



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 12, 2026 – 02:38 PM UTC

PDB ID : 4V4O / pdb_00004v4o
Title : Crystal Structure of the Chaperonin Complex Cpn60/Cpn10/(ADP)7 from Thermus Thermophilus
Authors : Shimamura, T.; Koike-Takeshita, A.; Yokoyama, K.; Masui, R.; Murai, N.; Yoshida, M.; Taguchi, H.; Iwata, S.
Deposited on : 2004-05-23
Resolution : 2.80 Å(reported)

This is a Full wwPDB X-ray Structure 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/XrayValidationReportHelp>

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:

MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

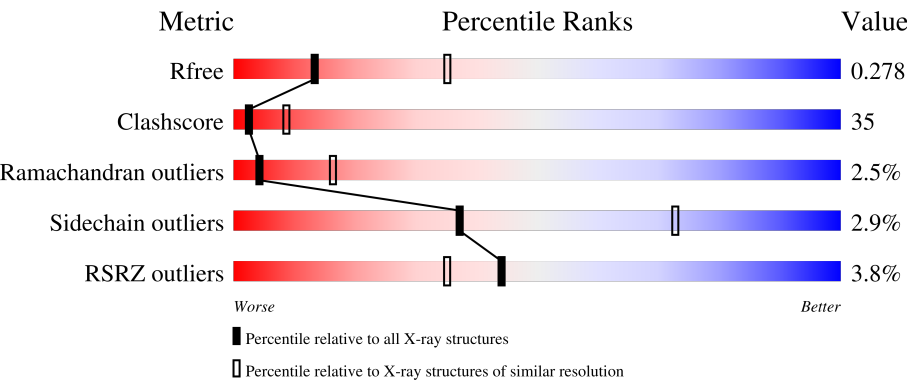
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.80 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	3866 (2.80-2.80)
Clashscore	190562	4276 (2.80-2.80)
Ramachandran outliers	187476	4196 (2.80-2.80)
Sidechain outliers	187428	4198 (2.80-2.80)
RSRZ outliers	180081	3869 (2.80-2.80)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	543	% 49% 45% . .
1	B	543	% 50% 43% . .
1	C	543	% 48% 45% . .
1	D	543	% 45% 47% . .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	E	543	
1	F	543	
1	G	543	
1	H	543	
1	I	543	
1	J	543	
1	K	543	
1	L	543	
1	M	543	
1	N	543	
1	a	543	
1	b	543	
1	c	543	
1	d	543	
1	e	543	
1	f	543	
1	g	543	
1	h	543	
1	i	543	
1	j	543	
1	k	543	
1	l	543	
1	m	543	
1	n	543	
2	O	100	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	P	100	
2	Q	100	
2	R	100	
2	S	100	
2	T	100	
2	U	100	
2	o	100	
2	p	100	
2	q	100	
2	r	100	
2	s	100	
2	t	100	
2	u	100	

2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 121267 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 cpn60(GroEL).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	527	Total	C	N	O	S	0	0	0
			3956	2484	686	781	5			
1	B	527	Total	C	N	O	S	0	0	0
			3956	2484	686	781	5			
1	C	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	D	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	E	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	F	529	Total	C	N	O	S	0	0	0
			3974	2495	689	785	5			
1	G	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	H	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	I	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	J	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	K	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	L	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	M	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	N	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	a	527	Total	C	N	O	S	0	0	0
			3956	2484	686	781	5			
1	b	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	c	527	Total	C	N	O	S	0	0	0
			3956	2484	686	781	5			
1	d	527	Total	C	N	O	S	0	0	0
			3956	2484	686	781	5			
1	e	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	f	527	Total	C	N	O	S	0	0	0
			3956	2484	686	781	5			
1	g	526	Total	C	N	O	S	0	0	0
			3947	2478	684	780	5			
1	h	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	i	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	j	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	k	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	l	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	m	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			
1	n	525	Total	C	N	O	S	0	0	0
			3938	2473	683	777	5			

- Molecule 2 is a protein called cpn10(GroES).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	O	96	Total	C	N	O		0	0	0
			739	470	126	143				
2	P	94	Total	C	N	O		0	0	0
			723	460	123	140				
2	Q	96	Total	C	N	O		0	0	0
			739	470	126	143				
2	R	96	Total	C	N	O		0	0	0
			739	470	126	143				
2	S	96	Total	C	N	O		0	0	0
			739	470	126	143				
2	T	96	Total	C	N	O		0	0	0
			739	470	126	143				
2	U	96	Total	C	N	O		0	0	0
			739	470	126	143				

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
2	o	96	Total	C	N	O	0	0	0
			739	470	126	143			
2	p	96	Total	C	N	O	0	0	0
			739	470	126	143			
2	q	96	Total	C	N	O	0	0	0
			739	470	126	143			
2	r	96	Total	C	N	O	0	0	0
			739	470	126	143			
2	s	96	Total	C	N	O	0	0	0
			739	470	126	143			
2	t	96	Total	C	N	O	0	0	0
			739	470	126	143			
2	u	96	Total	C	N	O	0	0	0
			739	470	126	143			

- Molecule 3 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

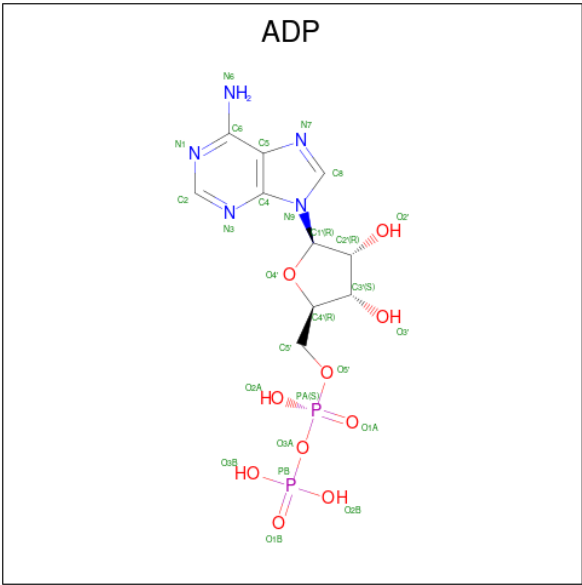
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	A	1	Total	Mg	0	0
			1	1		
3	B	1	Total	Mg	0	0
			1	1		
3	C	1	Total	Mg	0	0
			1	1		
3	D	1	Total	Mg	0	0
			1	1		
3	E	1	Total	Mg	0	0
			1	1		
3	F	1	Total	Mg	0	0
			1	1		
3	G	1	Total	Mg	0	0
			1	1		
3	a	1	Total	Mg	0	0
			1	1		
3	b	1	Total	Mg	0	0
			1	1		
3	c	1	Total	Mg	0	0
			1	1		
3	d	1	Total	Mg	0	0
			1	1		
3	e	1	Total	Mg	0	0
			1	1		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	f	1	Total	Mg	0	0
			1	1		
3	g	1	Total	Mg	0	0
			1	1		

- Molecule 4 is ADENOSINE-5'-DIPHOSPHATE (CCD ID: ADP) (formula: C₁₀H₁₅N₅O₁₀P₂).



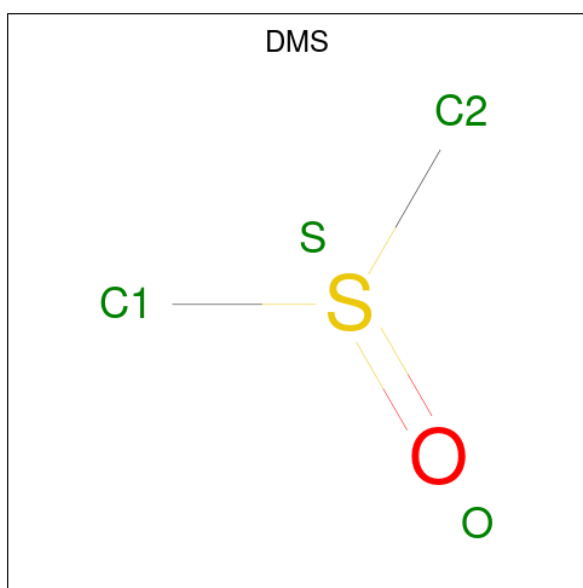
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
4	A	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	B	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	C	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	D	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	E	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	F	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	G	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	a	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	b	1	Total	C	N	O	P	0	0
			27	10	5	10	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
4	c	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	d	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	e	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	f	1	Total	C	N	O	P	0	0
			27	10	5	10	2		
4	g	1	Total	C	N	O	P	0	0
			27	10	5	10	2		

- Molecule 5 is DIMETHYL SULFOXIDE (CCD ID: DMS) (formula: C₂H₆OS).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
5	H	1	Total	C	O	S	0	0
			4	2	1	1		
5	I	1	Total	C	O	S	0	0
			4	2	1	1		
5	J	1	Total	C	O	S	0	0
			4	2	1	1		
5	K	1	Total	C	O	S	0	0
			4	2	1	1		
5	L	1	Total	C	O	S	0	0
			4	2	1	1		
5	M	1	Total	C	O	S	0	0
			4	2	1	1		

Continued on next page...

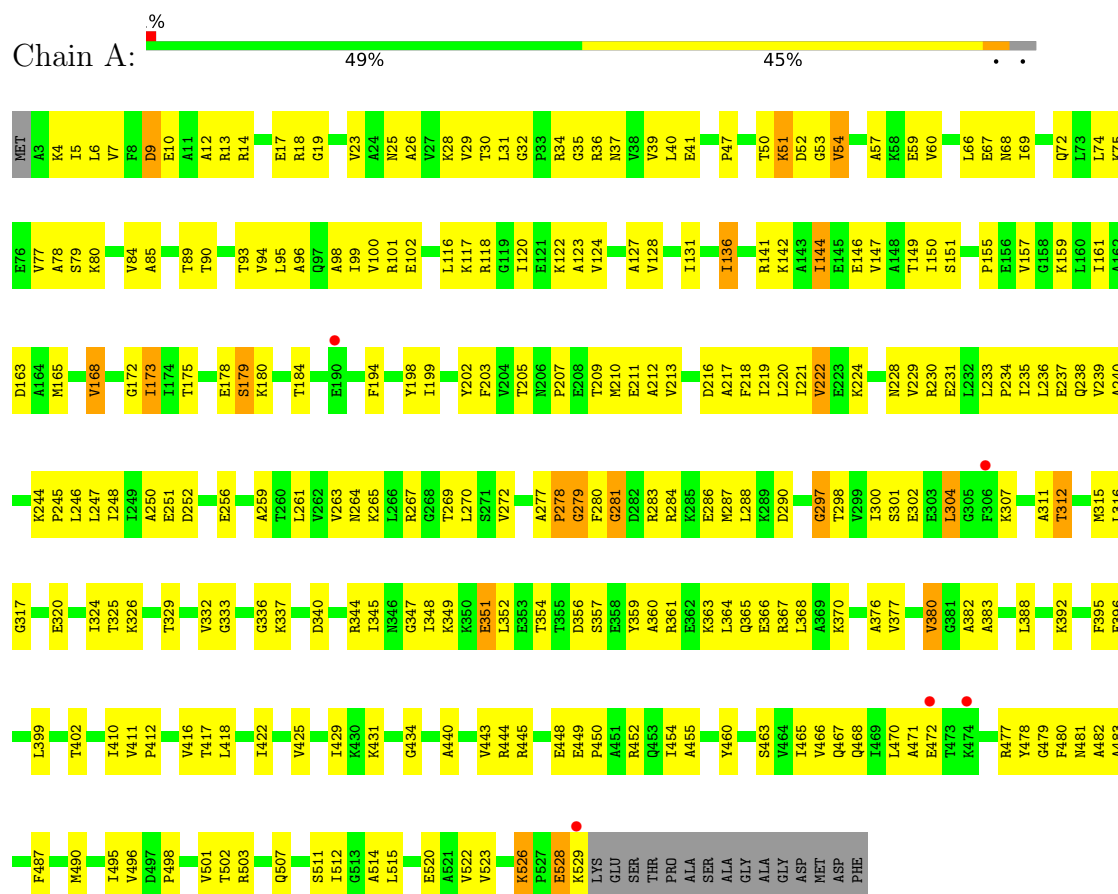
Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
5	N	1	Total 4	C 2	O 1	S 1	0	0
5	h	1	Total 4	C 2	O 1	S 1	0	0
5	i	1	Total 4	C 2	O 1	S 1	0	0
5	j	1	Total 4	C 2	O 1	S 1	0	0
5	k	1	Total 4	C 2	O 1	S 1	0	0
5	l	1	Total 4	C 2	O 1	S 1	0	0
5	m	1	Total 4	C 2	O 1	S 1	0	0
5	n	1	Total 4	C 2	O 1	S 1	0	0

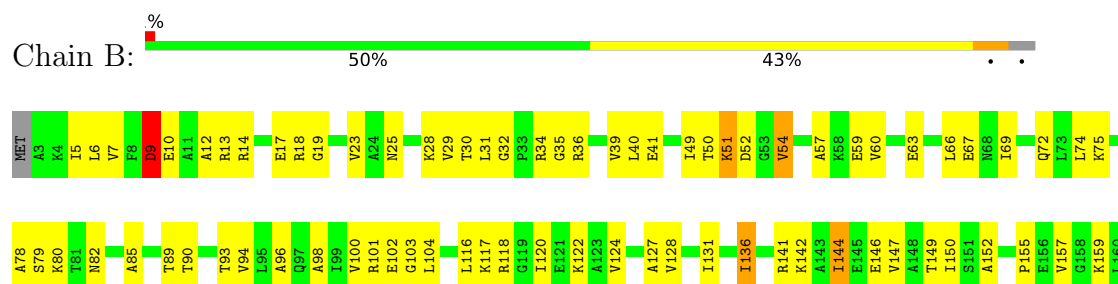
3 Residue-property plots

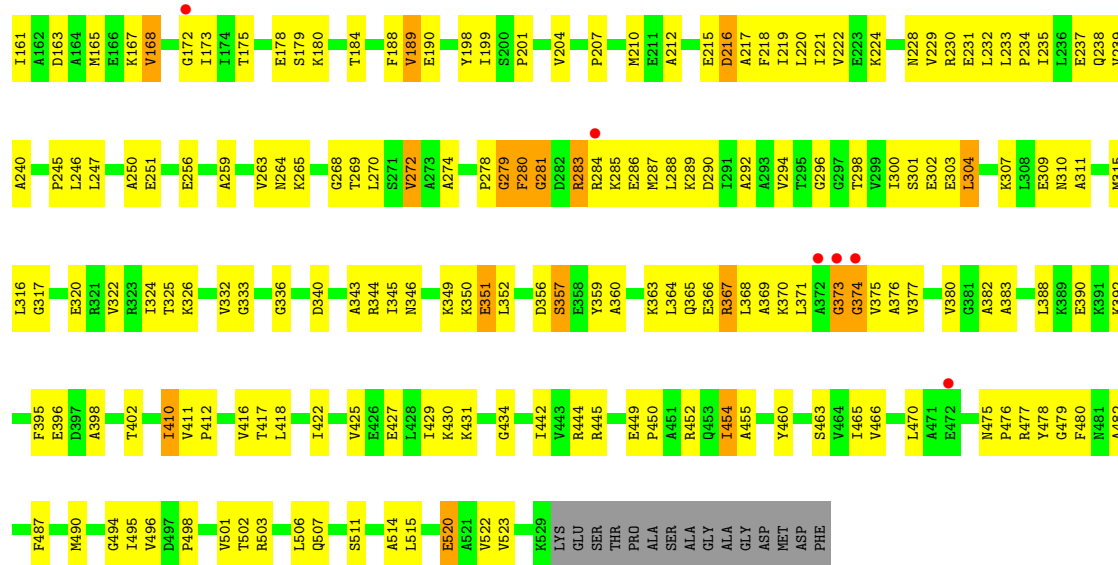
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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: cpn60(GroEL)

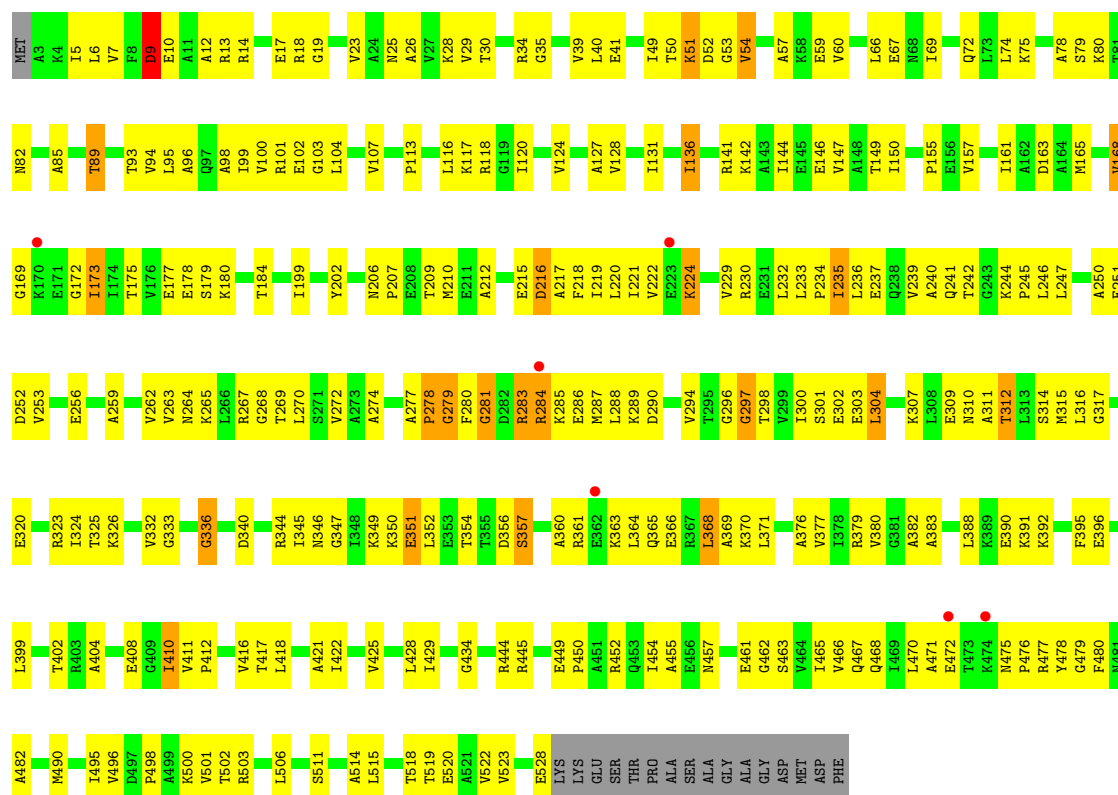


• Molecule 1: cpn60(GroEL)



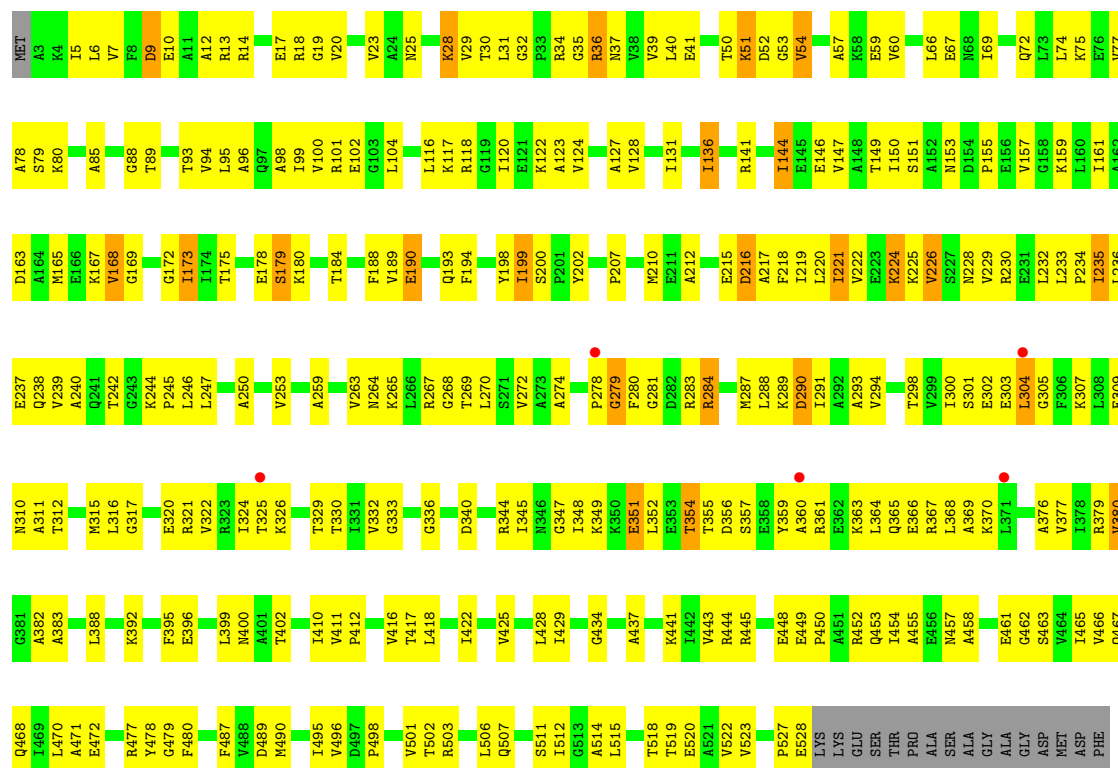


• Molecule 1: cpn60(GroEL)

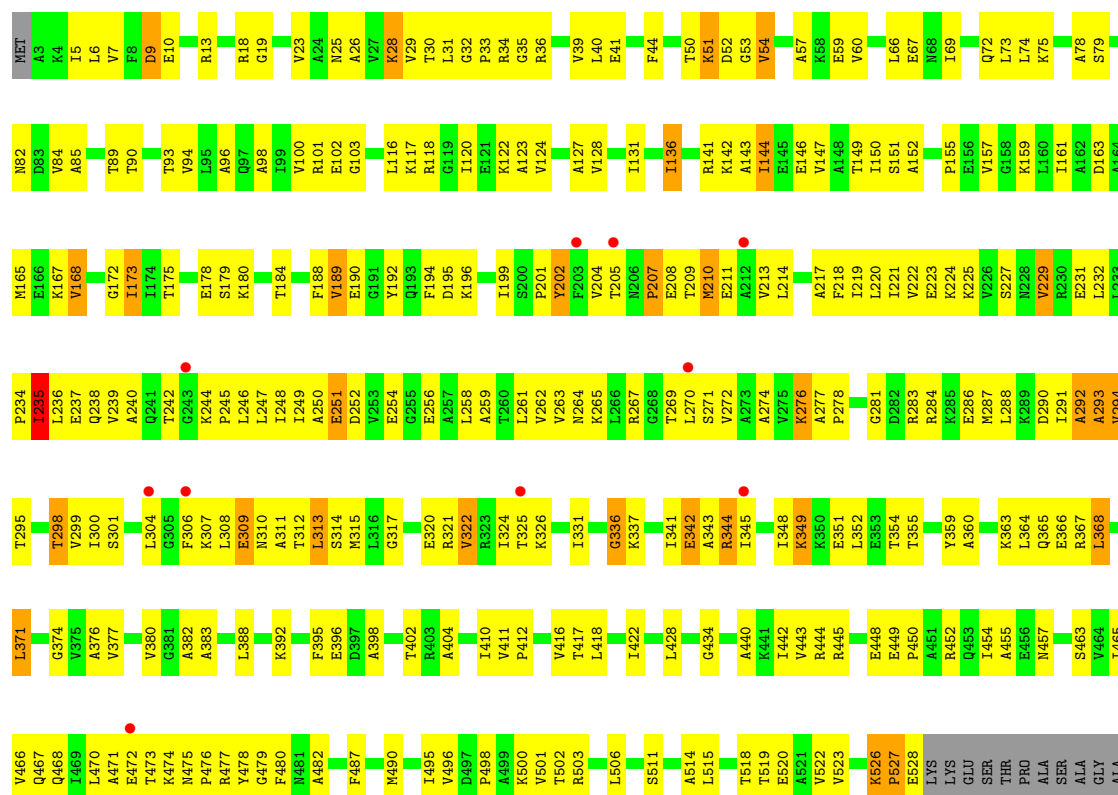
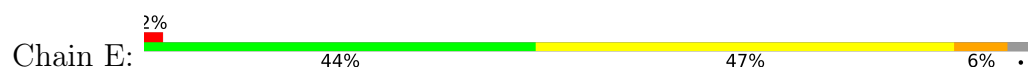


• Molecule 1: cpn60(GroEL)





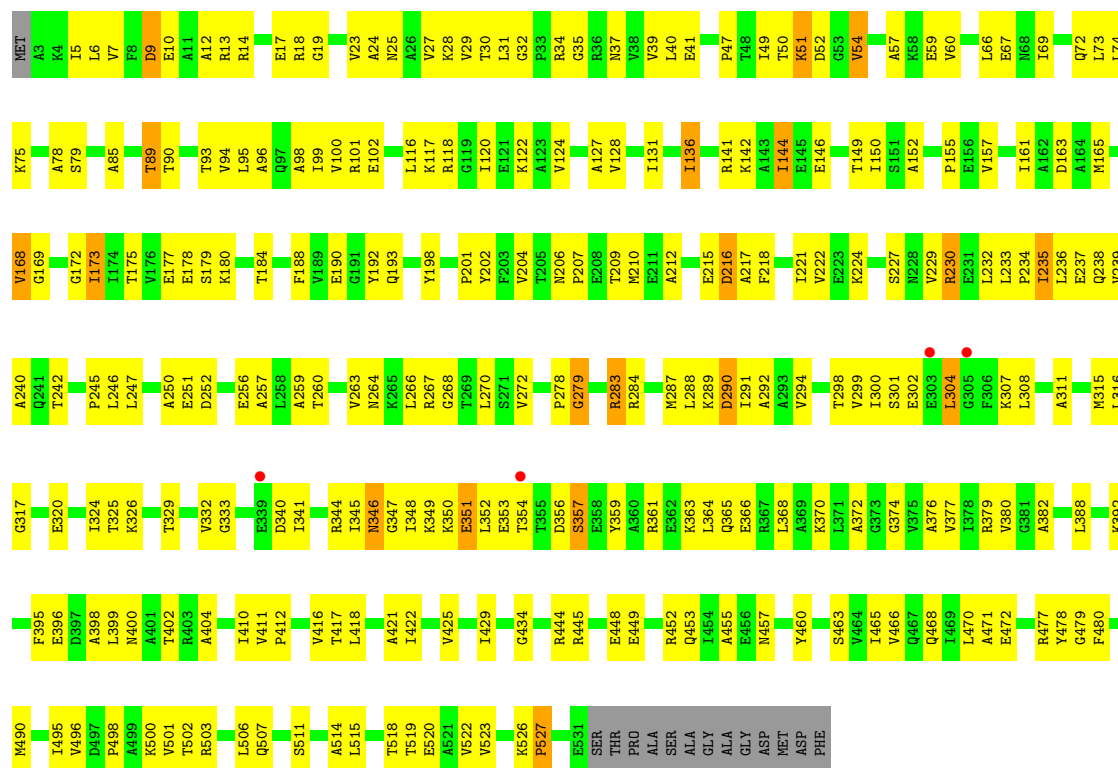
• Molecule 1: cpn60(GroEL)



GLY
ASP
MET
ASP
PHE

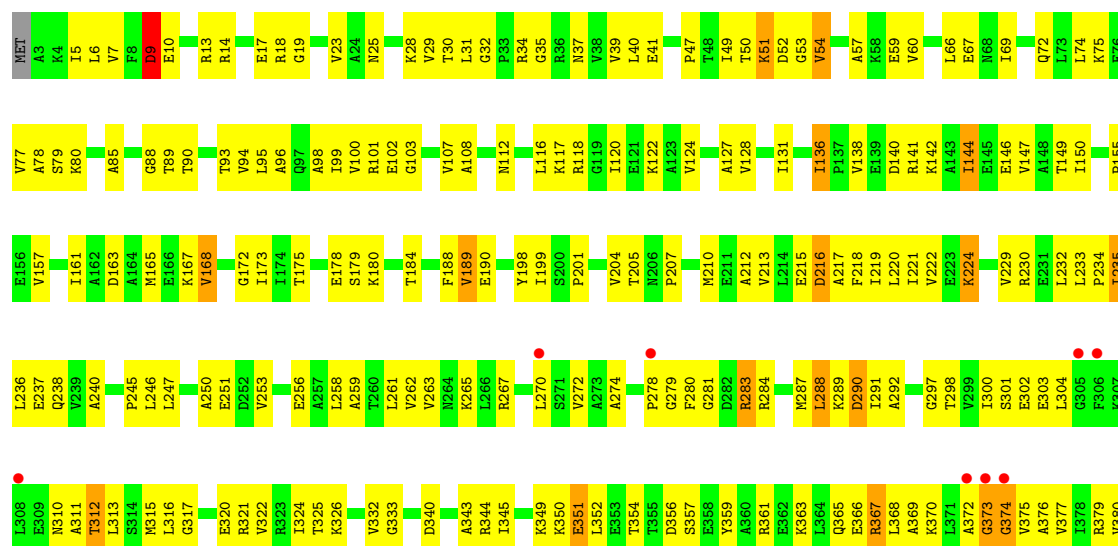
• Molecule 1: cpn60(GroEL)

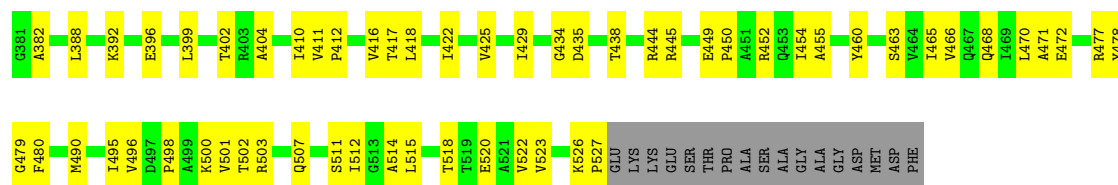
Chain F: %
50% 44%



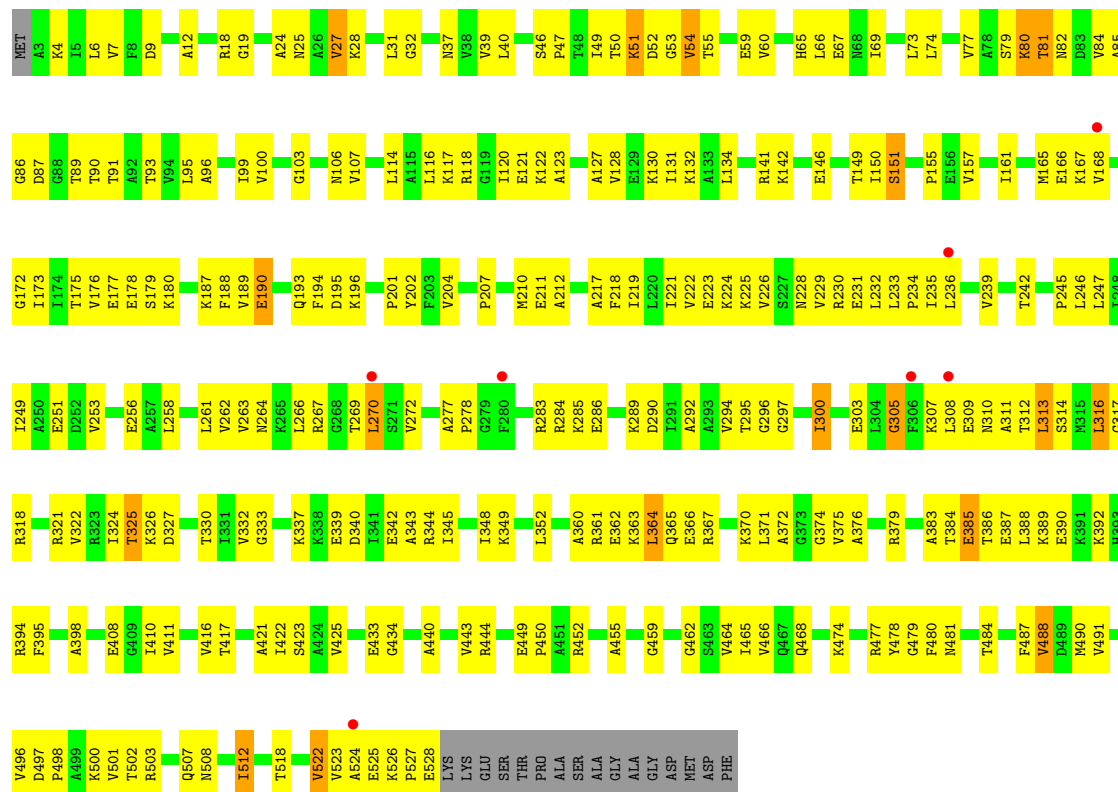
• Molecule 1: cpn60(GroEL)

Chain G: %
49% 45%

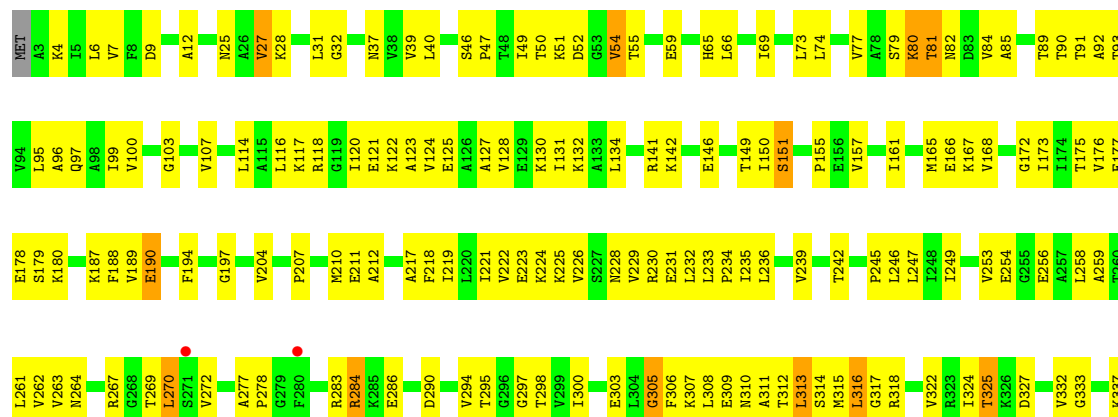


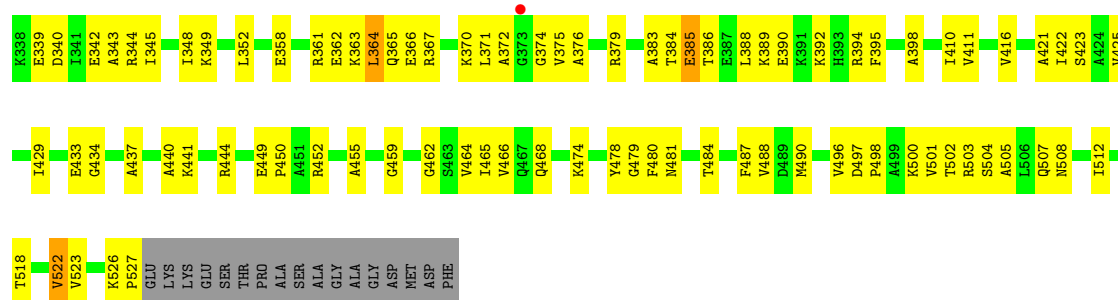


• Molecule 1: cpn60(GroEL)

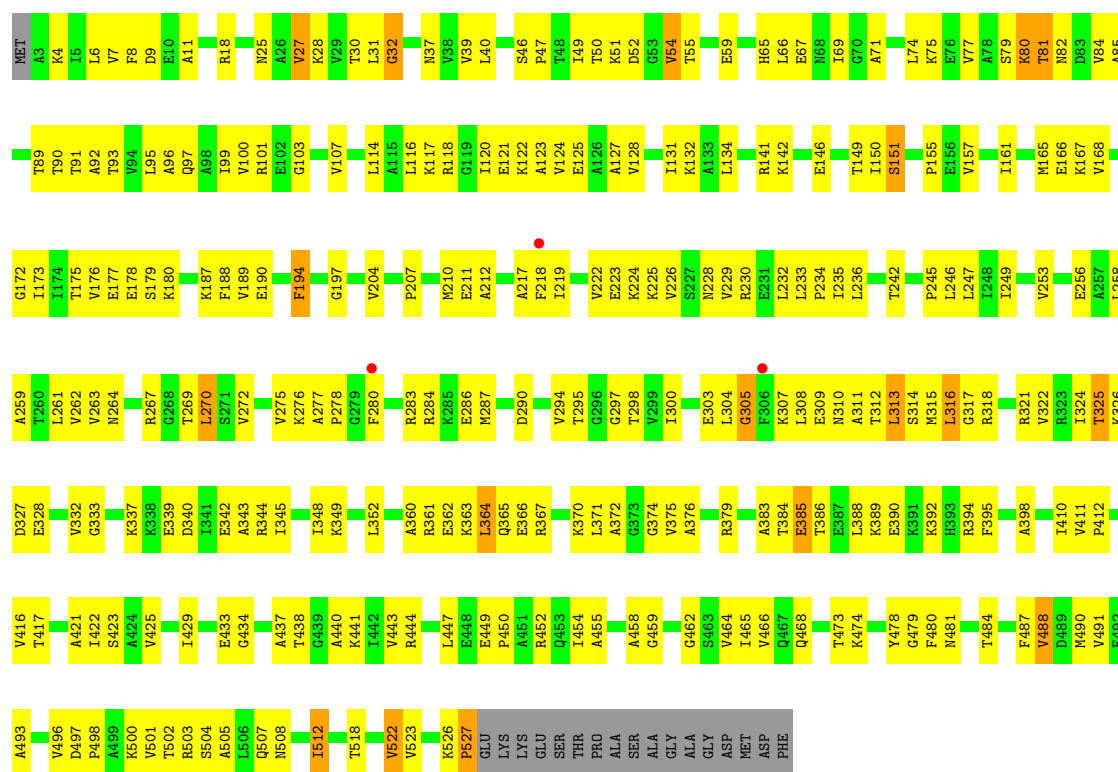


• Molecule 1: cpn60(GroEL)

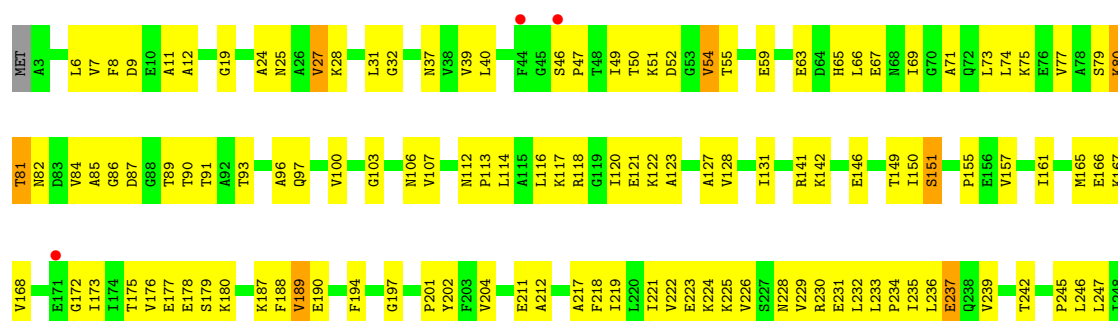


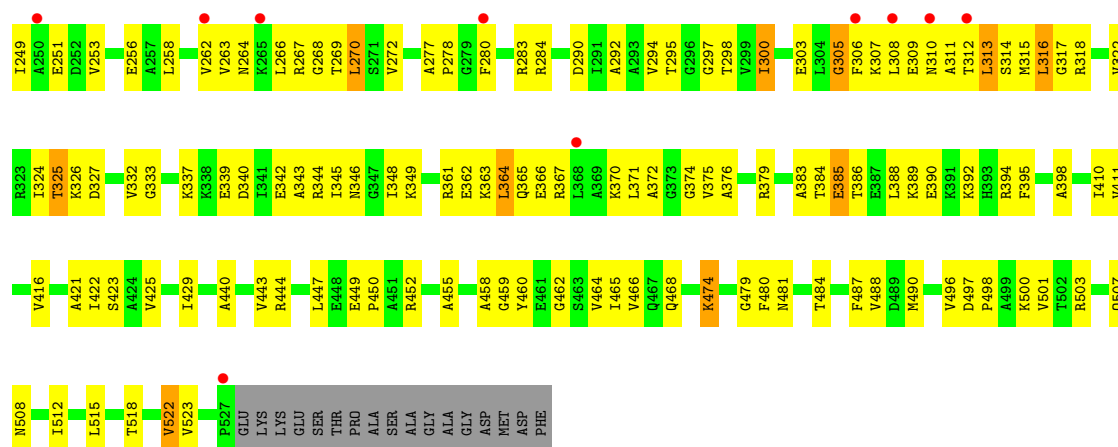


• Molecule 1: cpn60(GroEL)



• Molecule 1: cpn60(GroEL)

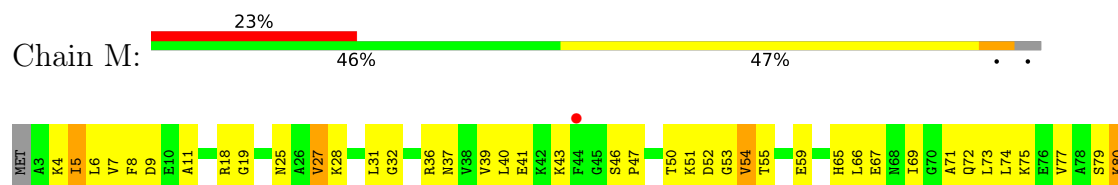


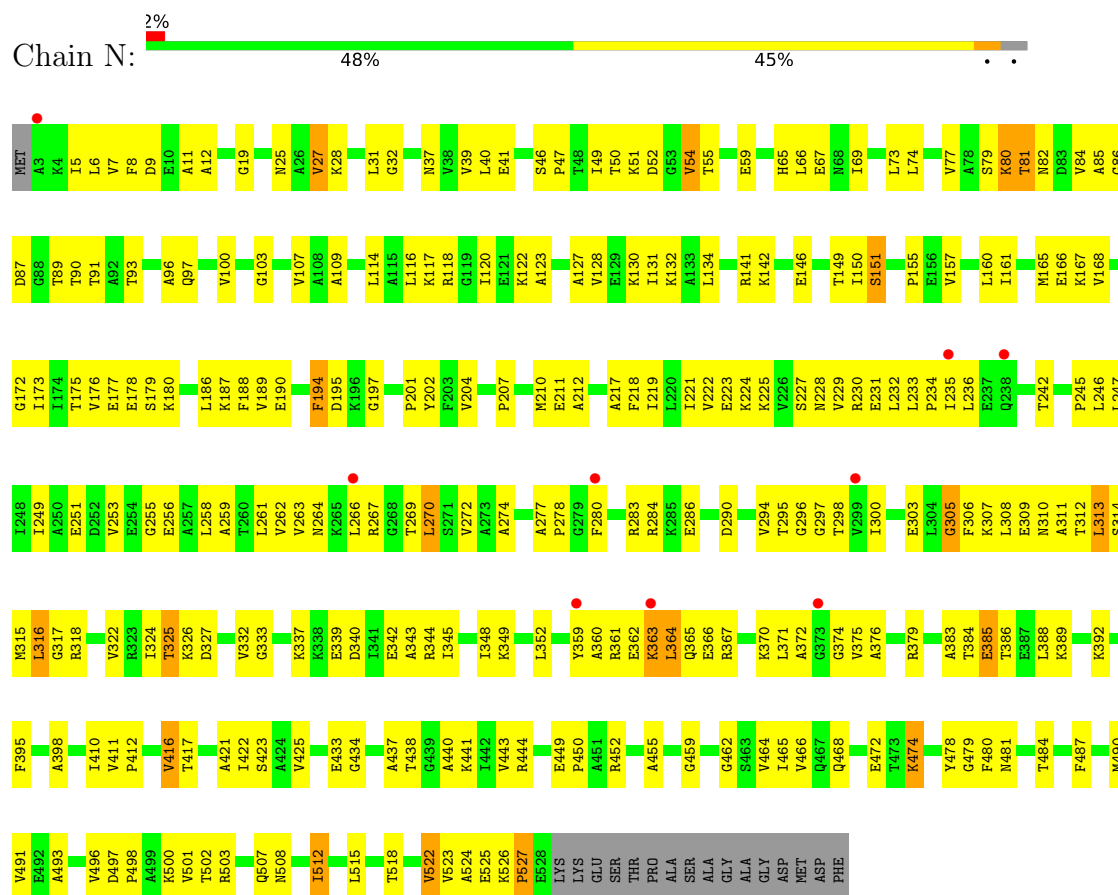
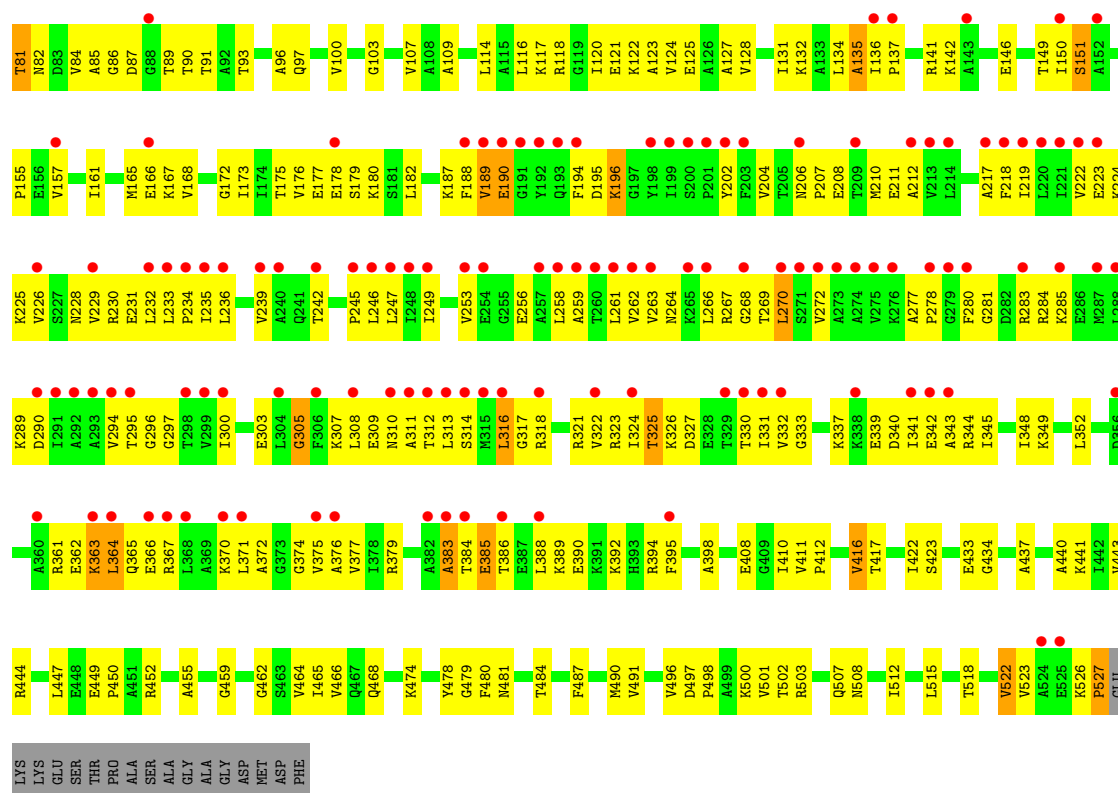


• Molecule 1: cpn60(GroEL)

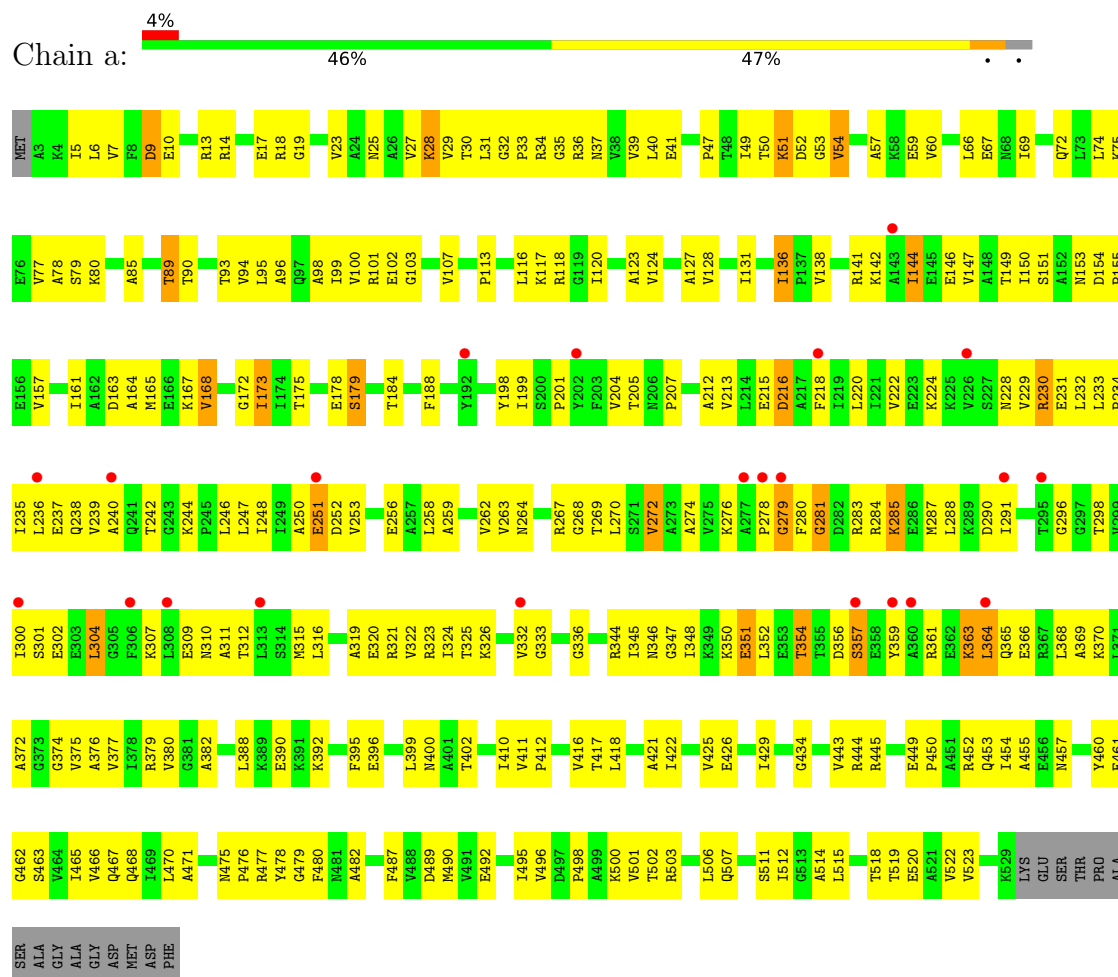


• Molecule 1: cpn60(GroEL)

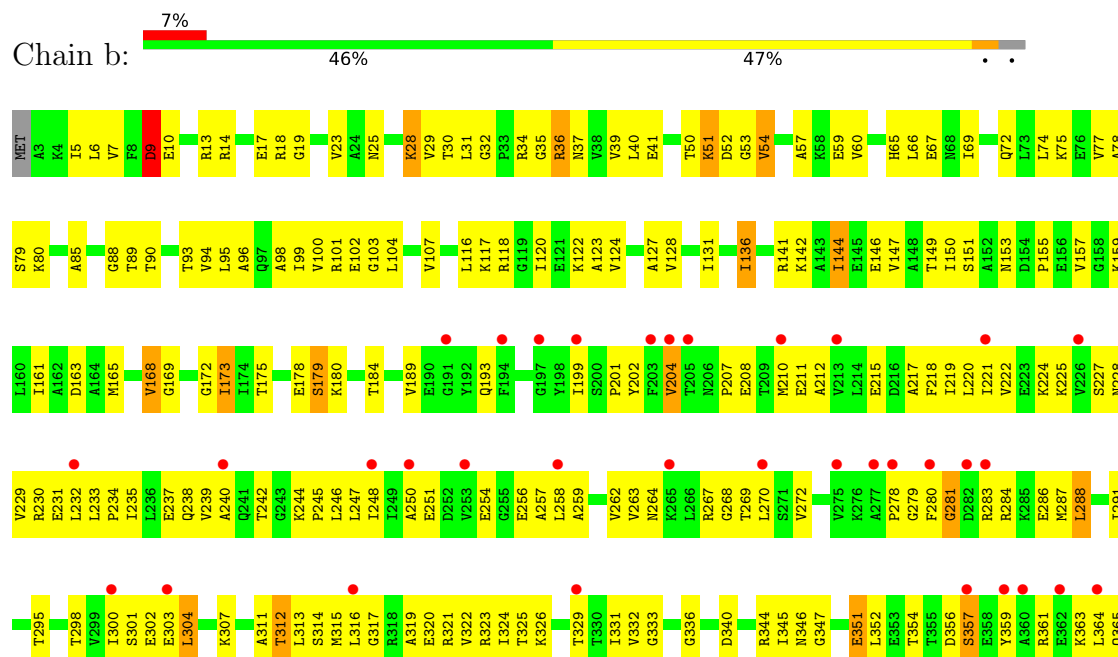


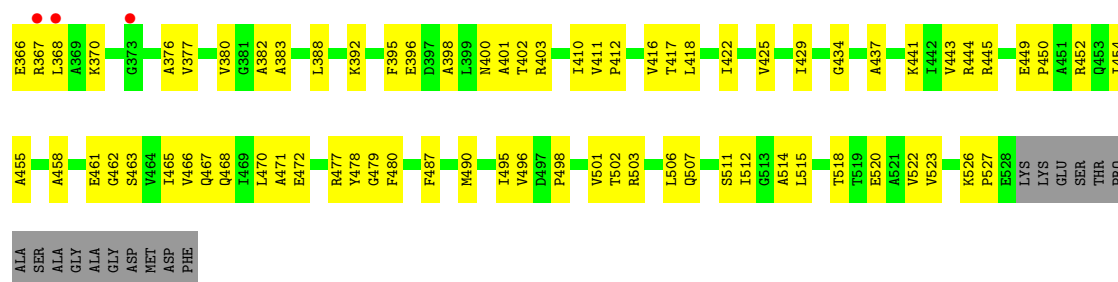


• Molecule 1: cpn60(GroEL)

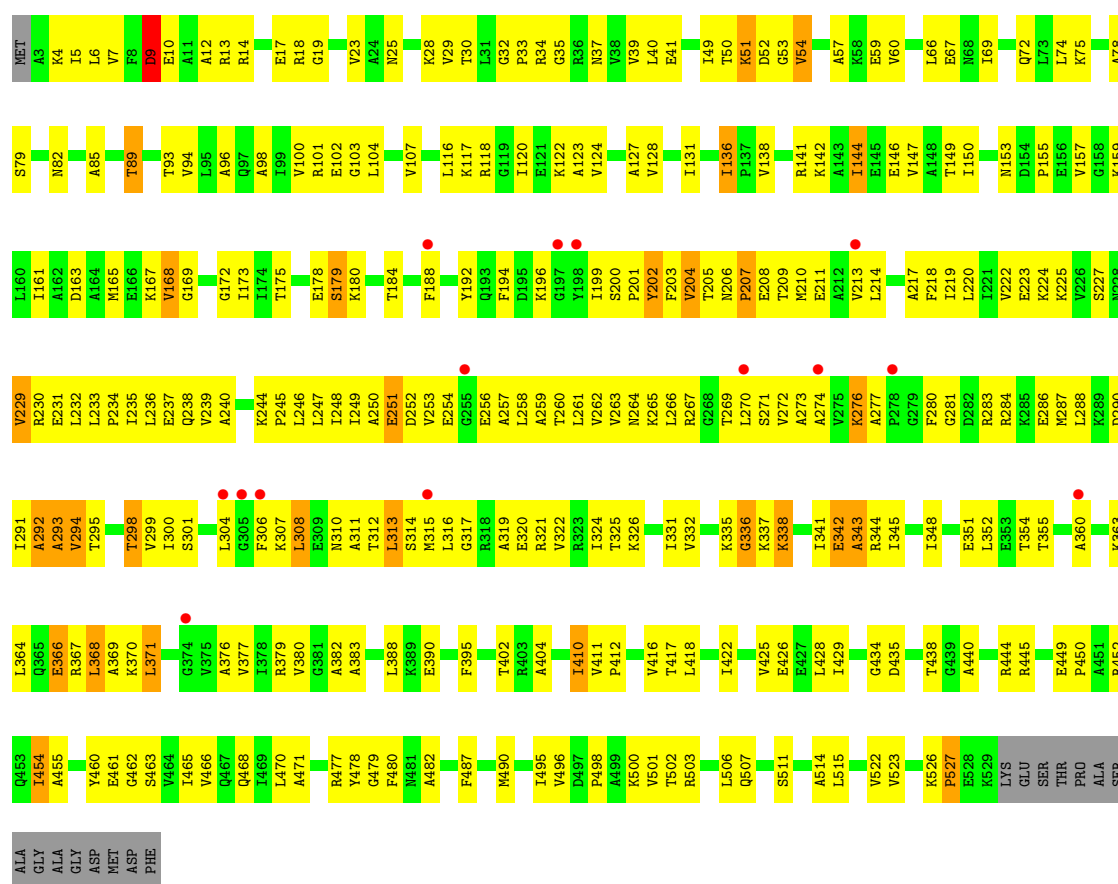
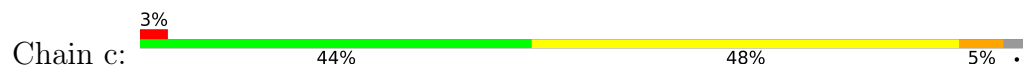


• Molecule 1: cpn60(GroEL)

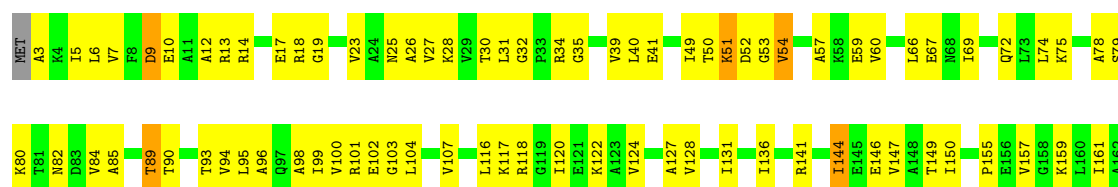


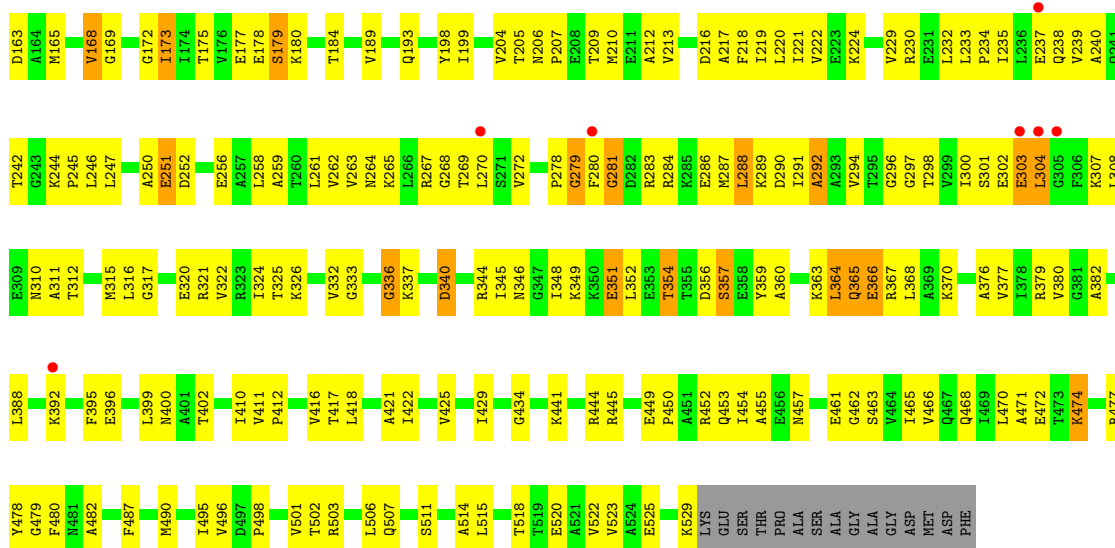


• Molecule 1: cpn60(GroEL)

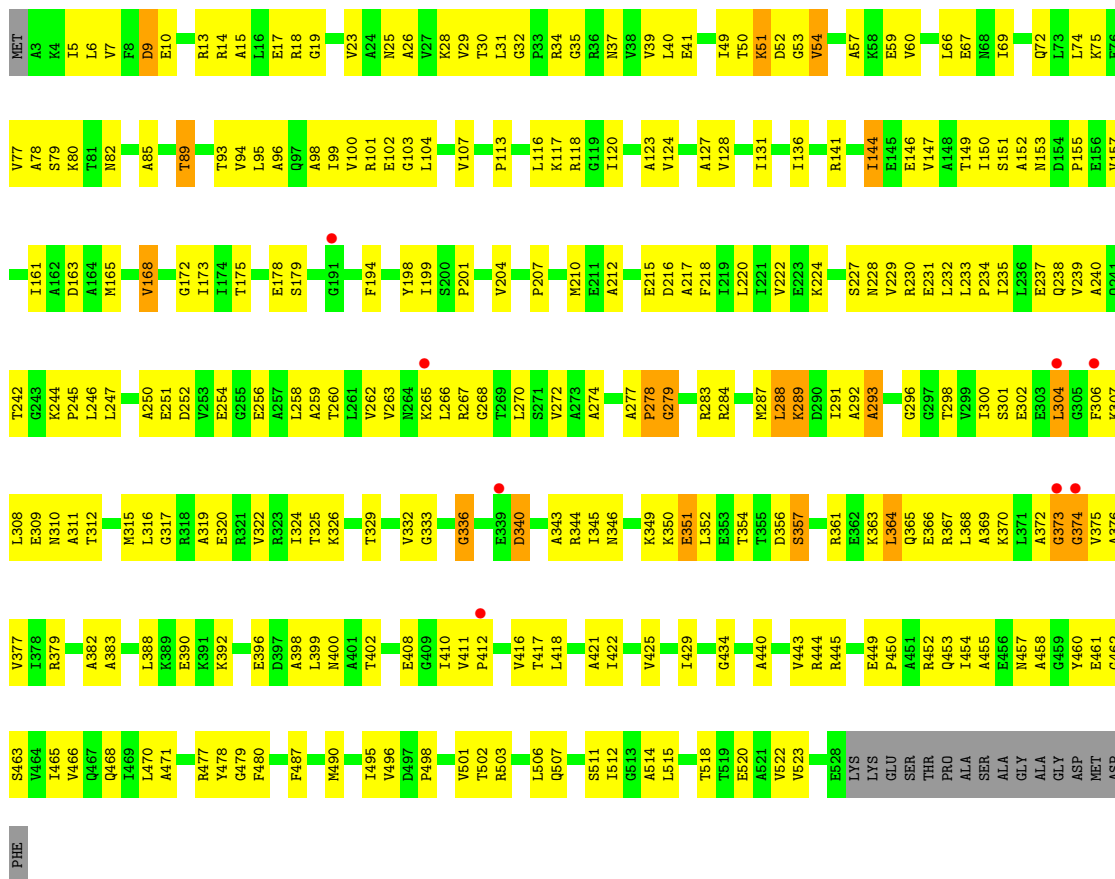


• Molecule 1: cpn60(GroEL)



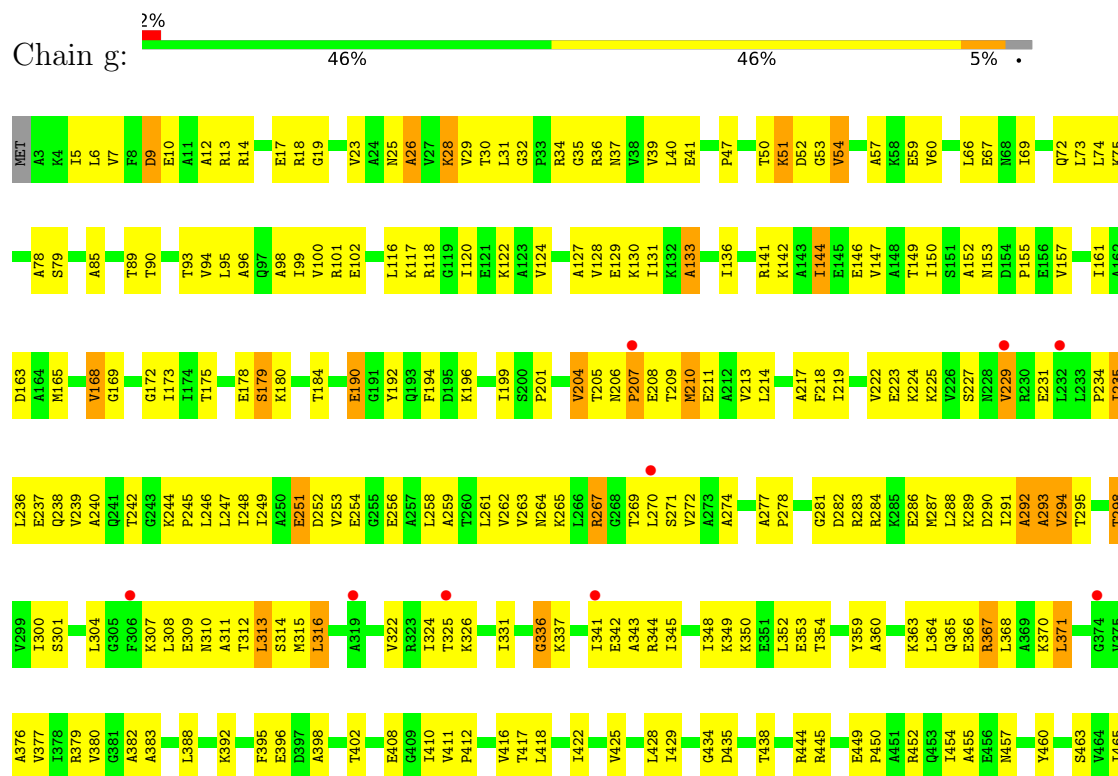
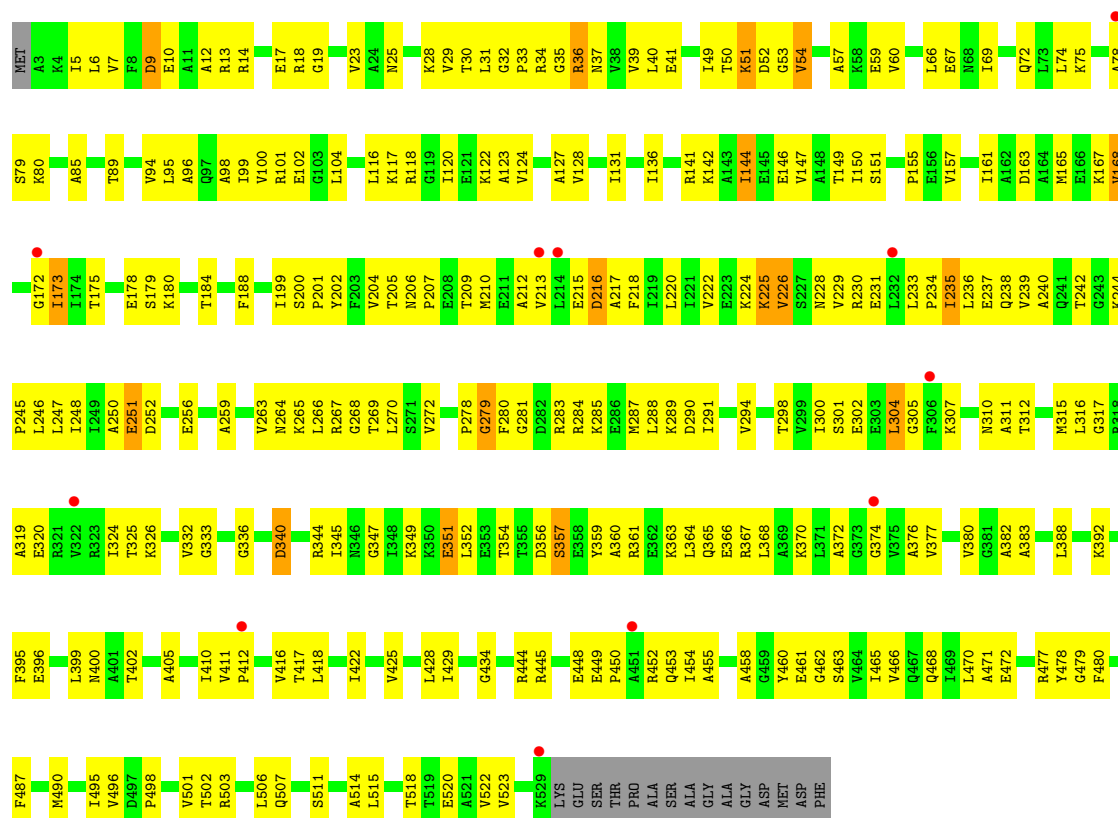


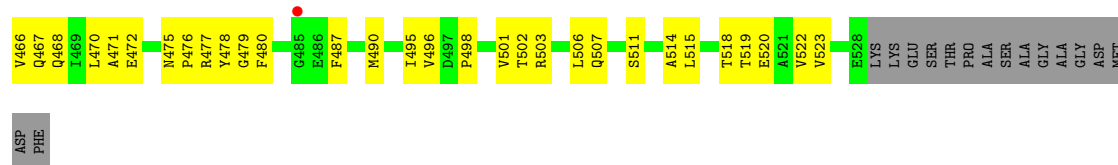
• Molecule 1: cpn60(GroEL)



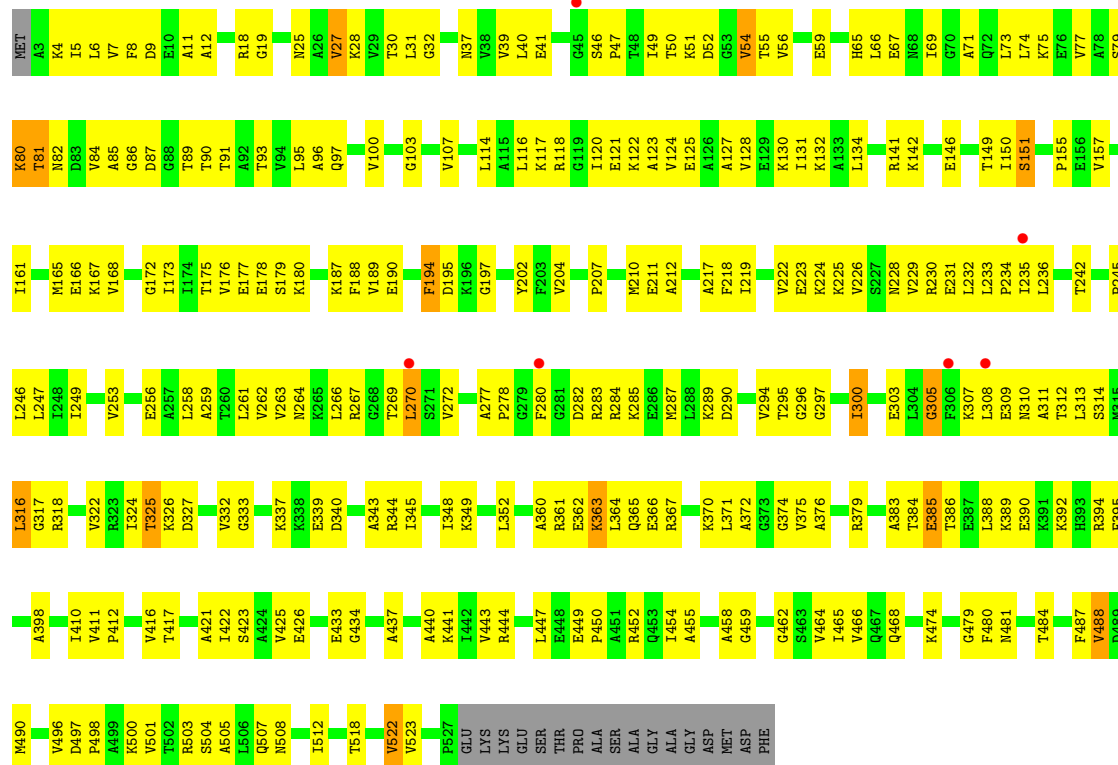
• Molecule 1: cpn60(GroEL)



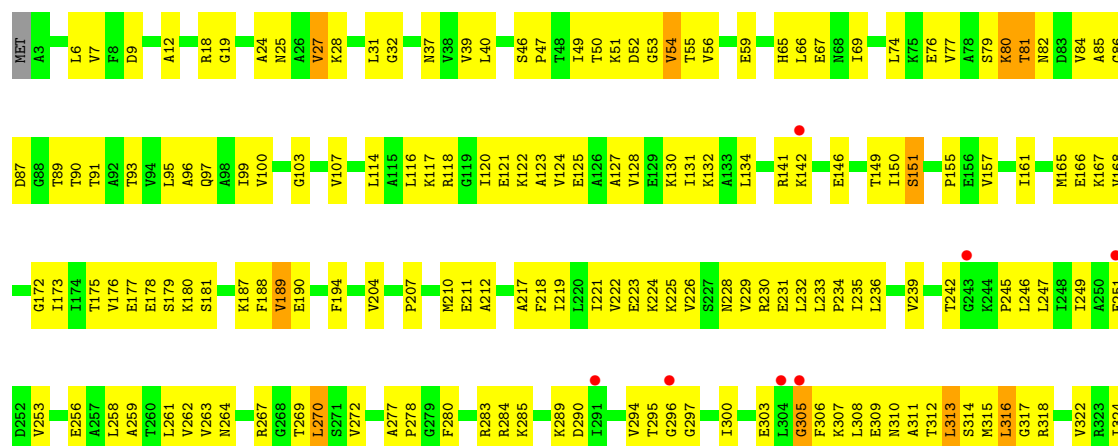


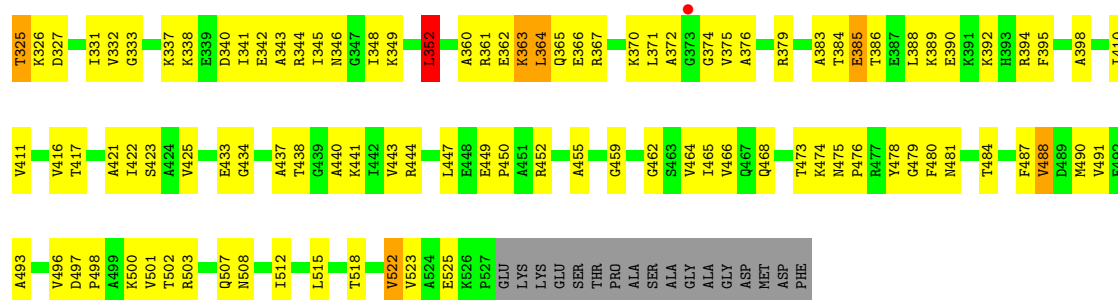


• Molecule 1: cpn60(GroEL)



• Molecule 1: cpn60(GroEL)



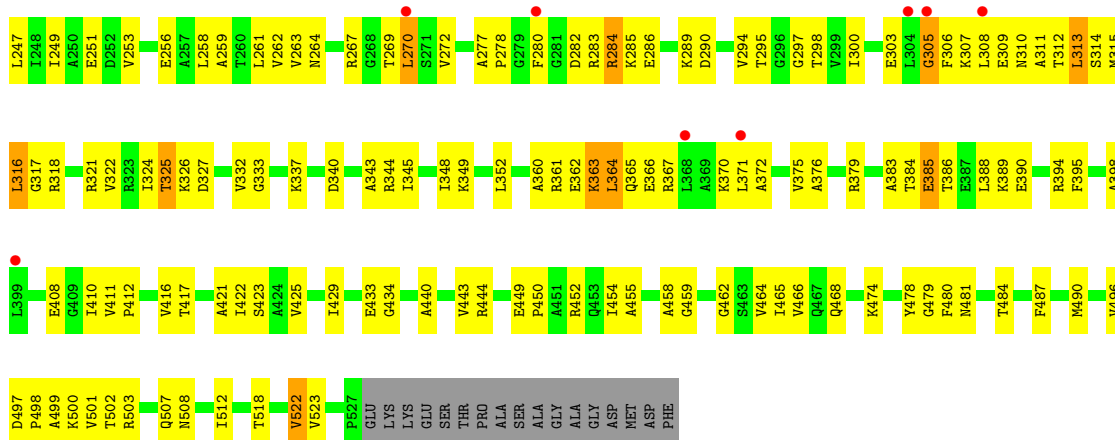


• Molecule 1: cpn60(GroEL)

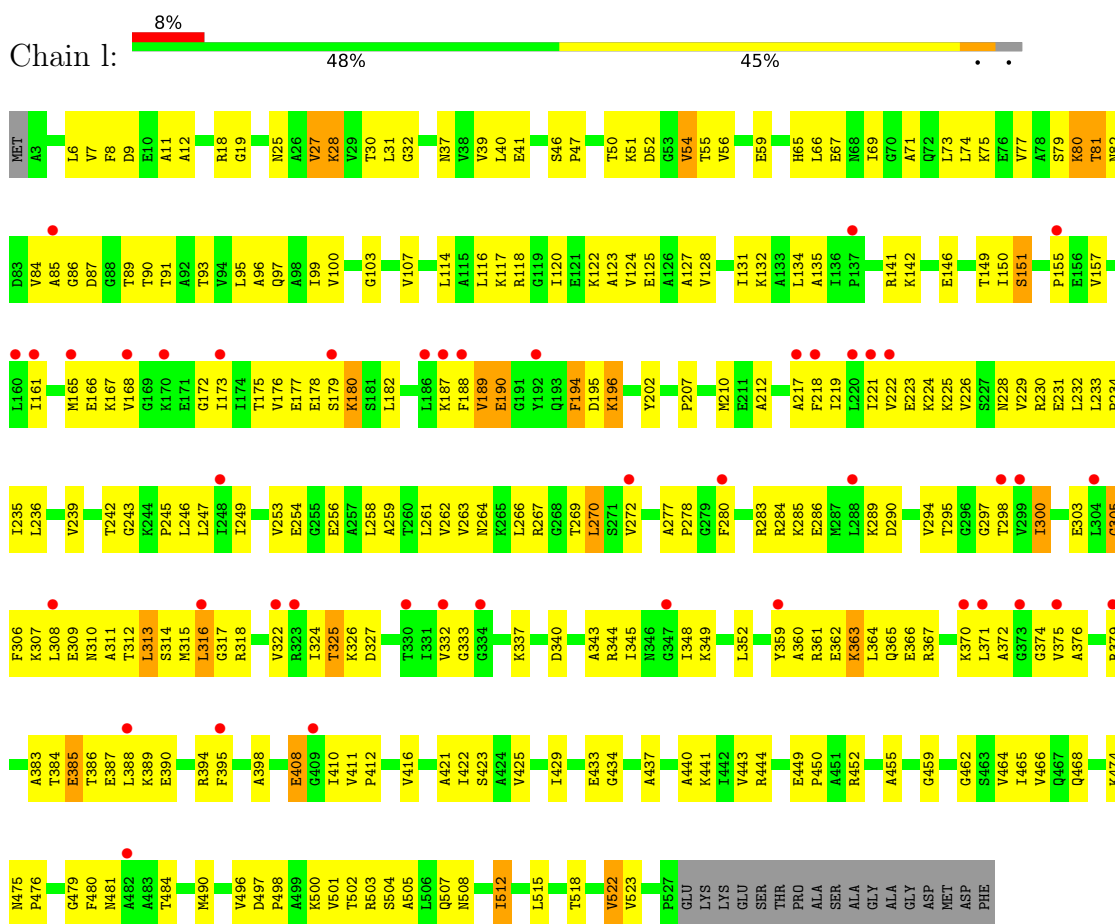


• Molecule 1: cpn60(GroEL)

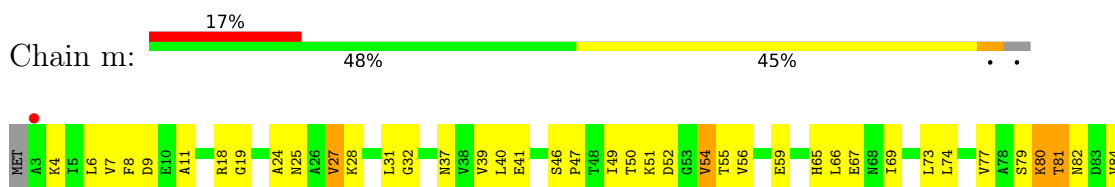


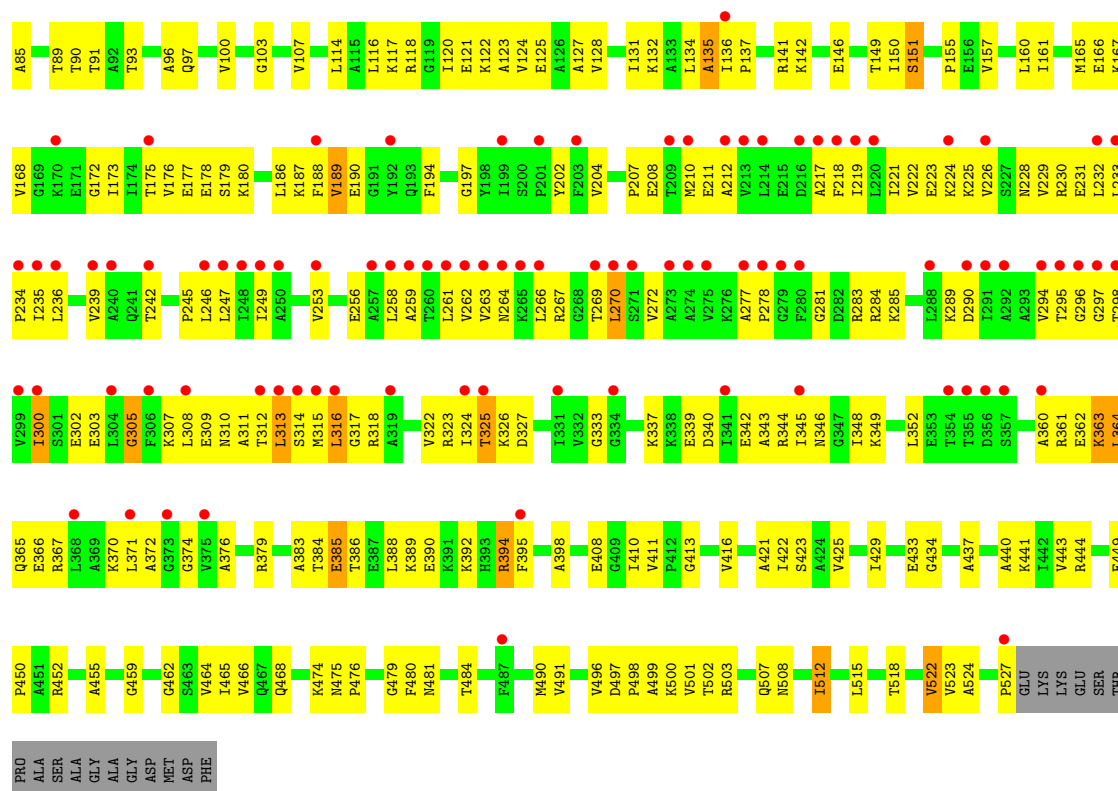


• Molecule 1: cpn60(GroEL)

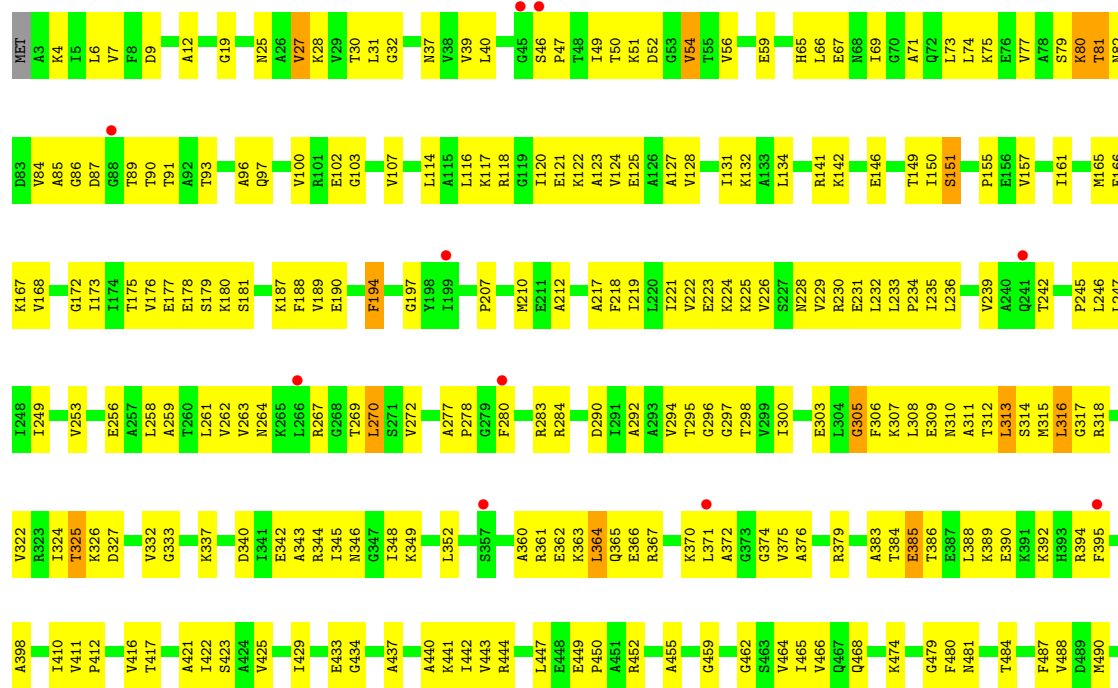


• Molecule 1: cpn60(GroEL)



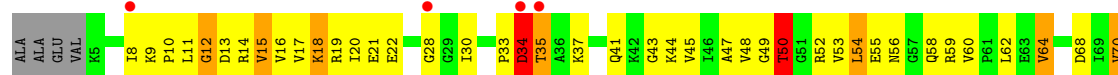


• Molecule 1: cpn60(GroEL)

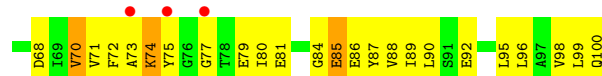




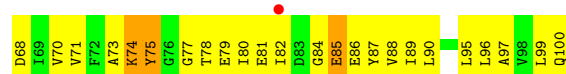
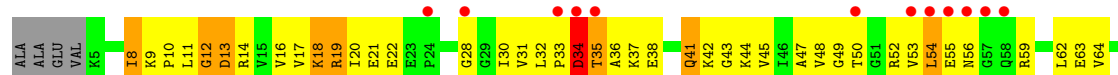
• Molecule 2: cpn10(GroES)



• Molecule 2: cpn10(GroES)



• Molecule 2: cpn10(GroES)

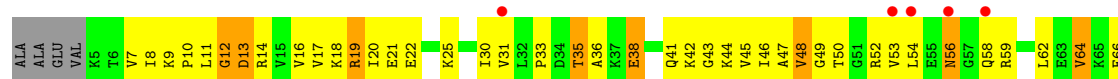


• Molecule 2: cpn10(GroES)

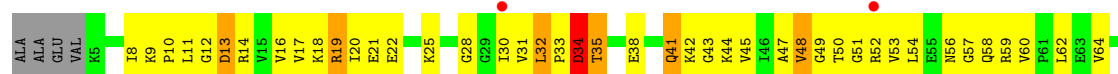


• Molecule 2: cpn10(GroES)

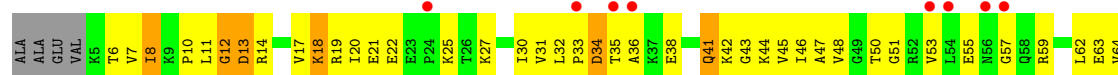




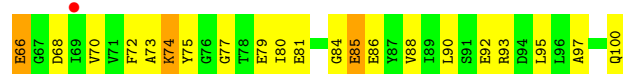
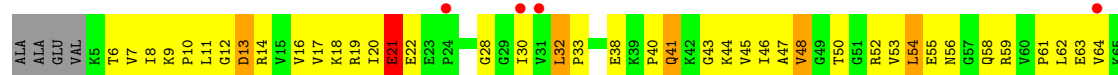
• Molecule 2: cpn10(GroES)



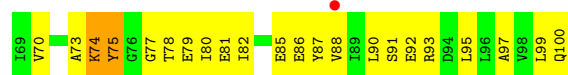
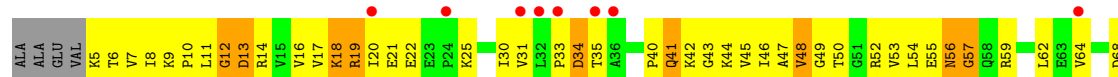
• Molecule 2: cpn10(GroES)



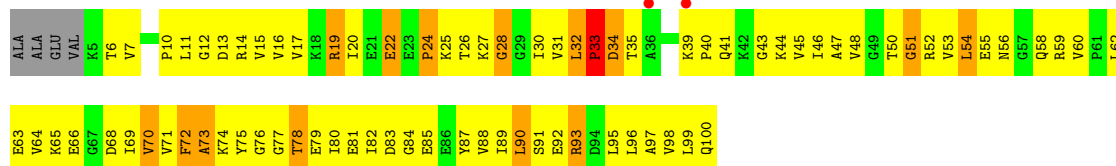
• Molecule 2: cpn10(GroES)



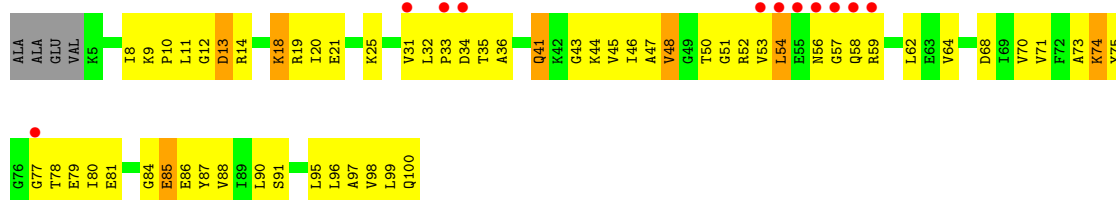
• Molecule 2: cpn10(GroES)



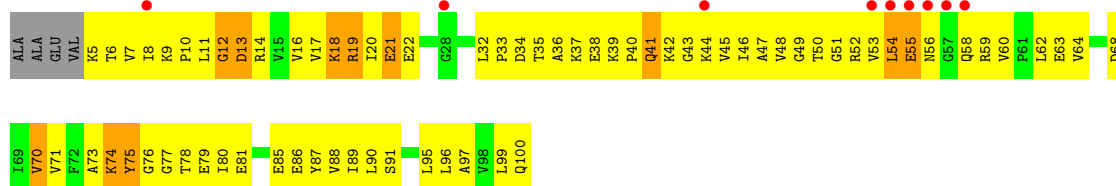
- Molecule 2: cpn10(GroES)



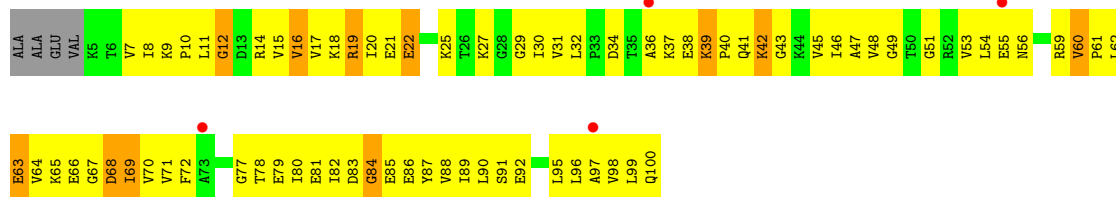
- Molecule 2: cpn10(GroES)



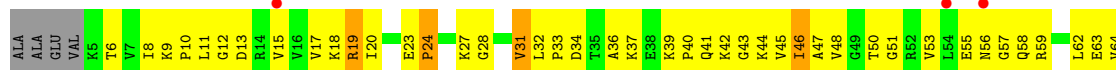
- Molecule 2: cpn10(GroES)



- Molecule 2: cpn10(GroES)



- Molecule 2: cpn10(GroES)



K65	E66	G67	D68	I69	Y70	V71	F72	A73	K74	Y75	T78	E79	I80	E81	I82	E85	E86	Y87	V88	I89	L90	S91	E92	R93	D94	L95	L96	A97	V98	L99	Q100
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------

4 Data and refinement statistics

Property	Value	Source
Space group	P 1	Depositor
Cell constants a, b, c, α , β , γ	140.38Å 156.42Å 273.15Å 82.88° 85.35° 68.52°	Depositor
Resolution (Å)	39.98 – 2.80 39.98 – 2.80	Depositor EDS
% Data completeness (in resolution range)	81.3 (39.98-2.80) 81.4 (39.98-2.80)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.35 (at 2.81Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.239 , 0.279 0.239 , 0.278	Depositor DCC
R_{free} test set	12690 reflections (2.95%)	wwPDB-VP
Wilson B-factor (Å ²)	55.6	Xtriage
Anisotropy	0.047	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.32 , 75.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	121267	wwPDB-VP
Average B, all atoms (Å ²)	79.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 4.53% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: ADP, DMS, MG

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	0.58	1/3989 (0.0%)	0.99	10/5383 (0.2%)
1	B	0.54	0/3989	0.98	10/5383 (0.2%)
1	C	0.56	0/3980	1.01	10/5372 (0.2%)
1	D	0.54	0/3980	0.99	13/5372 (0.2%)
1	E	0.55	0/3980	0.99	15/5372 (0.3%)
1	F	0.50	0/4007	0.95	9/5406 (0.2%)
1	G	0.51	0/3971	0.96	8/5360 (0.1%)
1	H	0.44	0/3980	0.94	13/5372 (0.2%)
1	I	0.47	0/3971	0.94	10/5360 (0.2%)
1	J	0.51	0/3971	0.97	11/5360 (0.2%)
1	K	0.49	0/3971	0.96	10/5360 (0.2%)
1	L	0.48	0/3980	0.94	11/5372 (0.2%)
1	M	0.49	0/3971	0.97	13/5360 (0.2%)
1	N	0.47	0/3980	0.97	13/5372 (0.2%)
1	a	0.49	0/3989	0.98	9/5383 (0.2%)
1	b	0.50	0/3980	0.98	9/5372 (0.2%)
1	c	0.47	0/3989	0.99	12/5383 (0.2%)
1	d	0.46	0/3989	0.96	10/5383 (0.2%)
1	e	0.44	0/3980	0.96	9/5372 (0.2%)
1	f	0.41	0/3989	0.94	8/5383 (0.1%)
1	g	0.52	1/3980 (0.0%)	0.95	13/5372 (0.2%)
1	h	0.49	0/3971	0.97	10/5360 (0.2%)
1	i	0.45	1/3971 (0.0%)	0.94	11/5360 (0.2%)
1	j	0.42	0/3971	0.95	11/5360 (0.2%)
1	k	0.41	0/3971	0.94	14/5360 (0.3%)
1	l	0.40	0/3971	0.93	11/5360 (0.2%)
1	m	0.43	1/3971 (0.0%)	0.95	11/5360 (0.2%)
1	n	0.41	0/3971	0.94	10/5360 (0.2%)
2	O	0.48	0/746	1.00	4/1003 (0.4%)
2	P	0.66	1/730 (0.1%)	1.12	6/982 (0.6%)
2	Q	0.48	0/746	0.99	4/1003 (0.4%)
2	R	0.49	0/746	1.07	4/1003 (0.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
2	S	0.47	0/746	1.07	5/1003 (0.5%)
2	T	0.45	0/746	1.00	2/1003 (0.2%)
2	U	0.50	0/746	1.04	2/1003 (0.2%)
2	o	0.53	0/746	1.06	4/1003 (0.4%)
2	p	0.45	0/746	1.06	3/1003 (0.3%)
2	q	0.47	0/746	0.98	0/1003
2	r	0.49	0/746	1.00	1/1003 (0.1%)
2	s	0.60	0/746	1.07	5/1003 (0.5%)
2	t	0.41	0/746	0.94	3/1003 (0.3%)
2	u	0.37	0/746	0.98	2/1003 (0.2%)
All	All	0.48	5/121841 (0.0%)	0.97	349/164393 (0.2%)

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	g	133	ALA	CA-CB	-17.13	1.24	1.53
1	m	394	ARG	CZ-NH2	-9.24	1.21	1.33
1	A	528	GLU	CA-C	6.71	1.61	1.52
1	i	352	LEU	CG-CD2	-5.85	1.33	1.52
2	P	40	PRO	C-O	-5.07	1.17	1.23

All (349) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	K	27	VAL	N-CA-C	9.38	119.35	110.53
1	m	81	THR	N-CA-C	-8.89	102.35	113.55
2	u	23	GLU	CA-C-N	8.88	130.94	119.84
2	u	23	GLU	C-N-CA	8.88	130.94	119.84
1	b	268	GLY	N-CA-C	-8.85	102.47	114.95
1	h	27	VAL	N-CA-C	8.76	118.76	110.53
1	I	81	THR	N-CA-C	-8.55	102.66	113.43
2	p	13	ASP	N-CA-CB	-8.48	105.62	114.10
1	J	27	VAL	N-CA-C	8.35	118.38	110.53
1	h	32	GLY	CA-C-N	8.33	128.06	119.56
1	h	32	GLY	C-N-CA	8.33	128.06	119.56
1	a	364	LEU	N-CA-C	-8.33	101.88	113.37
1	h	81	THR	N-CA-C	-8.22	103.08	113.43
1	i	27	VAL	N-CA-C	8.22	118.25	110.53
1	j	27	VAL	N-CA-C	8.20	118.24	110.53
2	P	41	GLN	N-CA-C	-8.20	102.58	112.59
1	N	27	VAL	N-CA-C	8.11	118.15	110.53
1	j	32	GLY	CA-C-N	8.08	127.80	119.56

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	j	32	GLY	C-N-CA	8.08	127.80	119.56
1	n	81	THR	N-CA-C	-8.07	103.26	113.43
1	n	27	VAL	N-CA-C	8.04	118.08	110.53
1	n	364	LEU	N-CA-C	-7.99	102.55	111.82
1	l	32	GLY	CA-C-N	7.99	127.71	119.56
1	l	32	GLY	C-N-CA	7.99	127.71	119.56
1	k	32	GLY	CA-C-N	7.99	127.71	119.56
1	k	32	GLY	C-N-CA	7.99	127.71	119.56
1	L	32	GLY	CA-C-N	7.96	127.68	119.56
1	L	32	GLY	C-N-CA	7.96	127.68	119.56
1	N	81	THR	N-CA-C	-7.96	103.40	113.43
1	H	32	GLY	CA-C-N	7.93	127.65	119.56
1	H	32	GLY	C-N-CA	7.93	127.65	119.56
1	N	32	GLY	CA-C-N	7.90	127.62	119.56
1	N	32	GLY	C-N-CA	7.90	127.62	119.56
1	k	81	THR	N-CA-C	-7.90	103.48	113.43
1	L	27	VAL	N-CA-C	7.89	117.95	110.53
1	C	304	LEU	N-CA-C	-7.89	103.47	113.72
1	I	27	VAL	N-CA-C	7.83	117.89	110.53
1	K	364	LEU	N-CA-C	-7.82	102.74	111.82
1	J	81	THR	N-CA-C	-7.79	103.61	113.43
1	D	268	GLY	N-CA-C	-7.75	104.39	114.85
1	M	81	THR	N-CA-C	-7.70	103.73	113.43
1	E	337	LYS	N-CA-C	7.67	122.53	110.17
1	B	268	GLY	N-CA-C	-7.66	104.51	114.85
1	M	27	VAL	N-CA-C	7.64	117.60	110.42
1	m	32	GLY	CA-C-N	7.63	127.35	119.56
1	m	32	GLY	C-N-CA	7.63	127.35	119.56
1	K	32	GLY	CA-C-N	7.62	127.33	119.56
1	K	32	GLY	C-N-CA	7.62	127.33	119.56
1	L	81	THR	N-CA-C	-7.62	103.95	113.55
1	c	294	VAL	N-CA-C	7.61	118.39	110.62
1	j	81	THR	N-CA-C	-7.60	103.97	113.55
1	m	27	VAL	N-CA-C	7.56	117.64	110.53
1	l	81	THR	N-CA-C	-7.54	103.93	113.43
1	M	32	GLY	CA-C-N	7.52	127.23	119.56
1	M	32	GLY	C-N-CA	7.52	127.23	119.56
1	K	81	THR	N-CA-C	-7.48	104.00	113.43
1	C	268	GLY	N-CA-C	-7.46	105.60	114.48
1	a	268	GLY	N-CA-C	-7.37	104.90	114.85
1	M	364	LEU	N-CA-C	-7.35	103.30	111.82
2	s	41	GLN	N-CA-C	-7.35	103.62	112.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	H	364	LEU	N-CA-C	-7.28	103.38	111.82
1	A	304	LEU	N-CA-C	-7.27	104.01	114.12
1	D	304	LEU	N-CA-C	-7.24	104.31	113.72
1	J	32	GLY	CA-C-N	7.24	126.94	119.56
1	J	32	GLY	C-N-CA	7.24	126.94	119.56
1	L	180	LYS	N-CA-C	-7.24	104.98	113.88
2	R	39	LYS	CA-C-N	7.23	127.27	119.89
2	R	39	LYS	C-N-CA	7.23	127.27	119.89
1	l	27	VAL	N-CA-C	7.21	117.31	110.53
1	H	27	VAL	N-CA-C	7.19	117.79	110.82
1	A	526	LYS	CA-C-N	7.09	127.49	119.83
1	A	526	LYS	C-N-CA	7.09	127.49	119.83
1	J	364	LEU	N-CA-C	-7.07	103.57	111.28
1	F	304	LEU	N-CA-C	-7.05	104.32	114.12
1	G	32	GLY	CA-C-N	7.04	126.65	119.19
1	G	32	GLY	C-N-CA	7.04	126.65	119.19
1	m	364	LEU	N-CA-C	-7.03	103.66	111.82
1	G	290	ASP	N-CA-C	-6.99	103.28	111.03
1	e	268	GLY	N-CA-C	-6.98	105.43	114.85
1	i	81	THR	N-CA-C	-6.97	104.64	113.43
1	L	364	LEU	N-CA-C	-6.96	103.75	111.82
1	H	81	THR	N-CA-C	-6.95	104.80	113.55
2	T	35	THR	N-CA-C	-6.89	105.42	114.31
1	b	221	ILE	N-CA-C	6.85	113.54	106.21
1	e	32	GLY	CA-C-N	6.83	126.43	119.19
1	e	32	GLY	C-N-CA	6.83	126.43	119.19
1	b	304	LEU	N-CA-C	-6.81	104.65	114.12
1	D	51	LYS	N-CA-C	-6.79	102.47	113.19
1	l	180	LYS	N-CA-C	-6.77	105.31	113.97
2	S	58	GLN	N-CA-C	6.76	119.76	108.20
1	N	82	ASN	N-CA-C	-6.75	103.98	111.82
1	d	268	GLY	N-CA-C	-6.73	105.77	114.85
1	I	364	LEU	N-CA-C	-6.72	103.98	111.71
1	n	32	GLY	CA-C-N	6.71	128.23	119.84
1	n	32	GLY	C-N-CA	6.71	128.23	119.84
1	b	51	LYS	N-CA-C	-6.67	102.49	113.50
1	J	82	ASN	N-CA-C	-6.65	104.10	111.82
1	i	180	LYS	N-CA-C	-6.60	105.52	113.97
1	k	27	VAL	N-CA-C	6.60	116.73	110.53
1	f	32	GLY	CA-C-N	6.58	126.17	119.19
1	f	32	GLY	C-N-CA	6.58	126.17	119.19
1	K	82	ASN	N-CA-C	-6.58	104.19	111.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	N	180	LYS	N-CA-C	-6.57	105.56	113.97
1	A	367	ARG	N-CA-C	-6.57	103.74	111.03
1	H	180	LYS	N-CA-C	-6.57	105.56	113.97
1	N	364	LEU	N-CA-C	-6.56	104.21	111.82
1	n	180	LYS	N-CA-C	-6.55	105.59	113.97
1	D	190	GLU	N-CA-C	6.53	124.71	110.80
1	K	180	LYS	N-CA-C	-6.53	105.61	113.97
1	e	367	ARG	N-CA-C	-6.53	102.82	111.24
1	H	82	ASN	N-CA-C	-6.52	104.25	111.82
1	E	205	THR	N-CA-C	-6.52	105.86	113.88
1	I	180	LYS	N-CA-C	-6.49	105.66	113.97
1	d	32	GLY	CA-C-N	6.49	126.07	119.19
1	d	32	GLY	C-N-CA	6.49	126.07	119.19
1	f	268	GLY	N-CA-C	-6.49	105.80	114.95
2	O	35	THR	N-CA-C	-6.47	106.01	114.04
1	h	180	LYS	N-CA-C	-6.47	105.69	113.97
1	B	285	LYS	N-CA-C	-6.46	104.16	111.14
1	f	304	LEU	N-CA-C	-6.46	105.14	114.12
1	b	367	ARG	N-CA-C	-6.45	102.92	111.24
1	E	313	LEU	N-CA-C	-6.42	105.42	113.20
1	j	180	LYS	N-CA-C	-6.42	105.75	113.97
1	m	385	GLU	N-CA-C	-6.42	104.70	112.54
1	k	180	LYS	N-CA-C	-6.42	105.75	113.97
1	k	385	GLU	N-CA-C	-6.42	104.71	112.54
1	I	385	GLU	N-CA-C	-6.41	104.72	112.54
2	P	21	GLU	N-CA-C	6.40	124.43	110.80
1	c	200	SER	CA-C-N	6.39	125.89	119.24
1	c	200	SER	C-N-CA	6.39	125.89	119.24
2	s	55	GLU	N-CA-C	-6.39	105.49	113.28
1	i	364	LEU	N-CA-C	-6.38	104.37	111.71
1	k	82	ASN	N-CA-C	-6.38	104.42	111.82
1	I	32	GLY	CA-C-N	6.36	127.79	119.84
1	I	32	GLY	C-N-CA	6.36	127.79	119.84
1	J	385	GLU	N-CA-C	-6.36	104.44	111.82
1	N	385	GLU	N-CA-C	-6.36	104.78	112.54
1	A	51	LYS	N-CA-C	-6.35	103.02	113.50
1	F	268	GLY	N-CA-C	-6.35	105.86	115.00
1	c	32	GLY	CA-C-N	6.35	126.26	119.28
1	c	32	GLY	C-N-CA	6.35	126.26	119.28
1	C	235	ILE	CB-CA-C	-6.34	103.71	112.02
1	a	51	LYS	N-CA-C	-6.33	103.18	113.19
2	o	41	GLN	N-CA-C	-6.33	104.87	112.59

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	a	304	LEU	N-CA-C	-6.32	105.50	113.72
1	G	367	ARG	N-CA-C	-6.29	104.05	111.03
1	e	51	LYS	N-CA-C	-6.25	103.31	113.19
1	h	296	GLY	N-CA-C	-6.25	105.73	115.67
1	L	385	GLU	N-CA-C	-6.25	104.92	112.54
1	M	385	GLU	N-CA-C	-6.23	104.59	111.82
1	B	367	ARG	N-CA-C	-6.23	104.12	111.03
1	i	32	GLY	CA-C-N	6.22	127.62	119.84
1	i	32	GLY	C-N-CA	6.22	127.62	119.84
1	g	51	LYS	N-CA-C	-6.22	103.36	113.19
1	J	180	LYS	N-CA-C	-6.22	106.01	113.97
1	n	385	GLU	N-CA-C	-6.21	104.96	112.54
2	R	41	GLN	N-CA-C	-6.21	105.02	112.59
1	g	337	LYS	N-CA-C	6.19	120.14	110.17
1	k	364	LEU	N-CA-C	-6.19	104.59	111.71
1	l	82	ASN	N-CA-C	-6.19	104.64	111.82
1	e	288	LEU	N-CA-C	-6.18	104.54	111.28
1	b	288	LEU	N-CA-C	-6.18	104.54	111.28
1	n	82	ASN	N-CA-C	-6.17	104.66	111.82
1	j	385	GLU	N-CA-C	-6.16	104.67	111.82
1	i	385	GLU	N-CA-C	-6.16	104.67	111.82
1	H	385	GLU	N-CA-C	-6.15	104.69	111.82
1	E	320	GLU	N-CA-C	-6.15	106.38	114.31
1	b	32	GLY	CA-C-N	6.14	125.70	119.19
1	b	32	GLY	C-N-CA	6.14	125.70	119.19
2	O	41	GLN	N-CA-C	-6.14	105.72	112.72
1	g	294	VAL	N-CA-C	6.13	116.88	110.62
1	H	51	LYS	N-CA-C	-6.13	103.38	113.50
1	m	180	LYS	N-CA-C	-6.12	106.13	113.97
1	B	51	LYS	N-CA-C	-6.11	103.53	113.19
2	s	75	TYR	N-CA-C	6.11	117.74	111.14
1	g	235	ILE	CB-CA-C	-6.08	104.05	112.02
1	h	82	ASN	N-CA-C	-6.08	104.76	111.82
1	f	51	LYS	N-CA-C	-6.08	103.47	113.50
1	M	180	LYS	N-CA-C	-6.06	106.21	113.97
1	f	367	ARG	N-CA-C	-6.06	104.01	111.40
2	P	70	VAL	N-CA-C	6.05	117.73	108.71
1	H	251	GLU	N-CA-C	-6.05	105.39	112.89
1	d	367	ARG	N-CA-C	-6.05	104.32	111.03
1	g	133	ALA	N-CA-C	6.04	123.66	110.80
1	d	304	LEU	N-CA-C	-6.04	106.24	113.97
1	A	32	GLY	CA-C-N	6.03	125.58	119.19

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	32	GLY	C-N-CA	6.03	125.58	119.19
1	E	51	LYS	N-CA-C	-6.01	103.69	113.19
1	h	385	GLU	N-CA-C	-6.01	104.85	111.82
1	I	383	ALA	N-CA-C	-6.01	107.77	114.62
1	K	383	ALA	N-CA-C	-5.99	107.79	114.62
1	g	367	ARG	N-CA-C	-5.99	104.32	111.69
1	E	344	ARG	N-CA-C	-5.98	105.07	112.90
1	L	383	ALA	N-CA-C	-5.97	107.81	114.62
1	i	82	ASN	N-CA-C	-5.97	104.89	111.82
1	j	82	ASN	N-CA-C	-5.97	104.89	111.82
2	P	13	ASP	N-CA-C	-5.97	105.31	112.59
2	p	41	GLN	N-CA-C	-5.97	105.92	112.72
2	P	50	THR	N-CA-C	5.96	119.37	111.75
1	l	383	ALA	N-CA-C	-5.95	107.84	114.62
1	c	320	GLU	N-CA-C	-5.94	105.77	114.39
1	l	408	GLU	N-CA-C	5.93	119.74	111.56
1	K	385	GLU	N-CA-C	-5.92	104.95	111.82
1	f	285	LYS	N-CA-C	-5.91	104.75	111.14
1	G	51	LYS	N-CA-C	-5.91	103.75	113.50
1	a	32	GLY	CA-C-N	5.90	125.44	119.19
1	a	32	GLY	C-N-CA	5.90	125.44	119.19
1	c	51	LYS	N-CA-C	-5.90	103.50	112.99
2	S	13	ASP	N-CA-CB	-5.88	105.28	114.45
2	o	22	GLU	N-CA-C	-5.86	101.80	110.48
1	L	82	ASN	N-CA-C	-5.85	105.03	111.82
1	k	191	GLY	N-CA-C	5.83	118.73	110.74
1	m	82	ASN	N-CA-C	-5.83	105.05	111.82
1	i	383	ALA	N-CA-C	-5.83	107.98	114.62
2	Q	75	TYR	N-CA-C	5.82	118.57	111.82
1	d	51	LYS	N-CA-C	-5.81	103.64	112.99
1	I	82	ASN	N-CA-C	-5.80	105.09	111.82
1	B	454	ILE	N-CA-C	-5.79	104.68	110.30
2	t	19	ARG	N-CA-C	5.79	117.80	110.33
1	J	328	GLU	N-CA-C	5.78	118.64	108.75
1	M	82	ASN	N-CA-C	-5.78	105.12	111.82
1	F	51	LYS	N-CA-C	-5.76	104.00	113.50
1	l	385	GLU	N-CA-C	-5.74	105.16	111.82
1	C	285	LYS	N-CA-C	-5.74	104.94	111.14
2	o	21	GLU	CB-CA-C	-5.74	100.95	109.90
1	M	383	ALA	N-CA-C	-5.73	108.09	114.62
2	T	41	GLN	N-CA-C	-5.72	105.88	112.92
1	N	383	ALA	N-CA-C	-5.70	108.13	114.62

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	290	ASP	N-CA-C	-5.69	104.77	110.97
1	n	383	ALA	N-CA-C	-5.68	108.14	114.62
1	D	235	ILE	CB-CA-C	-5.68	104.70	111.97
1	g	408	GLU	N-CA-C	5.68	120.32	113.17
1	g	133	ALA	CB-CA-C	-5.67	99.13	110.42
1	h	383	ALA	N-CA-C	-5.66	108.17	114.62
1	B	520	GLU	N-CA-C	-5.64	106.07	114.64
1	C	284	ARG	N-CA-C	-5.63	105.91	112.89
1	L	416	VAL	N-CA-C	5.63	117.04	110.62
1	B	32	GLY	CA-C-N	5.62	125.15	119.19
1	B	32	GLY	C-N-CA	5.62	125.15	119.19
2	U	75	TYR	N-CA-C	5.62	117.48	111.36
1	J	383	ALA	N-CA-C	-5.60	108.23	114.62
1	C	51	LYS	N-CA-C	-5.60	104.34	113.19
1	F	235	ILE	CB-CA-C	-5.59	104.75	112.24
1	e	304	LEU	N-CA-C	-5.58	106.36	114.12
1	H	383	ALA	N-CA-C	-5.58	108.25	114.62
2	S	64	VAL	N-CA-C	5.58	115.98	108.17
1	m	383	ALA	N-CA-C	-5.58	108.26	114.62
1	E	32	GLY	CA-C-N	5.57	124.92	118.85
1	E	32	GLY	C-N-CA	5.57	124.92	118.85
1	c	229	VAL	N-CA-C	5.54	115.74	110.53
2	o	48	VAL	N-CA-C	-5.54	104.01	110.05
1	e	364	LEU	N-CA-C	-5.53	106.85	113.21
1	g	313	LEU	N-CA-C	-5.53	106.38	113.01
1	M	135	ALA	N-CA-C	5.53	118.46	110.28
1	c	313	LEU	N-CA-C	-5.50	106.41	113.01
1	H	296	GLY	N-CA-C	-5.49	106.94	115.67
1	a	363	LYS	CB-CG-CD	-5.49	98.68	111.30
1	j	383	ALA	N-CA-C	-5.49	108.37	114.62
2	Q	13	ASP	N-CA-C	-5.48	104.85	112.30
1	E	526	LYS	CA-C-N	5.48	126.69	119.84
1	E	526	LYS	C-N-CA	5.48	126.69	119.84
1	d	204	VAL	N-CA-C	5.46	116.45	109.30
1	g	32	GLY	CA-C-N	5.46	124.98	119.19
1	g	32	GLY	C-N-CA	5.46	124.98	119.19
1	F	32	GLY	CA-C-N	5.45	125.28	119.28
1	F	32	GLY	C-N-CA	5.45	125.28	119.28
1	A	26	ALA	N-CA-C	-5.43	105.01	111.69
1	F	27	VAL	N-CA-C	5.43	115.52	110.42
1	k	383	ALA	N-CA-C	-5.42	108.44	114.62
1	K	251	GLU	N-CA-C	-5.42	105.93	112.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	229	VAL	N-CA-C	5.41	115.61	110.42
1	E	235	ILE	CB-CA-C	-5.38	104.79	112.22
1	G	140	ASP	N-CA-C	5.37	116.30	108.14
1	D	380	VAL	N-CA-C	5.37	116.01	109.30
1	c	454	ILE	N-CA-C	-5.36	105.10	110.30
1	M	416	VAL	N-CA-C	5.34	116.71	110.62
1	j	283	ARG	CG-CD-NE	5.34	123.75	112.00
1	a	272	VAL	N-CA-C	5.32	115.03	108.53
1	D	367	ARG	N-CA-C	-5.32	105.13	111.03
2	r	41	GLN	N-CA-C	-5.32	106.10	112.59
1	f	235	ILE	CB-CA-C	-5.31	104.89	112.22
1	D	489	ASP	N-CA-C	-5.30	99.88	108.41
1	d	27	VAL	N-CA-C	5.30	115.40	110.42
2	S	58	GLN	CA-CB-CG	5.30	124.69	114.10
1	C	26	ALA	N-CA-C	-5.29	105.18	111.69
2	s	70	VAL	N-CA-C	5.29	117.17	108.97
1	c	366	GLU	N-CA-C	-5.29	106.67	113.23
1	L	367	ARG	N-CA-C	-5.28	105.61	111.36
1	B	304	LEU	N-CA-C	-5.26	105.71	113.61
1	G	235	ILE	CB-CA-C	-5.26	105.12	112.02
1	N	195	ASP	N-CA-C	5.26	117.52	109.62
1	d	288	LEU	N-CA-C	-5.26	105.54	111.28
1	m	135	ALA	N-CA-C	5.26	118.06	110.28
1	g	229	VAL	N-CA-C	5.25	115.47	110.53
2	p	75	TYR	N-CA-C	5.24	117.07	111.36
1	F	192	TYR	N-CA-C	-5.24	102.00	110.32
1	k	284	ARG	N-CA-C	5.23	116.79	111.14
2	t	70	VAL	N-CA-C	5.23	117.31	109.20
1	J	512	ILE	CB-CA-C	-5.23	105.28	111.97
1	i	296	GLY	N-CA-C	-5.22	107.36	115.67
2	R	75	TYR	N-CA-C	5.22	117.05	111.36
2	O	64	VAL	N-CA-C	5.22	115.37	107.75
1	E	294	VAL	N-CA-C	5.22	115.99	110.72
2	O	70	VAL	N-CA-C	5.22	117.06	108.97
1	I	284	ARG	N-CA-C	5.21	116.77	111.14
1	k	135	ALA	N-CA-C	5.20	118.02	109.76
1	D	284	ARG	N-CA-C	-5.20	106.20	112.54
1	C	391	LYS	N-CA-C	-5.19	105.51	111.07
1	N	416	VAL	N-CA-C	5.19	116.54	110.62
1	H	60	VAL	N-CA-C	5.18	115.81	107.73
1	m	296	GLY	N-CA-C	-5.17	107.45	115.67
1	G	288	LEU	N-CA-C	-5.17	105.65	111.28

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	n	296	GLY	N-CA-C	-5.17	107.45	115.67
2	Q	35	THR	N-CA-C	-5.17	107.11	113.41
1	e	26	ALA	N-CA-C	-5.17	105.72	112.23
1	D	221	ILE	N-CA-C	5.16	114.04	106.55
1	i	251	GLU	N-CA-C	-5.16	106.25	112.54
1	E	44	PHE	N-CA-C	5.16	119.03	112.12
1	j	251	GLU	N-CA-C	-5.16	106.25	112.54
1	E	26	ALA	N-CA-C	-5.15	105.36	111.69
2	Q	41	GLN	N-CA-C	-5.15	106.31	112.59
1	M	408	GLU	N-CA-C	5.14	118.66	111.56
1	A	380	VAL	N-CA-C	5.14	115.72	109.30
2	s	39	LYS	N-CA-C	-5.14	103.30	109.83
1	k	251	GLU	N-CA-C	-5.14	106.28	112.54
1	j	296	GLY	N-CA-C	-5.13	107.51	115.67
1	F	290	ASP	N-CA-C	-5.13	105.58	111.07
1	l	135	ALA	N-CA-C	5.13	118.07	110.48
1	a	285	LYS	N-CA-C	-5.11	105.40	110.97
2	U	41	GLN	N-CA-C	-5.11	106.90	112.72
1	c	343	ALA	N-CA-C	-5.11	108.31	114.75
1	h	195	ASP	N-CA-C	5.09	117.26	109.62
2	S	35	THR	N-CA-C	-5.08	107.63	113.88
1	b	204	VAL	N-CA-C	5.08	115.96	109.30
2	t	42	LYS	N-CA-C	5.08	116.57	108.79
1	M	296	GLY	N-CA-C	-5.08	107.60	115.67
1	d	366	GLU	N-CA-C	-5.07	106.35	112.54
1	N	251	GLU	N-CA-C	-5.07	106.36	112.54
2	P	64	VAL	N-CA-C	5.07	115.20	108.11
1	C	244	LYS	CA-C-N	5.05	125.03	120.03
1	C	244	LYS	C-N-CA	5.05	125.03	120.03
1	A	222	VAL	N-CA-C	5.04	115.10	107.80
1	D	32	GLY	CA-C-N	5.02	124.52	119.19
1	D	32	GLY	C-N-CA	5.02	124.52	119.19
1	k	372	ALA	N-CA-C	-5.02	103.90	110.53
1	g	26	ALA	N-CA-C	-5.01	105.91	112.23
1	N	296	GLY	N-CA-C	-5.00	107.71	115.67
1	B	272	VAL	N-CA-C	5.00	114.64	108.53
1	l	28	LYS	N-CA-C	5.00	118.48	112.38

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3956	0	4129	247	0
1	B	3956	0	4129	248	0
1	C	3947	0	4116	255	1
1	D	3947	0	4116	273	0
1	E	3947	0	4116	299	3
1	F	3974	0	4148	254	0
1	G	3938	0	4110	233	0
1	H	3947	0	4116	268	0
1	I	3938	0	4110	258	0
1	J	3938	0	4110	279	0
1	K	3938	0	4110	268	1
1	L	3947	0	4116	327	1
1	M	3938	0	4110	387	0
1	N	3947	0	4116	309	4
1	a	3956	0	4129	293	0
1	b	3947	0	4116	274	0
1	c	3956	0	4129	324	0
1	d	3956	0	4129	264	4
1	e	3947	0	4116	262	0
1	f	3956	0	4129	248	0
1	g	3947	0	4116	289	4
1	h	3938	0	4110	276	0
1	i	3938	0	4110	281	0
1	j	3938	0	4110	273	0
1	k	3938	0	4110	279	0
1	l	3938	0	4110	303	0
1	m	3938	0	4110	304	0
1	n	3938	0	4110	266	0
2	O	739	0	786	108	0
2	P	723	0	766	107	0
2	Q	739	0	786	96	0
2	R	739	0	786	91	0
2	S	739	0	786	87	0
2	T	739	0	786	82	0
2	U	739	0	786	88	0
2	o	739	0	786	90	0
2	p	739	0	786	85	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	q	739	0	786	139	0
2	r	739	0	786	86	0
2	s	739	0	786	119	0
2	t	739	0	786	131	0
2	u	739	0	786	101	0
3	A	1	0	0	0	0
3	B	1	0	0	0	0
3	C	1	0	0	0	0
3	D	1	0	0	0	0
3	E	1	0	0	0	0
3	F	1	0	0	0	0
3	G	1	0	0	0	0
3	a	1	0	0	0	0
3	b	1	0	0	0	0
3	c	1	0	0	0	0
3	d	1	0	0	0	0
3	e	1	0	0	0	0
3	f	1	0	0	0	0
3	g	1	0	0	0	0
4	A	27	0	12	0	0
4	B	27	0	12	0	0
4	C	27	0	12	0	0
4	D	27	0	12	1	0
4	E	27	0	12	2	0
4	F	27	0	12	0	0
4	G	27	0	12	1	0
4	a	27	0	12	1	0
4	b	27	0	12	1	0
4	c	27	0	12	1	0
4	d	27	0	12	0	0
4	e	27	0	12	3	0
4	f	27	0	12	2	0
4	g	27	0	12	0	0
5	H	4	0	6	2	0
5	I	4	0	6	0	0
5	J	4	0	6	0	0
5	K	4	0	6	2	0
5	L	4	0	6	0	0
5	M	4	0	6	0	0
5	N	4	0	6	0	0
5	h	4	0	6	0	0
5	i	4	0	6	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	j	4	0	6	0	0
5	k	4	0	6	0	0
5	l	4	0	6	0	0
5	m	4	0	6	0	0
5	n	4	0	6	0	0
All	All	121267	0	126522	8582	9

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 35.

All (8582) 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:D:150:ILE:HD11	1:D:495:ILE:HA	1.22	1.21
1:d:3:ALA:HB1	1:d:529:LYS:NZ	1.56	1.21
1:k:283:ARG:NH2	1:k:367:ARG:HD3	1.56	1.20
1:k:283:ARG:HH21	1:k:367:ARG:CD	1.55	1.19
1:i:283:ARG:NH2	1:i:367:ARG:HD3	1.56	1.18
1:e:229:VAL:HG21	2:s:36:ALA:HB2	1.26	1.15
2:q:70:VAL:HG12	2:q:71:VAL:H	1.10	1.15
2:t:19:ARG:HD3	2:t:40:PRO:HG2	1.20	1.15
1:a:350:LYS:HB3	1:b:208:GLU:HG2	1.21	1.14
1:l:235:ILE:HD11	1:l:311:ALA:HB3	1.25	1.14
1:N:235:ILE:HD11	1:N:311:ALA:HB3	1.29	1.14
1:D:173:ILE:HD11	1:D:365:GLN:HG3	1.16	1.14
1:m:235:ILE:HD11	1:m:311:ALA:HB3	1.30	1.14
1:M:182:LEU:HD11	1:N:363:LYS:NZ	1.62	1.13
1:L:189:VAL:HG12	1:L:190:GLU:H	1.13	1.12
1:e:230:ARG:NH2	2:s:38:GLU:OE2	1.81	1.12
2:O:54:LEU:HD21	2:P:57:GLY:H	1.10	1.12
1:h:235:ILE:HD11	1:h:311:ALA:HB3	1.28	1.12
2:q:81:GLU:HG3	2:q:85:GLU:H	1.05	1.12
1:b:150:ILE:HD11	1:b:495:ILE:HA	1.26	1.12
1:E:150:ILE:HD11	1:E:495:ILE:HA	1.25	1.11
1:i:283:ARG:HH21	1:i:367:ARG:CD	1.61	1.11
2:p:100:GLN:HB3	2:q:7:VAL:HB	1.21	1.11
1:G:150:ILE:HD11	1:G:495:ILE:HA	1.30	1.11
1:L:235:ILE:HD11	1:L:311:ALA:HB3	1.33	1.11
1:l:182:LEU:HD11	1:m:363:LYS:NZ	1.65	1.11
1:J:325:THR:HG22	1:J:327:ASP:H	1.13	1.10
1:C:150:ILE:HD11	1:C:495:ILE:HA	1.19	1.10

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:235:ILE:HD11	1:K:311:ALA:HB3	1.30	1.10
1:L:243:GLY:HA2	1:M:228:ASN:CB	1.80	1.10
2:q:92:GLU:HA	2:q:95:LEU:HD12	1.13	1.10
1:H:325:THR:HG22	1:H:327:ASP:H	1.15	1.10
1:L:182:LEU:HD11	1:M:363:LYS:HZ3	1.09	1.09
1:l:243:GLY:HA2	1:m:228:ASN:HB2	1.15	1.09
1:d:150:ILE:HD11	1:d:495:ILE:HA	1.25	1.09
1:l:189:VAL:HG12	1:l:190:GLU:H	1.13	1.09
1:i:283:ARG:HH11	1:i:363:LYS:HE3	1.18	1.09
1:F:150:ILE:HD11	1:F:495:ILE:HA	1.23	1.09
1:n:235:ILE:HD11	1:n:311:ALA:HB3	1.26	1.08
1:B:150:ILE:HD11	1:B:495:ILE:HA	1.33	1.08
1:h:325:THR:HG22	1:h:327:ASP:H	1.18	1.08
1:A:150:ILE:HD11	1:A:495:ILE:HA	1.28	1.08
1:i:217:ALA:HB2	1:i:245:PRO:HG2	1.36	1.08
1:M:136:ILE:HB	1:M:410:ILE:HG13	1.34	1.07
1:a:150:ILE:HD11	1:a:495:ILE:HA	1.33	1.07
2:U:48:VAL:HG12	2:U:62:LEU:HD12	1.32	1.07
1:g:150:ILE:HD11	1:g:495:ILE:HA	1.36	1.07
1:k:235:ILE:HD11	1:k:311:ALA:HB3	1.31	1.07
1:e:256:GLU:HB3	2:s:35:THR:HB	1.32	1.07
1:f:283:ARG:HH12	1:f:363:LYS:HD2	1.08	1.06
1:H:217:ALA:HB2	1:H:245:PRO:HG2	1.37	1.06
1:M:189:VAL:HG12	1:M:190:GLU:H	0.95	1.06
1:i:325:THR:HG22	1:i:327:ASP:H	1.14	1.06
1:N:325:THR:HG22	1:N:327:ASP:H	1.18	1.06
1:e:150:ILE:HD11	1:e:495:ILE:HA	1.37	1.06
1:k:325:THR:HG22	1:k:327:ASP:H	1.19	1.06
1:I:235:ILE:HD11	1:I:311:ALA:HB3	1.31	1.05
1:N:189:VAL:HG11	1:N:333:GLY:HA2	1.36	1.05
1:c:150:ILE:HD11	1:c:495:ILE:HA	1.36	1.05
1:j:217:ALA:HB2	1:j:245:PRO:HG2	1.35	1.05
1:I:325:THR:HG22	1:I:327:ASP:H	1.17	1.05
1:A:168:VAL:HG12	1:A:172:GLY:HA3	1.39	1.04
2:P:48:VAL:HG12	2:P:62:LEU:HD12	1.39	1.04
1:G:168:VAL:HG12	1:G:172:GLY:HA3	1.40	1.04
2:O:48:VAL:HG12	2:O:62:LEU:HD12	1.32	1.04
1:B:229:VAL:HG21	2:P:36:ALA:HB2	1.39	1.04
1:L:325:THR:HG22	1:L:327:ASP:H	1.23	1.04
1:E:240:ALA:HA	1:E:270:LEU:HD13	1.39	1.04
1:l:182:LEU:CD1	1:m:363:LYS:HZ3	1.70	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:235:ILE:HD11	1:f:311:ALA:HB3	1.38	1.03
1:M:182:LEU:HD11	1:N:363:LYS:CE	1.87	1.03
1:j:325:THR:HG22	1:j:327:ASP:H	1.18	1.03
1:n:50:THR:HG22	1:n:52:ASP:H	1.21	1.03
1:L:217:ALA:HB2	1:L:245:PRO:HG2	1.38	1.03
1:L:243:GLY:HA2	1:M:228:ASN:HB2	1.04	1.03
1:D:168:VAL:HG12	1:D:172:GLY:HA3	1.41	1.03
1:H:235:ILE:HD11	1:H:311:ALA:HB3	1.35	1.03
1:a:350:LYS:HB3	1:b:208:GLU:CG	1.89	1.03
1:j:283:ARG:HG3	1:j:363:LYS:NZ	1.72	1.03
1:n:325:THR:HG22	1:n:327:ASP:H	1.18	1.03
1:B:251:GLU:HG3	1:B:284:ARG:HH12	1.21	1.02
1:a:237:GLU:HB3	2:o:28:GLY:HA3	1.39	1.02
1:d:3:ALA:HB1	1:d:529:LYS:HZ1	0.92	1.02
1:d:168:VAL:HG12	1:d:172:GLY:HA3	1.40	1.02
1:D:7:VAL:HG21	1:D:66:LEU:HD11	1.42	1.02
1:I:217:ALA:HB2	1:I:245:PRO:HG2	1.41	1.02
1:J:235:ILE:HD11	1:J:311:ALA:HB3	1.39	1.02
1:i:189:VAL:HG12	1:i:190:GLU:H	1.25	1.02
1:k:283:ARG:HH21	1:k:367:ARG:HD3	0.87	1.02
1:k:332:VAL:HG22	1:k:375:VAL:HG11	1.38	1.02
1:B:343:ALA:HB2	1:C:207:PRO:HB3	1.42	1.02
1:e:212:ALA:HB3	1:e:324:ILE:HB	1.41	1.02
1:g:283:ARG:NH1	1:g:363:LYS:HD2	1.73	1.02
1:j:283:ARG:NH1	1:j:363:LYS:HE3	1.75	1.02
1:l:243:GLY:CA	1:m:228:ASN:HB2	1.90	1.02
2:o:84:GLY:HA3	2:u:27:LYS:HD2	1.36	1.02
1:B:168:VAL:HG12	1:B:172:GLY:HA3	1.42	1.01
1:l:217:ALA:HB2	1:l:245:PRO:HG2	1.40	1.01
1:m:217:ALA:HB2	1:m:245:PRO:HG2	1.43	1.01
1:k:217:ALA:HB2	1:k:245:PRO:HG2	1.38	1.01
1:K:325:THR:HG22	1:K:327:ASP:H	1.17	1.01
1:f:150:ILE:HD11	1:f:495:ILE:HA	1.40	1.01
1:K:217:ALA:HB2	1:K:245:PRO:HG2	1.41	1.01
1:M:325:THR:HG22	1:M:327:ASP:H	1.23	1.01
1:N:217:ALA:HB2	1:N:245:PRO:HG2	1.42	1.01
1:G:50:THR:HG22	1:G:51:LYS:H	1.26	1.01
1:M:235:ILE:HD11	1:M:311:ALA:HB3	1.40	1.01
1:L:182:LEU:CD1	1:M:363:LYS:HZ3	1.74	1.00
1:f:168:VAL:HG12	1:f:172:GLY:HA3	1.43	1.00
1:f:235:ILE:HD11	1:f:311:ALA:CB	1.91	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:189:VAL:HG12	1:m:190:GLU:H	1.24	1.00
1:E:50:THR:HG22	1:E:52:ASP:H	1.26	1.00
2:O:15:VAL:HG21	2:O:95:LEU:HD11	1.43	1.00
2:O:70:VAL:HG11	2:O:95:LEU:HD22	1.40	1.00
1:b:212:ALA:HB3	1:b:324:ILE:HB	1.41	1.00
1:m:325:THR:HG22	1:m:327:ASP:H	1.23	1.00
1:f:283:ARG:NH1	1:f:363:LYS:HD2	1.76	0.99
1:b:168:VAL:HG12	1:b:172:GLY:HA3	1.44	0.99
1:K:189:VAL:HG12	1:K:190:GLU:H	1.26	0.99
1:g:352:LEU:HD13	1:g:364:LEU:HB2	1.45	0.99
1:c:168:VAL:HG12	1:c:172:GLY:HA3	1.41	0.99
1:I:50:THR:HG22	1:I:52:ASP:H	1.23	0.99
1:L:50:THR:HG22	1:L:52:ASP:H	1.27	0.99
2:p:12:GLY:O	2:p:13:ASP:HB3	1.62	0.99
1:F:168:VAL:HG12	1:F:172:GLY:HA3	1.44	0.98
1:n:189:VAL:HG11	1:n:333:GLY:HA2	1.42	0.98
1:M:189:VAL:CG1	1:M:190:GLU:H	1.72	0.98
1:e:168:VAL:HG12	1:e:172:GLY:HA3	1.42	0.98
1:f:7:VAL:HG21	1:f:66:LEU:HD11	1.42	0.98
1:i:283:ARG:HH21	1:i:367:ARG:HD3	0.84	0.98
1:h:283:ARG:NH2	1:h:367:ARG:HD3	1.78	0.98
1:l:325:THR:HG22	1:l:327:ASP:H	1.27	0.98
1:e:7:VAL:HG21	1:e:66:LEU:HD11	1.45	0.98
2:T:96:LEU:HA	2:U:14:ARG:HH11	1.29	0.98
1:i:235:ILE:HD11	1:i:311:ALA:HB3	1.46	0.98
1:M:323:ARG:NH2	1:M:392:LYS:HE2	1.79	0.97
1:E:352:LEU:HD13	1:E:364:LEU:HB2	1.44	0.97
1:j:50:THR:HG22	1:j:52:ASP:H	1.27	0.97
2:o:48:VAL:CG1	2:o:62:LEU:HD12	1.92	0.97
1:l:182:LEU:HD11	1:m:363:LYS:HZ3	1.18	0.97
1:M:182:LEU:CD1	1:N:363:LYS:HE2	1.94	0.97
1:C:168:VAL:HG12	1:C:172:GLY:HA3	1.43	0.97
1:l:50:THR:HG22	1:l:52:ASP:H	1.24	0.97
1:a:50:THR:HG22	1:a:51:LYS:H	1.29	0.97
1:f:50:THR:HG22	1:f:52:ASP:H	1.27	0.97
1:J:217:ALA:HB2	1:J:245:PRO:HG2	1.46	0.97
1:h:50:THR:HG22	1:h:52:ASP:H	1.29	0.96
1:h:283:ARG:HH21	1:h:367:ARG:HD3	1.28	0.96
1:M:178:GLU:N	1:M:321:ARG:NH1	2.13	0.96
1:m:50:THR:HG22	1:m:52:ASP:H	1.28	0.96
1:N:50:THR:HG22	1:N:52:ASP:H	1.29	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:50:THR:HG22	1:e:52:ASP:H	1.30	0.96
1:g:325:THR:HG22	1:g:326:LYS:H	1.30	0.96
1:M:217:ALA:HB2	1:M:245:PRO:HG2	1.43	0.96
1:d:3:ALA:CB	1:d:529:LYS:HZ1	1.77	0.96
1:g:50:THR:HG22	1:g:52:ASP:H	1.31	0.96
1:C:50:THR:HG22	1:C:51:LYS:H	1.31	0.96
1:M:189:VAL:HG12	1:M:190:GLU:N	1.80	0.96
1:H:189:VAL:HG11	1:H:333:GLY:HA2	1.47	0.95
1:L:182:LEU:HD11	1:M:363:LYS:NZ	1.80	0.95
1:b:50:THR:HG22	1:b:52:ASP:H	1.27	0.95
1:e:50:THR:HG22	1:e:51:LYS:H	1.31	0.95
2:r:54:LEU:HD21	2:s:55:GLU:HA	1.46	0.95
1:C:7:VAL:HG21	1:C:66:LEU:HD11	1.45	0.95
1:M:50:THR:HG22	1:M:52:ASP:H	1.29	0.95
1:h:217:ALA:HB2	1:h:245:PRO:HG2	1.48	0.95
1:k:283:ARG:HH11	1:k:363:LYS:HE3	1.29	0.95
2:o:54:LEU:HD13	2:p:55:GLU:O	1.66	0.95
1:N:526:LYS:HG3	1:N:527:PRO:HD2	1.48	0.95
1:D:50:THR:HG22	1:D:52:ASP:H	1.26	0.95
1:d:212:ALA:HB3	1:d:324:ILE:HB	1.49	0.95
1:n:217:ALA:HB2	1:n:245:PRO:HG2	1.45	0.95
2:r:70:VAL:HG11	2:r:95:LEU:HD22	1.47	0.95
2:Q:70:VAL:HG11	2:Q:95:LEU:HD22	1.46	0.95
1:L:410:ILE:HD12	1:L:496:VAL:HG11	1.47	0.95
1:M:176:VAL:O	1:M:323:ARG:NH1	1.98	0.95
1:b:50:THR:HG22	1:b:51:LYS:H	1.28	0.95
1:J:189:VAL:HG12	1:J:190:GLU:H	1.31	0.95
1:E:50:THR:HG22	1:E:51:LYS:H	1.31	0.94
1:E:298:THR:HG23	1:E:304:LEU:HD23	1.48	0.94
1:I:189:VAL:HG12	1:I:190:GLU:H	1.32	0.94
1:C:237:GLU:HB3	2:Q:28:GLY:HA3	1.48	0.94
1:d:50:THR:HG22	1:d:51:LYS:H	1.31	0.94
1:E:168:VAL:HG12	1:E:172:GLY:HA3	1.50	0.94
1:F:50:THR:HG22	1:F:51:LYS:H	1.31	0.94
1:H:189:VAL:HG12	1:H:190:GLU:H	1.30	0.94
2:P:15:VAL:HG21	2:P:95:LEU:HD11	1.46	0.94
1:c:240:ALA:HA	1:c:270:LEU:HD13	1.47	0.94
2:O:52:ARG:NH2	2:P:53:VAL:HB	1.81	0.94
1:a:168:VAL:HG12	1:a:172:GLY:HA3	1.47	0.94
1:g:50:THR:HG22	1:g:51:LYS:H	1.32	0.94
1:D:50:THR:HG22	1:D:51:LYS:H	1.29	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:50:THR:HG22	1:f:51:LYS:H	1.29	0.93
1:g:235:ILE:HG12	1:g:311:ALA:HB3	1.48	0.93
2:P:70:VAL:HG11	2:P:95:LEU:HD22	1.50	0.93
1:k:50:THR:HG22	1:k:52:ASP:H	1.29	0.93
2:R:70:VAL:HG11	2:R:95:LEU:HD22	1.46	0.93
1:d:7:VAL:HG21	1:d:66:LEU:HD11	1.47	0.93
1:A:50:THR:HG22	1:A:51:LYS:H	1.33	0.93
1:h:189:VAL:HG12	1:h:190:GLU:H	1.32	0.93
1:A:50:THR:HG22	1:A:52:ASP:H	1.29	0.93
1:d:283:ARG:NH1	1:d:363:LYS:HD3	1.82	0.93
2:q:13:ASP:HA	2:q:62:LEU:HD21	1.50	0.93
1:J:168:VAL:HG12	1:J:172:GLY:HA3	1.51	0.93
2:S:12:GLY:O	2:S:13:ASP:HB3	1.65	0.93
1:c:50:THR:HG22	1:c:51:LYS:H	1.33	0.93
2:o:48:VAL:HG12	2:o:62:LEU:HD12	1.47	0.93
2:t:69:ILE:HB	2:t:99:LEU:HB2	1.51	0.93
1:B:50:THR:HG22	1:B:52:ASP:H	1.34	0.92
1:g:168:VAL:HG12	1:g:172:GLY:HA3	1.48	0.92
1:l:270:LEU:HD22	1:l:272:VAL:HG13	1.49	0.92
1:J:50:THR:HG22	1:J:52:ASP:H	1.33	0.92
1:M:168:VAL:HG12	1:M:172:GLY:HA3	1.51	0.92
1:K:168:VAL:HG12	1:K:172:GLY:HA3	1.51	0.92
1:G:235:ILE:HD11	1:G:311:ALA:HB3	1.49	0.92
1:N:189:VAL:HG12	1:N:190:GLU:H	1.34	0.92
2:s:48:VAL:HG12	2:s:62:LEU:HD13	1.50	0.92
1:M:372:ALA:C	1:M:374:GLY:H	1.75	0.92
1:c:325:THR:HG22	1:c:326:LYS:H	1.35	0.92
1:j:283:ARG:HG3	1:j:363:LYS:HZ2	1.29	0.92
1:b:283:ARG:NH1	1:b:363:LYS:HD2	1.85	0.91
1:E:325:THR:HG22	1:E:326:LYS:H	1.32	0.91
1:m:498:PRO:HB2	1:m:501:VAL:HG23	1.51	0.91
1:C:251:GLU:HG3	1:C:284:ARG:HH12	1.33	0.91
1:E:227:SER:HB3	1:E:254:GLU:HG3	1.50	0.91
2:T:70:VAL:HG11	2:T:95:LEU:HD22	1.52	0.91
1:d:235:ILE:HG21	1:d:311:ALA:HB3	1.51	0.91
1:i:50:THR:HG22	1:i:52:ASP:H	1.33	0.91
1:F:212:ALA:HB3	1:F:324:ILE:HB	1.52	0.91
1:l:234:PRO:HG3	1:l:309:GLU:HA	1.53	0.91
1:D:173:ILE:CD1	1:D:365:GLN:HG3	2.01	0.91
1:l:180:LYS:O	1:m:281:GLY:HA3	1.71	0.91
1:K:498:PRO:HB2	1:K:501:VAL:HG23	1.52	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:46:SER:HB2	1:N:47:PRO:HD2	1.53	0.90
1:c:312:THR:HB	1:c:315:MET:HG2	1.50	0.90
1:k:168:VAL:HG12	1:k:172:GLY:HA3	1.53	0.90
1:a:212:ALA:HB3	1:a:324:ILE:HB	1.53	0.90
2:t:81:GLU:HA	2:t:85:GLU:O	1.70	0.90
1:I:50:THR:HG22	1:I:51:LYS:H	1.36	0.90
1:M:384:THR:HA	1:N:280:PHE:CE1	2.06	0.90
1:N:526:LYS:CG	1:N:527:PRO:HD2	2.01	0.90
1:l:168:VAL:HG12	1:l:172:GLY:HA3	1.53	0.90
1:l:498:PRO:HB2	1:l:501:VAL:HG23	1.50	0.90
1:J:40:LEU:HD23	1:J:59:GLU:HG3	1.53	0.90
1:j:270:LEU:HD22	1:j:272:VAL:HG13	1.51	0.90
2:t:20:ILE:HD12	2:t:42:LYS:HG3	1.54	0.90
1:H:50:THR:HG22	1:H:52:ASP:H	1.37	0.90
1:h:498:PRO:HB2	1:h:501:VAL:HG23	1.54	0.90
1:I:168:VAL:HG12	1:I:172:GLY:HA3	1.53	0.90
1:J:46:SER:HB2	1:J:47:PRO:HD2	1.54	0.90
1:h:46:SER:HB2	1:h:47:PRO:HD2	1.54	0.90
1:m:168:VAL:HG12	1:m:172:GLY:HA3	1.53	0.90
1:b:219:ILE:HD13	1:b:295:THR:HG21	1.54	0.89
1:G:50:THR:HG22	1:G:52:ASP:H	1.36	0.89
1:M:182:LEU:CD1	1:N:363:LYS:CE	2.51	0.89
1:j:50:THR:HG22	1:j:51:LYS:H	1.35	0.89
1:L:180:LYS:CB	1:M:281:GLY:HA2	2.03	0.89
1:D:173:ILE:HD11	1:D:365:GLN:CG	2.02	0.89
1:L:168:VAL:HG12	1:L:172:GLY:HA3	1.54	0.89
1:i:50:THR:HG22	1:i:51:LYS:H	1.37	0.89
2:p:79:GLU:O	2:p:80:ILE:HG13	1.73	0.89
1:D:212:ALA:HB3	1:D:324:ILE:HB	1.53	0.89
1:H:168:VAL:HG12	1:H:172:GLY:HA3	1.53	0.89
2:O:48:VAL:CG1	2:O:62:LEU:HD12	2.03	0.89
1:j:168:VAL:HG12	1:j:172:GLY:HA3	1.55	0.89
2:p:100:GLN:HB3	2:q:7:VAL:CB	2.02	0.89
1:a:350:LYS:CB	1:b:208:GLU:HG2	2.02	0.89
1:c:227:SER:HB3	1:c:254:GLU:HG3	1.55	0.89
1:n:189:VAL:HG12	1:n:190:GLU:H	1.34	0.89
1:J:490:MET:HA	1:J:490:MET:HE2	1.55	0.89
1:M:410:ILE:HD12	1:M:496:VAL:HG11	1.52	0.89
1:l:243:GLY:HA2	1:m:228:ASN:CB	2.03	0.89
2:u:74:LYS:HD2	2:u:75:TYR:N	1.88	0.89
2:P:41:GLN:OE1	2:Q:80:ILE:HG12	1.73	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:270:LEU:HD22	1:k:272:VAL:HG13	1.52	0.89
1:F:7:VAL:HG21	1:F:66:LEU:HD11	1.53	0.88
1:g:283:ARG:HH12	1:g:363:LYS:HD2	1.37	0.88
1:h:168:VAL:HG12	1:h:172:GLY:HA3	1.53	0.88
1:n:50:THR:HG22	1:n:51:LYS:H	1.36	0.88
2:s:5:LYS:HG2	2:s:6:THR:H	1.38	0.88
1:B:50:THR:HG22	1:B:51:LYS:H	1.38	0.88
1:h:410:ILE:HD12	1:h:496:VAL:HG11	1.55	0.88
1:M:136:ILE:HB	1:M:410:ILE:CG1	2.02	0.88
2:O:54:LEU:HD21	2:P:57:GLY:N	1.87	0.88
1:a:7:VAL:HG21	1:a:66:LEU:HD11	1.54	0.88
2:q:20:ILE:HG13	2:q:43:GLY:HA2	1.53	0.88
1:B:511:SER:O	1:B:515:LEU:HD23	1.73	0.88
2:r:13:ASP:HA	2:r:62:LEU:HD21	1.54	0.88
1:I:385:GLU:HB2	1:J:280:PHE:CD2	2.07	0.88
1:N:283:ARG:NH1	1:N:363:LYS:HE3	1.89	0.88
1:k:179:SER:HB2	1:k:379:ARG:HB3	1.56	0.88
1:l:182:LEU:CD1	1:m:363:LYS:NZ	2.31	0.88
1:K:235:ILE:CD1	1:K:311:ALA:HB3	2.02	0.88
1:L:189:VAL:HG12	1:L:190:GLU:N	1.89	0.88
1:N:50:THR:HG22	1:N:51:LYS:H	1.38	0.88
1:a:235:ILE:HG21	1:a:311:ALA:HB3	1.55	0.88
2:p:13:ASP:HA	2:p:62:LEU:HD21	1.54	0.88
1:J:189:VAL:HG11	1:J:333:GLY:HA2	1.56	0.88
1:K:234:PRO:HG3	1:K:309:GLU:HA	1.56	0.88
1:N:410:ILE:HD12	1:N:496:VAL:HG11	1.56	0.88
1:n:46:SER:HB2	1:n:47:PRO:HD2	1.55	0.88
1:H:498:PRO:HB2	1:H:501:VAL:HG23	1.55	0.88
2:S:13:ASP:HA	2:S:62:LEU:HD21	1.55	0.88
1:E:209:THR:HG22	1:E:211:GLU:HG3	1.55	0.88
1:L:40:LEU:HD23	1:L:59:GLU:HG3	1.54	0.88
2:s:70:VAL:HG11	2:s:95:LEU:HD22	1.54	0.88
1:A:246:LEU:HB3	1:A:272:VAL:HG12	1.56	0.88
1:I:345:ILE:O	1:I:348:ILE:HG22	1.74	0.88
1:l:46:SER:HB2	1:l:47:PRO:HD2	1.56	0.88
2:u:15:VAL:HG11	2:u:95:LEU:HD22	1.56	0.88
1:M:182:LEU:HD11	1:N:363:LYS:HE2	1.51	0.87
1:h:189:VAL:HG11	1:h:333:GLY:HA2	1.53	0.87
1:l:179:SER:HB2	1:l:379:ARG:HB3	1.56	0.87
2:U:48:VAL:CG1	2:U:62:LEU:HD12	2.04	0.87
1:n:410:ILE:HD12	1:n:496:VAL:HG11	1.56	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:7:VAL:HG21	1:A:66:LEU:HD11	1.56	0.87
1:i:267:ARG:O	1:j:256:GLU:HG3	1.75	0.87
1:n:168:VAL:HG12	1:n:172:GLY:HA3	1.54	0.87
1:i:168:VAL:HG12	1:i:172:GLY:HA3	1.57	0.87
1:j:283:ARG:HH11	1:j:363:LYS:HE3	1.36	0.87
1:N:168:VAL:HG12	1:N:172:GLY:HA3	1.54	0.87
2:Q:32:LEU:HG	2:Q:33:PRO:HD2	1.56	0.87
1:b:7:VAL:HG21	1:b:66:LEU:HD11	1.56	0.87
1:a:50:THR:HG22	1:a:52:ASP:H	1.36	0.87
1:k:46:SER:HB2	1:k:47:PRO:HD2	1.55	0.87
1:G:235:ILE:HD11	1:G:311:ALA:CB	2.04	0.87
1:l:59:GLU:O	1:m:4:LYS:HG3	1.75	0.87
1:J:498:PRO:HB2	1:J:501:VAL:HG23	1.57	0.87
1:K:50:THR:HG22	1:K:51:LYS:H	1.40	0.87
1:j:189:VAL:HG11	1:j:333:GLY:HA2	1.55	0.87
1:n:149:THR:HG23	1:n:155:PRO:HA	1.56	0.87
1:c:7:VAL:HG21	1:c:66:LEU:HD11	1.57	0.87
1:i:234:PRO:HG3	1:i:309:GLU:HA	1.57	0.87
1:l:50:THR:HG22	1:l:51:LYS:H	1.38	0.87
1:n:345:ILE:O	1:n:348:ILE:HG22	1.74	0.87
2:q:81:GLU:CG	2:q:85:GLU:H	1.88	0.87
1:e:246:LEU:HB3	1:e:272:VAL:HG12	1.57	0.86
1:g:7:VAL:HG21	1:g:66:LEU:HD11	1.55	0.86
1:J:345:ILE:O	1:J:348:ILE:HG22	1.75	0.86
1:I:234:PRO:HG3	1:I:309:GLU:HA	1.58	0.86
1:a:237:GLU:CB	2:o:28:GLY:HA3	2.04	0.86
2:p:100:GLN:CB	2:q:7:VAL:HB	2.06	0.86
2:t:17:VAL:HG22	2:t:45:VAL:HA	1.57	0.86
1:M:179:SER:HB2	1:M:379:ARG:HB3	1.57	0.86
1:N:498:PRO:HB2	1:N:501:VAL:HG23	1.57	0.86
1:f:246:LEU:HB3	1:f:272:VAL:HG12	1.55	0.86
2:o:13:ASP:HB2	2:o:62:LEU:HD21	1.57	0.86
1:B:7:VAL:HG21	1:B:66:LEU:HD11	1.56	0.86
1:K:46:SER:HB2	1:K:47:PRO:HD2	1.55	0.86
1:L:50:THR:HG22	1:L:51:LYS:H	1.39	0.86
1:l:410:ILE:HD12	1:l:496:VAL:HG11	1.57	0.86
1:M:323:ARG:NH1	1:M:392:LYS:NZ	2.24	0.86
1:d:173:ILE:HD12	1:d:366:GLU:HA	1.54	0.86
2:Q:55:GLU:HG3	2:R:55:GLU:HG2	1.58	0.86
1:M:182:LEU:CD1	1:N:363:LYS:NZ	2.39	0.86
1:j:46:SER:HB2	1:j:47:PRO:HD2	1.56	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:50:THR:HG22	1:C:52:ASP:H	1.40	0.86
1:I:270:LEU:HD22	1:I:272:VAL:HG13	1.55	0.86
1:L:149:THR:HG23	1:L:155:PRO:HA	1.58	0.86
1:j:283:ARG:HH21	1:j:367:ARG:HD3	1.39	0.86
1:n:179:SER:HB2	1:n:379:ARG:HB3	1.57	0.86
2:q:70:VAL:HG12	2:q:71:VAL:N	1.90	0.86
2:O:54:LEU:CD2	2:P:57:GLY:H	1.87	0.85
2:U:70:VAL:HG11	2:U:95:LEU:HD22	1.56	0.85
1:m:179:SER:HB2	1:m:379:ARG:HB3	1.58	0.85
1:m:410:ILE:HD12	1:m:496:VAL:HG11	1.56	0.85
1:L:498:PRO:HB2	1:L:501:VAL:HG23	1.58	0.85
1:i:46:SER:HB2	1:i:47:PRO:HD2	1.58	0.85
1:E:224:LYS:HE2	1:E:301:SER:HA	1.56	0.85
1:H:179:SER:HB2	1:H:379:ARG:HB3	1.58	0.85
1:g:201:PRO:O	1:g:204:VAL:HG22	1.77	0.85
1:i:345:ILE:O	1:i:348:ILE:HG22	1.76	0.85
1:k:40:LEU:HD23	1:k:59:GLU:HG3	1.57	0.85
1:j:189:VAL:HG12	1:j:190:GLU:H	1.39	0.85
1:E:235:ILE:HG12	1:E:311:ALA:HB3	1.58	0.85
1:I:410:ILE:HD12	1:I:496:VAL:HG11	1.56	0.85
1:K:50:THR:HG22	1:K:52:ASP:H	1.39	0.85
2:S:70:VAL:HG11	2:S:95:LEU:HD22	1.56	0.85
1:e:289:LYS:HE3	1:f:202:TYR:OH	1.76	0.85
1:f:212:ALA:HB3	1:f:324:ILE:HB	1.57	0.85
1:M:323:ARG:HH22	1:M:392:LYS:HE2	1.40	0.85
1:c:214:LEU:HB3	1:c:245:PRO:HB3	1.58	0.85
1:h:179:SER:HB2	1:h:379:ARG:HB3	1.59	0.85
1:N:235:ILE:CD1	1:N:311:ALA:HB3	2.06	0.85
1:h:270:LEU:HD22	1:h:272:VAL:HG13	1.56	0.85
2:q:81:GLU:HG3	2:q:85:GLU:N	1.91	0.85
1:I:46:SER:HB2	1:I:47:PRO:HD2	1.57	0.85
1:I:498:PRO:HB2	1:I:501:VAL:HG23	1.58	0.85
1:j:149:THR:HG23	1:j:155:PRO:HA	1.57	0.85
1:H:410:ILE:HD12	1:H:496:VAL:HG11	1.56	0.85
1:M:270:LEU:HD22	1:M:272:VAL:HG13	1.56	0.85
1:h:50:THR:HG22	1:h:51:LYS:H	1.41	0.85
1:l:40:LEU:HD23	1:l:59:GLU:HG3	1.59	0.85
2:q:54:LEU:HD12	2:q:55:GLU:H	1.40	0.85
1:e:229:VAL:HG11	2:s:32:LEU:HD22	1.55	0.84
1:k:149:THR:HG23	1:k:155:PRO:HA	1.59	0.84
1:M:50:THR:HG22	1:M:51:LYS:H	1.40	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:332:VAL:HG22	1:j:375:VAL:HG11	1.59	0.84
1:m:40:LEU:HD23	1:m:59:GLU:HG3	1.58	0.84
1:L:235:ILE:CD1	1:L:311:ALA:HB3	2.08	0.84
2:U:13:ASP:HB2	2:U:62:LEU:HD21	1.58	0.84
1:k:235:ILE:CD1	1:k:311:ALA:HB3	2.07	0.84
1:K:149:THR:HG23	1:K:155:PRO:HA	1.59	0.84
1:N:40:LEU:HD23	1:N:59:GLU:HG3	1.58	0.84
1:a:218:PHE:HB3	1:a:316:LEU:HD13	1.59	0.84
1:j:77:VAL:HG13	1:j:80:LYS:HE2	1.59	0.84
1:m:235:ILE:CD1	1:m:311:ALA:HB3	2.05	0.84
1:g:117:LYS:HG3	1:g:514:ALA:HB1	1.60	0.84
1:L:85:ALA:HB1	1:L:501:VAL:HG22	1.60	0.84
1:M:182:LEU:HD11	1:N:363:LYS:HZ1	1.37	0.84
1:g:209:THR:HG22	1:g:211:GLU:HG3	1.60	0.84
1:g:224:LYS:HE2	1:g:301:SER:HA	1.57	0.84
1:h:40:LEU:HD23	1:h:59:GLU:HG3	1.59	0.84
1:K:179:SER:HB2	1:K:379:ARG:HB3	1.58	0.84
1:L:268:GLY:O	1:M:256:GLU:HG3	1.78	0.84
1:N:179:SER:HB2	1:N:379:ARG:HB3	1.60	0.84
1:j:283:ARG:NH2	1:j:367:ARG:HD3	1.93	0.84
1:m:46:SER:HB2	1:m:47:PRO:HD2	1.58	0.84
1:n:498:PRO:HB2	1:n:501:VAL:HG23	1.57	0.84
1:L:182:LEU:CD1	1:M:363:LYS:NZ	2.38	0.84
1:M:40:LEU:HD23	1:M:59:GLU:HG3	1.60	0.84
1:i:179:SER:HB2	1:i:379:ARG:HB3	1.59	0.84
1:I:235:ILE:CD1	1:I:311:ALA:HB3	2.08	0.84
1:M:323:ARG:CZ	1:M:392:LYS:HE2	2.07	0.84
1:a:117:LYS:HG3	1:a:514:ALA:HB1	1.59	0.84
1:i:270:LEU:HD22	1:i:272:VAL:HG13	1.57	0.84
1:l:149:THR:HG23	1:l:155:PRO:HA	1.58	0.84
1:l:345:ILE:O	1:l:348:ILE:HG22	1.77	0.84
1:n:270:LEU:HD22	1:n:272:VAL:HG13	1.57	0.84
1:G:117:LYS:HG3	1:G:514:ALA:HB1	1.60	0.84
1:H:270:LEU:HD22	1:H:272:VAL:HG13	1.60	0.84
1:I:189:VAL:HG11	1:I:333:GLY:HA2	1.58	0.84
1:J:235:ILE:CD1	1:J:311:ALA:HB3	2.08	0.84
1:M:46:SER:HB2	1:M:47:PRO:HD2	1.59	0.84
1:N:149:THR:HG23	1:N:155:PRO:HA	1.60	0.83
2:P:21:GLU:O	2:P:22:GLU:O	1.95	0.83
1:k:345:ILE:O	1:k:348:ILE:HG22	1.78	0.83
2:r:79:GLU:O	2:r:80:ILE:HG13	1.76	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:74:LEU:HD21	1:N:93:THR:HG23	1.60	0.83
1:c:50:THR:HG22	1:c:52:ASP:H	1.41	0.83
1:e:229:VAL:CG2	2:s:36:ALA:HB2	2.08	0.83
1:j:40:LEU:HD23	1:j:59:GLU:HG3	1.60	0.83
1:j:235:ILE:HD11	1:j:311:ALA:HB3	1.58	0.83
2:q:90:LEU:HD23	2:q:90:LEU:H	1.39	0.83
1:G:7:VAL:HG21	1:G:66:LEU:HD11	1.60	0.83
1:b:325:THR:HG22	1:b:326:LYS:H	1.41	0.83
1:j:179:SER:HB2	1:j:379:ARG:HB3	1.58	0.83
1:j:498:PRO:HB2	1:j:501:VAL:HG23	1.59	0.83
2:s:96:LEU:CD2	2:t:14:ARG:HH12	1.91	0.83
1:J:149:THR:HG23	1:J:155:PRO:HA	1.58	0.83
1:M:149:THR:HG23	1:M:155:PRO:HA	1.60	0.83
1:a:511:SER:O	1:a:515:LEU:HD23	1.78	0.83
1:h:149:THR:HG23	1:h:155:PRO:HA	1.59	0.83
1:l:235:ILE:CD1	1:l:311:ALA:HB3	2.07	0.83
1:J:50:THR:HG22	1:J:51:LYS:H	1.44	0.83
1:d:246:LEU:HB3	1:d:272:VAL:HG12	1.59	0.83
1:B:117:LYS:HG3	1:B:514:ALA:HB1	1.59	0.83
1:M:178:GLU:C	1:M:321:ARG:HH12	1.85	0.83
1:j:410:ILE:HD12	1:j:496:VAL:HG11	1.60	0.83
1:k:498:PRO:HB2	1:k:501:VAL:HG23	1.59	0.83
1:L:243:GLY:CA	1:M:228:ASN:HB2	1.99	0.83
1:K:345:ILE:O	1:K:348:ILE:HG22	1.79	0.83
1:L:270:LEU:HD22	1:L:272:VAL:HG13	1.60	0.83
1:k:234:PRO:HG3	1:k:309:GLU:HA	1.59	0.83
1:k:410:ILE:HD12	1:k:496:VAL:HG11	1.59	0.83
1:B:228:ASN:HD22	1:B:231:GLU:HG3	1.43	0.83
1:m:149:THR:HG23	1:m:155:PRO:HA	1.59	0.83
1:H:40:LEU:HD23	1:H:59:GLU:HG3	1.59	0.83
1:m:50:THR:HG22	1:m:51:LYS:H	1.42	0.83
1:m:345:ILE:O	1:m:348:ILE:HG22	1.78	0.83
1:C:117:LYS:HG3	1:C:514:ALA:HB1	1.61	0.82
1:J:410:ILE:HD12	1:J:496:VAL:HG11	1.61	0.82
1:K:410:ILE:HD12	1:K:496:VAL:HG11	1.61	0.82
1:g:240:ALA:HA	1:g:270:LEU:HD13	1.61	0.82
1:m:270:LEU:HD22	1:m:272:VAL:HG13	1.58	0.82
1:i:498:PRO:HB2	1:i:501:VAL:HG23	1.59	0.82
1:L:179:SER:HB2	1:L:379:ARG:HB3	1.57	0.82
1:L:180:LYS:HB2	1:M:281:GLY:HA2	1.60	0.82
1:M:178:GLU:O	1:M:321:ARG:NH2	2.12	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:246:LEU:HB3	1:b:272:VAL:HG12	1.59	0.82
1:c:218:PHE:CE1	1:c:244:LYS:HD2	2.14	0.82
1:f:259:ALA:O	1:f:263:VAL:HG23	1.78	0.82
1:E:144:ILE:HD12	1:E:165:MET:HG2	1.62	0.82
1:L:37:ASN:OD1	1:M:515:LEU:HD12	1.78	0.82
2:r:100:GLN:HB3	2:s:7:VAL:HB	1.62	0.82
1:J:179:SER:HB2	1:J:379:ARG:HB3	1.61	0.82
1:L:46:SER:HB2	1:L:47:PRO:HD2	1.61	0.82
1:L:59:GLU:O	1:M:4:LYS:HG3	1.79	0.82
1:M:234:PRO:HG3	1:M:309:GLU:HA	1.59	0.82
1:f:117:LYS:HG3	1:f:514:ALA:HB1	1.61	0.82
1:J:234:PRO:HG3	1:J:309:GLU:HA	1.61	0.82
1:H:149:THR:HG23	1:H:155:PRO:HA	1.62	0.82
1:I:179:SER:HB2	1:I:379:ARG:HB3	1.60	0.82
1:c:312:THR:HG22	1:c:314:SER:H	1.42	0.82
1:A:66:LEU:HD22	1:A:522:VAL:HG11	1.61	0.82
1:I:149:THR:HG23	1:I:155:PRO:HA	1.59	0.82
1:a:246:LEU:HB3	1:a:272:VAL:HG12	1.60	0.82
1:a:283:ARG:NH1	1:a:363:LYS:HD2	1.94	0.82
1:m:234:PRO:HG3	1:m:309:GLU:HA	1.60	0.82
1:H:74:LEU:HD21	1:H:93:THR:HG23	1.62	0.82
1:M:247:LEU:HD22	1:M:322:VAL:HG11	1.62	0.82
1:g:348:ILE:HD11	1:g:367:ARG:NE	1.95	0.82
1:M:136:ILE:N	1:M:410:ILE:O	2.12	0.82
1:C:236:LEU:HB2	2:Q:30:ILE:HD11	1.61	0.81
1:F:50:THR:HG22	1:F:52:ASP:H	1.44	0.81
1:n:283:ARG:NH1	1:n:363:LYS:HE3	1.95	0.81
1:C:237:GLU:CB	2:Q:28:GLY:HA3	2.09	0.81
1:K:270:LEU:HD22	1:K:272:VAL:HG13	1.61	0.81
2:Q:79:GLU:O	2:Q:80:ILE:HG13	1.78	0.81
1:i:74:LEU:HD21	1:i:93:THR:HG23	1.61	0.81
1:i:410:ILE:HD12	1:i:496:VAL:HG11	1.60	0.81
1:H:46:SER:HB2	1:H:47:PRO:HD2	1.60	0.81
1:I:40:LEU:HD23	1:I:59:GLU:HG3	1.60	0.81
1:L:234:PRO:HG3	1:L:309:GLU:HA	1.62	0.81
1:M:85:ALA:HB1	1:M:501:VAL:HG22	1.62	0.81
1:M:178:GLU:N	1:M:321:ARG:HH12	1.76	0.81
1:N:345:ILE:O	1:N:348:ILE:HG22	1.80	0.81
1:b:66:LEU:HD22	1:b:522:VAL:HG11	1.61	0.81
1:e:283:ARG:NH1	1:e:363:LYS:HD2	1.95	0.81
1:g:227:SER:HB3	1:g:254:GLU:HG3	1.62	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:235:ILE:CD1	1:h:311:ALA:HB3	2.09	0.81
1:i:283:ARG:NH1	1:i:363:LYS:HE3	1.96	0.81
1:j:234:PRO:HG3	1:j:309:GLU:HA	1.61	0.81
1:j:283:ARG:NH1	1:j:363:LYS:HB2	1.95	0.81
1:l:189:VAL:HG12	1:l:190:GLU:N	1.92	0.81
1:E:66:LEU:HD22	1:E:522:VAL:HG11	1.62	0.81
1:b:117:LYS:HG3	1:b:514:ALA:HB1	1.61	0.81
2:t:11:LEU:O	2:t:14:ARG:HD2	1.80	0.81
1:E:117:LYS:HG3	1:E:514:ALA:HB1	1.62	0.81
1:H:345:ILE:O	1:H:348:ILE:HG22	1.80	0.81
1:c:224:LYS:HE2	1:c:301:SER:HA	1.61	0.81
1:d:50:THR:HG22	1:d:52:ASP:H	1.44	0.81
1:e:117:LYS:HG3	1:e:514:ALA:HB1	1.60	0.81
1:m:59:GLU:O	1:n:4:LYS:HG3	1.80	0.81
1:H:235:ILE:CD1	1:H:311:ALA:HB3	2.10	0.81
1:b:283:ARG:HH12	1:b:363:LYS:HD2	1.44	0.81
1:i:149:THR:HG23	1:i:155:PRO:HA	1.62	0.81
1:i:40:LEU:HD23	1:i:59:GLU:HG3	1.60	0.81
1:k:50:THR:HG22	1:k:51:LYS:H	1.43	0.81
1:G:246:LEU:HB3	1:G:272:VAL:HG12	1.61	0.81
1:I:116:LEU:O	1:I:120:ILE:HG13	1.81	0.81
1:M:498:PRO:HB2	1:M:501:VAL:HG23	1.62	0.81
1:n:234:PRO:HG3	1:n:309:GLU:HA	1.62	0.81
1:K:40:LEU:HD23	1:K:59:GLU:HG3	1.61	0.81
1:k:295:THR:HG22	1:k:318:ARG:N	1.96	0.81
1:l:180:LYS:CB	1:m:281:GLY:HA2	2.11	0.81
2:q:44:LYS:HA	2:q:68:ASP:O	1.81	0.81
2:P:41:GLN:HG2	2:P:74:LYS:HB3	1.63	0.80
1:l:180:LYS:HB3	1:m:281:GLY:HA2	1.64	0.80
1:A:117:LYS:HG3	1:A:514:ALA:HB1	1.63	0.80
1:D:259:ALA:O	1:D:263:VAL:HG23	1.82	0.80
1:e:301:SER:HB2	1:e:304:LEU:HB3	1.64	0.80
1:j:295:THR:HG22	1:j:318:ARG:N	1.96	0.80
2:q:92:GLU:HA	2:q:95:LEU:CD1	2.06	0.80
1:F:66:LEU:HD22	1:F:522:VAL:HG11	1.63	0.80
1:N:270:LEU:HD22	1:N:272:VAL:HG13	1.63	0.80
2:q:19:ARG:HD3	2:q:40:PRO:HG2	1.63	0.80
1:D:117:LYS:HG3	1:D:514:ALA:HB1	1.63	0.80
2:Q:100:GLN:HB3	2:R:7:VAL:HB	1.63	0.80
1:D:50:THR:HG22	1:D:52:ASP:N	1.96	0.80
1:D:246:LEU:HB3	1:D:272:VAL:HG12	1.64	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:307:LYS:HE3	2:U:34:ASP:O	1.81	0.80
2:t:98:VAL:O	2:u:8:ILE:HG23	1.80	0.80
1:B:201:PRO:O	1:B:204:VAL:HG23	1.81	0.80
1:L:295:THR:HG22	1:L:318:ARG:N	1.97	0.80
1:c:66:LEU:HD22	1:c:522:VAL:HG11	1.64	0.80
1:B:251:GLU:HG3	1:B:284:ARG:NH1	1.97	0.80
1:F:117:LYS:HG3	1:F:514:ALA:HB1	1.63	0.80
1:L:77:VAL:HG13	1:L:80:LYS:HE2	1.63	0.80
2:T:96:LEU:HD23	2:U:14:ARG:NH1	1.97	0.80
2:q:73:ALA:O	2:q:74:LYS:HG2	1.81	0.80
1:N:234:PRO:HG3	1:N:309:GLU:HA	1.61	0.80
1:g:66:LEU:HD22	1:g:522:VAL:HG11	1.64	0.79
1:H:85:ALA:HB1	1:H:501:VAL:HG22	1.64	0.79
1:i:246:LEU:HB3	1:i:272:VAL:HG12	1.64	0.79
1:B:289:LYS:HE2	1:C:202:TYR:OH	1.82	0.79
1:h:345:ILE:O	1:h:348:ILE:HG22	1.82	0.79
1:j:345:ILE:O	1:j:348:ILE:HG22	1.81	0.79
1:n:37:ASN:HD21	1:n:51:LYS:HE2	1.47	0.79
1:C:150:ILE:CD1	1:C:495:ILE:HA	2.07	0.79
1:d:117:LYS:HG3	1:d:514:ALA:HB1	1.62	0.79
1:m:385:GLU:HB2	1:n:280:PHE:CE2	2.16	0.79
2:s:56:ASN:HB3	2:s:58:GLN:HG3	1.64	0.79
1:c:223:GLU:O	1:c:251:GLU:HB2	1.82	0.79
1:E:149:THR:HG23	1:E:155:PRO:HA	1.65	0.79
1:G:66:LEU:HD22	1:G:522:VAL:HG11	1.63	0.79
1:e:98:ALA:HB2	1:e:449:GLU:HG3	1.63	0.79
1:f:511:SER:O	1:f:515:LEU:HD23	1.83	0.79
1:D:511:SER:O	1:D:515:LEU:HD23	1.83	0.79
1:l:180:LYS:C	1:m:281:GLY:HA3	2.07	0.79
1:A:307:LYS:HE3	2:P:34:ASP:O	1.83	0.79
1:d:525:GLU:OE1	1:d:529:LYS:NZ	2.16	0.79
1:h:234:PRO:HG3	1:h:309:GLU:HA	1.64	0.79
2:p:70:VAL:HG11	2:p:95:LEU:HD22	1.64	0.79
1:E:50:THR:HG22	1:E:52:ASP:N	1.98	0.79
1:H:106:ASN:HD21	5:H:601:DMS:H12	1.48	0.79
1:m:362:GLU:O	1:m:365:GLN:HB2	1.83	0.79
2:o:45:VAL:HG21	2:o:64:VAL:HG11	1.64	0.79
2:r:97:ALA:HA	2:s:11:LEU:CD1	2.13	0.79
2:P:15:VAL:HG12	2:P:45:VAL:HG13	1.63	0.78
1:J:74:LEU:HD21	1:J:93:THR:HG23	1.65	0.78
1:J:283:ARG:NH1	1:J:363:LYS:HE3	1.98	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:189:VAL:CG1	1:l:190:GLU:H	1.95	0.78
2:o:70:VAL:HG11	2:o:95:LEU:HD22	1.62	0.78
1:h:295:THR:HG22	1:h:318:ARG:N	1.97	0.78
1:n:235:ILE:CD1	1:n:311:ALA:HB3	2.09	0.78
2:s:53:VAL:HG22	2:s:59:ARG:HG2	1.65	0.78
2:u:20:ILE:H	2:u:43:GLY:HA2	1.48	0.78
1:I:422:ILE:HG23	1:I:444:ARG:HG3	1.66	0.78
1:J:228:ASN:HD21	1:J:230:ARG:HB3	1.49	0.78
1:J:270:LEU:HD22	1:J:272:VAL:HG13	1.65	0.78
1:d:66:LEU:HD22	1:d:522:VAL:HG11	1.63	0.78
1:N:295:THR:HG22	1:N:318:ARG:N	1.99	0.78
1:a:285:LYS:HD3	1:b:202:TYR:OH	1.82	0.78
1:b:50:THR:HG22	1:b:52:ASP:N	1.98	0.78
1:l:295:THR:HG22	1:l:318:ARG:N	1.98	0.78
2:q:70:VAL:CG1	2:q:71:VAL:H	1.93	0.78
1:B:325:THR:HG22	1:B:326:LYS:H	1.48	0.78
1:E:69:ILE:HD11	1:F:41:GLU:HB2	1.66	0.78
1:h:7:VAL:HG21	1:h:66:LEU:HD11	1.65	0.78
1:C:218:PHE:HB3	1:C:316:LEU:HD13	1.65	0.78
1:E:7:VAL:HG21	1:E:66:LEU:HD11	1.64	0.78
1:c:117:LYS:HG3	1:c:514:ALA:HB1	1.64	0.78
1:h:77:VAL:HG13	1:h:80:LYS:HE2	1.66	0.78
1:n:295:THR:HG22	1:n:318:ARG:N	1.99	0.78
1:J:116:LEU:O	1:J:120:ILE:HG13	1.84	0.78
1:M:229:VAL:HG23	1:M:256:GLU:HB3	1.65	0.78
1:c:149:THR:HG23	1:c:155:PRO:HA	1.65	0.78
1:e:511:SER:O	1:e:515:LEU:HD23	1.83	0.78
1:h:283:ARG:HG2	1:h:363:LYS:HZ2	1.49	0.78
1:i:295:THR:HG22	1:i:318:ARG:N	1.99	0.78
1:A:173:ILE:HD12	1:A:366:GLU:HA	1.65	0.78
1:D:150:ILE:HD11	1:D:495:ILE:CA	2.10	0.78
1:N:362:GLU:O	1:N:365:GLN:HB2	1.83	0.78
2:O:15:VAL:HG12	2:O:45:VAL:HG13	1.66	0.78
1:h:283:ARG:HH21	1:h:367:ARG:CD	1.95	0.78
1:n:40:LEU:HD23	1:n:59:GLU:HG3	1.64	0.78
1:D:66:LEU:HD22	1:D:522:VAL:HG11	1.64	0.78
1:c:511:SER:O	1:c:515:LEU:HD23	1.83	0.78
1:f:352:LEU:HD21	1:f:364:LEU:HB2	1.66	0.78
1:h:74:LEU:HD21	1:h:93:THR:HG23	1.65	0.78
1:D:173:ILE:HD12	1:D:369:ALA:HB2	1.65	0.77
1:I:332:VAL:HG22	1:I:375:VAL:HG11	1.66	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:o:48:VAL:HG23	2:o:66:GLU:HG3	1.65	0.77
1:B:212:ALA:HB3	1:B:324:ILE:HB	1.66	0.77
1:E:267:ARG:HD3	2:S:31:VAL:HG21	1.65	0.77
1:I:228:ASN:HD21	1:I:230:ARG:HB3	1.49	0.77
1:K:362:GLU:O	1:K:365:GLN:HB2	1.84	0.77
2:T:52:ARG:HH21	2:U:53:VAL:HB	1.49	0.77
1:h:267:ARG:O	1:i:256:GLU:HG3	1.84	0.77
2:r:97:ALA:HA	2:s:11:LEU:HD13	1.66	0.77
1:E:351:GLU:HG3	1:F:326:LYS:NZ	2.00	0.77
1:K:249:ILE:HG22	1:K:249:ILE:O	1.84	0.77
1:g:218:PHE:CE1	1:g:244:LYS:HD2	2.19	0.77
1:k:116:LEU:O	1:k:120:ILE:HG13	1.85	0.77
1:B:229:VAL:HG21	2:P:36:ALA:CB	2.14	0.77
1:E:246:LEU:HB3	1:E:272:VAL:HG12	1.66	0.77
1:g:312:THR:HG22	1:g:314:SER:H	1.49	0.77
1:l:116:LEU:O	1:l:120:ILE:HG13	1.84	0.77
1:B:230:ARG:HH21	2:P:38:GLU:CD	1.92	0.77
1:L:37:ASN:HD21	1:L:51:LYS:HE2	1.50	0.77
1:M:235:ILE:CD1	1:M:311:ALA:HB3	2.14	0.77
1:c:248:ILE:HD12	1:c:261:LEU:HD21	1.67	0.77
1:h:277:ALA:HB3	1:h:284:ARG:HD2	1.67	0.77
1:N:464:VAL:HG12	1:N:468:GLN:HE21	1.48	0.77
1:H:50:THR:HG22	1:H:51:LYS:H	1.48	0.77
1:N:85:ALA:HB1	1:N:501:VAL:HG22	1.67	0.77
1:f:50:THR:HG22	1:f:51:LYS:N	2.00	0.77
1:l:7:VAL:HG21	1:l:66:LEU:HD11	1.66	0.77
1:I:85:ALA:HB1	1:I:501:VAL:HG22	1.67	0.77
1:I:283:ARG:NH1	1:I:363:LYS:HE3	2.00	0.77
1:h:490:MET:HE2	1:h:490:MET:HA	1.66	0.77
1:m:136:ILE:HB	1:m:410:ILE:HG13	1.66	0.77
1:m:307:LYS:HE3	1:m:310:ASN:ND2	1.99	0.77
2:q:71:VAL:HG12	2:q:96:LEU:HD12	1.67	0.77
2:t:19:ARG:CD	2:t:40:PRO:HG2	2.09	0.77
1:c:201:PRO:O	1:c:204:VAL:HG23	1.84	0.77
1:c:498:PRO:O	1:c:501:VAL:HG22	1.85	0.77
1:h:228:ASN:HD21	1:h:230:ARG:HB3	1.50	0.77
1:n:235:ILE:HD11	1:n:311:ALA:CB	2.12	0.77
1:B:230:ARG:NH2	2:P:38:GLU:OE2	2.17	0.76
1:a:116:LEU:O	1:a:120:ILE:HG13	1.85	0.76
1:E:247:LEU:HD22	1:E:322:VAL:HG11	1.66	0.76
2:T:54:LEU:HD11	2:U:55:GLU:HA	1.66	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:301:SER:HB2	1:G:304:LEU:HB3	1.65	0.76
1:j:219:ILE:HD12	1:j:295:THR:HG23	1.67	0.76
1:D:50:THR:HG22	1:D:51:LYS:N	2.01	0.76
1:H:219:ILE:HD12	1:H:295:THR:HG23	1.67	0.76
1:K:422:ILE:HG23	1:K:444:ARG:HG3	1.67	0.76
1:L:54:VAL:HG22	1:L:89:THR:HG21	1.67	0.76
1:M:283:ARG:NH1	1:M:363:LYS:HE3	2.00	0.76
1:N:283:ARG:HH11	1:N:363:LYS:HE3	1.50	0.76
1:k:189:VAL:HG11	1:k:333:GLY:HA2	1.68	0.76
1:n:362:GLU:O	1:n:365:GLN:HB2	1.85	0.76
2:r:56:ASN:HB2	2:r:58:GLN:HG3	1.66	0.76
1:C:178:GLU:HG3	1:C:388:LEU:HD21	1.66	0.76
1:K:189:VAL:HG11	1:K:333:GLY:HA2	1.66	0.76
1:M:74:LEU:HD21	1:M:93:THR:HG23	1.67	0.76
1:M:345:ILE:O	1:M:348:ILE:HG22	1.86	0.76
1:l:235:ILE:HD11	1:l:311:ALA:CB	2.11	0.76
1:m:85:ALA:HB1	1:m:501:VAL:HG22	1.68	0.76
1:L:180:LYS:C	1:M:281:GLY:HA3	2.11	0.76
1:N:84:VAL:HG12	1:N:500:LYS:HE2	1.68	0.76
1:d:136:ILE:HD11	1:d:477:ARG:NH2	2.00	0.76
1:h:114:LEU:HD12	1:n:459:GLY:HA3	1.66	0.76
1:B:66:LEU:HD22	1:B:522:VAL:HG11	1.67	0.76
1:N:189:VAL:CG1	1:N:333:GLY:HA2	2.15	0.76
1:k:194:PHE:CD1	1:k:278:PRO:HB3	2.21	0.76
1:l:229:VAL:HG23	1:l:256:GLU:HB3	1.68	0.76
1:m:295:THR:HG22	1:m:318:ARG:N	2.01	0.76
2:q:16:VAL:HG12	2:q:46:ILE:HB	1.67	0.76
1:A:50:THR:HG22	1:A:52:ASP:N	2.01	0.76
1:J:295:THR:HG22	1:J:318:ARG:N	2.00	0.76
1:K:295:THR:HG22	1:K:318:ARG:N	2.00	0.76
1:M:332:VAL:HG13	1:M:377:VAL:HG21	1.68	0.76
1:c:283:ARG:NH1	1:c:363:LYS:HB3	2.00	0.76
2:q:10:PRO:HG3	2:q:47:ALA:O	1.85	0.76
1:H:295:THR:HG22	1:H:318:ARG:N	2.01	0.76
1:L:59:GLU:O	1:M:4:LYS:HE3	1.86	0.76
1:N:189:VAL:HG12	1:N:190:GLU:N	2.00	0.76
1:e:235:ILE:HD12	1:e:311:ALA:CB	2.16	0.76
1:g:98:ALA:HB2	1:g:449:GLU:HG3	1.68	0.76
1:h:116:LEU:O	1:h:120:ILE:HG13	1.86	0.76
1:D:69:ILE:HD11	1:E:41:GLU:HB2	1.68	0.75
1:a:235:ILE:CG2	1:a:311:ALA:HB3	2.15	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:283:ARG:NH2	1:l:367:ARG:HD3	2.00	0.75
2:s:10:PRO:HB2	2:s:14:ARG:O	1.85	0.75
1:D:116:LEU:O	1:D:120:ILE:HG13	1.87	0.75
1:H:189:VAL:CG1	1:H:333:GLY:HA2	2.16	0.75
1:H:234:PRO:HG3	1:H:309:GLU:HA	1.66	0.75
1:I:295:THR:HG22	1:I:318:ARG:N	2.01	0.75
1:M:228:ASN:HD21	1:M:230:ARG:HB3	1.50	0.75
2:S:10:PRO:HB2	2:S:14:ARG:O	1.86	0.75
1:a:41:GLU:HB2	1:g:69:ILE:HD11	1.67	0.75
1:a:120:ILE:O	1:a:124:VAL:HG23	1.86	0.75
1:k:385:GLU:HB2	1:l:280:PHE:CE2	2.21	0.75
1:C:511:SER:O	1:C:515:LEU:HD23	1.87	0.75
1:F:511:SER:O	1:F:515:LEU:HD23	1.86	0.75
1:J:362:GLU:O	1:J:365:GLN:HB2	1.86	0.75
1:K:300:ILE:HG21	1:K:308:LEU:HD23	1.69	0.75
1:M:323:ARG:CZ	1:M:392:LYS:CE	2.64	0.75
1:M:464:VAL:HG12	1:M:468:GLN:HE21	1.52	0.75
2:T:96:LEU:HA	2:U:14:ARG:NH1	2.01	0.75
1:f:66:LEU:HD22	1:f:522:VAL:HG11	1.67	0.75
1:n:219:ILE:HD12	1:n:295:THR:HG23	1.67	0.75
2:s:96:LEU:HA	2:t:14:ARG:CZ	2.17	0.75
1:B:301:SER:HB2	1:B:304:LEU:HB3	1.68	0.75
1:D:120:ILE:O	1:D:124:VAL:HG23	1.86	0.75
1:F:301:SER:HB2	1:F:304:LEU:HB3	1.67	0.75
1:K:74:LEU:HD21	1:K:93:THR:HG23	1.67	0.75
1:K:106:ASN:HD21	5:K:601:DMS:H13	1.52	0.75
1:N:526:LYS:CD	1:N:527:PRO:HD2	2.15	0.75
2:P:48:VAL:CG1	2:P:62:LEU:HD12	2.15	0.75
1:a:233:LEU:O	1:a:237:GLU:HG3	1.86	0.75
1:h:422:ILE:HG23	1:h:444:ARG:HG3	1.67	0.75
1:i:290:ASP:OD1	1:i:371:LEU:HD11	1.85	0.75
1:m:361:ARG:O	1:m:365:GLN:HG2	1.85	0.75
1:C:98:ALA:HB2	1:C:449:GLU:HG3	1.66	0.75
1:I:74:LEU:HD21	1:I:93:THR:HG23	1.67	0.75
1:i:235:ILE:CD1	1:i:311:ALA:HB3	2.15	0.75
1:B:498:PRO:O	1:B:501:VAL:HG22	1.87	0.75
1:G:50:THR:HG22	1:G:51:LYS:N	2.01	0.75
1:k:300:ILE:HG21	1:k:308:LEU:HD23	1.69	0.75
2:r:96:LEU:O	2:s:14:ARG:HD3	1.86	0.75
2:s:41:GLN:OE1	2:t:80:ILE:HG13	1.85	0.75
1:G:150:ILE:CD1	1:G:495:ILE:HA	2.15	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:96:LEU:HD23	2:R:14:ARG:HH21	1.49	0.75
1:d:98:ALA:HB2	1:d:449:GLU:HG3	1.66	0.75
1:g:477:ARG:HH11	1:g:477:ARG:HG3	1.52	0.75
1:g:511:SER:O	1:g:515:LEU:HD23	1.87	0.75
1:j:85:ALA:HB1	1:j:501:VAL:HG22	1.68	0.75
1:E:50:THR:HG22	1:E:51:LYS:N	2.01	0.75
1:H:37:ASN:HD21	1:H:51:LYS:HE2	1.51	0.75
1:J:194:PHE:CD1	1:J:278:PRO:HB3	2.21	0.75
1:K:189:VAL:HG12	1:K:190:GLU:N	2.01	0.75
1:L:283:ARG:NH1	1:L:363:LYS:HE3	2.01	0.75
1:b:50:THR:HG22	1:b:51:LYS:N	2.02	0.75
1:d:218:PHE:HB3	1:d:316:LEU:HD13	1.69	0.75
1:m:229:VAL:HG23	1:m:256:GLU:HB3	1.68	0.75
1:n:189:VAL:HG12	1:n:190:GLU:N	2.01	0.75
1:A:212:ALA:HB3	1:A:324:ILE:HB	1.67	0.74
1:D:235:ILE:HD11	1:D:311:ALA:HB3	1.67	0.74
1:E:98:ALA:HB2	1:E:449:GLU:HG3	1.68	0.74
1:m:74:LEU:HD21	1:m:93:THR:HG23	1.69	0.74
1:n:189:VAL:CG1	1:n:333:GLY:HA2	2.16	0.74
1:E:349:LYS:HG3	1:E:368:LEU:HD11	1.69	0.74
1:a:259:ALA:O	1:a:263:VAL:HG23	1.87	0.74
1:h:189:VAL:HG12	1:h:190:GLU:N	2.02	0.74
1:k:74:LEU:HD21	1:k:93:THR:HG23	1.69	0.74
1:k:189:VAL:CG1	1:k:333:GLY:HA2	2.17	0.74
1:l:85:ALA:HB1	1:l:501:VAL:HG22	1.69	0.74
1:m:247:LEU:HD22	1:m:322:VAL:HG11	1.68	0.74
1:m:503:ARG:HH11	1:m:507:GLN:HE22	1.35	0.74
2:u:81:GLU:HA	2:u:86:GLU:HA	1.68	0.74
1:E:498:PRO:O	1:E:501:VAL:HG22	1.86	0.74
1:F:98:ALA:HB2	1:F:449:GLU:HG3	1.67	0.74
1:G:178:GLU:HG3	1:G:388:LEU:HD21	1.69	0.74
1:f:522:VAL:HG22	1:g:39:VAL:HB	1.69	0.74
1:h:37:ASN:HD21	1:h:51:LYS:HE2	1.51	0.74
1:j:229:VAL:HG23	1:j:256:GLU:HB3	1.68	0.74
1:k:7:VAL:HG21	1:k:66:LEU:HD11	1.68	0.74
1:B:150:ILE:CD1	1:B:495:ILE:HA	2.16	0.74
1:I:229:VAL:HG23	1:I:256:GLU:HB3	1.68	0.74
1:K:37:ASN:HD21	1:K:51:LYS:HE2	1.52	0.74
1:M:459:GLY:HA3	1:N:114:LEU:HD12	1.69	0.74
1:a:50:THR:HG22	1:a:51:LYS:N	2.02	0.74
1:c:214:LEU:HB3	1:c:245:PRO:CB	2.16	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:511:SER:O	1:d:515:LEU:HD23	1.87	0.74
1:f:50:THR:HG22	1:f:52:ASP:N	2.01	0.74
1:k:212:ALA:HB3	1:k:324:ILE:HB	1.70	0.74
1:n:503:ARG:HH11	1:n:507:GLN:HE22	1.35	0.74
1:G:229:VAL:HG21	2:U:36:ALA:HB2	1.69	0.74
1:H:246:LEU:HB3	1:H:272:VAL:HG12	1.69	0.74
2:Q:96:LEU:HA	2:R:14:ARG:HE	1.53	0.74
1:a:72:GLN:HE22	1:a:75:LYS:NZ	1.85	0.74
1:h:229:VAL:HG23	1:h:256:GLU:HB3	1.69	0.74
1:i:37:ASN:HD21	1:i:51:LYS:HE2	1.51	0.74
1:n:229:VAL:HG23	1:n:256:GLU:HB3	1.68	0.74
2:q:51:GLY:HA3	2:q:60:VAL:O	1.87	0.74
2:r:96:LEU:HA	2:s:14:ARG:HE	1.52	0.74
1:B:178:GLU:HG3	1:B:388:LEU:HD21	1.69	0.74
1:K:77:VAL:HG13	1:K:80:LYS:HE2	1.69	0.74
1:f:98:ALA:HB2	1:f:449:GLU:HG3	1.67	0.74
1:k:85:ALA:HB1	1:k:501:VAL:HG22	1.70	0.74
1:n:85:ALA:HB1	1:n:501:VAL:HG22	1.69	0.74
1:M:37:ASN:HD21	1:M:51:LYS:HE2	1.52	0.74
1:M:323:ARG:NH2	1:M:392:LYS:CE	2.50	0.74
1:h:459:GLY:HA3	1:i:114:LEU:HD12	1.68	0.74
1:m:372:ALA:C	1:m:374:GLY:H	1.95	0.74
2:s:8:ILE:HG21	2:s:16:VAL:HG21	1.69	0.74
1:I:503:ARG:HH11	1:I:507:GLN:HE22	1.36	0.74
1:f:233:LEU:O	1:f:237:GLU:HG3	1.88	0.74
1:j:37:ASN:HD21	1:j:51:LYS:HE2	1.51	0.74
1:J:189:VAL:HG12	1:J:190:GLU:N	2.03	0.74
1:d:307:LYS:HE3	2:s:34:ASP:HB3	1.67	0.74
1:k:37:ASN:HD21	1:k:51:LYS:HE2	1.52	0.74
1:B:259:ALA:O	1:B:263:VAL:HG23	1.87	0.74
1:G:511:SER:O	1:G:515:LEU:HD23	1.88	0.74
1:h:232:LEU:HD22	1:h:236:LEU:HD22	1.69	0.74
1:j:217:ALA:CB	1:j:245:PRO:HG2	2.16	0.74
1:B:165:MET:HE3	1:B:402:THR:HG21	1.69	0.73
1:M:136:ILE:O	1:M:410:ILE:N	2.19	0.73
2:P:96:LEU:HB3	2:Q:89:ILE:HG21	1.70	0.73
2:S:100:GLN:OE1	2:T:9:LYS:HE2	1.88	0.73
1:I:77:VAL:HG13	1:I:80:LYS:HE2	1.71	0.73
1:J:229:VAL:HG23	1:J:256:GLU:HB3	1.69	0.73
1:M:77:VAL:HG13	1:M:80:LYS:HE2	1.68	0.73
1:b:511:SER:O	1:b:515:LEU:HD23	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:283:ARG:HH21	1:j:367:ARG:HH11	1.35	0.73
1:m:235:ILE:HD11	1:m:311:ALA:CB	2.16	0.73
1:G:120:ILE:O	1:G:124:VAL:HG23	1.88	0.73
1:I:7:VAL:HG21	1:I:66:LEU:HD11	1.69	0.73
1:J:77:VAL:HG13	1:J:80:LYS:HE2	1.69	0.73
1:M:246:LEU:HB3	1:M:272:VAL:HG12	1.68	0.73
1:M:323:ARG:NH1	1:M:392:LYS:HE2	2.03	0.73
1:N:219:ILE:HD12	1:N:295:THR:HG23	1.69	0.73
1:e:120:ILE:O	1:e:124:VAL:HG23	1.87	0.73
1:C:136:ILE:HD11	1:C:477:ARG:NH2	2.03	0.73
1:D:235:ILE:HD11	1:D:311:ALA:CB	2.18	0.73
1:M:7:VAL:HG21	1:M:66:LEU:HD11	1.70	0.73
2:T:32:LEU:HG	2:T:33:PRO:HD2	1.67	0.73
1:a:363:LYS:C	1:a:365:GLN:H	1.95	0.73
1:b:149:THR:HG23	1:b:155:PRO:HA	1.70	0.73
1:h:194:PHE:CD1	1:h:278:PRO:HB3	2.22	0.73
1:b:218:PHE:HB3	1:b:316:LEU:HD13	1.70	0.73
1:c:98:ALA:HB2	1:c:449:GLU:HG3	1.70	0.73
1:e:279:GLY:C	1:e:284:ARG:HB3	2.14	0.73
1:g:312:THR:HB	1:g:315:MET:HG2	1.70	0.73
1:k:219:ILE:HD12	1:k:295:THR:HG23	1.68	0.73
1:n:50:THR:HG22	1:n:52:ASP:N	2.02	0.73
1:A:34:ARG:HH12	1:G:118:ARG:HH22	1.36	0.73
1:B:149:THR:HG23	1:B:155:PRO:HA	1.69	0.73
1:C:236:LEU:CB	2:Q:30:ILE:HD11	2.18	0.73
1:a:149:THR:HG23	1:a:155:PRO:HA	1.71	0.73
1:g:50:THR:HG22	1:g:51:LYS:N	2.03	0.73
1:i:77:VAL:HG13	1:i:80:LYS:HE2	1.71	0.73
1:m:277:ALA:HB3	1:m:284:ARG:HD2	1.70	0.73
1:n:277:ALA:HB3	1:n:284:ARG:HD2	1.70	0.73
1:B:98:ALA:HB2	1:B:449:GLU:HG3	1.70	0.73
1:E:218:PHE:CE1	1:E:244:LYS:HD2	2.24	0.73
1:I:219:ILE:HD12	1:I:295:THR:HG23	1.68	0.73
2:Q:18:LYS:HG2	2:Q:87:TYR:CD2	2.24	0.73
1:a:66:LEU:HD22	1:a:522:VAL:HG11	1.68	0.73
1:a:98:ALA:HB2	1:a:449:GLU:HG3	1.69	0.73
1:b:136:ILE:HD11	1:b:477:ARG:HH21	1.54	0.73
1:C:120:ILE:O	1:C:124:VAL:HG23	1.89	0.73
1:E:150:ILE:CD1	1:E:495:ILE:HA	2.12	0.73
1:F:279:GLY:C	1:F:284:ARG:HB3	2.13	0.73
2:S:13:ASP:OD1	2:S:13:ASP:O	2.07	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:284:ARG:O	1:b:288:LEU:HG	1.88	0.73
1:d:50:THR:HG22	1:d:51:LYS:N	2.03	0.73
1:m:422:ILE:HG23	1:m:444:ARG:HG3	1.70	0.73
1:D:165:MET:HE3	1:D:402:THR:HG21	1.69	0.73
1:D:279:GLY:C	1:D:284:ARG:HB3	2.14	0.73
1:F:165:MET:HE3	1:F:402:THR:HG21	1.71	0.73
1:H:277:ALA:HB3	1:H:284:ARG:HD2	1.71	0.73
1:I:290:ASP:OD1	1:I:371:LEU:HD11	1.89	0.73
1:K:410:ILE:HB	1:K:496:VAL:CG1	2.19	0.73
1:L:194:PHE:CD1	1:L:278:PRO:HB3	2.23	0.73
1:N:235:ILE:HD11	1:N:311:ALA:CB	2.15	0.73
1:d:235:ILE:CG2	1:d:311:ALA:HB3	2.17	0.73
1:g:50:THR:HG22	1:g:52:ASP:N	2.04	0.73
1:i:229:VAL:HG23	1:i:256:GLU:HB3	1.71	0.73
1:j:300:ILE:HG21	1:j:308:LEU:HD23	1.69	0.73
2:o:14:ARG:HE	2:u:96:LEU:HA	1.54	0.73
1:H:290:ASP:OD1	1:H:371:LEU:HD11	1.89	0.73
1:J:37:ASN:HD21	1:J:51:LYS:HE2	1.53	0.73
1:M:212:ALA:HB3	1:M:324:ILE:HB	1.71	0.73
1:N:246:LEU:HB3	1:N:272:VAL:HG12	1.69	0.73
1:a:237:GLU:CG	2:o:28:GLY:HA3	2.19	0.73
1:d:259:ALA:O	1:d:263:VAL:HG23	1.89	0.73
1:i:300:ILE:HG21	1:i:308:LEU:HD23	1.71	0.73
1:n:410:ILE:HB	1:n:496:VAL:CG1	2.19	0.73
2:p:25:LYS:HG2	2:p:31:VAL:HG22	1.68	0.73
1:H:300:ILE:HG21	1:H:308:LEU:HD23	1.69	0.72
1:M:323:ARG:CZ	1:M:392:LYS:HZ1	2.02	0.72
2:t:61:PRO:HG3	2:u:59:ARG:NH2	2.04	0.72
1:J:422:ILE:HG23	1:J:444:ARG:HG3	1.70	0.72
1:K:246:LEU:HB3	1:K:272:VAL:HG12	1.69	0.72
1:L:422:ILE:HG23	1:L:444:ARG:HG3	1.71	0.72
1:b:98:ALA:HB2	1:b:449:GLU:HG3	1.69	0.72
1:e:66:LEU:HD22	1:e:522:VAL:HG11	1.71	0.72
2:q:80:ILE:HG12	2:q:81:GLU:H	1.54	0.72
1:A:149:THR:HG23	1:A:155:PRO:HA	1.71	0.72
1:A:422:ILE:HG23	1:A:444:ARG:HG3	1.71	0.72
1:C:217:ALA:HB2	1:C:245:PRO:HB2	1.69	0.72
1:H:77:VAL:HG13	1:H:80:LYS:HE2	1.69	0.72
2:P:13:ASP:HB2	2:P:62:LEU:HD21	1.71	0.72
2:s:96:LEU:HD22	2:t:14:ARG:HH12	1.54	0.72
1:A:259:ALA:O	1:A:263:VAL:HG23	1.88	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:362:GLU:O	1:H:365:GLN:HB2	1.90	0.72
1:M:189:VAL:HG11	1:M:333:GLY:HA2	1.69	0.72
1:N:384:THR:HG22	1:N:386:THR:H	1.54	0.72
2:S:14:ARG:HH11	2:S:14:ARG:HG3	1.55	0.72
1:f:235:ILE:CD1	1:f:311:ALA:HB3	2.17	0.72
1:i:74:LEU:HD12	1:i:512:ILE:HD12	1.71	0.72
1:j:228:ASN:HD21	1:j:230:ARG:HB3	1.54	0.72
1:k:77:VAL:HG13	1:k:80:LYS:HE2	1.70	0.72
1:n:361:ARG:O	1:n:365:GLN:HG2	1.88	0.72
2:s:5:LYS:CG	2:s:6:THR:H	2.00	0.72
1:C:165:MET:HE3	1:C:402:THR:HG21	1.72	0.72
1:G:218:PHE:HB3	1:G:316:LEU:HD13	1.72	0.72
1:H:217:ALA:CB	1:H:245:PRO:HG2	2.19	0.72
1:L:297:GLY:HA3	1:L:317:GLY:H	1.54	0.72
1:M:410:ILE:HB	1:M:496:VAL:CG1	2.19	0.72
1:e:165:MET:HE3	1:e:402:THR:HG21	1.71	0.72
1:e:229:VAL:HG21	2:s:36:ALA:CB	2.15	0.72
1:i:189:VAL:HG11	1:i:333:GLY:HA2	1.71	0.72
1:m:283:ARG:HH11	1:m:363:LYS:HE3	1.54	0.72
1:m:464:VAL:HG12	1:m:468:GLN:HE21	1.54	0.72
2:p:10:PRO:HB2	2:p:14:ARG:O	1.90	0.72
1:C:325:THR:HG22	1:C:326:LYS:H	1.54	0.72
1:K:85:ALA:HB1	1:K:501:VAL:HG22	1.70	0.72
1:L:503:ARG:HH11	1:L:507:GLN:HE22	1.37	0.72
1:M:323:ARG:CZ	1:M:392:LYS:NZ	2.53	0.72
1:b:259:ALA:O	1:b:263:VAL:HG23	1.89	0.72
1:d:120:ILE:O	1:d:124:VAL:HG23	1.90	0.72
1:e:50:THR:HG22	1:e:51:LYS:N	2.02	0.72
1:g:165:MET:HE3	1:g:402:THR:HG21	1.71	0.72
1:C:212:ALA:HB3	1:C:324:ILE:HB	1.72	0.72
1:G:235:ILE:CD1	1:G:311:ALA:HB3	2.20	0.72
1:L:189:VAL:CG1	1:L:190:GLU:H	1.94	0.72
1:N:7:VAL:HG21	1:N:66:LEU:HD11	1.70	0.72
1:N:422:ILE:HG23	1:N:444:ARG:HG3	1.72	0.72
2:O:81:GLU:HG3	2:O:85:GLU:H	1.55	0.72
1:h:235:ILE:HD11	1:h:311:ALA:CB	2.16	0.72
1:h:283:ARG:HH12	1:h:364:LEU:CD1	2.03	0.72
1:i:464:VAL:HG12	1:i:468:GLN:HE21	1.54	0.72
1:j:74:LEU:HD21	1:j:93:THR:HG23	1.70	0.72
1:j:277:ALA:HB3	1:j:284:ARG:HD2	1.72	0.72
1:k:422:ILE:HG23	1:k:444:ARG:HG3	1.72	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:178:GLU:HG3	1:E:388:LEU:HD21	1.72	0.72
1:F:233:LEU:O	1:F:237:GLU:HG3	1.88	0.72
1:a:359:TYR:CE2	1:a:363:LYS:HE2	2.25	0.72
1:c:225:LYS:HG3	1:c:252:ASP:HB3	1.72	0.72
1:d:498:PRO:O	1:d:501:VAL:HG22	1.88	0.72
1:l:246:LEU:HB3	1:l:272:VAL:HG12	1.72	0.72
1:l:422:ILE:HG23	1:l:444:ARG:HG3	1.71	0.72
1:m:77:VAL:HG13	1:m:80:LYS:HE2	1.71	0.72
1:C:233:LEU:O	1:C:237:GLU:HG3	1.90	0.72
1:C:235:ILE:HD11	1:C:311:ALA:HB3	1.70	0.72
1:F:150:ILE:CD1	1:F:495:ILE:HA	2.11	0.72
1:F:498:PRO:O	1:F:501:VAL:HG22	1.89	0.72
1:G:230:ARG:NH2	2:U:38:GLU:OE2	2.22	0.72
1:L:384:THR:HG22	1:L:386:THR:H	1.55	0.72
1:M:219:ILE:HD12	1:M:295:THR:HG23	1.71	0.72
1:M:295:THR:HG22	1:M:318:ARG:N	2.05	0.72
1:M:361:ARG:O	1:M:365:GLN:HG2	1.89	0.72
2:Q:79:GLU:C	2:Q:80:ILE:HG13	2.15	0.72
1:b:498:PRO:O	1:b:501:VAL:HG22	1.89	0.72
1:e:50:THR:HG22	1:e:52:ASP:N	2.02	0.72
1:i:228:ASN:HD21	1:i:230:ARG:HB3	1.53	0.72
1:j:361:ARG:O	1:j:365:GLN:HG2	1.90	0.72
1:m:37:ASN:HD21	1:m:51:LYS:HE2	1.53	0.72
1:n:277:ALA:CB	1:n:284:ARG:HD2	2.20	0.72
2:s:73:ALA:HB1	2:s:75:TYR:CE2	2.25	0.72
1:B:246:LEU:HB3	1:B:272:VAL:HG12	1.71	0.72
1:E:269:THR:HG21	2:S:30:ILE:HA	1.72	0.72
1:F:50:THR:HG22	1:F:51:LYS:N	2.03	0.72
1:L:228:ASN:HD21	1:L:230:ARG:HB3	1.54	0.72
1:M:224:LYS:HG2	1:M:225:LYS:N	2.05	0.72
1:N:224:LYS:HG2	1:N:225:LYS:N	2.05	0.72
1:k:229:VAL:HG23	1:k:256:GLU:HB3	1.71	0.72
1:l:74:LEU:HD21	1:l:93:THR:HG23	1.70	0.72
1:F:217:ALA:HB2	1:F:245:PRO:HB2	1.72	0.71
1:J:74:LEU:HD12	1:J:512:ILE:CD1	2.20	0.71
1:L:243:GLY:CA	1:M:228:ASN:CB	2.63	0.71
2:R:8:ILE:HG21	2:R:16:VAL:HG21	1.72	0.71
1:c:50:THR:HG22	1:c:51:LYS:N	2.04	0.71
1:d:150:ILE:HD11	1:d:495:ILE:CA	2.15	0.71
1:j:267:ARG:O	1:k:256:GLU:HG3	1.91	0.71
1:k:54:VAL:HG22	1:k:89:THR:HG21	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:247:LEU:HD22	1:l:322:VAL:HG11	1.72	0.71
1:m:283:ARG:NH1	1:m:363:LYS:HE3	2.05	0.71
2:q:70:VAL:HG11	2:q:95:LEU:CD2	2.19	0.71
1:C:498:PRO:O	1:C:501:VAL:HG22	1.90	0.71
1:H:503:ARG:HH11	1:H:507:GLN:HE22	1.37	0.71
1:I:464:VAL:HG12	1:I:468:GLN:HE21	1.55	0.71
1:K:235:ILE:HD11	1:K:311:ALA:CB	2.16	0.71
1:M:206:ASN:ND2	1:M:389:LYS:HE2	2.05	0.71
2:P:20:ILE:HG13	2:P:43:GLY:HA2	1.71	0.71
1:A:279:GLY:C	1:A:284:ARG:HB3	2.16	0.71
1:F:19:GLY:HA3	1:F:67:GLU:O	1.91	0.71
1:G:149:THR:HG23	1:G:155:PRO:HA	1.70	0.71
1:J:384:THR:HG22	1:J:386:THR:H	1.54	0.71
2:O:54:LEU:HG	2:P:55:GLU:O	1.90	0.71
2:T:10:PRO:HG3	2:T:47:ALA:O	1.89	0.71
1:b:136:ILE:O	1:b:410:ILE:HG22	1.89	0.71
1:e:450:PRO:O	1:e:454:ILE:HG13	1.90	0.71
1:k:246:LEU:HB3	1:k:272:VAL:HG12	1.70	0.71
1:l:464:VAL:HG12	1:l:468:GLN:HE21	1.55	0.71
1:m:246:LEU:HB3	1:m:272:VAL:HG12	1.71	0.71
1:A:233:LEU:O	1:A:237:GLU:HG3	1.90	0.71
1:D:498:PRO:O	1:D:501:VAL:HG22	1.91	0.71
1:J:85:ALA:HB1	1:J:501:VAL:HG22	1.71	0.71
1:J:361:ARG:O	1:J:365:GLN:HG2	1.90	0.71
1:L:74:LEU:HD21	1:L:93:THR:HG23	1.70	0.71
1:M:300:ILE:HG21	1:M:308:LEU:HD23	1.71	0.71
1:a:50:THR:HG22	1:a:52:ASP:N	2.05	0.71
1:b:69:ILE:HD11	1:c:41:GLU:HB2	1.72	0.71
1:d:136:ILE:HD11	1:d:477:ARG:HH21	1.52	0.71
1:f:136:ILE:HD11	1:f:477:ARG:HH21	1.55	0.71
1:j:235:ILE:CD1	1:j:311:ALA:HB3	2.20	0.71
1:D:218:PHE:HB3	1:D:316:LEU:HD13	1.72	0.71
1:H:84:VAL:HG12	1:H:500:LYS:HE2	1.70	0.71
1:I:361:ARG:O	1:I:365:GLN:HG2	1.90	0.71
1:f:149:THR:HG23	1:f:155:PRO:HA	1.72	0.71
1:i:362:GLU:O	1:i:365:GLN:HB2	1.90	0.71
1:j:224:LYS:HG2	1:j:225:LYS:N	2.06	0.71
1:l:84:VAL:HG12	1:l:500:LYS:HE2	1.72	0.71
2:t:48:VAL:CG1	2:t:62:LEU:HD12	2.21	0.71
1:F:259:ALA:O	1:F:263:VAL:HG23	1.90	0.71
1:G:165:MET:HE3	1:G:402:THR:HG21	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:283:ARG:NH2	1:H:367:ARG:HD3	2.06	0.71
1:J:232:LEU:HD22	1:J:236:LEU:HD22	1.71	0.71
1:L:74:LEU:HD12	1:L:512:ILE:HD12	1.72	0.71
1:L:410:ILE:HB	1:L:496:VAL:CG1	2.21	0.71
1:N:283:ARG:NH2	1:N:367:ARG:HD3	2.04	0.71
1:e:343:ALA:HA	1:f:210:MET:HE1	1.73	0.71
1:f:136:ILE:O	1:f:410:ILE:HG22	1.91	0.71
1:g:498:PRO:O	1:g:501:VAL:HG22	1.90	0.71
1:i:85:ALA:HB1	1:i:501:VAL:HG22	1.70	0.71
1:j:283:ARG:HG3	1:j:363:LYS:HZ1	1.54	0.71
1:l:37:ASN:HD21	1:l:51:LYS:HE2	1.55	0.71
1:L:283:ARG:HH12	1:L:364:LEU:HD12	1.56	0.71
1:b:229:VAL:HG12	1:b:233:LEU:HD11	1.72	0.71
1:j:189:VAL:CG1	1:j:333:GLY:HA2	2.21	0.71
1:m:219:ILE:HD12	1:m:295:THR:HG23	1.71	0.71
1:n:422:ILE:HG23	1:n:444:ARG:HG3	1.70	0.71
2:t:98:VAL:C	2:u:8:ILE:HG23	2.14	0.71
1:C:50:THR:HG22	1:C:51:LYS:N	2.03	0.71
1:F:136:ILE:HD11	1:F:477:ARG:HH21	1.56	0.71
1:K:224:LYS:HG2	1:K:225:LYS:N	2.06	0.71
1:L:464:VAL:HG12	1:L:468:GLN:HE21	1.55	0.71
1:e:222:VAL:HG22	1:e:300:ILE:HD12	1.72	0.71
1:h:503:ARG:HH11	1:h:507:GLN:HE22	1.38	0.71
1:l:50:THR:HG22	1:l:52:ASP:N	2.05	0.71
1:l:182:LEU:HD11	1:m:363:LYS:HZ1	1.55	0.71
1:n:384:THR:HG22	1:n:386:THR:H	1.56	0.71
2:r:73:ALA:HB1	2:r:75:TYR:CE2	2.26	0.71
2:t:100:GLN:HE22	2:u:9:LYS:NZ	1.87	0.71
1:C:66:LEU:HD22	1:C:522:VAL:HG11	1.72	0.71
1:I:50:THR:HG22	1:I:52:ASP:N	2.04	0.71
1:J:219:ILE:HD12	1:J:295:THR:HG23	1.72	0.71
1:K:283:ARG:NH1	1:K:363:LYS:HE3	2.06	0.71
1:K:490:MET:HE2	1:K:490:MET:HA	1.73	0.71
1:a:236:LEU:HB2	2:o:30:ILE:HD11	1.73	0.71
1:d:382:ALA:HB3	1:d:388:LEU:HB2	1.73	0.71
1:f:118:ARG:HH22	1:g:34:ARG:HH12	1.39	0.71
1:g:120:ILE:O	1:g:124:VAL:HG23	1.90	0.71
1:i:503:ARG:HH11	1:i:507:GLN:HE22	1.38	0.71
1:n:228:ASN:HD21	1:n:230:ARG:HB3	1.56	0.71
1:H:422:ILE:HG23	1:H:444:ARG:HG3	1.73	0.71
1:J:7:VAL:HG21	1:J:66:LEU:HD11	1.73	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:350:LYS:O	1:b:208:GLU:HA	1.91	0.71
1:j:194:PHE:CD1	1:j:278:PRO:HB3	2.25	0.71
1:l:277:ALA:HB3	1:l:284:ARG:HD2	1.71	0.71
1:m:116:LEU:O	1:m:120:ILE:HG13	1.90	0.71
2:o:79:GLU:HG2	2:o:88:VAL:HG22	1.73	0.71
2:r:56:ASN:ND2	2:s:55:GLU:O	2.23	0.71
1:B:50:THR:HG22	1:B:52:ASP:N	2.06	0.70
1:D:50:THR:CG2	1:D:52:ASP:H	2.03	0.70
1:D:98:ALA:HB2	1:D:449:GLU:HG3	1.73	0.70
1:F:229:VAL:HG12	1:F:233:LEU:HD11	1.71	0.70
1:K:464:VAL:HG12	1:K:468:GLN:HE21	1.56	0.70
1:L:217:ALA:CB	1:L:245:PRO:HG2	2.20	0.70
2:P:13:ASP:OD2	2:P:92:GLU:HB2	1.91	0.70
1:a:366:GLU:O	1:a:370:LYS:HG3	1.91	0.70
1:b:219:ILE:HD13	1:b:295:THR:CG2	2.21	0.70
1:k:247:LEU:HD22	1:k:322:VAL:HG11	1.71	0.70
2:r:20:ILE:HG13	2:r:43:GLY:HA2	1.73	0.70
1:L:50:THR:HG22	1:L:52:ASP:N	2.05	0.70
1:L:224:LYS:HG2	1:L:225:LYS:N	2.06	0.70
1:d:118:ARG:HH22	1:e:34:ARG:HH12	1.38	0.70
1:A:69:ILE:HD11	1:B:41:GLU:HB2	1.72	0.70
1:A:98:ALA:HB2	1:A:449:GLU:HG3	1.73	0.70
1:K:84:VAL:HG12	1:K:500:LYS:HE2	1.72	0.70
1:K:228:ASN:HD21	1:K:230:ARG:HB3	1.55	0.70
1:M:323:ARG:NH1	1:M:392:LYS:CE	2.53	0.70
1:N:503:ARG:HH11	1:N:507:GLN:HE22	1.38	0.70
1:j:410:ILE:HB	1:j:496:VAL:CG1	2.21	0.70
1:k:235:ILE:HD11	1:k:311:ALA:CB	2.18	0.70
1:k:362:GLU:O	1:k:365:GLN:HB2	1.91	0.70
1:l:372:ALA:C	1:l:374:GLY:H	1.99	0.70
1:n:283:ARG:HH11	1:n:363:LYS:HE3	1.56	0.70
2:o:97:ALA:HA	2:p:11:LEU:HG	1.73	0.70
2:q:26:THR:HG22	2:q:32:LEU:HD21	1.72	0.70
1:C:246:LEU:HB3	1:C:272:VAL:HG12	1.72	0.70
1:J:246:LEU:HB3	1:J:272:VAL:HG12	1.73	0.70
1:K:361:ARG:O	1:K:365:GLN:HG2	1.91	0.70
1:c:247:LEU:HD22	1:c:322:VAL:HG11	1.71	0.70
1:f:85:ALA:HB1	1:f:501:VAL:HG12	1.73	0.70
1:h:384:THR:HG22	1:h:386:THR:H	1.55	0.70
1:l:224:LYS:HG2	1:l:225:LYS:N	2.07	0.70
1:l:283:ARG:NH1	1:l:363:LYS:HE3	2.06	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:224:LYS:HG2	1:n:225:LYS:N	2.06	0.70
1:n:290:ASP:OD1	1:n:371:LEU:HD11	1.91	0.70
2:p:48:VAL:HG12	2:p:62:LEU:HD13	1.71	0.70
2:q:89:ILE:HG22	2:q:89:ILE:O	1.92	0.70
2:t:100:GLN:OXT	2:u:6:THR:HG23	1.91	0.70
1:A:368:LEU:HD12	1:A:368:LEU:O	1.92	0.70
1:B:50:THR:HG22	1:B:51:LYS:N	2.07	0.70
1:D:284:ARG:O	1:D:288:LEU:HG	1.91	0.70
1:J:290:ASP:OD1	1:J:371:LEU:HD11	1.91	0.70
1:K:194:PHE:CD1	1:K:278:PRO:HB3	2.27	0.70
1:M:277:ALA:HB3	1:M:284:ARG:HD2	1.72	0.70
1:g:246:LEU:HB3	1:g:272:VAL:HG12	1.72	0.70
1:k:228:ASN:HD21	1:k:230:ARG:HB3	1.55	0.70
1:k:277:ALA:HB3	1:k:284:ARG:HD2	1.73	0.70
1:l:503:ARG:HH11	1:l:507:GLN:HE22	1.37	0.70
1:m:384:THR:HG22	1:m:386:THR:H	1.56	0.70
1:L:526:LYS:CD	1:L:527:PRO:HD2	2.21	0.70
1:a:118:ARG:HH22	1:b:34:ARG:HH12	1.39	0.70
1:k:464:VAL:HG12	1:k:468:GLN:HE21	1.57	0.70
2:q:58:GLN:HG2	2:q:59:ARG:N	2.06	0.70
1:G:284:ARG:O	1:G:288:LEU:HG	1.91	0.70
1:N:194:PHE:CD1	1:N:278:PRO:HB3	2.26	0.70
1:l:228:ASN:HD21	1:l:230:ARG:HB3	1.56	0.70
1:D:366:GLU:O	1:D:370:LYS:HG3	1.91	0.70
2:Q:8:ILE:N	2:Q:8:ILE:HD12	2.07	0.70
1:e:498:PRO:O	1:e:501:VAL:HG22	1.91	0.70
1:j:464:VAL:HG12	1:j:468:GLN:HE21	1.56	0.70
1:m:84:VAL:HG12	1:m:500:LYS:HE2	1.73	0.70
1:n:74:LEU:HD21	1:n:93:THR:HG23	1.72	0.70
1:n:116:LEU:O	1:n:120:ILE:HG13	1.92	0.70
2:s:20:ILE:HG13	2:s:43:GLY:HA2	1.74	0.70
1:A:526:LYS:HD3	1:A:529:LYS:CE	2.22	0.70
1:H:384:THR:HG22	1:H:386:THR:H	1.55	0.70
1:J:74:LEU:HD12	1:J:512:ILE:HD12	1.72	0.70
1:J:464:VAL:HG12	1:J:468:GLN:HE21	1.56	0.70
1:N:77:VAL:HG13	1:N:80:LYS:HE2	1.74	0.70
1:b:279:GLY:C	1:b:284:ARG:HB3	2.17	0.70
1:c:352:LEU:HD23	1:c:364:LEU:HD12	1.72	0.70
1:d:363:LYS:C	1:d:365:GLN:H	1.98	0.70
1:e:325:THR:HG22	1:e:326:LYS:H	1.57	0.70
1:h:212:ALA:HB3	1:h:324:ILE:HB	1.74	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:194:PHE:CD1	1:l:278:PRO:HB3	2.27	0.70
1:l:361:ARG:O	1:l:365:GLN:HG2	1.91	0.70
1:B:352:LEU:HD21	1:B:364:LEU:HB2	1.73	0.70
1:D:23:VAL:HG22	1:D:60:VAL:HG11	1.72	0.70
1:D:234:PRO:O	1:D:238:GLN:HG3	1.91	0.70
1:D:522:VAL:HG22	1:E:39:VAL:HB	1.74	0.70
1:K:7:VAL:HG21	1:K:66:LEU:HD11	1.74	0.70
1:L:229:VAL:HG23	1:L:256:GLU:HB3	1.73	0.70
1:N:228:ASN:HD21	1:N:230:ARG:HB3	1.56	0.70
1:b:422:ILE:HG23	1:b:444:ARG:HG3	1.73	0.70
1:j:290:ASP:OD1	1:j:371:LEU:HD11	1.92	0.70
1:D:94:VAL:HG12	1:D:449:GLU:HB3	1.74	0.69
1:G:373:GLY:O	1:G:375:VAL:N	2.25	0.69
1:G:498:PRO:O	1:G:501:VAL:HG22	1.92	0.69
1:M:283:ARG:NH2	1:M:367:ARG:HD3	2.08	0.69
1:c:224:LYS:H	1:c:224:LYS:HD2	1.55	0.69
1:d:279:GLY:C	1:d:284:ARG:HB3	2.16	0.69
1:e:240:ALA:HA	1:e:270:LEU:HD13	1.74	0.69
1:i:277:ALA:HB3	1:i:284:ARG:HD2	1.72	0.69
1:j:74:LEU:HD12	1:j:512:ILE:HD12	1.72	0.69
1:j:384:THR:HG22	1:j:386:THR:H	1.56	0.69
1:l:77:VAL:HG13	1:l:80:LYS:HE2	1.74	0.69
1:H:189:VAL:HG12	1:H:190:GLU:N	2.05	0.69
1:I:84:VAL:HG12	1:I:500:LYS:HE2	1.74	0.69
1:I:277:ALA:HB3	1:I:284:ARG:HD2	1.74	0.69
1:c:422:ILE:HG23	1:c:444:ARG:HG3	1.72	0.69
1:j:283:ARG:HH11	1:j:363:LYS:CE	2.05	0.69
1:l:212:ALA:HB3	1:l:324:ILE:HB	1.74	0.69
1:n:77:VAL:HG13	1:n:80:LYS:HE2	1.73	0.69
1:L:372:ALA:C	1:L:374:GLY:H	2.00	0.69
1:M:116:LEU:O	1:M:120:ILE:HG13	1.91	0.69
1:N:116:LEU:O	1:N:120:ILE:HG13	1.92	0.69
1:c:348:ILE:HD12	1:c:367:ARG:NE	2.06	0.69
1:c:352:LEU:HD21	1:c:364:LEU:HB2	1.73	0.69
1:f:120:ILE:O	1:f:124:VAL:HG23	1.92	0.69
1:i:54:VAL:HG22	1:i:89:THR:HG21	1.73	0.69
1:m:7:VAL:HG21	1:m:66:LEU:HD11	1.72	0.69
1:m:300:ILE:HG21	1:m:308:LEU:HD23	1.73	0.69
1:I:246:LEU:HB3	1:I:272:VAL:HG12	1.74	0.69
1:L:79:SER:C	1:L:81:THR:H	2.01	0.69
1:M:54:VAL:HG22	1:M:89:THR:HG21	1.73	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:277:ALA:HB3	1:N:284:ARG:HD2	1.73	0.69
1:d:96:ALA:O	1:d:100:VAL:HG23	1.91	0.69
1:i:384:THR:HG22	1:i:386:THR:H	1.57	0.69
1:j:249:ILE:O	1:j:249:ILE:HG22	1.92	0.69
1:l:277:ALA:CB	1:l:284:ARG:HD2	2.22	0.69
1:A:50:THR:HG22	1:A:51:LYS:N	2.07	0.69
1:E:515:LEU:HD12	1:F:49:ILE:HG21	1.73	0.69
1:G:98:ALA:HB2	1:G:449:GLU:HG3	1.74	0.69
1:I:189:VAL:HG12	1:I:190:GLU:N	2.07	0.69
1:b:136:ILE:HD11	1:b:477:ARG:NH2	2.06	0.69
1:b:178:GLU:HG3	1:b:388:LEU:HD21	1.73	0.69
1:e:116:LEU:O	1:e:120:ILE:HG13	1.93	0.69
1:f:165:MET:HE3	1:f:402:THR:HG21	1.73	0.69
1:i:217:ALA:CB	1:i:245:PRO:HG2	2.19	0.69
1:j:54:VAL:HG22	1:j:89:THR:HG21	1.74	0.69
2:q:19:ARG:HB3	2:q:40:PRO:HB2	1.74	0.69
2:q:33:PRO:C	2:q:35:THR:H	2.01	0.69
2:t:79:GLU:C	2:t:80:ILE:HD12	2.18	0.69
1:B:363:LYS:C	1:B:365:GLN:H	1.98	0.69
1:F:234:PRO:O	1:F:238:GLN:HG3	1.92	0.69
1:H:490:MET:HE2	1:H:490:MET:HA	1.73	0.69
1:K:295:THR:HG22	1:K:317:GLY:C	2.18	0.69
1:M:385:GLU:HB2	1:N:280:PHE:CE2	2.27	0.69
1:N:37:ASN:HD21	1:N:51:LYS:HE2	1.55	0.69
2:S:8:ILE:HG21	2:S:16:VAL:HG21	1.73	0.69
1:h:84:VAL:HG12	1:h:500:LYS:HE2	1.75	0.69
1:m:410:ILE:HB	1:m:496:VAL:CG1	2.22	0.69
2:s:48:VAL:CG1	2:s:62:LEU:HD13	2.22	0.69
1:C:136:ILE:HD11	1:C:477:ARG:HH21	1.57	0.69
1:D:50:THR:HG21	1:D:52:ASP:HB3	1.75	0.69
1:G:50:THR:HG22	1:G:52:ASP:N	2.07	0.69
1:H:212:ALA:HB3	1:H:324:ILE:HB	1.75	0.69
1:H:410:ILE:HB	1:H:496:VAL:CG1	2.23	0.69
1:I:224:LYS:HG2	1:I:225:LYS:N	2.07	0.69
1:I:235:ILE:HD11	1:I:311:ALA:CB	2.17	0.69
1:J:264:ASN:HB3	1:J:269:THR:HB	1.73	0.69
1:L:39:VAL:C	1:L:40:LEU:HD12	2.17	0.69
1:L:219:ILE:HD12	1:L:295:THR:HG23	1.74	0.69
1:M:503:ARG:HH11	1:M:507:GLN:HE22	1.39	0.69
1:h:85:ALA:HB1	1:h:501:VAL:HG22	1.75	0.69
1:i:116:LEU:O	1:i:120:ILE:HG13	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:224:LYS:HG2	1:i:225:LYS:N	2.06	0.69
1:i:422:ILE:HG23	1:i:444:ARG:HG3	1.75	0.69
1:D:149:THR:HG23	1:D:155:PRO:HA	1.73	0.69
1:L:269:THR:HA	1:M:256:GLU:CG	2.23	0.69
1:N:229:VAL:HG23	1:N:256:GLU:HB3	1.74	0.69
2:S:10:PRO:HG3	2:S:47:ALA:O	1.93	0.69
2:U:77:GLY:HA3	2:U:90:LEU:HD23	1.75	0.69
1:a:178:GLU:HG3	1:a:388:LEU:HD21	1.75	0.69
1:a:233:LEU:HD23	2:o:30:ILE:HG21	1.74	0.69
1:c:199:ILE:HG23	1:c:276:LYS:HZ2	1.58	0.69
1:h:264:ASN:HB3	1:h:269:THR:HB	1.75	0.69
1:h:277:ALA:CB	1:h:284:ARG:HD2	2.21	0.69
1:h:300:ILE:HG21	1:h:308:LEU:HD23	1.74	0.69
1:j:312:THR:C	1:j:314:SER:H	1.99	0.69
1:l:234:PRO:CG	1:l:309:GLU:HA	2.23	0.69
1:n:194:PHE:CD1	1:n:278:PRO:HB3	2.28	0.69
1:n:212:ALA:HB3	1:n:324:ILE:HB	1.75	0.69
1:A:120:ILE:O	1:A:124:VAL:HG23	1.93	0.69
1:L:246:LEU:HB3	1:L:272:VAL:HG12	1.73	0.69
1:N:361:ARG:O	1:N:365:GLN:HG2	1.92	0.69
2:R:13:ASP:HB2	2:R:62:LEU:HD11	1.75	0.69
2:R:81:GLU:HG3	2:R:85:GLU:H	1.58	0.69
2:R:97:ALA:HA	2:S:11:LEU:CD1	2.23	0.69
1:c:298:THR:HG23	1:c:304:LEU:CD1	2.22	0.69
1:e:229:VAL:HG11	2:s:32:LEU:CD2	2.21	0.69
1:h:224:LYS:HG2	1:h:225:LYS:N	2.06	0.69
1:i:410:ILE:HB	1:i:496:VAL:CG1	2.22	0.69
1:A:498:PRO:O	1:A:501:VAL:HG22	1.93	0.69
1:F:118:ARG:HH22	1:G:34:ARG:HH12	1.41	0.69
1:G:224:LYS:HB3	1:G:302:GLU:OE1	1.92	0.69
1:H:283:ARG:NH1	1:H:363:LYS:HE3	2.07	0.69
1:M:268:GLY:HA3	1:N:227:SER:HB2	1.75	0.69
1:d:222:VAL:HG22	1:d:300:ILE:HD12	1.74	0.69
1:i:189:VAL:HG12	1:i:190:GLU:N	2.02	0.69
1:l:360:ALA:O	1:l:363:LYS:HG3	1.93	0.69
1:m:277:ALA:CB	1:m:284:ARG:HD2	2.23	0.69
1:E:511:SER:O	1:E:515:LEU:HD23	1.92	0.68
1:H:229:VAL:HG23	1:H:256:GLU:HB3	1.75	0.68
1:I:54:VAL:HG22	1:I:89:THR:HG21	1.74	0.68
1:K:219:ILE:HD12	1:K:295:THR:HG23	1.74	0.68
1:M:372:ALA:C	1:M:374:GLY:N	2.48	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:116:LEU:O	1:d:120:ILE:HG13	1.93	0.68
1:f:345:ILE:HG23	1:f:368:LEU:HD13	1.75	0.68
1:l:54:VAL:HG22	1:l:89:THR:HG21	1.74	0.68
1:m:307:LYS:HE3	1:m:310:ASN:HD21	1.55	0.68
1:n:464:VAL:HG12	1:n:468:GLN:HE21	1.58	0.68
1:E:235:ILE:O	1:E:239:VAL:HG23	1.92	0.68
1:G:72:GLN:HE22	1:G:75:LYS:NZ	1.91	0.68
1:I:300:ILE:HG21	1:I:308:LEU:HD23	1.74	0.68
1:K:283:ARG:NH2	1:K:367:ARG:HD3	2.09	0.68
1:K:384:THR:HG22	1:K:386:THR:H	1.59	0.68
1:L:290:ASP:OD1	1:L:371:LEU:HD11	1.93	0.68
1:M:366:GLU:O	1:M:370:LYS:HG3	1.94	0.68
1:N:526:LYS:HG3	1:N:527:PRO:CD	2.21	0.68
2:R:20:ILE:HG13	2:R:43:GLY:HA2	1.74	0.68
1:a:325:THR:HG22	1:a:326:LYS:H	1.58	0.68
1:a:422:ILE:HG23	1:a:444:ARG:HG3	1.75	0.68
1:c:307:LYS:HB3	1:c:310:ASN:HD22	1.57	0.68
1:h:246:LEU:HB3	1:h:272:VAL:HG12	1.76	0.68
1:i:325:THR:HG22	1:i:327:ASP:N	1.99	0.68
1:j:50:THR:HG22	1:j:52:ASP:N	2.07	0.68
1:D:382:ALA:HB3	1:D:388:LEU:HB2	1.75	0.68
1:E:527:PRO:O	1:E:528:GLU:HB2	1.93	0.68
1:G:259:ALA:O	1:G:263:VAL:HG23	1.94	0.68
1:J:224:LYS:HG2	1:J:225:LYS:N	2.09	0.68
1:J:277:ALA:HB3	1:J:284:ARG:HD2	1.74	0.68
1:J:410:ILE:HB	1:J:496:VAL:CG1	2.23	0.68
1:M:384:THR:HG22	1:M:386:THR:H	1.58	0.68
1:b:118:ARG:HH22	1:c:34:ARG:HH12	1.39	0.68
1:d:3:ALA:CB	1:d:529:LYS:NZ	2.47	0.68
1:m:54:VAL:HG22	1:m:89:THR:HG21	1.76	0.68
1:m:283:ARG:NH2	1:m:367:ARG:HD3	2.08	0.68
1:C:118:ARG:HH22	1:D:34:ARG:HH12	1.38	0.68
1:F:72:GLN:HE22	1:F:75:LYS:NZ	1.90	0.68
1:G:212:ALA:HB3	1:G:324:ILE:HB	1.73	0.68
1:H:283:ARG:HH11	1:H:363:LYS:HE3	1.58	0.68
1:I:384:THR:HG22	1:I:386:THR:H	1.56	0.68
1:I:410:ILE:HB	1:I:496:VAL:CG1	2.23	0.68
1:d:352:LEU:HD21	1:d:364:LEU:HB2	1.75	0.68
1:f:136:ILE:HD11	1:f:477:ARG:NH2	2.08	0.68
1:g:178:GLU:HG3	1:g:388:LEU:HD21	1.73	0.68
1:k:408:GLU:OE2	1:k:500:LYS:HG3	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:490:MET:HE2	1:n:490:MET:HA	1.75	0.68
2:o:9:LYS:HB2	2:u:98:VAL:O	1.93	0.68
1:B:218:PHE:HB3	1:B:316:LEU:HD13	1.76	0.68
1:B:235:ILE:HD11	1:B:316:LEU:HD21	1.75	0.68
1:C:450:PRO:O	1:C:454:ILE:HG13	1.94	0.68
1:G:189:VAL:CG1	1:G:190:GLU:N	2.56	0.68
1:H:464:VAL:HG12	1:H:468:GLN:HE21	1.58	0.68
1:I:59:GLU:O	1:J:4:LYS:HG3	1.92	0.68
1:K:229:VAL:HG23	1:K:256:GLU:HB3	1.75	0.68
2:U:73:ALA:HB1	2:U:75:TYR:CE2	2.29	0.68
1:c:246:LEU:HB3	1:c:272:VAL:HG12	1.76	0.68
1:d:366:GLU:O	1:d:370:LYS:HG3	1.94	0.68
1:g:223:GLU:O	1:g:251:GLU:HB2	1.92	0.68
1:k:283:ARG:NH1	1:k:363:LYS:HE3	2.06	0.68
1:l:410:ILE:HB	1:l:496:VAL:CG1	2.24	0.68
1:m:224:LYS:HG2	1:m:225:LYS:N	2.07	0.68
2:u:74:LYS:NZ	2:u:75:TYR:HB3	2.08	0.68
1:E:265:LYS:HZ2	1:E:271:SER:HB2	1.57	0.68
1:E:325:THR:HG22	1:E:326:LYS:N	2.08	0.68
1:M:222:VAL:HG12	1:M:224:LYS:H	1.58	0.68
2:O:14:ARG:HH11	2:O:14:ARG:HG3	1.57	0.68
2:O:45:VAL:HG21	2:O:64:VAL:HG11	1.74	0.68
1:a:150:ILE:CD1	1:a:495:ILE:HA	2.20	0.68
1:b:246:LEU:HB3	1:b:272:VAL:CG1	2.24	0.68
1:c:326:LYS:O	1:c:326:LYS:HD3	1.94	0.68
1:k:361:ARG:O	1:k:365:GLN:HG2	1.94	0.68
2:o:10:PRO:HB2	2:o:14:ARG:O	1.93	0.68
1:A:165:MET:HE3	1:A:402:THR:HG21	1.74	0.68
1:A:202:TYR:OH	1:G:289:LYS:HE2	1.94	0.68
1:F:235:ILE:HD11	1:F:311:ALA:HB3	1.74	0.68
1:e:136:ILE:HD11	1:e:477:ARG:HH21	1.58	0.68
1:h:283:ARG:HH12	1:h:364:LEU:HD12	1.59	0.68
1:i:219:ILE:HD12	1:i:295:THR:HG23	1.76	0.68
1:i:352:LEU:HD23	1:i:364:LEU:HD22	1.76	0.68
1:i:490:MET:HE2	1:i:490:MET:HA	1.75	0.68
1:j:232:LEU:HD22	1:j:236:LEU:HD22	1.73	0.68
1:l:243:GLY:CA	1:m:228:ASN:CB	2.67	0.68
1:n:247:LEU:HD22	1:n:322:VAL:HG11	1.76	0.68
2:p:12:GLY:O	2:p:13:ASP:CB	2.41	0.68
2:p:13:ASP:OD1	2:p:92:GLU:HB3	1.94	0.68
1:C:72:GLN:HE22	1:C:75:LYS:NZ	1.90	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:96:ALA:O	1:C:100:VAL:HG23	1.92	0.68
1:E:307:LYS:HB3	1:E:310:ASN:HD22	1.58	0.68
1:I:366:GLU:O	1:I:370:LYS:HG3	1.94	0.68
1:L:180:LYS:HB3	1:M:281:GLY:HA2	1.75	0.68
1:M:362:GLU:O	1:M:365:GLN:HB2	1.92	0.68
1:e:149:THR:HG23	1:e:155:PRO:HA	1.74	0.68
1:f:263:VAL:O	1:f:267:ARG:HB2	1.92	0.68
1:g:258:LEU:HA	1:g:261:LEU:HD12	1.76	0.68
1:h:219:ILE:HD12	1:h:295:THR:HG23	1.74	0.68
1:k:384:THR:HG22	1:k:386:THR:H	1.57	0.68
2:r:98:VAL:HG23	2:s:11:LEU:HD11	1.74	0.68
2:u:32:LEU:HD12	2:u:36:ALA:HB1	1.75	0.68
1:A:150:ILE:HD11	1:A:495:ILE:CA	2.17	0.68
1:F:270:LEU:HG	1:F:272:VAL:HG13	1.76	0.68
1:J:300:ILE:HG21	1:J:308:LEU:HD23	1.76	0.68
1:N:290:ASP:OD1	1:N:371:LEU:HD11	1.93	0.68
1:b:522:VAL:HG22	1:c:39:VAL:HB	1.76	0.68
1:g:222:VAL:HA	1:g:300:ILE:HB	1.74	0.68
1:h:103:GLY:O	1:h:107:VAL:HG23	1.93	0.68
1:j:246:LEU:HB3	1:j:272:VAL:HG12	1.75	0.68
1:k:224:LYS:HG2	1:k:225:LYS:N	2.08	0.68
1:B:373:GLY:O	1:B:375:VAL:N	2.27	0.68
1:C:236:LEU:HB2	2:Q:30:ILE:CD1	2.23	0.68
1:E:50:THR:CG2	1:E:52:ASP:H	2.04	0.68
1:F:69:ILE:HD11	1:G:41:GLU:HB2	1.75	0.68
1:a:263:VAL:O	1:a:267:ARG:HB2	1.93	0.68
1:h:222:VAL:HG12	1:h:224:LYS:H	1.59	0.68
1:k:410:ILE:HB	1:k:496:VAL:CG1	2.24	0.68
2:s:5:LYS:HG2	2:s:6:THR:N	2.07	0.68
2:O:13:ASP:HB2	2:O:62:LEU:HD21	1.76	0.67
2:O:20:ILE:HG13	2:O:43:GLY:HA2	1.76	0.67
1:e:422:ILE:HG23	1:e:444:ARG:HG3	1.76	0.67
1:h:410:ILE:HB	1:h:496:VAL:CG1	2.25	0.67
1:j:116:LEU:O	1:j:120:ILE:HG13	1.93	0.67
1:k:189:VAL:HG12	1:k:190:GLU:H	1.58	0.67
1:D:136:ILE:HD11	1:D:477:ARG:NH2	2.09	0.67
1:E:264:ASN:OD1	2:S:30:ILE:HG23	1.94	0.67
1:I:217:ALA:CB	1:I:245:PRO:HG2	2.23	0.67
1:K:503:ARG:HH11	1:K:507:GLN:HE22	1.42	0.67
1:N:300:ILE:HG21	1:N:308:LEU:HD23	1.75	0.67
2:U:10:PRO:HB2	2:U:14:ARG:O	1.95	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:232:LEU:HD22	1:k:236:LEU:HD22	1.75	0.67
2:t:99:LEU:O	2:t:100:GLN:HG3	1.94	0.67
1:A:511:SER:O	1:A:515:LEU:HD23	1.95	0.67
1:B:189:VAL:CG1	1:B:190:GLU:N	2.57	0.67
1:E:256:GLU:OE1	2:S:36:ALA:HA	1.94	0.67
1:I:459:GLY:HA3	1:J:114:LEU:HD12	1.74	0.67
1:I:490:MET:HE2	1:I:490:MET:HA	1.76	0.67
2:U:8:ILE:HD12	2:U:8:ILE:N	2.09	0.67
1:f:498:PRO:O	1:f:501:VAL:HG22	1.93	0.67
1:h:96:ALA:O	1:h:100:VAL:HG23	1.95	0.67
1:i:7:VAL:HG21	1:i:66:LEU:HD11	1.76	0.67
1:i:234:PRO:CG	1:i:309:GLU:HA	2.23	0.67
1:l:300:ILE:HG21	1:l:308:LEU:HD23	1.76	0.67
1:l:384:THR:HG22	1:l:386:THR:H	1.59	0.67
1:E:264:ASN:CG	2:S:30:ILE:HG23	2.19	0.67
1:K:74:LEU:HD12	1:K:512:ILE:HD12	1.77	0.67
1:K:232:LEU:HD22	1:K:236:LEU:HD22	1.76	0.67
1:L:312:THR:C	1:L:314:SER:H	2.01	0.67
2:P:38:GLU:OE1	2:P:74:LYS:NZ	2.27	0.67
1:a:69:ILE:HD11	1:b:41:GLU:HB2	1.74	0.67
1:c:345:ILE:CG1	1:c:368:LEU:HD23	2.25	0.67
1:h:290:ASP:OD1	1:h:371:LEU:HD11	1.95	0.67
1:i:59:GLU:O	1:j:4:LYS:HG3	1.95	0.67
1:k:84:VAL:HG12	1:k:500:LYS:HE2	1.76	0.67
1:k:503:ARG:HH11	1:k:507:GLN:HE22	1.40	0.67
2:r:14:ARG:HH11	2:r:14:ARG:HG3	1.58	0.67
1:B:228:ASN:ND2	1:B:231:GLU:HG3	2.09	0.67
1:G:422:ILE:HG23	1:G:444:ARG:HG3	1.75	0.67
2:S:80:ILE:HG22	2:S:81:GLU:N	2.09	0.67
1:a:301:SER:HB2	1:a:304:LEU:HB3	1.76	0.67
1:g:94:VAL:HG12	1:g:449:GLU:HB3	1.77	0.67
1:h:283:ARG:NH1	1:h:363:LYS:HE3	2.09	0.67
1:h:361:ARG:O	1:h:365:GLN:HG2	1.95	0.67
1:k:277:ALA:CB	1:k:284:ARG:HD2	2.24	0.67
2:s:14:ARG:HH11	2:s:14:ARG:HG3	1.60	0.67
1:A:301:SER:HB2	1:A:304:LEU:HB3	1.77	0.67
1:H:224:LYS:HG2	1:H:225:LYS:N	2.08	0.67
1:I:194:PHE:CD1	1:I:278:PRO:HB3	2.30	0.67
1:L:372:ALA:O	1:L:374:GLY:N	2.26	0.67
1:a:136:ILE:HD11	1:a:477:ARG:HH21	1.60	0.67
1:d:165:MET:HE3	1:d:402:THR:HG21	1.76	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:157:VAL:HG21	1:j:395:PHE:CE2	2.30	0.67
1:j:219:ILE:HD12	1:j:295:THR:CG2	2.24	0.67
1:j:277:ALA:CB	1:j:284:ARG:HD2	2.25	0.67
1:l:290:ASP:OD1	1:l:371:LEU:HD11	1.94	0.67
1:n:222:VAL:HG12	1:n:224:LYS:H	1.60	0.67
2:q:15:VAL:HG12	2:q:16:VAL:H	1.58	0.67
1:E:351:GLU:HG3	1:F:326:LYS:HZ1	1.59	0.67
1:H:249:ILE:HG22	1:H:249:ILE:O	1.93	0.67
1:H:277:ALA:CB	1:H:284:ARG:HD2	2.25	0.67
1:I:37:ASN:HD21	1:I:51:LYS:HE2	1.59	0.67
1:N:410:ILE:HB	1:N:496:VAL:CG1	2.24	0.67
1:a:498:PRO:O	1:a:501:VAL:HG22	1.94	0.67
1:d:515:LEU:HD12	1:e:49:ILE:HG21	1.75	0.67
1:g:225:LYS:HG3	1:g:252:ASP:HB3	1.77	0.67
1:h:464:VAL:HG12	1:h:468:GLN:HE21	1.60	0.67
1:i:84:VAL:HG12	1:i:500:LYS:HE2	1.77	0.67
1:k:222:VAL:HG12	1:k:223:GLU:N	2.09	0.67
1:m:189:VAL:HG12	1:m:190:GLU:N	2.03	0.67
1:A:50:THR:CG2	1:A:52:ASP:H	2.07	0.67
1:A:455:ALA:HB1	1:A:465:ILE:HD12	1.76	0.67
1:C:19:GLY:HA3	1:C:67:GLU:O	1.95	0.67
1:D:325:THR:HG22	1:D:326:LYS:H	1.60	0.67
1:F:149:THR:HG23	1:F:155:PRO:HA	1.77	0.67
1:K:212:ALA:HB3	1:K:324:ILE:HB	1.77	0.67
1:L:503:ARG:NH1	1:L:507:GLN:HE22	1.93	0.67
2:U:81:GLU:HG3	2:U:85:GLU:H	1.59	0.67
1:e:69:ILE:HD11	1:f:41:GLU:HB2	1.76	0.67
1:g:217:ALA:HB2	1:g:245:PRO:HB2	1.75	0.67
1:k:222:VAL:HG12	1:k:224:LYS:H	1.59	0.67
1:m:157:VAL:HG21	1:m:395:PHE:CE2	2.30	0.67
1:C:78:ALA:O	1:C:89:THR:HG22	1.95	0.67
1:F:96:ALA:O	1:F:100:VAL:HG23	1.94	0.67
1:I:385:GLU:HB2	1:J:280:PHE:CE2	2.30	0.67
1:K:277:ALA:HB3	1:K:284:ARG:HD2	1.76	0.67
1:L:84:VAL:HG12	1:L:500:LYS:HE2	1.77	0.67
1:L:277:ALA:HB3	1:L:284:ARG:HD2	1.77	0.67
1:M:283:ARG:HH11	1:M:363:LYS:HE3	1.59	0.67
1:N:249:ILE:O	1:N:249:ILE:HG22	1.94	0.67
2:P:8:ILE:HD12	2:P:8:ILE:N	2.10	0.67
2:Q:55:GLU:CG	2:R:55:GLU:HG2	2.24	0.67
1:b:50:THR:CG2	1:b:52:ASP:H	2.05	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:74:LEU:HD12	1:i:512:ILE:CD1	2.25	0.67
1:l:180:LYS:O	1:m:281:GLY:CA	2.42	0.67
1:n:300:ILE:HG21	1:n:308:LEU:HD23	1.77	0.67
2:o:10:PRO:HG3	2:o:47:ALA:O	1.94	0.67
1:M:234:PRO:CG	1:M:309:GLU:HA	2.24	0.67
1:N:217:ALA:CB	1:N:245:PRO:HG2	2.24	0.67
1:b:240:ALA:HA	1:b:270:LEU:HD13	1.77	0.67
1:b:325:THR:HG22	1:b:326:LYS:N	2.09	0.67
1:c:50:THR:HG22	1:c:52:ASP:N	2.08	0.67
1:f:50:THR:CG2	1:f:52:ASP:H	2.07	0.67
1:f:173:ILE:HD12	1:f:366:GLU:HA	1.75	0.67
1:i:194:PHE:CD1	1:i:278:PRO:HB3	2.30	0.67
1:k:290:ASP:OD1	1:k:371:LEU:HD11	1.95	0.67
1:k:312:THR:C	1:k:314:SER:H	2.03	0.67
1:l:219:ILE:HD12	1:l:295:THR:HG23	1.75	0.67
1:n:7:VAL:HG21	1:n:66:LEU:HD11	1.77	0.67
2:r:10:PRO:HG3	2:r:47:ALA:O	1.95	0.67
2:t:22:GLU:OE1	2:t:37:LYS:HB3	1.94	0.67
2:u:10:PRO:C	2:u:11:LEU:HD22	2.20	0.67
2:u:51:GLY:HA2	2:u:62:LEU:HD21	1.77	0.67
1:D:352:LEU:HD21	1:D:364:LEU:HB2	1.76	0.66
1:H:31:LEU:HD13	1:H:90:THR:HG22	1.76	0.66
1:L:40:LEU:HD23	1:L:59:GLU:CG	2.25	0.66
1:b:235:ILE:HD12	1:b:311:ALA:CB	2.24	0.66
1:i:361:ARG:O	1:i:365:GLN:HG2	1.94	0.66
1:m:189:VAL:HG11	1:m:333:GLY:HA2	1.77	0.66
1:C:184:THR:HG23	1:C:380:VAL:HA	1.77	0.66
1:G:116:LEU:O	1:G:120:ILE:HG13	1.95	0.66
1:H:524:ALA:HA	1:N:41:GLU:HG2	1.77	0.66
1:I:362:GLU:O	1:I:365:GLN:HB2	1.96	0.66
1:J:267:ARG:O	1:K:256:GLU:HG3	1.95	0.66
1:L:408:GLU:OE2	1:L:500:LYS:HG3	1.94	0.66
1:M:490:MET:HE2	1:M:490:MET:HA	1.76	0.66
1:e:72:GLN:HE22	1:e:75:LYS:NZ	1.91	0.66
1:h:222:VAL:HG12	1:h:223:GLU:N	2.09	0.66
2:o:73:ALA:HB1	2:o:75:TYR:CE2	2.30	0.66
2:r:48:VAL:HG12	2:r:62:LEU:CD1	2.25	0.66
1:B:85:ALA:HB1	1:B:501:VAL:HG12	1.78	0.66
1:F:246:LEU:HB3	1:F:272:VAL:HG12	1.77	0.66
1:I:234:PRO:CG	1:I:309:GLU:HA	2.25	0.66
1:K:116:LEU:O	1:K:120:ILE:HG13	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:157:VAL:HG21	1:N:395:PHE:CZ	2.30	0.66
2:U:53:VAL:HG22	2:U:59:ARG:HG2	1.77	0.66
1:d:149:THR:HG23	1:d:155:PRO:HA	1.75	0.66
1:e:96:ALA:O	1:e:100:VAL:HG23	1.95	0.66
1:g:116:LEU:O	1:g:120:ILE:HG13	1.95	0.66
1:h:234:PRO:CG	1:h:309:GLU:HA	2.25	0.66
1:E:290:ASP:HB3	1:E:371:LEU:HD21	1.77	0.66
1:H:54:VAL:HG22	1:H:89:THR:HG21	1.78	0.66
1:K:234:PRO:CG	1:K:309:GLU:HA	2.23	0.66
1:M:290:ASP:OD1	1:M:371:LEU:HD11	1.96	0.66
1:N:50:THR:HG22	1:N:52:ASP:N	2.08	0.66
2:O:54:LEU:CD2	2:P:57:GLY:N	2.53	0.66
1:a:173:ILE:HD12	1:a:366:GLU:HA	1.75	0.66
1:g:249:ILE:HD11	1:g:331:ILE:HD11	1.78	0.66
1:g:259:ALA:O	1:g:263:VAL:HG23	1.96	0.66
1:h:74:LEU:HD12	1:h:512:ILE:CD1	2.26	0.66
1:D:150:ILE:CD1	1:D:495:ILE:HA	2.14	0.66
1:F:235:ILE:CD1	1:F:311:ALA:HB3	2.25	0.66
1:J:40:LEU:HD23	1:J:59:GLU:CG	2.25	0.66
1:K:385:GLU:HB2	1:L:280:PHE:CD2	2.31	0.66
1:d:72:GLN:HE22	1:d:75:LYS:NZ	1.93	0.66
1:M:422:ILE:HG23	1:M:444:ARG:HG3	1.78	0.66
1:N:219:ILE:HD12	1:N:295:THR:CG2	2.25	0.66
1:c:120:ILE:O	1:c:124:VAL:HG23	1.96	0.66
1:f:455:ALA:HB1	1:f:465:ILE:HD12	1.77	0.66
1:C:149:THR:HG23	1:C:155:PRO:HA	1.76	0.66
1:H:228:ASN:HD21	1:H:230:ARG:HB3	1.58	0.66
1:I:219:ILE:HD12	1:I:295:THR:CG2	2.26	0.66
1:a:240:ALA:HA	1:a:270:LEU:HD13	1.77	0.66
1:j:7:VAL:HG21	1:j:66:LEU:HD11	1.77	0.66
1:B:325:THR:HG22	1:B:326:LYS:N	2.11	0.66
1:E:94:VAL:CG1	1:E:449:GLU:HB3	2.25	0.66
1:J:212:ALA:HB3	1:J:324:ILE:HB	1.77	0.66
1:K:410:ILE:HB	1:K:496:VAL:HG11	1.78	0.66
2:T:18:LYS:HZ1	2:T:85:GLU:CD	2.03	0.66
2:T:20:ILE:HG13	2:T:43:GLY:HA2	1.76	0.66
1:a:19:GLY:HA3	1:a:67:GLU:O	1.95	0.66
1:a:351:GLU:HG3	1:b:210:MET:HE3	1.77	0.66
1:c:277:ALA:HB1	1:c:284:ARG:HD2	1.76	0.66
1:d:233:LEU:O	1:d:237:GLU:HG3	1.96	0.66
1:n:246:LEU:HB3	1:n:272:VAL:HG12	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:s:96:LEU:HD23	2:t:14:ARG:HH12	1.60	0.66
1:J:103:GLY:O	1:J:107:VAL:HG23	1.96	0.66
1:e:228:ASN:HD22	1:e:231:GLU:HG3	1.60	0.66
2:r:80:ILE:HG22	2:r:81:GLU:N	2.09	0.66
1:A:237:GLU:CD	2:O:28:GLY:HA3	2.21	0.66
1:A:246:LEU:HB3	1:A:272:VAL:CG1	2.25	0.66
1:D:94:VAL:CG1	1:D:449:GLU:HB3	2.25	0.66
1:E:50:THR:HG21	1:E:52:ASP:HB3	1.76	0.66
1:G:382:ALA:HB3	1:G:388:LEU:HB2	1.77	0.66
1:L:490:MET:HE2	1:L:490:MET:HA	1.78	0.66
2:P:80:ILE:HG22	2:P:81:GLU:N	2.09	0.66
2:U:45:VAL:HG21	2:U:64:VAL:HG11	1.77	0.66
1:c:325:THR:HG22	1:c:326:LYS:N	2.11	0.66
1:g:422:ILE:HG23	1:g:444:ARG:HG3	1.78	0.66
2:q:17:VAL:HG12	2:q:45:VAL:HA	1.77	0.66
1:B:23:VAL:HG22	1:B:60:VAL:HG11	1.78	0.65
1:B:455:ALA:HB1	1:B:465:ILE:HD12	1.76	0.65
1:E:217:ALA:HB2	1:E:245:PRO:HB2	1.78	0.65
1:J:459:GLY:HA3	1:K:114:LEU:HD12	1.76	0.65
1:L:180:LYS:CB	1:M:281:GLY:CA	2.74	0.65
1:N:277:ALA:CB	1:N:284:ARG:HD2	2.26	0.65
1:a:298:THR:HB	1:a:315:MET:HB2	1.77	0.65
1:b:120:ILE:O	1:b:124:VAL:HG23	1.95	0.65
1:d:178:GLU:HG3	1:d:388:LEU:HD21	1.78	0.65
1:e:94:VAL:HG12	1:e:449:GLU:HB3	1.78	0.65
1:g:325:THR:HG22	1:g:326:LYS:N	2.07	0.65
1:j:490:MET:HA	1:j:490:MET:HE2	1.77	0.65
1:l:264:ASN:HB3	1:l:269:THR:HB	1.79	0.65
1:B:290:ASP:O	1:B:294:VAL:HG23	1.96	0.65
1:E:199:ILE:HG13	1:E:274:ALA:O	1.96	0.65
1:F:94:VAL:CG1	1:F:449:GLU:HB3	2.25	0.65
1:J:219:ILE:HD12	1:J:295:THR:CG2	2.26	0.65
1:J:283:ARG:HH11	1:J:363:LYS:HE3	1.59	0.65
1:M:383:ALA:O	1:N:280:PHE:CD1	2.50	0.65
1:N:283:ARG:HD3	1:N:363:LYS:HE3	1.78	0.65
2:O:8:ILE:HD12	2:O:8:ILE:N	2.10	0.65
2:O:11:LEU:O	2:O:12:GLY:C	2.39	0.65
2:P:10:PRO:HG3	2:P:47:ALA:O	1.96	0.65
1:c:259:ALA:O	1:c:263:VAL:HG23	1.96	0.65
1:d:50:THR:HG22	1:d:52:ASP:N	2.10	0.65
1:f:116:LEU:O	1:f:120:ILE:HG13	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:295:THR:HG22	1:j:317:GLY:C	2.20	0.65
1:k:264:ASN:HB3	1:k:269:THR:HB	1.76	0.65
1:l:50:THR:HG22	1:l:51:LYS:N	2.11	0.65
2:q:92:GLU:CA	2:q:95:LEU:HD12	2.08	0.65
1:K:232:LEU:HD21	1:K:236:LEU:HD13	1.75	0.65
1:L:180:LYS:O	1:M:280:PHE:C	2.40	0.65
2:P:73:ALA:HB1	2:P:75:TYR:CE2	2.31	0.65
1:a:522:VAL:HG22	1:b:39:VAL:HB	1.79	0.65
1:e:50:THR:CG2	1:e:52:ASP:H	2.07	0.65
1:f:94:VAL:HG12	1:f:449:GLU:HB3	1.77	0.65
1:j:50:THR:HG22	1:j:51:LYS:N	2.11	0.65
1:j:422:ILE:HG23	1:j:444:ARG:HG3	1.77	0.65
1:B:320:GLU:HB3	1:B:333:GLY:HA3	1.77	0.65
1:C:422:ILE:HG23	1:C:444:ARG:HG3	1.79	0.65
1:I:462:GLY:O	1:I:466:VAL:HG23	1.97	0.65
1:K:157:VAL:HG21	1:K:395:PHE:CE2	2.31	0.65
1:N:283:ARG:HG2	1:N:363:LYS:HZ2	1.59	0.65
2:R:53:VAL:HG22	2:R:59:ARG:HG2	1.78	0.65
1:g:94:VAL:CG1	1:g:449:GLU:HB3	2.26	0.65
1:h:325:THR:HG22	1:h:327:ASP:N	2.02	0.65
1:m:222:VAL:HG12	1:m:224:LYS:H	1.60	0.65
1:m:283:ARG:NH1	1:m:363:LYS:HG3	2.11	0.65
2:s:52:ARG:NH2	2:t:53:VAL:HB	2.12	0.65
1:E:259:ALA:O	1:E:263:VAL:HG23	1.97	0.65
1:J:283:ARG:HH12	1:J:364:LEU:HD12	1.61	0.65
1:N:157:VAL:HG21	1:N:395:PHE:CE2	2.32	0.65
2:Q:20:ILE:HG13	2:Q:43:GLY:HA2	1.78	0.65
2:S:73:ALA:HB1	2:S:75:TYR:CE2	2.32	0.65
1:a:50:THR:HG21	1:a:52:ASP:HB3	1.79	0.65
1:e:373:GLY:O	1:e:375:VAL:N	2.29	0.65
1:h:189:VAL:CG1	1:h:333:GLY:HA2	2.25	0.65
1:j:84:VAL:HG12	1:j:500:LYS:HE2	1.78	0.65
1:k:40:LEU:HD23	1:k:59:GLU:CG	2.27	0.65
1:k:234:PRO:CG	1:k:309:GLU:HA	2.26	0.65
1:m:295:THR:HG22	1:m:317:GLY:C	2.22	0.65
1:A:94:VAL:CG1	1:A:449:GLU:HB3	2.26	0.65
1:A:116:LEU:O	1:A:120:ILE:HG13	1.97	0.65
1:H:7:VAL:HG21	1:H:66:LEU:HD11	1.77	0.65
1:J:325:THR:HG22	1:J:327:ASP:N	1.98	0.65
1:K:96:ALA:O	1:K:100:VAL:HG23	1.97	0.65
1:L:366:GLU:O	1:L:370:LYS:HG3	1.97	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:490:MET:HE2	1:N:490:MET:HA	1.79	0.65
1:a:94:VAL:CG1	1:a:449:GLU:HB3	2.26	0.65
1:d:19:GLY:HA3	1:d:67:GLU:O	1.97	0.65
1:j:340:ASP:O	1:j:343:ALA:HB3	1.95	0.65
2:q:58:GLN:HG2	2:q:59:ARG:H	1.61	0.65
1:D:50:THR:CG2	1:D:51:LYS:H	2.08	0.65
1:F:94:VAL:HG12	1:F:449:GLU:HB3	1.79	0.65
1:F:522:VAL:HG22	1:G:39:VAL:HB	1.79	0.65
1:I:325:THR:HG22	1:I:327:ASP:N	2.01	0.65
1:e:256:GLU:OE1	2:s:35:THR:HG22	1.97	0.65
1:h:290:ASP:O	1:h:294:VAL:HG23	1.96	0.65
1:k:74:LEU:HD12	1:k:512:ILE:CD1	2.26	0.65
1:k:217:ALA:CB	1:k:245:PRO:HG2	2.20	0.65
2:o:48:VAL:HG13	2:o:62:LEU:HD12	1.79	0.65
2:q:52:ARG:HG2	2:q:52:ARG:HH11	1.61	0.65
2:r:45:VAL:HG21	2:r:64:VAL:HG11	1.79	0.65
1:C:50:THR:HG22	1:C:52:ASP:N	2.10	0.65
1:D:54:VAL:HG22	1:D:89:THR:HG21	1.78	0.65
1:E:207:PRO:HG2	1:E:208:GLU:H	1.60	0.65
1:G:50:THR:CG2	1:G:52:ASP:H	2.10	0.65
1:H:222:VAL:HG12	1:H:223:GLU:N	2.12	0.65
1:H:325:THR:HG22	1:H:327:ASP:N	2.00	0.65
2:S:52:ARG:HG3	2:S:52:ARG:O	1.95	0.65
2:U:10:PRO:HG3	2:U:47:ALA:O	1.97	0.65
1:c:522:VAL:HG22	1:d:39:VAL:HB	1.77	0.65
2:o:54:LEU:HD11	2:p:57:GLY:H	1.60	0.65
2:q:58:GLN:CG	2:q:59:ARG:H	2.10	0.65
2:s:62:LEU:H	2:s:62:LEU:HD12	1.62	0.65
1:C:263:VAL:O	1:C:267:ARG:HB2	1.96	0.65
1:G:96:ALA:O	1:G:100:VAL:HG23	1.97	0.65
1:H:312:THR:C	1:H:314:SER:H	2.05	0.65
1:J:187:LYS:NZ	1:J:379:ARG:HG3	2.12	0.65
1:L:234:PRO:CG	1:L:309:GLU:HA	2.27	0.65
1:L:340:ASP:O	1:L:343:ALA:HB3	1.96	0.65
1:M:177:GLU:HB3	1:M:321:ARG:NH1	2.12	0.65
1:M:194:PHE:CD1	1:M:278:PRO:HB3	2.32	0.65
1:M:249:ILE:HG22	1:M:249:ILE:O	1.97	0.65
1:N:232:LEU:HD23	1:N:232:LEU:O	1.97	0.65
2:U:13:ASP:C	2:U:13:ASP:OD1	2.40	0.65
1:a:307:LYS:HB2	1:a:310:ASN:HD22	1.61	0.65
1:b:224:LYS:HB3	1:b:302:GLU:OE1	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:450:PRO:O	1:b:454:ILE:HG13	1.96	0.65
1:j:503:ARG:HH11	1:j:507:GLN:HE22	1.44	0.65
1:l:290:ASP:N	1:l:344:ARG:HH12	1.95	0.65
1:m:194:PHE:CD1	1:m:278:PRO:HB3	2.32	0.65
1:m:234:PRO:CG	1:m:309:GLU:HA	2.25	0.65
1:n:79:SER:C	1:n:81:THR:H	2.05	0.65
2:q:91:SER:CB	2:q:93:ARG:HH11	2.09	0.65
1:A:515:LEU:HD12	1:B:49:ILE:HG21	1.77	0.65
1:F:236:LEU:HB2	2:T:30:ILE:HD11	1.79	0.65
1:G:57:ALA:O	1:G:75:LYS:HD3	1.97	0.65
1:G:136:ILE:HD11	1:G:477:ARG:HH21	1.61	0.65
1:H:168:VAL:HG11	1:H:173:ILE:H	1.62	0.65
1:H:194:PHE:CD1	1:H:278:PRO:HB3	2.32	0.65
1:L:157:VAL:HG21	1:L:395:PHE:CE2	2.32	0.65
1:d:94:VAL:HG12	1:d:449:GLU:HB3	1.80	0.65
1:d:298:THR:HB	1:d:315:MET:HB2	1.79	0.65
1:f:218:PHE:HB3	1:f:316:LEU:HD13	1.79	0.65
1:f:234:PRO:O	1:f:238:GLN:HG3	1.97	0.65
1:i:79:SER:C	1:i:81:THR:H	2.05	0.65
1:m:217:ALA:CB	1:m:245:PRO:HG2	2.24	0.65
1:m:459:GLY:HA3	1:n:114:LEU:HD12	1.79	0.65
1:n:222:VAL:HG12	1:n:223:GLU:N	2.12	0.65
1:F:345:ILE:HG23	1:F:368:LEU:HD13	1.77	0.64
1:H:167:LYS:HD2	1:H:188:PHE:CZ	2.32	0.64
1:H:524:ALA:HB1	1:N:41:GLU:OE2	1.96	0.64
1:J:283:ARG:NH2	1:J:367:ARG:HD3	2.12	0.64
1:K:79:SER:C	1:K:81:THR:H	2.05	0.64
1:L:290:ASP:N	1:L:344:ARG:HH12	1.95	0.64
1:M:277:ALA:CB	1:M:284:ARG:HD2	2.26	0.64
2:T:49:GLY:O	2:T:62:LEU:HD11	1.96	0.64
2:T:77:GLY:HA3	2:T:90:LEU:HD23	1.79	0.64
1:f:366:GLU:O	1:f:370:LYS:HG3	1.97	0.64
1:f:450:PRO:O	1:f:454:ILE:HG13	1.97	0.64
1:h:79:SER:C	1:h:81:THR:H	2.05	0.64
1:k:295:THR:HG22	1:k:317:GLY:C	2.21	0.64
1:l:503:ARG:NH1	1:l:507:GLN:HE22	1.96	0.64
1:m:503:ARG:NH1	1:m:507:GLN:HE22	1.94	0.64
2:u:13:ASP:CG	2:u:92:GLU:HB3	2.22	0.64
1:H:187:LYS:NZ	1:H:379:ARG:HG3	2.11	0.64
1:L:74:LEU:HD12	1:L:512:ILE:CD1	2.26	0.64
2:T:45:VAL:HG21	2:T:64:VAL:HG11	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:127:ALA:O	1:a:131:ILE:HG13	1.97	0.64
1:b:175:THR:HB	1:b:377:VAL:HG22	1.78	0.64
1:c:72:GLN:HE22	1:c:75:LYS:NZ	1.94	0.64
1:e:366:GLU:O	1:e:370:LYS:HG3	1.97	0.64
1:g:455:ALA:HB1	1:g:465:ILE:HD12	1.79	0.64
1:j:74:LEU:HD12	1:j:512:ILE:CD1	2.28	0.64
1:l:40:LEU:HD23	1:l:59:GLU:CG	2.27	0.64
1:n:219:ILE:HD12	1:n:295:THR:CG2	2.26	0.64
2:s:45:VAL:HG21	2:s:64:VAL:HG11	1.78	0.64
2:t:55:GLU:CD	2:u:55:GLU:HB3	2.23	0.64
1:E:141:ARG:NH2	1:E:163:ASP:OD1	2.30	0.64
1:F:120:ILE:O	1:F:124:VAL:HG23	1.98	0.64
1:H:79:SER:C	1:H:81:THR:H	2.05	0.64
1:J:312:THR:C	1:J:314:SER:H	2.05	0.64
1:M:173:ILE:HD11	1:M:370:LYS:HB3	1.78	0.64
2:S:8:ILE:N	2:S:8:ILE:HD12	2.13	0.64
1:b:50:THR:CG2	1:b:51:LYS:H	2.08	0.64
1:c:69:ILE:HD11	1:d:41:GLU:HB2	1.79	0.64
1:c:165:MET:HE3	1:c:402:THR:HG21	1.78	0.64
1:g:149:THR:HG23	1:g:155:PRO:HA	1.79	0.64
1:g:277:ALA:HB1	1:g:284:ARG:HD2	1.80	0.64
1:i:295:THR:HG22	1:i:317:GLY:C	2.23	0.64
2:o:20:ILE:HG13	2:o:43:GLY:HA2	1.78	0.64
1:A:366:GLU:O	1:A:370:LYS:HG3	1.98	0.64
1:B:50:THR:HG21	1:B:52:ASP:HB3	1.80	0.64
1:B:234:PRO:O	1:B:238:GLN:HG3	1.96	0.64
1:B:422:ILE:HG23	1:B:444:ARG:HG3	1.77	0.64
1:H:157:VAL:HG21	1:H:395:PHE:CE2	2.33	0.64
1:H:332:VAL:HG22	1:H:375:VAL:HG11	1.80	0.64
1:K:222:VAL:HG12	1:K:223:GLU:N	2.13	0.64
1:N:31:LEU:HD13	1:N:90:THR:HG22	1.80	0.64
1:N:212:ALA:HB3	1:N:324:ILE:HB	1.78	0.64
2:S:45:VAL:HG21	2:S:64:VAL:HG11	1.78	0.64
1:d:320:GLU:HB3	1:d:333:GLY:HA3	1.80	0.64
1:e:217:ALA:HB2	1:e:245:PRO:HB2	1.79	0.64
1:f:94:VAL:CG1	1:f:449:GLU:HB3	2.27	0.64
1:i:157:VAL:HG21	1:i:395:PHE:CE2	2.33	0.64
1:i:222:VAL:HG12	1:i:224:LYS:H	1.63	0.64
1:j:232:LEU:HD21	1:j:236:LEU:HD13	1.79	0.64
1:n:187:LYS:NZ	1:n:379:ARG:HG3	2.13	0.64
2:q:15:VAL:HG12	2:q:16:VAL:N	2.12	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:74:LEU:HA	1:H:512:ILE:HD11	1.79	0.64
1:K:277:ALA:CB	1:K:284:ARG:HD2	2.28	0.64
1:N:40:LEU:HD23	1:N:59:GLU:CG	2.27	0.64
2:O:56:ASN:HD21	2:P:56:ASN:HB3	1.63	0.64
1:b:50:THR:HG21	1:b:52:ASP:HB3	1.78	0.64
1:g:326:LYS:O	1:g:326:LYS:HD3	1.97	0.64
1:i:372:ALA:C	1:i:374:GLY:H	2.06	0.64
1:k:103:GLY:O	1:k:107:VAL:HG23	1.97	0.64
1:m:490:MET:HA	1:m:490:MET:HE2	1.79	0.64
1:n:50:THR:HG22	1:n:51:LYS:N	2.10	0.64
1:n:295:THR:HG22	1:n:317:GLY:C	2.22	0.64
2:t:96:LEU:HB3	2:u:89:ILE:HG21	1.80	0.64
1:B:94:VAL:CG1	1:B:449:GLU:HB3	2.27	0.64
1:J:157:VAL:HG21	1:J:395:PHE:CE2	2.32	0.64
1:L:7:VAL:HG21	1:L:66:LEU:HD11	1.79	0.64
1:L:50:THR:HG22	1:L:51:LYS:N	2.12	0.64
1:M:345:ILE:O	1:M:349:LYS:HG3	1.98	0.64
1:N:234:PRO:CG	1:N:309:GLU:HA	2.28	0.64
2:S:20:ILE:HG13	2:S:43:GLY:HA2	1.79	0.64
1:c:85:ALA:HB1	1:c:501:VAL:HG12	1.79	0.64
1:d:359:TYR:CZ	1:d:363:LYS:HE3	2.33	0.64
1:n:84:VAL:HG12	1:n:500:LYS:HE2	1.79	0.64
2:o:77:GLY:HA3	2:o:90:LEU:HD23	1.79	0.64
2:p:13:ASP:OD1	2:p:13:ASP:O	2.15	0.64
2:u:79:GLU:C	2:u:80:ILE:HD12	2.22	0.64
1:I:503:ARG:NH1	1:I:507:GLN:HE22	1.95	0.64
1:K:267:ARG:HG2	1:L:256:GLU:CD	2.23	0.64
1:L:222:VAL:HG12	1:L:223:GLU:N	2.13	0.64
1:M:323:ARG:NH1	1:M:392:LYS:HZ3	1.95	0.64
1:N:247:LEU:HD22	1:N:322:VAL:HG11	1.78	0.64
1:j:79:SER:C	1:j:81:THR:H	2.06	0.64
1:j:212:ALA:HB3	1:j:324:ILE:HB	1.80	0.64
1:m:175:THR:HG21	1:m:177:GLU:OE2	1.96	0.64
1:m:345:ILE:O	1:m:349:LYS:HG3	1.97	0.64
1:C:116:LEU:O	1:C:120:ILE:HG13	1.97	0.64
1:D:40:LEU:HD13	1:D:59:GLU:HG3	1.80	0.64
1:E:248:ILE:HD12	1:E:261:LEU:HD21	1.79	0.64
1:I:212:ALA:HB3	1:I:324:ILE:HB	1.79	0.64
1:I:222:VAL:HG12	1:I:223:GLU:N	2.11	0.64
1:M:157:VAL:HG21	1:M:395:PHE:CE2	2.32	0.64
1:N:79:SER:C	1:N:81:THR:H	2.06	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:P:100:GLN:HB2	2:Q:9:LYS:HE2	1.80	0.64
1:c:94:VAL:CG1	1:c:449:GLU:HB3	2.27	0.64
1:c:136:ILE:HD11	1:c:477:ARG:HH21	1.63	0.64
1:i:277:ALA:CB	1:i:284:ARG:HD2	2.26	0.64
1:j:234:PRO:CG	1:j:309:GLU:HA	2.28	0.64
1:m:366:GLU:O	1:m:370:LYS:HG3	1.98	0.64
1:A:522:VAL:HG22	1:B:39:VAL:HB	1.78	0.64
1:D:136:ILE:HD11	1:D:477:ARG:HH21	1.63	0.64
1:D:304:LEU:CD1	1:E:262:VAL:HG11	2.27	0.64
1:I:189:VAL:CG1	1:I:333:GLY:HA2	2.26	0.64
1:L:65:HIS:O	1:L:69:ILE:HG13	1.98	0.64
1:L:235:ILE:HD11	1:L:311:ALA:CB	2.18	0.64
1:e:233:LEU:O	1:e:237:GLU:HG3	1.98	0.64
1:e:320:GLU:HB3	1:e:333:GLY:HA3	1.80	0.64
1:f:23:VAL:HG22	1:f:60:VAL:HG11	1.80	0.64
1:g:348:ILE:HD11	1:g:367:ARG:HE	1.61	0.64
1:l:157:VAL:HG21	1:l:395:PHE:CE2	2.32	0.64
2:o:32:LEU:HG	2:o:33:PRO:HD2	1.80	0.64
2:q:54:LEU:CD1	2:q:55:GLU:H	2.11	0.64
2:u:48:VAL:CG1	2:u:62:LEU:HD12	2.28	0.64
1:A:312:THR:OG1	1:A:315:MET:HE3	1.98	0.64
1:B:224:LYS:HB3	1:B:302:GLU:OE1	1.98	0.64
1:H:114:LEU:HD12	1:N:459:GLY:HA3	1.77	0.64
1:J:503:ARG:HH11	1:J:507:GLN:HE22	1.46	0.64
1:K:168:VAL:HG11	1:K:173:ILE:H	1.63	0.64
1:K:297:GLY:HA3	1:K:317:GLY:H	1.63	0.64
1:N:222:VAL:HG12	1:N:223:GLU:N	2.13	0.64
1:e:298:THR:HB	1:e:315:MET:HB2	1.80	0.64
1:g:225:LYS:HD3	1:g:254:GLU:CD	2.23	0.64
1:i:247:LEU:HD22	1:i:322:VAL:HG11	1.80	0.64
1:m:290:ASP:OD1	1:m:371:LEU:HD11	1.96	0.64
1:n:264:ASN:HB3	1:n:269:THR:HB	1.80	0.64
1:F:150:ILE:HD11	1:F:495:ILE:CA	2.14	0.63
1:G:279:GLY:C	1:G:284:ARG:HB3	2.22	0.63
1:H:295:THR:HG22	1:H:317:GLY:C	2.21	0.63
1:K:157:VAL:HG21	1:K:395:PHE:CZ	2.33	0.63
1:M:167:LYS:HD2	1:M:188:PHE:CZ	2.32	0.63
2:S:100:GLN:OE1	2:T:9:LYS:CE	2.46	0.63
1:a:237:GLU:HB3	2:o:28:GLY:CA	2.22	0.63
1:b:319:ALA:HB1	1:b:332:VAL:O	1.98	0.63
1:c:50:THR:HG21	1:c:52:ASP:HB3	1.80	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:225:LYS:HD3	1:c:254:GLU:CD	2.23	0.63
1:e:416:VAL:HG21	1:e:490:MET:HG3	1.79	0.63
1:g:136:ILE:O	1:g:410:ILE:HG22	1.98	0.63
1:h:303:GLU:C	1:h:305:GLY:H	2.06	0.63
1:i:50:THR:HG22	1:i:52:ASP:N	2.10	0.63
1:j:167:LYS:HD2	1:j:188:PHE:CZ	2.33	0.63
1:j:345:ILE:O	1:j:349:LYS:HG3	1.98	0.63
1:G:94:VAL:CG1	1:G:449:GLU:HB3	2.28	0.63
1:H:157:VAL:HG21	1:H:395:PHE:CZ	2.34	0.63
1:H:247:LEU:HD22	1:H:322:VAL:HG11	1.80	0.63
1:H:264:ASN:HB3	1:H:269:THR:HB	1.78	0.63
1:I:232:LEU:HD21	1:I:236:LEU:HD13	1.79	0.63
1:I:277:ALA:CB	1:I:284:ARG:HD2	2.29	0.63
1:L:180:LYS:C	1:M:281:GLY:CA	2.71	0.63
1:L:222:VAL:HG12	1:L:224:LYS:H	1.62	0.63
2:Q:62:LEU:HD12	2:Q:62:LEU:H	1.63	0.63
1:b:301:SER:HB2	1:b:304:LEU:HB3	1.80	0.63
1:d:78:ALA:O	1:d:89:THR:HG22	1.98	0.63
1:f:422:ILE:HG23	1:f:444:ARG:HG3	1.80	0.63
1:g:19:GLY:HA3	1:g:67:GLU:O	1.98	0.63
1:i:352:LEU:HD11	1:i:365:GLN:HE22	1.62	0.63
1:j:411:VAL:O	1:j:496:VAL:HG13	1.98	0.63
1:k:340:ASP:O	1:k:343:ALA:HB3	1.97	0.63
1:l:295:THR:HG22	1:l:317:GLY:C	2.22	0.63
1:m:303:GLU:C	1:m:305:GLY:H	2.06	0.63
1:n:340:ASP:O	1:n:343:ALA:HB3	1.97	0.63
2:t:14:ARG:HG2	2:t:14:ARG:HH11	1.63	0.63
1:D:222:VAL:O	1:D:250:ALA:HA	1.97	0.63
1:E:120:ILE:O	1:E:124:VAL:HG23	1.99	0.63
1:F:50:THR:HG22	1:F:52:ASP:N	2.12	0.63
1:K:167:LYS:HD2	1:K:188:PHE:CZ	2.34	0.63
1:K:290:ASP:OD1	1:K:371:LEU:HD11	1.98	0.63
1:L:116:LEU:O	1:L:120:ILE:HG13	1.98	0.63
1:L:361:ARG:O	1:L:365:GLN:HG2	1.98	0.63
1:L:410:ILE:CD1	1:L:496:VAL:HG11	2.27	0.63
1:M:84:VAL:HG12	1:M:500:LYS:HE2	1.78	0.63
1:N:50:THR:HG22	1:N:51:LYS:N	2.10	0.63
2:P:15:VAL:CG2	2:P:95:LEU:HD11	2.26	0.63
2:P:81:GLU:HG3	2:P:85:GLU:H	1.63	0.63
1:a:287:MET:O	1:a:291:ILE:HG13	1.98	0.63
1:B:19:GLY:HA3	1:B:67:GLU:O	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:349:LYS:C	1:C:351:GLU:H	2.06	0.63
1:E:94:VAL:HG12	1:E:449:GLU:HB3	1.79	0.63
1:E:294:VAL:HA	1:E:341:ILE:HD11	1.79	0.63
1:F:290:ASP:O	1:F:294:VAL:HG23	1.98	0.63
1:K:312:THR:C	1:K:314:SER:H	2.07	0.63
1:M:79:SER:C	1:M:81:THR:H	2.06	0.63
1:c:280:PHE:O	1:c:283:ARG:HB3	1.97	0.63
1:e:235:ILE:HD12	1:e:311:ALA:HB1	1.80	0.63
1:f:19:GLY:HA3	1:f:67:GLU:O	1.98	0.63
1:i:167:LYS:HD2	1:i:188:PHE:CZ	2.34	0.63
1:j:283:ARG:CG	1:j:363:LYS:NZ	2.55	0.63
1:k:50:THR:HG22	1:k:52:ASP:N	2.10	0.63
1:k:297:GLY:HA3	1:k:317:GLY:H	1.63	0.63
1:m:39:VAL:O	1:n:522:VAL:HA	1.99	0.63
2:t:61:PRO:HG3	2:u:59:ARG:HH21	1.64	0.63
1:E:19:GLY:HA3	1:E:67:GLU:O	1.97	0.63
1:I:168:VAL:HG11	1:I:173:ILE:H	1.63	0.63
1:J:410:ILE:HB	1:J:496:VAL:HG11	1.79	0.63
1:L:295:THR:HG22	1:L:317:GLY:C	2.23	0.63
1:M:173:ILE:HD11	1:M:370:LYS:CB	2.29	0.63
1:M:219:ILE:HB	1:M:295:THR:HG21	1.81	0.63
1:N:337:LYS:HB2	1:N:340:ASP:OD2	1.98	0.63
2:O:81:GLU:HA	2:O:86:GLU:HA	1.81	0.63
1:k:157:VAL:HG21	1:k:395:PHE:CE2	2.32	0.63
1:l:103:GLY:O	1:l:107:VAL:HG23	1.98	0.63
1:n:27:VAL:HG12	1:n:90:THR:HG23	1.79	0.63
1:n:157:VAL:HG21	1:n:395:PHE:CE2	2.33	0.63
1:n:217:ALA:CB	1:n:245:PRO:HG2	2.25	0.63
2:p:18:LYS:HG2	2:p:87:TYR:CD2	2.33	0.63
1:B:298:THR:HB	1:B:315:MET:HB2	1.78	0.63
1:B:349:LYS:C	1:B:351:GLU:H	2.07	0.63
1:E:223:GLU:O	1:E:251:GLU:HB2	1.98	0.63
1:H:222:VAL:HG12	1:H:224:LYS:H	1.64	0.63
1:H:232:LEU:HD22	1:H:236:LEU:HD22	1.79	0.63
1:N:189:VAL:CG1	1:N:190:GLU:H	2.10	0.63
2:Q:45:VAL:HG21	2:Q:64:VAL:HG11	1.80	0.63
2:S:96:LEU:HB3	2:T:89:ILE:HD13	1.81	0.63
2:T:62:LEU:HD12	2:T:62:LEU:H	1.63	0.63
1:e:289:LYS:CE	1:f:202:TYR:OH	2.46	0.63
1:g:294:VAL:HA	1:g:341:ILE:HD11	1.81	0.63
1:i:352:LEU:HD11	1:i:365:GLN:NE2	2.14	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:157:VAL:HG21	1:j:395:PHE:CZ	2.33	0.63
1:j:222:VAL:HG12	1:j:224:LYS:H	1.63	0.63
1:j:290:ASP:N	1:j:344:ARG:HH12	1.97	0.63
1:k:168:VAL:HG11	1:k:173:ILE:H	1.64	0.63
1:k:219:ILE:HD12	1:k:295:THR:CG2	2.28	0.63
1:l:362:GLU:O	1:l:365:GLN:HB2	1.99	0.63
1:n:410:ILE:HB	1:n:496:VAL:HG11	1.79	0.63
2:o:45:VAL:HG21	2:o:64:VAL:CG1	2.29	0.63
1:E:265:LYS:NZ	1:E:271:SER:HB2	2.11	0.63
1:F:136:ILE:HD11	1:F:477:ARG:NH2	2.12	0.63
1:M:168:VAL:HG11	1:M:173:ILE:H	1.64	0.63
2:R:45:VAL:HG21	2:R:64:VAL:HG11	1.79	0.63
1:a:235:ILE:O	1:a:239:VAL:HG23	1.99	0.63
1:c:178:GLU:HG3	1:c:388:LEU:HD21	1.80	0.63
1:d:283:ARG:HH11	1:d:363:LYS:HD3	1.61	0.63
1:g:290:ASP:HB3	1:g:371:LEU:HD21	1.81	0.63
1:h:157:VAL:HG21	1:h:395:PHE:CE2	2.34	0.63
1:i:312:THR:C	1:i:314:SER:H	2.07	0.63
1:l:79:SER:C	1:l:81:THR:H	2.07	0.63
1:m:157:VAL:HG21	1:m:395:PHE:CZ	2.34	0.63
1:n:54:VAL:HG22	1:n:89:THR:HG21	1.79	0.63
2:p:8:ILE:HD12	2:p:8:ILE:N	2.13	0.63
2:q:17:VAL:HG12	2:q:44:LYS:O	1.98	0.63
2:t:99:LEU:HD23	2:u:8:ILE:CD1	2.28	0.63
2:t:100:GLN:HE22	2:u:9:LYS:HZ2	1.45	0.63
1:C:98:ALA:HB2	1:C:449:GLU:CG	2.28	0.63
1:H:74:LEU:HD12	1:H:512:ILE:CD1	2.29	0.63
1:I:295:THR:HG22	1:I:317:GLY:C	2.24	0.63
1:J:277:ALA:CB	1:J:284:ARG:HD2	2.27	0.63
1:K:290:ASP:O	1:K:294:VAL:HG23	1.99	0.63
1:L:157:VAL:HG21	1:L:395:PHE:CZ	2.34	0.63
1:M:178:GLU:HB3	1:M:388:LEU:HD21	1.81	0.63
1:N:74:LEU:HD12	1:N:512:ILE:CD1	2.29	0.63
1:N:178:GLU:HB3	1:N:388:LEU:HD21	1.81	0.63
2:R:18:LYS:HG2	2:R:87:TYR:CD2	2.34	0.63
1:a:94:VAL:HG12	1:a:449:GLU:HB3	1.80	0.63
1:d:345:ILE:HG23	1:d:368:LEU:HD13	1.80	0.63
1:g:287:MET:O	1:g:290:ASP:HB2	1.98	0.63
1:h:283:ARG:HG2	1:h:363:LYS:NZ	2.13	0.63
2:q:45:VAL:HG12	2:q:46:ILE:N	2.14	0.63
2:q:77:GLY:HA3	2:q:90:LEU:HB3	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:50:THR:HG22	1:I:51:LYS:N	2.10	0.63
1:K:178:GLU:HB3	1:K:388:LEU:HD21	1.81	0.63
1:L:264:ASN:HB3	1:L:269:THR:HB	1.81	0.63
1:N:222:VAL:HG12	1:N:224:LYS:H	1.64	0.63
2:R:48:VAL:HG13	2:R:62:LEU:HD23	1.79	0.63
1:f:69:ILE:HD11	1:g:41:GLU:HB2	1.81	0.63
1:g:50:THR:CG2	1:g:52:ASP:H	2.09	0.63
1:g:85:ALA:HB1	1:g:501:VAL:HG12	1.80	0.63
1:g:283:ARG:HH22	1:g:366:GLU:CD	2.07	0.63
1:h:40:LEU:HD23	1:h:59:GLU:CG	2.28	0.63
1:l:232:LEU:HD22	1:l:236:LEU:HD22	1.79	0.63
1:A:39:VAL:HB	1:G:522:VAL:HG22	1.81	0.62
1:C:259:ALA:O	1:C:263:VAL:HG23	1.99	0.62
1:D:450:PRO:O	1:D:454:ILE:HG13	1.98	0.62
1:F:298:THR:HB	1:F:315:MET:HB2	1.81	0.62
1:I:79:SER:C	1:I:81:THR:H	2.07	0.62
1:J:247:LEU:HD22	1:J:322:VAL:HG11	1.80	0.62
1:N:307:LYS:HE3	1:N:310:ASN:ND2	2.14	0.62
2:Q:11:LEU:O	2:Q:12:GLY:C	2.40	0.62
2:R:21:GLU:CD	2:R:21:GLU:H	2.07	0.62
2:S:81:GLU:HG3	2:S:85:GLU:H	1.64	0.62
2:U:80:ILE:HG22	2:U:81:GLU:N	2.14	0.62
1:a:39:VAL:HB	1:g:522:VAL:HG22	1.81	0.62
1:e:118:ARG:HH22	1:f:34:ARG:HH12	1.47	0.62
1:e:411:VAL:HB	1:e:412:PRO:HD2	1.81	0.62
1:C:224:LYS:HB3	1:C:302:GLU:OE1	1.99	0.62
1:E:283:ARG:NH2	1:E:366:GLU:OE1	2.32	0.62
1:I:303:GLU:C	1:I:305:GLY:H	2.08	0.62
1:J:465:ILE:HD13	1:J:480:PHE:CE1	2.34	0.62
1:K:187:LYS:NZ	1:K:379:ARG:HG3	2.14	0.62
1:L:247:LEU:HD22	1:L:322:VAL:HG11	1.80	0.62
2:Q:41:GLN:HG2	2:Q:74:LYS:HB3	1.81	0.62
1:b:72:GLN:HE22	1:b:75:LYS:NZ	1.97	0.62
1:e:263:VAL:O	1:e:267:ARG:HB2	1.99	0.62
1:f:246:LEU:HB3	1:f:272:VAL:CG1	2.28	0.62
1:k:408:GLU:O	1:k:499:ALA:HB3	1.99	0.62
1:l:175:THR:HG21	1:l:177:GLU:OE2	1.98	0.62
1:n:249:ILE:HG22	1:n:249:ILE:O	1.98	0.62
2:r:54:LEU:CD2	2:s:55:GLU:HA	2.27	0.62
1:A:352:LEU:HD21	1:A:364:LEU:HB2	1.81	0.62
1:C:124:VAL:O	1:C:128:VAL:HG23	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:503:ARG:NH1	1:H:507:GLN:HE22	1.97	0.62
1:I:157:VAL:HG21	1:I:395:PHE:CE2	2.34	0.62
1:J:295:THR:HG22	1:J:317:GLY:C	2.24	0.62
1:J:303:GLU:C	1:J:305:GLY:H	2.07	0.62
1:M:206:ASN:HD21	1:M:389:LYS:CD	2.12	0.62
1:M:503:ARG:NH1	1:M:507:GLN:HE22	1.98	0.62
1:c:326:LYS:HD3	1:c:326:LYS:C	2.24	0.62
1:f:416:VAL:HG21	1:f:490:MET:HG3	1.81	0.62
1:h:496:VAL:HG12	1:h:497:ASP:H	1.64	0.62
1:l:490:MET:HE2	1:l:490:MET:HA	1.80	0.62
1:n:234:PRO:CG	1:n:309:GLU:HA	2.28	0.62
2:q:50:THR:O	2:q:51:GLY:O	2.17	0.62
2:r:13:ASP:CA	2:r:62:LEU:HD21	2.26	0.62
2:s:41:GLN:HG2	2:s:74:LYS:HB3	1.79	0.62
1:G:312:THR:OG1	1:G:315:MET:HE3	1.99	0.62
1:J:232:LEU:HD21	1:J:236:LEU:HD13	1.80	0.62
1:L:212:ALA:HB3	1:L:324:ILE:HB	1.81	0.62
1:M:50:THR:HG22	1:M:51:LYS:N	2.14	0.62
1:b:366:GLU:O	1:b:370:LYS:HG3	1.98	0.62
1:c:199:ILE:HG13	1:c:274:ALA:O	1.98	0.62
1:e:382:ALA:HB3	1:e:388:LEU:HB2	1.81	0.62
1:j:297:GLY:HA3	1:j:317:GLY:H	1.64	0.62
1:k:79:SER:C	1:k:81:THR:H	2.06	0.62
1:l:195:ASP:O	1:l:196:LYS:HD3	1.99	0.62
1:l:303:GLU:C	1:l:305:GLY:H	2.08	0.62
2:p:20:ILE:HG13	2:p:43:GLY:HA2	1.82	0.62
2:s:10:PRO:HG3	2:s:47:ALA:O	1.99	0.62
2:t:60:VAL:HG13	2:t:61:PRO:HD2	1.81	0.62
1:C:175:THR:HB	1:C:377:VAL:HG22	1.80	0.62
1:E:422:ILE:HG23	1:E:444:ARG:HG3	1.80	0.62
1:E:455:ALA:HB1	1:E:465:ILE:HD12	1.81	0.62
1:F:168:VAL:HG12	1:F:168:VAL:O	2.00	0.62
1:G:256:GLU:HB3	2:U:35:THR:HB	1.81	0.62
1:I:187:LYS:NZ	1:I:379:ARG:HG3	2.14	0.62
1:J:54:VAL:HG22	1:J:89:THR:HG21	1.81	0.62
1:L:345:ILE:O	1:L:348:ILE:HG22	1.99	0.62
1:a:416:VAL:HG21	1:a:490:MET:HG3	1.80	0.62
1:c:209:THR:HB	1:c:211:GLU:HG2	1.82	0.62
1:d:50:THR:HG21	1:d:52:ASP:HB3	1.81	0.62
1:e:136:ILE:HD11	1:e:477:ARG:NH2	2.15	0.62
1:g:50:THR:HG21	1:g:52:ASP:HB3	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:341:ILE:C	1:g:343:ALA:H	2.07	0.62
1:h:217:ALA:CB	1:h:245:PRO:HG2	2.28	0.62
1:h:372:ALA:C	1:h:374:GLY:H	2.07	0.62
1:i:503:ARG:NH1	1:i:507:GLN:HE22	1.98	0.62
2:p:79:GLU:C	2:p:80:ILE:HG13	2.24	0.62
1:E:85:ALA:HB1	1:E:501:VAL:HG12	1.82	0.62
1:F:455:ALA:HB1	1:F:465:ILE:HD12	1.81	0.62
1:I:175:THR:HG21	1:I:177:GLU:OE2	2.00	0.62
1:c:343:ALA:HB1	1:d:210:MET:HE1	1.80	0.62
1:d:422:ILE:HG23	1:d:444:ARG:HG3	1.80	0.62
1:g:287:MET:HE1	1:g:370:LYS:NZ	2.15	0.62
1:l:178:GLU:HB3	1:l:388:LEU:HD21	1.81	0.62
2:r:48:VAL:HG12	2:r:62:LEU:HD13	1.81	0.62
2:t:99:LEU:HA	2:u:8:ILE:HG12	1.82	0.62
1:A:50:THR:CG2	1:A:51:LYS:H	2.11	0.62
1:B:94:VAL:HG12	1:B:449:GLU:HB3	1.80	0.62
1:D:57:ALA:O	1:D:75:LYS:HD3	1.99	0.62
1:F:422:ILE:HG23	1:F:444:ARG:HG3	1.82	0.62
1:G:411:VAL:HB	1:G:412:PRO:HD2	1.81	0.62
1:I:222:VAL:HG12	1:I:224:LYS:H	1.63	0.62
1:J:168:VAL:HG11	1:J:173:ILE:H	1.63	0.62
1:K:40:LEU:HD23	1:K:59:GLU:CG	2.29	0.62
2:P:45:VAL:HG21	2:P:64:VAL:HG11	1.80	0.62
2:P:77:GLY:HA3	2:P:90:LEU:HD23	1.82	0.62
1:b:23:VAL:HG22	1:b:60:VAL:HG11	1.81	0.62
1:e:50:THR:HG21	1:e:52:ASP:HB3	1.82	0.62
1:f:298:THR:HB	1:f:315:MET:HB2	1.81	0.62
1:g:247:LEU:HD22	1:g:322:VAL:HG11	1.81	0.62
1:h:360:ALA:HA	1:h:363:LYS:HG3	1.82	0.62
1:i:222:VAL:HG12	1:i:223:GLU:N	2.15	0.62
1:i:232:LEU:HD22	1:i:236:LEU:HD22	1.81	0.62
1:j:222:VAL:HG12	1:j:223:GLU:N	2.13	0.62
1:k:167:LYS:HD2	1:k:188:PHE:CZ	2.34	0.62
1:m:212:ALA:HB3	1:m:324:ILE:HB	1.81	0.62
1:n:366:GLU:O	1:n:370:LYS:HG3	2.00	0.62
2:p:45:VAL:HG21	2:p:64:VAL:HG11	1.82	0.62
2:q:97:ALA:HA	2:r:9:LYS:O	2.00	0.62
1:B:118:ARG:HH22	1:C:34:ARG:HH12	1.48	0.62
1:C:325:THR:HG22	1:C:326:LYS:N	2.15	0.62
1:I:226:VAL:HG11	1:I:232:LEU:HD12	1.81	0.62
1:J:79:SER:C	1:J:81:THR:H	2.08	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:157:VAL:HG21	1:J:395:PHE:CZ	2.35	0.62
1:J:234:PRO:CG	1:J:309:GLU:HA	2.29	0.62
1:J:290:ASP:O	1:J:294:VAL:HG23	1.99	0.62
1:L:283:ARG:HH11	1:L:363:LYS:HE3	1.64	0.62
1:L:526:LYS:CG	1:L:527:PRO:HD2	2.29	0.62
1:b:141:ARG:NH2	1:b:163:ASP:OD1	2.31	0.62
1:e:306:PHE:HA	2:t:34:ASP:OD2	2.00	0.62
1:f:411:VAL:HB	1:f:412:PRO:HD2	1.81	0.62
1:g:224:LYS:H	1:g:224:LYS:HD2	1.65	0.62
1:g:235:ILE:CG1	1:g:311:ALA:HB3	2.27	0.62
1:g:248:ILE:HD12	1:g:261:LEU:HD21	1.81	0.62
1:k:74:LEU:HD12	1:k:512:ILE:HD12	1.80	0.62
1:m:465:ILE:HD13	1:m:480:PHE:CE1	2.34	0.62
2:q:80:ILE:HG12	2:q:81:GLU:N	2.15	0.62
1:A:218:PHE:HB3	1:A:316:LEU:HD13	1.82	0.62
1:J:189:VAL:CG1	1:J:333:GLY:HA2	2.28	0.62
1:L:462:GLY:O	1:L:466:VAL:HG23	2.00	0.62
1:M:187:LYS:NZ	1:M:379:ARG:HG3	2.14	0.62
2:U:13:ASP:CB	2:U:62:LEU:HD21	2.30	0.62
1:a:450:PRO:O	1:a:454:ILE:HG13	2.00	0.62
1:c:229:VAL:HG23	1:c:256:GLU:HG3	1.82	0.62
1:e:57:ALA:O	1:e:75:LYS:HD3	2.00	0.62
1:e:199:ILE:HG13	1:e:274:ALA:O	1.98	0.62
1:f:72:GLN:HE22	1:f:75:LYS:NZ	1.98	0.62
1:f:368:LEU:HD12	1:f:368:LEU:O	2.00	0.62
1:h:167:LYS:HD2	1:h:188:PHE:CZ	2.34	0.62
1:i:187:LYS:NZ	1:i:379:ARG:HG3	2.15	0.62
1:l:96:ALA:O	1:l:100:VAL:HG23	2.00	0.62
1:n:503:ARG:NH1	1:n:507:GLN:HE22	1.96	0.62
2:r:18:LYS:HG2	2:r:87:TYR:CD2	2.35	0.62
2:r:25:LYS:HG2	2:r:31:VAL:HG22	1.80	0.62
1:A:416:VAL:HG21	1:A:490:MET:HG3	1.81	0.62
1:B:382:ALA:HB3	1:B:388:LEU:HB2	1.81	0.62
1:C:50:THR:HG21	1:C:52:ASP:HB3	1.82	0.62
1:E:54:VAL:HG22	1:E:89:THR:HG21	1.82	0.62
1:E:348:ILE:HD11	1:E:367:ARG:NE	2.14	0.62
1:G:94:VAL:HG12	1:G:449:GLU:HB3	1.82	0.62
1:G:234:PRO:O	1:G:238:GLN:HG3	2.00	0.62
1:I:247:LEU:HD22	1:I:322:VAL:HG11	1.82	0.62
1:I:312:THR:C	1:I:314:SER:H	2.07	0.62
1:I:340:ASP:O	1:I:343:ALA:HB3	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:465:ILE:HD13	1:K:480:PHE:CE1	2.35	0.62
1:N:189:VAL:HG11	1:N:333:GLY:CA	2.23	0.62
2:O:84:GLY:CA	2:U:27:LYS:HD3	2.30	0.62
2:U:92:GLU:HA	2:U:95:LEU:HD12	1.79	0.62
1:e:352:LEU:HD21	1:e:364:LEU:HB2	1.82	0.62
1:h:168:VAL:HG11	1:h:173:ILE:H	1.64	0.62
1:k:187:LYS:NZ	1:k:379:ARG:HG3	2.15	0.62
2:s:77:GLY:HA3	2:s:90:LEU:HD23	1.82	0.62
1:A:229:VAL:HG23	1:A:256:GLU:OE2	2.00	0.61
1:B:343:ALA:HB2	1:C:207:PRO:CB	2.26	0.61
1:B:522:VAL:HG22	1:C:39:VAL:HB	1.82	0.61
1:E:225:LYS:HD3	1:E:254:GLU:CD	2.25	0.61
1:F:235:ILE:HD11	1:F:311:ALA:CB	2.30	0.61
1:H:195:ASP:O	1:H:196:LYS:HD3	1.99	0.61
1:H:219:ILE:HD12	1:H:295:THR:CG2	2.30	0.61
1:I:283:ARG:NH2	1:I:367:ARG:HD3	2.14	0.61
1:L:180:LYS:HB3	1:M:281:GLY:N	2.15	0.61
1:M:283:ARG:HG2	1:M:363:LYS:HZ2	1.64	0.61
1:M:295:THR:HG22	1:M:317:GLY:C	2.25	0.61
1:N:503:ARG:NH1	1:N:507:GLN:HE22	1.98	0.61
2:O:73:ALA:HB1	2:O:75:TYR:CE2	2.35	0.61
1:c:352:LEU:CD2	1:c:364:LEU:HB2	2.30	0.61
1:e:259:ALA:O	1:e:263:VAL:HG23	2.00	0.61
1:h:178:GLU:HB3	1:h:388:LEU:HD21	1.80	0.61
1:h:187:LYS:NZ	1:h:379:ARG:HG3	2.14	0.61
1:i:178:GLU:HB3	1:i:388:LEU:HD21	1.82	0.61
1:i:264:ASN:HB3	1:i:269:THR:HB	1.81	0.61
1:i:303:GLU:C	1:i:305:GLY:H	2.08	0.61
1:k:74:LEU:HA	1:k:512:ILE:CD1	2.29	0.61
2:t:15:VAL:O	2:t:15:VAL:HG23	2.00	0.61
2:t:15:VAL:O	2:t:17:VAL:HG23	2.00	0.61
1:B:120:ILE:O	1:B:124:VAL:HG23	2.00	0.61
1:C:94:VAL:HG12	1:C:449:GLU:HB3	1.81	0.61
1:C:168:VAL:HG12	1:C:168:VAL:O	1.99	0.61
1:H:283:ARG:HH12	1:H:364:LEU:HD12	1.64	0.61
1:I:74:LEU:HD12	1:I:512:ILE:HD12	1.82	0.61
1:L:7:VAL:HG12	1:L:12:ALA:HB2	1.82	0.61
1:M:235:ILE:HD11	1:M:311:ALA:CB	2.23	0.61
1:M:283:ARG:HD3	1:M:363:LYS:NZ	2.15	0.61
2:S:25:LYS:HG2	2:S:31:VAL:HG22	1.82	0.61
1:e:455:ALA:HB1	1:e:465:ILE:HD12	1.82	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:283:ARG:HD3	1:h:363:LYS:NZ	2.14	0.61
1:h:295:THR:HG22	1:h:317:GLY:C	2.25	0.61
1:i:168:VAL:HG11	1:i:173:ILE:H	1.65	0.61
2:s:96:LEU:O	2:t:14:ARG:HD3	1.99	0.61
1:F:218:PHE:HB3	1:F:316:LEU:HD13	1.80	0.61
1:J:178:GLU:HB3	1:J:388:LEU:HD21	1.82	0.61
1:L:303:GLU:C	1:L:305:GLY:H	2.08	0.61
1:M:50:THR:HG22	1:M:52:ASP:N	2.09	0.61
1:b:345:ILE:HG23	1:b:368:LEU:HD13	1.81	0.61
1:d:284:ARG:O	1:d:288:LEU:HG	2.01	0.61
1:f:217:ALA:HB2	1:f:245:PRO:HB2	1.82	0.61
1:i:157:VAL:HG21	1:i:395:PHE:CZ	2.35	0.61
1:i:249:ILE:O	1:i:249:ILE:HG22	1.99	0.61
1:k:157:VAL:HG21	1:k:395:PHE:CZ	2.36	0.61
1:l:167:LYS:HD2	1:l:188:PHE:CZ	2.35	0.61
1:m:96:ALA:O	1:m:100:VAL:HG23	2.00	0.61
2:r:73:ALA:O	2:r:75:TYR:N	2.33	0.61
2:u:8:ILE:HG22	2:u:9:LYS:N	2.15	0.61
1:A:50:THR:HG21	1:A:52:ASP:HB3	1.81	0.61
1:C:270:LEU:HG	1:C:272:VAL:HG13	1.80	0.61
1:C:416:VAL:HG21	1:C:490:MET:HG3	1.81	0.61
1:F:178:GLU:HG3	1:F:388:LEU:HD21	1.82	0.61
1:G:52:ASP:OD1	1:G:54:VAL:HG23	2.01	0.61
1:H:178:GLU:HB3	1:H:388:LEU:HD21	1.82	0.61
1:L:189:VAL:HG11	1:L:333:GLY:HA2	1.81	0.61
1:M:195:ASP:O	1:M:196:LYS:HD3	2.00	0.61
1:M:229:VAL:HG23	1:M:256:GLU:CB	2.29	0.61
1:a:30:THR:O	1:a:35:GLY:HA3	2.00	0.61
1:b:189:VAL:HG11	1:b:193:GLN:HG2	1.82	0.61
1:c:94:VAL:HG12	1:c:449:GLU:HB3	1.81	0.61
1:d:416:VAL:HG21	1:d:490:MET:HG3	1.82	0.61
2:q:16:VAL:HG12	2:q:46:ILE:HD12	1.82	0.61
2:t:8:ILE:CD1	2:t:82:ILE:HD11	2.30	0.61
2:u:13:ASP:OD1	2:u:93:ARG:HG2	2.00	0.61
1:I:74:LEU:HD12	1:I:512:ILE:CD1	2.30	0.61
1:I:167:LYS:HD2	1:I:188:PHE:CZ	2.34	0.61
1:I:249:ILE:O	1:I:249:ILE:HG22	2.00	0.61
1:I:410:ILE:HB	1:I:496:VAL:HG11	1.82	0.61
1:M:264:ASN:HB3	1:M:269:THR:HB	1.83	0.61
1:N:264:ASN:HB3	1:N:269:THR:HB	1.80	0.61
1:c:136:ILE:HD11	1:c:477:ARG:NH2	2.16	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:150:ILE:CD1	1:e:495:ILE:HA	2.23	0.61
1:i:290:ASP:N	1:i:344:ARG:HH12	1.96	0.61
1:k:465:ILE:HD13	1:k:480:PHE:CE1	2.36	0.61
1:n:232:LEU:HD22	1:n:236:LEU:HD22	1.83	0.61
1:n:283:ARG:NH2	1:n:367:ARG:HD3	2.14	0.61
1:A:23:VAL:HG22	1:A:60:VAL:HG11	1.83	0.61
1:A:233:LEU:HD23	2:O:30:ILE:HD13	1.82	0.61
1:H:96:ALA:O	1:H:100:VAL:HG23	2.00	0.61
1:H:452:ARG:HG2	1:H:452:ARG:HH11	1.65	0.61
1:I:157:VAL:HG21	1:I:395:PHE:CZ	2.35	0.61
1:K:74:LEU:HD12	1:K:512:ILE:CD1	2.31	0.61
1:K:372:ALA:C	1:K:374:GLY:H	2.08	0.61
1:L:49:ILE:HG21	1:M:515:LEU:HD21	1.82	0.61
2:O:52:ARG:HH21	2:P:53:VAL:HB	1.63	0.61
1:b:19:GLY:HA3	1:b:67:GLU:O	2.01	0.61
1:b:526:LYS:HG3	1:b:527:PRO:HD2	1.82	0.61
1:c:116:LEU:O	1:c:120:ILE:HG13	1.99	0.61
1:h:157:VAL:O	1:h:161:ILE:HG13	2.00	0.61
1:i:212:ALA:HB3	1:i:324:ILE:HB	1.82	0.61
1:k:37:ASN:OD1	1:l:515:LEU:HD12	2.01	0.61
1:k:408:GLU:OE1	1:k:500:LYS:HA	2.01	0.61
1:l:187:LYS:NZ	1:l:379:ARG:HG3	2.15	0.61
1:m:222:VAL:HG12	1:m:223:GLU:N	2.15	0.61
2:q:78:THR:HG22	2:q:79:GLU:N	2.13	0.61
2:t:41:GLN:HG2	2:t:42:LYS:HE3	1.82	0.61
1:A:136:ILE:HD11	1:A:477:ARG:NH2	2.16	0.61
1:A:325:THR:HG22	1:A:326:LYS:H	1.65	0.61
1:C:235:ILE:CD1	1:C:311:ALA:HB3	2.30	0.61
1:D:422:ILE:HG23	1:D:444:ARG:HG3	1.82	0.61
1:H:218:PHE:CE1	1:H:242:THR:HG21	2.35	0.61
1:I:283:ARG:HH12	1:I:364:LEU:HD12	1.64	0.61
1:L:300:ILE:HG21	1:L:308:LEU:HD23	1.81	0.61
1:N:167:LYS:HD2	1:N:188:PHE:CZ	2.35	0.61
2:P:22:GLU:OE2	2:P:38:GLU:O	2.19	0.61
1:b:165:MET:HE3	1:b:402:THR:HG21	1.83	0.61
1:c:382:ALA:HB3	1:c:388:LEU:HB2	1.83	0.61
1:c:455:ALA:HB1	1:c:465:ILE:HD12	1.83	0.61
1:d:94:VAL:CG1	1:d:449:GLU:HB3	2.31	0.61
1:i:96:ALA:O	1:i:100:VAL:HG23	2.01	0.61
1:l:222:VAL:HG12	1:l:224:LYS:H	1.65	0.61
1:m:312:THR:C	1:m:314:SER:H	2.08	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:74:LEU:HD12	1:n:512:ILE:CD1	2.30	0.61
1:n:290:ASP:N	1:n:344:ARG:HH12	1.98	0.61
2:q:91:SER:HB3	2:q:93:ARG:HH11	1.65	0.61
1:A:85:ALA:HB1	1:A:501:VAL:HG12	1.83	0.61
1:D:175:THR:HB	1:D:377:VAL:HG22	1.83	0.61
1:E:341:ILE:C	1:E:343:ALA:H	2.08	0.61
1:H:361:ARG:O	1:H:365:GLN:HG2	2.01	0.61
1:a:50:THR:CG2	1:a:51:LYS:H	2.09	0.61
1:c:348:ILE:CD1	1:c:367:ARG:NE	2.63	0.61
1:e:178:GLU:HG3	1:e:388:LEU:HD21	1.83	0.61
1:k:218:PHE:CE1	1:k:242:THR:HG21	2.35	0.61
1:l:345:ILE:O	1:l:349:LYS:HG3	2.00	0.61
1:l:465:ILE:HD13	1:l:480:PHE:CE1	2.35	0.61
1:m:79:SER:C	1:m:81:THR:H	2.09	0.61
1:m:168:VAL:HG11	1:m:173:ILE:H	1.64	0.61
1:m:219:ILE:HD12	1:m:295:THR:CG2	2.31	0.61
1:m:283:ARG:HH12	1:m:364:LEU:HD12	1.66	0.61
1:n:65:HIS:O	1:n:69:ILE:HG13	2.01	0.61
1:n:303:GLU:C	1:n:305:GLY:H	2.07	0.61
2:t:10:PRO:HB3	2:t:16:VAL:HG23	1.82	0.61
1:A:19:GLY:HA3	1:A:67:GLU:O	2.00	0.61
1:A:94:VAL:HG12	1:A:449:GLU:HB3	1.83	0.61
1:A:235:ILE:HD12	1:A:311:ALA:CB	2.31	0.61
1:C:368:LEU:HD12	1:C:368:LEU:O	2.00	0.61
1:C:411:VAL:HB	1:C:412:PRO:HD2	1.83	0.61
1:E:522:VAL:HG22	1:F:39:VAL:HB	1.81	0.61
1:F:78:ALA:O	1:F:89:THR:HG22	2.00	0.61
1:G:50:THR:HG21	1:G:52:ASP:HB3	1.83	0.61
1:I:229:VAL:HG23	1:I:256:GLU:CB	2.30	0.61
1:I:264:ASN:HB3	1:I:269:THR:HB	1.81	0.61
1:M:268:GLY:O	1:N:227:SER:OG	2.18	0.61
1:a:136:ILE:HD11	1:a:477:ARG:NH2	2.15	0.61
1:a:228:ASN:HD21	1:a:230:ARG:HB2	1.65	0.61
1:b:411:VAL:HB	1:b:412:PRO:HD2	1.81	0.61
1:e:94:VAL:CG1	1:e:449:GLU:HB3	2.31	0.61
1:f:50:THR:CG2	1:f:51:LYS:H	2.09	0.61
1:f:178:GLU:HG3	1:f:388:LEU:HD21	1.81	0.61
1:j:40:LEU:HD23	1:j:59:GLU:CG	2.31	0.61
1:l:157:VAL:HG21	1:l:395:PHE:CZ	2.35	0.61
1:m:40:LEU:HD23	1:m:59:GLU:CG	2.28	0.61
1:n:157:VAL:HG21	1:n:395:PHE:CZ	2.35	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:168:VAL:HG11	1:n:173:ILE:H	1.65	0.61
2:o:14:ARG:HH11	2:o:14:ARG:HG3	1.66	0.61
2:q:41:GLN:HG3	2:q:72:PHE:O	2.01	0.61
2:t:66:GLU:HG2	2:t:67:GLY:N	2.16	0.61
1:C:50:THR:CG2	1:C:51:LYS:H	2.10	0.61
1:D:18:ARG:HD2	1:D:67:GLU:OE2	2.01	0.61
1:D:98:ALA:HB2	1:D:449:GLU:CG	2.31	0.61
1:G:240:ALA:HA	1:G:270:LEU:HD13	1.83	0.61
1:H:303:GLU:C	1:H:305:GLY:H	2.08	0.61
1:J:167:LYS:HD2	1:J:188:PHE:CZ	2.36	0.61
1:K:264:ASN:HB3	1:K:269:THR:HB	1.82	0.61
1:N:283:ARG:NH1	1:N:363:LYS:HG3	2.15	0.61
1:b:150:ILE:CD1	1:b:495:ILE:HA	2.17	0.61
1:d:50:THR:CG2	1:d:51:LYS:H	2.12	0.61
1:e:349:LYS:C	1:e:351:GLU:H	2.09	0.61
1:g:326:LYS:HD3	1:g:326:LYS:C	2.26	0.61
1:i:40:LEU:HD23	1:i:59:GLU:CG	2.29	0.61
1:j:178:GLU:HB3	1:j:388:LEU:HD21	1.82	0.61
1:l:168:VAL:HG11	1:l:173:ILE:H	1.64	0.61
1:m:167:LYS:HD2	1:m:188:PHE:CZ	2.35	0.61
2:s:80:ILE:HG22	2:s:81:GLU:N	2.14	0.61
2:t:10:PRO:HB2	2:t:14:ARG:HB2	1.82	0.61
1:B:136:ILE:HD11	1:B:477:ARG:NH2	2.16	0.60
1:C:94:VAL:CG1	1:C:449:GLU:HB3	2.30	0.60
1:D:6:LEU:HD22	1:D:523:VAL:HG22	1.82	0.60
1:D:85:ALA:HB1	1:D:501:VAL:HG12	1.82	0.60
1:E:348:ILE:HD11	1:E:367:ARG:HE	1.65	0.60
1:F:368:LEU:HD12	1:F:368:LEU:O	2.01	0.60
1:G:222:VAL:O	1:G:250:ALA:HA	2.01	0.60
1:H:116:LEU:O	1:H:120:ILE:HG13	2.01	0.60
1:L:232:LEU:HD22	1:L:236:LEU:HD22	1.82	0.60
1:L:277:ALA:CB	1:L:284:ARG:HD2	2.30	0.60
1:M:178:GLU:H	1:M:321:ARG:NH1	1.95	0.60
1:N:224:LYS:HG2	1:N:225:LYS:H	1.66	0.60
1:c:96:ALA:O	1:c:100:VAL:HG23	2.00	0.60
1:c:251:GLU:HA	1:c:277:ALA:HB2	1.83	0.60
1:c:265:LYS:NZ	1:c:271:SER:HB2	2.16	0.60
1:c:283:ARG:HH12	1:c:363:LYS:HB3	1.66	0.60
1:g:235:ILE:HG12	1:g:311:ALA:CB	2.27	0.60
1:h:50:THR:HG22	1:h:51:LYS:N	2.14	0.60
1:l:74:LEU:HD12	1:l:512:ILE:HD12	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:180:LYS:C	1:m:281:GLY:CA	2.74	0.60
2:s:100:GLN:HB2	2:t:9:LYS:HE3	1.82	0.60
2:u:24:PRO:HB2	2:u:37:LYS:HZ1	1.65	0.60
1:B:50:THR:CG2	1:B:52:ASP:H	2.11	0.60
1:D:19:GLY:HA3	1:D:67:GLU:O	2.01	0.60
1:H:290:ASP:N	1:H:344:ARG:HH12	1.99	0.60
1:K:345:ILE:HG22	1:K:349:LYS:HE3	1.83	0.60
1:M:232:LEU:HD22	1:M:236:LEU:HD22	1.83	0.60
2:O:9:LYS:HE2	2:U:100:GLN:HB2	1.82	0.60
1:h:312:THR:C	1:h:314:SER:H	2.09	0.60
1:h:458:ALA:O	1:i:114:LEU:HD12	2.02	0.60
1:i:410:ILE:HB	1:i:496:VAL:HG11	1.82	0.60
1:j:187:LYS:NZ	1:j:379:ARG:HG3	2.15	0.60
1:k:503:ARG:NH1	1:k:507:GLN:HE22	1.98	0.60
2:r:79:GLU:C	2:r:80:ILE:HG13	2.26	0.60
1:C:300:ILE:O	1:C:300:ILE:HG22	2.01	0.60
1:D:287:MET:O	1:D:291:ILE:HG13	2.01	0.60
1:E:23:VAL:HG22	1:E:60:VAL:HG11	1.82	0.60
1:E:210:MET:HE2	1:E:210:MET:HA	1.81	0.60
1:F:54:VAL:HG22	1:F:89:THR:HG21	1.83	0.60
1:F:184:THR:HG23	1:F:380:VAL:HA	1.82	0.60
1:G:50:THR:CG2	1:G:51:LYS:H	2.06	0.60
1:K:217:ALA:CB	1:K:245:PRO:HG2	2.25	0.60
1:M:410:ILE:HB	1:M:496:VAL:HG11	1.82	0.60
2:R:45:VAL:O	2:R:46:ILE:HD13	2.01	0.60
1:a:50:THR:CG2	1:a:52:ASP:H	2.10	0.60
1:a:184:THR:HG23	1:a:380:VAL:HA	1.83	0.60
1:a:350:LYS:O	1:b:208:GLU:CA	2.49	0.60
1:d:455:ALA:HB1	1:d:465:ILE:HD12	1.83	0.60
1:e:98:ALA:HB2	1:e:449:GLU:CG	2.30	0.60
1:h:280:PHE:CD2	1:n:385:GLU:HB2	2.36	0.60
2:p:6:THR:HG21	2:p:82:ILE:HG21	1.82	0.60
2:q:26:THR:HG22	2:q:32:LEU:CD2	2.30	0.60
2:q:54:LEU:HD12	2:q:55:GLU:N	2.15	0.60
1:B:366:GLU:O	1:B:370:LYS:HG3	2.01	0.60
1:C:455:ALA:HB1	1:C:465:ILE:HD12	1.83	0.60
1:E:345:ILE:HD11	1:E:368:LEU:HD23	1.82	0.60
1:H:219:ILE:HB	1:H:295:THR:HG21	1.84	0.60
1:I:229:VAL:CG2	1:I:256:GLU:HB3	2.31	0.60
1:K:263:VAL:O	1:K:267:ARG:HB2	2.01	0.60
1:M:178:GLU:OE1	1:M:323:ARG:NH2	2.33	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q:96:LEU:HA	2:R:14:ARG:NE	2.16	0.60
2:T:25:LYS:HG2	2:T:31:VAL:HG22	1.83	0.60
1:b:94:VAL:HG12	1:b:449:GLU:HB3	1.83	0.60
1:e:141:ARG:NH2	1:e:163:ASP:OD1	2.31	0.60
1:h:157:VAL:HG21	1:h:395:PHE:CZ	2.36	0.60
1:i:189:VAL:CG1	1:i:190:GLU:H	2.08	0.60
1:m:218:PHE:CE1	1:m:242:THR:HG21	2.36	0.60
2:o:81:GLU:HA	2:o:86:GLU:HA	1.82	0.60
2:t:80:ILE:HG22	2:t:81:GLU:N	2.16	0.60
1:D:235:ILE:CD1	1:D:311:ALA:HB3	2.29	0.60
1:E:360:ALA:O	1:E:364:LEU:HG	2.01	0.60
1:G:222:VAL:HG22	1:G:300:ILE:HD12	1.82	0.60
1:I:40:LEU:HD23	1:I:59:GLU:CG	2.30	0.60
1:J:249:ILE:O	1:J:249:ILE:HG22	2.01	0.60
1:K:224:LYS:HG2	1:K:225:LYS:H	1.66	0.60
1:L:180:LYS:HB3	1:M:281:GLY:CA	2.31	0.60
2:O:80:ILE:HG22	2:O:81:GLU:N	2.15	0.60
1:a:233:LEU:HA	2:o:30:ILE:CD1	2.32	0.60
1:c:19:GLY:HA3	1:c:67:GLU:O	2.00	0.60
1:h:337:LYS:HB2	1:h:340:ASP:OD2	2.01	0.60
1:h:503:ARG:NH1	1:h:507:GLN:HE22	1.99	0.60
1:j:410:ILE:HB	1:j:496:VAL:HG11	1.82	0.60
1:m:290:ASP:N	1:m:344:ARG:HH12	1.99	0.60
1:n:189:VAL:CG1	1:n:190:GLU:H	2.12	0.60
2:q:70:VAL:HG11	2:q:95:LEU:HD23	1.83	0.60
1:D:178:GLU:HG3	1:D:388:LEU:HD21	1.83	0.60
1:F:382:ALA:HB3	1:F:388:LEU:HB2	1.83	0.60
1:G:349:LYS:C	1:G:351:GLU:H	2.10	0.60
1:H:234:PRO:CG	1:H:309:GLU:HA	2.32	0.60
1:I:465:ILE:HD13	1:I:480:PHE:CE1	2.36	0.60
1:K:219:ILE:HD12	1:K:295:THR:CG2	2.32	0.60
1:L:526:LYS:HG3	1:L:527:PRO:HD2	1.82	0.60
1:M:157:VAL:HG21	1:M:395:PHE:CZ	2.36	0.60
1:N:295:THR:HG22	1:N:317:GLY:C	2.26	0.60
1:h:50:THR:HG22	1:h:52:ASP:N	2.09	0.60
1:j:168:VAL:HG11	1:j:173:ILE:H	1.66	0.60
1:k:28:LYS:NZ	1:k:97:GLN:HE22	1.98	0.60
2:q:58:GLN:CG	2:q:59:ARG:N	2.65	0.60
1:A:72:GLN:HE22	1:A:75:LYS:NZ	2.00	0.60
1:G:85:ALA:HB1	1:G:501:VAL:HG12	1.84	0.60
1:H:189:VAL:CG1	1:H:190:GLU:H	2.11	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:74:LEU:HA	1:I:512:ILE:HD11	1.84	0.60
1:N:207:PRO:O	1:N:210:MET:HE3	2.02	0.60
2:Q:73:ALA:HB1	2:Q:75:TYR:CE2	2.37	0.60
2:R:80:ILE:HG22	2:R:81:GLU:N	2.17	0.60
1:b:94:VAL:CG1	1:b:449:GLU:HB3	2.31	0.60
1:c:54:VAL:HG22	1:c:89:THR:HG21	1.84	0.60
1:d:127:ALA:O	1:d:131:ILE:HG13	2.02	0.60
1:g:263:VAL:HG13	1:g:267:ARG:NH1	2.16	0.60
1:i:31:LEU:HD13	1:i:90:THR:HG22	1.83	0.60
1:i:50:THR:HG22	1:i:51:LYS:N	2.12	0.60
1:i:465:ILE:HD13	1:i:480:PHE:CE1	2.37	0.60
1:j:229:VAL:HG23	1:j:256:GLU:CB	2.30	0.60
1:k:366:GLU:O	1:k:370:LYS:HG3	2.02	0.60
1:l:312:THR:C	1:l:314:SER:H	2.09	0.60
1:m:229:VAL:HG23	1:m:256:GLU:CB	2.31	0.60
1:C:404:ALA:HB1	1:C:500:LYS:HB3	1.82	0.60
1:G:23:VAL:HG22	1:G:60:VAL:HG11	1.83	0.60
1:H:40:LEU:HD23	1:H:59:GLU:CG	2.29	0.60
1:H:527:PRO:O	1:H:528:GLU:HG2	2.02	0.60
1:J:50:THR:HG22	1:J:52:ASP:N	2.12	0.60
1:J:222:VAL:HG12	1:J:224:LYS:H	1.66	0.60
1:N:74:LEU:HA	1:N:512:ILE:HD11	1.84	0.60
1:g:98:ALA:HB2	1:g:449:GLU:CG	2.32	0.60
1:h:175:THR:HG21	1:h:177:GLU:OE2	2.02	0.60
1:i:332:VAL:HG22	1:i:375:VAL:HG11	1.83	0.60
1:l:217:ALA:CB	1:l:245:PRO:HG2	2.24	0.60
1:l:340:ASP:O	1:l:343:ALA:HB3	2.02	0.60
1:m:410:ILE:HB	1:m:496:VAL:HG11	1.83	0.60
1:n:307:LYS:HE3	1:n:310:ASN:ND2	2.17	0.60
2:u:20:ILE:CG1	2:u:44:LYS:HG3	2.32	0.60
1:B:69:ILE:HD11	1:C:41:GLU:HB2	1.83	0.60
1:E:225:LYS:HG3	1:E:252:ASP:HB3	1.84	0.60
1:E:251:GLU:HA	1:E:277:ALA:HB2	1.83	0.60
1:H:316:LEU:CD2	1:H:316:LEU:H	2.15	0.60
1:L:178:GLU:HB3	1:L:388:LEU:HD21	1.83	0.60
1:M:182:LEU:HD12	1:N:363:LYS:HE2	1.82	0.60
1:M:222:VAL:HG12	1:M:223:GLU:N	2.16	0.60
2:R:73:ALA:HB1	2:R:75:TYR:CE2	2.36	0.60
1:c:298:THR:HG23	1:c:304:LEU:HD12	1.83	0.60
1:d:30:THR:O	1:d:35:GLY:HA3	2.01	0.60
1:e:234:PRO:O	1:e:238:GLN:HG3	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:98:ALA:HB2	1:f:449:GLU:CG	2.32	0.60
1:h:189:VAL:CG1	1:h:190:GLU:H	2.12	0.60
1:k:229:VAL:HG23	1:k:256:GLU:CB	2.31	0.60
1:k:345:ILE:HG22	1:k:349:LYS:HE3	1.83	0.60
2:q:62:LEU:O	2:q:64:VAL:N	2.35	0.60
2:s:96:LEU:CD2	2:t:14:ARG:NH1	2.65	0.60
1:B:72:GLN:HE22	1:B:75:LYS:NZ	2.00	0.60
1:D:150:ILE:CD1	1:D:496:VAL:H	2.14	0.60
1:F:233:LEU:HD23	2:T:30:ILE:HD13	1.84	0.60
1:J:222:VAL:HG12	1:J:223:GLU:N	2.17	0.60
1:K:50:THR:HG22	1:K:52:ASP:N	2.15	0.60
1:N:168:VAL:HG11	1:N:173:ILE:H	1.66	0.60
1:N:465:ILE:HD13	1:N:480:PHE:CE1	2.36	0.60
2:T:81:GLU:HA	2:T:85:GLU:O	2.02	0.60
1:a:150:ILE:HD11	1:a:495:ILE:CA	2.21	0.60
1:d:175:THR:HB	1:d:377:VAL:HG22	1.83	0.60
1:f:224:LYS:HB3	1:f:302:GLU:OE1	2.02	0.60
1:k:74:LEU:HA	1:k:512:ILE:HD11	1.83	0.60
1:l:222:VAL:HG12	1:l:223:GLU:N	2.16	0.60
1:m:74:LEU:HA	1:m:512:ILE:CD1	2.32	0.60
2:p:92:GLU:HA	2:p:95:LEU:HD12	1.84	0.60
2:r:10:PRO:C	2:r:11:LEU:HD12	2.27	0.60
2:s:41:GLN:HE21	2:s:74:LYS:HG2	1.67	0.60
1:A:178:GLU:HG3	1:A:388:LEU:HD21	1.83	0.59
1:B:136:ILE:HD11	1:B:477:ARG:HH21	1.68	0.59
1:D:118:ARG:HH22	1:E:34:ARG:HH12	1.50	0.59
1:E:258:LEU:HA	1:E:261:LEU:HD12	1.83	0.59
1:F:325:THR:HG22	1:F:326:LYS:H	1.66	0.59
1:H:232:LEU:HD21	1:H:236:LEU:HD13	1.84	0.59
1:K:54:VAL:HG22	1:K:89:THR:HG21	1.84	0.59
1:L:283:ARG:NH2	1:L:367:ARG:HD3	2.17	0.59
1:L:526:LYS:HD2	1:L:527:PRO:HD2	1.84	0.59
1:M:229:VAL:CG2	1:M:256:GLU:HB3	2.32	0.59
2:Q:96:LEU:HD23	2:R:14:ARG:NH2	2.16	0.59
1:a:222:VAL:HG22	1:a:300:ILE:HD12	1.84	0.59
1:e:246:LEU:HB3	1:e:272:VAL:CG1	2.30	0.59
1:f:218:PHE:O	1:f:246:LEU:HD12	2.02	0.59
1:g:72:GLN:HE22	1:g:75:LYS:NZ	2.00	0.59
1:h:6:LEU:HD23	1:h:523:VAL:HG22	1.84	0.59
1:h:219:ILE:HD12	1:h:295:THR:CG2	2.32	0.59
1:j:65:HIS:HD2	1:j:527:PRO:HG3	1.66	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:218:PHE:CE1	1:j:242:THR:HG21	2.37	0.59
1:k:178:GLU:HB3	1:k:388:LEU:HD21	1.84	0.59
2:s:13:ASP:HA	2:s:62:LEU:HD21	1.84	0.59
1:E:98:ALA:HB2	1:E:449:GLU:CG	2.32	0.59
1:E:382:ALA:HB3	1:E:388:LEU:HB2	1.83	0.59
1:I:157:VAL:O	1:I:161:ILE:HG13	2.01	0.59
1:L:180:LYS:O	1:M:281:GLY:HA3	2.02	0.59
1:L:232:LEU:HD21	1:L:236:LEU:HD13	1.84	0.59
1:L:410:ILE:HB	1:L:496:VAL:HG11	1.83	0.59
1:M:390:GLU:OE1	1:M:394:ARG:NH1	2.35	0.59
1:M:410:ILE:CD1	1:M:496:VAL:HG11	2.29	0.59
1:N:303:GLU:C	1:N:305:GLY:H	2.09	0.59
2:P:11:LEU:O	2:P:12:GLY:C	2.45	0.59
1:c:258:LEU:HA	1:c:261:LEU:HD12	1.84	0.59
1:i:283:ARG:HH12	1:i:364:LEU:HD12	1.67	0.59
1:j:157:VAL:O	1:j:161:ILE:HG13	2.02	0.59
1:l:157:VAL:O	1:l:161:ILE:HG13	2.02	0.59
1:m:136:ILE:HB	1:m:410:ILE:CG1	2.32	0.59
1:m:232:LEU:HD22	1:m:236:LEU:HD22	1.83	0.59
1:C:237:GLU:CG	2:Q:28:GLY:HA3	2.31	0.59
1:D:290:ASP:O	1:D:294:VAL:HG23	2.02	0.59
1:D:416:VAL:HG21	1:D:490:MET:HG3	1.85	0.59
1:J:233:LEU:N	1:J:234:PRO:HD2	2.17	0.59
1:M:40:LEU:HD23	1:M:59:GLU:CG	2.32	0.59
2:T:8:ILE:HD12	2:T:8:ILE:N	2.17	0.59
2:U:41:GLN:HG2	2:U:74:LYS:HB3	1.83	0.59
1:a:85:ALA:HB1	1:a:501:VAL:HG12	1.84	0.59
1:a:175:THR:HB	1:a:377:VAL:HG22	1.83	0.59
1:a:231:GLU:O	1:a:234:PRO:HD2	2.02	0.59
1:b:416:VAL:HG21	1:b:490:MET:HG3	1.83	0.59
1:c:498:PRO:HG2	1:c:501:VAL:CG2	2.31	0.59
1:g:267:ARG:HG3	1:g:267:ARG:HH11	1.66	0.59
1:j:226:VAL:HG11	1:j:232:LEU:HD12	1.83	0.59
1:n:167:LYS:HD2	1:n:188:PHE:CZ	2.36	0.59
1:n:290:ASP:O	1:n:294:VAL:HG23	2.02	0.59
2:q:81:GLU:OE2	2:q:84:GLY:HA2	2.02	0.59
1:B:116:LEU:O	1:B:120:ILE:HG13	2.01	0.59
1:E:213:VAL:O	1:E:214:LEU:HD23	2.02	0.59
1:G:127:ALA:O	1:G:131:ILE:HG13	2.02	0.59
1:J:28:LYS:NZ	1:J:97:GLN:HE22	1.99	0.59
1:J:458:ALA:O	1:K:114:LEU:HD12	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:189:VAL:CG1	1:K:190:GLU:H	2.08	0.59
1:L:118:ARG:O	1:L:122:LYS:HG3	2.02	0.59
1:M:136:ILE:HD11	1:M:491:VAL:CG2	2.33	0.59
1:M:177:GLU:HB3	1:M:321:ARG:HH11	1.67	0.59
1:N:218:PHE:CE1	1:N:242:THR:HG21	2.38	0.59
1:N:283:ARG:HH12	1:N:364:LEU:HD12	1.67	0.59
2:S:96:LEU:HB3	2:T:89:ILE:HG21	1.84	0.59
2:T:8:ILE:HD12	2:T:8:ILE:H	1.67	0.59
1:d:150:ILE:CD1	1:d:495:ILE:HA	2.16	0.59
1:j:74:LEU:HA	1:j:512:ILE:CD1	2.31	0.59
1:k:249:ILE:HG22	1:k:249:ILE:O	2.01	0.59
1:k:290:ASP:O	1:k:294:VAL:HG23	2.02	0.59
1:l:31:LEU:HD13	1:l:90:THR:HG22	1.85	0.59
1:l:229:VAL:HG23	1:l:256:GLU:CB	2.31	0.59
2:p:18:LYS:HE3	2:p:86:GLU:O	2.03	0.59
2:r:8:ILE:HD12	2:r:8:ILE:N	2.16	0.59
2:t:11:LEU:C	2:t:14:ARG:HD2	2.27	0.59
2:u:78:THR:HG22	2:u:80:ILE:HD11	1.84	0.59
1:C:54:VAL:HG22	1:C:89:THR:HG21	1.84	0.59
1:G:30:THR:O	1:G:35:GLY:HA3	2.02	0.59
1:I:232:LEU:HD22	1:I:236:LEU:HD22	1.84	0.59
1:I:325:THR:CG2	1:I:327:ASP:H	2.05	0.59
1:J:84:VAL:HG12	1:J:500:LYS:HE2	1.84	0.59
1:K:103:GLY:O	1:K:107:VAL:HG23	2.02	0.59
1:K:128:VAL:HA	1:K:131:ILE:HD12	1.83	0.59
1:L:167:LYS:HD2	1:L:188:PHE:CZ	2.37	0.59
1:L:232:LEU:HD23	1:L:232:LEU:O	2.03	0.59
1:M:410:ILE:HB	1:M:496:VAL:HG12	1.84	0.59
1:N:312:THR:C	1:N:314:SER:H	2.10	0.59
1:c:201:PRO:O	1:c:204:VAL:CG2	2.48	0.59
1:e:19:GLY:HA3	1:e:67:GLU:O	2.03	0.59
1:e:224:LYS:HB3	1:e:302:GLU:OE1	2.03	0.59
1:j:337:LYS:HB2	1:j:340:ASP:OD2	2.01	0.59
1:m:226:VAL:HG11	1:m:232:LEU:HD12	1.85	0.59
2:o:6:THR:HG23	2:u:100:GLN:OXT	2.01	0.59
2:r:81:GLU:HG3	2:r:85:GLU:H	1.67	0.59
2:s:96:LEU:HD23	2:t:14:ARG:NH1	2.16	0.59
2:t:96:LEU:O	2:t:97:ALA:HB2	2.03	0.59
2:t:97:ALA:HB1	2:u:8:ILE:CG2	2.32	0.59
1:B:136:ILE:HB	1:B:410:ILE:HG22	1.84	0.59
1:C:57:ALA:O	1:C:75:LYS:HD3	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:301:SER:HB2	1:F:304:LEU:CB	2.33	0.59
1:F:366:GLU:O	1:F:370:LYS:HG3	2.03	0.59
1:H:337:LYS:HB2	1:H:340:ASP:OD2	2.02	0.59
1:H:410:ILE:HB	1:H:496:VAL:HG11	1.83	0.59
1:I:290:ASP:N	1:I:344:ARG:HH12	2.00	0.59
1:K:283:ARG:HH12	1:K:364:LEU:HD12	1.66	0.59
1:M:74:LEU:HD12	1:M:512:ILE:CD1	2.32	0.59
1:a:455:ALA:HB1	1:a:465:ILE:HD12	1.84	0.59
1:g:352:LEU:HD21	1:g:365:GLN:HG2	1.84	0.59
1:h:54:VAL:HG22	1:h:89:THR:HG21	1.85	0.59
1:h:247:LEU:HD22	1:h:322:VAL:HG11	1.84	0.59
1:l:74:LEU:HD12	1:l:512:ILE:CD1	2.32	0.59
1:m:187:LYS:NZ	1:m:379:ARG:HG3	2.17	0.59
1:C:382:ALA:HB3	1:C:388:LEU:HB2	1.84	0.59
1:D:325:THR:HG22	1:D:326:LYS:N	2.18	0.59
1:E:281:GLY:O	1:E:284:ARG:HG2	2.02	0.59
1:F:284:ARG:O	1:F:288:LEU:HG	2.03	0.59
1:I:178:GLU:HB3	1:I:388:LEU:HD21	1.83	0.59
1:J:229:VAL:HG23	1:J:256:GLU:CB	2.32	0.59
1:K:290:ASP:N	1:K:344:ARG:HH12	2.00	0.59
1:L:187:LYS:NZ	1:L:379:ARG:HG3	2.17	0.59
1:M:219:ILE:HD12	1:M:295:THR:CG2	2.32	0.59
2:S:12:GLY:O	2:S:13:ASP:CB	2.45	0.59
2:U:81:GLU:HA	2:U:85:GLU:O	2.02	0.59
1:a:40:LEU:HD13	1:a:59:GLU:HG3	1.82	0.59
1:a:246:LEU:HB3	1:a:272:VAL:CG1	2.33	0.59
1:a:382:ALA:HB3	1:a:388:LEU:HB2	1.84	0.59
1:d:501:VAL:HG23	1:d:502:THR:N	2.18	0.59
1:f:124:VAL:O	1:f:128:VAL:HG23	2.03	0.59
1:f:270:LEU:HG	1:f:272:VAL:HG13	1.84	0.59
1:h:65:HIS:O	1:h:69:ILE:HG13	2.02	0.59
1:m:232:LEU:HD21	1:m:236:LEU:HD13	1.84	0.59
1:n:226:VAL:HG11	1:n:232:LEU:HD12	1.85	0.59
1:C:235:ILE:HD11	1:C:311:ALA:CB	2.33	0.59
1:C:501:VAL:HG23	1:C:502:THR:N	2.17	0.59
1:D:224:LYS:HB3	1:D:302:GLU:OE1	2.03	0.59
1:E:283:ARG:NH1	1:E:363:LYS:HB3	2.17	0.59
1:N:187:LYS:NZ	1:N:379:ARG:HG3	2.18	0.59
1:b:57:ALA:O	1:b:75:LYS:HD3	2.02	0.59
1:b:116:LEU:O	1:b:120:ILE:HG13	2.03	0.59
1:c:498:PRO:HG2	1:c:501:VAL:HG22	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:54:VAL:HG22	1:d:89:THR:HG21	1.84	0.59
1:d:450:PRO:O	1:d:454:ILE:HG13	2.03	0.59
1:g:136:ILE:HD11	1:g:477:ARG:NH2	2.18	0.59
1:g:242:THR:HG22	1:g:244:LYS:HG3	1.85	0.59
1:k:39:VAL:C	1:k:40:LEU:HD12	2.28	0.59
1:m:74:LEU:HD12	1:m:512:ILE:CD1	2.33	0.59
1:n:465:ILE:HD13	1:n:480:PHE:CE1	2.38	0.59
2:t:25:LYS:HA	2:t:30:ILE:O	2.03	0.59
1:B:229:VAL:HG12	1:B:233:LEU:HD11	1.85	0.59
1:B:498:PRO:HG2	1:B:501:VAL:CG2	2.32	0.59
1:G:301:SER:HB2	1:G:304:LEU:CB	2.31	0.59
1:I:74:LEU:HA	1:I:512:ILE:CD1	2.32	0.59
1:L:372:ALA:C	1:L:374:GLY:N	2.60	0.59
1:d:85:ALA:HB1	1:d:501:VAL:HG12	1.83	0.59
1:i:307:LYS:HE3	1:i:310:ASN:ND2	2.18	0.59
1:l:226:VAL:HG11	1:l:232:LEU:HD12	1.84	0.59
1:n:229:VAL:HG23	1:n:256:GLU:CB	2.32	0.59
2:t:8:ILE:CG2	2:t:16:VAL:HG21	2.33	0.59
1:F:157:VAL:HG22	1:F:395:PHE:CZ	2.37	0.59
1:H:157:VAL:O	1:H:161:ILE:HG13	2.03	0.59
1:H:283:ARG:NH1	1:H:363:LYS:HG3	2.17	0.59
1:H:459:GLY:HA3	1:I:114:LEU:HD12	1.85	0.59
1:J:332:VAL:HG22	1:J:375:VAL:HG11	1.85	0.59
1:K:222:VAL:HG12	1:K:224:LYS:H	1.68	0.59
1:K:283:ARG:HG2	1:K:363:LYS:HZ2	1.68	0.59
1:L:74:LEU:HA	1:L:512:ILE:CD1	2.32	0.59
1:N:175:THR:HG21	1:N:177:GLU:OE2	2.02	0.59
2:U:84:GLY:O	2:U:85:GLU:HG3	2.03	0.59
1:c:57:ALA:O	1:c:75:LYS:HD3	2.03	0.59
1:c:218:PHE:HE1	1:c:244:LYS:HD2	1.66	0.59
1:e:501:VAL:HG23	1:e:502:THR:N	2.17	0.59
1:f:50:THR:HG21	1:f:52:ASP:HB3	1.83	0.59
1:g:207:PRO:HG2	1:g:208:GLU:H	1.67	0.59
1:k:345:ILE:O	1:k:349:LYS:HG3	2.03	0.59
2:s:81:GLU:HG3	2:s:85:GLU:H	1.67	0.59
2:t:54:LEU:HD13	2:u:57:GLY:HA2	1.84	0.59
1:A:382:ALA:HB3	1:A:388:LEU:HB2	1.85	0.58
1:C:230:ARG:O	1:C:234:PRO:HD2	2.03	0.58
1:F:72:GLN:HE22	1:F:75:LYS:HZ1	1.50	0.58
1:F:116:LEU:O	1:F:120:ILE:HG13	2.03	0.58
1:J:217:ALA:CB	1:J:245:PRO:HG2	2.26	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:182:LEU:HD12	1:M:363:LYS:NZ	2.18	0.58
1:a:96:ALA:O	1:a:100:VAL:HG23	2.03	0.58
1:a:263:VAL:HG22	1:g:304:LEU:O	2.04	0.58
1:b:40:LEU:HD13	1:b:59:GLU:HG3	1.84	0.58
1:l:47:PRO:HB3	1:m:69:ILE:HG23	1.84	0.58
1:l:359:TYR:O	1:l:363:LYS:HG2	2.03	0.58
1:m:74:LEU:HA	1:m:512:ILE:HD11	1.84	0.58
1:m:297:GLY:HA3	1:m:317:GLY:H	1.67	0.58
1:A:136:ILE:HD11	1:A:477:ARG:HH21	1.67	0.58
1:A:298:THR:HB	1:A:315:MET:HB2	1.85	0.58
1:B:247:LEU:HD13	1:B:324:ILE:HD11	1.85	0.58
1:C:278:PRO:O	1:C:279:GLY:O	2.21	0.58
1:D:141:ARG:NH2	1:D:163:ASP:OD1	2.29	0.58
1:D:501:VAL:HG23	1:D:502:THR:N	2.18	0.58
1:E:165:MET:HE3	1:E:402:THR:HG21	1.84	0.58
1:F:50:THR:HG21	1:F:52:ASP:HB3	1.83	0.58
1:F:237:GLU:CG	2:T:28:GLY:HA3	2.32	0.58
1:H:118:ARG:O	1:H:122:LYS:HG3	2.02	0.58
1:K:496:VAL:HG12	1:K:497:ASP:H	1.68	0.58
1:L:168:VAL:HG11	1:L:173:ILE:H	1.67	0.58
1:L:226:VAL:HG11	1:L:232:LEU:HD12	1.84	0.58
2:R:81:GLU:HA	2:R:86:GLU:HA	1.85	0.58
2:S:56:ASN:OD1	2:S:56:ASN:N	2.35	0.58
2:T:81:GLU:HG3	2:T:85:GLU:H	1.67	0.58
1:a:72:GLN:HE22	1:a:75:LYS:HZ1	1.50	0.58
1:a:351:GLU:CG	1:b:210:MET:HE3	2.33	0.58
1:j:118:ARG:O	1:j:122:LYS:HG3	2.03	0.58
1:l:74:LEU:HA	1:l:512:ILE:CD1	2.33	0.58
1:l:283:ARG:HH21	1:l:367:ARG:CD	2.16	0.58
2:s:52:ARG:HH21	2:t:53:VAL:HB	1.66	0.58
2:t:20:ILE:HG13	2:t:43:GLY:HA2	1.84	0.58
1:B:124:VAL:O	1:B:128:VAL:HG23	2.03	0.58
1:C:136:ILE:CD1	1:C:477:ARG:HH21	2.16	0.58
1:F:85:ALA:HB1	1:F:501:VAL:HG12	1.84	0.58
1:K:175:THR:HG21	1:K:177:GLU:OE2	2.03	0.58
1:L:224:LYS:HG2	1:L:225:LYS:H	1.68	0.58
1:L:465:ILE:HD13	1:L:480:PHE:CE1	2.39	0.58
2:O:45:VAL:HG21	2:O:64:VAL:CG1	2.32	0.58
2:Q:34:ASP:N	2:Q:34:ASP:OD1	2.35	0.58
1:a:236:LEU:HB2	2:o:30:ILE:CD1	2.34	0.58
1:a:501:VAL:HG23	1:a:502:THR:N	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:127:ALA:O	1:b:131:ILE:HG13	2.03	0.58
1:b:501:VAL:HG23	1:b:502:THR:N	2.19	0.58
1:c:217:ALA:HB2	1:c:245:PRO:HB2	1.84	0.58
1:d:263:VAL:O	1:d:267:ARG:HB2	2.03	0.58
1:i:175:THR:HG21	1:i:177:GLU:OE2	2.04	0.58
1:i:340:ASP:O	1:i:343:ALA:HB3	2.03	0.58
1:i:345:ILE:O	1:i:349:LYS:HG3	2.04	0.58
1:j:217:ALA:HB2	1:j:245:PRO:CG	2.23	0.58
1:m:50:THR:HG22	1:m:52:ASP:N	2.09	0.58
2:s:49:GLY:O	2:s:62:LEU:HD11	2.03	0.58
1:B:498:PRO:HG2	1:B:501:VAL:HG22	1.84	0.58
1:K:303:GLU:C	1:K:305:GLY:H	2.11	0.58
1:L:175:THR:HG21	1:L:177:GLU:OE2	2.03	0.58
1:M:31:LEU:HD13	1:M:90:THR:HG22	1.84	0.58
1:M:303:GLU:C	1:M:305:GLY:H	2.10	0.58
1:N:103:GLY:O	1:N:107:VAL:HG23	2.04	0.58
1:N:258:LEU:O	1:N:262:VAL:HG23	2.03	0.58
2:O:14:ARG:HE	2:U:96:LEU:HD23	1.68	0.58
1:a:320:GLU:HB3	1:a:333:GLY:HA3	1.85	0.58
1:e:40:LEU:HD13	1:e:59:GLU:HG3	1.85	0.58
1:h:411:VAL:O	1:h:496:VAL:HG13	2.03	0.58
1:i:297:GLY:HA3	1:i:317:GLY:H	1.68	0.58
1:j:65:HIS:O	1:j:69:ILE:HG13	2.03	0.58
1:k:50:THR:HG22	1:k:51:LYS:N	2.17	0.58
1:l:290:ASP:O	1:l:294:VAL:HG23	2.04	0.58
2:s:96:LEU:HD23	2:t:14:ARG:HH22	1.68	0.58
1:H:235:ILE:HD11	1:H:311:ALA:CB	2.23	0.58
1:J:81:THR:OG1	1:J:508:ASN:ND2	2.35	0.58
1:L:36:ARG:HB3	1:M:518:THR:O	2.04	0.58
1:M:345:ILE:HG22	1:M:349:LYS:HE3	1.85	0.58
2:R:96:LEU:HA	2:S:14:ARG:HE	1.67	0.58
2:U:20:ILE:HG13	2:U:43:GLY:HA2	1.86	0.58
1:b:54:VAL:HG22	1:b:89:THR:HG21	1.86	0.58
1:c:78:ALA:O	1:c:89:THR:HG22	2.04	0.58
1:e:301:SER:HB2	1:e:304:LEU:CB	2.30	0.58
1:f:54:VAL:HG22	1:f:89:THR:HG21	1.85	0.58
1:g:50:THR:CG2	1:g:51:LYS:H	2.11	0.58
1:g:283:ARG:NH2	1:g:366:GLU:OE2	2.36	0.58
1:h:258:LEU:O	1:h:262:VAL:HG23	2.03	0.58
1:h:496:VAL:HG12	1:h:497:ASP:N	2.19	0.58
1:j:175:THR:HG21	1:j:177:GLU:OE2	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:503:ARG:NH1	1:j:507:GLN:HE22	2.01	0.58
1:k:258:LEU:O	1:k:262:VAL:HG23	2.03	0.58
1:n:345:ILE:O	1:n:349:LYS:HG3	2.04	0.58
2:p:10:PRO:HG3	2:p:47:ALA:O	2.04	0.58
1:C:298:THR:HB	1:C:315:MET:HB2	1.84	0.58
1:D:72:GLN:HE22	1:D:75:LYS:NZ	2.01	0.58
1:E:18:ARG:HD2	1:E:67:GLU:OE2	2.04	0.58
1:E:116:LEU:O	1:E:120:ILE:HG13	2.04	0.58
1:J:96:ALA:O	1:J:100:VAL:HG23	2.03	0.58
1:M:218:PHE:CE1	1:M:242:THR:HG21	2.39	0.58
1:N:229:VAL:HG23	1:N:256:GLU:CB	2.34	0.58
2:O:34:ASP:OD1	2:O:34:ASP:N	2.31	0.58
2:R:8:ILE:HD12	2:R:8:ILE:N	2.19	0.58
2:R:11:LEU:O	2:R:12:GLY:C	2.46	0.58
1:e:175:THR:HB	1:e:377:VAL:HG22	1.85	0.58
1:j:303:GLU:C	1:j:305:GLY:H	2.10	0.58
1:k:6:LEU:HD23	1:k:523:VAL:HG22	1.84	0.58
1:m:219:ILE:HB	1:m:295:THR:HG21	1.85	0.58
1:m:283:ARG:CZ	1:m:363:LYS:HG3	2.34	0.58
2:p:81:GLU:HG3	2:p:85:GLU:H	1.67	0.58
2:r:13:ASP:C	2:r:13:ASP:OD1	2.46	0.58
1:C:253:VAL:HG21	1:C:274:ALA:HB1	1.85	0.58
1:E:326:LYS:O	1:E:326:LYS:HD3	2.03	0.58
1:H:229:VAL:HG23	1:H:256:GLU:CB	2.33	0.58
1:I:263:VAL:O	1:I:267:ARG:HB2	2.03	0.58
1:M:259:ALA:O	1:M:263:VAL:HG23	2.03	0.58
1:M:337:LYS:HB2	1:M:340:ASP:OD2	2.04	0.58
1:N:290:ASP:N	1:N:344:ARG:HH12	2.01	0.58
2:R:73:ALA:O	2:R:75:TYR:N	2.36	0.58
1:b:218:PHE:HE1	1:b:244:LYS:HB2	1.67	0.58
1:b:222:VAL:O	1:b:250:ALA:HA	2.02	0.58
1:b:352:LEU:HD21	1:b:364:LEU:HB2	1.84	0.58
1:e:85:ALA:HB1	1:e:501:VAL:HG12	1.86	0.58
1:e:283:ARG:HH12	1:e:363:LYS:HD2	1.69	0.58
1:i:103:GLY:O	1:i:107:VAL:HG23	2.04	0.58
1:l:219:ILE:HB	1:l:295:THR:HG21	1.84	0.58
1:l:234:PRO:HG3	1:l:309:GLU:CA	2.31	0.58
1:m:337:LYS:HB2	1:m:340:ASP:OD2	2.04	0.58
1:n:103:GLY:O	1:n:107:VAL:HG23	2.02	0.58
1:n:178:GLU:HB3	1:n:388:LEU:HD21	1.84	0.58
2:u:74:LYS:HZ1	2:u:75:TYR:HB3	1.66	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:101:ARG:HG3	1:D:102:GLU:N	2.19	0.58
1:G:78:ALA:O	1:G:89:THR:HG22	2.04	0.58
1:G:88:GLY:HA2	4:G:602:ADP:O2B	2.03	0.58
1:G:392:LYS:O	1:G:396:GLU:HG3	2.04	0.58
1:H:325:THR:CG2	1:H:327:ASP:H	2.05	0.58
1:I:234:PRO:HG3	1:I:309:GLU:CA	2.33	0.58
1:J:189:VAL:CG1	1:J:190:GLU:H	2.12	0.58
2:T:81:GLU:HA	2:T:86:GLU:HA	1.84	0.58
1:a:236:LEU:CB	2:o:30:ILE:HD11	2.34	0.58
1:b:95:LEU:O	1:b:99:ILE:HG13	2.04	0.58
1:c:341:ILE:C	1:c:343:ALA:H	2.12	0.58
1:d:57:ALA:O	1:d:75:LYS:HD3	2.04	0.58
1:d:411:VAL:HB	1:d:412:PRO:HD2	1.85	0.58
1:g:501:VAL:HG23	1:g:502:THR:N	2.19	0.58
1:h:27:VAL:HG12	1:h:90:THR:HG23	1.85	0.58
1:k:283:ARG:HH12	1:k:364:LEU:HD12	1.69	0.58
1:k:303:GLU:C	1:k:305:GLY:H	2.11	0.58
2:o:62:LEU:C	2:o:64:VAL:H	2.11	0.58
2:o:80:ILE:HG22	2:o:81:GLU:N	2.18	0.58
2:r:33:PRO:C	2:r:35:THR:H	2.12	0.58
1:A:124:VAL:O	1:A:128:VAL:HG23	2.02	0.58
1:A:150:ILE:CD1	1:A:495:ILE:HA	2.19	0.58
1:B:78:ALA:O	1:B:89:THR:HG22	2.04	0.58
1:C:237:GLU:HB3	2:Q:28:GLY:CA	2.27	0.58
1:D:229:VAL:HG21	2:R:36:ALA:HB2	1.86	0.58
1:E:72:GLN:HE22	1:E:75:LYS:NZ	2.02	0.58
1:F:349:LYS:C	1:F:351:GLU:H	2.11	0.58
1:G:450:PRO:O	1:G:454:ILE:HG13	2.04	0.58
1:K:157:VAL:O	1:K:161:ILE:HG13	2.03	0.58
1:M:37:ASN:OD1	1:N:515:LEU:HD12	2.03	0.58
1:N:283:ARG:CZ	1:N:363:LYS:HG3	2.33	0.58
1:b:168:VAL:HG12	1:b:168:VAL:O	2.03	0.58
1:c:40:LEU:HD13	1:c:59:GLU:HG3	1.85	0.58
1:c:168:VAL:HG12	1:c:168:VAL:O	2.03	0.58
1:c:411:VAL:HB	1:c:412:PRO:HD2	1.86	0.58
1:e:289:LYS:HE3	1:f:202:TYR:CZ	2.39	0.58
1:l:233:LEU:N	1:l:234:PRO:HD2	2.19	0.58
2:u:18:LYS:O	2:u:19:ARG:C	2.47	0.58
1:B:300:ILE:HG22	1:B:300:ILE:O	2.02	0.58
1:F:325:THR:HG22	1:F:326:LYS:N	2.19	0.58
1:G:6:LEU:HD22	1:G:523:VAL:HG22	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:187:LYS:HZ2	1:H:379:ARG:HG3	1.69	0.58
1:K:234:PRO:HG3	1:K:309:GLU:CA	2.32	0.58
2:S:77:GLY:HA3	2:S:90:LEU:HD23	1.86	0.58
1:c:290:ASP:HB3	1:c:371:LEU:HD21	1.84	0.58
1:d:363:LYS:C	1:d:365:GLN:N	2.62	0.58
1:g:199:ILE:HG13	1:g:274:ALA:O	2.04	0.58
1:h:229:VAL:HG23	1:h:256:GLU:CB	2.32	0.58
1:h:458:ALA:C	1:i:114:LEU:CD1	2.77	0.58
1:j:316:LEU:H	1:j:316:LEU:CD2	2.16	0.58
1:k:219:ILE:HB	1:k:295:THR:HG21	1.85	0.58
1:k:290:ASP:N	1:k:344:ARG:HH12	2.02	0.58
1:k:490:MET:HE2	1:k:490:MET:HA	1.85	0.58
1:m:50:THR:HG22	1:m:51:LYS:N	2.16	0.58
1:n:410:ILE:HB	1:n:496:VAL:HG12	1.86	0.58
2:t:32:LEU:HB3	2:t:36:ALA:HB3	1.85	0.58
1:D:235:ILE:CG1	1:D:311:ALA:HB3	2.33	0.57
1:H:345:ILE:O	1:H:349:LYS:HG3	2.04	0.57
1:L:249:ILE:O	1:L:249:ILE:HG22	2.02	0.57
1:M:385:GLU:N	1:N:280:PHE:CE2	2.72	0.57
1:M:462:GLY:O	1:M:466:VAL:HG23	2.03	0.57
1:N:410:ILE:HB	1:N:496:VAL:HG11	1.85	0.57
1:c:192:TYR:C	1:c:192:TYR:CD2	2.82	0.57
1:e:23:VAL:HG22	1:e:60:VAL:HG11	1.85	0.57
1:l:27:VAL:HG12	1:l:90:THR:HG23	1.86	0.57
1:l:218:PHE:CE1	1:l:242:THR:HG21	2.39	0.57
1:m:157:VAL:O	1:m:161:ILE:HG13	2.03	0.57
1:A:57:ALA:O	1:A:75:LYS:HD3	2.03	0.57
1:B:366:GLU:O	1:B:369:ALA:HB3	2.03	0.57
1:C:150:ILE:HD11	1:C:495:ILE:CA	2.12	0.57
1:F:23:VAL:HG22	1:F:60:VAL:HG11	1.85	0.57
1:G:19:GLY:HA3	1:G:67:GLU:O	2.03	0.57
1:I:130:LYS:HD3	1:i:142:LYS:NZ	2.20	0.57
1:I:219:ILE:HB	1:I:295:THR:HG21	1.85	0.57
1:I:283:ARG:HH11	1:I:363:LYS:HE3	1.66	0.57
1:L:54:VAL:HG22	1:L:89:THR:CG2	2.32	0.57
1:L:316:LEU:H	1:L:316:LEU:CD2	2.18	0.57
1:M:307:LYS:HE3	1:M:310:ASN:ND2	2.19	0.57
1:M:332:VAL:CG1	1:M:377:VAL:HG21	2.34	0.57
1:N:290:ASP:O	1:N:294:VAL:HG23	2.04	0.57
1:e:127:ALA:O	1:e:131:ILE:HG13	2.02	0.57
1:g:231:GLU:HA	1:g:309:GLU:HB3	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:307:LYS:HB3	1:j:309:GLU:OE1	2.05	0.57
1:n:157:VAL:O	1:n:161:ILE:HG13	2.03	0.57
2:p:21:GLU:CD	2:p:21:GLU:H	2.12	0.57
2:u:78:THR:HG22	2:u:80:ILE:CD1	2.34	0.57
1:G:263:VAL:O	1:G:267:ARG:HB2	2.04	0.57
1:L:219:ILE:HD12	1:L:295:THR:CG2	2.34	0.57
1:M:283:ARG:HH12	1:M:364:LEU:HD12	1.69	0.57
1:M:312:THR:C	1:M:314:SER:H	2.12	0.57
2:R:17:VAL:HG12	2:R:18:LYS:N	2.18	0.57
2:T:80:ILE:HG22	2:T:81:GLU:N	2.19	0.57
1:a:101:ARG:HG3	1:a:102:GLU:N	2.19	0.57
1:f:57:ALA:O	1:f:75:LYS:HD3	2.04	0.57
1:g:411:VAL:HB	1:g:412:PRO:HD2	1.86	0.57
1:j:259:ALA:O	1:j:263:VAL:HG23	2.04	0.57
1:j:362:GLU:O	1:j:365:GLN:HB2	2.04	0.57
1:j:385:GLU:HB2	1:k:280:PHE:CD2	2.39	0.57
2:u:17:VAL:HG21	2:u:70:VAL:HG21	1.85	0.57
1:A:229:VAL:HG23	1:A:256:GLU:CD	2.29	0.57
1:B:54:VAL:HG22	1:B:89:THR:HG21	1.86	0.57
1:B:96:ALA:O	1:B:100:VAL:HG23	2.03	0.57
1:C:85:ALA:HB1	1:C:501:VAL:HG12	1.86	0.57
1:E:312:THR:HG22	1:E:314:SER:H	1.69	0.57
1:L:337:LYS:HB2	1:L:340:ASP:OD2	2.04	0.57
1:M:178:GLU:CA	1:M:321:ARG:HH12	2.17	0.57
1:M:290:ASP:N	1:M:344:ARG:HH12	2.02	0.57
1:N:74:LEU:HD12	1:N:512:ILE:HD12	1.87	0.57
2:O:54:LEU:HD11	2:P:55:GLU:HA	1.86	0.57
1:a:165:MET:HE3	1:a:402:THR:HG21	1.85	0.57
1:a:372:ALA:C	1:a:374:GLY:N	2.57	0.57
1:c:238:GLN:HB3	1:c:313:LEU:HG	1.85	0.57
1:c:264:ASN:OD1	1:c:269:THR:HG21	2.04	0.57
1:g:96:ALA:O	1:g:100:VAL:HG23	2.04	0.57
1:g:218:PHE:O	1:g:246:LEU:HD12	2.04	0.57
1:j:459:GLY:HA3	1:k:114:LEU:HD12	1.86	0.57
1:k:316:LEU:CD2	1:k:316:LEU:H	2.18	0.57
1:m:178:GLU:HB3	1:m:388:LEU:HD21	1.86	0.57
1:n:175:THR:HG21	1:n:177:GLU:OE2	2.04	0.57
2:q:46:ILE:O	2:q:66:GLU:HG3	2.05	0.57
1:E:352:LEU:HD21	1:E:365:GLN:HG2	1.87	0.57
1:H:74:LEU:HA	1:H:512:ILE:CD1	2.33	0.57
1:K:74:LEU:HA	1:K:512:ILE:CD1	2.35	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:410:ILE:HB	1:L:496:VAL:HG12	1.86	0.57
1:M:41:GLU:OE2	1:N:524:ALA:HB1	2.05	0.57
1:N:74:LEU:HA	1:N:512:ILE:CD1	2.34	0.57
2:P:13:ASP:HB2	2:P:62:LEU:CD2	2.34	0.57
1:a:218:PHE:O	1:a:246:LEU:HD12	2.05	0.57
1:b:96:ALA:O	1:b:100:VAL:HG23	2.04	0.57
1:b:298:THR:HB	1:b:315:MET:HB2	1.86	0.57
1:c:203:PHE:CD1	1:c:273:ALA:HA	2.39	0.57
1:g:184:THR:HG23	1:g:380:VAL:HA	1.87	0.57
1:g:284:ARG:O	1:g:288:LEU:HG	2.05	0.57
1:h:410:ILE:HB	1:h:496:VAL:HG11	1.86	0.57
1:l:337:LYS:HB2	1:l:340:ASP:OD2	2.04	0.57
1:n:232:LEU:HD21	1:n:236:LEU:HD13	1.85	0.57
2:p:79:GLU:HG2	2:p:88:VAL:HG22	1.87	0.57
1:B:18:ARG:HD2	1:B:67:GLU:OE2	2.05	0.57
1:G:175:THR:HB	1:G:377:VAL:HG22	1.86	0.57
1:G:207:PRO:O	1:G:210:MET:HE3	2.04	0.57
1:L:345:ILE:O	1:L:349:LYS:HG3	2.04	0.57
1:L:362:GLU:O	1:L:365:GLN:HB2	2.04	0.57
2:P:71:VAL:CG1	2:Q:80:ILE:HD13	2.35	0.57
2:S:10:PRO:C	2:S:11:LEU:HD12	2.30	0.57
2:T:8:ILE:HG21	2:T:16:VAL:HG21	1.86	0.57
2:T:56:ASN:O	2:T:58:GLN:HG3	2.04	0.57
1:a:288:LEU:HD23	1:a:291:ILE:HD12	1.87	0.57
1:a:325:THR:HG22	1:a:326:LYS:N	2.19	0.57
1:b:219:ILE:N	1:b:317:GLY:O	2.28	0.57
1:c:30:THR:O	1:c:35:GLY:HA3	2.04	0.57
1:c:136:ILE:HB	1:c:410:ILE:HG22	1.86	0.57
1:d:230:ARG:HA	1:d:233:LEU:HD12	1.87	0.57
1:h:360:ALA:O	1:h:364:LEU:HD13	2.04	0.57
1:i:352:LEU:HD23	1:i:364:LEU:CD2	2.35	0.57
1:l:297:GLY:HA3	1:l:317:GLY:H	1.70	0.57
1:m:264:ASN:HB3	1:m:269:THR:HB	1.87	0.57
1:m:345:ILE:HG22	1:m:349:LYS:HE3	1.87	0.57
1:n:258:LEU:O	1:n:262:VAL:HG23	2.04	0.57
2:q:81:GLU:CD	2:q:84:GLY:HA2	2.29	0.57
1:A:235:ILE:HD12	1:A:311:ALA:HB1	1.87	0.57
1:D:298:THR:HB	1:D:315:MET:HB2	1.87	0.57
1:E:118:ARG:HH22	1:F:34:ARG:HH12	1.52	0.57
1:H:256:GLU:HG3	1:N:267:ARG:O	2.04	0.57
1:K:50:THR:HG22	1:K:51:LYS:N	2.14	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:157:VAL:O	1:N:161:ILE:HG13	2.05	0.57
2:O:77:GLY:HA3	2:O:90:LEU:HD23	1.86	0.57
1:c:150:ILE:HD11	1:c:495:ILE:CA	2.25	0.57
1:d:98:ALA:HB2	1:d:449:GLU:CG	2.31	0.57
1:g:130:LYS:O	1:g:133:ALA:HB3	2.04	0.57
1:g:251:GLU:HA	1:g:277:ALA:HB2	1.86	0.57
1:h:465:ILE:HD13	1:h:480:PHE:CE1	2.40	0.57
1:i:229:VAL:HG23	1:i:256:GLU:CB	2.33	0.57
1:l:360:ALA:HA	1:l:363:LYS:HG3	1.87	0.57
1:n:312:THR:C	1:n:314:SER:H	2.11	0.57
2:u:15:VAL:HG11	2:u:95:LEU:CD2	2.30	0.57
1:C:229:VAL:HG23	1:C:256:GLU:OE2	2.03	0.57
1:D:128:VAL:HG13	1:D:503:ARG:HG3	1.85	0.57
1:G:40:LEU:HD13	1:G:59:GLU:HG3	1.87	0.57
1:G:168:VAL:HG12	1:G:168:VAL:O	2.05	0.57
1:G:184:THR:HG23	1:G:380:VAL:HA	1.86	0.57
1:G:233:LEU:O	1:G:237:GLU:HG3	2.04	0.57
1:J:235:ILE:HD11	1:J:311:ALA:CB	2.26	0.57
1:K:340:ASP:O	1:K:343:ALA:HB3	2.04	0.57
1:M:263:VAL:O	1:M:267:ARG:HB2	2.04	0.57
1:M:283:ARG:CD	1:M:363:LYS:HZ2	2.17	0.57
1:M:496:VAL:HG12	1:M:497:ASP:H	1.69	0.57
1:N:233:LEU:N	1:N:234:PRO:HD2	2.20	0.57
1:N:421:ALA:O	1:N:425:VAL:HG23	2.05	0.57
2:Q:54:LEU:HD11	2:R:57:GLY:CA	2.34	0.57
2:R:34:ASP:HA	2:R:37:LYS:HE2	1.85	0.57
2:R:81:GLU:HA	2:R:85:GLU:O	2.05	0.57
2:T:73:ALA:HB1	2:T:75:TYR:CE2	2.39	0.57
1:a:323:ARG:HH11	1:a:323:ARG:HG2	1.70	0.57
1:c:294:VAL:HG23	1:c:295:THR:HG23	1.87	0.57
1:d:101:ARG:HG3	1:d:102:GLU:N	2.19	0.57
1:f:233:LEU:HD21	2:t:32:LEU:HD21	1.86	0.57
1:g:382:ALA:HB3	1:g:388:LEU:HB2	1.87	0.57
1:i:157:VAL:O	1:i:161:ILE:HG13	2.05	0.57
1:j:307:LYS:HE3	1:j:310:ASN:ND2	2.20	0.57
1:k:459:GLY:HA3	1:l:114:LEU:HD12	1.86	0.57
1:n:496:VAL:HG12	1:n:497:ASP:H	1.70	0.57
2:p:80:ILE:HG22	2:p:81:GLU:N	2.19	0.57
2:q:48:VAL:CG1	2:q:62:LEU:HD12	2.35	0.57
2:u:46:ILE:HD12	2:u:87:TYR:CE2	2.40	0.57
1:B:199:ILE:HG13	1:B:274:ALA:O	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:80:LYS:HE2	1:E:383:ALA:O	2.04	0.57
1:F:98:ALA:HB2	1:F:449:GLU:CG	2.33	0.57
1:G:452:ARG:NH1	1:G:463:SER:HA	2.19	0.57
1:J:127:ALA:O	1:J:131:ILE:HG13	2.04	0.57
1:L:40:LEU:HD12	1:L:40:LEU:N	2.19	0.57
1:M:146:GLU:O	1:M:150:ILE:HG13	2.05	0.57
2:Q:17:VAL:O	2:Q:87:TYR:HB3	2.05	0.57
2:R:17:VAL:O	2:R:87:TYR:HB3	2.05	0.57
2:T:10:PRO:HB2	2:T:14:ARG:O	2.04	0.57
2:T:13:ASP:HA	2:T:62:LEU:HD21	1.87	0.57
1:b:85:ALA:HB1	1:b:501:VAL:HG12	1.85	0.57
1:b:235:ILE:HD12	1:b:311:ALA:HB1	1.86	0.57
1:d:247:LEU:HD22	1:d:322:VAL:HG11	1.87	0.57
1:e:80:LYS:HE2	1:f:383:ALA:O	2.04	0.57
1:e:101:ARG:HG3	1:e:102:GLU:N	2.20	0.57
1:g:224:LYS:CE	1:g:301:SER:HA	2.30	0.57
1:g:231:GLU:O	1:g:309:GLU:HA	2.04	0.57
1:h:290:ASP:N	1:h:344:ARG:HH12	2.02	0.57
1:j:103:GLY:O	1:j:107:VAL:HG23	2.05	0.57
1:j:263:VAL:O	1:j:267:ARG:HB2	2.04	0.57
1:m:74:LEU:HD12	1:m:512:ILE:HD12	1.87	0.57
2:p:73:ALA:HB1	2:p:75:TYR:CE2	2.40	0.57
2:u:20:ILE:HD11	2:u:44:LYS:HG3	1.87	0.57
1:B:345:ILE:HG23	1:B:368:LEU:HD13	1.87	0.57
1:C:290:ASP:O	1:C:294:VAL:HG23	2.04	0.57
1:C:445:ARG:CZ	1:C:452:ARG:HH21	2.18	0.57
1:F:101:ARG:HG3	1:F:102:GLU:N	2.20	0.57
1:H:74:LEU:HD12	1:H:512:ILE:HD12	1.87	0.57
1:H:283:ARG:HD3	1:H:363:LYS:HE3	1.87	0.57
1:H:345:ILE:HG22	1:H:349:LYS:HE3	1.86	0.57
1:L:31:LEU:HD13	1:L:90:THR:HG22	1.86	0.57
1:M:207:PRO:O	1:M:210:MET:HE3	2.04	0.57
1:N:54:VAL:HG22	1:N:89:THR:HG21	1.87	0.57
1:N:127:ALA:O	1:N:131:ILE:HG13	2.04	0.57
1:a:98:ALA:HB2	1:a:449:GLU:CG	2.34	0.57
1:a:307:LYS:HE3	2:p:34:ASP:O	2.05	0.57
1:b:136:ILE:CD1	1:b:477:ARG:HH21	2.17	0.57
1:c:101:ARG:HG3	1:c:102:GLU:N	2.19	0.57
1:d:40:LEU:HD13	1:d:59:GLU:HG3	1.87	0.57
1:d:349:LYS:C	1:d:351:GLU:H	2.13	0.57
1:d:452:ARG:NH1	1:d:463:SER:HA	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:78:ALA:O	1:e:89:THR:HG22	2.04	0.57
1:f:228:ASN:HD21	1:f:230:ARG:HB2	1.69	0.57
1:i:233:LEU:N	1:i:234:PRO:HD2	2.20	0.57
1:j:127:ALA:O	1:j:131:ILE:HG13	2.03	0.57
1:k:96:ALA:O	1:k:100:VAL:HG23	2.04	0.57
1:k:222:VAL:HG12	1:k:223:GLU:H	1.69	0.57
1:k:410:ILE:HB	1:k:496:VAL:HG12	1.87	0.57
1:m:360:ALA:O	1:m:363:LYS:HG2	2.05	0.57
2:r:77:GLY:HA3	2:r:90:LEU:HD23	1.86	0.57
2:t:48:VAL:HG12	2:t:62:LEU:HD12	1.86	0.57
1:B:359:TYR:CZ	1:B:363:LYS:HE3	2.40	0.56
1:C:220:LEU:HG	1:C:222:VAL:HG23	1.87	0.56
1:E:144:ILE:CD1	1:E:165:MET:HG2	2.34	0.56
1:F:411:VAL:HB	1:F:412:PRO:HD2	1.87	0.56
1:G:95:LEU:O	1:G:99:ILE:HG13	2.05	0.56
1:G:201:PRO:O	1:G:204:VAL:HG23	2.05	0.56
1:H:283:ARG:HH22	1:H:364:LEU:HA	1.70	0.56
1:I:31:LEU:HD13	1:I:90:THR:HG22	1.87	0.56
1:J:496:VAL:HG12	1:J:497:ASP:H	1.70	0.56
1:L:219:ILE:HB	1:L:295:THR:HG21	1.87	0.56
2:P:27:LYS:HD3	2:Q:84:GLY:HA3	1.86	0.56
1:c:207:PRO:HG2	1:c:208:GLU:H	1.70	0.56
1:e:54:VAL:HG22	1:e:89:THR:HG21	1.86	0.56
1:k:127:ALA:O	1:k:131:ILE:HG13	2.05	0.56
1:k:263:VAL:O	1:k:267:ARG:HB2	2.05	0.56
1:l:410:ILE:HB	1:l:496:VAL:HG11	1.85	0.56
1:n:50:THR:CG2	1:n:51:LYS:H	2.15	0.56
1:n:96:ALA:O	1:n:100:VAL:HG23	2.05	0.56
1:n:316:LEU:H	1:n:316:LEU:CD2	2.18	0.56
1:n:452:ARG:HG2	1:n:452:ARG:HH11	1.69	0.56
1:A:320:GLU:HB3	1:A:333:GLY:HA3	1.87	0.56
1:B:427:GLU:OE2	1:B:430:LYS:HD2	2.05	0.56
1:L:27:VAL:HG12	1:L:90:THR:HG23	1.88	0.56
1:M:39:VAL:C	1:M:40:LEU:HD12	2.30	0.56
1:M:65:HIS:O	1:M:69:ILE:HG13	2.05	0.56
1:M:283:ARG:HD3	1:M:363:LYS:HZ2	1.69	0.56
1:N:307:LYS:HE3	1:N:310:ASN:HD21	1.71	0.56
1:d:136:ILE:CD1	1:d:477:ARG:HH21	2.17	0.56
1:g:237:GLU:CD	2:u:28:GLY:HA3	2.30	0.56
1:h:25:ASN:HA	1:h:28:LYS:HE2	1.86	0.56
1:l:229:VAL:CG2	1:l:256:GLU:HB3	2.34	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:408:GLU:OE2	1:l:500:LYS:HG3	2.06	0.56
1:n:218:PHE:CE1	1:n:242:THR:HG21	2.40	0.56
1:n:372:ALA:C	1:n:374:GLY:H	2.12	0.56
2:o:44:LYS:HA	2:o:68:ASP:O	2.05	0.56
1:A:168:VAL:HG12	1:A:168:VAL:O	2.05	0.56
1:A:301:SER:HB2	1:A:304:LEU:CB	2.35	0.56
1:D:127:ALA:O	1:D:131:ILE:HG13	2.05	0.56
1:D:320:GLU:HB3	1:D:333:GLY:HA3	1.87	0.56
1:G:136:ILE:HD11	1:G:477:ARG:NH2	2.21	0.56
1:G:283:ARG:O	1:G:287:MET:HG3	2.05	0.56
1:G:416:VAL:HG21	1:G:490:MET:HG3	1.86	0.56
1:H:50:THR:HG22	1:H:51:LYS:N	2.18	0.56
1:I:54:VAL:HG22	1:I:89:THR:CG2	2.35	0.56
1:J:6:LEU:HD23	1:J:523:VAL:HG22	1.85	0.56
1:K:229:VAL:HG23	1:K:256:GLU:CB	2.35	0.56
1:L:47:PRO:HB3	1:M:69:ILE:HG23	1.86	0.56
1:L:180:LYS:HB3	1:M:281:GLY:H	1.68	0.56
1:L:229:VAL:HG23	1:L:256:GLU:CB	2.35	0.56
1:M:6:LEU:HD23	1:M:523:VAL:HG22	1.87	0.56
1:M:157:VAL:O	1:M:161:ILE:HG13	2.05	0.56
1:M:208:GLU:OE1	1:M:389:LYS:HD3	2.05	0.56
1:N:210:MET:HE2	1:N:210:MET:HA	1.87	0.56
1:N:410:ILE:CD1	1:N:496:VAL:HG11	2.34	0.56
2:O:50:THR:HG23	2:O:50:THR:O	2.05	0.56
2:O:97:ALA:HA	2:P:11:LEU:HG	1.86	0.56
2:S:100:GLN:CG	2:T:9:LYS:HE2	2.35	0.56
2:T:13:ASP:C	2:T:13:ASP:OD1	2.48	0.56
2:T:21:GLU:H	2:T:21:GLU:CD	2.13	0.56
1:a:356:ASP:O	1:a:357:SER:C	2.47	0.56
1:c:298:THR:HG23	1:c:304:LEU:HD13	1.86	0.56
1:d:286:GLU:OE1	1:d:344:ARG:NH2	2.38	0.56
1:e:289:LYS:NZ	1:f:202:TYR:CE2	2.66	0.56
1:f:128:VAL:HG13	1:f:503:ARG:HG3	1.86	0.56
1:h:232:LEU:HD21	1:h:236:LEU:HD13	1.86	0.56
1:j:410:ILE:HB	1:j:496:VAL:HG12	1.87	0.56
1:k:136:ILE:HB	1:k:410:ILE:HG13	1.86	0.56
1:k:410:ILE:HB	1:k:496:VAL:HG11	1.85	0.56
1:l:307:LYS:HE3	1:l:310:ASN:ND2	2.20	0.56
1:l:307:LYS:HB3	1:l:309:GLU:OE1	2.05	0.56
1:m:234:PRO:HG3	1:m:309:GLU:CA	2.34	0.56
1:m:249:ILE:O	1:m:249:ILE:HG22	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:q:26:THR:HG21	2:q:30:ILE:HB	1.87	0.56
1:A:175:THR:HB	1:A:377:VAL:HG22	1.86	0.56
1:A:501:VAL:HG23	1:A:502:THR:N	2.20	0.56
1:G:235:ILE:CG1	1:G:311:ALA:HB3	2.36	0.56
1:G:298:THR:HB	1:G:315:MET:HB2	1.88	0.56
1:H:465:ILE:HD13	1:H:480:PHE:CE1	2.40	0.56
1:H:496:VAL:HG12	1:H:497:ASP:N	2.20	0.56
1:I:297:GLY:HA3	1:I:317:GLY:H	1.70	0.56
1:J:411:VAL:O	1:J:496:VAL:HG13	2.05	0.56
1:K:7:VAL:HG12	1:K:12:ALA:HB2	1.87	0.56
1:K:496:VAL:HG12	1:K:497:ASP:N	2.21	0.56
1:M:27:VAL:HG12	1:M:90:THR:HG23	1.87	0.56
1:M:217:ALA:CB	1:M:245:PRO:HG2	2.25	0.56
1:M:233:LEU:N	1:M:234:PRO:HD2	2.21	0.56
1:M:258:LEU:O	1:M:262:VAL:HG23	2.06	0.56
2:O:52:ARG:HH21	2:P:53:VAL:CG1	2.18	0.56
2:Q:44:LYS:HA	2:Q:68:ASP:O	2.05	0.56
2:U:62:LEU:C	2:U:64:VAL:H	2.14	0.56
1:a:235:ILE:HG21	1:a:311:ALA:CB	2.33	0.56
1:a:345:ILE:HG23	1:a:368:LEU:HD13	1.88	0.56
1:b:101:ARG:HG3	1:b:102:GLU:N	2.21	0.56
1:c:348:ILE:CG2	1:c:368:LEU:HG	2.36	0.56
1:f:359:TYR:CE1	1:f:363:LYS:HE2	2.41	0.56
1:h:458:ALA:C	1:i:114:LEU:HD12	2.30	0.56
1:j:496:VAL:HG12	1:j:497:ASP:N	2.21	0.56
1:k:307:LYS:HB3	1:k:309:GLU:OE1	2.05	0.56
1:l:219:ILE:HD12	1:l:295:THR:CG2	2.36	0.56
2:q:26:THR:O	2:q:27:LYS:HB2	2.06	0.56
1:A:325:THR:HG22	1:A:326:LYS:N	2.20	0.56
1:B:147:VAL:CG2	1:B:410:ILE:HD11	2.35	0.56
1:C:168:VAL:CG1	1:C:172:GLY:HA3	2.27	0.56
1:C:520:GLU:HB3	1:D:29:VAL:HG11	1.88	0.56
1:D:229:VAL:HG11	2:R:32:LEU:CD2	2.35	0.56
1:E:50:THR:CG2	1:E:51:LYS:H	2.09	0.56
1:J:31:LEU:HD13	1:J:90:THR:HG22	1.87	0.56
1:L:157:VAL:O	1:L:161:ILE:HG13	2.06	0.56
2:O:52:ARG:NH2	2:P:53:VAL:CB	2.65	0.56
1:a:124:VAL:O	1:a:128:VAL:HG23	2.05	0.56
1:b:78:ALA:O	1:b:89:THR:HG22	2.06	0.56
1:e:228:ASN:ND2	1:e:231:GLU:HG3	2.20	0.56
1:g:101:ARG:HG3	1:g:102:GLU:N	2.20	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:450:PRO:O	1:g:454:ILE:HG13	2.04	0.56
1:j:27:VAL:HG12	1:j:90:THR:HG23	1.88	0.56
1:k:233:LEU:N	1:k:234:PRO:HD2	2.20	0.56
1:k:452:ARG:HG2	1:k:452:ARG:HH11	1.71	0.56
1:m:229:VAL:CG2	1:m:256:GLU:HB3	2.35	0.56
1:m:408:GLU:O	1:m:499:ALA:HB3	2.06	0.56
1:m:410:ILE:HB	1:m:496:VAL:HG12	1.87	0.56
1:B:219:ILE:HG22	1:B:221:ILE:HG13	1.86	0.56
1:B:452:ARG:NH1	1:B:463:SER:HA	2.21	0.56
1:E:326:LYS:HD3	1:E:326:LYS:C	2.30	0.56
1:G:465:ILE:HD13	1:G:480:PHE:CE2	2.41	0.56
1:J:340:ASP:O	1:J:343:ALA:HB3	2.05	0.56
1:L:283:ARG:HH12	1:L:364:LEU:CD1	2.18	0.56
1:a:363:LYS:C	1:a:365:GLN:N	2.58	0.56
1:b:215:GLU:OE1	1:b:321:ARG:HG3	2.06	0.56
1:c:235:ILE:O	1:c:239:VAL:HG23	2.06	0.56
1:e:361:ARG:O	1:e:365:GLN:HB2	2.05	0.56
1:i:218:PHE:CE1	1:i:242:THR:HG21	2.40	0.56
1:i:219:ILE:HD12	1:i:295:THR:CG2	2.34	0.56
1:j:229:VAL:CG2	1:j:256:GLU:HB3	2.35	0.56
1:k:54:VAL:HG22	1:k:89:THR:CG2	2.35	0.56
1:l:372:ALA:C	1:l:374:GLY:N	2.63	0.56
1:l:452:ARG:HG2	1:l:452:ARG:HH11	1.70	0.56
1:l:459:GLY:HA3	1:m:114:LEU:HD12	1.87	0.56
1:n:307:LYS:HB3	1:n:309:GLU:OE1	2.06	0.56
1:B:501:VAL:HG23	1:B:502:THR:N	2.20	0.56
1:C:178:GLU:CG	1:C:388:LEU:HD21	2.36	0.56
1:J:496:VAL:HG12	1:J:497:ASP:N	2.20	0.56
1:K:118:ARG:O	1:K:122:LYS:HG3	2.05	0.56
1:K:385:GLU:HB2	1:L:280:PHE:CE2	2.41	0.56
2:O:18:LYS:HG2	2:O:87:TYR:CD2	2.40	0.56
1:c:98:ALA:HB2	1:c:449:GLU:CG	2.34	0.56
1:d:235:ILE:O	1:d:239:VAL:HG23	2.05	0.56
1:f:127:ALA:O	1:f:131:ILE:HG13	2.05	0.56
1:f:237:GLU:OE1	2:t:27:LYS:HG3	2.05	0.56
1:h:224:LYS:HG2	1:h:225:LYS:H	1.69	0.56
1:h:363:LYS:O	1:h:366:GLU:HG2	2.05	0.56
1:i:224:LYS:HG2	1:i:225:LYS:H	1.69	0.56
2:q:33:PRO:C	2:q:35:THR:N	2.61	0.56
2:r:41:GLN:HG2	2:r:74:LYS:HB3	1.86	0.56
2:r:100:GLN:CG	2:s:9:LYS:HE2	2.35	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:23:VAL:HG22	1:C:60:VAL:HG11	1.86	0.56
1:D:78:ALA:O	1:D:89:THR:HG22	2.06	0.56
1:D:455:ALA:HB1	1:D:465:ILE:HD12	1.87	0.56
1:H:218:PHE:HE1	1:H:242:THR:HG21	1.70	0.56
1:I:27:VAL:HG12	1:I:90:THR:HG23	1.88	0.56
1:K:307:LYS:HE3	1:K:310:ASN:ND2	2.21	0.56
1:M:178:GLU:C	1:M:321:ARG:NH1	2.61	0.56
2:Q:18:LYS:HE3	2:Q:86:GLU:O	2.05	0.56
1:a:23:VAL:HG22	1:a:60:VAL:HG11	1.87	0.56
1:c:445:ARG:CZ	1:c:452:ARG:HH21	2.19	0.56
1:h:421:ALA:O	1:h:425:VAL:HG23	2.06	0.56
1:i:283:ARG:HH12	1:i:363:LYS:HG3	1.71	0.56
1:k:31:LEU:HD13	1:k:90:THR:HG22	1.86	0.56
1:A:332:VAL:HG12	1:A:333:GLY:N	2.21	0.56
1:D:189:VAL:HG13	1:D:193:GLN:HG2	1.86	0.56
1:J:345:ILE:O	1:J:349:LYS:HG3	2.06	0.56
1:L:283:ARG:HG2	1:L:363:LYS:HZ2	1.70	0.56
1:M:283:ARG:CG	1:M:363:LYS:HZ2	2.18	0.56
2:T:95:LEU:O	2:U:14:ARG:NH1	2.38	0.56
1:c:292:ALA:O	1:c:293:ALA:C	2.49	0.56
1:d:230:ARG:O	1:d:234:PRO:HD2	2.06	0.56
1:e:52:ASP:OD1	1:e:54:VAL:HG23	2.06	0.56
1:k:411:VAL:O	1:k:496:VAL:HG13	2.06	0.56
1:m:136:ILE:N	1:m:410:ILE:O	2.26	0.56
2:t:62:LEU:O	2:t:64:VAL:N	2.38	0.56
2:t:97:ALA:HB1	2:u:8:ILE:HG22	1.88	0.56
1:A:361:ARG:O	1:A:365:GLN:HB2	2.06	0.56
1:A:452:ARG:NH1	1:A:463:SER:HA	2.21	0.56
1:D:199:ILE:HG13	1:D:274:ALA:O	2.06	0.56
1:E:306:PHE:CE2	1:E:315:MET:SD	2.99	0.56
1:G:345:ILE:HG23	1:G:368:LEU:CD1	2.36	0.56
1:G:345:ILE:HG23	1:G:368:LEU:HD13	1.87	0.56
1:H:59:GLU:O	1:I:4:LYS:HG3	2.07	0.56
1:I:25:ASN:HA	1:I:28:LYS:HE2	1.87	0.56
1:I:103:GLY:O	1:I:107:VAL:HG23	2.06	0.56
1:J:197:GLY:HA3	1:J:325:THR:O	2.06	0.56
1:c:526:LYS:HG3	1:c:527:PRO:HD2	1.88	0.56
1:d:445:ARG:CZ	1:d:452:ARG:HH21	2.19	0.56
1:e:445:ARG:CZ	1:e:452:ARG:HH21	2.19	0.56
1:f:51:LYS:NZ	4:f:602:ADP:O1A	2.39	0.56
1:j:345:ILE:HG22	1:j:349:LYS:HE3	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:452:ARG:HG2	1:j:452:ARG:HH11	1.71	0.56
1:k:157:VAL:O	1:k:161:ILE:HG13	2.05	0.56
1:k:175:THR:HG21	1:k:177:GLU:OE2	2.05	0.56
1:k:232:LEU:HD21	1:k:236:LEU:HD13	1.87	0.56
1:m:452:ARG:HG2	1:m:452:ARG:HH11	1.71	0.56
2:o:41:GLN:HG2	2:o:74:LYS:HB3	1.88	0.56
1:B:301:SER:HB2	1:B:304:LEU:CB	2.34	0.55
1:C:307:LYS:HB3	1:C:310:ASN:HD22	1.71	0.55
1:F:150:ILE:CD1	1:F:496:VAL:H	2.19	0.55
1:F:201:PRO:O	1:F:204:VAL:HG23	2.05	0.55
1:J:218:PHE:CE1	1:J:242:THR:HG21	2.40	0.55
1:M:232:LEU:HD21	1:M:236:LEU:HD13	1.88	0.55
2:Q:8:ILE:HG21	2:Q:16:VAL:HG21	1.87	0.55
2:Q:18:LYS:HZ1	2:Q:85:GLU:CD	2.14	0.55
1:f:150:ILE:CD1	1:f:495:ILE:HA	2.26	0.55
1:i:316:LEU:H	1:i:316:LEU:CD2	2.19	0.55
1:l:421:ALA:O	1:l:425:VAL:HG23	2.06	0.55
1:m:118:ARG:O	1:m:122:LYS:HG3	2.06	0.55
1:m:290:ASP:O	1:m:294:VAL:HG23	2.06	0.55
1:n:219:ILE:HB	1:n:295:THR:HG21	1.86	0.55
1:B:98:ALA:HB2	1:B:449:GLU:CG	2.34	0.55
1:C:69:ILE:HD11	1:D:41:GLU:HB2	1.88	0.55
1:C:307:LYS:HE3	1:C:309:GLU:OE1	2.05	0.55
1:C:465:ILE:HD13	1:C:480:PHE:CD2	2.42	0.55
1:G:72:GLN:HE22	1:G:75:LYS:HZ1	1.52	0.55
1:M:103:GLY:O	1:M:107:VAL:HG23	2.06	0.55
2:S:21:GLU:H	2:S:21:GLU:CD	2.15	0.55
1:b:452:ARG:NH1	1:b:463:SER:HA	2.20	0.55
1:b:520:GLU:HB3	1:c:29:VAL:HG11	1.88	0.55
1:d:52:ASP:OD1	1:d:54:VAL:HG23	2.06	0.55
1:e:235:ILE:HD12	1:e:311:ALA:HB3	1.85	0.55
1:h:128:VAL:HA	1:h:131:ILE:HD12	1.89	0.55
1:i:283:ARG:HG2	1:i:363:LYS:HZ2	1.70	0.55
1:j:39:VAL:C	1:j:40:LEU:HD12	2.32	0.55
1:m:65:HIS:O	1:m:69:ILE:HG13	2.06	0.55
1:n:50:THR:CG2	1:n:52:ASP:H	2.08	0.55
2:u:20:ILE:HG13	2:u:43:GLY:HA2	1.88	0.55
1:A:356:ASP:O	1:A:357:SER:C	2.50	0.55
1:B:178:GLU:CG	1:B:388:LEU:HD21	2.36	0.55
1:C:72:GLN:HE22	1:C:75:LYS:HZ1	1.52	0.55
1:C:127:ALA:O	1:C:131:ILE:HG13	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:229:VAL:HG23	1:C:256:GLU:CD	2.31	0.55
1:C:290:ASP:HB3	1:C:371:LEU:HD21	1.89	0.55
1:D:356:ASP:O	1:D:357:SER:C	2.49	0.55
1:E:267:ARG:HH11	1:E:267:ARG:HG3	1.71	0.55
1:F:237:GLU:HB3	2:T:28:GLY:HA3	1.87	0.55
1:F:352:LEU:C	1:F:354:THR:H	2.14	0.55
1:N:307:LYS:HB3	1:N:309:GLU:OE1	2.06	0.55
1:e:515:LEU:HD12	1:f:49:ILE:HG21	1.87	0.55
1:f:325:THR:HG22	1:f:326:LYS:H	1.70	0.55
1:h:222:VAL:HG12	1:h:223:GLU:H	1.71	0.55
1:l:118:ARG:O	1:l:122:LYS:HG3	2.06	0.55
1:m:232:LEU:O	1:m:232:LEU:HD23	2.06	0.55
1:m:258:LEU:O	1:m:262:VAL:HG23	2.07	0.55
1:n:74:LEU:HD12	1:n:512:ILE:HD12	1.86	0.55
1:n:229:VAL:CG2	1:n:256:GLU:HB3	2.35	0.55
1:n:283:ARG:HD3	1:n:363:LYS:NZ	2.22	0.55
1:B:283:ARG:O	1:B:287:MET:HG3	2.06	0.55
1:D:136:ILE:CD1	1:D:477:ARG:HH21	2.19	0.55
1:D:345:ILE:HG23	1:D:368:LEU:HD13	1.87	0.55
1:F:14:ARG:NH1	1:M:109:ALA:HA	2.22	0.55
1:F:501:VAL:HG23	1:F:502:THR:N	2.22	0.55
1:H:366:GLU:O	1:H:370:LYS:HG3	2.06	0.55
1:K:325:THR:HG22	1:K:327:ASP:N	2.02	0.55
2:R:62:LEU:C	2:R:64:VAL:H	2.15	0.55
2:S:11:LEU:O	2:S:13:ASP:N	2.39	0.55
1:a:222:VAL:O	1:a:250:ALA:HA	2.07	0.55
1:b:230:ARG:HA	1:b:233:LEU:HD12	1.89	0.55
1:e:425:VAL:O	1:e:429:ILE:HG13	2.06	0.55
1:i:290:ASP:O	1:i:294:VAL:HG23	2.07	0.55
1:n:74:LEU:HA	1:n:512:ILE:CD1	2.36	0.55
2:p:45:VAL:HG21	2:p:64:VAL:CG1	2.37	0.55
2:s:52:ARG:HG3	2:s:52:ARG:O	2.04	0.55
1:E:343:ALA:HB1	1:F:210:MET:HE1	1.88	0.55
1:H:496:VAL:HG12	1:H:497:ASP:H	1.71	0.55
1:J:50:THR:HG22	1:J:51:LYS:N	2.17	0.55
1:N:232:LEU:HD22	1:N:236:LEU:HD22	1.87	0.55
2:O:9:LYS:O	2:U:97:ALA:HA	2.07	0.55
2:O:33:PRO:C	2:O:35:THR:H	2.14	0.55
2:P:56:ASN:N	2:P:56:ASN:OD1	2.39	0.55
2:T:96:LEU:HD23	2:U:14:ARG:HH11	1.71	0.55
1:b:98:ALA:HB2	1:b:449:GLU:CG	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:212:ALA:CB	1:b:324:ILE:HB	2.27	0.55
1:d:465:ILE:HD13	1:d:480:PHE:CE2	2.41	0.55
1:g:452:ARG:NH1	1:g:463:SER:HA	2.22	0.55
1:h:426:GLU:OE1	1:h:444:ARG:NH1	2.40	0.55
1:i:54:VAL:HG22	1:i:89:THR:CG2	2.36	0.55
1:j:54:VAL:HG22	1:j:89:THR:CG2	2.36	0.55
1:l:25:ASN:HA	1:l:28:LYS:HE2	1.89	0.55
1:l:224:LYS:HG2	1:l:225:LYS:H	1.72	0.55
2:o:52:ARG:O	2:o:52:ARG:HG3	2.06	0.55
2:q:33:PRO:O	2:q:35:THR:N	2.40	0.55
2:q:65:LYS:HG3	2:q:68:ASP:OD1	2.05	0.55
1:B:220:LEU:HD13	1:B:235:ILE:CD1	2.36	0.55
1:B:363:LYS:C	1:B:365:GLN:N	2.64	0.55
1:D:168:VAL:HG12	1:D:168:VAL:O	2.07	0.55
1:E:101:ARG:HG3	1:E:102:GLU:N	2.21	0.55
1:E:294:VAL:HA	1:E:341:ILE:CD1	2.35	0.55
1:I:218:PHE:CE1	1:I:242:THR:HG21	2.42	0.55
1:I:232:LEU:HD23	1:I:232:LEU:O	2.07	0.55
1:N:496:VAL:HG12	1:N:497:ASP:N	2.21	0.55
2:Q:80:ILE:HG22	2:Q:81:GLU:N	2.20	0.55
2:R:79:GLU:O	2:R:80:ILE:HG13	2.06	0.55
1:b:124:VAL:O	1:b:128:VAL:HG23	2.06	0.55
1:b:235:ILE:O	1:b:239:VAL:HG23	2.06	0.55
1:b:382:ALA:HB3	1:b:388:LEU:HB2	1.89	0.55
1:c:142:LYS:HE2	1:c:146:GLU:OE2	2.07	0.55
1:d:161:ILE:HD12	1:d:399:LEU:CD2	2.37	0.55
1:d:234:PRO:O	1:d:238:GLN:HG3	2.05	0.55
1:e:247:LEU:HD13	1:e:324:ILE:HD11	1.89	0.55
1:f:501:VAL:HG23	1:f:502:THR:N	2.22	0.55
1:g:472:GLU:HB3	1:g:478:TYR:CD2	2.42	0.55
1:i:283:ARG:NH1	1:i:363:LYS:HG3	2.22	0.55
1:i:496:VAL:HG12	1:i:497:ASP:N	2.20	0.55
1:l:6:LEU:HD23	1:l:523:VAL:HG22	1.88	0.55
1:l:410:ILE:CD1	1:l:496:VAL:HG11	2.35	0.55
1:m:31:LEU:HD13	1:m:90:THR:HG22	1.87	0.55
1:n:232:LEU:O	1:n:232:LEU:HD23	2.05	0.55
1:n:233:LEU:N	1:n:234:PRO:HD2	2.21	0.55
1:D:95:LEU:O	1:D:99:ILE:HG13	2.07	0.55
1:D:144:ILE:CD1	1:D:165:MET:HG2	2.37	0.55
1:E:30:THR:O	1:E:35:GLY:HA3	2.06	0.55
1:E:354:THR:HG22	1:E:354:THR:O	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:501:VAL:HG23	1:E:502:THR:N	2.22	0.55
1:F:320:GLU:HB3	1:F:333:GLY:HA3	1.88	0.55
1:I:290:ASP:O	1:I:294:VAL:HG23	2.07	0.55
1:K:518:THR:O	1:K:518:THR:HG22	2.07	0.55
1:L:41:GLU:HB3	1:M:69:ILE:HD11	1.88	0.55
1:M:182:LEU:CD1	1:N:363:LYS:HZ3	2.17	0.55
1:M:496:VAL:HG12	1:M:497:ASP:N	2.22	0.55
2:P:21:GLU:O	2:P:22:GLU:C	2.50	0.55
1:a:78:ALA:O	1:a:89:THR:HG22	2.06	0.55
1:b:455:ALA:HB1	1:b:465:ILE:HD12	1.89	0.55
1:c:50:THR:CG2	1:c:52:ASP:H	2.16	0.55
1:c:150:ILE:CD1	1:c:495:ILE:HA	2.24	0.55
1:c:354:THR:O	1:c:354:THR:HG22	2.07	0.55
1:c:526:LYS:CG	1:c:527:PRO:HD2	2.36	0.55
1:d:325:THR:HG22	1:d:326:LYS:H	1.71	0.55
1:e:520:GLU:HB3	1:f:29:VAL:HG11	1.89	0.55
1:h:307:LYS:HB3	1:h:309:GLU:OE1	2.06	0.55
1:i:74:LEU:HA	1:i:512:ILE:CD1	2.36	0.55
1:i:232:LEU:HD23	1:i:232:LEU:O	2.06	0.55
1:j:290:ASP:O	1:j:294:VAL:HG23	2.07	0.55
1:j:325:THR:HG22	1:j:327:ASP:N	2.04	0.55
1:l:54:VAL:HG22	1:l:89:THR:CG2	2.35	0.55
1:n:127:ALA:O	1:n:131:ILE:HG13	2.06	0.55
1:n:496:VAL:HG12	1:n:497:ASP:N	2.22	0.55
2:q:72:PHE:CD2	2:q:72:PHE:N	2.74	0.55
2:r:8:ILE:HD12	2:r:8:ILE:H	1.70	0.55
1:E:277:ALA:HB1	1:E:284:ARG:HD2	1.88	0.55
1:F:50:THR:CG2	1:F:52:ASP:H	2.18	0.55
1:G:501:VAL:HG23	1:G:502:THR:N	2.21	0.55
1:H:224:LYS:HG2	1:H:225:LYS:H	1.72	0.55
1:M:224:LYS:HG2	1:M:225:LYS:H	1.70	0.55
2:P:85:GLU:OE1	2:P:85:GLU:HA	2.05	0.55
1:a:234:PRO:HG2	1:a:309:GLU:HA	1.88	0.55
1:a:369:ALA:HB1	1:a:375:VAL:CG2	2.37	0.55
1:a:411:VAL:HB	1:a:412:PRO:HD2	1.87	0.55
1:c:267:ARG:HH11	1:c:267:ARG:HG3	1.72	0.55
1:e:218:PHE:HB3	1:e:316:LEU:HD13	1.88	0.55
1:f:136:ILE:CD1	1:f:477:ARG:HH21	2.20	0.55
1:f:184:THR:HG23	1:f:380:VAL:HA	1.89	0.55
1:i:232:LEU:HD21	1:i:236:LEU:HD13	1.87	0.55
1:i:360:ALA:O	1:i:364:LEU:HD13	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:345:ILE:HG22	1:n:349:LYS:HE3	1.88	0.55
2:r:80:ILE:CG2	2:r:81:GLU:N	2.69	0.55
1:A:207:PRO:HB3	1:G:343:ALA:HB2	1.88	0.55
1:A:228:ASN:HD22	1:A:231:GLU:HG3	1.72	0.55
1:C:18:ARG:HD2	1:C:67:GLU:OE2	2.07	0.55
1:C:52:ASP:OD1	1:C:54:VAL:HG23	2.07	0.55
1:C:356:ASP:O	1:C:357:SER:C	2.50	0.55
1:D:6:LEU:CD2	1:D:523:VAL:HG22	2.37	0.55
1:D:217:ALA:HB2	1:D:245:PRO:HB2	1.89	0.55
1:D:307:LYS:HB2	1:D:310:ASN:HD22	1.71	0.55
1:E:157:VAL:HG22	1:E:395:PHE:CZ	2.41	0.55
1:E:222:VAL:HA	1:E:300:ILE:HB	1.88	0.55
1:G:189:VAL:HG13	1:G:190:GLU:N	2.21	0.55
1:H:50:THR:HG22	1:H:52:ASP:N	2.16	0.55
1:H:307:LYS:HE3	1:H:310:ASN:ND2	2.21	0.55
1:I:118:ARG:O	1:I:122:LYS:HG3	2.07	0.55
1:N:232:LEU:HD21	1:N:236:LEU:HD13	1.89	0.55
1:N:496:VAL:HG12	1:N:497:ASP:H	1.71	0.55
1:N:518:THR:HG22	1:N:518:THR:O	2.05	0.55
2:Q:33:PRO:C	2:Q:35:THR:H	2.15	0.55
1:d:173:ILE:HD12	1:d:366:GLU:CA	2.34	0.55
1:f:101:ARG:HG3	1:f:102:GLU:N	2.21	0.55
1:f:225:LYS:O	1:f:226:VAL:HG23	2.07	0.55
1:f:307:LYS:HB2	1:f:310:ASN:HD22	1.71	0.55
1:f:452:ARG:NH1	1:f:463:SER:HA	2.22	0.55
1:g:168:VAL:HG21	1:g:376:ALA:HB2	1.89	0.55
1:g:238:GLN:C	1:g:313:LEU:HD21	2.32	0.55
1:g:354:THR:O	1:g:354:THR:HG22	2.06	0.55
1:j:189:VAL:HG12	1:j:190:GLU:N	2.14	0.55
1:k:218:PHE:HE1	1:k:242:THR:HG21	1.72	0.55
1:l:410:ILE:HB	1:l:496:VAL:HG12	1.88	0.55
1:m:316:LEU:H	1:m:316:LEU:CD2	2.19	0.55
2:p:100:GLN:OXT	2:q:7:VAL:N	2.40	0.55
2:s:8:ILE:HD12	2:s:8:ILE:N	2.22	0.55
1:B:230:ARG:O	1:B:234:PRO:HD2	2.08	0.55
1:F:235:ILE:CG1	1:F:311:ALA:HB3	2.37	0.55
1:G:178:GLU:CG	1:G:388:LEU:HD21	2.36	0.55
1:G:246:LEU:HB3	1:G:272:VAL:CG1	2.35	0.55
1:K:24:ALA:O	1:K:28:LYS:HG2	2.07	0.55
1:M:178:GLU:N	1:M:321:ARG:HH11	2.02	0.55
2:R:78:THR:HG22	2:R:79:GLU:N	2.21	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:233:LEU:CD2	2:o:30:ILE:HG21	2.36	0.55
1:d:124:VAL:O	1:d:128:VAL:HG23	2.06	0.55
1:d:465:ILE:HD13	1:d:480:PHE:CD2	2.42	0.55
1:g:325:THR:CG2	1:g:326:LYS:H	2.13	0.55
1:h:218:PHE:CE1	1:h:242:THR:HG21	2.42	0.55
1:i:410:ILE:HB	1:i:496:VAL:HG12	1.89	0.55
1:l:226:VAL:CG1	1:l:232:LEU:HD12	2.37	0.55
1:m:117:LYS:O	1:m:121:GLU:HG3	2.07	0.55
1:m:224:LYS:HG2	1:m:225:LYS:H	1.70	0.55
2:s:11:LEU:O	2:s:13:ASP:N	2.40	0.55
1:C:366:GLU:O	1:C:370:LYS:HG3	2.06	0.54
1:D:301:SER:HB2	1:D:304:LEU:HB2	1.89	0.54
1:D:452:ARG:NH1	1:D:463:SER:HA	2.23	0.54
1:F:230:ARG:HA	1:F:233:LEU:HD12	1.88	0.54
1:F:284:ARG:HH11	1:F:284:ARG:HG3	1.71	0.54
1:G:455:ALA:HB1	1:G:465:ILE:HD12	1.89	0.54
1:H:360:ALA:O	1:H:363:LYS:HG2	2.07	0.54
1:J:175:THR:HG21	1:J:177:GLU:OE2	2.07	0.54
1:J:232:LEU:HD23	1:J:236:LEU:HB2	1.88	0.54
1:K:31:LEU:HD13	1:K:90:THR:HG22	1.89	0.54
1:L:518:THR:HG22	1:L:518:THR:O	2.07	0.54
2:P:70:VAL:HG11	2:P:95:LEU:CD2	2.30	0.54
2:Q:73:ALA:O	2:Q:75:TYR:N	2.40	0.54
1:a:57:ALA:O	1:a:75:LYS:HD3	2.06	0.54
1:c:144:ILE:HD12	1:c:165:MET:HG2	1.89	0.54
1:d:417:THR:HG23	1:d:418:LEU:HD12	1.89	0.54
1:g:78:ALA:O	1:g:89:THR:HG22	2.07	0.54
1:i:496:VAL:HG12	1:i:497:ASP:H	1.73	0.54
1:j:226:VAL:CG1	1:j:232:LEU:HD12	2.37	0.54
1:j:247:LEU:HD22	1:j:322:VAL:HG11	1.89	0.54
1:l:249:ILE:O	1:l:249:ILE:HG22	2.06	0.54
1:m:136:ILE:HD11	1:m:491:VAL:HG21	1.89	0.54
1:A:284:ARG:O	1:A:288:LEU:HG	2.07	0.54
1:C:50:THR:CG2	1:C:52:ASP:H	2.15	0.54
1:C:222:VAL:O	1:C:250:ALA:HA	2.07	0.54
1:D:168:VAL:HG21	1:D:376:ALA:HB2	1.88	0.54
1:F:520:GLU:HB3	1:G:29:VAL:HG11	1.89	0.54
1:G:366:GLU:O	1:G:370:LYS:HG3	2.07	0.54
1:G:526:LYS:HG3	1:G:527:PRO:HD2	1.88	0.54
1:H:410:ILE:HB	1:H:496:VAL:HG12	1.88	0.54
1:J:307:LYS:HE3	1:J:310:ASN:ND2	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:337:LYS:HB2	1:J:340:ASP:OD2	2.07	0.54
1:K:27:VAL:HG12	1:K:90:THR:HG23	1.88	0.54
1:K:175:THR:HG22	1:K:176:VAL:N	2.22	0.54
1:K:345:ILE:O	1:K:349:LYS:HG3	2.07	0.54
2:O:60:VAL:HG21	2:P:53:VAL:HG11	1.89	0.54
2:Q:10:PRO:HG3	2:Q:47:ALA:O	2.06	0.54
2:T:33:PRO:C	2:T:35:THR:H	2.15	0.54
1:f:230:ARG:O	1:f:234:PRO:HD2	2.07	0.54
1:g:168:VAL:HG12	1:g:168:VAL:O	2.07	0.54
1:g:234:PRO:O	1:g:238:GLN:HG3	2.07	0.54
1:j:218:PHE:HE1	1:j:242:THR:HG21	1.73	0.54
1:k:6:LEU:CD2	1:k:523:VAL:HG22	2.37	0.54
1:l:258:LEU:O	1:l:262:VAL:HG23	2.08	0.54
1:l:316:LEU:H	1:l:316:LEU:CD2	2.19	0.54
1:n:297:GLY:HA3	1:n:317:GLY:H	1.69	0.54
1:n:332:VAL:HG22	1:n:375:VAL:HG11	1.88	0.54
2:r:20:ILE:CG1	2:r:43:GLY:HA2	2.38	0.54
2:t:48:VAL:CG1	2:t:62:LEU:CD1	2.84	0.54
1:D:218:PHE:HE1	1:D:244:LYS:HB2	1.73	0.54
1:G:101:ARG:HG3	1:G:102:GLU:N	2.23	0.54
1:K:332:VAL:HG22	1:K:375:VAL:HG11	1.88	0.54
1:L:297:GLY:HA3	1:L:317:GLY:N	2.20	0.54
1:a:141:ARG:NH2	1:a:163:ASP:OD1	2.38	0.54
1:c:204:VAL:HG11	1:c:210:MET:HA	1.89	0.54
1:d:229:VAL:HG12	1:d:233:LEU:HD11	1.89	0.54
1:d:270:LEU:HG	1:d:272:VAL:HG13	1.88	0.54
1:e:124:VAL:O	1:e:128:VAL:HG23	2.07	0.54
1:g:238:GLN:HB3	1:g:313:LEU:HG	1.89	0.54
1:g:350:LYS:O	1:g:353:GLU:HG2	2.06	0.54
1:i:39:VAL:C	1:i:40:LEU:HD12	2.33	0.54
1:i:234:PRO:HG3	1:i:309:GLU:CA	2.32	0.54
1:i:345:ILE:HG22	1:i:349:LYS:HE3	1.89	0.54
1:j:123:ALA:HB2	1:j:440:ALA:HA	1.88	0.54
1:j:264:ASN:HB3	1:j:269:THR:HB	1.88	0.54
1:k:229:VAL:CG2	1:k:256:GLU:HB3	2.37	0.54
2:o:81:GLU:HG3	2:o:85:GLU:H	1.71	0.54
1:C:147:VAL:CG2	1:C:410:ILE:HD11	2.37	0.54
1:J:283:ARG:HD3	1:J:363:LYS:NZ	2.22	0.54
1:K:410:ILE:HB	1:K:496:VAL:HG12	1.88	0.54
1:L:41:GLU:HB3	1:M:69:ILE:CD1	2.38	0.54
1:L:63:GLU:OE2	1:M:526:LYS:HE2	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:226:VAL:HG11	1:M:232:LEU:HD12	1.88	0.54
1:M:459:GLY:CA	1:N:114:LEU:HD12	2.37	0.54
1:N:316:LEU:H	1:N:316:LEU:CD2	2.19	0.54
2:O:22:GLU:OE1	2:O:22:GLU:N	2.35	0.54
2:R:14:ARG:HH11	2:R:14:ARG:HG3	1.73	0.54
2:R:85:GLU:OE1	2:R:85:GLU:HA	2.08	0.54
1:a:72:GLN:NE2	1:a:75:LYS:NZ	2.53	0.54
1:a:220:LEU:HG	1:a:222:VAL:HG23	1.89	0.54
1:a:233:LEU:HD23	2:o:30:ILE:HD13	1.90	0.54
1:c:229:VAL:HG12	1:c:233:LEU:HG	1.90	0.54
1:c:236:LEU:HB2	2:q:30:ILE:HD11	1.89	0.54
1:h:459:GLY:CA	1:i:114:LEU:HD12	2.38	0.54
1:l:37:ASN:OD1	1:m:515:LEU:HD12	2.08	0.54
1:n:40:LEU:HD23	1:n:59:GLU:CG	2.34	0.54
2:o:11:LEU:HD11	2:u:98:VAL:HG23	1.90	0.54
1:L:240:ALA:O	1:M:228:ASN:OD1	2.25	0.54
1:N:360:ALA:O	1:N:363:LYS:HG2	2.06	0.54
2:O:62:LEU:C	2:O:64:VAL:H	2.14	0.54
1:a:237:GLU:CD	2:o:28:GLY:HA3	2.32	0.54
1:a:284:ARG:O	1:a:288:LEU:HG	2.07	0.54
1:d:325:THR:HG22	1:d:326:LYS:N	2.22	0.54
1:e:522:VAL:HG22	1:f:39:VAL:HB	1.88	0.54
1:f:6:LEU:HD22	1:f:523:VAL:HG22	1.89	0.54
1:i:118:ARG:O	1:i:122:LYS:HG3	2.08	0.54
1:j:128:VAL:HA	1:j:131:ILE:HD12	1.88	0.54
1:j:366:GLU:O	1:j:370:LYS:HG3	2.08	0.54
1:n:360:ALA:O	1:n:364:LEU:HD12	2.07	0.54
2:p:85:GLU:OE1	2:p:85:GLU:HA	2.07	0.54
2:u:12:GLY:HA2	2:u:51:GLY:N	2.22	0.54
1:B:101:ARG:HG3	1:B:102:GLU:N	2.23	0.54
1:C:199:ILE:HG13	1:C:274:ALA:O	2.06	0.54
1:D:411:VAL:HB	1:D:412:PRO:HD2	1.89	0.54
1:E:219:ILE:N	1:E:317:GLY:O	2.41	0.54
1:I:96:ALA:O	1:I:100:VAL:HG23	2.07	0.54
1:I:316:LEU:H	1:I:316:LEU:CD2	2.21	0.54
1:J:157:VAL:O	1:J:161:ILE:HG13	2.06	0.54
1:K:219:ILE:HB	1:K:295:THR:HG21	1.90	0.54
1:b:150:ILE:HG22	1:b:151:SER:N	2.23	0.54
1:b:173:ILE:HD12	1:b:366:GLU:HA	1.89	0.54
1:b:356:ASP:O	1:b:357:SER:C	2.51	0.54
1:b:468:GLN:O	1:b:471:ALA:HB3	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:222:VAL:O	1:c:250:ALA:HA	2.07	0.54
1:d:6:LEU:CD2	1:d:523:VAL:HG22	2.38	0.54
1:g:341:ILE:O	1:g:345:ILE:HG22	2.08	0.54
1:g:445:ARG:CZ	1:g:452:ARG:HH21	2.20	0.54
1:i:204:VAL:HG13	1:i:211:GLU:O	2.08	0.54
1:i:258:LEU:O	1:i:262:VAL:HG23	2.07	0.54
1:j:6:LEU:HD23	1:j:523:VAL:HG22	1.89	0.54
1:j:219:ILE:O	1:j:221:ILE:HG13	2.08	0.54
1:k:410:ILE:CD1	1:k:496:VAL:HG11	2.36	0.54
1:n:307:LYS:HE3	1:n:310:ASN:HD21	1.72	0.54
2:q:15:VAL:CG1	2:q:45:VAL:HG13	2.37	0.54
2:u:71:VAL:O	2:u:95:LEU:HD12	2.08	0.54
1:A:365:GLN:OE1	1:A:365:GLN:HA	2.08	0.54
1:C:361:ARG:O	1:C:365:GLN:HB2	2.08	0.54
1:D:240:ALA:HA	1:D:270:LEU:HD13	1.90	0.54
1:F:136:ILE:CD1	1:F:477:ARG:HH21	2.20	0.54
1:I:410:ILE:HB	1:I:496:VAL:HG12	1.89	0.54
1:J:263:VAL:O	1:J:267:ARG:HB2	2.08	0.54
1:L:452:ARG:HG2	1:L:452:ARG:HH11	1.72	0.54
1:M:41:GLU:HG2	1:N:524:ALA:HA	1.90	0.54
2:T:41:GLN:HG2	2:T:74:LYS:HB3	1.90	0.54
1:c:50:THR:HA	1:c:390:GLU:OE1	2.08	0.54
1:h:37:ASN:OD1	1:i:515:LEU:HD12	2.07	0.54
1:h:410:ILE:CD1	1:h:496:VAL:HG11	2.33	0.54
1:k:27:VAL:HG12	1:k:90:THR:HG23	1.89	0.54
1:k:81:THR:OG1	1:k:508:ASN:ND2	2.40	0.54
1:l:69:ILE:O	1:l:73:LEU:HB2	2.08	0.54
1:n:263:VAL:O	1:n:267:ARG:HB2	2.07	0.54
2:p:77:GLY:HA3	2:p:90:LEU:HD23	1.90	0.54
2:u:24:PRO:HB2	2:u:37:LYS:NZ	2.21	0.54
1:A:41:GLU:HB2	1:G:69:ILE:HD11	1.90	0.54
1:B:416:VAL:HG21	1:B:479:GLY:HA3	1.88	0.54
1:C:30:THR:O	1:C:35:GLY:HA3	2.08	0.54
1:C:360:ALA:O	1:C:364:LEU:HG	2.07	0.54
1:D:246:LEU:HB3	1:D:272:VAL:CG1	2.34	0.54
1:D:472:GLU:HB3	1:D:478:TYR:CD2	2.43	0.54
1:E:31:LEU:HB2	1:E:90:THR:HG21	1.89	0.54
1:E:325:THR:CG2	1:E:326:LYS:H	2.14	0.54
1:G:124:VAL:O	1:G:128:VAL:HG23	2.08	0.54
1:H:226:VAL:HG11	1:H:232:LEU:HD12	1.89	0.54
1:I:410:ILE:CD1	1:I:496:VAL:HG11	2.35	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:141:ARG:NH1	1:M:166:GLU:HG3	2.23	0.54
1:M:218:PHE:HB3	1:M:316:LEU:HG	1.89	0.54
2:U:18:LYS:HG2	2:U:87:TYR:CD2	2.43	0.54
1:b:218:PHE:CE1	1:b:244:LYS:HB2	2.42	0.54
1:c:263:VAL:HG13	1:c:267:ARG:NH1	2.23	0.54
1:c:416:VAL:HG21	1:c:479:GLY:HA3	1.89	0.54
1:h:219:ILE:HB	1:h:295:THR:HG21	1.88	0.54
1:i:226:VAL:HG11	1:i:232:LEU:HD12	1.89	0.54
1:i:283:ARG:HG2	1:i:363:LYS:NZ	2.22	0.54
1:j:222:VAL:HG12	1:j:223:GLU:H	1.73	0.54
1:j:283:ARG:HH21	1:j:367:ARG:CD	2.15	0.54
1:j:360:ALA:O	1:j:363:LYS:HG3	2.08	0.54
1:j:465:ILE:HD13	1:j:480:PHE:CE1	2.42	0.54
2:t:78:THR:HG22	2:t:80:ILE:HD11	1.88	0.54
1:A:222:VAL:O	1:A:250:ALA:HA	2.08	0.54
1:E:247:LEU:HD22	1:E:322:VAL:CG1	2.36	0.54
1:F:232:LEU:HB3	1:F:236:LEU:CD1	2.38	0.54
1:G:261:LEU:O	1:G:265:LYS:HB2	2.08	0.54
1:H:6:LEU:HD23	1:H:523:VAL:HG22	1.90	0.54
1:H:307:LYS:HB3	1:H:309:GLU:OE1	2.08	0.54
1:J:118:ARG:O	1:J:122:LYS:HG3	2.08	0.54
1:J:316:LEU:HD23	1:J:316:LEU:O	2.08	0.54
1:K:283:ARG:HH11	1:K:363:LYS:HE3	1.71	0.54
1:M:208:GLU:OE1	1:M:389:LYS:CD	2.55	0.54
1:M:307:LYS:HB3	1:M:309:GLU:OE1	2.08	0.54
2:P:100:GLN:OE1	2:Q:9:LYS:CE	2.56	0.54
1:a:37:ASN:ND2	1:g:518:THR:OG1	2.40	0.54
1:a:168:VAL:HG12	1:a:168:VAL:O	2.08	0.54
1:a:251:GLU:O	1:a:252:ASP:HB2	2.08	0.54
1:a:279:GLY:C	1:a:284:ARG:HB3	2.33	0.54
1:c:127:ALA:O	1:c:131:ILE:HG13	2.06	0.54
1:f:168:VAL:HG21	1:f:376:ALA:HB2	1.90	0.54
1:g:178:GLU:CG	1:g:388:LEU:HD21	2.37	0.54
1:h:316:LEU:H	1:h:316:LEU:CD2	2.21	0.54
1:l:50:THR:CG2	1:l:51:LYS:H	2.17	0.54
1:m:54:VAL:HG22	1:m:89:THR:CG2	2.38	0.54
1:n:325:THR:HG22	1:n:327:ASP:N	2.03	0.54
1:n:411:VAL:O	1:n:496:VAL:HG13	2.08	0.54
2:o:63:GLU:OE2	2:p:50:THR:HG21	2.07	0.54
2:r:100:GLN:OE1	2:s:9:LYS:HE2	2.08	0.54
2:t:20:ILE:HD12	2:t:42:LYS:CG	2.32	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:t:25:LYS:HD3	2:t:29:GLY:O	2.08	0.54
1:A:127:ALA:O	1:A:131:ILE:HG13	2.07	0.54
1:C:173:ILE:HD12	1:C:369:ALA:HB2	1.89	0.54
1:D:199:ILE:HG22	1:D:199:ILE:O	2.06	0.54
1:G:217:ALA:HB2	1:G:245:PRO:HB2	1.89	0.54
1:I:226:VAL:CG1	1:I:232:LEU:HD12	2.38	0.54
1:I:233:LEU:N	1:I:234:PRO:HD2	2.23	0.54
1:J:6:LEU:CD2	1:J:523:VAL:HG22	2.38	0.54
1:J:187:LYS:HZ2	1:J:379:ARG:HG3	1.72	0.54
1:J:232:LEU:HD23	1:J:232:LEU:O	2.08	0.54
1:K:366:GLU:O	1:K:370:LYS:HG3	2.08	0.54
1:K:503:ARG:NH1	1:K:507:GLN:HE22	2.04	0.54
1:L:204:VAL:HG13	1:L:211:GLU:O	2.07	0.54
1:L:218:PHE:CE1	1:L:242:THR:HG21	2.43	0.54
1:L:345:ILE:HG22	1:L:349:LYS:HE3	1.89	0.54
1:M:96:ALA:O	1:M:100:VAL:HG23	2.07	0.54
2:S:80:ILE:CG2	2:S:81:GLU:N	2.71	0.54
1:f:78:ALA:O	1:f:89:THR:HG22	2.08	0.54
1:h:151:SER:HB2	1:h:398:ALA:HA	1.89	0.54
1:i:27:VAL:HG12	1:i:90:THR:HG23	1.90	0.54
1:j:283:ARG:CG	1:j:363:LYS:HZ1	2.20	0.54
1:l:218:PHE:HB3	1:l:316:LEU:HG	1.88	0.54
2:p:52:ARG:HG3	2:p:52:ARG:O	2.07	0.54
1:A:219:ILE:HG22	1:A:221:ILE:HG13	1.90	0.53
1:C:40:LEU:HD13	1:C:59:GLU:HG3	1.89	0.53
1:C:136:ILE:HB	1:C:410:ILE:HG22	1.89	0.53
1:F:235:ILE:HG12	1:F:311:ALA:HB3	1.90	0.53
1:I:352:LEU:HD21	1:I:365:GLN:HE22	1.73	0.53
1:I:452:ARG:HG2	1:I:452:ARG:HH11	1.73	0.53
1:K:233:LEU:N	1:K:234:PRO:HD2	2.23	0.53
1:L:455:ALA:HB1	1:L:465:ILE:HD12	1.89	0.53
1:M:135:ALA:O	1:M:137:PRO:HD3	2.08	0.53
1:M:247:LEU:HD22	1:M:322:VAL:CG1	2.36	0.53
2:O:8:ILE:HG21	2:O:16:VAL:HG21	1.90	0.53
2:Q:81:GLU:HG3	2:Q:85:GLU:H	1.70	0.53
2:S:41:GLN:HG2	2:S:74:LYS:HB3	1.89	0.53
1:a:6:LEU:HD22	1:a:523:VAL:HG22	1.90	0.53
1:c:515:LEU:HD12	1:d:49:ILE:HG21	1.90	0.53
1:d:261:LEU:O	1:d:265:LYS:HB2	2.08	0.53
1:g:54:VAL:HG22	1:g:89:THR:HG21	1.88	0.53
1:j:74:LEU:HA	1:j:512:ILE:HD11	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:496:VAL:HG12	1:j:497:ASP:H	1.72	0.53
1:k:40:LEU:HD12	1:k:40:LEU:N	2.23	0.53
1:l:142:LYS:O	1:l:146:GLU:HG3	2.08	0.53
1:m:226:VAL:CG1	1:m:232:LEU:HD12	2.37	0.53
1:m:233:LEU:N	1:m:234:PRO:HD2	2.22	0.53
1:m:496:VAL:HG12	1:m:497:ASP:N	2.23	0.53
1:n:360:ALA:O	1:n:364:LEU:CD1	2.56	0.53
2:o:13:ASP:CB	2:o:62:LEU:HD21	2.33	0.53
2:o:55:GLU:HG3	2:p:55:GLU:OE1	2.08	0.53
2:q:79:GLU:HB2	2:q:87:TYR:O	2.09	0.53
2:s:44:LYS:HA	2:s:68:ASP:O	2.09	0.53
1:A:230:ARG:O	1:A:234:PRO:HD2	2.09	0.53
1:B:287:MET:O	1:B:290:ASP:HB2	2.09	0.53
1:C:173:ILE:HD12	1:C:369:ALA:CB	2.38	0.53
1:H:25:ASN:HA	1:H:28:LYS:HE2	1.90	0.53
1:H:526:LYS:HG3	1:H:527:PRO:HD2	1.90	0.53
1:I:95:LEU:O	1:I:99:ILE:HG13	2.08	0.53
1:J:316:LEU:H	1:J:316:LEU:CD2	2.21	0.53
1:K:168:VAL:HG12	1:K:172:GLY:CA	2.33	0.53
1:K:189:VAL:CG1	1:K:333:GLY:HA2	2.37	0.53
1:M:316:LEU:H	1:M:316:LEU:CD2	2.20	0.53
1:N:234:PRO:HG3	1:N:309:GLU:CA	2.36	0.53
2:O:8:ILE:HD12	2:O:8:ILE:H	1.74	0.53
2:T:34:ASP:N	2:T:34:ASP:OD1	2.36	0.53
1:b:30:THR:O	1:b:35:GLY:HA3	2.08	0.53
1:b:284:ARG:HH11	1:b:284:ARG:HG3	1.72	0.53
1:b:515:LEU:HD12	1:c:49:ILE:HG21	1.91	0.53
1:c:52:ASP:OD1	1:c:54:VAL:HG23	2.09	0.53
1:c:128:VAL:HG13	1:c:503:ARG:HG3	1.90	0.53
1:c:466:VAL:HG12	1:c:470:LEU:HD12	1.91	0.53
1:h:31:LEU:HD13	1:h:90:THR:HG22	1.89	0.53
1:h:39:VAL:C	1:h:40:LEU:HD12	2.33	0.53
1:h:95:LEU:HD21	1:h:450:PRO:HG2	1.90	0.53
1:h:362:GLU:O	1:h:365:GLN:HB2	2.07	0.53
1:j:175:THR:HG22	1:j:176:VAL:N	2.23	0.53
1:j:233:LEU:N	1:j:234:PRO:HD2	2.23	0.53
1:k:325:THR:HG22	1:k:327:ASP:N	2.05	0.53
1:l:74:LEU:HA	1:l:512:ILE:HD11	1.88	0.53
1:m:189:VAL:CG1	1:m:190:GLU:H	2.08	0.53
2:o:8:ILE:HG21	2:o:16:VAL:HG21	1.89	0.53
2:s:96:LEU:HD23	2:t:14:ARG:NH2	2.23	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:144:ILE:HD12	1:G:165:MET:HG2	1.91	0.53
1:H:229:VAL:CG2	1:H:256:GLU:HB3	2.38	0.53
1:H:233:LEU:N	1:H:234:PRO:HD2	2.22	0.53
1:I:307:LYS:HE3	1:I:310:ASN:ND2	2.24	0.53
1:I:496:VAL:HG12	1:I:497:ASP:N	2.23	0.53
1:J:503:ARG:NH1	1:J:507:GLN:HE22	2.04	0.53
1:M:290:ASP:O	1:M:294:VAL:HG23	2.07	0.53
1:M:372:ALA:O	1:M:374:GLY:N	2.38	0.53
2:O:18:LYS:HE3	2:O:86:GLU:O	2.09	0.53
1:c:501:VAL:HG23	1:c:502:THR:N	2.22	0.53
1:g:30:THR:O	1:g:35:GLY:HA3	2.08	0.53
1:g:52:ASP:OD1	1:g:54:VAL:HG23	2.08	0.53
1:g:293:ALA:O	1:g:336:GLY:HA3	2.09	0.53
1:h:142:LYS:O	1:h:146:GLU:HG3	2.08	0.53
1:i:366:GLU:O	1:i:370:LYS:HG3	2.07	0.53
1:l:283:ARG:HH12	1:l:364:LEU:HD12	1.74	0.53
1:l:496:VAL:HG12	1:l:497:ASP:N	2.23	0.53
1:m:410:ILE:CD1	1:m:496:VAL:HG11	2.34	0.53
2:q:48:VAL:HG12	2:q:62:LEU:HD12	1.91	0.53
2:q:78:THR:CG2	2:q:79:GLU:N	2.71	0.53
1:A:98:ALA:HB2	1:A:449:GLU:CG	2.38	0.53
1:C:340:ASP:O	1:C:344:ARG:HB2	2.09	0.53
1:C:465:ILE:HD13	1:C:480:PHE:CE2	2.42	0.53
1:E:40:LEU:HD13	1:E:59:GLU:HG3	1.90	0.53
1:F:222:VAL:HG22	1:F:300:ILE:HD12	1.91	0.53
1:F:351:GLU:OE2	1:G:326:LYS:NZ	2.23	0.53
1:F:356:ASP:O	1:F:357:SER:C	2.52	0.53
1:F:445:ARG:CZ	1:F:452:ARG:HH21	2.22	0.53
1:I:151:SER:HB2	1:I:398:ALA:HA	1.90	0.53
1:L:459:GLY:HA3	1:M:114:LEU:HD12	1.91	0.53
2:U:44:LYS:HA	2:U:68:ASP:O	2.08	0.53
1:d:258:LEU:O	1:d:262:VAL:HG23	2.08	0.53
1:f:141:ARG:NH2	1:f:163:ASP:OD1	2.35	0.53
1:h:458:ALA:O	1:i:114:LEU:CD1	2.57	0.53
1:i:411:VAL:O	1:i:496:VAL:HG13	2.09	0.53
1:j:31:LEU:HD13	1:j:90:THR:HG22	1.90	0.53
1:j:224:LYS:HG2	1:j:225:LYS:H	1.71	0.53
1:k:283:ARG:HG2	1:k:363:LYS:HZ2	1.73	0.53
1:l:232:LEU:HD23	1:l:232:LEU:O	2.08	0.53
1:m:27:VAL:HG12	1:m:90:THR:HG23	1.89	0.53
1:n:6:LEU:HD23	1:n:523:VAL:HG22	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:202:TYR:CE1	1:G:289:LYS:NZ	2.71	0.53
1:D:198:TYR:HD1	1:D:198:TYR:O	1.92	0.53
1:E:78:ALA:O	1:E:89:THR:HG22	2.08	0.53
1:E:278:PRO:HG3	1:E:291:ILE:HD11	1.90	0.53
1:E:520:GLU:HB3	1:F:29:VAL:HG11	1.91	0.53
1:G:98:ALA:HB2	1:G:449:GLU:CG	2.39	0.53
1:H:263:VAL:O	1:H:267:ARG:HB2	2.09	0.53
1:J:27:VAL:HG12	1:J:90:THR:HG23	1.90	0.53
1:J:229:VAL:CG2	1:J:256:GLU:HB3	2.36	0.53
1:K:421:ALA:O	1:K:425:VAL:HG23	2.08	0.53
1:N:316:LEU:O	1:N:316:LEU:HD23	2.09	0.53
2:P:53:VAL:HG22	2:P:59:ARG:HE	1.74	0.53
1:a:258:LEU:O	1:a:262:VAL:HG23	2.08	0.53
1:b:184:THR:HG23	1:b:380:VAL:HA	1.90	0.53
1:b:220:LEU:HD23	1:b:248:ILE:HG23	1.88	0.53
1:b:392:LYS:O	1:b:396:GLU:HG3	2.08	0.53
1:c:360:ALA:O	1:c:364:LEU:HG	2.09	0.53
1:e:304:LEU:O	1:f:259:ALA:HB1	2.08	0.53
1:e:392:LYS:O	1:e:396:GLU:HG3	2.08	0.53
1:e:465:ILE:HD13	1:e:480:PHE:CE2	2.43	0.53
1:g:416:VAL:HG21	1:g:490:MET:HG3	1.90	0.53
1:k:226:VAL:HG11	1:k:232:LEU:HD12	1.90	0.53
1:l:411:VAL:O	1:l:496:VAL:HG13	2.08	0.53
2:o:54:LEU:CD1	2:p:57:GLY:H	2.21	0.53
2:s:8:ILE:CG2	2:s:16:VAL:HG21	2.38	0.53
1:B:144:ILE:HD12	1:B:165:MET:HG2	1.89	0.53
1:B:411:VAL:HB	1:B:412:PRO:HD2	1.90	0.53
1:D:150:ILE:CD1	1:D:496:VAL:N	2.72	0.53
1:D:477:ARG:HH11	1:D:477:ARG:HG3	1.74	0.53
1:E:201:PRO:O	1:E:204:VAL:HG22	2.09	0.53
1:H:201:PRO:O	1:H:204:VAL:HG23	2.08	0.53
1:J:452:ARG:HG2	1:J:452:ARG:HH11	1.73	0.53
1:K:218:PHE:CE1	1:K:242:THR:HG21	2.44	0.53
1:M:234:PRO:HG3	1:M:309:GLU:CA	2.33	0.53
1:N:50:THR:CG2	1:N:51:LYS:H	2.18	0.53
1:N:218:PHE:HE1	1:N:242:THR:HG21	1.72	0.53
1:N:263:VAL:O	1:N:267:ARG:HB2	2.08	0.53
1:N:410:ILE:HB	1:N:496:VAL:HG12	1.90	0.53
1:a:452:ARG:NH1	1:a:463:SER:HA	2.23	0.53
1:b:233:LEU:O	1:b:237:GLU:HG3	2.09	0.53
1:b:320:GLU:HB3	1:b:333:GLY:HA3	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:418:LEU:H	1:c:418:LEU:HD12	1.74	0.53
1:g:235:ILE:O	1:g:239:VAL:HG23	2.08	0.53
1:j:219:ILE:HB	1:j:295:THR:HG21	1.90	0.53
1:l:222:VAL:HG12	1:l:223:GLU:H	1.73	0.53
1:m:372:ALA:C	1:m:374:GLY:N	2.63	0.53
1:m:496:VAL:HG12	1:m:497:ASP:H	1.74	0.53
1:n:39:VAL:C	1:n:40:LEU:HD12	2.33	0.53
1:A:96:ALA:O	1:A:100:VAL:HG23	2.07	0.53
1:B:189:VAL:HG13	1:B:190:GLU:N	2.24	0.53
1:E:189:VAL:CG1	1:E:190:GLU:N	2.70	0.53
1:E:416:VAL:HG21	1:E:490:MET:HG3	1.90	0.53
1:F:240:ALA:HA	1:F:270:LEU:HD13	1.90	0.53
1:J:219:ILE:HB	1:J:295:THR:HG21	1.91	0.53
1:K:25:ASN:HA	1:K:28:LYS:HE2	1.90	0.53
1:K:142:LYS:O	1:K:146:GLU:HG3	2.09	0.53
1:K:218:PHE:HB3	1:K:316:LEU:HG	1.90	0.53
1:a:136:ILE:O	1:a:410:ILE:HG22	2.09	0.53
1:a:149:THR:HG23	1:a:155:PRO:CA	2.38	0.53
1:a:301:SER:HB2	1:a:304:LEU:CB	2.37	0.53
1:b:287:MET:O	1:b:291:ILE:HG13	2.08	0.53
1:f:410:ILE:HD11	1:f:496:VAL:HG21	1.89	0.53
1:g:150:ILE:CD1	1:g:496:VAL:H	2.22	0.53
1:h:263:VAL:O	1:h:267:ARG:HB2	2.09	0.53
1:h:410:ILE:HB	1:h:496:VAL:HG12	1.89	0.53
1:l:28:LYS:NZ	1:l:97:GLN:HE22	2.06	0.53
1:m:263:VAL:O	1:m:267:ARG:HB2	2.08	0.53
1:n:40:LEU:HD12	1:n:40:LEU:N	2.23	0.53
1:D:301:SER:HB2	1:D:304:LEU:CB	2.38	0.53
1:E:168:VAL:HG12	1:E:168:VAL:O	2.09	0.53
1:E:224:LYS:H	1:E:224:LYS:HD2	1.74	0.53
1:E:238:GLN:HB3	1:E:313:LEU:HG	1.90	0.53
1:H:103:GLY:O	1:H:107:VAL:HG23	2.09	0.53
1:H:175:THR:HG21	1:H:177:GLU:OE2	2.09	0.53
1:H:267:ARG:O	1:I:256:GLU:HG3	2.08	0.53
1:I:6:LEU:HD23	1:I:523:VAL:HG22	1.90	0.53
1:J:194:PHE:CG	1:J:278:PRO:HB3	2.44	0.53
1:K:411:VAL:O	1:K:496:VAL:HG13	2.09	0.53
1:L:259:ALA:O	1:L:263:VAL:HG23	2.08	0.53
1:L:269:THR:HA	1:M:256:GLU:CD	2.34	0.53
1:M:226:VAL:CG1	1:M:232:LEU:HD12	2.39	0.53
1:M:323:ARG:HH12	1:M:392:LYS:HE2	1.69	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:28:LYS:NZ	1:N:97:GLN:HE22	2.07	0.53
2:R:52:ARG:HG3	2:R:52:ARG:O	2.09	0.53
1:a:270:LEU:HG	1:a:272:VAL:HG13	1.91	0.53
1:a:520:GLU:HB3	1:b:29:VAL:HG11	1.90	0.53
1:d:141:ARG:NH2	1:d:163:ASP:OD1	2.35	0.53
1:d:289:LYS:O	1:d:292:ALA:HB3	2.08	0.53
1:e:368:LEU:HD12	1:e:368:LEU:O	2.09	0.53
1:g:210:MET:HE2	1:g:210:MET:HA	1.91	0.53
1:k:259:ALA:O	1:k:263:VAL:HG23	2.08	0.53
1:k:337:LYS:HB2	1:k:340:ASP:OD2	2.08	0.53
1:l:39:VAL:C	1:l:40:LEU:HD12	2.33	0.53
1:l:187:LYS:HZ2	1:l:379:ARG:HG3	1.74	0.53
1:l:189:VAL:HG11	1:l:333:GLY:HA2	1.90	0.53
1:l:263:VAL:O	1:l:267:ARG:HB2	2.08	0.53
1:n:74:LEU:HA	1:n:512:ILE:HD11	1.91	0.53
1:n:410:ILE:CD1	1:n:496:VAL:HG11	2.33	0.53
2:t:92:GLU:HA	2:t:95:LEU:HD12	1.91	0.53
1:B:228:ASN:HD21	1:B:230:ARG:HB2	1.74	0.53
1:C:206:ASN:HB3	1:C:209:THR:OG1	2.08	0.53
1:E:287:MET:O	1:E:290:ASP:HB2	2.08	0.53
1:E:294:VAL:HG23	1:E:295:THR:N	2.24	0.53
1:E:321:ARG:O	1:E:322:VAL:HG23	2.09	0.53
1:E:466:VAL:HG12	1:E:470:LEU:HD12	1.91	0.53
1:F:230:ARG:O	1:F:234:PRO:HD2	2.08	0.53
1:H:106:ASN:HD21	5:H:601:DMS:C1	2.19	0.53
1:I:189:VAL:CG1	1:I:190:GLU:H	2.14	0.53
1:I:518:THR:HG22	1:I:518:THR:O	2.09	0.53
1:J:224:LYS:HG2	1:J:225:LYS:H	1.73	0.53
1:M:383:ALA:HB1	1:N:359:TYR:OH	2.08	0.53
1:M:452:ARG:HH11	1:M:452:ARG:HG2	1.73	0.53
1:N:141:ARG:NH1	1:N:166:GLU:HG3	2.24	0.53
1:N:372:ALA:C	1:N:374:GLY:H	2.16	0.53
2:O:81:GLU:HA	2:O:85:GLU:O	2.09	0.53
2:P:44:LYS:HA	2:P:68:ASP:O	2.09	0.53
1:a:445:ARG:CZ	1:a:452:ARG:HH21	2.22	0.53
1:c:23:VAL:HG22	1:c:60:VAL:HG11	1.90	0.53
1:c:168:VAL:HG21	1:c:376:ALA:HB2	1.91	0.53
1:c:234:PRO:O	1:c:238:GLN:HG3	2.08	0.53
1:e:30:THR:O	1:e:35:GLY:HA3	2.08	0.53
1:e:372:ALA:O	1:e:374:GLY:N	2.40	0.53
1:g:6:LEU:HD22	1:g:523:VAL:HG22	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:229:VAL:HG23	1:g:256:GLU:HG3	1.91	0.53
1:h:249:ILE:HG22	1:h:249:ILE:O	2.09	0.53
1:h:452:ARG:HH11	1:h:452:ARG:HG2	1.73	0.53
1:i:219:ILE:HB	1:i:295:THR:HG21	1.90	0.53
1:i:363:LYS:O	1:i:366:GLU:HG2	2.09	0.53
1:l:180:LYS:HB3	1:m:281:GLY:CA	2.36	0.53
1:m:39:VAL:C	1:m:40:LEU:HD12	2.34	0.53
1:n:118:ARG:O	1:n:122:LYS:HG3	2.09	0.53
1:n:226:VAL:CG1	1:n:232:LEU:HD12	2.39	0.53
1:B:7:VAL:HG12	1:B:12:ALA:HB2	1.91	0.53
1:B:360:ALA:O	1:B:364:LEU:HG	2.09	0.53
1:C:320:GLU:HB3	1:C:333:GLY:HA3	1.91	0.53
1:D:7:VAL:HG21	1:D:66:LEU:CD1	2.29	0.53
1:D:184:THR:HG23	1:D:380:VAL:HA	1.90	0.53
1:E:234:PRO:O	1:E:238:GLN:HG3	2.09	0.53
1:J:117:LYS:O	1:J:121:GLU:HG3	2.09	0.53
1:J:218:PHE:HE1	1:J:242:THR:HG21	1.74	0.53
1:K:258:LEU:O	1:K:262:VAL:HG23	2.09	0.53
1:K:316:LEU:H	1:K:316:LEU:CD2	2.22	0.53
1:N:283:ARG:HG2	1:N:363:LYS:NZ	2.24	0.53
2:P:13:ASP:CB	2:P:62:LEU:HD21	2.37	0.53
2:Q:53:VAL:HG22	2:Q:59:ARG:HG2	1.91	0.53
1:a:168:VAL:HG21	1:a:376:ALA:HB2	1.91	0.53
1:c:136:ILE:CD1	1:c:477:ARG:HH21	2.21	0.53
1:d:240:ALA:HA	1:d:270:LEU:HD13	1.91	0.53
1:e:72:GLN:HE22	1:e:75:LYS:HZ1	1.56	0.53
1:f:301:SER:HB2	1:f:304:LEU:CB	2.39	0.53
1:f:416:VAL:HG21	1:f:479:GLY:HA3	1.91	0.53
1:g:392:LYS:O	1:g:396:GLU:HG3	2.09	0.53
1:i:25:ASN:HA	1:i:28:LYS:HE2	1.91	0.53
1:j:312:THR:C	1:j:314:SER:N	2.66	0.53
1:k:283:ARG:NH2	1:k:367:ARG:CD	2.37	0.53
1:l:239:VAL:HG22	1:l:313:LEU:CD1	2.38	0.53
1:l:345:ILE:HG22	1:l:349:LYS:HE3	1.90	0.53
1:n:337:LYS:HB2	1:n:340:ASP:OD2	2.09	0.53
1:C:347:GLY:O	1:C:351:GLU:HB2	2.08	0.52
1:D:368:LEU:O	1:D:368:LEU:HD12	2.09	0.52
1:E:57:ALA:O	1:E:75:LYS:HD3	2.08	0.52
1:E:147:VAL:CG2	1:E:410:ILE:HD11	2.38	0.52
1:J:283:ARG:HG2	1:J:363:LYS:HZ2	1.74	0.52
1:M:142:LYS:O	1:M:146:GLU:HG3	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:53:VAL:HG22	2:O:59:ARG:HG2	1.90	0.52
2:T:52:ARG:NH2	2:U:53:VAL:HB	2.21	0.52
1:b:235:ILE:HD12	1:b:311:ALA:HB3	1.89	0.52
1:b:368:LEU:HD12	1:b:368:LEU:O	2.09	0.52
1:c:128:VAL:HA	1:c:131:ILE:HD12	1.91	0.52
1:f:175:THR:HB	1:f:377:VAL:HG22	1.90	0.52
1:g:40:LEU:HD13	1:g:59:GLU:HG3	1.90	0.52
1:m:421:ALA:O	1:m:425:VAL:HG23	2.09	0.52
2:o:13:ASP:C	2:o:13:ASP:OD1	2.52	0.52
2:r:81:GLU:HA	2:r:85:GLU:O	2.09	0.52
1:A:30:THR:O	1:A:35:GLY:HA3	2.09	0.52
1:A:236:LEU:HB2	2:O:30:ILE:HD11	1.90	0.52
1:B:307:LYS:HD3	1:B:309:GLU:OE2	2.09	0.52
1:B:345:ILE:HG23	1:B:368:LEU:CD1	2.39	0.52
1:E:52:ASP:OD1	1:E:54:VAL:HG23	2.09	0.52
1:F:52:ASP:OD1	1:F:54:VAL:HG23	2.09	0.52
1:F:340:ASP:O	1:F:344:ARG:HB2	2.10	0.52
1:H:222:VAL:HG12	1:H:223:GLU:H	1.73	0.52
1:J:458:ALA:O	1:K:114:LEU:CD1	2.56	0.52
1:L:283:ARG:HD3	1:L:363:LYS:NZ	2.24	0.52
1:N:96:ALA:O	1:N:100:VAL:HG23	2.09	0.52
2:Q:62:LEU:C	2:Q:64:VAL:H	2.18	0.52
1:a:363:LYS:HA	1:a:366:GLU:HG2	1.91	0.52
1:b:263:VAL:HG21	2:p:33:PRO:HB3	1.90	0.52
1:b:498:PRO:HG2	1:b:501:VAL:CG2	2.40	0.52
1:c:175:THR:HB	1:c:377:VAL:HG22	1.91	0.52
1:f:40:LEU:HD13	1:f:59:GLU:HG3	1.90	0.52
1:f:235:ILE:HD11	1:f:311:ALA:HB1	1.86	0.52
1:h:229:VAL:CG2	1:h:256:GLU:HB3	2.37	0.52
1:i:7:VAL:HG12	1:i:12:ALA:HB2	1.91	0.52
1:i:229:VAL:CG2	1:i:256:GLU:HB3	2.37	0.52
1:i:283:ARG:HD3	1:i:363:LYS:NZ	2.24	0.52
1:i:452:ARG:HG2	1:i:452:ARG:HH11	1.73	0.52
1:k:142:LYS:O	1:k:146:GLU:HG3	2.09	0.52
1:k:175:THR:HG22	1:k:176:VAL:N	2.24	0.52
1:l:39:VAL:O	1:m:522:VAL:HA	2.09	0.52
1:m:228:ASN:HB3	1:m:231:GLU:HG2	1.90	0.52
2:t:63:GLU:HB3	2:u:11:LEU:CD1	2.38	0.52
1:D:528:GLU:CD	1:D:528:GLU:H	2.17	0.52
1:E:278:PRO:CG	1:E:291:ILE:HD11	2.39	0.52
1:F:222:VAL:O	1:F:250:ALA:HA	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:452:ARG:NH1	1:F:463:SER:HA	2.23	0.52
1:F:518:THR:OG1	1:G:37:ASN:ND2	2.41	0.52
1:G:253:VAL:HG12	1:G:258:LEU:HB2	1.91	0.52
1:G:258:LEU:O	1:G:262:VAL:HG23	2.09	0.52
1:J:142:LYS:O	1:J:146:GLU:HG3	2.10	0.52
1:K:127:ALA:O	1:K:131:ILE:HG13	2.09	0.52
1:M:465:ILE:HD13	1:M:480:PHE:CE1	2.44	0.52
1:N:151:SER:HB2	1:N:398:ALA:HA	1.91	0.52
2:Q:52:ARG:NH2	2:R:53:VAL:HB	2.24	0.52
1:a:128:VAL:HG13	1:a:503:ARG:HG3	1.90	0.52
1:c:416:VAL:HG21	1:c:490:MET:HG3	1.91	0.52
1:g:127:ALA:O	1:g:131:ILE:HG13	2.09	0.52
1:g:425:VAL:O	1:g:429:ILE:HG13	2.09	0.52
1:h:40:LEU:HD12	1:h:40:LEU:N	2.24	0.52
1:h:175:THR:HG22	1:h:176:VAL:N	2.25	0.52
1:i:50:THR:CG2	1:i:51:LYS:H	2.17	0.52
1:i:218:PHE:HB3	1:i:316:LEU:HG	1.92	0.52
1:j:96:ALA:O	1:j:100:VAL:HG23	2.09	0.52
1:k:234:PRO:HG3	1:k:309:GLU:CA	2.34	0.52
1:m:259:ALA:O	1:m:263:VAL:HG23	2.10	0.52
1:n:131:ILE:HD13	1:n:502:THR:HG22	1.90	0.52
2:r:14:ARG:HH11	2:r:14:ARG:CG	2.22	0.52
2:s:17:VAL:O	2:s:87:TYR:HB3	2.09	0.52
1:A:150:ILE:HG22	1:A:151:SER:N	2.24	0.52
1:A:466:VAL:HG12	1:A:470:LEU:HD12	1.91	0.52
1:B:50:THR:CG2	1:B:51:LYS:H	2.16	0.52
1:D:124:VAL:O	1:D:128:VAL:HG23	2.10	0.52
1:D:263:VAL:O	1:D:267:ARG:HB2	2.10	0.52
1:H:297:GLY:HA3	1:H:317:GLY:H	1.74	0.52
1:J:526:LYS:CD	1:J:527:PRO:HD2	2.40	0.52
1:K:168:VAL:HG11	1:K:173:ILE:N	2.24	0.52
1:L:41:GLU:OE2	1:M:65:HIS:ND1	2.42	0.52
1:L:218:PHE:HB3	1:L:316:LEU:HG	1.92	0.52
1:L:307:LYS:HB3	1:L:309:GLU:OE1	2.08	0.52
1:L:458:ALA:O	1:M:114:LEU:HD12	2.09	0.52
1:N:141:ARG:HH11	1:N:166:GLU:HG3	1.74	0.52
2:S:44:LYS:HA	2:S:68:ASP:O	2.08	0.52
2:T:38:GLU:OE1	2:T:74:LYS:NZ	2.34	0.52
1:a:347:GLY:O	1:a:351:GLU:HB2	2.09	0.52
1:a:396:GLU:O	1:a:400:ASN:ND2	2.42	0.52
1:d:23:VAL:HG22	1:d:60:VAL:HG11	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:224:LYS:HB3	1:d:302:GLU:OE1	2.10	0.52
1:d:498:PRO:HG2	1:d:501:VAL:HG22	1.92	0.52
1:f:242:THR:HG22	1:f:244:LYS:HG2	1.91	0.52
1:g:348:ILE:CD1	1:g:367:ARG:NE	2.68	0.52
1:m:141:ARG:NH1	1:m:166:GLU:HG3	2.23	0.52
1:m:142:LYS:O	1:m:146:GLU:HG3	2.09	0.52
1:m:218:PHE:HB3	1:m:316:LEU:HG	1.91	0.52
1:m:283:ARG:HH22	1:m:364:LEU:HA	1.74	0.52
1:n:123:ALA:HB2	1:n:440:ALA:HA	1.92	0.52
2:q:16:VAL:CG1	2:q:46:ILE:HB	2.39	0.52
1:A:118:ARG:O	1:A:122:LYS:HG3	2.10	0.52
1:E:351:GLU:CG	1:F:326:LYS:HZ1	2.22	0.52
1:E:448:GLU:OE1	1:E:452:ARG:NH2	2.43	0.52
1:F:7:VAL:HG12	1:F:12:ALA:HB2	1.90	0.52
1:F:144:ILE:CD1	1:F:165:MET:HG2	2.40	0.52
1:I:411:VAL:O	1:I:496:VAL:HG13	2.09	0.52
1:J:410:ILE:HB	1:J:496:VAL:HG12	1.92	0.52
1:K:222:VAL:HG12	1:K:223:GLU:H	1.74	0.52
1:L:142:LYS:O	1:L:146:GLU:HG3	2.09	0.52
1:L:151:SER:HB2	1:L:398:ALA:HA	1.91	0.52
1:N:6:LEU:HD23	1:N:523:VAL:HG22	1.91	0.52
2:O:13:ASP:CB	2:O:62:LEU:HD21	2.40	0.52
2:P:8:ILE:HG21	2:P:16:VAL:HG21	1.91	0.52
2:S:18:LYS:HZ1	2:S:85:GLU:CD	2.17	0.52
1:c:147:VAL:CG2	1:c:410:ILE:HD11	2.39	0.52
1:d:69:ILE:HD11	1:e:41:GLU:HB2	1.90	0.52
1:d:348:ILE:HG21	1:d:364:LEU:O	2.10	0.52
1:f:25:ASN:HA	1:f:28:LYS:HG2	1.92	0.52
1:f:312:THR:OG1	1:f:315:MET:HE3	2.09	0.52
1:g:214:LEU:HB3	1:g:245:PRO:CB	2.40	0.52
1:h:234:PRO:HG3	1:h:309:GLU:CA	2.38	0.52
1:i:283:ARG:HH11	1:i:363:LYS:CE	2.05	0.52
1:i:518:THR:HG22	1:i:518:THR:O	2.08	0.52
1:k:283:ARG:HG2	1:k:363:LYS:NZ	2.24	0.52
1:k:352:LEU:HD21	1:k:365:GLN:HE22	1.74	0.52
1:l:168:VAL:HG12	1:l:172:GLY:CA	2.34	0.52
1:l:363:LYS:O	1:l:366:GLU:HG2	2.10	0.52
2:u:45:VAL:HG22	2:u:70:VAL:HG13	1.91	0.52
1:B:515:LEU:HD12	1:C:49:ILE:HG21	1.90	0.52
1:C:452:ARG:NH1	1:C:463:SER:HA	2.25	0.52
1:D:157:VAL:HG22	1:D:395:PHE:CZ	2.45	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:293:ALA:HB1	1:D:340:ASP:HB3	1.92	0.52
1:F:128:VAL:HG13	1:F:503:ARG:HG3	1.92	0.52
1:H:218:PHE:HB3	1:H:316:LEU:HG	1.91	0.52
1:K:106:ASN:ND2	5:K:601:DMS:H13	2.22	0.52
1:L:175:THR:HG22	1:L:176:VAL:N	2.25	0.52
1:a:34:ARG:HH12	1:g:118:ARG:HH22	1.57	0.52
1:a:207:PRO:CB	1:g:343:ALA:HB2	2.40	0.52
1:e:416:VAL:HG21	1:e:479:GLY:HA3	1.92	0.52
1:f:305:GLY:HA2	2:u:33:PRO:HB2	1.91	0.52
1:g:57:ALA:O	1:g:75:LYS:HD3	2.09	0.52
1:j:142:LYS:O	1:j:146:GLU:HG3	2.10	0.52
1:l:141:ARG:NH1	1:l:166:GLU:HG3	2.25	0.52
1:m:141:ARG:HH11	1:m:166:GLU:HG3	1.74	0.52
1:n:151:SER:HB2	1:n:398:ALA:HA	1.90	0.52
1:n:168:VAL:HG12	1:n:172:GLY:CA	2.36	0.52
1:A:277:ALA:HB1	1:A:278:PRO:HD2	1.91	0.52
1:A:349:LYS:C	1:A:351:GLU:H	2.16	0.52
1:B:232:LEU:O	1:B:235:ILE:HG22	2.09	0.52
1:B:356:ASP:O	1:B:357:SER:C	2.53	0.52
1:D:304:LEU:HD11	1:E:262:VAL:HG11	1.90	0.52
1:D:466:VAL:HG12	1:D:470:LEU:HD12	1.92	0.52
1:E:131:ILE:HD13	1:E:502:THR:HG22	1.92	0.52
1:E:209:THR:CG2	1:E:211:GLU:HG3	2.32	0.52
1:F:526:LYS:O	1:F:527:PRO:C	2.52	0.52
1:G:361:ARG:O	1:G:365:GLN:HB2	2.08	0.52
1:H:54:VAL:HG22	1:H:89:THR:CG2	2.39	0.52
1:I:39:VAL:C	1:I:40:LEU:HD12	2.35	0.52
1:L:25:ASN:HA	1:L:28:LYS:HE2	1.92	0.52
1:L:226:VAL:CG1	1:L:232:LEU:HD12	2.40	0.52
1:L:233:LEU:N	1:L:234:PRO:HD2	2.25	0.52
1:L:312:THR:C	1:L:314:SER:N	2.67	0.52
1:M:168:VAL:HG11	1:M:173:ILE:N	2.25	0.52
1:N:175:THR:HG22	1:N:176:VAL:N	2.25	0.52
2:O:48:VAL:CG1	2:O:62:LEU:CD1	2.83	0.52
2:P:25:LYS:HG2	2:P:31:VAL:HG22	1.92	0.52
2:R:50:THR:CG2	2:R:59:ARG:HD3	2.40	0.52
1:c:50:THR:CG2	1:c:51:LYS:H	2.13	0.52
1:g:468:GLN:O	1:g:471:ALA:HB3	2.10	0.52
1:j:258:LEU:O	1:j:262:VAL:HG23	2.10	0.52
1:k:131:ILE:HD13	1:k:502:THR:HG22	1.92	0.52
1:k:458:ALA:O	1:l:114:LEU:HD12	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:141:ARG:HH11	1:l:166:GLU:HG3	1.75	0.52
2:q:99:LEU:HD21	2:r:8:ILE:HG13	1.91	0.52
2:s:45:VAL:HG21	2:s:64:VAL:CG1	2.40	0.52
2:t:69:ILE:HB	2:t:99:LEU:HD12	1.91	0.52
1:B:222:VAL:O	1:B:250:ALA:HA	2.10	0.52
1:B:345:ILE:HG22	1:B:346:ASN:N	2.25	0.52
1:C:7:VAL:HG12	1:C:12:ALA:HB2	1.92	0.52
1:C:141:ARG:NH2	1:C:163:ASP:OD1	2.43	0.52
1:F:175:THR:HB	1:F:377:VAL:HG22	1.91	0.52
1:H:7:VAL:HG12	1:H:12:ALA:HB2	1.92	0.52
1:H:283:ARG:NH2	1:H:367:ARG:CD	2.73	0.52
1:H:518:THR:O	1:H:518:THR:HG22	2.10	0.52
1:I:168:VAL:HG12	1:I:172:GLY:CA	2.35	0.52
1:J:462:GLY:O	1:J:466:VAL:HG23	2.09	0.52
1:N:340:ASP:O	1:N:343:ALA:HB3	2.10	0.52
2:S:45:VAL:HG21	2:S:64:VAL:CG1	2.39	0.52
2:S:100:GLN:CD	2:T:9:LYS:HE2	2.35	0.52
2:T:56:ASN:O	2:T:58:GLN:N	2.43	0.52
1:b:18:ARG:HD2	1:b:67:GLU:OE2	2.09	0.52
1:b:157:VAL:HG22	1:b:395:PHE:CZ	2.45	0.52
1:c:10:GLU:N	1:c:13:ARG:HH12	2.08	0.52
1:c:144:ILE:CD1	1:c:165:MET:HG2	2.40	0.52
1:c:201:PRO:O	1:c:203:PHE:N	2.43	0.52
1:g:289:LYS:HB2	1:g:344:ARG:NH2	2.25	0.52
1:j:232:LEU:O	1:j:232:LEU:HD23	2.09	0.52
1:m:37:ASN:OD1	1:n:515:LEU:HD12	2.09	0.52
1:m:41:GLU:OE2	1:n:524:ALA:HB1	2.10	0.52
2:q:39:LYS:HB3	2:q:40:PRO:HD2	1.92	0.52
2:u:15:VAL:HG23	2:u:47:ALA:O	2.10	0.52
1:A:128:VAL:HG13	1:A:503:ARG:HG3	1.90	0.52
1:A:235:ILE:HD11	1:A:316:LEU:HD21	1.91	0.52
1:C:290:ASP:OD2	1:C:371:LEU:HD11	2.10	0.52
1:E:452:ARG:NH1	1:E:463:SER:HA	2.24	0.52
1:F:30:THR:O	1:F:35:GLY:HA3	2.10	0.52
1:H:292:ALA:HB1	1:H:297:GLY:O	2.09	0.52
1:I:283:ARG:HD3	1:I:363:LYS:NZ	2.25	0.52
1:I:496:VAL:HG12	1:I:497:ASP:H	1.74	0.52
1:J:128:VAL:HA	1:J:131:ILE:HD12	1.92	0.52
1:L:28:LYS:NZ	1:L:97:GLN:HE22	2.07	0.52
1:L:180:LYS:O	1:M:281:GLY:N	2.43	0.52
1:M:141:ARG:HH11	1:M:166:GLU:HG3	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:27:VAL:HG12	1:N:90:THR:HG23	1.92	0.52
1:N:131:ILE:HD13	1:N:502:THR:HG22	1.92	0.52
1:N:283:ARG:NH2	1:N:367:ARG:CD	2.72	0.52
2:O:96:LEU:O	2:P:14:ARG:HD3	2.09	0.52
2:R:20:ILE:CG1	2:R:43:GLY:HA2	2.40	0.52
1:a:39:VAL:HG23	1:g:519:THR:HG23	1.92	0.52
1:b:445:ARG:CZ	1:b:452:ARG:HH21	2.22	0.52
1:c:220:LEU:HD13	1:c:235:ILE:CD1	2.40	0.52
1:c:283:ARG:NH1	1:c:363:LYS:HD2	2.25	0.52
1:d:207:PRO:O	1:d:210:MET:HE3	2.09	0.52
1:g:118:ARG:O	1:g:122:LYS:HG3	2.10	0.52
1:h:518:THR:O	1:h:518:THR:HG22	2.09	0.52
1:j:114:LEU:O	1:j:118:ARG:HG3	2.10	0.52
1:j:177:GLU:HB3	1:j:321:ARG:NH1	2.25	0.52
2:r:52:ARG:O	2:r:52:ARG:HG3	2.10	0.52
2:t:8:ILE:HG22	2:t:16:VAL:HG21	1.91	0.52
2:t:90:LEU:N	2:t:90:LEU:HD12	2.25	0.52
1:A:392:LYS:O	1:A:396:GLU:HG3	2.09	0.52
1:D:416:VAL:HG21	1:D:479:GLY:HA3	1.92	0.52
1:E:294:VAL:HG23	1:E:295:THR:HG23	1.92	0.52
1:E:418:LEU:H	1:E:418:LEU:HD12	1.75	0.52
1:F:144:ILE:HD12	1:F:165:MET:HG2	1.92	0.52
1:I:6:LEU:CD2	1:I:523:VAL:HG22	2.40	0.52
1:I:142:LYS:O	1:I:146:GLU:HG3	2.08	0.52
1:I:258:LEU:O	1:I:262:VAL:HG23	2.10	0.52
1:I:307:LYS:HB3	1:I:309:GLU:OE1	2.10	0.52
1:J:40:LEU:N	1:J:40:LEU:HD12	2.25	0.52
1:K:141:ARG:NH1	1:K:166:GLU:HG3	2.25	0.52
1:L:79:SER:O	1:L:81:THR:N	2.43	0.52
1:M:297:GLY:HA3	1:M:317:GLY:H	1.73	0.52
1:N:142:LYS:O	1:N:146:GLU:HG3	2.10	0.52
1:b:230:ARG:O	1:b:234:PRO:HD2	2.10	0.52
1:c:235:ILE:HD12	1:c:311:ALA:HB1	1.92	0.52
1:c:265:LYS:HD3	1:c:272:VAL:H	1.74	0.52
1:d:250:ALA:C	1:d:252:ASP:N	2.68	0.52
1:e:284:ARG:O	1:e:288:LEU:HG	2.10	0.52
1:e:346:ASN:HB2	1:f:210:MET:HE3	1.92	0.52
1:g:23:VAL:HG22	1:g:60:VAL:HG11	1.91	0.52
1:h:283:ARG:HH22	1:h:364:LEU:HA	1.75	0.52
1:i:462:GLY:O	1:i:466:VAL:HG23	2.09	0.52
1:k:141:ARG:HH11	1:k:166:GLU:HG3	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:168:VAL:CG1	1:l:173:ILE:H	2.23	0.52
1:n:142:LYS:O	1:n:146:GLU:HG3	2.10	0.52
2:s:13:ASP:C	2:s:13:ASP:OD1	2.51	0.52
2:t:32:LEU:HD13	2:t:36:ALA:HB1	1.91	0.52
1:A:136:ILE:CD1	1:A:477:ARG:HH21	2.23	0.51
1:B:235:ILE:O	1:B:239:VAL:HG23	2.10	0.51
1:B:465:ILE:HD13	1:B:480:PHE:CE2	2.44	0.51
1:C:283:ARG:O	1:C:287:MET:HG3	2.10	0.51
1:D:101:ARG:CG	1:D:102:GLU:N	2.73	0.51
1:D:144:ILE:HD12	1:D:165:MET:HG2	1.91	0.51
1:E:184:THR:HG23	1:E:380:VAL:HA	1.91	0.51
1:H:151:SER:HB2	1:H:398:ALA:HA	1.92	0.51
1:H:168:VAL:CG1	1:H:173:ILE:H	2.24	0.51
1:H:452:ARG:HG2	1:H:452:ARG:NH1	2.24	0.51
1:H:481:ASN:HD21	1:H:484:THR:HG23	1.75	0.51
1:I:131:ILE:HD13	1:I:502:THR:HG22	1.92	0.51
1:M:54:VAL:HG22	1:M:89:THR:CG2	2.37	0.51
1:N:219:ILE:HB	1:N:295:THR:HG21	1.91	0.51
1:N:297:GLY:HA3	1:N:317:GLY:H	1.75	0.51
1:N:437:ALA:O	1:N:441:LYS:HG3	2.09	0.51
1:a:150:ILE:CD1	1:a:496:VAL:H	2.23	0.51
1:b:304:LEU:O	1:c:263:VAL:HG22	2.10	0.51
1:e:256:GLU:OE1	2:s:35:THR:O	2.28	0.51
1:f:356:ASP:O	1:f:357:SER:C	2.52	0.51
1:h:316:LEU:HD23	1:h:316:LEU:O	2.10	0.51
1:i:65:HIS:O	1:i:69:ILE:HG13	2.10	0.51
1:k:189:VAL:HG12	1:k:333:GLY:HA2	1.92	0.51
1:k:283:ARG:HH22	1:k:364:LEU:HA	1.74	0.51
1:l:6:LEU:CD2	1:l:523:VAL:HG22	2.40	0.51
1:l:232:LEU:HD21	1:l:236:LEU:HD13	1.92	0.51
2:u:46:ILE:O	2:u:46:ILE:HG22	2.10	0.51
1:C:352:LEU:HD21	1:C:364:LEU:HB2	1.90	0.51
1:G:25:ASN:HA	1:G:28:LYS:HG2	1.92	0.51
1:K:141:ARG:HH11	1:K:166:GLU:HG3	1.75	0.51
1:K:168:VAL:HG21	1:K:376:ALA:HB2	1.93	0.51
1:K:295:THR:HG22	1:K:317:GLY:HA3	1.92	0.51
1:L:307:LYS:HE3	1:L:310:ASN:ND2	2.25	0.51
1:M:411:VAL:O	1:M:496:VAL:HG13	2.11	0.51
1:a:224:LYS:HB3	1:a:302:GLU:OE1	2.10	0.51
1:b:301:SER:HB2	1:b:304:LEU:CB	2.41	0.51
1:d:50:THR:CG2	1:d:52:ASP:H	2.17	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:498:PRO:HG2	1:d:501:VAL:CG2	2.40	0.51
1:e:235:ILE:HD11	1:e:316:LEU:HD21	1.92	0.51
1:f:361:ARG:O	1:f:365:GLN:HB2	2.10	0.51
1:g:248:ILE:CD1	1:g:261:LEU:HD21	2.40	0.51
1:i:131:ILE:HD13	1:i:502:THR:HG22	1.93	0.51
1:i:141:ARG:NH1	1:i:166:GLU:HG3	2.26	0.51
1:i:151:SER:HB2	1:i:398:ALA:HA	1.92	0.51
1:j:295:THR:HG22	1:j:317:GLY:HA3	1.91	0.51
1:k:194:PHE:CG	1:k:278:PRO:HB3	2.45	0.51
1:k:224:LYS:HG2	1:k:225:LYS:H	1.75	0.51
1:n:283:ARG:HG2	1:n:363:LYS:HZ2	1.75	0.51
2:o:93:ARG:O	2:p:14:ARG:NH2	2.43	0.51
2:r:33:PRO:HG2	2:r:36:ALA:HB2	1.92	0.51
2:r:81:GLU:HA	2:r:86:GLU:HA	1.91	0.51
2:t:99:LEU:HD23	2:u:8:ILE:HD11	1.91	0.51
1:A:78:ALA:O	1:A:89:THR:HG22	2.10	0.51
1:A:450:PRO:O	1:A:454:ILE:HG13	2.10	0.51
1:B:10:GLU:N	1:B:13:ARG:NH1	2.58	0.51
1:C:6:LEU:HD22	1:C:523:VAL:HG22	1.91	0.51
1:D:289:LYS:NZ	1:E:202:TYR:CE1	2.77	0.51
1:E:207:PRO:O	1:E:210:MET:HE3	2.10	0.51
1:E:209:THR:HG22	1:E:211:GLU:CG	2.36	0.51
1:H:141:ARG:NH1	1:H:166:GLU:HG3	2.25	0.51
1:J:421:ALA:O	1:J:425:VAL:HG23	2.11	0.51
1:M:481:ASN:HD21	1:M:484:THR:HG23	1.74	0.51
2:O:78:THR:HG22	2:O:80:ILE:HD11	1.92	0.51
1:a:350:LYS:C	1:b:208:GLU:HA	2.35	0.51
1:c:10:GLU:N	1:c:13:ARG:NH1	2.59	0.51
1:g:213:VAL:O	1:g:214:LEU:HD23	2.10	0.51
1:h:6:LEU:CD2	1:h:523:VAL:HG22	2.39	0.51
1:h:283:ARG:CG	1:h:363:LYS:NZ	2.73	0.51
1:h:345:ILE:O	1:h:349:LYS:HG3	2.10	0.51
1:i:459:GLY:HA3	1:j:114:LEU:HD12	1.93	0.51
1:j:518:THR:O	1:j:518:THR:HG22	2.10	0.51
1:k:496:VAL:HG12	1:k:497:ASP:N	2.25	0.51
1:l:128:VAL:HA	1:l:131:ILE:HD12	1.92	0.51
1:l:408:GLU:HB2	1:l:500:LYS:HB2	1.91	0.51
1:n:222:VAL:HG12	1:n:223:GLU:H	1.75	0.51
2:r:71:VAL:HG23	2:r:99:LEU:HD13	1.92	0.51
1:A:52:ASP:OD1	1:A:54:VAL:HG23	2.10	0.51
1:C:457:ASN:HD22	1:C:457:ASN:N	2.08	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:229:VAL:HG21	2:R:36:ALA:CB	2.39	0.51
1:E:498:PRO:HG2	1:E:501:VAL:CG2	2.40	0.51
1:F:18:ARG:HD2	1:F:67:GLU:OE2	2.10	0.51
1:H:525:GLU:N	1:N:41:GLU:OE2	2.37	0.51
1:a:234:PRO:O	1:a:238:GLN:HG3	2.10	0.51
1:b:10:GLU:N	1:b:13:ARG:NH1	2.58	0.51
1:b:246:LEU:CB	1:b:272:VAL:HG12	2.37	0.51
1:e:465:ILE:HD13	1:e:480:PHE:CD2	2.46	0.51
1:f:372:ALA:C	1:f:374:GLY:N	2.68	0.51
1:h:127:ALA:O	1:h:131:ILE:HG13	2.10	0.51
1:i:128:VAL:HA	1:i:131:ILE:HD12	1.91	0.51
1:i:416:VAL:HG21	1:i:479:GLY:HA3	1.93	0.51
1:j:410:ILE:CD1	1:j:496:VAL:HG11	2.37	0.51
1:k:151:SER:HB2	1:k:398:ALA:HA	1.92	0.51
1:l:179:SER:CB	1:l:379:ARG:HB3	2.35	0.51
1:m:6:LEU:HD23	1:m:523:VAL:HG22	1.92	0.51
1:n:25:ASN:HA	1:n:28:LYS:HE2	1.93	0.51
2:r:100:GLN:OE1	2:s:9:LYS:CE	2.59	0.51
2:t:14:ARG:HG2	2:t:14:ARG:NH1	2.26	0.51
1:A:131:ILE:HD13	1:A:502:THR:HG22	1.91	0.51
1:A:202:TYR:OH	1:G:289:LYS:CE	2.58	0.51
1:C:251:GLU:HG3	1:C:284:ARG:NH1	2.13	0.51
1:F:57:ALA:O	1:F:75:LYS:HD3	2.10	0.51
1:F:101:ARG:CG	1:F:102:GLU:N	2.73	0.51
1:H:232:LEU:O	1:H:232:LEU:HD23	2.10	0.51
1:I:168:VAL:CG1	1:I:173:ILE:H	2.24	0.51
1:J:123:ALA:HB2	1:J:440:ALA:HA	1.92	0.51
1:J:175:THR:HG22	1:J:176:VAL:N	2.25	0.51
1:J:297:GLY:HA3	1:J:317:GLY:H	1.75	0.51
1:M:6:LEU:CD2	1:M:523:VAL:HG22	2.41	0.51
2:P:17:VAL:HG12	2:P:18:LYS:N	2.24	0.51
2:S:73:ALA:O	2:S:75:TYR:N	2.42	0.51
1:a:228:ASN:HD22	1:a:231:GLU:HG3	1.76	0.51
1:c:235:ILE:HD12	1:c:311:ALA:CB	2.40	0.51
1:e:128:VAL:HG13	1:e:503:ARG:HG3	1.93	0.51
1:f:30:THR:O	1:f:35:GLY:HA3	2.11	0.51
1:g:231:GLU:HB3	1:g:308:LEU:HB3	1.92	0.51
1:h:340:ASP:O	1:h:343:ALA:HB3	2.10	0.51
1:i:175:THR:HG22	1:i:176:VAL:N	2.25	0.51
1:i:421:ALA:O	1:i:425:VAL:HG23	2.09	0.51
1:i:455:ALA:HB1	1:i:465:ILE:HD12	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:151:SER:HB2	1:j:398:ALA:HA	1.93	0.51
1:j:462:GLY:O	1:j:466:VAL:HG23	2.10	0.51
1:k:297:GLY:HA3	1:k:317:GLY:N	2.25	0.51
2:t:48:VAL:HG13	2:t:62:LEU:HD13	1.93	0.51
1:A:101:ARG:HG3	1:A:102:GLU:N	2.26	0.51
1:B:233:LEU:O	1:B:237:GLU:HG3	2.10	0.51
1:B:286:GLU:OE1	1:B:344:ARG:NH2	2.42	0.51
1:C:101:ARG:HG3	1:C:102:GLU:N	2.25	0.51
1:C:498:PRO:HG2	1:C:501:VAL:CG2	2.41	0.51
1:E:267:ARG:CD	2:S:31:VAL:HG21	2.36	0.51
1:G:144:ILE:CD1	1:G:165:MET:HG2	2.40	0.51
1:G:325:THR:HG22	1:G:326:LYS:H	1.75	0.51
1:I:127:ALA:O	1:I:131:ILE:HG13	2.10	0.51
1:J:168:VAL:HG11	1:J:173:ILE:N	2.26	0.51
1:K:247:LEU:HD22	1:K:322:VAL:HG11	1.92	0.51
1:M:127:ALA:O	1:M:131:ILE:HG13	2.10	0.51
1:M:151:SER:HB2	1:M:398:ALA:HA	1.92	0.51
1:N:25:ASN:HA	1:N:28:LYS:HE2	1.91	0.51
1:N:526:LYS:O	1:N:527:PRO:C	2.54	0.51
2:P:41:GLN:HE21	2:P:74:LYS:HG2	1.76	0.51
2:U:33:PRO:C	2:U:35:THR:H	2.19	0.51
1:b:128:VAL:HG13	1:b:503:ARG:HG3	1.91	0.51
1:b:466:VAL:HG12	1:b:470:LEU:HD12	1.91	0.51
1:c:224:LYS:CE	1:c:301:SER:HA	2.38	0.51
1:d:220:LEU:HG	1:d:222:VAL:HG23	1.92	0.51
1:d:242:THR:HG22	1:d:244:LYS:HG2	1.91	0.51
1:d:356:ASP:O	1:d:357:SER:C	2.54	0.51
1:e:256:GLU:O	2:s:33:PRO:HG2	2.11	0.51
1:f:325:THR:HG22	1:f:326:LYS:N	2.25	0.51
1:f:349:LYS:C	1:f:351:GLU:H	2.19	0.51
1:g:348:ILE:HD11	1:g:367:ARG:CZ	2.40	0.51
1:g:416:VAL:HG21	1:g:479:GLY:HA3	1.93	0.51
1:h:207:PRO:O	1:h:210:MET:HE3	2.11	0.51
1:k:168:VAL:HG11	1:k:173:ILE:N	2.26	0.51
1:m:151:SER:HB2	1:m:398:ALA:HA	1.93	0.51
1:m:168:VAL:HG11	1:m:173:ILE:N	2.25	0.51
1:n:54:VAL:HG22	1:n:89:THR:CG2	2.41	0.51
1:n:175:THR:HG22	1:n:176:VAL:N	2.25	0.51
2:q:20:ILE:HG13	2:q:43:GLY:CA	2.34	0.51
2:t:54:LEU:HD21	2:t:60:VAL:HG21	1.92	0.51
1:A:468:GLN:O	1:A:471:ALA:HB3	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:520:GLU:HB3	1:B:29:VAL:HG11	1.92	0.51
1:C:128:VAL:HA	1:C:131:ILE:HD12	1.91	0.51
1:C:279:GLY:C	1:C:284:ARG:HB3	2.36	0.51
1:D:359:TYR:CE1	1:D:363:LYS:HE2	2.45	0.51
1:E:192:TYR:C	1:E:192:TYR:CD2	2.88	0.51
1:G:168:VAL:HG21	1:G:376:ALA:HB2	1.92	0.51
1:I:222:VAL:HG12	1:I:223:GLU:H	1.75	0.51
1:K:28:LYS:NZ	1:K:97:GLN:HE22	2.09	0.51
1:N:283:ARG:HH21	1:N:367:ARG:CD	2.24	0.51
2:P:80:ILE:HG22	2:P:81:GLU:H	1.76	0.51
2:Q:96:LEU:O	2:R:14:ARG:HD3	2.11	0.51
2:R:44:LYS:HA	2:R:68:ASP:O	2.11	0.51
2:T:45:VAL:HG21	2:T:64:VAL:CG1	2.40	0.51
1:d:136:ILE:O	1:d:410:ILE:HG22	2.11	0.51
1:f:202:TYR:CD2	1:f:266:LEU:HD11	2.46	0.51
1:g:175:THR:HB	1:g:377:VAL:HG22	1.90	0.51
1:h:372:ALA:C	1:h:374:GLY:N	2.69	0.51
1:k:177:GLU:HB3	1:k:321:ARG:NH1	2.25	0.51
1:l:496:VAL:HG12	1:l:497:ASP:H	1.75	0.51
1:m:41:GLU:HG2	1:m:524:ALA:HA	1.91	0.51
2:p:62:LEU:C	2:p:64:VAL:H	2.19	0.51
2:s:53:VAL:HG22	2:s:59:ARG:CG	2.37	0.51
1:A:207:PRO:CB	1:G:343:ALA:HB2	2.41	0.51
1:D:445:ARG:CZ	1:D:452:ARG:HH21	2.24	0.51
1:E:10:GLU:N	1:E:13:ARG:NH1	2.59	0.51
1:G:14:ARG:NH1	1:G:17:GLU:OE1	2.44	0.51
1:H:372:ALA:C	1:H:374:GLY:H	2.19	0.51
1:I:345:ILE:O	1:I:349:LYS:HG3	2.11	0.51
1:L:229:VAL:CG2	1:L:256:GLU:HB3	2.41	0.51
1:M:136:ILE:HD11	1:M:491:VAL:HG22	1.91	0.51
2:R:79:GLU:C	2:R:80:ILE:HD12	2.36	0.51
1:a:52:ASP:OD1	1:a:54:VAL:HG23	2.11	0.51
1:b:258:LEU:O	1:b:262:VAL:HG23	2.11	0.51
1:c:232:LEU:O	1:c:235:ILE:HG22	2.10	0.51
1:c:238:GLN:C	1:c:313:LEU:HD21	2.35	0.51
1:c:452:ARG:NH1	1:c:463:SER:HA	2.26	0.51
1:f:80:LYS:HE2	1:g:383:ALA:O	2.11	0.51
1:i:141:ARG:HH11	1:i:166:GLU:HG3	1.76	0.51
1:j:306:PHE:CE2	1:j:315:MET:HE1	2.46	0.51
1:k:128:VAL:HA	1:k:131:ILE:HD12	1.93	0.51
1:l:151:SER:HB2	1:l:398:ALA:HA	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:103:GLY:O	1:m:107:VAL:HG23	2.11	0.51
1:n:141:ARG:NH1	1:n:166:GLU:HG3	2.26	0.51
2:o:100:GLN:CG	2:p:9:LYS:HE2	2.41	0.51
2:u:17:VAL:HG13	2:u:44:LYS:N	2.25	0.51
2:u:56:ASN:ND2	2:u:58:GLN:CD	2.69	0.51
1:C:74:LEU:HD21	1:C:93:THR:CG2	2.41	0.51
1:C:128:VAL:HG13	1:C:503:ARG:HG3	1.93	0.51
1:D:519:THR:HG23	1:E:39:VAL:HG23	1.92	0.51
1:E:149:THR:HG23	1:E:155:PRO:CA	2.37	0.51
1:E:249:ILE:HD11	1:E:331:ILE:HD11	1.93	0.51
1:E:292:ALA:O	1:E:293:ALA:C	2.54	0.51
1:G:219:ILE:HG22	1:G:221:ILE:HG13	1.93	0.51
1:H:39:VAL:C	1:H:40:LEU:HD12	2.36	0.51
1:J:141:ARG:NH1	1:J:166:GLU:HG3	2.26	0.51
1:J:194:PHE:CB	1:J:278:PRO:HB3	2.41	0.51
1:J:490:MET:HE2	1:J:490:MET:CA	2.35	0.51
1:K:452:ARG:HG2	1:K:452:ARG:HH11	1.75	0.51
1:L:295:THR:HG22	1:L:317:GLY:HA3	1.93	0.51
1:M:232:LEU:O	1:M:232:LEU:HD23	2.11	0.51
1:N:84:VAL:HG12	1:N:84:VAL:O	2.10	0.51
1:N:342:GLU:HA	1:N:345:ILE:HD12	1.93	0.51
2:P:98:VAL:O	2:Q:9:LYS:HB2	2.11	0.51
2:T:79:GLU:O	2:T:80:ILE:HG13	2.10	0.51
1:a:101:ARG:CG	1:a:102:GLU:N	2.74	0.51
1:c:6:LEU:HD22	1:c:523:VAL:HG22	1.93	0.51
1:c:348:ILE:CD1	1:c:367:ARG:HB3	2.41	0.51
1:f:382:ALA:HB3	1:f:388:LEU:HB2	1.93	0.51
1:h:222:VAL:CG1	1:h:223:GLU:N	2.74	0.51
1:h:449:GLU:HB2	1:h:450:PRO:HD3	1.93	0.51
1:j:95:LEU:O	1:j:99:ILE:HG13	2.11	0.51
1:k:168:VAL:HG12	1:k:172:GLY:CA	2.35	0.51
1:l:219:ILE:O	1:l:221:ILE:HG13	2.10	0.51
1:m:128:VAL:HA	1:m:131:ILE:HD12	1.93	0.51
1:m:168:VAL:CG1	1:m:173:ILE:H	2.24	0.51
2:q:52:ARG:HG2	2:q:52:ARG:NH1	2.24	0.51
1:C:289:LYS:CE	1:D:202:TYR:OH	2.59	0.51
1:F:177:GLU:O	1:F:379:ARG:HA	2.11	0.51
1:G:18:ARG:HD2	1:G:67:GLU:OE2	2.12	0.51
1:G:477:ARG:HH11	1:G:477:ARG:HG3	1.76	0.51
1:H:24:ALA:O	1:H:28:LYS:HG2	2.10	0.51
1:H:340:ASP:O	1:H:343:ALA:HB3	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:297:GLY:HA3	1:K:317:GLY:N	2.26	0.51
1:M:123:ALA:HB2	1:M:440:ALA:HA	1.91	0.51
1:M:175:THR:HG22	1:M:176:VAL:N	2.26	0.51
1:N:229:VAL:CG2	1:N:256:GLU:HB3	2.40	0.51
2:S:79:GLU:O	2:S:80:ILE:HG13	2.11	0.51
1:a:136:ILE:CD1	1:a:477:ARG:HH21	2.24	0.51
1:c:209:THR:CG2	1:c:211:GLU:HG2	2.41	0.51
1:c:281:GLY:O	1:c:284:ARG:HG2	2.10	0.51
1:d:168:VAL:HG21	1:d:376:ALA:HB2	1.91	0.51
1:e:363:LYS:C	1:e:365:GLN:H	2.16	0.51
1:e:452:ARG:NH1	1:e:463:SER:HA	2.25	0.51
1:h:141:ARG:NH1	1:h:166:GLU:HG3	2.26	0.51
1:l:65:HIS:O	1:l:69:ILE:HG13	2.11	0.51
1:l:283:ARG:NH2	1:l:367:ARG:CD	2.69	0.51
1:m:340:ASP:O	1:m:343:ALA:HB3	2.11	0.51
2:q:41:GLN:HA	2:q:74:LYS:HB3	1.93	0.51
1:C:219:ILE:HG22	1:C:221:ILE:HG13	1.93	0.50
1:D:54:VAL:HG11	1:D:79:SER:HA	1.92	0.50
1:F:237:GLU:CB	2:T:28:GLY:HA3	2.41	0.50
1:F:477:ARG:HG3	1:F:477:ARG:HH11	1.75	0.50
1:H:141:ARG:HH11	1:H:166:GLU:HG3	1.75	0.50
1:H:168:VAL:HG11	1:H:173:ILE:N	2.25	0.50
1:J:151:SER:HB2	1:J:398:ALA:HA	1.92	0.50
1:L:306:PHE:CE2	1:L:315:MET:HE1	2.46	0.50
1:M:437:ALA:O	1:M:441:LYS:HG3	2.10	0.50
2:T:54:LEU:HD21	2:U:57:GLY:H	1.76	0.50
1:a:368:LEU:HD12	1:a:368:LEU:O	2.11	0.50
1:f:352:LEU:C	1:f:354:THR:H	2.18	0.50
1:g:294:VAL:HA	1:g:341:ILE:CD1	2.40	0.50
1:h:307:LYS:HE3	1:h:310:ASN:ND2	2.26	0.50
1:h:344:ARG:HH11	1:h:344:ARG:HG3	1.76	0.50
1:j:141:ARG:NH1	1:j:166:GLU:HG3	2.26	0.50
1:j:352:LEU:HD21	1:j:365:GLN:HE22	1.75	0.50
1:j:359:TYR:O	1:j:363:LYS:HG2	2.09	0.50
2:o:50:THR:CG2	2:o:59:ARG:HD3	2.41	0.50
1:A:118:ARG:HH22	1:B:34:ARG:HH12	1.59	0.50
1:C:147:VAL:HG23	1:C:410:ILE:HD11	1.94	0.50
1:D:147:VAL:CG2	1:D:410:ILE:HD11	2.40	0.50
1:D:147:VAL:HG23	1:D:410:ILE:HD11	1.92	0.50
1:D:218:PHE:CE1	1:D:242:THR:HG21	2.45	0.50
1:E:214:LEU:HB3	1:E:245:PRO:CB	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:416:VAL:HG21	1:F:479:GLY:HA3	1.93	0.50
1:H:283:ARG:HH21	1:H:367:ARG:CD	2.24	0.50
1:H:316:LEU:HD23	1:H:316:LEU:O	2.12	0.50
1:I:65:HIS:O	1:I:69:ILE:HG13	2.11	0.50
1:I:175:THR:HG22	1:I:176:VAL:N	2.27	0.50
1:I:224:LYS:HG2	1:I:225:LYS:H	1.73	0.50
1:I:283:ARG:HD3	1:I:363:LYS:HZ1	1.77	0.50
1:J:168:VAL:HG21	1:J:376:ALA:HB2	1.93	0.50
1:L:253:VAL:O	1:L:258:LEU:HD22	2.11	0.50
2:Q:84:GLY:O	2:Q:85:GLU:HB2	2.11	0.50
2:U:42:LYS:HA	2:U:70:VAL:O	2.11	0.50
1:b:189:VAL:CG1	1:b:193:GLN:HG2	2.41	0.50
1:c:6:LEU:HD13	1:d:26:ALA:HB2	1.93	0.50
1:c:343:ALA:HB2	1:d:207:PRO:CB	2.41	0.50
1:h:28:LYS:NZ	1:h:97:GLN:HE22	2.08	0.50
1:i:263:VAL:O	1:i:267:ARG:HB2	2.11	0.50
1:k:65:HIS:O	1:k:69:ILE:HG13	2.11	0.50
1:k:141:ARG:NH1	1:k:166:GLU:HG3	2.25	0.50
1:k:232:LEU:O	1:k:232:LEU:HD23	2.10	0.50
1:l:518:THR:HG22	1:l:518:THR:O	2.11	0.50
1:m:455:ALA:HB1	1:m:465:ILE:HD12	1.93	0.50
1:n:114:LEU:O	1:n:118:ARG:HG3	2.11	0.50
2:r:100:GLN:HG2	2:s:9:LYS:HE2	1.92	0.50
2:s:73:ALA:O	2:s:75:TYR:N	2.45	0.50
1:C:363:LYS:C	1:C:365:GLN:H	2.19	0.50
1:C:425:VAL:O	1:C:429:ILE:HG13	2.11	0.50
1:F:227:SER:C	1:F:257:ALA:HB2	2.36	0.50
1:H:175:THR:HG22	1:H:176:VAL:N	2.25	0.50
1:H:290:ASP:O	1:H:294:VAL:HG23	2.11	0.50
1:J:65:HIS:O	1:J:69:ILE:HG13	2.12	0.50
1:K:449:GLU:HB2	1:K:450:PRO:HD3	1.94	0.50
1:L:96:ALA:O	1:L:100:VAL:HG23	2.12	0.50
1:N:332:VAL:HG22	1:N:375:VAL:HG11	1.92	0.50
1:a:161:ILE:HD12	1:a:399:LEU:CD2	2.42	0.50
1:b:10:GLU:N	1:b:13:ARG:HH12	2.09	0.50
1:c:283:ARG:NH2	1:c:366:GLU:OE2	2.44	0.50
1:e:168:VAL:HG21	1:e:376:ALA:HB2	1.93	0.50
1:f:18:ARG:HD2	1:f:67:GLU:OE2	2.12	0.50
1:g:150:ILE:HD11	1:g:495:ILE:CA	2.24	0.50
1:h:168:VAL:HG11	1:h:173:ILE:N	2.26	0.50
1:i:217:ALA:HB2	1:i:245:PRO:CG	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:337:LYS:HB2	1:i:340:ASP:OD2	2.11	0.50
1:j:50:THR:CG2	1:j:51:LYS:H	2.15	0.50
1:j:283:ARG:CG	1:j:363:LYS:HZ2	2.14	0.50
1:k:496:VAL:HG12	1:k:497:ASP:H	1.77	0.50
1:m:178:GLU:OE2	1:m:392:LYS:HE3	2.11	0.50
1:m:518:THR:O	1:m:518:THR:HG22	2.11	0.50
2:q:6:THR:HG21	2:q:82:ILE:HG21	1.94	0.50
2:s:62:LEU:C	2:s:64:VAL:H	2.18	0.50
2:t:82:ILE:O	2:t:82:ILE:HG22	2.11	0.50
1:A:54:VAL:HG22	1:A:89:THR:HG21	1.94	0.50
1:A:250:ALA:O	1:A:251:GLU:C	2.53	0.50
1:A:448:GLU:OE1	1:A:452:ARG:NH2	2.45	0.50
1:B:217:ALA:HB2	1:B:245:PRO:HB2	1.93	0.50
1:B:425:VAL:O	1:B:429:ILE:HG13	2.11	0.50
1:E:127:ALA:O	1:E:131:ILE:HG13	2.11	0.50
1:G:136:ILE:CD1	1:G:477:ARG:HH21	2.23	0.50
1:I:141:ARG:NH1	1:I:166:GLU:HG3	2.27	0.50
1:J:39:VAL:C	1:J:40:LEU:HD12	2.37	0.50
1:J:54:VAL:HG22	1:J:89:THR:CG2	2.41	0.50
1:J:168:VAL:CG1	1:J:173:ILE:H	2.24	0.50
1:L:228:ASN:HB3	1:L:231:GLU:HG2	1.92	0.50
1:N:114:LEU:O	1:N:118:ARG:HG3	2.12	0.50
1:N:345:ILE:O	1:N:349:LYS:HG3	2.12	0.50
1:N:481:ASN:HD21	1:N:484:THR:HG23	1.77	0.50
2:O:79:GLU:C	2:O:80:ILE:HD12	2.36	0.50
2:T:50:THR:HG23	2:T:59:ARG:HD3	1.94	0.50
1:c:345:ILE:HG13	1:c:368:LEU:HD23	1.92	0.50
1:d:522:VAL:HG22	1:e:39:VAL:HB	1.93	0.50
1:e:198:TYR:O	1:e:198:TYR:HD1	1.95	0.50
1:g:25:ASN:HA	1:g:28:LYS:HG2	1.93	0.50
1:g:157:VAL:O	1:g:161:ILE:HG12	2.11	0.50
1:g:295:THR:C	1:g:336:GLY:H	2.20	0.50
1:l:366:GLU:O	1:l:370:LYS:HG3	2.11	0.50
1:m:40:LEU:HD12	1:m:40:LEU:N	2.27	0.50
2:o:46:ILE:HG22	2:o:46:ILE:O	2.11	0.50
2:q:13:ASP:OD2	2:q:92:GLU:HB3	2.12	0.50
2:r:97:ALA:HA	2:s:11:LEU:HD12	1.91	0.50
2:u:19:ARG:HE	2:u:40:PRO:HG2	1.76	0.50
1:A:199:ILE:HG22	1:A:199:ILE:O	2.10	0.50
1:A:345:ILE:HG23	1:A:368:LEU:HD13	1.93	0.50
1:B:264:ASN:OD1	2:P:30:ILE:HA	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:236:LEU:CB	2:Q:30:ILE:CD1	2.86	0.50
1:F:515:LEU:HD12	1:G:49:ILE:HG21	1.92	0.50
1:G:466:VAL:HG12	1:G:470:LEU:HD12	1.93	0.50
1:H:19:GLY:HA3	1:H:67:GLU:O	2.12	0.50
1:I:114:LEU:O	1:I:118:ARG:HG3	2.12	0.50
1:I:283:ARG:HG2	1:I:363:LYS:HZ2	1.76	0.50
1:J:84:VAL:HG12	1:J:84:VAL:O	2.11	0.50
1:J:218:PHE:HB3	1:J:316:LEU:HG	1.93	0.50
1:L:50:THR:CG2	1:L:51:LYS:H	2.19	0.50
1:L:298:THR:N	1:L:315:MET:O	2.43	0.50
1:L:312:THR:O	1:L:314:SER:N	2.43	0.50
1:M:131:ILE:HD13	1:M:502:THR:HG22	1.92	0.50
1:M:204:VAL:HG13	1:M:211:GLU:O	2.11	0.50
1:N:117:LYS:O	1:N:118:ARG:C	2.55	0.50
2:O:52:ARG:HH21	2:P:53:VAL:CB	2.23	0.50
1:c:149:THR:HG23	1:c:155:PRO:CA	2.38	0.50
1:c:265:LYS:HA	1:c:270:LEU:O	2.11	0.50
1:c:450:PRO:O	1:c:454:ILE:HG13	2.12	0.50
1:f:520:GLU:HB3	1:g:29:VAL:HG11	1.92	0.50
1:g:292:ALA:O	1:g:293:ALA:C	2.55	0.50
1:g:477:ARG:HG3	1:g:477:ARG:NH1	2.25	0.50
1:i:307:LYS:HB3	1:i:309:GLU:OE1	2.11	0.50
1:k:219:ILE:O	1:k:221:ILE:HG13	2.12	0.50
1:k:283:ARG:HH21	1:k:367:ARG:HD2	1.63	0.50
1:n:481:ASN:HD21	1:n:484:THR:HG23	1.76	0.50
2:q:43:GLY:O	2:q:69:ILE:HA	2.11	0.50
2:s:50:THR:CG2	2:s:59:ARG:HD3	2.42	0.50
1:C:25:ASN:HA	1:C:28:LYS:HG2	1.93	0.50
1:C:477:ARG:HG3	1:C:477:ARG:HH11	1.75	0.50
1:H:128:VAL:HA	1:H:131:ILE:HD12	1.94	0.50
1:I:259:ALA:O	1:I:263:VAL:HG23	2.11	0.50
1:K:66:LEU:HD22	1:K:522:VAL:HG21	1.93	0.50
1:M:25:ASN:HA	1:M:28:LYS:HE2	1.93	0.50
1:M:175:THR:HG21	1:M:177:GLU:OE2	2.12	0.50
1:N:352:LEU:HD21	1:N:365:GLN:HE22	1.77	0.50
2:S:71:VAL:HG23	2:S:99:LEU:HD13	1.93	0.50
2:T:85:GLU:OE1	2:T:85:GLU:HA	2.11	0.50
2:U:80:ILE:CG2	2:U:81:GLU:N	2.74	0.50
1:a:49:ILE:HG21	1:g:515:LEU:HD12	1.94	0.50
1:d:168:VAL:HG12	1:d:168:VAL:O	2.11	0.50
1:d:520:GLU:HB3	1:e:29:VAL:HG11	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:6:LEU:HD22	1:e:523:VAL:HG22	1.92	0.50
1:e:18:ARG:HD2	1:e:67:GLU:OE2	2.11	0.50
1:e:218:PHE:HA	1:e:317:GLY:O	2.12	0.50
1:f:279:GLY:C	1:f:284:ARG:HB3	2.36	0.50
1:f:300:ILE:O	1:f:300:ILE:HG22	2.10	0.50
1:f:410:ILE:HG12	1:f:496:VAL:HB	1.93	0.50
1:g:205:THR:HB	1:g:213:VAL:H	1.76	0.50
1:g:410:ILE:HD11	1:g:496:VAL:CG2	2.42	0.50
1:h:416:VAL:HG21	1:h:479:GLY:HA3	1.94	0.50
1:i:6:LEU:HD23	1:i:523:VAL:HG22	1.93	0.50
1:i:142:LYS:O	1:i:146:GLU:HG3	2.11	0.50
1:i:372:ALA:C	1:i:374:GLY:N	2.70	0.50
1:l:455:ALA:HB1	1:l:465:ILE:HD12	1.94	0.50
1:m:178:GLU:OE1	1:m:323:ARG:NH2	2.45	0.50
1:n:518:THR:O	1:n:518:THR:HG22	2.11	0.50
2:q:90:LEU:HD23	2:q:90:LEU:N	2.18	0.50
1:A:261:LEU:O	1:A:265:LYS:HB2	2.10	0.50
1:D:168:VAL:CG1	1:D:172:GLY:HA3	2.29	0.50
1:E:23:VAL:CG1	1:E:74:LEU:HD23	2.40	0.50
1:F:236:LEU:HB2	2:T:30:ILE:CD1	2.41	0.50
1:F:498:PRO:HG2	1:F:501:VAL:CG2	2.42	0.50
1:H:6:LEU:CD2	1:H:523:VAL:HG22	2.41	0.50
1:H:204:VAL:HG13	1:H:211:GLU:O	2.12	0.50
1:I:50:THR:CG2	1:I:51:LYS:H	2.16	0.50
1:I:146:GLU:O	1:I:150:ILE:HG13	2.12	0.50
1:J:325:THR:CG2	1:J:326:LYS:N	2.74	0.50
1:K:300:ILE:O	1:K:300:ILE:HG22	2.11	0.50
1:L:61:GLU:O	1:M:4:LYS:N	2.36	0.50
1:L:74:LEU:HA	1:L:512:ILE:HD11	1.93	0.50
1:L:408:GLU:OE1	1:L:500:LYS:HA	2.11	0.50
1:M:194:PHE:CB	1:M:278:PRO:HB3	2.42	0.50
1:M:283:ARG:NH2	1:M:367:ARG:CD	2.75	0.50
1:M:526:LYS:CD	1:M:527:PRO:HD2	2.42	0.50
2:O:79:GLU:O	2:O:80:ILE:HG13	2.11	0.50
2:S:38:GLU:HG3	2:S:74:LYS:NZ	2.26	0.50
2:U:18:LYS:HE3	2:U:86:GLU:O	2.11	0.50
1:a:220:LEU:HD23	1:a:248:ILE:HG23	1.93	0.50
1:b:263:VAL:O	1:b:267:ARG:HB2	2.11	0.50
1:c:141:ARG:NH2	1:c:163:ASP:OD1	2.42	0.50
1:c:477:ARG:HH11	1:c:477:ARG:HG3	1.77	0.50
1:d:250:ALA:O	1:d:252:ASP:N	2.44	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:144:ILE:HD12	1:e:165:MET:HG2	1.92	0.50
1:f:240:ALA:HA	1:f:270:LEU:HD13	1.94	0.50
1:f:340:ASP:O	1:f:344:ARG:HB2	2.12	0.50
1:g:194:PHE:CD1	1:g:196:LYS:HB2	2.47	0.50
1:j:455:ALA:HB1	1:j:465:ILE:HD12	1.94	0.50
1:k:118:ARG:O	1:k:122:LYS:HG3	2.10	0.50
1:k:307:LYS:HE3	1:k:310:ASN:ND2	2.27	0.50
1:l:168:VAL:HG21	1:l:376:ALA:HB2	1.94	0.50
1:m:197:GLY:HA3	1:m:325:THR:O	2.12	0.50
1:n:189:VAL:HG11	1:n:333:GLY:CA	2.29	0.50
2:t:17:VAL:CG2	2:t:45:VAL:HA	2.35	0.50
2:u:53:VAL:HG22	2:u:59:ARG:HG2	1.93	0.50
1:A:168:VAL:HG21	1:A:376:ALA:HB2	1.94	0.50
1:B:10:GLU:N	1:B:13:ARG:HH12	2.10	0.50
1:B:40:LEU:HD13	1:B:59:GLU:HG3	1.94	0.50
1:B:280:PHE:O	1:B:281:GLY:C	2.55	0.50
1:C:522:VAL:HG22	1:D:39:VAL:HB	1.94	0.50
1:E:416:VAL:HG21	1:E:479:GLY:HA3	1.94	0.50
1:F:498:PRO:HG2	1:F:501:VAL:HG22	1.94	0.50
1:G:198:TYR:HD1	1:G:198:TYR:O	1.95	0.50
1:G:363:LYS:C	1:G:365:GLN:H	2.18	0.50
1:G:465:ILE:HD13	1:G:480:PHE:CD2	2.46	0.50
1:H:421:ALA:O	1:H:425:VAL:HG23	2.11	0.50
1:I:168:VAL:HG11	1:I:173:ILE:N	2.25	0.50
1:I:194:PHE:CG	1:I:278:PRO:HB3	2.47	0.50
1:J:290:ASP:N	1:J:344:ARG:HH12	2.09	0.50
1:J:410:ILE:CD1	1:J:496:VAL:HG11	2.39	0.50
1:L:141:ARG:HH11	1:L:166:GLU:HG3	1.77	0.50
1:L:258:LEU:O	1:L:262:VAL:HG23	2.11	0.50
1:M:114:LEU:O	1:M:118:ARG:HG3	2.12	0.50
1:M:385:GLU:HB2	1:N:280:PHE:CD2	2.46	0.50
2:U:48:VAL:CG1	2:U:62:LEU:CD1	2.85	0.50
1:b:101:ARG:CG	1:b:102:GLU:N	2.74	0.50
1:b:279:GLY:O	1:b:284:ARG:HD3	2.12	0.50
1:e:95:LEU:O	1:e:99:ILE:HG13	2.11	0.50
1:e:136:ILE:CD1	1:e:477:ARG:HH21	2.24	0.50
1:f:347:GLY:O	1:f:351:GLU:HB2	2.11	0.50
1:g:199:ILE:HG22	1:g:199:ILE:O	2.12	0.50
1:j:141:ARG:HH11	1:j:166:GLU:HG3	1.76	0.50
1:k:462:GLY:O	1:k:466:VAL:HG23	2.12	0.50
2:q:17:VAL:CG2	2:q:88:VAL:HB	2.42	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:u:32:LEU:O	2:u:37:LYS:NZ	2.38	0.50
1:A:54:VAL:HG11	1:A:79:SER:HA	1.94	0.50
1:A:168:VAL:CG1	1:A:172:GLY:HA3	2.25	0.50
1:A:526:LYS:HB3	1:A:529:LYS:HE3	1.93	0.50
1:B:57:ALA:O	1:B:75:LYS:HD3	2.12	0.50
1:C:498:PRO:HG2	1:C:501:VAL:HG22	1.94	0.50
1:E:73:LEU:CD2	1:F:47:PRO:HD2	2.42	0.50
1:G:215:GLU:O	1:G:216:ASP:C	2.53	0.50
1:I:84:VAL:HG12	1:I:84:VAL:O	2.11	0.50
1:I:218:PHE:HB3	1:I:316:LEU:HG	1.93	0.50
1:J:141:ARG:HH11	1:J:166:GLU:HG3	1.77	0.50
1:M:43:LYS:HG2	1:N:525:GLU:HG3	1.94	0.50
1:M:168:VAL:CG1	1:M:173:ILE:H	2.24	0.50
2:O:21:GLU:CD	2:O:21:GLU:H	2.20	0.50
1:a:350:LYS:CG	1:b:208:GLU:CD	2.85	0.50
1:c:124:VAL:O	1:c:128:VAL:HG23	2.11	0.50
1:g:18:ARG:HD2	1:g:67:GLU:OE2	2.12	0.50
1:h:232:LEU:O	1:h:232:LEU:HD23	2.12	0.50
1:i:239:VAL:HG22	1:i:313:LEU:CD1	2.42	0.50
1:k:194:PHE:CB	1:k:278:PRO:HB3	2.42	0.50
1:k:455:ALA:HB1	1:k:465:ILE:HD12	1.94	0.50
1:m:25:ASN:HA	1:m:28:LYS:HE2	1.92	0.50
1:m:175:THR:HG22	1:m:176:VAL:N	2.25	0.50
2:t:48:VAL:HG13	2:t:62:LEU:CD1	2.42	0.50
1:E:348:ILE:HD13	1:E:367:ARG:HB3	1.93	0.49
1:E:450:PRO:O	1:E:454:ILE:HG13	2.11	0.49
1:F:466:VAL:HG12	1:F:470:LEU:HD12	1.94	0.49
1:G:66:LEU:CD2	1:G:522:VAL:HG11	2.37	0.49
1:H:410:ILE:CD1	1:H:496:VAL:HG11	2.35	0.49
1:I:168:VAL:HG21	1:I:376:ALA:HB2	1.93	0.49
1:I:207:PRO:O	1:I:210:MET:HE3	2.12	0.49
1:L:481:ASN:HD21	1:L:484:THR:HG23	1.76	0.49
1:N:222:VAL:HG12	1:N:223:GLU:H	1.76	0.49
2:O:10:PRO:HA	2:U:97:ALA:HB2	1.94	0.49
2:O:84:GLY:HA3	2:U:27:LYS:HD3	1.93	0.49
2:P:80:ILE:CG2	2:P:81:GLU:N	2.73	0.49
2:Q:45:VAL:HG21	2:Q:64:VAL:CG1	2.41	0.49
2:Q:54:LEU:HD11	2:R:57:GLY:HA2	1.94	0.49
1:d:118:ARG:O	1:d:122:LYS:HG3	2.12	0.49
1:e:194:PHE:CE1	1:e:329:THR:HB	2.47	0.49
1:f:96:ALA:O	1:f:100:VAL:HG23	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:157:VAL:O	1:f:161:ILE:HG12	2.12	0.49
1:h:7:VAL:HG21	1:h:66:LEU:CD1	2.39	0.49
1:i:306:PHE:CE2	1:i:315:MET:HE1	2.46	0.49
1:j:168:VAL:HG11	1:j:173:ILE:N	2.27	0.49
1:m:175:THR:CG2	1:m:177:GLU:OE2	2.60	0.49
1:m:218:PHE:HE1	1:m:242:THR:HG21	1.76	0.49
1:n:65:HIS:HD2	1:n:527:PRO:HG3	1.77	0.49
1:n:234:PRO:HG3	1:n:309:GLU:CA	2.38	0.49
2:r:33:PRO:HG2	2:r:36:ALA:CB	2.42	0.49
1:B:128:VAL:HG13	1:B:503:ARG:HG3	1.94	0.49
1:B:168:VAL:HG21	1:B:376:ALA:HB2	1.93	0.49
1:B:418:LEU:HD12	1:B:418:LEU:H	1.77	0.49
1:C:142:LYS:HE2	1:C:146:GLU:OE2	2.11	0.49
1:H:18:ARG:HD2	1:H:67:GLU:OE1	2.12	0.49
1:H:178:GLU:CD	1:H:392:LYS:HE3	2.36	0.49
1:J:74:LEU:HA	1:J:512:ILE:CD1	2.41	0.49
1:L:222:VAL:HG12	1:L:223:GLU:H	1.77	0.49
1:M:526:LYS:HG3	1:M:527:PRO:HD2	1.94	0.49
1:N:123:ALA:HB2	1:N:440:ALA:HA	1.94	0.49
1:N:283:ARG:HD3	1:N:363:LYS:CE	2.41	0.49
2:T:14:ARG:HH11	2:T:14:ARG:HG3	1.77	0.49
1:b:416:VAL:HG21	1:b:479:GLY:HA3	1.94	0.49
1:e:50:THR:CG2	1:e:51:LYS:H	2.10	0.49
1:g:10:GLU:N	1:g:13:ARG:NH1	2.61	0.49
1:g:124:VAL:O	1:g:128:VAL:HG23	2.12	0.49
1:g:465:ILE:HD13	1:g:480:PHE:CE2	2.48	0.49
1:h:218:PHE:HB3	1:h:316:LEU:HG	1.93	0.49
1:i:322:VAL:HG22	1:i:331:ILE:HG12	1.94	0.49
1:j:40:LEU:HD12	1:j:40:LEU:N	2.27	0.49
1:j:84:VAL:HG12	1:j:84:VAL:O	2.12	0.49
1:k:25:ASN:HA	1:k:28:LYS:HE2	1.94	0.49
1:k:207:PRO:O	1:k:210:MET:HE3	2.12	0.49
1:k:222:VAL:CG1	1:k:223:GLU:N	2.75	0.49
1:l:127:ALA:O	1:l:131:ILE:HG13	2.12	0.49
1:l:290:ASP:N	1:l:344:ARG:NH1	2.60	0.49
2:p:44:LYS:HA	2:p:68:ASP:O	2.13	0.49
2:s:89:ILE:HG22	2:s:89:ILE:O	2.12	0.49
2:u:41:GLN:H	2:u:41:GLN:CD	2.20	0.49
1:A:4:LYS:HG3	1:B:59:GLU:O	2.12	0.49
1:A:157:VAL:HG22	1:A:395:PHE:CZ	2.47	0.49
1:A:477:ARG:HH11	1:A:477:ARG:HG3	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:168:VAL:HG12	1:B:168:VAL:O	2.11	0.49
1:B:270:LEU:HG	1:B:272:VAL:HG13	1.92	0.49
1:C:280:PHE:O	1:C:281:GLY:C	2.55	0.49
1:D:193:GLN:HB3	1:D:330:THR:HG23	1.95	0.49
1:F:233:LEU:HD23	2:T:30:ILE:CD1	2.42	0.49
1:G:54:VAL:HG22	1:G:89:THR:HG21	1.94	0.49
1:G:179:SER:HB2	1:G:379:ARG:HB3	1.94	0.49
1:H:411:VAL:O	1:H:496:VAL:HG13	2.13	0.49
1:I:128:VAL:HA	1:I:131:ILE:HD12	1.94	0.49
1:I:306:PHE:CE2	1:I:315:MET:HE1	2.48	0.49
1:J:283:ARG:HD3	1:J:363:LYS:HZ1	1.76	0.49
1:K:307:LYS:HB3	1:K:309:GLU:OE1	2.12	0.49
1:L:123:ALA:HB2	1:L:440:ALA:HA	1.94	0.49
1:M:40:LEU:HD12	1:M:40:LEU:N	2.27	0.49
1:M:307:LYS:HE3	1:M:310:ASN:HD21	1.75	0.49
2:R:80:ILE:CG2	2:R:81:GLU:N	2.76	0.49
2:U:17:VAL:HG12	2:U:18:LYS:N	2.27	0.49
1:b:54:VAL:HG11	1:b:79:SER:HA	1.93	0.49
1:b:225:LYS:HD3	1:b:254:GLU:OE1	2.12	0.49
1:b:477:ARG:HH11	1:b:477:ARG:HG3	1.76	0.49
1:c:51:LYS:O	1:c:51:LYS:HG2	2.12	0.49
1:c:150:ILE:CD1	1:c:496:VAL:H	2.25	0.49
1:d:6:LEU:HD22	1:d:523:VAL:HG22	1.94	0.49
1:e:229:VAL:HG23	1:e:256:GLU:CG	2.41	0.49
1:g:364:LEU:O	1:g:368:LEU:HB2	2.12	0.49
1:h:228:ASN:HB3	1:h:231:GLU:HG2	1.93	0.49
1:i:307:LYS:HE3	1:i:310:ASN:HD21	1.76	0.49
1:k:95:LEU:O	1:k:99:ILE:HG13	2.12	0.49
1:k:168:VAL:CG1	1:k:173:ILE:H	2.24	0.49
1:k:218:PHE:HB3	1:k:316:LEU:HG	1.94	0.49
1:k:481:ASN:HD21	1:k:484:THR:HG23	1.78	0.49
1:l:146:GLU:O	1:l:150:ILE:HG13	2.12	0.49
1:m:247:LEU:HD22	1:m:322:VAL:CG1	2.41	0.49
2:q:11:LEU:HB2	2:q:14:ARG:NH1	2.27	0.49
2:s:21:GLU:O	2:s:21:GLU:HG2	2.11	0.49
1:B:142:LYS:HE2	1:B:146:GLU:OE2	2.13	0.49
1:C:284:ARG:O	1:C:288:LEU:HG	2.12	0.49
1:H:194:PHE:CG	1:H:278:PRO:HB3	2.47	0.49
1:I:267:ARG:O	1:J:256:GLU:HG3	2.13	0.49
1:J:449:GLU:HB2	1:J:450:PRO:HD3	1.93	0.49
1:J:450:PRO:O	1:J:454:ILE:HG13	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:372:ALA:O	1:K:374:GLY:N	2.42	0.49
1:L:114:LEU:O	1:L:118:ARG:HG3	2.13	0.49
1:L:290:ASP:N	1:L:344:ARG:NH1	2.60	0.49
1:M:239:VAL:HG22	1:M:313:LEU:CD1	2.43	0.49
1:M:283:ARG:HH21	1:M:367:ARG:CD	2.25	0.49
1:M:518:THR:O	1:M:518:THR:HG22	2.12	0.49
2:P:100:GLN:CB	2:Q:9:LYS:HE2	2.42	0.49
2:Q:52:ARG:HH21	2:R:53:VAL:CG1	2.25	0.49
1:c:18:ARG:HD2	1:c:67:GLU:OE2	2.12	0.49
1:e:51:LYS:NZ	4:e:602:ADP:O1A	2.45	0.49
1:f:229:VAL:HG23	1:f:256:GLU:CD	2.38	0.49
1:h:194:PHE:CG	1:h:278:PRO:HB3	2.47	0.49
1:j:292:ALA:HB1	1:j:297:GLY:O	2.13	0.49
1:k:168:VAL:HG21	1:k:376:ALA:HB2	1.94	0.49
1:k:283:ARG:NH1	1:k:363:LYS:HG3	2.28	0.49
1:l:307:LYS:HE3	1:l:310:ASN:HD21	1.77	0.49
1:m:342:GLU:HA	1:m:345:ILE:HD12	1.93	0.49
2:o:100:GLN:OE1	2:p:9:LYS:HE2	2.12	0.49
2:q:91:SER:OG	2:q:93:ARG:NH1	2.46	0.49
1:A:417:THR:HG23	1:A:418:LEU:HD12	1.95	0.49
1:B:6:LEU:HD22	1:B:523:VAL:HG22	1.94	0.49
1:B:279:GLY:C	1:B:284:ARG:HB3	2.37	0.49
1:D:25:ASN:HA	1:D:28:LYS:HG2	1.93	0.49
1:E:194:PHE:CD1	1:E:196:LYS:HB2	2.48	0.49
1:E:392:LYS:O	1:E:396:GLU:HG3	2.11	0.49
1:E:498:PRO:HG2	1:E:501:VAL:HG22	1.94	0.49
1:F:54:VAL:HG11	1:F:79:SER:HA	1.94	0.49
1:F:179:SER:HB2	1:F:379:ARG:HB3	1.95	0.49
1:G:230:ARG:O	1:G:234:PRO:HD2	2.13	0.49
1:G:325:THR:HG22	1:G:326:LYS:N	2.28	0.49
1:K:40:LEU:HD12	1:K:40:LEU:N	2.28	0.49
1:K:229:VAL:CG2	1:K:256:GLU:HB3	2.40	0.49
1:L:141:ARG:NH1	1:L:166:GLU:HG3	2.27	0.49
1:L:269:THR:HA	1:M:256:GLU:HG3	1.92	0.49
1:M:178:GLU:O	1:M:321:ARG:CZ	2.60	0.49
1:N:7:VAL:HG21	1:N:66:LEU:CD1	2.42	0.49
2:P:30:ILE:HG22	2:P:30:ILE:O	2.12	0.49
2:S:14:ARG:HH11	2:S:14:ARG:CG	2.23	0.49
1:a:29:VAL:HG13	1:g:520:GLU:HG2	1.94	0.49
1:a:229:VAL:HG23	1:a:256:GLU:OE2	2.12	0.49
1:b:417:THR:HG23	1:b:418:LEU:HD12	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:222:VAL:HA	1:c:300:ILE:HB	1.92	0.49
1:c:284:ARG:O	1:c:288:LEU:HG	2.13	0.49
1:d:472:GLU:HB3	1:d:478:TYR:CD2	2.47	0.49
1:i:283:ARG:HH22	1:i:364:LEU:HA	1.77	0.49
1:j:218:PHE:HB3	1:j:316:LEU:HG	1.95	0.49
1:l:175:THR:HG22	1:l:176:VAL:N	2.26	0.49
1:m:28:LYS:NZ	1:m:97:GLN:HE22	2.11	0.49
1:m:84:VAL:HG12	1:m:84:VAL:O	2.13	0.49
1:m:228:ASN:HD21	1:m:230:ARG:HB3	1.77	0.49
2:p:50:THR:CG2	2:p:59:ARG:HD3	2.43	0.49
2:u:45:VAL:CG2	2:u:70:VAL:HG13	2.41	0.49
1:A:14:ARG:NH1	1:A:17:GLU:OE1	2.46	0.49
1:A:29:VAL:HG11	1:G:520:GLU:HB3	1.93	0.49
1:B:304:LEU:HD11	1:C:262:VAL:HG11	1.94	0.49
1:B:417:THR:HG23	1:B:418:LEU:HD12	1.94	0.49
1:C:72:GLN:NE2	1:C:75:LYS:NZ	2.59	0.49
1:C:312:THR:HB	1:C:314:SER:OG	2.12	0.49
1:D:150:ILE:HD12	1:D:496:VAL:H	1.76	0.49
1:E:224:LYS:CE	1:E:301:SER:HA	2.35	0.49
1:E:468:GLN:O	1:E:471:ALA:HB3	2.12	0.49
1:F:425:VAL:O	1:F:429:ILE:HG13	2.13	0.49
1:G:72:GLN:NE2	1:G:75:LYS:NZ	2.60	0.49
1:J:325:THR:CG2	1:J:327:ASP:H	2.04	0.49
1:K:337:LYS:HB2	1:K:340:ASP:OD2	2.12	0.49
1:L:168:VAL:HG11	1:L:173:ILE:N	2.27	0.49
1:L:496:VAL:HG12	1:L:497:ASP:N	2.26	0.49
1:N:218:PHE:HB3	1:N:316:LEU:HG	1.93	0.49
2:O:78:THR:HG22	2:O:79:GLU:N	2.26	0.49
2:P:100:GLN:OE1	2:Q:9:LYS:HE2	2.13	0.49
2:S:13:ASP:OD1	2:S:13:ASP:C	2.56	0.49
2:S:22:GLU:OE1	2:S:22:GLU:N	2.39	0.49
2:S:81:GLU:HA	2:S:86:GLU:HA	1.93	0.49
2:U:45:VAL:HG21	2:U:64:VAL:CG1	2.40	0.49
1:a:142:LYS:O	1:a:146:GLU:HG3	2.13	0.49
1:b:6:LEU:HD22	1:b:523:VAL:HG22	1.93	0.49
1:c:157:VAL:HG22	1:c:395:PHE:CZ	2.47	0.49
1:d:217:ALA:HB2	1:d:245:PRO:HB2	1.93	0.49
1:d:222:VAL:O	1:d:250:ALA:HA	2.13	0.49
1:d:287:MET:O	1:d:291:ILE:HG13	2.11	0.49
1:f:218:PHE:CE1	1:f:242:THR:HG21	2.48	0.49
1:f:417:THR:HG23	1:f:418:LEU:HD12	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:460:TYR:HB3	1:f:465:ILE:HD11	1.95	0.49
1:g:245:PRO:HA	1:g:271:SER:OG	2.12	0.49
1:i:232:LEU:HD23	1:i:236:LEU:HB2	1.95	0.49
1:k:518:THR:O	1:k:518:THR:HG22	2.12	0.49
1:m:297:GLY:HA3	1:m:317:GLY:N	2.27	0.49
2:r:18:LYS:HZ1	2:r:85:GLU:CD	2.20	0.49
1:A:383:ALA:O	1:G:80:LYS:HE2	2.13	0.49
1:B:157:VAL:HG22	1:B:395:PHE:CZ	2.48	0.49
1:I:7:VAL:HG21	1:I:66:LEU:CD1	2.41	0.49
1:K:77:VAL:O	1:K:80:LYS:HG2	2.13	0.49
1:c:72:GLN:HE22	1:c:75:LYS:HZ1	1.61	0.49
1:c:294:VAL:O	1:c:336:GLY:N	2.46	0.49
1:d:14:ARG:NH1	1:d:17:GLU:OE1	2.46	0.49
1:d:218:PHE:O	1:d:246:LEU:HD12	2.12	0.49
1:e:369:ALA:O	1:e:375:VAL:HG21	2.12	0.49
1:e:477:ARG:HH11	1:e:477:ARG:HG3	1.77	0.49
1:f:465:ILE:HD13	1:f:480:PHE:CE2	2.47	0.49
1:f:472:GLU:HB3	1:f:478:TYR:CD2	2.47	0.49
1:g:287:MET:HE1	1:g:370:LYS:HZ1	1.77	0.49
1:j:168:VAL:HG21	1:j:376:ALA:HB2	1.95	0.49
1:k:295:THR:HG22	1:k:317:GLY:HA3	1.94	0.49
1:l:168:VAL:HG11	1:l:173:ILE:N	2.25	0.49
1:m:283:ARG:HD3	1:m:363:LYS:HE3	1.95	0.49
1:n:6:LEU:CD2	1:n:523:VAL:HG22	2.42	0.49
1:n:455:ALA:HB1	1:n:465:ILE:HD12	1.95	0.49
2:t:22:GLU:OE2	2:t:40:PRO:HD3	2.12	0.49
2:u:82:ILE:N	2:u:85:GLU:O	2.45	0.49
1:A:529:LYS:HZ1	1:B:63:GLU:HB2	1.78	0.49
1:B:220:LEU:HG	1:B:222:VAL:HG23	1.94	0.49
1:F:31:LEU:HB2	1:F:90:THR:HG21	1.95	0.49
1:G:118:ARG:O	1:G:122:LYS:HG3	2.13	0.49
1:I:123:ALA:HB2	1:I:440:ALA:HA	1.94	0.49
1:K:151:SER:HB2	1:K:398:ALA:HA	1.94	0.49
1:K:161:ILE:O	1:K:165:MET:HG3	2.13	0.49
1:N:65:HIS:O	1:N:69:ILE:HG13	2.12	0.49
2:O:44:LYS:HA	2:O:68:ASP:O	2.12	0.49
1:a:77:VAL:HG23	1:a:512:ILE:HG13	1.94	0.49
1:b:234:PRO:O	1:b:238:GLN:HG3	2.11	0.49
1:c:345:ILE:HD12	1:c:371:LEU:O	2.13	0.49
1:d:287:MET:O	1:d:290:ASP:HB2	2.13	0.49
1:e:149:THR:HG23	1:e:155:PRO:CA	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:287:MET:O	1:e:291:ILE:HG13	2.12	0.49
1:f:301:SER:HB2	1:f:304:LEU:HB3	1.94	0.49
1:h:194:PHE:CB	1:h:278:PRO:HB3	2.43	0.49
1:i:222:VAL:HG12	1:i:223:GLU:H	1.78	0.49
1:l:232:LEU:HD23	1:l:236:LEU:HB2	1.94	0.49
1:n:179:SER:CB	1:n:379:ARG:HB3	2.37	0.49
1:n:224:LYS:HG2	1:n:225:LYS:H	1.74	0.49
2:q:93:ARG:O	2:r:14:ARG:NH2	2.46	0.49
1:A:101:ARG:CG	1:A:102:GLU:N	2.76	0.49
1:A:345:ILE:C	1:A:347:GLY:H	2.19	0.49
1:A:411:VAL:HB	1:A:412:PRO:HD2	1.94	0.49
1:A:425:VAL:O	1:A:429:ILE:HG13	2.13	0.49
1:B:349:LYS:C	1:B:351:GLU:N	2.71	0.49
1:D:225:LYS:O	1:D:226:VAL:HG23	2.13	0.49
1:E:10:GLU:N	1:E:13:ARG:HH12	2.11	0.49
1:F:50:THR:CG2	1:F:51:LYS:H	2.11	0.49
1:F:168:VAL:HG21	1:F:376:ALA:HB2	1.94	0.49
1:G:526:LYS:CG	1:G:527:PRO:HD2	2.43	0.49
1:J:207:PRO:O	1:J:210:MET:HE3	2.13	0.49
1:J:234:PRO:HG3	1:J:309:GLU:CA	2.38	0.49
1:J:458:ALA:C	1:K:114:LEU:CD1	2.85	0.49
1:K:168:VAL:CG1	1:K:173:ILE:H	2.24	0.49
1:K:226:VAL:HG11	1:K:232:LEU:HD12	1.95	0.49
1:M:84:VAL:HG12	1:M:84:VAL:O	2.13	0.49
1:M:168:VAL:HG21	1:M:376:ALA:HB2	1.95	0.49
1:M:385:GLU:O	1:M:389:LYS:HG3	2.13	0.49
2:O:71:VAL:HG23	2:O:99:LEU:HD13	1.94	0.49
2:P:100:GLN:CG	2:Q:9:LYS:HE2	2.42	0.49
1:a:242:THR:HG22	1:a:244:LYS:HG2	1.94	0.49
1:a:359:TYR:CE2	1:a:363:LYS:CE	2.95	0.49
1:b:220:LEU:HG	1:b:222:VAL:HG23	1.94	0.49
1:b:498:PRO:HG2	1:b:501:VAL:HG22	1.93	0.49
1:c:425:VAL:O	1:c:429:ILE:HG13	2.13	0.49
1:c:468:GLN:O	1:c:471:ALA:HB3	2.13	0.49
1:d:25:ASN:HA	1:d:28:LYS:HG2	1.94	0.49
1:d:95:LEU:O	1:d:99:ILE:HG13	2.13	0.49
1:d:161:ILE:HD12	1:d:399:LEU:HD21	1.95	0.49
1:d:198:TYR:CE1	1:d:326:LYS:HA	2.48	0.49
1:d:250:ALA:O	1:d:251:GLU:C	2.56	0.49
1:d:368:LEU:HD12	1:d:368:LEU:O	2.12	0.49
1:f:149:THR:HG23	1:f:155:PRO:CA	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:284:ARG:O	1:f:288:LEU:HG	2.13	0.49
1:j:385:GLU:HB2	1:k:280:PHE:CE2	2.47	0.49
1:l:161:ILE:O	1:l:165:MET:HG3	2.13	0.49
2:o:18:LYS:NZ	2:o:85:GLU:CD	2.70	0.49
2:r:48:VAL:HG12	2:r:62:LEU:HD12	1.93	0.49
2:s:80:ILE:CG2	2:s:81:GLU:N	2.76	0.49
2:s:81:GLU:HA	2:s:85:GLU:O	2.12	0.49
1:A:144:ILE:CD1	1:A:165:MET:HG2	2.43	0.49
1:A:234:PRO:O	1:A:238:GLN:HG3	2.13	0.49
1:B:465:ILE:HD13	1:B:480:PHE:CD2	2.48	0.49
1:D:270:LEU:HG	1:D:272:VAL:HG13	1.94	0.49
1:E:136:ILE:HD11	1:E:477:ARG:NH2	2.28	0.49
1:E:175:THR:HB	1:E:377:VAL:HG22	1.95	0.49
1:E:199:ILE:HG23	1:E:276:LYS:HZ2	1.78	0.49
1:F:165:MET:HE3	1:F:402:THR:CG2	2.43	0.49
1:G:6:LEU:CD2	1:G:523:VAL:HG22	2.43	0.49
1:J:25:ASN:HA	1:J:28:LYS:HE2	1.95	0.49
1:J:161:ILE:O	1:J:165:MET:HG3	2.13	0.49
1:J:345:ILE:HG22	1:J:349:LYS:HE3	1.95	0.49
1:J:352:LEU:HD21	1:J:365:GLN:HE22	1.78	0.49
1:L:526:LYS:HG3	1:L:527:PRO:CD	2.43	0.49
1:N:39:VAL:C	1:N:40:LEU:HD12	2.38	0.49
1:N:283:ARG:HH22	1:N:364:LEU:HA	1.77	0.49
1:N:411:VAL:O	1:N:496:VAL:HG13	2.13	0.49
2:U:78:THR:HG22	2:U:80:ILE:HD11	1.94	0.49
2:U:81:GLU:HG3	2:U:85:GLU:C	2.38	0.49
1:a:205:THR:HB	1:a:213:VAL:H	1.78	0.49
1:e:74:LEU:HD21	1:e:93:THR:CG2	2.43	0.49
1:e:256:GLU:OE1	2:s:35:THR:C	2.55	0.49
1:e:325:THR:HG22	1:e:326:LYS:N	2.25	0.49
1:f:52:ASP:OD1	1:f:54:VAL:HG23	2.12	0.49
1:g:227:SER:HB3	1:g:254:GLU:CG	2.40	0.49
1:h:4:LYS:HG3	1:n:59:GLU:O	2.12	0.49
1:h:123:ALA:HB2	1:h:440:ALA:HA	1.94	0.49
1:i:187:LYS:HZ2	1:i:379:ARG:HG3	1.76	0.49
1:k:363:LYS:O	1:k:366:GLU:HG2	2.12	0.49
1:l:41:GLU:HB3	1:m:69:ILE:HD11	1.94	0.49
1:n:259:ALA:O	1:n:263:VAL:HG23	2.13	0.49
2:o:84:GLY:CA	2:u:27:LYS:HD2	2.26	0.49
2:p:81:GLU:HA	2:p:85:GLU:O	2.13	0.49
2:q:17:VAL:HG23	2:q:88:VAL:HB	1.93	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:50:THR:HA	1:B:390:GLU:OE1	2.13	0.48
1:B:247:LEU:HD22	1:B:322:VAL:HG11	1.94	0.48
1:C:168:VAL:HG21	1:C:376:ALA:HB2	1.95	0.48
1:D:361:ARG:O	1:D:365:GLN:HB2	2.13	0.48
1:D:448:GLU:OE1	1:D:452:ARG:NH2	2.46	0.48
1:E:149:THR:CG2	1:E:155:PRO:HA	2.40	0.48
1:E:194:PHE:HD1	1:E:196:LYS:HB2	1.78	0.48
1:G:416:VAL:HG21	1:G:479:GLY:HA3	1.94	0.48
1:H:142:LYS:O	1:H:146:GLU:HG3	2.13	0.48
1:H:522:VAL:HA	1:N:39:VAL:O	2.13	0.48
1:I:219:ILE:O	1:I:221:ILE:HG13	2.12	0.48
1:I:228:ASN:HB3	1:I:231:GLU:HG2	1.95	0.48
1:I:416:VAL:HG21	1:I:490:MET:HG3	1.94	0.48
1:J:518:THR:O	1:J:518:THR:HG22	2.12	0.48
1:K:372:ALA:C	1:K:374:GLY:N	2.69	0.48
1:L:375:VAL:O	1:L:375:VAL:HG12	2.13	0.48
1:M:295:THR:HG22	1:M:317:GLY:HA3	1.94	0.48
1:N:118:ARG:O	1:N:122:LYS:HG3	2.13	0.48
2:R:33:PRO:C	2:R:35:THR:H	2.20	0.48
1:a:465:ILE:HD13	1:a:480:PHE:CE2	2.48	0.48
1:b:352:LEU:C	1:b:354:THR:H	2.21	0.48
1:d:198:TYR:O	1:d:198:TYR:HD1	1.96	0.48
1:d:425:VAL:O	1:d:429:ILE:HG13	2.12	0.48
1:f:72:GLN:HE22	1:f:75:LYS:HZ1	1.60	0.48
1:f:498:PRO:HG2	1:f:501:VAL:HG22	1.95	0.48
1:k:232:LEU:HD23	1:k:236:LEU:HB2	1.95	0.48
1:l:84:VAL:HG12	1:l:84:VAL:O	2.13	0.48
1:m:232:LEU:HD23	1:m:236:LEU:HB2	1.95	0.48
1:m:253:VAL:HG11	1:m:261:LEU:HD12	1.94	0.48
1:m:408:GLU:OE1	1:m:500:LYS:HA	2.13	0.48
1:A:37:ASN:ND2	1:G:518:THR:OG1	2.46	0.48
1:A:431:LYS:HG3	1:A:431:LYS:O	2.12	0.48
1:B:25:ASN:HA	1:B:28:LYS:HG2	1.94	0.48
1:B:141:ARG:NH2	1:B:163:ASP:OD1	2.42	0.48
1:B:210:MET:HA	1:B:210:MET:HE2	1.94	0.48
1:B:264:ASN:HB3	1:B:269:THR:HB	1.95	0.48
1:C:408:GLU:OE1	1:C:503:ARG:NH2	2.46	0.48
1:D:118:ARG:O	1:D:122:LYS:HG3	2.13	0.48
1:D:222:VAL:HB	1:D:250:ALA:HB2	1.94	0.48
1:D:349:LYS:C	1:D:351:GLU:H	2.19	0.48
1:E:227:SER:CB	1:E:254:GLU:HG3	2.31	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:352:LEU:HD21	1:E:365:GLN:CG	2.42	0.48
1:E:477:ARG:HH11	1:E:477:ARG:HG3	1.79	0.48
1:F:232:LEU:HD23	1:F:308:LEU:HD21	1.94	0.48
1:G:445:ARG:CZ	1:G:452:ARG:HH21	2.25	0.48
1:I:161:ILE:O	1:I:165:MET:HG3	2.14	0.48
1:K:178:GLU:CD	1:K:392:LYS:HE3	2.38	0.48
1:M:222:VAL:HG12	1:M:223:GLU:H	1.77	0.48
1:M:253:VAL:HG11	1:M:261:LEU:HD12	1.95	0.48
2:Q:17:VAL:HG12	2:Q:18:LYS:N	2.29	0.48
2:Q:96:LEU:HD23	2:R:14:ARG:HE	1.78	0.48
1:a:18:ARG:HD2	1:a:67:GLU:OE2	2.13	0.48
1:a:157:VAL:HG22	1:a:395:PHE:CZ	2.48	0.48
1:b:72:GLN:HE22	1:b:75:LYS:HZ1	1.59	0.48
1:b:144:ILE:CD1	1:b:165:MET:HG2	2.43	0.48
1:b:239:VAL:HG11	1:b:246:LEU:HB2	1.95	0.48
1:d:72:GLN:NE2	1:d:75:LYS:NZ	2.61	0.48
1:d:199:ILE:HG22	1:d:199:ILE:O	2.12	0.48
1:f:359:TYR:CZ	1:f:363:LYS:HE2	2.48	0.48
1:g:341:ILE:C	1:g:343:ALA:N	2.70	0.48
1:i:218:PHE:HE1	1:i:242:THR:HG21	1.78	0.48
1:k:217:ALA:HB2	1:k:245:PRO:CG	2.27	0.48
1:l:50:THR:CG2	1:l:52:ASP:H	2.11	0.48
1:l:194:PHE:CG	1:l:278:PRO:HB3	2.48	0.48
1:m:222:VAL:HG12	1:m:223:GLU:H	1.76	0.48
1:n:168:VAL:HG11	1:n:173:ILE:N	2.27	0.48
1:n:421:ALA:O	1:n:425:VAL:HG23	2.13	0.48
1:n:452:ARG:HG2	1:n:452:ARG:NH1	2.28	0.48
2:q:56:ASN:HD22	2:q:56:ASN:N	2.10	0.48
1:A:142:LYS:HE2	1:A:146:GLU:OE2	2.13	0.48
1:C:417:THR:HG23	1:C:418:LEU:HD12	1.95	0.48
1:D:10:GLU:N	1:D:13:ARG:NH1	2.61	0.48
1:D:222:VAL:HG22	1:D:300:ILE:HD12	1.94	0.48
1:H:4:LYS:HG3	1:N:59:GLU:O	2.13	0.48
1:H:312:THR:C	1:H:314:SER:N	2.71	0.48
1:J:390:GLU:OE1	1:J:394:ARG:NH1	2.46	0.48
1:K:233:LEU:O	1:K:237:GLU:HB2	2.14	0.48
1:K:325:THR:CG2	1:K:326:LYS:N	2.76	0.48
1:N:81:THR:OG1	1:N:508:ASN:ND2	2.46	0.48
1:N:366:GLU:O	1:N:370:LYS:HG3	2.13	0.48
2:O:52:ARG:O	2:O:52:ARG:HG3	2.12	0.48
2:Q:49:GLY:O	2:Q:62:LEU:HD11	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:95:LEU:O	1:a:99:ILE:HG13	2.13	0.48
1:c:404:ALA:HB1	1:c:500:LYS:HB3	1.95	0.48
1:j:168:VAL:CG1	1:j:173:ILE:H	2.26	0.48
1:k:136:ILE:HB	1:k:410:ILE:CG1	2.43	0.48
1:l:40:LEU:HD12	1:l:40:LEU:N	2.28	0.48
1:l:132:LYS:C	1:l:134:LEU:H	2.21	0.48
1:n:462:GLY:O	1:n:466:VAL:HG23	2.13	0.48
2:o:54:LEU:HD13	2:p:55:GLU:C	2.37	0.48
2:p:99:LEU:HD21	2:q:82:ILE:HD13	1.94	0.48
2:s:18:LYS:HE3	2:s:86:GLU:O	2.14	0.48
2:t:79:GLU:HA	2:t:87:TYR:O	2.13	0.48
1:A:198:TYR:O	1:A:198:TYR:HD1	1.96	0.48
1:C:150:ILE:CD1	1:C:496:VAL:H	2.26	0.48
1:D:359:TYR:OH	1:D:363:LYS:HE3	2.14	0.48
1:E:147:VAL:HG23	1:E:410:ILE:HD11	1.95	0.48
1:F:25:ASN:HA	1:F:28:LYS:HG2	1.94	0.48
1:F:72:GLN:NE2	1:F:75:LYS:NZ	2.59	0.48
1:K:79:SER:C	1:K:81:THR:N	2.72	0.48
1:L:194:PHE:CG	1:L:278:PRO:HB3	2.48	0.48
1:M:39:VAL:O	1:N:522:VAL:HA	2.13	0.48
1:N:7:VAL:HG12	1:N:12:ALA:HB2	1.95	0.48
1:N:120:ILE:HG23	1:N:443:VAL:CG2	2.43	0.48
2:P:21:GLU:C	2:P:22:GLU:O	2.54	0.48
2:R:53:VAL:HG22	2:R:59:ARG:CG	2.42	0.48
2:S:81:GLU:HA	2:S:85:GLU:O	2.13	0.48
2:U:13:ASP:CA	2:U:62:LEU:HD21	2.43	0.48
1:e:14:ARG:NH1	1:e:17:GLU:OE1	2.46	0.48
1:f:10:GLU:N	1:f:13:ARG:NH1	2.60	0.48
1:f:168:VAL:HG12	1:f:168:VAL:O	2.13	0.48
1:g:224:LYS:HD2	1:g:224:LYS:N	2.29	0.48
1:h:385:GLU:HB2	1:i:280:PHE:CD2	2.48	0.48
1:l:416:VAL:HG21	1:l:479:GLY:HA3	1.94	0.48
1:l:449:GLU:HB2	1:l:450:PRO:HD3	1.95	0.48
1:m:47:PRO:HB3	1:n:69:ILE:HG23	1.94	0.48
1:m:283:ARG:NH2	1:m:367:ARG:CD	2.76	0.48
1:n:232:LEU:HD23	1:n:236:LEU:HB2	1.95	0.48
2:u:48:VAL:HG12	2:u:62:LEU:HD12	1.93	0.48
2:u:79:GLU:HG2	2:u:88:VAL:HG12	1.95	0.48
1:C:235:ILE:CG1	1:C:311:ALA:HB3	2.43	0.48
1:D:284:ARG:HH11	1:D:284:ARG:HG3	1.79	0.48
1:D:300:ILE:HG22	1:D:300:ILE:O	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:229:VAL:HG23	1:E:256:GLU:HG3	1.95	0.48
1:E:237:GLU:HG2	2:S:30:ILE:HD12	1.96	0.48
1:F:288:LEU:HD23	1:F:291:ILE:HD12	1.95	0.48
1:F:416:VAL:HG21	1:F:490:MET:HG3	1.96	0.48
1:I:141:ARG:HH11	1:I:166:GLU:HG3	1.77	0.48
1:K:71:ALA:O	1:K:75:LYS:HG3	2.13	0.48
1:L:180:LYS:O	1:M:281:GLY:CA	2.61	0.48
1:N:84:VAL:HG12	1:N:500:LYS:CE	2.42	0.48
1:N:452:ARG:HG2	1:N:452:ARG:HH11	1.77	0.48
2:R:46:ILE:O	2:R:46:ILE:HG22	2.12	0.48
1:a:468:GLN:O	1:a:471:ALA:HB3	2.14	0.48
1:b:204:VAL:HG13	1:b:211:GLU:O	2.13	0.48
1:c:294:VAL:HG23	1:c:295:THR:N	2.28	0.48
1:e:229:VAL:HG23	1:e:256:GLU:HG3	1.95	0.48
1:f:445:ARG:CZ	1:f:452:ARG:HH21	2.26	0.48
1:g:363:LYS:HA	1:g:366:GLU:OE2	2.12	0.48
1:g:417:THR:HG23	1:g:418:LEU:HD12	1.94	0.48
1:h:69:ILE:O	1:h:73:LEU:HB2	2.13	0.48
1:h:168:VAL:CG1	1:h:173:ILE:H	2.25	0.48
1:h:226:VAL:HG11	1:h:232:LEU:HD12	1.96	0.48
1:h:259:ALA:O	1:h:263:VAL:HG23	2.14	0.48
1:i:168:VAL:HG11	1:i:173:ILE:N	2.28	0.48
1:l:295:THR:HG22	1:l:317:GLY:HA3	1.95	0.48
1:n:168:VAL:CG1	1:n:173:ILE:H	2.25	0.48
2:o:17:VAL:HG12	2:o:18:LYS:N	2.28	0.48
2:p:11:LEU:O	2:p:13:ASP:N	2.47	0.48
2:q:15:VAL:HG22	2:q:62:LEU:HD13	1.94	0.48
2:t:16:VAL:HB	2:t:47:ALA:HB3	1.96	0.48
1:A:6:LEU:HD22	1:A:523:VAL:HG22	1.95	0.48
1:A:23:VAL:CG1	1:A:74:LEU:HD23	2.43	0.48
1:A:80:LYS:HE2	1:B:383:ALA:O	2.14	0.48
1:A:240:ALA:HA	1:A:270:LEU:HD13	1.96	0.48
1:B:416:VAL:HG21	1:B:490:MET:HG3	1.96	0.48
1:C:149:THR:HG23	1:C:155:PRO:CA	2.44	0.48
1:D:242:THR:HG22	1:D:244:LYS:HG2	1.94	0.48
1:F:519:THR:HG23	1:G:39:VAL:HG23	1.96	0.48
1:G:101:ARG:CG	1:G:102:GLU:N	2.76	0.48
1:G:287:MET:O	1:G:291:ILE:HG13	2.13	0.48
1:G:410:ILE:HD11	1:G:496:VAL:HG21	1.94	0.48
1:H:283:ARG:CZ	1:H:363:LYS:HG3	2.44	0.48
1:J:385:GLU:HB2	1:K:280:PHE:CD2	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:39:VAL:C	1:K:40:LEU:HD12	2.39	0.48
1:K:123:ALA:HB2	1:K:440:ALA:HA	1.96	0.48
1:L:6:LEU:HD23	1:L:523:VAL:HG22	1.94	0.48
2:O:79:GLU:HG2	2:O:88:VAL:HG22	1.95	0.48
2:S:13:ASP:OD1	2:S:92:GLU:HB2	2.14	0.48
1:a:457:ASN:HD22	1:a:457:ASN:N	2.12	0.48
1:a:465:ILE:HD13	1:a:480:PHE:CD2	2.49	0.48
1:b:323:ARG:HG2	1:b:323:ARG:HH11	1.77	0.48
1:c:7:VAL:HG12	1:c:12:ALA:HB2	1.95	0.48
1:d:345:ILE:HG23	1:d:368:LEU:CD1	2.43	0.48
1:e:50:THR:HA	1:e:390:GLU:OE1	2.13	0.48
1:f:69:ILE:HG23	1:g:47:PRO:HG3	1.95	0.48
1:f:503:ARG:O	1:f:507:GLN:HG3	2.13	0.48
1:g:460:TYR:HB3	1:g:465:ILE:HD11	1.95	0.48
1:g:498:PRO:HG2	1:g:501:VAL:CG2	2.43	0.48
1:h:120:ILE:HG23	1:h:443:VAL:CG2	2.44	0.48
1:i:300:ILE:O	1:i:300:ILE:HG22	2.12	0.48
1:i:390:GLU:OE1	1:i:394:ARG:NH1	2.47	0.48
1:j:295:THR:HG22	1:j:317:GLY:CA	2.44	0.48
1:l:194:PHE:CB	1:l:278:PRO:HB3	2.44	0.48
1:l:253:VAL:O	1:l:258:LEU:HD22	2.14	0.48
2:p:17:VAL:CG1	2:p:43:GLY:HA3	2.43	0.48
2:t:38:GLU:O	2:t:39:LYS:C	2.56	0.48
2:u:8:ILE:CG2	2:u:9:LYS:N	2.77	0.48
1:A:247:LEU:HD13	1:A:324:ILE:HD11	1.95	0.48
1:D:30:THR:O	1:D:35:GLY:HA3	2.12	0.48
1:E:118:ARG:O	1:E:122:LYS:HG3	2.14	0.48
1:G:503:ARG:O	1:G:507:GLN:HG3	2.14	0.48
1:H:65:HIS:O	1:H:69:ILE:HG13	2.13	0.48
1:H:295:THR:HG22	1:H:317:GLY:HA3	1.95	0.48
1:I:28:LYS:NZ	1:I:97:GLN:HE22	2.11	0.48
1:I:175:THR:CG2	1:I:177:GLU:OE2	2.61	0.48
1:I:437:ALA:O	1:I:441:LYS:HG3	2.14	0.48
1:J:71:ALA:O	1:J:75:LYS:HG3	2.14	0.48
1:J:95:LEU:O	1:J:99:ILE:HG13	2.13	0.48
1:J:481:ASN:HD21	1:J:484:THR:HG23	1.79	0.48
1:K:239:VAL:HG22	1:K:313:LEU:CD1	2.44	0.48
1:L:168:VAL:CG1	1:L:173:ILE:H	2.26	0.48
1:L:416:VAL:HG21	1:L:479:GLY:HA3	1.95	0.48
1:M:132:LYS:C	1:M:134:LEU:H	2.22	0.48
1:N:360:ALA:O	1:N:364:LEU:HD13	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:80:ILE:CG2	2:O:81:GLU:N	2.77	0.48
2:P:45:VAL:HG21	2:P:64:VAL:CG1	2.43	0.48
2:R:22:GLU:OE1	2:R:22:GLU:N	2.38	0.48
1:a:173:ILE:HD11	1:a:365:GLN:HG3	1.96	0.48
1:a:323:ARG:HG2	1:a:323:ARG:NH1	2.28	0.48
1:b:150:ILE:O	1:b:153:ASN:N	2.43	0.48
1:b:264:ASN:HB3	1:b:269:THR:HB	1.95	0.48
1:c:72:GLN:NE2	1:c:75:LYS:NZ	2.62	0.48
1:c:157:VAL:O	1:c:161:ILE:HG12	2.13	0.48
1:d:128:VAL:HG13	1:d:503:ARG:HG3	1.95	0.48
1:e:6:LEU:CD2	1:e:523:VAL:HG22	2.43	0.48
1:e:210:MET:HA	1:e:210:MET:HE2	1.95	0.48
1:f:392:LYS:O	1:f:396:GLU:HG3	2.14	0.48
1:h:7:VAL:HG12	1:h:12:ALA:HB2	1.95	0.48
1:h:197:GLY:HA3	1:h:325:THR:O	2.14	0.48
1:i:28:LYS:NZ	1:i:97:GLN:HE22	2.10	0.48
1:i:123:ALA:HB2	1:i:440:ALA:HA	1.94	0.48
1:i:146:GLU:O	1:i:150:ILE:HG13	2.12	0.48
1:i:410:ILE:CD1	1:i:496:VAL:HG11	2.38	0.48
1:j:283:ARG:HH12	1:j:363:LYS:HB2	1.77	0.48
1:k:117:LYS:O	1:k:121:GLU:HG3	2.13	0.48
1:k:171:GLU:OE1	1:k:366:GLU:HB3	2.14	0.48
1:n:194:PHE:CG	1:n:278:PRO:HB3	2.48	0.48
1:n:194:PHE:CB	1:n:278:PRO:HB3	2.44	0.48
2:o:80:ILE:CG2	2:o:81:GLU:N	2.76	0.48
2:s:96:LEU:HA	2:t:14:ARG:NH1	2.29	0.48
1:B:229:VAL:HG23	1:B:256:GLU:OE2	2.13	0.48
1:D:14:ARG:NH1	1:D:17:GLU:OE1	2.47	0.48
1:E:157:VAL:O	1:E:161:ILE:HG12	2.13	0.48
1:F:287:MET:O	1:F:290:ASP:HB2	2.13	0.48
1:G:498:PRO:HG2	1:G:501:VAL:HG22	1.96	0.48
1:I:40:LEU:HD12	1:I:40:LEU:N	2.28	0.48
1:M:228:ASN:HB3	1:M:231:GLU:HG2	1.96	0.48
1:N:132:LYS:C	1:N:134:LEU:H	2.21	0.48
2:O:17:VAL:HG12	2:O:18:LYS:N	2.29	0.48
2:U:81:GLU:CG	2:U:85:GLU:H	2.27	0.48
1:a:220:LEU:HD13	1:a:235:ILE:HD12	1.95	0.48
1:c:202:TYR:HD2	1:c:266:LEU:HD21	1.78	0.48
1:c:248:ILE:CD1	1:c:261:LEU:HD21	2.41	0.48
1:e:144:ILE:CD1	1:e:165:MET:HG2	2.43	0.48
1:e:307:LYS:HB2	1:e:310:ASN:HD22	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:95:LEU:O	1:f:99:ILE:HG13	2.14	0.48
1:f:320:GLU:HB3	1:f:333:GLY:HA3	1.95	0.48
1:g:6:LEU:CD2	1:g:523:VAL:HG22	2.43	0.48
1:h:84:VAL:HG12	1:h:84:VAL:O	2.13	0.48
1:h:161:ILE:O	1:h:165:MET:HG3	2.13	0.48
1:h:283:ARG:NH2	1:h:367:ARG:CD	2.62	0.48
1:i:226:VAL:CG1	1:i:232:LEU:HD12	2.44	0.48
1:k:194:PHE:N	1:k:194:PHE:CD2	2.82	0.48
1:m:307:LYS:HB2	1:m:310:ASN:ND2	2.28	0.48
2:q:16:VAL:CG1	2:q:46:ILE:HD12	2.43	0.48
2:q:56:ASN:N	2:q:56:ASN:ND2	2.60	0.48
2:s:14:ARG:HH11	2:s:14:ARG:CG	2.25	0.48
2:u:19:ARG:NH2	2:u:39:LYS:HB3	2.29	0.48
1:A:246:LEU:CB	1:A:272:VAL:HG12	2.37	0.48
1:C:277:ALA:O	1:C:278:PRO:O	2.32	0.48
1:D:161:ILE:HD12	1:D:399:LEU:CD2	2.44	0.48
1:D:247:LEU:HD13	1:D:324:ILE:HD11	1.95	0.48
1:F:198:TYR:CE1	1:F:326:LYS:HA	2.49	0.48
1:F:232:LEU:HB3	1:F:236:LEU:HD11	1.95	0.48
1:G:54:VAL:HG11	1:G:79:SER:HA	1.96	0.48
1:G:344:ARG:HA	1:G:344:ARG:HD2	1.60	0.48
1:J:372:ALA:C	1:J:374:GLY:H	2.20	0.48
1:K:84:VAL:HG12	1:K:84:VAL:O	2.14	0.48
1:L:239:VAL:HG22	1:L:313:LEU:CD1	2.44	0.48
1:N:6:LEU:CD2	1:N:523:VAL:HG22	2.44	0.48
1:a:25:ASN:HA	1:a:28:LYS:HG2	1.96	0.48
1:b:25:ASN:HA	1:b:28:LYS:HG2	1.96	0.48
1:b:168:VAL:HG21	1:b:376:ALA:HB2	1.95	0.48
1:c:101:ARG:CG	1:c:102:GLU:N	2.75	0.48
1:e:199:ILE:HD12	1:e:274:ALA:HB1	1.96	0.48
1:f:477:ARG:HG3	1:f:477:ARG:HH11	1.78	0.48
1:g:144:ILE:HD12	1:g:165:MET:HG2	1.96	0.48
1:g:360:ALA:O	1:g:364:LEU:HG	2.14	0.48
1:h:141:ARG:HH11	1:h:166:GLU:HG3	1.78	0.48
1:j:234:PRO:HG3	1:j:309:GLU:CA	2.36	0.48
1:l:123:ALA:HB2	1:l:440:ALA:HA	1.95	0.48
1:l:175:THR:CG2	1:l:177:GLU:OE2	2.62	0.48
1:m:69:ILE:O	1:m:73:LEU:HB2	2.13	0.48
2:o:18:LYS:NZ	2:o:85:GLU:OE1	2.46	0.48
2:t:10:PRO:HB2	2:t:14:ARG:CB	2.44	0.48
1:C:54:VAL:HG11	1:C:79:SER:HA	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:237:GLU:O	1:E:238:GLN:C	2.57	0.48
1:E:284:ARG:O	1:E:288:LEU:HG	2.13	0.48
1:H:79:SER:C	1:H:81:THR:N	2.72	0.48
1:H:222:VAL:CG1	1:H:223:GLU:N	2.77	0.48
1:J:312:THR:C	1:J:314:SER:N	2.71	0.48
1:L:131:ILE:HD13	1:L:502:THR:HG22	1.95	0.48
1:N:168:VAL:HG12	1:N:172:GLY:CA	2.37	0.48
1:N:168:VAL:HG21	1:N:376:ALA:HB2	1.94	0.48
1:N:222:VAL:CG1	1:N:223:GLU:N	2.76	0.48
1:N:259:ALA:O	1:N:263:VAL:HG23	2.14	0.48
1:N:462:GLY:O	1:N:466:VAL:HG23	2.14	0.48
2:S:62:LEU:C	2:S:64:VAL:H	2.21	0.48
1:a:54:VAL:HG11	1:a:79:SER:HA	1.96	0.48
1:a:250:ALA:O	1:a:252:ASP:N	2.47	0.48
1:b:303:GLU:O	1:c:259:ALA:HA	2.14	0.48
1:c:14:ARG:NH1	1:c:17:GLU:OE1	2.47	0.48
1:c:265:LYS:HD2	1:c:271:SER:HA	1.96	0.48
1:d:150:ILE:CD1	1:d:496:VAL:H	2.27	0.48
1:f:6:LEU:CD2	1:f:523:VAL:HG22	2.44	0.48
1:f:218:PHE:HE1	1:f:244:LYS:HB2	1.78	0.48
1:f:410:ILE:HD11	1:f:496:VAL:CG2	2.44	0.48
1:g:281:GLY:O	1:g:284:ARG:HG2	2.14	0.48
1:i:40:LEU:HD12	1:i:40:LEU:N	2.28	0.48
1:i:84:VAL:HG12	1:i:84:VAL:O	2.14	0.48
1:k:30:THR:HB	1:k:51:LYS:O	2.13	0.48
1:l:59:GLU:OE1	1:m:4:LYS:NZ	2.34	0.48
1:m:146:GLU:O	1:m:150:ILE:HG13	2.13	0.48
1:n:141:ARG:HH11	1:n:166:GLU:HG3	1.77	0.48
1:n:178:GLU:OE2	1:n:392:LYS:HE3	2.14	0.48
1:n:222:VAL:CG1	1:n:223:GLU:N	2.77	0.48
2:q:90:LEU:H	2:q:90:LEU:CD2	2.19	0.48
2:r:11:LEU:O	2:r:13:ASP:N	2.47	0.48
2:r:50:THR:HG22	2:r:51:GLY:O	2.13	0.48
2:u:17:VAL:CG2	2:u:70:VAL:HG21	2.44	0.48
1:A:217:ALA:HB2	1:A:245:PRO:HB2	1.95	0.47
1:A:261:LEU:HD22	1:A:272:VAL:HG21	1.96	0.47
1:B:144:ILE:CD1	1:B:165:MET:HG2	2.44	0.47
1:D:344:ARG:HA	1:D:344:ARG:HD2	1.66	0.47
1:E:245:PRO:HA	1:E:271:SER:OG	2.14	0.47
1:H:84:VAL:HG12	1:H:84:VAL:O	2.13	0.47
1:I:50:THR:CG2	1:I:52:ASP:H	2.10	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:218:PHE:HE1	1:I:242:THR:HG21	1.78	0.47
1:J:258:LEU:O	1:J:262:VAL:HG23	2.14	0.47
1:K:79:SER:O	1:K:81:THR:N	2.47	0.47
1:L:24:ALA:O	1:L:28:LYS:HG2	2.13	0.47
1:L:458:ALA:O	1:M:114:LEU:CD1	2.62	0.47
1:L:526:LYS:O	1:L:527:PRO:C	2.56	0.47
1:M:168:VAL:HG12	1:M:172:GLY:CA	2.33	0.47
2:O:80:ILE:CG1	2:U:41:GLN:OE1	2.62	0.47
2:P:17:VAL:CG1	2:P:43:GLY:HA3	2.44	0.47
2:P:79:GLU:O	2:P:80:ILE:HG13	2.13	0.47
1:b:218:PHE:O	1:b:246:LEU:HD12	2.13	0.47
1:d:477:ARG:HH11	1:d:477:ARG:HG3	1.79	0.47
1:e:349:LYS:C	1:e:351:GLU:N	2.71	0.47
1:f:178:GLU:CG	1:f:388:LEU:HD21	2.43	0.47
1:g:144:ILE:CD1	1:g:165:MET:HG2	2.44	0.47
1:g:190:GLU:OE2	1:g:190:GLU:HA	2.13	0.47
1:g:410:ILE:HD11	1:g:496:VAL:HG21	1.96	0.47
1:i:312:THR:C	1:i:314:SER:N	2.72	0.47
1:j:146:GLU:O	1:j:150:ILE:HG13	2.13	0.47
1:j:297:GLY:HA3	1:j:317:GLY:N	2.28	0.47
1:l:7:VAL:HG21	1:l:66:LEU:CD1	2.41	0.47
1:n:187:LYS:HZ2	1:n:379:ARG:HG3	1.79	0.47
1:A:460:TYR:HB3	1:A:465:ILE:HD11	1.95	0.47
1:B:136:ILE:CD1	1:B:477:ARG:HH21	2.27	0.47
1:F:224:LYS:HB3	1:F:302:GLU:OE1	2.14	0.47
1:F:359:TYR:CZ	1:F:363:LYS:HE2	2.49	0.47
1:F:410:ILE:HD11	1:F:496:VAL:HG21	1.96	0.47
1:H:120:ILE:HG23	1:H:443:VAL:CG2	2.44	0.47
1:I:297:GLY:HA3	1:I:317:GLY:N	2.28	0.47
1:L:128:VAL:HA	1:L:131:ILE:HD12	1.95	0.47
1:L:263:VAL:O	1:L:267:ARG:HB2	2.14	0.47
1:N:526:LYS:HD2	1:N:527:PRO:HD2	1.93	0.47
1:a:29:VAL:HG11	1:g:520:GLU:HB3	1.96	0.47
1:a:149:THR:CG2	1:a:155:PRO:HA	2.41	0.47
1:a:173:ILE:HG13	1:a:365:GLN:HG3	1.96	0.47
1:a:250:ALA:C	1:a:252:ASP:N	2.70	0.47
1:a:352:LEU:C	1:a:354:THR:H	2.23	0.47
1:b:229:VAL:HG12	1:b:233:LEU:CD1	2.43	0.47
1:c:23:VAL:CG1	1:c:74:LEU:HD23	2.43	0.47
1:d:3:ALA:HB1	1:d:529:LYS:HZ3	1.64	0.47
1:d:80:LYS:HE2	1:e:383:ALA:O	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:503:ARG:O	1:e:507:GLN:HG3	2.14	0.47
1:f:54:VAL:HG11	1:f:79:SER:HA	1.96	0.47
1:f:150:ILE:CD1	1:f:496:VAL:H	2.27	0.47
1:f:466:VAL:HG12	1:f:470:LEU:HD12	1.96	0.47
1:h:283:ARG:HD3	1:h:363:LYS:HZ1	1.76	0.47
1:i:295:THR:HG22	1:i:317:GLY:HA3	1.96	0.47
1:j:416:VAL:HG21	1:j:479:GLY:HA3	1.96	0.47
1:k:283:ARG:HA	1:k:283:ARG:HD2	1.65	0.47
1:k:283:ARG:HD3	1:k:363:LYS:NZ	2.28	0.47
1:k:449:GLU:HB2	1:k:450:PRO:HD3	1.96	0.47
1:l:81:THR:OG1	1:l:508:ASN:ND2	2.47	0.47
1:l:180:LYS:HB2	1:m:281:GLY:HA2	1.90	0.47
1:l:297:GLY:HA3	1:l:317:GLY:N	2.29	0.47
1:n:161:ILE:O	1:n:165:MET:HG3	2.14	0.47
1:n:218:PHE:HB3	1:n:316:LEU:HG	1.95	0.47
2:o:85:GLU:OE1	2:o:85:GLU:HA	2.14	0.47
2:p:80:ILE:CG2	2:p:81:GLU:N	2.77	0.47
2:t:80:ILE:HD12	2:t:80:ILE:N	2.28	0.47
1:B:6:LEU:CD2	1:B:523:VAL:HG22	2.45	0.47
1:C:6:LEU:CD2	1:C:523:VAL:HG22	2.44	0.47
1:D:159:LYS:HE2	1:D:163:ASP:OD2	2.14	0.47
1:D:215:GLU:O	1:D:216:ASP:C	2.57	0.47
1:D:265:LYS:HA	1:D:270:LEU:O	2.13	0.47
1:E:251:GLU:O	1:E:252:ASP:HB2	2.14	0.47
1:F:6:LEU:HD22	1:F:523:VAL:HG22	1.96	0.47
1:I:363:LYS:O	1:I:366:GLU:HG2	2.15	0.47
1:J:28:LYS:HZ2	1:J:97:GLN:HE22	1.63	0.47
1:K:6:LEU:HD23	1:K:523:VAL:HG22	1.96	0.47
1:K:65:HIS:O	1:K:69:ILE:HG13	2.14	0.47
1:K:146:GLU:O	1:K:150:ILE:HG13	2.14	0.47
1:K:298:THR:N	1:K:315:MET:O	2.47	0.47
1:M:206:ASN:HD21	1:M:389:LYS:HE2	1.80	0.47
2:O:56:ASN:HB2	2:O:58:GLN:HG3	1.96	0.47
2:P:81:GLU:HA	2:P:86:GLU:HA	1.96	0.47
2:Q:10:PRO:HB2	2:Q:14:ARG:O	2.14	0.47
1:b:422:ILE:HD12	1:b:470:LEU:HD21	1.96	0.47
1:c:25:ASN:HA	1:c:28:LYS:HG2	1.96	0.47
1:e:201:PRO:O	1:e:204:VAL:HG23	2.14	0.47
1:f:7:VAL:CG2	1:f:66:LEU:HD11	2.31	0.47
1:g:192:TYR:C	1:g:192:TYR:CD2	2.92	0.47
1:g:498:PRO:HG2	1:g:501:VAL:HG22	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:283:ARG:HD3	1:h:363:LYS:CE	2.44	0.47
1:j:194:PHE:CB	1:j:278:PRO:HB3	2.45	0.47
1:j:197:GLY:HA3	1:j:325:THR:O	2.14	0.47
1:k:50:THR:HG21	1:k:55:THR:HB	1.96	0.47
1:k:450:PRO:O	1:k:454:ILE:HG13	2.13	0.47
1:l:259:ALA:O	1:l:263:VAL:HG23	2.14	0.47
1:m:49:ILE:O	1:m:49:ILE:HG13	2.14	0.47
1:m:127:ALA:O	1:m:131:ILE:HG13	2.14	0.47
1:m:194:PHE:CG	1:m:278:PRO:HB3	2.49	0.47
1:m:247:LEU:HD13	1:m:324:ILE:HD11	1.97	0.47
1:m:385:GLU:O	1:m:389:LYS:HG3	2.14	0.47
1:m:481:ASN:HD21	1:m:484:THR:HG23	1.78	0.47
2:t:18:LYS:HZ1	2:t:85:GLU:CD	2.22	0.47
2:t:20:ILE:O	2:t:21:GLU:C	2.56	0.47
2:t:80:ILE:O	2:t:86:GLU:HA	2.14	0.47
2:u:12:GLY:O	2:u:13:ASP:HB3	2.14	0.47
1:A:344:ARG:HA	1:A:344:ARG:HD2	1.67	0.47
1:D:465:ILE:HD13	1:D:480:PHE:CE2	2.50	0.47
1:G:37:ASN:HB3	1:G:50:THR:O	2.14	0.47
1:H:127:ALA:O	1:H:131:ILE:HG13	2.14	0.47
1:K:168:VAL:CG2	1:K:376:ALA:HB2	2.44	0.47
1:K:312:THR:C	1:K:314:SER:N	2.72	0.47
1:L:232:LEU:HD23	1:L:236:LEU:HB2	1.96	0.47
1:M:118:ARG:O	1:M:122:LYS:HG3	2.14	0.47
1:N:69:ILE:O	1:N:73:LEU:HB2	2.14	0.47
1:N:325:THR:HG22	1:N:327:ASP:N	2.04	0.47
2:R:96:LEU:O	2:S:14:ARG:HD3	2.14	0.47
1:a:161:ILE:HD12	1:a:399:LEU:HD21	1.96	0.47
1:b:229:VAL:HG23	1:b:256:GLU:CD	2.40	0.47
1:b:312:THR:OG1	1:b:315:MET:HE3	2.15	0.47
1:d:144:ILE:CD1	1:d:165:MET:HG2	2.44	0.47
1:d:144:ILE:HD12	1:d:165:MET:HG2	1.95	0.47
1:e:345:ILE:HG23	1:e:368:LEU:HD13	1.95	0.47
1:g:248:ILE:HD12	1:g:261:LEU:CD2	2.43	0.47
1:i:228:ASN:ND2	1:i:230:ARG:HB3	2.27	0.47
1:j:316:LEU:O	1:j:316:LEU:HD23	2.15	0.47
1:k:168:VAL:CG2	1:k:376:ALA:HB2	2.45	0.47
1:k:189:VAL:HG12	1:k:190:GLU:N	2.28	0.47
1:k:226:VAL:CG1	1:k:232:LEU:HD12	2.43	0.47
1:m:6:LEU:CD2	1:m:523:VAL:HG22	2.44	0.47
1:m:123:ALA:HB2	1:m:440:ALA:HA	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:q:62:LEU:C	2:q:64:VAL:H	2.22	0.47
2:r:21:GLU:CD	2:r:21:GLU:H	2.23	0.47
2:t:69:ILE:HB	2:t:99:LEU:CB	2.33	0.47
2:u:48:VAL:HG13	2:u:62:LEU:HD12	1.97	0.47
1:A:10:GLU:N	1:A:13:ARG:NH1	2.62	0.47
1:A:95:LEU:O	1:A:99:ILE:HG13	2.15	0.47
1:A:144:ILE:HD12	1:A:165:MET:HG2	1.96	0.47
1:A:224:LYS:HB3	1:A:302:GLU:OE1	2.13	0.47
1:B:149:THR:HG23	1:B:155:PRO:CA	2.41	0.47
1:B:343:ALA:HA	1:C:210:MET:HE1	1.94	0.47
1:C:418:LEU:HD12	1:C:418:LEU:H	1.79	0.47
1:F:118:ARG:O	1:F:122:LYS:HG3	2.15	0.47
1:F:465:ILE:HD13	1:F:480:PHE:CE2	2.49	0.47
1:H:194:PHE:CB	1:H:278:PRO:HB3	2.45	0.47
1:H:228:ASN:HB3	1:H:231:GLU:HG2	1.96	0.47
1:I:372:ALA:C	1:I:374:GLY:H	2.22	0.47
1:J:363:LYS:O	1:J:366:GLU:HG2	2.14	0.47
1:K:300:ILE:HG21	1:K:308:LEU:CD2	2.42	0.47
1:K:462:GLY:O	1:K:466:VAL:HG23	2.14	0.47
1:L:475:ASN:C	1:L:475:ASN:OD1	2.57	0.47
1:M:194:PHE:CG	1:M:278:PRO:HB3	2.50	0.47
1:N:19:GLY:HA3	1:N:67:GLU:O	2.14	0.47
2:O:13:ASP:HB2	2:O:62:LEU:CD2	2.44	0.47
2:Q:8:ILE:HD12	2:Q:8:ILE:H	1.78	0.47
2:T:44:LYS:HA	2:T:68:ASP:O	2.13	0.47
2:T:50:THR:CG2	2:T:59:ARG:HD3	2.45	0.47
1:c:178:GLU:CG	1:c:388:LEU:HD21	2.44	0.47
1:c:465:ILE:HD13	1:c:480:PHE:CD2	2.50	0.47
1:d:518:THR:OG1	1:e:37:ASN:ND2	2.45	0.47
1:f:468:GLN:O	1:f:471:ALA:HB3	2.14	0.47
1:g:267:ARG:NH1	1:g:267:ARG:HG3	2.28	0.47
1:g:307:LYS:HB3	1:g:310:ASN:HD22	1.79	0.47
1:h:54:VAL:HG22	1:h:89:THR:CG2	2.44	0.47
1:h:81:THR:OG1	1:h:508:ASN:ND2	2.48	0.47
1:h:118:ARG:O	1:h:122:LYS:HG3	2.14	0.47
1:j:6:LEU:CD2	1:j:523:VAL:HG22	2.45	0.47
1:j:131:ILE:HD13	1:j:502:THR:HG22	1.96	0.47
1:j:375:VAL:HG12	1:j:375:VAL:O	2.14	0.47
1:k:7:VAL:HG21	1:k:66:LEU:CD1	2.41	0.47
1:m:385:GLU:HB2	1:n:280:PHE:CD2	2.49	0.47
1:m:416:VAL:HG21	1:m:479:GLY:HA3	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:79:SER:C	1:n:81:THR:N	2.72	0.47
2:q:80:ILE:CG1	2:q:81:GLU:H	2.26	0.47
1:D:150:ILE:HG22	1:D:151:SER:N	2.28	0.47
1:E:265:LYS:HD3	1:E:272:VAL:H	1.80	0.47
1:F:289:LYS:O	1:F:292:ALA:HB3	2.15	0.47
1:F:520:GLU:HG2	1:G:29:VAL:HG13	1.96	0.47
1:H:178:GLU:OE2	1:H:392:LYS:HE3	2.15	0.47
1:J:146:GLU:O	1:J:150:ILE:HG13	2.14	0.47
1:L:194:PHE:CB	1:L:278:PRO:HB3	2.44	0.47
2:R:8:ILE:CG2	2:R:16:VAL:HG21	2.42	0.47
2:T:62:LEU:C	2:T:64:VAL:H	2.21	0.47
1:a:201:PRO:O	1:a:204:VAL:HG23	2.15	0.47
1:a:361:ARG:O	1:a:365:GLN:HB2	2.14	0.47
1:a:372:ALA:C	1:a:374:GLY:H	2.22	0.47
1:b:465:ILE:HD13	1:b:480:PHE:CE2	2.48	0.47
1:e:168:VAL:HG12	1:e:168:VAL:O	2.13	0.47
1:e:265:LYS:HA	1:e:270:LEU:O	2.14	0.47
1:f:101:ARG:CG	1:f:102:GLU:N	2.78	0.47
1:g:7:VAL:HG12	1:g:12:ALA:HB2	1.96	0.47
1:g:503:ARG:O	1:g:507:GLN:HG3	2.14	0.47
1:h:168:VAL:HG12	1:h:172:GLY:CA	2.35	0.47
1:h:372:ALA:O	1:h:374:GLY:N	2.39	0.47
1:i:74:LEU:HA	1:i:512:ILE:HD11	1.96	0.47
1:i:290:ASP:N	1:i:344:ARG:NH1	2.63	0.47
1:j:168:VAL:CG2	1:j:376:ALA:HB2	2.45	0.47
1:k:161:ILE:O	1:k:165:MET:HG3	2.15	0.47
1:l:120:ILE:HG23	1:l:443:VAL:CG2	2.44	0.47
1:m:161:ILE:O	1:m:165:MET:HG3	2.15	0.47
1:m:316:LEU:H	1:m:316:LEU:HD23	1.79	0.47
1:m:425:VAL:O	1:m:429:ILE:HG13	2.14	0.47
1:n:168:VAL:HG21	1:n:376:ALA:HB2	1.97	0.47
2:r:54:LEU:HD21	2:s:55:GLU:CA	2.32	0.47
2:t:51:GLY:HA2	2:t:62:LEU:HD21	1.97	0.47
1:A:40:LEU:HD13	1:A:59:GLU:HG3	1.96	0.47
1:A:149:THR:HG23	1:A:155:PRO:CA	2.43	0.47
1:A:203:PHE:HA	1:A:265:LYS:HE3	1.97	0.47
1:A:351:GLU:OE2	1:B:326:LYS:NZ	2.38	0.47
1:A:359:TYR:OH	1:A:363:LYS:HE3	2.15	0.47
1:A:360:ALA:O	1:A:364:LEU:HG	2.15	0.47
1:B:52:ASP:OD1	1:B:54:VAL:HG23	2.14	0.47
1:B:54:VAL:HG13	1:B:89:THR:HG21	1.95	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:127:ALA:O	1:B:131:ILE:HG13	2.14	0.47
1:B:284:ARG:O	1:B:288:LEU:HG	2.14	0.47
1:B:289:LYS:O	1:B:292:ALA:HB3	2.15	0.47
1:B:290:ASP:HB3	1:B:371:LEU:HD21	1.97	0.47
1:C:101:ARG:CG	1:C:102:GLU:N	2.78	0.47
1:C:161:ILE:HD12	1:C:399:LEU:CD2	2.45	0.47
1:E:6:LEU:HD22	1:E:523:VAL:HG22	1.96	0.47
1:E:54:VAL:CG2	1:E:89:THR:HG21	2.44	0.47
1:E:240:ALA:HB2	1:E:270:LEU:HD22	1.96	0.47
1:F:127:ALA:O	1:F:131:ILE:HG13	2.15	0.47
1:F:141:ARG:NH2	1:F:163:ASP:OD1	2.45	0.47
1:F:236:LEU:CB	2:T:30:ILE:HD11	2.44	0.47
1:G:367:ARG:C	1:G:369:ALA:H	2.23	0.47
1:H:226:VAL:CG1	1:H:232:LEU:HD12	2.43	0.47
1:H:390:GLU:OE1	1:H:394:ARG:NH1	2.48	0.47
1:I:345:ILE:HG22	1:I:349:LYS:HE3	1.97	0.47
1:K:114:LEU:O	1:K:118:ARG:HG3	2.14	0.47
1:K:222:VAL:CG1	1:K:223:GLU:N	2.78	0.47
1:K:425:VAL:O	1:K:429:ILE:HG13	2.15	0.47
1:L:84:VAL:HG12	1:L:84:VAL:O	2.15	0.47
1:L:194:PHE:CD2	1:L:194:PHE:N	2.82	0.47
1:M:28:LYS:NZ	1:M:97:GLN:HE22	2.12	0.47
1:M:228:ASN:ND2	1:M:230:ARG:HB3	2.25	0.47
1:N:300:ILE:O	1:N:300:ILE:HG22	2.14	0.47
2:O:9:LYS:HB2	2:U:98:VAL:O	2.14	0.47
2:O:10:PRO:HG2	2:O:49:GLY:HA2	1.97	0.47
2:P:84:GLY:O	2:P:85:GLU:HB2	2.14	0.47
2:U:21:GLU:CD	2:U:21:GLU:H	2.22	0.47
1:a:253:VAL:HG21	1:a:274:ALA:HB1	1.96	0.47
1:a:288:LEU:HA	1:a:291:ILE:HD12	1.95	0.47
1:b:179:SER:OG	1:b:180:LYS:N	2.48	0.47
1:b:340:ASP:O	1:b:344:ARG:HB2	2.15	0.47
1:c:149:THR:CG2	1:c:155:PRO:HA	2.41	0.47
1:c:224:LYS:HD2	1:c:224:LYS:N	2.28	0.47
1:c:417:THR:HG23	1:c:418:LEU:HD12	1.96	0.47
1:d:416:VAL:HG21	1:d:479:GLY:HA3	1.96	0.47
1:d:503:ARG:O	1:d:507:GLN:HG3	2.14	0.47
1:e:128:VAL:HA	1:e:131:ILE:HD12	1.96	0.47
1:e:199:ILE:O	1:e:199:ILE:HG22	2.14	0.47
1:e:293:ALA:HB1	1:e:340:ASP:HB3	1.95	0.47
1:e:352:LEU:C	1:e:354:THR:H	2.22	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:10:GLU:N	1:f:13:ARG:HH12	2.12	0.47
1:g:418:LEU:HD12	1:g:418:LEU:H	1.78	0.47
1:h:49:ILE:O	1:h:49:ILE:HG13	2.14	0.47
1:h:146:GLU:O	1:h:150:ILE:HG13	2.14	0.47
1:i:79:SER:O	1:i:81:THR:N	2.48	0.47
1:i:194:PHE:CG	1:i:278:PRO:HB3	2.49	0.47
1:i:253:VAL:HG11	1:i:261:LEU:HD12	1.95	0.47
1:i:259:ALA:O	1:i:263:VAL:HG23	2.15	0.47
1:i:481:ASN:HD21	1:i:484:THR:HG23	1.79	0.47
1:k:146:GLU:O	1:k:150:ILE:HG13	2.15	0.47
1:k:375:VAL:O	1:k:375:VAL:HG12	2.14	0.47
1:m:168:VAL:HG21	1:m:376:ALA:HB2	1.96	0.47
1:m:204:VAL:HG13	1:m:211:GLU:O	2.14	0.47
1:m:408:GLU:OE2	1:m:500:LYS:HG3	2.15	0.47
1:n:81:THR:OG1	1:n:508:ASN:ND2	2.47	0.47
1:n:239:VAL:HG22	1:n:313:LEU:CD1	2.45	0.47
2:p:33:PRO:C	2:p:35:THR:H	2.21	0.47
2:r:45:VAL:HG21	2:r:64:VAL:CG1	2.45	0.47
1:A:25:ASN:HA	1:A:28:LYS:HG2	1.97	0.47
1:C:301:SER:HB2	1:C:304:LEU:CB	2.45	0.47
1:D:232:LEU:HB3	1:D:236:LEU:CD1	2.45	0.47
1:E:25:ASN:HA	1:E:28:LYS:HG2	1.96	0.47
1:G:77:VAL:HG23	1:G:512:ILE:HG13	1.96	0.47
1:H:258:LEU:O	1:H:262:VAL:HG23	2.14	0.47
1:H:286:GLU:HG3	1:H:367:ARG:NH2	2.29	0.47
1:I:312:THR:C	1:I:314:SER:N	2.73	0.47
1:K:74:LEU:HA	1:K:512:ILE:HD13	1.96	0.47
1:K:224:LYS:CG	1:K:225:LYS:N	2.77	0.47
1:K:295:THR:HG22	1:K:317:GLY:CA	2.44	0.47
1:L:168:VAL:HG21	1:L:376:ALA:HB2	1.97	0.47
1:L:234:PRO:HG3	1:L:309:GLU:CA	2.37	0.47
1:L:449:GLU:O	1:L:450:PRO:C	2.58	0.47
1:L:496:VAL:HG12	1:L:497:ASP:H	1.80	0.47
1:M:5:ILE:HG23	1:M:5:ILE:O	2.15	0.47
1:M:168:VAL:CG2	1:M:376:ALA:HB2	2.45	0.47
1:N:146:GLU:O	1:N:150:ILE:HG13	2.14	0.47
1:N:219:ILE:O	1:N:221:ILE:HG13	2.15	0.47
1:N:449:GLU:HB2	1:N:450:PRO:HD3	1.97	0.47
2:Q:21:GLU:H	2:Q:21:GLU:CD	2.22	0.47
2:Q:81:GLU:C	2:Q:82:ILE:HG13	2.39	0.47
2:T:80:ILE:CG2	2:T:81:GLU:N	2.78	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:173:ILE:CD1	1:a:365:GLN:HG3	2.45	0.47
1:c:168:VAL:O	1:c:172:GLY:HA3	2.14	0.47
1:c:184:THR:HG23	1:c:380:VAL:HA	1.96	0.47
1:c:237:GLU:O	1:c:238:GLN:C	2.58	0.47
1:c:260:THR:HG22	1:c:264:ASN:ND2	2.30	0.47
1:e:54:VAL:HG11	1:e:79:SER:HA	1.97	0.47
1:e:289:LYS:O	1:e:292:ALA:HB3	2.15	0.47
1:f:425:VAL:O	1:f:429:ILE:HG13	2.14	0.47
1:g:10:GLU:N	1:g:13:ARG:HH12	2.12	0.47
1:g:294:VAL:O	1:g:336:GLY:N	2.47	0.47
1:h:79:SER:C	1:h:81:THR:N	2.73	0.47
1:h:233:LEU:N	1:h:234:PRO:HD2	2.30	0.47
1:h:450:PRO:O	1:h:454:ILE:HG13	2.15	0.47
1:i:168:VAL:HG21	1:i:376:ALA:HB2	1.96	0.47
1:j:181:SER:HA	1:k:282:ASP:OD2	2.14	0.47
1:j:452:ARG:HG2	1:j:452:ARG:NH1	2.29	0.47
1:k:253:VAL:O	1:k:258:LEU:HD22	2.15	0.47
1:m:411:VAL:O	1:m:496:VAL:HG13	2.15	0.47
2:o:56:ASN:HB2	2:o:58:GLN:HG3	1.97	0.47
2:s:5:LYS:CG	2:s:6:THR:N	2.71	0.47
1:A:222:VAL:HG22	1:A:300:ILE:HD12	1.95	0.47
1:B:152:ALA:HB2	1:B:398:ALA:HB2	1.97	0.47
1:B:184:THR:HG23	1:B:380:VAL:HA	1.96	0.47
1:D:167:LYS:HB2	1:D:188:PHE:CE2	2.49	0.47
1:D:360:ALA:O	1:D:364:LEU:HG	2.15	0.47
1:H:114:LEU:O	1:H:118:ARG:HG3	2.15	0.47
1:I:7:VAL:HG12	1:I:12:ALA:HB2	1.96	0.47
1:J:168:VAL:CG2	1:J:376:ALA:HB2	2.44	0.47
1:J:458:ALA:C	1:K:114:LEU:HD12	2.39	0.47
1:L:187:LYS:HZ2	1:L:379:ARG:HG3	1.79	0.47
1:M:128:VAL:HA	1:M:131:ILE:HD12	1.97	0.47
1:N:360:ALA:O	1:N:364:LEU:CD1	2.62	0.47
1:b:66:LEU:CD2	1:b:522:VAL:HG11	2.38	0.47
1:c:146:GLU:O	1:c:147:VAL:C	2.58	0.47
1:c:194:PHE:CD1	1:c:196:LYS:HB2	2.49	0.47
1:f:465:ILE:HD13	1:f:480:PHE:CD2	2.50	0.47
1:g:352:LEU:HD21	1:g:365:GLN:CG	2.45	0.47
1:h:79:SER:O	1:h:81:THR:N	2.48	0.47
1:h:282:ASP:OD2	1:n:181:SER:HA	2.15	0.47
1:j:194:PHE:CD2	1:j:194:PHE:N	2.83	0.47
1:m:114:LEU:O	1:m:118:ARG:HG3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:307:LYS:HB3	1:m:309:GLU:OE1	2.15	0.47
1:n:31:LEU:HD13	1:n:90:THR:HG22	1.96	0.47
1:n:316:LEU:O	1:n:316:LEU:HD23	2.15	0.47
2:o:38:GLU:OE1	2:o:74:LYS:NZ	2.40	0.47
2:p:91:SER:O	2:p:95:LEU:HG	2.13	0.47
2:r:32:LEU:CD2	2:r:33:PRO:HD2	2.45	0.47
1:A:237:GLU:CG	2:O:28:GLY:HA3	2.45	0.47
1:A:472:GLU:HB3	1:A:478:TYR:CD2	2.49	0.47
1:B:450:PRO:O	1:B:454:ILE:HG13	2.15	0.47
1:C:177:GLU:O	1:C:379:ARG:HA	2.15	0.47
1:C:349:LYS:C	1:C:351:GLU:N	2.69	0.47
1:E:417:THR:HG23	1:E:418:LEU:HD12	1.97	0.47
1:I:222:VAL:CG1	1:I:223:GLU:N	2.76	0.47
1:I:337:LYS:HB2	1:I:340:ASP:OD2	2.15	0.47
1:K:232:LEU:HD23	1:K:236:LEU:HB2	1.97	0.47
1:K:316:LEU:O	1:K:316:LEU:HD23	2.14	0.47
1:L:69:ILE:O	1:L:73:LEU:HB2	2.15	0.47
1:L:179:SER:CB	1:L:379:ARG:HB3	2.37	0.47
1:L:219:ILE:HD13	1:L:331:ILE:HD13	1.97	0.47
1:L:475:ASN:OD1	1:L:477:ARG:N	2.43	0.47
1:M:173:ILE:HD11	1:M:370:LYS:CG	2.45	0.47
1:M:173:ILE:HG13	1:M:370:LYS:HA	1.97	0.47
1:N:325:THR:CG2	1:N:326:LYS:N	2.78	0.47
2:O:54:LEU:HG	2:O:55:GLU:H	1.80	0.47
2:Q:81:GLU:HA	2:Q:86:GLU:HA	1.96	0.47
2:S:38:GLU:HG3	2:S:74:LYS:HZ2	1.79	0.47
2:U:25:LYS:HG2	2:U:31:VAL:HG22	1.97	0.47
1:b:465:ILE:HD13	1:b:480:PHE:CD2	2.50	0.47
1:b:478:TYR:CE1	1:b:487:PHE:HB3	2.50	0.47
1:c:465:ILE:HD13	1:c:480:PHE:CE2	2.48	0.47
1:e:179:SER:HB2	1:e:379:ARG:HB3	1.97	0.47
1:f:290:ASP:O	1:f:294:VAL:HG23	2.15	0.47
1:f:498:PRO:HG2	1:f:501:VAL:CG2	2.45	0.47
1:g:101:ARG:CG	1:g:102:GLU:N	2.78	0.47
1:g:142:LYS:O	1:g:146:GLU:HG3	2.15	0.47
1:i:178:GLU:CD	1:i:392:LYS:HE3	2.40	0.47
1:l:224:LYS:CG	1:l:225:LYS:N	2.78	0.47
1:l:462:GLY:O	1:l:466:VAL:HG23	2.15	0.47
1:m:135:ALA:O	1:m:137:PRO:HD3	2.15	0.47
1:m:207:PRO:O	1:m:210:MET:HE3	2.15	0.47
2:q:71:VAL:C	2:q:72:PHE:HD2	2.23	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:9:ASP:C	1:B:13:ARG:NH1	2.73	0.46
1:B:189:VAL:HG12	1:B:190:GLU:N	2.30	0.46
1:B:373:GLY:O	1:B:374:GLY:C	2.57	0.46
1:C:264:ASN:HB3	1:C:269:THR:HB	1.95	0.46
1:E:128:VAL:HG13	1:E:503:ARG:HG3	1.96	0.46
1:E:265:LYS:HZ2	1:E:271:SER:CB	2.25	0.46
1:E:265:LYS:HA	1:E:270:LEU:O	2.14	0.46
1:E:293:ALA:O	1:E:336:GLY:HA3	2.15	0.46
1:F:40:LEU:HD13	1:F:59:GLU:HG3	1.96	0.46
1:G:108:ALA:CB	1:N:109:ALA:CB	2.93	0.46
1:H:79:SER:O	1:H:81:THR:N	2.48	0.46
1:J:46:SER:HB2	1:J:47:PRO:CD	2.37	0.46
1:K:232:LEU:HD23	1:K:232:LEU:O	2.15	0.46
1:K:455:ALA:HB1	1:K:465:ILE:HD12	1.96	0.46
1:K:458:ALA:O	1:L:114:LEU:HD12	2.15	0.46
1:M:383:ALA:CB	1:N:359:TYR:OH	2.63	0.46
1:N:66:LEU:HD22	1:N:522:VAL:HG21	1.97	0.46
1:N:79:SER:O	1:N:81:THR:N	2.47	0.46
2:U:79:GLU:O	2:U:80:ILE:HG13	2.15	0.46
1:a:283:ARG:CZ	1:a:363:LYS:HB2	2.45	0.46
1:b:229:VAL:HG23	1:b:256:GLU:CG	2.44	0.46
1:b:410:ILE:HD11	1:b:496:VAL:HG21	1.97	0.46
1:c:209:THR:HG21	1:c:211:GLU:CD	2.39	0.46
1:c:348:ILE:HG23	1:c:368:LEU:HG	1.97	0.46
1:e:466:VAL:HG12	1:e:470:LEU:HD12	1.97	0.46
1:h:194:PHE:HB2	1:h:278:PRO:HB3	1.97	0.46
1:i:168:VAL:CG1	1:i:173:ILE:H	2.27	0.46
1:j:421:ALA:O	1:j:425:VAL:HG23	2.15	0.46
1:k:179:SER:CB	1:k:379:ARG:HB3	2.37	0.46
1:l:149:THR:HG23	1:l:155:PRO:CA	2.40	0.46
1:m:66:LEU:HD22	1:m:522:VAL:HG21	1.97	0.46
1:m:178:GLU:CD	1:m:392:LYS:HE3	2.39	0.46
1:m:202:TYR:CD2	1:m:266:LEU:HD11	2.50	0.46
1:m:202:TYR:HD2	1:m:266:LEU:HD11	1.80	0.46
1:m:295:THR:HG22	1:m:317:GLY:HA3	1.95	0.46
1:n:218:PHE:HE1	1:n:242:THR:HG21	1.77	0.46
2:o:53:VAL:HG22	2:o:59:ARG:HG2	1.97	0.46
2:s:19:ARG:HB3	2:s:40:PRO:HG2	1.97	0.46
1:A:150:ILE:CD1	1:A:496:VAL:H	2.27	0.46
1:A:250:ALA:C	1:A:252:ASP:N	2.73	0.46
1:B:250:ALA:O	1:B:251:GLU:C	2.57	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:235:ILE:O	1:C:239:VAL:HG23	2.15	0.46
1:C:296:GLY:CA	1:C:336:GLY:HA2	2.44	0.46
1:D:239:VAL:HG11	1:D:246:LEU:HB2	1.96	0.46
1:F:128:VAL:HA	1:F:131:ILE:HD12	1.97	0.46
1:F:250:ALA:C	1:F:252:ASP:N	2.73	0.46
1:G:422:ILE:HD12	1:G:470:LEU:HD21	1.98	0.46
1:H:123:ALA:HB2	1:H:440:ALA:HA	1.97	0.46
1:H:168:VAL:HG21	1:H:376:ALA:HB2	1.96	0.46
1:I:224:LYS:CG	1:I:225:LYS:N	2.78	0.46
1:I:307:LYS:HE3	1:I:310:ASN:HD21	1.80	0.46
1:J:178:GLU:CD	1:J:392:LYS:HE3	2.40	0.46
1:K:375:VAL:O	1:K:375:VAL:HG12	2.15	0.46
1:L:149:THR:HG23	1:L:155:PRO:CA	2.40	0.46
2:Q:33:PRO:O	2:Q:35:THR:N	2.48	0.46
2:R:48:VAL:CG1	2:R:62:LEU:HD23	2.46	0.46
2:T:91:SER:O	2:T:95:LEU:HG	2.14	0.46
1:a:80:LYS:HE2	1:b:383:ALA:O	2.14	0.46
1:c:4:LYS:HG3	1:d:59:GLU:O	2.16	0.46
1:d:179:SER:OG	1:d:180:LYS:N	2.49	0.46
1:d:307:LYS:HB2	1:d:310:ASN:HD22	1.81	0.46
1:d:410:ILE:HG12	1:d:496:VAL:HB	1.97	0.46
1:d:418:LEU:HD12	1:d:418:LEU:H	1.80	0.46
1:g:128:VAL:HG13	1:g:503:ARG:HG3	1.97	0.46
1:g:231:GLU:HB2	1:g:308:LEU:HD23	1.97	0.46
1:h:46:SER:HB2	1:h:47:PRO:CD	2.37	0.46
1:h:66:LEU:HD22	1:h:522:VAL:HG21	1.97	0.46
1:i:120:ILE:HG23	1:i:443:VAL:CG2	2.46	0.46
1:j:25:ASN:HA	1:j:28:LYS:HE2	1.98	0.46
1:j:363:LYS:O	1:j:366:GLU:HG2	2.14	0.46
1:k:84:VAL:HG12	1:k:84:VAL:O	2.14	0.46
1:k:300:ILE:HG21	1:k:308:LEU:CD2	2.43	0.46
1:l:360:ALA:C	1:l:363:LYS:HG3	2.40	0.46
1:m:168:VAL:HG12	1:m:172:GLY:CA	2.34	0.46
1:m:194:PHE:CB	1:m:278:PRO:HB3	2.45	0.46
1:m:462:GLY:O	1:m:466:VAL:HG23	2.16	0.46
1:n:224:LYS:CG	1:n:225:LYS:N	2.77	0.46
1:n:303:GLU:C	1:n:305:GLY:N	2.73	0.46
2:p:41:GLN:HG2	2:p:74:LYS:HB3	1.97	0.46
2:r:62:LEU:C	2:r:64:VAL:H	2.22	0.46
2:r:84:GLY:O	2:r:85:GLU:HB2	2.15	0.46
2:t:72:PHE:CD2	2:t:90:LEU:CD2	2.99	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:29:VAL:HG13	1:G:520:GLU:HG2	1.96	0.46
1:A:363:LYS:C	1:A:365:GLN:H	2.23	0.46
1:C:286:GLU:OE1	1:C:344:ARG:NH2	2.48	0.46
1:D:146:GLU:O	1:D:147:VAL:C	2.59	0.46
1:D:359:TYR:CZ	1:D:363:LYS:CE	2.98	0.46
1:E:235:ILE:HG12	1:E:311:ALA:CB	2.37	0.46
1:F:361:ARG:O	1:F:365:GLN:HB2	2.16	0.46
1:F:396:GLU:O	1:F:400:ASN:ND2	2.48	0.46
1:G:103:GLY:O	1:G:107:VAL:HG23	2.15	0.46
1:G:157:VAL:O	1:G:161:ILE:HG12	2.16	0.46
1:H:40:LEU:HD12	1:H:40:LEU:N	2.30	0.46
1:H:363:LYS:O	1:H:366:GLU:HG2	2.16	0.46
1:J:283:ARG:HA	1:J:283:ARG:HD2	1.70	0.46
1:J:465:ILE:HD13	1:J:480:PHE:CD1	2.51	0.46
1:K:194:PHE:CG	1:K:278:PRO:HB3	2.50	0.46
1:K:410:ILE:CD1	1:K:496:VAL:HG11	2.38	0.46
2:Q:54:LEU:CD1	2:R:57:GLY:N	2.79	0.46
2:Q:97:ALA:HA	2:R:11:LEU:HG	1.98	0.46
2:S:46:ILE:O	2:S:46:ILE:HG22	2.14	0.46
1:b:149:THR:HG23	1:b:155:PRO:CA	2.40	0.46
1:b:199:ILE:O	1:b:199:ILE:HG22	2.15	0.46
1:b:321:ARG:O	1:b:322:VAL:HG23	2.14	0.46
1:b:331:ILE:O	1:b:331:ILE:HG22	2.13	0.46
1:c:179:SER:OG	1:c:180:LYS:N	2.48	0.46
1:c:345:ILE:HG12	1:c:368:LEU:CD2	2.44	0.46
1:d:301:SER:HB2	1:d:304:LEU:HB3	1.97	0.46
1:d:303:GLU:HA	1:e:259:ALA:HB2	1.96	0.46
1:e:207:PRO:O	1:e:210:MET:HE3	2.16	0.46
1:e:218:PHE:HE1	1:e:244:LYS:HB2	1.81	0.46
1:e:232:LEU:O	1:e:235:ILE:HG22	2.15	0.46
1:e:410:ILE:HD11	1:e:496:VAL:HG21	1.98	0.46
1:f:229:VAL:HG23	1:f:256:GLU:OE2	2.15	0.46
1:f:307:LYS:HE3	2:u:34:ASP:O	2.15	0.46
1:g:54:VAL:HG11	1:g:79:SER:HA	1.97	0.46
1:h:297:GLY:HA3	1:h:317:GLY:H	1.80	0.46
1:i:217:ALA:HB1	1:i:245:PRO:O	2.15	0.46
1:j:77:VAL:O	1:j:80:LYS:HG2	2.15	0.46
1:j:311:ALA:HA	1:j:315:MET:SD	2.55	0.46
1:k:132:LYS:C	1:k:134:LEU:H	2.23	0.46
1:k:253:VAL:HG11	1:k:261:LEU:HD12	1.98	0.46
1:l:360:ALA:HA	1:l:363:LYS:CG	2.44	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:179:SER:CB	1:m:379:ARG:HB3	2.38	0.46
1:m:363:LYS:O	1:m:366:GLU:HG2	2.15	0.46
2:p:13:ASP:OD1	2:p:13:ASP:C	2.57	0.46
2:q:24:PRO:HG2	2:q:25:LYS:H	1.80	0.46
2:s:17:VAL:HG12	2:s:18:LYS:N	2.31	0.46
1:A:66:LEU:CD2	1:A:522:VAL:HG11	2.38	0.46
1:A:230:ARG:HA	1:A:233:LEU:HD12	1.98	0.46
1:A:498:PRO:HG2	1:A:501:VAL:HG22	1.96	0.46
1:D:54:VAL:CG2	1:D:89:THR:HG21	2.44	0.46
1:E:168:VAL:HG21	1:E:376:ALA:HB2	1.98	0.46
1:E:231:GLU:O	1:E:309:GLU:HA	2.15	0.46
1:F:263:VAL:O	1:F:267:ARG:HB2	2.15	0.46
1:G:141:ARG:NH2	1:G:163:ASP:OD1	2.38	0.46
1:H:207:PRO:O	1:H:210:MET:HE3	2.14	0.46
1:I:69:ILE:O	1:I:73:LEU:HB2	2.15	0.46
1:I:232:LEU:HD23	1:I:236:LEU:HB2	1.98	0.46
1:K:19:GLY:HA3	1:K:67:GLU:O	2.15	0.46
1:K:117:LYS:O	1:K:121:GLU:HG3	2.16	0.46
1:L:79:SER:C	1:L:81:THR:N	2.68	0.46
1:L:307:LYS:HE3	1:L:310:ASN:HD21	1.80	0.46
1:M:79:SER:C	1:M:81:THR:N	2.73	0.46
2:O:84:GLY:O	2:O:85:GLU:HB2	2.15	0.46
1:a:144:ILE:CD1	1:a:165:MET:HG2	2.46	0.46
1:a:216:ASP:HA	1:a:319:ALA:O	2.16	0.46
1:a:232:LEU:C	1:a:234:PRO:HD2	2.40	0.46
1:b:17:GLU:HB2	1:b:104:LEU:CD1	2.45	0.46
1:c:231:GLU:HB3	1:c:308:LEU:HB3	1.97	0.46
1:d:18:ARG:HD2	1:d:67:GLU:OE2	2.15	0.46
1:d:149:THR:HG23	1:d:155:PRO:CA	2.43	0.46
1:d:468:GLN:O	1:d:471:ALA:HB3	2.14	0.46
1:g:298:THR:HG23	1:g:304:LEU:CD1	2.45	0.46
1:i:375:VAL:O	1:i:375:VAL:HG12	2.14	0.46
1:j:194:PHE:CG	1:j:278:PRO:HB3	2.49	0.46
1:j:290:ASP:N	1:j:344:ARG:NH1	2.62	0.46
1:k:408:GLU:HB2	1:k:500:LYS:HB2	1.97	0.46
1:l:168:VAL:CG2	1:l:376:ALA:HB2	2.45	0.46
1:l:452:ARG:HG2	1:l:452:ARG:NH1	2.30	0.46
1:m:283:ARG:HH21	1:m:367:ARG:CD	2.28	0.46
1:m:452:ARG:HG2	1:m:452:ARG:NH1	2.30	0.46
2:o:13:ASP:OD1	2:o:13:ASP:O	2.33	0.46
2:o:79:GLU:O	2:o:80:ILE:HG13	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:p:52:ARG:NH2	2:q:53:VAL:O	2.48	0.46
2:p:81:GLU:HA	2:p:86:GLU:HA	1.97	0.46
1:C:250:ALA:O	1:C:251:GLU:C	2.57	0.46
1:C:528:GLU:OE1	1:C:528:GLU:N	2.48	0.46
1:D:161:ILE:HD12	1:D:399:LEU:HD21	1.96	0.46
1:D:352:LEU:C	1:D:354:THR:H	2.24	0.46
1:E:123:ALA:HB3	1:E:443:VAL:HG21	1.98	0.46
1:G:199:ILE:HG22	1:G:199:ILE:O	2.15	0.46
1:G:229:VAL:HG11	2:U:32:LEU:CD2	2.45	0.46
1:H:297:GLY:HA3	1:H:317:GLY:N	2.30	0.46
1:I:132:LYS:C	1:I:134:LEU:H	2.23	0.46
1:I:168:VAL:CG2	1:I:376:ALA:HB2	2.44	0.46
1:I:228:ASN:ND2	1:I:230:ARG:HB3	2.24	0.46
1:I:385:GLU:O	1:I:389:LYS:HG3	2.15	0.46
1:J:425:VAL:O	1:J:429:ILE:HG13	2.16	0.46
1:N:117:LYS:O	1:N:120:ILE:N	2.48	0.46
2:P:62:LEU:C	2:P:64:VAL:H	2.23	0.46
2:P:73:ALA:O	2:P:75:TYR:N	2.48	0.46
2:R:97:ALA:HA	2:S:11:LEU:HD13	1.95	0.46
2:S:33:PRO:C	2:S:35:THR:H	2.24	0.46
1:a:10:GLU:N	1:a:13:ARG:NH1	2.64	0.46
1:c:345:ILE:HG12	1:c:368:LEU:HD23	1.97	0.46
1:d:10:GLU:N	1:d:13:ARG:NH1	2.63	0.46
1:d:232:LEU:HD23	1:d:308:LEU:HD21	1.97	0.46
1:e:25:ASN:HA	1:e:28:LYS:HG2	1.96	0.46
1:e:235:ILE:O	1:e:239:VAL:HG23	2.16	0.46
1:f:228:ASN:HD22	1:f:231:GLU:HG3	1.80	0.46
1:h:168:VAL:HG21	1:h:376:ALA:HB2	1.96	0.46
1:h:462:GLY:O	1:h:466:VAL:HG23	2.15	0.46
1:i:127:ALA:O	1:i:131:ILE:HG13	2.15	0.46
1:i:222:VAL:CG1	1:i:223:GLU:N	2.79	0.46
1:j:168:VAL:HG12	1:j:172:GLY:CA	2.36	0.46
1:j:178:GLU:OE2	1:j:392:LYS:HE3	2.15	0.46
1:j:222:VAL:CG1	1:j:223:GLU:N	2.78	0.46
1:j:307:LYS:HE3	1:j:310:ASN:HD21	1.79	0.46
1:k:123:ALA:HB2	1:k:440:ALA:HA	1.96	0.46
1:l:218:PHE:HE1	1:l:242:THR:HG21	1.77	0.46
2:o:100:GLN:OE1	2:p:9:LYS:CE	2.63	0.46
1:A:31:LEU:HB2	1:A:90:THR:HG21	1.97	0.46
1:B:246:LEU:HB3	1:B:272:VAL:CG1	2.43	0.46
1:B:466:VAL:HG12	1:B:470:LEU:HD12	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:7:VAL:CG2	1:C:66:LEU:HD11	2.30	0.46
1:D:72:GLN:HE22	1:D:75:LYS:HZ1	1.63	0.46
1:E:343:ALA:HB2	1:F:207:PRO:HB2	1.97	0.46
1:E:465:ILE:HD13	1:E:480:PHE:CE2	2.51	0.46
1:E:518:THR:OG1	1:F:37:ASN:ND2	2.48	0.46
1:F:54:VAL:CG2	1:F:89:THR:HG21	2.45	0.46
1:G:320:GLU:HB3	1:G:333:GLY:HA3	1.97	0.46
1:I:204:VAL:HG13	1:I:211:GLU:O	2.15	0.46
1:I:487:PHE:C	1:I:488:VAL:HG13	2.41	0.46
1:K:232:LEU:CD2	1:K:236:LEU:HD13	2.43	0.46
1:K:416:VAL:HG21	1:K:479:GLY:HA3	1.98	0.46
1:L:222:VAL:CG1	1:L:223:GLU:N	2.78	0.46
1:N:40:LEU:HD12	1:N:40:LEU:N	2.31	0.46
1:a:150:ILE:HG22	1:a:151:SER:N	2.31	0.46
1:a:167:LYS:HB2	1:a:188:PHE:CE2	2.50	0.46
1:a:369:ALA:HB1	1:a:375:VAL:HG22	1.97	0.46
1:b:52:ASP:OD1	1:b:54:VAL:HG23	2.15	0.46
1:c:283:ARG:HH22	1:c:366:GLU:CG	2.29	0.46
1:d:157:VAL:O	1:d:161:ILE:HG12	2.16	0.46
1:e:31:LEU:HD12	4:e:602:ADP:H5'1	1.96	0.46
1:g:157:VAL:HG22	1:g:395:PHE:CZ	2.51	0.46
1:g:345:ILE:HD11	1:g:368:LEU:HD23	1.97	0.46
1:h:86:GLY:O	1:h:87:ASP:HB2	2.15	0.46
1:h:303:GLU:C	1:h:305:GLY:N	2.73	0.46
1:h:481:ASN:HD21	1:h:484:THR:HG23	1.80	0.46
1:k:295:THR:HG22	1:k:317:GLY:CA	2.46	0.46
1:m:385:GLU:HB2	1:n:280:PHE:HE2	1.78	0.46
1:n:27:VAL:CG1	1:n:90:THR:HG23	2.44	0.46
1:n:132:LYS:C	1:n:134:LEU:H	2.23	0.46
2:p:8:ILE:HG21	2:p:16:VAL:HG21	1.98	0.46
2:t:20:ILE:CD1	2:t:42:LYS:HG3	2.38	0.46
2:u:15:VAL:CG2	2:u:45:VAL:HG13	2.46	0.46
2:u:20:ILE:CD1	2:u:44:LYS:HG3	2.46	0.46
1:A:498:PRO:HG2	1:A:501:VAL:CG2	2.45	0.46
1:B:445:ARG:CZ	1:B:452:ARG:HH21	2.28	0.46
1:D:7:VAL:HG12	1:D:12:ALA:HB2	1.98	0.46
1:D:457:ASN:HD22	1:D:457:ASN:N	2.14	0.46
1:F:178:GLU:CG	1:F:388:LEU:HD21	2.45	0.46
1:G:199:ILE:HG13	1:G:274:ALA:O	2.15	0.46
1:G:310:ASN:HB3	2:O:34:ASP:OD2	2.15	0.46
1:G:312:THR:HG22	1:G:313:LEU:H	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:367:ARG:C	1:G:369:ALA:N	2.73	0.46
1:K:120:ILE:HG23	1:K:443:VAL:CG2	2.45	0.46
1:K:187:LYS:HZ2	1:K:379:ARG:HG3	1.78	0.46
1:K:218:PHE:HE1	1:K:242:THR:HG21	1.81	0.46
1:K:311:ALA:HA	1:K:315:MET:SD	2.55	0.46
1:L:316:LEU:O	1:L:316:LEU:HD23	2.16	0.46
1:N:46:SER:HB2	1:N:47:PRO:CD	2.36	0.46
1:N:168:VAL:CG2	1:N:376:ALA:HB2	2.46	0.46
1:b:361:ARG:O	1:b:365:GLN:HB2	2.16	0.46
1:c:257:ALA:O	1:c:261:LEU:HD12	2.15	0.46
1:c:299:VAL:N	1:c:304:LEU:HD12	2.31	0.46
1:c:299:VAL:O	1:c:304:LEU:HD12	2.15	0.46
1:d:10:GLU:N	1:d:13:ARG:HH12	2.14	0.46
1:d:101:ARG:CG	1:d:102:GLU:N	2.78	0.46
1:d:184:THR:HG23	1:d:380:VAL:HA	1.98	0.46
1:d:360:ALA:O	1:d:364:LEU:HG	2.15	0.46
1:d:421:ALA:O	1:d:425:VAL:HG23	2.15	0.46
1:e:251:GLU:O	1:e:252:ASP:HB2	2.16	0.46
1:h:332:VAL:HG22	1:h:375:VAL:HG11	1.97	0.46
1:h:437:ALA:O	1:h:441:LYS:HG3	2.15	0.46
1:i:194:PHE:CB	1:i:278:PRO:HB3	2.46	0.46
1:j:117:LYS:O	1:j:118:ARG:C	2.59	0.46
1:j:132:LYS:C	1:j:134:LEU:H	2.23	0.46
1:j:481:ASN:HD21	1:j:484:THR:HG23	1.81	0.46
1:k:79:SER:C	1:k:81:THR:N	2.73	0.46
1:k:316:LEU:H	1:k:316:LEU:HD23	1.81	0.46
1:m:131:ILE:HD13	1:m:502:THR:HG22	1.97	0.46
1:n:352:LEU:HD21	1:n:365:GLN:HE22	1.81	0.46
2:r:70:VAL:HG11	2:r:95:LEU:CD2	2.33	0.46
2:u:20:ILE:HG13	2:u:43:GLY:C	2.41	0.46
1:A:280:PHE:O	1:A:281:GLY:C	2.59	0.46
1:D:52:ASP:OD1	1:D:54:VAL:HG23	2.15	0.46
1:E:231:GLU:HB3	1:E:308:LEU:HB3	1.97	0.46
1:F:95:LEU:O	1:F:99:ILE:HG13	2.16	0.46
1:G:321:ARG:HG2	1:G:322:VAL:N	2.31	0.46
1:J:307:LYS:HB3	1:J:309:GLU:OE1	2.15	0.46
1:J:372:ALA:O	1:J:374:GLY:N	2.45	0.46
1:K:204:VAL:HG13	1:K:211:GLU:O	2.16	0.46
1:L:132:LYS:C	1:L:134:LEU:H	2.24	0.46
1:L:283:ARG:HD2	1:L:283:ARG:HA	1.70	0.46
1:L:316:LEU:H	1:L:316:LEU:HD23	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:179:SER:CB	1:M:379:ARG:HB3	2.38	0.46
1:M:206:ASN:HD21	1:M:389:LYS:CE	2.29	0.46
1:N:168:VAL:HG11	1:N:173:ILE:N	2.29	0.46
1:N:228:ASN:HB3	1:N:231:GLU:HG2	1.97	0.46
2:U:78:THR:HG22	2:U:80:ILE:CD1	2.46	0.46
1:a:54:VAL:HG22	1:a:89:THR:HG21	1.97	0.46
1:a:466:VAL:HG12	1:a:470:LEU:HD12	1.97	0.46
1:b:123:ALA:HB3	1:b:443:VAL:HG21	1.98	0.46
1:c:503:ARG:O	1:c:507:GLN:HG3	2.16	0.46
1:d:178:GLU:CG	1:d:388:LEU:HD21	2.46	0.46
1:e:289:LYS:HB3	1:e:344:ARG:NH2	2.30	0.46
1:f:236:LEU:HB3	2:t:30:ILE:HD13	1.98	0.46
1:h:312:THR:C	1:h:314:SER:N	2.74	0.46
1:i:168:VAL:HG12	1:i:172:GLY:CA	2.38	0.46
1:j:161:ILE:O	1:j:165:MET:HG3	2.16	0.46
1:n:71:ALA:O	1:n:75:LYS:HG3	2.15	0.46
2:q:22:GLU:OE2	2:q:40:PRO:HD3	2.16	0.46
2:t:91:SER:O	2:t:92:GLU:C	2.59	0.46
1:A:147:VAL:HG23	1:A:410:ILE:HD11	1.97	0.46
1:C:222:VAL:HG22	1:C:300:ILE:HD12	1.97	0.46
1:F:354:THR:O	1:F:354:THR:HG22	2.16	0.46
1:G:284:ARG:HH11	1:G:284:ARG:HG3	1.80	0.46
1:H:131:ILE:HD13	1:H:502:THR:HG22	1.97	0.46
1:H:168:VAL:CG2	1:H:376:ALA:HB2	2.46	0.46
1:I:311:ALA:HA	1:I:315:MET:SD	2.56	0.46
1:K:246:LEU:HB3	1:K:272:VAL:CG1	2.44	0.46
1:L:325:THR:CG2	1:L:326:LYS:N	2.79	0.46
1:L:363:LYS:O	1:L:366:GLU:HG2	2.16	0.46
1:M:117:LYS:O	1:M:121:GLU:HG3	2.16	0.46
1:M:178:GLU:CD	1:M:323:ARG:NH2	2.74	0.46
1:M:316:LEU:H	1:M:316:LEU:HD23	1.81	0.46
1:M:363:LYS:O	1:M:366:GLU:HG2	2.16	0.46
1:a:416:VAL:HG21	1:a:479:GLY:HA3	1.98	0.46
1:b:118:ARG:O	1:b:122:LYS:HG3	2.15	0.46
1:b:363:LYS:C	1:b:365:GLN:H	2.24	0.46
1:d:54:VAL:HG11	1:d:79:SER:HA	1.97	0.46
1:e:72:GLN:NE2	1:e:75:LYS:NZ	2.61	0.46
1:e:270:LEU:HG	1:e:272:VAL:HG13	1.98	0.46
1:f:246:LEU:CB	1:f:272:VAL:HG12	2.37	0.46
1:h:283:ARG:CD	1:h:363:LYS:NZ	2.79	0.46
1:h:385:GLU:HB2	1:i:280:PHE:CE2	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:117:LYS:O	1:i:121:GLU:HG3	2.16	0.46
1:i:303:GLU:C	1:i:305:GLY:N	2.74	0.46
1:k:416:VAL:HG21	1:k:479:GLY:HA3	1.98	0.46
1:l:228:ASN:HB3	1:l:231:GLU:HG2	1.98	0.46
1:l:481:ASN:HD21	1:l:484:THR:HG23	1.80	0.46
1:m:132:LYS:C	1:m:134:LEU:H	2.24	0.46
1:m:208:GLU:OE1	1:m:389:LYS:NZ	2.30	0.46
1:m:303:GLU:C	1:m:305:GLY:N	2.74	0.46
2:p:22:GLU:OE1	2:p:22:GLU:N	2.41	0.46
2:q:24:PRO:HG2	2:q:25:LYS:HG3	1.98	0.46
2:s:13:ASP:CA	2:s:62:LEU:HD21	2.46	0.46
1:A:141:ARG:NH2	1:A:163:ASP:OD1	2.47	0.46
1:A:179:SER:OG	1:A:180:LYS:N	2.49	0.46
1:A:465:ILE:HD13	1:A:480:PHE:CE2	2.51	0.46
1:A:529:LYS:HE2	1:B:63:GLU:OE2	2.16	0.46
1:C:14:ARG:NH1	1:C:17:GLU:OE1	2.49	0.46
1:D:478:TYR:CE1	1:D:487:PHE:HB3	2.51	0.46
1:E:69:ILE:CD1	1:F:41:GLU:HB2	2.42	0.46
1:E:167:LYS:HB2	1:E:188:PHE:CE2	2.51	0.46
1:E:178:GLU:CG	1:E:388:LEU:HD21	2.43	0.46
1:G:189:VAL:HG13	1:G:190:GLU:H	1.79	0.46
1:G:352:LEU:C	1:G:354:THR:H	2.24	0.46
1:G:356:ASP:O	1:G:357:SER:C	2.59	0.46
1:I:117:LYS:O	1:I:121:GLU:HG3	2.16	0.46
1:J:177:GLU:HB3	1:J:321:ARG:NH1	2.31	0.46
1:J:283:ARG:NH2	1:J:367:ARG:CD	2.78	0.46
1:L:103:GLY:O	1:L:107:VAL:HG23	2.15	0.46
1:L:178:GLU:CD	1:L:392:LYS:HE3	2.40	0.46
1:M:81:THR:OG1	1:M:508:ASN:ND2	2.49	0.46
1:M:136:ILE:HD11	1:M:491:VAL:HG21	1.97	0.46
1:N:204:VAL:HG13	1:N:211:GLU:O	2.15	0.46
1:N:416:VAL:HG21	1:N:479:GLY:HA3	1.98	0.46
2:R:38:GLU:H	2:R:38:GLU:HG2	1.54	0.46
2:T:17:VAL:O	2:T:87:TYR:HB3	2.16	0.46
2:U:13:ASP:HA	2:U:62:LEU:HD21	1.98	0.46
1:b:332:VAL:HG12	1:b:333:GLY:N	2.31	0.46
1:c:54:VAL:HG11	1:c:79:SER:HA	1.98	0.46
1:c:204:VAL:HG13	1:c:210:MET:C	2.41	0.46
1:e:422:ILE:HD12	1:e:470:LEU:HD21	1.98	0.46
1:e:498:PRO:HG2	1:e:501:VAL:CG2	2.46	0.46
1:f:7:VAL:HG12	1:f:12:ALA:HB2	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:226:VAL:CG1	1:h:232:LEU:HD12	2.46	0.46
1:h:325:THR:CG2	1:h:327:ASP:H	2.07	0.46
1:h:452:ARG:HG2	1:h:452:ARG:NH1	2.32	0.46
1:i:6:LEU:CD2	1:i:523:VAL:HG22	2.46	0.46
1:i:307:LYS:HB2	1:i:310:ASN:ND2	2.31	0.46
1:i:342:GLU:HA	1:i:345:ILE:HD12	1.97	0.46
1:m:50:THR:CG2	1:m:51:LYS:H	2.21	0.46
1:n:297:GLY:HA3	1:n:317:GLY:N	2.31	0.46
1:n:363:LYS:O	1:n:366:GLU:HG2	2.16	0.46
2:q:58:GLN:OE1	2:r:57:GLY:HA3	2.16	0.46
2:t:82:ILE:HD12	2:t:87:TYR:CE1	2.50	0.46
2:u:42:LYS:HG3	2:u:43:GLY:N	2.31	0.46
1:A:337:LYS:O	1:A:340:ASP:HB2	2.15	0.45
1:D:74:LEU:HD21	1:D:93:THR:CG2	2.45	0.45
1:D:207:PRO:O	1:D:210:MET:HE3	2.16	0.45
1:D:305:GLY:HA3	2:S:33:PRO:HB2	1.96	0.45
1:E:263:VAL:HG13	1:E:267:ARG:NH1	2.31	0.45
1:E:283:ARG:O	1:E:287:MET:HG3	2.15	0.45
1:H:307:LYS:HE3	1:H:310:ASN:HD21	1.80	0.45
1:I:452:ARG:HG2	1:I:452:ARG:NH1	2.31	0.45
1:I:526:LYS:HG3	1:I:527:PRO:HD2	1.98	0.45
1:J:259:ALA:O	1:J:263:VAL:HG23	2.17	0.45
1:K:63:GLU:HG2	1:L:3:ALA:HB1	1.97	0.45
1:K:219:ILE:O	1:K:221:ILE:HG13	2.16	0.45
1:L:84:VAL:HG12	1:L:500:LYS:CE	2.45	0.45
1:L:390:GLU:OE1	1:L:394:ARG:NH1	2.49	0.45
1:M:120:ILE:HG23	1:M:443:VAL:CG2	2.46	0.45
1:N:283:ARG:HA	1:N:283:ARG:HD2	1.72	0.45
2:R:84:GLY:O	2:R:85:GLU:HB2	2.16	0.45
2:S:17:VAL:HG12	2:S:18:LYS:N	2.31	0.45
2:S:96:LEU:O	2:T:14:ARG:HD3	2.16	0.45
2:U:17:VAL:O	2:U:87:TYR:HB3	2.16	0.45
1:a:215:GLU:O	1:a:216:ASP:C	2.59	0.45
1:a:250:ALA:O	1:a:251:GLU:C	2.59	0.45
1:b:410:ILE:HG12	1:b:496:VAL:HB	1.97	0.45
1:b:452:ARG:HH11	1:b:463:SER:HA	1.81	0.45
1:c:287:MET:O	1:c:290:ASP:HB2	2.16	0.45
1:d:235:ILE:HG21	1:d:311:ALA:CB	2.35	0.45
1:g:262:VAL:O	1:g:265:LYS:HB3	2.17	0.45
1:h:224:LYS:CG	1:h:225:LYS:N	2.77	0.45
1:i:37:ASN:HD21	1:i:51:LYS:CE	2.26	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:161:ILE:O	1:i:165:MET:HG3	2.17	0.45
1:i:219:ILE:HD13	1:i:331:ILE:HD13	1.99	0.45
1:i:224:LYS:CG	1:i:225:LYS:N	2.78	0.45
1:j:179:SER:CB	1:j:379:ARG:HB3	2.38	0.45
1:k:309:GLU:OE1	1:k:309:GLU:N	2.38	0.45
1:l:352:LEU:HD21	1:l:365:GLN:HE22	1.81	0.45
1:n:146:GLU:O	1:n:150:ILE:HG13	2.15	0.45
1:n:197:GLY:HA3	1:n:325:THR:O	2.16	0.45
1:n:253:VAL:HG11	1:n:261:LEU:HD12	1.97	0.45
2:q:73:ALA:O	2:q:75:TYR:CD1	2.69	0.45
2:q:77:GLY:O	2:q:78:THR:O	2.33	0.45
1:A:345:ILE:C	1:A:347:GLY:N	2.74	0.45
1:A:418:LEU:HD12	1:A:418:LEU:H	1.82	0.45
1:B:30:THR:O	1:B:35:GLY:HA3	2.15	0.45
1:B:118:ARG:O	1:B:122:LYS:HG3	2.16	0.45
1:B:189:VAL:HG13	1:B:190:GLU:H	1.81	0.45
1:C:165:MET:HE3	1:C:402:THR:CG2	2.45	0.45
1:C:472:GLU:HB3	1:C:478:TYR:CD2	2.51	0.45
1:D:219:ILE:N	1:D:317:GLY:O	2.40	0.45
1:D:363:LYS:C	1:D:365:GLN:H	2.23	0.45
1:E:31:LEU:HD13	1:E:90:THR:HG22	1.98	0.45
1:E:227:SER:HB3	1:E:254:GLU:CG	2.33	0.45
1:F:250:ALA:O	1:F:251:GLU:C	2.60	0.45
1:I:117:LYS:O	1:I:118:ARG:C	2.58	0.45
1:J:194:PHE:CD2	1:J:194:PHE:N	2.84	0.45
1:L:421:ALA:O	1:L:425:VAL:HG23	2.15	0.45
1:M:161:ILE:O	1:M:165:MET:HG3	2.16	0.45
1:M:175:THR:OG1	1:M:330:THR:HG21	2.16	0.45
1:M:218:PHE:HE1	1:M:242:THR:HG21	1.78	0.45
1:M:268:GLY:HA3	1:N:227:SER:CB	2.43	0.45
1:N:312:THR:HG22	1:N:313:LEU:N	2.31	0.45
2:Q:85:GLU:HA	2:Q:85:GLU:OE1	2.15	0.45
2:T:71:VAL:HG23	2:T:99:LEU:HD13	1.98	0.45
2:U:73:ALA:O	2:U:75:TYR:N	2.49	0.45
1:a:344:ARG:HA	1:a:344:ARG:HD2	1.71	0.45
1:a:351:GLU:HB2	1:b:207:PRO:O	2.16	0.45
1:a:503:ARG:O	1:a:507:GLN:HG3	2.16	0.45
1:c:54:VAL:CG2	1:c:89:THR:HG21	2.47	0.45
1:d:422:ILE:HD12	1:d:470:LEU:HD21	1.98	0.45
1:e:113:PRO:HG3	1:f:36:ARG:NH1	2.31	0.45
1:e:460:TYR:HB3	1:e:465:ILE:HD11	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:465:ILE:HD13	1:g:480:PHE:CD2	2.51	0.45
1:i:132:LYS:C	1:i:134:LEU:H	2.24	0.45
1:j:187:LYS:HZ2	1:j:379:ARG:HG3	1.81	0.45
1:j:309:GLU:OE1	1:j:309:GLU:N	2.41	0.45
1:l:41:GLU:HB3	1:m:69:ILE:CD1	2.47	0.45
1:l:316:LEU:H	1:l:316:LEU:HD23	1.82	0.45
1:l:372:ALA:O	1:l:374:GLY:N	2.40	0.45
1:n:416:VAL:HG21	1:n:479:GLY:HA3	1.98	0.45
2:q:50:THR:HB	2:q:59:ARG:CZ	2.46	0.45
2:q:81:GLU:C	2:q:82:ILE:HG13	2.42	0.45
1:B:220:LEU:HD13	1:B:235:ILE:HD13	1.98	0.45
1:B:506:LEU:HD12	1:B:506:LEU:O	2.16	0.45
1:D:173:ILE:O	1:D:173:ILE:HG22	2.16	0.45
1:D:455:ALA:O	1:D:458:ALA:HB3	2.17	0.45
1:E:101:ARG:CG	1:E:102:GLU:N	2.79	0.45
1:H:416:VAL:HG21	1:H:479:GLY:HA3	1.98	0.45
1:I:194:PHE:CB	1:I:278:PRO:HB3	2.46	0.45
1:I:307:LYS:HB2	1:I:310:ASN:ND2	2.31	0.45
1:J:194:PHE:CE1	1:J:278:PRO:HD3	2.52	0.45
1:K:46:SER:CB	1:K:47:PRO:HD2	2.38	0.45
1:L:50:THR:HG21	1:L:55:THR:HB	1.97	0.45
2:R:62:LEU:C	2:R:64:VAL:N	2.75	0.45
2:U:91:SER:O	2:U:95:LEU:HG	2.17	0.45
1:a:199:ILE:HG22	1:a:199:ILE:O	2.15	0.45
1:b:74:LEU:HD21	1:b:93:THR:CG2	2.46	0.45
1:c:204:VAL:HG12	1:c:206:ASN:O	2.15	0.45
1:c:232:LEU:HB3	1:c:236:LEU:CD1	2.47	0.45
1:d:51:LYS:HG2	1:d:51:LYS:O	2.16	0.45
1:d:284:ARG:HH11	1:d:284:ARG:HG3	1.81	0.45
1:d:466:VAL:HG12	1:d:470:LEU:HD12	1.97	0.45
1:e:242:THR:HG22	1:e:244:LYS:HG2	1.97	0.45
1:e:250:ALA:C	1:e:252:ASP:N	2.71	0.45
1:g:265:LYS:HD3	1:g:272:VAL:H	1.81	0.45
1:l:194:PHE:CD2	1:l:194:PHE:N	2.84	0.45
1:l:253:VAL:HG11	1:l:261:LEU:HD12	1.97	0.45
1:l:306:PHE:CE2	1:l:315:MET:HE1	2.51	0.45
1:n:385:GLU:O	1:n:389:LYS:HG3	2.16	0.45
2:p:17:VAL:HG12	2:p:18:LYS:N	2.31	0.45
2:q:56:ASN:OD1	2:r:56:ASN:HA	2.16	0.45
2:s:100:GLN:CB	2:t:9:LYS:HE3	2.46	0.45
1:C:240:ALA:HA	1:C:270:LEU:HD13	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:220:LEU:HG	1:D:222:VAL:HG23	1.97	0.45
1:D:396:GLU:O	1:D:400:ASN:ND2	2.49	0.45
1:F:300:ILE:O	1:F:300:ILE:HG22	2.15	0.45
1:G:498:PRO:HG2	1:G:501:VAL:CG2	2.46	0.45
1:H:27:VAL:HG12	1:H:90:THR:HG23	1.97	0.45
1:H:84:VAL:HG12	1:H:500:LYS:CE	2.44	0.45
1:H:86:GLY:O	1:H:87:ASP:HB2	2.17	0.45
1:I:232:LEU:CD2	1:I:236:LEU:HD13	2.47	0.45
1:J:283:ARG:HG2	1:J:363:LYS:NZ	2.31	0.45
1:M:178:GLU:H	1:M:321:ARG:HH11	1.64	0.45
1:M:452:ARG:HG2	1:M:452:ARG:NH1	2.32	0.45
1:N:168:VAL:CG1	1:N:173:ILE:H	2.28	0.45
1:N:295:THR:HG22	1:N:317:GLY:HA3	1.99	0.45
1:a:178:GLU:CG	1:a:388:LEU:HD21	2.43	0.45
1:c:192:TYR:C	1:c:192:TYR:HD2	2.23	0.45
1:d:205:THR:HB	1:d:213:VAL:H	1.80	0.45
1:g:236:LEU:O	1:g:240:ALA:HB2	2.16	0.45
1:h:71:ALA:O	1:h:75:LYS:HG3	2.17	0.45
1:j:189:VAL:CG1	1:j:190:GLU:H	2.21	0.45
1:l:47:PRO:CB	1:m:69:ILE:HG23	2.47	0.45
1:l:303:GLU:C	1:l:305:GLY:N	2.74	0.45
1:n:425:VAL:O	1:n:429:ILE:HG13	2.17	0.45
2:q:60:VAL:HG21	2:r:53:VAL:HG11	1.99	0.45
1:A:205:THR:HB	1:A:213:VAL:H	1.82	0.45
1:A:287:MET:O	1:A:290:ASP:HB2	2.17	0.45
1:A:359:TYR:CE1	1:A:363:LYS:HE2	2.52	0.45
1:C:103:GLY:O	1:C:107:VAL:HG23	2.17	0.45
1:D:124:VAL:HG13	1:D:506:LEU:HG	1.98	0.45
1:E:66:LEU:HD22	1:E:522:VAL:CG1	2.42	0.45
1:E:74:LEU:HD21	1:E:93:THR:CG2	2.47	0.45
1:E:238:GLN:C	1:E:313:LEU:HD21	2.41	0.45
1:E:465:ILE:HD13	1:E:480:PHE:CD2	2.50	0.45
1:F:283:ARG:HB2	1:F:283:ARG:HH11	1.82	0.45
1:G:198:TYR:CE1	1:G:326:LYS:HA	2.52	0.45
1:I:197:GLY:HA3	1:I:325:THR:O	2.16	0.45
1:J:283:ARG:HD3	1:J:363:LYS:HE3	1.99	0.45
1:K:80:LYS:HE3	1:K:508:ASN:OD1	2.16	0.45
1:L:253:VAL:HG11	1:L:261:LEU:HD12	1.98	0.45
1:M:253:VAL:O	1:M:258:LEU:HD22	2.16	0.45
2:P:41:GLN:HG2	2:P:74:LYS:CB	2.40	0.45
2:S:98:VAL:O	2:T:9:LYS:N	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:146:GLU:O	1:a:147:VAL:C	2.60	0.45
1:b:304:LEU:O	1:c:263:VAL:CG2	2.65	0.45
1:b:351:GLU:CD	1:b:364:LEU:HD13	2.42	0.45
1:b:425:VAL:O	1:b:429:ILE:HG13	2.16	0.45
1:c:247:LEU:HD13	1:c:324:ILE:HD11	1.98	0.45
1:d:206:ASN:HB3	1:d:209:THR:OG1	2.16	0.45
1:e:29:VAL:O	1:e:29:VAL:HG12	2.16	0.45
1:f:222:VAL:O	1:f:250:ALA:HA	2.16	0.45
1:f:250:ALA:C	1:f:252:ASP:N	2.71	0.45
1:g:150:ILE:CD1	1:g:495:ILE:HA	2.25	0.45
1:k:286:GLU:HG3	1:k:367:ARG:NH2	2.31	0.45
1:l:66:LEU:HD22	1:l:522:VAL:HG21	1.97	0.45
1:n:77:VAL:O	1:n:80:LYS:HG2	2.16	0.45
1:n:120:ILE:HG23	1:n:443:VAL:CG2	2.46	0.45
1:n:228:ASN:HB3	1:n:231:GLU:HG2	1.97	0.45
2:q:16:VAL:O	2:q:46:ILE:N	2.49	0.45
2:s:12:GLY:O	2:s:13:ASP:CG	2.59	0.45
2:t:18:LYS:NZ	2:t:85:GLU:CD	2.75	0.45
2:t:82:ILE:C	2:t:84:GLY:N	2.72	0.45
1:B:367:ARG:C	1:B:369:ALA:N	2.75	0.45
1:C:179:SER:OG	1:C:180:LYS:N	2.49	0.45
1:D:210:MET:HE2	1:D:210:MET:HA	1.98	0.45
1:D:287:MET:O	1:D:290:ASP:HB2	2.17	0.45
1:E:264:ASN:ND2	2:S:30:ILE:HG23	2.31	0.45
1:F:51:LYS:HG2	1:F:51:LYS:O	2.16	0.45
1:F:235:ILE:CD1	1:F:311:ALA:CB	2.92	0.45
1:F:468:GLN:O	1:F:471:ALA:HB3	2.16	0.45
1:I:239:VAL:HG22	1:I:313:LEU:CD1	2.46	0.45
1:I:416:VAL:HG21	1:I:479:GLY:HA3	1.98	0.45
1:J:18:ARG:HD2	1:J:67:GLU:OE1	2.16	0.45
1:K:54:VAL:HG22	1:K:89:THR:CG2	2.45	0.45
1:M:19:GLY:HA3	1:M:67:GLU:O	2.16	0.45
1:M:37:ASN:H	1:N:518:THR:HG22	1.81	0.45
1:M:267:ARG:O	1:N:255:GLY:HA3	2.16	0.45
1:a:321:ARG:O	1:a:322:VAL:HG23	2.16	0.45
1:a:477:ARG:HG3	1:a:477:ARG:HH11	1.81	0.45
1:e:10:GLU:N	1:e:13:ARG:NH1	2.63	0.45
1:e:230:ARG:O	1:e:234:PRO:HD2	2.16	0.45
1:g:281:GLY:C	1:g:283:ARG:N	2.75	0.45
1:i:179:SER:CB	1:i:379:ARG:HB3	2.39	0.45
1:k:8:PHE:CD1	1:k:8:PHE:N	2.84	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:69:ILE:O	1:k:73:LEU:HB2	2.15	0.45
1:l:86:GLY:O	1:l:87:ASP:HB2	2.16	0.45
1:l:283:ARG:HD2	1:l:283:ARG:HA	1.74	0.45
1:m:290:ASP:N	1:m:344:ARG:NH1	2.65	0.45
1:m:433:GLU:HG2	1:m:434:GLY:N	2.31	0.45
2:q:19:ARG:HD3	2:q:40:PRO:CG	2.42	0.45
2:u:64:VAL:HG22	2:u:98:VAL:HG21	1.97	0.45
1:A:146:GLU:O	1:A:147:VAL:C	2.59	0.45
1:A:263:VAL:O	1:A:267:ARG:HG2	2.17	0.45
1:A:348:ILE:HG21	1:A:364:LEU:O	2.16	0.45
1:B:14:ARG:NH1	1:B:17:GLU:OE1	2.49	0.45
1:B:477:ARG:HH11	1:B:477:ARG:HG3	1.80	0.45
1:D:468:GLN:O	1:D:471:ALA:HB3	2.17	0.45
1:E:103:GLY:HA2	1:E:442:ILE:HD13	1.99	0.45
1:E:238:GLN:O	1:E:313:LEU:HD11	2.16	0.45
1:F:14:ARG:NH1	1:F:17:GLU:OE1	2.50	0.45
1:G:349:LYS:C	1:G:351:GLU:N	2.71	0.45
1:I:178:GLU:OE2	1:I:392:LYS:HE3	2.17	0.45
1:I:267:ARG:HG2	1:J:256:GLU:CD	2.42	0.45
1:I:298:THR:N	1:I:315:MET:O	2.50	0.45
1:J:92:ALA:HB2	1:J:505:ALA:HA	1.99	0.45
1:J:95:LEU:HD21	1:J:450:PRO:HG2	1.99	0.45
1:J:366:GLU:O	1:J:370:LYS:HG3	2.17	0.45
1:J:455:ALA:HB1	1:J:465:ILE:HD12	1.98	0.45
1:L:283:ARG:HH22	1:L:364:LEU:HA	1.82	0.45
1:M:323:ARG:HH12	1:M:392:LYS:CE	2.28	0.45
1:N:178:GLU:CD	1:N:392:LYS:HE3	2.42	0.45
2:O:85:GLU:OE1	2:O:85:GLU:HA	2.15	0.45
2:O:89:ILE:O	2:O:89:ILE:HG22	2.16	0.45
2:U:22:GLU:OE1	2:U:22:GLU:N	2.39	0.45
1:b:6:LEU:CD2	1:b:523:VAL:HG22	2.46	0.45
1:b:14:ARG:NH1	1:b:17:GLU:OE1	2.49	0.45
1:b:418:LEU:HD12	1:b:418:LEU:H	1.82	0.45
1:d:283:ARG:HH12	1:d:363:LYS:HD3	1.76	0.45
1:e:150:ILE:HG22	1:e:151:SER:N	2.32	0.45
1:e:220:LEU:HD11	1:e:300:ILE:HD11	1.98	0.45
1:e:231:GLU:HA	1:e:309:GLU:HB3	1.98	0.45
1:e:277:ALA:HB1	1:e:278:PRO:HD2	1.99	0.45
1:e:468:GLN:O	1:e:471:ALA:HB3	2.16	0.45
1:f:69:ILE:CG2	1:g:47:PRO:HG3	2.46	0.45
1:f:218:PHE:HA	1:f:317:GLY:O	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:247:LEU:HD13	1:g:324:ILE:HD11	1.99	0.45
1:g:368:LEU:HD23	1:g:368:LEU:O	2.17	0.45
1:i:50:THR:HG21	1:i:55:THR:HB	1.99	0.45
1:k:8:PHE:O	1:k:11:ALA:HB3	2.17	0.45
1:k:232:LEU:C	1:k:234:PRO:HD2	2.42	0.45
1:l:286:GLU:HG3	1:l:367:ARG:NH2	2.32	0.45
2:o:84:GLY:O	2:o:85:GLU:HB2	2.17	0.45
2:p:5:LYS:HG2	2:p:5:LYS:O	2.17	0.45
2:q:88:VAL:HG12	2:q:90:LEU:HD22	1.99	0.45
2:s:45:VAL:O	2:s:46:ILE:HD13	2.16	0.45
2:u:24:PRO:CB	2:u:37:LYS:NZ	2.80	0.45
2:u:65:LYS:O	2:u:68:ASP:OD2	2.34	0.45
1:A:18:ARG:HD2	1:A:67:GLU:OE2	2.17	0.45
1:A:352:LEU:C	1:A:354:THR:H	2.24	0.45
1:B:131:ILE:HD13	1:B:502:THR:HG22	1.99	0.45
1:C:345:ILE:C	1:C:347:GLY:H	2.25	0.45
1:C:466:VAL:HG12	1:C:470:LEU:HD12	1.99	0.45
1:D:96:ALA:O	1:D:100:VAL:HG23	2.16	0.45
1:E:231:GLU:HB2	1:E:308:LEU:HD23	1.97	0.45
1:E:348:ILE:HD11	1:E:367:ARG:CZ	2.46	0.45
1:F:345:ILE:C	1:F:347:GLY:H	2.25	0.45
1:H:69:ILE:O	1:H:73:LEU:HB2	2.16	0.45
1:J:120:ILE:HG23	1:J:443:VAL:CG2	2.47	0.45
1:J:438:THR:O	1:J:441:LYS:HB2	2.16	0.45
1:M:383:ALA:O	1:N:280:PHE:HD1	1.98	0.45
1:M:416:VAL:HG21	1:M:479:GLY:HA3	1.98	0.45
1:N:194:PHE:N	1:N:194:PHE:CD2	2.84	0.45
1:N:194:PHE:CB	1:N:278:PRO:HB3	2.47	0.45
2:O:20:ILE:CG1	2:O:43:GLY:HA2	2.45	0.45
2:Q:34:ASP:HA	2:Q:37:LYS:HE2	1.99	0.45
1:a:103:GLY:O	1:a:107:VAL:HG23	2.17	0.45
1:a:237:GLU:OE2	2:o:28:GLY:N	2.49	0.45
1:a:252:ASP:OD1	1:a:276:LYS:HE2	2.17	0.45
1:d:218:PHE:HE1	1:d:244:LYS:HB2	1.81	0.45
1:e:417:THR:HG23	1:e:418:LEU:HD12	1.99	0.45
1:f:157:VAL:HG22	1:f:395:PHE:CZ	2.52	0.45
1:g:294:VAL:HG23	1:g:295:THR:HG23	1.99	0.45
1:h:46:SER:CB	1:h:47:PRO:HD2	2.37	0.45
1:h:117:LYS:O	1:h:121:GLU:HG3	2.17	0.45
1:i:207:PRO:O	1:i:210:MET:HE3	2.17	0.45
1:i:228:ASN:HB3	1:i:231:GLU:HG2	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:37:ASN:ND2	1:j:51:LYS:HE2	2.26	0.45
1:l:325:THR:CG2	1:l:326:LYS:N	2.80	0.45
1:m:390:GLU:OE1	1:m:394:ARG:NH1	2.50	0.45
1:n:69:ILE:O	1:n:73:LEU:HB2	2.17	0.45
1:n:117:LYS:O	1:n:118:ARG:C	2.60	0.45
1:n:253:VAL:O	1:n:258:LEU:HD22	2.17	0.45
2:s:79:GLU:O	2:s:80:ILE:HG13	2.17	0.45
2:t:15:VAL:HG21	2:t:95:LEU:HD21	1.98	0.45
1:B:101:ARG:CG	1:B:102:GLU:N	2.80	0.45
1:C:237:GLU:CG	2:Q:30:ILE:HD12	2.47	0.45
1:C:518:THR:OG1	1:D:37:ASN:ND2	2.50	0.45
1:E:54:VAL:HG13	1:E:89:THR:HG21	1.98	0.45
1:E:348:ILE:HD11	1:E:367:ARG:NH2	2.32	0.45
1:G:425:VAL:O	1:G:429:ILE:HG13	2.17	0.45
1:H:239:VAL:HG22	1:H:313:LEU:CD1	2.47	0.45
1:I:247:LEU:HD13	1:I:324:ILE:HD11	1.99	0.45
1:J:504:SER:O	1:J:505:ALA:C	2.59	0.45
1:K:179:SER:CB	1:K:379:ARG:HB3	2.39	0.45
1:K:481:ASN:HD21	1:K:484:THR:HG23	1.81	0.45
1:M:522:VAL:O	1:M:522:VAL:CG2	2.64	0.45
1:N:128:VAL:HA	1:N:131:ILE:HD12	1.98	0.45
2:Q:80:ILE:CG2	2:Q:81:GLU:N	2.79	0.45
2:T:84:GLY:O	2:T:85:GLU:HB2	2.17	0.45
2:T:92:GLU:HA	2:T:95:LEU:HD12	1.99	0.45
1:a:425:VAL:O	1:a:429:ILE:HG13	2.17	0.45
1:c:209:THR:CB	1:c:211:GLU:HG2	2.46	0.45
1:c:253:VAL:HG11	1:c:261:LEU:CD1	2.47	0.45
1:d:220:LEU:HD11	1:d:300:ILE:CD1	2.47	0.45
1:e:356:ASP:O	1:e:357:SER:C	2.59	0.45
1:f:199:ILE:O	1:f:199:ILE:HG22	2.17	0.45
1:f:478:TYR:CE1	1:f:487:PHE:HB3	2.52	0.45
1:h:114:LEU:HD12	1:n:459:GLY:CA	2.40	0.45
1:h:194:PHE:N	1:h:194:PHE:CD2	2.85	0.45
1:h:325:THR:CG2	1:h:326:LYS:N	2.80	0.45
1:i:178:GLU:OE2	1:i:392:LYS:HE3	2.17	0.45
1:j:412:PRO:HB3	1:j:490:MET:HB2	1.98	0.45
1:j:437:ALA:O	1:j:441:LYS:HG3	2.17	0.45
1:k:66:LEU:HD22	1:k:522:VAL:HG21	1.99	0.45
1:l:19:GLY:HA3	1:l:67:GLU:O	2.17	0.45
1:l:247:LEU:HD13	1:l:324:ILE:HD11	1.99	0.45
1:m:84:VAL:HG12	1:m:500:LYS:CE	2.45	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:168:VAL:CG2	1:m:376:ALA:HB2	2.47	0.45
1:n:37:ASN:ND2	1:n:51:LYS:HE2	2.23	0.45
2:r:85:GLU:OE1	2:r:85:GLU:HA	2.16	0.45
2:u:81:GLU:HG3	2:u:85:GLU:O	2.17	0.45
1:B:150:ILE:CD1	1:B:496:VAL:H	2.30	0.45
1:B:159:LYS:HE2	1:B:163:ASP:OD2	2.16	0.45
1:C:54:VAL:CG2	1:C:89:THR:HG21	2.47	0.45
1:D:189:VAL:CG1	1:D:193:GLN:HG2	2.47	0.45
1:D:461:GLU:O	1:D:462:GLY:C	2.60	0.45
1:E:247:LEU:HD13	1:E:324:ILE:HD11	1.98	0.45
1:E:267:ARG:HG3	1:E:267:ARG:NH1	2.31	0.45
1:F:418:LEU:H	1:F:418:LEU:HD12	1.81	0.45
1:H:132:LYS:C	1:H:134:LEU:H	2.25	0.45
1:H:161:ILE:O	1:H:165:MET:HG3	2.17	0.45
1:H:202:TYR:HD2	1:H:266:LEU:HD11	1.82	0.45
1:H:309:GLU:OE1	1:H:309:GLU:N	2.40	0.45
1:H:487:PHE:C	1:H:488:VAL:HG13	2.42	0.45
1:I:375:VAL:O	1:I:375:VAL:HG12	2.17	0.45
1:I:449:GLU:HB2	1:I:450:PRO:HD3	1.99	0.45
1:J:149:THR:HG23	1:J:155:PRO:CA	2.39	0.45
1:K:201:PRO:O	1:K:204:VAL:HG23	2.16	0.45
1:L:295:THR:HG22	1:L:317:GLY:CA	2.47	0.45
1:M:283:ARG:HD2	1:M:283:ARG:HA	1.70	0.45
1:N:161:ILE:O	1:N:165:MET:HG3	2.17	0.45
1:N:286:GLU:HG3	1:N:367:ARG:NH2	2.31	0.45
2:O:78:THR:HG22	2:O:80:ILE:CD1	2.46	0.45
2:R:13:ASP:O	2:R:62:LEU:HD21	2.16	0.45
2:S:10:PRO:CB	2:S:14:ARG:O	2.62	0.45
1:a:501:VAL:HG23	1:a:502:THR:H	1.82	0.45
1:b:23:VAL:CG1	1:b:74:LEU:HD23	2.47	0.45
1:b:72:GLN:NE2	1:b:75:LYS:NZ	2.64	0.45
1:b:288:LEU:HD23	1:b:291:ILE:HD12	1.99	0.45
1:b:526:LYS:CG	1:b:527:PRO:HD2	2.46	0.45
1:c:147:VAL:HG23	1:c:410:ILE:HD11	1.98	0.45
1:c:194:PHE:HD1	1:c:196:LYS:HB2	1.82	0.45
1:e:13:ARG:HB3	1:e:104:LEU:HD22	1.99	0.45
1:e:136:ILE:HB	1:e:410:ILE:HG22	1.98	0.45
1:e:161:ILE:HD12	1:e:399:LEU:CD2	2.47	0.45
1:e:340:ASP:O	1:e:344:ARG:HB2	2.17	0.45
1:f:23:VAL:CG1	1:f:74:LEU:HD23	2.46	0.45
1:f:264:ASN:HB3	1:f:269:THR:HB	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:352:LEU:HD13	1:g:364:LEU:CB	2.31	0.45
1:h:41:GLU:OE2	1:i:525:GLU:N	2.26	0.45
1:h:149:THR:HG23	1:h:155:PRO:CA	2.41	0.45
1:h:218:PHE:HE1	1:h:242:THR:HG21	1.81	0.45
1:i:283:ARG:HD2	1:i:283:ARG:HA	1.58	0.45
1:j:66:LEU:HD22	1:j:522:VAL:HG21	1.97	0.45
1:j:300:ILE:HG21	1:j:308:LEU:CD2	2.43	0.45
1:k:187:LYS:HZ2	1:k:379:ARG:HG3	1.81	0.45
1:k:224:LYS:CG	1:k:225:LYS:N	2.79	0.45
1:l:18:ARG:HD2	1:l:67:GLU:OE1	2.17	0.45
1:m:50:THR:HG21	1:m:55:THR:HB	1.99	0.45
1:n:86:GLY:O	1:n:87:ASP:HB2	2.17	0.45
1:B:10:GLU:HA	1:B:13:ARG:HH11	1.83	0.44
1:B:54:VAL:HG11	1:B:79:SER:HA	1.98	0.44
1:C:7:VAL:HG21	1:C:66:LEU:CD1	2.33	0.44
1:D:233:LEU:O	1:D:237:GLU:HG3	2.17	0.44
1:D:246:LEU:O	1:D:272:VAL:HA	2.16	0.44
1:D:418:LEU:H	1:D:418:LEU:HD12	1.81	0.44
1:E:248:ILE:CD1	1:E:261:LEU:HD21	2.44	0.44
1:E:286:GLU:OE2	1:E:344:ARG:NH2	2.43	0.44
1:E:343:ALA:HB2	1:F:207:PRO:CB	2.47	0.44
1:E:411:VAL:HB	1:E:412:PRO:HD2	1.98	0.44
1:F:124:VAL:O	1:F:128:VAL:HG23	2.16	0.44
1:F:229:VAL:HG23	1:F:256:GLU:CG	2.47	0.44
1:F:235:ILE:O	1:F:239:VAL:HG23	2.17	0.44
1:G:207:PRO:O	1:G:210:MET:CE	2.66	0.44
1:G:220:LEU:HG	1:G:222:VAL:HG23	1.97	0.44
1:G:373:GLY:O	1:G:374:GLY:C	2.59	0.44
1:H:168:VAL:HG12	1:H:172:GLY:CA	2.34	0.44
1:I:124:VAL:O	1:I:125:GLU:C	2.60	0.44
1:I:290:ASP:N	1:I:344:ARG:NH1	2.66	0.44
1:J:204:VAL:HG13	1:J:211:GLU:O	2.18	0.44
1:K:6:LEU:CD2	1:K:523:VAL:HG22	2.47	0.44
1:K:46:SER:HB2	1:K:47:PRO:CD	2.38	0.44
1:K:228:ASN:HB3	1:K:231:GLU:HG2	1.99	0.44
1:K:253:VAL:O	1:K:258:LEU:HD22	2.16	0.44
1:M:47:PRO:CG	1:N:73:LEU:HD13	2.47	0.44
1:M:50:THR:HG21	1:M:55:THR:HB	1.99	0.44
1:M:178:GLU:OE2	1:M:392:LYS:HE3	2.16	0.44
1:N:149:THR:HG23	1:N:155:PRO:CA	2.41	0.44
1:N:455:ALA:HB1	1:N:465:ILE:HD12	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:8:ILE:HD12	2:S:8:ILE:H	1.82	0.44
1:a:6:LEU:CD2	1:a:523:VAL:HG22	2.46	0.44
1:a:518:THR:OG1	1:b:37:ASN:ND2	2.49	0.44
1:a:520:GLU:HG2	1:b:29:VAL:HG13	1.98	0.44
1:b:201:PRO:O	1:b:204:VAL:HG23	2.18	0.44
1:b:247:LEU:HD13	1:b:324:ILE:HD11	1.99	0.44
1:d:74:LEU:HD21	1:d:93:THR:CG2	2.47	0.44
1:e:101:ARG:CG	1:e:102:GLU:N	2.79	0.44
1:e:150:ILE:O	1:e:153:ASN:N	2.48	0.44
1:e:457:ASN:N	1:e:457:ASN:HD22	2.15	0.44
1:h:232:LEU:HD23	1:h:236:LEU:HB2	1.98	0.44
1:h:280:PHE:CE2	1:n:385:GLU:HB2	2.52	0.44
1:h:283:ARG:O	1:h:287:MET:HG3	2.18	0.44
1:h:412:PRO:HB3	1:h:490:MET:HB2	1.99	0.44
1:j:224:LYS:CG	1:j:225:LYS:N	2.77	0.44
1:l:41:GLU:HG2	1:m:524:ALA:HA	1.99	0.44
1:l:182:LEU:HD12	1:m:363:LYS:NZ	2.28	0.44
1:m:325:THR:HG22	1:m:327:ASP:N	2.08	0.44
1:n:306:PHE:CE2	1:n:315:MET:HE1	2.52	0.44
2:o:20:ILE:CG1	2:o:43:GLY:HA2	2.46	0.44
2:t:31:VAL:HG12	2:t:32:LEU:N	2.32	0.44
2:t:80:ILE:CG2	2:t:81:GLU:N	2.80	0.44
2:u:74:LYS:HD2	2:u:74:LYS:C	2.40	0.44
1:A:478:TYR:CE1	1:A:487:PHE:HB3	2.52	0.44
1:A:515:LEU:HD12	1:B:49:ILE:CG2	2.46	0.44
1:B:349:LYS:O	1:B:351:GLU:N	2.51	0.44
1:C:168:VAL:O	1:C:168:VAL:CG1	2.65	0.44
1:C:421:ALA:O	1:C:425:VAL:HG23	2.18	0.44
1:D:149:THR:HG23	1:D:155:PRO:CA	2.43	0.44
1:D:392:LYS:O	1:D:396:GLU:HG3	2.17	0.44
1:E:220:LEU:C	1:E:221:ILE:HG13	2.42	0.44
1:E:222:VAL:O	1:E:250:ALA:HA	2.17	0.44
1:E:291:ILE:O	1:E:294:VAL:HG22	2.18	0.44
1:G:229:VAL:HG23	1:G:256:GLU:CG	2.47	0.44
1:H:253:VAL:HG11	1:H:261:LEU:HD12	1.99	0.44
1:H:300:ILE:HG21	1:H:308:LEU:CD2	2.45	0.44
1:I:187:LYS:HZ2	1:I:379:ARG:HG3	1.83	0.44
1:K:202:TYR:HD2	1:K:266:LEU:HD11	1.82	0.44
1:K:337:LYS:C	1:K:339:GLU:N	2.74	0.44
1:K:385:GLU:O	1:K:389:LYS:HG3	2.18	0.44
1:M:232:LEU:HD23	1:M:236:LEU:HB2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:62:LEU:C	2:O:64:VAL:N	2.76	0.44
2:P:79:GLU:C	2:P:80:ILE:HD12	2.42	0.44
2:S:50:THR:CG2	2:S:59:ARG:HD3	2.47	0.44
1:a:33:PRO:HD3	4:a:602:ADP:C5	2.52	0.44
1:a:198:TYR:O	1:a:198:TYR:HD1	2.00	0.44
1:a:348:ILE:HG21	1:a:364:LEU:O	2.17	0.44
1:a:369:ALA:HB1	1:a:375:VAL:HG23	2.00	0.44
1:b:77:VAL:HG23	1:b:512:ILE:HG13	2.00	0.44
1:b:345:ILE:HG22	1:b:346:ASN:N	2.31	0.44
1:c:227:SER:HA	1:c:254:GLU:O	2.18	0.44
1:c:230:ARG:O	1:c:234:PRO:HD2	2.17	0.44
1:c:277:ALA:CB	1:c:284:ARG:HD2	2.45	0.44
1:c:422:ILE:HD12	1:c:470:LEU:HD21	1.99	0.44
1:d:321:ARG:HB3	1:d:332:VAL:HB	1.98	0.44
1:f:150:ILE:HD11	1:f:495:ILE:CA	2.29	0.44
1:f:250:ALA:O	1:f:251:GLU:C	2.59	0.44
1:f:287:MET:O	1:f:291:ILE:HG13	2.17	0.44
1:h:132:LYS:C	1:h:134:LEU:H	2.24	0.44
1:h:375:VAL:O	1:h:375:VAL:HG12	2.17	0.44
1:i:19:GLY:HA3	1:i:67:GLU:O	2.17	0.44
1:i:219:ILE:O	1:i:221:ILE:HG13	2.17	0.44
1:j:65:HIS:CD2	1:j:527:PRO:HG3	2.50	0.44
1:k:114:LEU:O	1:k:118:ARG:HG3	2.16	0.44
1:l:47:PRO:HG2	1:m:73:LEU:HD13	1.99	0.44
1:n:178:GLU:CD	1:n:392:LYS:HE3	2.42	0.44
1:n:307:LYS:HB2	1:n:310:ASN:ND2	2.33	0.44
2:o:81:GLU:HA	2:o:85:GLU:O	2.18	0.44
2:q:45:VAL:HG12	2:q:46:ILE:H	1.82	0.44
2:q:84:GLY:O	2:q:85:GLU:HG2	2.16	0.44
2:r:91:SER:O	2:r:95:LEU:HG	2.17	0.44
2:t:22:GLU:HG2	2:t:40:PRO:HB3	1.99	0.44
1:B:218:PHE:HA	1:B:317:GLY:O	2.17	0.44
1:B:431:LYS:HG3	1:B:431:LYS:O	2.16	0.44
1:D:101:ARG:CG	1:D:102:GLU:H	2.31	0.44
1:I:309:GLU:OE1	1:I:309:GLU:N	2.42	0.44
1:K:278:PRO:O	1:K:284:ARG:HD3	2.17	0.44
1:K:292:ALA:HB1	1:K:297:GLY:O	2.18	0.44
1:L:74:LEU:HA	1:L:512:ILE:HD13	1.98	0.44
1:M:117:LYS:O	1:M:118:ARG:C	2.59	0.44
1:N:253:VAL:HG11	1:N:261:LEU:HD12	1.99	0.44
2:O:15:VAL:CG2	2:O:95:LEU:HD11	2.30	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:78:THR:CG2	2:O:80:ILE:HD11	2.46	0.44
2:R:41:GLN:HG2	2:R:74:LYS:HB3	1.99	0.44
2:U:69:ILE:O	2:U:98:VAL:HG13	2.17	0.44
1:a:47:PRO:HD2	1:g:73:LEU:CD2	2.47	0.44
1:d:280:PHE:O	1:d:281:GLY:C	2.59	0.44
1:g:31:LEU:HB2	1:g:90:THR:HG21	2.00	0.44
1:g:466:VAL:HG12	1:g:470:LEU:HD12	1.99	0.44
1:h:283:ARG:HH12	1:h:364:LEU:HD11	1.79	0.44
1:i:114:LEU:O	1:i:118:ARG:HG3	2.18	0.44
1:j:360:ALA:O	1:j:364:LEU:HD13	2.17	0.44
1:k:123:ALA:HB3	1:k:443:VAL:HG21	2.00	0.44
1:l:180:LYS:CB	1:m:281:GLY:CA	2.91	0.44
1:m:222:VAL:CG1	1:m:223:GLU:N	2.80	0.44
1:m:362:GLU:HA	1:m:365:GLN:CG	2.47	0.44
1:m:408:GLU:HB2	1:m:500:LYS:HB2	1.98	0.44
2:q:89:ILE:O	2:q:89:ILE:CG2	2.63	0.44
1:C:301:SER:HB2	1:C:304:LEU:HB3	1.99	0.44
1:D:31:LEU:HD23	1:D:453:GLN:HB3	1.98	0.44
1:D:425:VAL:O	1:D:429:ILE:HG13	2.18	0.44
1:E:295:THR:C	1:E:336:GLY:H	2.24	0.44
1:G:468:GLN:O	1:G:471:ALA:HB3	2.17	0.44
1:H:80:LYS:HE3	1:H:508:ASN:OD1	2.18	0.44
1:H:117:LYS:O	1:H:118:ARG:C	2.60	0.44
1:H:117:LYS:O	1:H:121:GLU:HG3	2.17	0.44
1:H:295:THR:HG22	1:H:317:GLY:CA	2.47	0.44
1:H:455:ALA:HB1	1:H:465:ILE:HD12	2.00	0.44
1:I:66:LEU:HD22	1:I:522:VAL:HG21	1.98	0.44
1:J:222:VAL:CG1	1:J:223:GLU:N	2.81	0.44
1:J:307:LYS:HB2	1:J:310:ASN:ND2	2.32	0.44
1:K:7:VAL:HG21	1:K:66:LEU:CD1	2.47	0.44
1:K:283:ARG:HD3	1:K:363:LYS:NZ	2.32	0.44
1:L:290:ASP:O	1:L:294:VAL:HG23	2.17	0.44
2:O:93:ARG:O	2:P:14:ARG:NH2	2.50	0.44
2:R:78:THR:HG22	2:R:80:ILE:CD1	2.47	0.44
2:T:51:GLY:HA3	2:T:60:VAL:O	2.17	0.44
1:a:392:LYS:O	1:a:396:GLU:HG3	2.17	0.44
1:c:283:ARG:HH12	1:c:363:LYS:CB	2.29	0.44
1:c:315:MET:HB3	1:c:315:MET:HE2	1.67	0.44
1:d:13:ARG:HB3	1:d:104:LEU:HD22	1.99	0.44
1:d:103:GLY:O	1:d:107:VAL:HG23	2.17	0.44
1:e:149:THR:CG2	1:e:155:PRO:HA	2.46	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:179:SER:OG	1:f:180:LYS:N	2.50	0.44
1:f:235:ILE:CG1	1:f:311:ALA:HB3	2.47	0.44
1:g:14:ARG:NH1	1:g:17:GLU:OE1	2.51	0.44
1:h:313:LEU:HG	1:h:313:LEU:O	2.18	0.44
1:j:30:THR:HB	1:j:51:LYS:O	2.17	0.44
1:j:84:VAL:HG12	1:j:500:LYS:CE	2.47	0.44
1:j:92:ALA:HB2	1:j:505:ALA:HA	2.00	0.44
1:j:433:GLU:HG2	1:j:434:GLY:N	2.33	0.44
1:k:325:THR:CG2	1:k:326:LYS:N	2.80	0.44
1:l:283:ARG:HH21	1:l:367:ARG:HD3	1.71	0.44
1:l:312:THR:C	1:l:314:SER:N	2.75	0.44
1:m:24:ALA:O	1:m:28:LYS:HG2	2.17	0.44
1:n:66:LEU:HD22	1:n:522:VAL:HG21	1.99	0.44
2:q:77:GLY:C	2:q:78:THR:O	2.61	0.44
2:q:100:GLN:OE1	2:r:9:LYS:HE2	2.17	0.44
2:s:13:ASP:C	2:s:62:LEU:HD21	2.42	0.44
2:s:75:TYR:CD1	2:s:76:GLY:N	2.85	0.44
2:t:54:LEU:C	2:t:56:ASN:H	2.26	0.44
2:t:65:LYS:O	2:t:68:ASP:HB2	2.17	0.44
2:t:72:PHE:CD2	2:t:90:LEU:HD22	2.53	0.44
1:B:240:ALA:HA	1:B:270:LEU:HD13	2.00	0.44
1:B:460:TYR:HB3	1:B:465:ILE:HD11	2.00	0.44
1:D:23:VAL:CG1	1:D:74:LEU:HD23	2.47	0.44
1:D:247:LEU:HD22	1:D:322:VAL:HG11	2.00	0.44
1:E:526:LYS:HA	1:E:527:PRO:HD3	1.82	0.44
1:F:392:LYS:O	1:F:396:GLU:HG3	2.18	0.44
1:H:37:ASN:ND2	1:H:51:LYS:HE2	2.26	0.44
1:H:66:LEU:HD22	1:H:522:VAL:HG21	1.99	0.44
1:I:179:SER:CB	1:I:379:ARG:HB3	2.40	0.44
1:I:352:LEU:HD21	1:I:365:GLN:NE2	2.33	0.44
1:J:253:VAL:HG11	1:J:261:LEU:HD12	1.99	0.44
1:M:352:LEU:HD21	1:M:365:GLN:HE22	1.83	0.44
1:N:54:VAL:HG22	1:N:89:THR:CG2	2.47	0.44
1:N:303:GLU:C	1:N:305:GLY:N	2.76	0.44
2:O:73:ALA:O	2:O:75:TYR:N	2.51	0.44
2:P:81:GLU:HG3	2:P:85:GLU:C	2.42	0.44
2:Q:79:GLU:HG2	2:Q:88:VAL:HG13	1.99	0.44
1:a:14:ARG:NH1	1:a:17:GLU:OE1	2.51	0.44
1:a:350:LYS:HG2	1:b:208:GLU:CD	2.42	0.44
1:b:146:GLU:O	1:b:147:VAL:C	2.60	0.44
1:c:224:LYS:H	1:c:224:LYS:CD	2.27	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:232:LEU:HB3	1:c:236:LEU:HD11	1.99	0.44
1:c:294:VAL:HA	1:c:341:ILE:HD11	2.00	0.44
1:d:31:LEU:HB2	1:d:90:THR:HG21	1.98	0.44
1:e:54:VAL:CG2	1:e:89:THR:HG21	2.48	0.44
1:e:498:PRO:HG2	1:e:501:VAL:HG22	1.98	0.44
1:g:237:GLU:OE2	2:u:28:GLY:N	2.49	0.44
1:g:463:SER:O	1:g:467:GLN:HG2	2.17	0.44
1:i:81:THR:OG1	1:i:508:ASN:ND2	2.50	0.44
1:i:168:VAL:CG2	1:i:376:ALA:HB2	2.47	0.44
1:i:181:SER:HA	1:j:282:ASP:OD2	2.18	0.44
1:i:385:GLU:HB2	1:j:280:PHE:CD2	2.52	0.44
1:l:228:ASN:ND2	1:l:230:ARG:HB3	2.29	0.44
2:q:41:GLN:HE21	2:q:73:ALA:HA	1.82	0.44
2:r:18:LYS:HG2	2:r:87:TYR:CE2	2.52	0.44
2:r:79:GLU:HG2	2:r:88:VAL:HG22	1.99	0.44
2:r:81:GLU:HG3	2:r:85:GLU:O	2.17	0.44
2:s:20:ILE:O	2:s:40:PRO:HB3	2.17	0.44
1:B:39:VAL:HG22	1:B:49:ILE:HG12	1.99	0.44
1:B:179:SER:OG	1:B:180:LYS:N	2.51	0.44
1:B:199:ILE:HG13	1:B:274:ALA:C	2.42	0.44
1:C:50:THR:HA	1:C:390:GLU:OE1	2.17	0.44
1:D:233:LEU:O	1:D:234:PRO:C	2.61	0.44
1:E:136:ILE:CD1	1:E:477:ARG:HH21	2.31	0.44
1:E:227:SER:HA	1:E:254:GLU:O	2.17	0.44
1:F:74:LEU:HD21	1:F:93:THR:CG2	2.47	0.44
1:F:179:SER:OG	1:F:180:LYS:N	2.51	0.44
1:H:224:LYS:CG	1:H:225:LYS:N	2.79	0.44
1:H:342:GLU:HA	1:H:345:ILE:HD12	2.00	0.44
1:J:412:PRO:HD2	1:J:417:THR:OG1	2.17	0.44
1:L:22:ALA:HB1	1:M:6:LEU:HD12	1.99	0.44
1:L:168:VAL:HG12	1:L:172:GLY:CA	2.36	0.44
1:L:178:GLU:OE2	1:L:392:LYS:HE3	2.18	0.44
1:L:452:ARG:HG2	1:L:452:ARG:NH1	2.32	0.44
1:M:69:ILE:O	1:M:73:LEU:HB2	2.17	0.44
1:N:175:THR:CG2	1:N:177:GLU:OE2	2.65	0.44
1:N:194:PHE:CG	1:N:278:PRO:HB3	2.52	0.44
1:N:297:GLY:HA3	1:N:317:GLY:N	2.33	0.44
1:N:307:LYS:HB2	1:N:310:ASN:ND2	2.33	0.44
2:Q:54:LEU:HD11	2:R:57:GLY:N	2.31	0.44
2:Q:62:LEU:C	2:Q:64:VAL:N	2.75	0.44
2:R:78:THR:CG2	2:R:80:ILE:HD11	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:S:19:ARG:HA	2:S:42:LYS:O	2.17	0.44
2:S:78:THR:HG22	2:S:79:GLU:N	2.32	0.44
2:U:53:VAL:HG22	2:U:59:ARG:CG	2.48	0.44
1:a:27:VAL:O	1:a:29:VAL:N	2.51	0.44
1:a:478:TYR:CE1	1:a:487:PHE:HB3	2.53	0.44
1:b:88:GLY:HA2	4:b:602:ADP:O2B	2.17	0.44
1:b:307:LYS:HG3	2:q:34:ASP:O	2.17	0.44
1:d:7:VAL:HG12	1:d:12:ALA:HB2	2.00	0.44
1:d:501:VAL:HG23	1:d:502:THR:H	1.81	0.44
1:f:461:GLU:O	1:f:462:GLY:C	2.61	0.44
1:h:168:VAL:CG2	1:h:376:ALA:HB2	2.48	0.44
1:h:247:LEU:HD13	1:h:324:ILE:HD11	1.98	0.44
1:j:175:THR:CG2	1:j:177:GLU:OE2	2.66	0.44
1:k:222:VAL:CG1	1:k:223:GLU:H	2.29	0.44
2:p:52:ARG:HD3	2:p:92:GLU:OE2	2.18	0.44
2:t:84:GLY:O	2:t:85:GLU:HG2	2.18	0.44
1:A:229:VAL:HG23	1:A:256:GLU:CG	2.47	0.44
1:B:180:LYS:HD3	1:B:180:LYS:HA	1.81	0.44
1:B:215:GLU:O	1:B:216:ASP:C	2.60	0.44
1:C:323:ARG:HG2	1:C:323:ARG:HH11	1.82	0.44
1:C:520:GLU:HB3	1:D:29:VAL:CG1	2.47	0.44
1:D:348:ILE:HG21	1:D:364:LEU:O	2.17	0.44
1:G:265:LYS:C	1:G:265:LYS:HD3	2.43	0.44
1:G:472:GLU:HB3	1:G:478:TYR:CD2	2.52	0.44
1:I:478:TYR:CZ	1:I:487:PHE:HB3	2.53	0.44
1:J:307:LYS:HE3	1:J:310:ASN:HD21	1.83	0.44
1:K:49:ILE:O	1:K:49:ILE:HG13	2.18	0.44
1:L:168:VAL:CG2	1:L:376:ALA:HB2	2.47	0.44
1:L:283:ARG:HD3	1:L:363:LYS:HE3	2.00	0.44
1:M:285:LYS:HG2	1:M:289:LYS:HE3	2.00	0.44
1:N:160:LEU:HD22	1:N:186:LEU:HB2	2.00	0.44
1:N:222:VAL:CG1	1:N:223:GLU:H	2.31	0.44
2:O:33:PRO:O	2:O:35:THR:N	2.51	0.44
1:a:10:GLU:N	1:a:13:ARG:HH12	2.16	0.44
1:a:101:ARG:CG	1:a:102:GLU:H	2.30	0.44
1:a:519:THR:HG23	1:b:39:VAL:HG23	1.98	0.44
1:b:128:VAL:HA	1:b:131:ILE:HD12	1.99	0.44
1:b:490:MET:CE	1:b:495:ILE:HG21	2.48	0.44
1:d:410:ILE:HD11	1:d:496:VAL:HG21	1.98	0.44
1:e:10:GLU:N	1:e:13:ARG:HH12	2.16	0.44
1:e:227:SER:HA	1:e:254:GLU:O	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:233:LEU:N	1:e:234:PRO:HD2	2.32	0.44
1:g:237:GLU:O	1:g:238:GLN:C	2.61	0.44
1:g:457:ASN:HD22	1:g:457:ASN:N	2.15	0.44
1:h:178:GLU:OE2	1:h:392:LYS:HE3	2.18	0.44
1:k:458:ALA:C	1:l:114:LEU:HD12	2.42	0.44
1:l:46:SER:HB2	1:l:47:PRO:CD	2.38	0.44
1:l:222:VAL:CG1	1:l:223:GLU:N	2.81	0.44
1:m:124:VAL:O	1:m:125:GLU:C	2.61	0.44
1:m:323:ARG:NH1	1:m:392:LYS:NZ	2.65	0.44
2:q:45:VAL:CG1	2:q:46:ILE:N	2.80	0.44
2:s:34:ASP:HA	2:s:37:LYS:HE2	2.00	0.44
1:A:10:GLU:N	1:A:13:ARG:HH12	2.15	0.44
1:A:101:ARG:HH22	1:A:449:GLU:CD	2.26	0.44
1:A:210:MET:HE2	1:A:210:MET:HA	2.00	0.44
1:C:113:PRO:HG3	1:D:36:ARG:NH1	2.32	0.44
1:D:264:ASN:HB3	1:D:269:THR:HB	2.00	0.44
1:E:152:ALA:HB2	1:E:398:ALA:HB2	2.00	0.44
1:E:478:TYR:CE1	1:E:487:PHE:HB3	2.53	0.44
1:F:150:ILE:CD1	1:F:496:VAL:N	2.80	0.44
1:G:233:LEU:CD2	2:U:30:ILE:HG21	2.48	0.44
1:G:270:LEU:HG	1:G:272:VAL:HG13	1.98	0.44
1:H:385:GLU:O	1:H:389:LYS:HG3	2.18	0.44
1:J:117:LYS:O	1:J:118:ARG:C	2.61	0.44
1:K:226:VAL:CG1	1:K:232:LEU:HD12	2.48	0.44
1:L:247:LEU:HD13	1:L:324:ILE:HD11	2.00	0.44
1:M:455:ALA:HB1	1:M:465:ILE:HD12	1.98	0.44
1:N:253:VAL:HG21	1:N:274:ALA:HB1	2.00	0.44
2:O:53:VAL:HG22	2:O:59:ARG:HE	1.82	0.44
2:P:8:ILE:N	2:P:8:ILE:CD1	2.80	0.44
2:P:13:ASP:CA	2:P:62:LEU:HD21	2.48	0.44
2:P:17:VAL:O	2:P:87:TYR:HB3	2.17	0.44
1:a:147:VAL:CG2	1:a:410:ILE:HD11	2.48	0.44
1:b:398:ALA:O	1:b:401:ALA:HB3	2.18	0.44
1:d:337:LYS:O	1:d:340:ASP:HB2	2.18	0.44
1:e:250:ALA:O	1:e:251:GLU:C	2.60	0.44
1:e:410:ILE:HG12	1:e:496:VAL:HB	1.99	0.44
1:e:418:LEU:HD12	1:e:418:LEU:H	1.82	0.44
1:e:501:VAL:CG2	1:e:502:THR:N	2.81	0.44
1:f:250:ALA:O	1:f:252:ASP:N	2.51	0.44
1:g:214:LEU:HB3	1:g:245:PRO:HB3	1.99	0.44
1:g:238:GLN:HB3	1:g:313:LEU:CG	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:238:GLN:O	1:g:313:LEU:HD11	2.18	0.44
1:i:175:THR:CG2	1:i:177:GLU:OE2	2.65	0.44
1:j:460:TYR:CE2	1:j:480:PHE:HZ	2.36	0.44
1:k:37:ASN:ND2	1:k:51:LYS:HE2	2.28	0.44
1:k:385:GLU:O	1:k:389:LYS:HG3	2.17	0.44
1:l:295:THR:HG22	1:l:317:GLY:CA	2.47	0.44
1:m:18:ARG:HD2	1:m:67:GLU:OE1	2.17	0.44
1:n:298:THR:N	1:n:315:MET:O	2.48	0.44
1:n:316:LEU:H	1:n:316:LEU:HD23	1.82	0.44
2:o:73:ALA:O	2:o:75:TYR:N	2.51	0.44
2:s:71:VAL:HG23	2:s:99:LEU:HD13	1.98	0.44
1:A:34:ARG:NH1	1:G:112:ASN:HD21	2.16	0.44
1:A:422:ILE:HD12	1:A:470:LEU:HD21	2.00	0.44
1:C:289:LYS:HE2	1:D:202:TYR:OH	2.18	0.44
1:D:218:PHE:CE1	1:D:244:LYS:HB2	2.52	0.44
1:D:218:PHE:HA	1:D:317:GLY:O	2.18	0.44
1:E:515:LEU:HD12	1:F:49:ILE:CG2	2.44	0.44
1:F:348:ILE:HG21	1:F:364:LEU:O	2.18	0.44
1:F:363:LYS:C	1:F:365:GLN:H	2.25	0.44
1:G:142:LYS:O	1:G:146:GLU:HG3	2.18	0.44
1:H:146:GLU:O	1:H:150:ILE:HG13	2.18	0.44
1:I:81:THR:OG1	1:I:508:ASN:ND2	2.50	0.44
1:J:30:THR:HB	1:J:51:LYS:O	2.17	0.44
1:J:37:ASN:OD1	1:K:515:LEU:HD12	2.18	0.44
1:J:179:SER:CB	1:J:379:ARG:HB3	2.41	0.44
1:J:194:PHE:HB2	1:J:278:PRO:HB3	1.99	0.44
1:J:412:PRO:HB3	1:J:490:MET:HB2	2.00	0.44
1:K:384:THR:HG22	1:K:385:GLU:N	2.33	0.44
1:L:39:VAL:HG11	1:M:69:ILE:HG21	1.98	0.44
1:M:526:LYS:CG	1:M:527:PRO:HD2	2.48	0.44
2:P:10:PRO:HB2	2:P:14:ARG:O	2.17	0.44
2:P:48:VAL:CG1	2:P:62:LEU:CD1	2.93	0.44
1:a:410:ILE:HG12	1:a:496:VAL:HB	2.00	0.44
1:a:418:LEU:H	1:a:418:LEU:HD12	1.83	0.44
1:b:455:ALA:O	1:b:458:ALA:HB3	2.17	0.44
1:c:217:ALA:CB	1:c:245:PRO:HB2	2.48	0.44
1:c:218:PHE:HE1	1:c:244:LYS:HB2	1.82	0.44
1:c:235:ILE:CD1	1:c:311:ALA:HB1	2.48	0.44
1:c:265:LYS:HZ3	1:c:271:SER:HB2	1.83	0.44
1:c:348:ILE:HD12	1:c:367:ARG:HE	1.79	0.44
1:d:229:VAL:HG23	1:d:256:GLU:OE2	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:f:14:ARG:NH1	1:f:17:GLU:OE1	2.50	0.44
1:f:123:ALA:HA	1:f:428:LEU:HD23	2.00	0.44
1:g:165:MET:HE3	1:g:402:THR:CG2	2.46	0.44
1:g:247:LEU:HD22	1:g:322:VAL:CG1	2.46	0.44
1:g:277:ALA:CB	1:g:284:ARG:HD2	2.46	0.44
1:j:28:LYS:NZ	1:j:97:GLN:HE22	2.16	0.44
1:j:46:SER:CB	1:j:47:PRO:HD2	2.39	0.44
1:j:69:ILE:O	1:j:73:LEU:HB2	2.17	0.44
1:j:232:LEU:CD2	1:j:236:LEU:HD13	2.46	0.44
1:k:267:ARG:HG2	1:l:256:GLU:CD	2.43	0.44
1:k:478:TYR:CZ	1:k:487:PHE:HB3	2.53	0.44
1:l:207:PRO:O	1:l:210:MET:HE3	2.18	0.44
1:m:19:GLY:HA3	1:m:67:GLU:O	2.18	0.44
1:n:79:SER:O	1:n:81:THR:N	2.49	0.44
2:o:59:ARG:O	2:o:61:PRO:HD3	2.17	0.44
2:p:48:VAL:HG12	2:p:62:LEU:CD1	2.43	0.44
2:r:97:ALA:CA	2:s:11:LEU:HD13	2.40	0.44
1:A:233:LEU:O	1:A:234:PRO:C	2.61	0.43
1:B:265:LYS:HA	1:B:270:LEU:O	2.17	0.43
1:C:80:LYS:HE2	1:D:383:ALA:O	2.18	0.43
1:C:345:ILE:HG22	1:C:346:ASN:N	2.33	0.43
1:D:321:ARG:HB3	1:D:332:VAL:HB	2.00	0.43
1:D:359:TYR:CZ	1:D:363:LYS:HE3	2.52	0.43
1:D:465:ILE:HD13	1:D:480:PHE:CD2	2.52	0.43
1:E:142:LYS:O	1:E:143:ALA:C	2.61	0.43
1:E:355:THR:CG2	1:E:360:ALA:HB3	2.48	0.43
1:F:23:VAL:CG1	1:F:74:LEU:HD23	2.48	0.43
1:F:229:VAL:HG12	1:F:233:LEU:CD1	2.44	0.43
1:H:526:LYS:O	1:H:527:PRO:C	2.61	0.43
1:J:286:GLU:OE2	1:J:344:ARG:NH2	2.50	0.43
1:J:526:LYS:HG3	1:J:527:PRO:HD2	1.99	0.43
1:L:194:PHE:CE2	1:L:329:THR:HB	2.53	0.43
1:L:228:ASN:ND2	1:L:230:ARG:HB3	2.29	0.43
1:M:124:VAL:O	1:M:125:GLU:C	2.60	0.43
1:M:316:LEU:HD23	1:M:316:LEU:O	2.18	0.43
1:N:345:ILE:HG22	1:N:349:LYS:HE3	1.99	0.43
2:Q:81:GLU:HA	2:Q:85:GLU:O	2.18	0.43
2:R:17:VAL:CG1	2:R:18:LYS:N	2.81	0.43
2:R:98:VAL:O	2:S:9:LYS:HB2	2.18	0.43
2:U:50:THR:CG2	2:U:59:ARG:HD3	2.48	0.43
1:a:332:VAL:HG12	1:a:333:GLY:N	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:284:ARG:HG3	1:b:284:ARG:NH1	2.33	0.43
1:b:344:ARG:HD2	1:b:344:ARG:HA	1.62	0.43
1:c:6:LEU:CD2	1:c:523:VAL:HG22	2.47	0.43
1:c:287:MET:HE3	1:c:367:ARG:HG3	2.00	0.43
1:c:348:ILE:HD11	1:c:367:ARG:HB3	2.00	0.43
1:e:31:LEU:CD1	4:e:602:ADP:H5'1	2.48	0.43
1:e:455:ALA:O	1:e:458:ALA:HB3	2.17	0.43
1:f:54:VAL:CG2	1:f:89:THR:HG21	2.48	0.43
1:g:150:ILE:HD12	1:g:496:VAL:H	1.83	0.43
1:h:84:VAL:HG12	1:h:500:LYS:CE	2.45	0.43
1:h:253:VAL:HG11	1:h:261:LEU:HD12	2.00	0.43
1:h:283:ARG:HA	1:h:283:ARG:HD2	1.73	0.43
1:i:49:ILE:O	1:i:49:ILE:HG13	2.16	0.43
1:i:130:LYS:O	1:i:134:LEU:HB2	2.18	0.43
1:j:316:LEU:H	1:j:316:LEU:HD23	1.83	0.43
1:k:290:ASP:N	1:k:344:ARG:NH1	2.65	0.43
1:k:412:PRO:HB3	1:k:490:MET:HB2	2.00	0.43
1:k:452:ARG:HG2	1:k:452:ARG:NH1	2.31	0.43
1:l:247:LEU:HD22	1:l:322:VAL:CG1	2.44	0.43
1:l:298:THR:N	1:l:315:MET:O	2.50	0.43
1:l:307:LYS:HB2	1:l:310:ASN:ND2	2.33	0.43
1:l:465:ILE:HD13	1:l:480:PHE:CD1	2.52	0.43
1:m:46:SER:CB	1:m:47:PRO:HD2	2.40	0.43
1:m:285:LYS:O	1:m:289:LYS:HG3	2.18	0.43
1:n:7:VAL:HG12	1:n:12:ALA:HB2	1.99	0.43
1:n:30:THR:HB	1:n:51:LYS:O	2.17	0.43
1:n:207:PRO:O	1:n:210:MET:HE3	2.18	0.43
1:n:292:ALA:HB1	1:n:297:GLY:O	2.18	0.43
1:n:342:GLU:HA	1:n:345:ILE:HD12	1.99	0.43
1:n:449:GLU:HB2	1:n:450:PRO:HD3	2.00	0.43
2:q:48:VAL:HG13	2:q:62:LEU:HD12	2.00	0.43
2:r:18:LYS:HE3	2:r:86:GLU:O	2.18	0.43
2:u:45:VAL:HG22	2:u:70:VAL:CG1	2.48	0.43
1:A:157:VAL:O	1:A:161:ILE:HG12	2.17	0.43
1:B:256:GLU:HB3	2:P:35:THR:HB	2.00	0.43
1:C:215:GLU:O	1:C:216:ASP:C	2.61	0.43
1:E:54:VAL:HG11	1:E:79:SER:HA	1.99	0.43
1:E:146:GLU:O	1:E:147:VAL:C	2.62	0.43
1:E:231:GLU:CB	1:E:308:LEU:HD23	2.49	0.43
1:F:6:LEU:CD2	1:F:523:VAL:HG22	2.49	0.43
1:F:221:ILE:HG22	1:F:299:VAL:HG13	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:235:ILE:HD13	1:F:235:ILE:HG21	1.82	0.43
1:F:460:TYR:HB3	1:F:465:ILE:HD11	2.01	0.43
1:G:359:TYR:CE1	1:G:363:LYS:HE2	2.52	0.43
1:H:49:ILE:O	1:H:49:ILE:HG13	2.16	0.43
1:H:232:LEU:HD23	1:H:236:LEU:HB2	2.00	0.43
1:I:253:VAL:O	1:I:258:LEU:HD22	2.18	0.43
1:I:300:ILE:HG21	1:I:308:LEU:CD2	2.46	0.43
1:I:316:LEU:O	1:I:316:LEU:HD23	2.18	0.43
1:I:425:VAL:O	1:I:429:ILE:HG13	2.19	0.43
1:J:7:VAL:HG21	1:J:66:LEU:CD1	2.47	0.43
1:J:226:VAL:CG1	1:J:232:LEU:HD12	2.48	0.43
1:L:25:ASN:C	1:M:8:PHE:HE2	2.26	0.43
1:L:117:LYS:O	1:L:121:GLU:HG3	2.18	0.43
1:L:342:GLU:O	1:L:346:ASN:ND2	2.51	0.43
1:L:385:GLU:O	1:L:389:LYS:HG3	2.16	0.43
1:M:194:PHE:HB2	1:M:278:PRO:HB3	1.99	0.43
1:M:412:PRO:HB3	1:M:490:MET:HB2	2.00	0.43
2:P:18:LYS:HZ1	2:P:85:GLU:CD	2.26	0.43
2:P:20:ILE:O	2:P:40:PRO:HB3	2.18	0.43
2:Q:38:GLU:H	2:Q:38:GLU:HG2	1.58	0.43
2:T:17:VAL:HG12	2:T:18:LYS:N	2.33	0.43
2:T:22:GLU:OE1	2:T:22:GLU:N	2.46	0.43
1:a:147:VAL:HG23	1:a:410:ILE:HD11	2.00	0.43
1:a:150:ILE:CD1	1:a:496:VAL:N	2.81	0.43
1:a:283:ARG:O	1:a:287:MET:HG3	2.18	0.43
1:c:74:LEU:HD21	1:c:93:THR:CG2	2.49	0.43
1:d:147:VAL:CG2	1:d:410:ILE:HD11	2.48	0.43
1:d:150:ILE:CD1	1:d:496:VAL:N	2.81	0.43
1:f:72:GLN:NE2	1:f:75:LYS:NZ	2.66	0.43
1:f:265:LYS:HA	1:f:270:LEU:O	2.18	0.43
1:g:410:ILE:HG12	1:g:496:VAL:HB	1.99	0.43
1:g:452:ARG:HH11	1:g:463:SER:HA	1.83	0.43
1:j:81:THR:OG1	1:j:508:ASN:ND2	2.51	0.43
1:k:197:GLY:HA3	1:k:325:THR:O	2.18	0.43
1:k:465:ILE:HD13	1:k:480:PHE:CD1	2.53	0.43
1:l:132:LYS:C	1:l:134:LEU:N	2.76	0.43
1:m:342:GLU:O	1:m:346:ASN:ND2	2.52	0.43
2:p:13:ASP:CG	2:p:92:GLU:HB3	2.43	0.43
2:s:17:VAL:CG1	2:s:43:GLY:HA3	2.48	0.43
1:B:147:VAL:HG23	1:B:410:ILE:HD11	2.00	0.43
1:B:307:LYS:HB2	1:B:310:ASN:HD22	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:452:ARG:HH11	1:B:463:SER:HA	1.83	0.43
1:B:503:ARG:O	1:B:507:GLN:HG3	2.18	0.43
1:C:297:GLY:H	1:C:317:GLY:HA2	1.83	0.43
1:C:501:VAL:HG23	1:C:502:THR:H	1.81	0.43
1:D:452:ARG:HH11	1:D:463:SER:HA	1.84	0.43
1:E:33:PRO:HG3	4:E:602:ADP:C6	2.53	0.43
1:J:342:GLU:HA	1:J:345:ILE:HD12	1.99	0.43
1:K:194:PHE:N	1:K:194:PHE:CD2	2.86	0.43
1:K:459:GLY:HA3	1:L:114:LEU:HD12	2.00	0.43
1:L:39:VAL:HG11	1:M:69:ILE:CG2	2.48	0.43
1:L:175:THR:CG2	1:L:177:GLU:OE2	2.65	0.43
1:L:425:VAL:O	1:L:429:ILE:HG13	2.17	0.43
1:L:478:TYR:CZ	1:L:487:PHE:HB3	2.54	0.43
1:M:177:GLU:C	1:M:321:ARG:NH1	2.74	0.43
1:N:433:GLU:HG2	1:N:434:GLY:N	2.33	0.43
2:U:17:VAL:CG1	2:U:43:GLY:HA3	2.48	0.43
1:a:307:LYS:HG3	2:p:34:ASP:HB3	2.00	0.43
1:a:354:THR:O	1:a:354:THR:HG22	2.18	0.43
1:a:421:ALA:O	1:a:425:VAL:HG23	2.18	0.43
1:b:80:LYS:HG2	1:c:383:ALA:O	2.19	0.43
1:c:312:THR:HG22	1:c:314:SER:N	2.23	0.43
1:c:321:ARG:O	1:c:322:VAL:HG23	2.18	0.43
1:d:23:VAL:HB	1:d:74:LEU:HD23	1.99	0.43
1:d:189:VAL:CG1	1:d:193:GLN:HG2	2.48	0.43
1:d:220:LEU:HD13	1:d:235:ILE:HD12	2.00	0.43
1:d:457:ASN:N	1:d:457:ASN:HD22	2.16	0.43
1:h:50:THR:HG21	1:h:55:THR:HB	2.00	0.43
1:j:46:SER:HB2	1:j:47:PRO:CD	2.39	0.43
1:k:278:PRO:O	1:k:284:ARG:HD3	2.19	0.43
1:k:298:THR:N	1:k:315:MET:O	2.51	0.43
1:k:433:GLU:HG2	1:k:434:GLY:N	2.33	0.43
1:k:458:ALA:C	1:l:114:LEU:CD1	2.91	0.43
1:l:332:VAL:HG22	1:l:375:VAL:HG11	2.00	0.43
1:m:46:SER:HB2	1:m:47:PRO:CD	2.40	0.43
1:n:28:LYS:NZ	1:n:97:GLN:HE22	2.15	0.43
1:n:277:ALA:HB1	1:n:284:ARG:HD2	1.96	0.43
1:n:487:PHE:C	1:n:488:VAL:HG13	2.43	0.43
2:t:60:VAL:HG13	2:t:61:PRO:CD	2.46	0.43
1:A:209:THR:O	1:A:211:GLU:HG3	2.18	0.43
1:B:235:ILE:HD12	1:B:311:ALA:HB1	2.00	0.43
1:B:289:LYS:CE	1:C:202:TYR:OH	2.60	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:296:GLY:CA	1:B:336:GLY:HA2	2.48	0.43
1:C:157:VAL:O	1:C:161:ILE:HG12	2.18	0.43
1:D:77:VAL:HG23	1:D:512:ILE:HG13	1.99	0.43
1:D:179:SER:HB2	1:D:379:ARG:HB3	2.00	0.43
1:E:445:ARG:CZ	1:E:452:ARG:HH21	2.31	0.43
1:F:215:GLU:O	1:F:216:ASP:C	2.61	0.43
1:F:218:PHE:HA	1:F:317:GLY:O	2.19	0.43
1:F:229:VAL:HG23	1:F:256:GLU:OE2	2.18	0.43
1:F:352:LEU:HD21	1:F:364:LEU:HB2	2.01	0.43
1:F:448:GLU:OE1	1:F:452:ARG:NH2	2.51	0.43
1:F:520:GLU:HB3	1:G:29:VAL:CG1	2.48	0.43
1:G:340:ASP:O	1:G:344:ARG:HB2	2.19	0.43
1:G:410:ILE:HG12	1:G:496:VAL:HB	2.00	0.43
1:H:375:VAL:O	1:H:375:VAL:HG12	2.18	0.43
1:I:316:LEU:H	1:I:316:LEU:HD23	1.82	0.43
1:J:337:LYS:C	1:J:339:GLU:N	2.76	0.43
1:K:283:ARG:HH22	1:K:364:LEU:HA	1.84	0.43
1:L:311:ALA:HA	1:L:315:MET:SD	2.58	0.43
1:M:71:ALA:O	1:M:75:LYS:HG3	2.18	0.43
1:M:178:GLU:CA	1:M:321:ARG:NH1	2.79	0.43
1:M:222:VAL:CG1	1:M:223:GLU:N	2.80	0.43
1:N:444:ARG:O	1:N:444:ARG:HG2	2.18	0.43
2:P:41:GLN:HB3	2:P:72:PHE:O	2.18	0.43
2:P:80:ILE:CG2	2:P:81:GLU:H	2.31	0.43
2:Q:33:PRO:C	2:Q:35:THR:N	2.73	0.43
2:S:11:LEU:O	2:S:12:GLY:C	2.62	0.43
1:a:506:LEU:HD12	1:a:506:LEU:O	2.19	0.43
1:b:250:ALA:O	1:b:251:GLU:C	2.62	0.43
1:b:267:ARG:HB3	1:b:269:THR:OG1	2.17	0.43
1:c:337:LYS:O	1:c:338:LYS:C	2.61	0.43
1:c:341:ILE:O	1:c:345:ILE:HG22	2.18	0.43
1:c:369:ALA:O	1:c:370:LYS:C	2.61	0.43
1:d:344:ARG:HD2	1:d:344:ARG:HA	1.75	0.43
1:e:7:VAL:CG2	1:e:66:LEU:HD11	2.33	0.43
1:f:146:GLU:O	1:f:147:VAL:C	2.61	0.43
1:f:422:ILE:HD12	1:f:470:LEU:HD21	2.00	0.43
1:g:150:ILE:CD1	1:g:496:VAL:N	2.82	0.43
1:h:366:GLU:O	1:h:370:LYS:HG3	2.18	0.43
1:j:303:GLU:C	1:j:305:GLY:N	2.76	0.43
1:k:303:GLU:C	1:k:305:GLY:N	2.77	0.43
1:l:316:LEU:HD23	1:l:316:LEU:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:o:9:LYS:HE3	2:u:100:GLN:HB2	2.00	0.43
2:q:96:LEU:O	2:r:10:PRO:HA	2.19	0.43
2:q:98:VAL:HB	2:r:9:LYS:HB2	2.00	0.43
2:s:78:THR:HG22	2:s:80:ILE:HD11	2.01	0.43
2:t:66:GLU:HG2	2:t:67:GLY:H	1.82	0.43
2:u:70:VAL:O	2:u:71:VAL:HG23	2.18	0.43
1:A:51:LYS:HG2	1:A:51:LYS:O	2.18	0.43
1:A:147:VAL:CG2	1:A:410:ILE:HD11	2.48	0.43
1:A:220:LEU:HD23	1:A:248:ILE:HG23	2.01	0.43
1:A:478:TYR:CZ	1:A:487:PHE:HB3	2.54	0.43
1:B:146:GLU:O	1:B:147:VAL:C	2.61	0.43
1:B:198:TYR:O	1:B:198:TYR:HD1	2.01	0.43
1:B:325:THR:CG2	1:B:326:LYS:H	2.25	0.43
1:C:199:ILE:O	1:C:199:ILE:HG22	2.19	0.43
1:D:417:THR:HG23	1:D:418:LEU:HD12	2.00	0.43
1:D:520:GLU:HB3	1:E:29:VAL:HG11	2.01	0.43
1:E:242:THR:HG22	1:E:242:THR:O	2.18	0.43
1:E:250:ALA:C	1:E:252:ASP:N	2.75	0.43
1:E:341:ILE:O	1:E:345:ILE:HG22	2.19	0.43
1:F:73:LEU:CD2	1:G:47:PRO:HD2	2.49	0.43
1:F:168:VAL:O	1:F:168:VAL:CG1	2.66	0.43
1:G:320:GLU:O	1:G:321:ARG:HB2	2.19	0.43
1:H:253:VAL:O	1:H:258:LEU:HD22	2.17	0.43
1:I:270:LEU:CD2	1:I:272:VAL:HG13	2.38	0.43
1:J:49:ILE:O	1:J:49:ILE:HG13	2.19	0.43
1:J:313:LEU:HG	1:J:313:LEU:O	2.19	0.43
1:K:84:VAL:HG12	1:K:500:LYS:CE	2.44	0.43
1:K:217:ALA:HB1	1:K:245:PRO:O	2.19	0.43
1:L:313:LEU:O	1:L:313:LEU:HG	2.17	0.43
2:P:15:VAL:CG1	2:P:45:VAL:HG13	2.42	0.43
1:b:178:GLU:CG	1:b:388:LEU:HD21	2.43	0.43
1:b:396:GLU:O	1:b:400:ASN:ND2	2.51	0.43
1:c:101:ARG:CG	1:c:102:GLU:H	2.32	0.43
1:d:101:ARG:HH22	1:d:449:GLU:CD	2.26	0.43
1:d:146:GLU:O	1:d:147:VAL:C	2.60	0.43
1:d:247:LEU:HD13	1:d:324:ILE:HD11	1.99	0.43
1:d:288:LEU:HD23	1:d:291:ILE:HD12	2.01	0.43
1:d:332:VAL:HG12	1:d:333:GLY:N	2.33	0.43
1:f:345:ILE:HG23	1:f:368:LEU:CD1	2.47	0.43
1:g:23:VAL:CG1	1:g:74:LEU:HD23	2.47	0.43
1:i:385:GLU:O	1:i:389:LYS:HG3	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:49:ILE:O	1:j:49:ILE:HG13	2.18	0.43
1:j:360:ALA:O	1:j:364:LEU:CD1	2.66	0.43
1:j:449:GLU:HB2	1:j:450:PRO:HD3	2.00	0.43
1:k:28:LYS:HZ2	1:k:97:GLN:HE22	1.67	0.43
1:k:267:ARG:O	1:l:256:GLU:HG3	2.19	0.43
1:k:332:VAL:HG22	1:k:375:VAL:CG1	2.26	0.43
1:l:39:VAL:HB	1:m:522:VAL:HG12	2.01	0.43
1:l:71:ALA:O	1:l:75:LYS:HG3	2.19	0.43
1:l:179:SER:HB2	1:l:379:ARG:CB	2.39	0.43
1:l:300:ILE:O	1:l:300:ILE:HG22	2.17	0.43
1:m:295:THR:HG22	1:m:317:GLY:CA	2.47	0.43
1:n:168:VAL:CG2	1:n:376:ALA:HB2	2.47	0.43
2:p:13:ASP:HB2	2:p:52:ARG:HB3	2.01	0.43
2:p:19:ARG:HA	2:p:42:LYS:O	2.19	0.43
2:q:31:VAL:O	2:q:32:LEU:O	2.36	0.43
2:q:70:VAL:HG11	2:q:95:LEU:HD22	1.96	0.43
2:t:20:ILE:O	2:t:20:ILE:HG22	2.18	0.43
2:u:17:VAL:HG13	2:u:44:LYS:C	2.44	0.43
2:u:33:PRO:O	2:u:36:ALA:N	2.33	0.43
1:A:84:VAL:O	1:A:84:VAL:HG12	2.18	0.43
1:A:218:PHE:HA	1:A:317:GLY:O	2.18	0.43
1:A:452:ARG:HH11	1:A:463:SER:HA	1.83	0.43
1:C:461:GLU:O	1:C:462:GLY:C	2.61	0.43
1:D:54:VAL:HG13	1:D:89:THR:HG21	2.00	0.43
1:D:253:VAL:HG21	1:D:274:ALA:HB1	2.01	0.43
1:E:31:LEU:HB2	1:E:90:THR:CG2	2.47	0.43
1:E:124:VAL:O	1:E:128:VAL:HG23	2.18	0.43
1:E:262:VAL:O	1:E:265:LYS:HB3	2.19	0.43
1:E:475:ASN:HA	1:E:476:PRO:HD2	1.92	0.43
1:F:152:ALA:HB2	1:F:398:ALA:HB2	2.00	0.43
1:G:297:GLY:N	1:G:317:GLY:HA2	2.34	0.43
1:H:193:GLN:HE21	1:H:330:THR:CG2	2.31	0.43
1:I:49:ILE:O	1:I:49:ILE:HG13	2.18	0.43
1:I:210:MET:HE2	1:I:210:MET:HA	1.99	0.43
1:J:222:VAL:HG12	1:J:223:GLU:H	1.84	0.43
1:J:360:ALA:O	1:J:363:LYS:HG2	2.17	0.43
1:K:342:GLU:O	1:K:346:ASN:ND2	2.51	0.43
1:L:40:LEU:N	1:L:40:LEU:CD1	2.81	0.43
1:L:95:LEU:O	1:L:99:ILE:HG13	2.18	0.43
1:M:8:PHE:N	1:M:8:PHE:CD1	2.87	0.43
1:M:190:GLU:HG3	1:M:341:ILE:HD13	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:298:THR:N	1:N:315:MET:O	2.51	0.43
2:O:13:ASP:CA	2:O:62:LEU:HD21	2.49	0.43
2:P:71:VAL:HG13	2:Q:80:ILE:HD13	1.99	0.43
2:R:78:THR:CG2	2:R:79:GLU:N	2.81	0.43
2:T:11:LEU:O	2:T:13:ASP:N	2.52	0.43
1:a:218:PHE:CE1	1:a:242:THR:HG21	2.54	0.43
1:a:228:ASN:ND2	1:a:230:ARG:HB2	2.33	0.43
1:b:193:GLN:HB2	1:b:329:THR:O	2.19	0.43
1:b:229:VAL:HG23	1:b:256:GLU:OE2	2.19	0.43
1:c:144:ILE:HD13	1:c:402:THR:CG2	2.49	0.43
1:c:267:ARG:HG3	1:c:267:ARG:NH1	2.33	0.43
1:d:54:VAL:CG2	1:d:89:THR:HG21	2.46	0.43
1:d:349:LYS:C	1:d:351:GLU:N	2.75	0.43
1:e:103:GLY:O	1:e:107:VAL:HG23	2.18	0.43
1:e:198:TYR:O	1:e:198:TYR:CD1	2.71	0.43
1:e:345:ILE:HG22	1:e:346:ASN:N	2.33	0.43
1:f:51:LYS:HG2	1:f:51:LYS:O	2.18	0.43
1:f:218:PHE:CE1	1:f:244:LYS:HB2	2.53	0.43
1:f:218:PHE:CZ	1:f:242:THR:HG21	2.53	0.43
1:g:264:ASN:OD1	1:g:269:THR:HG21	2.18	0.43
1:h:433:GLU:HG2	1:h:434:GLY:N	2.34	0.43
1:i:311:ALA:HA	1:i:315:MET:SD	2.58	0.43
1:j:337:LYS:C	1:j:339:GLU:N	2.76	0.43
1:k:86:GLY:O	1:k:87:ASP:HB2	2.17	0.43
1:k:124:VAL:O	1:k:125:GLU:C	2.61	0.43
1:k:307:LYS:HB2	1:k:310:ASN:ND2	2.34	0.43
1:k:360:ALA:O	1:k:364:LEU:CD1	2.67	0.43
1:m:277:ALA:HB1	1:m:284:ARG:HD2	2.01	0.43
1:n:49:ILE:O	1:n:49:ILE:HG13	2.17	0.43
1:n:117:LYS:O	1:n:121:GLU:HG3	2.18	0.43
1:A:66:LEU:HD22	1:A:522:VAL:CG1	2.42	0.43
1:A:261:LEU:CD2	1:A:272:VAL:HG21	2.48	0.43
1:B:51:LYS:O	1:B:51:LYS:HG2	2.18	0.43
1:B:199:ILE:O	1:B:199:ILE:HG22	2.19	0.43
1:C:146:GLU:O	1:C:147:VAL:C	2.60	0.43
1:C:229:VAL:O	1:C:233:LEU:HG	2.18	0.43
1:C:237:GLU:HG2	2:Q:30:ILE:HD12	2.00	0.43
1:C:506:LEU:HD12	1:C:506:LEU:O	2.18	0.43
1:D:157:VAL:O	1:D:161:ILE:HG12	2.19	0.43
1:E:101:ARG:HH22	1:E:449:GLU:CD	2.26	0.43
1:E:210:MET:HA	1:E:210:MET:CE	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:288:LEU:HD23	1:F:288:LEU:HA	1.88	0.43
1:F:344:ARG:HA	1:F:344:ARG:HD2	1.63	0.43
1:F:465:ILE:HD13	1:F:480:PHE:CD2	2.53	0.43
1:H:222:VAL:CG1	1:H:223:GLU:H	2.32	0.43
1:H:352:LEU:HD21	1:H:365:GLN:HE22	1.84	0.43
1:K:222:VAL:CG1	1:K:223:GLU:H	2.32	0.43
1:M:202:TYR:HD2	1:M:266:LEU:HD11	1.84	0.43
1:M:295:THR:HG22	1:M:317:GLY:CA	2.48	0.43
1:N:261:LEU:HD22	1:N:272:VAL:HG21	1.99	0.43
2:Q:71:VAL:HG23	2:Q:99:LEU:HD13	2.01	0.43
2:S:53:VAL:HG22	2:S:59:ARG:HG2	1.99	0.43
1:b:242:THR:HG22	1:b:244:LYS:HG2	2.01	0.43
1:b:323:ARG:HG2	1:b:323:ARG:NH1	2.34	0.43
1:b:518:THR:OG1	1:c:37:ASN:ND2	2.52	0.43
1:c:54:VAL:HG13	1:c:89:THR:HG21	2.01	0.43
1:c:219:ILE:N	1:c:317:GLY:O	2.43	0.43
1:c:281:GLY:C	1:c:283:ARG:N	2.73	0.43
1:c:335:LYS:O	1:c:336:GLY:C	2.61	0.43
1:d:150:ILE:HD12	1:d:496:VAL:H	1.83	0.43
1:d:168:VAL:CG1	1:d:172:GLY:HA3	2.29	0.43
1:d:359:TYR:CE1	1:d:363:LYS:HE3	2.54	0.43
1:e:421:ALA:O	1:e:425:VAL:HG23	2.19	0.43
1:f:452:ARG:HH11	1:f:463:SER:HA	1.84	0.43
1:g:51:LYS:HG2	1:g:51:LYS:O	2.19	0.43
1:g:74:LEU:HD21	1:g:93:THR:CG2	2.48	0.43
1:h:5:ILE:HG23	1:h:5:ILE:O	2.19	0.43
1:h:412:PRO:HD2	1:h:417:THR:OG1	2.18	0.43
1:i:117:LYS:O	1:i:118:ARG:C	2.61	0.43
1:i:316:LEU:O	1:i:316:LEU:HD23	2.18	0.43
1:j:342:GLU:HA	1:j:345:ILE:HD12	2.00	0.43
1:j:385:GLU:O	1:j:389:LYS:HG3	2.19	0.43
1:j:411:VAL:O	1:j:496:VAL:CG1	2.64	0.43
1:k:18:ARG:HD2	1:k:67:GLU:OE1	2.18	0.43
1:k:117:LYS:O	1:k:118:ARG:C	2.61	0.43
1:l:433:GLU:HG2	1:l:434:GLY:N	2.34	0.43
2:p:78:THR:HG22	2:p:79:GLU:N	2.33	0.43
2:q:33:PRO:O	2:q:33:PRO:HG2	2.18	0.43
2:q:77:GLY:O	2:q:78:THR:C	2.61	0.43
2:u:13:ASP:OD1	2:u:13:ASP:O	2.36	0.43
1:A:150:ILE:CD1	1:A:496:VAL:N	2.82	0.43
1:A:297:GLY:H	1:A:317:GLY:HA2	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:352:LEU:C	1:C:354:THR:H	2.25	0.43
1:C:501:VAL:CG2	1:C:502:THR:N	2.82	0.43
1:D:503:ARG:O	1:D:507:GLN:HG3	2.19	0.43
1:E:232:LEU:HB3	1:E:236:LEU:CD1	2.48	0.43
1:F:457:ASN:N	1:F:457:ASN:HD22	2.17	0.43
1:H:234:PRO:HG3	1:H:309:GLU:CA	2.41	0.43
1:H:286:GLU:HG3	1:H:367:ARG:HH22	1.84	0.43
1:I:50:THR:HG21	1:I:55:THR:HB	2.01	0.43
1:I:390:GLU:OE1	1:I:394:ARG:NH1	2.51	0.43
1:L:37:ASN:ND2	1:L:51:LYS:HE2	2.26	0.43
1:L:283:ARG:HD3	1:L:363:LYS:HZ1	1.83	0.43
1:M:224:LYS:CG	1:M:225:LYS:N	2.78	0.43
1:N:197:GLY:HA3	1:N:325:THR:O	2.19	0.43
1:N:438:THR:O	1:N:441:LYS:HB2	2.19	0.43
2:R:56:ASN:HB2	2:R:58:GLN:HG3	1.99	0.43
2:R:97:ALA:HA	2:S:11:LEU:HD12	2.01	0.43
2:T:13:ASP:C	2:T:62:LEU:HD21	2.44	0.43
2:T:78:THR:HG22	2:T:80:ILE:HD11	2.00	0.43
1:b:228:ASN:HD22	1:b:231:GLU:HG3	1.84	0.43
1:b:303:GLU:HA	1:c:259:ALA:HB2	2.01	0.43
1:b:472:GLU:HB3	1:b:478:TYR:CD2	2.54	0.43
1:d:72:GLN:HE22	1:d:75:LYS:HZ1	1.64	0.43
1:d:179:SER:HB2	1:d:379:ARG:HB3	2.00	0.43
1:d:396:GLU:O	1:d:400:ASN:ND2	2.51	0.43
1:g:475:ASN:HA	1:g:476:PRO:HD2	1.94	0.43
1:h:204:VAL:HG13	1:h:211:GLU:O	2.18	0.43
1:h:285:LYS:O	1:h:289:LYS:HG3	2.18	0.43
1:i:86:GLY:O	1:i:87:ASP:HB2	2.18	0.43
1:i:316:LEU:H	1:i:316:LEU:HD23	1.84	0.43
1:i:449:GLU:HB2	1:i:450:PRO:HD3	2.00	0.43
1:l:41:GLU:OE2	1:m:524:ALA:HB1	2.18	0.43
1:m:194:PHE:CD2	1:m:194:PHE:N	2.87	0.43
1:m:253:VAL:O	1:m:258:LEU:HD22	2.18	0.43
2:q:15:VAL:CG2	2:q:62:LEU:HD13	2.49	0.43
2:u:71:VAL:CG2	2:u:99:LEU:HG	2.49	0.43
1:A:235:ILE:HD12	1:A:311:ALA:HB3	1.99	0.43
1:A:264:ASN:HB3	1:A:269:THR:HB	2.01	0.43
1:B:103:GLY:HA2	1:B:442:ILE:HD13	2.00	0.43
1:C:124:VAL:HG13	1:C:506:LEU:HG	2.00	0.43
1:C:392:LYS:O	1:C:396:GLU:HG3	2.19	0.43
1:D:230:ARG:O	1:D:234:PRO:HD2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:527:PRO:O	1:D:528:GLU:C	2.62	0.43
1:E:519:THR:HG23	1:F:39:VAL:HG23	2.00	0.43
1:F:472:GLU:HB3	1:F:478:TYR:CD2	2.54	0.43
1:H:179:SER:CB	1:H:379:ARG:HB3	2.38	0.43
1:I:92:ALA:HB2	1:I:505:ALA:HA	2.00	0.43
1:J:226:VAL:HG11	1:J:232:LEU:HD12	1.99	0.43
1:K:307:LYS:HE3	1:K:310:ASN:HD21	1.82	0.43
1:K:390:GLU:OE1	1:K:394:ARG:NH1	2.51	0.43
1:N:77:VAL:HG11	1:N:512:ILE:HG13	2.00	0.43
1:N:86:GLY:O	1:N:87:ASP:HB2	2.19	0.43
1:N:388:LEU:O	1:N:389:LYS:C	2.62	0.43
2:S:80:ILE:HG22	2:S:81:GLU:H	1.83	0.43
1:a:198:TYR:CZ	1:a:326:LYS:HA	2.54	0.43
1:a:230:ARG:HA	1:a:233:LEU:HD12	2.01	0.43
1:a:350:LYS:O	1:b:208:GLU:O	2.36	0.43
1:b:37:ASN:HB3	1:b:50:THR:O	2.19	0.43
1:b:437:ALA:O	1:b:441:LYS:HG3	2.19	0.43
1:c:118:ARG:O	1:c:122:LYS:HG3	2.19	0.43
1:c:335:LYS:O	1:c:336:GLY:O	2.37	0.43
1:d:84:VAL:O	1:d:84:VAL:HG12	2.19	0.43
1:e:260:THR:OG1	2:s:33:PRO:CG	2.67	0.43
1:e:345:ILE:HG23	1:e:368:LEU:CD1	2.49	0.43
1:e:396:GLU:O	1:e:400:ASN:ND2	2.52	0.43
1:f:200:SER:HG	1:f:202:TYR:HD1	1.67	0.43
1:g:209:THR:CG2	1:g:211:GLU:HG3	2.40	0.43
1:h:385:GLU:O	1:h:389:LYS:HG3	2.19	0.43
1:j:232:LEU:HD23	1:j:236:LEU:HB2	2.01	0.43
1:j:253:VAL:HG11	1:j:261:LEU:HD12	1.99	0.43
1:n:412:PRO:HB3	1:n:490:MET:HB2	2.00	0.43
2:r:81:GLU:HG3	2:r:85:GLU:C	2.44	0.43
2:s:11:LEU:HB3	2:s:12:GLY:H	1.74	0.43
2:t:10:PRO:O	2:t:49:GLY:HA2	2.19	0.43
1:B:520:GLU:HB3	1:C:29:VAL:HG11	2.01	0.43
1:C:51:LYS:HG2	1:C:51:LYS:O	2.19	0.43
1:C:250:ALA:C	1:C:252:ASP:N	2.76	0.43
1:E:214:LEU:HB3	1:E:245:PRO:HB3	2.01	0.43
1:E:224:LYS:HD2	1:E:224:LYS:N	2.33	0.43
1:E:410:ILE:HD11	1:E:496:VAL:HG21	2.01	0.43
1:F:288:LEU:HA	1:F:291:ILE:HD12	2.00	0.43
1:I:455:ALA:HB1	1:I:465:ILE:HD12	2.01	0.43
1:J:232:LEU:C	1:J:234:PRO:HD2	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:384:THR:HG22	1:J:385:GLU:N	2.33	0.43
1:J:385:GLU:O	1:J:389:LYS:HG3	2.19	0.43
1:K:175:THR:CG2	1:K:177:GLU:OE2	2.66	0.43
1:L:6:LEU:CD2	1:L:523:VAL:HG22	2.49	0.43
1:L:47:PRO:HD2	1:M:72:GLN:HB3	2.01	0.43
1:L:47:PRO:CD	1:M:72:GLN:HB2	2.49	0.43
1:L:218:PHE:HE1	1:L:242:THR:HG21	1.82	0.43
1:M:247:LEU:HD13	1:M:324:ILE:HD11	2.00	0.43
1:M:307:LYS:HB2	1:M:310:ASN:ND2	2.34	0.43
1:N:132:LYS:C	1:N:134:LEU:N	2.76	0.43
1:N:286:GLU:HG3	1:N:367:ARG:HH22	1.84	0.43
1:N:306:PHE:CE2	1:N:315:MET:HE1	2.54	0.43
2:O:80:ILE:HG12	2:U:41:GLN:OE1	2.18	0.43
2:P:20:ILE:CG1	2:P:43:GLY:HA2	2.46	0.43
2:S:85:GLU:OE1	2:S:85:GLU:HA	2.19	0.43
1:a:74:LEU:HD21	1:a:93:THR:CG2	2.49	0.43
1:d:159:LYS:HE2	1:d:163:ASP:OD2	2.19	0.43
1:e:15:ALA:HA	1:e:18:ARG:CZ	2.49	0.43
1:e:478:TYR:CE1	1:e:487:PHE:HB3	2.53	0.43
1:f:128:VAL:HA	1:f:131:ILE:HD12	2.00	0.43
1:h:50:THR:CG2	1:h:51:LYS:H	2.21	0.43
1:h:175:THR:CG2	1:h:177:GLU:OE2	2.65	0.43
1:h:300:ILE:HG21	1:h:308:LEU:CD2	2.46	0.43
1:i:297:GLY:HA3	1:i:317:GLY:N	2.33	0.43
1:j:79:SER:C	1:j:81:THR:N	2.73	0.43
1:j:298:THR:N	1:j:315:MET:O	2.51	0.43
1:k:74:LEU:HA	1:k:512:ILE:HD13	2.01	0.43
1:l:79:SER:C	1:l:81:THR:N	2.74	0.43
1:m:79:SER:C	1:m:81:THR:N	2.75	0.43
2:p:93:ARG:O	2:q:14:ARG:NH2	2.52	0.43
2:q:98:VAL:HG12	2:q:99:LEU:N	2.34	0.43
2:s:18:LYS:HG2	2:s:87:TYR:CD2	2.54	0.43
2:s:81:GLU:HA	2:s:86:GLU:HA	2.00	0.43
2:t:78:THR:HG22	2:t:80:ILE:CD1	2.49	0.43
2:u:17:VAL:CG1	2:u:43:GLY:HA3	2.48	0.43
1:A:10:GLU:HA	1:A:13:ARG:HH11	1.84	0.42
1:A:465:ILE:HD13	1:A:480:PHE:CD2	2.53	0.42
1:B:235:ILE:HD12	1:B:311:ALA:CB	2.49	0.42
1:B:237:GLU:O	1:B:238:GLN:C	2.61	0.42
1:B:332:VAL:HG12	1:B:333:GLY:N	2.33	0.42
1:C:101:ARG:HH22	1:C:449:GLU:CD	2.27	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:416:VAL:HG21	1:C:479:GLY:HA3	2.01	0.42
1:F:157:VAL:O	1:F:161:ILE:HG12	2.19	0.42
1:F:161:ILE:HD12	1:F:399:LEU:CD2	2.49	0.42
1:F:279:GLY:O	1:F:284:ARG:HD3	2.19	0.42
1:G:417:THR:HG23	1:G:418:LEU:HD12	2.00	0.42
1:H:290:ASP:N	1:H:344:ARG:NH1	2.65	0.42
1:H:433:GLU:HG2	1:H:434:GLY:N	2.34	0.42
1:I:84:VAL:HG12	1:I:500:LYS:CE	2.47	0.42
1:I:283:ARG:HG2	1:I:363:LYS:NZ	2.33	0.42
1:K:69:ILE:O	1:K:73:LEU:HB2	2.19	0.42
1:K:306:PHE:CE2	1:K:315:MET:HE1	2.54	0.42
1:L:297:GLY:CA	1:L:317:GLY:N	2.81	0.42
1:M:285:LYS:O	1:M:289:LYS:HG3	2.19	0.42
1:N:224:LYS:CG	1:N:225:LYS:N	2.78	0.42
2:P:89:ILE:O	2:P:89:ILE:HG22	2.18	0.42
2:R:62:LEU:HA	2:R:62:LEU:HD12	1.78	0.42
2:S:49:GLY:O	2:S:50:THR:C	2.62	0.42
2:T:49:GLY:O	2:T:62:LEU:CD1	2.65	0.42
1:a:10:GLU:HA	1:a:13:ARG:HH11	1.84	0.42
1:a:179:SER:HB2	1:a:379:ARG:HB3	2.00	0.42
1:b:31:LEU:HD13	1:b:90:THR:HG22	2.01	0.42
1:b:345:ILE:HG23	1:b:368:LEU:CD1	2.49	0.42
1:c:124:VAL:HG13	1:c:506:LEU:HG	2.00	0.42
1:c:245:PRO:HA	1:c:271:SER:OG	2.18	0.42
1:c:426:GLU:OE2	1:c:444:ARG:NH1	2.52	0.42
1:d:441:LYS:O	1:d:444:ARG:HB3	2.19	0.42
1:e:284:ARG:HH11	1:e:284:ARG:HG3	1.83	0.42
1:f:267:ARG:HG2	2:t:31:VAL:HG21	2.00	0.42
1:g:136:ILE:HD11	1:g:477:ARG:HH21	1.84	0.42
1:g:205:THR:N	1:g:211:GLU:O	2.46	0.42
1:g:435:ASP:O	1:g:438:THR:HB	2.19	0.42
1:k:458:ALA:O	1:l:114:LEU:CD1	2.67	0.42
1:l:385:GLU:O	1:l:389:LYS:HG3	2.19	0.42
1:m:120:ILE:HG23	1:m:443:VAL:CG2	2.49	0.42
1:m:239:VAL:HG22	1:m:313:LEU:CD1	2.49	0.42
1:m:449:GLU:HB2	1:m:450:PRO:HD3	2.00	0.42
2:o:41:GLN:HB3	2:o:72:PHE:O	2.19	0.42
2:p:10:PRO:CB	2:p:14:ARG:O	2.63	0.42
2:s:96:LEU:HD23	2:t:14:ARG:CZ	2.48	0.42
2:t:17:VAL:HG22	2:t:45:VAL:CA	2.39	0.42
2:t:62:LEU:HA	2:t:62:LEU:HD23	1.79	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:246:LEU:O	1:A:272:VAL:HA	2.19	0.42
1:B:475:ASN:HA	1:B:476:PRO:HD2	1.93	0.42
1:D:23:VAL:HG22	1:D:60:VAL:CG1	2.44	0.42
1:D:219:ILE:HG22	1:D:221:ILE:HG13	2.00	0.42
1:E:33:PRO:HD3	4:E:602:ADP:C5	2.54	0.42
1:E:294:VAL:O	1:E:336:GLY:N	2.52	0.42
1:F:217:ALA:CB	1:F:245:PRO:HB2	2.46	0.42
1:H:53:GLY:HA3	1:H:90:THR:OG1	2.20	0.42
1:H:246:LEU:HB3	1:H:272:VAL:CG1	2.46	0.42
1:H:316:LEU:H	1:H:316:LEU:HD23	1.83	0.42
1:H:478:TYR:CZ	1:H:487:PHE:HB3	2.54	0.42
1:I:303:GLU:C	1:I:305:GLY:N	2.74	0.42
1:J:131:ILE:HD13	1:J:502:THR:HG22	2.01	0.42
1:K:74:LEU:HA	1:K:512:ILE:HD11	2.00	0.42
1:K:460:TYR:CE2	1:K:480:PHE:HZ	2.37	0.42
1:L:161:ILE:O	1:L:165:MET:HG3	2.18	0.42
1:L:384:THR:HG22	1:L:385:GLU:N	2.34	0.42
1:L:408:GLU:O	1:L:499:ALA:HB3	2.19	0.42
1:M:202:TYR:CD2	1:M:266:LEU:HD11	2.54	0.42
1:M:313:LEU:HG	1:M:313:LEU:O	2.19	0.42
1:M:411:VAL:HB	1:M:417:THR:OG1	2.19	0.42
1:N:253:VAL:O	1:N:258:LEU:HD22	2.18	0.42
2:O:97:ALA:HB2	2:P:10:PRO:HA	2.00	0.42
2:P:79:GLU:HG2	2:P:88:VAL:HG22	2.02	0.42
2:P:81:GLU:HA	2:P:85:GLU:O	2.19	0.42
2:Q:22:GLU:OE1	2:Q:22:GLU:N	2.42	0.42
2:T:78:THR:HG22	2:T:79:GLU:N	2.33	0.42
1:a:123:ALA:HB3	1:a:443:VAL:HG21	2.01	0.42
1:a:128:VAL:HA	1:a:131:ILE:HD12	2.01	0.42
1:a:280:PHE:O	1:a:281:GLY:C	2.63	0.42
1:a:460:TYR:HB3	1:a:465:ILE:HD11	2.00	0.42
1:b:144:ILE:HD12	1:b:165:MET:HG2	2.00	0.42
1:b:159:LYS:HE2	1:b:163:ASP:OD2	2.20	0.42
1:c:167:LYS:O	1:c:168:VAL:HG23	2.18	0.42
1:c:461:GLU:O	1:c:462:GLY:C	2.59	0.42
1:d:352:LEU:C	1:d:354:THR:H	2.26	0.42
1:f:144:ILE:CD1	1:f:165:MET:HG2	2.49	0.42
1:g:23:VAL:HB	1:g:74:LEU:HD23	2.01	0.42
1:g:179:SER:HB2	1:g:379:ARG:HB3	2.01	0.42
1:g:298:THR:HG23	1:g:304:LEU:HD13	2.01	0.42
1:h:8:PHE:O	1:h:11:ALA:HB3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:222:VAL:CG1	1:h:223:GLU:H	2.30	0.42
1:h:344:ARG:HG3	1:h:344:ARG:NH1	2.34	0.42
1:i:189:VAL:CG1	1:i:333:GLY:HA2	2.46	0.42
1:j:247:LEU:HD21	1:j:249:ILE:HD11	2.01	0.42
1:k:285:LYS:HG2	1:k:289:LYS:HE3	2.01	0.42
1:n:40:LEU:HD21	1:n:56:VAL:HA	2.01	0.42
1:n:128:VAL:HA	1:n:131:ILE:HD12	1.99	0.42
1:n:372:ALA:C	1:n:374:GLY:N	2.76	0.42
2:o:100:GLN:HG2	2:p:9:LYS:HE2	2.01	0.42
2:q:15:VAL:CG1	2:q:16:VAL:N	2.82	0.42
2:u:20:ILE:HD11	2:u:44:LYS:CG	2.49	0.42
1:A:184:THR:HG23	1:A:380:VAL:HA	2.02	0.42
1:C:265:LYS:HA	1:C:270:LEU:O	2.19	0.42
1:C:519:THR:HG23	1:D:39:VAL:HG23	2.01	0.42
1:D:218:PHE:CZ	1:D:242:THR:HG21	2.55	0.42
1:D:218:PHE:O	1:D:246:LEU:HD12	2.19	0.42
1:E:150:ILE:HG22	1:E:151:SER:N	2.32	0.42
1:E:159:LYS:HE2	1:E:163:ASP:OD2	2.19	0.42
1:E:239:VAL:HG22	1:E:313:LEU:CD2	2.49	0.42
1:F:251:GLU:O	1:F:252:ASP:HB2	2.19	0.42
1:G:51:LYS:O	1:G:51:LYS:HG2	2.19	0.42
1:G:452:ARG:HH11	1:G:463:SER:HA	1.81	0.42
1:H:95:LEU:O	1:H:99:ILE:HG13	2.18	0.42
1:I:178:GLU:CD	1:I:392:LYS:HE3	2.45	0.42
1:I:194:PHE:HB2	1:I:278:PRO:HB3	2.02	0.42
1:J:312:THR:O	1:J:314:SER:N	2.48	0.42
1:J:452:ARG:HG2	1:J:452:ARG:NH1	2.33	0.42
1:L:352:LEU:HD21	1:L:365:GLN:HE22	1.84	0.42
1:M:37:ASN:ND2	1:M:51:LYS:HE2	2.26	0.42
1:M:283:ARG:NH1	1:M:363:LYS:HG3	2.33	0.42
1:M:325:THR:CG2	1:M:326:LYS:N	2.82	0.42
2:Q:19:ARG:HA	2:Q:42:LYS:O	2.19	0.42
2:U:62:LEU:C	2:U:64:VAL:N	2.77	0.42
1:a:23:VAL:HB	1:a:74:LEU:HD23	2.01	0.42
1:b:142:LYS:HE2	1:b:146:GLU:OE2	2.20	0.42
1:b:168:VAL:O	1:b:172:GLY:HA3	2.19	0.42
1:b:235:ILE:HD11	1:b:316:LEU:HD21	2.00	0.42
1:c:10:GLU:HA	1:c:13:ARG:HH11	1.83	0.42
1:c:281:GLY:C	1:c:283:ARG:H	2.26	0.42
1:c:292:ALA:O	1:c:294:VAL:N	2.52	0.42
1:c:341:ILE:C	1:c:343:ALA:N	2.75	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:355:THR:HG21	1:c:360:ALA:C	2.44	0.42
1:d:220:LEU:HD22	1:d:235:ILE:HD11	2.01	0.42
1:e:222:VAL:O	1:e:250:ALA:HA	2.19	0.42
1:f:206:ASN:HB3	1:f:209:THR:OG1	2.18	0.42
1:g:219:ILE:O	1:g:316:LEU:HB2	2.19	0.42
1:g:235:ILE:HD11	1:g:311:ALA:HB2	2.00	0.42
1:i:24:ALA:O	1:i:28:LYS:HG2	2.19	0.42
1:j:149:THR:HG23	1:j:155:PRO:CA	2.39	0.42
1:j:222:VAL:CG1	1:j:223:GLU:H	2.32	0.42
1:j:249:ILE:O	1:j:249:ILE:CG2	2.62	0.42
1:k:239:VAL:HG22	1:k:313:LEU:CD1	2.49	0.42
1:l:95:LEU:HD21	1:l:450:PRO:HG2	2.01	0.42
1:l:117:LYS:O	1:l:118:ARG:C	2.62	0.42
1:n:7:VAL:HG21	1:n:66:LEU:CD1	2.48	0.42
1:n:194:PHE:N	1:n:194:PHE:CD2	2.86	0.42
1:n:360:ALA:O	1:n:363:LYS:HG2	2.19	0.42
1:n:375:VAL:O	1:n:375:VAL:HG12	2.18	0.42
2:s:49:GLY:O	2:s:62:LEU:CD1	2.67	0.42
1:A:297:GLY:N	1:A:317:GLY:HA2	2.34	0.42
1:B:80:LYS:HE2	1:C:383:ALA:O	2.18	0.42
1:D:131:ILE:HD13	1:D:502:THR:HG22	2.01	0.42
1:D:280:PHE:O	1:D:281:GLY:C	2.61	0.42
1:D:490:MET:CE	1:D:495:ILE:HG21	2.49	0.42
1:E:96:ALA:O	1:E:100:VAL:HG23	2.19	0.42
1:F:341:ILE:O	1:F:344:ARG:N	2.51	0.42
1:F:404:ALA:HB1	1:F:500:LYS:HB3	2.02	0.42
1:G:31:LEU:HB2	1:G:90:THR:HG21	2.01	0.42
1:G:149:THR:HG23	1:G:155:PRO:CA	2.44	0.42
1:G:404:ALA:HB1	1:G:500:LYS:HB3	2.01	0.42
1:J:488:VAL:HG23	1:J:490:MET:CE	2.50	0.42
1:L:124:VAL:O	1:L:125:GLU:C	2.62	0.42
1:M:178:GLU:O	1:M:321:ARG:NH1	2.53	0.42
1:N:232:LEU:HD23	1:N:232:LEU:C	2.45	0.42
2:O:10:PRO:HG3	2:O:47:ALA:O	2.19	0.42
2:R:42:LYS:HA	2:R:70:VAL:O	2.20	0.42
2:T:48:VAL:HG11	2:T:64:VAL:O	2.19	0.42
2:U:6:THR:HB	2:U:82:ILE:CG2	2.49	0.42
1:a:236:LEU:CB	2:o:30:ILE:CD1	2.97	0.42
1:b:232:LEU:O	1:b:235:ILE:HG22	2.19	0.42
1:c:258:LEU:O	1:c:262:VAL:HG23	2.20	0.42
1:d:264:ASN:HB3	1:d:269:THR:HB	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:392:LYS:O	1:d:396:GLU:HG3	2.19	0.42
1:e:123:ALA:HB2	1:e:440:ALA:HA	2.01	0.42
1:e:246:LEU:CB	1:e:272:VAL:HG12	2.40	0.42
1:g:294:VAL:HG23	1:g:295:THR:N	2.35	0.42
1:h:117:LYS:O	1:h:118:ARG:C	2.62	0.42
1:i:283:ARG:NH2	1:i:367:ARG:CD	2.41	0.42
1:i:294:VAL:HA	1:i:341:ILE:HD11	2.01	0.42
1:l:131:ILE:HD13	1:l:502:THR:HG22	2.00	0.42
1:m:7:VAL:HG21	1:m:66:LEU:CD1	2.46	0.42
1:m:283:ARG:HD2	1:m:283:ARG:HA	1.73	0.42
1:n:102:GLU:HB2	1:n:442:ILE:HG23	2.02	0.42
1:n:194:PHE:HB2	1:n:278:PRO:HB3	2.02	0.42
2:s:91:SER:O	2:s:95:LEU:HG	2.20	0.42
2:t:10:PRO:CD	2:t:47:ALA:HB1	2.50	0.42
2:t:88:VAL:O	2:t:90:LEU:HD12	2.18	0.42
1:A:7:VAL:HG12	1:A:12:ALA:HB2	2.02	0.42
1:B:167:LYS:O	1:B:168:VAL:HG23	2.19	0.42
1:E:124:VAL:HG13	1:E:506:LEU:HG	2.01	0.42
1:E:345:ILE:HD12	1:E:371:LEU:O	2.20	0.42
1:E:490:MET:HE3	1:E:495:ILE:CG2	2.49	0.42
1:F:206:ASN:HB3	1:F:209:THR:OG1	2.19	0.42
1:G:10:GLU:N	1:G:13:ARG:NH1	2.68	0.42
1:G:287:MET:O	1:G:290:ASP:HB2	2.18	0.42
1:H:177:GLU:HB3	1:H:321:ARG:NH1	2.34	0.42
1:H:202:TYR:CD2	1:H:266:LEU:HD11	2.55	0.42
1:H:449:GLU:HB2	1:H:450:PRO:HD3	2.00	0.42
1:H:477:ARG:HD3	1:H:491:VAL:HG21	2.01	0.42
1:I:286:GLU:HG3	1:I:367:ARG:NH2	2.34	0.42
1:I:342:GLU:HA	1:I:345:ILE:HD12	2.01	0.42
1:J:32:GLY:HA3	1:J:454:ILE:HG23	2.01	0.42
1:J:178:GLU:OE2	1:J:392:LYS:HE3	2.20	0.42
1:J:228:ASN:ND2	1:J:230:ARG:HB3	2.25	0.42
1:J:297:GLY:HA3	1:J:317:GLY:N	2.35	0.42
1:K:283:ARG:NH2	1:K:367:ARG:CD	2.80	0.42
1:K:290:ASP:N	1:K:344:ARG:NH1	2.66	0.42
1:K:452:ARG:HG2	1:K:452:ARG:NH1	2.33	0.42
1:M:36:ARG:HD2	1:N:518:THR:HG23	2.02	0.42
1:N:384:THR:HG22	1:N:385:GLU:N	2.35	0.42
2:Q:32:LEU:HG	2:Q:36:ALA:HB3	2.00	0.42
2:R:16:VAL:O	2:R:16:VAL:HG12	2.18	0.42
1:a:31:LEU:HB2	1:a:90:THR:HG21	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:229:VAL:HG23	1:a:256:GLU:CD	2.45	0.42
1:a:233:LEU:HA	2:o:30:ILE:HD13	2.01	0.42
1:b:54:VAL:HG13	1:b:89:THR:HG21	2.01	0.42
1:b:307:LYS:HE3	2:q:34:ASP:O	2.20	0.42
1:b:461:GLU:O	1:b:462:GLY:C	2.62	0.42
1:c:33:PRO:HD3	4:c:602:ADP:C5	2.54	0.42
1:c:237:GLU:OE2	2:q:28:GLY:HA3	2.19	0.42
1:d:246:LEU:HB3	1:d:272:VAL:CG1	2.39	0.42
1:d:301:SER:HB2	1:d:304:LEU:CB	2.48	0.42
1:e:124:VAL:HG13	1:e:506:LEU:HG	2.01	0.42
1:e:146:GLU:O	1:e:147:VAL:C	2.62	0.42
1:e:216:ASP:HA	1:e:319:ALA:O	2.20	0.42
1:e:461:GLU:O	1:e:462:GLY:C	2.63	0.42
1:f:229:VAL:HG23	1:f:256:GLU:CG	2.49	0.42
1:g:281:GLY:C	1:g:283:ARG:H	2.27	0.42
1:g:283:ARG:O	1:g:287:MET:HG3	2.19	0.42
1:h:487:PHE:C	1:h:488:VAL:HG13	2.44	0.42
1:i:40:LEU:HD21	1:i:56:VAL:HA	2.00	0.42
1:l:8:PHE:O	1:l:11:ALA:HB3	2.20	0.42
1:m:352:LEU:HD21	1:m:365:GLN:HE22	1.83	0.42
1:m:437:ALA:O	1:m:441:LYS:HG3	2.19	0.42
1:n:46:SER:HB2	1:n:47:PRO:CD	2.39	0.42
1:n:283:ARG:HD2	1:n:283:ARG:HA	1.73	0.42
2:o:11:LEU:O	2:o:13:ASP:N	2.52	0.42
2:p:17:VAL:HG12	2:p:43:GLY:HA3	2.02	0.42
2:r:33:PRO:C	2:r:35:THR:N	2.76	0.42
2:s:19:ARG:HA	2:s:42:LYS:O	2.20	0.42
2:t:11:LEU:O	2:t:12:GLY:C	2.63	0.42
2:u:20:ILE:HG13	2:u:43:GLY:CA	2.49	0.42
2:u:32:LEU:HD12	2:u:36:ALA:CB	2.45	0.42
1:B:31:LEU:HB2	1:B:90:THR:HG21	2.00	0.42
1:B:373:GLY:O	1:B:375:VAL:HG23	2.20	0.42
1:C:221:ILE:HG23	1:C:288:LEU:HD22	2.01	0.42
1:D:233:LEU:HD23	2:R:30:ILE:HD13	2.01	0.42
1:E:50:THR:CG2	1:E:52:ASP:HB3	2.48	0.42
1:E:188:PHE:CD1	1:E:188:PHE:N	2.88	0.42
1:E:242:THR:HG22	1:E:244:LYS:HG3	2.01	0.42
1:E:472:GLU:HB3	1:E:478:TYR:CD2	2.54	0.42
1:F:150:ILE:HD12	1:F:496:VAL:H	1.83	0.42
1:F:202:TYR:CD2	1:F:266:LEU:HD11	2.54	0.42
1:F:410:ILE:HD11	1:F:496:VAL:CG2	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:503:ARG:O	1:F:507:GLN:HG3	2.19	0.42
1:J:267:ARG:HG2	1:K:256:GLU:CD	2.44	0.42
1:J:283:ARG:HD3	1:J:363:LYS:CE	2.49	0.42
1:L:332:VAL:HG22	1:L:375:VAL:HG11	2.02	0.42
2:Q:50:THR:CG2	2:Q:59:ARG:HD3	2.49	0.42
2:Q:77:GLY:HA3	2:Q:90:LEU:HD23	1.99	0.42
1:a:157:VAL:O	1:a:161:ILE:HG12	2.19	0.42
1:a:463:SER:O	1:a:467:GLN:HG2	2.20	0.42
1:b:312:THR:HB	1:b:314:SER:OG	2.20	0.42
1:c:118:ARG:HH22	1:d:34:ARG:HH12	1.66	0.42
1:d:235:ILE:HG21	1:d:235:ILE:HD13	1.69	0.42
1:d:265:LYS:HA	1:d:270:LEU:O	2.19	0.42
1:e:506:LEU:HD12	1:e:506:LEU:O	2.20	0.42
1:f:247:LEU:HD13	1:f:324:ILE:HD11	2.02	0.42
1:f:520:GLU:HG2	1:g:29:VAL:HG13	2.01	0.42
1:g:224:LYS:H	1:g:224:LYS:CD	2.32	0.42
1:g:227:SER:CB	1:g:254:GLU:HG3	2.41	0.42
1:i:132:LYS:C	1:i:134:LEU:N	2.78	0.42
1:i:295:THR:HG22	1:i:317:GLY:CA	2.48	0.42
1:m:65:HIS:HD2	1:m:527:PRO:HG3	1.84	0.42
1:m:117:LYS:O	1:m:118:ARG:C	2.62	0.42
1:m:285:LYS:HG2	1:m:289:LYS:HE3	2.01	0.42
1:n:124:VAL:O	1:n:125:GLU:C	2.61	0.42
1:n:132:LYS:C	1:n:134:LEU:N	2.77	0.42
1:n:312:THR:C	1:n:314:SER:N	2.76	0.42
2:p:10:PRO:HG2	2:p:49:GLY:CA	2.49	0.42
2:s:51:GLY:HA3	2:s:60:VAL:O	2.19	0.42
1:A:228:ASN:HD21	1:A:230:ARG:HB2	1.85	0.42
1:A:445:ARG:CZ	1:A:452:ARG:HH21	2.33	0.42
1:B:74:LEU:HD21	1:B:93:THR:CG2	2.50	0.42
1:B:149:THR:CG2	1:B:155:PRO:HA	2.44	0.42
1:C:95:LEU:O	1:C:99:ILE:HG13	2.20	0.42
1:C:217:ALA:HB1	1:C:245:PRO:O	2.20	0.42
1:D:150:ILE:O	1:D:153:ASN:N	2.51	0.42
1:D:288:LEU:HD23	1:D:291:ILE:HD12	2.01	0.42
1:D:422:ILE:HD12	1:D:470:LEU:HD21	2.01	0.42
1:D:490:MET:HE3	1:D:495:ILE:CG2	2.50	0.42
1:E:180:LYS:HD3	1:E:180:LYS:HA	1.85	0.42
1:F:149:THR:HG23	1:F:155:PRO:CA	2.49	0.42
1:G:23:VAL:CG1	1:G:74:LEU:HD23	2.49	0.42
1:G:189:VAL:HG12	1:G:190:GLU:N	2.33	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:358:GLU:HG2	1:i:473:THR:HG21	2.01	0.42
1:J:295:THR:HG22	1:J:317:GLY:HA3	2.02	0.42
1:K:149:THR:HG23	1:K:155:PRO:CA	2.41	0.42
1:K:487:PHE:C	1:K:488:VAL:HG13	2.44	0.42
1:L:59:GLU:OE1	1:M:4:LYS:NZ	2.35	0.42
1:M:66:LEU:HD22	1:M:522:VAL:HG21	2.00	0.42
1:M:290:ASP:N	1:M:344:ARG:NH1	2.68	0.42
1:M:340:ASP:O	1:M:343:ALA:HB3	2.19	0.42
1:N:50:THR:CG2	1:N:52:ASP:H	2.14	0.42
1:N:130:LYS:O	1:N:134:LEU:HB2	2.20	0.42
2:O:11:LEU:O	2:O:12:GLY:O	2.38	0.42
2:O:52:ARG:NH2	2:P:53:VAL:O	2.53	0.42
2:P:42:LYS:HA	2:P:70:VAL:O	2.20	0.42
1:a:50:THR:HA	1:a:390:GLU:OE1	2.20	0.42
1:a:150:ILE:O	1:a:153:ASN:N	2.49	0.42
1:b:357:SER:C	1:b:359:TYR:N	2.76	0.42
1:d:79:SER:O	1:d:82:ASN:N	2.53	0.42
1:f:205:THR:HB	1:f:213:VAL:H	1.85	0.42
1:h:37:ASN:ND2	1:h:51:LYS:HE2	2.28	0.42
1:h:210:MET:HE2	1:h:210:MET:HA	2.01	0.42
1:i:124:VAL:O	1:i:125:GLU:C	2.63	0.42
1:i:433:GLU:HG2	1:i:434:GLY:N	2.35	0.42
1:i:452:ARG:HG2	1:i:452:ARG:NH1	2.33	0.42
1:k:277:ALA:HB1	1:k:284:ARG:HD2	2.02	0.42
1:k:411:VAL:O	1:k:496:VAL:CG1	2.67	0.42
1:l:202:TYR:HD2	1:l:266:LEU:HD11	1.83	0.42
1:l:360:ALA:CA	1:l:363:LYS:HG3	2.50	0.42
1:m:8:PHE:O	1:m:11:ALA:HB3	2.20	0.42
1:m:40:LEU:HD21	1:m:56:VAL:HA	2.02	0.42
1:n:290:ASP:N	1:n:344:ARG:NH1	2.65	0.42
2:p:21:GLU:CD	2:p:21:GLU:N	2.77	0.42
2:p:56:ASN:OD1	2:p:56:ASN:N	2.53	0.42
2:q:17:VAL:HG22	2:q:90:LEU:HD21	2.00	0.42
2:r:78:THR:HG22	2:r:79:GLU:N	2.34	0.42
2:t:20:ILE:N	2:t:42:LYS:O	2.53	0.42
1:C:206:ASN:HA	1:C:207:PRO:HD3	1.81	0.42
1:C:345:ILE:HG23	1:C:368:LEU:HD13	2.02	0.42
1:D:345:ILE:C	1:D:347:GLY:H	2.26	0.42
1:D:468:GLN:HB3	1:D:487:PHE:CE2	2.55	0.42
1:E:225:LYS:HD3	1:E:254:GLU:OE1	2.19	0.42
1:E:457:ASN:N	1:E:457:ASN:HD22	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:332:VAL:HG12	1:G:333:GLY:N	2.34	0.42
1:G:410:ILE:HD11	1:G:496:VAL:CG2	2.49	0.42
1:I:222:VAL:CG1	1:I:223:GLU:H	2.32	0.42
1:I:481:ASN:HD21	1:I:484:THR:HG23	1.84	0.42
1:J:124:VAL:O	1:J:125:GLU:C	2.63	0.42
1:J:490:MET:HA	1:J:490:MET:CE	2.37	0.42
1:K:8:PHE:O	1:K:11:ALA:HB3	2.20	0.42
1:K:202:TYR:CD2	1:K:266:LEU:HD11	2.54	0.42
1:L:117:LYS:O	1:L:118:ARG:C	2.62	0.42
1:L:217:ALA:HB1	1:L:245:PRO:O	2.20	0.42
1:M:194:PHE:N	1:M:194:PHE:CD2	2.87	0.42
1:M:210:MET:HE2	1:M:210:MET:HA	2.02	0.42
1:N:372:ALA:C	1:N:374:GLY:N	2.77	0.42
1:N:465:ILE:HD13	1:N:480:PHE:CD1	2.55	0.42
2:P:27:LYS:HD3	2:Q:84:GLY:CA	2.49	0.42
2:P:71:VAL:HG23	2:P:99:LEU:HD13	2.01	0.42
2:R:100:GLN:HB2	2:S:7:VAL:HB	2.01	0.42
2:U:81:GLU:HG3	2:U:85:GLU:N	2.28	0.42
1:a:233:LEU:HD23	2:o:30:ILE:CD1	2.50	0.42
1:b:9:ASP:C	1:b:13:ARG:NH1	2.78	0.42
1:b:65:HIS:O	1:b:69:ILE:HG13	2.18	0.42
1:b:149:THR:CG2	1:b:155:PRO:HA	2.43	0.42
1:c:79:SER:O	1:c:82:ASN:N	2.52	0.42
1:c:150:ILE:O	1:c:153:ASN:N	2.51	0.42
1:c:229:VAL:O	1:c:230:ARG:C	2.62	0.42
1:c:343:ALA:HB2	1:d:207:PRO:HB2	2.02	0.42
1:c:348:ILE:HD11	1:c:367:ARG:CD	2.50	0.42
1:d:307:LYS:CE	2:s:34:ASP:HB3	2.45	0.42
1:e:31:LEU:HD23	1:e:453:GLN:HB3	2.01	0.42
1:e:101:ARG:HH22	1:e:449:GLU:CD	2.27	0.42
1:e:198:TYR:HB3	1:e:324:ILE:HG21	2.01	0.42
1:f:239:VAL:HG11	1:f:246:LEU:HB2	2.00	0.42
1:g:253:VAL:HG11	1:g:261:LEU:CD1	2.50	0.42
1:h:290:ASP:N	1:h:344:ARG:NH1	2.66	0.42
1:h:352:LEU:HD21	1:h:365:GLN:HE22	1.84	0.42
1:i:66:LEU:HD22	1:i:522:VAL:HG21	2.01	0.42
1:i:283:ARG:NH1	1:i:364:LEU:HD12	2.35	0.42
1:j:178:GLU:CD	1:j:392:LYS:HE3	2.44	0.42
1:k:286:GLU:OE2	1:k:344:ARG:NH2	2.53	0.42
1:k:390:GLU:OE1	1:k:394:ARG:NH1	2.53	0.42
1:l:28:LYS:HZ2	1:l:97:GLN:HE22	1.66	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:40:LEU:HD21	1:l:56:VAL:HA	2.01	0.42
1:l:425:VAL:O	1:l:429:ILE:HG13	2.19	0.42
1:m:149:THR:HG23	1:m:155:PRO:CA	2.40	0.42
1:m:475:ASN:HA	1:m:476:PRO:HD2	1.96	0.42
1:n:84:VAL:HG12	1:n:84:VAL:O	2.20	0.42
2:o:13:ASP:HB2	2:o:62:LEU:CD2	2.37	0.42
2:q:17:VAL:HG12	2:q:44:LYS:C	2.45	0.42
2:s:19:ARG:HB3	2:s:40:PRO:CG	2.49	0.42
2:t:42:LYS:HE2	2:t:42:LYS:HB3	1.94	0.42
1:A:284:ARG:HH11	1:A:284:ARG:HG3	1.85	0.42
1:A:410:ILE:HG12	1:A:496:VAL:HB	2.01	0.42
1:B:368:LEU:HD12	1:B:368:LEU:O	2.20	0.42
1:C:349:LYS:O	1:C:351:GLU:N	2.53	0.42
1:D:233:LEU:CD2	2:R:30:ILE:HG21	2.49	0.42
1:D:463:SER:O	1:D:467:GLN:HG2	2.19	0.42
1:E:84:VAL:O	1:E:84:VAL:HG12	2.19	0.42
1:E:190:GLU:HA	1:E:190:GLU:OE2	2.20	0.42
1:E:359:TYR:O	1:E:363:LYS:HG2	2.19	0.42
1:F:10:GLU:N	1:F:13:ARG:NH1	2.67	0.42
1:F:124:VAL:HG13	1:F:506:LEU:HG	2.02	0.42
1:F:332:VAL:HG12	1:F:333:GLY:N	2.34	0.42
1:I:253:VAL:HG12	1:I:258:LEU:HB2	2.01	0.42
1:I:306:PHE:CZ	1:I:315:MET:HE1	2.55	0.42
1:J:74:LEU:HA	1:J:512:ILE:HD11	2.00	0.42
1:J:253:VAL:O	1:J:258:LEU:HD22	2.19	0.42
1:K:50:THR:HG21	1:K:55:THR:HB	2.02	0.42
1:K:283:ARG:HH12	1:K:364:LEU:CD1	2.31	0.42
1:L:528:GLU:H	1:L:528:GLU:HG3	1.63	0.42
1:M:297:GLY:HA3	1:M:317:GLY:N	2.34	0.42
1:N:217:ALA:HB2	1:N:245:PRO:CG	2.31	0.42
2:Q:8:ILE:N	2:Q:8:ILE:CD1	2.77	0.42
2:Q:13:ASP:OD1	2:Q:13:ASP:C	2.63	0.42
2:R:21:GLU:CD	2:R:21:GLU:N	2.73	0.42
2:R:53:VAL:HG22	2:R:59:ARG:HE	1.83	0.42
1:a:345:ILE:HG23	1:a:368:LEU:CD1	2.49	0.42
1:a:417:THR:HG23	1:a:418:LEU:HD12	2.02	0.42
1:b:80:LYS:HE2	1:c:383:ALA:O	2.20	0.42
1:b:325:THR:CG2	1:b:326:LYS:H	2.21	0.42
1:b:520:GLU:HG2	1:c:29:VAL:HG13	2.02	0.42
1:c:50:THR:HG23	1:c:390:GLU:OE1	2.20	0.42
1:c:478:TYR:CE1	1:c:487:PHE:HB3	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:177:GLU:O	1:d:379:ARG:HA	2.19	0.42
1:d:244:LYS:HA	1:d:245:PRO:HD3	1.86	0.42
1:d:345:ILE:HG22	1:d:346:ASN:N	2.35	0.42
1:e:123:ALA:HB3	1:e:443:VAL:HG21	2.01	0.42
1:e:222:VAL:HA	1:e:300:ILE:HB	2.01	0.42
1:f:236:LEU:C	2:t:30:ILE:HD11	2.45	0.42
1:g:147:VAL:CG2	1:g:410:ILE:HD11	2.50	0.42
1:g:282:ASP:O	1:g:286:GLU:HG2	2.20	0.42
1:h:130:LYS:O	1:h:134:LEU:HB2	2.20	0.42
1:h:253:VAL:O	1:h:258:LEU:HD22	2.20	0.42
1:h:411:VAL:HB	1:h:417:THR:OG1	2.19	0.42
1:j:120:ILE:HG23	1:j:443:VAL:CG2	2.49	0.42
1:j:124:VAL:O	1:j:125:GLU:C	2.63	0.42
1:j:487:PHE:C	1:j:488:VAL:HG13	2.44	0.42
1:l:7:VAL:HG12	1:l:12:ALA:HB2	2.01	0.42
1:l:390:GLU:OE1	1:l:394:ARG:NH1	2.53	0.42
1:m:136:ILE:HD11	1:m:491:VAL:CG2	2.48	0.42
1:n:342:GLU:O	1:n:346:ASN:ND2	2.52	0.42
2:p:7:VAL:C	2:p:8:ILE:HD12	2.45	0.42
2:s:85:GLU:OE1	2:s:85:GLU:HA	2.20	0.42
1:B:66:LEU:HD22	1:B:522:VAL:CG1	2.46	0.42
1:B:144:ILE:HD13	1:B:402:THR:CG2	2.50	0.42
1:B:167:LYS:C	1:B:168:VAL:HG23	2.45	0.42
1:C:13:ARG:HB3	1:C:104:LEU:HD22	2.01	0.42
1:C:199:ILE:HG13	1:C:274:ALA:C	2.45	0.42
1:C:232:LEU:O	1:C:233:LEU:C	2.63	0.42
1:D:244:LYS:HA	1:D:245:PRO:HD3	1.93	0.42
1:E:136:ILE:HD12	1:E:477:ARG:HH21	1.85	0.42
1:E:150:ILE:CD1	1:E:496:VAL:H	2.33	0.42
1:F:173:ILE:HD12	1:F:366:GLU:HA	2.02	0.42
1:G:9:ASP:HB3	1:G:10:GLU:H	1.61	0.42
1:G:368:LEU:HD12	1:G:368:LEU:O	2.19	0.42
1:H:300:ILE:O	1:H:300:ILE:HG22	2.20	0.42
1:I:337:LYS:C	1:I:339:GLU:N	2.77	0.42
1:J:37:ASN:ND2	1:J:51:LYS:HE2	2.28	0.42
1:J:210:MET:HA	1:J:210:MET:HE2	2.02	0.42
1:J:224:LYS:CG	1:J:225:LYS:N	2.80	0.42
1:K:197:GLY:HA3	1:K:325:THR:O	2.20	0.42
1:L:66:LEU:HD22	1:L:522:VAL:HG21	2.01	0.42
1:L:202:TYR:HD2	1:L:266:LEU:HD11	1.84	0.42
1:L:224:LYS:CG	1:L:225:LYS:N	2.76	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:232:LEU:HD23	1:L:232:LEU:C	2.44	0.42
1:M:206:ASN:ND2	1:M:389:LYS:CE	2.79	0.42
2:O:8:ILE:N	2:O:8:ILE:CD1	2.79	0.42
2:Q:18:LYS:HG2	2:Q:87:TYR:HD2	1.80	0.42
2:R:7:VAL:HG12	2:R:8:ILE:N	2.35	0.42
2:S:80:ILE:CG2	2:S:81:GLU:H	2.32	0.42
2:U:33:PRO:C	2:U:35:THR:N	2.78	0.42
1:a:410:ILE:HD11	1:a:496:VAL:HG21	2.01	0.42
1:a:501:VAL:CG2	1:a:502:THR:N	2.83	0.42
1:b:10:GLU:HA	1:b:13:ARG:HH11	1.85	0.42
1:b:280:PHE:O	1:b:281:GLY:C	2.63	0.42
1:c:179:SER:HB2	1:c:379:ARG:HB3	2.00	0.42
1:c:238:GLN:HB3	1:c:313:LEU:CG	2.48	0.42
1:c:286:GLU:OE2	1:c:344:ARG:NH2	2.46	0.42
1:c:291:ILE:O	1:c:294:VAL:HG22	2.20	0.42
1:d:157:VAL:HG13	1:d:395:PHE:CD2	2.55	0.42
1:f:6:LEU:HD13	1:g:26:ALA:HB2	2.02	0.42
1:f:124:VAL:HG13	1:f:506:LEU:HG	2.02	0.42
1:g:225:LYS:HD3	1:g:254:GLU:OE1	2.20	0.42
1:g:235:ILE:CD1	1:g:311:ALA:CB	2.98	0.42
1:g:278:PRO:HD2	1:g:288:LEU:HD21	2.02	0.42
1:h:283:ARG:HH11	1:h:363:LYS:HE3	1.82	0.42
1:j:7:VAL:HG21	1:j:66:LEU:CD1	2.47	0.42
1:j:74:LEU:HA	1:j:512:ILE:HD13	2.01	0.42
1:l:375:VAL:O	1:l:375:VAL:HG12	2.18	0.42
1:m:325:THR:CG2	1:m:326:LYS:N	2.82	0.42
2:q:70:VAL:O	2:q:71:VAL:HG23	2.20	0.42
2:s:10:PRO:CB	2:s:14:ARG:O	2.64	0.42
2:t:77:GLY:HA3	2:t:89:ILE:O	2.20	0.42
2:u:46:ILE:O	2:u:46:ILE:CG2	2.68	0.42
1:A:503:ARG:O	1:A:507:GLN:HG3	2.20	0.41
1:C:136:ILE:CD1	1:C:477:ARG:NH2	2.76	0.41
1:C:463:SER:O	1:C:467:GLN:HG2	2.20	0.41
1:C:468:GLN:O	1:C:471:ALA:HB3	2.20	0.41
1:C:475:ASN:HA	1:C:476:PRO:HD2	1.94	0.41
1:E:463:SER:O	1:E:467:GLN:HG2	2.20	0.41
1:F:218:PHE:O	1:F:246:LEU:HD12	2.19	0.41
1:J:66:LEU:HD22	1:J:522:VAL:HG21	2.01	0.41
1:K:50:THR:CG2	1:K:52:ASP:H	2.22	0.41
1:K:194:PHE:CB	1:K:278:PRO:HB3	2.49	0.41
1:L:307:LYS:HB2	1:L:310:ASN:ND2	2.35	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:411:VAL:O	1:L:496:VAL:HG13	2.20	0.41
1:M:18:ARG:HD2	1:M:67:GLU:OE1	2.20	0.41
1:M:53:GLY:HA3	1:M:90:THR:OG1	2.19	0.41
1:M:132:LYS:C	1:M:134:LEU:N	2.77	0.41
1:M:433:GLU:HG2	1:M:434:GLY:N	2.35	0.41
1:N:201:PRO:O	1:N:204:VAL:HG23	2.20	0.41
1:N:464:VAL:HG12	1:N:468:GLN:NE2	2.26	0.41
2:O:18:LYS:HZ1	2:O:85:GLU:CD	2.27	0.41
2:O:78:THR:CG2	2:O:79:GLU:N	2.83	0.41
2:U:7:VAL:HG12	2:U:8:ILE:N	2.34	0.41
2:U:78:THR:CG2	2:U:80:ILE:HD11	2.50	0.41
1:a:287:MET:O	1:a:290:ASP:HB2	2.20	0.41
1:a:350:LYS:HB3	1:b:208:GLU:CB	2.46	0.41
1:b:51:LYS:O	1:b:51:LYS:HG2	2.19	0.41
1:b:478:TYR:CZ	1:b:487:PHE:HB3	2.55	0.41
1:c:229:VAL:HG12	1:c:233:LEU:CG	2.49	0.41
1:d:452:ARG:HH11	1:d:463:SER:HA	1.83	0.41
1:e:231:GLU:HB3	1:e:308:LEU:HB3	2.02	0.41
1:g:256:GLU:HA	1:g:259:ALA:HB3	2.01	0.41
1:g:278:PRO:HG3	1:g:291:ILE:HD11	2.02	0.41
1:g:345:ILE:HD12	1:g:371:LEU:O	2.19	0.41
1:h:40:LEU:HD21	1:h:56:VAL:HA	2.02	0.41
1:h:194:PHE:CE1	1:h:278:PRO:HD3	2.55	0.41
1:h:277:ALA:HB1	1:h:284:ARG:HD2	2.02	0.41
1:i:194:PHE:N	1:i:194:PHE:CD2	2.88	0.41
1:i:438:THR:O	1:i:441:LYS:HB2	2.20	0.41
1:i:478:TYR:CZ	1:i:487:PHE:HB3	2.55	0.41
1:j:132:LYS:C	1:j:134:LEU:N	2.78	0.41
1:k:5:ILE:HG23	1:k:5:ILE:O	2.20	0.41
1:k:316:LEU:HD23	1:k:316:LEU:O	2.20	0.41
1:k:412:PRO:HD2	1:k:417:THR:OG1	2.20	0.41
1:k:425:VAL:O	1:k:429:ILE:HG13	2.19	0.41
1:m:132:LYS:C	1:m:134:LEU:N	2.78	0.41
1:m:218:PHE:CZ	1:m:242:THR:HG21	2.55	0.41
1:n:175:THR:CG2	1:n:177:GLU:OE2	2.67	0.41
2:p:100:GLN:OXT	2:q:7:VAL:HG23	2.19	0.41
2:q:6:THR:HG22	2:q:7:VAL:N	2.35	0.41
1:A:74:LEU:HD21	1:A:93:THR:CG2	2.50	0.41
1:A:501:VAL:CG2	1:A:502:THR:N	2.83	0.41
1:B:124:VAL:HG13	1:B:506:LEU:HG	2.01	0.41
1:C:150:ILE:CD1	1:C:496:VAL:N	2.83	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:247:LEU:HD13	1:C:324:ILE:HD11	2.01	0.41
1:E:173:ILE:O	1:E:173:ILE:HG22	2.18	0.41
1:G:161:ILE:HD12	1:G:399:LEU:CD2	2.50	0.41
1:G:435:ASP:O	1:G:438:THR:HB	2.19	0.41
1:H:130:LYS:O	1:H:134:LEU:HB2	2.20	0.41
1:H:307:LYS:HB2	1:H:310:ASN:ND2	2.35	0.41
1:H:411:VAL:HB	1:H:417:THR:OG1	2.19	0.41
1:I:283:ARG:HH12	1:I:364:LEU:CD1	2.30	0.41
1:J:433:GLU:HG2	1:J:434:GLY:N	2.33	0.41
1:K:232:LEU:C	1:K:234:PRO:HD2	2.44	0.41
1:L:325:THR:HG22	1:L:327:ASP:N	2.08	0.41
1:N:236:LEU:HD12	1:N:236:LEU:HA	1.92	0.41
1:N:337:LYS:C	1:N:339:GLU:N	2.76	0.41
1:N:412:PRO:HD2	1:N:417:THR:OG1	2.20	0.41
1:a:284:ARG:HA	1:a:287:MET:HB2	2.02	0.41
1:a:346:ASN:O	1:a:350:LYS:HB2	2.20	0.41
1:a:426:GLU:OE2	1:a:444:ARG:NH1	2.52	0.41
1:a:452:ARG:HH11	1:a:463:SER:HA	1.85	0.41
1:a:461:GLU:O	1:a:462:GLY:C	2.63	0.41
1:b:270:LEU:HG	1:b:272:VAL:HG13	2.02	0.41
1:c:167:LYS:HB2	1:c:188:PHE:CE2	2.55	0.41
1:d:101:ARG:CG	1:d:102:GLU:H	2.33	0.41
1:d:290:ASP:O	1:d:294:VAL:HG23	2.20	0.41
1:d:307:LYS:HE3	2:s:34:ASP:CB	2.43	0.41
1:e:77:VAL:HG23	1:e:512:ILE:HG13	2.02	0.41
1:f:23:VAL:HB	1:f:74:LEU:HD23	2.02	0.41
1:f:229:VAL:HG12	1:f:233:LEU:HD11	2.02	0.41
1:g:72:GLN:HE22	1:g:75:LYS:HZ3	1.68	0.41
1:g:128:VAL:HA	1:g:131:ILE:HD12	2.02	0.41
1:g:180:LYS:HA	1:g:180:LYS:HD3	1.83	0.41
1:g:349:LYS:HB2	1:g:368:LEU:HD11	2.01	0.41
1:g:422:ILE:HD12	1:g:470:LEU:HD21	2.01	0.41
1:h:30:THR:HB	1:h:51:LYS:O	2.20	0.41
1:h:202:TYR:HD2	1:h:266:LEU:HD11	1.86	0.41
1:h:504:SER:O	1:h:505:ALA:C	2.63	0.41
1:j:194:PHE:HB2	1:j:278:PRO:HB3	2.02	0.41
1:j:360:ALA:HA	1:j:363:LYS:CG	2.50	0.41
1:l:285:LYS:O	1:l:289:LYS:HG3	2.21	0.41
1:n:411:VAL:HB	1:n:417:THR:OG1	2.20	0.41
1:n:437:ALA:O	1:n:441:LYS:HG3	2.20	0.41
2:t:62:LEU:HD23	2:t:92:GLU:OE1	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:t:71:VAL:HB	2:t:97:ALA:HB3	2.02	0.41
1:A:202:TYR:CZ	1:G:289:LYS:NZ	2.72	0.41
1:A:239:VAL:HG11	1:A:246:LEU:HB2	2.02	0.41
1:B:13:ARG:HB3	1:B:104:LEU:HD22	2.01	0.41
1:C:269:THR:HG21	2:Q:31:VAL:H	1.85	0.41
1:C:422:ILE:HD12	1:C:470:LEU:HD21	2.01	0.41
1:D:51:LYS:HG2	1:D:51:LYS:O	2.20	0.41
1:D:178:GLU:CG	1:D:388:LEU:HD21	2.48	0.41
1:D:180:LYS:HA	1:D:180:LYS:HD3	1.82	0.41
1:D:340:ASP:O	1:D:344:ARG:HB2	2.19	0.41
1:E:256:GLU:HA	1:E:259:ALA:HB3	2.02	0.41
1:F:101:ARG:CG	1:F:102:GLU:H	2.32	0.41
1:F:193:GLN:HB2	1:F:329:THR:O	2.21	0.41
1:G:10:GLU:HA	1:G:13:ARG:HH11	1.85	0.41
1:H:132:LYS:C	1:H:134:LEU:N	2.78	0.41
1:I:504:SER:O	1:I:505:ALA:C	2.62	0.41
1:J:275:VAL:HG12	1:J:276:LYS:O	2.20	0.41
1:J:491:VAL:C	1:J:493:ALA:N	2.78	0.41
1:J:526:LYS:CG	1:J:527:PRO:HD2	2.50	0.41
1:L:49:ILE:O	1:L:49:ILE:HG13	2.19	0.41
1:L:92:ALA:HB2	1:L:505:ALA:HA	2.02	0.41
1:L:202:TYR:CD2	1:L:266:LEU:HD11	2.55	0.41
1:L:458:ALA:C	1:M:114:LEU:CD1	2.93	0.41
1:M:8:PHE:O	1:M:11:ALA:HB3	2.21	0.41
1:M:47:PRO:HG2	1:N:73:LEU:CD1	2.51	0.41
1:M:86:GLY:O	1:M:87:ASP:HB2	2.20	0.41
2:Q:89:ILE:O	2:Q:89:ILE:HG22	2.20	0.41
1:a:113:PRO:HG3	1:b:36:ARG:NH1	2.35	0.41
1:b:124:VAL:HG13	1:b:506:LEU:HG	2.02	0.41
1:b:463:SER:O	1:b:467:GLN:HG2	2.20	0.41
1:c:159:LYS:HE2	1:c:163:ASP:OD2	2.20	0.41
1:c:265:LYS:HZ2	1:c:271:SER:HB2	1.85	0.41
1:d:210:MET:HE2	1:d:210:MET:HA	2.03	0.41
1:d:218:PHE:HA	1:d:317:GLY:O	2.21	0.41
1:d:348:ILE:CG2	1:d:364:LEU:O	2.68	0.41
1:d:461:GLU:O	1:d:462:GLY:C	2.63	0.41
1:e:152:ALA:HB2	1:e:398:ALA:HB2	2.02	0.41
1:f:150:ILE:HG22	1:f:151:SER:N	2.34	0.41
1:f:161:ILE:HD12	1:f:399:LEU:CD2	2.49	0.41
1:g:10:GLU:HA	1:g:13:ARG:HH11	1.86	0.41
1:g:141:ARG:NH2	1:g:163:ASP:OD1	2.40	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:214:LEU:HB3	1:g:245:PRO:HB2	2.02	0.41
1:h:18:ARG:HD2	1:h:67:GLU:OE1	2.21	0.41
1:h:124:VAL:O	1:h:125:GLU:C	2.63	0.41
1:h:384:THR:HG22	1:h:385:GLU:N	2.35	0.41
1:i:487:PHE:C	1:i:488:VAL:HG13	2.46	0.41
1:j:228:ASN:HB3	1:j:231:GLU:HG2	2.03	0.41
1:j:270:LEU:CD2	1:j:272:VAL:HG13	2.36	0.41
1:k:40:LEU:HD21	1:k:56:VAL:HA	2.03	0.41
1:k:306:PHE:CE2	1:k:315:MET:HE1	2.55	0.41
1:k:311:ALA:HA	1:k:315:MET:SD	2.60	0.41
1:k:421:ALA:O	1:k:425:VAL:HG23	2.20	0.41
1:l:77:VAL:O	1:l:80:LYS:HG2	2.20	0.41
1:l:84:VAL:HG12	1:l:500:LYS:CE	2.46	0.41
2:q:80:ILE:CG1	2:q:81:GLU:N	2.83	0.41
2:s:79:GLU:HG2	2:s:88:VAL:HG22	2.01	0.41
1:A:29:VAL:CG1	1:G:520:GLU:HB3	2.49	0.41
1:A:228:ASN:ND2	1:A:231:GLU:HG3	2.34	0.41
1:B:54:VAL:HG13	1:B:89:THR:CG2	2.50	0.41
1:B:101:ARG:HH22	1:B:449:GLU:CD	2.28	0.41
1:B:175:THR:HB	1:B:377:VAL:HG22	2.02	0.41
1:B:207:PRO:O	1:B:210:MET:HE3	2.20	0.41
1:C:235:ILE:HG12	1:C:311:ALA:HB3	2.02	0.41
1:E:136:ILE:CD1	1:E:477:ARG:NH2	2.84	0.41
1:E:264:ASN:OD1	1:E:269:THR:HG21	2.20	0.41
1:E:490:MET:CE	1:E:495:ILE:HG21	2.50	0.41
1:F:142:LYS:O	1:F:146:GLU:HG3	2.20	0.41
1:F:452:ARG:HH11	1:F:463:SER:HA	1.85	0.41
1:G:74:LEU:HD21	1:G:93:THR:CG2	2.50	0.41
1:G:180:LYS:HD3	1:G:180:LYS:HA	1.86	0.41
1:H:325:THR:CG2	1:H:326:LYS:N	2.81	0.41
1:H:384:THR:HB	1:H:387:GLU:H	1.86	0.41
1:J:8:PHE:O	1:J:11:ALA:HB3	2.20	0.41
1:J:79:SER:O	1:J:81:THR:N	2.53	0.41
1:J:526:LYS:HD2	1:J:527:PRO:HD2	2.00	0.41
1:K:37:ASN:OD1	1:L:515:LEU:HD12	2.19	0.41
1:L:283:ARG:HG2	1:L:363:LYS:NZ	2.34	0.41
1:M:173:ILE:HD11	1:M:370:LYS:HG2	2.01	0.41
1:M:384:THR:HA	1:N:280:PHE:CD1	2.54	0.41
2:P:45:VAL:O	2:P:46:ILE:HD13	2.21	0.41
2:T:19:ARG:HA	2:T:42:LYS:O	2.21	0.41
1:a:198:TYR:CE1	1:a:326:LYS:HA	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:247:LEU:HD13	1:a:324:ILE:HD11	2.02	0.41
1:a:489:ASP:HB3	1:a:492:GLU:HB3	2.02	0.41
1:b:345:ILE:C	1:b:347:GLY:H	2.28	0.41
1:f:101:ARG:HH22	1:f:449:GLU:CD	2.29	0.41
1:f:332:VAL:HG12	1:f:333:GLY:N	2.35	0.41
1:f:518:THR:OG1	1:g:37:ASN:ND2	2.54	0.41
1:g:95:LEU:O	1:g:99:ILE:HG13	2.20	0.41
1:j:312:THR:O	1:j:314:SER:N	2.48	0.41
1:k:120:ILE:HG23	1:k:443:VAL:CG2	2.50	0.41
1:l:225:LYS:HD3	1:l:254:GLU:OE2	2.20	0.41
1:l:285:LYS:HG2	1:l:289:LYS:HE3	2.02	0.41
1:l:412:PRO:HB3	1:l:490:MET:HB2	2.01	0.41
1:l:475:ASN:HA	1:l:476:PRO:HD2	1.96	0.41
1:m:337:LYS:C	1:m:339:GLU:N	2.79	0.41
1:n:219:ILE:O	1:n:221:ILE:HG13	2.20	0.41
1:n:312:THR:HG22	1:n:313:LEU:N	2.35	0.41
1:n:384:THR:HG22	1:n:385:GLU:N	2.35	0.41
1:n:465:ILE:HD13	1:n:480:PHE:CD1	2.56	0.41
2:r:44:LYS:HA	2:r:68:ASP:O	2.21	0.41
2:r:46:ILE:O	2:r:46:ILE:HG22	2.21	0.41
1:B:367:ARG:C	1:B:369:ALA:H	2.29	0.41
1:B:392:LYS:O	1:B:396:GLU:HG3	2.21	0.41
1:D:20:VAL:HG13	1:D:74:LEU:HD13	2.02	0.41
1:D:228:ASN:HD21	1:D:230:ARG:HB2	1.85	0.41
1:D:246:LEU:CB	1:D:272:VAL:HG12	2.42	0.41
1:F:10:GLU:N	1:F:13:ARG:HH12	2.19	0.41
1:F:37:ASN:HB3	1:F:50:THR:O	2.20	0.41
1:F:239:VAL:O	1:F:242:THR:N	2.41	0.41
1:F:239:VAL:HG11	1:F:246:LEU:HB2	2.01	0.41
1:F:260:THR:HG22	1:F:264:ASN:ND2	2.36	0.41
1:F:345:ILE:HG22	1:F:346:ASN:N	2.36	0.41
1:G:205:THR:HB	1:G:213:VAL:H	1.84	0.41
1:G:250:ALA:O	1:G:251:GLU:C	2.64	0.41
1:I:46:SER:CB	1:I:47:PRO:HD2	2.39	0.41
1:I:278:PRO:O	1:I:284:ARG:HD3	2.20	0.41
1:J:283:ARG:O	1:J:287:MET:HG3	2.21	0.41
1:K:283:ARG:HG2	1:K:363:LYS:NZ	2.34	0.41
1:L:309:GLU:OE1	1:L:309:GLU:N	2.41	0.41
1:M:47:PRO:HB3	1:N:69:ILE:HG23	2.02	0.41
1:M:187:LYS:HZ2	1:M:379:ARG:HG3	1.82	0.41
1:M:322:VAL:HG22	1:M:331:ILE:HG12	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:49:ILE:O	1:N:49:ILE:HG13	2.21	0.41
2:O:14:ARG:HE	2:U:96:LEU:HA	1.85	0.41
2:S:11:LEU:HB3	2:S:12:GLY:H	1.74	0.41
2:U:81:GLU:HA	2:U:86:GLU:HA	2.03	0.41
1:a:230:ARG:O	1:a:231:GLU:C	2.63	0.41
1:b:157:VAL:O	1:b:161:ILE:HG12	2.21	0.41
1:c:9:ASP:C	1:c:13:ARG:NH1	2.79	0.41
1:c:66:LEU:HD22	1:c:522:VAL:CG1	2.43	0.41
1:c:203:PHE:CG	1:c:273:ALA:HA	2.56	0.41
1:c:287:MET:O	1:c:291:ILE:HG13	2.21	0.41
1:c:319:ALA:HB1	1:c:332:VAL:O	2.21	0.41
1:d:54:VAL:HG13	1:d:89:THR:HG21	2.03	0.41
1:d:101:ARG:HG3	1:d:102:GLU:H	1.84	0.41
1:d:359:TYR:OH	1:d:363:LYS:NZ	2.44	0.41
1:e:157:VAL:O	1:e:161:ILE:HG12	2.20	0.41
1:f:33:PRO:HD3	4:f:602:ADP:C5	2.54	0.41
1:f:237:GLU:CD	2:t:27:LYS:HG3	2.45	0.41
1:f:520:GLU:HB3	1:g:29:VAL:CG1	2.50	0.41
1:g:54:VAL:HG13	1:g:89:THR:HG21	2.01	0.41
1:g:101:ARG:HH22	1:g:449:GLU:CD	2.28	0.41
1:g:150:ILE:O	1:g:153:ASN:N	2.49	0.41
1:g:267:ARG:HD2	2:u:31:VAL:HG21	2.02	0.41
1:g:478:TYR:CE1	1:g:487:PHE:HB3	2.55	0.41
1:h:37:ASN:HD21	1:h:51:LYS:CE	2.28	0.41
1:h:74:LEU:HD12	1:h:512:ILE:HD12	2.00	0.41
1:i:217:ALA:O	1:i:318:ARG:HB2	2.20	0.41
1:k:360:ALA:HA	1:k:363:LYS:HG2	2.02	0.41
1:l:50:THR:HG21	1:l:55:THR:HB	2.02	0.41
1:l:117:LYS:O	1:l:120:ILE:N	2.54	0.41
1:l:180:LYS:O	1:m:281:GLY:N	2.53	0.41
1:n:222:VAL:CG1	1:n:223:GLU:H	2.33	0.41
2:q:24:PRO:HG2	2:q:25:LYS:N	2.36	0.41
2:q:82:ILE:O	2:q:83:ASP:HB2	2.20	0.41
2:r:53:VAL:HG22	2:r:59:ARG:HG2	2.02	0.41
1:A:161:ILE:HD12	1:A:399:LEU:CD2	2.51	0.41
1:A:233:LEU:HD23	2:O:30:ILE:CD1	2.48	0.41
1:A:286:GLU:OE1	1:A:344:ARG:NH2	2.53	0.41
1:A:481:ASN:O	1:A:483:ALA:N	2.54	0.41
1:B:79:SER:O	1:B:82:ASN:N	2.53	0.41
1:B:157:VAL:O	1:B:161:ILE:HG12	2.20	0.41
1:B:167:LYS:HB2	1:B:188:PHE:CE2	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:233:LEU:O	1:B:234:PRO:C	2.62	0.41
1:C:428:LEU:HD12	1:C:428:LEU:O	2.19	0.41
1:D:17:GLU:HB2	1:D:104:LEU:CD1	2.51	0.41
1:D:149:THR:CG2	1:D:155:PRO:HA	2.46	0.41
1:D:198:TYR:C	1:D:200:SER:H	2.28	0.41
1:D:235:ILE:HG12	1:D:311:ALA:HB3	2.01	0.41
1:E:157:VAL:HG13	1:E:395:PHE:CD2	2.55	0.41
1:F:247:LEU:HD13	1:F:324:ILE:HD11	2.01	0.41
1:G:168:VAL:HG12	1:G:172:GLY:CA	2.30	0.41
1:H:219:ILE:O	1:H:221:ILE:HG13	2.21	0.41
1:I:132:LYS:C	1:I:134:LEU:N	2.79	0.41
1:J:132:LYS:C	1:J:134:LEU:H	2.26	0.41
1:J:303:GLU:C	1:J:305:GLY:N	2.73	0.41
1:J:375:VAL:O	1:J:375:VAL:HG12	2.20	0.41
1:K:112:ASN:HA	1:K:113:PRO:HD3	1.96	0.41
1:L:87:ASP:O	1:L:501:VAL:HG13	2.21	0.41
1:M:79:SER:O	1:M:81:THR:N	2.53	0.41
1:M:219:ILE:HD13	1:M:331:ILE:HD13	2.03	0.41
1:M:261:LEU:HD22	1:M:272:VAL:HG21	2.02	0.41
1:M:449:GLU:O	1:M:450:PRO:C	2.63	0.41
1:N:313:LEU:O	1:N:313:LEU:HG	2.21	0.41
1:N:491:VAL:C	1:N:493:ALA:H	2.28	0.41
2:O:34:ASP:HA	2:O:37:LYS:HE2	2.02	0.41
2:O:80:ILE:HG13	2:U:41:GLN:OE1	2.21	0.41
2:O:81:GLU:CG	2:O:85:GLU:H	2.31	0.41
1:a:51:LYS:HG2	1:a:51:LYS:O	2.21	0.41
1:a:149:THR:HG23	1:a:154:ASP:C	2.46	0.41
1:b:103:GLY:O	1:b:107:VAL:HG23	2.20	0.41
1:b:212:ALA:HB3	1:b:324:ILE:CB	2.30	0.41
1:b:233:LEU:O	1:b:234:PRO:C	2.62	0.41
1:b:503:ARG:O	1:b:507:GLN:HG3	2.20	0.41
1:c:218:PHE:CE1	1:c:244:LYS:HB2	2.55	0.41
1:d:218:PHE:CE1	1:d:244:LYS:HB2	2.55	0.41
1:d:340:ASP:O	1:d:344:ARG:HB2	2.20	0.41
1:d:501:VAL:CG2	1:d:502:THR:N	2.83	0.41
1:e:408:GLU:OE1	1:e:503:ARG:NH2	2.54	0.41
1:f:31:LEU:HD23	1:f:453:GLN:HB3	2.02	0.41
1:f:215:GLU:O	1:f:216:ASP:C	2.63	0.41
1:f:418:LEU:HD12	1:f:418:LEU:H	1.85	0.41
1:g:428:LEU:HD12	1:g:428:LEU:O	2.20	0.41
1:h:390:GLU:OE1	1:h:394:ARG:NH1	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:18:ARG:HD2	1:i:67:GLU:OE1	2.19	0.41
1:i:372:ALA:O	1:i:374:GLY:N	2.49	0.41
1:i:411:VAL:HB	1:i:417:THR:OG1	2.21	0.41
1:j:19:GLY:HA3	1:j:67:GLU:O	2.20	0.41
1:j:204:VAL:HG13	1:j:211:GLU:O	2.20	0.41
1:j:295:THR:CG2	1:j:318:ARG:N	2.75	0.41
1:k:84:VAL:HG12	1:k:500:LYS:CE	2.46	0.41
1:l:8:PHE:N	1:l:8:PHE:CD1	2.88	0.41
1:l:232:LEU:C	1:l:234:PRO:HD2	2.44	0.41
1:l:384:THR:HB	1:l:387:GLU:H	1.85	0.41
1:m:239:VAL:HG11	1:m:246:LEU:HB2	2.03	0.41
1:m:298:THR:N	1:m:315:MET:O	2.52	0.41
1:n:325:THR:CG2	1:n:326:LYS:N	2.84	0.41
2:p:97:ALA:HA	2:q:11:LEU:HG	2.03	0.41
2:s:46:ILE:HG22	2:s:46:ILE:O	2.21	0.41
2:t:82:ILE:O	2:t:83:ASP:C	2.62	0.41
2:u:12:GLY:HA2	2:u:51:GLY:H	1.85	0.41
1:A:77:VAL:HG23	1:A:512:ILE:HG13	2.01	0.41
1:C:241:GLN:HE21	2:Q:28:GLY:HA2	1.85	0.41
1:D:50:THR:CG2	1:D:52:ASP:HB3	2.48	0.41
1:D:72:GLN:NE2	1:D:75:LYS:NZ	2.68	0.41
1:D:123:ALA:HA	1:D:428:LEU:HD23	2.02	0.41
1:E:214:LEU:HB3	1:E:245:PRO:HB2	2.02	0.41
1:E:277:ALA:HA	1:E:278:PRO:HD3	1.96	0.41
1:E:348:ILE:CD1	1:E:367:ARG:NE	2.84	0.41
1:G:232:LEU:HB3	1:G:236:LEU:CD1	2.51	0.41
1:G:247:LEU:HD13	1:G:324:ILE:HD11	2.03	0.41
1:H:408:GLU:OE2	1:H:500:LYS:HG3	2.20	0.41
1:I:46:SER:HB2	1:I:47:PRO:CD	2.39	0.41
1:J:232:LEU:CD2	1:J:236:LEU:HB2	2.50	0.41
1:J:437:ALA:O	1:J:441:LYS:HG3	2.21	0.41
1:K:283:ARG:HD3	1:K:363:LYS:HE3	2.03	0.41
1:K:342:GLU:HA	1:K:345:ILE:HD12	2.02	0.41
1:L:86:GLY:O	1:L:87:ASP:HB2	2.20	0.41
1:M:342:GLU:HA	1:M:345:ILE:HD12	2.01	0.41
1:N:8:PHE:O	1:N:11:ALA:HB3	2.21	0.41
1:N:375:VAL:O	1:N:375:VAL:HG12	2.19	0.41
2:O:97:ALA:HB1	2:P:9:LYS:O	2.21	0.41
2:P:53:VAL:HG22	2:P:59:ARG:HG2	2.02	0.41
1:a:345:ILE:HG22	1:a:346:ASN:N	2.36	0.41
1:c:307:LYS:O	1:c:308:LEU:C	2.64	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:14:ARG:HD3	1:d:14:ARG:HA	1.88	0.41
1:d:72:GLN:HE22	1:d:75:LYS:HZ3	1.64	0.41
1:d:478:TYR:CE1	1:d:487:PHE:HB3	2.55	0.41
1:e:23:VAL:HB	1:e:74:LEU:HD23	2.03	0.41
1:e:220:LEU:HD11	1:e:300:ILE:CD1	2.51	0.41
1:e:247:LEU:HD22	1:e:322:VAL:HG11	2.03	0.41
1:e:344:ARG:HA	1:e:344:ARG:HD2	1.82	0.41
1:f:216:ASP:HA	1:f:319:ALA:O	2.21	0.41
1:f:220:LEU:HG	1:f:222:VAL:HG23	2.02	0.41
1:f:402:THR:O	1:f:405:ALA:HB3	2.21	0.41
1:g:359:TYR:O	1:g:363:LYS:HG2	2.20	0.41
1:h:411:VAL:O	1:h:496:VAL:CG1	2.69	0.41
1:i:475:ASN:HA	1:i:476:PRO:HD2	1.93	0.41
1:j:27:VAL:CG1	1:j:90:THR:HG23	2.50	0.41
1:j:53:GLY:HA3	1:j:90:THR:OG1	2.21	0.41
1:j:325:THR:CG2	1:j:326:LYS:N	2.82	0.41
1:l:311:ALA:HA	1:l:315:MET:SD	2.61	0.41
1:m:465:ILE:HD13	1:m:480:PHE:CD1	2.55	0.41
1:n:232:LEU:HD23	1:n:232:LEU:C	2.46	0.41
2:t:63:GLU:HB3	2:u:11:LEU:HD11	2.03	0.41
2:u:10:PRO:O	2:u:11:LEU:HD22	2.21	0.41
1:A:463:SER:O	1:A:467:GLN:HG2	2.21	0.41
1:C:79:SER:O	1:C:82:ASN:N	2.53	0.41
1:C:239:VAL:HG11	1:C:246:LEU:HB2	2.03	0.41
1:D:194:PHE:CE1	1:D:329:THR:HB	2.56	0.41
1:D:332:VAL:HG12	1:D:333:GLY:N	2.35	0.41
1:E:123:ALA:HA	1:E:428:LEU:HD23	2.02	0.41
1:E:312:THR:C	1:E:314:SER:H	2.28	0.41
1:F:188:PHE:CD1	1:F:188:PHE:N	2.89	0.41
1:F:198:TYR:O	1:F:198:TYR:HD1	2.03	0.41
1:F:417:THR:HG23	1:F:418:LEU:HD12	2.01	0.41
1:G:40:LEU:HD13	1:G:59:GLU:CG	2.50	0.41
1:G:146:GLU:O	1:G:147:VAL:C	2.64	0.41
1:G:372:ALA:O	1:G:373:GLY:C	2.63	0.41
1:G:460:TYR:HB3	1:G:465:ILE:HD11	2.02	0.41
1:H:217:ALA:HB1	1:H:245:PRO:O	2.20	0.41
1:H:283:ARG:HA	1:H:283:ARG:HD2	1.74	0.41
1:I:433:GLU:HG2	1:I:434:GLY:N	2.36	0.41
1:L:283:ARG:HD3	1:L:363:LYS:CE	2.51	0.41
1:L:337:LYS:C	1:L:339:GLU:N	2.77	0.41
1:M:449:GLU:HB2	1:M:450:PRO:HD3	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:478:TYR:CZ	1:N:487:PHE:HB3	2.55	0.41
2:O:9:LYS:C	2:U:97:ALA:HB1	2.45	0.41
2:S:69:ILE:O	2:S:98:VAL:HG13	2.21	0.41
1:a:31:LEU:HD23	1:a:453:GLN:HB3	2.02	0.41
1:b:101:ARG:CG	1:b:102:GLU:H	2.33	0.41
1:b:490:MET:HE3	1:b:495:ILE:CG2	2.50	0.41
1:c:235:ILE:HD13	1:c:235:ILE:HG21	1.78	0.41
1:c:283:ARG:HH11	1:c:363:LYS:HB3	1.83	0.41
1:c:351:GLU:HG2	1:d:326:LYS:NZ	2.36	0.41
1:e:113:PRO:HD3	1:f:36:ARG:NH2	2.36	0.41
1:e:178:GLU:CG	1:e:388:LEU:HD21	2.50	0.41
1:g:144:ILE:HD13	1:g:402:THR:CG2	2.51	0.41
1:g:265:LYS:NZ	1:g:271:SER:HB2	2.35	0.41
1:g:312:THR:HG22	1:g:313:LEU:N	2.36	0.41
1:h:27:VAL:CG1	1:h:90:THR:HG23	2.50	0.41
1:h:312:THR:HG22	1:h:313:LEU:N	2.35	0.41
1:h:337:LYS:C	1:h:339:GLU:N	2.78	0.41
1:h:455:ALA:HB1	1:h:465:ILE:HD12	2.03	0.41
1:i:285:LYS:O	1:i:289:LYS:HG3	2.21	0.41
1:i:325:THR:CG2	1:i:326:LYS:N	2.84	0.41
1:j:312:THR:HG22	1:j:313:LEU:N	2.36	0.41
1:k:49:ILE:O	1:k:49:ILE:HG13	2.20	0.41
1:l:30:THR:HB	1:l:51:LYS:O	2.21	0.41
1:l:124:VAL:O	1:l:125:GLU:C	2.64	0.41
1:l:202:TYR:CD2	1:l:266:LEU:HD11	2.55	0.41
1:l:309:GLU:OE1	1:l:309:GLU:N	2.42	0.41
2:o:17:VAL:CG1	2:o:43:GLY:HA3	2.51	0.41
2:o:20:ILE:O	2:o:40:PRO:HB3	2.21	0.41
2:o:21:GLU:N	2:o:21:GLU:CD	2.78	0.41
2:t:69:ILE:HB	2:t:99:LEU:CD1	2.51	0.41
1:A:68:ASN:O	1:A:72:GLN:HG2	2.20	0.41
1:A:123:ALA:HB2	1:A:440:ALA:HA	2.03	0.41
1:A:123:ALA:HB3	1:A:443:VAL:HG21	2.03	0.41
1:A:173:ILE:HD12	1:A:366:GLU:CA	2.45	0.41
1:A:354:THR:O	1:A:354:THR:HG22	2.20	0.41
1:A:416:VAL:HG21	1:A:479:GLY:HA3	2.03	0.41
1:A:481:ASN:C	1:A:483:ALA:H	2.29	0.41
1:B:54:VAL:CG2	1:B:89:THR:HG21	2.50	0.41
1:B:150:ILE:HD11	1:B:494:GLY:O	2.21	0.41
1:B:199:ILE:HD12	1:B:274:ALA:HB1	2.03	0.41
1:B:229:VAL:HG12	1:B:233:LEU:CD1	2.49	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:72:GLN:O	1:C:75:LYS:N	2.54	0.41
1:C:332:VAL:HG12	1:C:333:GLY:N	2.36	0.41
1:C:345:ILE:C	1:C:347:GLY:N	2.76	0.41
1:D:198:TYR:O	1:D:198:TYR:CD1	2.72	0.41
1:D:198:TYR:HB3	1:D:324:ILE:HG21	2.02	0.41
1:D:437:ALA:O	1:D:441:LYS:HG3	2.21	0.41
1:E:231:GLU:HA	1:E:309:GLU:HG2	2.03	0.41
1:E:304:LEU:O	1:F:263:VAL:HG22	2.21	0.41
1:F:24:ALA:O	1:F:28:LYS:HG2	2.20	0.41
1:F:31:LEU:HD23	1:F:453:GLN:HB3	2.02	0.41
1:F:168:VAL:O	1:F:172:GLY:HA3	2.21	0.41
1:G:363:LYS:C	1:G:365:GLN:N	2.79	0.41
1:H:149:THR:HG23	1:H:155:PRO:CA	2.43	0.41
1:H:194:PHE:HB2	1:H:278:PRO:HB3	2.03	0.41
1:H:232:LEU:C	1:H:234:PRO:HD2	2.46	0.41
1:H:278:PRO:O	1:H:284:ARG:HD3	2.21	0.41
1:H:384:THR:HG22	1:H:385:GLU:N	2.36	0.41
1:H:462:GLY:O	1:H:466:VAL:HG23	2.19	0.41
1:I:149:THR:HG23	1:I:155:PRO:CA	2.40	0.41
1:I:232:LEU:C	1:I:234:PRO:HD2	2.45	0.41
1:I:421:ALA:O	1:I:425:VAL:HG23	2.20	0.41
1:J:175:THR:CG2	1:J:177:GLU:OE2	2.69	0.41
1:J:298:THR:N	1:J:315:MET:O	2.52	0.41
1:J:344:ARG:HH11	1:J:344:ARG:HG3	1.84	0.41
1:J:372:ALA:C	1:J:374:GLY:N	2.77	0.41
1:J:473:THR:O	1:J:473:THR:HG22	2.21	0.41
1:J:491:VAL:C	1:J:493:ALA:H	2.28	0.41
1:K:86:GLY:O	1:K:87:ASP:HB2	2.19	0.41
1:K:178:GLU:OE2	1:K:392:LYS:HE3	2.20	0.41
1:K:228:ASN:ND2	1:K:230:ARG:HB3	2.29	0.41
1:K:337:LYS:C	1:K:339:GLU:H	2.29	0.41
1:K:363:LYS:O	1:K:366:GLU:HG2	2.20	0.41
1:K:465:ILE:HD13	1:K:480:PHE:CD1	2.56	0.41
1:L:207:PRO:O	1:L:210:MET:HE3	2.21	0.41
1:L:246:LEU:HB3	1:L:272:VAL:CG1	2.47	0.41
1:L:360:ALA:O	1:L:363:LYS:HG2	2.21	0.41
1:L:433:GLU:HG2	1:L:434:GLY:N	2.36	0.41
1:M:303:GLU:C	1:M:305:GLY:N	2.77	0.41
1:N:202:TYR:HD2	1:N:266:LEU:HD11	1.85	0.41
1:N:247:LEU:HD22	1:N:322:VAL:CG1	2.49	0.41
1:N:412:PRO:HB3	1:N:490:MET:HB2	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:O:9:LYS:HE2	2:U:100:GLN:OE1	2.21	0.41
2:O:54:LEU:CG	2:P:55:GLU:O	2.66	0.41
2:Q:20:ILE:CG1	2:Q:43:GLY:HA2	2.46	0.41
2:Q:78:THR:HG22	2:Q:79:GLU:N	2.36	0.41
2:R:9:LYS:HA	2:R:10:PRO:HD2	1.94	0.41
2:R:62:LEU:O	2:R:64:VAL:N	2.54	0.41
2:R:81:GLU:HG3	2:R:85:GLU:C	2.45	0.41
2:S:13:ASP:CG	2:S:92:GLU:HB2	2.45	0.41
2:S:14:ARG:CG	2:S:14:ARG:NH1	2.83	0.41
2:S:48:VAL:HG11	2:S:64:VAL:O	2.19	0.41
2:T:52:ARG:HG3	2:T:52:ARG:O	2.20	0.41
2:U:13:ASP:HB2	2:U:62:LEU:CD2	2.39	0.41
1:a:29:VAL:CG1	1:g:520:GLU:CG	2.99	0.41
1:a:296:GLY:CA	1:a:336:GLY:HA2	2.51	0.41
1:a:351:GLU:OE1	1:a:364:LEU:HD13	2.20	0.41
1:a:475:ASN:HA	1:a:476:PRO:HD2	1.95	0.41
1:b:50:THR:CG2	1:b:52:ASP:HB3	2.50	0.41
1:b:238:GLN:HB3	1:b:313:LEU:HG	2.02	0.41
1:c:123:ALA:HA	1:c:428:LEU:HD23	2.03	0.41
1:c:203:PHE:CE2	1:c:272:VAL:HG23	2.56	0.41
1:c:205:THR:HB	1:c:213:VAL:H	1.85	0.41
1:c:239:VAL:HG22	1:c:313:LEU:CD2	2.51	0.41
1:c:363:LYS:HD3	1:c:366:GLU:OE2	2.21	0.41
1:d:128:VAL:HA	1:d:131:ILE:HD12	2.02	0.41
1:d:136:ILE:CD1	1:d:477:ARG:NH2	2.79	0.41
1:d:144:ILE:HD13	1:d:402:THR:CG2	2.51	0.41
1:d:296:GLY:CA	1:d:336:GLY:HA2	2.51	0.41
1:e:136:ILE:O	1:e:410:ILE:HG22	2.21	0.41
1:e:258:LEU:O	1:e:262:VAL:HG23	2.21	0.41
1:e:332:VAL:HG12	1:e:333:GLY:N	2.35	0.41
1:e:490:MET:HE3	1:e:495:ILE:CG2	2.51	0.41
1:f:66:LEU:CD2	1:f:522:VAL:HG11	2.45	0.41
1:f:289:LYS:HB3	1:f:344:ARG:NH2	2.35	0.41
1:f:396:GLU:O	1:f:400:ASN:ND2	2.54	0.41
1:f:455:ALA:O	1:f:458:ALA:HB3	2.21	0.41
1:g:229:VAL:HG11	2:u:32:LEU:HD11	2.03	0.41
1:h:19:GLY:HA3	1:h:67:GLU:O	2.21	0.41
1:i:74:LEU:HA	1:i:512:ILE:HD13	2.02	0.41
1:i:95:LEU:O	1:i:99:ILE:HG13	2.21	0.41
1:i:246:LEU:HB3	1:i:272:VAL:CG1	2.42	0.41
1:i:309:GLU:OE1	1:i:309:GLU:N	2.41	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:491:VAL:C	1:i:493:ALA:H	2.29	0.41
1:j:239:VAL:HG22	1:j:313:LEU:CD1	2.51	0.41
1:k:46:SER:HB2	1:k:47:PRO:CD	2.38	0.41
1:k:79:SER:O	1:k:81:THR:N	2.51	0.41
1:k:194:PHE:HB2	1:k:278:PRO:HB3	2.02	0.41
1:l:95:LEU:O	1:l:99:ILE:HG13	2.21	0.41
1:l:277:ALA:HB1	1:l:284:ARG:HD2	2.01	0.41
1:m:79:SER:O	1:m:81:THR:N	2.54	0.41
1:m:219:ILE:O	1:m:221:ILE:HG13	2.20	0.41
1:n:179:SER:HB2	1:n:379:ARG:CB	2.41	0.41
1:n:228:ASN:ND2	1:n:230:ARG:HB3	2.30	0.41
2:o:6:THR:HG22	2:o:7:VAL:N	2.35	0.41
2:p:46:ILE:O	2:p:46:ILE:HG22	2.20	0.41
2:r:10:PRO:HB2	2:r:14:ARG:O	2.20	0.41
2:s:33:PRO:HD2	2:s:36:ALA:CB	2.51	0.41
2:u:62:LEU:O	2:u:64:VAL:N	2.54	0.41
1:B:478:TYR:CE1	1:B:487:PHE:HB3	2.56	0.41
1:D:74:LEU:HD21	1:D:93:THR:HG23	2.03	0.41
1:D:128:VAL:HA	1:D:131:ILE:HD12	2.01	0.41
1:D:355:THR:CG2	1:D:361:ARG:HG2	2.50	0.41
1:F:421:ALA:O	1:F:425:VAL:HG23	2.20	0.41
1:G:10:GLU:N	1:G:13:ARG:HH12	2.19	0.41
1:K:37:ASN:ND2	1:K:51:LYS:HE2	2.29	0.41
1:K:297:GLY:CA	1:K:317:GLY:N	2.84	0.41
1:L:28:LYS:HZ2	1:L:97:GLN:HE22	1.67	0.41
1:M:77:VAL:HB	1:M:512:ILE:HD11	2.03	0.41
1:M:337:LYS:C	1:M:339:GLU:N	2.79	0.41
1:M:478:TYR:CZ	1:M:487:PHE:HB3	2.56	0.41
1:N:50:THR:HG21	1:N:55:THR:HB	2.02	0.41
1:N:290:ASP:N	1:N:344:ARG:NH1	2.66	0.41
1:N:362:GLU:HA	1:N:365:GLN:CG	2.51	0.41
1:a:164:ALA:O	1:a:165:MET:C	2.64	0.41
1:b:222:VAL:HG22	1:b:300:ILE:HD12	2.03	0.41
1:d:503:ARG:HG2	1:d:507:GLN:OE1	2.21	0.41
1:e:79:SER:O	1:e:82:ASN:N	2.55	0.41
1:f:118:ARG:O	1:f:122:LYS:HG3	2.21	0.41
1:f:220:LEU:HD23	1:f:248:ILE:HG23	2.02	0.41
1:f:344:ARG:HD2	1:f:344:ARG:HA	1.68	0.41
1:g:66:LEU:CD2	1:g:522:VAL:HG11	2.43	0.41
1:g:152:ALA:HB2	1:g:398:ALA:HB2	2.02	0.41
1:g:295:THR:C	1:g:336:GLY:N	2.79	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:228:ASN:ND2	1:j:230:ARG:HB3	2.29	0.41
1:j:289:LYS:C	1:j:344:ARG:NH1	2.79	0.41
1:k:19:GLY:HA3	1:k:67:GLU:O	2.21	0.41
1:m:413:GLY:HA2	1:m:497:ASP:OD2	2.21	0.41
2:o:45:VAL:O	2:o:46:ILE:HD13	2.21	0.41
2:p:8:ILE:N	2:p:8:ILE:CD1	2.82	0.41
2:t:46:ILE:HG22	2:t:46:ILE:O	2.20	0.41
2:t:54:LEU:HD13	2:u:57:GLY:CA	2.50	0.41
1:A:159:LYS:HE2	1:A:163:ASP:OD2	2.21	0.40
1:C:217:ALA:CB	1:C:245:PRO:HB2	2.44	0.40
1:D:359:TYR:CZ	1:D:363:LYS:HE2	2.56	0.40
1:D:515:LEU:O	1:D:518:THR:OG1	2.34	0.40
1:E:79:SER:O	1:E:82:ASN:N	2.54	0.40
1:E:123:ALA:HB2	1:E:440:ALA:HA	2.03	0.40
1:E:278:PRO:HG3	1:E:291:ILE:CD1	2.50	0.40
1:E:404:ALA:HB1	1:E:500:LYS:HB3	2.02	0.40
1:E:478:TYR:CZ	1:E:487:PHE:HB3	2.57	0.40
1:F:237:GLU:OE2	2:T:28:GLY:N	2.54	0.40
1:G:23:VAL:HB	1:G:74:LEU:HD23	2.03	0.40
1:H:50:THR:HG21	1:H:55:THR:HB	2.02	0.40
1:H:372:ALA:C	1:H:374:GLY:N	2.80	0.40
1:J:28:LYS:C	1:J:30:THR:H	2.29	0.40
1:J:416:VAL:HG21	1:J:479:GLY:HA3	2.02	0.40
1:J:478:TYR:CZ	1:J:487:PHE:HB3	2.56	0.40
1:L:221:ILE:HD11	1:L:291:ILE:HG22	2.04	0.40
1:M:375:VAL:O	1:M:375:VAL:HG12	2.20	0.40
1:N:217:ALA:HB1	1:N:245:PRO:O	2.21	0.40
1:N:295:THR:HG22	1:N:317:GLY:CA	2.51	0.40
2:O:33:PRO:C	2:O:35:THR:N	2.79	0.40
2:P:81:GLU:HG3	2:P:85:GLU:O	2.21	0.40
2:R:19:ARG:HA	2:R:42:LYS:O	2.20	0.40
2:S:9:LYS:HA	2:S:10:PRO:HD2	1.94	0.40
2:T:33:PRO:C	2:T:35:THR:N	2.79	0.40
2:T:81:GLU:HG3	2:T:85:GLU:C	2.46	0.40
2:U:50:THR:HG22	2:U:51:GLY:O	2.21	0.40
1:a:72:GLN:HE22	1:a:75:LYS:HZ3	1.66	0.40
1:b:29:VAL:O	1:b:29:VAL:HG12	2.21	0.40
1:c:101:ARG:HH22	1:c:449:GLU:CD	2.29	0.40
1:c:150:ILE:CD1	1:c:496:VAL:N	2.84	0.40
1:c:247:LEU:HD22	1:c:322:VAL:CG1	2.46	0.40
1:c:435:ASP:O	1:c:438:THR:HB	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:31:LEU:HD23	1:d:453:GLN:HB3	2.02	0.40
1:e:296:GLY:CA	1:e:336:GLY:HA2	2.51	0.40
1:f:13:ARG:HB3	1:f:104:LEU:HD22	2.03	0.40
1:f:167:LYS:HB2	1:f:188:PHE:CE2	2.56	0.40
1:i:194:PHE:HB2	1:i:278:PRO:HB3	2.03	0.40
1:k:132:LYS:C	1:k:134:LEU:N	2.78	0.40
1:k:149:THR:HG23	1:k:155:PRO:CA	2.41	0.40
1:k:283:ARG:HH12	1:k:363:LYS:HG3	1.86	0.40
1:m:222:VAL:CG1	1:m:223:GLU:H	2.35	0.40
1:n:433:GLU:HG2	1:n:434:GLY:N	2.35	0.40
2:p:25:LYS:HG2	2:p:31:VAL:CG2	2.44	0.40
2:p:53:VAL:HG22	2:p:59:ARG:HG2	2.03	0.40
2:r:50:THR:HG23	2:r:59:ARG:HD3	2.03	0.40
2:s:53:VAL:HG22	2:s:59:ARG:HE	1.87	0.40
2:s:97:ALA:HB2	2:t:10:PRO:HA	2.03	0.40
2:u:72:PHE:CZ	2:u:90:LEU:HD21	2.56	0.40
1:A:47:PRO:HG3	1:G:69:ILE:HG23	2.03	0.40
1:B:251:GLU:CG	1:B:284:ARG:HH12	2.10	0.40
1:C:150:ILE:HD12	1:C:496:VAL:H	1.86	0.40
1:C:161:ILE:HD12	1:C:399:LEU:HD21	2.03	0.40
1:C:168:VAL:O	1:C:172:GLY:HA3	2.22	0.40
1:C:180:LYS:HA	1:C:180:LYS:HD3	1.87	0.40
1:D:10:GLU:N	1:D:13:ARG:HH12	2.19	0.40
1:D:229:VAL:HG11	2:R:32:LEU:HD21	2.02	0.40
1:D:501:VAL:CG2	1:D:502:THR:N	2.84	0.40
1:E:54:VAL:HG13	1:E:89:THR:CG2	2.52	0.40
1:H:285:LYS:O	1:H:289:LYS:HG3	2.22	0.40
1:K:268:GLY:O	1:L:228:ASN:HB2	2.21	0.40
1:L:80:LYS:HE3	1:L:508:ASN:OD1	2.21	0.40
1:L:189:VAL:CG1	1:L:190:GLU:N	2.61	0.40
1:L:219:ILE:O	1:L:221:ILE:HG13	2.19	0.40
2:O:14:ARG:NE	2:U:96:LEU:HD23	2.33	0.40
2:Q:13:ASP:O	2:Q:62:LEU:CD2	2.69	0.40
2:R:33:PRO:C	2:R:35:THR:N	2.79	0.40
2:S:21:GLU:CD	2:S:21:GLU:N	2.78	0.40
2:S:98:VAL:HB	2:T:9:LYS:HB2	2.03	0.40
2:U:45:VAL:O	2:U:46:ILE:HD13	2.20	0.40
1:b:286:GLU:OE1	1:b:344:ARG:NH2	2.54	0.40
1:c:17:GLU:HB2	1:c:104:LEU:CD1	2.51	0.40
1:c:123:ALA:HB2	1:c:440:ALA:HA	2.02	0.40
1:c:238:GLN:O	1:c:313:LEU:HD11	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:478:TYR:CZ	1:c:487:PHE:HB3	2.57	0.40
1:d:265:LYS:HD3	1:d:265:LYS:C	2.46	0.40
1:f:142:LYS:O	1:f:146:GLU:HG3	2.22	0.40
1:f:180:LYS:HD3	1:f:180:LYS:HA	1.86	0.40
1:f:280:PHE:O	1:f:281:GLY:C	2.64	0.40
1:g:206:ASN:OD1	1:g:207:PRO:HD2	2.21	0.40
1:i:37:ASN:ND2	1:i:51:LYS:HE2	2.28	0.40
1:i:84:VAL:HG12	1:i:500:LYS:CE	2.49	0.40
1:j:478:TYR:CZ	1:j:487:PHE:HB3	2.55	0.40
1:k:297:GLY:CA	1:k:317:GLY:N	2.84	0.40
2:o:92:GLU:HA	2:o:95:LEU:HD12	2.02	0.40
2:p:19:ARG:HB3	2:p:40:PRO:HG2	2.03	0.40
2:q:41:GLN:OE1	2:r:80:ILE:HG12	2.21	0.40
2:r:45:VAL:O	2:r:46:ILE:HD13	2.21	0.40
2:t:10:PRO:HG2	2:t:48:VAL:C	2.47	0.40
1:A:6:LEU:CD2	1:A:523:VAL:HG22	2.51	0.40
1:A:270:LEU:HG	1:A:272:VAL:HG13	2.04	0.40
1:C:23:VAL:CG1	1:C:74:LEU:HD23	2.51	0.40
1:C:218:PHE:O	1:C:246:LEU:HD12	2.20	0.40
1:D:88:GLY:HA2	4:D:602:ADP:O2B	2.22	0.40
1:D:179:SER:OG	1:D:180:LYS:N	2.54	0.40
1:D:501:VAL:HG23	1:D:502:THR:H	1.84	0.40
1:E:10:GLU:HA	1:E:13:ARG:HH11	1.86	0.40
1:F:66:LEU:CD2	1:F:522:VAL:HG11	2.43	0.40
1:F:372:ALA:C	1:F:374:GLY:N	2.76	0.40
1:G:312:THR:HG22	1:G:313:LEU:N	2.36	0.40
1:G:503:ARG:HG2	1:G:507:GLN:OE1	2.21	0.40
1:H:7:VAL:HG21	1:H:66:LEU:CD1	2.50	0.40
1:H:337:LYS:C	1:H:339:GLU:N	2.78	0.40
1:J:50:THR:HG21	1:J:55:THR:HB	2.03	0.40
1:J:283:ARG:HH21	1:J:367:ARG:CD	2.34	0.40
1:J:411:VAL:O	1:J:496:VAL:CG1	2.68	0.40
1:L:26:ALA:HB2	1:M:6:LEU:HD22	2.03	0.40
1:L:50:THR:CG2	1:L:52:ASP:H	2.13	0.40
1:L:132:LYS:C	1:L:134:LEU:N	2.78	0.40
1:L:197:GLY:HA3	1:L:325:THR:O	2.21	0.40
1:M:46:SER:HB2	1:M:47:PRO:CD	2.42	0.40
1:N:385:GLU:O	1:N:389:LYS:HG3	2.20	0.40
2:O:9:LYS:O	2:U:97:ALA:CA	2.68	0.40
2:O:14:ARG:HG3	2:O:14:ARG:NH1	2.30	0.40
2:R:56:ASN:C	2:R:58:GLN:H	2.30	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U:11:LEU:O	2:U:12:GLY:C	2.64	0.40
1:a:40:LEU:HD13	1:a:59:GLU:CG	2.50	0.40
1:a:66:LEU:CD2	1:a:522:VAL:HG11	2.45	0.40
1:a:142:LYS:HE2	1:a:146:GLU:OE2	2.21	0.40
1:a:478:TYR:CZ	1:a:487:PHE:HB3	2.56	0.40
1:a:498:PRO:C	1:a:500:LYS:N	2.79	0.40
1:c:249:ILE:HD11	1:c:331:ILE:HD11	2.03	0.40
1:c:304:LEU:HD23	1:c:304:LEU:HA	1.88	0.40
1:d:219:ILE:HG22	1:d:221:ILE:HG13	2.03	0.40
1:e:23:VAL:CG1	1:e:74:LEU:HD23	2.51	0.40
1:e:218:PHE:CE1	1:e:244:LYS:HB2	2.56	0.40
1:e:478:TYR:CZ	1:e:487:PHE:HB3	2.57	0.40
1:f:360:ALA:O	1:f:364:LEU:HG	2.21	0.40
1:f:448:GLU:OE1	1:f:452:ARG:NH2	2.54	0.40
1:g:506:LEU:O	1:g:506:LEU:HD12	2.21	0.40
1:h:465:ILE:HD13	1:h:480:PHE:CD1	2.56	0.40
1:k:194:PHE:CE1	1:k:278:PRO:HD3	2.56	0.40
1:l:270:LEU:CD2	1:l:272:VAL:HG13	2.35	0.40
1:l:504:SER:O	1:l:505:ALA:C	2.64	0.40
1:n:283:ARG:HH12	1:n:364:LEU:HD12	1.86	0.40
1:n:390:GLU:OE1	1:n:394:ARG:NH1	2.55	0.40
2:o:18:LYS:HZ3	2:o:85:GLU:HG3	1.86	0.40
2:s:10:PRO:C	2:s:11:LEU:HD12	2.47	0.40
2:t:69:ILE:CB	2:t:99:LEU:HD12	2.51	0.40
2:u:91:SER:O	2:u:92:GLU:C	2.63	0.40
1:A:244:LYS:HA	1:A:245:PRO:HD3	1.95	0.40
1:A:265:LYS:HA	1:A:270:LEU:O	2.21	0.40
1:C:218:PHE:CE1	1:C:242:THR:HG21	2.57	0.40
1:D:123:ALA:HB3	1:D:443:VAL:HG21	2.03	0.40
1:E:312:THR:HG22	1:E:313:LEU:N	2.37	0.40
1:E:520:GLU:HG2	1:F:29:VAL:HG13	2.02	0.40
1:G:128:VAL:HA	1:G:131:ILE:HD12	2.04	0.40
1:G:167:LYS:HB2	1:G:188:PHE:CE2	2.56	0.40
1:I:225:LYS:HD3	1:I:254:GLU:OE2	2.21	0.40
1:I:253:VAL:HG11	1:I:261:LEU:HD12	2.03	0.40
1:J:132:LYS:C	1:J:134:LEU:N	2.80	0.40
1:L:127:ALA:O	1:L:131:ILE:HG13	2.21	0.40
1:M:179:SER:HB2	1:M:379:ARG:CB	2.41	0.40
1:M:206:ASN:HD21	1:M:389:LYS:CG	2.35	0.40
1:N:187:LYS:HZ2	1:N:379:ARG:HG3	1.86	0.40
2:R:78:THR:HG22	2:R:80:ILE:HD11	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:89:ILE:O	2:R:89:ILE:HG22	2.20	0.40
2:S:11:LEU:HD12	2:S:11:LEU:N	2.36	0.40
1:a:101:ARG:HG3	1:a:102:GLU:H	1.86	0.40
1:b:217:ALA:HB2	1:b:245:PRO:HB2	2.03	0.40
1:b:227:SER:C	1:b:257:ALA:HB2	2.46	0.40
1:b:403:ARG:HA	1:b:403:ARG:HD3	1.95	0.40
1:c:506:LEU:HD12	1:c:506:LEU:O	2.22	0.40
1:e:363:LYS:C	1:e:365:GLN:N	2.80	0.40
1:e:518:THR:OG1	1:f:37:ASN:ND2	2.53	0.40
1:f:10:GLU:HA	1:f:13:ARG:HH11	1.87	0.40
1:f:201:PRO:O	1:f:204:VAL:HG23	2.22	0.40
1:g:218:PHE:HE1	1:g:244:LYS:HD2	1.77	0.40
1:i:285:LYS:HG2	1:i:289:LYS:HE3	2.03	0.40
1:i:289:LYS:C	1:i:344:ARG:NH1	2.80	0.40
1:i:342:GLU:O	1:i:346:ASN:ND2	2.55	0.40
1:j:79:SER:O	1:j:81:THR:N	2.52	0.40
1:j:307:LYS:HB2	1:j:310:ASN:ND2	2.37	0.40
1:l:210:MET:HE2	1:l:210:MET:HA	2.04	0.40
1:m:81:THR:OG1	1:m:508:ASN:ND2	2.55	0.40
1:m:160:LEU:HD22	1:m:186:LEU:HB2	2.03	0.40
1:n:28:LYS:C	1:n:30:THR:H	2.29	0.40
1:n:283:ARG:HH21	1:n:367:ARG:CD	2.34	0.40
2:q:30:ILE:HG22	2:q:31:VAL:N	2.36	0.40
1:A:194:PHE:CE1	1:A:329:THR:HB	2.56	0.40
1:B:23:VAL:CG1	1:B:74:LEU:HD23	2.51	0.40
1:C:9:ASP:HB3	1:C:10:GLU:H	1.55	0.40
1:C:157:VAL:HG13	1:C:395:PHE:CD2	2.57	0.40
1:C:457:ASN:N	1:C:457:ASN:ND2	2.70	0.40
1:D:232:LEU:HB3	1:D:236:LEU:HD11	2.03	0.40
1:F:222:VAL:HA	1:F:300:ILE:HB	2.03	0.40
1:F:284:ARG:HG3	1:F:284:ARG:NH1	2.37	0.40
1:G:280:PHE:O	1:G:281:GLY:C	2.64	0.40
1:L:19:GLY:HA3	1:L:67:GLU:O	2.20	0.40
1:L:303:GLU:C	1:L:305:GLY:N	2.75	0.40
1:M:385:GLU:HB2	1:N:280:PHE:HE2	1.80	0.40
1:N:79:SER:C	1:N:81:THR:N	2.73	0.40
1:N:232:LEU:C	1:N:234:PRO:HD2	2.47	0.40
1:N:452:ARG:HG2	1:N:452:ARG:NH1	2.37	0.40
2:O:96:LEU:HD23	2:P:14:ARG:HE	1.85	0.40
2:P:54:LEU:HB3	2:P:58:GLN:HB3	2.04	0.40
2:S:92:GLU:HA	2:S:95:LEU:HD12	2.04	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:37:ASN:HB3	1:a:50:THR:O	2.21	0.40
1:a:264:ASN:HB3	1:a:269:THR:HB	2.02	0.40
1:b:54:VAL:CG2	1:b:89:THR:HG21	2.51	0.40
1:c:4:LYS:HE3	1:d:59:GLU:O	2.22	0.40
1:c:103:GLY:O	1:c:107:VAL:HG23	2.22	0.40
1:c:306:PHE:CE2	1:c:315:MET:SD	3.15	0.40
1:c:460:TYR:HB3	1:c:465:ILE:HD11	2.03	0.40
1:d:506:LEU:O	1:d:506:LEU:HD12	2.20	0.40
1:e:343:ALA:HB2	1:f:207:PRO:HB3	2.02	0.40
1:e:354:THR:HG22	1:e:354:THR:O	2.21	0.40
1:e:490:MET:CE	1:e:495:ILE:HG21	2.51	0.40
1:g:283:ARG:HH12	1:g:363:LYS:CD	2.20	0.40
1:h:307:LYS:HE3	1:h:310:ASN:HD21	1.87	0.40
1:i:53:GLY:HA3	1:i:90:THR:OG1	2.22	0.40
1:i:338:LYS:O	1:i:338:LYS:HG2	2.22	0.40
1:i:437:ALA:O	1:i:441:LYS:HG3	2.21	0.40
1:k:360:ALA:HA	1:k:363:LYS:CG	2.51	0.40
1:l:66:LEU:O	1:l:69:ILE:HB	2.22	0.40
1:l:437:ALA:O	1:l:441:LYS:HG3	2.21	0.40
1:m:197:GLY:CA	1:m:325:THR:O	2.70	0.40
1:m:217:ALA:O	1:m:318:ARG:HB2	2.22	0.40
1:m:388:LEU:O	1:m:389:LYS:C	2.64	0.40
1:n:19:GLY:HA3	1:n:67:GLU:O	2.21	0.40
2:o:17:VAL:HG21	2:o:90:LEU:HD12	2.03	0.40
2:o:48:VAL:HG13	2:o:62:LEU:CD1	2.50	0.40
2:r:100:GLN:CD	2:s:9:LYS:HE2	2.46	0.40

All (9) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:474:LYS:CE	1:N:472:GLU:OE1[1_455]	1.85	0.35
1:K:474:LYS:NZ	1:N:493:ALA:O[1_455]	1.93	0.27
1:d:474:LYS:CE	1:g:133:ALA:CB[1_455]	1.93	0.27
1:d:474:LYS:NZ	1:g:133:ALA:CB[1_455]	1.95	0.25
1:C:141:ARG:NH2	1:L:353:GLU:OE1[1_565]	2.11	0.09
1:E:473:THR:OG1	1:N:474:LYS:CE[1_455]	2.17	0.03
1:E:474:LYS:NZ	1:N:472:GLU:OE1[1_455]	2.18	0.02
1:d:474:LYS:NZ	1:g:129:GLU:O[1_455]	2.19	0.01
1:d:474:LYS:CD	1:g:133:ALA:CB[1_455]	2.19	0.01

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 X-ray entries followed by that with respect to entries of similar resolution.

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	525/543 (97%)	456 (87%)	56 (11%)	13 (2%)	4	16
1	B	525/543 (97%)	458 (87%)	55 (10%)	12 (2%)	5	18
1	C	524/543 (96%)	451 (86%)	58 (11%)	15 (3%)	3	13
1	D	524/543 (96%)	441 (84%)	67 (13%)	16 (3%)	3	12
1	E	524/543 (96%)	440 (84%)	65 (12%)	19 (4%)	2	10
1	F	527/543 (97%)	453 (86%)	60 (11%)	14 (3%)	4	15
1	G	523/543 (96%)	447 (86%)	65 (12%)	11 (2%)	5	20
1	H	524/543 (96%)	457 (87%)	60 (12%)	7 (1%)	9	31
1	I	523/543 (96%)	457 (87%)	61 (12%)	5 (1%)	12	38
1	J	523/543 (96%)	456 (87%)	58 (11%)	9 (2%)	7	25
1	K	523/543 (96%)	458 (88%)	57 (11%)	8 (2%)	8	28
1	L	524/543 (96%)	454 (87%)	63 (12%)	7 (1%)	9	31
1	M	523/543 (96%)	455 (87%)	61 (12%)	7 (1%)	9	31
1	N	524/543 (96%)	457 (87%)	61 (12%)	6 (1%)	11	36
1	a	525/543 (97%)	453 (86%)	57 (11%)	15 (3%)	3	13
1	b	524/543 (96%)	452 (86%)	61 (12%)	11 (2%)	5	20
1	c	525/543 (97%)	446 (85%)	61 (12%)	18 (3%)	3	11
1	d	525/543 (97%)	451 (86%)	56 (11%)	18 (3%)	3	11
1	e	524/543 (96%)	455 (87%)	57 (11%)	12 (2%)	5	18
1	f	525/543 (97%)	458 (87%)	55 (10%)	12 (2%)	5	18
1	g	524/543 (96%)	450 (86%)	60 (12%)	14 (3%)	4	15
1	h	523/543 (96%)	459 (88%)	57 (11%)	7 (1%)	9	31
1	i	523/543 (96%)	456 (87%)	58 (11%)	9 (2%)	7	25
1	j	523/543 (96%)	454 (87%)	60 (12%)	9 (2%)	7	25
1	k	523/543 (96%)	456 (87%)	61 (12%)	6 (1%)	11	36

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	l	523/543 (96%)	457 (87%)	59 (11%)	7 (1%)	9	31
1	m	523/543 (96%)	465 (89%)	51 (10%)	7 (1%)	9	31
1	n	523/543 (96%)	459 (88%)	58 (11%)	6 (1%)	11	36
2	O	94/100 (94%)	74 (79%)	13 (14%)	7 (7%)	1	2
2	P	92/100 (92%)	72 (78%)	13 (14%)	7 (8%)	1	2
2	Q	94/100 (94%)	75 (80%)	12 (13%)	7 (7%)	1	2
2	R	94/100 (94%)	75 (80%)	11 (12%)	8 (8%)	0	1
2	S	94/100 (94%)	72 (77%)	17 (18%)	5 (5%)	1	5
2	T	94/100 (94%)	72 (77%)	15 (16%)	7 (7%)	1	2
2	U	94/100 (94%)	77 (82%)	10 (11%)	7 (7%)	1	2
2	o	94/100 (94%)	75 (80%)	13 (14%)	6 (6%)	1	3
2	p	94/100 (94%)	72 (77%)	15 (16%)	7 (7%)	1	2
2	q	94/100 (94%)	58 (62%)	21 (22%)	15 (16%)	0	0
2	r	94/100 (94%)	71 (76%)	17 (18%)	6 (6%)	1	3
2	s	94/100 (94%)	76 (81%)	13 (14%)	5 (5%)	1	5
2	t	94/100 (94%)	69 (73%)	17 (18%)	8 (8%)	0	1
2	u	94/100 (94%)	66 (70%)	18 (19%)	10 (11%)	0	1
All	All	15983/16604 (96%)	13715 (86%)	1863 (12%)	405 (2%)	4	16

All (405) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	9	ASP
1	A	278	PRO
1	B	9	ASP
1	B	278	PRO
1	C	9	ASP
1	C	278	PRO
1	C	279	GLY
1	D	9	ASP
1	D	190	GLU
1	D	278	PRO
1	E	9	ASP
1	E	292	ALA
1	E	293	ALA
1	F	9	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	278	PRO
1	G	9	ASP
1	G	278	PRO
1	H	9	ASP
1	I	9	ASP
1	J	9	ASP
1	K	9	ASP
1	L	9	ASP
1	M	9	ASP
1	N	9	ASP
2	O	74	LYS
2	P	22	GLU
2	P	74	LYS
2	Q	19	ARG
2	Q	54	LEU
2	Q	74	LYS
2	R	74	LYS
2	S	12	GLY
2	S	74	LYS
2	T	12	GLY
2	T	19	ARG
2	T	74	LYS
2	U	74	LYS
1	a	9	ASP
1	a	278	PRO
1	b	9	ASP
1	b	278	PRO
1	c	9	ASP
1	c	202	TYR
1	c	292	ALA
1	c	293	ALA
1	c	338	LYS
1	d	9	ASP
1	d	278	PRO
1	e	9	ASP
1	e	278	PRO
1	e	373	GLY
1	f	9	ASP
1	f	278	PRO
1	f	279	GLY
1	g	9	ASP
1	h	9	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	i	9	ASP
1	j	9	ASP
1	k	9	ASP
1	l	9	ASP
1	m	9	ASP
1	n	9	ASP
2	o	12	GLY
2	o	19	ARG
2	o	74	LYS
2	p	12	GLY
2	p	74	LYS
2	q	22	GLU
2	q	51	GLY
2	q	54	LEU
2	q	63	GLU
2	r	12	GLY
2	r	19	ARG
2	r	54	LEU
2	r	74	LYS
2	s	12	GLY
2	s	74	LYS
2	t	63	GLU
2	u	50	THR
2	u	66	GLU
2	u	96	LEU
1	A	168	VAL
1	A	279	GLY
1	A	336	GLY
1	A	528	GLU
1	B	168	VAL
1	B	216	ASP
1	B	279	GLY
1	B	350	LYS
1	B	374	GLY
1	B	434	GLY
1	C	168	VAL
1	C	169	GLY
1	C	281	GLY
1	C	336	GLY
1	C	434	GLY
1	D	168	VAL
1	D	336	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	E	28	LYS
1	E	179	SER
1	E	336	GLY
1	G	373	GLY
1	G	374	GLY
1	H	305	GLY
1	I	305	GLY
1	J	305	GLY
1	K	305	GLY
1	L	305	GLY
1	M	305	GLY
1	N	305	GLY
2	O	54	LEU
2	Q	12	GLY
2	Q	34	ASP
2	R	19	ARG
2	S	19	ARG
2	S	54	LEU
2	T	57	GLY
2	U	12	GLY
2	U	34	ASP
2	U	63	GLU
1	a	28	LYS
1	a	168	VAL
1	a	434	GLY
1	b	168	VAL
1	b	179	SER
1	c	168	VAL
1	c	276	LYS
1	c	336	GLY
1	c	527	PRO
1	d	279	GLY
1	d	434	GLY
1	e	168	VAL
1	e	374	GLY
1	f	168	VAL
1	g	168	VAL
1	h	305	GLY
1	i	305	GLY
1	j	305	GLY
1	k	305	GLY
1	l	305	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	m	305	GLY
1	n	305	GLY
2	o	54	LEU
2	o	66	GLU
2	q	12	GLY
2	q	34	ASP
2	q	78	THR
2	s	54	LEU
2	u	19	ARG
2	u	63	GLU
1	A	482	ALA
1	C	216	ASP
1	C	350	LYS
1	D	199	ILE
1	D	216	ASP
1	E	168	VAL
1	E	276	LYS
1	E	342	GLU
1	F	169	GLY
1	F	190	GLU
1	F	216	ASP
1	F	350	LYS
1	G	168	VAL
1	G	216	ASP
1	G	434	GLY
1	H	80	LYS
1	J	313	LEU
1	K	80	LYS
1	L	80	LYS
1	L	313	LEU
1	L	447	LEU
1	N	80	LYS
1	N	527	PRO
2	O	12	GLY
2	O	19	ARG
2	O	34	ASP
2	P	12	GLY
2	P	19	ARG
2	P	21	GLU
2	R	34	ASP
2	R	54	LEU
2	S	66	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	T	34	ASP
2	U	19	ARG
1	a	53	GLY
1	a	179	SER
1	b	53	GLY
1	b	434	GLY
1	c	53	GLY
1	c	169	GLY
1	c	434	GLY
1	d	168	VAL
1	d	251	GLU
1	d	281	GLY
1	e	350	LYS
1	f	216	ASP
1	f	336	GLY
1	f	434	GLY
1	g	292	ALA
1	g	434	GLY
1	h	80	LYS
1	h	447	LEU
1	i	80	LYS
1	j	80	LYS
1	j	313	LEU
1	l	474	LYS
1	m	474	LYS
1	n	80	LYS
2	q	32	LEU
2	q	33	PRO
2	q	73	ALA
2	r	34	ASP
2	s	63	GLU
2	t	12	GLY
2	t	59	ARG
2	u	75	TYR
2	u	99	LEU
1	A	216	ASP
1	A	297	GLY
1	A	434	GLY
1	B	281	GLY
1	B	357	SER
1	B	373	GLY
1	C	357	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	482	ALA
1	D	53	GLY
1	D	179	SER
1	D	224	LYS
1	E	207	PRO
1	E	482	ALA
1	E	527	PRO
1	F	230	ARG
1	F	279	GLY
1	G	224	LYS
1	H	313	LEU
1	H	474	LYS
1	I	313	LEU
1	J	80	LYS
1	J	447	LEU
1	J	474	LYS
1	K	313	LEU
1	K	447	LEU
1	K	474	LYS
1	M	80	LYS
1	M	189	VAL
1	N	313	LEU
1	N	474	LYS
2	P	85	GLU
2	Q	85	GLU
2	R	12	GLY
2	R	63	GLU
1	a	216	ASP
1	a	251	GLU
1	a	357	SER
1	b	169	GLY
1	b	357	SER
1	c	482	ALA
1	d	179	SER
1	d	216	ASP
1	e	293	ALA
1	e	336	GLY
1	e	434	GLY
1	f	225	LYS
1	f	226	VAL
1	g	28	LYS
1	g	207	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	g	336	GLY
1	g	371	LEU
1	h	474	LYS
1	i	76	GLU
1	i	447	LEU
1	i	474	LYS
1	j	474	LYS
1	k	80	LYS
1	k	313	LEU
1	k	474	LYS
1	l	80	LYS
1	m	80	LYS
1	n	313	LEU
1	n	447	LEU
1	n	474	LYS
2	o	85	GLU
2	p	19	ARG
2	p	54	LEU
2	q	19	ARG
2	q	28	GLY
2	s	19	ARG
2	u	24	PRO
1	A	179	SER
1	C	224	LYS
1	D	28	LYS
1	D	279	GLY
1	D	354	THR
1	D	434	GLY
1	E	195	ASP
1	E	202	TYR
1	E	371	LEU
1	E	374	GLY
1	F	168	VAL
1	F	353	GLU
1	G	292	ALA
1	G	350	LYS
1	H	300	ILE
1	I	80	LYS
1	I	474	LYS
1	J	101	ARG
1	L	474	LYS
1	M	474	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	O	50	THR
2	O	85	GLU
2	Q	63	GLU
2	R	85	GLU
2	T	85	GLU
1	a	230	ARG
1	a	482	ALA
1	b	28	LYS
1	c	179	SER
1	c	207	PRO
1	c	308	LEU
1	c	342	GLU
1	c	371	LEU
1	d	354	THR
1	d	357	SER
1	d	364	LEU
1	d	482	ALA
1	f	251	GLU
1	f	357	SER
1	g	179	SER
1	g	267	ARG
1	g	293	ALA
1	i	313	LEU
1	j	76	GLU
1	k	76	GLU
1	l	313	LEU
1	m	313	LEU
2	p	34	ASP
2	q	76	GLY
2	r	85	GLU
2	t	22	GLU
1	B	482	ALA
1	D	169	GLY
1	E	53	GLY
1	F	346	ASN
1	F	357	SER
1	F	434	GLY
1	J	304	LEU
1	M	447	LEU
2	U	85	GLU
1	a	354	THR
1	b	281	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	d	169	GLY
1	d	292	ALA
1	d	336	GLY
1	e	357	SER
1	f	53	GLY
1	g	53	GLY
1	g	190	GLU
1	j	220	LEU
2	q	24	PRO
2	t	39	LYS
2	t	68	ASP
2	t	84	GLY
1	a	279	GLY
1	b	336	GLY
1	e	279	GLY
2	u	46	ILE
2	u	70	VAL
1	A	281	GLY
1	C	53	GLY
1	E	322	VAL
1	F	527	PRO
1	K	300	ILE
1	M	5	ILE
2	P	30	ILE
1	d	297	GLY
1	e	53	GLY
1	m	189	VAL
2	p	57	GLY
2	t	16	VAL
1	A	53	GLY
1	E	434	GLY
1	G	53	GLY
2	T	53	VAL
1	d	53	GLY
1	g	169	GLY
1	h	300	ILE
1	i	189	VAL
1	C	297	GLY
1	D	226	VAL
1	J	488	VAL
1	L	189	VAL
2	R	67	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	h	488	VAL
1	i	488	VAL
1	l	189	VAL
1	l	300	ILE
1	m	300	ILE
2	q	70	VAL
1	H	488	VAL
1	K	189	VAL
2	U	67	GLY
1	a	281	GLY
1	j	300	ILE
1	j	488	VAL
2	p	30	ILE

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 X-ray entries followed by that with respect to entries of similar resolution.

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	412/423 (97%)	402 (98%)	10 (2%)	43	77
1	B	412/423 (97%)	398 (97%)	14 (3%)	32	68
1	C	411/423 (97%)	398 (97%)	13 (3%)	34	70
1	D	411/423 (97%)	399 (97%)	12 (3%)	37	73
1	E	411/423 (97%)	394 (96%)	17 (4%)	27	62
1	F	414/423 (98%)	405 (98%)	9 (2%)	45	78
1	G	410/423 (97%)	398 (97%)	12 (3%)	37	73
1	H	411/423 (97%)	401 (98%)	10 (2%)	43	77
1	I	410/423 (97%)	401 (98%)	9 (2%)	45	78
1	J	410/423 (97%)	400 (98%)	10 (2%)	43	77
1	K	410/423 (97%)	401 (98%)	9 (2%)	45	78
1	L	411/423 (97%)	402 (98%)	9 (2%)	45	78
1	M	410/423 (97%)	398 (97%)	12 (3%)	37	73
1	N	411/423 (97%)	399 (97%)	12 (3%)	37	73

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	a	412/423 (97%)	401 (97%)	11 (3%)	39	74
1	b	411/423 (97%)	402 (98%)	9 (2%)	45	78
1	c	412/423 (97%)	397 (96%)	15 (4%)	31	66
1	d	412/423 (97%)	400 (97%)	12 (3%)	37	73
1	e	411/423 (97%)	399 (97%)	12 (3%)	37	73
1	f	412/423 (97%)	404 (98%)	8 (2%)	50	81
1	g	411/423 (97%)	399 (97%)	12 (3%)	37	73
1	h	410/423 (97%)	400 (98%)	10 (2%)	43	77
1	i	410/423 (97%)	400 (98%)	10 (2%)	43	77
1	j	410/423 (97%)	398 (97%)	12 (3%)	37	73
1	k	410/423 (97%)	399 (97%)	11 (3%)	39	74
1	l	410/423 (97%)	397 (97%)	13 (3%)	34	70
1	m	410/423 (97%)	399 (97%)	11 (3%)	39	74
1	n	410/423 (97%)	400 (98%)	10 (2%)	43	77
2	O	81/83 (98%)	77 (95%)	4 (5%)	22	55
2	P	79/83 (95%)	75 (95%)	4 (5%)	21	54
2	Q	81/83 (98%)	76 (94%)	5 (6%)	16	45
2	R	81/83 (98%)	79 (98%)	2 (2%)	42	76
2	S	81/83 (98%)	78 (96%)	3 (4%)	30	65
2	T	81/83 (98%)	77 (95%)	4 (5%)	22	55
2	U	81/83 (98%)	77 (95%)	4 (5%)	22	55
2	o	81/83 (98%)	78 (96%)	3 (4%)	30	65
2	p	81/83 (98%)	78 (96%)	3 (4%)	30	65
2	q	81/83 (98%)	77 (95%)	4 (5%)	22	55
2	r	81/83 (98%)	78 (96%)	3 (4%)	30	65
2	s	81/83 (98%)	76 (94%)	5 (6%)	16	45
2	t	81/83 (98%)	78 (96%)	3 (4%)	30	65
2	u	81/83 (98%)	79 (98%)	2 (2%)	42	76
All	All	12637/13006 (97%)	12274 (97%)	363 (3%)	37	73

All (363) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	5	ILE
1	A	9	ASP
1	A	36	ARG
1	A	54	VAL
1	A	136	ILE
1	A	144	ILE
1	A	173	ILE
1	A	283	ARG
1	A	312	THR
1	A	351	GLU
1	B	5	ILE
1	B	9	ASP
1	B	36	ARG
1	B	54	VAL
1	B	136	ILE
1	B	144	ILE
1	B	173	ILE
1	B	189	VAL
1	B	280	PHE
1	B	283	ARG
1	B	303	GLU
1	B	340	ASP
1	B	351	GLU
1	B	410	ILE
1	C	5	ILE
1	C	9	ASP
1	C	54	VAL
1	C	89	THR
1	C	136	ILE
1	C	144	ILE
1	C	173	ILE
1	C	283	ARG
1	C	303	GLU
1	C	312	THR
1	C	351	GLU
1	C	368	LEU
1	C	410	ILE
1	D	5	ILE
1	D	9	ASP
1	D	36	ARG
1	D	54	VAL
1	D	136	ILE
1	D	144	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	173	ILE
1	D	283	ARG
1	D	303	GLU
1	D	309	GLU
1	D	312	THR
1	D	351	GLU
1	E	5	ILE
1	E	9	ASP
1	E	36	ARG
1	E	54	VAL
1	E	136	ILE
1	E	144	ILE
1	E	173	ILE
1	E	189	VAL
1	E	210	MET
1	E	235	ILE
1	E	251	GLU
1	E	298	THR
1	E	299	VAL
1	E	309	GLU
1	E	342	GLU
1	E	349	LYS
1	E	368	LEU
1	F	5	ILE
1	F	9	ASP
1	F	54	VAL
1	F	89	THR
1	F	136	ILE
1	F	144	ILE
1	F	173	ILE
1	F	283	ARG
1	F	351	GLU
1	G	5	ILE
1	G	9	ASP
1	G	54	VAL
1	G	136	ILE
1	G	138	VAL
1	G	144	ILE
1	G	173	ILE
1	G	189	VAL
1	G	283	ARG
1	G	303	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	G	312	THR
1	G	351	GLU
1	H	54	VAL
1	H	91	THR
1	H	151	SER
1	H	190	GLU
1	H	270	LEU
1	H	316	LEU
1	H	325	THR
1	H	423	SER
1	H	512	ILE
1	H	522	VAL
1	I	54	VAL
1	I	91	THR
1	I	151	SER
1	I	190	GLU
1	I	270	LEU
1	I	316	LEU
1	I	325	THR
1	I	423	SER
1	I	522	VAL
1	J	54	VAL
1	J	91	THR
1	J	151	SER
1	J	194	PHE
1	J	270	LEU
1	J	316	LEU
1	J	325	THR
1	J	423	SER
1	J	522	VAL
1	J	527	PRO
1	K	54	VAL
1	K	91	THR
1	K	151	SER
1	K	237	GLU
1	K	270	LEU
1	K	316	LEU
1	K	325	THR
1	K	423	SER
1	K	522	VAL
1	L	54	VAL
1	L	91	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	L	151	SER
1	L	194	PHE
1	L	270	LEU
1	L	316	LEU
1	L	325	THR
1	L	423	SER
1	L	522	VAL
1	M	54	VAL
1	M	91	THR
1	M	151	SER
1	M	190	GLU
1	M	196	LYS
1	M	270	LEU
1	M	316	LEU
1	M	325	THR
1	M	363	LYS
1	M	423	SER
1	M	522	VAL
1	M	527	PRO
1	N	5	ILE
1	N	54	VAL
1	N	91	THR
1	N	151	SER
1	N	194	PHE
1	N	270	LEU
1	N	316	LEU
1	N	325	THR
1	N	363	LYS
1	N	423	SER
1	N	512	ILE
1	N	522	VAL
2	O	15	VAL
2	O	18	LYS
2	O	34	ASP
2	O	50	THR
2	P	8	ILE
2	P	15	VAL
2	P	21	GLU
2	P	56	ASN
2	Q	8	ILE
2	Q	18	LYS
2	Q	34	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	Q	48	VAL
2	Q	56	ASN
2	R	18	LYS
2	R	62	LEU
2	S	38	GLU
2	S	48	VAL
2	S	56	ASN
2	T	13	ASP
2	T	32	LEU
2	T	34	ASP
2	T	48	VAL
2	U	8	ILE
2	U	13	ASP
2	U	18	LYS
2	U	92	GLU
1	a	5	ILE
1	a	9	ASP
1	a	36	ARG
1	a	54	VAL
1	a	89	THR
1	a	136	ILE
1	a	138	VAL
1	a	144	ILE
1	a	173	ILE
1	a	312	THR
1	a	351	GLU
1	b	5	ILE
1	b	9	ASP
1	b	36	ARG
1	b	54	VAL
1	b	136	ILE
1	b	144	ILE
1	b	173	ILE
1	b	312	THR
1	b	351	GLU
1	c	5	ILE
1	c	9	ASP
1	c	54	VAL
1	c	89	THR
1	c	136	ILE
1	c	138	VAL
1	c	144	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	c	173	ILE
1	c	204	VAL
1	c	251	GLU
1	c	298	THR
1	c	316	LEU
1	c	342	GLU
1	c	368	LEU
1	c	410	ILE
1	d	5	ILE
1	d	9	ASP
1	d	54	VAL
1	d	89	THR
1	d	144	ILE
1	d	173	ILE
1	d	303	GLU
1	d	312	THR
1	d	340	ASP
1	d	351	GLU
1	d	365	GLN
1	d	474	LYS
1	e	5	ILE
1	e	9	ASP
1	e	54	VAL
1	e	89	THR
1	e	144	ILE
1	e	173	ILE
1	e	215	GLU
1	e	266	LEU
1	e	289	LYS
1	e	312	THR
1	e	340	ASP
1	e	351	GLU
1	f	5	ILE
1	f	9	ASP
1	f	36	ARG
1	f	54	VAL
1	f	144	ILE
1	f	173	ILE
1	f	340	ASP
1	f	351	GLU
1	g	5	ILE
1	g	9	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	g	36	ARG
1	g	54	VAL
1	g	144	ILE
1	g	173	ILE
1	g	204	VAL
1	g	210	MET
1	g	251	GLU
1	g	298	THR
1	g	316	LEU
1	g	342	GLU
1	h	54	VAL
1	h	91	THR
1	h	151	SER
1	h	194	PHE
1	h	270	LEU
1	h	316	LEU
1	h	325	THR
1	h	363	LYS
1	h	423	SER
1	h	522	VAL
1	i	54	VAL
1	i	91	THR
1	i	151	SER
1	i	270	LEU
1	i	316	LEU
1	i	325	THR
1	i	352	LEU
1	i	363	LYS
1	i	423	SER
1	i	522	VAL
1	j	54	VAL
1	j	91	THR
1	j	151	SER
1	j	190	GLU
1	j	194	PHE
1	j	270	LEU
1	j	283	ARG
1	j	316	LEU
1	j	325	THR
1	j	363	LYS
1	j	423	SER
1	j	522	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	k	54	VAL
1	k	91	THR
1	k	151	SER
1	k	190	GLU
1	k	194	PHE
1	k	270	LEU
1	k	316	LEU
1	k	325	THR
1	k	363	LYS
1	k	423	SER
1	k	522	VAL
1	l	54	VAL
1	l	91	THR
1	l	151	SER
1	l	190	GLU
1	l	194	PHE
1	l	196	LYS
1	l	270	LEU
1	l	316	LEU
1	l	325	THR
1	l	363	LYS
1	l	423	SER
1	l	512	ILE
1	l	522	VAL
1	m	54	VAL
1	m	91	THR
1	m	151	SER
1	m	270	LEU
1	m	302	GLU
1	m	316	LEU
1	m	325	THR
1	m	363	LYS
1	m	423	SER
1	m	512	ILE
1	m	522	VAL
1	n	54	VAL
1	n	91	THR
1	n	151	SER
1	n	194	PHE
1	n	270	LEU
1	n	316	LEU
1	n	325	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	n	423	SER
1	n	512	ILE
1	n	522	VAL
2	o	13	ASP
2	o	21	GLU
2	o	32	LEU
2	p	18	LYS
2	p	48	VAL
2	p	56	ASN
2	q	33	PRO
2	q	72	PHE
2	q	90	LEU
2	q	93	ARG
2	r	13	ASP
2	r	18	LYS
2	r	48	VAL
2	s	13	ASP
2	s	18	LYS
2	s	21	GLU
2	s	22	GLU
2	s	54	LEU
2	t	7	VAL
2	t	60	VAL
2	t	69	ILE
2	u	31	VAL
2	u	70	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (304) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	72	GLN
1	A	228	ASN
1	A	310	ASN
1	A	400	ASN
1	A	453	GLN
1	A	457	ASN
1	B	72	GLN
1	B	228	ASN
1	B	310	ASN
1	B	400	ASN
1	B	453	GLN
1	B	457	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	72	GLN
1	C	241	GLN
1	C	310	ASN
1	C	400	ASN
1	C	453	GLN
1	C	457	ASN
1	C	467	GLN
1	D	72	GLN
1	D	82	ASN
1	D	106	ASN
1	D	310	ASN
1	D	400	ASN
1	D	453	GLN
1	D	457	ASN
1	E	72	GLN
1	E	193	GLN
1	E	310	ASN
1	E	346	ASN
1	E	400	ASN
1	E	453	GLN
1	E	457	ASN
1	F	72	GLN
1	F	153	ASN
1	F	228	ASN
1	F	310	ASN
1	F	400	ASN
1	F	453	GLN
1	F	457	ASN
1	G	72	GLN
1	G	228	ASN
1	G	310	ASN
1	G	400	ASN
1	G	453	GLN
1	G	457	ASN
1	H	37	ASN
1	H	65	HIS
1	H	97	GLN
1	H	106	ASN
1	H	153	ASN
1	H	193	GLN
1	H	228	ASN
1	H	264	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	H	310	ASN
1	H	346	ASN
1	H	365	GLN
1	H	400	ASN
1	H	468	GLN
1	H	481	ASN
1	H	507	GLN
1	H	508	ASN
1	I	37	ASN
1	I	65	HIS
1	I	97	GLN
1	I	153	ASN
1	I	193	GLN
1	I	228	ASN
1	I	264	ASN
1	I	310	ASN
1	I	346	ASN
1	I	365	GLN
1	I	400	ASN
1	I	468	GLN
1	I	481	ASN
1	I	507	GLN
1	I	508	ASN
1	J	37	ASN
1	J	97	GLN
1	J	153	ASN
1	J	193	GLN
1	J	228	ASN
1	J	310	ASN
1	J	346	ASN
1	J	365	GLN
1	J	400	ASN
1	J	468	GLN
1	J	481	ASN
1	J	507	GLN
1	J	508	ASN
1	K	37	ASN
1	K	97	GLN
1	K	106	ASN
1	K	153	ASN
1	K	193	GLN
1	K	228	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	K	264	ASN
1	K	310	ASN
1	K	346	ASN
1	K	365	GLN
1	K	400	ASN
1	K	468	GLN
1	K	481	ASN
1	K	507	GLN
1	K	508	ASN
1	L	37	ASN
1	L	65	HIS
1	L	97	GLN
1	L	153	ASN
1	L	193	GLN
1	L	228	ASN
1	L	264	ASN
1	L	310	ASN
1	L	346	ASN
1	L	365	GLN
1	L	400	ASN
1	L	468	GLN
1	L	481	ASN
1	L	507	GLN
1	L	508	ASN
1	M	37	ASN
1	M	97	GLN
1	M	153	ASN
1	M	193	GLN
1	M	228	ASN
1	M	264	ASN
1	M	310	ASN
1	M	346	ASN
1	M	365	GLN
1	M	400	ASN
1	M	468	GLN
1	M	481	ASN
1	M	507	GLN
1	M	508	ASN
1	N	37	ASN
1	N	65	HIS
1	N	97	GLN
1	N	153	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	N	193	GLN
1	N	228	ASN
1	N	264	ASN
1	N	310	ASN
1	N	346	ASN
1	N	365	GLN
1	N	400	ASN
1	N	468	GLN
1	N	481	ASN
1	N	507	GLN
1	N	508	ASN
2	O	56	ASN
2	R	56	ASN
2	T	58	GLN
1	a	72	GLN
1	a	82	ASN
1	a	228	ASN
1	a	310	ASN
1	a	400	ASN
1	a	453	GLN
1	a	457	ASN
1	b	72	GLN
1	b	106	ASN
1	b	228	ASN
1	b	310	ASN
1	b	400	ASN
1	b	453	GLN
1	b	457	ASN
1	c	72	GLN
1	c	106	ASN
1	c	193	GLN
1	c	310	ASN
1	c	346	ASN
1	c	400	ASN
1	c	453	GLN
1	c	457	ASN
1	d	72	GLN
1	d	310	ASN
1	d	400	ASN
1	d	453	GLN
1	d	457	ASN
1	e	72	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	e	228	ASN
1	e	310	ASN
1	e	400	ASN
1	e	453	GLN
1	e	457	ASN
1	f	72	GLN
1	f	228	ASN
1	f	310	ASN
1	f	346	ASN
1	f	400	ASN
1	f	453	GLN
1	f	457	ASN
1	g	72	GLN
1	g	310	ASN
1	g	346	ASN
1	g	400	ASN
1	g	453	GLN
1	g	457	ASN
1	h	37	ASN
1	h	65	HIS
1	h	97	GLN
1	h	153	ASN
1	h	193	GLN
1	h	228	ASN
1	h	310	ASN
1	h	346	ASN
1	h	365	GLN
1	h	400	ASN
1	h	468	GLN
1	h	481	ASN
1	h	507	GLN
1	h	508	ASN
1	i	37	ASN
1	i	65	HIS
1	i	97	GLN
1	i	153	ASN
1	i	228	ASN
1	i	264	ASN
1	i	310	ASN
1	i	346	ASN
1	i	365	GLN
1	i	400	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	i	468	GLN
1	i	481	ASN
1	i	507	GLN
1	i	508	ASN
1	j	37	ASN
1	j	65	HIS
1	j	97	GLN
1	j	153	ASN
1	j	193	GLN
1	j	228	ASN
1	j	264	ASN
1	j	310	ASN
1	j	346	ASN
1	j	365	GLN
1	j	400	ASN
1	j	468	GLN
1	j	481	ASN
1	j	507	GLN
1	j	508	ASN
1	k	37	ASN
1	k	65	HIS
1	k	97	GLN
1	k	153	ASN
1	k	193	GLN
1	k	228	ASN
1	k	264	ASN
1	k	310	ASN
1	k	346	ASN
1	k	365	GLN
1	k	400	ASN
1	k	468	GLN
1	k	481	ASN
1	k	507	GLN
1	k	508	ASN
1	l	37	ASN
1	l	65	HIS
1	l	97	GLN
1	l	153	ASN
1	l	193	GLN
1	l	228	ASN
1	l	310	ASN
1	l	346	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	l	365	GLN
1	l	400	ASN
1	l	468	GLN
1	l	481	ASN
1	l	507	GLN
1	l	508	ASN
1	m	37	ASN
1	m	97	GLN
1	m	153	ASN
1	m	193	GLN
1	m	228	ASN
1	m	264	ASN
1	m	310	ASN
1	m	346	ASN
1	m	365	GLN
1	m	400	ASN
1	m	468	GLN
1	m	481	ASN
1	m	507	GLN
1	m	508	ASN
1	n	37	ASN
1	n	97	GLN
1	n	153	ASN
1	n	193	GLN
1	n	228	ASN
1	n	264	ASN
1	n	310	ASN
1	n	346	ASN
1	n	365	GLN
1	n	400	ASN
1	n	468	GLN
1	n	481	ASN
1	n	507	GLN
1	n	508	ASN
2	q	41	GLN
2	r	41	GLN
2	t	41	GLN
2	t	100	GLN
2	u	56	ASN
2	u	58	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6 Ligand geometry ⓘ

Of 42 ligands modelled in this entry, 14 are monoatomic - leaving 28 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z > 2$	Counts	RMSZ	# $ Z > 2$
5	DMS	n	701	-	3,3,3	0.25	0	3,3,3	0.64	0
4	ADP	A	602	3	28,29,29	1.27	3 (10%)	43,45,45	1.81	7 (16%)
4	ADP	F	602	3	28,29,29	1.52	4 (14%)	43,45,45	2.09	11 (25%)
5	DMS	k	601	-	3,3,3	0.31	0	3,3,3	0.68	0
4	ADP	B	602	3	28,29,29	1.44	4 (14%)	43,45,45	2.10	11 (25%)
4	ADP	C	602	3	28,29,29	1.40	3 (10%)	43,45,45	1.96	11 (25%)
4	ADP	e	602	3	28,29,29	1.61	7 (25%)	43,45,45	2.17	11 (25%)
4	ADP	b	602	3	28,29,29	1.45	5 (17%)	43,45,45	1.98	8 (18%)
4	ADP	c	602	3	28,29,29	1.64	6 (21%)	43,45,45	2.32	11 (25%)
5	DMS	J	601	-	3,3,3	0.38	0	3,3,3	0.77	0
4	ADP	d	602	3	28,29,29	1.60	5 (17%)	43,45,45	2.08	12 (27%)
4	ADP	D	602	3	28,29,29	1.52	7 (25%)	43,45,45	1.94	8 (18%)
5	DMS	K	601	-	3,3,3	0.29	0	3,3,3	0.70	0
5	DMS	L	601	-	3,3,3	0.31	0	3,3,3	0.71	0
4	ADP	E	602	3	28,29,29	1.32	5 (17%)	43,45,45	2.07	10 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
5	DMS	I	601	-	3,3,3	0.26	0	3,3,3	0.69	0
4	ADP	g	602	3	28,29,29	1.55	4 (14%)	43,45,45	2.07	11 (25%)
5	DMS	H	601	-	3,3,3	0.22	0	3,3,3	0.68	0
4	ADP	f	602	3	28,29,29	1.48	5 (17%)	43,45,45	2.07	8 (18%)
4	ADP	G	602	3	28,29,29	1.40	6 (21%)	43,45,45	2.06	9 (20%)
5	DMS	i	601	-	3,3,3	0.33	0	3,3,3	0.73	0
5	DMS	j	601	-	3,3,3	0.29	0	3,3,3	0.68	0
5	DMS	l	601	-	3,3,3	0.33	0	3,3,3	0.69	0
5	DMS	M	601	-	3,3,3	0.28	0	3,3,3	0.66	0
4	ADP	a	602	3	28,29,29	1.45	5 (17%)	43,45,45	2.03	9 (20%)
5	DMS	N	701	-	3,3,3	0.25	0	3,3,3	0.67	0
5	DMS	m	601	-	3,3,3	0.26	0	3,3,3	0.63	0
5	DMS	h	601	-	3,3,3	0.35	0	3,3,3	0.72	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
4	ADP	C	602	3	-	7/16/32/32	0/3/3/3
4	ADP	e	602	3	-	7/16/32/32	0/3/3/3
4	ADP	b	602	3	-	8/16/32/32	0/3/3/3
4	ADP	f	602	3	-	8/16/32/32	0/3/3/3
4	ADP	A	602	3	-	6/16/32/32	0/3/3/3
4	ADP	c	602	3	-	8/16/32/32	0/3/3/3
4	ADP	F	602	3	-	7/16/32/32	0/3/3/3
4	ADP	a	602	3	-	7/16/32/32	0/3/3/3
4	ADP	E	602	3	-	8/16/32/32	0/3/3/3
4	ADP	G	602	3	-	7/16/32/32	0/3/3/3
4	ADP	g	602	3	-	8/16/32/32	0/3/3/3
4	ADP	d	602	3	-	6/16/32/32	0/3/3/3
4	ADP	D	602	3	-	8/16/32/32	0/3/3/3
4	ADP	B	602	3	-	7/16/32/32	0/3/3/3

All (69) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	F	602	ADP	C5-N7	-4.34	1.31	1.39
4	c	602	ADP	C4-N9	-4.20	1.29	1.37
4	g	602	ADP	C5-N7	-4.08	1.31	1.39
4	d	602	ADP	C5-N7	-3.74	1.32	1.39
4	B	602	ADP	C5-N7	-3.68	1.32	1.39
4	e	602	ADP	C5-N7	-3.44	1.32	1.39
4	a	602	ADP	C5-N7	-3.42	1.32	1.39
4	f	602	ADP	C5-N7	-3.40	1.32	1.39
4	d	602	ADP	C4-N3	3.11	1.40	1.34
4	D	602	ADP	C5-N7	-3.10	1.33	1.39
4	C	602	ADP	C5-N7	-3.08	1.33	1.39
4	F	602	ADP	C4-N9	-3.06	1.31	1.37
4	A	602	ADP	C5-N7	-3.03	1.33	1.39
4	g	602	ADP	C4-N9	-3.02	1.31	1.37
4	c	602	ADP	C5-N7	-3.01	1.33	1.39
4	e	602	ADP	C5-C4	2.99	1.44	1.39
4	b	602	ADP	C4-N3	2.85	1.39	1.34
4	G	602	ADP	C5-N7	-2.84	1.33	1.39
4	G	602	ADP	C4-N9	-2.84	1.31	1.37
4	b	602	ADP	C5-N7	-2.82	1.33	1.39
4	e	602	ADP	C4-N9	-2.79	1.31	1.37
4	c	602	ADP	C5-C4	2.78	1.44	1.39
4	D	602	ADP	C2-N3	2.78	1.38	1.33
4	d	602	ADP	C4-N9	-2.73	1.32	1.37
4	E	602	ADP	C4-N9	-2.66	1.32	1.37
4	D	602	ADP	PB-O2B	2.66	1.64	1.54
4	c	602	ADP	C2-N1	2.64	1.38	1.33
4	G	602	ADP	C4-N3	2.61	1.39	1.34
4	e	602	ADP	C4-N3	2.60	1.39	1.34
4	f	602	ADP	C4-N3	2.60	1.39	1.34
4	E	602	ADP	C4-N3	2.51	1.39	1.34
4	B	602	ADP	C2-N3	2.51	1.38	1.33
4	C	602	ADP	C4-N9	-2.50	1.32	1.37
4	f	602	ADP	C4-N9	-2.46	1.32	1.37
4	E	602	ADP	C5-N7	-2.46	1.34	1.39
4	a	602	ADP	C4-N9	-2.46	1.32	1.37
4	C	602	ADP	C4-N3	2.45	1.39	1.34
4	D	602	ADP	C4-N9	-2.43	1.32	1.37
4	a	602	ADP	C2-N3	2.41	1.38	1.33
4	B	602	ADP	C4-N9	-2.40	1.32	1.37
4	e	602	ADP	C2-N1	2.40	1.38	1.33
4	c	602	ADP	C2-N3	2.37	1.38	1.33
4	b	602	ADP	C2-N1	2.36	1.38	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	g	602	ADP	C4-N3	2.34	1.38	1.34
4	a	602	ADP	C4-N3	2.34	1.38	1.34
4	G	602	ADP	C2-N1	2.31	1.38	1.33
4	d	602	ADP	C5-C4	2.28	1.43	1.39
4	D	602	ADP	C4-N3	2.27	1.38	1.34
4	b	602	ADP	C4-N9	-2.24	1.33	1.37
4	f	602	ADP	C2-N1	2.23	1.37	1.33
4	F	602	ADP	C4-N3	2.22	1.38	1.34
4	G	602	ADP	C5'-C4'	2.18	1.58	1.51
4	G	602	ADP	PA-O2A	-2.18	1.45	1.55
4	d	602	ADP	C2-N1	2.17	1.37	1.33
4	E	602	ADP	PA-O2A	-2.15	1.45	1.55
4	b	602	ADP	C2'-C1'	-2.13	1.46	1.53
4	D	602	ADP	PA-O2A	-2.12	1.45	1.55
4	E	602	ADP	C5'-C4'	2.12	1.57	1.51
4	A	602	ADP	C5'-C4'	2.09	1.57	1.51
4	e	602	ADP	C2-N3	2.06	1.37	1.33
4	c	602	ADP	C5'-C4'	2.06	1.57	1.51
4	B	602	ADP	PA-O2A	-2.06	1.45	1.55
4	a	602	ADP	PA-O2A	-2.06	1.45	1.55
4	f	602	ADP	C5'-C4'	2.04	1.57	1.51
4	e	602	ADP	PA-O2A	-2.03	1.46	1.55
4	g	602	ADP	PB-O2B	2.02	1.62	1.54
4	A	602	ADP	C1'-N9	2.02	1.51	1.46
4	D	602	ADP	C2-N1	2.01	1.37	1.33
4	F	602	ADP	C2-N3	2.00	1.37	1.33

All (137) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	c	602	ADP	N3-C2-N1	-7.32	117.50	128.58
4	f	602	ADP	N3-C2-N1	-7.17	117.72	128.58
4	b	602	ADP	N3-C2-N1	-7.15	117.77	128.58
4	d	602	ADP	N3-C2-N1	-7.14	117.78	128.58
4	C	602	ADP	N3-C2-N1	-7.08	117.86	128.58
4	G	602	ADP	N3-C2-N1	-7.05	117.91	128.58
4	E	602	ADP	N3-C2-N1	-6.95	118.06	128.58
4	g	602	ADP	N3-C2-N1	-6.94	118.08	128.58
4	e	602	ADP	N3-C2-N1	-6.86	118.19	128.58
4	D	602	ADP	N3-C2-N1	-6.83	118.25	128.58
4	a	602	ADP	N3-C2-N1	-6.81	118.27	128.58
4	A	602	ADP	N3-C2-N1	-6.78	118.32	128.58

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	602	ADP	N3-C2-N1	-6.76	118.35	128.58
4	B	602	ADP	N3-C2-N1	-6.71	118.42	128.58
4	c	602	ADP	C5-C4-N3	-6.04	118.40	126.72
4	E	602	ADP	C5-C4-N3	-5.51	119.13	126.72
4	G	602	ADP	C5-C4-N3	-5.44	119.22	126.72
4	B	602	ADP	C5-C4-N3	-5.34	119.37	126.72
4	f	602	ADP	C5-C4-N3	-5.27	119.45	126.72
4	e	602	ADP	C5-C4-N3	-5.08	119.72	126.72
4	F	602	ADP	C5-C4-N3	-5.06	119.75	126.72
4	a	602	ADP	C5-C4-N3	-5.02	119.81	126.72
4	c	602	ADP	C2-N3-C4	5.01	124.06	111.83
4	g	602	ADP	C5-C4-N3	-4.97	119.88	126.72
4	G	602	ADP	C2-N3-C4	4.84	123.66	111.83
4	b	602	ADP	C5-C4-N3	-4.83	120.06	126.72
4	d	602	ADP	C5-C4-N3	-4.83	120.07	126.72
4	C	602	ADP	C5-C4-N3	-4.81	120.10	126.72
4	c	602	ADP	C4-C5-N7	-4.77	105.13	110.58
4	D	602	ADP	C5-C4-N3	-4.77	120.15	126.72
4	E	602	ADP	C2-N3-C4	4.58	123.03	111.83
4	B	602	ADP	C2-N3-C4	4.55	122.94	111.83
4	b	602	ADP	C2-N3-C4	4.53	122.88	111.83
4	f	602	ADP	C2-N3-C4	4.52	122.88	111.83
4	d	602	ADP	C2-N3-C4	4.49	122.80	111.83
4	g	602	ADP	C2-N3-C4	4.47	122.75	111.83
4	F	602	ADP	C2-N3-C4	4.41	122.60	111.83
4	C	602	ADP	C2-N3-C4	4.40	122.59	111.83
4	e	602	ADP	C2-N3-C4	4.38	122.52	111.83
4	a	602	ADP	C2-N3-C4	4.36	122.49	111.83
4	D	602	ADP	C2-N3-C4	4.36	122.48	111.83
4	e	602	ADP	C5-N7-C8	4.33	110.25	103.45
4	e	602	ADP	C4-C5-N7	-4.24	105.73	110.58
4	A	602	ADP	C5-C4-N3	-4.24	120.88	126.72
4	A	602	ADP	C2-N3-C4	4.20	122.09	111.83
4	c	602	ADP	C5-N7-C8	4.12	109.93	103.45
4	e	602	ADP	N9-C8-N7	-3.90	108.40	113.94
4	c	602	ADP	N9-C8-N7	-3.68	108.72	113.94
4	F	602	ADP	N3-C4-N9	3.62	133.32	127.17
4	f	602	ADP	N3-C4-N9	3.56	133.22	127.17
4	B	602	ADP	C5-N7-C8	3.51	108.97	103.45
4	g	602	ADP	C5-N7-C8	3.50	108.94	103.45
4	F	602	ADP	C5-N7-C8	3.49	108.94	103.45
4	g	602	ADP	N9-C8-N7	-3.49	108.99	113.94

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	g	602	ADP	N3-C4-N9	3.48	133.09	127.17
4	C	602	ADP	N3-C4-N9	3.48	133.08	127.17
4	A	602	ADP	N3-C4-N9	3.47	133.06	127.17
4	G	602	ADP	N3-C4-N9	3.45	133.03	127.17
4	d	602	ADP	N3-C4-N9	3.44	133.03	127.17
4	c	602	ADP	N3-C4-N9	3.43	133.00	127.17
4	B	602	ADP	N3-C4-N9	3.42	132.99	127.17
4	B	602	ADP	C4-C5-N7	-3.42	106.67	110.58
4	f	602	ADP	C5-N7-C8	3.42	108.82	103.45
4	F	602	ADP	N9-C8-N7	-3.40	109.11	113.94
4	e	602	ADP	N3-C4-N9	3.39	132.93	127.17
4	d	602	ADP	C5-N7-C8	3.38	108.77	103.45
4	a	602	ADP	N9-C8-N7	-3.37	109.16	113.94
4	E	602	ADP	N3-C4-N9	3.36	132.89	127.17
4	E	602	ADP	C4-C5-N7	-3.34	106.76	110.58
4	F	602	ADP	C4-C5-N7	-3.34	106.76	110.58
4	d	602	ADP	N9-C8-N7	-3.34	109.20	113.94
4	a	602	ADP	C5-N7-C8	3.34	108.69	103.45
4	b	602	ADP	N3-C4-N9	3.33	132.83	127.17
4	a	602	ADP	N3-C4-N9	3.29	132.77	127.17
4	a	602	ADP	C4-C5-N7	-3.28	106.83	110.58
4	B	602	ADP	N9-C8-N7	-3.28	109.29	113.94
4	D	602	ADP	N3-C4-N9	3.24	132.68	127.17
4	g	602	ADP	C4-C5-N7	-3.20	106.93	110.58
4	d	602	ADP	C4-C5-N7	-3.19	106.93	110.58
4	G	602	ADP	C4-C5-N7	-3.15	106.98	110.58
4	f	602	ADP	N9-C8-N7	-3.13	109.50	113.94
4	f	602	ADP	C4-C5-N7	-3.11	107.03	110.58
4	E	602	ADP	C5-N7-C8	2.95	108.09	103.45
4	F	602	ADP	O4'-C4'-C5'	2.92	118.70	109.33
4	c	602	ADP	C6-C5-N7	2.83	137.55	132.09
4	G	602	ADP	C5-N7-C8	2.78	107.82	103.45
4	D	602	ADP	N9-C8-N7	-2.77	110.00	113.94
4	e	602	ADP	C6-C5-N7	2.77	137.42	132.09
4	D	602	ADP	C5-N7-C8	2.76	107.79	103.45
4	b	602	ADP	N9-C8-N7	-2.72	110.08	113.94
4	c	602	ADP	O4'-C4'-C5'	2.71	118.01	109.33
4	B	602	ADP	O4'-C4'-C5'	2.67	117.88	109.33
4	C	602	ADP	N9-C8-N7	-2.65	110.18	113.94
4	b	602	ADP	C5-N7-C8	2.62	107.57	103.45
4	B	602	ADP	O4'-C1'-N9	2.61	113.09	108.09
4	D	602	ADP	O4'-C4'-C5'	2.60	117.66	109.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	D	602	ADP	C4-C5-N7	-2.59	107.62	110.58
4	G	602	ADP	N9-C8-N7	-2.59	110.26	113.94
4	E	602	ADP	N9-C8-N7	-2.58	110.27	113.94
4	F	602	ADP	O4'-C1'-N9	2.55	112.98	108.09
4	c	602	ADP	C5-C4-N9	2.54	108.58	105.81
4	a	602	ADP	O4'-C4'-C5'	2.53	117.44	109.33
4	G	602	ADP	O4'-C4'-C5'	2.52	117.41	109.33
4	b	602	ADP	C4-C5-N7	-2.50	107.72	110.58
4	b	602	ADP	O4'-C4'-C5'	2.50	117.34	109.33
4	C	602	ADP	O4'-C4'-C5'	2.47	117.23	109.33
4	e	602	ADP	C4-N9-C8	2.45	108.31	105.74
4	F	602	ADP	C4-N9-C8	2.41	108.27	105.74
4	g	602	ADP	O4'-C4'-C5'	2.40	117.04	109.33
4	e	602	ADP	O4'-C4'-C5'	2.36	116.89	109.33
4	d	602	ADP	C4-N9-C8	2.35	108.21	105.74
4	f	602	ADP	O4'-C4'-C5'	2.35	116.86	109.33
4	E	602	ADP	O4'-C4'-C5'	2.34	116.83	109.33
4	d	602	ADP	O4'-C4'-C5'	2.34	116.83	109.33
4	A	602	ADP	O4'-C4'-C5'	2.33	116.79	109.33
4	A	602	ADP	C2-N1-C6	2.33	122.55	118.73
4	d	602	ADP	O4'-C1'-N9	2.32	112.55	108.09
4	C	602	ADP	C5-N7-C8	2.29	107.05	103.45
4	d	602	ADP	C6-C5-N7	2.26	136.45	132.09
4	g	602	ADP	C4-N9-C8	2.26	108.11	105.74
4	d	602	ADP	C2-N1-C6	2.22	122.37	118.73
4	C	602	ADP	C4-C5-N7	-2.21	108.06	110.58
4	B	602	ADP	O2A-PA-O3A	2.20	113.23	107.27
4	E	602	ADP	C3'-C2'-C1'	-2.20	97.31	101.46
4	A	602	ADP	N9-C8-N7	-2.18	110.85	113.94
4	e	602	ADP	O4'-C1'-N9	2.17	112.25	108.09
4	C	602	ADP	C2-N1-C6	2.15	122.26	118.73
4	C	602	ADP	O4'-C1'-N9	2.15	112.22	108.09
4	F	602	ADP	C6-C5-N7	2.14	136.22	132.09
4	g	602	ADP	C6-C5-N7	2.13	136.19	132.09
4	B	602	ADP	C6-C5-N7	2.12	136.17	132.09
4	a	602	ADP	C4-N9-C8	2.11	107.95	105.74
4	g	602	ADP	O4'-C1'-N9	2.09	112.10	108.09
4	c	602	ADP	O4'-C1'-N9	2.09	112.10	108.09
4	E	602	ADP	C6-C5-N7	2.06	136.05	132.09
4	G	602	ADP	C6-C5-N7	2.04	136.03	132.09
4	C	602	ADP	C4-N9-C8	2.04	107.88	105.74

There are no chirality outliers.

All (102) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
4	A	602	ADP	C5'-O5'-PA-O1A
4	A	602	ADP	C5'-O5'-PA-O2A
4	A	602	ADP	C5'-O5'-PA-O3A
4	A	602	ADP	O4'-C4'-C5'-O5'
4	B	602	ADP	C5'-O5'-PA-O1A
4	B	602	ADP	C5'-O5'-PA-O2A
4	B	602	ADP	C5'-O5'-PA-O3A
4	B	602	ADP	O4'-C4'-C5'-O5'
4	C	602	ADP	C5'-O5'-PA-O1A
4	C	602	ADP	C5'-O5'-PA-O2A
4	C	602	ADP	C5'-O5'-PA-O3A
4	C	602	ADP	O4'-C4'-C5'-O5'
4	D	602	ADP	C5'-O5'-PA-O1A
4	D	602	ADP	C5'-O5'-PA-O2A
4	D	602	ADP	C5'-O5'-PA-O3A
4	D	602	ADP	O4'-C4'-C5'-O5'
4	E	602	ADP	C5'-O5'-PA-O1A
4	E	602	ADP	C5'-O5'-PA-O2A
4	E	602	ADP	C5'-O5'-PA-O3A
4	E	602	ADP	O4'-C4'-C5'-O5'
4	F	602	ADP	C5'-O5'-PA-O1A
4	F	602	ADP	C5'-O5'-PA-O2A
4	F	602	ADP	C5'-O5'-PA-O3A
4	F	602	ADP	O4'-C4'-C5'-O5'
4	G	602	ADP	C5'-O5'-PA-O1A
4	G	602	ADP	C5'-O5'-PA-O2A
4	G	602	ADP	C5'-O5'-PA-O3A
4	G	602	ADP	O4'-C4'-C5'-O5'
4	a	602	ADP	C5'-O5'-PA-O1A
4	a	602	ADP	C5'-O5'-PA-O2A
4	a	602	ADP	C5'-O5'-PA-O3A
4	a	602	ADP	O4'-C4'-C5'-O5'
4	b	602	ADP	C5'-O5'-PA-O1A
4	b	602	ADP	C5'-O5'-PA-O2A
4	b	602	ADP	C5'-O5'-PA-O3A
4	b	602	ADP	O4'-C4'-C5'-O5'
4	c	602	ADP	C5'-O5'-PA-O1A
4	c	602	ADP	C5'-O5'-PA-O2A
4	c	602	ADP	C5'-O5'-PA-O3A
4	c	602	ADP	O4'-C4'-C5'-O5'
4	d	602	ADP	C5'-O5'-PA-O1A
4	d	602	ADP	C5'-O5'-PA-O2A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
4	d	602	ADP	C5'-O5'-PA-O3A
4	d	602	ADP	O4'-C4'-C5'-O5'
4	e	602	ADP	C5'-O5'-PA-O1A
4	e	602	ADP	C5'-O5'-PA-O2A
4	e	602	ADP	C5'-O5'-PA-O3A
4	f	602	ADP	C5'-O5'-PA-O1A
4	f	602	ADP	C5'-O5'-PA-O2A
4	f	602	ADP	C5'-O5'-PA-O3A
4	f	602	ADP	O4'-C4'-C5'-O5'
4	g	602	ADP	C5'-O5'-PA-O1A
4	g	602	ADP	C5'-O5'-PA-O2A
4	g	602	ADP	C5'-O5'-PA-O3A
4	g	602	ADP	O4'-C4'-C5'-O5'
4	D	602	ADP	C3'-C4'-C5'-O5'
4	E	602	ADP	C3'-C4'-C5'-O5'
4	F	602	ADP	C3'-C4'-C5'-O5'
4	b	602	ADP	C3'-C4'-C5'-O5'
4	e	602	ADP	O4'-C4'-C5'-O5'
4	A	602	ADP	C3'-C4'-C5'-O5'
4	B	602	ADP	C3'-C4'-C5'-O5'
4	C	602	ADP	C3'-C4'-C5'-O5'
4	a	602	ADP	C3'-C4'-C5'-O5'
4	c	602	ADP	C3'-C4'-C5'-O5'
4	f	602	ADP	C3'-C4'-C5'-O5'
4	G	602	ADP	C3'-C4'-C5'-O5'
4	d	602	ADP	C3'-C4'-C5'-O5'
4	e	602	ADP	C3'-C4'-C5'-O5'
4	g	602	ADP	C3'-C4'-C5'-O5'
4	E	602	ADP	PA-O3A-PB-O1B
4	b	602	ADP	PA-O3A-PB-O1B
4	c	602	ADP	PA-O3A-PB-O1B
4	g	602	ADP	PA-O3A-PB-O1B
4	A	602	ADP	PA-O3A-PB-O2B
4	F	602	ADP	PA-O3A-PB-O2B
4	G	602	ADP	PB-O3A-PA-O1A
4	C	602	ADP	PB-O3A-PA-O1A
4	f	602	ADP	PA-O3A-PB-O1B
4	C	602	ADP	PB-O3A-PA-O2A
4	D	602	ADP	PA-O3A-PB-O1B
4	e	602	ADP	PA-O3A-PB-O1B
4	B	602	ADP	PA-O3A-PB-O2B
4	B	602	ADP	PA-O3A-PB-O3B

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms
4	D	602	ADP	PA-O3A-PB-O2B
4	D	602	ADP	PA-O3A-PB-O3B
4	E	602	ADP	PA-O3A-PB-O2B
4	E	602	ADP	PA-O3A-PB-O3B
4	F	602	ADP	PA-O3A-PB-O3B
4	a	602	ADP	PA-O3A-PB-O2B
4	a	602	ADP	PA-O3A-PB-O3B
4	b	602	ADP	PA-O3A-PB-O2B
4	b	602	ADP	PA-O3A-PB-O3B
4	c	602	ADP	PA-O3A-PB-O2B
4	c	602	ADP	PA-O3A-PB-O3B
4	d	602	ADP	PA-O3A-PB-O2B
4	e	602	ADP	PA-O3A-PB-O3B
4	f	602	ADP	PA-O3A-PB-O2B
4	f	602	ADP	PA-O3A-PB-O3B
4	g	602	ADP	PA-O3A-PB-O2B
4	g	602	ADP	PA-O3A-PB-O3B
4	G	602	ADP	PB-O3A-PA-O2A

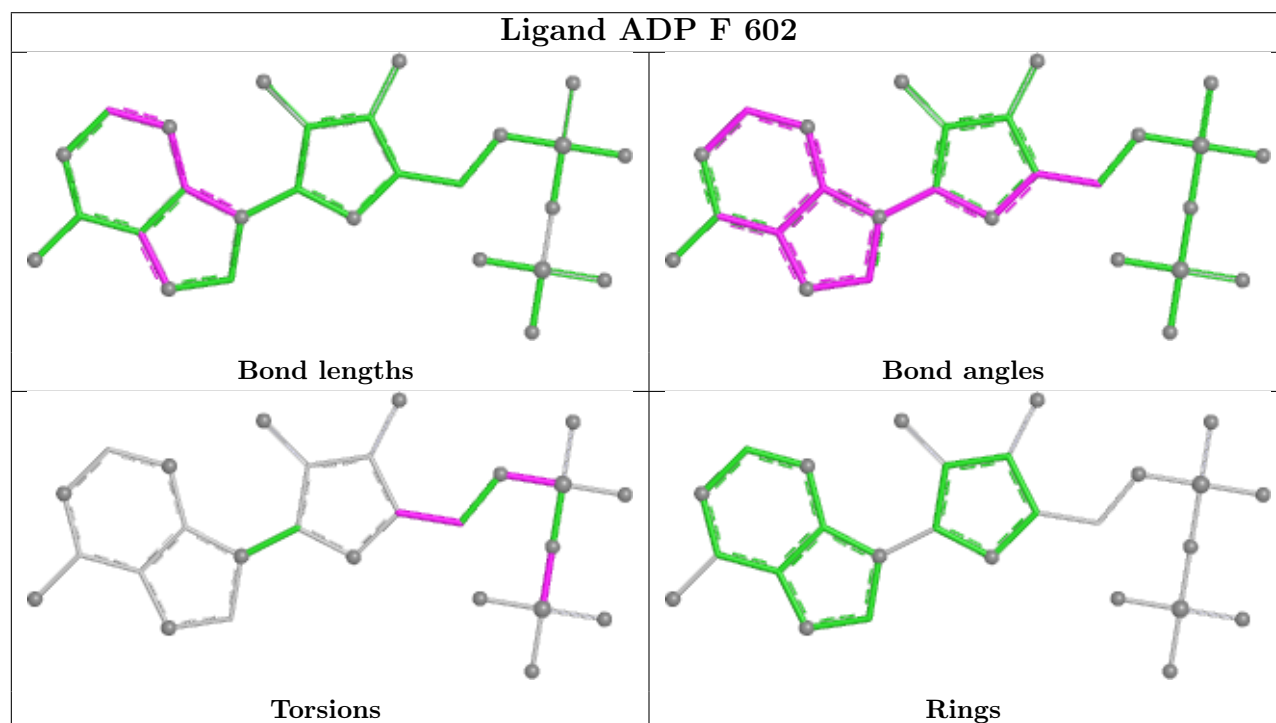
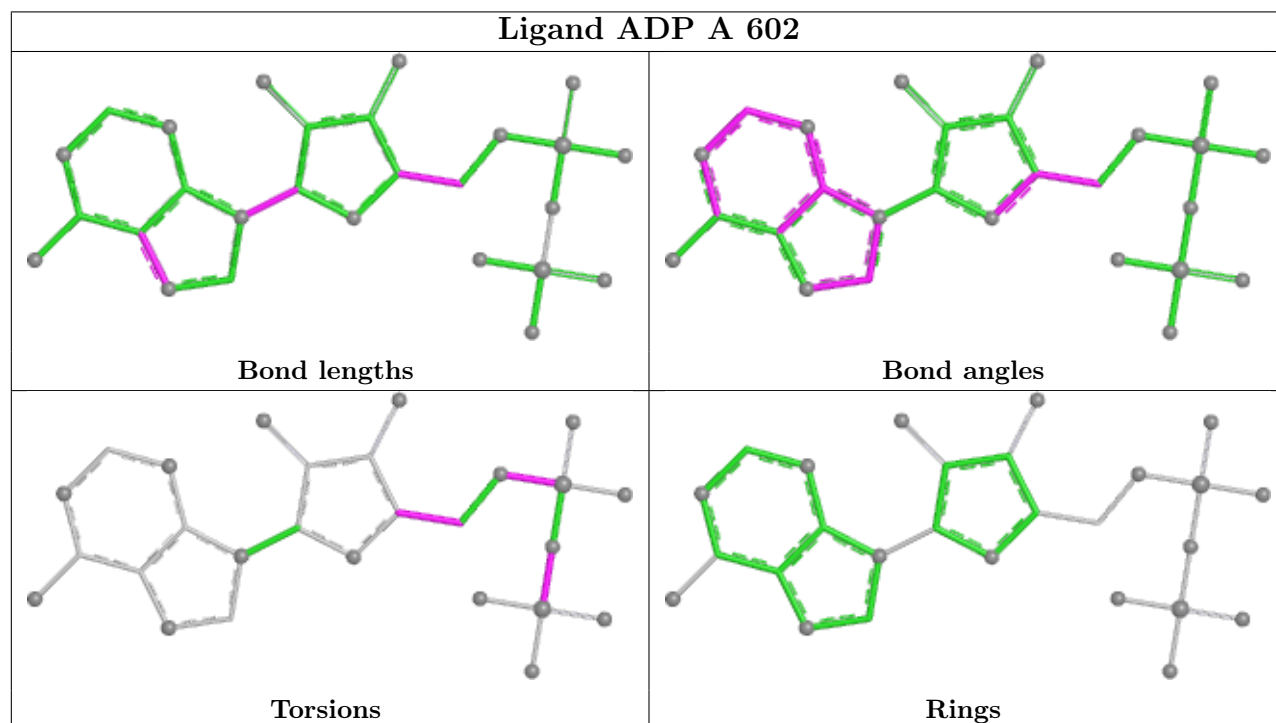
There are no ring outliers.

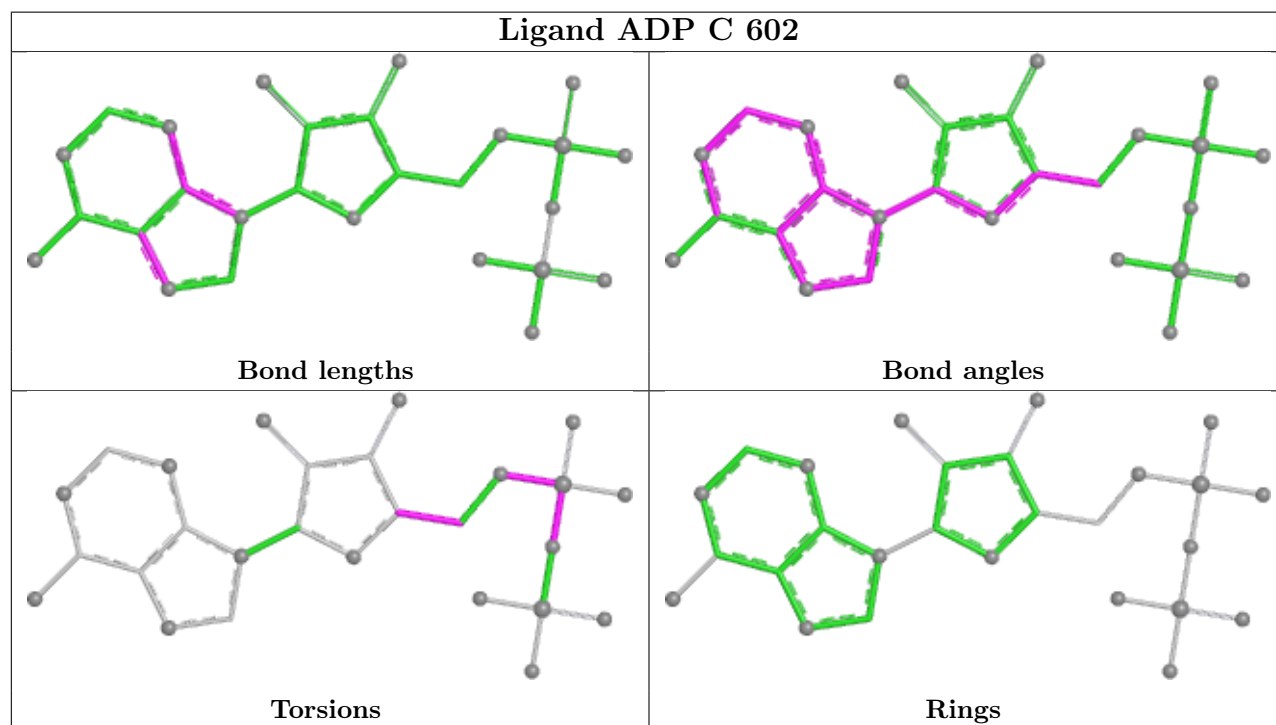
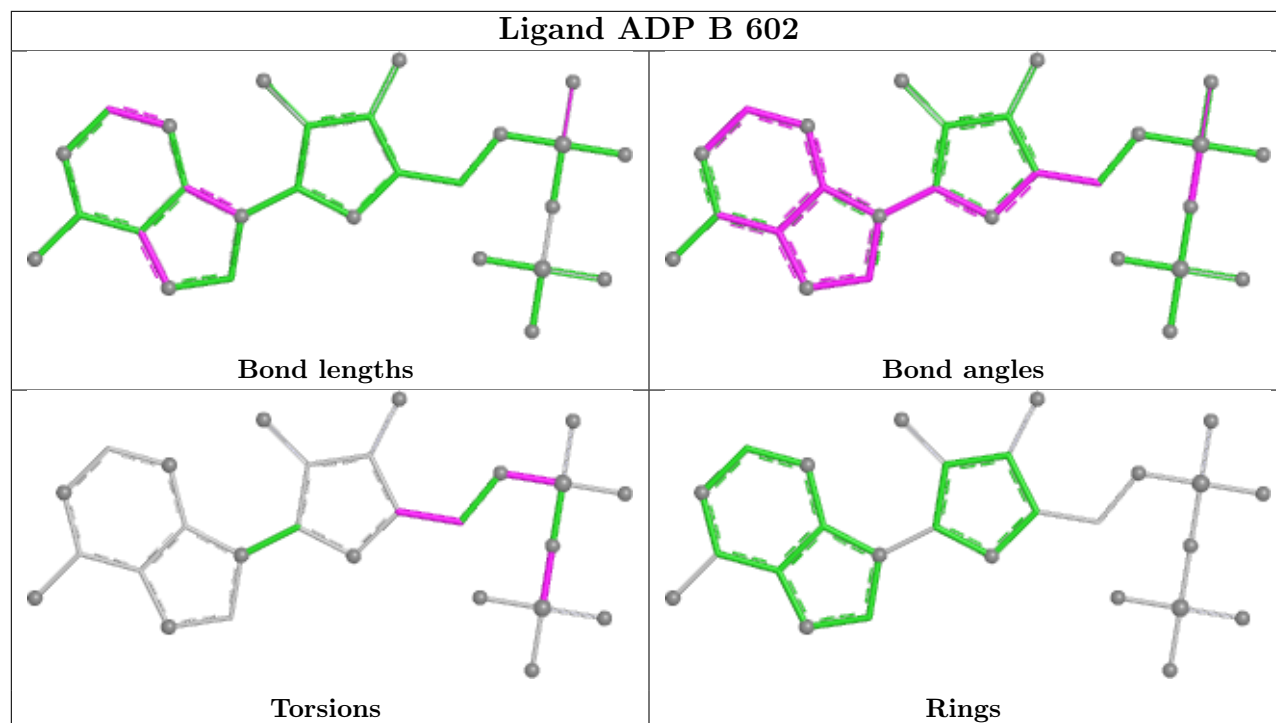
10 monomers are involved in 16 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
4	e	602	ADP	3	0
4	b	602	ADP	1	0
4	c	602	ADP	1	0
4	D	602	ADP	1	0
5	K	601	DMS	2	0
4	E	602	ADP	2	0
5	H	601	DMS	2	0
4	f	602	ADP	2	0
4	G	602	ADP	1	0
4	a	602	ADP	1	0

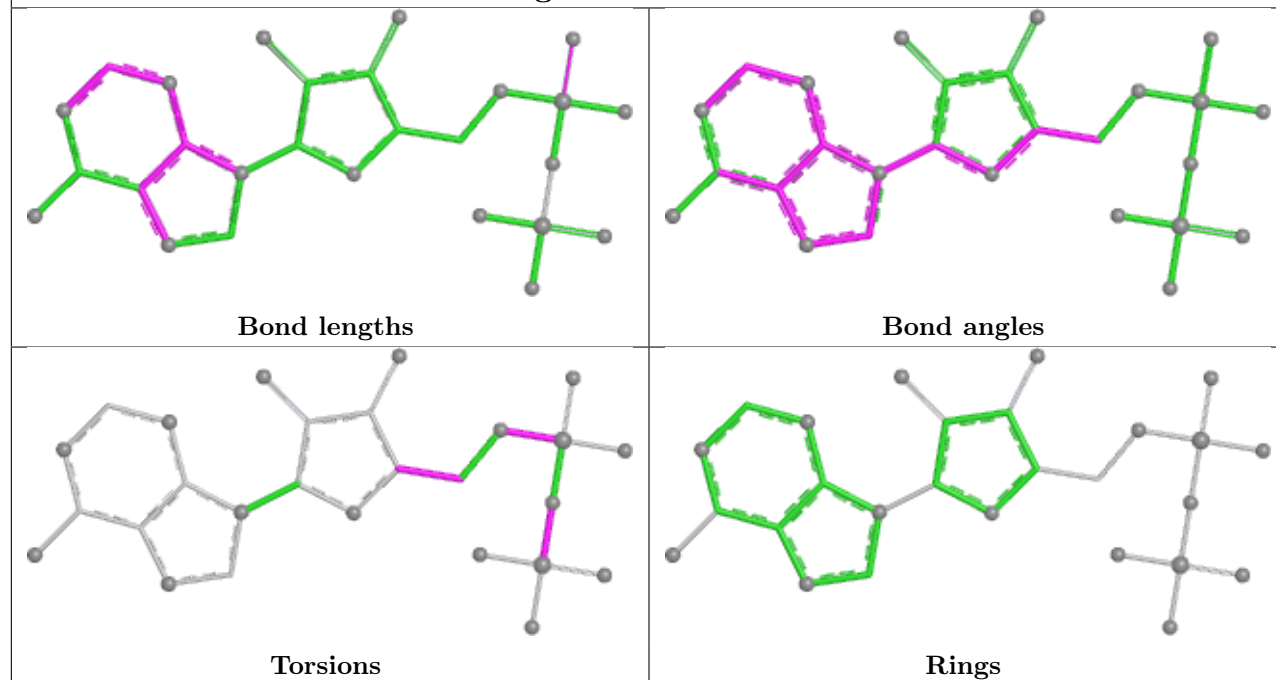
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the

average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

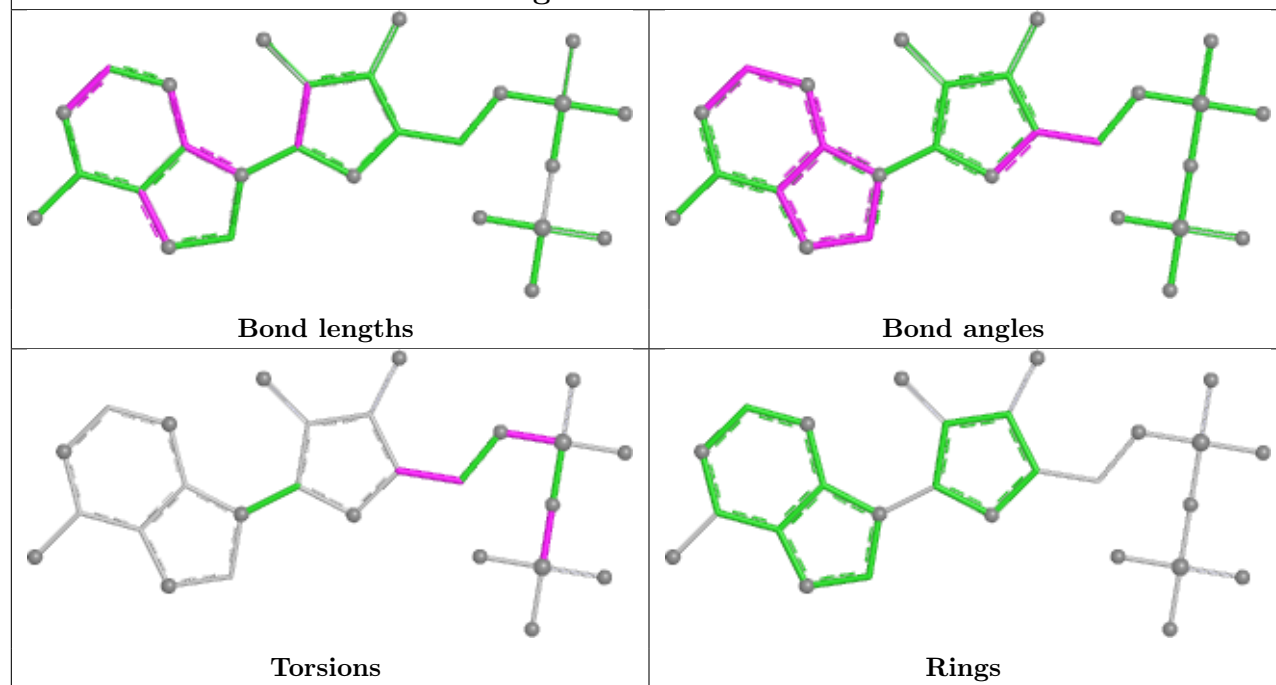




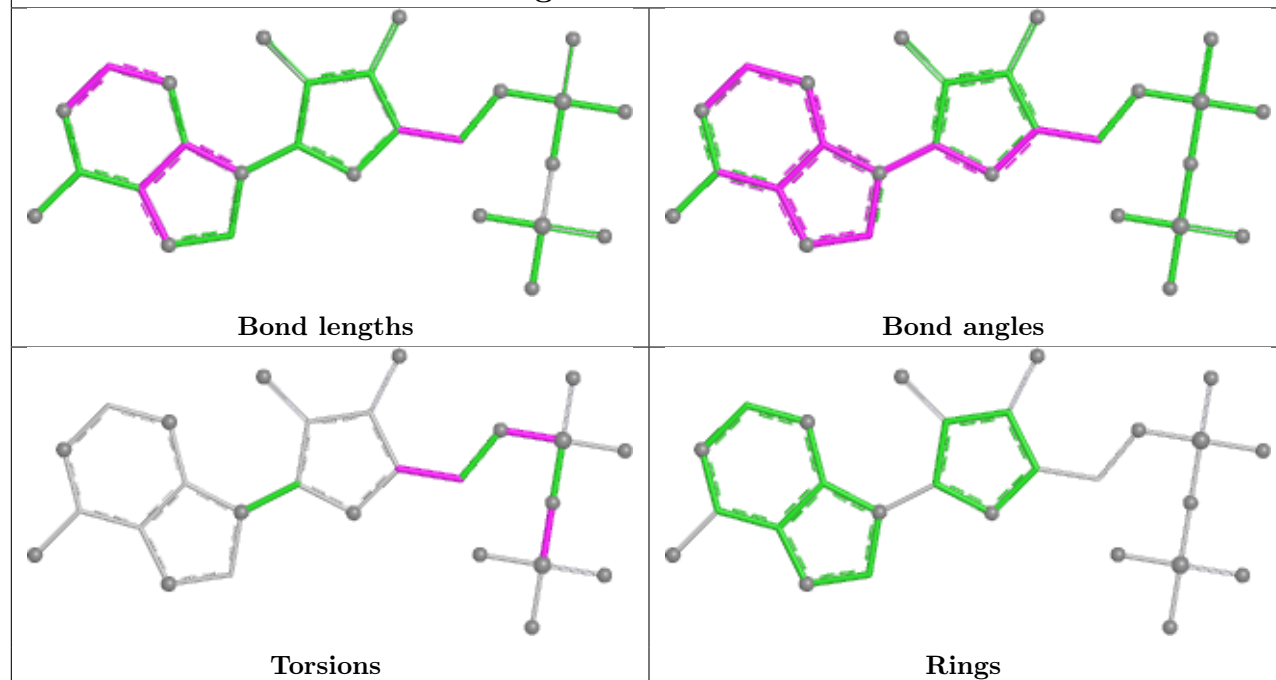
Ligand ADP e 602



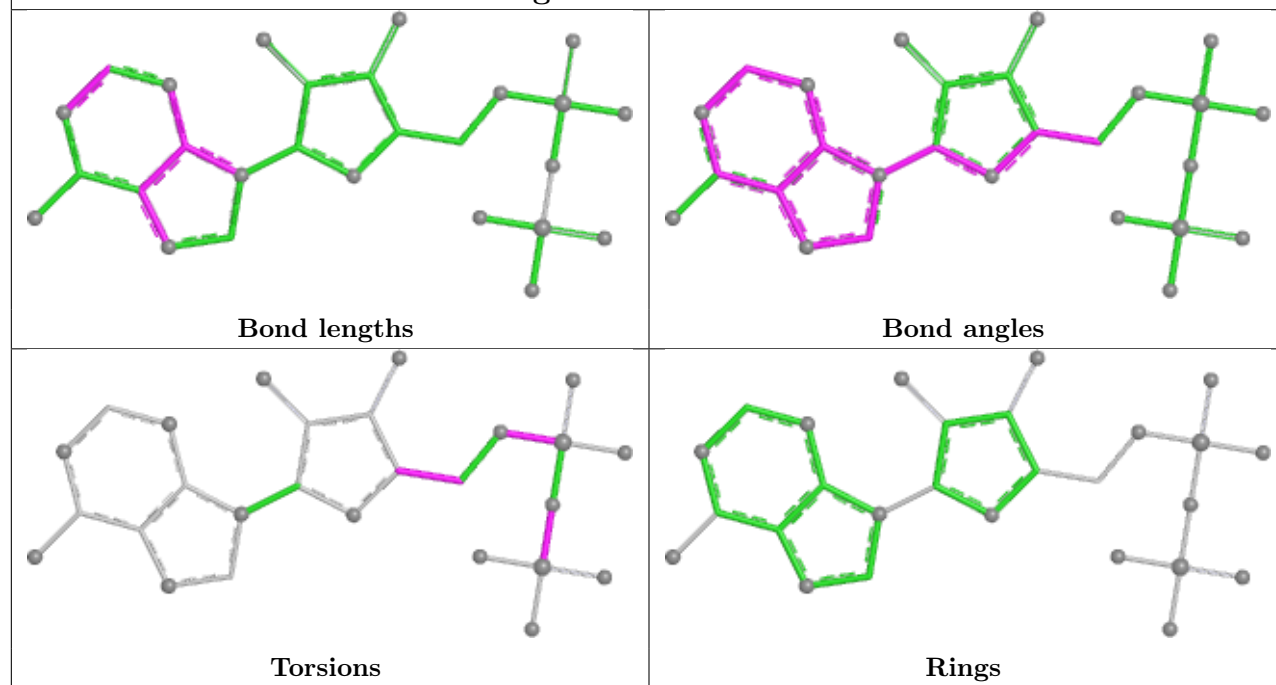
Ligand ADP b 602

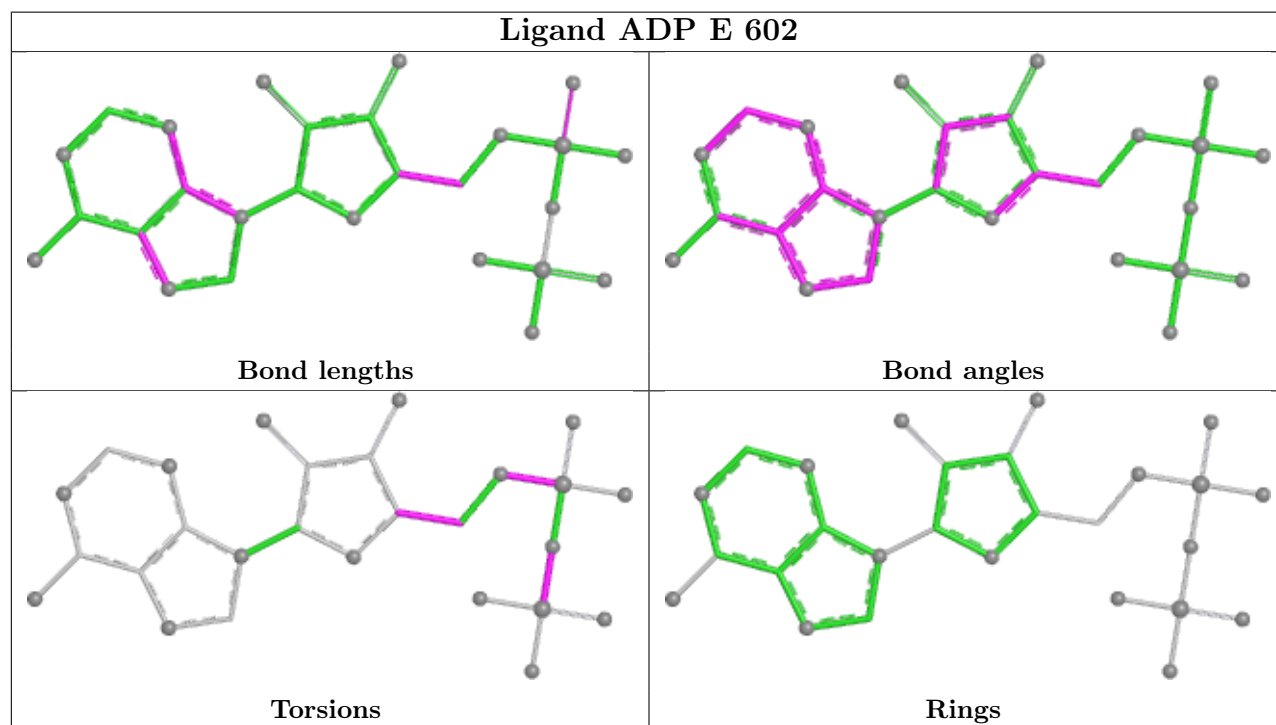
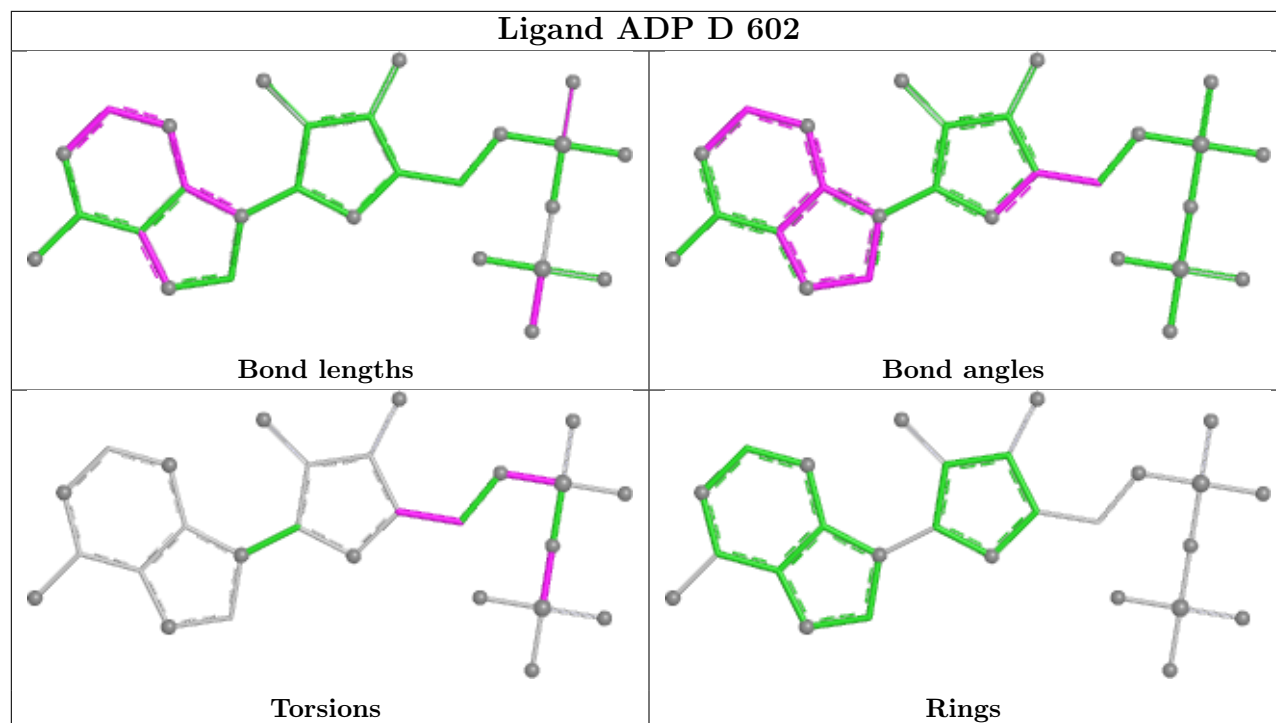


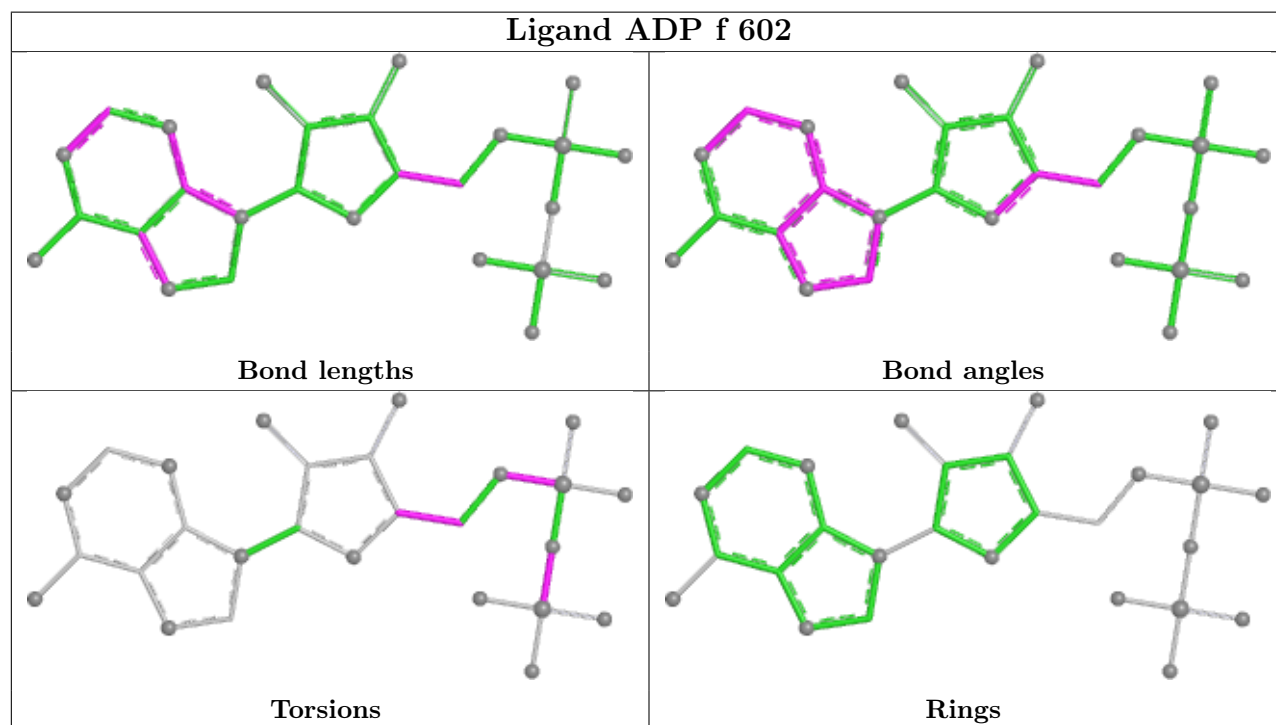
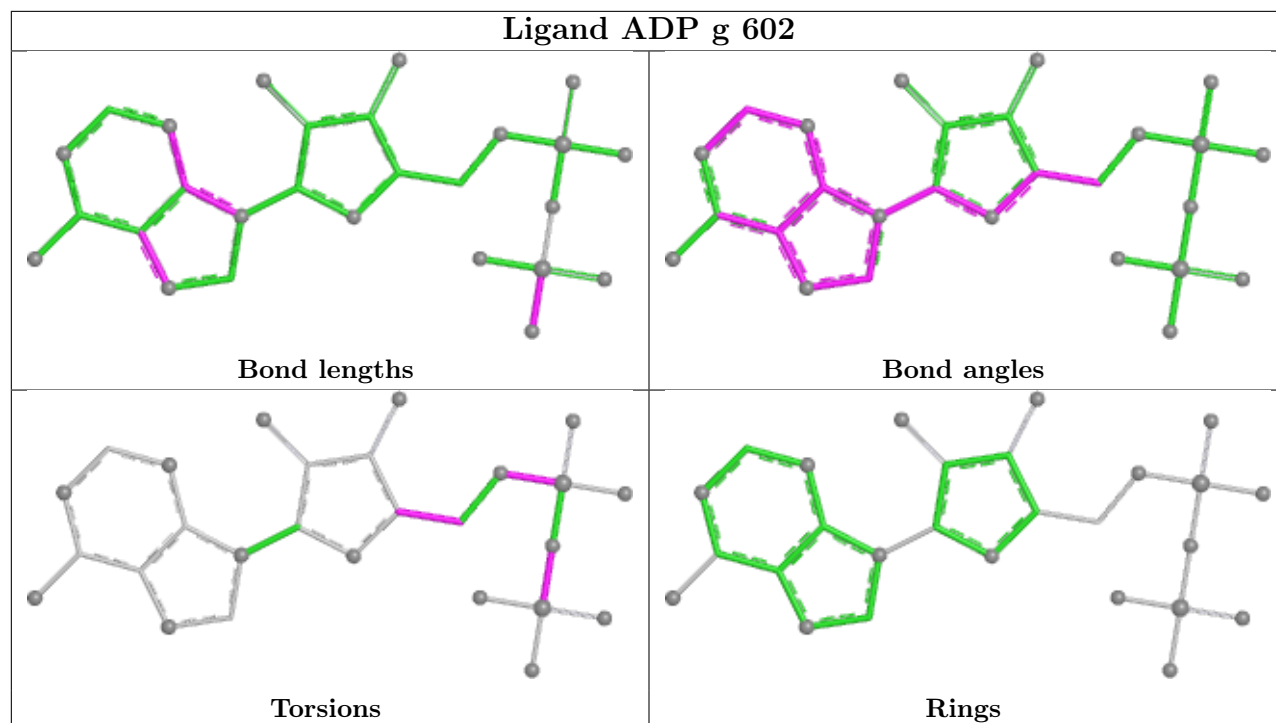
Ligand ADP c 602

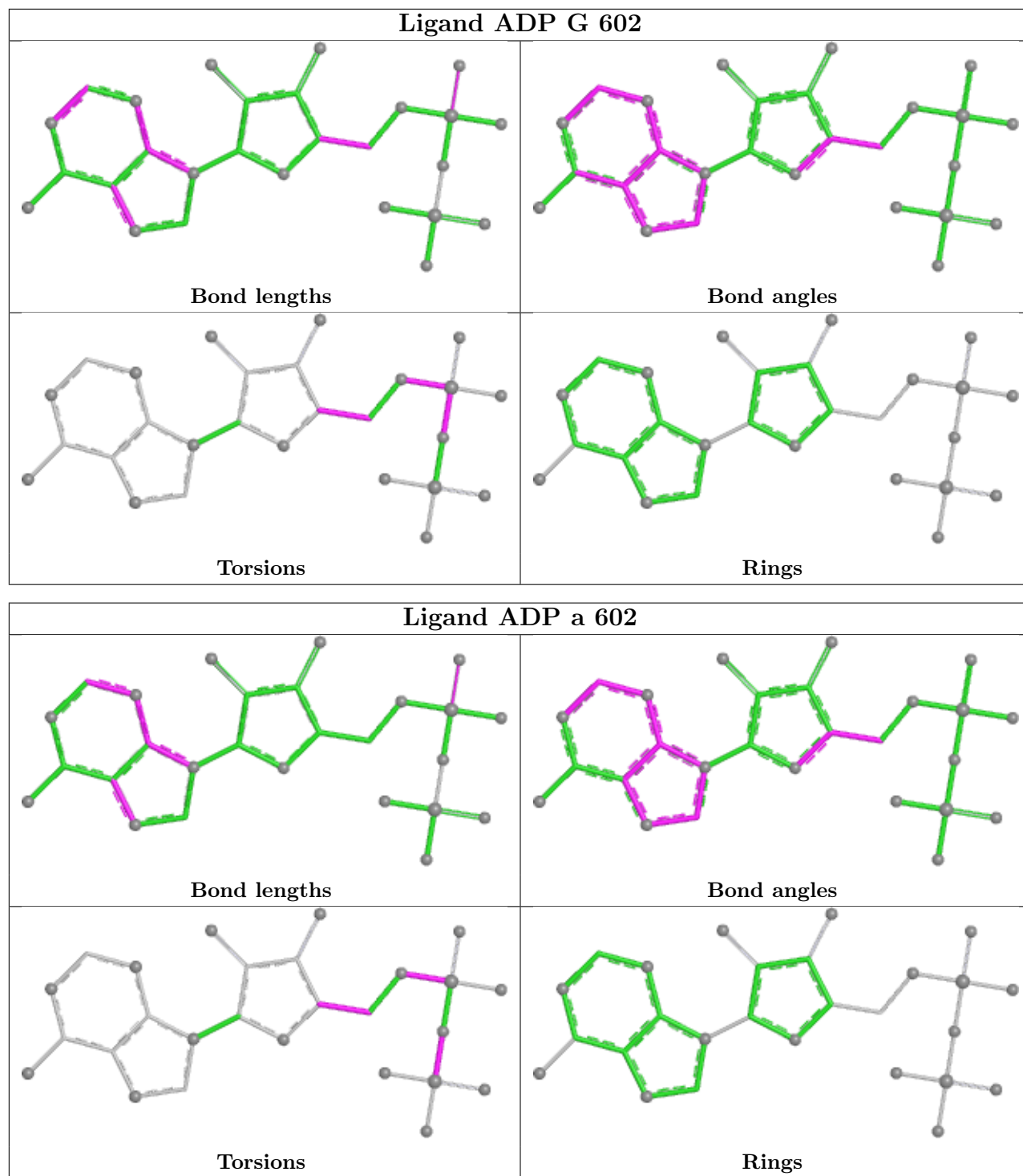


Ligand ADP d 602









5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ > 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q < 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	527/543 (97%)	-0.27	5 (0%) 81 74	16, 51, 95, 147	0
1	B	527/543 (97%)	-0.24	6 (1%) 78 70	15, 52, 101, 146	0
1	C	526/543 (96%)	-0.30	6 (1%) 78 70	14, 50, 101, 140	0
1	D	526/543 (96%)	-0.17	5 (0%) 79 72	14, 55, 120, 154	0
1	E	526/543 (96%)	-0.11	10 (1%) 66 57	9, 51, 127, 164	0
1	F	529/543 (97%)	-0.16	4 (0%) 82 75	17, 58, 108, 159	0
1	G	525/543 (96%)	-0.17	8 (1%) 72 63	19, 57, 106, 140	0
1	H	526/543 (96%)	-0.08	7 (1%) 75 66	26, 70, 120, 163	0
1	I	525/543 (96%)	-0.08	3 (0%) 85 80	24, 67, 121, 151	0
1	J	525/543 (96%)	-0.15	3 (0%) 85 80	14, 55, 110, 163	0
1	K	525/543 (96%)	-0.01	13 (2%) 58 48	16, 63, 120, 157	0
1	L	526/543 (96%)	-0.01	11 (2%) 63 54	23, 62, 115, 154	0
1	M	525/543 (96%)	1.04	125 (23%) 2 1	25, 95, 150, 167	0
1	N	526/543 (96%)	-0.00	9 (1%) 69 60	25, 70, 124, 167	0
1	a	527/543 (97%)	0.21	22 (4%) 40 32	18, 71, 128, 157	0
1	b	526/543 (96%)	0.15	37 (7%) 22 16	18, 66, 121, 163	0
1	c	527/543 (97%)	0.14	14 (2%) 56 46	23, 72, 134, 166	0
1	d	527/543 (97%)	0.23	7 (1%) 75 66	29, 77, 118, 146	0
1	e	526/543 (96%)	0.33	8 (1%) 72 63	42, 81, 116, 155	0
1	f	527/543 (97%)	0.44	11 (2%) 63 54	45, 88, 123, 149	0
1	g	526/543 (96%)	0.28	10 (1%) 66 57	27, 88, 136, 163	0
1	h	525/543 (96%)	-0.09	6 (1%) 78 70	24, 61, 112, 150	0
1	i	525/543 (96%)	0.04	8 (1%) 72 63	28, 76, 125, 160	0
1	j	525/543 (96%)	0.27	16 (3%) 52 42	32, 79, 125, 153	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	k	525/543 (96%)	0.43	12 (2%) 61 51	37, 94, 135, 158	0
1	l	525/543 (96%)	0.71	44 (8%) 17 12	48, 106, 143, 162	0
1	m	525/543 (96%)	0.90	93 (17%) 4 3	56, 104, 146, 174	0
1	n	525/543 (96%)	0.15	10 (1%) 66 57	37, 79, 130, 158	0
2	O	96/100 (96%)	0.74	4 (4%) 40 32	59, 109, 142, 146	0
2	P	94/100 (94%)	0.90	10 (10%) 11 8	69, 108, 142, 146	0
2	Q	96/100 (96%)	0.92	13 (13%) 7 5	60, 108, 142, 149	0
2	R	96/100 (96%)	0.76	5 (5%) 33 25	60, 99, 134, 151	0
2	S	96/100 (96%)	0.86	6 (6%) 26 19	61, 107, 140, 150	0
2	T	96/100 (96%)	0.88	3 (3%) 51 41	65, 106, 141, 154	0
2	U	96/100 (96%)	0.73	8 (8%) 17 12	55, 107, 142, 148	0
2	o	96/100 (96%)	0.76	5 (5%) 33 25	86, 116, 152, 164	0
2	p	96/100 (96%)	0.93	9 (9%) 14 10	80, 112, 146, 150	0
2	q	96/100 (96%)	0.52	2 (2%) 63 54	45, 101, 141, 157	0
2	r	96/100 (96%)	0.92	11 (11%) 9 7	60, 109, 141, 150	0
2	s	96/100 (96%)	1.03	9 (9%) 14 10	73, 114, 143, 150	0
2	t	96/100 (96%)	0.65	4 (4%) 40 32	82, 118, 147, 159	0
2	u	96/100 (96%)	0.53	3 (3%) 51 41	83, 122, 153, 167	0
All	All	16067/16604 (96%)	0.18	605 (3%) 44 35	9, 76, 133, 174	0

All (605) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	M	294	VAL	13.5
1	M	291	ILE	11.3
1	M	295	THR	7.9
1	M	273	ALA	7.2
1	M	219	ILE	7.0
2	s	57	GLY	6.7
1	M	217	ALA	6.5
1	M	247	LEU	6.4
1	M	322	VAL	6.3
2	S	54	LEU	6.3
1	m	260	THR	6.2
1	M	331	ILE	6.0
1	M	308	LEU	5.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	m	232	LEU	5.9
2	r	54	LEU	5.6
1	M	222	VAL	5.6
1	M	368	LEU	5.6
1	m	308	LEU	5.6
1	a	300	ILE	5.4
1	m	316	LEU	5.4
1	M	288	LEU	5.4
1	M	239	VAL	5.4
1	m	226	VAL	5.3
1	M	246	LEU	5.3
1	m	233	LEU	5.2
1	B	373	GLY	5.0
1	m	236	LEU	4.9
1	m	355	THR	4.8
1	M	275	VAL	4.8
1	m	298	THR	4.8
1	m	253	VAL	4.7
1	G	373	GLY	4.6
1	e	373	GLY	4.6
1	m	291	ILE	4.6
1	B	372	ALA	4.6
1	m	292	ALA	4.5
1	m	280	PHE	4.5
1	m	313	LEU	4.5
1	M	248	ILE	4.5
1	a	332	VAL	4.5
1	M	236	LEU	4.5
1	M	261	LEU	4.4
1	M	324	ILE	4.4
1	M	212	ALA	4.4
1	M	329	THR	4.4
1	M	226	VAL	4.3
2	S	31	VAL	4.3
1	m	261	LEU	4.3
1	M	274	ALA	4.3
1	M	245	PRO	4.3
1	M	375	VAL	4.2
1	b	226	VAL	4.2
2	p	33	PRO	4.2
1	m	273	ALA	4.2
1	M	280	PHE	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	M	343	ALA	4.2
1	N	266	LEU	4.2
1	M	332	VAL	4.1
2	Q	28	GLY	4.1
1	m	249	ILE	4.1
2	r	56	ASN	4.1
1	A	474	LYS	4.1
1	M	290	ASP	4.1
1	M	271	SER	4.1
1	M	376	ALA	4.0
1	l	373	GLY	4.0
1	M	218	PHE	4.0
1	B	374	GLY	4.0
1	m	258	LEU	3.9
1	m	356	ASP	3.9
2	Q	54	LEU	3.9
1	m	262	VAL	3.9
1	E	472	GLU	3.9
1	M	299	VAL	3.9
1	e	374	GLY	3.8
1	b	253	VAL	3.8
1	M	221	ILE	3.8
1	M	311	ALA	3.8
2	P	36	ALA	3.8
2	P	28	GLY	3.8
1	M	199	ILE	3.8
1	G	372	ALA	3.8
1	M	298	THR	3.8
1	a	360	ALA	3.7
1	j	368	LEU	3.7
1	M	306	PHE	3.7
1	m	279	GLY	3.7
2	R	57	GLY	3.7
1	D	371	LEU	3.7
1	m	304	LEU	3.7
1	M	293	ALA	3.7
1	a	277	ALA	3.7
1	G	374	GLY	3.7
1	M	312	THR	3.7
1	M	233	LEU	3.6
1	m	315	MET	3.6
1	M	395	PHE	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	m	235	ILE	3.6
1	a	236	LEU	3.6
1	m	210	MET	3.6
2	P	77	GLY	3.6
1	M	263	VAL	3.6
1	M	214	LEU	3.6
2	s	54	LEU	3.6
1	M	314	SER	3.6
1	M	229	VAL	3.6
1	M	220	LEU	3.6
1	M	315	MET	3.6
1	M	249	ILE	3.5
1	M	360	ALA	3.5
1	M	316	LEU	3.5
2	U	54	LEU	3.5
1	b	329	THR	3.5
1	M	240	ALA	3.5
1	m	257	ALA	3.5
1	m	274	ALA	3.5
1	M	189	VAL	3.5
1	M	292	ALA	3.5
2	R	58	GLN	3.4
1	m	294	VAL	3.4
1	M	278	PRO	3.4
1	a	357	SER	3.4
1	m	263	VAL	3.4
1	M	152	ALA	3.4
1	M	300	ILE	3.4
1	M	341	ILE	3.4
1	L	182	LEU	3.4
1	b	204	VAL	3.4
1	E	212	ALA	3.4
1	e	191	GLY	3.3
1	M	200	SER	3.3
1	m	192	TYR	3.3
1	A	472	GLU	3.3
1	M	178	GLU	3.3
1	m	324	ILE	3.3
1	m	345	ILE	3.3
1	h	306	PHE	3.3
2	p	32	LEU	3.3
1	l	395	PHE	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	T	94	ASP	3.3
1	g	232	LEU	3.3
1	M	371	LEU	3.2
1	d	305	GLY	3.2
1	m	248	ILE	3.2
1	M	232	LEU	3.2
1	m	247	LEU	3.2
1	M	188	PHE	3.2
1	m	314	SER	3.2
2	U	33	PRO	3.2
1	a	313	LEU	3.2
1	k	304	LEU	3.2
2	p	31	VAL	3.2
1	m	234	PRO	3.2
1	l	288	LEU	3.2
1	m	288	LEU	3.2
1	c	188	PHE	3.2
1	M	268	GLY	3.2
1	a	278	PRO	3.2
1	b	277	ALA	3.1
1	c	306	PHE	3.1
1	m	239	VAL	3.1
1	b	303	GLU	3.1
1	j	319	ALA	3.1
1	m	319	ALA	3.1
1	E	306	PHE	3.1
1	M	203	PHE	3.1
1	a	218	PHE	3.1
1	k	280	PHE	3.1
1	E	270	LEU	3.1
2	r	33	PRO	3.1
1	M	253	VAL	3.0
1	l	173	ILE	3.0
2	r	59	ARG	3.0
1	j	306	PHE	3.0
1	m	375	VAL	3.0
1	M	192	TYR	3.0
1	a	291	ILE	3.0
1	a	308	LEU	3.0
2	r	55	GLU	3.0
1	M	260	THR	3.0
1	m	354	THR	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	U	35	THR	3.0
1	b	360	ALA	3.0
1	m	217	ALA	3.0
1	f	306	PHE	3.0
1	c	270	LEU	3.0
1	M	259	ALA	3.0
1	j	372	ALA	3.0
1	M	213	VAL	3.0
1	l	332	VAL	3.0
2	r	53	VAL	3.0
1	k	214	LEU	3.0
1	M	198	TYR	2.9
1	M	364	LEU	2.9
1	h	308	LEU	2.9
1	L	527	PRO	2.9
1	m	259	ALA	2.9
2	p	35	THR	2.9
1	m	214	LEU	2.9
1	m	266	LEU	2.9
2	P	29	GLY	2.9
2	o	24	PRO	2.9
2	Q	56	ASN	2.9
1	K	250	ALA	2.9
2	t	97	ALA	2.9
1	K	280	PHE	2.9
1	n	280	PHE	2.9
1	M	304	LEU	2.9
1	m	264	ASN	2.9
1	l	85	ALA	2.9
1	h	280	PHE	2.9
1	m	325	THR	2.9
1	b	364	LEU	2.9
1	J	280	PHE	2.9
2	R	59	ARG	2.9
1	M	209	THR	2.9
2	s	8	ILE	2.9
1	M	279	GLY	2.8
1	j	334	GLY	2.8
1	l	334	GLY	2.8
1	M	283	ARG	2.8
1	f	78	ALA	2.8
1	M	270	LEU	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	m	269	THR	2.8
2	r	57	GLY	2.8
1	M	318	ARG	2.8
2	O	34	ASP	2.8
1	k	305	GLY	2.8
1	b	213	VAL	2.8
1	m	360	ALA	2.8
1	M	266	LEU	2.8
2	S	56	ASN	2.8
1	a	279	GLY	2.8
1	l	347	GLY	2.8
1	C	472	GLU	2.8
1	m	213	VAL	2.8
1	J	306	PHE	2.8
1	m	220	LEU	2.8
1	m	331	ILE	2.8
1	m	371	LEU	2.8
1	i	243	GLY	2.8
1	m	373	GLY	2.8
1	l	299	VAL	2.7
1	C	170	LYS	2.7
1	M	363	LYS	2.7
1	i	142	LYS	2.7
2	s	55	GLU	2.7
1	K	368	LEU	2.7
1	M	194	PHE	2.7
1	j	371	LEU	2.7
1	m	341	ILE	2.7
2	P	54	LEU	2.7
2	t	73	ALA	2.7
1	M	310	ASN	2.7
1	m	209	THR	2.7
2	Q	24	PRO	2.7
1	a	226	VAL	2.7
1	l	375	VAL	2.7
1	M	235	ILE	2.7
2	t	36	ALA	2.7
1	b	359	TYR	2.7
1	F	354	THR	2.7
1	b	205	THR	2.7
1	a	364	LEU	2.7
1	b	232	LEU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	K	44	PHE	2.7
1	M	285	LYS	2.7
1	l	379	ARG	2.7
1	m	295	THR	2.7
1	M	254	GLU	2.7
1	j	250	ALA	2.6
1	m	218	PHE	2.6
1	C	284	ARG	2.6
1	M	206	ASN	2.6
1	M	258	LEU	2.6
1	N	299	VAL	2.6
1	l	170	LYS	2.6
1	l	222	VAL	2.6
2	p	88	VAL	2.6
2	r	58	GLN	2.6
1	L	280	PHE	2.6
1	M	367	ARG	2.6
1	N	373	GLY	2.6
1	b	191	GLY	2.6
1	c	305	GLY	2.6
1	i	373	GLY	2.6
2	U	57	GLY	2.6
1	N	363	LYS	2.6
1	m	224	LYS	2.6
1	M	262	VAL	2.6
2	r	31	VAL	2.6
1	m	216	ASP	2.6
2	r	34	ASP	2.6
1	M	382	ALA	2.6
1	m	306	PHE	2.6
1	l	192	TYR	2.6
1	g	207	PRO	2.6
1	M	265	LYS	2.6
1	l	370	LYS	2.6
1	f	214	LEU	2.6
1	l	330	THR	2.6
1	m	368	LEU	2.6
2	o	64	VAL	2.6
1	e	339	GLU	2.6
1	D	360	ALA	2.6
1	G	306	PHE	2.6
1	b	203	PHE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	m	277	ALA	2.6
2	q	39	LYS	2.6
1	M	191	GLY	2.6
1	h	270	LEU	2.6
1	M	330	THR	2.6
1	l	168	VAL	2.6
2	u	15	VAL	2.6
2	Q	55	GLU	2.6
1	m	395	PHE	2.6
1	b	367	ARG	2.5
2	R	74	LYS	2.5
1	D	278	PRO	2.5
1	M	313	LEU	2.5
2	s	53	VAL	2.5
1	M	525	GLU	2.5
1	m	175	THR	2.5
1	M	383	ALA	2.5
1	n	395	PHE	2.5
2	s	56	ASN	2.5
1	m	170	LYS	2.5
1	c	278	PRO	2.5
1	i	304	LEU	2.5
2	p	20	ILE	2.5
1	C	223	GLU	2.5
1	k	178	GLU	2.5
2	t	55	GLU	2.5
1	l	218	PHE	2.5
2	T	52	ARG	2.5
1	n	46	SER	2.5
1	M	201	PRO	2.5
1	b	278	PRO	2.5
1	g	341	ILE	2.5
1	l	221	ILE	2.5
1	M	157	VAL	2.5
1	a	306	PHE	2.5
1	b	280	PHE	2.5
1	M	257	ALA	2.5
1	M	287	MET	2.5
1	k	368	LEU	2.5
1	l	160	LEU	2.5
1	m	270	LEU	2.5
1	m	278	PRO	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	M	136	ILE	2.5
1	i	305	GLY	2.5
1	M	272	VAL	2.5
2	S	53	VAL	2.5
1	a	192	TYR	2.5
1	l	359	TYR	2.5
1	m	203	PHE	2.5
1	H	524	ALA	2.5
1	c	304	LEU	2.4
1	m	246	LEU	2.4
1	b	357	SER	2.4
1	K	306	PHE	2.4
1	M	44	PHE	2.4
1	L	224	LYS	2.4
1	b	240	ALA	2.4
1	m	212	ALA	2.4
2	P	73	ALA	2.4
1	M	386	THR	2.4
1	b	270	LEU	2.4
1	b	368	LEU	2.4
1	m	219	ILE	2.4
2	O	8	ILE	2.4
1	m	297	GLY	2.4
1	M	190	GLU	2.4
1	l	188	PHE	2.4
1	M	143	ALA	2.4
1	m	3	ALA	2.4
2	s	58	GLN	2.4
1	M	234	PRO	2.4
1	m	527	PRO	2.4
1	H	168	VAL	2.4
1	f	172	GLY	2.4
1	L	306	PHE	2.4
1	m	271	SER	2.4
1	g	319	ALA	2.4
2	p	36	ALA	2.4
2	q	36	ALA	2.4
2	P	75	TYR	2.4
1	l	298	THR	2.4
1	H	236	LEU	2.4
1	f	232	LEU	2.4
1	l	220	LEU	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	f	322	VAL	2.4
1	C	474	LYS	2.4
1	M	88	GLY	2.4
1	K	171	GLU	2.4
1	l	217	ALA	2.4
1	l	482	ALA	2.4
1	M	242	THR	2.4
1	m	242	THR	2.4
2	Q	50	THR	2.4
1	l	316	LEU	2.4
2	U	53	VAL	2.3
2	o	31	VAL	2.3
1	L	302	GLU	2.3
1	m	357	SER	2.3
1	E	205	THR	2.3
1	M	150	ILE	2.3
1	N	235	ILE	2.3
1	l	248	ILE	2.3
1	A	529	LYS	2.3
1	f	374	GLY	2.3
1	j	243	GLY	2.3
1	M	342	GLU	2.3
1	b	210	MET	2.3
1	D	304	LEU	2.3
1	K	46	SER	2.3
1	d	270	LEU	2.3
1	g	270	LEU	2.3
1	m	275	VAL	2.3
1	I	373	GLY	2.3
1	l	409	GLY	2.3
2	U	56	ASN	2.3
2	u	56	ASN	2.3
1	e	306	PHE	2.3
1	M	524	ALA	2.3
2	S	58	GLN	2.3
1	l	137	PRO	2.3
1	m	296	GLY	2.3
1	F	303	GLU	2.3
1	L	85	ALA	2.3
1	j	186	LEU	2.3
1	e	265	LYS	2.3
1	k	224	LYS	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	l	187	LYS	2.3
1	m	299	VAL	2.3
1	m	334	GLY	2.3
1	n	88	GLY	2.3
1	E	203	PHE	2.2
1	N	280	PHE	2.2
1	j	218	PHE	2.2
1	m	188	PHE	2.2
1	a	240	ALA	2.2
2	R	56	ASN	2.2
2	U	36	ALA	2.2
1	M	276	LYS	2.2
1	m	300	ILE	2.2
1	n	199	ILE	2.2
1	e	412	PRO	2.2
1	m	201	PRO	2.2
1	M	202	TYR	2.2
1	n	357	SER	2.2
1	H	306	PHE	2.2
1	l	280	PHE	2.2
1	b	250	ALA	2.2
1	b	362	GLU	2.2
1	m	240	ALA	2.2
1	l	186	LEU	2.2
1	m	265	LYS	2.2
2	Q	34	ASP	2.2
2	Q	35	THR	2.2
1	l	165	MET	2.2
1	B	472	GLU	2.2
1	N	3	ALA	2.2
1	d	392	LYS	2.2
1	d	303	GLU	2.2
1	e	304	LEU	2.2
1	M	193	GLN	2.2
2	Q	58	GLN	2.2
2	p	24	PRO	2.2
2	p	64	VAL	2.2
1	E	325	THR	2.2
1	n	45	GLY	2.2
1	b	194	PHE	2.2
1	k	399	LEU	2.2
1	i	251	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	b	221	ILE	2.2
1	b	300	ILE	2.2
1	l	322	VAL	2.2
2	P	35	THR	2.2
1	M	370	LYS	2.2
1	b	197	GLY	2.2
1	b	373	GLY	2.2
2	s	44	LYS	2.2
1	H	280	PHE	2.2
1	d	304	LEU	2.2
1	k	270	LEU	2.2
1	n	371	LEU	2.2
1	c	274	ALA	2.2
1	d	237	GLU	2.2
1	B	284	ARG	2.1
1	K	310	ASN	2.1
1	f	213	VAL	2.1
1	l	155	PRO	2.1
1	K	265	LYS	2.1
1	M	338	LYS	2.1
1	k	167	LYS	2.1
1	g	374	GLY	2.1
1	j	485	GLY	2.1
1	H	270	LEU	2.1
1	k	371	LEU	2.1
1	l	323	ARG	2.1
2	Q	33	PRO	2.1
1	f	529	LYS	2.1
1	a	295	THR	2.1
1	g	325	THR	2.1
1	G	308	LEU	2.1
1	I	280	PHE	2.1
1	j	280	PHE	2.1
1	k	308	LEU	2.1
1	l	388	LEU	2.1
1	m	487	PHE	2.1
1	a	359	TYR	2.1
1	c	198	TYR	2.1
1	L	351	GLU	2.1
1	b	248	ILE	2.1
1	i	291	ILE	2.1
1	l	179	SER	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	o	69	ILE	2.1
1	N	238	GLN	2.1
1	b	275	VAL	2.1
1	M	137	PRO	2.1
1	G	270	LEU	2.1
1	L	308	LEU	2.1
1	i	296	GLY	2.1
1	j	182	LEU	2.1
1	l	304	LEU	2.1
2	O	28	GLY	2.1
1	A	306	PHE	2.1
1	J	218	PHE	2.1
1	K	312	THR	2.1
1	M	384	THR	2.1
1	b	282	ASP	2.1
1	g	306	PHE	2.1
1	E	345	ILE	2.1
1	m	250	ALA	2.1
1	a	251	GLU	2.1
2	Q	82	ILE	2.1
2	T	30	ILE	2.1
2	o	30	ILE	2.1
1	n	241	GLN	2.1
1	K	262	VAL	2.1
1	b	265	LYS	2.1
1	c	213	VAL	2.1
2	P	27	LYS	2.1
1	G	278	PRO	2.1
1	b	316	LEU	2.1
1	l	371	LEU	2.1
1	B	172	GLY	2.1
1	c	197	GLY	2.1
1	c	255	GLY	2.1
1	d	280	PHE	2.1
1	j	373	GLY	2.1
2	r	77	GLY	2.1
1	b	283	ARG	2.1
2	O	35	THR	2.1
1	c	360	ALA	2.1
1	l	161	ILE	2.1
1	m	136	ILE	2.1
1	N	359	TYR	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	j	460	TYR	2.1
1	I	271	SER	2.0
1	c	315	MET	2.0
1	l	272	VAL	2.0
1	E	304	LEU	2.0
1	H	308	LEU	2.0
1	K	308	LEU	2.0
1	b	258	LEU	2.0
1	n	266	LEU	2.0
2	u	54	LEU	2.0
1	E	243	GLY	2.0
1	F	305	GLY	2.0
1	c	374	GLY	2.0
2	Q	57	GLY	2.0
1	M	356	ASP	2.0
1	m	199	ILE	2.0
1	m	312	THR	2.0
1	f	451	ALA	2.0
1	A	190	GLU	2.0
1	F	339	GLU	2.0
1	M	366	GLU	2.0
1	a	202	TYR	2.0
1	g	229	VAL	2.0
1	K	527	PRO	2.0
1	f	412	PRO	2.0
2	U	24	PRO	2.0
1	M	388	LEU	2.0
1	l	308	LEU	2.0
1	G	305	GLY	2.0
1	g	485	GLY	2.0
1	h	45	GLY	2.0
2	s	28	GLY	2.0
1	b	199	ILE	2.0
1	h	235	ILE	2.0
1	D	325	THR	2.0
1	a	143	ALA	2.0
1	j	217	ALA	2.0
1	C	362	GLU	2.0
1	m	290	ASP	2.0
2	P	34	ASP	2.0
2	S	94	ASP	2.0
1	L	526	LYS	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	M	166	GLU	2.0
1	M	223	GLU	2.0
1	L	262	VAL	2.0
2	Q	53	VAL	2.0

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

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

6.3 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
5	DMS	k	601	4/4	0.80	0.27	89,96,103,115	0
5	DMS	l	601	4/4	0.83	0.22	63,95,106,125	0
5	DMS	j	601	4/4	0.84	0.15	82,83,101,117	0
5	DMS	L	601	4/4	0.85	0.17	39,58,61,94	0
3	MG	d	601	1/1	0.86	0.12	68,68,68,68	0
5	DMS	n	701	4/4	0.86	0.20	69,85,87,99	0
5	DMS	m	601	4/4	0.88	0.17	82,92,95,105	0
3	MG	b	601	1/1	0.89	0.12	53,53,53,53	0
5	DMS	J	601	4/4	0.89	0.14	39,53,65,90	0
5	DMS	M	601	4/4	0.91	0.10	26,29,60,79	0
5	DMS	h	601	4/4	0.91	0.13	52,58,85,96	0
5	DMS	i	601	4/4	0.91	0.10	27,32,40,87	0
3	MG	f	601	1/1	0.91	0.07	70,70,70,70	0
3	MG	g	601	1/1	0.92	0.12	66,66,66,66	0
4	ADP	e	602	27/27	0.92	0.10	48,78,103,108	0
4	ADP	f	602	27/27	0.93	0.10	47,93,109,116	0
4	ADP	d	602	27/27	0.93	0.09	45,72,87,93	0
5	DMS	K	601	4/4	0.93	0.10	43,44,76,91	0
3	MG	e	601	1/1	0.93	0.11	62,62,62,62	0

Continued on next page...

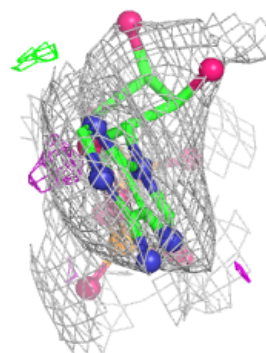
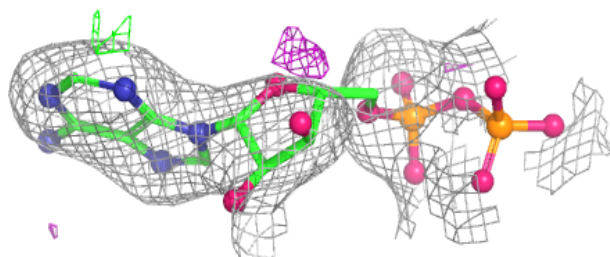
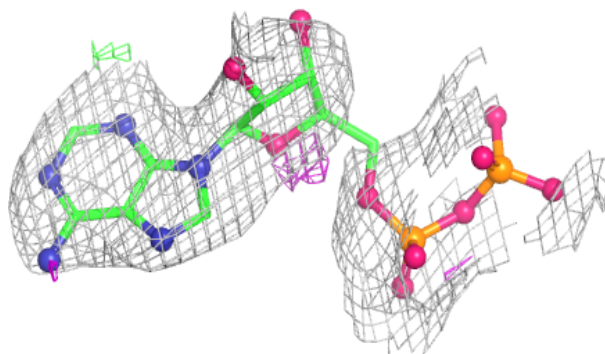
Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
3	MG	E	601	1/1	0.94	0.06	20,20,20,20	0
4	ADP	c	602	27/27	0.95	0.09	24,67,80,102	0
3	MG	A	601	1/1	0.95	0.07	27,27,27,27	0
3	MG	F	601	1/1	0.95	0.06	25,25,25,25	0
3	MG	C	601	1/1	0.95	0.05	28,28,28,28	0
4	ADP	g	602	27/27	0.95	0.09	56,84,98,103	0
3	MG	c	601	1/1	0.95	0.11	51,51,51,51	0
4	ADP	D	602	27/27	0.95	0.08	1,38,64,69	0
4	ADP	a	602	27/27	0.95	0.09	21,70,81,90	0
4	ADP	b	602	27/27	0.96	0.07	13,58,79,85	0
4	ADP	E	602	27/27	0.96	0.08	12,44,74,80	0
4	ADP	C	602	27/27	0.96	0.08	1,34,70,78	0
5	DMS	H	601	4/4	0.96	0.11	24,28,74,96	0
5	DMS	N	701	4/4	0.96	0.12	53,57,64,90	0
5	DMS	I	601	4/4	0.96	0.07	37,58,66,93	0
4	ADP	A	602	27/27	0.97	0.07	1,47,68,77	0
4	ADP	F	602	27/27	0.97	0.07	23,51,75,88	0
4	ADP	G	602	27/27	0.97	0.07	1,61,76,85	0
4	ADP	B	602	27/27	0.97	0.08	18,54,75,80	0
3	MG	B	601	1/1	0.97	0.13	44,44,44,44	0
3	MG	G	601	1/1	0.97	0.06	29,29,29,29	0
3	MG	D	601	1/1	0.98	0.10	29,29,29,29	0
3	MG	a	601	1/1	0.98	0.06	54,54,54,54	0

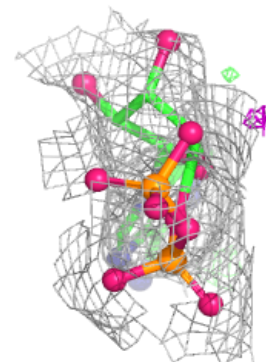
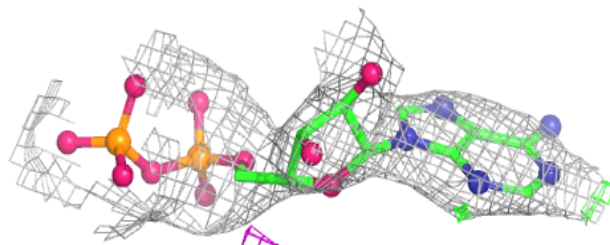
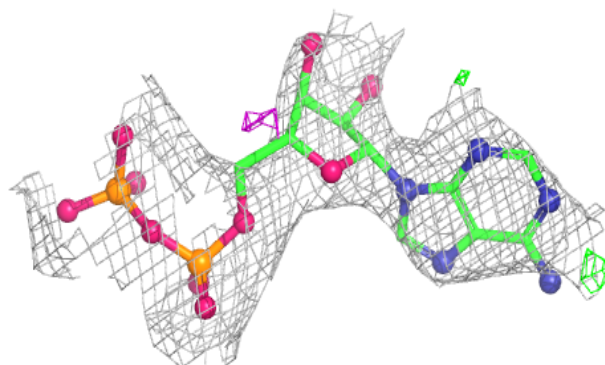
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around ADP e 602:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

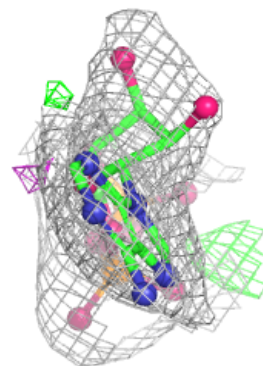
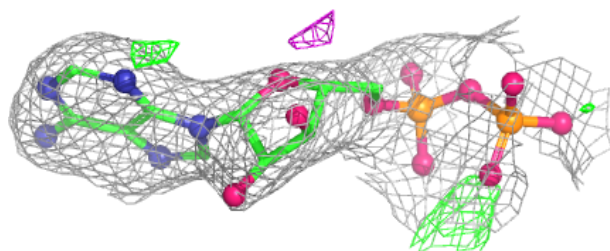
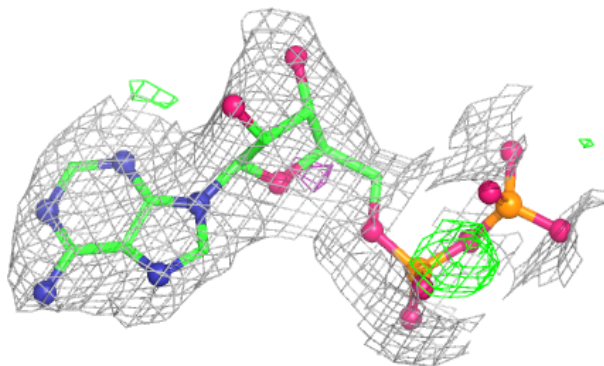
**Electron density around ADP f 602:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

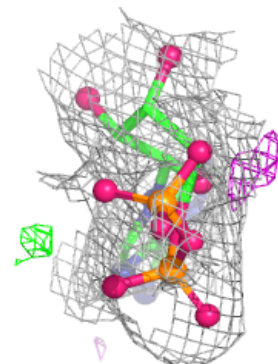
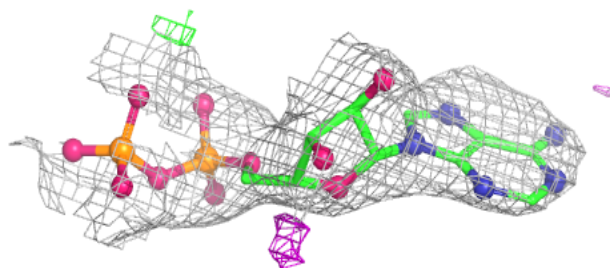
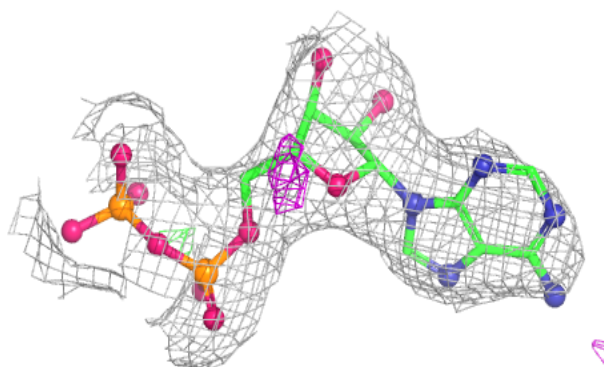


Electron density around ADP d 602:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

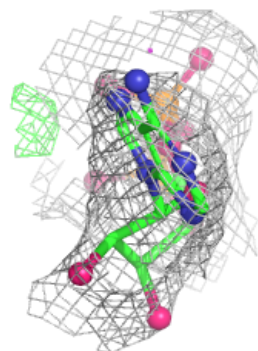
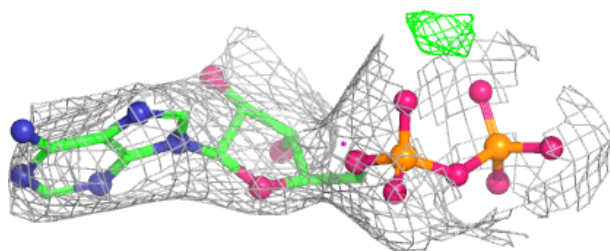
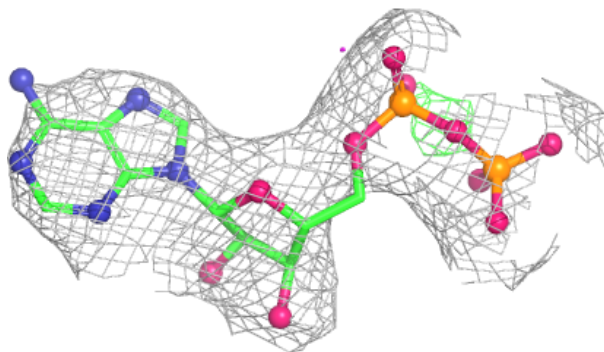
**Electron density around ADP c 602:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

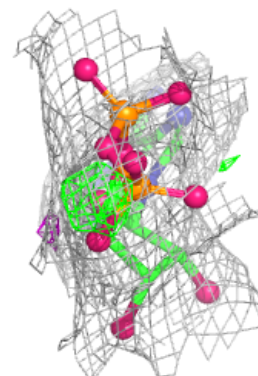
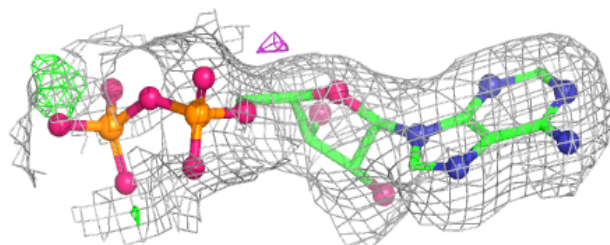
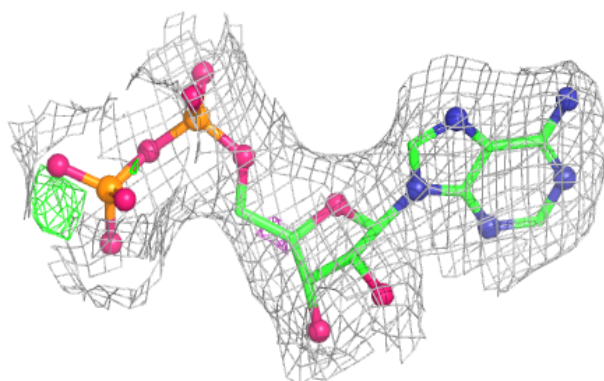


Electron density around ADP g 602:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

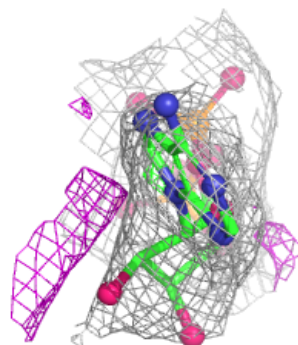
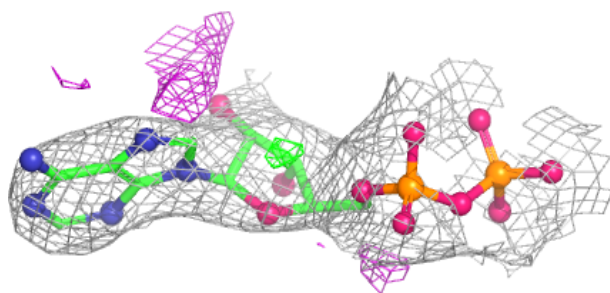
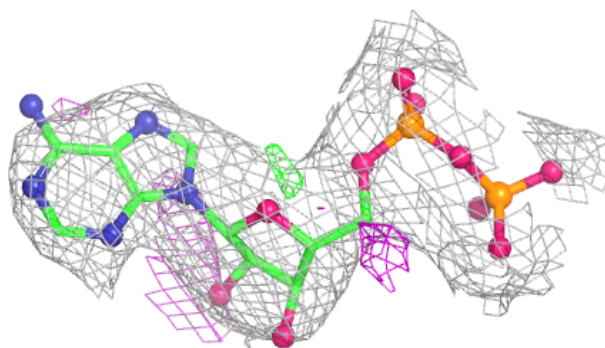
**Electron density around ADP D 602:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

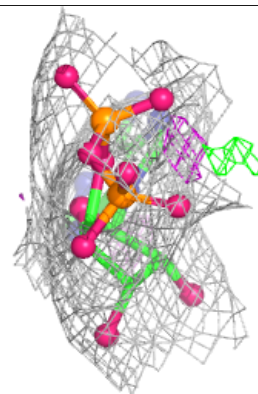
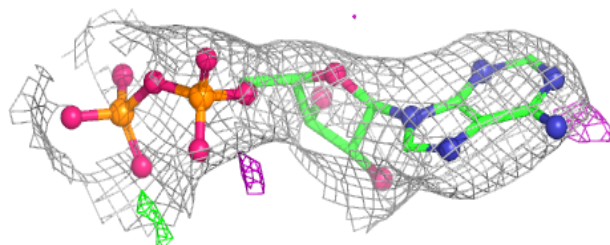
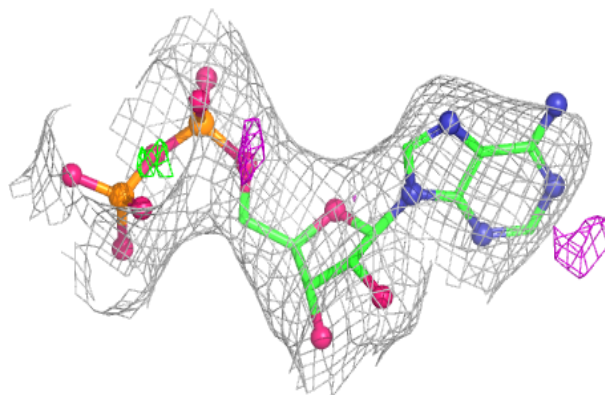


Electron density around ADP a 602:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

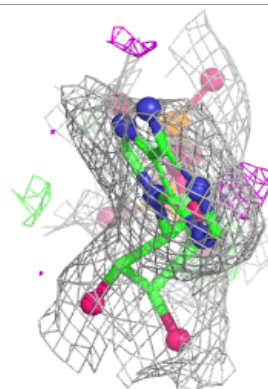
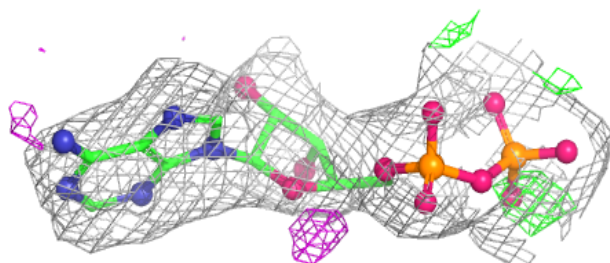
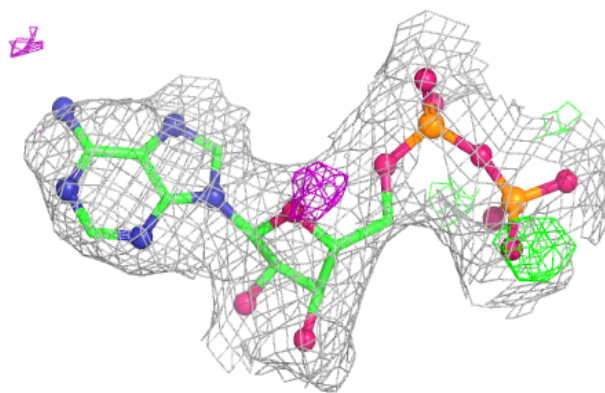
**Electron density around ADP b 602:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

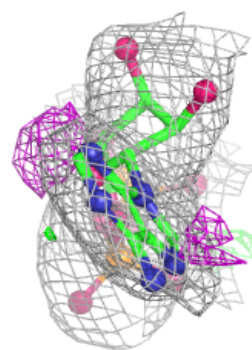
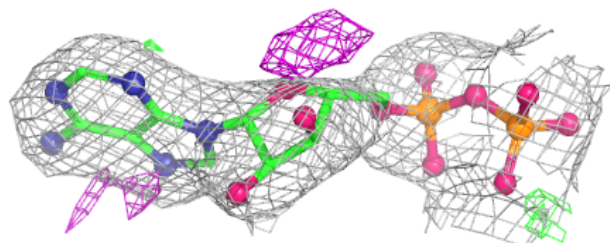
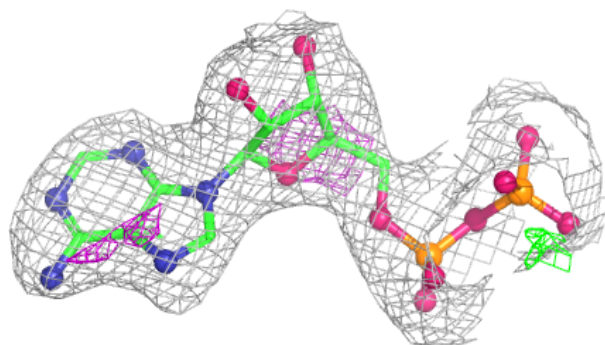


Electron density around ADP E 602:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

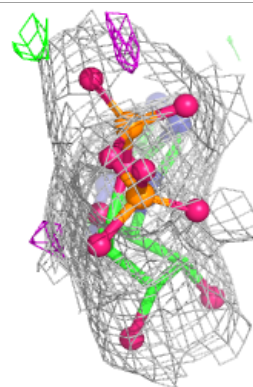
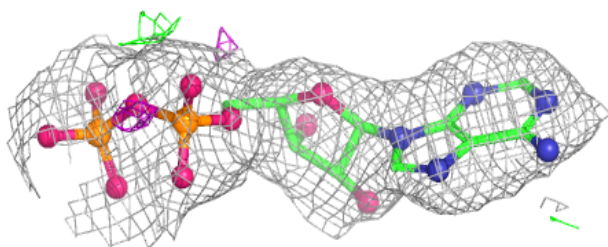
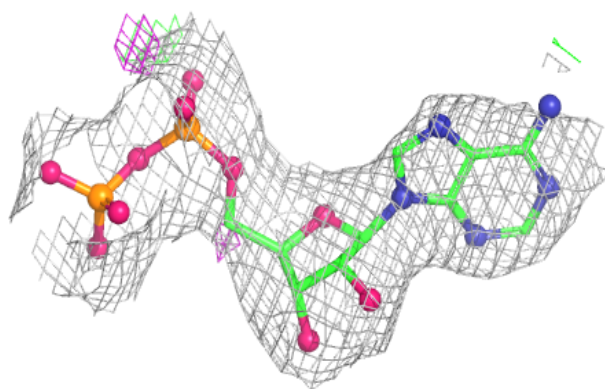
**Electron density around ADP C 602:**

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

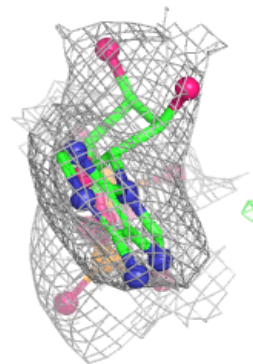
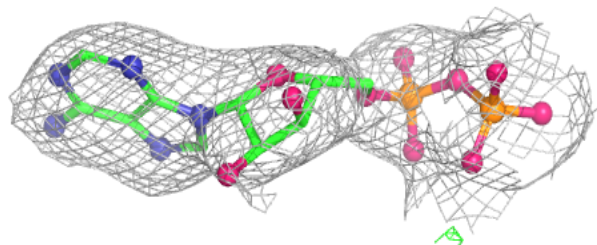
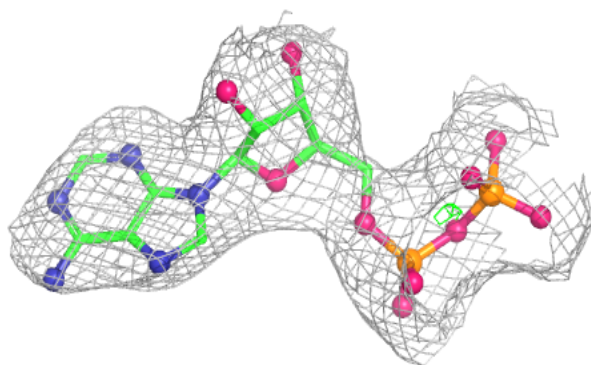


Electron density around ADP A 602:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

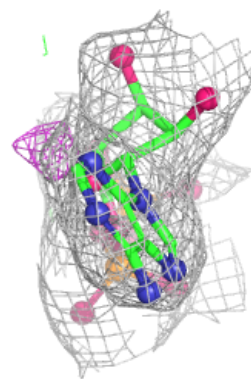
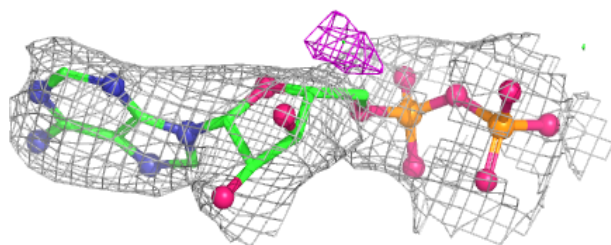
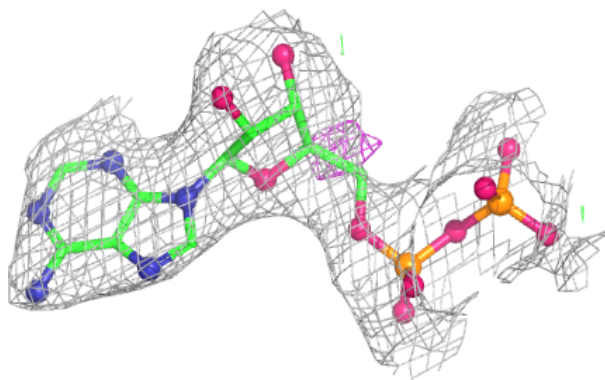
**Electron density around ADP F 602:**

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

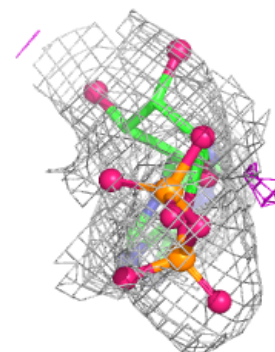
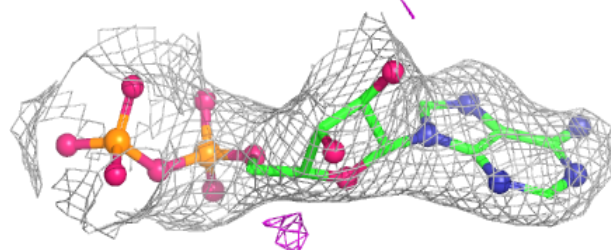
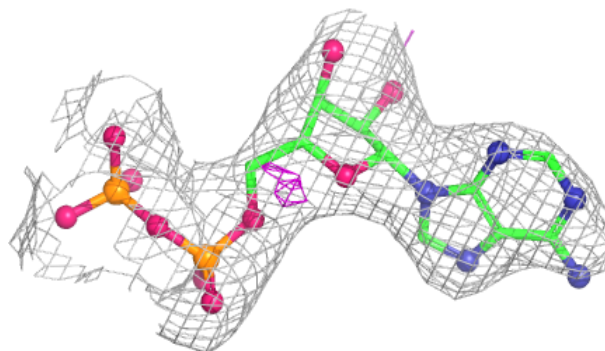


Electron density around ADP G 602:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around ADP B 602:**

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



6.5 Other polymers [i](#)

There are no such residues in this entry.