



Full wwPDB EM Validation Report ⓘ

Jun 29, 2025 – 12:59 am BST

PDB ID : 7Q56 / pdb_00007q56
EMDB ID : EMD-13827
Title : Single Particle Cryo-EM structure of photosynthetic A8B8 glyceraldehyde-3-phosphate dehydrogenase (minor conformer) from *Spinacia oleracea*.
Authors : Marotta, R.; Fermani, S.; Sparla, F.; Trost, P.; Del Giudice, A.
Deposited on : 2021-11-02
Resolution : 7.10 Å (reported)
Based on initial model : 2PKQ

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

EMDB validation analysis : 0.0.1.dev118
Mogul : 1.8.4, CSD as541be (2020)
MolProbity : 4-5-2 with Phenix2.0rc1
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.44

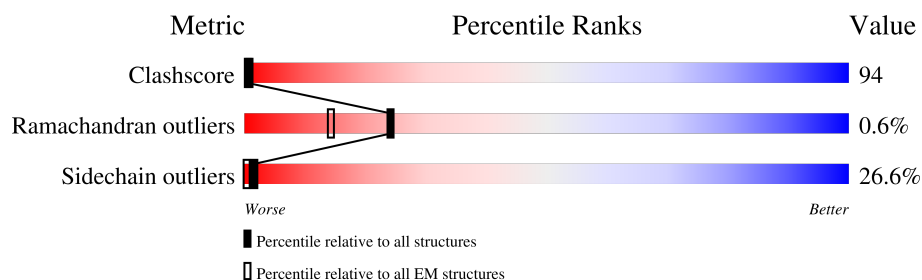
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 7.10 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.



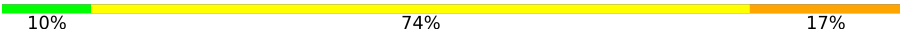
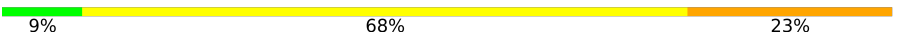
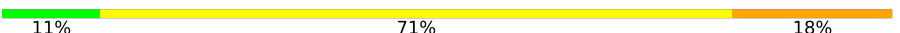
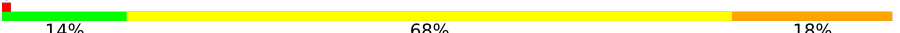
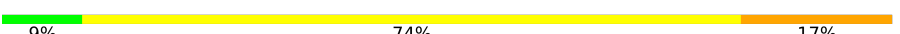
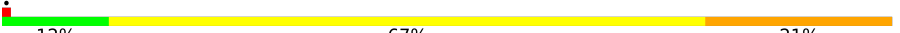
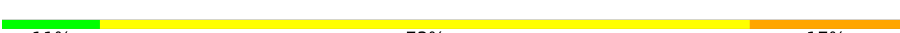
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	368	
1	C	368	
1	E	368	
1	G	368	
1	I	368	
1	K	368	
1	O	368	
1	Q	368	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	B	337	 10%74%17%
2	D	337	 9%68%23%
2	F	337	 11%71%18%
2	H	337	 14%68%18%
2	J	337	 9%74%17%
2	L	337	 12%67%21%
2	P	337	 11%73%17%
2	R	337	 12%70%18%

2 Entry composition [i](#)

There are 3 unique types of molecules in this entry. The entry contains 42608 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 Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	I	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	K	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	A	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	C	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	Q	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	O	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	G	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		
1	E	368	Total	C	N	O	S	0	0
			2694	1700	473	510	11		

- Molecule 2 is a protein called Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	J	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	L	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	B	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	D	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	R	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	P	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		
2	H	337	Total	C	N	O	S	0	0
			2544	1600	445	488	11		

Continued on next page...

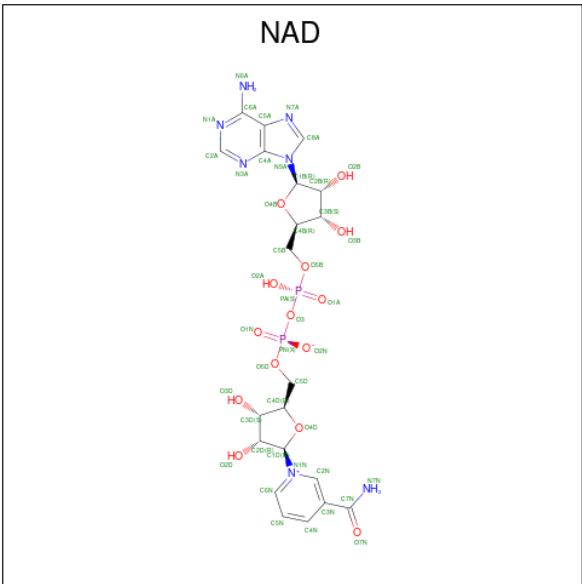
Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	F	337	2544	1600	445	488	11	0	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
J	336	ALA	-	insertion	UNP P19866
L	336	ALA	-	insertion	UNP P19866
B	336	ALA	-	insertion	UNP P19866
D	336	ALA	-	insertion	UNP P19866
R	336	ALA	-	insertion	UNP P19866
P	336	ALA	-	insertion	UNP P19866
H	336	ALA	-	insertion	UNP P19866
F	336	ALA	-	insertion	UNP P19866

- Molecule 3 is NICOTINAMIDE-ADENINE-DINUCLEOTIDE (CCD ID: NAD) (formula: C₂₁H₂₇N₇O₁₄P₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
3	J	1	44	21	7	14	2	0
3	K	1	44	21	7	14	2	0
3	K	1	44	21	7	14	2	0
3	L	1	44	21	7	14	2	0

Continued on next page...

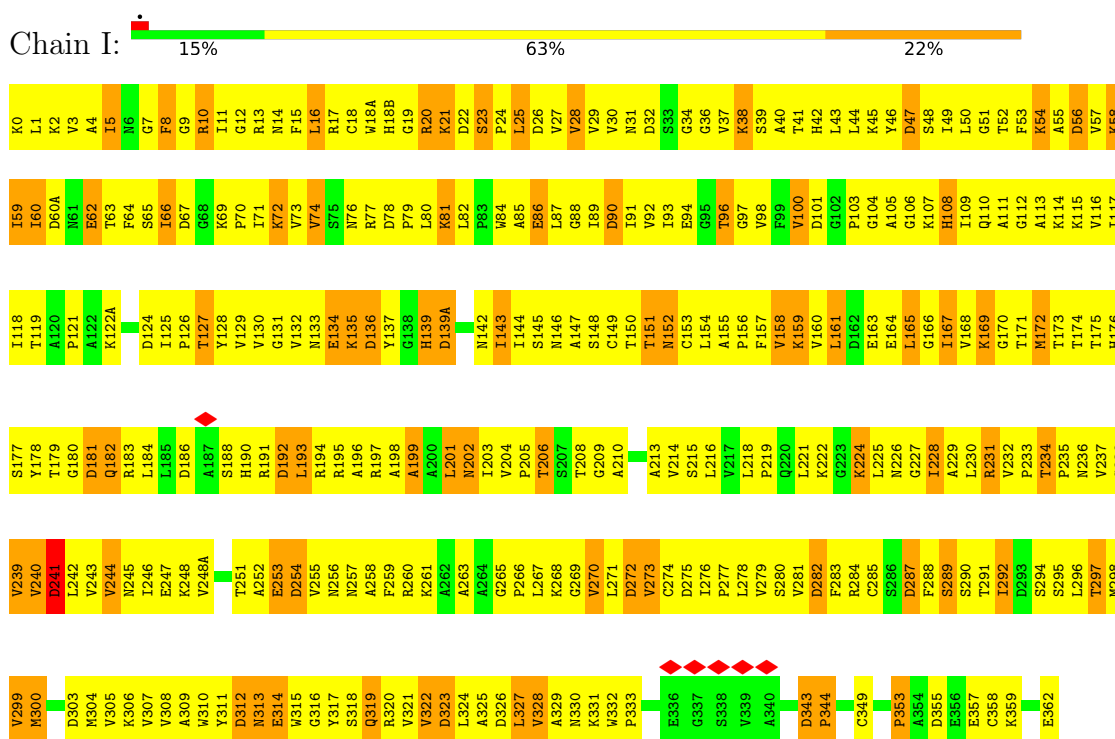
Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf
3	A	1	Total 44	C 21	N 7	O 14	P 2	0
3	B	1	Total 44	C 21	N 7	O 14	P 2	0
3	C	1	Total 44	C 21	N 7	O 14	P 2	0
3	D	1	Total 44	C 21	N 7	O 14	P 2	0
3	Q	1	Total 44	C 21	N 7	O 14	P 2	0
3	Q	1	Total 44	C 21	N 7	O 14	P 2	0
3	R	1	Total 44	C 21	N 7	O 14	P 2	0
3	O	1	Total 44	C 21	N 7	O 14	P 2	0
3	P	1	Total 44	C 21	N 7	O 14	P 2	0
3	G	1	Total 44	C 21	N 7	O 14	P 2	0
3	H	1	Total 44	C 21	N 7	O 14	P 2	0
3	F	1	Total 44	C 21	N 7	O 14	P 2	0

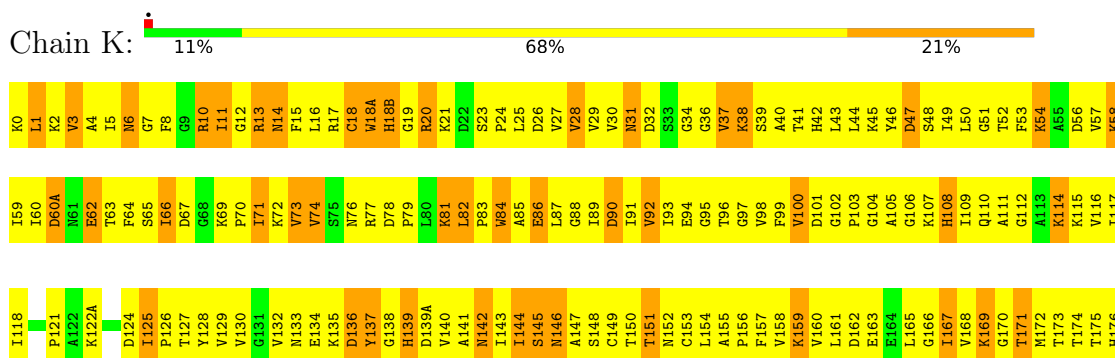
3 Residue-property plots

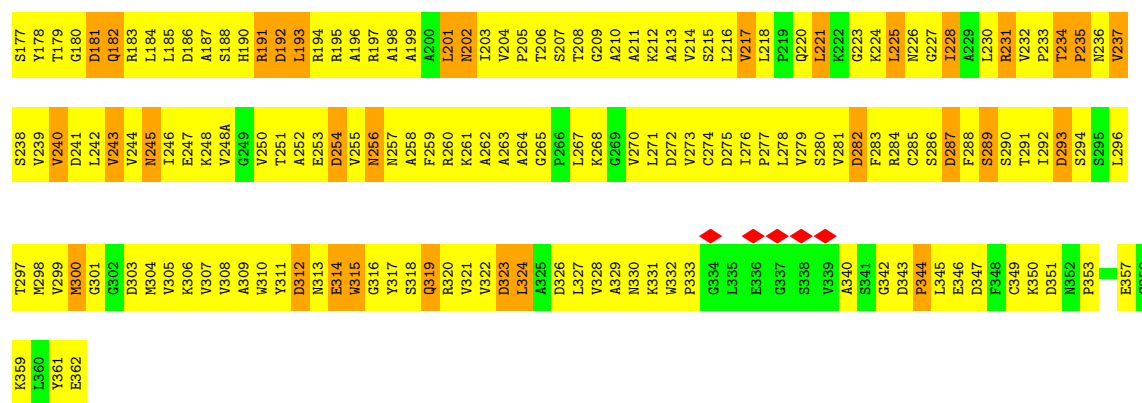
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

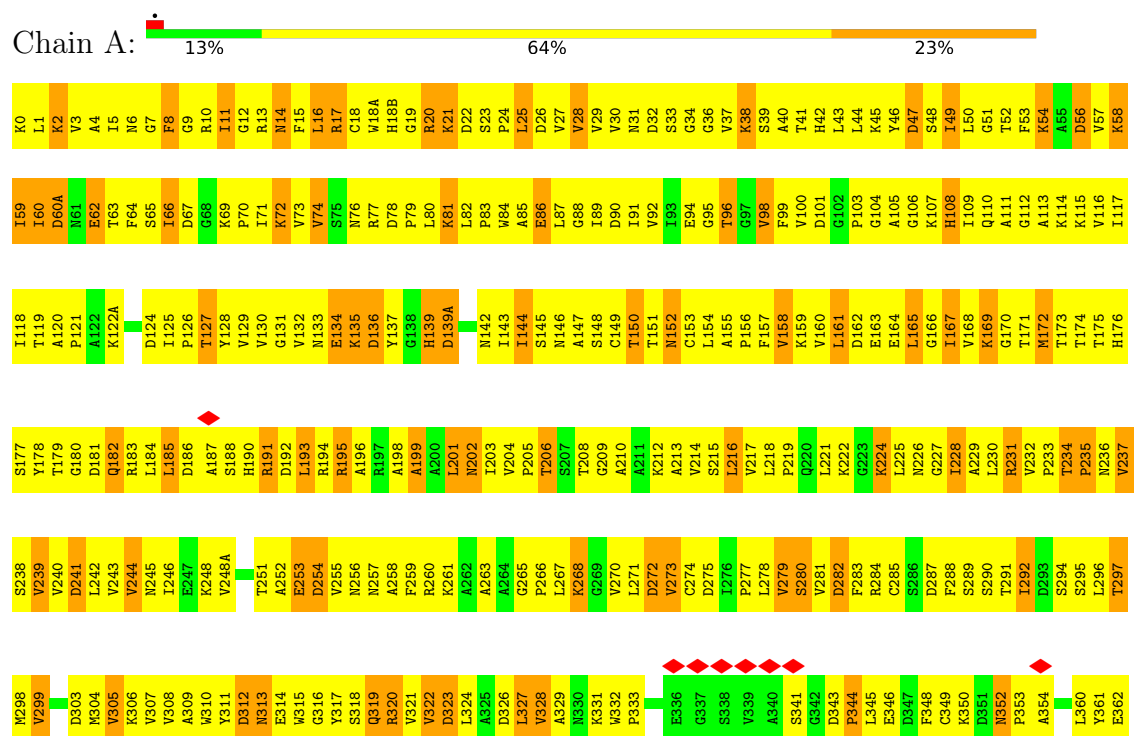


- Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

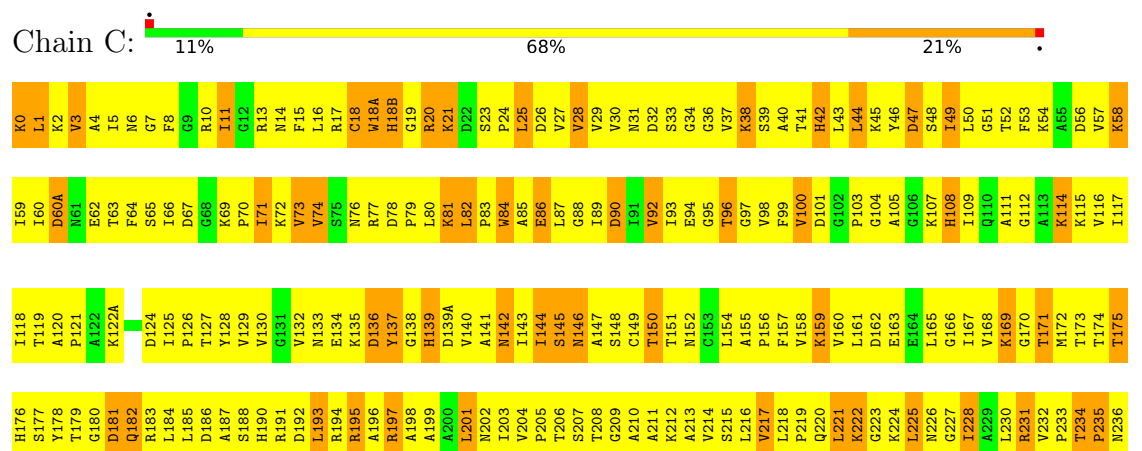




• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

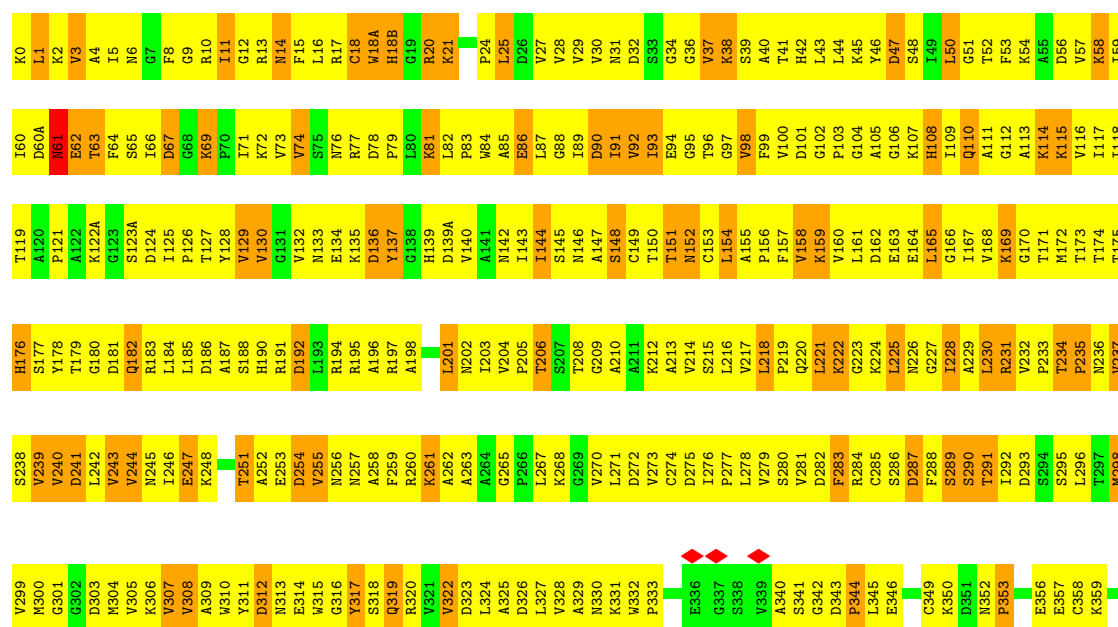
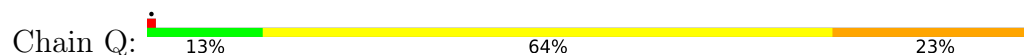


• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

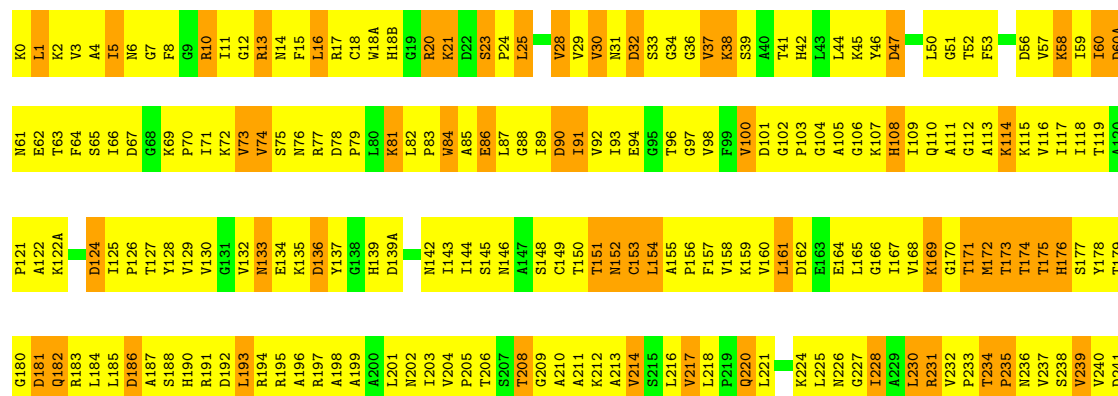


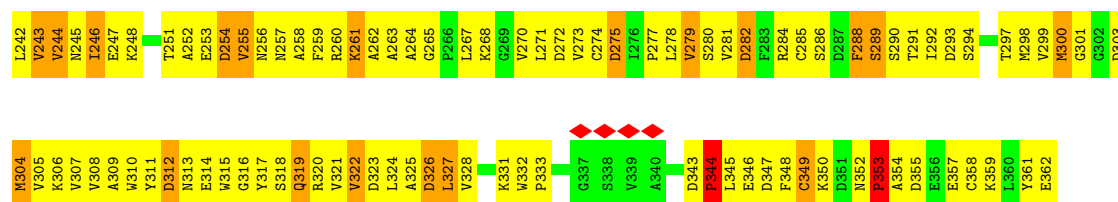


• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

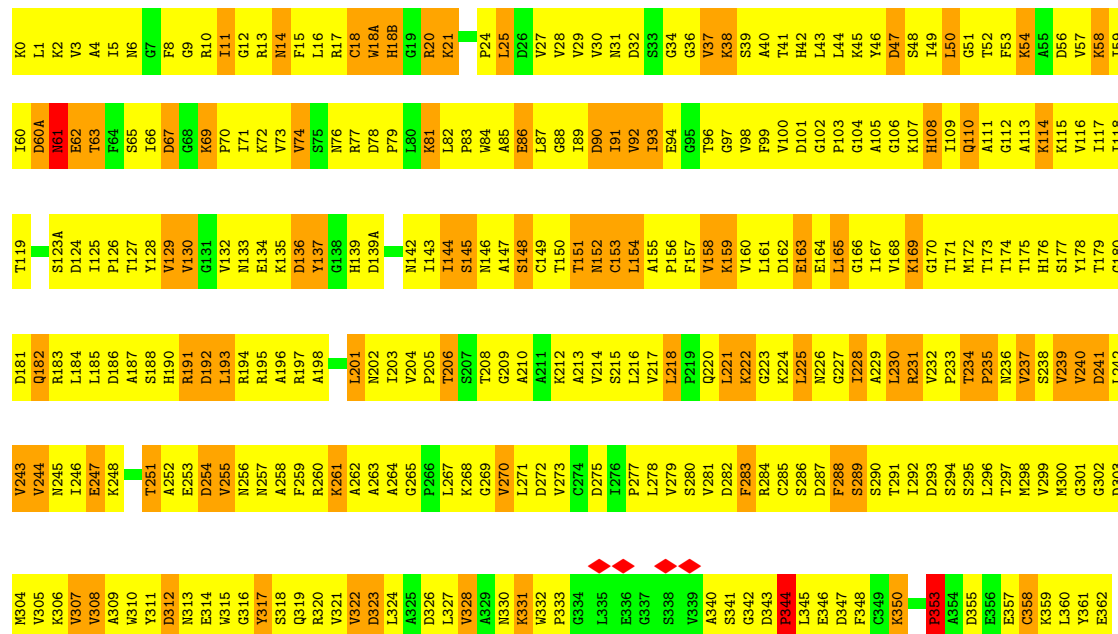
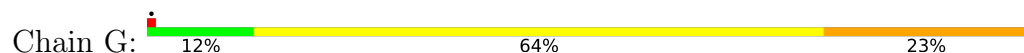


• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic

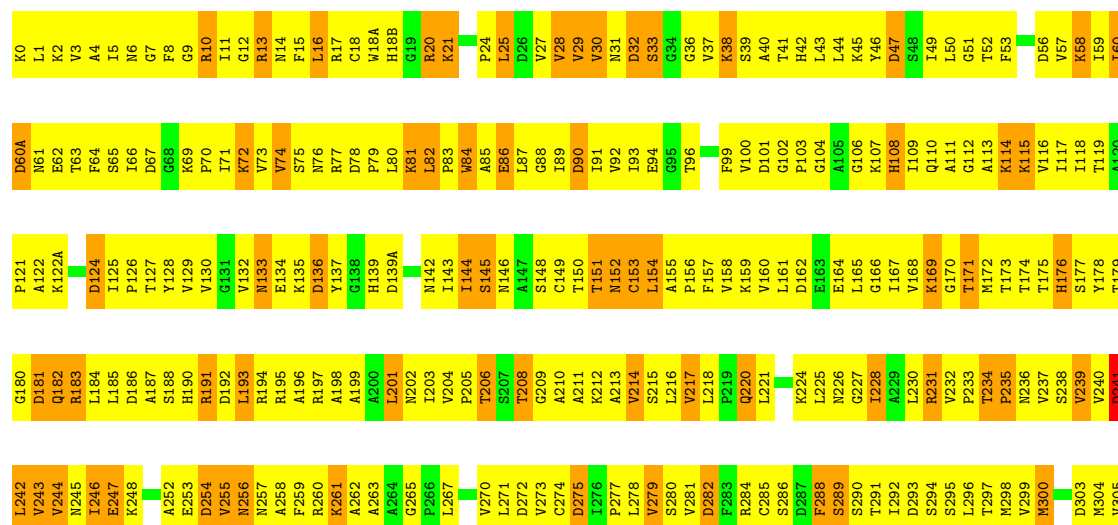
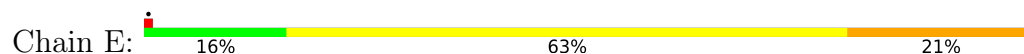


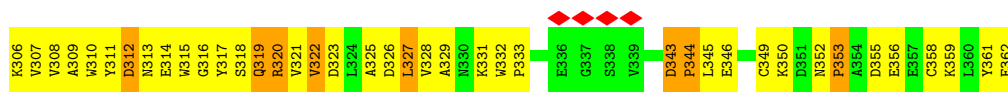


• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic



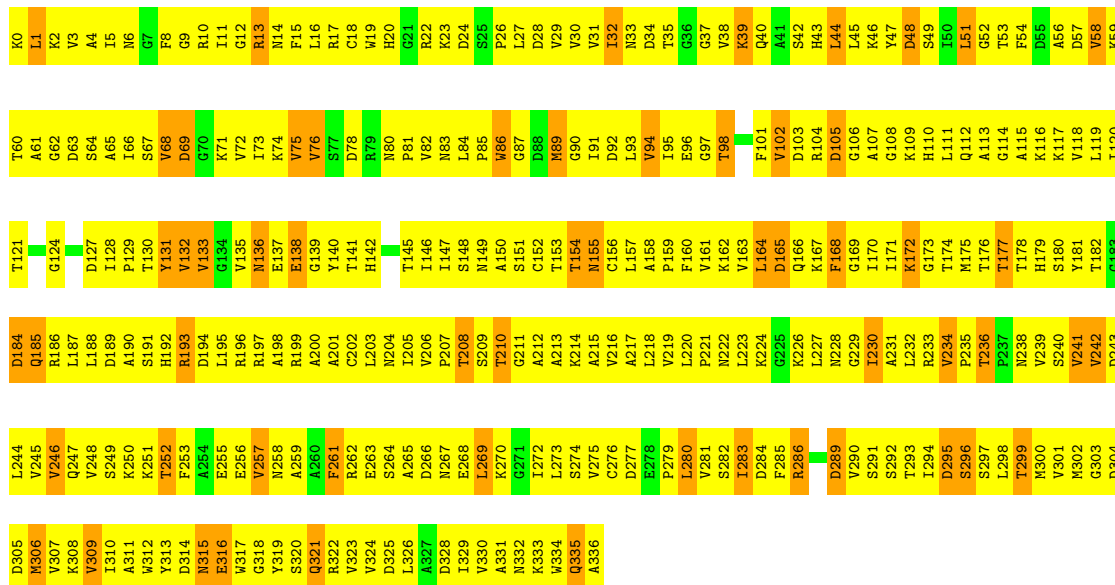
• Molecule 1: Glyceraldehyde-3-phosphate dehydrogenase B, chloroplastic





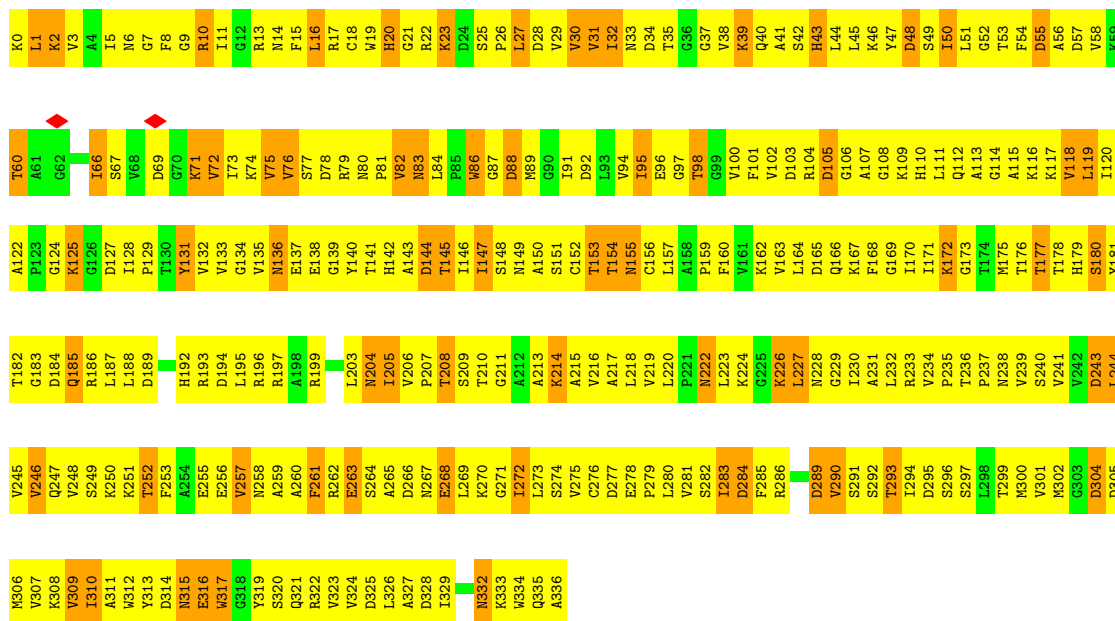
• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplasic

Chain J: 9% 74% 17%



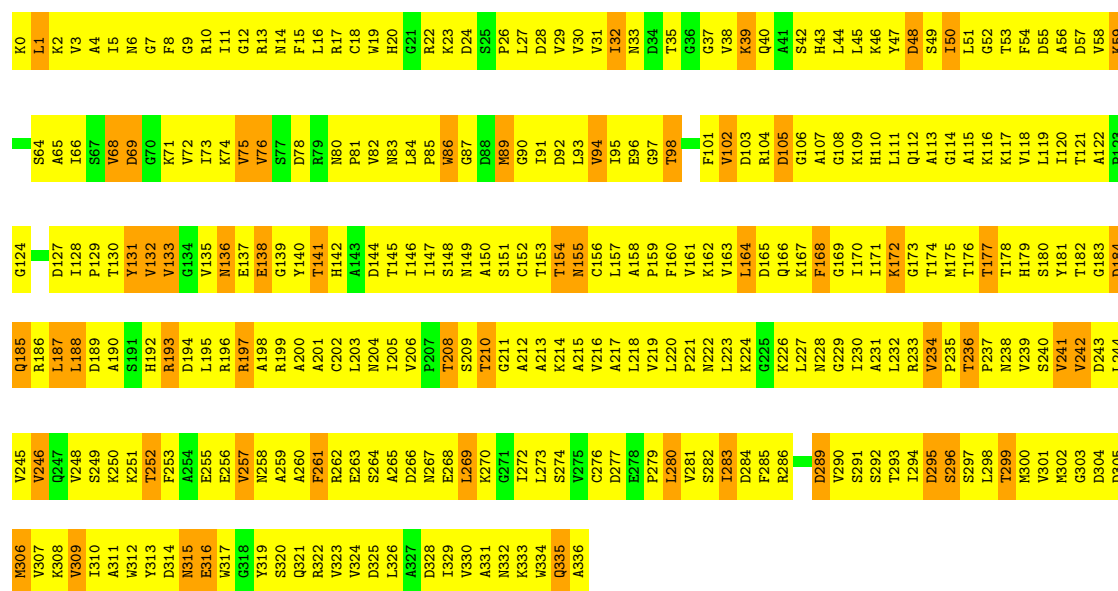
• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplasic

Chain L: 12% 67% 21%



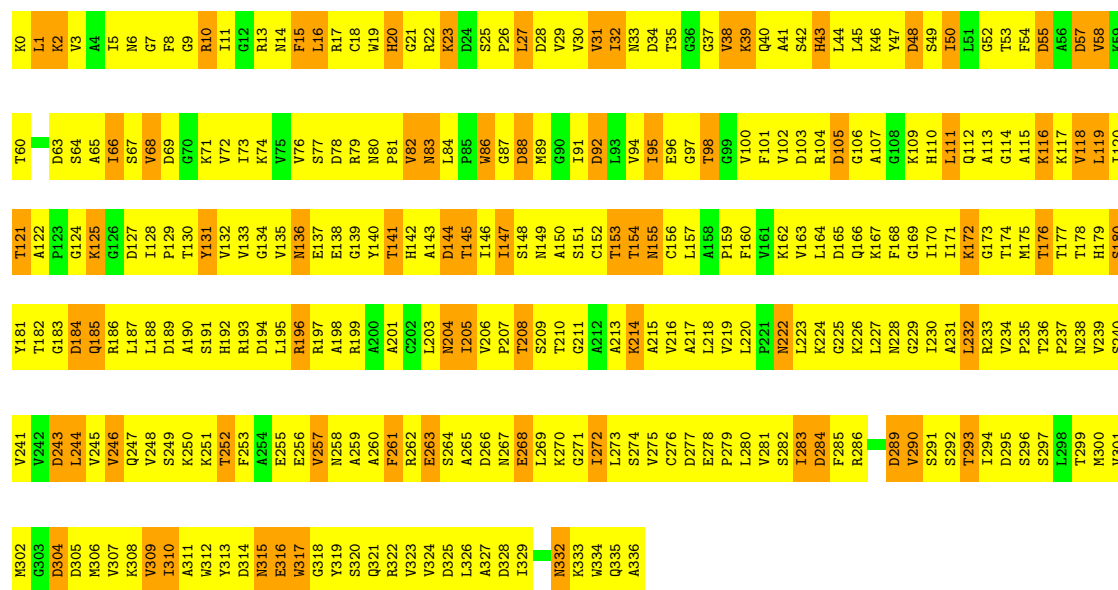
• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplasic

Chain B: 10% 74% 17%



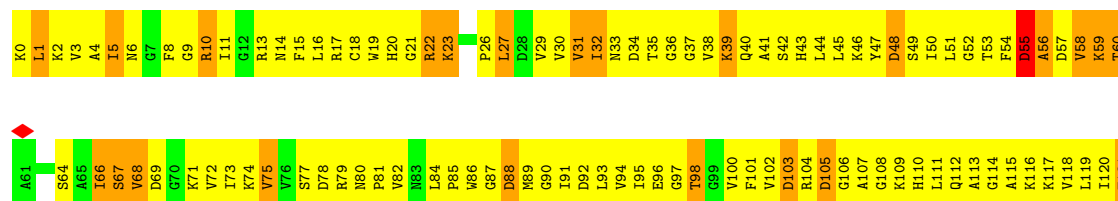
• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic

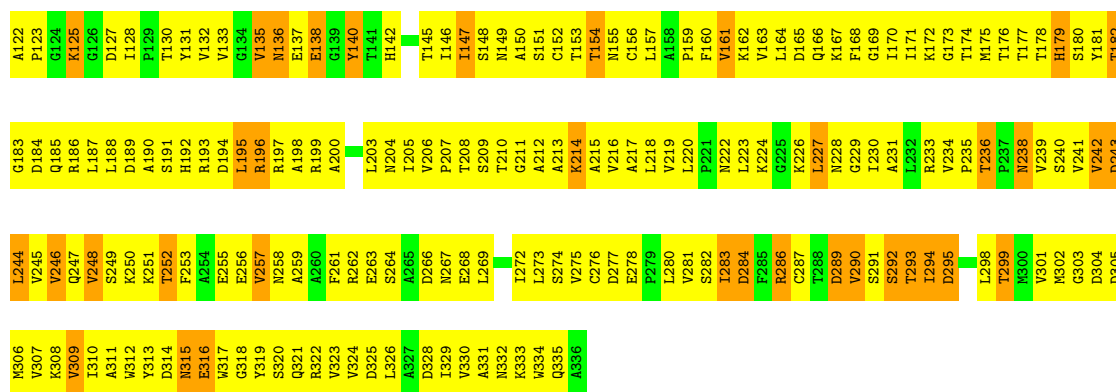
Chain D: 9% 68% 23%



• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic

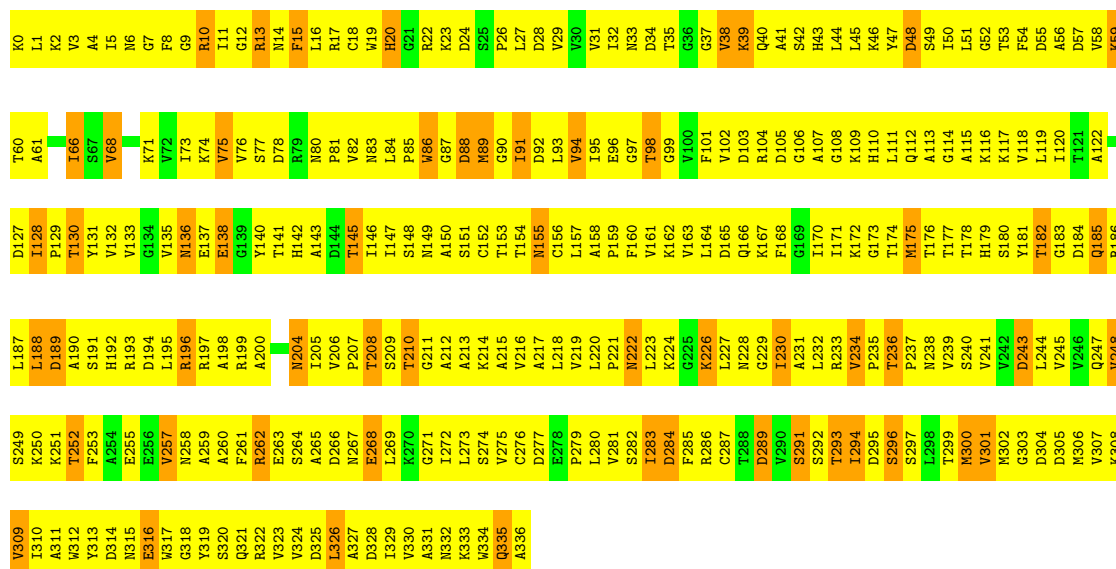
Chain R: 12% 70% 18%





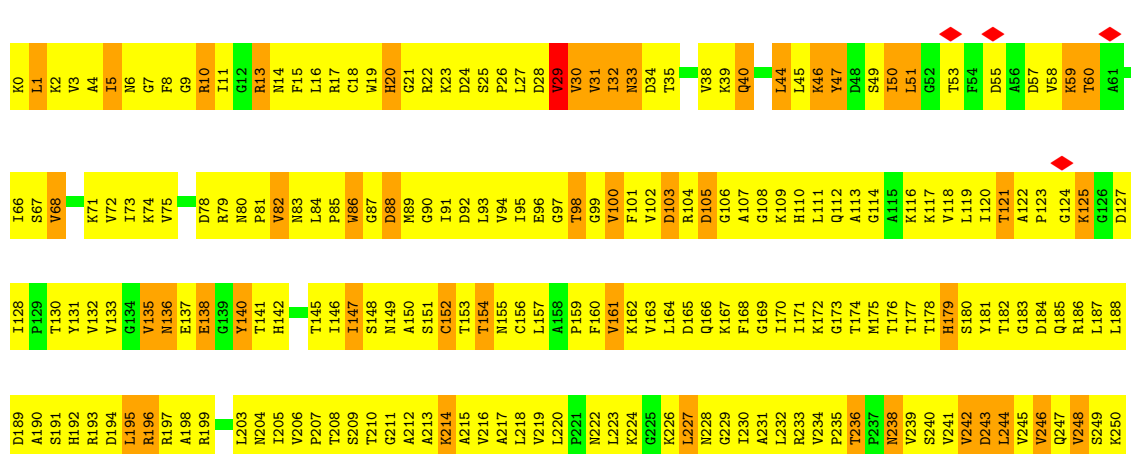
● Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic

Chain P: 11% 73% 17%



● Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic

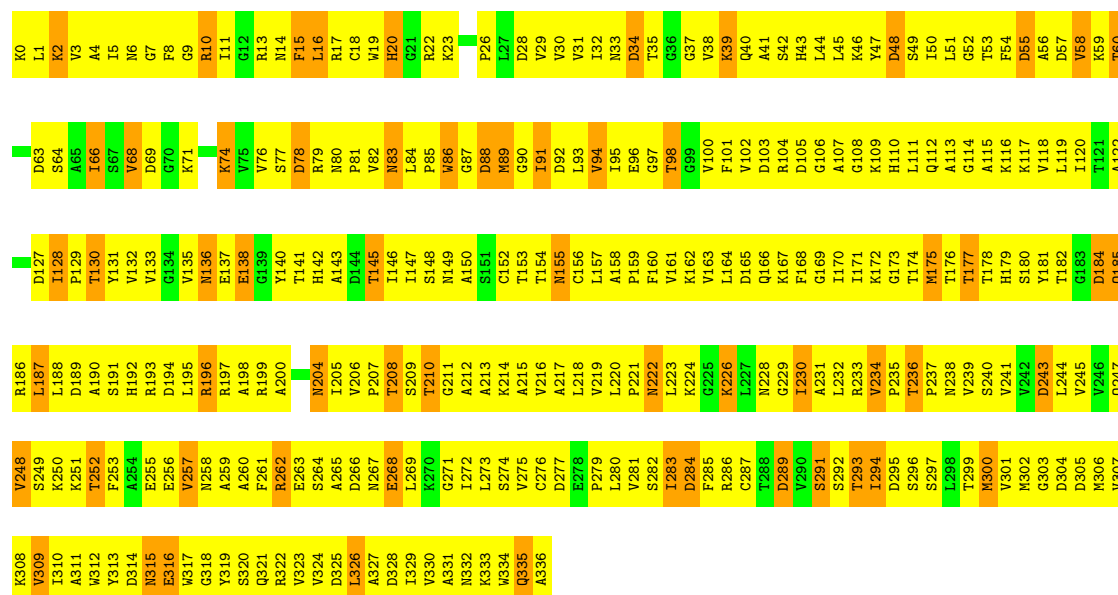
Chain H: 14% 68% 18%





• Molecule 2: Glyceraldehyde-3-phosphate dehydrogenase A, chloroplastic

Chain F: 11% 71% 18%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C2	Depositor
Number of particles used	10768	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	42	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	3500	Depositor
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.051	Depositor
Minimum map value	-0.018	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.0125	Depositor
Map size (Å)	363.0, 363.0, 363.0	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.21, 1.21, 1.21	Depositor

5 Model quality

5.1 Standard geometry

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

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	A	0.41	1/2739 (0.0%)	0.76	2/3726 (0.1%)
1	C	0.39	0/2739	0.78	4/3726 (0.1%)
1	E	0.39	1/2739 (0.0%)	0.74	2/3726 (0.1%)
1	G	0.40	1/2739 (0.0%)	0.76	4/3726 (0.1%)
1	I	0.39	0/2739	0.75	3/3726 (0.1%)
1	K	0.40	1/2739 (0.0%)	0.77	2/3726 (0.1%)
1	O	0.38	0/2739	0.72	2/3726 (0.1%)
1	Q	0.41	1/2739 (0.0%)	0.78	2/3726 (0.1%)
2	B	0.34	0/2585	0.55	0/3509
2	D	0.35	0/2585	0.55	0/3509
2	F	0.36	0/2585	0.56	0/3509
2	H	0.47	0/2585	0.64	0/3509
2	J	0.34	0/2585	0.55	0/3509
2	L	0.41	0/2585	0.58	0/3509
2	P	0.39	0/2585	0.58	0/3509
2	R	0.36	0/2585	0.56	0/3509
All	All	0.39	5/42592 (0.0%)	0.67	21/57880 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	1
1	C	0	1
1	I	0	2
1	O	0	1
2	P	0	1
All	All	0	6

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	E	241	ASP	CA-CB	-6.92	1.41	1.53
1	G	241	ASP	CA-CB	-5.98	1.44	1.53
1	Q	241	ASP	CA-CB	-5.78	1.44	1.53
1	A	241	ASP	CA-CB	-5.77	1.44	1.53
1	K	31	ASN	CA-CB	-5.13	1.46	1.52

All (21) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	Q	344	PRO	N-CA-CB	12.50	111.00	102.25
1	E	353	PRO	N-CA-CB	11.50	110.30	102.25
1	C	344	PRO	N-CA-CB	8.07	111.73	103.25
1	O	353	PRO	N-CA-CB	7.98	111.63	103.25
1	C	353	PRO	N-CA-CB	7.81	111.45	103.25
1	E	344	PRO	N-CA-CB	7.68	111.31	103.25
1	G	353	PRO	N-CA-CB	7.59	111.22	103.25
1	O	344	PRO	N-CA-CB	7.44	111.06	103.25
1	A	344	PRO	N-CA-CB	7.39	111.01	103.25
1	G	344	PRO	N-CA-CB	6.76	110.35	103.25
1	Q	353	PRO	N-CA-CB	6.73	109.97	103.51
1	I	353	PRO	N-CA-CB	6.56	110.11	102.76
1	A	353	PRO	N-CA-CB	6.50	109.70	103.52
1	K	344	PRO	N-CA-CB	6.45	110.13	103.23
1	K	353	PRO	N-CA-CB	6.42	109.99	103.25
1	I	344	PRO	N-CA-CB	6.38	109.95	103.25
1	I	241	ASP	N-CA-C	-6.36	101.54	110.50
1	C	341	SER	CA-C-N	6.11	128.87	120.92
1	C	341	SER	C-N-CA	6.11	128.87	120.92
1	G	350	LYS	N-CA-C	-5.76	104.63	111.03
1	G	100	VAL	N-CA-C	-5.52	106.08	112.98

There are no chirality outliers.

All (6) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	199	ALA	Peptide
1	C	332	TRP	Peptide
1	I	199	ALA	Peptide
1	I	240	VAL	Peptide
1	O	174	THR	Peptide
2	P	61	ALA	Peptide

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	2694	0	2680	547	0
1	C	2694	0	2681	571	0
1	E	2694	0	2681	518	0
1	G	2694	0	2680	562	0
1	I	2694	0	2681	524	0
1	K	2694	0	2681	565	0
1	O	2694	0	2681	536	0
1	Q	2694	0	2680	538	0
2	B	2544	0	2578	539	0
2	D	2544	0	2579	488	0
2	F	2544	0	2580	531	0
2	H	2544	0	2580	515	0
2	J	2544	0	2580	532	0
2	L	2544	0	2580	539	0
2	P	2544	0	2580	494	0
2	R	2544	0	2580	470	0
3	A	44	0	25	10	0
3	B	44	0	24	12	0
3	C	44	0	25	11	0
3	D	44	0	25	9	0
3	F	44	0	25	10	0
3	G	44	0	25	11	0
3	H	44	0	25	8	0
3	J	44	0	25	10	0
3	K	88	0	49	18	0
3	L	44	0	25	13	0
3	O	44	0	25	14	0
3	P	44	0	25	9	0
3	Q	88	0	49	19	0
3	R	44	0	25	7	0
All	All	42608	0	42479	8017	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 94.

All (8017) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:67:SER:HB3	2:R:72:VAL:CG2	1.39	1.51
2:R:67:SER:CB	2:R:72:VAL:HG22	1.36	1.51
2:H:31:VAL:HG23	2:H:74:LYS:CE	1.45	1.45
2:L:31:VAL:CA	2:L:74:LYS:O	1.66	1.41
2:H:34:ASP:N	2:H:75:VAL:HG23	1.40	1.33
2:F:56:ALA:HB1	2:F:69:ASP:OD1	1.16	1.25
2:L:32:ILE:O	2:L:75:VAL:HG23	1.26	1.24
2:H:31:VAL:HG22	2:H:74:LYS:CB	1.67	1.24
2:H:32:ILE:O	2:H:75:VAL:HA	1.36	1.23
2:H:17:ARG:CD	2:H:51:LEU:HD12	1.71	1.20
2:L:32:ILE:HG22	2:L:75:VAL:CB	1.73	1.18
2:L:32:ILE:C	2:L:75:VAL:HG23	1.69	1.18
2:H:32:ILE:O	2:H:75:VAL:CA	1.92	1.18
2:H:31:VAL:CG2	2:H:74:LYS:CD	2.23	1.15
2:L:32:ILE:HG22	2:L:75:VAL:CG2	1.77	1.15
2:L:32:ILE:O	2:L:75:VAL:CG2	1.95	1.15
2:H:2:LYS:HZ1	2:H:30:VAL:HG21	1.05	1.14
2:H:35:THR:OG1	2:H:79:ARG:NH2	1.80	1.13
2:H:17:ARG:HD3	2:H:51:LEU:CD1	1.77	1.13
2:H:32:ILE:O	2:H:74:LYS:O	1.63	1.13
2:R:67:SER:HA	2:R:72:VAL:HA	1.29	1.12
2:L:32:ILE:HG22	2:L:75:VAL:HB	1.22	1.12
2:H:31:VAL:HG23	2:H:74:LYS:HE3	1.24	1.12
2:F:38:VAL:HG11	2:F:64:SER:HA	1.12	1.11
2:L:32:ILE:H	2:L:75:VAL:HA	1.10	1.11
2:L:31:VAL:CG1	2:L:74:LYS:O	1.98	1.11
2:H:32:ILE:N	2:H:74:LYS:O	1.82	1.10
2:H:31:VAL:HG23	2:H:74:LYS:CD	1.81	1.10
2:L:32:ILE:CG2	2:L:75:VAL:CG2	2.30	1.10
2:H:31:VAL:HG22	2:H:74:LYS:HB2	1.16	1.09
2:H:34:ASP:N	2:H:75:VAL:CG2	2.15	1.09
2:H:31:VAL:CG2	2:H:74:LYS:HD2	1.81	1.09
1:G:278:LEU:HD21	2:H:47:TYR:CE2	1.88	1.08
2:H:2:LYS:NZ	2:H:30:VAL:HG21	1.68	1.08
1:G:281:VAL:HG11	2:H:49:SER:HA	1.34	1.07
2:L:42:SER:HB3	2:L:66:ILE:CD1	1.85	1.07
2:L:31:VAL:HA	2:L:74:LYS:O	0.91	1.06
2:H:31:VAL:CG2	2:H:74:LYS:CE	2.32	1.06
2:F:56:ALA:CB	2:F:69:ASP:OD1	2.02	1.05
2:H:34:ASP:H	2:H:75:VAL:CG2	1.69	1.05
2:H:35:THR:CB	2:H:79:ARG:HH21	1.70	1.05
2:F:46:LYS:HD2	2:F:58:VAL:HG13	1.38	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:31:VAL:CB	2:L:74:LYS:O	2.05	1.04
2:H:17:ARG:NH1	2:H:51:LEU:HB3	1.74	1.03
2:H:31:VAL:CG2	2:H:74:LYS:HB2	1.89	1.02
2:F:38:VAL:HG11	2:F:64:SER:CA	1.89	1.02
2:L:30:VAL:O	2:L:74:LYS:N	1.92	1.01
1:C:133:ASN:HD22	1:C:217:VAL:HG11	1.26	1.00
2:L:31:VAL:HG13	2:L:74:LYS:O	1.56	1.00
1:G:278:LEU:CD2	2:H:47:TYR:CE2	2.45	0.99
2:H:17:ARG:HD3	2:H:51:LEU:HD12	1.02	0.99
1:K:133:ASN:HD22	1:K:217:VAL:HG11	1.27	0.99
1:O:328:VAL:HA	1:O:331:LYS:HB2	1.46	0.98
2:H:187:LEU:HB2	1:E:184:LEU:HB2	1.44	0.97
2:D:57:ASP:O	2:D:69:ASP:N	1.98	0.97
2:R:66:ILE:O	2:R:72:VAL:CG1	2.15	0.95
2:H:34:ASP:H	2:H:75:VAL:HG23	1.17	0.95
2:L:39:LYS:HZ3	2:L:40:GLN:H	1.12	0.94
1:G:176:HIS:HB3	1:G:231:ARG:HA	1.47	0.94
1:O:130:VAL:HA	1:O:134:GLU:HB3	1.51	0.93
1:E:130:VAL:HA	1:E:134:GLU:HB3	1.51	0.92
2:F:170:ILE:HA	2:F:248:VAL:HA	1.52	0.92
2:H:16:LEU:HD13	2:H:45:LEU:HD11	1.50	0.91
2:R:66:ILE:C	2:R:72:VAL:HG13	1.96	0.91
2:R:67:SER:HB2	2:R:72:VAL:HG22	1.50	0.91
2:L:31:VAL:HG13	2:L:74:LYS:C	1.93	0.91
2:R:39:LYS:HZ3	2:R:40:GLN:H	1.12	0.91
2:R:66:ILE:O	2:R:72:VAL:HG13	1.69	0.90
2:P:170:ILE:HA	2:P:248:VAL:HA	1.51	0.90
2:H:34:ASP:HB3	2:H:75:VAL:HG21	1.53	0.90
2:L:31:VAL:HA	2:L:74:LYS:C	1.95	0.90
1:Q:176:HIS:HB3	1:Q:231:ARG:HA	1.53	0.90
1:G:278:LEU:HD21	2:H:47:TYR:HE2	1.36	0.90
1:E:115:LYS:HA	1:E:142:ASN:HB3	1.54	0.89
1:C:265:GLY:O	1:C:268:LYS:NZ	2.06	0.89
1:K:169:LYS:HA	1:K:224:LYS:HG3	1.55	0.89
2:H:170:ILE:HA	2:H:248:VAL:HA	1.54	0.89
2:H:17:ARG:NH1	2:H:51:LEU:CB	2.34	0.89
1:E:118:ILE:HB	1:E:145:SER:HA	1.55	0.89
1:A:242:LEU:HB3	1:A:307:VAL:HB	1.55	0.88
1:E:175:THR:HA	1:E:230:LEU:HB2	1.54	0.88
2:F:104:ARG:HH21	2:F:128:ILE:HA	1.38	0.88
1:K:265:GLY:O	1:K:268:LYS:NZ	2.06	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:30:VAL:C	2:L:73:ILE:HG23	1.99	0.88
2:R:170:ILE:HA	2:R:248:VAL:HA	1.54	0.88
1:I:215:SER:HB2	1:I:222:LYS:HA	1.55	0.88
1:Q:254:ASP:OD1	1:Q:254:ASP:N	2.07	0.88
1:I:179:THR:H	1:I:182:GLN:HE22	1.17	0.87
1:I:362:GLU:H	1:Q:195:ARG:HH12	1.17	0.87
1:E:328:VAL:HA	1:E:331:LYS:HB2	1.54	0.87
2:D:57:ASP:O	2:D:69:ASP:CA	2.22	0.87
1:O:115:LYS:HA	1:O:142:ASN:HB3	1.57	0.87
2:F:38:VAL:CG1	2:F:64:SER:HA	2.01	0.87
2:L:240:SER:O	2:L:313:TYR:N	2.08	0.87
1:K:5:ILE:HA	1:K:93:ILE:HB	1.57	0.86
2:B:47:TYR:O	1:C:197:ARG:NH2	2.07	0.86
1:K:297:THR:HG23	1:K:307:VAL:HA	1.55	0.86
2:D:265:ALA:HA	2:D:269:LEU:HB2	1.57	0.86
1:O:167:ILE:HG23	1:O:244:VAL:HG21	1.56	0.86
2:P:240:SER:O	2:P:313:TYR:N	2.08	0.86
2:J:58:VAL:HA	2:J:68:VAL:HA	1.57	0.86
2:L:32:ILE:O	2:L:76:VAL:N	2.08	0.86
2:P:104:ARG:HH21	2:P:128:ILE:HA	1.38	0.86
1:K:282:ASP:OD1	1:K:282:ASP:N	2.09	0.86
2:L:32:ILE:CG2	2:L:75:VAL:HG21	2.04	0.86
1:O:28:VAL:HA	1:O:71:ILE:HG13	1.55	0.86
1:O:184:LEU:HG	1:O:185:LEU:HG	1.57	0.86
1:I:323:ASP:OD1	1:I:323:ASP:N	2.07	0.85
2:L:244:LEU:HD11	2:L:246:VAL:HG13	1.55	0.85
1:I:121:PRO:HA	1:I:147:ALA:HA	1.56	0.85
1:A:118:ILE:HD11	1:A:143:ILE:HG22	1.58	0.85
1:I:194:ARG:HH12	1:I:205:PRO:HD2	1.41	0.85
2:L:32:ILE:HG23	2:L:75:VAL:CG2	2.06	0.85
1:C:282:ASP:OD1	1:C:282:ASP:N	2.06	0.85
1:E:66:ILE:HB	1:E:69:LYS:HB2	1.58	0.85
1:G:184:LEU:HB2	2:F:187:LEU:HB2	1.57	0.85
2:H:34:ASP:CB	2:H:75:VAL:HG21	2.06	0.85
1:E:254:ASP:OD1	1:E:254:ASP:N	2.03	0.85
2:L:265:ALA:HA	2:L:269:LEU:HB2	1.56	0.85
2:P:6:ASN:HA	2:P:33:ASN:HB3	1.59	0.85
2:F:38:VAL:HG21	2:F:63:ASP:OD2	1.76	0.84
2:R:240:SER:O	2:R:313:TYR:N	2.10	0.84
2:H:31:VAL:HG23	2:H:74:LYS:NZ	1.91	0.84
2:H:32:ILE:O	2:H:74:LYS:C	2.19	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:236:ASN:H	1:I:284:ARG:HH21	1.21	0.84
2:J:8:PHE:O	2:J:13:ARG:NH2	2.10	0.84
2:D:240:SER:O	2:D:313:TYR:N	2.10	0.84
1:Q:130:VAL:HA	1:Q:134:GLU:HB3	1.60	0.84
1:A:317:TYR:HE2	3:A:401:NAD:H4N	1.42	0.84
1:G:130:VAL:HA	1:G:134:GLU:HB3	1.58	0.84
1:K:115:LYS:HG2	1:K:142:ASN:HA	1.60	0.84
2:H:179:HIS:O	2:H:234:VAL:N	2.11	0.84
1:A:176:HIS:HB3	1:A:231:ARG:HA	1.60	0.84
1:O:157:PHE:O	1:O:161:LEU:N	2.09	0.84
1:G:177:SER:O	1:G:231:ARG:NH2	2.11	0.84
1:K:17:ARG:NH2	1:K:51:GLY:O	2.10	0.84
2:P:17:ARG:NH1	2:P:52:GLY:O	2.10	0.84
1:E:181:ASP:OD2	1:E:195:ARG:NH1	2.10	0.84
2:F:43:HIS:HA	2:F:46:LYS:HB3	1.58	0.84
2:J:187:LEU:HB2	1:K:184:LEU:HB2	1.59	0.83
1:I:181:ASP:OD2	1:I:195:ARG:NH2	2.11	0.83
2:F:186:ARG:HG2	2:F:192:HIS:HB2	1.60	0.83
2:B:8:PHE:O	2:B:13:ARG:NH2	2.11	0.83
2:R:46:LYS:NZ	2:R:53:THR:OG1	2.11	0.83
2:P:42:SER:O	2:P:46:LYS:N	2.09	0.83
2:H:32:ILE:C	2:H:74:LYS:O	2.21	0.83
2:H:240:SER:O	2:H:313:TYR:N	2.10	0.83
1:E:179:THR:OG1	1:E:231:ARG:NH2	2.10	0.83
2:F:240:SER:O	2:F:313:TYR:N	2.11	0.83
1:K:63:THR:HA	1:K:72:LYS:HA	1.60	0.83
2:B:189:ASP:HA	2:B:199:ARG:HA	1.60	0.83
1:A:253:GLU:OE1	1:A:260:ARG:NH2	2.11	0.83
1:G:1:LEU:HB2	1:G:25:LEU:HB3	1.60	0.83
1:E:10:ARG:O	1:E:14:ASN:ND2	2.11	0.83
1:G:254:ASP:N	1:G:254:ASP:OD1	2.09	0.83
1:E:157:PHE:O	1:E:161:LEU:N	2.11	0.83
1:I:253:GLU:OE1	1:I:260:ARG:NH2	2.11	0.83
1:C:191:ARG:NH2	1:O:358:CYS:SG	2.49	0.83
2:D:223:LEU:HA	2:D:227:LEU:HD23	1.59	0.83
2:R:179:HIS:O	2:R:234:VAL:N	2.10	0.83
2:P:43:HIS:HA	2:P:46:LYS:HB3	1.60	0.83
1:G:270:VAL:O	1:G:290:SER:N	2.11	0.83
1:C:340:ALA:HA	1:C:345:LEU:HA	1.61	0.83
2:H:31:VAL:CG2	2:H:74:LYS:NZ	2.42	0.83
1:I:118:ILE:HB	1:I:145:SER:HA	1.61	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:58:LYS:HZ2	1:K:59:ILE:H	1.25	0.82
1:I:246:ILE:HG22	1:I:303:ASP:HA	1.61	0.82
2:L:32:ILE:CG2	2:L:75:VAL:HG23	2.08	0.82
1:A:121:PRO:HA	1:A:147:ALA:HA	1.62	0.82
1:O:20:ARG:HH21	1:O:319:GLN:HE21	1.26	0.82
1:O:57:VAL:HA	1:O:67:ASP:H	1.45	0.82
1:O:157:PHE:HB3	1:O:271:LEU:HD21	1.60	0.82
2:H:32:ILE:CA	2:H:74:LYS:O	2.27	0.82
2:F:46:LYS:HD2	2:F:58:VAL:CG1	2.09	0.82
2:J:217:ALA:HA	2:J:224:LYS:HG2	1.62	0.82
1:K:151:THR:HG21	1:K:213:ALA:HB3	1.62	0.82
1:G:341:SER:HA	1:G:345:LEU:HA	1.61	0.82
1:Q:298:MET:HG2	1:Q:306:LYS:HB3	1.61	0.82
1:Q:45:LYS:NZ	1:Q:53:PHE:O	2.13	0.82
2:B:217:ALA:HA	2:B:224:LYS:HG2	1.61	0.82
1:Q:90:ASP:HA	1:Q:114:LYS:HB2	1.61	0.82
2:R:30:VAL:O	2:R:74:LYS:N	2.13	0.82
2:F:6:ASN:HA	2:F:33:ASN:HB3	1.62	0.82
2:F:42:SER:O	2:F:46:LYS:N	2.11	0.82
1:A:239:VAL:HB	1:A:310:TRP:HA	1.62	0.82
1:A:149:CYS:HA	1:A:152:ASN:HB2	1.62	0.82
1:G:57:VAL:HG22	1:G:66:ILE:HG23	1.60	0.82
1:G:155:ALA:O	1:G:159:LYS:N	2.12	0.82
2:H:299:THR:HG22	2:H:309:VAL:HA	1.61	0.82
2:J:272:ILE:O	2:J:291:SER:N	2.10	0.81
1:C:231:ARG:HH11	1:C:231:ARG:HA	1.45	0.81
2:F:17:ARG:NH1	2:F:52:GLY:O	2.11	0.81
1:A:181:ASP:OD2	1:A:195:ARG:NH1	2.13	0.81
2:D:170:ILE:HA	2:D:248:VAL:HA	1.60	0.81
1:O:254:ASP:N	1:O:254:ASP:OD1	2.05	0.81
1:I:176:HIS:O	1:I:232:VAL:N	2.12	0.81
1:K:286:SER:O	1:K:315:TRP:NE1	2.13	0.81
2:L:32:ILE:N	2:L:75:VAL:HA	1.92	0.81
1:A:206:THR:HB	1:A:229:ALA:HB3	1.63	0.81
1:A:323:ASP:OD1	1:A:323:ASP:N	2.09	0.81
1:C:115:LYS:HG2	1:C:142:ASN:HA	1.61	0.81
1:O:66:ILE:HB	1:O:69:LYS:HB2	1.62	0.81
2:P:38:VAL:HB	2:P:66:ILE:HD11	1.61	0.81
2:R:299:THR:HG22	2:R:309:VAL:HA	1.61	0.81
1:E:346:GLU:O	1:E:350:LYS:N	2.13	0.81
2:L:67:SER:HB3	2:L:72:VAL:HG23	1.61	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:181:ASP:OD1	1:C:182:GLN:NE2	2.13	0.81
1:Q:270:VAL:O	1:Q:290:SER:N	2.14	0.81
2:F:185:GLN:HE21	2:F:233:ARG:HH11	1.27	0.81
2:J:46:LYS:NZ	2:J:53:THR:OG1	2.14	0.81
2:F:318:GLY:HA2	2:F:321:GLN:HB2	1.62	0.81
2:L:182:THR:OG1	2:L:185:GLN:NE2	2.13	0.81
2:B:281:VAL:HB	2:D:204:ASN:HB2	1.61	0.81
1:O:174:THR:HB	1:O:240:VAL:HG12	1.60	0.81
2:H:33:ASN:C	2:H:75:VAL:HG23	2.04	0.81
2:H:302:MET:HB2	2:H:306:MET:HB3	1.61	0.81
1:E:1:LEU:HB2	1:E:25:LEU:HA	1.63	0.81
1:A:322:VAL:O	1:A:326:ASP:N	2.14	0.81
1:C:151:THR:HG21	1:C:213:ALA:HB3	1.61	0.81
1:I:13:ARG:NH2	3:Q:401:NAD:O2A	2.14	0.81
1:K:16:LEU:O	1:K:18(B):HIS:N	2.11	0.81
1:A:194:ARG:HH12	1:A:205:PRO:HD2	1.46	0.81
2:P:26:PRO:HB2	2:P:331:ALA:HB1	1.63	0.81
2:H:120:ILE:H	2:H:148:SER:HA	1.46	0.81
1:Q:257:ASN:HA	1:Q:260:ARG:HD2	1.63	0.80
2:D:64:SER:HB3	2:D:74:LYS:HZ2	1.45	0.80
1:Q:127:THR:HG21	1:Q:216:LEU:HB3	1.64	0.80
1:Q:316:GLY:O	1:Q:320:ARG:NH1	2.15	0.80
1:O:114:LYS:O	1:O:142:ASN:ND2	2.14	0.80
2:P:239:VAL:HG22	2:P:314:ASP:HA	1.62	0.80
1:G:45:LYS:NZ	1:G:53:PHE:O	2.12	0.80
2:H:31:VAL:CG2	2:H:74:LYS:CB	2.53	0.80
1:Q:155:ALA:O	1:Q:159:LYS:N	2.13	0.80
1:K:6:ASN:HD22	1:K:94:GLU:HA	1.46	0.80
2:B:179:HIS:O	2:B:234:VAL:N	2.14	0.80
1:Q:57:VAL:HG22	1:Q:66:ILE:HG23	1.64	0.80
2:R:22:ARG:HG3	2:R:324:VAL:HG11	1.61	0.80
2:F:16:LEU:CD2	2:F:68:VAL:HG11	2.12	0.80
2:B:46:LYS:NZ	2:B:53:THR:OG1	2.13	0.80
2:F:135:VAL:HG11	2:F:219:VAL:HB	1.64	0.80
2:B:10:ARG:HA	2:B:13:ARG:HD2	1.63	0.80
2:B:272:ILE:O	2:B:291:SER:N	2.11	0.80
2:R:48:ASP:H	2:R:53:THR:HA	1.46	0.80
2:R:67:SER:CA	2:R:72:VAL:HG13	2.12	0.80
2:F:239:VAL:HG22	2:F:314:ASP:HA	1.63	0.80
1:Q:83:PRO:HB2	1:Q:86:GLU:HB3	1.61	0.80
1:E:129:VAL:H	1:E:133:ASN:HD21	1.30	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:183:ARG:NH1	1:E:359:LYS:O	2.15	0.80
2:L:160:PHE:O	2:L:164:LEU:N	2.15	0.80
1:A:118:ILE:HB	1:A:145:SER:HA	1.62	0.80
1:Q:185:LEU:HD11	2:P:183:GLY:H	1.46	0.80
2:R:55:ASP:OD1	2:R:55:ASP:N	2.15	0.80
2:R:302:MET:HB2	2:R:306:MET:HB3	1.63	0.80
1:G:105:ALA:HB1	1:G:116:VAL:HG11	1.62	0.80
1:I:254:ASP:OD1	1:I:254:ASP:N	2.15	0.80
1:Q:46:TYR:O	2:P:199:ARG:NH2	2.14	0.80
1:E:20:ARG:HH21	1:E:319:GLN:HE21	1.30	0.80
1:E:258:ALA:O	1:E:261:LYS:NZ	2.15	0.80
1:C:45:LYS:O	1:C:53:PHE:N	2.14	0.79
2:B:302:MET:HE3	2:D:228:ASN:HB3	1.64	0.79
1:Q:205:PRO:HA	1:Q:230:LEU:HA	1.63	0.79
1:G:83:PRO:HB2	1:G:86:GLU:HB3	1.61	0.79
2:J:281:VAL:HB	2:L:204:ASN:HB2	1.63	0.79
1:I:192:ASP:OD2	1:I:196:ALA:N	2.15	0.79
2:B:265:ALA:HA	2:B:269:LEU:HB2	1.65	0.79
1:C:5:ILE:HA	1:C:93:ILE:HB	1.65	0.79
2:L:170:ILE:HA	2:L:248:VAL:HA	1.64	0.79
2:B:213:ALA:O	2:B:228:ASN:ND2	2.16	0.79
2:B:240:SER:O	2:B:313:TYR:N	2.15	0.79
2:R:67:SER:HA	2:R:72:VAL:CA	2.10	0.79
2:F:255:GLU:O	2:F:259:ALA:N	2.14	0.79
1:Q:177:SER:HA	1:Q:234:THR:HG23	1.64	0.79
1:G:65:SER:HA	1:G:70:PRO:HA	1.64	0.79
1:G:257:ASN:HA	1:G:260:ARG:HD2	1.62	0.79
2:F:38:VAL:HB	2:F:66:ILE:HD11	1.64	0.79
2:J:265:ALA:HA	2:J:269:LEU:HB2	1.64	0.79
1:Q:167:ILE:HG12	1:Q:246:ILE:HG13	1.65	0.79
1:G:11:ILE:HA	1:G:14:ASN:HB2	1.65	0.79
2:L:181:TYR:N	2:L:236:THR:O	2.16	0.79
2:P:255:GLU:O	2:P:259:ALA:N	2.15	0.79
1:E:57:VAL:HA	1:E:67:ASP:H	1.47	0.79
2:F:26:PRO:HB2	2:F:331:ALA:HB1	1.63	0.79
2:L:28:ASP:CG	2:L:71:LYS:HE3	2.08	0.79
1:A:282:ASP:OD1	1:A:282:ASP:N	2.09	0.79
2:B:90:GLY:O	2:B:116:LYS:NZ	2.16	0.79
1:Q:57:VAL:HA	1:Q:66:ILE:HA	1.63	0.79
2:R:11:ILE:HA	2:R:14:ASN:HB2	1.64	0.79
1:O:118:ILE:HB	1:O:145:SER:HA	1.63	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:204:VAL:O	1:G:231:ARG:N	2.15	0.79
1:E:236:ASN:ND2	1:E:312:ASP:OD2	2.16	0.79
2:J:213:ALA:O	2:J:228:ASN:ND2	2.16	0.79
1:C:136:ASP:N	1:C:136:ASP:OD1	2.15	0.79
1:Q:105:ALA:HB1	1:Q:116:VAL:HG11	1.63	0.79
1:O:258:ALA:O	1:O:261:LYS:NZ	2.16	0.79
1:E:149:CYS:HA	1:E:153:CYS:H	1.48	0.79
2:F:16:LEU:HD22	2:F:68:VAL:HG11	1.65	0.79
2:F:160:PHE:HB2	2:F:261:PHE:HE2	1.46	0.79
2:L:10:ARG:N	3:L:401:NAD:O1N	2.16	0.78
1:A:254:ASP:OD1	1:A:254:ASP:N	2.16	0.78
2:L:42:SER:HB3	2:L:66:ILE:HD12	1.63	0.78
1:G:46:TYR:O	2:F:199:ARG:NH2	2.16	0.78
1:E:176:HIS:N	1:E:230:LEU:O	2.14	0.78
1:I:149:CYS:HA	1:I:152:ASN:HB2	1.65	0.78
2:L:28:ASP:OD2	2:L:71:LYS:CE	2.31	0.78
1:A:179:THR:OG1	1:A:181:ASP:OD1	2.01	0.78
2:J:90:GLY:O	2:J:116:LYS:NZ	2.16	0.78
1:A:13:ARG:NH2	3:A:401:NAD:O2A	2.15	0.78
2:D:160:PHE:O	2:D:164:LEU:N	2.15	0.78
1:Q:47:ASP:OD1	1:Q:51:GLY:N	2.17	0.78
1:G:323:ASP:N	1:G:323:ASP:OD1	2.11	0.78
2:F:88:ASP:N	2:F:88:ASP:OD1	2.12	0.78
2:B:204:ASN:ND2	2:D:282:SER:OG	2.17	0.78
1:Q:11:ILE:HA	1:Q:14:ASN:HB2	1.66	0.78
1:Q:66:ILE:N	1:Q:69:LYS:O	2.16	0.78
2:R:120:ILE:H	2:R:148:SER:HA	1.45	0.78
1:G:47:ASP:OD1	1:G:51:GLY:N	2.17	0.78
1:E:157:PHE:HB3	1:E:271:LEU:HD21	1.64	0.78
2:F:38:VAL:HG21	2:F:63:ASP:O	1.84	0.78
1:I:314:GLU:OE2	3:Q:401:NAD:N7N	2.16	0.78
2:J:179:HIS:O	2:J:234:VAL:N	2.14	0.78
2:P:318:GLY:HA2	2:P:321:GLN:HB2	1.65	0.78
1:E:177:SER:O	1:E:231:ARG:NH1	2.16	0.78
1:G:34:GLY:O	1:G:38:LYS:NZ	2.17	0.78
2:F:241:VAL:HG22	2:F:312:TRP:HA	1.66	0.78
2:L:11:ILE:HA	2:L:14:ASN:HB2	1.65	0.78
1:A:57:VAL:HA	1:A:66:ILE:HA	1.66	0.78
1:C:299:VAL:HG13	1:C:305:VAL:HG22	1.66	0.78
2:F:120:ILE:HG22	2:F:122:ALA:H	1.48	0.78
2:F:213:ALA:O	2:F:228:ASN:ND2	2.16	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:18:CYS:O	2:J:22:ARG:N	2.15	0.78
1:K:10:ARG:O	1:K:14:ASN:ND2	2.17	0.78
2:D:5:ILE:HD12	2:D:95:ILE:HG12	1.66	0.78
1:G:167:ILE:HA	1:G:247:GLU:H	1.49	0.78
2:H:59:LYS:NZ	2:H:59:LYS:HB3	1.97	0.78
1:I:183:ARG:NH2	1:I:188:SER:O	2.15	0.78
1:Q:34:GLY:O	1:Q:38:LYS:NZ	2.16	0.78
2:P:213:ALA:O	2:P:228:ASN:ND2	2.16	0.78
1:G:253:GLU:O	1:G:257:ASN:N	2.17	0.78
2:J:18:CYS:SG	2:J:321:GLN:NE2	2.57	0.77
1:K:231:ARG:HH11	1:K:231:ARG:HA	1.48	0.77
1:Q:90:ASP:OD1	1:Q:114:LYS:NZ	2.17	0.77
1:I:57:VAL:HA	1:I:66:ILE:HA	1.65	0.77
1:I:66:ILE:HG23	1:I:69:LYS:HB2	1.67	0.77
2:J:46:LYS:O	2:J:53:THR:OG1	2.02	0.77
1:K:3:VAL:HG21	1:K:25:LEU:HB3	1.66	0.77
1:A:198:ALA:O	1:A:202:ASN:ND2	2.17	0.77
2:F:16:LEU:HA	2:F:19:TRP:HB3	1.67	0.77
1:I:195:ARG:NH1	1:Q:359:LYS:O	2.16	0.77
1:K:37:VAL:HA	1:K:40:ALA:HB3	1.66	0.77
1:A:172:MET:SD	1:A:172:MET:N	2.57	0.77
2:B:201:ALA:HB1	2:B:204:ASN:HB2	1.67	0.77
2:D:92:ASP:O	2:D:117:LYS:N	2.13	0.77
2:H:2:LYS:NZ	2:H:30:VAL:CG2	2.47	0.77
2:H:320:SER:O	2:H:324:VAL:N	2.14	0.77
2:F:6:ASN:OD1	2:F:33:ASN:ND2	2.18	0.77
1:I:184:LEU:HB2	2:L:187:LEU:HB3	1.67	0.77
1:I:5:ILE:HB	1:I:30:VAL:HG13	1.67	0.77
2:P:120:ILE:HG22	2:P:122:ALA:H	1.49	0.77
2:P:221:PRO:O	2:P:224:LYS:NZ	2.17	0.77
1:G:57:VAL:HA	1:G:66:ILE:HA	1.64	0.77
2:H:16:LEU:HD11	2:H:45:LEU:HD21	1.67	0.77
2:J:192:HIS:HB3	2:J:198:ALA:HA	1.67	0.77
2:F:56:ALA:HB1	2:F:69:ASP:CG	2.07	0.77
2:F:186:ARG:NH2	2:F:191:SER:O	2.18	0.77
2:J:204:ASN:ND2	2:L:282:SER:OG	2.18	0.77
1:K:362:GLU:H	1:E:195:ARG:HH12	1.33	0.77
1:A:66:ILE:HG23	1:A:69:LYS:HB2	1.67	0.77
2:D:10:ARG:O	2:D:14:ASN:N	2.18	0.77
1:I:322:VAL:O	1:I:326:ASP:N	2.15	0.77
1:O:175:THR:HA	1:O:230:LEU:HB2	1.66	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:177:SER:HA	1:A:234:THR:HG23	1.66	0.76
2:D:180:SER:HB3	2:D:315:ASN:HD22	1.50	0.76
1:O:256:ASN:HB2	1:O:260:ARG:HH21	1.49	0.76
2:H:6:ASN:HB3	2:H:96:GLU:HA	1.66	0.76
2:H:248:VAL:HG22	2:H:305:ASP:HA	1.67	0.76
1:E:349:CYS:O	1:E:353:PRO:N	2.18	0.76
1:K:136:ASP:N	1:K:136:ASP:OD1	2.15	0.76
1:G:45:LYS:O	1:G:53:PHE:N	2.16	0.76
2:J:170:ILE:HA	2:J:248:VAL:HA	1.68	0.76
2:L:14:ASN:O	2:L:18:CYS:N	2.13	0.76
1:A:195:ARG:HH12	1:G:362:GLU:H	1.32	0.76
1:A:246:ILE:HG22	1:A:303:ASP:HA	1.67	0.76
1:C:297:THR:HG23	1:C:307:VAL:HA	1.66	0.76
1:Q:136:ASP:OD1	1:Q:136:ASP:N	2.18	0.76
1:Q:169:LYS:HA	1:Q:224:LYS:HB3	1.66	0.76
1:G:9:GLY:O	1:G:13:ARG:N	2.18	0.76
2:H:282:SER:O	2:H:286:ARG:NH2	2.18	0.76
1:E:213:ALA:HA	1:E:216:LEU:HD23	1.67	0.76
1:Q:45:LYS:O	1:Q:53:PHE:N	2.16	0.76
1:Q:217:VAL:HG23	1:Q:218:LEU:HD22	1.66	0.76
1:O:129:VAL:HB	1:O:132:VAL:HB	1.67	0.76
2:P:135:VAL:HG11	2:P:219:VAL:HB	1.66	0.76
2:F:220:LEU:HB3	2:F:223:LEU:HD13	1.66	0.76
2:F:321:GLN:O	2:F:325:ASP:N	2.13	0.76
2:J:258:ASN:O	2:J:262:ARG:N	2.19	0.76
2:L:6:ASN:HA	2:L:33:ASN:HB3	1.68	0.76
1:A:263:ALA:HA	1:A:267:LEU:HB2	1.68	0.76
1:Q:346:GLU:HA	1:Q:349:CYS:HB3	1.68	0.76
1:O:349:CYS:O	1:O:353:PRO:N	2.18	0.76
2:H:8:PHE:O	2:H:13:ARG:NH2	2.18	0.76
2:H:31:VAL:HG22	2:H:74:LYS:HD2	1.64	0.76
1:A:0:LYS:NZ	1:A:22:ASP:O	2.18	0.76
1:A:9:GLY:O	1:A:13:ARG:N	2.16	0.76
1:A:281:VAL:HG11	2:B:49:SER:HA	1.68	0.76
2:B:238:ASN:O	2:B:315:ASN:ND2	2.18	0.76
1:Q:15:PHE:HE1	1:Q:322:VAL:HG22	1.49	0.76
2:R:220:LEU:HD13	2:R:223:LEU:HD13	1.67	0.76
1:E:245:ASN:HB3	1:E:304:MET:HE3	1.67	0.76
1:I:16:LEU:O	1:I:18(B):HIS:N	2.17	0.76
1:I:76:ASN:ND2	1:I:78:ASP:O	2.19	0.76
3:K:401:NAD:N7N	3:K:401:NAD:O2N	2.19	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:184:LEU:HB2	2:D:187:LEU:HB2	1.65	0.76
2:P:186:ARG:NH2	2:P:191:SER:O	2.19	0.76
2:P:186:ARG:HG2	2:P:192:HIS:HB2	1.66	0.76
2:P:247:GLN:HA	2:P:306:MET:HA	1.67	0.76
2:P:248:VAL:N	2:P:305:ASP:O	2.18	0.76
2:H:17:ARG:NE	2:H:51:LEU:HD12	2.01	0.76
2:H:220:LEU:HD13	2:H:223:LEU:HD13	1.68	0.76
2:L:39:LYS:O	2:L:42:SER:OG	2.04	0.76
2:B:142:HIS:HB2	2:B:333:LYS:HE2	1.65	0.76
1:Q:204:VAL:O	1:Q:231:ARG:N	2.19	0.76
1:O:118:ILE:HD11	1:O:143:ILE:HG22	1.68	0.76
2:P:220:LEU:HB3	2:P:223:LEU:HD13	1.68	0.76
2:L:19:TRP:O	2:L:23:LYS:NZ	2.19	0.76
1:C:30:VAL:H	1:C:73:VAL:HA	1.51	0.76
2:D:57:ASP:O	2:D:69:ASP:HA	1.85	0.76
2:D:60:THR:HB	2:D:66:ILE:HD13	1.65	0.76
2:R:320:SER:O	2:R:324:VAL:N	2.16	0.76
2:F:179:HIS:O	2:F:234:VAL:N	2.12	0.76
2:J:22:ARG:NH2	2:J:325:ASP:OD1	2.19	0.75
2:L:17:ARG:O	2:L:21:GLY:N	2.18	0.75
2:B:186:ARG:HD3	2:B:192:HIS:HB2	1.68	0.75
1:C:58:LYS:HZ1	1:C:59:ILE:H	1.32	0.75
1:Q:167:ILE:HA	1:Q:247:GLU:H	1.49	0.75
2:H:175:MET:HG3	2:H:244:LEU:HD13	1.69	0.75
2:H:244:LEU:HD11	2:H:246:VAL:HG13	1.67	0.75
1:K:78:ASP:HB3	1:K:81:LYS:HD2	1.66	0.75
1:C:293:ASP:OD1	1:C:297:THR:N	2.20	0.75
2:R:248:VAL:HG22	2:R:305:ASP:HA	1.68	0.75
2:H:106:GLY:O	2:H:110:HIS:ND1	2.19	0.75
2:L:5:ILE:HD12	2:L:95:ILE:HG12	1.66	0.75
1:A:147:ALA:O	1:A:317:TYR:OH	2.04	0.75
1:I:263:ALA:HA	1:I:267:LEU:HB2	1.68	0.75
2:J:240:SER:O	2:J:313:TYR:N	2.19	0.75
2:B:118:VAL:HB	2:B:146:ILE:HA	1.68	0.75
2:D:182:THR:OG1	2:D:185:GLN:NE2	2.18	0.75
1:G:136:ASP:N	1:G:136:ASP:OD1	2.20	0.75
2:H:181:TYR:HE1	1:E:185:LEU:HD21	1.51	0.75
1:K:236:ASN:ND2	1:K:312:ASP:OD2	2.20	0.75
1:C:323:ASP:OD1	1:C:323:ASP:N	2.16	0.75
1:O:181:ASP:OD1	1:O:182:GLN:NE2	2.18	0.75
1:G:15:PHE:O	1:G:18(A):TRP:N	2.14	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:221:PRO:O	2:F:224:LYS:NZ	2.18	0.75
1:I:116:VAL:HB	1:I:143:ILE:HA	1.67	0.75
2:J:238:ASN:O	2:J:315:ASN:ND2	2.19	0.75
1:C:0:LYS:HD3	1:C:1:LEU:HD22	1.67	0.75
1:C:183:ARG:HH22	1:O:357:GLU:HA	1.49	0.75
1:O:84:TRP:HB3	1:O:89:ILE:HB	1.68	0.75
2:P:40:GLN:O	2:P:44:LEU:N	2.16	0.75
2:P:241:VAL:HG22	2:P:312:TRP:HA	1.67	0.75
1:E:116:VAL:O	1:E:144:ILE:N	2.17	0.75
2:F:131:TYR:HA	2:F:136:ASN:HB2	1.69	0.75
1:I:224:LYS:HB3	1:I:224:LYS:HZ3	1.51	0.75
2:J:221:PRO:HA	2:J:224:LYS:HE2	1.69	0.75
2:B:258:ASN:O	2:B:262:ARG:N	2.19	0.75
1:Q:253:GLU:O	1:Q:257:ASN:N	2.18	0.75
1:O:179:THR:N	1:O:182:GLN:OE1	2.19	0.75
2:H:315:ASN:OD1	2:H:315:ASN:N	2.20	0.75
2:F:140:TYR:O	2:F:333:LYS:NZ	2.20	0.75
1:I:147:ALA:O	1:I:317:TYR:OH	2.05	0.75
1:I:181:ASP:HB2	1:I:195:ARG:HH12	1.51	0.75
1:I:205:PRO:HB2	1:K:296:LEU:HD12	1.69	0.75
1:C:298:MET:O	1:C:306:LYS:N	2.20	0.75
1:O:6:ASN:ND2	1:O:96:THR:OG1	2.20	0.75
2:P:252:THR:H	2:P:304:ASP:HB3	1.51	0.75
2:J:201:ALA:HB1	2:J:204:ASN:HB2	1.68	0.75
1:G:217:VAL:HG23	1:G:218:LEU:HD22	1.66	0.75
1:G:278:LEU:HD22	2:H:47:TYR:CE2	2.22	0.75
1:K:298:MET:O	1:K:306:LYS:N	2.19	0.74
1:Q:186:ASP:O	2:P:10:ARG:NH2	2.20	0.74
2:F:117:LYS:NZ	2:F:142:HIS:O	2.19	0.74
2:F:247:GLN:HA	2:F:306:MET:HA	1.67	0.74
1:I:349:CYS:SG	1:Q:191:ARG:NH2	2.61	0.74
2:D:10:ARG:N	3:D:401:NAD:O1N	2.14	0.74
1:G:148:SER:O	1:G:152:ASN:N	2.17	0.74
1:E:15:PHE:O	1:E:18(A):TRP:N	2.16	0.74
1:K:316:GLY:O	1:K:320:ARG:N	2.17	0.74
1:K:340:ALA:O	1:K:344:PRO:N	2.19	0.74
1:C:345:LEU:O	1:C:349:CYS:N	2.19	0.74
1:Q:62:GLU:HB2	1:Q:72:LYS:HZ1	1.52	0.74
2:R:66:ILE:O	2:R:72:VAL:HG12	1.86	0.74
2:R:195:LEU:HD13	2:P:279:PRO:HG3	1.69	0.74
1:O:177:SER:HA	1:O:234:THR:HG23	1.68	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:195:LEU:HD13	2:F:279:PRO:HG3	1.68	0.74
2:L:92:ASP:O	2:L:117:LYS:N	2.16	0.74
1:C:312:ASP:OD1	1:C:316:GLY:N	2.21	0.74
2:D:46:LYS:O	2:D:54:PHE:N	2.17	0.74
1:Q:265:GLY:O	1:Q:268:LYS:NZ	2.20	0.74
2:R:59:LYS:CE	2:R:59:LYS:HA	2.17	0.74
2:R:263:GLU:O	2:R:267:ASN:ND2	2.19	0.74
1:O:8:PHE:O	1:O:13:ARG:NH1	2.19	0.74
1:G:102:GLY:O	1:G:106:GLY:N	2.19	0.74
2:L:136:ASN:HD21	2:L:219:VAL:HG12	1.53	0.74
2:D:19:TRP:O	2:D:23:LYS:NZ	2.20	0.74
2:P:117:LYS:NZ	2:P:142:HIS:O	2.20	0.74
2:F:6:ASN:HB3	2:F:96:GLU:HA	1.69	0.74
1:K:324:LEU:O	1:K:328:VAL:N	2.17	0.74
2:B:22:ARG:HG3	2:B:324:VAL:HG11	1.69	0.74
1:C:78:ASP:HB3	1:C:81:LYS:HD2	1.70	0.74
1:Q:102:GLY:O	1:Q:106:GLY:N	2.18	0.74
2:H:87:GLY:N	2:H:113:ALA:O	2.21	0.74
2:H:255:GLU:OE2	2:H:262:ARG:NH1	2.21	0.74
1:E:178:TYR:HD2	1:E:233:PRO:HA	1.52	0.74
1:I:136:ASP:OD1	1:I:136:ASP:N	2.20	0.74
2:J:39:LYS:HZ3	2:J:40:GLN:H	1.33	0.74
2:L:46:LYS:O	2:L:54:PHE:N	2.17	0.74
2:R:282:SER:O	2:R:286:ARG:NH2	2.20	0.74
1:O:149:CYS:HA	1:O:153:CYS:H	1.52	0.74
2:H:31:VAL:HA	2:H:74:LYS:HB2	1.70	0.74
2:H:263:GLU:O	2:H:267:ASN:ND2	2.20	0.74
1:I:91:ILE:HG23	1:I:115:LYS:HB2	1.69	0.74
2:J:47:TYR:O	1:K:197:ARG:NH2	2.21	0.74
1:K:293:ASP:OD1	1:K:297:THR:N	2.18	0.74
2:B:11:ILE:O	2:B:15:PHE:N	2.14	0.74
1:C:34:GLY:O	1:C:38:LYS:NZ	2.20	0.74
1:C:37:VAL:HA	1:C:40:ALA:HB3	1.70	0.74
1:C:162:ASP:O	1:C:166:GLY:N	2.21	0.74
2:D:11:ILE:HA	2:D:14:ASN:HB2	1.70	0.74
2:D:149:ASN:OD1	2:D:150:ALA:N	2.20	0.74
2:R:255:GLU:OE2	2:R:262:ARG:NH1	2.21	0.74
1:O:177:SER:O	1:O:231:ARG:NH1	2.18	0.74
2:P:142:HIS:HD2	2:P:336:ALA:H	1.35	0.74
1:G:28:VAL:O	1:G:72:LYS:N	2.21	0.74
1:G:167:ILE:HG12	1:G:246:ILE:HG13	1.68	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:323:ASP:OD1	1:K:323:ASP:N	2.17	0.74
1:A:242:LEU:N	1:A:307:VAL:O	2.20	0.74
2:B:46:LYS:O	2:B:53:THR:OG1	2.05	0.74
2:R:244:LEU:HD11	2:R:246:VAL:HG13	1.68	0.74
2:P:6:ASN:OD1	2:P:33:ASN:ND2	2.21	0.74
1:G:179:THR:O	1:G:182:GLN:NE2	2.20	0.74
1:E:270:VAL:O	1:E:290:SER:N	2.21	0.74
2:F:32:ILE:N	2:F:74:LYS:O	2.21	0.74
2:B:46:LYS:HB2	2:B:58:VAL:HG21	1.70	0.74
1:C:63:THR:HA	1:C:72:LYS:HA	1.70	0.74
2:D:275:VAL:HA	2:D:294:ILE:H	1.53	0.74
1:O:15:PHE:O	1:O:18(A):TRP:N	2.16	0.74
2:J:172:LYS:NZ	2:L:306:MET:SD	2.60	0.73
2:B:170:ILE:HA	2:B:248:VAL:HA	1.70	0.73
2:D:14:ASN:O	2:D:18:CYS:N	2.14	0.73
2:D:181:TYR:N	2:D:236:THR:O	2.16	0.73
1:G:62:GLU:OE1	1:G:72:LYS:NZ	2.20	0.73
2:H:44:LEU:HD23	1:E:197:ARG:CZ	2.18	0.73
1:I:91:ILE:HG22	1:I:117:ILE:HG13	1.69	0.73
1:K:183:ARG:NH2	1:K:188:SER:O	2.21	0.73
2:R:67:SER:HB3	2:R:72:VAL:CB	2.18	0.73
2:P:131:TYR:HA	2:P:136:ASN:HB2	1.67	0.73
1:I:282:ASP:OD1	1:I:282:ASP:N	2.20	0.73
2:L:17:ARG:NH2	2:L:53:THR:O	2.22	0.73
1:A:164:GLU:OE1	1:A:261:LYS:NZ	2.19	0.73
2:D:136:ASN:HD21	2:D:219:VAL:HG12	1.52	0.73
1:O:76:ASN:ND2	1:O:78:ASP:O	2.21	0.73
1:O:270:VAL:O	1:O:290:SER:N	2.21	0.73
2:P:191:SER:O	2:P:193:ARG:NH1	2.21	0.73
1:G:312:ASP:OD1	1:G:316:GLY:N	2.21	0.73
1:E:160:VAL:O	1:E:164:GLU:N	2.20	0.73
2:F:248:VAL:N	2:F:305:ASP:O	2.21	0.73
2:J:48:ASP:H	2:J:53:THR:HA	1.54	0.73
2:J:149:ASN:HD22	2:J:323:VAL:HG22	1.52	0.73
1:K:270:VAL:HG13	1:K:289:SER:HB2	1.69	0.73
1:C:349:CYS:O	1:C:353:PRO:N	2.22	0.73
2:D:6:ASN:HA	2:D:33:ASN:HB3	1.70	0.73
2:R:67:SER:HB3	2:R:72:VAL:HG22	0.75	0.73
2:R:238:ASN:O	2:R:315:ASN:ND2	2.21	0.73
2:P:19:TRP:CH2	2:P:68:VAL:HG22	2.23	0.73
1:G:316:GLY:O	1:G:320:ARG:NH1	2.21	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:96:GLU:OE2	2:H:98:THR:OG1	2.06	0.73
2:H:209:SER:HA	2:H:231:ALA:H	1.53	0.73
1:I:304:MET:H	1:K:169:LYS:HZ2	1.35	0.73
2:L:217:ALA:O	2:L:224:LYS:NZ	2.21	0.73
1:C:31:ASN:ND2	1:C:76:ASN:O	2.19	0.73
3:Q:401:NAD:N7N	3:Q:401:NAD:O1N	2.21	0.73
2:P:140:TYR:O	2:P:333:LYS:NZ	2.21	0.73
1:E:18:CYS:O	1:E:20:ARG:N	2.22	0.73
2:J:302:MET:HE3	2:L:228:ASN:HB3	1.71	0.73
1:K:263:ALA:O	1:K:268:LYS:NZ	2.20	0.73
1:A:76:ASN:ND2	1:A:78:ASP:O	2.21	0.73
1:C:316:GLY:O	1:C:320:ARG:N	2.18	0.73
1:C:358:CYS:O	1:O:191:ARG:N	2.21	0.73
2:F:92:ASP:O	2:F:117:LYS:N	2.22	0.73
2:F:191:SER:O	2:F:193:ARG:NH1	2.21	0.73
1:I:168:VAL:O	1:I:224:LYS:NZ	2.20	0.73
2:R:175:MET:HG3	2:R:244:LEU:HD13	1.69	0.73
2:R:252:THR:H	2:R:304:ASP:HB3	1.53	0.73
2:P:142:HIS:CD2	2:P:335:GLN:H	2.07	0.73
1:G:169:LYS:HA	1:G:224:LYS:HB3	1.70	0.73
1:E:118:ILE:HD11	1:E:143:ILE:HG22	1.70	0.73
1:K:34:GLY:O	1:K:38:LYS:NZ	2.22	0.73
2:L:11:ILE:N	3:L:401:NAD:O2N	2.19	0.73
2:L:171:ILE:HD12	2:L:247:GLN:HG2	1.71	0.73
2:R:96:GLU:OE2	2:R:98:THR:OG1	2.06	0.73
1:G:129:VAL:N	1:G:133:ASN:OD1	2.21	0.73
1:G:239:VAL:HB	1:G:310:TRP:HA	1.71	0.73
2:F:252:THR:H	2:F:304:ASP:HB3	1.52	0.73
2:J:118:VAL:HB	2:J:146:ILE:HA	1.71	0.73
1:K:299:VAL:HG13	1:K:305:VAL:HG22	1.68	0.73
2:L:223:LEU:HA	2:L:227:LEU:HD23	1.71	0.73
1:C:65:SER:HA	1:C:70:PRO:HA	1.69	0.73
1:Q:9:GLY:O	1:Q:13:ARG:N	2.21	0.73
1:Q:213:ALA:HA	1:Q:216:LEU:HB2	1.70	0.73
2:R:87:GLY:N	2:R:113:ALA:O	2.22	0.73
2:P:50:ILE:HG23	2:P:286:ARG:HH11	1.51	0.73
1:G:110:GLN:OE1	1:G:111:ALA:N	2.22	0.73
1:G:178:TYR:HB3	1:G:233:PRO:HA	1.70	0.73
1:G:214:VAL:O	1:G:218:LEU:N	2.22	0.73
1:E:136:ASP:N	1:E:136:ASP:OD1	2.20	0.73
1:K:254:ASP:OD1	1:K:254:ASP:N	2.17	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:110:GLN:OE1	1:Q:111:ALA:N	2.22	0.73
2:R:22:ARG:NH2	2:R:325:ASP:OD1	2.18	0.73
1:I:1:LEU:H	1:I:25:LEU:HA	1.53	0.72
1:I:179:THR:OG1	1:I:181:ASP:OD1	2.08	0.72
2:L:149:ASN:OD1	2:L:150:ALA:N	2.19	0.72
1:Q:306:LYS:NZ	1:O:173:THR:OG1	2.22	0.72
2:P:10:ARG:O	2:P:14:ASN:N	2.15	0.72
2:H:16:LEU:CD1	2:H:45:LEU:HD21	2.19	0.72
2:H:31:VAL:HG22	2:H:74:LYS:CG	2.19	0.72
1:K:181:ASP:OD1	1:K:182:GLN:NE2	2.22	0.72
2:B:175:MET:HA	2:B:244:LEU:HA	1.71	0.72
1:C:348:PHE:O	1:C:352:ASN:N	2.21	0.72
2:D:17:ARG:O	2:D:21:GLY:N	2.19	0.72
2:R:67:SER:HB3	2:R:72:VAL:HG21	1.66	0.72
2:H:22:ARG:NH2	2:H:325:ASP:OD1	2.19	0.72
2:F:251:LYS:NZ	2:F:303:GLY:O	2.21	0.72
1:I:93:ILE:HD13	1:I:117:ILE:HG21	1.71	0.72
2:D:134:GLY:O	2:D:162:LYS:NZ	2.21	0.72
1:Q:129:VAL:N	1:Q:133:ASN:OD1	2.19	0.72
1:Q:194:ARG:HB3	1:Q:204:VAL:HG11	1.70	0.72
2:P:167:LYS:O	2:P:250:LYS:NZ	2.23	0.72
2:P:182:THR:HG23	2:P:185:GLN:HE22	1.54	0.72
2:H:11:ILE:HA	2:H:14:ASN:HB2	1.68	0.72
2:H:205:ILE:HG13	2:H:234:VAL:HA	1.70	0.72
1:I:0:LYS:NZ	1:I:22:ASP:O	2.23	0.72
1:I:176:HIS:HB3	1:I:231:ARG:HA	1.71	0.72
1:K:10:ARG:HA	1:K:13:ARG:HG3	1.70	0.72
2:B:10:ARG:N	3:B:401:NAD:O2A	2.22	0.72
2:D:184:ASP:OD2	2:D:185:GLN:NE2	2.19	0.72
1:O:297:THR:HG23	1:O:307:VAL:HA	1.72	0.72
1:G:236:ASN:OD1	1:G:313:ASN:N	2.19	0.72
1:G:263:ALA:HA	1:G:267:LEU:HB2	1.72	0.72
1:G:293:ASP:OD1	1:G:295:SER:OG	2.07	0.72
1:I:16:LEU:HD22	1:I:44:LEU:HD21	1.71	0.72
1:K:172:MET:HB3	1:K:242:LEU:HA	1.70	0.72
2:L:149:ASN:HD22	2:L:323:VAL:HG22	1.55	0.72
2:D:179:HIS:HB3	2:D:233:ARG:HG2	1.71	0.72
1:Q:15:PHE:O	1:Q:18(A):TRP:N	2.16	0.72
1:Q:135:LYS:O	1:Q:135:LYS:NZ	2.19	0.72
1:O:179:THR:OG1	1:O:181:ASP:OD1	2.06	0.72
1:G:15:PHE:HZ	1:G:322:VAL:HG13	1.55	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:165:LEU:HB3	1:I:248:LYS:HD2	1.72	0.72
1:I:287:ASP:HB3	1:I:319:GLN:HG3	1.71	0.72
1:K:17:ARG:NH1	1:K:44:LEU:O	2.22	0.72
1:C:16:LEU:O	1:C:18(B):HIS:N	2.22	0.72
1:C:172:MET:HB3	1:C:242:LEU:HA	1.72	0.72
1:C:263:ALA:O	1:C:268:LYS:NZ	2.21	0.72
2:H:238:ASN:O	2:H:315:ASN:ND2	2.23	0.72
1:E:209:GLY:O	1:E:213:ALA:N	2.23	0.72
1:I:179:THR:H	1:I:182:GLN:NE2	1.88	0.72
1:K:357:GLU:O	1:E:190:HIS:ND1	2.22	0.72
1:G:89:ILE:HG21	1:G:92:VAL:HG22	1.72	0.72
2:H:130:THR:HG22	2:H:218:LEU:HD22	1.72	0.72
1:E:58:LYS:HA	1:E:58:LYS:HZ2	1.54	0.72
2:F:258:ASN:O	2:F:262:ARG:N	2.23	0.72
1:I:312:ASP:OD2	1:I:315:TRP:N	2.21	0.72
2:J:150:ALA:O	2:J:319:TYR:OH	2.08	0.72
1:A:222:LYS:NZ	1:G:123(A):SER:O	2.20	0.72
2:B:6:ASN:OD1	2:B:33:ASN:ND2	2.22	0.72
2:B:39:LYS:HZ3	2:B:40:GLN:HG3	1.54	0.72
2:B:104:ARG:HH21	2:B:128:ILE:HA	1.54	0.72
2:D:179:HIS:O	2:D:234:VAL:N	2.22	0.72
1:Q:340:ALA:O	1:Q:344:PRO:N	2.22	0.72
1:O:160:VAL:O	1:O:164:GLU:N	2.22	0.72
1:G:10:ARG:HH12	1:G:48:SER:H	1.37	0.72
2:H:35:THR:CB	2:H:79:ARG:NH2	2.48	0.72
1:I:238:SER:HB2	1:I:311:TYR:CE2	2.25	0.72
1:A:259:PHE:O	1:A:263:ALA:N	2.17	0.72
2:B:136:ASN:N	2:B:136:ASN:OD1	2.23	0.72
1:C:160:VAL:HA	1:C:163:GLU:HG2	1.71	0.72
2:H:120:ILE:O	2:H:149:ASN:N	2.21	0.72
2:H:175:MET:HA	2:H:244:LEU:HB2	1.72	0.72
2:H:314:ASP:OD1	2:H:317:TRP:N	2.23	0.72
1:E:129:VAL:HB	1:E:132:VAL:HB	1.70	0.72
1:I:259:PHE:O	1:I:263:ALA:N	2.16	0.72
1:A:204:VAL:O	1:A:206:THR:OG1	2.08	0.72
1:C:137:TYR:O	1:C:331:LYS:NZ	2.19	0.72
2:D:149:ASN:HD22	2:D:323:VAL:HG22	1.54	0.72
2:R:136:ASN:N	2:R:136:ASN:OD1	2.22	0.72
1:G:117:ILE:HD13	1:G:144:ILE:HD11	1.71	0.72
2:H:136:ASN:OD1	2:H:136:ASN:N	2.21	0.72
2:L:208:THR:N	2:L:231:ALA:O	2.22	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:89:ILE:O	1:C:114:LYS:NZ	2.21	0.71
1:Q:171:THR:HG1	1:O:306:LYS:HZ3	1.37	0.71
2:R:15:PHE:HA	2:R:18:CYS:HB2	1.71	0.71
1:O:7:GLY:HA2	1:O:31:ASN:HB3	1.71	0.71
1:O:18:CYS:O	1:O:20:ARG:N	2.22	0.71
1:A:224:LYS:HB3	1:A:224:LYS:HZ3	1.53	0.71
1:C:3:VAL:HG21	1:C:25:LEU:HB3	1.72	0.71
3:C:401:NAD:N7N	3:C:401:NAD:O1N	2.22	0.71
2:D:39:LYS:O	2:D:42:SER:OG	2.06	0.71
1:Q:28:VAL:O	1:Q:72:LYS:N	2.22	0.71
1:Q:178:TYR:HB3	1:Q:233:PRO:HA	1.70	0.71
2:R:187:LEU:HB2	1:O:184:LEU:HB2	1.71	0.71
2:R:205:ILE:HG13	2:R:234:VAL:HA	1.70	0.71
1:O:182:GLN:OE1	1:O:231:ARG:NH1	2.23	0.71
1:G:62:GLU:HB2	1:G:72:LYS:HZ2	1.54	0.71
1:E:238:SER:HB2	1:E:311:TYR:CE2	2.25	0.71
2:F:18:CYS:O	2:F:22:ARG:N	2.23	0.71
2:R:314:ASP:OD1	2:R:317:TRP:N	2.22	0.71
2:J:8:PHE:CZ	2:J:13:ARG:HG3	2.25	0.71
1:K:256:ASN:OD1	1:K:256:ASN:N	2.22	0.71
2:L:320:SER:O	2:L:324:VAL:N	2.18	0.71
1:A:16:LEU:O	1:A:18(B):HIS:N	2.19	0.71
2:B:150:ALA:O	2:B:319:TYR:OH	2.07	0.71
2:B:188:LEU:HA	2:B:200:ALA:HB2	1.71	0.71
2:B:279:PRO:HG2	2:D:195:LEU:HB2	1.72	0.71
1:O:209:GLY:O	1:O:213:ALA:N	2.24	0.71
1:G:127:THR:HG21	1:G:216:LEU:HB3	1.73	0.71
1:G:178:TYR:H	1:G:234:THR:H	1.38	0.71
1:I:164:GLU:OE1	1:I:261:LYS:NZ	2.20	0.71
2:J:166:GLN:OE1	2:J:167:LYS:NZ	2.24	0.71
1:K:31:ASN:ND2	1:K:76:ASN:O	2.22	0.71
1:K:149:CYS:HA	1:K:152:ASN:HB2	1.72	0.71
2:B:43:HIS:HA	2:B:46:LYS:HB3	1.71	0.71
1:C:176:HIS:N	1:C:230:LEU:O	2.22	0.71
1:Q:312:ASP:OD2	1:Q:315:TRP:N	2.22	0.71
2:R:240:SER:N	2:R:315:ASN:OD1	2.24	0.71
1:O:25:LEU:H	1:O:25:LEU:HD13	1.56	0.71
2:P:88:ASP:OD1	2:P:88:ASP:N	2.11	0.71
1:G:213:ALA:HA	1:G:216:LEU:HB2	1.72	0.71
2:F:46:LYS:O	2:F:54:PHE:N	2.22	0.71
2:J:82:VAL:HA	2:J:113:ALA:HB2	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:57:VAL:HA	1:K:66:ILE:HA	1.71	0.71
1:K:234:THR:OG1	1:K:284:ARG:NH2	2.23	0.71
1:C:256:ASN:O	1:C:260:ARG:N	2.16	0.71
1:C:340:ALA:O	1:C:347:ASP:N	2.21	0.71
1:Q:42:HIS:O	2:P:199:ARG:NH2	2.23	0.71
2:R:121:THR:HA	2:R:149:ASN:HB3	1.73	0.71
1:O:136:ASP:OD1	1:O:136:ASP:N	2.20	0.71
1:O:328:VAL:O	1:O:332:TRP:N	2.24	0.71
1:G:66:ILE:N	1:G:69:LYS:O	2.18	0.71
2:H:244:LEU:O	2:H:309:VAL:N	2.23	0.71
2:L:42:SER:HB3	2:L:66:ILE:HD13	1.72	0.71
2:B:86:TRP:NE1	2:B:110:HIS:O	2.24	0.71
1:C:327:LEU:HD11	1:C:331:LYS:HE3	1.71	0.71
1:Q:214:VAL:O	1:Q:218:LEU:N	2.21	0.71
2:R:185:GLN:HG3	2:R:197:ARG:HG2	1.72	0.71
1:E:149:CYS:HB2	1:E:153:CYS:HB3	1.71	0.71
1:I:237:VAL:HG11	1:I:280:SER:HB2	1.72	0.71
1:K:263:ALA:HB2	1:K:271:LEU:HD23	1.72	0.71
1:A:205:PRO:HB2	1:C:296:LEU:HD12	1.73	0.71
2:B:10:ARG:O	2:B:14:ASN:N	2.19	0.71
1:C:19:GLY:O	1:C:21:LYS:NZ	2.22	0.71
1:C:263:ALA:HB2	1:C:271:LEU:HD23	1.73	0.71
2:D:178:THR:OG1	2:D:241:VAL:N	2.20	0.71
1:Q:129:VAL:HB	1:Q:133:ASN:HD21	1.55	0.71
1:Q:346:GLU:O	1:Q:350:LYS:N	2.20	0.71
2:F:172:LYS:NZ	2:F:247:GLN:OE1	2.23	0.71
1:I:8:PHE:O	1:I:13:ARG:NH1	2.24	0.71
2:J:138:GLU:OE1	2:J:139:GLY:N	2.22	0.71
2:B:172:LYS:NZ	2:D:306:MET:SD	2.64	0.71
2:B:210:THR:HG22	2:B:231:ALA:HB2	1.73	0.71
2:D:17:ARG:NH2	2:D:53:THR:O	2.22	0.71
2:D:71:LYS:NZ	2:D:72:VAL:O	2.23	0.71
1:O:36:GLY:O	1:O:39:SER:OG	2.09	0.71
2:P:258:ASN:O	2:P:262:ARG:NH1	2.23	0.71
1:K:4:ALA:HA	1:K:27:VAL:HG13	1.73	0.71
1:Q:78:ASP:OD2	1:Q:81:LYS:NZ	2.20	0.71
1:Q:117:ILE:HD13	1:Q:144:ILE:HD11	1.73	0.71
1:O:116:VAL:HB	1:O:143:ILE:HA	1.72	0.71
2:P:245:VAL:HG22	2:P:308:LYS:HA	1.72	0.71
2:H:252:THR:H	2:H:304:ASP:HB3	1.55	0.71
1:I:10:ARG:HG2	1:I:13:ARG:HH21	1.54	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:31:VAL:HG12	2:L:75:VAL:HA	1.73	0.70
2:D:217:ALA:O	2:D:224:LYS:NZ	2.20	0.70
1:Q:257:ASN:OD1	1:Q:260:ARG:NH1	2.24	0.70
2:F:238:ASN:HD22	2:F:282:SER:HB2	1.56	0.70
2:J:43:HIS:HA	2:J:46:LYS:HB3	1.71	0.70
1:K:65:SER:HA	1:K:70:PRO:HA	1.73	0.70
1:A:190:HIS:HA	1:G:357:GLU:HA	1.74	0.70
1:A:345:LEU:O	1:A:349:CYS:N	2.22	0.70
2:B:40:GLN:HE22	1:O:346:GLU:H	1.38	0.70
2:B:292:SER:HA	2:B:313:TYR:HA	1.72	0.70
1:C:169:LYS:HA	1:C:224:LYS:HG3	1.72	0.70
2:R:175:MET:HA	2:R:244:LEU:HB2	1.72	0.70
1:G:281:VAL:HG21	2:H:49:SER:CB	2.21	0.70
2:H:32:ILE:O	2:H:75:VAL:CB	2.39	0.70
2:F:10:ARG:HH11	2:F:13:ARG:HH11	1.36	0.70
2:F:142:HIS:HD2	2:F:336:ALA:H	1.36	0.70
1:I:179:THR:OG1	1:I:182:GLN:OE1	2.10	0.70
2:J:17:ARG:NH2	2:J:53:THR:O	2.23	0.70
2:D:205:ILE:HG23	2:D:207:PRO:HD3	1.71	0.70
1:Q:149:CYS:SG	1:Q:150:THR:N	2.62	0.70
1:Q:169:LYS:HZ1	1:O:301:GLY:HA3	1.56	0.70
1:Q:306:LYS:HZ3	1:O:228:ILE:H	1.39	0.70
1:O:282:ASP:OD1	1:O:282:ASP:N	2.23	0.70
1:E:139:HIS:HE1	1:E:332:TRP:CD1	2.09	0.70
1:I:299:VAL:HG23	1:I:305:VAL:HG13	1.74	0.70
2:J:210:THR:HG22	2:J:231:ALA:HB2	1.73	0.70
2:J:279:PRO:HG2	2:L:195:LEU:HB2	1.73	0.70
1:K:179:THR:OG1	1:K:231:ARG:NH2	2.25	0.70
2:L:46:LYS:O	2:L:53:THR:OG1	2.06	0.70
2:B:50:ILE:HD11	2:B:237:PRO:HB2	1.73	0.70
2:R:47:TYR:HB2	1:O:197:ARG:HH12	1.54	0.70
2:R:120:ILE:O	2:R:149:ASN:N	2.22	0.70
2:R:142:HIS:HE1	2:R:334:TRP:CE3	2.09	0.70
2:P:176:THR:O	2:P:243:ASP:N	2.24	0.70
1:G:18:CYS:O	1:G:20:ARG:N	2.23	0.70
1:G:326:ASP:O	1:G:330:ASN:ND2	2.24	0.70
1:I:135:LYS:O	1:I:135:LYS:NZ	2.19	0.70
2:J:136:ASN:N	2:J:136:ASN:OD1	2.24	0.70
2:J:173:GLY:N	2:J:226:LYS:O	2.25	0.70
1:A:181:ASP:OD2	1:A:231:ARG:NH1	2.23	0.70
2:B:333:LYS:O	2:B:335:GLN:NE2	2.25	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:29:VAL:HG11	1:C:87:LEU:HD13	1.72	0.70
1:C:234:THR:OG1	1:C:284:ARG:NH2	2.25	0.70
1:Q:239:VAL:HB	1:Q:310:TRP:HA	1.72	0.70
2:R:14:ASN:O	2:R:18:CYS:N	2.20	0.70
2:R:46:LYS:O	2:R:53:THR:OG1	2.07	0.70
1:O:236:ASN:ND2	1:O:312:ASP:OD2	2.24	0.70
1:O:320:ARG:NE	1:O:323:ASP:OD2	2.22	0.70
2:H:90:GLY:O	2:H:116:LYS:NZ	2.25	0.70
2:F:258:ASN:O	2:F:262:ARG:NH1	2.23	0.70
2:J:282:SER:OG	2:J:286:ARG:NH2	2.25	0.70
2:J:292:SER:HA	2:J:313:TYR:HA	1.74	0.70
2:L:220:LEU:O	2:L:224:LYS:NZ	2.19	0.70
2:B:138:GLU:OE1	2:B:139:GLY:N	2.22	0.70
1:C:254:ASP:OD1	1:C:254:ASP:N	2.17	0.70
2:D:68:VAL:HG13	2:D:71:LYS:HB3	1.74	0.70
1:Q:118:ILE:HB	1:Q:145:SER:HA	1.73	0.70
1:Q:298:MET:O	1:Q:306:LYS:N	2.24	0.70
2:R:8:PHE:O	2:R:13:ARG:NH1	2.24	0.70
1:O:1:LEU:HB2	1:O:25:LEU:HB3	1.73	0.70
3:P:401:NAD:H2N	3:P:401:NAD:H52N	1.74	0.70
2:H:46:LYS:HE2	2:H:57:ASP:HB2	1.72	0.70
1:E:115:LYS:NZ	1:E:139(A):ASP:OD1	2.20	0.70
1:E:291:THR:O	1:E:310:TRP:N	2.23	0.70
2:F:142:HIS:CD2	2:F:335:GLN:H	2.08	0.70
2:J:6:ASN:HA	2:J:33:ASN:HB3	1.74	0.70
2:J:6:ASN:OD1	2:J:33:ASN:ND2	2.25	0.70
1:A:136:ASP:OD1	1:A:136:ASP:N	2.19	0.70
1:C:66:ILE:HB	1:C:69:LYS:HB2	1.73	0.70
2:R:258:ASN:O	2:R:262:ARG:N	2.22	0.70
1:O:78:ASP:OD2	1:O:81:LYS:NZ	2.25	0.70
1:O:243:VAL:HG12	1:O:304:MET:HB3	1.73	0.70
1:K:176:HIS:N	1:K:230:LEU:O	2.24	0.70
2:L:164:LEU:O	2:L:168:PHE:N	2.25	0.70
2:B:221:PRO:HA	2:B:224:LYS:HE2	1.71	0.70
1:C:171:THR:OG1	1:C:172:MET:N	2.23	0.70
2:R:130:THR:HG22	2:R:218:LEU:HD22	1.73	0.70
2:R:162:LYS:O	2:R:166:GLN:N	2.24	0.70
2:R:165:ASP:OD2	2:R:222:ASN:ND2	2.24	0.70
1:G:78:ASP:OD2	1:G:81:LYS:NZ	2.19	0.70
2:H:105:ASP:O	2:H:109:LYS:N	2.17	0.70
2:H:182:THR:N	2:H:185:GLN:OE1	2.24	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:222:LYS:NZ	1:Q:123(A):SER:O	2.20	0.70
2:J:176:THR:HG22	2:J:177:THR:H	1.56	0.70
2:L:205:ILE:HG23	2:L:207:PRO:HD3	1.73	0.70
2:B:82:VAL:HA	2:B:113:ALA:HB2	1.74	0.70
1:C:272:ASP:N	1:C:290:SER:O	2.24	0.70
1:Q:179:THR:OG1	1:Q:181:ASP:OD1	2.09	0.70
1:Q:273:VAL:HG22	1:Q:292:ILE:HB	1.73	0.70
1:O:42:HIS:O	1:O:46:TYR:N	2.20	0.70
1:O:160:VAL:HG21	1:O:267:LEU:HD11	1.73	0.70
2:P:22:ARG:NH1	2:P:328:ASP:OD2	2.25	0.70
2:H:50:ILE:HD13	2:H:238:ASN:ND2	2.06	0.70
2:F:167:LYS:O	2:F:250:LYS:NZ	2.23	0.70
2:J:333:LYS:O	2:J:335:GLN:NE2	2.24	0.70
1:K:272:ASP:N	1:K:290:SER:O	2.23	0.70
2:L:46:LYS:NZ	2:L:53:THR:OG1	2.22	0.70
2:D:88:ASP:OD1	2:D:88:ASP:N	2.20	0.70
1:Q:178:TYR:H	1:Q:234:THR:H	1.38	0.70
2:R:86:TRP:CD1	2:R:113:ALA:HB3	2.27	0.70
1:O:129:VAL:H	1:O:133:ASN:HD21	1.38	0.70
1:G:60:ILE:HG13	1:G:65:SER:HB3	1.72	0.70
2:H:149:ASN:OD1	2:H:150:ALA:N	2.24	0.70
1:K:242:LEU:HB3	1:K:307:VAL:HB	1.73	0.69
1:A:47:ASP:OD1	1:A:51:GLY:N	2.25	0.69
2:B:6:ASN:HA	2:B:33:ASN:HB3	1.74	0.69
1:C:101:ASP:OD1	1:C:104:GLY:N	2.25	0.69
1:C:256:ASN:OD1	1:C:256:ASN:N	2.23	0.69
2:D:30:VAL:HA	2:D:73:ILE:HG12	1.72	0.69
2:P:216:VAL:HG22	2:P:223:LEU:HB3	1.73	0.69
1:E:139:HIS:HE1	1:E:332:TRP:HD1	1.39	0.69
2:J:152:CYS:O	2:J:156:CYS:N	2.24	0.69
1:K:246:ILE:H	1:K:303:ASP:HA	1.58	0.69
1:K:312:ASP:CG	1:K:316:GLY:H	1.99	0.69
2:L:132:VAL:H	2:L:136:ASN:HB2	1.57	0.69
2:L:252:THR:OG1	2:L:253:PHE:N	2.25	0.69
1:A:32:ASP:HB3	1:A:73:VAL:HG13	1.74	0.69
2:D:150:ALA:O	2:D:319:TYR:OH	2.10	0.69
2:P:180:SER:HA	2:P:236:THR:HG22	1.74	0.69
1:E:160:VAL:HG12	1:E:164:GLU:HG3	1.73	0.69
2:F:89:MET:SD	2:F:89:MET:N	2.65	0.69
1:I:181:ASP:O	1:I:195:ARG:NH1	2.25	0.69
2:L:98:THR:HA	3:L:401:NAD:H52A	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:275:VAL:HA	2:L:294:ILE:H	1.56	0.69
2:D:39:LYS:HD2	2:D:40:GLN:H	1.55	0.69
2:D:46:LYS:O	2:D:53:THR:OG1	2.08	0.69
2:D:204:ASN:N	2:D:204:ASN:OD1	2.26	0.69
2:D:220:LEU:O	2:D:224:LYS:NZ	2.20	0.69
1:Q:324:LEU:O	1:Q:328:VAL:N	2.21	0.69
2:P:89:MET:N	2:P:89:MET:SD	2.65	0.69
2:P:178:THR:OG1	2:P:241:VAL:N	2.24	0.69
1:G:205:PRO:HA	1:G:230:LEU:HA	1.74	0.69
2:H:121:THR:HA	2:H:149:ASN:HB3	1.74	0.69
2:F:142:HIS:HB2	2:F:333:LYS:HE2	1.74	0.69
2:J:266:ASP:O	2:J:270:LYS:NZ	2.24	0.69
1:K:47:ASP:OD1	1:K:51:GLY:N	2.26	0.69
1:A:194:ARG:NH2	1:C:278:LEU:O	2.25	0.69
2:D:207:PRO:HA	2:D:232:LEU:HA	1.75	0.69
1:Q:190:HIS:CD2	1:Q:195:ARG:HB2	2.27	0.69
2:R:315:ASN:OD1	2:R:315:ASN:N	2.20	0.69
1:O:236:ASN:HD21	1:O:315:TRP:H	1.41	0.69
2:H:179:HIS:HB3	2:H:233:ARG:HA	1.75	0.69
1:E:184:LEU:HG	1:E:185:LEU:HG	1.73	0.69
1:I:58:LYS:HG3	1:I:60:ILE:HG12	1.75	0.69
1:I:192:ASP:O	2:L:40:GLN:NE2	2.25	0.69
2:J:30:VAL:O	2:J:74:LYS:N	2.22	0.69
2:B:18:CYS:O	2:B:22:ARG:N	2.26	0.69
2:B:166:GLN:OE1	2:B:167:LYS:NZ	2.26	0.69
1:Q:218:LEU:HB3	1:Q:221:LEU:HB2	1.74	0.69
1:O:241:ASP:OD1	1:O:307:VAL:N	2.24	0.69
2:P:276:CYS:SG	2:P:277:ASP:N	2.65	0.69
1:E:42:HIS:O	1:E:46:TYR:N	2.18	0.69
1:E:271:LEU:HD23	1:E:292:ILE:HD11	1.74	0.69
2:F:180:SER:HA	2:F:236:THR:HG22	1.73	0.69
1:I:304:MET:HB3	1:K:169:LYS:HZ2	1.56	0.69
2:J:31:VAL:HG13	2:J:74:LYS:HB2	1.73	0.69
1:K:162:ASP:O	1:K:166:GLY:N	2.25	0.69
1:A:329:ALA:HA	1:A:332:TRP:HB2	1.74	0.69
2:D:171:ILE:HD12	2:D:247:GLN:HG2	1.73	0.69
2:D:252:THR:OG1	2:D:253:PHE:N	2.25	0.69
2:J:10:ARG:HA	2:J:13:ARG:HB2	1.73	0.69
1:K:312:ASP:OD1	1:K:316:GLY:N	2.26	0.69
2:L:20:HIS:CE1	2:L:69:ASP:OD1	2.45	0.69
2:L:134:GLY:O	2:L:162:LYS:NZ	2.20	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3:VAL:N	1:A:26:ASP:O	2.25	0.69
1:A:169:LYS:HE3	1:C:304:MET:HB2	1.74	0.69
3:C:401:NAD:H2N	3:C:401:NAD:O5D	1.92	0.69
2:D:216:VAL:HG23	2:D:220:LEU:HD12	1.73	0.69
2:R:174:THR:HG21	2:P:245:VAL:HG11	1.73	0.69
1:G:218:LEU:HB3	1:G:221:LEU:HB2	1.75	0.69
1:E:256:ASN:HA	1:E:259:PHE:HB2	1.73	0.69
2:F:137:GLU:OE1	2:F:137:GLU:N	2.26	0.69
1:I:79:PRO:HG2	1:I:108:HIS:CD2	2.28	0.69
1:I:204:VAL:O	1:I:206:THR:OG1	2.09	0.69
1:I:315:TRP:O	1:I:318:SER:OG	2.09	0.69
2:J:105:ASP:OD2	2:J:109:LYS:NZ	2.25	0.69
2:J:175:MET:HA	2:J:244:LEU:HA	1.74	0.69
2:B:31:VAL:HG13	2:B:74:LYS:HB2	1.74	0.69
1:C:359:LYS:HA	1:O:191:ARG:HG2	1.75	0.69
2:D:30:VAL:O	2:D:74:LYS:N	2.26	0.69
2:D:60:THR:HB	2:D:66:ILE:HG23	1.75	0.69
2:D:164:LEU:O	2:D:168:PHE:N	2.25	0.69
1:Q:0:LYS:N	1:Q:24:PRO:O	2.25	0.69
1:Q:328:VAL:HA	1:Q:331:LYS:HB2	1.74	0.69
2:R:80:ASN:HD21	2:R:82:VAL:HB	1.57	0.69
1:O:6:ASN:N	1:O:93:ILE:O	2.22	0.69
2:P:41:ALA:HA	2:P:44:LEU:HD12	1.73	0.69
2:P:142:HIS:HB2	2:P:333:LYS:HE2	1.72	0.69
2:P:160:PHE:HB2	2:P:261:PHE:HE2	1.55	0.69
1:G:42:HIS:O	2:F:199:ARG:NH2	2.24	0.69
1:G:148:SER:HG	1:G:150:THR:HG1	1.40	0.69
2:H:15:PHE:HA	2:H:18:CYS:HB2	1.73	0.69
2:H:165:ASP:OD2	2:H:222:ASN:ND2	2.25	0.69
1:E:166:GLY:O	1:E:247:GLU:N	2.23	0.69
2:F:211:GLY:O	2:F:215:ALA:N	2.26	0.69
1:I:134:GLU:OE1	1:I:135:LYS:N	2.22	0.69
1:I:161:LEU:O	1:I:166:GLY:N	2.24	0.69
1:K:259:PHE:O	1:K:263:ALA:N	2.19	0.69
1:Q:236:ASN:OD1	1:Q:313:ASN:N	2.22	0.69
1:O:149:CYS:HB2	1:O:153:CYS:HB3	1.74	0.69
1:O:169:LYS:HA	1:O:224:LYS:HB3	1.75	0.69
2:P:6:ASN:O	2:P:97:GLY:N	2.22	0.69
1:G:115:LYS:HA	1:G:142:ASN:HB3	1.74	0.69
2:H:31:VAL:CG2	2:H:74:LYS:CG	2.71	0.69
2:H:239:VAL:HG22	2:H:314:ASP:HA	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:25:LEU:HD22	1:E:25:LEU:H	1.57	0.69
1:E:129:VAL:H	1:E:133:ASN:ND2	1.91	0.69
1:E:292:ILE:HA	1:E:309:ALA:HA	1.75	0.69
2:F:22:ARG:NH1	2:F:328:ASP:OD2	2.25	0.69
2:F:281:VAL:O	2:F:284:ASP:N	2.26	0.69
1:I:84:TRP:HB3	1:I:89:ILE:HB	1.75	0.69
1:I:194:ARG:NH2	1:K:278:LEU:O	2.26	0.69
2:J:129:PRO:HD2	2:J:147:ILE:HA	1.74	0.69
2:J:132:VAL:O	2:J:137:GLU:N	2.26	0.69
2:J:283:ILE:HA	2:J:286:ARG:HE	1.57	0.69
1:A:37:VAL:O	1:A:41:THR:N	2.16	0.69
1:A:58:LYS:HG3	1:A:60:ILE:HG12	1.75	0.69
2:B:42:SER:O	2:B:46:LYS:N	2.19	0.69
2:B:151:SER:OG	2:B:153:THR:OG1	2.10	0.69
1:Q:179:THR:O	1:Q:182:GLN:NE2	2.26	0.69
1:Q:253:GLU:OE1	1:Q:256:ASN:ND2	2.26	0.69
2:P:19:TRP:HH2	2:P:68:VAL:HG22	1.58	0.69
2:H:34:ASP:CB	2:H:75:VAL:CG2	2.71	0.69
2:H:162:LYS:O	2:H:166:GLN:N	2.24	0.69
2:H:240:SER:N	2:H:315:ASN:OD1	2.24	0.69
1:K:16:LEU:HA	1:K:18(A):TRP:HB3	1.75	0.68
2:B:105:ASP:OD2	2:B:109:LYS:NZ	2.26	0.68
2:B:289:ASP:OD1	2:B:317:TRP:NE1	2.26	0.68
2:D:320:SER:O	2:D:324:VAL:N	2.18	0.68
1:Q:13:ARG:HD3	1:Q:43:LEU:HB3	1.75	0.68
2:H:81:PRO:HB2	2:H:109:LYS:HB3	1.73	0.68
2:H:185:GLN:HG3	2:H:197:ARG:HG2	1.74	0.68
1:I:329:ALA:HA	1:I:332:TRP:HB2	1.73	0.68
1:K:29:VAL:HG11	1:K:87:LEU:HD13	1.74	0.68
1:K:160:VAL:HA	1:K:163:GLU:HG2	1.75	0.68
1:K:175:THR:HB	1:K:232:VAL:HG21	1.75	0.68
1:K:359:LYS:O	1:E:195:ARG:NH1	2.26	0.68
2:L:43:HIS:O	2:L:47:TYR:N	2.26	0.68
1:C:176:HIS:HB3	1:C:231:ARG:HD2	1.74	0.68
2:D:322:ARG:NE	2:D:325:ASP:OD2	2.26	0.68
2:R:58:VAL:HB	2:R:68:VAL:HB	1.75	0.68
1:O:148:SER:O	1:O:152:ASN:N	2.22	0.68
1:O:165:LEU:HA	1:O:248:LYS:HD2	1.74	0.68
1:O:178:TYR:HD2	1:O:233:PRO:HA	1.57	0.68
2:P:59:LYS:HA	2:P:59:LYS:NZ	2.08	0.68
1:G:161:LEU:O	1:G:165:LEU:N	2.23	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:238:SER:N	1:G:313:ASN:OD1	2.26	0.68
1:E:263:ALA:HA	1:E:267:LEU:HB2	1.75	0.68
2:F:217:ALA:HB2	2:F:224:LYS:HB3	1.74	0.68
1:I:160:VAL:O	1:I:164:GLU:N	2.26	0.68
1:K:20:ARG:HA	1:K:21:LYS:HZ3	1.58	0.68
1:K:299:VAL:HA	1:K:305:VAL:HA	1.75	0.68
1:Q:157:PHE:HA	1:Q:271:LEU:HD21	1.76	0.68
2:R:239:VAL:HG22	2:R:314:ASP:HA	1.75	0.68
1:O:2:LYS:HB3	1:O:89:ILE:HD13	1.74	0.68
1:O:256:ASN:HA	1:O:259:PHE:HB2	1.76	0.68
1:G:194:ARG:HB3	1:G:204:VAL:HG11	1.74	0.68
2:F:6:ASN:O	2:F:97:GLY:N	2.23	0.68
2:L:20:HIS:HE2	2:L:69:ASP:CG	2.00	0.68
1:A:312:ASP:OD2	1:A:315:TRP:N	2.25	0.68
1:C:58:LYS:HB3	1:C:65:SER:HB3	1.75	0.68
1:Q:62:GLU:OE1	1:Q:72:LYS:NZ	2.25	0.68
1:Q:147:ALA:O	1:Q:317:TYR:OH	2.10	0.68
1:O:267:LEU:HB3	1:O:271:LEU:HD13	1.76	0.68
2:P:251:LYS:NZ	2:P:303:GLY:O	2.21	0.68
2:H:142:HIS:HE1	2:H:334:TRP:CE3	2.12	0.68
2:F:222:ASN:O	2:F:226:LYS:NZ	2.25	0.68
1:I:362:GLU:H	1:Q:195:ARG:NH1	1.91	0.68
2:J:293:THR:HB	2:J:312:TRP:HB2	1.75	0.68
1:K:6:ASN:O	1:K:95:GLY:N	2.27	0.68
2:B:152:CYS:O	2:B:156:CYS:N	2.25	0.68
2:B:189:ASP:OD2	1:C:10:ARG:NH1	2.25	0.68
1:C:300:MET:N	1:C:304:MET:O	2.23	0.68
2:R:173:GLY:HA3	2:R:227:LEU:HD13	1.75	0.68
2:H:31:VAL:CG2	2:H:74:LYS:HZ2	2.06	0.68
1:E:6:ASN:HB3	1:E:94:GLU:HA	1.76	0.68
1:E:256:ASN:HB2	1:E:260:ARG:HH21	1.56	0.68
2:F:38:VAL:CG2	2:F:63:ASP:OD2	2.40	0.68
1:I:3:VAL:N	1:I:26:ASP:O	2.27	0.68
2:J:142:HIS:HB2	2:J:333:LYS:HE2	1.74	0.68
2:L:33:ASN:HA	2:L:76:VAL:O	1.94	0.68
2:L:216:VAL:HG23	2:L:220:LEU:HD12	1.73	0.68
1:A:160:VAL:O	1:A:164:GLU:N	2.24	0.68
1:A:191:ARG:NH2	1:G:358:CYS:O	2.25	0.68
1:A:354:ALA:HB1	1:G:77:ARG:HH21	1.58	0.68
2:B:188:LEU:HD22	1:C:180:GLY:H	1.58	0.68
1:C:190:HIS:HA	1:O:358:CYS:HA	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:194:ARG:HD2	1:C:205:PRO:HD2	1.75	0.68
2:R:60:THR:HB	2:R:66:ILE:HA	1.76	0.68
2:F:48:ASP:OD2	2:F:51:LEU:N	2.25	0.68
2:F:50:ILE:HG23	2:F:286:ARG:HH11	1.58	0.68
1:K:261:LYS:O	1:K:265:GLY:N	2.27	0.68
2:L:29:VAL:O	2:L:73:ILE:CG2	2.41	0.68
2:B:132:VAL:O	2:B:137:GLU:N	2.26	0.68
1:O:1:LEU:H	1:O:25:LEU:HA	1.58	0.68
2:P:222:ASN:O	2:P:226:LYS:NZ	2.26	0.68
2:P:321:GLN:O	2:P:325:ASP:N	2.18	0.68
1:G:162:ASP:O	1:G:166:GLY:N	2.27	0.68
1:G:281:VAL:HG21	2:H:49:SER:HB3	1.74	0.68
1:G:306:LYS:HZ3	1:E:227:GLY:HA2	1.59	0.68
2:H:31:VAL:HG21	2:H:74:LYS:HD2	1.76	0.68
1:E:32:ASP:N	1:E:74:VAL:O	2.26	0.68
1:I:90:ASP:HA	1:I:114:LYS:HG2	1.75	0.68
2:L:289:ASP:O	2:L:322:ARG:NH1	2.27	0.68
2:B:129:PRO:HD2	2:B:147:ILE:HA	1.75	0.68
1:C:361:TYR:O	1:O:195:ARG:NH1	2.21	0.68
1:O:84:TRP:O	1:O:88:GLY:N	2.26	0.68
2:P:18:CYS:O	2:P:22:ARG:N	2.20	0.68
1:I:203:ILE:HG13	1:I:232:VAL:HA	1.74	0.68
1:K:78:ASP:OD2	1:K:81:LYS:NZ	2.22	0.68
2:L:106:GLY:HA2	2:L:109:LYS:HZ3	1.59	0.68
1:A:17:ARG:O	1:A:19:GLY:N	2.24	0.68
2:B:17:ARG:NH2	2:B:53:THR:O	2.27	0.68
1:Q:162:ASP:O	1:Q:166:GLY:N	2.27	0.68
2:R:123:PRO:O	2:R:125:LYS:NZ	2.26	0.68
2:R:244:LEU:O	2:R:309:VAL:N	2.23	0.68
1:G:60:ILE:HG22	1:G:60(A):ASP:H	1.59	0.68
1:G:206:THR:N	1:G:229:ALA:O	2.27	0.68
1:E:165:LEU:HA	1:E:248:LYS:HD2	1.76	0.68
2:F:276:CYS:SG	2:F:277:ASP:N	2.65	0.68
1:I:245:ASN:ND2	1:K:304:MET:SD	2.67	0.68
2:J:171:ILE:HD12	2:J:247:GLN:HG2	1.76	0.68
1:K:30:VAL:H	1:K:73:VAL:HA	1.58	0.68
1:A:168:VAL:O	1:A:224:LYS:NZ	2.21	0.68
2:B:176:THR:HG22	2:B:177:THR:H	1.57	0.68
2:B:299:THR:HG22	2:B:309:VAL:HA	1.75	0.68
1:C:6:ASN:O	1:C:95:GLY:N	2.27	0.68
1:C:130:VAL:HG21	1:C:323:ASP:HB2	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:6:ASN:OD1	2:P:7:GLY:N	2.27	0.68
2:P:92:ASP:O	2:P:117:LYS:N	2.27	0.68
1:G:253:GLU:OE2	1:G:260:ARG:NH2	2.25	0.68
1:I:1:LEU:O	1:I:26:ASP:N	2.27	0.67
2:J:157:LEU:HD21	2:J:212:ALA:HB1	1.75	0.67
2:L:184:ASP:O	2:L:186:ARG:NH1	2.27	0.67
2:B:157:LEU:HD21	2:B:212:ALA:HB1	1.76	0.67
2:B:253:PHE:HE2	2:B:255:GLU:HB3	1.59	0.67
1:C:4:ALA:HA	1:C:27:VAL:HG13	1.75	0.67
1:C:236:ASN:ND2	1:C:312:ASP:OD2	2.28	0.67
1:Q:4:ALA:HA	1:Q:27:VAL:HG13	1.75	0.67
1:Q:306:LYS:HE2	1:O:228:ILE:HG23	1.76	0.67
1:O:134:GLU:OE1	1:O:134:GLU:N	2.23	0.67
2:P:258:ASN:O	2:P:262:ARG:N	2.25	0.67
1:G:257:ASN:OD1	1:G:260:ARG:NH1	2.26	0.67
2:F:17:ARG:NH2	2:F:53:THR:O	2.27	0.67
1:I:274:CYS:N	1:I:292:ILE:O	2.27	0.67
2:J:86:TRP:NE1	2:J:110:HIS:O	2.27	0.67
2:J:160:PHE:O	2:J:164:LEU:N	2.25	0.67
2:J:255:GLU:OE2	2:J:262:ARG:NH1	2.23	0.67
1:A:135:LYS:NZ	1:A:137:TYR:O	2.27	0.67
2:B:26:PRO:HB2	2:B:331:ALA:HB1	1.76	0.67
2:B:66:ILE:N	2:B:73:ILE:O	2.28	0.67
1:C:242:LEU:HB3	1:C:307:VAL:HB	1.76	0.67
2:D:30:VAL:HG23	2:D:31:VAL:HG23	1.76	0.67
2:D:39:LYS:NZ	1:G:342:GLY:O	2.27	0.67
1:Q:42:HIS:CD2	2:P:195:LEU:HB3	2.29	0.67
2:P:137:GLU:OE1	2:P:137:GLU:N	2.26	0.67
2:P:211:GLY:O	2:P:215:ALA:N	2.26	0.67
1:G:179:THR:N	1:G:182:GLN:OE1	2.26	0.67
1:G:198:ALA:HB3	1:G:201:LEU:HD11	1.74	0.67
2:H:187:LEU:HD23	1:E:180:GLY:HA2	1.74	0.67
1:E:121:PRO:HG3	1:E:148:SER:H	1.59	0.67
1:E:183:ARG:NH2	1:E:188:SER:O	2.26	0.67
1:E:253:GLU:O	1:E:260:ARG:NH2	2.27	0.67
1:E:297:THR:OG1	1:E:308:VAL:N	2.25	0.67
2:B:154:THR:HG23	2:B:212:ALA:HA	1.74	0.67
1:C:319:GLN:O	1:C:319:GLN:NE2	2.28	0.67
1:Q:41:THR:O	1:Q:45:LYS:N	2.25	0.67
2:R:17:ARG:NH1	2:R:52:GLY:O	2.25	0.67
2:R:149:ASN:OD1	2:R:150:ALA:N	2.27	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:162:LYS:HB2	2:R:220:LEU:HD11	1.76	0.67
2:P:179:HIS:O	2:P:234:VAL:N	2.15	0.67
1:G:226:ASN:HD22	1:E:300:MET:HA	1.59	0.67
1:I:46:TYR:O	2:L:199:ARG:NH1	2.27	0.67
1:A:41:THR:O	1:A:45:LYS:N	2.22	0.67
1:C:168:VAL:HG12	1:C:169:LYS:HG3	1.76	0.67
1:O:261:LYS:O	1:O:265:GLY:N	2.28	0.67
1:E:299:VAL:HG12	1:E:305:VAL:HA	1.75	0.67
2:F:31:VAL:HG21	2:F:89:MET:HE3	1.76	0.67
2:F:90:GLY:O	2:F:116:LYS:NZ	2.26	0.67
2:L:32:ILE:O	2:L:75:VAL:CA	2.42	0.67
1:A:108:HIS:N	1:A:108:HIS:CD2	2.61	0.67
2:B:140:TYR:OH	2:B:142:HIS:ND1	2.27	0.67
2:B:182:THR:OG1	2:B:185:GLN:NE2	2.28	0.67
1:C:13:ARG:NH2	1:C:46:TYR:O	2.28	0.67
1:C:258:ALA:O	1:C:262:ALA:N	2.25	0.67
2:P:3:VAL:HG22	2:P:93:LEU:HB3	1.76	0.67
1:G:13:ARG:HD3	1:G:43:LEU:HB3	1.77	0.67
2:F:238:ASN:O	2:F:315:ASN:ND2	2.27	0.67
2:J:154:THR:HG23	2:J:212:ALA:HA	1.77	0.67
2:L:109:LYS:HA	2:L:112:GLN:HB2	1.76	0.67
2:L:210:THR:HG23	2:L:213:ALA:H	1.60	0.67
1:A:235:PRO:HG2	1:A:284:ARG:HH12	1.59	0.67
1:A:315:TRP:O	1:A:318:SER:OG	2.09	0.67
2:B:142:HIS:CE1	2:B:334:TRP:HA	2.29	0.67
1:C:177:SER:HA	1:C:234:THR:HG23	1.76	0.67
1:Q:41:THR:HG21	1:Q:59:ILE:HG12	1.77	0.67
2:R:6:ASN:HA	2:R:33:ASN:HB3	1.77	0.67
2:P:46:LYS:O	2:P:54:PHE:N	2.23	0.67
2:H:258:ASN:O	2:H:262:ARG:N	2.22	0.67
2:F:176:THR:O	2:F:243:ASP:N	2.23	0.67
1:K:212:LYS:HA	1:K:225:LEU:HD12	1.76	0.67
1:A:135:LYS:NZ	1:A:135:LYS:O	2.19	0.67
2:B:30:VAL:O	2:B:74:LYS:N	2.24	0.67
2:B:274:SER:HB3	2:B:290:VAL:HG11	1.75	0.67
1:C:98:VAL:HG13	1:O:354:ALA:HB3	1.76	0.67
1:Q:161:LEU:O	1:Q:165:LEU:N	2.26	0.67
1:G:315:TRP:O	1:G:318:SER:OG	2.13	0.67
2:F:157:LEU:HD21	2:F:212:ALA:HB1	1.76	0.67
2:F:178:THR:OG1	2:F:241:VAL:N	2.27	0.67
2:J:10:ARG:N	3:J:401:NAD:O2A	2.28	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:142:HIS:CE1	2:J:334:TRP:HA	2.29	0.67
2:J:184:ASP:OD2	2:J:184:ASP:N	2.26	0.67
1:A:161:LEU:O	1:A:166:GLY:N	2.14	0.67
1:C:78:ASP:OD2	1:C:81:LYS:NZ	2.21	0.67
2:D:222:ASN:O	2:D:226:LYS:NZ	2.26	0.67
2:D:259:ALA:HA	2:D:262:ARG:HD2	1.75	0.67
1:O:31:ASN:ND2	1:O:76:ASN:O	2.27	0.67
2:P:272:ILE:O	2:P:322:ARG:NH1	2.28	0.67
2:P:281:VAL:O	2:P:284:ASP:N	2.26	0.67
1:G:332:TRP:CG	1:G:333:PRO:HD2	2.29	0.67
2:H:206:VAL:N	2:H:233:ARG:O	2.24	0.67
2:H:230:ILE:HG12	2:F:308:LYS:HZ3	1.60	0.67
1:E:256:ASN:O	1:E:260:ARG:N	2.22	0.67
1:I:41:THR:O	1:I:45:LYS:N	2.22	0.67
1:I:47:ASP:OD1	1:I:51:GLY:N	2.28	0.67
1:I:118:ILE:HD11	1:I:143:ILE:HG22	1.77	0.67
1:K:345:LEU:O	1:K:349:CYS:N	2.28	0.67
2:L:32:ILE:HG22	2:L:75:VAL:HG21	1.70	0.67
2:L:32:ILE:HG23	2:L:75:VAL:HG23	1.70	0.67
2:L:153:THR:OG1	2:L:154:THR:N	2.26	0.67
1:A:81:LYS:HE3	1:A:81:LYS:H	1.59	0.67
2:D:140:TYR:OH	2:D:332:ASN:O	2.08	0.67
2:R:276:CYS:SG	2:R:277:ASP:N	2.68	0.67
2:P:6:ASN:HB3	2:P:96:GLU:HA	1.77	0.67
2:P:7:GLY:H	2:P:33:ASN:HD22	1.41	0.67
2:P:9:GLY:O	2:P:13:ARG:N	2.19	0.67
1:G:149:CYS:SG	1:G:150:THR:N	2.67	0.67
1:G:182:GLN:HG3	1:G:195:ARG:HH12	1.59	0.67
1:G:186:ASP:OD1	1:G:198:ALA:N	2.26	0.67
1:E:316:GLY:O	1:E:320:ARG:NH1	2.27	0.67
2:F:272:ILE:O	2:F:322:ARG:NH1	2.27	0.67
1:I:128:TYR:HB3	1:I:134:GLU:HA	1.77	0.67
1:I:316:GLY:O	1:I:320:ARG:HG2	1.95	0.67
2:J:65:ALA:HA	2:J:74:LYS:HA	1.75	0.67
2:J:173:GLY:HA3	2:J:227:LEU:HD13	1.76	0.67
1:K:270:VAL:O	1:K:290:SER:N	2.28	0.67
1:K:292:ILE:HA	1:K:309:ALA:HA	1.75	0.67
1:A:1:LEU:O	1:A:26:ASP:N	2.27	0.67
1:Q:270:VAL:HG13	1:Q:289:SER:HB2	1.77	0.67
2:R:88:ASP:OD1	2:R:88:ASP:N	2.23	0.67
1:O:28:VAL:O	1:O:72:LYS:N	2.25	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:173:GLY:O	2:P:228:ASN:N	2.28	0.67
1:G:256:ASN:ND2	1:G:294:SER:HB2	2.10	0.67
2:F:175:MET:SD	2:F:175:MET:N	2.67	0.67
1:I:37:VAL:HG22	1:I:73:VAL:HG21	1.77	0.66
1:K:62:GLU:O	1:K:73:VAL:N	2.28	0.66
2:B:160:PHE:O	2:B:164:LEU:N	2.26	0.66
2:B:328:ASP:O	2:B:332:ASN:N	2.18	0.66
1:C:18:CYS:O	1:C:20:ARG:N	2.28	0.66
1:C:192:ASP:O	1:C:196:ALA:N	2.28	0.66
1:C:261:LYS:O	1:C:265:GLY:N	2.27	0.66
1:C:274:CYS:N	1:C:292:ILE:O	2.27	0.66
1:Q:25:LEU:HD13	1:Q:25:LEU:H	1.60	0.66
1:Q:281:VAL:HG11	2:R:49:SER:HA	1.77	0.66
1:O:10:ARG:NH2	1:O:314:GLU:OE1	2.25	0.66
2:P:34:ASP:O	2:P:77:SER:OG	2.12	0.66
1:E:312:ASP:OD1	1:E:316:GLY:N	2.28	0.66
2:F:46:LYS:HA	2:F:58:VAL:HG11	1.77	0.66
2:J:87:GLY:N	2:J:113:ALA:O	2.27	0.66
1:A:60:ILE:H	1:A:64:PHE:HA	1.60	0.66
1:A:152:ASN:HD22	1:A:152:ASN:N	1.94	0.66
2:D:213:ALA:O	2:D:228:ASN:ND2	2.28	0.66
1:Q:18:CYS:O	1:Q:20:ARG:N	2.28	0.66
2:R:182:THR:N	2:R:185:GLN:OE1	2.24	0.66
1:O:32:ASP:N	1:O:74:VAL:O	2.27	0.66
1:O:132:VAL:HG13	1:O:159:LYS:HD2	1.77	0.66
1:G:41:THR:O	1:G:45:LYS:N	2.25	0.66
1:G:226:ASN:ND2	1:E:298:MET:SD	2.63	0.66
2:H:34:ASP:H	2:H:75:VAL:HG22	1.59	0.66
1:E:167:ILE:HG23	1:E:244:VAL:HG21	1.77	0.66
2:F:182:THR:OG1	2:F:184:ASP:OD2	2.13	0.66
1:I:148:SER:OG	1:I:151:THR:OG1	2.13	0.66
1:K:89:ILE:O	1:K:114:LYS:NZ	2.28	0.66
2:L:326:LEU:HD12	2:L:329:ILE:HD12	1.76	0.66
1:A:173:THR:N	1:A:241:ASP:OD2	2.28	0.66
2:B:204:ASN:HD21	2:D:283:ILE:H	1.43	0.66
1:Q:326:ASP:O	1:Q:330:ASN:ND2	2.28	0.66
2:R:4:ALA:HB2	2:R:31:VAL:HB	1.77	0.66
1:E:6:ASN:N	1:E:93:ILE:O	2.28	0.66
1:E:148:SER:O	1:E:152:ASN:N	2.23	0.66
2:L:259:ALA:HA	2:L:262:ARG:HD2	1.75	0.66
1:O:178:TYR:CD2	1:O:233:PRO:HA	2.31	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:111:LEU:HG	2:P:146:ILE:HD11	1.78	0.66
2:H:91:ILE:N	2:H:114:GLY:O	2.27	0.66
2:F:46:LYS:O	2:F:46:LYS:NZ	2.29	0.66
1:I:115:LYS:HA	1:I:142:ASN:HD22	1.59	0.66
1:I:214:VAL:O	1:I:218:LEU:N	2.25	0.66
2:J:66:ILE:N	2:J:73:ILE:O	2.27	0.66
1:K:18:CYS:O	1:K:20:ARG:N	2.29	0.66
1:A:4:ALA:HB2	1:A:89:ILE:HG13	1.77	0.66
1:A:70:PRO:O	1:A:72:LYS:NZ	2.23	0.66
1:Q:263:ALA:HA	1:Q:267:LEU:HB2	1.77	0.66
2:R:180:SER:OG	2:R:236:THR:O	2.09	0.66
2:R:284:ASP:OD1	2:R:284:ASP:N	2.28	0.66
1:O:90:ASP:HA	1:O:114:LYS:HG2	1.76	0.66
1:O:286:SER:HB3	1:O:312:ASP:HB3	1.77	0.66
2:P:195:LEU:H	2:P:195:LEU:HD12	1.60	0.66
1:G:179:THR:OG1	1:G:181:ASP:OD1	2.12	0.66
1:E:179:THR:H	1:E:182:GLN:HE22	1.44	0.66
1:E:319:GLN:HA	1:E:322:VAL:HG23	1.76	0.66
2:F:195:LEU:H	2:F:195:LEU:HD12	1.60	0.66
1:I:34:GLY:O	1:I:39:SER:OG	2.14	0.66
2:J:119:LEU:HG	2:J:148:SER:HA	1.77	0.66
1:K:101:ASP:OD1	1:K:104:GLY:N	2.28	0.66
1:Q:10:ARG:HH12	1:Q:48:SER:H	1.43	0.66
1:Q:84:TRP:O	1:Q:88:GLY:N	2.29	0.66
1:Q:299:VAL:HA	1:Q:305:VAL:HA	1.77	0.66
2:R:17:ARG:O	2:R:21:GLY:N	2.25	0.66
1:O:5:ILE:HG23	1:O:93:ILE:HB	1.77	0.66
1:O:253:GLU:O	1:O:257:ASN:N	2.29	0.66
1:G:312:ASP:OD2	1:G:315:TRP:N	2.28	0.66
2:H:8:PHE:HZ	2:H:45:LEU:HD13	1.59	0.66
2:H:92:ASP:O	2:H:117:LYS:N	2.27	0.66
2:H:173:GLY:HA3	2:H:227:LEU:HD13	1.76	0.66
2:L:204:ASN:N	2:L:204:ASN:OD1	2.28	0.66
2:B:119:LEU:HG	2:B:148:SER:HA	1.76	0.66
2:B:192:HIS:HB3	2:B:198:ALA:HA	1.78	0.66
2:B:206:VAL:N	2:B:233:ARG:O	2.29	0.66
2:D:106:GLY:HA2	2:D:109:LYS:HZ3	1.59	0.66
1:Q:185:LEU:HD21	2:P:182:THR:HA	1.77	0.66
1:Q:312:ASP:OD1	1:Q:316:GLY:N	2.26	0.66
1:Q:315:TRP:O	1:Q:318:SER:OG	2.13	0.66
1:O:129:VAL:H	1:O:133:ASN:ND2	1.93	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:217:ALA:HB2	2:P:224:LYS:HB3	1.78	0.66
1:G:129:VAL:HB	1:G:133:ASN:HD21	1.61	0.66
1:E:244:VAL:O	1:E:304:MET:HA	1.96	0.66
1:I:10:ARG:HA	1:I:13:ARG:NE	2.11	0.66
2:J:175:MET:O	2:L:308:LYS:NZ	2.29	0.66
1:K:155:ALA:O	1:K:159:LYS:N	2.21	0.66
2:L:30:VAL:CA	2:L:73:ILE:HG23	2.26	0.66
2:L:295:ASP:N	2:L:310:ILE:O	2.27	0.66
1:A:40:ALA:O	1:A:44:LEU:N	2.25	0.66
1:A:148:SER:O	1:A:151:THR:OG1	2.11	0.66
1:A:183:ARG:NH2	1:A:188:SER:O	2.28	0.66
1:A:192:ASP:HB3	1:A:195:ARG:HB2	1.76	0.66
1:A:274:CYS:N	1:A:292:ILE:O	2.28	0.66
2:B:137:GLU:N	2:B:137:GLU:OE1	2.28	0.66
2:B:175:MET:O	2:D:308:LYS:NZ	2.28	0.66
2:D:132:VAL:H	2:D:136:ASN:HB2	1.59	0.66
1:Q:206:THR:N	1:Q:229:ALA:O	2.28	0.66
1:G:258:ALA:O	1:G:261:LYS:NZ	2.28	0.66
1:I:281:VAL:HG11	2:J:49:SER:HA	1.76	0.66
2:J:80:ASN:HB3	2:J:83:ASN:HB2	1.77	0.66
2:L:236:THR:OG1	2:L:238:ASN:ND2	2.29	0.66
2:B:47:TYR:HA	2:B:53:THR:HA	1.77	0.66
1:Q:299:VAL:HG12	1:Q:305:VAL:HG22	1.78	0.66
2:R:179:HIS:HB3	2:R:233:ARG:HA	1.77	0.66
1:O:162:ASP:OD1	1:O:167:ILE:N	2.27	0.66
1:O:299:VAL:HG12	1:O:305:VAL:HA	1.78	0.66
1:O:312:ASP:OD2	1:O:315:TRP:N	2.28	0.66
1:G:0:LYS:N	1:G:24:PRO:O	2.28	0.66
2:F:184:ASP:OD2	2:F:233:ARG:NH1	2.29	0.66
1:I:135:LYS:NZ	1:I:137:TYR:O	2.29	0.66
2:J:137:GLU:N	2:J:137:GLU:OE1	2.29	0.66
2:B:173:GLY:N	2:B:226:LYS:O	2.29	0.66
2:R:90:GLY:O	2:R:116:LYS:NZ	2.29	0.66
1:O:183:ARG:NH2	1:O:188:SER:OG	2.28	0.66
2:H:18:CYS:O	2:H:22:ARG:N	2.28	0.66
2:H:289:ASP:O	2:H:322:ARG:NH1	2.24	0.66
1:E:36:GLY:O	1:E:39:SER:OG	2.11	0.66
1:I:17:ARG:O	1:I:19:GLY:N	2.25	0.65
2:J:302:MET:N	2:J:306:MET:O	2.28	0.65
1:K:11:ILE:HA	1:K:14:ASN:HB2	1.76	0.65
1:K:130:VAL:HG22	1:K:324:LEU:HD23	1.76	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:177:SER:HA	1:K:234:THR:HG23	1.78	0.65
1:C:212:LYS:HA	1:C:225:LEU:HD12	1.76	0.65
2:D:58:VAL:HG12	2:D:68:VAL:HG23	1.78	0.65
2:D:326:LEU:HD12	2:D:329:ILE:HD12	1.76	0.65
2:R:182:THR:OG1	2:R:183:GLY:N	2.28	0.65
2:R:209:SER:HA	2:R:231:ALA:H	1.60	0.65
1:O:312:ASP:OD1	1:O:316:GLY:N	2.27	0.65
2:H:88:ASP:N	2:H:88:ASP:OD1	2.26	0.65
1:I:108:HIS:CD2	1:I:108:HIS:N	2.61	0.65
1:I:178:TYR:HB3	1:I:233:PRO:HA	1.79	0.65
1:I:206:THR:HB	1:I:229:ALA:HB3	1.77	0.65
2:J:182:THR:OG1	2:J:185:GLN:NE2	2.29	0.65
2:J:244:LEU:HG	2:J:246:VAL:HG22	1.77	0.65
2:L:9:GLY:O	2:L:13:ARG:N	2.22	0.65
2:L:222:ASN:O	2:L:226:LYS:NZ	2.23	0.65
1:A:165:LEU:HB3	1:A:248:LYS:HD2	1.79	0.65
2:B:65:ALA:HA	2:B:74:LYS:HA	1.77	0.65
2:B:102:VAL:HG23	2:B:120:ILE:HG21	1.78	0.65
2:B:315:ASN:N	2:B:315:ASN:OD1	2.29	0.65
1:C:179:THR:N	1:C:182:GLN:OE1	2.30	0.65
1:C:239:VAL:HA	1:C:310:TRP:HA	1.77	0.65
1:Q:203:ILE:HG23	1:Q:232:VAL:HA	1.77	0.65
2:R:39:LYS:O	2:R:42:SER:OG	2.09	0.65
1:G:41:THR:HG21	1:G:59:ILE:HG12	1.78	0.65
2:H:22:ARG:HG3	2:H:324:VAL:HG11	1.78	0.65
2:H:272:ILE:O	2:H:322:ARG:NH1	2.29	0.65
1:E:261:LYS:O	1:E:265:GLY:N	2.28	0.65
2:J:253:PHE:HE2	2:J:255:GLU:HB3	1.60	0.65
2:J:269:LEU:HB3	2:J:273:LEU:HD23	1.78	0.65
1:K:100:VAL:HB	1:K:122(A):LYS:HB2	1.78	0.65
1:K:151:THR:HG22	1:K:214:VAL:HG23	1.79	0.65
1:K:246:ILE:HG13	1:K:248:LYS:H	1.59	0.65
2:L:32:ILE:HG23	2:L:75:VAL:HG21	1.75	0.65
2:B:181:TYR:HD2	2:B:235:PRO:HA	1.61	0.65
2:B:320:SER:O	2:B:324:VAL:N	2.27	0.65
1:C:159:LYS:O	1:C:163:GLU:N	2.27	0.65
2:D:284:ASP:OD1	2:D:284:ASP:N	2.29	0.65
2:R:18:CYS:O	2:R:22:ARG:N	2.30	0.65
2:R:92:ASP:O	2:R:117:LYS:N	2.27	0.65
2:R:106:GLY:O	2:R:110:HIS:N	2.28	0.65
1:O:239:VAL:HB	1:O:310:TRP:HA	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:17:ARG:CZ	2:H:51:LEU:HB3	2.27	0.65
1:E:78:ASP:OD2	1:E:81:LYS:NZ	2.22	0.65
2:J:14:ASN:O	2:J:18:CYS:N	2.18	0.65
2:J:151:SER:OG	2:J:153:THR:OG1	2.10	0.65
1:K:190:HIS:CE1	1:K:191:ARG:HG2	2.30	0.65
2:L:88:ASP:OD1	2:L:88:ASP:N	2.18	0.65
1:A:221:LEU:HD13	1:A:224:LYS:HD3	1.78	0.65
2:R:102:VAL:HG22	2:R:125:LYS:H	1.61	0.65
2:P:96:GLU:OE2	2:P:98:THR:OG1	2.09	0.65
1:G:259:PHE:O	1:G:263:ALA:N	2.26	0.65
1:E:84:TRP:O	1:E:88:GLY:N	2.30	0.65
1:E:193:LEU:HD12	1:E:194:ARG:H	1.60	0.65
1:E:253:GLU:O	1:E:257:ASN:N	2.29	0.65
1:E:282:ASP:N	1:E:282:ASP:OD1	2.28	0.65
2:J:26:PRO:HB2	2:J:331:ALA:HB1	1.77	0.65
1:K:181:ASP:O	1:K:195:ARG:NH1	2.29	0.65
1:A:174:THR:OG1	1:A:311:TYR:OH	2.14	0.65
2:D:208:THR:OG1	2:D:209:SER:N	2.29	0.65
2:D:289:ASP:O	2:D:322:ARG:NH1	2.30	0.65
2:R:118:VAL:N	2:R:145:THR:O	2.29	0.65
2:H:8:PHE:CZ	2:H:13:ARG:HG3	2.31	0.65
2:F:3:VAL:HG22	2:F:93:LEU:HB3	1.78	0.65
1:I:37:VAL:O	1:I:41:THR:N	2.17	0.65
1:I:190:HIS:NE2	1:I:192:ASP:HB3	2.12	0.65
2:J:308:LYS:HZ2	2:L:230:ILE:HG12	1.61	0.65
2:L:3:VAL:HG21	2:L:27:LEU:HB3	1.78	0.65
1:A:306:LYS:NZ	1:C:172:MET:O	2.29	0.65
1:O:256:ASN:O	1:O:260:ARG:N	2.23	0.65
1:G:272:ASP:O	1:G:292:ILE:N	2.28	0.65
1:E:62:GLU:O	1:E:72:LYS:NZ	2.21	0.65
1:E:84:TRP:HA	1:E:87:LEU:HD12	1.79	0.65
2:F:216:VAL:HG22	2:F:223:LEU:HB3	1.79	0.65
1:I:257:ASN:O	1:I:261:LYS:N	2.24	0.65
2:J:13:ARG:HG2	2:J:45:LEU:HA	1.79	0.65
2:J:328:ASP:O	2:J:332:ASN:N	2.21	0.65
1:K:13:ARG:HB3	1:K:44:LEU:HA	1.79	0.65
2:B:37:GLY:HA2	1:O:345:LEU:HA	1.79	0.65
2:B:87:GLY:N	2:B:113:ALA:O	2.25	0.65
1:C:62:GLU:O	1:C:73:VAL:N	2.29	0.65
1:C:324:LEU:O	1:C:328:VAL:N	2.21	0.65
2:R:272:ILE:O	2:R:322:ARG:NH1	2.30	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:96:THR:HG22	3:O:401:NAD:H52A	1.78	0.65
2:P:142:HIS:HB2	2:P:333:LYS:HG3	1.77	0.65
1:G:63:THR:HG23	1:G:72:LYS:HD3	1.79	0.65
1:G:147:ALA:O	1:G:317:TYR:OH	2.11	0.65
1:G:265:GLY:O	1:G:268:LYS:NZ	2.28	0.65
2:H:162:LYS:HB2	2:H:220:LEU:HD11	1.79	0.65
2:H:275:VAL:HA	2:H:294:ILE:H	1.61	0.65
1:E:0:LYS:HB2	1:E:1:LEU:HD22	1.78	0.65
1:E:183:ARG:HD3	1:E:196:ALA:HA	1.79	0.65
2:F:5:ILE:HB	2:F:32:ILE:HG23	1.78	0.65
1:I:149:CYS:O	1:I:153:CYS:N	2.21	0.65
1:K:130:VAL:HG21	1:K:323:ASP:HB2	1.79	0.65
1:K:274:CYS:N	1:K:292:ILE:O	2.26	0.65
1:A:174:THR:O	1:A:230:LEU:HB2	1.97	0.65
1:Q:183:ARG:HG3	1:Q:187:ALA:HB3	1.77	0.65
2:R:6:ASN:OD1	2:R:33:ASN:ND2	2.30	0.65
2:R:8:PHE:H	2:R:34:ASP:HB2	1.61	0.65
2:P:17:ARG:NH2	2:P:53:THR:O	2.30	0.65
2:P:59:LYS:HA	2:P:59:LYS:HZ3	1.62	0.65
1:G:203:ILE:HG23	1:G:232:VAL:HA	1.78	0.65
2:H:284:ASP:N	2:H:284:ASP:OD1	2.28	0.65
1:K:38:LYS:HZ3	1:K:39:SER:H	1.43	0.65
1:K:319:GLN:O	1:K:319:GLN:NE2	2.30	0.65
3:K:402:NAD:O3B	1:E:13:ARG:NH2	2.27	0.65
2:L:140:TYR:OH	2:L:332:ASN:O	2.08	0.65
1:C:179:THR:OG1	1:C:231:ARG:NH2	2.29	0.65
1:C:292:ILE:HA	1:C:309:ALA:HA	1.78	0.65
2:D:274:SER:C	2:D:293:THR:HA	2.22	0.65
1:O:10:ARG:O	1:O:14:ASN:ND2	2.24	0.65
2:P:206:VAL:HB	2:P:233:ARG:HB2	1.78	0.65
1:G:324:LEU:HD12	1:G:327:LEU:HB3	1.78	0.65
1:E:28:VAL:O	1:E:72:LYS:N	2.24	0.65
2:F:142:HIS:HB2	2:F:333:LYS:HG3	1.77	0.65
1:I:94:GLU:HB3	1:I:119:THR:H	1.62	0.65
1:I:152:ASN:HD22	1:I:152:ASN:N	1.95	0.65
1:K:0:LYS:H2	1:K:25:LEU:C	2.05	0.65
1:A:238:SER:HB2	1:A:311:TYR:CE2	2.32	0.65
2:B:255:GLU:OE2	2:B:262:ARG:NH1	2.23	0.65
1:C:129:VAL:H	1:C:133:ASN:CG	2.05	0.65
2:D:109:LYS:HA	2:D:112:GLN:HB2	1.78	0.65
1:Q:198:ALA:HB3	1:Q:201:LEU:HD11	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:90:GLY:O	2:P:116:LYS:NZ	2.30	0.65
2:J:206:VAL:N	2:J:233:ARG:O	2.28	0.64
1:A:132:VAL:HA	1:A:159:LYS:HD2	1.78	0.64
2:B:91:ILE:O	2:B:116:LYS:N	2.30	0.64
2:B:266:ASP:O	2:B:270:LYS:NZ	2.24	0.64
1:C:238:SER:HB3	1:C:311:TYR:CZ	2.32	0.64
1:Q:277:PRO:HG2	1:O:193:LEU:HD11	1.77	0.64
2:R:236:THR:HG23	2:R:238:ASN:H	1.62	0.64
1:O:245:ASN:HB3	1:O:304:MET:HE2	1.80	0.64
2:P:15:PHE:HZ	2:P:29:VAL:HG21	1.60	0.64
2:P:54:PHE:C	2:P:56:ALA:H	2.05	0.64
2:P:168:PHE:O	2:P:249:SER:OG	2.14	0.64
1:G:267:LEU:HD13	1:G:271:LEU:HD22	1.80	0.64
2:F:165:ASP:OD1	2:F:170:ILE:N	2.30	0.64
1:I:236:ASN:ND2	1:I:312:ASP:OD2	2.28	0.64
1:K:141:ALA:HB1	1:K:144:ILE:HA	1.78	0.64
2:L:208:THR:OG1	2:L:209:SER:N	2.31	0.64
2:L:295:ASP:OD1	2:L:297:SER:OG	2.13	0.64
1:A:149:CYS:O	1:A:153:CYS:N	2.25	0.64
1:A:328:VAL:O	1:A:332:TRP:N	2.30	0.64
2:B:238:ASN:HD22	2:B:282:SER:HB2	1.61	0.64
1:C:262:ALA:HB1	1:C:267:LEU:HD12	1.80	0.64
1:G:36:GLY:O	1:G:39:SER:OG	2.13	0.64
1:G:57:VAL:HG13	1:G:66:ILE:HG13	1.77	0.64
1:E:239:VAL:HB	1:E:310:TRP:HA	1.78	0.64
2:F:16:LEU:HD23	2:F:54:PHE:HE2	1.63	0.64
1:I:246:ILE:N	1:I:303:ASP:O	2.29	0.64
2:J:189:ASP:HA	2:J:199:ARG:HA	1.79	0.64
1:K:186:ASP:HA	1:K:197:ARG:HA	1.78	0.64
1:K:298:MET:N	1:K:306:LYS:O	2.29	0.64
1:A:215:SER:HB2	1:A:222:LYS:HA	1.79	0.64
2:B:29:VAL:O	2:B:71:LYS:NZ	2.31	0.64
2:B:39:LYS:HZ3	2:B:40:GLN:H	1.44	0.64
1:C:6:ASN:N	1:C:93:ILE:O	2.30	0.64
1:C:178:TYR:N	1:C:234:THR:O	2.29	0.64
1:C:259:PHE:O	1:C:263:ALA:N	2.20	0.64
2:D:81:PRO:HB2	2:D:109:LYS:HB2	1.79	0.64
2:D:153:THR:OG1	2:D:154:THR:N	2.25	0.64
1:Q:36:GLY:O	1:Q:39:SER:OG	2.13	0.64
1:Q:139:HIS:NE2	1:Q:332:TRP:HA	2.12	0.64
2:R:257:VAL:O	2:R:261:PHE:N	2.25	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:23:SER:OG	1:O:25:LEU:O	2.16	0.64
2:P:175:MET:SD	2:P:175:MET:N	2.68	0.64
2:H:7:GLY:HA3	2:H:98:THR:HG22	1.79	0.64
2:H:104:ARG:HE	2:H:128:ILE:HG13	1.63	0.64
2:H:276:CYS:SG	2:H:277:ASP:N	2.69	0.64
1:E:47:ASP:OD1	1:E:51:GLY:N	2.30	0.64
1:E:158:VAL:HA	1:E:161:LEU:HD12	1.77	0.64
1:E:267:LEU:HB3	1:E:271:LEU:HD13	1.78	0.64
2:F:111:LEU:HG	2:F:146:ILE:HD11	1.79	0.64
2:F:245:VAL:HG22	2:F:308:LYS:HA	1.77	0.64
1:I:23:SER:OG	1:I:25:LEU:O	2.16	0.64
1:I:173:THR:HB	1:I:241:ASP:HB3	1.80	0.64
2:L:228:ASN:OD1	2:L:229:GLY:N	2.31	0.64
1:A:11:ILE:O	1:A:14:ASN:ND2	2.30	0.64
1:A:37:VAL:HG22	1:A:73:VAL:HG21	1.79	0.64
2:B:80:ASN:HB3	2:B:83:ASN:HB2	1.79	0.64
2:B:302:MET:N	2:B:306:MET:O	2.30	0.64
1:C:150:THR:OG1	1:C:151:THR:N	2.29	0.64
2:D:177:THR:OG1	2:D:313:TYR:OH	2.14	0.64
2:R:182:THR:HG23	2:R:184:ASP:HB3	1.78	0.64
1:I:60:ILE:H	1:I:64:PHE:HA	1.62	0.64
1:I:274:CYS:SG	1:I:275:ASP:N	2.67	0.64
1:K:45:LYS:HD2	1:K:53:PHE:HB3	1.79	0.64
1:K:57:VAL:HG22	1:K:66:ILE:HG23	1.78	0.64
2:L:116:LYS:HD2	2:L:336:ALA:HB1	1.80	0.64
2:L:322:ARG:NE	2:L:325:ASP:OD2	2.27	0.64
1:A:104:GLY:O	1:A:108:HIS:NE2	2.30	0.64
1:A:193:LEU:HD12	1:A:194:ARG:HG2	1.80	0.64
1:C:10:ARG:O	1:C:14:ASN:ND2	2.31	0.64
2:D:43:HIS:O	2:D:47:TYR:N	2.26	0.64
2:D:60:THR:HA	2:D:66:ILE:HA	1.78	0.64
1:Q:253:GLU:OE2	1:Q:260:ARG:NH2	2.27	0.64
2:R:81:PRO:HA	2:R:84:LEU:HB2	1.77	0.64
1:I:193:LEU:HD12	1:I:194:ARG:H	1.62	0.64
2:J:172:LYS:NZ	2:L:302:MET:O	2.29	0.64
2:J:179:HIS:HB3	2:J:233:ARG:HA	1.78	0.64
2:L:150:ALA:O	2:L:319:TYR:OH	2.10	0.64
2:L:206:VAL:O	2:L:233:ARG:N	2.31	0.64
2:L:274:SER:C	2:L:293:THR:HA	2.23	0.64
2:D:65:ALA:HB2	2:D:74:LYS:HE2	1.79	0.64
1:Q:13:ARG:HH21	1:Q:47:ASP:HA	1.62	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:149:CYS:HA	1:Q:152:ASN:HD22	1.63	0.64
1:Q:177:SER:O	1:Q:231:ARG:NE	2.31	0.64
2:R:192:HIS:HB3	2:R:198:ALA:HA	1.80	0.64
2:R:289:ASP:O	2:R:322:ARG:NH1	2.27	0.64
1:G:220:GLN:HG2	1:G:221:LEU:HD13	1.80	0.64
1:G:304:MET:HE1	1:E:245:ASN:H	1.63	0.64
1:E:177:SER:HA	1:E:234:THR:HG23	1.80	0.64
1:I:173:THR:O	1:I:241:ASP:N	2.20	0.64
1:I:181:ASP:HB2	1:I:195:ARG:NH1	2.12	0.64
2:J:13:ARG:HD3	2:J:44:LEU:HD22	1.78	0.64
2:L:284:ASP:OD1	2:L:284:ASP:N	2.30	0.64
1:A:105:ALA:HB1	1:A:116:VAL:HG21	1.78	0.64
1:A:172:MET:HB3	1:A:242:LEU:HA	1.79	0.64
1:A:176:HIS:N	1:A:230:LEU:O	2.31	0.64
2:B:12:GLY:O	2:B:16:LEU:N	2.24	0.64
1:Q:148:SER:O	1:Q:152:ASN:N	2.24	0.64
1:Q:258:ALA:O	1:Q:261:LYS:NZ	2.31	0.64
2:R:206:VAL:N	2:R:233:ARG:O	2.25	0.64
2:P:48:ASP:OD2	2:P:51:LEU:N	2.31	0.64
1:G:253:GLU:OE1	1:G:256:ASN:ND2	2.30	0.64
1:G:298:MET:O	1:G:306:LYS:N	2.31	0.64
2:H:104:ARG:HG3	2:H:146:ILE:HG21	1.79	0.64
1:E:28:VAL:HA	1:E:71:ILE:HG13	1.79	0.64
1:I:14:ASN:HA	1:I:17:ARG:HG3	1.79	0.64
1:K:271:LEU:HA	1:K:290:SER:HB3	1.78	0.64
2:L:119:LEU:HG	2:L:148:SER:HA	1.79	0.64
2:L:196:ARG:HB3	2:L:206:VAL:HG22	1.79	0.64
2:B:204:ASN:HD21	2:D:283:ILE:HG22	1.61	0.64
1:C:275:ASP:OD1	1:C:294:SER:OG	2.15	0.64
2:D:104:ARG:NE	2:D:127:ASP:O	2.31	0.64
1:Q:259:PHE:O	1:Q:263:ALA:N	2.31	0.64
1:O:135:LYS:O	1:O:331:LYS:NZ	2.28	0.64
1:O:179:THR:OG1	1:O:231:ARG:NH2	2.31	0.64
2:P:171:ILE:HG22	2:P:172:LYS:HG3	1.79	0.64
1:G:89:ILE:O	1:G:114:LYS:NZ	2.25	0.64
1:E:297:THR:HG23	1:E:307:VAL:HA	1.79	0.64
2:F:3:VAL:HB	2:F:29:VAL:HG22	1.79	0.64
2:J:47:TYR:HB2	1:K:197:ARG:HH12	1.63	0.64
1:C:105:ALA:O	1:C:109:ILE:N	2.24	0.64
2:F:40:GLN:O	2:F:44:LEU:N	2.20	0.64
1:I:126:PRO:HD3	1:Q:103:PRO:HG3	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:299:THR:HG22	2:J:309:VAL:HA	1.80	0.64
2:J:317:TRP:O	2:J:320:SER:OG	2.16	0.64
1:K:159:LYS:O	1:K:163:GLU:N	2.30	0.64
1:K:171:THR:OG1	1:K:172:MET:N	2.31	0.64
2:L:179:HIS:N	2:L:232:LEU:O	2.31	0.64
1:A:46:TYR:O	2:D:199:ARG:NH1	2.30	0.64
2:B:8:PHE:N	2:B:33:ASN:O	2.31	0.64
1:C:280:SER:O	1:C:284:ARG:N	2.30	0.64
2:D:17:ARG:NH2	2:D:55:ASP:OD1	2.24	0.64
2:D:105:ASP:OD2	2:D:109:LYS:NZ	2.31	0.64
1:O:236:ASN:OD1	1:O:314:GLU:N	2.31	0.64
2:H:118:VAL:N	2:H:145:THR:O	2.30	0.64
2:F:206:VAL:HB	2:F:233:ARG:HB2	1.80	0.64
1:I:40:ALA:O	1:I:44:LEU:N	2.25	0.63
1:I:58:LYS:O	1:I:65:SER:N	2.22	0.63
1:K:0:LYS:N	1:K:23:SER:O	2.31	0.63
2:L:184:ASP:OD1	2:L:185:GLN:NE2	2.29	0.63
1:C:41:THR:O	1:C:45:LYS:N	2.18	0.63
1:C:299:VAL:HA	1:C:305:VAL:HA	1.81	0.63
1:Q:5:ILE:HB	1:Q:30:VAL:HG13	1.80	0.63
1:O:253:GLU:O	1:O:260:ARG:NH2	2.31	0.63
1:G:139:HIS:CE1	1:G:332:TRP:HA	2.34	0.63
2:H:31:VAL:HG22	2:H:74:LYS:CD	2.12	0.63
2:H:194:ASP:O	2:H:198:ALA:N	2.30	0.63
2:H:283:ILE:HD12	2:H:286:ARG:HD2	1.79	0.63
1:E:102:GLY:O	1:E:106:GLY:N	2.31	0.63
1:I:139(A):ASP:O	1:Q:107:LYS:NZ	2.30	0.63
2:J:8:PHE:N	2:J:33:ASN:O	2.31	0.63
2:J:22:ARG:NH1	2:J:328:ASP:OD2	2.31	0.63
2:J:29:VAL:O	2:J:71:LYS:NZ	2.31	0.63
2:J:91:ILE:O	2:J:116:LYS:N	2.30	0.63
2:J:104:ARG:O	2:J:108:GLY:N	2.27	0.63
2:J:104:ARG:HH21	2:J:128:ILE:HA	1.64	0.63
2:J:186:ARG:HH22	2:J:193:ARG:HH22	1.45	0.63
1:C:340:ALA:C	1:C:342:GLY:H	2.06	0.63
2:D:244:LEU:HD11	2:D:246:VAL:HG13	1.79	0.63
1:Q:15:PHE:CE1	1:Q:322:VAL:HG22	2.33	0.63
1:Q:173:THR:HG23	1:Q:230:LEU:HB2	1.80	0.63
1:O:0:LYS:N	1:O:24:PRO:O	2.21	0.63
2:P:3:VAL:HB	2:P:29:VAL:HG22	1.79	0.63
2:P:142:HIS:NE2	2:P:336:ALA:O	2.31	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:15:PHE:O	2:H:19:TRP:N	2.21	0.63
1:E:1:LEU:HD23	1:E:25:LEU:HD13	1.80	0.63
1:E:134:GLU:OE1	1:E:134:GLU:N	2.23	0.63
2:F:42:SER:HB3	2:F:60:THR:HG22	1.80	0.63
1:I:150:THR:OG1	1:I:151:THR:N	2.32	0.63
1:I:236:ASN:H	1:I:284:ARG:NH2	1.96	0.63
2:J:140:TYR:OH	2:J:142:HIS:ND1	2.28	0.63
2:J:291:SER:HB3	2:J:322:ARG:HD2	1.80	0.63
1:K:16:LEU:HB3	1:K:44:LEU:HD11	1.79	0.63
2:L:22:ARG:NH1	2:L:328:ASP:OD2	2.31	0.63
2:L:104:ARG:NE	2:L:127:ASP:O	2.30	0.63
2:L:263:GLU:OE1	2:L:264:SER:N	2.27	0.63
1:A:1:LEU:N	1:A:24:PRO:O	2.31	0.63
1:A:257:ASN:O	1:A:261:LYS:N	2.23	0.63
1:A:287:ASP:O	1:A:320:ARG:NH1	2.32	0.63
1:Q:15:PHE:HZ	1:Q:322:VAL:HG13	1.63	0.63
1:Q:132:VAL:N	1:Q:134:GLU:OE1	2.31	0.63
2:R:275:VAL:HA	2:R:294:ILE:H	1.63	0.63
1:O:118:ILE:N	1:O:144:ILE:O	2.28	0.63
1:O:270:VAL:HG12	1:O:271:LEU:HD12	1.80	0.63
2:P:157:LEU:HD21	2:P:212:ALA:HB1	1.79	0.63
2:H:173:GLY:H	2:H:227:LEU:HA	1.63	0.63
2:F:173:GLY:O	2:F:228:ASN:N	2.29	0.63
1:I:9:GLY:O	1:I:13:ARG:HG3	1.97	0.63
1:I:306:LYS:NZ	1:K:172:MET:O	2.31	0.63
2:J:6:ASN:O	2:J:97:GLY:N	2.31	0.63
2:J:189:ASP:OD2	1:K:10:ARG:NH1	2.31	0.63
1:K:76:ASN:OD1	1:K:78:ASP:N	2.31	0.63
2:B:14:ASN:OD1	2:B:320:SER:OG	2.15	0.63
2:B:196:ARG:NH1	2:D:280:LEU:O	2.31	0.63
2:B:208:THR:OG1	2:B:209:SER:N	2.31	0.63
2:D:78:ASP:OD1	2:D:80:ASN:N	2.31	0.63
1:Q:261:LYS:HZ3	1:Q:262:ALA:HB2	1.63	0.63
1:O:77:ARG:HE	3:O:401:NAD:C6A	2.11	0.63
1:G:135:LYS:HD2	1:G:331:LYS:HE2	1.81	0.63
1:G:160:VAL:O	1:G:164:GLU:N	2.29	0.63
2:H:33:ASN:HA	2:H:75:VAL:HA	1.80	0.63
2:H:150:ALA:O	2:H:319:TYR:OH	2.14	0.63
2:F:152:CYS:SG	2:F:153:THR:N	2.71	0.63
1:I:76:ASN:HD22	1:I:82:LEU:HD21	1.63	0.63
2:J:6:ASN:HB3	2:J:96:GLU:HA	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:315:ASN:N	2:J:315:ASN:OD1	2.30	0.63
2:L:213:ALA:O	2:L:228:ASN:ND2	2.32	0.63
2:B:18:CYS:SG	2:B:320:SER:OG	2.57	0.63
1:C:56:ASP:N	1:C:67:ASP:OD2	2.31	0.63
2:D:79:ARG:HD3	3:D:401:NAD:H61A	1.64	0.63
2:D:194:ASP:HB3	2:D:197:ARG:HB2	1.81	0.63
2:D:210:THR:HG23	2:D:213:ALA:H	1.62	0.63
1:Q:238:SER:N	1:Q:313:ASN:OD1	2.31	0.63
1:Q:320:ARG:NE	1:Q:323:ASP:OD2	2.31	0.63
2:R:104:ARG:HE	2:R:128:ILE:HG13	1.64	0.63
2:R:186:ARG:NH2	2:R:191:SER:O	2.31	0.63
1:O:176:HIS:N	1:O:230:LEU:O	2.31	0.63
1:G:40:ALA:HA	1:G:43:LEU:HD12	1.81	0.63
1:G:279:VAL:N	1:G:282:ASP:OD2	2.26	0.63
2:H:34:ASP:HB3	2:H:75:VAL:CG2	2.27	0.63
2:H:236:THR:HG23	2:H:238:ASN:H	1.63	0.63
1:E:162:ASP:OD1	1:E:167:ILE:N	2.29	0.63
2:F:263:GLU:O	2:F:267:ASN:N	2.31	0.63
2:F:267:ASN:OD1	2:F:268:GLU:N	2.32	0.63
1:I:190:HIS:O	2:L:40:GLN:NE2	2.29	0.63
2:J:248:VAL:N	2:J:305:ASP:O	2.29	0.63
1:A:34:GLY:O	1:A:39:SER:OG	2.13	0.63
1:A:299:VAL:HG23	1:A:305:VAL:HG13	1.79	0.63
1:O:47:ASP:OD1	1:O:51:GLY:N	2.32	0.63
1:O:238:SER:HB2	1:O:311:TYR:CE2	2.34	0.63
2:P:263:GLU:O	2:P:267:ASN:N	2.31	0.63
1:G:39:SER:O	1:G:43:LEU:N	2.20	0.63
1:E:296:LEU:HB2	1:E:308:VAL:HG21	1.80	0.63
2:F:39:LYS:HA	2:F:60:THR:HG21	1.79	0.63
2:F:299:THR:HG22	2:F:310:ILE:H	1.63	0.63
1:I:84:TRP:HA	1:I:87:LEU:HB2	1.81	0.63
1:K:107:LYS:O	1:K:111:ALA:N	2.31	0.63
2:L:223:LEU:H	2:L:223:LEU:HD12	1.62	0.63
1:A:178:TYR:HB3	1:A:233:PRO:HA	1.80	0.63
2:B:86:TRP:CD1	2:B:115:ALA:H	2.17	0.63
2:B:208:THR:HG23	2:B:231:ALA:HB3	1.81	0.63
1:C:76:ASN:OD1	1:C:78:ASP:N	2.31	0.63
1:C:115:LYS:HE3	1:C:139:HIS:HA	1.81	0.63
1:Q:220:GLN:HG2	1:Q:221:LEU:HD13	1.80	0.63
1:O:263:ALA:HA	1:O:267:LEU:HB2	1.80	0.63
2:P:238:ASN:HD22	2:P:282:SER:HB2	1.64	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:267:ASN:OD1	2:P:268:GLU:N	2.31	0.63
1:G:132:VAL:N	1:G:134:GLU:OE1	2.31	0.63
2:F:10:ARG:O	2:F:14:ASN:N	2.15	0.63
2:F:243:ASP:N	2:F:243:ASP:OD2	2.32	0.63
1:I:10:ARG:NH2	1:I:314:GLU:OE1	2.29	0.63
2:J:240:SER:N	2:J:313:TYR:O	2.31	0.63
2:L:272:ILE:O	2:L:322:ARG:NH1	2.31	0.63
1:A:181:ASP:HB2	1:A:195:ARG:HD3	1.79	0.63
2:B:140:TYR:O	2:B:333:LYS:NZ	2.32	0.63
2:B:153:THR:OG1	2:B:154:THR:N	2.32	0.63
2:B:326:LEU:HD12	2:B:329:ILE:HB	1.80	0.63
1:C:253:GLU:O	1:C:257:ASN:ND2	2.31	0.63
1:C:271:LEU:HA	1:C:290:SER:HB3	1.80	0.63
2:D:142:HIS:H	2:D:333:LYS:HE2	1.64	0.63
2:D:243:ASP:OD2	2:D:243:ASP:N	2.31	0.63
2:D:281:VAL:N	2:D:284:ASP:OD2	2.19	0.63
2:R:36:GLY:O	2:R:77:SER:OG	2.16	0.63
2:R:67:SER:N	2:R:72:VAL:HG13	2.13	0.63
2:R:152:CYS:O	2:R:156:CYS:N	2.32	0.63
1:O:76:ASN:HD22	1:O:82:LEU:HD21	1.63	0.63
1:O:146:ASN:O	1:O:317:TYR:OH	2.17	0.63
1:O:271:LEU:HD23	1:O:292:ILE:HD11	1.81	0.63
1:G:278:LEU:HD22	2:H:47:TYR:CD2	2.33	0.63
2:H:246:VAL:HG23	2:H:307:VAL:HB	1.80	0.63
2:F:2:LYS:NZ	2:F:92:ASP:OD2	2.27	0.63
2:F:149:ASN:HD21	2:F:155:ASN:HB2	1.64	0.63
2:J:192:HIS:CE1	2:J:194:ASP:H	2.17	0.63
1:K:112:GLY:O	1:K:114:LYS:NZ	2.23	0.63
2:L:171:ILE:N	2:L:247:GLN:O	2.32	0.63
1:C:270:VAL:O	1:C:290:SER:N	2.31	0.63
2:D:46:LYS:NZ	2:D:53:THR:OG1	2.23	0.63
2:D:223:LEU:H	2:D:223:LEU:HD12	1.63	0.63
2:D:295:ASP:N	2:D:310:ILE:O	2.31	0.63
1:Q:48:SER:OG	2:P:189:ASP:OD2	2.16	0.63
1:Q:170:GLY:N	1:Q:224:LYS:O	2.32	0.63
1:Q:345:LEU:O	1:Q:349:CYS:N	2.26	0.63
2:R:102:VAL:HG13	2:R:125:LYS:HB2	1.80	0.63
1:O:58:LYS:HA	1:O:58:LYS:HZ2	1.63	0.63
1:G:292:ILE:HG13	1:G:309:ALA:HB2	1.79	0.63
2:H:92:ASP:HB3	2:H:334:TRP:CH2	2.33	0.63
2:F:130:THR:HG21	2:F:218:LEU:HB3	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:203:ILE:HG13	1:I:233:PRO:HD3	1.80	0.62
2:J:172:LYS:HG2	2:J:226:LYS:HB2	1.82	0.62
2:J:204:ASN:HD21	2:L:283:ILE:H	1.46	0.62
1:K:66:ILE:HB	1:K:69:LYS:HB2	1.80	0.62
1:K:150:THR:OG1	1:K:151:THR:N	2.31	0.62
1:A:121:PRO:HD3	3:A:401:NAD:H5N	1.81	0.62
1:A:195:ARG:HH12	1:G:362:GLU:N	1.97	0.62
1:A:298:MET:HG3	1:A:306:LYS:HB3	1.80	0.62
1:C:36:GLY:O	1:C:39:SER:OG	2.13	0.62
1:Q:160:VAL:O	1:Q:164:GLU:N	2.28	0.62
2:H:14:ASN:O	2:H:18:CYS:N	2.23	0.62
2:H:16:LEU:HD13	2:H:45:LEU:CD1	2.27	0.62
1:E:118:ILE:N	1:E:144:ILE:O	2.25	0.62
1:E:192:ASP:O	1:E:196:ALA:N	2.31	0.62
2:F:46:LYS:HZ1	2:F:53:THR:HG1	1.46	0.62
1:K:47:ASP:CG	1:K:49:ILE:H	2.07	0.62
1:K:192:ASP:OD2	1:K:195:ARG:N	2.24	0.62
1:A:212:LYS:O	1:A:216:LEU:N	2.30	0.62
2:B:6:ASN:HB3	2:B:96:GLU:HA	1.82	0.62
2:D:208:THR:N	2:D:231:ALA:O	2.25	0.62
2:D:241:VAL:HG22	2:D:312:TRP:HA	1.81	0.62
2:D:263:GLU:OE1	2:D:264:SER:N	2.27	0.62
1:Q:239:VAL:HA	1:Q:311:TYR:CE1	2.33	0.62
1:Q:293:ASP:OD1	1:Q:295:SER:OG	2.14	0.62
2:R:5:ILE:H	2:R:32:ILE:HG12	1.64	0.62
2:R:19:TRP:HH2	2:R:69:ASP:HB2	1.63	0.62
2:R:105:ASP:O	2:R:109:LYS:N	2.25	0.62
2:R:167:LYS:O	2:R:250:LYS:NZ	2.29	0.62
1:O:41:THR:O	1:O:45:LYS:N	2.19	0.62
1:O:79:PRO:HG3	1:O:108:HIS:CD2	2.34	0.62
1:O:198:ALA:HB1	1:O:201:LEU:HD13	1.82	0.62
2:P:14:ASN:OD1	2:P:320:SER:OG	2.06	0.62
2:P:82:VAL:HG22	2:P:109:LYS:HB3	1.80	0.62
2:P:291:SER:OG	2:P:322:ARG:NH1	2.30	0.62
2:P:318:GLY:O	2:P:322:ARG:N	2.26	0.62
1:G:42:HIS:CD2	2:F:195:LEU:HB3	2.34	0.62
2:H:32:ILE:O	2:H:75:VAL:N	2.31	0.62
2:H:178:THR:OG1	2:H:241:VAL:N	2.27	0.62
1:E:325:ALA:O	1:E:329:ALA:N	2.30	0.62
1:I:32:ASP:HB3	1:I:73:VAL:HG13	1.80	0.62
1:I:171:THR:HB	1:I:226:ASN:HB3	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:14:ASN:OD1	2:J:320:SER:OG	2.17	0.62
2:L:10:ARG:O	2:L:14:ASN:N	2.25	0.62
2:L:81:PRO:HB2	2:L:109:LYS:HB2	1.79	0.62
1:A:149:CYS:HB3	1:A:317:TYR:CG	2.34	0.62
1:A:186:ASP:OD1	1:A:198:ALA:N	2.26	0.62
1:A:291:THR:HB	1:A:310:TRP:C	2.24	0.62
1:C:15:PHE:O	1:C:18(A):TRP:N	2.17	0.62
1:C:115:LYS:NZ	1:C:142:ASN:OD1	2.33	0.62
1:C:132:VAL:N	1:C:134:GLU:OE1	2.33	0.62
1:C:149:CYS:HA	1:C:152:ASN:HB2	1.80	0.62
2:D:119:LEU:HG	2:D:148:SER:HA	1.81	0.62
2:D:295:ASP:OD1	2:D:297:SER:OG	2.14	0.62
2:R:16:LEU:HD13	2:R:45:LEU:HD13	1.80	0.62
2:R:194:ASP:O	2:R:198:ALA:N	2.32	0.62
1:O:30:VAL:O	1:O:74:VAL:N	2.31	0.62
2:H:31:VAL:HG21	2:H:74:LYS:NZ	2.15	0.62
1:E:85:ALA:N	1:E:112:GLY:HA3	2.14	0.62
2:F:171:ILE:N	2:F:247:GLN:O	2.32	0.62
1:I:131:GLY:N	1:I:134:GLU:OE2	2.32	0.62
2:J:194:ASP:O	2:J:198:ALA:N	2.33	0.62
2:J:204:ASN:HD21	2:L:283:ILE:HG22	1.63	0.62
1:K:45:LYS:NZ	1:K:53:PHE:O	2.26	0.62
1:K:121:PRO:HG3	1:K:148:SER:N	2.14	0.62
2:L:60:THR:HA	2:L:66:ILE:HA	1.80	0.62
1:A:278:LEU:O	1:C:194:ARG:NH1	2.33	0.62
2:B:179:HIS:HB3	2:B:233:ARG:HA	1.80	0.62
2:B:240:SER:N	2:B:315:ASN:OD1	2.31	0.62
1:C:45:LYS:NZ	1:C:53:PHE:O	2.24	0.62
1:C:126:PRO:HG3	1:O:103:PRO:HG3	1.79	0.62
2:D:272:ILE:O	2:D:291:SER:N	2.21	0.62
2:D:289:ASP:N	2:D:289:ASP:OD1	2.32	0.62
1:Q:32:ASP:OD1	1:Q:36:GLY:N	2.33	0.62
2:R:41:ALA:HA	2:R:44:LEU:HB2	1.81	0.62
2:P:86:TRP:CZ2	2:P:110:HIS:HA	2.34	0.62
2:P:314:ASP:OD1	2:P:317:TRP:N	2.30	0.62
1:G:149:CYS:HA	1:G:152:ASN:HD22	1.64	0.62
2:F:168:PHE:O	2:F:249:SER:OG	2.17	0.62
1:I:31:ASN:HD21	1:I:76:ASN:H	1.46	0.62
2:J:16:LEU:O	2:J:20:HIS:N	2.20	0.62
2:J:43:HIS:O	2:J:47:TYR:N	2.28	0.62
2:L:29:VAL:O	2:L:73:ILE:HG23	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:239:VAL:HG22	2:L:314:ASP:HA	1.82	0.62
1:A:176:HIS:O	1:A:232:VAL:N	2.20	0.62
2:B:86:TRP:O	2:B:90:GLY:N	2.33	0.62
2:B:180:SER:HA	2:B:236:THR:HG22	1.82	0.62
2:B:182:THR:H	2:B:185:GLN:HB2	1.64	0.62
1:C:176:HIS:O	1:C:232:VAL:N	2.24	0.62
1:C:193:LEU:O	1:C:197:ARG:N	2.33	0.62
2:D:40:GLN:O	2:D:44:LEU:N	2.23	0.62
2:R:22:ARG:NH2	2:R:321:GLN:O	2.32	0.62
2:P:5:ILE:HG23	2:P:95:ILE:HB	1.80	0.62
1:G:299:VAL:HG22	1:G:305:VAL:HG13	1.81	0.62
2:F:205:ILE:HG23	2:F:207:PRO:HD3	1.80	0.62
2:L:105:ASP:OD2	2:L:109:LYS:NZ	2.31	0.62
2:L:245:VAL:HG22	2:L:308:LYS:HA	1.82	0.62
1:A:58:LYS:O	1:A:65:SER:N	2.23	0.62
1:A:148:SER:OG	1:A:150:THR:OG1	2.17	0.62
2:B:183:GLY:H	1:C:185:LEU:HD11	1.65	0.62
1:C:100:VAL:HB	1:C:122(A):LYS:HB2	1.82	0.62
1:Q:115:LYS:HE3	1:Q:139:HIS:CE1	2.35	0.62
1:Q:186:ASP:OD1	1:Q:198:ALA:N	2.26	0.62
2:R:67:SER:HA	2:R:72:VAL:HG13	1.80	0.62
1:O:60:ILE:HD11	1:O:65:SER:HB3	1.82	0.62
2:P:243:ASP:N	2:P:243:ASP:OD2	2.31	0.62
1:E:164:GLU:O	1:E:248:LYS:NZ	2.30	0.62
1:E:270:VAL:HG12	1:E:271:LEU:HD12	1.82	0.62
2:J:208:THR:OG1	2:J:209:SER:N	2.30	0.62
1:K:6:ASN:HB3	1:K:92:VAL:HG13	1.80	0.62
1:K:176:HIS:O	1:K:232:VAL:N	2.25	0.62
1:A:5:ILE:HB	1:A:30:VAL:HA	1.80	0.62
1:A:270:VAL:O	1:A:290:SER:N	2.32	0.62
2:B:1:LEU:N	2:B:28:ASP:H	1.98	0.62
2:B:184:ASP:OD2	2:B:184:ASP:N	2.32	0.62
2:B:317:TRP:O	2:B:320:SER:OG	2.18	0.62
1:Q:126:PRO:HB2	1:Q:128:TYR:CE1	2.35	0.62
1:Q:300:MET:HB3	1:Q:304:MET:HB3	1.80	0.62
2:R:6:ASN:HB3	2:R:96:GLU:HA	1.80	0.62
1:G:93:ILE:HA	1:G:117:ILE:HB	1.80	0.62
1:G:177:SER:HA	1:G:234:THR:HG23	1.79	0.62
1:G:226:ASN:OD1	1:G:227:GLY:N	2.30	0.62
1:G:241:ASP:HB2	1:G:308:VAL:HG13	1.82	0.62
2:F:186:ARG:HB3	2:F:188:LEU:O	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:315:ASN:OD1	2:F:315:ASN:N	2.32	0.62
2:J:86:TRP:CD1	2:J:115:ALA:H	2.17	0.62
2:J:153:THR:OG1	2:J:154:THR:N	2.33	0.62
1:K:129:VAL:N	1:K:133:ASN:OD1	2.31	0.62
2:L:32:ILE:O	2:L:75:VAL:C	2.43	0.62
1:A:150:THR:OG1	1:A:151:THR:N	2.30	0.62
1:O:237:VAL:HA	1:O:312:ASP:HA	1.81	0.62
1:G:90:ASP:O	1:G:115:LYS:N	2.33	0.62
1:G:169:LYS:HE3	1:E:300:MET:HG3	1.80	0.62
1:G:281:VAL:CG1	2:H:49:SER:HA	2.20	0.62
2:H:157:LEU:HD21	2:H:212:ALA:HB1	1.81	0.62
1:I:170:GLY:HA3	1:I:244:VAL:HG12	1.80	0.62
2:J:86:TRP:O	2:J:90:GLY:N	2.32	0.62
2:J:187:LEU:HD13	1:K:184:LEU:HA	1.82	0.62
1:K:179:THR:N	1:K:182:GLN:OE1	2.33	0.62
2:B:43:HIS:O	2:B:47:TYR:N	2.32	0.62
2:B:104:ARG:NH2	2:B:129:PRO:HD3	2.15	0.62
2:D:22:ARG:NH1	2:D:328:ASP:OD2	2.32	0.62
1:O:214:VAL:O	1:O:218:LEU:N	2.32	0.62
2:P:295:ASP:OD1	2:P:297:SER:OG	2.18	0.62
1:G:273:VAL:HG22	1:G:292:ILE:HB	1.82	0.62
1:G:281:VAL:HA	1:G:284:ARG:HG2	1.82	0.62
1:E:132:VAL:HG13	1:E:159:LYS:HD2	1.82	0.62
2:F:9:GLY:O	2:F:13:ARG:N	2.20	0.62
2:F:181:TYR:HD2	2:F:235:PRO:HA	1.64	0.62
1:I:46:TYR:HB2	2:L:199:ARG:HH12	1.65	0.62
1:I:70:PRO:O	1:I:72:LYS:NZ	2.23	0.62
2:J:46:LYS:O	2:J:54:PHE:N	2.33	0.62
2:J:188:LEU:HD22	1:K:180:GLY:H	1.65	0.62
1:K:115:LYS:NZ	1:K:142:ASN:OD1	2.33	0.62
1:K:129:VAL:H	1:K:133:ASN:CG	2.07	0.62
2:B:4:ALA:HA	2:B:31:VAL:O	2.00	0.62
2:D:272:ILE:O	2:D:322:ARG:NH1	2.32	0.62
2:R:102:VAL:O	2:R:125:LYS:N	2.33	0.62
1:O:102:GLY:O	1:O:106:GLY:N	2.31	0.62
2:P:46:LYS:NZ	2:P:54:PHE:O	2.28	0.62
2:P:51:LEU:HD22	2:P:287:CYS:HB2	1.82	0.62
2:P:326:LEU:HA	2:P:329:ILE:HD12	1.81	0.62
2:H:95:ILE:HA	2:H:119:LEU:O	2.00	0.62
2:H:105:ASP:OD2	2:H:109:LYS:NZ	2.33	0.62
2:H:189:ASP:OD2	2:H:199:ARG:NE	2.31	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:76:ASN:HB3	1:E:82:LEU:HD11	1.82	0.62
1:E:225:LEU:O	1:E:226:ASN:ND2	2.33	0.62
1:I:112:GLY:O	1:I:114:LYS:NZ	2.26	0.61
1:I:306:LYS:HZ2	1:K:228:ILE:HG22	1.64	0.61
2:J:10:ARG:HH22	1:K:186:ASP:HB2	1.65	0.61
2:J:181:TYR:HD2	2:J:235:PRO:HA	1.63	0.61
1:K:168:VAL:HG12	1:K:169:LYS:HG3	1.81	0.61
1:K:327:LEU:HD12	1:K:330:ASN:HB2	1.82	0.61
2:B:106:GLY:O	2:B:110:HIS:N	2.29	0.61
2:B:172:LYS:NZ	2:D:302:MET:O	2.33	0.61
2:D:246:VAL:HG23	2:D:307:VAL:HB	1.81	0.61
2:D:315:ASN:N	2:D:315:ASN:OD1	2.32	0.61
1:Q:6:ASN:HD21	1:Q:96:THR:HG23	1.64	0.61
1:Q:162:ASP:OD1	1:Q:167:ILE:N	2.30	0.61
1:O:126:PRO:HG2	1:O:144:ILE:HA	1.80	0.61
2:H:109:LYS:HA	2:H:112:GLN:CD	2.25	0.61
1:E:146:ASN:HD21	1:E:320:ARG:HB2	1.65	0.61
1:E:272:ASP:O	1:E:292:ILE:N	2.23	0.61
1:E:328:VAL:O	1:E:332:TRP:N	2.33	0.61
1:I:132:VAL:HG22	1:I:159:LYS:HD2	1.82	0.61
2:J:196:ARG:NH1	2:L:280:LEU:O	2.34	0.61
2:L:78:ASP:OD1	2:L:80:ASN:N	2.32	0.61
1:C:7:GLY:HA2	1:C:31:ASN:HB3	1.81	0.61
1:Q:60:ILE:HB	1:Q:63:THR:O	2.00	0.61
1:Q:226:ASN:HD22	1:O:300:MET:HA	1.64	0.61
1:Q:255:VAL:O	1:Q:259:PHE:N	2.33	0.61
1:Q:319:GLN:O	1:Q:322:VAL:HG23	2.00	0.61
2:R:173:GLY:H	2:R:227:LEU:HA	1.64	0.61
2:R:194:ASP:HB3	2:R:197:ARG:HB2	1.82	0.61
2:P:205:ILE:HG13	2:P:234:VAL:HA	1.83	0.61
1:G:190:HIS:HE1	1:G:192:ASP:HB3	1.64	0.61
1:G:300:MET:HB3	1:G:304:MET:HB3	1.82	0.61
2:H:135:VAL:HB	2:H:219:VAL:HB	1.82	0.61
2:H:241:VAL:HG22	2:H:312:TRP:HA	1.82	0.61
2:F:98:THR:HA	3:F:401:NAD:H3B	1.81	0.61
1:I:10:ARG:N	3:Q:401:NAD:O3	2.17	0.61
1:I:281:VAL:HA	1:I:284:ARG:HG2	1.82	0.61
2:J:180:SER:HA	2:J:236:THR:HG22	1.81	0.61
1:K:62:GLU:OE2	1:K:63:THR:OG1	2.13	0.61
1:K:236:ASN:HD21	1:K:312:ASP:CG	2.07	0.61
1:K:258:ALA:O	1:K:262:ALA:N	2.26	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:262:ALA:HB1	1:K:267:LEU:HD12	1.81	0.61
1:K:300:MET:N	1:K:304:MET:O	2.25	0.61
2:L:240:SER:HB3	2:L:315:ASN:HD21	1.64	0.61
1:A:8:PHE:O	1:A:13:ARG:NH1	2.33	0.61
1:A:10:ARG:HH22	1:A:48:SER:H	1.45	0.61
1:A:29:VAL:HG11	1:A:87:LEU:HD13	1.81	0.61
2:B:205:ILE:HD11	2:B:232:LEU:HB3	1.82	0.61
2:R:81:PRO:HD2	2:R:109:LYS:HE2	1.82	0.61
1:O:66:ILE:N	1:O:69:LYS:O	2.20	0.61
1:O:82:LEU:HB2	1:O:84:TRP:CH2	2.36	0.61
1:O:319:GLN:HA	1:O:322:VAL:HG23	1.81	0.61
1:G:46:TYR:HA	1:G:52:THR:HA	1.82	0.61
1:G:151:THR:HA	1:G:154:LEU:HB3	1.81	0.61
1:I:195:ARG:NH2	1:I:231:ARG:HH12	1.98	0.61
1:I:256:ASN:HA	1:I:259:PHE:HB2	1.82	0.61
1:A:192:ASP:CG	1:A:195:ARG:H	2.08	0.61
2:B:7:GLY:HA3	2:B:98:THR:HG22	1.83	0.61
1:C:38:LYS:HZ3	1:C:39:SER:H	1.46	0.61
2:D:3:VAL:HG21	2:D:27:LEU:HB3	1.82	0.61
2:D:181:TYR:HD2	2:D:235:PRO:HA	1.64	0.61
1:Q:287:ASP:N	1:Q:287:ASP:OD1	2.34	0.61
2:R:109:LYS:HA	2:R:112:GLN:CD	2.26	0.61
2:R:272:ILE:O	2:R:291:SER:OG	2.15	0.61
1:O:57:VAL:HG22	1:O:66:ILE:HA	1.83	0.61
2:P:1:LEU:HD22	2:P:331:ALA:HA	1.82	0.61
1:G:156:PRO:HA	1:G:159:LYS:HD3	1.81	0.61
1:G:190:HIS:ND1	1:G:195:ARG:HB2	2.14	0.61
2:F:96:GLU:OE2	2:F:98:THR:OG1	2.17	0.61
2:F:111:LEU:HA	2:F:115:ALA:HB3	1.82	0.61
2:L:20:HIS:NE2	2:L:69:ASP:CG	2.58	0.61
1:A:178:TYR:N	1:A:234:THR:O	2.34	0.61
1:A:191:ARG:HG3	1:G:357:GLU:O	2.01	0.61
1:C:11:ILE:H	3:C:401:NAD:PN	2.23	0.61
1:C:30:VAL:O	1:C:74:VAL:N	2.33	0.61
1:C:139:HIS:NE2	1:C:332:TRP:HA	2.14	0.61
1:Q:46:TYR:HA	1:Q:52:THR:HA	1.83	0.61
1:Q:241:ASP:HB2	1:Q:308:VAL:HG13	1.81	0.61
2:R:39:LYS:HZ3	2:R:40:GLN:N	1.93	0.61
2:R:314:ASP:CG	2:R:318:GLY:H	2.08	0.61
1:O:65:SER:HA	1:O:70:PRO:HA	1.83	0.61
2:P:130:THR:HG21	2:P:218:LEU:HB3	1.81	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:287:ASP:OD2	1:G:319:GLN:NE2	2.33	0.61
1:E:84:TRP:HB3	1:E:89:ILE:HB	1.82	0.61
1:E:117:ILE:HA	1:E:144:ILE:HG12	1.82	0.61
1:E:185:LEU:HA	1:E:198:ALA:HB2	1.83	0.61
1:K:241:ASP:OD1	1:K:307:VAL:N	2.31	0.61
1:A:50:LEU:HD22	1:A:285:CYS:HB2	1.81	0.61
2:B:11:ILE:H	3:B:401:NAD:PN	2.23	0.61
2:B:240:SER:N	2:B:313:TYR:O	2.34	0.61
2:B:273:LEU:HD12	2:B:292:SER:HB3	1.83	0.61
2:D:262:ARG:O	2:D:266:ASP:N	2.32	0.61
2:R:274:SER:C	2:R:293:THR:HA	2.26	0.61
1:G:139(A):ASP:OD1	1:G:142:ASN:ND2	2.34	0.61
2:F:46:LYS:NZ	2:F:54:PHE:O	2.28	0.61
2:J:4:ALA:HA	2:J:31:VAL:O	2.00	0.61
2:J:104:ARG:NH2	2:J:129:PRO:HD3	2.15	0.61
2:J:208:THR:HG23	2:J:231:ALA:HB3	1.82	0.61
2:J:273:LEU:HD12	2:J:294:ILE:HD11	1.82	0.61
1:K:6:ASN:N	1:K:93:ILE:O	2.34	0.61
2:L:163:VAL:O	2:L:167:LYS:N	2.26	0.61
1:A:193:LEU:HD12	1:A:194:ARG:H	1.66	0.61
2:B:203:LEU:HD23	2:D:236:THR:HA	1.82	0.61
1:C:142:ASN:OD1	1:C:142:ASN:N	2.33	0.61
1:C:327:LEU:HD12	1:C:330:ASN:HB2	1.83	0.61
2:R:95:ILE:HA	2:R:119:LEU:O	2.00	0.61
2:R:176:THR:OG1	2:R:243:ASP:O	2.14	0.61
2:P:135:VAL:HG13	2:P:162:LYS:HZ1	1.65	0.61
2:P:215:ALA:O	2:P:219:VAL:N	2.32	0.61
1:G:162:ASP:OD1	1:G:167:ILE:N	2.30	0.61
1:E:10:ARG:NH2	1:E:314:GLU:OE1	2.27	0.61
1:E:78:ASP:HB3	1:E:81:LYS:HD2	1.81	0.61
2:F:289:ASP:O	2:F:322:ARG:NH1	2.32	0.61
1:I:36:GLY:O	1:I:39:SER:OG	2.18	0.61
1:I:219:PRO:HA	1:I:222:LYS:HB2	1.83	0.61
2:J:289:ASP:N	2:J:289:ASP:OD1	2.32	0.61
1:C:230:LEU:O	1:C:232:VAL:HG13	2.00	0.61
2:D:39:LYS:HD2	2:D:40:GLN:N	2.14	0.61
1:Q:215:SER:HB2	1:Q:222:LYS:HG2	1.82	0.61
1:Q:257:ASN:O	1:Q:261:LYS:N	2.33	0.61
2:R:157:LEU:HD21	2:R:212:ALA:HB1	1.82	0.61
2:R:283:ILE:HD12	2:R:286:ARG:HD2	1.83	0.61
2:P:264:SER:O	2:P:269:LEU:N	2.34	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:51:GLY:HA2	2:H:283:ILE:HD11	1.83	0.61
1:G:212:LYS:O	1:G:215:SER:OG	2.17	0.61
2:H:184:ASP:OD2	2:H:185:GLN:NE2	2.33	0.61
1:E:169:LYS:HA	1:E:224:LYS:HB3	1.81	0.61
2:F:295:ASP:O	2:F:299:THR:N	2.32	0.61
1:I:297:THR:HG23	1:I:307:VAL:HA	1.83	0.61
2:J:240:SER:N	2:J:315:ASN:OD1	2.34	0.61
2:L:207:PRO:HA	2:L:232:LEU:HA	1.81	0.61
2:B:48:ASP:OD2	2:B:51:LEU:N	2.34	0.61
1:C:183:ARG:NH2	1:C:188:SER:O	2.34	0.61
2:D:102:VAL:HG22	2:D:124:GLY:HA2	1.83	0.61
1:Q:115:LYS:HG2	1:Q:142:ASN:HB3	1.83	0.61
1:Q:300:MET:N	1:Q:304:MET:O	2.31	0.61
2:R:39:LYS:NZ	2:R:40:GLN:H	1.94	0.61
2:R:246:VAL:HG23	2:R:307:VAL:HB	1.81	0.61
1:O:161:LEU:O	1:O:165:LEU:N	2.28	0.61
2:P:186:ARG:HB3	2:P:188:LEU:O	2.00	0.61
1:G:25:LEU:H	1:G:25:LEU:HD13	1.66	0.61
1:G:84:TRP:HA	1:G:87:LEU:HB2	1.82	0.61
1:G:275:ASP:OD2	1:G:295:SER:N	2.34	0.61
1:G:298:MET:HG2	1:G:306:LYS:HB3	1.83	0.61
2:H:178:THR:HG1	2:H:241:VAL:H	1.47	0.61
2:F:264:SER:O	2:F:269:LEU:N	2.33	0.61
1:I:172:MET:SD	1:I:227:GLY:HA3	2.41	0.61
2:J:274:SER:HB3	2:J:290:VAL:HG11	1.82	0.61
1:K:30:VAL:O	1:K:74:VAL:N	2.33	0.61
1:K:132:VAL:N	1:K:134:GLU:OE1	2.33	0.61
2:L:31:VAL:HG21	2:L:89:MET:HE3	1.81	0.61
2:L:276:CYS:SG	2:L:277:ASP:N	2.74	0.61
1:A:228:ILE:HD12	1:C:306:LYS:HD3	1.82	0.61
1:C:0:LYS:H2	1:C:25:LEU:C	2.08	0.61
1:C:64:PHE:O	1:C:71:ILE:N	2.34	0.61
1:C:107:LYS:O	1:C:111:ALA:N	2.30	0.61
1:Q:310:TRP:CH2	1:O:203:ILE:HB	2.36	0.61
2:R:15:PHE:O	2:R:19:TRP:N	2.23	0.61
1:O:172:MET:HB2	1:O:240:VAL:HB	1.82	0.61
1:O:225:LEU:O	1:O:226:ASN:ND2	2.34	0.61
2:P:152:CYS:O	2:P:156:CYS:N	2.32	0.61
2:H:199:ARG:NH1	1:E:46:TYR:O	2.34	0.61
2:F:318:GLY:O	2:F:322:ARG:N	2.24	0.61
2:J:264:SER:O	2:J:269:LEU:N	2.34	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:256:ASN:HA	1:K:259:PHE:HB2	1.82	0.60
1:A:256:ASN:HA	1:A:259:PHE:HB2	1.82	0.60
1:C:11:ILE:N	3:C:401:NAD:O1N	2.30	0.60
2:D:97:GLY:O	3:D:401:NAD:O3D	2.18	0.60
1:O:319:GLN:HB2	1:O:320:ARG:NH2	2.15	0.60
2:P:8:PHE:O	2:P:13:ARG:NH2	2.34	0.60
2:P:20:HIS:O	2:P:23:LYS:NZ	2.33	0.60
2:P:60:THR:HA	2:P:66:ILE:HA	1.83	0.60
2:P:165:ASP:OD1	2:P:170:ILE:N	2.33	0.60
1:G:118:ILE:HB	1:G:145:SER:HA	1.83	0.60
2:H:38:VAL:HG12	2:H:75:VAL:CG1	2.31	0.60
2:H:274:SER:C	2:H:293:THR:HA	2.25	0.60
2:F:240:SER:N	2:F:315:ASN:OD1	2.33	0.60
1:I:115:LYS:HA	1:I:142:ASN:HB2	1.82	0.60
2:L:240:SER:N	2:L:313:TYR:O	2.32	0.60
1:A:42:HIS:O	1:A:46:TYR:N	2.31	0.60
2:D:58:VAL:HB	2:D:68:VAL:HA	1.83	0.60
2:D:206:VAL:O	2:D:233:ARG:N	2.33	0.60
1:Q:230:LEU:HD22	1:Q:232:VAL:HG12	1.83	0.60
2:R:108:GLY:O	2:R:112:GLN:N	2.34	0.60
2:R:135:VAL:HB	2:R:219:VAL:HB	1.82	0.60
2:P:46:LYS:O	2:P:46:LYS:NZ	2.34	0.60
2:P:136:ASN:HD21	2:P:219:VAL:HG12	1.66	0.60
2:P:289:ASP:O	2:P:322:ARG:NH1	2.33	0.60
2:P:314:ASP:CG	2:P:318:GLY:H	2.08	0.60
1:G:31:ASN:ND2	3:G:401:NAD:H2A	2.16	0.60
1:G:85:ALA:N	1:G:111:ALA:O	2.34	0.60
2:H:180:SER:OG	2:H:236:THR:O	2.10	0.60
1:E:160:VAL:HG21	1:E:267:LEU:HD11	1.83	0.60
1:E:267:LEU:HD13	1:E:271:LEU:HD22	1.82	0.60
2:F:150:ALA:O	2:F:319:TYR:OH	2.17	0.60
2:F:160:PHE:O	2:F:164:LEU:N	2.34	0.60
2:F:295:ASP:OD1	2:F:297:SER:OG	2.18	0.60
1:A:362:GLU:O	3:G:401:NAD:O3D	2.19	0.60
2:B:14:ASN:HD21	2:B:317:TRP:HB2	1.66	0.60
2:B:189:ASP:OD1	2:B:200:ALA:N	2.28	0.60
1:C:179:THR:HG1	1:C:231:ARG:NH2	1.98	0.60
1:C:213:ALA:HA	1:C:216:LEU:HG	1.83	0.60
2:D:160:PHE:HA	2:D:163:VAL:HB	1.84	0.60
1:Q:31:ASN:HD21	1:Q:76:ASN:H	1.48	0.60
1:Q:137:TYR:HE2	1:Q:331:LYS:HG3	1.66	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:192:ASP:OD2	1:Q:195:ARG:N	2.24	0.60
2:R:5:ILE:HG22	2:R:32:ILE:HD11	1.83	0.60
2:R:184:ASP:OD2	2:R:185:GLN:NE2	2.34	0.60
1:O:10:ARG:HA	1:O:13:ARG:NE	2.16	0.60
2:P:320:SER:O	2:P:324:VAL:HG23	2.00	0.60
1:G:139:HIS:CE1	1:G:333:PRO:HD3	2.35	0.60
2:H:211:GLY:O	2:H:215:ALA:N	2.21	0.60
2:H:291:SER:OG	2:H:322:ARG:NH1	2.30	0.60
2:F:289:ASP:OD1	2:F:317:TRP:NE1	2.33	0.60
2:J:326:LEU:HD12	2:J:329:ILE:HB	1.83	0.60
1:K:170:GLY:HA3	1:K:244:VAL:HG12	1.83	0.60
1:K:195:ARG:NH1	1:E:361:TYR:O	2.34	0.60
1:K:253:GLU:O	1:K:257:ASN:ND2	2.33	0.60
2:L:177:THR:OG1	2:L:313:TYR:OH	2.18	0.60
2:B:92:ASP:O	2:B:117:LYS:N	2.34	0.60
2:B:142:HIS:HD2	2:B:336:ALA:H	1.48	0.60
1:C:92:VAL:HG21	1:C:108:HIS:HB3	1.84	0.60
2:P:295:ASP:O	2:P:299:THR:N	2.32	0.60
1:G:93:ILE:HG22	1:G:119:THR:HG22	1.84	0.60
1:G:239:VAL:HA	1:G:311:TYR:CE1	2.36	0.60
2:H:209:SER:OG	2:H:214:LYS:NZ	2.31	0.60
2:H:257:VAL:O	2:H:261:PHE:N	2.25	0.60
1:E:134:GLU:HB2	1:E:327:LEU:HD13	1.84	0.60
2:F:185:GLN:HG2	2:F:233:ARG:HD3	1.81	0.60
2:F:186:ARG:HH22	2:F:193:ARG:HH22	1.50	0.60
1:I:39:SER:O	1:I:43:LEU:N	2.31	0.60
1:I:178:TYR:N	1:I:234:THR:O	2.34	0.60
2:J:85:PRO:HA	2:J:113:ALA:HB1	1.82	0.60
2:J:92:ASP:O	2:J:117:LYS:N	2.34	0.60
2:J:205:ILE:HD11	2:J:232:LEU:HB3	1.82	0.60
1:K:178:TYR:N	1:K:234:THR:O	2.34	0.60
2:L:182:THR:OG1	2:L:233:ARG:NH1	2.34	0.60
2:L:317:TRP:O	2:L:321:GLN:HG2	2.01	0.60
1:A:8:PHE:HB2	1:A:30:VAL:HG11	1.83	0.60
1:A:219:PRO:HA	1:A:222:LYS:HB2	1.81	0.60
2:B:9:GLY:HA2	3:B:401:NAD:H4B	1.83	0.60
2:B:192:HIS:CE1	2:B:194:ASP:H	2.20	0.60
2:D:42:SER:HB3	2:D:66:ILE:CD1	2.30	0.60
2:D:251:LYS:HE3	2:D:304:ASP:HB2	1.82	0.60
1:O:90:ASP:N	1:O:90:ASP:OD1	2.34	0.60
1:G:16:LEU:HA	1:G:18(A):TRP:HB3	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:272:ASP:HB3	1:G:291:THR:HG22	1.82	0.60
2:F:38:VAL:CG2	2:F:63:ASP:O	2.50	0.60
2:F:326:LEU:HA	2:F:329:ILE:HD12	1.84	0.60
1:I:149:CYS:HB3	1:I:317:TYR:CG	2.36	0.60
1:I:190:HIS:ND1	1:Q:357:GLU:O	2.29	0.60
2:J:1:LEU:HD11	2:J:334:TRP:CD2	2.36	0.60
1:K:30:VAL:HB	1:K:73:VAL:HG22	1.83	0.60
2:L:142:HIS:H	2:L:333:LYS:HE2	1.66	0.60
2:B:78:ASP:OD1	2:B:80:ASN:N	2.30	0.60
2:B:173:GLY:HA3	2:B:227:LEU:HD13	1.83	0.60
2:B:194:ASP:CG	2:B:197:ARG:H	2.09	0.60
2:B:251:LYS:NZ	2:B:303:GLY:O	2.30	0.60
1:C:90:ASP:N	1:C:90:ASP:OD1	2.33	0.60
2:D:240:SER:N	2:D:313:TYR:O	2.35	0.60
2:R:136:ASN:HD21	2:R:219:VAL:HG12	1.65	0.60
1:O:279:VAL:O	1:O:282:ASP:N	2.35	0.60
2:P:122:ALA:O	2:P:148:SER:OG	2.17	0.60
1:G:32:ASP:OD1	1:G:36:GLY:N	2.35	0.60
1:G:78:ASP:HB3	1:G:81:LYS:HD2	1.83	0.60
2:H:73:ILE:O	2:H:73:ILE:HG22	2.02	0.60
1:E:190:HIS:NE2	1:E:192:ASP:HB3	2.16	0.60
2:F:154:THR:HG23	2:F:212:ALA:HA	1.83	0.60
1:I:101:ASP:OD1	1:I:104:GLY:N	2.35	0.60
1:K:126:PRO:HG3	1:E:103:PRO:HG3	1.84	0.60
1:K:230:LEU:O	1:K:232:VAL:HG13	2.01	0.60
2:L:35:THR:HA	2:L:77:SER:HB3	1.83	0.60
2:L:317:TRP:O	2:L:320:SER:OG	2.19	0.60
1:C:256:ASN:HA	1:C:259:PHE:HB2	1.81	0.60
1:Q:118:ILE:HD11	1:Q:143:ILE:HG22	1.83	0.60
1:Q:179:THR:N	1:Q:182:GLN:OE1	2.34	0.60
1:Q:261:LYS:HZ2	1:Q:261:LYS:HB3	1.66	0.60
2:R:59:LYS:HA	2:R:59:LYS:NZ	2.17	0.60
1:O:17:ARG:NH1	1:O:51:GLY:O	2.21	0.60
2:H:194:ASP:HB3	2:H:197:ARG:HB2	1.83	0.60
1:E:260:ARG:HG3	1:E:273:VAL:HB	1.84	0.60
2:F:152:CYS:O	2:F:156:CYS:N	2.30	0.60
1:I:19:GLY:O	1:I:21:LYS:NZ	2.35	0.60
1:I:181:ASP:OD1	1:I:181:ASP:N	2.29	0.60
1:I:251:THR:HG22	1:I:253:GLU:H	1.66	0.60
2:J:10:ARG:HA	2:J:13:ARG:HD2	1.83	0.60
2:J:102:VAL:HG23	2:J:120:ILE:HG21	1.82	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:320:SER:O	2:J:324:VAL:N	2.29	0.60
2:L:97:GLY:O	3:L:401:NAD:O3D	2.20	0.60
1:A:185:LEU:HD11	2:D:182:THR:HA	1.82	0.60
1:A:246:ILE:N	1:A:303:ASP:O	2.30	0.60
2:B:22:ARG:NH2	2:B:325:ASP:OD1	2.28	0.60
2:B:37:GLY:HA3	2:B:40:GLN:CD	2.26	0.60
2:B:274:SER:O	2:B:294:ILE:HG12	2.02	0.60
1:C:190:HIS:CE1	1:C:191:ARG:HG2	2.36	0.60
1:Q:182:GLN:NE2	1:Q:182:GLN:O	2.35	0.60
1:O:181:ASP:OD2	1:O:195:ARG:NH1	2.35	0.60
1:O:272:ASP:O	1:O:292:ILE:N	2.26	0.60
1:G:256:ASN:HD22	1:G:294:SER:HB2	1.67	0.60
2:H:174:THR:HG21	2:F:245:VAL:HG11	1.83	0.60
1:E:204:VAL:O	1:E:206:THR:OG1	2.18	0.60
2:F:10:ARG:HA	2:F:13:ARG:HD2	1.82	0.60
2:F:130:THR:O	2:F:136:ASN:ND2	2.35	0.60
2:F:248:VAL:HG22	2:F:305:ASP:HA	1.83	0.60
2:F:289:ASP:OD1	2:F:289:ASP:N	2.35	0.60
2:F:320:SER:O	2:F:324:VAL:N	2.23	0.60
1:K:41:THR:HG21	1:K:59:ILE:HG12	1.82	0.60
1:K:253:GLU:HA	1:K:256:ASN:HD21	1.66	0.60
2:L:151:SER:O	2:L:155:ASN:N	2.21	0.60
2:L:180:SER:HB2	2:L:236:THR:HG23	1.84	0.60
1:A:238:SER:OG	1:A:313:ASN:ND2	2.35	0.60
1:A:257:ASN:N	1:A:260:ARG:HH21	2.00	0.60
2:B:269:LEU:HB3	2:B:273:LEU:HD23	1.82	0.60
2:D:98:THR:HA	3:D:401:NAD:H52A	1.84	0.60
2:D:133:VAL:HA	2:D:137:GLU:HB3	1.83	0.60
1:Q:101:ASP:HB2	1:Q:103:PRO:HG2	1.83	0.60
1:O:84:TRP:HA	1:O:87:LEU:HD12	1.82	0.60
2:P:31:VAL:HG21	2:P:89:MET:HE3	1.83	0.60
1:G:18(B):HIS:HB3	1:G:53:PHE:HZ	1.65	0.60
2:H:176:THR:OG1	2:H:243:ASP:O	2.16	0.60
2:F:135:VAL:HG13	2:F:162:LYS:HZ1	1.67	0.60
1:K:19:GLY:O	1:K:21:LYS:NZ	2.35	0.60
1:K:169:LYS:HE3	1:K:245:ASN:HD21	1.66	0.60
2:L:251:LYS:HE3	2:L:304:ASP:HB2	1.83	0.60
1:A:39:SER:O	1:A:43:LEU:N	2.33	0.60
1:A:251:THR:HG22	1:A:253:GLU:H	1.65	0.60
2:B:6:ASN:O	2:B:97:GLY:N	2.33	0.60
2:B:48:ASP:OD2	2:B:52:GLY:N	2.34	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:162:ASP:OD1	1:C:167:ILE:N	2.34	0.60
2:D:239:VAL:HB	2:D:282:SER:HB2	1.82	0.60
2:R:163:VAL:O	2:R:167:LYS:N	2.33	0.60
2:R:253:PHE:CZ	2:R:255:GLU:HB3	2.37	0.60
2:R:281:VAL:HB	2:P:204:ASN:HD22	1.67	0.60
1:O:87:LEU:HB2	1:O:89:ILE:HG12	1.84	0.60
1:O:137:TYR:CD2	1:O:331:LYS:HB3	2.36	0.60
1:O:157:PHE:HD2	1:O:271:LEU:HD11	1.66	0.60
2:P:205:ILE:HG23	2:P:207:PRO:HD3	1.83	0.60
1:G:5:ILE:HB	1:G:30:VAL:HG13	1.84	0.60
1:E:0:LYS:N	1:E:24:PRO:O	2.30	0.60
1:I:182:GLN:HA	1:I:195:ARG:HB3	1.82	0.59
1:K:205:PRO:HA	1:K:228:ILE:HD11	1.84	0.59
1:A:115:LYS:HA	1:A:142:ASN:HD22	1.67	0.59
2:B:171:ILE:HG22	2:B:172:LYS:HG3	1.83	0.59
2:B:320:SER:O	2:B:324:VAL:HG23	2.01	0.59
1:C:112:GLY:O	1:C:114:LYS:NZ	2.24	0.59
1:C:191:ARG:HH22	1:O:347:ASP:HA	1.67	0.59
1:C:274:CYS:O	1:C:294:SER:N	2.33	0.59
1:Q:18(B):HIS:HB3	1:Q:53:PHE:HZ	1.67	0.59
2:R:48:ASP:OD2	2:R:52:GLY:N	2.35	0.59
1:O:128:TYR:HA	1:O:133:ASN:OD1	2.02	0.59
1:G:173:THR:HG23	1:G:230:LEU:HB2	1.84	0.59
1:E:33:SER:OG	1:E:76:ASN:N	2.35	0.59
1:E:279:VAL:O	1:E:282:ASP:N	2.35	0.59
2:F:164:LEU:HB3	2:F:170:ILE:HD11	1.83	0.59
2:F:291:SER:OG	2:F:322:ARG:NH1	2.33	0.59
1:I:271:LEU:HA	1:I:290:SER:HB3	1.84	0.59
2:J:1:LEU:N	2:J:28:ASP:H	1.99	0.59
1:K:5:ILE:HD13	1:K:12:GLY:HA2	1.84	0.59
1:A:274:CYS:SG	1:A:275:ASP:N	2.74	0.59
1:A:314:GLU:OE2	3:A:401:NAD:N7N	2.36	0.59
2:B:1:LEU:HD11	2:B:334:TRP:CD2	2.37	0.59
1:C:155:ALA:O	1:C:159:LYS:N	2.21	0.59
2:D:35:THR:HA	2:D:77:SER:HB3	1.82	0.59
1:Q:57:VAL:HG13	1:Q:66:ILE:HG13	1.83	0.59
1:Q:314:GLU:O	1:Q:318:SER:N	2.31	0.59
2:R:3:VAL:HG22	2:R:93:LEU:H	1.65	0.59
2:R:96:GLU:HG2	2:R:98:THR:HG23	1.84	0.59
2:R:196:ARG:CZ	2:R:207:PRO:HD2	2.32	0.59
1:O:289:SER:HB3	1:O:320:ARG:HD2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:35:THR:HA	2:P:77:SER:HB3	1.83	0.59
2:P:111:LEU:HA	2:P:115:ALA:HB3	1.83	0.59
2:P:171:ILE:N	2:P:247:GLN:O	2.35	0.59
2:P:193:ARG:NE	2:P:193:ARG:H	2.00	0.59
2:P:265:ALA:HA	2:P:269:LEU:HB2	1.84	0.59
2:H:196:ARG:CZ	2:H:207:PRO:HD2	2.33	0.59
2:F:38:VAL:HG21	2:F:63:ASP:C	2.27	0.59
2:F:136:ASN:HD21	2:F:219:VAL:HG12	1.66	0.59
1:I:171:THR:O	1:I:242:LEU:HD12	2.02	0.59
1:I:359:LYS:O	1:Q:195:ARG:NH1	2.34	0.59
2:J:142:HIS:NE2	2:J:336:ALA:O	2.35	0.59
1:K:128:TYR:N	1:K:145:SER:O	2.34	0.59
2:L:40:GLN:O	2:L:44:LEU:N	2.22	0.59
1:C:149:CYS:HB3	1:C:317:TYR:HD1	1.66	0.59
2:D:116:LYS:HD2	2:D:336:ALA:HB1	1.84	0.59
2:D:119:LEU:HD12	2:D:147:ILE:HB	1.84	0.59
2:D:239:VAL:HG22	2:D:314:ASP:HA	1.83	0.59
1:Q:96:THR:HA	3:Q:402:NAD:C8A	2.31	0.59
2:R:289:ASP:OD1	2:R:317:TRP:NE1	2.34	0.59
1:O:0:LYS:HB2	1:O:1:LEU:HD22	1.82	0.59
2:P:261:PHE:O	2:P:264:SER:OG	2.20	0.59
2:H:31:VAL:HG22	2:H:74:LYS:HB3	1.79	0.59
2:H:152:CYS:HA	2:H:155:ASN:HB3	1.84	0.59
2:H:314:ASP:CG	2:H:318:GLY:H	2.09	0.59
1:E:76:ASN:OD1	1:E:78:ASP:N	2.26	0.59
1:E:175:THR:HB	1:E:232:VAL:HG11	1.84	0.59
2:F:142:HIS:NE2	2:F:336:ALA:O	2.35	0.59
2:F:263:GLU:OE1	2:F:267:ASN:ND2	2.35	0.59
2:J:140:TYR:O	2:J:333:LYS:NZ	2.33	0.59
2:J:142:HIS:HD2	2:J:336:ALA:H	1.49	0.59
1:K:185:LEU:HA	1:K:198:ALA:HB2	1.85	0.59
3:K:402:NAD:H4B	1:E:9:GLY:HA2	1.82	0.59
2:L:120:ILE:O	2:L:148:SER:OG	2.20	0.59
1:A:128:TYR:HB3	1:A:134:GLU:HA	1.84	0.59
1:A:177:SER:OG	1:A:237:VAL:O	2.15	0.59
2:D:102:VAL:HG22	2:D:125:LYS:H	1.68	0.59
2:D:240:SER:N	2:D:315:ASN:OD1	2.34	0.59
1:O:11:ILE:HA	1:O:14:ASN:HB2	1.83	0.59
1:O:63:THR:OG1	1:O:72:LYS:NZ	2.30	0.59
2:H:203:LEU:HD22	2:F:237:PRO:HD3	1.84	0.59
1:E:56:ASP:OD1	1:E:58:LYS:NZ	2.34	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:114:LYS:O	1:E:142:ASN:ND2	2.18	0.59
1:E:286:SER:HB3	1:E:312:ASP:HB3	1.83	0.59
2:F:16:LEU:HD22	2:F:45:LEU:HD21	1.83	0.59
1:I:10:ARG:HD2	1:I:13:ARG:HE	1.66	0.59
1:I:43:LEU:HD23	2:L:199:ARG:HD3	1.84	0.59
1:I:178:TYR:H	1:I:234:THR:H	1.50	0.59
1:I:272:ASP:N	1:I:290:SER:OG	2.36	0.59
2:J:142:HIS:NE2	2:J:334:TRP:HA	2.18	0.59
1:K:142:ASN:OD1	1:K:142:ASN:N	2.35	0.59
1:K:183:ARG:NH2	1:E:358:CYS:O	2.30	0.59
1:K:203:ILE:HG12	1:K:232:VAL:HG12	1.84	0.59
1:K:343:ASP:O	1:K:347:ASP:N	2.28	0.59
2:L:122:ALA:O	2:L:148:SER:OG	2.20	0.59
1:A:236:ASN:HD21	1:A:314:GLU:H	1.48	0.59
2:D:58:VAL:HA	2:D:68:VAL:HA	1.83	0.59
2:D:176:THR:N	2:D:243:ASP:O	2.35	0.59
2:R:181:TYR:HE1	1:O:185:LEU:HD21	1.66	0.59
2:R:241:VAL:HG22	2:R:312:TRP:HA	1.82	0.59
2:P:320:SER:O	2:P:324:VAL:N	2.28	0.59
2:P:328:ASP:O	2:P:332:ASN:N	2.29	0.59
1:E:87:LEU:HB2	1:E:89:ILE:HG12	1.85	0.59
2:F:46:LYS:CD	2:F:58:VAL:HG13	2.23	0.59
2:J:120:ILE:H	2:J:148:SER:HA	1.68	0.59
2:J:194:ASP:CG	2:J:197:ARG:H	2.11	0.59
1:A:32:ASP:N	1:A:74:VAL:O	2.36	0.59
2:B:6:ASN:N	2:B:95:ILE:O	2.35	0.59
2:B:104:ARG:O	2:B:108:GLY:N	2.29	0.59
2:B:149:ASN:HD22	2:B:323:VAL:HG22	1.65	0.59
2:B:187:LEU:HB2	1:C:184:LEU:HB2	1.85	0.59
1:C:170:GLY:HA3	1:C:244:VAL:HG12	1.85	0.59
1:O:93:ILE:HG23	1:O:117:ILE:HB	1.84	0.59
2:P:140:TYR:CZ	2:P:142:HIS:HA	2.37	0.59
2:P:185:GLN:HG2	2:P:233:ARG:HD3	1.83	0.59
2:P:263:GLU:OE1	2:P:267:ASN:ND2	2.35	0.59
1:G:15:PHE:HE1	1:G:322:VAL:HG22	1.66	0.59
1:E:162:ASP:HB2	1:E:221:LEU:HD21	1.85	0.59
1:I:179:THR:N	1:I:182:GLN:HE22	1.94	0.59
1:K:178:TYR:HD2	1:K:233:PRO:HA	1.68	0.59
1:A:134:GLU:OE1	1:A:135:LYS:N	2.25	0.59
2:B:142:HIS:NE2	2:B:336:ALA:O	2.36	0.59
1:C:6:ASN:HD22	1:C:94:GLU:HA	1.67	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:20:ARG:HA	1:C:21:LYS:HZ2	1.66	0.59
1:C:137:TYR:CZ	1:C:331:LYS:HB2	2.38	0.59
1:G:162:ASP:HA	1:G:166:GLY:H	1.68	0.59
1:G:184:LEU:HD13	2:F:187:LEU:HD13	1.84	0.59
2:H:305:ASP:OD1	2:F:172:LYS:NZ	2.29	0.59
1:E:58:LYS:O	1:E:65:SER:N	2.29	0.59
1:I:355:ASP:O	1:Q:183:ARG:NH2	2.36	0.59
1:K:0:LYS:HD2	1:K:1:LEU:HD22	1.84	0.59
2:L:102:VAL:HG22	2:L:124:GLY:HA2	1.84	0.59
1:A:106:GLY:O	1:A:110:GLN:N	2.30	0.59
1:A:226:ASN:OD1	1:A:227:GLY:N	2.36	0.59
1:C:256:ASN:HB2	1:C:260:ARG:HH21	1.67	0.59
2:D:179:HIS:HB3	2:D:233:ARG:HA	1.85	0.59
1:O:32:ASP:OD1	1:O:36:GLY:N	2.36	0.59
2:P:130:THR:O	2:P:136:ASN:ND2	2.36	0.59
1:G:5:ILE:HD13	1:G:12:GLY:HA2	1.85	0.59
2:H:102:VAL:HG22	2:H:124:GLY:HA2	1.84	0.59
1:E:183:ARG:HG2	1:E:187:ALA:H	1.68	0.59
1:E:198:ALA:O	1:E:202:ASN:ND2	2.35	0.59
2:F:41:ALA:HA	2:F:44:LEU:HD12	1.84	0.59
1:I:29:VAL:HB	1:I:72:LYS:HB2	1.83	0.59
1:I:177:SER:HA	1:I:234:THR:HG23	1.83	0.59
2:J:168:PHE:O	2:J:249:SER:OG	2.21	0.59
2:J:215:ALA:O	2:J:219:VAL:N	2.32	0.59
1:K:134:GLU:H	1:K:134:GLU:CD	2.09	0.59
1:K:303:ASP:OD1	1:K:304:MET:N	2.32	0.59
1:K:362:GLU:N	1:E:195:ARG:HH12	2.01	0.59
1:A:0:LYS:HB2	1:A:24:PRO:HA	1.84	0.59
1:A:303:ASP:OD1	1:C:169:LYS:NZ	2.34	0.59
2:B:66:ILE:O	2:B:73:ILE:N	2.35	0.59
1:C:151:THR:HG22	1:C:214:VAL:HG23	1.84	0.59
1:C:192:ASP:HB3	1:C:195:ARG:HB2	1.83	0.59
2:R:152:CYS:HA	2:R:155:ASN:HB3	1.83	0.59
1:G:190:HIS:CE1	1:G:192:ASP:HB3	2.37	0.59
1:G:257:ASN:O	1:G:261:LYS:N	2.32	0.59
2:H:163:VAL:O	2:H:167:LYS:N	2.33	0.59
1:E:116:VAL:HB	1:E:143:ILE:HA	1.85	0.59
1:E:135:LYS:C	1:E:331:LYS:HZ1	2.10	0.59
2:F:118:VAL:HB	2:F:146:ILE:HA	1.85	0.59
2:F:196:ARG:NH1	2:F:207:PRO:HD2	2.17	0.59
2:F:323:VAL:O	2:F:327:ALA:N	2.30	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:8:PHE:HB3	1:I:13:ARG:HH11	1.67	0.59
2:J:251:LYS:NZ	2:J:303:GLY:O	2.31	0.59
1:K:92:VAL:HG21	1:K:108:HIS:HB3	1.84	0.59
1:A:167:ILE:HA	1:A:246:ILE:HA	1.84	0.59
2:B:131:TYR:HA	2:B:136:ASN:HB2	1.84	0.59
2:B:192:HIS:CE1	2:B:197:ARG:HB3	2.38	0.59
2:B:294:ILE:HA	2:B:311:ALA:HA	1.85	0.59
2:D:67:SER:HA	2:D:72:VAL:HA	1.85	0.59
1:Q:277:PRO:HB2	1:O:194:ARG:HE	1.68	0.59
2:P:15:PHE:O	2:P:19:TRP:N	2.28	0.59
1:G:3:VAL:HG13	1:G:91:ILE:HG13	1.85	0.59
1:G:30:VAL:O	1:G:74:VAL:N	2.36	0.59
1:G:261:LYS:HZ3	1:G:262:ALA:HB2	1.67	0.59
2:H:59:LYS:HB3	2:H:59:LYS:HZ1	1.65	0.59
2:H:107:ALA:O	2:H:111:LEU:N	2.23	0.59
2:H:108:GLY:O	2:H:112:GLN:N	2.32	0.59
1:E:165:LEU:HD12	1:E:248:LYS:HD2	1.85	0.59
1:E:213:ALA:O	1:E:216:LEU:HB2	2.03	0.59
2:F:7:GLY:H	2:F:33:ASN:HD22	1.50	0.59
2:F:17:ARG:NH2	2:F:55:ASP:OD1	2.35	0.59
1:I:59:ILE:HA	1:I:64:PHE:HB2	1.85	0.58
2:J:189:ASP:OD1	2:J:200:ALA:N	2.26	0.58
1:K:274:CYS:HB3	1:K:293:ASP:HA	1.84	0.58
2:L:262:ARG:O	2:L:266:ASP:N	2.31	0.58
1:C:0:LYS:HZ2	1:C:1:LEU:HD13	1.68	0.58
1:C:8:PHE:CZ	1:C:13:ARG:HD2	2.38	0.58
1:C:16:LEU:HD12	1:C:18(A):TRP:HB3	1.84	0.58
1:C:127:THR:HB	1:C:217:VAL:HG13	1.83	0.58
1:C:253:GLU:HA	1:C:256:ASN:HD21	1.66	0.58
2:D:31:VAL:HG21	2:D:89:MET:HE3	1.85	0.58
2:D:294:ILE:HG23	2:D:311:ALA:HB2	1.85	0.58
1:Q:312:ASP:OD2	1:Q:314:GLU:N	2.34	0.58
1:G:90:ASP:OD1	1:G:90:ASP:N	2.34	0.58
1:G:149:CYS:N	3:G:401:NAD:O7N	2.35	0.58
1:G:177:SER:OG	1:G:237:VAL:O	2.21	0.58
1:G:183:ARG:N	1:G:195:ARG:O	2.34	0.58
2:H:145:THR:HG23	2:H:146:ILE:HG13	1.83	0.58
1:E:203:ILE:HG12	1:E:232:VAL:HG12	1.85	0.58
1:I:206:THR:O	1:I:229:ALA:N	2.29	0.58
1:I:357:GLU:O	1:Q:190:HIS:HA	2.03	0.58
2:L:196:ARG:CZ	2:L:207:PRO:HD2	2.33	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:255:VAL:O	1:C:259:PHE:N	2.32	0.58
2:D:105:ASP:O	2:D:109:LYS:N	2.26	0.58
2:D:185:GLN:HB3	2:D:197:ARG:HA	1.84	0.58
2:D:276:CYS:SG	2:D:277:ASP:N	2.74	0.58
1:Q:60(A):ASP:OD1	1:Q:61:ASN:ND2	2.36	0.58
1:Q:171:THR:OG1	1:O:306:LYS:NZ	2.25	0.58
2:R:206:VAL:HB	2:R:233:ARG:HB2	1.84	0.58
2:R:272:ILE:O	2:R:291:SER:N	2.23	0.58
2:R:291:SER:OG	2:R:322:ARG:NH1	2.30	0.58
1:O:157:PHE:HA	1:O:160:VAL:HB	1.83	0.58
1:G:299:VAL:HA	1:G:305:VAL:HA	1.85	0.58
2:H:6:ASN:O	2:H:97:GLY:N	2.31	0.58
2:H:91:ILE:O	2:H:116:LYS:N	2.36	0.58
1:E:176:HIS:O	1:E:231:ARG:HA	2.03	0.58
1:E:275:ASP:OD1	1:E:275:ASP:N	2.35	0.58
2:F:261:PHE:O	2:F:264:SER:OG	2.17	0.58
1:I:291:THR:HB	1:I:310:TRP:C	2.28	0.58
2:L:160:PHE:HA	2:L:163:VAL:HB	1.84	0.58
2:L:185:GLN:HB3	2:L:197:ARG:HA	1.83	0.58
1:A:38:LYS:HA	1:A:41:THR:HB	1.86	0.58
1:A:179:THR:O	1:A:182:GLN:NE2	2.22	0.58
2:B:244:LEU:HG	2:B:246:VAL:HG22	1.85	0.58
1:C:252:ALA:O	1:C:255:VAL:N	2.35	0.58
2:D:317:TRP:O	2:D:321:GLN:HG2	2.04	0.58
2:R:104:ARG:HG3	2:R:146:ILE:HG21	1.84	0.58
1:O:151:THR:HA	1:O:154:LEU:HD23	1.84	0.58
1:G:58:LYS:HZ3	1:G:58:LYS:HA	1.68	0.58
2:H:206:VAL:HB	2:H:233:ARG:HB2	1.86	0.58
2:H:253:PHE:CZ	2:H:255:GLU:HB3	2.37	0.58
1:E:82:LEU:HB2	1:E:84:TRP:CH2	2.38	0.58
2:F:34:ASP:HA	3:F:401:NAD:H2A	1.84	0.58
2:F:262:ARG:N	2:F:262:ARG:HH11	2.01	0.58
1:I:104:GLY:O	1:I:108:HIS:NE2	2.37	0.58
1:I:194:ARG:O	1:I:197:ARG:N	2.32	0.58
1:I:209:GLY:O	1:I:213:ALA:N	2.21	0.58
1:I:270:VAL:O	1:I:290:SER:N	2.31	0.58
2:J:140:TYR:CZ	2:J:142:HIS:HA	2.38	0.58
1:K:181:ASP:OD2	1:K:195:ARG:NH1	2.35	0.58
1:K:254:ASP:HA	1:K:257:ASN:HD22	1.68	0.58
1:K:327:LEU:HA	1:K:330:ASN:HB2	1.86	0.58
2:L:133:VAL:HA	2:L:137:GLU:HB3	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:162:LYS:HB2	2:L:220:LEU:HD22	1.86	0.58
2:L:300:MET:O	2:L:308:LYS:N	2.36	0.58
1:A:84:TRP:HB3	1:A:89:ILE:HB	1.85	0.58
1:A:287:ASP:HB3	1:A:319:GLN:HG3	1.84	0.58
1:A:297:THR:OG1	1:A:308:VAL:O	2.21	0.58
2:B:38:VAL:N	1:O:344:PRO:O	2.33	0.58
2:B:293:THR:HB	2:B:312:TRP:HB2	1.85	0.58
1:C:147:ALA:O	1:C:152:ASN:ND2	2.33	0.58
2:D:162:LYS:HB2	2:D:220:LEU:HD22	1.85	0.58
2:P:136:ASN:OD1	2:P:136:ASN:N	2.37	0.58
1:G:18:CYS:HB3	1:G:20:ARG:HE	1.68	0.58
2:F:38:VAL:HB	2:F:66:ILE:CD1	2.32	0.58
2:F:140:TYR:CZ	2:F:142:HIS:HA	2.38	0.58
1:I:105:ALA:HB1	1:I:116:VAL:HG21	1.85	0.58
2:J:180:SER:OG	2:J:236:THR:O	2.08	0.58
1:K:46:TYR:CD1	2:L:280:LEU:HD11	2.38	0.58
1:K:329:ALA:O	1:K:333:PRO:HD3	2.04	0.58
1:K:346:GLU:O	1:K:350:LYS:N	2.26	0.58
2:L:332:ASN:OD1	2:L:332:ASN:N	2.36	0.58
1:C:292:ILE:HG22	1:C:309:ALA:HB2	1.85	0.58
2:D:11:ILE:HG12	3:D:401:NAD:O5D	2.03	0.58
2:D:152:CYS:O	2:D:156:CYS:N	2.35	0.58
2:P:181:TYR:HD2	2:P:235:PRO:HA	1.68	0.58
1:G:255:VAL:O	1:G:259:PHE:N	2.36	0.58
2:H:32:ILE:O	2:H:75:VAL:HB	2.02	0.58
2:H:182:THR:OG1	2:H:183:GLY:N	2.36	0.58
1:E:294:SER:HA	1:E:297:THR:HB	1.86	0.58
1:I:257:ASN:N	1:I:260:ARG:HH21	2.00	0.58
2:J:175:MET:H	2:J:229:GLY:HA3	1.69	0.58
1:K:50:LEU:HD13	1:K:285:CYS:HA	1.86	0.58
2:L:140:TYR:O	2:L:333:LYS:NZ	2.32	0.58
2:B:85:PRO:HA	2:B:113:ALA:HB1	1.84	0.58
2:B:152:CYS:HB3	2:B:319:TYR:CD2	2.38	0.58
2:B:305:ASP:OD1	2:D:172:LYS:NZ	2.36	0.58
1:C:134:GLU:H	1:C:134:GLU:CD	2.10	0.58
1:C:141:ALA:HB1	1:C:144:ILE:HA	1.84	0.58
1:C:245:ASN:HB3	1:C:304:MET:HE2	1.83	0.58
1:Q:281:VAL:HA	1:Q:284:ARG:HG2	1.85	0.58
2:R:210:THR:HG22	2:R:231:ALA:HB2	1.85	0.58
1:O:156:PRO:HB2	1:O:267:LEU:HD22	1.86	0.58
2:P:11:ILE:N	3:P:401:NAD:O1N	2.35	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:157:LEU:HB2	2:P:161:VAL:HG11	1.86	0.58
2:P:180:SER:OG	2:P:181:TYR:N	2.36	0.58
2:P:196:ARG:NH1	2:P:207:PRO:HD2	2.18	0.58
2:P:289:ASP:OD1	2:P:289:ASP:N	2.34	0.58
2:H:142:HIS:ND1	2:H:330:VAL:O	2.36	0.58
2:H:152:CYS:O	2:H:156:CYS:N	2.36	0.58
2:H:280:LEU:O	2:F:196:ARG:NH2	2.37	0.58
3:F:401:NAD:O3B	3:F:401:NAD:O1A	2.21	0.58
1:I:177:SER:OG	1:I:237:VAL:N	2.31	0.58
1:I:198:ALA:O	1:I:202:ASN:ND2	2.37	0.58
2:J:215:ALA:HA	2:J:218:LEU:HB2	1.86	0.58
1:K:3:VAL:HA	1:K:89:ILE:HG23	1.85	0.58
1:K:138:GLY:H	1:K:140:VAL:HB	1.69	0.58
1:K:165:LEU:HD23	1:K:248:LYS:HD2	1.85	0.58
2:L:118:VAL:N	2:L:145:THR:O	2.34	0.58
2:L:157:LEU:HA	2:L:160:PHE:CE1	2.38	0.58
2:L:215:ALA:HA	2:L:218:LEU:HD13	1.86	0.58
2:L:289:ASP:N	2:L:289:ASP:OD1	2.34	0.58
2:L:321:GLN:O	2:L:325:ASP:N	2.27	0.58
2:B:30:VAL:HA	2:B:73:ILE:HG12	1.85	0.58
1:C:13:ARG:NH2	1:C:43:LEU:O	2.29	0.58
2:D:157:LEU:HA	2:D:160:PHE:CE1	2.39	0.58
2:D:290:VAL:HA	2:D:322:ARG:HH12	1.69	0.58
2:D:321:GLN:O	2:D:325:ASP:N	2.27	0.58
2:D:332:ASN:OD1	2:D:332:ASN:N	2.36	0.58
1:O:56:ASP:OD1	1:O:58:LYS:NZ	2.36	0.58
2:P:149:ASN:HD21	2:P:155:ASN:HB2	1.69	0.58
1:G:90:ASP:HA	1:G:114:LYS:HG2	1.86	0.58
2:H:208:THR:OG1	2:H:209:SER:N	2.37	0.58
1:E:20:ARG:HD2	1:E:21:LYS:HZ3	1.69	0.58
2:F:51:LEU:HD22	2:F:287:CYS:HB2	1.84	0.58
2:J:163:VAL:HA	2:J:166:GLN:CD	2.29	0.58
2:J:289:ASP:HB3	2:J:321:GLN:HG3	1.85	0.58
2:J:294:ILE:HA	2:J:311:ALA:HA	1.86	0.58
1:K:255:VAL:O	1:K:259:PHE:N	2.34	0.58
2:L:22:ARG:NH2	2:L:321:GLN:O	2.37	0.58
1:A:206:THR:N	1:A:229:ALA:O	2.37	0.58
1:A:297:THR:HG23	1:A:307:VAL:HA	1.83	0.58
2:B:175:MET:H	2:B:229:GLY:HA3	1.68	0.58
1:C:3:VAL:C	1:C:27:VAL:HA	2.28	0.58
1:C:90:ASP:HA	1:C:114:LYS:HZ3	1.69	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:130:VAL:HA	1:C:134:GLU:HB3	1.86	0.58
1:C:194:ARG:HB3	1:C:204:VAL:HG22	1.85	0.58
2:R:165:ASP:HA	2:R:169:GLY:HA2	1.86	0.58
2:R:199:ARG:NH1	1:O:46:TYR:O	2.35	0.58
2:P:248:VAL:HG22	2:P:305:ASP:HA	1.86	0.58
2:P:299:THR:HG22	2:P:310:ILE:H	1.68	0.58
1:G:346:GLU:O	1:G:350:LYS:N	2.37	0.58
2:H:192:HIS:HB3	2:H:198:ALA:HA	1.85	0.58
1:E:47:ASP:OD1	1:E:50:LEU:N	2.37	0.58
1:I:5:ILE:HG13	1:I:30:VAL:HG22	1.86	0.58
1:I:32:ASP:N	1:I:74:VAL:O	2.36	0.58
2:J:11:ILE:HG12	3:J:401:NAD:PN	2.43	0.58
2:J:279:PRO:HB2	2:L:196:ARG:HG3	1.86	0.58
1:K:280:SER:O	1:K:284:ARG:N	2.37	0.58
1:C:47:ASP:OD1	1:C:50:LEU:N	2.36	0.58
1:C:62:GLU:OE2	1:C:63:THR:OG1	2.21	0.58
2:D:9:GLY:O	2:D:13:ARG:N	2.23	0.58
2:H:136:ASN:HD21	2:H:219:VAL:HG12	1.68	0.58
1:E:270:VAL:HG13	1:E:289:SER:HB2	1.86	0.58
1:I:183:ARG:N	1:I:195:ARG:O	2.37	0.58
1:I:218:LEU:HD23	1:I:221:LEU:HD23	1.84	0.58
2:J:1:LEU:HD13	2:J:331:ALA:HA	1.85	0.58
1:K:118:ILE:O	1:K:146:ASN:ND2	2.36	0.58
2:L:257:VAL:HA	2:L:260:ALA:HB3	1.86	0.58
1:A:272:ASP:N	1:A:290:SER:OG	2.36	0.58
1:A:281:VAL:HB	1:C:202:ASN:HD21	1.69	0.58
1:C:25:LEU:HD11	1:C:329:ALA:HB2	1.85	0.58
1:C:60:ILE:HG22	1:C:60(A):ASP:H	1.68	0.58
1:C:84:TRP:HA	1:C:87:LEU:HD12	1.84	0.58
1:Q:40:ALA:HA	1:Q:43:LEU:HD12	1.86	0.58
1:Q:67:ASP:N	1:Q:67:ASP:OD1	2.37	0.58
1:Q:151:THR:HA	1:Q:154:LEU:HB3	1.86	0.58
1:O:115:LYS:HG3	1:O:332:TRP:CE3	2.39	0.58
2:P:46:LYS:HB2	2:P:58:VAL:HG21	1.84	0.58
2:P:172:LYS:NZ	2:P:247:GLN:OE1	2.32	0.58
1:G:8:PHE:CE1	1:G:13:ARG:HG2	2.39	0.58
1:G:109:ILE:HA	1:G:113:ALA:HB3	1.85	0.58
2:H:22:ARG:NH2	2:H:321:GLN:O	2.37	0.58
2:F:5:ILE:HG23	2:F:95:ILE:HB	1.86	0.58
2:F:30:VAL:O	2:F:74:LYS:N	2.23	0.58
2:F:265:ALA:HA	2:F:269:LEU:HB2	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:38:LYS:HA	1:I:41:THR:HB	1.86	0.57
2:J:274:SER:O	2:J:294:ILE:HG12	2.04	0.57
2:B:173:GLY:O	2:B:228:ASN:N	2.31	0.57
2:D:32:ILE:O	2:D:76:VAL:N	2.37	0.57
1:Q:162:ASP:HA	1:Q:166:GLY:H	1.68	0.57
1:O:181:ASP:OD1	1:O:231:ARG:NH2	2.36	0.57
1:O:315:TRP:O	1:O:318:SER:OG	2.22	0.57
1:G:84:TRP:O	1:G:88:GLY:N	2.36	0.57
1:I:47:ASP:CG	1:I:49:ILE:H	2.11	0.57
1:I:60:ILE:HD11	1:I:65:SER:HB2	1.86	0.57
1:I:175:THR:OG1	1:I:239:VAL:N	2.22	0.57
2:J:0:LYS:NZ	2:J:331:ALA:O	2.29	0.57
2:J:217:ALA:C	2:J:224:LYS:HZ3	2.12	0.57
2:J:301:VAL:HG13	2:J:307:VAL:HG22	1.85	0.57
1:K:167:ILE:HG13	1:K:246:ILE:HD12	1.86	0.57
1:K:239:VAL:HA	1:K:310:TRP:HA	1.85	0.57
1:K:326:ASP:O	1:K:330:ASN:N	2.38	0.57
2:L:208:THR:HG21	2:L:233:ARG:HG3	1.85	0.57
1:A:10:ARG:HH12	1:A:48:SER:HB2	1.69	0.57
1:A:327:LEU:O	1:A:331:LYS:N	2.35	0.57
2:B:0:LYS:NZ	2:B:331:ALA:O	2.29	0.57
2:B:13:ARG:NH1	3:B:401:NAD:O2A	2.37	0.57
2:B:46:LYS:O	2:B:54:PHE:N	2.37	0.57
2:B:47:TYR:HB2	1:C:197:ARG:HH12	1.68	0.57
2:B:120:ILE:H	2:B:148:SER:HA	1.68	0.57
2:B:142:HIS:CD2	2:B:335:GLN:H	2.22	0.57
2:B:204:ASN:ND2	2:D:283:ILE:HG22	2.19	0.57
1:Q:256:ASN:HA	1:Q:259:PHE:CD2	2.38	0.57
2:R:208:THR:OG1	2:R:209:SER:N	2.37	0.57
2:R:230:ILE:HG12	2:P:308:LYS:HZ3	1.68	0.57
2:R:252:THR:OG1	2:R:253:PHE:N	2.37	0.57
2:R:298:LEU:HD13	2:P:230:ILE:HD13	1.85	0.57
1:O:85:ALA:N	1:O:112:GLY:HA3	2.18	0.57
1:G:179:THR:OG1	1:G:231:ARG:NH1	2.38	0.57
1:E:128:TYR:HA	1:E:133:ASN:OD1	2.04	0.57
1:I:79:PRO:O	1:I:82:LEU:N	2.38	0.57
1:I:132:VAL:HG11	1:I:155:ALA:HB1	1.86	0.57
1:I:148:SER:O	1:I:152:ASN:N	2.26	0.57
2:J:92:ASP:OD1	2:J:116:LYS:NZ	2.27	0.57
2:J:131:TYR:N	2:J:148:SER:O	2.34	0.57
1:A:179:THR:OG1	1:A:231:ARG:NH2	2.38	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:129:VAL:N	1:C:133:ASN:OD1	2.32	0.57
2:D:42:SER:HB3	2:D:66:ILE:HD12	1.85	0.57
1:Q:109:ILE:HA	1:Q:113:ALA:HB3	1.85	0.57
2:R:209:SER:OG	2:R:214:LYS:NZ	2.29	0.57
1:O:259:PHE:O	1:O:263:ALA:N	2.25	0.57
2:P:186:ARG:HH22	2:P:193:ARG:HH22	1.52	0.57
2:P:224:LYS:O	2:P:226:LYS:NZ	2.37	0.57
2:H:67:SER:HA	2:H:72:VAL:HA	1.86	0.57
2:H:264:SER:O	2:H:268:GLU:N	2.35	0.57
2:F:82:VAL:HG22	2:F:109:LYS:HB3	1.85	0.57
2:F:317:TRP:O	2:F:320:SER:OG	2.22	0.57
1:I:10:ARG:HB3	1:I:314:GLU:OE2	2.05	0.57
2:J:305:ASP:OD1	2:L:172:LYS:NZ	2.35	0.57
1:K:176:HIS:HB3	1:K:231:ARG:HD2	1.86	0.57
2:L:29:VAL:O	2:L:73:ILE:HG21	2.04	0.57
1:A:36:GLY:O	1:A:39:SER:OG	2.22	0.57
1:C:29:VAL:HG22	1:C:74:VAL:HG22	1.86	0.57
1:Q:39:SER:O	1:Q:43:LEU:N	2.21	0.57
1:O:2:LYS:O	1:O:90:ASP:N	2.37	0.57
1:O:29:VAL:HG11	1:O:87:LEU:HD13	1.86	0.57
1:O:254:ASP:HA	1:O:257:ASN:HD22	1.69	0.57
2:P:168:PHE:HD2	2:P:250:LYS:HG2	1.69	0.57
2:H:44:LEU:HD23	1:E:197:ARG:NH1	2.19	0.57
2:H:272:ILE:O	2:H:291:SER:N	2.23	0.57
2:F:14:ASN:OD1	2:F:320:SER:OG	2.07	0.57
1:I:31:ASN:ND2	1:I:76:ASN:H	2.03	0.57
1:K:256:ASN:O	1:K:260:ARG:N	2.18	0.57
2:B:215:ALA:HA	2:B:218:LEU:HB2	1.85	0.57
2:B:315:ASN:N	2:B:316:GLU:OE2	2.33	0.57
1:C:60:ILE:HD11	1:C:65:SER:HB2	1.86	0.57
2:D:151:SER:O	2:D:155:ASN:N	2.23	0.57
2:D:257:VAL:HA	2:D:260:ALA:HB3	1.86	0.57
1:Q:178:TYR:N	1:Q:234:THR:O	2.38	0.57
1:Q:270:VAL:HA	1:Q:289:SER:H	1.69	0.57
2:R:6:ASN:N	2:R:95:ILE:O	2.37	0.57
1:G:182:GLN:HG3	1:G:195:ARG:NH1	2.19	0.57
2:H:98:THR:HG21	2:H:101:PHE:HE2	1.70	0.57
2:F:59:LYS:HB2	2:F:59:LYS:NZ	2.20	0.57
2:J:131:TYR:HA	2:J:136:ASN:HB2	1.85	0.57
2:L:102:VAL:HG22	2:L:125:LYS:H	1.69	0.57
2:L:299:THR:HA	2:L:310:ILE:HD11	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:10:ARG:N	3:A:401:NAD:O3	2.37	0.57
1:A:101:ASP:OD1	1:A:104:GLY:N	2.37	0.57
2:B:1:LEU:HD13	2:B:331:ALA:HA	1.85	0.57
2:B:16:LEU:O	2:B:20:HIS:N	2.23	0.57
2:B:140:TYR:CZ	2:B:142:HIS:HA	2.39	0.57
2:B:252:THR:OG1	2:B:253:PHE:N	2.38	0.57
1:C:84:TRP:HD1	1:C:112:GLY:C	2.12	0.57
1:C:167:ILE:HG12	1:C:244:VAL:HG21	1.85	0.57
1:C:270:VAL:HG13	1:C:289:SER:HB2	1.85	0.57
1:Q:56:ASP:HB3	1:Q:67:ASP:HA	1.87	0.57
2:R:224:LYS:H	2:R:226:LYS:HZ3	1.52	0.57
1:O:85:ALA:H	1:O:112:GLY:HA3	1.69	0.57
1:O:137:TYR:HD2	1:O:331:LYS:HD2	1.69	0.57
1:O:205:PRO:HA	1:O:230:LEU:HD23	1.86	0.57
2:P:323:VAL:O	2:P:327:ALA:N	2.28	0.57
1:G:4:ALA:HA	1:G:27:VAL:HG13	1.85	0.57
1:G:287:ASP:OD1	1:G:315:TRP:NE1	2.36	0.57
2:H:252:THR:OG1	2:H:253:PHE:N	2.37	0.57
2:J:12:GLY:HA2	2:J:15:PHE:HB2	1.86	0.57
2:J:60:THR:O	2:J:60:THR:HG23	2.05	0.57
2:J:177:THR:OG1	2:J:178:THR:N	2.36	0.57
2:J:300:MET:O	2:J:308:LYS:N	2.29	0.57
1:K:3:VAL:C	1:K:27:VAL:HA	2.30	0.57
1:K:190:HIS:HE2	1:K:192:ASP:HB3	1.70	0.57
2:L:163:VAL:HG13	2:L:167:LYS:HZ1	1.68	0.57
2:B:15:PHE:CZ	2:B:324:VAL:HA	2.40	0.57
2:B:154:THR:HG21	2:B:215:ALA:HB3	1.85	0.57
1:C:279:VAL:HA	1:C:310:TRP:CH2	2.40	0.57
1:C:298:MET:N	1:C:306:LYS:O	2.30	0.57
2:D:210:THR:HB	2:D:231:ALA:HB2	1.85	0.57
1:Q:85:ALA:N	1:Q:111:ALA:O	2.37	0.57
2:P:182:THR:OG1	2:P:184:ASP:OD2	2.23	0.57
1:G:92:VAL:O	1:G:117:ILE:N	2.35	0.57
1:G:157:PHE:HA	1:G:271:LEU:HD21	1.86	0.57
1:G:270:VAL:HA	1:G:289:SER:H	1.68	0.57
1:G:304:MET:HB2	1:E:169:LYS:HE3	1.87	0.57
2:H:172:LYS:HD3	2:F:303:GLY:HA3	1.86	0.57
2:H:281:VAL:HB	2:F:204:ASN:HD22	1.68	0.57
1:E:94:GLU:O	1:E:119:THR:OG1	2.16	0.57
2:F:11:ILE:HG12	3:F:401:NAD:PN	2.44	0.57
2:F:168:PHE:HD2	2:F:250:LYS:HG2	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:193:ARG:H	2:F:193:ARG:NE	2.02	0.57
2:J:48:ASP:OD2	2:J:51:LEU:N	2.38	0.57
1:K:83:PRO:O	1:K:86:GLU:N	2.38	0.57
1:K:178:TYR:N	1:K:232:VAL:O	2.38	0.57
2:L:131:TYR:OH	2:L:139:GLY:O	2.18	0.57
2:B:217:ALA:C	2:B:224:LYS:HZ3	2.12	0.57
2:B:263:GLU:O	2:B:267:ASN:ND2	2.38	0.57
2:B:289:ASP:OD1	2:B:289:ASP:N	2.37	0.57
1:C:176:HIS:H	1:C:232:VAL:HG22	1.69	0.57
1:Q:174:THR:OG1	1:Q:311:TYR:OH	2.14	0.57
2:R:320:SER:HA	2:R:323:VAL:HB	1.86	0.57
2:H:301:VAL:HG22	2:H:307:VAL:HG22	1.87	0.57
2:F:136:ASN:OD1	2:F:136:ASN:N	2.37	0.57
2:J:142:HIS:CD2	2:J:335:GLN:H	2.22	0.57
1:K:127:THR:HB	1:K:217:VAL:HG13	1.86	0.57
1:K:149:CYS:HB3	1:K:317:TYR:HD1	1.70	0.57
1:K:176:HIS:O	1:K:231:ARG:NH1	2.37	0.57
1:K:292:ILE:HG22	1:K:309:ALA:HB2	1.86	0.57
1:K:347:ASP:O	1:K:351:ASP:N	2.36	0.57
2:L:220:LEU:HB3	2:L:223:LEU:HD13	1.86	0.57
1:A:270:VAL:HA	1:A:289:SER:HG	1.68	0.57
2:D:57:ASP:N	2:D:69:ASP:OD2	2.37	0.57
2:D:228:ASN:OD1	2:D:229:GLY:N	2.37	0.57
2:P:22:ARG:NH2	2:P:325:ASP:OD1	2.37	0.57
2:P:94:VAL:O	2:P:118:VAL:HA	2.05	0.57
2:P:160:PHE:HB2	2:P:261:PHE:CE2	2.39	0.57
2:P:262:ARG:N	2:P:262:ARG:HH11	2.03	0.57
2:H:122:ALA:O	2:H:148:SER:OG	2.22	0.57
2:H:165:ASP:HA	2:H:169:GLY:HA2	1.87	0.57
1:I:154:LEU:O	1:I:158:VAL:HB	2.04	0.57
2:J:11:ILE:O	2:J:15:PHE:N	2.20	0.57
2:J:120:ILE:O	2:J:149:ASN:N	2.36	0.57
2:J:149:ASN:HD21	2:J:155:ASN:HB2	1.69	0.57
2:J:252:THR:H	2:J:304:ASP:HB3	1.70	0.57
1:K:115:LYS:HE3	1:K:139:HIS:HA	1.87	0.57
1:K:177:SER:O	1:K:231:ARG:NH1	2.24	0.57
2:L:6:ASN:HB3	2:L:96:GLU:HA	1.86	0.57
2:L:34:ASP:HA	3:L:401:NAD:H2A	1.87	0.57
2:L:140:TYR:HE2	2:L:332:ASN:HB2	1.69	0.57
2:L:152:CYS:O	2:L:156:CYS:N	2.38	0.57
1:A:19:GLY:O	1:A:21:LYS:NZ	2.36	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:131:GLY:N	1:A:134:GLU:OE2	2.38	0.57
2:B:177:THR:OG1	2:B:178:THR:N	2.37	0.57
1:C:244:VAL:O	1:C:304:MET:HA	2.05	0.57
2:D:317:TRP:O	2:D:320:SER:OG	2.22	0.57
1:Q:14:ASN:ND2	1:Q:314:GLU:OE1	2.37	0.57
1:Q:134:GLU:OE1	1:Q:134:GLU:N	2.35	0.57
2:R:154:THR:HA	2:R:157:LEU:HG	1.87	0.57
2:R:178:THR:OG1	2:R:241:VAL:N	2.29	0.57
2:R:196:ARG:NH2	2:P:280:LEU:O	2.38	0.57
1:O:31:ASN:OD1	1:O:76:ASN:N	2.38	0.57
2:P:11:ILE:H	3:P:401:NAD:PN	2.27	0.57
1:G:29:VAL:HG11	1:G:87:LEU:HD13	1.87	0.57
1:G:31:ASN:OD1	1:G:76:ASN:N	2.38	0.57
1:G:151:THR:O	1:G:155:ALA:N	2.23	0.57
1:G:178:TYR:N	1:G:234:THR:O	2.38	0.57
1:E:3:VAL:HG21	1:E:25:LEU:HB3	1.87	0.57
1:I:106:GLY:O	1:I:110:GLN:N	2.32	0.56
1:I:167:ILE:HA	1:I:246:ILE:HA	1.86	0.56
1:I:174:THR:O	1:I:230:LEU:HB2	2.05	0.56
2:J:6:ASN:N	2:J:95:ILE:O	2.37	0.56
2:J:32:ILE:N	2:J:74:LYS:O	2.38	0.56
1:K:60:ILE:HG22	1:K:60(A):ASP:H	1.70	0.56
1:K:213:ALA:HA	1:K:216:LEU:HG	1.86	0.56
1:K:252:ALA:O	1:K:255:VAL:N	2.36	0.56
2:L:194:ASP:HB3	2:L:197:ARG:HB2	1.86	0.56
1:A:6:ASN:HB3	1:A:95:GLY:H	1.69	0.56
1:A:31:ASN:ND2	1:A:76:ASN:O	2.38	0.56
1:A:171:THR:O	1:A:242:LEU:HD12	2.04	0.56
1:A:253:GLU:O	1:A:257:ASN:N	2.36	0.56
1:A:327:LEU:HD23	1:A:328:VAL:HG22	1.87	0.56
2:D:122:ALA:O	2:D:148:SER:OG	2.23	0.56
2:D:141:THR:OG1	2:D:144:ASP:OD1	2.21	0.56
2:D:152:CYS:HB3	2:D:319:TYR:CD2	2.40	0.56
2:D:300:MET:O	2:D:308:LYS:N	2.38	0.56
1:Q:238:SER:HB2	1:Q:311:TYR:CE2	2.40	0.56
2:R:295:ASP:OD1	2:R:299:THR:N	2.38	0.56
1:O:162:ASP:HB2	1:O:221:LEU:HD21	1.86	0.56
2:P:38:VAL:O	2:P:42:SER:N	2.29	0.56
1:G:236:ASN:O	1:G:284:ARG:NH1	2.38	0.56
2:H:3:VAL:HG22	2:H:93:LEU:H	1.70	0.56
2:H:154:THR:HA	2:H:157:LEU:HG	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:H:401:NAD:O2B	1:E:188:SER:OG	2.18	0.56
1:E:122:ALA:HA	1:E:125:ILE:HG12	1.86	0.56
2:F:38:VAL:CB	2:F:66:ILE:HD11	2.34	0.56
1:I:169:LYS:N	1:I:245:ASN:OD1	2.38	0.56
1:I:221:LEU:HA	1:I:224:LYS:HD3	1.87	0.56
1:K:5:ILE:HB	1:K:30:VAL:HG22	1.86	0.56
1:K:253:GLU:CD	1:K:260:ARG:HH22	2.13	0.56
2:L:152:CYS:HB3	2:L:319:TYR:CD2	2.40	0.56
2:L:179:HIS:O	2:L:234:VAL:N	2.38	0.56
1:A:148:SER:O	1:A:152:ASN:ND2	2.38	0.56
2:B:264:SER:O	2:B:269:LEU:N	2.36	0.56
2:B:301:VAL:HG13	2:B:307:VAL:HG22	1.86	0.56
1:C:105:ALA:HA	1:C:108:HIS:CG	2.40	0.56
1:C:165:LEU:HD23	1:C:248:LYS:HD2	1.86	0.56
2:D:15:PHE:HE2	2:D:323:VAL:HB	1.70	0.56
2:D:192:HIS:CE1	2:D:194:ASP:H	2.24	0.56
1:Q:202:ASN:CG	1:O:279:VAL:HB	2.30	0.56
1:O:190:HIS:CE1	1:O:192:ASP:HB3	2.40	0.56
2:P:179:HIS:HB3	2:P:233:ARG:HA	1.87	0.56
1:G:119:THR:O	1:G:146:ASN:ND2	2.37	0.56
1:G:270:VAL:HG13	1:G:289:SER:HB2	1.85	0.56
2:H:17:ARG:NH1	2:H:51:LEU:HB2	2.20	0.56
2:H:17:ARG:O	2:H:21:GLY:N	2.27	0.56
2:H:79:ARG:HA	3:H:401:NAD:H62A	1.70	0.56
1:I:45:LYS:O	1:I:53:PHE:N	2.27	0.56
1:I:105:ALA:HA	1:I:108:HIS:CE1	2.40	0.56
2:J:48:ASP:OD2	2:J:52:GLY:N	2.38	0.56
2:J:186:ARG:HB3	2:J:188:LEU:O	2.06	0.56
2:J:204:ASN:ND2	2:L:283:ILE:HG22	2.21	0.56
1:K:29:VAL:HG22	1:K:74:VAL:HG22	1.87	0.56
1:K:36:GLY:O	1:K:39:SER:OG	2.15	0.56
2:L:18:CYS:O	2:L:22:ARG:N	2.23	0.56
2:L:28:ASP:OD2	2:L:71:LYS:HE3	1.98	0.56
2:L:319:TYR:O	2:L:323:VAL:HG23	2.04	0.56
2:B:8:PHE:O	3:B:401:NAD:O3B	2.24	0.56
2:B:175:MET:HB3	2:B:244:LEU:HB2	1.87	0.56
2:B:187:LEU:HD22	1:C:184:LEU:H	1.70	0.56
2:B:240:SER:OG	2:B:241:VAL:N	2.38	0.56
1:C:20:ARG:HA	1:C:20:ARG:HH11	1.71	0.56
1:C:246:ILE:HG13	1:C:248:LYS:H	1.69	0.56
1:Q:60(A):ASP:O	1:Q:63:THR:N	2.37	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:84:TRP:HA	1:Q:87:LEU:HB2	1.86	0.56
2:R:91:ILE:N	2:R:114:GLY:O	2.38	0.56
1:O:174:THR:OG1	1:O:238:SER:HB3	2.05	0.56
1:O:273:VAL:HA	1:O:292:ILE:HB	1.87	0.56
1:O:275:ASP:N	1:O:275:ASP:OD1	2.34	0.56
2:P:39:LYS:O	2:P:42:SER:OG	2.10	0.56
2:P:253:PHE:CZ	2:P:255:GLU:HB3	2.40	0.56
1:G:108:HIS:HA	1:G:111:ALA:HB3	1.87	0.56
1:G:218:LEU:HD12	1:G:220:GLN:HE22	1.69	0.56
1:G:318:SER:OG	1:G:319:GLN:OE1	2.23	0.56
2:H:188:LEU:HD22	1:E:180:GLY:H	1.69	0.56
1:E:94:GLU:HB3	1:E:119:THR:H	1.69	0.56
1:E:292:ILE:HG23	1:E:309:ALA:HB2	1.87	0.56
2:F:1:LEU:HD22	2:F:331:ALA:HA	1.85	0.56
2:F:8:PHE:O	2:F:13:ARG:NE	2.38	0.56
2:F:196:ARG:HB3	2:F:196:ARG:HH11	1.71	0.56
1:I:300:MET:HG2	1:K:169:LYS:HD3	1.87	0.56
2:J:65:ALA:HB1	2:J:72:VAL:HG13	1.86	0.56
2:J:149:ASN:OD1	2:J:150:ALA:N	2.39	0.56
1:K:11:ILE:N	1:K:314:GLU:OE2	2.39	0.56
1:K:105:ALA:HB1	1:K:116:VAL:HG11	1.87	0.56
2:L:253:PHE:CE2	2:L:255:GLU:HB3	2.40	0.56
1:A:236:ASN:H	1:A:284:ARG:NH2	2.04	0.56
2:B:65:ALA:HB1	2:B:72:VAL:HG13	1.87	0.56
2:B:106:GLY:O	2:B:110:HIS:ND1	2.37	0.56
2:B:142:HIS:NE2	2:B:334:TRP:HA	2.18	0.56
1:C:83:PRO:HB2	1:C:86:GLU:HB3	1.86	0.56
1:C:253:GLU:HA	1:C:256:ASN:ND2	2.20	0.56
1:C:253:GLU:CD	1:C:260:ARG:HH22	2.13	0.56
2:D:3:VAL:HA	2:D:91:ILE:HG23	1.88	0.56
2:D:18:CYS:O	2:D:22:ARG:N	2.29	0.56
2:D:215:ALA:HA	2:D:218:LEU:HD13	1.88	0.56
1:Q:327:LEU:HA	1:Q:330:ASN:HD21	1.70	0.56
2:R:8:PHE:HZ	2:R:45:LEU:HB2	1.69	0.56
1:O:116:VAL:O	1:O:144:ILE:N	2.22	0.56
2:P:154:THR:HG23	2:P:212:ALA:HA	1.86	0.56
1:G:178:TYR:N	1:G:232:VAL:O	2.39	0.56
2:H:161:VAL:O	2:H:165:ASP:N	2.25	0.56
2:H:167:LYS:O	2:H:250:LYS:NZ	2.28	0.56
2:F:215:ALA:O	2:F:219:VAL:N	2.34	0.56
1:I:93:ILE:HA	1:I:117:ILE:HB	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:240:SER:OG	2:J:241:VAL:N	2.38	0.56
1:K:102:GLY:O	1:K:106:GLY:N	2.38	0.56
2:L:86:TRP:NE1	2:L:110:HIS:O	2.38	0.56
2:L:185:GLN:NE2	2:L:185:GLN:H	2.03	0.56
1:A:192:ASP:O	1:A:196:ALA:N	2.33	0.56
2:B:255:GLU:CD	2:B:262:ARG:HH12	2.12	0.56
1:C:17:ARG:NH2	1:C:51:GLY:O	2.32	0.56
2:D:31:VAL:HG13	2:D:74:LYS:HB3	1.88	0.56
1:Q:1:LEU:HD23	1:Q:91:ILE:HD13	1.86	0.56
1:Q:1:LEU:HD22	1:Q:329:ALA:HA	1.87	0.56
2:R:67:SER:CB	2:R:72:VAL:CG2	2.26	0.56
2:R:137:GLU:HB2	2:R:326:LEU:HD13	1.88	0.56
2:R:172:LYS:HD3	2:P:303:GLY:HA3	1.87	0.56
1:O:237:VAL:HG11	1:O:280:SER:HB2	1.86	0.56
2:P:138:GLU:H	2:P:138:GLU:CD	2.14	0.56
2:P:184:ASP:OD1	2:P:233:ARG:NH1	2.39	0.56
2:P:208:THR:OG1	2:P:209:SER:N	2.39	0.56
1:G:173:THR:OG1	1:G:228:ILE:HG23	2.06	0.56
2:H:177:THR:HG1	2:H:313:TYR:HH	1.51	0.56
2:H:182:THR:HG23	2:H:184:ASP:HB3	1.86	0.56
1:E:178:TYR:HA	1:E:182:GLN:HE22	1.71	0.56
1:E:274:CYS:N	1:E:292:ILE:O	2.38	0.56
2:F:38:VAL:HG11	2:F:64:SER:C	2.30	0.56
2:F:167:LYS:HG2	2:F:260:ALA:HB1	1.86	0.56
1:I:129:VAL:HB	1:I:132:VAL:HB	1.88	0.56
2:J:13:ARG:NH1	3:J:401:NAD:O2A	2.39	0.56
2:J:66:ILE:O	2:J:73:ILE:N	2.38	0.56
2:J:104:ARG:HD3	2:J:146:ILE:HG21	1.87	0.56
1:K:25:LEU:HD11	1:K:329:ALA:HB2	1.87	0.56
1:K:171:THR:O	1:K:242:LEU:HD12	2.04	0.56
2:L:0:LYS:N	2:L:25:SER:O	2.33	0.56
1:A:59:ILE:HA	1:A:64:PHE:HB2	1.87	0.56
1:A:272:ASP:HB3	1:A:290:SER:O	2.06	0.56
2:B:172:LYS:HG2	2:B:226:LYS:HB2	1.86	0.56
2:B:174:THR:O	2:B:245:VAL:N	2.35	0.56
2:B:264:SER:O	2:B:268:GLU:N	2.39	0.56
1:C:176:HIS:O	1:C:231:ARG:NH1	2.39	0.56
2:D:140:TYR:O	2:D:333:LYS:NZ	2.33	0.56
1:Q:272:ASP:O	1:Q:292:ILE:N	2.35	0.56
2:R:194:ASP:CG	2:R:197:ARG:H	2.14	0.56
1:O:270:VAL:HG13	1:O:289:SER:HB2	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:256:ASN:HA	1:G:259:PHE:CG	2.41	0.56
2:H:272:ILE:O	2:H:291:SER:OG	2.15	0.56
2:H:295:ASP:OD1	2:H:299:THR:N	2.38	0.56
1:E:82:LEU:HB2	1:E:84:TRP:CZ3	2.40	0.56
1:E:84:TRP:HA	1:E:87:LEU:HB2	1.88	0.56
2:F:15:PHE:O	2:F:19:TRP:N	2.31	0.56
2:F:253:PHE:CZ	2:F:255:GLU:HB3	2.40	0.56
2:F:299:THR:HG22	2:F:310:ILE:N	2.21	0.56
1:I:353:PRO:HA	1:I:358:CYS:HB3	1.87	0.56
2:J:106:GLY:O	2:J:110:HIS:ND1	2.39	0.56
2:J:195:LEU:HD12	2:J:195:LEU:H	1.71	0.56
2:L:224:LYS:H	2:L:226:LYS:HZ2	1.54	0.56
1:A:76:ASN:HD21	1:A:78:ASP:HB3	1.69	0.56
1:A:105:ALA:HA	1:A:108:HIS:CE1	2.41	0.56
1:A:304:MET:HE1	1:C:245:ASN:H	1.70	0.56
2:B:170:ILE:HG21	2:B:246:VAL:HG12	1.88	0.56
2:B:183:GLY:HA2	1:C:184:LEU:HD23	1.87	0.56
2:D:86:TRP:NE1	2:D:110:HIS:O	2.38	0.56
2:D:165:ASP:OD1	2:D:170:ILE:N	2.39	0.56
2:D:172:LYS:HZ1	2:D:247:GLN:CD	2.14	0.56
1:Q:60:ILE:HG22	1:Q:60(A):ASP:H	1.70	0.56
1:Q:274:CYS:SG	1:Q:275:ASP:N	2.79	0.56
2:R:142:HIS:CE1	2:R:334:TRP:HA	2.40	0.56
1:G:157:PHE:CE1	1:G:292:ILE:HG12	2.41	0.56
1:E:157:PHE:HD2	1:E:271:LEU:HD11	1.69	0.56
2:F:157:LEU:HA	2:F:160:PHE:CE1	2.40	0.56
1:I:304:MET:HB3	1:K:169:LYS:NZ	2.20	0.56
1:I:318:SER:O	1:I:321:VAL:N	2.37	0.56
2:L:32:ILE:O	2:L:75:VAL:CB	2.54	0.56
2:L:138:GLU:OE1	2:L:138:GLU:N	2.30	0.56
1:A:10:ARG:NH1	2:D:189:ASP:OD1	2.38	0.56
1:A:317:TYR:CE2	3:A:401:NAD:H4N	2.33	0.56
2:B:32:ILE:N	2:B:74:LYS:O	2.38	0.56
2:B:103:ASP:CG	2:B:106:GLY:H	2.14	0.56
2:B:239:VAL:HG22	2:B:314:ASP:HA	1.88	0.56
1:C:254:ASP:HA	1:C:257:ASN:HD22	1.71	0.56
1:Q:51:GLY:HA2	2:R:283:ILE:HD11	1.88	0.56
2:R:211:GLY:O	2:R:215:ALA:N	2.21	0.56
2:P:317:TRP:O	2:P:320:SER:OG	2.23	0.56
1:G:2:LYS:O	1:G:90:ASP:N	2.38	0.56
1:G:11:ILE:HB	3:G:401:NAD:PN	2.45	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:317:TRP:O	2:H:320:SER:OG	2.16	0.56
1:E:76:ASN:OD1	1:E:77:ARG:N	2.39	0.56
1:E:108:HIS:CD2	1:E:108:HIS:N	2.74	0.56
1:I:1:LEU:N	1:I:24:PRO:O	2.39	0.56
1:I:8:PHE:CE2	1:I:13:ARG:HA	2.39	0.56
2:J:252:THR:OG1	2:J:253:PHE:N	2.38	0.56
1:K:90:ASP:OD1	1:K:90:ASP:N	2.39	0.56
1:A:25:LEU:HD21	1:A:326:ASP:HA	1.87	0.56
1:A:45:LYS:O	1:A:53:PHE:N	2.25	0.56
1:A:195:ARG:NH2	1:G:361:TYR:H	2.03	0.56
2:B:185:GLN:HA	2:B:197:ARG:HD3	1.86	0.56
2:D:67:SER:HB3	2:D:72:VAL:HG22	1.88	0.56
2:D:140:TYR:HE2	2:D:332:ASN:HB2	1.70	0.56
2:D:142:HIS:CE1	2:D:334:TRP:HA	2.41	0.56
2:D:253:PHE:CE2	2:D:255:GLU:HB3	2.41	0.56
1:Q:182:GLN:OE1	1:Q:231:ARG:NH1	2.38	0.56
1:Q:306:LYS:NZ	1:O:227:GLY:HA2	2.21	0.56
2:R:92:ASP:HB3	2:R:334:TRP:CH2	2.41	0.56
1:O:108:HIS:CD2	1:O:108:HIS:N	2.74	0.56
1:O:135:LYS:C	1:O:331:LYS:HZ1	2.14	0.56
1:O:165:LEU:HD12	1:O:248:LYS:HD2	1.88	0.56
2:H:34:ASP:CA	2:H:75:VAL:CG2	2.84	0.56
2:H:171:ILE:N	2:H:247:GLN:O	2.39	0.56
2:H:216:VAL:HA	2:H:219:VAL:HG22	1.88	0.56
2:H:224:LYS:H	2:H:226:LYS:HZ3	1.53	0.56
1:E:126:PRO:HG2	1:E:144:ILE:HA	1.87	0.56
1:I:45:LYS:NZ	1:I:53:PHE:O	2.31	0.56
1:I:148:SER:OG	1:I:150:THR:OG1	2.17	0.56
1:I:279:VAL:HA	1:I:310:TRP:CZ2	2.41	0.56
2:J:13:ARG:NH2	3:J:401:NAD:O3B	2.38	0.56
2:J:117:LYS:NZ	2:J:142:HIS:O	2.29	0.56
2:J:253:PHE:CE1	2:J:256:GLU:HB2	2.40	0.56
1:K:147:ALA:O	1:K:152:ASN:ND2	2.34	0.56
2:L:1:LEU:O	2:L:28:ASP:N	2.39	0.56
2:L:238:ASN:OD1	2:L:286:ARG:NH2	2.33	0.56
1:A:17:ARG:NH1	1:A:44:LEU:O	2.35	0.56
1:C:186:ASP:OD1	1:C:198:ALA:N	2.28	0.56
2:D:238:ASN:O	2:D:315:ASN:ND2	2.38	0.56
1:Q:8:PHE:CE1	1:Q:13:ARG:HG2	2.41	0.56
1:Q:296:LEU:HD13	1:O:205:PRO:HB2	1.87	0.56
2:P:16:LEU:HA	2:P:19:TRP:HB3	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:215:SER:HB2	1:G:222:LYS:HG2	1.87	0.56
1:E:85:ALA:H	1:E:112:GLY:HA3	1.70	0.56
1:E:319:GLN:HB2	1:E:320:ARG:NH2	2.20	0.56
2:F:252:THR:OG1	2:F:253:PHE:N	2.38	0.56
1:I:272:ASP:HB3	1:I:290:SER:O	2.05	0.55
2:J:176:THR:O	2:J:243:ASP:N	2.39	0.55
1:K:150:THR:HA	1:K:311:TYR:OH	2.06	0.55
2:L:154:THR:HG21	2:L:215:ALA:HB3	1.87	0.55
2:L:179:HIS:HB3	2:L:233:ARG:HG2	1.89	0.55
1:A:60:ILE:HB	1:A:63:THR:O	2.06	0.55
1:C:84:TRP:NE1	1:C:108:HIS:O	2.37	0.55
2:D:17:ARG:NH1	2:D:48:ASP:OD2	2.39	0.55
1:Q:190:HIS:NE2	1:Q:195:ARG:HB2	2.21	0.55
1:Q:280:SER:OG	1:O:202:ASN:OD1	2.23	0.55
2:R:251:LYS:NZ	2:R:303:GLY:O	2.39	0.55
2:R:301:VAL:HG22	2:R:307:VAL:HG22	1.87	0.55
1:O:91:ILE:HG21	1:O:117:ILE:HG13	1.88	0.55
2:P:167:LYS:HG2	2:P:260:ALA:HB1	1.87	0.55
2:P:236:THR:HG23	2:P:238:ASN:H	1.71	0.55
1:G:190:HIS:CE1	1:G:195:ARG:HB2	2.42	0.55
2:H:22:ARG:HH21	2:H:321:GLN:HA	1.71	0.55
2:H:81:PRO:HG2	2:H:109:LYS:HE2	1.88	0.55
1:E:62:GLU:O	1:E:73:VAL:N	2.31	0.55
1:E:254:ASP:HA	1:E:257:ASN:HD22	1.70	0.55
1:I:84:TRP:N	1:I:111:ALA:O	2.38	0.55
2:J:27:LEU:HB3	2:J:29:VAL:HG13	1.88	0.55
2:J:156:CYS:SG	2:J:157:LEU:N	2.79	0.55
1:K:45:LYS:O	1:K:53:PHE:N	2.24	0.55
2:L:193:ARG:H	2:L:193:ARG:CZ	2.20	0.55
2:B:274:SER:N	2:B:292:SER:O	2.39	0.55
1:Q:62:GLU:O	1:Q:73:VAL:N	2.39	0.55
2:R:280:LEU:O	2:P:196:ARG:NH2	2.38	0.55
1:O:76:ASN:OD1	1:O:77:ARG:N	2.37	0.55
1:O:316:GLY:O	1:O:320:ARG:HG2	2.06	0.55
2:P:194:ASP:HB3	2:P:197:ARG:HB2	1.88	0.55
1:G:60(A):ASP:OD1	1:G:61:ASN:ND2	2.39	0.55
2:H:96:GLU:OE2	2:H:101:PHE:N	2.25	0.55
2:H:137:GLU:OE1	2:H:137:GLU:N	2.39	0.55
1:E:31:ASN:HD21	1:E:76:ASN:H	1.52	0.55
1:E:214:VAL:O	1:E:218:LEU:N	2.37	0.55
2:F:18:CYS:SG	2:F:320:SER:OG	2.64	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:138:GLU:H	2:F:138:GLU:CD	2.13	0.55
1:I:242:LEU:HB3	1:I:307:VAL:HB	1.88	0.55
2:J:192:HIS:CE1	2:J:197:ARG:HB3	2.40	0.55
1:K:56:ASP:N	1:K:67:ASP:OD2	2.39	0.55
2:L:153:THR:O	2:L:157:LEU:N	2.20	0.55
2:L:236:THR:HG1	2:L:238:ASN:ND2	2.03	0.55
1:A:116:VAL:HB	1:A:143:ILE:HA	1.86	0.55
2:B:195:LEU:HD22	2:D:279:PRO:HG2	1.87	0.55
1:C:303:ASP:OD1	1:C:304:MET:N	2.36	0.55
1:Q:83:PRO:O	1:Q:87:LEU:HG	2.06	0.55
1:Q:177:SER:HB3	1:Q:234:THR:O	2.06	0.55
1:Q:212:LYS:O	1:Q:215:SER:OG	2.17	0.55
2:R:317:TRP:O	2:R:320:SER:OG	2.16	0.55
1:O:256:ASN:HA	1:O:259:PHE:CD2	2.41	0.55
2:P:263:GLU:HA	2:P:266:ASP:HB2	1.89	0.55
1:G:8:PHE:O	3:G:401:NAD:O2B	2.24	0.55
1:E:259:PHE:O	1:E:263:ALA:N	2.26	0.55
1:I:56:ASP:N	1:I:67:ASP:OD2	2.40	0.55
1:I:184:LEU:HD23	2:L:183:GLY:HA2	1.88	0.55
1:I:357:GLU:N	1:Q:188:SER:O	2.40	0.55
2:J:174:THR:O	2:J:245:VAL:N	2.38	0.55
1:K:14:ASN:HD22	1:K:14:ASN:N	2.04	0.55
1:K:57:VAL:HG13	1:K:66:ILE:HG12	1.87	0.55
1:K:207:SER:OG	1:K:227:GLY:O	2.20	0.55
2:L:42:SER:CB	2:L:66:ILE:CD1	2.74	0.55
1:A:65:SER:HA	1:A:70:PRO:HA	1.89	0.55
2:B:86:TRP:HD1	2:B:115:ALA:H	1.54	0.55
1:C:124:ASP:O	1:O:103:PRO:HD3	2.07	0.55
2:D:319:TYR:O	2:D:323:VAL:HG23	2.06	0.55
2:P:0:LYS:HZ2	2:P:1:LEU:HD13	1.72	0.55
2:P:15:PHE:HD2	2:P:324:VAL:HG22	1.71	0.55
2:P:193:ARG:H	2:P:193:ARG:CZ	2.19	0.55
2:P:196:ARG:HB3	2:P:196:ARG:HH11	1.72	0.55
2:H:98:THR:HA	3:H:401:NAD:H52A	1.89	0.55
1:E:298:MET:SD	1:E:306:LYS:HD3	2.46	0.55
2:F:15:PHE:O	2:F:18:CYS:HB2	2.06	0.55
1:I:47:ASP:H	1:I:52:THR:HA	1.72	0.55
1:I:65:SER:HA	1:I:70:PRO:HA	1.89	0.55
1:I:203:ILE:HA	1:I:231:ARG:O	2.07	0.55
1:I:316:GLY:O	1:I:319:GLN:HG2	2.06	0.55
1:I:328:VAL:O	1:I:332:TRP:N	2.40	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:228:ASN:HB3	2:L:302:MET:HE3	1.87	0.55
1:K:84:TRP:O	1:K:88:GLY:N	2.40	0.55
1:K:84:TRP:HA	1:K:87:LEU:HD12	1.88	0.55
1:K:214:VAL:HG13	1:K:218:LEU:HD13	1.87	0.55
1:A:209:GLY:O	1:A:213:ALA:N	2.32	0.55
1:C:3:VAL:HA	1:C:89:ILE:HG23	1.88	0.55
1:C:130:VAL:HG22	1:C:324:LEU:HD23	1.88	0.55
1:C:161:LEU:HA	1:C:165:LEU:HD13	1.88	0.55
2:D:33:ASN:O	3:D:401:NAD:H2A	2.06	0.55
2:D:196:ARG:HB2	2:D:206:VAL:HG13	1.89	0.55
2:D:196:ARG:CZ	2:D:207:PRO:HD2	2.36	0.55
1:Q:171:THR:HG21	1:O:243:VAL:HG11	1.89	0.55
1:Q:291:THR:O	1:Q:310:TRP:N	2.39	0.55
2:H:320:SER:HA	2:H:323:VAL:HB	1.89	0.55
1:E:246:ILE:N	1:E:303:ASP:O	2.39	0.55
1:E:319:GLN:HB2	1:E:320:ARG:CZ	2.37	0.55
2:F:86:TRP:CZ2	2:F:110:HIS:HA	2.41	0.55
1:I:327:LEU:O	1:I:331:LYS:N	2.38	0.55
2:J:39:LYS:HG2	2:J:40:GLN:N	2.21	0.55
1:K:84:TRP:HB2	1:K:89:ILE:HB	1.89	0.55
1:K:283:PHE:HE2	1:K:310:TRP:CD2	2.24	0.55
1:A:0:LYS:HD3	1:A:23:SER:O	2.07	0.55
1:A:45:LYS:O	1:A:52:THR:OG1	2.13	0.55
1:A:203:ILE:HG23	1:A:232:VAL:HG12	1.88	0.55
2:B:93:LEU:HB2	2:B:117:LYS:HB2	1.89	0.55
1:C:177:SER:HB3	1:C:234:THR:O	2.06	0.55
1:C:253:GLU:CD	1:C:257:ASN:HD21	2.14	0.55
2:D:22:ARG:NH2	2:D:321:GLN:O	2.39	0.55
2:D:71:LYS:HZ2	2:D:73:ILE:HG13	1.72	0.55
1:Q:87:LEU:HB2	1:Q:89:ILE:HG12	1.88	0.55
2:R:133:VAL:HA	2:R:137:GLU:HB3	1.88	0.55
2:R:264:SER:O	2:R:268:GLU:N	2.33	0.55
2:R:302:MET:N	2:R:306:MET:O	2.31	0.55
1:O:166:GLY:O	1:O:247:GLU:N	2.25	0.55
1:O:343:ASP:C	1:O:345:LEU:H	2.15	0.55
1:O:358:CYS:SG	1:O:359:LYS:N	2.78	0.55
2:P:7:GLY:HA2	3:P:401:NAD:N3A	2.22	0.55
2:P:156:CYS:SG	2:P:157:LEU:N	2.80	0.55
1:G:14:ASN:HB3	1:G:318:SER:HB3	1.89	0.55
1:G:48:SER:OG	2:F:189:ASP:OD2	2.25	0.55
1:G:175:THR:HB	1:G:232:VAL:HG21	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:194:ASP:CG	2:H:197:ARG:H	2.14	0.55
1:E:161:LEU:HA	1:E:259:PHE:HZ	1.71	0.55
1:I:137:TYR:HB3	1:I:327:LEU:HD11	1.87	0.55
1:I:157:PHE:HB2	1:I:259:PHE:CE1	2.42	0.55
1:I:238:SER:O	1:I:311:TYR:N	2.40	0.55
1:I:252:ALA:O	1:I:256:ASN:N	2.31	0.55
2:J:239:VAL:HG13	2:J:313:TYR:C	2.31	0.55
1:K:11:ILE:O	1:K:15:PHE:N	2.36	0.55
1:K:84:TRP:HD1	1:K:112:GLY:C	2.14	0.55
2:L:223:LEU:HD23	2:L:227:LEU:HG	1.89	0.55
1:A:14:ASN:HA	1:A:17:ARG:HG3	1.88	0.55
1:A:84:TRP:N	1:A:111:ALA:O	2.40	0.55
1:A:153:CYS:C	1:A:156:PRO:HD2	2.31	0.55
1:A:214:VAL:O	1:A:218:LEU:N	2.40	0.55
2:B:140:TYR:CZ	2:B:330:VAL:HG22	2.41	0.55
2:B:239:VAL:HG13	2:B:313:TYR:C	2.32	0.55
2:B:253:PHE:CE1	2:B:256:GLU:HB2	2.41	0.55
1:Q:6:ASN:ND2	1:Q:95:GLY:H	2.05	0.55
2:R:43:HIS:O	2:R:47:TYR:N	2.32	0.55
2:R:50:ILE:HG21	2:R:238:ASN:HD21	1.71	0.55
1:O:117:ILE:HG12	1:O:144:ILE:HD11	1.89	0.55
1:O:210:ALA:HA	1:O:213:ALA:HB3	1.88	0.55
1:O:220:GLN:H	1:O:220:GLN:CD	2.14	0.55
1:G:40:ALA:O	1:G:44:LEU:N	2.24	0.55
1:G:84:TRP:HE3	1:G:89:ILE:HG13	1.72	0.55
2:H:186:ARG:HH22	2:H:193:ARG:HH22	1.53	0.55
2:F:108:GLY:O	2:F:112:GLN:N	2.40	0.55
1:K:64:PHE:O	1:K:71:ILE:N	2.39	0.55
2:L:120:ILE:O	2:L:149:ASN:N	2.31	0.55
1:A:156:PRO:HB3	1:A:270:VAL:HG12	1.89	0.55
1:A:258:ALA:HA	1:A:261:LYS:HE3	1.88	0.55
2:B:194:ASP:O	2:B:198:ALA:N	2.39	0.55
1:C:94:GLU:HB3	1:C:118:ILE:HG23	1.89	0.55
2:D:182:THR:N	2:D:185:GLN:OE1	2.26	0.55
1:Q:28:VAL:HA	1:Q:71:ILE:HG12	1.88	0.55
1:Q:306:LYS:HZ3	1:O:227:GLY:HA2	1.72	0.55
2:R:298:LEU:HD12	2:P:207:PRO:HB3	1.87	0.55
2:P:80:ASN:HD22	2:P:83:ASN:HB2	1.71	0.55
2:P:118:VAL:HB	2:P:146:ILE:HA	1.88	0.55
2:P:119:LEU:HD21	2:P:149:ASN:HB2	1.88	0.55
2:P:289:ASP:OD1	2:P:317:TRP:NE1	2.37	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:116:VAL:HB	1:G:143:ILE:HG12	1.89	0.55
1:G:256:ASN:HA	1:G:259:PHE:CD2	2.41	0.55
1:G:306:LYS:HZ1	1:E:173:THR:HG1	1.53	0.55
1:E:153:CYS:SG	1:E:154:LEU:N	2.79	0.55
1:I:15:PHE:CE1	1:I:321:VAL:HB	2.42	0.55
1:I:118:ILE:HD12	1:I:125:ILE:HG21	1.89	0.55
1:I:258:ALA:HA	1:I:261:LYS:HE3	1.89	0.55
1:I:279:VAL:H	1:I:282:ASP:CG	2.15	0.55
2:J:8:PHE:O	3:J:401:NAD:O3B	2.24	0.55
2:J:263:GLU:O	2:J:267:ASN:ND2	2.39	0.55
1:K:253:GLU:CD	1:K:257:ASN:HD21	2.15	0.55
1:A:132:VAL:HG11	1:A:155:ALA:HB1	1.89	0.55
1:A:281:VAL:HA	1:A:284:ARG:HG2	1.89	0.55
1:A:343:ASP:HA	2:F:37:GLY:HA2	1.88	0.55
1:C:5:ILE:HG13	1:C:27:VAL:HG11	1.88	0.55
1:C:212:LYS:HE3	1:C:223:GLY:H	1.72	0.55
2:D:117:LYS:NZ	2:D:142:HIS:O	2.38	0.55
2:D:226:LYS:HG3	2:D:227:LEU:HD22	1.89	0.55
1:Q:218:LEU:HD12	1:Q:220:GLN:HE22	1.72	0.55
1:Q:279:VAL:N	1:Q:282:ASP:OD2	2.32	0.55
1:Q:320:ARG:HA	1:Q:323:ASP:OD2	2.07	0.55
2:R:8:PHE:CZ	2:R:45:LEU:HB2	2.42	0.55
1:O:74:VAL:HG12	1:O:75:SER:H	1.72	0.55
2:P:160:PHE:O	2:P:164:LEU:N	2.38	0.55
2:P:241:VAL:HG13	2:P:311:ALA:C	2.32	0.55
1:G:2:LYS:HB2	1:G:89:ILE:HA	1.87	0.55
2:H:31:VAL:CA	2:H:74:LYS:HB2	2.36	0.55
2:H:86:TRP:HD1	2:H:113:ALA:C	2.15	0.55
2:F:161:VAL:HA	2:F:164:LEU:HD12	1.88	0.55
2:F:274:SER:N	2:F:292:SER:O	2.39	0.55
1:I:2:LYS:HZ2	1:I:88:GLY:HA3	1.71	0.55
1:I:28:VAL:O	1:I:72:LYS:N	2.29	0.55
2:J:140:TYR:CZ	2:J:330:VAL:HG22	2.42	0.55
2:L:2:LYS:HB2	2:L:91:ILE:HD13	1.89	0.55
2:B:120:ILE:O	2:B:149:ASN:N	2.40	0.55
1:C:121:PRO:HG3	1:C:148:SER:N	2.22	0.55
2:D:117:LYS:HE3	2:D:145:THR:HA	1.87	0.55
2:D:174:THR:HA	2:D:228:ASN:O	2.07	0.55
2:D:299:THR:HA	2:D:310:ILE:HD11	1.89	0.55
1:Q:3:VAL:CG2	1:Q:25:LEU:HB2	2.37	0.55
1:Q:29:VAL:HA	1:Q:72:LYS:O	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:33:SER:OG	1:O:76:ASN:N	2.39	0.55
1:O:58:LYS:HA	1:O:58:LYS:NZ	2.21	0.55
1:O:213:ALA:HA	1:O:216:LEU:HG	1.89	0.55
2:P:142:HIS:HE1	2:P:330:VAL:O	1.90	0.55
1:G:261:LYS:HZ2	1:G:261:LYS:HB3	1.71	0.55
2:H:13:ARG:CZ	2:H:44:LEU:CD1	2.85	0.55
2:H:177:THR:OG1	2:H:313:TYR:OH	2.22	0.55
2:H:253:PHE:HA	2:H:301:VAL:HG11	1.88	0.55
1:E:4:ALA:O	1:E:93:ILE:HG12	2.07	0.55
1:E:220:GLN:CD	1:E:220:GLN:H	2.15	0.55
2:F:142:HIS:HE1	2:F:330:VAL:O	1.90	0.55
2:F:157:LEU:HB2	2:F:161:VAL:HG11	1.89	0.55
1:I:89:ILE:O	1:I:114:LYS:NZ	2.39	0.54
2:J:59:LYS:NZ	2:J:61:ALA:HB2	2.22	0.54
2:J:152:CYS:HB3	2:J:319:TYR:CD2	2.42	0.54
2:L:86:TRP:HE1	2:L:113:ALA:HB3	1.72	0.54
2:L:239:VAL:HB	2:L:282:SER:HB2	1.89	0.54
2:L:301:VAL:HG22	2:L:307:VAL:HG13	1.89	0.54
1:A:58:LYS:N	1:A:65:SER:O	2.40	0.54
1:A:76:ASN:HD22	1:A:82:LEU:HD21	1.71	0.54
1:A:124:ASP:OD1	1:A:124:ASP:N	2.39	0.54
2:B:300:MET:O	2:B:308:LYS:N	2.34	0.54
2:B:317:TRP:O	2:B:321:GLN:HG2	2.08	0.54
1:C:5:ILE:HB	1:C:30:VAL:HG13	1.89	0.54
1:C:139:HIS:CE1	1:C:332:TRP:HA	2.42	0.54
1:C:300:MET:HB3	1:C:304:MET:HB3	1.88	0.54
2:D:120:ILE:O	2:D:149:ASN:N	2.32	0.54
2:D:277:ASP:OD1	2:D:296:SER:OG	2.21	0.54
1:Q:16:LEU:HA	1:Q:18(A):TRP:HB3	1.89	0.54
1:Q:130:VAL:HG21	1:Q:323:ASP:OD2	2.07	0.54
2:R:11:ILE:HG12	3:R:401:NAD:PN	2.47	0.54
2:R:320:SER:O	2:R:324:VAL:HG23	2.07	0.54
1:O:291:THR:O	1:O:310:TRP:N	2.30	0.54
2:F:87:GLY:HA2	2:F:114:GLY:HA3	1.89	0.54
1:I:186:ASP:OD1	1:I:198:ALA:N	2.39	0.54
1:I:287:ASP:N	1:I:287:ASP:OD1	2.40	0.54
2:J:175:MET:HB3	2:J:244:LEU:HB2	1.89	0.54
2:L:241:VAL:HG22	2:L:312:TRP:HA	1.89	0.54
2:L:294:ILE:HG23	2:L:311:ALA:HB2	1.89	0.54
1:A:139(A):ASP:O	1:G:107:LYS:NZ	2.38	0.54
2:B:80:ASN:HD21	2:B:82:VAL:HB	1.72	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:47:ASP:OD1	1:C:51:GLY:N	2.40	0.54
1:Q:168:VAL:HB	1:Q:245:ASN:CG	2.32	0.54
1:Q:226:ASN:OD1	1:Q:227:GLY:N	2.37	0.54
1:G:316:GLY:HA2	1:G:319:GLN:HG2	1.89	0.54
1:E:236:ASN:OD1	1:E:314:GLU:N	2.40	0.54
2:F:263:GLU:HA	2:F:266:ASP:HB2	1.89	0.54
1:I:100:VAL:HB	1:I:122(A):LYS:HG2	1.89	0.54
1:I:235:PRO:HG2	1:I:284:ARG:NH2	2.23	0.54
2:J:93:LEU:HD12	2:J:117:LYS:HB2	1.90	0.54
2:J:106:GLY:O	2:J:110:HIS:N	2.31	0.54
2:J:277:ASP:OD1	2:J:297:SER:N	2.36	0.54
1:K:165:LEU:HB3	1:K:248:LYS:HB2	1.90	0.54
1:C:317:TYR:O	1:C:321:VAL:HG23	2.07	0.54
2:D:6:ASN:HB3	2:D:96:GLU:HA	1.88	0.54
1:Q:173:THR:OG1	1:Q:228:ILE:HG23	2.07	0.54
1:Q:267:LEU:HB3	1:Q:271:LEU:HD13	1.88	0.54
2:R:171:ILE:N	2:R:247:GLN:O	2.41	0.54
1:O:122:ALA:HA	1:O:125:ILE:HG12	1.89	0.54
2:P:111:LEU:HD21	2:P:118:VAL:HG23	1.89	0.54
1:G:182:GLN:OE1	1:G:231:ARG:NH1	2.40	0.54
2:H:102:VAL:HG13	2:H:125:LYS:HB2	1.90	0.54
2:H:116:LYS:O	2:H:145:THR:OG1	2.12	0.54
2:H:251:LYS:NZ	2:H:303:GLY:O	2.39	0.54
1:E:10:ARG:CZ	1:E:14:ASN:HD21	2.20	0.54
1:E:241:ASP:CB	1:E:307:VAL:H	2.21	0.54
2:F:20:HIS:HB3	2:F:54:PHE:HZ	1.72	0.54
1:K:137:TYR:CZ	1:K:331:LYS:HB2	2.42	0.54
1:K:139:HIS:CE1	1:K:332:TRP:HA	2.43	0.54
1:K:168:VAL:N	1:K:245:ASN:O	2.41	0.54
1:K:317:TYR:O	1:K:321:VAL:HG23	2.07	0.54
3:K:402:NAD:O2N	1:E:10:ARG:N	2.40	0.54
2:L:23:LYS:HA	2:L:23:LYS:HZ2	1.73	0.54
1:A:132:VAL:HG22	1:A:159:LYS:HD2	1.88	0.54
1:A:222:LYS:HZ2	1:G:123(A):SER:C	2.12	0.54
1:A:271:LEU:HA	1:A:290:SER:HB3	1.88	0.54
2:B:164:LEU:HA	2:B:168:PHE:CD1	2.43	0.54
1:C:214:VAL:HG13	1:C:218:LEU:HD13	1.89	0.54
1:C:226:ASN:OD1	1:C:227:GLY:N	2.36	0.54
2:D:129:PRO:HD2	2:D:147:ILE:HA	1.90	0.54
2:D:211:GLY:O	2:D:215:ALA:N	2.20	0.54
1:Q:310:TRP:HE1	1:O:194:ARG:HH12	1.55	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:47:ASP:OD1	1:O:50:LEU:N	2.40	0.54
2:P:8:PHE:CE2	2:P:13:ARG:HG3	2.42	0.54
1:G:332:TRP:CD1	1:G:333:PRO:HD2	2.43	0.54
2:H:196:ARG:NH2	2:F:280:LEU:O	2.40	0.54
2:H:209:SER:HG	2:H:214:LYS:HZ3	1.53	0.54
2:F:86:TRP:CD1	2:F:113:ALA:HB3	2.42	0.54
1:I:148:SER:O	1:I:152:ASN:ND2	2.41	0.54
1:I:253:GLU:O	1:I:257:ASN:N	2.36	0.54
2:J:54:PHE:HE2	2:J:68:VAL:HG21	1.72	0.54
2:J:188:LEU:HA	2:J:200:ALA:HB2	1.89	0.54
2:J:295:ASP:OD2	2:J:297:SER:OG	2.15	0.54
1:K:114:LYS:HB2	1:K:332:TRP:CH2	2.43	0.54
1:K:239:VAL:HA	1:K:309:ALA:O	2.07	0.54
2:L:48:ASP:H	2:L:53:THR:HA	1.72	0.54
2:L:277:ASP:HB3	2:L:297:SER:HB3	1.89	0.54
1:A:16:LEU:HD22	1:A:44:LEU:HD21	1.90	0.54
1:A:56:ASP:N	1:A:67:ASP:OD2	2.40	0.54
2:B:259:ALA:HA	2:B:262:ARG:HB2	1.90	0.54
1:C:174:THR:OG1	1:C:239:VAL:O	2.25	0.54
1:C:288:PHE:O	1:C:320:ARG:NH1	2.41	0.54
2:D:1:LEU:O	2:D:28:ASP:N	2.40	0.54
2:D:96:GLU:HG2	2:D:98:THR:HG23	1.89	0.54
2:D:104:ARG:H	2:D:127:ASP:CG	2.15	0.54
2:R:210:THR:HB	2:R:233:ARG:HH12	1.72	0.54
1:O:10:ARG:HB2	3:O:401:NAD:O3	2.08	0.54
1:O:96:THR:HG1	1:O:97:GLY:N	2.05	0.54
2:P:13:ARG:HG2	2:P:45:LEU:HA	1.87	0.54
2:H:298:LEU:HD13	2:F:230:ILE:HD13	1.88	0.54
1:I:58:LYS:N	1:I:65:SER:O	2.40	0.54
2:J:277:ASP:OD1	2:J:296:SER:N	2.41	0.54
1:K:31:ASN:HD21	1:K:76:ASN:H	1.53	0.54
1:K:324:LEU:HD13	1:K:327:LEU:HB3	1.90	0.54
2:L:96:GLU:HG2	2:L:98:THR:HG23	1.90	0.54
2:L:281:VAL:N	2:L:284:ASP:OD2	2.18	0.54
1:A:128:TYR:HA	1:A:133:ASN:OD1	2.08	0.54
1:A:130:VAL:HA	1:A:134:GLU:HG3	1.89	0.54
1:A:139:HIS:CD2	1:A:333:PRO:HD3	2.42	0.54
1:A:169:LYS:NZ	1:C:301:GLY:HA3	2.22	0.54
2:B:222:ASN:O	2:B:226:LYS:NZ	2.33	0.54
2:B:246:VAL:HG23	2:B:307:VAL:HB	1.88	0.54
2:B:248:VAL:N	2:B:305:ASP:O	2.35	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:43:HIS:HA	2:R:46:LYS:HB3	1.89	0.54
1:O:158:VAL:HG22	1:O:242:LEU:HD22	1.88	0.54
2:P:86:TRP:CD1	2:P:113:ALA:HB3	2.43	0.54
2:P:116:LYS:O	2:P:145:THR:OG1	2.14	0.54
2:P:150:ALA:O	2:P:319:TYR:OH	2.19	0.54
2:P:172:LYS:O	2:P:247:GLN:N	2.41	0.54
2:P:210:THR:HG22	2:P:231:ALA:HB2	1.90	0.54
1:G:275:ASP:OD2	1:G:294:SER:OG	2.15	0.54
2:H:163:VAL:HA	2:H:166:GLN:HB2	1.89	0.54
1:E:151:THR:HA	1:E:154:LEU:HD23	1.88	0.54
2:J:102:VAL:HG22	2:J:124:GLY:HA2	1.89	0.54
2:L:165:ASP:OD1	2:L:170:ILE:N	2.41	0.54
2:L:280:LEU:HB3	2:L:285:PHE:CZ	2.43	0.54
2:B:38:VAL:O	2:B:42:SER:N	2.35	0.54
2:B:96:GLU:HG3	2:B:101:PHE:HB2	1.90	0.54
2:B:131:TYR:N	2:B:148:SER:O	2.34	0.54
2:D:131:TYR:CZ	2:D:140:TYR:HA	2.42	0.54
2:D:154:THR:HG21	2:D:215:ALA:HB3	1.89	0.54
1:Q:61:ASN:ND2	1:Q:62:GLU:OE2	2.40	0.54
1:Q:156:PRO:HA	1:Q:159:LYS:HD3	1.89	0.54
2:R:0:LYS:N	2:R:26:PRO:O	2.36	0.54
1:O:164:GLU:O	1:O:248:LYS:NZ	2.35	0.54
1:G:101:ASP:HB2	1:G:103:PRO:HG2	1.89	0.54
2:H:164:LEU:HD23	2:H:168:PHE:HB2	1.89	0.54
2:F:56:ALA:O	2:F:58:VAL:HG12	2.07	0.54
2:F:193:ARG:H	2:F:193:ARG:CZ	2.21	0.54
2:F:294:ILE:HG23	2:F:311:ALA:HB2	1.89	0.54
1:I:50:LEU:HD22	1:I:285:CYS:HB2	1.90	0.54
1:I:270:VAL:HA	1:I:289:SER:OG	2.07	0.54
1:K:37:VAL:O	1:K:41:THR:N	2.40	0.54
2:L:20:HIS:NE2	2:L:69:ASP:OD1	2.41	0.54
2:L:239:VAL:HG13	2:L:313:TYR:C	2.32	0.54
1:A:178:TYR:H	1:A:234:THR:H	1.53	0.54
1:A:195:ARG:CZ	1:G:360:LEU:HA	2.38	0.54
2:B:11:ILE:N	3:B:401:NAD:O1N	2.41	0.54
1:C:79:PRO:HD3	1:C:99:PHE:CZ	2.42	0.54
1:C:182:GLN:HE22	1:C:231:ARG:CZ	2.21	0.54
2:D:263:GLU:CD	2:D:264:SER:H	2.15	0.54
1:Q:28:VAL:C	1:Q:71:ILE:HG23	2.33	0.54
1:Q:128:TYR:CE1	1:Q:137:TYR:HB2	2.43	0.54
2:R:164:LEU:HD23	2:R:168:PHE:HB2	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:203:LEU:HD22	2:P:236:THR:HA	1.89	0.54
1:O:4:ALA:O	1:O:93:ILE:HG12	2.07	0.54
2:P:6:ASN:N	2:P:95:ILE:O	2.41	0.54
2:P:14:ASN:HD21	2:P:317:TRP:HB2	1.73	0.54
1:G:192:ASP:OD2	1:G:195:ARG:N	2.27	0.54
2:H:38:VAL:HB	2:H:66:ILE:CD1	2.38	0.54
2:H:238:ASN:HD22	2:H:239:VAL:H	1.55	0.54
1:E:178:TYR:N	1:E:234:THR:O	2.40	0.54
1:E:179:THR:OG1	1:E:182:GLN:OE1	2.17	0.54
1:I:118:ILE:O	1:I:146:ASN:N	2.41	0.54
2:J:131:TYR:CZ	2:J:140:TYR:HA	2.42	0.54
1:K:177:SER:HB3	1:K:234:THR:O	2.08	0.54
1:K:182:GLN:HE22	1:K:231:ARG:NE	2.06	0.54
2:L:243:ASP:OD2	2:L:243:ASP:N	2.40	0.54
1:A:129:VAL:HB	1:A:132:VAL:HB	1.90	0.54
1:A:139:HIS:ND1	1:A:331:LYS:HB3	2.22	0.54
2:B:131:TYR:CZ	2:B:140:TYR:HA	2.43	0.54
2:B:277:ASP:OD1	2:B:297:SER:N	2.34	0.54
1:C:207:SER:HB2	1:C:228:ILE:HB	1.90	0.54
1:Q:114:LYS:H	1:Q:114:LYS:HE3	1.72	0.54
1:Q:171:THR:O	1:Q:243:VAL:N	2.41	0.54
1:Q:182:GLN:HA	1:Q:195:ARG:HB3	1.88	0.54
2:R:48:ASP:OD2	2:R:51:LEU:N	2.41	0.54
2:R:67:SER:HB3	2:R:72:VAL:CG1	2.38	0.54
2:R:161:VAL:O	2:R:165:ASP:N	2.24	0.54
2:R:216:VAL:HA	2:R:219:VAL:HG22	1.89	0.54
1:O:21:LYS:HZ3	1:O:21:LYS:H	1.55	0.54
1:O:21:LYS:H	1:O:21:LYS:NZ	2.06	0.54
2:P:97:GLY:C	3:P:401:NAD:H52A	2.33	0.54
2:P:152:CYS:HB2	2:P:315:ASN:HA	1.89	0.54
1:G:118:ILE:HD11	1:G:143:ILE:HG22	1.90	0.54
1:G:193:LEU:HD12	1:G:194:ARG:H	1.73	0.54
1:G:340:ALA:O	1:G:348:PHE:N	2.34	0.54
2:F:42:SER:OG	2:F:43:HIS:N	2.40	0.54
2:F:180:SER:OG	2:F:181:TYR:N	2.38	0.54
2:F:327:ALA:O	2:F:331:ALA:N	2.33	0.54
1:I:167:ILE:HG23	1:I:246:ILE:HD12	1.88	0.54
1:I:327:LEU:HD23	1:I:328:VAL:HG22	1.89	0.54
1:K:30:VAL:C	1:K:74:VAL:HG23	2.33	0.54
2:L:8:PHE:O	2:L:13:ARG:NH1	2.41	0.54
2:L:60:THR:HB	2:L:66:ILE:HD13	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:104:ARG:H	2:L:127:ASP:CG	2.16	0.54
2:L:131:TYR:CZ	2:L:140:TYR:HA	2.43	0.54
1:A:18:CYS:O	1:A:20:ARG:N	2.41	0.54
1:A:235:PRO:HG2	1:A:284:ARG:HH22	1.73	0.54
2:B:8:PHE:CG	2:B:32:ILE:HG21	2.43	0.54
1:C:0:LYS:N	1:C:23:SER:O	2.41	0.54
1:C:138:GLY:H	1:C:140:VAL:HB	1.72	0.54
1:O:115:LYS:HE3	1:O:139(A):ASP:HA	1.89	0.54
2:P:157:LEU:HA	2:P:160:PHE:CZ	2.43	0.54
2:P:205:ILE:HD11	2:P:232:LEU:HB3	1.89	0.54
1:E:236:ASN:HD21	1:E:315:TRP:H	1.55	0.54
2:F:208:THR:OG1	2:F:209:SER:N	2.40	0.54
1:I:18:CYS:O	1:I:20:ARG:N	2.40	0.53
1:I:181:ASP:OD2	1:I:231:ARG:NH2	2.37	0.53
1:I:303:ASP:OD1	1:I:303:ASP:N	2.41	0.53
1:K:87:LEU:HB2	1:K:89:ILE:HG12	1.89	0.53
3:K:401:NAD:O2D	1:E:362:GLU:OXT	2.26	0.53
2:L:54:PHE:C	2:L:56:ALA:H	2.16	0.53
1:A:60:ILE:N	1:A:64:PHE:HA	2.22	0.53
1:A:230:LEU:O	1:A:232:VAL:HG13	2.07	0.53
1:A:295:SER:OG	1:A:296:LEU:N	2.41	0.53
2:B:9:GLY:O	2:B:13:ARG:N	2.28	0.53
2:B:230:ILE:HG12	2:D:308:LYS:HD3	1.89	0.53
1:C:30:VAL:C	1:C:74:VAL:HG23	2.33	0.53
1:C:174:THR:OG1	1:C:238:SER:OG	2.17	0.53
2:D:120:ILE:H	2:D:148:SER:HA	1.71	0.53
1:Q:124:ASP:OD1	1:Q:124:ASP:N	2.41	0.53
2:R:31:VAL:HA	2:R:74:LYS:O	2.08	0.53
1:O:20:ARG:HD2	1:O:21:LYS:HZ3	1.72	0.53
1:O:244:VAL:O	1:O:304:MET:HA	2.07	0.53
2:P:7:GLY:H	2:P:33:ASN:ND2	2.06	0.53
1:G:10:ARG:HH12	1:G:48:SER:N	2.03	0.53
1:G:306:LYS:HE2	1:E:228:ILE:HG23	1.90	0.53
1:E:24:PRO:HD2	1:E:25:LEU:HD22	1.89	0.53
1:E:29:VAL:HG21	1:E:87:LEU:HD13	1.90	0.53
1:E:135:LYS:O	1:E:331:LYS:NZ	2.31	0.53
1:E:137:TYR:CD2	1:E:331:LYS:HB3	2.42	0.53
1:E:175:THR:HB	1:E:232:VAL:HG21	1.90	0.53
2:F:93:LEU:HD21	2:F:95:ILE:HD11	1.90	0.53
1:I:17:ARG:NH1	1:I:44:LEU:O	2.34	0.53
1:I:125:ILE:HG12	1:I:143:ILE:HB	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:402:NAD:H2A	1:E:31:ASN:ND2	2.23	0.53
2:L:17:ARG:NH1	2:L:48:ASP:OD2	2.42	0.53
1:A:252:ALA:O	1:A:256:ASN:N	2.29	0.53
1:A:257:ASN:OD1	1:A:260:ARG:NH2	2.41	0.53
2:B:180:SER:OG	2:B:236:THR:O	2.10	0.53
1:C:84:TRP:HE1	1:C:108:HIS:C	2.16	0.53
2:D:144:ASP:OD1	2:D:144:ASP:N	2.38	0.53
2:D:301:VAL:HG22	2:D:307:VAL:HG13	1.89	0.53
1:Q:30:VAL:O	1:Q:74:VAL:N	2.33	0.53
1:Q:171:THR:O	1:Q:242:LEU:HD12	2.08	0.53
2:R:80:ASN:ND2	2:R:82:VAL:HB	2.23	0.53
1:O:30:VAL:H	1:O:73:VAL:HA	1.73	0.53
2:P:274:SER:N	2:P:292:SER:O	2.39	0.53
1:G:16:LEU:HD12	1:G:18(A):TRP:HB3	1.90	0.53
1:G:124:ASP:N	1:G:124:ASP:OD1	2.41	0.53
2:H:20:HIS:O	2:H:23:LYS:NZ	2.36	0.53
2:H:298:LEU:HD12	2:F:207:PRO:HB3	1.89	0.53
1:E:20:ARG:HH21	1:E:319:GLN:NE2	2.02	0.53
1:E:41:THR:HG21	1:E:59:ILE:HG12	1.88	0.53
1:E:60:ILE:HD11	1:E:65:SER:HB3	1.89	0.53
1:E:312:ASP:OD2	1:E:315:TRP:N	2.41	0.53
2:F:119:LEU:HD21	2:F:149:ASN:HB2	1.89	0.53
1:I:128:TYR:HA	1:I:133:ASN:OD1	2.08	0.53
1:I:297:THR:OG1	1:I:308:VAL:O	2.21	0.53
2:J:164:LEU:HB3	2:J:170:ILE:HD11	1.90	0.53
2:J:264:SER:O	2:J:268:GLU:N	2.41	0.53
1:K:13:ARG:HA	1:K:44:LEU:HD12	1.89	0.53
1:K:32:ASP:CG	1:K:40:ALA:HB2	2.32	0.53
1:K:253:GLU:HA	1:K:256:ASN:ND2	2.22	0.53
1:K:273:VAL:HG13	1:K:292:ILE:HD11	1.91	0.53
2:L:205:ILE:HD11	2:L:232:LEU:HB3	1.91	0.53
1:A:287:ASP:OD1	1:A:315:TRP:NE1	2.38	0.53
2:B:314:ASP:OD1	2:B:316:GLU:N	2.41	0.53
1:C:183:ARG:HG2	1:C:187:ALA:H	1.73	0.53
1:C:191:ARG:NH2	1:O:346:GLU:O	2.41	0.53
2:D:79:ARG:HD3	3:D:401:NAD:N6A	2.23	0.53
1:Q:9:GLY:H	1:Q:12:GLY:HA3	1.73	0.53
1:Q:47:ASP:OD2	1:Q:50:LEU:N	2.41	0.53
1:Q:66:ILE:HD11	1:Q:71:ILE:HB	1.90	0.53
1:Q:78:ASP:HB3	1:Q:81:LYS:HD2	1.89	0.53
1:Q:90:ASP:O	1:Q:115:LYS:N	2.37	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:94:GLU:OE2	1:Q:96:THR:OG1	2.18	0.53
2:R:42:SER:O	2:R:46:LYS:N	2.27	0.53
2:R:203:LEU:HD22	2:P:237:PRO:HD3	1.90	0.53
1:O:270:VAL:HA	1:O:289:SER:H	1.73	0.53
1:O:348:PHE:O	1:O:352:ASN:N	2.37	0.53
2:P:272:ILE:O	2:P:291:SER:N	2.21	0.53
1:G:83:PRO:O	1:G:87:LEU:HG	2.08	0.53
1:E:2:LYS:N	1:E:90:ASP:OD1	2.42	0.53
1:E:156:PRO:HB2	1:E:267:LEU:HD22	1.90	0.53
1:E:208:THR:O	1:E:212:LYS:NZ	2.28	0.53
2:F:210:THR:HG22	2:F:231:ALA:HB2	1.90	0.53
1:I:147:ALA:HB3	1:I:152:ASN:HD21	1.73	0.53
1:I:191:ARG:NH2	1:Q:358:CYS:O	2.41	0.53
2:J:255:GLU:CD	2:J:262:ARG:HH12	2.14	0.53
1:K:105:ALA:HA	1:K:108:HIS:CD2	2.44	0.53
1:K:162:ASP:OD1	1:K:167:ILE:N	2.41	0.53
1:K:173:THR:HG22	1:K:230:LEU:HD11	1.90	0.53
1:K:182:GLN:HE22	1:K:231:ARG:CZ	2.22	0.53
3:K:402:NAD:H52N	3:K:402:NAD:O5B	2.09	0.53
2:L:246:VAL:HG23	2:L:307:VAL:HB	1.89	0.53
1:C:30:VAL:HB	1:C:73:VAL:HG22	1.89	0.53
1:C:165:LEU:HB3	1:C:248:LYS:HB2	1.89	0.53
1:Q:16:LEU:HD12	1:Q:18(A):TRP:HB3	1.91	0.53
1:Q:179:THR:OG1	1:Q:231:ARG:NH1	2.40	0.53
1:O:172:MET:HA	1:O:241:ASP:O	2.09	0.53
2:P:9:GLY:HA2	2:P:13:ARG:CZ	2.39	0.53
2:P:86:TRP:CD1	2:P:86:TRP:H	2.25	0.53
1:G:37:VAL:HA	1:G:40:ALA:HB3	1.90	0.53
2:H:240:SER:N	2:H:313:TYR:O	2.40	0.53
2:F:177:THR:O	2:F:232:LEU:HB2	2.08	0.53
2:F:271:GLY:O	2:F:322:ARG:NH2	2.41	0.53
1:I:192:ASP:OD1	1:I:194:ARG:N	2.41	0.53
1:I:326:ASP:O	1:I:330:ASN:N	2.30	0.53
2:J:289:ASP:OD1	2:J:317:TRP:NE1	2.32	0.53
2:L:104:ARG:HB2	2:L:127:ASP:O	2.08	0.53
2:L:117:LYS:HE3	2:L:145:THR:HA	1.91	0.53
1:A:280:SER:OG	1:A:281:VAL:N	2.42	0.53
2:B:102:VAL:HG22	2:B:124:GLY:HA2	1.91	0.53
2:R:3:VAL:HG13	2:R:93:LEU:O	2.08	0.53
1:G:30:VAL:C	1:G:74:VAL:HG23	2.34	0.53
2:H:1:LEU:N	2:H:26:PRO:O	2.32	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:153:THR:OG1	2:H:154:THR:N	2.42	0.53
1:E:179:THR:OG1	1:E:181:ASP:HB3	2.09	0.53
2:F:86:TRP:CD1	2:F:86:TRP:H	2.26	0.53
1:I:60:ILE:HB	1:I:63:THR:O	2.09	0.53
2:J:19:TRP:HA	2:J:22:ARG:HB2	1.89	0.53
2:J:105:ASP:O	2:J:109:LYS:N	2.28	0.53
1:K:50:LEU:HD22	1:K:285:CYS:SG	2.48	0.53
2:L:180:SER:OG	2:L:181:TYR:O	2.27	0.53
1:C:183:ARG:NH1	1:O:357:GLU:O	2.41	0.53
2:D:205:ILE:HG12	2:D:234:VAL:HA	1.91	0.53
1:Q:77:ARG:HA	3:Q:402:NAD:H62A	1.73	0.53
1:Q:137:TYR:CE2	1:Q:331:LYS:HG3	2.44	0.53
1:Q:179:THR:H	1:Q:182:GLN:CD	2.17	0.53
2:R:138:GLU:CD	2:R:138:GLU:H	2.16	0.53
2:R:163:VAL:HA	2:R:166:GLN:HB2	1.89	0.53
1:O:58:LYS:N	1:O:65:SER:O	2.37	0.53
1:O:76:ASN:CG	1:O:78:ASP:H	2.17	0.53
1:O:101:ASP:OD1	1:O:104:GLY:N	2.41	0.53
1:O:252:ALA:O	1:O:255:VAL:N	2.42	0.53
2:P:13:ARG:NH2	2:P:44:LEU:HD13	2.24	0.53
2:P:299:THR:HG22	2:P:310:ILE:N	2.23	0.53
1:G:79:PRO:HB3	1:G:108:HIS:CE1	2.44	0.53
1:E:66:ILE:N	1:E:69:LYS:O	2.22	0.53
1:E:173:THR:H	1:E:240:VAL:HG21	1.74	0.53
1:E:210:ALA:HA	1:E:213:ALA:HB3	1.90	0.53
2:F:4:ALA:HA	2:F:31:VAL:O	2.08	0.53
1:I:124:ASP:OD1	1:I:124:ASP:N	2.41	0.53
1:I:182:GLN:HG3	1:I:195:ARG:HG2	1.91	0.53
2:J:87:GLY:N	2:J:114:GLY:HA3	2.24	0.53
2:J:185:GLN:HE21	2:J:197:ARG:HD3	1.73	0.53
1:K:212:LYS:O	1:K:215:SER:OG	2.26	0.53
3:K:402:NAD:H2A	1:E:31:ASN:HD22	1.72	0.53
2:L:17:ARG:NH1	2:L:52:GLY:O	2.41	0.53
2:L:277:ASP:OD1	2:L:296:SER:OG	2.21	0.53
2:L:315:ASN:N	2:L:315:ASN:OD1	2.40	0.53
1:A:15:PHE:CE1	1:A:321:VAL:HB	2.44	0.53
1:A:263:ALA:O	1:A:268:LYS:NZ	2.27	0.53
1:C:57:VAL:HG22	1:C:66:ILE:HG23	1.90	0.53
1:C:80:LEU:HD21	1:C:107:LYS:HB3	1.90	0.53
1:C:137:TYR:CE2	1:C:327:LEU:HG	2.44	0.53
2:D:31:VAL:HG12	2:D:32:ILE:H	1.73	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:11:ILE:HB	3:Q:402:NAD:PN	2.49	0.53
1:Q:16:LEU:O	1:Q:18(B):HIS:N	2.38	0.53
2:R:3:VAL:HB	2:R:29:VAL:HG22	1.90	0.53
1:O:166:GLY:HA3	1:O:247:GLU:HB3	1.90	0.53
1:G:135:LYS:O	1:G:135:LYS:NZ	2.29	0.53
1:G:157:PHE:O	1:G:160:VAL:HG12	2.09	0.53
1:G:172:MET:H	1:G:227:GLY:HA2	1.74	0.53
1:G:324:LEU:O	1:G:328:VAL:N	2.28	0.53
2:H:186:ARG:NH2	2:H:191:SER:O	2.41	0.53
2:H:240:SER:OG	2:H:241:VAL:N	2.42	0.53
1:E:146:ASN:O	1:E:317:TYR:OH	2.24	0.53
1:E:256:ASN:HA	1:E:259:PHE:HD2	1.73	0.53
2:F:205:ILE:HG13	2:F:234:VAL:HA	1.90	0.53
1:I:60:ILE:N	1:I:64:PHE:HA	2.23	0.53
1:I:257:ASN:OD1	1:I:260:ARG:NH2	2.41	0.53
1:K:279:VAL:HA	1:K:310:TRP:CH2	2.44	0.53
2:L:15:PHE:O	2:L:19:TRP:N	2.31	0.53
2:L:142:HIS:CE1	2:L:334:TRP:HA	2.43	0.53
2:L:143:ALA:N	2:L:335:GLN:HE22	2.06	0.53
1:A:91:ILE:HG23	1:A:115:LYS:C	2.34	0.53
2:B:168:PHE:O	2:B:249:SER:OG	2.24	0.53
2:R:238:ASN:HD22	2:R:239:VAL:H	1.56	0.53
2:R:326:LEU:O	2:R:330:VAL:HG23	2.09	0.53
1:O:10:ARG:N	3:O:401:NAD:O2N	2.41	0.53
1:O:298:MET:HG3	1:O:306:LYS:HD3	1.89	0.53
2:P:269:LEU:O	2:P:273:LEU:N	2.39	0.53
2:P:328:ASP:HA	2:P:331:ALA:HB3	1.90	0.53
1:G:6:ASN:HB3	1:G:94:GLU:HA	1.91	0.53
1:G:15:PHE:CE1	1:G:322:VAL:HG22	2.44	0.53
1:G:170:GLY:N	1:G:224:LYS:O	2.42	0.53
1:G:174:THR:OG1	1:G:238:SER:HB3	2.09	0.53
1:G:204:VAL:N	1:G:231:ARG:O	2.41	0.53
1:E:31:ASN:ND2	1:E:76:ASN:O	2.41	0.53
1:E:91:ILE:HG21	1:E:117:ILE:HG13	1.89	0.53
1:E:137:TYR:O	1:E:331:LYS:NZ	2.34	0.53
1:E:281:VAL:HA	1:E:284:ARG:NE	2.24	0.53
1:I:149:CYS:HB3	1:I:317:TYR:CD2	2.43	0.53
2:J:103:ASP:CG	2:J:106:GLY:H	2.17	0.53
2:J:259:ALA:HA	2:J:262:ARG:HB2	1.91	0.53
1:K:124:ASP:O	1:E:103:PRO:HD3	2.09	0.53
1:K:287:ASP:HB3	1:K:315:TRP:CZ2	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:6:ASN:OD1	2:L:33:ASN:ND2	2.42	0.53
2:L:32:ILE:CG2	2:L:75:VAL:HB	2.15	0.53
2:L:280:LEU:HB3	2:L:285:PHE:HZ	1.73	0.53
2:L:314:ASP:OD1	2:L:316:GLU:N	2.42	0.53
1:A:85:ALA:C	1:A:88:GLY:H	2.17	0.53
1:A:115:LYS:HA	1:A:142:ASN:HB2	1.90	0.53
2:B:93:LEU:HD12	2:B:117:LYS:HB2	1.91	0.53
2:B:163:VAL:HA	2:B:166:GLN:CD	2.33	0.53
1:C:135:LYS:O	1:C:331:LYS:NZ	2.37	0.53
2:D:104:ARG:HB2	2:D:127:ASP:O	2.09	0.53
2:R:203:LEU:C	2:R:235:PRO:HG3	2.34	0.53
2:P:179:HIS:ND1	2:P:180:SER:O	2.41	0.53
1:G:236:ASN:HD21	1:G:314:GLU:H	1.56	0.53
1:G:279:VAL:HA	1:G:310:TRP:CZ2	2.44	0.53
2:H:102:VAL:HG22	2:H:125:LYS:H	1.73	0.53
2:H:322:ARG:NE	2:H:325:ASP:OD2	2.28	0.53
2:F:122:ALA:O	2:F:148:SER:OG	2.20	0.53
2:F:204:ASN:OD1	2:F:204:ASN:N	2.42	0.53
1:I:103:PRO:HA	1:Q:110:GLN:HB3	1.91	0.53
1:I:177:SER:HB3	1:I:234:THR:O	2.09	0.53
2:J:316:GLU:CD	2:J:316:GLU:N	2.67	0.53
1:K:10:ARG:N	3:K:401:NAD:O2A	2.42	0.53
1:A:171:THR:HB	1:A:226:ASN:HB3	1.90	0.53
1:C:16:LEU:HA	1:C:18(A):TRP:HB3	1.91	0.53
1:C:63:THR:OG1	1:C:72:LYS:HG3	2.09	0.53
1:C:82:LEU:HB2	1:C:84:TRP:CZ3	2.44	0.53
1:C:256:ASN:HA	1:C:259:PHE:CD2	2.43	0.53
1:C:276:ILE:H	1:C:276:ILE:HD12	1.73	0.53
2:D:163:VAL:O	2:D:167:LYS:N	2.27	0.53
2:R:3:VAL:HG12	2:R:29:VAL:HG13	1.90	0.53
2:R:8:PHE:HB3	2:R:34:ASP:HB2	1.89	0.53
2:R:162:LYS:HG3	2:R:220:LEU:HD21	1.91	0.53
2:R:306:MET:HB2	2:P:172:LYS:HD2	1.90	0.53
2:P:48:ASP:H	2:P:53:THR:HA	1.74	0.53
1:G:10:ARG:N	3:G:401:NAD:O1N	2.42	0.53
1:G:327:LEU:HA	1:G:330:ASN:HD21	1.74	0.53
1:G:327:LEU:HG	1:G:331:LYS:HG3	1.91	0.53
2:H:92:ASP:HB3	2:H:334:TRP:HH2	1.73	0.53
1:E:17:ARG:NH1	1:E:51:GLY:O	2.21	0.53
1:E:21:LYS:NZ	1:E:21:LYS:H	2.07	0.53
2:F:34:ASP:O	2:F:77:SER:OG	2.18	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:46:LYS:O	2:F:53:THR:OG1	2.16	0.53
1:I:51:GLY:H	2:J:283:ILE:HD11	1.74	0.52
2:J:108:GLY:O	2:J:112:GLN:N	2.35	0.52
1:K:14:ASN:HD22	1:K:14:ASN:H	1.55	0.52
1:K:194:ARG:HB3	1:K:204:VAL:HG22	1.91	0.52
2:L:5:ILE:HB	2:L:32:ILE:HG12	1.91	0.52
2:D:143:ALA:N	2:D:335:GLN:HE22	2.07	0.52
1:Q:236:ASN:O	1:Q:284:ARG:NH1	2.42	0.52
2:R:1:LEU:HD11	2:R:334:TRP:CE3	2.43	0.52
1:O:246:ILE:HG23	1:O:248:LYS:H	1.73	0.52
2:P:46:LYS:HZ1	2:P:53:THR:HG1	1.49	0.52
2:P:171:ILE:HG13	2:P:249:SER:HA	1.90	0.52
2:P:253:PHE:CE2	2:P:255:GLU:HB3	2.44	0.52
1:G:28:VAL:HA	1:G:71:ILE:HG12	1.90	0.52
1:G:29:VAL:HA	1:G:72:LYS:O	2.08	0.52
1:G:85:ALA:N	1:G:112:GLY:HA3	2.23	0.52
1:G:190:HIS:CE1	1:G:192:ASP:H	2.28	0.52
1:G:252:ALA:O	1:G:255:VAL:N	2.42	0.52
2:H:80:ASN:HD21	2:H:82:VAL:HB	1.74	0.52
1:I:139:HIS:HE2	1:I:333:PRO:HD3	1.75	0.52
1:I:357:GLU:HA	1:Q:183:ARG:HE	1.73	0.52
2:J:80:ASN:HD21	2:J:82:VAL:HB	1.73	0.52
2:J:168:PHE:HD2	2:J:250:LYS:HZ1	1.56	0.52
2:J:187:LEU:HD22	1:K:184:LEU:N	2.24	0.52
2:J:192:HIS:ND1	2:J:197:ARG:HB3	2.24	0.52
2:J:314:ASP:OD1	2:J:316:GLU:N	2.43	0.52
1:K:82:LEU:HB2	1:K:84:TRP:CZ3	2.45	0.52
1:K:90:ASP:HB2	1:K:91:ILE:HD12	1.91	0.52
2:L:120:ILE:H	2:L:148:SER:HA	1.75	0.52
2:L:172:LYS:HZ1	2:L:247:GLN:CD	2.16	0.52
1:A:158:VAL:HA	1:A:161:LEU:HD21	1.91	0.52
1:A:191:ARG:HD2	1:A:192:ASP:N	2.24	0.52
2:B:96:GLU:HG2	2:B:98:THR:HG23	1.90	0.52
2:B:104:ARG:NE	2:B:127:ASP:O	2.41	0.52
1:C:47:ASP:CG	1:C:49:ILE:H	2.16	0.52
1:C:52:THR:O	1:C:54:LYS:NZ	2.25	0.52
1:Q:184:LEU:HB3	2:P:187:LEU:HD22	1.91	0.52
2:R:240:SER:N	2:R:313:TYR:O	2.42	0.52
1:G:11:ILE:HG13	1:G:314:GLU:CD	2.34	0.52
1:G:67:ASP:OD1	1:G:67:ASP:N	2.39	0.52
1:G:194:ARG:HE	1:E:277:PRO:HB2	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:324:LEU:HA	1:G:327:LEU:HB3	1.91	0.52
2:H:2:LYS:NZ	2:H:28:ASP:OD2	2.42	0.52
2:H:24:ASP:O	2:H:26:PRO:HD3	2.08	0.52
2:H:35:THR:OG1	2:H:79:ARG:CZ	2.54	0.52
2:H:81:PRO:HA	2:H:84:LEU:HD12	1.91	0.52
2:H:85:PRO:HB2	2:H:88:ASP:OD1	2.09	0.52
2:H:289:ASP:OD1	2:H:317:TRP:NE1	2.41	0.52
1:E:20:ARG:HG3	1:E:322:VAL:HG11	1.90	0.52
1:E:172:MET:HB3	1:E:242:LEU:HA	1.91	0.52
1:I:213:ALA:O	1:I:216:LEU:HB2	2.09	0.52
2:J:10:ARG:O	2:J:14:ASN:N	2.28	0.52
2:J:164:LEU:HA	2:J:168:PHE:CD1	2.44	0.52
2:J:252:THR:N	2:J:304:ASP:HB3	2.24	0.52
1:K:198:ALA:HB1	1:K:201:LEU:HD21	1.90	0.52
2:L:33:ASN:O	3:L:401:NAD:H2A	2.09	0.52
2:L:37:GLY:O	2:L:41:ALA:N	2.31	0.52
2:L:240:SER:OG	2:L:241:VAL:N	2.41	0.52
1:A:31:ASN:OD1	1:A:76:ASN:N	2.43	0.52
1:A:64:PHE:O	1:A:70:PRO:HA	2.10	0.52
1:A:184:LEU:HD13	2:D:187:LEU:HD13	1.90	0.52
2:B:206:VAL:HB	2:B:233:ARG:HB2	1.91	0.52
1:C:50:LEU:HD13	1:C:285:CYS:HA	1.91	0.52
1:C:161:LEU:O	1:C:165:LEU:HB2	2.09	0.52
1:C:171:THR:HG1	1:C:172:MET:H	1.58	0.52
1:C:177:SER:O	1:C:231:ARG:NH1	2.26	0.52
1:C:212:LYS:O	1:C:215:SER:OG	2.24	0.52
2:D:23:LYS:HA	2:D:23:LYS:HZ2	1.75	0.52
2:D:39:LYS:HB2	2:D:43:HIS:CE1	2.44	0.52
2:D:184:ASP:OD2	2:D:233:ARG:NH1	2.42	0.52
2:D:277:ASP:HB3	2:D:297:SER:HB3	1.90	0.52
1:Q:37:VAL:HA	1:Q:40:ALA:HB3	1.90	0.52
2:R:117:LYS:HD3	2:R:145:THR:HA	1.91	0.52
1:O:79:PRO:O	1:O:82:LEU:N	2.32	0.52
2:P:1:LEU:O	2:P:28:ASP:N	2.43	0.52
2:H:136:ASN:ND2	2:H:219:VAL:HG12	2.25	0.52
1:E:126:PRO:HD2	1:E:145:SER:HB3	1.91	0.52
1:E:221:LEU:HA	1:E:224:LYS:HE3	1.90	0.52
2:F:178:THR:HG1	2:F:241:VAL:H	1.54	0.52
1:I:1:LEU:N	1:I:25:LEU:HA	2.23	0.52
1:I:139:HIS:NE2	1:I:333:PRO:HD3	2.23	0.52
1:I:178:TYR:N	1:I:232:VAL:O	2.42	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:93:LEU:HB2	2:J:117:LYS:HB2	1.92	0.52
2:J:230:ILE:HG12	2:L:308:LYS:HD3	1.92	0.52
2:J:293:THR:O	2:J:312:TRP:N	2.39	0.52
1:K:60:ILE:HB	1:K:63:THR:O	2.09	0.52
1:K:256:ASN:HB2	1:K:260:ARG:HH21	1.74	0.52
2:B:5:ILE:HG23	2:B:95:ILE:HB	1.91	0.52
2:B:10:ARG:NH1	1:C:186:ASP:O	2.41	0.52
1:Q:77:ARG:HA	3:Q:402:NAD:N6A	2.25	0.52
1:Q:93:ILE:HA	1:Q:117:ILE:HB	1.90	0.52
2:R:46:LYS:O	2:R:54:PHE:N	2.41	0.52
2:R:176:THR:HA	2:R:230:ILE:O	2.09	0.52
2:R:303:GLY:HA3	2:P:172:LYS:HE2	1.92	0.52
1:O:186:ASP:HA	1:O:197:ARG:HA	1.91	0.52
2:P:181:TYR:CD2	2:P:235:PRO:HA	2.44	0.52
1:G:1:LEU:HB3	1:G:90:ASP:HB2	1.90	0.52
1:G:28:VAL:C	1:G:71:ILE:HG23	2.33	0.52
1:G:275:ASP:CG	1:G:295:SER:H	2.18	0.52
2:H:2:LYS:O	2:H:92:ASP:N	2.26	0.52
2:H:87:GLY:HA2	2:H:114:GLY:HA3	1.92	0.52
1:E:7:GLY:HA2	1:E:31:ASN:HB3	1.91	0.52
1:E:79:PRO:HG3	1:E:108:HIS:CD2	2.44	0.52
1:I:130:VAL:HA	1:I:134:GLU:HG3	1.92	0.52
1:I:291:THR:HB	1:I:310:TRP:O	2.09	0.52
2:J:39:LYS:O	2:J:42:SER:OG	2.11	0.52
1:K:29:VAL:HA	1:K:72:LYS:O	2.10	0.52
1:K:159:LYS:HG2	1:K:163:GLU:CD	2.35	0.52
1:K:226:ASN:OD1	1:K:227:GLY:N	2.36	0.52
1:K:319:GLN:OE1	1:K:320:ARG:NH2	2.41	0.52
2:L:258:ASN:O	2:L:262:ARG:N	2.43	0.52
1:A:154:LEU:O	1:A:158:VAL:HB	2.08	0.52
2:B:210:THR:H	2:B:231:ALA:HB2	1.74	0.52
2:D:37:GLY:HA3	2:D:40:GLN:CD	2.35	0.52
1:Q:50:LEU:HD22	1:Q:285:CYS:SG	2.49	0.52
1:Q:209:GLY:HA2	1:Q:212:LYS:HG3	1.92	0.52
1:Q:278:LEU:HB3	1:Q:282:ASP:CG	2.34	0.52
2:R:136:ASN:ND2	2:R:219:VAL:HG12	2.24	0.52
2:R:153:THR:HG21	2:R:210:THR:HG21	1.91	0.52
1:O:108:HIS:HA	1:O:111:ALA:HB3	1.90	0.52
1:O:179:THR:HG23	1:O:231:ARG:HH12	1.75	0.52
2:P:20:HIS:HB3	2:P:54:PHE:HZ	1.74	0.52
1:G:126:PRO:HB2	1:G:128:TYR:CE1	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:241:ASP:HA	1:G:307:VAL:O	2.10	0.52
1:E:137:TYR:HD2	1:E:331:LYS:HD2	1.74	0.52
2:F:179:HIS:HB3	2:F:233:ARG:HA	1.92	0.52
1:I:107:LYS:HB2	1:I:108:HIS:HD2	1.73	0.52
1:I:255:VAL:O	1:I:259:PHE:N	2.29	0.52
1:K:79:PRO:HG2	1:K:107:LYS:HB2	1.92	0.52
1:K:130:VAL:HA	1:K:134:GLU:HB3	1.90	0.52
1:K:361:TYR:H	1:E:195:ARG:NH2	2.07	0.52
2:L:177:THR:HG23	2:L:231:ALA:HA	1.90	0.52
1:A:170:GLY:HA3	1:A:244:VAL:HG12	1.91	0.52
2:B:153:THR:HG1	2:B:154:THR:H	1.56	0.52
1:C:41:THR:HG21	1:C:59:ILE:HG12	1.90	0.52
1:C:83:PRO:O	1:C:86:GLU:N	2.43	0.52
1:C:207:SER:OG	1:C:208:THR:N	2.42	0.52
1:Q:256:ASN:HA	1:Q:259:PHE:CG	2.44	0.52
2:R:47:TYR:O	1:O:197:ARG:NH2	2.41	0.52
2:R:194:ASP:OD1	2:R:195:LEU:HD12	2.10	0.52
1:O:20:ARG:HD2	1:O:21:LYS:NZ	2.25	0.52
1:G:169:LYS:NZ	1:E:303:ASP:OD2	2.42	0.52
2:H:133:VAL:HA	2:H:137:GLU:HB3	1.92	0.52
2:H:326:LEU:O	2:H:330:VAL:HG23	2.09	0.52
1:E:20:ARG:HD2	1:E:21:LYS:NZ	2.25	0.52
1:E:91:ILE:HA	1:E:115:LYS:O	2.10	0.52
2:F:111:LEU:HD21	2:F:118:VAL:HG23	1.92	0.52
2:F:253:PHE:HA	2:F:301:VAL:HG21	1.91	0.52
2:J:57:ASP:O	2:J:69:ASP:N	2.43	0.52
2:J:86:TRP:HD1	2:J:115:ALA:H	1.57	0.52
1:K:23:SER:OG	1:K:25:LEU:O	2.26	0.52
1:K:279:VAL:N	1:K:282:ASP:OD2	2.27	0.52
2:L:80:ASN:ND2	2:L:83:ASN:OD1	2.43	0.52
2:L:273:LEU:HD13	2:L:291:SER:HB2	1.92	0.52
1:A:46:TYR:HA	1:A:52:THR:HA	1.92	0.52
1:A:48:SER:OG	2:D:189:ASP:OD2	2.24	0.52
1:A:183:ARG:O	1:A:199:ALA:N	2.42	0.52
2:B:109:LYS:HA	2:B:112:GLN:HB2	1.92	0.52
2:B:186:ARG:HB2	2:B:197:ARG:O	2.10	0.52
2:D:17:ARG:NH1	2:D:52:GLY:O	2.40	0.52
2:D:17:ARG:HH21	2:D:55:ASP:CG	2.15	0.52
2:D:171:ILE:N	2:D:247:GLN:O	2.42	0.52
2:D:280:LEU:HB3	2:D:285:PHE:CZ	2.44	0.52
1:Q:276:ILE:H	1:Q:276:ILE:HD12	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:279:VAL:HA	1:Q:310:TRP:CZ2	2.45	0.52
1:Q:304:MET:HB2	1:O:169:LYS:HE3	1.90	0.52
2:R:54:PHE:C	2:R:56:ALA:H	2.18	0.52
2:R:122:ALA:O	2:R:148:SER:OG	2.27	0.52
2:R:152:CYS:SG	3:R:401:NAD:N7N	2.80	0.52
1:O:292:ILE:HA	1:O:309:ALA:HA	1.92	0.52
2:P:119:LEU:HA	2:P:147:ILE:O	2.10	0.52
2:H:31:VAL:CB	2:H:74:LYS:HB2	2.40	0.52
2:H:86:TRP:CD1	2:H:113:ALA:HB3	2.43	0.52
1:E:60(A):ASP:OD1	1:E:61:ASN:ND2	2.42	0.52
2:F:39:LYS:CA	2:F:60:THR:HG21	2.40	0.52
2:F:236:THR:HG23	2:F:238:ASN:H	1.74	0.52
2:J:206:VAL:HB	2:J:233:ARG:HB2	1.92	0.52
1:K:20:ARG:HA	1:K:20:ARG:HH11	1.75	0.52
1:K:137:TYR:CE2	1:K:327:LEU:HG	2.45	0.52
1:K:161:LEU:O	1:K:165:LEU:HB2	2.10	0.52
2:L:290:VAL:HA	2:L:322:ARG:HH12	1.74	0.52
1:A:179:THR:N	1:A:182:GLN:OE1	2.41	0.52
1:A:316:GLY:O	1:A:319:GLN:HG2	2.09	0.52
2:B:48:ASP:H	2:B:53:THR:HA	1.75	0.52
2:B:108:GLY:O	2:B:112:GLN:N	2.37	0.52
2:B:192:HIS:ND1	2:B:197:ARG:HB3	2.24	0.52
2:B:215:ALA:O	2:B:219:VAL:N	2.32	0.52
1:C:214:VAL:O	1:C:218:LEU:N	2.42	0.52
2:D:172:LYS:HB2	2:D:172:LYS:HZ2	1.75	0.52
1:Q:93:ILE:HG22	1:Q:119:THR:HG22	1.91	0.52
1:Q:119:THR:O	1:Q:146:ASN:ND2	2.43	0.52
1:O:79:PRO:HG3	1:O:108:HIS:NE2	2.24	0.52
1:O:115:LYS:HG3	1:O:332:TRP:CZ3	2.45	0.52
2:P:182:THR:HG23	2:P:185:GLN:NE2	2.23	0.52
1:G:37:VAL:O	1:G:41:THR:N	2.25	0.52
1:G:101:ASP:OD1	1:G:104:GLY:N	2.35	0.52
1:G:139:HIS:HB2	1:G:331:LYS:HB3	1.90	0.52
1:G:280:SER:OG	1:E:202:ASN:OD1	2.28	0.52
2:H:174:THR:OG1	2:H:245:VAL:O	2.27	0.52
2:H:242:VAL:HG22	2:H:311:ALA:N	2.25	0.52
1:E:57:VAL:HG13	1:E:66:ILE:HA	1.92	0.52
1:E:58:LYS:HA	1:E:58:LYS:NZ	2.23	0.52
1:I:45:LYS:O	1:I:52:THR:OG1	2.16	0.52
1:I:153:CYS:O	1:I:156:PRO:HD2	2.09	0.52
1:I:191:ARG:HG3	1:Q:357:GLU:O	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:37:GLY:HA3	2:J:40:GLN:CD	2.35	0.52
2:J:153:THR:HG1	2:J:154:THR:H	1.57	0.52
2:J:167:LYS:N	2:J:167:LYS:HD2	2.24	0.52
2:J:187:LEU:N	1:K:184:LEU:HD22	2.24	0.52
2:J:205:ILE:HG13	2:J:234:VAL:HG12	1.92	0.52
1:K:11:ILE:HB	3:K:401:NAD:H72N	1.75	0.52
2:L:87:GLY:N	2:L:114:GLY:HA3	2.25	0.52
1:A:15:PHE:HD1	1:A:318:SER:HB2	1.75	0.52
1:A:91:ILE:HG21	1:A:117:ILE:HG13	1.92	0.52
2:B:13:ARG:HD3	2:B:44:LEU:HD22	1.90	0.52
2:B:149:ASN:OD1	2:B:150:ALA:N	2.42	0.52
2:B:182:THR:OG1	2:B:185:GLN:N	2.41	0.52
1:C:84:TRP:O	1:C:88:GLY:N	2.43	0.52
1:C:203:ILE:O	1:C:205:PRO:HD3	2.10	0.52
2:D:8:PHE:HB2	2:D:32:ILE:HD12	1.92	0.52
1:Q:157:PHE:O	1:Q:160:VAL:HG12	2.09	0.52
1:Q:179:THR:H	1:Q:182:GLN:NE2	2.08	0.52
1:O:34:GLY:O	1:O:39:SER:OG	2.27	0.52
1:O:203:ILE:HA	1:O:232:VAL:HG12	1.92	0.52
2:P:119:LEU:HG	2:P:148:SER:HA	1.92	0.52
2:P:140:TYR:CE2	2:P:333:LYS:HD3	2.45	0.52
1:G:209:GLY:HA2	1:G:212:LYS:HG3	1.92	0.52
2:H:156:CYS:SG	2:H:157:LEU:N	2.83	0.52
1:E:58:LYS:N	1:E:65:SER:O	2.36	0.52
1:E:153:CYS:O	1:E:156:PRO:HD2	2.09	0.52
1:E:312:ASP:CG	1:E:316:GLY:H	2.17	0.52
1:E:315:TRP:O	1:E:318:SER:OG	2.20	0.52
2:F:50:ILE:HG22	2:F:51:LEU:HD23	1.92	0.52
2:F:239:VAL:HG13	2:F:313:TYR:O	2.09	0.52
2:F:301:VAL:HA	2:F:307:VAL:HG13	1.91	0.52
2:J:210:THR:H	2:J:231:ALA:HB2	1.74	0.52
2:J:320:SER:O	2:J:324:VAL:HG23	2.10	0.52
1:K:258:ALA:HA	1:K:261:LYS:HB3	1.92	0.52
2:L:28:ASP:OD1	2:L:71:LYS:HE3	2.10	0.52
2:L:30:VAL:C	2:L:73:ILE:CG2	2.80	0.52
2:L:107:ALA:HB1	2:L:118:VAL:HG11	1.91	0.52
1:A:0:LYS:N	1:A:23:SER:O	2.41	0.52
1:A:195:ARG:HH22	1:G:361:TYR:H	1.58	0.52
2:B:86:TRP:NE1	2:B:113:ALA:HB3	2.24	0.52
2:B:152:CYS:HA	2:B:155:ASN:HD22	1.75	0.52
1:C:5:ILE:O	1:C:30:VAL:HA	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:157:PHE:CE1	1:C:158:VAL:HG23	2.45	0.52
1:C:326:ASP:O	1:C:330:ASN:N	2.39	0.52
2:D:258:ASN:O	2:D:262:ARG:N	2.42	0.52
1:Q:10:ARG:HH12	1:Q:48:SER:N	2.07	0.52
1:Q:62:GLU:HB2	1:Q:72:LYS:NZ	2.24	0.52
2:R:253:PHE:HA	2:R:301:VAL:HG11	1.90	0.52
1:O:126:PRO:HD2	1:O:145:SER:HB3	1.92	0.52
2:P:46:LYS:HD3	2:P:58:VAL:HG22	1.92	0.52
1:E:127:THR:HG21	1:E:216:LEU:HB3	1.91	0.52
2:F:47:TYR:HA	2:F:53:THR:HA	1.91	0.52
2:F:166:GLN:OE1	2:F:167:LYS:NZ	2.42	0.52
2:J:319:TYR:O	2:J:323:VAL:HG23	2.09	0.51
1:K:32:ASP:N	1:K:74:VAL:O	2.39	0.51
1:K:157:PHE:CE1	1:K:158:VAL:HG23	2.44	0.51
1:K:167:ILE:HG12	1:K:244:VAL:HG21	1.92	0.51
2:L:119:LEU:HD12	2:L:147:ILE:HB	1.91	0.51
2:L:181:TYR:CE1	2:L:237:PRO:HB3	2.45	0.51
2:L:193:ARG:H	2:L:193:ARG:NE	2.08	0.51
1:A:2:LYS:HB2	1:A:89:ILE:HD13	1.92	0.51
1:A:77:ARG:HB3	3:A:401:NAD:H62A	1.74	0.51
1:A:154:LEU:HD12	1:A:157:PHE:HE2	1.75	0.51
1:A:236:ASN:ND2	1:A:312:ASP:OD2	2.41	0.51
2:B:157:LEU:HA	2:B:160:PHE:CZ	2.45	0.51
2:B:209:SER:O	2:B:214:LYS:NZ	2.42	0.51
2:B:268:GLU:HG3	2:B:269:LEU:HD23	1.92	0.51
1:C:126:PRO:HB2	1:C:128:TYR:CE2	2.45	0.51
2:D:41:ALA:HA	2:D:44:LEU:HD12	1.92	0.51
2:D:86:TRP:HE1	2:D:113:ALA:HB3	1.73	0.51
2:D:120:ILE:O	2:D:148:SER:OG	2.19	0.51
2:D:153:THR:O	2:D:157:LEU:N	2.22	0.51
2:R:5:ILE:O	2:R:33:ASN:N	2.30	0.51
2:R:168:PHE:HE2	2:R:256:GLU:HG2	1.75	0.51
1:O:184:LEU:O	1:O:198:ALA:HA	2.10	0.51
1:O:270:VAL:O	1:O:289:SER:N	2.43	0.51
1:G:108:HIS:N	1:G:108:HIS:CD2	2.78	0.51
1:G:168:VAL:HB	1:G:245:ASN:CG	2.34	0.51
1:G:319:GLN:HB2	1:G:320:ARG:NH1	2.25	0.51
2:H:138:GLU:H	2:H:138:GLU:CD	2.17	0.51
2:H:171:ILE:HD12	2:H:247:GLN:HG2	1.92	0.51
2:H:176:THR:HA	2:H:230:ILE:O	2.10	0.51
1:I:10:ARG:HA	1:I:13:ARG:HE	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:81:LYS:HE3	1:I:81:LYS:H	1.74	0.51
1:I:287:ASP:OD1	1:I:315:TRP:NE1	2.43	0.51
1:I:296:LEU:HD11	1:K:194:ARG:HH22	1.75	0.51
2:J:209:SER:O	2:J:214:LYS:NZ	2.41	0.51
2:L:43:HIS:HA	2:L:46:LYS:HB3	1.92	0.51
1:A:31:ASN:HD21	1:A:76:ASN:H	1.58	0.51
1:C:169:LYS:HA	1:C:224:LYS:CG	2.39	0.51
1:C:327:LEU:HA	1:C:330:ASN:HB2	1.92	0.51
2:D:131:TYR:OH	2:D:139:GLY:O	2.18	0.51
2:D:132:VAL:O	2:D:136:ASN:N	2.43	0.51
2:D:176:THR:HA	2:D:230:ILE:O	2.11	0.51
1:Q:0:LYS:H3	1:Q:24:PRO:C	2.19	0.51
1:Q:40:ALA:O	1:Q:44:LEU:N	2.25	0.51
1:Q:310:TRP:NE1	1:O:194:ARG:HH12	2.06	0.51
1:O:31:ASN:HD21	1:O:76:ASN:H	1.58	0.51
1:O:41:THR:HG21	1:O:59:ILE:HG12	1.92	0.51
2:P:42:SER:OG	2:P:43:HIS:N	2.42	0.51
2:P:245:VAL:HG13	2:P:307:VAL:C	2.35	0.51
2:P:275:VAL:HA	2:P:294:ILE:H	1.75	0.51
2:H:302:MET:N	2:H:306:MET:O	2.29	0.51
2:F:241:VAL:HG13	2:F:311:ALA:C	2.35	0.51
3:F:401:NAD:H2N	3:F:401:NAD:H52N	1.91	0.51
1:I:3:VAL:HB	1:I:27:VAL:HA	1.92	0.51
1:I:78:ASP:HB3	1:I:81:LYS:HD2	1.92	0.51
1:I:210:ALA:O	1:I:214:VAL:N	2.33	0.51
2:J:10:ARG:NH1	1:K:186:ASP:O	2.42	0.51
2:J:80:ASN:O	2:J:84:LEU:N	2.44	0.51
2:J:92:ASP:HB3	2:J:334:TRP:CH2	2.46	0.51
2:L:48:ASP:OD1	2:L:49:SER:N	2.43	0.51
1:A:8:PHE:CE2	1:A:13:ARG:HA	2.45	0.51
1:A:191:ARG:HD2	1:A:192:ASP:H	1.75	0.51
1:A:296:LEU:HD11	1:C:194:ARG:HH22	1.74	0.51
1:A:323:ASP:O	1:A:327:LEU:N	2.43	0.51
2:B:19:TRP:HA	2:B:22:ARG:HB2	1.92	0.51
2:B:316:GLU:N	2:B:316:GLU:CD	2.67	0.51
1:C:324:LEU:HD13	1:C:327:LEU:HB3	1.90	0.51
2:D:6:ASN:OD1	2:D:7:GLY:N	2.43	0.51
1:Q:121:PRO:HG3	1:Q:148:SER:H	1.76	0.51
1:Q:287:ASP:OD2	1:Q:319:GLN:NE2	2.44	0.51
1:Q:341:SER:O	1:Q:345:LEU:HA	2.11	0.51
2:R:294:ILE:HA	2:R:311:ALA:HB2	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:281:VAL:O	1:O:284:ARG:HG2	2.11	0.51
1:O:326:ASP:OD1	1:O:326:ASP:N	2.43	0.51
2:P:204:ASN:OD1	2:P:204:ASN:N	2.43	0.51
1:G:148:SER:OG	1:G:150:THR:OG1	2.18	0.51
1:G:272:ASP:N	1:G:290:SER:O	2.38	0.51
1:G:282:ASP:OD1	2:H:47:TYR:CG	2.62	0.51
2:H:142:HIS:CE1	2:H:334:TRP:HA	2.46	0.51
2:H:194:ASP:OD1	2:H:195:LEU:HD12	2.09	0.51
2:H:204:ASN:ND2	2:F:282:SER:OG	2.43	0.51
1:E:64:PHE:O	1:E:70:PRO:HA	2.11	0.51
1:E:80:LEU:HD21	1:E:107:LYS:HB3	1.93	0.51
2:F:208:THR:HG23	2:F:231:ALA:HB3	1.92	0.51
1:I:289:SER:HB3	1:I:320:ARG:HD2	1.92	0.51
2:J:5:ILE:HG23	2:J:95:ILE:HB	1.90	0.51
2:J:283:ILE:C	2:J:285:PHE:H	2.19	0.51
1:K:11:ILE:HD11	1:K:317:TYR:HB3	1.93	0.51
1:K:272:ASP:HB3	1:K:291:THR:HA	1.93	0.51
2:L:168:PHE:HA	2:L:250:LYS:HD3	1.91	0.51
2:L:186:ARG:CZ	2:L:192:HIS:HB2	2.41	0.51
1:A:46:TYR:HB2	2:D:199:ARG:HH12	1.75	0.51
1:A:178:TYR:CE1	1:A:235:PRO:HA	2.45	0.51
2:B:87:GLY:N	2:B:114:GLY:HA3	2.24	0.51
2:B:142:HIS:CD2	2:B:336:ALA:H	2.27	0.51
2:B:187:LEU:HA	1:C:184:LEU:HD22	1.91	0.51
2:B:283:ILE:HA	2:B:286:ARG:HE	1.75	0.51
1:C:45:LYS:HA	1:C:53:PHE:HB2	1.92	0.51
1:C:256:ASN:CB	1:C:260:ARG:HH21	2.23	0.51
1:C:263:ALA:HA	1:C:267:LEU:HB2	1.92	0.51
2:D:48:ASP:H	2:D:53:THR:HA	1.75	0.51
1:Q:151:THR:O	1:Q:155:ALA:N	2.28	0.51
1:Q:270:VAL:HG12	1:Q:290:SER:HB3	1.92	0.51
2:R:142:HIS:HB2	2:R:333:LYS:HG3	1.91	0.51
2:R:150:ALA:O	2:R:319:TYR:OH	2.15	0.51
1:O:16:LEU:HD13	1:O:44:LEU:HD13	1.92	0.51
1:O:260:ARG:HG3	1:O:273:VAL:HB	1.91	0.51
2:P:0:LYS:NZ	2:P:1:LEU:HD13	2.25	0.51
2:P:4:ALA:HB2	2:P:31:VAL:HB	1.93	0.51
2:P:239:VAL:HG13	2:P:313:TYR:C	2.35	0.51
2:H:2:LYS:HZ2	2:H:30:VAL:CG2	2.23	0.51
2:H:11:ILE:HG12	3:H:401:NAD:PN	2.51	0.51
2:H:168:PHE:HE2	2:H:256:GLU:HG2	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:283:ILE:HG22	2:F:204:ASN:HD21	1.76	0.51
2:F:30:VAL:O	2:F:74:LYS:NZ	2.30	0.51
2:F:81:PRO:HB2	2:F:109:LYS:HE2	1.92	0.51
1:I:45:LYS:HD3	1:I:57:VAL:HG23	1.93	0.51
1:I:169:LYS:NZ	1:K:301:GLY:HA3	2.25	0.51
1:I:312:ASP:OD2	1:I:314:GLU:N	2.43	0.51
2:J:95:ILE:HA	2:J:119:LEU:O	2.10	0.51
2:L:41:ALA:HA	2:L:44:LEU:HB2	1.91	0.51
1:A:129:VAL:O	1:A:133:ASN:N	2.44	0.51
1:A:237:VAL:HG11	1:A:280:SER:HB2	1.91	0.51
2:B:13:ARG:HG2	2:B:45:LEU:HB2	1.92	0.51
2:B:92:ASP:HB3	2:B:334:TRP:CH2	2.46	0.51
2:B:117:LYS:NZ	2:B:142:HIS:O	2.27	0.51
2:D:0:LYS:HE3	2:D:1:LEU:HD22	1.92	0.51
1:Q:119:THR:O	1:Q:317:TYR:OH	2.29	0.51
1:Q:172:MET:H	1:Q:227:GLY:HA2	1.75	0.51
2:R:178:THR:OG1	2:R:240:SER:OG	2.17	0.51
1:O:83:PRO:HG2	1:O:86:GLU:CD	2.34	0.51
1:O:239:VAL:HG23	1:O:309:ALA:O	2.10	0.51
2:P:153:THR:O	2:P:157:LEU:HG	2.10	0.51
2:P:252:THR:OG1	2:P:253:PHE:N	2.44	0.51
2:H:320:SER:O	2:H:324:VAL:HG23	2.11	0.51
1:E:204:VAL:O	1:E:230:LEU:HA	2.11	0.51
2:F:22:ARG:HH22	2:F:325:ASP:N	2.09	0.51
2:F:275:VAL:HA	2:F:294:ILE:H	1.74	0.51
2:F:328:ASP:HA	2:F:331:ALA:HB3	1.91	0.51
1:K:96:THR:HA	3:K:401:NAD:C8A	2.41	0.51
1:K:105:ALA:HA	1:K:108:HIS:CG	2.46	0.51
2:L:210:THR:HB	2:L:231:ALA:HB2	1.93	0.51
2:L:251:LYS:HZ2	2:L:305:ASP:HB3	1.76	0.51
2:L:263:GLU:CD	2:L:264:SER:H	2.15	0.51
1:A:236:ASN:H	1:A:284:ARG:HH22	1.58	0.51
1:C:283:PHE:HE2	1:C:310:TRP:CD2	2.28	0.51
2:D:48:ASP:OD1	2:D:49:SER:N	2.44	0.51
2:D:118:VAL:N	2:D:145:THR:O	2.36	0.51
2:D:245:VAL:HG22	2:D:308:LYS:HA	1.92	0.51
1:Q:76:ASN:HB3	1:Q:82:LEU:HD21	1.92	0.51
2:R:175:MET:N	2:R:175:MET:SD	2.84	0.51
2:R:242:VAL:HG22	2:R:311:ALA:N	2.24	0.51
1:O:274:CYS:N	1:O:292:ILE:O	2.43	0.51
1:G:47:ASP:OD2	1:G:50:LEU:N	2.43	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:1:LEU:HD11	2:H:334:TRP:CZ3	2.45	0.51
1:E:57:VAL:HG22	1:E:66:ILE:HA	1.93	0.51
1:E:237:VAL:HA	1:E:312:ASP:HA	1.92	0.51
1:E:281:VAL:O	1:E:284:ARG:HG2	2.10	0.51
2:F:240:SER:OG	2:F:241:VAL:N	2.43	0.51
2:F:259:ALA:HA	2:F:262:ARG:HD2	1.93	0.51
1:I:29:VAL:HG23	1:I:72:LYS:C	2.34	0.51
1:I:176:HIS:N	1:I:230:LEU:O	2.44	0.51
1:K:209:GLY:O	1:K:213:ALA:N	2.43	0.51
2:L:129:PRO:HD2	2:L:147:ILE:HA	1.92	0.51
1:A:1:LEU:H	1:A:25:LEU:HA	1.75	0.51
1:A:60:ILE:HD11	1:A:65:SER:HB2	1.92	0.51
1:A:126:PRO:HD3	1:G:103:PRO:HG3	1.92	0.51
1:A:151:THR:HG22	1:A:214:VAL:HG23	1.93	0.51
2:B:167:LYS:N	2:B:167:LYS:HD2	2.26	0.51
2:B:179:HIS:CE1	2:B:233:ARG:HD3	2.46	0.51
3:B:401:NAD:H8A	3:B:401:NAD:H51A	1.91	0.51
1:C:50:LEU:HD22	1:C:285:CYS:SG	2.51	0.51
1:C:162:ASP:HB2	1:C:167:ILE:HD12	1.92	0.51
2:D:58:VAL:HA	2:D:69:ASP:H	1.76	0.51
2:R:30:VAL:HA	2:R:73:ILE:HG12	1.92	0.51
2:R:116:LYS:O	2:R:145:THR:OG1	2.17	0.51
2:R:142:HIS:ND1	2:R:330:VAL:O	2.44	0.51
1:O:208:THR:O	1:O:212:LYS:NZ	2.34	0.51
1:O:232:VAL:HB	1:O:233:PRO:HD2	1.92	0.51
1:O:267:LEU:HD13	1:O:271:LEU:HD22	1.91	0.51
1:G:13:ARG:HH21	1:G:47:ASP:HA	1.75	0.51
2:H:78:ASP:OD1	2:H:79:ARG:N	2.43	0.51
2:H:162:LYS:HG3	2:H:220:LEU:HD21	1.92	0.51
2:H:210:THR:HG22	2:H:231:ALA:HB2	1.92	0.51
2:F:10:ARG:HD2	2:F:13:ARG:NH1	2.25	0.51
2:F:39:LYS:O	2:F:42:SER:OG	2.15	0.51
2:F:284:ASP:N	2:F:284:ASP:OD1	2.42	0.51
1:I:14:ASN:O	1:I:18:CYS:N	2.29	0.51
1:I:240:VAL:HG13	1:I:311:TYR:CE1	2.46	0.51
2:J:80:ASN:HD22	2:J:83:ASN:CG	2.18	0.51
2:J:204:ASN:HD22	2:L:282:SER:H	1.57	0.51
1:K:280:SER:O	1:K:283:PHE:N	2.44	0.51
2:L:46:LYS:HA	2:L:58:VAL:HG21	1.93	0.51
2:L:95:ILE:HG23	2:L:120:ILE:HA	1.92	0.51
1:A:116:VAL:O	1:A:144:ILE:N	2.32	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:254:ASP:HA	1:A:257:ASN:HD22	1.76	0.51
2:B:282:SER:OG	2:B:286:ARG:NH2	2.42	0.51
1:Q:157:PHE:CE1	1:Q:292:ILE:HG12	2.46	0.51
2:R:171:ILE:HD12	2:R:247:GLN:HG2	1.93	0.51
2:R:192:HIS:HB3	2:R:198:ALA:CA	2.40	0.51
1:O:253:GLU:O	1:O:257:ASN:ND2	2.43	0.51
1:O:298:MET:O	1:O:306:LYS:N	2.44	0.51
2:P:327:ALA:O	2:P:331:ALA:N	2.32	0.51
1:G:344:PRO:O	1:G:347:ASP:N	2.31	0.51
2:H:68:VAL:HG13	2:H:73:ILE:HG13	1.92	0.51
1:E:134:GLU:H	1:E:134:GLU:CD	2.17	0.51
1:E:241:ASP:HB2	1:E:307:VAL:O	2.10	0.51
2:F:38:VAL:HG23	2:F:39:LYS:H	1.76	0.51
2:F:335:GLN:OE1	2:F:336:ALA:N	2.44	0.51
1:I:121:PRO:O	1:I:122(A):LYS:N	2.41	0.51
2:J:239:VAL:HG22	2:J:314:ASP:HA	1.92	0.51
1:K:362:GLU:OXT	3:K:402:NAD:O2D	2.28	0.51
2:L:132:VAL:O	2:L:136:ASN:N	2.42	0.51
1:A:165:LEU:HD23	1:A:248:LYS:HZ3	1.76	0.51
1:C:203:ILE:HG23	1:C:230:LEU:HB3	1.93	0.51
2:D:33:ASN:HA	2:D:76:VAL:HG23	1.92	0.51
1:Q:94:GLU:OE2	1:Q:97:GLY:N	2.44	0.51
1:Q:305:VAL:HG12	1:Q:307:VAL:HG22	1.93	0.51
1:Q:324:LEU:HD12	1:Q:327:LEU:HB3	1.92	0.51
1:O:12:GLY:O	1:O:16:LEU:HB2	2.11	0.51
1:O:90:ASP:HB2	1:O:91:ILE:HD12	1.93	0.51
1:O:193:LEU:O	1:O:197:ARG:HG2	2.11	0.51
2:P:161:VAL:HA	2:P:164:LEU:HD12	1.91	0.51
1:G:206:THR:O	1:G:229:ALA:N	2.41	0.51
1:E:101:ASP:OD1	1:E:104:GLY:N	2.42	0.51
1:E:303:ASP:N	1:E:303:ASP:OD1	2.41	0.51
2:F:81:PRO:O	2:F:110:HIS:ND1	2.34	0.51
2:F:105:ASP:O	2:F:109:LYS:N	2.35	0.51
2:F:211:GLY:HA2	2:F:214:LYS:HD2	1.92	0.51
1:I:172:MET:HA	1:I:242:LEU:HA	1.93	0.51
1:I:194:ARG:HH22	1:K:310:TRP:HZ2	1.59	0.51
2:J:54:PHE:CZ	2:J:56:ALA:HB3	2.46	0.51
2:J:142:HIS:HE1	2:J:330:VAL:O	1.94	0.51
2:J:154:THR:HG21	2:J:215:ALA:HB3	1.93	0.51
2:J:195:LEU:HD13	2:L:279:PRO:HG3	1.93	0.51
1:K:108:HIS:ND1	1:K:108:HIS:N	2.59	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:31:VAL:HG12	2:L:32:ILE:H	1.76	0.51
1:A:94:GLU:HB3	1:A:119:THR:H	1.76	0.51
1:A:103:PRO:HA	1:G:110:GLN:HB3	1.93	0.51
1:C:114:LYS:HB2	1:C:332:TRP:CH2	2.46	0.51
1:C:209:GLY:O	1:C:213:ALA:N	2.44	0.51
2:D:240:SER:OG	2:D:241:VAL:N	2.43	0.51
1:Q:173:THR:O	1:Q:240:VAL:HA	2.11	0.51
1:Q:190:HIS:HB3	1:Q:196:ALA:HB2	1.93	0.51
2:R:187:LEU:HD22	1:O:184:LEU:HA	1.92	0.51
1:O:18:CYS:HB3	1:O:20:ARG:HE	1.75	0.51
1:O:139:HIS:CE1	1:O:332:TRP:HD1	2.29	0.51
1:O:182:GLN:HE22	1:O:231:ARG:CZ	2.23	0.51
2:P:80:ASN:HB3	2:P:83:ASN:HB3	1.92	0.51
2:P:142:HIS:CD2	2:P:336:ALA:H	2.23	0.51
2:H:93:LEU:HA	2:H:117:LYS:O	2.10	0.51
1:E:253:GLU:O	1:E:257:ASN:ND2	2.44	0.51
2:F:39:LYS:HA	2:F:60:THR:CG2	2.42	0.51
2:F:76:VAL:HG11	2:F:85:PRO:HD2	1.92	0.51
2:F:196:ARG:HH11	2:F:206:VAL:HA	1.76	0.51
2:F:283:ILE:HA	2:F:286:ARG:HE	1.76	0.51
2:F:292:SER:HB2	2:F:313:TYR:HA	1.92	0.51
1:I:12:GLY:HA2	1:I:15:PHE:HB3	1.93	0.50
1:I:269:GLY:O	1:I:289:SER:OG	2.22	0.50
1:A:7:GLY:N	1:A:31:ASN:HB3	2.26	0.50
1:A:281:VAL:H	1:C:202:ASN:ND2	2.09	0.50
2:B:38:VAL:HG23	2:B:39:LYS:H	1.76	0.50
2:B:196:ARG:CZ	2:D:280:LEU:H	2.24	0.50
1:C:293:ASP:O	1:C:297:THR:OG1	2.27	0.50
2:D:5:ILE:HB	2:D:32:ILE:HG12	1.93	0.50
1:Q:2:LYS:HB2	1:Q:90:ASP:H	1.76	0.50
1:Q:85:ALA:N	1:Q:112:GLY:HA3	2.27	0.50
1:Q:314:GLU:HG2	3:Q:402:NAD:H72N	1.76	0.50
1:O:10:ARG:CZ	1:O:14:ASN:HD21	2.23	0.50
1:O:165:LEU:HD22	1:O:255:VAL:HG21	1.93	0.50
2:H:38:VAL:HG12	2:H:75:VAL:HG13	1.91	0.50
2:H:203:LEU:C	2:H:235:PRO:HG3	2.37	0.50
1:I:31:ASN:OD1	1:I:76:ASN:N	2.44	0.50
1:K:161:LEU:HD13	1:K:242:LEU:HD23	1.93	0.50
2:L:39:LYS:HE2	2:L:40:GLN:HG3	1.93	0.50
1:A:157:PHE:HB2	1:A:259:PHE:CE1	2.46	0.50
2:B:39:LYS:N	2:B:39:LYS:HZ2	2.09	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:295:ASP:N	2:B:310:ILE:O	2.28	0.50
1:C:10:ARG:HA	1:C:13:ARG:HD3	1.92	0.50
1:C:240:VAL:HG22	1:C:309:ALA:HB3	1.92	0.50
2:D:80:ASN:ND2	2:D:83:ASN:OD1	2.44	0.50
2:D:152:CYS:SG	2:D:153:THR:N	2.84	0.50
1:Q:252:ALA:O	1:Q:256:ASN:N	2.36	0.50
1:Q:292:ILE:HG23	1:Q:308:VAL:O	2.11	0.50
1:Q:319:GLN:HB2	1:Q:320:ARG:NH1	2.26	0.50
1:E:161:LEU:O	1:E:165:LEU:N	2.34	0.50
2:F:43:HIS:HB3	2:F:47:TYR:HD2	1.76	0.50
2:F:76:VAL:HG21	2:F:84:LEU:HB3	1.93	0.50
2:F:96:GLU:HB3	2:F:120:ILE:HD12	1.92	0.50
2:F:205:ILE:HD11	2:F:232:LEU:HB3	1.93	0.50
2:J:131:TYR:HD2	2:J:147:ILE:HD12	1.77	0.50
2:J:295:ASP:N	2:J:310:ILE:O	2.27	0.50
2:L:0:LYS:HE3	2:L:1:LEU:HD22	1.93	0.50
1:C:57:VAL:HA	1:C:66:ILE:HA	1.93	0.50
1:C:195:ARG:NE	1:O:361:TYR:HA	2.27	0.50
2:D:127:ASP:OD1	2:D:127:ASP:N	2.42	0.50
2:R:91:ILE:O	2:R:116:LYS:N	2.44	0.50
2:R:153:THR:OG1	2:R:154:THR:N	2.44	0.50
2:R:240:SER:OG	2:R:241:VAL:N	2.41	0.50
1:O:4:ALA:HB3	1:O:92:VAL:HG22	1.94	0.50
1:O:83:PRO:HA	1:O:111:ALA:O	2.11	0.50
1:O:94:GLU:O	1:O:119:THR:OG1	2.24	0.50
1:O:139:HIS:CE1	1:O:332:TRP:HA	2.46	0.50
1:O:281:VAL:HA	1:O:284:ARG:NE	2.26	0.50
1:G:0:LYS:HG2	1:G:24:PRO:C	2.36	0.50
1:G:16:LEU:O	1:G:18(B):HIS:N	2.39	0.50
2:H:294:ILE:HA	2:H:311:ALA:HB2	1.93	0.50
1:E:156:PRO:O	1:E:160:VAL:N	2.34	0.50
2:F:38:VAL:H	2:F:39:LYS:HZ3	1.59	0.50
2:F:245:VAL:HG13	2:F:307:VAL:C	2.36	0.50
2:J:18:CYS:SG	2:J:320:SER:OG	2.68	0.50
2:J:30:VAL:HA	2:J:73:ILE:HG12	1.93	0.50
1:A:45:LYS:HD3	1:A:57:VAL:HG23	1.93	0.50
2:B:11:ILE:HG13	3:B:401:NAD:H71N	1.75	0.50
2:B:11:ILE:HG12	3:B:401:NAD:PN	2.52	0.50
2:B:293:THR:O	2:B:312:TRP:N	2.43	0.50
2:D:1:LEU:O	2:D:3:VAL:HG23	2.12	0.50
2:D:81:PRO:HB3	2:D:110:HIS:CE1	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:87:GLY:N	2:D:114:GLY:HA3	2.26	0.50
2:D:180:SER:OG	2:D:181:TYR:O	2.30	0.50
2:D:280:LEU:HB3	2:D:285:PHE:HZ	1.76	0.50
1:Q:178:TYR:H	1:Q:234:THR:N	2.08	0.50
1:Q:179:THR:H	1:Q:182:GLN:HE22	1.59	0.50
2:R:261:PHE:O	2:R:264:SER:OG	2.29	0.50
2:P:9:GLY:HA3	3:P:401:NAD:O3	2.11	0.50
2:P:192:HIS:CE1	2:P:197:ARG:HD2	2.47	0.50
2:H:218:LEU:H	2:H:218:LEU:HD12	1.77	0.50
2:F:119:LEU:HA	2:F:147:ILE:O	2.12	0.50
2:J:95:ILE:HG23	2:J:120:ILE:HA	1.93	0.50
1:K:128:TYR:HA	1:K:133:ASN:CG	2.36	0.50
1:K:203:ILE:O	1:K:205:PRO:HD3	2.11	0.50
1:K:210:ALA:HA	1:K:213:ALA:HB3	1.93	0.50
3:K:401:NAD:O2D	1:E:361:TYR:O	2.25	0.50
2:L:192:HIS:CE1	2:L:197:ARG:HD2	2.47	0.50
1:A:31:ASN:ND2	1:A:76:ASN:H	2.09	0.50
1:A:79:PRO:HG2	1:A:108:HIS:CD2	2.46	0.50
1:A:228:ILE:H	1:C:306:LYS:NZ	2.08	0.50
1:A:343:ASP:O	2:F:39:LYS:NZ	2.44	0.50
2:B:179:HIS:ND1	2:B:180:SER:O	2.41	0.50
1:C:10:ARG:NH2	1:C:47:ASP:OD2	2.45	0.50
1:C:240:VAL:O	1:C:308:VAL:HA	2.11	0.50
2:D:95:ILE:HG23	2:D:120:ILE:HA	1.93	0.50
2:D:174:THR:C	2:D:244:LEU:HD12	2.36	0.50
1:Q:221:LEU:HD12	1:Q:224:LYS:HZ2	1.76	0.50
1:O:5:ILE:HA	1:O:93:ILE:H	1.77	0.50
1:O:86:GLU:HG2	1:O:87:LEU:N	2.27	0.50
1:O:121:PRO:HG3	1:O:148:SER:H	1.75	0.50
1:O:134:GLU:HB2	1:O:327:LEU:HD13	1.93	0.50
2:P:283:ILE:HA	2:P:286:ARG:HE	1.77	0.50
1:G:61:ASN:ND2	1:G:62:GLU:OE2	2.45	0.50
1:G:238:SER:HB2	1:G:311:TYR:CE2	2.46	0.50
2:H:261:PHE:O	2:H:264:SER:OG	2.29	0.50
1:E:349:CYS:O	1:E:352:ASN:N	2.44	0.50
2:F:179:HIS:ND1	2:F:180:SER:O	2.45	0.50
2:F:269:LEU:HB3	2:F:273:LEU:HB2	1.93	0.50
1:I:194:ARG:HE	1:K:277:PRO:C	2.20	0.50
1:K:161:LEU:HA	1:K:165:LEU:HD13	1.94	0.50
1:K:203:ILE:HA	1:K:231:ARG:O	2.12	0.50
1:K:253:GLU:O	1:K:260:ARG:NH2	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:28:ASP:OD2	2:L:71:LYS:HE2	2.07	0.50
2:L:175:MET:O	2:L:176:THR:OG1	2.30	0.50
2:L:178:THR:OG1	2:L:241:VAL:O	2.28	0.50
1:A:84:TRP:HA	1:A:87:LEU:HB2	1.93	0.50
1:A:105:ALA:HB3	1:A:143:ILE:HD13	1.94	0.50
1:A:154:LEU:HD23	1:A:214:VAL:HG21	1.94	0.50
1:A:186:ASP:HB2	2:D:10:ARG:NH1	2.26	0.50
1:A:283:PHE:HE2	1:A:310:TRP:CD2	2.30	0.50
2:B:277:ASP:OD1	2:B:296:SER:N	2.43	0.50
2:B:298:LEU:HB2	2:B:310:ILE:HG13	1.94	0.50
2:D:299:THR:HG22	2:D:309:VAL:HA	1.93	0.50
1:Q:11:ILE:HA	1:Q:14:ASN:CB	2.40	0.50
1:Q:108:HIS:HA	1:Q:111:ALA:HB3	1.92	0.50
2:P:152:CYS:SG	2:P:153:THR:N	2.85	0.50
2:P:177:THR:O	2:P:232:LEU:HB2	2.11	0.50
1:G:169:LYS:HZ1	1:E:303:ASP:CG	2.19	0.50
1:E:18:CYS:HB3	1:E:20:ARG:HE	1.76	0.50
1:E:31:ASN:OD1	1:E:76:ASN:N	2.45	0.50
1:E:56:ASP:OD2	1:E:58:LYS:HD2	2.11	0.50
1:E:57:VAL:O	1:E:58:LYS:NZ	2.43	0.50
1:E:79:PRO:HD3	1:E:99:PHE:CZ	2.46	0.50
1:E:126:PRO:HB2	1:E:145:SER:H	1.77	0.50
1:I:254:ASP:HA	1:I:257:ASN:HD22	1.76	0.50
2:J:195:LEU:HD22	2:L:279:PRO:HG2	1.94	0.50
2:J:332:ASN:O	2:J:333:LYS:HG2	2.12	0.50
1:K:99:PHE:HB3	1:K:104:GLY:HA3	1.94	0.50
2:L:18:CYS:CB	2:L:324:VAL:HG21	2.42	0.50
2:B:46:LYS:NZ	2:B:54:PHE:O	2.30	0.50
2:B:186:ARG:HE	2:B:190:ALA:HB3	1.77	0.50
1:C:90:ASP:HA	1:C:114:LYS:NZ	2.27	0.50
2:D:119:LEU:HA	2:D:147:ILE:O	2.12	0.50
2:D:137:GLU:OE1	2:D:137:GLU:N	2.44	0.50
2:D:323:VAL:O	2:D:327:ALA:N	2.40	0.50
2:R:16:LEU:HD22	2:R:45:LEU:HD11	1.93	0.50
2:R:318:GLY:O	2:R:321:GLN:HB2	2.11	0.50
1:O:7:GLY:HA3	3:O:401:NAD:N3A	2.27	0.50
2:P:10:ARG:H	2:P:10:ARG:NH1	2.08	0.50
2:P:284:ASP:N	2:P:284:ASP:OD1	2.42	0.50
1:G:202:ASN:CG	1:E:279:VAL:HB	2.37	0.50
1:G:292:ILE:HG23	1:G:308:VAL:O	2.12	0.50
2:H:50:ILE:HD13	2:H:238:ASN:CG	2.36	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:269:LEU:HB3	2:H:273:LEU:HB2	1.94	0.50
2:F:98:THR:HB	3:F:401:NAD:C8A	2.41	0.50
1:I:46:TYR:HA	1:I:52:THR:HA	1.93	0.50
2:J:157:LEU:HA	2:J:160:PHE:CZ	2.46	0.50
2:J:268:GLU:HG3	2:J:269:LEU:HD23	1.94	0.50
1:K:11:ILE:HG23	1:K:318:SER:HB3	1.94	0.50
1:K:84:TRP:HE1	1:K:108:HIS:C	2.19	0.50
1:K:115:LYS:HA	1:K:142:ASN:O	2.11	0.50
2:L:6:ASN:OD1	2:L:7:GLY:N	2.44	0.50
2:L:39:LYS:NZ	2:L:40:GLN:H	1.97	0.50
2:L:119:LEU:HA	2:L:147:ILE:O	2.11	0.50
1:C:37:VAL:HG13	1:C:41:THR:OG1	2.12	0.50
1:C:178:TYR:N	1:C:232:VAL:O	2.45	0.50
1:C:280:SER:O	1:C:283:PHE:N	2.45	0.50
1:C:319:GLN:OE1	1:C:320:ARG:NH2	2.44	0.50
2:D:104:ARG:HD3	2:D:146:ILE:HG21	1.94	0.50
2:D:273:LEU:HD13	2:D:291:SER:HB2	1.92	0.50
1:Q:1:LEU:HB3	1:Q:91:ILE:HD11	1.94	0.50
1:Q:180:GLY:HA2	2:P:187:LEU:HD11	1.93	0.50
1:Q:293:ASP:OD1	1:Q:296:LEU:N	2.31	0.50
1:O:10:ARG:HG2	1:O:13:ARG:HH21	1.76	0.50
2:P:281:VAL:N	2:P:284:ASP:OD2	2.34	0.50
1:G:10:ARG:C	1:G:14:ASN:HD22	2.19	0.50
1:G:157:PHE:O	1:G:161:LEU:HG	2.12	0.50
1:G:287:ASP:HB3	1:G:319:GLN:HG3	1.93	0.50
1:E:8:PHE:C	1:E:13:ARG:HH12	2.19	0.50
2:F:107:ALA:HB1	2:F:118:VAL:HG21	1.93	0.50
2:F:209:SER:OG	2:F:214:LYS:NZ	2.45	0.50
2:F:238:ASN:CG	2:F:239:VAL:H	2.20	0.50
1:I:84:TRP:O	1:I:89:ILE:N	2.32	0.50
1:I:91:ILE:HG23	1:I:115:LYS:C	2.37	0.50
1:I:126:PRO:HG2	1:I:128:TYR:CE2	2.47	0.50
2:J:38:VAL:HG23	2:J:39:LYS:H	1.76	0.50
2:J:118:VAL:HB	2:J:146:ILE:HG12	1.92	0.50
1:K:5:ILE:HG13	1:K:27:VAL:HG11	1.94	0.50
1:K:83:PRO:HD2	1:K:86:GLU:OE1	2.12	0.50
1:K:263:ALA:HA	1:K:267:LEU:HB2	1.94	0.50
2:L:34:ASP:N	2:L:76:VAL:O	2.40	0.50
2:L:176:THR:HG23	2:L:230:ILE:HG12	1.93	0.50
2:L:181:TYR:HD2	2:L:235:PRO:HA	1.76	0.50
1:A:3:VAL:O	1:A:28:VAL:N	2.43	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:28:VAL:O	1:A:72:LYS:N	2.34	0.50
1:A:43:LEU:HD23	2:D:199:ARG:HD3	1.94	0.50
1:A:47:ASP:CG	1:A:49:ILE:H	2.19	0.50
1:A:273:VAL:HG13	1:A:292:ILE:HD12	1.94	0.50
2:B:27:LEU:HB3	2:B:29:VAL:HG13	1.94	0.50
2:B:161:VAL:HA	2:B:164:LEU:HB2	1.94	0.50
2:B:178:THR:N	2:B:241:VAL:O	2.29	0.50
2:D:273:LEU:HD13	2:D:292:SER:N	2.27	0.50
1:Q:2:LYS:O	1:Q:90:ASP:N	2.44	0.50
1:Q:11:ILE:HG13	1:Q:314:GLU:CD	2.37	0.50
1:Q:31:ASN:ND2	1:Q:76:ASN:O	2.45	0.50
1:O:84:TRP:N	1:O:111:ALA:O	2.45	0.50
1:O:316:GLY:O	1:O:320:ARG:NH1	2.45	0.50
2:P:104:ARG:H	2:P:127:ASP:CG	2.19	0.50
2:P:208:THR:HG23	2:P:231:ALA:HB3	1.93	0.50
1:G:60(A):ASP:OD2	1:G:63:THR:OG1	2.24	0.50
2:H:44:LEU:HD23	1:E:197:ARG:NH2	2.27	0.50
2:H:98:THR:HG21	2:H:101:PHE:CE2	2.46	0.50
2:H:119:LEU:HA	2:H:147:ILE:O	2.12	0.50
2:H:318:GLY:HA2	2:H:321:GLN:HB2	1.93	0.50
1:E:91:ILE:HG13	1:E:332:TRP:HZ3	1.77	0.50
1:E:115:LYS:HG3	1:E:332:TRP:CE3	2.47	0.50
2:F:140:TYR:CE2	2:F:333:LYS:HD3	2.46	0.50
1:I:20:ARG:NH1	1:I:21:LYS:HZ1	2.10	0.49
1:I:108:HIS:HA	1:I:111:ALA:HB3	1.93	0.49
1:I:169:LYS:HZ1	1:K:301:GLY:HA3	1.76	0.49
2:J:202:CYS:SG	1:K:178:TYR:OH	2.67	0.49
2:L:1:LEU:O	2:L:3:VAL:HG23	2.12	0.49
1:A:147:ALA:HB3	1:A:152:ASN:HD21	1.76	0.49
1:A:304:MET:SD	1:C:170:GLY:HA2	2.52	0.49
1:A:361:TYR:H	1:G:195:ARG:HE	1.60	0.49
2:B:228:ASN:HB3	2:D:302:MET:HE3	1.93	0.49
1:C:83:PRO:HD2	1:C:86:GLU:OE1	2.12	0.49
1:C:128:TYR:HA	1:C:133:ASN:CG	2.36	0.49
1:C:332:TRP:O	1:C:334:GLY:N	2.45	0.49
2:D:107:ALA:HB1	2:D:118:VAL:HG11	1.93	0.49
1:Q:76:ASN:OD1	1:Q:78:ASP:N	2.44	0.49
1:Q:241:ASP:CG	1:Q:306:LYS:HG3	2.37	0.49
2:R:98:THR:HB	3:R:401:NAD:C5A	2.42	0.49
2:R:131:TYR:N	2:R:148:SER:O	2.35	0.49
1:O:101:ASP:N	1:O:122(A):LYS:HZ3	2.10	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:259:ALA:HA	2:P:262:ARG:HD2	1.93	0.49
1:G:94:GLU:OE2	1:G:97:GLY:N	2.45	0.49
1:G:169:LYS:HB2	1:E:300:MET:HE2	1.95	0.49
1:G:312:ASP:CG	1:G:313:ASN:N	2.70	0.49
2:H:326:LEU:HA	2:H:329:ILE:HD12	1.93	0.49
1:E:79:PRO:HG3	1:E:108:HIS:NE2	2.27	0.49
2:F:175:MET:HA	2:F:244:LEU:HB2	1.94	0.49
2:F:224:LYS:O	2:F:226:LYS:NZ	2.45	0.49
1:I:194:ARG:HH11	1:I:204:VAL:HG22	1.76	0.49
1:I:270:VAL:HA	1:I:289:SER:HG	1.76	0.49
2:L:81:PRO:HB3	2:L:110:HIS:CE1	2.47	0.49
2:L:211:GLY:O	2:L:215:ALA:N	2.23	0.49
2:B:46:LYS:HB2	2:B:58:VAL:CG2	2.40	0.49
2:B:183:GLY:N	1:C:185:LEU:HD11	2.28	0.49
2:B:319:TYR:O	2:B:323:VAL:HG23	2.12	0.49
1:C:92:VAL:HG12	1:C:116:VAL:HG13	1.94	0.49
1:C:175:THR:HG23	1:C:239:VAL:H	1.75	0.49
1:C:210:ALA:HA	1:C:213:ALA:HB3	1.94	0.49
1:C:361:TYR:C	1:O:195:ARG:HH12	2.15	0.49
2:D:168:PHE:HA	2:D:250:LYS:HD3	1.94	0.49
1:Q:43:LEU:HD23	2:P:199:ARG:NH1	2.28	0.49
2:R:223:LEU:HD23	2:R:227:LEU:HG	1.93	0.49
2:P:2:LYS:HA	2:P:28:ASP:O	2.12	0.49
2:P:105:ASP:OD2	2:P:109:LYS:NZ	2.39	0.49
1:G:6:ASN:HD22	1:G:94:GLU:HA	1.77	0.49
1:G:43:LEU:HD23	2:F:199:ARG:NH1	2.27	0.49
1:G:58:LYS:N	1:G:65:SER:O	2.45	0.49
1:G:319:GLN:HB2	1:G:320:ARG:HH12	1.76	0.49
2:H:137:GLU:HB2	2:H:326:LEU:HD13	1.94	0.49
2:H:275:VAL:HA	2:H:294:ILE:N	2.26	0.49
1:E:82:LEU:HD12	1:E:84:TRP:HH2	1.77	0.49
2:F:48:ASP:H	2:F:53:THR:HA	1.77	0.49
1:I:7:GLY:N	1:I:31:ASN:HB3	2.27	0.49
1:I:8:PHE:CZ	1:I:13:ARG:HA	2.48	0.49
1:I:9:GLY:O	1:I:13:ARG:N	2.37	0.49
1:I:169:LYS:HE2	1:K:304:MET:SD	2.52	0.49
2:J:8:PHE:CD1	2:J:32:ILE:HG21	2.47	0.49
2:J:33:ASN:HD21	2:J:84:LEU:HD13	1.77	0.49
2:J:131:TYR:CE2	2:J:140:TYR:HA	2.47	0.49
2:L:180:SER:HA	2:L:234:VAL:HG22	1.93	0.49
1:A:151:THR:HA	1:A:154:LEU:HB3	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:228:ILE:HG12	1:A:229:ALA:N	2.26	0.49
1:A:277:PRO:HB2	1:C:193:LEU:HD11	1.93	0.49
2:B:142:HIS:HE1	2:B:330:VAL:O	1.94	0.49
1:C:182:GLN:HE22	1:C:231:ARG:NE	2.10	0.49
1:C:183:ARG:HB3	1:C:185:LEU:O	2.12	0.49
1:C:236:ASN:OD1	1:C:314:GLU:N	2.45	0.49
1:Q:21:LYS:H	1:Q:21:LYS:HE2	1.77	0.49
2:R:8:PHE:HB2	2:R:32:ILE:HD12	1.93	0.49
2:R:93:LEU:HA	2:R:117:LYS:O	2.13	0.49
2:R:152:CYS:HB3	2:R:319:TYR:CD2	2.48	0.49
1:O:171:THR:OG1	1:O:172:MET:O	2.30	0.49
1:O:255:VAL:O	1:O:259:PHE:N	2.44	0.49
2:P:175:MET:HA	2:P:244:LEU:HB2	1.94	0.49
2:P:294:ILE:HG23	2:P:311:ALA:HB2	1.92	0.49
1:G:159:LYS:O	1:G:163:GLU:HB3	2.13	0.49
2:H:44:LEU:HA	1:E:197:ARG:NH1	2.27	0.49
2:H:148:SER:OG	2:H:149:ASN:O	2.31	0.49
2:F:8:PHE:CZ	2:F:13:ARG:HA	2.47	0.49
2:F:60:THR:HA	2:F:66:ILE:HA	1.94	0.49
2:F:180:SER:HG	2:F:181:TYR:H	1.60	0.49
1:I:109:ILE:HD11	1:I:116:VAL:HG23	1.93	0.49
1:I:127:THR:OG1	1:I:145:SER:O	2.24	0.49
2:J:152:CYS:HA	2:J:155:ASN:HD22	1.78	0.49
2:J:280:LEU:O	2:L:196:ARG:NH1	2.45	0.49
1:K:190:HIS:NE2	1:K:192:ASP:HB3	2.28	0.49
1:K:238:SER:N	1:K:313:ASN:OD1	2.45	0.49
1:K:256:ASN:CB	1:K:260:ARG:HH21	2.25	0.49
2:L:219:VAL:HG23	2:L:220:LEU:HG	1.94	0.49
2:L:245:VAL:HA	2:L:307:VAL:O	2.11	0.49
1:A:184:LEU:HG	1:A:185:LEU:HG	1.94	0.49
1:A:279:VAL:H	1:A:282:ASP:CG	2.21	0.49
2:B:104:ARG:HD3	2:B:146:ILE:HG21	1.93	0.49
2:B:187:LEU:HG	1:C:180:GLY:HA2	1.94	0.49
1:C:291:THR:O	1:C:310:TRP:N	2.45	0.49
2:D:316:GLU:CD	2:D:316:GLU:N	2.70	0.49
1:Q:89:ILE:HG21	1:Q:92:VAL:HG22	1.93	0.49
2:R:97:GLY:O	3:R:401:NAD:H52A	2.13	0.49
2:R:148:SER:OG	2:R:149:ASN:O	2.31	0.49
2:R:192:HIS:CE1	2:R:194:ASP:H	2.30	0.49
2:R:210:THR:O	2:R:214:LYS:NZ	2.35	0.49
1:O:94:GLU:N	1:O:117:ILE:O	2.37	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:13:ARG:NH2	2:P:34:ASP:OD2	2.43	0.49
2:P:104:ARG:NH1	2:P:146:ILE:HB	2.27	0.49
1:G:21:LYS:H	1:G:21:LYS:HE2	1.78	0.49
1:G:237:VAL:HG11	1:G:310:TRP:HE3	1.77	0.49
2:H:0:LYS:H2	2:H:28:ASP:HB2	1.77	0.49
2:H:15:PHE:CG	2:H:324:VAL:HG22	2.46	0.49
1:E:259:PHE:HA	1:E:262:ALA:HB3	1.93	0.49
2:F:2:LYS:NZ	2:F:2:LYS:H	2.11	0.49
2:F:2:LYS:HA	2:F:28:ASP:O	2.12	0.49
2:F:38:VAL:CG1	2:F:64:SER:O	2.60	0.49
2:F:222:ASN:HD22	2:F:223:LEU:HD12	1.77	0.49
1:I:0:LYS:HD3	1:I:23:SER:O	2.12	0.49
1:I:180:GLY:N	2:L:188:LEU:HD22	2.28	0.49
1:I:314:GLU:O	1:I:317:TYR:HB3	2.13	0.49
2:J:189:ASP:HB2	1:K:13:ARG:HH12	1.78	0.49
2:J:203:LEU:HD23	2:L:236:THR:HA	1.95	0.49
2:J:298:LEU:HB2	2:J:310:ILE:HG13	1.94	0.49
1:K:176:HIS:C	1:K:232:VAL:HG22	2.37	0.49
1:K:276:ILE:H	1:K:276:ILE:HD12	1.77	0.49
2:L:30:VAL:HA	2:L:73:ILE:HG23	1.93	0.49
2:L:289:ASP:OD1	2:L:317:TRP:NE1	2.44	0.49
2:B:2:LYS:HE3	2:B:89:MET:HB3	1.95	0.49
1:C:236:ASN:HD21	1:C:312:ASP:CG	2.19	0.49
2:D:8:PHE:O	2:D:13:ARG:NH1	2.45	0.49
2:D:104:ARG:NH1	2:D:129:PRO:HD3	2.28	0.49
2:D:138:GLU:OE1	2:D:138:GLU:N	2.31	0.49
1:Q:37:VAL:O	1:Q:41:THR:N	2.26	0.49
1:Q:100:VAL:HB	1:Q:122(A):LYS:H	1.77	0.49
1:Q:316:GLY:HA2	1:Q:319:GLN:HG2	1.94	0.49
1:Q:327:LEU:HD11	1:Q:331:LYS:HE3	1.93	0.49
1:O:193:LEU:HD12	1:O:194:ARG:H	1.77	0.49
2:P:215:ALA:HA	2:P:218:LEU:HB2	1.94	0.49
2:H:192:HIS:CE1	2:H:194:ASP:H	2.30	0.49
1:E:239:VAL:HG23	1:E:309:ALA:O	2.12	0.49
2:F:45:LEU:O	2:F:54:PHE:HB2	2.12	0.49
2:F:253:PHE:CE2	2:F:255:GLU:HB3	2.47	0.49
2:F:305:ASP:OD1	2:F:306:MET:N	2.45	0.49
1:I:25:LEU:H	1:I:25:LEU:HD22	1.78	0.49
1:I:64:PHE:O	1:I:70:PRO:HA	2.12	0.49
1:I:80:LEU:HD23	1:I:110:GLN:HB3	1.95	0.49
2:J:38:VAL:HG22	1:E:343:ASP:O	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:132:VAL:H	2:J:136:ASN:HB2	1.78	0.49
2:J:191:SER:O	2:J:193:ARG:NH1	2.45	0.49
2:J:222:ASN:O	2:J:226:LYS:NZ	2.33	0.49
2:J:281:VAL:HG23	2:J:283:ILE:HG22	1.94	0.49
2:J:315:ASN:N	2:J:316:GLU:OE2	2.39	0.49
2:L:105:ASP:O	2:L:109:LYS:N	2.26	0.49
1:A:118:ILE:N	1:A:144:ILE:O	2.36	0.49
1:A:139:HIS:NE2	1:A:332:TRP:HA	2.28	0.49
1:A:168:VAL:HB	1:A:245:ASN:CG	2.37	0.49
2:B:181:TYR:N	2:B:236:THR:O	2.41	0.49
1:C:129:VAL:H	1:C:133:ASN:ND2	2.10	0.49
1:C:159:LYS:HG2	1:C:163:GLU:CD	2.38	0.49
1:C:161:LEU:HD13	1:C:242:LEU:HD23	1.93	0.49
2:D:289:ASP:OD1	2:D:317:TRP:NE1	2.42	0.49
1:Q:94:GLU:CD	1:Q:97:GLY:H	2.20	0.49
1:Q:101:ASP:OD1	1:Q:104:GLY:N	2.37	0.49
2:R:283:ILE:HG23	2:R:284:ASP:OD1	2.12	0.49
3:R:401:NAD:O1A	3:R:401:NAD:O3D	2.26	0.49
1:O:90:ASP:HA	1:O:114:LYS:CG	2.41	0.49
1:O:192:ASP:HB3	1:O:195:ARG:HB2	1.95	0.49
3:O:401:NAD:H52N	3:O:401:NAD:PA	2.52	0.49
2:P:0:LYS:H3	2:P:26:PRO:C	2.20	0.49
2:P:164:LEU:HB3	2:P:170:ILE:HD11	1.94	0.49
2:P:274:SER:O	2:P:293:THR:HA	2.13	0.49
1:G:183:ARG:HH21	1:G:188:SER:C	2.19	0.49
1:G:214:VAL:HB	1:G:225:LEU:HD22	1.95	0.49
2:H:4:ALA:O	2:H:94:VAL:HA	2.11	0.49
2:H:131:TYR:HA	2:H:136:ASN:HB2	1.94	0.49
2:H:306:MET:HB2	2:F:172:LYS:NZ	2.28	0.49
2:F:10:ARG:N	3:F:401:NAD:O1N	2.40	0.49
2:F:160:PHE:HB2	2:F:261:PHE:CE2	2.36	0.49
2:J:109:LYS:HA	2:J:112:GLN:HB2	1.94	0.49
2:J:196:ARG:CZ	2:L:279:PRO:HA	2.42	0.49
2:L:31:VAL:HG12	2:L:75:VAL:CA	2.42	0.49
1:A:91:ILE:HG12	1:A:115:LYS:HB2	1.94	0.49
1:A:341:SER:O	2:F:77:SER:HB2	2.12	0.49
2:B:39:LYS:HG2	2:B:40:GLN:N	2.27	0.49
2:B:205:ILE:HG13	2:B:234:VAL:HG12	1.95	0.49
1:C:29:VAL:HA	1:C:72:LYS:O	2.13	0.49
1:C:47:ASP:H	1:C:52:THR:HA	1.76	0.49
1:C:87:LEU:HB2	1:C:89:ILE:HG12	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:253:PHE:CZ	2:D:255:GLU:HB3	2.47	0.49
1:Q:14:ASN:HB3	1:Q:318:SER:HB3	1.94	0.49
1:Q:169:LYS:HB2	1:O:300:MET:HE2	1.93	0.49
1:Q:190:HIS:CG	1:Q:192:ASP:H	2.31	0.49
1:Q:252:ALA:O	1:Q:255:VAL:N	2.45	0.49
2:R:218:LEU:HD12	2:R:218:LEU:H	1.78	0.49
1:O:214:VAL:HG23	1:O:225:LEU:HD13	1.93	0.49
1:O:261:LYS:HZ3	1:O:262:ALA:HB2	1.77	0.49
2:P:17:ARG:CZ	2:P:54:PHE:HA	2.42	0.49
2:P:46:LYS:CD	2:P:58:VAL:HG22	2.42	0.49
2:P:85:PRO:HB2	2:P:88:ASP:OD1	2.12	0.49
2:P:96:GLU:CD	2:P:99:GLY:H	2.20	0.49
2:P:196:ARG:HH11	2:P:206:VAL:HA	1.77	0.49
1:G:6:ASN:ND2	1:G:94:GLU:OE2	2.45	0.49
1:G:149:CYS:HA	1:G:152:ASN:ND2	2.27	0.49
2:H:96:GLU:HG2	2:H:98:THR:HG23	1.94	0.49
2:H:223:LEU:HD23	2:H:227:LEU:HG	1.95	0.49
1:I:260:ARG:HG3	1:I:273:VAL:HB	1.94	0.49
2:J:177:THR:HA	2:J:242:VAL:HA	1.94	0.49
1:K:17:ARG:NH1	1:K:45:LYS:O	2.46	0.49
1:K:259:PHE:HB3	1:K:271:LEU:HD21	1.95	0.49
2:L:2:LYS:NZ	2:L:89:MET:O	2.35	0.49
2:L:104:ARG:NH1	2:L:129:PRO:HD3	2.28	0.49
1:A:47:ASP:H	1:A:52:THR:HA	1.78	0.49
1:A:184:LEU:HD23	2:D:183:GLY:HA2	1.94	0.49
1:A:279:VAL:HG12	1:A:310:TRP:CZ2	2.48	0.49
1:C:32:ASP:OD1	1:C:36:GLY:N	2.46	0.49
1:C:239:VAL:HG23	1:C:309:ALA:C	2.38	0.49
2:D:65:ALA:HA	2:D:74:LYS:HA	1.94	0.49
1:Q:17:ARG:CZ	1:Q:53:PHE:HA	2.43	0.49
1:Q:175:THR:HG1	1:Q:238:SER:HA	1.78	0.49
1:Q:194:ARG:NH1	1:O:277:PRO:O	2.45	0.49
1:Q:270:VAL:HA	1:Q:289:SER:N	2.26	0.49
2:R:4:ALA:HA	2:R:31:VAL:O	2.13	0.49
2:R:67:SER:CB	2:R:72:VAL:HG13	2.43	0.49
2:R:213:ALA:HB3	2:R:214:LYS:HZ2	1.77	0.49
2:R:326:LEU:HA	2:R:329:ILE:HD12	1.95	0.49
1:O:278:LEU:HB3	1:O:282:ASP:HB2	1.95	0.49
2:P:238:ASN:OD1	2:P:286:ARG:NH1	2.46	0.49
2:P:271:GLY:O	2:P:322:ARG:NH2	2.45	0.49
2:P:305:ASP:OD1	2:P:306:MET:N	2.46	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:0:LYS:HB2	1:G:1:LEU:HD12	1.95	0.49
1:G:126:PRO:HB2	1:G:128:TYR:CZ	2.47	0.49
1:G:154:LEU:HG	1:G:158:VAL:HB	1.93	0.49
2:H:192:HIS:HB3	2:H:198:ALA:CA	2.42	0.49
1:E:107:LYS:HA	1:E:110:GLN:CD	2.37	0.49
2:J:172:LYS:HB2	2:L:306:MET:SD	2.52	0.49
2:J:274:SER:OG	2:J:290:VAL:HG21	2.13	0.49
1:K:133:ASN:N	1:K:134:GLU:OE1	2.46	0.49
2:L:253:PHE:CZ	2:L:255:GLU:HB3	2.48	0.49
1:A:272:ASP:O	1:A:290:SER:OG	2.30	0.49
2:B:92:ASP:OD1	2:B:116:LYS:NZ	2.26	0.49
2:B:95:ILE:HA	2:B:119:LEU:O	2.11	0.49
2:B:195:LEU:HD12	2:B:195:LEU:H	1.76	0.49
2:B:308:LYS:NZ	2:D:176:THR:HG23	2.27	0.49
2:D:57:ASP:O	2:D:69:ASP:CG	2.56	0.49
1:Q:79:PRO:HB3	1:Q:108:HIS:CE1	2.48	0.49
2:R:208:THR:O	2:R:230:ILE:HB	2.12	0.49
2:P:17:ARG:HG2	2:P:54:PHE:CD1	2.47	0.49
2:P:96:GLU:HB3	2:P:120:ILE:HD12	1.94	0.49
2:P:209:SER:OG	2:P:214:LYS:NZ	2.45	0.49
1:G:29:VAL:HG22	1:G:74:VAL:HG22	1.95	0.49
1:G:173:THR:O	1:G:240:VAL:HA	2.12	0.49
1:G:264:ALA:O	1:G:268:LYS:NZ	2.39	0.49
2:H:98:THR:HB	3:H:401:NAD:C8A	2.43	0.49
2:H:121:THR:O	2:H:319:TYR:OH	2.30	0.49
2:H:196:ARG:HB3	2:H:206:VAL:HG22	1.95	0.49
1:E:15:PHE:CE1	1:E:322:VAL:HG22	2.48	0.49
1:E:177:SER:HB3	1:E:234:THR:O	2.11	0.49
1:E:236:ASN:ND2	1:E:314:GLU:HB3	2.28	0.49
1:E:270:VAL:HA	1:E:289:SER:H	1.78	0.49
2:F:1:LEU:N	2:F:28:ASP:H	2.10	0.49
2:F:10:ARG:NH1	2:F:13:ARG:HH11	2.09	0.49
2:F:58:VAL:HB	2:F:68:VAL:HB	1.95	0.49
2:F:94:VAL:O	2:F:118:VAL:HA	2.13	0.49
2:F:104:ARG:NH1	2:F:146:ILE:HB	2.28	0.49
2:F:272:ILE:O	2:F:291:SER:N	2.22	0.49
1:I:82:LEU:HB2	1:I:84:TRP:CZ2	2.48	0.49
1:K:76:ASN:HB3	1:K:82:LEU:HD11	1.94	0.49
1:K:92:VAL:HG11	1:K:108:HIS:HD2	1.78	0.49
1:K:238:SER:HB2	1:K:311:TYR:CE2	2.48	0.49
2:L:104:ARG:HD3	2:L:146:ILE:HG21	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:185:GLN:NE2	2:L:233:ARG:HH11	2.11	0.49
2:L:253:PHE:O	2:L:256:GLU:HB3	2.13	0.49
2:L:266:ASP:O	2:L:270:LYS:HB2	2.12	0.49
1:A:85:ALA:N	1:A:112:GLY:HA3	2.28	0.49
1:A:231:ARG:HH22	1:G:362:GLU:HA	1.77	0.49
2:B:10:ARG:HA	2:B:13:ARG:HB2	1.95	0.49
2:B:95:ILE:HG23	2:B:120:ILE:HA	1.95	0.49
2:B:252:THR:N	2:B:304:ASP:HB3	2.28	0.49
1:C:16:LEU:HD21	1:C:66:ILE:HG21	1.94	0.49
2:D:1:LEU:HB2	2:D:27:LEU:HA	1.95	0.49
2:D:163:VAL:HA	2:D:166:GLN:HB2	1.95	0.49
2:D:193:ARG:H	2:D:193:ARG:CZ	2.26	0.49
2:D:266:ASP:O	2:D:270:LYS:HB2	2.12	0.49
1:Q:291:THR:HB	1:Q:310:TRP:HB2	1.94	0.49
2:R:17:ARG:NH2	2:R:53:THR:O	2.45	0.49
1:O:238:SER:HB2	1:O:311:TYR:CZ	2.47	0.49
2:H:0:LYS:HD2	2:H:1:LEU:HD12	1.94	0.49
2:H:2:LYS:HE3	2:H:89:MET:HB3	1.94	0.49
1:E:16:LEU:HD13	1:E:44:LEU:HD13	1.95	0.49
1:E:261:LYS:HZ3	1:E:262:ALA:HB2	1.78	0.49
2:F:55:ASP:OD1	2:F:55:ASP:N	2.46	0.49
1:I:46:TYR:HB2	2:L:199:ARG:NH1	2.27	0.48
2:J:196:ARG:CZ	2:L:280:LEU:H	2.26	0.48
2:J:246:VAL:O	2:J:307:VAL:N	2.46	0.48
1:A:74:VAL:HG21	1:A:84:TRP:CH2	2.47	0.48
1:A:96:THR:OG1	1:A:98:VAL:N	2.46	0.48
2:B:176:THR:HA	2:B:230:ILE:O	2.13	0.48
2:B:192:HIS:CE1	2:B:194:ASP:HB3	2.48	0.48
2:B:238:ASN:HD21	2:B:286:ARG:HG2	1.78	0.48
1:C:66:ILE:N	1:C:69:LYS:O	2.45	0.48
1:C:94:GLU:HG3	1:C:99:PHE:HB2	1.95	0.48
1:C:171:THR:O	1:C:242:LEU:HD12	2.13	0.48
1:C:283:PHE:HE2	1:C:310:TRP:CE2	2.31	0.48
2:D:173:GLY:O	2:D:228:ASN:N	2.38	0.48
2:D:239:VAL:HG13	2:D:313:TYR:C	2.38	0.48
1:Q:287:ASP:OD1	1:Q:315:TRP:NE1	2.43	0.48
1:Q:324:LEU:HG	1:Q:328:VAL:HB	1.95	0.48
2:R:67:SER:HA	2:R:72:VAL:CG1	2.43	0.48
2:R:119:LEU:HA	2:R:147:ILE:O	2.12	0.48
2:R:121:THR:O	2:R:319:TYR:OH	2.30	0.48
2:R:131:TYR:CD2	2:R:147:ILE:HG21	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:15:PHE:CE1	1:O:322:VAL:HG22	2.47	0.48
1:O:178:TYR:CE1	1:O:235:PRO:HA	2.48	0.48
2:P:152:CYS:O	2:P:155:ASN:ND2	2.45	0.48
2:P:253:PHE:HA	2:P:301:VAL:HG11	1.94	0.48
2:P:320:SER:C	2:P:324:VAL:HG23	2.38	0.48
1:G:62:GLU:HB2	1:G:72:LYS:NZ	2.26	0.48
1:G:177:SER:HB3	1:G:234:THR:O	2.13	0.48
1:G:256:ASN:O	1:G:259:PHE:HB2	2.13	0.48
2:H:15:PHE:CD2	2:H:324:VAL:HG22	2.47	0.48
2:H:31:VAL:HG23	2:H:74:LYS:CG	2.39	0.48
2:H:44:LEU:O	2:H:44:LEU:HD22	2.13	0.48
2:H:46:LYS:HE2	2:H:57:ASP:CB	2.41	0.48
2:H:175:MET:N	2:H:175:MET:SD	2.84	0.48
2:H:203:LEU:HD22	2:F:236:THR:HA	1.95	0.48
1:E:6:ASN:ND2	1:E:96:THR:OG1	2.38	0.48
1:E:320:ARG:NH2	1:E:323:ASP:OD2	2.44	0.48
2:F:142:HIS:HB3	2:F:335:GLN:CD	2.38	0.48
2:F:257:VAL:HA	2:F:260:ALA:HB3	1.94	0.48
1:I:199:ALA:O	1:I:201:LEU:N	2.45	0.48
1:I:239:VAL:HA	1:I:309:ALA:O	2.13	0.48
2:J:42:SER:O	2:J:46:LYS:N	2.22	0.48
2:J:181:TYR:N	2:J:234:VAL:O	2.46	0.48
2:J:238:ASN:HD22	2:J:282:SER:HB2	1.77	0.48
2:J:274:SER:N	2:J:292:SER:O	2.46	0.48
1:K:90:ASP:HA	1:K:114:LYS:HZ3	1.77	0.48
1:K:256:ASN:HA	1:K:259:PHE:CD2	2.47	0.48
2:L:11:ILE:HG12	3:L:401:NAD:O5D	2.13	0.48
2:L:172:LYS:HB2	2:L:172:LYS:HZ2	1.78	0.48
2:L:179:HIS:O	2:L:234:VAL:HG13	2.12	0.48
1:A:221:LEU:HD12	1:A:225:LEU:HD21	1.94	0.48
2:B:132:VAL:H	2:B:136:ASN:CG	2.20	0.48
2:B:172:LYS:HB2	2:D:306:MET:SD	2.53	0.48
2:B:176:THR:O	2:B:243:ASP:N	2.45	0.48
2:D:142:HIS:H	2:D:333:LYS:CE	2.26	0.48
2:D:185:GLN:NE2	2:D:233:ARG:HH11	2.11	0.48
2:D:208:THR:HG21	2:D:233:ARG:HG3	1.93	0.48
2:D:314:ASP:OD1	2:D:317:TRP:N	2.46	0.48
1:Q:117:ILE:HA	1:Q:144:ILE:HG12	1.93	0.48
1:Q:133:ASN:HA	1:Q:136:ASP:CG	2.37	0.48
1:Q:253:GLU:O	1:Q:260:ARG:NH1	2.45	0.48
2:R:178:THR:HG1	2:R:241:VAL:H	1.54	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:275:VAL:HA	2:R:294:ILE:N	2.26	0.48
2:R:289:ASP:OD1	2:R:289:ASP:N	2.44	0.48
1:O:56:ASP:OD2	1:O:58:LYS:HD2	2.14	0.48
1:O:139(A):ASP:N	1:O:139(A):ASP:OD1	2.45	0.48
2:P:222:ASN:HD22	2:P:223:LEU:HD12	1.78	0.48
1:G:60(A):ASP:O	1:G:63:THR:N	2.46	0.48
1:G:282:ASP:OD1	2:H:47:TYR:CD2	2.66	0.48
2:F:46:LYS:HA	2:F:58:VAL:CG1	2.43	0.48
2:F:140:TYR:CE1	2:F:142:HIS:HA	2.48	0.48
2:F:175:MET:HB3	2:F:244:LEU:HB2	1.95	0.48
1:I:25:LEU:HD11	1:I:326:ASP:HA	1.94	0.48
1:I:228:ILE:H	1:K:306:LYS:NZ	2.11	0.48
2:J:16:LEU:HD22	2:J:45:LEU:HD11	1.94	0.48
1:K:114:LYS:HB2	1:K:332:TRP:HH2	1.78	0.48
1:K:315:TRP:O	1:K:318:SER:OG	2.30	0.48
2:L:3:VAL:HA	2:L:91:ILE:HG23	1.94	0.48
1:A:74:VAL:HG11	1:A:82:LEU:HB3	1.96	0.48
1:A:204:VAL:O	1:A:230:LEU:HA	2.13	0.48
2:B:131:TYR:CE2	2:B:140:TYR:HA	2.48	0.48
2:B:281:VAL:HA	2:B:312:TRP:CH2	2.48	0.48
2:B:289:ASP:HB3	2:B:321:GLN:HG3	1.95	0.48
1:C:60:ILE:HB	1:C:64:PHE:HA	1.95	0.48
2:D:10:ARG:HB3	2:D:10:ARG:CZ	2.43	0.48
1:Q:24:PRO:HD2	1:Q:25:LEU:HD13	1.95	0.48
1:Q:197:ARG:NH2	2:P:47:TYR:HB3	2.28	0.48
1:Q:324:LEU:HA	1:Q:327:LEU:HB3	1.95	0.48
2:R:30:VAL:O	2:R:74:LYS:HE3	2.13	0.48
2:R:131:TYR:CZ	2:R:140:TYR:HA	2.48	0.48
2:R:140:TYR:CE1	2:R:330:VAL:HG22	2.49	0.48
1:O:176:HIS:HB3	1:O:231:ARG:CD	2.42	0.48
1:O:211:ALA:HB3	1:O:212:LYS:NZ	2.28	0.48
1:O:298:MET:HG3	1:O:306:LYS:HB2	1.94	0.48
2:P:105:ASP:O	2:P:109:LYS:N	2.32	0.48
2:P:157:LEU:HA	2:P:160:PHE:CE1	2.47	0.48
1:G:150:THR:HG1	1:G:151:THR:H	1.62	0.48
1:G:223:GLY:O	1:E:300:MET:HE1	2.13	0.48
1:E:150:THR:OG1	1:E:176:HIS:NE2	2.33	0.48
1:E:172:MET:HB3	1:E:242:LEU:CA	2.43	0.48
2:F:142:HIS:CE1	2:F:334:TRP:HA	2.48	0.48
2:F:300:MET:N	2:F:308:LYS:HB3	2.28	0.48
2:J:306:MET:HE3	2:L:306:MET:HG2	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:42:HIS:O	1:K:46:TYR:N	2.28	0.48
2:L:1:LEU:HB2	2:L:27:LEU:HA	1.95	0.48
2:L:89:MET:N	2:L:89:MET:SD	2.86	0.48
2:L:163:VAL:HA	2:L:166:GLN:HB2	1.96	0.48
1:A:118:ILE:HG22	1:A:120:ALA:H	1.78	0.48
1:C:173:THR:HA	1:C:228:ILE:O	2.14	0.48
1:C:241:ASP:HA	1:C:307:VAL:O	2.13	0.48
2:D:22:ARG:HE	2:D:321:GLN:NE2	2.10	0.48
2:D:104:ARG:NH2	2:D:129:PRO:HD3	2.29	0.48
2:D:130:THR:HG21	2:D:218:LEU:HB3	1.94	0.48
1:Q:154:LEU:HG	1:Q:158:VAL:HB	1.95	0.48
1:Q:272:ASP:HB2	1:Q:288:PHE:CD1	2.48	0.48
2:R:10:ARG:O	2:R:14:ASN:N	2.36	0.48
2:R:42:SER:OG	2:R:43:HIS:N	2.47	0.48
2:R:289:ASP:OD2	2:R:321:GLN:NE2	2.46	0.48
1:O:236:ASN:ND2	1:O:314:GLU:HB3	2.28	0.48
2:P:81:PRO:HB3	2:P:110:HIS:CE1	2.48	0.48
2:P:140:TYR:CE1	2:P:142:HIS:HA	2.48	0.48
1:G:11:ILE:HB	3:G:401:NAD:O5D	2.13	0.48
2:H:155:ASN:HD21	2:H:322:ARG:HB2	1.78	0.48
2:H:208:THR:O	2:H:230:ILE:HB	2.13	0.48
2:H:321:GLN:O	2:H:325:ASP:N	2.44	0.48
1:E:159:LYS:HB2	1:E:218:LEU:HG	1.96	0.48
1:E:237:VAL:HG11	1:E:280:SER:HB2	1.95	0.48
1:E:308:VAL:HG12	1:E:310:TRP:HE1	1.76	0.48
2:F:194:ASP:HB3	2:F:197:ARG:HB2	1.95	0.48
2:F:274:SER:O	2:F:293:THR:HA	2.13	0.48
1:I:77:ARG:HA	3:Q:401:NAD:N1A	2.29	0.48
1:I:85:ALA:C	1:I:88:GLY:H	2.21	0.48
1:I:132:VAL:HA	1:I:159:LYS:HE3	1.94	0.48
1:I:259:PHE:HB3	1:I:273:VAL:HG21	1.95	0.48
2:J:0:LYS:H3	2:J:26:PRO:C	2.22	0.48
2:J:220:LEU:HB3	2:J:223:LEU:HD13	1.95	0.48
1:K:11:ILE:HG13	1:K:314:GLU:CD	2.39	0.48
2:L:86:TRP:NE1	2:L:113:ALA:HB3	2.29	0.48
1:A:108:HIS:N	1:A:108:HIS:HD2	2.10	0.48
1:A:292:ILE:HG12	1:A:309:ALA:CB	2.43	0.48
2:B:38:VAL:HG22	1:O:344:PRO:O	2.13	0.48
2:B:220:LEU:HB3	2:B:223:LEU:HD13	1.96	0.48
1:C:203:ILE:HG12	1:C:232:VAL:HG12	1.95	0.48
2:D:10:ARG:H	2:D:10:ARG:HD2	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:295:ASP:O	2:D:299:THR:HG23	2.13	0.48
1:Q:3:VAL:HG13	1:Q:91:ILE:HG13	1.95	0.48
1:Q:20:ARG:HA	1:Q:21:LYS:HZ3	1.78	0.48
1:Q:319:GLN:HB2	1:Q:320:ARG:HH12	1.79	0.48
1:O:281:VAL:HG11	2:P:49:SER:HA	1.94	0.48
2:P:32:ILE:HB	2:P:75:VAL:HA	1.95	0.48
2:P:292:SER:HB2	2:P:313:TYR:HA	1.96	0.48
2:P:320:SER:OG	2:P:321:GLN:N	2.47	0.48
1:G:261:LYS:O	1:G:265:GLY:N	2.46	0.48
1:G:299:VAL:HG11	1:G:302:GLY:C	2.39	0.48
2:F:140:TYR:OH	2:F:142:HIS:ND1	2.44	0.48
2:F:192:HIS:CE1	2:F:197:ARG:HD2	2.48	0.48
2:F:328:ASP:O	2:F:332:ASN:N	2.35	0.48
1:I:139:HIS:CD2	1:I:333:PRO:HD3	2.49	0.48
1:I:186:ASP:O	2:L:10:ARG:NH1	2.47	0.48
1:I:295:SER:OG	1:I:296:LEU:N	2.47	0.48
1:I:324:LEU:HG	1:I:327:LEU:HD22	1.96	0.48
1:K:84:TRP:NE1	1:K:108:HIS:O	2.41	0.48
1:K:85:ALA:N	1:K:112:GLY:HA3	2.29	0.48
1:K:215:SER:HA	1:K:218:LEU:C	2.38	0.48
2:L:9:GLY:O	2:L:13:ARG:HD2	2.13	0.48
2:L:82:VAL:HG22	2:L:109:LYS:HD2	1.96	0.48
1:A:54:LYS:H	1:A:54:LYS:HD2	1.78	0.48
1:A:62:GLU:HG3	1:A:63:THR:OG1	2.13	0.48
2:B:204:ASN:HD22	2:D:282:SER:H	1.60	0.48
2:B:246:VAL:O	2:B:307:VAL:N	2.47	0.48
1:C:169:LYS:HE3	1:C:245:ASN:HD21	1.78	0.48
1:C:215:SER:HB3	1:C:225:LEU:HD11	1.95	0.48
1:C:343:ASP:C	2:R:77:SER:HB2	2.39	0.48
2:D:192:HIS:HD1	2:D:194:ASP:N	2.12	0.48
1:Q:30:VAL:C	1:Q:74:VAL:HG23	2.38	0.48
1:Q:174:THR:OG1	1:Q:238:SER:HB3	2.13	0.48
2:R:84:LEU:HB3	2:R:86:TRP:CZ2	2.48	0.48
2:R:239:VAL:HG13	2:R:313:TYR:O	2.13	0.48
1:O:139:HIS:ND1	1:O:332:TRP:HA	2.27	0.48
1:O:176:HIS:H	1:O:230:LEU:C	2.21	0.48
1:O:303:ASP:OD1	1:O:303:ASP:N	2.45	0.48
2:P:269:LEU:HB3	2:P:273:LEU:HB2	1.94	0.48
1:G:114:LYS:O	1:G:115:LYS:HG2	2.13	0.48
2:H:6:ASN:N	2:H:95:ILE:O	2.47	0.48
2:H:239:VAL:HG13	2:H:313:TYR:O	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:289:ASP:OD1	2:H:289:ASP:N	2.45	0.48
1:E:20:ARG:CZ	1:E:322:VAL:HG21	2.43	0.48
1:E:115:LYS:HG2	1:E:142:ASN:ND2	2.28	0.48
1:E:278:LEU:HB3	1:E:282:ASP:HB2	1.96	0.48
2:F:292:SER:OG	2:F:311:ALA:HB1	2.13	0.48
1:I:230:LEU:O	1:I:232:VAL:HG13	2.13	0.48
2:J:46:LYS:NZ	2:J:54:PHE:O	2.33	0.48
1:K:11:ILE:HG12	1:K:318:SER:HB3	1.95	0.48
2:L:176:THR:N	2:L:243:ASP:O	2.47	0.48
1:A:9:GLY:HA3	3:A:401:NAD:O2N	2.13	0.48
1:A:171:THR:OG1	1:A:172:MET:N	2.46	0.48
1:A:210:ALA:O	1:A:214:VAL:N	2.39	0.48
1:A:303:ASP:OD1	1:A:303:ASP:N	2.45	0.48
1:C:6:ASN:CB	1:C:92:VAL:HG13	2.44	0.48
2:D:96:GLU:OE2	2:D:98:THR:OG1	2.19	0.48
2:D:138:GLU:H	2:D:138:GLU:CD	2.18	0.48
2:D:163:VAL:HG13	2:D:167:LYS:NZ	2.28	0.48
2:D:253:PHE:O	2:D:256:GLU:HB3	2.12	0.48
1:Q:139:HIS:CE1	1:Q:332:TRP:HA	2.48	0.48
1:Q:278:LEU:O	1:O:194:ARG:NH1	2.47	0.48
3:Q:402:NAD:H2N	3:Q:402:NAD:H2D	1.61	0.48
2:R:151:SER:OG	2:R:153:THR:OG1	2.19	0.48
2:R:283:ILE:HG22	2:P:204:ASN:HD21	1.79	0.48
1:O:29:VAL:HA	1:O:72:LYS:O	2.13	0.48
1:O:244:VAL:HG23	1:O:245:ASN:O	2.14	0.48
2:P:129:PRO:HD2	2:P:147:ILE:HA	1.95	0.48
2:P:176:THR:HA	2:P:230:ILE:O	2.14	0.48
1:G:60(A):ASP:O	1:G:62:GLU:N	2.47	0.48
1:G:194:ARG:HH11	1:G:204:VAL:HG22	1.79	0.48
3:G:401:NAD:O3D	3:G:401:NAD:O1A	2.25	0.48
2:H:210:THR:O	2:H:214:LYS:NZ	2.37	0.48
2:H:283:ILE:HG23	2:H:284:ASP:OD1	2.14	0.48
1:E:30:VAL:O	1:E:74:VAL:N	2.30	0.48
1:E:137:TYR:HB3	1:E:331:LYS:HE3	1.95	0.48
1:E:183:ARG:HH21	1:E:188:SER:C	2.22	0.48
1:E:238:SER:OG	1:E:313:ASN:ND2	2.43	0.48
1:I:54:LYS:CD	1:I:54:LYS:H	2.26	0.48
1:I:256:ASN:HB2	1:I:260:ARG:NH2	2.28	0.48
2:J:2:LYS:HE3	2:J:89:MET:HB3	1.95	0.48
2:J:132:VAL:H	2:J:136:ASN:CG	2.22	0.48
2:J:301:VAL:HG22	2:J:307:VAL:HG13	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:186:ASP:OD1	1:K:198:ALA:N	2.37	0.48
2:L:179:HIS:O	2:L:233:ARG:HA	2.14	0.48
2:L:277:ASP:OD1	2:L:297:SER:N	2.47	0.48
1:A:30:VAL:O	1:A:74:VAL:N	2.34	0.48
1:A:54:LYS:H	1:A:54:LYS:CD	2.26	0.48
1:A:253:GLU:OE2	1:A:257:ASN:ND2	2.39	0.48
1:A:255:VAL:O	1:A:259:PHE:N	2.29	0.48
1:A:291:THR:O	1:A:310:TRP:N	2.47	0.48
2:B:31:VAL:HA	2:B:74:LYS:HB2	1.96	0.48
2:B:59:LYS:O	2:B:66:ILE:CG2	2.62	0.48
2:B:131:TYR:HD2	2:B:147:ILE:HD12	1.76	0.48
2:B:196:ARG:CZ	2:D:279:PRO:HA	2.44	0.48
2:B:274:SER:OG	2:B:290:VAL:HG21	2.14	0.48
1:C:133:ASN:N	1:C:134:GLU:OE1	2.46	0.48
2:D:241:VAL:HG13	2:D:311:ALA:C	2.38	0.48
2:D:314:ASP:CG	2:D:317:TRP:H	2.22	0.48
1:Q:2:LYS:H	1:Q:90:ASP:CG	2.19	0.48
1:Q:15:PHE:HA	1:Q:18:CYS:SG	2.54	0.48
1:Q:39:SER:OG	1:Q:40:ALA:N	2.46	0.48
2:R:8:PHE:CZ	2:R:13:ARG:HG3	2.49	0.48
2:R:9:GLY:O	2:R:13:ARG:HD2	2.13	0.48
2:P:11:ILE:HG12	3:P:401:NAD:O1N	2.14	0.48
2:P:212:ALA:O	2:P:216:VAL:HB	2.14	0.48
1:G:130:VAL:HG21	1:G:323:ASP:OD2	2.14	0.48
1:G:182:GLN:HG2	1:G:231:ARG:HD2	1.94	0.48
2:H:94:VAL:HG11	2:H:110:HIS:HD2	1.79	0.48
2:H:181:TYR:HD2	2:H:235:PRO:HA	1.78	0.48
2:F:215:ALA:HA	2:F:218:LEU:HB2	1.96	0.48
2:F:224:LYS:O	2:F:226:LYS:HG3	2.14	0.48
1:I:129:VAL:O	1:I:133:ASN:N	2.45	0.48
1:I:180:GLY:H	2:L:188:LEU:HD22	1.78	0.48
2:J:205:ILE:HG22	2:L:312:TRP:CH2	2.49	0.48
2:J:210:THR:HB	2:J:233:ARG:HH22	1.79	0.48
1:K:72:LYS:HG2	1:K:73:VAL:N	2.29	0.48
1:K:139:HIS:HE1	1:K:332:TRP:CD2	2.31	0.48
1:K:283:PHE:O	1:K:286:SER:HB3	2.14	0.48
2:L:35:THR:HB	2:L:79:ARG:NH1	2.28	0.48
2:L:272:ILE:O	2:L:291:SER:N	2.23	0.48
2:L:316:GLU:N	2:L:316:GLU:CD	2.71	0.48
1:A:84:TRP:HA	1:A:87:LEU:HD12	1.96	0.48
1:A:167:ILE:HG23	1:A:246:ILE:HD12	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:14:ASN:OD1	2:B:317:TRP:HA	2.14	0.48
2:B:80:ASN:HD22	2:B:83:ASN:CG	2.20	0.48
2:B:118:VAL:O	2:B:147:ILE:HG12	2.13	0.48
2:B:281:VAL:HG23	2:B:283:ILE:HG22	1.95	0.48
1:C:10:ARG:HH22	1:C:48:SER:H	1.62	0.48
1:C:105:ALA:HA	1:C:108:HIS:CD2	2.49	0.48
1:C:215:SER:HA	1:C:218:LEU:C	2.38	0.48
2:D:193:ARG:H	2:D:193:ARG:NE	2.12	0.48
2:D:220:LEU:HB3	2:D:223:LEU:HD13	1.96	0.48
1:Q:10:ARG:C	1:Q:14:ASN:HD22	2.17	0.48
1:Q:157:PHE:O	1:Q:161:LEU:HG	2.14	0.48
1:Q:261:LYS:O	1:Q:265:GLY:N	2.46	0.48
2:R:38:VAL:O	2:R:42:SER:N	2.38	0.48
2:R:123:PRO:HG3	2:R:150:ALA:HA	1.96	0.48
2:R:199:ARG:HH12	1:O:46:TYR:HB2	1.79	0.48
1:O:183:ARG:HB2	1:O:196:ALA:HA	1.95	0.48
1:O:198:ALA:O	1:O:202:ASN:ND2	2.26	0.48
2:P:239:VAL:HG13	2:P:313:TYR:O	2.14	0.48
1:E:65:SER:HA	1:E:70:PRO:HA	1.94	0.48
1:E:327:LEU:HD23	1:E:328:VAL:HG23	1.95	0.48
2:F:17:ARG:HG2	2:F:54:PHE:CD1	2.49	0.48
2:F:176:THR:HA	2:F:230:ILE:O	2.13	0.48
1:I:11:ILE:HB	1:I:314:GLU:HG2	1.95	0.48
1:I:81:LYS:H	1:I:81:LYS:CE	2.26	0.48
1:I:132:VAL:HA	1:I:159:LYS:HD2	1.96	0.48
1:I:240:VAL:HG13	1:I:311:TYR:HE1	1.79	0.48
1:I:243:VAL:HA	1:I:305:VAL:O	2.13	0.48
2:J:283:ILE:H	2:L:204:ASN:ND2	2.12	0.48
1:K:171:THR:HG1	1:K:172:MET:N	2.10	0.48
1:K:207:SER:OG	1:K:208:THR:N	2.47	0.48
1:K:312:ASP:OD2	1:K:315:TRP:HB3	2.14	0.48
2:L:30:VAL:HG13	2:L:71:LYS:HZ1	1.79	0.48
2:L:178:THR:N	2:L:243:ASP:OD2	2.45	0.48
1:A:256:ASN:HB2	1:A:260:ARG:NH2	2.29	0.48
1:A:318:SER:O	1:A:321:VAL:N	2.45	0.48
2:B:148:SER:OG	2:B:149:ASN:O	2.32	0.48
2:B:164:LEU:HA	2:B:168:PHE:HD1	1.79	0.48
2:B:322:ARG:HA	2:B:325:ASP:OD2	2.14	0.48
1:C:32:ASP:N	1:C:74:VAL:O	2.44	0.48
2:D:82:VAL:HG22	2:D:109:LYS:HD2	1.95	0.48
1:Q:181:ASP:CG	1:Q:231:ARG:HH12	2.21	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:67:SER:HA	2:R:72:VAL:CB	2.44	0.48
2:R:86:TRP:NE1	2:R:110:HIS:HD1	2.12	0.48
2:R:257:VAL:HG22	2:R:258:ASN:HD22	1.79	0.48
1:O:191:ARG:HG3	1:O:192:ASP:H	1.79	0.48
2:P:46:LYS:O	2:P:53:THR:OG1	2.17	0.48
2:P:171:ILE:HB	2:P:247:GLN:HG2	1.96	0.48
1:G:18(A):TRP:O	1:G:20:ARG:HB2	2.13	0.48
1:G:99:PHE:HD1	1:G:104:GLY:HA3	1.78	0.48
1:G:183:ARG:HG3	1:G:187:ALA:O	2.13	0.48
1:G:301:GLY:C	1:G:303:ASP:H	2.21	0.48
2:H:257:VAL:HG22	2:H:258:ASN:HD22	1.77	0.48
2:F:22:ARG:NH2	2:F:325:ASP:OD1	2.47	0.48
2:F:81:PRO:HB3	2:F:110:HIS:HE1	1.78	0.48
1:I:148:SER:HG	1:I:151:THR:HG1	1.44	0.47
2:J:186:ARG:HD2	2:J:190:ALA:HB3	1.96	0.47
1:K:203:ILE:HG13	1:K:232:VAL:HA	1.95	0.47
3:K:402:NAD:O2N	1:E:11:ILE:HG22	2.14	0.47
2:L:8:PHE:HB2	2:L:32:ILE:HD12	1.95	0.47
2:L:152:CYS:SG	3:L:401:NAD:N7N	2.87	0.47
1:A:130:VAL:HG21	1:A:323:ASP:HB2	1.96	0.47
2:B:42:SER:HG	2:B:43:HIS:H	1.61	0.47
2:B:64:SER:O	2:B:66:ILE:HG12	2.14	0.47
1:C:151:THR:O	1:C:154:LEU:N	2.47	0.47
2:D:178:THR:HG1	2:D:241:VAL:H	1.56	0.47
2:D:189:ASP:HA	2:D:199:ARG:HA	1.96	0.47
2:D:277:ASP:OD1	2:D:297:SER:N	2.47	0.47
1:Q:11:ILE:C	1:Q:14:ASN:H	2.21	0.47
2:R:51:LEU:HD22	2:R:287:CYS:HB2	1.95	0.47
1:O:84:TRP:HD1	1:O:113:ALA:N	2.12	0.47
2:P:17:ARG:NH1	2:P:51:LEU:HB2	2.29	0.47
2:P:142:HIS:HB3	2:P:335:GLN:CD	2.39	0.47
2:P:292:SER:OG	2:P:311:ALA:HB1	2.13	0.47
1:G:63:THR:OG1	1:G:72:LYS:NZ	2.23	0.47
1:G:77:ARG:HA	3:G:401:NAD:N1A	2.29	0.47
1:G:204:VAL:C	1:G:230:LEU:HD23	2.39	0.47
1:G:306:LYS:NZ	1:E:227:GLY:HA2	2.29	0.47
2:H:88:ASP:HB2	2:H:89:MET:SD	2.54	0.47
2:H:104:ARG:H	2:H:127:ASP:CG	2.21	0.47
2:H:318:GLY:O	2:H:321:GLN:HB2	2.15	0.47
1:E:79:PRO:O	1:E:82:LEU:N	2.38	0.47
1:E:93:ILE:HD12	1:E:117:ILE:HD12	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:87:GLY:C	2:F:90:GLY:H	2.21	0.47
2:F:283:ILE:HG23	2:F:284:ASP:OD1	2.14	0.47
1:I:0:LYS:HB2	1:I:24:PRO:HA	1.96	0.47
1:I:48:SER:OG	2:L:199:ARG:NE	2.47	0.47
1:I:59:ILE:H	1:I:59:ILE:HD12	1.80	0.47
2:J:46:LYS:HA	2:J:54:PHE:HB3	1.96	0.47
2:J:118:VAL:O	2:J:147:ILE:HG12	2.14	0.47
2:J:119:LEU:HA	2:J:147:ILE:O	2.14	0.47
2:J:281:VAL:HB	2:L:204:ASN:CB	2.39	0.47
2:J:299:THR:HG23	2:J:310:ILE:HG12	1.95	0.47
1:K:177:SER:OG	1:K:237:VAL:N	2.38	0.47
1:K:214:VAL:O	1:K:218:LEU:N	2.47	0.47
1:K:243:VAL:HA	1:K:305:VAL:O	2.13	0.47
2:L:29:VAL:HG12	2:L:31:VAL:O	2.15	0.47
2:L:283:ILE:HA	2:L:286:ARG:HG3	1.96	0.47
1:A:17:ARG:NH2	1:A:51:GLY:O	2.46	0.47
1:A:177:SER:HG	1:A:237:VAL:H	1.60	0.47
2:B:105:ASP:O	2:B:109:LYS:N	2.28	0.47
2:B:187:LEU:HD13	1:C:184:LEU:HB2	1.96	0.47
1:C:145:SER:O	1:C:145:SER:OG	2.32	0.47
1:C:202:ASN:C	1:C:203:ILE:HD12	2.39	0.47
1:C:324:LEU:HD22	1:C:324:LEU:HA	1.60	0.47
1:Q:93:ILE:HG23	1:Q:117:ILE:HB	1.96	0.47
1:Q:301:GLY:C	1:Q:303:ASP:H	2.23	0.47
2:P:140:TYR:OH	2:P:142:HIS:ND1	2.47	0.47
2:P:142:HIS:CE1	2:P:334:TRP:HA	2.50	0.47
1:G:3:VAL:HG22	1:G:91:ILE:HG13	1.96	0.47
1:G:87:LEU:HB2	1:G:89:ILE:HG12	1.96	0.47
2:H:106:GLY:O	2:H:110:HIS:N	2.48	0.47
2:H:164:LEU:O	2:H:168:PHE:N	2.30	0.47
2:H:197:ARG:HH21	2:H:233:ARG:NH2	2.12	0.47
1:E:129:VAL:HG11	1:E:155:ALA:HB3	1.96	0.47
1:E:190:HIS:CE1	1:E:191:ARG:HG3	2.49	0.47
2:F:11:ILE:O	2:F:15:PHE:N	2.42	0.47
1:I:62:GLU:HG3	1:I:63:THR:OG1	2.13	0.47
2:J:142:HIS:CD2	2:J:336:ALA:H	2.28	0.47
2:J:199:ARG:NH2	1:K:48:SER:OG	2.32	0.47
2:J:277:ASP:OD2	2:J:296:SER:OG	2.29	0.47
1:K:138:GLY:HA2	1:K:331:LYS:HD2	1.96	0.47
2:L:154:THR:HA	2:L:157:LEU:HG	1.96	0.47
1:A:174:THR:HG23	1:A:176:HIS:H	1.78	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:299:THR:HG23	2:B:310:ILE:HG12	1.95	0.47
1:C:0:LYS:NZ	1:C:1:LEU:HD13	2.29	0.47
1:C:239:VAL:HA	1:C:309:ALA:O	2.15	0.47
1:C:258:ALA:HA	1:C:261:LYS:HB3	1.95	0.47
1:C:312:ASP:OD2	1:C:315:TRP:HB3	2.14	0.47
1:C:316:GLY:HA2	1:C:320:ARG:NH2	2.29	0.47
1:C:340:ALA:HB1	1:C:342:GLY:O	2.15	0.47
2:D:18:CYS:CB	2:D:324:VAL:HG21	2.44	0.47
2:D:140:TYR:CE2	2:D:332:ASN:HB2	2.49	0.47
2:D:210:THR:HG23	2:D:213:ALA:N	2.29	0.47
2:D:245:VAL:HA	2:D:307:VAL:O	2.14	0.47
1:Q:10:ARG:HA	1:Q:13:ARG:HB2	1.96	0.47
1:Q:205:PRO:HB3	1:Q:228:ILE:HD11	1.95	0.47
3:Q:401:NAD:H2N	3:Q:401:NAD:H2D	1.68	0.47
2:R:45:LEU:HD11	2:R:54:PHE:HD2	1.79	0.47
2:R:102:VAL:HG22	2:R:125:LYS:N	2.27	0.47
2:R:164:LEU:O	2:R:168:PHE:N	2.29	0.47
2:R:189:ASP:OD2	2:R:199:ARG:NE	2.30	0.47
2:P:175:MET:SD	2:P:229:GLY:N	2.87	0.47
2:P:269:LEU:HD22	2:P:273:LEU:HB2	1.95	0.47
1:G:99:PHE:C	1:G:101:ASP:H	2.22	0.47
1:G:106:GLY:C	1:G:108:HIS:H	2.22	0.47
1:G:114:LYS:O	1:G:142:ASN:ND2	2.27	0.47
1:E:17:ARG:HD2	1:E:53:PHE:CD2	2.49	0.47
1:E:176:HIS:HA	1:E:238:SER:OG	2.14	0.47
2:F:120:ILE:H	2:F:148:SER:HA	1.79	0.47
1:I:76:ASN:HD21	1:I:78:ASP:HB3	1.79	0.47
2:J:64:SER:OG	2:J:75:VAL:N	2.44	0.47
2:J:187:LEU:HG	1:K:180:GLY:HA2	1.97	0.47
1:K:66:ILE:HD11	1:K:71:ILE:HB	1.97	0.47
2:L:273:LEU:HD13	2:L:292:SER:N	2.29	0.47
1:A:127:THR:OG1	1:A:145:SER:O	2.25	0.47
1:C:33:SER:OG	1:C:76:ASN:N	2.48	0.47
1:C:312:ASP:CG	1:C:316:GLY:H	2.18	0.47
2:D:43:HIS:HA	2:D:46:LYS:HB3	1.95	0.47
2:D:180:SER:OG	2:D:181:TYR:N	2.47	0.47
3:O:401:NAD:N7N	3:O:401:NAD:O1N	2.47	0.47
2:P:283:ILE:HG23	2:P:284:ASP:OD1	2.14	0.47
1:G:17:ARG:CZ	1:G:53:PHE:HA	2.44	0.47
1:G:134:GLU:OE1	1:G:134:GLU:N	2.36	0.47
1:G:236:ASN:HD21	1:G:314:GLU:N	2.12	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:0:LYS:NZ	2:H:331:ALA:O	2.42	0.47
2:H:249:SER:OG	2:H:250:LYS:N	2.48	0.47
1:E:18(B):HIS:HB3	1:E:53:PHE:CE2	2.48	0.47
1:E:46:TYR:HA	1:E:52:THR:HA	1.96	0.47
1:E:108:HIS:HA	1:E:111:ALA:HB3	1.95	0.47
2:F:39:LYS:HB2	2:F:43:HIS:CE1	2.50	0.47
2:F:320:SER:O	2:F:324:VAL:HG23	2.13	0.47
1:I:76:ASN:OD1	1:I:77:ARG:N	2.47	0.47
2:J:22:ARG:HG3	2:J:324:VAL:HG11	1.96	0.47
2:J:192:HIS:CE1	2:J:194:ASP:HB3	2.49	0.47
2:J:253:PHE:CE2	2:J:255:GLU:HB3	2.46	0.47
2:J:277:ASP:HB3	2:J:297:SER:HB3	1.96	0.47
1:K:47:ASP:OD1	1:K:50:LEU:N	2.47	0.47
1:K:281:VAL:O	1:K:284:ARG:HB2	2.13	0.47
2:L:131:TYR:HD1	2:L:131:TYR:HA	1.63	0.47
2:L:140:TYR:CE2	2:L:332:ASN:HB2	2.49	0.47
2:L:181:TYR:N	2:L:234:VAL:O	2.48	0.47
2:L:240:SER:CB	2:L:315:ASN:HD21	2.27	0.47
1:A:0:LYS:H2	1:A:25:LEU:C	2.21	0.47
1:A:3:VAL:HB	1:A:27:VAL:HA	1.96	0.47
2:B:97:GLY:O	3:B:401:NAD:H52A	2.14	0.47
2:B:176:THR:HG23	2:B:230:ILE:HG13	1.96	0.47
2:B:281:VAL:HB	2:D:204:ASN:CB	2.39	0.47
1:C:283:PHE:O	1:C:286:SER:HB3	2.14	0.47
2:D:3:VAL:HB	2:D:29:VAL:HA	1.96	0.47
1:Q:175:THR:HB	1:Q:232:VAL:HG21	1.95	0.47
2:R:27:LEU:HD22	2:R:27:LEU:H	1.79	0.47
2:P:35:THR:HA	2:P:77:SER:CB	2.44	0.47
1:G:125:ILE:H	1:G:125:ILE:HD12	1.79	0.47
1:G:171:THR:C	1:G:242:LEU:HD12	2.40	0.47
1:G:230:LEU:HD22	1:G:232:VAL:HG12	1.95	0.47
2:H:326:LEU:HD12	2:H:329:ILE:HB	1.97	0.47
1:E:156:PRO:O	1:E:160:VAL:HG23	2.13	0.47
2:F:129:PRO:HD2	2:F:147:ILE:HA	1.96	0.47
2:F:188:LEU:HA	2:F:200:ALA:HA	1.96	0.47
2:F:315:ASN:N	2:F:316:GLU:OE2	2.45	0.47
1:I:29:VAL:HG11	1:I:87:LEU:HD13	1.96	0.47
1:I:85:ALA:N	1:I:112:GLY:HA3	2.30	0.47
1:I:148:SER:HG	1:I:150:THR:HG1	1.58	0.47
1:I:186:ASP:H	2:L:10:ARG:NH2	2.12	0.47
1:I:287:ASP:O	1:I:320:ARG:NH1	2.42	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:236:ASN:H	1:K:284:ARG:NH2	2.13	0.47
2:L:15:PHE:HE2	2:L:323:VAL:HB	1.80	0.47
1:A:169:LYS:HE2	1:A:245:ASN:ND2	2.30	0.47
1:A:183:ARG:HG2	1:A:187:ALA:H	1.80	0.47
2:B:80:ASN:O	2:B:84:LEU:N	2.47	0.47
2:B:279:PRO:HD2	2:D:195:LEU:HD22	1.97	0.47
1:C:11:ILE:HA	1:C:14:ASN:HB2	1.97	0.47
1:C:40:ALA:HA	1:C:43:LEU:HD12	1.96	0.47
1:C:198:ALA:HB1	1:C:201:LEU:HD21	1.96	0.47
1:Q:165:LEU:O	1:Q:248:LYS:NZ	2.30	0.47
1:Q:178:TYR:N	1:Q:232:VAL:O	2.47	0.47
1:Q:201:LEU:H	1:Q:201:LEU:HG	1.49	0.47
1:Q:236:ASN:H	1:Q:284:ARG:HH22	1.63	0.47
2:R:2:LYS:HE3	2:R:89:MET:HB3	1.96	0.47
2:R:29:VAL:N	2:R:71:LYS:HZ1	2.13	0.47
1:O:17:ARG:HD2	1:O:53:PHE:CD2	2.49	0.47
1:O:109:ILE:HA	1:O:113:ALA:HB3	1.96	0.47
1:G:117:ILE:HA	1:G:144:ILE:HG12	1.95	0.47
1:E:80:LEU:HB2	1:E:81:LYS:NZ	2.30	0.47
2:F:96:GLU:O	2:F:120:ILE:HG23	2.15	0.47
2:F:175:MET:SD	2:F:229:GLY:N	2.87	0.47
2:F:215:ALA:HA	2:F:218:LEU:HD13	1.97	0.47
1:I:18(A):TRP:HA	1:I:20:ARG:HB2	1.95	0.47
1:I:47:ASP:OD1	1:I:50:LEU:N	2.48	0.47
1:I:76:ASN:CG	1:I:78:ASP:H	2.22	0.47
1:I:298:MET:SD	1:I:306:LYS:HD2	2.55	0.47
2:J:8:PHE:HB3	2:J:34:ASP:HB2	1.97	0.47
2:J:215:ALA:HB1	2:J:219:VAL:HG13	1.96	0.47
1:K:3:VAL:HG12	1:K:4:ALA:H	1.79	0.47
1:K:37:VAL:HG13	1:K:41:THR:OG1	2.15	0.47
2:L:42:SER:CB	2:L:66:ILE:HD12	2.39	0.47
2:L:104:ARG:NH2	2:L:129:PRO:HD3	2.29	0.47
2:L:189:ASP:HA	2:L:199:ARG:HA	1.97	0.47
2:L:295:ASP:O	2:L:299:THR:HG23	2.14	0.47
1:A:3:VAL:HA	1:A:89:ILE:HG23	1.96	0.47
1:A:84:TRP:O	1:A:89:ILE:N	2.32	0.47
1:A:115:LYS:HZ1	1:A:139:HIS:CD2	2.33	0.47
1:A:199:ALA:O	1:A:201:LEU:N	2.44	0.47
1:A:201:LEU:H	1:A:201:LEU:HG	1.61	0.47
1:A:203:ILE:HA	1:A:231:ARG:O	2.15	0.47
2:B:14:ASN:ND2	2:B:317:TRP:HE3	2.12	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:42:SER:OG	2:B:43:HIS:N	2.47	0.47
2:B:104:ARG:NH2	2:B:128:ILE:HA	2.28	0.47
2:B:164:LEU:HB3	2:B:170:ILE:HD11	1.96	0.47
2:B:210:THR:HB	2:B:233:ARG:HH12	1.79	0.47
1:C:37:VAL:HG12	1:C:59:ILE:HG23	1.97	0.47
1:C:154:LEU:HG	1:C:158:VAL:HG21	1.97	0.47
1:C:178:TYR:H	1:C:234:THR:H	1.62	0.47
2:D:103:ASP:C	2:D:128:ILE:HD11	2.40	0.47
2:D:180:SER:HB3	2:D:315:ASN:ND2	2.24	0.47
2:D:248:VAL:N	2:D:305:ASP:O	2.34	0.47
1:Q:0:LYS:HG2	1:Q:24:PRO:C	2.40	0.47
1:Q:31:ASN:ND2	1:Q:76:ASN:H	2.11	0.47
1:Q:116:VAL:HB	1:Q:143:ILE:HG23	1.96	0.47
1:Q:149:CYS:HA	1:Q:152:ASN:ND2	2.27	0.47
1:Q:226:ASN:HB2	1:O:300:MET:SD	2.55	0.47
1:Q:230:LEU:O	1:Q:232:VAL:HG13	2.15	0.47
1:Q:306:LYS:HZ3	1:O:228:ILE:N	2.10	0.47
2:R:35:THR:HG21	2:R:79:ARG:NE	2.29	0.47
2:R:197:ARG:HH21	2:R:233:ARG:NH2	2.12	0.47
2:R:209:SER:HA	2:R:231:ALA:N	2.29	0.47
2:R:245:VAL:HA	2:R:308:LYS:HA	1.97	0.47
2:R:255:GLU:OE1	2:R:262:ARG:NH2	2.38	0.47
1:O:10:ARG:HD2	1:O:13:ARG:HE	1.80	0.47
3:O:401:NAD:PN	3:O:401:NAD:H3D	2.55	0.47
2:P:34:ASP:C	2:P:77:SER:HG	2.23	0.47
2:P:81:PRO:HB2	2:P:109:LYS:HE2	1.97	0.47
2:P:120:ILE:H	2:P:148:SER:HA	1.80	0.47
2:P:168:PHE:HB3	2:P:250:LYS:HB3	1.96	0.47
2:P:175:MET:HB3	2:P:244:LEU:HB2	1.96	0.47
2:P:175:MET:HG3	2:P:244:LEU:HD13	1.95	0.47
2:P:185:GLN:HA	2:P:197:ARG:HB3	1.96	0.47
2:P:188:LEU:HA	2:P:200:ALA:HA	1.96	0.47
1:G:14:ASN:ND2	1:G:314:GLU:OE1	2.48	0.47
1:G:171:THR:O	1:G:242:LEU:HD12	2.14	0.47
1:G:190:HIS:HB3	1:G:196:ALA:CA	2.45	0.47
1:G:228:ILE:HG12	1:G:229:ALA:N	2.29	0.47
1:G:242:LEU:O	1:G:307:VAL:HG23	2.14	0.47
1:G:299:VAL:HG13	1:G:305:VAL:HA	1.96	0.47
1:G:306:LYS:NZ	1:E:172:MET:O	2.48	0.47
2:H:131:TYR:N	2:H:148:SER:O	2.33	0.47
2:H:142:HIS:CE1	2:H:334:TRP:CE3	3.00	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:238:ASN:ND2	2:H:239:VAL:H	2.13	0.47
2:H:258:ASN:O	2:H:262:ARG:HG3	2.15	0.47
1:E:84:TRP:HD1	1:E:113:ALA:N	2.13	0.47
1:E:165:LEU:HD22	1:E:255:VAL:HG21	1.96	0.47
1:E:209:GLY:HA2	1:E:212:LYS:HE2	1.95	0.47
2:F:96:GLU:HG2	2:F:98:THR:HG23	1.97	0.47
2:F:142:HIS:CD2	2:F:336:ALA:H	2.25	0.47
2:F:176:THR:HB	2:F:243:ASP:HB2	1.96	0.47
2:F:212:ALA:O	2:F:216:VAL:HB	2.14	0.47
1:I:273:VAL:HG13	1:I:292:ILE:HD12	1.97	0.47
2:J:31:VAL:HA	2:J:74:LYS:HB2	1.97	0.47
1:K:40:ALA:HA	1:K:43:LEU:HD12	1.97	0.47
1:K:195:ARG:HH12	1:E:361:TYR:C	2.22	0.47
1:K:220:GLN:HG2	1:K:221:LEU:HD22	1.96	0.47
2:L:196:ARG:NH1	2:L:207:PRO:HD2	2.30	0.47
2:L:220:LEU:CB	2:L:223:LEU:HB2	2.45	0.47
1:A:121:PRO:O	1:A:122(A):LYS:N	2.44	0.47
1:A:190:HIS:HA	1:G:357:GLU:CA	2.43	0.47
1:A:346:GLU:O	1:A:350:LYS:N	2.39	0.47
2:B:132:VAL:HG22	2:B:149:ASN:HA	1.96	0.47
2:B:244:LEU:HD11	2:B:246:VAL:HG13	1.97	0.47
2:B:244:LEU:N	2:B:309:VAL:HG22	2.30	0.47
1:C:139:HIS:C	1:C:140:VAL:H	2.23	0.47
1:C:169:LYS:CE	1:C:245:ASN:HD21	2.28	0.47
2:D:86:TRP:NE1	2:D:113:ALA:HB3	2.30	0.47
2:D:124:GLY:HA3	2:D:128:ILE:HD13	1.97	0.47
1:Q:1:LEU:CB	1:Q:25:LEU:HB3	2.44	0.47
2:R:220:LEU:HD23	2:R:220:LEU:HA	1.77	0.47
2:R:269:LEU:HB3	2:R:273:LEU:HB2	1.97	0.47
2:R:269:LEU:O	2:R:273:LEU:N	2.41	0.47
1:O:18(B):HIS:HE1	1:O:67:ASP:HB2	1.79	0.47
1:O:203:ILE:HG23	1:O:230:LEU:HB3	1.97	0.47
2:P:107:ALA:HB1	2:P:118:VAL:HG21	1.96	0.47
1:G:60:ILE:HB	1:G:63:THR:O	2.15	0.47
1:G:300:MET:N	1:G:304:MET:O	2.38	0.47
2:H:86:TRP:HB2	2:H:114:GLY:C	2.40	0.47
2:H:152:CYS:HB3	2:H:319:TYR:CG	2.49	0.47
2:H:205:ILE:HG23	2:H:207:PRO:HD3	1.96	0.47
2:H:210:THR:H	2:H:231:ALA:HB2	1.79	0.47
2:H:269:LEU:O	2:H:273:LEU:N	2.40	0.47
1:E:10:ARG:O	1:E:13:ARG:HG3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:179:THR:H	1:E:182:GLN:NE2	2.10	0.47
2:F:50:ILE:HG23	2:F:286:ARG:NH1	2.27	0.47
1:I:3:VAL:C	1:I:89:ILE:HD12	2.40	0.47
1:I:20:ARG:HA	1:I:21:LYS:HZ3	1.80	0.47
1:I:42:HIS:O	1:I:46:TYR:N	2.35	0.47
1:I:48:SER:OG	2:L:189:ASP:OD2	2.29	0.47
1:I:54:LYS:H	1:I:54:LYS:HD2	1.78	0.47
2:J:61:ALA:HA	2:J:62:GLY:HA2	1.54	0.47
2:J:238:ASN:ND2	2:J:282:SER:O	2.47	0.47
2:J:273:LEU:HD12	2:J:292:SER:HB3	1.97	0.47
2:J:283:ILE:N	2:J:286:ARG:HH21	2.12	0.47
1:K:241:ASP:HA	1:K:307:VAL:O	2.15	0.47
2:L:79:ARG:HD3	3:L:401:NAD:H61A	1.80	0.47
1:A:46:TYR:HB2	2:D:199:ARG:NH1	2.29	0.47
1:A:79:PRO:HG2	1:A:107:LYS:HB2	1.96	0.47
2:B:0:LYS:H3	2:B:26:PRO:C	2.23	0.47
2:B:11:ILE:HG12	3:B:401:NAD:O5D	2.15	0.47
2:B:107:ALA:HB1	2:B:118:VAL:HG11	1.97	0.47
2:B:162:LYS:HB2	2:B:220:LEU:HD21	1.96	0.47
2:B:166:GLN:HB2	2:B:167:LYS:HD2	1.96	0.47
2:B:180:SER:OG	2:B:181:TYR:N	2.47	0.47
2:B:182:THR:O	1:C:184:LEU:HD21	2.14	0.47
2:B:281:VAL:N	2:B:284:ASP:OD2	2.42	0.47
2:B:332:ASN:O	2:B:333:LYS:HG2	2.15	0.47
1:C:72:LYS:HG2	1:C:73:VAL:H	1.80	0.47
2:D:9:GLY:O	2:D:13:ARG:HD2	2.14	0.47
2:D:65:ALA:HB2	2:D:74:LYS:CE	2.44	0.47
2:D:223:LEU:HD23	2:D:227:LEU:HG	1.96	0.47
1:Q:78:ASP:O	1:Q:82:LEU:HG	2.15	0.47
1:Q:167:ILE:HG23	1:Q:246:ILE:HA	1.96	0.47
1:Q:169:LYS:N	1:Q:245:ASN:OD1	2.42	0.47
1:Q:241:ASP:HA	1:Q:307:VAL:O	2.15	0.47
2:R:104:ARG:H	2:R:127:ASP:CG	2.23	0.47
1:O:30:VAL:O	1:O:74:VAL:HG23	2.15	0.47
1:O:94:GLU:CD	1:O:97:GLY:H	2.22	0.47
1:O:137:TYR:HD2	1:O:331:LYS:HB3	1.76	0.47
1:O:167:ILE:HA	1:O:246:ILE:HD12	1.97	0.47
1:O:175:THR:HB	1:O:232:VAL:HG21	1.96	0.47
1:O:316:GLY:HA2	1:O:319:GLN:HG2	1.97	0.47
2:P:0:LYS:NZ	2:P:331:ALA:O	2.42	0.47
2:P:4:ALA:HA	2:P:31:VAL:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:12:GLY:O	2:P:16:LEU:N	2.46	0.47
2:P:86:TRP:HD1	2:P:113:ALA:O	1.97	0.47
2:P:185:GLN:OE1	2:P:185:GLN:N	2.41	0.47
1:G:186:ASP:H	2:F:10:ARG:NH2	2.13	0.47
1:G:243:VAL:HG21	1:E:243:VAL:HG11	1.97	0.47
1:G:291:THR:OG1	1:G:310:TRP:O	2.27	0.47
2:H:51:LEU:HD22	2:H:51:LEU:HA	1.78	0.47
2:H:60:THR:O	2:H:60:THR:OG1	2.28	0.47
2:H:142:HIS:HB3	2:H:335:GLN:NE2	2.30	0.47
2:H:213:ALA:HB3	2:H:214:LYS:HZ1	1.80	0.47
2:H:238:ASN:ND2	2:H:286:ARG:HH12	2.13	0.47
2:H:241:VAL:HG13	2:H:311:ALA:C	2.40	0.47
1:E:5:ILE:HB	1:E:30:VAL:HG13	1.97	0.47
1:E:8:PHE:CZ	1:E:44:LEU:HB2	2.50	0.47
1:E:15:PHE:CA	1:E:318:SER:HB2	2.45	0.47
1:E:191:ARG:HB2	1:E:191:ARG:CZ	2.45	0.47
1:E:193:LEU:H	1:E:193:LEU:HG	1.37	0.47
1:E:262:ALA:C	1:E:265:GLY:H	2.23	0.47
1:E:298:MET:O	1:E:306:LYS:N	2.48	0.47
2:F:35:THR:HA	2:F:77:SER:HB3	1.96	0.47
2:F:38:VAL:CB	2:F:63:ASP:O	2.63	0.47
2:F:182:THR:H	2:F:185:GLN:CD	2.22	0.47
1:I:255:VAL:HG12	1:I:259:PHE:CE2	2.50	0.47
1:I:272:ASP:HB2	1:I:288:PHE:CD1	2.50	0.47
2:J:104:ARG:NH2	2:J:128:ILE:HA	2.29	0.47
2:J:244:LEU:N	2:J:309:VAL:HG22	2.29	0.47
2:J:245:VAL:HG11	2:J:306:MET:HE2	1.97	0.47
2:J:267:ASN:OD1	2:J:268:GLU:N	2.48	0.47
1:K:31:ASN:HD22	3:K:401:NAD:H2A	1.80	0.47
2:L:41:ALA:HA	2:L:44:LEU:HD12	1.96	0.47
1:A:29:VAL:HB	1:A:72:LYS:HB2	1.97	0.47
1:A:80:LEU:HD23	1:A:110:GLN:HB3	1.97	0.47
1:A:158:VAL:HG22	1:A:161:LEU:HD11	1.97	0.47
2:B:119:LEU:HA	2:B:147:ILE:O	2.15	0.47
1:C:92:VAL:O	1:C:117:ILE:N	2.44	0.47
2:D:196:ARG:NH1	2:D:207:PRO:HD2	2.30	0.47
2:D:216:VAL:HG22	2:D:223:LEU:O	2.14	0.47
1:O:45:LYS:NZ	1:O:53:PHE:O	2.26	0.47
1:O:153:CYS:O	1:O:156:PRO:HD2	2.15	0.47
1:O:350:LYS:N	1:O:358:CYS:SG	2.88	0.47
2:P:211:GLY:HA2	2:P:214:LYS:HD2	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:238:ASN:ND2	2:P:239:VAL:H	2.13	0.47
1:G:278:LEU:H	1:E:194:ARG:NH2	2.13	0.47
2:H:102:VAL:HG21	2:H:125:LYS:HD2	1.96	0.47
2:H:123:PRO:HG3	2:H:150:ALA:HA	1.96	0.47
2:H:131:TYR:CD2	2:H:147:ILE:HG21	2.50	0.47
1:E:252:ALA:O	1:E:255:VAL:N	2.48	0.47
2:F:85:PRO:O	2:F:89:MET:HE1	2.15	0.47
2:F:196:ARG:HB2	2:F:206:VAL:HG13	1.95	0.47
1:I:164:GLU:OE1	1:I:258:ALA:HB1	2.15	0.46
1:I:272:ASP:O	1:I:290:SER:OG	2.33	0.46
2:J:1:LEU:HB2	2:J:26:PRO:O	2.16	0.46
2:J:176:THR:HA	2:J:230:ILE:O	2.15	0.46
2:J:208:THR:O	2:J:230:ILE:HB	2.15	0.46
2:J:215:ALA:HA	2:J:218:LEU:HD13	1.98	0.46
2:J:281:VAL:HA	2:J:312:TRP:CH2	2.50	0.46
1:K:139:HIS:C	1:K:140:VAL:H	2.23	0.46
1:K:193:LEU:O	1:K:197:ARG:HG2	2.15	0.46
2:L:184:ASP:CG	2:L:185:GLN:HE21	2.22	0.46
2:L:206:VAL:O	2:L:208:THR:HG22	2.15	0.46
2:L:224:LYS:H	2:L:226:LYS:NZ	2.12	0.46
2:L:239:VAL:HA	2:L:314:ASP:HA	1.97	0.46
1:A:348:PHE:O	1:A:352:ASN:N	2.29	0.46
2:B:31:VAL:HG21	2:B:89:MET:HG2	1.96	0.46
2:B:32:ILE:HG22	2:B:33:ASN:H	1.80	0.46
2:B:257:VAL:O	2:B:261:PHE:N	2.23	0.46
1:C:115:LYS:HA	1:C:142:ASN:O	2.15	0.46
1:C:172:MET:SD	1:C:174:THR:N	2.88	0.46
2:D:175:MET:HA	2:D:244:LEU:HA	1.97	0.46
2:D:179:HIS:N	2:D:232:LEU:O	2.48	0.46
1:Q:29:VAL:HB	1:Q:72:LYS:HB3	1.97	0.46
1:Q:91:ILE:HA	1:Q:115:LYS:O	2.15	0.46
1:Q:142:ASN:O	1:Q:144:ILE:HD13	2.15	0.46
1:Q:194:ARG:HD3	1:O:277:PRO:HB2	1.96	0.46
2:R:78:ASP:OD1	2:R:79:ARG:N	2.48	0.46
1:O:171:THR:HB	1:O:226:ASN:HB2	1.97	0.46
1:O:218:LEU:HA	1:O:220:GLN:NE2	2.30	0.46
1:O:232:VAL:HG23	1:O:234:THR:HG22	1.97	0.46
2:H:46:LYS:HE2	2:H:57:ASP:HA	1.96	0.46
1:E:4:ALA:HB2	1:E:89:ILE:HG13	1.96	0.46
1:E:218:LEU:HA	1:E:220:GLN:NE2	2.30	0.46
1:E:290:SER:OG	1:E:291:THR:N	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:58:VAL:HA	2:F:68:VAL:HA	1.97	0.46
2:F:208:THR:O	2:F:230:ILE:HB	2.14	0.46
2:F:269:LEU:HD22	2:F:273:LEU:HB2	1.97	0.46
1:I:176:HIS:HA	1:I:238:SER:OG	2.16	0.46
2:J:182:THR:O	2:J:185:GLN:HB2	2.15	0.46
2:J:281:VAL:O	2:J:284:ASP:N	2.39	0.46
1:K:17:ARG:HH22	1:K:47:ASP:HB3	1.80	0.46
1:K:31:ASN:ND2	1:K:76:ASN:H	2.13	0.46
1:K:126:PRO:HG2	1:K:141:ALA:HA	1.96	0.46
1:K:244:VAL:O	1:K:304:MET:HA	2.15	0.46
2:L:175:MET:O	2:L:229:GLY:HA3	2.16	0.46
2:L:299:THR:HG22	2:L:309:VAL:HA	1.96	0.46
2:L:314:ASP:CG	2:L:317:TRP:H	2.23	0.46
1:A:62:GLU:O	1:A:73:VAL:N	2.48	0.46
1:A:82:LEU:HB2	1:A:84:TRP:CZ2	2.50	0.46
1:A:169:LYS:HZ1	1:C:301:GLY:HA3	1.78	0.46
2:B:1:LEU:O	2:B:28:ASP:N	2.48	0.46
2:B:282:SER:H	2:D:204:ASN:HB3	1.80	0.46
1:C:273:VAL:HG22	1:C:292:ILE:HD11	1.95	0.46
2:D:300:MET:HB3	2:D:308:LYS:HB3	1.97	0.46
1:Q:81:LYS:HE3	1:Q:81:LYS:HB3	1.66	0.46
1:Q:85:ALA:CA	1:Q:112:GLY:HA3	2.45	0.46
1:Q:236:ASN:HD21	1:Q:314:GLU:N	2.12	0.46
2:R:96:GLU:HG3	2:R:101:PHE:HB2	1.97	0.46
2:R:159:PRO:HA	2:R:162:LYS:HE3	1.97	0.46
2:R:258:ASN:O	2:R:262:ARG:HG3	2.15	0.46
1:O:258:ALA:O	1:O:261:LYS:HB3	2.15	0.46
1:O:310:TRP:N	1:O:310:TRP:CD1	2.83	0.46
2:P:133:VAL:HA	2:P:137:GLU:HB3	1.97	0.46
2:P:335:GLN:OE1	2:P:336:ALA:N	2.47	0.46
1:G:151:THR:O	1:G:154:LEU:N	2.49	0.46
2:H:87:GLY:CA	2:H:114:GLY:HA3	2.44	0.46
2:H:173:GLY:O	2:H:228:ASN:N	2.49	0.46
2:H:279:PRO:HG2	2:F:195:LEU:HD22	1.97	0.46
1:E:45:LYS:HZ2	1:E:53:PHE:C	2.18	0.46
1:E:157:PHE:HA	1:E:160:VAL:HB	1.97	0.46
1:I:15:PHE:HE1	1:I:322:VAL:HG22	1.80	0.46
1:I:219:PRO:HB3	1:Q:123(A):SER:OG	2.14	0.46
2:J:32:ILE:HG12	2:J:74:LYS:O	2.16	0.46
2:J:39:LYS:NZ	2:J:40:GLN:HG3	2.30	0.46
2:J:86:TRP:NE1	2:J:113:ALA:HB3	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:161:VAL:HA	2:J:164:LEU:HB2	1.97	0.46
2:J:170:ILE:HG12	2:J:246:VAL:HG12	1.98	0.46
2:J:180:SER:OG	2:J:181:TYR:N	2.48	0.46
2:J:187:LEU:HA	1:K:184:LEU:HD13	1.96	0.46
1:K:296:LEU:HA	1:K:298:MET:HE3	1.97	0.46
2:L:121:THR:HA	2:L:149:ASN:HB3	1.97	0.46
2:L:144:ASP:N	2:L:144:ASP:OD1	2.48	0.46
2:L:300:MET:HB3	2:L:308:LYS:HB3	1.96	0.46
2:B:11:ILE:HA	2:B:14:ASN:HB3	1.97	0.46
2:B:45:LEU:O	2:B:54:PHE:HB2	2.16	0.46
2:B:156:CYS:SG	2:B:157:LEU:N	2.88	0.46
2:B:283:ILE:C	2:B:285:PHE:H	2.22	0.46
1:C:57:VAL:HG13	1:C:66:ILE:HA	1.98	0.46
1:C:360:LEU:O	1:O:195:ARG:NH2	2.48	0.46
2:D:231:ALA:O	2:D:232:LEU:HD23	2.15	0.46
1:Q:10:ARG:O	1:Q:14:ASN:ND2	2.31	0.46
1:O:324:LEU:O	1:O:328:VAL:HG23	2.16	0.46
1:G:39:SER:OG	1:G:40:ALA:N	2.49	0.46
1:G:50:LEU:HD22	1:G:285:CYS:SG	2.55	0.46
1:E:178:TYR:CE1	1:E:235:PRO:HA	2.50	0.46
1:E:293:ASP:O	1:E:308:VAL:HB	2.15	0.46
2:F:2:LYS:HG3	2:F:91:ILE:HA	1.98	0.46
2:F:167:LYS:HD2	2:F:167:LYS:N	2.29	0.46
2:F:239:VAL:HG13	2:F:313:TYR:C	2.40	0.46
2:F:273:LEU:HD13	2:F:291:SER:HB2	1.97	0.46
1:I:9:GLY:O	1:I:12:GLY:N	2.48	0.46
1:I:40:ALA:HA	1:I:43:LEU:HB2	1.97	0.46
1:I:179:THR:O	1:I:182:GLN:NE2	2.48	0.46
2:J:9:GLY:HA2	3:J:401:NAD:H4B	1.97	0.46
2:J:17:ARG:NH1	2:J:52:GLY:O	2.45	0.46
2:J:168:PHE:HA	2:J:250:LYS:HE2	1.97	0.46
2:J:173:GLY:O	2:J:228:ASN:N	2.34	0.46
2:J:179:HIS:CE1	2:J:233:ARG:HD3	2.49	0.46
1:K:151:THR:O	1:K:154:LEU:N	2.47	0.46
1:K:273:VAL:HA	1:K:292:ILE:HG13	1.96	0.46
2:L:22:ARG:HE	2:L:321:GLN:NE2	2.13	0.46
2:L:32:ILE:O	2:L:75:VAL:HA	2.15	0.46
2:L:168:PHE:O	2:L:249:SER:OG	2.33	0.46
2:L:180:SER:H	2:L:315:ASN:ND2	2.13	0.46
2:L:216:VAL:HG22	2:L:223:LEU:O	2.15	0.46
1:A:59:ILE:H	1:A:59:ILE:HD12	1.79	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:118:ILE:O	1:A:146:ASN:N	2.48	0.46
1:A:164:GLU:OE1	1:A:258:ALA:HB1	2.15	0.46
1:A:240:VAL:H	1:A:311:TYR:HE1	1.62	0.46
1:A:292:ILE:HG12	1:A:309:ALA:HB1	1.96	0.46
2:B:4:ALA:O	2:B:94:VAL:HA	2.15	0.46
2:B:118:VAL:HB	2:B:146:ILE:HG12	1.97	0.46
1:C:5:ILE:HB	1:C:30:VAL:HG22	1.97	0.46
1:C:108:HIS:ND1	1:C:108:HIS:N	2.63	0.46
1:C:278:LEU:HB3	1:C:282:ASP:OD2	2.15	0.46
1:Q:206:THR:O	1:Q:229:ALA:N	2.42	0.46
2:R:60:THR:CB	2:R:66:ILE:HA	2.45	0.46
2:R:186:ARG:HH22	2:R:193:ARG:HH22	1.64	0.46
1:O:292:ILE:HG23	1:O:309:ALA:HB2	1.97	0.46
3:O:401:NAD:H2D	3:O:401:NAD:H2N	1.69	0.46
2:P:294:ILE:HA	2:P:311:ALA:HB2	1.98	0.46
1:G:74:VAL:HG11	1:G:82:LEU:HD22	1.98	0.46
2:H:5:ILE:HD11	2:H:95:ILE:HG12	1.96	0.46
2:H:93:LEU:HD21	2:H:95:ILE:HD11	1.98	0.46
1:E:203:ILE:HA	1:E:231:ARG:O	2.16	0.46
1:E:258:ALA:O	1:E:261:LYS:HB3	2.15	0.46
2:F:20:HIS:O	2:F:23:LYS:NZ	2.28	0.46
2:F:152:CYS:HA	2:F:155:ASN:HD22	1.80	0.46
2:F:172:LYS:O	2:F:247:GLN:N	2.44	0.46
2:F:224:LYS:HG3	2:F:226:LYS:HZ2	1.81	0.46
2:F:314:ASP:OD2	2:F:317:TRP:N	2.38	0.46
1:I:4:ALA:HB2	1:I:89:ILE:HG13	1.96	0.46
1:I:154:LEU:HD12	1:I:157:PHE:CE2	2.51	0.46
1:I:161:LEU:HB2	1:I:167:ILE:HG12	1.97	0.46
1:I:343:ASP:HA	2:P:37:GLY:HA2	1.97	0.46
2:J:32:ILE:HG22	2:J:33:ASN:H	1.79	0.46
2:J:184:ASP:O	2:J:197:ARG:NH1	2.43	0.46
1:K:252:ALA:HB2	1:K:298:MET:HA	1.97	0.46
2:L:96:GLU:OE2	2:L:98:THR:OG1	2.20	0.46
1:A:94:GLU:O	1:A:119:THR:OG1	2.30	0.46
1:A:150:THR:O	1:A:154:LEU:N	2.41	0.46
1:A:181:ASP:HB3	1:G:362:GLU:O	2.14	0.46
2:B:253:PHE:CE2	2:B:255:GLU:HB3	2.45	0.46
1:C:173:THR:HG23	1:C:228:ILE:O	2.15	0.46
1:C:264:ALA:HA	1:C:268:LYS:HD3	1.98	0.46
1:Q:5:ILE:HG12	1:Q:93:ILE:HG13	1.96	0.46
1:Q:6:ASN:HB3	1:Q:93:ILE:O	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:40:GLN:O	2:R:44:LEU:N	2.26	0.46
2:R:180:SER:HG	2:R:236:THR:C	2.15	0.46
2:R:242:VAL:HG13	2:R:311:ALA:O	2.16	0.46
1:O:20:ARG:HH21	1:O:319:GLN:HB3	1.81	0.46
1:O:204:VAL:O	1:O:230:LEU:HA	2.14	0.46
1:O:294:SER:HA	1:O:297:THR:HB	1.98	0.46
2:P:50:ILE:HG22	2:P:51:LEU:HD23	1.96	0.46
2:P:152:CYS:HB3	2:P:319:TYR:CD2	2.50	0.46
2:P:252:THR:N	2:P:304:ASP:HB3	2.25	0.46
1:G:84:TRP:CE3	1:G:89:ILE:HG13	2.50	0.46
2:H:210:THR:HB	2:H:233:ARG:HH12	1.79	0.46
1:E:169:LYS:HE2	1:E:245:ASN:ND2	2.30	0.46
1:E:256:ASN:HA	1:E:259:PHE:CD2	2.49	0.46
2:F:172:LYS:H	2:F:247:GLN:HB3	1.81	0.46
1:I:74:VAL:HG21	1:I:84:TRP:CH2	2.51	0.46
2:J:54:PHE:CE2	2:J:56:ALA:HB3	2.51	0.46
2:J:168:PHE:CZ	2:J:257:VAL:HG23	2.51	0.46
1:K:15:PHE:O	1:K:18(A):TRP:N	2.33	0.46
1:K:20:ARG:NH1	1:K:21:LYS:H	2.13	0.46
1:K:103:PRO:HG2	1:E:109:ILE:HG22	1.97	0.46
1:K:137:TYR:OH	1:K:328:VAL:O	2.34	0.46
1:K:150:THR:O	1:K:154:LEU:HB2	2.16	0.46
1:K:293:ASP:HB3	1:K:308:VAL:HB	1.96	0.46
2:L:42:SER:CB	2:L:66:ILE:HD13	2.44	0.46
2:L:167:LYS:HA	2:L:167:LYS:HD3	1.71	0.46
1:A:255:VAL:HG12	1:A:259:PHE:CE2	2.51	0.46
2:B:208:THR:O	2:B:230:ILE:HB	2.16	0.46
1:C:2:LYS:HB3	1:C:89:ILE:HD13	1.97	0.46
1:C:177:SER:HB2	1:C:236:ASN:HA	1.98	0.46
1:C:252:ALA:HB2	1:C:298:MET:HA	1.98	0.46
1:C:281:VAL:O	1:C:284:ARG:HB2	2.16	0.46
1:Q:24:PRO:HD3	1:Q:326:ASP:OD2	2.15	0.46
1:Q:133:ASN:N	1:Q:134:GLU:OE1	2.49	0.46
2:R:67:SER:CA	2:R:72:VAL:HG22	2.32	0.46
2:R:241:VAL:HG13	2:R:311:ALA:C	2.41	0.46
2:R:255:GLU:HA	2:R:258:ASN:CG	2.41	0.46
1:O:10:ARG:O	1:O:13:ARG:HG3	2.15	0.46
2:P:43:HIS:HB3	2:P:47:TYR:HD2	1.81	0.46
2:P:91:ILE:HG21	2:P:94:VAL:HG23	1.97	0.46
2:P:108:GLY:O	2:P:112:GLN:N	2.49	0.46
2:P:258:ASN:O	2:P:262:ARG:HD2	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:18(B):HIS:HB3	1:G:53:PHE:CZ	2.49	0.46
2:H:154:THR:HG21	2:H:215:ALA:HB3	1.97	0.46
1:E:171:THR:HB	1:E:226:ASN:HB2	1.97	0.46
2:F:168:PHE:HB3	2:F:250:LYS:HB3	1.97	0.46
2:F:274:SER:C	2:F:293:THR:HA	2.41	0.46
1:I:74:VAL:HG11	1:I:82:LEU:HB3	1.98	0.46
1:I:236:ASN:OD1	1:I:314:GLU:N	2.49	0.46
1:I:236:ASN:HD21	1:I:314:GLU:H	1.62	0.46
2:J:63:ASP:HB3	2:J:64:SER:H	1.62	0.46
2:J:81:PRO:HA	2:J:84:LEU:HB2	1.97	0.46
2:J:162:LYS:HB2	2:J:220:LEU:HD21	1.98	0.46
2:J:166:GLN:HB2	2:J:167:LYS:HD2	1.97	0.46
1:K:134:GLU:CD	1:K:134:GLU:N	2.74	0.46
1:K:256:ASN:C	1:K:260:ARG:HE	2.23	0.46
1:K:316:GLY:HA2	1:K:320:ARG:NH2	2.31	0.46
2:L:40:GLN:HA	2:L:43:HIS:ND1	2.31	0.46
1:A:191:ARG:HH21	1:G:358:CYS:C	2.22	0.46
1:A:231:ARG:HH11	1:A:231:ARG:HG3	1.80	0.46
2:B:14:ASN:O	2:B:18:CYS:N	2.32	0.46
2:B:17:ARG:HG3	2:B:54:PHE:CE1	2.51	0.46
2:B:272:ILE:O	2:B:322:ARG:NH1	2.49	0.46
1:C:20:ARG:HH11	1:C:20:ARG:CA	2.27	0.46
1:C:283:PHE:CE2	1:C:310:TRP:CD2	3.03	0.46
1:C:361:TYR:O	1:O:181:ASP:HB2	2.15	0.46
1:Q:223:GLY:O	1:O:300:MET:HE1	2.15	0.46
2:R:39:LYS:HG2	2:R:40:GLN:N	2.29	0.46
2:R:196:ARG:HB3	2:R:206:VAL:HG22	1.98	0.46
1:O:175:THR:HG22	1:O:232:VAL:HG11	1.97	0.46
1:O:241:ASP:HA	1:O:307:VAL:O	2.16	0.46
2:P:22:ARG:NH2	2:P:321:GLN:O	2.47	0.46
1:G:15:PHE:CZ	1:G:322:VAL:HG13	2.43	0.46
1:G:42:HIS:CD2	2:F:195:LEU:HD23	2.50	0.46
1:G:81:LYS:HB3	1:G:81:LYS:HE3	1.64	0.46
2:H:10:ARG:HH11	2:H:13:ARG:HH11	1.63	0.46
2:H:140:TYR:CE1	2:H:330:VAL:HG22	2.50	0.46
1:E:243:VAL:HG22	1:E:304:MET:HB3	1.98	0.46
2:F:186:ARG:HG3	2:F:190:ALA:O	2.16	0.46
2:F:269:LEU:O	2:F:273:LEU:N	2.39	0.46
1:I:91:ILE:HD11	1:I:332:TRP:CZ3	2.51	0.46
1:I:278:LEU:HB3	1:I:282:ASP:HB2	1.97	0.46
1:K:190:HIS:HB3	1:K:196:ALA:HA	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:152:CYS:SG	2:L:153:THR:N	2.89	0.46
2:L:241:VAL:HG13	2:L:311:ALA:C	2.41	0.46
1:A:3:VAL:HG23	1:A:26:ASP:H	1.79	0.46
1:A:194:ARG:HG3	1:A:204:VAL:HG13	1.98	0.46
2:B:105:ASP:CG	2:B:109:LYS:HZ3	2.24	0.46
2:B:295:ASP:OD2	2:B:297:SER:OG	2.15	0.46
1:C:253:GLU:O	1:C:260:ARG:NH2	2.48	0.46
1:Q:18(A):TRP:O	1:Q:20:ARG:HB2	2.16	0.46
1:Q:312:ASP:CG	1:Q:313:ASN:N	2.72	0.46
2:R:142:HIS:HB3	2:R:335:GLN:NE2	2.30	0.46
1:O:37:VAL:HG23	1:O:73:VAL:HG11	1.98	0.46
1:O:116:VAL:HB	1:O:143:ILE:HG12	1.97	0.46
1:O:238:SER:O	1:O:311:TYR:N	2.49	0.46
1:O:264:ALA:O	1:O:268:LYS:NZ	2.31	0.46
2:P:54:PHE:C	2:P:56:ALA:N	2.70	0.46
2:P:85:PRO:O	2:P:89:MET:HE1	2.16	0.46
1:G:176:HIS:O	1:G:231:ARG:NE	2.37	0.46
1:G:241:ASP:OD1	1:G:308:VAL:HG22	2.15	0.46
2:H:152:CYS:HB3	2:H:319:TYR:CD2	2.51	0.46
1:E:12:GLY:O	1:E:16:LEU:HB2	2.16	0.46
2:F:103:ASP:OD2	2:F:105:ASP:HB3	2.16	0.46
1:I:84:TRP:HB2	1:I:112:GLY:C	2.41	0.46
1:I:150:THR:O	1:I:154:LEU:N	2.47	0.46
1:I:203:ILE:HG22	1:I:230:LEU:HD22	1.98	0.46
1:I:227:GLY:HA2	1:K:306:LYS:NZ	2.30	0.46
2:J:226:LYS:NZ	2:J:227:LEU:HD23	2.31	0.46
1:K:342:GLY:O	1:K:346:GLU:N	2.32	0.46
2:L:103:ASP:C	2:L:128:ILE:HD11	2.41	0.46
2:L:181:TYR:CD1	2:L:181:TYR:C	2.93	0.46
1:A:41:THR:HG23	1:A:57:VAL:HG11	1.98	0.46
1:A:77:ARG:HA	3:A:401:NAD:N1A	2.31	0.46
1:A:108:HIS:HA	1:A:111:ALA:HB3	1.97	0.46
1:A:181:ASP:OD1	1:A:181:ASP:N	2.49	0.46
1:A:182:GLN:HG2	1:A:231:ARG:HD2	1.98	0.46
1:A:236:ASN:OD1	1:A:313:ASN:HB2	2.15	0.46
1:A:314:GLU:O	1:A:317:TYR:HB3	2.16	0.46
2:B:168:PHE:HA	2:B:250:LYS:HE2	1.98	0.46
2:B:171:ILE:O	2:B:226:LYS:HD2	2.15	0.46
1:C:158:VAL:HG22	1:C:242:LEU:HD22	1.98	0.46
1:C:171:THR:O	1:C:243:VAL:N	2.34	0.46
1:C:178:TYR:CE1	1:C:235:PRO:HA	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:35:THR:HB	2:D:79:ARG:NH1	2.30	0.46
1:Q:18(B):HIS:NE2	1:Q:67:ASP:OD2	2.48	0.46
2:R:15:PHE:CE2	2:R:324:VAL:HA	2.50	0.46
2:R:322:ARG:HA	2:R:325:ASP:OD2	2.16	0.46
1:O:182:GLN:NE2	1:O:231:ARG:HG3	2.31	0.46
2:P:11:ILE:HG12	3:P:401:NAD:PN	2.55	0.46
2:P:43:HIS:O	2:P:47:TYR:N	2.43	0.46
2:P:96:GLU:OE2	2:P:99:GLY:N	2.49	0.46
2:P:127:ASP:OD1	2:P:127:ASP:N	2.49	0.46
1:G:162:ASP:CA	1:G:166:GLY:H	2.29	0.46
1:G:220:GLN:OE1	1:G:220:GLN:N	2.47	0.46
1:G:300:MET:HA	1:E:226:ASN:OD1	2.15	0.46
2:H:131:TYR:CZ	2:H:140:TYR:HA	2.51	0.46
2:H:192:HIS:CE1	2:H:197:ARG:HD2	2.51	0.46
1:E:1:LEU:HB3	1:E:90:ASP:OD2	2.15	0.46
1:E:134:GLU:N	1:E:134:GLU:CD	2.74	0.46
1:E:139:HIS:CE1	1:E:332:TRP:HD1	2.28	0.46
2:F:1:LEU:HD12	2:F:1:LEU:HA	1.78	0.46
2:F:101:PHE:CG	2:F:106:GLY:HA3	2.51	0.46
2:F:152:CYS:HB2	2:F:315:ASN:HA	1.97	0.46
2:F:175:MET:HG3	2:F:244:LEU:HD13	1.98	0.46
2:J:185:GLN:HG3	2:J:197:ARG:HG2	1.98	0.46
1:K:91:ILE:HG12	1:K:328:VAL:HG11	1.98	0.46
2:L:205:ILE:HD13	2:L:206:VAL:C	2.41	0.46
1:A:15:PHE:HE1	1:A:322:VAL:HG22	1.81	0.46
1:A:194:ARG:NH1	1:A:204:VAL:HA	2.31	0.46
2:B:3:VAL:HG13	2:B:93:LEU:O	2.16	0.46
2:B:167:LYS:O	2:B:250:LYS:NZ	2.40	0.46
2:B:215:ALA:HB1	2:B:219:VAL:HG13	1.97	0.46
1:C:3:VAL:O	1:C:27:VAL:HA	2.16	0.46
1:C:168:VAL:HB	1:C:245:ASN:OD1	2.15	0.46
1:C:175:THR:OG1	1:C:176:HIS:N	2.47	0.46
1:C:231:ARG:HA	1:C:231:ARG:HD2	1.79	0.46
1:C:241:ASP:OD1	1:C:307:VAL:N	2.46	0.46
2:D:179:HIS:O	2:D:233:ARG:HA	2.15	0.46
1:Q:167:ILE:HA	1:Q:246:ILE:HA	1.97	0.46
1:Q:240:VAL:HG23	1:Q:241:ASP:C	2.41	0.46
1:Q:287:ASP:HB3	1:Q:319:GLN:HG3	1.96	0.46
2:R:192:HIS:CE1	2:R:197:ARG:HD2	2.51	0.46
1:O:192:ASP:CG	1:O:195:ARG:H	2.23	0.46
2:P:34:ASP:HA	3:P:401:NAD:H2A	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:41:ALA:HA	2:P:44:LEU:HB2	1.98	0.46
2:P:154:THR:OG1	2:P:212:ALA:N	2.49	0.46
2:P:159:PRO:O	2:P:163:VAL:HG23	2.16	0.46
2:P:211:GLY:HA2	2:P:214:LYS:HB2	1.97	0.46
1:G:3:VAL:CG2	1:G:25:LEU:HB2	2.46	0.46
1:G:37:VAL:HG13	1:G:41:THR:HG23	1.98	0.46
1:G:284:ARG:C	1:G:286:SER:H	2.24	0.46
2:H:177:THR:OG1	2:H:178:THR:N	2.48	0.46
2:H:222:ASN:O	2:H:226:LYS:NZ	2.49	0.46
2:H:255:GLU:HA	2:H:258:ASN:CG	2.41	0.46
1:E:90:ASP:HA	1:E:114:LYS:HG2	1.98	0.46
1:E:166:GLY:HA3	1:E:247:GLU:HB3	1.98	0.46
2:F:17:ARG:NH2	2:F:51:LEU:O	2.49	0.46
2:F:18:CYS:O	2:F:22:ARG:HG2	2.16	0.46
2:F:258:ASN:O	2:F:262:ARG:HD2	2.15	0.46
1:I:41:THR:HG23	1:I:57:VAL:HG11	1.98	0.45
2:J:59:LYS:HZ2	2:J:61:ALA:HB2	1.81	0.45
2:J:157:LEU:HA	2:J:160:PHE:CE1	2.50	0.45
2:J:199:ARG:HH22	1:K:13:ARG:HH22	1.64	0.45
1:K:124:ASP:HB2	1:E:102:GLY:C	2.40	0.45
1:K:134:GLU:HG2	1:K:135:LYS:H	1.81	0.45
1:K:150:THR:HG1	1:K:151:THR:H	1.63	0.45
2:L:231:ALA:O	2:L:232:LEU:HD23	2.16	0.45
1:A:84:TRP:HB2	1:A:112:GLY:C	2.41	0.45
1:A:154:LEU:HD12	1:A:157:PHE:CE2	2.52	0.45
1:A:242:LEU:HD11	1:A:244:VAL:HG13	1.97	0.45
1:A:248:LYS:HG2	1:A:248(A):VAL:HG12	1.97	0.45
1:A:272:ASP:HB2	1:A:288:PHE:CD1	2.50	0.45
1:A:283:PHE:CE2	1:A:310:TRP:CG	3.04	0.45
2:B:1:LEU:HG	2:B:92:ASP:OD2	2.17	0.45
2:B:32:ILE:HG12	2:B:74:LYS:O	2.16	0.45
2:B:226:LYS:NZ	2:B:227:LEU:HD23	2.30	0.45
2:B:279:PRO:HB2	2:D:196:ARG:HG3	1.98	0.45
1:C:96:THR:HA	3:C:401:NAD:O4B	2.17	0.45
1:C:137:TYR:HE2	1:C:327:LEU:HG	1.80	0.45
1:C:236:ASN:H	1:C:284:ARG:NH2	2.13	0.45
2:D:118:VAL:HB	2:D:146:ILE:HG12	1.97	0.45
2:D:239:VAL:HG13	2:D:313:TYR:O	2.16	0.45
2:D:251:LYS:HZ2	2:D:305:ASP:HB3	1.81	0.45
1:Q:42:HIS:HA	1:Q:46:TYR:CD2	2.51	0.45
1:Q:172:MET:HB3	1:Q:242:LEU:HA	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:152:CYS:HB3	2:R:319:TYR:CG	2.52	0.45
2:R:187:LEU:HD23	1:O:180:GLY:HA2	1.98	0.45
2:P:273:LEU:HD13	2:P:291:SER:HB2	1.98	0.45
1:G:11:ILE:HA	1:G:14:ASN:HD22	1.81	0.45
1:G:149:CYS:O	1:G:153:CYS:N	2.27	0.45
1:G:190:HIS:HB3	1:G:196:ALA:HA	1.97	0.45
1:G:305:VAL:HG12	1:G:307:VAL:HG22	1.98	0.45
1:E:270:VAL:O	1:E:289:SER:N	2.48	0.45
1:E:322:VAL:HG12	1:E:326:ASP:OD1	2.16	0.45
2:F:39:LYS:C	2:F:42:SER:HG	2.16	0.45
2:F:116:LYS:O	2:F:145:THR:OG1	2.17	0.45
2:F:181:TYR:CD2	2:F:235:PRO:HA	2.48	0.45
2:F:211:GLY:HA2	2:F:214:LYS:HB2	1.98	0.45
1:I:5:ILE:HG21	1:I:8:PHE:HA	1.98	0.45
2:J:192:HIS:CG	2:J:193:ARG:N	2.83	0.45
1:K:212:LYS:HE3	1:K:223:GLY:H	1.81	0.45
2:L:1:LEU:HD21	2:L:334:TRP:CG	2.51	0.45
2:L:20:HIS:CE1	2:L:69:ASP:CG	2.94	0.45
2:L:32:ILE:HD13	2:L:33:ASN:N	2.31	0.45
2:L:142:HIS:H	2:L:333:LYS:CE	2.27	0.45
2:L:224:LYS:O	2:L:226:LYS:HD3	2.16	0.45
1:A:4:ALA:HB3	1:A:92:VAL:HG13	1.98	0.45
1:A:178:TYR:N	1:A:232:VAL:O	2.49	0.45
1:A:181:ASP:CG	1:G:362:GLU:HA	2.41	0.45
1:A:313:ASN:N	1:A:313:ASN:OD1	2.50	0.45
2:B:22:ARG:HE	2:B:321:GLN:NE2	2.13	0.45
2:B:215:ALA:HA	2:B:218:LEU:HD13	1.98	0.45
1:C:1:LEU:O	1:C:26:ASP:N	2.48	0.45
1:C:243:VAL:HA	1:C:305:VAL:O	2.16	0.45
1:C:272:ASP:HB3	1:C:291:THR:HA	1.99	0.45
2:D:104:ARG:HH11	2:D:146:ILE:HB	1.82	0.45
1:Q:42:HIS:HD2	2:P:195:LEU:HB3	1.76	0.45
1:Q:58:LYS:HA	1:Q:58:LYS:NZ	2.32	0.45
1:Q:162:ASP:CA	1:Q:166:GLY:H	2.29	0.45
1:Q:221:LEU:HA	1:Q:224:LYS:NZ	2.31	0.45
2:R:173:GLY:O	2:R:228:ASN:N	2.49	0.45
2:R:210:THR:H	2:R:231:ALA:HB2	1.80	0.45
2:R:255:GLU:HA	2:R:258:ASN:OD1	2.16	0.45
1:O:246:ILE:N	1:O:303:ASP:O	2.49	0.45
2:P:131:TYR:HD2	2:P:147:ILE:HG21	1.81	0.45
2:P:163:VAL:HA	2:P:166:GLN:CD	2.41	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:238:ASN:CG	2:P:239:VAL:H	2.25	0.45
2:P:257:VAL:HA	2:P:260:ALA:HB3	1.98	0.45
1:G:181:ASP:CG	1:G:231:ARG:HH12	2.25	0.45
1:I:91:ILE:CG2	1:I:117:ILE:HG13	2.42	0.45
2:J:238:ASN:OD1	2:J:286:ARG:HG3	2.17	0.45
1:K:18(A):TRP:HA	1:K:20:ARG:HB2	1.97	0.45
1:K:31:ASN:ND2	3:K:401:NAD:H2A	2.30	0.45
1:K:153:CYS:SG	1:K:290:SER:HA	2.56	0.45
1:K:264:ALA:HA	1:K:268:LYS:HD3	1.97	0.45
2:L:129:PRO:O	2:L:148:SER:N	2.48	0.45
1:A:173:THR:HG21	1:A:230:LEU:HG	1.97	0.45
1:A:244:VAL:HG23	1:A:305:VAL:HB	1.97	0.45
1:A:297:THR:HA	1:A:308:VAL:HG12	1.98	0.45
1:C:85:ALA:H	1:C:112:GLY:HA3	1.81	0.45
2:D:47:TYR:HA	2:D:53:THR:HA	1.98	0.45
2:D:64:SER:CB	2:D:74:LYS:HZ2	2.23	0.45
2:D:71:LYS:HD2	2:D:71:LYS:HA	1.77	0.45
2:D:129:PRO:O	2:D:148:SER:N	2.49	0.45
2:D:156:CYS:O	2:D:159:PRO:HD2	2.16	0.45
2:D:240:SER:HB3	2:D:313:TYR:CZ	2.52	0.45
1:Q:6:ASN:ND2	1:Q:96:THR:HG23	2.31	0.45
1:Q:177:SER:OG	1:Q:237:VAL:O	2.34	0.45
2:R:137:GLU:OE1	2:R:137:GLU:N	2.38	0.45
2:R:186:ARG:CZ	2:R:192:HIS:HB2	2.46	0.45
2:R:195:LEU:HD12	2:R:196:ARG:H	1.80	0.45
2:R:239:VAL:HB	2:R:286:ARG:HH22	1.82	0.45
2:R:255:GLU:CD	2:R:262:ARG:HH12	2.22	0.45
1:O:46:TYR:HA	1:O:52:THR:HA	1.97	0.45
1:O:105:ALA:HB1	1:O:116:VAL:HG11	1.98	0.45
1:O:221:LEU:HA	1:O:224:LYS:HE3	1.98	0.45
2:P:15:PHE:O	2:P:18:CYS:HB2	2.17	0.45
2:P:50:ILE:HG23	2:P:286:ARG:NH1	2.23	0.45
2:P:96:GLU:O	2:P:120:ILE:HG23	2.16	0.45
2:P:308:LYS:HE3	2:P:308:LYS:HB2	1.81	0.45
2:H:1:LEU:HA	2:H:92:ASP:OD2	2.16	0.45
2:H:194:ASP:OD2	2:H:197:ARG:HG3	2.16	0.45
2:F:11:ILE:HD12	2:F:316:GLU:HA	1.98	0.45
1:I:190:HIS:CE1	1:I:192:ASP:HB3	2.51	0.45
2:J:16:LEU:HG	2:J:19:TRP:CE3	2.51	0.45
2:J:272:ILE:HA	2:J:322:ARG:CZ	2.46	0.45
1:K:81:LYS:C	1:K:83:PRO:HD3	2.42	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:217:VAL:C	1:K:218:LEU:HD12	2.41	0.45
1:K:362:GLU:HA	1:E:181:ASP:HB2	1.98	0.45
2:L:156:CYS:O	2:L:159:PRO:HD2	2.16	0.45
2:L:240:SER:N	2:L:315:ASN:OD1	2.49	0.45
1:A:40:ALA:HA	1:A:43:LEU:HB2	1.97	0.45
1:A:87:LEU:HB2	1:A:89:ILE:HG12	1.99	0.45
1:A:107:LYS:O	1:A:111:ALA:N	2.48	0.45
1:A:116:VAL:HB	1:A:143:ILE:HG23	1.97	0.45
1:A:172:MET:HA	1:A:241:ASP:OD1	2.15	0.45
2:B:119:LEU:HD12	2:B:147:ILE:HG13	1.98	0.45
2:B:152:CYS:SG	2:B:153:THR:N	2.89	0.45
2:B:181:TYR:N	2:B:234:VAL:O	2.50	0.45
1:C:8:PHE:HB2	1:C:30:VAL:HG12	1.97	0.45
1:C:32:ASP:CG	1:C:40:ALA:HB2	2.41	0.45
1:C:124:ASP:HB2	1:O:102:GLY:C	2.41	0.45
2:D:5:ILE:HA	2:D:94:VAL:HG13	1.99	0.45
2:D:86:TRP:HD1	2:D:113:ALA:C	2.25	0.45
2:D:300:MET:SD	2:D:302:MET:HE2	2.56	0.45
1:Q:92:VAL:O	1:Q:117:ILE:N	2.39	0.45
1:Q:102:GLY:N	1:Q:103:PRO:HD2	2.31	0.45
1:Q:108:HIS:CD2	1:Q:108:HIS:N	2.85	0.45
1:Q:169:LYS:CB	1:O:300:MET:HE2	2.46	0.45
1:Q:190:HIS:NE2	1:Q:192:ASP:HB3	2.31	0.45
2:R:205:ILE:HG23	2:R:207:PRO:HD3	1.98	0.45
2:R:282:SER:OG	2:P:204:ASN:ND2	2.50	0.45
2:R:314:ASP:OD2	2:R:317:TRP:HB3	2.17	0.45
1:O:8:PHE:CE2	1:O:44:LEU:HB2	2.52	0.45
1:O:72:LYS:HG2	1:O:73:VAL:H	1.81	0.45
1:O:76:ASN:HB3	1:O:82:LEU:HD11	1.97	0.45
2:P:87:GLY:HA2	2:P:114:GLY:HA3	1.97	0.45
2:P:315:ASN:OD1	2:P:315:ASN:N	2.49	0.45
1:G:40:ALA:O	1:G:43:LEU:HB2	2.16	0.45
1:G:154:LEU:O	1:G:158:VAL:N	2.32	0.45
1:G:203:ILE:O	1:G:205:PRO:HD3	2.16	0.45
1:G:230:LEU:O	1:G:232:VAL:HG13	2.15	0.45
1:G:235:PRO:HG2	1:G:284:ARG:HH22	1.81	0.45
2:H:44:LEU:HA	1:E:197:ARG:HH12	1.81	0.45
1:E:4:ALA:HB3	1:E:92:VAL:HG22	1.99	0.45
1:E:139:HIS:ND1	1:E:333:PRO:HD2	2.31	0.45
1:E:194:ARG:NH1	1:E:205:PRO:HD2	2.31	0.45
1:E:231:ARG:HA	1:E:231:ARG:HD2	1.61	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:297:THR:HG23	1:E:306:LYS:O	2.15	0.45
2:F:86:TRP:HB2	2:F:115:ALA:N	2.32	0.45
2:F:86:TRP:HD1	2:F:113:ALA:O	1.99	0.45
2:F:153:THR:O	2:F:157:LEU:HG	2.16	0.45
2:F:157:LEU:HA	2:F:160:PHE:CZ	2.52	0.45
1:I:56:ASP:O	1:I:66:ILE:HG13	2.16	0.45
2:J:159:PRO:HA	2:J:162:LYS:HE3	1.98	0.45
2:J:204:ASN:HB3	2:L:281:VAL:HB	1.98	0.45
2:J:238:ASN:CG	2:J:239:VAL:H	2.24	0.45
2:J:255:GLU:HA	2:J:258:ASN:OD1	2.16	0.45
1:K:171:THR:HB	1:K:226:ASN:HB3	1.97	0.45
2:L:106:GLY:O	2:L:110:HIS:ND1	2.49	0.45
2:L:205:ILE:CG1	2:L:234:VAL:HG12	2.46	0.45
2:L:210:THR:HG23	2:L:213:ALA:N	2.28	0.45
2:L:325:ASP:O	2:L:329:ILE:HG13	2.17	0.45
1:A:107:LYS:HB2	1:A:108:HIS:HD2	1.81	0.45
1:A:201:LEU:HD12	1:A:202:ASN:OD1	2.17	0.45
2:B:164:LEU:HD22	2:B:170:ILE:HD11	1.97	0.45
2:B:192:HIS:HB3	2:B:198:ALA:CA	2.45	0.45
2:B:192:HIS:CD2	2:B:193:ARG:HG2	2.52	0.45
2:B:274:SER:O	2:B:294:ILE:N	2.36	0.45
1:C:156:PRO:O	1:C:160:VAL:HG23	2.17	0.45
1:C:256:ASN:C	1:C:260:ARG:HE	2.25	0.45
1:Q:169:LYS:NZ	1:O:303:ASP:OD2	2.46	0.45
1:Q:237:VAL:HA	1:Q:312:ASP:HA	1.98	0.45
1:Q:256:ASN:O	1:Q:259:PHE:HB2	2.17	0.45
1:Q:298:MET:HE3	1:Q:306:LYS:HG2	1.96	0.45
2:R:195:LEU:H	2:R:195:LEU:HG	1.44	0.45
2:P:86:TRP:HD1	2:P:113:ALA:C	2.23	0.45
2:P:192:HIS:HB3	2:P:198:ALA:HA	1.98	0.45
2:P:255:GLU:OE2	2:P:259:ALA:N	2.49	0.45
2:H:137:GLU:HA	2:H:140:TYR:HB3	1.99	0.45
1:E:31:ASN:HA	1:E:74:VAL:HB	1.98	0.45
1:E:114:LYS:HB2	1:E:332:TRP:CH2	2.51	0.45
1:E:298:MET:HE2	1:E:298:MET:HB2	1.80	0.45
2:F:78:ASP:OD1	2:F:80:ASN:HB3	2.15	0.45
2:F:79:ARG:HD3	3:F:401:NAD:N6A	2.32	0.45
2:F:86:TRP:HD1	2:F:113:ALA:C	2.25	0.45
2:F:209:SER:HA	2:F:231:ALA:N	2.32	0.45
1:I:179:THR:HG23	1:I:231:ARG:HE	1.82	0.45
1:I:243:VAL:HG21	1:K:243:VAL:HG21	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:31:VAL:HG21	2:J:89:MET:HG2	1.98	0.45
2:J:92:ASP:OD1	2:J:92:ASP:N	2.49	0.45
1:K:3:VAL:O	1:K:27:VAL:HA	2.17	0.45
1:K:63:THR:OG1	1:K:72:LYS:HG3	2.17	0.45
2:L:124:GLY:HA3	2:L:128:ILE:HD13	1.99	0.45
1:A:8:PHE:HD1	1:A:8:PHE:HA	1.59	0.45
1:A:270:VAL:HA	1:A:289:SER:OG	2.14	0.45
1:A:274:CYS:O	1:A:294:SER:OG	2.32	0.45
2:B:205:ILE:HG22	2:D:312:TRP:CH2	2.52	0.45
2:B:250:LYS:O	2:B:252:THR:HG22	2.17	0.45
1:C:128:TYR:CE2	1:C:141:ALA:HB2	2.52	0.45
1:C:221:LEU:HD12	1:C:224:LYS:HD2	1.99	0.45
2:D:206:VAL:O	2:D:208:THR:HG22	2.17	0.45
2:R:160:PHE:O	2:R:164:LEU:N	2.34	0.45
1:O:211:ALA:O	1:O:225:LEU:HB3	2.16	0.45
2:P:215:ALA:HA	2:P:218:LEU:HD13	1.99	0.45
2:H:10:ARG:HA	2:H:13:ARG:HD2	1.98	0.45
2:H:86:TRP:CD1	2:H:86:TRP:H	2.32	0.45
2:H:142:HIS:HB2	2:H:333:LYS:HG3	1.99	0.45
1:E:182:GLN:OE1	1:E:182:GLN:N	2.50	0.45
1:E:204:VAL:HB	1:E:231:ARG:HB2	1.99	0.45
1:E:257:ASN:HA	1:E:260:ARG:HB2	1.98	0.45
2:F:80:ASN:HB3	2:F:83:ASN:HB3	1.98	0.45
2:F:143:ALA:N	2:F:335:GLN:HE22	2.14	0.45
1:I:108:HIS:C	1:I:111:ALA:H	2.24	0.45
1:I:277:PRO:HB2	1:K:193:LEU:HD11	1.99	0.45
2:J:232:LEU:HA	2:J:232:LEU:HD23	1.74	0.45
1:K:0:LYS:N	1:K:25:LEU:O	2.46	0.45
1:K:52:THR:O	1:K:54:LYS:NZ	2.38	0.45
1:K:288:PHE:O	1:K:320:ARG:NH1	2.50	0.45
2:L:8:PHE:HZ	2:L:45:LEU:HD13	1.81	0.45
1:A:69:LYS:HD3	1:A:69:LYS:HA	1.69	0.45
1:C:13:ARG:HE	1:C:43:LEU:C	2.25	0.45
1:C:161:LEU:HB3	1:C:167:ILE:HD11	1.97	0.45
1:C:217:VAL:C	1:C:218:LEU:HD12	2.41	0.45
2:D:58:VAL:CB	2:D:68:VAL:HA	2.47	0.45
2:D:314:ASP:CG	2:D:318:GLY:H	2.24	0.45
1:Q:3:VAL:HG21	1:Q:25:LEU:HB2	1.97	0.45
1:Q:89:ILE:O	1:Q:113:ALA:HA	2.17	0.45
1:Q:314:GLU:HG2	3:Q:402:NAD:N7N	2.32	0.45
2:R:27:LEU:HD11	2:R:328:ASP:HA	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:290:VAL:O	2:R:292:SER:N	2.50	0.45
1:O:17:ARG:CZ	1:O:53:PHE:HA	2.47	0.45
1:O:98:VAL:HG21	3:O:401:NAD:H61A	1.80	0.45
2:P:22:ARG:NH2	2:P:324:VAL:HB	2.31	0.45
2:P:274:SER:C	2:P:293:THR:HA	2.41	0.45
1:G:221:LEU:HA	1:G:224:LYS:NZ	2.32	0.45
1:G:237:VAL:HA	1:G:312:ASP:HA	1.99	0.45
2:H:228:ASN:HB3	2:F:302:MET:SD	2.57	0.45
2:F:104:ARG:H	2:F:127:ASP:CG	2.24	0.45
1:I:7:GLY:H	1:I:31:ASN:H	1.65	0.45
1:I:43:LEU:HA	2:L:199:ARG:HH11	1.81	0.45
1:I:137:TYR:HH	1:I:139:HIS:CE1	2.29	0.45
1:I:139:HIS:CE1	1:I:328:VAL:HG12	2.52	0.45
1:I:179:THR:OG1	1:I:231:ARG:NH2	2.49	0.45
2:J:46:LYS:NZ	2:J:46:LYS:O	2.36	0.45
2:J:205:ILE:CD1	2:J:232:LEU:HB3	2.47	0.45
2:J:220:LEU:HD13	2:J:223:LEU:HD22	1.99	0.45
2:J:279:PRO:HD2	2:L:195:LEU:HD22	1.99	0.45
2:J:300:MET:HB3	2:J:308:LYS:HB3	1.99	0.45
1:K:173:THR:HG23	1:K:228:ILE:HD13	1.99	0.45
1:K:204:VAL:HB	1:K:231:ARG:HG2	1.99	0.45
2:L:47:TYR:HA	2:L:53:THR:HA	1.99	0.45
2:L:127:ASP:OD1	2:L:127:ASP:N	2.42	0.45
2:L:323:VAL:O	2:L:327:ALA:N	2.43	0.45
1:A:56:ASP:O	1:A:66:ILE:HG13	2.16	0.45
1:A:104:GLY:HA2	1:A:107:LYS:NZ	2.31	0.45
1:A:113:ALA:HB1	1:A:115:LYS:O	2.15	0.45
1:A:317:TYR:O	1:A:321:VAL:HG23	2.15	0.45
1:A:324:LEU:HG	1:A:327:LEU:HD22	1.99	0.45
2:B:59:LYS:O	2:B:66:ILE:HG22	2.17	0.45
2:B:59:LYS:HD2	2:B:59:LYS:HA	1.67	0.45
2:B:199:ARG:HH22	1:C:13:ARG:HH22	1.65	0.45
2:B:263:GLU:OE1	2:B:267:ASN:ND2	2.29	0.45
1:C:31:ASN:HA	1:C:74:VAL:C	2.41	0.45
1:C:119:THR:HA	1:C:317:TYR:HE2	1.81	0.45
2:D:106:GLY:O	2:D:110:HIS:ND1	2.49	0.45
2:D:154:THR:HA	2:D:157:LEU:HG	1.98	0.45
2:D:177:THR:HG1	2:D:313:TYR:HH	1.55	0.45
2:D:325:ASP:O	2:D:329:ILE:HG13	2.17	0.45
1:Q:125:ILE:HD12	1:Q:125:ILE:H	1.82	0.45
1:Q:204:VAL:N	1:Q:231:ARG:O	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:54:PHE:C	2:R:56:ALA:N	2.74	0.45
2:R:103:ASP:OD2	2:R:105:ASP:HB3	2.17	0.45
2:R:155:ASN:HD21	2:R:322:ARG:HB2	1.82	0.45
2:R:174:THR:OG1	2:R:245:VAL:O	2.27	0.45
1:O:101:ASP:CG	1:O:104:GLY:H	2.25	0.45
1:O:115:LYS:HD3	1:O:142:ASN:HA	1.98	0.45
1:O:169:LYS:C	1:O:244:VAL:HB	2.41	0.45
2:P:84:LEU:HB2	2:P:86:TRP:CZ2	2.52	0.45
2:P:143:ALA:N	2:P:335:GLN:HE22	2.15	0.45
2:P:239:VAL:HA	2:P:315:ASN:OD1	2.17	0.45
1:G:10:ARG:O	1:G:14:ASN:N	2.49	0.45
1:G:185:LEU:C	1:G:198:ALA:HA	2.41	0.45
1:G:296:LEU:HD13	1:E:205:PRO:HB2	1.99	0.45
2:H:165:ASP:HA	2:H:169:GLY:CA	2.47	0.45
1:E:18(B):HIS:HE1	1:E:67:ASP:HB2	1.81	0.45
1:E:57:VAL:HG22	1:E:66:ILE:HG23	1.99	0.45
1:E:183:ARG:HG2	1:E:187:ALA:N	2.30	0.45
2:F:197:ARG:NH2	2:F:208:THR:OG1	2.48	0.45
2:F:220:LEU:HD23	2:F:220:LEU:HA	1.71	0.45
2:F:255:GLU:OE2	2:F:259:ALA:N	2.50	0.45
1:I:5:ILE:HG21	1:I:8:PHE:CD1	2.52	0.45
2:J:32:ILE:O	2:J:75:VAL:HA	2.17	0.45
1:K:158:VAL:HG22	1:K:242:LEU:HD22	1.99	0.45
1:K:183:ARG:HB3	1:K:185:LEU:O	2.16	0.45
1:A:91:ILE:CG2	1:A:117:ILE:HG13	2.47	0.45
1:A:191:ARG:HA	2:D:40:GLN:NE2	2.31	0.45
2:B:160:PHE:HB2	2:B:261:PHE:CZ	2.52	0.45
2:B:168:PHE:CZ	2:B:257:VAL:HG23	2.52	0.45
2:B:269:LEU:HD22	2:B:273:LEU:HD23	1.98	0.45
1:C:16:LEU:HD12	1:C:16:LEU:HA	1.76	0.45
1:C:58:LYS:O	1:C:64:PHE:HB2	2.17	0.45
1:C:178:TYR:HD2	1:C:233:PRO:HA	1.81	0.45
2:D:16:LEU:HD22	2:D:45:LEU:HD11	1.98	0.45
2:D:89:MET:N	2:D:89:MET:SD	2.90	0.45
2:D:131:TYR:HA	2:D:136:ASN:HB2	1.99	0.45
2:D:185:GLN:NE2	2:D:185:GLN:H	2.14	0.45
2:D:196:ARG:HB3	2:D:206:VAL:HG22	1.99	0.45
1:Q:32:ASP:CG	1:Q:40:ALA:HB2	2.42	0.45
1:Q:175:THR:HG23	1:Q:239:VAL:O	2.17	0.45
1:Q:244:VAL:O	1:Q:304:MET:HA	2.17	0.45
1:O:8:PHE:CZ	1:O:44:LEU:HB2	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:20:ARG:CZ	1:O:322:VAL:HG21	2.47	0.45
1:O:31:ASN:ND2	1:O:76:ASN:H	2.15	0.45
1:O:106:GLY:C	1:O:108:HIS:H	2.24	0.45
1:O:167:ILE:HG22	1:O:224:LYS:HD3	1.99	0.45
1:O:241:ASP:OD1	1:O:243:VAL:HG22	2.17	0.45
1:O:314:GLU:HB2	3:O:401:NAD:H72N	1.82	0.45
2:P:294:ILE:HG22	2:P:299:THR:HG21	1.97	0.45
1:G:182:GLN:HB3	1:G:195:ARG:HA	1.98	0.45
1:G:270:VAL:C	1:G:288:PHE:HD2	2.25	0.45
1:G:282:ASP:OD1	2:H:47:TYR:CB	2.64	0.45
2:H:164:LEU:HD22	2:H:170:ILE:HD11	1.98	0.45
2:H:276:CYS:N	2:H:293:THR:HG23	2.32	0.45
1:E:31:ASN:ND2	1:E:76:ASN:H	2.15	0.45
1:E:80:LEU:HD11	1:E:107:LYS:HE3	1.99	0.45
1:E:84:TRP:CB	1:E:89:ILE:HB	2.45	0.45
1:E:109:ILE:HA	1:E:113:ALA:HB3	1.99	0.45
1:E:139:HIS:ND1	1:E:331:LYS:O	2.46	0.45
1:E:194:ARG:HB3	1:E:204:VAL:HG13	1.98	0.45
1:E:279:VAL:HA	1:E:310:TRP:CH2	2.52	0.45
2:F:39:LYS:O	2:F:43:HIS:CG	2.70	0.45
2:F:104:ARG:NH2	2:F:128:ILE:HA	2.19	0.45
2:F:156:CYS:SG	2:F:157:LEU:N	2.90	0.45
2:F:171:ILE:HG22	2:F:172:LYS:HG3	1.99	0.45
2:F:281:VAL:N	2:F:284:ASP:OD2	2.34	0.45
3:F:401:NAD:O3B	3:F:401:NAD:O3D	2.35	0.45
1:I:86:GLU:OE1	1:I:87:LEU:HG	2.16	0.45
1:I:108:HIS:N	1:I:108:HIS:HD2	2.11	0.45
1:I:175:THR:N	1:I:239:VAL:O	2.49	0.45
1:I:292:ILE:HG12	1:I:309:ALA:CB	2.47	0.45
2:J:1:LEU:HG	2:J:92:ASP:OD2	2.17	0.45
2:J:210:THR:OG1	2:J:211:GLY:N	2.50	0.45
1:K:42:HIS:HE1	2:L:280:LEU:HD13	1.82	0.45
1:K:287:ASP:HB3	1:K:315:TRP:HZ2	1.82	0.45
2:L:163:VAL:HG13	2:L:167:LYS:NZ	2.30	0.45
1:A:12:GLY:O	1:A:15:PHE:HB3	2.17	0.45
1:A:57:VAL:HG13	1:A:66:ILE:HB	1.98	0.45
1:A:139:HIS:NE2	1:A:333:PRO:HD3	2.32	0.45
2:B:1:LEU:HB2	2:B:26:PRO:O	2.17	0.45
2:B:197:ARG:HG3	2:B:206:VAL:HG11	1.98	0.45
2:B:232:LEU:HA	2:B:232:LEU:HD23	1.73	0.45
2:B:277:ASP:HB3	2:B:297:SER:HB3	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:283:ILE:H	2:D:204:ASN:ND2	2.15	0.45
2:D:257:VAL:O	2:D:261:PHE:N	2.50	0.45
2:D:304:ASP:OD1	2:D:304:ASP:N	2.50	0.45
1:Q:220:GLN:OE1	1:Q:220:GLN:N	2.47	0.45
1:Q:332:TRP:CD2	1:Q:333:PRO:HD2	2.52	0.45
2:R:39:LYS:C	2:R:42:SER:HG	2.16	0.45
2:R:117:LYS:NZ	2:R:142:HIS:O	2.37	0.45
2:R:205:ILE:HA	2:R:235:PRO:HD3	1.98	0.45
1:O:2:LYS:HE3	1:O:88:GLY:O	2.16	0.45
1:O:134:GLU:N	1:O:134:GLU:CD	2.74	0.45
1:O:203:ILE:HG13	1:O:232:VAL:HG12	1.98	0.45
1:O:212:LYS:HB2	1:O:212:LYS:HE2	1.74	0.45
2:P:76:VAL:HG23	2:P:84:LEU:HD22	1.98	0.45
2:P:272:ILE:HA	2:P:322:ARG:CZ	2.48	0.45
1:G:76:ASN:HB3	1:G:82:LEU:HD21	1.99	0.45
1:G:316:GLY:O	1:G:320:ARG:HG2	2.16	0.45
2:H:152:CYS:SG	3:H:401:NAD:N7N	2.80	0.45
2:H:186:ARG:HB2	2:H:198:ALA:O	2.17	0.45
2:H:213:ALA:HB1	2:H:228:ASN:ND2	2.32	0.45
2:H:255:GLU:HA	2:H:258:ASN:OD1	2.16	0.45
1:E:106:GLY:C	1:E:108:HIS:H	2.25	0.45
1:E:115:LYS:HZ1	1:E:332:TRP:CG	2.34	0.45
1:E:215:SER:HA	1:E:218:LEU:C	2.42	0.45
2:F:17:ARG:CZ	2:F:54:PHE:HA	2.46	0.45
2:F:41:ALA:HA	2:F:44:LEU:HB2	1.98	0.45
1:I:165:LEU:HD23	1:I:248:LYS:NZ	2.32	0.44
1:I:169:LYS:HE3	1:K:300:MET:HG2	1.99	0.44
2:J:1:LEU:O	2:J:28:ASP:N	2.50	0.44
2:J:4:ALA:O	2:J:94:VAL:HA	2.17	0.44
2:J:14:ASN:HD21	2:J:317:TRP:HB2	1.82	0.44
2:J:203:LEU:HA	2:J:235:PRO:HG2	1.99	0.44
1:K:240:VAL:O	1:K:308:VAL:HA	2.17	0.44
1:K:291:THR:O	1:K:310:TRP:N	2.48	0.44
2:L:234:VAL:O	2:L:236:THR:N	2.46	0.44
1:A:182:GLN:HA	1:A:195:ARG:HG2	1.99	0.44
2:B:92:ASP:HA	2:B:116:LYS:HB2	2.00	0.44
2:B:157:LEU:HA	2:B:160:PHE:CE1	2.52	0.44
2:B:157:LEU:HD12	2:B:158:ALA:N	2.32	0.44
2:B:210:THR:OG1	2:B:211:GLY:N	2.50	0.44
2:B:272:ILE:O	2:B:291:SER:OG	2.33	0.44
1:C:10:ARG:O	1:C:13:ARG:HG2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:139:HIS:HE1	1:C:332:TRP:CD2	2.35	0.44
1:C:144:ILE:H	1:C:144:ILE:HG13	1.60	0.44
1:C:218:LEU:HB3	1:C:221:LEU:HD23	1.99	0.44
2:D:8:PHE:HZ	2:D:45:LEU:HD13	1.81	0.44
2:D:60:THR:CB	2:D:66:ILE:HG23	2.46	0.44
2:D:86:TRP:CD1	2:D:86:TRP:H	2.35	0.44
1:Q:197:ARG:HG3	1:O:279:VAL:HG21	1.98	0.44
2:R:5:ILE:HD12	2:R:94:VAL:HA	2.00	0.44
2:R:18:CYS:O	2:R:22:ARG:HG2	2.17	0.44
2:R:249:SER:OG	2:R:250:LYS:N	2.47	0.44
1:O:81:LYS:HE3	1:O:81:LYS:HB3	1.55	0.44
1:O:117:ILE:HA	1:O:144:ILE:HG12	1.99	0.44
1:O:172:MET:N	1:O:242:LEU:HD12	2.32	0.44
1:O:192:ASP:OD2	1:O:194:ARG:HB2	2.17	0.44
1:O:293:ASP:HB3	1:O:308:VAL:HG12	1.98	0.44
2:P:1:LEU:O	2:P:3:VAL:HG23	2.17	0.44
2:P:119:LEU:O	2:P:120:ILE:HD13	2.16	0.44
2:P:189:ASP:HA	2:P:198:ALA:O	2.17	0.44
1:G:15:PHE:CD1	1:G:321:VAL:HB	2.52	0.44
1:G:20:ARG:HH21	1:G:319:GLN:HE21	1.65	0.44
1:G:20:ARG:HH21	1:G:319:GLN:NE2	2.15	0.44
1:G:353:PRO:O	1:G:355:ASP:N	2.50	0.44
1:E:211:ALA:HB3	1:E:212:LYS:NZ	2.32	0.44
1:E:272:ASP:HB3	1:E:291:THR:HG23	1.99	0.44
2:F:0:LYS:HZ2	2:F:1:LEU:HD22	1.82	0.44
2:F:119:LEU:O	2:F:120:ILE:HD13	2.17	0.44
2:F:163:VAL:O	2:F:166:GLN:HB2	2.17	0.44
2:F:294:ILE:HG22	2:F:299:THR:HG21	1.99	0.44
1:I:204:VAL:HA	1:I:205:PRO:HD2	1.83	0.44
2:J:248:VAL:HG22	2:J:305:ASP:O	2.16	0.44
1:K:126:PRO:HB2	1:K:128:TYR:CE2	2.53	0.44
1:K:166:GLY:C	1:K:247:GLU:HB2	2.42	0.44
1:K:221:LEU:HB3	1:K:224:LYS:HB3	1.99	0.44
1:K:238:SER:HB2	1:K:311:TYR:CZ	2.52	0.44
2:L:10:ARG:H	2:L:10:ARG:HD2	1.82	0.44
2:L:178:THR:O	2:L:240:SER:OG	2.23	0.44
1:A:128:TYR:HD1	1:A:133:ASN:O	2.01	0.44
1:A:165:LEU:HD23	1:A:248:LYS:NZ	2.32	0.44
2:B:132:VAL:H	2:B:136:ASN:HB2	1.82	0.44
2:B:220:LEU:HD13	2:B:223:LEU:HD13	2.00	0.44
2:B:325:ASP:O	2:B:329:ILE:HG13	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:118:ILE:O	1:C:146:ASN:ND2	2.49	0.44
2:D:39:LYS:HE2	2:D:40:GLN:HE21	1.82	0.44
2:D:272:ILE:O	2:D:291:SER:OG	2.22	0.44
1:Q:37:VAL:HG13	1:Q:41:THR:HG23	1.98	0.44
1:Q:204:VAL:C	1:Q:230:LEU:HD23	2.42	0.44
1:Q:292:ILE:HA	1:Q:309:ALA:HA	1.99	0.44
1:O:149:CYS:SG	1:O:313:ASN:HA	2.57	0.44
1:O:243:VAL:HG13	1:O:305:VAL:C	2.42	0.44
2:P:186:ARG:HG3	2:P:190:ALA:O	2.18	0.44
2:P:208:THR:O	2:P:230:ILE:HB	2.17	0.44
2:P:239:VAL:N	2:P:316:GLU:OE2	2.50	0.44
1:G:1:LEU:HD12	1:G:1:LEU:H	1.82	0.44
1:G:96:THR:HG22	3:G:401:NAD:C4A	2.47	0.44
1:G:312:ASP:OD2	1:G:314:GLU:N	2.44	0.44
2:H:159:PRO:HA	2:H:162:LYS:HE3	1.98	0.44
2:H:186:ARG:HD2	2:H:190:ALA:HB3	1.99	0.44
2:H:205:ILE:HD11	2:H:232:LEU:HB3	2.00	0.44
1:E:84:TRP:NE1	1:E:111:ALA:HB3	2.32	0.44
1:I:182:GLN:CD	1:I:182:GLN:N	2.75	0.44
1:I:226:ASN:OD1	1:I:227:GLY:N	2.50	0.44
2:J:3:VAL:HG13	2:J:93:LEU:O	2.17	0.44
1:K:173:THR:HA	1:K:228:ILE:O	2.17	0.44
1:K:272:ASP:HB2	1:K:288:PHE:CG	2.52	0.44
1:K:275:ASP:HA	1:K:294:SER:OG	2.17	0.44
1:K:298:MET:HE2	1:K:298:MET:HB3	1.73	0.44
2:L:83:ASN:OD1	2:L:83:ASN:N	2.49	0.44
2:L:273:LEU:HD13	2:L:292:SER:H	1.80	0.44
1:A:117:ILE:HA	1:A:144:ILE:HG23	1.98	0.44
1:A:190:HIS:O	1:A:196:ALA:HB2	2.18	0.44
2:B:177:THR:HA	2:B:242:VAL:HA	1.97	0.44
2:B:195:LEU:HD13	2:D:279:PRO:HG3	1.99	0.44
2:B:248:VAL:HG22	2:B:305:ASP:O	2.18	0.44
1:C:72:LYS:HG2	1:C:73:VAL:N	2.32	0.44
1:C:134:GLU:CD	1:C:134:GLU:N	2.74	0.44
1:C:191:ARG:CZ	1:C:191:ARG:HB3	2.47	0.44
1:C:345:LEU:O	1:C:348:PHE:N	2.50	0.44
2:D:149:ASN:HD21	2:D:155:ASN:HB2	1.81	0.44
2:D:283:ILE:HG23	2:D:284:ASP:OD1	2.17	0.44
1:Q:284:ARG:C	1:Q:286:SER:H	2.25	0.44
2:R:180:SER:OG	2:R:181:TYR:N	2.50	0.44
2:R:250:LYS:HE2	2:R:250:LYS:HB3	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:64:PHE:HE1	1:O:66:ILE:HD11	1.82	0.44
2:P:185:GLN:CG	2:P:233:ARG:HD3	2.47	0.44
1:G:150:THR:OG1	1:G:151:THR:N	2.49	0.44
1:G:167:ILE:HA	1:G:246:ILE:HA	1.99	0.44
1:G:175:THR:OG1	1:G:238:SER:HA	2.18	0.44
1:G:221:LEU:HD12	1:G:224:LYS:HZ3	1.83	0.44
1:G:244:VAL:O	1:G:304:MET:HA	2.16	0.44
2:H:3:VAL:HG13	2:H:93:LEU:O	2.18	0.44
2:H:4:ALA:O	2:H:5:ILE:HD12	2.17	0.44
2:H:81:PRO:HA	2:H:84:LEU:HB2	1.98	0.44
2:H:101:PHE:HZ	3:H:401:NAD:H61A	1.64	0.44
2:H:245:VAL:HA	2:H:308:LYS:HA	1.98	0.44
1:E:179:THR:N	1:E:182:GLN:HE22	2.12	0.44
1:E:320:ARG:H	1:E:320:ARG:HG2	1.51	0.44
2:F:120:ILE:O	2:F:148:SER:OG	2.35	0.44
2:F:196:ARG:CZ	2:F:207:PRO:HD2	2.47	0.44
1:I:274:CYS:O	1:I:294:SER:OG	2.34	0.44
2:J:5:ILE:O	2:J:33:ASN:N	2.47	0.44
2:J:17:ARG:HG3	2:J:54:PHE:CE1	2.52	0.44
2:J:47:TYR:HA	2:J:53:THR:HA	1.98	0.44
2:J:97:GLY:O	3:J:401:NAD:H52A	2.17	0.44
2:J:178:THR:N	2:J:241:VAL:O	2.32	0.44
1:K:5:ILE:O	1:K:30:VAL:HA	2.17	0.44
1:K:47:ASP:H	1:K:52:THR:HA	1.82	0.44
1:K:129:VAL:H	1:K:133:ASN:ND2	2.16	0.44
1:K:220:GLN:C	1:K:221:LEU:HD13	2.43	0.44
1:K:276:ILE:O	1:K:278:LEU:HG	2.16	0.44
2:L:39:LYS:HD2	2:L:43:HIS:HE1	1.83	0.44
1:A:204:VAL:HB	1:A:231:ARG:HB2	1.99	0.44
2:B:17:ARG:NH1	2:B:52:GLY:O	2.46	0.44
2:B:39:LYS:H	2:B:39:LYS:HZ2	1.64	0.44
2:B:210:THR:HB	2:B:233:ARG:HH22	1.82	0.44
2:B:226:LYS:HZ2	2:B:227:LEU:HD23	1.82	0.44
2:B:244:LEU:HD23	2:B:309:VAL:HG11	1.99	0.44
2:B:267:ASN:OD1	2:B:268:GLU:N	2.50	0.44
1:C:13:ARG:HB2	1:C:44:LEU:HA	2.00	0.44
1:C:93:ILE:HD13	1:C:117:ILE:HB	1.99	0.44
1:C:194:ARG:HG3	1:C:206:THR:OG1	2.17	0.44
1:C:316:GLY:O	1:C:320:ARG:HG2	2.17	0.44
2:D:50:ILE:HG23	2:D:286:ARG:CZ	2.47	0.44
2:D:186:ARG:CZ	2:D:192:HIS:HB2	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:186:ARG:NE	2:D:191:SER:O	2.50	0.44
2:R:208:THR:HG21	2:R:233:ARG:NE	2.33	0.44
2:R:238:ASN:ND2	2:R:286:ARG:HH12	2.15	0.44
2:R:263:GLU:HA	2:R:266:ASP:HB2	2.00	0.44
2:R:276:CYS:N	2:R:293:THR:HG23	2.32	0.44
2:R:305:ASP:CG	2:P:172:LYS:HZ3	2.21	0.44
2:P:39:LYS:HG2	2:P:40:GLN:N	2.32	0.44
2:P:140:TYR:HE2	2:P:333:LYS:HD3	1.82	0.44
2:P:151:SER:HG	2:P:154:THR:H	1.64	0.44
2:P:194:ASP:OD2	2:P:197:ARG:HG3	2.18	0.44
2:P:224:LYS:O	2:P:226:LYS:HG3	2.18	0.44
1:G:3:VAL:HB	1:G:27:VAL:HA	2.00	0.44
1:G:293:ASP:HB3	1:G:296:LEU:HB2	2.00	0.44
2:H:117:LYS:HD3	2:H:145:THR:HA	1.99	0.44
2:H:179:HIS:O	2:H:234:VAL:HG22	2.17	0.44
2:H:184:ASP:OD1	2:H:197:ARG:NH1	2.50	0.44
1:E:128:TYR:OH	1:E:137:TYR:HA	2.17	0.44
1:E:165:LEU:HB3	1:E:246:ILE:HG12	1.98	0.44
1:E:199:ALA:C	1:E:201:LEU:H	2.26	0.44
2:F:133:VAL:HA	2:F:137:GLU:HB3	1.98	0.44
1:I:2:LYS:H	1:I:2:LYS:HG3	1.59	0.44
1:I:15:PHE:HD1	1:I:318:SER:HB2	1.82	0.44
1:I:221:LEU:HD13	1:I:224:LYS:HD3	2.00	0.44
2:J:96:GLU:HG2	2:J:98:THR:HG23	1.98	0.44
2:J:104:ARG:HH22	2:J:129:PRO:HD3	1.81	0.44
2:J:175:MET:HB3	2:J:244:LEU:HD13	2.00	0.44
2:J:246:VAL:HG23	2:J:307:VAL:HB	1.99	0.44
1:K:36:GLY:O	1:K:40:ALA:N	2.33	0.44
1:K:176:HIS:H	1:K:232:VAL:HG22	1.82	0.44
2:L:86:TRP:CD1	2:L:86:TRP:H	2.35	0.44
2:L:280:LEU:HD12	2:L:280:LEU:HA	1.73	0.44
1:A:63:THR:OG1	1:A:72:LYS:HG3	2.17	0.44
2:B:8:PHE:CD1	2:B:32:ILE:HG21	2.53	0.44
2:B:92:ASP:OD1	2:B:92:ASP:N	2.50	0.44
2:B:238:ASN:ND2	2:B:286:ARG:HG2	2.32	0.44
2:B:255:GLU:HA	2:B:258:ASN:OD1	2.17	0.44
1:C:85:ALA:N	1:C:112:GLY:HA3	2.32	0.44
1:C:115:LYS:HZ2	1:C:140:VAL:C	2.26	0.44
1:C:220:GLN:HG2	1:C:221:LEU:HD22	1.98	0.44
1:C:356:GLU:O	1:O:183:ARG:NH1	2.50	0.44
2:D:38:VAL:HG23	2:D:39:LYS:H	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:83:ASN:OD1	2:D:83:ASN:N	2.49	0.44
2:D:271:GLY:O	2:D:322:ARG:NH1	2.50	0.44
1:Q:160:VAL:HG22	1:Q:164:GLU:CD	2.43	0.44
1:Q:162:ASP:C	1:Q:166:GLY:H	2.25	0.44
1:Q:263:ALA:O	1:Q:268:LYS:N	2.51	0.44
2:R:165:ASP:HA	2:R:169:GLY:CA	2.46	0.44
2:R:194:ASP:OD2	2:R:197:ARG:HG3	2.17	0.44
2:R:222:ASN:HB3	2:R:223:LEU:HD12	2.00	0.44
2:P:17:ARG:HA	2:P:54:PHE:CZ	2.52	0.44
1:G:15:PHE:CE1	1:G:321:VAL:HB	2.53	0.44
1:G:20:ARG:HH11	1:G:21:LYS:HZ1	1.64	0.44
1:G:151:THR:OG1	1:G:210:ALA:HB1	2.17	0.44
1:G:172:MET:HG3	1:G:227:GLY:HA3	1.98	0.44
1:G:279:VAL:HB	1:E:202:ASN:HB3	1.99	0.44
2:H:151:SER:OG	2:H:153:THR:OG1	2.17	0.44
2:H:209:SER:HA	2:H:231:ALA:N	2.27	0.44
2:H:255:GLU:OE1	2:H:262:ARG:NH2	2.39	0.44
1:E:101:ASP:CG	1:E:104:GLY:H	2.26	0.44
2:F:39:LYS:HG2	2:F:40:GLN:N	2.32	0.44
2:F:149:ASN:ND2	2:F:155:ASN:HB2	2.30	0.44
2:F:272:ILE:HA	2:F:322:ARG:CZ	2.47	0.44
1:I:45:LYS:NZ	1:I:55:ALA:O	2.40	0.44
1:I:63:THR:OG1	1:I:72:LYS:HG3	2.17	0.44
2:J:0:LYS:HG3	2:J:26:PRO:HA	2.00	0.44
2:J:4:ALA:O	2:J:5:ILE:HD13	2.17	0.44
2:J:45:LEU:O	2:J:54:PHE:HB2	2.17	0.44
2:J:92:ASP:HA	2:J:116:LYS:HB2	1.99	0.44
2:J:127:ASP:OD1	2:J:127:ASP:N	2.44	0.44
2:J:148:SER:OG	2:J:149:ASN:O	2.33	0.44
2:J:209:SER:HA	2:J:231:ALA:N	2.33	0.44
1:K:20:ARG:HA	1:K:20:ARG:HD2	1.32	0.44
1:K:20:ARG:HH11	1:K:20:ARG:CA	2.30	0.44
1:K:72:LYS:HG2	1:K:73:VAL:H	1.82	0.44
1:K:156:PRO:O	1:K:160:VAL:HG23	2.18	0.44
1:K:173:THR:HG23	1:K:228:ILE:HG23	1.99	0.44
1:K:211:ALA:O	1:K:225:LEU:HB2	2.18	0.44
2:L:37:GLY:HA2	1:Q:343:ASP:HA	1.98	0.44
2:L:79:ARG:HA	3:L:401:NAD:N6A	2.32	0.44
2:L:118:VAL:HB	2:L:146:ILE:HG12	1.99	0.44
2:L:173:GLY:N	2:L:227:LEU:HD13	2.32	0.44
2:L:180:SER:H	2:L:315:ASN:HD21	1.64	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L:238:ASN:CG	2:L:286:ARG:HH21	2.23	0.44
1:A:177:SER:HB3	1:A:234:THR:O	2.16	0.44
1:A:190:HIS:NE2	1:A:195:ARG:HD2	2.33	0.44
2:B:80:ASN:ND2	2:B:82:VAL:HB	2.33	0.44
2:B:192:HIS:CG	2:B:193:ARG:N	2.86	0.44
2:B:209:SER:HA	2:B:231:ALA:N	2.33	0.44
1:C:60:ILE:HB	1:C:63:THR:O	2.17	0.44
1:C:134:GLU:HG2	1:C:135:LYS:H	1.83	0.44
2:D:32:ILE:HD13	2:D:33:ASN:N	2.33	0.44
2:D:111:LEU:HD22	2:D:116:LYS:C	2.43	0.44
1:Q:31:ASN:OD1	1:Q:76:ASN:N	2.51	0.44
1:Q:79:PRO:HA	1:Q:82:LEU:HD12	2.00	0.44
1:Q:281:VAL:HA	1:Q:284:ARG:CG	2.48	0.44
1:O:181:ASP:O	1:O:195:ARG:NH1	2.50	0.44
1:O:262:ALA:C	1:O:265:GLY:H	2.26	0.44
2:P:87:GLY:C	2:P:90:GLY:H	2.26	0.44
2:P:101:PHE:CG	2:P:106:GLY:HA3	2.53	0.44
2:P:131:TYR:CZ	2:P:140:TYR:HA	2.52	0.44
2:P:152:CYS:HA	2:P:155:ASN:HD22	1.82	0.44
1:G:165:LEU:HA	1:G:248:LYS:HD2	2.00	0.44
1:G:182:GLN:HA	1:G:195:ARG:HB3	1.98	0.44
2:H:35:THR:CG2	2:H:79:ARG:NH2	2.80	0.44
2:H:92:ASP:HA	2:H:116:LYS:HE2	1.98	0.44
2:H:137:GLU:C	2:H:140:TYR:HB3	2.43	0.44
2:H:205:ILE:HA	2:H:235:PRO:HD3	2.00	0.44
1:E:42:HIS:CD2	1:E:42:HIS:C	2.96	0.44
1:E:217:VAL:HG23	1:E:218:LEU:HD22	1.99	0.44
2:F:0:LYS:HZ2	2:F:1:LEU:HD13	1.82	0.44
2:F:240:SER:N	2:F:313:TYR:O	2.51	0.44
1:I:128:TYR:HA	1:I:133:ASN:CG	2.42	0.44
2:J:46:LYS:HZ2	2:J:53:THR:HG1	1.66	0.44
2:J:167:LYS:O	2:J:250:LYS:NZ	2.48	0.44
2:J:269:LEU:HD13	2:J:273:LEU:HG	1.99	0.44
1:K:183:ARG:HB2	1:K:195:ARG:O	2.17	0.44
1:A:108:HIS:C	1:A:111:ALA:H	2.26	0.44
2:B:4:ALA:O	2:B:5:ILE:HD13	2.18	0.44
2:B:91:ILE:HD13	2:B:91:ILE:HA	1.88	0.44
2:B:104:ARG:HA	2:B:107:ALA:HB3	1.99	0.44
2:B:162:LYS:HD2	2:B:163:VAL:HG23	1.99	0.44
1:C:100:VAL:HG12	1:C:120:ALA:HB1	1.98	0.44
1:C:287:ASP:HB3	1:C:319:GLN:HG3	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:79:ARG:HA	3:D:401:NAD:N6A	2.32	0.44
2:D:135:VAL:N	2:D:137:GLU:OE1	2.51	0.44
1:Q:253:GLU:HA	1:Q:256:ASN:HB2	2.00	0.44
2:R:89:MET:N	2:R:89:MET:SD	2.91	0.44
2:R:156:CYS:SG	2:R:157:LEU:N	2.90	0.44
2:R:222:ASN:O	2:R:226:LYS:NZ	2.49	0.44
1:O:318:SER:O	1:O:321:VAL:HB	2.18	0.44
2:P:161:VAL:O	2:P:164:LEU:HB2	2.17	0.44
2:P:205:ILE:HD11	2:P:234:VAL:HG12	1.99	0.44
1:G:301:GLY:HA3	1:E:169:LYS:NZ	2.32	0.44
2:H:38:VAL:CG1	2:H:75:VAL:HG13	2.48	0.44
1:E:305:VAL:O	1:E:307:VAL:HG23	2.18	0.44
1:E:310:TRP:N	1:E:310:TRP:CD1	2.86	0.44
2:F:283:ILE:C	2:F:285:PHE:H	2.25	0.44
2:J:86:TRP:HD1	2:J:113:ALA:C	2.25	0.44
2:J:179:HIS:N	2:J:232:LEU:O	2.51	0.44
1:K:146:ASN:ND2	1:K:317:TYR:OH	2.43	0.44
1:K:173:THR:HG23	1:K:228:ILE:O	2.17	0.44
1:K:215:SER:HB3	1:K:225:LEU:HD11	1.99	0.44
1:K:324:LEU:O	1:K:327:LEU:N	2.51	0.44
3:K:402:NAD:PN	3:K:402:NAD:H3D	2.58	0.44
2:L:135:VAL:N	2:L:137:GLU:OE1	2.51	0.44
2:L:137:GLU:OE1	2:L:137:GLU:N	2.45	0.44
1:A:28:VAL:HA	1:A:71:ILE:HG13	2.00	0.44
1:A:260:ARG:HA	1:A:263:ALA:HB3	2.00	0.44
1:A:279:VAL:HB	1:C:202:ASN:HB3	2.00	0.44
1:A:324:LEU:HA	1:A:327:LEU:HB3	1.99	0.44
2:B:133:VAL:HA	2:B:137:GLU:HB3	1.99	0.44
2:B:159:PRO:HA	2:B:162:LYS:HE3	2.00	0.44
2:B:293:THR:N	2:B:312:TRP:O	2.26	0.44
1:C:192:ASP:CG	1:C:195:ARG:H	2.24	0.44
1:C:203:ILE:CG2	1:C:230:LEU:HB3	2.47	0.44
2:D:41:ALA:HA	2:D:44:LEU:HB2	2.00	0.44
2:D:318:GLY:HA2	2:D:321:GLN:HB2	2.00	0.44
1:Q:99:PHE:C	1:Q:101:ASP:H	2.26	0.44
1:Q:165:LEU:HA	1:Q:248:LYS:HD2	2.00	0.44
1:Q:300:MET:HG2	1:O:170:GLY:N	2.33	0.44
2:R:1:LEU:HD11	2:R:334:TRP:CZ3	2.52	0.44
2:R:119:LEU:O	2:R:120:ILE:HD13	2.18	0.44
2:R:132:VAL:O	2:R:136:ASN:N	2.47	0.44
1:O:20:ARG:NH2	1:O:319:GLN:HB3	2.32	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:148:SER:O	1:O:151:THR:N	2.50	0.44
1:O:355:ASP:O	1:O:357:GLU:N	2.51	0.44
2:P:13:ARG:HG2	2:P:45:LEU:CA	2.48	0.44
2:P:172:LYS:H	2:P:247:GLN:HB3	1.82	0.44
2:P:196:ARG:CZ	2:P:207:PRO:HD2	2.48	0.44
1:G:6:ASN:HB3	1:G:93:ILE:O	2.18	0.44
1:G:20:ARG:HD2	1:G:21:LYS:NZ	2.33	0.44
1:G:133:ASN:HA	1:G:136:ASP:CG	2.43	0.44
1:G:176:HIS:C	1:G:232:VAL:HG22	2.42	0.44
1:G:183:ARG:HB3	1:G:187:ALA:HB3	1.99	0.44
1:G:263:ALA:O	1:G:268:LYS:N	2.51	0.44
1:G:314:GLU:O	1:G:318:SER:N	2.38	0.44
2:H:117:LYS:NZ	2:H:142:HIS:O	2.38	0.44
1:E:15:PHE:CD1	1:E:322:VAL:HG22	2.52	0.44
2:F:127:ASP:OD1	2:F:127:ASP:N	2.50	0.44
1:I:94:GLU:OE2	1:I:96:THR:OG1	2.31	0.44
1:I:248:LYS:HG2	1:I:248(A):VAL:HG12	2.00	0.44
1:I:276:ILE:HG21	2:J:47:TYR:OH	2.18	0.44
2:J:96:GLU:HG3	2:J:101:PHE:HB2	1.99	0.44
2:J:133:VAL:HA	2:J:137:GLU:HB3	2.00	0.44
2:J:276:CYS:O	2:J:295:ASP:HA	2.18	0.44
1:K:2:LYS:HB3	1:K:2:LYS:HE2	1.83	0.44
1:K:17:ARG:NH2	1:K:47:ASP:HB3	2.33	0.44
2:L:39:LYS:HD2	2:L:43:HIS:CE1	2.53	0.44
2:L:278:GLU:OE1	2:L:280:LEU:HD13	2.17	0.44
1:A:20:ARG:NH1	1:A:21:LYS:HZ1	2.16	0.44
1:A:76:ASN:HB3	1:A:82:LEU:HD11	1.98	0.44
1:A:239:VAL:HB	1:A:310:TRP:CA	2.43	0.44
1:A:332:TRP:CG	1:A:333:PRO:HD2	2.53	0.44
2:B:24:ASP:O	2:B:26:PRO:HD3	2.16	0.44
2:B:86:TRP:HD1	2:B:113:ALA:C	2.26	0.44
2:B:151:SER:OG	2:B:154:THR:OG1	2.33	0.44
2:B:276:CYS:O	2:B:295:ASP:HA	2.18	0.44
2:B:277:ASP:OD2	2:B:296:SER:OG	2.32	0.44
1:C:17:ARG:NH2	1:C:52:THR:O	2.50	0.44
1:C:38:LYS:O	1:C:42:HIS:HB3	2.18	0.44
2:D:50:ILE:O	2:D:286:ARG:NH1	2.51	0.44
2:D:86:TRP:CD1	2:D:113:ALA:C	2.96	0.44
2:D:186:ARG:HB3	2:D:190:ALA:HB3	2.00	0.44
1:Q:37:VAL:O	1:Q:41:THR:OG1	2.34	0.44
3:Q:402:NAD:H3D	3:Q:402:NAD:PA	2.58	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:81:PRO:HB3	2:R:110:HIS:ND1	2.32	0.44
2:R:181:TYR:HD2	2:R:235:PRO:HA	1.82	0.44
1:G:38:LYS:HE2	1:G:38:LYS:HB2	1.62	0.44
1:G:162:ASP:C	1:G:166:GLY:H	2.24	0.44
1:G:278:LEU:CD2	2:H:47:TYR:CD2	2.96	0.44
2:H:16:LEU:HD13	2:H:45:LEU:HD21	1.97	0.44
2:H:35:THR:HG21	2:H:79:ARG:NH2	2.33	0.44
2:H:195:LEU:HD12	2:H:196:ARG:H	1.82	0.44
2:H:294:ILE:H	2:H:294:ILE:HG12	1.64	0.44
1:E:5:ILE:HG23	1:E:93:ILE:HB	1.98	0.44
1:E:102:GLY:N	1:E:103:PRO:HD2	2.33	0.44
1:E:148:SER:HA	1:E:317:TYR:CE2	2.53	0.44
2:F:131:TYR:CZ	2:F:140:TYR:HA	2.53	0.44
2:F:148:SER:OG	2:F:149:ASN:N	2.50	0.44
2:F:179:HIS:N	2:F:232:LEU:O	2.50	0.44
1:I:77:ARG:HH22	3:Q:401:NAD:H2B	1.83	0.43
1:I:178:TYR:CE1	1:I:235:PRO:HA	2.52	0.43
1:I:194:ARG:HE	1:K:278:LEU:N	2.16	0.43
1:I:240:VAL:HG23	1:I:308:VAL:HA	1.99	0.43
2:J:42:SER:OG	2:J:43:HIS:N	2.51	0.43
2:L:104:ARG:CZ	2:L:129:PRO:HD3	2.48	0.43
2:L:149:ASN:HD21	2:L:155:ASN:HB2	1.83	0.43
2:L:182:THR:N	2:L:185:GLN:OE1	2.30	0.43
1:A:76:ASN:CG	1:A:78:ASP:H	2.25	0.43
1:A:96:THR:HG21	1:A:99:PHE:CE2	2.53	0.43
1:A:177:SER:OG	1:A:237:VAL:N	2.36	0.43
1:A:193:LEU:H	1:A:193:LEU:HG	1.31	0.43
2:B:15:PHE:O	2:B:18:CYS:HB2	2.18	0.43
1:C:2:LYS:HB3	1:C:2:LYS:HE2	1.79	0.43
1:C:119:THR:HG21	3:C:401:NAD:H51N	2.00	0.43
1:C:176:HIS:HB3	1:C:231:ARG:HA	2.00	0.43
1:Q:16:LEU:HA	1:Q:16:LEU:HD12	1.81	0.43
1:Q:62:GLU:HB2	1:Q:72:LYS:HE3	1.98	0.43
1:Q:194:ARG:NH2	1:O:279:VAL:HG22	2.33	0.43
2:R:137:GLU:HA	2:R:140:TYR:HB3	2.00	0.43
2:R:181:TYR:CE1	1:O:185:LEU:HD21	2.50	0.43
1:O:102:GLY:N	1:O:103:PRO:HD2	2.32	0.43
2:P:14:ASN:CG	2:P:317:TRP:HA	2.43	0.43
1:G:63:THR:HA	1:G:72:LYS:HA	1.99	0.43
1:G:133:ASN:N	1:G:134:GLU:OE1	2.51	0.43
1:G:203:ILE:HG23	1:G:233:PRO:HD3	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:268:LYS:C	1:G:270:VAL:H	2.25	0.43
1:G:275:ASP:OD1	1:G:294:SER:N	2.51	0.43
2:H:103:ASP:OD2	2:H:105:ASP:HB3	2.18	0.43
2:F:5:ILE:O	2:F:33:ASN:N	2.34	0.43
2:F:186:ARG:HD2	2:F:190:ALA:HB3	1.99	0.43
2:F:192:HIS:HB3	2:F:198:ALA:HA	2.00	0.43
1:I:8:PHE:CG	1:I:13:ARG:HG2	2.52	0.43
1:I:58:LYS:HB3	1:I:65:SER:HB3	2.00	0.43
1:I:107:LYS:O	1:I:111:ALA:N	2.51	0.43
1:I:204:VAL:O	1:I:230:LEU:HA	2.17	0.43
2:J:274:SER:HG	2:J:293:THR:HA	1.83	0.43
1:K:34:GLY:O	1:K:39:SER:OG	2.35	0.43
1:K:207:SER:HB2	1:K:228:ILE:HB	1.99	0.43
2:L:2:LYS:H	2:L:2:LYS:HG2	1.59	0.43
2:L:37:GLY:HA3	2:L:40:GLN:HB2	1.99	0.43
2:L:50:ILE:HG23	2:L:286:ARG:CZ	2.48	0.43
2:L:204:ASN:O	2:L:235:PRO:HG3	2.18	0.43
2:L:300:MET:SD	2:L:302:MET:HE2	2.57	0.43
1:A:160:VAL:HG13	1:A:164:GLU:HG3	1.99	0.43
1:A:195:ARG:NH1	1:G:359:LYS:O	2.51	0.43
1:A:279:VAL:CG2	1:C:202:ASN:HD22	2.30	0.43
2:B:111:LEU:HA	2:B:115:ALA:HB3	1.99	0.43
2:B:140:TYR:CE2	2:B:333:LYS:HD3	2.53	0.43
2:B:157:LEU:HB2	2:B:161:VAL:HG11	2.00	0.43
1:C:14:ASN:ND2	1:C:314:GLU:OE1	2.48	0.43
1:C:46:TYR:CE1	2:D:280:LEU:HD21	2.53	0.43
1:C:105:ALA:HB3	1:C:143:ILE:HD13	2.00	0.43
2:D:162:LYS:HE3	2:D:162:LYS:HB3	1.81	0.43
2:D:168:PHE:O	2:D:249:SER:OG	2.36	0.43
1:Q:17:ARG:NH1	1:Q:51:GLY:O	2.44	0.43
1:Q:96:THR:HB	1:Q:98:VAL:HG23	1.99	0.43
1:Q:170:GLY:O	1:Q:226:ASN:N	2.50	0.43
1:Q:322:VAL:HA	1:Q:325:ALA:HB3	2.00	0.43
2:R:37:GLY:O	2:R:40:GLN:HB2	2.18	0.43
1:O:14:ASN:HD22	1:O:14:ASN:H	1.66	0.43
1:O:93:ILE:HD12	1:O:117:ILE:HD12	2.01	0.43
1:O:153:CYS:SG	1:O:154:LEU:N	2.90	0.43
2:P:106:GLY:HA2	2:P:109:LYS:HZ3	1.82	0.43
1:G:102:GLY:HA2	1:G:105:ALA:HB3	2.00	0.43
1:G:134:GLU:N	1:G:134:GLU:CD	2.76	0.43
1:G:148:SER:O	1:G:149:CYS:C	2.61	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:166:GLY:C	1:G:247:GLU:HB3	2.43	0.43
1:G:269:GLY:O	1:G:288:PHE:HA	2.18	0.43
2:H:123:PRO:O	2:H:125:LYS:NZ	2.28	0.43
2:H:210:THR:HG23	2:H:212:ALA:H	1.83	0.43
2:H:263:GLU:HA	2:H:266:ASP:HB2	1.99	0.43
1:E:116:VAL:HB	1:E:143:ILE:HG12	2.00	0.43
1:E:212:LYS:HE2	1:E:212:LYS:HB2	1.77	0.43
2:F:104:ARG:NH2	2:F:129:PRO:HD3	2.34	0.43
2:F:194:ASP:OD1	2:F:196:ARG:HG3	2.18	0.43
1:I:169:LYS:HE2	1:I:245:ASN:HD21	1.82	0.43
1:I:177:SER:OG	1:I:237:VAL:O	2.20	0.43
2:J:104:ARG:NH1	2:J:146:ILE:HB	2.33	0.43
2:J:119:LEU:O	2:J:120:ILE:HD13	2.18	0.43
1:K:248:LYS:HG2	1:K:248(A):VAL:H	1.84	0.43
1:K:271:LEU:HD11	1:K:292:ILE:HG12	1.99	0.43
2:L:86:TRP:HD1	2:L:113:ALA:C	2.25	0.43
2:L:271:GLY:O	2:L:322:ARG:NH1	2.51	0.43
1:A:15:PHE:O	1:A:18(A):TRP:N	2.31	0.43
1:A:151:THR:O	1:A:154:LEU:N	2.52	0.43
1:C:11:ILE:HD11	1:C:317:TYR:HB3	2.00	0.43
1:C:16:LEU:HD23	1:C:44:LEU:HD21	1.99	0.43
1:C:20:ARG:NH1	1:C:21:LYS:H	2.16	0.43
1:C:176:HIS:C	1:C:232:VAL:HG22	2.44	0.43
1:C:263:ALA:O	1:C:268:LYS:HG3	2.18	0.43
1:C:281:VAL:HA	1:C:284:ARG:HB2	2.00	0.43
1:Q:149:CYS:HA	1:Q:152:ASN:HB3	2.00	0.43
1:Q:159:LYS:O	1:Q:163:GLU:HB3	2.18	0.43
1:Q:161:LEU:O	1:Q:165:LEU:HD22	2.19	0.43
1:Q:168:VAL:N	1:Q:245:ASN:O	2.50	0.43
1:Q:228:ILE:HG12	1:Q:229:ALA:N	2.30	0.43
1:Q:267:LEU:HD13	1:Q:271:LEU:HD22	1.99	0.43
2:R:94:VAL:O	2:R:95:ILE:HD13	2.17	0.43
2:R:179:HIS:O	2:R:234:VAL:HG22	2.18	0.43
1:O:91:ILE:HA	1:O:115:LYS:O	2.18	0.43
1:O:128:TYR:OH	1:O:137:TYR:HA	2.17	0.43
2:P:16:LEU:HA	2:P:16:LEU:HD23	1.52	0.43
2:P:45:LEU:O	2:P:54:PHE:HB2	2.18	0.43
2:P:313:TYR:CE2	2:P:315:ASN:HB3	2.54	0.43
1:G:118:ILE:HD12	1:G:125:ILE:HG21	1.98	0.43
1:G:167:ILE:HG23	1:G:246:ILE:HA	1.99	0.43
1:G:186:ASP:OD2	2:F:49:SER:N	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:81:PRO:HB3	2:H:86:TRP:HZ2	1.83	0.43
2:H:119:LEU:O	2:H:120:ILE:HD13	2.18	0.43
2:H:142:HIS:HA	2:H:330:VAL:HG13	2.00	0.43
2:H:205:ILE:HG13	2:H:234:VAL:CA	2.44	0.43
2:H:259:ALA:HA	2:H:262:ARG:HB2	1.99	0.43
3:H:401:NAD:H4D	3:H:401:NAD:PA	2.57	0.43
1:E:135:LYS:HA	1:E:135:LYS:HD2	1.65	0.43
1:E:190:HIS:CE1	1:E:192:ASP:H	2.36	0.43
1:E:298:MET:N	1:E:306:LYS:O	2.48	0.43
2:F:16:LEU:HD21	2:F:68:VAL:HG11	1.94	0.43
2:F:17:ARG:NH1	2:F:51:LEU:HB2	2.33	0.43
1:I:31:ASN:HA	1:I:74:VAL:HG23	2.01	0.43
1:I:60:ILE:HG13	1:I:64:PHE:HA	1.99	0.43
1:I:312:ASP:CG	1:I:316:GLY:H	2.27	0.43
2:J:37:GLY:HA3	2:J:40:GLN:NE2	2.34	0.43
2:J:196:ARG:NH1	2:L:280:LEU:H	2.16	0.43
1:K:116:VAL:HB	1:K:143:ILE:HG23	2.00	0.43
1:K:183:ARG:HG3	1:K:187:ALA:HB3	2.00	0.43
2:L:45:LEU:O	2:L:54:PHE:HB2	2.18	0.43
2:L:86:TRP:CB	2:L:91:ILE:HB	2.48	0.43
2:L:192:HIS:CE1	2:L:194:ASP:H	2.36	0.43
2:L:192:HIS:ND1	2:L:194:ASP:N	2.66	0.43
2:L:257:VAL:O	2:L:261:PHE:N	2.51	0.43
1:A:107:LYS:HA	1:A:110:GLN:HB2	1.99	0.43
2:B:31:VAL:HG11	2:B:89:MET:HE3	1.99	0.43
2:B:32:ILE:O	2:B:75:VAL:HA	2.18	0.43
2:B:122:ALA:HB2	3:B:401:NAD:H6N	2.00	0.43
2:B:203:LEU:HA	2:B:235:PRO:HG2	1.99	0.43
2:B:249:SER:HG	2:B:250:LYS:H	1.66	0.43
1:C:92:VAL:HG11	1:C:108:HIS:HD2	1.83	0.43
1:C:137:TYR:OH	1:C:331:LYS:HB2	2.18	0.43
1:C:171:THR:C	1:C:242:LEU:HD12	2.44	0.43
1:C:237:VAL:C	1:C:313:ASN:HD21	2.26	0.43
1:C:272:ASP:HB2	1:C:288:PHE:CG	2.53	0.43
2:D:220:LEU:HB2	2:D:223:LEU:O	2.19	0.43
2:D:237:PRO:HG2	2:D:238:ASN:OD1	2.19	0.43
1:Q:58:LYS:O	1:Q:64:PHE:HB2	2.17	0.43
1:Q:142:ASN:OD1	1:Q:142:ASN:N	2.52	0.43
1:Q:225:LEU:H	1:Q:225:LEU:HG	1.46	0.43
1:Q:235:PRO:HG2	1:Q:284:ARG:HH22	1.83	0.43
2:R:47:TYR:C	1:O:197:ARG:HH22	2.26	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:101:ASP:HB2	1:O:103:PRO:HG2	1.99	0.43
1:O:181:ASP:HB3	3:O:401:NAD:O2D	2.18	0.43
2:P:209:SER:HA	2:P:231:ALA:N	2.34	0.43
2:P:240:SER:HB3	2:P:313:TYR:CZ	2.53	0.43
2:P:301:VAL:HA	2:P:307:VAL:HG13	2.00	0.43
1:G:16:LEU:HD21	1:G:66:ILE:HG12	2.00	0.43
1:G:42:HIS:HA	1:G:46:TYR:CD2	2.54	0.43
1:G:102:GLY:N	1:G:103:PRO:HD2	2.33	0.43
1:G:169:LYS:CB	1:E:300:MET:HE2	2.48	0.43
1:G:221:LEU:HA	1:G:224:LYS:HZ2	1.83	0.43
1:G:304:MET:HE2	1:E:304:MET:HE2	2.00	0.43
2:H:80:ASN:HD22	2:H:83:ASN:CG	2.26	0.43
2:H:210:THR:H	2:H:231:ALA:CB	2.32	0.43
2:H:242:VAL:HG13	2:H:311:ALA:O	2.18	0.43
2:H:314:ASP:OD2	2:H:317:TRP:HB3	2.19	0.43
1:E:192:ASP:HB3	1:E:195:ARG:HB2	2.00	0.43
1:E:217:VAL:O	1:E:218:LEU:HD13	2.18	0.43
1:E:278:LEU:HB3	1:E:282:ASP:CB	2.48	0.43
2:F:140:TYR:HE2	2:F:333:LYS:HD3	1.84	0.43
1:I:47:ASP:CG	1:I:50:LEU:H	2.25	0.43
1:I:260:ARG:HA	1:I:263:ALA:HB3	2.00	0.43
2:J:11:ILE:H	3:J:401:NAD:PN	2.40	0.43
2:J:33:ASN:ND2	2:J:84:LEU:HD13	2.34	0.43
2:J:104:ARG:HA	2:J:107:ALA:HB3	2.01	0.43
2:L:60:THR:HB	2:L:66:ILE:HG23	2.01	0.43
2:L:169:GLY:O	2:L:249:SER:N	2.42	0.43
1:A:20:ARG:HA	1:A:21:LYS:HZ3	1.83	0.43
1:A:96:THR:HG21	1:A:99:PHE:HE2	1.84	0.43
1:C:257:ASN:OD1	1:C:260:ARG:NH1	2.52	0.43
2:D:167:LYS:HA	2:D:167:LYS:HD3	1.77	0.43
1:Q:310:TRP:HH2	1:O:203:ILE:HB	1.84	0.43
1:O:129:VAL:HG11	1:O:155:ALA:HB3	2.00	0.43
1:O:194:ARG:HB3	1:O:204:VAL:HG13	2.00	0.43
1:O:278:LEU:HB3	1:O:282:ASP:CB	2.48	0.43
1:O:319:GLN:O	1:O:322:VAL:N	2.52	0.43
2:P:157:LEU:HD12	2:P:158:ALA:N	2.33	0.43
2:P:163:VAL:O	2:P:166:GLN:HB2	2.18	0.43
1:G:159:LYS:HG2	1:G:160:VAL:N	2.31	0.43
1:G:181:ASP:OD1	1:G:231:ARG:NH1	2.51	0.43
2:H:18:CYS:SG	2:H:324:VAL:HG21	2.58	0.43
2:H:172:LYS:O	2:H:247:GLN:N	2.29	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:21:LYS:HZ3	1:E:21:LYS:H	1.66	0.43
2:F:1:LEU:O	2:F:28:ASP:N	2.51	0.43
2:F:161:VAL:O	2:F:164:LEU:HB2	2.19	0.43
2:F:176:THR:N	2:F:243:ASP:O	2.51	0.43
2:F:241:VAL:HA	2:F:311:ALA:O	2.18	0.43
2:J:104:ARG:N	2:J:128:ILE:HD11	2.33	0.43
2:J:111:LEU:HA	2:J:115:ALA:HB3	2.00	0.43
1:K:58:LYS:NZ	1:K:59:ILE:H	2.06	0.43
1:K:287:ASP:OD1	1:K:287:ASP:N	2.51	0.43
1:K:288:PHE:HB3	1:K:290:SER:O	2.19	0.43
2:L:206:VAL:N	2:L:233:ARG:O	2.37	0.43
1:A:115:LYS:HB3	1:A:142:ASN:O	2.17	0.43
1:A:128:TYR:HA	1:A:133:ASN:CG	2.44	0.43
2:B:57:ASP:O	2:B:68:VAL:HG23	2.19	0.43
2:B:104:ARG:NH1	2:B:146:ILE:HB	2.34	0.43
2:B:169:GLY:O	2:B:249:SER:N	2.49	0.43
2:B:204:ASN:HB3	2:D:281:VAL:HB	2.01	0.43
1:C:46:TYR:CG	2:D:280:LEU:HD11	2.54	0.43
1:C:193:LEU:HG	1:C:194:ARG:H	1.84	0.43
1:C:287:ASP:OD1	1:C:315:TRP:NE1	2.52	0.43
2:D:50:ILE:HG23	2:D:286:ARG:NE	2.34	0.43
2:D:273:LEU:HD13	2:D:292:SER:H	1.82	0.43
1:Q:121:PRO:HG3	1:Q:148:SER:N	2.33	0.43
2:R:177:THR:OG1	2:R:178:THR:N	2.51	0.43
1:O:89:ILE:O	1:O:114:LYS:HE3	2.18	0.43
1:O:134:GLU:CD	1:O:134:GLU:H	2.19	0.43
1:O:327:LEU:O	1:O:331:LYS:N	2.39	0.43
2:P:3:VAL:HG21	2:P:27:LEU:HD12	2.01	0.43
2:P:5:ILE:HG21	2:P:8:PHE:HD1	1.83	0.43
2:P:5:ILE:O	2:P:33:ASN:N	2.41	0.43
2:P:22:ARG:HH21	2:P:321:GLN:NE2	2.16	0.43
2:P:84:LEU:HB2	2:P:86:TRP:CH2	2.53	0.43
2:P:86:TRP:HB2	2:P:115:ALA:N	2.34	0.43
2:P:300:MET:N	2:P:308:LYS:HB3	2.33	0.43
1:G:281:VAL:HA	1:G:284:ARG:CG	2.48	0.43
2:H:40:GLN:CD	2:H:40:GLN:C	2.86	0.43
2:H:46:LYS:HG2	2:H:47:TYR:CE1	2.53	0.43
2:H:89:MET:SD	2:H:89:MET:N	2.91	0.43
2:H:186:ARG:HG3	2:H:190:ALA:O	2.17	0.43
2:F:96:GLU:CD	2:F:98:THR:HG1	2.21	0.43
2:F:104:ARG:CZ	2:F:146:ILE:HB	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:131:TYR:HD2	2:F:147:ILE:HG21	1.84	0.43
2:J:120:ILE:O	2:J:148:SER:OG	2.37	0.43
2:J:322:ARG:HA	2:J:325:ASP:OD2	2.19	0.43
2:L:86:TRP:CD1	2:L:113:ALA:C	2.96	0.43
2:L:104:ARG:HH11	2:L:146:ILE:HB	1.84	0.43
2:L:142:HIS:CD2	2:L:335:GLN:H	2.36	0.43
2:L:173:GLY:O	2:L:228:ASN:N	2.42	0.43
2:L:211:GLY:O	2:L:214:LYS:HG3	2.19	0.43
2:L:267:ASN:OD1	2:L:268:GLU:N	2.48	0.43
1:A:9:GLY:O	1:A:13:ARG:HG3	2.18	0.43
1:A:51:GLY:H	2:B:283:ILE:HD11	1.83	0.43
1:A:175:THR:HG23	1:A:239:VAL:O	2.19	0.43
1:A:183:ARG:HB3	1:A:185:LEU:O	2.18	0.43
1:A:260:ARG:HG3	1:A:273:VAL:HB	2.01	0.43
1:A:270:VAL:O	1:A:289:SER:HB2	2.19	0.43
1:C:4:ALA:HB1	1:C:29:VAL:HG12	2.01	0.43
1:C:4:ALA:O	1:C:93:ILE:HG12	2.19	0.43
1:C:46:TYR:CD1	2:D:280:LEU:HD11	2.54	0.43
1:C:81:LYS:C	1:C:83:PRO:HD3	2.43	0.43
1:C:167:ILE:O	1:C:224:LYS:NZ	2.50	0.43
1:C:198:ALA:HB3	1:C:201:LEU:HD11	2.00	0.43
1:C:203:ILE:CG1	1:C:232:VAL:HG12	2.49	0.43
1:C:208:THR:HG23	1:C:210:ALA:HB3	2.00	0.43
2:D:104:ARG:CZ	2:D:129:PRO:HD3	2.48	0.43
2:D:163:VAL:HG12	2:D:261:PHE:HE1	1.84	0.43
1:Q:171:THR:HA	1:Q:226:ASN:O	2.19	0.43
2:R:38:VAL:HG12	2:R:75:VAL:HG22	2.01	0.43
2:R:85:PRO:HB2	2:R:88:ASP:CG	2.43	0.43
2:R:204:ASN:ND2	2:P:282:SER:OG	2.51	0.43
2:R:239:VAL:HG13	2:R:313:TYR:C	2.44	0.43
1:O:81:LYS:H	1:O:81:LYS:HD2	1.84	0.43
1:O:90:ASP:HB3	1:O:332:TRP:CZ3	2.54	0.43
1:O:115:LYS:HE2	1:O:332:TRP:HB2	2.00	0.43
1:O:168:VAL:HB	1:O:245:ASN:OD1	2.18	0.43
1:O:176:HIS:HA	1:O:238:SER:OG	2.18	0.43
1:O:182:GLN:HA	1:O:195:ARG:HB3	2.00	0.43
2:P:32:ILE:O	2:P:76:VAL:HG22	2.18	0.43
1:G:17:ARG:NH1	1:G:47:ASP:HB3	2.34	0.43
1:G:240:VAL:O	1:G:308:VAL:HA	2.18	0.43
2:H:199:ARG:HH12	1:E:46:TYR:HB2	1.83	0.43
2:H:199:ARG:NH2	1:E:46:TYR:O	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H:204:ASN:HB3	2:F:281:VAL:HB	2.00	0.43
2:H:208:THR:HG21	2:H:233:ARG:NE	2.33	0.43
1:E:20:ARG:HD2	1:E:20:ARG:HA	1.50	0.43
1:E:119:THR:OG1	1:E:119:THR:O	2.35	0.43
2:F:5:ILE:H	2:F:32:ILE:HA	1.83	0.43
2:F:15:PHE:CZ	2:F:29:VAL:HG21	2.53	0.43
2:F:22:ARG:NH2	2:F:321:GLN:O	2.48	0.43
2:F:29:VAL:O	2:F:71:LYS:NZ	2.51	0.43
1:I:104:GLY:HA2	1:I:107:LYS:NZ	2.34	0.43
1:I:166:GLY:O	1:I:246:ILE:HG13	2.18	0.43
1:I:251:THR:O	1:I:255:VAL:HG23	2.19	0.43
1:I:292:ILE:HG12	1:I:309:ALA:HB1	2.00	0.43
1:I:298:MET:O	1:I:306:LYS:N	2.52	0.43
1:I:312:ASP:CG	1:I:313:ASN:N	2.77	0.43
2:J:1:LEU:HD11	2:J:334:TRP:CE3	2.54	0.43
2:J:257:VAL:O	2:J:261:PHE:N	2.24	0.43
2:J:275:VAL:HB	2:J:294:ILE:HB	2.01	0.43
1:K:77:ARG:HH12	1:E:356:GLU:CB	2.32	0.43
1:K:92:VAL:HG12	1:K:116:VAL:HG13	2.00	0.43
1:K:115:LYS:HB2	1:K:332:TRP:HZ3	1.84	0.43
2:L:30:VAL:HG13	2:L:71:LYS:NZ	2.33	0.43
2:L:320:SER:O	2:L:324:VAL:HG23	2.19	0.43
1:A:6:ASN:HB3	1:A:95:GLY:N	2.33	0.43
1:A:60:ILE:HG13	1:A:64:PHE:HA	2.01	0.43
1:A:312:ASP:OD1	1:A:317:TYR:N	2.33	0.43
2:B:46:LYS:HD2	2:B:54:PHE:HB3	2.01	0.43
2:B:202:CYS:HG	1:C:178:TYR:HH	1.61	0.43
1:C:4:ALA:HB2	1:C:89:ILE:HG13	2.01	0.43
1:C:86:GLU:HG2	1:C:87:LEU:N	2.29	0.43
1:C:192:ASP:OD2	1:C:194:ARG:HB2	2.17	0.43
1:C:220:GLN:C	1:C:221:LEU:HD13	2.43	0.43
1:C:245:ASN:HA	1:C:303:ASP:C	2.44	0.43
1:C:263:ALA:O	1:C:268:LYS:N	2.52	0.43
1:Q:17:ARG:NH1	1:Q:47:ASP:HB3	2.34	0.43
1:Q:50:LEU:HD11	1:Q:315:TRP:CD2	2.54	0.43
1:Q:151:THR:O	1:Q:154:LEU:N	2.51	0.43
1:Q:159:LYS:HG2	1:Q:160:VAL:N	2.32	0.43
1:Q:242:LEU:O	1:Q:307:VAL:HG23	2.18	0.43
2:R:255:GLU:CD	2:R:258:ASN:HB2	2.44	0.43
2:R:259:ALA:HA	2:R:262:ARG:HB2	1.99	0.43
1:O:217:VAL:O	1:O:218:LEU:HD13	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:84:LEU:HD12	2:P:86:TRP:CH2	2.54	0.43
2:P:104:ARG:HD2	2:P:146:ILE:HD12	2.00	0.43
2:P:159:PRO:O	2:P:162:LYS:HB3	2.18	0.43
1:G:90:ASP:HA	1:G:114:LYS:CG	2.49	0.43
1:G:172:MET:O	1:G:227:GLY:HA2	2.18	0.43
1:G:175:THR:HG23	1:G:239:VAL:O	2.18	0.43
2:H:98:THR:OG1	2:H:99:GLY:N	2.51	0.43
1:E:87:LEU:CB	1:E:89:ILE:HG12	2.48	0.43
1:E:99:PHE:HE1	1:E:107:LYS:HZ3	1.65	0.43
1:E:191:ARG:HD3	1:E:192:ASP:N	2.34	0.43
1:E:241:ASP:HB2	1:E:307:VAL:H	1.84	0.43
2:F:2:LYS:HG2	2:F:92:ASP:CG	2.43	0.43
2:F:118:VAL:HB	2:F:146:ILE:HG23	2.00	0.43
1:I:3:VAL:HA	1:I:89:ILE:HG23	2.00	0.43
1:I:15:PHE:CZ	1:I:322:VAL:HG13	2.54	0.43
2:J:8:PHE:HZ	2:J:13:ARG:HG3	1.80	0.43
2:J:10:ARG:HA	2:J:13:ARG:CD	2.48	0.43
2:J:24:ASP:O	2:J:26:PRO:HD3	2.18	0.43
2:J:59:LYS:N	2:J:67:SER:O	2.52	0.43
2:J:318:GLY:HA2	2:J:321:GLN:HG2	2.00	0.43
1:K:58:LYS:HB3	1:K:65:SER:OG	2.19	0.43
1:K:84:TRP:CE2	1:K:111:ALA:HB3	2.54	0.43
1:K:97:GLY:O	1:K:100:VAL:HG13	2.18	0.43
1:K:172:MET:SD	1:K:174:THR:N	2.92	0.43
1:K:328:VAL:O	1:K:332:TRP:HB2	2.19	0.43
2:L:84:LEU:O	2:L:86:TRP:N	2.52	0.43
2:L:119:LEU:HG	2:L:120:ILE:H	1.84	0.43
2:L:131:TYR:HA	2:L:136:ASN:HB2	2.01	0.43
2:L:164:LEU:HD22	2:L:170:ILE:HD11	1.99	0.43
2:B:26:PRO:HD2	2:B:27:LEU:HD22	2.01	0.43
2:B:132:VAL:HG12	2:B:133:VAL:H	1.84	0.43
2:B:179:HIS:O	2:B:234:VAL:HG13	2.19	0.43
2:B:282:SER:OG	2:D:204:ASN:ND2	2.51	0.43
1:C:64:PHE:HE1	1:C:66:ILE:HG12	1.83	0.43
1:C:178:TYR:HB3	1:C:233:PRO:HA	2.00	0.43
3:C:401:NAD:PN	3:C:401:NAD:H3D	2.57	0.43
2:D:2:LYS:H	2:D:2:LYS:HG2	1.64	0.43
2:D:186:ARG:HB2	2:D:198:ALA:O	2.19	0.43
2:D:292:SER:OG	2:D:311:ALA:HB1	2.19	0.43
1:Q:40:ALA:O	1:Q:43:LEU:HB2	2.18	0.43
1:Q:118:ILE:HB	1:Q:145:SER:CA	2.46	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:311:TYR:HD2	1:Q:312:ASP:O	2.01	0.43
2:R:15:PHE:CG	2:R:324:VAL:HG22	2.54	0.43
2:R:40:GLN:OE1	1:O:190:HIS:N	2.52	0.43
2:R:175:MET:O	2:R:229:GLY:HA3	2.19	0.43
1:O:28:VAL:C	1:O:71:ILE:HG23	2.43	0.43
1:O:74:VAL:HG11	1:O:82:LEU:HD22	2.00	0.43
1:O:135:LYS:HD2	1:O:135:LYS:HA	1.59	0.43
1:G:128:TYR:HD2	1:G:145:SER:N	2.17	0.43
1:G:253:GLU:OE2	1:G:294:SER:OG	2.37	0.43
2:H:222:ASN:HB3	2:H:223:LEU:HD12	2.00	0.43
2:H:239:VAL:HG13	2:H:313:TYR:C	2.44	0.43
1:E:29:VAL:HA	1:E:72:LYS:O	2.18	0.43
1:E:172:MET:HG3	1:E:242:LEU:HD12	2.01	0.43
1:E:178:TYR:N	1:E:232:VAL:O	2.52	0.43
1:E:320:ARG:HA	1:E:323:ASP:HB2	2.00	0.43
2:F:159:PRO:O	2:F:163:VAL:HG23	2.18	0.43
2:F:163:VAL:HA	2:F:166:GLN:CD	2.42	0.43
2:F:165:ASP:HA	2:F:170:ILE:HG13	2.00	0.43
2:J:96:GLU:OE2	2:J:98:THR:HG23	2.19	0.43
2:J:281:VAL:N	2:J:284:ASP:OD2	2.40	0.43
1:K:107:LYS:HA	1:K:110:GLN:CD	2.44	0.43
1:K:236:ASN:ND2	1:K:236:ASN:O	2.52	0.43
1:K:263:ALA:O	1:K:268:LYS:N	2.51	0.43
2:L:151:SER:HA	3:L:401:NAD:H4N	2.00	0.43
1:A:1:LEU:N	1:A:25:LEU:HA	2.34	0.43
1:A:10:ARG:HG2	1:A:13:ARG:HH21	1.83	0.43
1:A:251:THR:O	1:A:255:VAL:HG23	2.18	0.43
1:A:287:ASP:OD1	1:A:287:ASP:N	2.51	0.43
2:B:92:ASP:HA	2:B:116:LYS:HE2	2.01	0.43
3:C:401:NAD:H1D	1:O:362:GLU:OXT	2.19	0.43
2:D:40:GLN:HA	2:D:43:HIS:ND1	2.34	0.43
2:D:84:LEU:O	2:D:86:TRP:N	2.51	0.43
2:D:96:GLU:HG3	2:D:101:PHE:HB2	2.01	0.43
1:Q:38:LYS:HB2	1:Q:38:LYS:HE2	1.64	0.43
1:Q:332:TRP:CG	1:Q:333:PRO:HD2	2.53	0.43
1:Q:356:GLU:C	1:Q:358:CYS:H	2.27	0.43
2:R:164:LEU:HD22	2:R:170:ILE:HD11	2.00	0.43
2:R:213:ALA:HB1	2:R:228:ASN:ND2	2.34	0.43
2:R:318:GLY:O	2:R:322:ARG:HG2	2.18	0.43
2:R:331:ALA:O	2:R:334:TRP:HB2	2.19	0.43
1:O:93:ILE:HD12	1:O:117:ILE:HB	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:59:LYS:HA	2:P:59:LYS:HZ2	1.83	0.43
2:P:283:ILE:C	2:P:285:PHE:H	2.26	0.43
1:G:1:LEU:HD13	1:G:25:LEU:HD12	2.01	0.43
1:G:287:ASP:OD1	1:G:287:ASP:N	2.52	0.43
2:H:289:ASP:OD2	2:H:321:GLN:NE2	2.52	0.43
1:E:8:PHE:O	1:E:13:ARG:NH1	2.36	0.43
1:E:40:ALA:HA	1:E:43:LEU:HD12	2.01	0.43
1:E:164:GLU:OE1	1:E:255:VAL:HG12	2.19	0.43
2:F:38:VAL:HG12	2:F:64:SER:O	2.18	0.43
2:F:119:LEU:HG	2:F:148:SER:HA	2.00	0.43
1:I:77:ARG:HD2	3:Q:401:NAD:N1A	2.34	0.42
2:J:104:ARG:NE	2:J:127:ASP:O	2.41	0.42
2:J:142:HIS:HB2	2:J:333:LYS:HG3	2.00	0.42
2:J:157:LEU:HD12	2:J:158:ALA:N	2.33	0.42
2:J:179:HIS:O	2:J:234:VAL:HG13	2.19	0.42
1:K:24:PRO:O	1:K:25:LEU:HD13	2.19	0.42
1:K:45:LYS:HD2	1:K:53:PHE:CB	2.49	0.42
1:K:283:PHE:HE2	1:K:310:TRP:CE2	2.37	0.42
2:L:248:VAL:N	2:L:305:ASP:O	2.37	0.42
2:L:272:ILE:O	2:L:291:SER:OG	2.21	0.42
1:A:48:SER:HA	2:B:283:ILE:HG12	2.00	0.42
1:A:74:VAL:HG21	1:A:84:TRP:HH2	1.83	0.42
1:A:80:LEU:HG	1:A:107:LYS:HB3	2.01	0.42
1:A:180:GLY:N	2:D:188:LEU:HD22	2.34	0.42
1:A:272:ASP:HB2	1:A:288:PHE:CG	2.54	0.42
1:A:312:ASP:CG	1:A:316:GLY:H	2.26	0.42
2:B:172:LYS:HA	2:B:227:LEU:HD22	2.00	0.42
2:B:220:LEU:HD13	2:B:223:LEU:HD22	2.00	0.42
2:D:163:VAL:HG13	2:D:167:LYS:HZ1	1.84	0.42
2:D:181:TYR:CE1	2:D:237:PRO:HB3	2.53	0.42
2:D:192:HIS:ND1	2:D:197:ARG:HB2	2.33	0.42
1:Q:17:ARG:HD2	1:Q:53:PHE:CG	2.54	0.42
1:Q:29:VAL:HG23	1:Q:72:LYS:C	2.44	0.42
1:Q:241:ASP:OD1	1:Q:306:LYS:HG3	2.18	0.42
2:R:142:HIS:HA	2:R:330:VAL:HG13	2.01	0.42
2:P:42:SER:HG	2:P:43:HIS:H	1.66	0.42
2:P:111:LEU:HD22	2:P:116:LYS:N	2.34	0.42
2:P:137:GLU:O	2:P:140:TYR:HB3	2.19	0.42
1:G:47:ASP:CG	1:G:49:ILE:H	2.27	0.42
1:G:54:LYS:HA	1:G:54:LYS:HZ2	1.84	0.42
1:G:93:ILE:HG23	1:G:117:ILE:HB	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:149:CYS:HA	1:G:152:ASN:HB3	2.00	0.42
1:G:180:GLY:HA2	2:F:187:LEU:CD2	2.49	0.42
2:H:0:LYS:N	2:H:26:PRO:O	2.28	0.42
2:H:160:PHE:O	2:H:164:LEU:N	2.34	0.42
2:H:217:ALA:HA	2:H:224:LYS:HG2	2.00	0.42
1:E:37:VAL:HG13	1:E:73:VAL:HG11	2.00	0.42
1:E:45:LYS:NZ	1:E:53:PHE:O	2.33	0.42
2:F:0:LYS:NZ	2:F:1:LEU:HD13	2.33	0.42
2:F:205:ILE:HD11	2:F:234:VAL:HG12	2.01	0.42
1:I:78:ASP:OD1	1:I:80:LEU:HD12	2.19	0.42
1:I:272:ASP:HB2	1:I:288:PHE:CG	2.54	0.42
2:J:107:ALA:HB1	2:J:118:VAL:HG11	2.00	0.42
2:J:185:GLN:HA	2:J:197:ARG:HD3	2.02	0.42
2:J:210:THR:HG23	2:J:212:ALA:HB3	2.01	0.42
1:K:103:PRO:HA	1:E:110:GLN:HG2	2.00	0.42
1:K:125:ILE:H	1:K:125:ILE:HD12	1.83	0.42
1:K:137:TYR:OH	1:K:331:LYS:HB2	2.19	0.42
1:K:169:LYS:HA	1:K:224:LYS:CG	2.36	0.42
1:K:169:LYS:N	1:K:245:ASN:OD1	2.44	0.42
2:L:10:ARG:H	2:L:10:ARG:CD	2.30	0.42
2:L:178:THR:HG23	2:L:243:ASP:CG	2.44	0.42
2:L:304:ASP:OD1	2:L:304:ASP:N	2.50	0.42
2:B:10:ARG:HH12	1:C:186:ASP:C	2.25	0.42
2:B:56:ALA:HB1	2:B:69:ASP:OD2	2.19	0.42
2:B:89:MET:N	2:B:89:MET:SD	2.92	0.42
1:C:174:THR:HG23	1:C:175:THR:O	2.19	0.42
2:D:31:VAL:HA	2:D:74:LYS:O	2.18	0.42
2:D:278:GLU:OE1	2:D:280:LEU:HD13	2.19	0.42
1:Q:204:VAL:O	1:Q:230:LEU:HD23	2.19	0.42
2:R:93:LEU:HD21	2:R:95:ILE:HD11	2.01	0.42
2:R:238:ASN:ND2	2:R:239:VAL:H	2.17	0.42
1:O:20:ARG:HD2	1:O:20:ARG:HA	1.46	0.42
1:O:38:LYS:HE3	1:O:38:LYS:HB2	1.83	0.42
1:O:42:HIS:CD2	1:O:42:HIS:C	2.97	0.42
1:O:57:VAL:O	1:O:58:LYS:NZ	2.52	0.42
1:O:79:PRO:HG3	1:O:108:HIS:CE1	2.54	0.42
1:O:181:ASP:O	1:O:195:ARG:HD2	2.19	0.42
1:O:305:VAL:O	1:O:307:VAL:HG23	2.19	0.42
3:O:401:NAD:H52N	3:O:401:NAD:O5B	2.19	0.42
2:P:179:HIS:N	2:P:232:LEU:O	2.52	0.42
1:G:183:ARG:HG3	1:G:196:ALA:HA	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:251:THR:HG22	1:G:252:ALA:H	1.84	0.42
2:H:140:TYR:OH	2:H:330:VAL:HA	2.18	0.42
2:H:245:VAL:HA	2:H:307:VAL:O	2.19	0.42
1:E:40:ALA:HA	1:E:43:LEU:HB2	2.01	0.42
1:E:83:PRO:HG2	1:E:86:GLU:HB3	2.01	0.42
1:E:139:HIS:CD2	1:E:333:PRO:HG2	2.55	0.42
1:E:221:LEU:HG	1:E:224:LYS:HD2	2.01	0.42
2:F:15:PHE:HZ	2:F:29:VAL:HG21	1.84	0.42
2:F:104:ARG:HD2	2:F:146:ILE:HD12	2.01	0.42
2:F:180:SER:HG	2:F:181:TYR:N	2.16	0.42
1:I:96:THR:OG1	1:I:98:VAL:N	2.51	0.42
1:I:109:ILE:HD13	1:I:113:ALA:HB3	2.01	0.42
2:J:46:LYS:HG3	2:J:47:TYR:CE1	2.55	0.42
2:J:92:ASP:HA	2:J:116:LYS:HE2	2.00	0.42
2:J:160:PHE:HB2	2:J:261:PHE:CZ	2.54	0.42
2:J:247:GLN:HA	2:J:306:MET:HA	2.01	0.42
1:K:23:SER:C	1:K:25:LEU:H	2.26	0.42
1:K:202:ASN:C	1:K:203:ILE:HD12	2.44	0.42
2:L:187:LEU:H	2:L:187:LEU:HD23	1.83	0.42
1:A:14:ASN:HD22	1:A:15:PHE:N	2.17	0.42
1:A:77:ARG:HD3	3:A:401:NAD:N6A	2.34	0.42
1:A:183:ARG:HG2	1:A:187:ALA:N	2.35	0.42
1:A:203:ILE:HG13	1:A:232:VAL:HA	2.00	0.42
1:A:265:GLY:HA3	1:A:266:PRO:HD3	1.91	0.42
2:B:205:ILE:CD1	2:B:232:LEU:HB3	2.48	0.42
1:C:215:SER:HB2	1:C:222:LYS:HA	2.01	0.42
2:D:1:LEU:HB2	2:D:26:PRO:O	2.20	0.42
2:D:86:TRP:HD1	2:D:114:GLY:N	2.17	0.42
1:Q:184:LEU:H	2:P:187:LEU:HD22	1.85	0.42
2:R:131:TYR:HA	2:R:136:ASN:HB2	2.02	0.42
2:R:226:LYS:HG3	2:R:227:LEU:N	2.35	0.42
1:O:11:ILE:HB	1:O:314:GLU:HG3	2.00	0.42
1:O:129:VAL:HG23	1:O:217:VAL:HG11	2.02	0.42
1:O:172:MET:HE3	1:O:227:GLY:HA3	2.01	0.42
1:O:183:ARG:HE	1:O:187:ALA:C	2.27	0.42
1:O:190:HIS:HB3	1:O:196:ALA:HB2	2.00	0.42
1:G:15:PHE:CD2	1:G:18(A):TRP:HB2	2.54	0.42
1:G:118:ILE:HD12	1:G:145:SER:HA	2.01	0.42
1:G:277:PRO:HG3	1:E:193:LEU:HD13	2.00	0.42
2:H:164:LEU:HA	2:H:168:PHE:HD1	1.85	0.42
2:H:328:ASP:O	2:H:331:ALA:HB3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:10:ARG:NH2	1:E:14:ASN:HD21	2.16	0.42
1:E:211:ALA:HB3	1:E:212:LYS:HZ2	1.84	0.42
1:E:262:ALA:O	1:E:265:GLY:N	2.52	0.42
2:F:38:VAL:CA	2:F:66:ILE:HD11	2.50	0.42
2:F:81:PRO:HB3	2:F:110:HIS:CE1	2.54	0.42
1:I:23:SER:C	1:I:25:LEU:H	2.27	0.42
1:I:222:LYS:HZ2	1:Q:123(A):SER:C	2.16	0.42
1:I:241:ASP:OD1	1:I:242:LEU:N	2.53	0.42
1:I:265:GLY:HA3	1:I:266:PRO:HD3	1.90	0.42
2:J:132:VAL:HG22	2:J:149:ASN:HA	2.02	0.42
2:J:249:SER:OG	2:J:250:LYS:N	2.52	0.42
1:K:31:ASN:HA	1:K:74:VAL:C	2.45	0.42
1:K:42:HIS:CD2	1:K:42:HIS:C	2.97	0.42
1:K:139:HIS:NE2	1:K:332:TRP:HA	2.34	0.42
1:K:263:ALA:O	1:K:268:LYS:HG3	2.18	0.42
2:L:31:VAL:CG1	2:L:74:LYS:C	2.69	0.42
2:L:81:PRO:HB2	2:L:109:LYS:CB	2.48	0.42
1:A:23:SER:C	1:A:25:LEU:H	2.27	0.42
1:A:60:ILE:H	1:A:60:ILE:HG13	1.62	0.42
1:A:204:VAL:HA	1:A:205:PRO:HD2	1.90	0.42
2:B:104:ARG:HH22	2:B:129:PRO:HD3	1.83	0.42
2:B:119:LEU:O	2:B:120:ILE:HD13	2.19	0.42
2:B:182:THR:HG1	2:B:185:GLN:NE2	2.18	0.42
2:B:260:ALA:HA	2:B:263:GLU:HG3	2.02	0.42
2:B:308:LYS:NZ	2:D:175:MET:O	2.33	0.42
1:C:31:ASN:OD1	1:C:76:ASN:N	2.52	0.42
1:C:134:GLU:O	1:C:137:TYR:HB3	2.20	0.42
1:C:137:TYR:CE2	1:C:331:LYS:HB2	2.55	0.42
1:C:150:THR:O	1:C:154:LEU:HB2	2.19	0.42
2:D:22:ARG:O	2:D:23:LYS:NZ	2.48	0.42
2:D:121:THR:HA	2:D:149:ASN:HB3	2.01	0.42
2:D:182:THR:CB	2:D:185:GLN:HE22	2.30	0.42
1:Q:2:LYS:HD3	1:Q:88:GLY:O	2.19	0.42
1:Q:116:VAL:HB	1:Q:143:ILE:HG12	2.01	0.42
1:Q:134:GLU:N	1:Q:134:GLU:CD	2.77	0.42
1:G:181:ASP:O	1:G:195:ARG:HD3	2.18	0.42
1:G:216:LEU:HA	1:G:216:LEU:HD13	1.82	0.42
1:G:283:PHE:O	1:G:286:SER:OG	2.29	0.42
2:H:169:GLY:C	2:H:249:SER:H	2.27	0.42
2:H:220:LEU:HD23	2:H:220:LEU:HA	1.76	0.42
1:E:63:THR:OG1	1:E:72:LYS:HA	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:286:SER:HA	1:E:288:PHE:CE1	2.54	0.42
1:E:343:ASP:C	1:E:345:LEU:N	2.78	0.42
2:F:38:VAL:C	2:F:66:ILE:HD11	2.44	0.42
2:F:280:LEU:HB3	2:F:284:ASP:HB2	2.01	0.42
1:I:3:VAL:O	1:I:28:VAL:N	2.47	0.42
1:K:47:ASP:OD1	1:K:49:ILE:N	2.53	0.42
1:K:109:ILE:HD11	1:K:142:ASN:O	2.20	0.42
1:K:176:HIS:N	1:K:232:VAL:HG22	2.34	0.42
1:K:218:LEU:HB3	1:K:221:LEU:HD23	2.01	0.42
2:L:3:VAL:HG12	2:L:29:VAL:HG13	2.01	0.42
2:L:175:MET:HG3	2:L:228:ASN:C	2.44	0.42
1:A:31:ASN:CG	1:A:76:ASN:H	2.27	0.42
1:A:126:PRO:HG2	1:A:128:TYR:CE2	2.55	0.42
1:A:174:THR:HA	1:A:240:VAL:HA	2.01	0.42
1:A:258:ALA:HA	1:A:261:LYS:HB3	2.02	0.42
1:C:3:VAL:HG12	1:C:4:ALA:H	1.85	0.42
1:C:194:ARG:H	1:C:194:ARG:HG2	1.62	0.42
1:C:254:ASP:CA	1:C:257:ASN:HD22	2.32	0.42
2:D:31:VAL:HG22	2:D:74:LYS:HB2	2.02	0.42
2:D:34:ASP:O	2:D:77:SER:OG	2.36	0.42
2:D:131:TYR:N	2:D:148:SER:O	2.31	0.42
2:D:216:VAL:HG13	2:D:225:GLY:H	1.84	0.42
1:Q:44:LEU:HD12	1:Q:44:LEU:HA	1.85	0.42
1:Q:176:HIS:O	1:Q:232:VAL:N	2.22	0.42
2:R:50:ILE:C	2:R:52:GLY:H	2.26	0.42
1:O:10:ARG:NE	1:O:14:ASN:HD21	2.16	0.42
1:O:87:LEU:CB	1:O:89:ILE:HG12	2.48	0.42
1:O:298:MET:HE3	1:O:298:MET:HB2	1.78	0.42
2:P:81:PRO:HB3	2:P:110:HIS:HE1	1.84	0.42
2:P:153:THR:HG22	2:P:157:LEU:HD23	2.01	0.42
2:P:175:MET:N	2:P:229:GLY:HA3	2.34	0.42
2:P:305:ASP:O	2:P:307:VAL:HG23	2.18	0.42
1:G:96:THR:C	1:G:98:VAL:H	2.27	0.42
1:G:312:ASP:CG	1:G:315:TRP:HB3	2.44	0.42
2:H:17:ARG:CZ	2:H:51:LEU:HD12	2.48	0.42
2:H:132:VAL:O	2:H:136:ASN:N	2.48	0.42
2:H:180:SER:OG	2:H:181:TYR:N	2.52	0.42
2:H:226:LYS:HG3	2:H:227:LEU:N	2.35	0.42
2:H:255:GLU:CD	2:H:258:ASN:HB2	2.44	0.42
2:H:294:ILE:HG23	2:H:311:ALA:HB2	2.02	0.42
1:E:39:SER:OG	1:E:40:ALA:N	2.52	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:39:SER:HG	1:E:40:ALA:H	1.67	0.42
1:E:60:ILE:O	1:E:60(A):ASP:C	2.62	0.42
1:E:101:ASP:N	1:E:122(A):LYS:HZ3	2.17	0.42
1:E:170:GLY:HA3	1:E:244:VAL:HG12	2.01	0.42
2:F:194:ASP:OD2	2:F:197:ARG:HG3	2.19	0.42
2:F:196:ARG:NH1	2:F:196:ARG:HB3	2.32	0.42
1:I:36:GLY:HA3	1:I:38:LYS:NZ	2.35	0.42
1:I:63:THR:HG23	1:I:71:ILE:C	2.45	0.42
1:I:74:VAL:HG21	1:I:84:TRP:HH2	1.84	0.42
1:I:324:LEU:HA	1:I:327:LEU:HB3	2.01	0.42
2:J:276:CYS:SG	2:J:277:ASP:N	2.91	0.42
1:K:11:ILE:HB	3:K:401:NAD:N7N	2.34	0.42
1:K:85:ALA:H	1:K:112:GLY:HA3	1.83	0.42
1:K:98:VAL:HG13	1:E:355:ASP:HA	2.00	0.42
1:K:236:ASN:C	1:K:284:ARG:HH21	2.28	0.42
2:L:86:TRP:HD1	2:L:114:GLY:N	2.17	0.42
2:L:149:ASN:ND2	2:L:323:VAL:HG22	2.28	0.42
2:L:179:HIS:CE1	2:L:315:ASN:HD22	2.38	0.42
2:L:220:LEU:HB2	2:L:223:LEU:O	2.19	0.42
1:A:176:HIS:HA	1:A:238:SER:OG	2.20	0.42
2:B:46:LYS:HG3	2:B:47:TYR:CE1	2.55	0.42
2:B:301:VAL:HG22	2:B:307:VAL:HG13	2.01	0.42
1:C:3:VAL:HG23	1:C:26:ASP:H	1.85	0.42
1:C:203:ILE:HG13	1:C:232:VAL:HA	2.01	0.42
1:C:324:LEU:O	1:C:327:LEU:N	2.51	0.42
1:Q:0:LYS:NZ	1:Q:24:PRO:O	2.35	0.42
1:Q:194:ARG:HB3	1:Q:204:VAL:CG1	2.46	0.42
2:R:30:VAL:C	2:R:73:ILE:HG23	2.45	0.42
2:R:142:HIS:CE1	2:R:334:TRP:CE3	3.00	0.42
1:O:45:LYS:O	1:O:53:PHE:N	2.47	0.42
1:O:203:ILE:C	1:O:205:PRO:HD3	2.44	0.42
1:O:322:VAL:HA	1:O:325:ALA:HB3	2.02	0.42
2:P:39:LYS:O	2:P:43:HIS:CG	2.72	0.42
1:G:298:MET:HG2	1:G:306:LYS:HD3	2.01	0.42
1:E:9:GLY:O	1:E:13:ARG:HG2	2.20	0.42
2:F:17:ARG:HA	2:F:54:PHE:CZ	2.55	0.42
2:F:111:LEU:HD22	2:F:116:LYS:N	2.34	0.42
1:I:222:LYS:HE3	1:Q:124:ASP:HA	2.02	0.42
2:J:179:HIS:ND1	2:J:180:SER:O	2.43	0.42
2:J:186:ARG:HD3	2:J:186:ARG:HA	1.94	0.42
2:J:283:ILE:H	2:L:204:ASN:HD22	1.65	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:20:ARG:HH11	1:K:21:LYS:H	1.67	0.42
1:K:86:GLU:HG2	1:K:87:LEU:HG	2.02	0.42
1:K:92:VAL:HG11	1:K:108:HIS:CD2	2.55	0.42
1:K:137:TYR:CZ	1:K:328:VAL:HA	2.54	0.42
1:K:254:ASP:CA	1:K:257:ASN:HD22	2.31	0.42
2:L:8:PHE:CZ	2:L:45:LEU:HB2	2.54	0.42
2:L:175:MET:HA	2:L:244:LEU:HA	2.01	0.42
1:A:18(A):TRP:HA	1:A:20:ARG:HB2	2.00	0.42
1:A:63:THR:HG23	1:A:71:ILE:C	2.44	0.42
1:C:77:ARG:HA	3:C:401:NAD:N1A	2.34	0.42
1:C:183:ARG:HH12	1:O:357:GLU:N	2.17	0.42
1:C:183:ARG:O	1:C:199:ALA:N	2.53	0.42
1:C:219:PRO:C	1:C:222:LYS:H	2.27	0.42
2:D:1:LEU:HD21	2:D:334:TRP:CG	2.54	0.42
2:D:39:LYS:H	2:D:39:LYS:HG3	1.57	0.42
2:D:177:THR:HG23	2:D:232:LEU:H	1.85	0.42
1:Q:171:THR:HA	1:Q:226:ASN:C	2.44	0.42
1:Q:283:PHE:HE2	1:Q:310:TRP:CE3	2.37	0.42
2:R:8:PHE:CD2	2:R:41:ALA:HB1	2.54	0.42
2:R:169:GLY:C	2:R:249:SER:H	2.27	0.42
2:R:245:VAL:HA	2:R:307:VAL:O	2.20	0.42
1:O:15:PHE:CD1	1:O:322:VAL:HG22	2.55	0.42
1:O:64:PHE:O	1:O:70:PRO:HA	2.19	0.42
1:O:84:TRP:NE1	1:O:111:ALA:HB3	2.35	0.42
1:O:183:ARG:NH2	1:O:188:SER:HG	2.16	0.42
1:O:273:VAL:HG22	1:O:292:ILE:HD13	2.02	0.42
2:P:38:VAL:HG23	2:P:39:LYS:H	1.85	0.42
2:P:103:ASP:OD2	2:P:105:ASP:HB3	2.19	0.42
2:P:241:VAL:HA	2:P:311:ALA:O	2.19	0.42
1:G:66:ILE:HD11	1:G:71:ILE:HB	2.01	0.42
1:G:168:VAL:N	1:G:245:ASN:O	2.52	0.42
1:G:182:GLN:NE2	1:G:182:GLN:O	2.52	0.42
2:H:98:THR:OG1	2:H:100:VAL:N	2.46	0.42
2:H:195:LEU:O	2:H:199:ARG:HG2	2.19	0.42
2:H:240:SER:HG	2:H:241:VAL:N	2.16	0.42
2:H:244:LEU:HD23	2:H:309:VAL:HG21	2.02	0.42
2:H:312:TRP:HH2	2:F:205:ILE:H	1.67	0.42
2:F:13:ARG:CZ	2:F:44:LEU:HD22	2.50	0.42
2:F:18:CYS:C	2:F:22:ARG:HG2	2.45	0.42
2:F:159:PRO:O	2:F:162:LYS:HB3	2.19	0.42
1:I:0:LYS:H3	1:I:24:PRO:C	2.27	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:0:LYS:H2	1:I:25:LEU:C	2.28	0.42
1:I:107:LYS:HA	1:I:110:GLN:HB2	2.02	0.42
1:I:318:SER:C	1:I:320:ARG:N	2.77	0.42
2:J:31:VAL:O	2:J:32:ILE:HD13	2.19	0.42
2:J:89:MET:N	2:J:89:MET:SD	2.92	0.42
2:J:171:ILE:O	2:J:226:LYS:HD2	2.20	0.42
2:J:196:ARG:HD3	2:J:207:PRO:HD2	2.01	0.42
1:K:1:LEU:O	1:K:26:ASP:N	2.51	0.42
1:K:199:ALA:O	1:K:201:LEU:N	2.53	0.42
2:L:38:VAL:HG23	2:L:39:LYS:H	1.85	0.42
2:L:285:PHE:HE1	2:L:312:TRP:CG	2.38	0.42
1:A:43:LEU:HA	2:D:199:ARG:HH11	1.84	0.42
1:A:86:GLU:OE1	1:A:87:LEU:HG	2.20	0.42
1:A:241:ASP:HA	1:A:308:VAL:HG23	2.00	0.42
2:B:194:ASP:OD2	2:B:196:ARG:HB2	2.20	0.42
1:C:79:PRO:HG3	1:C:108:HIS:CE1	2.54	0.42
1:C:81:LYS:HB3	1:C:81:LYS:HE3	1.79	0.42
1:C:84:TRP:HE1	1:C:108:HIS:CA	2.32	0.42
1:C:150:THR:HG1	1:C:151:THR:H	1.67	0.42
1:C:248:LYS:HG2	1:C:248(A):VAL:H	1.83	0.42
1:C:274:CYS:O	1:C:294:SER:OG	2.38	0.42
1:C:328:VAL:O	1:C:332:TRP:HB2	2.19	0.42
2:D:219:VAL:HG23	2:D:220:LEU:HG	2.00	0.42
1:Q:3:VAL:O	1:Q:27:VAL:HA	2.19	0.42
1:Q:149:CYS:HB3	1:Q:317:TYR:CD2	2.55	0.42
2:R:32:ILE:HG22	2:R:75:VAL:HB	2.01	0.42
2:R:186:ARG:HD2	2:R:190:ALA:HB3	2.02	0.42
2:R:188:LEU:HD11	1:O:179:THR:HA	2.00	0.42
2:R:228:ASN:HB3	2:P:302:MET:SD	2.59	0.42
1:O:119:THR:OG1	1:O:119:THR:O	2.38	0.42
1:O:217:VAL:HG23	1:O:218:LEU:HD22	2.02	0.42
2:P:104:ARG:CZ	2:P:146:ILE:HB	2.49	0.42
2:P:179:HIS:O	2:P:234:VAL:HG22	2.19	0.42
2:P:196:ARG:NH1	2:P:196:ARG:HB3	2.33	0.42
1:G:58:LYS:HA	1:G:58:LYS:NZ	2.31	0.42
1:G:172:MET:HB2	1:G:240:VAL:HG23	2.02	0.42
3:G:401:NAD:PN	3:G:401:NAD:H3D	2.57	0.42
2:H:60:THR:HA	2:H:66:ILE:CG2	2.49	0.42
2:H:162:LYS:HE3	2:H:162:LYS:HB3	1.83	0.42
2:H:175:MET:O	2:H:229:GLY:HA3	2.20	0.42
1:E:243:VAL:HG23	1:E:305:VAL:C	2.45	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:94:VAL:N	2:F:117:LYS:O	2.40	0.42
2:F:238:ASN:ND2	2:F:239:VAL:H	2.17	0.42
2:F:294:ILE:HA	2:F:311:ALA:HB2	2.01	0.42
2:J:164:LEU:HA	2:J:168:PHE:HD1	1.82	0.42
2:J:220:LEU:HD13	2:J:223:LEU:HD13	2.01	0.42
1:K:155:ALA:N	1:K:156:PRO:HD2	2.34	0.42
2:L:91:ILE:O	2:L:115:ALA:HA	2.19	0.42
2:L:94:VAL:HG12	2:L:95:ILE:O	2.20	0.42
2:L:261:PHE:HD1	2:L:261:PHE:HA	1.63	0.42
1:A:41:THR:HG21	1:A:59:ILE:HG12	2.02	0.42
1:A:107:LYS:H	1:A:107:LYS:HG3	1.50	0.42
1:A:153:CYS:SG	1:A:311:TYR:HB3	2.60	0.42
1:A:181:ASP:HB3	1:G:362:GLU:C	2.44	0.42
2:B:5:ILE:H	2:B:32:ILE:HA	1.85	0.42
2:B:140:TYR:HE2	2:B:333:LYS:HD3	1.85	0.42
1:C:28:VAL:O	1:C:72:LYS:N	2.52	0.42
1:C:31:ASN:HD21	1:C:76:ASN:H	1.68	0.42
2:D:205:ILE:HD13	2:D:206:VAL:C	2.45	0.42
2:D:267:ASN:OD1	2:D:268:GLU:N	2.45	0.42
2:R:78:ASP:HB3	2:R:84:LEU:CD2	2.50	0.42
2:R:164:LEU:HA	2:R:168:PHE:HD1	1.85	0.42
2:R:186:ARG:HB2	2:R:198:ALA:O	2.19	0.42
1:O:199:ALA:C	1:O:201:LEU:N	2.78	0.42
1:O:286:SER:HA	1:O:288:PHE:CE1	2.54	0.42
2:P:118:VAL:HB	2:P:146:ILE:HG23	2.02	0.42
1:G:306:LYS:HE2	1:E:228:ILE:H	1.84	0.42
2:H:119:LEU:HG	2:H:148:SER:HA	2.02	0.42
2:H:149:ASN:ND2	2:H:155:ASN:OD1	2.33	0.42
2:H:171:ILE:O	2:H:226:LYS:HB2	2.20	0.42
2:H:316:GLU:N	2:H:316:GLU:CD	2.77	0.42
1:E:20:ARG:NH2	1:E:319:GLN:HB3	2.35	0.42
2:F:8:PHE:N	2:F:34:ASP:OD1	2.43	0.42
2:F:8:PHE:HB3	2:F:34:ASP:CG	2.45	0.42
2:F:137:GLU:O	2:F:140:TYR:HB3	2.20	0.42
2:F:253:PHE:O	2:F:256:GLU:HB3	2.20	0.42
1:I:306:LYS:HZ1	1:K:227:GLY:HA2	1.85	0.42
2:J:152:CYS:SG	2:J:153:THR:N	2.93	0.42
2:J:186:ARG:NH2	2:J:191:SER:O	2.53	0.42
2:J:239:VAL:HA	2:J:314:ASP:HA	2.02	0.42
2:J:249:SER:HG	2:J:250:LYS:H	1.68	0.42
2:J:309:VAL:O	2:J:310:ILE:HD13	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:16:LEU:O	1:K:18(A):TRP:N	2.52	0.42
1:K:17:ARG:H	1:K:17:ARG:HG2	1.62	0.42
1:K:172:MET:O	1:K:227:GLY:HA2	2.20	0.42
2:L:79:ARG:HD3	3:L:401:NAD:N6A	2.34	0.42
2:L:138:GLU:H	2:L:138:GLU:CD	2.18	0.42
1:A:8:PHE:CZ	1:A:13:ARG:HA	2.55	0.42
1:A:182:GLN:HA	1:A:195:ARG:HA	2.01	0.42
1:A:227:GLY:HA2	1:C:306:LYS:HZ2	1.85	0.42
1:A:227:GLY:HA2	1:C:306:LYS:NZ	2.35	0.42
2:B:86:TRP:CD1	2:B:113:ALA:HB3	2.54	0.42
2:B:276:CYS:SG	2:B:277:ASP:N	2.90	0.42
1:C:26:ASP:OD2	1:C:28:VAL:HG12	2.20	0.42
1:C:105:ALA:HB1	1:C:116:VAL:HG11	2.00	0.42
1:C:303:ASP:CG	1:C:304:MET:HE3	2.44	0.42
2:D:211:GLY:O	2:D:214:LYS:HG3	2.19	0.42
1:Q:151:THR:OG1	1:Q:210:ALA:HB1	2.20	0.42
1:Q:304:MET:HE1	1:O:245:ASN:H	1.85	0.42
1:Q:320:ARG:HA	1:Q:323:ASP:CG	2.45	0.42
2:R:50:ILE:HG22	2:R:51:LEU:HD23	2.02	0.42
3:R:401:NAD:O5B	3:R:401:NAD:H4D	2.20	0.42
1:O:176:HIS:HB3	1:O:231:ARG:HD3	2.01	0.42
1:O:204:VAL:CG2	1:O:231:ARG:HB2	2.50	0.42
2:P:240:SER:OG	2:P:241:VAL:N	2.53	0.42
2:P:251:LYS:HD2	2:P:304:ASP:HB2	2.02	0.42
1:G:197:ARG:NH2	1:E:282:ASP:OD1	2.40	0.42
1:E:33:SER:HA	1:E:75:SER:OG	2.19	0.42
1:E:94:GLU:HB2	1:E:118:ILE:HA	2.02	0.42
2:F:175:MET:N	2:F:229:GLY:HA3	2.35	0.42
2:F:230:ILE:HD12	2:F:231:ALA:O	2.20	0.42
2:F:240:SER:HB3	2:F:313:TYR:CZ	2.54	0.42
1:I:28:VAL:HA	1:I:71:ILE:HG13	2.01	0.41
1:I:94:GLU:CD	1:I:97:GLY:H	2.27	0.41
1:I:246:ILE:HA	1:I:246:ILE:HD12	1.91	0.41
1:I:284:ARG:HD2	1:I:284:ARG:HA	1.65	0.41
2:J:95:ILE:HD13	2:J:119:LEU:O	2.20	0.41
2:J:238:ASN:HB2	2:J:286:ARG:NH1	2.35	0.41
1:K:46:TYR:HE1	2:L:280:LEU:HD21	1.83	0.41
1:K:178:TYR:H	1:K:234:THR:H	1.67	0.41
2:L:1:LEU:HB2	2:L:26:PRO:O	2.20	0.41
2:L:17:ARG:NH2	2:L:51:LEU:O	2.53	0.41
1:A:31:ASN:ND2	1:A:77:ARG:HH21	2.18	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:58:LYS:HZ1	1:A:59:ILE:C	2.28	0.41
1:A:162:ASP:OD1	1:A:163:GLU:HG3	2.19	0.41
1:A:346:GLU:HA	1:A:349:CYS:HB3	2.02	0.41
2:B:32:ILE:C	2:B:75:VAL:HA	2.46	0.41
1:C:2:LYS:NZ	1:C:88:GLY:HA3	2.34	0.41
1:C:129:VAL:N	1:C:133:ASN:HD21	2.18	0.41
1:C:174:THR:OG1	1:C:175:THR:N	2.53	0.41
1:C:271:LEU:HD11	1:C:292:ILE:HG12	2.02	0.41
2:D:0:LYS:N	2:D:25:SER:O	2.36	0.41
2:D:33:ASN:C	3:D:401:NAD:H2A	2.45	0.41
2:D:91:ILE:O	2:D:115:ALA:HA	2.19	0.41
1:Q:62:GLU:HB2	1:Q:72:LYS:CE	2.50	0.41
1:Q:121:PRO:HD2	3:Q:402:NAD:H5N	2.01	0.41
1:Q:128:TYR:HD2	1:Q:145:SER:N	2.18	0.41
1:Q:148:SER:O	1:Q:149:CYS:C	2.62	0.41
1:Q:175:THR:OG1	1:Q:238:SER:HA	2.20	0.41
1:Q:175:THR:H	1:Q:239:VAL:H	1.68	0.41
1:Q:180:GLY:N	2:P:188:LEU:HD22	2.35	0.41
1:Q:349:CYS:SG	1:Q:353:PRO:HA	2.60	0.41
3:Q:402:NAD:PN	3:Q:402:NAD:H3D	2.60	0.41
2:R:22:ARG:HH21	2:R:324:VAL:HB	1.85	0.41
2:R:92:ASP:HA	2:R:116:LYS:HE2	2.02	0.41
2:R:170:ILE:HA	2:R:248:VAL:CA	2.38	0.41
2:R:295:ASP:OD2	2:R:298:LEU:N	2.49	0.41
1:O:212:LYS:HG3	1:O:225:LEU:HB2	2.02	0.41
2:P:22:ARG:HH22	2:P:325:ASP:N	2.18	0.41
2:P:230:ILE:HD12	2:P:231:ALA:O	2.20	0.41
2:P:255:GLU:CD	2:P:258:ASN:HB2	2.45	0.41
1:G:129:VAL:HG12	1:G:132:VAL:HB	2.01	0.41
1:G:180:GLY:H	2:F:188:LEU:HD22	1.85	0.41
1:G:201:LEU:H	1:G:201:LEU:HG	1.48	0.41
2:H:25:SER:C	2:H:27:LEU:H	2.27	0.41
2:H:153:THR:OG1	2:H:212:ALA:HB2	2.19	0.41
2:H:267:ASN:OD1	2:H:268:GLU:HG2	2.19	0.41
2:H:273:LEU:HD13	2:H:291:SER:HB2	2.01	0.41
1:E:3:VAL:HB	1:E:27:VAL:HG22	2.02	0.41
2:F:14:ASN:CG	2:F:317:TRP:HA	2.44	0.41
2:F:42:SER:HG	2:F:43:HIS:H	1.68	0.41
2:F:318:GLY:CA	2:F:321:GLN:HB2	2.41	0.41
1:I:298:MET:HE2	1:I:298:MET:HB2	1.85	0.41
1:I:322:VAL:HA	1:I:325:ALA:HB3	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:66:ILE:H	2:J:73:ILE:C	2.24	0.41
2:J:244:LEU:HD21	2:J:246:VAL:HG13	2.01	0.41
1:K:8:PHE:CE1	1:K:13:ARG:HG2	2.55	0.41
1:K:139:HIS:NE2	1:K:332:TRP:O	2.52	0.41
1:K:203:ILE:HG13	1:K:233:PRO:HD3	2.02	0.41
2:L:186:ARG:HG2	2:L:197:ARG:O	2.20	0.41
2:L:272:ILE:H	2:L:272:ILE:HG12	1.62	0.41
2:L:292:SER:OG	2:L:311:ALA:HB1	2.20	0.41
1:A:58:LYS:HA	1:A:58:LYS:HD2	1.86	0.41
1:A:124:ASP:CG	1:A:125:ILE:HD12	2.45	0.41
1:A:182:GLN:CD	1:A:182:GLN:H	2.27	0.41
2:B:142:HIS:HB2	2:B:333:LYS:HG3	2.02	0.41
2:B:164:LEU:HG	2:B:261:PHE:CZ	2.55	0.41
2:B:244:LEU:HD21	2:B:246:VAL:HG13	2.02	0.41
1:C:37:VAL:O	1:C:41:THR:N	2.42	0.41
1:C:57:VAL:HG13	1:C:66:ILE:HG12	2.02	0.41
2:D:107:ALA:HA	2:D:110:HIS:CD2	2.55	0.41
2:D:119:LEU:HG	2:D:120:ILE:H	1.85	0.41
2:D:314:ASP:OD1	2:D:316:GLU:N	2.54	0.41
2:R:160:PHE:CD2	2:R:161:VAL:HG13	2.55	0.41
2:R:187:LEU:HB2	1:O:184:LEU:HD13	2.02	0.41
2:R:204:ASN:HB3	2:P:281:VAL:HB	2.01	0.41
1:O:190:HIS:CE1	1:O:195:ARG:HB2	2.55	0.41
2:P:10:ARG:H	2:P:10:ARG:CZ	2.33	0.41
2:P:76:VAL:HG21	2:P:84:LEU:HB3	2.01	0.41
1:G:137:TYR:OH	1:G:331:LYS:HB2	2.20	0.41
1:G:149:CYS:HB3	1:G:317:TYR:CD2	2.55	0.41
1:G:169:LYS:HE2	1:E:304:MET:SD	2.60	0.41
1:G:171:THR:O	1:G:243:VAL:N	2.53	0.41
2:H:32:ILE:H	2:H:74:LYS:C	2.09	0.41
2:H:231:ALA:O	2:H:232:LEU:HD23	2.21	0.41
2:H:238:ASN:HD22	2:H:239:VAL:N	2.16	0.41
2:H:282:SER:OG	2:F:204:ASN:ND2	2.54	0.41
1:E:241:ASP:HB2	1:E:307:VAL:HB	2.01	0.41
1:E:318:SER:O	1:E:321:VAL:HB	2.19	0.41
2:F:142:HIS:NE2	2:F:334:TRP:HA	2.35	0.41
1:I:3:VAL:HG23	1:I:26:ASP:H	1.85	0.41
2:J:15:PHE:CE2	2:J:323:VAL:HB	2.55	0.41
2:J:19:TRP:CH2	2:J:71:LYS:HG2	2.55	0.41
2:J:86:TRP:CD1	2:J:113:ALA:C	2.98	0.41
2:J:152:CYS:HB3	2:J:319:TYR:CG	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:3:VAL:O	1:K:28:VAL:HG13	2.20	0.41
1:K:26:ASP:OD2	1:K:28:VAL:HG12	2.20	0.41
1:K:170:GLY:O	1:K:225:LEU:HA	2.20	0.41
1:K:181:ASP:CG	1:K:195:ARG:HH11	2.28	0.41
2:L:81:PRO:HB3	2:L:110:HIS:ND1	2.36	0.41
2:L:95:ILE:HG22	2:L:96:GLU:H	1.85	0.41
2:L:104:ARG:O	2:L:108:GLY:N	2.31	0.41
2:L:220:LEU:HD13	2:L:223:LEU:HD22	2.01	0.41
1:A:312:ASP:OD2	1:A:314:GLU:N	2.53	0.41
1:A:312:ASP:CG	1:A:313:ASN:N	2.78	0.41
1:A:360:LEU:HA	1:G:195:ARG:HD2	2.01	0.41
2:B:58:VAL:HA	2:B:68:VAL:HA	2.02	0.41
1:C:24:PRO:O	1:C:25:LEU:HD13	2.21	0.41
1:C:139:HIS:HE2	1:C:332:TRP:CD1	2.38	0.41
1:C:166:GLY:C	1:C:247:GLU:HB2	2.45	0.41
1:C:190:HIS:O	1:C:196:ALA:HB2	2.20	0.41
1:C:272:ASP:O	1:C:291:THR:HA	2.20	0.41
1:C:289:SER:HA	1:C:320:ARG:NH1	2.35	0.41
2:D:29:VAL:HG12	2:D:31:VAL:O	2.19	0.41
2:D:180:SER:HA	2:D:236:THR:HG22	2.03	0.41
2:D:215:ALA:HA	2:D:218:LEU:HB2	2.00	0.41
2:D:247:GLN:HA	2:D:306:MET:HA	2.01	0.41
1:Q:39:SER:O	1:Q:43:LEU:HG	2.21	0.41
1:Q:214:VAL:HB	1:Q:225:LEU:HD22	2.02	0.41
2:R:22:ARG:NH2	2:R:324:VAL:HB	2.34	0.41
2:R:41:ALA:HA	2:R:44:LEU:HD12	2.02	0.41
2:R:195:LEU:O	2:R:199:ARG:HG2	2.20	0.41
2:R:210:THR:H	2:R:231:ALA:CB	2.33	0.41
1:O:18(B):HIS:HB3	1:O:53:PHE:CE2	2.54	0.41
1:O:162:ASP:HB2	1:O:167:ILE:HB	2.01	0.41
1:G:161:LEU:O	1:G:165:LEU:HD22	2.19	0.41
1:G:175:THR:O	1:G:238:SER:HA	2.20	0.41
1:G:320:ARG:HA	1:G:323:ASP:OD2	2.20	0.41
2:H:31:VAL:HG21	2:H:74:LYS:HZ2	1.82	0.41
2:H:211:GLY:HA2	2:H:214:LYS:HD2	2.01	0.41
2:H:295:ASP:OD2	2:H:298:LEU:N	2.49	0.41
1:E:17:ARG:CZ	1:E:53:PHE:HA	2.50	0.41
1:E:18:CYS:SG	1:E:319:GLN:NE2	2.89	0.41
1:E:157:PHE:CD1	1:E:158:VAL:HG23	2.55	0.41
2:F:8:PHE:HB3	2:F:34:ASP:OD2	2.20	0.41
2:F:32:ILE:HG22	2:F:33:ASN:N	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:F:38:VAL:HG11	2:F:64:SER:O	2.21	0.41
2:F:85:PRO:HB2	2:F:88:ASP:CG	2.45	0.41
2:F:320:SER:OG	2:F:321:GLN:N	2.51	0.41
1:I:84:TRP:CD1	1:I:92:VAL:HG21	2.56	0.41
1:I:156:PRO:HB3	1:I:270:VAL:HG12	2.02	0.41
1:I:159:LYS:HB3	1:I:163:GLU:CD	2.45	0.41
1:I:176:HIS:O	1:I:232:VAL:HG22	2.20	0.41
2:J:86:TRP:CD1	2:J:113:ALA:HB3	2.54	0.41
2:J:105:ASP:CG	2:J:109:LYS:HZ3	2.28	0.41
2:J:131:TYR:HA	2:J:131:TYR:HD1	1.62	0.41
2:J:197:ARG:HG3	2:J:206:VAL:HG11	2.01	0.41
2:J:259:ALA:O	2:J:263:GLU:N	2.31	0.41
2:J:308:LYS:NZ	2:L:230:ILE:H	2.19	0.41
1:K:38:LYS:NZ	1:K:39:SER:H	2.14	0.41
1:K:56:ASP:O	1:K:67:ASP:N	2.51	0.41
1:K:250:VAL:HG23	1:K:251:THR:O	2.20	0.41
2:L:205:ILE:HD13	2:L:206:VAL:N	2.36	0.41
2:L:294:ILE:HA	2:L:311:ALA:HB2	2.02	0.41
1:A:0:LYS:H3	1:A:24:PRO:C	2.28	0.41
1:A:219:PRO:HB3	1:G:123(A):SER:OG	2.20	0.41
2:B:0:LYS:HG3	2:B:26:PRO:HA	2.01	0.41
2:B:1:LEU:HD11	2:B:334:TRP:CG	2.54	0.41
2:B:10:ARG:HH22	1:C:186:ASP:HB2	1.85	0.41
2:B:46:LYS:HZ2	2:B:53:THR:HG1	1.68	0.41
1:C:149:CYS:H	1:C:317:TYR:HE1	1.67	0.41
2:D:18:CYS:O	2:D:22:ARG:HG2	2.20	0.41
2:D:81:PRO:HB3	2:D:110:HIS:ND1	2.36	0.41
1:Q:18(B):HIS:HB3	1:Q:53:PHE:CZ	2.52	0.41
1:Q:60(A):ASP:O	1:Q:62:GLU:N	2.53	0.41
1:Q:175:THR:O	1:Q:238:SER:HA	2.21	0.41
1:Q:301:GLY:HA3	1:O:169:LYS:NZ	2.35	0.41
2:R:137:GLU:C	2:R:140:TYR:HB3	2.44	0.41
2:R:189:ASP:HA	2:R:199:ARG:HA	2.03	0.41
2:R:217:ALA:HA	2:R:224:LYS:HG2	2.02	0.41
2:R:267:ASN:OD1	2:R:268:GLU:HG2	2.21	0.41
2:R:328:ASP:O	2:R:331:ALA:HB3	2.21	0.41
1:O:18(A):TRP:HZ3	1:O:66:ILE:HG21	1.85	0.41
1:O:148:SER:OG	1:O:150:THR:HB	2.20	0.41
1:O:176:HIS:O	1:O:231:ARG:HA	2.19	0.41
2:P:19:TRP:CZ3	2:P:68:VAL:CG2	3.03	0.41
2:P:160:PHE:HB3	2:P:269:LEU:HD11	2.00	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:17:ARG:NH1	1:G:51:GLY:O	2.49	0.41
1:G:160:VAL:HA	1:G:163:GLU:CD	2.46	0.41
1:G:160:VAL:HG22	1:G:164:GLU:CD	2.45	0.41
1:G:170:GLY:O	1:G:226:ASN:N	2.53	0.41
2:H:3:VAL:HG12	2:H:29:VAL:HG13	2.02	0.41
2:H:168:PHE:CZ	2:H:257:VAL:HA	2.55	0.41
2:H:305:ASP:O	2:H:307:VAL:HG23	2.20	0.41
1:E:41:THR:O	1:E:45:LYS:N	2.24	0.41
1:E:183:ARG:HB2	1:E:196:ALA:C	2.45	0.41
2:F:45:LEU:HG	2:F:54:PHE:HD2	1.86	0.41
2:F:78:ASP:CG	2:F:80:ASN:H	2.29	0.41
2:F:152:CYS:HB3	2:F:319:TYR:CD2	2.56	0.41
1:I:94:GLU:OE1	1:I:119:THR:OG1	2.39	0.41
1:I:246:ILE:HG23	1:I:248:LYS:N	2.35	0.41
1:I:324:LEU:O	1:I:327:LEU:HB3	2.20	0.41
2:J:32:ILE:C	2:J:75:VAL:HA	2.45	0.41
2:J:176:THR:HG23	2:J:230:ILE:HG13	2.01	0.41
2:J:325:ASP:O	2:J:329:ILE:HG13	2.19	0.41
1:K:11:ILE:HA	1:K:14:ASN:CB	2.46	0.41
1:K:83:PRO:C	1:K:85:ALA:N	2.78	0.41
2:L:5:ILE:HA	2:L:94:VAL:HG13	2.03	0.41
2:L:96:GLU:HG3	2:L:101:PHE:HB2	2.02	0.41
1:A:108:HIS:CD2	1:A:108:HIS:H	2.37	0.41
1:A:332:TRP:CD1	1:A:333:PRO:HD2	2.54	0.41
2:B:31:VAL:O	2:B:32:ILE:HD13	2.20	0.41
2:B:141:THR:N	2:B:144:ASP:OD2	2.53	0.41
2:B:204:ASN:HD22	2:D:282:SER:N	2.18	0.41
1:C:10:ARG:HH12	1:C:48:SER:HB2	1.86	0.41
1:C:155:ALA:N	1:C:156:PRO:HD2	2.35	0.41
1:C:235:PRO:HG2	1:C:284:ARG:NH2	2.35	0.41
1:C:325:ALA:O	1:C:328:VAL:HB	2.20	0.41
2:D:5:ILE:HG22	2:D:6:ASN:N	2.36	0.41
2:D:37:GLY:HA2	1:G:342:GLY:O	2.20	0.41
1:Q:89:ILE:CG2	1:Q:92:VAL:HG22	2.50	0.41
1:Q:139:HIS:O	1:Q:140:VAL:HG23	2.20	0.41
3:Q:402:NAD:O2A	3:Q:402:NAD:H4B	2.21	0.41
2:R:54:PHE:O	2:R:56:ALA:N	2.53	0.41
2:R:189:ASP:CG	2:R:200:ALA:H	2.29	0.41
2:R:206:VAL:O	2:R:208:THR:HG22	2.21	0.41
2:R:211:GLY:HA2	2:R:214:LYS:HD2	2.03	0.41
1:O:11:ILE:HG22	3:O:401:NAD:O2N	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:18(B):HIS:HB3	1:O:53:PHE:CZ	2.56	0.41
1:O:237:VAL:O	1:O:238:SER:OG	2.36	0.41
1:O:290:SER:OG	1:O:291:THR:N	2.53	0.41
1:O:312:ASP:CG	1:O:316:GLY:H	2.27	0.41
2:P:148:SER:OG	2:P:149:ASN:N	2.54	0.41
1:G:81:LYS:H	1:G:81:LYS:HG2	1.50	0.41
1:G:137:TYR:O	1:G:331:LYS:NZ	2.53	0.41
1:G:175:THR:HG1	1:G:238:SER:HA	1.84	0.41
1:G:183:ARG:HE	1:G:188:SER:C	2.28	0.41
1:G:184:LEU:HD22	2:F:187:LEU:HA	2.01	0.41
2:H:7:GLY:O	2:H:9:GLY:N	2.53	0.41
1:E:194:ARG:HB3	1:E:204:VAL:CG1	2.51	0.41
2:F:16:LEU:HD23	2:F:54:PHE:CE2	2.51	0.41
2:F:43:HIS:CD2	2:F:47:TYR:HE2	2.39	0.41
2:F:96:GLU:OE2	2:F:100:VAL:N	2.53	0.41
2:F:174:THR:HA	2:F:228:ASN:O	2.21	0.41
2:F:255:GLU:CD	2:F:258:ASN:HB2	2.46	0.41
1:I:124:ASP:CG	1:I:125:ILE:HD12	2.45	0.41
1:I:272:ASP:O	1:I:292:ILE:HG13	2.20	0.41
2:L:34:ASP:HA	3:L:401:NAD:C2A	2.49	0.41
2:L:86:TRP:HB3	2:L:91:ILE:HB	2.02	0.41
2:L:89:MET:HE2	2:L:89:MET:HB2	1.91	0.41
2:L:163:VAL:HG12	2:L:261:PHE:HE1	1.85	0.41
1:A:36:GLY:HA3	1:A:38:LYS:NZ	2.36	0.41
2:B:1:LEU:HD11	2:B:334:TRP:CE3	2.56	0.41
2:B:13:ARG:O	2:B:16:LEU:HB3	2.21	0.41
2:B:32:ILE:O	2:B:76:VAL:HG23	2.21	0.41
2:B:249:SER:OG	2:B:250:LYS:N	2.53	0.41
2:B:308:LYS:HB2	2:B:308:LYS:HE3	1.84	0.41
1:C:96:THR:HB	3:C:401:NAD:C4A	2.51	0.41
1:C:97:GLY:O	1:C:100:VAL:HG13	2.20	0.41
1:C:103:PRO:O	1:C:107:LYS:HG3	2.21	0.41
1:C:154:LEU:HA	1:C:157:PHE:CZ	2.56	0.41
1:C:154:LEU:C	1:C:156:PRO:HD2	2.46	0.41
1:C:165:LEU:HB2	1:C:246:ILE:HD11	2.01	0.41
1:C:260:ARG:O	1:C:264:ALA:N	2.42	0.41
1:C:276:ILE:HB	1:C:278:LEU:HD11	2.03	0.41
2:D:178:THR:HG23	2:D:243:ASP:OD2	2.20	0.41
2:D:272:ILE:H	2:D:272:ILE:HG12	1.64	0.41
1:Q:1:LEU:HD12	1:Q:1:LEU:HA	1.87	0.41
2:R:34:ASP:OD1	3:R:401:NAD:H1B	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:46:LYS:HA	2:R:46:LYS:HD2	1.92	0.41
2:R:86:TRP:HD1	2:R:113:ALA:HB3	1.79	0.41
2:R:91:ILE:HB	2:R:115:ALA:HA	2.02	0.41
2:R:186:ARG:HG3	2:R:190:ALA:O	2.20	0.41
2:R:305:ASP:O	2:R:307:VAL:HG23	2.20	0.41
2:R:316:GLU:CD	2:R:316:GLU:N	2.78	0.41
1:O:107:LYS:HA	1:O:110:GLN:OE1	2.21	0.41
1:O:148:SER:HA	1:O:317:TYR:CE2	2.56	0.41
1:G:43:LEU:HA	2:F:199:ARG:HH12	1.86	0.41
1:G:56:ASP:OD1	1:G:58:LYS:HD3	2.21	0.41
1:G:171:THR:HG1	1:G:226:ASN:HB3	1.86	0.41
1:G:191:ARG:HB2	1:G:191:ARG:NH1	2.36	0.41
1:E:84:TRP:N	1:E:111:ALA:O	2.54	0.41
1:E:139:HIS:CE1	1:E:332:TRP:HA	2.55	0.41
2:F:6:ASN:HA	2:F:33:ASN:HD22	1.85	0.41
2:F:157:LEU:HD12	2:F:158:ALA:N	2.36	0.41
2:F:258:ASN:C	2:F:261:PHE:H	2.28	0.41
1:I:31:ASN:CG	1:I:76:ASN:H	2.27	0.41
1:I:186:ASP:CG	1:I:197:ARG:HE	2.29	0.41
1:I:201:LEU:H	1:I:201:LEU:HG	1.59	0.41
1:I:278:LEU:HB3	1:I:282:ASP:CB	2.50	0.41
1:I:289:SER:CB	1:I:320:ARG:HD2	2.51	0.41
2:J:1:LEU:HD11	2:J:334:TRP:CG	2.56	0.41
1:K:3:VAL:HG23	1:K:26:ASP:H	1.86	0.41
1:K:65:SER:C	1:K:66:ILE:HG13	2.44	0.41
1:K:66:ILE:HD12	1:K:71:ILE:HD13	2.03	0.41
1:K:98:VAL:HG22	1:E:355:ASP:HA	2.03	0.41
1:K:139:HIS:O	1:K:140:VAL:HG23	2.19	0.41
1:K:244:VAL:O	1:K:304:MET:HE3	2.20	0.41
2:L:142:HIS:CD2	2:L:334:TRP:HA	2.56	0.41
2:L:142:HIS:CG	2:L:334:TRP:HA	2.55	0.41
1:A:33:SER:OG	1:A:77:ARG:NH2	2.54	0.41
1:A:45:LYS:NZ	1:A:53:PHE:O	2.33	0.41
1:A:83:PRO:HG2	1:A:86:GLU:OE1	2.20	0.41
1:A:152:ASN:OD1	1:A:317:TYR:HE1	2.04	0.41
1:A:299:VAL:HA	1:A:306:LYS:H	1.86	0.41
2:B:137:GLU:CD	2:B:138:GLU:HG3	2.45	0.41
2:B:219:VAL:HG23	2:B:220:LEU:HG	2.02	0.41
2:B:308:LYS:NZ	2:D:230:ILE:H	2.18	0.41
1:C:128:TYR:OH	1:C:137:TYR:HA	2.20	0.41
1:C:272:ASP:HB2	1:C:288:PHE:CD1	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:272:ASP:O	1:C:292:ILE:N	2.43	0.41
2:D:194:ASP:OD1	2:D:196:ARG:HG3	2.20	0.41
1:Q:94:GLU:CG	1:Q:99:PHE:HB2	2.50	0.41
1:Q:270:VAL:HG12	1:Q:271:LEU:HD12	2.02	0.41
2:R:46:LYS:HZ1	2:R:55:ASP:HA	1.86	0.41
1:O:8:PHE:CE1	1:O:13:ARG:HG2	2.55	0.41
1:O:96:THR:HG1	1:O:97:GLY:H	1.68	0.41
1:O:126:PRO:HB2	1:O:145:SER:H	1.86	0.41
1:O:139:HIS:CE1	1:O:333:PRO:HD2	2.56	0.41
1:O:149:CYS:SG	1:O:150:THR:N	2.93	0.41
1:O:162:ASP:HB2	1:O:167:ILE:HD12	2.03	0.41
1:O:199:ALA:C	1:O:201:LEU:H	2.28	0.41
1:O:267:LEU:CD1	1:O:271:LEU:HD22	2.51	0.41
1:O:343:ASP:C	1:O:345:LEU:N	2.79	0.41
2:P:96:GLU:HG2	2:P:98:THR:HG23	2.03	0.41
2:P:104:ARG:NH2	2:P:129:PRO:HD3	2.34	0.41
2:P:118:VAL:HB	2:P:146:ILE:HG12	2.03	0.41
2:P:207:PRO:HA	2:P:232:LEU:HD23	2.03	0.41
1:G:184:LEU:N	2:F:187:LEU:HD22	2.36	0.41
1:G:332:TRP:CD2	1:G:333:PRO:HD2	2.55	0.41
2:H:94:VAL:O	2:H:95:ILE:HD13	2.20	0.41
2:H:153:THR:HG21	2:H:210:THR:HG21	2.02	0.41
1:E:62:GLU:HB3	1:E:72:LYS:HZ3	1.85	0.41
1:E:126:PRO:HG2	1:E:143:ILE:O	2.21	0.41
1:E:327:LEU:O	1:E:331:LYS:N	2.37	0.41
2:F:135:VAL:HG22	2:F:162:LYS:HE3	2.02	0.41
2:F:179:HIS:O	2:F:234:VAL:HG22	2.21	0.41
1:I:107:LYS:HB2	1:I:108:HIS:CD2	2.55	0.41
1:I:139:HIS:HE1	1:I:328:VAL:HG12	1.85	0.41
1:I:194:ARG:HH12	1:I:204:VAL:HA	1.85	0.41
1:I:194:ARG:NH1	1:I:204:VAL:HA	2.36	0.41
1:I:227:GLY:HA2	1:K:306:LYS:HZ1	1.86	0.41
1:I:304:MET:HE3	1:K:245:ASN:ND2	2.36	0.41
2:J:9:GLY:O	2:J:13:ARG:N	2.42	0.41
2:J:26:PRO:HD2	2:J:27:LEU:HD22	2.02	0.41
2:J:96:GLU:OE2	2:J:101:PHE:N	2.52	0.41
2:J:157:LEU:HB2	2:J:161:VAL:HG11	2.01	0.41
2:J:194:ASP:OD2	2:J:196:ARG:HB2	2.21	0.41
2:J:321:GLN:HA	2:J:324:VAL:HB	2.02	0.41
1:K:79:PRO:HG3	1:K:108:HIS:CE1	2.55	0.41
1:K:148:SER:O	1:K:152:ASN:N	2.32	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:272:ASP:HB2	1:K:288:PHE:CD1	2.54	0.41
1:K:319:GLN:HB3	1:K:320:ARG:NH2	2.35	0.41
1:K:361:TYR:H	1:E:195:ARG:HH22	1.67	0.41
2:L:15:PHE:CE2	2:L:323:VAL:HB	2.56	0.41
2:L:205:ILE:HG12	2:L:234:VAL:HA	2.02	0.41
1:A:109:ILE:HD11	1:A:116:VAL:HG23	2.02	0.41
1:A:153:CYS:O	1:A:156:PRO:HD2	2.20	0.41
1:A:186:ASP:HA	1:A:196:ALA:O	2.21	0.41
1:A:283:PHE:HE2	1:A:310:TRP:CG	2.37	0.41
1:A:324:LEU:O	1:A:327:LEU:HB3	2.20	0.41
2:B:39:LYS:HG2	2:B:40:GLN:H	1.84	0.41
2:B:179:HIS:N	2:B:232:LEU:O	2.54	0.41
2:B:210:THR:HG23	2:B:212:ALA:HB3	2.01	0.41
2:B:210:THR:N	2:B:231:ALA:HB2	2.36	0.41
1:C:1:LEU:O	1:C:3:VAL:HG23	2.21	0.41
1:C:16:LEU:HG	1:C:18(B):HIS:HB2	2.02	0.41
1:C:84:TRP:CB	1:C:89:ILE:HB	2.51	0.41
1:C:173:THR:HG23	1:C:228:ILE:HD13	2.02	0.41
1:C:211:ALA:O	1:C:225:LEU:HB2	2.21	0.41
1:C:250:VAL:HG23	1:C:251:THR:O	2.19	0.41
1:C:260:ARG:HG3	1:C:273:VAL:HG21	2.03	0.41
1:C:358:CYS:C	1:O:190:HIS:HA	2.45	0.41
2:D:1:LEU:HD21	2:D:334:TRP:CD2	2.56	0.41
1:Q:5:ILE:HG12	1:Q:93:ILE:CG1	2.51	0.41
1:Q:15:PHE:CZ	1:Q:322:VAL:HG13	2.48	0.41
2:R:8:PHE:HD2	2:R:41:ALA:HB1	1.84	0.41
2:R:162:LYS:HE3	2:R:162:LYS:HB3	1.83	0.41
1:O:1:LEU:O	1:O:3:VAL:HG23	2.20	0.41
1:O:38:LYS:HA	1:O:59:ILE:HD13	2.03	0.41
1:O:63:THR:HG23	1:O:71:ILE:C	2.46	0.41
1:O:84:TRP:HB2	1:O:112:GLY:O	2.21	0.41
1:O:162:ASP:O	1:O:166:GLY:N	2.54	0.41
2:P:13:ARG:NH1	2:P:44:LEU:HD22	2.35	0.41
2:P:18:CYS:O	2:P:22:ARG:HG2	2.20	0.41
2:P:94:VAL:HG12	2:P:118:VAL:HG22	2.03	0.41
2:P:131:TYR:CD2	2:P:147:ILE:HG21	2.56	0.41
2:P:174:THR:HA	2:P:228:ASN:O	2.21	0.41
2:P:223:LEU:HA	2:P:227:LEU:HD23	2.02	0.41
1:G:162:ASP:HA	1:G:167:ILE:HG13	2.03	0.41
1:G:169:LYS:N	1:G:245:ASN:OD1	2.48	0.41
1:G:198:ALA:HB1	1:G:201:LEU:HD21	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:253:GLU:HA	1:G:256:ASN:HB2	2.02	0.41
2:H:245:VAL:HG22	2:H:308:LYS:HA	2.03	0.41
1:E:63:THR:HA	1:E:73:VAL:HG23	2.03	0.41
1:E:91:ILE:HG13	1:E:115:LYS:HB2	2.01	0.41
1:E:346:GLU:O	1:E:349:CYS:N	2.53	0.41
2:F:31:VAL:HA	2:F:74:LYS:HB2	2.02	0.41
2:F:295:ASP:O	2:F:299:THR:HG23	2.20	0.41
1:I:41:THR:HG21	1:I:59:ILE:HG12	2.02	0.41
1:I:158:VAL:HA	1:I:161:LEU:HD21	2.03	0.41
1:I:186:ASP:HB2	2:L:10:ARG:HH12	1.86	0.41
1:I:236:ASN:OD1	1:I:313:ASN:HB2	2.21	0.41
1:I:254:ASP:O	1:I:258:ALA:N	2.31	0.41
1:I:303:ASP:OD1	1:K:169:LYS:NZ	2.50	0.41
2:J:80:ASN:ND2	2:J:82:VAL:HB	2.35	0.41
2:J:165:ASP:HA	2:J:169:GLY:HA2	2.01	0.41
2:J:172:LYS:HA	2:J:227:LEU:HD22	2.03	0.41
1:K:84:TRP:N	1:K:111:ALA:O	2.54	0.41
1:K:203:ILE:CG2	1:K:230:LEU:HB3	2.51	0.41
1:K:316:GLY:O	1:K:320:ARG:HG2	2.21	0.41
1:K:319:GLN:CD	1:K:320:ARG:HH21	2.28	0.41
2:L:37:GLY:O	2:L:40:GLN:HB2	2.21	0.41
2:L:82:VAL:HA	2:L:113:ALA:HB2	2.03	0.41
2:L:192:HIS:ND1	2:L:197:ARG:HB2	2.36	0.41
2:L:283:ILE:HG23	2:L:284:ASP:OD1	2.21	0.41
1:A:9:GLY:C	1:A:13:ARG:HG3	2.46	0.41
1:A:45:LYS:HD2	1:A:53:PHE:HB3	2.03	0.41
1:A:85:ALA:HB2	1:A:112:GLY:HA2	2.03	0.41
1:A:115:LYS:HD2	1:A:328:VAL:HG11	2.03	0.41
1:A:139(A):ASP:OD1	1:A:139(A):ASP:N	2.54	0.41
1:A:213:ALA:O	1:A:216:LEU:HB2	2.20	0.41
1:A:268:LYS:C	1:A:270:VAL:H	2.28	0.41
2:B:5:ILE:O	2:B:33:ASN:N	2.47	0.41
2:B:81:PRO:HA	2:B:84:LEU:HD12	2.03	0.41
2:B:120:ILE:O	2:B:148:SER:OG	2.39	0.41
2:B:157:LEU:O	2:B:161:VAL:HG22	2.21	0.41
2:B:195:LEU:HB2	2:D:279:PRO:HB2	2.02	0.41
2:B:240:SER:HB3	2:B:313:TYR:CZ	2.56	0.41
2:B:280:LEU:HB3	2:B:284:ASP:HB2	2.03	0.41
2:B:303:GLY:C	2:B:305:ASP:H	2.29	0.41
1:C:10:ARG:HB2	3:C:401:NAD:O1N	2.21	0.41
1:C:31:ASN:HA	1:C:74:VAL:HB	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:272:ASP:O	1:C:292:ILE:HG12	2.21	0.41
1:C:276:ILE:O	1:C:278:LEU:HG	2.20	0.41
2:D:0:LYS:H3	2:D:25:SER:C	2.22	0.41
2:D:60:THR:CA	2:D:66:ILE:HG23	2.51	0.41
2:D:89:MET:HE2	2:D:89:MET:HB2	1.90	0.41
2:D:186:ARG:HH11	2:D:186:ARG:N	2.19	0.41
2:D:192:HIS:CE1	2:D:197:ARG:HB2	2.55	0.41
1:Q:18:CYS:HB3	1:Q:20:ARG:HH21	1.86	0.41
1:Q:29:VAL:HG22	1:Q:74:VAL:HG22	2.02	0.41
1:Q:56:ASP:OD1	1:Q:58:LYS:HD3	2.21	0.41
1:Q:99:PHE:CD1	1:Q:104:GLY:HA3	2.56	0.41
1:Q:254:ASP:HA	1:Q:257:ASN:HD22	1.86	0.41
1:Q:279:VAL:HG12	1:O:194:ARG:HH11	1.86	0.41
2:R:5:ILE:HG23	2:R:95:ILE:O	2.20	0.41
2:R:87:GLY:C	2:R:90:GLY:H	2.29	0.41
2:R:104:ARG:HG3	2:R:146:ILE:HD13	2.01	0.41
2:R:168:PHE:CZ	2:R:257:VAL:HA	2.56	0.41
2:R:184:ASP:OD1	2:R:197:ARG:NH1	2.54	0.41
2:R:245:VAL:HG22	2:R:308:LYS:HA	2.03	0.41
2:R:306:MET:CB	2:P:172:LYS:HD2	2.50	0.41
1:O:15:PHE:CA	1:O:318:SER:HB2	2.51	0.41
1:O:84:TRP:CB	1:O:89:ILE:HB	2.44	0.41
1:O:124:ASP:O	1:O:125:ILE:C	2.63	0.41
1:O:226:ASN:HD22	1:O:226:ASN:HA	1.64	0.41
1:O:228:ILE:HD11	1:O:230:LEU:HD21	2.03	0.41
1:O:297:THR:OG1	1:O:308:VAL:HB	2.21	0.41
2:P:14:ASN:OD1	2:P:317:TRP:HA	2.21	0.41
2:P:85:PRO:HB2	2:P:88:ASP:CG	2.46	0.41
2:P:196:ARG:HB2	2:P:206:VAL:HG13	2.03	0.41
1:G:29:VAL:HG23	1:G:73:VAL:N	2.35	0.41
1:G:48:SER:HA	2:H:283:ILE:HG21	2.01	0.41
1:G:106:GLY:C	1:G:108:HIS:N	2.78	0.41
1:G:139:HIS:HE1	1:G:333:PRO:HD3	1.83	0.41
1:G:197:ARG:NH1	1:E:279:VAL:HG23	2.36	0.41
1:G:273:VAL:HA	1:G:292:ILE:O	2.21	0.41
2:H:15:PHE:CE1	2:H:324:VAL:HG13	2.55	0.41
2:H:223:LEU:HD12	2:H:223:LEU:H	1.86	0.41
1:E:15:PHE:HA	1:E:318:SER:HB2	2.03	0.41
1:E:74:VAL:HG11	1:E:82:LEU:HD13	2.01	0.41
1:E:89:ILE:O	1:E:114:LYS:HE3	2.21	0.41
1:E:124:ASP:O	1:E:125:ILE:C	2.63	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:148:SER:O	1:E:151:THR:N	2.50	0.41
1:E:212:LYS:HD2	1:E:226:ASN:HD22	1.85	0.41
1:E:270:VAL:HG13	1:E:289:SER:CB	2.49	0.41
2:F:97:GLY:C	3:F:401:NAD:H51A	2.46	0.41
2:F:142:HIS:HD2	2:F:336:ALA:N	2.11	0.41
2:F:173:GLY:N	2:F:226:LYS:O	2.34	0.41
2:F:252:THR:N	2:F:304:ASP:HB3	2.27	0.41
2:F:316:GLU:CD	2:F:316:GLU:N	2.79	0.41
1:I:17:ARG:NH2	1:I:47:ASP:HB3	2.35	0.41
1:I:38:LYS:H	1:I:38:LYS:HG3	1.62	0.41
1:I:107:LYS:H	1:I:107:LYS:HG3	1.51	0.41
2:J:1:LEU:HD22	2:J:331:ALA:HA	2.03	0.41
2:J:107:ALA:HA	2:J:110:HIS:CD2	2.56	0.41
2:J:137:GLU:O	2:J:140:TYR:HB3	2.21	0.41
2:J:210:THR:HB	2:J:233:ARG:HH12	1.85	0.41
2:J:280:LEU:HB3	2:J:284:ASP:HB2	2.02	0.41
1:K:1:LEU:O	1:K:3:VAL:HG23	2.21	0.41
1:K:93:ILE:HD13	1:K:117:ILE:HB	2.02	0.41
1:K:135:LYS:HD2	1:K:331:LYS:HZ1	1.86	0.41
1:K:257:ASN:OD1	1:K:260:ARG:NH1	2.54	0.41
2:L:48:ASP:CG	2:L:49:SER:N	2.79	0.41
2:L:314:ASP:CG	2:L:316:GLU:H	2.29	0.41
1:A:47:ASP:HB3	1:A:51:GLY:O	2.21	0.41
1:A:91:ILE:HG23	1:A:115:LYS:HB2	2.03	0.41
1:A:167:ILE:HG23	1:A:246:ILE:HA	2.02	0.41
1:A:246:ILE:HA	1:A:246:ILE:HD12	1.96	0.41
2:B:46:LYS:HD2	2:B:46:LYS:HA	1.86	0.41
2:B:127:ASP:N	2:B:127:ASP:OD1	2.43	0.41
2:B:170:ILE:HB	2:B:227:LEU:HD11	2.03	0.41
2:B:187:LEU:CG	1:C:180:GLY:HA2	2.51	0.41
2:B:259:ALA:O	2:B:263:GLU:N	2.31	0.41
2:B:261:PHE:O	2:B:264:SER:OG	2.38	0.41
1:C:84:TRP:CE2	1:C:111:ALA:HB3	2.56	0.41
1:C:319:GLN:CD	1:C:320:ARG:HE	2.29	0.41
2:D:15:PHE:O	2:D:19:TRP:N	2.35	0.41
2:D:117:LYS:HA	2:D:145:THR:OG1	2.20	0.41
2:D:252:THR:N	2:D:304:ASP:HB3	2.36	0.41
1:Q:184:LEU:HD11	2:P:181:TYR:CE1	2.56	0.41
1:Q:184:LEU:HG	1:Q:185:LEU:HD23	2.03	0.41
2:R:107:ALA:O	2:R:111:LEU:N	2.27	0.41
2:R:192:HIS:HA	2:R:193:ARG:NH1	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:205:ILE:HG13	2:R:234:VAL:CA	2.45	0.41
1:O:2:LYS:NZ	1:O:88:GLY:HA3	2.36	0.41
1:O:92:VAL:C	1:O:93:ILE:HD13	2.46	0.41
2:P:220:LEU:HB2	2:P:223:LEU:HD22	2.03	0.41
2:P:295:ASP:O	2:P:299:THR:HG23	2.21	0.41
1:G:4:ALA:O	1:G:93:ILE:HG12	2.21	0.41
1:G:42:HIS:O	1:G:46:TYR:HD2	2.03	0.41
2:H:45:LEU:HD12	2:H:45:LEU:HA	1.82	0.41
2:H:247:GLN:HG3	2:H:305:ASP:OD1	2.21	0.41
1:E:10:ARG:HA	1:E:13:ARG:CZ	2.51	0.41
1:E:83:PRO:HA	1:E:111:ALA:O	2.20	0.41
1:E:214:VAL:HG23	1:E:225:LEU:HD13	2.03	0.41
1:E:322:VAL:HA	1:E:325:ALA:HB3	2.03	0.41
2:F:111:LEU:HD22	2:F:115:ALA:C	2.46	0.41
2:F:117:LYS:HD2	2:F:145:THR:HA	2.03	0.41
2:F:303:GLY:C	2:F:305:ASP:H	2.29	0.41
1:I:151:THR:HA	1:I:154:LEU:HB3	2.03	0.40
1:I:225:LEU:C	1:K:300:MET:HE1	2.46	0.40
1:I:362:GLU:HA	1:Q:181:ASP:HB3	2.03	0.40
2:J:204:ASN:HD22	2:L:282:SER:N	2.17	0.40
2:J:206:VAL:O	2:J:232:LEU:HA	2.21	0.40
2:J:283:ILE:HG22	2:L:204:ASN:ND2	2.36	0.40
2:J:293:THR:N	2:J:312:TRP:O	2.28	0.40
1:K:84:TRP:HE1	1:K:108:HIS:CA	2.34	0.40
1:K:86:GLU:HG2	1:K:87:LEU:N	2.29	0.40
1:K:139:HIS:CE1	1:K:332:TRP:CD2	3.09	0.40
1:K:182:GLN:OE1	1:K:231:ARG:NH2	2.53	0.40
1:K:207:SER:HA	1:K:228:ILE:HA	2.02	0.40
1:K:245:ASN:HB3	1:K:304:MET:HE1	2.03	0.40
1:K:293:ASP:O	1:K:297:THR:OG1	2.38	0.40
2:L:3:VAL:N	2:L:28:ASP:O	2.48	0.40
2:L:16:LEU:HD13	2:L:45:LEU:HD13	2.04	0.40
2:L:186:ARG:HH22	2:L:192:HIS:HD2	1.69	0.40
2:L:226:LYS:HD3	2:L:226:LYS:H	1.86	0.40
1:A:60(A):ASP:O	1:A:63:THR:N	2.54	0.40
1:A:194:ARG:HH12	1:A:204:VAL:HA	1.87	0.40
1:A:261:LYS:O	1:A:265:GLY:N	2.54	0.40
2:B:3:VAL:HG21	2:B:27:LEU:HD12	2.03	0.40
2:B:226:LYS:HZ2	2:B:226:LYS:HG3	1.68	0.40
2:B:226:LYS:HG3	2:B:227:LEU:H	1.86	0.40
2:B:295:ASP:OD1	2:B:298:LEU:N	2.52	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:300:MET:HB3	2:B:308:LYS:HB3	2.03	0.40
1:C:1:LEU:N	1:C:25:LEU:HA	2.36	0.40
1:C:30:VAL:C	1:C:74:VAL:H	2.29	0.40
1:C:171:THR:HB	1:C:226:ASN:HB3	2.02	0.40
2:D:64:SER:O	2:D:74:LYS:HD3	2.21	0.40
2:D:148:SER:OG	2:D:149:ASN:O	2.39	0.40
2:D:165:ASP:HA	2:D:169:GLY:H	1.86	0.40
2:D:172:LYS:NZ	2:D:172:LYS:HB2	2.34	0.40
2:D:180:SER:HB2	2:D:236:THR:HG23	2.02	0.40
1:Q:115:LYS:NZ	1:Q:139(A):ASP:H	2.19	0.40
2:R:48:ASP:HB3	2:R:52:GLY:O	2.21	0.40
2:R:102:VAL:HG21	2:R:125:LYS:HD2	2.03	0.40
2:R:240:SER:HB3	2:R:313:TYR:CZ	2.57	0.40
2:R:244:LEU:HD23	2:R:309:VAL:HG21	2.02	0.40
2:R:255:GLU:O	2:R:258:ASN:N	2.53	0.40
1:O:62:GLU:HB2	1:O:72:LYS:HZ1	1.86	0.40
1:O:83:PRO:C	1:O:85:ALA:N	2.79	0.40
1:O:91:ILE:HG13	1:O:115:LYS:HB2	2.03	0.40
1:O:183:ARG:NE	1:O:188:SER:O	2.54	0.40
1:O:190:HIS:CE1	1:O:192:ASP:H	2.38	0.40
2:P:132:VAL:H	2:P:136:ASN:CG	2.29	0.40
2:P:244:LEU:O	2:P:309:VAL:HG13	2.20	0.40
2:H:8:PHE:CE1	2:H:13:ARG:HG3	2.55	0.40
2:H:127:ASP:N	2:H:127:ASP:OD1	2.53	0.40
2:H:130:THR:HG23	2:H:136:ASN:ND2	2.36	0.40
2:H:281:VAL:HG12	2:F:196:ARG:HH12	1.85	0.40
1:E:64:PHE:CE1	1:E:71:ILE:HB	2.56	0.40
1:E:125:ILE:O	1:E:127:THR:N	2.54	0.40
1:E:272:ASP:C	1:E:292:ILE:HD12	2.46	0.40
1:E:273:VAL:HG22	1:E:292:ILE:HD13	2.03	0.40
2:F:10:ARG:CZ	2:F:10:ARG:HB3	2.50	0.40
2:F:251:LYS:HD2	2:F:304:ASP:HB2	2.03	0.40
1:I:5:ILE:O	1:I:31:ASN:N	2.54	0.40
1:I:30:VAL:O	1:I:73:VAL:HA	2.22	0.40
1:I:298:MET:SD	1:K:226:ASN:ND2	2.95	0.40
1:I:304:MET:H	1:K:169:LYS:NZ	2.12	0.40
2:J:32:ILE:O	2:J:76:VAL:HG23	2.21	0.40
2:J:137:GLU:CD	2:J:138:GLU:HG3	2.46	0.40
2:J:163:VAL:HG13	2:J:167:LYS:HD3	2.03	0.40
2:J:216:VAL:HG13	2:J:217:ALA:H	1.86	0.40
2:J:226:LYS:HZ2	2:J:227:LEU:HD23	1.85	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:5:ILE:HG22	1:K:7:GLY:O	2.21	0.40
1:K:16:LEU:O	1:K:17:ARG:C	2.64	0.40
1:K:16:LEU:HD11	1:K:66:ILE:HD13	2.03	0.40
1:K:194:ARG:HG3	1:K:206:THR:OG1	2.22	0.40
1:K:276:ILE:HB	1:K:278:LEU:HD11	2.03	0.40
2:L:108:GLY:O	2:L:112:GLN:N	2.40	0.40
2:L:289:ASP:HB3	2:L:321:GLN:HG3	2.04	0.40
1:A:91:ILE:HD11	1:A:332:TRP:CZ3	2.56	0.40
1:A:139:HIS:CE1	1:A:328:VAL:HG12	2.56	0.40
1:A:139:HIS:HE1	1:A:328:VAL:HG12	1.86	0.40
1:A:270:VAL:HA	1:A:289:SER:CB	2.51	0.40
1:A:299:VAL:HA	1:A:305:VAL:HA	2.03	0.40
2:B:39:LYS:O	2:B:43:HIS:CG	2.74	0.40
2:B:205:ILE:CD1	2:B:234:VAL:HG12	2.52	0.40
2:B:216:VAL:O	2:B:220:LEU:HB2	2.21	0.40
1:C:1:LEU:HD13	1:C:1:LEU:HA	1.84	0.40
1:C:207:SER:OG	1:C:227:GLY:O	2.17	0.40
1:C:296:LEU:HA	1:C:298:MET:HE3	2.01	0.40
2:D:17:ARG:HA	2:D:54:PHE:CZ	2.56	0.40
2:D:179:HIS:O	2:D:234:VAL:HG22	2.21	0.40
1:Q:6:ASN:HD22	1:Q:94:GLU:HA	1.86	0.40
1:Q:94:GLU:HG3	1:Q:99:PHE:HB2	2.03	0.40
1:Q:137:TYR:CE1	1:Q:139:HIS:HA	2.55	0.40
1:Q:203:ILE:HG23	1:Q:233:PRO:HD3	2.03	0.40
1:O:91:ILE:HG23	1:O:115:LYS:C	2.46	0.40
2:P:8:PHE:CZ	2:P:13:ARG:HG3	2.56	0.40
2:P:10:ARG:HH22	2:P:13:ARG:NH1	2.19	0.40
1:G:20:ARG:HD2	1:G:20:ARG:HA	1.84	0.40
1:G:149:CYS:HB3	1:G:317:TYR:CG	2.56	0.40
2:H:269:LEU:HA	2:H:272:ILE:HB	2.03	0.40
2:H:303:GLY:HA3	2:F:172:LYS:HE2	2.03	0.40
1:E:29:VAL:HB	1:E:72:LYS:HB3	2.04	0.40
1:E:38:LYS:HE3	1:E:38:LYS:HB2	1.94	0.40
1:E:81:LYS:HE3	1:E:81:LYS:HB3	1.84	0.40
1:E:203:ILE:HG23	1:E:230:LEU:HB3	2.02	0.40
1:E:267:LEU:CD1	1:E:271:LEU:HD22	2.49	0.40
2:F:87:GLY:CA	2:F:114:GLY:HA3	2.51	0.40
2:F:169:GLY:O	2:F:249:SER:N	2.28	0.40
2:F:244:LEU:O	2:F:309:VAL:HG13	2.22	0.40
2:F:281:VAL:H	2:F:284:ASP:CG	2.26	0.40
1:I:79:PRO:O	1:I:80:LEU:C	2.63	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:154:LEU:HD12	1:I:157:PHE:HE2	1.86	0.40
1:I:167:ILE:HA	1:I:247:GLU:H	1.85	0.40
1:I:192:ASP:OD1	1:I:195:ARG:N	2.54	0.40
1:I:258:ALA:HA	1:I:261:LYS:HB3	2.03	0.40
1:I:317:TYR:O	1:I:321:VAL:HG23	2.22	0.40
1:I:362:GLU:N	1:Q:195:ARG:HH22	2.19	0.40
1:K:137:TYR:HE2	1:K:327:LEU:HG	1.84	0.40
1:K:235:PRO:HG2	1:K:284:ARG:NH2	2.36	0.40
1:K:239:VAL:HG23	1:K:309:ALA:C	2.46	0.40
1:K:283:PHE:CE2	1:K:310:TRP:CD2	3.06	0.40
1:K:318:SER:O	1:K:322:VAL:HG23	2.21	0.40
2:L:5:ILE:HG22	2:L:6:ASN:N	2.36	0.40
2:L:11:ILE:HA	2:L:14:ASN:CB	2.45	0.40
2:L:20:HIS:HA	2:L:23:LYS:NZ	2.36	0.40
2:L:160:PHE:HB2	2:L:261:PHE:CZ	2.56	0.40
2:L:177:THR:O	2:L:232:LEU:N	2.52	0.40
2:L:215:ALA:HA	2:L:218:LEU:HB2	2.03	0.40
1:A:17:ARG:NH2	1:A:47:ASP:HB3	2.36	0.40
1:A:49:ILE:HG21	1:A:284:ARG:NH2	2.37	0.40
1:A:135:LYS:HA	1:A:135:LYS:HD2	1.78	0.40
1:A:152:ASN:HD22	1:A:152:ASN:H	1.64	0.40
1:A:235:PRO:HG2	1:A:284:ARG:NH1	2.31	0.40
1:A:236:ASN:ND2	1:A:314:GLU:H	2.16	0.40
1:A:259:PHE:HB3	1:A:273:VAL:HG21	2.03	0.40
2:B:17:ARG:NH2	2:B:55:ASP:OD1	2.55	0.40
2:B:196:ARG:NH1	2:D:280:LEU:H	2.18	0.40
2:B:252:THR:H	2:B:304:ASP:HB3	1.87	0.40
2:B:281:VAL:HG11	2:D:201:ALA:HB2	2.03	0.40
2:B:291:SER:HB3	2:B:322:ARG:HD2	2.03	0.40
1:C:84:TRP:HA	1:C:87:LEU:HB2	2.03	0.40
1:C:135:LYS:C	1:C:331:LYS:HZ1	2.26	0.40
2:D:132:VAL:N	2:D:136:ASN:HB2	2.32	0.40
2:D:172:LYS:O	2:D:247:GLN:N	2.49	0.40
1:Q:219:PRO:O	1:Q:222:LYS:HB2	2.21	0.40
1:Q:251:THR:HG22	1:Q:252:ALA:H	1.86	0.40
2:R:1:LEU:HD22	2:R:331:ALA:HB2	2.04	0.40
2:R:21:GLY:O	2:R:23:LYS:NZ	2.51	0.40
2:R:154:THR:HG21	2:R:215:ALA:HB3	2.03	0.40
2:R:178:THR:HG23	2:R:243:ASP:OD2	2.22	0.40
1:O:56:ASP:N	1:O:67:ASP:OD2	2.54	0.40
1:O:135:LYS:HD2	1:O:331:LYS:HE2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:193:LEU:HD13	1:O:194:ARG:HG2	2.04	0.40
1:O:262:ALA:O	1:O:265:GLY:N	2.54	0.40
2:P:4:ALA:O	2:P:5:ILE:HD13	2.21	0.40
2:P:24:ASP:O	2:P:26:PRO:HD3	2.22	0.40
2:P:93:LEU:HA	2:P:117:LYS:HB2	2.03	0.40
2:P:179:HIS:ND1	2:P:233:ARG:HG2	2.37	0.40
2:P:316:GLU:HG2	2:P:317:TRP:H	1.86	0.40
1:G:171:THR:HA	1:G:226:ASN:O	2.22	0.40
1:E:37:VAL:HG22	1:E:73:VAL:HG11	2.03	0.40
1:E:59:ILE:HA	1:E:64:PHE:CB	2.51	0.40
1:E:84:TRP:HB2	1:E:112:GLY:O	2.21	0.40
1:E:90:ASP:OD2	1:E:91:ILE:HD12	2.20	0.40
1:E:168:VAL:HB	1:E:245:ASN:OD1	2.22	0.40
1:E:173:THR:C	1:E:240:VAL:HG21	2.46	0.40
2:F:132:VAL:H	2:F:136:ASN:CG	2.29	0.40
2:J:8:PHE:H	2:J:34:ASP:HB2	1.87	0.40
2:J:10:ARG:H	3:J:401:NAD:PA	2.43	0.40
2:J:98:THR:HA	3:J:401:NAD:C4A	2.51	0.40
2:J:182:THR:HG1	2:J:185:GLN:NE2	2.20	0.40
1:K:7:GLY:HA2	1:K:31:ASN:HB3	2.03	0.40
1:K:31:ASN:HA	1:K:74:VAL:HB	2.03	0.40
1:K:81:LYS:HE3	1:K:81:LYS:HB3	1.80	0.40
1:K:84:TRP:CB	1:K:89:ILE:HB	2.50	0.40
1:K:238:SER:O	1:K:311:TYR:N	2.54	0.40
2:L:17:ARG:HA	2:L:54:PHE:CZ	2.57	0.40
1:A:84:TRP:HB2	1:A:112:GLY:O	2.21	0.40
2:B:86:TRP:CD1	2:B:113:ALA:C	2.99	0.40
2:B:182:THR:O	2:B:185:GLN:HB2	2.22	0.40
1:C:15:PHE:HZ	1:C:322:VAL:HA	1.87	0.40
1:C:246:ILE:HG22	1:C:303:ASP:HA	2.04	0.40
2:D:20:HIS:HA	2:D:23:LYS:NZ	2.36	0.40
2:D:239:VAL:HG22	2:D:314:ASP:CA	2.50	0.40
2:D:261:PHE:HD1	2:D:261:PHE:HA	1.65	0.40
1:Q:160:VAL:HA	1:Q:163:GLU:OE2	2.22	0.40
1:Q:194:ARG:HH22	1:O:279:VAL:HG22	1.86	0.40
1:Q:226:ASN:HD21	1:O:298:MET:CE	2.35	0.40
1:Q:244:VAL:HB	1:Q:246:ILE:HD12	2.04	0.40
1:Q:340:ALA:O	1:Q:342:GLY:N	2.53	0.40
2:R:168:PHE:CE2	2:R:256:GLU:HG2	2.54	0.40
2:R:169:GLY:HA3	2:R:249:SER:HG	1.87	0.40
1:O:42:HIS:HE1	2:P:279:PRO:O	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:100:VAL:HB	1:O:122(A):LYS:HD3	2.03	0.40
1:O:127:THR:HG21	1:O:216:LEU:HB3	2.02	0.40
1:O:253:GLU:OE1	1:O:254:ASP:N	2.55	0.40
2:P:157:LEU:O	2:P:161:VAL:HG22	2.22	0.40
2:P:276:CYS:O	2:P:296:SER:OG	2.39	0.40
1:G:17:ARG:HD2	1:G:53:PHE:CG	2.57	0.40
1:G:85:ALA:CA	1:G:112:GLY:HA3	2.51	0.40
1:G:142:ASN:O	1:G:144:ILE:HD13	2.21	0.40
2:H:44:LEU:HD23	2:H:44:LEU:HA	1.86	0.40
2:H:168:PHE:HA	2:H:250:LYS:HE2	2.02	0.40
2:H:192:HIS:HA	2:H:193:ARG:NH1	2.37	0.40
2:H:206:VAL:O	2:H:208:THR:HG22	2.21	0.40
1:E:212:LYS:HD2	1:E:226:ASN:HA	2.04	0.40
1:E:293:ASP:OD1	1:E:295:SER:OG	2.22	0.40
1:E:314:GLU:O	1:E:318:SER:N	2.48	0.40
1:I:22:ASP:OD1	1:I:22:ASP:N	2.49	0.40
1:I:139:HIS:NE2	1:I:332:TRP:HA	2.36	0.40
1:I:155:ALA:O	1:I:158:VAL:HG12	2.22	0.40
1:I:201:LEU:HD12	1:I:202:ASN:OD1	2.21	0.40
2:J:48:ASP:N	2:J:53:THR:HA	2.30	0.40
2:J:56:ALA:HB1	2:J:69:ASP:OD2	2.22	0.40
2:J:174:THR:O	2:J:244:LEU:HD12	2.21	0.40
2:J:181:TYR:N	2:J:236:THR:O	2.47	0.40
2:J:303:GLY:C	2:J:305:ASP:H	2.28	0.40
1:K:0:LYS:HD3	1:K:0:LYS:C	2.46	0.40
1:K:29:VAL:HG23	1:K:72:LYS:HB3	2.04	0.40
1:K:92:VAL:O	1:K:117:ILE:N	2.41	0.40
1:K:115:LYS:HZ2	1:K:140:VAL:C	2.30	0.40
1:K:127:THR:HA	1:K:145:SER:OG	2.22	0.40
1:K:178:TYR:CE1	1:K:235:PRO:HA	2.56	0.40
1:K:179:THR:HG1	1:K:182:GLN:CD	2.24	0.40
2:L:165:ASP:HA	2:L:169:GLY:H	1.86	0.40
1:A:230:LEU:HA	1:A:230:LEU:HD23	1.67	0.40
1:A:272:ASP:O	1:A:292:ILE:HG13	2.22	0.40
2:B:283:ILE:H	2:D:204:ASN:HD22	1.68	0.40
1:C:10:ARG:HH22	1:C:48:SER:N	2.19	0.40
1:C:109:ILE:HD11	1:C:142:ASN:O	2.21	0.40
1:C:158:VAL:HA	1:C:161:LEU:HB2	2.02	0.40
1:C:170:GLY:O	1:C:225:LEU:HA	2.20	0.40
1:C:272:ASP:OD1	1:C:273:VAL:N	2.54	0.40
2:D:160:PHE:HB2	2:D:261:PHE:CZ	2.57	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D:210:THR:HG22	2:D:230:ILE:HA	2.03	0.40
2:D:253:PHE:O	2:D:257:VAL:HG13	2.22	0.40
1:Q:184:LEU:HD11	2:P:181:TYR:CD1	2.57	0.40
1:Q:318:SER:OG	1:Q:319:GLN:OE1	2.19	0.40
2:R:87:GLY:CA	2:R:114:GLY:HA3	2.52	0.40
2:R:168:PHE:HA	2:R:250:LYS:HE2	2.03	0.40
2:R:192:HIS:CE1	2:R:197:ARG:HB2	2.57	0.40
1:O:176:HIS:O	1:O:232:VAL:HG22	2.22	0.40
2:P:194:ASP:OD1	2:P:196:ARG:HG3	2.22	0.40
1:G:62:GLU:HB2	1:G:72:LYS:CE	2.52	0.40
1:G:127:THR:OG1	1:G:216:LEU:O	2.34	0.40
1:G:134:GLU:HG2	1:G:135:LYS:H	1.86	0.40
1:G:184:LEU:HD23	2:F:182:THR:C	2.47	0.40
1:G:203:ILE:HG22	1:G:230:LEU:HD22	2.04	0.40
1:G:254:ASP:HA	1:G:257:ASN:HD22	1.87	0.40
1:G:311:TYR:HD2	1:G:312:ASP:O	2.05	0.40
2:H:160:PHE:CD2	2:H:161:VAL:HG13	2.56	0.40
1:E:63:THR:HG23	1:E:71:ILE:C	2.46	0.40
1:E:241:ASP:CG	1:E:307:VAL:H	2.30	0.40
2:F:41:ALA:O	2:F:44:LEU:HB2	2.22	0.40
2:F:119:LEU:HD12	2:F:147:ILE:HD11	2.02	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	366/368 (100%)	278 (76%)	85 (23%)	3 (1%)	16	55
1	C	366/368 (100%)	274 (75%)	87 (24%)	5 (1%)	9	41
1	E	366/368 (100%)	279 (76%)	84 (23%)	3 (1%)	16	55
1	G	366/368 (100%)	260 (71%)	100 (27%)	6 (2%)	8	38

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	I	366/368 (100%)	276 (75%)	88 (24%)	2 (0%)	25	64
1	K	366/368 (100%)	287 (78%)	77 (21%)	2 (0%)	25	64
1	O	366/368 (100%)	275 (75%)	87 (24%)	4 (1%)	12	47
1	Q	366/368 (100%)	265 (72%)	98 (27%)	3 (1%)	16	55
2	B	335/337 (99%)	263 (78%)	72 (22%)	0	100	100
2	D	335/337 (99%)	270 (81%)	65 (19%)	0	100	100
2	F	335/337 (99%)	260 (78%)	74 (22%)	1 (0%)	37	73
2	H	335/337 (99%)	266 (79%)	68 (20%)	1 (0%)	37	73
2	J	335/337 (99%)	261 (78%)	74 (22%)	0	100	100
2	L	335/337 (99%)	274 (82%)	60 (18%)	1 (0%)	37	73
2	P	335/337 (99%)	269 (80%)	65 (19%)	1 (0%)	37	73
2	R	335/337 (99%)	262 (78%)	71 (21%)	2 (1%)	22	60
All	All	5608/5640 (99%)	4319 (77%)	1255 (22%)	34 (1%)	24	60

All (34) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	352	ASN
1	C	344	PRO
1	C	353	PRO
1	Q	352	ASN
1	O	344	PRO
1	O	353	PRO
1	G	344	PRO
1	G	353	PRO
1	E	343	ASP
1	E	344	PRO
2	F	57	ASP
2	R	55	ASP
2	P	55	ASP
1	K	60(A)	ASP
2	L	55	ASP
1	A	344	PRO
1	C	60(A)	ASP
2	R	56	ALA
1	G	61	ASN
1	I	343	ASP
1	Q	61	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	O	60(A)	ASP
1	O	235	PRO
1	G	60(A)	ASP
1	E	235	PRO
1	C	235	PRO
1	G	343	ASP
1	A	235	PRO
1	Q	235	PRO
1	G	235	PRO
1	I	344	PRO
1	K	235	PRO
2	H	29	VAL
1	C	339	VAL

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	282/304 (93%)	197 (70%)	85 (30%)	0	2
1	C	282/304 (93%)	204 (72%)	78 (28%)	0	2
1	E	282/304 (93%)	203 (72%)	79 (28%)	0	2
1	G	282/304 (93%)	198 (70%)	84 (30%)	0	2
1	I	282/304 (93%)	201 (71%)	81 (29%)	0	2
1	K	282/304 (93%)	207 (73%)	75 (27%)	0	3
1	O	282/304 (93%)	204 (72%)	78 (28%)	0	2
1	Q	282/304 (93%)	198 (70%)	84 (30%)	0	2
2	B	279/279 (100%)	216 (77%)	63 (23%)	1	5
2	D	279/279 (100%)	200 (72%)	79 (28%)	0	2
2	F	279/279 (100%)	216 (77%)	63 (23%)	1	5
2	H	279/279 (100%)	208 (75%)	71 (25%)	0	3
2	J	279/279 (100%)	213 (76%)	66 (24%)	0	3
2	L	279/279 (100%)	202 (72%)	77 (28%)	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	P	279/279 (100%)	216 (77%)	63 (23%)	1	5
2	R	279/279 (100%)	213 (76%)	66 (24%)	0	3
All	All	4488/4664 (96%)	3296 (73%)	1192 (27%)	1	3

All (1192) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	I	5	ILE
1	I	8	PHE
1	I	10	ARG
1	I	16	LEU
1	I	20	ARG
1	I	21	LYS
1	I	23	SER
1	I	25	LEU
1	I	28	VAL
1	I	38	LYS
1	I	47	ASP
1	I	54	LYS
1	I	56	ASP
1	I	58	LYS
1	I	59	ILE
1	I	60	ILE
1	I	60(A)	ASP
1	I	62	GLU
1	I	66	ILE
1	I	72	LYS
1	I	74	VAL
1	I	81	LYS
1	I	86	GLU
1	I	90	ASP
1	I	96	THR
1	I	100	VAL
1	I	108	HIS
1	I	127	THR
1	I	134	GLU
1	I	135	LYS
1	I	136	ASP
1	I	139	HIS
1	I	139(A)	ASP
1	I	143	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	144	ILE
1	I	151	THR
1	I	152	ASN
1	I	158	VAL
1	I	159	LYS
1	I	161	LEU
1	I	165	LEU
1	I	167	ILE
1	I	169	LYS
1	I	172	MET
1	I	181	ASP
1	I	182	GLN
1	I	192	ASP
1	I	193	LEU
1	I	201	LEU
1	I	202	ASN
1	I	206	THR
1	I	208	THR
1	I	224	LYS
1	I	228	ILE
1	I	231	ARG
1	I	234	THR
1	I	239	VAL
1	I	241	ASP
1	I	244	VAL
1	I	253	GLU
1	I	254	ASP
1	I	268	LYS
1	I	270	VAL
1	I	272	ASP
1	I	273	VAL
1	I	282	ASP
1	I	283	PHE
1	I	287	ASP
1	I	289	SER
1	I	292	ILE
1	I	297	THR
1	I	299	VAL
1	I	300	MET
1	I	312	ASP
1	I	313	ASN
1	I	314	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	I	319	GLN
1	I	322	VAL
1	I	323	ASP
1	I	327	LEU
1	I	328	VAL
2	J	1	LEU
2	J	13	ARG
2	J	23	LYS
2	J	32	ILE
2	J	35	THR
2	J	39	LYS
2	J	44	LEU
2	J	48	ASP
2	J	51	LEU
2	J	58	VAL
2	J	68	VAL
2	J	69	ASP
2	J	75	VAL
2	J	76	VAL
2	J	78	ASP
2	J	86	TRP
2	J	89	MET
2	J	94	VAL
2	J	98	THR
2	J	102	VAL
2	J	105	ASP
2	J	121	THR
2	J	130	THR
2	J	131	TYR
2	J	132	VAL
2	J	133	VAL
2	J	135	VAL
2	J	136	ASN
2	J	138	GLU
2	J	141	THR
2	J	145	THR
2	J	154	THR
2	J	155	ASN
2	J	164	LEU
2	J	165	ASP
2	J	168	PHE
2	J	172	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	J	177	THR
2	J	184	ASP
2	J	185	GLN
2	J	193	ARG
2	J	208	THR
2	J	210	THR
2	J	230	ILE
2	J	234	VAL
2	J	236	THR
2	J	241	VAL
2	J	242	VAL
2	J	246	VAL
2	J	252	THR
2	J	257	VAL
2	J	261	PHE
2	J	269	LEU
2	J	280	LEU
2	J	283	ILE
2	J	286	ARG
2	J	289	ASP
2	J	295	ASP
2	J	296	SER
2	J	299	THR
2	J	306	MET
2	J	309	VAL
2	J	315	ASN
2	J	316	GLU
2	J	321	GLN
2	J	335	GLN
1	K	1	LEU
1	K	3	VAL
1	K	6	ASN
1	K	10	ARG
1	K	11	ILE
1	K	13	ARG
1	K	14	ASN
1	K	18	CYS
1	K	18(A)	TRP
1	K	18(B)	HIS
1	K	20	ARG
1	K	28	VAL
1	K	37	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	38	LYS
1	K	47	ASP
1	K	54	LYS
1	K	58	LYS
1	K	62	GLU
1	K	66	ILE
1	K	71	ILE
1	K	73	VAL
1	K	74	VAL
1	K	81	LYS
1	K	82	LEU
1	K	84	TRP
1	K	86	GLU
1	K	90	ASP
1	K	92	VAL
1	K	100	VAL
1	K	108	HIS
1	K	114	LYS
1	K	125	ILE
1	K	136	ASP
1	K	137	TYR
1	K	139	HIS
1	K	139(A)	ASP
1	K	142	ASN
1	K	144	ILE
1	K	145	SER
1	K	146	ASN
1	K	151	THR
1	K	159	LYS
1	K	167	ILE
1	K	169	LYS
1	K	171	THR
1	K	181	ASP
1	K	182	GLN
1	K	191	ARG
1	K	192	ASP
1	K	193	LEU
1	K	201	LEU
1	K	202	ASN
1	K	217	VAL
1	K	221	LEU
1	K	225	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	228	ILE
1	K	231	ARG
1	K	234	THR
1	K	237	VAL
1	K	240	VAL
1	K	243	VAL
1	K	245	ASN
1	K	254	ASP
1	K	256	ASN
1	K	282	ASP
1	K	287	ASP
1	K	289	SER
1	K	293	ASP
1	K	300	MET
1	K	312	ASP
1	K	314	GLU
1	K	315	TRP
1	K	319	GLN
1	K	323	ASP
1	K	324	LEU
2	L	1	LEU
2	L	2	LYS
2	L	10	ARG
2	L	16	LEU
2	L	20	HIS
2	L	23	LYS
2	L	27	LEU
2	L	30	VAL
2	L	31	VAL
2	L	32	ILE
2	L	39	LYS
2	L	43	HIS
2	L	48	ASP
2	L	50	ILE
2	L	55	ASP
2	L	57	ASP
2	L	60	THR
2	L	66	ILE
2	L	71	LYS
2	L	72	VAL
2	L	75	VAL
2	L	76	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	L	82	VAL
2	L	83	ASN
2	L	86	TRP
2	L	88	ASP
2	L	95	ILE
2	L	98	THR
2	L	100	VAL
2	L	105	ASP
2	L	111	LEU
2	L	118	VAL
2	L	119	LEU
2	L	121	THR
2	L	125	LYS
2	L	131	TYR
2	L	136	ASN
2	L	141	THR
2	L	144	ASP
2	L	145	THR
2	L	147	ILE
2	L	153	THR
2	L	154	THR
2	L	155	ASN
2	L	172	LYS
2	L	177	THR
2	L	180	SER
2	L	185	GLN
2	L	203	LEU
2	L	204	ASN
2	L	205	ILE
2	L	208	THR
2	L	214	LYS
2	L	222	ASN
2	L	226	LYS
2	L	227	LEU
2	L	243	ASP
2	L	244	LEU
2	L	246	VAL
2	L	252	THR
2	L	257	VAL
2	L	261	PHE
2	L	263	GLU
2	L	268	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	L	272	ILE
2	L	283	ILE
2	L	284	ASP
2	L	289	ASP
2	L	290	VAL
2	L	293	THR
2	L	304	ASP
2	L	309	VAL
2	L	310	ILE
2	L	315	ASN
2	L	316	GLU
2	L	317	TRP
2	L	332	ASN
1	A	2	LYS
1	A	8	PHE
1	A	11	ILE
1	A	14	ASN
1	A	16	LEU
1	A	17	ARG
1	A	20	ARG
1	A	21	LYS
1	A	25	LEU
1	A	28	VAL
1	A	38	LYS
1	A	47	ASP
1	A	49	ILE
1	A	54	LYS
1	A	56	ASP
1	A	58	LYS
1	A	59	ILE
1	A	60	ILE
1	A	60(A)	ASP
1	A	62	GLU
1	A	66	ILE
1	A	72	LYS
1	A	74	VAL
1	A	81	LYS
1	A	86	GLU
1	A	90	ASP
1	A	96	THR
1	A	98	VAL
1	A	100	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	108	HIS
1	A	114	LYS
1	A	127	THR
1	A	134	GLU
1	A	135	LYS
1	A	136	ASP
1	A	139	HIS
1	A	139(A)	ASP
1	A	144	ILE
1	A	150	THR
1	A	152	ASN
1	A	158	VAL
1	A	161	LEU
1	A	165	LEU
1	A	167	ILE
1	A	169	LYS
1	A	172	MET
1	A	182	GLN
1	A	185	LEU
1	A	191	ARG
1	A	193	LEU
1	A	195	ARG
1	A	201	LEU
1	A	202	ASN
1	A	206	THR
1	A	208	THR
1	A	216	LEU
1	A	217	VAL
1	A	224	LYS
1	A	228	ILE
1	A	231	ARG
1	A	234	THR
1	A	237	VAL
1	A	239	VAL
1	A	243	VAL
1	A	244	VAL
1	A	253	GLU
1	A	254	ASP
1	A	268	LYS
1	A	272	ASP
1	A	273	VAL
1	A	279	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	280	SER
1	A	282	ASP
1	A	292	ILE
1	A	297	THR
1	A	299	VAL
1	A	305	VAL
1	A	312	ASP
1	A	313	ASN
1	A	319	GLN
1	A	320	ARG
1	A	322	VAL
1	A	323	ASP
1	A	327	LEU
1	A	328	VAL
2	B	1	LEU
2	B	23	LYS
2	B	32	ILE
2	B	35	THR
2	B	39	LYS
2	B	48	ASP
2	B	50	ILE
2	B	59	LYS
2	B	68	VAL
2	B	69	ASP
2	B	75	VAL
2	B	76	VAL
2	B	86	TRP
2	B	89	MET
2	B	94	VAL
2	B	98	THR
2	B	102	VAL
2	B	105	ASP
2	B	121	THR
2	B	130	THR
2	B	131	TYR
2	B	132	VAL
2	B	133	VAL
2	B	135	VAL
2	B	136	ASN
2	B	138	GLU
2	B	141	THR
2	B	145	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	154	THR
2	B	155	ASN
2	B	164	LEU
2	B	165	ASP
2	B	168	PHE
2	B	172	LYS
2	B	177	THR
2	B	184	ASP
2	B	185	GLN
2	B	187	LEU
2	B	188	LEU
2	B	193	ARG
2	B	197	ARG
2	B	208	THR
2	B	210	THR
2	B	234	VAL
2	B	236	THR
2	B	241	VAL
2	B	242	VAL
2	B	246	VAL
2	B	252	THR
2	B	257	VAL
2	B	261	PHE
2	B	269	LEU
2	B	280	LEU
2	B	283	ILE
2	B	289	ASP
2	B	295	ASP
2	B	296	SER
2	B	299	THR
2	B	306	MET
2	B	309	VAL
2	B	315	ASN
2	B	316	GLU
2	B	335	GLN
1	C	0	LYS
1	C	1	LEU
1	C	3	VAL
1	C	11	ILE
1	C	18	CYS
1	C	18(A)	TRP
1	C	18(B)	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	20	ARG
1	C	21	LYS
1	C	25	LEU
1	C	28	VAL
1	C	38	LYS
1	C	42	HIS
1	C	44	LEU
1	C	47	ASP
1	C	49	ILE
1	C	58	LYS
1	C	71	ILE
1	C	73	VAL
1	C	74	VAL
1	C	81	LYS
1	C	82	LEU
1	C	84	TRP
1	C	86	GLU
1	C	90	ASP
1	C	92	VAL
1	C	96	THR
1	C	100	VAL
1	C	108	HIS
1	C	114	LYS
1	C	125	ILE
1	C	136	ASP
1	C	137	TYR
1	C	139	HIS
1	C	139(A)	ASP
1	C	142	ASN
1	C	144	ILE
1	C	145	SER
1	C	146	ASN
1	C	150	THR
1	C	159	LYS
1	C	169	LYS
1	C	171	THR
1	C	175	THR
1	C	181	ASP
1	C	182	GLN
1	C	193	LEU
1	C	195	ARG
1	C	197	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	201	LEU
1	C	217	VAL
1	C	221	LEU
1	C	222	LYS
1	C	225	LEU
1	C	228	ILE
1	C	231	ARG
1	C	234	THR
1	C	237	VAL
1	C	240	VAL
1	C	243	VAL
1	C	244	VAL
1	C	245	ASN
1	C	254	ASP
1	C	256	ASN
1	C	282	ASP
1	C	289	SER
1	C	293	ASP
1	C	300	MET
1	C	304	MET
1	C	312	ASP
1	C	313	ASN
1	C	314	GLU
1	C	319	GLN
1	C	323	ASP
1	C	324	LEU
1	C	326	ASP
1	C	332	TRP
1	C	358	CYS
2	D	1	LEU
2	D	2	LYS
2	D	10	ARG
2	D	15	PHE
2	D	16	LEU
2	D	20	HIS
2	D	23	LYS
2	D	27	LEU
2	D	31	VAL
2	D	32	ILE
2	D	38	VAL
2	D	39	LYS
2	D	43	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	D	48	ASP
2	D	50	ILE
2	D	55	ASP
2	D	57	ASP
2	D	58	VAL
2	D	63	ASP
2	D	66	ILE
2	D	68	VAL
2	D	82	VAL
2	D	83	ASN
2	D	86	TRP
2	D	88	ASP
2	D	92	ASP
2	D	95	ILE
2	D	98	THR
2	D	100	VAL
2	D	105	ASP
2	D	111	LEU
2	D	116	LYS
2	D	118	VAL
2	D	119	LEU
2	D	121	THR
2	D	125	LYS
2	D	131	TYR
2	D	136	ASN
2	D	141	THR
2	D	144	ASP
2	D	145	THR
2	D	147	ILE
2	D	153	THR
2	D	154	THR
2	D	155	ASN
2	D	172	LYS
2	D	176	THR
2	D	180	SER
2	D	184	ASP
2	D	185	GLN
2	D	196	ARG
2	D	203	LEU
2	D	204	ASN
2	D	205	ILE
2	D	208	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	D	214	LYS
2	D	222	ASN
2	D	232	LEU
2	D	243	ASP
2	D	244	LEU
2	D	246	VAL
2	D	252	THR
2	D	257	VAL
2	D	261	PHE
2	D	263	GLU
2	D	268	GLU
2	D	272	ILE
2	D	283	ILE
2	D	284	ASP
2	D	289	ASP
2	D	290	VAL
2	D	293	THR
2	D	304	ASP
2	D	309	VAL
2	D	310	ILE
2	D	315	ASN
2	D	316	GLU
2	D	317	TRP
2	D	332	ASN
1	Q	1	LEU
1	Q	3	VAL
1	Q	11	ILE
1	Q	14	ASN
1	Q	18	CYS
1	Q	18(A)	TRP
1	Q	18(B)	HIS
1	Q	20	ARG
1	Q	21	LYS
1	Q	25	LEU
1	Q	37	VAL
1	Q	38	LYS
1	Q	47	ASP
1	Q	50	LEU
1	Q	54	LYS
1	Q	58	LYS
1	Q	61	ASN
1	Q	62	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	63	THR
1	Q	65	SER
1	Q	67	ASP
1	Q	69	LYS
1	Q	74	VAL
1	Q	81	LYS
1	Q	86	GLU
1	Q	90	ASP
1	Q	91	ILE
1	Q	92	VAL
1	Q	93	ILE
1	Q	98	VAL
1	Q	108	HIS
1	Q	110	GLN
1	Q	114	LYS
1	Q	115	LYS
1	Q	129	VAL
1	Q	130	VAL
1	Q	136	ASP
1	Q	137	TYR
1	Q	144	ILE
1	Q	148	SER
1	Q	151	THR
1	Q	152	ASN
1	Q	153	CYS
1	Q	154	LEU
1	Q	158	VAL
1	Q	159	LYS
1	Q	165	LEU
1	Q	169	LYS
1	Q	176	HIS
1	Q	182	GLN
1	Q	192	ASP
1	Q	201	LEU
1	Q	206	THR
1	Q	208	THR
1	Q	218	LEU
1	Q	221	LEU
1	Q	222	LYS
1	Q	225	LEU
1	Q	228	ILE
1	Q	230	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	Q	231	ARG
1	Q	234	THR
1	Q	237	VAL
1	Q	239	VAL
1	Q	240	VAL
1	Q	243	VAL
1	Q	244	VAL
1	Q	247	GLU
1	Q	251	THR
1	Q	254	ASP
1	Q	255	VAL
1	Q	261	LYS
1	Q	283	PHE
1	Q	287	ASP
1	Q	289	SER
1	Q	290	SER
1	Q	291	THR
1	Q	298	MET
1	Q	307	VAL
1	Q	308	VAL
1	Q	312	ASP
1	Q	317	TYR
1	Q	319	GLN
1	Q	322	VAL
2	R	1	LEU
2	R	5	ILE
2	R	10	ARG
2	R	20	HIS
2	R	22	ARG
2	R	23	LYS
2	R	27	LEU
2	R	31	VAL
2	R	32	ILE
2	R	39	LYS
2	R	48	ASP
2	R	55	ASP
2	R	57	ASP
2	R	58	VAL
2	R	59	LYS
2	R	60	THR
2	R	64	SER
2	R	66	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	R	67	SER
2	R	68	VAL
2	R	75	VAL
2	R	88	ASP
2	R	98	THR
2	R	100	VAL
2	R	103	ASP
2	R	105	ASP
2	R	121	THR
2	R	125	LYS
2	R	135	VAL
2	R	136	ASN
2	R	138	GLU
2	R	140	TYR
2	R	147	ILE
2	R	154	THR
2	R	161	VAL
2	R	179	HIS
2	R	182	THR
2	R	195	LEU
2	R	196	ARG
2	R	214	LYS
2	R	227	LEU
2	R	236	THR
2	R	238	ASN
2	R	242	VAL
2	R	243	ASP
2	R	244	LEU
2	R	246	VAL
2	R	248	VAL
2	R	252	THR
2	R	257	VAL
2	R	278	GLU
2	R	283	ILE
2	R	284	ASP
2	R	286	ARG
2	R	289	ASP
2	R	290	VAL
2	R	292	SER
2	R	293	THR
2	R	294	ILE
2	R	295	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	R	299	THR
2	R	309	VAL
2	R	310	ILE
2	R	315	ASN
2	R	316	GLU
2	R	332	ASN
1	O	1	LEU
1	O	5	ILE
1	O	10	ARG
1	O	13	ARG
1	O	16	LEU
1	O	20	ARG
1	O	21	LYS
1	O	23	SER
1	O	25	LEU
1	O	28	VAL
1	O	30	VAL
1	O	32	ASP
1	O	37	VAL
1	O	38	LYS
1	O	47	ASP
1	O	58	LYS
1	O	60	ILE
1	O	60(A)	ASP
1	O	61	ASN
1	O	73	VAL
1	O	74	VAL
1	O	81	LYS
1	O	84	TRP
1	O	86	GLU
1	O	90	ASP
1	O	91	ILE
1	O	100	VAL
1	O	108	HIS
1	O	114	LYS
1	O	124	ASP
1	O	133	ASN
1	O	136	ASP
1	O	151	THR
1	O	152	ASN
1	O	153	CYS
1	O	154	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	O	161	LEU
1	O	169	LYS
1	O	171	THR
1	O	172	MET
1	O	173	THR
1	O	175	THR
1	O	176	HIS
1	O	181	ASP
1	O	182	GLN
1	O	186	ASP
1	O	193	LEU
1	O	206	THR
1	O	208	THR
1	O	214	VAL
1	O	217	VAL
1	O	220	GLN
1	O	228	ILE
1	O	230	LEU
1	O	231	ARG
1	O	234	THR
1	O	239	VAL
1	O	243	VAL
1	O	244	VAL
1	O	246	ILE
1	O	251	THR
1	O	254	ASP
1	O	255	VAL
1	O	261	LYS
1	O	275	ASP
1	O	279	VAL
1	O	282	ASP
1	O	285	CYS
1	O	288	PHE
1	O	289	SER
1	O	300	MET
1	O	304	MET
1	O	312	ASP
1	O	319	GLN
1	O	322	VAL
1	O	326	ASP
1	O	327	LEU
1	O	349	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	P	10	ARG
2	P	13	ARG
2	P	15	PHE
2	P	20	HIS
2	P	38	VAL
2	P	39	LYS
2	P	48	ASP
2	P	57	ASP
2	P	59	LYS
2	P	66	ILE
2	P	68	VAL
2	P	71	LYS
2	P	73	ILE
2	P	74	LYS
2	P	75	VAL
2	P	78	ASP
2	P	86	TRP
2	P	88	ASP
2	P	89	MET
2	P	91	ILE
2	P	94	VAL
2	P	98	THR
2	P	102	VAL
2	P	128	ILE
2	P	130	THR
2	P	136	ASN
2	P	138	GLU
2	P	141	THR
2	P	145	THR
2	P	155	ASN
2	P	175	MET
2	P	182	THR
2	P	185	GLN
2	P	188	LEU
2	P	189	ASP
2	P	196	ARG
2	P	204	ASN
2	P	208	THR
2	P	210	THR
2	P	222	ASN
2	P	226	LYS
2	P	230	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	P	234	VAL
2	P	236	THR
2	P	243	ASP
2	P	248	VAL
2	P	252	THR
2	P	257	VAL
2	P	262	ARG
2	P	268	GLU
2	P	283	ILE
2	P	284	ASP
2	P	289	ASP
2	P	291	SER
2	P	293	THR
2	P	294	ILE
2	P	296	SER
2	P	300	MET
2	P	301	VAL
2	P	309	VAL
2	P	316	GLU
2	P	326	LEU
2	P	335	GLN
1	G	11	ILE
1	G	14	ASN
1	G	18	CYS
1	G	18(A)	TRP
1	G	18(B)	HIS
1	G	20	ARG
1	G	21	LYS
1	G	25	LEU
1	G	37	VAL
1	G	38	LYS
1	G	47	ASP
1	G	50	LEU
1	G	54	LYS
1	G	58	LYS
1	G	61	ASN
1	G	62	GLU
1	G	63	THR
1	G	67	ASP
1	G	69	LYS
1	G	74	VAL
1	G	81	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	86	GLU
1	G	90	ASP
1	G	91	ILE
1	G	92	VAL
1	G	93	ILE
1	G	108	HIS
1	G	110	GLN
1	G	114	LYS
1	G	129	VAL
1	G	130	VAL
1	G	136	ASP
1	G	137	TYR
1	G	144	ILE
1	G	145	SER
1	G	148	SER
1	G	151	THR
1	G	152	ASN
1	G	153	CYS
1	G	154	LEU
1	G	158	VAL
1	G	159	LYS
1	G	163	GLU
1	G	165	LEU
1	G	169	LYS
1	G	182	GLN
1	G	191	ARG
1	G	192	ASP
1	G	193	LEU
1	G	201	LEU
1	G	206	THR
1	G	208	THR
1	G	218	LEU
1	G	221	LEU
1	G	222	LYS
1	G	225	LEU
1	G	228	ILE
1	G	230	LEU
1	G	231	ARG
1	G	234	THR
1	G	237	VAL
1	G	239	VAL
1	G	240	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	243	VAL
1	G	244	VAL
1	G	247	GLU
1	G	251	THR
1	G	254	ASP
1	G	255	VAL
1	G	261	LYS
1	G	270	VAL
1	G	283	PHE
1	G	288	PHE
1	G	289	SER
1	G	297	THR
1	G	307	VAL
1	G	308	VAL
1	G	312	ASP
1	G	317	TYR
1	G	322	VAL
1	G	323	ASP
1	G	328	VAL
1	G	331	LYS
1	G	358	CYS
2	H	1	LEU
2	H	5	ILE
2	H	10	ARG
2	H	13	ARG
2	H	20	HIS
2	H	29	VAL
2	H	30	VAL
2	H	31	VAL
2	H	32	ILE
2	H	33	ASN
2	H	39	LYS
2	H	40	GLN
2	H	44	LEU
2	H	46	LYS
2	H	47	TYR
2	H	50	ILE
2	H	51	LEU
2	H	53	THR
2	H	55	ASP
2	H	58	VAL
2	H	59	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	H	60	THR
2	H	68	VAL
2	H	71	LYS
2	H	82	VAL
2	H	86	TRP
2	H	88	ASP
2	H	98	THR
2	H	100	VAL
2	H	103	ASP
2	H	105	ASP
2	H	121	THR
2	H	125	LYS
2	H	135	VAL
2	H	136	ASN
2	H	138	GLU
2	H	140	TYR
2	H	141	THR
2	H	147	ILE
2	H	152	CYS
2	H	154	THR
2	H	161	VAL
2	H	179	HIS
2	H	195	LEU
2	H	196	ARG
2	H	214	LYS
2	H	227	LEU
2	H	236	THR
2	H	238	ASN
2	H	242	VAL
2	H	243	ASP
2	H	244	LEU
2	H	246	VAL
2	H	248	VAL
2	H	252	THR
2	H	257	VAL
2	H	278	GLU
2	H	283	ILE
2	H	284	ASP
2	H	286	ARG
2	H	289	ASP
2	H	290	VAL
2	H	292	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	H	293	THR
2	H	294	ILE
2	H	295	ASP
2	H	299	THR
2	H	309	VAL
2	H	310	ILE
2	H	315	ASN
2	H	316	GLU
1	E	10	ARG
1	E	13	ARG
1	E	16	LEU
1	E	20	ARG
1	E	21	LYS
1	E	25	LEU
1	E	28	VAL
1	E	29	VAL
1	E	30	VAL
1	E	32	ASP
1	E	33	SER
1	E	38	LYS
1	E	47	ASP
1	E	49	ILE
1	E	58	LYS
1	E	60	ILE
1	E	60(A)	ASP
1	E	72	LYS
1	E	74	VAL
1	E	81	LYS
1	E	82	LEU
1	E	84	TRP
1	E	86	GLU
1	E	90	ASP
1	E	100	VAL
1	E	108	HIS
1	E	114	LYS
1	E	115	LYS
1	E	124	ASP
1	E	133	ASN
1	E	136	ASP
1	E	144	ILE
1	E	145	SER
1	E	151	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	152	ASN
1	E	153	CYS
1	E	154	LEU
1	E	169	LYS
1	E	171	THR
1	E	174	THR
1	E	176	HIS
1	E	181	ASP
1	E	182	GLN
1	E	183	ARG
1	E	186	ASP
1	E	191	ARG
1	E	193	LEU
1	E	201	LEU
1	E	206	THR
1	E	208	THR
1	E	214	VAL
1	E	217	VAL
1	E	220	GLN
1	E	228	ILE
1	E	231	ARG
1	E	234	THR
1	E	239	VAL
1	E	241	ASP
1	E	242	LEU
1	E	243	VAL
1	E	244	VAL
1	E	246	ILE
1	E	247	GLU
1	E	254	ASP
1	E	255	VAL
1	E	256	ASN
1	E	261	LYS
1	E	275	ASP
1	E	279	VAL
1	E	282	ASP
1	E	285	CYS
1	E	288	PHE
1	E	289	SER
1	E	300	MET
1	E	312	ASP
1	E	319	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	320	ARG
1	E	322	VAL
1	E	327	LEU
2	F	2	LYS
2	F	10	ARG
2	F	15	PHE
2	F	16	LEU
2	F	20	HIS
2	F	34	ASP
2	F	39	LYS
2	F	48	ASP
2	F	55	ASP
2	F	58	VAL
2	F	60	THR
2	F	66	ILE
2	F	68	VAL
2	F	74	LYS
2	F	78	ASP
2	F	83	ASN
2	F	86	TRP
2	F	88	ASP
2	F	89	MET
2	F	91	ILE
2	F	94	VAL
2	F	98	THR
2	F	102	VAL
2	F	128	ILE
2	F	130	THR
2	F	136	ASN
2	F	138	GLU
2	F	141	THR
2	F	145	THR
2	F	155	ASN
2	F	175	MET
2	F	177	THR
2	F	184	ASP
2	F	185	GLN
2	F	187	LEU
2	F	196	ARG
2	F	204	ASN
2	F	208	THR
2	F	210	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	F	222	ASN
2	F	226	LYS
2	F	230	ILE
2	F	234	VAL
2	F	236	THR
2	F	243	ASP
2	F	248	VAL
2	F	252	THR
2	F	257	VAL
2	F	262	ARG
2	F	268	GLU
2	F	283	ILE
2	F	284	ASP
2	F	289	ASP
2	F	291	SER
2	F	293	THR
2	F	294	ILE
2	F	296	SER
2	F	300	MET
2	F	309	VAL
2	F	315	ASN
2	F	316	GLU
2	F	326	LEU
2	F	335	GLN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (101) such sidechains are listed below:

Mol	Chain	Res	Type
1	I	76	ASN
1	I	142	ASN
1	I	152	ASN
1	I	182	GLN
1	I	319	GLN
2	J	14	ASN
2	J	20	HIS
2	J	33	ASN
2	J	40	GLN
2	J	43	HIS
2	J	155	ASN
2	J	185	GLN
2	J	192	HIS
2	J	204	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	J	222	ASN
2	J	258	ASN
2	J	321	GLN
1	K	6	ASN
1	K	42	HIS
1	K	61	ASN
1	K	108	HIS
1	K	202	ASN
1	K	257	ASN
2	L	43	HIS
2	L	136	ASN
2	L	204	ASN
1	A	61	ASN
1	A	76	ASN
1	A	142	ASN
1	A	152	ASN
1	A	319	GLN
2	B	20	HIS
2	B	40	GLN
2	B	80	ASN
2	B	155	ASN
2	B	185	GLN
2	B	204	ASN
2	B	238	ASN
2	B	258	ASN
2	B	321	GLN
1	C	6	ASN
1	C	108	HIS
1	C	257	ASN
2	D	40	GLN
2	D	43	HIS
2	D	80	ASN
2	D	204	ASN
2	D	321	GLN
1	Q	6	ASN
1	Q	61	ASN
1	Q	146	ASN
1	Q	176	HIS
2	R	43	HIS
2	R	83	ASN
2	R	204	ASN
2	R	238	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	R	258	ASN
1	O	6	ASN
1	O	61	ASN
1	O	133	ASN
1	O	152	ASN
1	O	226	ASN
1	O	257	ASN
1	O	319	GLN
1	O	330	ASN
2	P	20	HIS
2	P	33	ASN
2	P	43	HIS
2	P	83	ASN
2	P	155	ASN
2	P	204	ASN
2	P	222	ASN
2	P	238	ASN
2	P	321	GLN
2	P	332	ASN
1	G	6	ASN
1	G	14	ASN
1	G	61	ASN
1	G	139	HIS
1	G	146	ASN
1	G	176	HIS
2	H	83	ASN
2	H	179	HIS
2	H	204	ASN
2	H	238	ASN
2	H	258	ASN
1	E	6	ASN
1	E	61	ASN
1	E	133	ASN
1	E	152	ASN
1	E	226	ASN
1	E	257	ASN
1	E	319	GLN
2	F	20	HIS
2	F	33	ASN
2	F	43	HIS
2	F	155	ASN
2	F	204	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	F	222	ASN
2	F	321	GLN
2	F	332	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

16 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
3	NAD	Q	401	-	42,48,48	3.84	18 (42%)	50,73,73	2.46	9 (18%)
3	NAD	H	401	-	42,48,48	3.85	17 (40%)	50,73,73	2.35	8 (16%)
3	NAD	C	401	-	42,48,48	3.82	16 (38%)	50,73,73	2.39	8 (16%)
3	NAD	D	401	-	42,48,48	3.84	17 (40%)	50,73,73	2.37	9 (18%)
3	NAD	O	401	-	42,48,48	3.84	19 (45%)	50,73,73	2.36	7 (14%)
3	NAD	L	401	-	42,48,48	3.84	18 (42%)	50,73,73	2.33	9 (18%)
3	NAD	R	401	-	42,48,48	3.84	18 (42%)	50,73,73	2.25	7 (14%)
3	NAD	K	402	-	42,48,48	3.82	19 (45%)	50,73,73	2.24	8 (16%)
3	NAD	B	401	-	42,48,48	3.83	19 (45%)	50,73,73	2.32	8 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
3	NAD	F	401	-	42,48,48	3.81	18 (42%)	50,73,73	2.15	7 (14%)
3	NAD	G	401	-	42,48,48	3.85	19 (45%)	50,73,73	2.29	8 (16%)
3	NAD	Q	402	-	42,48,48	3.83	19 (45%)	50,73,73	2.13	6 (12%)
3	NAD	K	401	-	42,48,48	3.82	17 (40%)	50,73,73	2.29	7 (14%)
3	NAD	J	401	-	42,48,48	3.82	17 (40%)	50,73,73	2.32	7 (14%)
3	NAD	A	401	-	42,48,48	3.85	18 (42%)	50,73,73	2.40	10 (20%)
3	NAD	P	401	-	42,48,48	3.83	18 (42%)	50,73,73	2.22	7 (14%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	NAD	Q	401	-	-	16/26/62/62	0/5/5/5
3	NAD	H	401	-	-	17/26/62/62	0/5/5/5
3	NAD	C	401	-	-	13/26/62/62	0/5/5/5
3	NAD	D	401	-	-	11/26/62/62	0/5/5/5
3	NAD	O	401	-	-	12/26/62/62	0/5/5/5
3	NAD	L	401	-	-	12/26/62/62	0/5/5/5
3	NAD	R	401	-	-	17/26/62/62	0/5/5/5
3	NAD	K	402	-	-	9/26/62/62	0/5/5/5
3	NAD	B	401	-	-	11/26/62/62	0/5/5/5
3	NAD	F	401	-	-	11/26/62/62	0/5/5/5
3	NAD	G	401	-	-	15/26/62/62	0/5/5/5
3	NAD	Q	402	-	-	19/26/62/62	0/5/5/5
3	NAD	K	401	-	-	11/26/62/62	0/5/5/5
3	NAD	J	401	-	-	13/26/62/62	0/5/5/5
3	NAD	A	401	-	-	14/26/62/62	0/5/5/5
3	NAD	P	401	-	-	8/26/62/62	0/5/5/5

All (287) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	L	401	NAD	O4D-C1D	-10.45	1.26	1.41
3	G	401	NAD	O4D-C1D	-10.36	1.26	1.41
3	D	401	NAD	O4D-C1D	-10.30	1.26	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	K	402	NAD	O4D-C1D	-10.28	1.26	1.41
3	H	401	NAD	O4D-C1D	-10.24	1.26	1.41
3	O	401	NAD	O4D-C1D	-10.23	1.26	1.41
3	P	401	NAD	O4D-C1D	-10.19	1.26	1.41
3	Q	401	NAD	O4D-C1D	-10.08	1.27	1.41
3	C	401	NAD	O4D-C1D	-10.08	1.27	1.41
3	A	401	NAD	O4D-C1D	-10.04	1.27	1.41
3	K	401	NAD	O4D-C1D	-10.02	1.27	1.41
3	Q	402	NAD	O4D-C1D	-9.99	1.27	1.41
3	B	401	NAD	O4D-C1D	-9.96	1.27	1.41
3	J	401	NAD	O4D-C1D	-9.93	1.27	1.41
3	F	401	NAD	O4D-C1D	-9.91	1.27	1.41
3	R	401	NAD	O4D-C1D	-9.86	1.27	1.41
3	K	402	NAD	C3B-C4B	-9.47	1.28	1.53
3	Q	402	NAD	C3B-C4B	-9.43	1.28	1.53
3	A	401	NAD	C3B-C4B	-9.33	1.29	1.53
3	C	401	NAD	C3B-C4B	-9.33	1.29	1.53
3	G	401	NAD	C3B-C4B	-9.29	1.29	1.53
3	O	401	NAD	C3B-C4B	-9.21	1.29	1.53
3	Q	401	NAD	C3B-C4B	-9.18	1.29	1.53
3	K	401	NAD	C3B-C4B	-9.16	1.29	1.53
3	P	401	NAD	C3B-C4B	-9.14	1.29	1.53
3	F	401	NAD	C3B-C4B	-9.14	1.29	1.53
3	J	401	NAD	C3B-C4B	-9.05	1.29	1.53
3	R	401	NAD	C3B-C4B	-9.04	1.29	1.53
3	B	401	NAD	C3B-C4B	-8.98	1.30	1.53
3	H	401	NAD	C3B-C4B	-8.96	1.30	1.53
3	D	401	NAD	C3B-C4B	-8.96	1.30	1.53
3	L	401	NAD	C3B-C4B	-8.92	1.30	1.53
3	Q	402	NAD	C3D-C4D	-8.63	1.30	1.53
3	B	401	NAD	C3D-C4D	-8.63	1.30	1.53
3	F	401	NAD	C3D-C4D	-8.62	1.31	1.53
3	D	401	NAD	C3D-C4D	-8.60	1.31	1.53
3	J	401	NAD	C3D-C4D	-8.58	1.31	1.53
3	L	401	NAD	C3D-C4D	-8.57	1.31	1.53
3	R	401	NAD	C3D-C4D	-8.48	1.31	1.53
3	P	401	NAD	C3D-C4D	-8.48	1.31	1.53
3	A	401	NAD	C3D-C4D	-8.46	1.31	1.53
3	Q	401	NAD	C7N-N7N	8.46	1.49	1.33
3	J	401	NAD	C7N-N7N	8.46	1.49	1.33
3	C	401	NAD	C7N-N7N	8.45	1.49	1.33
3	G	401	NAD	C7N-N7N	8.44	1.49	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	401	NAD	C7N-N7N	8.44	1.49	1.33
3	Q	401	NAD	C3D-C4D	-8.43	1.31	1.53
3	K	401	NAD	C7N-N7N	8.43	1.49	1.33
3	H	401	NAD	C3D-C4D	-8.42	1.31	1.53
3	R	401	NAD	C7N-N7N	8.42	1.49	1.33
3	H	401	NAD	C7N-N7N	8.40	1.49	1.33
3	B	401	NAD	C7N-N7N	8.40	1.49	1.33
3	D	401	NAD	C7N-N7N	8.39	1.49	1.33
3	L	401	NAD	C7N-N7N	8.39	1.49	1.33
3	F	401	NAD	C7N-N7N	8.38	1.49	1.33
3	Q	402	NAD	C7N-N7N	8.37	1.48	1.33
3	G	401	NAD	C3D-C4D	-8.35	1.31	1.53
3	P	401	NAD	C7N-N7N	8.34	1.48	1.33
3	K	402	NAD	C7N-N7N	8.34	1.48	1.33
3	K	401	NAD	C3D-C4D	-8.31	1.31	1.53
3	O	401	NAD	C7N-N7N	8.30	1.48	1.33
3	O	401	NAD	C3D-C4D	-8.25	1.31	1.53
3	C	401	NAD	C3D-C4D	-8.23	1.32	1.53
3	K	402	NAD	C3D-C4D	-8.12	1.32	1.53
3	O	401	NAD	O4B-C4B	7.64	1.62	1.45
3	O	401	NAD	O4D-C4D	7.58	1.61	1.45
3	K	402	NAD	O4D-C4D	7.55	1.61	1.45
3	A	401	NAD	O4D-C4D	7.55	1.61	1.45
3	G	401	NAD	O4D-C4D	7.52	1.61	1.45
3	L	401	NAD	O4B-C4B	7.52	1.61	1.45
3	Q	401	NAD	O4D-C4D	7.49	1.61	1.45
3	K	401	NAD	O4D-C4D	7.47	1.61	1.45
3	D	401	NAD	O4B-C4B	7.46	1.61	1.45
3	K	402	NAD	O4B-C4B	7.46	1.61	1.45
3	Q	402	NAD	O4B-C4B	7.46	1.61	1.45
3	C	401	NAD	O4D-C4D	7.45	1.61	1.45
3	P	401	NAD	O4D-C4D	7.44	1.61	1.45
3	A	401	NAD	O4B-C4B	7.44	1.61	1.45
3	G	401	NAD	O4B-C4B	7.43	1.61	1.45
3	P	401	NAD	O4B-C4B	7.43	1.61	1.45
3	K	401	NAD	O4B-C4B	7.40	1.61	1.45
3	H	401	NAD	O4B-C4B	7.40	1.61	1.45
3	B	401	NAD	O4B-C4B	7.38	1.61	1.45
3	J	401	NAD	O4D-C4D	7.38	1.61	1.45
3	R	401	NAD	O4B-C4B	7.36	1.61	1.45
3	F	401	NAD	O4D-C4D	7.36	1.61	1.45
3	C	401	NAD	O4B-C4B	7.35	1.61	1.45

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	J	401	NAD	O4B-C4B	7.32	1.61	1.45
3	F	401	NAD	O4B-C4B	7.32	1.61	1.45
3	B	401	NAD	O4D-C4D	7.32	1.61	1.45
3	H	401	NAD	O4D-C4D	7.29	1.61	1.45
3	Q	402	NAD	O4D-C4D	7.29	1.61	1.45
3	Q	401	NAD	O4B-C4B	7.27	1.61	1.45
3	R	401	NAD	O4D-C4D	7.23	1.61	1.45
3	D	401	NAD	O4D-C4D	7.22	1.61	1.45
3	Q	401	NAD	O4B-C1B	-7.15	1.31	1.41
3	L	401	NAD	O4D-C4D	7.14	1.61	1.45
3	H	401	NAD	O4B-C1B	-7.05	1.31	1.41
3	K	401	NAD	O4B-C1B	-7.01	1.31	1.41
3	R	401	NAD	O4B-C1B	-6.94	1.31	1.41
3	C	401	NAD	O4B-C1B	-6.85	1.31	1.41
3	J	401	NAD	O4B-C1B	-6.78	1.31	1.41
3	B	401	NAD	O4B-C1B	-6.76	1.31	1.41
3	A	401	NAD	O4B-C1B	-6.74	1.31	1.41
3	O	401	NAD	O4B-C1B	-6.67	1.31	1.41
3	P	401	NAD	O4B-C1B	-6.65	1.31	1.41
3	L	401	NAD	O4B-C1B	-6.62	1.31	1.41
3	F	401	NAD	O4B-C1B	-6.60	1.31	1.41
3	D	401	NAD	O4B-C1B	-6.57	1.31	1.41
3	Q	402	NAD	O4B-C1B	-6.55	1.31	1.41
3	G	401	NAD	O4B-C1B	-6.46	1.32	1.41
3	K	402	NAD	O4B-C1B	-6.35	1.32	1.41
3	R	401	NAD	C3N-C7N	5.07	1.58	1.50
3	H	401	NAD	C3N-C7N	4.88	1.57	1.50
3	O	401	NAD	O3D-C3D	4.54	1.53	1.43
3	G	401	NAD	C3N-C7N	4.53	1.57	1.50
3	D	401	NAD	C3N-C7N	4.52	1.57	1.50
3	K	402	NAD	O3D-C3D	4.52	1.53	1.43
3	K	401	NAD	O3D-C3D	4.48	1.53	1.43
3	B	401	NAD	O3D-C3D	4.48	1.53	1.43
3	L	401	NAD	C3N-C7N	4.46	1.57	1.50
3	J	401	NAD	O3D-C3D	4.44	1.53	1.43
3	L	401	NAD	O3D-C3D	4.44	1.53	1.43
3	H	401	NAD	O3D-C3D	4.44	1.53	1.43
3	P	401	NAD	O3D-C3D	4.43	1.53	1.43
3	C	401	NAD	C3N-C7N	4.43	1.57	1.50
3	D	401	NAD	O3D-C3D	4.43	1.53	1.43
3	Q	401	NAD	O3D-C3D	4.42	1.53	1.43
3	B	401	NAD	C3N-C7N	4.41	1.57	1.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A	401	NAD	O3D-C3D	4.40	1.53	1.43
3	R	401	NAD	O3D-C3D	4.39	1.53	1.43
3	C	401	NAD	O3D-C3D	4.38	1.53	1.43
3	J	401	NAD	C3N-C7N	4.38	1.57	1.50
3	Q	402	NAD	O3D-C3D	4.38	1.53	1.43
3	F	401	NAD	O3D-C3D	4.36	1.53	1.43
3	P	401	NAD	C3N-C7N	4.34	1.57	1.50
3	G	401	NAD	O3D-C3D	4.32	1.53	1.43
3	A	401	NAD	C3N-C7N	4.32	1.57	1.50
3	F	401	NAD	C3N-C7N	4.29	1.57	1.50
3	Q	401	NAD	C3N-C7N	4.21	1.56	1.50
3	O	401	NAD	C3N-C7N	4.20	1.56	1.50
3	K	401	NAD	C6A-N6A	4.19	1.49	1.34
3	P	401	NAD	C6A-N6A	4.18	1.49	1.34
3	O	401	NAD	C6A-N6A	4.18	1.49	1.34
3	F	401	NAD	C6A-N6A	4.17	1.49	1.34
3	K	402	NAD	C6A-N6A	4.16	1.49	1.34
3	K	401	NAD	C3N-C7N	4.15	1.56	1.50
3	B	401	NAD	C6A-N6A	4.15	1.49	1.34
3	A	401	NAD	C6A-N6A	4.14	1.49	1.34
3	C	401	NAD	C6A-N6A	4.13	1.49	1.34
3	Q	401	NAD	C6A-N6A	4.13	1.49	1.34
3	J	401	NAD	C6A-N6A	4.11	1.49	1.34
3	R	401	NAD	C6A-N6A	4.10	1.49	1.34
3	G	401	NAD	C6A-N6A	4.10	1.49	1.34
3	H	401	NAD	C6A-N6A	4.09	1.49	1.34
3	K	402	NAD	C3N-C7N	4.08	1.56	1.50
3	Q	402	NAD	C6A-N6A	4.07	1.48	1.34
3	Q	402	NAD	C3N-C7N	4.07	1.56	1.50
3	L	401	NAD	C6A-N6A	4.05	1.48	1.34
3	D	401	NAD	C6A-N6A	4.03	1.48	1.34
3	B	401	NAD	O3B-C3B	3.41	1.51	1.43
3	J	401	NAD	O3B-C3B	3.28	1.50	1.43
3	A	401	NAD	O3B-C3B	3.22	1.50	1.43
3	R	401	NAD	O3B-C3B	3.21	1.50	1.43
3	Q	401	NAD	O3B-C3B	3.20	1.50	1.43
3	F	401	NAD	O3B-C3B	3.20	1.50	1.43
3	L	401	NAD	O3B-C3B	3.20	1.50	1.43
3	O	401	NAD	O3B-C3B	3.20	1.50	1.43
3	P	401	NAD	O3B-C3B	3.20	1.50	1.43
3	H	401	NAD	O3B-C3B	3.19	1.50	1.43
3	Q	402	NAD	O3B-C3B	3.17	1.50	1.43

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	D	401	NAD	O3B-C3B	3.15	1.50	1.43
3	G	401	NAD	O3B-C3B	3.15	1.50	1.43
3	C	401	NAD	O3B-C3B	3.13	1.50	1.43
3	K	402	NAD	O3B-C3B	3.12	1.50	1.43
3	K	401	NAD	O3B-C3B	3.12	1.50	1.43
3	D	401	NAD	C2N-N1N	2.87	1.38	1.35
3	K	401	NAD	O2B-C2B	-2.82	1.36	1.43
3	C	401	NAD	O2B-C2B	-2.82	1.36	1.43
3	R	401	NAD	C2N-N1N	2.80	1.38	1.35
3	A	401	NAD	O2B-C2B	-2.80	1.36	1.43
3	K	402	NAD	O2B-C2B	-2.79	1.36	1.43
3	P	401	NAD	O2B-C2B	-2.79	1.36	1.43
3	H	401	NAD	O2B-C2B	-2.79	1.36	1.43
3	L	401	NAD	C2N-N1N	2.78	1.38	1.35
3	Q	401	NAD	C5A-C4A	-2.78	1.33	1.40
3	Q	402	NAD	O2B-C2B	-2.77	1.36	1.43
3	O	401	NAD	O2B-C2B	-2.77	1.36	1.43
3	F	401	NAD	O2B-C2B	-2.77	1.36	1.43
3	R	401	NAD	C5A-C4A	-2.76	1.33	1.40
3	Q	401	NAD	O2B-C2B	-2.75	1.36	1.43
3	C	401	NAD	C5A-C4A	-2.74	1.33	1.40
3	G	401	NAD	O2B-C2B	-2.74	1.36	1.43
3	R	401	NAD	O2B-C2B	-2.73	1.36	1.43
3	J	401	NAD	O2B-C2B	-2.71	1.36	1.43
3	O	401	NAD	C5A-C4A	-2.71	1.33	1.40
3	A	401	NAD	C5A-C4A	-2.70	1.33	1.40
3	L	401	NAD	O2B-C2B	-2.70	1.36	1.43
3	K	401	NAD	C5A-C4A	-2.69	1.33	1.40
3	H	401	NAD	C5A-C4A	-2.69	1.33	1.40
3	J	401	NAD	C5A-C4A	-2.69	1.33	1.40
3	B	401	NAD	O2B-C2B	-2.69	1.36	1.43
3	K	402	NAD	C5A-C4A	-2.68	1.33	1.40
3	D	401	NAD	O2B-C2B	-2.68	1.36	1.43
3	Q	402	NAD	C5A-C4A	-2.68	1.33	1.40
3	H	401	NAD	C2N-N1N	2.67	1.38	1.35
3	G	401	NAD	C5A-C4A	-2.66	1.33	1.40
3	B	401	NAD	C5A-C4A	-2.65	1.33	1.40
3	P	401	NAD	C5A-C4A	-2.63	1.34	1.40
3	D	401	NAD	C5A-C4A	-2.62	1.34	1.40
3	J	401	NAD	C2A-N1A	2.59	1.38	1.33
3	F	401	NAD	C5A-C4A	-2.59	1.34	1.40
3	B	401	NAD	C2A-N1A	2.59	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	G	401	NAD	C2N-N1N	2.56	1.38	1.35
3	L	401	NAD	C5A-C4A	-2.55	1.34	1.40
3	F	401	NAD	O7N-C7N	-2.55	1.19	1.24
3	P	401	NAD	O7N-C7N	-2.53	1.19	1.24
3	K	401	NAD	C2A-N1A	2.51	1.38	1.33
3	A	401	NAD	C2A-N1A	2.50	1.38	1.33
3	O	401	NAD	O7N-C7N	-2.50	1.19	1.24
3	Q	402	NAD	C2A-N1A	2.50	1.38	1.33
3	B	401	NAD	C2N-N1N	2.49	1.38	1.35
3	P	401	NAD	C2A-N1A	2.49	1.38	1.33
3	H	401	NAD	O7N-C7N	-2.48	1.19	1.24
3	Q	402	NAD	O7N-C7N	-2.48	1.19	1.24
3	R	401	NAD	C2A-N1A	2.48	1.38	1.33
3	K	401	NAD	O7N-C7N	-2.48	1.19	1.24
3	G	401	NAD	C2A-N1A	2.47	1.38	1.33
3	K	402	NAD	O7N-C7N	-2.46	1.19	1.24
3	K	402	NAD	C2A-N1A	2.45	1.38	1.33
3	B	401	NAD	O7N-C7N	-2.45	1.19	1.24
3	D	401	NAD	C2D-C1D	2.45	1.57	1.53
3	C	401	NAD	C2A-N1A	2.44	1.38	1.33
3	Q	401	NAD	O7N-C7N	-2.43	1.19	1.24
3	Q	401	NAD	C2A-N1A	2.42	1.38	1.33
3	G	401	NAD	O7N-C7N	-2.42	1.19	1.24
3	F	401	NAD	C2A-N1A	2.42	1.38	1.33
3	O	401	NAD	C2A-N1A	2.41	1.38	1.33
3	J	401	NAD	O7N-C7N	-2.41	1.19	1.24
3	C	401	NAD	O7N-C7N	-2.39	1.19	1.24
3	L	401	NAD	C2D-C1D	2.38	1.57	1.53
3	R	401	NAD	O7N-C7N	-2.38	1.19	1.24
3	D	401	NAD	O7N-C7N	-2.36	1.19	1.24
3	L	401	NAD	O7N-C7N	-2.35	1.19	1.24
3	A	401	NAD	C2N-N1N	2.33	1.37	1.35
3	Q	401	NAD	C2N-N1N	2.32	1.37	1.35
3	A	401	NAD	O7N-C7N	-2.31	1.19	1.24
3	J	401	NAD	C2N-N1N	2.31	1.37	1.35
3	H	401	NAD	C2A-N1A	2.31	1.38	1.33
3	P	401	NAD	C2A-N3A	2.23	1.35	1.32
3	L	401	NAD	C2A-N1A	2.21	1.38	1.33
3	Q	401	NAD	C2D-C1D	2.21	1.57	1.53
3	Q	402	NAD	C2A-N3A	2.19	1.35	1.32
3	K	402	NAD	C2N-N1N	2.18	1.37	1.35
3	K	402	NAD	C2A-N3A	2.17	1.35	1.32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	F	401	NAD	PA-O5B	2.15	1.68	1.59
3	O	401	NAD	C2N-N1N	2.15	1.37	1.35
3	A	401	NAD	C2A-N3A	2.15	1.35	1.32
3	F	401	NAD	C2A-N3A	2.14	1.35	1.32
3	K	402	NAD	C2D-C1D	2.12	1.57	1.53
3	D	401	NAD	C2A-N1A	2.12	1.37	1.33
3	Q	402	NAD	PA-O5B	2.12	1.67	1.59
3	Q	402	NAD	C2N-N1N	2.11	1.37	1.35
3	Q	402	NAD	O2D-C2D	-2.11	1.38	1.43
3	O	401	NAD	C2D-C1D	2.11	1.57	1.53
3	K	401	NAD	PA-O5B	2.11	1.67	1.59
3	G	401	NAD	O2D-C2D	-2.10	1.38	1.43
3	G	401	NAD	PA-O5B	2.10	1.67	1.59
3	C	401	NAD	C2D-C1D	2.09	1.56	1.53
3	O	401	NAD	C2A-N3A	2.08	1.35	1.32
3	Q	401	NAD	O2D-C2D	-2.08	1.38	1.43
3	L	401	NAD	PA-O5B	2.06	1.67	1.59
3	K	402	NAD	PA-O5B	2.06	1.67	1.59
3	P	401	NAD	PA-O5B	2.06	1.67	1.59
3	F	401	NAD	C2N-N1N	2.06	1.37	1.35
3	B	401	NAD	C2D-C1D	2.06	1.56	1.53
3	H	401	NAD	C2D-C1D	2.05	1.56	1.53
3	B	401	NAD	C2A-N3A	2.04	1.35	1.32
3	O	401	NAD	PA-O5B	2.04	1.67	1.59
3	A	401	NAD	PA-O5B	2.04	1.67	1.59
3	R	401	NAD	C2D-C1D	2.03	1.56	1.53
3	G	401	NAD	C2A-N3A	2.03	1.35	1.32
3	J	401	NAD	C2A-N3A	2.02	1.35	1.32
3	R	401	NAD	PA-O5B	2.01	1.67	1.59
3	B	401	NAD	PA-O5B	2.01	1.67	1.59
3	P	401	NAD	C2N-N1N	2.01	1.37	1.35
3	K	401	NAD	O2D-C2D	-2.00	1.38	1.43

All (125) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	Q	401	NAD	C1B-N9A-C4A	-10.17	108.78	126.64
3	J	401	NAD	C1B-N9A-C4A	-10.00	109.07	126.64
3	B	401	NAD	C1B-N9A-C4A	-9.88	109.29	126.64
3	R	401	NAD	C1B-N9A-C4A	-9.84	109.34	126.64
3	C	401	NAD	C1B-N9A-C4A	-9.84	109.36	126.64
3	H	401	NAD	C1B-N9A-C4A	-9.67	109.65	126.64

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	O	401	NAD	C1B-N9A-C4A	-9.43	110.08	126.64
3	A	401	NAD	C1B-N9A-C4A	-9.39	110.15	126.64
3	G	401	NAD	C1B-N9A-C4A	-9.19	110.49	126.64
3	K	401	NAD	C1B-N9A-C4A	-9.10	110.65	126.64
3	K	402	NAD	C1B-N9A-C4A	-9.00	110.83	126.64
3	L	401	NAD	C1B-N9A-C4A	-8.98	110.86	126.64
3	D	401	NAD	C1B-N9A-C4A	-8.90	111.01	126.64
3	P	401	NAD	C1B-N9A-C4A	-8.85	111.10	126.64
3	D	401	NAD	C5A-C6A-N6A	8.59	133.41	120.35
3	Q	402	NAD	C1B-N9A-C4A	-8.52	111.68	126.64
3	L	401	NAD	C5A-C6A-N6A	8.42	133.15	120.35
3	H	401	NAD	C5A-C6A-N6A	8.19	132.80	120.35
3	K	401	NAD	C5A-C6A-N6A	8.18	132.78	120.35
3	Q	401	NAD	C5A-C6A-N6A	8.14	132.72	120.35
3	F	401	NAD	C5A-C6A-N6A	8.12	132.69	120.35
3	C	401	NAD	C5A-C6A-N6A	8.10	132.65	120.35
3	F	401	NAD	C1B-N9A-C4A	-8.08	112.45	126.64
3	O	401	NAD	C5A-C6A-N6A	8.04	132.56	120.35
3	P	401	NAD	C5A-C6A-N6A	7.96	132.45	120.35
3	K	402	NAD	C5A-C6A-N6A	7.89	132.35	120.35
3	A	401	NAD	C5A-C6A-N6A	7.76	132.15	120.35
3	J	401	NAD	C5A-C6A-N6A	7.71	132.07	120.35
3	B	401	NAD	C5A-C6A-N6A	7.69	132.04	120.35
3	G	401	NAD	C5A-C6A-N6A	7.67	132.01	120.35
3	Q	402	NAD	C5A-C6A-N6A	7.56	131.84	120.35
3	R	401	NAD	C5A-C6A-N6A	7.50	131.75	120.35
3	D	401	NAD	N6A-C6A-N1A	-6.00	106.11	118.57
3	L	401	NAD	N6A-C6A-N1A	-5.83	106.47	118.57
3	A	401	NAD	N3A-C2A-N1A	-5.83	119.57	128.68
3	B	401	NAD	N3A-C2A-N1A	-5.75	119.69	128.68
3	J	401	NAD	N3A-C2A-N1A	-5.73	119.73	128.68
3	Q	401	NAD	N3A-C2A-N1A	-5.70	119.77	128.68
3	O	401	NAD	N3A-C2A-N1A	-5.66	119.84	128.68
3	C	401	NAD	N3A-C2A-N1A	-5.63	119.88	128.68
3	F	401	NAD	N3A-C2A-N1A	-5.63	119.88	128.68
3	H	401	NAD	N6A-C6A-N1A	-5.60	106.95	118.57
3	Q	402	NAD	N3A-C2A-N1A	-5.60	119.93	128.68
3	P	401	NAD	N3A-C2A-N1A	-5.58	119.95	128.68
3	F	401	NAD	N6A-C6A-N1A	-5.57	107.01	118.57
3	G	401	NAD	N3A-C2A-N1A	-5.55	120.01	128.68
3	D	401	NAD	N3A-C2A-N1A	-5.53	120.04	128.68
3	R	401	NAD	N3A-C2A-N1A	-5.50	120.08	128.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	Q	401	NAD	N6A-C6A-N1A	-5.48	107.21	118.57
3	P	401	NAD	N6A-C6A-N1A	-5.42	107.33	118.57
3	C	401	NAD	N6A-C6A-N1A	-5.41	107.34	118.57
3	K	402	NAD	N3A-C2A-N1A	-5.39	120.25	128.68
3	O	401	NAD	N6A-C6A-N1A	-5.38	107.41	118.57
3	H	401	NAD	N3A-C2A-N1A	-5.36	120.31	128.68
3	K	402	NAD	N6A-C6A-N1A	-5.31	107.55	118.57
3	K	401	NAD	N6A-C6A-N1A	-5.30	107.58	118.57
3	A	401	NAD	N6A-C6A-N1A	-5.24	107.69	118.57
3	L	401	NAD	N3A-C2A-N1A	-5.24	120.49	128.68
3	J	401	NAD	N6A-C6A-N1A	-5.14	107.91	118.57
3	B	401	NAD	N6A-C6A-N1A	-5.12	107.94	118.57
3	Q	402	NAD	N6A-C6A-N1A	-5.04	108.10	118.57
3	K	401	NAD	N3A-C2A-N1A	-5.03	120.82	128.68
3	R	401	NAD	N6A-C6A-N1A	-5.03	108.14	118.57
3	G	401	NAD	N6A-C6A-N1A	-5.03	108.14	118.57
3	G	401	NAD	O4D-C1D-C2D	-4.05	101.01	106.93
3	K	401	NAD	PN-O3-PA	-3.91	119.41	132.83
3	Q	401	NAD	PN-O3-PA	-3.79	119.81	132.83
3	C	401	NAD	C3D-C2D-C1D	3.50	106.25	100.98
3	A	401	NAD	C3D-C2D-C1D	3.46	106.19	100.98
3	B	401	NAD	C3B-C2B-C1B	3.20	105.79	100.98
3	J	401	NAD	C3B-C2B-C1B	3.19	105.77	100.98
3	O	401	NAD	PN-O3-PA	-3.12	122.11	132.83
3	C	401	NAD	PN-O3-PA	-3.08	122.25	132.83
3	K	402	NAD	PN-O3-PA	-3.07	122.29	132.83
3	G	401	NAD	PN-O3-PA	-2.95	122.70	132.83
3	D	401	NAD	PN-O3-PA	-2.92	122.80	132.83
3	Q	401	NAD	C3D-C2D-C1D	2.88	105.32	100.98
3	Q	402	NAD	PN-O3-PA	-2.87	122.97	132.83
3	G	401	NAD	C3D-C2D-C1D	-2.86	96.67	100.98
3	O	401	NAD	C3D-C2D-C1D	2.83	105.25	100.98
3	B	401	NAD	PN-O3-PA	-2.77	123.31	132.83
3	J	401	NAD	PN-O3-PA	-2.75	123.40	132.83
3	H	401	NAD	C3D-C2D-C1D	2.73	105.08	100.98
3	C	401	NAD	C2D-C3D-C4D	2.71	107.92	102.64
3	H	401	NAD	O4B-C1B-C2B	-2.70	102.98	106.93
3	A	401	NAD	C6N-N1N-C2N	-2.69	119.52	121.97
3	K	401	NAD	C3D-C2D-C1D	2.68	105.01	100.98
3	Q	402	NAD	C2N-C3N-C4N	2.66	121.28	118.26
3	F	401	NAD	C3B-C2B-C1B	2.59	104.87	100.98
3	D	401	NAD	O4B-C1B-C2B	-2.58	103.15	106.93

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	P	401	NAD	C3D-C2D-C1D	2.49	104.73	100.98
3	Q	401	NAD	C2N-C3N-C4N	2.48	121.07	118.26
3	L	401	NAD	C3D-C2D-C1D	2.45	104.67	100.98
3	L	401	NAD	PN-O3-PA	-2.43	124.50	132.83
3	D	401	NAD	C3D-C2D-C1D	2.41	104.61	100.98
3	O	401	NAD	C2N-C3N-C4N	2.40	120.98	118.26
3	B	401	NAD	C2N-C3N-C4N	2.39	120.97	118.26
3	K	402	NAD	C3D-C2D-C1D	2.37	104.54	100.98
3	A	401	NAD	PN-O3-PA	-2.31	124.91	132.83
3	J	401	NAD	C2N-C3N-C4N	2.28	120.84	118.26
3	K	402	NAD	C2N-C3N-C4N	2.28	120.84	118.26
3	R	401	NAD	O7N-C7N-N7N	-2.27	119.36	122.58
3	R	401	NAD	PN-O3-PA	-2.27	125.05	132.83
3	C	401	NAD	C6N-N1N-C2N	-2.25	119.92	121.97
3	P	401	NAD	C3B-C2B-C1B	2.24	104.35	100.98
3	K	402	NAD	C3B-C2B-C1B	2.24	104.35	100.98
3	A	401	NAD	C2D-C3D-C4D	2.23	106.98	102.64
3	G	401	NAD	C2N-C3N-C4N	2.22	120.77	118.26
3	P	401	NAD	O4B-C1B-C2B	-2.21	103.70	106.93
3	F	401	NAD	O4B-C1B-C2B	-2.20	103.71	106.93
3	Q	401	NAD	C3B-C2B-C1B	2.19	104.27	100.98
3	R	401	NAD	C3N-C7N-N7N	2.14	120.32	117.75
3	D	401	NAD	C2N-C3N-C4N	2.14	120.68	118.26
3	F	401	NAD	C2N-C3N-C4N	2.13	120.68	118.26
3	A	401	NAD	C3B-C2B-C1B	2.13	104.19	100.98
3	D	401	NAD	C6N-N1N-C2N	-2.09	120.07	121.97
3	B	401	NAD	C2B-C3B-C4B	2.09	106.69	102.64
3	H	401	NAD	C2D-C3D-C4D	2.07	106.67	102.64
3	Q	401	NAD	C2D-C3D-C4D	2.06	106.64	102.64
3	K	401	NAD	C2N-C3N-C4N	2.06	120.59	118.26
3	H	401	NAD	O7N-C7N-N7N	-2.05	119.67	122.58
3	L	401	NAD	C3B-C2B-C1B	2.04	104.05	100.98
3	L	401	NAD	C2N-C3N-C4N	2.03	120.56	118.26
3	L	401	NAD	C2B-C3B-C4B	2.02	106.58	102.64
3	A	401	NAD	O4D-C1D-C2D	-2.01	103.99	106.93

There are no chirality outliers.

All (209) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	J	401	NAD	C5B-O5B-PA-O1A
3	J	401	NAD	C5B-O5B-PA-O2A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
3	J	401	NAD	C5B-O5B-PA-O3
3	J	401	NAD	PN-O3-PA-O5B
3	J	401	NAD	C5D-O5D-PN-O3
3	J	401	NAD	C5D-O5D-PN-O2N
3	J	401	NAD	C4D-C5D-O5D-PN
3	K	401	NAD	C5B-O5B-PA-O3
3	K	401	NAD	C4B-C5B-O5B-PA
3	K	401	NAD	C3B-C4B-C5B-O5B
3	K	401	NAD	C5D-O5D-PN-O1N
3	K	401	NAD	O4D-C4D-C5D-O5D
3	K	401	NAD	C3D-C4D-C5D-O5D
3	K	402	NAD	PN-O3-PA-O5B
3	K	402	NAD	C2D-C1D-N1N-C2N
3	K	402	NAD	C2D-C1D-N1N-C6N
3	L	401	NAD	C3B-C4B-C5B-O5B
3	L	401	NAD	C5D-O5D-PN-O3
3	L	401	NAD	C3D-C4D-C5D-O5D
3	L	401	NAD	C2D-C1D-N1N-C2N
3	L	401	NAD	C2D-C1D-N1N-C6N
3	A	401	NAD	C3B-C4B-C5B-O5B
3	A	401	NAD	C5D-O5D-PN-O1N
3	A	401	NAD	C5D-O5D-PN-O2N
3	A	401	NAD	O4D-C4D-C5D-O5D
3	A	401	NAD	O4D-C1D-N1N-C2N
3	A	401	NAD	O4D-C1D-N1N-C6N
3	A	401	NAD	C2D-C1D-N1N-C6N
3	B	401	NAD	C5B-O5B-PA-O2A
3	B	401	NAD	C5B-O5B-PA-O3
3	B	401	NAD	O4B-C4B-C5B-O5B
3	B	401	NAD	C5D-O5D-PN-O3
3	B	401	NAD	C5D-O5D-PN-O2N
3	B	401	NAD	C4D-C5D-O5D-PN
3	C	401	NAD	O4B-C4B-C5B-O5B
3	C	401	NAD	C3B-C4B-C5B-O5B
3	C	401	NAD	O4D-C1D-N1N-C2N
3	C	401	NAD	O4D-C1D-N1N-C6N
3	D	401	NAD	C3B-C4B-C5B-O5B
3	D	401	NAD	C5D-O5D-PN-O3
3	D	401	NAD	C2D-C1D-N1N-C2N
3	D	401	NAD	C2D-C1D-N1N-C6N
3	Q	401	NAD	PN-O3-PA-O5B
3	Q	401	NAD	O4B-C4B-C5B-O5B

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
3	Q	401	NAD	C3B-C4B-C5B-O5B
3	Q	401	NAD	C5D-O5D-PN-O2N
3	Q	401	NAD	C2D-C1D-N1N-C2N
3	Q	401	NAD	C2D-C1D-N1N-C6N
3	Q	402	NAD	C5B-O5B-PA-O3
3	Q	402	NAD	PN-O3-PA-O5B
3	Q	402	NAD	C4B-C5B-O5B-PA
3	Q	402	NAD	C5D-O5D-PN-O1N
3	Q	402	NAD	C5D-O5D-PN-O2N
3	Q	402	NAD	O4D-C4D-C5D-O5D
3	Q	402	NAD	O4D-C1D-N1N-C2N
3	Q	402	NAD	O4D-C1D-N1N-C6N
3	Q	402	NAD	C2D-C1D-N1N-C2N
3	Q	402	NAD	C2D-C1D-N1N-C6N
3	R	401	NAD	C5B-O5B-PA-O3
3	R	401	NAD	C4D-C5D-O5D-PN
3	R	401	NAD	C2D-C1D-N1N-C2N
3	R	401	NAD	C2D-C1D-N1N-C6N
3	O	401	NAD	C5B-O5B-PA-O3
3	O	401	NAD	PN-O3-PA-O5B
3	O	401	NAD	C5D-O5D-PN-O3
3	O	401	NAD	C2D-C1D-N1N-C2N
3	O	401	NAD	C2D-C1D-N1N-C6N
3	P	401	NAD	C4B-C5B-O5B-PA
3	P	401	NAD	C3B-C4B-C5B-O5B
3	G	401	NAD	PN-O3-PA-O5B
3	G	401	NAD	C3B-C4B-C5B-O5B
3	G	401	NAD	O4D-C1D-N1N-C2N
3	G	401	NAD	O4D-C1D-N1N-C6N
3	G	401	NAD	C2D-C1D-N1N-C2N
3	G	401	NAD	C2D-C1D-N1N-C6N
3	H	401	NAD	C5B-O5B-PA-O3
3	H	401	NAD	O4B-C4B-C5B-O5B
3	H	401	NAD	C4D-C5D-O5D-PN
3	H	401	NAD	C2D-C1D-N1N-C2N
3	H	401	NAD	C2D-C1D-N1N-C6N
3	H	401	NAD	C2N-C3N-C7N-O7N
3	H	401	NAD	C2N-C3N-C7N-N7N
3	F	401	NAD	C5B-O5B-PA-O1A
3	F	401	NAD	C4B-C5B-O5B-PA
3	F	401	NAD	C5D-O5D-PN-O3
3	F	401	NAD	C5D-O5D-PN-O1N

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
3	F	401	NAD	C5D-O5D-PN-O2N
3	F	401	NAD	C4D-C5D-O5D-PN
3	H	401	NAD	C4N-C3N-C7N-O7N
3	H	401	NAD	C4N-C3N-C7N-N7N
3	J	401	NAD	O4B-C4B-C5B-O5B
3	J	401	NAD	C3B-C4B-C5B-O5B
3	K	402	NAD	O4B-C4B-C5B-O5B
3	K	402	NAD	C3B-C4B-C5B-O5B
3	A	401	NAD	O4B-C4B-C5B-O5B
3	A	401	NAD	C3D-C4D-C5D-O5D
3	B	401	NAD	C3B-C4B-C5B-O5B
3	Q	402	NAD	C3B-C4B-C5B-O5B
3	R	401	NAD	O4B-C4B-C5B-O5B
3	O	401	NAD	O4B-C4B-C5B-O5B
3	O	401	NAD	C3B-C4B-C5B-O5B
3	G	401	NAD	C3D-C4D-C5D-O5D
3	Q	401	NAD	C4B-C5B-O5B-PA
3	R	401	NAD	C2N-C3N-C7N-O7N
3	R	401	NAD	C2N-C3N-C7N-N7N
3	K	401	NAD	O4B-C4B-C5B-O5B
3	L	401	NAD	O4B-C4B-C5B-O5B
3	L	401	NAD	O4D-C4D-C5D-O5D
3	D	401	NAD	O4B-C4B-C5B-O5B
3	Q	402	NAD	C3D-C4D-C5D-O5D
3	P	401	NAD	O4B-C4B-C5B-O5B
3	G	401	NAD	O4B-C4B-C5B-O5B
3	G	401	NAD	O4D-C4D-C5D-O5D
3	H	401	NAD	C3B-C4B-C5B-O5B
3	G	401	NAD	C4B-C5B-O5B-PA
3	R	401	NAD	C4N-C3N-C7N-O7N
3	R	401	NAD	C4N-C3N-C7N-N7N
3	R	401	NAD	C3B-C4B-C5B-O5B
3	Q	401	NAD	C4N-C3N-C7N-N7N
3	C	401	NAD	O4D-C4D-C5D-O5D
3	Q	401	NAD	O4D-C4D-C5D-O5D
3	Q	402	NAD	O4B-C4B-C5B-O5B
3	B	401	NAD	C4B-C5B-O5B-PA
3	C	401	NAD	C4B-C5B-O5B-PA
3	Q	401	NAD	C4N-C3N-C7N-O7N
3	Q	401	NAD	C2N-C3N-C7N-N7N
3	Q	401	NAD	C2N-C3N-C7N-O7N
3	C	401	NAD	PN-O3-PA-O1A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
3	Q	402	NAD	PA-O3-PN-O1N
3	R	401	NAD	PN-O3-PA-O1A
3	D	401	NAD	C3D-C4D-C5D-O5D
3	J	401	NAD	C4B-C5B-O5B-PA
3	L	401	NAD	C4D-C5D-O5D-PN
3	Q	402	NAD	C4D-C5D-O5D-PN
3	O	401	NAD	C4B-C5B-O5B-PA
3	A	401	NAD	C4B-C5B-O5B-PA
3	D	401	NAD	C4D-C5D-O5D-PN
3	O	401	NAD	C4D-C5D-O5D-PN
3	K	401	NAD	PN-O3-PA-O5B
3	A	401	NAD	PN-O3-PA-O5B
3	B	401	NAD	PN-O3-PA-O5B
3	C	401	NAD	PN-O3-PA-O5B
3	Q	401	NAD	PA-O3-PN-O5D
3	R	401	NAD	PN-O3-PA-O5B
3	P	401	NAD	PN-O3-PA-O5B
3	P	401	NAD	PA-O3-PN-O5D
3	H	401	NAD	PN-O3-PA-O5B
3	F	401	NAD	PN-O3-PA-O5B
3	C	401	NAD	C3D-C4D-C5D-O5D
3	Q	401	NAD	C3D-C4D-C5D-O5D
3	K	402	NAD	C4B-C5B-O5B-PA
3	K	401	NAD	C5D-O5D-PN-O3
3	A	401	NAD	C5D-O5D-PN-O3
3	Q	401	NAD	C5D-O5D-PN-O3
3	Q	402	NAD	C5D-O5D-PN-O3
3	G	401	NAD	C5D-O5D-PN-O3
3	D	401	NAD	O4D-C4D-C5D-O5D
3	H	401	NAD	PN-O3-PA-O1A
3	R	401	NAD	C4B-C5B-O5B-PA
3	H	401	NAD	C4B-C5B-O5B-PA
3	J	401	NAD	C5D-O5D-PN-O1N
3	K	401	NAD	C5B-O5B-PA-O2A
3	L	401	NAD	C5D-O5D-PN-O1N
3	L	401	NAD	C5D-O5D-PN-O2N
3	B	401	NAD	C5D-O5D-PN-O1N
3	D	401	NAD	C5D-O5D-PN-O1N
3	D	401	NAD	C5D-O5D-PN-O2N
3	Q	401	NAD	C5D-O5D-PN-O1N
3	R	401	NAD	C5B-O5B-PA-O2A
3	O	401	NAD	C5D-O5D-PN-O2N

Continued on next page...

Continued from previous page...

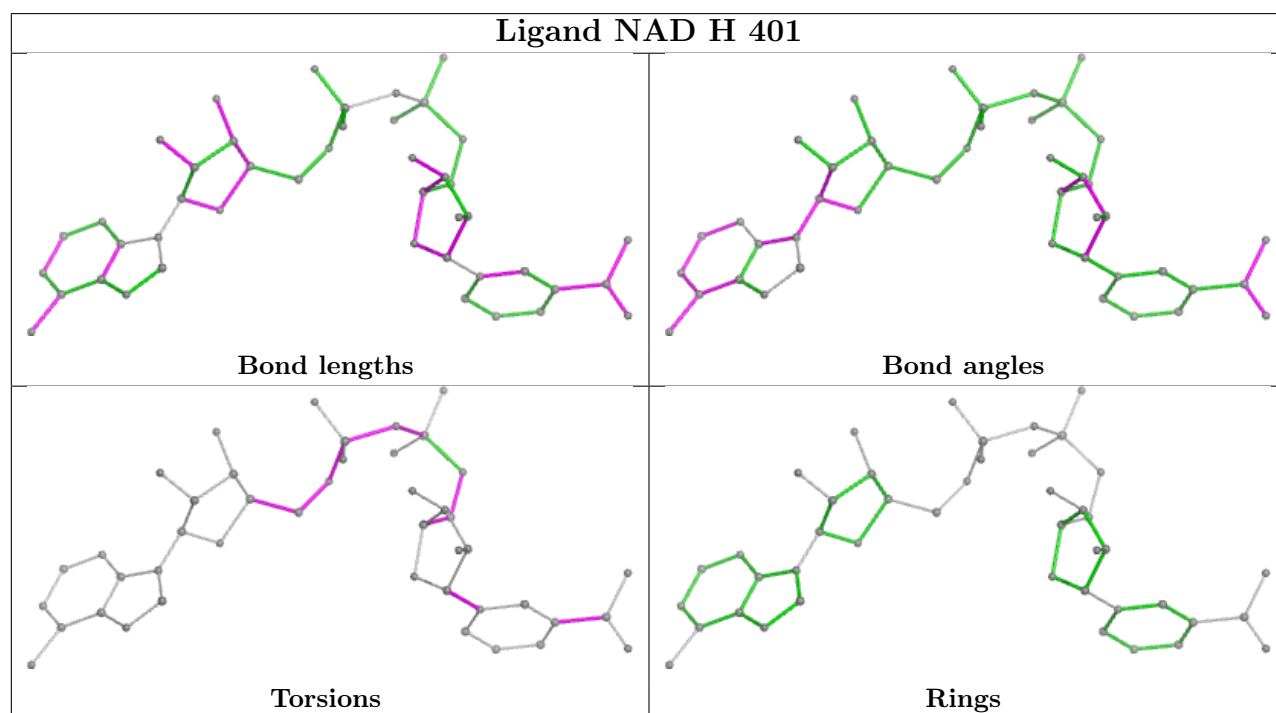
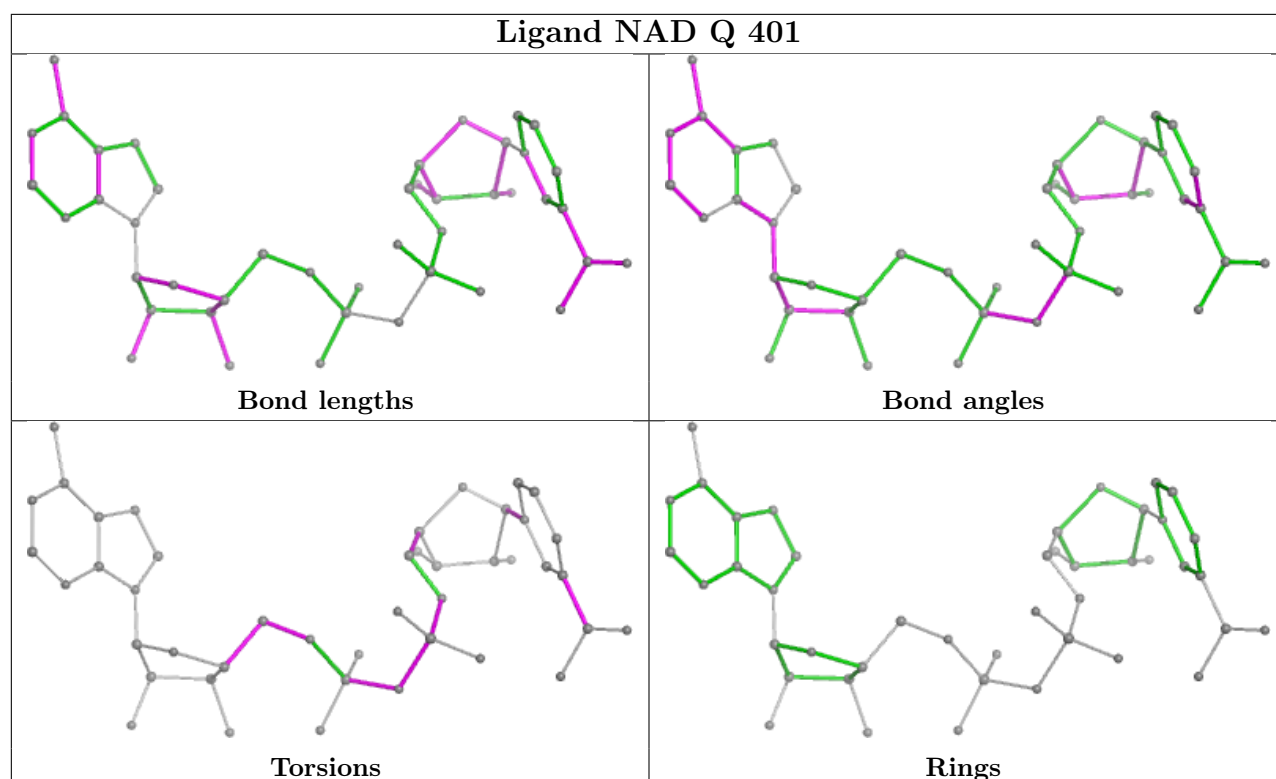
Mol	Chain	Res	Type	Atoms
3	G	401	NAD	C5D-O5D-PN-O1N
3	H	401	NAD	C5B-O5B-PA-O2A
3	K	402	NAD	C4D-C5D-O5D-PN
3	J	401	NAD	PA-O3-PN-O2N
3	L	401	NAD	PN-O3-PA-O2A
3	R	401	NAD	PA-O3-PN-O2N
3	H	401	NAD	PA-O3-PN-O2N
3	F	401	NAD	PA-O3-PN-O1N
3	D	401	NAD	C4B-C5B-O5B-PA
3	G	401	NAD	C4D-C5D-O5D-PN
3	P	401	NAD	C4D-C5D-O5D-PN
3	A	401	NAD	PN-O3-PA-O2A
3	B	401	NAD	PA-O3-PN-O2N
3	K	402	NAD	C5D-O5D-PN-O3
3	A	401	NAD	C2D-C1D-N1N-C2N
3	C	401	NAD	C5B-O5B-PA-O3
3	C	401	NAD	C2D-C1D-N1N-C2N
3	C	401	NAD	C2D-C1D-N1N-C6N
3	P	401	NAD	C5B-O5B-PA-O3
3	F	401	NAD	C5B-O5B-PA-O3
3	C	401	NAD	C4D-C5D-O5D-PN
3	J	401	NAD	PA-O3-PN-O1N
3	K	401	NAD	PN-O3-PA-O1A
3	K	402	NAD	PN-O3-PA-O1A
3	L	401	NAD	PN-O3-PA-O1A
3	Q	402	NAD	PN-O3-PA-O1A
3	Q	402	NAD	PN-O3-PA-O2A
3	R	401	NAD	PA-O3-PN-O1N
3	G	401	NAD	PN-O3-PA-O1A
3	H	401	NAD	PA-O3-PN-O1N
3	F	401	NAD	PA-O3-PN-O2N
3	Q	402	NAD	C5B-O5B-PA-O2A
3	O	401	NAD	C5B-O5B-PA-O2A
3	O	401	NAD	C5D-O5D-PN-O1N
3	P	401	NAD	C5D-O5D-PN-O1N
3	G	401	NAD	C5B-O5B-PA-O1A
3	R	401	NAD	O4D-C4D-C5D-O5D
3	H	401	NAD	O4D-C4D-C5D-O5D
3	F	401	NAD	O4B-C4B-C5B-O5B

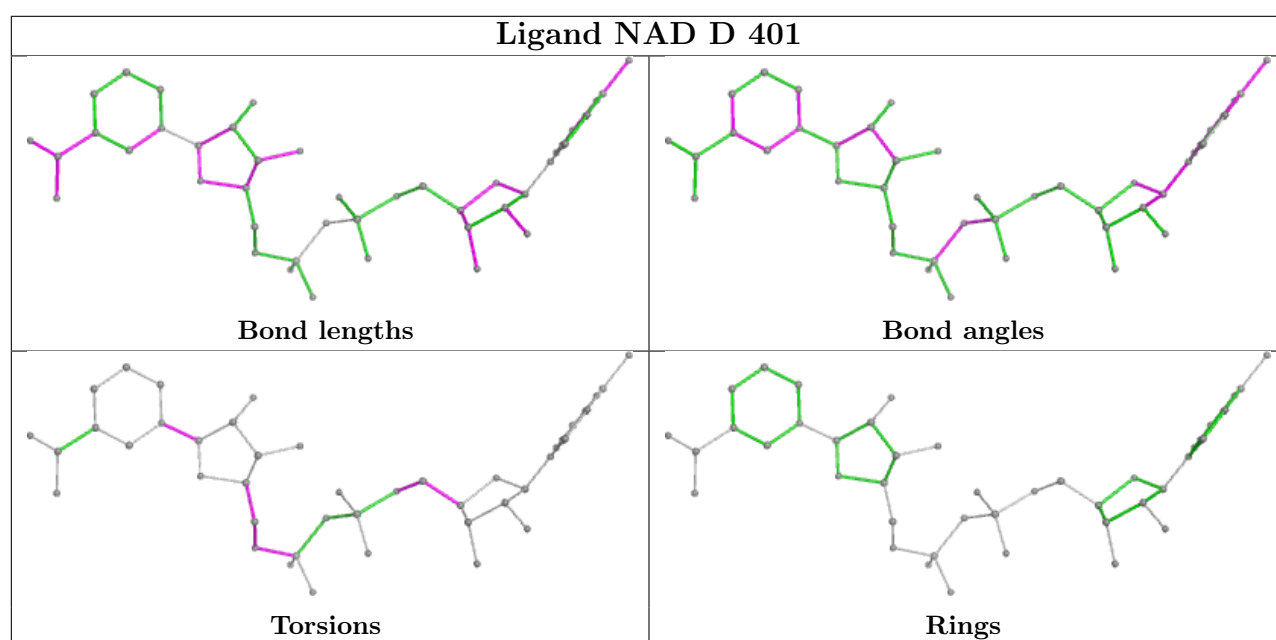
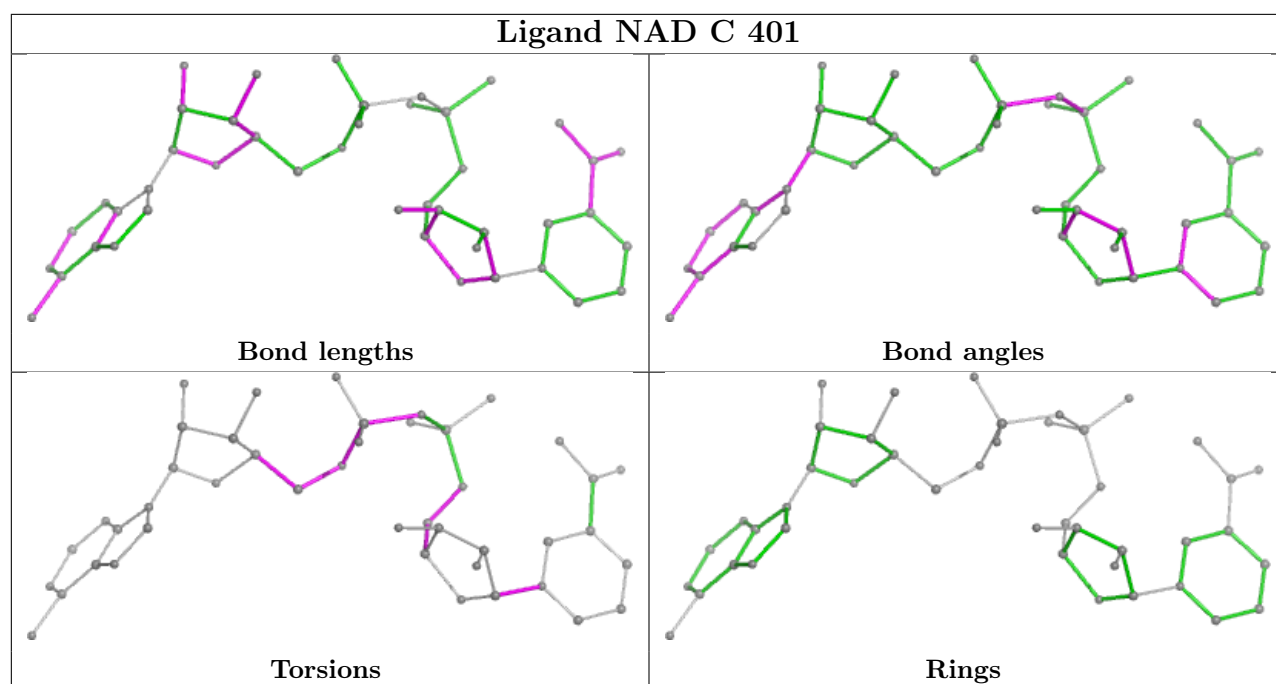
There are no ring outliers.

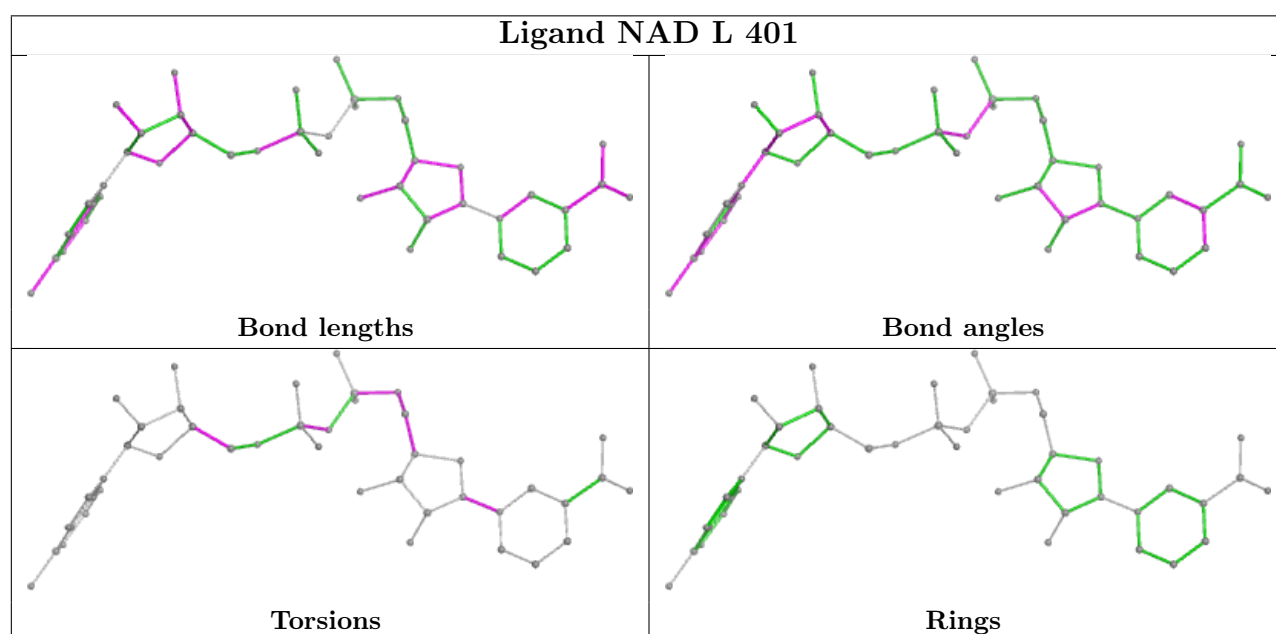
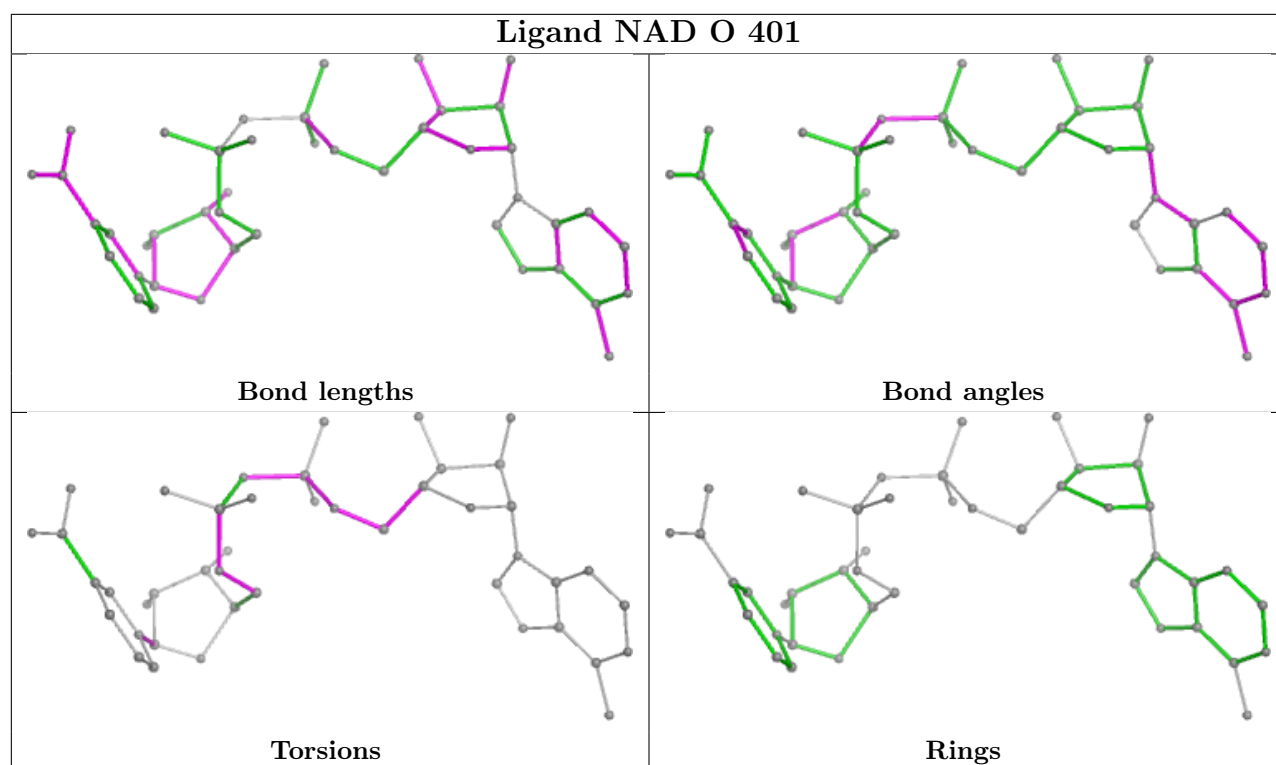
16 monomers are involved in 161 short contacts:

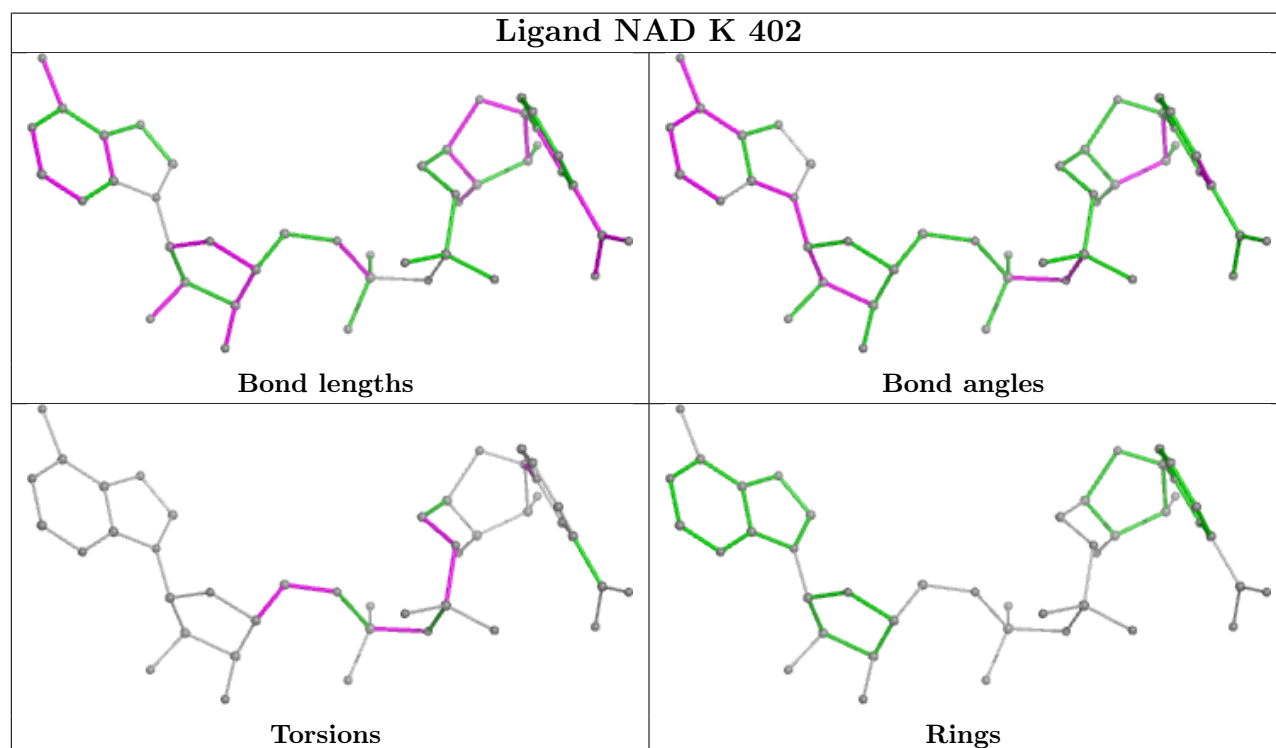
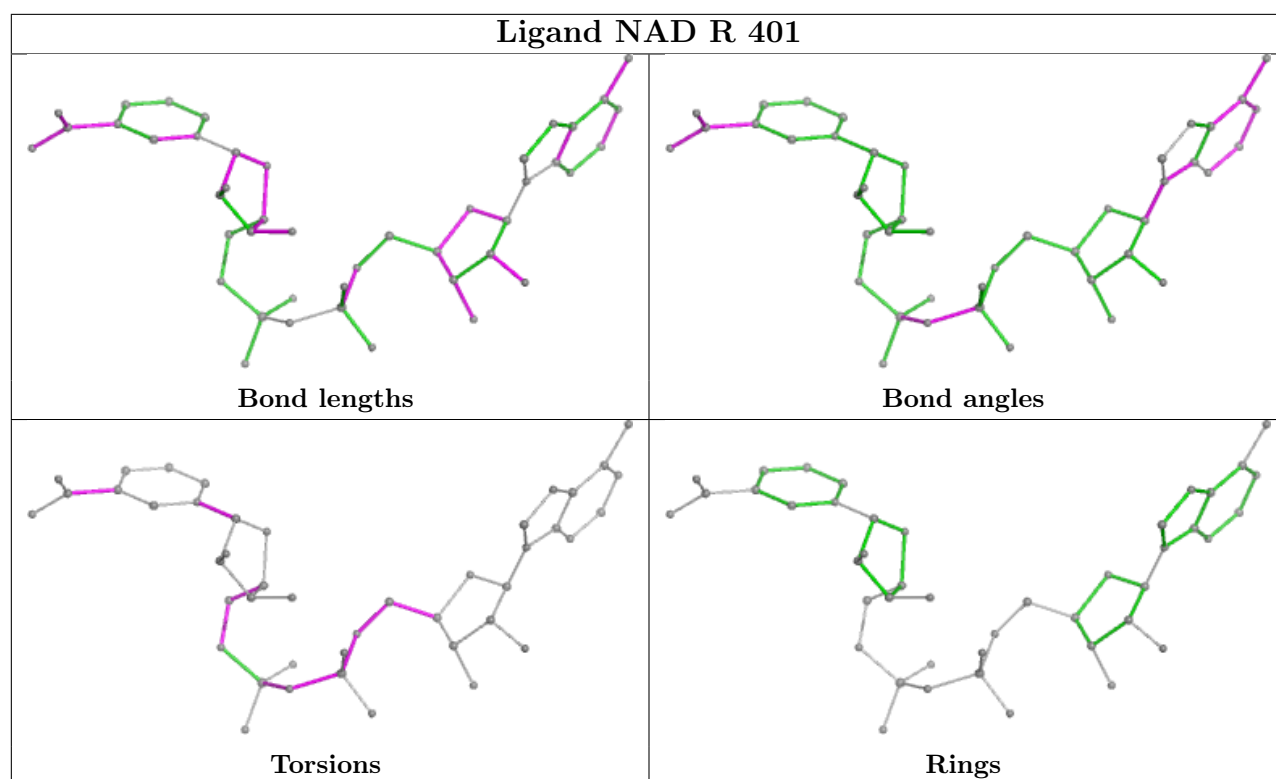
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	Q	401	NAD	8	0
3	H	401	NAD	8	0
3	C	401	NAD	11	0
3	D	401	NAD	9	0
3	O	401	NAD	14	0
3	L	401	NAD	13	0
3	R	401	NAD	7	0
3	K	402	NAD	9	0
3	B	401	NAD	12	0
3	F	401	NAD	10	0
3	G	401	NAD	11	0
3	Q	402	NAD	11	0
3	K	401	NAD	9	0
3	J	401	NAD	10	0
3	A	401	NAD	10	0
3	P	401	NAD	9	0

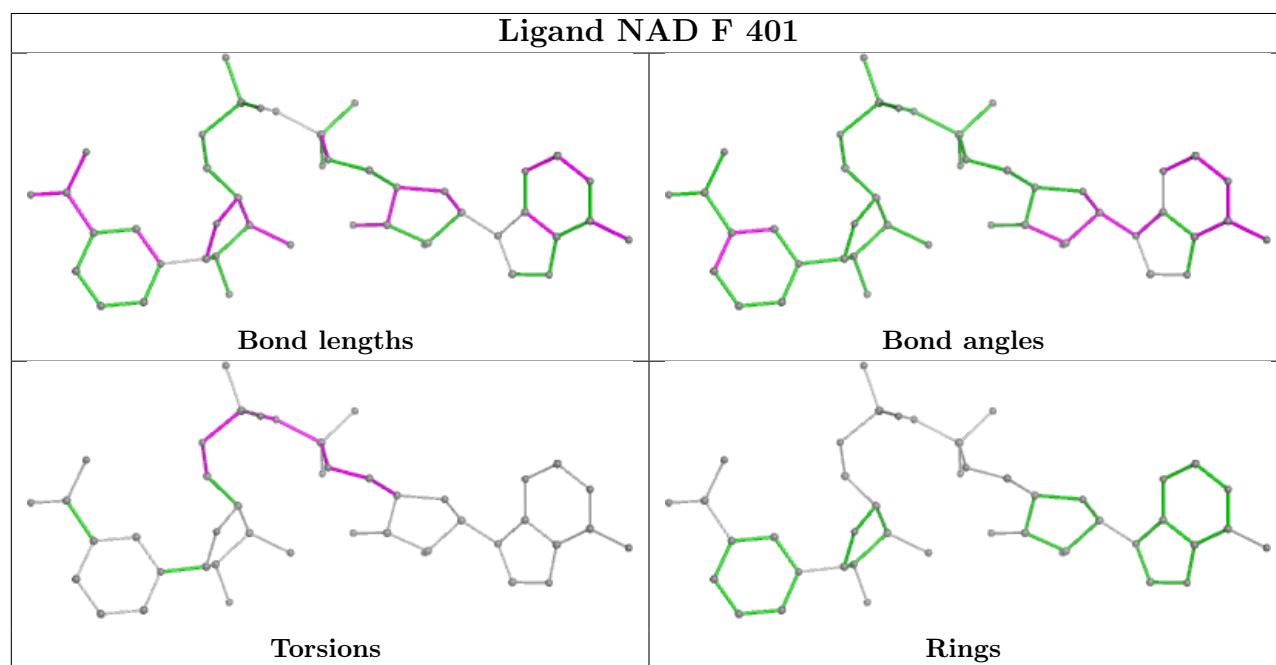
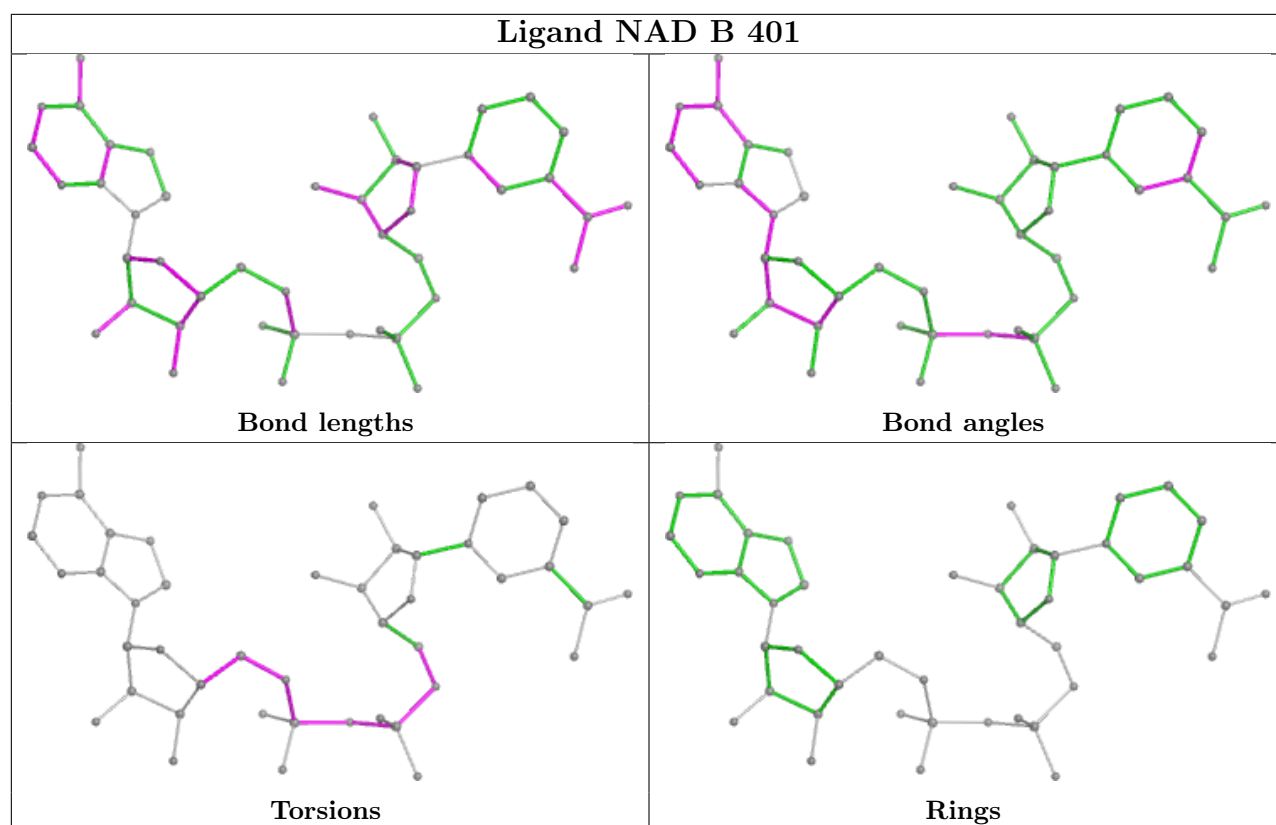
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

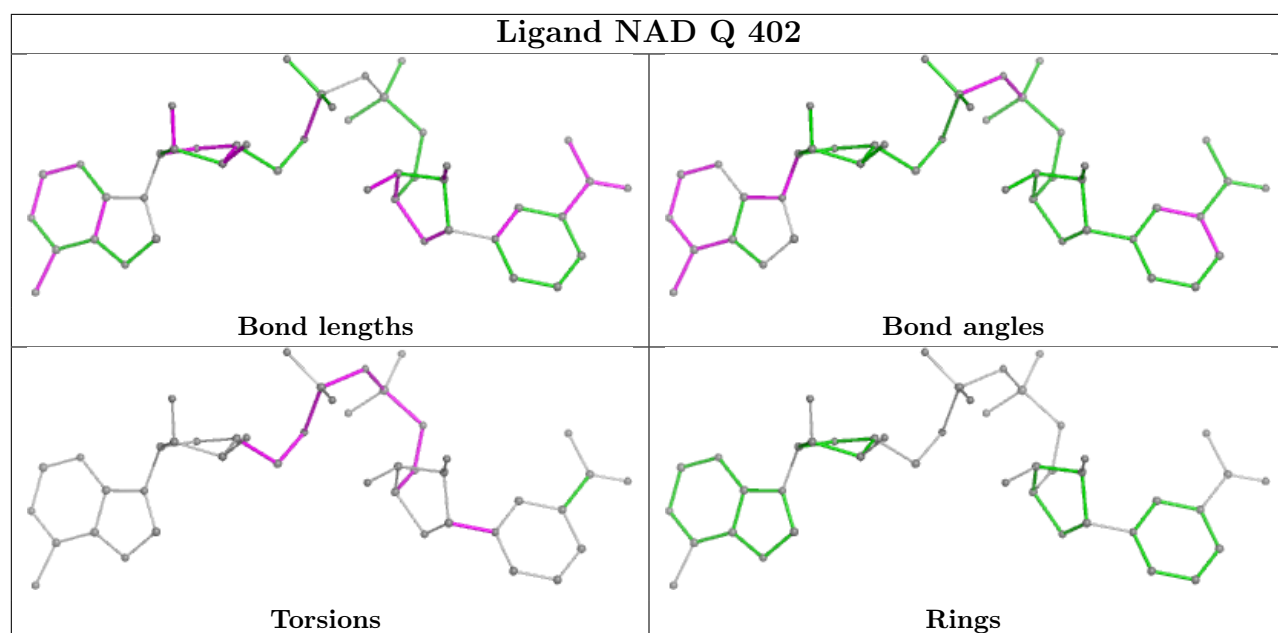
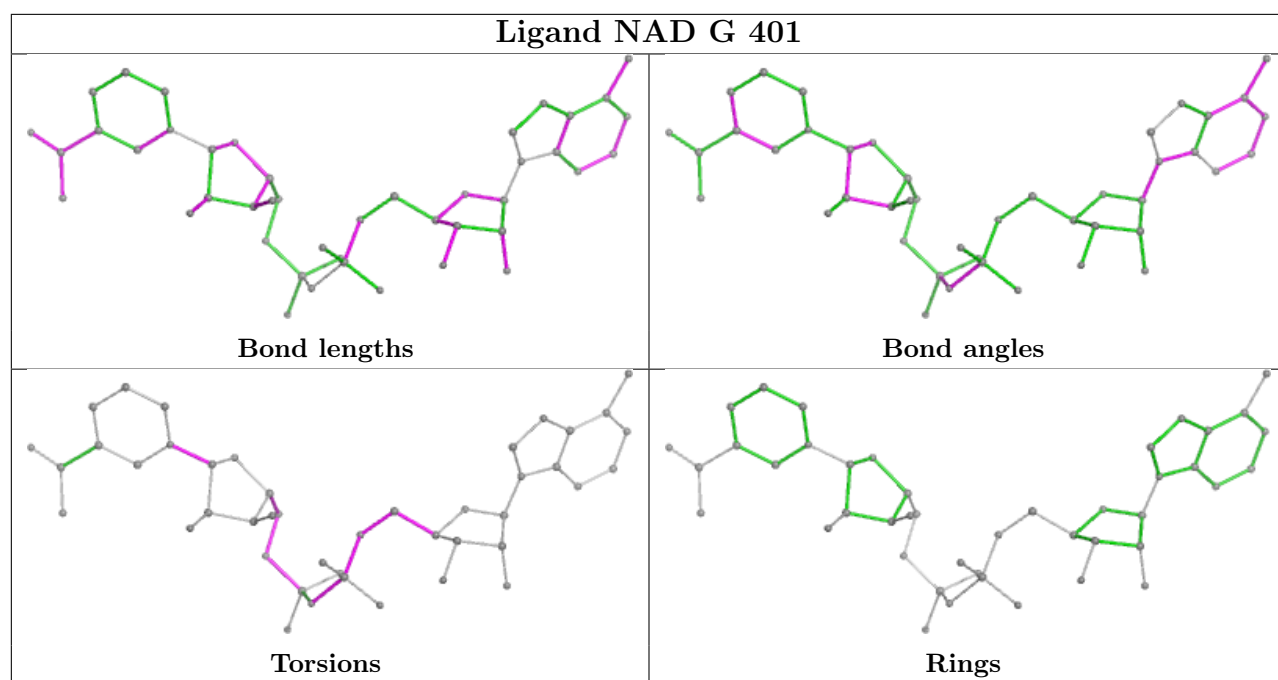


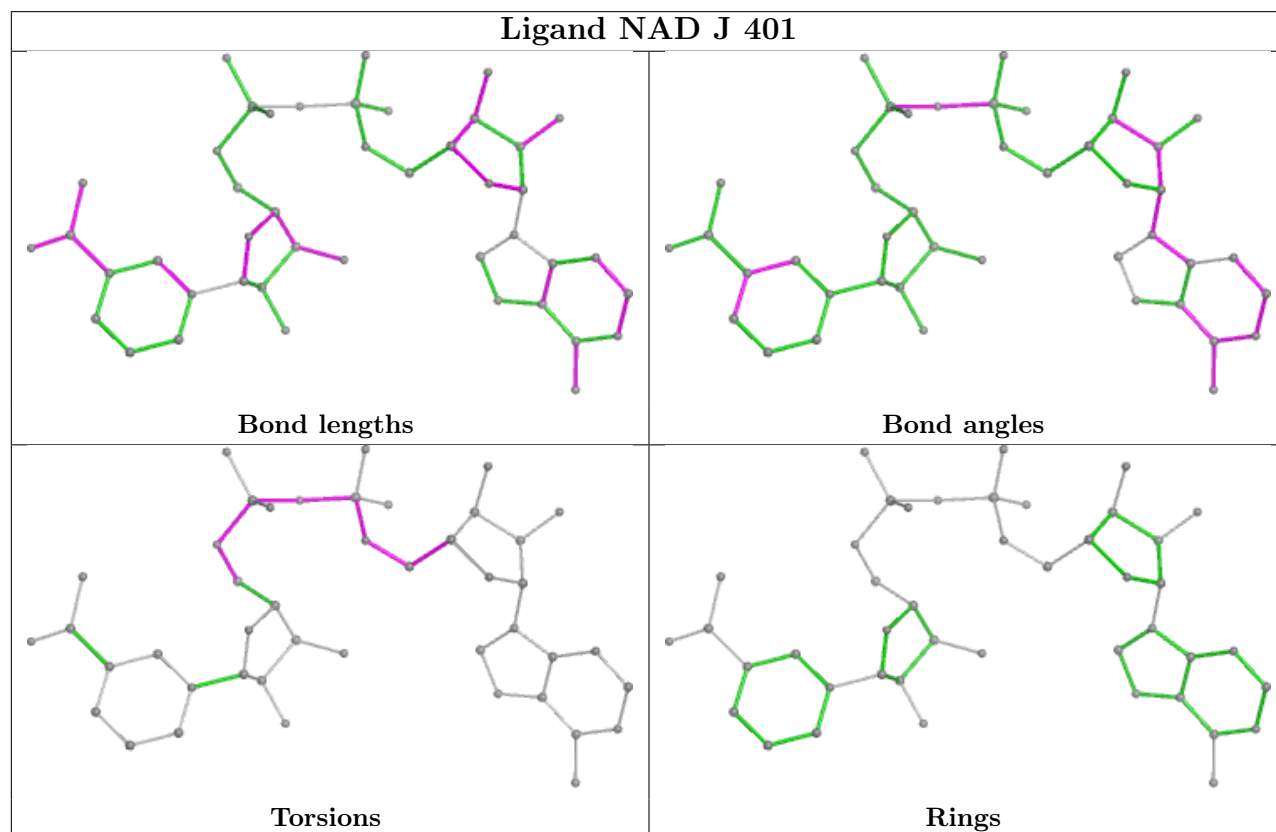
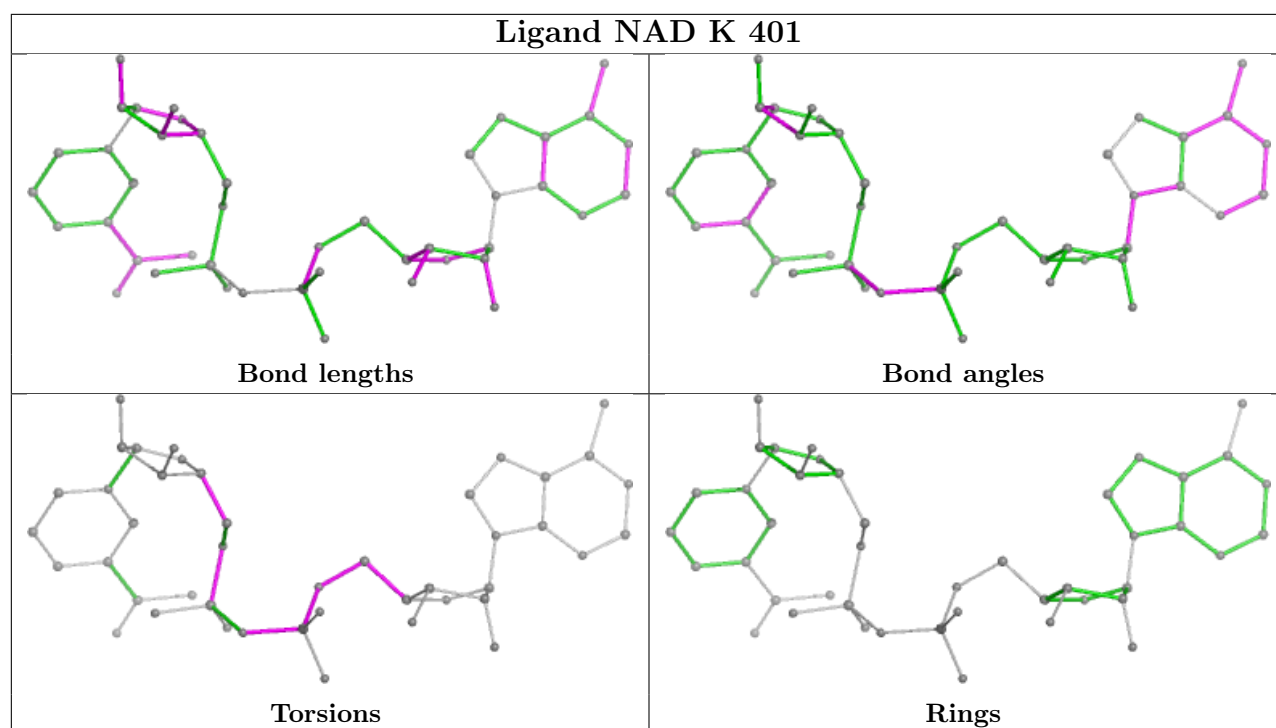


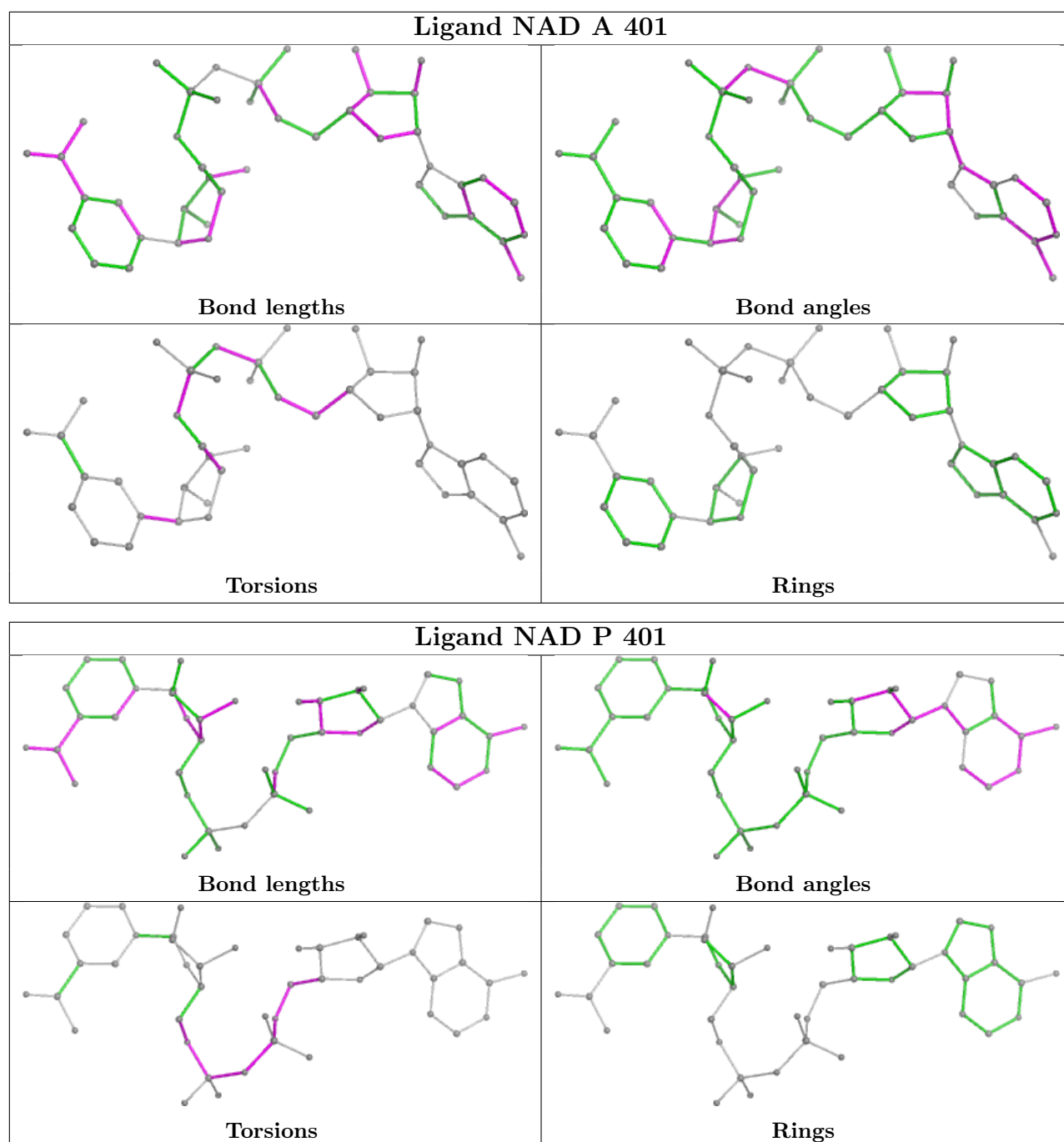












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-13827. These allow visual inspection of the internal detail of the map and identification of artifacts.

Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

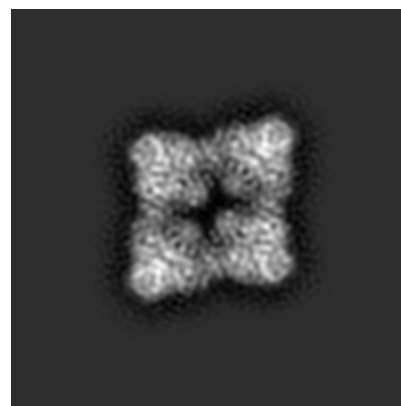
6.1.1 Primary map



X

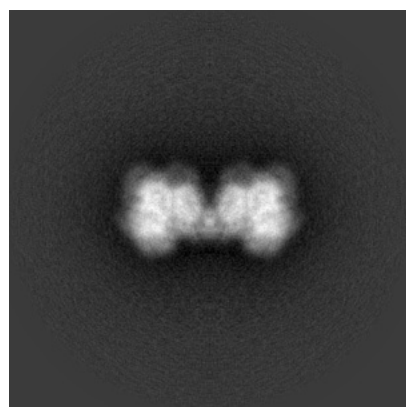


Y

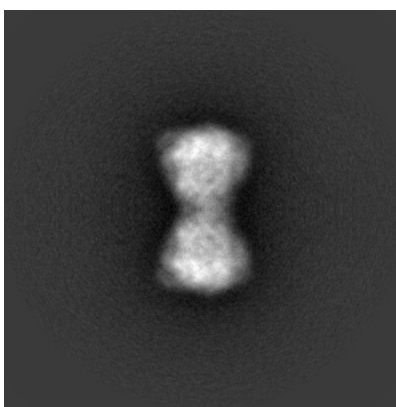


Z

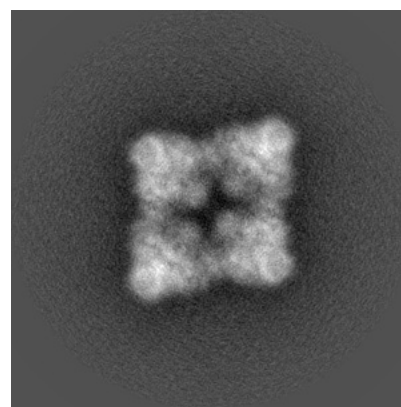
6.1.2 Raw map



X



Y



Z

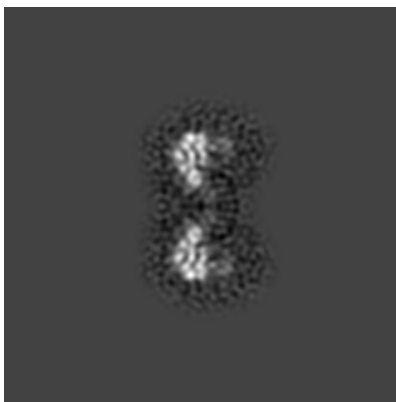
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

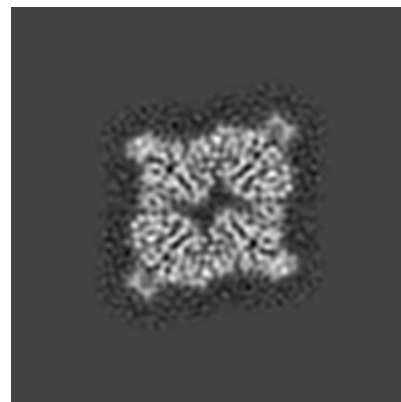
6.2.1 Primary map



X Index: 150

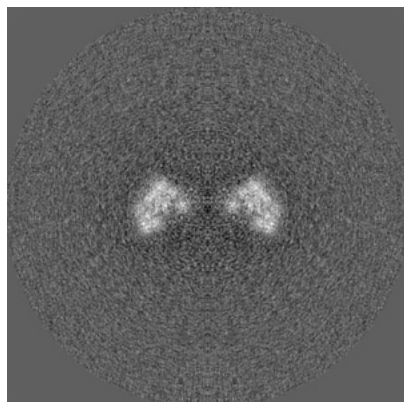


Y Index: 150

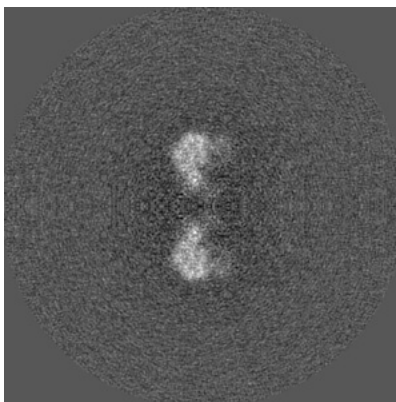


Z Index: 150

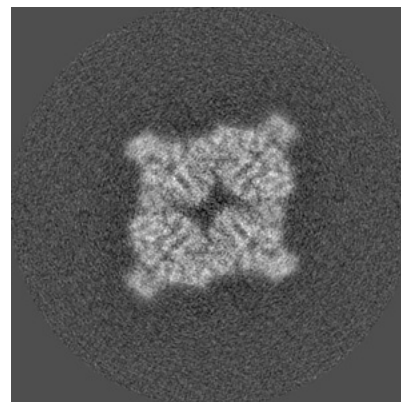
6.2.2 Raw map



X Index: 150



Y Index: 150



Z Index: 150

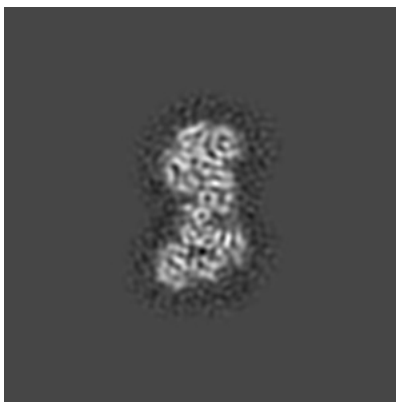
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

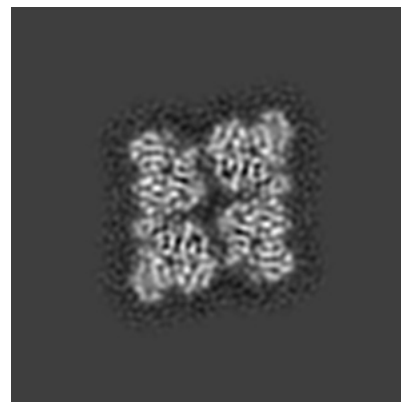
6.3.1 Primary map



X Index: 110

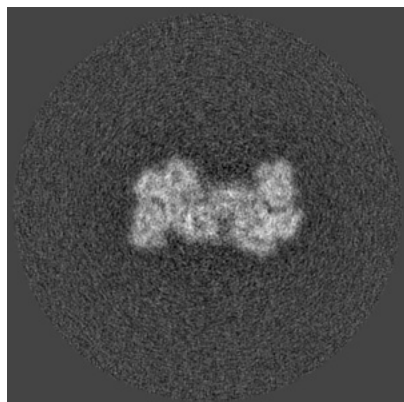


Y Index: 112

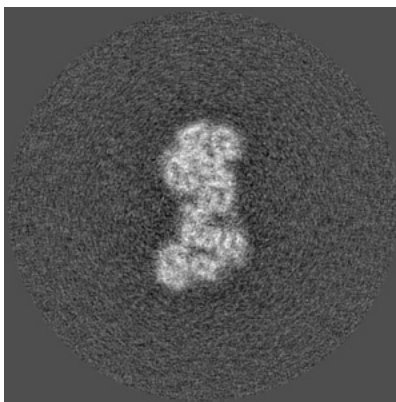


Z Index: 143

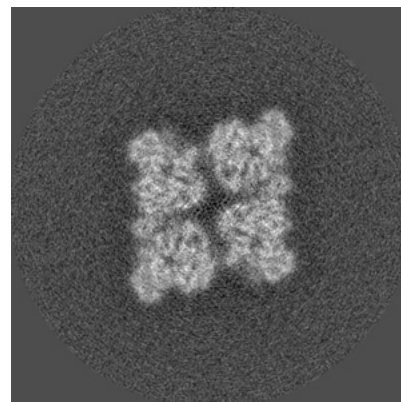
6.3.2 Raw map



X Index: 191



Y Index: 112

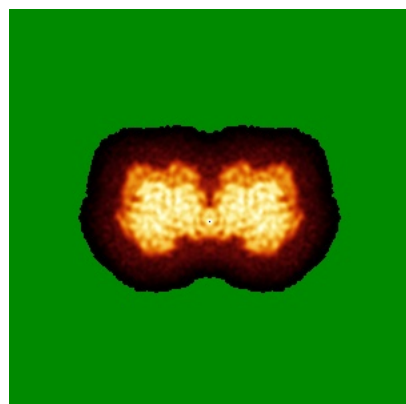


Z Index: 143

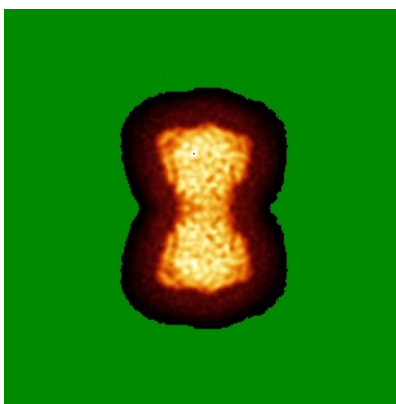
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

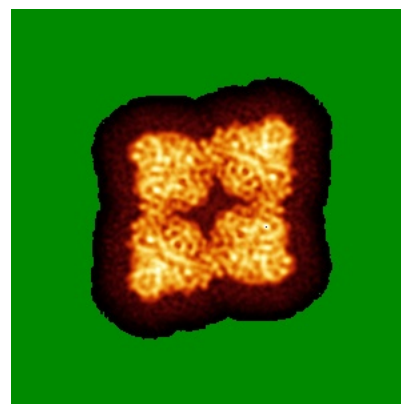
6.4.1 Primary map



X

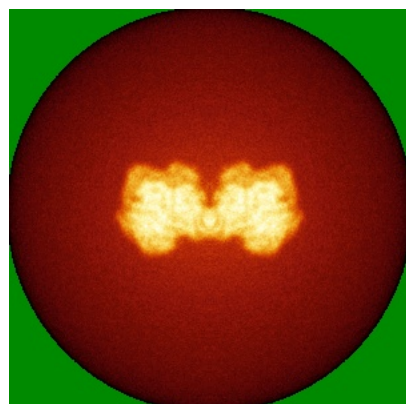


Y

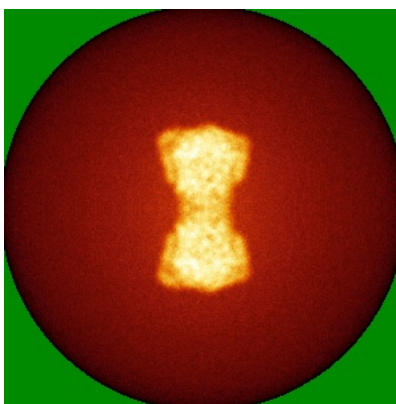


Z

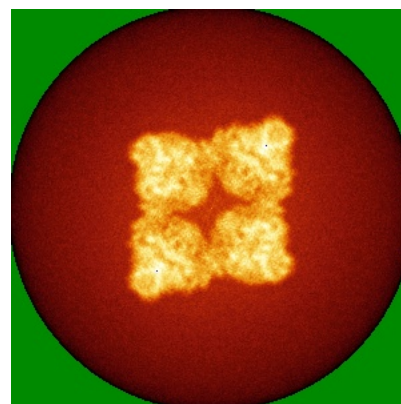
6.4.2 Raw map



X



Y

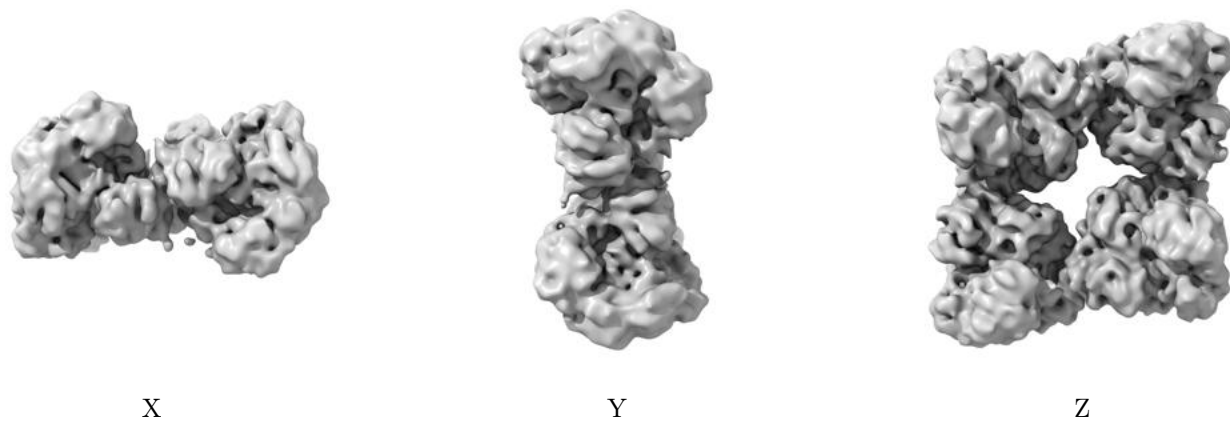


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

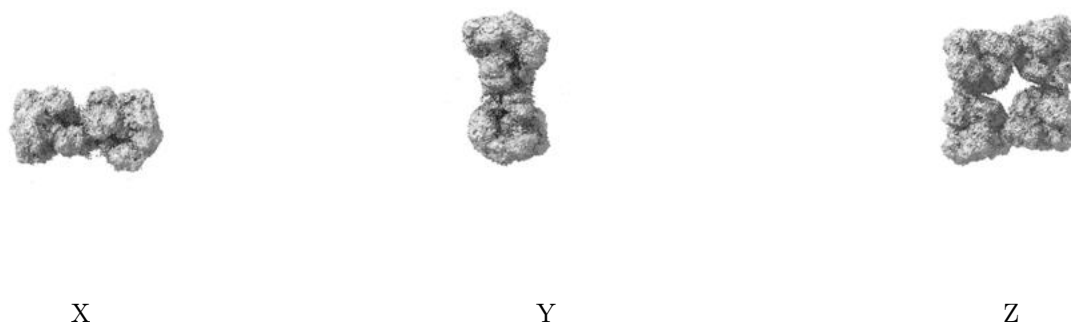
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.0125. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

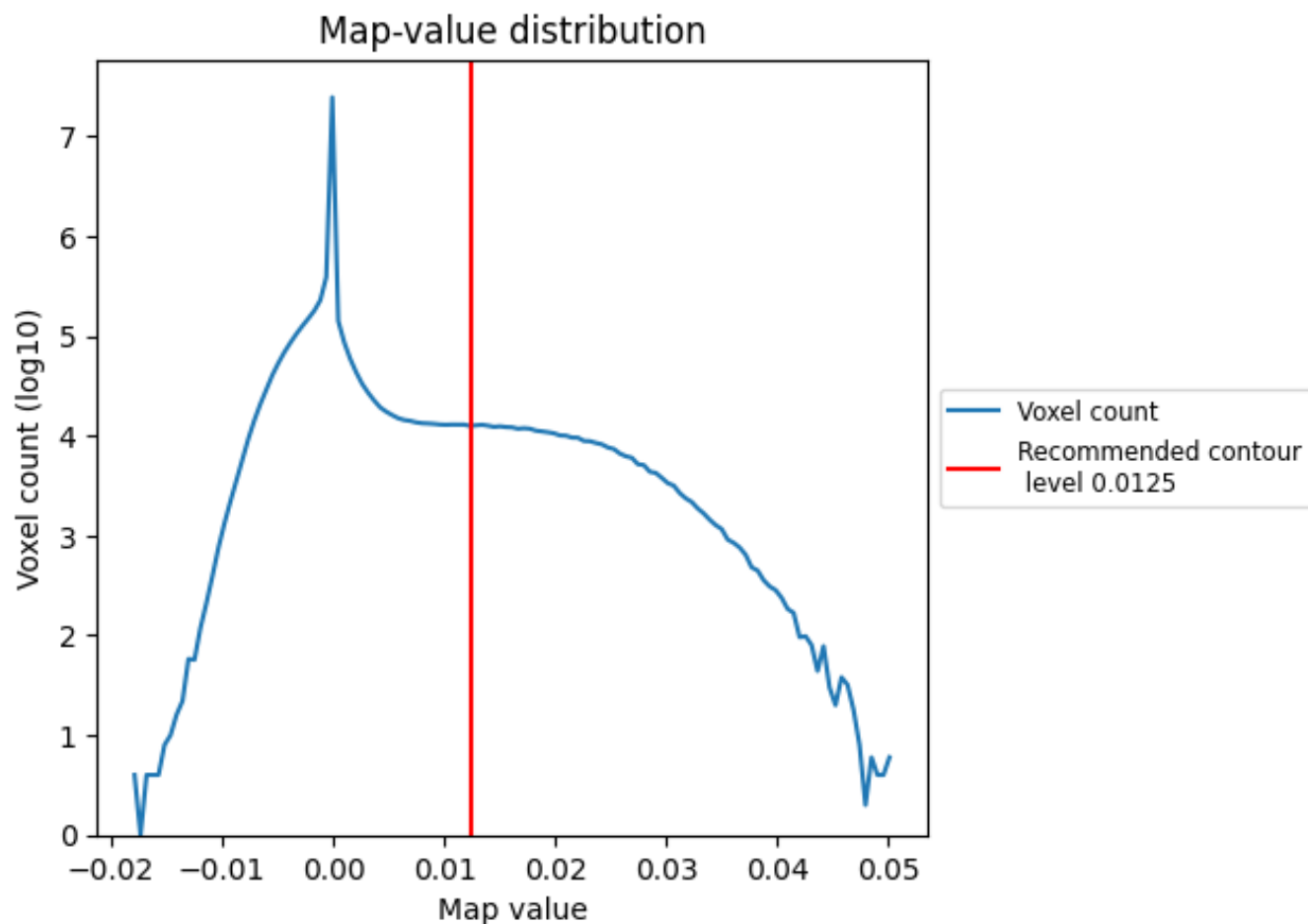
6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

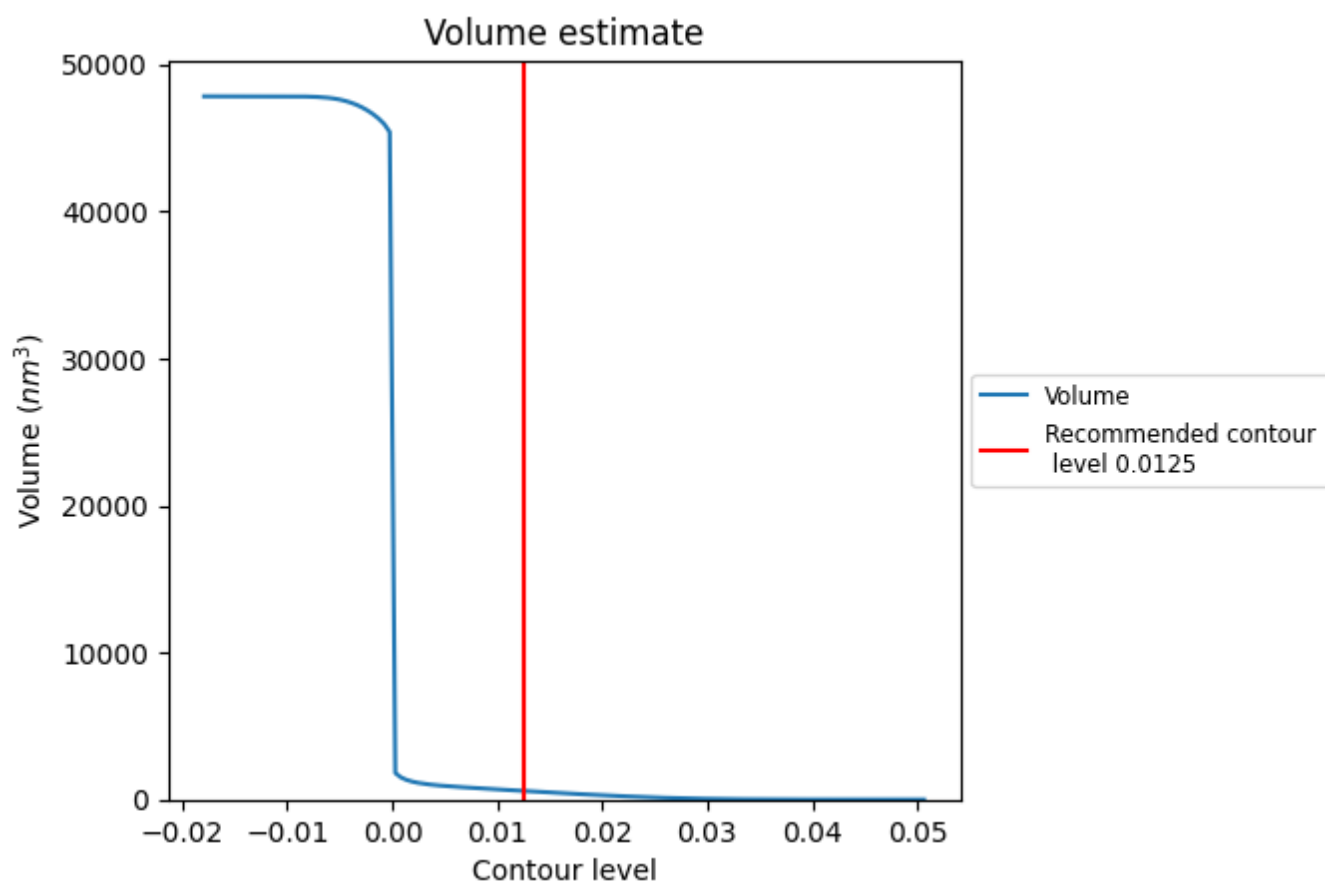
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

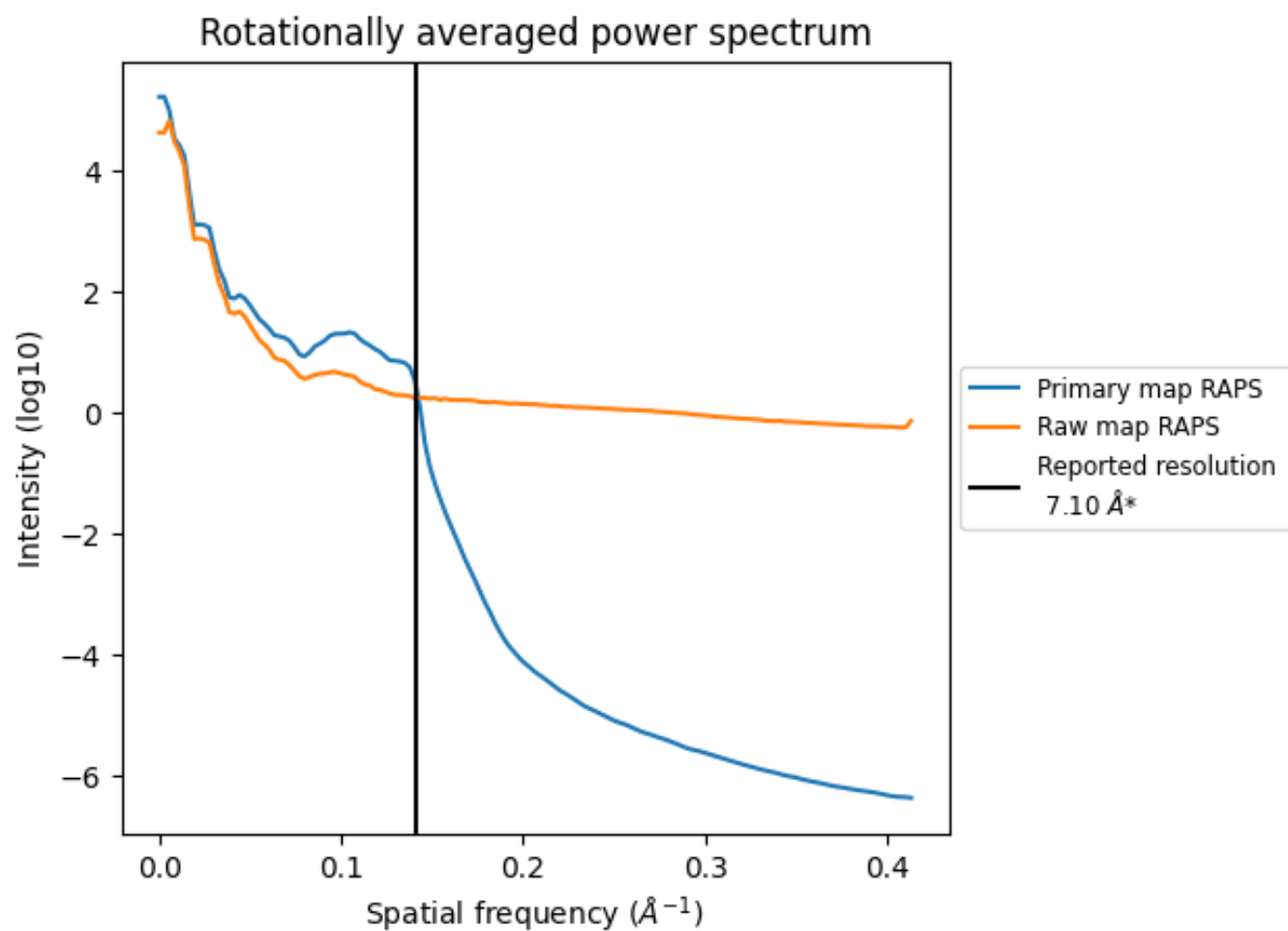
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 588 nm³; this corresponds to an approximate mass of 531 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum [i](#)

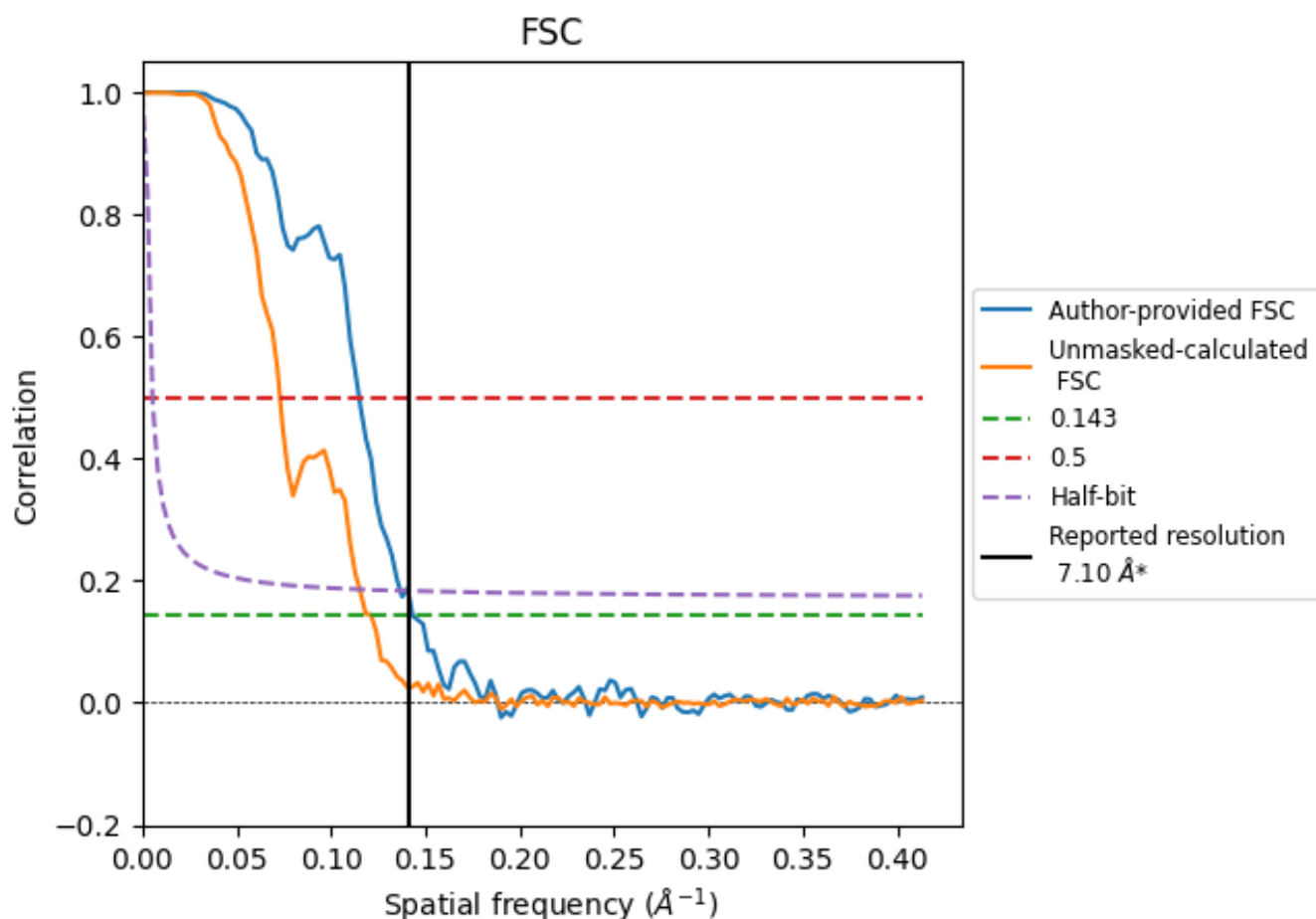


*Reported resolution corresponds to spatial frequency of 0.141 $\text{\AA}^{-1}$

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.141 $\text{\AA}^{-1}$

8.2 Resolution estimates [i](#)

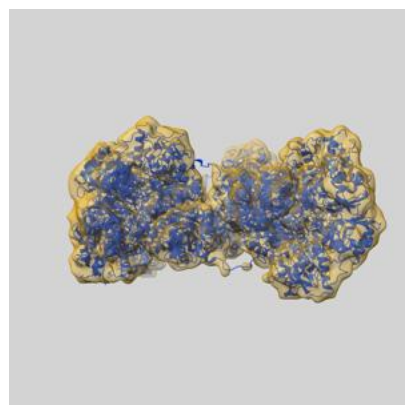
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	7.10	-	-
Author-provided FSC curve	6.98	8.70	7.31
Unmasked-calculated*	8.24	13.70	8.68

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 8.24 differs from the reported value 7.1 by more than 10 %

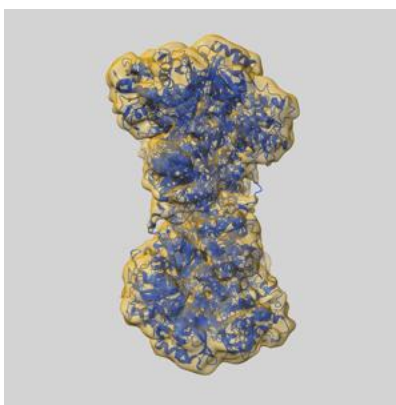
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-13827 and PDB model 7Q56. Per-residue inclusion information can be found in section [3](#) on page [7](#).

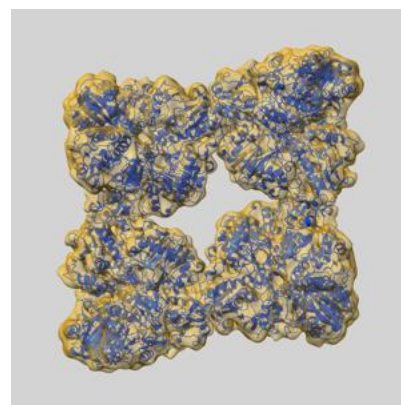
9.1 Map-model overlay [i](#)



X



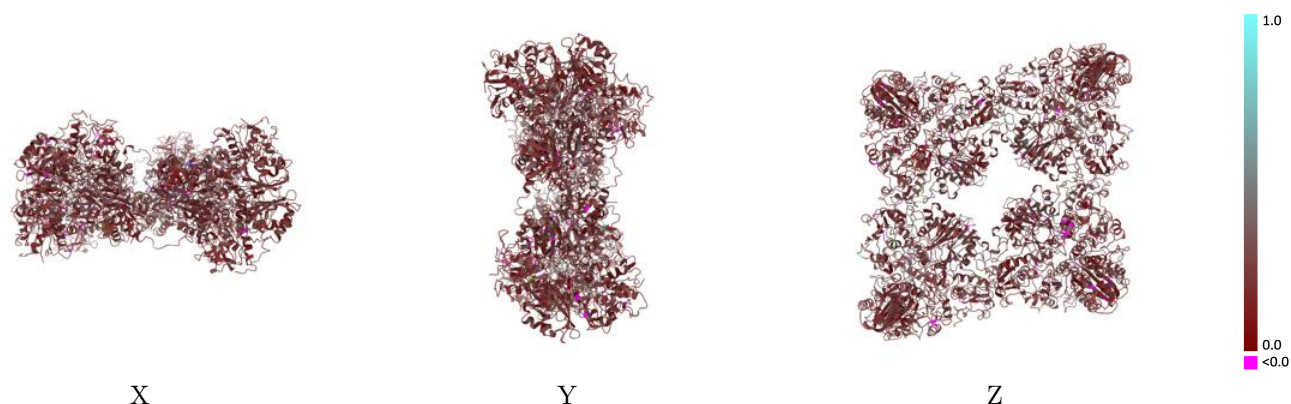
Y



Z

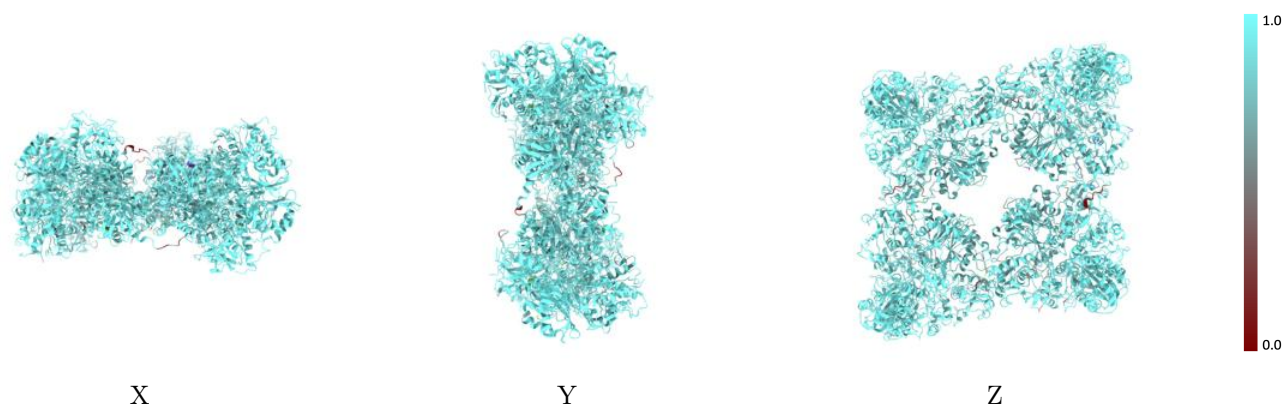
The images above show the 3D surface view of the map at the recommended contour level 0.0125 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



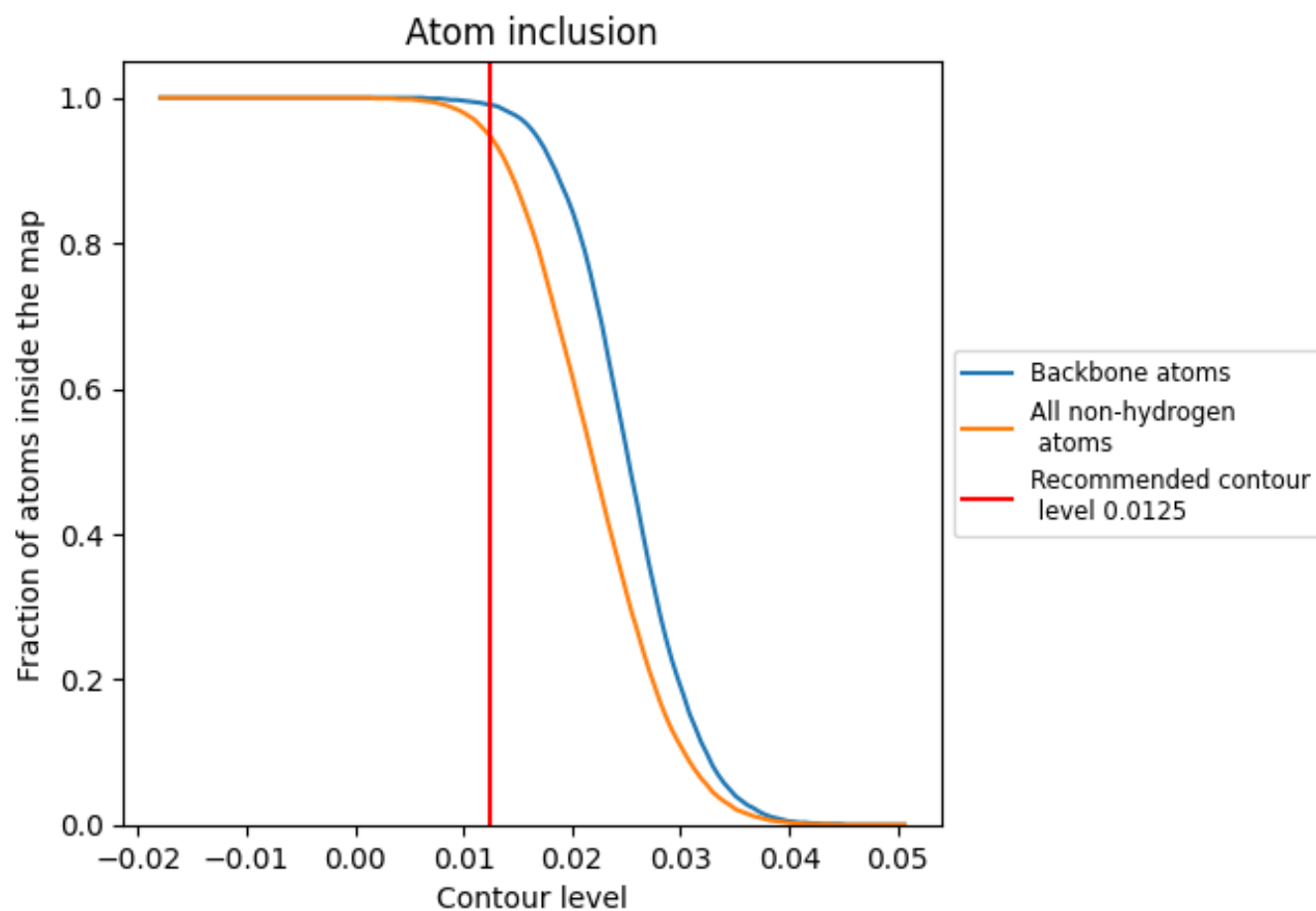
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.0125).

9.4 Atom inclusion [i](#)



At the recommended contour level, 99% of all backbone atoms, 95% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.0125) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9470	0.2310
A	0.9240	0.2430
B	0.9620	0.2250
C	0.9330	0.2360
D	0.9630	0.2270
E	0.9300	0.2340
F	0.9650	0.2200
G	0.9460	0.2380
H	0.9470	0.2130
I	0.9280	0.2400
J	0.9630	0.2260
K	0.9360	0.2380
L	0.9620	0.2250
O	0.9290	0.2360
P	0.9620	0.2190
Q	0.9420	0.2410
R	0.9610	0.2230

