



Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 07:24 AM EST

PDB ID : 3J2M
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.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.3

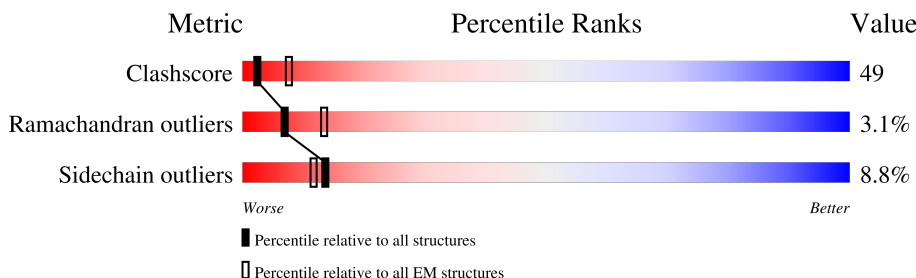
1 Overall quality at a glance

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)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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	
1	E	272	
1	F	272	
2	U	659	
2	V	659	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	W	659	<div><div></div><div></div><div></div><div></div></div> <div>34%49%9%8%</div>
2	X	659	<div><div></div><div></div><div></div><div></div></div> <div>34%49%9%8%</div>
2	Y	659	<div><div></div><div></div><div></div><div></div></div> <div>34%49%9%8%</div>
2	Z	659	<div><div></div><div></div><div></div><div></div></div> <div>33%50%9%8%</div>

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...

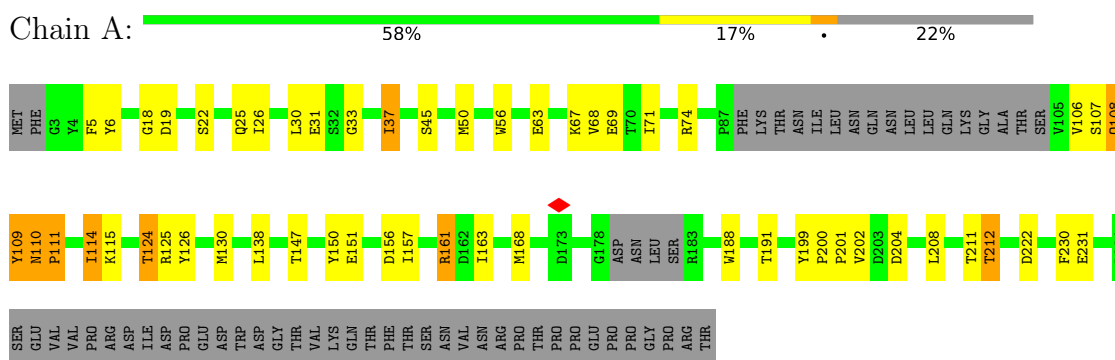
Continued from previous page...

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

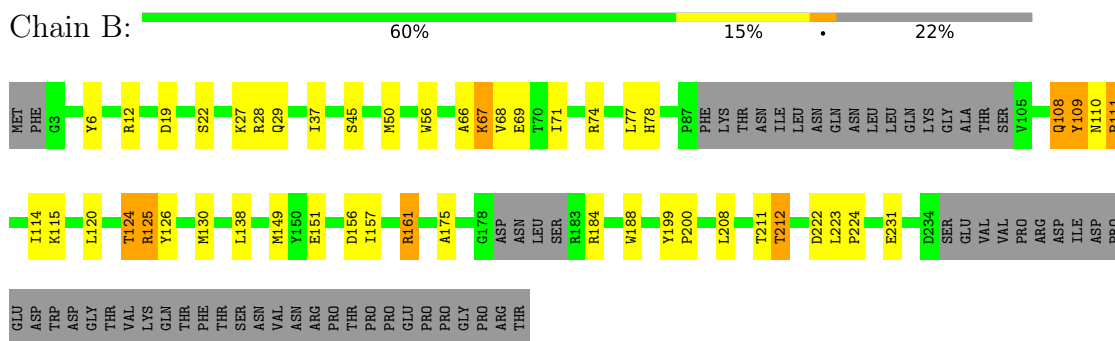
3 Residue-property plots [i](#)

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.

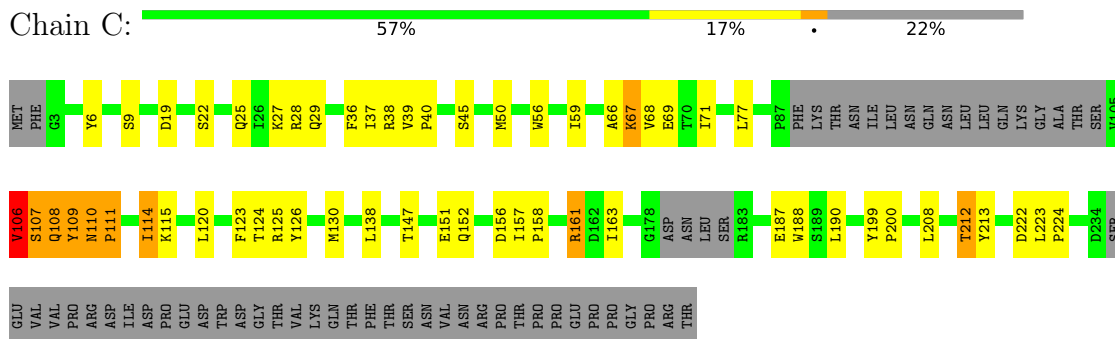
• Molecule 1: Tail connector protein Gp15



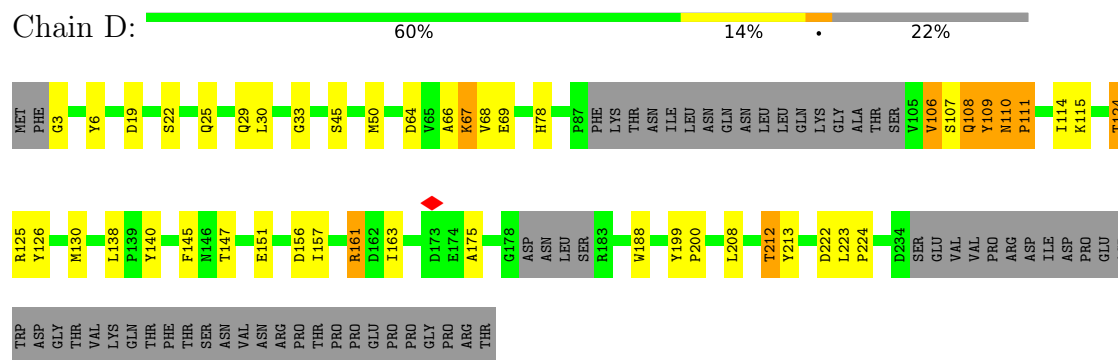
• Molecule 1: Tail connector protein Gp15



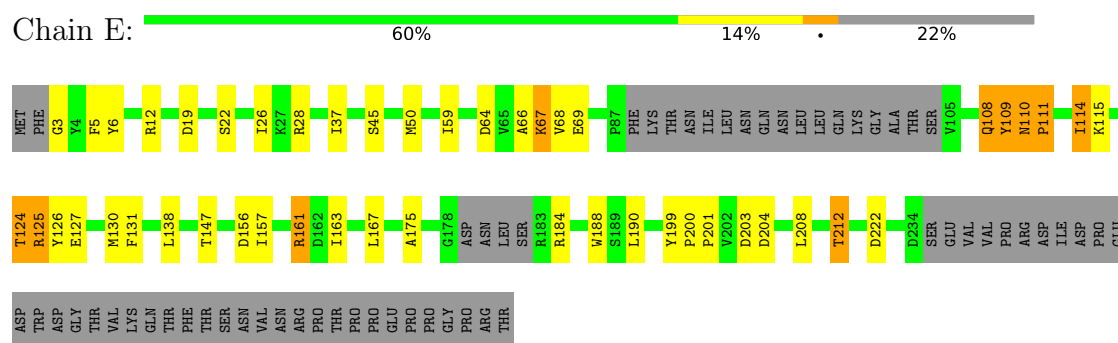
• Molecule 1: Tail connector protein Gp15



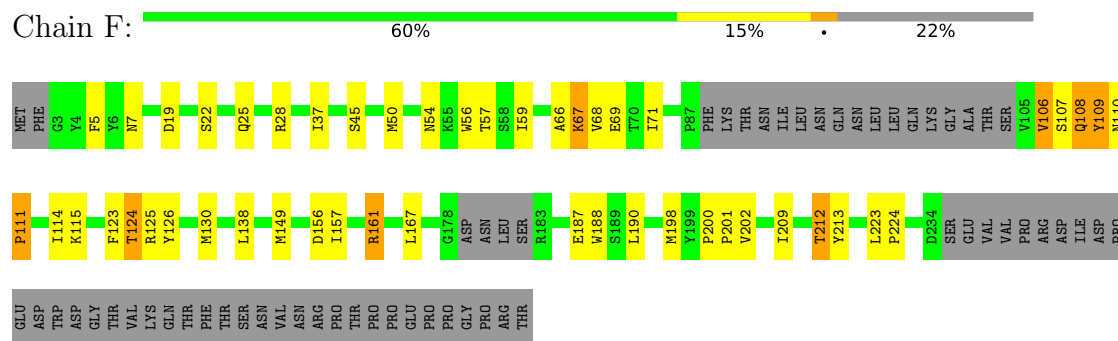
- Molecule 1: Tail connector protein Gp15



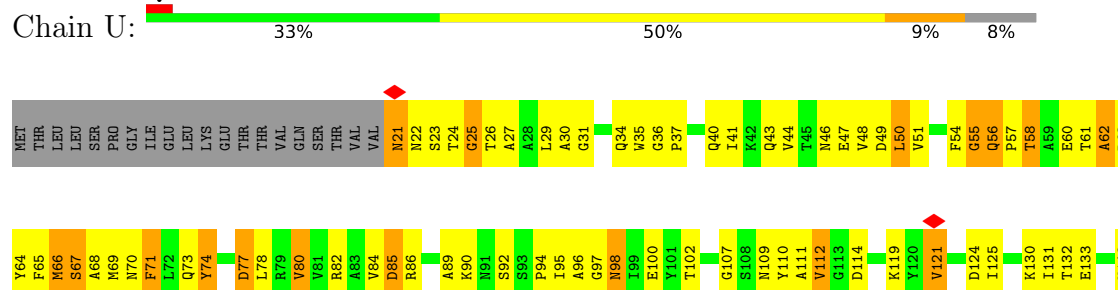
- Molecule 1: Tail connector protein Gp15

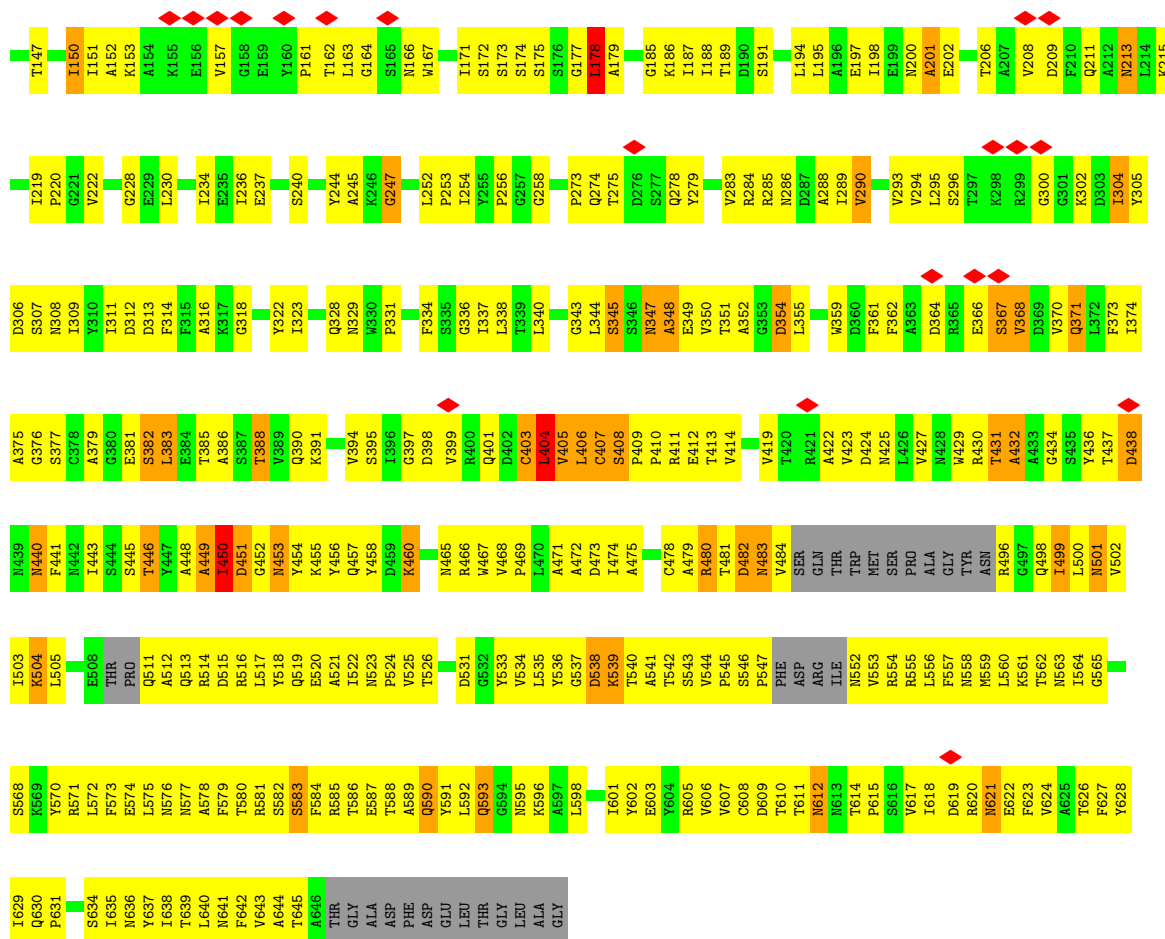


- Molecule 1: Tail connector protein Gp15

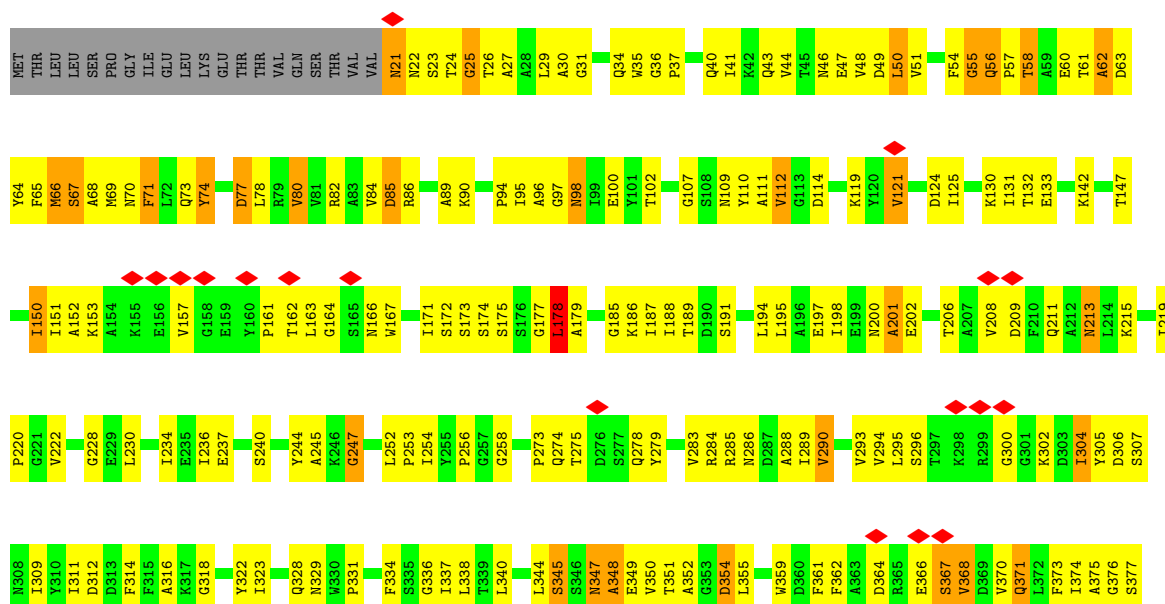
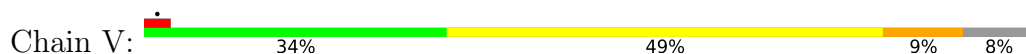


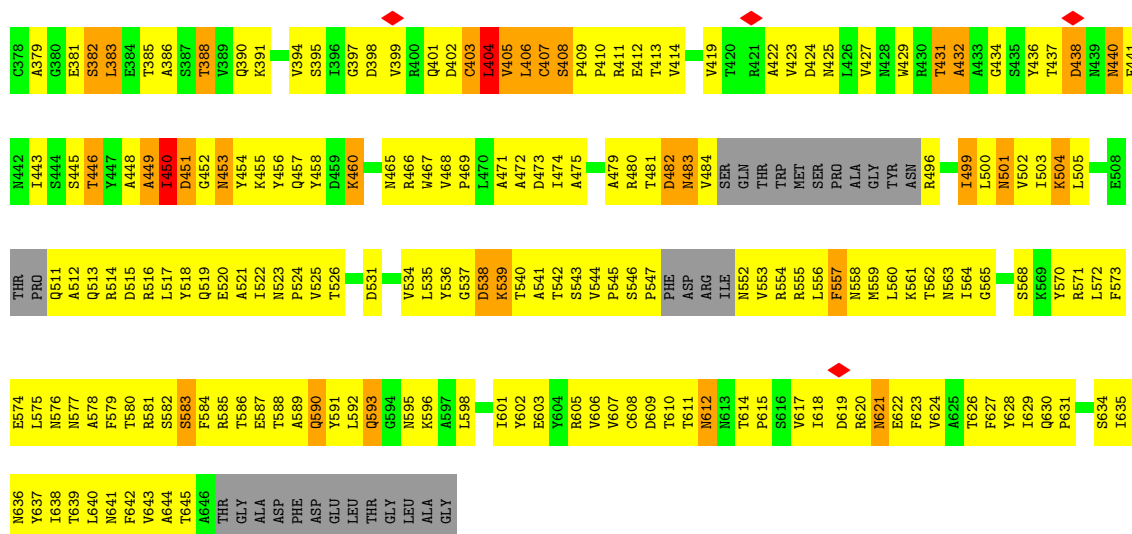
- Molecule 2: Tail sheath protein Gp18



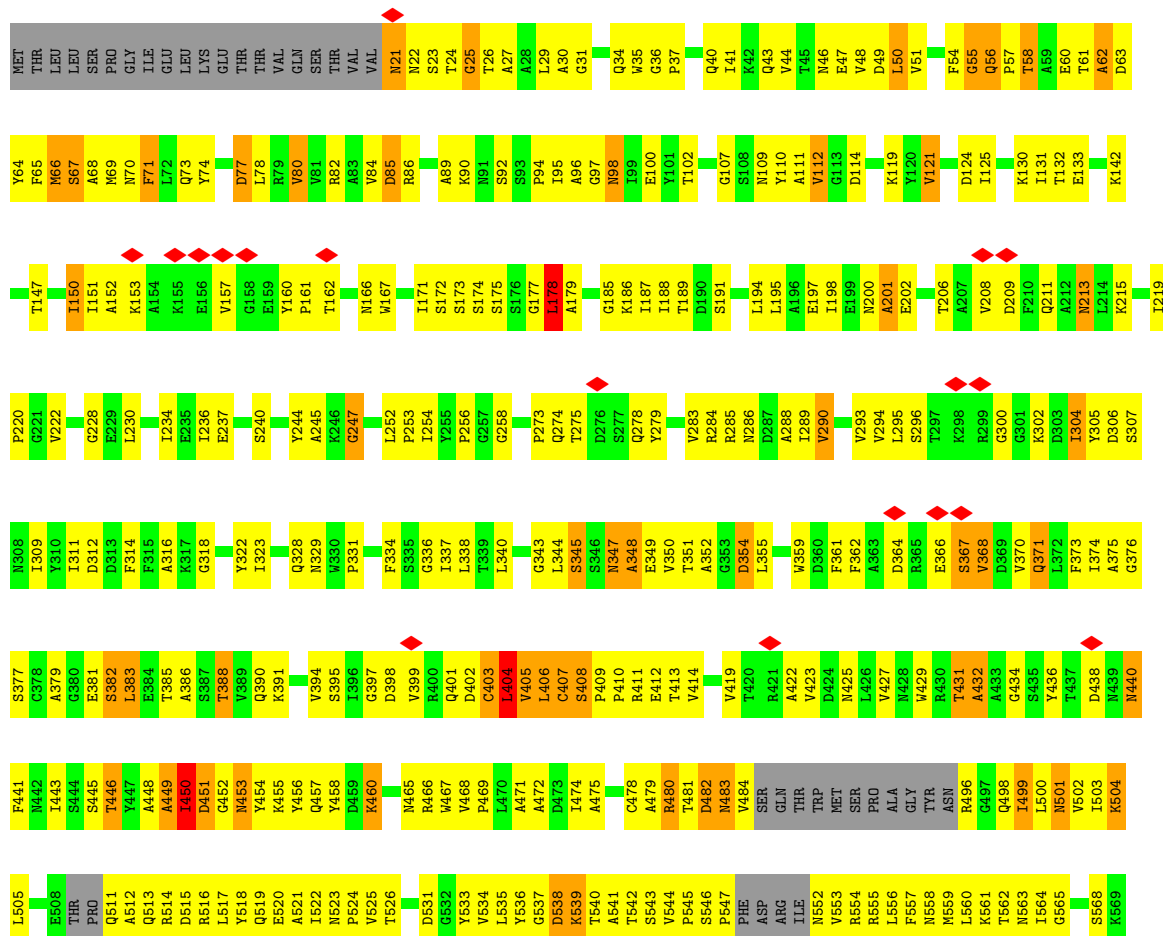
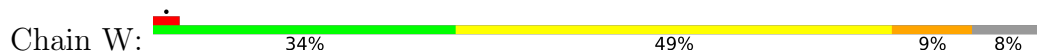


• Molecule 2: Tail sheath protein Gp18





• Molecule 2: Tail sheath protein Gp18





S634	L572	E508	I443	A379	Y810	V222
I635	F573	THR	S444	G380	I311	G228
N636	E574	PRO	S445	E381	D312	E229
Y637	L575	Q511	T446	S382	D313	L230
I638	N576	A512	Y447	L383	F314	L234
T639	N577	Q513	A448	E384	F315	E235
L640	A578	R514	A449	T385	A316	I236
M641	F579	D515	T450	A386	K317	E237
F642	T580	R516	D450	A387	G318	S240
V643	R581	L517	D451	T388	Y322	Y244
A644	S582	Y518	N452	V389	I323	A245
T645	S583	Q519	N453	K390	Q328	K246
A646	F584	E520	Y454	K391	N329	G247
THR	R585	A521	K455	Q394	Q334	L252
GLY	T586	I522	Y456	V394	S335	P253
ALA	E587	N523	Q457	S395	G336	I254
ASP	T588	P524	D459	I396	I337	Y255
PHE	A589	V525	K460	G397	L338	P256
ASP	Q590	T526	N465	D398	T339	G257
GLU	Y591	D531	W466	V399	L340	G258
LEU	L592	G532	W467	R400	G343	P273
THR	Q593	Y533	V468	Q401	L344	Q274
GLY	G594	V534	P469	D402	S345	T275
LEU	N595	L535	L470	C403	S346	D276
ALA	K596	Y536	A471	L404	N347	S277
GLY	A597	G537	D472	V405	A348	Q278
	L598	D538	A473	L406	E349	Y279
	I601	T540	I474	S408	V350	V283
	E603	A541	A475	P409	T351	R284
	Y604	T542	C478	P410	A352	R285
	R605	S543	A479	R411	G353	N286
	V606	V544	R480	E412	D354	D287
	V607	P545	T481	T413	L355	A288
	C608	S546	D482	V414	W359	I289
	D609	P547	N483	V419	F361	V290
	T610	PHE	V484	T420	F362	V293
	T611	ASP	SER	R421	A363	V294
	N612	ARG	GLN	A422	D364	L295
	N613	ILE	THR	V423	E365	S296
	P615	N552	TRP	D424	E366	T297
	S616	V553	MET	M425	S367	K298
	V617	R554	PRO	L426	V368	R299
	I618	R555	ALA	V427	D369	G300
	D619	L556	GLY	M428	V370	K301
	R620	F557	TYR	W429	L372	I304
	M621	N558	ASN	R430	F373	Y305
	E622	L560	R496	T431	I374	D306
	F623	K561	G497	A432	A375	S307
	V624	N563	Q498	A433	G376	N308
	A625	I564	I499	G434	C378	I309
	T626	I564	L500	S435		
	F627	G565	N501	Y436		
	Y628	S568	V502	T437		
	I629	K569	I503	D438		
	Q630	Y570	K504	M439		
	P631	R571	L505	M440		
				F441		
				N442		

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 (\AA)	714.6, 714.6, 1508.6	wwPDB
Map dimensions	180, 180, 380	wwPDB
Map angles ($^\circ$)	90, 90, 90	wwPDB
Pixel spacing (\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	0.49	0/1787	0.64	0/2421
1	B	0.47	0/1787	0.63	0/2421
1	C	0.48	0/1787	0.64	1/2421 (0.0%)
1	D	0.49	0/1787	0.63	0/2421
1	E	0.49	0/1787	0.63	0/2421
1	F	0.50	0/1787	0.65	0/2421
2	U	0.60	0/4729	0.89	21/6427 (0.3%)
2	V	0.60	0/4729	0.90	21/6427 (0.3%)
2	W	0.60	0/4729	0.89	21/6427 (0.3%)
2	X	0.60	0/4729	0.90	21/6427 (0.3%)
2	Y	0.60	1/4729 (0.0%)	0.89	20/6427 (0.3%)
2	Z	0.60	1/4729 (0.0%)	0.89	19/6427 (0.3%)
All	All	0.57	2/39096 (0.0%)	0.83	124/53088 (0.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
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 (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	Z	23	SER	C-O	5.16	1.33	1.23
2	Y	23	SER	C-O	5.03	1.32	1.23

All (124) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	V	55	GLY	N-CA-C	18.09	158.33	113.10
2	U	55	GLY	N-CA-C	18.03	158.18	113.10
2	Y	55	GLY	N-CA-C	18.01	158.12	113.10
2	W	55	GLY	N-CA-C	17.99	158.08	113.10
2	X	55	GLY	N-CA-C	17.93	157.92	113.10
2	Z	55	GLY	N-CA-C	17.84	157.71	113.10
2	V	56	GLN	N-CA-CB	-11.41	90.05	110.60
2	Y	56	GLN	N-CA-CB	-11.38	90.11	110.60
2	X	56	GLN	N-CA-CB	-11.37	90.13	110.60
2	Z	56	GLN	N-CA-CB	-11.37	90.13	110.60
2	U	56	GLN	N-CA-CB	-11.36	90.15	110.60
2	W	56	GLN	N-CA-CB	-11.35	90.17	110.60
2	X	367	SER	N-CA-CB	-10.77	94.34	110.50
2	V	367	SER	N-CA-CB	-10.64	94.54	110.50
2	W	367	SER	N-CA-CB	-10.56	94.65	110.50
2	U	367	SER	N-CA-CB	-10.54	94.68	110.50
2	Z	367	SER	N-CA-CB	-10.43	94.85	110.50
2	Y	367	SER	N-CA-CB	-10.41	94.88	110.50
2	V	111	ALA	CB-CA-C	9.73	124.70	110.10
2	W	111	ALA	CB-CA-C	9.72	124.68	110.10
2	X	111	ALA	CB-CA-C	9.69	124.64	110.10
2	X	405	VAL	N-CA-C	-9.68	84.88	111.00
2	U	112	VAL	N-CA-C	9.62	136.98	111.00
2	Y	112	VAL	N-CA-C	9.61	136.95	111.00
2	Y	405	VAL	N-CA-C	-9.59	85.11	111.00
2	Z	405	VAL	N-CA-C	-9.59	85.12	111.00
2	V	112	VAL	N-CA-C	9.57	136.83	111.00
2	U	407	CYS	CB-CA-C	-9.56	91.28	110.40
2	W	405	VAL	N-CA-C	-9.56	85.19	111.00
2	Z	407	CYS	CB-CA-C	-9.55	91.30	110.40
2	U	405	VAL	N-CA-C	-9.54	85.24	111.00
2	W	112	VAL	N-CA-C	9.53	136.74	111.00
2	X	112	VAL	N-CA-C	9.52	136.71	111.00
2	Z	112	VAL	N-CA-C	9.52	136.70	111.00
2	U	111	ALA	CB-CA-C	9.49	124.33	110.10
2	V	405	VAL	N-CA-C	-9.49	85.39	111.00
2	Z	111	ALA	CB-CA-C	9.48	124.32	110.10
2	Y	111	ALA	CB-CA-C	9.47	124.31	110.10
2	Y	407	CYS	CB-CA-C	-9.47	91.46	110.40
2	V	407	CYS	CB-CA-C	-9.46	91.47	110.40
2	X	407	CYS	CB-CA-C	-9.46	91.48	110.40
2	W	407	CYS	CB-CA-C	-9.43	91.54	110.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	V	408	SER	N-CA-CB	-8.89	97.16	110.50
2	X	408	SER	N-CA-CB	-8.85	97.23	110.50
2	Y	408	SER	N-CA-CB	-8.83	97.26	110.50
2	U	408	SER	N-CA-CB	-8.82	97.27	110.50
2	W	408	SER	N-CA-CB	-8.75	97.38	110.50
2	Z	408	SER	N-CA-CB	-8.67	97.50	110.50
2	Y	112	VAL	CB-CA-C	-7.75	96.67	111.40
2	V	112	VAL	CB-CA-C	-7.69	96.80	111.40
2	Z	112	VAL	CB-CA-C	-7.65	96.86	111.40
2	U	112	VAL	CB-CA-C	-7.65	96.87	111.40
2	W	112	VAL	CB-CA-C	-7.61	96.94	111.40
2	Y	404	LEU	N-CA-C	-7.60	90.49	111.00
2	X	112	VAL	CB-CA-C	-7.58	96.99	111.40
2	Z	404	LEU	N-CA-C	-7.55	90.61	111.00
2	U	404	LEU	N-CA-C	-7.55	90.62	111.00
2	W	404	LEU	N-CA-C	-7.54	90.64	111.00
2	X	404	LEU	N-CA-C	-7.53	90.68	111.00
2	V	404	LEU	N-CA-C	-7.52	90.70	111.00
2	U	366	GLU	CB-CA-C	7.44	125.29	110.40
2	Z	366	GLU	CB-CA-C	7.40	125.20	110.40
2	V	366	GLU	CB-CA-C	7.38	125.16	110.40
2	W	366	GLU	CB-CA-C	7.38	125.16	110.40
2	X	366	GLU	CB-CA-C	7.32	125.04	110.40
2	Y	366	GLU	CB-CA-C	7.23	124.86	110.40
2	U	404	LEU	CB-CA-C	6.87	123.25	110.20
2	X	404	LEU	CB-CA-C	6.87	123.25	110.20
2	Y	404	LEU	CB-CA-C	6.84	123.20	110.20
2	W	404	LEU	CB-CA-C	6.84	123.20	110.20
2	V	404	LEU	CB-CA-C	6.83	123.18	110.20
2	Z	404	LEU	CB-CA-C	6.83	123.17	110.20
2	V	449	ALA	CB-CA-C	6.67	120.10	110.10
2	X	449	ALA	CB-CA-C	6.67	120.10	110.10
2	Z	85	ASP	N-CA-C	-6.62	93.13	111.00
2	U	449	ALA	CB-CA-C	6.60	120.00	110.10
2	V	85	ASP	N-CA-C	-6.59	93.19	111.00
2	Y	449	ALA	CB-CA-C	6.59	119.99	110.10
2	W	449	ALA	CB-CA-C	6.59	119.98	110.10
2	Y	85	ASP	N-CA-C	-6.57	93.25	111.00
2	W	85	ASP	N-CA-C	-6.50	93.46	111.00
2	Z	449	ALA	CB-CA-C	6.48	119.82	110.10
2	X	85	ASP	N-CA-C	-6.47	93.52	111.00
2	U	85	ASP	N-CA-C	-6.42	93.67	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	V	406	LEU	CB-CA-C	6.24	122.05	110.20
2	Z	406	LEU	CB-CA-C	6.19	121.97	110.20
2	W	406	LEU	CB-CA-C	6.18	121.94	110.20
2	Y	406	LEU	CB-CA-C	6.16	121.91	110.20
2	U	406	LEU	CB-CA-C	6.12	121.82	110.20
2	X	406	LEU	CB-CA-C	6.12	121.82	110.20
2	V	85	ASP	CB-CA-C	5.81	122.01	110.40
2	Y	85	ASP	CB-CA-C	5.79	121.98	110.40
2	Z	85	ASP	CB-CA-C	5.72	121.84	110.40
2	X	85	ASP	CB-CA-C	5.71	121.82	110.40
2	U	85	ASP	CB-CA-C	5.70	121.79	110.40
2	W	85	ASP	CB-CA-C	5.68	121.76	110.40
2	W	406	LEU	N-CA-C	-5.36	96.53	111.00
2	Z	406	LEU	N-CA-C	-5.36	96.53	111.00
2	U	406	LEU	N-CA-C	-5.35	96.56	111.00
2	Y	406	LEU	N-CA-C	-5.31	96.65	111.00
2	V	406	LEU	N-CA-C	-5.30	96.68	111.00
2	X	406	LEU	N-CA-C	-5.29	96.72	111.00
2	X	178	LEU	N-CA-CB	-5.28	99.84	110.40
2	U	178	LEU	N-CA-CB	-5.27	99.86	110.40
2	V	179	ALA	N-CA-C	5.25	125.16	111.00
2	U	179	ALA	N-CA-C	5.24	125.15	111.00
2	X	179	ALA	N-CA-C	5.24	125.14	111.00
2	Y	179	ALA	N-CA-C	5.24	125.14	111.00
2	W	179	ALA	N-CA-C	5.20	125.04	111.00
2	Z	179	ALA	N-CA-C	5.19	125.01	111.00
2	Y	178	LEU	N-CA-CB	-5.17	100.05	110.40
2	X	21	ASN	C-N-CA	5.12	134.51	121.70
2	U	449	ALA	N-CA-C	-5.12	97.17	111.00
1	C	190	LEU	CA-CB-CG	5.10	127.03	115.30
2	V	21	ASN	C-N-CA	5.09	134.43	121.70
2	X	449	ALA	N-CA-C	-5.09	97.26	111.00
2	Y	21	ASN	C-N-CA	5.08	134.41	121.70
2	V	557	PHE	CA-CB-CG	-5.06	101.75	113.90
2	W	21	ASN	C-N-CA	5.06	134.35	121.70
2	Z	21	ASN	C-N-CA	5.05	134.33	121.70
2	V	178	LEU	N-CA-CB	-5.05	100.31	110.40
2	W	178	LEU	N-CA-CB	-5.03	100.33	110.40
2	W	449	ALA	N-CA-C	-5.02	97.43	111.00
2	U	21	ASN	C-N-CA	5.02	134.25	121.70

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	54	0
1	B	1742	0	1673	59	0
1	C	1742	0	1673	49	0
1	D	1742	0	1673	44	0
1	E	1742	0	1673	46	0
1	F	1742	0	1673	36	0
2	U	4647	0	4564	595	0
2	V	4647	0	4564	592	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	W	4647	0	4564	588	0
2	X	4647	0	4564	587	0
2	Y	4647	0	4562	576	0
2	Z	4647	0	4564	577	0
All	All	38334	0	37420	3690	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 49.

All (3690) 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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:51:VAL:HA	2:W:55:GLY:HA2	1.36	1.05
2:W:450:ILE:HG12	2:W:451:ASP:N	1.67	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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:X:23:SER:CB	2:X:483:ASN:HB3	2.04	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: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: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: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:Z:391:LYS:NZ	2:Z:440:ASN:ND2	2.23	0.86
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:U:622:GLU:CD	2:U:645:THR:HA	1.99	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:Y:622:GLU:CD	2:Y:645:THR:HA	2.00	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
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:W:622:GLU:CD	2:W:645:THR:HA	1.99	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:V:622:GLU:CD	2:V:645:THR:HA	1.99	0.81
2:X:622:GLU:CD	2:X:645:THR:HA	1.99	0.81
2:W:110:TYR:CE1	2:W:178:LEU:O	2.33	0.81
2:Z:622:GLU:CD	2:Z:645:THR:HA	2.00	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Z:112:VAL:O	2:Z:112:VAL:HG12	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
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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:U:505:LEU:HD11	2:U:525:VAL:HG11	1.65	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
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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:451:ASP:OD1	2:V:474:ILE:HD13	1.86	0.76
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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:Z:22:ASN:O	2:Z:23:SER:OG	2.04	0.75
2:W:517:LEU:CD1	2:W:524:PRO:HG3	2.16	0.75
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:U:391:LYS:HZ1	2:U:440:ASN:ND2	1.84	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:22:ASN:O	2:W:23:SER:OG	2.05	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
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:22:ASN:O	2:Y:23:SER:OG	2.05	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:Y:172:SER:C	2:Y:174:SER:HA	2.09	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
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:172:SER:C	2:W:174:SER:HA	2.09	0.72
2:W:526:THR:CG2	2:W:535:LEU:HD21	2.19	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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:X:496:ARG:HG3	2:X:496:ARG:O	1.89	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: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:X:22:ASN:O	2:X:23:SER:OG	2.04	0.72
2:X:410:PRO:O	2:X:413:THR:HG22	1.90	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:564:ILE:HD11	2:X:642:PHE:HB2	1.72	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:172:SER:C	2:V:174:SER:HA	2.09	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:172:SER:C	2:X:174:SER:HA	2.10	0.71
2:X:394:VAL:HG11	2:X:443:ILE:HD12	1.73	0.71
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:172:SER:C	2:Z:174:SER:HA	2.09	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:U:172:SER:C	2:U:174:SER:HA	2.10	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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
2:Z:622:GLU:OE1	2:Z:645:THR:HA	1.93	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:U:51:VAL:CA	2:U:55:GLY:HA2	2.20	0.68
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:391:LYS:NZ	2:U:440:ASN:HD21	1.92	0.68
2:U:596:LYS:O	2:U:596:LYS:HD3	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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: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: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
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:X:409:PRO:C	2:X:454:TYR:HE1	1.97	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:391:LYS:HZ3	2:U:440:ASN:HD21	1.41	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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: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
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
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:Z:96:ALA:HB2	2:Z:191:SER:HA	1.77	0.66
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:Y:544:VAL:HG12	2:Y:545:PRO:N	2.11	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:W:23:SER:HG	2:W:483:ASN:HB3	1.61	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:W:409:PRO:C	2:W:454:TYR:HE1	1.98	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:X:547:PRO:C	2:X:553:VAL:HG21	2.19	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: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:Y:547:PRO:C	2:Y:553:VAL:HG21	2.19	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:V:547:PRO:C	2:V:553:VAL:HG21	2.19	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
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:547:PRO:C	2:W:553:VAL:HG21	2.19	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
2:Z:547:PRO:C	2:Z:553:VAL:HG21	2.19	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:547:PRO:C	2:U:553:VAL:HG21	2.19	0.62
2:U:561:LYS:O	2:U:564:ILE:HG12	1.99	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:555:ARG:O	2:W:559:MET:HE2	2.00	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
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
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:X:555:ARG:O	2:X:559:MET:HE2	2.00	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
1:E:69:GLU:OE2	1:E:126:TYR:OH	2.09	0.61
2:V:555:ARG:O	2:V:559:MET:HE2	2.00	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
2:Z:555:ARG:O	2:Z:559:MET:HE2	2.00	0.61
1:D:69:GLU:OE2	1:D:126:TYR:OH	2.13	0.61
2:U:409:PRO:C	2:U:454:TYR:HE1	1.98	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:W:573:PHE:HD2	2:W:574:GLU:CD	2.04	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:U:573:PHE:HD2	2:U:574:GLU:CD	2.04	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:Y:213:ASN:HD22	2:Y:213:ASN:N	1.98	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
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: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:Y:573:PHE:HD2	2:Y:574:GLU:CD	2.03	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: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
1:D:108:GLN:HB3	1:D:200:PRO:HD2	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:573:PHE:HD2	2:V:574:GLU:CD	2.04	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:407:CYS:O	2:Y:450:ILE:HA	2.00	0.60
2:Z:409:PRO:C	2:Z:454:TYR:HE1	1.98	0.60
2:V:278:GLN:HG2	2:V:296:SER:HB2	1.83	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
2:Z:573:PHE:HD2	2:Z:574:GLU:CD	2.04	0.60
2:X:573:PHE:HD2	2:X:574:GLU:CD	2.04	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: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
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:Y:23:SER:HG	2:Y:483:ASN:HB3	1.65	0.60
2:U:617:VAL:HG23	2:U:619:ASP:N	2.17	0.60
2:V:575:LEU:N	2:V:575:LEU:HD12	2.17	0.60
2:Y:555:ARG:O	2:Y:559:MET:HE2	2.01	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:V:409:PRO:C	2:V:454:TYR:HE1	1.98	0.59
2:Y:409:PRO:C	2:Y:454:TYR:HE1	1.98	0.59
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:560:LEU:O	2:U:564:ILE:HG23	2.03	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:W:542:THR:HG23	2:W:543:SER:N	2.17	0.59
2:X:404:LEU:CD2	2:X:554:ARG:NH1	2.59	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:X:542:THR:HG23	2:X:543:SER:N	2.17	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: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:Y:501:ASN:OD1	2:Y:501:ASN:N	2.36	0.59
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:Y:161:PRO:HB3	2:Y:187:ILE:HB	1.83	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:526:THR:HG23	2:U:535:LEU:HG	1.85	0.58
2:U:555:ARG:O	2:U:559:MET:HE2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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: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
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: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: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: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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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: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:423:VAL:HG21	2:X:513:GLN:CD	2.25	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: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: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: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

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	0.57
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
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: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: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:U:423:VAL:HG21	2:U:513:GLN:CD	2.25	0.57
2:V:596:LYS:HG2	2:V:601:ILE:O	2.05	0.57
2:Y:423:VAL:HG21	2:Y:513:GLN:CD	2.26	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: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
2:U:455:LYS:HG2	2:U:456:TYR:N	2.19	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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:W:423:VAL:HG21	2:W:513:GLN:CD	2.25	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: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:50:LEU:C	2:X:50:LEU:HD12	2.26	0.56
2:X:431:THR:O	2:X:432:ALA:HB2	2.06	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
2:W:283:VAL:HG21	2:W:323:ILE:HD13	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:50:LEU:C	2:U:50:LEU:HD12	2.26	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:423:VAL:HG21	2:V:513:GLN:CD	2.25	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: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:Y:50:LEU:C	2:Y:50:LEU:HD12	2.26	0.56
2:Z:50:LEU:HD12	2:Z:50:LEU:C	2.26	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:50:LEU:C	2:W:50:LEU:HD12	2.27	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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
2:Z:635:ILE:HG23	2:Z:635:ILE:O	2.06	0.56
1:D:114:ILE:HG12	1:D:115:LYS:H	1.71	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: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:V:50:LEU:C	2:V:50:LEU:HD12	2.26	0.55
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
2:U:234:ILE:HB	2:U:340:LEU:HD12	1.89	0.55
2:U:382:SER:O	2:U:383:LEU:C	2.45	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
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:347:ASN:O	2:U:348:ALA:C	2.45	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:V:23:SER:HG	2:V:483:ASN:HB3	1.69	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:Z:347:ASN:O	2:Z:348:ALA:C	2.45	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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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: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:382:SER:O	2:W:383:LEU:C	2.45	0.55
2:W:630:GLN:HE21	2:W:636:ASN:H	1.55	0.55
2:Y:206:THR:HG22	2:Y:206:THR:O	2.07	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:V:347:ASN:O	2:V:348:ALA:C	2.45	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: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:X:206:THR:O	2:X:206:THR:HG22	2.08	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:570:TYR:HD2	2:W:584:PHE:CZ	2.25	0.54
2:X:347:ASN:O	2:X:348:ALA:C	2.45	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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: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:206:THR:HG22	2:W:206:THR:O	2.08	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:23:SER:HG	2:Z:483:ASN:HB3	1.69	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:347:ASN:O	2:W:348:ALA:C	2.46	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
2:Y:618:ILE:HG23	2:Y:619:ASP:N	2.23	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:X:618:ILE:HG23	2:X:619:ASP:N	2.23	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:244:TYR:CD2	2:X:273:PRO:HD2	2.43	0.54
2:Y:347:ASN:O	2:Y:348:ALA:C	2.46	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:523:ASN:CG	2:U:538:ASP:HA	2.29	0.54
2:U:570:TYR:HD2	2:U:584:PHE:CZ	2.26	0.54
2:X:234:ILE:HB	2:X:340:LEU:HD12	1.89	0.54
2:X:382:SER:O	2:X:383:LEU:C	2.46	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: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: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: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
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:U:618:ILE:HG23	2:U:619:ASP:N	2.23	0.53
2:W:523:ASN:CG	2:W:538:ASP:HA	2.29	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:114:ASP:CG	2:U:175:SER:HB2	2.29	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:451:ASP:OD2	2:Z:471:ALA:N	2.42	0.53
2:Z:562:THR:HG23	2:Z:563:ASN:N	2.24	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
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:523:ASN:CG	2:X:538:ASP:HA	2.29	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:114:ASP:CG	2:Z:175:SER:HB2	2.29	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: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:Y:114:ASP:CG	2:Y:175:SER:HB2	2.29	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: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:523:ASN:CG	2:Z:538:ASP:HA	2.29	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:523:ASN:CG	2:Y:538:ASP:HA	2.29	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

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: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:Y:382:SER:O	2:Y:383:LEU:C	2.46	0.53
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:U:172:SER:O	2:U:174:SER:HA	2.09	0.52
2:V:449:ALA:HB2	2:V:539:LYS:HA	1.91	0.52
2:V:523:ASN:CG	2:V:538:ASP:HA	2.29	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: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:114:ASP:CG	2:W:175:SER:HB2	2.29	0.52
2:W:518:TYR:O	2:W:519:GLN:HB3	2.09	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: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: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:114:ASP:CG	2:V:175:SER:HB2	2.29	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:Y:352:ALA:O	2:Y:355:LEU:HB2	2.10	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: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:W:446:THR:C	2:W:539:LYS:HE3	2.20	0.52
2:X:23:SER:HG	2:X:483:ASN:HB3	1.74	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:382:SER:O	2:V:383:LEU:C	2.45	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:399:VAL:O	2:Y:399:VAL:HG12	2.09	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:V:172:SER:O	2:V:174:SER:HA	2.08	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
1:F:66:ALA:C	1:F:68:VAL:H	2.13	0.52
2:U:399:VAL:O	2:U:399:VAL:HG12	2.09	0.52
2:U:446:THR:C	2:U:539:LYS:HE3	2.21	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:382:SER:O	2:Z:383:LEU:C	2.46	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
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:518:TYR:O	2:V:519:GLN:HB3	2.10	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:114:ASP:CG	2:X:175:SER:HB2	2.29	0.52
2:X:374:ILE:HG23	2:X:472:ALA:HA	1.91	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:448:ALA:HB3	2:Y:540:THR:OG1	2.10	0.52
2:Z:511:GLN:HA	2:Z:511:GLN:HE21	1.75	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:454:TYR:HE2	2:Y:469:PRO:HB3	1.76	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
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: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: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:518:TYR:O	2:Z:519:GLN:HB3	2.10	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: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:X:446:THR:C	2:X:539:LYS:HE3	2.21	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: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:V:237:GLU:HG3	2:V:337:ILE:CD1	2.40	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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: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:391:LYS:HE3	2:Z:441:PHE:HA	1.93	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
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:66:ALA:C	1:E:68:VAL:H	2.13	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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: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: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: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: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: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:71:PHE:C	2:Y:71:PHE:CD2	2.85	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:71:PHE:CD2	2:Z:71:PHE:C	2.85	0.50
2:Z:300:GLY:O	2:Z:302:LYS:HG3	2.11	0.50
2:Z:627:PHE:CZ	2:Z:640:LEU:CD2	2.95	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: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: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:W:245:ALA:C	2:W:247:GLY:H	2.15	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: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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:71:PHE:C	2:X:71:PHE:CD2	2.85	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: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: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
2:Y:220:PRO:HD2	2:Y:338:LEU:HD11	1.94	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:409:PRO:C	2:W:454:TYR:CE1	2.71	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:71:PHE:C	2:U:71:PHE:CD2	2.85	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:220:PRO:HD2	2:W:338:LEU:HD11	1.94	0.49
2:X:245:ALA:C	2:X:247:GLY:H	2.16	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: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
2:U:557:PHE:CE1	2:U:638:ILE:HG22	2.47	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: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: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:245:ALA:C	2:U:247:GLY:H	2.16	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:71:PHE:C	2:V:71:PHE:CD2	2.85	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:W:71:PHE:C	2:W:71:PHE:CD2	2.85	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
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:V:245:ALA:C	2:V:247:GLY:H	2.15	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: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: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:Y:383:LEU:O	2:Y:386:ALA:HB3	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
2:Z:629:ILE:HG22	2:Z:630:GLN:N	2.28	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
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
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:440:ASN:C	2:U:440:ASN:HD22	2.17	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:V:440:ASN:C	2:V:440:ASN:HD22	2.17	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: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
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:Z:440:ASN:C	2:Z:440:ASN:HD22	2.17	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:W:440:ASN:HD22	2:W:440:ASN:C	2.17	0.48
2:X:284:ARG:HA	2:X:288:ALA:O	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:408:SER:HA	2:X:451:ASP:O	2.14	0.48
2:Y:245:ALA:C	2:Y:247:GLY:H	2.16	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:130:MET:HE2	1:C:188:TRP:CD2	2.49	0.47
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
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:536:TYR:CG	2:U:537:GLY:N	2.82	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:X:440:ASN:C	2:X:440:ASN:HD22	2.17	0.47
2:Y:58:THR:H	2:Y:61:THR:HB	1.80	0.47
2:Y:440:ASN:HD22	2:Y:440:ASN:C	2.17	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:502:VAL:HG12	2:X:503:ILE:N	2.30	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:ND2	2:W:453:ASN:N	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: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:284:ARG:HA	2:U:288:ALA:O	2.14	0.47
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: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:453:ASN:ND2	2:X:453:ASN:N	2.62	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
2:Z:245:ALA:C	2:Z:247:GLY:H	2.16	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:547:PRO:C	2:W:553:VAL:CG2	2.82	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:X:409:PRO:C	2:X:454:TYR:CE1	2.71	0.47
2:Y:411:ARG:O	2:Y:412:GLU:C	2.53	0.47
2:Y:413:THR:OG1	2:Y:425:ASN:HB3	2.14	0.47
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:411:ARG:O	2:Z:412:GLU:C	2.53	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:621:ASN:CG	2:W:622:GLU:H	2.18	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:130:MET:HE2	1:E:188:TRP:CD2	2.50	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:66:MET:HA	2:Z:66:MET:HE3	1.97	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:X:27:ALA:HB3	2:X:78:LEU:HD12	1.97	0.47
2:X:561:LYS:HG3	2:X:562:THR:N	2.30	0.47
2:Y:350:VAL:HG13	2:Y:354:ASP:HB2	1.97	0.47
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:215:LYS:CE	2:Z:329:ASN:HD21	2.25	0.47
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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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: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: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:71:PHE:C	2:W:73:GLN:N	2.69	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: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
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:411:ARG:O	2:V:412:GLU:C	2.54	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:Y:285:ARG:O	2:Y:286:ASN:HB2	2.14	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
2:W:71:PHE:C	2:W:73:GLN:H	2.19	0.46
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:Y:151:ILE:HG13	2:Y:152:ALA:N	2.31	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:411:ARG:O	2:W:412:GLU:C	2.54	0.46
2:W:502:VAL:HG12	2:W:503:ILE:N	2.29	0.46
2:X:71:PHE:C	2:X:73:GLN:H	2.19	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:X:621:ASN:CG	2:X:622:GLU:H	2.19	0.46
2:Z:71:PHE:C	2:Z:73:GLN:H	2.19	0.46
2:Z:621:ASN:CG	2:Z:622:GLU:H	2.18	0.46
1:A:5:PHE:CE2	1:A:201:PRO:HB3	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:V:621:ASN:CG	2:V:622:GLU:H	2.19	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: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: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:283:VAL:CG2	2:W:323:ILE:HD13	2.46	0.46
2:Y:71:PHE:C	2:Y:73:GLN:H	2.19	0.46
2:Y:130:LYS:O	2:Y:132:THR:HG23	2.16	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: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:293:VAL:HG22	2:U:294:VAL:N	2.31	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:290:VAL:HG11	2:W:322:TYR:CD1	2.51	0.46
2:W:624:VAL:HG12	2:W:643:VAL:CB	2.46	0.46
2:X:293:VAL:HG22	2:X:294:VAL:N	2.31	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
2:Y:621:ASN:CG	2:Y:622:GLU:H	2.19	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:U:553:VAL:HG23	2:U:554:ARG:N	2.30	0.45
2:U:621:ASN:CG	2:U:622:GLU:H	2.19	0.45
2:V:37:PRO:HB2	2:V:40:GLN:HB2	1.97	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:X:526:THR:HG21	2:X:535:LEU:HD11	1.96	0.45
2:X:547:PRO:C	2:X:553:VAL:CG2	2.83	0.45
2:Z:73:GLN:HB3	2:Z:500:LEU:HD12	1.99	0.45
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:B:130:MET:HE2	1:B:188:TRP:CD2	2.51	0.45
1:C:6:TYR:CD2	1:C:208:LEU:HG	2.52	0.45
2:U:411:ARG:O	2:U:412:GLU:C	2.54	0.45
2:U:544:VAL:CG1	2:U:545:PRO:HD2	2.46	0.45
2:V:71:PHE:C	2:V:73:GLN:H	2.19	0.45
2:V:544:VAL:CG1	2:V:545:PRO:HD2	2.47	0.45
2:W:293:VAL:HG22	2:W:294:VAL:N	2.30	0.45
2:X:71:PHE:C	2:X:73:GLN:N	2.69	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: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: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:X:411:ARG:O	2:X:412:GLU:C	2.54	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:71:PHE:C	2:U:73:GLN:H	2.19	0.45
2:V:211:GLN:OE1	2:V:328:GLN:HG2	2.16	0.45
2:V:536:TYR:HD2	2:V:538:ASP:H	1.63	0.45
2:V:596:LYS:HD3	2:V:596:LYS:C	2.37	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:D:66:ALA:O	1:D:68:VAL:N	2.45	0.45
2:U:71:PHE:C	2:U:73:GLN:N	2.69	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
2:U:526:THR:HG21	2:U:535:LEU:HD11	1.97	0.45
2:U:596:LYS:HD3	2:U:596:LYS:C	2.37	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:71:PHE:C	2:Y:73:GLN:N	2.69	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: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: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:561:LYS:CB	2:W:640:LEU:HD21	2.47	0.45
2:X:456:TYR:CE2	2:X:503:ILE:HD11	2.52	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:446:THR:C	2:Z:539:LYS:HE3	2.23	0.45
2:U:624:VAL:HG11	2:U:643:VAL:HG12	1.98	0.45
2:W:544:VAL:CG1	2:W:545:PRO:HD2	2.47	0.45
2:W:596:LYS:HD3	2:W:596:LYS:C	2.37	0.45
2:X:173:SER:HA	2:X:174:SER:HB3	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2: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: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
1:D:130:MET:HE2	1:D:188:TRP:CD2	2.52	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: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: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
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: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
2:X:211:GLN:OE1	2:X:328:GLN:HG2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:X:390:GLN:HE22	2:X:408:SER:H	1.65	0.45
2:X:596:LYS:HD3	2:X:596:LYS:C	2.37	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: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
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: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: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
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:V:71:PHE:C	2:V:73:GLN:N	2.70	0.44
2:V:171:ILE:CG2	2:V:172:SER:H	2.25	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:HG23	2:V:626:THR:O	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:517:LEU:C	2:W:522:ILE:HG22	2.38	0.44
2:W:583:SER:HA	2:W:586:THR:HG22	1.98	0.44
2:X:62:ALA:HB1	2:X:466:ARG:HE	1.82	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:147:THR:O	2:V:151:ILE:HG23	2.17	0.44
2:V:517:LEU:C	2:V:522:ILE:HG22	2.38	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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: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: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
2:Z:627:PHE:CZ	2:Z:640:LEU:CB	2.95	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: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: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:Y:171:ILE:CG2	2:Y:172:SER:H	2.26	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:626:THR:HG23	2:W:626:THR:O	2.17	0.44
2:X:153:LYS:O	2:X:157:VAL:HG22	2.17	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
2:Z:596:LYS:HD3	2:Z:596:LYS:C	2.37	0.44
1:A:108:GLN:HB3	1:A:199:TYR:HB2	2.00	0.44
2:U:66:MET:HA	2:U:66:MET:HE3	1.98	0.44
2:U:153:LYS:O	2:U:157:VAL:HG22	2.17	0.44
2:V:153:LYS:O	2:V:157:VAL:HG22	2.17	0.44
2:X:517:LEU:C	2:X:522:ILE:HG22	2.38	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:71:PHE:C	2:Z:73:GLN:N	2.69	0.44
2:Z:151:ILE:HG13	2:Z:152:ALA:N	2.30	0.44
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:B:66:ALA:C	1:B:68:VAL:H	2.20	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
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: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: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:Y:596:LYS:HD3	2:Y:596:LYS:C	2.37	0.44
2:Z:626:THR:HG23	2:Z:626:THR:O	2.17	0.44
1:F:130:MET:HE2	1:F:188:TRP:CD2	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:253:PRO:HD2	2:Y:336:GLY:HA2	2.00	0.43
2:Z:517:LEU:C	2:Z:522:ILE:HG22	2.38	0.43
1:C:212:THR:HA	1:C:222:ASP:HA	2.00	0.43
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:453:ASN:HD22	2:U:453:ASN:N	2.16	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:X:643:VAL:HG23	2:X:643:VAL:O	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:C:106:VAL:HG12	1:C:107:SER:H	1.82	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:48:VAL:O	2:V:48:VAL:HG12	2.18	0.43
2:V:240:SER:HB3	2:V:279:TYR:CE1	2.53	0.43
2:W:364:ASP:N	2:W:364:ASP:OD1	2.51	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:517:LEU:C	2:U:522:ILE:HG22	2.38	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
2:Y:517:LEU:C	2:Y:522:ILE:HG22	2.38	0.43
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: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:438:ASP:OD2	2:V:438:ASP:N	2.47	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: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:502:VAL:CG1	2:Z:504:LYS:H	2.31	0.43
2:Z:547:PRO:C	2:Z:553:VAL:CG2	2.83	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
2:X:222:VAL:HG11	2:X:236:ILE:HG12	2.00	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:V:364:ASP:N	2:V:364:ASP:OD1	2.50	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: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
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: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
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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:478:CYS:C	2:Z:480:ARG:N	2.73	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: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:100:GLU:HB2	2:W:185:GLY:CA	2.49	0.42
2:W:171:ILE:CG2	2:W:172:SER:H	2.26	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: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:423:VAL:HG21	2:Z:513:GLN:NE2	2.34	0.42
2:Z:453:ASN:HD22	2:Z:453:ASN:N	2.15	0.42
1:D:66:ALA:C	1:D:68:VAL:H	2.22	0.42
2:U:68:ALA:O	2:U:69:MET:C	2.58	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
2:U:254:ILE:HB	2:U:258:GLY:O	2.18	0.42
2:V:68:ALA:O	2:V:69:MET:C	2.58	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:66:ALA:C	1:C:68:VAL:H	2.23	0.42
1:C:123:PHE:CE1	1:C:187:GLU:HG3	2.54	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: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: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: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:643:VAL:O	2:Y:643:VAL:HG23	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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
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: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:624:VAL:CB	2:U:643:VAL:HG12	2.50	0.42
2:U:643:VAL:HG23	2:U:643:VAL:O	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:562:THR:CG2	2:Z:563:ASN:N	2.82	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: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
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: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:438:ASP:OD2	2:U:438:ASP:N	2.48	0.42
2:V:312:ASP:O	2:V:316:ALA:HB2	2.20	0.42
2:W:68:ALA:O	2:W:69:MET:C	2.58	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:Y:478:CYS:C	2:Y:480:ARG:N	2.73	0.42
2:Z:68:ALA:O	2:Z:69:MET:C	2.58	0.42
2:Z:197:GLU:H	2:Z:197:GLU:CD	2.23	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:197:GLU:CD	2:U:197:GLU:H	2.22	0.42
2:U:236:ILE:HD11	2:U:340:LEU:HD11	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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
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:364:ASP:N	2:Y:364:ASP:OD1	2.51	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:X:377:SER:HA	2:X:469:PRO:HG3	2.00	0.42
2:X:496:ARG:O	2:X:496:ARG:CG	2.60	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:423:VAL:O	2:Z:424:ASP:C	2.58	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:U:200:ASN:O	2:U:201:ALA:C	2.58	0.41
2:V:61:THR:O	2:V:62:ALA:C	2.59	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:Y:67:SER:OG	2:Y:472:ALA:HB2	2.20	0.41
2:Y:370:VAL:HG23	2:Y:370:VAL:O	2.20	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: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: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: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: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: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:200:ASN:O	2:Z:201:ALA:C	2.58	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: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:V:618:ILE:CG2	2:V:619:ASP:N	2.83	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:197:GLU:H	2:X:197:GLU:CD	2.23	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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: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:537:GLY:O	2:Z:538:ASP:CB	2.69	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:X:290:VAL:HG11	2:X:322:TYR:CE1	2.56	0.41
2:X:627:PHE:CD1	2:X:627:PHE:C	2.94	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: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
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:555:ARG:O	2:V:559:MET:HG3	2.19	0.41
2:X:56:GLN:HA	2:X:57:PRO:HD3	1.81	0.41
2:X:68:ALA:O	2:X:69:MET:C	2.58	0.41
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: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:627:PHE:CD1	2:Y:627:PHE:C	2.94	0.41
2:Z:61:THR:O	2:Z:62:ALA:C	2.59	0.41
2:Z:150:ILE:H	2:Z:150:ILE:HG12	1.63	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
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:370:VAL:HG23	2:W:370:VAL:O	2.20	0.41
2:W:478:CYS:C	2:W:480:ARG:N	2.72	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:HG23	2:X:370:VAL:O	2.20	0.41
2:X:381:GLU:O	2:X:382:SER:C	2.59	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:556:LEU:HD23	2:Z:556:LEU:O	2.20	0.41
2:Z:583:SER:C	2:Z:586:THR:HG22	2.41	0.41
2:U:308:ASN:HD21	2:U:313:ASP:CB	2.34	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
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:61:THR:O	2:W:62:ALA:C	2.59	0.41
2:W:160:TYR:HA	2:W:161:PRO:HA	1.82	0.41
2:W:197:GLU:H	2:W:197:GLU:CD	2.23	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:200:ASN:O	2:X:201:ALA:C	2.59	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:197:GLU:H	2:Y:197:GLU:CD	2.23	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:61:THR:O	2:U:62:ALA:C	2.59	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: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:197:GLU:H	2:V:197:GLU:CD	2.23	0.41
2:V:445:SER:O	2:V:540:THR:O	2.39	0.41
2:V:446:THR:C	2:V:539:LYS:HE3	2.20	0.41
2:V:521:ALA:HB1	2:V:540:THR:CA	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:200:ASN:O	2:W:201:ALA:C	2.59	0.41
2:W:402:ASP:O	2:W:402:ASP:CG	2.59	0.41
2:W:427:VAL:HG21	2:W:516:ARG:NH2	2.36	0.41
2:W:627:PHE:CD1	2:W:627:PHE:C	2.94	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:X:583:SER:C	2:X:586:THR:HG22	2.41	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:391:LYS:CE	2:Z:440:ASN:ND2	2.83	0.41
2:Z:409:PRO:C	2:Z:454:TYR:CE1	2.71	0.41
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: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:200:ASN:O	2:V:201:ALA:C	2.59	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:W:23:SER:OG	2:W:483:ASN:CA	2.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:W:90:LYS:HA	2:W:90:LYS:HD3	1.93	0.41
2:W:381:GLU:O	2:W:382:SER:C	2.59	0.41
2:X:61:THR:O	2:X:62:ALA:C	2.59	0.41
2:X:215:LYS:HE3	2:X:329:ASN:CG	2.42	0.41
2:X:304:ILE:HG13	2:X:305:TYR:HE2	1.81	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:409:PRO:HG2	2:Y:454:TYR:CE1	2.56	0.41
2:Y:423:VAL:O	2:Y:424:ASP:C	2.58	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
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
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:V:423:VAL:O	2:V:424:ASP:C	2.59	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:537:GLY:O	2:W:538:ASP:CB	2.68	0.41
2:W:627:PHE:CZ	2:W:640:LEU:CB	2.95	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:Y:573:PHE:HD2	2:Y:574:GLU:OE2	2.04	0.41
2:Z:427:VAL:O	2:Z:431:THR:CG2	2.68	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: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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:621:ASN:HD22	2:U:621:ASN:HA	1.64	0.40
2:V:402:ASP:O	2:V:402:ASP:CG	2.59	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:450:ILE:HG22	2:W:540:THR:HG21	2.01	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:478:CYS:C	2:X:480:ARG:N	2.73	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
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: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:391:LYS:CE	2:U:440:ASN:ND2	2.84	0.40
2:U:423:VAL:O	2:U:424:ASP:C	2.59	0.40
2:V:556:LEU:HD23	2:V:556:LEU:C	2.42	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: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: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: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
1:F:114:ILE:HD12	1:F:198:MET:HE3	2.02	0.40
2:U:92:SER:OG	2:U:343:GLY:HA3	2.22	0.40
2:U:215:LYS:HE3	2:U:329:ASN:CG	2.42	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

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:V:23:SER:HB2	2:V:559:MET:SD	2.59	0.40
2:V:74:TYR:OH	2:V:473:ASP:OD2	2.35	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: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:66:MET:O	2:X:67:SER:C	2.60	0.40
2:X:92:SER:OG	2:X:343:GLY:HA3	2.21	0.40
2:Y:381:GLU:O	2:Y:382:SER:C	2.60	0.40
2:Y:558:ASN:O	2:Y:561:LYS:HG2	2.21	0.40
2:Z:66:MET:O	2:Z:67:SER:C	2.60	0.40
2:Z:308:ASN:HD21	2:Z:313:ASP:CB	2.34	0.40
2:Z:573:PHE:HD2	2:Z:574:GLU:OE2	2.04	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:381:GLU:O	2:U:382:SER:C	2.59	0.40
2:U:478:CYS:C	2:U:480:ARG:N	2.72	0.40
2:V:290:VAL:HG11	2:V:322:TYR:CE1	2.56	0.40
2:V:627:PHE:CD1	2:V:627:PHE:C	2.95	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:X:104:SER:HB2	2:X:181:VAL:HG12	2.03	0.40
2:X:554:ARG:HG2	2:X:558:ASN:OD1	2.21	0.40
2:Y:66:MET:O	2:Y:67:SER:C	2.60	0.40
2:Y:68:ALA:O	2:Y:69:MET:C	2.58	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
1:A:110:ASN:HA	1:A:111:PRO:HD3	1.71	0.40
1:A:130:MET:HE2	1:A:188:TRP:CD2	2.57	0.40
1:A:156:ASP:CG	2:U:579:PHE:HE1	2.17	0.40
2:V:514:ARG:HA	2:V:517:LEU:CG	2.49	0.40
2:V:627:PHE:CZ	2:V:640:LEU:CB	2.95	0.40
2:W:66:MET:O	2:W:67:SER:C	2.60	0.40
2:X:73:GLN:HB3	2:X:500:LEU:CD1	2.52	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:215:LYS:HE3	2:Y:329:ASN:CG	2.42	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: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
2:Z:627:PHE:CD1	2:Z:627:PHE:C	2.94	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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%)	10	46
1	B	205/272 (75%)	184 (90%)	17 (8%)	4 (2%)	7	38
1	C	205/272 (75%)	184 (90%)	17 (8%)	4 (2%)	7	38
1	D	205/272 (75%)	184 (90%)	17 (8%)	4 (2%)	7	38
1	E	205/272 (75%)	183 (89%)	18 (9%)	4 (2%)	7	38
1	F	205/272 (75%)	184 (90%)	18 (9%)	3 (2%)	10	46
2	U	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	25
2	V	601/659 (91%)	480 (80%)	100 (17%)	21 (4%)	3	25
2	W	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	25
2	X	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	25

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	Y	601/659 (91%)	479 (80%)	101 (17%)	21 (4%)	3	25
2	Z	601/659 (91%)	480 (80%)	100 (17%)	21 (4%)	3	25
All	All	4836/5586 (87%)	3979 (82%)	709 (15%)	148 (3%)	7	27

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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Z	98	ASN
2	Z	201	ALA
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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	X	311	ILE
2	X	348	ALA
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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Z	25	GLY
2	Z	304	ILE
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%)	176 (92%)	16 (8%)	11 34

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	192/250 (77%)	181 (94%)	11 (6%)	20	45
1	C	192/250 (77%)	176 (92%)	16 (8%)	11	34
1	D	192/250 (77%)	180 (94%)	12 (6%)	18	43
1	E	192/250 (77%)	180 (94%)	12 (6%)	18	43
1	F	192/250 (77%)	179 (93%)	13 (7%)	16	41
2	U	494/536 (92%)	446 (90%)	48 (10%)	8	27
2	V	494/536 (92%)	447 (90%)	47 (10%)	8	27
2	W	494/536 (92%)	448 (91%)	46 (9%)	9	28
2	X	494/536 (92%)	448 (91%)	46 (9%)	9	28
2	Y	494/536 (92%)	446 (90%)	48 (10%)	8	27
2	Z	494/536 (92%)	446 (90%)	48 (10%)	8	27
All	All	4116/4716 (87%)	3753 (91%)	363 (9%)	13	31

All (363) 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	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	212	THR
1	B	37	ILE
1	B	45	SER
1	B	50	MET
1	B	67	LYS
1	B	78	HIS
1	B	109	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	124	THR
1	B	125	ARG
1	B	138	LEU
1	B	161	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	106	VAL
1	C	107	SER
1	C	109	TYR
1	C	110	ASN
1	C	114	ILE
1	C	125	ARG
1	C	138	LEU
1	C	161	ARG
1	C	212	THR
1	D	25	GLN
1	D	45	SER
1	D	50	MET
1	D	78	HIS
1	D	106	VAL
1	D	109	TYR
1	D	110	ASN
1	D	124	THR
1	D	125	ARG
1	D	138	LEU
1	D	161	ARG
1	D	212	THR
1	E	45	SER
1	E	50	MET
1	E	59	ILE
1	E	67	LYS
1	E	109	TYR
1	E	110	ASN
1	E	114	ILE
1	E	124	THR
1	E	125	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	138	LEU
1	E	161	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	124	THR
1	F	125	ARG
1	F	138	LEU
1	F	161	ARG
1	F	212	THR
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	77	ASP
2	U	80	VAL
2	U	86	ARG
2	U	95	ILE
2	U	102	THR
2	U	150	ILE
2	U	162	THR
2	U	178	LEU
2	U	188	ILE
2	U	189	THR
2	U	202	GLU
2	U	213	ASN
2	U	290	VAL
2	U	345	SER
2	U	347	ASN
2	U	349	GLU
2	U	354	ASP
2	U	367	SER
2	U	368	VAL
2	U	371	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	U	382	SER
2	U	383	LEU
2	U	388	THR
2	U	395	SER
2	U	404	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	483	ASN
2	U	499	ILE
2	U	501	ASN
2	U	590	GLN
2	U	593	GLN
2	U	612	ASN
2	U	621	ASN
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	77	ASP
2	V	80	VAL
2	V	86	ARG
2	V	95	ILE
2	V	102	THR
2	V	150	ILE
2	V	162	THR
2	V	178	LEU
2	V	188	ILE
2	V	189	THR
2	V	202	GLU
2	V	213	ASN
2	V	290	VAL
2	V	345	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	V	347	ASN
2	V	349	GLU
2	V	354	ASP
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	431	THR
2	V	436	TYR
2	V	437	THR
2	V	438	ASP
2	V	440	ASN
2	V	446	THR
2	V	450	ILE
2	V	453	ASN
2	V	460	LYS
2	V	483	ASN
2	V	499	ILE
2	V	501	ASN
2	V	590	GLN
2	V	593	GLN
2	V	612	ASN
2	V	621	ASN
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	77	ASP
2	W	80	VAL
2	W	86	ARG
2	W	95	ILE
2	W	102	THR
2	W	150	ILE
2	W	162	THR
2	W	178	LEU
2	W	188	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	W	189	THR
2	W	202	GLU
2	W	213	ASN
2	W	290	VAL
2	W	345	SER
2	W	347	ASN
2	W	349	GLU
2	W	354	ASP
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	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	483	ASN
2	W	499	ILE
2	W	501	ASN
2	W	590	GLN
2	W	593	GLN
2	W	612	ASN
2	W	621	ASN
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	77	ASP
2	X	80	VAL
2	X	86	ARG
2	X	95	ILE
2	X	102	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	X	150	ILE
2	X	162	THR
2	X	178	LEU
2	X	188	ILE
2	X	189	THR
2	X	202	GLU
2	X	213	ASN
2	X	290	VAL
2	X	345	SER
2	X	347	ASN
2	X	349	GLU
2	X	354	ASP
2	X	367	SER
2	X	368	VAL
2	X	371	GLN
2	X	382	SER
2	X	383	LEU
2	X	388	THR
2	X	395	SER
2	X	404	LEU
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	483	ASN
2	X	499	ILE
2	X	501	ASN
2	X	590	GLN
2	X	593	GLN
2	X	612	ASN
2	X	621	ASN
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	77	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Y	80	VAL
2	Y	86	ARG
2	Y	95	ILE
2	Y	102	THR
2	Y	150	ILE
2	Y	162	THR
2	Y	178	LEU
2	Y	188	ILE
2	Y	189	THR
2	Y	202	GLU
2	Y	213	ASN
2	Y	290	VAL
2	Y	345	SER
2	Y	347	ASN
2	Y	349	GLU
2	Y	354	ASP
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	430	ARG
2	Y	431	THR
2	Y	436	TYR
2	Y	437	THR
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	483	ASN
2	Y	499	ILE
2	Y	501	ASN
2	Y	590	GLN
2	Y	593	GLN
2	Y	612	ASN
2	Y	621	ASN
2	Z	50	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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
2	Z	86	ARG
2	Z	95	ILE
2	Z	102	THR
2	Z	150	ILE
2	Z	162	THR
2	Z	178	LEU
2	Z	188	ILE
2	Z	189	THR
2	Z	202	GLU
2	Z	213	ASN
2	Z	290	VAL
2	Z	345	SER
2	Z	347	ASN
2	Z	349	GLU
2	Z	354	ASP
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	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	483	ASN
2	Z	499	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Z	501	ASN
2	Z	590	GLN
2	Z	593	GLN
2	Z	612	ASN
2	Z	621	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (100) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	152	GLN
2	U	43	GLN
2	U	70	ASN
2	U	213	ASN
2	U	278	GLN
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	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
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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	V	641	ASN
2	W	43	GLN
2	W	70	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	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
2	X	641	ASN
2	Y	43	GLN
2	Y	70	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

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
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	213	ASN
2	Z	278	GLN
2	Z	329	ASN
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 ⓘ

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

5.5 Carbohydrates ⓘ

There are no monosaccharides 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.

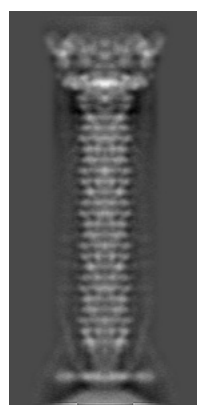
6 Map visualisation [i](#)

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.

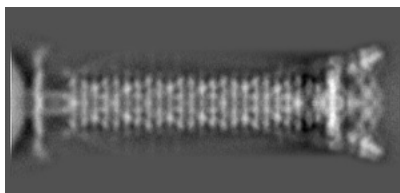
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

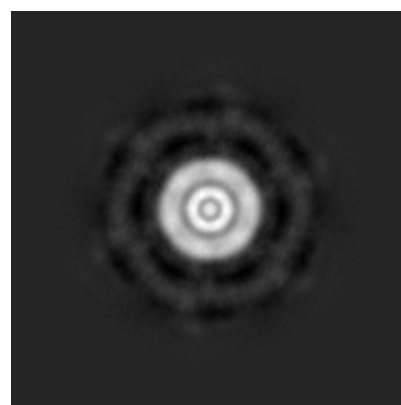
6.1.1 Primary map



X



Y

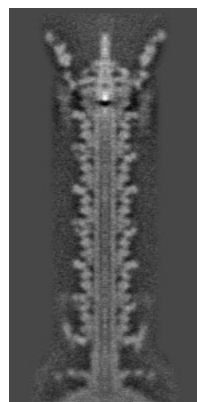


Z

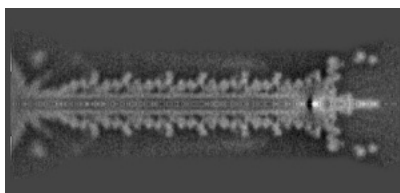
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

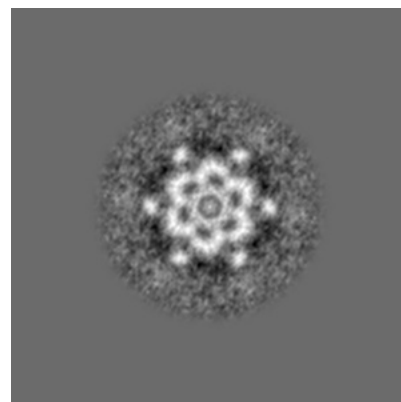
6.2.1 Primary map



X Index: 90



Y Index: 90

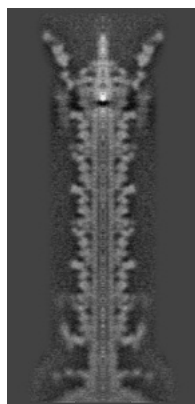


Z Index: 190

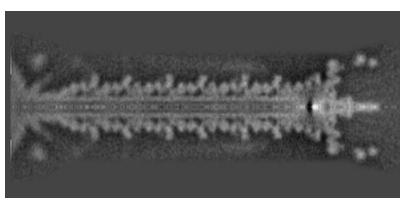
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

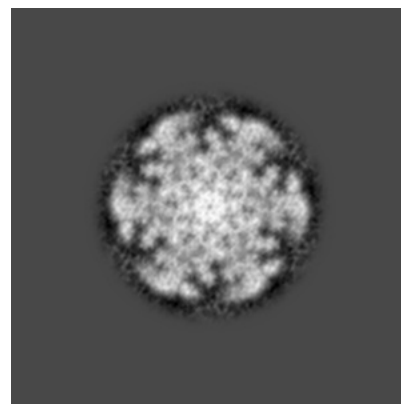
6.3.1 Primary map



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 surface views [i](#)

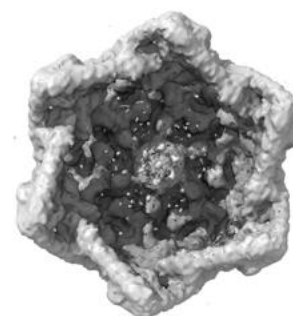
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 1.01. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

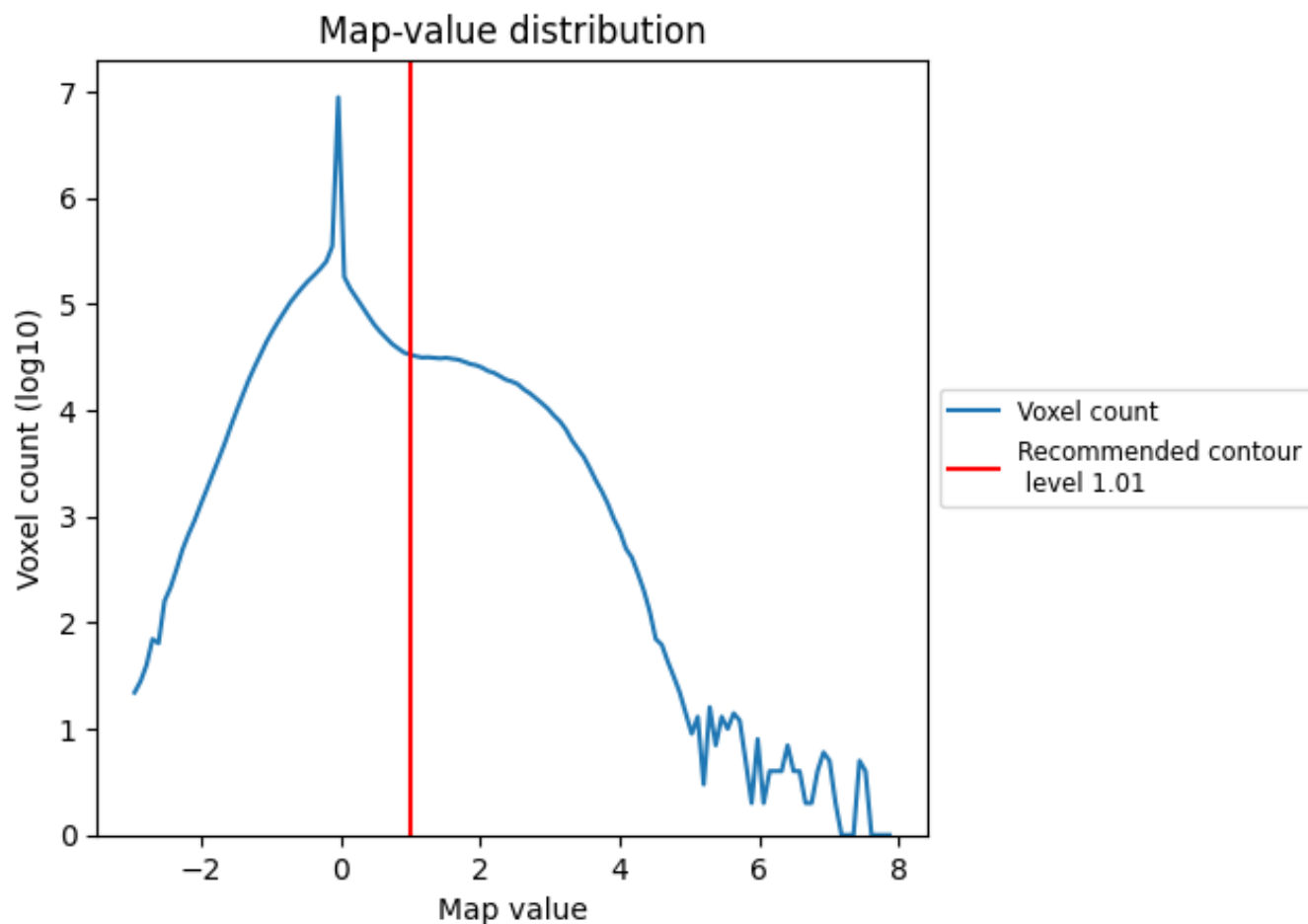
6.5 Mask visualisation

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

7 Map analysis [i](#)

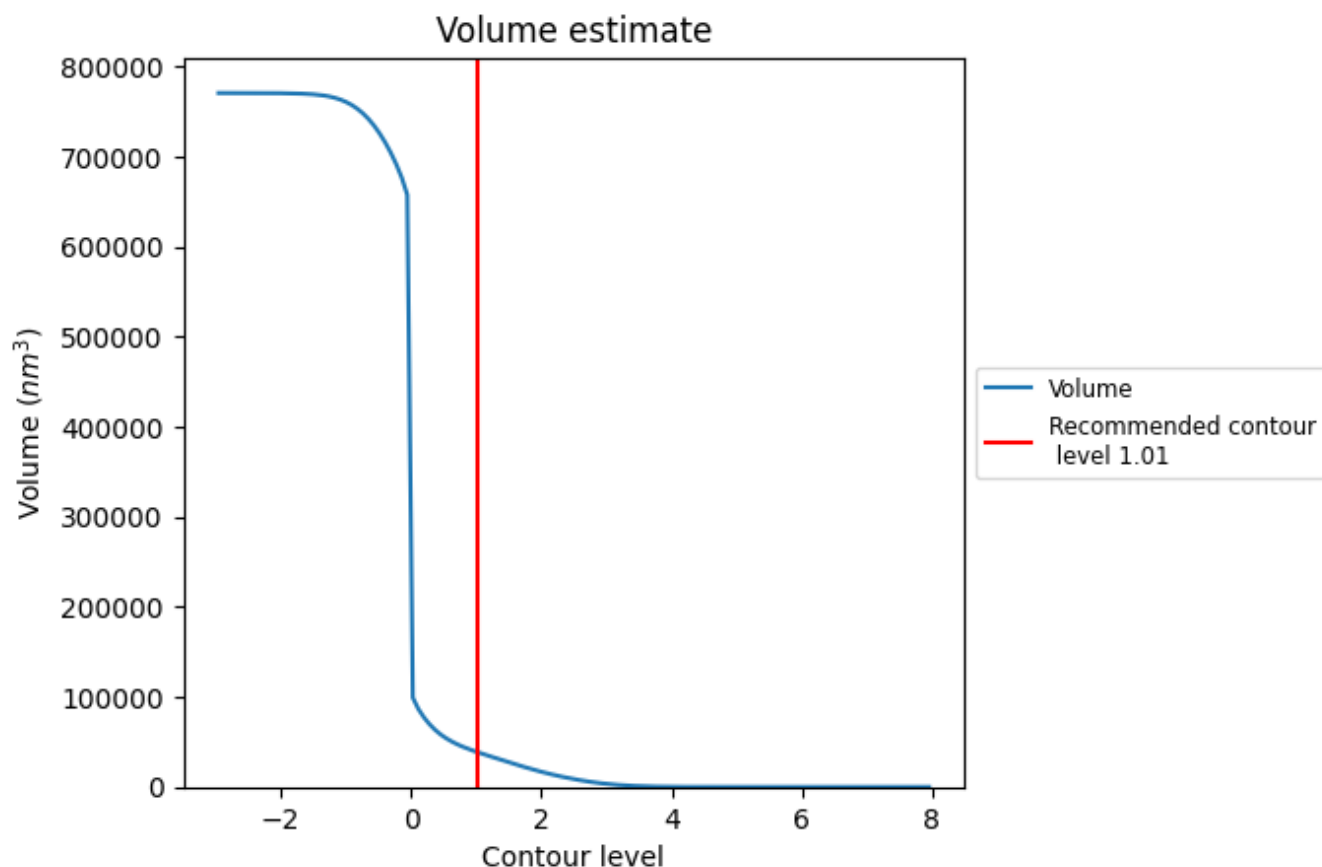
This section contains the results of statistical analysis of the map.

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.

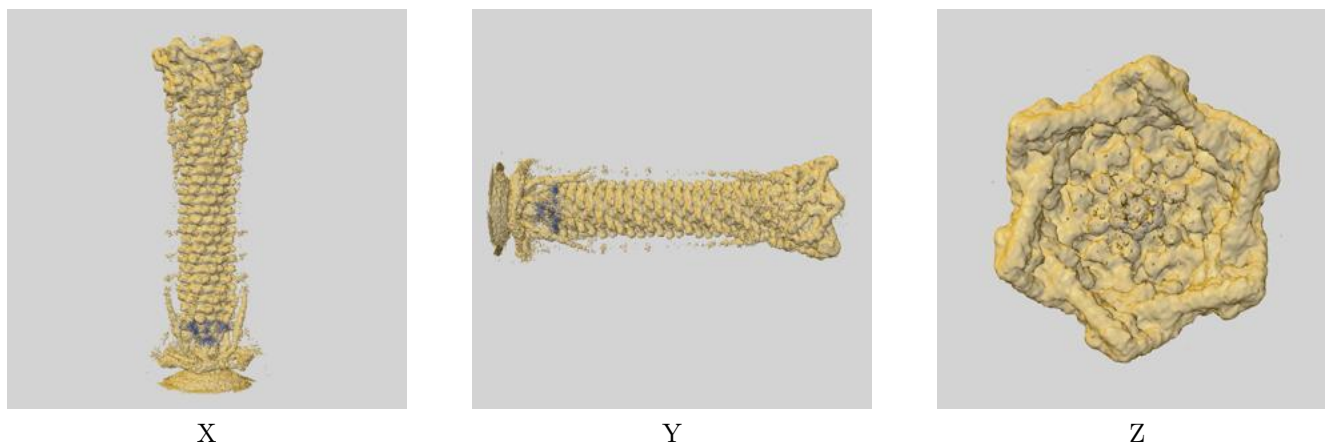
8 Fourier-Shell correlation

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](#)



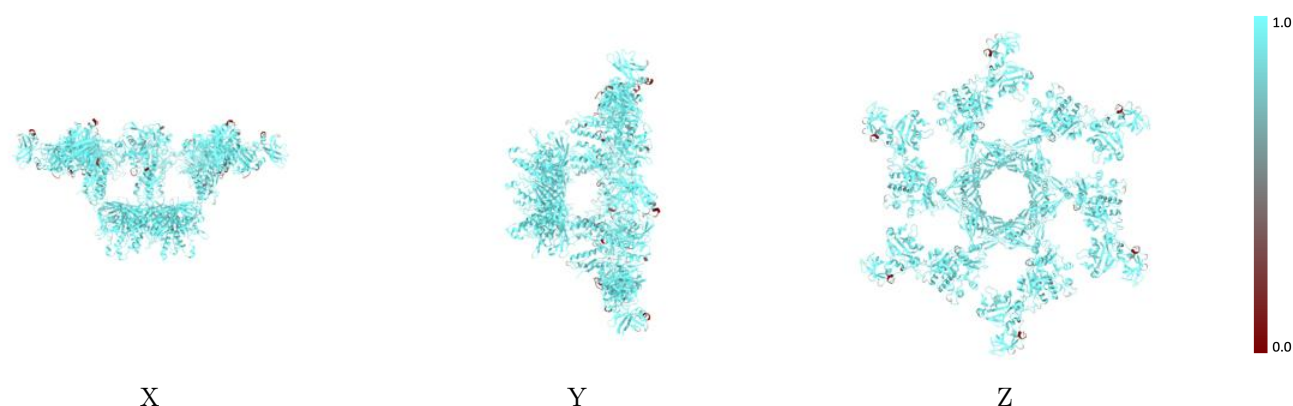
The images above show the 3D surface view of the map at the recommended contour level 1.01 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



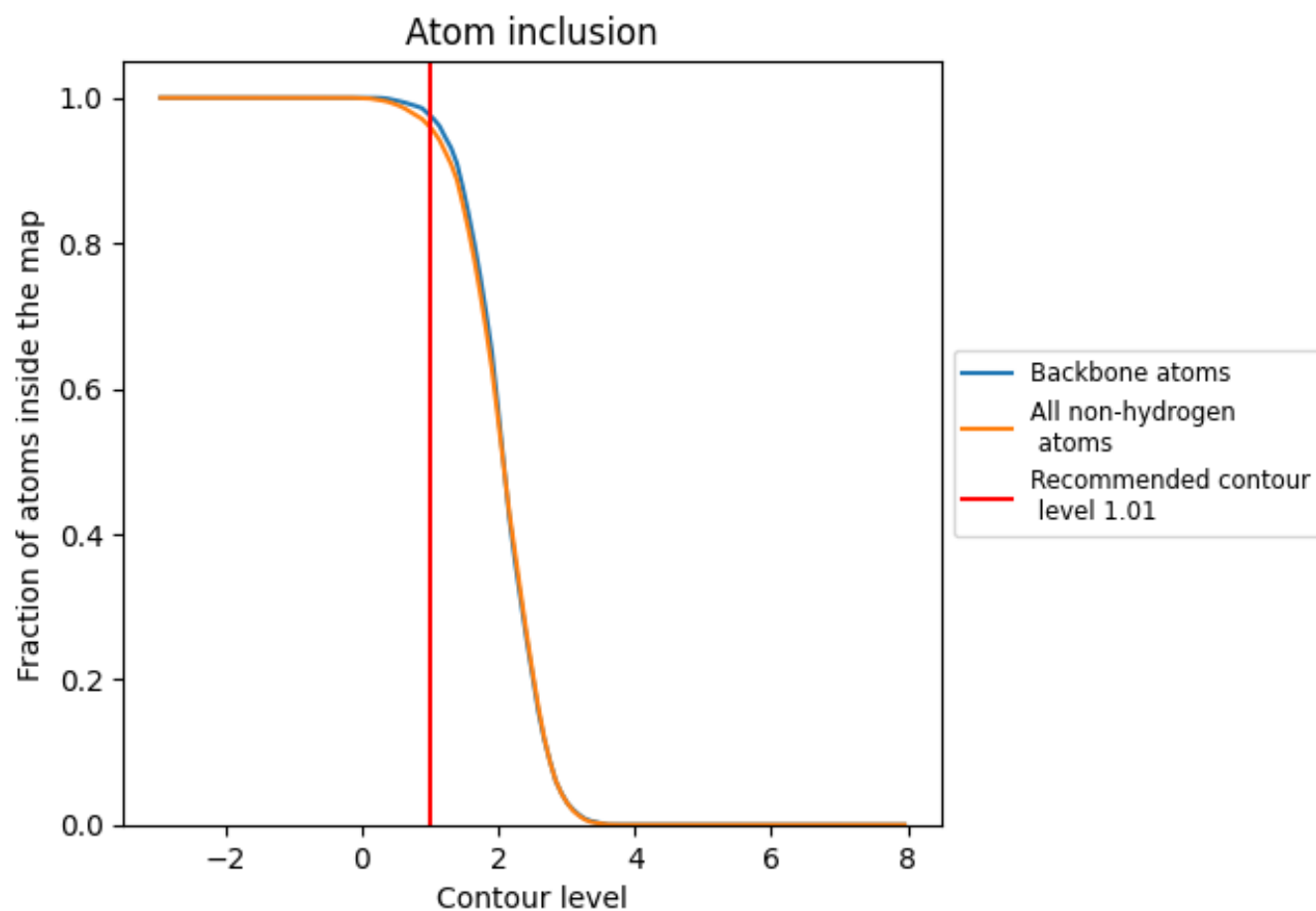
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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, 97% 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	<div><div></div></div> 0.9584	<div><div></div></div> 0.0430
A	<div><div></div></div> 0.9930	<div><div></div></div> 0.0230
B	<div><div></div></div> 0.9924	<div><div></div></div> 0.0260
C	<div><div></div></div> 0.9924	<div><div></div></div> 0.0260
D	<div><div></div></div> 0.9924	<div><div></div></div> 0.0220
E	<div><div></div></div> 0.9924	<div><div></div></div> 0.0260
F	<div><div></div></div> 0.9935	<div><div></div></div> 0.0250
U	<div><div></div></div> 0.9445	<div><div></div></div> 0.0540
V	<div><div></div></div> 0.9456	<div><div></div></div> 0.0500
W	<div><div></div></div> 0.9467	<div><div></div></div> 0.0480
X	<div><div></div></div> 0.9443	<div><div></div></div> 0.0510
Y	<div><div></div></div> 0.9456	<div><div></div></div> 0.0500
Z	<div><div></div></div> 0.9471	<div><div></div></div> 0.0490

1.0

0.0

<0.0