



Full wwPDB EM Validation Report ⓘ

Mar 5, 2026 – 05:47 PM UTC

PDB ID : 3J2M / pdb_00003j2m
EMDB ID : EMD-1126
Title : The X-ray structure of the gp15 hexamer and the model of the gp18 protein fitted into the cryo-EM reconstruction of the extended T4 tail
Authors : Fokine, A.; Zhang, Z.; Kanamaru, S.; Bowman, V.D.; Aksyuk, A.; Arisaka, F.; Rao, V.B.; Rossmann, M.G.
Deposited on : 2012-11-09
Resolution : 15.00 Å(reported)

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:

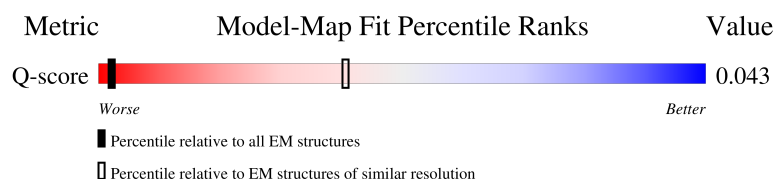
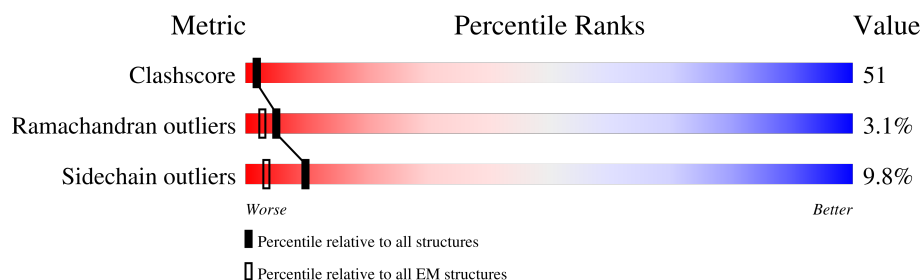
EMDB validation analysis : 0.0.1.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

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 15.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	37 (14.50 - 15.50)

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	272	
1	B	272	
1	C	272	
1	D	272	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	E	272	58%15%5%22%
1	F	272	58%16%.22%
2	U	659	30%50%11%.8%
2	V	659	31%49%11%.8%
2	W	659	31%49%11%.8%
2	X	659	31%49%11%.8%
2	Y	659	31%49%11%.8%
2	Z	659	31%50%11%.8%

2 Entry composition [i](#)

There are 2 unique types of molecules in this entry. The entry contains 38334 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 Tail connector protein Gp15.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	211	Total	C	N	O	S	0	0
			1742	1123	283	328	8		
1	B	211	Total	C	N	O	S	0	0
			1742	1123	283	328	8		
1	C	211	Total	C	N	O	S	0	0
			1742	1123	283	328	8		
1	D	211	Total	C	N	O	S	0	0
			1742	1123	283	328	8		
1	E	211	Total	C	N	O	S	0	0
			1742	1123	283	328	8		
1	F	211	Total	C	N	O	S	0	0
			1742	1123	283	328	8		

- Molecule 2 is a protein called Tail sheath protein Gp18.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	U	609	Total	C	N	O	S	0	0
			4647	2929	785	923	10		
2	V	609	Total	C	N	O	S	0	0
			4647	2929	785	923	10		
2	W	609	Total	C	N	O	S	0	0
			4647	2929	785	923	10		
2	X	609	Total	C	N	O	S	0	0
			4647	2929	785	923	10		
2	Y	609	Total	C	N	O	S	0	0
			4647	2929	785	923	10		
2	Z	609	Total	C	N	O	S	0	0
			4647	2929	785	923	10		

There are 48 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
U	100	GLU	ASP	SEE REMARK 999	UNP P13332
U	148	ALA	GLY	SEE REMARK 999	UNP P13332

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
U	150	ILE	ASN	SEE REMARK 999	UNP P13332
U	151	ILE	TYR	SEE REMARK 999	UNP P13332
U	301	GLY	GLU	SEE REMARK 999	UNP P13332
U	399	VAL	ALA	SEE REMARK 999	UNP P13332
U	454	TYR	HIS	SEE REMARK 999	UNP P13332
U	510	PRO	ARG	engineered mutation	UNP P13332
V	100	GLU	ASP	SEE REMARK 999	UNP P13332
V	148	ALA	GLY	SEE REMARK 999	UNP P13332
V	150	ILE	ASN	SEE REMARK 999	UNP P13332
V	151	ILE	TYR	SEE REMARK 999	UNP P13332
V	301	GLY	GLU	SEE REMARK 999	UNP P13332
V	399	VAL	ALA	SEE REMARK 999	UNP P13332
V	454	TYR	HIS	SEE REMARK 999	UNP P13332
V	510	PRO	ARG	engineered mutation	UNP P13332
W	100	GLU	ASP	SEE REMARK 999	UNP P13332
W	148	ALA	GLY	SEE REMARK 999	UNP P13332
W	150	ILE	ASN	SEE REMARK 999	UNP P13332
W	151	ILE	TYR	SEE REMARK 999	UNP P13332
W	301	GLY	GLU	SEE REMARK 999	UNP P13332
W	399	VAL	ALA	SEE REMARK 999	UNP P13332
W	454	TYR	HIS	SEE REMARK 999	UNP P13332
W	510	PRO	ARG	engineered mutation	UNP P13332
X	100	GLU	ASP	SEE REMARK 999	UNP P13332
X	148	ALA	GLY	SEE REMARK 999	UNP P13332
X	150	ILE	ASN	SEE REMARK 999	UNP P13332
X	151	ILE	TYR	SEE REMARK 999	UNP P13332
X	301	GLY	GLU	SEE REMARK 999	UNP P13332
X	399	VAL	ALA	SEE REMARK 999	UNP P13332
X	454	TYR	HIS	SEE REMARK 999	UNP P13332
X	510	PRO	ARG	engineered mutation	UNP P13332
Y	100	GLU	ASP	SEE REMARK 999	UNP P13332
Y	148	ALA	GLY	SEE REMARK 999	UNP P13332
Y	150	ILE	ASN	SEE REMARK 999	UNP P13332
Y	151	ILE	TYR	SEE REMARK 999	UNP P13332
Y	301	GLY	GLU	SEE REMARK 999	UNP P13332
Y	399	VAL	ALA	SEE REMARK 999	UNP P13332
Y	454	TYR	HIS	SEE REMARK 999	UNP P13332
Y	510	PRO	ARG	engineered mutation	UNP P13332
Z	100	GLU	ASP	SEE REMARK 999	UNP P13332
Z	148	ALA	GLY	SEE REMARK 999	UNP P13332
Z	150	ILE	ASN	SEE REMARK 999	UNP P13332
Z	151	ILE	TYR	SEE REMARK 999	UNP P13332

Continued on next page...

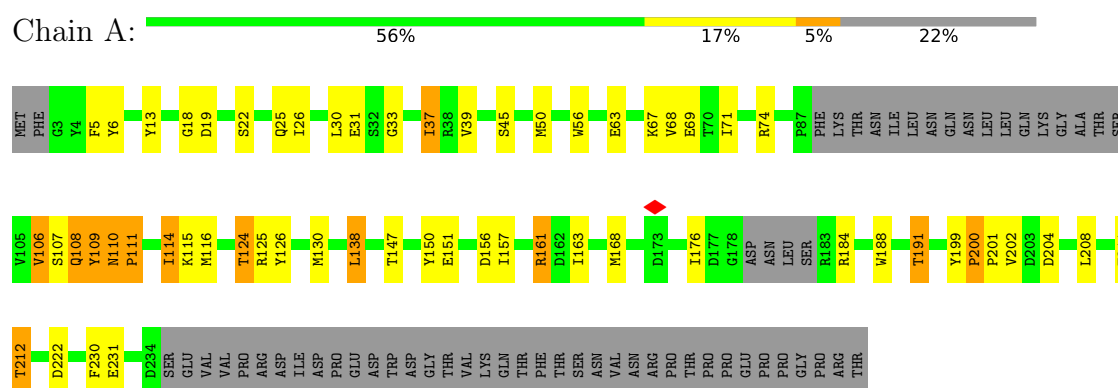
Continued from previous page...

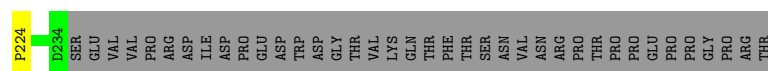
Chain	Residue	Modelled	Actual	Comment	Reference
Z	301	GLY	GLU	SEE REMARK 999	UNP P13332
Z	399	VAL	ALA	SEE REMARK 999	UNP P13332
Z	454	TYR	HIS	SEE REMARK 999	UNP P13332
Z	510	PRO	ARG	engineered mutation	UNP P13332

3 Residue-property plots

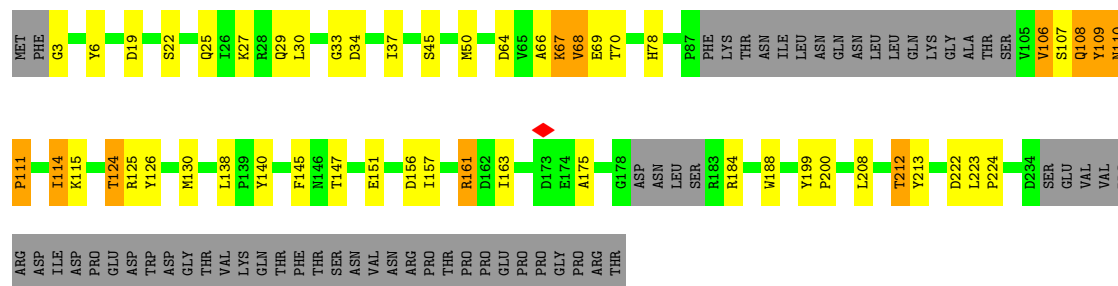
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: Tail connector protein Gp15

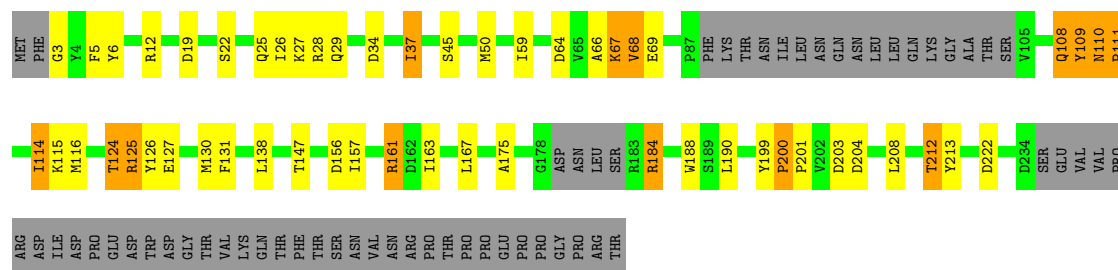




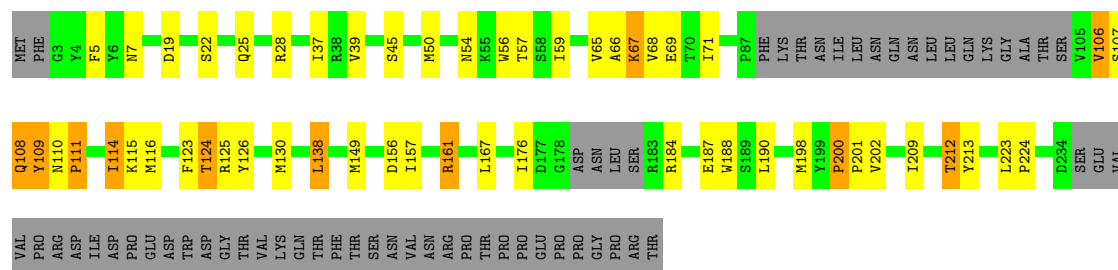
- Molecule 1: Tail connector protein Gp15



- Molecule 1: Tail connector protein Gp15

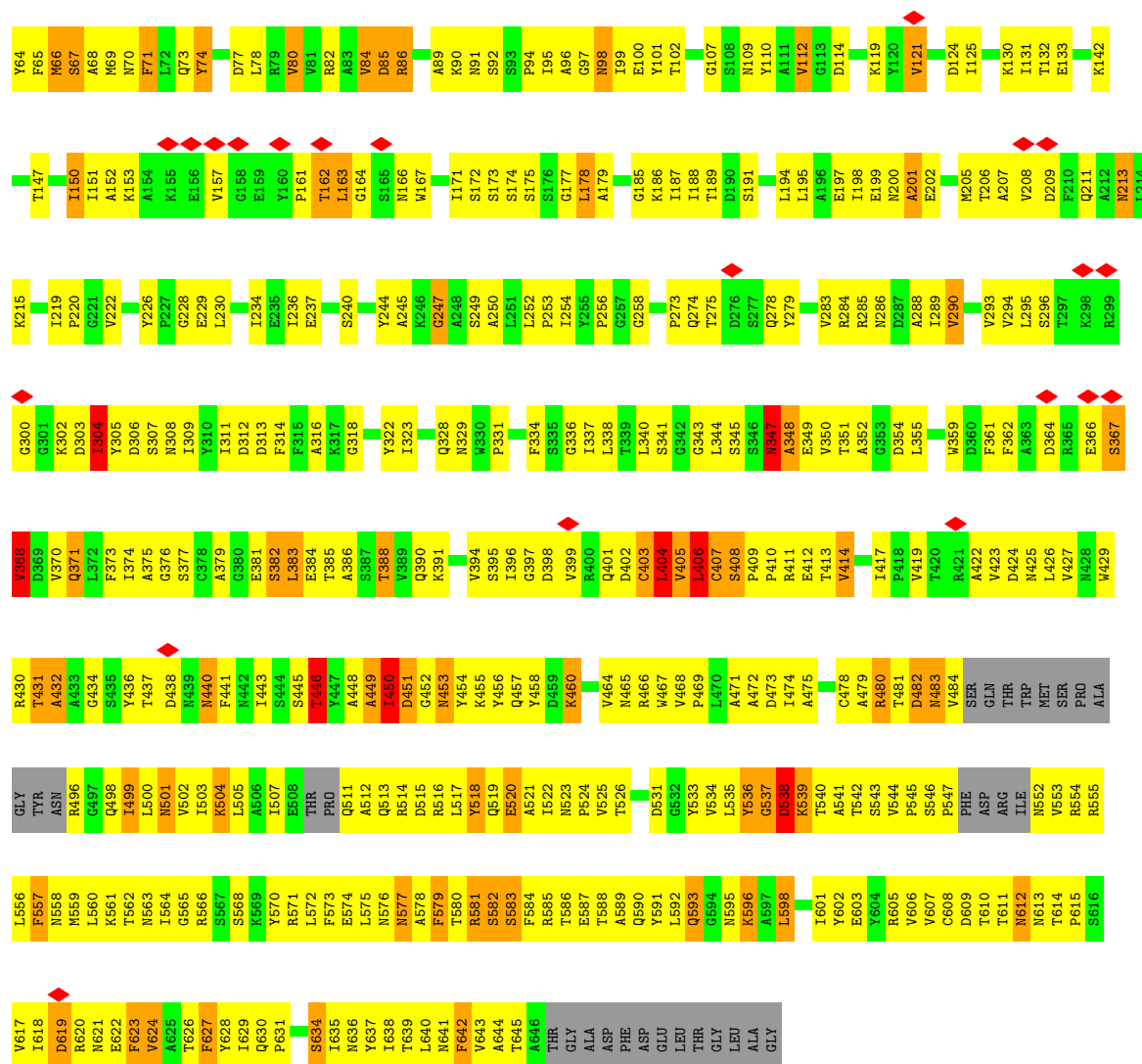


- Molecule 1: Tail connector protein Gp15



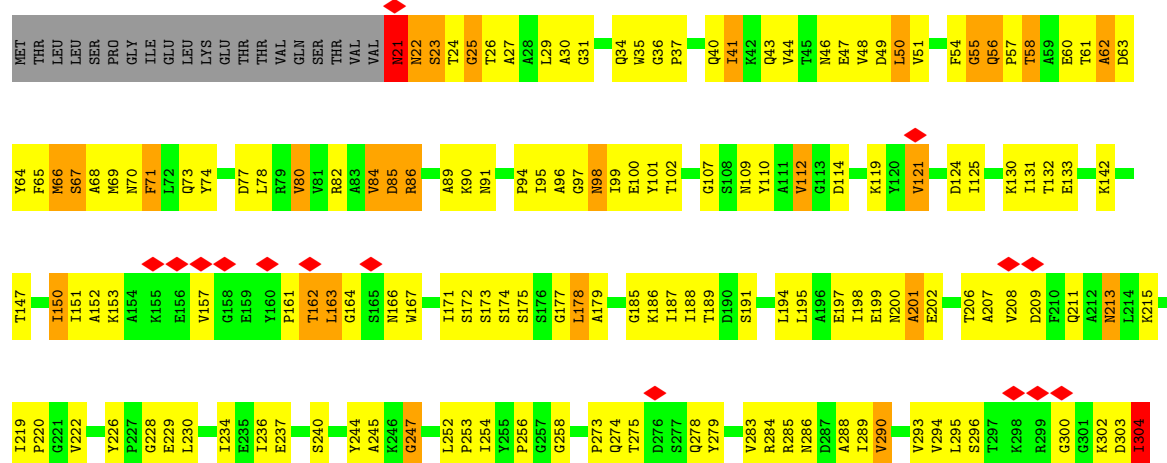
- Molecule 2: Tail sheath protein Gp18





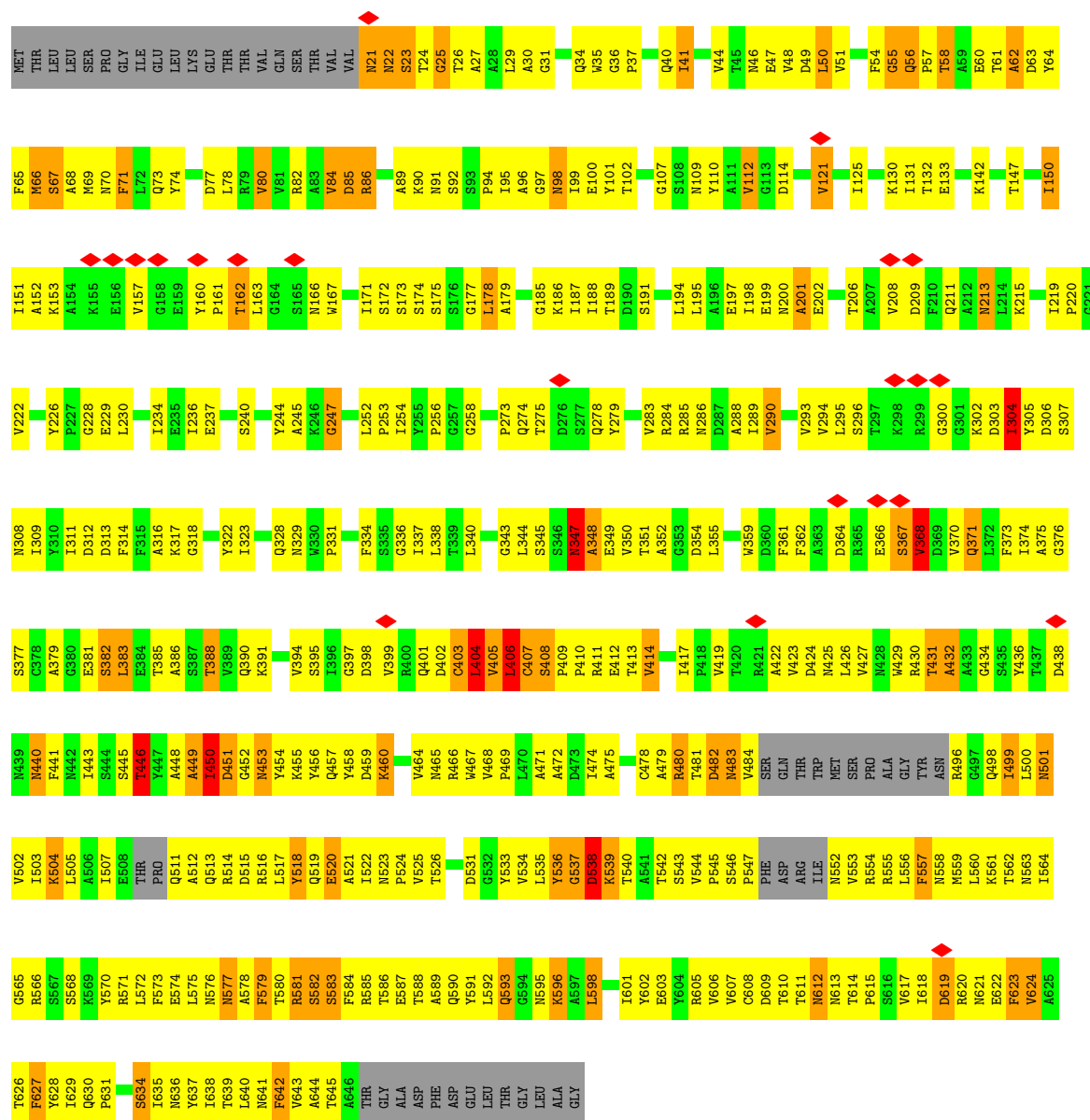
• Molecule 2: Tail sheath protein Gp18

Chain V: 31% 49% 11% 8%



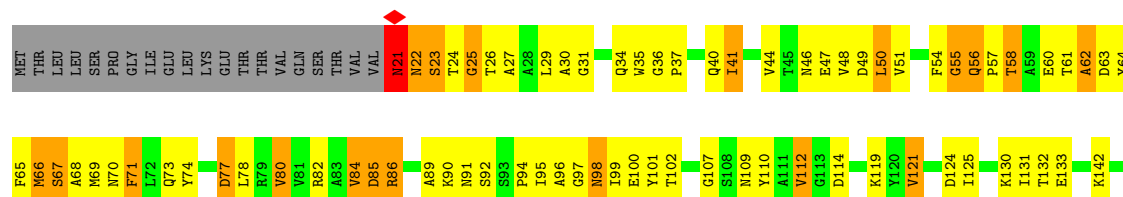
WORLDWIDE
PDB
PROTEIN DATA BANK

Chain Y: 



• Molecule 2: Tail sheath protein Gp18

Chain Z: 





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C6	Depositor
Number of particles used	3029	Depositor
Resolution determination method	FSC 0.5 CUT-OFF	Depositor
CTF correction method	each particle image	Depositor
Microscope	FEI/PHILIPS CM300FEG/ST	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	47000	Depositor
Image detector	Not provided	
Maximum map value	7.953	Depositor
Minimum map value	-2.953	Depositor
Average map value	0.059	Depositor
Map value standard deviation	0.533	Depositor
Recommended contour level	1.01	Depositor
Map size ($\text{\AA}$)	714.6, 714.6, 1508.6	wwPDB
Map dimensions	180, 180, 380	wwPDB
Map angles ($^\circ$)	90, 90, 90	wwPDB
Pixel spacing ($\text{\AA}$)	3.97, 3.97, 3.97	Depositor

5 Model quality

5.1 Standard geometry

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.62	1/1787 (0.1%)	0.98	3/2421 (0.1%)
1	B	0.63	1/1787 (0.1%)	0.98	4/2421 (0.2%)
1	C	0.62	0/1787	0.99	6/2421 (0.2%)
1	D	0.63	0/1787	0.95	1/2421 (0.0%)
1	E	0.64	1/1787 (0.1%)	0.96	1/2421 (0.0%)
1	F	0.65	1/1787 (0.1%)	1.03	5/2421 (0.2%)
2	U	0.82	4/4729 (0.1%)	1.25	57/6427 (0.9%)
2	V	0.82	4/4729 (0.1%)	1.26	55/6427 (0.9%)
2	W	0.82	4/4729 (0.1%)	1.26	55/6427 (0.9%)
2	X	0.82	4/4729 (0.1%)	1.26	55/6427 (0.9%)
2	Y	0.82	4/4729 (0.1%)	1.25	55/6427 (0.9%)
2	Z	0.83	4/4729 (0.1%)	1.26	55/6427 (0.9%)
All	All	0.78	28/39096 (0.1%)	1.19	352/53088 (0.7%)

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
2	U	0	4
2	V	0	4
2	W	0	4
2	X	0	4
2	Y	0	4
2	Z	0	4
All	All	0	24

All (28) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	Y	22	ASN	C-N	-7.35	1.23	1.33
2	X	22	ASN	C-N	-7.29	1.23	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	Z	23	SER	C-O	7.29	1.33	1.24
2	U	22	ASN	C-N	-7.24	1.23	1.33
2	Z	22	ASN	C-N	-7.19	1.23	1.33
2	W	22	ASN	C-N	-7.14	1.23	1.33
2	V	22	ASN	C-N	-7.10	1.23	1.33
2	Y	23	SER	C-O	7.08	1.32	1.24
2	V	23	SER	C-N	-6.95	1.24	1.33
2	Y	23	SER	C-N	-6.88	1.24	1.33
2	W	23	SER	C-N	-6.85	1.24	1.33
2	Z	23	SER	C-N	-6.80	1.24	1.33
2	X	23	SER	C-O	6.73	1.32	1.24
2	U	23	SER	C-O	6.67	1.32	1.24
2	V	23	SER	C-O	6.58	1.32	1.24
2	W	23	SER	C-O	6.50	1.32	1.24
2	U	23	SER	C-N	-6.45	1.25	1.33
2	X	23	SER	C-N	-6.45	1.25	1.33
2	Z	22	ASN	C-O	6.06	1.31	1.24
2	U	22	ASN	C-O	5.85	1.31	1.24
1	E	200	PRO	CA-C	5.82	1.55	1.51
1	F	200	PRO	CA-C	5.66	1.54	1.51
1	B	200	PRO	CA-C	5.63	1.54	1.51
1	A	200	PRO	CA-C	5.61	1.54	1.51
2	Y	22	ASN	C-O	5.51	1.30	1.24
2	W	22	ASN	C-O	5.50	1.30	1.24
2	X	22	ASN	C-O	5.49	1.30	1.24
2	V	22	ASN	C-O	5.48	1.30	1.24

All (352) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	V	55	GLY	N-CA-C	19.05	158.33	113.18
2	U	55	GLY	N-CA-C	18.99	158.18	113.18
2	Y	55	GLY	N-CA-C	18.96	158.12	113.18
2	W	55	GLY	N-CA-C	18.95	158.08	113.18
2	X	55	GLY	N-CA-C	18.88	157.92	113.18
2	Z	55	GLY	N-CA-C	18.79	157.71	113.18
2	U	112	VAL	N-CA-C	17.61	136.98	112.50
2	Y	112	VAL	N-CA-C	17.59	136.95	112.50
2	V	112	VAL	N-CA-C	17.50	136.83	112.50
2	W	112	VAL	N-CA-C	17.44	136.74	112.50
2	X	112	VAL	N-CA-C	17.41	136.71	112.50
2	Z	112	VAL	N-CA-C	17.41	136.70	112.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	X	405	VAL	N-CA-C	-15.66	84.88	107.75
2	Y	405	VAL	N-CA-C	-15.50	85.11	107.75
2	Z	405	VAL	N-CA-C	-15.50	85.12	107.75
2	W	405	VAL	N-CA-C	-15.45	85.19	107.75
2	U	405	VAL	N-CA-C	-15.42	85.24	107.75
2	V	405	VAL	N-CA-C	-15.32	85.39	107.75
2	V	557	PHE	CA-CB-CG	-12.05	101.75	113.80
2	Z	557	PHE	CA-CB-CG	-11.88	101.92	113.80
2	X	557	PHE	CA-CB-CG	-11.69	102.11	113.80
2	W	557	PHE	CA-CB-CG	-11.51	102.29	113.80
2	Y	557	PHE	CA-CB-CG	-11.50	102.30	113.80
2	U	557	PHE	CA-CB-CG	-11.47	102.33	113.80
2	Y	404	LEU	N-CA-C	-10.87	90.49	108.32
2	Z	404	LEU	N-CA-C	-10.80	90.61	108.32
2	U	404	LEU	N-CA-C	-10.79	90.62	108.32
2	W	404	LEU	N-CA-C	-10.78	90.64	108.32
2	X	404	LEU	N-CA-C	-10.76	90.68	108.32
2	V	404	LEU	N-CA-C	-10.74	90.70	108.32
2	V	56	GLN	N-CA-CB	-10.66	90.05	110.10
1	F	39	VAL	CA-C-N	10.65	130.41	119.76
1	F	39	VAL	C-N-CA	10.65	130.41	119.76
2	Y	56	GLN	N-CA-CB	-10.63	90.11	110.10
2	X	56	GLN	N-CA-CB	-10.62	90.13	110.10
2	Z	56	GLN	N-CA-CB	-10.62	90.13	110.10
2	U	56	GLN	N-CA-CB	-10.61	90.15	110.10
2	W	56	GLN	N-CA-CB	-10.60	90.17	110.10
2	Z	85	ASP	N-CA-C	-10.46	93.13	109.76
2	V	85	ASP	N-CA-C	-10.42	93.19	109.76
2	Y	85	ASP	N-CA-C	-10.38	93.25	109.76
2	W	85	ASP	N-CA-C	-10.25	93.46	109.76
2	X	85	ASP	N-CA-C	-10.21	93.52	109.76
2	U	85	ASP	N-CA-C	-10.12	93.67	109.76
2	X	367	SER	N-CA-CB	-9.52	94.34	110.33
2	V	367	SER	N-CA-CB	-9.40	94.54	110.33
2	W	367	SER	N-CA-CB	-9.33	94.65	110.33
2	U	367	SER	N-CA-CB	-9.31	94.68	110.33
2	Z	407	CYS	CB-CA-C	-9.29	91.30	109.68
2	Z	367	SER	N-CA-CB	-9.21	94.85	110.33
2	V	407	CYS	CB-CA-C	-9.19	91.47	109.68
2	Y	367	SER	N-CA-CB	-9.19	94.88	110.33
2	W	407	CYS	CB-CA-C	-9.16	91.54	109.68
2	U	407	CYS	CB-CA-C	-8.76	91.28	109.94

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	U	366	GLU	CB-CA-C	8.73	125.29	110.79
2	Z	366	GLU	CB-CA-C	8.68	125.20	110.79
2	Y	407	CYS	CB-CA-C	-8.67	91.46	109.94
2	X	407	CYS	CB-CA-C	-8.67	91.48	109.94
2	V	366	GLU	CB-CA-C	8.66	125.16	110.79
2	W	366	GLU	CB-CA-C	8.66	125.16	110.79
2	X	366	GLU	CB-CA-C	8.59	125.04	110.79
2	Y	366	GLU	CB-CA-C	8.48	124.86	110.79
1	C	39	VAL	CA-C-N	8.47	128.23	119.76
1	C	39	VAL	C-N-CA	8.47	128.23	119.76
2	U	404	LEU	CB-CA-C	7.90	123.25	109.89
2	X	404	LEU	CB-CA-C	7.90	123.25	109.89
2	W	406	LEU	N-CA-C	-7.90	96.53	109.40
2	Z	406	LEU	N-CA-C	-7.89	96.53	109.40
2	Y	404	LEU	CB-CA-C	7.88	123.20	109.89
2	W	404	LEU	CB-CA-C	7.88	123.20	109.89
1	C	61	SER	N-CA-C	7.87	118.37	108.45
2	U	406	LEU	N-CA-C	-7.87	96.56	109.40
2	V	404	LEU	CB-CA-C	7.87	123.18	109.89
2	Z	404	LEU	CB-CA-C	7.86	123.17	109.89
2	Y	406	LEU	N-CA-C	-7.82	96.65	109.40
2	V	406	LEU	N-CA-C	-7.80	96.68	109.40
2	X	406	LEU	N-CA-C	-7.78	96.72	109.40
2	U	366	GLU	N-CA-C	-7.76	102.82	111.28
2	X	347	ASN	N-CA-C	-7.69	103.70	113.23
2	V	366	GLU	N-CA-C	-7.68	102.91	111.28
2	Z	366	GLU	N-CA-C	-7.65	102.95	111.28
2	Y	347	ASN	N-CA-C	-7.64	103.75	113.23
2	W	366	GLU	N-CA-C	-7.61	102.98	111.28
2	X	366	GLU	N-CA-C	-7.56	103.04	111.28
2	Y	366	GLU	N-CA-C	-7.52	103.08	111.28
2	V	85	ASP	CB-CA-C	7.47	122.01	109.84
2	W	347	ASN	N-CA-C	-7.45	103.99	113.23
2	Y	85	ASP	CB-CA-C	7.45	121.98	109.84
2	U	347	ASN	N-CA-C	-7.39	104.06	113.23
2	Z	85	ASP	CB-CA-C	7.36	121.84	109.84
2	X	85	ASP	CB-CA-C	7.35	121.82	109.84
2	U	85	ASP	CB-CA-C	7.33	121.79	109.84
2	W	85	ASP	CB-CA-C	7.31	121.76	109.84
2	Z	347	ASN	N-CA-C	-7.30	104.17	113.23
2	V	347	ASN	N-CA-C	-7.25	104.24	113.23
2	W	642	PHE	CA-CB-CG	-7.24	106.56	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	U	520	GLU	N-CA-C	-7.22	103.72	112.54
2	X	520	GLU	N-CA-C	-7.18	103.78	112.54
1	A	39	VAL	CA-C-N	7.15	126.91	119.76
1	A	39	VAL	C-N-CA	7.15	126.91	119.76
2	W	520	GLU	N-CA-C	-7.11	103.87	112.54
2	Y	86	ARG	N-CA-C	-7.10	104.09	112.89
2	Z	86	ARG	N-CA-C	-7.10	104.09	112.89
2	V	520	GLU	N-CA-C	-7.08	103.90	112.54
2	Y	520	GLU	N-CA-C	-7.08	103.90	112.54
2	Z	520	GLU	N-CA-C	-7.08	103.91	112.54
2	W	405	VAL	N-CA-CB	7.02	120.77	111.64
2	U	642	PHE	CA-CB-CG	-6.99	106.81	113.80
2	X	86	ARG	N-CA-C	-6.99	104.23	112.89
2	Z	405	VAL	N-CA-CB	6.98	120.71	111.64
2	W	86	ARG	N-CA-C	-6.97	104.25	112.89
2	U	86	ARG	N-CA-C	-6.94	104.29	112.89
2	U	405	VAL	N-CA-CB	6.91	120.62	111.64
2	U	449	ALA	N-CA-C	-6.90	97.17	108.41
2	V	86	ARG	N-CA-C	-6.88	104.36	112.89
2	X	449	ALA	N-CA-C	-6.84	97.26	108.41
2	X	642	PHE	CA-C-N	-6.84	113.44	122.94
2	X	642	PHE	C-N-CA	-6.84	113.44	122.94
2	X	642	PHE	CA-CB-CG	-6.82	106.98	113.80
2	Z	642	PHE	CA-CB-CG	-6.81	106.99	113.80
2	Y	405	VAL	N-CA-CB	6.79	120.47	111.64
2	X	21	ASN	CA-C-N	6.79	134.51	121.54
2	X	21	ASN	C-N-CA	6.79	134.51	121.54
2	V	405	VAL	N-CA-CB	6.77	120.44	111.64
2	V	21	ASN	CA-C-N	6.75	134.43	121.54
2	V	21	ASN	C-N-CA	6.75	134.43	121.54
2	V	179	ALA	N-CA-C	6.74	125.16	110.80
2	U	179	ALA	N-CA-C	6.74	125.15	110.80
2	Y	21	ASN	CA-C-N	6.74	134.41	121.54
2	Y	21	ASN	C-N-CA	6.74	134.41	121.54
2	W	449	ALA	N-CA-C	-6.73	97.43	108.41
2	X	179	ALA	N-CA-C	6.73	125.14	110.80
2	Y	179	ALA	N-CA-C	6.73	125.14	110.80
2	W	21	ASN	CA-C-N	6.71	134.35	121.54
2	W	21	ASN	C-N-CA	6.71	134.35	121.54
2	Y	642	PHE	CA-CB-CG	-6.71	107.09	113.80
2	V	408	SER	N-CA-CB	-6.70	97.16	110.70
2	V	642	PHE	CA-C-N	-6.70	113.63	122.94

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	V	642	PHE	C-N-CA	-6.70	113.63	122.94
2	Z	21	ASN	CA-C-N	6.70	134.33	121.54
2	Z	21	ASN	C-N-CA	6.70	134.33	121.54
2	X	405	VAL	N-CA-CB	6.69	120.34	111.64
2	W	179	ALA	N-CA-C	6.69	125.04	110.80
2	Z	449	ALA	N-CA-C	-6.67	97.53	108.41
2	X	408	SER	N-CA-CB	-6.67	97.23	110.70
2	Z	179	ALA	N-CA-C	6.67	125.01	110.80
2	V	642	PHE	CA-CB-CG	-6.66	107.14	113.80
2	U	21	ASN	CA-C-N	6.66	134.25	121.54
2	U	21	ASN	C-N-CA	6.66	134.25	121.54
2	Y	408	SER	N-CA-CB	-6.65	97.26	110.70
2	U	408	SER	N-CA-CB	-6.65	97.27	110.70
2	V	406	LEU	CB-CA-C	6.64	122.05	109.37
2	Y	642	PHE	CA-C-N	-6.62	113.74	122.94
2	Y	642	PHE	C-N-CA	-6.62	113.74	122.94
2	V	449	ALA	N-CA-C	-6.62	97.63	108.41
2	W	642	PHE	CA-C-N	-6.60	113.77	122.94
2	W	642	PHE	C-N-CA	-6.60	113.77	122.94
2	Z	406	LEU	CB-CA-C	6.60	121.97	109.37
2	W	408	SER	N-CA-CB	-6.59	97.38	110.70
2	Y	449	ALA	N-CA-C	-6.59	97.67	108.41
2	Z	642	PHE	CA-C-N	-6.59	113.78	122.94
2	Z	642	PHE	C-N-CA	-6.59	113.78	122.94
2	W	406	LEU	CB-CA-C	6.58	121.94	109.37
2	Y	406	LEU	CB-CA-C	6.56	121.91	109.37
2	Z	408	SER	N-CA-CB	-6.54	97.50	110.70
2	U	406	LEU	CB-CA-C	6.52	121.82	109.37
2	X	406	LEU	CB-CA-C	6.52	121.82	109.37
2	X	579	PHE	CA-CB-CG	-6.48	107.32	113.80
2	Y	579	PHE	CA-CB-CG	-6.40	107.40	113.80
2	U	178	LEU	N-CA-C	6.39	120.66	109.80
2	U	642	PHE	CA-C-N	-6.35	114.12	122.94
2	U	642	PHE	C-N-CA	-6.35	114.12	122.94
2	X	178	LEU	N-CA-C	6.32	120.55	109.80
2	V	579	PHE	CA-CB-CG	-6.29	107.50	113.80
2	Z	579	PHE	CA-CB-CG	-6.27	107.53	113.80
2	V	536	TYR	CA-C-N	6.26	127.97	120.14
2	V	536	TYR	C-N-CA	6.26	127.97	120.14
2	W	579	PHE	CA-CB-CG	-6.24	107.56	113.80
2	V	163	LEU	CB-CA-C	-6.21	107.69	115.89
2	U	579	PHE	CA-CB-CG	-6.18	107.62	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	Z	163	LEU	CB-CA-C	-6.18	107.73	115.89
2	Y	178	LEU	N-CA-CB	-6.18	100.05	110.49
2	X	163	LEU	CB-CA-C	-6.14	107.78	115.89
2	U	163	LEU	CB-CA-C	-6.13	107.79	115.89
2	W	163	LEU	CB-CA-C	-6.13	107.80	115.89
2	V	178	LEU	N-CA-C	6.12	120.19	109.80
2	W	536	TYR	CA-C-N	6.10	127.76	120.14
2	W	536	TYR	C-N-CA	6.10	127.76	120.14
2	U	581	ARG	N-CA-C	-6.09	104.55	111.07
2	Y	627	PHE	CA-CB-CG	-6.07	107.73	113.80
2	Y	163	LEU	CB-CA-C	-6.06	107.89	115.89
2	Z	536	TYR	CA-C-N	6.06	127.72	120.14
2	Z	536	TYR	C-N-CA	6.06	127.72	120.14
1	D	70	THR	N-CA-C	-6.06	106.05	113.50
2	Y	446	THR	N-CA-C	-6.06	105.74	113.01
1	F	138	LEU	CA-C-N	-6.04	113.46	119.56
1	F	138	LEU	C-N-CA	-6.04	113.46	119.56
2	X	536	TYR	CA-C-N	6.03	127.68	120.14
2	X	536	TYR	C-N-CA	6.03	127.68	120.14
2	W	627	PHE	CA-CB-CG	-6.03	107.77	113.80
2	Y	536	TYR	CA-C-N	6.02	127.66	120.14
2	Y	536	TYR	C-N-CA	6.02	127.66	120.14
2	W	178	LEU	N-CA-CB	-6.01	100.33	110.49
2	Z	581	ARG	N-CA-C	-6.01	104.64	111.07
2	U	536	TYR	CA-C-N	5.99	127.63	120.14
2	U	536	TYR	C-N-CA	5.99	127.63	120.14
2	V	449	ALA	CB-CA-C	5.99	120.10	110.16
2	X	449	ALA	CB-CA-C	5.99	120.10	110.16
2	Y	623	PHE	CA-CB-CG	-5.98	107.82	113.80
2	U	627	PHE	CA-CB-CG	-5.98	107.82	113.80
2	Z	178	LEU	N-CA-CB	-5.97	100.40	110.49
2	U	449	ALA	CB-CA-C	5.93	120.00	110.16
2	Y	449	ALA	CB-CA-C	5.92	119.99	110.16
2	W	449	ALA	CB-CA-C	5.92	119.98	110.16
2	X	627	PHE	CA-CB-CG	-5.92	107.88	113.80
2	U	518	TYR	N-CA-C	-5.91	102.68	110.43
2	V	627	PHE	CA-CB-CG	-5.89	107.91	113.80
2	U	446	THR	N-CA-C	-5.89	105.94	113.01
2	U	634	SER	CA-C-N	-5.89	116.11	121.65
2	U	634	SER	C-N-CA	-5.89	116.11	121.65
2	U	623	PHE	CA-CB-CG	-5.89	107.91	113.80
2	V	623	PHE	CA-CB-CG	-5.89	107.91	113.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	X	538	ASP	CA-C-N	5.88	132.78	121.54
2	X	538	ASP	C-N-CA	5.88	132.78	121.54
2	U	538	ASP	CA-C-N	5.88	132.77	121.54
2	U	538	ASP	C-N-CA	5.88	132.77	121.54
2	Y	581	ARG	N-CA-C	-5.87	104.79	111.07
2	V	538	ASP	CA-C-N	5.85	132.72	121.54
2	V	538	ASP	C-N-CA	5.85	132.72	121.54
2	W	518	TYR	N-CA-C	-5.85	102.76	110.43
2	V	581	ARG	N-CA-C	-5.84	104.82	111.07
2	V	518	TYR	N-CA-C	-5.83	102.79	110.43
2	Z	623	PHE	CA-CB-CG	-5.82	107.98	113.80
2	Z	449	ALA	CB-CA-C	5.82	119.82	110.16
2	X	623	PHE	CA-CB-CG	-5.80	108.00	113.80
2	Z	538	ASP	CA-C-N	5.80	132.61	121.54
2	Z	538	ASP	C-N-CA	5.80	132.61	121.54
2	W	538	ASP	CA-C-N	5.79	132.60	121.54
2	W	538	ASP	C-N-CA	5.79	132.60	121.54
2	Y	634	SER	CA-C-N	-5.79	116.21	121.65
2	Y	634	SER	C-N-CA	-5.79	116.21	121.65
2	X	518	TYR	N-CA-C	-5.78	102.85	110.43
1	B	39	VAL	CA-C-N	5.78	125.54	119.76
1	B	39	VAL	C-N-CA	5.78	125.54	119.76
2	Z	634	SER	CA-C-N	-5.78	116.22	121.65
2	Z	634	SER	C-N-CA	-5.78	116.22	121.65
2	Y	518	TYR	N-CA-C	-5.78	102.86	110.43
2	U	537	GLY	CA-C-O	-5.76	114.18	120.40
2	V	537	GLY	CA-C-O	-5.76	114.18	120.40
2	W	446	THR	N-CA-C	-5.72	106.14	113.01
2	W	623	PHE	CA-CB-CG	-5.72	108.08	113.80
2	Y	538	ASP	CA-C-N	5.72	132.47	121.54
2	Y	538	ASP	C-N-CA	5.72	132.47	121.54
2	V	446	THR	N-CA-C	-5.71	106.16	113.01
2	W	581	ARG	N-CA-C	-5.71	104.97	111.07
2	V	634	SER	CA-C-N	-5.70	116.29	121.65
2	V	634	SER	C-N-CA	-5.70	116.29	121.65
2	Y	537	GLY	CA-C-O	-5.69	114.25	120.40
2	X	537	GLY	CA-C-O	-5.68	114.26	120.40
2	Y	582	SER	N-CA-C	-5.68	103.15	110.19
2	Z	518	TYR	N-CA-C	-5.67	103.00	110.43
2	Z	446	THR	N-CA-C	-5.66	106.22	113.01
2	Z	627	PHE	CA-CB-CG	-5.65	108.15	113.80
2	V	612	ASN	CA-CB-CG	-5.65	106.95	112.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	X	581	ARG	N-CA-C	-5.65	105.03	111.07
2	V	582	SER	N-CA-C	-5.62	103.22	110.19
2	W	582	SER	N-CA-C	-5.56	103.29	110.19
2	X	582	SER	N-CA-C	-5.55	103.31	110.19
1	A	138	LEU	N-CA-C	5.55	122.07	109.81
2	Z	582	SER	N-CA-C	-5.54	103.32	110.19
2	X	624	VAL	CA-C-N	-5.54	115.41	122.77
2	X	624	VAL	C-N-CA	-5.54	115.41	122.77
2	Z	537	GLY	CA-C-O	-5.52	114.44	120.40
2	W	368	VAL	N-CA-C	5.52	115.81	107.75
2	W	537	GLY	CA-C-O	-5.51	114.45	120.40
2	X	634	SER	CA-C-N	-5.48	116.50	121.65
2	X	634	SER	C-N-CA	-5.48	116.50	121.65
2	Y	112	VAL	CB-CA-C	-5.47	96.67	111.34
2	U	368	VAL	N-CA-C	5.47	115.73	107.75
2	Z	619	ASP	CA-CB-CG	-5.45	107.15	112.60
2	Z	613	ASN	CA-CB-CG	-5.44	107.16	112.60
2	V	624	VAL	CA-C-N	-5.43	115.54	122.77
2	V	624	VAL	C-N-CA	-5.43	115.54	122.77
1	C	70	THR	N-CA-C	-5.43	106.82	113.50
2	V	112	VAL	CB-CA-C	-5.43	96.80	111.34
2	U	613	ASN	CA-CB-CG	-5.41	107.19	112.60
2	X	446	THR	N-CA-C	-5.41	106.52	113.01
1	F	65	VAL	N-CA-C	5.40	116.03	110.36
1	E	29	GLN	N-CA-C	5.40	117.53	109.59
2	U	112	VAL	CB-CA-C	-5.40	96.87	111.34
2	Z	112	VAL	CB-CA-C	-5.40	96.86	111.34
2	W	634	SER	CA-C-N	-5.39	116.58	121.65
2	W	634	SER	C-N-CA	-5.39	116.58	121.65
2	Z	368	VAL	N-CA-C	5.38	115.61	107.75
2	Y	619	ASP	CA-CB-CG	-5.38	107.22	112.60
2	Y	624	VAL	CA-C-N	-5.38	115.62	122.77
2	Y	624	VAL	C-N-CA	-5.38	115.62	122.77
2	W	112	VAL	CB-CA-C	-5.37	96.94	111.34
2	Z	624	VAL	CA-C-N	-5.37	115.62	122.77
2	Z	624	VAL	C-N-CA	-5.37	115.62	122.77
2	W	624	VAL	CA-C-N	-5.37	115.63	122.77
2	W	624	VAL	C-N-CA	-5.37	115.63	122.77
2	W	538	ASP	N-CA-CB	5.36	119.55	110.49
2	X	112	VAL	CB-CA-C	-5.35	96.99	111.34
2	Y	368	VAL	N-CA-C	5.35	115.56	107.75
2	Y	612	ASN	CA-CB-CG	-5.34	107.26	112.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	V	368	VAL	N-CA-C	5.34	115.55	107.75
2	V	577	ASN	CA-CB-CG	-5.34	107.26	112.60
2	U	612	ASN	CA-CB-CG	-5.30	107.30	112.60
2	W	612	ASN	CA-CB-CG	-5.29	107.31	112.60
2	X	612	ASN	CA-CB-CG	-5.29	107.31	112.60
2	Z	612	ASN	CA-CB-CG	-5.28	107.32	112.60
1	C	223	LEU	CA-C-N	5.28	125.25	120.03
1	C	223	LEU	C-N-CA	5.28	125.25	120.03
2	V	538	ASP	N-CA-CB	5.28	119.40	110.49
2	X	368	VAL	N-CA-C	5.27	115.45	107.75
2	Y	538	ASP	N-CA-CB	5.27	119.40	110.49
2	X	598	LEU	N-CA-C	-5.26	105.55	111.28
2	V	613	ASN	CA-CB-CG	-5.26	107.34	112.60
2	U	598	LEU	N-CA-C	-5.25	105.55	111.28
2	U	538	ASP	N-CA-CB	5.24	119.35	110.49
2	X	178	LEU	N-CA-CB	-5.23	99.84	109.10
2	V	367	SER	N-CA-C	5.22	119.63	112.68
2	Y	577	ASN	CA-CB-CG	-5.22	107.38	112.60
2	Z	577	ASN	CA-CB-CG	-5.22	107.38	112.60
2	U	178	LEU	N-CA-CB	-5.22	99.86	109.10
2	X	538	ASP	N-CA-CB	5.21	119.29	110.49
2	X	619	ASP	CA-CB-CG	-5.21	107.39	112.60
2	Y	613	ASN	CA-CB-CG	-5.20	107.40	112.60
2	U	582	SER	N-CA-C	-5.20	103.74	110.19
2	U	624	VAL	CA-C-N	-5.20	115.86	122.77
2	U	624	VAL	C-N-CA	-5.20	115.86	122.77
2	Z	396	ILE	N-CA-C	-5.19	107.76	112.12
2	Z	367	SER	N-CA-C	5.18	119.57	112.68
2	U	367	SER	N-CA-C	5.18	119.57	112.68
2	W	577	ASN	CA-CB-CG	-5.18	107.42	112.60
2	W	367	SER	N-CA-C	5.17	119.56	112.68
2	V	619	ASP	CA-CB-CG	-5.16	107.44	112.60
2	W	619	ASP	CA-CB-CG	-5.16	107.44	112.60
2	W	396	ILE	N-CA-C	-5.15	107.80	112.12
2	X	396	ILE	N-CA-C	-5.14	107.80	112.12
2	U	619	ASP	CA-CB-CG	-5.13	107.47	112.60
2	X	367	SER	N-CA-C	5.12	119.49	112.68
2	U	396	ILE	N-CA-C	-5.10	107.83	112.12
2	V	598	LEU	N-CA-C	-5.09	105.73	111.28
2	Y	598	LEU	N-CA-C	-5.04	105.79	111.28
2	U	577	ASN	CA-CB-CG	-5.04	107.56	112.60
2	Y	367	SER	N-CA-C	5.04	119.38	112.68

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	Z	598	LEU	N-CA-C	-5.03	105.79	111.28
1	B	200	PRO	CA-C-N	5.00	124.91	119.76
1	B	200	PRO	C-N-CA	5.00	124.91	119.76
2	W	598	LEU	N-CA-C	-5.00	105.83	111.28

There are no chirality outliers.

All (24) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	U	21	ASN	Peptide
2	U	450	ILE	Peptide
2	U	451	ASP	Peptide
2	U	452	GLY	Peptide
2	V	21	ASN	Peptide
2	V	450	ILE	Peptide
2	V	451	ASP	Peptide
2	V	452	GLY	Peptide
2	W	21	ASN	Peptide
2	W	450	ILE	Peptide
2	W	451	ASP	Peptide
2	W	452	GLY	Peptide
2	X	21	ASN	Peptide
2	X	450	ILE	Peptide
2	X	451	ASP	Peptide
2	X	452	GLY	Peptide
2	Y	21	ASN	Peptide
2	Y	450	ILE	Peptide
2	Y	451	ASP	Peptide
2	Y	452	GLY	Peptide
2	Z	21	ASN	Peptide
2	Z	450	ILE	Peptide
2	Z	451	ASP	Peptide
2	Z	452	GLY	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	1742	0	1673	56	0
1	B	1742	0	1673	61	0
1	C	1742	0	1673	50	0
1	D	1742	0	1673	45	0
1	E	1742	0	1673	50	0
1	F	1742	0	1673	37	0
2	U	4647	0	4564	630	0
2	V	4647	0	4564	624	0
2	W	4647	0	4564	621	0
2	X	4647	0	4564	615	0
2	Y	4647	0	4562	606	0
2	Z	4647	0	4564	605	0
All	All	38334	0	37420	3887	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 51.

All (3887) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:156:ASP:HB3	2:U:579:PHE:CE1	1.23	1.68
1:B:157:ILE:CD1	2:V:579:PHE:HB3	1.20	1.63
1:B:157:ILE:HG13	2:V:579:PHE:CB	1.21	1.57
1:B:156:ASP:HB3	2:V:579:PHE:CE1	1.39	1.54
1:A:157:ILE:HG13	2:U:579:PHE:CB	1.22	1.54
2:Z:404:LEU:CG	2:Z:554:ARG:HH12	1.22	1.52
2:Y:404:LEU:CG	2:Y:554:ARG:HH12	1.22	1.51
2:U:404:LEU:CG	2:U:554:ARG:HH12	1.22	1.51
2:X:404:LEU:CG	2:X:554:ARG:HH12	1.22	1.51
2:Z:496:ARG:N	2:Z:534:VAL:CB	1.74	1.51
2:W:404:LEU:CG	2:W:554:ARG:HH12	1.22	1.50
2:V:409:PRO:O	2:V:454:TYR:CE1	1.65	1.49
2:W:409:PRO:O	2:W:454:TYR:CE1	1.65	1.49
2:U:496:ARG:N	2:U:534:VAL:CB	1.74	1.49
2:W:446:THR:HG22	2:W:542:THR:CG2	1.42	1.49
2:X:409:PRO:O	2:X:454:TYR:CE1	1.65	1.48
2:X:496:ARG:N	2:X:534:VAL:CB	1.74	1.48
2:Y:496:ARG:N	2:Y:534:VAL:CB	1.74	1.48
2:V:446:THR:HG22	2:V:542:THR:CG2	1.42	1.48
2:Y:446:THR:HG22	2:Y:542:THR:CG2	1.42	1.48
2:V:496:ARG:N	2:V:534:VAL:CB	1.74	1.48
2:V:404:LEU:CG	2:V:554:ARG:HH12	1.22	1.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:157:ILE:CG1	2:V:579:PHE:CB	1.90	1.47
2:Z:446:THR:HG22	2:Z:542:THR:CG2	1.42	1.47
2:U:409:PRO:O	2:U:454:TYR:CE1	1.66	1.47
2:Y:409:PRO:O	2:Y:454:TYR:CE1	1.65	1.47
2:U:446:THR:HG22	2:U:542:THR:CG2	1.42	1.47
2:Z:409:PRO:O	2:Z:454:TYR:CE1	1.65	1.47
2:X:446:THR:HG22	2:X:542:THR:CG2	1.42	1.46
1:A:157:ILE:CD1	2:U:579:PHE:HB3	1.44	1.45
2:W:496:ARG:N	2:W:534:VAL:HB	1.14	1.45
2:W:496:ARG:N	2:W:534:VAL:CB	1.74	1.44
2:X:496:ARG:N	2:X:534:VAL:HB	1.14	1.44
2:Y:496:ARG:N	2:Y:534:VAL:HB	1.14	1.44
1:B:157:ILE:HB	2:V:579:PHE:CD2	1.51	1.43
2:Z:496:ARG:N	2:Z:534:VAL:HB	1.14	1.43
2:U:496:ARG:N	2:U:534:VAL:HB	1.14	1.42
2:V:496:ARG:N	2:V:534:VAL:HB	1.14	1.41
1:A:157:ILE:CG1	2:U:579:PHE:CB	1.99	1.38
2:Z:404:LEU:HG	2:Z:554:ARG:NH1	1.09	1.37
2:U:404:LEU:HG	2:U:554:ARG:NH1	1.09	1.37
2:W:404:LEU:HG	2:W:554:ARG:NH1	1.09	1.37
2:X:404:LEU:HG	2:X:554:ARG:NH1	1.08	1.36
2:Y:404:LEU:HG	2:Y:554:ARG:NH1	1.08	1.36
2:V:404:LEU:HG	2:V:554:ARG:NH1	1.09	1.35
1:A:157:ILE:CG1	2:U:579:PHE:HB3	1.56	1.34
2:X:409:PRO:CD	2:X:451:ASP:O	1.75	1.33
2:W:409:PRO:CD	2:W:451:ASP:O	1.75	1.33
2:W:446:THR:O	2:W:539:LYS:HE3	1.27	1.33
2:Y:409:PRO:CD	2:Y:451:ASP:O	1.76	1.33
2:Z:409:PRO:CD	2:Z:451:ASP:O	1.75	1.33
2:V:446:THR:O	2:V:539:LYS:HE3	1.27	1.32
2:U:409:PRO:CD	2:U:451:ASP:O	1.76	1.32
2:V:409:PRO:CD	2:V:451:ASP:O	1.76	1.32
2:Z:446:THR:O	2:Z:539:LYS:HE3	1.29	1.29
1:A:156:ASP:CB	2:U:579:PHE:CE1	2.16	1.28
2:U:446:THR:O	2:U:539:LYS:HE3	1.28	1.25
2:V:379:ALA:CB	2:V:454:TYR:OH	1.85	1.25
2:X:379:ALA:CB	2:X:454:TYR:OH	1.84	1.25
2:Z:379:ALA:CB	2:Z:454:TYR:OH	1.84	1.25
2:U:379:ALA:CB	2:U:454:TYR:OH	1.85	1.25
1:E:156:ASP:HB3	2:Y:579:PHE:CE1	1.69	1.25
1:B:157:ILE:CG1	2:V:579:PHE:HB3	1.56	1.24

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:379:ALA:HB2	2:U:454:TYR:OH	1.36	1.24
2:Y:379:ALA:CB	2:Y:454:TYR:OH	1.84	1.24
2:V:379:ALA:HB2	2:V:454:TYR:OH	1.37	1.24
2:X:446:THR:O	2:X:539:LYS:HE3	1.27	1.24
2:W:379:ALA:CB	2:W:454:TYR:OH	1.84	1.24
1:A:157:ILE:HB	2:U:579:PHE:CD2	1.73	1.23
2:V:427:VAL:HG11	2:V:516:ARG:NH2	1.54	1.22
2:Z:379:ALA:HB2	2:Z:454:TYR:OH	1.36	1.22
2:U:427:VAL:HG11	2:U:516:ARG:NH2	1.55	1.22
1:A:156:ASP:HB3	2:U:579:PHE:CD1	1.76	1.21
1:C:157:ILE:CD1	2:W:579:PHE:HB3	1.71	1.21
1:A:156:ASP:CB	2:U:579:PHE:HE1	1.51	1.20
1:C:156:ASP:HB3	2:W:579:PHE:CE1	1.77	1.19
1:B:157:ILE:HG13	2:V:579:PHE:CG	1.77	1.19
2:X:427:VAL:HG11	2:X:516:ARG:NH2	1.55	1.19
2:Y:427:VAL:HG11	2:Y:516:ARG:NH2	1.54	1.19
2:W:427:VAL:HG11	2:W:516:ARG:NH2	1.55	1.19
2:Z:427:VAL:HG11	2:Z:516:ARG:NH2	1.54	1.19
2:W:379:ALA:HB2	2:W:454:TYR:OH	1.36	1.18
2:X:379:ALA:HB2	2:X:454:TYR:OH	1.37	1.18
2:X:427:VAL:HG11	2:X:516:ARG:HH21	1.01	1.18
1:E:157:ILE:HG13	2:Y:579:PHE:HB2	1.22	1.17
2:W:427:VAL:HG11	2:W:516:ARG:HH21	1.02	1.17
2:Y:379:ALA:HB2	2:Y:454:TYR:OH	1.37	1.17
1:B:157:ILE:CD1	2:V:579:PHE:CB	2.14	1.16
2:Y:409:PRO:HD3	2:Y:451:ASP:O	0.99	1.16
2:Y:427:VAL:HG11	2:Y:516:ARG:HH21	1.02	1.16
1:D:156:ASP:HB3	2:X:579:PHE:CE1	1.80	1.16
2:U:483:ASN:O	2:U:555:ARG:HB3	1.46	1.16
2:Y:496:ARG:N	2:Y:534:VAL:CG2	2.09	1.16
2:Z:409:PRO:HD3	2:Z:451:ASP:O	0.99	1.16
2:Z:496:ARG:N	2:Z:534:VAL:CG2	2.09	1.16
2:W:496:ARG:N	2:W:534:VAL:CG2	2.09	1.15
2:V:409:PRO:HD3	2:V:451:ASP:O	0.99	1.15
2:V:483:ASN:O	2:V:555:ARG:HB3	1.46	1.15
2:W:446:THR:HG22	2:W:542:THR:HG21	1.26	1.15
2:Z:483:ASN:O	2:Z:555:ARG:HB3	1.46	1.15
2:W:483:ASN:O	2:W:555:ARG:HB3	1.46	1.14
2:X:409:PRO:HD3	2:X:451:ASP:O	0.99	1.14
2:Y:483:ASN:O	2:Y:555:ARG:HB3	1.46	1.14
2:X:496:ARG:N	2:X:534:VAL:CG2	2.09	1.14

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:496:ARG:N	2:V:534:VAL:CG2	2.09	1.14
2:V:524:PRO:HG2	2:V:535:LEU:HB2	1.23	1.14
2:Y:379:ALA:HB1	2:Y:454:TYR:CZ	1.82	1.13
2:Z:524:PRO:HG2	2:Z:535:LEU:HB2	1.24	1.13
1:D:157:ILE:HD12	2:X:579:PHE:HB3	1.23	1.13
2:U:496:ARG:N	2:U:534:VAL:CG2	2.10	1.13
2:U:409:PRO:HD3	2:U:451:ASP:O	0.98	1.13
2:V:454:TYR:CE2	2:V:469:PRO:HA	1.84	1.13
2:Z:427:VAL:HG11	2:Z:516:ARG:HH21	1.02	1.13
2:X:483:ASN:O	2:X:555:ARG:HB3	1.46	1.13
2:U:454:TYR:CE2	2:U:469:PRO:HA	1.84	1.13
2:V:446:THR:HG22	2:V:542:THR:HG21	1.26	1.12
2:W:409:PRO:HD3	2:W:451:ASP:O	0.98	1.12
2:W:505:LEU:CD1	2:W:525:VAL:HG11	1.79	1.12
2:X:379:ALA:HB1	2:X:454:TYR:CZ	1.83	1.12
2:Y:454:TYR:CE2	2:Y:469:PRO:HA	1.83	1.12
2:Z:379:ALA:HB1	2:Z:454:TYR:CZ	1.83	1.12
2:U:505:LEU:CD1	2:U:525:VAL:HG11	1.79	1.12
2:Y:524:PRO:HG2	2:Y:535:LEU:HB2	1.23	1.12
2:U:379:ALA:HB1	2:U:454:TYR:CZ	1.83	1.12
2:Y:505:LEU:CD1	2:Y:525:VAL:HG11	1.79	1.12
1:C:157:ILE:HG13	2:W:579:PHE:CB	1.79	1.12
1:D:157:ILE:CD1	2:X:579:PHE:HB3	1.80	1.12
2:W:379:ALA:HB1	2:W:454:TYR:CZ	1.83	1.12
2:W:454:TYR:CE2	2:W:469:PRO:HA	1.85	1.12
2:V:379:ALA:HB1	2:V:454:TYR:CZ	1.83	1.11
2:V:427:VAL:HG11	2:V:516:ARG:HH21	1.01	1.11
2:W:524:PRO:HG2	2:W:535:LEU:HB2	1.23	1.11
2:X:505:LEU:CD1	2:X:525:VAL:HG11	1.79	1.11
2:Z:454:TYR:CE2	2:Z:469:PRO:HA	1.85	1.11
2:X:454:TYR:CE2	2:X:469:PRO:HA	1.84	1.11
2:Z:505:LEU:CD1	2:Z:525:VAL:HG11	1.79	1.11
1:B:156:ASP:CB	2:V:579:PHE:HE1	1.61	1.11
1:E:157:ILE:HG13	2:Y:579:PHE:CB	1.81	1.11
1:F:157:ILE:HB	2:Z:579:PHE:CD2	1.78	1.11
2:V:505:LEU:CD1	2:V:525:VAL:HG11	1.79	1.11
2:Z:450:ILE:HG12	2:Z:451:ASP:H	0.94	1.10
2:Y:379:ALA:CB	2:Y:454:TYR:CZ	2.35	1.10
2:Z:446:THR:HG22	2:Z:542:THR:HG21	1.26	1.10
2:X:379:ALA:CB	2:X:454:TYR:CZ	2.35	1.10
1:B:157:ILE:HD12	2:V:579:PHE:HB3	1.18	1.10

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:450:ILE:HG12	2:Y:451:ASP:H	0.94	1.10
2:U:450:ILE:HG12	2:U:451:ASP:H	0.94	1.09
2:V:409:PRO:O	2:V:454:TYR:CZ	2.05	1.09
2:X:409:PRO:O	2:X:454:TYR:CZ	2.06	1.09
2:Y:446:THR:HG22	2:Y:542:THR:HG21	1.26	1.09
2:Z:379:ALA:CB	2:Z:454:TYR:CZ	2.35	1.09
1:B:156:ASP:CB	2:V:579:PHE:CE1	2.34	1.09
2:Z:409:PRO:O	2:Z:454:TYR:CZ	2.05	1.09
2:W:379:ALA:CB	2:W:454:TYR:CZ	2.35	1.09
2:U:446:THR:HG22	2:U:542:THR:HG21	1.26	1.08
2:X:524:PRO:HG2	2:X:535:LEU:HB2	1.23	1.08
2:U:379:ALA:CB	2:U:454:TYR:CZ	2.35	1.08
2:U:524:PRO:HG2	2:U:535:LEU:HB2	1.23	1.08
2:Y:409:PRO:O	2:Y:454:TYR:CZ	2.06	1.08
2:V:379:ALA:CB	2:V:454:TYR:CZ	2.35	1.08
2:X:446:THR:HG22	2:X:542:THR:HG21	1.26	1.08
2:Y:51:VAL:HA	2:Y:55:GLY:HA2	1.36	1.08
2:U:427:VAL:HG11	2:U:516:ARG:HH21	1.02	1.07
2:V:450:ILE:HG12	2:V:451:ASP:H	0.94	1.07
2:V:454:TYR:CD2	2:V:469:PRO:HA	1.89	1.07
2:W:409:PRO:O	2:W:454:TYR:CZ	2.06	1.07
2:X:450:ILE:HG12	2:X:451:ASP:H	0.94	1.07
2:U:446:THR:CG2	2:U:542:THR:CG2	2.32	1.07
2:X:446:THR:CG2	2:X:542:THR:CG2	2.32	1.07
2:X:454:TYR:CD2	2:X:469:PRO:HA	1.90	1.07
2:Z:51:VAL:HA	2:Z:55:GLY:HA2	1.36	1.07
2:W:454:TYR:CD2	2:W:469:PRO:HA	1.90	1.07
2:X:51:VAL:HA	2:X:55:GLY:HA2	1.36	1.07
2:Y:446:THR:HG22	2:Y:542:THR:HG22	1.08	1.07
2:Z:446:THR:HG22	2:Z:542:THR:HG22	1.08	1.07
2:U:51:VAL:HA	2:U:55:GLY:HA2	1.36	1.07
2:U:409:PRO:O	2:U:454:TYR:CZ	2.06	1.07
2:U:454:TYR:CD2	2:U:469:PRO:HA	1.89	1.06
2:X:446:THR:HG22	2:X:542:THR:HG22	1.08	1.06
2:Y:454:TYR:CD2	2:Y:469:PRO:HA	1.89	1.06
2:W:446:THR:CG2	2:W:542:THR:CG2	2.32	1.06
2:X:446:THR:CG2	2:X:542:THR:HG22	1.85	1.06
2:Z:446:THR:CG2	2:Z:542:THR:CG2	2.32	1.06
1:B:157:ILE:CB	2:V:579:PHE:CD2	2.38	1.06
2:W:446:THR:CG2	2:W:542:THR:HG22	1.85	1.06
2:W:450:ILE:HG12	2:W:451:ASP:H	0.94	1.06

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:157:ILE:HD12	2:Y:579:PHE:HB3	1.34	1.05
2:V:446:THR:CG2	2:V:542:THR:CG2	2.32	1.05
2:V:51:VAL:HA	2:V:55:GLY:HA2	1.36	1.05
2:V:446:THR:CG2	2:V:542:THR:HG22	1.85	1.05
2:Y:446:THR:CG2	2:Y:542:THR:HG22	1.85	1.05
2:Y:446:THR:CG2	2:Y:542:THR:CG2	2.32	1.05
2:Z:454:TYR:CD2	2:Z:469:PRO:HA	1.90	1.05
2:W:51:VAL:HA	2:W:55:GLY:HA2	1.36	1.05
1:B:157:ILE:HD11	2:V:579:PHE:HB3	1.38	1.04
1:E:157:ILE:CD1	2:Y:579:PHE:HB3	1.87	1.04
2:W:446:THR:HG22	2:W:542:THR:HG22	1.08	1.04
1:A:157:ILE:HD12	2:U:579:PHE:HB3	1.31	1.04
1:B:157:ILE:CG1	2:V:579:PHE:CG	2.34	1.04
2:U:446:THR:CG2	2:U:542:THR:HG22	1.85	1.04
2:Z:446:THR:CG2	2:Z:542:THR:HG22	1.86	1.04
2:U:446:THR:HG22	2:U:542:THR:HG22	1.07	1.03
2:V:450:ILE:HG12	2:V:451:ASP:N	1.67	1.03
1:B:157:ILE:N	2:V:579:PHE:CD1	2.27	1.01
2:V:446:THR:HG22	2:V:542:THR:HG22	1.08	1.01
2:X:450:ILE:HG12	2:X:451:ASP:N	1.67	1.00
1:B:156:ASP:HB3	2:V:579:PHE:CD1	1.95	1.00
1:D:157:ILE:HG13	2:X:579:PHE:HB2	1.43	1.00
1:E:156:ASP:HB3	2:Y:579:PHE:CD1	1.96	1.00
2:U:450:ILE:HG12	2:U:451:ASP:N	1.67	0.98
2:W:450:ILE:HG12	2:W:451:ASP:N	1.67	0.98
2:Y:450:ILE:HG12	2:Y:451:ASP:N	1.68	0.98
1:B:157:ILE:HB	2:V:579:PHE:CG	1.99	0.98
2:Z:450:ILE:HG12	2:Z:451:ASP:N	1.67	0.98
2:U:409:PRO:O	2:U:454:TYR:HE1	1.16	0.97
2:U:514:ARG:HG3	2:U:535:LEU:HD13	1.47	0.97
2:X:556:LEU:HD23	2:X:560:LEU:HD23	1.46	0.97
1:C:156:ASP:HB3	2:W:579:PHE:HE1	1.26	0.97
2:W:556:LEU:HD23	2:W:560:LEU:HD23	1.46	0.97
2:Z:514:ARG:HG3	2:Z:535:LEU:HD13	1.46	0.97
2:U:228:GLY:HA2	2:U:345:SER:HB3	1.46	0.97
2:Y:556:LEU:HD23	2:Y:560:LEU:HD23	1.47	0.97
2:Z:556:LEU:HD23	2:Z:560:LEU:HD23	1.46	0.97
2:V:556:LEU:HD23	2:V:560:LEU:HD23	1.45	0.96
2:V:514:ARG:HG3	2:V:535:LEU:HD13	1.46	0.96
2:V:628:TYR:CD2	2:V:639:THR:HG22	2.00	0.96
1:A:157:ILE:HG13	2:U:579:PHE:CG	1.99	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:628:TYR:CD2	2:U:639:THR:HG22	2.01	0.96
2:Y:514:ARG:HG3	2:Y:535:LEU:HD13	1.47	0.96
2:Z:228:GLY:HA2	2:Z:345:SER:HB3	1.47	0.96
1:B:157:ILE:CB	2:V:579:PHE:CG	2.48	0.96
1:E:156:ASP:HB3	2:Y:579:PHE:HE1	1.30	0.96
2:Y:628:TYR:CD2	2:Y:639:THR:HG22	2.00	0.96
2:V:228:GLY:HA2	2:V:345:SER:HB3	1.48	0.96
2:X:628:TYR:CD2	2:X:639:THR:HG22	2.01	0.96
2:W:112:VAL:O	2:W:112:VAL:CG1	2.14	0.96
2:Z:628:TYR:CD2	2:Z:639:THR:HG22	2.01	0.96
2:Z:112:VAL:O	2:Z:112:VAL:CG1	2.14	0.95
2:W:628:TYR:CD2	2:W:639:THR:HG22	2.01	0.95
2:X:112:VAL:CG1	2:X:112:VAL:O	2.14	0.95
2:W:514:ARG:HG3	2:W:535:LEU:HD13	1.46	0.95
2:Y:409:PRO:O	2:Y:454:TYR:HE1	1.16	0.95
2:X:514:ARG:HG3	2:X:535:LEU:HD13	1.47	0.95
1:E:157:ILE:CG1	2:Y:579:PHE:CB	2.45	0.94
2:U:556:LEU:HD23	2:U:560:LEU:HD23	1.46	0.94
2:W:228:GLY:HA2	2:W:345:SER:HB3	1.47	0.94
1:A:157:ILE:CD1	2:U:579:PHE:CB	2.37	0.94
2:U:481:THR:HG21	2:U:496:ARG:NH2	1.82	0.94
2:V:112:VAL:O	2:V:112:VAL:CG1	2.14	0.94
2:Y:112:VAL:O	2:Y:112:VAL:CG1	2.14	0.94
2:Y:228:GLY:HA2	2:Y:345:SER:HB3	1.48	0.94
1:D:157:ILE:HG13	2:X:579:PHE:CB	1.97	0.94
2:U:112:VAL:O	2:U:112:VAL:CG1	2.14	0.94
2:X:228:GLY:HA2	2:X:345:SER:HB3	1.46	0.94
1:A:157:ILE:N	2:U:579:PHE:CD1	2.36	0.94
2:V:518:TYR:CE2	2:V:536:TYR:HB2	2.04	0.93
1:C:157:ILE:HG13	2:W:579:PHE:HB2	1.50	0.93
2:W:518:TYR:CE2	2:W:536:TYR:HB2	2.04	0.93
1:B:157:ILE:HG13	2:V:579:PHE:HB2	0.96	0.93
2:U:483:ASN:O	2:U:555:ARG:CB	2.17	0.93
2:U:518:TYR:CE2	2:U:536:TYR:HB2	2.04	0.93
2:Z:518:TYR:CE2	2:Z:536:TYR:HB2	2.03	0.93
2:W:514:ARG:CZ	2:W:535:LEU:HD22	1.99	0.93
2:V:409:PRO:O	2:V:454:TYR:HE1	1.16	0.92
2:Y:483:ASN:O	2:Y:555:ARG:CB	2.17	0.92
2:Z:481:THR:HG21	2:Z:496:ARG:NH2	1.84	0.92
2:Y:481:THR:HG21	2:Y:496:ARG:NH2	1.83	0.92
2:V:483:ASN:O	2:V:555:ARG:CB	2.17	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:514:ARG:CZ	2:V:535:LEU:HD22	2.00	0.92
2:X:408:SER:CA	2:X:451:ASP:HB3	2.00	0.92
2:W:408:SER:CA	2:W:451:ASP:HB3	2.00	0.92
2:X:514:ARG:CZ	2:X:535:LEU:HD22	1.99	0.92
2:X:518:TYR:CE2	2:X:536:TYR:HB2	2.04	0.92
2:U:514:ARG:CZ	2:U:535:LEU:HD22	2.00	0.91
2:V:408:SER:CA	2:V:451:ASP:HB3	2.00	0.91
2:Z:483:ASN:O	2:Z:555:ARG:CB	2.17	0.91
1:A:157:ILE:HG13	2:U:579:PHE:HB2	0.93	0.91
2:W:483:ASN:O	2:W:555:ARG:CB	2.18	0.91
2:X:483:ASN:O	2:X:555:ARG:CB	2.17	0.91
2:Y:408:SER:CA	2:Y:451:ASP:HB3	2.00	0.91
2:Z:514:ARG:CZ	2:Z:535:LEU:HD22	1.99	0.91
2:V:496:ARG:N	2:V:534:VAL:HG21	1.86	0.91
2:V:23:SER:OG	2:V:483:ASN:CB	2.19	0.91
2:X:409:PRO:O	2:X:454:TYR:HE1	1.15	0.91
2:Y:514:ARG:CZ	2:Y:535:LEU:HD22	1.99	0.91
2:U:408:SER:CA	2:U:451:ASP:HB3	2.00	0.91
1:E:157:ILE:HB	2:Y:579:PHE:CD2	2.05	0.91
2:V:481:THR:HG21	2:V:496:ARG:NH2	1.84	0.91
2:Z:408:SER:CA	2:Z:451:ASP:HB3	2.00	0.91
2:W:23:SER:OG	2:W:483:ASN:CB	2.19	0.90
2:Y:23:SER:OG	2:Y:483:ASN:CB	2.19	0.90
2:Y:518:TYR:CE2	2:Y:536:TYR:HB2	2.04	0.90
2:Z:23:SER:OG	2:Z:483:ASN:CB	2.19	0.90
2:W:409:PRO:O	2:W:454:TYR:HE1	1.15	0.90
2:W:496:ARG:N	2:W:534:VAL:HG21	1.86	0.90
2:U:23:SER:OG	2:U:483:ASN:CB	2.19	0.90
2:V:482:ASP:OD2	2:V:552:ASN:ND2	2.05	0.90
1:C:157:ILE:CG1	2:W:579:PHE:CB	2.50	0.90
2:U:496:ARG:N	2:U:534:VAL:HG21	1.87	0.90
2:X:23:SER:OG	2:X:483:ASN:CB	2.19	0.89
2:X:482:ASP:OD2	2:X:552:ASN:ND2	2.05	0.89
2:Z:408:SER:HA	2:Z:451:ASP:HB3	1.54	0.89
2:W:481:THR:HG21	2:W:496:ARG:NH2	1.85	0.89
2:Z:409:PRO:O	2:Z:454:TYR:HE1	1.16	0.89
2:Z:496:ARG:N	2:Z:534:VAL:HG21	1.87	0.89
2:Z:482:ASP:OD2	2:Z:552:ASN:ND2	2.05	0.89
1:F:156:ASP:HB3	2:Z:579:PHE:CE1	2.07	0.89
2:Y:482:ASP:OD2	2:Y:552:ASN:ND2	2.05	0.89
2:U:483:ASN:O	2:U:555:ARG:HD3	1.73	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:408:SER:HA	2:V:451:ASP:HB3	1.54	0.89
2:X:496:ARG:N	2:X:534:VAL:HG21	1.86	0.89
2:V:483:ASN:O	2:V:555:ARG:HD3	1.73	0.89
2:W:482:ASP:OD2	2:W:552:ASN:ND2	2.05	0.88
2:W:408:SER:HA	2:W:451:ASP:HB3	1.54	0.88
2:W:483:ASN:O	2:W:555:ARG:HD3	1.73	0.88
2:Y:496:ARG:N	2:Y:534:VAL:HG21	1.87	0.88
2:U:482:ASP:OD2	2:U:552:ASN:ND2	2.05	0.88
2:Y:408:SER:HA	2:Y:451:ASP:HB3	1.54	0.88
2:X:481:THR:HG21	2:X:496:ARG:NH2	1.87	0.88
2:Y:23:SER:CB	2:Y:483:ASN:HB3	2.04	0.88
2:U:391:LYS:HZ3	2:U:440:ASN:HD21	1.22	0.87
2:X:23:SER:CB	2:X:483:ASN:HB3	2.04	0.87
2:Y:622:GLU:CD	2:Y:645:THR:HA	2.00	0.87
2:Z:483:ASN:O	2:Z:555:ARG:HD3	1.74	0.87
2:U:404:LEU:CG	2:U:554:ARG:NH1	2.00	0.87
2:W:622:GLU:CD	2:W:645:THR:HA	1.99	0.87
2:Y:41:ILE:HD11	2:Y:361:PHE:HB3	1.56	0.87
1:A:157:ILE:CG1	2:U:579:PHE:HB2	1.87	0.87
1:B:157:ILE:HB	2:V:579:PHE:CE2	2.10	0.87
2:X:483:ASN:O	2:X:555:ARG:HD3	1.73	0.87
2:Y:483:ASN:O	2:Y:555:ARG:HD3	1.73	0.87
2:Z:23:SER:CB	2:Z:483:ASN:HB3	2.04	0.87
2:X:408:SER:HA	2:X:451:ASP:HB3	1.54	0.87
2:Z:622:GLU:CD	2:Z:645:THR:HA	2.00	0.87
2:U:23:SER:CB	2:U:483:ASN:HB3	2.04	0.87
2:W:505:LEU:HD13	2:W:525:VAL:HG11	1.57	0.87
2:Z:41:ILE:HD11	2:Z:361:PHE:HB3	1.57	0.87
2:U:408:SER:HA	2:U:451:ASP:HB3	1.54	0.87
2:Z:517:LEU:HD12	2:Z:518:TYR:N	1.90	0.87
2:W:23:SER:CB	2:W:483:ASN:HB3	2.04	0.86
1:C:157:ILE:HG13	2:W:579:PHE:CG	2.08	0.86
2:U:41:ILE:HD11	2:U:361:PHE:HB3	1.57	0.86
2:U:505:LEU:HD13	2:U:525:VAL:HG11	1.57	0.86
2:U:517:LEU:HD12	2:U:518:TYR:N	1.90	0.86
2:V:622:GLU:CD	2:V:645:THR:HA	1.99	0.86
2:X:41:ILE:HD11	2:X:361:PHE:HB3	1.57	0.86
2:V:23:SER:CB	2:V:483:ASN:HB3	2.04	0.86
2:V:391:LYS:NZ	2:V:440:ASN:ND2	2.23	0.86
2:X:622:GLU:CD	2:X:645:THR:HA	1.99	0.86
2:Z:391:LYS:NZ	2:Z:440:ASN:ND2	2.23	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:517:LEU:HB2	2:U:522:ILE:CG2	2.06	0.86
2:X:524:PRO:HB2	2:X:535:LEU:HD12	1.56	0.86
1:B:157:ILE:CG1	2:V:579:PHE:HB2	1.82	0.86
1:D:109:TYR:HB3	1:D:161:ARG:HH22	1.39	0.86
2:U:23:SER:OG	2:U:483:ASN:HB3	1.76	0.86
2:U:391:LYS:NZ	2:U:440:ASN:ND2	2.23	0.86
2:W:391:LYS:HE3	2:W:440:ASN:O	1.76	0.86
2:X:391:LYS:HE3	2:X:440:ASN:O	1.76	0.86
2:V:517:LEU:HB2	2:V:522:ILE:CG2	2.06	0.86
2:Z:517:LEU:HB2	2:Z:522:ILE:CG2	2.06	0.86
1:C:157:ILE:HD12	2:W:579:PHE:HB3	1.55	0.86
2:U:524:PRO:HB2	2:U:535:LEU:HD12	1.57	0.86
2:W:517:LEU:HB2	2:W:522:ILE:CG2	2.06	0.86
2:Y:391:LYS:HE3	2:Y:440:ASN:O	1.76	0.86
2:Y:517:LEU:HD12	2:Y:518:TYR:N	1.90	0.86
2:U:622:GLU:CD	2:U:645:THR:HA	1.99	0.86
2:W:391:LYS:NZ	2:W:440:ASN:ND2	2.23	0.86
2:Y:481:THR:HG21	2:Y:496:ARG:CZ	2.06	0.86
2:Z:23:SER:OG	2:Z:483:ASN:HB3	1.76	0.86
2:Y:23:SER:OG	2:Y:483:ASN:HB3	1.76	0.85
2:Y:391:LYS:NZ	2:Y:440:ASN:ND2	2.23	0.85
2:V:391:LYS:HE3	2:V:440:ASN:O	1.75	0.85
2:X:391:LYS:NZ	2:X:440:ASN:ND2	2.23	0.85
2:V:41:ILE:HD11	2:V:361:PHE:HB3	1.57	0.85
2:W:41:ILE:HD11	2:W:361:PHE:HB3	1.56	0.85
2:X:505:LEU:HD13	2:X:525:VAL:HG11	1.57	0.85
2:X:517:LEU:HD12	2:X:518:TYR:N	1.90	0.85
2:X:517:LEU:HB2	2:X:522:ILE:CG2	2.06	0.85
2:W:23:SER:OG	2:W:483:ASN:HB3	1.76	0.85
2:X:23:SER:CB	2:X:483:ASN:CB	2.55	0.85
2:U:481:THR:HG21	2:U:496:ARG:CZ	2.06	0.85
2:Y:517:LEU:HB2	2:Y:522:ILE:CG2	2.06	0.85
2:V:627:PHE:CZ	2:V:640:LEU:HB3	2.12	0.85
2:X:23:SER:OG	2:X:483:ASN:HB3	1.76	0.85
2:Z:505:LEU:HD13	2:Z:525:VAL:HG11	1.57	0.85
2:U:391:LYS:HE3	2:U:440:ASN:O	1.75	0.84
2:Y:23:SER:CB	2:Y:483:ASN:CB	2.55	0.84
2:W:517:LEU:HD12	2:W:518:TYR:N	1.91	0.84
2:Y:454:TYR:HE2	2:Y:469:PRO:HA	1.42	0.84
2:W:23:SER:CB	2:W:483:ASN:CB	2.55	0.84
2:Y:627:PHE:CZ	2:Y:640:LEU:HB3	2.13	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:481:THR:HG21	2:Z:496:ARG:CZ	2.07	0.84
1:C:157:ILE:CD1	2:W:579:PHE:CB	2.55	0.84
1:C:157:ILE:HD11	2:W:579:PHE:HB3	1.57	0.84
2:V:404:LEU:CG	2:V:554:ARG:NH1	2.00	0.84
2:Z:391:LYS:HE3	2:Z:440:ASN:O	1.75	0.84
2:U:23:SER:CB	2:U:483:ASN:CB	2.56	0.84
2:V:505:LEU:HD13	2:V:525:VAL:HG11	1.57	0.84
2:U:627:PHE:CZ	2:U:640:LEU:HB3	2.12	0.84
2:V:23:SER:OG	2:V:483:ASN:HB3	1.76	0.84
2:V:23:SER:CB	2:V:483:ASN:CB	2.55	0.84
2:V:481:THR:HG21	2:V:496:ARG:CZ	2.08	0.84
2:W:524:PRO:HB2	2:W:535:LEU:HD12	1.57	0.84
2:Z:524:PRO:HB2	2:Z:535:LEU:HD12	1.57	0.84
2:V:517:LEU:HD12	2:V:518:TYR:N	1.91	0.84
2:Y:524:PRO:HB2	2:Y:535:LEU:HD12	1.58	0.84
1:D:156:ASP:HB3	2:X:579:PHE:HE1	1.39	0.84
2:V:524:PRO:HB2	2:V:535:LEU:HD12	1.58	0.84
2:X:627:PHE:CZ	2:X:640:LEU:HB3	2.12	0.84
2:Z:23:SER:CB	2:Z:483:ASN:CB	2.55	0.84
2:W:481:THR:HG21	2:W:496:ARG:CZ	2.08	0.84
2:W:568:SER:O	2:W:571:ARG:HG2	1.78	0.84
2:X:404:LEU:CG	2:X:554:ARG:NH1	2.00	0.84
2:X:454:TYR:HE2	2:X:469:PRO:HA	1.43	0.84
2:Y:505:LEU:HD13	2:Y:525:VAL:HG11	1.56	0.84
2:W:627:PHE:CZ	2:W:640:LEU:HB3	2.12	0.84
2:U:331:PRO:HB2	2:U:334:PHE:HB2	1.60	0.83
2:U:568:SER:O	2:U:571:ARG:HG2	1.78	0.83
2:X:331:PRO:HB2	2:X:334:PHE:HB2	1.60	0.83
2:V:331:PRO:HB2	2:V:334:PHE:HB2	1.60	0.83
2:Z:627:PHE:CZ	2:Z:640:LEU:HB3	2.12	0.83
1:C:109:TYR:HB3	1:C:161:ARG:HH22	1.41	0.83
2:Z:94:PRO:HB2	2:Z:219:ILE:HD12	1.61	0.83
2:W:331:PRO:HB2	2:W:334:PHE:HB2	1.60	0.83
1:D:157:ILE:CD1	2:X:579:PHE:CB	2.57	0.83
2:W:404:LEU:CG	2:W:554:ARG:NH1	2.00	0.83
2:X:539:LYS:HE2	2:X:541:ALA:HA	1.61	0.83
2:X:568:SER:O	2:X:571:ARG:HG2	1.78	0.83
1:A:157:ILE:HB	2:U:579:PHE:CG	2.13	0.83
2:Y:331:PRO:HB2	2:Y:334:PHE:HB2	1.60	0.83
2:X:94:PRO:HB2	2:X:219:ILE:HD12	1.61	0.83
2:Z:568:SER:O	2:Z:571:ARG:HG2	1.78	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:568:SER:O	2:V:571:ARG:HG2	1.78	0.83
2:Z:331:PRO:HB2	2:Z:334:PHE:HB2	1.61	0.82
2:W:614:THR:HB	2:W:620:ARG:HA	1.61	0.82
2:U:94:PRO:HB2	2:U:219:ILE:HD12	1.61	0.82
2:W:94:PRO:HB2	2:W:219:ILE:HD12	1.61	0.82
2:Y:404:LEU:CG	2:Y:554:ARG:NH1	2.00	0.82
2:Y:568:SER:O	2:Y:571:ARG:HG2	1.78	0.82
1:B:109:TYR:HB3	1:B:161:ARG:HH22	1.45	0.82
2:U:379:ALA:HB2	2:U:454:TYR:CZ	2.10	0.82
2:W:539:LYS:HE2	2:W:541:ALA:HA	1.62	0.82
2:Z:454:TYR:HE2	2:Z:469:PRO:HA	1.43	0.82
2:W:454:TYR:HE2	2:W:469:PRO:HA	1.43	0.82
2:X:481:THR:HG21	2:X:496:ARG:CZ	2.09	0.82
2:U:110:TYR:CE1	2:U:178:LEU:O	2.33	0.82
2:U:454:TYR:HE2	2:U:469:PRO:HA	1.43	0.82
2:V:614:THR:HB	2:V:620:ARG:HA	1.61	0.82
2:W:110:TYR:CE1	2:W:178:LEU:O	2.33	0.81
1:E:157:ILE:HB	2:Y:579:PHE:CG	2.15	0.81
2:V:110:TYR:CE1	2:V:178:LEU:O	2.33	0.81
2:V:379:ALA:HB1	2:V:454:TYR:OH	1.74	0.81
1:E:157:ILE:CG1	2:Y:579:PHE:HB3	2.07	0.81
2:V:539:LYS:HE2	2:V:541:ALA:HA	1.62	0.81
2:W:404:LEU:HG	2:W:554:ARG:HH11	1.46	0.81
1:A:109:TYR:HB3	1:A:161:ARG:HH22	1.44	0.81
2:V:404:LEU:HG	2:V:554:ARG:HH11	1.46	0.81
2:U:404:LEU:CD2	2:U:554:ARG:HH12	1.94	0.81
2:W:496:ARG:N	2:W:534:VAL:CG1	2.43	0.81
2:W:547:PRO:O	2:W:553:VAL:HG22	1.81	0.81
2:Y:110:TYR:CE1	2:Y:178:LEU:O	2.33	0.81
2:Y:496:ARG:N	2:Y:534:VAL:CG1	2.44	0.81
2:V:404:LEU:CD2	2:V:554:ARG:HH12	1.94	0.81
2:U:496:ARG:N	2:U:534:VAL:CG1	2.44	0.80
2:V:379:ALA:HB2	2:V:454:TYR:CZ	2.11	0.80
2:X:112:VAL:O	2:X:112:VAL:HG12	1.81	0.80
2:X:110:TYR:CE1	2:X:178:LEU:O	2.33	0.80
2:X:524:PRO:HG2	2:X:535:LEU:CB	2.10	0.80
2:X:614:THR:HB	2:X:620:ARG:HA	1.61	0.80
2:Y:94:PRO:HB2	2:Y:219:ILE:HD12	1.61	0.80
2:Y:614:THR:HB	2:Y:620:ARG:HA	1.62	0.80
2:Z:404:LEU:CD2	2:Z:554:ARG:HH12	1.94	0.80
1:D:157:ILE:CG1	2:X:579:PHE:CB	2.59	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:156:ASP:CB	2:Y:579:PHE:CE1	2.61	0.80
2:Y:23:SER:HB3	2:Y:483:ASN:HB3	1.64	0.80
2:Z:547:PRO:O	2:Z:553:VAL:HG22	1.82	0.80
2:U:524:PRO:CB	2:U:535:LEU:HD12	2.11	0.80
2:U:614:THR:HB	2:U:620:ARG:HA	1.61	0.80
2:V:23:SER:HB3	2:V:483:ASN:HB3	1.64	0.80
2:X:524:PRO:CB	2:X:535:LEU:HD12	2.11	0.80
2:X:547:PRO:O	2:X:553:VAL:HG22	1.82	0.80
2:Y:404:LEU:CD2	2:Y:554:ARG:HH12	1.94	0.80
1:A:157:ILE:CB	2:U:579:PHE:CD2	2.63	0.80
2:Y:112:VAL:O	2:Y:112:VAL:HG12	1.82	0.80
2:Y:547:PRO:O	2:Y:553:VAL:HG22	1.82	0.80
2:Z:110:TYR:CE1	2:Z:178:LEU:O	2.34	0.80
2:V:94:PRO:HB2	2:V:219:ILE:HD12	1.61	0.80
2:X:404:LEU:CD2	2:X:554:ARG:HH12	1.94	0.80
2:V:23:SER:HB3	2:V:559:MET:SD	2.22	0.80
2:V:496:ARG:N	2:V:534:VAL:CG1	2.44	0.80
2:W:379:ALA:HB2	2:W:454:TYR:CZ	2.11	0.80
2:W:450:ILE:H	2:W:540:THR:CG2	1.95	0.80
2:X:496:ARG:N	2:X:534:VAL:CG1	2.44	0.80
2:U:539:LYS:HE2	2:U:541:ALA:HA	1.62	0.80
2:W:23:SER:CB	2:W:559:MET:SD	2.70	0.80
2:W:112:VAL:O	2:W:112:VAL:HG12	1.81	0.80
2:X:379:ALA:HB2	2:X:454:TYR:CZ	2.11	0.80
2:X:404:LEU:HG	2:X:554:ARG:HH11	1.45	0.80
2:V:112:VAL:O	2:V:112:VAL:HG12	1.82	0.80
2:V:450:ILE:H	2:V:540:THR:CG2	1.95	0.80
2:V:454:TYR:HE2	2:V:469:PRO:HA	1.42	0.80
2:W:23:SER:HB3	2:W:483:ASN:HB3	1.64	0.80
2:X:450:ILE:H	2:X:540:THR:CG2	1.95	0.80
2:Z:23:SER:CB	2:Z:559:MET:SD	2.70	0.80
2:Z:23:SER:HB3	2:Z:559:MET:SD	2.22	0.80
2:U:446:THR:CG2	2:U:542:THR:HG21	2.07	0.79
2:U:23:SER:CB	2:U:559:MET:SD	2.70	0.79
2:U:23:SER:HB3	2:U:559:MET:SD	2.22	0.79
2:V:23:SER:CB	2:V:559:MET:SD	2.70	0.79
2:X:23:SER:CB	2:X:559:MET:SD	2.70	0.79
2:Y:23:SER:CB	2:Y:559:MET:SD	2.70	0.79
2:Z:23:SER:HB3	2:Z:483:ASN:HB3	1.64	0.79
2:Z:446:THR:CG2	2:Z:542:THR:HG21	2.06	0.79
2:Z:496:ARG:N	2:Z:534:VAL:CG1	2.44	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:404:LEU:HG	2:U:554:ARG:HH11	1.45	0.79
2:Y:614:THR:CB	2:Y:620:ARG:HA	2.13	0.79
2:Z:524:PRO:CB	2:Z:535:LEU:HD12	2.12	0.79
2:Z:614:THR:HB	2:Z:620:ARG:HA	1.62	0.79
2:V:547:PRO:O	2:V:553:VAL:HG22	1.81	0.79
2:Y:505:LEU:CD1	2:Y:525:VAL:CG1	2.60	0.79
2:U:178:LEU:HD23	2:U:178:LEU:H	1.48	0.79
2:U:547:PRO:O	2:U:553:VAL:HG22	1.81	0.79
2:W:524:PRO:CB	2:W:535:LEU:HD12	2.12	0.79
2:Y:450:ILE:H	2:Y:540:THR:CG2	1.95	0.79
2:U:112:VAL:O	2:U:112:VAL:HG12	1.82	0.79
2:V:505:LEU:CD1	2:V:525:VAL:CG1	2.61	0.79
2:X:23:SER:HB3	2:X:559:MET:SD	2.22	0.79
2:X:479:ALA:HA	2:X:484:VAL:HG11	1.65	0.79
2:Y:524:PRO:CB	2:Y:535:LEU:HD12	2.12	0.79
2:U:524:PRO:HG2	2:U:535:LEU:CB	2.10	0.79
2:W:23:SER:HB3	2:W:559:MET:SD	2.23	0.79
2:X:178:LEU:HD23	2:X:178:LEU:H	1.48	0.79
1:A:157:ILE:CB	2:U:579:PHE:CG	2.66	0.79
2:V:614:THR:CB	2:V:620:ARG:HA	2.13	0.79
2:W:524:PRO:HG2	2:W:535:LEU:CB	2.10	0.79
2:U:23:SER:HB3	2:U:483:ASN:HB3	1.64	0.79
2:Y:23:SER:HB3	2:Y:559:MET:SD	2.22	0.78
2:Y:379:ALA:HB2	2:Y:454:TYR:CZ	2.11	0.78
2:Z:614:THR:CB	2:Z:620:ARG:HA	2.13	0.78
2:X:614:THR:CB	2:X:620:ARG:HA	2.13	0.78
2:Z:404:LEU:CG	2:Z:554:ARG:NH1	2.00	0.78
2:V:524:PRO:CB	2:V:535:LEU:HD12	2.12	0.78
2:W:614:THR:CB	2:W:620:ARG:HA	2.13	0.78
2:X:23:SER:HB3	2:X:483:ASN:HB3	1.64	0.78
1:F:156:ASP:HB3	2:Z:579:PHE:HE1	1.44	0.78
2:U:614:THR:CB	2:U:620:ARG:HA	2.13	0.78
2:Y:450:ILE:HG22	2:Y:540:THR:HG22	1.65	0.78
1:A:157:ILE:CG1	2:U:579:PHE:CG	2.60	0.78
2:U:450:ILE:H	2:U:540:THR:CG2	1.95	0.78
2:U:505:LEU:CD1	2:U:525:VAL:CG1	2.61	0.78
2:V:479:ALA:HA	2:V:484:VAL:HG11	1.65	0.78
2:W:505:LEU:HD11	2:W:525:VAL:HG11	1.64	0.78
2:Y:178:LEU:HD23	2:Y:178:LEU:H	1.48	0.78
2:Y:454:TYR:CE2	2:Y:469:PRO:CA	2.67	0.78
2:W:479:ALA:HA	2:W:484:VAL:HG11	1.66	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:178:LEU:HD23	2:Z:178:LEU:H	1.48	0.78
2:Y:479:ALA:HA	2:Y:484:VAL:HG11	1.65	0.78
2:Z:450:ILE:HG22	2:Z:540:THR:HG22	1.66	0.78
2:Y:172:SER:C	2:Y:174:SER:HA	2.09	0.78
2:U:454:TYR:CE2	2:U:469:PRO:CA	2.67	0.78
2:X:450:ILE:HG22	2:X:540:THR:HG22	1.66	0.78
2:Z:505:LEU:CD1	2:Z:525:VAL:CG1	2.61	0.78
2:Z:539:LYS:HE2	2:Z:541:ALA:HA	1.64	0.78
2:Z:595:ASN:HB2	2:Z:601:ILE:HD12	1.66	0.78
2:V:524:PRO:HG2	2:V:535:LEU:CB	2.10	0.77
2:X:505:LEU:CD1	2:X:525:VAL:CG1	2.61	0.77
2:V:454:TYR:CE2	2:V:469:PRO:CA	2.67	0.77
2:V:518:TYR:OH	2:V:535:LEU:HB3	1.84	0.77
2:X:84:VAL:HG13	2:X:85:ASP:O	1.85	0.77
2:Y:407:CYS:O	2:Y:451:ASP:CB	2.32	0.77
2:Z:112:VAL:O	2:Z:112:VAL:HG12	1.81	0.77
2:U:505:LEU:HD11	2:U:525:VAL:HG11	1.65	0.77
2:W:172:SER:C	2:W:174:SER:HA	2.09	0.77
2:W:450:ILE:HG22	2:W:540:THR:HG22	1.66	0.77
2:W:518:TYR:OH	2:W:535:LEU:HB3	1.85	0.77
2:Z:454:TYR:CE2	2:Z:469:PRO:CA	2.68	0.77
2:U:84:VAL:HG13	2:U:85:ASP:O	1.85	0.77
2:U:481:THR:CG2	2:U:496:ARG:NH2	2.47	0.77
2:W:404:LEU:CD2	2:W:554:ARG:HH12	1.95	0.77
2:Y:481:THR:CG2	2:Y:496:ARG:NH2	2.48	0.77
2:Z:407:CYS:O	2:Z:451:ASP:CB	2.33	0.77
2:Z:450:ILE:H	2:Z:540:THR:CG2	1.95	0.77
2:U:450:ILE:HG22	2:U:540:THR:HG22	1.66	0.77
2:V:505:LEU:HD11	2:V:525:VAL:HG11	1.64	0.77
2:U:407:CYS:O	2:U:451:ASP:HB2	1.85	0.77
2:V:178:LEU:HD23	2:V:178:LEU:H	1.49	0.77
2:V:450:ILE:HG22	2:V:540:THR:CG2	2.15	0.77
2:W:407:CYS:O	2:W:451:ASP:CB	2.33	0.77
2:W:449:ALA:HA	2:W:540:THR:HG23	1.67	0.77
2:X:518:TYR:OH	2:X:535:LEU:HB3	1.85	0.77
2:Y:84:VAL:HG13	2:Y:85:ASP:O	1.85	0.77
2:U:595:ASN:HB2	2:U:601:ILE:HD12	1.67	0.77
2:U:628:TYR:HD2	2:U:639:THR:HG22	1.50	0.77
2:X:407:CYS:O	2:X:451:ASP:HB2	1.85	0.77
2:Z:524:PRO:HG2	2:Z:535:LEU:CB	2.10	0.77
2:V:407:CYS:O	2:V:451:ASP:CB	2.33	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:407:CYS:O	2:Y:451:ASP:HB2	1.84	0.77
2:Z:479:ALA:HA	2:Z:484:VAL:HG11	1.65	0.77
2:Z:505:LEU:HD11	2:Z:525:VAL:HG11	1.64	0.77
2:U:172:SER:C	2:U:174:SER:HA	2.10	0.77
2:X:505:LEU:HD11	2:X:525:VAL:HG11	1.64	0.77
2:X:557:PHE:CZ	2:X:638:ILE:HG22	2.20	0.77
2:U:570:TYR:HD2	2:U:584:PHE:CE2	2.03	0.77
2:V:450:ILE:HG22	2:V:540:THR:HG22	1.65	0.77
2:V:557:PHE:CZ	2:V:638:ILE:HG22	2.20	0.77
2:W:451:ASP:OD1	2:W:474:ILE:HD13	1.85	0.77
2:X:178:LEU:H	2:X:178:LEU:CD2	1.98	0.77
2:X:454:TYR:CE2	2:X:469:PRO:CA	2.67	0.77
2:Y:524:PRO:HG2	2:Y:535:LEU:CB	2.10	0.77
2:Y:595:ASN:HB2	2:Y:601:ILE:HD12	1.67	0.77
2:Y:628:TYR:HD2	2:Y:639:THR:HG22	1.49	0.77
2:Z:84:VAL:HG13	2:Z:85:ASP:O	1.85	0.77
2:U:479:ALA:HA	2:U:484:VAL:HG11	1.65	0.76
2:U:518:TYR:OH	2:U:535:LEU:HB3	1.85	0.76
2:W:178:LEU:H	2:W:178:LEU:HD23	1.49	0.76
2:W:450:ILE:HG22	2:W:540:THR:CG2	2.15	0.76
2:Y:557:PHE:CZ	2:Y:638:ILE:HG22	2.20	0.76
2:Z:451:ASP:OD1	2:Z:474:ILE:HD13	1.85	0.76
2:Z:557:PHE:CZ	2:Z:638:ILE:HG22	2.20	0.76
2:V:407:CYS:O	2:V:451:ASP:HB2	1.85	0.76
2:V:570:TYR:HD2	2:V:584:PHE:CE2	2.04	0.76
2:X:449:ALA:HA	2:X:540:THR:HG23	1.67	0.76
2:X:450:ILE:HG22	2:X:540:THR:CG2	2.15	0.76
2:Z:172:SER:C	2:Z:174:SER:HA	2.09	0.76
2:Z:178:LEU:H	2:Z:178:LEU:CD2	1.98	0.76
2:Z:449:ALA:HA	2:Z:540:THR:HG23	1.66	0.76
2:Z:518:TYR:OH	2:Z:535:LEU:HB3	1.85	0.76
2:U:407:CYS:O	2:U:451:ASP:CB	2.33	0.76
2:V:449:ALA:HA	2:V:540:THR:HG23	1.66	0.76
2:W:24:THR:O	2:W:371:GLN:OE1	2.03	0.76
2:W:407:CYS:O	2:W:451:ASP:HB2	1.85	0.76
2:Y:451:ASP:OD1	2:Y:474:ILE:HD13	1.86	0.76
2:U:450:ILE:HG22	2:U:540:THR:CG2	2.15	0.76
2:U:557:PHE:CZ	2:U:638:ILE:HG22	2.20	0.76
2:V:84:VAL:HG13	2:V:85:ASP:O	1.85	0.76
2:V:172:SER:C	2:V:174:SER:HA	2.09	0.76
2:V:451:ASP:OD1	2:V:474:ILE:HD13	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:407:CYS:O	2:X:451:ASP:CB	2.32	0.76
2:Y:450:ILE:CG1	2:Y:451:ASP:H	1.89	0.76
2:Z:112:VAL:O	2:Z:131:ILE:O	2.04	0.76
2:U:110:TYR:HE1	2:U:178:LEU:O	1.68	0.76
2:V:595:ASN:HB2	2:V:601:ILE:HD12	1.67	0.76
2:W:84:VAL:HG13	2:W:85:ASP:O	1.85	0.76
2:X:172:SER:C	2:X:174:SER:HA	2.10	0.76
2:Y:450:ILE:HG22	2:Y:540:THR:CG2	2.15	0.76
2:Z:450:ILE:HG22	2:Z:540:THR:CG2	2.15	0.76
2:U:171:ILE:HG22	2:U:172:SER:H	1.50	0.76
2:W:570:TYR:HD2	2:W:584:PHE:CE2	2.03	0.76
2:Y:178:LEU:H	2:Y:178:LEU:CD2	1.98	0.76
2:Z:379:ALA:HB2	2:Z:454:TYR:CZ	2.11	0.76
2:U:178:LEU:H	2:U:178:LEU:CD2	1.98	0.76
2:W:178:LEU:H	2:W:178:LEU:CD2	1.99	0.76
2:W:450:ILE:H	2:W:540:THR:HG23	1.51	0.76
2:X:451:ASP:OD1	2:X:474:ILE:HD13	1.86	0.76
2:X:595:ASN:HB2	2:X:601:ILE:HD12	1.67	0.76
2:Z:171:ILE:HG22	2:Z:172:SER:H	1.50	0.76
2:Z:407:CYS:O	2:Z:451:ASP:HB2	1.85	0.76
2:Z:481:THR:CG2	2:Z:496:ARG:NH2	2.49	0.76
2:Z:628:TYR:HD2	2:Z:639:THR:HG22	1.51	0.76
2:V:112:VAL:O	2:V:131:ILE:O	2.04	0.76
2:Y:518:TYR:OH	2:Y:535:LEU:HB3	1.85	0.76
2:Z:379:ALA:HB1	2:Z:454:TYR:OH	1.73	0.76
2:U:112:VAL:O	2:U:131:ILE:O	2.04	0.76
2:U:451:ASP:OD1	2:U:474:ILE:HD13	1.86	0.76
2:W:454:TYR:CE2	2:W:469:PRO:CA	2.68	0.76
2:W:557:PHE:CZ	2:W:638:ILE:HG22	2.21	0.76
2:Y:570:TYR:HD2	2:Y:584:PHE:CE2	2.04	0.76
2:Z:570:TYR:HD2	2:Z:584:PHE:CE2	2.04	0.76
2:V:628:TYR:HD2	2:V:639:THR:HG22	1.50	0.75
2:Y:112:VAL:O	2:Y:131:ILE:O	2.04	0.75
2:Y:446:THR:CG2	2:Y:542:THR:HG21	2.07	0.75
2:Z:404:LEU:HG	2:Z:554:ARG:HH11	1.46	0.75
2:W:112:VAL:O	2:W:131:ILE:O	2.04	0.75
2:W:595:ASN:HB2	2:W:601:ILE:HD12	1.67	0.75
2:Y:449:ALA:HA	2:Y:540:THR:HG23	1.66	0.75
2:W:110:TYR:HE1	2:W:178:LEU:O	1.68	0.75
2:X:450:ILE:H	2:X:540:THR:HG23	1.51	0.75
2:W:517:LEU:CD1	2:W:524:PRO:HG3	2.16	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:24:THR:O	2:X:371:GLN:OE1	2.04	0.75
2:U:517:LEU:CD1	2:U:524:PRO:HG3	2.17	0.75
2:V:24:THR:O	2:V:371:GLN:OE1	2.04	0.75
2:V:450:ILE:H	2:V:540:THR:HG23	1.51	0.75
2:V:171:ILE:HG22	2:V:172:SER:H	1.50	0.75
2:X:171:ILE:HG22	2:X:172:SER:H	1.51	0.75
2:Z:517:LEU:CD1	2:Z:524:PRO:HG3	2.16	0.75
2:V:110:TYR:HE1	2:V:178:LEU:O	1.69	0.75
2:V:481:THR:CG2	2:V:496:ARG:NH2	2.49	0.75
2:X:112:VAL:O	2:X:131:ILE:O	2.05	0.75
2:X:570:TYR:HD2	2:X:584:PHE:CE2	2.04	0.75
2:V:517:LEU:CD1	2:V:524:PRO:HG3	2.17	0.75
2:X:391:LYS:HZ3	2:X:440:ASN:HD21	1.35	0.75
2:X:517:LEU:CD1	2:X:524:PRO:HG3	2.16	0.75
2:Y:450:ILE:H	2:Y:540:THR:HG23	1.51	0.75
2:U:24:THR:O	2:U:371:GLN:OE1	2.04	0.74
2:W:505:LEU:CD1	2:W:525:VAL:CG1	2.61	0.74
2:X:26:THR:HA	2:X:77:ASP:OD1	1.87	0.74
2:Y:26:THR:HA	2:Y:77:ASP:OD1	1.87	0.74
2:U:22:ASN:O	2:U:23:SER:OG	2.04	0.74
2:V:26:THR:HA	2:V:77:ASP:OD1	1.87	0.74
2:V:178:LEU:H	2:V:178:LEU:CD2	1.99	0.74
2:Y:24:THR:O	2:Y:371:GLN:OE1	2.04	0.74
2:Y:517:LEU:CD1	2:Y:524:PRO:HG3	2.16	0.74
2:Z:24:THR:O	2:Z:371:GLN:OE1	2.03	0.74
2:U:449:ALA:HA	2:U:540:THR:HG23	1.67	0.74
2:X:628:TYR:HD2	2:X:639:THR:HG22	1.51	0.74
2:Z:110:TYR:HE1	2:Z:178:LEU:O	1.69	0.74
2:U:450:ILE:H	2:U:540:THR:HG23	1.51	0.74
2:V:523:ASN:HD21	2:V:538:ASP:HB3	1.53	0.74
2:W:171:ILE:HG22	2:W:172:SER:H	1.51	0.74
2:X:409:PRO:O	2:X:454:TYR:OH	2.06	0.74
2:W:446:THR:CG2	2:W:542:THR:HG21	2.07	0.74
2:W:523:ASN:HD21	2:W:538:ASP:HB3	1.53	0.74
2:V:496:ARG:HG3	2:V:496:ARG:O	1.88	0.74
2:X:556:LEU:HD23	2:X:560:LEU:CD2	2.18	0.74
2:Z:26:THR:HA	2:Z:77:ASP:OD1	1.87	0.74
2:Z:450:ILE:H	2:Z:540:THR:HG23	1.51	0.74
2:Z:450:ILE:CG1	2:Z:451:ASP:H	1.89	0.74
2:W:26:THR:HA	2:W:77:ASP:OD1	1.88	0.74
2:Y:171:ILE:HG22	2:Y:172:SER:H	1.51	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:379:ALA:HB1	2:W:454:TYR:OH	1.74	0.74
2:W:450:ILE:CG1	2:W:451:ASP:H	1.88	0.74
2:Y:110:TYR:HE1	2:Y:178:LEU:O	1.69	0.74
2:V:450:ILE:CG1	2:V:451:ASP:H	1.89	0.73
2:V:517:LEU:HD22	2:V:524:PRO:HB3	1.70	0.73
2:X:627:PHE:CZ	2:X:640:LEU:HD23	2.23	0.73
2:U:26:THR:HA	2:U:77:ASP:OD1	1.87	0.73
2:U:450:ILE:CG1	2:U:451:ASP:H	1.89	0.73
2:U:521:ALA:HB1	2:U:540:THR:HA	1.70	0.73
2:U:523:ASN:HD21	2:U:538:ASP:HB3	1.53	0.73
2:W:409:PRO:O	2:W:454:TYR:OH	2.06	0.73
2:W:556:LEU:HD23	2:W:560:LEU:CD2	2.18	0.73
2:Y:505:LEU:HD11	2:Y:525:VAL:HG11	1.64	0.73
2:Z:627:PHE:CZ	2:Z:640:LEU:HD23	2.23	0.73
1:C:157:ILE:HB	2:W:579:PHE:CD2	2.22	0.73
2:V:446:THR:CG2	2:V:542:THR:HG21	2.07	0.73
2:W:496:ARG:HG3	2:W:496:ARG:O	1.88	0.73
2:Y:523:ASN:HD21	2:Y:538:ASP:HB3	1.53	0.73
2:V:112:VAL:O	2:V:112:VAL:HG13	1.88	0.73
2:V:409:PRO:O	2:V:454:TYR:OH	2.06	0.73
2:W:481:THR:CG2	2:W:496:ARG:NH2	2.51	0.73
2:X:517:LEU:HD22	2:X:524:PRO:HB3	1.70	0.73
2:W:628:TYR:HD2	2:W:639:THR:HG22	1.51	0.73
2:Y:409:PRO:O	2:Y:454:TYR:OH	2.06	0.73
2:Y:517:LEU:HD22	2:Y:524:PRO:HB3	1.70	0.73
2:Z:391:LYS:HZ1	2:Z:440:ASN:ND2	1.84	0.73
2:Z:523:ASN:HD21	2:Z:538:ASP:HB3	1.53	0.73
2:X:454:TYR:HD2	2:X:469:PRO:HA	1.53	0.73
2:Y:627:PHE:CZ	2:Y:640:LEU:HD23	2.24	0.73
2:U:526:THR:CG2	2:U:535:LEU:HD21	2.19	0.73
2:W:112:VAL:O	2:W:112:VAL:HG13	1.88	0.73
2:X:523:ASN:HD21	2:X:538:ASP:HB3	1.53	0.73
2:V:521:ALA:HB1	2:V:540:THR:HA	1.70	0.73
2:W:391:LYS:HZ3	2:W:440:ASN:HD21	1.37	0.73
2:Y:404:LEU:HG	2:Y:554:ARG:HH11	1.45	0.73
2:Y:556:LEU:HD23	2:Y:560:LEU:CD2	2.19	0.73
2:Z:526:THR:CG2	2:Z:535:LEU:HD11	2.19	0.73
1:F:108:GLN:HB3	1:F:200:PRO:HD2	1.70	0.73
2:W:517:LEU:HD22	2:W:524:PRO:HB3	1.71	0.73
2:W:627:PHE:CZ	2:W:640:LEU:HD23	2.23	0.73
2:Z:409:PRO:O	2:Z:454:TYR:OH	2.05	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:157:ILE:CB	2:Z:579:PHE:CD2	2.64	0.73
2:U:483:ASN:O	2:U:555:ARG:CD	2.37	0.73
2:V:526:THR:CG2	2:V:535:LEU:HD21	2.19	0.73
2:W:51:VAL:HG13	2:W:55:GLY:O	1.89	0.73
2:X:481:THR:CG2	2:X:496:ARG:NH2	2.52	0.73
2:Y:391:LYS:HZ3	2:Y:440:ASN:HD21	1.37	0.73
2:U:526:THR:CG2	2:U:535:LEU:HD11	2.19	0.72
2:W:526:THR:CG2	2:W:535:LEU:HD21	2.19	0.72
2:X:51:VAL:HG13	2:X:55:GLY:O	1.90	0.72
2:Y:410:PRO:O	2:Y:413:THR:HG22	1.89	0.72
2:U:409:PRO:O	2:U:454:TYR:OH	2.06	0.72
2:U:496:ARG:O	2:U:496:ARG:HG3	1.89	0.72
2:V:556:LEU:HD23	2:V:560:LEU:CD2	2.18	0.72
2:V:627:PHE:CZ	2:V:640:LEU:HD23	2.23	0.72
2:Y:483:ASN:O	2:Y:555:ARG:CD	2.38	0.72
2:Y:517:LEU:O	2:Y:520:GLU:HB3	1.89	0.72
2:Z:410:PRO:O	2:Z:413:THR:HG22	1.89	0.72
2:U:556:LEU:HD23	2:U:560:LEU:CD2	2.18	0.72
2:V:51:VAL:HG13	2:V:55:GLY:O	1.89	0.72
2:Z:112:VAL:O	2:Z:112:VAL:HG13	1.88	0.72
2:U:517:LEU:HD22	2:U:524:PRO:HB3	1.71	0.72
2:X:526:THR:CG2	2:X:535:LEU:HD21	2.19	0.72
2:Y:526:THR:CG2	2:Y:535:LEU:HD21	2.19	0.72
2:Z:526:THR:CG2	2:Z:535:LEU:HD21	2.19	0.72
2:V:483:ASN:O	2:V:555:ARG:CD	2.37	0.72
2:W:410:PRO:O	2:W:413:THR:HG22	1.89	0.72
2:X:22:ASN:O	2:X:23:SER:OG	2.04	0.72
2:X:409:PRO:C	2:X:454:TYR:HE1	1.97	0.72
2:X:446:THR:CG2	2:X:542:THR:HG21	2.07	0.72
2:Y:409:PRO:HD2	2:Y:451:ASP:O	1.88	0.72
2:Y:526:THR:CG2	2:Y:535:LEU:HD11	2.19	0.72
2:Y:564:ILE:HD11	2:Y:642:PHE:HB2	1.72	0.72
2:Z:564:ILE:HD11	2:Z:642:PHE:HB2	1.71	0.72
2:U:627:PHE:CZ	2:U:640:LEU:HD23	2.23	0.72
2:Z:483:ASN:O	2:Z:555:ARG:CD	2.38	0.72
2:Z:517:LEU:HD22	2:Z:524:PRO:HB3	1.71	0.72
2:V:410:PRO:O	2:V:413:THR:HG22	1.90	0.72
2:Z:514:ARG:HG3	2:Z:535:LEU:CD1	2.20	0.72
2:U:564:ILE:HD11	2:U:642:PHE:HB2	1.71	0.72
2:X:427:VAL:CG1	2:X:516:ARG:HH21	1.93	0.72
2:Y:112:VAL:O	2:Y:112:VAL:HG13	1.88	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:410:PRO:O	2:U:413:THR:HG22	1.89	0.72
2:V:557:PHE:CE1	2:V:629:ILE:HB	2.25	0.72
2:X:110:TYR:HE1	2:X:178:LEU:O	1.68	0.72
2:Y:413:THR:HG23	2:Y:414:VAL:HG23	1.72	0.72
2:Z:521:ALA:HB1	2:Z:540:THR:HA	1.70	0.72
2:U:391:LYS:HZ3	2:U:440:ASN:ND2	1.81	0.72
2:U:590:GLN:O	2:U:593:GLN:HG3	1.90	0.72
2:U:630:GLN:HG3	2:U:636:ASN:O	1.90	0.72
2:W:409:PRO:C	2:W:454:TYR:HE1	1.98	0.72
2:X:410:PRO:O	2:X:413:THR:HG22	1.90	0.72
2:X:564:ILE:HD11	2:X:642:PHE:HB2	1.72	0.72
2:Y:409:PRO:C	2:Y:454:TYR:HE1	1.98	0.72
2:Z:496:ARG:O	2:Z:496:ARG:HG3	1.89	0.72
2:Z:517:LEU:O	2:Z:520:GLU:HB3	1.90	0.72
2:Z:590:GLN:O	2:Z:593:GLN:HG3	1.90	0.72
1:C:157:ILE:CG1	2:W:579:PHE:HB3	2.17	0.71
2:U:112:VAL:O	2:U:112:VAL:HG13	1.88	0.71
2:V:517:LEU:O	2:V:520:GLU:HB3	1.90	0.71
2:V:590:GLN:O	2:V:593:GLN:HG3	1.90	0.71
2:W:499:ILE:HD13	2:W:499:ILE:H	1.55	0.71
2:W:630:GLN:HG3	2:W:636:ASN:O	1.90	0.71
2:X:23:SER:CB	2:X:483:ASN:HB2	2.20	0.71
2:X:36:GLY:HA2	2:X:82:ARG:HD2	1.72	0.71
2:X:483:ASN:O	2:X:555:ARG:CD	2.38	0.71
2:X:630:GLN:HG3	2:X:636:ASN:O	1.90	0.71
2:Y:521:ALA:HB1	2:Y:540:THR:HA	1.70	0.71
2:U:382:SER:HB2	2:U:385:THR:HG22	1.72	0.71
2:V:526:THR:CG2	2:V:535:LEU:HD11	2.19	0.71
2:W:31:GLY:HA3	2:W:64:TYR:CD2	2.25	0.71
2:W:521:ALA:HB1	2:W:540:THR:HA	1.71	0.71
2:W:614:THR:HG21	2:W:619:ASP:O	1.90	0.71
2:X:112:VAL:O	2:X:112:VAL:HG13	1.88	0.71
2:X:499:ILE:HD13	2:X:499:ILE:H	1.56	0.71
2:X:614:THR:HG21	2:X:619:ASP:O	1.90	0.71
2:U:379:ALA:HB1	2:U:454:TYR:OH	1.73	0.71
2:U:557:PHE:CE1	2:U:629:ILE:HB	2.26	0.71
2:X:521:ALA:HB1	2:X:540:THR:HA	1.70	0.71
2:X:557:PHE:CE1	2:X:629:ILE:HB	2.25	0.71
2:V:630:GLN:HG3	2:V:636:ASN:O	1.90	0.71
2:W:590:GLN:O	2:W:593:GLN:HG3	1.90	0.71
2:X:394:VAL:HG11	2:X:443:ILE:HD12	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:499:ILE:H	2:Y:499:ILE:HD13	1.55	0.71
2:Z:413:THR:HG23	2:Z:414:VAL:HG23	1.72	0.71
2:U:51:VAL:HG13	2:U:55:GLY:O	1.90	0.71
2:V:614:THR:HG21	2:V:619:ASP:O	1.91	0.71
2:W:394:VAL:HG11	2:W:443:ILE:HD12	1.72	0.71
2:X:31:GLY:HA3	2:X:64:TYR:CD2	2.26	0.71
2:X:382:SER:HB2	2:X:385:THR:HG22	1.72	0.71
2:Y:51:VAL:HG13	2:Y:55:GLY:O	1.89	0.71
2:Y:630:GLN:HG3	2:Y:636:ASN:O	1.90	0.71
2:Z:51:VAL:HG13	2:Z:55:GLY:O	1.89	0.71
2:U:583:SER:O	2:U:586:THR:HG22	1.91	0.71
2:V:23:SER:CB	2:V:483:ASN:HB2	2.21	0.71
2:V:36:GLY:HA2	2:V:82:ARG:HD2	1.72	0.71
2:V:499:ILE:H	2:V:499:ILE:HD13	1.55	0.71
2:V:583:SER:O	2:V:586:THR:HG22	1.91	0.71
2:W:51:VAL:CA	2:W:55:GLY:HA2	2.19	0.71
2:W:517:LEU:O	2:W:520:GLU:HB3	1.89	0.71
2:X:483:ASN:O	2:X:555:ARG:CG	2.39	0.71
2:X:556:LEU:O	2:X:560:LEU:HD23	1.91	0.71
2:Y:114:ASP:OD2	2:Y:175:SER:HB2	1.91	0.71
2:Z:382:SER:HB2	2:Z:385:THR:HG22	1.72	0.71
2:U:36:GLY:HA2	2:U:82:ARG:HD2	1.73	0.71
2:U:394:VAL:HG11	2:U:443:ILE:HD12	1.73	0.71
2:U:517:LEU:O	2:U:520:GLU:HB3	1.89	0.71
2:V:391:LYS:HZ1	2:V:440:ASN:ND2	1.87	0.71
2:W:564:ILE:HD11	2:W:642:PHE:HB2	1.71	0.71
2:Y:394:VAL:HG11	2:Y:443:ILE:HD12	1.73	0.71
2:Y:454:TYR:HE2	2:Y:469:PRO:CA	2.03	0.71
2:Y:496:ARG:HG3	2:Y:496:ARG:O	1.88	0.71
2:Y:614:THR:HG21	2:Y:619:ASP:O	1.91	0.71
2:Z:630:GLN:HG3	2:Z:636:ASN:O	1.90	0.71
2:V:22:ASN:O	2:V:23:SER:OG	2.04	0.71
2:V:394:VAL:HG11	2:V:443:ILE:HD12	1.73	0.71
2:V:413:THR:HG23	2:V:414:VAL:HG23	1.72	0.71
2:W:514:ARG:HG3	2:W:535:LEU:CD1	2.20	0.71
2:V:564:ILE:HD11	2:V:642:PHE:HB2	1.72	0.71
2:W:521:ALA:HB1	2:W:539:LYS:O	1.91	0.71
2:W:557:PHE:CE1	2:W:629:ILE:HB	2.26	0.71
2:X:496:ARG:HG3	2:X:496:ARG:O	1.89	0.71
2:X:526:THR:CG2	2:X:535:LEU:HD11	2.19	0.71
2:U:114:ASP:OD2	2:U:175:SER:HB2	1.91	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:556:LEU:O	2:U:560:LEU:HD23	1.91	0.71
2:V:409:PRO:HD2	2:V:451:ASP:O	1.88	0.71
2:W:483:ASN:O	2:W:555:ARG:CD	2.37	0.71
2:W:526:THR:CG2	2:W:535:LEU:HD11	2.19	0.71
2:W:583:SER:O	2:W:586:THR:HG22	1.91	0.71
2:Y:382:SER:HB2	2:Y:385:THR:HG22	1.71	0.71
2:Y:556:LEU:O	2:Y:560:LEU:HD23	1.91	0.71
2:Y:557:PHE:CE1	2:Y:629:ILE:HB	2.26	0.71
2:Z:36:GLY:HA2	2:Z:82:ARG:HD2	1.72	0.71
2:Z:394:VAL:HG11	2:Z:443:ILE:HD12	1.73	0.71
2:Z:583:SER:O	2:Z:586:THR:HG22	1.91	0.71
2:W:406:LEU:HD11	2:W:475:ALA:HB2	1.73	0.70
2:W:556:LEU:O	2:W:560:LEU:HD23	1.91	0.70
2:W:576:ASN:HB3	2:W:620:ARG:HH22	1.56	0.70
2:X:406:LEU:HD11	2:X:475:ALA:HB2	1.73	0.70
2:Y:31:GLY:HA3	2:Y:64:TYR:CD2	2.25	0.70
2:Y:36:GLY:HA2	2:Y:82:ARG:HD2	1.72	0.70
2:U:406:LEU:HD11	2:U:475:ALA:HB2	1.73	0.70
2:V:514:ARG:HG3	2:V:535:LEU:CD1	2.20	0.70
2:W:114:ASP:OD2	2:W:175:SER:HB2	1.91	0.70
2:W:413:THR:HG23	2:W:414:VAL:HG23	1.71	0.70
2:Y:23:SER:CB	2:Y:483:ASN:HB2	2.21	0.70
2:Y:521:ALA:HB1	2:Y:539:LYS:O	1.91	0.70
2:Y:559:MET:O	2:Y:562:THR:HG22	1.91	0.70
2:Z:614:THR:HG21	2:Z:619:ASP:O	1.91	0.70
2:U:409:PRO:HD2	2:U:451:ASP:O	1.89	0.70
2:U:614:THR:HG21	2:U:619:ASP:O	1.91	0.70
2:V:521:ALA:HB1	2:V:539:LYS:O	1.91	0.70
2:X:521:ALA:HB1	2:X:539:LYS:O	1.92	0.70
2:X:576:ASN:HB3	2:X:620:ARG:HH22	1.57	0.70
2:Y:590:GLN:O	2:Y:593:GLN:HG3	1.90	0.70
2:Z:547:PRO:O	2:Z:553:VAL:CG2	2.39	0.70
2:Z:556:LEU:HD23	2:Z:560:LEU:CD2	2.18	0.70
2:Z:557:PHE:CE1	2:Z:629:ILE:HB	2.26	0.70
2:U:499:ILE:HD13	2:U:499:ILE:H	1.56	0.70
2:V:382:SER:HB2	2:V:385:THR:HG22	1.71	0.70
2:W:409:PRO:HD2	2:W:451:ASP:O	1.88	0.70
2:W:454:TYR:HD2	2:W:469:PRO:HA	1.53	0.70
2:W:483:ASN:O	2:W:555:ARG:CG	2.39	0.70
2:X:413:THR:HG23	2:X:414:VAL:HG23	1.72	0.70
2:X:450:ILE:CG1	2:X:451:ASP:H	1.89	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:406:LEU:HD11	2:Y:475:ALA:HB2	1.73	0.70
2:Z:31:GLY:HA3	2:Z:64:TYR:CD2	2.25	0.70
2:Z:499:ILE:HD13	2:Z:499:ILE:H	1.56	0.70
2:Z:556:LEU:O	2:Z:560:LEU:HD23	1.90	0.70
1:E:156:ASP:CB	2:Y:579:PHE:HE1	2.01	0.70
2:U:521:ALA:HB1	2:U:539:LYS:O	1.91	0.70
2:V:31:GLY:HA3	2:V:64:TYR:CD2	2.25	0.70
2:W:391:LYS:HZ1	2:W:440:ASN:ND2	1.88	0.70
2:X:547:PRO:O	2:X:553:VAL:CG2	2.39	0.70
2:Z:47:GLU:HG3	2:Z:69:MET:HG3	1.73	0.70
2:U:547:PRO:O	2:U:553:VAL:CG2	2.39	0.70
2:U:576:ASN:HB3	2:U:620:ARG:HH22	1.56	0.70
2:V:51:VAL:CA	2:V:55:GLY:HA2	2.19	0.70
2:V:556:LEU:O	2:V:560:LEU:HD23	1.91	0.70
2:X:517:LEU:O	2:X:520:GLU:HB3	1.89	0.70
2:X:590:GLN:O	2:X:593:GLN:HG3	1.90	0.70
2:Y:22:ASN:O	2:Y:23:SER:OG	2.05	0.70
2:Z:114:ASP:OD2	2:Z:175:SER:HB2	1.91	0.70
2:V:406:LEU:HD11	2:V:475:ALA:HB2	1.74	0.70
2:V:483:ASN:O	2:V:555:ARG:CG	2.39	0.70
2:W:36:GLY:HA2	2:W:82:ARG:HD2	1.72	0.70
2:X:454:TYR:HE2	2:X:469:PRO:CA	2.03	0.70
2:Y:576:ASN:HB3	2:Y:620:ARG:HH22	1.56	0.70
2:Y:583:SER:O	2:Y:586:THR:HG22	1.91	0.70
2:Z:521:ALA:HB1	2:Z:539:LYS:O	1.91	0.70
2:U:483:ASN:O	2:U:555:ARG:CG	2.39	0.70
2:X:559:MET:O	2:X:562:THR:HG22	1.92	0.70
2:Y:547:PRO:O	2:Y:553:VAL:CG2	2.39	0.70
2:Z:406:LEU:HD11	2:Z:475:ALA:HB2	1.73	0.70
2:Z:454:TYR:HE2	2:Z:469:PRO:CA	2.04	0.70
2:Z:514:ARG:CG	2:Z:535:LEU:HD13	2.22	0.70
1:F:124:THR:HG21	1:F:130:MET:HG2	1.73	0.70
2:U:47:GLU:HG3	2:U:69:MET:HG3	1.74	0.70
2:U:413:THR:HG23	2:U:414:VAL:HG23	1.72	0.70
2:V:391:LYS:HZ3	2:V:440:ASN:HD21	1.39	0.70
2:W:382:SER:HB2	2:W:385:THR:HG22	1.72	0.70
2:Z:559:MET:O	2:Z:562:THR:HG22	1.91	0.70
2:U:23:SER:CB	2:U:483:ASN:HB2	2.21	0.70
2:W:23:SER:CB	2:W:483:ASN:HB2	2.20	0.70
2:X:114:ASP:OD2	2:X:175:SER:HB2	1.91	0.70
2:Z:483:ASN:O	2:Z:555:ARG:CG	2.39	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:454:TYR:HE2	2:U:469:PRO:CA	2.03	0.69
2:V:454:TYR:HE2	2:V:469:PRO:CA	2.03	0.69
2:W:547:PRO:O	2:W:553:VAL:CG2	2.38	0.69
2:W:559:MET:O	2:W:562:THR:HG22	1.92	0.69
2:Z:409:PRO:HD2	2:Z:451:ASP:O	1.88	0.69
2:Z:524:PRO:CG	2:Z:535:LEU:HD12	2.22	0.69
2:U:524:PRO:CG	2:U:535:LEU:HD12	2.22	0.69
2:U:31:GLY:HA3	2:U:64:TYR:CD2	2.26	0.69
2:V:547:PRO:O	2:V:553:VAL:CG2	2.39	0.69
2:W:427:VAL:CG1	2:W:516:ARG:HH21	1.94	0.69
2:X:23:SER:HB3	2:X:483:ASN:CB	2.22	0.69
2:Y:514:ARG:CG	2:Y:535:LEU:HD13	2.22	0.69
2:V:559:MET:O	2:V:562:THR:HG22	1.92	0.69
2:V:576:ASN:HB3	2:V:620:ARG:HH22	1.56	0.69
2:X:583:SER:O	2:X:586:THR:HG22	1.91	0.69
2:Y:483:ASN:O	2:Y:555:ARG:CG	2.39	0.69
2:Z:576:ASN:HB3	2:Z:620:ARG:HH22	1.56	0.69
2:U:55:GLY:O	2:U:65:PHE:CE1	2.46	0.69
2:U:228:GLY:CA	2:U:345:SER:HB3	2.23	0.69
2:U:559:MET:O	2:U:562:THR:HG22	1.91	0.69
2:V:427:VAL:CG1	2:V:516:ARG:HH21	1.93	0.69
2:W:524:PRO:CG	2:W:535:LEU:HD12	2.22	0.69
2:W:564:ILE:HG13	2:W:565:GLY:N	2.07	0.69
2:Z:23:SER:CB	2:Z:483:ASN:HB2	2.21	0.69
2:V:215:LYS:HE3	2:V:329:ASN:HD21	1.58	0.69
2:X:47:GLU:HG3	2:X:69:MET:HG3	1.73	0.69
2:X:55:GLY:O	2:X:65:PHE:CE1	2.46	0.69
2:X:391:LYS:HZ1	2:X:440:ASN:ND2	1.90	0.69
2:Y:289:ILE:H	2:Y:289:ILE:HD12	1.58	0.69
2:V:55:GLY:O	2:V:65:PHE:CE1	2.46	0.69
2:V:409:PRO:C	2:V:454:TYR:HE1	1.98	0.69
2:V:524:PRO:CG	2:V:535:LEU:HD12	2.22	0.69
2:W:23:SER:HB3	2:W:483:ASN:CB	2.22	0.69
2:W:454:TYR:HE2	2:W:469:PRO:CA	2.04	0.69
2:W:521:ALA:CB	2:W:540:THR:HA	2.22	0.69
2:X:289:ILE:HD12	2:X:289:ILE:H	1.58	0.69
2:X:521:ALA:CB	2:X:540:THR:HA	2.23	0.69
2:X:622:GLU:OE1	2:X:645:THR:HA	1.93	0.69
2:Y:391:LYS:HZ1	2:Y:440:ASN:ND2	1.89	0.69
2:Y:524:PRO:CG	2:Y:535:LEU:HD12	2.22	0.69
2:Z:521:ALA:CB	2:Z:540:THR:HA	2.23	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:521:ALA:CB	2:U:540:THR:HA	2.23	0.69
2:U:561:LYS:HB3	2:U:640:LEU:CD2	2.23	0.69
2:V:521:ALA:CB	2:V:540:THR:HA	2.23	0.69
2:W:517:LEU:O	2:W:522:ILE:HG22	1.93	0.69
2:X:455:LYS:HG3	2:X:502:VAL:HG22	1.75	0.69
2:Y:51:VAL:CA	2:Y:55:GLY:HA2	2.19	0.69
2:Y:622:GLU:OE1	2:Y:645:THR:HA	1.93	0.69
2:U:455:LYS:HG3	2:U:502:VAL:HG22	1.75	0.69
2:U:614:THR:CG2	2:U:620:ARG:HA	2.23	0.69
2:W:455:LYS:HG3	2:W:502:VAL:HG22	1.75	0.69
2:Y:47:GLU:HG3	2:Y:69:MET:HG3	1.74	0.69
2:Z:561:LYS:HB3	2:Z:640:LEU:CD2	2.23	0.69
2:V:561:LYS:HB3	2:V:640:LEU:CD2	2.23	0.68
2:W:215:LYS:HE3	2:W:329:ASN:HD21	1.58	0.68
2:W:561:LYS:HB3	2:W:640:LEU:CD2	2.23	0.68
2:X:517:LEU:O	2:X:522:ILE:HG22	1.93	0.68
2:X:524:PRO:CG	2:X:535:LEU:HD12	2.22	0.68
2:Y:455:LYS:HG3	2:Y:502:VAL:HG22	1.75	0.68
2:Z:455:LYS:HG3	2:Z:502:VAL:HG22	1.75	0.68
2:Z:517:LEU:O	2:Z:522:ILE:HG22	1.93	0.68
2:V:517:LEU:O	2:V:522:ILE:HG22	1.93	0.68
2:X:564:ILE:HG13	2:X:565:GLY:N	2.08	0.68
2:Z:22:ASN:O	2:Z:23:SER:OG	2.04	0.68
2:Z:55:GLY:O	2:Z:65:PHE:CE1	2.46	0.68
2:Z:517:LEU:HD12	2:Z:518:TYR:H	1.57	0.68
2:U:514:ARG:HG3	2:U:535:LEU:CD1	2.21	0.68
2:V:454:TYR:HD2	2:V:469:PRO:HA	1.53	0.68
2:Y:23:SER:HB3	2:Y:483:ASN:CB	2.22	0.68
1:D:124:THR:HG21	1:D:130:MET:HG2	1.75	0.68
2:V:47:GLU:HG3	2:V:69:MET:HG3	1.74	0.68
2:W:596:LYS:O	2:W:596:LYS:HD3	1.94	0.68
2:W:622:GLU:OE1	2:W:645:THR:HA	1.93	0.68
2:X:578:ALA:O	2:X:581:ARG:HB3	1.94	0.68
2:U:427:VAL:CG1	2:U:516:ARG:HH21	1.94	0.68
2:U:598:LEU:O	2:U:598:LEU:HD23	1.94	0.68
2:Z:598:LEU:O	2:Z:598:LEU:HD23	1.93	0.68
1:B:108:GLN:HB3	1:B:200:PRO:HD2	1.75	0.68
2:V:596:LYS:O	2:V:596:LYS:HD3	1.94	0.68
2:X:514:ARG:HG3	2:X:535:LEU:CD1	2.21	0.68
2:X:547:PRO:C	2:X:553:VAL:HG21	2.19	0.68
2:U:51:VAL:CA	2:U:55:GLY:HA2	2.20	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:575:LEU:O	2:U:580:THR:HG21	1.94	0.68
2:V:114:ASP:OD2	2:V:175:SER:HB2	1.92	0.68
2:W:55:GLY:O	2:W:65:PHE:CE1	2.46	0.68
2:W:578:ALA:O	2:W:581:ARG:HB3	1.94	0.68
2:Y:521:ALA:CB	2:Y:540:THR:HA	2.23	0.68
2:Y:575:LEU:O	2:Y:580:THR:HG21	1.93	0.68
2:Z:289:ILE:H	2:Z:289:ILE:HD12	1.57	0.68
2:Z:578:ALA:O	2:Z:581:ARG:HB3	1.94	0.68
2:Z:596:LYS:O	2:Z:596:LYS:HD3	1.94	0.68
2:U:596:LYS:O	2:U:596:LYS:HD3	1.94	0.68
2:V:523:ASN:HD21	2:V:538:ASP:CB	2.06	0.68
2:W:614:THR:CG2	2:W:620:ARG:HA	2.23	0.68
2:X:523:ASN:HD21	2:X:538:ASP:CB	2.07	0.68
2:Y:55:GLY:O	2:Y:65:PHE:CE1	2.46	0.68
2:Y:547:PRO:C	2:Y:553:VAL:HG21	2.19	0.68
2:Z:450:ILE:CG1	2:Z:451:ASP:N	2.53	0.68
2:Z:575:LEU:O	2:Z:580:THR:HG21	1.94	0.68
2:V:622:GLU:OE1	2:V:645:THR:HA	1.93	0.68
2:X:427:VAL:O	2:X:431:THR:HG22	1.94	0.68
2:X:522:ILE:O	2:X:524:PRO:HD3	1.94	0.68
2:Z:427:VAL:O	2:Z:431:THR:HG22	1.94	0.68
2:Z:622:GLU:OE1	2:Z:645:THR:HA	1.93	0.68
2:U:289:ILE:HD12	2:U:289:ILE:H	1.58	0.68
2:U:454:TYR:HD2	2:U:469:PRO:HA	1.53	0.68
2:V:228:GLY:CA	2:V:345:SER:HB3	2.24	0.68
2:V:289:ILE:H	2:V:289:ILE:HD12	1.57	0.68
2:V:455:LYS:HG3	2:V:502:VAL:HG22	1.76	0.68
2:V:526:THR:HG21	2:V:535:LEU:HD21	1.76	0.68
2:V:547:PRO:C	2:V:553:VAL:HG21	2.19	0.68
2:W:47:GLU:HG3	2:W:69:MET:HG3	1.73	0.68
2:W:289:ILE:H	2:W:289:ILE:HD12	1.58	0.68
2:W:408:SER:HB2	2:W:471:ALA:HB2	1.76	0.68
2:W:522:ILE:O	2:W:524:PRO:HD3	1.94	0.68
2:X:514:ARG:CG	2:X:535:LEU:HD13	2.23	0.68
2:X:596:LYS:O	2:X:596:LYS:HD3	1.94	0.68
2:Y:427:VAL:O	2:Y:431:THR:HG22	1.94	0.68
2:Y:523:ASN:HD21	2:Y:538:ASP:CB	2.07	0.68
2:Y:561:LYS:HB3	2:Y:640:LEU:CD2	2.23	0.68
2:Z:215:LYS:HE3	2:Z:329:ASN:HD21	1.58	0.68
2:V:614:THR:CG2	2:V:620:ARG:HA	2.24	0.67
2:W:55:GLY:O	2:W:65:PHE:HE1	1.78	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:547:PRO:C	2:W:553:VAL:HG21	2.19	0.67
2:X:215:LYS:HE3	2:X:329:ASN:HD21	1.58	0.67
2:X:408:SER:HB2	2:X:471:ALA:HB2	1.76	0.67
2:U:427:VAL:CG1	2:U:516:ARG:NH2	2.47	0.67
2:U:500:LEU:HB2	2:U:501:ASN:OD1	1.94	0.67
2:U:517:LEU:O	2:U:522:ILE:HG22	1.93	0.67
2:U:523:ASN:HD21	2:U:538:ASP:CB	2.07	0.67
2:V:171:ILE:HG22	2:V:172:SER:N	2.09	0.67
2:Y:379:ALA:HB1	2:Y:454:TYR:OH	1.73	0.67
2:Z:23:SER:HB3	2:Z:483:ASN:CB	2.22	0.67
2:Z:391:LYS:HZ3	2:Z:440:ASN:HD21	1.41	0.67
2:Z:547:PRO:C	2:Z:553:VAL:HG21	2.19	0.67
2:U:408:SER:HB2	2:U:471:ALA:HB2	1.76	0.67
2:U:517:LEU:HD12	2:U:518:TYR:H	1.58	0.67
2:U:622:GLU:OE1	2:U:645:THR:HA	1.93	0.67
2:V:578:ALA:O	2:V:581:ARG:HB3	1.94	0.67
2:W:22:ASN:O	2:W:23:SER:OG	2.05	0.67
2:W:96:ALA:HB2	2:W:191:SER:HA	1.77	0.67
2:W:514:ARG:CG	2:W:535:LEU:HD13	2.22	0.67
2:W:598:LEU:O	2:W:598:LEU:HD23	1.94	0.67
2:X:561:LYS:HB3	2:X:640:LEU:CD2	2.23	0.67
2:Y:228:GLY:CA	2:Y:345:SER:HB3	2.24	0.67
2:Y:522:ILE:O	2:Y:524:PRO:HD3	1.94	0.67
2:Y:564:ILE:HG13	2:Y:565:GLY:N	2.08	0.67
2:Z:427:VAL:CG1	2:Z:516:ARG:HH21	1.94	0.67
2:Z:564:ILE:HG13	2:Z:565:GLY:N	2.07	0.67
2:Z:614:THR:CG2	2:Z:620:ARG:HA	2.24	0.67
2:U:564:ILE:HG13	2:U:565:GLY:N	2.08	0.67
2:V:408:SER:HB2	2:V:471:ALA:HB2	1.77	0.67
2:V:598:LEU:HD23	2:V:598:LEU:O	1.94	0.67
2:W:500:LEU:HB2	2:W:501:ASN:OD1	1.95	0.67
2:Y:578:ALA:O	2:Y:581:ARG:HB3	1.94	0.67
2:Y:596:LYS:O	2:Y:596:LYS:HD3	1.94	0.67
2:Y:614:THR:CG2	2:Y:620:ARG:HA	2.23	0.67
2:Z:454:TYR:HD2	2:Z:469:PRO:HA	1.53	0.67
1:B:157:ILE:HD12	2:V:579:PHE:CB	2.04	0.67
2:W:517:LEU:HD12	2:W:518:TYR:H	1.58	0.67
2:W:523:ASN:HD21	2:W:538:ASP:CB	2.07	0.67
2:X:304:ILE:HG13	2:X:305:TYR:CE2	2.30	0.67
2:X:614:THR:CG2	2:X:620:ARG:HA	2.24	0.67
2:Y:215:LYS:HE3	2:Y:329:ASN:HD21	1.60	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:500:LEU:HB2	2:Z:501:ASN:OD1	1.95	0.67
1:C:157:ILE:CG1	2:W:579:PHE:CG	2.77	0.67
1:D:156:ASP:HB3	2:X:579:PHE:CD1	2.30	0.67
2:V:96:ALA:HB2	2:V:191:SER:HA	1.77	0.67
2:V:500:LEU:HB2	2:V:501:ASN:OD1	1.94	0.67
2:V:575:LEU:O	2:V:580:THR:HG21	1.94	0.67
2:W:304:ILE:HG13	2:W:305:TYR:CE2	2.30	0.67
2:W:575:LEU:O	2:W:580:THR:HG21	1.94	0.67
2:Y:55:GLY:O	2:Y:65:PHE:HE1	1.78	0.67
2:Y:517:LEU:O	2:Y:522:ILE:HG22	1.93	0.67
2:Z:171:ILE:HG22	2:Z:172:SER:N	2.09	0.67
2:U:427:VAL:O	2:U:431:THR:HG22	1.94	0.67
2:U:578:ALA:O	2:U:581:ARG:HB3	1.94	0.67
2:V:564:ILE:HG13	2:V:565:GLY:N	2.08	0.67
2:Y:351:THR:HG23	2:Y:354:ASP:H	1.60	0.67
2:Z:351:THR:HG23	2:Z:354:ASP:H	1.60	0.67
1:F:19:ASP:HA	1:F:22:SER:HB2	1.77	0.67
2:U:351:THR:HG23	2:U:354:ASP:H	1.60	0.67
2:U:514:ARG:NE	2:U:535:LEU:HD22	2.10	0.67
2:X:351:THR:HG23	2:X:354:ASP:H	1.60	0.67
2:X:575:LEU:O	2:X:580:THR:HG21	1.94	0.67
2:Z:304:ILE:HG13	2:Z:305:TYR:CE2	2.30	0.67
2:U:547:PRO:C	2:U:553:VAL:HG21	2.19	0.67
2:W:171:ILE:HG22	2:W:172:SER:N	2.09	0.67
2:W:427:VAL:O	2:W:431:THR:HG22	1.94	0.67
2:W:512:ALA:HA	2:W:515:ASP:OD2	1.95	0.67
2:Y:514:ARG:NE	2:Y:535:LEU:HD22	2.10	0.67
2:U:304:ILE:HG13	2:U:305:TYR:CE2	2.30	0.67
2:U:526:THR:HG21	2:U:535:LEU:HD21	1.77	0.67
2:V:514:ARG:NE	2:V:535:LEU:HD22	2.10	0.67
2:V:522:ILE:O	2:V:524:PRO:HD3	1.94	0.67
2:W:379:ALA:CB	2:W:454:TYR:CE2	2.78	0.67
2:X:409:PRO:HD2	2:X:451:ASP:O	1.87	0.67
2:Z:523:ASN:HD21	2:Z:538:ASP:CB	2.07	0.67
2:U:171:ILE:HG22	2:U:172:SER:N	2.09	0.66
2:W:228:GLY:CA	2:W:345:SER:HB3	2.23	0.66
2:X:171:ILE:HG22	2:X:172:SER:N	2.09	0.66
2:X:449:ALA:CA	2:X:540:THR:HG23	2.25	0.66
2:Y:512:ALA:HA	2:Y:515:ASP:OD2	1.95	0.66
2:Y:514:ARG:HG3	2:Y:535:LEU:CD1	2.21	0.66
2:U:96:ALA:HB2	2:U:191:SER:HA	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:391:LYS:NZ	2:Z:440:ASN:HD21	1.91	0.66
2:Z:522:ILE:O	2:Z:524:PRO:HD3	1.94	0.66
2:U:215:LYS:HE3	2:U:329:ASN:HD21	1.59	0.66
2:V:427:VAL:CG1	2:V:516:ARG:NH2	2.47	0.66
2:X:96:ALA:HB2	2:X:191:SER:HA	1.77	0.66
2:Y:171:ILE:HG22	2:Y:172:SER:N	2.09	0.66
2:Y:598:LEU:O	2:Y:598:LEU:HD23	1.94	0.66
2:V:304:ILE:HG13	2:V:305:TYR:CE2	2.30	0.66
2:V:512:ALA:HA	2:V:515:ASP:OD2	1.95	0.66
2:W:351:THR:HG23	2:W:354:ASP:H	1.60	0.66
2:X:500:LEU:HB2	2:X:501:ASN:OD1	1.95	0.66
2:U:379:ALA:CB	2:U:454:TYR:CE2	2.78	0.66
2:V:351:THR:HG23	2:V:354:ASP:H	1.61	0.66
2:V:514:ARG:CG	2:V:535:LEU:HD13	2.22	0.66
2:W:449:ALA:CA	2:W:540:THR:HG23	2.25	0.66
2:W:526:THR:HG21	2:W:535:LEU:HD21	1.77	0.66
2:Y:500:LEU:HB2	2:Y:501:ASN:OD1	1.94	0.66
2:Z:379:ALA:CB	2:Z:454:TYR:CE2	2.78	0.66
2:Z:449:ALA:CA	2:Z:540:THR:HG23	2.25	0.66
2:Z:517:LEU:HD13	2:Z:524:PRO:HG3	1.78	0.66
2:U:409:PRO:C	2:U:454:TYR:HE1	1.98	0.66
2:V:379:ALA:CB	2:V:454:TYR:CE2	2.79	0.66
2:V:427:VAL:O	2:V:431:THR:HG22	1.94	0.66
2:X:55:GLY:O	2:X:65:PHE:HE1	1.77	0.66
2:X:514:ARG:NE	2:X:535:LEU:HD22	2.10	0.66
2:X:517:LEU:HD12	2:X:518:TYR:H	1.57	0.66
2:X:526:THR:HG21	2:X:535:LEU:HD21	1.77	0.66
2:Z:512:ALA:HA	2:Z:515:ASP:OD2	1.95	0.66
2:Z:514:ARG:NE	2:Z:535:LEU:HD22	2.10	0.66
2:U:522:ILE:O	2:U:524:PRO:HD3	1.94	0.66
2:V:391:LYS:NZ	2:V:440:ASN:HD21	1.92	0.66
2:W:573:PHE:HD2	2:W:574:GLU:CD	2.04	0.66
2:Y:427:VAL:CG1	2:Y:516:ARG:NH2	2.47	0.66
2:Z:408:SER:HB2	2:Z:471:ALA:HB2	1.77	0.66
2:Z:573:PHE:HD2	2:Z:574:GLU:CD	2.04	0.66
1:F:109:TYR:HB3	1:F:161:ARG:HH22	1.60	0.66
2:W:544:VAL:HG12	2:W:545:PRO:N	2.10	0.66
2:Y:408:SER:HB2	2:Y:471:ALA:HB2	1.77	0.66
2:Y:427:VAL:CG1	2:Y:516:ARG:HH21	1.94	0.66
2:X:228:GLY:CA	2:X:345:SER:HB3	2.23	0.66
2:X:544:VAL:HG12	2:X:545:PRO:N	2.11	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:51:VAL:CA	2:Z:55:GLY:HA2	2.19	0.66
2:W:121:VAL:HG22	2:W:166:ASN:HB3	1.78	0.66
2:X:379:ALA:CB	2:X:454:TYR:CE2	2.79	0.66
2:Y:526:THR:HG21	2:Y:535:LEU:HD21	1.77	0.66
2:Y:573:PHE:HD2	2:Y:574:GLU:CD	2.03	0.66
2:Z:96:ALA:HB2	2:Z:191:SER:HA	1.77	0.66
2:V:573:PHE:HD2	2:V:574:GLU:CD	2.04	0.65
2:W:514:ARG:NE	2:W:535:LEU:HD22	2.09	0.65
2:X:121:VAL:HG22	2:X:166:ASN:HB3	1.79	0.65
2:X:512:ALA:HA	2:X:515:ASP:OD2	1.95	0.65
2:X:598:LEU:HD23	2:X:598:LEU:O	1.95	0.65
2:Y:379:ALA:CB	2:Y:454:TYR:CE2	2.78	0.65
2:V:55:GLY:O	2:V:65:PHE:HE1	1.78	0.65
2:Y:121:VAL:HG22	2:Y:166:ASN:HB3	1.78	0.65
2:Y:544:VAL:HG12	2:Y:545:PRO:N	2.11	0.65
1:A:124:THR:HG21	1:A:130:MET:HG2	1.77	0.65
1:D:157:ILE:HB	2:X:579:PHE:CD2	2.31	0.65
2:U:449:ALA:CA	2:U:540:THR:HG23	2.25	0.65
2:Y:96:ALA:HB2	2:Y:191:SER:HA	1.77	0.65
2:Y:304:ILE:HG13	2:Y:305:TYR:CE2	2.30	0.65
2:Z:409:PRO:C	2:Z:454:TYR:HE1	1.98	0.65
2:U:573:PHE:HD2	2:U:574:GLU:CD	2.04	0.65
2:X:573:PHE:HD2	2:X:574:GLU:CD	2.04	0.65
2:Y:449:ALA:CA	2:Y:540:THR:HG23	2.25	0.65
2:U:55:GLY:O	2:U:65:PHE:HE1	1.78	0.65
2:V:517:LEU:HD12	2:V:518:TYR:H	1.58	0.65
2:Y:505:LEU:HD13	2:Y:525:VAL:CG1	2.26	0.65
2:Z:544:VAL:HG12	2:Z:545:PRO:N	2.10	0.65
2:V:449:ALA:CA	2:V:540:THR:HG23	2.25	0.65
2:X:427:VAL:CG1	2:X:516:ARG:NH2	2.47	0.65
2:U:512:ALA:HA	2:U:515:ASP:OD2	1.95	0.65
2:V:603:GLU:HG2	2:V:637:TYR:OH	1.97	0.65
2:X:517:LEU:HD11	2:X:524:PRO:HG3	1.79	0.65
2:Y:427:VAL:HG21	2:Y:516:ARG:CZ	2.27	0.65
2:Y:517:LEU:HD13	2:Y:524:PRO:HG3	1.78	0.65
2:U:427:VAL:HG21	2:U:516:ARG:CZ	2.27	0.65
2:X:51:VAL:CA	2:X:55:GLY:HA2	2.19	0.65
2:Z:526:THR:HG21	2:Z:535:LEU:HD21	1.77	0.65
2:Y:454:TYR:HD2	2:Y:469:PRO:HA	1.54	0.65
2:Y:526:THR:HG23	2:Y:535:LEU:CG	2.28	0.65
2:Z:427:VAL:HG21	2:Z:516:ARG:CZ	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:630:GLN:HE21	2:V:636:ASN:N	1.95	0.64
2:W:630:GLN:HE21	2:W:636:ASN:N	1.95	0.64
1:A:156:ASP:CB	2:U:579:PHE:CD1	2.63	0.64
2:Z:526:THR:HG23	2:Z:535:LEU:CG	2.27	0.64
2:Z:630:GLN:HE21	2:Z:636:ASN:N	1.95	0.64
2:V:121:VAL:HG22	2:V:166:ASN:HB3	1.78	0.64
2:W:391:LYS:NZ	2:W:440:ASN:HD21	1.91	0.64
2:W:517:LEU:HD11	2:W:524:PRO:HG3	1.79	0.64
2:Y:100:GLU:HG3	2:Y:186:LYS:H	1.62	0.64
2:Z:55:GLY:O	2:Z:65:PHE:HE1	1.78	0.64
2:Z:121:VAL:HG22	2:Z:166:ASN:HB3	1.78	0.64
2:W:514:ARG:HG2	2:W:518:TYR:HE1	1.63	0.64
2:W:561:LYS:HB3	2:W:640:LEU:HD21	1.80	0.64
2:X:526:THR:HG23	2:X:535:LEU:CG	2.28	0.64
2:Y:517:LEU:HD12	2:Y:518:TYR:H	1.58	0.64
1:A:108:GLN:HB3	1:A:200:PRO:HD2	1.80	0.64
1:C:69:GLU:OE2	1:C:126:TYR:OH	2.14	0.64
2:V:526:THR:HG23	2:V:535:LEU:CG	2.27	0.64
2:W:514:ARG:HG2	2:W:518:TYR:CE1	2.33	0.64
2:V:514:ARG:HG2	2:V:518:TYR:CE1	2.33	0.64
2:W:427:VAL:CG1	2:W:516:ARG:NH2	2.47	0.64
2:W:526:THR:HG23	2:W:535:LEU:CG	2.27	0.64
2:W:603:GLU:HG2	2:W:637:TYR:OH	1.97	0.64
2:Z:66:MET:HG2	2:Z:468:VAL:HG11	1.80	0.64
2:Y:517:LEU:HD11	2:Y:524:PRO:HG3	1.80	0.64
2:Y:603:GLU:HG2	2:Y:637:TYR:OH	1.97	0.64
1:B:157:ILE:N	2:V:579:PHE:CE1	2.65	0.64
2:V:544:VAL:HG12	2:V:545:PRO:N	2.11	0.64
2:V:561:LYS:HB3	2:V:640:LEU:HD21	1.80	0.64
2:X:561:LYS:HB3	2:X:640:LEU:HD21	1.80	0.64
2:X:603:GLU:HG2	2:X:637:TYR:OH	1.98	0.64
2:Y:557:PHE:CE2	2:Y:631:PRO:HD3	2.33	0.64
2:Z:603:GLU:HG2	2:Z:637:TYR:OH	1.98	0.64
1:C:156:ASP:CB	2:W:579:PHE:HE1	2.07	0.64
2:U:121:VAL:HG22	2:U:166:ASN:HB3	1.78	0.64
2:U:514:ARG:CG	2:U:535:LEU:HD13	2.23	0.64
2:U:544:VAL:HG12	2:U:545:PRO:N	2.11	0.64
2:W:450:ILE:N	2:W:540:THR:HG23	2.13	0.64
2:Y:499:ILE:HG13	2:Y:502:VAL:HG21	1.80	0.64
2:Y:514:ARG:HG2	2:Y:518:TYR:CE1	2.33	0.64
2:Z:561:LYS:HB3	2:Z:640:LEU:HD21	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:100:GLU:HG3	2:W:186:LYS:H	1.63	0.64
2:W:215:LYS:HE3	2:W:329:ASN:ND2	2.13	0.64
2:W:427:VAL:HG21	2:W:516:ARG:CZ	2.28	0.64
2:Z:228:GLY:CA	2:Z:345:SER:HB3	2.23	0.64
2:Z:505:LEU:HD13	2:Z:525:VAL:CG1	2.27	0.64
2:U:100:GLU:HG3	2:U:186:LYS:H	1.63	0.63
2:U:517:LEU:HD13	2:U:524:PRO:HG3	1.78	0.63
2:X:215:LYS:HE3	2:X:329:ASN:ND2	2.13	0.63
2:X:517:LEU:HD13	2:X:524:PRO:HG3	1.78	0.63
2:X:630:GLN:HE21	2:X:636:ASN:N	1.95	0.63
2:Y:66:MET:HG2	2:Y:468:VAL:HG11	1.80	0.63
2:Y:450:ILE:N	2:Y:540:THR:HG23	2.13	0.63
2:U:450:ILE:N	2:U:540:THR:HG23	2.14	0.63
2:U:526:THR:HG23	2:U:535:LEU:CG	2.28	0.63
2:V:100:GLU:HG3	2:V:186:LYS:H	1.63	0.63
2:V:517:LEU:HD11	2:V:524:PRO:HG3	1.80	0.63
2:W:517:LEU:HD13	2:W:524:PRO:HG3	1.78	0.63
2:X:379:ALA:HB1	2:X:454:TYR:OH	1.73	0.63
2:X:505:LEU:HD13	2:X:525:VAL:CG1	2.27	0.63
2:Z:100:GLU:HG3	2:Z:186:LYS:H	1.63	0.63
2:Z:215:LYS:HE3	2:Z:329:ASN:ND2	2.13	0.63
2:V:66:MET:HG2	2:V:468:VAL:HG11	1.80	0.63
2:V:427:VAL:HG21	2:V:516:ARG:CZ	2.28	0.63
2:X:100:GLU:HG3	2:X:186:LYS:H	1.63	0.63
2:X:450:ILE:N	2:X:540:THR:HG23	2.13	0.63
2:Z:499:ILE:HG13	2:Z:502:VAL:HG21	1.81	0.63
2:Z:557:PHE:CE2	2:Z:631:PRO:HD3	2.34	0.63
2:U:23:SER:HB3	2:U:483:ASN:CB	2.23	0.63
2:V:215:LYS:HE3	2:V:329:ASN:ND2	2.13	0.63
2:W:446:THR:C	2:W:539:LYS:HE3	2.20	0.63
2:X:427:VAL:HG21	2:X:516:ARG:CZ	2.28	0.63
2:X:514:ARG:HG2	2:X:518:TYR:CE1	2.34	0.63
2:Z:514:ARG:HG2	2:Z:518:TYR:CE1	2.33	0.63
2:U:66:MET:HG2	2:U:468:VAL:HG11	1.80	0.63
2:U:557:PHE:CE2	2:U:631:PRO:HD3	2.33	0.63
2:U:630:GLN:HE21	2:U:636:ASN:N	1.95	0.63
2:Z:450:ILE:N	2:Z:540:THR:HG23	2.13	0.63
2:Z:517:LEU:HD11	2:Z:524:PRO:HG3	1.80	0.63
2:U:561:LYS:HB3	2:U:640:LEU:HD21	1.80	0.63
2:X:628:TYR:CE2	2:X:639:THR:HG22	2.34	0.63
2:Z:561:LYS:O	2:Z:564:ILE:HG12	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:603:GLU:HG2	2:U:637:TYR:OH	1.98	0.63
2:W:66:MET:HG2	2:W:468:VAL:HG11	1.79	0.63
2:W:404:LEU:CD2	2:W:554:ARG:NH1	2.60	0.63
2:W:561:LYS:O	2:W:564:ILE:HG12	1.99	0.63
2:X:499:ILE:HG13	2:X:502:VAL:HG21	1.81	0.63
1:E:108:GLN:HB3	1:E:200:PRO:HD2	1.81	0.63
1:E:124:THR:HG21	1:E:130:MET:HG2	1.81	0.63
2:Y:628:TYR:CE2	2:Y:639:THR:HG22	2.34	0.63
1:A:156:ASP:HB3	2:U:579:PHE:HE1	0.83	0.62
2:X:391:LYS:NZ	2:X:440:ASN:HD21	1.91	0.62
2:Y:630:GLN:HE21	2:Y:636:ASN:N	1.95	0.62
2:V:450:ILE:N	2:V:540:THR:HG23	2.13	0.62
2:V:499:ILE:HG13	2:V:502:VAL:HG21	1.80	0.62
2:V:514:ARG:HG2	2:V:518:TYR:HE1	1.63	0.62
2:V:517:LEU:HD13	2:V:524:PRO:HG3	1.79	0.62
2:U:514:ARG:HG2	2:U:518:TYR:CE1	2.34	0.62
2:V:557:PHE:CE2	2:V:631:PRO:HD3	2.34	0.62
2:W:557:PHE:CE2	2:W:631:PRO:HD3	2.33	0.62
2:X:561:LYS:O	2:X:564:ILE:HG12	1.98	0.62
2:U:499:ILE:HG13	2:U:502:VAL:HG21	1.81	0.62
2:V:23:SER:HB3	2:V:483:ASN:CB	2.22	0.62
2:X:514:ARG:HG2	2:X:518:TYR:HE1	1.64	0.62
2:U:215:LYS:HE3	2:U:329:ASN:ND2	2.14	0.62
2:X:557:PHE:CE2	2:X:631:PRO:HD3	2.34	0.62
2:Y:514:ARG:O	2:Y:518:TYR:HD1	1.82	0.62
2:Z:213:ASN:HD22	2:Z:213:ASN:N	1.97	0.62
2:Z:628:TYR:CE2	2:Z:639:THR:HG22	2.34	0.62
2:U:407:CYS:O	2:U:450:ILE:HA	2.00	0.62
2:U:561:LYS:O	2:U:564:ILE:HG12	1.99	0.62
2:X:423:VAL:HG21	2:X:513:GLN:CD	2.25	0.62
2:Y:561:LYS:HB3	2:Y:640:LEU:HD21	1.80	0.62
2:Z:107:GLY:HA3	2:Z:110:TYR:CE1	2.35	0.62
2:W:628:TYR:CE2	2:W:639:THR:HG22	2.34	0.62
2:X:66:MET:HG2	2:X:468:VAL:HG11	1.80	0.62
2:Y:107:GLY:HA3	2:Y:110:TYR:HE1	1.65	0.62
2:Y:514:ARG:HG2	2:Y:518:TYR:HE1	1.63	0.62
2:Z:514:ARG:O	2:Z:517:LEU:HG	2.00	0.62
2:U:514:ARG:HG2	2:U:518:TYR:HE1	1.65	0.62
2:U:514:ARG:O	2:U:518:TYR:HD1	1.82	0.62
2:W:514:ARG:O	2:W:517:LEU:HG	2.00	0.62
2:Y:561:LYS:O	2:Y:564:ILE:HG12	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:423:VAL:HG21	2:Z:513:GLN:CD	2.25	0.62
2:U:107:GLY:HA3	2:U:110:TYR:CE1	2.34	0.62
2:X:407:CYS:O	2:X:450:ILE:HA	2.00	0.62
2:Y:107:GLY:HA3	2:Y:110:TYR:CE1	2.34	0.62
1:E:130:MET:HE2	1:E:188:TRP:CD2	2.35	0.62
2:U:213:ASN:HD22	2:U:213:ASN:N	1.98	0.62
2:U:514:ARG:O	2:U:517:LEU:HG	2.00	0.62
2:V:407:CYS:O	2:V:450:ILE:HA	2.00	0.62
2:V:628:TYR:CE2	2:V:639:THR:HG22	2.34	0.62
2:Y:215:LYS:HE3	2:Y:329:ASN:ND2	2.14	0.62
2:Y:514:ARG:O	2:Y:517:LEU:HG	2.00	0.62
2:Z:407:CYS:O	2:Z:450:ILE:HA	2.00	0.62
2:Z:514:ARG:O	2:Z:518:TYR:HD1	1.82	0.62
2:U:423:VAL:HG21	2:U:513:GLN:CD	2.25	0.61
2:U:628:TYR:CE2	2:U:639:THR:HG22	2.34	0.61
2:V:107:GLY:HA3	2:V:110:TYR:HE1	1.65	0.61
2:V:561:LYS:O	2:V:564:ILE:HG12	2.00	0.61
2:W:107:GLY:HA3	2:W:110:TYR:HE1	1.65	0.61
2:W:407:CYS:O	2:W:450:ILE:HA	2.00	0.61
2:Z:514:ARG:HG2	2:Z:518:TYR:HE1	1.63	0.61
2:Z:556:LEU:CD1	2:Z:631:PRO:HA	2.30	0.61
2:U:455:LYS:HE2	2:U:502:VAL:HG22	1.82	0.61
2:V:514:ARG:O	2:V:517:LEU:HG	2.00	0.61
2:Y:423:VAL:HG21	2:Y:513:GLN:CD	2.26	0.61
1:E:69:GLU:OE2	1:E:126:TYR:OH	2.09	0.61
2:W:514:ARG:O	2:W:518:TYR:HD1	1.82	0.61
2:Z:427:VAL:CG1	2:Z:516:ARG:NH2	2.47	0.61
1:D:69:GLU:OE2	1:D:126:TYR:OH	2.13	0.61
2:V:505:LEU:HD13	2:V:525:VAL:CG1	2.27	0.61
2:W:107:GLY:HA3	2:W:110:TYR:CE1	2.34	0.61
2:W:499:ILE:HG13	2:W:502:VAL:HG21	1.81	0.61
2:W:505:LEU:HD13	2:W:525:VAL:CG1	2.27	0.61
2:X:107:GLY:HA3	2:X:110:TYR:CE1	2.34	0.61
2:U:278:GLN:HG2	2:U:296:SER:HB2	1.83	0.61
2:V:107:GLY:HA3	2:V:110:TYR:CE1	2.35	0.61
2:V:213:ASN:HD22	2:V:213:ASN:N	1.98	0.61
2:W:423:VAL:HG21	2:W:513:GLN:CD	2.25	0.61
2:Y:213:ASN:HD22	2:Y:213:ASN:N	1.98	0.61
1:D:130:MET:HE2	1:D:188:TRP:CD2	2.36	0.61
2:U:556:LEU:CD1	2:U:631:PRO:HA	2.30	0.61
2:V:514:ARG:O	2:V:518:TYR:HD1	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:213:ASN:HD22	2:X:213:ASN:N	1.98	0.61
2:Z:278:GLN:HG2	2:Z:296:SER:HB2	1.83	0.61
2:U:517:LEU:HD11	2:U:524:PRO:HG3	1.81	0.61
2:W:213:ASN:HD22	2:W:213:ASN:N	1.98	0.61
2:X:50:LEU:C	2:X:50:LEU:HD12	2.26	0.61
2:Y:391:LYS:NZ	2:Y:440:ASN:HD21	1.92	0.61
2:U:107:GLY:HA3	2:U:110:TYR:HE1	1.66	0.61
2:X:107:GLY:HA3	2:X:110:TYR:HE1	1.65	0.61
2:Y:278:GLN:HG2	2:Y:296:SER:HB2	1.83	0.61
2:Z:107:GLY:HA3	2:Z:110:TYR:HE1	1.66	0.61
2:U:514:ARG:HA	2:U:517:LEU:HG	1.82	0.61
2:V:455:LYS:HE2	2:V:502:VAL:HG22	1.83	0.61
1:F:66:ALA:O	1:F:68:VAL:N	2.32	0.61
2:U:50:LEU:C	2:U:50:LEU:HD12	2.26	0.61
2:U:404:LEU:CD2	2:U:554:ARG:NH1	2.60	0.61
2:Y:556:LEU:CD1	2:Y:631:PRO:HA	2.31	0.61
2:Z:50:LEU:HD12	2:Z:50:LEU:C	2.26	0.61
1:D:108:GLN:HB3	1:D:200:PRO:HD2	1.83	0.60
2:V:446:THR:C	2:V:539:LYS:HE3	2.20	0.60
2:X:391:LYS:CE	2:X:440:ASN:O	2.49	0.60
2:X:514:ARG:O	2:X:518:TYR:HD1	1.82	0.60
2:Y:50:LEU:C	2:Y:50:LEU:HD12	2.26	0.60
2:Y:407:CYS:O	2:Y:450:ILE:HA	2.00	0.60
2:V:278:GLN:HG2	2:V:296:SER:HB2	1.83	0.60
2:W:50:LEU:C	2:W:50:LEU:HD12	2.27	0.60
2:W:97:GLY:HA3	2:W:256:PRO:HG2	1.83	0.60
2:W:517:LEU:HB2	2:W:522:ILE:HG21	1.83	0.60
2:X:514:ARG:O	2:X:517:LEU:HG	2.00	0.60
2:X:556:LEU:CD1	2:X:631:PRO:HA	2.31	0.60
2:Z:455:LYS:HE2	2:Z:502:VAL:HG22	1.83	0.60
2:Z:514:ARG:HA	2:Z:517:LEU:HG	1.82	0.60
1:E:66:ALA:O	1:E:68:VAL:N	2.32	0.60
2:V:556:LEU:CD1	2:V:631:PRO:HA	2.31	0.60
2:V:617:VAL:HG23	2:V:619:ASP:N	2.17	0.60
2:W:556:LEU:CD1	2:W:631:PRO:HA	2.31	0.60
2:W:627:PHE:HD1	2:W:629:ILE:HG13	1.67	0.60
2:X:161:PRO:HB3	2:X:187:ILE:HB	1.83	0.60
1:B:124:THR:HG21	1:B:130:MET:HG2	1.82	0.60
2:V:50:LEU:C	2:V:50:LEU:HD12	2.26	0.60
2:V:514:ARG:HA	2:V:517:LEU:HG	1.82	0.60
2:V:614:THR:HG21	2:V:620:ARG:HA	1.84	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:514:ARG:HA	2:W:517:LEU:HG	1.82	0.60
2:Y:517:LEU:HB2	2:Y:522:ILE:HG21	1.83	0.60
2:Z:617:VAL:HG23	2:Z:619:ASP:N	2.17	0.60
2:U:161:PRO:HB3	2:U:187:ILE:HB	1.83	0.60
2:U:575:LEU:HD12	2:U:575:LEU:N	2.17	0.60
2:W:161:PRO:HB3	2:W:187:ILE:HB	1.83	0.60
2:W:278:GLN:HG2	2:W:296:SER:HB2	1.82	0.60
2:U:617:VAL:HG23	2:U:619:ASP:N	2.17	0.60
2:V:423:VAL:HG21	2:V:513:GLN:CD	2.25	0.60
2:V:575:LEU:N	2:V:575:LEU:HD12	2.17	0.60
1:D:157:ILE:CG1	2:X:579:PHE:HB2	2.24	0.60
1:D:157:ILE:CG1	2:X:579:PHE:HB3	2.30	0.60
2:U:382:SER:O	2:U:383:LEU:C	2.45	0.60
2:U:614:THR:HG21	2:U:620:ARG:HA	1.83	0.60
2:X:517:LEU:HB2	2:X:522:ILE:HG21	1.83	0.60
2:V:627:PHE:HD1	2:V:629:ILE:HG13	1.66	0.60
2:W:391:LYS:CE	2:W:440:ASN:O	2.49	0.60
2:W:614:THR:HG21	2:W:620:ARG:HA	1.83	0.60
2:Y:97:GLY:HA3	2:Y:256:PRO:HG2	1.84	0.60
2:Y:514:ARG:HA	2:Y:517:LEU:HG	1.82	0.60
2:Y:617:VAL:HG23	2:Y:619:ASP:N	2.17	0.60
2:U:526:THR:HG23	2:U:535:LEU:HD11	1.84	0.60
2:X:455:LYS:HE2	2:X:502:VAL:HG22	1.83	0.60
2:Y:557:PHE:HE2	2:Y:631:PRO:HD3	1.67	0.60
2:Z:97:GLY:HA3	2:Z:256:PRO:HG2	1.83	0.60
2:U:347:ASN:O	2:U:348:ALA:C	2.45	0.59
2:Z:347:ASN:O	2:Z:348:ALA:C	2.45	0.59
2:V:97:GLY:HA3	2:V:256:PRO:HG2	1.84	0.59
2:V:517:LEU:HB2	2:V:522:ILE:HG21	1.83	0.59
2:W:575:LEU:HD12	2:W:575:LEU:N	2.16	0.59
2:Y:526:THR:HG23	2:Y:535:LEU:HG	1.85	0.59
2:Y:614:THR:HG21	2:Y:620:ARG:HA	1.83	0.59
2:W:617:VAL:HG23	2:W:619:ASP:N	2.17	0.59
2:X:514:ARG:HA	2:X:517:LEU:HG	1.82	0.59
2:X:526:THR:HG23	2:X:535:LEU:HG	1.84	0.59
2:X:617:VAL:HG23	2:X:619:ASP:N	2.16	0.59
2:Z:161:PRO:HB3	2:Z:187:ILE:HB	1.83	0.59
2:Z:391:LYS:CE	2:Z:440:ASN:O	2.49	0.59
2:U:517:LEU:HB2	2:U:522:ILE:HG21	1.83	0.59
2:U:542:THR:HG23	2:U:543:SER:N	2.18	0.59
2:W:382:SER:O	2:W:383:LEU:C	2.45	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:526:THR:HG23	2:Z:535:LEU:HD11	1.84	0.59
2:Z:614:THR:HG21	2:Z:620:ARG:HA	1.83	0.59
1:C:114:ILE:HG12	1:C:115:LYS:N	2.17	0.59
2:U:66:MET:HA	2:U:66:MET:HE3	1.85	0.59
2:U:560:LEU:O	2:U:564:ILE:HG23	2.03	0.59
2:V:347:ASN:O	2:V:348:ALA:C	2.45	0.59
2:X:278:GLN:HG2	2:X:296:SER:HB2	1.83	0.59
2:Z:560:LEU:O	2:Z:564:ILE:HG23	2.03	0.59
2:U:419:VAL:HA	2:U:422:ALA:HB3	1.83	0.59
2:U:557:PHE:HE2	2:U:631:PRO:HD3	1.68	0.59
2:V:560:LEU:O	2:V:564:ILE:HG23	2.03	0.59
2:Y:455:LYS:HE2	2:Y:502:VAL:HG22	1.83	0.59
2:Y:575:LEU:HD12	2:Y:575:LEU:N	2.17	0.59
2:Z:542:THR:HG23	2:Z:543:SER:N	2.18	0.59
2:Z:557:PHE:HE2	2:Z:631:PRO:HD3	1.68	0.59
2:V:161:PRO:HB3	2:V:187:ILE:HB	1.83	0.59
2:V:391:LYS:CE	2:V:440:ASN:O	2.49	0.59
2:V:542:THR:HG23	2:V:543:SER:N	2.18	0.59
2:V:557:PHE:HE2	2:V:631:PRO:HD3	1.68	0.59
2:X:347:ASN:O	2:X:348:ALA:C	2.45	0.59
2:X:404:LEU:CD2	2:X:554:ARG:NH1	2.59	0.59
2:X:575:LEU:N	2:X:575:LEU:HD12	2.16	0.59
2:X:614:THR:HG21	2:X:620:ARG:HA	1.83	0.59
2:Y:560:LEU:O	2:Y:564:ILE:HG23	2.03	0.59
2:V:526:THR:HG23	2:V:535:LEU:HD11	1.84	0.59
2:W:557:PHE:HE2	2:W:631:PRO:HD3	1.68	0.59
2:X:97:GLY:HA3	2:X:256:PRO:HG2	1.83	0.59
2:Z:398:ASP:O	2:Z:401:GLN:HG3	2.03	0.59
2:Z:575:LEU:HD12	2:Z:575:LEU:N	2.17	0.59
2:V:409:PRO:C	2:V:454:TYR:CE1	2.71	0.59
2:W:455:LYS:HE2	2:W:502:VAL:HG22	1.83	0.59
2:W:560:LEU:O	2:W:564:ILE:HG23	2.03	0.59
2:X:560:LEU:O	2:X:564:ILE:HG23	2.03	0.59
2:Y:404:LEU:CD2	2:Y:554:ARG:NH1	2.60	0.59
2:Z:526:THR:HG23	2:Z:535:LEU:HG	1.85	0.59
2:U:23:SER:HG	2:U:483:ASN:HB3	1.66	0.59
2:U:391:LYS:CE	2:U:440:ASN:O	2.49	0.59
2:V:581:ARG:HB2	2:V:623:PHE:CZ	2.38	0.59
2:W:347:ASN:O	2:W:348:ALA:C	2.46	0.59
2:Y:66:MET:HE3	2:Y:66:MET:HA	1.84	0.59
2:Y:501:ASN:OD1	2:Y:501:ASN:N	2.36	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:576:ASN:HA	2:Y:580:THR:HG21	1.85	0.59
2:U:627:PHE:HD1	2:U:629:ILE:HG13	1.67	0.58
2:X:456:TYR:HB3	2:X:504:LYS:HB3	1.85	0.58
2:Z:517:LEU:HB2	2:Z:522:ILE:HG21	1.83	0.58
1:D:156:ASP:CB	2:X:579:PHE:HE1	2.14	0.58
1:F:114:ILE:HG12	1:F:115:LYS:H	1.68	0.58
2:V:526:THR:HG23	2:V:535:LEU:HG	1.84	0.58
2:W:419:VAL:HA	2:W:422:ALA:HB3	1.84	0.58
2:X:557:PHE:HE2	2:X:631:PRO:HD3	1.68	0.58
2:X:581:ARG:HB2	2:X:623:PHE:CZ	2.38	0.58
2:X:627:PHE:HD1	2:X:629:ILE:HG13	1.67	0.58
2:Y:398:ASP:O	2:Y:401:GLN:HG3	2.03	0.58
2:Y:581:ARG:HB2	2:Y:623:PHE:CZ	2.38	0.58
2:Z:60:GLU:HG2	2:Z:347:ASN:HB2	1.85	0.58
2:X:373:PHE:HB2	2:X:405:VAL:HA	1.85	0.58
2:X:382:SER:O	2:X:383:LEU:C	2.46	0.58
2:Y:161:PRO:HB3	2:Y:187:ILE:HB	1.83	0.58
2:Y:347:ASN:O	2:Y:348:ALA:C	2.46	0.58
2:Y:557:PHE:HZ	2:Y:629:ILE:O	1.86	0.58
1:A:157:ILE:HD11	2:U:579:PHE:HB3	1.69	0.58
1:B:151:GLU:OE2	1:B:161:ARG:NH1	2.34	0.58
2:U:501:ASN:OD1	2:U:501:ASN:N	2.36	0.58
2:U:505:LEU:HD13	2:U:525:VAL:CG1	2.27	0.58
2:U:523:ASN:CG	2:U:538:ASP:HA	2.29	0.58
2:U:526:THR:HG23	2:U:535:LEU:HG	1.85	0.58
2:U:576:ASN:HA	2:U:580:THR:HG21	1.86	0.58
2:V:178:LEU:CD2	2:V:178:LEU:N	2.67	0.58
2:V:557:PHE:HE1	2:V:629:ILE:HB	1.68	0.58
2:W:542:THR:HG23	2:W:543:SER:N	2.17	0.58
2:X:398:ASP:O	2:X:401:GLN:HG3	2.03	0.58
2:Y:133:GLU:HB3	2:Y:142:LYS:HB3	1.86	0.58
2:Y:419:VAL:HA	2:Y:422:ALA:HB3	1.84	0.58
2:Z:66:MET:HA	2:Z:66:MET:HE3	1.85	0.58
2:Z:627:PHE:HD1	2:Z:629:ILE:HG13	1.67	0.58
1:E:125:ARG:HH21	1:E:184:ARG:HG2	1.68	0.58
2:V:429:TRP:CZ2	2:V:441:PHE:HB2	2.39	0.58
2:W:23:SER:OG	2:W:483:ASN:HB2	2.03	0.58
2:W:373:PHE:HB2	2:W:405:VAL:HA	1.86	0.58
2:X:576:ASN:HA	2:X:580:THR:HG21	1.86	0.58
2:Y:627:PHE:HD1	2:Y:629:ILE:HG13	1.67	0.58
2:Z:523:ASN:OD1	2:Z:538:ASP:HA	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:398:ASP:O	2:U:401:GLN:HG3	2.04	0.58
2:W:429:TRP:CZ2	2:W:441:PHE:HB2	2.39	0.58
2:W:501:ASN:OD1	2:W:501:ASN:N	2.36	0.58
2:W:581:ARG:HB2	2:W:623:PHE:CZ	2.39	0.58
2:X:66:MET:HA	2:X:66:MET:HE3	1.84	0.58
2:X:429:TRP:CZ2	2:X:441:PHE:HB2	2.39	0.58
2:Y:429:TRP:CZ2	2:Y:441:PHE:HB2	2.39	0.58
2:Z:576:ASN:HA	2:Z:580:THR:HG21	1.86	0.58
2:U:523:ASN:OD1	2:U:538:ASP:HA	2.04	0.58
2:W:523:ASN:ND2	2:W:538:ASP:HA	2.19	0.58
2:W:523:ASN:CG	2:W:538:ASP:HA	2.29	0.58
2:X:542:THR:HG23	2:X:543:SER:N	2.17	0.58
2:Y:391:LYS:CE	2:Y:440:ASN:O	2.49	0.58
2:U:557:PHE:HE1	2:U:629:ILE:HB	1.69	0.58
2:U:581:ARG:HB2	2:U:623:PHE:CZ	2.39	0.58
2:V:450:ILE:HG23	2:V:522:ILE:HG13	1.86	0.58
2:W:450:ILE:HG23	2:W:522:ILE:HG13	1.86	0.58
2:W:576:ASN:HA	2:W:580:THR:HG21	1.85	0.58
2:X:133:GLU:HB3	2:X:142:LYS:HB3	1.86	0.58
2:X:455:LYS:HG2	2:X:456:TYR:N	2.19	0.58
2:Z:429:TRP:CZ2	2:Z:441:PHE:HB2	2.39	0.58
2:U:114:ASP:CG	2:U:175:SER:HB2	2.29	0.58
2:U:450:ILE:N	2:U:540:THR:CG2	2.67	0.58
2:U:614:THR:HG23	2:U:615:PRO:O	2.04	0.58
2:V:419:VAL:HA	2:V:422:ALA:HB3	1.85	0.58
2:V:450:ILE:N	2:V:540:THR:CG2	2.66	0.58
2:W:66:MET:HA	2:W:66:MET:HE3	1.84	0.58
2:W:133:GLU:HB3	2:W:142:LYS:HB3	1.86	0.58
2:W:398:ASP:O	2:W:401:GLN:HG3	2.04	0.58
2:Y:542:THR:HG23	2:Y:543:SER:N	2.18	0.58
2:Z:373:PHE:HB2	2:Z:404:LEU:O	2.04	0.58
2:V:455:LYS:HG2	2:V:456:TYR:N	2.19	0.58
2:X:523:ASN:CG	2:X:538:ASP:HA	2.29	0.58
2:Z:114:ASP:CG	2:Z:175:SER:HB2	2.29	0.58
2:U:557:PHE:HZ	2:U:629:ILE:O	1.87	0.57
2:V:557:PHE:HZ	2:V:629:ILE:O	1.86	0.57
2:W:373:PHE:HB2	2:W:404:LEU:O	2.04	0.57
2:X:523:ASN:ND2	2:X:538:ASP:HA	2.19	0.57
2:Z:404:LEU:CD2	2:Z:554:ARG:NH1	2.60	0.57
1:A:151:GLU:OE2	1:A:161:ARG:NH1	2.30	0.57
1:E:109:TYR:HB3	1:E:161:ARG:HH22	1.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:60:GLU:HG2	2:U:347:ASN:HB2	1.85	0.57
2:U:429:TRP:CZ2	2:U:441:PHE:HB2	2.39	0.57
2:W:456:TYR:O	2:W:503:ILE:HG12	2.04	0.57
2:W:526:THR:HG23	2:W:535:LEU:HD11	1.85	0.57
2:X:450:ILE:HG23	2:X:522:ILE:HG13	1.86	0.57
2:X:557:PHE:HZ	2:X:629:ILE:O	1.86	0.57
2:Y:450:ILE:HG23	2:Y:522:ILE:HG13	1.86	0.57
2:Y:526:THR:HG23	2:Y:535:LEU:HD11	1.85	0.57
2:Z:523:ASN:CG	2:Z:538:ASP:HA	2.29	0.57
2:U:97:GLY:HA3	2:U:256:PRO:HG2	1.84	0.57
2:U:178:LEU:CD2	2:U:178:LEU:N	2.66	0.57
2:V:60:GLU:HG2	2:V:347:ASN:HB2	1.85	0.57
2:V:373:PHE:HB2	2:V:404:LEU:O	2.04	0.57
2:V:576:ASN:HA	2:V:580:THR:HG21	1.86	0.57
2:W:526:THR:HG23	2:W:535:LEU:HG	1.85	0.57
2:W:557:PHE:HZ	2:W:629:ILE:O	1.87	0.57
2:W:571:ARG:HG3	2:W:572:LEU:N	2.19	0.57
2:X:456:TYR:O	2:X:503:ILE:HG12	2.05	0.57
2:X:501:ASN:OD1	2:X:501:ASN:N	2.37	0.57
2:Y:114:ASP:CG	2:Y:175:SER:HB2	2.29	0.57
2:Y:382:SER:O	2:Y:383:LEU:C	2.46	0.57
2:Y:523:ASN:CG	2:Y:538:ASP:HA	2.29	0.57
2:U:450:ILE:HD13	2:U:522:ILE:HD12	1.86	0.57
2:U:523:ASN:ND2	2:U:538:ASP:HA	2.19	0.57
2:V:66:MET:HA	2:V:66:MET:HE3	1.85	0.57
2:V:373:PHE:HB2	2:V:405:VAL:HA	1.86	0.57
2:V:398:ASP:O	2:V:401:GLN:HG3	2.04	0.57
2:V:404:LEU:CD2	2:V:554:ARG:NH1	2.59	0.57
2:Z:419:VAL:HA	2:Z:422:ALA:HB3	1.85	0.57
2:Z:499:ILE:HG13	2:Z:502:VAL:CG2	2.34	0.57
2:U:456:TYR:HB3	2:U:504:LYS:HB3	1.85	0.57
2:U:499:ILE:HG13	2:U:502:VAL:CG2	2.35	0.57
2:V:523:ASN:CG	2:V:538:ASP:HA	2.29	0.57
2:W:499:ILE:HG13	2:W:502:VAL:CG2	2.35	0.57
2:W:514:ARG:CG	2:W:518:TYR:HE1	2.18	0.57
2:X:419:VAL:HA	2:X:422:ALA:HB3	1.84	0.57
2:Y:373:PHE:HB2	2:Y:405:VAL:HA	1.86	0.57
2:Y:456:TYR:O	2:Y:503:ILE:HG12	2.04	0.57
2:Y:456:TYR:HB3	2:Y:504:LYS:HB3	1.86	0.57
2:Z:450:ILE:HG23	2:Z:522:ILE:HG13	1.86	0.57
1:C:109:TYR:HB3	1:C:161:ARG:NH2	2.18	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:450:ILE:HG23	2:U:522:ILE:HG13	1.86	0.57
2:V:571:ARG:HG3	2:V:572:LEU:N	2.20	0.57
2:W:114:ASP:CG	2:W:175:SER:HB2	2.29	0.57
2:W:178:LEU:CD2	2:W:178:LEU:N	2.66	0.57
2:X:627:PHE:HZ	2:X:640:LEU:HD23	1.69	0.57
2:Z:178:LEU:CD2	2:Z:178:LEU:N	2.66	0.57
2:Z:557:PHE:HZ	2:Z:629:ILE:O	1.86	0.57
2:Z:581:ARG:HB2	2:Z:623:PHE:CZ	2.39	0.57
2:Z:614:THR:HG23	2:Z:615:PRO:O	2.05	0.57
2:V:501:ASN:OD1	2:V:501:ASN:N	2.37	0.57
2:V:523:ASN:ND2	2:V:538:ASP:HA	2.19	0.57
2:X:60:GLU:HG2	2:X:347:ASN:HB2	1.85	0.57
2:X:523:ASN:OD1	2:X:538:ASP:HA	2.04	0.57
2:Y:60:GLU:HG2	2:Y:347:ASN:HB2	1.85	0.57
2:Y:373:PHE:HB2	2:Y:404:LEU:O	2.04	0.57
2:Y:514:ARG:CG	2:Y:518:TYR:HE1	2.18	0.57
2:Y:523:ASN:ND2	2:Y:538:ASP:HA	2.19	0.57
2:V:114:ASP:CG	2:V:175:SER:HB2	2.29	0.57
2:V:456:TYR:O	2:V:503:ILE:HG12	2.04	0.57
2:V:514:ARG:CG	2:V:518:TYR:HE1	2.18	0.57
2:V:627:PHE:CD1	2:V:629:ILE:HG13	2.40	0.57
2:W:523:ASN:OD1	2:W:538:ASP:HA	2.05	0.57
2:X:557:PHE:HE1	2:X:629:ILE:HB	1.68	0.57
2:Z:450:ILE:N	2:Z:540:THR:CG2	2.66	0.57
2:Z:514:ARG:CG	2:Z:518:TYR:HE1	2.18	0.57
2:Z:627:PHE:CD1	2:Z:629:ILE:HG13	2.40	0.57
1:E:157:ILE:CD1	2:Y:579:PHE:CB	2.71	0.57
2:V:596:LYS:HG2	2:V:601:ILE:O	2.05	0.57
2:Y:558:ASN:HA	2:Y:561:LYS:HE2	1.86	0.57
2:Y:571:ARG:HG3	2:Y:572:LEU:N	2.20	0.57
2:Z:455:LYS:HG2	2:Z:456:TYR:N	2.19	0.57
1:C:151:GLU:OE2	1:C:161:ARG:NH1	2.37	0.57
2:U:373:PHE:HB2	2:U:404:LEU:O	2.05	0.57
2:U:596:LYS:HG2	2:U:601:ILE:O	2.05	0.57
2:V:382:SER:O	2:V:383:LEU:C	2.45	0.57
2:Y:499:ILE:HG13	2:Y:502:VAL:CG2	2.35	0.57
2:Y:614:THR:HG23	2:Y:615:PRO:O	2.04	0.57
2:Z:456:TYR:HB3	2:Z:504:LYS:HB3	1.86	0.57
1:B:130:MET:HE2	1:B:188:TRP:CD2	2.40	0.56
1:C:130:MET:HE2	1:C:188:TRP:CD2	2.40	0.56
2:U:446:THR:C	2:U:539:LYS:HE3	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:455:LYS:HG2	2:U:456:TYR:N	2.19	0.56
2:U:514:ARG:CG	2:U:518:TYR:HE1	2.18	0.56
2:V:450:ILE:HD13	2:V:522:ILE:HD12	1.86	0.56
2:V:499:ILE:HG13	2:V:502:VAL:CG2	2.34	0.56
2:W:456:TYR:HB3	2:W:504:LYS:HB3	1.85	0.56
2:X:450:ILE:HD13	2:X:522:ILE:HD12	1.86	0.56
2:X:514:ARG:CG	2:X:518:TYR:HE1	2.18	0.56
2:Y:455:LYS:HG2	2:Y:456:TYR:N	2.19	0.56
2:Y:557:PHE:HE1	2:Y:629:ILE:HB	1.69	0.56
2:Z:84:VAL:CG1	2:Z:85:ASP:O	2.53	0.56
2:Z:557:PHE:HE1	2:Z:629:ILE:HB	1.69	0.56
2:Z:571:ARG:HG3	2:Z:572:LEU:N	2.20	0.56
1:F:66:ALA:C	1:F:68:VAL:H	2.13	0.56
2:U:133:GLU:HB3	2:U:142:LYS:HB3	1.86	0.56
2:U:627:PHE:CD1	2:U:629:ILE:HG13	2.40	0.56
2:V:627:PHE:CE2	2:V:640:LEU:HD23	2.40	0.56
2:W:60:GLU:HG2	2:W:347:ASN:HB2	1.85	0.56
2:X:526:THR:HG23	2:X:535:LEU:HD11	1.85	0.56
2:Y:431:THR:O	2:Y:432:ALA:HB2	2.05	0.56
2:Y:585:ARG:HH21	2:Y:606:VAL:HG12	1.71	0.56
2:Z:373:PHE:HB2	2:Z:405:VAL:HA	1.86	0.56
2:Z:382:SER:O	2:Z:383:LEU:C	2.46	0.56
2:U:571:ARG:HG3	2:U:572:LEU:N	2.20	0.56
2:U:627:PHE:CE2	2:U:640:LEU:HD23	2.40	0.56
2:V:133:GLU:HB3	2:V:142:LYS:HB3	1.86	0.56
2:V:454:TYR:HE2	2:V:469:PRO:CB	2.19	0.56
2:V:456:TYR:HB3	2:V:504:LYS:HB3	1.86	0.56
2:W:605:ARG:HE	2:W:607:VAL:HB	1.70	0.56
2:X:114:ASP:CG	2:X:175:SER:HB2	2.29	0.56
2:X:499:ILE:HG13	2:X:502:VAL:CG2	2.35	0.56
2:X:571:ARG:HG3	2:X:572:LEU:N	2.20	0.56
2:Y:454:TYR:HE2	2:Y:469:PRO:CB	2.19	0.56
2:Y:523:ASN:OD1	2:Y:538:ASP:HA	2.05	0.56
2:Y:605:ARG:HE	2:Y:607:VAL:HB	1.70	0.56
2:Y:627:PHE:CD1	2:Y:629:ILE:HG13	2.40	0.56
2:Z:133:GLU:HB3	2:Z:142:LYS:HB3	1.86	0.56
2:Z:501:ASN:OD1	2:Z:501:ASN:N	2.37	0.56
1:F:114:ILE:HG12	1:F:115:LYS:N	2.20	0.56
2:U:373:PHE:HB2	2:U:405:VAL:HA	1.86	0.56
2:U:624:VAL:HG12	2:U:643:VAL:HB	1.87	0.56
2:V:523:ASN:OD1	2:V:538:ASP:HA	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:283:VAL:HG21	2:W:323:ILE:HD13	1.87	0.56
2:Y:84:VAL:CG1	2:Y:85:ASP:O	2.53	0.56
2:Y:450:ILE:HD13	2:Y:522:ILE:HD12	1.87	0.56
2:Z:523:ASN:ND2	2:Z:538:ASP:HA	2.20	0.56
2:Z:539:LYS:HD2	2:Z:554:ARG:HD2	1.88	0.56
2:U:454:TYR:HE2	2:U:469:PRO:CB	2.19	0.56
2:U:456:TYR:O	2:U:503:ILE:HG12	2.04	0.56
2:V:431:THR:O	2:V:432:ALA:HB2	2.06	0.56
2:W:450:ILE:HD13	2:W:522:ILE:HD12	1.86	0.56
2:W:455:LYS:HG2	2:W:456:TYR:N	2.19	0.56
2:X:23:SER:HG	2:X:483:ASN:HB3	1.70	0.56
2:X:614:THR:HG23	2:X:615:PRO:O	2.04	0.56
2:X:627:PHE:CD1	2:X:629:ILE:HG13	2.40	0.56
2:Z:456:TYR:O	2:Z:503:ILE:HG12	2.04	0.56
2:W:46:ASN:HB2	2:W:49:ASP:HB2	1.88	0.56
2:X:373:PHE:HB2	2:X:404:LEU:O	2.05	0.56
2:X:454:TYR:HE2	2:X:469:PRO:CB	2.19	0.56
2:Y:236:ILE:H	2:Y:236:ILE:HD12	1.71	0.56
2:Y:627:PHE:HZ	2:Y:640:LEU:HD23	1.70	0.56
2:Z:558:ASN:HA	2:Z:561:LYS:HE2	1.87	0.56
2:Z:596:LYS:HG2	2:Z:601:ILE:O	2.05	0.56
2:Z:627:PHE:CE2	2:Z:640:LEU:HD23	2.41	0.56
2:V:450:ILE:CG1	2:V:451:ASP:N	2.53	0.56
2:W:450:ILE:N	2:W:540:THR:CG2	2.66	0.56
2:Z:454:TYR:HE2	2:Z:469:PRO:CB	2.19	0.56
1:B:69:GLU:OE2	1:B:126:TYR:OH	2.18	0.56
1:D:156:ASP:CB	2:X:579:PHE:CE1	2.73	0.56
1:E:124:THR:HG23	1:E:126:TYR:H	1.71	0.56
2:U:503:ILE:O	2:U:504:LYS:HB2	2.06	0.56
2:V:558:ASN:HA	2:V:561:LYS:HE2	1.87	0.56
2:V:614:THR:HG23	2:V:615:PRO:O	2.05	0.56
2:W:431:THR:O	2:W:432:ALA:HB2	2.06	0.56
2:W:454:TYR:HE2	2:W:469:PRO:CB	2.19	0.56
2:W:627:PHE:CD1	2:W:629:ILE:HG13	2.40	0.56
2:X:84:VAL:CG1	2:X:85:ASP:O	2.53	0.56
2:X:585:ARG:HH21	2:X:606:VAL:HG12	1.71	0.56
2:X:605:ARG:HE	2:X:607:VAL:HB	1.70	0.56
2:X:635:ILE:HG23	2:X:635:ILE:O	2.06	0.56
2:Y:450:ILE:N	2:Y:540:THR:CG2	2.66	0.56
2:W:627:PHE:CE2	2:W:640:LEU:HD23	2.40	0.56
2:X:46:ASN:HB2	2:X:49:ASP:HB2	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:446:THR:C	2:X:539:LYS:HE3	2.21	0.56
2:X:624:VAL:HG12	2:X:643:VAL:HB	1.88	0.56
2:X:627:PHE:CE2	2:X:640:LEU:HD23	2.40	0.56
2:Y:627:PHE:CE2	2:Y:640:LEU:HD23	2.40	0.56
1:D:114:ILE:HG12	1:D:115:LYS:H	1.71	0.56
1:F:130:MET:HE2	1:F:188:TRP:CD2	2.41	0.56
2:U:558:ASN:HA	2:U:561:LYS:HE2	1.87	0.56
2:V:23:SER:OG	2:V:483:ASN:HB2	2.04	0.56
2:V:89:ALA:HB3	2:V:194:LEU:HD11	1.88	0.56
2:W:236:ILE:H	2:W:236:ILE:HD12	1.71	0.56
2:W:558:ASN:HA	2:W:561:LYS:HE2	1.87	0.56
2:X:431:THR:O	2:X:432:ALA:HB2	2.06	0.56
2:X:596:LYS:HG2	2:X:601:ILE:O	2.05	0.56
2:Z:431:THR:O	2:Z:432:ALA:HB2	2.06	0.56
2:W:596:LYS:HG2	2:W:601:ILE:O	2.05	0.55
2:W:614:THR:HG23	2:W:615:PRO:O	2.05	0.55
2:X:503:ILE:O	2:X:504:LYS:HB2	2.06	0.55
2:Z:450:ILE:HD13	2:Z:522:ILE:HD12	1.86	0.55
1:D:124:THR:HG23	1:D:126:TYR:H	1.72	0.55
2:W:557:PHE:HE1	2:W:629:ILE:HB	1.69	0.55
2:Y:150:ILE:HG22	2:Y:167:TRP:CZ3	2.41	0.55
2:Y:503:ILE:O	2:Y:504:LYS:HB2	2.06	0.55
2:Y:624:VAL:HG12	2:Y:643:VAL:HB	1.89	0.55
2:Z:585:ARG:HH21	2:Z:606:VAL:HG12	1.71	0.55
2:Z:624:VAL:HG12	2:Z:643:VAL:HB	1.88	0.55
2:U:274:GLN:H	2:U:278:GLN:NE2	2.05	0.55
2:U:283:VAL:HG21	2:U:323:ILE:HD13	1.88	0.55
2:U:431:THR:O	2:U:432:ALA:HB2	2.06	0.55
2:V:283:VAL:HG21	2:V:323:ILE:HD13	1.88	0.55
2:W:234:ILE:HB	2:W:340:LEU:HD12	1.89	0.55
2:Y:635:ILE:O	2:Y:635:ILE:HG23	2.06	0.55
2:Z:46:ASN:HB2	2:Z:49:ASP:HB2	1.89	0.55
2:Z:381:GLU:HB3	2:Z:385:THR:HG23	1.87	0.55
2:U:84:VAL:CG1	2:U:85:ASP:O	2.54	0.55
2:U:89:ALA:HB3	2:U:194:LEU:HD11	1.89	0.55
2:U:539:LYS:HD2	2:U:554:ARG:HD2	1.89	0.55
2:V:150:ILE:HG22	2:V:167:TRP:CZ3	2.42	0.55
2:V:503:ILE:O	2:V:504:LYS:HB2	2.06	0.55
2:V:539:LYS:HD2	2:V:554:ARG:HD2	1.89	0.55
2:W:302:LYS:HD3	2:W:306:ASP:HA	1.88	0.55
1:A:109:TYR:HB3	1:A:161:ARG:NH2	2.18	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:234:ILE:HB	2:U:340:LEU:HD12	1.89	0.55
2:V:605:ARG:HE	2:V:607:VAL:HB	1.70	0.55
2:V:624:VAL:HG12	2:V:643:VAL:HB	1.87	0.55
2:X:150:ILE:HG22	2:X:167:TRP:CZ3	2.42	0.55
2:X:283:VAL:HG21	2:X:323:ILE:HD13	1.88	0.55
2:X:381:GLU:HB3	2:X:385:THR:HG23	1.89	0.55
2:X:539:LYS:HG2	2:X:541:ALA:N	2.22	0.55
2:Y:46:ASN:HB2	2:Y:49:ASP:HB2	1.88	0.55
2:Y:234:ILE:HB	2:Y:340:LEU:HD12	1.89	0.55
2:Z:150:ILE:HG22	2:Z:167:TRP:CZ3	2.42	0.55
1:E:66:ALA:C	1:E:68:VAL:H	2.13	0.55
2:U:51:VAL:HG22	2:U:65:PHE:HZ	1.72	0.55
2:U:570:TYR:CD2	2:U:584:PHE:CZ	2.95	0.55
2:V:302:LYS:HD3	2:V:306:ASP:HA	1.88	0.55
2:V:381:GLU:HB3	2:V:385:THR:HG23	1.89	0.55
2:V:526:THR:HG23	2:V:535:LEU:CD1	2.37	0.55
2:W:624:VAL:HG12	2:W:643:VAL:HB	1.88	0.55
2:Z:570:TYR:CD2	2:Z:584:PHE:CZ	2.95	0.55
2:Z:605:ARG:HE	2:Z:607:VAL:HB	1.70	0.55
1:A:6:TYR:CD2	1:A:208:LEU:HG	2.42	0.55
1:C:114:ILE:HG12	1:C:115:LYS:H	1.72	0.55
1:F:19:ASP:OD2	1:F:213:TYR:OH	2.22	0.55
2:U:381:GLU:HB3	2:U:385:THR:HG23	1.88	0.55
2:U:526:THR:HG23	2:U:535:LEU:CD1	2.37	0.55
2:W:455:LYS:HE2	2:W:502:VAL:CG2	2.37	0.55
2:X:236:ILE:H	2:X:236:ILE:HD12	1.71	0.55
2:X:558:ASN:HA	2:X:561:LYS:HE2	1.88	0.55
2:U:46:ASN:HB2	2:U:49:ASP:HB2	1.89	0.55
2:V:236:ILE:HD12	2:V:236:ILE:H	1.72	0.55
2:V:570:TYR:CD2	2:V:584:PHE:CZ	2.95	0.55
2:W:274:GLN:H	2:W:278:GLN:NE2	2.05	0.55
2:X:624:VAL:HB	2:X:643:VAL:HG12	1.89	0.55
2:Y:71:PHE:C	2:Y:71:PHE:CD2	2.85	0.55
1:E:19:ASP:HA	1:E:22:SER:HB2	1.89	0.55
2:U:150:ILE:HG22	2:U:167:TRP:CZ3	2.42	0.55
2:U:635:ILE:HG23	2:U:635:ILE:O	2.06	0.55
2:V:46:ASN:HB2	2:V:49:ASP:HB2	1.89	0.55
2:V:84:VAL:CG1	2:V:85:ASP:O	2.54	0.55
2:V:234:ILE:HB	2:V:340:LEU:HD12	1.89	0.55
2:W:635:ILE:HG23	2:W:635:ILE:O	2.06	0.55
2:X:274:GLN:H	2:X:278:GLN:NE2	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:450:ILE:N	2:X:540:THR:CG2	2.66	0.55
2:Y:274:GLN:H	2:Y:278:GLN:NE2	2.05	0.55
2:Y:570:TYR:CD2	2:Y:584:PHE:CZ	2.95	0.55
2:Z:71:PHE:CD2	2:Z:71:PHE:C	2.85	0.55
2:Z:150:ILE:HG22	2:Z:167:TRP:HZ3	1.72	0.55
2:U:585:ARG:HH21	2:U:606:VAL:HG12	1.71	0.55
2:V:274:GLN:H	2:V:278:GLN:NE2	2.05	0.55
2:W:630:GLN:HE21	2:W:636:ASN:H	1.55	0.55
2:Y:302:LYS:HD3	2:Y:306:ASP:HA	1.88	0.55
2:Z:89:ALA:HB3	2:Z:194:LEU:HD11	1.88	0.55
2:U:150:ILE:HG22	2:U:167:TRP:HZ3	1.72	0.54
2:V:206:THR:O	2:V:206:THR:HG22	2.07	0.54
2:W:89:ALA:HB3	2:W:194:LEU:HD11	1.88	0.54
2:W:526:THR:HG23	2:W:535:LEU:CD1	2.37	0.54
2:W:539:LYS:HG2	2:W:541:ALA:N	2.22	0.54
2:W:570:TYR:CD2	2:W:584:PHE:CZ	2.95	0.54
2:W:585:ARG:HH21	2:W:606:VAL:HG12	1.71	0.54
2:X:71:PHE:C	2:X:71:PHE:CD2	2.85	0.54
2:Y:526:THR:HG23	2:Y:535:LEU:CD1	2.37	0.54
2:Z:274:GLN:H	2:Z:278:GLN:NE2	2.06	0.54
1:A:6:TYR:N	1:A:204:ASP:OD2	2.38	0.54
2:V:624:VAL:HB	2:V:643:VAL:HG12	1.90	0.54
2:W:503:ILE:O	2:W:504:LYS:HB2	2.06	0.54
2:W:624:VAL:HB	2:W:643:VAL:HG12	1.89	0.54
2:Y:283:VAL:HG21	2:Y:323:ILE:HD13	1.88	0.54
2:Y:624:VAL:HB	2:Y:643:VAL:HG12	1.89	0.54
2:U:539:LYS:HG2	2:U:541:ALA:N	2.22	0.54
2:U:624:VAL:HB	2:U:643:VAL:HG12	1.89	0.54
2:W:409:PRO:C	2:W:454:TYR:CE1	2.71	0.54
2:W:570:TYR:HD2	2:W:584:PHE:CZ	2.25	0.54
2:X:526:THR:HG23	2:X:535:LEU:CD1	2.37	0.54
2:Y:596:LYS:HG2	2:Y:601:ILE:O	2.06	0.54
2:Z:206:THR:O	2:Z:206:THR:HG22	2.07	0.54
2:Z:455:LYS:HE2	2:Z:502:VAL:CG2	2.37	0.54
2:Z:503:ILE:O	2:Z:504:LYS:HB2	2.06	0.54
2:Z:635:ILE:HG23	2:Z:635:ILE:O	2.06	0.54
2:U:236:ILE:H	2:U:236:ILE:HD12	1.72	0.54
2:V:51:VAL:HG22	2:V:65:PHE:HZ	1.72	0.54
2:V:455:LYS:HE2	2:V:502:VAL:CG2	2.37	0.54
2:V:585:ARG:HH21	2:V:606:VAL:HG12	1.71	0.54
2:W:381:GLU:HB3	2:W:385:THR:HG23	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:89:ALA:HB3	2:X:194:LEU:HD11	1.88	0.54
2:Z:526:THR:HG23	2:Z:535:LEU:CD1	2.37	0.54
2:U:71:PHE:C	2:U:71:PHE:CD2	2.85	0.54
2:U:302:LYS:HD3	2:U:306:ASP:HA	1.88	0.54
2:U:605:ARG:HE	2:U:607:VAL:HB	1.71	0.54
2:U:630:GLN:HE21	2:U:636:ASN:H	1.55	0.54
2:V:150:ILE:HG22	2:V:167:TRP:HZ3	1.72	0.54
2:W:627:PHE:HZ	2:W:640:LEU:HD23	1.68	0.54
2:X:90:LYS:HB2	2:X:344:LEU:HB3	1.90	0.54
2:X:570:TYR:CD2	2:X:584:PHE:CZ	2.95	0.54
2:Z:236:ILE:H	2:Z:236:ILE:HD12	1.71	0.54
2:V:570:TYR:HD2	2:V:584:PHE:CZ	2.26	0.54
2:W:245:ALA:C	2:W:247:GLY:H	2.15	0.54
2:W:539:LYS:HD2	2:W:554:ARG:HD2	1.89	0.54
2:X:455:LYS:HE2	2:X:502:VAL:CG2	2.37	0.54
2:X:539:LYS:HD2	2:X:554:ARG:HD2	1.90	0.54
2:X:580:THR:O	2:X:584:PHE:HD1	1.90	0.54
2:Y:89:ALA:HB3	2:Y:194:LEU:HD11	1.88	0.54
2:Z:51:VAL:HG22	2:Z:65:PHE:HZ	1.73	0.54
2:Z:234:ILE:HB	2:Z:340:LEU:HD12	1.89	0.54
2:Z:624:VAL:HB	2:Z:643:VAL:HG12	1.89	0.54
2:V:539:LYS:HG2	2:V:541:ALA:N	2.22	0.54
2:V:635:ILE:HG23	2:V:635:ILE:O	2.06	0.54
2:W:580:THR:O	2:W:584:PHE:HD1	1.91	0.54
2:X:178:LEU:CD2	2:X:178:LEU:N	2.66	0.54
2:Y:244:TYR:CD2	2:Y:273:PRO:HD2	2.43	0.54
1:B:66:ALA:O	1:B:68:VAL:N	2.38	0.54
2:U:455:LYS:HE2	2:U:502:VAL:CG2	2.37	0.54
2:W:84:VAL:CG1	2:W:85:ASP:O	2.54	0.54
2:Y:381:GLU:HB3	2:Y:385:THR:HG23	1.89	0.54
2:Z:244:TYR:CD2	2:Z:273:PRO:HD2	2.43	0.54
2:U:245:ALA:C	2:U:247:GLY:H	2.16	0.54
2:V:71:PHE:C	2:V:71:PHE:CD2	2.85	0.54
2:W:71:PHE:C	2:W:71:PHE:CD2	2.85	0.54
2:W:150:ILE:HG22	2:W:167:TRP:CZ3	2.42	0.54
2:X:173:SER:N	2:X:174:SER:HA	2.22	0.54
2:X:244:TYR:CD2	2:X:273:PRO:HD2	2.43	0.54
2:X:618:ILE:HG23	2:X:619:ASP:N	2.23	0.54
2:Z:539:LYS:HG2	2:Z:541:ALA:N	2.23	0.54
1:B:156:ASP:CB	2:V:579:PHE:CD1	2.82	0.54
2:U:570:TYR:HD2	2:U:584:PHE:CZ	2.26	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:234:ILE:HB	2:X:340:LEU:HD12	1.89	0.54
2:Y:23:SER:OG	2:Y:483:ASN:HB2	2.04	0.54
2:Y:150:ILE:HG22	2:Y:167:TRP:HZ3	1.72	0.54
2:Y:455:LYS:HE2	2:Y:502:VAL:CG2	2.37	0.54
2:Y:557:PHE:HE2	2:Y:631:PRO:CD	2.20	0.54
2:Z:283:VAL:HG21	2:Z:323:ILE:HD13	1.88	0.54
1:F:157:ILE:HB	2:Z:579:PHE:CE2	2.39	0.53
2:V:23:SER:HG	2:V:483:ASN:HB3	1.70	0.53
2:V:90:LYS:HB2	2:V:344:LEU:HB3	1.90	0.53
2:X:570:TYR:HD2	2:X:584:PHE:CZ	2.26	0.53
2:Y:618:ILE:HG23	2:Y:619:ASP:N	2.23	0.53
2:Z:618:ILE:HG23	2:Z:619:ASP:N	2.23	0.53
1:B:125:ARG:HH21	1:B:184:ARG:HG2	1.74	0.53
1:F:124:THR:CG2	1:F:130:MET:HG2	2.37	0.53
2:V:245:ALA:C	2:V:247:GLY:H	2.15	0.53
2:X:150:ILE:HG22	2:X:167:TRP:HZ3	1.72	0.53
2:Y:228:GLY:HA2	2:Y:345:SER:H	1.74	0.53
2:Y:371:GLN:HB3	2:Y:484:VAL:HG23	1.90	0.53
2:Z:446:THR:CB	2:Z:542:THR:HG22	2.39	0.53
1:A:130:MET:HE2	1:A:188:TRP:CD2	2.44	0.53
2:U:206:THR:O	2:U:206:THR:HG22	2.07	0.53
2:U:408:SER:CB	2:U:451:ASP:HB3	2.39	0.53
2:Z:397:GLY:HA2	2:Z:403:CYS:SG	2.49	0.53
1:A:106:VAL:HG12	1:A:107:SER:H	1.74	0.53
2:W:172:SER:O	2:W:174:SER:HA	2.07	0.53
2:W:408:SER:CB	2:W:451:ASP:HB3	2.39	0.53
2:Y:90:LYS:HB2	2:Y:344:LEU:HB3	1.91	0.53
2:Z:228:GLY:HA2	2:Z:345:SER:H	1.74	0.53
2:Z:302:LYS:HD3	2:Z:306:ASP:HA	1.89	0.53
2:U:627:PHE:HZ	2:U:640:LEU:HD23	1.69	0.53
2:V:244:TYR:CD2	2:V:273:PRO:HD2	2.43	0.53
2:W:90:LYS:HB2	2:W:344:LEU:HB3	1.91	0.53
2:W:371:GLN:HB3	2:W:484:VAL:HG23	1.90	0.53
2:W:448:ALA:HB3	2:W:540:THR:OG1	2.09	0.53
2:W:618:ILE:HG23	2:W:619:ASP:N	2.23	0.53
2:X:302:LYS:HD3	2:X:306:ASP:HA	1.89	0.53
2:Y:580:THR:O	2:Y:584:PHE:HD1	1.91	0.53
2:Z:409:PRO:C	2:Z:454:TYR:CE1	2.71	0.53
2:Z:451:ASP:OD2	2:Z:471:ALA:N	2.42	0.53
2:U:244:TYR:CD2	2:U:273:PRO:HD2	2.44	0.53
2:U:557:PHE:HE2	2:U:631:PRO:CD	2.21	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:580:THR:O	2:V:584:PHE:HD1	1.91	0.53
2:V:618:ILE:HG23	2:V:619:ASP:N	2.23	0.53
2:X:448:ALA:HB3	2:X:540:THR:OG1	2.08	0.53
2:X:557:PHE:HE2	2:X:631:PRO:CD	2.21	0.53
2:Y:51:VAL:HG22	2:Y:65:PHE:HZ	1.73	0.53
2:Y:173:SER:N	2:Y:174:SER:HA	2.22	0.53
2:Y:630:GLN:HE21	2:Y:636:ASN:H	1.55	0.53
2:Z:172:SER:O	2:Z:174:SER:HA	2.08	0.53
1:B:19:ASP:HA	1:B:22:SER:HB2	1.90	0.53
2:U:440:ASN:C	2:U:440:ASN:HD22	2.17	0.53
2:U:448:ALA:HB3	2:U:540:THR:OG1	2.09	0.53
2:V:374:ILE:HG23	2:V:472:ALA:HA	1.90	0.53
2:V:557:PHE:HE2	2:V:631:PRO:CD	2.21	0.53
2:V:630:GLN:HE21	2:V:636:ASN:H	1.56	0.53
2:W:150:ILE:HG22	2:W:167:TRP:HZ3	1.72	0.53
2:W:449:ALA:HB2	2:W:539:LYS:HA	1.91	0.53
2:X:245:ALA:C	2:X:247:GLY:H	2.16	0.53
2:Z:408:SER:CB	2:Z:451:ASP:HB3	2.39	0.53
2:U:580:THR:O	2:U:584:PHE:HD1	1.90	0.53
2:V:440:ASN:C	2:V:440:ASN:HD22	2.17	0.53
2:X:228:GLY:HA2	2:X:345:SER:CB	2.31	0.53
2:X:449:ALA:HB2	2:X:539:LYS:HA	1.91	0.53
2:Y:570:TYR:HD2	2:Y:584:PHE:CZ	2.26	0.53
2:Z:371:GLN:HB3	2:Z:484:VAL:HG23	1.90	0.53
2:Z:440:ASN:C	2:Z:440:ASN:HD22	2.17	0.53
2:Z:570:TYR:HD2	2:Z:584:PHE:CZ	2.26	0.53
1:A:56:TRP:HB3	1:A:71:ILE:HD13	1.91	0.53
2:U:275:THR:OG1	2:U:278:GLN:HG3	2.09	0.53
2:V:289:ILE:HD12	2:V:289:ILE:N	2.24	0.53
2:V:627:PHE:HZ	2:V:640:LEU:HD23	1.69	0.53
2:X:51:VAL:HG22	2:X:65:PHE:HZ	1.73	0.53
2:Y:245:ALA:C	2:Y:247:GLY:H	2.16	0.53
2:Y:557:PHE:HE2	2:Y:631:PRO:CG	2.22	0.53
2:Y:562:THR:HG23	2:Y:563:ASN:N	2.24	0.53
2:Z:90:LYS:HB2	2:Z:344:LEU:HB3	1.91	0.53
1:F:124:THR:HG23	1:F:126:TYR:H	1.73	0.53
2:U:446:THR:CB	2:U:542:THR:HG22	2.39	0.53
2:V:451:ASP:OD2	2:V:471:ALA:N	2.42	0.53
2:W:275:THR:OG1	2:W:278:GLN:HG3	2.09	0.53
2:X:206:THR:O	2:X:206:THR:HG22	2.08	0.53
2:Y:206:THR:HG22	2:Y:206:THR:O	2.07	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:451:ASP:OD2	2:Y:471:ALA:N	2.42	0.53
2:Z:502:VAL:HG12	2:Z:504:LYS:H	1.74	0.53
1:E:26:ILE:HD11	1:E:37:ILE:HD11	1.91	0.52
2:V:449:ALA:HB2	2:V:539:LYS:HA	1.91	0.52
2:W:440:ASN:HD22	2:W:440:ASN:C	2.17	0.52
2:X:562:THR:HG23	2:X:563:ASN:N	2.24	0.52
2:Y:172:SER:O	2:Y:174:SER:HA	2.08	0.52
2:Z:289:ILE:HD12	2:Z:289:ILE:N	2.24	0.52
2:Z:517:LEU:CD2	2:Z:524:PRO:HB3	2.39	0.52
1:E:157:ILE:CB	2:Y:579:PHE:CG	2.89	0.52
1:F:69:GLU:OE2	1:F:126:TYR:OH	2.11	0.52
2:U:90:LYS:HB2	2:U:344:LEU:HB3	1.91	0.52
2:U:289:ILE:HD12	2:U:289:ILE:N	2.24	0.52
2:U:618:ILE:HG23	2:U:619:ASP:N	2.23	0.52
2:V:228:GLY:HA2	2:V:345:SER:N	2.25	0.52
2:V:408:SER:CB	2:V:451:ASP:HB3	2.39	0.52
2:V:446:THR:CB	2:V:542:THR:HG22	2.39	0.52
2:W:51:VAL:HG22	2:W:65:PHE:HZ	1.73	0.52
2:W:518:TYR:O	2:W:519:GLN:HB3	2.09	0.52
2:W:547:PRO:C	2:W:553:VAL:CG2	2.82	0.52
2:W:595:ASN:CB	2:W:601:ILE:HD12	2.39	0.52
2:X:371:GLN:HB3	2:X:484:VAL:HG23	1.90	0.52
2:Y:449:ALA:HB2	2:Y:539:LYS:HA	1.92	0.52
1:E:157:ILE:N	2:Y:579:PHE:CD1	2.72	0.52
2:U:371:GLN:HB3	2:U:484:VAL:HG23	1.90	0.52
2:U:576:ASN:HB3	2:U:620:ARG:NH2	2.24	0.52
2:W:198:ILE:HG23	2:W:201:ALA:HB2	1.92	0.52
2:W:206:THR:HG22	2:W:206:THR:O	2.08	0.52
2:W:557:PHE:HE2	2:W:631:PRO:CD	2.21	0.52
2:X:172:SER:O	2:X:174:SER:HA	2.09	0.52
2:X:408:SER:CB	2:X:451:ASP:HB3	2.39	0.52
2:Y:275:THR:OG1	2:Y:278:GLN:HG3	2.09	0.52
2:Z:557:PHE:HE2	2:Z:631:PRO:CD	2.21	0.52
2:Z:580:THR:O	2:Z:584:PHE:HD1	1.91	0.52
2:U:172:SER:O	2:U:174:SER:HA	2.09	0.52
2:U:198:ILE:HG23	2:U:201:ALA:HB2	1.92	0.52
2:U:502:VAL:HG12	2:U:504:LYS:H	1.74	0.52
2:V:595:ASN:CB	2:V:601:ILE:HD12	2.39	0.52
2:W:244:TYR:CD2	2:W:273:PRO:HD2	2.44	0.52
2:X:440:ASN:C	2:X:440:ASN:HD22	2.17	0.52
2:Y:352:ALA:O	2:Y:355:LEU:HB2	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:440:ASN:HD22	2:Y:440:ASN:C	2.17	0.52
2:Z:29:LEU:O	2:Z:80:VAL:HA	2.10	0.52
2:Z:198:ILE:HG23	2:Z:201:ALA:HB2	1.92	0.52
2:Z:446:THR:C	2:Z:539:LYS:HE3	2.23	0.52
2:Z:449:ALA:HB2	2:Z:539:LYS:HA	1.92	0.52
1:B:27:LYS:HE2	1:B:29:GLN:HG2	1.91	0.52
2:U:374:ILE:HG23	2:U:472:ALA:HA	1.91	0.52
2:V:371:GLN:HB3	2:V:484:VAL:HG23	1.91	0.52
2:W:173:SER:N	2:W:174:SER:HA	2.22	0.52
2:W:397:GLY:HA2	2:W:403:CYS:SG	2.49	0.52
2:Y:409:PRO:C	2:Y:454:TYR:CE1	2.71	0.52
2:Z:275:THR:OG1	2:Z:278:GLN:HG3	2.10	0.52
2:Z:630:GLN:HE21	2:Z:636:ASN:H	1.55	0.52
2:U:562:THR:HG23	2:U:563:ASN:N	2.24	0.52
2:U:582:SER:O	2:U:583:SER:HB3	2.10	0.52
2:V:228:GLY:HA2	2:V:345:SER:H	1.74	0.52
2:V:562:THR:HG23	2:V:563:ASN:N	2.24	0.52
2:W:289:ILE:HD12	2:W:289:ILE:N	2.24	0.52
2:W:451:ASP:OD2	2:W:471:ALA:N	2.42	0.52
2:Y:518:TYR:O	2:Y:519:GLN:HB3	2.10	0.52
2:Z:448:ALA:HB3	2:Z:540:THR:OG1	2.09	0.52
2:Z:557:PHE:HE2	2:Z:631:PRO:CG	2.22	0.52
2:U:397:GLY:HA2	2:U:403:CYS:SG	2.49	0.52
2:X:557:PHE:HE2	2:X:631:PRO:CG	2.22	0.52
2:Y:374:ILE:HG23	2:Y:472:ALA:HA	1.91	0.52
2:Z:518:TYR:HE2	2:Z:536:TYR:HB2	1.69	0.52
1:C:157:ILE:HD12	2:W:579:PHE:CD2	2.45	0.52
1:D:151:GLU:OE2	1:D:161:ARG:NH1	2.39	0.52
2:U:399:VAL:O	2:U:399:VAL:HG12	2.09	0.52
2:U:557:PHE:HE2	2:U:631:PRO:CG	2.22	0.52
2:V:198:ILE:HG23	2:V:201:ALA:HB2	1.92	0.52
2:W:502:VAL:HG12	2:W:504:LYS:H	1.75	0.52
2:X:198:ILE:HG23	2:X:201:ALA:HB2	1.92	0.52
2:X:228:GLY:HA2	2:X:345:SER:N	2.25	0.52
2:X:397:GLY:HA2	2:X:403:CYS:SG	2.49	0.52
2:Y:198:ILE:HG23	2:Y:201:ALA:HB2	1.92	0.52
2:Y:518:TYR:HE2	2:Y:536:TYR:HB2	1.70	0.52
2:Z:453:ASN:H	2:Z:453:ASN:HD22	1.58	0.52
1:D:124:THR:CG2	1:D:130:MET:HG2	2.39	0.52
2:U:51:VAL:HG22	2:U:65:PHE:CZ	2.45	0.52
2:U:228:GLY:HA2	2:U:345:SER:H	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:391:LYS:HE3	2:U:441:PHE:HA	1.92	0.52
2:U:518:TYR:O	2:U:519:GLN:HB3	2.10	0.52
2:V:496:ARG:N	2:V:534:VAL:HG11	2.25	0.52
2:V:547:PRO:C	2:V:553:VAL:CG2	2.83	0.52
2:W:228:GLY:HA2	2:W:345:SER:H	1.74	0.52
2:W:446:THR:CB	2:W:542:THR:HG22	2.39	0.52
2:X:374:ILE:HG23	2:X:472:ALA:HA	1.91	0.52
2:X:409:PRO:C	2:X:454:TYR:CE1	2.71	0.52
2:Y:51:VAL:HG22	2:Y:65:PHE:CZ	2.45	0.52
2:Z:25:GLY:HA2	2:Z:484:VAL:HG21	1.92	0.52
2:U:228:GLY:HA2	2:U:345:SER:N	2.25	0.52
2:V:29:LEU:O	2:V:80:VAL:HA	2.10	0.52
2:V:397:GLY:HA2	2:V:403:CYS:SG	2.50	0.52
2:V:502:VAL:HG12	2:V:504:LYS:H	1.75	0.52
2:W:391:LYS:HE3	2:W:441:PHE:HA	1.92	0.52
2:W:605:ARG:O	2:W:609:ASP:HB2	2.10	0.52
2:X:23:SER:OG	2:X:483:ASN:HB2	2.04	0.52
2:X:51:VAL:HG22	2:X:65:PHE:CZ	2.45	0.52
2:X:391:LYS:HE3	2:X:441:PHE:HA	1.92	0.52
2:Y:228:GLY:HA2	2:Y:345:SER:N	2.25	0.52
2:Y:411:ARG:O	2:Y:412:GLU:C	2.53	0.52
2:Y:448:ALA:HB3	2:Y:540:THR:OG1	2.10	0.52
2:Z:411:ARG:O	2:Z:412:GLU:C	2.53	0.52
2:Z:511:GLN:HA	2:Z:511:GLN:HE21	1.75	0.52
2:Z:562:THR:HG23	2:Z:563:ASN:N	2.24	0.52
1:A:212:THR:HA	1:A:222:ASP:HA	1.92	0.51
2:U:449:ALA:HB2	2:U:539:LYS:HA	1.92	0.51
2:V:51:VAL:HG22	2:V:65:PHE:CZ	2.45	0.51
2:V:557:PHE:HE2	2:V:631:PRO:CG	2.22	0.51
2:W:51:VAL:HG22	2:W:65:PHE:CZ	2.45	0.51
2:W:352:ALA:O	2:W:355:LEU:HB2	2.10	0.51
2:W:454:TYR:HE2	2:W:469:PRO:HB3	1.76	0.51
2:W:621:ASN:CG	2:W:622:GLU:H	2.18	0.51
2:X:451:ASP:OD2	2:X:471:ALA:N	2.42	0.51
2:X:539:LYS:HD3	2:X:541:ALA:HB2	1.91	0.51
2:Y:289:ILE:HD12	2:Y:289:ILE:N	2.24	0.51
2:Y:397:GLY:HA2	2:Y:403:CYS:SG	2.49	0.51
2:Y:454:TYR:HE2	2:Y:469:PRO:HB3	1.76	0.51
2:Z:23:SER:HG	2:Z:483:ASN:HB3	1.72	0.51
2:U:84:VAL:HG13	2:U:89:ALA:HB2	1.92	0.51
2:U:451:ASP:OD2	2:U:471:ALA:N	2.42	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:454:TYR:HE2	2:U:469:PRO:HB3	1.76	0.51
2:V:275:THR:OG1	2:V:278:GLN:HG3	2.10	0.51
2:X:502:VAL:HG12	2:X:504:LYS:H	1.75	0.51
2:X:511:GLN:HE21	2:X:511:GLN:HA	1.75	0.51
2:X:517:LEU:CD2	2:X:524:PRO:HB3	2.38	0.51
2:X:605:ARG:HD3	2:X:608:CYS:SG	2.51	0.51
2:Y:517:LEU:CD2	2:Y:524:PRO:HB3	2.39	0.51
2:Z:245:ALA:C	2:Z:247:GLY:H	2.16	0.51
2:U:605:ARG:HD3	2:U:608:CYS:SG	2.51	0.51
2:V:560:LEU:HD13	2:V:591:TYR:HE2	1.76	0.51
2:W:496:ARG:N	2:W:534:VAL:HG11	2.24	0.51
2:W:557:PHE:HE2	2:W:631:PRO:CG	2.22	0.51
2:X:30:ALA:HB3	2:X:359:TRP:CD2	2.46	0.51
2:X:399:VAL:O	2:X:399:VAL:HG12	2.10	0.51
2:X:454:TYR:HE2	2:X:469:PRO:HB3	1.76	0.51
2:X:547:PRO:C	2:X:553:VAL:CG2	2.83	0.51
2:Y:23:SER:HG	2:Y:483:ASN:HB3	1.71	0.51
2:Z:194:LEU:HD23	2:Z:195:LEU:N	2.25	0.51
2:Z:374:ILE:HG23	2:Z:472:ALA:HA	1.91	0.51
2:Z:576:ASN:HB3	2:Z:620:ARG:NH2	2.25	0.51
2:Z:627:PHE:HZ	2:Z:640:LEU:HD23	1.69	0.51
1:A:147:THR:HG23	1:A:163:ILE:HB	1.92	0.51
1:D:109:TYR:HB3	1:D:161:ARG:NH2	2.18	0.51
2:U:453:ASN:H	2:U:453:ASN:HD22	1.58	0.51
2:U:605:ARG:O	2:U:609:ASP:HB2	2.10	0.51
2:V:448:ALA:HB3	2:V:540:THR:OG1	2.10	0.51
2:V:518:TYR:O	2:V:519:GLN:HB3	2.10	0.51
2:W:399:VAL:O	2:W:399:VAL:HG12	2.10	0.51
2:X:84:VAL:HG13	2:X:89:ALA:HB2	1.93	0.51
2:X:275:THR:OG1	2:X:278:GLN:HG3	2.09	0.51
2:Y:84:VAL:HG13	2:Y:89:ALA:HB2	1.92	0.51
2:Z:173:SER:N	2:Z:174:SER:HA	2.22	0.51
2:Z:399:VAL:HG12	2:Z:399:VAL:O	2.09	0.51
2:Z:595:ASN:CB	2:Z:601:ILE:HD12	2.39	0.51
2:U:29:LEU:O	2:U:80:VAL:HA	2.10	0.51
2:W:228:GLY:HA2	2:W:345:SER:N	2.25	0.51
2:X:228:GLY:HA2	2:X:345:SER:H	1.74	0.51
2:Y:29:LEU:O	2:Y:80:VAL:HA	2.10	0.51
2:Y:237:GLU:HG3	2:Y:337:ILE:CD1	2.41	0.51
2:Y:502:VAL:HG12	2:Y:504:LYS:H	1.75	0.51
2:Y:605:ARG:O	2:Y:609:ASP:HB2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:108:GLN:HB3	1:C:200:PRO:HD2	1.91	0.51
2:U:496:ARG:N	2:U:534:VAL:HG11	2.25	0.51
2:U:517:LEU:CD2	2:U:524:PRO:HB3	2.39	0.51
2:V:25:GLY:HA2	2:V:484:VAL:HG21	1.93	0.51
2:V:173:SER:N	2:V:174:SER:HA	2.22	0.51
2:V:194:LEU:HD23	2:V:195:LEU:N	2.26	0.51
2:V:352:ALA:O	2:V:355:LEU:HB2	2.11	0.51
2:V:605:ARG:O	2:V:609:ASP:HB2	2.10	0.51
2:W:84:VAL:HG13	2:W:89:ALA:HB2	1.93	0.51
2:W:161:PRO:O	2:W:186:LYS:HB3	2.11	0.51
2:W:562:THR:HG23	2:W:563:ASN:N	2.24	0.51
2:Y:194:LEU:HD23	2:Y:195:LEU:N	2.26	0.51
2:Z:51:VAL:HG22	2:Z:65:PHE:CZ	2.45	0.51
2:Z:560:LEU:HD13	2:Z:591:TYR:HE2	1.75	0.51
1:F:5:PHE:CE2	1:F:201:PRO:HB3	2.45	0.51
2:U:173:SER:N	2:U:174:SER:HA	2.22	0.51
2:U:194:LEU:HD23	2:U:195:LEU:N	2.26	0.51
2:U:237:GLU:HG3	2:U:337:ILE:CD1	2.41	0.51
2:U:352:ALA:O	2:U:355:LEU:HB2	2.10	0.51
2:V:411:ARG:O	2:V:412:GLU:C	2.54	0.51
2:W:374:ILE:HG23	2:W:472:ALA:HA	1.91	0.51
2:X:161:PRO:O	2:X:186:LYS:HB3	2.11	0.51
2:X:595:ASN:CB	2:X:601:ILE:HD12	2.40	0.51
2:X:630:GLN:HE21	2:X:636:ASN:H	1.56	0.51
2:Y:408:SER:CB	2:Y:451:ASP:HB3	2.39	0.51
2:Y:617:VAL:HG23	2:Y:619:ASP:O	2.11	0.51
2:Z:228:GLY:HA2	2:Z:345:SER:N	2.25	0.51
2:Z:352:ALA:O	2:Z:355:LEU:HB2	2.11	0.51
2:Z:582:SER:O	2:Z:583:SER:HB3	2.11	0.51
2:Z:605:ARG:HD3	2:Z:608:CYS:SG	2.50	0.51
2:Z:605:ARG:O	2:Z:609:ASP:HB2	2.10	0.51
2:Z:617:VAL:HG23	2:Z:619:ASP:O	2.11	0.51
1:A:124:THR:CG2	1:A:130:MET:HG2	2.40	0.51
2:V:511:GLN:HA	2:V:511:GLN:HE21	1.75	0.51
2:W:30:ALA:HB3	2:W:359:TRP:CD2	2.46	0.51
2:X:605:ARG:O	2:X:609:ASP:HB2	2.10	0.51
2:X:617:VAL:HG23	2:X:619:ASP:O	2.10	0.51
2:Y:627:PHE:CD1	2:Y:629:ILE:CD1	2.94	0.51
2:U:450:ILE:CG1	2:U:451:ASP:N	2.53	0.51
2:U:511:GLN:HA	2:U:511:GLN:HE21	1.76	0.51
2:U:621:ASN:CG	2:U:622:GLU:H	2.19	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:172:SER:O	2:V:174:SER:HA	2.08	0.51
2:V:237:GLU:HG3	2:V:337:ILE:CD1	2.40	0.51
2:V:582:SER:O	2:V:583:SER:HB3	2.11	0.51
2:V:605:ARG:HD3	2:V:608:CYS:SG	2.51	0.51
2:W:71:PHE:C	2:W:73:GLN:H	2.19	0.51
2:W:539:LYS:HD3	2:W:541:ALA:HB2	1.92	0.51
2:X:70:ASN:HB3	2:X:457:GLN:HE22	1.76	0.51
2:X:352:ALA:O	2:X:355:LEU:HB2	2.11	0.51
2:X:496:ARG:N	2:X:534:VAL:HG11	2.25	0.51
2:Y:399:VAL:O	2:Y:399:VAL:HG12	2.09	0.51
1:B:157:ILE:CG1	2:V:579:PHE:CD2	2.79	0.51
2:V:300:GLY:O	2:V:302:LYS:HG3	2.11	0.51
2:V:391:LYS:HE3	2:V:441:PHE:HA	1.93	0.51
2:V:399:VAL:O	2:V:399:VAL:HG12	2.09	0.51
2:V:450:ILE:HD13	2:V:522:ILE:CD1	2.41	0.51
2:V:621:ASN:CG	2:V:622:GLU:H	2.19	0.51
2:W:411:ARG:O	2:W:412:GLU:C	2.54	0.51
2:X:71:PHE:C	2:X:73:GLN:H	2.19	0.51
2:X:621:ASN:CG	2:X:622:GLU:H	2.19	0.51
2:Y:30:ALA:HB3	2:Y:359:TRP:CD2	2.46	0.51
2:Y:254:ILE:HG12	2:Y:337:ILE:HB	1.93	0.51
2:Z:30:ALA:HB3	2:Z:359:TRP:CD2	2.46	0.51
1:E:114:ILE:HG12	1:E:115:LYS:H	1.76	0.50
2:U:617:VAL:HG23	2:U:619:ASP:O	2.10	0.50
2:U:627:PHE:CD1	2:U:629:ILE:CD1	2.95	0.50
2:V:407:CYS:N	2:V:449:ALA:O	2.44	0.50
2:W:582:SER:O	2:W:583:SER:HB3	2.10	0.50
2:X:29:LEU:O	2:X:80:VAL:HA	2.10	0.50
2:X:254:ILE:HG12	2:X:337:ILE:HB	1.93	0.50
2:Y:583:SER:CA	2:Y:586:THR:HG22	2.42	0.50
2:Z:71:PHE:C	2:Z:73:GLN:H	2.19	0.50
2:Z:391:LYS:HE3	2:Z:441:PHE:HA	1.93	0.50
2:Z:621:ASN:CG	2:Z:622:GLU:H	2.18	0.50
2:U:23:SER:OG	2:U:483:ASN:HB2	2.04	0.50
2:U:595:ASN:CB	2:U:601:ILE:HD12	2.40	0.50
2:V:215:LYS:CE	2:V:329:ASN:HD21	2.24	0.50
2:V:588:THR:HG23	2:V:589:ALA:N	2.27	0.50
2:V:617:VAL:HG23	2:V:619:ASP:O	2.11	0.50
2:W:450:ILE:HD13	2:W:522:ILE:CD1	2.41	0.50
2:W:605:ARG:HD3	2:W:608:CYS:SG	2.51	0.50
2:X:518:TYR:O	2:X:519:GLN:HB3	2.10	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:543:SER:O	2:X:544:VAL:HG23	2.12	0.50
2:Y:25:GLY:HA2	2:Y:484:VAL:HG21	1.93	0.50
2:Y:161:PRO:O	2:Y:186:LYS:HB3	2.11	0.50
2:Y:178:LEU:CD2	2:Y:178:LEU:N	2.66	0.50
2:Y:450:ILE:HD13	2:Y:522:ILE:CD1	2.42	0.50
2:Y:453:ASN:HD22	2:Y:453:ASN:H	1.58	0.50
2:Z:237:GLU:HG3	2:Z:337:ILE:CD1	2.41	0.50
1:E:124:THR:CG2	1:E:130:MET:HG2	2.41	0.50
2:U:560:LEU:HD13	2:U:591:TYR:HE2	1.76	0.50
2:V:543:SER:O	2:V:544:VAL:HG23	2.11	0.50
2:V:627:PHE:CD1	2:V:629:ILE:CD1	2.94	0.50
2:W:25:GLY:HA2	2:W:484:VAL:HG21	1.93	0.50
2:W:194:LEU:HD23	2:W:195:LEU:N	2.26	0.50
2:W:511:GLN:HA	2:W:511:GLN:HE21	1.76	0.50
2:W:517:LEU:CD2	2:W:524:PRO:HB3	2.39	0.50
2:X:588:THR:HG23	2:X:589:ALA:N	2.27	0.50
2:Y:496:ARG:N	2:Y:534:VAL:HG11	2.25	0.50
2:Y:496:ARG:O	2:Y:496:ARG:CG	2.59	0.50
2:Y:621:ASN:CG	2:Y:622:GLU:H	2.19	0.50
2:Z:454:TYR:HE2	2:Z:469:PRO:HB3	1.76	0.50
2:Z:543:SER:O	2:Z:544:VAL:HG23	2.11	0.50
1:C:19:ASP:HA	1:C:22:SER:HB2	1.93	0.50
2:U:391:LYS:HZ1	2:U:440:ASN:ND2	2.06	0.50
2:V:517:LEU:CD2	2:V:524:PRO:HB3	2.39	0.50
2:V:622:GLU:HG2	2:V:644:ALA:O	2.12	0.50
2:W:560:LEU:HD13	2:W:591:TYR:HE2	1.76	0.50
2:X:71:PHE:C	2:X:73:GLN:N	2.69	0.50
2:X:220:PRO:HD2	2:X:338:LEU:HD11	1.94	0.50
2:X:453:ASN:H	2:X:453:ASN:HD22	1.58	0.50
2:X:582:SER:O	2:X:583:SER:HB3	2.11	0.50
2:X:627:PHE:CD1	2:X:629:ILE:CD1	2.94	0.50
2:X:627:PHE:CE1	2:X:629:ILE:HD12	2.47	0.50
2:Y:71:PHE:C	2:Y:73:GLN:H	2.19	0.50
2:Y:228:GLY:HA2	2:Y:345:SER:CB	2.32	0.50
2:Y:557:PHE:CE1	2:Y:638:ILE:HG22	2.47	0.50
2:Z:627:PHE:CD1	2:Z:629:ILE:CD1	2.95	0.50
1:D:223:LEU:HD12	1:D:224:PRO:HD2	1.92	0.50
2:U:411:ARG:O	2:U:412:GLU:C	2.54	0.50
2:U:627:PHE:CE1	2:U:629:ILE:HD12	2.47	0.50
2:V:30:ALA:HB3	2:V:359:TRP:CD2	2.46	0.50
2:V:71:PHE:C	2:V:73:GLN:H	2.19	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:161:PRO:O	2:V:186:LYS:HB3	2.11	0.50
2:V:454:TYR:HE2	2:V:469:PRO:HB3	1.76	0.50
2:W:29:LEU:O	2:W:80:VAL:HA	2.10	0.50
2:W:300:GLY:O	2:W:302:LYS:HG3	2.12	0.50
2:W:622:GLU:HG2	2:W:644:ALA:O	2.12	0.50
2:W:624:VAL:CG1	2:W:643:VAL:HG12	2.42	0.50
2:X:194:LEU:HD23	2:X:195:LEU:N	2.27	0.50
2:X:446:THR:CB	2:X:542:THR:HG22	2.39	0.50
2:X:583:SER:CA	2:X:586:THR:HG22	2.42	0.50
2:Y:560:LEU:HD13	2:Y:591:TYR:HE2	1.76	0.50
2:Z:220:PRO:HD2	2:Z:338:LEU:HD11	1.94	0.50
2:Z:450:ILE:HD13	2:Z:522:ILE:CD1	2.41	0.50
2:Z:557:PHE:CE1	2:Z:638:ILE:CG2	2.95	0.50
2:Z:557:PHE:CE1	2:Z:638:ILE:HG22	2.46	0.50
1:B:157:ILE:HD12	2:V:579:PHE:CD2	2.47	0.50
2:U:30:ALA:HB3	2:U:359:TRP:CD2	2.46	0.50
2:U:70:ASN:HB3	2:U:457:GLN:HE22	1.76	0.50
2:U:220:PRO:HD2	2:U:338:LEU:HD11	1.93	0.50
2:W:588:THR:HG23	2:W:589:ALA:N	2.27	0.50
2:W:627:PHE:CE1	2:W:629:ILE:HD12	2.47	0.50
2:X:237:GLU:HG3	2:X:337:ILE:CD1	2.41	0.50
2:X:362:PHE:HA	2:X:368:VAL:HG21	1.94	0.50
2:X:557:PHE:CE1	2:X:638:ILE:HG22	2.47	0.50
2:Y:391:LYS:HE3	2:Y:441:PHE:HA	1.93	0.50
2:Y:557:PHE:CE2	2:Y:631:PRO:HG3	2.47	0.50
2:Y:627:PHE:CE1	2:Y:629:ILE:HD12	2.47	0.50
2:Z:300:GLY:O	2:Z:302:LYS:HG3	2.11	0.50
2:Z:518:TYR:O	2:Z:519:GLN:HB3	2.10	0.50
2:Z:627:PHE:CZ	2:Z:640:LEU:CD2	2.95	0.50
2:U:71:PHE:C	2:U:73:GLN:H	2.19	0.50
2:U:518:TYR:HE2	2:U:536:TYR:HB2	1.71	0.50
2:V:236:ILE:HD12	2:V:236:ILE:N	2.27	0.50
2:V:596:LYS:HD3	2:V:596:LYS:C	2.37	0.50
2:W:362:PHE:HA	2:W:368:VAL:HG21	1.94	0.50
2:W:617:VAL:HG23	2:W:619:ASP:O	2.11	0.50
2:X:622:GLU:HG2	2:X:644:ALA:O	2.12	0.50
2:Y:557:PHE:CE1	2:Y:638:ILE:CG2	2.95	0.50
2:Z:254:ILE:HG12	2:Z:337:ILE:HB	1.93	0.50
2:Z:588:THR:HG23	2:Z:589:ALA:N	2.26	0.50
1:C:66:ALA:O	1:C:68:VAL:N	2.45	0.50
2:U:71:PHE:C	2:U:73:GLN:N	2.69	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:407:CYS:N	2:U:449:ALA:O	2.44	0.50
2:U:539:LYS:HD3	2:U:541:ALA:HB2	1.93	0.50
2:U:543:SER:O	2:U:544:VAL:HG23	2.12	0.50
2:U:588:THR:HG23	2:U:589:ALA:N	2.27	0.50
2:U:596:LYS:HD3	2:U:596:LYS:C	2.37	0.50
2:W:453:ASN:H	2:W:453:ASN:HD22	1.58	0.50
2:W:557:PHE:CE1	2:W:638:ILE:HG22	2.46	0.50
2:W:627:PHE:CD1	2:W:629:ILE:CD1	2.94	0.50
2:X:236:ILE:HD12	2:X:236:ILE:N	2.27	0.50
2:X:411:ARG:O	2:X:412:GLU:C	2.54	0.50
2:X:445:SER:HB3	2:X:448:ALA:HB2	1.94	0.50
2:X:523:ASN:HD21	2:X:538:ASP:CA	2.25	0.50
2:Y:70:ASN:HB3	2:Y:457:GLN:HE22	1.77	0.50
2:Y:71:PHE:C	2:Y:73:GLN:N	2.69	0.50
2:Y:446:THR:CB	2:Y:542:THR:HG22	2.39	0.50
2:Y:576:ASN:HB3	2:Y:620:ARG:NH2	2.25	0.50
2:Y:582:SER:O	2:Y:583:SER:HB3	2.10	0.50
1:C:147:THR:HG23	1:C:163:ILE:HB	1.93	0.50
2:U:25:GLY:HA2	2:U:484:VAL:HG21	1.93	0.50
2:V:220:PRO:HD2	2:V:338:LEU:HD11	1.94	0.50
2:V:383:LEU:O	2:V:386:ALA:HB3	2.12	0.50
2:V:453:ASN:HD22	2:V:453:ASN:H	1.58	0.50
2:V:627:PHE:CZ	2:V:640:LEU:CD2	2.94	0.50
2:W:236:ILE:HD12	2:W:236:ILE:N	2.27	0.50
2:W:547:PRO:HB2	2:W:553:VAL:HG11	1.94	0.50
2:X:304:ILE:HG13	2:X:305:TYR:CD2	2.47	0.50
2:Y:543:SER:O	2:Y:544:VAL:HG23	2.12	0.50
2:Y:588:THR:HG23	2:Y:589:ALA:N	2.27	0.50
2:Y:605:ARG:HD3	2:Y:608:CYS:SG	2.52	0.50
2:Z:84:VAL:HG13	2:Z:89:ALA:HB2	1.93	0.50
2:Z:547:PRO:C	2:Z:553:VAL:CG2	2.83	0.50
2:Z:547:PRO:HB2	2:Z:553:VAL:HG11	1.94	0.50
2:Z:557:PHE:CE2	2:Z:631:PRO:HG3	2.47	0.50
2:Z:583:SER:CA	2:Z:586:THR:HG22	2.42	0.50
2:U:362:PHE:HA	2:U:368:VAL:HG21	1.94	0.49
2:U:583:SER:CA	2:U:586:THR:HG22	2.42	0.49
2:U:622:GLU:HG2	2:U:644:ALA:O	2.12	0.49
2:V:84:VAL:HG13	2:V:89:ALA:HB2	1.93	0.49
2:W:596:LYS:HD3	2:W:596:LYS:C	2.37	0.49
2:X:450:ILE:HD13	2:X:522:ILE:CD1	2.42	0.49
2:X:560:LEU:HD13	2:X:591:TYR:HE2	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:220:PRO:HD2	2:Y:338:LEU:HD11	1.94	0.49
2:Y:596:LYS:HD3	2:Y:596:LYS:C	2.37	0.49
2:Z:236:ILE:HD12	2:Z:236:ILE:N	2.27	0.49
2:Z:622:GLU:HG2	2:Z:644:ALA:O	2.12	0.49
1:A:124:THR:HG23	1:A:126:TYR:H	1.77	0.49
2:W:254:ILE:HG12	2:W:337:ILE:HB	1.93	0.49
2:W:304:ILE:HG13	2:W:305:TYR:CD2	2.47	0.49
2:W:456:TYR:HB2	2:W:467:TRP:CZ3	2.47	0.49
2:W:627:PHE:CZ	2:W:640:LEU:CD2	2.94	0.49
2:X:289:ILE:HD12	2:X:289:ILE:N	2.24	0.49
2:Y:627:PHE:CZ	2:Y:640:LEU:CD2	2.95	0.49
2:Z:407:CYS:N	2:Z:449:ALA:O	2.45	0.49
2:Z:539:LYS:HD3	2:Z:541:ALA:HB2	1.94	0.49
2:Z:557:PHE:CZ	2:Z:638:ILE:CG2	2.94	0.49
1:B:77:LEU:HD13	1:B:120:LEU:HD23	1.94	0.49
2:U:161:PRO:O	2:U:186:LYS:HB3	2.11	0.49
2:U:254:ILE:HG12	2:U:337:ILE:HB	1.93	0.49
2:U:300:GLY:O	2:U:302:LYS:HG3	2.12	0.49
2:V:557:PHE:CZ	2:V:638:ILE:CG2	2.94	0.49
2:W:220:PRO:HD2	2:W:338:LEU:HD11	1.94	0.49
2:X:627:PHE:CZ	2:X:640:LEU:CD2	2.95	0.49
2:X:627:PHE:CD1	2:X:629:ILE:HD12	2.48	0.49
2:Y:236:ILE:HD12	2:Y:236:ILE:N	2.27	0.49
2:Y:304:ILE:HG13	2:Y:305:TYR:CD2	2.48	0.49
2:Y:595:ASN:CB	2:Y:601:ILE:HD12	2.39	0.49
2:Z:161:PRO:O	2:Z:186:LYS:HB3	2.11	0.49
2:Z:228:GLY:HA2	2:Z:345:SER:CB	2.32	0.49
2:Z:627:PHE:CE1	2:Z:629:ILE:HD12	2.47	0.49
1:A:157:ILE:N	2:U:579:PHE:CG	2.72	0.49
2:U:557:PHE:CE1	2:U:638:ILE:CG2	2.95	0.49
2:W:627:PHE:CD1	2:W:629:ILE:HD12	2.48	0.49
2:X:518:TYR:HE2	2:X:536:TYR:HB2	1.70	0.49
2:X:547:PRO:HB2	2:X:553:VAL:HG11	1.94	0.49
2:X:557:PHE:CE1	2:X:638:ILE:CG2	2.95	0.49
2:X:596:LYS:HD3	2:X:596:LYS:C	2.37	0.49
2:Y:511:GLN:HA	2:Y:511:GLN:HE21	1.76	0.49
2:Y:627:PHE:CD1	2:Y:629:ILE:HD12	2.47	0.49
1:B:6:TYR:CD2	1:B:208:LEU:HG	2.48	0.49
1:B:74:ARG:NH2	1:B:231:GLU:OE2	2.43	0.49
2:U:109:ASN:O	2:U:177:GLY:HA3	2.13	0.49
2:U:450:ILE:HD13	2:U:522:ILE:CD1	2.41	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:557:PHE:CE1	2:U:638:ILE:HG22	2.47	0.49
2:V:71:PHE:C	2:V:73:GLN:N	2.70	0.49
2:V:254:ILE:HG12	2:V:337:ILE:HB	1.93	0.49
2:V:557:PHE:CE2	2:V:631:PRO:HG3	2.47	0.49
2:W:70:ASN:HB3	2:W:457:GLN:HE22	1.76	0.49
2:W:382:SER:CB	2:W:385:THR:HG22	2.42	0.49
2:W:543:SER:O	2:W:544:VAL:HG23	2.11	0.49
2:X:300:GLY:O	2:X:302:LYS:HG3	2.11	0.49
2:Y:300:GLY:O	2:Y:302:LYS:HG3	2.12	0.49
2:Y:379:ALA:HB2	2:Y:454:TYR:CE2	2.46	0.49
2:Y:547:PRO:HB2	2:Y:553:VAL:HG11	1.93	0.49
2:Z:511:GLN:HA	2:Z:511:GLN:NE2	2.28	0.49
2:V:517:LEU:C	2:V:522:ILE:HG22	2.38	0.49
2:V:627:PHE:CD1	2:V:629:ILE:HD12	2.48	0.49
2:V:627:PHE:CE1	2:V:629:ILE:HD12	2.48	0.49
2:W:237:GLU:HG3	2:W:337:ILE:CD1	2.41	0.49
2:W:517:LEU:C	2:W:522:ILE:HG22	2.38	0.49
2:X:383:LEU:O	2:X:386:ALA:HB3	2.13	0.49
2:X:448:ALA:CB	2:X:540:THR:OG1	2.61	0.49
1:E:12:ARG:NH2	1:E:199:TYR:OH	2.45	0.49
2:U:236:ILE:HD12	2:U:236:ILE:N	2.28	0.49
2:U:304:ILE:HG13	2:U:305:TYR:CD2	2.46	0.49
2:U:557:PHE:CE2	2:U:631:PRO:HG3	2.47	0.49
2:U:627:PHE:CD1	2:U:629:ILE:HD12	2.48	0.49
2:V:109:ASN:O	2:V:177:GLY:HA3	2.13	0.49
2:V:539:LYS:HD3	2:V:541:ALA:HB2	1.93	0.49
2:V:557:PHE:CE1	2:V:638:ILE:HG22	2.47	0.49
2:V:557:PHE:CE1	2:V:638:ILE:CG2	2.95	0.49
2:V:576:ASN:HB3	2:V:620:ARG:NH2	2.25	0.49
2:V:624:VAL:CG1	2:V:643:VAL:HG12	2.42	0.49
2:X:511:GLN:HA	2:X:511:GLN:NE2	2.28	0.49
2:X:624:VAL:CG1	2:X:643:VAL:HG12	2.42	0.49
2:Z:453:ASN:H	2:Z:453:ASN:ND2	2.11	0.49
2:U:215:LYS:CE	2:U:329:ASN:HD21	2.26	0.49
2:V:304:ILE:HG13	2:V:305:TYR:CD2	2.47	0.49
2:V:547:PRO:HB2	2:V:553:VAL:HG11	1.93	0.49
2:V:583:SER:CA	2:V:586:THR:HG22	2.41	0.49
2:W:215:LYS:CE	2:W:329:ASN:HD21	2.25	0.49
2:W:557:PHE:CE1	2:W:638:ILE:CG2	2.95	0.49
2:W:583:SER:CA	2:W:586:THR:HG22	2.42	0.49
2:X:456:TYR:HB2	2:X:467:TRP:CZ3	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:622:GLU:HG2	2:Y:644:ALA:O	2.12	0.49
2:U:627:PHE:CZ	2:U:640:LEU:CD2	2.95	0.49
2:V:70:ASN:HB3	2:V:457:GLN:HE22	1.77	0.49
2:W:523:ASN:HD21	2:W:538:ASP:CA	2.25	0.49
2:W:615:PRO:O	2:W:617:VAL:HG22	2.13	0.49
2:X:215:LYS:CE	2:X:329:ASN:HD21	2.25	0.49
1:B:156:ASP:HB3	2:V:579:PHE:HE1	0.80	0.49
2:U:496:ARG:O	2:U:496:ARG:CG	2.60	0.49
2:W:23:SER:HG	2:W:483:ASN:HB3	1.77	0.49
2:W:557:PHE:CE2	2:W:631:PRO:HG3	2.47	0.49
2:X:557:PHE:CE2	2:X:631:PRO:HG3	2.47	0.49
2:Y:456:TYR:HB2	2:Y:467:TRP:CZ3	2.48	0.49
2:Z:70:ASN:HB3	2:Z:457:GLN:HE22	1.77	0.49
2:Z:362:PHE:HA	2:Z:368:VAL:HG21	1.95	0.49
2:Z:383:LEU:O	2:Z:386:ALA:HB3	2.13	0.49
2:Z:596:LYS:HD3	2:Z:596:LYS:C	2.37	0.49
2:U:383:LEU:O	2:U:386:ALA:HB3	2.13	0.48
2:U:629:ILE:HG22	2:U:630:GLN:N	2.28	0.48
2:W:376:GLY:HA2	2:W:390:GLN:NE2	2.27	0.48
2:X:517:LEU:C	2:X:522:ILE:HG22	2.38	0.48
2:Y:383:LEU:O	2:Y:386:ALA:HB3	2.12	0.48
1:B:109:TYR:HB3	1:B:161:ARG:NH2	2.20	0.48
1:C:110:ASN:HA	1:C:111:PRO:HD3	1.71	0.48
2:U:376:GLY:HA2	2:U:390:GLN:NE2	2.28	0.48
2:U:615:PRO:O	2:U:617:VAL:HG22	2.13	0.48
2:W:109:ASN:O	2:W:177:GLY:HA3	2.13	0.48
2:W:408:SER:HA	2:W:451:ASP:O	2.13	0.48
2:Y:376:GLY:HA2	2:Y:390:GLN:NE2	2.28	0.48
2:Y:445:SER:HB3	2:Y:448:ALA:HB2	1.95	0.48
2:Z:71:PHE:C	2:Z:73:GLN:N	2.69	0.48
2:Z:304:ILE:HG13	2:Z:305:TYR:CD2	2.47	0.48
2:Z:523:ASN:HD21	2:Z:538:ASP:CA	2.26	0.48
1:B:66:ALA:C	1:B:68:VAL:H	2.20	0.48
1:B:212:THR:HA	1:B:222:ASP:HA	1.94	0.48
1:F:54:ASN:HA	1:F:57:THR:HG22	1.96	0.48
2:U:577:ASN:H	2:U:580:THR:CG2	2.26	0.48
2:V:448:ALA:CB	2:V:540:THR:OG1	2.62	0.48
2:W:383:LEU:O	2:W:386:ALA:HB3	2.14	0.48
2:W:448:ALA:O	2:W:540:THR:N	2.42	0.48
2:X:109:ASN:O	2:X:177:GLY:HA3	2.13	0.48
2:X:379:ALA:HB2	2:X:454:TYR:CE2	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:407:CYS:N	2:Y:449:ALA:O	2.44	0.48
2:Y:408:SER:HA	2:Y:451:ASP:O	2.13	0.48
2:Z:624:VAL:CG1	2:Z:643:VAL:HG12	2.42	0.48
2:Z:627:PHE:CD1	2:Z:629:ILE:HD12	2.48	0.48
2:U:624:VAL:CG1	2:U:643:VAL:HG12	2.42	0.48
2:W:407:CYS:N	2:W:449:ALA:O	2.44	0.48
2:W:445:SER:HB3	2:W:448:ALA:HB2	1.95	0.48
2:W:456:TYR:CZ	2:W:465:ASN:HB3	2.48	0.48
2:X:25:GLY:HA2	2:X:484:VAL:HG21	1.93	0.48
2:X:376:GLY:HA2	2:X:390:GLN:NE2	2.28	0.48
2:Y:511:GLN:HA	2:Y:511:GLN:NE2	2.28	0.48
2:Z:63:ASP:O	2:Z:67:SER:HB2	2.14	0.48
2:Z:109:ASN:O	2:Z:177:GLY:HA3	2.13	0.48
2:Z:413:THR:OG1	2:Z:425:ASN:HB3	2.14	0.48
2:Z:448:ALA:CB	2:Z:540:THR:OG1	2.61	0.48
2:Z:517:LEU:C	2:Z:522:ILE:HG22	2.38	0.48
1:D:147:THR:HG23	1:D:163:ILE:HB	1.94	0.48
1:D:157:ILE:HG13	2:X:579:PHE:CG	2.48	0.48
2:U:453:ASN:H	2:U:453:ASN:ND2	2.11	0.48
2:V:362:PHE:HA	2:V:368:VAL:HG21	1.95	0.48
2:V:376:GLY:HA2	2:V:390:GLN:NE2	2.28	0.48
2:X:615:PRO:O	2:X:617:VAL:HG22	2.13	0.48
2:Y:362:PHE:HA	2:Y:368:VAL:HG21	1.94	0.48
2:Z:379:ALA:HB2	2:Z:454:TYR:CE2	2.46	0.48
2:Z:445:SER:HB3	2:Z:448:ALA:HB2	1.94	0.48
2:U:63:ASP:O	2:U:67:SER:HB2	2.14	0.48
2:U:408:SER:HA	2:U:451:ASP:O	2.13	0.48
2:U:517:LEU:C	2:U:522:ILE:HG22	2.38	0.48
2:U:547:PRO:C	2:U:553:VAL:CG2	2.83	0.48
2:W:71:PHE:C	2:W:73:GLN:N	2.69	0.48
2:X:407:CYS:N	2:X:449:ALA:O	2.44	0.48
2:X:413:THR:OG1	2:X:425:ASN:HB3	2.13	0.48
2:Y:63:ASP:O	2:Y:67:SER:HB2	2.14	0.48
2:Y:453:ASN:H	2:Y:453:ASN:ND2	2.11	0.48
2:Y:523:ASN:HD21	2:Y:538:ASP:CA	2.26	0.48
2:Z:376:GLY:HA2	2:Z:390:GLN:NE2	2.28	0.48
2:Z:408:SER:HA	2:Z:451:ASP:O	2.14	0.48
2:Z:615:PRO:O	2:Z:617:VAL:HG22	2.13	0.48
2:Z:629:ILE:HG22	2:Z:630:GLN:N	2.28	0.48
2:W:125:ILE:HD12	2:W:153:LYS:HG2	1.96	0.48
2:W:576:ASN:HB3	2:W:620:ARG:NH2	2.25	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:382:SER:CB	2:X:385:THR:HG22	2.42	0.48
2:Y:109:ASN:O	2:Y:177:GLY:HA3	2.12	0.48
2:Y:517:LEU:C	2:Y:522:ILE:HG22	2.38	0.48
2:Z:496:ARG:O	2:Z:496:ARG:CG	2.60	0.48
2:Z:536:TYR:CG	2:Z:537:GLY:N	2.82	0.48
2:U:448:ALA:CB	2:U:540:THR:OG1	2.61	0.48
2:U:456:TYR:HB2	2:U:467:TRP:CZ3	2.48	0.48
2:V:228:GLY:HA2	2:V:345:SER:CB	2.32	0.48
2:V:615:PRO:O	2:V:617:VAL:HG22	2.13	0.48
2:W:63:ASP:O	2:W:67:SER:HB2	2.14	0.48
2:W:448:ALA:CB	2:W:540:THR:OG1	2.61	0.48
2:W:561:LYS:HG3	2:W:562:THR:N	2.29	0.48
2:X:63:ASP:O	2:X:67:SER:HB2	2.14	0.48
2:Y:30:ALA:HB3	2:Y:359:TRP:CE2	2.49	0.48
2:Y:624:VAL:CG1	2:Y:643:VAL:HG12	2.43	0.48
1:D:6:TYR:CD2	1:D:208:LEU:HG	2.49	0.48
2:U:511:GLN:HA	2:U:511:GLN:NE2	2.28	0.48
2:U:523:ASN:HD21	2:U:538:ASP:CA	2.26	0.48
2:V:449:ALA:CB	2:V:539:LYS:HA	2.44	0.48
2:V:511:GLN:HA	2:V:511:GLN:NE2	2.28	0.48
2:V:523:ASN:HD21	2:V:538:ASP:CA	2.26	0.48
2:V:553:VAL:HG23	2:V:554:ARG:N	2.29	0.48
2:W:284:ARG:HA	2:W:288:ALA:O	2.14	0.48
2:X:284:ARG:HA	2:X:288:ALA:O	2.14	0.48
2:X:408:SER:HA	2:X:451:ASP:O	2.14	0.48
2:Y:629:ILE:HG22	2:Y:630:GLN:N	2.28	0.48
2:Z:30:ALA:HB3	2:Z:359:TRP:CE2	2.49	0.48
2:V:453:ASN:N	2:V:453:ASN:ND2	2.62	0.48
2:V:502:VAL:HG12	2:V:503:ILE:N	2.29	0.48
2:W:557:PHE:CZ	2:W:638:ILE:CG2	2.95	0.48
2:X:58:THR:H	2:X:61:THR:HB	1.79	0.48
2:X:449:ALA:CB	2:X:539:LYS:HA	2.44	0.48
2:X:576:ASN:HB3	2:X:620:ARG:NH2	2.25	0.48
2:Z:284:ARG:HA	2:Z:288:ALA:O	2.14	0.48
1:C:156:ASP:HB3	2:W:579:PHE:CD1	2.40	0.47
2:V:456:TYR:CZ	2:V:465:ASN:HB3	2.49	0.47
2:V:456:TYR:HB2	2:V:467:TRP:CZ3	2.48	0.47
2:W:612:ASN:HD21	2:W:614:THR:HG22	1.79	0.47
2:X:456:TYR:CZ	2:X:465:ASN:HB3	2.49	0.47
2:Y:125:ILE:HD12	2:Y:153:LYS:HG2	1.96	0.47
2:Z:382:SER:CB	2:Z:385:THR:HG22	2.42	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:453:ASN:ND2	2:Z:453:ASN:N	2.62	0.47
2:Z:496:ARG:N	2:Z:534:VAL:HG11	2.25	0.47
1:C:124:THR:HG21	1:C:130:MET:HG2	1.95	0.47
2:U:448:ALA:O	2:U:540:THR:N	2.42	0.47
2:U:502:VAL:HG12	2:U:503:ILE:N	2.29	0.47
2:U:547:PRO:HB2	2:U:553:VAL:HG11	1.94	0.47
2:V:30:ALA:HB3	2:V:359:TRP:CE2	2.49	0.47
2:V:408:SER:HA	2:V:451:ASP:O	2.14	0.47
2:W:518:TYR:HE2	2:W:536:TYR:HB2	1.70	0.47
2:X:407:CYS:O	2:X:451:ASP:N	2.48	0.47
2:Y:58:THR:H	2:Y:61:THR:HB	1.80	0.47
2:Y:577:ASN:H	2:Y:580:THR:CG2	2.27	0.47
2:Z:125:ILE:HD12	2:Z:153:LYS:HG2	1.96	0.47
2:U:536:TYR:CG	2:U:537:GLY:N	2.82	0.47
2:V:58:THR:H	2:V:61:THR:HB	1.79	0.47
2:V:285:ARG:O	2:V:286:ASN:HB2	2.14	0.47
2:V:629:ILE:HG22	2:V:630:GLN:N	2.28	0.47
2:W:30:ALA:HB3	2:W:359:TRP:CE2	2.49	0.47
2:W:58:THR:H	2:W:61:THR:HB	1.80	0.47
2:X:30:ALA:HB3	2:X:359:TRP:CE2	2.49	0.47
2:X:536:TYR:CG	2:X:537:GLY:N	2.82	0.47
2:X:536:TYR:CD2	2:X:537:GLY:N	2.83	0.47
2:X:629:ILE:HG22	2:X:630:GLN:N	2.28	0.47
2:Y:448:ALA:CB	2:Y:540:THR:OG1	2.62	0.47
2:U:526:THR:OG1	2:U:535:LEU:HD21	2.15	0.47
2:W:453:ASN:H	2:W:453:ASN:ND2	2.11	0.47
2:W:453:ASN:N	2:W:453:ASN:ND2	2.62	0.47
2:W:536:TYR:CD2	2:W:537:GLY:N	2.83	0.47
2:X:450:ILE:CG1	2:X:451:ASP:N	2.53	0.47
2:X:453:ASN:H	2:X:453:ASN:ND2	2.11	0.47
2:Y:284:ARG:HA	2:Y:288:ALA:O	2.13	0.47
2:Y:382:SER:CB	2:Y:385:THR:HG22	2.42	0.47
2:Y:553:VAL:HG23	2:Y:554:ARG:N	2.29	0.47
2:Z:350:VAL:HG13	2:Z:354:ASP:HB2	1.97	0.47
2:Z:553:VAL:HG23	2:Z:554:ARG:N	2.29	0.47
2:Z:577:ASN:H	2:Z:580:THR:CG2	2.27	0.47
1:D:66:ALA:C	1:D:68:VAL:H	2.22	0.47
1:E:5:PHE:CE2	1:E:201:PRO:HB3	2.50	0.47
1:E:147:THR:HG23	1:E:163:ILE:HB	1.97	0.47
2:U:68:ALA:O	2:U:69:MET:C	2.58	0.47
2:U:284:ARG:HA	2:U:288:ALA:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:449:ALA:CB	2:U:539:LYS:HA	2.44	0.47
2:U:456:TYR:CZ	2:U:465:ASN:HB3	2.49	0.47
2:V:63:ASP:O	2:V:67:SER:HB2	2.14	0.47
2:V:68:ALA:O	2:V:69:MET:C	2.58	0.47
2:V:125:ILE:HD12	2:V:153:LYS:HG2	1.97	0.47
2:V:536:TYR:CG	2:V:537:GLY:N	2.82	0.47
2:V:577:ASN:H	2:V:580:THR:CG2	2.27	0.47
2:W:627:PHE:HZ	2:W:640:LEU:CD2	2.28	0.47
2:X:553:VAL:HG23	2:X:554:ARG:N	2.29	0.47
2:Y:215:LYS:CE	2:Y:329:ASN:HD21	2.26	0.47
2:Y:407:CYS:O	2:Y:451:ASP:N	2.48	0.47
2:Y:526:THR:OG1	2:Y:535:LEU:HD21	2.15	0.47
2:Y:536:TYR:CG	2:Y:537:GLY:N	2.82	0.47
2:Y:612:ASN:HD21	2:Y:614:THR:HG22	1.79	0.47
2:Z:27:ALA:HB2	2:Z:71:PHE:CZ	2.50	0.47
1:C:66:ALA:C	1:C:68:VAL:H	2.23	0.47
1:E:167:LEU:HD11	1:E:190:LEU:HD12	1.96	0.47
2:U:30:ALA:HB3	2:U:359:TRP:CE2	2.49	0.47
2:U:125:ILE:HD12	2:U:153:LYS:HG2	1.97	0.47
2:V:284:ARG:HA	2:V:288:ALA:O	2.14	0.47
2:W:577:ASN:H	2:W:580:THR:CG2	2.26	0.47
2:X:557:PHE:CZ	2:X:638:ILE:CG2	2.95	0.47
2:Y:456:TYR:CZ	2:Y:465:ASN:HB3	2.49	0.47
2:Y:502:VAL:HG12	2:Y:503:ILE:N	2.29	0.47
2:Y:561:LYS:HG3	2:Y:562:THR:N	2.30	0.47
2:Z:456:TYR:HB2	2:Z:467:TRP:CZ3	2.49	0.47
1:A:114:ILE:HG12	1:A:115:LYS:N	2.29	0.47
2:U:58:THR:H	2:U:61:THR:HB	1.79	0.47
2:U:413:THR:OG1	2:U:425:ASN:HB3	2.14	0.47
2:U:445:SER:HB3	2:U:448:ALA:HB2	1.95	0.47
2:U:561:LYS:HG3	2:U:562:THR:N	2.30	0.47
2:V:445:SER:HB3	2:V:448:ALA:HB2	1.95	0.47
2:V:453:ASN:H	2:V:453:ASN:ND2	2.12	0.47
2:W:379:ALA:HB2	2:W:454:TYR:CE2	2.45	0.47
2:W:407:CYS:O	2:W:451:ASP:N	2.48	0.47
2:W:413:THR:OG1	2:W:425:ASN:HB3	2.14	0.47
2:W:511:GLN:HA	2:W:511:GLN:NE2	2.29	0.47
2:W:526:THR:OG1	2:W:535:LEU:HD21	2.15	0.47
2:W:553:VAL:HG23	2:W:554:ARG:N	2.30	0.47
2:X:285:ARG:O	2:X:286:ASN:HB2	2.14	0.47
2:Y:413:THR:OG1	2:Y:425:ASN:HB3	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:546:SER:N	2:Y:547:PRO:HD2	2.30	0.47
2:Y:615:PRO:O	2:Y:617:VAL:HG22	2.13	0.47
2:Z:171:ILE:CG2	2:Z:172:SER:H	2.25	0.47
2:Z:449:ALA:CB	2:Z:539:LYS:HA	2.44	0.47
2:Z:502:VAL:HG12	2:Z:503:ILE:N	2.30	0.47
2:Z:560:LEU:HD12	2:Z:592:LEU:CD2	2.45	0.47
2:Z:561:LYS:HG3	2:Z:562:THR:N	2.30	0.47
2:U:285:ARG:O	2:U:286:ASN:HB2	2.14	0.47
2:U:612:ASN:HD21	2:U:614:THR:HG22	1.79	0.47
2:U:614:THR:HB	2:U:620:ARG:CA	2.40	0.47
2:V:526:THR:OG1	2:V:535:LEU:HD21	2.15	0.47
2:W:629:ILE:HG22	2:W:630:GLN:N	2.28	0.47
2:X:526:THR:OG1	2:X:535:LEU:HD21	2.15	0.47
2:X:612:ASN:HD21	2:X:614:THR:HG22	1.80	0.47
2:Z:526:THR:OG1	2:Z:535:LEU:HD21	2.15	0.47
2:Z:602:TYR:CG	2:Z:603:GLU:N	2.83	0.47
2:U:37:PRO:HB2	2:U:40:GLN:HB2	1.97	0.47
2:U:62:ALA:HB1	2:U:466:ARG:NE	2.30	0.47
2:U:350:VAL:HG13	2:U:354:ASP:HB2	1.97	0.47
2:V:536:TYR:CD2	2:V:537:GLY:N	2.83	0.47
2:V:560:LEU:HD12	2:V:592:LEU:CD2	2.45	0.47
2:V:561:LYS:HG3	2:V:562:THR:N	2.29	0.47
2:V:610:THR:HG23	2:V:611:THR:N	2.30	0.47
2:V:614:THR:HB	2:V:620:ARG:CA	2.40	0.47
2:X:27:ALA:HB2	2:X:71:PHE:CZ	2.49	0.47
2:X:577:ASN:H	2:X:580:THR:CG2	2.27	0.47
2:X:610:THR:HG23	2:X:611:THR:N	2.29	0.47
2:Y:293:VAL:HG22	2:Y:294:VAL:N	2.30	0.47
2:Y:514:ARG:CA	2:Y:517:LEU:HG	2.45	0.47
2:Y:536:TYR:CD2	2:Y:537:GLY:N	2.83	0.47
2:Z:514:ARG:CA	2:Z:517:LEU:HG	2.45	0.47
2:Z:546:SER:N	2:Z:547:PRO:HD2	2.30	0.47
2:Z:610:THR:HG23	2:Z:611:THR:N	2.29	0.47
2:U:228:GLY:HA2	2:U:345:SER:CB	2.31	0.47
2:U:382:SER:CB	2:U:385:THR:HG22	2.42	0.47
2:U:407:CYS:O	2:U:451:ASP:N	2.48	0.47
2:U:610:THR:HG23	2:U:611:THR:N	2.29	0.47
2:V:62:ALA:HB1	2:V:466:ARG:NE	2.30	0.47
2:W:68:ALA:O	2:W:69:MET:C	2.58	0.47
2:X:27:ALA:HB3	2:X:78:LEU:HD12	1.97	0.47
2:Y:350:VAL:HG13	2:Y:354:ASP:HB2	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:449:ALA:CB	2:Y:539:LYS:HA	2.45	0.47
2:Y:450:ILE:CG1	2:Y:451:ASP:N	2.53	0.47
2:Y:499:ILE:HD13	2:Y:499:ILE:N	2.28	0.47
2:Z:58:THR:H	2:Z:61:THR:HB	1.80	0.47
2:Z:68:ALA:O	2:Z:69:MET:C	2.58	0.47
2:Z:215:LYS:CE	2:Z:329:ASN:HD21	2.25	0.47
2:U:197:GLU:CD	2:U:197:GLU:H	2.22	0.46
2:U:536:TYR:CD2	2:U:537:GLY:N	2.83	0.46
2:W:514:ARG:CA	2:W:517:LEU:HG	2.45	0.46
2:W:536:TYR:CG	2:W:537:GLY:N	2.82	0.46
2:W:536:TYR:HD2	2:W:538:ASP:H	1.63	0.46
2:W:610:THR:HG23	2:W:611:THR:N	2.30	0.46
2:X:561:LYS:HG3	2:X:562:THR:N	2.30	0.46
2:X:602:TYR:CG	2:X:603:GLU:N	2.83	0.46
2:Y:62:ALA:HB1	2:Y:466:ARG:NE	2.30	0.46
2:Y:448:ALA:O	2:Y:540:THR:N	2.41	0.46
2:Y:610:THR:HG23	2:Y:611:THR:N	2.29	0.46
2:Z:56:GLN:HA	2:Z:57:PRO:HD3	1.81	0.46
2:Z:62:ALA:HB1	2:Z:466:ARG:NE	2.30	0.46
2:Z:456:TYR:CZ	2:Z:465:ASN:HB3	2.49	0.46
1:A:13:TYR:CD2	1:A:116:MET:HE1	2.50	0.46
1:C:27:LYS:HB2	1:C:36:PHE:CE2	2.50	0.46
2:U:27:ALA:HB2	2:U:71:PHE:CZ	2.50	0.46
2:V:350:VAL:HG13	2:V:354:ASP:HB2	1.97	0.46
2:V:413:THR:OG1	2:V:425:ASN:HB3	2.14	0.46
2:W:450:ILE:CG1	2:W:451:ASP:N	2.53	0.46
2:Y:27:ALA:HB2	2:Y:71:PHE:CZ	2.50	0.46
2:Y:602:TYR:CG	2:Y:603:GLU:N	2.83	0.46
2:Z:423:VAL:O	2:Z:424:ASP:C	2.58	0.46
2:Z:499:ILE:HD13	2:Z:499:ILE:N	2.28	0.46
1:E:6:TYR:CD2	1:E:208:LEU:HG	2.51	0.46
1:F:56:TRP:HB3	1:F:71:ILE:HD13	1.98	0.46
2:U:100:GLU:HG2	2:U:186:LYS:O	2.16	0.46
2:V:61:THR:O	2:V:62:ALA:C	2.59	0.46
2:V:100:GLU:HG2	2:V:186:LYS:O	2.16	0.46
2:V:627:PHE:HZ	2:V:640:LEU:CD2	2.29	0.46
2:W:100:GLU:HG2	2:W:186:LYS:O	2.16	0.46
2:W:285:ARG:O	2:W:286:ASN:HB2	2.14	0.46
2:X:453:ASN:ND2	2:X:453:ASN:N	2.62	0.46
2:X:514:ARG:CA	2:X:517:LEU:HG	2.45	0.46
2:X:536:TYR:HD2	2:X:538:ASP:H	1.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:570:TYR:CD2	2:X:584:PHE:CE2	2.95	0.46
2:Y:290:VAL:HG11	2:Y:322:TYR:CD1	2.51	0.46
2:Y:517:LEU:HB2	2:Y:522:ILE:HG23	1.95	0.46
2:Y:560:LEU:HD12	2:Y:592:LEU:CD2	2.45	0.46
2:Z:536:TYR:CD2	2:Z:537:GLY:N	2.83	0.46
2:Z:612:ASN:HD21	2:Z:614:THR:HG22	1.80	0.46
1:D:212:THR:HA	1:D:222:ASP:HA	1.98	0.46
2:U:499:ILE:HD13	2:U:499:ILE:N	2.28	0.46
2:U:583:SER:HA	2:U:586:THR:HG22	1.98	0.46
2:V:293:VAL:HG22	2:V:294:VAL:N	2.30	0.46
2:V:612:ASN:HD21	2:V:614:THR:HG22	1.81	0.46
2:W:449:ALA:CB	2:W:539:LYS:HA	2.44	0.46
2:W:517:LEU:HB2	2:W:522:ILE:HG23	1.95	0.46
2:W:602:TYR:CG	2:W:603:GLU:N	2.83	0.46
2:X:62:ALA:HB1	2:X:466:ARG:NE	2.30	0.46
2:X:502:VAL:HG12	2:X:503:ILE:N	2.30	0.46
2:Y:285:ARG:O	2:Y:286:ASN:HB2	2.14	0.46
2:Z:200:ASN:O	2:Z:201:ALA:C	2.58	0.46
2:Z:290:VAL:HG11	2:Z:322:TYR:CD1	2.51	0.46
2:Z:407:CYS:O	2:Z:451:ASP:N	2.48	0.46
2:Z:544:VAL:CG1	2:Z:545:PRO:N	2.78	0.46
1:D:29:GLN:OE1	1:E:3:GLY:N	2.49	0.46
1:F:157:ILE:N	2:Z:579:PHE:CD1	2.73	0.46
2:U:546:SER:N	2:U:547:PRO:HD2	2.29	0.46
2:W:546:SER:N	2:W:547:PRO:HD2	2.30	0.46
2:W:560:LEU:HD12	2:W:592:LEU:CD2	2.45	0.46
2:X:37:PRO:HB2	2:X:40:GLN:HB2	1.97	0.46
2:X:125:ILE:HD12	2:X:153:LYS:HG2	1.97	0.46
2:X:197:GLU:CD	2:X:197:GLU:H	2.23	0.46
2:X:290:VAL:HG11	2:X:322:TYR:CD1	2.50	0.46
2:X:601:ILE:HG22	2:X:602:TYR:N	2.31	0.46
2:X:614:THR:HB	2:X:620:ARG:CA	2.41	0.46
2:X:627:PHE:HZ	2:X:640:LEU:CD2	2.29	0.46
2:Y:37:PRO:HB2	2:Y:40:GLN:HB2	1.97	0.46
2:Z:285:ARG:O	2:Z:286:ASN:HB2	2.14	0.46
2:Z:293:VAL:HG22	2:Z:294:VAL:N	2.30	0.46
2:U:379:ALA:HB2	2:U:454:TYR:CE2	2.46	0.46
2:U:544:VAL:CG1	2:U:545:PRO:N	2.78	0.46
2:U:602:TYR:CG	2:U:603:GLU:N	2.83	0.46
2:V:407:CYS:O	2:V:451:ASP:N	2.48	0.46
2:V:546:SER:N	2:V:547:PRO:HD2	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:350:VAL:HG13	2:W:354:ASP:HB2	1.97	0.46
2:X:350:VAL:HG13	2:X:354:ASP:HB2	1.98	0.46
2:X:458:TYR:CE2	2:X:460:LYS:HA	2.51	0.46
2:X:627:PHE:CD1	2:X:627:PHE:C	2.94	0.46
2:Y:458:TYR:CE2	2:Y:460:LYS:HA	2.51	0.46
2:U:35:TRP:HB3	2:U:54:PHE:HA	1.98	0.46
2:V:27:ALA:HB2	2:V:71:PHE:CZ	2.50	0.46
2:V:151:ILE:HG13	2:V:152:ALA:N	2.30	0.46
2:V:518:TYR:HE2	2:V:536:TYR:HB2	1.70	0.46
2:W:27:ALA:HB2	2:W:71:PHE:CZ	2.50	0.46
2:W:37:PRO:HB2	2:W:40:GLN:HB2	1.97	0.46
2:W:502:VAL:HG12	2:W:503:ILE:N	2.29	0.46
2:X:307:SER:O	2:X:309:ILE:HG23	2.16	0.46
2:X:517:LEU:HB2	2:X:522:ILE:HG23	1.95	0.46
2:X:517:LEU:HD13	2:X:524:PRO:CG	2.46	0.46
2:Y:627:PHE:CD1	2:Y:627:PHE:C	2.94	0.46
1:A:5:PHE:CE2	1:A:201:PRO:HB3	2.51	0.46
1:D:19:ASP:HA	1:D:22:SER:HB2	1.98	0.46
2:U:290:VAL:HG11	2:U:322:TYR:CD1	2.51	0.46
2:U:557:PHE:CZ	2:U:638:ILE:CG2	2.95	0.46
2:U:560:LEU:HD12	2:U:592:LEU:CD2	2.45	0.46
2:U:627:PHE:HZ	2:U:640:LEU:CD2	2.29	0.46
2:V:35:TRP:HB3	2:V:54:PHE:HA	1.98	0.46
2:V:130:LYS:O	2:V:132:THR:HG23	2.16	0.46
2:V:407:CYS:O	2:V:451:ASP:HB3	2.15	0.46
2:X:68:ALA:O	2:X:69:MET:C	2.58	0.46
2:X:100:GLU:HG2	2:X:186:LYS:O	2.15	0.46
2:X:151:ILE:HG13	2:X:152:ALA:N	2.30	0.46
2:X:381:GLU:O	2:X:382:SER:C	2.59	0.46
2:X:546:SER:N	2:X:547:PRO:HD2	2.30	0.46
2:X:560:LEU:HD12	2:X:592:LEU:CD2	2.46	0.46
2:Y:27:ALA:HB3	2:Y:78:LEU:HD12	1.98	0.46
2:Y:100:GLU:HG2	2:Y:186:LYS:O	2.15	0.46
2:Y:173:SER:HA	2:Y:174:SER:HB3	1.98	0.46
2:Z:511:GLN:HE21	2:Z:511:GLN:CA	2.29	0.46
2:Z:583:SER:C	2:Z:586:THR:HG22	2.41	0.46
2:Z:583:SER:HA	2:Z:586:THR:HG22	1.98	0.46
2:U:517:LEU:HB2	2:U:522:ILE:HG23	1.95	0.46
2:V:73:GLN:HB3	2:V:500:LEU:HD12	1.98	0.46
2:W:61:THR:O	2:W:62:ALA:C	2.59	0.46
2:W:197:GLU:H	2:W:197:GLU:CD	2.23	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:283:VAL:CG2	2:W:323:ILE:HD13	2.46	0.46
2:X:200:ASN:O	2:X:201:ALA:C	2.59	0.46
2:Y:130:LYS:O	2:Y:132:THR:HG23	2.16	0.46
2:Y:197:GLU:H	2:Y:197:GLU:CD	2.23	0.46
2:Y:307:SER:O	2:Y:309:ILE:HG23	2.16	0.46
2:Z:35:TRP:HB3	2:Z:54:PHE:HA	1.98	0.46
2:Z:197:GLU:H	2:Z:197:GLU:CD	2.23	0.46
2:Z:208:VAL:HG23	2:Z:209:ASP:N	2.31	0.46
2:Z:517:LEU:HB2	2:Z:522:ILE:HG23	1.95	0.46
1:B:114:ILE:HG12	1:B:115:LYS:H	1.81	0.46
1:E:125:ARG:NH2	1:E:184:ARG:HG2	2.30	0.46
1:F:157:ILE:CB	2:Z:579:PHE:CD1	2.85	0.46
2:U:61:THR:O	2:U:62:ALA:C	2.59	0.46
2:U:293:VAL:HG22	2:U:294:VAL:N	2.31	0.46
2:V:197:GLU:H	2:V:197:GLU:CD	2.23	0.46
2:V:602:TYR:CG	2:V:603:GLU:N	2.83	0.46
2:W:35:TRP:HB3	2:W:54:PHE:HA	1.98	0.46
2:W:62:ALA:HB1	2:W:466:ARG:NE	2.31	0.46
2:W:200:ASN:O	2:W:201:ALA:C	2.59	0.46
2:W:290:VAL:HG11	2:W:322:TYR:CD1	2.51	0.46
2:W:402:ASP:CG	2:W:402:ASP:O	2.59	0.46
2:W:624:VAL:HG12	2:W:643:VAL:CB	2.46	0.46
2:W:627:PHE:CD1	2:W:627:PHE:C	2.94	0.46
2:X:293:VAL:HG22	2:X:294:VAL:N	2.31	0.46
2:X:583:SER:C	2:X:586:THR:HG22	2.41	0.46
2:Y:73:GLN:HB3	2:Y:500:LEU:HD12	1.98	0.46
2:Y:283:VAL:CG2	2:Y:323:ILE:HD13	2.46	0.46
2:Y:526:THR:HG21	2:Y:535:LEU:HD11	1.97	0.46
1:A:18:GLY:HA3	1:A:230:PHE:CZ	2.52	0.45
1:A:114:ILE:HG12	1:A:115:LYS:H	1.81	0.45
1:C:19:ASP:OD2	1:C:213:TYR:OH	2.25	0.45
2:U:50:LEU:HD12	2:U:51:VAL:N	2.31	0.45
2:U:151:ILE:HG13	2:U:152:ALA:N	2.30	0.45
2:V:37:PRO:HB2	2:V:40:GLN:HB2	1.97	0.45
2:V:200:ASN:O	2:V:201:ALA:C	2.59	0.45
2:V:544:VAL:CG1	2:V:545:PRO:N	2.78	0.45
2:V:583:SER:HA	2:V:586:THR:HG22	1.97	0.45
2:W:381:GLU:O	2:W:382:SER:C	2.59	0.45
2:X:215:LYS:HE3	2:X:329:ASN:CG	2.42	0.45
2:X:526:THR:HG21	2:X:535:LEU:HD11	1.96	0.45
2:Z:73:GLN:HB3	2:Z:500:LEU:HD12	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:130:LYS:O	2:Z:132:THR:HG23	2.16	0.45
2:Z:517:LEU:HD13	2:Z:524:PRO:CG	2.46	0.45
1:C:6:TYR:CD2	1:C:208:LEU:HG	2.52	0.45
2:U:544:VAL:CG1	2:U:545:PRO:HD2	2.46	0.45
2:V:544:VAL:CG1	2:V:545:PRO:HD2	2.47	0.45
2:V:556:LEU:HD23	2:V:556:LEU:C	2.42	0.45
2:W:293:VAL:HG22	2:W:294:VAL:N	2.30	0.45
2:X:61:THR:O	2:X:62:ALA:C	2.59	0.45
2:Y:423:VAL:O	2:Y:424:ASP:C	2.58	0.45
2:Z:100:GLU:HG2	2:Z:186:LYS:O	2.16	0.45
2:Z:614:THR:HB	2:Z:620:ARG:CA	2.41	0.45
1:B:110:ASN:HA	1:B:111:PRO:HD3	1.70	0.45
1:B:223:LEU:HD12	1:B:224:PRO:HD2	1.98	0.45
1:D:106:VAL:HG12	1:D:107:SER:H	1.80	0.45
2:U:200:ASN:O	2:U:201:ALA:C	2.58	0.45
2:U:456:TYR:CE2	2:U:503:ILE:HD11	2.52	0.45
2:U:511:GLN:HE21	2:U:511:GLN:CA	2.29	0.45
2:V:171:ILE:CG2	2:V:172:SER:N	2.79	0.45
2:V:290:VAL:HG11	2:V:322:TYR:CD1	2.51	0.45
2:V:423:VAL:O	2:V:424:ASP:C	2.59	0.45
2:V:624:VAL:HG12	2:V:643:VAL:CB	2.46	0.45
2:W:130:LYS:O	2:W:132:THR:HG23	2.17	0.45
2:W:228:GLY:HA2	2:W:345:SER:CB	2.31	0.45
2:W:307:SER:O	2:W:309:ILE:HG23	2.16	0.45
2:W:456:TYR:CE2	2:W:503:ILE:HD11	2.52	0.45
2:Y:208:VAL:HG23	2:Y:209:ASP:N	2.31	0.45
2:Y:536:TYR:HD2	2:Y:538:ASP:H	1.63	0.45
2:Y:601:ILE:HG22	2:Y:602:TYR:N	2.31	0.45
2:U:423:VAL:O	2:U:424:ASP:C	2.59	0.45
2:U:583:SER:C	2:U:586:THR:HG22	2.41	0.45
2:V:211:GLN:OE1	2:V:328:GLN:HG2	2.16	0.45
2:V:402:ASP:CG	2:V:402:ASP:O	2.59	0.45
2:V:536:TYR:HD2	2:V:538:ASP:H	1.63	0.45
2:X:283:VAL:CG2	2:X:323:ILE:HD13	2.47	0.45
2:X:626:THR:HB	2:X:641:ASN:ND2	2.31	0.45
2:Y:419:VAL:HA	2:Y:422:ALA:CB	2.47	0.45
1:A:19:ASP:HA	1:A:22:SER:HB2	1.97	0.45
1:C:13:TYR:CD2	1:C:116:MET:HE1	2.51	0.45
1:D:66:ALA:O	1:D:68:VAL:N	2.45	0.45
2:U:130:LYS:O	2:U:132:THR:HG23	2.16	0.45
2:U:208:VAL:HG23	2:U:209:ASP:N	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:526:THR:HG21	2:U:535:LEU:HD11	1.97	0.45
2:U:553:VAL:HG23	2:U:554:ARG:N	2.30	0.45
2:W:407:CYS:O	2:W:451:ASP:HB3	2.14	0.45
2:X:130:LYS:O	2:X:132:THR:HG23	2.16	0.45
2:Y:557:PHE:CZ	2:Y:638:ILE:CG2	2.95	0.45
2:Z:37:PRO:HB2	2:Z:40:GLN:HB2	1.97	0.45
2:Z:61:THR:O	2:Z:62:ALA:C	2.59	0.45
2:Z:173:SER:HA	2:Z:174:SER:HB3	1.98	0.45
2:Z:252:LEU:HA	2:Z:253:PRO:HD3	1.79	0.45
2:Z:390:GLN:HE22	2:Z:408:SER:H	1.65	0.45
1:E:114:ILE:HG12	1:E:115:LYS:N	2.31	0.45
2:U:27:ALA:HB3	2:U:78:LEU:HD12	1.97	0.45
2:U:73:GLN:HB3	2:U:500:LEU:HD12	1.99	0.45
2:U:211:GLN:OE1	2:U:328:GLN:HG2	2.17	0.45
2:U:215:LYS:HE3	2:U:329:ASN:CG	2.42	0.45
2:V:283:VAL:CG2	2:V:323:ILE:HD13	2.47	0.45
2:V:456:TYR:CE2	2:V:503:ILE:HD11	2.52	0.45
2:V:499:ILE:HD13	2:V:499:ILE:N	2.28	0.45
2:V:514:ARG:CA	2:V:517:LEU:HG	2.45	0.45
2:W:458:TYR:CE2	2:W:460:LYS:HA	2.51	0.45
2:W:478:CYS:C	2:W:480:ARG:N	2.72	0.45
2:W:561:LYS:CB	2:W:640:LEU:HD21	2.47	0.45
2:X:66:MET:O	2:X:67:SER:C	2.60	0.45
2:X:456:TYR:CE2	2:X:503:ILE:HD11	2.52	0.45
2:Y:66:MET:O	2:Y:67:SER:C	2.60	0.45
2:Y:381:GLU:O	2:Y:382:SER:C	2.60	0.45
2:Y:385:THR:HA	2:Y:388:THR:HG23	1.98	0.45
2:Y:544:VAL:CG1	2:Y:545:PRO:N	2.78	0.45
2:Y:583:SER:HA	2:Y:586:THR:HG22	1.97	0.45
2:Z:66:MET:O	2:Z:67:SER:C	2.60	0.45
2:U:381:GLU:O	2:U:382:SER:C	2.59	0.45
2:U:624:VAL:HG11	2:U:643:VAL:HG12	1.98	0.45
2:V:627:PHE:CD1	2:V:627:PHE:C	2.95	0.45
2:W:544:VAL:CG1	2:W:545:PRO:HD2	2.47	0.45
2:X:173:SER:HA	2:X:174:SER:HB3	1.98	0.45
2:Y:478:CYS:C	2:Y:480:ARG:N	2.73	0.45
2:Z:27:ALA:HB3	2:Z:78:LEU:HD12	1.98	0.45
2:Z:385:THR:HA	2:Z:388:THR:HG23	1.99	0.45
2:Z:544:VAL:CG1	2:Z:545:PRO:HD2	2.47	0.45
1:A:30:LEU:HB2	1:A:33:GLY:O	2.17	0.45
1:A:156:ASP:CG	2:U:579:PHE:HE1	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:64:ASP:O	1:D:68:VAL:HG23	2.16	0.45
1:D:110:ASN:HA	1:D:111:PRO:HD3	1.69	0.45
2:U:390:GLN:HE22	2:U:408:SER:H	1.65	0.45
2:U:514:ARG:CA	2:U:517:LEU:HG	2.45	0.45
2:V:626:THR:HB	2:V:641:ASN:ND2	2.32	0.45
2:W:66:MET:O	2:W:67:SER:C	2.60	0.45
2:W:73:GLN:HB3	2:W:500:LEU:HD12	1.99	0.45
2:W:517:LEU:HD13	2:W:524:PRO:CG	2.46	0.45
2:W:544:VAL:CG1	2:W:545:PRO:N	2.78	0.45
2:X:171:ILE:CG2	2:X:172:SER:N	2.79	0.45
2:Y:153:LYS:O	2:Y:157:VAL:HG22	2.16	0.45
2:Y:215:LYS:HE3	2:Y:329:ASN:CG	2.42	0.45
2:Y:390:GLN:HE22	2:Y:408:SER:H	1.65	0.45
2:Z:307:SER:O	2:Z:309:ILE:HG23	2.16	0.45
2:Z:624:VAL:HG12	2:Z:643:VAL:CB	2.46	0.45
2:Z:627:PHE:CD1	2:Z:627:PHE:C	2.94	0.45
1:D:114:ILE:HG12	1:D:115:LYS:N	2.31	0.45
1:F:123:PHE:CE1	1:F:187:GLU:HG3	2.52	0.45
2:U:307:SER:O	2:U:309:ILE:HG23	2.16	0.45
2:U:407:CYS:O	2:U:451:ASP:HB3	2.15	0.45
2:U:544:VAL:HG13	2:U:545:PRO:HD2	1.99	0.45
2:V:307:SER:O	2:V:309:ILE:HG23	2.16	0.45
2:V:385:THR:HA	2:V:388:THR:HG23	1.99	0.45
2:W:390:GLN:HE22	2:W:408:SER:H	1.64	0.45
2:W:601:ILE:HG22	2:W:602:TYR:N	2.31	0.45
2:X:50:LEU:HD12	2:X:51:VAL:N	2.31	0.45
2:X:147:THR:O	2:X:151:ILE:HG23	2.17	0.45
2:X:419:VAL:HA	2:X:422:ALA:CB	2.46	0.45
2:X:624:VAL:HG11	2:X:643:VAL:HG12	1.99	0.45
2:Y:61:THR:O	2:Y:62:ALA:C	2.59	0.45
2:Y:68:ALA:O	2:Y:69:MET:C	2.58	0.45
2:Y:583:SER:C	2:Y:586:THR:HG22	2.42	0.45
2:Y:614:THR:HB	2:Y:620:ARG:CA	2.41	0.45
2:U:44:VAL:HG11	2:U:50:LEU:HB3	1.99	0.45
2:U:385:THR:HA	2:U:388:THR:HG23	1.99	0.45
2:U:419:VAL:HA	2:U:422:ALA:CB	2.46	0.45
2:U:626:THR:HB	2:U:641:ASN:ND2	2.32	0.45
2:V:27:ALA:HB3	2:V:78:LEU:HD12	1.98	0.45
2:V:208:VAL:HG23	2:V:209:ASP:N	2.30	0.45
2:V:521:ALA:HB3	2:V:540:THR:HA	1.99	0.45
2:W:27:ALA:HB3	2:W:78:LEU:HD12	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:215:LYS:HE3	2:W:329:ASN:CG	2.41	0.45
2:X:211:GLN:OE1	2:X:328:GLN:HG2	2.17	0.45
2:X:390:GLN:HE22	2:X:408:SER:H	1.65	0.45
2:X:624:VAL:HG12	2:X:643:VAL:CB	2.46	0.45
2:X:626:THR:O	2:X:626:THR:HG23	2.17	0.45
2:Y:200:ASN:O	2:Y:201:ALA:C	2.58	0.45
2:Y:453:ASN:ND2	2:Y:453:ASN:N	2.62	0.45
2:Y:624:VAL:HG11	2:Y:643:VAL:HG12	1.99	0.45
2:Z:50:LEU:HD12	2:Z:51:VAL:N	2.32	0.45
2:Z:283:VAL:CG2	2:Z:323:ILE:HD13	2.47	0.45
2:Z:381:GLU:O	2:Z:382:SER:C	2.60	0.45
2:Z:556:LEU:HD23	2:Z:556:LEU:C	2.42	0.45
1:C:152:GLN:HA	1:C:158:PRO:HA	1.98	0.44
2:U:252:LEU:HA	2:U:253:PRO:HD3	1.80	0.44
2:U:283:VAL:CG2	2:U:323:ILE:HD13	2.47	0.44
2:U:364:ASP:OD1	2:U:364:ASP:N	2.50	0.44
2:U:458:TYR:CE2	2:U:460:LYS:HA	2.51	0.44
2:V:381:GLU:O	2:V:382:SER:C	2.59	0.44
2:X:35:TRP:HB3	2:X:54:PHE:HA	1.98	0.44
2:Y:50:LEU:HD12	2:Y:51:VAL:N	2.32	0.44
2:Y:402:ASP:CG	2:Y:402:ASP:O	2.59	0.44
2:Y:556:LEU:HD23	2:Y:556:LEU:C	2.42	0.44
2:Y:586:THR:HG23	2:Y:587:GLU:N	2.32	0.44
2:Z:23:SER:OG	2:Z:483:ASN:HB2	2.04	0.44
2:Z:402:ASP:O	2:Z:402:ASP:CG	2.59	0.44
1:C:27:LYS:HB2	1:C:36:PHE:HE2	1.82	0.44
2:U:523:ASN:HD21	2:U:538:ASP:HA	1.82	0.44
2:U:556:LEU:HD23	2:U:556:LEU:C	2.42	0.44
2:V:171:ILE:CG2	2:V:172:SER:H	2.25	0.44
2:V:215:LYS:HE3	2:V:329:ASN:CG	2.42	0.44
2:V:304:ILE:HG13	2:V:305:TYR:HE2	1.82	0.44
2:V:375:ALA:HB3	2:V:406:LEU:O	2.17	0.44
2:V:458:TYR:CE2	2:V:460:LYS:HA	2.52	0.44
2:V:544:VAL:HG13	2:V:545:PRO:HD2	1.99	0.44
2:V:626:THR:O	2:V:626:THR:HG23	2.17	0.44
2:W:211:GLN:OE1	2:W:328:GLN:HG2	2.17	0.44
2:W:385:THR:HA	2:W:388:THR:HG23	1.98	0.44
2:W:419:VAL:HA	2:W:422:ALA:CB	2.46	0.44
2:W:423:VAL:O	2:W:424:ASP:C	2.59	0.44
2:W:556:LEU:HD23	2:W:556:LEU:C	2.42	0.44
2:W:583:SER:HA	2:W:586:THR:HG22	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:62:ALA:HB1	2:X:466:ARG:HE	1.82	0.44
2:X:478:CYS:C	2:X:480:ARG:N	2.73	0.44
2:Y:514:ARG:HE	2:Y:518:TYR:HE1	1.66	0.44
2:Y:626:THR:HB	2:Y:641:ASN:ND2	2.32	0.44
2:Z:211:GLN:OE1	2:Z:328:GLN:HG2	2.16	0.44
2:Z:586:THR:HG23	2:Z:587:GLU:N	2.32	0.44
2:V:66:MET:O	2:V:67:SER:C	2.60	0.44
2:V:147:THR:O	2:V:151:ILE:HG23	2.17	0.44
2:V:229:GLU:H	2:V:229:GLU:CD	2.26	0.44
2:V:624:VAL:HG11	2:V:643:VAL:HG12	1.99	0.44
2:W:151:ILE:HG13	2:W:152:ALA:N	2.30	0.44
2:W:586:THR:HG23	2:W:587:GLU:N	2.32	0.44
2:W:626:THR:HB	2:W:641:ASN:ND2	2.33	0.44
2:X:499:ILE:HD13	2:X:499:ILE:N	2.28	0.44
2:Y:51:VAL:HG13	2:Y:55:GLY:C	2.42	0.44
2:Y:211:GLN:OE1	2:Y:328:GLN:HG2	2.16	0.44
2:Y:624:VAL:HG12	2:Y:643:VAL:CB	2.47	0.44
2:Z:215:LYS:HE3	2:Z:329:ASN:CG	2.42	0.44
2:Z:458:TYR:CE2	2:Z:460:LYS:HA	2.51	0.44
1:C:29:GLN:OE1	1:D:3:GLY:N	2.51	0.44
1:F:110:ASN:HA	1:F:111:PRO:HD3	1.69	0.44
2:U:163:LEU:HB3	2:U:164:GLY:H	1.63	0.44
2:U:375:ALA:HB3	2:U:406:LEU:O	2.18	0.44
2:U:624:VAL:HG12	2:U:643:VAL:CB	2.46	0.44
2:V:222:VAL:HG11	2:V:236:ILE:HG12	2.00	0.44
2:W:100:GLU:HG3	2:W:186:LYS:N	2.32	0.44
2:W:153:LYS:O	2:W:157:VAL:HG22	2.17	0.44
2:W:208:VAL:HG23	2:W:209:ASP:N	2.31	0.44
2:W:304:ILE:HG13	2:W:305:TYR:HE2	1.81	0.44
2:W:624:VAL:HG11	2:W:643:VAL:HG12	1.98	0.44
2:X:73:GLN:HB3	2:X:500:LEU:HD12	1.99	0.44
2:X:208:VAL:HG23	2:X:209:ASP:N	2.31	0.44
2:X:229:GLU:CD	2:X:229:GLU:H	2.26	0.44
2:X:423:VAL:O	2:X:424:ASP:C	2.59	0.44
2:X:454:TYR:O	2:X:467:TRP:CZ3	2.71	0.44
2:X:544:VAL:CG1	2:X:545:PRO:N	2.78	0.44
2:X:583:SER:HA	2:X:586:THR:HG22	1.98	0.44
2:Y:35:TRP:HB3	2:Y:54:PHE:HA	1.98	0.44
2:Y:147:THR:O	2:Y:151:ILE:HG23	2.18	0.44
2:Y:544:VAL:CG1	2:Y:545:PRO:HD2	2.46	0.44
2:Z:536:TYR:HD2	2:Z:538:ASP:H	1.63	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:627:PHE:CZ	2:Z:640:LEU:CB	2.95	0.44
2:U:66:MET:O	2:U:67:SER:C	2.60	0.44
2:U:454:TYR:O	2:U:467:TRP:CZ3	2.71	0.44
2:V:50:LEU:HD12	2:V:51:VAL:N	2.32	0.44
2:V:99:ILE:O	2:V:100:GLU:C	2.61	0.44
2:V:254:ILE:HB	2:V:258:GLY:O	2.18	0.44
2:V:454:TYR:O	2:V:467:TRP:CZ3	2.71	0.44
2:V:478:CYS:C	2:V:480:ARG:N	2.73	0.44
2:V:601:ILE:HG22	2:V:602:TYR:N	2.31	0.44
2:W:171:ILE:CG2	2:W:172:SER:N	2.80	0.44
2:W:173:SER:HA	2:W:174:SER:HB3	1.98	0.44
2:W:454:TYR:O	2:W:467:TRP:CZ3	2.71	0.44
2:X:385:THR:HA	2:X:388:THR:HG23	1.98	0.44
2:X:402:ASP:CG	2:X:402:ASP:O	2.59	0.44
2:Y:171:ILE:CG2	2:Y:172:SER:H	2.26	0.44
2:Y:194:LEU:HD23	2:Y:194:LEU:C	2.43	0.44
2:Y:375:ALA:HB3	2:Y:406:LEU:O	2.17	0.44
2:Y:456:TYR:CE2	2:Y:503:ILE:HD11	2.52	0.44
2:Z:601:ILE:HG22	2:Z:602:TYR:N	2.31	0.44
2:U:453:ASN:ND2	2:U:453:ASN:N	2.62	0.44
2:U:536:TYR:HD2	2:U:538:ASP:H	1.64	0.44
2:U:601:ILE:HG22	2:U:602:TYR:N	2.31	0.44
2:V:100:GLU:HG3	2:V:186:LYS:N	2.31	0.44
2:W:147:THR:O	2:W:151:ILE:HG23	2.18	0.44
2:W:583:SER:C	2:W:586:THR:HG22	2.41	0.44
2:W:626:THR:O	2:W:626:THR:HG23	2.17	0.44
2:X:99:ILE:O	2:X:100:GLU:C	2.61	0.44
2:X:153:LYS:O	2:X:157:VAL:HG22	2.17	0.44
2:X:556:LEU:HD23	2:X:556:LEU:C	2.42	0.44
2:X:586:THR:HG23	2:X:587:GLU:N	2.32	0.44
2:Z:419:VAL:HA	2:Z:422:ALA:CB	2.46	0.44
2:Z:544:VAL:HG13	2:Z:545:PRO:HD2	1.99	0.44
1:A:108:GLN:HB3	1:A:199:TYR:HB2	2.00	0.44
2:U:153:LYS:O	2:U:157:VAL:HG22	2.17	0.44
2:V:51:VAL:HG13	2:V:55:GLY:C	2.42	0.44
2:V:153:LYS:O	2:V:157:VAL:HG22	2.17	0.44
2:X:51:VAL:HG13	2:X:55:GLY:C	2.42	0.44
2:Y:295:LEU:HD11	2:Y:314:PHE:CD2	2.53	0.44
2:Y:454:TYR:O	2:Y:467:TRP:CZ3	2.71	0.44
2:Z:51:VAL:HG13	2:Z:55:GLY:C	2.42	0.44
2:Z:151:ILE:HG13	2:Z:152:ALA:N	2.30	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:454:TYR:O	2:Z:467:TRP:CZ3	2.71	0.44
2:Z:456:TYR:CE2	2:Z:503:ILE:HD11	2.53	0.44
1:A:26:ILE:HG13	1:A:37:ILE:HG12	2.00	0.44
2:V:379:ALA:HB2	2:V:454:TYR:CE2	2.46	0.44
2:V:586:THR:HG23	2:V:587:GLU:N	2.32	0.44
2:W:375:ALA:HB3	2:W:406:LEU:O	2.17	0.44
2:Y:56:GLN:HA	2:Y:57:PRO:HD3	1.80	0.44
2:Z:153:LYS:O	2:Z:157:VAL:HG22	2.17	0.44
2:Z:626:THR:HB	2:Z:641:ASN:ND2	2.32	0.44
1:D:67:LYS:HG2	1:D:67:LYS:O	2.18	0.44
1:E:212:THR:HA	1:E:222:ASP:HA	2.00	0.44
1:F:114:ILE:HG23	1:F:116:MET:HE2	2.00	0.44
2:U:222:VAL:HG11	2:U:236:ILE:HG12	2.00	0.44
2:U:626:THR:O	2:U:626:THR:HG23	2.17	0.44
2:U:627:PHE:CD1	2:U:627:PHE:C	2.94	0.44
2:V:173:SER:HA	2:V:174:SER:HB3	1.98	0.44
2:V:253:PRO:HD2	2:V:336:GLY:HA2	2.00	0.44
2:V:419:VAL:HA	2:V:422:ALA:CB	2.46	0.44
2:V:523:ASN:HD21	2:V:538:ASP:HA	1.83	0.44
2:X:109:ASN:C	2:X:177:GLY:HA3	2.43	0.44
2:Y:240:SER:HB3	2:Y:279:TYR:CE1	2.53	0.44
2:Y:453:ASN:HD22	2:Y:453:ASN:N	2.16	0.44
2:Z:194:LEU:HD23	2:Z:194:LEU:C	2.43	0.44
2:Z:626:THR:O	2:Z:626:THR:HG23	2.17	0.44
2:U:304:ILE:HG13	2:U:305:TYR:HE2	1.81	0.43
2:U:514:ARG:HE	2:U:518:TYR:HE1	1.66	0.43
2:V:390:GLN:HE22	2:V:408:SER:H	1.66	0.43
2:W:194:LEU:HD23	2:W:194:LEU:C	2.43	0.43
2:W:240:SER:HB3	2:W:279:TYR:CE1	2.53	0.43
2:X:74:TYR:OH	2:X:473:ASP:OD2	2.35	0.43
2:X:100:GLU:HB2	2:X:185:GLY:CA	2.48	0.43
2:X:253:PRO:HD2	2:X:336:GLY:HA2	2.00	0.43
2:X:521:ALA:HB1	2:X:540:THR:CA	2.46	0.43
2:X:544:VAL:CG1	2:X:545:PRO:HD2	2.47	0.43
2:Y:62:ALA:HB1	2:Y:466:ARG:HE	1.83	0.43
2:Y:109:ASN:C	2:Y:177:GLY:HA3	2.43	0.43
2:Y:229:GLU:H	2:Y:229:GLU:CD	2.26	0.43
2:Y:253:PRO:HD2	2:Y:336:GLY:HA2	2.00	0.43
2:Z:109:ASN:C	2:Z:177:GLY:HA3	2.43	0.43
2:Z:598:LEU:HD23	2:Z:598:LEU:C	2.42	0.43
1:C:212:THR:HA	1:C:222:ASP:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:124:THR:HG23	1:F:126:TYR:N	2.33	0.43
2:U:173:SER:HA	2:U:174:SER:HB3	1.98	0.43
2:U:402:ASP:O	2:U:402:ASP:CG	2.59	0.43
2:U:453:ASN:HD22	2:U:453:ASN:N	2.16	0.43
2:V:194:LEU:HD23	2:V:194:LEU:C	2.43	0.43
2:V:382:SER:CB	2:V:385:THR:HG22	2.42	0.43
2:V:517:LEU:HB2	2:V:522:ILE:HG23	1.95	0.43
2:W:598:LEU:HD23	2:W:598:LEU:C	2.43	0.43
2:X:643:VAL:O	2:X:643:VAL:HG23	2.19	0.43
2:Y:544:VAL:HG13	2:Y:545:PRO:HD2	1.99	0.43
2:Y:626:THR:O	2:Y:626:THR:HG23	2.17	0.43
2:Z:253:PRO:HD2	2:Z:336:GLY:HA2	2.00	0.43
1:B:13:TYR:CD2	1:B:116:MET:HE1	2.54	0.43
1:C:106:VAL:HG12	1:C:107:SER:H	1.82	0.43
1:E:19:ASP:OD2	1:E:213:TYR:OH	2.34	0.43
2:U:48:VAL:HG12	2:U:48:VAL:O	2.19	0.43
2:U:90:LYS:N	2:U:344:LEU:O	2.48	0.43
2:U:100:GLU:HB2	2:U:185:GLY:CA	2.48	0.43
2:U:253:PRO:HD2	2:U:336:GLY:HA2	2.00	0.43
2:U:295:LEU:HD11	2:U:314:PHE:CD2	2.53	0.43
2:U:586:THR:HG23	2:U:587:GLU:N	2.32	0.43
2:V:44:VAL:HG11	2:V:50:LEU:HB3	1.99	0.43
2:V:240:SER:HB3	2:V:279:TYR:CE1	2.53	0.43
2:V:598:LEU:HD23	2:V:598:LEU:C	2.43	0.43
2:X:48:VAL:O	2:X:48:VAL:HG12	2.18	0.43
2:X:364:ASP:OD1	2:X:364:ASP:N	2.50	0.43
2:X:502:VAL:CG1	2:X:504:LYS:H	2.31	0.43
2:X:526:THR:CG2	2:X:535:LEU:CD2	2.95	0.43
2:Y:598:LEU:HD23	2:Y:598:LEU:C	2.42	0.43
2:Z:254:ILE:HB	2:Z:258:GLY:O	2.19	0.43
2:Z:624:VAL:HG11	2:Z:643:VAL:HG12	1.99	0.43
1:B:56:TRP:HB3	1:B:71:ILE:HD13	2.00	0.43
1:D:157:ILE:HB	2:X:579:PHE:CG	2.54	0.43
2:V:100:GLU:HB2	2:V:185:GLY:CA	2.48	0.43
2:V:511:GLN:HE21	2:V:511:GLN:CA	2.30	0.43
2:V:517:LEU:HD13	2:V:524:PRO:CG	2.46	0.43
2:W:222:VAL:HG11	2:W:236:ILE:HG12	2.00	0.43
2:W:502:VAL:CG1	2:W:504:LYS:H	2.31	0.43
2:W:521:ALA:HB3	2:W:540:THR:HA	1.99	0.43
2:X:240:SER:HB3	2:X:279:TYR:CE1	2.53	0.43
2:Y:517:LEU:HD13	2:Y:524:PRO:CG	2.45	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:521:ALA:HB3	2:Y:540:THR:HA	2.00	0.43
2:Z:44:VAL:HG11	2:Z:50:LEU:HB3	2.00	0.43
2:Z:222:VAL:HG11	2:Z:236:ILE:HG12	2.00	0.43
2:Z:304:ILE:HG13	2:Z:305:TYR:HE2	1.81	0.43
1:E:127:GLU:HG2	1:E:131:PHE:CZ	2.54	0.43
2:U:51:VAL:HG13	2:U:55:GLY:C	2.42	0.43
2:U:377:SER:HA	2:U:469:PRO:HG3	2.00	0.43
2:U:502:VAL:CG1	2:U:504:LYS:H	2.31	0.43
2:U:514:ARG:NH2	2:U:535:LEU:HD22	2.33	0.43
2:V:526:THR:CG2	2:V:535:LEU:CD2	2.94	0.43
2:W:50:LEU:HD12	2:W:51:VAL:N	2.32	0.43
2:W:526:THR:HG21	2:W:535:LEU:HD11	1.97	0.43
2:X:254:ILE:HB	2:X:258:GLY:O	2.18	0.43
2:X:375:ALA:HB3	2:X:406:LEU:O	2.17	0.43
2:X:561:LYS:CB	2:X:640:LEU:HD21	2.47	0.43
2:Y:547:PRO:C	2:Y:553:VAL:CG2	2.83	0.43
2:Z:229:GLU:CD	2:Z:229:GLU:H	2.26	0.43
2:Z:375:ALA:HB3	2:Z:406:LEU:O	2.17	0.43
2:Z:526:THR:HG21	2:Z:535:LEU:HD11	1.97	0.43
1:B:114:ILE:HG12	1:B:115:LYS:N	2.33	0.43
2:U:240:SER:HB3	2:U:279:TYR:CE1	2.53	0.43
2:V:581:ARG:HB2	2:V:623:PHE:HZ	1.82	0.43
2:W:521:ALA:HB1	2:W:540:THR:CA	2.46	0.43
2:X:67:SER:OG	2:X:472:ALA:HB2	2.19	0.43
2:Y:171:ILE:CG2	2:Y:172:SER:N	2.79	0.43
2:Z:62:ALA:HB1	2:Z:466:ARG:HE	1.83	0.43
2:Z:99:ILE:O	2:Z:100:GLU:C	2.61	0.43
2:Z:502:VAL:CG1	2:Z:504:LYS:H	2.31	0.43
2:Z:581:ARG:HA	2:Z:623:PHE:CE2	2.53	0.43
1:A:168:MET:HB2	1:A:191:THR:HG22	2.01	0.43
1:B:108:GLN:CB	1:B:199:TYR:HB2	2.49	0.43
1:C:56:TRP:HB3	1:C:71:ILE:HD13	2.01	0.43
1:D:30:LEU:HB2	1:D:33:GLY:O	2.18	0.43
2:U:109:ASN:C	2:U:177:GLY:HA3	2.43	0.43
2:U:581:ARG:HB2	2:U:623:PHE:HZ	1.83	0.43
2:V:502:VAL:CG1	2:V:504:LYS:H	2.31	0.43
2:V:514:ARG:NH2	2:V:535:LEU:HD22	2.33	0.43
2:W:48:VAL:O	2:W:48:VAL:HG12	2.19	0.43
2:W:229:GLU:CD	2:W:229:GLU:H	2.26	0.43
2:W:423:VAL:HG21	2:W:513:GLN:NE2	2.34	0.43
2:W:523:ASN:HD21	2:W:538:ASP:HA	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:194:LEU:HD23	2:X:194:LEU:C	2.44	0.43
2:X:222:VAL:HG11	2:X:236:ILE:HG12	2.00	0.43
2:X:440:ASN:ND2	2:X:440:ASN:C	2.77	0.43
2:Y:197:GLU:HB3	2:Y:199:GLU:CD	2.44	0.43
2:Z:100:GLU:HB2	2:Z:185:GLY:CA	2.48	0.43
1:B:124:THR:HG23	1:B:126:TYR:H	1.84	0.43
1:B:124:THR:CG2	1:B:130:MET:HG2	2.46	0.43
2:U:408:SER:OG	2:U:451:ASP:OD2	2.32	0.43
2:U:598:LEU:HD23	2:U:598:LEU:C	2.42	0.43
2:V:364:ASP:N	2:V:364:ASP:OD1	2.50	0.43
2:V:440:ASN:ND2	2:V:440:ASN:C	2.77	0.43
2:V:583:SER:C	2:V:586:THR:HG22	2.41	0.43
2:W:44:VAL:HG11	2:W:50:LEU:HB3	1.99	0.43
2:W:254:ILE:HB	2:W:258:GLY:O	2.19	0.43
2:W:499:ILE:HD13	2:W:499:ILE:N	2.28	0.43
2:X:407:CYS:O	2:X:451:ASP:HB3	2.15	0.43
2:X:598:LEU:HD23	2:X:598:LEU:C	2.43	0.43
2:Y:100:GLU:HB2	2:Y:185:GLY:CA	2.49	0.43
2:Y:581:ARG:HA	2:Y:623:PHE:CE2	2.54	0.43
2:Z:89:ALA:HB3	2:Z:194:LEU:CD1	2.49	0.43
2:Z:147:THR:O	2:Z:151:ILE:HG23	2.18	0.43
2:Z:377:SER:HA	2:Z:469:PRO:HG3	2.00	0.43
1:F:114:ILE:HD12	1:F:198:MET:HE3	2.00	0.43
2:V:295:LEU:HD11	2:V:314:PHE:CD2	2.54	0.43
2:V:526:THR:HG21	2:V:535:LEU:HD11	1.97	0.43
2:V:576:ASN:CA	2:V:580:THR:HG21	2.49	0.43
2:V:643:VAL:O	2:V:643:VAL:HG23	2.19	0.43
2:W:51:VAL:HG13	2:W:55:GLY:C	2.42	0.43
2:W:109:ASN:C	2:W:177:GLY:HA3	2.43	0.43
2:W:197:GLU:HB3	2:W:199:GLU:CD	2.43	0.43
2:W:502:VAL:CG1	2:W:503:ILE:N	2.82	0.43
2:W:544:VAL:HG13	2:W:545:PRO:HD2	2.00	0.43
2:X:581:ARG:HB2	2:X:623:PHE:HZ	1.83	0.43
2:Y:254:ILE:HB	2:Y:258:GLY:O	2.18	0.43
2:Y:312:ASP:O	2:Y:316:ALA:HB2	2.19	0.43
1:B:223:LEU:HA	1:B:224:PRO:HD3	1.84	0.43
2:U:34:GLN:OE1	2:U:230:LEU:HD11	2.19	0.43
2:U:89:ALA:HB3	2:U:194:LEU:CD1	2.49	0.43
2:U:577:ASN:N	2:U:580:THR:CG2	2.82	0.43
2:U:581:ARG:HA	2:U:623:PHE:CE2	2.53	0.43
2:V:34:GLN:OE1	2:V:230:LEU:HD11	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:89:ALA:HB3	2:V:194:LEU:CD1	2.49	0.43
2:V:97:GLY:O	2:V:98:ASN:O	2.37	0.43
2:V:577:ASN:N	2:V:580:THR:CG2	2.82	0.43
2:W:97:GLY:O	2:W:98:ASN:O	2.37	0.43
2:W:581:ARG:HB2	2:W:623:PHE:HZ	1.83	0.43
2:X:295:LEU:HD11	2:X:314:PHE:CD2	2.54	0.43
2:X:577:ASN:N	2:X:580:THR:CG2	2.82	0.43
2:Y:89:ALA:HB3	2:Y:194:LEU:CD1	2.49	0.43
2:Y:215:LYS:HE3	2:Y:329:ASN:OD1	2.19	0.43
2:Y:377:SER:HA	2:Y:469:PRO:HG3	2.00	0.43
2:Z:48:VAL:O	2:Z:48:VAL:HG12	2.19	0.43
2:Z:312:ASP:O	2:Z:316:ALA:HB2	2.19	0.43
2:Z:602:TYR:CD2	2:Z:603:GLU:N	2.87	0.43
1:C:223:LEU:HA	1:C:224:PRO:HD3	1.80	0.42
1:E:114:ILE:HG23	1:E:116:MET:HE2	2.01	0.42
1:F:109:TYR:OH	1:F:202:VAL:HG21	2.19	0.42
1:F:149:MET:HG3	1:F:212:THR:O	2.18	0.42
2:U:147:THR:O	2:U:151:ILE:HG23	2.18	0.42
2:U:215:LYS:HE3	2:U:329:ASN:OD1	2.19	0.42
2:U:602:TYR:CD2	2:U:603:GLU:N	2.87	0.42
2:V:24:THR:O	2:V:26:THR:N	2.52	0.42
2:V:62:ALA:HB1	2:V:466:ARG:HE	1.83	0.42
2:W:24:THR:O	2:W:26:THR:N	2.52	0.42
2:W:62:ALA:HB1	2:W:466:ARG:HE	1.83	0.42
2:W:99:ILE:O	2:W:100:GLU:C	2.61	0.42
2:W:100:GLU:HB2	2:W:185:GLY:CA	2.49	0.42
2:W:161:PRO:O	2:W:162:THR:C	2.62	0.42
2:W:171:ILE:CG2	2:W:172:SER:H	2.26	0.42
2:W:518:TYR:C	2:W:520:GLU:H	2.27	0.42
2:X:24:THR:O	2:X:26:THR:N	2.52	0.42
2:X:89:ALA:HB3	2:X:194:LEU:CD1	2.49	0.42
2:X:514:ARG:HE	2:X:518:TYR:HE1	1.67	0.42
2:X:539:LYS:HE2	2:X:541:ALA:CA	2.41	0.42
2:Y:151:ILE:HG13	2:Y:152:ALA:N	2.31	0.42
2:Y:576:ASN:CA	2:Y:580:THR:HG21	2.48	0.42
2:Z:34:GLN:OE1	2:Z:230:LEU:HD11	2.19	0.42
2:Z:295:LEU:HD11	2:Z:314:PHE:CD2	2.54	0.42
2:Z:407:CYS:O	2:Z:451:ASP:HB3	2.14	0.42
2:Z:453:ASN:HD22	2:Z:453:ASN:N	2.15	0.42
2:U:97:GLY:O	2:U:98:ASN:O	2.37	0.42
2:U:178:LEU:HD23	2:U:178:LEU:N	2.22	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:229:GLU:CD	2:U:229:GLU:H	2.26	0.42
2:U:254:ILE:HB	2:U:258:GLY:O	2.18	0.42
2:V:48:VAL:O	2:V:48:VAL:HG12	2.18	0.42
2:W:252:LEU:HA	2:W:253:PRO:HD3	1.80	0.42
2:W:253:PRO:HD2	2:W:336:GLY:HA2	2.00	0.42
2:W:539:LYS:HE2	2:W:541:ALA:CA	2.42	0.42
2:W:602:TYR:CD2	2:W:603:GLU:N	2.87	0.42
2:W:621:ASN:HD22	2:W:621:ASN:HA	1.63	0.42
2:X:44:VAL:HG11	2:X:50:LEU:HB3	1.99	0.42
2:X:90:LYS:N	2:X:344:LEU:O	2.48	0.42
2:X:312:ASP:O	2:X:316:ALA:HB2	2.19	0.42
2:X:576:ASN:CA	2:X:580:THR:HG21	2.49	0.42
2:X:581:ARG:HA	2:X:623:PHE:CE2	2.54	0.42
2:Y:44:VAL:HG11	2:Y:50:LEU:HB3	1.99	0.42
2:Y:77:ASP:OD1	2:Y:77:ASP:O	2.38	0.42
2:Y:440:ASN:ND2	2:Y:440:ASN:C	2.77	0.42
2:Y:518:TYR:C	2:Y:520:GLU:H	2.26	0.42
2:Z:101:TYR:CD2	2:Z:101:TYR:C	2.98	0.42
2:Z:240:SER:HB3	2:Z:279:TYR:CE1	2.53	0.42
2:Z:364:ASP:OD1	2:Z:364:ASP:N	2.51	0.42
1:C:38:ARG:O	1:C:40:PRO:HD3	2.20	0.42
1:C:123:PHE:CE1	1:C:187:GLU:HG3	2.54	0.42
2:U:161:PRO:O	2:U:162:THR:C	2.63	0.42
2:U:440:ASN:ND2	2:U:440:ASN:C	2.77	0.42
2:U:502:VAL:CG1	2:U:503:ILE:N	2.82	0.42
2:U:514:ARG:HA	2:U:517:LEU:CG	2.49	0.42
2:U:556:LEU:HD13	2:U:631:PRO:HA	2.01	0.42
2:U:576:ASN:CA	2:U:580:THR:HG21	2.49	0.42
2:V:556:LEU:C	2:V:556:LEU:CD2	2.93	0.42
2:V:602:TYR:CD2	2:V:603:GLU:N	2.87	0.42
2:W:67:SER:OG	2:W:472:ALA:HB2	2.19	0.42
2:W:215:LYS:HE3	2:W:329:ASN:OD1	2.18	0.42
2:W:295:LEU:HD11	2:W:314:PHE:CD2	2.54	0.42
2:W:570:TYR:CD2	2:W:584:PHE:CE2	2.95	0.42
2:X:409:PRO:HG2	2:X:454:TYR:CE1	2.54	0.42
2:Y:222:VAL:HG11	2:Y:236:ILE:HG12	2.00	0.42
2:Y:502:VAL:CG1	2:Y:504:LYS:H	2.31	0.42
2:Y:514:ARG:HA	2:Y:517:LEU:CD2	2.50	0.42
2:Z:24:THR:O	2:Z:26:THR:N	2.52	0.42
2:Z:77:ASP:OD1	2:Z:77:ASP:O	2.37	0.42
2:Z:197:GLU:HB3	2:Z:199:GLU:CD	2.45	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:502:VAL:CG1	2:Z:503:ILE:N	2.83	0.42
2:Z:514:ARG:HE	2:Z:518:TYR:HE1	1.66	0.42
2:Z:523:ASN:HD21	2:Z:538:ASP:HA	1.83	0.42
2:U:99:ILE:O	2:U:100:GLU:C	2.61	0.42
2:U:101:TYR:CD2	2:U:101:TYR:C	2.98	0.42
2:U:194:LEU:HD23	2:U:194:LEU:C	2.43	0.42
2:U:478:CYS:C	2:U:480:ARG:N	2.72	0.42
2:U:627:PHE:CZ	2:U:640:LEU:CB	2.95	0.42
2:V:496:ARG:O	2:V:496:ARG:CG	2.59	0.42
2:W:514:ARG:HE	2:W:518:TYR:HE1	1.67	0.42
2:W:514:ARG:NH2	2:W:535:LEU:HD22	2.33	0.42
2:W:576:ASN:CA	2:W:580:THR:HG21	2.49	0.42
2:W:581:ARG:HA	2:W:623:PHE:CE2	2.54	0.42
2:W:588:THR:CG2	2:W:589:ALA:N	2.83	0.42
2:W:643:VAL:HG23	2:W:643:VAL:O	2.19	0.42
2:X:34:GLN:OE1	2:X:230:LEU:HD11	2.19	0.42
2:Y:48:VAL:O	2:Y:48:VAL:HG12	2.19	0.42
2:Y:99:ILE:O	2:Y:100:GLU:C	2.61	0.42
2:Y:643:VAL:O	2:Y:643:VAL:HG23	2.18	0.42
2:Z:91:ASN:ND2	2:Z:226:TYR:C	2.78	0.42
2:Z:371:GLN:O	2:Z:403:CYS:HA	2.19	0.42
2:Z:577:ASN:N	2:Z:580:THR:CG2	2.83	0.42
2:Z:588:THR:CG2	2:Z:589:ALA:N	2.82	0.42
1:C:28:ARG:HD3	1:C:28:ARG:HA	1.85	0.42
1:E:110:ASN:HA	1:E:111:PRO:HD3	1.73	0.42
1:F:7:ASN:HB3	1:F:209:ILE:HD12	2.01	0.42
1:F:28:ARG:HD3	1:F:28:ARG:HA	1.90	0.42
2:U:62:ALA:HB1	2:U:466:ARG:HE	1.83	0.42
2:U:312:ASP:O	2:U:316:ALA:HB2	2.20	0.42
2:U:370:VAL:HG23	2:U:370:VAL:O	2.20	0.42
2:V:109:ASN:C	2:V:177:GLY:HA3	2.43	0.42
2:V:197:GLU:HB3	2:V:199:GLU:CD	2.44	0.42
2:V:518:TYR:C	2:V:520:GLU:H	2.28	0.42
2:V:526:THR:CG2	2:V:535:LEU:CD1	2.95	0.42
2:V:562:THR:CG2	2:V:563:ASN:N	2.82	0.42
2:W:89:ALA:HB3	2:W:194:LEU:CD1	2.49	0.42
2:W:577:ASN:N	2:W:580:THR:CG2	2.82	0.42
2:X:77:ASP:OD1	2:X:77:ASP:O	2.38	0.42
2:X:97:GLY:O	2:X:98:ASN:O	2.37	0.42
2:X:215:LYS:HE3	2:X:329:ASN:OD1	2.19	0.42
2:X:391:LYS:CE	2:X:440:ASN:ND2	2.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:518:TYR:C	2:X:520:GLU:H	2.27	0.42
2:X:575:LEU:N	2:X:575:LEU:CD1	2.83	0.42
2:X:624:VAL:CB	2:X:643:VAL:HG12	2.50	0.42
2:Y:24:THR:O	2:Y:26:THR:N	2.53	0.42
2:Y:407:CYS:O	2:Y:451:ASP:HB3	2.14	0.42
2:Y:602:TYR:CD2	2:Y:603:GLU:N	2.87	0.42
2:Y:618:ILE:CG2	2:Y:619:ASP:N	2.83	0.42
2:Z:67:SER:OG	2:Z:472:ALA:HB2	2.19	0.42
2:Z:539:LYS:HE2	2:Z:541:ALA:CA	2.43	0.42
2:Z:555:ARG:O	2:Z:559:MET:HG3	2.19	0.42
2:Z:566:ARG:C	2:Z:568:SER:H	2.27	0.42
2:Z:643:VAL:O	2:Z:643:VAL:HG23	2.19	0.42
1:B:12:ARG:NH2	1:B:199:TYR:OH	2.52	0.42
2:U:171:ILE:CG2	2:U:172:SER:H	2.25	0.42
2:U:518:TYR:C	2:U:520:GLU:H	2.27	0.42
2:U:624:VAL:CB	2:U:643:VAL:HG12	2.50	0.42
2:U:643:VAL:O	2:U:643:VAL:HG23	2.19	0.42
2:V:215:LYS:HE3	2:V:329:ASN:OD1	2.18	0.42
2:V:252:LEU:HA	2:V:253:PRO:HD3	1.80	0.42
2:V:423:VAL:HG21	2:V:513:GLN:NE2	2.34	0.42
2:V:556:LEU:HD23	2:V:556:LEU:O	2.20	0.42
2:V:588:THR:CG2	2:V:589:ALA:N	2.82	0.42
2:W:101:TYR:CD2	2:W:101:TYR:C	2.97	0.42
2:W:440:ASN:ND2	2:W:440:ASN:C	2.77	0.42
2:W:453:ASN:HD22	2:W:453:ASN:N	2.16	0.42
2:W:511:GLN:HE21	2:W:511:GLN:CA	2.30	0.42
2:X:46:ASN:HB2	2:X:49:ASP:CB	2.50	0.42
2:X:618:ILE:CG2	2:X:619:ASP:N	2.83	0.42
2:Y:390:GLN:O	2:Y:391:LYS:C	2.63	0.42
2:Y:557:PHE:HZ	2:Y:629:ILE:C	2.28	0.42
2:Y:627:PHE:CZ	2:Y:640:LEU:CB	2.95	0.42
2:Z:236:ILE:HD11	2:Z:340:LEU:HD11	2.01	0.42
2:Z:543:SER:C	2:Z:544:VAL:HG23	2.45	0.42
2:Z:562:THR:CG2	2:Z:563:ASN:N	2.82	0.42
1:E:27:LYS:HE3	1:E:34:ASP:CG	2.44	0.42
2:U:56:GLN:HA	2:U:57:PRO:HD3	1.80	0.42
2:U:538:ASP:HB2	2:U:539:LYS:H	1.43	0.42
2:U:562:THR:CG2	2:U:563:ASN:N	2.82	0.42
2:V:91:ASN:ND2	2:V:226:TYR:C	2.78	0.42
2:V:377:SER:HA	2:V:469:PRO:HG3	2.01	0.42
2:V:502:VAL:CG1	2:V:503:ILE:N	2.82	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:566:ARG:C	2:V:568:SER:H	2.27	0.42
2:W:91:ASN:ND2	2:W:226:TYR:C	2.78	0.42
2:W:312:ASP:O	2:W:316:ALA:HB2	2.19	0.42
2:W:371:GLN:O	2:W:403:CYS:HA	2.19	0.42
2:W:514:ARG:HA	2:W:517:LEU:CD2	2.50	0.42
2:X:197:GLU:HB3	2:X:199:GLU:CD	2.44	0.42
2:X:371:GLN:O	2:X:403:CYS:HA	2.19	0.42
2:X:423:VAL:HG21	2:X:513:GLN:NE2	2.35	0.42
2:X:588:THR:CG2	2:X:589:ALA:N	2.82	0.42
2:Y:514:ARG:HA	2:Y:517:LEU:CG	2.49	0.42
2:Y:561:LYS:CB	2:Y:640:LEU:HD21	2.47	0.42
2:Y:562:THR:CG2	2:Y:563:ASN:N	2.82	0.42
2:Y:577:ASN:N	2:Y:580:THR:CG2	2.82	0.42
2:Y:624:VAL:CB	2:Y:643:VAL:HG12	2.50	0.42
2:Z:561:LYS:CB	2:Z:640:LEU:HD21	2.47	0.42
2:Z:627:PHE:HZ	2:Z:640:LEU:CD2	2.29	0.42
2:U:24:THR:O	2:U:26:THR:N	2.52	0.42
2:U:197:GLU:HB3	2:U:199:GLU:CD	2.44	0.42
2:V:312:ASP:O	2:V:316:ALA:HB2	2.20	0.42
2:W:408:SER:OG	2:W:409:PRO:HD2	2.20	0.42
2:W:409:PRO:HG2	2:W:454:TYR:CE1	2.55	0.42
2:W:496:ARG:O	2:W:496:ARG:CG	2.59	0.42
2:X:171:ILE:CG2	2:X:172:SER:H	2.25	0.42
2:X:236:ILE:HD11	2:X:340:LEU:HD11	2.01	0.42
2:X:502:VAL:CG1	2:X:503:ILE:N	2.83	0.42
2:X:514:ARG:HA	2:X:517:LEU:CG	2.49	0.42
2:X:537:GLY:O	2:X:538:ASP:CB	2.68	0.42
2:Z:478:CYS:C	2:Z:480:ARG:N	2.73	0.42
2:Z:518:TYR:C	2:Z:520:GLU:H	2.27	0.42
2:Z:521:ALA:HB3	2:Z:540:THR:HA	1.99	0.42
1:A:109:TYR:OH	1:A:202:VAL:HG21	2.20	0.42
1:B:108:GLN:HB3	1:B:199:TYR:HB2	2.02	0.42
2:U:236:ILE:HD11	2:U:340:LEU:HD11	2.02	0.42
2:U:629:ILE:CG2	2:U:630:GLN:N	2.83	0.42
2:V:556:LEU:HD13	2:V:631:PRO:HA	2.02	0.42
2:V:581:ARG:HA	2:V:623:PHE:CE2	2.54	0.42
2:W:34:GLN:OE1	2:W:230:LEU:HD11	2.19	0.42
2:W:56:GLN:HA	2:W:57:PRO:HD3	1.81	0.42
2:W:236:ILE:HD11	2:W:340:LEU:HD11	2.01	0.42
2:W:618:ILE:CG2	2:W:619:ASP:N	2.83	0.42
2:W:624:VAL:CB	2:W:643:VAL:HG12	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:101:TYR:CD2	2:X:101:TYR:C	2.98	0.42
2:X:161:PRO:O	2:X:162:THR:C	2.63	0.42
2:X:213:ASN:N	2:X:213:ASN:ND2	2.67	0.42
2:X:460:LYS:HB3	2:X:460:LYS:HE3	1.82	0.42
2:Y:101:TYR:CD2	2:Y:101:TYR:C	2.98	0.42
2:Y:364:ASP:N	2:Y:364:ASP:OD1	2.51	0.42
2:Y:375:ALA:C	2:Y:377:SER:H	2.28	0.42
2:Y:555:ARG:O	2:Y:559:MET:HG3	2.19	0.42
2:Y:627:PHE:HZ	2:Y:640:LEU:CD2	2.30	0.42
2:Z:514:ARG:HA	2:Z:517:LEU:CD2	2.50	0.42
2:Z:618:ILE:CG2	2:Z:619:ASP:N	2.83	0.42
1:E:222:ASP:OD1	1:E:222:ASP:N	2.53	0.42
2:U:371:GLN:O	2:U:403:CYS:HA	2.20	0.42
2:V:404:LEU:HA	2:V:554:ARG:HH22	1.85	0.42
2:V:537:GLY:O	2:V:538:ASP:CB	2.68	0.42
2:W:46:ASN:HB2	2:W:49:ASP:CB	2.50	0.42
2:W:207:ALA:O	2:W:208:VAL:C	2.63	0.42
2:W:566:ARG:C	2:W:568:SER:H	2.28	0.42
2:X:377:SER:HA	2:X:469:PRO:HG3	2.00	0.42
2:X:390:GLN:O	2:X:391:LYS:C	2.63	0.42
2:X:496:ARG:O	2:X:496:ARG:CG	2.60	0.42
2:X:556:LEU:C	2:X:556:LEU:CD2	2.93	0.42
2:X:562:THR:CG2	2:X:563:ASN:N	2.82	0.42
2:X:602:TYR:CD2	2:X:603:GLU:N	2.88	0.42
2:Y:97:GLY:O	2:Y:98:ASN:O	2.37	0.42
2:Y:304:ILE:HG13	2:Y:305:TYR:HE2	1.82	0.42
2:Y:371:GLN:O	2:Y:403:CYS:HA	2.19	0.42
2:Y:588:THR:CG2	2:Y:589:ALA:N	2.82	0.42
2:Z:370:VAL:O	2:Z:370:VAL:HG23	2.20	0.42
2:Z:556:LEU:C	2:Z:556:LEU:CD2	2.93	0.42
2:Z:624:VAL:CB	2:Z:643:VAL:HG12	2.49	0.42
1:A:222:ASP:OD1	1:A:222:ASP:N	2.53	0.41
1:B:28:ARG:HA	1:B:28:ARG:HD3	1.96	0.41
2:V:101:TYR:CD2	2:V:101:TYR:C	2.97	0.41
2:V:624:VAL:CB	2:V:643:VAL:HG12	2.50	0.41
2:W:526:THR:CG2	2:W:535:LEU:CD1	2.95	0.41
2:X:23:SER:HB2	2:X:559:MET:SD	2.59	0.41
2:X:566:ARG:C	2:X:568:SER:H	2.27	0.41
2:Y:67:SER:OG	2:Y:472:ALA:HB2	2.20	0.41
2:Y:161:PRO:O	2:Y:162:THR:C	2.63	0.41
2:Y:502:VAL:CG1	2:Y:503:ILE:N	2.82	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:556:LEU:C	2:Y:556:LEU:CD2	2.93	0.41
2:Z:119:LYS:HE3	2:Z:124:ASP:OD1	2.20	0.41
2:Z:404:LEU:HA	2:Z:554:ARG:HH22	1.85	0.41
2:Z:581:ARG:HB2	2:Z:623:PHE:HZ	1.84	0.41
1:C:108:GLN:HB3	1:C:199:TYR:HB2	2.03	0.41
2:U:74:TYR:OH	2:U:473:ASP:OD2	2.35	0.41
2:U:77:ASP:OD1	2:U:77:ASP:O	2.38	0.41
2:U:555:ARG:O	2:U:559:MET:HG3	2.20	0.41
2:U:557:PHE:HZ	2:U:629:ILE:C	2.28	0.41
2:U:558:ASN:O	2:U:561:LYS:HG2	2.20	0.41
2:U:561:LYS:CB	2:U:640:LEU:HD21	2.47	0.41
2:U:588:THR:CG2	2:U:589:ALA:N	2.82	0.41
2:V:77:ASP:OD1	2:V:77:ASP:O	2.37	0.41
2:V:90:LYS:N	2:V:344:LEU:O	2.48	0.41
2:V:213:ASN:N	2:V:213:ASN:ND2	2.67	0.41
2:V:370:VAL:HG23	2:V:370:VAL:O	2.20	0.41
2:V:514:ARG:HA	2:V:517:LEU:CD2	2.50	0.41
2:W:77:ASP:OD1	2:W:77:ASP:O	2.38	0.41
2:W:377:SER:HA	2:W:469:PRO:HG3	2.00	0.41
2:W:408:SER:OG	2:W:451:ASP:OD2	2.32	0.41
2:W:562:THR:CG2	2:W:563:ASN:N	2.82	0.41
2:X:90:LYS:HA	2:X:90:LYS:HD3	1.93	0.41
2:X:91:ASN:ND2	2:X:226:TYR:C	2.78	0.41
2:X:514:ARG:NH2	2:X:535:LEU:HD22	2.33	0.41
2:Y:46:ASN:HB2	2:Y:49:ASP:CB	2.50	0.41
2:Y:50:LEU:HD11	2:Y:65:PHE:CE1	2.56	0.41
2:Y:370:VAL:O	2:Y:370:VAL:HG23	2.20	0.41
2:Y:627:PHE:CE1	2:Y:640:LEU:HB3	2.55	0.41
2:Z:97:GLY:O	2:Z:98:ASN:O	2.37	0.41
2:Z:100:GLU:HG3	2:Z:186:LYS:N	2.32	0.41
2:Z:440:ASN:ND2	2:Z:440:ASN:C	2.77	0.41
2:Z:499:ILE:H	2:Z:499:ILE:CD1	2.25	0.41
2:Z:554:ARG:HG2	2:Z:558:ASN:OD1	2.20	0.41
1:A:108:GLN:CB	1:A:199:TYR:HB2	2.50	0.41
1:E:28:ARG:HA	1:E:28:ARG:HD3	1.89	0.41
1:E:64:ASP:O	1:E:68:VAL:HG23	2.20	0.41
1:F:167:LEU:HD11	1:F:190:LEU:HD12	2.02	0.41
2:U:50:LEU:HD11	2:U:65:PHE:CE1	2.55	0.41
2:U:67:SER:OG	2:U:472:ALA:HB2	2.19	0.41
2:U:375:ALA:C	2:U:377:SER:H	2.28	0.41
2:U:390:GLN:O	2:U:391:LYS:C	2.63	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:514:ARG:HA	2:U:517:LEU:CD2	2.51	0.41
2:U:521:ALA:HB1	2:U:540:THR:CA	2.46	0.41
2:U:543:SER:C	2:U:544:VAL:HG23	2.45	0.41
2:V:618:ILE:CG2	2:V:619:ASP:N	2.83	0.41
2:W:364:ASP:OD1	2:W:364:ASP:N	2.51	0.41
2:W:391:LYS:CE	2:W:440:ASN:ND2	2.83	0.41
2:W:557:PHE:CE2	2:W:631:PRO:CG	3.03	0.41
2:X:50:LEU:HD11	2:X:65:PHE:CE1	2.55	0.41
2:X:544:VAL:HG13	2:X:545:PRO:HD2	2.01	0.41
2:X:558:ASN:O	2:X:561:LYS:HG2	2.21	0.41
2:Y:91:ASN:ND2	2:Y:226:TYR:C	2.78	0.41
2:Y:590:GLN:HE21	2:Y:590:GLN:HB3	1.66	0.41
2:Z:46:ASN:HB2	2:Z:49:ASP:CB	2.50	0.41
2:Z:90:LYS:HA	2:Z:90:LYS:HD3	1.92	0.41
2:Z:215:LYS:HE3	2:Z:329:ASN:OD1	2.19	0.41
2:Z:390:GLN:O	2:Z:391:LYS:C	2.63	0.41
2:Z:537:GLY:O	2:Z:538:ASP:CB	2.69	0.41
2:U:341:SER:C	2:U:343:GLY:H	2.29	0.41
2:U:423:VAL:HG21	2:U:513:GLN:NE2	2.34	0.41
2:V:56:GLN:HA	2:V:57:PRO:HD3	1.80	0.41
2:V:561:LYS:CB	2:V:640:LEU:HD21	2.46	0.41
2:V:627:PHE:CE1	2:V:640:LEU:HB3	2.54	0.41
2:W:213:ASN:N	2:W:213:ASN:ND2	2.67	0.41
2:W:557:PHE:HZ	2:W:629:ILE:C	2.28	0.41
2:X:290:VAL:HG11	2:X:322:TYR:CE1	2.56	0.41
2:Y:150:ILE:H	2:Y:150:ILE:HG12	1.63	0.41
2:Y:391:LYS:CE	2:Y:440:ASN:ND2	2.84	0.41
2:Y:406:LEU:HA	2:Y:449:ALA:O	2.20	0.41
2:Z:423:VAL:HG21	2:Z:513:GLN:NE2	2.34	0.41
2:Z:498:GLN:HG3	2:Z:533:TYR:HA	2.02	0.41
1:A:157:ILE:N	2:U:579:PHE:CE1	2.86	0.41
1:B:222:ASP:OD1	1:B:222:ASP:N	2.53	0.41
1:D:27:LYS:HE3	1:D:34:ASP:CG	2.46	0.41
2:U:403:CYS:HB2	2:U:404:LEU:H	1.77	0.41
2:U:427:VAL:O	2:U:431:THR:CG2	2.68	0.41
2:U:618:ILE:CG2	2:U:619:ASP:N	2.83	0.41
2:V:23:SER:OG	2:V:483:ASN:CA	2.69	0.41
2:V:383:LEU:O	2:V:384:GLU:C	2.64	0.41
2:V:555:ARG:O	2:V:559:MET:HG3	2.19	0.41
2:W:543:SER:C	2:W:544:VAL:HG23	2.46	0.41
2:X:56:GLN:HA	2:X:57:PRO:HD3	1.81	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:406:LEU:HA	2:X:449:ALA:O	2.21	0.41
2:X:408:SER:OG	2:X:409:PRO:HD2	2.21	0.41
2:X:557:PHE:HZ	2:X:629:ILE:C	2.28	0.41
2:X:627:PHE:CZ	2:X:640:LEU:CB	2.95	0.41
2:Y:160:TYR:HA	2:Y:161:PRO:HA	1.82	0.41
2:Y:543:SER:C	2:Y:544:VAL:HG23	2.46	0.41
2:Z:150:ILE:H	2:Z:150:ILE:HG12	1.63	0.41
2:Z:194:LEU:C	2:Z:194:LEU:CD2	2.94	0.41
2:Z:409:PRO:HG2	2:Z:454:TYR:CE1	2.55	0.41
1:E:108:GLN:HB3	1:E:199:TYR:HB2	2.03	0.41
1:F:156:ASP:HB3	2:Z:579:PHE:CD1	2.54	0.41
2:U:91:ASN:ND2	2:U:226:TYR:C	2.78	0.41
2:U:194:LEU:C	2:U:194:LEU:CD2	2.94	0.41
2:U:556:LEU:C	2:U:556:LEU:CD2	2.93	0.41
2:V:341:SER:C	2:V:343:GLY:H	2.29	0.41
2:V:371:GLN:O	2:V:403:CYS:HA	2.19	0.41
2:V:391:LYS:CE	2:V:440:ASN:ND2	2.84	0.41
2:V:406:LEU:HA	2:V:449:ALA:O	2.20	0.41
2:V:408:SER:OG	2:V:409:PRO:HD2	2.21	0.41
2:V:409:PRO:HG2	2:V:454:TYR:CE1	2.56	0.41
2:V:427:VAL:HG21	2:V:516:ARG:NH2	2.36	0.41
2:W:341:SER:C	2:W:343:GLY:H	2.28	0.41
2:W:370:VAL:HG23	2:W:370:VAL:O	2.20	0.41
2:W:383:LEU:O	2:W:384:GLU:C	2.64	0.41
2:W:498:GLN:HG3	2:W:533:TYR:HA	2.02	0.41
2:W:538:ASP:HB2	2:W:539:LYS:H	1.42	0.41
2:W:555:ARG:O	2:W:559:MET:HG3	2.20	0.41
2:X:370:VAL:O	2:X:370:VAL:HG23	2.20	0.41
2:Y:236:ILE:HD11	2:Y:340:LEU:HD11	2.01	0.41
2:Y:252:LEU:HA	2:Y:253:PRO:HD3	1.81	0.41
2:Y:427:VAL:O	2:Y:431:THR:CG2	2.68	0.41
2:Z:375:ALA:C	2:Z:377:SER:H	2.28	0.41
2:Z:556:LEU:HD23	2:Z:556:LEU:O	2.20	0.41
1:E:66:ALA:C	1:E:68:VAL:N	2.78	0.41
2:U:308:ASN:HD21	2:U:313:ASP:CB	2.34	0.41
2:U:383:LEU:O	2:U:384:GLU:C	2.64	0.41
2:U:517:LEU:HD13	2:U:524:PRO:CG	2.46	0.41
2:U:537:GLY:O	2:U:538:ASP:CB	2.68	0.41
2:V:50:LEU:HD11	2:V:65:PHE:CE1	2.55	0.41
2:V:67:SER:OG	2:V:472:ALA:HB2	2.20	0.41
2:V:100:GLU:HB2	2:V:185:GLY:HA3	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:194:LEU:C	2:V:194:LEU:CD2	2.94	0.41
2:V:236:ILE:HD11	2:V:340:LEU:HD11	2.02	0.41
2:V:554:ARG:HG2	2:V:558:ASN:OD1	2.20	0.41
2:W:160:TYR:HA	2:W:161:PRO:HA	1.82	0.41
2:W:514:ARG:HA	2:W:517:LEU:CG	2.49	0.41
2:W:554:ARG:HG2	2:W:558:ASN:OD1	2.21	0.41
2:W:556:LEU:HD23	2:W:556:LEU:O	2.20	0.41
2:X:543:SER:C	2:X:544:VAL:HG23	2.45	0.41
2:X:556:LEU:HD23	2:X:556:LEU:O	2.20	0.41
2:X:629:ILE:CG2	2:X:630:GLN:N	2.83	0.41
2:Y:34:GLN:OE1	2:Y:230:LEU:HD11	2.19	0.41
2:Y:404:LEU:HA	2:Y:554:ARG:HH22	1.85	0.41
2:Y:423:VAL:HG21	2:Y:513:GLN:NE2	2.35	0.41
2:Y:499:ILE:H	2:Y:499:ILE:CD1	2.25	0.41
2:Y:556:LEU:HD23	2:Y:556:LEU:O	2.21	0.41
2:Y:566:ARG:C	2:Y:568:SER:H	2.28	0.41
2:Y:581:ARG:HB2	2:Y:623:PHE:HZ	1.82	0.41
2:Z:629:ILE:CG2	2:Z:630:GLN:N	2.83	0.41
1:D:19:ASP:OD2	1:D:213:TYR:OH	2.31	0.41
1:E:124:THR:HG23	1:E:126:TYR:N	2.35	0.41
2:U:119:LYS:HE3	2:U:124:ASP:OD1	2.20	0.41
2:U:408:SER:OG	2:U:409:PRO:HD2	2.21	0.41
2:U:556:LEU:HD23	2:U:556:LEU:O	2.20	0.41
2:U:564:ILE:CD1	2:U:642:PHE:HB2	2.48	0.41
2:U:598:LEU:C	2:U:598:LEU:CD2	2.94	0.41
2:V:43:GLN:NE2	2:V:77:ASP:HB2	2.36	0.41
2:V:119:LYS:HE3	2:V:124:ASP:OD1	2.20	0.41
2:V:445:SER:O	2:V:540:THR:O	2.39	0.41
2:V:521:ALA:HB1	2:V:540:THR:CA	2.46	0.41
2:V:543:SER:C	2:V:544:VAL:HG23	2.46	0.41
2:V:629:ILE:CG2	2:V:630:GLN:N	2.83	0.41
2:W:92:SER:OG	2:W:343:GLY:HA3	2.21	0.41
2:W:245:ALA:C	2:W:247:GLY:N	2.79	0.41
2:W:427:VAL:HG21	2:W:516:ARG:NH2	2.36	0.41
2:X:119:LYS:HE3	2:X:124:ASP:OD1	2.20	0.41
2:X:498:GLN:HG3	2:X:533:TYR:HA	2.03	0.41
2:X:555:ARG:O	2:X:559:MET:HG3	2.20	0.41
2:Y:408:SER:OG	2:Y:409:PRO:HD2	2.21	0.41
2:Z:23:SER:OG	2:Z:483:ASN:CA	2.69	0.41
2:Z:161:PRO:O	2:Z:162:THR:C	2.62	0.41
2:Z:391:LYS:CE	2:Z:440:ASN:ND2	2.83	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:427:VAL:HG21	2:Z:516:ARG:NH2	2.35	0.41
2:Z:557:PHE:CE2	2:Z:631:PRO:CG	3.03	0.41
1:A:74:ARG:NH2	1:A:231:GLU:OE2	2.48	0.41
1:C:77:LEU:HD13	1:C:120:LEU:HD23	2.03	0.41
1:D:108:GLN:HB3	1:D:199:TYR:HB2	2.02	0.41
1:D:140:TYR:O	1:D:145:PHE:HB2	2.21	0.41
1:E:203:ASP:OD1	1:E:204:ASP:N	2.54	0.41
1:F:106:VAL:HG12	1:F:107:SER:H	1.86	0.41
2:U:55:GLY:C	2:U:65:PHE:HE1	2.28	0.41
2:U:303:ASP:C	2:U:305:TYR:H	2.29	0.41
2:U:406:LEU:HA	2:U:449:ALA:O	2.20	0.41
2:U:445:SER:O	2:U:540:THR:O	2.39	0.41
2:U:498:GLN:HG3	2:U:533:TYR:HA	2.03	0.41
2:V:163:LEU:HB3	2:V:164:GLY:H	1.63	0.41
2:V:207:ALA:O	2:V:208:VAL:C	2.64	0.41
2:V:303:ASP:C	2:V:305:TYR:H	2.29	0.41
2:V:514:ARG:HE	2:V:518:TYR:HE1	1.67	0.41
2:V:558:ASN:O	2:V:561:LYS:HG2	2.21	0.41
2:V:598:LEU:C	2:V:598:LEU:CD2	2.94	0.41
2:W:23:SER:OG	2:W:483:ASN:CA	2.68	0.41
2:W:90:LYS:HA	2:W:90:LYS:HD3	1.93	0.41
2:W:556:LEU:C	2:W:556:LEU:CD2	2.93	0.41
2:X:304:ILE:HG13	2:X:305:TYR:HE2	1.81	0.41
2:X:375:ALA:C	2:X:377:SER:N	2.79	0.41
2:X:445:SER:O	2:X:540:THR:O	2.39	0.41
2:X:448:ALA:O	2:X:540:THR:N	2.42	0.41
2:X:511:GLN:HE21	2:X:511:GLN:CA	2.30	0.41
2:Y:194:LEU:C	2:Y:194:LEU:CD2	2.94	0.41
2:Y:409:PRO:HG2	2:Y:454:TYR:CE1	2.56	0.41
2:Y:554:ARG:HG2	2:Y:558:ASN:OD1	2.20	0.41
2:Y:605:ARG:HG2	2:Y:608:CYS:H	1.86	0.41
2:Z:50:LEU:HD11	2:Z:65:PHE:CE1	2.56	0.41
2:Z:92:SER:OG	2:Z:343:GLY:HA3	2.21	0.41
2:Z:347:ASN:HA	2:Z:350:VAL:HG23	2.03	0.41
2:Z:406:LEU:HA	2:Z:449:ALA:O	2.20	0.41
2:Z:408:SER:OG	2:Z:409:PRO:HD2	2.21	0.41
2:Z:514:ARG:HA	2:Z:517:LEU:CG	2.49	0.41
2:Z:556:LEU:HD13	2:Z:631:PRO:HA	2.01	0.41
2:Z:598:LEU:C	2:Z:598:LEU:CD2	2.94	0.41
1:C:124:THR:CB	1:C:130:MET:HG2	2.50	0.41
1:C:157:ILE:HD12	2:W:579:PHE:HD2	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:205:MET:HE3	2:U:205:MET:HB3	1.98	0.41
2:U:544:VAL:HG12	2:U:545:PRO:CD	2.51	0.41
2:U:554:ARG:HG2	2:U:558:ASN:OD1	2.21	0.41
2:U:566:ARG:C	2:U:568:SER:H	2.28	0.41
2:V:544:VAL:HG12	2:V:545:PRO:CD	2.51	0.41
2:W:290:VAL:HG11	2:W:322:TYR:CE1	2.56	0.41
2:W:627:PHE:CZ	2:W:640:LEU:CB	2.95	0.41
2:X:55:GLY:C	2:X:65:PHE:HE1	2.28	0.41
2:X:100:GLU:HB2	2:X:185:GLY:HA3	2.03	0.41
2:X:404:LEU:HD23	2:X:404:LEU:HA	1.91	0.41
2:Y:537:GLY:O	2:Y:538:ASP:CB	2.68	0.41
2:Y:557:PHE:CE2	2:Y:631:PRO:CG	3.02	0.41
2:Z:427:VAL:O	2:Z:431:THR:CG2	2.68	0.41
2:Z:459:ASP:OD2	2:Z:459:ASP:C	2.64	0.41
2:Z:544:VAL:HG12	2:Z:545:PRO:CD	2.51	0.41
1:B:149:MET:HG3	1:B:212:THR:O	2.21	0.40
1:C:39:VAL:HA	1:C:40:PRO:HD2	1.88	0.40
2:U:375:ALA:C	2:U:377:SER:N	2.79	0.40
2:U:404:LEU:HD23	2:U:404:LEU:HA	1.91	0.40
2:U:409:PRO:HG2	2:U:454:TYR:CE1	2.56	0.40
2:U:427:VAL:HG21	2:U:516:ARG:NH2	2.35	0.40
2:U:526:THR:CG2	2:U:535:LEU:CD2	2.95	0.40
2:U:621:ASN:HD22	2:U:621:ASN:HA	1.64	0.40
2:V:55:GLY:C	2:V:65:PHE:HE1	2.28	0.40
2:V:375:ALA:C	2:V:377:SER:H	2.28	0.40
2:V:621:ASN:HD22	2:V:621:ASN:HA	1.63	0.40
2:W:119:LYS:HE3	2:W:124:ASP:OD1	2.21	0.40
2:W:390:GLN:O	2:W:391:LYS:C	2.64	0.40
2:W:450:ILE:HG22	2:W:540:THR:HG21	2.01	0.40
2:W:537:GLY:O	2:W:538:ASP:CB	2.68	0.40
2:W:629:ILE:CG2	2:W:630:GLN:N	2.83	0.40
2:X:308:ASN:HD21	2:X:313:ASP:CB	2.34	0.40
2:X:410:PRO:O	2:X:411:ARG:C	2.64	0.40
2:X:580:THR:O	2:X:584:PHE:CD1	2.73	0.40
2:X:624:VAL:CG1	2:X:643:VAL:HB	2.51	0.40
2:Y:90:LYS:N	2:Y:344:LEU:O	2.48	0.40
2:Y:92:SER:OG	2:Y:343:GLY:HA3	2.21	0.40
2:Y:100:GLU:HG3	2:Y:186:LYS:N	2.31	0.40
2:Y:427:VAL:HG21	2:Y:516:ARG:NH2	2.35	0.40
2:Y:445:SER:O	2:Y:540:THR:O	2.39	0.40
2:Y:575:LEU:N	2:Y:575:LEU:CD1	2.83	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:576:ASN:CA	2:Z:580:THR:HG21	2.49	0.40
2:Z:586:THR:CG2	2:Z:587:GLU:N	2.85	0.40
1:A:150:TYR:O	1:A:211:THR:HA	2.21	0.40
1:B:13:TYR:CG	1:B:116:MET:HE1	2.56	0.40
1:B:157:ILE:HD12	2:V:579:PHE:HD2	1.86	0.40
1:B:211:THR:HB	1:B:223:LEU:HB3	2.04	0.40
1:F:223:LEU:HA	1:F:224:PRO:HD3	1.86	0.40
2:U:73:GLN:HB3	2:U:500:LEU:CD1	2.51	0.40
2:U:100:GLU:HB2	2:U:185:GLY:HA3	2.03	0.40
2:U:249:SER:O	2:U:250:ALA:C	2.65	0.40
2:U:391:LYS:CE	2:U:440:ASN:ND2	2.84	0.40
2:V:161:PRO:O	2:V:162:THR:C	2.63	0.40
2:V:627:PHE:CD1	2:V:629:ILE:CG1	3.04	0.40
2:W:558:ASN:O	2:W:561:LYS:HG2	2.21	0.40
2:W:598:LEU:C	2:W:598:LEU:CD2	2.94	0.40
2:W:614:THR:HB	2:W:620:ARG:CA	2.40	0.40
2:W:627:PHE:CD1	2:W:629:ILE:CG1	3.04	0.40
2:X:207:ALA:O	2:X:208:VAL:C	2.63	0.40
2:X:514:ARG:C	2:X:517:LEU:HG	2.46	0.40
2:Y:290:VAL:HG11	2:Y:322:TYR:CE1	2.56	0.40
2:Y:308:ASN:HD21	2:Y:313:ASP:CB	2.34	0.40
2:Y:459:ASP:OD2	2:Y:459:ASP:C	2.64	0.40
2:Y:544:VAL:HG12	2:Y:545:PRO:CD	2.51	0.40
2:Y:627:PHE:CD1	2:Y:629:ILE:CG1	3.04	0.40
2:Z:73:GLN:HB3	2:Z:500:LEU:CD1	2.51	0.40
2:Z:205:MET:HE3	2:Z:205:MET:HB3	1.98	0.40
2:U:92:SER:OG	2:U:343:GLY:HA3	2.22	0.40
2:U:245:ALA:C	2:U:247:GLY:N	2.79	0.40
2:U:409:PRO:C	2:U:454:TYR:CE1	2.71	0.40
2:U:575:LEU:N	2:U:575:LEU:CD1	2.83	0.40
2:U:605:ARG:HG2	2:U:608:CYS:H	1.87	0.40
2:V:23:SER:HB2	2:V:559:MET:SD	2.59	0.40
2:V:375:ALA:C	2:V:377:SER:N	2.79	0.40
2:V:390:GLN:O	2:V:391:LYS:C	2.63	0.40
2:W:90:LYS:N	2:W:344:LEU:O	2.48	0.40
2:W:100:GLU:HB2	2:W:185:GLY:HA3	2.04	0.40
2:W:194:LEU:C	2:W:194:LEU:CD2	2.94	0.40
2:W:404:LEU:HA	2:W:554:ARG:HH22	1.86	0.40
2:W:406:LEU:HA	2:W:449:ALA:O	2.20	0.40
2:X:92:SER:OG	2:X:343:GLY:HA3	2.21	0.40
2:Y:55:GLY:C	2:Y:65:PHE:HE1	2.28	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:303:ASP:C	2:Y:305:TYR:H	2.29	0.40
2:Y:558:ASN:O	2:Y:561:LYS:HG2	2.21	0.40
2:Y:598:LEU:C	2:Y:598:LEU:CD2	2.94	0.40
2:Z:21:ASN:O	2:Z:21:ASN:CG	2.65	0.40
2:Z:308:ASN:HD21	2:Z:313:ASP:CB	2.34	0.40
2:Z:383:LEU:O	2:Z:384:GLU:C	2.64	0.40
2:Z:573:PHE:HD2	2:Z:574:GLU:OE2	2.04	0.40
1:A:13:TYR:CG	1:A:116:MET:HE1	2.57	0.40
1:C:157:ILE:HD12	2:W:579:PHE:CB	2.37	0.40
1:F:115:LYS:HE3	1:F:115:LYS:HB2	1.77	0.40
2:U:43:GLN:NE2	2:U:77:ASP:HB2	2.37	0.40
2:U:46:ASN:HB2	2:U:49:ASP:CB	2.51	0.40
2:U:100:GLU:HG3	2:U:186:LYS:N	2.32	0.40
2:U:207:ALA:O	2:U:208:VAL:C	2.64	0.40
2:V:290:VAL:HG11	2:V:322:TYR:CE1	2.56	0.40
2:W:43:GLN:NE2	2:W:77:ASP:HB2	2.36	0.40
2:W:50:LEU:HD11	2:W:65:PHE:CE1	2.56	0.40
2:W:375:ALA:C	2:W:377:SER:N	2.79	0.40
2:W:410:PRO:O	2:W:411:ARG:C	2.64	0.40
2:X:104:SER:HB2	2:X:181:VAL:HG12	2.03	0.40
2:X:303:ASP:C	2:X:305:TYR:H	2.29	0.40
2:X:554:ARG:HG2	2:X:558:ASN:OD1	2.21	0.40
2:X:598:LEU:C	2:X:598:LEU:CD2	2.95	0.40
2:Y:317:LYS:HE3	2:Y:317:LYS:HB2	1.97	0.40
2:Y:498:GLN:HG3	2:Y:533:TYR:HA	2.03	0.40
2:Z:55:GLY:C	2:Z:65:PHE:HE1	2.28	0.40
2:Z:341:SER:C	2:Z:343:GLY:H	2.28	0.40
1:A:110:ASN:HA	1:A:111:PRO:HD3	1.71	0.40
2:V:21:ASN:O	2:V:21:ASN:CG	2.65	0.40
2:V:514:ARG:HA	2:V:517:LEU:CG	2.49	0.40
2:V:557:PHE:HZ	2:V:629:ILE:C	2.28	0.40
2:V:627:PHE:CZ	2:V:640:LEU:CB	2.95	0.40
2:W:303:ASP:C	2:W:305:TYR:H	2.29	0.40
2:W:391:LYS:HE3	2:W:440:ASN:C	2.45	0.40
2:W:555:ARG:O	2:W:559:MET:HE2	2.22	0.40
2:X:73:GLN:HB3	2:X:500:LEU:CD1	2.52	0.40
2:X:383:LEU:O	2:X:384:GLU:C	2.64	0.40
2:X:404:LEU:HA	2:X:554:ARG:HH22	1.86	0.40
2:X:427:VAL:HG21	2:X:516:ARG:NH2	2.36	0.40
2:X:514:ARG:HA	2:X:517:LEU:CD2	2.51	0.40
2:X:564:ILE:HD11	2:X:642:PHE:CB	2.47	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:590:GLN:HE21	2:X:590:GLN:HB3	1.65	0.40
2:Y:526:THR:CG2	2:Y:535:LEU:CD2	2.95	0.40
2:Y:556:LEU:HD13	2:Y:631:PRO:HA	2.03	0.40
2:Y:573:PHE:HD2	2:Y:574:GLU:OE2	2.04	0.40
2:Y:586:THR:CG2	2:Y:587:GLU:N	2.85	0.40
2:Y:629:ILE:CG2	2:Y:630:GLN:N	2.83	0.40
2:Z:22:ASN:O	2:Z:23:SER:CB	2.70	0.40
2:Z:90:LYS:N	2:Z:344:LEU:O	2.48	0.40
2:Z:521:ALA:HB1	2:Z:540:THR:CA	2.46	0.40
2:Z:558:ASN:O	2:Z:561:LYS:HG2	2.22	0.40
2:Z:616:SER:O	2:Z:617:VAL:HG13	2.22	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	205/272 (75%)	184 (90%)	18 (9%)	3 (2%)	8	40
1	B	205/272 (75%)	184 (90%)	17 (8%)	4 (2%)	6	31
1	C	205/272 (75%)	184 (90%)	17 (8%)	4 (2%)	6	31
1	D	205/272 (75%)	184 (90%)	17 (8%)	4 (2%)	6	31
1	E	205/272 (75%)	183 (89%)	18 (9%)	4 (2%)	6	31
1	F	205/272 (75%)	184 (90%)	18 (9%)	3 (2%)	8	40
2	U	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	20
2	V	601/659 (91%)	480 (80%)	100 (17%)	21 (4%)	3	20
2	W	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	20
2	X	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	20
2	Y	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	20

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	Z	601/659 (91%)	480 (80%)	100 (17%)	21 (4%)	3	20
All	All	4836/5586 (87%)	3979 (82%)	709 (15%)	148 (3%)	5	22

All (148) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	108	GLN
1	B	67	LYS
1	B	108	GLN
1	C	67	LYS
1	C	108	GLN
1	D	67	LYS
1	E	67	LYS
1	E	108	GLN
1	F	67	LYS
2	U	98	ASN
2	U	201	ALA
2	U	432	ALA
2	U	538	ASP
2	U	539	LYS
2	V	98	ASN
2	V	201	ALA
2	V	432	ALA
2	V	538	ASP
2	V	539	LYS
2	W	98	ASN
2	W	201	ALA
2	W	432	ALA
2	W	538	ASP
2	W	539	LYS
2	X	98	ASN
2	X	201	ALA
2	X	432	ALA
2	X	538	ASP
2	X	539	LYS
2	Y	98	ASN
2	Y	201	ALA
2	Y	432	ALA
2	Y	538	ASP
2	Y	539	LYS
2	Z	98	ASN
2	Z	201	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Z	432	ALA
2	Z	538	ASP
2	Z	539	LYS
1	D	108	GLN
1	F	108	GLN
2	U	403	CYS
2	U	480	ARG
2	U	504	LYS
2	V	403	CYS
2	V	480	ARG
2	V	504	LYS
2	W	403	CYS
2	W	480	ARG
2	W	504	LYS
2	X	403	CYS
2	X	480	ARG
2	X	504	LYS
2	Y	403	CYS
2	Y	480	ARG
2	Y	504	LYS
2	Z	403	CYS
2	Z	480	ARG
2	Z	504	LYS
1	A	67	LYS
1	F	111	PRO
2	U	62	ALA
2	U	311	ILE
2	U	348	ALA
2	U	482	ASP
2	U	531	ASP
2	V	62	ALA
2	V	348	ALA
2	V	482	ASP
2	V	531	ASP
2	W	62	ALA
2	W	311	ILE
2	W	348	ALA
2	W	482	ASP
2	W	531	ASP
2	X	62	ALA
2	X	311	ILE
2	X	348	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	X	482	ASP
2	X	531	ASP
2	Y	62	ALA
2	Y	311	ILE
2	Y	348	ALA
2	Y	482	ASP
2	Y	531	ASP
2	Z	62	ALA
2	Z	348	ALA
2	Z	482	ASP
2	Z	531	ASP
1	A	111	PRO
1	E	111	PRO
2	U	634	SER
2	V	311	ILE
2	V	634	SER
2	W	634	SER
2	X	634	SER
2	Y	634	SER
2	Z	311	ILE
2	Z	634	SER
1	B	111	PRO
1	B	175	ALA
1	C	111	PRO
1	D	175	ALA
1	E	175	ALA
2	U	583	SER
2	V	25	GLY
2	V	583	SER
2	W	583	SER
2	X	25	GLY
2	X	583	SER
2	Y	583	SER
2	Z	583	SER
2	U	25	GLY
2	U	304	ILE
2	V	304	ILE
2	W	25	GLY
2	Y	25	GLY
2	Y	304	ILE
2	Z	25	GLY
2	Z	304	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	W	304	ILE
2	X	304	ILE
2	Z	247	GLY
2	Z	434	GLY
1	D	111	PRO
2	U	247	GLY
2	U	434	GLY
2	V	247	GLY
2	V	318	GLY
2	V	434	GLY
2	W	247	GLY
2	W	434	GLY
2	X	434	GLY
2	Y	247	GLY
2	Y	434	GLY
1	C	106	VAL
2	U	318	GLY
2	X	247	GLY
2	X	318	GLY
2	U	121	VAL
2	W	121	VAL
2	W	318	GLY
2	X	121	VAL
2	Y	121	VAL
2	Y	318	GLY
2	Z	121	VAL
2	Z	318	GLY
2	V	121	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	192/250 (77%)	172 (90%)	20 (10%)	7	22
1	B	192/250 (77%)	177 (92%)	15 (8%)	11	32
1	C	192/250 (77%)	174 (91%)	18 (9%)	8	26

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	D	192/250 (77%)	176 (92%)	16 (8%)	10	30
1	E	192/250 (77%)	176 (92%)	16 (8%)	10	30
1	F	192/250 (77%)	176 (92%)	16 (8%)	10	30
2	U	494/536 (92%)	443 (90%)	51 (10%)	7	23
2	V	494/536 (92%)	444 (90%)	50 (10%)	7	23
2	W	494/536 (92%)	444 (90%)	50 (10%)	7	23
2	X	494/536 (92%)	444 (90%)	50 (10%)	7	23
2	Y	494/536 (92%)	444 (90%)	50 (10%)	7	23
2	Z	494/536 (92%)	442 (90%)	52 (10%)	6	21
All	All	4116/4716 (87%)	3712 (90%)	404 (10%)	10	24

All (404) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	25	GLN
1	A	31	GLU
1	A	37	ILE
1	A	45	SER
1	A	50	MET
1	A	63	GLU
1	A	68	VAL
1	A	69	GLU
1	A	106	VAL
1	A	109	TYR
1	A	110	ASN
1	A	114	ILE
1	A	124	THR
1	A	125	ARG
1	A	138	LEU
1	A	161	ARG
1	A	176	ILE
1	A	184	ARG
1	A	191	THR
1	A	212	THR
1	B	25	GLN
1	B	37	ILE
1	B	45	SER
1	B	50	MET
1	B	67	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	78	HIS
1	B	109	TYR
1	B	114	ILE
1	B	124	THR
1	B	125	ARG
1	B	138	LEU
1	B	161	ARG
1	B	176	ILE
1	B	184	ARG
1	B	212	THR
1	C	9	SER
1	C	25	GLN
1	C	37	ILE
1	C	45	SER
1	C	50	MET
1	C	59	ILE
1	C	67	LYS
1	C	105	VAL
1	C	106	VAL
1	C	109	TYR
1	C	110	ASN
1	C	114	ILE
1	C	124	THR
1	C	125	ARG
1	C	138	LEU
1	C	161	ARG
1	C	184	ARG
1	C	212	THR
1	D	25	GLN
1	D	37	ILE
1	D	45	SER
1	D	50	MET
1	D	68	VAL
1	D	78	HIS
1	D	106	VAL
1	D	109	TYR
1	D	110	ASN
1	D	114	ILE
1	D	124	THR
1	D	125	ARG
1	D	138	LEU
1	D	161	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	184	ARG
1	D	212	THR
1	E	25	GLN
1	E	37	ILE
1	E	45	SER
1	E	50	MET
1	E	59	ILE
1	E	67	LYS
1	E	68	VAL
1	E	109	TYR
1	E	110	ASN
1	E	114	ILE
1	E	124	THR
1	E	125	ARG
1	E	138	LEU
1	E	161	ARG
1	E	184	ARG
1	E	212	THR
1	F	25	GLN
1	F	37	ILE
1	F	45	SER
1	F	50	MET
1	F	59	ILE
1	F	67	LYS
1	F	106	VAL
1	F	109	TYR
1	F	114	ILE
1	F	124	THR
1	F	125	ARG
1	F	138	LEU
1	F	161	ARG
1	F	176	ILE
1	F	184	ARG
1	F	212	THR
2	U	41	ILE
2	U	50	LEU
2	U	58	THR
2	U	66	MET
2	U	67	SER
2	U	71	PHE
2	U	74	TYR
2	U	80	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	U	84	VAL
2	U	86	ARG
2	U	95	ILE
2	U	102	THR
2	U	150	ILE
2	U	162	THR
2	U	188	ILE
2	U	189	THR
2	U	202	GLU
2	U	213	ASN
2	U	290	VAL
2	U	304	ILE
2	U	347	ASN
2	U	349	GLU
2	U	367	SER
2	U	368	VAL
2	U	371	GLN
2	U	382	SER
2	U	383	LEU
2	U	388	THR
2	U	395	SER
2	U	404	LEU
2	U	406	LEU
2	U	414	VAL
2	U	417	ILE
2	U	426	LEU
2	U	430	ARG
2	U	431	THR
2	U	436	TYR
2	U	437	THR
2	U	438	ASP
2	U	440	ASN
2	U	446	THR
2	U	450	ILE
2	U	453	ASN
2	U	460	LYS
2	U	464	VAL
2	U	483	ASN
2	U	499	ILE
2	U	501	ASN
2	U	507	ILE
2	U	593	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	U	596	LYS
2	V	41	ILE
2	V	50	LEU
2	V	58	THR
2	V	66	MET
2	V	67	SER
2	V	71	PHE
2	V	74	TYR
2	V	80	VAL
2	V	84	VAL
2	V	86	ARG
2	V	95	ILE
2	V	102	THR
2	V	150	ILE
2	V	162	THR
2	V	188	ILE
2	V	189	THR
2	V	202	GLU
2	V	213	ASN
2	V	290	VAL
2	V	304	ILE
2	V	347	ASN
2	V	349	GLU
2	V	367	SER
2	V	368	VAL
2	V	371	GLN
2	V	382	SER
2	V	383	LEU
2	V	388	THR
2	V	395	SER
2	V	404	LEU
2	V	406	LEU
2	V	414	VAL
2	V	417	ILE
2	V	426	LEU
2	V	430	ARG
2	V	431	THR
2	V	436	TYR
2	V	438	ASP
2	V	440	ASN
2	V	446	THR
2	V	450	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	V	453	ASN
2	V	460	LYS
2	V	464	VAL
2	V	483	ASN
2	V	499	ILE
2	V	501	ASN
2	V	507	ILE
2	V	593	GLN
2	V	596	LYS
2	W	41	ILE
2	W	50	LEU
2	W	58	THR
2	W	66	MET
2	W	67	SER
2	W	71	PHE
2	W	74	TYR
2	W	80	VAL
2	W	84	VAL
2	W	86	ARG
2	W	95	ILE
2	W	102	THR
2	W	150	ILE
2	W	162	THR
2	W	188	ILE
2	W	189	THR
2	W	202	GLU
2	W	213	ASN
2	W	290	VAL
2	W	304	ILE
2	W	347	ASN
2	W	349	GLU
2	W	367	SER
2	W	368	VAL
2	W	371	GLN
2	W	382	SER
2	W	383	LEU
2	W	388	THR
2	W	395	SER
2	W	404	LEU
2	W	406	LEU
2	W	414	VAL
2	W	417	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	W	426	LEU
2	W	430	ARG
2	W	431	THR
2	W	436	TYR
2	W	438	ASP
2	W	440	ASN
2	W	446	THR
2	W	450	ILE
2	W	453	ASN
2	W	460	LYS
2	W	464	VAL
2	W	483	ASN
2	W	499	ILE
2	W	501	ASN
2	W	507	ILE
2	W	593	GLN
2	W	596	LYS
2	X	41	ILE
2	X	50	LEU
2	X	58	THR
2	X	66	MET
2	X	67	SER
2	X	71	PHE
2	X	74	TYR
2	X	80	VAL
2	X	84	VAL
2	X	86	ARG
2	X	95	ILE
2	X	102	THR
2	X	150	ILE
2	X	162	THR
2	X	188	ILE
2	X	189	THR
2	X	202	GLU
2	X	213	ASN
2	X	290	VAL
2	X	304	ILE
2	X	347	ASN
2	X	349	GLU
2	X	367	SER
2	X	368	VAL
2	X	371	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	X	382	SER
2	X	383	LEU
2	X	388	THR
2	X	395	SER
2	X	404	LEU
2	X	406	LEU
2	X	414	VAL
2	X	417	ILE
2	X	426	LEU
2	X	430	ARG
2	X	431	THR
2	X	436	TYR
2	X	438	ASP
2	X	440	ASN
2	X	446	THR
2	X	450	ILE
2	X	453	ASN
2	X	460	LYS
2	X	464	VAL
2	X	483	ASN
2	X	499	ILE
2	X	501	ASN
2	X	507	ILE
2	X	593	GLN
2	X	596	LYS
2	Y	41	ILE
2	Y	50	LEU
2	Y	58	THR
2	Y	66	MET
2	Y	67	SER
2	Y	71	PHE
2	Y	74	TYR
2	Y	80	VAL
2	Y	84	VAL
2	Y	86	ARG
2	Y	95	ILE
2	Y	102	THR
2	Y	150	ILE
2	Y	162	THR
2	Y	188	ILE
2	Y	189	THR
2	Y	202	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Y	213	ASN
2	Y	290	VAL
2	Y	304	ILE
2	Y	347	ASN
2	Y	349	GLU
2	Y	367	SER
2	Y	368	VAL
2	Y	371	GLN
2	Y	382	SER
2	Y	383	LEU
2	Y	388	THR
2	Y	395	SER
2	Y	404	LEU
2	Y	406	LEU
2	Y	414	VAL
2	Y	417	ILE
2	Y	426	LEU
2	Y	430	ARG
2	Y	431	THR
2	Y	436	TYR
2	Y	438	ASP
2	Y	440	ASN
2	Y	446	THR
2	Y	450	ILE
2	Y	453	ASN
2	Y	460	LYS
2	Y	464	VAL
2	Y	483	ASN
2	Y	499	ILE
2	Y	501	ASN
2	Y	507	ILE
2	Y	593	GLN
2	Y	596	LYS
2	Z	41	ILE
2	Z	50	LEU
2	Z	58	THR
2	Z	66	MET
2	Z	67	SER
2	Z	71	PHE
2	Z	74	TYR
2	Z	77	ASP
2	Z	80	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Z	84	VAL
2	Z	86	ARG
2	Z	95	ILE
2	Z	102	THR
2	Z	150	ILE
2	Z	162	THR
2	Z	188	ILE
2	Z	189	THR
2	Z	202	GLU
2	Z	213	ASN
2	Z	290	VAL
2	Z	304	ILE
2	Z	347	ASN
2	Z	349	GLU
2	Z	367	SER
2	Z	368	VAL
2	Z	371	GLN
2	Z	382	SER
2	Z	383	LEU
2	Z	388	THR
2	Z	395	SER
2	Z	404	LEU
2	Z	406	LEU
2	Z	414	VAL
2	Z	417	ILE
2	Z	426	LEU
2	Z	430	ARG
2	Z	431	THR
2	Z	436	TYR
2	Z	437	THR
2	Z	438	ASP
2	Z	440	ASN
2	Z	446	THR
2	Z	450	ILE
2	Z	453	ASN
2	Z	460	LYS
2	Z	464	VAL
2	Z	483	ASN
2	Z	499	ILE
2	Z	501	ASN
2	Z	507	ILE
2	Z	593	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Z	596	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (114) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	25	GLN
1	A	136	GLN
1	B	152	GLN
1	C	62	GLN
1	C	217	HIS
1	D	62	GLN
1	E	108	GLN
1	E	110	ASN
1	F	110	ASN
2	U	43	GLN
2	U	70	ASN
2	U	166	ASN
2	U	213	ASN
2	U	278	GLN
2	U	347	ASN
2	U	390	GLN
2	U	440	ASN
2	U	453	ASN
2	U	457	GLN
2	U	511	GLN
2	U	513	GLN
2	U	523	ASN
2	U	590	GLN
2	U	612	ASN
2	U	621	ASN
2	U	630	GLN
2	U	641	ASN
2	V	43	GLN
2	V	70	ASN
2	V	166	ASN
2	V	213	ASN
2	V	278	GLN
2	V	329	ASN
2	V	390	GLN
2	V	440	ASN
2	V	453	ASN
2	V	457	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	V	511	GLN
2	V	513	GLN
2	V	523	ASN
2	V	590	GLN
2	V	612	ASN
2	V	621	ASN
2	V	630	GLN
2	V	641	ASN
2	W	43	GLN
2	W	70	ASN
2	W	166	ASN
2	W	213	ASN
2	W	278	GLN
2	W	329	ASN
2	W	390	GLN
2	W	440	ASN
2	W	453	ASN
2	W	457	GLN
2	W	511	GLN
2	W	513	GLN
2	W	523	ASN
2	W	590	GLN
2	W	612	ASN
2	W	621	ASN
2	W	630	GLN
2	W	641	ASN
2	X	43	GLN
2	X	70	ASN
2	X	166	ASN
2	X	213	ASN
2	X	278	GLN
2	X	390	GLN
2	X	440	ASN
2	X	453	ASN
2	X	457	GLN
2	X	511	GLN
2	X	513	GLN
2	X	523	ASN
2	X	590	GLN
2	X	612	ASN
2	X	621	ASN
2	X	630	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	X	641	ASN
2	Y	43	GLN
2	Y	70	ASN
2	Y	166	ASN
2	Y	213	ASN
2	Y	278	GLN
2	Y	390	GLN
2	Y	440	ASN
2	Y	453	ASN
2	Y	457	GLN
2	Y	511	GLN
2	Y	513	GLN
2	Y	523	ASN
2	Y	590	GLN
2	Y	612	ASN
2	Y	621	ASN
2	Y	630	GLN
2	Y	641	ASN
2	Z	43	GLN
2	Z	70	ASN
2	Z	166	ASN
2	Z	213	ASN
2	Z	278	GLN
2	Z	390	GLN
2	Z	440	ASN
2	Z	453	ASN
2	Z	457	GLN
2	Z	511	GLN
2	Z	513	GLN
2	Z	523	ASN
2	Z	590	GLN
2	Z	612	ASN
2	Z	621	ASN
2	Z	630	GLN
2	Z	641	ASN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

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.

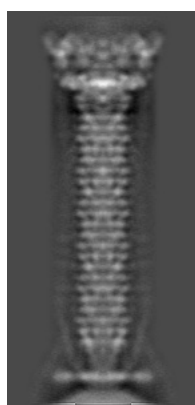
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-1126. These allow visual inspection of the internal detail of the map and identification of artifacts.

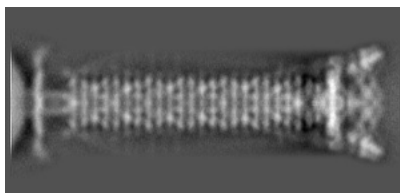
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

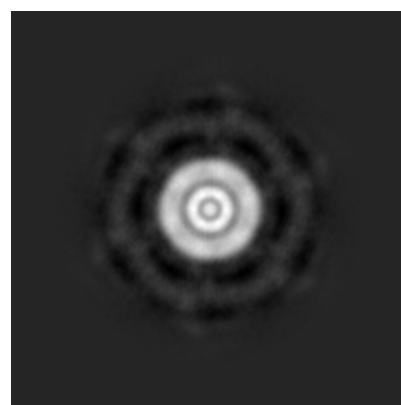
6.1.1 Primary map



X



Y

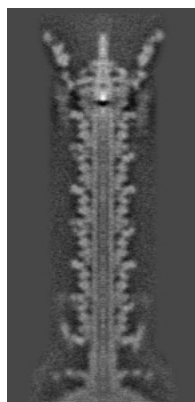


Z

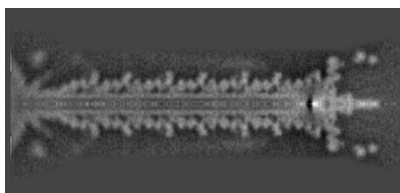
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

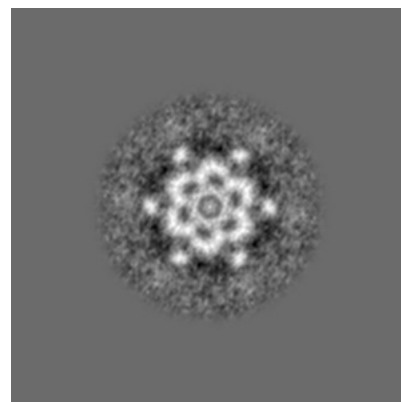
6.2.1 Primary map



X Index: 90



Y Index: 90

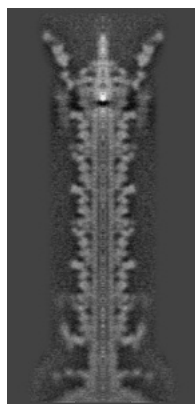


Z Index: 190

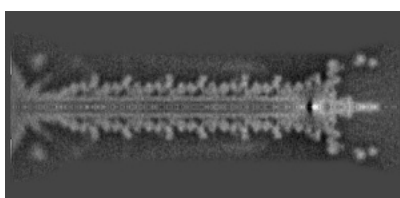
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

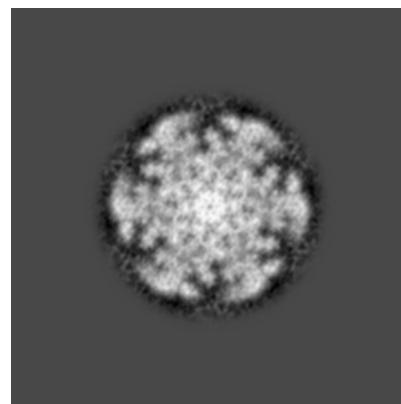
6.3.1 Primary map



X Index: 89



Y Index: 90

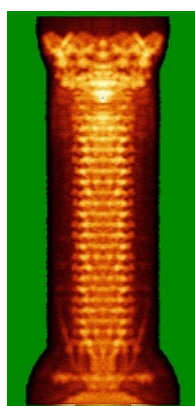


Z Index: 310

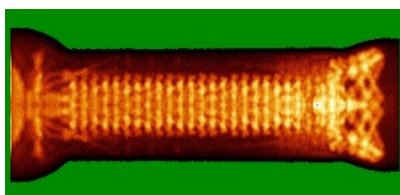
The images above show the largest variance slices of the map in three orthogonal directions.

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

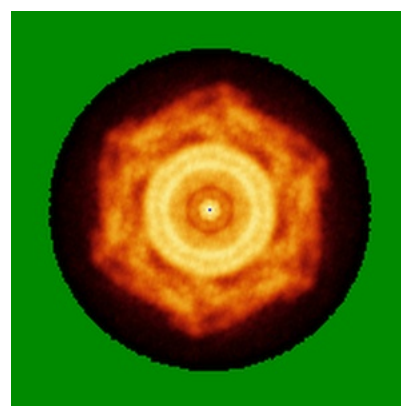
6.4.1 Primary map



X



Y



Z

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

This section was not generated.

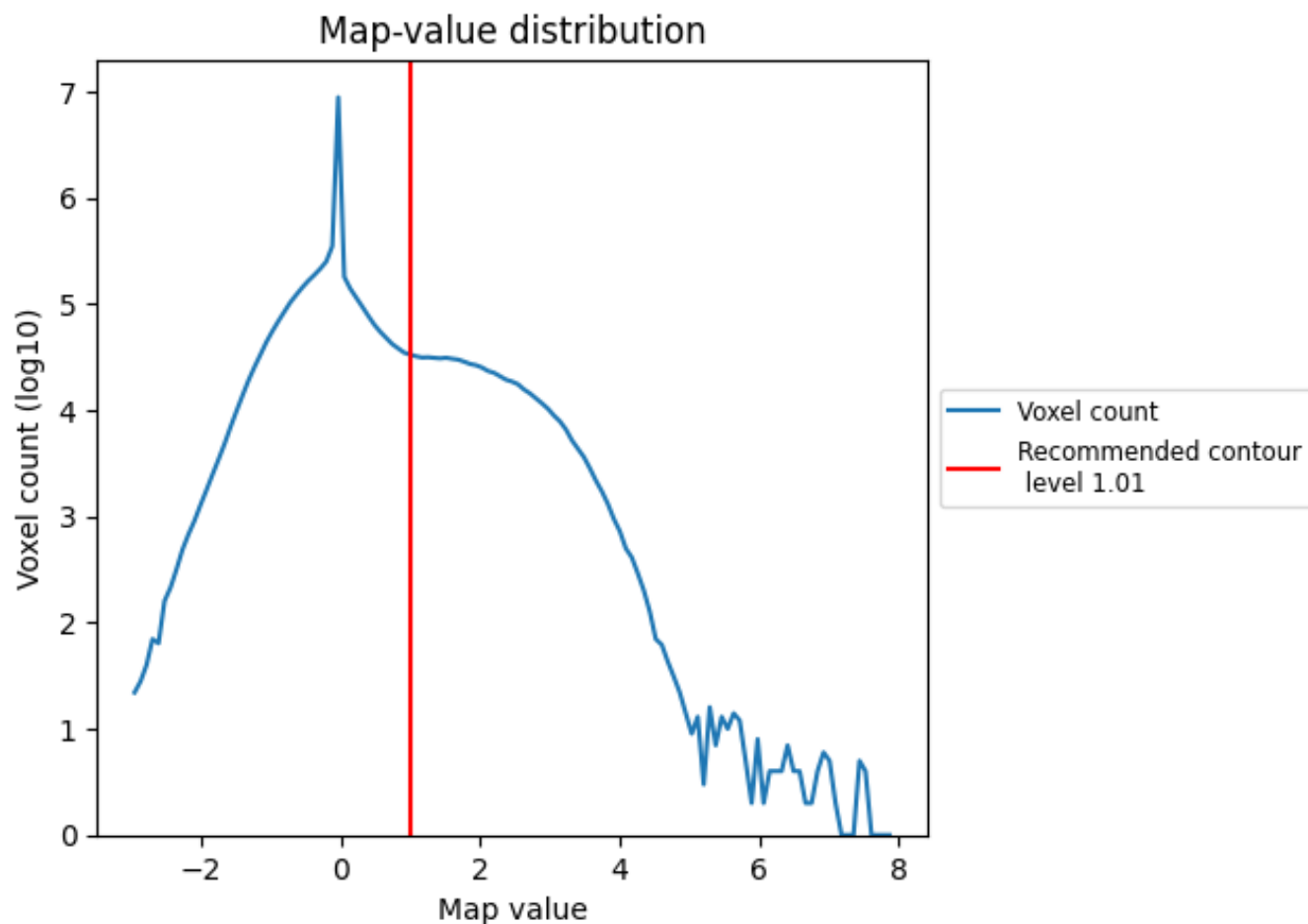
6.6 Mask visualisation

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

7 Map analysis [i](#)

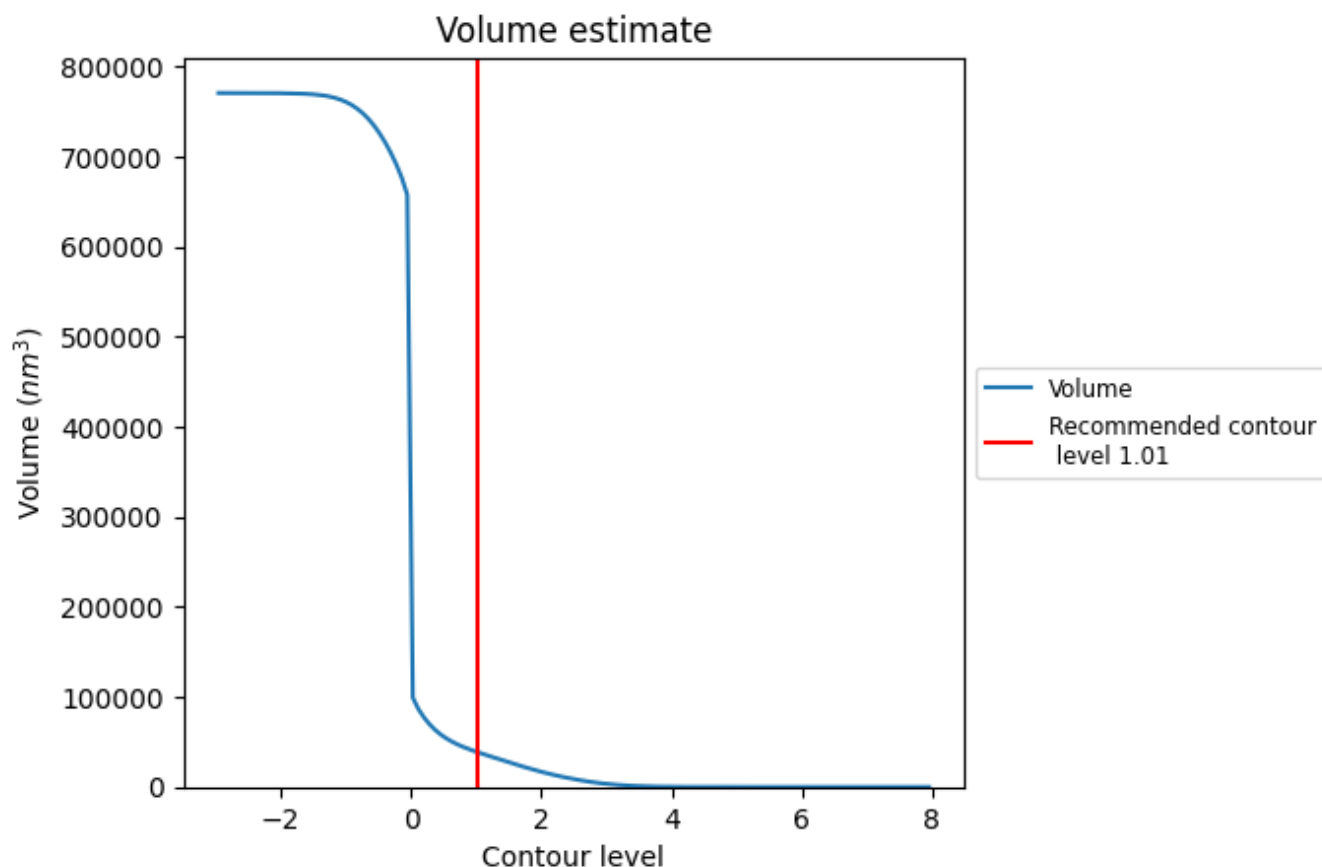
This section contains the results of statistical analysis of the map.

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 38892 nm³; this corresponds to an approximate mass of 35132 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](#)

This section was not generated. The rotationally averaged power spectrum is only generated for cubic maps.

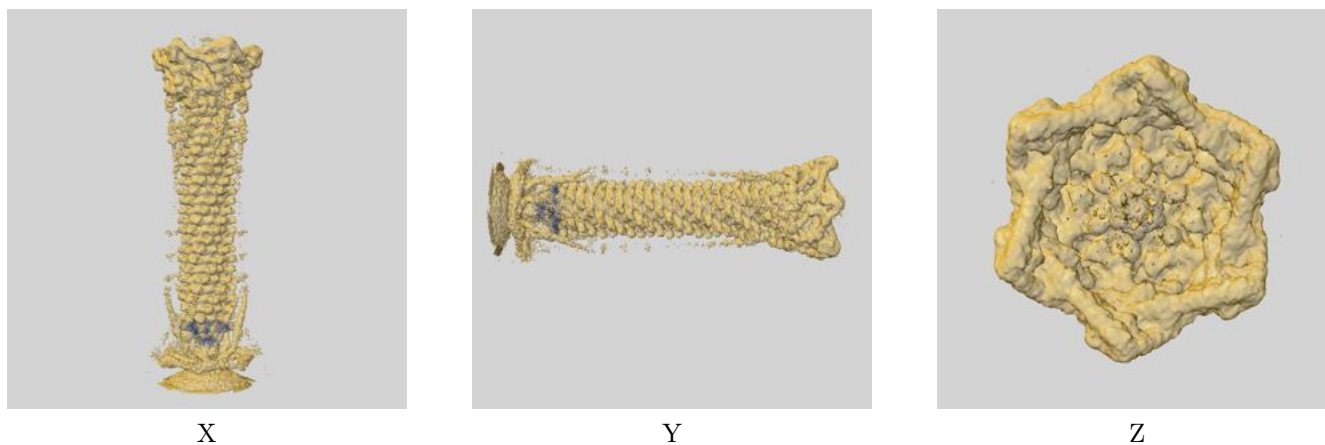
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit [i](#)

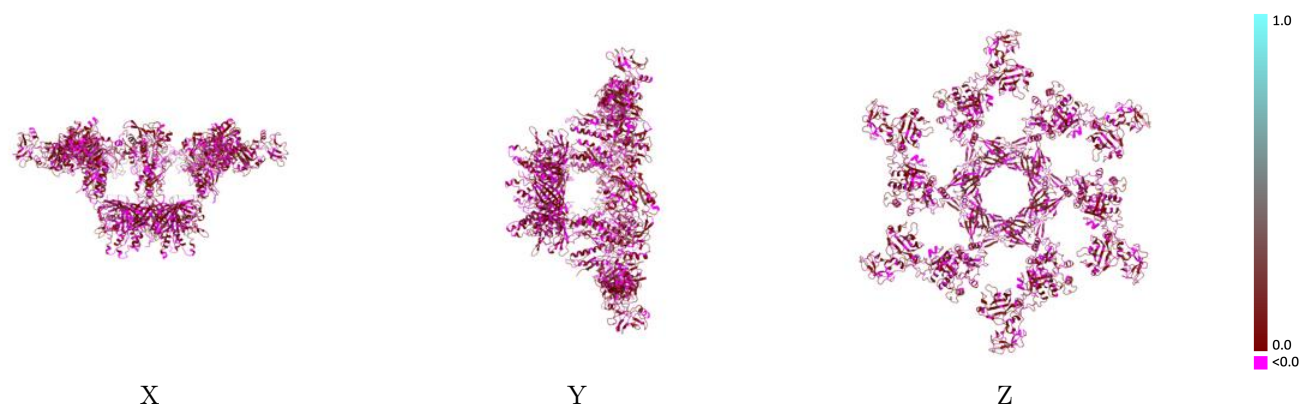
This section contains information regarding the fit between EMDB map EMD-1126 and PDB model 3J2M. Per-residue inclusion information can be found in section [3](#) on page [7](#).

9.1 Map-model overlay [i](#)



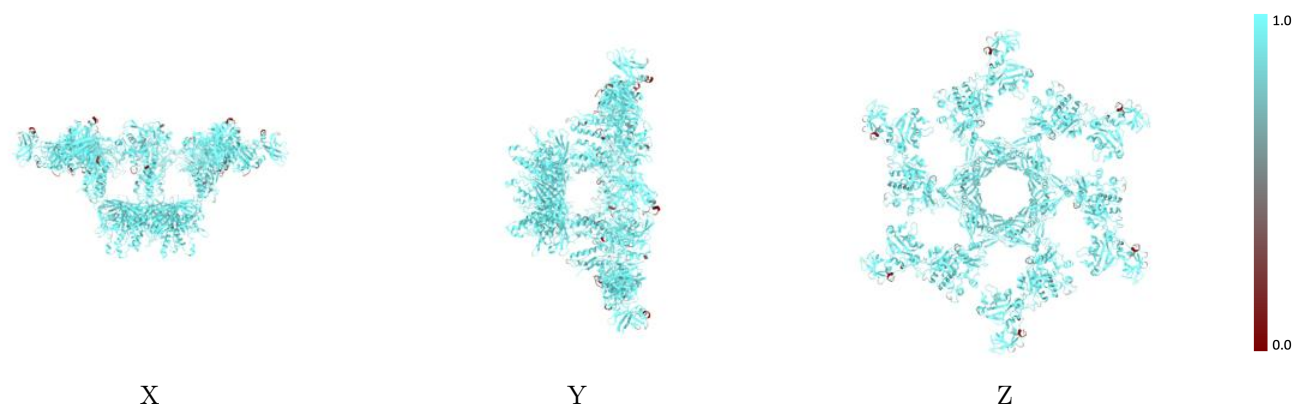
The images above show the 3D surface view of the map at the recommended contour level 1.01 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



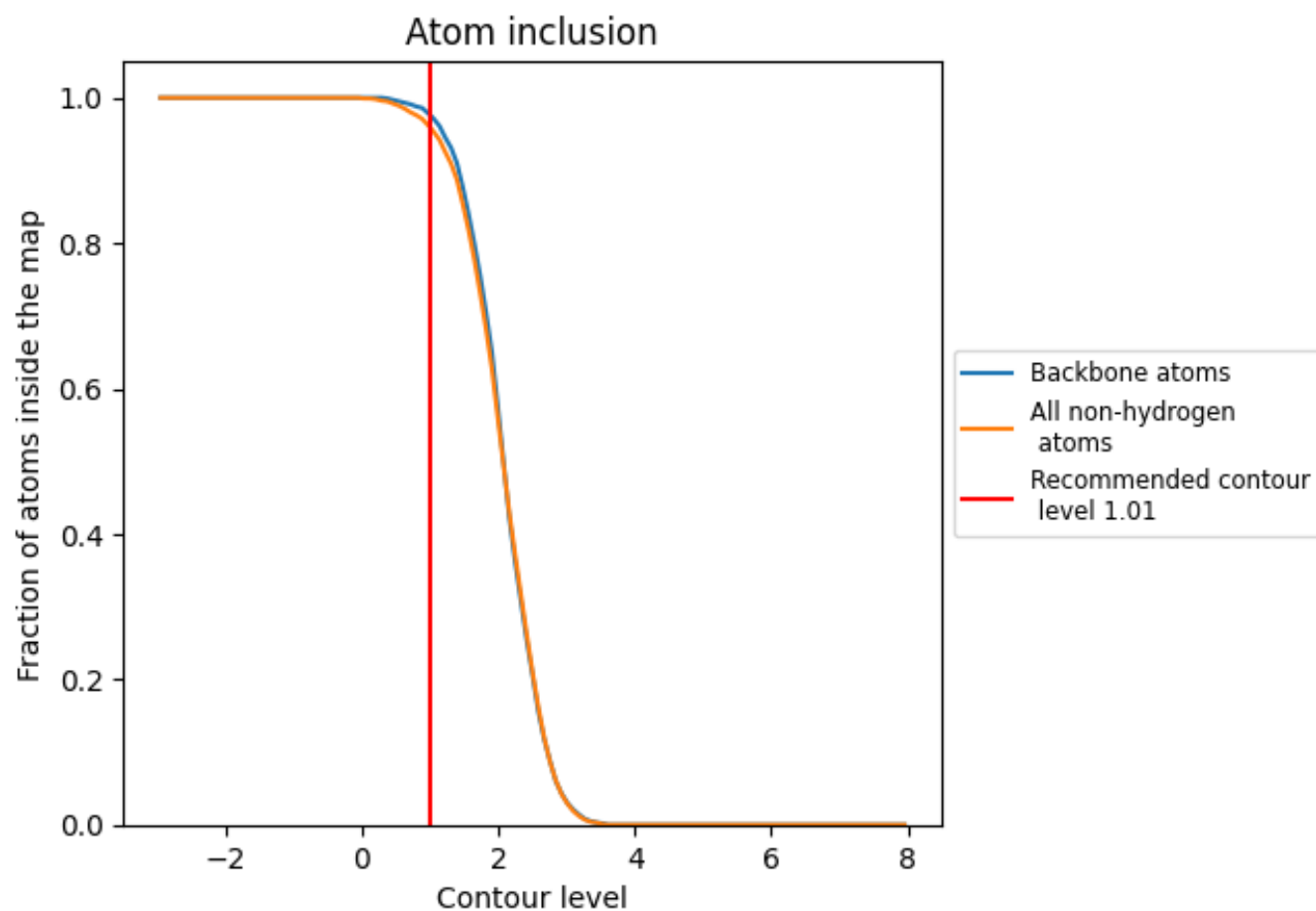
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (1.01).

9.4 Atom inclusion [i](#)



At the recommended contour level, 98% of all backbone atoms, 96% 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 (1.01) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9580	0.0430
A	0.9930	0.0230
B	0.9920	0.0260
C	0.9920	0.0260
D	0.9920	0.0220
E	0.9920	0.0260
F	0.9940	0.0250
U	0.9450	0.0540
V	0.9460	0.0500
W	0.9470	0.0480
X	0.9440	0.0510
Y	0.9460	0.0500
Z	0.9470	0.0490

1.0

0.0

<0.0