR:HG22	1:A:137:THR:N	1.95	0.81
1:B:136:THR:HG22	1:B:137:THR:N	1.96	0.81
1:C:136:THR:HG22	1:C:137:THR:N	1.96	0.81
1:D:123:LEU:HD11	1:D:132:VAL:HG22	1.61	0.81
1:F:136:THR:HG22	1:F:137:THR:N	1.95	0.81
1:C:417:ARG:HG2	1:C:418:TYR:CD1	2.15	0.81
1:F:38:THR:HG22	1:F:448:LEU:HD21	1.61	0.81
1:E:38:THR:HG22	1:E:448:LEU:HD21	1.61	0.81
1:C:393:MET:CG	1:C:396:VAL:HG12	2.11	0.81
1:A:87:HIS:HB2	1:A:92:GLU:OE2	1.81	0.80
1:F:154:LEU:HG	1:F:329:THR:HB	1.60	0.80
1:A:92:GLU:HA	1:A:381:ILE:HG12	1.61	0.80
1:B:122:LEU:HD11	1:B:260:GLY:HA2	1.62	0.80
1:D:122:LEU:HD11	1:D:260:GLY:HA2	1.63	0.80
1:B:408:THR:CG2	1:B:411:ILE:CD1	2.58	0.80
1:C:459:PHE:HB3	1:C:460:PRO:HD2	1.60	0.80
1:A:164:TYR:CE2	1:A:187:LYS:CB	2.57	0.80
1:C:164:TYR:HE2	1:C:187:LYS:CB	1.94	0.80
1:C:122:LEU:HD11	1:C:260:GLY:HA2	1.61	0.80
1:A:242:MET:CE	1:A:314:GLN:NE2	2.44	0.80
1:E:136:THR:HG22	1:E:137:THR:N	1.96	0.80
1:F:153:LEU:HD13	1:F:330:VAL:HG22	1.63	0.80
1:D:393:MET:CG	1:D:396:VAL:HG12	2.12	0.80
1:F:154:LEU:HD11	1:F:329:THR:HB	1.57	0.80
1:F:429:ASN:O	1:F:432:PRO:CD	2.30	0.79
1:D:242:MET:HE3	1:D:314:GLN:NE2	1.98	0.79
1:D:164:TYR:HE2	1:D:187:LYS:CB	1.95	0.79
1:A:296:LEU:HA	1:B:252:TYR:HB3	1.62	0.79
1:B:393:MET:CG	1:B:396:VAL:HG12	2.12	0.79
1:C:6:GLN:HE21	1:C:6:GLN:HA	1.48	0.79
1:A:393:MET:CG	1:A:396:VAL:HG12	2.11	0.79
1:A:196:MET:SD	1:A:223:GLU:OE1	2.40	0.79
1:E:122:LEU:HD11	1:E:260:GLY:HA2	1.62	0.79
1:A:431:ILE:N	1:A:432:PRO:CD	2.45	0.79
1:E:123:LEU:HD11	1:E:132:VAL:HG22	1.62	0.79
1:E:158:THR:CG2	1:E:159:PRO:HD2	2.11	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:459:PHE:HE2	1:A:409:SER:OG	1.64	0.79
1:E:242:MET:CE	1:E:314:GLN:NE2	2.45	0.79
1:E:393:MET:CG	1:E:396:VAL:HG12	2.13	0.79
1:D:242:MET:CE	1:D:314:GLN:NE2	2.45	0.79
1:E:71:ILE:N	1:E:71:ILE:HD12	1.98	0.79
1:A:382:THR:O	1:A:386:VAL:HG23	1.83	0.79
1:F:154:LEU:CD1	1:F:329:THR:H	1.95	0.78
1:C:425:LYS:CE	1:C:428:SER:HB3	2.13	0.78
1:F:71:ILE:HD12	1:F:71:ILE:N	1.98	0.78
1:F:393:MET:CG	1:F:396:VAL:HG12	2.12	0.78
1:A:429:ASN:O	1:A:432:PRO:CD	2.30	0.78
1:F:242:MET:CE	1:F:314:GLN:NE2	2.45	0.78
1:A:71:ILE:N	1:A:71:ILE:HD12	1.98	0.78
1:C:123:LEU:HD11	1:C:132:VAL:HG22	1.61	0.78
1:C:87:HIS:HE1	1:C:94:LEU:CD1	1.97	0.78
1:C:71:ILE:HD12	1:C:71:ILE:N	1.99	0.78
1:B:71:ILE:HD12	1:B:71:ILE:N	1.98	0.78
1:B:361:TYR:CD1	1:C:181:CYS:CB	2.67	0.78
1:A:397:LEU:HD22	1:A:402:ILE:HD13	1.66	0.78
1:E:3:LEU:CD1	1:E:3:LEU:O	2.30	0.78
1:C:297:VAL:HG21	1:C:334:THR:CG2	2.14	0.78
1:C:242:MET:CE	1:C:314:GLN:NE2	2.46	0.78
1:C:15:THR:CG2	1:C:17:VAL:HG23	2.14	0.78
1:C:400:TRP:O	1:C:401:GLU:HG2	1.84	0.78
1:C:164:TYR:CE2	1:C:187:LYS:CB	2.66	0.78
1:B:475:THR:O	1:C:312:ARG:HB2	1.83	0.78
1:C:393:MET:SD	1:C:396:VAL:HG11	2.24	0.78
1:F:153:LEU:HD12	1:F:330:VAL:CG2	2.10	0.77
1:C:122:LEU:CD1	1:C:260:GLY:HA2	2.14	0.77
1:F:397:LEU:O	1:F:402:ILE:HG12	1.83	0.77
1:C:425:LYS:HE2	1:C:428:SER:OG	1.83	0.77
1:D:475:THR:O	1:E:312:ARG:HB2	1.83	0.77
1:D:382:THR:O	1:D:386:VAL:HG23	1.85	0.77
1:E:10:LEU:O	1:E:10:LEU:HD12	1.85	0.77
1:B:442:LYS:H	1:B:442:LYS:HD3	1.47	0.77
1:F:382:THR:O	1:F:386:VAL:HG23	1.85	0.77
1:B:122:LEU:CD1	1:B:260:GLY:HA2	2.15	0.77
1:F:431:ILE:N	1:F:432:PRO:CD	2.45	0.77
1:B:393:MET:HE2	1:B:396:VAL:H	1.49	0.77
1:E:250:GLN:NE2	1:E:295:SER:CB	2.47	0.77
1:F:86:VAL:HG13	1:A:82:PRO:HG2	1.64	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:412:LEU:CB	1:B:235:GLU:OE1	2.21	0.77
1:A:81:LEU:HD22	1:A:86:VAL:HG11	1.66	0.77
1:B:99:ILE:HD11	1:B:375:GLU:HB3	1.67	0.77
1:C:296:LEU:HD12	1:C:296:LEU:C	2.05	0.77
1:D:397:LEU:O	1:D:400:TRP:HB2	1.85	0.77
1:A:87:HIS:CE1	1:A:94:LEU:CG	2.68	0.77
1:E:382:THR:O	1:E:386:VAL:HG23	1.85	0.77
1:F:407:PRO:CG	1:F:410:SER:HB2	2.15	0.77
1:F:296:LEU:C	1:F:296:LEU:HD12	2.05	0.76
1:E:296:LEU:C	1:E:296:LEU:HD12	2.05	0.76
1:A:297:VAL:HG21	1:A:334:THR:CG2	2.15	0.76
1:F:122:LEU:CD1	1:F:260:GLY:HA2	2.15	0.76
1:E:122:LEU:CD1	1:E:260:GLY:HA2	2.16	0.76
1:C:386:VAL:CG1	1:C:402:ILE:HG21	2.15	0.76
1:D:296:LEU:HD12	1:D:296:LEU:C	2.05	0.76
1:B:47:PRO:HG2	1:B:48:TYR:CE1	2.20	0.76
1:B:242:MET:CE	1:B:314:GLN:NE2	2.48	0.76
1:C:431:ILE:HG23	1:C:432:PRO:HA	1.68	0.76
1:D:136:THR:HG22	1:D:137:THR:N	1.96	0.76
1:B:297:VAL:HG21	1:B:334:THR:CG2	2.14	0.76
1:F:429:ASN:O	1:F:432:PRO:CG	2.34	0.76
1:F:99:ILE:HD11	1:F:375:GLU:HB3	1.67	0.76
1:E:99:ILE:HD11	1:E:375:GLU:HB3	1.68	0.76
1:F:92:GLU:OE2	1:F:380:GLU:HG2	1.84	0.76
1:D:164:TYR:CE2	1:D:187:LYS:CB	2.67	0.76
1:C:360:VAL:HG23	1:D:261:GLY:HA3	1.67	0.76
1:F:379:VAL:HG21	1:F:400:TRP:CH2	2.21	0.76
1:D:297:VAL:HG21	1:D:334:THR:CG2	2.15	0.76
1:C:431:ILE:HG22	1:C:432:PRO:CB	2.16	0.76
1:C:431:ILE:CG2	1:C:432:PRO:CA	2.64	0.76
1:A:360:VAL:HG23	1:B:261:GLY:HA3	1.67	0.76
1:E:410:SER:C	1:E:411:ILE:HG13	2.04	0.76
1:B:455:ASP:CB	1:C:19:LYS:HZ2	1.97	0.75
1:F:252:TYR:CE2	1:F:293:SER:OG	2.40	0.75
1:A:122:LEU:CD1	1:A:260:GLY:HA2	2.16	0.75
1:B:296:LEU:HD12	1:B:296:LEU:C	2.07	0.75
1:C:431:ILE:HG22	1:C:432:PRO:HB3	1.67	0.75
1:D:354:ASP:HB2	1:D:357:LYS:HG2	1.68	0.75
1:B:382:THR:O	1:B:386:VAL:HG23	1.85	0.75
1:B:354:ASP:HB2	1:B:357:LYS:HG2	1.69	0.75
1:D:360:VAL:HG23	1:E:261:GLY:HA3	1.67	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:393:MET:HE2	1:E:396:VAL:H	1.52	0.75
1:A:429:ASN:O	1:A:432:PRO:CG	2.34	0.75
1:A:354:ASP:HB2	1:A:357:LYS:HG2	1.68	0.75
1:D:122:LEU:CD1	1:D:260:GLY:HA2	2.16	0.75
1:A:164:TYR:HE2	1:A:187:LYS:HB2	1.30	0.75
1:C:382:THR:O	1:C:386:VAL:HG23	1.86	0.75
1:C:431:ILE:CG2	1:C:432:PRO:CB	2.64	0.75
1:B:393:MET:SD	1:B:396:VAL:HG11	2.27	0.75
1:C:81:LEU:HD13	1:C:86:VAL:CG1	2.17	0.75
1:D:99:ILE:HD11	1:D:375:GLU:HB3	1.68	0.75
1:C:354:ASP:HB2	1:C:357:LYS:HG2	1.69	0.75
1:E:354:ASP:HB2	1:E:357:LYS:HG2	1.69	0.75
1:B:436:ASP:OD1	1:B:437:PRO:CD	2.30	0.75
1:E:297:VAL:HG21	1:E:334:THR:CG2	2.15	0.75
1:F:81:LEU:HD22	1:F:86:VAL:HG11	1.66	0.75
1:D:2:ALA:C	1:D:3:LEU:HD12	2.07	0.75
1:F:32:ILE:HD12	1:F:32:ILE:N	2.02	0.75
1:E:252:TYR:CE2	1:E:293:SER:OG	2.40	0.74
1:B:455:ASP:HB3	1:C:19:LYS:HZ1	1.51	0.74
1:B:242:MET:HE3	1:B:314:GLN:NE2	2.01	0.74
1:C:101:VAL:HG21	1:C:155:LEU:HD22	1.69	0.74
1:F:478:LYS:HG3	1:F:478:LYS:O	1.87	0.74
1:B:250:GLN:NE2	1:B:295:SER:CB	2.49	0.74
1:D:250:GLN:NE2	1:D:295:SER:CB	2.49	0.74
1:C:250:GLN:HE21	1:C:295:SER:CB	1.99	0.74
1:E:410:SER:O	1:E:411:ILE:HG13	1.85	0.74
1:D:393:MET:SD	1:D:396:VAL:HG11	2.27	0.74
1:D:9:LYS:CD	1:D:9:LYS:H	1.99	0.74
1:A:425:LYS:HD2	1:A:429:ASN:ND2	2.01	0.74
1:E:205:ASN:HA	1:E:224:ILE:HG12	1.70	0.74
1:C:99:ILE:HD11	1:C:375:GLU:HB3	1.68	0.74
1:F:393:MET:SD	1:F:396:VAL:HG11	2.27	0.74
1:A:261:GLY:HA3	1:E:360:VAL:HG23	1.68	0.74
1:D:478:LYS:O	1:D:478:LYS:HG3	1.87	0.74
1:D:32:ILE:N	1:D:32:ILE:HD12	2.01	0.74
1:F:354:ASP:HB2	1:F:357:LYS:HG2	1.69	0.74
1:A:127:ASN:ND2	1:E:257:TRP:CD1	2.56	0.74
1:B:257:TRP:CD1	1:C:127:ASN:ND2	2.56	0.74
1:B:360:VAL:HG23	1:C:261:GLY:HA3	1.69	0.74
1:A:393:MET:SD	1:A:396:VAL:HG11	2.26	0.74
1:E:87:HIS:HE1	1:E:94:LEU:HG	1.48	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:99:ILE:HD11	1:A:375:GLU:HB3	1.68	0.74
1:C:16:PRO:HD2	1:C:17:VAL:H	1.52	0.74
1:E:478:LYS:HG3	1:E:478:LYS:O	1.88	0.74
1:C:95:VAL:CG1	1:C:400:TRP:HZ2	1.99	0.73
1:A:252:TYR:CE2	1:A:293:SER:OG	2.41	0.73
1:C:386:VAL:HG13	1:C:402:ILE:CG2	2.18	0.73
1:A:101:VAL:HG21	1:A:155:LEU:HD22	1.70	0.73
1:A:87:HIS:HE1	1:A:94:LEU:CD1	1.99	0.73
1:F:425:LYS:HD2	1:F:429:ASN:ND2	2.01	0.73
1:F:297:VAL:HG21	1:F:334:THR:CG2	2.15	0.73
1:F:87:HIS:HE1	1:F:94:LEU:HD12	1.54	0.73
1:E:81:LEU:CD2	1:E:86:VAL:HG11	2.18	0.73
1:B:296:LEU:O	1:B:296:LEU:CD1	2.31	0.73
1:B:442:LYS:N	1:B:442:LYS:HD3	2.04	0.73
1:C:257:TRP:CD1	1:D:127:ASN:ND2	2.56	0.73
1:A:32:ILE:N	1:A:32:ILE:HD12	2.04	0.73
1:C:478:LYS:HG3	1:C:478:LYS:O	1.88	0.73
1:B:478:LYS:O	1:B:478:LYS:HG3	1.88	0.73
1:F:79:PHE:HD2	1:A:80:ALA:N	1.87	0.73
1:B:32:ILE:HD12	1:B:32:ILE:N	2.03	0.73
1:F:101:VAL:HG21	1:F:155:LEU:HD22	1.70	0.73
1:A:165:TRP:CE2	1:E:365:MET:SD	2.82	0.73
1:C:32:ILE:N	1:C:32:ILE:HD12	2.03	0.73
1:F:46:HIS:NE2	1:F:48:TYR:HB2	2.04	0.72
1:B:53:ILE:HG13	1:B:53:ILE:O	1.88	0.72
1:B:81:LEU:CD2	1:B:86:VAL:HG11	2.19	0.72
1:A:257:TRP:CD1	1:B:127:ASN:ND2	2.57	0.72
1:A:21:LEU:HD21	1:A:25:THR:HG21	1.70	0.72
1:C:76:PRO:HG3	1:C:95:VAL:HA	1.70	0.72
1:D:46:HIS:NE2	1:D:48:TYR:HB2	2.05	0.72
1:C:53:ILE:HG13	1:C:53:ILE:O	1.89	0.72
1:F:53:ILE:HG13	1:F:53:ILE:O	1.90	0.72
1:C:252:TYR:CE2	1:C:293:SER:OG	2.42	0.72
1:E:46:HIS:NE2	1:E:48:TYR:HB2	2.05	0.72
1:B:365:MET:SD	1:C:165:TRP:CE2	2.82	0.72
1:A:407:PRO:CG	1:A:410:SER:HB2	2.17	0.72
1:F:397:LEU:HD22	1:F:402:ILE:CD1	2.19	0.72
1:D:361:TYR:CD1	1:E:181:CYS:CB	2.73	0.72
1:C:250:GLN:NE2	1:C:295:SER:CB	2.53	0.72
1:B:87:HIS:CE1	1:B:94:LEU:CG	2.72	0.72
1:D:101:VAL:HG21	1:D:155:LEU:HD22	1.72	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:393:MET:SD	1:E:396:VAL:HG11	2.29	0.72
1:B:81:LEU:HD13	1:B:86:VAL:HG11	1.71	0.72
1:D:205:ASN:HA	1:D:224:ILE:HG12	1.71	0.72
1:F:205:ASN:HA	1:F:224:ILE:HG12	1.71	0.72
1:C:88:ASN:ND2	1:C:89:PRO:N	2.29	0.72
1:C:46:HIS:NE2	1:C:48:TYR:HB2	2.05	0.72
1:C:361:TYR:CD1	1:D:181:CYS:CB	2.71	0.72
1:D:81:LEU:CD2	1:D:86:VAL:HG11	2.19	0.72
1:F:250:GLN:HE21	1:F:295:SER:CB	2.02	0.72
1:A:475:THR:O	1:B:312:ARG:HB2	1.90	0.72
1:E:32:ILE:HD12	1:E:32:ILE:N	2.04	0.71
1:E:395:SER:O	1:E:398:GLU:HB2	1.90	0.71
1:B:76:PRO:HG3	1:B:95:VAL:HA	1.71	0.71
1:D:71:ILE:N	1:D:71:ILE:HD12	2.04	0.71
1:C:205:ASN:HA	1:C:224:ILE:HG12	1.72	0.71
1:B:47:PRO:HG2	1:B:48:TYR:HD1	1.54	0.71
1:E:76:PRO:HG3	1:E:95:VAL:HA	1.71	0.71
1:C:430:VAL:O	1:C:430:VAL:CG1	2.38	0.71
1:C:78:GLN:HG2	1:D:9:LYS:HB3	1.72	0.71
1:F:70:LYS:HE3	1:F:445:ASN:HD21	1.55	0.71
1:C:150:GLN:CG	1:C:249:GLU:HB3	2.18	0.71
1:B:70:LYS:HE3	1:B:445:ASN:HD21	1.55	0.71
1:A:245:PHE:O	1:E:478:LYS:NZ	2.23	0.71
1:C:475:THR:O	1:D:312:ARG:HB2	1.90	0.71
1:D:93:ARG:NE	1:D:402:ILE:HD11	2.05	0.71
1:D:430:VAL:O	1:D:432:PRO:HD3	1.91	0.71
1:A:379:VAL:HG21	1:A:400:TRP:CH2	2.26	0.71
1:B:46:HIS:ND1	1:B:47:PRO:HD2	2.05	0.71
1:F:402:ILE:O	1:B:18:SER:HB3	1.89	0.71
1:E:81:LEU:HD13	1:E:86:VAL:HG11	1.73	0.71
1:C:431:ILE:HG23	1:C:432:PRO:CA	2.21	0.71
1:C:381:ILE:HG23	1:C:386:VAL:HG22	1.73	0.71
1:A:361:TYR:CD1	1:B:181:CYS:CB	2.73	0.71
1:A:242:MET:HE3	1:A:314:GLN:NE2	2.02	0.71
1:D:53:ILE:O	1:D:53:ILE:HG13	1.88	0.71
1:A:53:ILE:O	1:A:53:ILE:HG13	1.89	0.71
1:C:81:LEU:CD2	1:C:86:VAL:HG11	2.21	0.70
1:B:478:LYS:NZ	1:C:245:PHE:O	2.24	0.70
1:C:365:MET:SD	1:D:165:TRP:CE2	2.84	0.70
1:D:365:MET:SD	1:E:165:TRP:CE2	2.85	0.70
1:A:312:ARG:HG3	1:E:475:THR:HB	1.72	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:101:VAL:HG21	1:B:155:LEU:HD22	1.71	0.70
1:B:458:GLN:HE22	1:C:20:VAL:H	1.39	0.70
1:F:444:TRP:CE2	1:A:417:ARG:HD2	2.26	0.70
1:A:416:TYR:HB2	1:A:419:ILE:HG12	1.73	0.70
1:C:15:THR:HG22	1:C:17:VAL:HG23	1.71	0.70
1:D:478:LYS:NZ	1:E:245:PHE:O	2.24	0.70
1:D:166:THR:O	1:D:184:LEU:HD23	1.92	0.70
1:A:87:HIS:CE1	1:A:94:LEU:HD11	2.25	0.70
1:D:81:LEU:HD13	1:D:86:VAL:HG11	1.72	0.70
1:D:250:GLN:NE2	1:D:295:SER:OG	2.25	0.70
1:A:381:ILE:HG23	1:A:386:VAL:HG22	1.73	0.70
1:C:70:LYS:HE3	1:C:445:ASN:HD21	1.57	0.70
1:E:53:ILE:HG13	1:E:53:ILE:O	1.89	0.70
1:A:46:HIS:NE2	1:A:48:TYR:HB2	2.07	0.70
1:A:166:THR:O	1:A:184:LEU:HD23	1.92	0.70
1:F:123:LEU:HD11	1:F:132:VAL:HG13	1.74	0.69
1:E:101:VAL:HG21	1:E:155:LEU:HD22	1.73	0.69
1:C:322:TRP:HZ3	1:C:400:TRP:HH2	0.74	0.69
1:F:80:ALA:O	1:F:82:PRO:HD3	1.92	0.69
1:A:46:HIS:HE2	1:A:48:TYR:HB2	1.57	0.69
1:F:87:HIS:ND1	1:F:94:LEU:HD11	2.07	0.69
1:C:393:MET:SD	1:C:396:VAL:HB	2.33	0.69
1:B:205:ASN:HA	1:B:224:ILE:HG12	1.72	0.69
1:E:463:ARG:HH11	1:E:463:ARG:HB2	1.57	0.69
1:A:365:MET:SD	1:B:165:TRP:CE2	2.86	0.69
1:D:76:PRO:HG3	1:D:95:VAL:HA	1.74	0.69
1:E:381:ILE:HG23	1:E:386:VAL:HG22	1.74	0.69
1:A:150:GLN:CG	1:A:249:GLU:HB3	2.20	0.69
1:B:164:TYR:CE2	1:B:187:LYS:CB	2.62	0.69
1:C:81:LEU:CD1	1:C:86:VAL:HG11	2.22	0.69
1:C:478:LYS:NZ	1:D:245:PHE:O	2.26	0.69
1:E:192:GLU:OE2	1:E:441:PHE:HB3	1.91	0.69
1:F:250:GLN:NE2	1:F:295:SER:CB	2.56	0.69
1:E:166:THR:O	1:E:184:LEU:HD23	1.93	0.69
1:E:70:LYS:HE3	1:E:445:ASN:HD21	1.57	0.69
1:B:296:LEU:HA	1:C:252:TYR:HB3	1.74	0.68
1:C:123:LEU:HD11	1:C:132:VAL:HG13	1.75	0.68
1:F:379:VAL:HG21	1:F:400:TRP:HH2	1.57	0.68
1:F:417:ARG:HB3	1:A:43:THR:HG22	1.75	0.68
1:A:393:MET:SD	1:A:396:VAL:HB	2.33	0.68
1:F:459:PHE:CE2	1:A:409:SER:OG	2.41	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:475:THR:HB	1:C:312:ARG:HG3	1.75	0.68
1:C:192:GLU:OE2	1:C:441:PHE:HB3	1.92	0.68
1:F:424:THR:HG22	1:F:425:LYS:N	2.08	0.68
1:A:80:ALA:O	1:A:82:PRO:HD3	1.93	0.68
1:A:252:TYR:HB3	1:E:296:LEU:HA	1.75	0.68
1:A:149:GLN:HE22	1:A:297:VAL:CG2	2.07	0.68
1:E:95:VAL:HG12	1:E:400:TRP:HH2	1.56	0.68
1:D:192:GLU:OE2	1:D:441:PHE:HB3	1.93	0.68
1:B:166:THR:O	1:B:184:LEU:HD23	1.93	0.68
1:A:478:LYS:HG3	1:A:478:LYS:O	1.92	0.68
1:A:469:GLN:HE21	1:A:469:GLN:HA	1.58	0.68
1:D:88:ASN:HD22	1:D:89:PRO:N	1.91	0.68
1:B:381:ILE:HG23	1:B:386:VAL:HG22	1.75	0.68
1:D:153:LEU:HG	1:D:330:VAL:HG22	1.76	0.68
1:B:192:GLU:OE2	1:B:441:PHE:HB3	1.94	0.68
1:B:303:ILE:O	1:B:303:ILE:HG13	1.94	0.68
1:F:412:LEU:CD2	1:A:40:ARG:HH21	2.06	0.68
1:E:123:LEU:HD11	1:E:132:VAL:HG13	1.75	0.68
1:A:424:THR:HG22	1:A:425:LYS:N	2.08	0.68
1:D:463:ARG:HH11	1:D:463:ARG:HB2	1.59	0.68
1:C:166:THR:O	1:C:184:LEU:HD23	1.93	0.68
1:F:416:TYR:HB2	1:F:419:ILE:HG12	1.75	0.68
1:B:123:LEU:HD11	1:B:132:VAL:HG13	1.75	0.67
1:D:145:LEU:HD23	1:D:217:PRO:HG3	1.76	0.67
1:A:136:THR:CG2	1:A:137:THR:H	2.07	0.67
1:A:463:ARG:HH11	1:A:463:ARG:HB2	1.58	0.67
1:F:166:THR:O	1:F:184:LEU:HD23	1.94	0.67
1:A:123:LEU:HD11	1:A:132:VAL:HG13	1.75	0.67
1:C:145:LEU:HD23	1:C:217:PRO:HG3	1.76	0.67
1:C:149:GLN:HE22	1:C:297:VAL:CG2	2.07	0.67
1:E:149:GLN:HE22	1:E:297:VAL:CG2	2.08	0.67
1:E:136:THR:CG2	1:E:137:THR:H	2.07	0.67
1:F:145:LEU:HD23	1:F:217:PRO:HG3	1.76	0.67
1:D:381:ILE:HG23	1:D:386:VAL:HG22	1.76	0.67
1:F:460:PRO:HA	1:F:463:ARG:HH12	1.59	0.67
1:C:393:MET:HE2	1:C:396:VAL:H	1.59	0.67
1:E:145:LEU:HD23	1:E:217:PRO:HG3	1.76	0.67
1:D:393:MET:HE2	1:D:396:VAL:H	1.58	0.67
1:B:393:MET:SD	1:B:396:VAL:HB	2.34	0.67
1:A:460:PRO:HA	1:A:463:ARG:HH12	1.59	0.67
1:F:407:PRO:CG	1:F:410:SER:CB	2.67	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:10:LEU:N	1:D:10:LEU:HD12	2.09	0.67
1:D:123:LEU:HD11	1:D:132:VAL:HG13	1.75	0.67
1:A:58:VAL:HG11	1:A:363:ARG:HH12	1.60	0.67
1:E:303:ILE:O	1:E:303:ILE:HG13	1.93	0.67
1:F:389:LEU:HB2	1:F:397:LEU:HD21	1.75	0.67
1:D:393:MET:SD	1:D:396:VAL:HB	2.34	0.67
1:C:463:ARG:HB2	1:C:463:ARG:HH11	1.60	0.67
1:F:192:GLU:OE2	1:F:441:PHE:HB3	1.94	0.67
1:C:404:VAL:HG12	1:C:406:PRO:HD2	1.76	0.67
1:F:393:MET:SD	1:F:396:VAL:HB	2.34	0.67
1:C:431:ILE:HG23	1:C:432:PRO:HB3	1.77	0.67
1:A:303:ILE:HG13	1:A:303:ILE:O	1.94	0.67
1:F:381:ILE:HG23	1:F:386:VAL:HG22	1.77	0.67
1:D:252:TYR:CE2	1:D:293:SER:OG	2.44	0.67
1:B:463:ARG:HB2	1:B:463:ARG:HH11	1.59	0.67
1:D:303:ILE:O	1:D:303:ILE:HG13	1.94	0.67
1:C:78:GLN:HG2	1:D:9:LYS:CB	2.24	0.67
1:A:296:LEU:HD12	1:A:296:LEU:C	2.14	0.66
1:F:463:ARG:HB2	1:F:463:ARG:HH11	1.60	0.66
1:D:257:TRP:CD1	1:E:127:ASN:ND2	2.62	0.66
1:A:389:LEU:HB2	1:A:397:LEU:HD21	1.77	0.66
1:D:339:LEU:HB3	1:D:363:ARG:O	1.95	0.66
1:C:303:ILE:O	1:C:303:ILE:HG13	1.94	0.66
1:F:150:GLN:CG	1:F:249:GLU:HB3	2.20	0.66
1:F:149:GLN:HE22	1:F:297:VAL:CG2	2.08	0.66
1:E:393:MET:SD	1:E:396:VAL:HB	2.34	0.66
1:A:192:GLU:OE2	1:A:441:PHE:HB3	1.94	0.66
1:A:171:CYS:HB3	1:A:173:THR:HG22	1.76	0.66
1:C:389:LEU:HB2	1:C:397:LEU:HD21	1.78	0.66
1:D:460:PRO:HA	1:D:463:ARG:HH12	1.59	0.66
1:C:16:PRO:CD	1:C:17:VAL:N	2.59	0.66
1:A:145:LEU:HD23	1:A:217:PRO:HG3	1.78	0.66
1:B:149:GLN:HE22	1:B:297:VAL:CG2	2.07	0.66
1:E:250:GLN:NE2	1:E:295:SER:OG	2.28	0.66
1:D:88:ASN:ND2	1:D:89:PRO:CD	2.13	0.66
1:E:87:HIS:CE1	1:E:94:LEU:CD1	2.78	0.66
1:D:9:LYS:N	1:D:9:LYS:HD3	2.04	0.66
1:B:460:PRO:HA	1:B:463:ARG:HH12	1.60	0.66
1:C:95:VAL:HG11	1:C:400:TRP:HZ2	1.59	0.66
1:A:405:GLN:CB	1:A:406:PRO:CD	2.71	0.66
1:C:386:VAL:CG1	1:C:402:ILE:CG2	2.74	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:427:ALA:O	1:F:430:VAL:HG23	1.96	0.66
1:C:136:THR:CG2	1:C:137:THR:H	2.08	0.66
1:B:158:THR:HG22	1:B:159:PRO:CD	2.25	0.66
1:D:158:THR:HG22	1:D:159:PRO:CD	2.25	0.66
1:D:475:THR:HB	1:E:312:ARG:HG3	1.76	0.66
1:E:411:ILE:HG22	1:E:412:LEU:H	1.60	0.65
1:B:408:THR:HG22	1:B:408:THR:O	1.95	0.65
1:F:79:PHE:CD2	1:A:79:PHE:HA	2.32	0.65
1:B:136:THR:CG2	1:B:137:THR:H	2.07	0.65
1:C:460:PRO:HA	1:C:463:ARG:HH12	1.59	0.65
1:F:303:ILE:HG13	1:F:303:ILE:O	1.93	0.65
1:E:92:GLU:OE2	1:E:380:GLU:HG2	1.95	0.65
1:F:393:MET:HE2	1:F:396:VAL:H	1.61	0.65
1:D:71:ILE:CG2	1:D:448:LEU:HD12	2.27	0.65
1:A:393:MET:HE2	1:A:396:VAL:H	1.61	0.65
1:C:296:LEU:HA	1:D:252:TYR:HB3	1.78	0.65
1:A:181:CYS:HB2	1:E:361:TYR:CE1	2.32	0.65
1:B:122:LEU:O	1:B:123:LEU:HD23	1.96	0.65
1:F:71:ILE:CG2	1:F:448:LEU:HD12	2.27	0.65
1:C:122:LEU:O	1:C:123:LEU:HD23	1.96	0.65
1:B:145:LEU:HD23	1:B:217:PRO:HG3	1.77	0.65
1:F:122:LEU:O	1:F:123:LEU:HD23	1.96	0.65
1:F:418:TYR:CD1	1:A:59:PRO:HG3	2.32	0.65
1:D:429:ASN:OD1	1:D:430:VAL:N	2.30	0.65
1:B:77:ASN:OD1	1:B:93:ARG:HD2	1.97	0.65
1:C:466:LEU:HB3	1:C:471:ALA:O	1.97	0.65
1:A:71:ILE:CG2	1:A:448:LEU:HD12	2.26	0.65
1:E:122:LEU:O	1:E:123:LEU:HD23	1.97	0.65
1:D:150:GLN:CG	1:D:249:GLU:HB3	2.20	0.65
1:A:427:ALA:O	1:A:430:VAL:HG23	1.96	0.65
1:A:81:LEU:HD13	1:A:86:VAL:HG11	1.79	0.65
1:C:158:THR:HG22	1:C:159:PRO:CD	2.26	0.65
1:D:149:GLN:HE22	1:D:297:VAL:CG2	2.08	0.65
1:A:81:LEU:HD13	1:A:86:VAL:CG1	2.27	0.65
1:D:122:LEU:O	1:D:123:LEU:HD23	1.96	0.64
1:B:455:ASP:HB3	1:C:19:LYS:HZ2	1.58	0.64
1:F:76:PRO:HG3	1:F:95:VAL:HA	1.80	0.64
1:E:87:HIS:HE1	1:E:94:LEU:CD1	2.10	0.64
1:E:164:TYR:CE2	1:E:187:LYS:CB	2.56	0.64
1:C:401:GLU:O	1:C:401:GLU:HG3	1.98	0.64
1:E:460:PRO:HA	1:E:463:ARG:HH12	1.62	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:393:MET:HE1	1:C:396:VAL:CB	2.20	0.64
1:A:91:LYS:HB2	1:A:92:GLU:OE1	1.98	0.64
1:F:154:LEU:C	1:F:154:LEU:HD12	2.17	0.64
1:B:81:LEU:HD13	1:B:86:VAL:CG1	2.28	0.64
1:C:5:GLN:HA	1:C:5:GLN:OE1	1.97	0.64
1:C:296:LEU:CD1	1:C:296:LEU:O	2.35	0.64
1:C:71:ILE:CG2	1:C:448:LEU:HD12	2.28	0.64
1:E:71:ILE:CG2	1:E:448:LEU:HD12	2.28	0.64
1:A:403:GLY:O	1:A:404:VAL:HG23	1.98	0.64
1:B:339:LEU:HB3	1:B:363:ARG:O	1.97	0.64
1:C:233:MET:HB2	1:C:242:MET:HE1	1.79	0.64
1:D:81:LEU:HD13	1:D:86:VAL:CG1	2.28	0.64
1:E:65:GLN:HA	1:E:195:ASP:O	1.98	0.64
1:C:51:VAL:HG12	1:C:52:SER:N	2.13	0.64
1:C:8:GLN:HA	1:C:8:GLN:OE1	1.98	0.64
1:E:20:VAL:HG22	1:E:21:LEU:N	2.13	0.64
1:A:122:LEU:O	1:A:123:LEU:HD23	1.96	0.64
1:C:148:LYS:HG3	1:C:251:VAL:HG21	1.80	0.64
1:F:82:PRO:HG2	1:A:86:VAL:HG13	1.78	0.64
1:D:436:ASP:O	1:D:437:PRO:C	2.36	0.64
1:C:16:PRO:HG2	1:C:18:SER:H	1.62	0.64
1:C:417:ARG:HH11	1:C:417:ARG:HG3	1.63	0.64
1:F:156:GLY:CA	1:F:243:PHE:HE1	1.97	0.64
1:E:77:ASN:OD1	1:E:93:ARG:HD2	1.98	0.64
1:F:65:GLN:HA	1:F:195:ASP:O	1.98	0.64
1:C:475:THR:HB	1:D:312:ARG:HG3	1.80	0.63
1:A:158:THR:HG22	1:A:159:PRO:CD	2.26	0.63
1:F:252:TYR:O	1:F:293:SER:HB3	1.99	0.63
1:F:164:TYR:CE2	1:F:187:LYS:CB	2.58	0.63
1:F:158:THR:HG22	1:F:159:PRO:CD	2.25	0.63
1:E:3:LEU:HD12	1:E:3:LEU:C	2.18	0.63
1:B:150:GLN:CG	1:B:249:GLU:HB3	2.20	0.63
1:F:79:PHE:HA	1:A:79:PHE:CD2	2.33	0.63
1:C:47:PRO:HB3	1:C:62:SER:HA	1.80	0.63
1:F:136:THR:CG2	1:F:137:THR:H	2.07	0.63
1:E:22:CYS:HA	1:E:316:MET:HB3	1.80	0.63
1:B:217:PRO:HD2	1:B:220:ILE:HG21	1.81	0.63
1:C:81:LEU:HD22	1:C:86:VAL:CG1	2.27	0.63
1:C:171:CYS:HB2	1:C:173:THR:HG22	1.80	0.63
1:D:20:VAL:HG11	1:D:237:ALA:HB1	1.80	0.63
1:A:77:ASN:HD21	1:A:93:ARG:HH11	1.46	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:47:PRO:HB3	1:D:62:SER:HA	1.80	0.63
1:D:360:VAL:CG1	1:E:287:VAL:HG21	2.29	0.63
1:A:91:LYS:CB	1:A:92:GLU:OE1	2.47	0.62
1:E:410:SER:O	1:E:411:ILE:CG1	2.46	0.62
1:B:203:ALA:HB1	1:B:225:CYS:O	1.99	0.62
1:C:393:MET:CE	1:C:396:VAL:CB	2.72	0.62
1:A:379:VAL:HG21	1:A:400:TRP:HH2	1.62	0.62
1:A:60:LYS:NZ	1:A:223:GLU:OE2	2.32	0.62
1:F:86:VAL:HA	1:A:82:PRO:HB2	1.81	0.62
1:A:360:VAL:HG11	1:B:287:VAL:HG21	1.81	0.62
1:F:51:VAL:HG12	1:F:52:SER:N	2.14	0.62
1:B:71:ILE:CG2	1:B:448:LEU:HD12	2.29	0.62
1:A:403:GLY:O	1:A:404:VAL:CG2	2.47	0.62
1:E:81:LEU:HD13	1:E:86:VAL:CG1	2.29	0.62
1:F:417:ARG:HD2	1:A:444:TRP:CE2	2.34	0.62
1:A:437:PRO:HG2	1:A:438:TYR:CE1	2.34	0.62
1:D:51:VAL:HG12	1:D:52:SER:N	2.14	0.62
1:D:296:LEU:HA	1:E:252:TYR:HB3	1.82	0.62
1:C:65:GLN:HA	1:C:195:ASP:O	1.99	0.62
1:E:88:ASN:HD21	1:E:89:PRO:HD2	1.56	0.62
1:E:217:PRO:HD2	1:E:220:ILE:HG21	1.81	0.62
1:E:47:PRO:HB3	1:E:62:SER:HA	1.81	0.62
1:C:242:MET:HE3	1:C:314:GLN:NE2	2.06	0.62
1:A:360:VAL:CG1	1:B:287:VAL:HG21	2.30	0.62
1:C:360:VAL:HG11	1:D:287:VAL:HG21	1.82	0.62
1:B:318:ASN:HD22	1:B:318:ASN:N	1.98	0.62
1:E:51:VAL:HG12	1:E:52:SER:N	2.15	0.62
1:A:65:GLN:HA	1:A:195:ASP:O	1.99	0.62
1:E:164:TYR:HE2	1:E:187:LYS:HB3	1.63	0.62
1:E:150:GLN:CG	1:E:249:GLU:HB3	2.20	0.62
1:B:92:GLU:OE2	1:B:380:GLU:HG2	1.99	0.62
1:E:158:THR:HG22	1:E:159:PRO:CD	2.27	0.62
1:A:51:VAL:HG12	1:A:52:SER:N	2.14	0.62
1:E:122:LEU:HD21	1:E:139:ASP:OD2	2.00	0.62
1:A:217:PRO:HD2	1:A:220:ILE:HG21	1.81	0.62
1:C:339:LEU:HB3	1:C:363:ARG:O	2.00	0.62
1:F:47:PRO:HB3	1:F:62:SER:HA	1.81	0.62
1:F:437:PRO:HG2	1:F:438:TYR:CE1	2.34	0.62
1:D:65:GLN:HA	1:D:195:ASP:O	1.99	0.62
1:C:318:ASN:HD22	1:C:318:ASN:N	1.97	0.62
1:F:64:ASN:N	1:F:64:ASN:HD22	1.98	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:318:ASN:HD22	1:A:318:ASN:N	1.97	0.62
1:E:171:CYS:HB2	1:E:173:THR:HG22	1.81	0.62
1:E:148:LYS:HG3	1:E:251:VAL:HG21	1.82	0.62
1:A:220:ILE:O	1:A:223:GLU:HB2	2.00	0.62
1:B:88:ASN:HD21	1:B:89:PRO:HD2	1.54	0.61
1:D:217:PRO:HD2	1:D:220:ILE:HG21	1.82	0.61
1:F:81:LEU:HD13	1:F:86:VAL:CG1	2.30	0.61
1:A:478:LYS:NZ	1:B:245:PHE:O	2.33	0.61
1:A:396:VAL:O	1:A:400:TRP:HB2	2.00	0.61
1:D:148:LYS:HG3	1:D:251:VAL:HG21	1.82	0.61
1:A:47:PRO:HB3	1:A:62:SER:HA	1.81	0.61
1:F:403:GLY:O	1:F:404:VAL:HG23	1.99	0.61
1:B:361:TYR:CE1	1:C:181:CYS:CB	2.82	0.61
1:F:403:GLY:O	1:F:404:VAL:CG2	2.48	0.61
1:C:91:LYS:O	1:C:381:ILE:HB	2.00	0.61
1:B:51:VAL:HG12	1:B:52:SER:N	2.14	0.61
1:D:81:LEU:HD22	1:D:86:VAL:CG1	2.27	0.61
1:F:217:PRO:HD2	1:F:220:ILE:HG21	1.82	0.61
1:B:65:GLN:HA	1:B:195:ASP:O	2.00	0.61
1:D:122:LEU:HD21	1:D:139:ASP:OD2	2.00	0.61
1:B:148:LYS:HG3	1:B:251:VAL:HG21	1.83	0.61
1:A:393:MET:CE	1:A:396:VAL:CB	2.74	0.61
1:A:252:TYR:O	1:A:293:SER:HB3	2.00	0.61
1:D:88:ASN:HD21	1:D:89:PRO:HD2	1.54	0.61
1:F:122:LEU:HD21	1:F:139:ASP:OD2	2.01	0.61
1:D:136:THR:CG2	1:D:137:THR:H	2.08	0.61
1:B:254:ARG:HD3	1:B:293:SER:HB3	1.81	0.61
1:F:154:LEU:CD1	1:F:329:THR:N	2.64	0.61
1:C:431:ILE:HG23	1:C:432:PRO:CB	2.31	0.61
1:D:30:LYS:HB3	1:D:32:ILE:HD13	1.83	0.61
1:A:30:LYS:HB3	1:A:32:ILE:HD13	1.83	0.61
1:A:203:ALA:HB1	1:A:225:CYS:O	2.01	0.61
1:F:393:MET:SD	1:F:396:VAL:HG12	2.41	0.61
1:F:81:LEU:HD13	1:F:86:VAL:HG11	1.81	0.61
1:F:148:LYS:HG3	1:F:251:VAL:HG21	1.83	0.61
1:A:287:VAL:HG21	1:E:360:VAL:HG11	1.83	0.61
1:E:263:GLU:OE2	1:E:285:PRO:HA	2.01	0.61
1:D:360:VAL:HG11	1:E:287:VAL:HG21	1.81	0.61
1:F:203:ALA:HB1	1:F:225:CYS:O	2.00	0.61
1:A:405:GLN:HB2	1:A:406:PRO:CD	2.06	0.60
1:B:455:ASP:CG	1:C:19:LYS:HZ3	2.03	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:203:ALA:HB1	1:C:225:CYS:O	2.01	0.60
1:C:76:PRO:HD2	1:C:324:ASN:OD1	2.00	0.60
1:B:122:LEU:HD21	1:B:139:ASP:OD2	2.01	0.60
1:C:296:LEU:CD1	1:C:296:LEU:C	2.70	0.60
1:D:220:ILE:HD13	1:D:220:ILE:O	2.01	0.60
1:D:296:LEU:CD1	1:D:296:LEU:C	2.70	0.60
1:B:393:MET:SD	1:B:396:VAL:HG12	2.41	0.60
1:C:6:GLN:HE21	1:C:6:GLN:CA	2.13	0.60
1:A:148:LYS:HG3	1:A:251:VAL:HG21	1.83	0.60
1:B:70:LYS:CE	1:B:445:ASN:ND2	2.63	0.60
1:D:318:ASN:HD22	1:D:318:ASN:N	1.97	0.60
1:D:341:ILE:HG23	1:E:209:ILE:HG23	1.83	0.60
1:B:263:GLU:OE2	1:B:285:PRO:HA	2.00	0.60
1:F:171:CYS:HB2	1:F:173:THR:HG22	1.83	0.60
1:E:64:ASN:N	1:E:64:ASN:HD22	1.98	0.60
1:C:122:LEU:HD21	1:C:139:ASP:OD2	2.01	0.60
1:D:251:VAL:HG22	1:D:252:TYR:N	2.17	0.60
1:B:400:TRP:O	1:B:401:GLU:HB2	2.01	0.60
1:E:393:MET:SD	1:E:396:VAL:HG12	2.40	0.60
1:B:393:MET:CE	1:B:396:VAL:CB	2.74	0.60
1:D:402:ILE:HG22	1:D:402:ILE:O	2.00	0.60
1:A:263:GLU:OE2	1:A:285:PRO:HA	2.00	0.60
1:C:83:ASP:OD1	1:C:83:ASP:N	2.34	0.60
1:C:393:MET:CG	1:C:396:VAL:CG1	2.80	0.60
1:C:220:ILE:HD13	1:C:220:ILE:O	2.02	0.60
1:F:397:LEU:HD22	1:F:402:ILE:HD13	1.82	0.60
1:F:70:LYS:CE	1:F:445:ASN:ND2	2.64	0.60
1:E:203:ALA:HB1	1:E:225:CYS:O	2.00	0.60
1:C:252:TYR:O	1:C:293:SER:HB3	2.02	0.60
1:E:251:VAL:HG22	1:E:252:TYR:N	2.17	0.60
1:D:393:MET:CE	1:D:396:VAL:CB	2.75	0.60
1:F:193:ASP:HB2	1:F:443:PHE:CA	2.31	0.60
1:C:360:VAL:CG1	1:D:287:VAL:HG21	2.31	0.60
1:C:77:ASN:OD1	1:C:93:ARG:HD2	2.02	0.60
1:F:71:ILE:CD1	1:F:71:ILE:N	2.65	0.60
1:C:94:LEU:CD2	1:C:378:SER:HB3	2.32	0.60
1:F:393:MET:CE	1:F:396:VAL:CB	2.75	0.60
1:F:405:GLN:CB	1:F:406:PRO:CD	2.73	0.60
1:E:95:VAL:HG23	1:E:377:CYS:SG	2.42	0.60
1:D:400:TRP:HE3	1:D:400:TRP:HA	1.67	0.60
1:A:322:TRP:O	1:A:323:ASN:HB2	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:64:ASN:N	1:B:64:ASN:HD22	1.99	0.60
1:A:122:LEU:HD21	1:A:139:ASP:OD2	2.01	0.60
1:E:252:TYR:O	1:E:293:SER:HB3	2.01	0.60
1:F:251:VAL:HG22	1:F:252:TYR:N	2.16	0.60
1:E:70:LYS:CE	1:E:445:ASN:ND2	2.65	0.60
1:E:317:ASN:HD21	1:E:320:ILE:H	1.49	0.60
1:A:397:LEU:CB	1:A:402:ILE:HD11	2.27	0.60
1:D:9:LYS:O	1:D:9:LYS:HG2	2.01	0.60
1:F:220:ILE:O	1:F:220:ILE:HD13	2.01	0.60
1:D:263:GLU:OE2	1:D:285:PRO:HA	2.01	0.60
1:E:71:ILE:N	1:E:71:ILE:CD1	2.65	0.59
1:A:251:VAL:HG22	1:A:252:TYR:N	2.17	0.59
1:C:405:GLN:HB2	1:C:406:PRO:CD	2.09	0.59
1:C:167:THR:HG23	1:C:182:PRO:HB2	1.84	0.59
1:C:263:GLU:OE2	1:C:285:PRO:HA	2.02	0.59
1:C:250:GLN:NE2	1:C:295:SER:OG	2.35	0.59
1:D:64:ASN:HD22	1:D:64:ASN:N	1.99	0.59
1:A:393:MET:SD	1:A:396:VAL:CB	2.90	0.59
1:E:296:LEU:C	1:E:296:LEU:CD1	2.70	0.59
1:A:171:CYS:CB	1:A:173:THR:HG22	2.31	0.59
1:B:317:ASN:HD21	1:B:320:ILE:H	1.50	0.59
1:A:87:HIS:HE1	1:A:94:LEU:HD12	1.65	0.59
1:C:217:PRO:HD2	1:C:220:ILE:HG21	1.83	0.59
1:A:220:ILE:O	1:A:220:ILE:HD13	2.02	0.59
1:E:167:THR:HG23	1:E:182:PRO:HB2	1.84	0.59
1:F:82:PRO:O	1:F:83:ASP:OD2	2.21	0.59
1:C:193:ASP:HB2	1:C:443:PHE:CA	2.32	0.59
1:D:203:ALA:HB1	1:D:225:CYS:O	2.02	0.59
1:C:322:TRP:O	1:C:323:ASN:HB2	2.01	0.59
1:C:70:LYS:CE	1:C:445:ASN:ND2	2.65	0.59
1:A:268:THR:HG22	1:A:269:THR:N	2.18	0.59
1:E:83:ASP:N	1:E:83:ASP:OD1	2.35	0.59
1:A:71:ILE:N	1:A:71:ILE:CD1	2.65	0.59
1:C:251:VAL:HG22	1:C:252:TYR:N	2.18	0.59
1:C:87:HIS:CE1	1:C:94:LEU:HD11	2.36	0.59
1:C:92:GLU:OE2	1:C:380:GLU:HG2	2.03	0.59
1:A:287:VAL:HG13	1:E:362:HIS:CE1	2.38	0.59
1:B:360:VAL:HG11	1:C:287:VAL:HG21	1.84	0.59
1:F:318:ASN:N	1:F:318:ASN:HD22	1.97	0.59
1:D:94:LEU:CD2	1:D:378:SER:HB3	2.33	0.59
1:C:393:MET:SD	1:C:396:VAL:CB	2.89	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:155:LEU:C	1:F:243:PHE:HD1	2.06	0.59
1:A:233:MET:HB2	1:A:242:MET:HE1	1.84	0.59
1:A:82:PRO:O	1:A:83:ASP:OD2	2.21	0.59
1:E:318:ASN:N	1:E:318:ASN:HD22	1.97	0.59
1:E:130:ARG:HG2	1:E:131:LYS:N	2.18	0.59
1:E:268:THR:HG22	1:E:269:THR:N	2.18	0.59
1:B:393:MET:CG	1:B:396:VAL:CG1	2.81	0.59
1:F:263:GLU:OE2	1:F:285:PRO:HA	2.02	0.59
1:D:400:TRP:CE3	1:D:400:TRP:HA	2.37	0.59
1:A:317:ASN:HD21	1:A:320:ILE:H	1.50	0.59
1:D:466:LEU:HB3	1:D:471:ALA:O	2.02	0.59
1:D:87:HIS:HE1	1:D:94:LEU:HD12	1.61	0.59
1:C:405:GLN:CB	1:C:406:PRO:CD	2.76	0.59
1:B:30:LYS:HB3	1:B:32:ILE:HD13	1.84	0.59
1:D:296:LEU:CD1	1:D:296:LEU:O	2.35	0.59
1:F:393:MET:CG	1:F:396:VAL:CG1	2.81	0.59
1:B:130:ARG:HG2	1:B:131:LYS:N	2.17	0.59
1:A:341:ILE:HG23	1:B:209:ILE:HG23	1.85	0.59
1:D:322:TRP:O	1:D:323:ASN:HB2	2.02	0.59
1:A:130:ARG:HG2	1:A:131:LYS:N	2.18	0.59
1:B:361:TYR:CE1	1:C:181:CYS:CA	2.86	0.59
1:D:361:TYR:CE1	1:E:181:CYS:CB	2.86	0.59
1:A:361:TYR:CE1	1:B:181:CYS:CB	2.86	0.59
1:F:30:LYS:HB3	1:F:32:ILE:HD13	1.85	0.59
1:C:64:ASN:N	1:C:64:ASN:HD22	2.00	0.59
1:D:87:HIS:ND1	1:D:94:LEU:HD21	2.17	0.58
1:F:296:LEU:C	1:F:296:LEU:CD1	2.70	0.58
1:A:65:GLN:HG2	1:A:196:MET:CE	2.33	0.58
1:C:15:THR:HG21	1:C:17:VAL:HG23	1.83	0.58
1:D:362:HIS:CE1	1:E:287:VAL:HG13	2.37	0.58
1:C:30:LYS:HB3	1:C:32:ILE:HD13	1.84	0.58
1:E:466:LEU:HB3	1:E:471:ALA:O	2.03	0.58
1:D:130:ARG:HG2	1:D:131:LYS:N	2.18	0.58
1:B:22:CYS:HA	1:B:316:MET:HB3	1.84	0.58
1:F:130:ARG:HG2	1:F:131:LYS:N	2.18	0.58
1:B:83:ASP:OD1	1:B:83:ASP:N	2.34	0.58
1:C:322:TRP:CE3	1:C:400:TRP:CH2	2.90	0.58
1:A:405:GLN:N	1:A:405:GLN:OE1	2.30	0.58
1:B:220:ILE:HD13	1:B:220:ILE:O	2.04	0.58
1:B:46:HIS:HD2	1:B:49:TYR:H	1.49	0.58
1:D:393:MET:SD	1:D:396:VAL:CB	2.91	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:94:LEU:CD2	1:F:378:SER:HB3	2.32	0.58
1:F:424:THR:CG2	1:F:425:LYS:N	2.66	0.58
1:D:167:THR:HG23	1:D:182:PRO:HB2	1.84	0.58
1:A:475:THR:HB	1:B:312:ARG:HG3	1.85	0.58
1:F:65:GLN:HG2	1:F:196:MET:CE	2.33	0.58
1:B:268:THR:HG22	1:B:269:THR:N	2.18	0.58
1:A:64:ASN:HD22	1:A:64:ASN:N	2.01	0.58
1:D:83:ASP:OD1	1:D:83:ASP:N	2.36	0.58
1:F:393:MET:SD	1:F:396:VAL:CB	2.91	0.58
1:A:149:GLN:HE22	1:A:297:VAL:HG23	1.67	0.58
1:E:11:TYR:O	1:E:12:LEU:HG	2.03	0.58
1:B:362:HIS:CE1	1:C:287:VAL:HG13	2.37	0.58
1:E:65:GLN:HG2	1:E:196:MET:CE	2.32	0.58
1:C:65:GLN:HG2	1:C:196:MET:CE	2.33	0.58
1:F:317:ASN:HD21	1:F:320:ILE:H	1.50	0.58
1:E:220:ILE:O	1:E:220:ILE:HD13	2.03	0.58
1:B:251:VAL:HG22	1:B:252:TYR:N	2.17	0.58
1:C:268:THR:HG22	1:C:269:THR:N	2.18	0.58
1:B:71:ILE:CD1	1:B:71:ILE:N	2.65	0.58
1:E:393:MET:CE	1:E:396:VAL:CB	2.78	0.58
1:B:151:GLN:NE2	1:B:302:GLN:HA	2.09	0.58
1:D:317:ASN:HD21	1:D:320:ILE:H	1.50	0.58
1:A:87:HIS:ND1	1:A:94:LEU:HD11	2.18	0.58
1:E:393:MET:SD	1:E:396:VAL:CB	2.91	0.58
1:B:393:MET:SD	1:B:396:VAL:CB	2.91	0.58
1:C:128:VAL:HG12	1:C:128:VAL:O	2.03	0.58
1:E:87:HIS:HE1	1:E:94:LEU:CG	2.06	0.58
1:A:424:THR:CG2	1:A:425:LYS:N	2.67	0.58
1:F:418:TYR:HD1	1:A:59:PRO:HG3	1.66	0.58
1:A:469:GLN:NE2	1:A:469:GLN:HA	2.18	0.58
1:D:305:ASN:ND2	1:D:305:ASN:N	2.51	0.58
1:C:305:ASN:N	1:C:305:ASN:ND2	2.52	0.58
1:C:130:ARG:HG2	1:C:131:LYS:N	2.18	0.58
1:A:94:LEU:CD2	1:A:378:SER:HB3	2.32	0.58
1:D:252:TYR:O	1:D:293:SER:HB3	2.03	0.58
1:C:361:TYR:CE1	1:D:181:CYS:CB	2.85	0.58
1:B:193:ASP:HB2	1:B:443:PHE:CA	2.32	0.58
1:A:181:CYS:HB2	1:E:361:TYR:CD1	2.39	0.58
1:A:164:TYR:HE2	1:A:187:LYS:HB3	1.64	0.58
1:C:362:HIS:CE1	1:D:287:VAL:HG13	2.39	0.58
1:F:322:TRP:O	1:F:323:ASN:HB2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:466:LEU:HB3	1:A:471:ALA:O	2.04	0.58
1:B:296:LEU:CD1	1:B:296:LEU:C	2.71	0.58
1:B:217:PRO:HD2	1:B:220:ILE:CG2	2.34	0.58
1:E:95:VAL:HG12	1:E:400:TRP:CH2	2.37	0.58
1:C:11:TYR:O	1:C:12:LEU:HD23	2.03	0.58
1:F:85:THR:HB	1:A:83:ASP:CG	2.23	0.58
1:A:193:ASP:HB2	1:A:443:PHE:CA	2.31	0.58
1:B:65:GLN:HG2	1:B:196:MET:CE	2.34	0.58
1:D:107:GLN:OE1	1:D:108:PRO:HD3	2.04	0.58
1:B:418:TYR:C	1:B:420:GLU:H	2.07	0.58
1:E:128:VAL:O	1:E:128:VAL:HG12	2.04	0.58
1:A:95:VAL:HG23	1:A:377:CYS:SG	2.43	0.58
1:F:393:MET:HE1	1:F:396:VAL:CB	2.21	0.57
1:B:167:THR:HG23	1:B:182:PRO:HB2	1.85	0.57
1:C:431:ILE:CG2	1:C:432:PRO:HA	2.28	0.57
1:E:30:LYS:HB3	1:E:32:ILE:HD13	1.86	0.57
1:F:268:THR:HG22	1:F:269:THR:N	2.19	0.57
1:A:305:ASN:N	1:A:305:ASN:ND2	2.52	0.57
1:D:268:THR:HG22	1:D:269:THR:N	2.19	0.57
1:A:11:TYR:O	1:E:80:ALA:HB2	2.04	0.57
1:F:86:VAL:HG13	1:A:82:PRO:CG	2.34	0.57
1:B:95:VAL:HG23	1:B:377:CYS:SG	2.44	0.57
1:B:149:GLN:HE22	1:B:297:VAL:HG23	1.69	0.57
1:E:76:PRO:HD2	1:E:324:ASN:OD1	2.04	0.57
1:C:17:VAL:O	1:C:17:VAL:CG1	2.51	0.57
1:B:322:TRP:O	1:B:323:ASN:HB2	2.03	0.57
1:E:305:ASN:ND2	1:E:305:ASN:N	2.52	0.57
1:F:466:LEU:HB3	1:F:471:ALA:O	2.04	0.57
1:C:266:ALA:HB1	1:C:267:PRO:HD2	1.87	0.57
1:A:128:VAL:HG12	1:A:128:VAL:O	2.04	0.57
1:D:87:HIS:ND1	1:D:94:LEU:CG	2.67	0.57
1:F:149:GLN:HE22	1:F:297:VAL:HG23	1.69	0.57
1:A:362:HIS:O	1:A:363:ARG:HD3	2.04	0.57
1:D:65:GLN:HG2	1:D:196:MET:CE	2.34	0.57
1:B:128:VAL:HG12	1:B:128:VAL:O	2.04	0.57
1:A:393:MET:CG	1:A:396:VAL:CG1	2.80	0.57
1:E:91:LYS:O	1:E:381:ILE:HB	2.04	0.57
1:C:407:PRO:CG	1:C:410:SER:CB	2.60	0.57
1:E:217:PRO:HD2	1:E:220:ILE:CG2	2.33	0.57
1:C:149:GLN:HE22	1:C:297:VAL:HG23	1.68	0.57
1:C:16:PRO:C	1:C:18:SER:N	2.55	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:419:ILE:HG22	1:F:419:ILE:O	2.04	0.57
1:F:412:LEU:HD21	1:A:40:ARG:HE	1.69	0.57
1:F:86:VAL:N	1:A:83:ASP:OD1	2.38	0.57
1:B:266:ALA:HB1	1:B:267:PRO:HD2	1.87	0.57
1:B:35:HIS:NE2	1:B:37:GLU:HB2	2.19	0.57
1:C:153:LEU:HD12	1:C:330:VAL:CG2	2.17	0.57
1:B:91:LYS:O	1:B:381:ILE:HB	2.05	0.57
1:E:149:GLN:HE22	1:E:297:VAL:HG23	1.68	0.57
1:D:149:GLN:HE22	1:D:297:VAL:HG23	1.69	0.57
1:C:317:ASN:HD21	1:C:320:ILE:H	1.52	0.57
1:C:95:VAL:HG23	1:C:377:CYS:SG	2.44	0.57
1:C:393:MET:SD	1:C:396:VAL:HG12	2.40	0.57
1:C:438:TYR:CD1	1:C:438:TYR:N	2.70	0.57
1:A:287:VAL:HG21	1:E:360:VAL:CG1	2.34	0.57
1:C:81:LEU:CG	1:C:86:VAL:HG11	2.34	0.57
1:D:193:ASP:HB2	1:D:443:PHE:CA	2.32	0.57
1:B:305:ASN:N	1:B:305:ASN:ND2	2.51	0.57
1:B:107:GLN:OE1	1:B:108:PRO:HD3	2.04	0.57
1:E:389:LEU:HD23	1:E:392:LEU:HD23	1.87	0.57
1:B:21:LEU:HD21	1:B:25:THR:HG21	1.85	0.57
1:E:81:LEU:HD22	1:E:86:VAL:CG1	2.27	0.57
1:A:35:HIS:NE2	1:A:37:GLU:HB2	2.20	0.57
1:C:35:HIS:NE2	1:C:37:GLU:HB2	2.20	0.57
1:B:458:GLN:HE22	1:C:20:VAL:HG12	1.69	0.57
1:C:389:LEU:HD23	1:C:392:LEU:HD23	1.86	0.57
1:A:217:PRO:HD2	1:A:220:ILE:CG2	2.34	0.56
1:D:233:MET:HB2	1:D:242:MET:HE1	1.85	0.56
1:B:81:LEU:HD22	1:B:86:VAL:CG1	2.27	0.56
1:C:71:ILE:CD1	1:C:71:ILE:N	2.65	0.56
1:B:360:VAL:CG1	1:C:287:VAL:HG21	2.35	0.56
1:F:405:GLN:N	1:F:405:GLN:OE1	2.30	0.56
1:A:419:ILE:O	1:A:419:ILE:HG22	2.05	0.56
1:E:193:ASP:HB2	1:E:443:PHE:CA	2.31	0.56
1:D:128:VAL:O	1:D:128:VAL:HG12	2.04	0.56
1:F:128:VAL:HG12	1:F:128:VAL:O	2.05	0.56
1:D:251:VAL:HG22	1:D:252:TYR:H	1.71	0.56
1:B:49:TYR:HB2	1:B:50:PRO:HD2	1.88	0.56
1:C:107:GLN:OE1	1:C:108:PRO:HD3	2.05	0.56
1:E:393:MET:CG	1:E:396:VAL:CG1	2.83	0.56
1:B:233:MET:HB2	1:B:242:MET:HE1	1.87	0.56
1:B:81:LEU:CD1	1:B:86:VAL:HG11	2.36	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:83:ASP:OD1	1:A:86:VAL:N	2.38	0.56
1:F:251:VAL:HG22	1:F:252:TYR:H	1.70	0.56
1:E:268:THR:HB	1:E:270:ASP:OD1	2.06	0.56
1:E:107:GLN:OE1	1:E:108:PRO:HD3	2.06	0.56
1:F:107:GLN:OE1	1:F:108:PRO:HD3	2.04	0.56
1:D:393:MET:CG	1:D:396:VAL:CG1	2.81	0.56
1:F:217:PRO:HD2	1:F:220:ILE:CG2	2.35	0.56
1:F:305:ASN:ND2	1:F:305:ASN:N	2.53	0.56
1:E:419:ILE:HG23	1:E:420:GLU:N	2.20	0.56
1:F:164:TYR:HE2	1:F:187:LYS:HB3	1.65	0.56
1:C:217:PRO:HD2	1:C:220:ILE:CG2	2.36	0.56
1:F:405:GLN:HB2	1:F:406:PRO:CD	2.07	0.56
1:D:389:LEU:HD23	1:D:392:LEU:HD23	1.88	0.56
1:D:217:PRO:HD2	1:D:220:ILE:CG2	2.36	0.56
1:F:43:THR:HG22	1:A:417:ARG:HB3	1.86	0.56
1:D:71:ILE:N	1:D:71:ILE:CD1	2.69	0.56
1:D:35:HIS:NE2	1:D:37:GLU:HB2	2.20	0.56
1:A:201:PHE:N	1:A:201:PHE:CD1	2.72	0.56
1:B:210:ASN:OD1	1:B:213:LYS:N	2.36	0.56
1:B:400:TRP:CE3	1:B:400:TRP:HA	2.41	0.56
1:F:33:PHE:CD1	1:F:33:PHE:N	2.74	0.56
1:B:268:THR:HB	1:B:270:ASP:OD1	2.06	0.56
1:A:209:ILE:HG23	1:E:341:ILE:HG23	1.88	0.56
1:D:172:VAL:O	1:D:173:THR:C	2.43	0.56
1:C:396:VAL:O	1:C:400:TRP:HB2	2.06	0.56
1:C:107:GLN:OE1	1:C:107:GLN:HA	2.06	0.56
1:E:411:ILE:HG22	1:E:412:LEU:N	2.20	0.56
1:A:354:ASP:HB2	1:A:357:LYS:CG	2.35	0.56
1:A:107:GLN:OE1	1:A:108:PRO:HD3	2.06	0.56
1:D:4:TRP:CD1	1:D:4:TRP:N	2.74	0.56
1:D:266:ALA:HB1	1:D:267:PRO:HD2	1.87	0.56
1:D:81:LEU:CD1	1:D:86:VAL:HG11	2.36	0.55
1:A:200:GLY:C	1:A:201:PHE:HD1	2.09	0.55
1:E:153:LEU:HD12	1:E:330:VAL:CG2	2.17	0.55
1:A:389:LEU:HD23	1:A:392:LEU:HD23	1.88	0.55
1:A:65:GLN:OE1	1:A:67:ARG:NH2	2.40	0.55
1:B:87:HIS:CD2	1:B:92:GLU:O	2.59	0.55
1:B:33:PHE:CD1	1:B:33:PHE:N	2.75	0.55
1:B:466:LEU:HB3	1:B:471:ALA:O	2.07	0.55
1:A:87:HIS:CB	1:A:92:GLU:OE2	2.51	0.55
1:E:94:LEU:CD2	1:E:378:SER:HB3	2.37	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:393:MET:SD	1:D:396:VAL:HG12	2.41	0.55
1:F:250:GLN:NE2	1:F:295:SER:OG	2.39	0.55
1:D:354:ASP:HB2	1:D:357:LYS:CG	2.36	0.55
1:D:65:GLN:OE1	1:D:67:ARG:NH2	2.39	0.55
1:A:210:ASN:OD1	1:A:213:LYS:N	2.36	0.55
1:C:354:ASP:HB2	1:C:357:LYS:CG	2.36	0.55
1:B:361:TYR:CE1	1:C:181:CYS:N	2.75	0.55
1:B:164:TYR:HE2	1:B:187:LYS:HB3	1.68	0.55
1:F:95:VAL:HG23	1:F:377:CYS:SG	2.46	0.55
1:B:389:LEU:HD23	1:B:392:LEU:HD23	1.88	0.55
1:E:328:LEU:HG	1:E:330:VAL:HG23	1.89	0.55
1:E:149:GLN:HA	1:E:333:ASN:ND2	2.19	0.55
1:B:361:TYR:HE1	1:C:181:CYS:N	2.04	0.55
1:D:158:THR:HG23	1:D:438:TYR:OH	2.07	0.55
1:F:65:GLN:OE1	1:F:67:ARG:NH2	2.40	0.55
1:D:268:THR:HB	1:D:270:ASP:OD1	2.07	0.55
1:E:40:ARG:HD3	1:E:367:GLU:OE2	2.07	0.55
1:F:150:GLN:HG3	1:F:249:GLU:CB	2.25	0.55
1:B:151:GLN:HE22	1:B:302:GLN:CA	2.10	0.55
1:F:435:GLU:O	1:F:435:GLU:CD	2.45	0.55
1:A:33:PHE:N	1:A:33:PHE:CD1	2.74	0.55
1:B:76:PRO:HD2	1:B:324:ASN:OD1	2.06	0.55
1:C:268:THR:HB	1:C:270:ASP:OD1	2.06	0.55
1:B:107:GLN:OE1	1:B:107:GLN:HA	2.07	0.55
1:E:35:HIS:NE2	1:E:37:GLU:HB2	2.22	0.55
1:E:266:ALA:HB1	1:E:267:PRO:HD2	1.88	0.55
1:B:200:GLY:C	1:B:201:PHE:HD1	2.10	0.55
1:B:70:LYS:HE3	1:B:445:ASN:ND2	2.21	0.55
1:B:354:ASP:HB2	1:B:357:LYS:CG	2.37	0.55
1:C:70:LYS:HE3	1:C:445:ASN:ND2	2.22	0.55
1:D:95:VAL:HG23	1:D:377:CYS:SG	2.47	0.55
1:F:266:ALA:HB1	1:F:267:PRO:HD2	1.87	0.55
1:F:35:HIS:NE2	1:F:37:GLU:HB2	2.20	0.55
1:C:341:ILE:HG23	1:D:209:ILE:HG23	1.89	0.55
1:B:424:THR:HG22	1:B:425:LYS:N	2.21	0.55
1:A:118:THR:HB	1:A:140:ARG:HD3	1.89	0.55
1:C:150:GLN:HG3	1:C:249:GLU:CB	2.24	0.55
1:E:151:GLN:HE22	1:E:302:GLN:CA	2.12	0.55
1:E:81:LEU:CD1	1:E:86:VAL:HG11	2.37	0.55
1:A:435:GLU:CD	1:A:435:GLU:O	2.45	0.55
1:B:442:LYS:CD	1:B:442:LYS:N	2.70	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:40:ARG:HD3	1:C:367:GLU:OE2	2.07	0.55
1:B:200:GLY:HA3	1:B:292:PRO:HG3	1.88	0.55
1:F:389:LEU:CB	1:F:397:LEU:HD21	2.36	0.55
1:B:149:GLN:HA	1:B:333:ASN:ND2	2.19	0.55
1:D:299:THR:CG2	1:E:249:GLU:H	2.20	0.55
1:C:33:PHE:N	1:C:33:PHE:CD1	2.75	0.55
1:A:266:ALA:HB1	1:A:267:PRO:HD2	1.88	0.55
1:F:156:GLY:O	1:F:243:PHE:HE1	1.90	0.54
1:F:153:LEU:HD13	1:F:330:VAL:CG2	2.26	0.54
1:A:251:VAL:HG22	1:A:252:TYR:H	1.70	0.54
1:F:78:GLN:O	1:F:79:PHE:CD1	2.60	0.54
1:D:328:LEU:HG	1:D:330:VAL:HG23	1.89	0.54
1:C:6:GLN:NE2	1:C:6:GLN:HA	2.20	0.54
1:B:341:ILE:HG23	1:C:209:ILE:HG23	1.89	0.54
1:B:36:ALA:HB2	1:B:452:LEU:HD13	1.87	0.54
1:E:118:THR:HB	1:E:140:ARG:HD3	1.89	0.54
1:A:296:LEU:CD1	1:A:296:LEU:C	2.76	0.54
1:F:70:LYS:HE2	1:F:445:ASN:ND2	2.22	0.54
1:A:107:GLN:OE1	1:A:107:GLN:HA	2.07	0.54
1:E:73:LEU:HD13	1:E:96:TRP:CD1	2.42	0.54
1:B:36:ALA:HB1	1:B:448:LEU:HD13	1.89	0.54
1:C:148:LYS:HB2	1:C:292:PRO:HB2	1.90	0.54
1:D:50:PRO:N	1:D:60:LYS:HB3	2.22	0.54
1:F:389:LEU:HD23	1:F:392:LEU:HD23	1.89	0.54
1:F:268:THR:HB	1:F:270:ASP:OD1	2.08	0.54
1:E:414:ASP:N	1:E:414:ASP:OD2	2.40	0.54
1:C:50:PRO:N	1:C:60:LYS:HB3	2.23	0.54
1:C:81:LEU:HB3	1:C:86:VAL:CG2	2.35	0.54
1:D:91:LYS:O	1:D:381:ILE:HB	2.07	0.54
1:B:65:GLN:OE1	1:B:67:ARG:NH2	2.40	0.54
1:F:73:LEU:HD13	1:F:96:TRP:CD1	2.42	0.54
1:B:465:PHE:CE2	1:B:469:GLN:HG3	2.42	0.54
1:A:88:ASN:OD1	1:A:91:LYS:NZ	2.38	0.54
1:E:151:GLN:NE2	1:E:302:GLN:HA	2.11	0.54
1:F:254:ARG:HB2	1:F:293:SER:HB2	1.90	0.54
1:F:252:TYR:CE2	1:F:293:SER:CB	2.91	0.54
1:B:70:LYS:HE2	1:B:445:ASN:ND2	2.23	0.54
1:D:73:LEU:HD13	1:D:96:TRP:CD1	2.43	0.54
1:D:107:GLN:OE1	1:D:107:GLN:HA	2.06	0.54
1:D:87:HIS:HD1	1:D:94:LEU:HD21	1.71	0.54
1:F:91:LYS:O	1:F:381:ILE:HB	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:151:GLN:NE2	1:A:302:GLN:HA	2.11	0.54
1:E:250:GLN:NE2	1:E:295:SER:HB3	2.12	0.54
1:D:40:ARG:HD3	1:D:367:GLU:OE2	2.08	0.54
1:A:402:ILE:HG13	1:A:403:GLY:N	2.23	0.54
1:F:68:VAL:HG22	1:F:329:THR:HG23	1.90	0.54
1:B:94:LEU:CD2	1:B:378:SER:HB3	2.37	0.54
1:C:65:GLN:OE1	1:C:67:ARG:NH2	2.40	0.54
1:C:26:TYR:CD1	1:C:27:VAL:HG23	2.43	0.54
1:C:251:VAL:HG22	1:C:252:TYR:H	1.72	0.54
1:F:80:ALA:N	1:A:79:PHE:CD2	2.61	0.54
1:C:431:ILE:HG22	1:C:432:PRO:CD	2.38	0.54
1:F:172:VAL:O	1:F:173:THR:C	2.46	0.54
1:D:26:TYR:CD1	1:D:27:VAL:HG23	2.42	0.54
1:B:73:LEU:HD13	1:B:96:TRP:CD1	2.43	0.54
1:A:389:LEU:CB	1:A:397:LEU:HD21	2.38	0.54
1:D:200:GLY:C	1:D:201:PHE:HD1	2.10	0.54
1:A:148:LYS:HB2	1:A:292:PRO:HB2	1.90	0.54
1:A:50:PRO:N	1:A:60:LYS:HB3	2.23	0.54
1:A:268:THR:HB	1:A:270:ASP:OD1	2.07	0.54
1:F:123:LEU:HD12	1:F:132:VAL:CG2	2.38	0.54
1:E:148:LYS:HB2	1:E:292:PRO:HB2	1.90	0.54
1:E:252:TYR:CE2	1:E:293:SER:CB	2.91	0.54
1:F:79:PHE:HA	1:A:79:PHE:CE2	2.43	0.54
1:E:354:ASP:HB2	1:E:357:LYS:CG	2.36	0.54
1:E:20:VAL:HG22	1:E:21:LEU:H	1.71	0.54
1:C:210:ASN:OD1	1:C:213:LYS:N	2.35	0.54
1:D:201:PHE:N	1:D:201:PHE:CD1	2.74	0.53
1:D:50:PRO:HD3	1:D:60:LYS:HG2	1.90	0.53
1:B:251:VAL:HG22	1:B:252:TYR:H	1.71	0.53
1:A:249:GLU:H	1:E:299:THR:CG2	2.21	0.53
1:D:113:VAL:HG11	1:E:256:ILE:HG23	1.91	0.53
1:B:123:LEU:HD12	1:B:132:VAL:HG22	1.82	0.53
1:E:87:HIS:ND1	1:E:94:LEU:HG	2.19	0.53
1:E:251:VAL:HG22	1:E:252:TYR:H	1.71	0.53
1:C:150:GLN:CD	1:C:249:GLU:OE1	2.46	0.53
1:B:400:TRP:HE3	1:B:400:TRP:HA	1.73	0.53
1:A:299:THR:CG2	1:B:249:GLU:H	2.20	0.53
1:E:65:GLN:OE1	1:E:67:ARG:NH2	2.41	0.53
1:A:22:CYS:HA	1:A:316:MET:HB3	1.89	0.53
1:F:118:THR:HB	1:F:140:ARG:HD3	1.90	0.53
1:F:50:PRO:N	1:F:60:LYS:HB3	2.22	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:104:SER:OG	1:C:231:LEU:HD21	2.09	0.53
1:B:34:TYR:HB3	1:B:452:LEU:HD11	1.90	0.53
1:D:148:LYS:HB2	1:D:292:PRO:HB2	1.90	0.53
1:D:33:PHE:CD1	1:D:33:PHE:N	2.77	0.53
1:D:303:ILE:O	1:D:304:PHE:CG	2.62	0.53
1:C:254:ARG:HB2	1:C:293:SER:HB2	1.91	0.53
1:B:201:PHE:CD1	1:B:201:PHE:N	2.75	0.53
1:A:73:LEU:HD13	1:A:96:TRP:CD1	2.43	0.53
1:C:32:ILE:N	1:C:32:ILE:CD1	2.71	0.53
1:E:33:PHE:N	1:E:33:PHE:CD1	2.75	0.53
1:F:107:GLN:HA	1:F:107:GLN:OE1	2.09	0.53
1:F:453:SER:OG	1:F:454:LEU:N	2.42	0.53
1:E:50:PRO:N	1:E:60:LYS:HB3	2.23	0.53
1:E:76:PRO:CG	1:E:95:VAL:HA	2.38	0.53
1:B:193:ASP:OD2	1:B:444:TRP:HB2	2.09	0.53
1:D:436:ASP:OD2	1:D:439:ALA:HB2	2.08	0.53
1:A:303:ILE:O	1:A:304:PHE:CG	2.62	0.53
1:F:40:ARG:HD3	1:F:367:GLU:OE2	2.07	0.53
1:B:113:VAL:HG12	1:B:114:THR:N	2.24	0.53
1:C:76:PRO:CG	1:C:95:VAL:HA	2.37	0.53
1:A:252:TYR:CE2	1:A:293:SER:CB	2.92	0.53
1:C:242:MET:HG3	1:C:314:GLN:HE21	1.74	0.53
1:A:453:SER:OG	1:A:454:LEU:N	2.42	0.53
1:E:453:SER:OG	1:E:454:LEU:N	2.42	0.53
1:E:73:LEU:HB3	1:E:74:PRO:CD	2.39	0.53
1:A:113:VAL:HG12	1:A:114:THR:N	2.24	0.53
1:C:48:TYR:CD2	1:C:219:ASP:HB3	2.42	0.53
1:D:254:ARG:HB2	1:D:293:SER:HB2	1.89	0.53
1:E:95:VAL:CG1	1:E:400:TRP:HH2	2.21	0.53
1:F:200:GLY:C	1:F:201:PHE:HD1	2.12	0.53
1:C:429:ASN:O	1:C:430:VAL:HB	2.08	0.53
1:B:303:ILE:O	1:B:304:PHE:CG	2.62	0.53
1:A:20:VAL:HG13	1:A:316:MET:HG2	1.89	0.53
1:E:136:THR:CG2	1:E:137:THR:N	2.66	0.53
1:D:135:GLN:NE2	1:D:285:PRO:HD2	2.23	0.53
1:D:32:ILE:CD1	1:D:32:ILE:N	2.69	0.53
1:F:354:ASP:HB2	1:F:357:LYS:CG	2.37	0.53
1:C:51:VAL:CG1	1:C:52:SER:N	2.72	0.53
1:C:172:VAL:O	1:C:173:THR:C	2.46	0.53
1:C:328:LEU:HG	1:C:330:VAL:HG23	1.91	0.53
1:D:200:GLY:C	1:D:201:PHE:CD1	2.83	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:404:VAL:CG1	1:C:406:PRO:O	2.56	0.53
1:B:408:THR:HG22	1:B:411:ILE:HD12	1.89	0.53
1:A:361:TYR:CE1	1:B:181:CYS:CA	2.92	0.53
1:D:77:ASN:OD1	1:D:93:ARG:HD2	2.09	0.53
1:B:135:GLN:NE2	1:B:285:PRO:HD2	2.24	0.53
1:A:32:ILE:N	1:A:32:ILE:CD1	2.72	0.53
1:C:73:LEU:HD13	1:C:96:TRP:CD1	2.43	0.53
1:B:68:VAL:HG22	1:B:329:THR:HG23	1.90	0.53
1:E:200:GLY:C	1:E:201:PHE:HD1	2.13	0.53
1:D:68:VAL:HG22	1:D:329:THR:HG23	1.90	0.53
1:A:40:ARG:HD3	1:A:367:GLU:OE2	2.09	0.52
1:E:123:LEU:HD12	1:E:132:VAL:CG2	2.39	0.52
1:F:154:LEU:CD1	1:F:154:LEU:C	2.78	0.52
1:C:50:PRO:HD3	1:C:60:LYS:HG2	1.90	0.52
1:A:254:ARG:HB2	1:A:293:SER:HB2	1.91	0.52
1:A:150:GLN:CD	1:A:249:GLU:OE1	2.48	0.52
1:E:70:LYS:HE2	1:E:445:ASN:ND2	2.24	0.52
1:D:305:ASN:HD22	1:D:305:ASN:N	2.06	0.52
1:B:309:TRP:CD1	1:B:468:GLN:OE1	2.62	0.52
1:E:36:ALA:HB1	1:E:448:LEU:HD13	1.91	0.52
1:B:453:SER:OG	1:B:454:LEU:N	2.42	0.52
1:A:393:MET:SD	1:A:396:VAL:HG12	2.40	0.52
1:F:403:GLY:C	1:F:404:VAL:HG23	2.30	0.52
1:C:361:TYR:CE1	1:D:181:CYS:CA	2.92	0.52
1:F:148:LYS:HB2	1:F:292:PRO:HB2	1.91	0.52
1:E:107:GLN:HA	1:E:107:GLN:OE1	2.08	0.52
1:F:113:VAL:HG12	1:F:114:THR:N	2.24	0.52
1:E:68:VAL:HG22	1:E:329:THR:HG23	1.92	0.52
1:B:200:GLY:C	1:B:201:PHE:CD1	2.83	0.52
1:A:258:THR:HG21	1:E:142:GLN:NE2	2.25	0.52
1:C:135:GLN:NE2	1:C:285:PRO:HD2	2.24	0.52
1:C:417:ARG:HG2	1:C:418:TYR:HD1	1.73	0.52
1:C:118:THR:HB	1:C:140:ARG:HD3	1.91	0.52
1:F:15:THR:N	1:F:16:PRO:HD3	2.23	0.52
1:A:403:GLY:C	1:A:404:VAL:HG23	2.29	0.52
1:B:299:THR:CG2	1:C:249:GLU:H	2.22	0.52
1:F:135:GLN:NE2	1:F:285:PRO:HD2	2.24	0.52
1:F:32:ILE:CD1	1:F:32:ILE:N	2.69	0.52
1:F:303:ILE:O	1:F:304:PHE:CG	2.63	0.52
1:E:390:GLN:OE1	1:E:397:LEU:CD1	2.58	0.52
1:D:104:SER:OG	1:E:231:LEU:HD21	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:67:ARG:HG3	1:A:368:TYR:CZ	2.44	0.52
1:B:87:HIS:ND1	1:B:94:LEU:HG	2.21	0.52
1:A:149:GLN:HA	1:A:333:ASN:ND2	2.18	0.52
1:C:431:ILE:HG22	1:C:432:PRO:CA	2.35	0.52
1:A:305:ASN:N	1:A:305:ASN:HD22	2.06	0.52
1:B:305:ASN:N	1:B:305:ASN:HD22	2.07	0.52
1:F:40:ARG:HH21	1:A:412:LEU:HD23	1.75	0.52
1:B:309:TRP:NE1	1:B:468:GLN:OE1	2.42	0.52
1:F:26:TYR:CD1	1:F:27:VAL:HG23	2.44	0.52
1:A:26:TYR:CD1	1:A:27:VAL:HG23	2.44	0.52
1:B:40:ARG:HD3	1:B:367:GLU:OE2	2.09	0.52
1:C:252:TYR:CE2	1:C:293:SER:CB	2.92	0.52
1:B:48:TYR:CD2	1:B:219:ASP:HB3	2.45	0.52
1:D:150:GLN:CD	1:D:249:GLU:OE1	2.48	0.52
1:E:400:TRP:O	1:E:401:GLU:CG	2.46	0.52
1:A:429:ASN:C	1:A:432:PRO:HD3	2.29	0.52
1:A:257:TRP:NE1	1:B:127:ASN:ND2	2.57	0.52
1:A:113:VAL:HG11	1:B:256:ILE:HG23	1.92	0.52
1:B:118:THR:HB	1:B:140:ARG:HD3	1.90	0.52
1:D:118:THR:HB	1:D:140:ARG:HD3	1.91	0.52
1:D:340:THR:HG21	1:E:259:ARG:HE	1.75	0.52
1:C:113:VAL:HG11	1:D:256:ILE:HG23	1.91	0.52
1:E:26:TYR:CD1	1:E:27:VAL:HG23	2.44	0.52
1:C:201:PHE:CD1	1:C:201:PHE:N	2.77	0.52
1:F:150:GLN:CD	1:F:249:GLU:OE1	2.48	0.52
1:E:150:GLN:CD	1:E:249:GLU:OE1	2.48	0.52
1:B:81:LEU:HB3	1:B:86:VAL:HG21	1.92	0.52
1:D:424:THR:HG22	1:D:425:LYS:N	2.25	0.52
1:F:201:PHE:CD1	1:F:201:PHE:N	2.75	0.52
1:D:10:LEU:N	1:D:10:LEU:CD1	2.72	0.52
1:D:37:GLU:OE2	1:D:369:LYS:CE	2.58	0.52
1:A:36:ALA:HB1	1:A:448:LEU:HD13	1.91	0.52
1:C:200:GLY:C	1:C:201:PHE:HD1	2.13	0.52
1:E:50:PRO:HD3	1:E:60:LYS:HG2	1.92	0.52
1:C:16:PRO:CG	1:C:17:VAL:N	2.73	0.52
1:E:303:ILE:O	1:E:304:PHE:CG	2.62	0.52
1:B:418:TYR:C	1:B:420:GLU:N	2.62	0.52
1:B:73:LEU:HB3	1:B:74:PRO:CD	2.40	0.52
1:D:113:VAL:HG12	1:D:114:THR:N	2.25	0.52
1:F:265:GLU:O	1:F:265:GLU:HG3	2.10	0.52
1:C:88:ASN:HD22	1:C:88:ASN:C	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:151:GLN:HE22	1:D:302:GLN:CA	2.13	0.52
1:D:149:GLN:HA	1:D:333:ASN:ND2	2.20	0.52
1:D:36:ALA:HB1	1:D:448:LEU:HD13	1.91	0.52
1:B:76:PRO:CG	1:B:95:VAL:HA	2.40	0.52
1:E:201:PHE:N	1:E:201:PHE:CD1	2.75	0.52
1:A:256:ILE:HG23	1:E:113:VAL:HG11	1.91	0.52
1:F:309:TRP:CD1	1:F:468:GLN:OE1	2.63	0.52
1:A:68:VAL:HG22	1:A:329:THR:HG23	1.91	0.52
1:E:265:GLU:HG3	1:E:265:GLU:O	2.10	0.52
1:F:328:LEU:HG	1:F:330:VAL:HG23	1.92	0.52
1:D:361:TYR:CE1	1:E:181:CYS:CA	2.93	0.52
1:A:135:GLN:NE2	1:A:285:PRO:HD2	2.25	0.52
1:D:2:ALA:O	1:D:3:LEU:HD12	2.08	0.52
1:E:70:LYS:HE3	1:E:445:ASN:ND2	2.23	0.52
1:C:303:ILE:O	1:C:304:PHE:CG	2.63	0.52
1:F:67:ARG:HG3	1:F:368:TYR:CZ	2.45	0.52
1:F:37:GLU:OE2	1:F:369:LYS:CE	2.58	0.52
1:D:265:GLU:HG3	1:D:265:GLU:O	2.10	0.52
1:E:254:ARG:HB2	1:E:293:SER:HB2	1.91	0.51
1:A:48:TYR:CD2	1:A:219:ASP:HB3	2.46	0.51
1:F:402:ILE:HG13	1:F:403:GLY:N	2.25	0.51
1:F:86:VAL:HG22	1:A:82:PRO:HB2	1.92	0.51
1:A:34:TYR:HB3	1:A:452:LEU:HD11	1.92	0.51
1:F:51:VAL:CG1	1:F:52:SER:N	2.73	0.51
1:E:51:VAL:CG1	1:E:52:SER:N	2.74	0.51
1:D:67:ARG:HG3	1:D:368:TYR:CZ	2.45	0.51
1:B:51:VAL:CG1	1:B:52:SER:N	2.73	0.51
1:B:435:GLU:HG3	1:B:436:ASP:N	2.24	0.51
1:A:196:MET:CG	1:A:223:GLU:OE1	2.58	0.51
1:B:150:GLN:HG3	1:B:249:GLU:CB	2.26	0.51
1:B:150:GLN:CD	1:B:249:GLU:OE1	2.49	0.51
1:A:96:TRP:HA	1:A:96:TRP:CE3	2.46	0.51
1:A:165:TRP:CD2	1:E:365:MET:SD	3.03	0.51
1:C:70:LYS:HE2	1:C:445:ASN:ND2	2.25	0.51
1:C:305:ASN:HD22	1:C:305:ASN:N	2.07	0.51
1:C:113:VAL:HG12	1:C:114:THR:N	2.25	0.51
1:A:340:THR:HG21	1:B:259:ARG:HE	1.75	0.51
1:A:151:GLN:HE22	1:A:302:GLN:CA	2.12	0.51
1:F:149:GLN:HA	1:F:333:ASN:ND2	2.19	0.51
1:F:233:MET:HB2	1:F:242:MET:HE1	1.92	0.51
1:D:150:GLN:HG3	1:D:249:GLU:CB	2.25	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:242:MET:HE2	1:A:314:GLN:NE2	2.26	0.51
1:D:164:TYR:N	1:D:164:TYR:HD2	2.09	0.51
1:A:193:ASP:OD2	1:A:444:TRP:HB2	2.10	0.51
1:C:453:SER:OG	1:C:454:LEU:N	2.42	0.51
1:D:51:VAL:CG1	1:D:52:SER:N	2.73	0.51
1:F:318:ASN:ND2	1:F:318:ASN:N	2.59	0.51
1:B:37:GLU:OE2	1:B:369:LYS:CE	2.58	0.51
1:A:200:GLY:C	1:A:201:PHE:CD1	2.82	0.51
1:C:142:GLN:NE2	1:D:258:THR:HG21	2.25	0.51
1:C:420:GLU:HG2	1:C:421:SER:H	1.76	0.51
1:D:416:TYR:HB2	1:D:419:ILE:HG22	1.91	0.51
1:A:265:GLU:O	1:A:265:GLU:HG3	2.10	0.51
1:F:151:GLN:NE2	1:F:302:GLN:HA	2.12	0.51
1:C:164:TYR:N	1:C:164:TYR:HD2	2.08	0.51
1:A:312:ARG:CB	1:E:475:THR:O	2.56	0.51
1:E:67:ARG:HG3	1:E:368:TYR:CZ	2.46	0.51
1:B:390:GLN:OE1	1:B:397:LEU:CD1	2.58	0.51
1:C:265:GLU:O	1:C:265:GLU:HG3	2.10	0.51
1:D:309:TRP:CD1	1:D:468:GLN:OE1	2.64	0.51
1:C:123:LEU:HD12	1:C:132:VAL:CG2	2.40	0.51
1:D:109:LEU:HD21	1:D:297:VAL:HG13	1.93	0.51
1:D:435:GLU:HG3	1:D:439:ALA:HB3	1.92	0.51
1:F:74:PRO:HG3	1:F:449:LYS:HA	1.92	0.51
1:A:353:TYR:HB3	1:C:275:ASN:HB3	1.93	0.51
1:C:95:VAL:CG1	1:C:400:TRP:CZ2	2.89	0.51
1:A:123:LEU:HD12	1:A:132:VAL:CG2	2.39	0.51
1:E:233:MET:HB2	1:E:242:MET:HE1	1.92	0.51
1:D:34:TYR:CD2	1:D:453:SER:O	2.64	0.51
1:D:453:SER:OG	1:D:454:LEU:N	2.42	0.51
1:C:34:TYR:HB3	1:C:452:LEU:HD11	1.91	0.51
1:B:318:ASN:N	1:B:318:ASN:ND2	2.59	0.51
1:A:318:ASN:ND2	1:A:318:ASN:N	2.59	0.51
1:B:67:ARG:HG3	1:B:368:TYR:CZ	2.45	0.51
1:F:305:ASN:HD22	1:F:305:ASN:N	2.08	0.51
1:A:231:LEU:HD21	1:E:104:SER:OG	2.11	0.51
1:F:309:TRP:NE1	1:F:468:GLN:OE1	2.43	0.51
1:F:341:ILE:HG22	1:F:342:SER:N	2.26	0.51
1:A:309:TRP:CD1	1:A:468:GLN:OE1	2.64	0.51
1:C:10:LEU:HD12	1:C:10:LEU:O	2.10	0.51
1:F:423:ALA:O	1:B:183:PRO:HA	2.10	0.51
1:B:328:LEU:HG	1:B:330:VAL:HG23	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:154:LEU:HD11	1:F:329:THR:N	2.26	0.51
1:A:50:PRO:HD3	1:A:60:LYS:HG2	1.91	0.51
1:B:455:ASP:CB	1:C:19:LYS:HZ3	2.21	0.51
1:D:109:LEU:HD11	1:D:334:THR:HG22	1.93	0.51
1:D:164:TYR:CD2	1:D:164:TYR:N	2.78	0.51
1:F:200:GLY:C	1:F:201:PHE:CD1	2.84	0.51
1:F:50:PRO:HD3	1:F:60:LYS:HG2	1.91	0.51
1:D:250:GLN:NE2	1:D:295:SER:HB3	2.17	0.51
1:C:67:ARG:HG3	1:C:368:TYR:CZ	2.45	0.51
1:A:341:ILE:HG22	1:A:342:SER:N	2.26	0.51
1:E:210:ASN:OD1	1:E:213:LYS:N	2.38	0.51
1:E:309:TRP:CD1	1:E:468:GLN:OE1	2.63	0.51
1:A:12:LEU:N	1:A:12:LEU:HD23	2.26	0.51
1:C:78:GLN:CG	1:D:9:LYS:HB3	2.40	0.51
1:C:164:TYR:CD2	1:C:164:TYR:N	2.78	0.51
1:E:135:GLN:NE2	1:E:285:PRO:HD2	2.25	0.51
1:A:51:VAL:CG1	1:A:52:SER:N	2.73	0.51
1:E:200:GLY:C	1:E:201:PHE:CD1	2.84	0.51
1:A:309:TRP:NE1	1:A:468:GLN:OE1	2.44	0.51
1:B:26:TYR:CD1	1:B:27:VAL:HG23	2.46	0.51
1:A:88:ASN:HD21	1:A:89:PRO:HD2	1.60	0.51
1:B:109:LEU:HD11	1:B:334:THR:HG22	1.93	0.51
1:B:150:GLN:HG2	1:B:151:GLN:N	2.26	0.51
1:C:193:ASP:OD2	1:C:444:TRP:HB2	2.11	0.51
1:E:304:PHE:O	1:E:306:ARG:HG3	2.11	0.51
1:E:318:ASN:N	1:E:318:ASN:ND2	2.59	0.51
1:E:34:TYR:HB3	1:E:452:LEU:HD11	1.92	0.51
1:B:74:PRO:HG3	1:B:449:LYS:HA	1.93	0.51
1:D:48:TYR:CD2	1:D:219:ASP:HB3	2.46	0.51
1:F:96:TRP:HA	1:F:96:TRP:CE3	2.46	0.51
1:C:68:VAL:HG22	1:C:329:THR:HG23	1.92	0.51
1:C:309:TRP:CD1	1:C:468:GLN:OE1	2.64	0.51
1:B:265:GLU:O	1:B:265:GLU:HG3	2.11	0.51
1:D:122:LEU:O	1:D:123:LEU:CD2	2.59	0.50
1:F:36:ALA:HB1	1:F:448:LEU:HD13	1.92	0.50
1:A:251:VAL:HG23	1:A:293:SER:O	2.11	0.50
1:A:150:GLN:HG2	1:A:151:GLN:N	2.26	0.50
1:A:109:LEU:HD11	1:A:334:THR:HG22	1.93	0.50
1:F:242:MET:HG3	1:F:314:GLN:HE21	1.77	0.50
1:A:74:PRO:HG3	1:A:449:LYS:HA	1.93	0.50
1:C:322:TRP:CE3	1:C:322:TRP:HA	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:87:HIS:HB2	1:A:92:GLU:CD	2.30	0.50
1:D:252:TYR:CE2	1:D:293:SER:CB	2.93	0.50
1:B:87:HIS:HE1	1:B:94:LEU:HG	1.65	0.50
1:C:299:THR:CG2	1:D:249:GLU:H	2.25	0.50
1:F:429:ASN:C	1:F:432:PRO:HD3	2.29	0.50
1:C:361:TYR:HE1	1:D:181:CYS:N	2.09	0.50
1:D:73:LEU:HB3	1:D:74:PRO:CD	2.40	0.50
1:D:304:PHE:O	1:D:306:ARG:HG3	2.11	0.50
1:E:37:GLU:OE2	1:E:369:LYS:CE	2.59	0.50
1:F:34:TYR:HB3	1:F:452:LEU:HD11	1.92	0.50
1:E:309:TRP:NE1	1:E:468:GLN:OE1	2.44	0.50
1:F:412:LEU:HD11	1:A:40:ARG:H	1.76	0.50
1:C:200:GLY:C	1:C:201:PHE:CD1	2.84	0.50
1:F:151:GLN:HE22	1:F:302:GLN:CA	2.13	0.50
1:D:150:GLN:HG2	1:D:151:GLN:N	2.26	0.50
1:F:145:LEU:HD23	1:F:217:PRO:CG	2.42	0.50
1:B:172:VAL:O	1:B:173:THR:C	2.50	0.50
1:D:193:ASP:OD2	1:D:444:TRP:HB2	2.11	0.50
1:C:36:ALA:HB1	1:C:448:LEU:HD13	1.91	0.50
1:D:123:LEU:HD12	1:D:132:VAL:CG2	2.39	0.50
1:F:109:LEU:HD21	1:F:297:VAL:HG13	1.93	0.50
1:E:109:LEU:HD11	1:E:334:THR:HG22	1.94	0.50
1:D:242:MET:HG3	1:D:314:GLN:HE21	1.76	0.50
1:F:193:ASP:OD2	1:F:444:TRP:HB2	2.11	0.50
1:E:193:ASP:OD2	1:E:444:TRP:HB2	2.11	0.50
1:A:34:TYR:CD2	1:A:453:SER:O	2.65	0.50
1:B:37:GLU:OE2	1:B:369:LYS:NZ	2.44	0.50
1:E:341:ILE:HG22	1:E:342:SER:N	2.26	0.50
1:E:113:VAL:HG12	1:E:114:THR:N	2.24	0.50
1:F:210:ASN:OD1	1:F:213:LYS:N	2.38	0.50
1:A:275:ASN:HB3	1:D:353:TYR:HB3	1.92	0.50
1:C:251:VAL:HG23	1:C:293:SER:O	2.12	0.50
1:C:122:LEU:O	1:C:123:LEU:CD2	2.59	0.50
1:F:296:LEU:CD1	1:F:296:LEU:O	2.35	0.50
1:E:81:LEU:HB3	1:E:86:VAL:HG21	1.93	0.50
1:D:318:ASN:N	1:D:318:ASN:ND2	2.59	0.50
1:D:341:ILE:HG22	1:D:342:SER:N	2.26	0.50
1:D:322:TRP:CE3	1:D:322:TRP:HA	2.47	0.50
1:B:413:GLU:H	1:B:413:GLU:CD	2.13	0.50
1:E:48:TYR:CD2	1:E:219:ASP:HB3	2.47	0.50
1:C:404:VAL:HG12	1:C:406:PRO:CD	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:296:LEU:CD1	1:A:296:LEU:O	2.40	0.50
1:C:389:LEU:CB	1:C:397:LEU:HD21	2.39	0.50
1:E:305:ASN:HD22	1:E:305:ASN:N	2.08	0.50
1:A:37:GLU:OE2	1:A:369:LYS:CE	2.60	0.50
1:A:205:ASN:OD1	1:A:205:ASN:O	2.30	0.50
1:C:95:VAL:HG11	1:C:400:TRP:CZ2	2.42	0.50
1:E:46:HIS:HD2	1:E:49:TYR:H	1.60	0.50
1:E:109:LEU:HD21	1:E:297:VAL:HG13	1.94	0.50
1:E:150:GLN:HG2	1:E:151:GLN:N	2.26	0.50
1:A:435:GLU:OE1	1:A:435:GLU:O	2.30	0.50
1:E:205:ASN:OD1	1:E:205:ASN:O	2.30	0.50
1:C:96:TRP:HA	1:C:96:TRP:CE3	2.46	0.50
1:A:304:PHE:O	1:A:306:ARG:HG3	2.12	0.50
1:C:37:GLU:OE2	1:C:369:LYS:NZ	2.41	0.50
1:E:74:PRO:HG2	1:E:452:LEU:HD22	1.93	0.50
1:F:73:LEU:HB3	1:F:74:PRO:CD	2.41	0.50
1:E:251:VAL:HG23	1:E:293:SER:O	2.11	0.50
1:B:94:LEU:HD23	1:B:378:SER:HB3	1.94	0.50
1:A:73:LEU:HB3	1:A:74:PRO:CD	2.42	0.50
1:B:341:ILE:HG22	1:B:342:SER:N	2.27	0.50
1:F:40:ARG:HE	1:A:412:LEU:HG	1.77	0.50
1:C:353:TYR:CD1	1:D:140:ARG:NH2	2.80	0.50
1:C:309:TRP:NE1	1:C:468:GLN:OE1	2.45	0.50
1:A:153:LEU:HD12	1:A:330:VAL:CG2	2.16	0.50
1:E:122:LEU:O	1:E:123:LEU:CD2	2.59	0.50
1:E:94:LEU:HD23	1:E:378:SER:HB3	1.94	0.50
1:C:109:LEU:HD11	1:C:334:THR:HG22	1.93	0.50
1:F:251:VAL:HG23	1:F:293:SER:O	2.12	0.50
1:B:32:ILE:CD1	1:B:32:ILE:N	2.71	0.50
1:C:73:LEU:HB3	1:C:74:PRO:CD	2.42	0.50
1:C:116:HIS:CD2	1:C:218:LEU:HB2	2.47	0.50
1:D:309:TRP:NE1	1:D:468:GLN:OE1	2.44	0.50
1:D:210:ASN:OD1	1:D:213:LYS:N	2.37	0.50
1:F:122:LEU:O	1:F:123:LEU:CD2	2.59	0.49
1:A:122:LEU:O	1:A:123:LEU:CD2	2.59	0.49
1:F:154:LEU:HD11	1:F:329:THR:CA	2.41	0.49
1:A:32:ILE:C	1:A:33:PHE:CD1	2.86	0.49
1:B:304:PHE:O	1:B:306:ARG:HG3	2.12	0.49
1:B:123:LEU:HD12	1:B:132:VAL:CG2	2.39	0.49
1:C:145:LEU:HD23	1:C:217:PRO:CG	2.41	0.49
1:C:150:GLN:HG2	1:C:151:GLN:N	2.26	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:109:LEU:HD21	1:C:297:VAL:HG13	1.94	0.49
1:F:48:TYR:CD2	1:F:219:ASP:HB3	2.47	0.49
1:B:365:MET:SD	1:C:165:TRP:CD2	3.05	0.49
1:C:404:VAL:CG1	1:C:406:PRO:HD2	2.41	0.49
1:D:152:ILE:HD13	1:D:228:PRO:HG2	1.95	0.49
1:C:361:TYR:CE1	1:D:181:CYS:N	2.80	0.49
1:D:34:TYR:HB3	1:D:452:LEU:HD11	1.93	0.49
1:A:142:GLN:NE2	1:B:258:THR:HG21	2.27	0.49
1:F:205:ASN:OD1	1:F:205:ASN:O	2.30	0.49
1:A:393:MET:HE1	1:A:396:VAL:CB	2.21	0.49
1:E:296:LEU:O	1:E:296:LEU:CD1	2.35	0.49
1:F:150:GLN:HG2	1:F:151:GLN:N	2.26	0.49
1:B:145:LEU:HD23	1:B:217:PRO:CG	2.43	0.49
1:B:109:LEU:HG	1:B:110:GLY:N	2.26	0.49
1:D:96:TRP:CE3	1:D:96:TRP:HA	2.48	0.49
1:A:74:PRO:HG2	1:A:452:LEU:HD22	1.95	0.49
1:C:341:ILE:HG22	1:C:342:SER:N	2.27	0.49
1:B:34:TYR:CD2	1:B:453:SER:O	2.66	0.49
1:F:412:LEU:CD2	1:A:40:ARG:HE	2.25	0.49
1:E:322:TRP:O	1:E:323:ASN:HB3	2.12	0.49
1:D:109:LEU:HG	1:D:110:GLY:N	2.27	0.49
1:C:421:SER:N	1:C:422:PRO:HD2	2.28	0.49
1:F:122:LEU:HD23	1:F:139:ASP:HB2	1.95	0.49
1:E:77:ASN:OD1	1:E:93:ARG:HB3	2.13	0.49
1:F:109:LEU:HG	1:F:110:GLY:N	2.28	0.49
1:F:46:HIS:HD2	1:F:49:TYR:H	1.60	0.49
1:C:304:PHE:O	1:C:306:ARG:HG3	2.12	0.49
1:C:340:THR:HG21	1:D:259:ARG:HE	1.77	0.49
1:B:122:LEU:O	1:B:123:LEU:CD2	2.59	0.49
1:D:251:VAL:HG23	1:D:293:SER:O	2.13	0.49
1:A:249:GLU:N	1:E:299:THR:CG2	2.76	0.49
1:D:81:LEU:HB3	1:D:86:VAL:HG21	1.95	0.49
1:E:80:ALA:O	1:E:81:LEU:HD23	2.12	0.49
1:C:74:PRO:HG3	1:C:449:LYS:HA	1.94	0.49
1:C:74:PRO:HG2	1:C:452:LEU:HD22	1.94	0.49
1:D:205:ASN:OD1	1:D:205:ASN:O	2.30	0.49
1:F:304:PHE:O	1:F:306:ARG:HG3	2.12	0.49
1:A:181:CYS:CA	1:E:361:TYR:CE1	2.96	0.49
1:C:10:LEU:C	1:C:10:LEU:HD12	2.33	0.49
1:F:156:GLY:N	1:F:243:PHE:CD1	2.80	0.49
1:D:145:LEU:HD23	1:D:217:PRO:CG	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:242:MET:HG3	1:E:314:GLN:HE21	1.77	0.49
1:A:109:LEU:HD21	1:A:297:VAL:HG13	1.95	0.49
1:A:361:TYR:HE1	1:B:181:CYS:N	2.11	0.49
1:C:242:MET:HE2	1:C:314:GLN:NE2	2.26	0.49
1:D:74:PRO:HG3	1:D:449:LYS:HA	1.93	0.49
1:F:322:TRP:HA	1:F:322:TRP:CE3	2.48	0.49
1:B:322:TRP:HA	1:B:322:TRP:CE3	2.48	0.49
1:C:69:PHE:CD1	1:C:370:LEU:HD11	2.47	0.49
1:A:328:LEU:HG	1:A:330:VAL:HG23	1.93	0.49
1:A:400:TRP:O	1:A:401:GLU:HB2	2.13	0.49
1:F:109:LEU:HD11	1:F:334:THR:HG22	1.94	0.49
1:B:109:LEU:HD21	1:B:297:VAL:HG13	1.94	0.49
1:A:242:MET:HG3	1:A:314:GLN:HE21	1.77	0.49
1:B:80:ALA:O	1:B:81:LEU:HD23	2.12	0.49
1:F:250:GLN:NE2	1:F:295:SER:HB3	2.16	0.49
1:D:478:LYS:CG	1:D:478:LYS:O	2.58	0.49
1:C:34:TYR:CD2	1:C:453:SER:O	2.66	0.49
1:E:64:ASN:N	1:E:64:ASN:ND2	2.60	0.49
1:B:462:GLY:O	1:B:465:PHE:HB3	2.12	0.49
1:B:96:TRP:HA	1:B:96:TRP:CE3	2.48	0.49
1:C:46:HIS:HD2	1:C:49:TYR:H	1.61	0.49
1:C:87:HIS:HE1	1:C:94:LEU:CG	2.12	0.49
1:A:145:LEU:HD23	1:A:217:PRO:CG	2.43	0.49
1:A:109:LEU:HG	1:A:110:GLY:N	2.28	0.49
1:E:396:VAL:HA	1:E:399:ASN:ND2	2.28	0.49
1:C:205:ASN:OD1	1:C:205:ASN:O	2.30	0.49
1:C:104:SER:OG	1:D:231:LEU:HD21	2.13	0.49
1:E:109:LEU:HG	1:E:110:GLY:N	2.28	0.48
1:B:81:LEU:CG	1:B:86:VAL:HG11	2.43	0.48
1:C:164:TYR:HE2	1:C:187:LYS:HB3	1.73	0.48
1:A:353:TYR:CD1	1:B:140:ARG:NH2	2.81	0.48
1:D:116:HIS:CD2	1:D:218:LEU:HB2	2.48	0.48
1:A:259:ARG:HE	1:E:340:THR:HG21	1.78	0.48
1:D:169:ARG:O	1:D:169:ARG:HD2	2.14	0.48
1:C:424:THR:HG22	1:C:425:LYS:N	2.27	0.48
1:A:60:LYS:O	1:A:60:LYS:HG3	2.14	0.48
1:C:151:GLN:HE22	1:C:302:GLN:CA	2.15	0.48
1:E:322:TRP:HA	1:E:322:TRP:CE3	2.48	0.48
1:A:361:TYR:CE1	1:B:181:CYS:N	2.81	0.48
1:E:81:LEU:CG	1:E:86:VAL:HG11	2.44	0.48
1:F:435:GLU:O	1:F:435:GLU:OE1	2.30	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:79:PHE:HD2	1:A:79:PHE:HA	1.77	0.48
1:F:37:GLU:OE2	1:F:369:LYS:NZ	2.45	0.48
1:D:5:GLN:CD	1:D:5:GLN:N	2.66	0.48
1:A:122:LEU:HD23	1:A:139:ASP:HB2	1.95	0.48
1:C:122:LEU:HD23	1:C:139:ASP:HB2	1.95	0.48
1:D:46:HIS:HD2	1:D:49:TYR:H	1.60	0.48
1:B:242:MET:HG3	1:B:314:GLN:HE21	1.78	0.48
1:F:436:ASP:OD1	1:F:439:ALA:HB2	2.13	0.48
1:D:460:PRO:HB3	1:E:234:ALA:O	2.13	0.48
1:F:57:THR:O	1:A:422:PRO:CD	2.54	0.48
1:F:32:ILE:C	1:F:33:PHE:CD1	2.87	0.48
1:D:113:VAL:HG11	1:E:256:ILE:CG2	2.43	0.48
1:A:113:VAL:HG11	1:B:256:ILE:CG2	2.43	0.48
1:B:413:GLU:N	1:B:413:GLU:OE1	2.44	0.48
1:D:298:SER:OG	1:D:301:ASN:HB2	2.13	0.48
1:D:87:HIS:ND1	1:D:94:LEU:HD11	2.27	0.48
1:C:252:TYR:CE2	1:C:293:SER:HB3	2.48	0.48
1:B:46:HIS:NE2	1:B:48:TYR:HB2	2.28	0.48
1:F:397:LEU:CB	1:F:402:ILE:HD11	2.39	0.48
1:F:397:LEU:HD22	1:F:402:ILE:HD11	1.94	0.48
1:B:164:TYR:N	1:B:164:TYR:CD2	2.80	0.48
1:D:81:LEU:CG	1:D:86:VAL:HG11	2.43	0.48
1:F:79:PHE:CE2	1:A:79:PHE:HA	2.49	0.48
1:C:80:ALA:O	1:C:81:LEU:HD23	2.13	0.48
1:F:31:SER:C	1:F:32:ILE:HD12	2.33	0.48
1:D:31:SER:C	1:D:32:ILE:HD12	2.34	0.48
1:E:32:ILE:C	1:E:33:PHE:CD1	2.87	0.48
1:A:221:GLN:O	1:A:222:ASN:HB3	2.13	0.48
1:A:275:ASN:HA	1:D:353:TYR:H	1.78	0.48
1:E:122:LEU:HD23	1:E:139:ASP:HB2	1.95	0.48
1:E:145:LEU:HD23	1:E:217:PRO:CG	2.43	0.48
1:A:252:TYR:CE2	1:A:293:SER:HB3	2.48	0.48
1:F:82:PRO:HB2	1:A:86:VAL:HA	1.95	0.48
1:A:362:HIS:CE1	1:B:287:VAL:HG13	2.47	0.48
1:E:34:TYR:CD2	1:E:453:SER:O	2.66	0.48
1:A:77:ASN:OD1	1:A:93:ARG:HD2	2.13	0.48
1:E:60:LYS:HG3	1:E:60:LYS:O	2.14	0.48
1:A:148:LYS:HD3	1:A:148:LYS:O	2.13	0.48
1:B:205:ASN:O	1:B:205:ASN:OD1	2.30	0.48
1:A:104:SER:OG	1:B:231:LEU:HD21	2.14	0.48
1:D:37:GLU:OE2	1:D:369:LYS:NZ	2.45	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:74:PRO:HG3	1:E:449:LYS:HA	1.94	0.48
1:D:416:TYR:HB3	1:D:418:TYR:O	2.13	0.48
1:B:142:GLN:NE2	1:C:258:THR:HG21	2.28	0.48
1:C:318:ASN:N	1:C:318:ASN:ND2	2.59	0.48
1:B:162:GLY:HA2	1:B:227:TYR:O	2.14	0.48
1:A:119:PHE:O	1:A:140:ARG:HA	2.14	0.48
1:E:96:TRP:HA	1:E:96:TRP:CE3	2.47	0.48
1:F:34:TYR:CD2	1:F:453:SER:O	2.66	0.48
1:B:113:VAL:HG11	1:C:256:ILE:HG23	1.95	0.48
1:B:122:LEU:HD23	1:B:139:ASP:HB2	1.95	0.48
1:C:87:HIS:ND1	1:C:94:LEU:CG	2.76	0.48
1:C:94:LEU:HD23	1:C:378:SER:HB3	1.96	0.48
1:E:252:TYR:CE2	1:E:293:SER:HB3	2.48	0.48
1:F:400:TRP:O	1:F:401:GLU:HB2	2.13	0.48
1:D:162:GLY:HA2	1:D:227:TYR:O	2.14	0.48
1:F:94:LEU:HD23	1:F:378:SER:HB3	1.95	0.48
1:F:46:HIS:CD2	1:F:48:TYR:HB2	2.49	0.48
1:D:142:GLN:NE2	1:E:258:THR:HG21	2.29	0.48
1:D:252:TYR:CE2	1:D:293:SER:HB3	2.49	0.48
1:A:46:HIS:HD2	1:A:49:TYR:H	1.62	0.48
1:C:257:TRP:NE1	1:D:127:ASN:ND2	2.61	0.48
1:B:32:ILE:C	1:B:33:PHE:CD1	2.87	0.48
1:F:23:SER:HA	1:F:26:TYR:CZ	2.48	0.48
1:E:221:GLN:O	1:E:222:ASN:HB3	2.13	0.48
1:D:60:LYS:HG3	1:D:60:LYS:O	2.14	0.48
1:D:151:GLN:NE2	1:D:302:GLN:HA	2.12	0.48
1:F:252:TYR:CE2	1:F:293:SER:HB3	2.48	0.48
1:F:60:LYS:O	1:F:60:LYS:HG3	2.14	0.48
1:C:417:ARG:HG3	1:C:417:ARG:NH1	2.28	0.48
1:D:76:PRO:HD2	1:D:324:ASN:OD1	2.14	0.48
1:A:172:VAL:O	1:A:173:THR:C	2.51	0.48
1:C:64:ASN:ND2	1:C:64:ASN:N	2.62	0.48
1:A:162:GLY:HA2	1:A:227:TYR:O	2.14	0.48
1:B:353:TYR:CD1	1:C:140:ARG:NH2	2.82	0.48
1:A:397:LEU:HD22	1:A:402:ILE:HD11	1.90	0.47
1:A:94:LEU:HD23	1:A:378:SER:HB3	1.96	0.47
1:C:87:HIS:ND1	1:C:94:LEU:HG	2.23	0.47
1:C:402:ILE:O	1:C:402:ILE:HG22	2.14	0.47
1:C:78:GLN:HG2	1:D:9:LYS:HB2	1.96	0.47
1:A:436:ASP:OD1	1:A:439:ALA:HB2	2.13	0.47
1:B:257:TRP:NE1	1:C:127:ASN:ND2	2.60	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:32:ILE:N	1:E:32:ILE:CD1	2.72	0.47
1:A:116:HIS:CD2	1:A:218:LEU:HB2	2.49	0.47
1:C:169:ARG:HD2	1:C:169:ARG:O	2.14	0.47
1:D:122:LEU:HD23	1:D:139:ASP:HB2	1.94	0.47
1:E:46:HIS:CD2	1:E:48:TYR:HB2	2.49	0.47
1:C:109:LEU:CD1	1:C:334:THR:HG22	2.44	0.47
1:A:322:TRP:CE3	1:A:322:TRP:HA	2.49	0.47
1:D:64:ASN:ND2	1:D:64:ASN:N	2.61	0.47
1:B:116:HIS:CD2	1:B:218:LEU:HB2	2.49	0.47
1:D:206:PHE:HD2	1:D:216:LEU:HD13	1.78	0.47
1:F:243:PHE:HD2	1:F:319:GLY:HA2	1.71	0.47
1:B:200:GLY:CA	1:B:292:PRO:HG3	2.45	0.47
1:E:95:VAL:CG1	1:E:400:TRP:CH2	2.96	0.47
1:D:109:LEU:HD11	1:D:334:THR:CG2	2.44	0.47
1:D:361:TYR:HE1	1:E:181:CYS:N	2.11	0.47
1:C:365:MET:SD	1:D:165:TRP:CD2	3.07	0.47
1:D:416:TYR:O	1:D:417:ARG:C	2.53	0.47
1:C:462:GLY:O	1:C:465:PHE:HB3	2.13	0.47
1:B:340:THR:HG21	1:C:259:ARG:HE	1.79	0.47
1:A:477:ARG:HD2	1:A:479:ARG:HG2	1.97	0.47
1:F:298:SER:OG	1:F:301:ASN:HB2	2.14	0.47
1:B:298:SER:OG	1:B:301:ASN:HB2	2.13	0.47
1:C:21:LEU:HD23	1:C:388:HIS:CE1	2.49	0.47
1:D:109:LEU:CD1	1:D:334:THR:HG22	2.44	0.47
1:D:361:TYR:CE1	1:E:181:CYS:N	2.82	0.47
1:D:164:TYR:HE2	1:D:187:LYS:HB3	1.73	0.47
1:F:417:ARG:HD3	1:A:43:THR:HG21	1.97	0.47
1:C:32:ILE:C	1:C:33:PHE:CD1	2.87	0.47
1:F:64:ASN:N	1:F:64:ASN:ND2	2.61	0.47
1:E:227:TYR:CD1	1:E:228:PRO:HD2	2.49	0.47
1:A:37:GLU:OE2	1:A:369:LYS:NZ	2.47	0.47
1:E:40:ARG:O	1:E:40:ARG:HG3	2.14	0.47
1:F:15:THR:N	1:F:16:PRO:CD	2.77	0.47
1:C:298:SER:OG	1:C:301:ASN:HB2	2.14	0.47
1:A:46:HIS:CD2	1:A:48:TYR:HB2	2.50	0.47
1:D:227:TYR:CD1	1:D:228:PRO:HD2	2.50	0.47
1:F:425:LYS:HD3	1:B:185:GLU:OE1	2.14	0.47
1:F:82:PRO:HB2	1:A:86:VAL:HG22	1.97	0.47
1:C:227:TYR:CD1	1:C:228:PRO:HD2	2.49	0.47
1:D:119:PHE:O	1:D:140:ARG:HA	2.14	0.47
1:C:113:VAL:HG11	1:D:256:ILE:CG2	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:462:GLY:O	1:E:465:PHE:HB3	2.14	0.47
1:A:298:SER:OG	1:A:301:ASN:HB2	2.14	0.47
1:D:221:GLN:O	1:D:222:ASN:HB3	2.14	0.47
1:F:221:GLN:O	1:F:222:ASN:HB3	2.14	0.47
1:E:116:HIS:CD2	1:E:218:LEU:HB2	2.49	0.47
1:C:109:LEU:HG	1:C:110:GLY:N	2.28	0.47
1:D:393:MET:HE1	1:D:396:VAL:CB	2.25	0.47
1:E:109:LEU:CD1	1:E:334:THR:HG22	2.45	0.47
1:B:361:TYR:HD2	1:B:361:TYR:HA	1.51	0.47
1:F:83:ASP:OD1	1:A:86:VAL:HG23	2.15	0.47
1:F:251:VAL:HA	1:F:293:SER:O	2.15	0.47
1:D:74:PRO:HG2	1:D:452:LEU:HD22	1.96	0.47
1:D:475:THR:O	1:E:312:ARG:CB	2.60	0.47
1:E:37:GLU:OE2	1:E:369:LYS:NZ	2.47	0.47
1:A:140:ARG:NH2	1:E:353:TYR:CD1	2.82	0.47
1:C:221:GLN:O	1:C:222:ASN:HB3	2.14	0.47
1:F:162:GLY:HA2	1:F:227:TYR:O	2.13	0.47
1:F:390:GLN:OE1	1:F:390:GLN:HA	2.15	0.47
1:A:28:GLN:HB2	1:A:378:SER:O	2.15	0.47
1:A:40:ARG:O	1:A:40:ARG:HG3	2.14	0.47
1:E:28:GLN:HB2	1:E:378:SER:O	2.15	0.47
1:A:251:VAL:HA	1:A:293:SER:O	2.14	0.47
1:D:299:THR:CG2	1:E:249:GLU:N	2.77	0.47
1:F:427:ALA:O	1:F:430:VAL:CG2	2.62	0.47
1:E:362:HIS:O	1:E:363:ARG:HD3	2.15	0.47
1:C:193:ASP:O	1:C:193:ASP:OD1	2.32	0.47
1:D:435:GLU:HG2	1:D:439:ALA:CB	2.37	0.47
1:B:475:THR:O	1:C:312:ARG:CB	2.60	0.47
1:E:64:ASN:HB3	1:E:197:MET:HB3	1.97	0.47
1:E:376:LEU:HD12	1:E:376:LEU:HA	1.79	0.47
1:E:41:LEU:O	1:E:42:LEU:HD23	2.15	0.47
1:E:298:SER:OG	1:E:301:ASN:HB2	2.14	0.47
1:B:15:THR:O	1:B:15:THR:HG22	2.15	0.47
1:C:148:LYS:HD3	1:C:148:LYS:O	2.15	0.47
1:D:217:PRO:O	1:D:220:ILE:HG22	2.15	0.47
1:D:46:HIS:CD2	1:D:48:TYR:HB2	2.49	0.47
1:E:219:ASP:OD1	1:E:220:ILE:N	2.48	0.47
1:A:217:PRO:O	1:A:220:ILE:HG22	2.15	0.47
1:B:28:GLN:HB2	1:B:378:SER:O	2.15	0.47
1:C:458:GLN:NE2	1:D:19:LYS:CB	2.64	0.47
1:C:431:ILE:HG22	1:C:432:PRO:N	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:193:ASP:OD1	1:F:193:ASP:O	2.32	0.47
1:B:64:ASN:ND2	1:B:64:ASN:N	2.61	0.47
1:C:162:GLY:HA2	1:C:227:TYR:O	2.14	0.47
1:F:154:LEU:CD2	1:F:329:THR:HB	2.44	0.47
1:A:408:THR:HG23	1:A:409:SER:N	2.30	0.47
1:F:116:HIS:CD2	1:F:218:LEU:HB2	2.49	0.47
1:C:404:VAL:HG12	1:C:406:PRO:O	2.15	0.47
1:F:164:TYR:CD2	1:F:164:TYR:N	2.83	0.47
1:B:87:HIS:CE1	1:B:94:LEU:CD1	2.98	0.47
1:F:58:VAL:HG13	1:A:423:ALA:HB2	1.97	0.47
1:E:193:ASP:OD1	1:E:193:ASP:O	2.32	0.47
1:D:135:GLN:HE21	1:D:285:PRO:HD2	1.80	0.47
1:A:31:SER:C	1:A:32:ILE:HD12	2.36	0.47
1:A:268:THR:CG2	1:A:269:THR:N	2.78	0.47
1:A:152:ILE:HD13	1:A:228:PRO:HG2	1.97	0.47
1:C:40:ARG:HG3	1:C:40:ARG:O	2.14	0.47
1:B:477:ARG:HD3	1:B:477:ARG:HA	1.74	0.47
1:A:93:ARG:HB2	1:A:400:TRP:CZ2	2.50	0.46
1:D:219:ASP:OD1	1:D:220:ILE:N	2.48	0.46
1:B:400:TRP:CE3	1:B:400:TRP:CA	2.98	0.46
1:A:109:LEU:CD1	1:A:334:THR:HG22	2.45	0.46
1:F:135:GLN:HE21	1:F:285:PRO:HD2	1.80	0.46
1:D:94:LEU:HD23	1:D:378:SER:HB3	1.96	0.46
1:E:251:VAL:HA	1:E:293:SER:O	2.14	0.46
1:A:193:ASP:O	1:A:193:ASP:OD1	2.33	0.46
1:E:66:TYR:HE2	1:E:196:MET:O	1.98	0.46
1:E:162:GLY:HA2	1:E:227:TYR:O	2.15	0.46
1:E:152:ILE:HD13	1:E:228:PRO:HG2	1.97	0.46
1:B:227:TYR:CD1	1:B:228:PRO:HD2	2.50	0.46
1:B:119:PHE:O	1:B:140:ARG:HA	2.15	0.46
1:E:169:ARG:HD2	1:E:169:ARG:O	2.15	0.46
1:C:396:VAL:HG22	1:C:400:TRP:CE3	2.50	0.46
1:A:219:ASP:OD1	1:A:220:ILE:N	2.48	0.46
1:F:109:LEU:HD11	1:F:334:THR:CG2	2.46	0.46
1:C:135:GLN:HE21	1:C:285:PRO:HD2	1.81	0.46
1:A:460:PRO:HG2	1:A:461:LEU:H	1.79	0.46
1:B:460:PRO:HB3	1:C:234:ALA:O	2.15	0.46
1:B:460:PRO:HG2	1:B:461:LEU:H	1.80	0.46
1:B:268:THR:CG2	1:B:269:THR:N	2.78	0.46
1:A:227:TYR:CD1	1:A:228:PRO:HD2	2.49	0.46
1:B:416:TYR:HB2	1:B:419:ILE:HG23	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:41:LEU:O	1:F:42:LEU:HD23	2.16	0.46
1:A:41:LEU:O	1:A:42:LEU:HD23	2.16	0.46
1:A:276:ASN:HA	1:D:352:GLU:OE2	2.16	0.46
1:B:41:LEU:O	1:B:42:LEU:HD23	2.15	0.46
1:D:462:GLY:O	1:D:465:PHE:HB3	2.16	0.46
1:B:38:THR:CG2	1:B:370:LEU:HB2	2.46	0.46
1:F:109:LEU:CD1	1:F:334:THR:HG22	2.45	0.46
1:F:435:GLU:C	1:F:435:GLU:OE1	2.54	0.46
1:D:193:ASP:OD1	1:D:193:ASP:O	2.33	0.46
1:C:250:GLN:NE2	1:C:295:SER:HB3	2.14	0.46
1:C:460:PRO:HG2	1:C:461:LEU:H	1.81	0.46
1:B:64:ASN:HB3	1:B:197:MET:HB3	1.97	0.46
1:B:221:GLN:O	1:B:222:ASN:HB3	2.14	0.46
1:F:169:ARG:O	1:F:169:ARG:HD2	2.15	0.46
1:E:122:LEU:HD11	1:E:260:GLY:CA	2.40	0.46
1:C:60:LYS:O	1:C:60:LYS:HG3	2.15	0.46
1:D:148:LYS:HD2	1:D:198:GLU:OE1	2.16	0.46
1:E:217:PRO:O	1:E:220:ILE:HG22	2.16	0.46
1:B:458:GLN:NE2	1:C:20:VAL:HG12	2.31	0.46
1:E:339:LEU:HB3	1:E:363:ARG:O	2.15	0.46
1:A:421:SER:OG	1:A:422:PRO:HD2	2.16	0.46
1:C:31:SER:C	1:C:32:ILE:HD12	2.36	0.46
1:F:74:PRO:HG2	1:F:452:LEU:HD22	1.96	0.46
1:A:120:ASN:HD21	1:A:260:GLY:H	1.64	0.46
1:F:154:LEU:O	1:F:328:LEU:CD1	2.49	0.46
1:C:251:VAL:HA	1:C:293:SER:O	2.15	0.46
1:C:46:HIS:CD2	1:C:48:TYR:HB2	2.50	0.46
1:B:60:LYS:HG3	1:B:60:LYS:O	2.16	0.46
1:B:109:LEU:HD11	1:B:334:THR:CG2	2.46	0.46
1:B:408:THR:C	1:B:410:SER:H	2.17	0.46
1:F:417:ARG:HH11	1:A:43:THR:HG21	1.81	0.46
1:D:460:PRO:HG2	1:D:461:LEU:H	1.81	0.46
1:A:58:VAL:HG11	1:A:363:ARG:NH1	2.29	0.46
1:D:32:ILE:C	1:D:33:PHE:CD1	2.89	0.46
1:A:469:GLN:HE21	1:A:469:GLN:CA	2.21	0.46
1:C:67:ARG:HD3	1:C:67:ARG:HA	1.58	0.46
1:D:41:LEU:O	1:D:42:LEU:HD23	2.15	0.46
1:D:477:ARG:HA	1:D:477:ARG:HD3	1.75	0.46
1:F:156:GLY:N	1:F:243:PHE:HD1	2.14	0.46
1:B:120:ASN:HD21	1:B:260:GLY:H	1.64	0.46
1:D:353:TYR:CD1	1:E:140:ARG:NH2	2.83	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:120:ASN:HB2	1:D:214:SER:HB2	1.98	0.46
1:C:217:PRO:O	1:C:220:ILE:HG22	2.16	0.46
1:C:122:LEU:HD11	1:C:260:GLY:CA	2.39	0.46
1:A:67:ARG:HD3	1:A:67:ARG:HA	1.57	0.46
1:B:299:THR:CG2	1:C:249:GLU:N	2.79	0.46
1:C:149:GLN:HA	1:C:333:ASN:ND2	2.21	0.46
1:E:135:GLN:HE21	1:E:285:PRO:HD2	1.81	0.46
1:A:64:ASN:ND2	1:A:64:ASN:N	2.64	0.46
1:F:268:THR:CG2	1:F:269:THR:N	2.79	0.46
1:D:268:THR:CG2	1:D:269:THR:N	2.79	0.46
1:F:119:PHE:O	1:F:140:ARG:HA	2.16	0.46
1:F:462:GLY:O	1:F:465:PHE:HB3	2.16	0.46
1:A:462:GLY:O	1:A:465:PHE:HB3	2.15	0.46
1:D:390:GLN:HA	1:D:390:GLN:OE1	2.15	0.46
1:D:28:GLN:HB2	1:D:378:SER:O	2.16	0.46
1:B:123:LEU:HD11	1:B:132:VAL:CG2	2.36	0.46
1:E:123:LEU:HD11	1:E:132:VAL:CG2	2.37	0.46
1:C:219:ASP:OD1	1:C:220:ILE:N	2.48	0.46
1:F:148:LYS:O	1:F:148:LYS:HD3	2.15	0.46
1:F:217:PRO:O	1:F:220:ILE:HG22	2.16	0.46
1:B:31:SER:C	1:B:32:ILE:HD12	2.36	0.46
1:D:365:MET:SD	1:E:165:TRP:CD2	3.09	0.46
1:B:77:ASN:OD1	1:B:93:ARG:HB3	2.16	0.46
1:E:268:THR:CG2	1:E:269:THR:N	2.78	0.46
1:A:256:ILE:CG2	1:E:113:VAL:HG11	2.45	0.46
1:B:146:ASP:CG	1:C:253:VAL:HG21	2.36	0.46
1:E:119:PHE:O	1:E:140:ARG:HA	2.15	0.46
1:A:164:TYR:N	1:A:164:TYR:CD2	2.82	0.46
1:B:219:ASP:OD1	1:B:220:ILE:N	2.48	0.46
1:B:109:LEU:CD1	1:B:334:THR:HG22	2.45	0.46
1:F:425:LYS:HD3	1:B:185:GLU:CD	2.36	0.46
1:F:219:ASP:OD1	1:F:220:ILE:N	2.48	0.46
1:F:460:PRO:HG2	1:F:461:LEU:H	1.80	0.46
1:A:234:ALA:O	1:E:460:PRO:HB3	2.16	0.46
1:C:268:THR:CG2	1:C:269:THR:N	2.78	0.46
1:C:119:PHE:O	1:C:140:ARG:HA	2.16	0.46
1:F:227:TYR:CD1	1:F:228:PRO:HD2	2.51	0.46
1:B:406:PRO:HA	1:B:407:PRO:HD3	1.63	0.46
1:D:405:GLN:HB3	1:D:406:PRO:HD2	1.97	0.46
1:A:397:LEU:CD2	1:A:402:ILE:HD13	2.43	0.46
1:D:122:LEU:HD11	1:D:260:GLY:CA	2.41	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:38:THR:CG2	1:F:370:LEU:HB2	2.46	0.46
1:A:227:TYR:CZ	1:E:108:PRO:HA	2.50	0.46
1:F:102:GLN:HE21	1:F:305:ASN:HA	1.81	0.46
1:D:401:GLU:HA	1:D:401:GLU:OE1	2.16	0.46
1:F:404:VAL:HG12	1:F:405:GLN:N	2.31	0.45
1:A:435:GLU:OE1	1:A:435:GLU:C	2.54	0.45
1:B:135:GLN:HE21	1:B:285:PRO:HD2	1.80	0.45
1:F:417:ARG:HD3	1:A:43:THR:CG2	2.47	0.45
1:B:102:GLN:HE21	1:B:305:ASN:HA	1.82	0.45
1:A:353:TYR:H	1:C:275:ASN:HA	1.80	0.45
1:C:400:TRP:O	1:C:401:GLU:CG	2.61	0.45
1:C:120:ASN:HD21	1:C:260:GLY:H	1.65	0.45
1:A:416:TYR:CE1	1:A:425:LYS:HE2	2.51	0.45
1:B:164:TYR:HD2	1:B:164:TYR:N	2.14	0.45
1:B:393:MET:HE2	1:B:396:VAL:N	2.24	0.45
1:E:460:PRO:HG2	1:E:461:LEU:H	1.80	0.45
1:B:350:LEU:HD22	1:B:357:LYS:HB3	1.99	0.45
1:F:419:ILE:CG2	1:F:419:ILE:O	2.64	0.45
1:E:65:GLN:HG2	1:E:196:MET:HE1	1.98	0.45
1:F:120:ASN:HB2	1:F:214:SER:HB2	1.98	0.45
1:D:120:ASN:HD21	1:D:260:GLY:H	1.64	0.45
1:F:396:VAL:O	1:F:400:TRP:HB2	2.15	0.45
1:D:80:ALA:O	1:D:81:LEU:HD23	2.16	0.45
1:A:102:GLN:HE21	1:A:305:ASN:HA	1.81	0.45
1:D:40:ARG:O	1:D:40:ARG:HG3	2.15	0.45
1:A:477:ARG:HD2	1:A:479:ARG:CG	2.46	0.45
1:F:120:ASN:HD21	1:F:260:GLY:H	1.64	0.45
1:B:123:LEU:HD11	1:B:132:VAL:CG1	2.45	0.45
1:C:123:LEU:HD11	1:C:132:VAL:CG1	2.45	0.45
1:A:148:LYS:HD2	1:A:198:GLU:OE1	2.16	0.45
1:B:148:LYS:HD3	1:B:148:LYS:O	2.16	0.45
1:A:150:GLN:HG3	1:A:249:GLU:CB	2.25	0.45
1:B:217:PRO:O	1:B:220:ILE:HG22	2.16	0.45
1:C:109:LEU:HD11	1:C:334:THR:CG2	2.45	0.45
1:F:362:HIS:O	1:F:363:ARG:HD3	2.16	0.45
1:F:62:SER:OG	1:F:63:ALA:N	2.50	0.45
1:A:135:GLN:HE21	1:A:285:PRO:HD2	1.81	0.45
1:D:322:TRP:HA	1:D:322:TRP:HE3	1.81	0.45
1:F:40:ARG:O	1:F:40:ARG:HG3	2.16	0.45
1:F:364:HIS:HE2	1:F:366:GLU:CD	2.19	0.45
1:D:87:HIS:ND1	1:D:94:LEU:CD2	2.78	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:252:TYR:CD2	1:E:293:SER:HB3	2.52	0.45
1:E:47:PRO:O	1:E:60:LYS:HD3	2.16	0.45
1:A:65:GLN:HG2	1:A:196:MET:HE1	1.97	0.45
1:C:150:GLN:HB2	1:C:249:GLU:HB2	1.99	0.45
1:E:297:VAL:CG2	1:E:334:THR:HG23	2.28	0.45
1:D:164:TYR:CD2	1:D:187:LYS:O	2.70	0.45
1:F:417:ARG:O	1:F:418:TYR:HB2	2.17	0.45
1:D:245:PHE:CD1	1:D:245:PHE:C	2.90	0.45
1:F:65:GLN:HG2	1:F:196:MET:HE2	1.99	0.45
1:C:322:TRP:HE3	1:C:322:TRP:HA	1.81	0.45
1:C:47:PRO:O	1:C:60:LYS:HD3	2.17	0.45
1:D:251:VAL:HA	1:D:293:SER:O	2.16	0.45
1:F:28:GLN:HB2	1:F:378:SER:O	2.16	0.45
1:A:299:THR:CG2	1:B:249:GLU:N	2.78	0.45
1:A:350:LEU:HD22	1:A:357:LYS:HB3	1.99	0.45
1:E:205:ASN:CA	1:E:224:ILE:HG12	2.45	0.45
1:B:65:GLN:HG2	1:B:196:MET:HE1	1.98	0.45
1:A:76:PRO:HG3	1:A:95:VAL:HA	1.98	0.45
1:B:152:ILE:HD13	1:B:228:PRO:HG2	1.98	0.45
1:B:40:ARG:HG3	1:B:40:ARG:O	2.16	0.45
1:C:28:GLN:HB2	1:C:378:SER:O	2.16	0.45
1:B:80:ALA:HB2	1:C:11:TYR:O	2.16	0.45
1:F:252:TYR:CD2	1:F:293:SER:HB3	2.51	0.45
1:B:193:ASP:OD1	1:B:193:ASP:O	2.35	0.45
1:F:135:GLN:NE2	1:F:285:PRO:CD	2.80	0.45
1:D:350:LEU:HD22	1:D:357:LYS:HB3	1.99	0.45
1:C:478:LYS:CG	1:C:478:LYS:O	2.58	0.45
1:C:23:SER:HA	1:C:26:TYR:CZ	2.52	0.45
1:B:352:GLU:OE2	1:D:276:ASN:HA	2.17	0.45
1:B:148:LYS:HD2	1:B:198:GLU:OE1	2.17	0.45
1:A:109:LEU:HD11	1:A:334:THR:CG2	2.46	0.45
1:A:427:ALA:O	1:A:430:VAL:CG2	2.62	0.45
1:D:19:LYS:O	1:D:19:LYS:HG3	2.17	0.45
1:F:59:PRO:HG3	1:A:418:TYR:HD1	1.81	0.45
1:D:257:TRP:NE1	1:E:127:ASN:ND2	2.63	0.45
1:C:66:TYR:HE2	1:C:196:MET:O	2.00	0.45
1:B:318:ASN:H	1:B:318:ASN:ND2	2.15	0.45
1:B:353:TYR:HB3	1:D:275:ASN:HB3	1.98	0.45
1:E:120:ASN:HB2	1:E:214:SER:HB2	1.98	0.45
1:C:164:TYR:CD2	1:C:187:LYS:O	2.69	0.45
1:B:459:PHE:N	1:B:459:PHE:CD1	2.85	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:389:LEU:HB2	1:D:397:LEU:HD21	1.99	0.45
1:F:64:ASN:HB3	1:F:197:MET:HB3	1.99	0.45
1:F:318:ASN:ND2	1:F:318:ASN:H	2.14	0.45
1:F:376:LEU:HD12	1:F:376:LEU:HA	1.79	0.45
1:D:148:LYS:O	1:D:148:LYS:HD3	2.17	0.45
1:B:62:SER:OG	1:B:63:ALA:N	2.49	0.45
1:D:135:GLN:NE2	1:D:285:PRO:CD	2.80	0.45
1:E:354:ASP:CB	1:E:357:LYS:HG2	2.45	0.45
1:E:102:GLN:HE21	1:E:305:ASN:HA	1.82	0.45
1:F:152:ILE:HD13	1:F:228:PRO:HG2	1.99	0.45
1:B:252:TYR:HD1	1:B:253:VAL:O	2.00	0.44
1:B:135:GLN:NE2	1:B:285:PRO:CD	2.80	0.44
1:E:135:GLN:NE2	1:E:285:PRO:CD	2.80	0.44
1:E:31:SER:C	1:E:32:ILE:HD12	2.36	0.44
1:A:303:ILE:O	1:A:304:PHE:CD1	2.71	0.44
1:A:76:PRO:CG	1:A:95:VAL:HA	2.47	0.44
1:C:154:LEU:HD11	1:C:160:ALA:HB2	2.00	0.44
1:C:390:GLN:HA	1:C:390:GLN:OE1	2.16	0.44
1:A:420:GLU:CD	1:A:420:GLU:N	2.71	0.44
1:E:123:LEU:HD11	1:E:132:VAL:CG1	2.45	0.44
1:C:28:GLN:OE1	1:C:28:GLN:HA	2.16	0.44
1:D:47:PRO:O	1:D:60:LYS:HD3	2.17	0.44
1:B:408:THR:O	1:B:408:THR:CG2	2.63	0.44
1:E:181:CYS:SG	1:E:182:PRO:HD2	2.57	0.44
1:E:9:LYS:HG2	1:E:11:TYR:HE1	1.83	0.44
1:C:11:TYR:O	1:C:12:LEU:CD2	2.64	0.44
1:C:205:ASN:CA	1:C:224:ILE:HG12	2.46	0.44
1:E:20:VAL:CG2	1:E:21:LEU:N	2.80	0.44
1:D:316:MET:N	1:D:316:MET:SD	2.91	0.44
1:E:138:ASP:OD1	1:E:139:ASP:N	2.50	0.44
1:A:47:PRO:O	1:A:60:LYS:HD3	2.17	0.44
1:F:407:PRO:CG	1:F:410:SER:HB3	2.32	0.44
1:C:181:CYS:SG	1:C:182:PRO:HD2	2.58	0.44
1:E:410:SER:C	1:E:411:ILE:CG1	2.81	0.44
1:A:318:ASN:ND2	1:A:318:ASN:H	2.14	0.44
1:B:66:TYR:HE2	1:B:196:MET:O	2.01	0.44
1:E:317:ASN:ND2	1:E:320:ILE:H	2.15	0.44
1:D:64:ASN:HB3	1:D:197:MET:HB3	1.98	0.44
1:E:390:GLN:OE1	1:E:390:GLN:HA	2.17	0.44
1:E:206:PHE:HD2	1:E:216:LEU:HD13	1.81	0.44
1:A:390:GLN:HA	1:A:390:GLN:OE1	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:138:ASP:OD1	1:B:139:ASP:N	2.50	0.44
1:E:28:GLN:HA	1:E:28:GLN:OE1	2.18	0.44
1:C:87:HIS:HE1	1:C:94:LEU:HD12	1.79	0.44
1:E:148:LYS:O	1:E:148:LYS:HD3	2.17	0.44
1:A:252:TYR:CD2	1:A:293:SER:HB3	2.52	0.44
1:B:28:GLN:OE1	1:B:28:GLN:HA	2.17	0.44
1:E:109:LEU:HD11	1:E:334:THR:CG2	2.46	0.44
1:F:148:LYS:HD2	1:F:198:GLU:OE1	2.18	0.44
1:B:263:GLU:CG	1:B:285:PRO:HA	2.47	0.44
1:A:417:ARG:O	1:A:418:TYR:HB2	2.18	0.44
1:C:350:LEU:HD22	1:C:357:LYS:HB3	1.99	0.44
1:F:350:LEU:HD22	1:F:357:LYS:HB3	1.99	0.44
1:A:365:MET:SD	1:B:165:TRP:CD2	3.10	0.44
1:B:245:PHE:C	1:B:245:PHE:CD1	2.91	0.44
1:B:390:GLN:HA	1:B:390:GLN:OE1	2.16	0.44
1:F:420:GLU:N	1:F:420:GLU:CD	2.70	0.44
1:E:120:ASN:HD21	1:E:260:GLY:H	1.64	0.44
1:D:62:SER:OG	1:D:63:ALA:N	2.50	0.44
1:A:66:TYR:HE2	1:A:196:MET:O	2.00	0.44
1:B:145:LEU:CD1	1:B:291:SER:HB2	2.48	0.44
1:C:108:PRO:HA	1:D:227:TYR:CZ	2.52	0.44
1:A:419:ILE:O	1:A:419:ILE:CG2	2.64	0.44
1:F:86:VAL:HG22	1:A:82:PRO:HD2	1.98	0.44
1:A:263:GLU:CG	1:A:285:PRO:HA	2.47	0.44
1:D:459:PHE:CD1	1:D:459:PHE:N	2.85	0.44
1:C:16:PRO:O	1:C:18:SER:N	2.51	0.44
1:E:245:PHE:C	1:E:245:PHE:CD1	2.91	0.44
1:C:44:ILE:HG22	1:C:365:MET:HB3	1.99	0.44
1:C:102:GLN:HE21	1:C:305:ASN:HA	1.82	0.44
1:C:97:ALA:HA	1:C:319:GLY:O	2.17	0.44
1:F:138:ASP:OD1	1:F:139:ASP:N	2.50	0.44
1:B:251:VAL:CG2	1:B:292:PRO:HB2	2.47	0.44
1:A:407:PRO:HG2	1:A:410:SER:HB3	1.95	0.44
1:D:299:THR:HG23	1:E:249:GLU:H	1.83	0.44
1:F:424:THR:CG2	1:F:425:LYS:H	2.31	0.44
1:D:181:CYS:SG	1:D:182:PRO:HD2	2.58	0.44
1:C:135:GLN:NE2	1:C:285:PRO:CD	2.80	0.44
1:A:459:PHE:HB3	1:A:460:PRO:CD	2.42	0.44
1:C:318:ASN:H	1:C:318:ASN:ND2	2.15	0.44
1:D:102:GLN:HE21	1:D:305:ASN:HA	1.82	0.44
1:B:275:ASN:HB3	1:E:353:TYR:HB3	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:390:GLN:CD	1:B:397:LEU:CD1	2.86	0.44
1:D:28:GLN:OE1	1:D:28:GLN:HA	2.17	0.44
1:B:120:ASN:HB2	1:B:214:SER:HB2	2.00	0.44
1:E:148:LYS:HD2	1:E:198:GLU:OE1	2.18	0.44
1:E:164:TYR:N	1:E:164:TYR:CD2	2.85	0.44
1:E:322:TRP:HA	1:E:322:TRP:HE3	1.83	0.44
1:B:181:CYS:SG	1:B:182:PRO:HD2	2.58	0.44
1:C:159:PRO:CD	1:C:438:TYR:HE2	2.30	0.44
1:A:135:GLN:NE2	1:A:285:PRO:CD	2.81	0.44
1:F:478:LYS:O	1:F:478:LYS:CG	2.58	0.44
1:B:44:ILE:HG22	1:B:365:MET:HB3	2.00	0.44
1:E:318:ASN:H	1:E:318:ASN:ND2	2.15	0.44
1:B:322:TRP:HA	1:B:322:TRP:HE3	1.83	0.44
1:A:153:LEU:HD13	1:A:330:VAL:HG21	1.89	0.44
1:A:196:MET:HE2	1:A:196:MET:HA	2.00	0.44
1:A:62:SER:OG	1:A:63:ALA:N	2.51	0.44
1:A:75:ASP:O	1:A:79:PHE:CE1	2.71	0.44
1:F:417:ARG:HD2	1:A:444:TRP:CZ2	2.53	0.44
1:A:245:PHE:C	1:A:245:PHE:CD1	2.91	0.44
1:F:67:ARG:HD3	1:F:67:ARG:HA	1.58	0.44
1:B:196:MET:HA	1:B:196:MET:HE2	1.99	0.44
1:A:477:ARG:HA	1:A:477:ARG:HD3	1.77	0.44
1:F:408:THR:HG23	1:F:409:SER:N	2.33	0.44
1:A:120:ASN:HB2	1:A:214:SER:HB2	2.00	0.44
1:D:123:LEU:HD11	1:D:132:VAL:CG2	2.37	0.44
1:F:328:LEU:HD23	1:F:370:LEU:HD22	2.00	0.44
1:F:79:PHE:HD2	1:A:79:PHE:CA	2.31	0.44
1:A:81:LEU:CD2	1:A:86:VAL:HG11	2.42	0.44
1:B:136:THR:CG2	1:B:137:THR:N	2.66	0.44
1:E:459:PHE:N	1:E:459:PHE:CD1	2.85	0.44
1:E:477:ARG:HD3	1:E:477:ARG:HA	1.74	0.44
1:B:153:LEU:HD12	1:B:330:VAL:CG2	2.16	0.43
1:D:458:GLN:OE1	1:D:458:GLN:HA	2.18	0.43
1:B:50:PRO:N	1:B:60:LYS:HB3	2.33	0.43
1:A:424:THR:CG2	1:A:425:LYS:H	2.31	0.43
1:D:328:LEU:HD23	1:D:370:LEU:HD22	2.00	0.43
1:E:350:LEU:HD22	1:E:357:LYS:HB3	1.99	0.43
1:F:14:PRO:C	1:F:16:PRO:HD3	2.38	0.43
1:C:41:LEU:O	1:C:42:LEU:HD23	2.17	0.43
1:E:427:ALA:O	1:E:428:SER:OG	2.29	0.43
1:A:92:GLU:N	1:A:92:GLU:OE1	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:123:LEU:HD11	1:F:132:VAL:CG1	2.45	0.43
1:D:120:ASN:HB2	1:D:214:SER:CB	2.48	0.43
1:E:62:SER:OG	1:E:63:ALA:N	2.51	0.43
1:F:81:LEU:CD2	1:F:86:VAL:HG11	2.43	0.43
1:C:263:GLU:CG	1:C:285:PRO:HA	2.48	0.43
1:A:459:PHE:CD1	1:A:459:PHE:N	2.86	0.43
1:E:459:PHE:HB3	1:E:460:PRO:CD	2.41	0.43
1:B:67:ARG:HA	1:B:67:ARG:HD3	1.57	0.43
1:E:389:LEU:HB2	1:E:397:LEU:HD21	1.99	0.43
1:A:104:SER:HB3	1:A:369:LYS:HB3	2.00	0.43
1:A:228:PRO:HB2	1:A:230:TYR:CZ	2.53	0.43
1:B:122:LEU:HD11	1:B:260:GLY:CA	2.40	0.43
1:D:120:ASN:HB2	1:D:214:SER:OG	2.19	0.43
1:A:296:LEU:HB3	1:B:252:TYR:CD2	2.54	0.43
1:C:151:GLN:NE2	1:C:302:GLN:HA	2.14	0.43
1:C:299:THR:CG2	1:D:249:GLU:N	2.81	0.43
1:C:182:PRO:HA	1:C:183:PRO:HD3	1.87	0.43
1:D:242:MET:HE2	1:D:314:GLN:NE2	2.31	0.43
1:D:70:LYS:HD3	1:D:443:PHE:HE1	1.83	0.43
1:D:38:THR:CG2	1:D:370:LEU:HB2	2.47	0.43
1:C:245:PHE:C	1:C:245:PHE:CD1	2.91	0.43
1:C:152:ILE:HD13	1:C:228:PRO:HG2	1.99	0.43
1:E:74:PRO:HG2	1:E:452:LEU:CD2	2.48	0.43
1:C:316:MET:N	1:C:316:MET:SD	2.92	0.43
1:A:97:ALA:HA	1:A:319:GLY:O	2.19	0.43
1:A:28:GLN:OE1	1:A:28:GLN:HA	2.18	0.43
1:E:87:HIS:CD2	1:E:92:GLU:O	2.71	0.43
1:B:435:GLU:OE2	1:B:439:ALA:HB3	2.19	0.43
1:A:297:VAL:CG2	1:A:334:THR:HG23	2.28	0.43
1:F:60:LYS:O	1:F:60:LYS:CG	2.67	0.43
1:A:154:LEU:HD11	1:A:160:ALA:HB2	2.00	0.43
1:B:30:LYS:HB3	1:B:32:ILE:CD1	2.48	0.43
1:D:318:ASN:H	1:D:318:ASN:ND2	2.14	0.43
1:E:390:GLN:CD	1:E:397:LEU:CD1	2.86	0.43
1:A:22:CYS:HB3	1:A:316:MET:HG3	2.00	0.43
1:B:97:ALA:HA	1:B:319:GLY:O	2.18	0.43
1:C:400:TRP:C	1:C:401:GLU:HG2	2.38	0.43
1:C:62:SER:OG	1:C:63:ALA:N	2.51	0.43
1:A:361:TYR:HD2	1:A:361:TYR:HA	1.51	0.43
1:E:263:GLU:CG	1:E:285:PRO:HA	2.48	0.43
1:F:205:ASN:CA	1:F:224:ILE:HG12	2.45	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:322:TRP:HE3	1:A:322:TRP:HA	1.83	0.43
1:B:113:VAL:HG11	1:C:256:ILE:CG2	2.47	0.43
1:E:309:TRP:HB3	1:E:311:PHE:CE1	2.53	0.43
1:E:97:ALA:HA	1:E:319:GLY:O	2.19	0.43
1:E:229:ASP:OD2	1:E:232:LYS:HB2	2.18	0.43
1:E:154:LEU:HD11	1:E:160:ALA:HB2	2.00	0.43
1:F:245:PHE:C	1:F:245:PHE:CD1	2.91	0.43
1:F:361:TYR:HA	1:F:361:TYR:HD2	1.52	0.43
1:D:223:GLU:OE1	1:D:223:GLU:HA	2.18	0.43
1:E:416:TYR:N	1:E:416:TYR:CD1	2.86	0.43
1:C:424:THR:CG2	1:C:425:LYS:N	2.81	0.43
1:C:252:TYR:CD2	1:C:293:SER:HB3	2.54	0.43
1:B:46:HIS:CG	1:B:47:PRO:HD2	2.54	0.43
1:D:228:PRO:HB2	1:D:230:TYR:CZ	2.54	0.43
1:F:339:LEU:HB3	1:F:363:ARG:O	2.17	0.43
1:A:44:ILE:HG22	1:A:365:MET:HB3	2.00	0.43
1:E:196:MET:HE2	1:E:196:MET:HA	2.00	0.43
1:A:316:MET:N	1:A:316:MET:SD	2.92	0.43
1:B:68:VAL:CG2	1:B:329:THR:HG23	2.49	0.43
1:D:68:VAL:CG2	1:D:329:THR:HG23	2.49	0.43
1:A:23:SER:HA	1:A:26:TYR:CZ	2.53	0.43
1:F:44:ILE:HG22	1:F:365:MET:HB3	2.00	0.43
1:D:97:ALA:HA	1:D:319:GLY:O	2.19	0.43
1:E:372:PHE:N	1:E:372:PHE:CD1	2.87	0.43
1:F:120:ASN:HB2	1:F:214:SER:CB	2.48	0.43
1:A:120:ASN:HB2	1:A:214:SER:OG	2.19	0.43
1:C:138:ASP:OD1	1:C:139:ASP:N	2.51	0.43
1:C:120:ASN:HB2	1:C:214:SER:HB2	1.99	0.43
1:D:252:TYR:CD2	1:D:293:SER:HB3	2.54	0.43
1:D:60:LYS:CG	1:D:60:LYS:O	2.67	0.43
1:E:47:PRO:O	1:E:60:LYS:CD	2.66	0.43
1:A:145:LEU:CD1	1:A:291:SER:HB2	2.49	0.43
1:A:150:GLN:HB2	1:A:249:GLU:HB2	2.01	0.43
1:D:424:THR:CG2	1:D:425:LYS:N	2.81	0.43
1:B:309:TRP:HB3	1:B:311:PHE:CE1	2.54	0.43
1:B:414:ASP:N	1:B:414:ASP:OD1	2.51	0.43
1:E:120:ASN:HB2	1:E:214:SER:OG	2.19	0.43
1:E:396:VAL:HG22	1:E:400:TRP:NE1	2.33	0.43
1:F:83:ASP:CG	1:A:85:THR:HB	2.38	0.43
1:F:47:PRO:O	1:F:60:LYS:HD3	2.18	0.43
1:F:263:GLU:CG	1:F:285:PRO:HA	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:459:PHE:CD1	1:C:459:PHE:N	2.85	0.43
1:C:354:ASP:CB	1:C:357:LYS:HG2	2.45	0.43
1:D:154:LEU:HD11	1:D:160:ALA:HB2	2.00	0.43
1:A:364:HIS:C	1:A:365:MET:HG3	2.39	0.43
1:D:66:TYR:HE2	1:D:196:MET:O	2.01	0.43
1:A:64:ASN:HB3	1:A:197:MET:HB3	1.99	0.43
1:B:228:PRO:HB2	1:B:230:TYR:CZ	2.53	0.43
1:F:223:GLU:HA	1:F:223:GLU:OE1	2.18	0.43
1:A:38:THR:CG2	1:A:370:LEU:HB2	2.49	0.43
1:F:155:LEU:O	1:F:243:PHE:HD1	2.02	0.43
1:B:120:ASN:HB2	1:B:214:SER:OG	2.18	0.43
1:A:138:ASP:OD1	1:A:139:ASP:N	2.52	0.43
1:F:93:ARG:HB2	1:F:400:TRP:CZ2	2.54	0.43
1:F:28:GLN:HA	1:F:28:GLN:OE1	2.18	0.43
1:F:459:PHE:HB3	1:F:460:PRO:CD	2.42	0.43
1:F:206:PHE:HD2	1:F:216:LEU:HD13	1.83	0.43
1:A:328:LEU:HA	1:A:328:LEU:HD12	1.70	0.43
1:F:88:ASN:OD1	1:F:91:LYS:NZ	2.48	0.43
1:D:138:ASP:OD1	1:D:139:ASP:N	2.51	0.43
1:C:60:LYS:O	1:C:60:LYS:CG	2.67	0.43
1:C:120:ASN:HB2	1:C:214:SER:OG	2.18	0.43
1:E:3:LEU:CD1	1:E:3:LEU:C	2.80	0.43
1:A:60:LYS:O	1:A:60:LYS:CG	2.66	0.43
1:B:60:LYS:HE2	1:B:223:GLU:OE2	2.18	0.43
1:B:458:GLN:HE21	1:C:19:LYS:HE3	1.84	0.43
1:F:79:PHE:CA	1:A:79:PHE:HD2	2.32	0.43
1:C:65:GLN:HG2	1:C:196:MET:HE1	2.01	0.43
1:B:108:PRO:HA	1:C:227:TYR:CZ	2.54	0.43
1:C:37:GLU:OE2	1:C:369:LYS:HE2	2.19	0.43
1:C:120:ASN:HB2	1:C:214:SER:CB	2.49	0.42
1:E:60:LYS:CG	1:E:60:LYS:O	2.66	0.42
1:B:458:GLN:NE2	1:C:20:VAL:H	2.11	0.42
1:E:150:GLN:HB2	1:E:249:GLU:HB2	2.01	0.42
1:B:242:MET:HE2	1:B:314:GLN:NE2	2.32	0.42
1:F:459:PHE:N	1:F:459:PHE:CD1	2.86	0.42
1:A:127:ASN:ND2	1:E:257:TRP:NE1	2.62	0.42
1:B:154:LEU:HD11	1:B:160:ALA:HB2	2.00	0.42
1:B:317:ASN:ND2	1:B:320:ILE:H	2.16	0.42
1:C:37:GLU:OE2	1:C:369:LYS:CE	2.67	0.42
1:A:309:TRP:HB3	1:A:311:PHE:CE1	2.53	0.42
1:C:309:TRP:HB3	1:C:311:PHE:CE1	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:223:GLU:OE1	1:C:223:GLU:HA	2.19	0.42
1:E:223:GLU:OE1	1:E:223:GLU:HA	2.18	0.42
1:B:328:LEU:HD23	1:B:370:LEU:HD22	2.00	0.42
1:F:120:ASN:HB2	1:F:214:SER:OG	2.19	0.42
1:B:437:PRO:HB2	1:B:438:TYR:CD1	2.53	0.42
1:B:400:TRP:HB3	1:B:402:ILE:HG23	2.00	0.42
1:E:393:MET:HE2	1:E:396:VAL:N	2.27	0.42
1:D:9:LYS:O	1:D:9:LYS:CG	2.67	0.42
1:F:316:MET:SD	1:F:316:MET:N	2.92	0.42
1:B:444:TRP:HD1	1:B:445:ASN:N	2.17	0.42
1:C:196:MET:HE2	1:C:196:MET:HA	2.01	0.42
1:A:169:ARG:O	1:A:169:ARG:HD2	2.19	0.42
1:E:38:THR:CG2	1:E:370:LEU:HB2	2.48	0.42
1:C:47:PRO:O	1:C:60:LYS:CD	2.68	0.42
1:D:150:GLN:HB2	1:D:249:GLU:HB2	2.00	0.42
1:B:186:LEU:HG	1:B:187:LYS:N	2.35	0.42
1:D:74:PRO:HG2	1:D:452:LEU:CD2	2.50	0.42
1:F:303:ILE:O	1:F:304:PHE:CD1	2.72	0.42
1:A:181:CYS:CB	1:E:361:TYR:CD1	3.02	0.42
1:A:181:CYS:CB	1:E:361:TYR:CE1	3.02	0.42
1:C:228:PRO:HB2	1:C:230:TYR:CZ	2.54	0.42
1:F:14:PRO:HD2	1:B:14:PRO:HD3	2.00	0.42
1:B:413:GLU:C	1:B:414:ASP:OD1	2.57	0.42
1:A:167:THR:HG23	1:A:182:PRO:HB2	2.01	0.42
1:E:95:VAL:HG22	1:E:377:CYS:O	2.19	0.42
1:D:354:ASP:CB	1:D:357:LYS:HG2	2.45	0.42
1:F:66:TYR:HE2	1:F:196:MET:O	2.02	0.42
1:B:130:ARG:HG2	1:B:131:LYS:H	1.85	0.42
1:E:40:ARG:HB2	1:E:367:GLU:OE2	2.20	0.42
1:F:40:ARG:HB2	1:F:367:GLU:OE2	2.20	0.42
1:E:92:GLU:HA	1:E:381:ILE:HG12	2.01	0.42
1:A:47:PRO:O	1:A:60:LYS:CD	2.68	0.42
1:F:87:HIS:ND1	1:F:94:LEU:CD1	2.75	0.42
1:C:186:LEU:HG	1:C:187:LYS:N	2.34	0.42
1:E:44:ILE:HG22	1:E:365:MET:HB3	2.01	0.42
1:D:67:ARG:HA	1:D:67:ARG:HD3	1.58	0.42
1:D:317:ASN:ND2	1:D:320:ILE:H	2.16	0.42
1:F:309:TRP:HB3	1:F:311:PHE:CE1	2.54	0.42
1:C:144:GLY:HA3	1:D:125:ALA:HB2	2.01	0.42
1:D:229:ASP:OD2	1:D:232:LYS:HB2	2.19	0.42
1:C:328:LEU:HD23	1:C:370:LEU:HD22	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:186:LEU:HG	1:A:187:LYS:N	2.34	0.42
1:F:22:CYS:HG	1:F:316:MET:HG3	1.79	0.42
1:F:82:PRO:CG	1:A:86:VAL:HG13	2.45	0.42
1:F:438:TYR:N	1:F:438:TYR:CD1	2.88	0.42
1:C:459:PHE:HB3	1:C:460:PRO:CD	2.41	0.42
1:C:30:LYS:HB3	1:C:32:ILE:CD1	2.49	0.42
1:C:74:PRO:HG2	1:C:452:LEU:CD2	2.49	0.42
1:E:313:ALA:CB	1:E:318:ASN:HA	2.50	0.42
1:B:274:LYS:HG2	1:B:275:ASN:N	2.35	0.42
1:F:74:PRO:HG2	1:F:452:LEU:CD2	2.50	0.42
1:D:40:ARG:HB2	1:D:367:GLU:OE2	2.20	0.42
1:E:456:LEU:HA	1:E:456:LEU:HD23	1.86	0.42
1:B:41:LEU:C	1:B:42:LEU:HD23	2.40	0.42
1:E:328:LEU:HD23	1:E:370:LEU:HD22	2.02	0.42
1:A:122:LEU:HD11	1:A:260:GLY:CA	2.41	0.42
1:E:77:ASN:ND2	1:E:94:LEU:H	2.18	0.42
1:D:328:LEU:HA	1:D:328:LEU:HD12	1.73	0.42
1:F:354:ASP:CB	1:F:357:LYS:HG2	2.46	0.42
1:F:228:PRO:HB2	1:F:230:TYR:CZ	2.55	0.42
1:D:144:GLY:HA3	1:E:125:ALA:HB2	2.01	0.42
1:F:122:LEU:HD11	1:F:260:GLY:CA	2.40	0.42
1:B:120:ASN:HB2	1:B:214:SER:CB	2.50	0.42
1:D:47:PRO:CB	1:D:62:SER:HA	2.49	0.42
1:F:59:PRO:HG3	1:A:418:TYR:CD1	2.55	0.42
1:E:193:ASP:CB	1:E:443:PHE:HA	2.41	0.42
1:C:16:PRO:O	1:C:17:VAL:C	2.57	0.42
1:C:17:VAL:O	1:C:17:VAL:HG12	2.19	0.42
1:E:463:ARG:HB2	1:E:463:ARG:NH1	2.31	0.42
1:D:205:ASN:CA	1:D:224:ILE:HG12	2.46	0.42
1:B:205:ASN:CA	1:B:224:ILE:HG12	2.47	0.42
1:A:313:ALA:CB	1:A:318:ASN:HA	2.50	0.42
1:C:64:ASN:HB3	1:C:197:MET:HB3	2.01	0.42
1:B:40:ARG:HB2	1:B:367:GLU:OE2	2.19	0.42
1:F:420:GLU:N	1:F:420:GLU:OE1	2.52	0.42
1:E:364:HIS:HE2	1:E:366:GLU:CD	2.21	0.42
1:A:19:LYS:O	1:A:19:LYS:HG3	2.20	0.42
1:D:226:LEU:HA	1:D:226:LEU:HD23	1.88	0.42
1:A:404:VAL:HG12	1:A:405:GLN:N	2.33	0.42
1:D:123:LEU:HD11	1:D:132:VAL:CG1	2.46	0.42
1:E:77:ASN:HD22	1:E:77:ASN:HA	1.62	0.42
1:B:150:GLN:HB2	1:B:249:GLU:HB2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:463:ARG:NH1	1:D:463:ARG:HB2	2.32	0.42
1:C:16:PRO:HG2	1:C:17:VAL:N	2.34	0.42
1:A:74:PRO:HG2	1:A:452:LEU:CD2	2.49	0.42
1:D:154:LEU:HB3	1:D:245:PHE:HB2	2.02	0.42
1:B:316:MET:N	1:B:316:MET:SD	2.92	0.42
1:A:116:HIS:CE1	1:A:118:THR:H	2.38	0.42
1:A:420:GLU:OE1	1:A:420:GLU:N	2.53	0.42
1:A:458:GLN:HA	1:A:458:GLN:OE1	2.20	0.42
1:B:372:PHE:N	1:B:372:PHE:CD1	2.87	0.42
1:B:458:GLN:OE1	1:B:458:GLN:HA	2.19	0.42
1:C:233:MET:HB2	1:C:242:MET:CE	2.48	0.42
1:F:78:GLN:NE2	1:A:450:GLU:O	2.40	0.42
1:C:431:ILE:HA	1:C:432:PRO:HA	1.81	0.42
1:A:193:ASP:HB2	1:A:443:PHE:CB	2.50	0.42
1:A:193:ASP:CB	1:A:443:PHE:HA	2.41	0.42
1:B:154:LEU:HB3	1:B:245:PHE:HB2	2.01	0.42
1:E:361:TYR:HD2	1:E:361:TYR:HA	1.51	0.42
1:B:77:ASN:HA	1:B:77:ASN:HD22	1.62	0.42
1:D:196:MET:HA	1:D:196:MET:HE2	2.01	0.42
1:F:317:ASN:ND2	1:F:320:ILE:H	2.17	0.42
1:E:228:PRO:HB2	1:E:230:TYR:CZ	2.55	0.42
1:E:274:LYS:HG2	1:E:275:ASN:N	2.35	0.42
1:C:376:LEU:HA	1:C:376:LEU:HD12	1.76	0.42
1:F:259:ARG:HA	1:F:259:ARG:HD3	1.82	0.42
1:A:40:ARG:HB2	1:A:367:GLU:OE2	2.20	0.41
1:F:68:VAL:CG2	1:F:329:THR:HG23	2.49	0.41
1:A:296:LEU:CA	1:B:252:TYR:HB3	2.40	0.41
1:A:164:TYR:N	1:A:164:TYR:HD2	2.18	0.41
1:F:150:GLN:HB2	1:F:249:GLU:HB2	2.00	0.41
1:A:299:THR:HG23	1:B:249:GLU:H	1.84	0.41
1:A:438:TYR:N	1:A:438:TYR:CD1	2.88	0.41
1:D:44:ILE:HG22	1:D:365:MET:HB3	2.01	0.41
1:E:316:MET:SD	1:E:316:MET:N	2.93	0.41
1:A:64:ASN:HD21	1:A:112:THR:HG21	1.85	0.41
1:D:108:PRO:HA	1:E:227:TYR:CZ	2.55	0.41
1:E:390:GLN:HA	1:E:397:LEU:HD11	2.01	0.41
1:C:40:ARG:HB2	1:C:367:GLU:OE2	2.19	0.41
1:E:405:GLN:CD	1:E:405:GLN:H	2.23	0.41
1:B:226:LEU:HD23	1:B:226:LEU:HA	1.86	0.41
1:A:123:LEU:HD11	1:A:132:VAL:CG1	2.46	0.41
1:E:120:ASN:HB2	1:E:214:SER:CB	2.49	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:404:VAL:HG11	1:C:406:PRO:O	2.20	0.41
1:B:402:ILE:HG13	1:B:403:GLY:N	2.34	0.41
1:D:263:GLU:CG	1:D:285:PRO:HA	2.48	0.41
1:D:71:ILE:HG23	1:D:448:LEU:HD12	1.99	0.41
1:E:478:LYS:O	1:E:478:LYS:CG	2.58	0.41
1:A:317:ASN:ND2	1:A:320:ILE:H	2.16	0.41
1:B:353:TYR:H	1:D:275:ASN:HA	1.85	0.41
1:C:421:SER:N	1:C:422:PRO:CD	2.82	0.41
1:A:182:PRO:HA	1:A:183:PRO:HD3	1.87	0.41
1:F:97:ALA:HA	1:F:319:GLY:O	2.19	0.41
1:C:123:LEU:HD11	1:C:132:VAL:CG2	2.36	0.41
1:B:401:GLU:HA	1:B:401:GLU:OE1	2.19	0.41
1:F:393:MET:CE	1:F:396:VAL:H	2.32	0.41
1:F:79:PHE:CA	1:A:79:PHE:CD2	3.03	0.41
1:A:460:PRO:HB3	1:B:234:ALA:O	2.21	0.41
1:D:313:ALA:CB	1:D:318:ASN:HA	2.50	0.41
1:D:309:TRP:HB3	1:D:311:PHE:CE1	2.55	0.41
1:D:456:LEU:O	1:D:462:GLY:HA3	2.20	0.41
1:E:405:GLN:HB2	1:E:406:PRO:HD2	2.01	0.41
1:E:328:LEU:HA	1:E:328:LEU:HD12	1.74	0.41
1:C:328:LEU:HA	1:C:328:LEU:HD12	1.72	0.41
1:A:249:GLU:H	1:E:299:THR:HG23	1.83	0.41
1:C:20:VAL:HG22	1:C:21:LEU:N	2.35	0.41
1:B:80:ALA:C	1:B:81:LEU:HD23	2.41	0.41
1:F:193:ASP:CB	1:F:443:PHE:HA	2.40	0.41
1:B:258:THR:HA	1:B:287:VAL:O	2.21	0.41
1:C:16:PRO:HB2	1:C:18:SER:HB3	2.02	0.41
1:C:313:ALA:CB	1:C:318:ASN:HA	2.50	0.41
1:A:76:PRO:HD2	1:A:324:ASN:OD1	2.21	0.41
1:A:95:VAL:HG22	1:A:377:CYS:O	2.21	0.41
1:F:222:ASN:O	1:F:222:ASN:CG	2.59	0.41
1:B:153:LEU:HD13	1:B:330:VAL:HG21	1.89	0.41
1:A:274:LYS:HG2	1:A:275:ASN:N	2.35	0.41
1:C:299:THR:HG23	1:D:249:GLU:H	1.86	0.41
1:F:79:PHE:HA	1:A:79:PHE:HD2	1.84	0.41
1:D:382:THR:O	1:D:383:ALA:C	2.58	0.41
1:A:108:PRO:HA	1:B:227:TYR:CZ	2.55	0.41
1:D:476:VAL:HG12	1:D:476:VAL:O	2.20	0.41
1:B:88:ASN:ND2	1:B:89:PRO:N	2.68	0.41
1:A:120:ASN:HB2	1:A:214:SER:CB	2.50	0.41
1:B:382:THR:O	1:B:383:ALA:C	2.59	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:233:MET:HB2	1:F:242:MET:CE	2.51	0.41
1:D:454:LEU:O	1:D:454:LEU:HG	2.20	0.41
1:D:304:PHE:C	1:D:306:ARG:N	2.74	0.41
1:C:77:ASN:OD1	1:C:93:ARG:HB3	2.19	0.41
1:F:313:ALA:CB	1:F:318:ASN:HA	2.51	0.41
1:A:212:SER:O	1:A:213:LYS:HB2	2.21	0.41
1:F:182:PRO:HA	1:F:183:PRO:HD3	1.92	0.41
1:A:125:ALA:HB2	1:E:144:GLY:HA3	2.02	0.41
1:A:77:ASN:CG	1:A:93:ARG:HD2	2.41	0.41
1:E:138:ASP:OD1	1:E:140:ARG:N	2.45	0.41
1:F:201:PHE:HE2	1:F:217:PRO:HD3	1.86	0.41
1:F:193:ASP:HB2	1:F:443:PHE:CB	2.51	0.41
1:C:417:ARG:NE	1:C:418:TYR:HE1	2.17	0.41
1:D:30:LYS:HB3	1:D:32:ILE:CD1	2.48	0.41
1:C:454:LEU:O	1:C:454:LEU:HG	2.20	0.41
1:A:222:ASN:CG	1:A:222:ASN:O	2.59	0.41
1:F:247:ARG:O	1:F:247:ARG:HG3	2.20	0.41
1:C:145:LEU:CD1	1:C:291:SER:HB2	2.51	0.41
1:D:47:PRO:O	1:D:60:LYS:CD	2.69	0.41
1:F:297:VAL:CG2	1:F:334:THR:HG23	2.28	0.41
1:A:99:ILE:CD1	1:A:375:GLU:HB3	2.46	0.41
1:E:304:PHE:C	1:E:306:ARG:N	2.74	0.41
1:B:78:GLN:NE2	1:C:8:GLN:O	2.54	0.41
1:D:64:ASN:HD21	1:D:112:THR:HG21	1.86	0.41
1:D:317:ASN:C	1:D:317:ASN:ND2	2.74	0.41
1:E:68:VAL:CG2	1:E:329:THR:HG23	2.50	0.41
1:E:41:LEU:C	1:E:42:LEU:HD23	2.41	0.41
1:C:433:ALA:HA	1:C:434:LYS:HA	1.58	0.41
1:D:376:LEU:HA	1:D:376:LEU:HD12	1.79	0.41
1:B:476:VAL:O	1:B:476:VAL:HG12	2.21	0.41
1:A:328:LEU:HD23	1:A:370:LEU:HD22	2.02	0.41
1:E:116:HIS:CE1	1:E:118:THR:H	2.39	0.41
1:C:201:PHE:CE2	1:C:217:PRO:HD3	2.55	0.41
1:C:148:LYS:HD2	1:C:198:GLU:OE1	2.20	0.41
1:E:198:GLU:OE1	1:E:198:GLU:O	2.39	0.41
1:B:92:GLU:HA	1:B:381:ILE:HG12	2.02	0.41
1:B:60:LYS:O	1:B:60:LYS:CG	2.68	0.41
1:B:149:GLN:HE22	1:B:297:VAL:CB	2.33	0.41
1:F:47:PRO:O	1:F:60:LYS:CD	2.68	0.41
1:B:193:ASP:HB2	1:B:443:PHE:CB	2.51	0.41
1:D:36:ALA:HB2	1:D:452:LEU:HD13	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:99:ILE:CD1	1:F:375:GLU:HB3	2.46	0.41
1:C:475:THR:O	1:D:312:ARG:CB	2.64	0.41
1:F:322:TRP:O	1:F:323:ASN:CB	2.68	0.41
1:B:104:SER:HB3	1:B:369:LYS:HB3	2.03	0.41
1:E:104:SER:HB3	1:E:369:LYS:HB3	2.02	0.41
1:F:104:SER:HB3	1:F:369:LYS:HB3	2.03	0.41
1:C:116:HIS:CE1	1:C:118:THR:H	2.39	0.41
1:E:259:ARG:HA	1:E:259:ARG:HD3	1.83	0.41
1:D:212:SER:O	1:D:213:LYS:HB2	2.20	0.41
1:A:41:LEU:C	1:A:42:LEU:HD23	2.40	0.41
1:B:222:ASN:O	1:B:222:ASN:CG	2.59	0.41
1:F:456:LEU:O	1:F:462:GLY:HA3	2.21	0.41
1:E:464:ARG:HA	1:E:464:ARG:HD3	1.87	0.41
1:B:338:ASN:HD22	1:B:338:ASN:N	2.19	0.41
1:A:376:LEU:HD12	1:A:376:LEU:HA	1.77	0.41
1:F:274:LYS:HG2	1:F:275:ASN:N	2.36	0.41
1:C:229:ASP:OD2	1:C:232:LYS:HB2	2.21	0.41
1:C:416:TYR:CD2	1:C:424:THR:HG23	2.55	0.41
1:E:186:LEU:HG	1:E:187:LYS:N	2.35	0.41
1:B:47:PRO:O	1:B:62:SER:HB2	2.21	0.41
1:C:92:GLU:HA	1:C:381:ILE:HG12	2.03	0.41
1:F:87:HIS:ND1	1:F:94:LEU:CG	2.82	0.41
1:C:417:ARG:NE	1:C:418:TYR:CE1	2.89	0.41
1:B:478:LYS:O	1:B:478:LYS:CG	2.58	0.41
1:B:95:VAL:HG22	1:B:377:CYS:O	2.21	0.41
1:B:205:ASN:CG	1:B:205:ASN:O	2.60	0.41
1:B:64:ASN:HD21	1:B:112:THR:HG21	1.87	0.41
1:E:317:ASN:ND2	1:E:317:ASN:C	2.74	0.41
1:D:104:SER:HB3	1:D:369:LYS:HB3	2.03	0.41
1:A:113:VAL:CG1	1:A:114:THR:N	2.84	0.41
1:D:274:LYS:HG2	1:D:275:ASN:N	2.36	0.41
1:F:168:ALA:O	1:F:169:ARG:C	2.59	0.41
1:C:398:GLU:CG	1:C:399:ASN:N	2.84	0.40
1:E:80:ALA:C	1:E:81:LEU:HD23	2.41	0.40
1:A:258:THR:HA	1:A:287:VAL:O	2.21	0.40
1:A:30:LYS:HB3	1:A:32:ILE:CD1	2.48	0.40
1:A:32:ILE:HG22	1:A:34:TYR:CE1	2.56	0.40
1:F:113:VAL:CG1	1:F:114:THR:N	2.85	0.40
1:A:205:ASN:CG	1:A:205:ASN:O	2.59	0.40
1:F:44:ILE:HG21	1:F:44:ILE:HD13	1.85	0.40
1:C:372:PHE:N	1:C:372:PHE:CD1	2.89	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:372:PHE:N	1:D:372:PHE:CD1	2.88	0.40
1:B:328:LEU:HA	1:B:328:LEU:HD12	1.73	0.40
1:C:148:LYS:NZ	1:C:198:GLU:OE1	2.48	0.40
1:A:431:ILE:O	1:A:431:ILE:HG22	2.20	0.40
1:B:233:MET:HB2	1:B:242:MET:CE	2.51	0.40
1:D:182:PRO:HA	1:D:183:PRO:HD3	1.87	0.40
1:E:182:PRO:HA	1:E:183:PRO:HD3	1.87	0.40
1:C:458:GLN:OE1	1:C:458:GLN:HA	2.21	0.40
1:D:186:LEU:HG	1:D:187:LYS:N	2.35	0.40
1:F:201:PHE:CE2	1:F:217:PRO:HD3	2.56	0.40
1:D:193:ASP:HB2	1:D:443:PHE:CB	2.51	0.40
1:A:454:LEU:HG	1:A:454:LEU:O	2.21	0.40
1:B:364:HIS:C	1:B:365:MET:HG3	2.41	0.40
1:D:130:ARG:HG2	1:D:131:LYS:H	1.85	0.40
1:E:168:ALA:O	1:E:169:ARG:C	2.60	0.40
1:F:41:LEU:C	1:F:42:LEU:HD23	2.42	0.40
1:F:372:PHE:N	1:F:372:PHE:CD1	2.89	0.40
1:E:338:ASN:ND2	1:E:338:ASN:N	2.69	0.40
1:B:435:GLU:HG3	1:B:436:ASP:O	2.22	0.40
1:B:299:THR:HG23	1:C:249:GLU:H	1.85	0.40
1:B:386:VAL:CG1	1:B:402:ILE:HD12	2.51	0.40
1:F:404:VAL:HG12	1:F:406:PRO:HD2	2.04	0.40
1:E:323:ASN:O	1:E:324:ASN:C	2.59	0.40
1:C:32:ILE:HG22	1:C:34:TYR:CE1	2.56	0.40
1:A:317:ASN:ND2	1:A:317:ASN:C	2.75	0.40
1:F:116:HIS:CE1	1:F:118:THR:H	2.39	0.40
1:B:116:HIS:CE1	1:B:118:THR:H	2.39	0.40
1:E:222:ASN:O	1:E:222:ASN:CG	2.59	0.40
1:E:169:ARG:H	1:E:169:ARG:HG3	1.75	0.40
1:F:169:ARG:HA	1:F:170:PRO:HD2	1.85	0.40
1:C:41:LEU:C	1:C:42:LEU:HD23	2.42	0.40
1:E:338:ASN:HD22	1:E:338:ASN:N	2.18	0.40
1:F:458:GLN:OE1	1:F:458:GLN:HA	2.20	0.40
1:E:226:LEU:HD23	1:E:226:LEU:HA	1.88	0.40
1:A:251:VAL:CG2	1:A:252:TYR:N	2.85	0.40
1:A:249:GLU:N	1:E:299:THR:HG23	2.37	0.40
1:F:186:LEU:HG	1:F:187:LYS:N	2.36	0.40
1:E:205:ASN:O	1:E:205:ASN:CG	2.59	0.40
1:A:154:LEU:HB3	1:A:245:PHE:HB2	2.03	0.40
1:F:304:PHE:C	1:F:306:ARG:N	2.75	0.40
1:F:95:VAL:HG22	1:F:377:CYS:O	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:317:ASN:ND2	1:B:317:ASN:C	2.74	0.40
1:A:317:ASN:HD21	1:A:320:ILE:HB	1.87	0.40
1:F:322:TRP:HE3	1:F:322:TRP:HA	1.83	0.40
1:B:424:THR:CG2	1:B:425:LYS:N	2.83	0.40
1:C:212:SER:O	1:C:213:LYS:HB2	2.22	0.40
1:E:113:VAL:CG1	1:E:114:THR:N	2.85	0.40
1:C:68:VAL:CG2	1:C:329:THR:HG23	2.51	0.40
1:E:456:LEU:O	1:E:462:GLY:HA3	2.20	0.40
1:F:477:ARG:HD3	1:F:477:ARG:HA	1.76	0.40
1:A:400:TRP:HB3	1:A:402:ILE:HG23	2.03	0.40
1:A:87:HIS:ND1	1:A:94:LEU:HG	2.34	0.40
1:D:201:PHE:CE2	1:D:217:PRO:HD3	2.57	0.40
1:D:150:GLN:NE2	1:D:152:ILE:HD11	2.35	0.40
1:C:382:THR:O	1:C:383:ALA:C	2.60	0.40
1:F:431:ILE:HG22	1:F:431:ILE:O	2.20	0.40
1:D:361:TYR:HD2	1:D:361:TYR:HA	1.51	0.40
1:C:80:ALA:C	1:C:81:LEU:HD23	2.42	0.40
1:C:193:ASP:HB2	1:C:443:PHE:CB	2.51	0.40
1:E:193:ASP:HB2	1:E:443:PHE:CB	2.51	0.40
1:E:135:GLN:HG3	1:E:135:GLN:H	1.74	0.40
1:B:354:ASP:CB	1:B:357:LYS:HG2	2.45	0.40
1:F:205:ASN:CB	1:F:224:ILE:HG12	2.51	0.40
1:C:205:ASN:CG	1:C:205:ASN:O	2.60	0.40
1:C:304:PHE:C	1:C:306:ARG:N	2.75	0.40
1:B:313:ALA:CB	1:B:318:ASN:HA	2.51	0.40
1:A:35:HIS:C	1:A:35:HIS:CD2	2.94	0.40
1:E:212:SER:O	1:E:213:LYS:HB2	2.21	0.40
1:D:222:ASN:O	1:D:222:ASN:CG	2.59	0.40
1:D:405:GLN:HB2	1:D:405:GLN:HE21	1.59	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	479/495 (97%)	436 (91%)	42 (9%)	1 (0%)	52 86
1	B	467/495 (94%)	430 (92%)	36 (8%)	1 (0%)	52 86
1	C	479/495 (97%)	435 (91%)	41 (9%)	3 (1%)	30 74
1	D	479/495 (97%)	444 (93%)	35 (7%)	0	100 100
1	E	479/495 (97%)	438 (91%)	39 (8%)	2 (0%)	39 80
1	F	467/495 (94%)	425 (91%)	41 (9%)	1 (0%)	52 86
All	All	2850/2970 (96%)	2608 (92%)	234 (8%)	8 (0%)	50 83

All (8) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	F	406	PRO
1	A	406	PRO
1	C	406	PRO
1	C	430	VAL
1	E	432	PRO
1	B	432	PRO
1	E	411	ILE
1	C	13	PRO

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	417/430 (97%)	388 (93%)	29 (7%)	19 59
1	B	407/430 (95%)	372 (91%)	35 (9%)	13 50
1	C	417/430 (97%)	382 (92%)	35 (8%)	14 51
1	D	417/430 (97%)	382 (92%)	35 (8%)	14 51
1	E	417/430 (97%)	381 (91%)	36 (9%)	13 50
1	F	407/430 (95%)	379 (93%)	28 (7%)	19 59
All	All	2482/2580 (96%)	2284 (92%)	198 (8%)	20 53

All (198) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	F	60	LYS
1	F	64	ASN
1	F	88	ASN
1	F	98	VAL
1	F	139	ASP
1	F	154	LEU
1	F	157	CYS
1	F	164	TYR
1	F	199	ILE
1	F	220	ILE
1	F	225	CYS
1	F	276	ASN
1	F	296	LEU
1	F	299	THR
1	F	301	ASN
1	F	305	ASN
1	F	317	ASN
1	F	318	ASN
1	F	322	TRP
1	F	355	SER
1	F	365	MET
1	F	387	SER
1	F	400	TRP
1	F	442	LYS
1	F	443	PHE
1	F	445	ASN
1	F	463	ARG
1	F	473	CYS
1	A	22	CYS
1	A	60	LYS
1	A	64	ASN
1	A	88	ASN
1	A	98	VAL
1	A	139	ASP
1	A	154	LEU
1	A	157	CYS
1	A	164	TYR
1	A	199	ILE
1	A	220	ILE
1	A	225	CYS
1	A	250	GLN
1	A	276	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	296	LEU
1	A	299	THR
1	A	301	ASN
1	A	305	ASN
1	A	317	ASN
1	A	318	ASN
1	A	322	TRP
1	A	355	SER
1	A	365	MET
1	A	387	SER
1	A	400	TRP
1	A	442	LYS
1	A	443	PHE
1	A	463	ARG
1	A	473	CYS
1	B	22	CYS
1	B	60	LYS
1	B	64	ASN
1	B	77	ASN
1	B	79	PHE
1	B	83	ASP
1	B	88	ASN
1	B	98	VAL
1	B	139	ASP
1	B	154	LEU
1	B	157	CYS
1	B	164	TYR
1	B	171	CYS
1	B	199	ILE
1	B	220	ILE
1	B	225	CYS
1	B	276	ASN
1	B	296	LEU
1	B	299	THR
1	B	301	ASN
1	B	305	ASN
1	B	317	ASN
1	B	318	ASN
1	B	322	TRP
1	B	355	SER
1	B	365	MET
1	B	387	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	400	TRP
1	B	415	THR
1	B	419	ILE
1	B	426	CYS
1	B	442	LYS
1	B	443	PHE
1	B	445	ASN
1	B	473	CYS
1	C	6	GLN
1	C	15	THR
1	C	22	CYS
1	C	60	LYS
1	C	64	ASN
1	C	77	ASN
1	C	79	PHE
1	C	83	ASP
1	C	88	ASN
1	C	98	VAL
1	C	139	ASP
1	C	154	LEU
1	C	157	CYS
1	C	164	TYR
1	C	199	ILE
1	C	220	ILE
1	C	225	CYS
1	C	276	ASN
1	C	296	LEU
1	C	299	THR
1	C	301	ASN
1	C	305	ASN
1	C	317	ASN
1	C	318	ASN
1	C	322	TRP
1	C	355	SER
1	C	364	HIS
1	C	365	MET
1	C	387	SER
1	C	438	TYR
1	C	442	LYS
1	C	443	PHE
1	C	445	ASN
1	C	463	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	473	CYS
1	D	9	LYS
1	D	60	LYS
1	D	64	ASN
1	D	77	ASN
1	D	79	PHE
1	D	83	ASP
1	D	88	ASN
1	D	98	VAL
1	D	139	ASP
1	D	154	LEU
1	D	157	CYS
1	D	164	TYR
1	D	199	ILE
1	D	220	ILE
1	D	225	CYS
1	D	276	ASN
1	D	296	LEU
1	D	299	THR
1	D	301	ASN
1	D	305	ASN
1	D	317	ASN
1	D	318	ASN
1	D	322	TRP
1	D	355	SER
1	D	364	HIS
1	D	365	MET
1	D	387	SER
1	D	400	TRP
1	D	415	THR
1	D	417	ARG
1	D	442	LYS
1	D	443	PHE
1	D	445	ASN
1	D	463	ARG
1	D	473	CYS
1	E	3	LEU
1	E	12	LEU
1	E	22	CYS
1	E	60	LYS
1	E	64	ASN
1	E	77	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	79	PHE
1	E	83	ASP
1	E	88	ASN
1	E	98	VAL
1	E	139	ASP
1	E	154	LEU
1	E	157	CYS
1	E	164	TYR
1	E	199	ILE
1	E	220	ILE
1	E	225	CYS
1	E	276	ASN
1	E	296	LEU
1	E	299	THR
1	E	301	ASN
1	E	305	ASN
1	E	317	ASN
1	E	318	ASN
1	E	322	TRP
1	E	355	SER
1	E	365	MET
1	E	387	SER
1	E	413	GLU
1	E	414	ASP
1	E	426	CYS
1	E	442	LYS
1	E	443	PHE
1	E	445	ASN
1	E	463	ARG
1	E	473	CYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (115) such sidechains are listed below:

Mol	Chain	Res	Type
1	F	64	ASN
1	F	72	GLN
1	F	77	ASN
1	F	87	HIS
1	F	102	GLN
1	F	135	GLN
1	F	149	GLN
1	F	151	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	221	GLN
1	F	250	GLN
1	F	305	ASN
1	F	314	GLN
1	F	317	ASN
1	F	318	ASN
1	F	338	ASN
1	F	359	ASN
1	F	445	ASN
1	F	468	GLN
1	A	64	ASN
1	A	72	GLN
1	A	77	ASN
1	A	87	HIS
1	A	102	GLN
1	A	135	GLN
1	A	142	GLN
1	A	149	GLN
1	A	151	GLN
1	A	221	GLN
1	A	250	GLN
1	A	305	ASN
1	A	314	GLN
1	A	317	ASN
1	A	318	ASN
1	A	338	ASN
1	A	429	ASN
1	A	468	GLN
1	A	469	GLN
1	B	64	ASN
1	B	72	GLN
1	B	78	GLN
1	B	87	HIS
1	B	88	ASN
1	B	102	GLN
1	B	135	GLN
1	B	142	GLN
1	B	149	GLN
1	B	151	GLN
1	B	221	GLN
1	B	250	GLN
1	B	305	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	314	GLN
1	B	317	ASN
1	B	318	ASN
1	B	338	ASN
1	B	445	ASN
1	B	458	GLN
1	B	468	GLN
1	C	6	GLN
1	C	64	ASN
1	C	72	GLN
1	C	87	HIS
1	C	88	ASN
1	C	102	GLN
1	C	135	GLN
1	C	142	GLN
1	C	149	GLN
1	C	151	GLN
1	C	221	GLN
1	C	250	GLN
1	C	305	ASN
1	C	314	GLN
1	C	317	ASN
1	C	318	ASN
1	C	338	ASN
1	C	388	HIS
1	C	445	ASN
1	C	468	GLN
1	D	64	ASN
1	D	72	GLN
1	D	87	HIS
1	D	88	ASN
1	D	102	GLN
1	D	135	GLN
1	D	142	GLN
1	D	149	GLN
1	D	151	GLN
1	D	221	GLN
1	D	250	GLN
1	D	305	ASN
1	D	314	GLN
1	D	317	ASN
1	D	318	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	338	ASN
1	D	405	GLN
1	D	445	ASN
1	D	468	GLN
1	E	64	ASN
1	E	72	GLN
1	E	87	HIS
1	E	88	ASN
1	E	102	GLN
1	E	135	GLN
1	E	142	GLN
1	E	149	GLN
1	E	151	GLN
1	E	221	GLN
1	E	250	GLN
1	E	305	ASN
1	E	314	GLN
1	E	317	ASN
1	E	318	ASN
1	E	338	ASN
1	E	399	ASN
1	E	445	ASN
1	E	468	GLN

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.