



Full wwPDB X-ray Structure Validation Report

Jun 16, 2014 – 06:36 PM BST

PDB ID : 4V5W
Title : Grapevine Fanleaf virus
Authors : Schellenberger, P.; Demangeat, G.; Ritzenthaler, C.; Lorber, B.; Sauter, C.
Deposited on : 2011-05-10
Resolution : 3.70 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.

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

A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

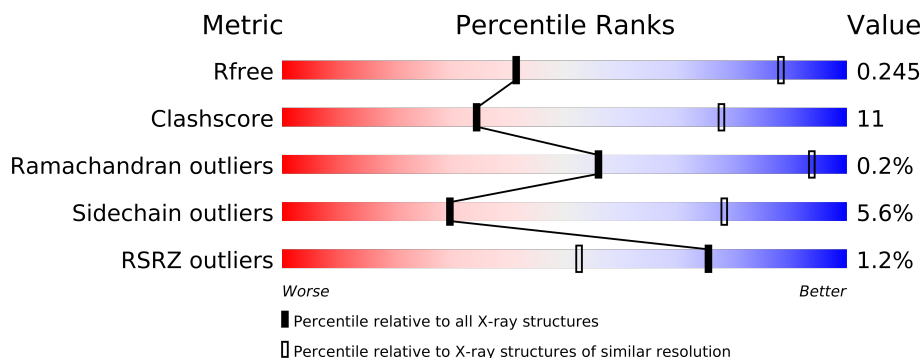
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.16 November 2013
Xtriage (Phenix) : dev-1323
EDS : stable23397
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable23397

1 Overall quality at a glance

The reported resolution of this entry is 3.70 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}	66092	1098 (4.00-3.40)
Clashscore	79885	1009 (3.94-3.46)
Ramachandran outliers	78287	1016 (3.98-3.42)
Sidechain outliers	78261	1014 (3.98-3.42)
RSRZ outliers	66119	1099 (4.00-3.40)

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 on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	AA	504	
1	AB	504	
1	AC	504	
1	AD	504	
1	AE	504	
1	AF	504	
1	AG	504	
1	AH	504	
1	AI	504	
1	AJ	504	
1	AK	504	
1	AL	504	
1	AM	504	
1	AN	504	





Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	AO	504	
1	AP	504	
1	AQ	504	
1	AR	504	
1	AS	504	
1	AT	504	
1	BA	504	
1	BB	504	
1	BC	504	
1	BD	504	
1	BE	504	
1	BF	504	
1	BG	504	
1	BH	504	
1	BI	504	
1	BJ	504	
1	BK	504	
1	BL	504	
1	BM	504	
1	BN	504	
1	BO	504	
1	BP	504	
1	BQ	504	
1	BR	504	
1	BS	504	
1	BT	504	
1	CA	504	
1	CB	504	
1	CC	504	
1	CD	504	
1	CE	504	
1	CF	504	
1	CG	504	
1	CH	504	
1	CI	504	
1	CJ	504	
1	CK	504	
1	CL	504	
1	CM	504	
1	CN	504	
1	CO	504	
1	CP	504	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	CQ	504	
1	CR	504	
1	CS	504	
1	CT	504	

2 Entry composition

There is only 1 type of molecule in this entry. The entry contains 237060 atoms, of which 0 are hydrogen and 0 are deuterium.

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 COAT PROTEIN.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AB	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AC	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AD	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AE	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AF	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AG	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AH	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AI	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AJ	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AK	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AL	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AM	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AN	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AO	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	AP	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AQ	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	AR	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	AS	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	AT	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BA	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BB	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BC	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BD	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BE	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BF	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BG	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BH	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BI	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BJ	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BK	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BL	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BM	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BN	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BO	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BP	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BQ	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	BR	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BS	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	BT	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CA	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CB	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CC	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CD	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CE	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CF	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CG	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CH	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CI	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CJ	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CK	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CL	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CM	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CN	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CO	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CP	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CQ	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0
1	CR	504	Total 3951	C 2555	N 653	O 721	S 22	0	0	0

Continued on next page...

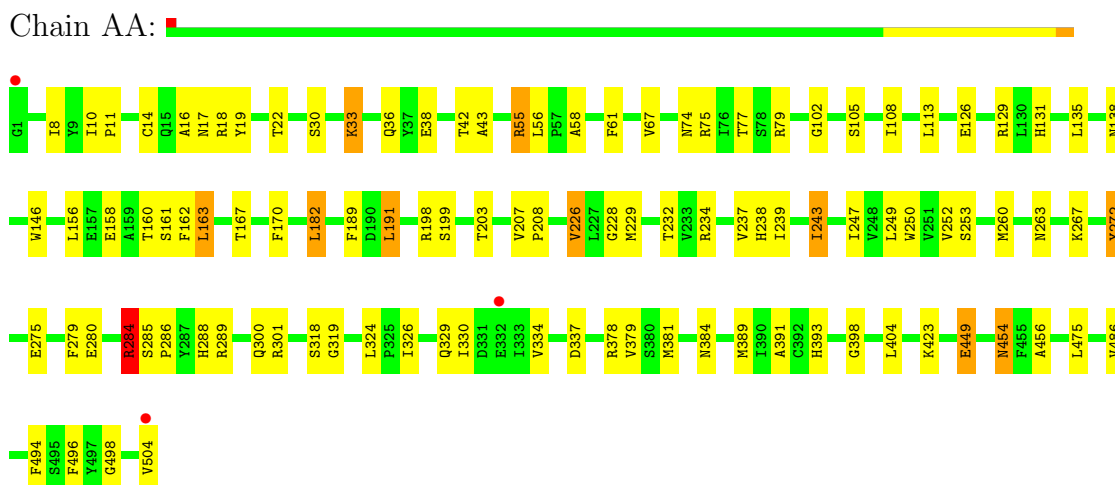
Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	CS	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			
1	CT	504	Total	C	N	O	S	0	0	0
			3951	2555	653	721	22			

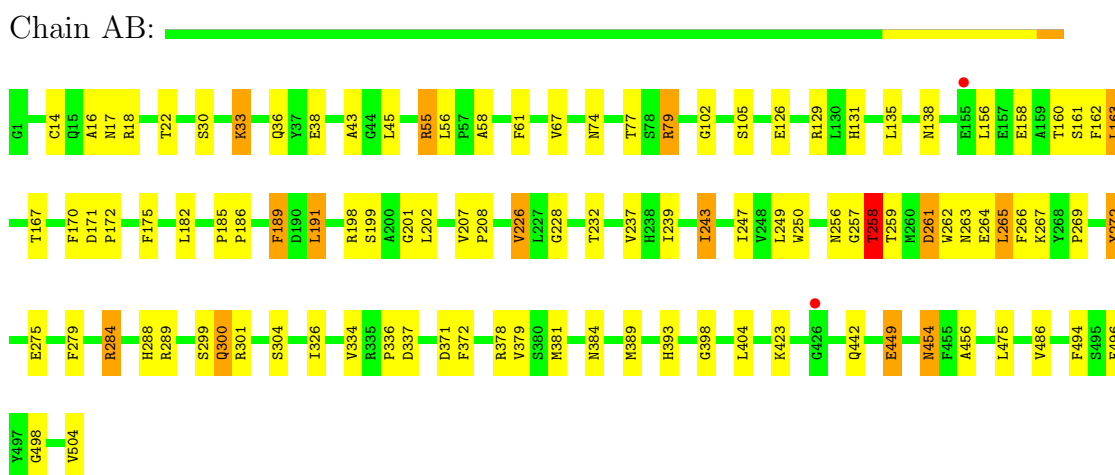
3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry 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.

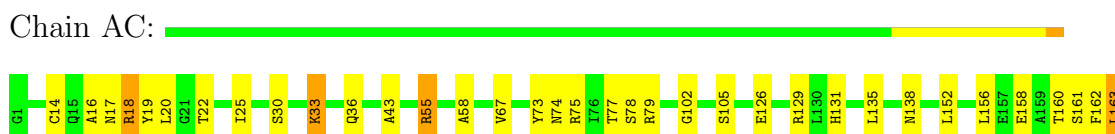
• Molecule 1: COAT PROTEIN

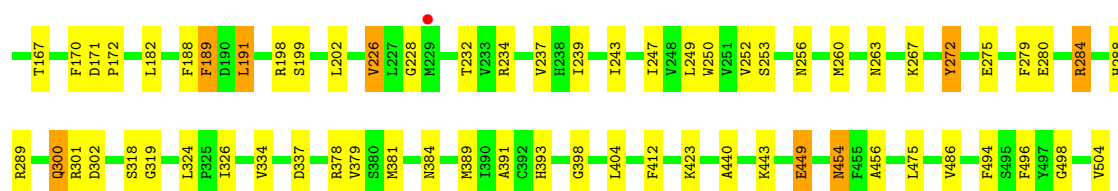


• Molecule 1: COAT PROTEIN



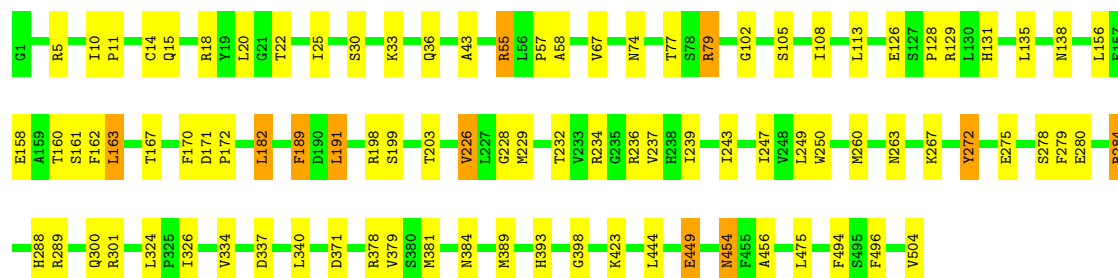
• Molecule 1: COAT PROTEIN





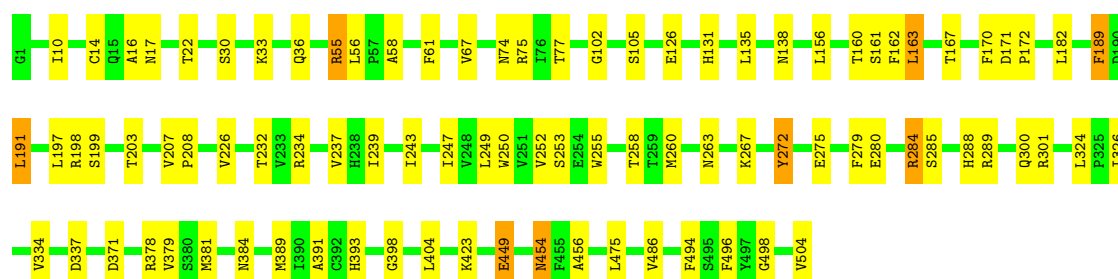
• Molecule 1: COAT PROTEIN

Chain AD:



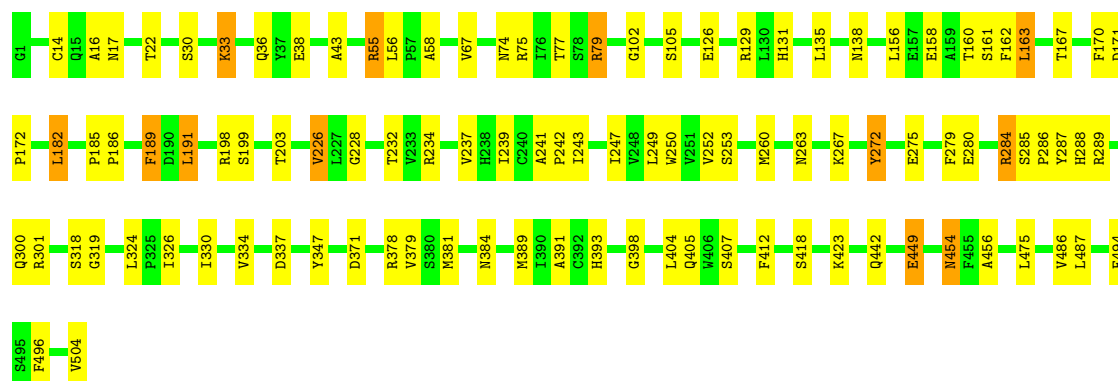
• Molecule 1: COAT PROTEIN

Chain AE:



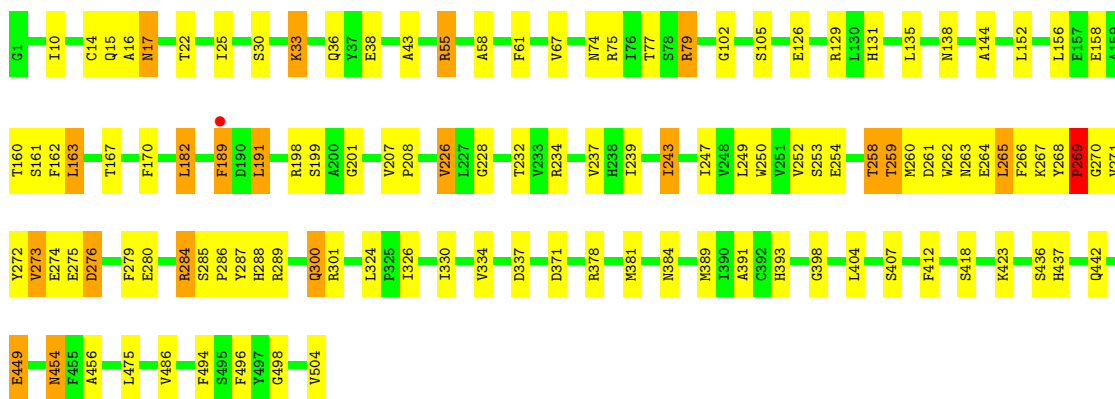
• Molecule 1: COAT PROTEIN

Chain AF:



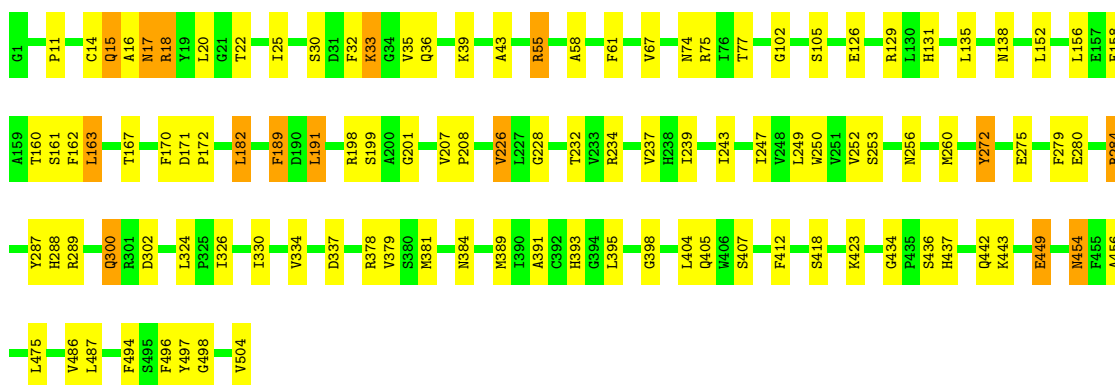
• Molecule 1: COAT PROTEIN

Chain AG:



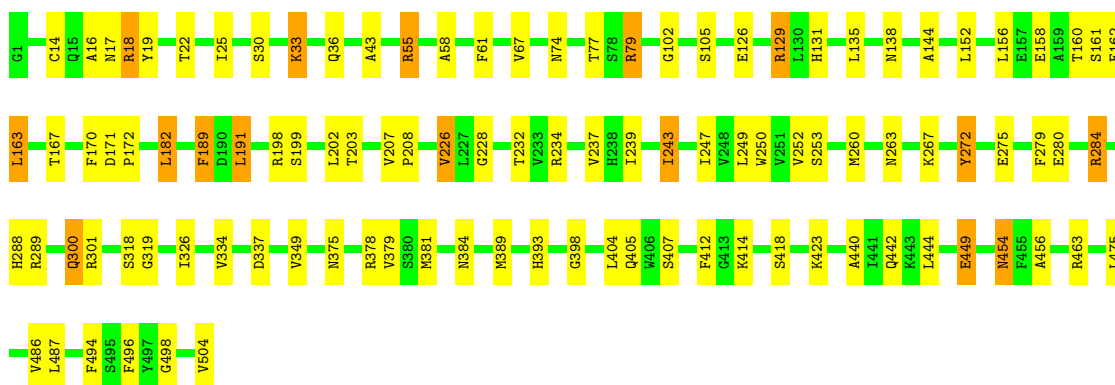
• Molecule 1: COAT PROTEIN

Chain AH:



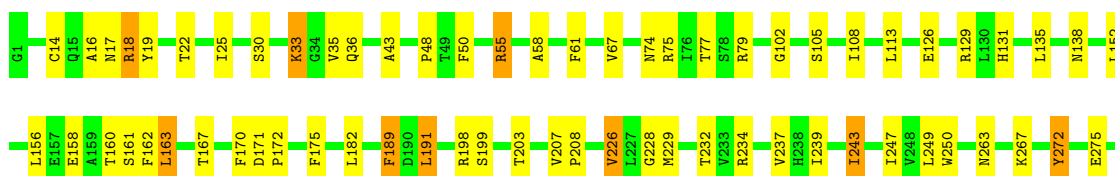
• Molecule 1: COAT PROTEIN

Chain AI:



• Molecule 1: COAT PROTEIN

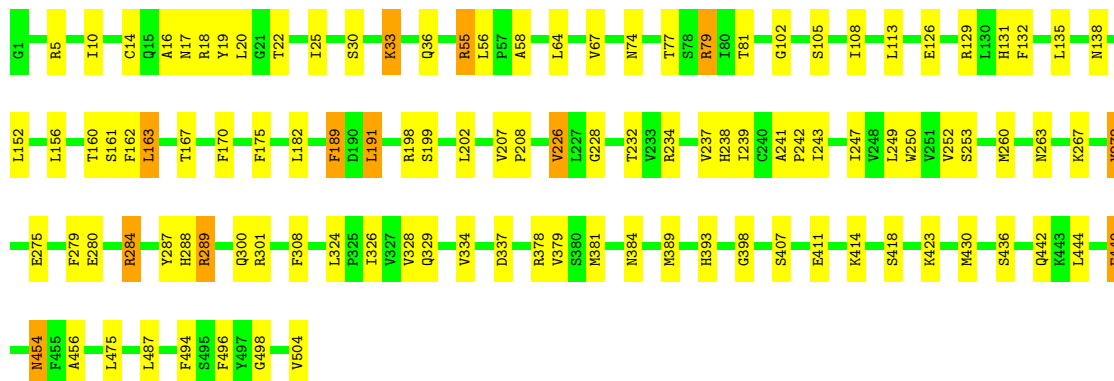
Chain AJ:





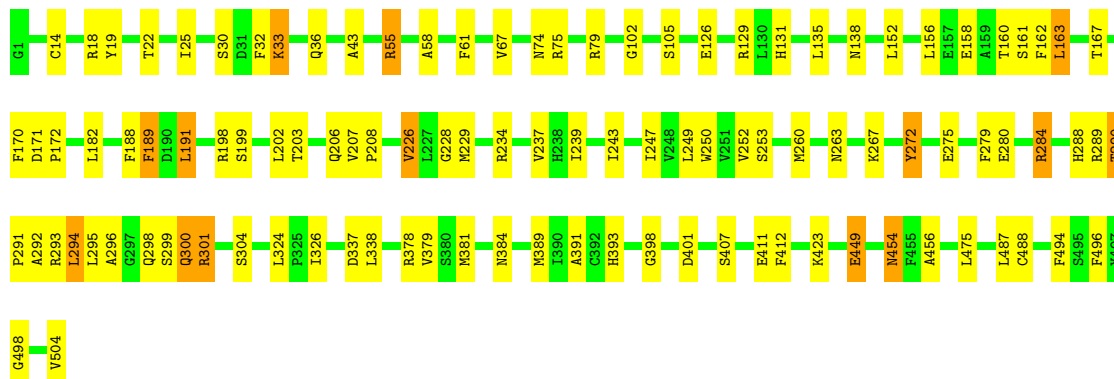
• Molecule 1: COAT PROTEIN

Chain AN:



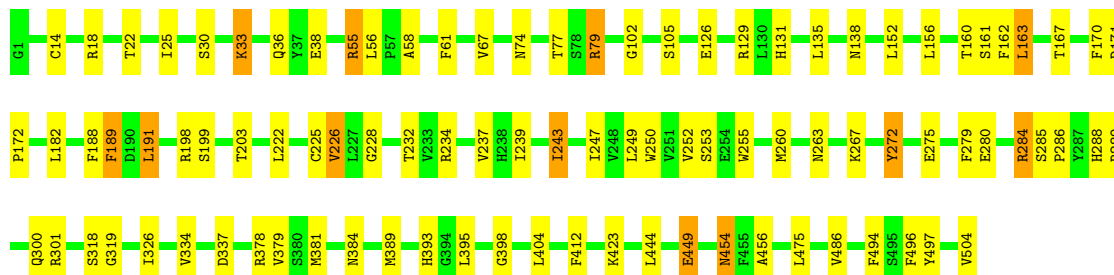
• Molecule 1: COAT PROTEIN

Chain AO:



• Molecule 1: COAT PROTEIN

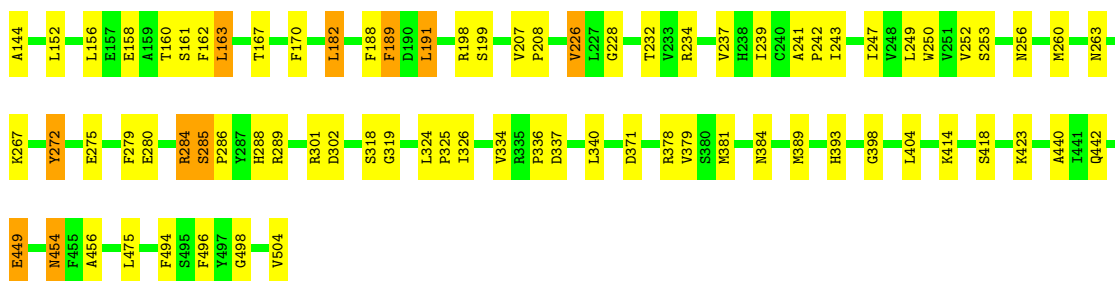
Chain AP:



• Molecule 1: COAT PROTEIN

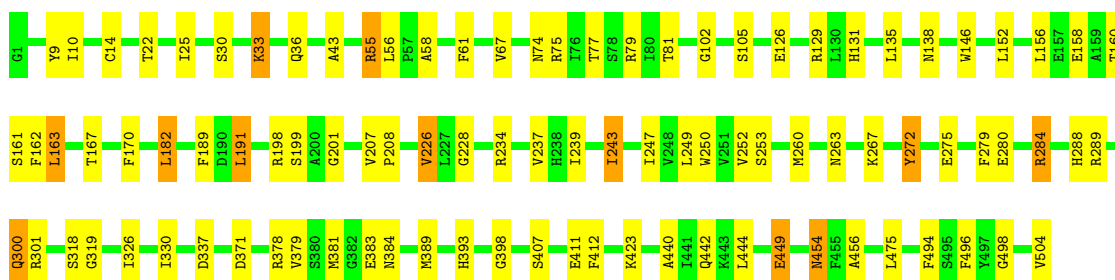
Chain AQ:





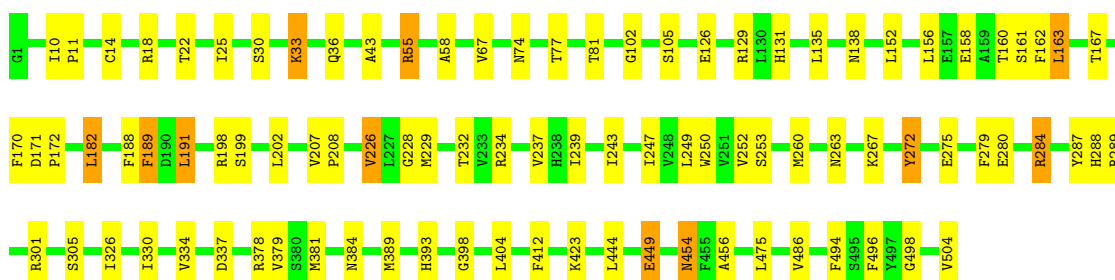
• Molecule 1: COAT PROTEIN

Chain AR:



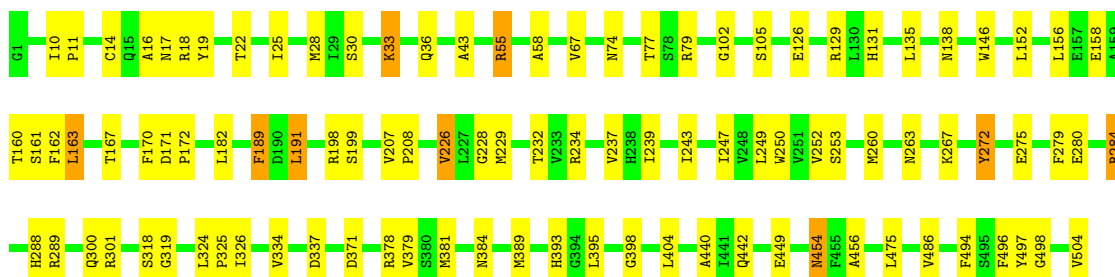
• Molecule 1: COAT PROTEIN

Chain AS:



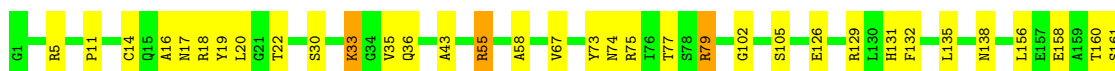
• Molecule 1: COAT PROTEIN

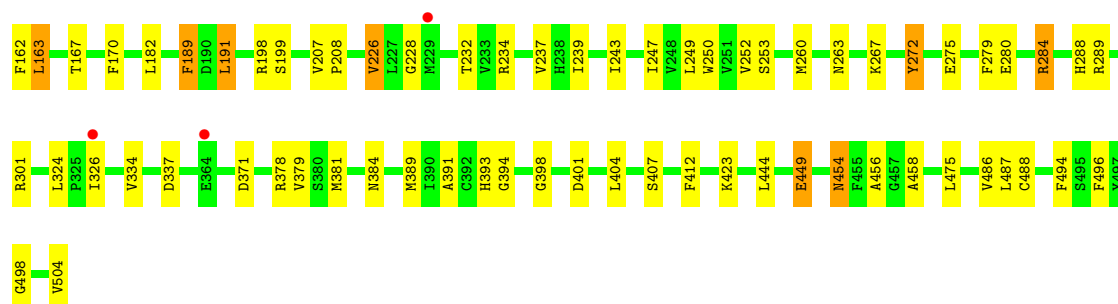
Chain AT:



• Molecule 1: COAT PROTEIN

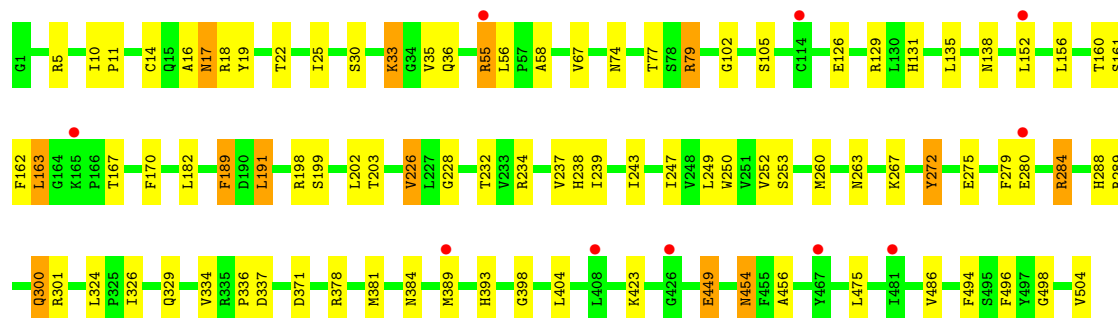
Chain BA:

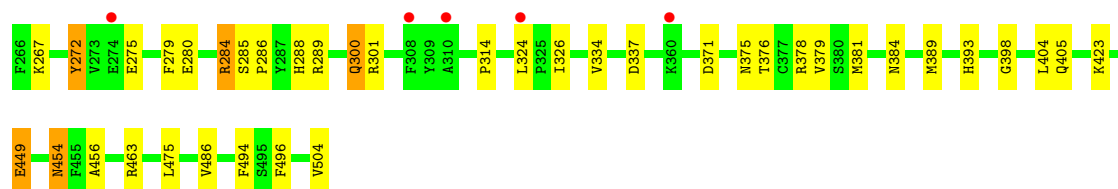




• Molecule 1: COAT PROTEIN

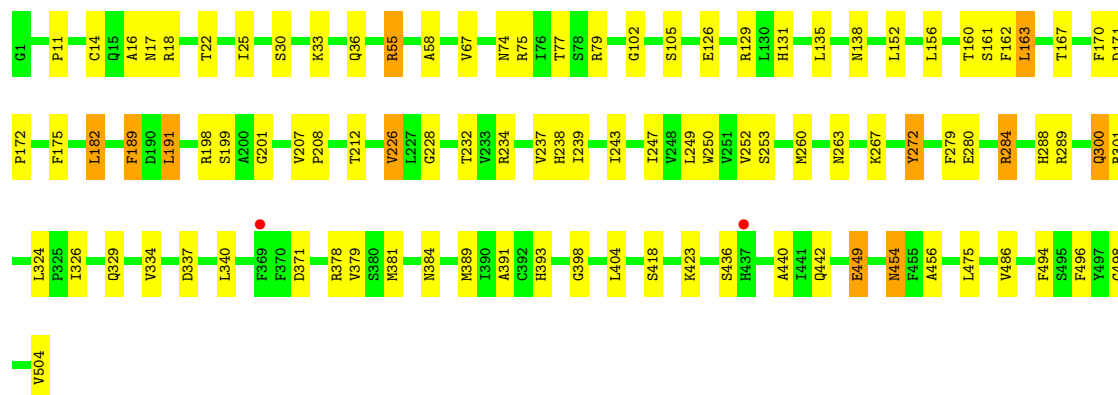
Chain BB:





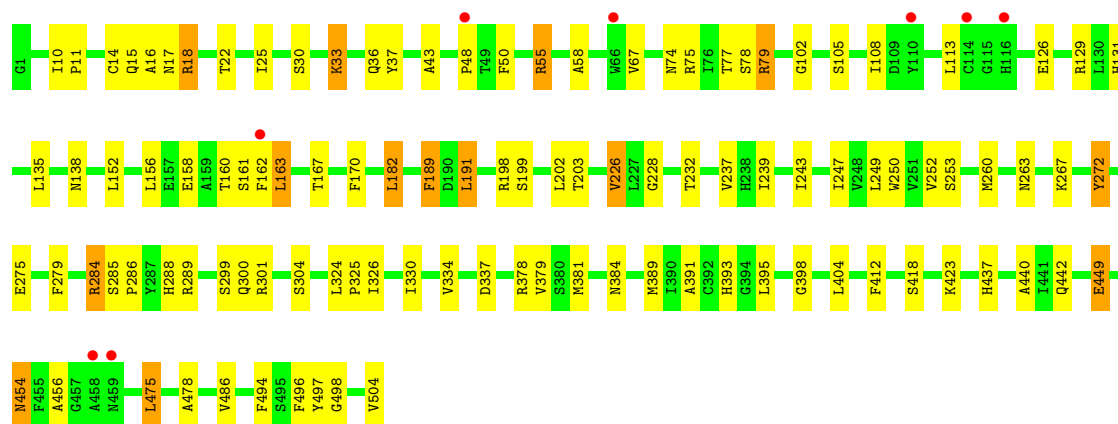
• Molecule 1: COAT PROTEIN

Chain BE:



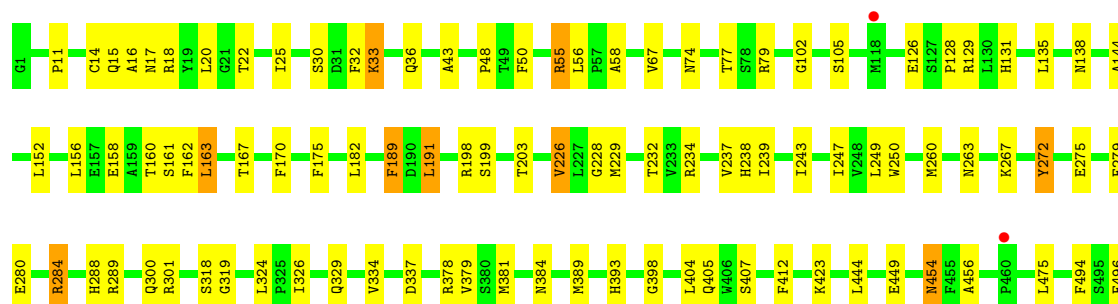
• Molecule 1: COAT PROTEIN

Chain BF:



• Molecule 1: COAT PROTEIN

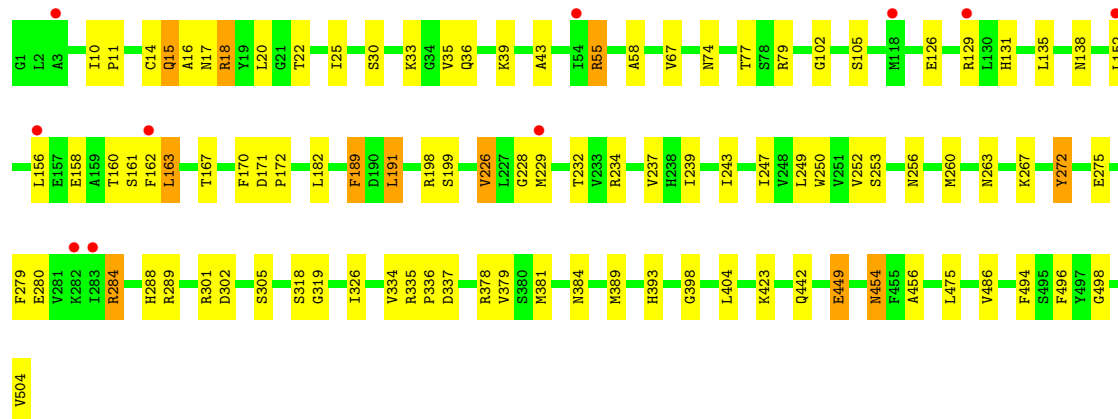
Chain BG:





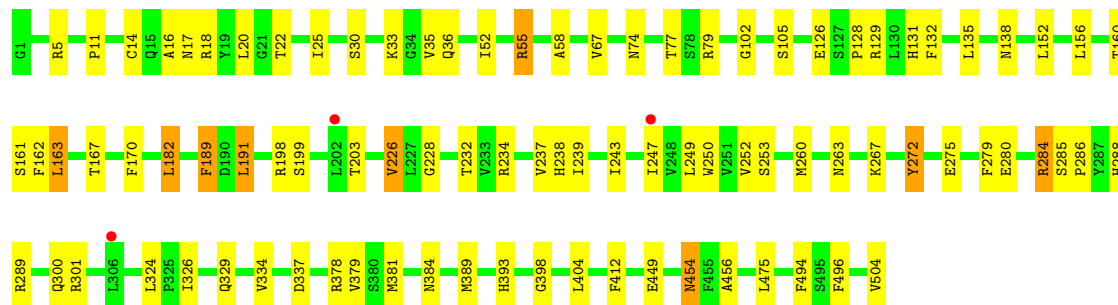
• Molecule 1: COAT PROTEIN

Chain BH:



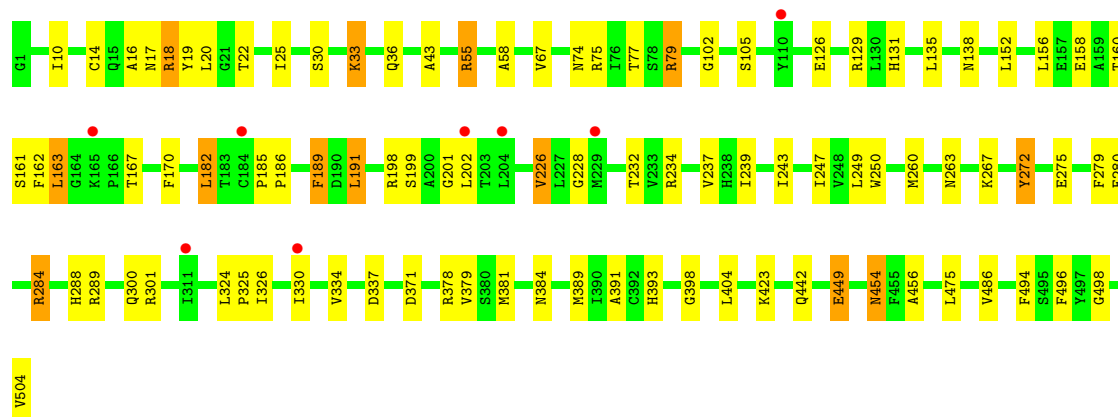
• Molecule 1: COAT PROTEIN

Chain BI:



• Molecule 1: COAT PROTEIN

Chain BJ:



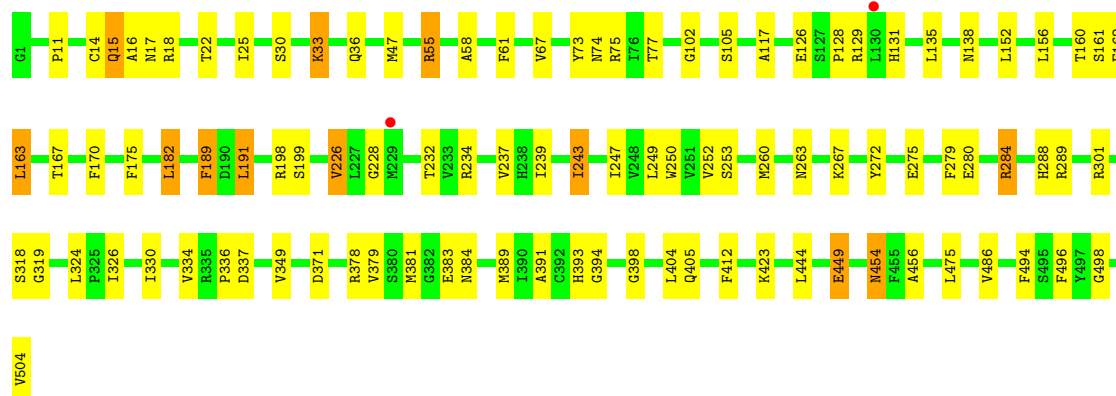
• Molecule 1: COAT PROTEIN

Chain BK:



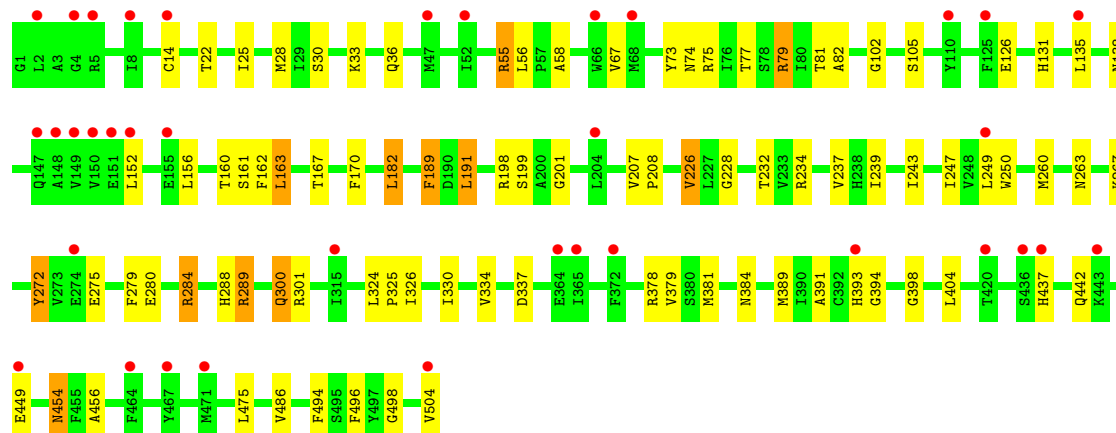
• Molecule 1: COAT PROTEIN

Chain BO:



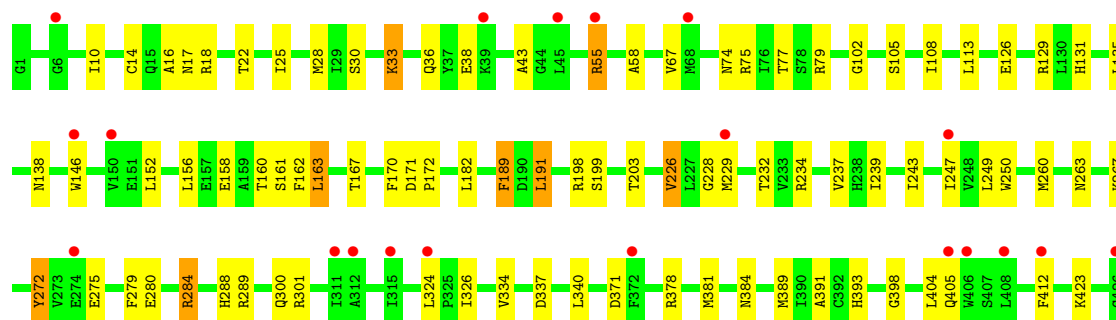
• Molecule 1: COAT PROTEIN

Chain BP:



• Molecule 1: COAT PROTEIN

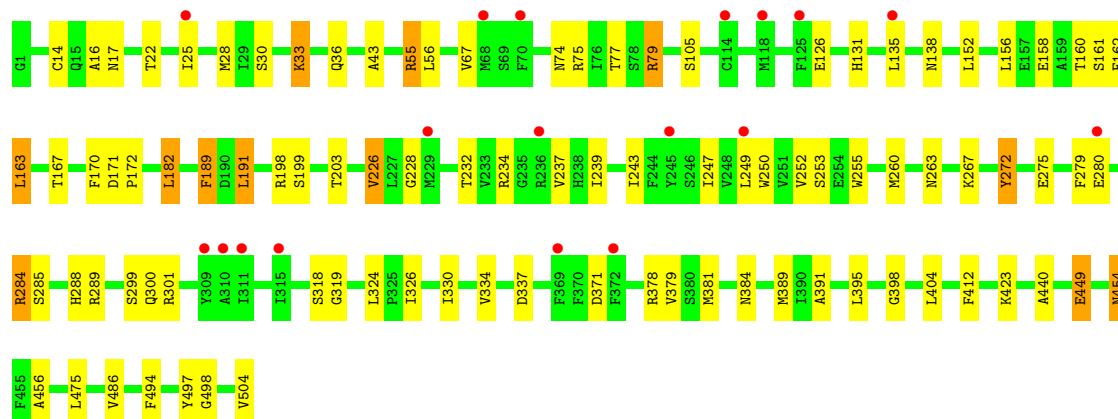
Chain BQ:





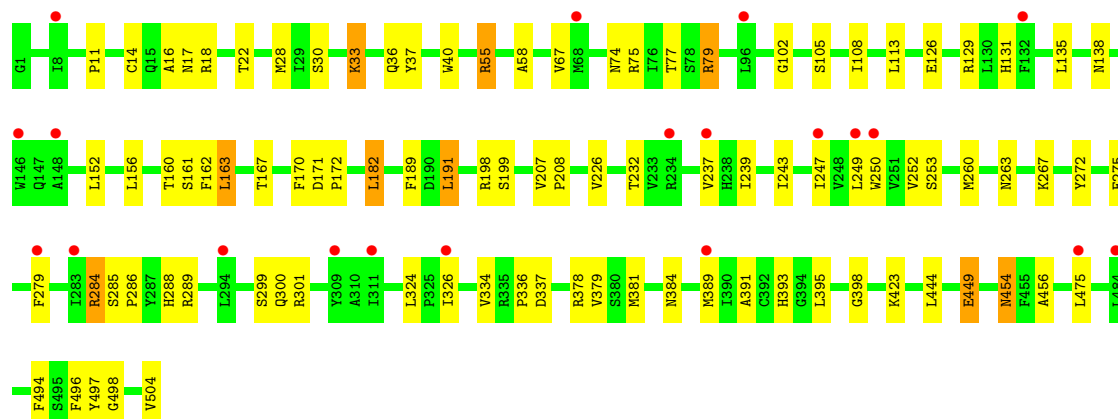
• Molecule 1: COAT PROTEIN

Chain BR:



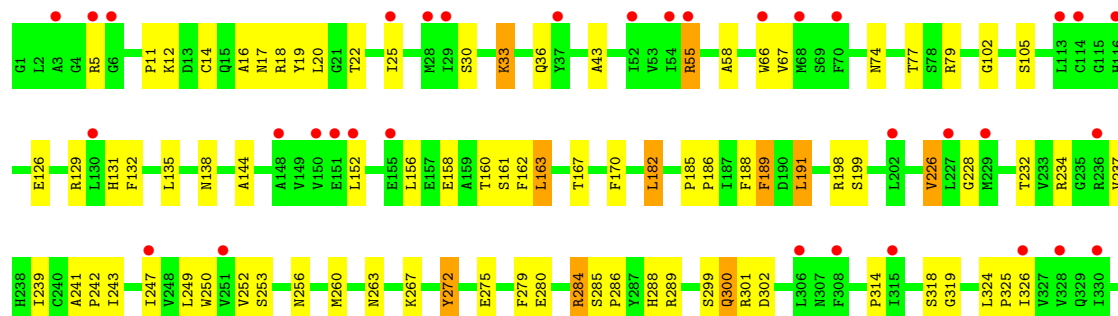
• Molecule 1: COAT PROTEIN

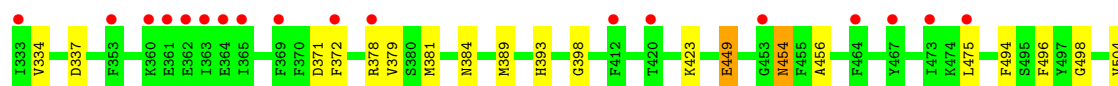
Chain BS:



• Molecule 1: COAT PROTEIN

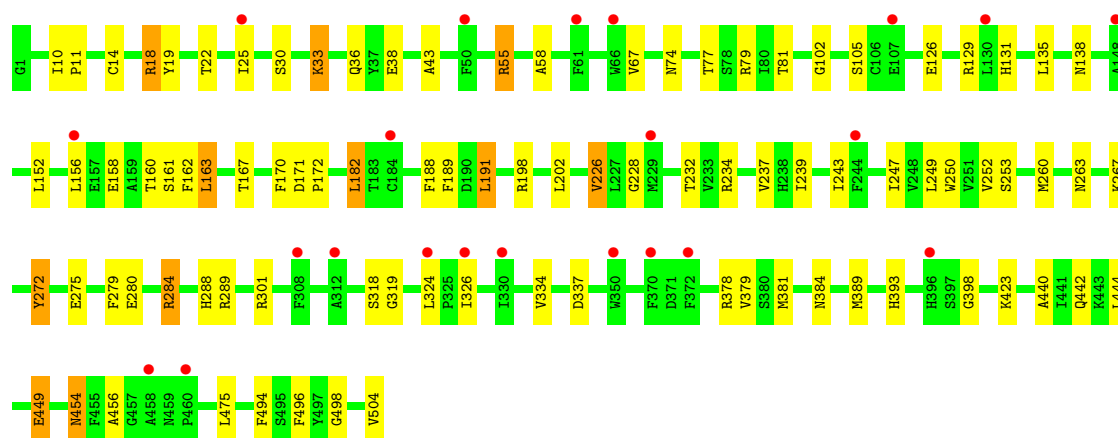
Chain BT:





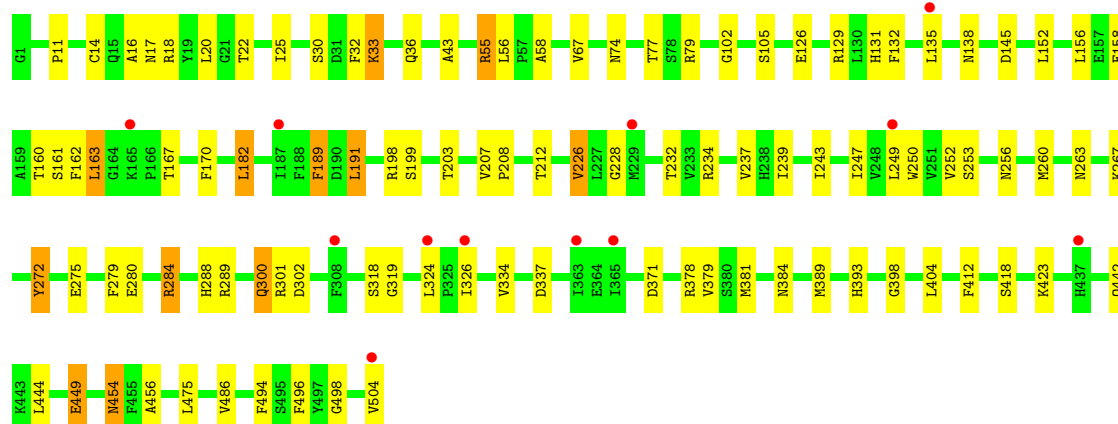
• Molecule 1: COAT PROTEIN

Chain CA:



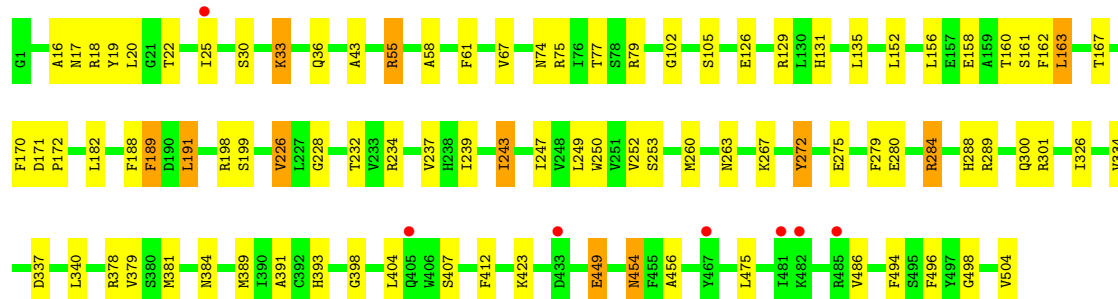
• Molecule 1: COAT PROTEIN

Chain CB:



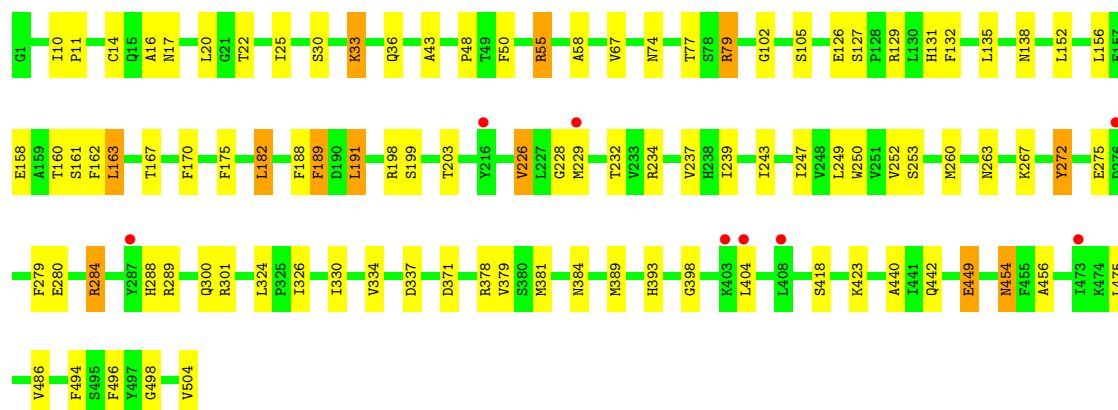
• Molecule 1: COAT PROTEIN

Chain CC:



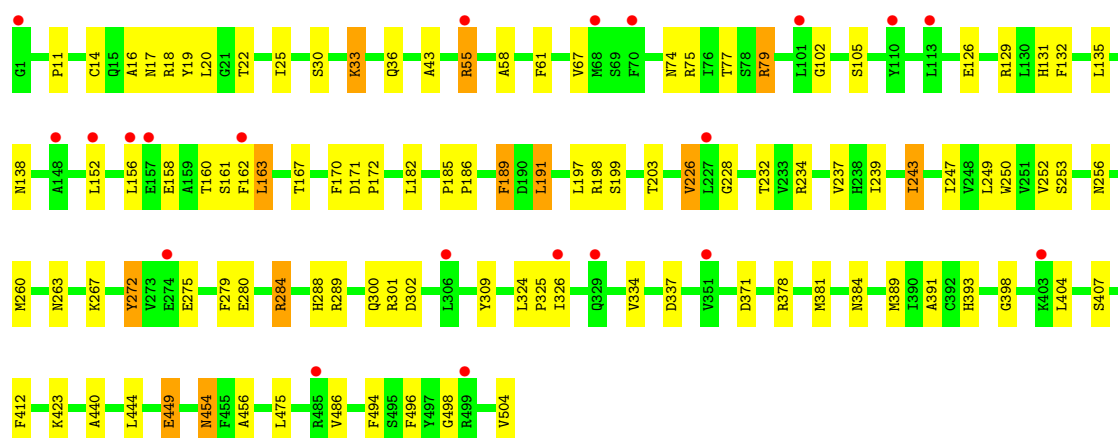
• Molecule 1: COAT PROTEIN

Chain CD:



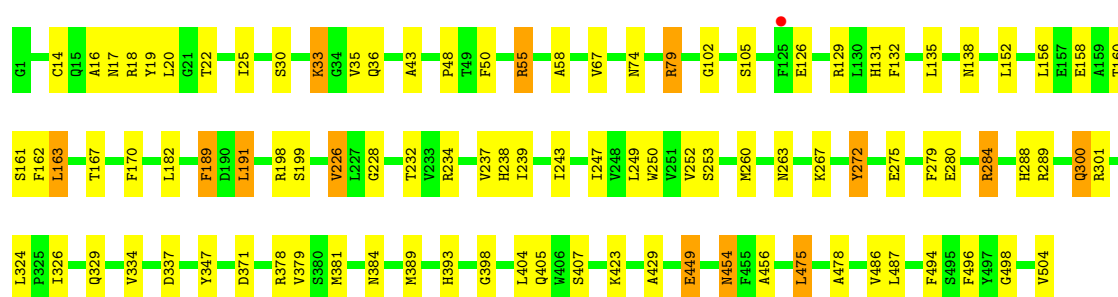
• Molecule 1: COAT PROTEIN

Chain CE:



• Molecule 1: COAT PROTEIN

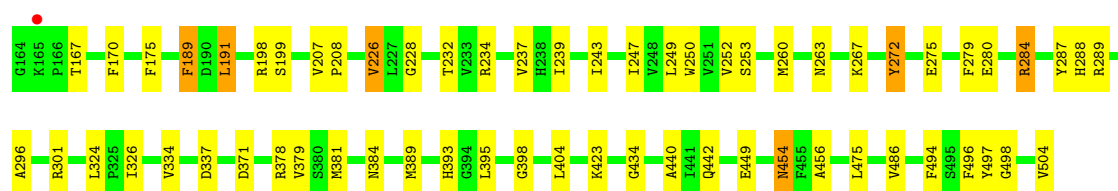
Chain CF:



• Molecule 1: COAT PROTEIN

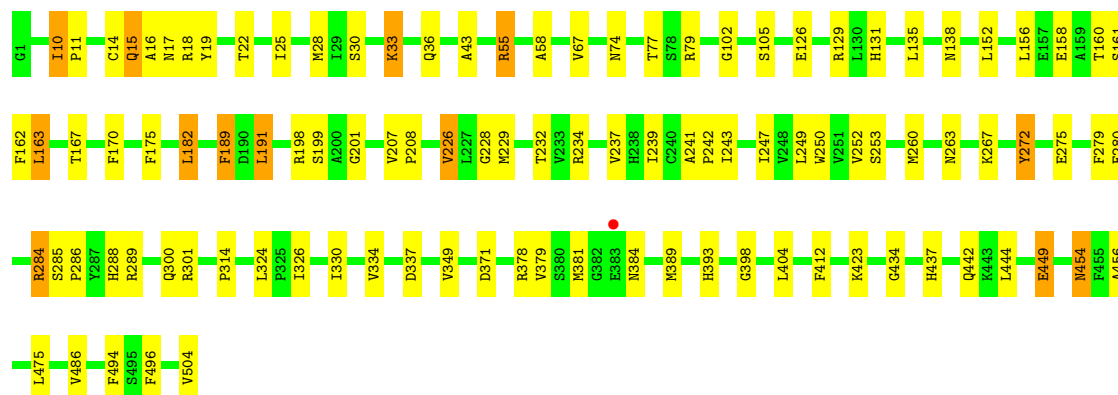
Chain CG:





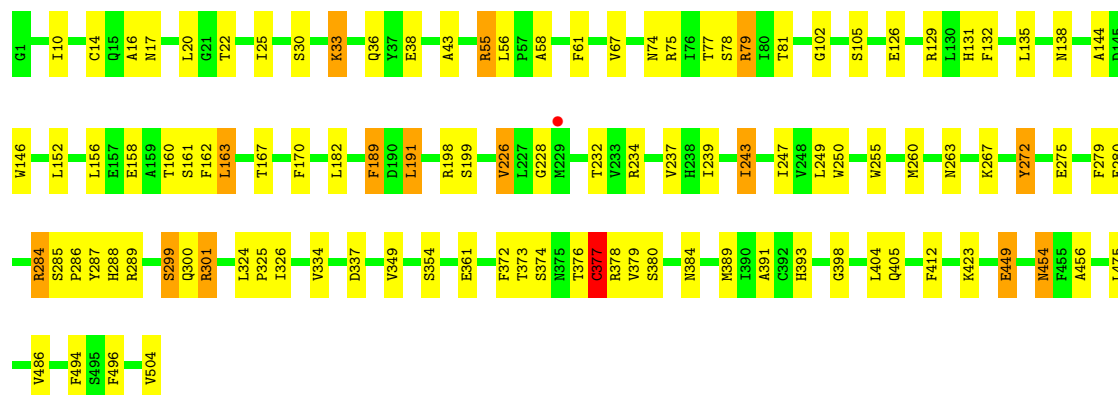
• Molecule 1: COAT PROTEIN

Chain CH: A horizontal bar chart representing the sequence of Chain CH. The bar is primarily green, indicating good quality, with a small yellow segment at the end.



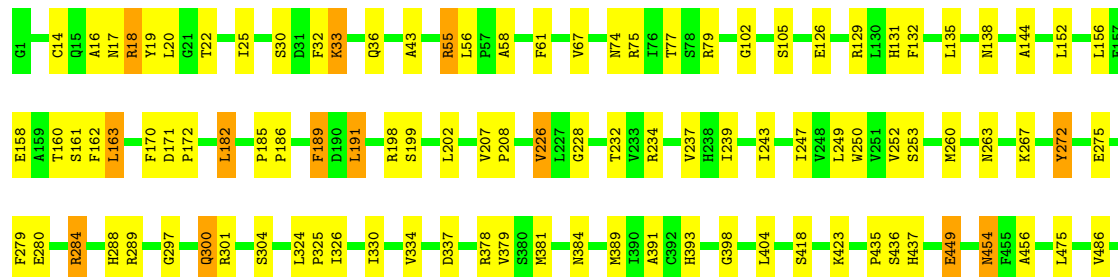
• Molecule 1: COAT PROTEIN

Chain CI: A horizontal bar chart representing the sequence of Chain CI. The bar is primarily green, indicating good quality, with a small yellow segment at the end.



• Molecule 1: COAT PROTEIN

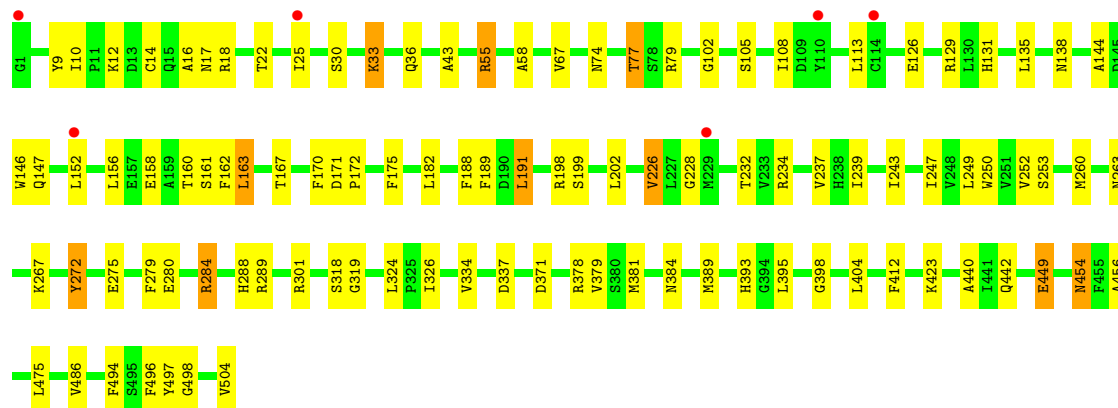
Chain CJ: A horizontal bar chart representing the sequence of Chain CJ. The bar is primarily green, indicating good quality, with a small yellow segment at the end.





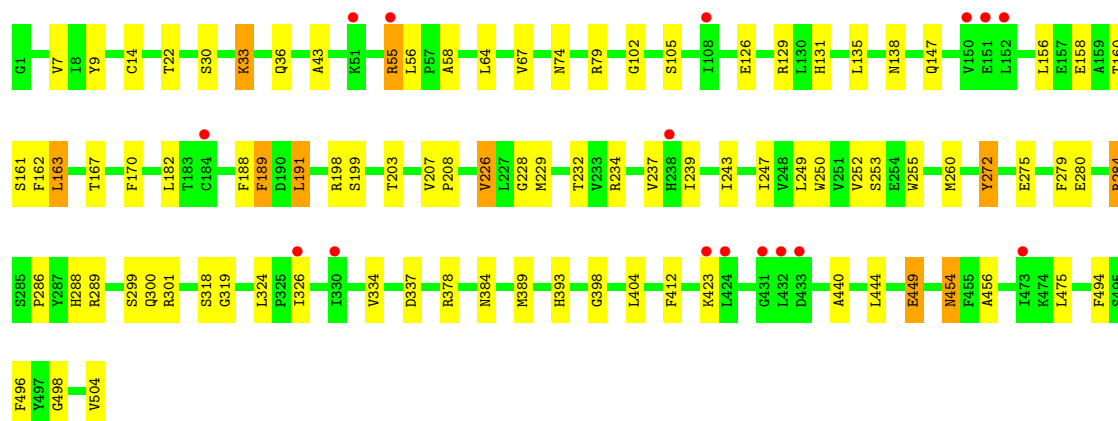
• Molecule 1: COAT PROTEIN

Chain CK:



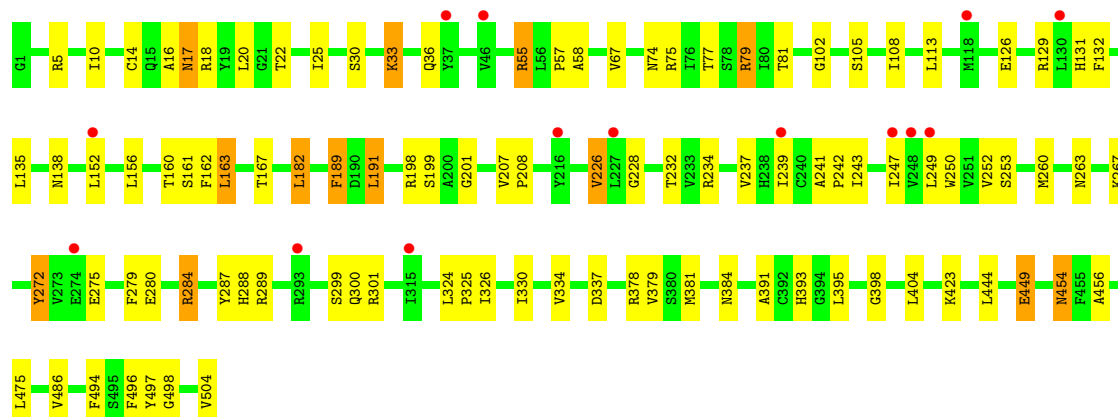
• Molecule 1: COAT PROTEIN

Chain CL:

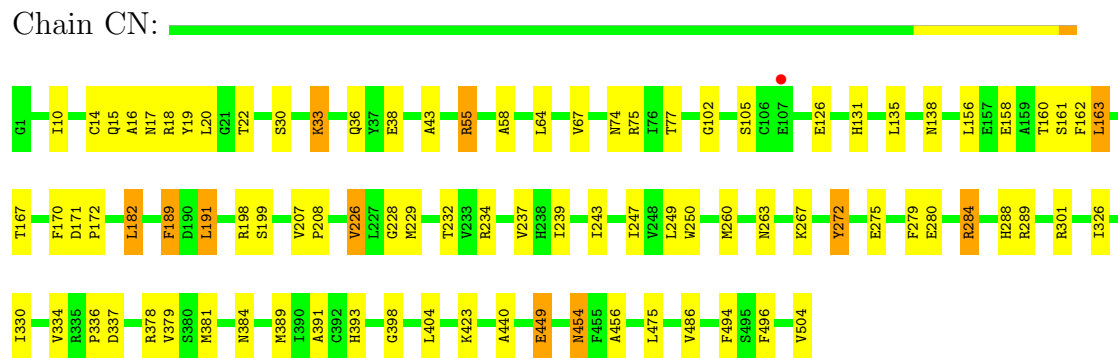


• Molecule 1: COAT PROTEIN

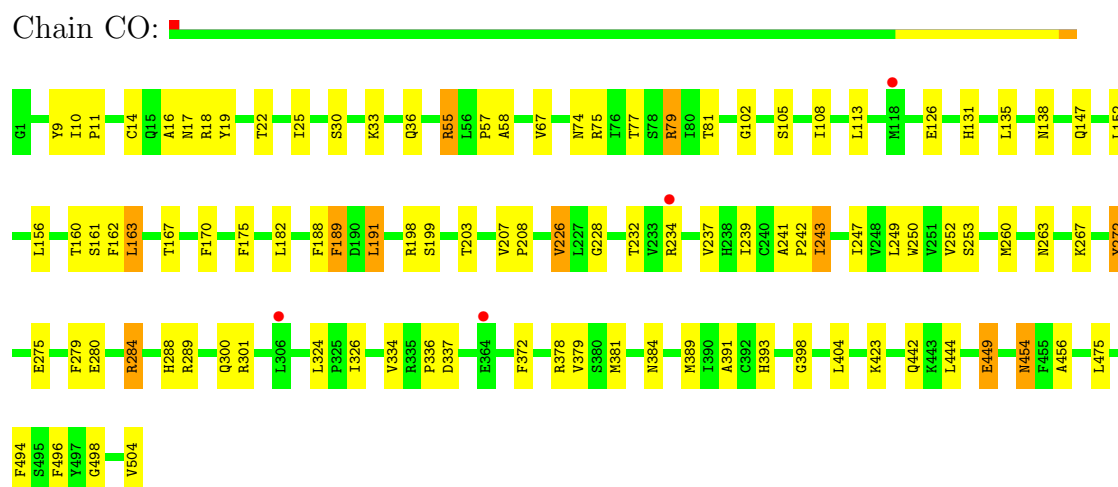
Chain CM:



- Molecule 1: COAT PROTEIN



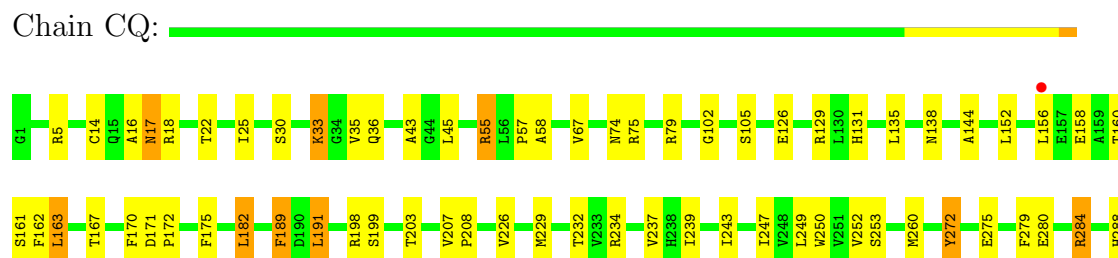
- Molecule 1: COAT PROTEIN

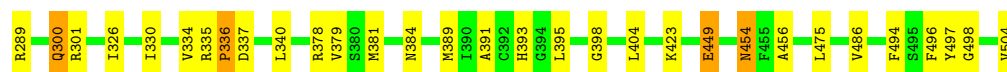


- Molecule 1: COAT PROTEIN



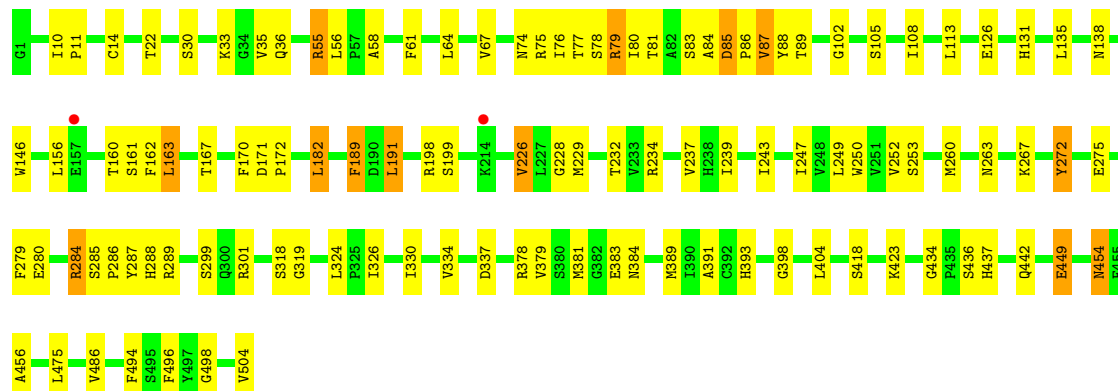
- Molecule 1: COAT PROTEIN





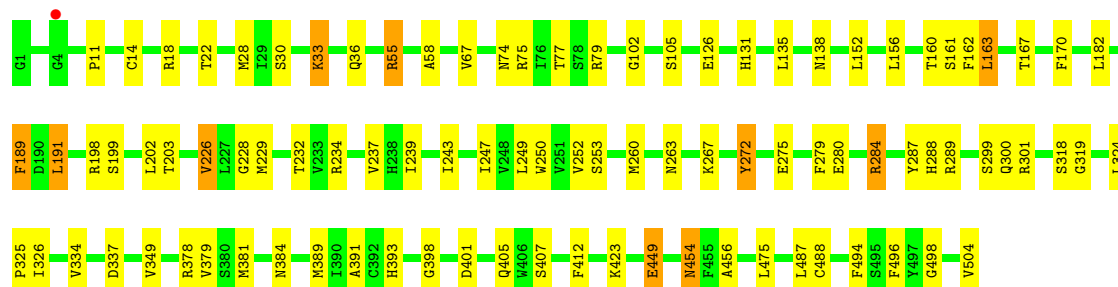
• Molecule 1: COAT PROTEIN

Chain CR:



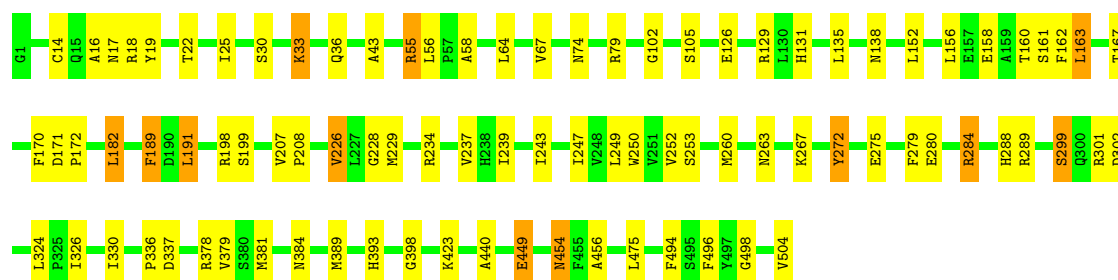
• Molecule 1: COAT PROTEIN

Chain CS:



• Molecule 1: COAT PROTEIN

Chain CT:



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	283.60Å 295.50Å 394.30Å 90.00° 91.60° 90.00°	Depositor
Resolution (Å)	49.80 – 3.70 98.52 – 3.70	Depositor EDS
% Data completeness (in resolution range)	99.0 (49.80-3.70) 91.4 (98.52-3.70)	Depositor EDS
R_{merge}	0.27	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.88 (at 3.67Å)	Xtriage
Refinement program	PHENIX (PHENIX.REFINE)	Depositor
R, R_{free}	0.232 , 0.247 0.240 , 0.245	Depositor DCC
R_{free} test set	34196 reflections (5.28%)	DCC
Wilson B-factor (Å ²)	66.2	Xtriage
Anisotropy	0.406	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.33 , 42.6	EDS
Estimated twinning fraction	0.088 for -k,-h,-l 0.087 for k,h,-l 0.089 for h,-k,-l	Xtriage
L-test for twinning	$\langle L \rangle = 0.38$, $\langle L^2 \rangle = 0.21$	Xtriage
Outliers	0 of 682381 reflections	Xtriage
F_o, F_c correlation	0.83	EDS
Total number of atoms	237060	wwPDB-VP
Average B, all atoms (Å ²)	91.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.66% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	AA	0.50	0/4058	0.62	2/5517 (0.0%)
1	AB	0.56	2/4058 (0.0%)	0.64	2/5517 (0.0%)
1	AC	0.49	2/4058 (0.0%)	0.62	0/5517
1	AD	0.50	2/4058 (0.0%)	0.62	0/5517
1	AE	0.53	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	AF	0.49	1/4058 (0.0%)	0.62	1/5517 (0.0%)
1	AG	0.59	1/4058 (0.0%)	0.65	2/5517 (0.0%)
1	AH	0.51	2/4058 (0.0%)	0.62	0/5517
1	AI	0.50	2/4058 (0.0%)	0.62	0/5517
1	AJ	0.49	1/4058 (0.0%)	0.62	0/5517
1	AK	0.49	2/4058 (0.0%)	0.61	0/5517
1	AL	0.53	2/4058 (0.0%)	0.64	0/5517
1	AM	0.51	2/4058 (0.0%)	0.62	1/5517 (0.0%)
1	AN	0.50	1/4058 (0.0%)	0.63	1/5517 (0.0%)
1	AO	0.57	2/4058 (0.0%)	0.66	0/5517
1	AP	0.51	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	AQ	0.50	1/4058 (0.0%)	0.61	0/5517
1	AR	0.52	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	AS	0.51	1/4058 (0.0%)	0.62	0/5517
1	AT	0.49	1/4058 (0.0%)	0.61	0/5517
1	BA	0.49	1/4058 (0.0%)	0.63	0/5517
1	BB	0.52	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	BC	0.49	1/4058 (0.0%)	0.62	0/5517
1	BD	0.48	2/4058 (0.0%)	0.62	0/5517
1	BE	0.50	2/4058 (0.0%)	0.63	0/5517
1	BF	0.51	2/4058 (0.0%)	0.62	0/5517
1	BG	0.50	2/4058 (0.0%)	0.62	1/5517 (0.0%)
1	BH	0.49	2/4058 (0.0%)	0.62	0/5517
1	BI	0.51	1/4058 (0.0%)	0.63	0/5517
1	BJ	0.50	1/4058 (0.0%)	0.62	0/5517
1	BK	0.49	2/4058 (0.0%)	0.61	0/5517
1	BL	0.52	3/4058 (0.1%)	0.62	0/5517
1	BM	0.53	3/4058 (0.1%)	0.64	1/5517 (0.0%)
1	BN	0.51	2/4058 (0.0%)	0.63	0/5517

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	BO	0.51	3/4058 (0.1%)	0.63	0/5517
1	BP	0.53	2/4058 (0.0%)	0.65	1/5517 (0.0%)
1	BQ	0.51	2/4058 (0.0%)	0.62	0/5517
1	BR	0.51	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	BS	0.50	0/4058	0.62	0/5517
1	BT	0.48	1/4058 (0.0%)	0.62	0/5517
1	CA	0.50	0/4058	0.62	0/5517
1	CB	0.51	2/4058 (0.0%)	0.62	1/5517 (0.0%)
1	CC	0.49	1/4058 (0.0%)	0.62	0/5517
1	CD	0.50	2/4058 (0.0%)	0.62	0/5517
1	CE	0.50	1/4058 (0.0%)	0.62	0/5517
1	CF	0.48	1/4058 (0.0%)	0.62	0/5517
1	CG	0.51	1/4058 (0.0%)	0.63	0/5517
1	CH	0.49	1/4058 (0.0%)	0.62	0/5517
1	CI	0.55	1/4058 (0.0%)	0.64	1/5517 (0.0%)
1	CJ	0.50	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	CK	0.48	0/4058	0.62	0/5517
1	CL	0.52	2/4058 (0.0%)	0.63	1/5517 (0.0%)
1	CM	0.51	1/4058 (0.0%)	0.62	0/5517
1	CN	0.51	1/4058 (0.0%)	0.63	0/5517
1	CO	0.51	2/4058 (0.0%)	0.63	0/5517
1	CP	0.52	2/4058 (0.0%)	0.62	0/5517
1	CQ	0.50	2/4058 (0.0%)	0.62	0/5517
1	CR	0.54	3/4058 (0.1%)	0.64	1/5517 (0.0%)
1	CS	0.52	2/4058 (0.0%)	0.63	0/5517
1	CT	0.50	1/4058 (0.0%)	0.62	1/5517 (0.0%)
All	All	0.51	95/243480 (0.0%)	0.63	23/331020 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	0	2
1	AB	0	2
1	AC	0	2
1	AD	0	1
1	AE	0	1
1	AF	0	2
1	AG	0	2
1	AH	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AI	0	2
1	AJ	0	2
1	AK	0	1
1	AL	0	1
1	AM	0	2
1	AN	0	2
1	AO	0	2
1	AP	0	2
1	AQ	0	1
1	AR	0	2
1	AS	0	2
1	AT	0	2
1	BA	0	2
1	BB	0	2
1	BC	0	1
1	BD	0	2
1	BE	0	1
1	BF	0	2
1	BG	0	2
1	BH	0	1
1	BI	0	1
1	BJ	0	2
1	BK	0	2
1	BL	0	2
1	BM	0	1
1	BN	0	2
1	BO	0	2
1	BP	0	1
1	BQ	0	2
1	BR	0	2
1	BS	0	2
1	BT	0	2
1	CA	0	2
1	CB	0	2
1	CC	0	2
1	CD	0	2
1	CE	0	2
1	CF	0	2
1	CG	0	2
1	CH	0	2
1	CI	0	3
1	CJ	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
1	CK	0	2
1	CL	0	2
1	CM	0	2
1	CN	0	2
1	CO	0	1
1	CP	0	2
1	CQ	0	2
1	CR	0	1
1	CS	0	2
1	CT	0	2
All	All	0	108

All (95) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	BM	189	PHE	CE1-CZ	-6.81	1.24	1.37
1	AL	189	PHE	CE1-CZ	-6.43	1.25	1.37
1	CJ	189	PHE	CE1-CZ	-6.33	1.25	1.37
1	BL	189	PHE	CE1-CZ	-6.28	1.25	1.37
1	BR	189	PHE	CE1-CZ	-6.26	1.25	1.37
1	CP	189	PHE	CE1-CZ	-6.25	1.25	1.37
1	BN	189	PHE	CE1-CZ	-6.25	1.25	1.37
1	CS	189	PHE	CE1-CZ	-6.21	1.25	1.37
1	BH	189	PHE	CE1-CZ	-6.17	1.25	1.37
1	AG	189	PHE	CE1-CZ	-6.12	1.25	1.37
1	BQ	189	PHE	CE1-CZ	-6.11	1.25	1.37
1	BR	189	PHE	CE2-CZ	-6.09	1.25	1.37
1	BK	189	PHE	CE1-CZ	-6.03	1.25	1.37
1	AK	189	PHE	CE1-CZ	-6.02	1.25	1.37
1	AP	189	PHE	CE1-CZ	-6.01	1.25	1.37
1	AP	189	PHE	CE2-CZ	-5.99	1.25	1.37
1	BN	189	PHE	CE2-CZ	-5.98	1.25	1.37
1	BM	189	PHE	CE2-CZ	-5.97	1.26	1.37
1	AI	189	PHE	CE1-CZ	-5.94	1.26	1.37
1	CN	189	PHE	CE1-CZ	-5.94	1.26	1.37
1	CI	189	PHE	CE1-CZ	-5.92	1.26	1.37
1	AH	189	PHE	CE1-CZ	-5.89	1.26	1.37
1	AM	189	PHE	CE1-CZ	-5.85	1.26	1.37
1	CQ	189	PHE	CE1-CZ	-5.83	1.26	1.37
1	BO	189	PHE	CE1-CZ	-5.80	1.26	1.37
1	AE	189	PHE	CE1-CZ	-5.79	1.26	1.37
1	CB	189	PHE	CE1-CZ	-5.78	1.26	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AD	189	PHE	CE1-CZ	-5.77	1.26	1.37
1	AC	189	PHE	CE1-CZ	-5.76	1.26	1.37
1	BC	189	PHE	CE1-CZ	-5.74	1.26	1.37
1	AE	189	PHE	CE2-CZ	-5.71	1.26	1.37
1	CR	189	PHE	CE1-CZ	-5.71	1.26	1.37
1	BH	189	PHE	CE2-CZ	-5.70	1.26	1.37
1	AO	189	PHE	CE1-CZ	-5.68	1.26	1.37
1	BG	189	PHE	CE2-CZ	-5.67	1.26	1.37
1	BK	189	PHE	CE2-CZ	-5.66	1.26	1.37
1	CQ	189	PHE	CE2-CZ	-5.65	1.26	1.37
1	BF	189	PHE	CE1-CZ	-5.63	1.26	1.37
1	AM	189	PHE	CE2-CZ	-5.62	1.26	1.37
1	CM	189	PHE	CE1-CZ	-5.60	1.26	1.37
1	BG	189	PHE	CE1-CZ	-5.60	1.26	1.37
1	AO	189	PHE	CE2-CZ	-5.57	1.26	1.37
1	AI	189	PHE	CE2-CZ	-5.54	1.26	1.37
1	BI	189	PHE	CE1-CZ	-5.54	1.26	1.37
1	AJ	189	PHE	CE1-CZ	-5.52	1.26	1.37
1	CP	189	PHE	CE2-CZ	-5.50	1.26	1.37
1	BB	189	PHE	CE1-CZ	-5.49	1.26	1.37
1	BJ	189	PHE	CE1-CZ	-5.49	1.26	1.37
1	CT	189	PHE	CE1-CZ	-5.49	1.26	1.37
1	AB	189	PHE	CE1-CZ	-5.47	1.26	1.37
1	CH	189	PHE	CE1-CZ	-5.46	1.26	1.37
1	BE	189	PHE	CE1-CZ	-5.45	1.26	1.37
1	BL	9	TYR	CE1-CZ	5.44	1.45	1.38
1	AS	189	PHE	CE2-CZ	-5.43	1.27	1.37
1	BD	189	PHE	CE1-CZ	-5.42	1.27	1.37
1	CF	189	PHE	CE1-CZ	-5.42	1.27	1.37
1	BB	189	PHE	CE2-CZ	-5.42	1.27	1.37
1	AD	189	PHE	CE2-CZ	-5.41	1.27	1.37
1	CR	189	PHE	CE2-CZ	-5.37	1.27	1.37
1	CG	189	PHE	CE1-CZ	-5.37	1.27	1.37
1	BF	189	PHE	CE2-CZ	-5.36	1.27	1.37
1	AF	189	PHE	CE1-CZ	-5.36	1.27	1.37
1	CC	189	PHE	CE1-CZ	-5.34	1.27	1.37
1	AN	189	PHE	CE1-CZ	-5.33	1.27	1.37
1	AT	189	PHE	CE1-CZ	-5.33	1.27	1.37
1	BP	189	PHE	CE1-CZ	-5.33	1.27	1.37
1	BL	189	PHE	CE2-CZ	-5.32	1.27	1.37
1	CB	189	PHE	CE2-CZ	-5.28	1.27	1.37
1	CO	189	PHE	CE1-CZ	-5.28	1.27	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	BP	189	PHE	CE2-CZ	-5.28	1.27	1.37
1	AB	189	PHE	CE2-CZ	-5.28	1.27	1.37
1	BE	189	PHE	CE2-CZ	-5.27	1.27	1.37
1	BM	189	PHE	CG-CD1	-5.26	1.30	1.38
1	AL	189	PHE	CE2-CZ	-5.25	1.27	1.37
1	BD	189	PHE	CE2-CZ	-5.24	1.27	1.37
1	BO	383	GLU	CG-CD	5.21	1.59	1.51
1	BA	189	PHE	CE1-CZ	-5.18	1.27	1.37
1	AC	189	PHE	CE2-CZ	-5.18	1.27	1.37
1	AH	189	PHE	CE2-CZ	-5.18	1.27	1.37
1	BQ	189	PHE	CE2-CZ	-5.17	1.27	1.37
1	AR	383	GLU	CG-CD	5.13	1.59	1.51
1	BO	189	PHE	CE2-CZ	-5.10	1.27	1.37
1	CD	189	PHE	CE1-CZ	-5.09	1.27	1.37
1	CE	189	PHE	CE1-CZ	-5.09	1.27	1.37
1	CD	189	PHE	CE2-CZ	-5.09	1.27	1.37
1	BT	189	PHE	CE2-CZ	-5.08	1.27	1.37
1	CJ	189	PHE	CE2-CZ	-5.08	1.27	1.37
1	CO	189	PHE	CE2-CZ	-5.07	1.27	1.37
1	AQ	189	PHE	CE1-CZ	-5.07	1.27	1.37
1	CL	189	PHE	CE2-CZ	-5.06	1.27	1.37
1	AK	189	PHE	CE2-CZ	-5.05	1.27	1.37
1	CS	189	PHE	CE2-CZ	-5.04	1.27	1.37
1	CR	383	GLU	CG-CD	5.04	1.59	1.51
1	AR	9	TYR	CD1-CE1	5.03	1.46	1.39
1	CL	189	PHE	CE1-CZ	-5.01	1.27	1.37

All (23) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	284	ARG	NE-CZ-NH2	-5.70	117.45	120.30
1	AG	265	LEU	CA-CB-CG	-5.59	102.45	115.30
1	AB	258	THR	N-CA-C	-5.51	96.11	111.00
1	CJ	56	LEU	CA-CB-CG	5.46	127.86	115.30
1	AF	56	LEU	CA-CB-CG	5.33	127.57	115.30
1	CT	56	LEU	CA-CB-CG	5.30	127.50	115.30
1	AG	265	LEU	CB-CG-CD1	-5.28	102.03	111.00
1	CR	56	LEU	CA-CB-CG	5.24	127.36	115.30
1	BM	56	LEU	CA-CB-CG	5.24	127.35	115.30
1	AR	56	LEU	CA-CB-CG	5.24	127.34	115.30
1	BR	56	LEU	CA-CB-CG	5.23	127.33	115.30
1	BP	56	LEU	CA-CB-CG	5.23	127.33	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AE	56	LEU	CA-CB-CG	5.22	127.31	115.30
1	AM	56	LEU	CA-CB-CG	5.21	127.29	115.30
1	BB	56	LEU	CA-CB-CG	5.20	127.25	115.30
1	CI	56	LEU	CA-CB-CG	5.18	127.22	115.30
1	AB	56	LEU	CA-CB-CG	5.18	127.21	115.30
1	CL	56	LEU	CA-CB-CG	5.12	127.07	115.30
1	AP	56	LEU	CA-CB-CG	5.09	127.02	115.30
1	AA	56	LEU	CA-CB-CG	5.09	127.01	115.30
1	AN	56	LEU	CA-CB-CG	5.06	126.94	115.30
1	BG	56	LEU	CA-CB-CG	5.04	126.89	115.30
1	CB	56	LEU	CA-CB-CG	5.00	126.81	115.30

There are no chirality outliers.

All (108) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	33	LYS	Peptide
1	AA	55	ARG	Peptide
1	AB	33	LYS	Peptide
1	AB	55	ARG	Peptide
1	AC	33	LYS	Peptide
1	AC	55	ARG	Peptide
1	AD	55	ARG	Peptide
1	AE	55	ARG	Peptide
1	AF	33	LYS	Peptide
1	AF	55	ARG	Peptide
1	AG	33	LYS	Peptide
1	AG	55	ARG	Peptide
1	AH	33	LYS	Peptide
1	AH	55	ARG	Peptide
1	AI	33	LYS	Peptide
1	AI	55	ARG	Peptide
1	AJ	33	LYS	Peptide
1	AJ	55	ARG	Peptide
1	AK	55	ARG	Peptide
1	AL	55	ARG	Peptide
1	AM	33	LYS	Peptide
1	AM	55	ARG	Peptide
1	AN	33	LYS	Peptide
1	AN	55	ARG	Peptide
1	AO	33	LYS	Peptide
1	AO	55	ARG	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AP	33	LYS	Peptide
1	AP	55	ARG	Peptide
1	AQ	55	ARG	Peptide
1	AR	33	LYS	Peptide
1	AR	55	ARG	Peptide
1	AS	33	LYS	Peptide
1	AS	55	ARG	Peptide
1	AT	33	LYS	Peptide
1	AT	55	ARG	Peptide
1	BA	33	LYS	Peptide
1	BA	55	ARG	Peptide
1	BB	33	LYS	Peptide
1	BB	55	ARG	Peptide
1	BC	55	ARG	Peptide
1	BD	33	LYS	Peptide
1	BD	55	ARG	Peptide
1	BE	55	ARG	Peptide
1	BF	33	LYS	Peptide
1	BF	55	ARG	Peptide
1	BG	33	LYS	Peptide
1	BG	55	ARG	Peptide
1	BH	55	ARG	Peptide
1	BI	55	ARG	Peptide
1	BJ	33	LYS	Peptide
1	BJ	55	ARG	Peptide
1	BK	33	LYS	Peptide
1	BK	55	ARG	Peptide
1	BL	33	LYS	Peptide
1	BL	55	ARG	Peptide
1	BM	55	ARG	Peptide
1	BN	33	LYS	Peptide
1	BN	55	ARG	Peptide
1	BO	33	LYS	Peptide
1	BO	55	ARG	Peptide
1	BP	55	ARG	Peptide
1	BQ	33	LYS	Peptide
1	BQ	55	ARG	Peptide
1	BR	33	LYS	Peptide
1	BR	55	ARG	Peptide
1	BS	33	LYS	Peptide
1	BS	55	ARG	Peptide
1	BT	33	LYS	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	BT	55	ARG	Peptide
1	CA	33	LYS	Peptide
1	CA	55	ARG	Peptide
1	CB	33	LYS	Peptide
1	CB	55	ARG	Peptide
1	CC	33	LYS	Peptide
1	CC	55	ARG	Peptide
1	CD	33	LYS	Peptide
1	CD	55	ARG	Peptide
1	CE	33	LYS	Peptide
1	CE	55	ARG	Peptide
1	CF	33	LYS	Peptide
1	CF	55	ARG	Peptide
1	CG	33	LYS	Peptide
1	CG	55	ARG	Peptide
1	CH	33	LYS	Peptide
1	CH	55	ARG	Peptide
1	CI	33	LYS	Peptide
1	CI	372	PHE	Peptide
1	CI	55	ARG	Peptide
1	CJ	33	LYS	Peptide
1	CJ	55	ARG	Peptide
1	CK	33	LYS	Peptide
1	CK	55	ARG	Peptide
1	CL	33	LYS	Peptide
1	CL	55	ARG	Peptide
1	CM	33	LYS	Peptide
1	CM	55	ARG	Peptide
1	CN	33	LYS	Peptide
1	CN	55	ARG	Peptide
1	CO	55	ARG	Peptide
1	CP	33	LYS	Peptide
1	CP	55	ARG	Peptide
1	CQ	33	LYS	Peptide
1	CQ	55	ARG	Peptide
1	CR	55	ARG	Peptide
1	CS	33	LYS	Peptide
1	CS	55	ARG	Peptide
1	CT	33	LYS	Peptide
1	CT	55	ARG	Peptide

5.2 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 hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	3951	0	3909	93	0
1	AB	3951	0	3909	116	0
1	AC	3951	0	3909	92	0
1	AD	3951	0	3909	89	0
1	AE	3951	0	3909	89	0
1	AF	3951	0	3909	99	0
1	AG	3951	0	3907	149	1
1	AH	3951	0	3909	108	0
1	AI	3951	0	3909	113	5
1	AJ	3951	0	3909	109	1
1	AK	3951	0	3909	106	0
1	AL	3951	0	3909	110	0
1	AM	3951	0	3909	94	5
1	AN	3951	0	3909	111	1
1	AO	3951	0	3909	129	0
1	AP	3951	0	3909	84	0
1	AQ	3951	0	3909	101	0
1	AR	3951	0	3909	96	0
1	AS	3951	0	3909	92	0
1	AT	3951	0	3909	96	0
1	BA	3951	0	3909	97	0
1	BB	3951	0	3909	87	0
1	BC	3951	0	3909	80	0
1	BD	3951	0	3909	86	2
1	BE	3951	0	3909	93	1
1	BF	3951	0	3909	101	0
1	BG	3951	0	3909	108	2
1	BH	3951	0	3909	90	0
1	BI	3951	0	3909	86	0
1	BJ	3951	0	3909	91	0
1	BK	3951	0	3909	72	0
1	BL	3951	0	3909	90	0
1	BM	3951	0	3909	90	0
1	BN	3951	0	3909	90	0
1	BO	3951	0	3909	100	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	BP	3951	0	3909	93	0
1	BQ	3951	0	3909	85	0
1	BR	3951	0	3909	97	0
1	BS	3951	0	3909	81	0
1	BT	3951	0	3909	91	0
1	CA	3951	0	3909	89	0
1	CB	3951	0	3909	96	3
1	CC	3951	0	3909	85	0
1	CD	3951	0	3909	94	0
1	CE	3951	0	3909	105	0
1	CF	3951	0	3909	103	0
1	CG	3951	0	3909	89	0
1	CH	3951	0	3909	95	0
1	CI	3951	0	3909	115	1
1	CJ	3951	0	3909	109	2
1	CK	3951	0	3909	86	0
1	CL	3951	0	3909	83	0
1	CM	3951	0	3909	89	0
1	CN	3951	0	3909	81	0
1	CO	3951	0	3909	95	0
1	CP	3951	0	3909	94	0
1	CQ	3951	0	3909	88	0
1	CR	3951	0	3909	122	0
1	CS	3951	0	3909	85	0
1	CT	3951	0	3909	77	0
All	All	237060	0	234538	5081	12

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 11.

All (5081) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AG:263:ASN:ND2	1:BG:32:PHE:CA	1.68	1.50
1:AG:272:TYR:CE2	1:BG:55:ARG:CZ	2.02	1.43
1:AG:272:TYR:HE2	1:BG:55:ARG:NE	1.23	1.37
1:AN:430:MET:CE	1:AO:296:ALA:HB2	1.62	1.29
1:AG:272:TYR:HE2	1:BG:55:ARG:CZ	1.36	1.25
1:CR:86:PRO:O	1:CR:88:TYR:N	1.74	1.19
1:CR:79:ARG:CG	1:CR:79:ARG:HH11	1.57	1.15
1:AN:430:MET:HE3	1:AO:296:ALA:HB2	1.21	1.12
1:AG:263:ASN:ND2	1:BG:32:PHE:HA	0.78	1.11
1:AG:265:LEU:HD12	1:AG:265:LEU:O	1.50	1.11

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AB:265:LEU:C	1:AB:265:LEU:HD12	1.62	1.10
1:AG:272:TYR:CE2	1:BG:55:ARG:NE	2.11	1.09
1:AG:272:TYR:HD2	1:BG:55:ARG:NH1	1.51	1.08
1:AB:250:TRP:HE1	1:AB:265:LEU:HD11	1.09	1.07
1:AG:272:TYR:CD2	1:BG:55:ARG:NH1	2.23	1.07
1:CF:79:ARG:HG3	1:CF:79:ARG:HH11	1.18	1.06
1:CR:79:ARG:HG2	1:CR:79:ARG:HH11	1.19	1.04
1:AL:272:TYR:CE2	1:CJ:55:ARG:NE	2.26	1.04
1:AG:272:TYR:CD2	1:BG:55:ARG:CZ	2.40	1.04
1:AO:295:LEU:HB2	1:AO:298:GLN:OE1	1.58	1.03
1:CC:250:TRP:CZ3	1:CC:272:TYR:HE1	1.77	1.01
1:AN:430:MET:CE	1:AO:296:ALA:CB	2.39	1.00
1:AB:265:LEU:C	1:AB:265:LEU:CD1	2.30	1.00
1:AI:272:TYR:CE2	1:AO:55:ARG:NE	2.30	0.99
1:AA:38:GLU:OE1	1:AB:267:LYS:NZ	1.96	0.99
1:CR:86:PRO:O	1:CR:87:VAL:C	1.97	0.99
1:AH:55:ARG:NE	1:AK:272:TYR:CE2	2.31	0.99
1:AO:290:THR:O	1:AO:290:THR:HG23	1.63	0.97
1:CI:376:THR:O	1:CI:377:CYS:HB3	1.62	0.96
1:AN:55:ARG:NE	1:AS:272:TYR:CE2	2.33	0.95
1:BO:250:TRP:CZ3	1:BO:272:TYR:HE1	1.83	0.95
1:AN:430:MET:HE3	1:AO:296:ALA:CB	1.97	0.95
1:AL:272:TYR:CE2	1:CJ:55:ARG:CD	2.49	0.95
1:CC:250:TRP:CZ3	1:CC:272:TYR:CE1	2.54	0.95
1:BS:79:ARG:HG3	1:BS:79:ARG:HH11	1.31	0.94
1:AB:250:TRP:NE1	1:AB:265:LEU:HD11	1.83	0.94
1:CJ:272:TYR:HE2	1:CQ:55:ARG:NE	1.67	0.93
1:AJ:191:LEU:H	1:AJ:191:LEU:HD23	1.34	0.93
1:BJ:250:TRP:CZ3	1:BJ:272:TYR:HE1	1.85	0.93
1:CJ:272:TYR:CE2	1:CQ:55:ARG:NE	2.37	0.93
1:CD:79:ARG:HH11	1:CD:79:ARG:HG3	1.34	0.93
1:BI:55:ARG:NE	1:BR:272:TYR:CE2	2.36	0.93
1:BP:272:TYR:CE2	1:CE:55:ARG:NE	2.35	0.93
1:AO:295:LEU:O	1:AO:298:GLN:HB2	1.69	0.92
1:BO:272:TYR:CE2	1:BR:55:ARG:NE	2.37	0.92
1:AN:55:ARG:NE	1:AS:272:TYR:HE2	1.66	0.92
1:AS:250:TRP:CZ3	1:AS:272:TYR:HE1	1.87	0.92
1:CO:272:TYR:CE2	1:CR:55:ARG:NE	2.38	0.92
1:BP:250:TRP:CZ3	1:BP:272:TYR:HE1	1.86	0.92
1:BJ:191:LEU:HD23	1:BJ:191:LEU:H	1.34	0.92
1:AL:272:TYR:HE2	1:CJ:55:ARG:CD	1.82	0.92
1:BO:250:TRP:CZ3	1:BO:272:TYR:CE1	2.58	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BJ:250:TRP:CZ3	1:BJ:272:TYR:CE1	2.58	0.91
1:AC:191:LEU:HD23	1:AC:191:LEU:H	1.36	0.90
1:AG:79:ARG:HG3	1:AG:79:ARG:HH11	1.36	0.90
1:BJ:79:ARG:HH11	1:BJ:79:ARG:HG3	1.35	0.90
1:CI:377:CYS:SG	1:CI:378:ARG:N	2.43	0.90
1:CI:377:CYS:SG	1:CI:378:ARG:O	2.30	0.90
1:AB:191:LEU:HD23	1:AB:191:LEU:H	1.37	0.90
1:BL:9:TYR:CE1	1:BL:147:GLN:NE2	2.40	0.90
1:BP:272:TYR:HE2	1:CE:55:ARG:CD	1.84	0.90
1:BE:191:LEU:HD23	1:BE:191:LEU:H	1.36	0.90
1:BP:272:TYR:HE2	1:CE:55:ARG:NE	1.70	0.90
1:CE:272:TYR:CE2	1:CM:55:ARG:NE	2.40	0.89
1:AS:250:TRP:CZ3	1:AS:272:TYR:CE1	2.59	0.89
1:AR:191:LEU:HD23	1:AR:191:LEU:H	1.38	0.89
1:AL:191:LEU:H	1:AL:191:LEU:HD23	1.37	0.89
1:AB:265:LEU:HD12	1:AB:265:LEU:O	1.73	0.89
1:CC:191:LEU:H	1:CC:191:LEU:HD23	1.38	0.89
1:BP:250:TRP:CZ3	1:BP:272:TYR:CE1	2.60	0.89
1:CP:191:LEU:H	1:CP:191:LEU:HD23	1.38	0.89
1:BP:191:LEU:HD23	1:BP:191:LEU:H	1.37	0.88
1:AP:191:LEU:H	1:AP:191:LEU:HD23	1.36	0.88
1:CI:191:LEU:HD23	1:CI:191:LEU:H	1.37	0.88
1:BJ:272:TYR:CE2	1:BQ:55:ARG:NE	2.41	0.88
1:BO:191:LEU:H	1:BO:191:LEU:HD23	1.38	0.88
1:AQ:191:LEU:HD23	1:AQ:191:LEU:H	1.39	0.88
1:AO:191:LEU:H	1:AO:191:LEU:HD23	1.37	0.88
1:AE:55:ARG:NE	1:CP:272:TYR:CE2	2.42	0.88
1:AO:292:ALA:O	1:AO:293:ARG:HG2	1.73	0.88
1:AG:191:LEU:H	1:AG:191:LEU:HD23	1.38	0.88
1:CQ:191:LEU:H	1:CQ:191:LEU:HD23	1.37	0.88
1:CI:378:ARG:HG3	1:CI:379:VAL:N	1.88	0.88
1:CF:191:LEU:HD23	1:CF:191:LEU:H	1.39	0.88
1:BB:191:LEU:H	1:BB:191:LEU:HD23	1.39	0.88
1:BD:191:LEU:HD23	1:BD:191:LEU:H	1.39	0.87
1:AD:191:LEU:HD23	1:AD:191:LEU:H	1.40	0.87
1:BM:191:LEU:H	1:BM:191:LEU:HD23	1.38	0.87
1:AK:191:LEU:H	1:AK:191:LEU:HD23	1.38	0.87
1:CD:191:LEU:H	1:CD:191:LEU:HD23	1.39	0.87
1:AE:191:LEU:HD23	1:AE:191:LEU:H	1.39	0.87
1:CO:250:TRP:CZ3	1:CO:272:TYR:CE1	2.63	0.87
1:BJ:189:PHE:HE1	1:BJ:198:ARG:HG3	1.40	0.86
1:BF:191:LEU:H	1:BF:191:LEU:HD23	1.40	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BQ:191:LEU:H	1:BQ:191:LEU:HD23	1.40	0.86
1:AN:79:ARG:HH11	1:AN:79:ARG:HG3	1.38	0.86
1:AA:191:LEU:HD23	1:AA:191:LEU:H	1.37	0.86
1:AM:191:LEU:H	1:AM:191:LEU:HD23	1.38	0.86
1:AO:250:TRP:CZ3	1:AO:272:TYR:CE1	2.63	0.86
1:CE:191:LEU:H	1:CE:191:LEU:HD23	1.39	0.86
1:CG:191:LEU:H	1:CG:191:LEU:HD23	1.40	0.86
1:BT:191:LEU:HD23	1:BT:191:LEU:H	1.40	0.86
1:AJ:272:TYR:CE2	1:AQ:55:ARG:NE	2.44	0.86
1:CJ:250:TRP:CZ3	1:CJ:272:TYR:HE1	1.94	0.86
1:CR:191:LEU:H	1:CR:191:LEU:HD23	1.41	0.86
1:CQ:250:TRP:CZ3	1:CQ:272:TYR:CE1	2.64	0.86
1:BO:272:TYR:HE2	1:BR:55:ARG:NE	1.73	0.86
1:CJ:250:TRP:CZ3	1:CJ:272:TYR:CE1	2.63	0.86
1:BH:191:LEU:H	1:BH:191:LEU:HD23	1.40	0.86
1:AH:55:ARG:CD	1:AK:272:TYR:CE2	2.59	0.86
1:AP:272:TYR:CE2	1:BE:55:ARG:CD	2.59	0.86
1:CM:191:LEU:H	1:CM:191:LEU:HD23	1.39	0.86
1:BG:191:LEU:H	1:BG:191:LEU:HD23	1.39	0.86
1:CO:272:TYR:HE2	1:CR:55:ARG:CD	1.89	0.86
1:AF:79:ARG:HH11	1:AF:79:ARG:HG3	1.38	0.86
1:BK:191:LEU:HD23	1:BK:191:LEU:H	1.41	0.86
1:CK:191:LEU:HD23	1:CK:191:LEU:H	1.40	0.86
1:AG:265:LEU:HD12	1:AG:265:LEU:C	1.80	0.86
1:CN:191:LEU:H	1:CN:191:LEU:HD23	1.40	0.86
1:BP:272:TYR:CE2	1:CE:55:ARG:CD	2.58	0.85
1:BT:55:ARG:NE	1:CA:272:TYR:CE2	2.44	0.85
1:BS:191:LEU:H	1:BS:191:LEU:HD23	1.40	0.85
1:AL:272:TYR:CD2	1:CJ:55:ARG:HD3	2.10	0.85
1:AL:79:ARG:HG3	1:AL:79:ARG:HH11	1.39	0.85
1:CL:191:LEU:H	1:CL:191:LEU:HD23	1.39	0.85
1:CH:191:LEU:H	1:CH:191:LEU:HD23	1.39	0.85
1:CR:79:ARG:NH1	1:CR:79:ARG:CG	2.30	0.85
1:BH:15:GLN:HE21	1:BH:15:GLN:HA	1.38	0.85
1:BN:191:LEU:HD23	1:BN:191:LEU:H	1.41	0.85
1:AT:250:TRP:CZ3	1:AT:272:TYR:CE1	2.65	0.85
1:CD:272:TYR:CE2	1:CS:55:ARG:NE	2.44	0.85
1:CG:189:PHE:HE1	1:CG:198:ARG:CG	1.90	0.85
1:CM:250:TRP:CZ3	1:CM:272:TYR:CE1	2.64	0.85
1:CA:191:LEU:HD23	1:CA:191:LEU:H	1.41	0.85
1:CR:189:PHE:HE1	1:CR:198:ARG:CG	1.89	0.85
1:CO:250:TRP:CZ3	1:CO:272:TYR:HE1	1.95	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BC:191:LEU:H	1:BC:191:LEU:HD23	1.40	0.85
1:CB:191:LEU:HD23	1:CB:191:LEU:H	1.40	0.85
1:AO:250:TRP:CZ3	1:AO:272:TYR:HE1	1.95	0.85
1:CO:272:TYR:HE2	1:CR:55:ARG:NE	1.74	0.84
1:CB:189:PHE:HE1	1:CB:198:ARG:CG	1.90	0.84
1:CO:191:LEU:HD23	1:CO:191:LEU:H	1.42	0.84
1:AO:272:TYR:HE2	1:AR:55:ARG:CD	1.88	0.84
1:CS:454:ASN:HD22	1:CS:456:ALA:H	1.24	0.84
1:BE:189:PHE:HE1	1:BE:198:ARG:CG	1.91	0.84
1:BI:191:LEU:HD23	1:BI:191:LEU:H	1.40	0.84
1:CR:79:ARG:NH1	1:CR:79:ARG:HG2	1.86	0.84
1:CR:79:ARG:HG3	1:CR:79:ARG:HH11	1.42	0.84
1:CP:250:TRP:CZ3	1:CP:272:TYR:CE1	2.65	0.84
1:CN:189:PHE:HE1	1:CN:198:ARG:HG3	1.41	0.84
1:AH:191:LEU:H	1:AH:191:LEU:HD23	1.43	0.84
1:AG:263:ASN:ND2	1:BG:32:PHE:CB	2.41	0.84
1:AB:250:TRP:CZ3	1:AB:272:TYR:CE1	2.66	0.84
1:BN:189:PHE:HE1	1:BN:198:ARG:CG	1.91	0.84
1:AS:191:LEU:H	1:AS:191:LEU:HD23	1.42	0.84
1:CS:191:LEU:HD23	1:CS:191:LEU:H	1.42	0.84
1:AI:191:LEU:HD23	1:AI:191:LEU:H	1.40	0.83
1:AF:191:LEU:H	1:AF:191:LEU:HD23	1.42	0.83
1:AI:272:TYR:CE2	1:AO:55:ARG:CD	2.62	0.83
1:AP:272:TYR:CE2	1:BE:55:ARG:NE	2.46	0.83
1:AE:189:PHE:HE1	1:AE:198:ARG:HG3	1.42	0.83
1:AN:189:PHE:HE1	1:AN:198:ARG:CG	1.91	0.83
1:AR:189:PHE:HE1	1:AR:198:ARG:HG3	1.42	0.83
1:AN:191:LEU:HD23	1:AN:191:LEU:H	1.42	0.83
1:CF:250:TRP:CZ3	1:CF:272:TYR:CE1	2.66	0.83
1:BB:189:PHE:HE1	1:BB:198:ARG:CG	1.92	0.83
1:CJ:191:LEU:H	1:CJ:191:LEU:HD23	1.42	0.83
1:AI:189:PHE:HE1	1:AI:198:ARG:CG	1.91	0.83
1:AT:191:LEU:H	1:AT:191:LEU:HD23	1.42	0.83
1:AN:189:PHE:HE1	1:AN:198:ARG:HG3	1.44	0.83
1:AF:454:ASN:HD22	1:AF:456:ALA:H	1.27	0.83
1:CJ:189:PHE:HE1	1:CJ:198:ARG:CG	1.92	0.83
1:CC:250:TRP:CE3	1:CC:272:TYR:CE1	2.66	0.83
1:CD:250:TRP:CZ3	1:CD:272:TYR:CE1	2.65	0.83
1:BR:191:LEU:H	1:BR:191:LEU:HD23	1.42	0.83
1:CE:189:PHE:HE1	1:CE:198:ARG:HG3	1.44	0.83
1:CJ:189:PHE:HE1	1:CJ:198:ARG:HG3	1.43	0.83
1:BT:250:TRP:CZ3	1:BT:272:TYR:CE1	2.65	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BA:191:LEU:H	1:BA:191:LEU:HD23	1.42	0.83
1:AF:38:GLU:OE1	1:AG:267:LYS:HE2	1.79	0.83
1:BL:9:TYR:HE1	1:BL:147:GLN:HE21	1.25	0.83
1:AJ:189:PHE:HE1	1:AJ:198:ARG:CG	1.92	0.83
1:CR:85:ASP:OD1	1:CR:86:PRO:HD2	1.78	0.83
1:AO:272:TYR:CE2	1:AR:55:ARG:NE	2.47	0.83
1:AM:454:ASN:HD22	1:AM:456:ALA:H	1.26	0.83
1:BG:250:TRP:CZ3	1:BG:272:TYR:CE1	2.67	0.83
1:AR:250:TRP:CZ3	1:AR:272:TYR:CE1	2.67	0.83
1:AI:189:PHE:HE1	1:AI:198:ARG:HG3	1.42	0.82
1:CG:250:TRP:CZ3	1:CG:272:TYR:CE1	2.67	0.82
1:AG:269:PRO:O	1:AG:269:PRO:HG2	1.78	0.82
1:AL:272:TYR:CE2	1:CJ:55:ARG:HD3	2.15	0.82
1:CM:189:PHE:HE1	1:CM:198:ARG:CG	1.91	0.82
1:CT:191:LEU:H	1:CT:191:LEU:HD23	1.41	0.82
1:AR:189:PHE:HE1	1:AR:198:ARG:CG	1.91	0.82
1:CN:250:TRP:CZ3	1:CN:272:TYR:CE1	2.67	0.82
1:BP:79:ARG:HH11	1:BP:79:ARG:CG	1.90	0.82
1:AP:272:TYR:CD2	1:BE:55:ARG:HD3	2.14	0.82
1:BB:250:TRP:CZ3	1:BB:272:TYR:CE1	2.68	0.82
1:BD:250:TRP:CZ3	1:BD:272:TYR:CE1	2.67	0.82
1:AO:291:PRO:O	1:AO:291:PRO:HD2	1.79	0.82
1:BL:191:LEU:HD23	1:BL:191:LEU:H	1.43	0.82
1:BA:250:TRP:CZ3	1:BA:272:TYR:CE1	2.67	0.82
1:CG:189:PHE:HE1	1:CG:198:ARG:HG3	1.44	0.82
1:AN:250:TRP:CZ3	1:AN:272:TYR:CE1	2.68	0.82
1:BB:55:ARG:NE	1:CB:272:TYR:CE2	2.48	0.82
1:CF:189:PHE:HE1	1:CF:198:ARG:CG	1.92	0.82
1:BH:189:PHE:HE1	1:BH:198:ARG:CG	1.92	0.82
1:CR:250:TRP:CZ3	1:CR:272:TYR:CE1	2.68	0.82
1:BB:454:ASN:HD22	1:BB:456:ALA:H	1.26	0.82
1:BK:454:ASN:HD22	1:BK:456:ALA:H	1.27	0.82
1:BO:15:GLN:HE21	1:BO:15:GLN:HA	1.43	0.82
1:BA:79:ARG:HH11	1:BA:79:ARG:HG3	1.43	0.82
1:AC:250:TRP:CZ3	1:AC:272:TYR:CE1	2.67	0.82
1:CF:454:ASN:HD22	1:CF:456:ALA:H	1.26	0.82
1:CM:189:PHE:HE1	1:CM:198:ARG:HG3	1.45	0.81
1:CT:250:TRP:CZ3	1:CT:272:TYR:CE1	2.68	0.81
1:BR:79:ARG:HH11	1:BR:79:ARG:HG3	1.45	0.81
1:CF:79:ARG:CG	1:CF:79:ARG:HH11	1.91	0.81
1:CE:250:TRP:CZ3	1:CE:272:TYR:CE1	2.68	0.81
1:AI:79:ARG:HG3	1:AI:79:ARG:HH11	1.43	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AB:189:PHE:HE1	1:AB:198:ARG:CG	1.93	0.81
1:AC:55:ARG:NE	1:AT:272:TYR:CE2	2.49	0.81
1:CN:189:PHE:HE1	1:CN:198:ARG:CG	1.92	0.81
1:CH:79:ARG:HH11	1:CH:79:ARG:HG3	1.45	0.81
1:CQ:454:ASN:HD22	1:CQ:456:ALA:H	1.27	0.81
1:BK:250:TRP:CZ3	1:BK:272:TYR:CE1	2.68	0.81
1:BN:250:TRP:CZ3	1:BN:272:TYR:CE1	2.69	0.81
1:CK:250:TRP:CZ3	1:CK:272:TYR:CE1	2.68	0.81
1:CI:376:THR:O	1:CI:376:THR:HG23	1.79	0.81
1:BJ:272:TYR:HE2	1:BQ:55:ARG:NE	1.78	0.81
1:BI:250:TRP:CZ3	1:BI:272:TYR:CE1	2.69	0.81
1:AH:55:ARG:HD3	1:AK:272:TYR:CD2	2.15	0.81
1:BG:189:PHE:HE1	1:BG:198:ARG:HG3	1.45	0.81
1:BL:9:TYR:HE1	1:BL:147:GLN:NE2	1.79	0.81
1:AM:189:PHE:HE1	1:AM:198:ARG:CG	1.94	0.81
1:BH:250:TRP:CZ3	1:BH:272:TYR:CE1	2.69	0.81
1:AH:189:PHE:HE1	1:AH:198:ARG:CG	1.93	0.81
1:CM:454:ASN:HD22	1:CM:456:ALA:H	1.29	0.81
1:CH:250:TRP:CZ3	1:CH:272:TYR:CE1	2.68	0.81
1:BI:454:ASN:HD22	1:BI:456:ALA:H	1.26	0.81
1:CE:272:TYR:HE2	1:CM:55:ARG:NE	1.78	0.81
1:AM:189:PHE:HE1	1:AM:198:ARG:HG3	1.45	0.81
1:AE:250:TRP:CZ3	1:AE:272:TYR:CE1	2.69	0.81
1:BI:189:PHE:HE1	1:BI:198:ARG:HG3	1.45	0.81
1:AH:272:TYR:CE2	1:CF:55:ARG:NE	2.48	0.81
1:BB:189:PHE:HE1	1:BB:198:ARG:HG3	1.45	0.80
1:CI:250:TRP:CZ3	1:CI:272:TYR:CE1	2.69	0.80
1:CS:250:TRP:CZ3	1:CS:272:TYR:CE1	2.69	0.80
1:CR:85:ASP:OD1	1:CR:86:PRO:CD	2.30	0.80
1:AL:250:TRP:CZ3	1:AL:272:TYR:CE1	2.69	0.80
1:CI:189:PHE:HE1	1:CI:198:ARG:HG3	1.45	0.80
1:CD:454:ASN:HD22	1:CD:456:ALA:H	1.30	0.80
1:CH:189:PHE:HE1	1:CH:198:ARG:HG3	1.46	0.80
1:CI:378:ARG:O	1:CI:379:VAL:HG23	1.81	0.80
1:CF:189:PHE:HE1	1:CF:198:ARG:HG3	1.46	0.80
1:BM:250:TRP:CZ3	1:BM:272:TYR:CE1	2.69	0.80
1:BP:454:ASN:HD22	1:BP:456:ALA:H	1.27	0.80
1:BF:189:PHE:HE1	1:BF:198:ARG:CG	1.95	0.80
1:CR:454:ASN:HD22	1:CR:456:ALA:H	1.27	0.80
1:AP:272:TYR:HE2	1:BE:55:ARG:CD	1.93	0.80
1:BG:272:TYR:CE2	1:CG:55:ARG:NE	2.49	0.80
1:AI:55:ARG:HD3	1:AR:272:TYR:CD2	2.17	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CB:250:TRP:CZ3	1:CB:272:TYR:CE1	2.70	0.80
1:AH:250:TRP:CZ3	1:AH:272:TYR:CE1	2.68	0.80
1:AF:189:PHE:HE1	1:AF:198:ARG:HG3	1.43	0.80
1:AI:272:TYR:CD2	1:AO:55:ARG:HD3	2.16	0.80
1:AK:250:TRP:CZ3	1:AK:272:TYR:CE1	2.69	0.80
1:AO:272:TYR:CE2	1:AR:55:ARG:CD	2.65	0.80
1:CC:55:ARG:NE	1:CT:272:TYR:CE2	2.50	0.80
1:BL:250:TRP:CZ3	1:BL:272:TYR:CE1	2.70	0.80
1:AF:250:TRP:CZ3	1:AF:272:TYR:CE1	2.70	0.80
1:CL:454:ASN:HD22	1:CL:456:ALA:H	1.29	0.80
1:AG:189:PHE:HE1	1:AG:198:ARG:CG	1.95	0.80
1:CB:189:PHE:HE1	1:CB:198:ARG:HG3	1.44	0.80
1:AG:189:PHE:HE1	1:AG:198:ARG:HG3	1.46	0.80
1:AR:454:ASN:HD22	1:AR:456:ALA:H	1.29	0.80
1:AB:265:LEU:CD1	1:AB:265:LEU:O	2.30	0.80
1:AH:55:ARG:CD	1:AK:272:TYR:HE2	1.95	0.80
1:AO:290:THR:OG1	1:AO:291:PRO:CD	2.30	0.80
1:AO:292:ALA:O	1:AO:293:ARG:CG	2.30	0.80
1:BM:189:PHE:HE1	1:BM:198:ARG:CG	1.94	0.80
1:AO:290:THR:OG1	1:AO:291:PRO:HD2	1.81	0.79
1:CI:376:THR:O	1:CI:377:CYS:CB	2.29	0.79
1:BO:250:TRP:CE3	1:BO:272:TYR:CE1	2.70	0.79
1:AG:265:LEU:CD1	1:AG:265:LEU:O	2.30	0.79
1:CH:189:PHE:HE1	1:CH:198:ARG:CG	1.95	0.79
1:BH:189:PHE:HE1	1:BH:198:ARG:HG3	1.45	0.79
1:AM:250:TRP:CZ3	1:AM:272:TYR:CE1	2.70	0.79
1:CR:86:PRO:O	1:CR:89:THR:N	2.14	0.79
1:AN:454:ASN:HD22	1:AN:456:ALA:H	1.31	0.79
1:CL:250:TRP:CZ3	1:CL:272:TYR:CE1	2.70	0.79
1:CJ:272:TYR:HE2	1:CQ:55:ARG:CD	1.95	0.79
1:CO:272:TYR:CE2	1:CR:55:ARG:CD	2.66	0.79
1:BE:189:PHE:HE1	1:BE:198:ARG:HG3	1.46	0.79
1:AC:454:ASN:HD22	1:AC:456:ALA:H	1.31	0.79
1:CN:454:ASN:HD22	1:CN:456:ALA:H	1.30	0.79
1:BF:250:TRP:CZ3	1:BF:272:TYR:CE1	2.70	0.79
1:BR:189:PHE:HE1	1:BR:198:ARG:HG3	1.46	0.79
1:CR:189:PHE:HE1	1:CR:198:ARG:HG3	1.47	0.79
1:AJ:189:PHE:HE1	1:AJ:198:ARG:HG3	1.48	0.79
1:AB:259:THR:CG2	1:AB:259:THR:O	2.30	0.79
1:BJ:189:PHE:HE1	1:BJ:198:ARG:CG	1.96	0.79
1:AQ:250:TRP:CZ3	1:AQ:272:TYR:CE1	2.71	0.79
1:AH:189:PHE:HE1	1:AH:198:ARG:HG3	1.49	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AG:272:TYR:O	1:AG:273:VAL:HG23	1.83	0.78
1:BQ:189:PHE:HE1	1:BQ:198:ARG:HG3	1.49	0.78
1:AN:55:ARG:CD	1:AS:272:TYR:HE2	1.96	0.78
1:CD:250:TRP:CZ3	1:CD:272:TYR:HE1	2.02	0.78
1:BQ:250:TRP:CZ3	1:BQ:272:TYR:CE1	2.71	0.78
1:CI:189:PHE:HE1	1:CI:198:ARG:CG	1.96	0.78
1:CK:454:ASN:HD22	1:CK:456:ALA:H	1.28	0.78
1:BA:189:PHE:HE1	1:BA:198:ARG:HG3	1.49	0.78
1:AK:55:ARG:NE	1:CF:272:TYR:CE2	2.52	0.78
1:AG:55:ARG:CD	1:CG:272:TYR:CE2	2.66	0.78
1:AD:250:TRP:CZ3	1:AD:272:TYR:CE1	2.72	0.78
1:CO:79:ARG:HH11	1:CO:79:ARG:HG3	1.49	0.78
1:BR:454:ASN:HD22	1:BR:456:ALA:H	1.31	0.78
1:BM:454:ASN:HD22	1:BM:456:ALA:H	1.31	0.78
1:CO:189:PHE:HE1	1:CO:198:ARG:HG3	1.49	0.78
1:AG:272:TYR:O	1:AG:273:VAL:CG2	2.32	0.78
1:BO:272:TYR:HE2	1:BR:55:ARG:CD	1.97	0.78
1:CD:272:TYR:HE2	1:CS:55:ARG:CD	1.97	0.78
1:AA:250:TRP:CZ3	1:AA:272:TYR:CE1	2.72	0.78
1:BR:250:TRP:CZ3	1:BR:272:TYR:CE1	2.71	0.78
1:AD:454:ASN:HD22	1:AD:456:ALA:H	1.32	0.78
1:BL:454:ASN:HD22	1:BL:456:ALA:H	1.31	0.78
1:BH:454:ASN:HD22	1:BH:456:ALA:H	1.30	0.78
1:BO:272:TYR:CE2	1:BR:55:ARG:CD	2.67	0.77
1:BG:189:PHE:HE1	1:BG:198:ARG:CG	1.96	0.77
1:AG:55:ARG:HD3	1:CG:272:TYR:CE2	2.19	0.77
1:BF:272:TYR:CE2	1:CK:55:ARG:NE	2.52	0.77
1:BI:55:ARG:CD	1:BR:272:TYR:CE2	2.67	0.77
1:CE:272:TYR:HE2	1:CM:55:ARG:CD	1.97	0.77
1:AD:272:TYR:CE2	1:AS:55:ARG:NE	2.52	0.77
1:AG:272:TYR:CE2	1:BG:55:ARG:NH2	2.52	0.77
1:BT:55:ARG:CD	1:CA:272:TYR:HE2	1.97	0.77
1:BP:250:TRP:CE3	1:BP:272:TYR:CE1	2.73	0.77
1:CE:250:TRP:CZ3	1:CE:272:TYR:HE1	2.03	0.77
1:CP:250:TRP:CZ3	1:CP:272:TYR:HE1	2.01	0.77
1:BA:454:ASN:HD22	1:BA:456:ALA:H	1.32	0.77
1:BS:454:ASN:HD22	1:BS:456:ALA:H	1.30	0.77
1:AO:272:TYR:CE2	1:AR:55:ARG:HD3	2.19	0.77
1:AE:454:ASN:HD22	1:AE:456:ALA:H	1.31	0.77
1:BJ:250:TRP:CE3	1:BJ:272:TYR:CE1	2.73	0.77
1:CA:250:TRP:CZ3	1:CA:272:TYR:CE1	2.71	0.77
1:AB:189:PHE:HE1	1:AB:198:ARG:HG3	1.49	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CJ:454:ASN:HD22	1:CJ:456:ALA:H	1.31	0.77
1:BF:454:ASN:HD22	1:BF:456:ALA:H	1.31	0.77
1:CJ:272:TYR:CE2	1:CQ:55:ARG:CZ	2.68	0.77
1:AG:272:TYR:C	1:AG:273:VAL:HG23	2.05	0.77
1:CD:22:THR:OG1	1:CD:131:HIS:HD2	1.68	0.77
1:BT:454:ASN:HD22	1:BT:456:ALA:H	1.31	0.77
1:BP:22:THR:OG1	1:BP:131:HIS:HD2	1.68	0.77
1:AP:250:TRP:CZ3	1:AP:272:TYR:CE1	2.73	0.77
1:AA:454:ASN:HD22	1:AA:456:ALA:H	1.30	0.77
1:AH:272:TYR:CE2	1:CF:55:ARG:CD	2.68	0.76
1:BE:250:TRP:CZ3	1:BE:272:TYR:CE1	2.73	0.76
1:BQ:284:ARG:HH11	1:BQ:284:ARG:CG	1.98	0.76
1:BI:55:ARG:CD	1:BR:272:TYR:HE2	1.97	0.76
1:BT:55:ARG:CD	1:CA:272:TYR:CE2	2.68	0.76
1:AE:189:PHE:HE1	1:AE:198:ARG:CG	1.98	0.76
1:BF:79:ARG:HG3	1:BF:79:ARG:HH11	1.48	0.76
1:BS:250:TRP:CZ3	1:BS:272:TYR:CE1	2.73	0.76
1:AP:22:THR:OG1	1:AP:131:HIS:HD2	1.68	0.76
1:CH:454:ASN:HD22	1:CH:456:ALA:H	1.32	0.76
1:AO:291:PRO:O	1:AO:291:PRO:CD	2.30	0.76
1:CC:79:ARG:HH11	1:CC:79:ARG:HG3	1.51	0.76
1:BP:189:PHE:HE1	1:BP:198:ARG:HG3	1.50	0.76
1:CE:189:PHE:HE1	1:CE:198:ARG:CG	1.98	0.76
1:AO:454:ASN:HD22	1:AO:456:ALA:H	1.33	0.76
1:BN:454:ASN:HD22	1:BN:456:ALA:H	1.33	0.76
1:BL:7:VAL:HG11	1:BL:9:TYR:CZ	2.21	0.76
1:AB:259:THR:HG23	1:AB:259:THR:O	1.85	0.76
1:AG:55:ARG:HD3	1:CG:272:TYR:CD2	2.21	0.76
1:AN:55:ARG:CD	1:AS:272:TYR:CE2	2.69	0.76
1:AP:272:TYR:CE2	1:BE:55:ARG:HD3	2.20	0.76
1:AO:289:ARG:NH1	1:AO:337:ASP:O	2.19	0.76
1:CD:272:TYR:CE2	1:CS:55:ARG:CD	2.68	0.75
1:AF:189:PHE:HE1	1:AF:198:ARG:CG	1.98	0.75
1:BJ:454:ASN:HD22	1:BJ:456:ALA:H	1.32	0.75
1:CE:22:THR:OG1	1:CE:131:HIS:HD2	1.68	0.75
1:AK:189:PHE:HE1	1:AK:198:ARG:HG3	1.51	0.75
1:BG:74:ASN:HB3	1:BG:126:GLU:HG2	1.68	0.75
1:AE:22:THR:OG1	1:AE:131:HIS:HD2	1.69	0.75
1:AL:454:ASN:HD22	1:AL:456:ALA:H	1.30	0.75
1:BC:454:ASN:HD22	1:BC:456:ALA:H	1.31	0.75
1:BT:79:ARG:HG3	1:BT:79:ARG:HH11	1.51	0.75
1:CR:77:THR:O	1:CR:80:ILE:CG1	2.33	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AI:272:TYR:HE2	1:AO:55:ARG:CD	1.99	0.75
1:BP:272:TYR:CD2	1:CE:55:ARG:HD3	2.22	0.75
1:CC:454:ASN:HD22	1:CC:456:ALA:H	1.34	0.75
1:BL:189:PHE:HE1	1:BL:198:ARG:HG3	1.51	0.75
1:AI:55:ARG:CD	1:AR:272:TYR:CE2	2.69	0.75
1:AJ:55:ARG:NE	1:BL:272:TYR:CE2	2.55	0.75
1:BC:22:THR:OG1	1:BC:131:HIS:HD2	1.69	0.75
1:CI:272:TYR:CE2	1:CO:55:ARG:NE	2.55	0.75
1:BF:189:PHE:HE1	1:BF:198:ARG:HG3	1.51	0.75
1:BS:189:PHE:HE1	1:BS:198:ARG:HG3	1.52	0.75
1:CB:11:PRO:HG2	1:CB:18:ARG:CD	2.17	0.75
1:CI:74:ASN:HB3	1:CI:126:GLU:HG2	1.67	0.75
1:AP:454:ASN:HD22	1:AP:456:ALA:H	1.32	0.75
1:AJ:250:TRP:CZ3	1:AJ:272:TYR:CE1	2.75	0.75
1:BN:189:PHE:HE1	1:BN:198:ARG:HG3	1.51	0.75
1:AE:272:TYR:CE2	1:AM:55:ARG:NE	2.55	0.75
1:CD:55:ARG:NE	1:CN:272:TYR:CE2	2.55	0.75
1:AF:22:THR:OG1	1:AF:131:HIS:HD2	1.70	0.75
1:BQ:36:GLN:NE2	1:BQ:156:LEU:H	1.85	0.75
1:AM:284:ARG:HG2	1:AM:284:ARG:HH11	1.51	0.75
1:BI:189:PHE:HE1	1:BI:198:ARG:CG	2.00	0.74
1:CB:11:PRO:HG2	1:CB:18:ARG:NE	2.02	0.74
1:BA:33:LYS:O	1:BA:33:LYS:HG2	1.87	0.74
1:CI:454:ASN:HD22	1:CI:456:ALA:H	1.35	0.74
1:BE:454:ASN:HD22	1:BE:456:ALA:H	1.35	0.74
1:AF:55:ARG:NE	1:BH:272:TYR:CE2	2.55	0.74
1:AP:33:LYS:O	1:AP:33:LYS:HG2	1.86	0.74
1:AR:22:THR:OG1	1:AR:131:HIS:HD2	1.70	0.74
1:BP:272:TYR:CE2	1:CE:55:ARG:HD3	2.22	0.74
1:AM:284:ARG:HH11	1:AM:284:ARG:CG	2.00	0.74
1:CJ:22:THR:OG1	1:CJ:131:HIS:HD2	1.70	0.74
1:BB:33:LYS:HG2	1:BB:33:LYS:O	1.87	0.74
1:BL:33:LYS:HG2	1:BL:33:LYS:O	1.87	0.74
1:CL:189:PHE:HE1	1:CL:198:ARG:HG3	1.52	0.74
1:AB:201:GLY:HA3	1:AB:300:GLN:HG2	1.70	0.74
1:CG:33:LYS:O	1:CG:33:LYS:HG2	1.88	0.74
1:BA:22:THR:OG1	1:BA:131:HIS:HD2	1.70	0.74
1:AE:55:ARG:CD	1:CP:272:TYR:CE2	2.70	0.74
1:AC:55:ARG:CD	1:AT:272:TYR:HE2	2.01	0.74
1:AF:272:TYR:CE2	1:BK:55:ARG:NE	2.55	0.74
1:BQ:284:ARG:HG2	1:BQ:284:ARG:HH11	1.52	0.74
1:AI:250:TRP:CZ3	1:AI:272:TYR:CE1	2.76	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AE:55:ARG:CD	1:CP:272:TYR:HE2	2.00	0.74
1:CL:33:LYS:O	1:CL:33:LYS:HG2	1.88	0.74
1:CG:79:ARG:HH11	1:CG:79:ARG:HG3	1.52	0.74
1:BK:33:LYS:O	1:BK:33:LYS:HG2	1.88	0.74
1:BK:189:PHE:HE1	1:BK:198:ARG:HG3	1.52	0.74
1:AG:55:ARG:CD	1:CG:272:TYR:HE2	2.00	0.74
1:BR:189:PHE:HE1	1:BR:198:ARG:CG	2.00	0.74
1:CT:454:ASN:HD22	1:CT:456:ALA:H	1.33	0.74
1:CB:454:ASN:HD22	1:CB:456:ALA:H	1.35	0.74
1:CT:33:LYS:HG2	1:CT:33:LYS:O	1.88	0.74
1:AJ:454:ASN:HD22	1:AJ:456:ALA:H	1.35	0.74
1:AT:454:ASN:HD22	1:AT:456:ALA:H	1.36	0.74
1:AS:250:TRP:CE3	1:AS:272:TYR:CE1	2.75	0.74
1:AT:250:TRP:CZ3	1:AT:272:TYR:HE1	2.06	0.74
1:BP:79:ARG:HH11	1:BP:79:ARG:HG3	1.52	0.74
1:AH:272:TYR:HE2	1:CF:55:ARG:CD	1.99	0.74
1:CG:22:THR:OG1	1:CG:131:HIS:HD2	1.71	0.74
1:AS:454:ASN:HD22	1:AS:456:ALA:H	1.35	0.73
1:AA:189:PHE:HE1	1:AA:198:ARG:HG3	1.53	0.73
1:AR:250:TRP:CZ3	1:AR:272:TYR:HE1	2.06	0.73
1:AT:33:LYS:O	1:AT:33:LYS:HG2	1.88	0.73
1:CC:55:ARG:CD	1:CT:272:TYR:CE2	2.72	0.73
1:BE:33:LYS:O	1:BE:33:LYS:HG2	1.88	0.73
1:BA:14:CYS:H	1:BA:138:ASN:HD21	1.35	0.73
1:AT:189:PHE:HE1	1:AT:198:ARG:HG3	1.54	0.73
1:AA:55:ARG:NE	1:CC:272:TYR:HE2	1.86	0.73
1:BJ:189:PHE:CE1	1:BJ:198:ARG:HG3	2.24	0.73
1:AE:272:TYR:CE2	1:AM:55:ARG:CD	2.72	0.73
1:AO:289:ARG:NH1	1:AO:337:ASP:C	2.42	0.73
1:BG:33:LYS:O	1:BG:33:LYS:HG2	1.88	0.73
1:AN:430:MET:SD	1:AO:296:ALA:HB2	2.28	0.73
1:CR:77:THR:O	1:CR:80:ILE:HG13	1.89	0.73
1:BC:250:TRP:CZ3	1:BC:272:TYR:CE1	2.76	0.73
1:BA:74:ASN:HB3	1:BA:126:GLU:HG2	1.69	0.73
1:AK:454:ASN:HD22	1:AK:456:ALA:H	1.34	0.73
1:AN:55:ARG:CZ	1:AS:272:TYR:CE2	2.71	0.73
1:AT:55:ARG:NE	1:BA:272:TYR:CE2	2.56	0.73
1:AF:272:TYR:CE2	1:BK:55:ARG:CD	2.72	0.73
1:CA:454:ASN:HD22	1:CA:456:ALA:H	1.34	0.73
1:BD:33:LYS:O	1:BD:33:LYS:HG2	1.89	0.73
1:AI:55:ARG:HD3	1:AR:272:TYR:HD2	1.53	0.73
1:CO:454:ASN:HD22	1:CO:456:ALA:H	1.34	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AI:272:TYR:CD2	1:AO:55:ARG:CZ	2.72	0.73
1:AO:206:GLN:HE22	1:AO:294:LEU:HB2	1.53	0.73
1:CQ:250:TRP:CZ3	1:CQ:272:TYR:HE1	2.05	0.73
1:AC:55:ARG:CD	1:AT:272:TYR:CE2	2.71	0.73
1:BD:272:TYR:CE2	1:BS:55:ARG:NE	2.57	0.73
1:BD:55:ARG:CD	1:BN:272:TYR:CE2	2.72	0.73
1:AJ:55:ARG:CD	1:BL:272:TYR:CE2	2.72	0.73
1:AF:33:LYS:O	1:AF:33:LYS:HG2	1.88	0.73
1:BS:74:ASN:HB3	1:BS:126:GLU:HG2	1.71	0.73
1:CP:79:ARG:HG3	1:CP:79:ARG:HH11	1.54	0.73
1:AB:250:TRP:CZ3	1:AB:272:TYR:HE1	2.06	0.73
1:CN:189:PHE:CE1	1:CN:198:ARG:HG3	2.23	0.73
1:AG:189:PHE:HE2	1:AG:249:LEU:HD21	1.54	0.73
1:BO:33:LYS:O	1:BO:33:LYS:HG2	1.87	0.73
1:CC:33:LYS:O	1:CC:33:LYS:HG2	1.88	0.73
1:BL:74:ASN:HB3	1:BL:126:GLU:HG2	1.71	0.73
1:BJ:191:LEU:CD2	1:BJ:191:LEU:H	2.02	0.72
1:BD:250:TRP:CZ3	1:BD:272:TYR:HE1	2.06	0.72
1:AM:22:THR:OG1	1:AM:131:HIS:HD2	1.72	0.72
1:CE:454:ASN:HD22	1:CE:456:ALA:H	1.37	0.72
1:BB:284:ARG:HH11	1:BB:284:ARG:CG	2.02	0.72
1:CL:284:ARG:CG	1:CL:284:ARG:HH11	2.01	0.72
1:CG:454:ASN:HD22	1:CG:456:ALA:H	1.34	0.72
1:CJ:272:TYR:CE2	1:CQ:55:ARG:CD	2.72	0.72
1:CM:250:TRP:CZ3	1:CM:272:TYR:HE1	2.06	0.72
1:AD:55:ARG:NE	1:AN:272:TYR:CE2	2.56	0.72
1:CI:55:ARG:CD	1:CR:272:TYR:CE2	2.72	0.72
1:AD:189:PHE:HE1	1:AD:198:ARG:HG3	1.54	0.72
1:AD:79:ARG:HG3	1:AD:79:ARG:HH11	1.54	0.72
1:CD:284:ARG:HH11	1:CD:284:ARG:HG2	1.55	0.72
1:AK:55:ARG:CD	1:CF:272:TYR:CE2	2.71	0.72
1:CH:36:GLN:NE2	1:CH:156:LEU:H	1.88	0.72
1:CL:74:ASN:HB3	1:CL:126:GLU:HG2	1.71	0.72
1:CI:189:PHE:HE2	1:CI:249:LEU:HD21	1.53	0.72
1:AI:55:ARG:NE	1:AR:272:TYR:CE2	2.57	0.72
1:BE:16:ALA:O	1:BE:17:ASN:HB2	1.89	0.72
1:CP:33:LYS:HG2	1:CP:33:LYS:O	1.89	0.72
1:AL:74:ASN:HB3	1:AL:126:GLU:HG2	1.70	0.72
1:AN:22:THR:OG1	1:AN:131:HIS:HD2	1.72	0.72
1:BO:454:ASN:HD22	1:BO:456:ALA:H	1.37	0.72
1:CI:378:ARG:CG	1:CI:379:VAL:N	2.52	0.72
1:BN:55:ARG:NE	1:BS:272:TYR:CE2	2.57	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BM:284:ARG:CG	1:BM:284:ARG:HH11	2.02	0.72
1:AF:74:ASN:HB3	1:AF:126:GLU:HG2	1.72	0.72
1:BB:191:LEU:H	1:BB:191:LEU:CD2	2.03	0.72
1:AG:454:ASN:HD22	1:AG:456:ALA:H	1.36	0.72
1:BQ:33:LYS:HG2	1:BQ:33:LYS:O	1.89	0.72
1:AJ:33:LYS:HG2	1:AJ:33:LYS:O	1.90	0.72
1:CI:22:THR:OG1	1:CI:131:HIS:HD2	1.72	0.72
1:AQ:22:THR:OG1	1:AQ:131:HIS:HD2	1.72	0.72
1:AH:454:ASN:HD22	1:AH:456:ALA:H	1.35	0.72
1:CM:22:THR:OG1	1:CM:131:HIS:HD2	1.73	0.72
1:BI:33:LYS:HG2	1:BI:33:LYS:O	1.90	0.72
1:BR:33:LYS:HG2	1:BR:33:LYS:O	1.90	0.72
1:AE:189:PHE:HE2	1:AE:249:LEU:HD21	1.55	0.72
1:CC:284:ARG:HG2	1:CC:284:ARG:HH11	1.55	0.72
1:AS:22:THR:OG1	1:AS:131:HIS:HD2	1.73	0.72
1:BH:33:LYS:HG2	1:BH:33:LYS:O	1.90	0.72
1:AS:33:LYS:HG2	1:AS:33:LYS:O	1.90	0.72
1:AA:55:ARG:NE	1:CC:272:TYR:CE2	2.58	0.71
1:AK:55:ARG:HD3	1:CF:272:TYR:CD2	2.25	0.71
1:BC:189:PHE:HE1	1:BC:198:ARG:HG3	1.55	0.71
1:AC:284:ARG:HH11	1:AC:284:ARG:CG	2.02	0.71
1:BQ:454:ASN:HD22	1:BQ:456:ALA:H	1.36	0.71
1:AQ:33:LYS:HG2	1:AQ:33:LYS:O	1.89	0.71
1:AB:454:ASN:HD22	1:AB:456:ALA:H	1.38	0.71
1:AG:250:TRP:CZ3	1:AG:272:TYR:HE1	2.08	0.71
1:CC:55:ARG:CD	1:CT:272:TYR:HE2	2.02	0.71
1:CK:36:GLN:NE2	1:CK:156:LEU:H	1.88	0.71
1:BR:74:ASN:HB3	1:BR:126:GLU:HG2	1.72	0.71
1:CT:189:PHE:HE1	1:CT:198:ARG:HG3	1.55	0.71
1:BO:284:ARG:HH11	1:BO:284:ARG:CG	2.02	0.71
1:BM:79:ARG:HH11	1:BM:79:ARG:HG3	1.55	0.71
1:BO:74:ASN:HB3	1:BO:126:GLU:HG2	1.73	0.71
1:CG:79:ARG:HH11	1:CG:79:ARG:CG	2.03	0.71
1:BH:22:THR:OG1	1:BH:131:HIS:HD2	1.73	0.71
1:AB:284:ARG:HH11	1:AB:284:ARG:HG2	1.55	0.71
1:AR:33:LYS:HG2	1:AR:33:LYS:O	1.88	0.71
1:CB:22:THR:OG1	1:CB:131:HIS:HD2	1.73	0.71
1:AL:22:THR:OG1	1:AL:131:HIS:HD2	1.72	0.71
1:AG:273:VAL:O	1:AG:273:VAL:HG12	1.91	0.71
1:AR:189:PHE:CE1	1:AR:198:ARG:HG3	2.25	0.71
1:AR:189:PHE:HE2	1:AR:249:LEU:HD21	1.53	0.71
1:AQ:74:ASN:HB3	1:AQ:126:GLU:HG2	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BT:33:LYS:O	1:BT:33:LYS:HG2	1.90	0.71
1:CT:284:ARG:HH11	1:CT:284:ARG:CG	2.04	0.71
1:CN:250:TRP:CZ3	1:CN:272:TYR:HE1	2.08	0.71
1:AC:250:TRP:CZ3	1:AC:272:TYR:HE1	2.08	0.71
1:CN:74:ASN:HB3	1:CN:126:GLU:HG2	1.73	0.71
1:AK:14:CYS:H	1:AK:138:ASN:HD21	1.39	0.71
1:CO:33:LYS:HG2	1:CO:33:LYS:O	1.90	0.71
1:BD:22:THR:OG1	1:BD:131:HIS:HD2	1.73	0.71
1:BC:36:GLN:NE2	1:BC:156:LEU:H	1.89	0.71
1:BN:22:THR:OG1	1:BN:131:HIS:HD2	1.74	0.71
1:CO:272:TYR:CE2	1:CR:55:ARG:HD3	2.26	0.71
1:AJ:272:TYR:CE2	1:AQ:55:ARG:CD	2.73	0.71
1:CD:55:ARG:CD	1:CN:272:TYR:CE2	2.74	0.71
1:AF:272:TYR:CD2	1:BK:55:ARG:HD3	2.25	0.71
1:CC:284:ARG:CG	1:CC:284:ARG:HH11	2.04	0.71
1:CA:33:LYS:HG2	1:CA:33:LYS:O	1.90	0.71
1:AB:74:ASN:HB3	1:AB:126:GLU:HG2	1.72	0.71
1:CS:74:ASN:HB3	1:CS:126:GLU:HG2	1.72	0.71
1:CE:33:LYS:HG2	1:CE:33:LYS:O	1.89	0.71
1:AB:79:ARG:HG3	1:AB:79:ARG:HH11	1.56	0.71
1:BG:454:ASN:HD22	1:BG:456:ALA:H	1.39	0.71
1:BP:33:LYS:O	1:BP:33:LYS:HG2	1.90	0.71
1:AO:295:LEU:CB	1:AO:298:GLN:OE1	2.35	0.71
1:CD:284:ARG:HH11	1:CD:284:ARG:CG	2.04	0.71
1:CT:14:CYS:H	1:CT:138:ASN:HD21	1.38	0.71
1:CT:16:ALA:O	1:CT:17:ASN:HB2	1.91	0.71
1:CN:36:GLN:NE2	1:CN:156:LEU:H	1.88	0.71
1:CE:272:TYR:CE2	1:CM:55:ARG:CZ	2.73	0.71
1:BD:191:LEU:CD2	1:BD:191:LEU:H	2.04	0.71
1:CJ:14:CYS:H	1:CJ:138:ASN:HD21	1.38	0.71
1:CR:33:LYS:HG2	1:CR:33:LYS:O	1.90	0.71
1:CS:189:PHE:HE1	1:CS:198:ARG:HG3	1.56	0.71
1:AM:33:LYS:O	1:AM:33:LYS:HG2	1.91	0.71
1:BS:22:THR:OG1	1:BS:131:HIS:HD2	1.74	0.71
1:AN:55:ARG:CZ	1:AS:272:TYR:CD2	2.74	0.71
1:CQ:191:LEU:CD2	1:CQ:191:LEU:H	2.04	0.71
1:BM:189:PHE:HE2	1:BM:249:LEU:HD21	1.54	0.71
1:BF:22:THR:OG1	1:BF:131:HIS:HD2	1.74	0.71
1:CJ:33:LYS:O	1:CJ:33:LYS:HG2	1.91	0.71
1:BC:33:LYS:HG2	1:BC:33:LYS:O	1.91	0.71
1:CP:22:THR:OG1	1:CP:131:HIS:HD2	1.74	0.71
1:BA:284:ARG:HH11	1:BA:284:ARG:CG	2.03	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AB:191:LEU:CD2	1:AB:191:LEU:H	2.04	0.70
1:AI:189:PHE:CE1	1:AI:198:ARG:HG3	2.25	0.70
1:AE:272:TYR:HE2	1:AM:55:ARG:CD	2.03	0.70
1:CL:284:ARG:HH11	1:CL:284:ARG:HG2	1.56	0.70
1:AC:33:LYS:O	1:AC:33:LYS:HG2	1.90	0.70
1:CS:33:LYS:HG2	1:CS:33:LYS:O	1.91	0.70
1:AS:284:ARG:HH11	1:AS:284:ARG:CG	2.04	0.70
1:CJ:189:PHE:CE1	1:CJ:198:ARG:HG3	2.25	0.70
1:BM:189:PHE:HE1	1:BM:198:ARG:HG3	1.55	0.70
1:BS:33:LYS:HG2	1:BS:33:LYS:O	1.92	0.70
1:AN:33:LYS:O	1:AN:33:LYS:HG2	1.90	0.70
1:BI:22:THR:OG1	1:BI:131:HIS:HD2	1.73	0.70
1:CP:189:PHE:HE1	1:CP:198:ARG:HG3	1.56	0.70
1:AN:430:MET:HE1	1:AO:296:ALA:CB	2.19	0.70
1:BQ:272:TYR:CE2	1:CL:55:ARG:NE	2.59	0.70
1:CL:22:THR:OG1	1:CL:131:HIS:HD2	1.73	0.70
1:AN:74:ASN:HB3	1:AN:126:GLU:HG2	1.72	0.70
1:BD:55:ARG:HD3	1:BN:272:TYR:CD2	2.26	0.70
1:CF:74:ASN:HB3	1:CF:126:GLU:HG2	1.73	0.70
1:AG:284:ARG:CG	1:AG:284:ARG:HH11	2.04	0.70
1:CH:33:LYS:HG2	1:CH:33:LYS:O	1.91	0.70
1:BF:272:TYR:CE2	1:CK:55:ARG:CD	2.75	0.70
1:CB:33:LYS:HG2	1:CB:33:LYS:O	1.91	0.70
1:CK:33:LYS:HG2	1:CK:33:LYS:O	1.90	0.70
1:AQ:454:ASN:HD22	1:AQ:456:ALA:H	1.36	0.70
1:AO:79:ARG:HH11	1:AO:79:ARG:HG3	1.56	0.70
1:AA:33:LYS:O	1:AA:33:LYS:HG2	1.92	0.70
1:BO:284:ARG:HH11	1:BO:284:ARG:HG2	1.54	0.70
1:CT:284:ARG:HH11	1:CT:284:ARG:HG2	1.56	0.70
1:BT:189:PHE:HE1	1:BT:198:ARG:HG3	1.56	0.70
1:AJ:74:ASN:HB3	1:AJ:126:GLU:HG2	1.73	0.70
1:BL:22:THR:OG1	1:BL:131:HIS:HD2	1.73	0.70
1:CG:189:PHE:CE1	1:CG:198:ARG:HG3	2.27	0.70
1:AN:189:PHE:HE2	1:AN:249:LEU:HD21	1.56	0.70
1:BE:272:TYR:CE2	1:BM:55:ARG:NE	2.59	0.70
1:BK:36:GLN:NE2	1:BK:156:LEU:H	1.89	0.70
1:CF:22:THR:OG1	1:CF:131:HIS:HD2	1.73	0.70
1:AI:33:LYS:HG2	1:AI:33:LYS:O	1.92	0.70
1:BJ:272:TYR:CE2	1:BQ:55:ARG:CD	2.74	0.70
1:BP:191:LEU:CD2	1:BP:191:LEU:H	2.05	0.70
1:AO:191:LEU:H	1:AO:191:LEU:CD2	2.05	0.70
1:AJ:272:TYR:HE2	1:AQ:55:ARG:CD	2.05	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CD:55:ARG:HD3	1:CN:272:TYR:CD2	2.27	0.70
1:AF:189:PHE:HE2	1:AF:249:LEU:HD21	1.56	0.70
1:AA:272:TYR:CE2	1:CT:55:ARG:NE	2.60	0.70
1:AG:284:ARG:HH11	1:AG:284:ARG:HG2	1.56	0.70
1:BF:284:ARG:CG	1:BF:284:ARG:HH11	2.04	0.70
1:CB:79:ARG:HH11	1:CB:79:ARG:HG3	1.56	0.70
1:BP:284:ARG:HG2	1:BP:284:ARG:HH11	1.56	0.70
1:BT:22:THR:OG1	1:BT:131:HIS:HD2	1.74	0.70
1:AS:189:PHE:HE1	1:AS:198:ARG:HG3	1.57	0.70
1:AB:33:LYS:O	1:AB:33:LYS:HG2	1.90	0.70
1:BO:191:LEU:CD2	1:BO:191:LEU:H	2.05	0.70
1:BB:189:PHE:HE2	1:BB:249:LEU:HD21	1.56	0.70
1:BA:250:TRP:CZ3	1:BA:272:TYR:HE1	2.10	0.70
1:CO:189:PHE:CE1	1:CO:198:ARG:HG3	2.26	0.70
1:BF:284:ARG:HG2	1:BF:284:ARG:HH11	1.57	0.70
1:CP:74:ASN:HB3	1:CP:126:GLU:HG2	1.74	0.70
1:CN:284:ARG:HH11	1:CN:284:ARG:HG2	1.56	0.70
1:AL:284:ARG:CG	1:AL:284:ARG:HH11	2.05	0.70
1:CA:284:ARG:HG2	1:CA:284:ARG:HH11	1.57	0.70
1:AH:15:GLN:HE21	1:AH:15:GLN:HA	1.57	0.70
1:CI:38:GLU:HB2	1:CQ:35:VAL:HG22	1.74	0.70
1:AG:261:ASP:OD1	1:AG:261:ASP:C	2.30	0.70
1:CJ:250:TRP:CE3	1:CJ:272:TYR:CE1	2.80	0.70
1:BT:250:TRP:CZ3	1:BT:272:TYR:HE1	2.08	0.70
1:AD:55:ARG:CD	1:AN:272:TYR:CE2	2.75	0.70
1:AM:272:TYR:CE2	1:CP:55:ARG:NE	2.60	0.70
1:AK:74:ASN:HB3	1:AK:126:GLU:HG2	1.72	0.70
1:BH:284:ARG:HH11	1:BH:284:ARG:CG	2.04	0.70
1:CN:33:LYS:HG2	1:CN:33:LYS:O	1.91	0.70
1:BJ:22:THR:OG1	1:BJ:131:HIS:HD2	1.75	0.70
1:CT:74:ASN:HB3	1:CT:126:GLU:HG2	1.73	0.70
1:BK:74:ASN:HB3	1:BK:126:GLU:HG2	1.74	0.70
1:CD:272:TYR:CD2	1:CS:55:ARG:HD3	2.26	0.69
1:AH:33:LYS:HG2	1:AH:33:LYS:O	1.92	0.69
1:BD:284:ARG:CG	1:BD:284:ARG:HH11	2.05	0.69
1:BN:74:ASN:HB3	1:BN:126:GLU:HG2	1.74	0.69
1:CG:189:PHE:HE2	1:CG:249:LEU:HD21	1.57	0.69
1:AA:22:THR:OG1	1:AA:131:HIS:HD2	1.74	0.69
1:BO:22:THR:OG1	1:BO:131:HIS:HD2	1.75	0.69
1:AG:33:LYS:HG2	1:AG:33:LYS:O	1.91	0.69
1:AI:284:ARG:CG	1:AI:284:ARG:HH11	2.05	0.69
1:BJ:36:GLN:NE2	1:BJ:156:LEU:H	1.89	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CE:16:ALA:O	1:CE:17:ASN:HB2	1.92	0.69
1:AH:284:ARG:CG	1:AH:284:ARG:HH11	2.05	0.69
1:BI:284:ARG:CG	1:BI:284:ARG:HH11	2.05	0.69
1:AJ:79:ARG:HG3	1:AJ:79:ARG:HH11	1.56	0.69
1:AO:284:ARG:HH11	1:AO:284:ARG:CG	2.05	0.69
1:AE:74:ASN:HB3	1:AE:126:GLU:HG2	1.74	0.69
1:AH:55:ARG:HD3	1:AK:272:TYR:HD2	1.58	0.69
1:AN:189:PHE:CE1	1:AN:198:ARG:HG3	2.26	0.69
1:CI:55:ARG:HD3	1:CR:272:TYR:CD2	2.26	0.69
1:AB:284:ARG:CG	1:AB:284:ARG:HH11	2.05	0.69
1:AD:74:ASN:HB3	1:AD:126:GLU:HG2	1.73	0.69
1:CI:33:LYS:O	1:CI:33:LYS:HG2	1.90	0.69
1:CI:284:ARG:HH11	1:CI:284:ARG:HG2	1.57	0.69
1:AF:284:ARG:CG	1:AF:284:ARG:HH11	2.05	0.69
1:CB:74:ASN:HB3	1:CB:126:GLU:HG2	1.74	0.69
1:AR:191:LEU:H	1:AR:191:LEU:CD2	2.06	0.69
1:AL:191:LEU:H	1:AL:191:LEU:CD2	2.06	0.69
1:BI:191:LEU:CD2	1:BI:191:LEU:H	2.06	0.69
1:CN:189:PHE:HE2	1:CN:249:LEU:HD21	1.58	0.69
1:CA:36:GLN:NE2	1:CA:156:LEU:H	1.89	0.69
1:AD:284:ARG:CG	1:AD:284:ARG:HH11	2.05	0.69
1:AG:262:TRP:O	1:AG:263:ASN:C	2.29	0.69
1:AO:250:TRP:CE3	1:AO:272:TYR:CE1	2.81	0.69
1:BP:55:ARG:NE	1:CM:272:TYR:CE2	2.61	0.69
1:AH:250:TRP:CZ3	1:AH:272:TYR:HE1	2.11	0.69
1:CQ:74:ASN:HB3	1:CQ:126:GLU:HG2	1.74	0.69
1:BL:79:ARG:HH11	1:BL:79:ARG:HG3	1.57	0.69
1:CJ:74:ASN:HB3	1:CJ:126:GLU:HG2	1.74	0.69
1:AK:33:LYS:O	1:AK:33:LYS:HG2	1.93	0.69
1:CE:272:TYR:CE2	1:CM:55:ARG:CD	2.74	0.69
1:CG:250:TRP:CZ3	1:CG:272:TYR:HE1	2.10	0.69
1:AD:55:ARG:CD	1:AN:272:TYR:HE2	2.06	0.69
1:BJ:74:ASN:HB3	1:BJ:126:GLU:HG2	1.73	0.69
1:CE:284:ARG:HH11	1:CE:284:ARG:CG	2.06	0.69
1:AO:74:ASN:HB3	1:AO:126:GLU:HG2	1.75	0.69
1:AT:22:THR:OG1	1:AT:131:HIS:HD2	1.76	0.69
1:CC:22:THR:OG1	1:CC:131:HIS:HD2	1.75	0.69
1:AB:261:ASP:OD1	1:AB:261:ASP:C	2.28	0.69
1:AJ:191:LEU:H	1:AJ:191:LEU:CD2	2.04	0.69
1:CI:191:LEU:CD2	1:CI:191:LEU:H	2.05	0.69
1:AO:206:GLN:NE2	1:AO:294:LEU:HB2	2.07	0.69
1:AA:191:LEU:CD2	1:AA:191:LEU:H	2.05	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CM:191:LEU:CD2	1:CM:191:LEU:H	2.06	0.69
1:CN:191:LEU:H	1:CN:191:LEU:CD2	2.06	0.69
1:CB:191:LEU:CD2	1:CB:191:LEU:H	2.06	0.69
1:BH:189:PHE:HE2	1:BH:249:LEU:HD21	1.56	0.69
1:CI:55:ARG:HD3	1:CR:272:TYR:CE2	2.27	0.69
1:BB:284:ARG:HH11	1:BB:284:ARG:HG2	1.57	0.69
1:AO:284:ARG:HH11	1:AO:284:ARG:HG2	1.57	0.69
1:CM:284:ARG:HH11	1:CM:284:ARG:CG	2.06	0.69
1:BM:16:ALA:O	1:BM:17:ASN:HB2	1.92	0.69
1:CQ:22:THR:OG1	1:CQ:131:HIS:HD2	1.76	0.69
1:AT:79:ARG:HH11	1:AT:79:ARG:HG3	1.58	0.69
1:AK:442:GLN:HE21	1:AL:412:PHE:HB2	1.58	0.69
1:AK:191:LEU:CD2	1:AK:191:LEU:H	2.05	0.69
1:AM:191:LEU:CD2	1:AM:191:LEU:H	2.05	0.69
1:CA:191:LEU:CD2	1:CA:191:LEU:H	2.06	0.69
1:CJ:189:PHE:HE2	1:CJ:249:LEU:HD21	1.58	0.69
1:CE:189:PHE:CE1	1:CE:198:ARG:HG3	2.27	0.69
1:AH:189:PHE:HE2	1:AH:249:LEU:HD21	1.56	0.69
1:BI:284:ARG:HH11	1:BI:284:ARG:HG2	1.57	0.69
1:AD:284:ARG:HG2	1:AD:284:ARG:HH11	1.57	0.69
1:AI:14:CYS:H	1:AI:138:ASN:HD21	1.41	0.69
1:CA:79:ARG:HH11	1:CA:79:ARG:HG3	1.58	0.69
1:AP:284:ARG:HH11	1:AP:284:ARG:CG	2.06	0.69
1:CH:15:GLN:HE21	1:CH:15:GLN:HA	1.57	0.69
1:AA:284:ARG:HH11	1:AA:284:ARG:HG2	1.58	0.69
1:AG:74:ASN:HB3	1:AG:126:GLU:HG2	1.75	0.69
1:CG:191:LEU:H	1:CG:191:LEU:CD2	2.06	0.69
1:CF:250:TRP:CZ3	1:CF:272:TYR:HE1	2.09	0.69
1:BB:189:PHE:CE1	1:BB:198:ARG:HG3	2.28	0.69
1:BB:250:TRP:CZ3	1:BB:272:TYR:HE1	2.11	0.69
1:AF:55:ARG:CD	1:BH:272:TYR:CE2	2.76	0.69
1:AD:272:TYR:CE2	1:AS:55:ARG:CD	2.76	0.69
1:AD:33:LYS:HG2	1:AD:33:LYS:O	1.93	0.69
1:AI:22:THR:OG1	1:AI:131:HIS:HD2	1.75	0.69
1:AE:14:CYS:H	1:AE:138:ASN:HD21	1.39	0.69
1:AL:272:TYR:CE2	1:CJ:55:ARG:CZ	2.75	0.68
1:BJ:272:TYR:HE2	1:BQ:55:ARG:CD	2.05	0.68
1:AL:79:ARG:HH11	1:AL:79:ARG:CG	2.06	0.68
1:CR:189:PHE:HE2	1:CR:249:LEU:HD21	1.57	0.68
1:CB:189:PHE:CE1	1:CB:198:ARG:HG3	2.28	0.68
1:BC:272:TYR:CD2	1:CA:55:ARG:HD3	2.27	0.68
1:AA:284:ARG:HH11	1:AA:284:ARG:CG	2.06	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AG:36:GLN:NE2	1:AG:156:LEU:H	1.91	0.68
1:AL:14:CYS:H	1:AL:138:ASN:HD21	1.40	0.68
1:BN:33:LYS:HG2	1:BN:33:LYS:O	1.93	0.68
1:CQ:284:ARG:HH11	1:CQ:284:ARG:CG	2.06	0.68
1:CK:284:ARG:CG	1:CK:284:ARG:HH11	2.06	0.68
1:AL:272:TYR:CD2	1:CJ:55:ARG:CZ	2.76	0.68
1:CP:191:LEU:H	1:CP:191:LEU:CD2	2.05	0.68
1:AT:55:ARG:CD	1:BA:272:TYR:CE2	2.76	0.68
1:AM:189:PHE:CE1	1:AM:198:ARG:HG3	2.28	0.68
1:BQ:189:PHE:CE1	1:BQ:198:ARG:HG3	2.29	0.68
1:CI:284:ARG:CG	1:CI:284:ARG:HH11	2.06	0.68
1:BH:74:ASN:HB3	1:BH:126:GLU:HG2	1.74	0.68
1:CR:22:THR:OG1	1:CR:131:HIS:HD2	1.76	0.68
1:BC:284:ARG:CG	1:BC:284:ARG:HH11	2.07	0.68
1:BT:74:ASN:HB3	1:BT:126:GLU:HG2	1.74	0.68
1:AC:22:THR:OG1	1:AC:131:HIS:HD2	1.76	0.68
1:BF:191:LEU:H	1:BF:191:LEU:CD2	2.05	0.68
1:CK:191:LEU:CD2	1:CK:191:LEU:H	2.07	0.68
1:BI:189:PHE:CE1	1:BI:198:ARG:HG3	2.28	0.68
1:CO:22:THR:OG1	1:CO:131:HIS:HD2	1.75	0.68
1:AJ:22:THR:OG1	1:AJ:131:HIS:HD2	1.76	0.68
1:CM:33:LYS:O	1:CM:33:LYS:HG2	1.93	0.68
1:BK:284:ARG:HH11	1:BK:284:ARG:HG2	1.57	0.68
1:CO:272:TYR:CE2	1:CR:55:ARG:CZ	2.76	0.68
1:AP:191:LEU:H	1:AP:191:LEU:CD2	2.05	0.68
1:BH:55:ARG:NE	1:BK:272:TYR:CE2	2.61	0.68
1:BD:55:ARG:CD	1:BN:272:TYR:HE2	2.07	0.68
1:BG:189:PHE:HE2	1:BG:249:LEU:HD21	1.57	0.68
1:AF:189:PHE:CE1	1:AF:198:ARG:HG3	2.26	0.68
1:AJ:55:ARG:HD3	1:BL:272:TYR:CD2	2.28	0.68
1:AQ:272:TYR:CE2	1:BL:55:ARG:NE	2.62	0.68
1:CH:284:ARG:HG2	1:CH:284:ARG:HH11	1.59	0.68
1:AK:284:ARG:CG	1:AK:284:ARG:HH11	2.06	0.68
1:AA:36:GLN:NE2	1:AA:156:LEU:H	1.92	0.68
1:CR:86:PRO:C	1:CR:88:TYR:N	2.47	0.68
1:AO:272:TYR:CD2	1:AR:55:ARG:HD3	2.29	0.68
1:AN:250:TRP:CZ3	1:AN:272:TYR:HE1	2.10	0.68
1:CH:189:PHE:HE2	1:CH:249:LEU:HD21	1.59	0.68
1:CL:189:PHE:CE1	1:CL:198:ARG:HG3	2.28	0.68
1:CN:284:ARG:CG	1:CN:284:ARG:HH11	2.06	0.68
1:BC:284:ARG:HH11	1:BC:284:ARG:HG2	1.59	0.68
1:CB:16:ALA:O	1:CB:17:ASN:HB2	1.93	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CK:189:PHE:HE1	1:CK:198:ARG:HG3	1.58	0.68
1:BB:16:ALA:O	1:BB:17:ASN:HB2	1.92	0.68
1:CL:191:LEU:H	1:CL:191:LEU:CD2	2.06	0.68
1:CH:191:LEU:H	1:CH:191:LEU:CD2	2.07	0.68
1:CE:189:PHE:HE2	1:CE:249:LEU:HD21	1.59	0.68
1:CB:250:TRP:CZ3	1:CB:272:TYR:HE1	2.11	0.68
1:BP:189:PHE:CE1	1:BP:198:ARG:HG3	2.28	0.68
1:AK:189:PHE:CE1	1:AK:198:ARG:HG3	2.28	0.68
1:AS:74:ASN:HB3	1:AS:126:GLU:HG2	1.74	0.68
1:AO:33:LYS:HG2	1:AO:33:LYS:O	1.94	0.68
1:CS:22:THR:OG1	1:CS:131:HIS:HD2	1.76	0.68
1:BM:22:THR:OG1	1:BM:131:HIS:HD2	1.76	0.68
1:CG:189:PHE:CE1	1:CG:198:ARG:CG	2.77	0.68
1:AI:191:LEU:CD2	1:AI:191:LEU:H	2.07	0.68
1:BB:55:ARG:NE	1:CB:272:TYR:HE2	1.92	0.68
1:BB:55:ARG:CD	1:CB:272:TYR:HE2	2.07	0.68
1:AE:250:TRP:CZ3	1:AE:272:TYR:HE1	2.11	0.68
1:AH:272:TYR:CE2	1:CF:55:ARG:HD3	2.28	0.68
1:CN:22:THR:OG1	1:CN:131:HIS:HD2	1.76	0.68
1:AI:36:GLN:NE2	1:AI:156:LEU:H	1.92	0.68
1:BT:284:ARG:CG	1:BT:284:ARG:HH11	2.07	0.68
1:BK:22:THR:OG1	1:BK:131:HIS:HD2	1.76	0.68
1:AI:454:ASN:HD22	1:AI:456:ALA:H	1.39	0.68
1:AL:189:PHE:HE1	1:AL:198:ARG:HG3	1.58	0.68
1:AI:189:PHE:HE2	1:AI:249:LEU:HD21	1.58	0.68
1:CK:284:ARG:HG2	1:CK:284:ARG:HH11	1.59	0.68
1:AL:33:LYS:HG2	1:AL:33:LYS:O	1.94	0.68
1:CA:189:PHE:HE1	1:CA:198:ARG:HG3	1.58	0.68
1:AE:33:LYS:O	1:AE:33:LYS:HG2	1.92	0.68
1:CH:74:ASN:HB3	1:CH:126:GLU:HG2	1.74	0.68
1:BD:189:PHE:HE1	1:BD:198:ARG:HG3	1.58	0.68
1:BN:284:ARG:CG	1:BN:284:ARG:HH11	2.06	0.68
1:BR:284:ARG:HH11	1:BR:284:ARG:HG2	1.59	0.68
1:CA:22:THR:OG1	1:CA:131:HIS:HD2	1.75	0.68
1:CF:33:LYS:O	1:CF:33:LYS:HG2	1.94	0.68
1:AT:36:GLN:NE2	1:AT:156:LEU:H	1.92	0.68
1:AI:272:TYR:HD2	1:AO:55:ARG:HD3	1.56	0.68
1:BT:191:LEU:CD2	1:BT:191:LEU:H	2.06	0.68
1:AE:189:PHE:CE1	1:AE:198:ARG:HG3	2.26	0.68
1:BM:284:ARG:HH11	1:BM:284:ARG:HG2	1.59	0.68
1:AC:284:ARG:HG2	1:AC:284:ARG:HH11	1.59	0.68
1:AC:74:ASN:HB3	1:AC:126:GLU:HG2	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CO:284:ARG:HH11	1:CO:284:ARG:HG2	1.58	0.68
1:CP:454:ASN:HD22	1:CP:456:ALA:H	1.40	0.68
1:BE:74:ASN:HB3	1:BE:126:GLU:HG2	1.74	0.68
1:AG:259:THR:CG2	1:AG:268:TYR:OH	2.42	0.68
1:AE:55:ARG:NE	1:CP:272:TYR:HE2	1.88	0.68
1:BD:272:TYR:HE2	1:BS:55:ARG:CD	2.06	0.68
1:CI:189:PHE:CE1	1:CI:198:ARG:HG3	2.28	0.68
1:AG:189:PHE:CE1	1:AG:198:ARG:HG3	2.29	0.68
1:BA:189:PHE:CE1	1:BA:198:ARG:HG3	2.29	0.68
1:AT:284:ARG:HH11	1:AT:284:ARG:HG2	1.59	0.68
1:BO:272:TYR:CD2	1:BR:55:ARG:HD3	2.29	0.67
1:BE:189:PHE:CE1	1:BE:198:ARG:HG3	2.29	0.67
1:CF:189:PHE:HE2	1:CF:249:LEU:HD21	1.59	0.67
1:AD:14:CYS:H	1:AD:138:ASN:HD21	1.42	0.67
1:BG:284:ARG:HG2	1:BG:284:ARG:HH11	1.60	0.67
1:AR:284:ARG:CG	1:AR:284:ARG:HH11	2.06	0.67
1:BQ:191:LEU:H	1:BQ:191:LEU:CD2	2.07	0.67
1:BH:191:LEU:H	1:BH:191:LEU:CD2	2.07	0.67
1:BA:79:ARG:HH11	1:BA:79:ARG:CG	2.06	0.67
1:AM:189:PHE:HE2	1:AM:249:LEU:HD21	1.58	0.67
1:AH:272:TYR:CD2	1:CF:55:ARG:HD3	2.28	0.67
1:AJ:55:ARG:CD	1:BL:272:TYR:HE2	2.07	0.67
1:AF:272:TYR:HE2	1:BK:55:ARG:CD	2.07	0.67
1:BG:284:ARG:CG	1:BG:284:ARG:HH11	2.06	0.67
1:AM:16:ALA:O	1:AM:17:ASN:HB2	1.92	0.67
1:BJ:33:LYS:O	1:BJ:33:LYS:HG2	1.94	0.67
1:AO:36:GLN:NE2	1:AO:156:LEU:H	1.92	0.67
1:CF:191:LEU:H	1:CF:191:LEU:CD2	2.07	0.67
1:BF:55:ARG:NE	1:CH:272:TYR:CE2	2.63	0.67
1:CO:284:ARG:CG	1:CO:284:ARG:HH11	2.07	0.67
1:CB:36:GLN:NE2	1:CB:156:LEU:H	1.92	0.67
1:AG:16:ALA:O	1:AG:17:ASN:HB2	1.94	0.67
1:CQ:33:LYS:O	1:CQ:33:LYS:HG2	1.93	0.67
1:BE:22:THR:OG1	1:BE:131:HIS:HD2	1.76	0.67
1:CM:189:PHE:HE2	1:CM:249:LEU:HD21	1.58	0.67
1:BD:55:ARG:HD3	1:BN:272:TYR:CE2	2.28	0.67
1:BJ:55:ARG:NE	1:CL:272:TYR:CE2	2.62	0.67
1:BM:33:LYS:O	1:BM:33:LYS:HG2	1.93	0.67
1:BL:284:ARG:CG	1:BL:284:ARG:HH11	2.07	0.67
1:AD:191:LEU:H	1:AD:191:LEU:CD2	2.07	0.67
1:AK:55:ARG:CD	1:CF:272:TYR:HE2	2.08	0.67
1:CD:55:ARG:CD	1:CN:272:TYR:HE2	2.08	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:272:TYR:CD2	1:CT:55:ARG:HD3	2.29	0.67
1:AG:22:THR:OG1	1:AG:131:HIS:HD2	1.77	0.67
1:CE:79:ARG:HH11	1:CE:79:ARG:HG3	1.60	0.67
1:BE:191:LEU:CD2	1:BE:191:LEU:H	2.06	0.67
1:BD:55:ARG:NE	1:BN:272:TYR:CE2	2.63	0.67
1:AD:272:TYR:HE2	1:AS:55:ARG:CD	2.08	0.67
1:CE:74:ASN:HB3	1:CE:126:GLU:HG2	1.76	0.67
1:BE:284:ARG:HH11	1:BE:284:ARG:CG	2.07	0.67
1:AQ:189:PHE:HE1	1:AQ:198:ARG:HG3	1.60	0.67
1:CC:74:ASN:HB3	1:CC:126:GLU:HG2	1.75	0.67
1:AP:74:ASN:HB3	1:AP:126:GLU:HG2	1.76	0.67
1:BM:191:LEU:H	1:BM:191:LEU:CD2	2.06	0.67
1:BC:191:LEU:CD2	1:BC:191:LEU:H	2.08	0.67
1:AJ:189:PHE:HE2	1:AJ:249:LEU:HD21	1.59	0.67
1:CD:36:GLN:NE2	1:CD:156:LEU:H	1.93	0.67
1:AT:74:ASN:HB3	1:AT:126:GLU:HG2	1.75	0.67
1:AB:22:THR:OG1	1:AB:131:HIS:HD2	1.78	0.67
1:AB:256:ASN:CG	1:AB:256:ASN:O	2.30	0.67
1:CG:284:ARG:HH11	1:CG:284:ARG:CG	2.07	0.67
1:BE:189:PHE:HE2	1:BE:249:LEU:HD21	1.59	0.67
1:CT:191:LEU:H	1:CT:191:LEU:CD2	2.08	0.67
1:CF:189:PHE:CE1	1:CF:198:ARG:HG3	2.29	0.67
1:BI:189:PHE:HE2	1:BI:249:LEU:HD21	1.59	0.67
1:BQ:272:TYR:CE2	1:CL:55:ARG:CD	2.78	0.67
1:BK:284:ARG:CG	1:BK:284:ARG:HH11	2.07	0.67
1:CC:189:PHE:HE1	1:CC:198:ARG:HG3	1.59	0.67
1:CD:33:LYS:O	1:CD:33:LYS:HG2	1.95	0.67
1:CS:250:TRP:CZ3	1:CS:272:TYR:HE1	2.12	0.67
1:BQ:284:ARG:NH1	1:BQ:284:ARG:HG2	2.09	0.67
1:AS:284:ARG:HH11	1:AS:284:ARG:HG2	1.58	0.67
1:AI:284:ARG:HG2	1:AI:284:ARG:HH11	1.58	0.67
1:BD:454:ASN:HD22	1:BD:456:ALA:H	1.43	0.67
1:BJ:284:ARG:HH11	1:BJ:284:ARG:CG	2.08	0.67
1:BS:284:ARG:CG	1:BS:284:ARG:HH11	2.08	0.67
1:AK:36:GLN:NE2	1:AK:156:LEU:H	1.92	0.67
1:AE:55:ARG:HD3	1:CP:272:TYR:CD2	2.30	0.67
1:CR:189:PHE:CE1	1:CR:198:ARG:HG3	2.29	0.67
1:AT:55:ARG:CD	1:BA:272:TYR:HE2	2.08	0.67
1:BH:189:PHE:CE1	1:BH:198:ARG:HG3	2.28	0.67
1:BC:272:TYR:CE2	1:CA:55:ARG:CD	2.78	0.67
1:AT:284:ARG:HH11	1:AT:284:ARG:CG	2.08	0.67
1:AR:284:ARG:HG2	1:AR:284:ARG:HH11	1.60	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AI:74:ASN:HB3	1:AI:126:GLU:HG2	1.76	0.67
1:CR:85:ASP:C	1:CR:85:ASP:OD1	2.29	0.66
1:AH:55:ARG:CZ	1:AK:272:TYR:CD2	2.79	0.66
1:AE:191:LEU:CD2	1:AE:191:LEU:H	2.08	0.66
1:BF:55:ARG:HD3	1:CH:272:TYR:CD2	2.31	0.66
1:BF:272:TYR:HE2	1:CK:55:ARG:CD	2.08	0.66
1:CH:284:ARG:CG	1:CH:284:ARG:HH11	2.08	0.66
1:AE:284:ARG:CG	1:AE:284:ARG:HH11	2.08	0.66
1:CK:74:ASN:HB3	1:CK:126:GLU:HG2	1.76	0.66
1:CM:74:ASN:HB3	1:CM:126:GLU:HG2	1.77	0.66
1:BT:55:ARG:HD3	1:CA:272:TYR:CE2	2.30	0.66
1:BC:189:PHE:CE1	1:BC:198:ARG:HG3	2.30	0.66
1:BR:284:ARG:CG	1:BR:284:ARG:HH11	2.07	0.66
1:CG:74:ASN:HB3	1:CG:126:GLU:HG2	1.78	0.66
1:CB:284:ARG:CG	1:CB:284:ARG:HH11	2.08	0.66
1:AR:14:CYS:H	1:AR:138:ASN:HD21	1.42	0.66
1:AC:191:LEU:CD2	1:AC:191:LEU:H	2.06	0.66
1:BA:191:LEU:H	1:BA:191:LEU:CD2	2.08	0.66
1:CO:250:TRP:CE3	1:CO:272:TYR:CE1	2.83	0.66
1:AL:55:ARG:NE	1:CQ:272:TYR:CE2	2.64	0.66
1:BL:191:LEU:CD2	1:BL:191:LEU:H	2.09	0.66
1:AB:189:PHE:CE1	1:AB:198:ARG:HG3	2.31	0.66
1:BN:55:ARG:CD	1:BS:272:TYR:CE2	2.78	0.66
1:AE:36:GLN:NE2	1:AE:156:LEU:H	1.94	0.66
1:CT:22:THR:OG1	1:CT:131:HIS:HD2	1.78	0.66
1:CD:79:ARG:HH11	1:CD:79:ARG:CG	2.07	0.66
1:BI:55:ARG:CZ	1:BR:272:TYR:CE2	2.78	0.66
1:CP:250:TRP:CE3	1:CP:272:TYR:CE1	2.84	0.66
1:CR:191:LEU:H	1:CR:191:LEU:CD2	2.09	0.66
1:AN:189:PHE:HE2	1:AN:249:LEU:CD2	2.08	0.66
1:CH:250:TRP:CZ3	1:CH:272:TYR:HE1	2.12	0.66
1:BA:284:ARG:HH11	1:BA:284:ARG:HG2	1.61	0.66
1:CN:14:CYS:H	1:CN:138:ASN:HD21	1.41	0.66
1:CP:284:ARG:HH11	1:CP:284:ARG:CG	2.07	0.66
1:CI:378:ARG:HG3	1:CI:379:VAL:H	1.61	0.66
1:BI:55:ARG:HD3	1:BR:272:TYR:CD2	2.31	0.66
1:BJ:189:PHE:HE2	1:BJ:249:LEU:HD21	1.61	0.66
1:CO:191:LEU:CD2	1:CO:191:LEU:H	2.07	0.66
1:CM:189:PHE:CE1	1:CM:198:ARG:HG3	2.28	0.66
1:AE:272:TYR:CD2	1:AM:55:ARG:HD3	2.30	0.66
1:CI:74:ASN:CB	1:CI:126:GLU:HG2	2.26	0.66
1:CM:284:ARG:HH11	1:CM:284:ARG:HG2	1.60	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CO:74:ASN:HB3	1:CO:126:GLU:HG2	1.76	0.66
1:BM:11:PRO:HG2	1:BM:18:ARG:HD3	1.76	0.66
1:CH:22:THR:OG1	1:CH:131:HIS:HD2	1.79	0.66
1:AH:36:GLN:NE2	1:AH:156:LEU:H	1.94	0.66
1:CD:74:ASN:HB3	1:CD:126:GLU:HG2	1.77	0.66
1:CR:86:PRO:HG2	1:CR:87:VAL:H	1.60	0.66
1:BS:79:ARG:HH11	1:BS:79:ARG:CG	2.04	0.66
1:CA:250:TRP:CZ3	1:CA:272:TYR:HE1	2.14	0.66
1:BS:189:PHE:CE1	1:BS:198:ARG:HG3	2.31	0.66
1:CN:74:ASN:ND2	1:CN:77:THR:OG1	2.27	0.66
1:CB:284:ARG:HG2	1:CB:284:ARG:HH11	1.59	0.66
1:BF:33:LYS:O	1:BF:33:LYS:HG2	1.96	0.66
1:AN:284:ARG:HH11	1:AN:284:ARG:CG	2.08	0.66
1:CG:16:ALA:O	1:CG:17:ASN:HB2	1.95	0.66
1:BD:272:TYR:CE2	1:BS:55:ARG:CD	2.78	0.66
1:BK:250:TRP:CZ3	1:BK:272:TYR:HE1	2.13	0.66
1:CC:191:LEU:CD2	1:CC:191:LEU:H	2.07	0.66
1:CN:189:PHE:CE1	1:CN:198:ARG:CG	2.79	0.66
1:CR:250:TRP:CZ3	1:CR:272:TYR:HE1	2.14	0.66
1:AD:250:TRP:CZ3	1:AD:272:TYR:HE1	2.14	0.66
1:BL:189:PHE:CE1	1:BL:198:ARG:HG3	2.31	0.66
1:AK:22:THR:OG1	1:AK:131:HIS:HD2	1.79	0.66
1:AO:272:TYR:HE2	1:AR:55:ARG:NE	1.89	0.65
1:AH:189:PHE:CE1	1:AH:198:ARG:HG3	2.31	0.65
1:CA:284:ARG:HH11	1:CA:284:ARG:CG	2.09	0.65
1:BN:36:GLN:NE2	1:BN:156:LEU:H	1.94	0.65
1:CL:79:ARG:HH11	1:CL:79:ARG:HG3	1.59	0.65
1:BE:189:PHE:CE1	1:BE:198:ARG:CG	2.78	0.65
1:CT:250:TRP:CZ3	1:CT:272:TYR:HE1	2.14	0.65
1:AP:284:ARG:HH11	1:AP:284:ARG:HG2	1.62	0.65
1:BB:74:ASN:HB3	1:BB:126:GLU:HG2	1.79	0.65
1:CD:191:LEU:H	1:CD:191:LEU:CD2	2.09	0.65
1:AB:189:PHE:HE2	1:AB:249:LEU:HD21	1.59	0.65
1:BN:284:ARG:HH11	1:BN:284:ARG:HG2	1.62	0.65
1:BJ:284:ARG:HH11	1:BJ:284:ARG:HG2	1.62	0.65
1:AQ:191:LEU:H	1:AQ:191:LEU:CD2	2.08	0.65
1:CD:272:TYR:CE2	1:CS:55:ARG:HD3	2.30	0.65
1:CB:189:PHE:HE2	1:CB:249:LEU:HD21	1.61	0.65
1:AR:189:PHE:HE2	1:AR:249:LEU:CD2	2.09	0.65
1:CI:55:ARG:CD	1:CR:272:TYR:HE2	2.08	0.65
1:BR:189:PHE:HE2	1:BR:249:LEU:HD21	1.61	0.65
1:BQ:272:TYR:HE2	1:CL:55:ARG:CD	2.09	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AL:284:ARG:HG2	1:AL:284:ARG:HH11	1.60	0.65
1:AO:189:PHE:HE1	1:AO:198:ARG:HG3	1.61	0.65
1:BD:74:ASN:HB3	1:BD:126:GLU:HG2	1.77	0.65
1:BK:189:PHE:CE1	1:BK:198:ARG:HG3	2.32	0.65
1:CG:284:ARG:HG2	1:CG:284:ARG:HH11	1.62	0.65
1:CS:284:ARG:CG	1:CS:284:ARG:HH11	2.09	0.65
1:AD:36:GLN:NE2	1:AD:156:LEU:H	1.95	0.65
1:AI:272:TYR:CD2	1:AO:55:ARG:CD	2.79	0.65
1:AH:191:LEU:H	1:AH:191:LEU:CD2	2.10	0.65
1:AF:55:ARG:CD	1:BH:272:TYR:HE2	2.10	0.65
1:BH:284:ARG:HG2	1:BH:284:ARG:HH11	1.61	0.65
1:CN:16:ALA:O	1:CN:17:ASN:HB2	1.97	0.65
1:AD:22:THR:OG1	1:AD:131:HIS:HD2	1.79	0.65
1:AB:262:TRP:O	1:AB:265:LEU:N	2.30	0.65
1:BF:55:ARG:CD	1:CH:272:TYR:CE2	2.80	0.65
1:BF:189:PHE:HE2	1:BF:249:LEU:HD21	1.62	0.65
1:CD:284:ARG:NH1	1:CD:284:ARG:HG2	2.12	0.65
1:AF:284:ARG:HH11	1:AF:284:ARG:HG2	1.61	0.65
1:AB:256:ASN:ND2	1:AB:256:ASN:O	2.30	0.65
1:CF:288:HIS:HD2	1:CF:337:ASP:OD2	1.79	0.65
1:CI:36:GLN:NE2	1:CI:156:LEU:H	1.94	0.65
1:AJ:189:PHE:CE1	1:AJ:198:ARG:HG3	2.30	0.65
1:BG:189:PHE:CE1	1:BG:198:ARG:HG3	2.29	0.65
1:AA:272:TYR:CE2	1:CT:55:ARG:CD	2.80	0.65
1:CR:80:ILE:O	1:CR:83:SER:N	2.30	0.65
1:BO:189:PHE:HE1	1:BO:198:ARG:HG3	1.61	0.65
1:BB:22:THR:OG1	1:BB:131:HIS:HD2	1.80	0.65
1:AB:36:GLN:NE2	1:AB:156:LEU:H	1.94	0.65
1:CL:14:CYS:H	1:CL:138:ASN:HD21	1.45	0.65
1:AK:250:TRP:CZ3	1:AK:272:TYR:HE1	2.14	0.65
1:AP:250:TRP:CZ3	1:AP:272:TYR:HE1	2.14	0.65
1:BK:191:LEU:H	1:BK:191:LEU:CD2	2.09	0.65
1:BB:189:PHE:CE1	1:BB:198:ARG:CG	2.78	0.65
1:CC:189:PHE:CE1	1:CC:198:ARG:HG3	2.32	0.65
1:AS:36:GLN:NE2	1:AS:156:LEU:H	1.95	0.65
1:BF:36:GLN:NE2	1:BF:156:LEU:H	1.94	0.65
1:AN:191:LEU:CD2	1:AN:191:LEU:H	2.10	0.65
1:CH:55:ARG:NE	1:CK:272:TYR:CE2	2.65	0.65
1:CH:189:PHE:CE1	1:CH:198:ARG:HG3	2.30	0.65
1:AT:189:PHE:CE1	1:AT:198:ARG:HG3	2.32	0.65
1:AS:189:PHE:CE1	1:AS:198:ARG:HG3	2.32	0.65
1:BS:36:GLN:NE2	1:BS:156:LEU:H	1.95	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BO:272:TYR:CD2	1:BR:55:ARG:CZ	2.80	0.64
1:BJ:272:TYR:CD2	1:BQ:55:ARG:HD3	2.32	0.64
1:AC:55:ARG:HD3	1:AT:272:TYR:CE2	2.32	0.64
1:BG:22:THR:OG1	1:BG:131:HIS:HD2	1.80	0.64
1:AJ:189:PHE:CE1	1:AJ:198:ARG:CG	2.79	0.64
1:CC:55:ARG:HD3	1:CT:272:TYR:CD2	2.32	0.64
1:AM:74:ASN:HB3	1:AM:126:GLU:HG2	1.78	0.64
1:AJ:284:ARG:CG	1:AJ:284:ARG:HH11	2.10	0.64
1:CQ:16:ALA:O	1:CQ:17:ASN:HB2	1.95	0.64
1:BI:55:ARG:CZ	1:BR:272:TYR:CD2	2.80	0.64
1:BN:189:PHE:HE2	1:BN:249:LEU:HD21	1.61	0.64
1:AG:55:ARG:NE	1:CG:272:TYR:CE2	2.66	0.64
1:BL:74:ASN:CB	1:BL:126:GLU:HG2	2.27	0.64
1:CC:284:ARG:HG2	1:CC:284:ARG:NH1	2.12	0.64
1:CM:16:ALA:O	1:CM:17:ASN:HB2	1.95	0.64
1:AQ:36:GLN:NE2	1:AQ:156:LEU:H	1.94	0.64
1:CK:14:CYS:H	1:CK:138:ASN:HD21	1.44	0.64
1:AN:79:ARG:HH11	1:AN:79:ARG:CG	2.11	0.64
1:BR:191:LEU:H	1:BR:191:LEU:CD2	2.09	0.64
1:CH:189:PHE:HE2	1:CH:249:LEU:CD2	2.10	0.64
1:AF:189:PHE:HE2	1:AF:249:LEU:CD2	2.10	0.64
1:BM:189:PHE:HE2	1:BM:249:LEU:CD2	2.10	0.64
1:CL:250:TRP:CZ3	1:CL:272:TYR:HE1	2.15	0.64
1:BE:272:TYR:HE2	1:BM:55:ARG:CD	2.10	0.64
1:AN:74:ASN:CB	1:AN:126:GLU:HG2	2.28	0.64
1:CN:18:ARG:HG3	1:CN:19:TYR:N	2.12	0.64
1:CF:79:ARG:HG3	1:CF:79:ARG:NH1	2.00	0.64
1:BG:250:TRP:CZ3	1:BG:272:TYR:HE1	2.13	0.64
1:BG:272:TYR:HE2	1:CG:55:ARG:CD	2.10	0.64
1:AM:250:TRP:CZ3	1:AM:272:TYR:HE1	2.16	0.64
1:BA:74:ASN:CB	1:BA:126:GLU:HG2	2.28	0.64
1:AG:284:ARG:HG2	1:AG:284:ARG:NH1	2.12	0.64
1:AJ:36:GLN:NE2	1:AJ:156:LEU:H	1.96	0.64
1:BG:36:GLN:NE2	1:BG:156:LEU:H	1.95	0.64
1:CF:284:ARG:CG	1:CF:284:ARG:HH11	2.10	0.64
1:CJ:284:ARG:HH11	1:CJ:284:ARG:CG	2.10	0.64
1:AT:191:LEU:H	1:AT:191:LEU:CD2	2.08	0.64
1:AF:250:TRP:CZ3	1:AF:272:TYR:HE1	2.15	0.64
1:AC:189:PHE:HE1	1:AC:198:ARG:HG3	1.63	0.64
1:AA:74:ASN:HB3	1:AA:126:GLU:HG2	1.78	0.64
1:BI:55:ARG:HD3	1:BR:272:TYR:CE2	2.33	0.64
1:BF:250:TRP:CZ3	1:BF:272:TYR:HE1	2.14	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BF:272:TYR:CD2	1:CK:55:ARG:HD3	2.32	0.64
1:CP:189:PHE:CE1	1:CP:198:ARG:HG3	2.33	0.64
1:BE:284:ARG:HH11	1:BE:284:ARG:HG2	1.61	0.64
1:BB:239:ILE:HG12	1:BB:326:ILE:CD1	2.27	0.64
1:BP:74:ASN:HB3	1:BP:126:GLU:HG2	1.80	0.64
1:AN:16:ALA:O	1:AN:17:ASN:HB2	1.97	0.64
1:BC:74:ASN:HB3	1:BC:126:GLU:HG2	1.78	0.64
1:BF:74:ASN:HB3	1:BF:126:GLU:HG2	1.80	0.64
1:AG:263:ASN:O	1:BG:32:PHE:CE1	2.51	0.64
1:CR:85:ASP:OD1	1:CR:86:PRO:N	2.31	0.64
1:AI:55:ARG:CD	1:AR:272:TYR:HE2	2.11	0.64
1:BB:55:ARG:CZ	1:CB:272:TYR:CE2	2.81	0.64
1:AM:189:PHE:CE1	1:AM:198:ARG:CG	2.80	0.64
1:CN:55:ARG:CD	1:CS:272:TYR:CE2	2.80	0.64
1:BL:284:ARG:HG2	1:BL:284:ARG:HH11	1.63	0.64
1:BL:16:ALA:O	1:BL:17:ASN:HB2	1.98	0.64
1:BM:74:ASN:HB3	1:BM:126:GLU:HG2	1.80	0.64
1:CK:22:THR:OG1	1:CK:131:HIS:HD2	1.81	0.64
1:BJ:189:PHE:CE1	1:BJ:198:ARG:CG	2.81	0.64
1:AJ:272:TYR:CD2	1:AQ:55:ARG:HD3	2.32	0.64
1:AG:269:PRO:CG	1:AG:269:PRO:O	2.46	0.64
1:AF:55:ARG:HD3	1:BH:272:TYR:CD2	2.33	0.64
1:BH:250:TRP:CZ3	1:BH:272:TYR:HE1	2.15	0.64
1:BR:189:PHE:CE1	1:BR:198:ARG:HG3	2.29	0.64
1:CR:74:ASN:HB3	1:CR:126:GLU:HG2	1.79	0.64
1:AN:284:ARG:HH11	1:AN:284:ARG:HG2	1.63	0.64
1:CL:9:TYR:CE1	1:CL:147:GLN:NE2	2.65	0.64
1:AR:36:GLN:NE2	1:AR:156:LEU:H	1.95	0.64
1:CA:67:VAL:HG23	1:CA:135:LEU:HB2	1.79	0.64
1:CE:189:PHE:CE1	1:CE:198:ARG:CG	2.81	0.64
1:BI:250:TRP:CZ3	1:BI:272:TYR:HE1	2.16	0.64
1:AJ:55:ARG:HD3	1:BL:272:TYR:CE2	2.32	0.64
1:CR:80:ILE:HA	1:CR:83:SER:O	1.98	0.64
1:AM:284:ARG:HG2	1:AM:284:ARG:NH1	2.09	0.64
1:CQ:284:ARG:HG2	1:CQ:284:ARG:HH11	1.62	0.64
1:BR:250:TRP:CZ3	1:BR:272:TYR:HE1	2.15	0.63
1:BP:272:TYR:CE2	1:CE:55:ARG:CZ	2.81	0.63
1:BT:55:ARG:HD3	1:CA:272:TYR:CD2	2.32	0.63
1:CI:250:TRP:CZ3	1:CI:272:TYR:HE1	2.15	0.63
1:AB:74:ASN:CB	1:AB:126:GLU:HG2	2.29	0.63
1:CF:284:ARG:HG2	1:CF:284:ARG:HH11	1.63	0.63
1:CQ:189:PHE:HE1	1:CQ:198:ARG:HG3	1.62	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BE:36:GLN:NE2	1:BE:156:LEU:H	1.96	0.63
1:CQ:14:CYS:H	1:CQ:138:ASN:HD21	1.43	0.63
1:AG:259:THR:HG21	1:AG:268:TYR:OH	1.98	0.63
1:CE:250:TRP:CE3	1:CE:272:TYR:CE1	2.86	0.63
1:AG:191:LEU:H	1:AG:191:LEU:CD2	2.07	0.63
1:AM:272:TYR:CE2	1:CP:55:ARG:CD	2.81	0.63
1:BT:74:ASN:CB	1:BT:126:GLU:HG2	2.28	0.63
1:CK:189:PHE:CE1	1:CK:198:ARG:HG3	2.33	0.63
1:BG:79:ARG:HG3	1:BG:79:ARG:HH11	1.62	0.63
1:BB:14:CYS:H	1:BB:138:ASN:HD21	1.45	0.63
1:AL:36:GLN:NE2	1:AL:156:LEU:H	1.95	0.63
1:AM:36:GLN:NE2	1:AM:156:LEU:H	1.96	0.63
1:BT:14:CYS:H	1:BT:138:ASN:HD21	1.46	0.63
1:AC:55:ARG:HD3	1:AT:272:TYR:CD2	2.32	0.63
1:CF:454:ASN:HD22	1:CF:456:ALA:N	1.96	0.63
1:CC:55:ARG:HD3	1:CT:272:TYR:CE2	2.33	0.63
1:BQ:22:THR:OG1	1:BQ:131:HIS:HD2	1.81	0.63
1:BH:14:CYS:H	1:BH:138:ASN:HD21	1.46	0.63
1:CD:442:GLN:HE21	1:CE:412:PHE:HB2	1.63	0.63
1:CE:272:TYR:CD2	1:CM:55:ARG:CZ	2.81	0.63
1:BG:191:LEU:H	1:BG:191:LEU:CD2	2.08	0.63
1:CD:250:TRP:CE3	1:CD:272:TYR:CE1	2.86	0.63
1:CM:189:PHE:HE2	1:CM:249:LEU:CD2	2.11	0.63
1:CL:36:GLN:NE2	1:CL:156:LEU:H	1.97	0.63
1:AG:250:TRP:CE3	1:AG:272:TYR:CE1	2.86	0.63
1:AH:55:ARG:CD	1:AK:272:TYR:CD2	2.81	0.63
1:BS:191:LEU:H	1:BS:191:LEU:CD2	2.08	0.63
1:AT:55:ARG:HD3	1:BA:272:TYR:CD2	2.33	0.63
1:BG:189:PHE:CE1	1:BG:198:ARG:CG	2.81	0.63
1:CT:284:ARG:HG2	1:CT:284:ARG:NH1	2.13	0.63
1:BP:284:ARG:CG	1:BP:284:ARG:HH11	2.12	0.63
1:BT:284:ARG:HG2	1:BT:284:ARG:HH11	1.63	0.63
1:AH:22:THR:OG1	1:AH:131:HIS:HD2	1.81	0.63
1:BB:36:GLN:NE2	1:BB:156:LEU:H	1.96	0.63
1:AA:55:ARG:CD	1:CC:272:TYR:HE2	2.11	0.63
1:AD:55:ARG:HD3	1:AN:272:TYR:CD2	2.34	0.63
1:AC:272:TYR:CE2	1:BA:55:ARG:NE	2.66	0.63
1:BS:74:ASN:CB	1:BS:126:GLU:HG2	2.28	0.63
1:AH:284:ARG:HG2	1:AH:284:ARG:HH11	1.63	0.63
1:CE:14:CYS:H	1:CE:138:ASN:HD21	1.45	0.63
1:BH:36:GLN:NE2	1:BH:156:LEU:H	1.96	0.63
1:BL:239:ILE:HG12	1:BL:326:ILE:CD1	2.29	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BB:55:ARG:CD	1:CB:272:TYR:CE2	2.82	0.63
1:CS:189:PHE:CE1	1:CS:198:ARG:HG3	2.34	0.63
1:BE:79:ARG:HH11	1:BE:79:ARG:HG3	1.63	0.63
1:AO:22:THR:OG1	1:AO:131:HIS:HD2	1.82	0.63
1:AB:262:TRP:O	1:AB:263:ASN:C	2.30	0.63
1:AH:55:ARG:HD3	1:AK:272:TYR:CE2	2.31	0.63
1:AF:191:LEU:H	1:AF:191:LEU:CD2	2.11	0.63
1:CK:250:TRP:CZ3	1:CK:272:TYR:HE1	2.13	0.63
1:BI:272:TYR:CE2	1:BO:55:ARG:CD	2.81	0.63
1:BF:67:VAL:HG23	1:BF:135:LEU:HB2	1.80	0.63
1:AA:14:CYS:H	1:AA:138:ASN:HD21	1.45	0.63
1:AG:270:GLY:C	1:AG:271:VAL:HG13	2.19	0.63
1:BR:36:GLN:NE2	1:BR:156:LEU:H	1.97	0.63
1:BB:79:ARG:HG3	1:BB:79:ARG:HH11	1.64	0.63
1:AG:272:TYR:CE2	1:BG:55:ARG:CD	2.81	0.63
1:AB:261:ASP:OD1	1:AB:263:ASN:N	2.31	0.63
1:AF:79:ARG:HH11	1:AF:79:ARG:CG	2.10	0.63
1:CN:189:PHE:HE2	1:CN:249:LEU:CD2	2.12	0.63
1:AE:272:TYR:CE2	1:AM:55:ARG:HD3	2.34	0.63
1:AD:189:PHE:CE1	1:AD:198:ARG:HG3	2.34	0.63
1:BO:284:ARG:NH1	1:BO:284:ARG:HG2	2.12	0.63
1:BC:74:ASN:ND2	1:BC:77:THR:OG1	2.32	0.63
1:AH:74:ASN:HB3	1:AH:126:GLU:HG2	1.79	0.63
1:AG:263:ASN:ND2	1:BG:32:PHE:CD1	2.67	0.62
1:CD:272:TYR:HE2	1:CS:55:ARG:NE	1.91	0.62
1:BN:189:PHE:CE1	1:BN:198:ARG:CG	2.79	0.62
1:BI:272:TYR:CE2	1:BO:55:ARG:HD3	2.34	0.62
1:BA:189:PHE:HE1	1:BA:198:ARG:CG	2.11	0.62
1:CT:189:PHE:CE1	1:CT:198:ARG:HG3	2.33	0.62
1:AN:36:GLN:NE2	1:AN:156:LEU:H	1.96	0.62
1:AR:74:ASN:HB3	1:AR:126:GLU:HG2	1.81	0.62
1:AP:36:GLN:NE2	1:AP:156:LEU:H	1.97	0.62
1:CE:36:GLN:NE2	1:CE:156:LEU:H	1.97	0.62
1:AM:454:ASN:ND2	1:AM:456:ALA:H	1.96	0.62
1:CN:55:ARG:NE	1:CS:272:TYR:CE2	2.67	0.62
1:BD:284:ARG:HG2	1:BD:284:ARG:HH11	1.64	0.62
1:BS:284:ARG:HG2	1:BS:284:ARG:HH11	1.64	0.62
1:AR:201:GLY:HA3	1:AR:300:GLN:HG2	1.81	0.62
1:BI:74:ASN:HB3	1:BI:126:GLU:HG2	1.79	0.62
1:BG:15:GLN:HA	1:BG:15:GLN:HE21	1.64	0.62
1:AG:274:GLU:N	1:AG:274:GLU:OE1	2.30	0.62
1:BI:239:ILE:HG12	1:BI:326:ILE:CD1	2.30	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AG:264:GLU:O	1:AG:267:LYS:HB2	1.99	0.62
1:CG:189:PHE:HE2	1:CG:249:LEU:CD2	2.12	0.62
1:AD:272:TYR:CD2	1:AS:55:ARG:HD3	2.33	0.62
1:AK:284:ARG:HH11	1:AK:284:ARG:HG2	1.64	0.62
1:CC:36:GLN:NE2	1:CC:156:LEU:H	1.98	0.62
1:BP:14:CYS:H	1:BP:138:ASN:HD21	1.47	0.62
1:BB:288:HIS:HD2	1:BB:337:ASP:OD2	1.82	0.62
1:CM:189:PHE:CE1	1:CM:198:ARG:CG	2.79	0.62
1:BN:55:ARG:CD	1:BS:272:TYR:HE2	2.11	0.62
1:AO:284:ARG:NH1	1:AO:284:ARG:HG2	2.15	0.62
1:AL:250:TRP:CZ3	1:AL:272:TYR:HE1	2.14	0.62
1:AI:272:TYR:CD2	1:AO:55:ARG:NE	2.67	0.62
1:CO:272:TYR:CD2	1:CR:55:ARG:HD3	2.34	0.62
1:CP:74:ASN:CB	1:CP:126:GLU:HG2	2.30	0.62
1:CT:36:GLN:NE2	1:CT:156:LEU:H	1.97	0.62
1:AB:250:TRP:HE1	1:AB:265:LEU:CD1	2.00	0.62
1:BN:189:PHE:CE1	1:BN:198:ARG:HG3	2.34	0.62
1:AR:189:PHE:CE1	1:AR:198:ARG:CG	2.79	0.62
1:BG:272:TYR:CE2	1:CG:55:ARG:CD	2.83	0.62
1:BI:272:TYR:CE2	1:BO:55:ARG:NE	2.68	0.62
1:BI:189:PHE:HE2	1:BI:249:LEU:CD2	2.12	0.62
1:BQ:250:TRP:CZ3	1:BQ:272:TYR:HE1	2.16	0.62
1:AK:74:ASN:CB	1:AK:126:GLU:HG2	2.29	0.62
1:CD:14:CYS:H	1:CD:138:ASN:HD21	1.46	0.62
1:AF:36:GLN:NE2	1:AF:156:LEU:H	1.97	0.62
1:BO:36:GLN:NE2	1:BO:156:LEU:H	1.96	0.62
1:CR:284:ARG:HH11	1:CR:284:ARG:CG	2.12	0.62
1:AD:55:ARG:HD3	1:AN:272:TYR:CE2	2.35	0.62
1:BN:250:TRP:CZ3	1:BN:272:TYR:HE1	2.15	0.62
1:CH:189:PHE:CE1	1:CH:198:ARG:CG	2.81	0.62
1:BJ:55:ARG:CD	1:CL:272:TYR:CE2	2.82	0.62
1:BC:272:TYR:CE2	1:CA:55:ARG:NE	2.68	0.62
1:BB:284:ARG:HG2	1:BB:284:ARG:NH1	2.14	0.62
1:CL:284:ARG:NH1	1:CL:284:ARG:HG2	2.14	0.62
1:AD:284:ARG:HG2	1:AD:284:ARG:NH1	2.14	0.62
1:AL:189:PHE:CE1	1:AL:198:ARG:HG3	2.33	0.62
1:CD:189:PHE:HE1	1:CD:198:ARG:HG3	1.64	0.62
1:AB:263:ASN:HD22	1:CB:32:PHE:HA	1.64	0.62
1:AL:272:TYR:CD2	1:CJ:55:ARG:CD	2.80	0.62
1:AL:272:TYR:HD2	1:CJ:55:ARG:HD3	1.62	0.62
1:CE:191:LEU:CD2	1:CE:191:LEU:H	2.09	0.62
1:CB:74:ASN:CB	1:CB:126:GLU:HG2	2.30	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BF:14:CYS:H	1:BF:138:ASN:HD21	1.47	0.62
1:CA:74:ASN:HB3	1:CA:126:GLU:HG2	1.81	0.62
1:AF:272:TYR:CE2	1:BK:55:ARG:HD3	2.35	0.62
1:BF:284:ARG:HG2	1:BF:284:ARG:NH1	2.13	0.62
1:BO:14:CYS:H	1:BO:138:ASN:HD21	1.48	0.62
1:AQ:79:ARG:HG3	1:AQ:79:ARG:HH11	1.64	0.62
1:AB:272:TYR:CE2	1:CB:55:ARG:NE	2.67	0.62
1:BJ:272:TYR:CD2	1:BQ:55:ARG:CZ	2.82	0.62
1:BD:250:TRP:CE3	1:BD:272:TYR:CE1	2.88	0.62
1:AQ:284:ARG:CG	1:AQ:284:ARG:HH11	2.11	0.62
1:CQ:36:GLN:NE2	1:CQ:156:LEU:H	1.98	0.62
1:CJ:36:GLN:NE2	1:CJ:156:LEU:H	1.98	0.62
1:AN:55:ARG:HD3	1:AS:272:TYR:CD2	2.34	0.61
1:BB:189:PHE:HE2	1:BB:249:LEU:CD2	2.13	0.61
1:AB:55:ARG:HD3	1:BB:272:TYR:CE2	2.36	0.61
1:AG:189:PHE:HE2	1:AG:249:LEU:CD2	2.12	0.61
1:AM:272:TYR:HE2	1:CP:55:ARG:CD	2.12	0.61
1:BQ:272:TYR:CE2	1:CL:55:ARG:HD3	2.35	0.61
1:BE:272:TYR:CE2	1:BM:55:ARG:CD	2.83	0.61
1:CH:74:ASN:CB	1:CH:126:GLU:HG2	2.30	0.61
1:AJ:284:ARG:HH11	1:AJ:284:ARG:HG2	1.65	0.61
1:BC:74:ASN:CB	1:BC:126:GLU:HG2	2.30	0.61
1:AL:16:ALA:O	1:AL:17:ASN:HB2	1.98	0.61
1:CJ:272:TYR:CD2	1:CQ:55:ARG:CZ	2.83	0.61
1:AT:250:TRP:CE3	1:AT:272:TYR:CE1	2.88	0.61
1:CB:189:PHE:CE1	1:CB:198:ARG:CG	2.79	0.61
1:AE:189:PHE:CE1	1:AE:198:ARG:CG	2.83	0.61
1:AM:189:PHE:HE2	1:AM:249:LEU:CD2	2.13	0.61
1:CN:55:ARG:HD3	1:CS:272:TYR:CE2	2.35	0.61
1:CR:80:ILE:O	1:CR:83:SER:C	2.38	0.61
1:CI:284:ARG:NH1	1:CI:284:ARG:HG2	2.15	0.61
1:CM:79:ARG:HH11	1:CM:79:ARG:HG3	1.64	0.61
1:AH:67:VAL:HG23	1:AH:135:LEU:HB2	1.81	0.61
1:AB:265:LEU:HD12	1:AB:266:PHE:N	2.12	0.61
1:CH:55:ARG:CD	1:CK:272:TYR:CE2	2.84	0.61
1:BI:189:PHE:CE1	1:BI:198:ARG:CG	2.83	0.61
1:CD:454:ASN:HD22	1:CD:456:ALA:N	1.98	0.61
1:BQ:189:PHE:HE1	1:BQ:198:ARG:CG	2.13	0.61
1:AB:58:ALA:HB2	1:AB:102:GLY:HA3	1.83	0.61
1:BR:22:THR:OG1	1:BR:131:HIS:HD2	1.82	0.61
1:AL:55:ARG:HD3	1:CQ:272:TYR:CD2	2.35	0.61
1:CQ:250:TRP:CE3	1:CQ:272:TYR:CE1	2.89	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CK:454:ASN:HD22	1:CK:456:ALA:N	1.98	0.61
1:CI:38:GLU:HB3	1:CQ:35:VAL:HG23	1.83	0.61
1:BD:189:PHE:CE1	1:BD:198:ARG:HG3	2.34	0.61
1:CO:284:ARG:HG2	1:CO:284:ARG:NH1	2.15	0.61
1:CS:284:ARG:HG2	1:CS:284:ARG:HH11	1.63	0.61
1:BQ:74:ASN:HB3	1:BQ:126:GLU:HG2	1.81	0.61
1:CG:14:CYS:H	1:CG:138:ASN:HD21	1.48	0.61
1:CI:189:PHE:HE2	1:CI:249:LEU:CD2	2.12	0.61
1:BQ:272:TYR:CD2	1:CL:55:ARG:HD3	2.35	0.61
1:AF:74:ASN:CB	1:AF:126:GLU:HG2	2.30	0.61
1:CP:284:ARG:HH11	1:CP:284:ARG:HG2	1.66	0.61
1:AN:288:HIS:HD2	1:AN:337:ASP:OD2	1.84	0.61
1:CI:376:THR:O	1:CI:376:THR:CG2	2.48	0.61
1:BJ:55:ARG:HD3	1:CL:272:TYR:CD2	2.35	0.61
1:CR:284:ARG:HH11	1:CR:284:ARG:HG2	1.64	0.61
1:BD:36:GLN:NE2	1:BD:156:LEU:H	1.98	0.61
1:BN:191:LEU:CD2	1:BN:191:LEU:H	2.10	0.61
1:CJ:189:PHE:CE1	1:CJ:198:ARG:CG	2.80	0.61
1:BP:454:ASN:HD22	1:BP:456:ALA:N	1.99	0.61
1:AS:284:ARG:NH1	1:AS:284:ARG:HG2	2.15	0.61
1:CQ:74:ASN:CB	1:CQ:126:GLU:HG2	2.30	0.61
1:AR:79:ARG:HG3	1:AR:79:ARG:HH11	1.64	0.61
1:CP:36:GLN:NE2	1:CP:156:LEU:H	1.98	0.61
1:AG:79:ARG:NH1	1:AG:79:ARG:HG3	2.10	0.61
1:AH:189:PHE:CE1	1:AH:198:ARG:CG	2.81	0.61
1:AF:189:PHE:CE1	1:AF:198:ARG:CG	2.82	0.61
1:AA:250:TRP:CZ3	1:AA:272:TYR:HE1	2.17	0.61
1:CN:284:ARG:NH1	1:CN:284:ARG:HG2	2.15	0.61
1:CK:284:ARG:HG2	1:CK:284:ARG:NH1	2.15	0.61
1:CD:189:PHE:CE1	1:CD:198:ARG:HG3	2.36	0.61
1:CI:14:CYS:H	1:CI:138:ASN:HD21	1.47	0.61
1:AB:250:TRP:CE3	1:AB:272:TYR:CE1	2.89	0.61
1:AL:55:ARG:CD	1:CQ:272:TYR:CE2	2.83	0.61
1:AI:55:ARG:CD	1:AR:272:TYR:CD2	2.83	0.61
1:CF:189:PHE:CE1	1:CF:198:ARG:CG	2.79	0.61
1:AQ:250:TRP:CZ3	1:AQ:272:TYR:HE1	2.17	0.61
1:BS:250:TRP:CZ3	1:BS:272:TYR:HE1	2.19	0.61
1:CR:77:THR:O	1:CR:80:ILE:HG12	1.99	0.61
1:BR:74:ASN:CB	1:BR:126:GLU:HG2	2.31	0.61
1:CJ:74:ASN:CB	1:CJ:126:GLU:HG2	2.31	0.61
1:BE:74:ASN:CB	1:BE:126:GLU:HG2	2.30	0.61
1:BA:288:HIS:HD2	1:BA:337:ASP:OD2	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BH:398:GLY:HA3	1:BH:494:PHE:CD2	2.36	0.61
1:BN:16:ALA:O	1:BN:17:ASN:HB2	2.01	0.61
1:BK:14:CYS:H	1:BK:138:ASN:HD21	1.49	0.61
1:AO:67:VAL:HG23	1:AO:135:LEU:HB2	1.83	0.61
1:AC:36:GLN:NE2	1:AC:156:LEU:H	1.98	0.61
1:AG:261:ASP:O	1:AG:264:GLU:HB3	2.01	0.61
1:AE:55:ARG:CZ	1:CP:272:TYR:CD2	2.84	0.61
1:CS:191:LEU:H	1:CS:191:LEU:CD2	2.10	0.61
1:AN:189:PHE:CE1	1:AN:198:ARG:CG	2.79	0.61
1:AI:189:PHE:HE2	1:AI:249:LEU:CD2	2.14	0.61
1:BI:272:TYR:HE2	1:BO:55:ARG:CD	2.12	0.61
1:BG:189:PHE:HE2	1:BG:249:LEU:CD2	2.14	0.61
1:BO:74:ASN:CB	1:BO:126:GLU:HG2	2.31	0.61
1:CM:284:ARG:NH1	1:CM:284:ARG:HG2	2.15	0.61
1:CH:284:ARG:HG2	1:CH:284:ARG:NH1	2.16	0.61
1:AR:284:ARG:NH1	1:AR:284:ARG:HG2	2.16	0.61
1:AE:284:ARG:HG2	1:AE:284:ARG:HH11	1.66	0.61
1:CM:74:ASN:CB	1:CM:126:GLU:HG2	2.31	0.61
1:AJ:203:THR:HB	1:AJ:300:GLN:HG3	1.82	0.61
1:BA:36:GLN:NE2	1:BA:156:LEU:H	1.99	0.61
1:BI:55:ARG:NE	1:BR:272:TYR:HE2	1.89	0.60
1:CE:189:PHE:HE2	1:CE:249:LEU:CD2	2.13	0.60
1:BA:284:ARG:HG2	1:BA:284:ARG:NH1	2.15	0.60
1:CF:74:ASN:CB	1:CF:126:GLU:HG2	2.31	0.60
1:AF:454:ASN:HD22	1:AF:456:ALA:N	1.99	0.60
1:CR:76:ILE:O	1:CR:80:ILE:HG12	2.02	0.60
1:AA:189:PHE:CE1	1:AA:198:ARG:HG3	2.33	0.60
1:AC:284:ARG:HG2	1:AC:284:ARG:NH1	2.13	0.60
1:AD:74:ASN:CB	1:AD:126:GLU:HG2	2.31	0.60
1:CA:189:PHE:CE1	1:CA:198:ARG:HG3	2.34	0.60
1:AA:55:ARG:CD	1:CC:272:TYR:CE2	2.85	0.60
1:AH:55:ARG:CZ	1:AK:272:TYR:CE2	2.84	0.60
1:AO:294:LEU:HD11	1:AO:299:SER:HA	1.84	0.60
1:BE:250:TRP:CZ3	1:BE:272:TYR:HE1	2.18	0.60
1:CI:272:TYR:CE2	1:CO:55:ARG:CD	2.84	0.60
1:BL:250:TRP:CZ3	1:BL:272:TYR:HE1	2.20	0.60
1:BO:16:ALA:O	1:BO:17:ASN:HB2	2.00	0.60
1:BH:55:ARG:CD	1:BK:272:TYR:CE2	2.85	0.60
1:CN:55:ARG:HD3	1:CS:272:TYR:CD2	2.36	0.60
1:CN:55:ARG:CD	1:CS:272:TYR:HE2	2.13	0.60
1:BF:454:ASN:HD22	1:BF:456:ALA:N	2.00	0.60
1:AA:189:PHE:HE1	1:AA:198:ARG:CG	2.13	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AE:74:ASN:CB	1:AE:126:GLU:HG2	2.31	0.60
1:AT:74:ASN:CB	1:AT:126:GLU:HG2	2.31	0.60
1:CB:284:ARG:HG2	1:CB:284:ARG:NH1	2.16	0.60
1:CQ:189:PHE:CE1	1:CQ:198:ARG:HG3	2.37	0.60
1:BQ:74:ASN:ND2	1:BQ:77:THR:OG1	2.34	0.60
1:AP:189:PHE:HE1	1:AP:198:ARG:HG3	1.67	0.60
1:BT:36:GLN:NE2	1:BT:156:LEU:H	1.99	0.60
1:AS:191:LEU:CD2	1:AS:191:LEU:H	2.12	0.60
1:BM:250:TRP:CZ3	1:BM:272:TYR:HE1	2.17	0.60
1:BF:189:PHE:CE1	1:BF:198:ARG:HG3	2.35	0.60
1:AA:454:ASN:HD22	1:AA:456:ALA:N	1.99	0.60
1:AQ:74:ASN:CB	1:AQ:126:GLU:HG2	2.31	0.60
1:BR:284:ARG:HG2	1:BR:284:ARG:NH1	2.16	0.60
1:AH:74:ASN:ND2	1:AH:77:THR:OG1	2.34	0.60
1:AE:203:THR:HB	1:AE:300:GLN:HG3	1.83	0.60
1:CR:86:PRO:HG2	1:CR:87:VAL:N	2.17	0.60
1:BJ:79:ARG:HG3	1:BJ:79:ARG:NH1	2.13	0.60
1:CE:272:TYR:CE2	1:CM:55:ARG:HD3	2.36	0.60
1:AE:55:ARG:HD3	1:CP:272:TYR:CE2	2.36	0.60
1:CR:189:PHE:HE2	1:CR:249:LEU:CD2	2.15	0.60
1:CJ:191:LEU:H	1:CJ:191:LEU:CD2	2.10	0.60
1:AB:189:PHE:HE2	1:AB:249:LEU:CD2	2.14	0.60
1:AB:284:ARG:NH1	1:AB:284:ARG:HG2	2.13	0.60
1:CE:284:ARG:HH11	1:CE:284:ARG:HG2	1.66	0.60
1:AG:74:ASN:CB	1:AG:126:GLU:HG2	2.32	0.60
1:AI:272:TYR:CE2	1:AO:55:ARG:CZ	2.84	0.60
1:AE:189:PHE:HE2	1:AE:249:LEU:CD2	2.14	0.60
1:AJ:189:PHE:HE2	1:AJ:249:LEU:CD2	2.15	0.60
1:BD:272:TYR:CE2	1:BS:55:ARG:HD3	2.36	0.60
1:AH:189:PHE:HE2	1:AH:249:LEU:CD2	2.15	0.60
1:BL:189:PHE:HE1	1:BL:198:ARG:CG	2.14	0.60
1:CA:284:ARG:NH1	1:CA:284:ARG:HG2	2.15	0.60
1:BG:284:ARG:NH1	1:BG:284:ARG:HG2	2.15	0.60
1:CR:14:CYS:H	1:CR:138:ASN:HD21	1.50	0.60
1:AH:398:GLY:HA3	1:AH:494:PHE:CD2	2.37	0.60
1:AT:55:ARG:HD3	1:BA:272:TYR:CE2	2.37	0.60
1:CE:74:ASN:ND2	1:CE:77:THR:OG1	2.35	0.60
1:BQ:67:VAL:HG23	1:BQ:135:LEU:HB2	1.84	0.60
1:BO:272:TYR:CE2	1:BR:55:ARG:CZ	2.85	0.60
1:AJ:272:TYR:HE2	1:AQ:55:ARG:NE	2.00	0.60
1:BH:15:GLN:NE2	1:BH:15:GLN:HA	2.15	0.60
1:AC:454:ASN:HD22	1:AC:456:ALA:N	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BF:272:TYR:CE2	1:CK:55:ARG:HD3	2.36	0.60
1:CL:74:ASN:CB	1:CL:126:GLU:HG2	2.32	0.60
1:CE:74:ASN:CB	1:CE:126:GLU:HG2	2.32	0.60
1:CD:74:ASN:CB	1:CD:126:GLU:HG2	2.32	0.60
1:AE:55:ARG:CZ	1:CP:272:TYR:CE2	2.85	0.59
1:BJ:189:PHE:HE2	1:BJ:249:LEU:CD2	2.14	0.59
1:CI:144:ALA:HB3	1:CR:191:LEU:O	2.02	0.59
1:BP:55:ARG:CD	1:CM:272:TYR:HE2	2.15	0.59
1:CR:189:PHE:CE1	1:CR:198:ARG:CG	2.78	0.59
1:AB:55:ARG:CD	1:BB:272:TYR:CE2	2.85	0.59
1:CM:454:ASN:HD22	1:CM:456:ALA:N	1.99	0.59
1:BM:250:TRP:HZ3	1:BM:272:TYR:CE1	2.20	0.59
1:BA:189:PHE:HE2	1:BA:249:LEU:HD21	1.67	0.59
1:AH:284:ARG:HG2	1:AH:284:ARG:NH1	2.17	0.59
1:AP:284:ARG:NH1	1:AP:284:ARG:HG2	2.17	0.59
1:BC:284:ARG:NH1	1:BC:284:ARG:HG2	2.16	0.59
1:CS:14:CYS:H	1:CS:138:ASN:HD21	1.49	0.59
1:BR:16:ALA:O	1:BR:17:ASN:HB2	2.02	0.59
1:BO:398:GLY:HA3	1:BO:494:PHE:CD2	2.37	0.59
1:BM:239:ILE:HG12	1:BM:326:ILE:CD1	2.32	0.59
1:BT:55:ARG:CZ	1:CA:272:TYR:CE2	2.85	0.59
1:AT:250:TRP:HZ3	1:AT:272:TYR:CE1	2.20	0.59
1:BT:250:TRP:CE3	1:BT:272:TYR:CE1	2.90	0.59
1:CT:74:ASN:CB	1:CT:126:GLU:HG2	2.31	0.59
1:AG:250:TRP:CZ3	1:AG:272:TYR:CE1	2.89	0.59
1:AG:79:ARG:CG	1:AG:79:ARG:HH11	2.13	0.59
1:BR:189:PHE:CE1	1:BR:198:ARG:CG	2.84	0.59
1:BN:55:ARG:HD3	1:BS:272:TYR:CE2	2.37	0.59
1:AS:74:ASN:CB	1:AS:126:GLU:HG2	2.31	0.59
1:BH:189:PHE:HE2	1:BH:249:LEU:CD2	2.16	0.59
1:BF:189:PHE:CE1	1:BF:198:ARG:CG	2.81	0.59
1:AJ:74:ASN:CB	1:AJ:126:GLU:HG2	2.32	0.59
1:AH:14:CYS:H	1:AH:138:ASN:HD21	1.50	0.59
1:CG:36:GLN:NE2	1:CG:156:LEU:H	1.99	0.59
1:CF:250:TRP:CE3	1:CF:272:TYR:CE1	2.91	0.59
1:AI:189:PHE:CE1	1:AI:198:ARG:CG	2.79	0.59
1:AM:454:ASN:HD22	1:AM:456:ALA:N	1.97	0.59
1:BG:272:TYR:CE2	1:CG:55:ARG:CZ	2.86	0.59
1:BD:272:TYR:CD2	1:BS:55:ARG:HD3	2.38	0.59
1:CS:74:ASN:CB	1:CS:126:GLU:HG2	2.32	0.59
1:AA:284:ARG:NH1	1:AA:284:ARG:HG2	2.15	0.59
1:BH:74:ASN:CB	1:BH:126:GLU:HG2	2.31	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CO:74:ASN:CB	1:CO:126:GLU:HG2	2.31	0.59
1:AR:250:TRP:CE3	1:AR:272:TYR:CE1	2.91	0.59
1:AO:162:PHE:CD2	1:AO:163:LEU:HD13	2.38	0.59
1:AG:272:TYR:C	1:AG:273:VAL:CG2	2.71	0.59
1:BN:189:PHE:HE2	1:BN:249:LEU:CD2	2.16	0.59
1:BK:189:PHE:HE1	1:BK:198:ARG:CG	2.15	0.59
1:CP:79:ARG:CG	1:CP:79:ARG:HH11	2.16	0.59
1:BI:284:ARG:NH1	1:BI:284:ARG:HG2	2.15	0.59
1:AB:256:ASN:C	1:AB:256:ASN:ND2	2.54	0.59
1:CJ:284:ARG:HG2	1:CJ:284:ARG:HH11	1.66	0.59
1:CS:36:GLN:NE2	1:CS:156:LEU:H	2.01	0.59
1:AP:272:TYR:HD2	1:BE:55:ARG:HD3	1.64	0.59
1:AN:454:ASN:HD22	1:AN:456:ALA:N	2.00	0.59
1:BA:189:PHE:HE2	1:BA:249:LEU:CD2	2.16	0.59
1:BK:74:ASN:CB	1:BK:126:GLU:HG2	2.32	0.59
1:CF:189:PHE:HE2	1:CF:249:LEU:CD2	2.15	0.59
1:AG:189:PHE:CE1	1:AG:198:ARG:CG	2.81	0.59
1:BS:189:PHE:HE1	1:BS:198:ARG:CG	2.15	0.59
1:CG:454:ASN:HD22	1:CG:456:ALA:N	2.01	0.59
1:CK:74:ASN:CB	1:CK:126:GLU:HG2	2.33	0.59
1:BF:74:ASN:CB	1:BF:126:GLU:HG2	2.33	0.59
1:BI:74:ASN:CB	1:BI:126:GLU:HG2	2.32	0.59
1:AC:250:TRP:CE3	1:AC:272:TYR:CE1	2.91	0.59
1:CH:79:ARG:NH1	1:CH:79:ARG:HG3	2.17	0.59
1:BA:454:ASN:HD22	1:BA:456:ALA:N	2.01	0.59
1:BT:189:PHE:CE1	1:BT:198:ARG:HG3	2.36	0.59
1:AI:74:ASN:CB	1:AI:126:GLU:HG2	2.33	0.59
1:AA:74:ASN:ND2	1:AA:77:THR:OG1	2.36	0.59
1:BK:288:HIS:HD2	1:BK:337:ASP:OD2	1.86	0.59
1:AG:14:CYS:H	1:AG:138:ASN:HD21	1.49	0.59
1:AG:264:GLU:O	1:AG:267:LYS:N	2.30	0.58
1:AI:272:TYR:CE2	1:AO:55:ARG:HD3	2.36	0.58
1:CJ:272:TYR:CE2	1:CQ:55:ARG:HD3	2.38	0.58
1:AK:55:ARG:HD3	1:CF:272:TYR:CE2	2.37	0.58
1:CI:55:ARG:NE	1:CR:272:TYR:CE2	2.71	0.58
1:CJ:454:ASN:HD22	1:CJ:456:ALA:N	2.00	0.58
1:BP:189:PHE:HE1	1:BP:198:ARG:CG	2.16	0.58
1:AD:189:PHE:HE1	1:AD:198:ARG:CG	2.15	0.58
1:AC:74:ASN:CB	1:AC:126:GLU:HG2	2.32	0.58
1:CC:74:ASN:CB	1:CC:126:GLU:HG2	2.32	0.58
1:AP:79:ARG:HH11	1:AP:79:ARG:HG3	1.66	0.58
1:AB:16:ALA:O	1:AB:17:ASN:HB2	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CN:250:TRP:CE3	1:CN:272:TYR:CE1	2.91	0.58
1:BH:189:PHE:CE1	1:BH:198:ARG:CG	2.80	0.58
1:BS:454:ASN:HD22	1:BS:456:ALA:N	2.01	0.58
1:AE:454:ASN:HD22	1:AE:456:ALA:N	2.01	0.58
1:AT:189:PHE:HE1	1:AT:198:ARG:CG	2.16	0.58
1:BP:284:ARG:HG2	1:BP:284:ARG:NH1	2.17	0.58
1:BE:284:ARG:NH1	1:BE:284:ARG:HG2	2.17	0.58
1:AQ:284:ARG:HH11	1:AQ:284:ARG:HG2	1.68	0.58
1:AP:58:ALA:HB2	1:AP:102:GLY:HA3	1.84	0.58
1:CA:43:ALA:HB1	1:CA:158:GLU:HA	1.86	0.58
1:CS:288:HIS:HD2	1:CS:337:ASP:OD2	1.86	0.58
1:AG:272:TYR:HD1	1:AG:272:TYR:N	2.00	0.58
1:CO:272:TYR:CD2	1:CR:55:ARG:CZ	2.87	0.58
1:BA:189:PHE:CE1	1:BA:198:ARG:CG	2.86	0.58
1:AT:74:ASN:ND2	1:AT:77:THR:OG1	2.35	0.58
1:AG:38:GLU:HB2	1:CF:35:VAL:HG22	1.84	0.58
1:AD:272:TYR:CE2	1:AS:55:ARG:HD3	2.38	0.58
1:BT:454:ASN:HD22	1:BT:456:ALA:N	2.01	0.58
1:BC:454:ASN:HD22	1:BC:456:ALA:N	2.00	0.58
1:AF:203:THR:HB	1:AF:300:GLN:HG3	1.85	0.58
1:BC:14:CYS:H	1:BC:138:ASN:HD21	1.51	0.58
1:AB:262:TRP:CD1	1:AB:262:TRP:N	2.70	0.58
1:CB:189:PHE:HE2	1:CB:249:LEU:CD2	2.17	0.58
1:CN:74:ASN:CB	1:CN:126:GLU:HG2	2.32	0.58
1:CG:284:ARG:NH1	1:CG:284:ARG:HG2	2.17	0.58
1:AC:189:PHE:CE1	1:AC:198:ARG:HG3	2.39	0.58
1:AO:239:ILE:HG12	1:AO:326:ILE:CD1	2.33	0.58
1:BD:14:CYS:H	1:BD:138:ASN:HD21	1.51	0.58
1:CQ:250:TRP:HZ3	1:CQ:272:TYR:CE1	2.19	0.58
1:BP:55:ARG:CD	1:CM:272:TYR:CE2	2.87	0.58
1:AO:454:ASN:HD22	1:AO:456:ALA:N	2.00	0.58
1:BG:74:ASN:CB	1:BG:126:GLU:HG2	2.31	0.58
1:AI:284:ARG:HG2	1:AI:284:ARG:NH1	2.15	0.58
1:AB:288:HIS:HD2	1:AB:337:ASP:OD2	1.86	0.58
1:BQ:43:ALA:HB1	1:BQ:158:GLU:HA	1.86	0.58
1:BP:272:TYR:CD2	1:CE:55:ARG:CZ	2.87	0.58
1:BJ:79:ARG:CG	1:BJ:79:ARG:HH11	2.10	0.58
1:AL:55:ARG:CD	1:CQ:272:TYR:HE2	2.17	0.58
1:BR:454:ASN:HD22	1:BR:456:ALA:N	2.01	0.58
1:AL:454:ASN:HD22	1:AL:456:ALA:N	2.01	0.58
1:BD:284:ARG:HG2	1:BD:284:ARG:NH1	2.18	0.58
1:BN:74:ASN:CB	1:BN:126:GLU:HG2	2.34	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BB:74:ASN:CB	1:BB:126:GLU:HG2	2.34	0.58
1:CJ:263:ASN:HD22	1:CQ:5:ARG:HD3	1.68	0.58
1:AA:67:VAL:HG23	1:AA:135:LEU:HB2	1.85	0.58
1:BG:11:PRO:HG2	1:BG:18:ARG:HD2	1.85	0.58
1:AL:74:ASN:CB	1:AL:126:GLU:HG2	2.32	0.58
1:BM:284:ARG:NH1	1:BM:284:ARG:HG2	2.15	0.58
1:AQ:189:PHE:HE2	1:AQ:249:LEU:CD2	2.17	0.58
1:AN:284:ARG:HG2	1:AN:284:ARG:NH1	2.18	0.58
1:BM:36:GLN:NE2	1:BM:156:LEU:H	2.02	0.58
1:AJ:14:CYS:H	1:AJ:138:ASN:HD21	1.51	0.58
1:BH:55:ARG:CD	1:BK:272:TYR:HE2	2.17	0.58
1:BF:189:PHE:HE2	1:BF:249:LEU:CD2	2.17	0.58
1:CB:454:ASN:HD22	1:CB:456:ALA:N	2.01	0.58
1:BJ:74:ASN:CB	1:BJ:126:GLU:HG2	2.33	0.58
1:BT:284:ARG:HG2	1:BT:284:ARG:NH1	2.18	0.58
1:BS:284:ARG:HG2	1:BS:284:ARG:NH1	2.19	0.58
1:CL:9:TYR:HE1	1:CL:147:GLN:HE21	1.50	0.58
1:CH:43:ALA:HB1	1:CH:158:GLU:HA	1.86	0.58
1:CO:239:ILE:HG12	1:CO:326:ILE:CD1	2.34	0.58
1:BN:67:VAL:HG23	1:BN:135:LEU:HB2	1.86	0.58
1:AN:239:ILE:HG12	1:AN:326:ILE:CD1	2.34	0.58
1:AJ:272:TYR:CE2	1:AQ:55:ARG:HD3	2.39	0.58
1:CM:250:TRP:CE3	1:CM:272:TYR:CE1	2.91	0.58
1:BP:454:ASN:ND2	1:BP:456:ALA:H	2.00	0.58
1:BN:55:ARG:HD3	1:BS:272:TYR:CD2	2.39	0.58
1:AD:189:PHE:HE2	1:AD:249:LEU:CD2	2.17	0.58
1:AP:74:ASN:CB	1:AP:126:GLU:HG2	2.34	0.58
1:AA:398:GLY:HA3	1:AA:494:PHE:CD2	2.38	0.58
1:CR:36:GLN:NE2	1:CR:156:LEU:H	2.02	0.58
1:AG:250:TRP:CE3	1:AG:272:TYR:HE1	2.22	0.57
1:AN:55:ARG:HD3	1:AS:272:TYR:CE2	2.38	0.57
1:CS:454:ASN:ND2	1:CS:456:ALA:H	1.98	0.57
1:AQ:272:TYR:CE2	1:BL:55:ARG:CD	2.87	0.57
1:CQ:284:ARG:HG2	1:CQ:284:ARG:NH1	2.17	0.57
1:BL:284:ARG:HG2	1:BL:284:ARG:NH1	2.19	0.57
1:AP:74:ASN:ND2	1:AP:77:THR:OG1	2.37	0.57
1:CF:284:ARG:NH1	1:CF:284:ARG:HG2	2.19	0.57
1:BH:79:ARG:HG3	1:BH:79:ARG:HH11	1.67	0.57
1:BC:239:ILE:HG12	1:BC:326:ILE:CD1	2.33	0.57
1:CT:454:ASN:HD22	1:CT:456:ALA:N	2.01	0.57
1:AA:189:PHE:CE1	1:AA:198:ARG:CG	2.87	0.57
1:AK:284:ARG:NH1	1:AK:284:ARG:HG2	2.17	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BN:284:ARG:HG2	1:BN:284:ARG:NH1	2.17	0.57
1:AR:74:ASN:CB	1:AR:126:GLU:HG2	2.34	0.57
1:AP:189:PHE:CE1	1:AP:198:ARG:HG3	2.38	0.57
1:CF:18:ARG:HG3	1:CF:19:TYR:N	2.19	0.57
1:BN:189:PHE:HE1	1:BN:198:ARG:HG2	1.68	0.57
1:BF:55:ARG:CD	1:CH:272:TYR:HE2	2.16	0.57
1:BE:272:TYR:CE2	1:BM:55:ARG:HD3	2.39	0.57
1:CI:454:ASN:HD22	1:CI:456:ALA:N	2.02	0.57
1:AT:189:PHE:CE1	1:AT:198:ARG:CG	2.87	0.57
1:BJ:284:ARG:HG2	1:BJ:284:ARG:NH1	2.18	0.57
1:CG:250:TRP:CE3	1:CG:272:TYR:CE1	2.92	0.57
1:AN:250:TRP:CE3	1:AN:272:TYR:CE1	2.92	0.57
1:AB:189:PHE:CE1	1:AB:198:ARG:CG	2.81	0.57
1:CQ:454:ASN:ND2	1:CQ:456:ALA:H	2.00	0.57
1:BP:189:PHE:CE1	1:BP:198:ARG:CG	2.88	0.57
1:BH:284:ARG:HG2	1:BH:284:ARG:NH1	2.16	0.57
1:AF:284:ARG:HG2	1:AF:284:ARG:NH1	2.17	0.57
1:AA:74:ASN:CB	1:AA:126:GLU:HG2	2.34	0.57
1:CH:288:HIS:HD2	1:CH:337:ASP:OD2	1.88	0.57
1:AH:11:PRO:HG2	1:AH:18:ARG:HD2	1.87	0.57
1:BG:16:ALA:O	1:BG:17:ASN:HB2	2.03	0.57
1:CF:36:GLN:NE2	1:CF:156:LEU:H	2.03	0.57
1:AL:284:ARG:HG2	1:AL:284:ARG:NH1	2.16	0.57
1:BQ:288:HIS:HD2	1:BQ:337:ASP:OD2	1.87	0.57
1:BO:272:TYR:CE2	1:BR:55:ARG:HD3	2.40	0.57
1:CF:454:ASN:ND2	1:CF:456:ALA:H	2.00	0.57
1:BR:79:ARG:HH11	1:BR:79:ARG:CG	2.16	0.57
1:BI:454:ASN:ND2	1:BI:456:ALA:H	2.01	0.57
1:BN:454:ASN:HD22	1:BN:456:ALA:N	2.02	0.57
1:CL:189:PHE:CE1	1:CL:198:ARG:CG	2.88	0.57
1:AT:454:ASN:HD22	1:AT:456:ALA:N	2.02	0.57
1:CI:79:ARG:HH11	1:CI:79:ARG:HG3	1.68	0.57
1:BS:14:CYS:H	1:BS:138:ASN:HD21	1.52	0.57
1:CR:189:PHE:HE1	1:CR:198:ARG:HG2	1.67	0.57
1:AM:272:TYR:CE2	1:CP:55:ARG:HD3	2.40	0.57
1:BL:189:PHE:CE1	1:BL:198:ARG:CG	2.87	0.57
1:BE:454:ASN:HD22	1:BE:456:ALA:N	2.02	0.57
1:BK:284:ARG:NH1	1:BK:284:ARG:HG2	2.15	0.57
1:AO:189:PHE:CE1	1:AO:198:ARG:HG3	2.40	0.57
1:BP:36:GLN:NE2	1:BP:156:LEU:H	2.02	0.57
1:CK:9:TYR:HE1	1:CK:147:GLN:HE21	1.53	0.57
1:AF:14:CYS:H	1:AF:138:ASN:HD21	1.52	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AB:272:TYR:HE2	1:CB:55:ARG:CD	2.18	0.57
1:CC:250:TRP:CE3	1:CC:272:TYR:CD1	2.92	0.57
1:BJ:272:TYR:CE2	1:BQ:55:ARG:CZ	2.88	0.57
1:BB:250:TRP:CE3	1:BB:272:TYR:CE1	2.92	0.57
1:CT:250:TRP:HZ3	1:CT:272:TYR:CE1	2.22	0.57
1:AP:454:ASN:HD22	1:AP:456:ALA:N	2.02	0.57
1:AH:75:ARG:NH2	1:AH:391:ALA:O	2.37	0.57
1:AT:288:HIS:HD2	1:AT:337:ASP:OD2	1.88	0.57
1:CM:36:GLN:NE2	1:CM:156:LEU:H	2.02	0.57
1:BD:398:GLY:HA3	1:BD:494:PHE:CD2	2.40	0.57
1:AM:398:GLY:HA3	1:AM:494:PHE:CD2	2.39	0.57
1:BS:79:ARG:CG	1:BS:79:ARG:NH1	2.66	0.57
1:CD:55:ARG:HD3	1:CN:272:TYR:CE2	2.40	0.57
1:BB:250:TRP:HZ3	1:BB:272:TYR:CE1	2.23	0.57
1:AM:272:TYR:CD2	1:CP:55:ARG:HD3	2.40	0.57
1:BJ:55:ARG:CD	1:CL:272:TYR:HE2	2.17	0.57
1:BM:284:ARG:CG	1:BM:284:ARG:NH1	2.67	0.57
1:BE:74:ASN:ND2	1:BE:77:THR:OG1	2.38	0.57
1:CJ:284:ARG:NH1	1:CJ:284:ARG:HG2	2.20	0.57
1:AH:288:HIS:HD2	1:AH:337:ASP:OD2	1.88	0.57
1:AG:272:TYR:N	1:AG:272:TYR:CD1	2.67	0.57
1:AP:55:ARG:NE	1:BM:272:TYR:CE2	2.73	0.57
1:AK:454:ASN:HD22	1:AK:456:ALA:N	2.03	0.57
1:AQ:189:PHE:CE1	1:AQ:198:ARG:HG3	2.39	0.57
1:AE:284:ARG:HG2	1:AE:284:ARG:NH1	2.20	0.57
1:BO:189:PHE:CE1	1:BO:198:ARG:HG3	2.39	0.57
1:BC:79:ARG:HG3	1:BC:79:ARG:HH11	1.70	0.57
1:BA:232:THR:HB	1:BA:334:VAL:HG23	1.87	0.57
1:AO:290:THR:O	1:AO:290:THR:CG2	2.39	0.56
1:BM:189:PHE:CE1	1:BM:198:ARG:CG	2.82	0.56
1:BM:189:PHE:CE1	1:BM:198:ARG:HG3	2.38	0.56
1:AA:189:PHE:HE2	1:AA:249:LEU:CD2	2.18	0.56
1:CP:284:ARG:NH1	1:CP:284:ARG:HG2	2.20	0.56
1:CS:284:ARG:HG2	1:CS:284:ARG:NH1	2.19	0.56
1:AS:398:GLY:HA3	1:AS:494:PHE:CD2	2.40	0.56
1:AJ:250:TRP:CZ3	1:AJ:272:TYR:HE1	2.23	0.56
1:BG:272:TYR:CD2	1:CG:55:ARG:CZ	2.88	0.56
1:AB:55:ARG:HD3	1:BB:272:TYR:CD2	2.40	0.56
1:CS:250:TRP:CE3	1:CS:272:TYR:CE1	2.93	0.56
1:BS:189:PHE:CE1	1:BS:198:ARG:CG	2.88	0.56
1:CM:14:CYS:H	1:CM:138:ASN:HD21	1.51	0.56
1:AH:16:ALA:O	1:AH:17:ASN:HB2	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CM:239:ILE:HG12	1:CM:326:ILE:CD1	2.35	0.56
1:CS:398:GLY:HA3	1:CS:494:PHE:CD2	2.40	0.56
1:CI:378:ARG:CG	1:CI:379:VAL:H	2.17	0.56
1:AP:250:TRP:CE3	1:AP:272:TYR:CE1	2.93	0.56
1:CB:191:LEU:N	1:CB:191:LEU:HD23	2.18	0.56
1:BN:189:PHE:CE1	1:BN:198:ARG:HG2	2.41	0.56
1:CJ:189:PHE:HE2	1:CJ:249:LEU:CD2	2.18	0.56
1:AB:55:ARG:CD	1:BB:272:TYR:HE2	2.19	0.56
1:CB:250:TRP:CE3	1:CB:272:TYR:CE1	2.93	0.56
1:BB:454:ASN:ND2	1:BB:456:ALA:H	2.00	0.56
1:AH:250:TRP:CE3	1:AH:272:TYR:CE1	2.93	0.56
1:CC:454:ASN:HD22	1:CC:456:ALA:N	2.02	0.56
1:AJ:454:ASN:HD22	1:AJ:456:ALA:N	2.03	0.56
1:CK:74:ASN:ND2	1:CK:77:THR:OG1	2.38	0.56
1:BP:74:ASN:CB	1:BP:126:GLU:HG2	2.35	0.56
1:CR:284:ARG:NH1	1:CR:284:ARG:HG2	2.20	0.56
1:BQ:74:ASN:CB	1:BQ:126:GLU:HG2	2.35	0.56
1:BM:398:GLY:HA3	1:BM:494:PHE:CD2	2.40	0.56
1:BJ:250:TRP:HZ3	1:BJ:272:TYR:CE1	2.22	0.56
1:CN:250:TRP:HZ3	1:CN:272:TYR:CE1	2.23	0.56
1:CR:250:TRP:HZ3	1:CR:272:TYR:CE1	2.23	0.56
1:AN:454:ASN:ND2	1:AN:456:ALA:H	2.03	0.56
1:AA:272:TYR:HE2	1:CT:55:ARG:CD	2.18	0.56
1:AI:454:ASN:HD22	1:AI:456:ALA:N	2.03	0.56
1:BE:288:HIS:HD2	1:BE:337:ASP:OD2	1.89	0.56
1:CO:14:CYS:H	1:CO:138:ASN:HD21	1.53	0.56
1:AI:442:GLN:HE21	1:AJ:412:PHE:HB2	1.70	0.56
1:BE:189:PHE:HE2	1:BE:249:LEU:CD2	2.18	0.56
1:AF:454:ASN:ND2	1:AF:456:ALA:H	2.01	0.56
1:BQ:189:PHE:CE1	1:BQ:198:ARG:CG	2.88	0.56
1:BF:79:ARG:CG	1:BF:79:ARG:HH11	2.18	0.56
1:AS:454:ASN:HD22	1:AS:456:ALA:N	2.03	0.56
1:CE:454:ASN:HD22	1:CE:456:ALA:N	2.03	0.56
1:AD:189:PHE:CE1	1:AD:198:ARG:CG	2.89	0.56
1:AJ:79:ARG:HG3	1:AJ:79:ARG:NH1	2.21	0.56
1:BL:288:HIS:HD2	1:BL:337:ASP:OD2	1.89	0.56
1:AD:398:GLY:HA3	1:AD:494:PHE:CD2	2.40	0.56
1:AQ:442:GLN:HE21	1:AR:412:PHE:HB2	1.71	0.56
1:AQ:67:VAL:HG23	1:AQ:135:LEU:HB2	1.88	0.56
1:BA:250:TRP:CE3	1:BA:272:TYR:CE1	2.93	0.56
1:BH:55:ARG:HD3	1:BK:272:TYR:CD2	2.41	0.56
1:CH:55:ARG:CD	1:CK:272:TYR:HE2	2.17	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BR:189:PHE:HE2	1:BR:249:LEU:CD2	2.18	0.56
1:BR:454:ASN:ND2	1:BR:456:ALA:H	2.03	0.56
1:CR:74:ASN:CB	1:CR:126:GLU:HG2	2.35	0.56
1:CJ:18:ARG:HD2	1:CJ:19:TYR:O	2.05	0.56
1:BT:288:HIS:HD2	1:BT:337:ASP:OD2	1.89	0.56
1:AM:288:HIS:HD2	1:AM:337:ASP:OD2	1.89	0.56
1:CM:75:ARG:NH2	1:CM:391:ALA:O	2.38	0.56
1:BS:79:ARG:HG3	1:BS:79:ARG:NH1	2.10	0.56
1:CI:189:PHE:CE1	1:CI:198:ARG:CG	2.83	0.56
1:BM:189:PHE:HE1	1:BM:198:ARG:HG2	1.70	0.56
1:BT:79:ARG:NH1	1:BT:79:ARG:HG3	2.21	0.56
1:AL:14:CYS:H	1:AL:138:ASN:ND2	2.03	0.56
1:BQ:14:CYS:H	1:BQ:138:ASN:HD21	1.53	0.56
1:CF:239:ILE:HG12	1:CF:326:ILE:CD1	2.35	0.56
1:CO:36:GLN:NE2	1:CO:156:LEU:H	2.03	0.56
1:CM:250:TRP:HZ3	1:CM:272:TYR:CE1	2.19	0.56
1:CN:454:ASN:HD22	1:CN:456:ALA:N	2.00	0.56
1:CT:189:PHE:HE2	1:CT:249:LEU:CD2	2.19	0.56
1:CE:284:ARG:NH1	1:CE:284:ARG:HG2	2.21	0.56
1:BN:442:GLN:HE21	1:BO:412:PHE:HB2	1.71	0.56
1:AH:43:ALA:HB1	1:AH:158:GLU:HA	1.88	0.56
1:AL:288:HIS:HD2	1:AL:337:ASP:OD2	1.89	0.56
1:BP:79:ARG:HH11	1:BP:79:ARG:HG2	1.70	0.56
1:CR:250:TRP:CE3	1:CR:272:TYR:CE1	2.94	0.56
1:AE:250:TRP:CE3	1:AE:272:TYR:CE1	2.94	0.56
1:CI:272:TYR:CD2	1:CO:55:ARG:HD3	2.40	0.56
1:AP:14:CYS:H	1:AP:138:ASN:HD21	1.53	0.56
1:AN:14:CYS:H	1:AN:138:ASN:HD21	1.53	0.56
1:AK:191:LEU:N	1:AK:191:LEU:HD23	2.17	0.56
1:BG:250:TRP:HZ3	1:BG:272:TYR:CE1	2.20	0.56
1:BK:250:TRP:HZ3	1:BK:272:TYR:CE1	2.23	0.56
1:BH:250:TRP:HZ3	1:BH:272:TYR:CE1	2.22	0.56
1:CH:454:ASN:HD22	1:CH:456:ALA:N	2.02	0.56
1:BB:74:ASN:ND2	1:BB:77:THR:OG1	2.39	0.56
1:AM:74:ASN:ND2	1:AM:77:THR:OG1	2.39	0.56
1:BF:74:ASN:ND2	1:BF:77:THR:OG1	2.38	0.56
1:AG:288:HIS:HD2	1:AG:337:ASP:OD2	1.89	0.56
1:BK:398:GLY:HA3	1:BK:494:PHE:CD2	2.40	0.56
1:AQ:288:HIS:HD2	1:AQ:337:ASP:OD2	1.89	0.56
1:AH:55:ARG:NE	1:AK:272:TYR:CD2	2.74	0.55
1:AB:191:LEU:HD23	1:AB:191:LEU:N	2.16	0.55
1:BT:189:PHE:HE1	1:BT:198:ARG:CG	2.18	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AT:284:ARG:NH1	1:AT:284:ARG:HG2	2.16	0.55
1:AJ:284:ARG:NH1	1:AJ:284:ARG:HG2	2.22	0.55
1:BB:67:VAL:HG23	1:BB:135:LEU:HB2	1.88	0.55
1:AD:67:VAL:HG23	1:AD:135:LEU:HB2	1.87	0.55
1:BG:67:VAL:HG23	1:BG:135:LEU:HB2	1.88	0.55
1:AI:144:ALA:HB3	1:AR:191:LEU:O	2.06	0.55
1:CH:55:ARG:HD3	1:CK:272:TYR:CD2	2.41	0.55
1:CI:272:TYR:HE2	1:CO:55:ARG:CD	2.18	0.55
1:AP:55:ARG:CD	1:BM:272:TYR:CE2	2.90	0.55
1:CK:454:ASN:ND2	1:CK:456:ALA:H	2.01	0.55
1:CL:189:PHE:HE1	1:CL:198:ARG:CG	2.19	0.55
1:BM:74:ASN:CB	1:BM:126:GLU:HG2	2.36	0.55
1:CQ:288:HIS:HD2	1:CQ:337:ASP:OD2	1.89	0.55
1:BM:14:CYS:H	1:BM:138:ASN:HD21	1.52	0.55
1:BB:11:PRO:HG2	1:BB:18:ARG:HD2	1.88	0.55
1:CD:55:ARG:HD3	1:CN:272:TYR:HD2	1.70	0.55
1:AC:272:TYR:HE2	1:BA:55:ARG:CD	2.19	0.55
1:CD:454:ASN:ND2	1:CD:456:ALA:H	2.02	0.55
1:BQ:189:PHE:HE2	1:BQ:249:LEU:HD21	1.71	0.55
1:AD:250:TRP:CE3	1:AD:272:TYR:CE1	2.95	0.55
1:BC:272:TYR:CE2	1:CA:55:ARG:HD3	2.42	0.55
1:AQ:454:ASN:HD22	1:AQ:456:ALA:N	2.04	0.55
1:CQ:189:PHE:HE2	1:CQ:249:LEU:CD2	2.20	0.55
1:BC:16:ALA:O	1:BC:17:ASN:HB2	2.06	0.55
1:BS:288:HIS:HD2	1:BS:337:ASP:OD2	1.89	0.55
1:BK:189:PHE:HE2	1:BK:249:LEU:CD2	2.18	0.55
1:AM:74:ASN:CB	1:AM:126:GLU:HG2	2.35	0.55
1:BA:232:THR:HB	1:BA:334:VAL:CG2	2.37	0.55
1:AE:288:HIS:HD2	1:AE:337:ASP:OD2	1.90	0.55
1:BP:75:ARG:NH2	1:BP:391:ALA:O	2.39	0.55
1:AS:67:VAL:HG23	1:AS:135:LEU:HB2	1.88	0.55
1:BJ:67:VAL:HG23	1:BJ:135:LEU:HB2	1.89	0.55
1:AR:10:ILE:HG21	1:AR:146:TRP:CZ2	2.41	0.55
1:AA:16:ALA:O	1:AA:17:ASN:HB2	2.07	0.55
1:CH:11:PRO:HG2	1:CH:18:ARG:HD2	1.88	0.55
1:AR:58:ALA:HB2	1:AR:102:GLY:HA3	1.88	0.55
1:AJ:272:TYR:CE2	1:AQ:55:ARG:CZ	2.89	0.55
1:BL:250:TRP:HZ3	1:BL:272:TYR:CE1	2.22	0.55
1:AQ:272:TYR:HE2	1:BL:55:ARG:CD	2.19	0.55
1:BQ:189:PHE:HE2	1:BQ:249:LEU:CD2	2.20	0.55
1:AA:272:TYR:HD2	1:CT:55:ARG:HD3	1.72	0.55
1:CA:454:ASN:HD22	1:CA:456:ALA:N	2.04	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BM:67:VAL:HG23	1:BM:135:LEU:HB2	1.88	0.55
1:CP:288:HIS:HD2	1:CP:337:ASP:OD2	1.90	0.55
1:BK:454:ASN:ND2	1:BK:456:ALA:H	2.02	0.55
1:BK:250:TRP:CE3	1:BK:272:TYR:CE1	2.94	0.55
1:CK:250:TRP:CE3	1:CK:272:TYR:CE1	2.94	0.55
1:CS:189:PHE:HE1	1:CS:198:ARG:CG	2.19	0.55
1:AI:74:ASN:ND2	1:AI:77:THR:OG1	2.39	0.55
1:CG:398:GLY:HA3	1:CG:494:PHE:CD2	2.41	0.55
1:BH:288:HIS:HD2	1:BH:337:ASP:OD2	1.90	0.55
1:BD:67:VAL:HG23	1:BD:135:LEU:HB2	1.88	0.55
1:CS:239:ILE:HG12	1:CS:326:ILE:CD1	2.37	0.55
1:AI:272:TYR:HE2	1:AO:55:ARG:NE	1.92	0.55
1:BB:55:ARG:CZ	1:CB:272:TYR:CD2	2.90	0.55
1:BM:454:ASN:HD22	1:BM:456:ALA:N	2.00	0.55
1:BG:454:ASN:HD22	1:BG:456:ALA:N	2.04	0.55
1:CA:74:ASN:CB	1:CA:126:GLU:HG2	2.37	0.55
1:BM:288:HIS:HD2	1:BM:337:ASP:OD2	1.90	0.55
1:AA:191:LEU:HD23	1:AA:191:LEU:N	2.16	0.55
1:CQ:454:ASN:HD22	1:CQ:456:ALA:N	2.00	0.55
1:BF:55:ARG:HD3	1:CH:272:TYR:CE2	2.42	0.55
1:CI:250:TRP:HZ3	1:CI:272:TYR:CE1	2.22	0.55
1:BK:189:PHE:CE1	1:BK:198:ARG:CG	2.89	0.55
1:CB:14:CYS:H	1:CB:138:ASN:HD21	1.54	0.55
1:AC:398:GLY:HA3	1:AC:494:PHE:CD2	2.42	0.55
1:CR:67:VAL:HG23	1:CR:135:LEU:HB2	1.89	0.55
1:CS:454:ASN:HD22	1:CS:456:ALA:N	1.98	0.55
1:BK:454:ASN:HD22	1:BK:456:ALA:N	1.99	0.55
1:AH:272:TYR:CE2	1:CF:55:ARG:CZ	2.90	0.55
1:CJ:454:ASN:ND2	1:CJ:456:ALA:H	2.04	0.55
1:BA:74:ASN:ND2	1:BA:77:THR:OG1	2.40	0.55
1:AQ:284:ARG:NH1	1:AQ:284:ARG:HG2	2.20	0.55
1:AB:14:CYS:H	1:AB:138:ASN:HD21	1.52	0.55
1:CJ:79:ARG:HG3	1:CJ:79:ARG:HH11	1.72	0.55
1:BI:272:TYR:CD2	1:BO:55:ARG:HD3	2.41	0.55
1:CH:250:TRP:CE3	1:CH:272:TYR:CE1	2.93	0.55
1:CO:189:PHE:CE1	1:CO:198:ARG:CG	2.90	0.55
1:CI:74:ASN:ND2	1:CI:77:THR:OG1	2.40	0.55
1:BD:189:PHE:HE2	1:BD:249:LEU:CD2	2.20	0.55
1:BQ:398:GLY:HA3	1:BQ:494:PHE:CD2	2.41	0.55
1:CM:288:HIS:HD2	1:CM:337:ASP:OD2	1.90	0.55
1:BL:36:GLN:NE2	1:BL:156:LEU:H	2.05	0.55
1:BI:250:TRP:HZ3	1:BI:272:TYR:CE1	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BI:454:ASN:HD22	1:BI:456:ALA:N	1.99	0.54
1:BS:189:PHE:HE2	1:BS:249:LEU:CD2	2.20	0.54
1:AH:454:ASN:HD22	1:AH:456:ALA:N	2.03	0.54
1:CS:189:PHE:CE1	1:CS:198:ARG:CG	2.90	0.54
1:BD:74:ASN:CB	1:BD:126:GLU:HG2	2.36	0.54
1:CH:67:VAL:HG23	1:CH:135:LEU:HB2	1.90	0.54
1:CE:288:HIS:HD2	1:CE:337:ASP:OD2	1.90	0.54
1:AR:288:HIS:HD2	1:AR:337:ASP:OD2	1.90	0.54
1:AQ:16:ALA:O	1:AQ:17:ASN:HB2	2.07	0.54
1:BJ:18:ARG:HD2	1:BJ:19:TYR:O	2.06	0.54
1:AB:250:TRP:HZ3	1:AB:272:TYR:CE1	2.22	0.54
1:CJ:250:TRP:HZ3	1:CJ:272:TYR:CE1	2.25	0.54
1:AJ:272:TYR:CD2	1:AQ:55:ARG:CZ	2.90	0.54
1:BT:55:ARG:NE	1:CA:272:TYR:HE2	1.96	0.54
1:BP:189:PHE:HE2	1:BP:249:LEU:CD2	2.20	0.54
1:AB:454:ASN:HD22	1:AB:456:ALA:N	2.03	0.54
1:BT:189:PHE:HE2	1:BT:249:LEU:CD2	2.20	0.54
1:CG:74:ASN:CB	1:CG:126:GLU:HG2	2.37	0.54
1:AA:58:ALA:HB2	1:AA:102:GLY:HA3	1.89	0.54
1:AH:162:PHE:CD2	1:AH:163:LEU:HD13	2.43	0.54
1:AF:405:GLN:NE2	1:AJ:437:HIS:CE1	2.76	0.54
1:AS:288:HIS:HD2	1:AS:337:ASP:OD2	1.91	0.54
1:AG:258:THR:O	1:AG:259:THR:C	2.40	0.54
1:AB:272:TYR:CE2	1:CB:55:ARG:CD	2.90	0.54
1:AL:250:TRP:CE3	1:AL:272:TYR:CE1	2.95	0.54
1:BA:250:TRP:HZ3	1:BA:272:TYR:CE1	2.22	0.54
1:CL:454:ASN:HD22	1:CL:456:ALA:N	2.01	0.54
1:AR:398:GLY:HA3	1:AR:494:PHE:CD2	2.42	0.54
1:BI:398:GLY:HA3	1:BI:494:PHE:CD2	2.41	0.54
1:BS:58:ALA:HB2	1:BS:102:GLY:HA3	1.88	0.54
1:AQ:256:ASN:HD22	1:AQ:302:ASP:HA	1.73	0.54
1:AG:398:GLY:HA3	1:AG:494:PHE:CD2	2.43	0.54
1:CJ:272:TYR:CD2	1:CQ:55:ARG:HD3	2.43	0.54
1:BG:250:TRP:CE3	1:BG:272:TYR:CE1	2.95	0.54
1:CQ:454:ASN:HD21	1:CQ:456:ALA:HB3	1.72	0.54
1:CK:250:TRP:HZ3	1:CK:272:TYR:CE1	2.22	0.54
1:CM:454:ASN:ND2	1:CM:456:ALA:H	2.02	0.54
1:AH:284:ARG:CG	1:AH:284:ARG:NH1	2.70	0.54
1:BJ:74:ASN:ND2	1:BJ:77:THR:OG1	2.40	0.54
1:AK:442:GLN:NE2	1:AL:412:PHE:HB2	2.23	0.54
1:CE:226:VAL:HG13	1:CE:228:GLY:H	1.73	0.54
1:AF:16:ALA:O	1:AF:17:ASN:HB2	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CS:203:THR:HB	1:CS:300:GLN:HG3	1.88	0.54
1:AB:398:GLY:HA3	1:AB:494:PHE:CD2	2.43	0.54
1:BN:250:TRP:CE3	1:BN:272:TYR:CE1	2.96	0.54
1:BA:189:PHE:HD2	1:BA:247:ILE:HD11	1.73	0.54
1:CC:79:ARG:HG3	1:CC:79:ARG:NH1	2.21	0.54
1:AG:454:ASN:HD22	1:AG:456:ALA:N	2.04	0.54
1:AO:74:ASN:CB	1:AO:126:GLU:HG2	2.37	0.54
1:CP:454:ASN:HD22	1:CP:456:ALA:N	2.06	0.54
1:BP:398:GLY:HA3	1:BP:494:PHE:CD2	2.43	0.54
1:AJ:67:VAL:HG23	1:AJ:135:LEU:HB2	1.90	0.54
1:BI:14:CYS:H	1:BI:138:ASN:HD21	1.56	0.54
1:BD:288:HIS:HD2	1:BD:337:ASP:OD2	1.90	0.54
1:AM:67:VAL:HG23	1:AM:135:LEU:HB2	1.89	0.54
1:BO:250:TRP:CE3	1:BO:272:TYR:CD1	2.95	0.54
1:BB:454:ASN:HD22	1:BB:456:ALA:N	1.99	0.54
1:CT:250:TRP:CE3	1:CT:272:TYR:CE1	2.96	0.54
1:BF:250:TRP:CE3	1:BF:272:TYR:CE1	2.95	0.54
1:BJ:454:ASN:HD21	1:BJ:456:ALA:HB3	1.73	0.54
1:CT:189:PHE:HE1	1:CT:198:ARG:CG	2.19	0.54
1:CF:30:SER:O	1:CF:33:LYS:HB2	2.08	0.54
1:BQ:162:PHE:CD2	1:BQ:163:LEU:HD13	2.43	0.54
1:CB:398:GLY:HA3	1:CB:494:PHE:CD2	2.43	0.54
1:AG:58:ALA:HB2	1:AG:102:GLY:HA3	1.89	0.54
1:CJ:272:TYR:CD2	1:CQ:55:ARG:NH1	2.75	0.54
1:CF:250:TRP:HZ3	1:CF:272:TYR:CE1	2.21	0.54
1:BT:250:TRP:HZ3	1:BT:272:TYR:CE1	2.22	0.54
1:BH:454:ASN:HD22	1:BH:456:ALA:N	2.02	0.54
1:AO:289:ARG:HH12	1:AO:337:ASP:C	2.10	0.54
1:BP:77:THR:O	1:BP:81:THR:HG23	2.07	0.54
1:BG:14:CYS:H	1:BG:138:ASN:HD21	1.54	0.54
1:CC:67:VAL:HG23	1:CC:135:LEU:HB2	1.90	0.54
1:AI:250:TRP:CZ3	1:AI:272:TYR:HE1	2.22	0.54
1:AN:55:ARG:NH1	1:AS:272:TYR:CD2	2.76	0.54
1:AF:55:ARG:HD3	1:BH:272:TYR:CE2	2.43	0.54
1:BT:454:ASN:ND2	1:BT:456:ALA:H	2.03	0.54
1:CT:189:PHE:HD2	1:CT:247:ILE:HD11	1.73	0.54
1:BT:189:PHE:CE1	1:BT:198:ARG:CG	2.91	0.54
1:CB:67:VAL:HG23	1:CB:135:LEU:HB2	1.89	0.54
1:AK:58:ALA:HB2	1:AK:102:GLY:HA3	1.89	0.54
1:BC:398:GLY:HA3	1:BC:494:PHE:CD2	2.43	0.54
1:CA:11:PRO:HG2	1:CA:18:ARG:HD2	1.90	0.54
1:BO:15:GLN:HA	1:BO:15:GLN:NE2	2.18	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AH:250:TRP:HZ3	1:AH:272:TYR:CE1	2.24	0.54
1:AQ:189:PHE:HE2	1:AQ:249:LEU:HD21	1.71	0.54
1:AH:74:ASN:CB	1:AH:126:GLU:HG2	2.37	0.54
1:CK:67:VAL:HG23	1:CK:135:LEU:HB2	1.89	0.54
1:AI:418:SER:HB3	1:AJ:407:SER:HB3	1.90	0.54
1:AI:43:ALA:HB1	1:AI:158:GLU:HA	1.89	0.54
1:CD:67:VAL:HG23	1:CD:135:LEU:HB2	1.88	0.54
1:AJ:191:LEU:O	1:AQ:144:ALA:HB3	2.09	0.54
1:AO:203:THR:CG2	1:AO:293:ARG:HA	2.38	0.54
1:AD:272:TYR:HE2	1:AS:55:ARG:NE	2.06	0.54
1:CE:203:THR:HB	1:CE:300:GLN:HG3	1.90	0.54
1:AF:288:HIS:HD2	1:AF:337:ASP:OD2	1.91	0.54
1:CS:79:ARG:HH11	1:CS:79:ARG:HG3	1.73	0.54
1:AO:272:TYR:CE2	1:AR:55:ARG:CZ	2.91	0.53
1:BM:189:PHE:CE1	1:BM:198:ARG:HG2	2.43	0.53
1:CN:454:ASN:ND2	1:CN:456:ALA:H	2.02	0.53
1:BO:454:ASN:HD22	1:BO:456:ALA:N	2.06	0.53
1:CT:67:VAL:HG23	1:CT:135:LEU:HB2	1.89	0.53
1:BR:398:GLY:HA3	1:BR:494:PHE:CD2	2.43	0.53
1:BA:398:GLY:HA3	1:BA:494:PHE:CD2	2.42	0.53
1:BJ:14:CYS:H	1:BJ:138:ASN:HD21	1.54	0.53
1:BJ:288:HIS:HD2	1:BJ:337:ASP:OD2	1.91	0.53
1:AO:398:GLY:HA3	1:AO:494:PHE:CD2	2.42	0.53
1:CH:16:ALA:O	1:CH:17:ASN:HB2	2.08	0.53
1:AL:442:GLN:HE21	1:AM:412:PHE:HB2	1.73	0.53
1:AO:288:HIS:HD2	1:AO:337:ASP:OD2	1.91	0.53
1:CR:398:GLY:HA3	1:CR:494:PHE:CD2	2.42	0.53
1:BN:170:PHE:HD1	1:BN:389:MET:HE2	1.73	0.53
1:BS:191:LEU:HD23	1:BS:191:LEU:N	2.19	0.53
1:AI:79:ARG:HG3	1:AI:79:ARG:NH1	2.18	0.53
1:BF:189:PHE:CE1	1:BF:198:ARG:HG2	2.43	0.53
1:CL:250:TRP:CE3	1:CL:272:TYR:CE1	2.95	0.53
1:BJ:454:ASN:HD22	1:BJ:456:ALA:N	2.03	0.53
1:AT:189:PHE:HE2	1:AT:249:LEU:CD2	2.21	0.53
1:CT:189:PHE:CE1	1:CT:198:ARG:CG	2.91	0.53
1:AK:288:HIS:HD2	1:AK:337:ASP:OD2	1.90	0.53
1:AT:398:GLY:HA3	1:AT:494:PHE:CD2	2.42	0.53
1:BA:239:ILE:HG12	1:BA:326:ILE:CD1	2.39	0.53
1:BM:203:THR:HB	1:BM:300:GLN:HG3	1.91	0.53
1:AT:11:PRO:HG2	1:AT:18:ARG:HD2	1.89	0.53
1:AB:264:GLU:O	1:AB:265:LEU:C	2.45	0.53
1:AK:250:TRP:CE3	1:AK:272:TYR:CE1	2.96	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CP:250:TRP:HZ3	1:CP:272:TYR:CE1	2.25	0.53
1:CD:272:TYR:CD2	1:CS:55:ARG:CZ	2.92	0.53
1:BH:250:TRP:CE3	1:BH:272:TYR:CE1	2.97	0.53
1:BC:272:TYR:HE2	1:CA:55:ARG:CD	2.21	0.53
1:CE:454:ASN:HD21	1:CE:456:ALA:HB3	1.73	0.53
1:CO:67:VAL:HG23	1:CO:135:LEU:HB2	1.90	0.53
1:AR:67:VAL:HG23	1:AR:135:LEU:HB2	1.91	0.53
1:AI:67:VAL:HG23	1:AI:135:LEU:HB2	1.89	0.53
1:BT:398:GLY:HA3	1:BT:494:PHE:CD2	2.43	0.53
1:CP:170:PHE:HD1	1:CP:389:MET:HE2	1.74	0.53
1:CJ:288:HIS:HD2	1:CJ:337:ASP:OD2	1.91	0.53
1:CA:250:TRP:CE3	1:CA:272:TYR:CE1	2.95	0.53
1:AM:250:TRP:CE3	1:AM:272:TYR:CE1	2.96	0.53
1:AQ:250:TRP:CE3	1:AQ:272:TYR:CE1	2.97	0.53
1:AA:250:TRP:CE3	1:AA:272:TYR:CE1	2.97	0.53
1:BC:454:ASN:ND2	1:BC:456:ALA:H	2.03	0.53
1:AL:74:ASN:ND2	1:AL:77:THR:OG1	2.41	0.53
1:AK:14:CYS:H	1:AK:138:ASN:ND2	2.05	0.53
1:CK:288:HIS:HD2	1:CK:337:ASP:OD2	1.92	0.53
1:BN:18:ARG:HG3	1:BN:19:TYR:N	2.22	0.53
1:CH:14:CYS:H	1:CH:138:ASN:HD21	1.56	0.53
1:CC:75:ARG:NH2	1:CC:391:ALA:O	2.41	0.53
1:CE:67:VAL:HG23	1:CE:135:LEU:HB2	1.91	0.53
1:BB:162:PHE:CD2	1:BB:163:LEU:HD13	2.44	0.53
1:AL:272:TYR:CD2	1:CJ:55:ARG:NE	2.77	0.53
1:CD:272:TYR:CE2	1:CS:55:ARG:CZ	2.91	0.53
1:AK:55:ARG:HD3	1:CF:272:TYR:HD2	1.69	0.53
1:BI:250:TRP:CE3	1:BI:272:TYR:CE1	2.96	0.53
1:AO:30:SER:O	1:AO:33:LYS:HB2	2.09	0.53
1:CT:43:ALA:HB1	1:CT:158:GLU:HA	1.90	0.53
1:BT:67:VAL:HG23	1:BT:135:LEU:HB2	1.89	0.53
1:AG:266:PHE:N	1:AG:266:PHE:HD1	2.07	0.53
1:AC:288:HIS:HD2	1:AC:337:ASP:OD2	1.92	0.53
1:BE:14:CYS:H	1:BE:138:ASN:HD21	1.57	0.53
1:AL:272:TYR:CD2	1:CJ:55:ARG:NH1	2.76	0.53
1:BR:250:TRP:CE3	1:BR:272:TYR:CE1	2.96	0.53
1:AF:79:ARG:NH1	1:AF:79:ARG:HG3	2.17	0.53
1:CH:250:TRP:HZ3	1:CH:272:TYR:CE1	2.22	0.53
1:AR:454:ASN:ND2	1:AR:456:ALA:H	2.03	0.53
1:BL:454:ASN:HD22	1:BL:456:ALA:N	2.03	0.53
1:CP:189:PHE:HE2	1:CP:249:LEU:CD2	2.22	0.53
1:AC:67:VAL:HG23	1:AC:135:LEU:HB2	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CJ:58:ALA:HB2	1:CJ:102:GLY:HA3	1.89	0.53
1:AA:239:ILE:HG12	1:AA:326:ILE:CD1	2.39	0.53
1:CC:288:HIS:HD2	1:CC:337:ASP:OD2	1.92	0.53
1:AF:487:LEU:HD21	1:AJ:436:SER:O	2.09	0.53
1:CA:14:CYS:H	1:CA:138:ASN:HD21	1.57	0.53
1:AP:412:PHE:HB2	1:AT:442:GLN:HE21	1.74	0.53
1:AH:55:ARG:NE	1:AK:272:TYR:HE2	1.92	0.53
1:BJ:272:TYR:N	1:BJ:272:TYR:HD1	2.06	0.53
1:BM:191:LEU:N	1:BM:191:LEU:HD23	2.17	0.53
1:AN:79:ARG:NH1	1:AN:79:ARG:HG3	2.18	0.53
1:BI:191:LEU:HD23	1:BI:191:LEU:N	2.18	0.53
1:BG:272:TYR:HE2	1:CG:55:ARG:NE	1.99	0.53
1:BN:250:TRP:HZ3	1:BN:272:TYR:CE1	2.24	0.53
1:CO:79:ARG:NH1	1:CO:79:ARG:HG3	2.23	0.53
1:BM:79:ARG:HH11	1:BM:79:ARG:CG	2.22	0.53
1:AA:30:SER:O	1:AA:33:LYS:HB2	2.09	0.53
1:BA:58:ALA:HB2	1:BA:102:GLY:HA3	1.90	0.53
1:AM:203:THR:HB	1:AM:300:GLN:HG3	1.91	0.53
1:CB:288:HIS:HD2	1:CB:337:ASP:OD2	1.92	0.53
1:BK:67:VAL:HG23	1:BK:135:LEU:HB2	1.90	0.53
1:AI:243:ILE:HD13	1:AO:61:PHE:CZ	2.44	0.53
1:AQ:43:ALA:HB1	1:AQ:158:GLU:HA	1.91	0.53
1:CR:189:PHE:CE1	1:CR:198:ARG:HG2	2.43	0.53
1:AF:250:TRP:CE3	1:AF:272:TYR:CE1	2.97	0.53
1:CO:189:PHE:HE2	1:CO:249:LEU:CD2	2.22	0.53
1:AD:454:ASN:HD22	1:AD:456:ALA:N	2.02	0.53
1:AK:189:PHE:CE1	1:AK:198:ARG:CG	2.92	0.53
1:CL:189:PHE:HE2	1:CL:249:LEU:CD2	2.22	0.53
1:AK:74:ASN:ND2	1:AK:77:THR:OG1	2.42	0.53
1:BM:25:ILE:HG23	1:BM:152:LEU:HD11	1.91	0.53
1:AD:288:HIS:HD2	1:AD:337:ASP:OD2	1.92	0.53
1:AF:67:VAL:HG23	1:AF:135:LEU:HB2	1.91	0.53
1:CD:58:ALA:HB2	1:CD:102:GLY:HA3	1.91	0.53
1:CC:398:GLY:HA3	1:CC:494:PHE:CD2	2.44	0.53
1:CI:288:HIS:HD2	1:CI:337:ASP:OD2	1.90	0.53
1:BP:250:TRP:CE3	1:BP:272:TYR:CD1	2.97	0.53
1:AO:191:LEU:N	1:AO:191:LEU:CD2	2.72	0.53
1:CG:189:PHE:CE1	1:CG:198:ARG:HG2	2.44	0.53
1:AR:250:TRP:HZ3	1:AR:272:TYR:CE1	2.23	0.53
1:AR:454:ASN:HD21	1:AR:456:ALA:HB3	1.73	0.53
1:BK:189:PHE:HD2	1:BK:247:ILE:HD11	1.74	0.53
1:BA:14:CYS:H	1:BA:138:ASN:ND2	2.03	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BT:74:ASN:ND2	1:BT:77:THR:OG1	2.41	0.53
1:AL:189:PHE:HE2	1:AL:249:LEU:CD2	2.22	0.53
1:CD:288:HIS:HD2	1:CD:337:ASP:OD2	1.92	0.53
1:BT:170:PHE:HD1	1:BT:389:MET:CE	2.22	0.53
1:BF:43:ALA:HB1	1:BF:158:GLU:HA	1.91	0.53
1:AT:43:ALA:HB1	1:AT:158:GLU:HA	1.90	0.53
1:BP:58:ALA:HB2	1:BP:102:GLY:HA3	1.91	0.53
1:BC:288:HIS:HD2	1:BC:337:ASP:OD2	1.92	0.53
1:CC:272:TYR:HD1	1:CC:272:TYR:N	2.07	0.52
1:AL:55:ARG:HD3	1:CQ:272:TYR:CE2	2.44	0.52
1:AD:79:ARG:CG	1:AD:79:ARG:HH11	2.21	0.52
1:AG:284:ARG:CG	1:AG:284:ARG:NH1	2.69	0.52
1:BD:454:ASN:HD22	1:BD:456:ALA:N	2.06	0.52
1:CP:284:ARG:NH1	1:CP:284:ARG:CG	2.72	0.52
1:AK:398:GLY:HA3	1:AK:494:PHE:CD2	2.43	0.52
1:BO:288:HIS:HD2	1:BO:337:ASP:OD2	1.92	0.52
1:AK:75:ARG:NH2	1:AK:391:ALA:O	2.42	0.52
1:BI:36:GLN:NE2	1:BI:156:LEU:H	2.07	0.52
1:CL:398:GLY:HA3	1:CL:494:PHE:CD2	2.45	0.52
1:AJ:191:LEU:N	1:AJ:191:LEU:CD2	2.70	0.52
1:AO:250:TRP:HZ3	1:AO:272:TYR:CE1	2.25	0.52
1:BT:55:ARG:CZ	1:CA:272:TYR:CD2	2.92	0.52
1:BB:30:SER:O	1:BB:33:LYS:HB2	2.09	0.52
1:CJ:14:CYS:H	1:CJ:138:ASN:ND2	2.07	0.52
1:CS:189:PHE:HE2	1:CS:249:LEU:CD2	2.20	0.52
1:CA:189:PHE:CE1	1:CA:198:ARG:CG	2.93	0.52
1:AQ:239:ILE:HG12	1:AQ:326:ILE:CD1	2.40	0.52
1:AH:437:HIS:CE1	1:AI:405:GLN:NE2	2.77	0.52
1:CN:288:HIS:HD2	1:CN:337:ASP:OD2	1.92	0.52
1:AO:226:VAL:HG13	1:AO:228:GLY:H	1.74	0.52
1:CC:250:TRP:HZ3	1:CC:272:TYR:CE1	2.20	0.52
1:AR:189:PHE:CE2	1:AR:249:LEU:HD21	2.41	0.52
1:BA:79:ARG:CG	1:BA:79:ARG:NH1	2.71	0.52
1:AA:272:TYR:CE2	1:CT:55:ARG:HD3	2.43	0.52
1:CT:14:CYS:H	1:CT:138:ASN:ND2	2.04	0.52
1:BH:74:ASN:ND2	1:BH:77:THR:OG1	2.42	0.52
1:AG:266:PHE:N	1:AG:266:PHE:CD1	2.77	0.52
1:CF:398:GLY:HA3	1:CF:494:PHE:CD2	2.45	0.52
1:BG:288:HIS:HD2	1:BG:337:ASP:OD2	1.92	0.52
1:AA:288:HIS:HD2	1:AA:337:ASP:OD2	1.92	0.52
1:BO:191:LEU:CD2	1:BO:191:LEU:N	2.73	0.52
1:AF:250:TRP:HZ3	1:AF:272:TYR:CE1	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CL:454:ASN:ND2	1:CL:456:ALA:H	2.03	0.52
1:CK:454:ASN:HD21	1:CK:456:ALA:HB3	1.75	0.52
1:AO:289:ARG:NH1	1:AO:338:LEU:C	2.62	0.52
1:BC:189:PHE:CE1	1:BC:198:ARG:CG	2.92	0.52
1:BO:284:ARG:NH1	1:BO:284:ARG:CG	2.68	0.52
1:AS:189:PHE:HE2	1:AS:249:LEU:CD2	2.22	0.52
1:AD:284:ARG:CG	1:AD:284:ARG:NH1	2.70	0.52
1:BL:79:ARG:CG	1:BL:79:ARG:HH11	2.23	0.52
1:CA:189:PHE:HE2	1:CA:249:LEU:CD2	2.23	0.52
1:CA:288:HIS:HD2	1:CA:337:ASP:OD2	1.92	0.52
1:BL:398:GLY:HA3	1:BL:494:PHE:CD2	2.44	0.52
1:BJ:398:GLY:HA3	1:BJ:494:PHE:CD2	2.44	0.52
1:CG:226:VAL:HG13	1:CG:228:GLY:H	1.75	0.52
1:BH:232:THR:HB	1:BH:334:VAL:CG2	2.40	0.52
1:BF:398:GLY:HA3	1:BF:494:PHE:CD2	2.45	0.52
1:AK:250:TRP:HZ3	1:AK:272:TYR:CE1	2.23	0.52
1:BJ:250:TRP:CE3	1:BJ:272:TYR:CD1	2.97	0.52
1:CE:272:TYR:CD2	1:CM:55:ARG:HD3	2.44	0.52
1:BE:189:PHE:CE1	1:BE:198:ARG:HG2	2.43	0.52
1:AJ:189:PHE:HE1	1:AJ:198:ARG:HG2	1.74	0.52
1:BG:272:TYR:CE2	1:CG:55:ARG:HD3	2.43	0.52
1:AN:250:TRP:HZ3	1:AN:272:TYR:CE1	2.24	0.52
1:CM:454:ASN:HD21	1:CM:456:ALA:HB3	1.74	0.52
1:CI:250:TRP:CE3	1:CI:272:TYR:CE1	2.97	0.52
1:AR:454:ASN:HD22	1:AR:456:ALA:N	2.01	0.52
1:CA:30:SER:O	1:CA:33:LYS:HB2	2.10	0.52
1:BF:30:SER:O	1:BF:33:LYS:HB2	2.09	0.52
1:CS:75:ARG:NH2	1:CS:391:ALA:O	2.42	0.52
1:BN:288:HIS:HD2	1:BN:337:ASP:OD2	1.92	0.52
1:CE:398:GLY:HA3	1:CE:494:PHE:CD2	2.44	0.52
1:CE:272:TYR:HD1	1:CE:272:TYR:N	2.08	0.52
1:AO:203:THR:HG21	1:AO:294:LEU:HD23	1.92	0.52
1:CL:7:VAL:HG11	1:CL:9:TYR:CZ	2.44	0.52
1:CF:487:LEU:HD21	1:CJ:436:SER:O	2.09	0.52
1:CO:75:ARG:NH2	1:CO:391:ALA:O	2.43	0.52
1:CG:162:PHE:CD2	1:CG:163:LEU:HD13	2.45	0.52
1:BE:58:ALA:HB2	1:BE:102:GLY:HA3	1.92	0.52
1:AJ:16:ALA:O	1:AJ:17:ASN:HB2	2.10	0.52
1:AC:239:ILE:HG12	1:AC:326:ILE:CD1	2.38	0.52
1:BQ:25:ILE:HG23	1:BQ:152:LEU:HD11	1.91	0.52
1:BR:162:PHE:CD2	1:BR:163:LEU:HD13	2.44	0.52
1:BJ:43:ALA:HB1	1:BJ:158:GLU:HA	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AL:191:LEU:N	1:AL:191:LEU:CD2	2.72	0.52
1:CB:189:PHE:HE1	1:CB:198:ARG:HG2	1.73	0.52
1:BB:55:ARG:HD3	1:CB:272:TYR:CE2	2.44	0.52
1:CR:454:ASN:HD22	1:CR:456:ALA:N	2.02	0.52
1:BA:189:PHE:CE2	1:BA:249:LEU:HD21	2.45	0.52
1:AA:454:ASN:ND2	1:AA:456:ALA:H	2.03	0.52
1:AD:189:PHE:HE2	1:AD:249:LEU:HD21	1.75	0.52
1:BQ:454:ASN:HD22	1:BQ:456:ALA:N	2.03	0.52
1:AL:284:ARG:CG	1:AL:284:ARG:NH1	2.70	0.52
1:BN:170:PHE:HD1	1:BN:389:MET:CE	2.21	0.52
1:AI:398:GLY:HA3	1:AI:494:PHE:CD2	2.44	0.52
1:AL:58:ALA:HB2	1:AL:102:GLY:HA3	1.92	0.52
1:AT:14:CYS:H	1:AT:138:ASN:HD21	1.56	0.52
1:BG:379:VAL:HG11	1:BG:381:MET:HE1	1.92	0.52
1:BO:67:VAL:HG23	1:BO:135:LEU:HB2	1.90	0.52
1:AC:162:PHE:CD2	1:AC:163:LEU:HD13	2.44	0.52
1:BO:191:LEU:N	1:BO:191:LEU:HD23	2.17	0.52
1:BT:191:LEU:N	1:BT:191:LEU:HD23	2.19	0.52
1:BS:250:TRP:CE3	1:BS:272:TYR:CE1	2.98	0.52
1:BC:250:TRP:HZ3	1:BC:272:TYR:CE1	2.28	0.52
1:CI:38:GLU:HB2	1:CQ:35:VAL:CG2	2.38	0.52
1:AL:189:PHE:CE1	1:AL:198:ARG:CG	2.92	0.52
1:CC:74:ASN:ND2	1:CC:77:THR:OG1	2.43	0.52
1:BB:18:ARG:HG3	1:BB:19:TYR:N	2.25	0.52
1:CG:67:VAL:HG23	1:CG:135:LEU:HB2	1.90	0.52
1:BJ:226:VAL:HG13	1:BJ:228:GLY:H	1.75	0.52
1:CR:288:HIS:HD2	1:CR:337:ASP:OD2	1.92	0.52
1:AO:75:ARG:NH2	1:AO:391:ALA:O	2.41	0.52
1:AQ:398:GLY:HA3	1:AQ:494:PHE:CD2	2.44	0.52
1:BC:43:ALA:HB1	1:BC:158:GLU:HA	1.92	0.52
1:AL:267:LYS:HG2	1:CJ:32:PHE:CZ	2.45	0.52
1:AB:272:TYR:CD1	1:AB:272:TYR:N	2.78	0.52
1:BJ:272:TYR:N	1:BJ:272:TYR:CD1	2.78	0.52
1:AP:191:LEU:CD2	1:AP:191:LEU:N	2.72	0.52
1:AP:55:ARG:CD	1:BM:272:TYR:HE2	2.23	0.52
1:AP:55:ARG:HD3	1:BM:272:TYR:CD2	2.44	0.52
1:BE:272:TYR:CE2	1:BM:55:ARG:CZ	2.93	0.52
1:CP:74:ASN:ND2	1:CP:77:THR:OG1	2.43	0.52
1:AQ:189:PHE:HE1	1:AQ:198:ARG:CG	2.22	0.52
1:CA:170:PHE:HD1	1:CA:389:MET:CE	2.23	0.52
1:CO:398:GLY:HA3	1:CO:494:PHE:CD2	2.44	0.52
1:BC:58:ALA:HB2	1:BC:102:GLY:HA3	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CJ:75:ARG:NH2	1:CJ:391:ALA:O	2.42	0.52
1:BQ:16:ALA:O	1:BQ:17:ASN:HB2	2.10	0.52
1:CS:250:TRP:HZ3	1:CS:272:TYR:CE1	2.26	0.52
1:CO:79:ARG:CG	1:CO:79:ARG:HH11	2.20	0.52
1:CS:11:PRO:HG2	1:CS:18:ARG:HD2	1.92	0.52
1:BI:288:HIS:HD2	1:BI:337:ASP:OD2	1.93	0.52
1:CJ:67:VAL:HG23	1:CJ:135:LEU:HB2	1.92	0.52
1:BQ:442:GLN:HE21	1:BR:412:PHE:HB2	1.75	0.52
1:CF:162:PHE:CD2	1:CF:163:LEU:HD13	2.45	0.52
1:BN:398:GLY:HA3	1:BN:494:PHE:CD2	2.45	0.52
1:BN:43:ALA:HB1	1:BN:158:GLU:HA	1.91	0.52
1:CF:79:ARG:NH1	1:CF:79:ARG:CG	2.60	0.51
1:BD:191:LEU:N	1:BD:191:LEU:CD2	2.73	0.51
1:AN:191:LEU:HD23	1:AN:191:LEU:N	2.20	0.51
1:AC:272:TYR:CE2	1:BA:55:ARG:CD	2.92	0.51
1:BQ:250:TRP:CE3	1:BQ:272:TYR:CE1	2.97	0.51
1:AD:454:ASN:ND2	1:AD:456:ALA:H	2.05	0.51
1:AG:270:GLY:O	1:AG:271:VAL:CG1	2.58	0.51
1:AN:239:ILE:HG23	1:AN:324:LEU:HD21	1.93	0.51
1:BR:67:VAL:HG23	1:BR:135:LEU:HB2	1.91	0.51
1:AK:67:VAL:HG23	1:AK:135:LEU:HB2	1.92	0.51
1:CT:58:ALA:HB2	1:CT:102:GLY:HA3	1.92	0.51
1:AN:398:GLY:HA3	1:AN:494:PHE:CD2	2.43	0.51
1:CD:398:GLY:HA3	1:CD:494:PHE:CD2	2.45	0.51
1:AI:288:HIS:HD2	1:AI:337:ASP:OD2	1.92	0.51
1:AS:232:THR:HB	1:AS:334:VAL:HG23	1.92	0.51
1:BL:250:TRP:CE3	1:BL:272:TYR:CE1	2.98	0.51
1:CL:250:TRP:HZ3	1:CL:272:TYR:CE1	2.24	0.51
1:BC:250:TRP:CZ3	1:BC:272:TYR:HE1	2.26	0.51
1:BI:30:SER:O	1:BI:33:LYS:HB2	2.10	0.51
1:AE:14:CYS:H	1:AE:138:ASN:ND2	2.05	0.51
1:BR:43:ALA:HB1	1:BR:158:GLU:HA	1.91	0.51
1:CN:43:ALA:HB1	1:CN:158:GLU:HA	1.92	0.51
1:AR:239:ILE:HG12	1:AR:326:ILE:CD1	2.41	0.51
1:CT:288:HIS:HD2	1:CT:337:ASP:OD2	1.92	0.51
1:CE:18:ARG:HG3	1:CE:19:TYR:N	2.25	0.51
1:BK:79:ARG:HH11	1:BK:79:ARG:HG3	1.75	0.51
1:CS:67:VAL:HG23	1:CS:135:LEU:HB2	1.92	0.51
1:CM:67:VAL:HG23	1:CM:135:LEU:HB2	1.91	0.51
1:AL:250:TRP:HZ3	1:AL:272:TYR:CE1	2.22	0.51
1:BO:272:TYR:CD2	1:BR:55:ARG:CD	2.94	0.51
1:BJ:272:TYR:HD2	1:BQ:55:ARG:HD3	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CO:250:TRP:HZ3	1:CO:272:TYR:CE1	2.23	0.51
1:BL:7:VAL:CG1	1:BL:9:TYR:CZ	2.93	0.51
1:CE:272:TYR:CD2	1:CM:55:ARG:NH1	2.78	0.51
1:CF:191:LEU:HD23	1:CF:191:LEU:N	2.18	0.51
1:CK:191:LEU:HD23	1:CK:191:LEU:N	2.19	0.51
1:CA:250:TRP:HZ3	1:CA:272:TYR:CE1	2.26	0.51
1:AC:454:ASN:HD21	1:AC:456:ALA:HB3	1.75	0.51
1:AE:454:ASN:ND2	1:AE:456:ALA:H	2.03	0.51
1:CA:74:ASN:ND2	1:CA:77:THR:OG1	2.43	0.51
1:AS:43:ALA:HB1	1:AS:158:GLU:HA	1.92	0.51
1:AI:58:ALA:HB2	1:AI:102:GLY:HA3	1.92	0.51
1:AB:265:LEU:HD13	1:AB:265:LEU:O	2.10	0.51
1:AS:250:TRP:HZ3	1:AS:272:TYR:CE1	2.23	0.51
1:CJ:272:TYR:HD1	1:CJ:272:TYR:N	2.07	0.51
1:AH:189:PHE:HE1	1:AH:198:ARG:HG2	1.75	0.51
1:AG:189:PHE:CE2	1:AG:249:LEU:HD21	2.42	0.51
1:AM:250:TRP:HZ3	1:AM:272:TYR:CE1	2.24	0.51
1:BE:250:TRP:CE3	1:BE:272:TYR:CE1	2.98	0.51
1:BL:189:PHE:HE2	1:BL:249:LEU:CD2	2.24	0.51
1:CP:189:PHE:CE1	1:CP:198:ARG:CG	2.93	0.51
1:BH:58:ALA:HB2	1:BH:102:GLY:HA3	1.92	0.51
1:CF:14:CYS:H	1:CF:138:ASN:HD21	1.57	0.51
1:AQ:25:ILE:HG23	1:AQ:152:LEU:HD11	1.92	0.51
1:BQ:239:ILE:HG12	1:BQ:326:ILE:CD1	2.41	0.51
1:AS:162:PHE:CD2	1:AS:163:LEU:HD13	2.45	0.51
1:BH:170:PHE:HD1	1:BH:389:MET:CE	2.23	0.51
1:AK:189:PHE:HE2	1:AK:249:LEU:CD2	2.23	0.51
1:CR:80:ILE:O	1:CR:83:SER:CA	2.59	0.51
1:BC:272:TYR:HD2	1:CA:55:ARG:HD3	1.73	0.51
1:AO:189:PHE:HE2	1:AO:249:LEU:CD2	2.24	0.51
1:BH:232:THR:HB	1:BH:334:VAL:HG23	1.93	0.51
1:CF:67:VAL:HG23	1:CF:135:LEU:HB2	1.91	0.51
1:CG:239:ILE:HG12	1:CG:326:ILE:CD1	2.40	0.51
1:AI:170:PHE:HD1	1:AI:389:MET:CE	2.24	0.51
1:AF:412:PHE:HB2	1:AJ:442:GLN:HE21	1.74	0.51
1:BO:58:ALA:HB2	1:BO:102:GLY:HA3	1.93	0.51
1:AD:239:ILE:HG12	1:AD:326:ILE:CD1	2.41	0.51
1:AN:232:THR:HB	1:AN:334:VAL:CG2	2.40	0.51
1:AJ:288:HIS:HD2	1:AJ:337:ASP:OD2	1.93	0.51
1:CI:354:SER:O	1:CI:378:ARG:CB	2.58	0.51
1:AS:272:TYR:HD1	1:AS:272:TYR:N	2.08	0.51
1:BE:191:LEU:CD2	1:BE:191:LEU:N	2.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BD:144:ALA:HB3	1:BN:191:LEU:O	2.10	0.51
1:BB:189:PHE:CE1	1:BB:198:ARG:HG2	2.46	0.51
1:AJ:189:PHE:CE1	1:AJ:198:ARG:HG2	2.45	0.51
1:BN:454:ASN:ND2	1:BN:456:ALA:H	2.05	0.51
1:AK:189:PHE:HE1	1:AK:198:ARG:CG	2.21	0.51
1:CR:74:ASN:ND2	1:CR:77:THR:OG1	2.43	0.51
1:CG:30:SER:O	1:CG:33:LYS:HB2	2.11	0.51
1:CI:38:GLU:CB	1:CQ:35:VAL:CG2	2.88	0.51
1:AQ:189:PHE:HD2	1:AQ:247:ILE:HD11	1.76	0.51
1:BO:189:PHE:CE1	1:BO:198:ARG:CG	2.94	0.51
1:CQ:14:CYS:H	1:CQ:138:ASN:ND2	2.09	0.51
1:CQ:239:ILE:HG12	1:CQ:326:ILE:CD1	2.41	0.51
1:BD:18:ARG:HG3	1:BD:19:TYR:N	2.26	0.51
1:BI:226:VAL:HG13	1:BI:228:GLY:H	1.76	0.51
1:CF:347:TYR:O	1:CJ:435:PRO:HB3	2.11	0.51
1:BI:79:ARG:HH11	1:BI:79:ARG:HG3	1.75	0.51
1:BK:239:ILE:HG12	1:BK:326:ILE:CD1	2.41	0.51
1:AA:55:ARG:HD3	1:CC:272:TYR:CD2	2.45	0.51
1:AR:191:LEU:N	1:AR:191:LEU:CD2	2.73	0.51
1:AQ:272:TYR:CD2	1:BL:55:ARG:HD3	2.45	0.51
1:BO:30:SER:O	1:BO:33:LYS:HB2	2.11	0.51
1:AL:189:PHE:HE2	1:AL:249:LEU:HD21	1.75	0.51
1:AQ:189:PHE:CE1	1:AQ:198:ARG:CG	2.94	0.51
1:AP:226:VAL:HG13	1:AP:228:GLY:H	1.75	0.51
1:AP:67:VAL:HG23	1:AP:135:LEU:HB2	1.93	0.51
1:CT:263:ASN:O	1:CT:267:LYS:HG3	2.11	0.51
1:BE:162:PHE:CD2	1:BE:163:LEU:HD13	2.46	0.51
1:AM:58:ALA:HB2	1:AM:102:GLY:HA3	1.93	0.51
1:CN:38:GLU:HB2	1:CR:35:VAL:HG22	1.92	0.51
1:AA:8:ILE:HG22	1:AA:10:ILE:HD11	1.92	0.51
1:CC:404:LEU:HD22	1:CC:486:VAL:HG22	1.92	0.51
1:CR:86:PRO:O	1:CR:88:TYR:CA	2.56	0.51
1:BO:272:TYR:N	1:BO:272:TYR:HD1	2.08	0.51
1:CD:250:TRP:HZ3	1:CD:272:TYR:CE1	2.26	0.51
1:AF:191:LEU:HD23	1:AF:191:LEU:N	2.21	0.51
1:BK:454:ASN:HD21	1:BK:456:ALA:HB3	1.76	0.51
1:BM:454:ASN:ND2	1:BM:456:ALA:H	2.04	0.51
1:CO:189:PHE:HE1	1:CO:198:ARG:CG	2.19	0.51
1:CR:80:ILE:O	1:CR:83:SER:O	2.29	0.51
1:CE:30:SER:O	1:CE:33:LYS:HB2	2.11	0.51
1:CP:189:PHE:HE1	1:CP:198:ARG:CG	2.23	0.51
1:CK:189:PHE:CE1	1:CK:198:ARG:CG	2.94	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CB:43:ALA:HB1	1:CB:158:GLU:HA	1.92	0.51
1:AK:43:ALA:HB1	1:AK:158:GLU:HA	1.93	0.51
1:AD:263:ASN:O	1:AD:267:LYS:HG3	2.10	0.51
1:AQ:14:CYS:H	1:AQ:138:ASN:HD21	1.58	0.51
1:AJ:170:PHE:HD1	1:AJ:389:MET:CE	2.24	0.51
1:AG:262:TRP:O	1:AG:265:LEU:N	2.43	0.51
1:BP:55:ARG:HD3	1:CM:272:TYR:CE2	2.46	0.51
1:AC:250:TRP:HZ3	1:AC:272:TYR:CE1	2.26	0.51
1:BF:55:ARG:HD3	1:CH:272:TYR:HD2	1.75	0.51
1:AA:189:PHE:HE2	1:AA:249:LEU:HD21	1.74	0.51
1:BS:74:ASN:ND2	1:BS:77:THR:OG1	2.44	0.51
1:AH:454:ASN:HD21	1:AH:456:ALA:HB3	1.76	0.51
1:BJ:30:SER:O	1:BJ:33:LYS:HB2	2.09	0.51
1:CN:14:CYS:H	1:CN:138:ASN:ND2	2.09	0.51
1:CL:288:HIS:HD2	1:CL:337:ASP:OD2	1.94	0.51
1:CQ:398:GLY:HA3	1:CQ:494:PHE:CD2	2.46	0.51
1:AO:43:ALA:HB1	1:AO:158:GLU:HA	1.91	0.51
1:BA:16:ALA:O	1:BA:17:ASN:HB2	2.11	0.51
1:BP:191:LEU:CD2	1:BP:191:LEU:N	2.73	0.51
1:CB:250:TRP:HZ3	1:CB:272:TYR:CE1	2.25	0.51
1:BL:189:PHE:HD2	1:BL:247:ILE:HD11	1.76	0.51
1:BD:30:SER:O	1:BD:33:LYS:HB2	2.10	0.51
1:BT:30:SER:O	1:BT:33:LYS:HB2	2.11	0.51
1:AP:288:HIS:HD2	1:AP:337:ASP:OD2	1.94	0.51
1:AN:67:VAL:HG23	1:AN:135:LEU:HB2	1.93	0.51
1:AF:58:ALA:HB2	1:AF:102:GLY:HA3	1.93	0.51
1:AF:239:ILE:HG12	1:AF:326:ILE:CD1	2.41	0.51
1:BB:398:GLY:HA3	1:BB:494:PHE:CD2	2.46	0.51
1:CB:232:THR:HB	1:CB:334:VAL:CG2	2.41	0.51
1:AG:263:ASN:O	1:BG:32:PHE:HE1	1.93	0.50
1:CQ:191:LEU:N	1:CQ:191:LEU:CD2	2.73	0.50
1:AM:191:LEU:CD2	1:AM:191:LEU:N	2.73	0.50
1:BT:191:LEU:N	1:BT:191:LEU:CD2	2.74	0.50
1:CH:191:LEU:N	1:CH:191:LEU:CD2	2.75	0.50
1:CC:55:ARG:CZ	1:CT:272:TYR:CE2	2.93	0.50
1:BH:55:ARG:HD3	1:BK:272:TYR:CE2	2.45	0.50
1:BM:250:TRP:CE3	1:BM:272:TYR:CE1	2.99	0.50
1:BQ:30:SER:O	1:BQ:33:LYS:HB2	2.12	0.50
1:AD:14:CYS:H	1:AD:138:ASN:ND2	2.09	0.50
1:AR:14:CYS:H	1:AR:138:ASN:ND2	2.07	0.50
1:BJ:239:ILE:HG12	1:BJ:326:ILE:CD1	2.41	0.50
1:CI:58:ALA:HB2	1:CI:102:GLY:HA3	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CH:398:GLY:HA3	1:CH:494:PHE:CD2	2.45	0.50
1:CI:404:LEU:HD22	1:CI:486:VAL:HG22	1.92	0.50
1:CJ:170:PHE:HD1	1:CJ:389:MET:CE	2.23	0.50
1:AL:398:GLY:HA3	1:AL:494:PHE:CD2	2.46	0.50
1:CP:239:ILE:HG12	1:CP:326:ILE:CD1	2.41	0.50
1:CG:25:ILE:HG23	1:CG:152:LEU:HD11	1.93	0.50
1:CF:16:ALA:O	1:CF:17:ASN:HB2	2.12	0.50
1:BS:162:PHE:CD2	1:BS:163:LEU:HD13	2.46	0.50
1:AR:379:VAL:HG11	1:AR:381:MET:HE1	1.94	0.50
1:AK:170:PHE:HD1	1:AK:389:MET:CE	2.24	0.50
1:AG:75:ARG:NH2	1:AG:391:ALA:O	2.45	0.50
1:AS:250:TRP:CE3	1:AS:272:TYR:CD1	2.99	0.50
1:CC:191:LEU:CD2	1:CC:191:LEU:N	2.74	0.50
1:AJ:189:PHE:HD2	1:AJ:247:ILE:CD1	2.24	0.50
1:BD:272:TYR:HE2	1:BS:55:ARG:NE	2.04	0.50
1:AI:79:ARG:CG	1:AI:79:ARG:HH11	2.19	0.50
1:AD:454:ASN:HD21	1:AD:456:ALA:HB3	1.75	0.50
1:AP:454:ASN:ND2	1:AP:456:ALA:H	2.05	0.50
1:AB:79:ARG:CG	1:AB:79:ARG:HH11	2.22	0.50
1:AG:38:GLU:HB3	1:CF:35:VAL:HG23	1.93	0.50
1:AH:436:SER:O	1:AI:487:LEU:HD21	2.11	0.50
1:AO:25:ILE:HG23	1:AO:152:LEU:HD11	1.93	0.50
1:BM:162:PHE:CD2	1:BM:163:LEU:HD13	2.46	0.50
1:BI:67:VAL:HG23	1:BI:135:LEU:HB2	1.93	0.50
1:AT:67:VAL:HG23	1:AT:135:LEU:HB2	1.93	0.50
1:AD:170:PHE:HD1	1:AD:389:MET:CE	2.24	0.50
1:AD:5:ARG:HD3	1:AN:263:ASN:HD22	1.75	0.50
1:AL:418:SER:HB3	1:AM:407:SER:HB3	1.93	0.50
1:CJ:272:TYR:CD1	1:CJ:272:TYR:N	2.80	0.50
1:AA:191:LEU:CD2	1:AA:191:LEU:N	2.74	0.50
1:BA:191:LEU:N	1:BA:191:LEU:HD23	2.21	0.50
1:AP:55:ARG:HD3	1:BM:272:TYR:CE2	2.47	0.50
1:AC:30:SER:O	1:AC:33:LYS:HB2	2.11	0.50
1:CS:30:SER:O	1:CS:33:LYS:HB2	2.12	0.50
1:BT:189:PHE:HE2	1:BT:249:LEU:HD21	1.76	0.50
1:AJ:74:ASN:ND2	1:AJ:77:THR:OG1	2.44	0.50
1:AI:14:CYS:H	1:AI:138:ASN:ND2	2.08	0.50
1:AL:30:SER:O	1:AL:33:LYS:HB2	2.12	0.50
1:CK:14:CYS:H	1:CK:138:ASN:ND2	2.08	0.50
1:BT:234:ARG:HG2	1:BT:280:GLU:HG2	1.94	0.50
1:BB:58:ALA:HB2	1:BB:102:GLY:HA3	1.92	0.50
1:CK:43:ALA:HB1	1:CK:158:GLU:HA	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BR:288:HIS:HD2	1:BR:337:ASP:OD2	1.93	0.50
1:CL:67:VAL:HG23	1:CL:135:LEU:HB2	1.93	0.50
1:BJ:16:ALA:O	1:BJ:17:ASN:HB2	2.11	0.50
1:AG:258:THR:C	1:AG:259:THR:O	2.41	0.50
1:BO:272:TYR:N	1:BO:272:TYR:CD1	2.79	0.50
1:BR:250:TRP:HZ3	1:BR:272:TYR:CE1	2.27	0.50
1:AE:191:LEU:CD2	1:AE:191:LEU:N	2.74	0.50
1:CM:272:TYR:N	1:CM:272:TYR:CD1	2.79	0.50
1:CM:272:TYR:HD1	1:CM:272:TYR:N	2.09	0.50
1:CG:250:TRP:HZ3	1:CG:272:TYR:CE1	2.23	0.50
1:BL:454:ASN:ND2	1:BL:456:ALA:H	2.06	0.50
1:CJ:74:ASN:ND2	1:CJ:77:THR:OG1	2.44	0.50
1:CA:189:PHE:HE1	1:CA:198:ARG:CG	2.24	0.50
1:CN:170:PHE:HD1	1:CN:389:MET:CE	2.23	0.50
1:BG:398:GLY:HA3	1:BG:494:PHE:CD2	2.47	0.50
1:AG:259:THR:HG21	1:AG:268:TYR:CZ	2.45	0.50
1:AB:261:ASP:O	1:AB:261:ASP:OD1	2.30	0.50
1:AC:191:LEU:CD2	1:AC:191:LEU:N	2.73	0.50
1:CB:189:PHE:CE1	1:CB:198:ARG:HG2	2.46	0.50
1:AH:272:TYR:CD2	1:CF:55:ARG:CZ	2.94	0.50
1:CI:454:ASN:ND2	1:CI:456:ALA:H	2.08	0.50
1:AS:189:PHE:CE1	1:AS:198:ARG:CG	2.95	0.50
1:AB:239:ILE:HG12	1:AB:326:ILE:CD1	2.41	0.50
1:BM:43:ALA:HB1	1:BM:158:GLU:HA	1.92	0.50
1:CI:226:VAL:HG13	1:CI:228:GLY:H	1.76	0.50
1:CR:58:ALA:HB2	1:CR:102:GLY:HA3	1.94	0.50
1:AI:239:ILE:HG12	1:AI:326:ILE:CD1	2.42	0.50
1:BN:263:ASN:O	1:BN:267:LYS:HG3	2.12	0.50
1:AK:16:ALA:O	1:AK:17:ASN:HB2	2.12	0.50
1:CI:191:LEU:HD23	1:CI:191:LEU:N	2.17	0.50
1:AO:272:TYR:N	1:AO:272:TYR:HD1	2.10	0.50
1:CN:189:PHE:HD2	1:CN:247:ILE:CD1	2.24	0.50
1:BC:55:ARG:NE	1:BT:272:TYR:CE2	2.79	0.50
1:BB:272:TYR:CD1	1:BB:272:TYR:N	2.79	0.50
1:BA:454:ASN:HD21	1:BA:456:ALA:HB3	1.77	0.50
1:BS:250:TRP:HZ3	1:BS:272:TYR:CE1	2.27	0.50
1:BO:189:PHE:HD2	1:BO:247:ILE:HD11	1.77	0.50
1:AH:226:VAL:HG13	1:AH:228:GLY:H	1.76	0.50
1:CC:58:ALA:HB2	1:CC:102:GLY:HA3	1.94	0.50
1:CQ:67:VAL:HG23	1:CQ:135:LEU:HB2	1.94	0.50
1:AI:226:VAL:HG13	1:AI:228:GLY:H	1.76	0.50
1:AC:58:ALA:HB2	1:AC:102:GLY:HA3	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AR:442:GLN:HE21	1:AS:412:PHE:HB2	1.76	0.50
1:CQ:232:THR:HB	1:CQ:334:VAL:CG2	2.42	0.50
1:AT:162:PHE:CD2	1:AT:163:LEU:HD13	2.47	0.50
1:AC:55:ARG:CZ	1:AT:272:TYR:CE2	2.95	0.50
1:AN:189:PHE:CE2	1:AN:249:LEU:HD21	2.42	0.50
1:AC:454:ASN:ND2	1:AC:456:ALA:H	2.06	0.50
1:AK:189:PHE:HD2	1:AK:247:ILE:HD11	1.77	0.50
1:AO:79:ARG:NH1	1:AO:79:ARG:HG3	2.24	0.50
1:AI:284:ARG:CG	1:AI:284:ARG:NH1	2.71	0.50
1:BE:284:ARG:CG	1:BE:284:ARG:NH1	2.72	0.50
1:AO:189:PHE:CE1	1:AO:198:ARG:CG	2.95	0.50
1:CD:442:GLN:NE2	1:CE:412:PHE:HB2	2.27	0.50
1:BI:58:ALA:HB2	1:BI:102:GLY:HA3	1.92	0.50
1:BS:398:GLY:HA3	1:BS:494:PHE:CD2	2.47	0.50
1:AB:61:PHE:CD2	1:AB:243:ILE:HD11	2.47	0.50
1:AB:272:TYR:N	1:AB:272:TYR:HD1	2.09	0.50
1:CB:191:LEU:CD2	1:CB:191:LEU:N	2.74	0.50
1:BD:250:TRP:HZ3	1:BD:272:TYR:CE1	2.27	0.50
1:AF:272:TYR:HD2	1:BK:55:ARG:HD3	1.72	0.50
1:BG:30:SER:O	1:BG:33:LYS:HB2	2.10	0.50
1:AJ:203:THR:CB	1:AJ:300:GLN:HG3	2.42	0.50
1:AN:14:CYS:HB3	1:AN:64:LEU:HD21	1.94	0.50
1:CQ:232:THR:HB	1:CQ:334:VAL:HG23	1.93	0.50
1:BP:67:VAL:HG23	1:BP:135:LEU:HB2	1.93	0.50
1:BD:170:PHE:HD1	1:BD:389:MET:CE	2.24	0.50
1:AL:226:VAL:HG13	1:AL:228:GLY:H	1.77	0.50
1:AA:226:VAL:HG13	1:AA:228:GLY:H	1.77	0.50
1:BF:162:PHE:CD2	1:BF:163:LEU:HD13	2.47	0.50
1:CQ:79:ARG:HH11	1:CQ:79:ARG:HG3	1.77	0.50
1:BE:67:VAL:HG23	1:BE:135:LEU:HB2	1.94	0.50
1:CO:16:ALA:O	1:CO:17:ASN:HB2	2.11	0.50
1:AL:272:TYR:HE2	1:CJ:55:ARG:NE	1.87	0.50
1:BS:191:LEU:CD2	1:BS:191:LEU:N	2.75	0.50
1:BH:15:GLN:HE21	1:BH:15:GLN:CA	2.09	0.50
1:AE:197:LEU:HD12	1:AE:198:ARG:N	2.26	0.50
1:CH:55:ARG:HD3	1:CK:272:TYR:CE2	2.47	0.50
1:BF:272:TYR:CD2	1:CK:55:ARG:CZ	2.95	0.50
1:CB:454:ASN:ND2	1:CB:456:ALA:H	2.08	0.50
1:AK:454:ASN:ND2	1:AK:456:ALA:H	2.07	0.50
1:BO:189:PHE:HE2	1:BO:249:LEU:CD2	2.24	0.50
1:CL:14:CYS:HB3	1:CL:64:LEU:HD21	1.93	0.50
1:CH:18:ARG:HG3	1:CH:19:TYR:N	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BQ:58:ALA:HB2	1:BQ:102:GLY:HA3	1.94	0.50
1:BE:239:ILE:HG12	1:BE:326:ILE:CD1	2.42	0.50
1:AE:67:VAL:HG23	1:AE:135:LEU:HB2	1.93	0.50
1:AQ:232:THR:HB	1:AQ:334:VAL:HG23	1.94	0.50
1:AE:58:ALA:HB2	1:AE:102:GLY:HA3	1.92	0.50
1:AF:398:GLY:HA3	1:AF:494:PHE:CD2	2.46	0.50
1:BF:170:PHE:HD1	1:BF:389:MET:CE	2.24	0.50
1:CE:272:TYR:CD1	1:CE:272:TYR:N	2.80	0.49
1:BE:189:PHE:HE1	1:BE:198:ARG:HG2	1.73	0.49
1:BF:189:PHE:HE1	1:BF:198:ARG:HG2	1.75	0.49
1:BS:454:ASN:ND2	1:BS:456:ALA:H	2.03	0.49
1:CH:454:ASN:ND2	1:CH:456:ALA:H	2.06	0.49
1:AL:454:ASN:ND2	1:AL:456:ALA:H	2.05	0.49
1:AF:30:SER:O	1:AF:33:LYS:HB2	2.12	0.49
1:BO:74:ASN:ND2	1:BO:77:THR:OG1	2.45	0.49
1:CP:189:PHE:HD2	1:CP:247:ILE:HD11	1.77	0.49
1:BT:189:PHE:HD2	1:BT:247:ILE:HD11	1.77	0.49
1:CG:239:ILE:HD12	1:CG:275:GLU:HA	1.94	0.49
1:BN:14:CYS:H	1:BN:138:ASN:HD21	1.58	0.49
1:CD:418:SER:HB3	1:CE:407:SER:HB3	1.93	0.49
1:CB:25:ILE:HG23	1:CB:152:LEU:HD11	1.94	0.49
1:BJ:191:LEU:CD2	1:BJ:191:LEU:N	2.70	0.49
1:AI:55:ARG:HD3	1:AR:272:TYR:CE2	2.44	0.49
1:CH:189:PHE:HD2	1:CH:247:ILE:CD1	2.25	0.49
1:BS:189:PHE:HE2	1:BS:249:LEU:HD21	1.77	0.49
1:CB:454:ASN:HD21	1:CB:456:ALA:HB3	1.77	0.49
1:CB:74:ASN:ND2	1:CB:77:THR:OG1	2.44	0.49
1:AO:189:PHE:HE1	1:AO:198:ARG:CG	2.24	0.49
1:CQ:189:PHE:HE2	1:CQ:249:LEU:HD21	1.77	0.49
1:CD:189:PHE:CE1	1:CD:198:ARG:CG	2.96	0.49
1:CB:232:THR:HB	1:CB:334:VAL:HG23	1.93	0.49
1:BQ:75:ARG:NH2	1:BQ:391:ALA:O	2.43	0.49
1:BJ:404:LEU:HD22	1:BJ:486:VAL:HG22	1.93	0.49
1:AK:79:ARG:HH11	1:AK:79:ARG:HG3	1.77	0.49
1:CD:170:PHE:HD1	1:CD:389:MET:CE	2.25	0.49
1:CL:203:THR:HB	1:CL:300:GLN:HG3	1.94	0.49
1:CN:67:VAL:HG23	1:CN:135:LEU:HB2	1.94	0.49
1:AG:258:THR:O	1:AG:258:THR:OG1	2.29	0.49
1:CG:191:LEU:N	1:CG:191:LEU:CD2	2.75	0.49
1:BG:191:LEU:CD2	1:BG:191:LEU:N	2.75	0.49
1:CF:454:ASN:HD21	1:CF:456:ALA:HB3	1.78	0.49
1:BR:79:ARG:NH1	1:BR:79:ARG:HG3	2.22	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AB:189:PHE:HD2	1:AB:247:ILE:CD1	2.25	0.49
1:BG:189:PHE:CE2	1:BG:249:LEU:HD21	2.44	0.49
1:BJ:454:ASN:ND2	1:BJ:456:ALA:H	2.07	0.49
1:CN:30:SER:O	1:CN:33:LYS:HB2	2.11	0.49
1:CO:284:ARG:CG	1:CO:284:ARG:NH1	2.72	0.49
1:CO:77:THR:O	1:CO:81:THR:HG23	2.11	0.49
1:AE:16:ALA:O	1:AE:17:ASN:HB2	2.11	0.49
1:AP:239:ILE:HG12	1:AP:326:ILE:CD1	2.42	0.49
1:AQ:418:SER:HB3	1:AR:407:SER:HB3	1.94	0.49
1:AN:58:ALA:HB2	1:AN:102:GLY:HA3	1.94	0.49
1:AG:275:GLU:O	1:AG:276:ASP:C	2.44	0.49
1:AC:79:ARG:HH11	1:AC:79:ARG:HG3	1.76	0.49
1:AE:398:GLY:HA3	1:AE:494:PHE:CD2	2.47	0.49
1:CO:288:HIS:HD2	1:CO:337:ASP:OD2	1.95	0.49
1:CK:239:ILE:HD12	1:CK:275:GLU:HA	1.94	0.49
1:CC:272:TYR:N	1:CC:272:TYR:CD1	2.78	0.49
1:CI:191:LEU:CD2	1:CI:191:LEU:N	2.73	0.49
1:BH:191:LEU:N	1:BH:191:LEU:HD23	2.19	0.49
1:CK:191:LEU:CD2	1:CK:191:LEU:N	2.75	0.49
1:CE:189:PHE:CE2	1:CE:249:LEU:HD21	2.45	0.49
1:BD:272:TYR:N	1:BD:272:TYR:HD1	2.10	0.49
1:AR:30:SER:O	1:AR:33:LYS:HB2	2.12	0.49
1:CS:189:PHE:HE2	1:CS:249:LEU:HD21	1.77	0.49
1:AQ:454:ASN:HD21	1:AQ:456:ALA:HB3	1.78	0.49
1:AB:30:SER:O	1:AB:33:LYS:HB2	2.12	0.49
1:AG:74:ASN:ND2	1:AG:77:THR:OG1	2.46	0.49
1:BD:189:PHE:HD2	1:BD:247:ILE:HD11	1.78	0.49
1:AC:189:PHE:CE1	1:AC:198:ARG:CG	2.95	0.49
1:BB:18:ARG:NH1	1:BB:18:ARG:HB2	2.27	0.49
1:CK:239:ILE:HG12	1:CK:326:ILE:CD1	2.42	0.49
1:AM:162:PHE:CD2	1:AM:163:LEU:HD13	2.48	0.49
1:CJ:16:ALA:O	1:CJ:17:ASN:HB2	2.11	0.49
1:AA:75:ARG:NH2	1:AA:391:ALA:O	2.45	0.49
1:BF:16:ALA:O	1:BF:17:ASN:HB2	2.11	0.49
1:AL:75:ARG:NH2	1:AL:391:ALA:O	2.46	0.49
1:BP:162:PHE:CD2	1:BP:163:LEU:HD13	2.47	0.49
1:AB:262:TRP:HA	1:AB:265:LEU:HB3	1.95	0.49
1:AS:272:TYR:CD1	1:AS:272:TYR:N	2.80	0.49
1:BI:55:ARG:NH1	1:BR:272:TYR:CD2	2.81	0.49
1:CP:191:LEU:N	1:CP:191:LEU:CD2	2.73	0.49
1:CP:272:TYR:N	1:CP:272:TYR:HD1	2.10	0.49
1:CD:191:LEU:HD23	1:CD:191:LEU:N	2.18	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BP:55:ARG:HD3	1:CM:272:TYR:CD2	2.47	0.49
1:BA:272:TYR:N	1:BA:272:TYR:CD1	2.80	0.49
1:CF:189:PHE:HD2	1:CF:247:ILE:CD1	2.26	0.49
1:CT:454:ASN:ND2	1:CT:456:ALA:H	2.06	0.49
1:BC:189:PHE:HE2	1:BC:249:LEU:CD2	2.26	0.49
1:CJ:30:SER:O	1:CJ:33:LYS:HB2	2.12	0.49
1:CK:189:PHE:HE2	1:CK:249:LEU:CD2	2.25	0.49
1:BD:189:PHE:CE1	1:BD:198:ARG:CG	2.95	0.49
1:AT:58:ALA:HB2	1:AT:102:GLY:HA3	1.93	0.49
1:BJ:170:PHE:HD1	1:BJ:389:MET:CE	2.25	0.49
1:AF:162:PHE:CD2	1:AF:163:LEU:HD13	2.47	0.49
1:CR:170:PHE:HD1	1:CR:389:MET:CE	2.25	0.49
1:AA:252:VAL:HG22	1:AA:253:SER:N	2.28	0.49
1:CH:442:GLN:HE21	1:CI:412:PHE:HB2	1.77	0.49
1:AR:162:PHE:CD2	1:AR:163:LEU:HD13	2.46	0.49
1:BB:189:PHE:HD2	1:BB:247:ILE:CD1	2.24	0.49
1:BF:250:TRP:HZ3	1:BF:272:TYR:CE1	2.26	0.49
1:AD:272:TYR:CD2	1:AS:55:ARG:CZ	2.96	0.49
1:AH:30:SER:O	1:AH:33:LYS:HB2	2.12	0.49
1:AO:284:ARG:NH1	1:AO:284:ARG:CG	2.71	0.49
1:AL:189:PHE:HE1	1:AL:198:ARG:CG	2.24	0.49
1:AQ:239:ILE:HD12	1:AQ:275:GLU:HA	1.94	0.49
1:AQ:232:THR:HB	1:AQ:334:VAL:CG2	2.43	0.49
1:BS:170:PHE:HD1	1:BS:389:MET:CE	2.25	0.49
1:CI:398:GLY:HA3	1:CI:494:PHE:CD2	2.47	0.49
1:BI:162:PHE:CD2	1:BI:163:LEU:HD13	2.47	0.49
1:BC:67:VAL:HG23	1:BC:135:LEU:HB2	1.94	0.49
1:AC:16:ALA:O	1:AC:17:ASN:HB2	2.13	0.49
1:CO:18:ARG:HG3	1:CO:19:TYR:N	2.27	0.49
1:AH:170:PHE:HD1	1:AH:389:MET:HE2	1.77	0.49
1:CM:191:LEU:CD2	1:CM:191:LEU:N	2.74	0.49
1:AC:55:ARG:NE	1:AT:272:TYR:HE2	2.02	0.49
1:CG:189:PHE:HD2	1:CG:247:ILE:HD11	1.77	0.49
1:AR:189:PHE:HD2	1:AR:247:ILE:CD1	2.26	0.49
1:CM:189:PHE:CE1	1:CM:198:ARG:HG2	2.47	0.49
1:CR:454:ASN:HD21	1:CR:456:ALA:HB3	1.77	0.49
1:CL:454:ASN:HD21	1:CL:456:ALA:HB3	1.77	0.49
1:BJ:55:ARG:HD3	1:CL:272:TYR:CE2	2.46	0.49
1:CC:189:PHE:CE1	1:CC:198:ARG:CG	2.96	0.49
1:CP:398:GLY:HA3	1:CP:494:PHE:CD2	2.48	0.49
1:BD:379:VAL:HG11	1:BD:381:MET:HE1	1.95	0.49
1:CF:170:PHE:HD1	1:CF:389:MET:CE	2.25	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AG:267:LYS:C	1:AG:268:TYR:O	2.45	0.49
1:AI:250:TRP:CE3	1:AI:272:TYR:CE1	3.01	0.49
1:BH:191:LEU:N	1:BH:191:LEU:CD2	2.76	0.49
1:AI:191:LEU:N	1:AI:191:LEU:HD23	2.19	0.49
1:AR:272:TYR:N	1:AR:272:TYR:CD1	2.80	0.49
1:AM:189:PHE:CE2	1:AM:249:LEU:HD21	2.45	0.49
1:AH:189:PHE:CE2	1:AH:249:LEU:HD21	2.44	0.49
1:BI:454:ASN:HD21	1:BI:456:ALA:HB3	1.78	0.49
1:BI:189:PHE:HD2	1:BI:247:ILE:HD11	1.76	0.49
1:AG:189:PHE:HD2	1:AG:247:ILE:CD1	2.25	0.49
1:BM:189:PHE:CE2	1:BM:249:LEU:HD21	2.42	0.49
1:AQ:272:TYR:CE2	1:BL:55:ARG:HD3	2.48	0.49
1:AJ:30:SER:O	1:AJ:33:LYS:HB2	2.13	0.49
1:AK:284:ARG:NH1	1:AK:284:ARG:CG	2.70	0.49
1:AG:270:GLY:C	1:AG:271:VAL:CG1	2.81	0.49
1:BP:263:ASN:O	1:BP:267:LYS:HG3	2.13	0.49
1:BJ:58:ALA:HB2	1:BJ:102:GLY:HA3	1.94	0.49
1:BS:67:VAL:HG23	1:BS:135:LEU:HB2	1.95	0.49
1:CG:288:HIS:HD2	1:CG:337:ASP:OD2	1.95	0.49
1:BO:272:TYR:HD2	1:BR:55:ARG:HD3	1.78	0.49
1:BJ:272:TYR:CE2	1:BQ:55:ARG:HD3	2.48	0.49
1:BQ:191:LEU:CD2	1:BQ:191:LEU:N	2.76	0.49
1:CM:189:PHE:HD2	1:CM:247:ILE:CD1	2.25	0.49
1:BD:272:TYR:N	1:BD:272:TYR:CD1	2.81	0.49
1:CF:189:PHE:CE1	1:CF:198:ARG:HG2	2.47	0.49
1:AB:189:PHE:HE1	1:AB:198:ARG:HG2	1.74	0.49
1:CR:454:ASN:ND2	1:CR:456:ALA:H	2.02	0.49
1:CN:454:ASN:HD21	1:CN:456:ALA:HB3	1.77	0.49
1:CO:189:PHE:HE2	1:CO:249:LEU:HD21	1.78	0.49
1:CO:454:ASN:HD22	1:CO:456:ALA:N	2.06	0.49
1:CS:74:ASN:ND2	1:CS:77:THR:OG1	2.46	0.49
1:CE:14:CYS:H	1:CE:138:ASN:ND2	2.11	0.49
1:CO:393:HIS:CG	1:CO:496:PHE:HB3	2.48	0.49
1:AL:67:VAL:HG23	1:AL:135:LEU:HB2	1.94	0.49
1:BR:75:ARG:NH2	1:BR:391:ALA:O	2.46	0.49
1:CT:299:SER:O	1:CT:302:ASP:HB2	2.13	0.49
1:AT:28:MET:HE2	1:AT:152:LEU:HG	1.95	0.49
1:CF:58:ALA:HB2	1:CF:102:GLY:HA3	1.94	0.49
1:CN:191:LEU:HD23	1:CN:191:LEU:N	2.19	0.49
1:BB:272:TYR:HD1	1:BB:272:TYR:N	2.11	0.49
1:BA:454:ASN:ND2	1:BA:456:ALA:H	2.05	0.49
1:BE:272:TYR:CD2	1:BM:55:ARG:HD3	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CC:454:ASN:ND2	1:CC:456:ALA:H	2.06	0.49
1:BK:189:PHE:HE2	1:BK:249:LEU:HD21	1.78	0.49
1:AS:232:THR:HB	1:AS:334:VAL:CG2	2.43	0.49
1:AS:58:ALA:HB2	1:AS:102:GLY:HA3	1.95	0.49
1:CL:170:PHE:HD1	1:CL:389:MET:HE2	1.78	0.49
1:AG:162:PHE:CD2	1:AG:163:LEU:HD13	2.48	0.49
1:BC:404:LEU:HD22	1:BC:486:VAL:HG22	1.95	0.49
1:CA:239:ILE:HG12	1:CA:326:ILE:CD1	2.43	0.49
1:BE:398:GLY:HA3	1:BE:494:PHE:CD2	2.48	0.49
1:AT:170:PHE:HD1	1:AT:389:MET:CE	2.25	0.49
1:AB:261:ASP:O	1:AB:261:ASP:CG	2.51	0.48
1:BJ:272:TYR:CD2	1:BQ:55:ARG:CD	2.95	0.48
1:BP:272:TYR:HD1	1:BP:272:TYR:N	2.11	0.48
1:CO:272:TYR:CD2	1:CR:55:ARG:NH1	2.81	0.48
1:CE:250:TRP:HZ3	1:CE:272:TYR:CE1	2.29	0.48
1:BB:191:LEU:N	1:BB:191:LEU:HD23	2.17	0.48
1:BM:191:LEU:N	1:BM:191:LEU:CD2	2.74	0.48
1:AH:189:PHE:HD2	1:AH:247:ILE:CD1	2.26	0.48
1:CS:272:TYR:N	1:CS:272:TYR:HD1	2.11	0.48
1:CT:189:PHE:HE2	1:CT:249:LEU:HD21	1.78	0.48
1:CR:30:SER:O	1:CR:33:LYS:HB2	2.12	0.48
1:AO:18:ARG:HG3	1:AO:19:TYR:N	2.28	0.48
1:BH:239:ILE:HG12	1:BH:326:ILE:CD1	2.42	0.48
1:CI:16:ALA:O	1:CI:17:ASN:HB2	2.13	0.48
1:AB:262:TRP:N	1:AB:262:TRP:HD1	2.11	0.48
1:BF:191:LEU:N	1:BF:191:LEU:CD2	2.74	0.48
1:CH:189:PHE:CE2	1:CH:249:LEU:HD21	2.45	0.48
1:BP:189:PHE:HE2	1:BP:249:LEU:HD21	1.79	0.48
1:BN:454:ASN:HD21	1:BN:456:ALA:HB3	1.78	0.48
1:AD:30:SER:O	1:AD:33:LYS:HB2	2.13	0.48
1:CJ:43:ALA:HB1	1:CJ:158:GLU:HA	1.95	0.48
1:CK:379:VAL:HG11	1:CK:381:MET:HE1	1.95	0.48
1:CD:440:ALA:HB3	1:CE:444:LEU:HD13	1.95	0.48
1:BD:43:ALA:HB1	1:BD:158:GLU:HA	1.94	0.48
1:AH:443:LYS:HE2	1:AI:444:LEU:HB2	1.95	0.48
1:CT:398:GLY:HA3	1:CT:494:PHE:CD2	2.47	0.48
1:BC:226:VAL:HG13	1:BC:228:GLY:H	1.77	0.48
1:AB:162:PHE:CD2	1:AB:163:LEU:HD13	2.48	0.48
1:CM:398:GLY:HA3	1:CM:494:PHE:CD2	2.48	0.48
1:BR:170:PHE:HD1	1:BR:389:MET:HE2	1.78	0.48
1:AQ:170:PHE:HD1	1:AQ:389:MET:CE	2.25	0.48
1:BK:43:ALA:HB1	1:BK:158:GLU:HA	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:55:ARG:CZ	1:CC:272:TYR:CE2	2.96	0.48
1:CD:272:TYR:HD2	1:CS:55:ARG:HD3	1.75	0.48
1:AT:191:LEU:N	1:AT:191:LEU:CD2	2.76	0.48
1:AD:272:TYR:CE2	1:AS:55:ARG:CZ	2.96	0.48
1:BR:74:ASN:ND2	1:BR:77:THR:OG1	2.46	0.48
1:CD:74:ASN:ND2	1:CD:77:THR:OG1	2.46	0.48
1:BH:67:VAL:HG23	1:BH:135:LEU:HB2	1.96	0.48
1:CB:263:ASN:O	1:CB:267:LYS:HG3	2.12	0.48
1:BG:226:VAL:HG13	1:BG:228:GLY:H	1.78	0.48
1:CD:393:HIS:CG	1:CD:496:PHE:HB3	2.48	0.48
1:AG:259:THR:HG22	1:AG:268:TYR:OH	2.14	0.48
1:CD:272:TYR:CD1	1:CD:272:TYR:N	2.82	0.48
1:CA:191:LEU:CD2	1:CA:191:LEU:N	2.74	0.48
1:BA:272:TYR:N	1:BA:272:TYR:HD1	2.12	0.48
1:BH:189:PHE:CE2	1:BH:249:LEU:HD21	2.44	0.48
1:CT:272:TYR:CD1	1:CT:272:TYR:N	2.82	0.48
1:CI:189:PHE:HD2	1:CI:247:ILE:CD1	2.25	0.48
1:BF:454:ASN:HD21	1:BF:456:ALA:HB3	1.78	0.48
1:AP:22:THR:OG1	1:AP:131:HIS:CD2	2.58	0.48
1:AO:454:ASN:ND2	1:AO:456:ALA:H	2.06	0.48
1:BN:74:ASN:ND2	1:BN:77:THR:OG1	2.45	0.48
1:CM:239:ILE:HD12	1:CM:275:GLU:HA	1.94	0.48
1:CS:11:PRO:HG2	1:CS:18:ARG:CD	2.43	0.48
1:AN:232:THR:HB	1:AN:334:VAL:HG23	1.96	0.48
1:CH:239:ILE:HG12	1:CH:326:ILE:CD1	2.42	0.48
1:CK:170:PHE:HD1	1:CK:389:MET:CE	2.26	0.48
1:AB:67:VAL:HG23	1:AB:135:LEU:HB2	1.96	0.48
1:BA:67:VAL:HG23	1:BA:135:LEU:HB2	1.94	0.48
1:AJ:239:ILE:HD12	1:AJ:275:GLU:HA	1.94	0.48
1:CH:162:PHE:CD2	1:CH:163:LEU:HD13	2.49	0.48
1:AJ:35:VAL:HG22	1:BK:38:GLU:HB2	1.94	0.48
1:BA:170:PHE:HD1	1:BA:389:MET:CE	2.26	0.48
1:BT:16:ALA:O	1:BT:17:ASN:HB2	2.14	0.48
1:CR:191:LEU:N	1:CR:191:LEU:HD23	2.19	0.48
1:AP:272:TYR:CD2	1:BE:55:ARG:CD	2.88	0.48
1:CN:189:PHE:HD2	1:CN:247:ILE:HD11	1.77	0.48
1:AK:55:ARG:CD	1:CF:272:TYR:CD2	2.94	0.48
1:BG:272:TYR:N	1:BG:272:TYR:CD1	2.82	0.48
1:AB:189:PHE:CE1	1:AB:198:ARG:HG2	2.49	0.48
1:CO:189:PHE:HD2	1:CO:247:ILE:HD11	1.78	0.48
1:AA:250:TRP:HZ3	1:AA:272:TYR:CE1	2.28	0.48
1:AT:189:PHE:HD2	1:AT:247:ILE:HD11	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CC:30:SER:O	1:CC:33:LYS:HB2	2.13	0.48
1:AS:284:ARG:NH1	1:AS:284:ARG:CG	2.70	0.48
1:CH:284:ARG:CG	1:CH:284:ARG:NH1	2.73	0.48
1:BO:189:PHE:HE1	1:BO:198:ARG:CG	2.24	0.48
1:BB:234:ARG:HG2	1:BB:280:GLU:HG2	1.95	0.48
1:CJ:226:VAL:HG13	1:CJ:228:GLY:H	1.78	0.48
1:CO:162:PHE:CD2	1:CO:163:LEU:HD13	2.47	0.48
1:BT:239:ILE:HG12	1:BT:326:ILE:CD1	2.43	0.48
1:BE:263:ASN:HD22	1:BM:5:ARG:HD3	1.78	0.48
1:AG:67:VAL:HG23	1:AG:135:LEU:HB2	1.96	0.48
1:CQ:170:PHE:HD1	1:CQ:389:MET:CE	2.26	0.48
1:AK:440:ALA:HB3	1:AL:444:LEU:HD13	1.96	0.48
1:BO:239:ILE:HG12	1:BO:326:ILE:CD1	2.44	0.48
1:CP:272:TYR:N	1:CP:272:TYR:CD1	2.81	0.48
1:CR:189:PHE:HD2	1:CR:247:ILE:CD1	2.25	0.48
1:AQ:250:TRP:HZ3	1:AQ:272:TYR:CE1	2.26	0.48
1:BQ:189:PHE:HD2	1:BQ:247:ILE:HD11	1.79	0.48
1:BE:250:TRP:HZ3	1:BE:272:TYR:CE1	2.29	0.48
1:AO:289:ARG:NH1	1:AO:338:LEU:O	2.47	0.48
1:BS:189:PHE:HD2	1:BS:247:ILE:HD11	1.79	0.48
1:BA:30:SER:O	1:BA:33:LYS:HB2	2.13	0.48
1:CL:189:PHE:HD2	1:CL:247:ILE:HD11	1.77	0.48
1:BD:189:PHE:HE2	1:BD:249:LEU:HD21	1.79	0.48
1:BB:5:ARG:HD3	1:CB:263:ASN:HD22	1.79	0.48
1:BC:252:VAL:HG22	1:BC:253:SER:N	2.28	0.48
1:CC:162:PHE:CD2	1:CC:163:LEU:HD13	2.49	0.48
1:BA:75:ARG:NH2	1:BA:391:ALA:O	2.44	0.48
1:BN:58:ALA:HB2	1:BN:102:GLY:HA3	1.96	0.48
1:AO:14:CYS:H	1:AO:138:ASN:HD21	1.60	0.48
1:BO:75:ARG:NH2	1:BO:391:ALA:O	2.46	0.48
1:BP:272:TYR:CD2	1:CE:55:ARG:CD	2.93	0.48
1:AB:191:LEU:CD2	1:AB:191:LEU:N	2.72	0.48
1:AE:55:ARG:HD3	1:CP:272:TYR:HD2	1.77	0.48
1:AJ:250:TRP:CE3	1:AJ:272:TYR:CE1	3.01	0.48
1:CI:144:ALA:CB	1:CR:191:LEU:O	2.61	0.48
1:BN:189:PHE:HD2	1:BN:247:ILE:CD1	2.26	0.48
1:CJ:189:PHE:HD2	1:CJ:247:ILE:CD1	2.26	0.48
1:CG:272:TYR:CD1	1:CG:272:TYR:N	2.82	0.48
1:AG:454:ASN:ND2	1:AG:456:ALA:H	2.08	0.48
1:BB:14:CYS:H	1:BB:138:ASN:ND2	2.12	0.48
1:CD:188:PHE:C	1:CD:189:PHE:HD1	2.17	0.48
1:AG:276:ASP:N	1:AG:276:ASP:OD1	2.30	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AH:170:PHE:HD1	1:AH:389:MET:CE	2.26	0.48
1:CK:16:ALA:O	1:CK:17:ASN:HB2	2.14	0.48
1:AJ:398:GLY:HA3	1:AJ:494:PHE:CD2	2.48	0.48
1:AK:418:SER:HB3	1:AL:407:SER:HB3	1.94	0.48
1:CS:234:ARG:HG2	1:CS:280:GLU:HG2	1.94	0.48
1:AJ:404:LEU:HD22	1:AJ:486:VAL:HG22	1.95	0.48
1:BF:440:ALA:CB	1:BG:444:LEU:HD13	2.43	0.48
1:BS:239:ILE:HG12	1:BS:326:ILE:CD1	2.44	0.48
1:AQ:191:LEU:N	1:AQ:191:LEU:CD2	2.75	0.48
1:AG:191:LEU:CD2	1:AG:191:LEU:N	2.74	0.48
1:AR:189:PHE:CE1	1:AR:198:ARG:HG2	2.49	0.48
1:AE:250:TRP:HZ3	1:AE:272:TYR:CE1	2.28	0.48
1:AE:272:TYR:HD2	1:AM:55:ARG:HD3	1.78	0.48
1:BQ:250:TRP:HZ3	1:BQ:272:TYR:CE1	2.27	0.48
1:AT:189:PHE:HE2	1:AT:249:LEU:HD21	1.79	0.48
1:AL:189:PHE:HD2	1:AL:247:ILE:HD11	1.79	0.48
1:AO:189:PHE:HD2	1:AO:247:ILE:HD11	1.79	0.48
1:CG:14:CYS:H	1:CG:138:ASN:ND2	2.10	0.48
1:AQ:442:GLN:NE2	1:AR:412:PHE:HB2	2.29	0.48
1:AB:239:ILE:HD12	1:AB:275:GLU:HA	1.96	0.48
1:AQ:393:HIS:CG	1:AQ:496:PHE:HB3	2.49	0.48
1:BS:379:VAL:HG11	1:BS:381:MET:HE1	1.95	0.48
1:CH:58:ALA:HB2	1:CH:102:GLY:HA3	1.96	0.48
1:BF:412:PHE:HB2	1:BJ:442:GLN:HE21	1.79	0.48
1:BK:58:ALA:HB2	1:BK:102:GLY:HA3	1.95	0.48
1:CF:232:THR:HB	1:CF:334:VAL:CG2	2.43	0.48
1:CJ:379:VAL:HG11	1:CJ:381:MET:HE1	1.95	0.48
1:AP:404:LEU:HD22	1:AP:486:VAL:HG22	1.94	0.48
1:BH:43:ALA:HB1	1:BH:158:GLU:HA	1.95	0.48
1:AS:234:ARG:HG2	1:AS:280:GLU:HG2	1.96	0.48
1:CJ:162:PHE:CD2	1:CJ:163:LEU:HD13	2.49	0.48
1:AL:79:ARG:NH1	1:AL:79:ARG:CG	2.71	0.48
1:CD:272:TYR:HD1	1:CD:272:TYR:N	2.11	0.48
1:BB:454:ASN:HD21	1:BB:456:ALA:HB3	1.77	0.48
1:AF:55:ARG:HD3	1:BH:272:TYR:HD2	1.77	0.48
1:CH:189:PHE:CE1	1:CH:198:ARG:HG2	2.49	0.48
1:AD:272:TYR:N	1:AD:272:TYR:HD1	2.12	0.48
1:AA:272:TYR:CD1	1:AA:272:TYR:N	2.82	0.48
1:CH:454:ASN:HD21	1:CH:456:ALA:HB3	1.79	0.48
1:AT:284:ARG:CG	1:AT:284:ARG:NH1	2.73	0.48
1:BO:189:PHE:HE2	1:BO:249:LEU:HD21	1.79	0.48
1:CQ:189:PHE:CE1	1:CQ:198:ARG:CG	2.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AC:239:ILE:HD12	1:AC:275:GLU:HA	1.94	0.48
1:BH:170:PHE:HD1	1:BH:389:MET:HE2	1.79	0.48
1:BN:239:ILE:HG12	1:BN:326:ILE:CD1	2.44	0.48
1:BD:16:ALA:O	1:BD:17:ASN:HB2	2.14	0.48
1:BF:239:ILE:HG12	1:BF:326:ILE:CD1	2.44	0.48
1:BE:11:PRO:HG2	1:BE:18:ARG:HD3	1.95	0.48
1:BD:38:GLU:HB2	1:BM:35:VAL:HG22	1.96	0.48
1:AP:444:LEU:HD13	1:AT:440:ALA:HB3	1.95	0.48
1:CA:398:GLY:HA3	1:CA:494:PHE:CD2	2.49	0.48
1:CN:10:ILE:HD13	1:CN:20:LEU:HD13	1.95	0.48
1:CR:237:VAL:HG23	1:CR:279:PHE:CD2	2.48	0.48
1:BS:232:THR:HB	1:BS:334:VAL:HG23	1.96	0.48
1:BD:201:GLY:HA3	1:BD:300:GLN:HG2	1.96	0.48
1:BR:440:ALA:CB	1:BS:444:LEU:HD13	2.44	0.48
1:BO:404:LEU:HD22	1:BO:486:VAL:HG22	1.96	0.48
1:BT:162:PHE:CD2	1:BT:163:LEU:HD13	2.48	0.48
1:AF:79:ARG:NH1	1:AF:79:ARG:CG	2.72	0.48
1:CB:189:PHE:HD2	1:CB:247:ILE:CD1	2.27	0.48
1:CI:272:TYR:N	1:CI:272:TYR:CD1	2.81	0.48
1:BF:454:ASN:ND2	1:BF:456:ALA:H	2.05	0.48
1:CT:454:ASN:HD21	1:CT:456:ALA:HB3	1.79	0.48
1:AD:189:PHE:HD2	1:AD:247:ILE:HD11	1.79	0.48
1:CC:189:PHE:HE2	1:CC:249:LEU:CD2	2.26	0.48
1:CJ:284:ARG:NH1	1:CJ:284:ARG:CG	2.74	0.48
1:BB:239:ILE:HG23	1:BB:324:LEU:HD21	1.96	0.48
1:AI:170:PHE:HD1	1:AI:389:MET:HE2	1.79	0.48
1:BN:239:ILE:HD12	1:BN:275:GLU:HA	1.95	0.48
1:CC:239:ILE:HG12	1:CC:326:ILE:CD1	2.44	0.48
1:CA:442:GLN:HE21	1:CB:412:PHE:HB2	1.78	0.48
1:CA:25:ILE:HG23	1:CA:152:LEU:HD11	1.96	0.48
1:CJ:398:GLY:HA3	1:CJ:494:PHE:CD2	2.49	0.48
1:BO:170:PHE:HD1	1:BO:389:MET:HE2	1.79	0.48
1:BR:232:THR:HB	1:BR:334:VAL:HG23	1.96	0.48
1:AI:263:ASN:O	1:AI:267:LYS:HG3	2.13	0.48
1:AH:25:ILE:HG23	1:AH:152:LEU:HD11	1.96	0.48
1:CN:58:ALA:HB2	1:CN:102:GLY:HA3	1.96	0.48
1:AM:252:VAL:HG22	1:AM:253:SER:N	2.29	0.48
1:AK:272:TYR:N	1:AK:272:TYR:CD1	2.81	0.47
1:AO:272:TYR:N	1:AO:272:TYR:CD1	2.81	0.47
1:CG:189:PHE:HD2	1:CG:247:ILE:CD1	2.26	0.47
1:AN:191:LEU:CD2	1:AN:191:LEU:N	2.77	0.47
1:BC:55:ARG:CD	1:BT:272:TYR:CE2	2.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BC:250:TRP:CE3	1:BC:272:TYR:CE1	3.02	0.47
1:CM:30:SER:O	1:CM:33:LYS:HB2	2.14	0.47
1:BS:170:PHE:HD1	1:BS:389:MET:HE2	1.79	0.47
1:CB:20:LEU:HB2	1:CB:132:PHE:O	2.14	0.47
1:BJ:393:HIS:CG	1:BJ:496:PHE:HB3	2.49	0.47
1:AD:58:ALA:HB2	1:AD:102:GLY:HA3	1.96	0.47
1:BQ:79:ARG:HG3	1:BQ:79:ARG:HH11	1.79	0.47
1:CP:162:PHE:CD2	1:CP:163:LEU:HD13	2.48	0.47
1:BH:263:ASN:O	1:BH:267:LYS:HG3	2.14	0.47
1:CF:379:VAL:HG11	1:CF:381:MET:HE1	1.95	0.47
1:BC:237:VAL:HG23	1:BC:279:PHE:CD2	2.49	0.47
1:AG:272:TYR:O	1:AG:273:VAL:HG22	2.10	0.47
1:CR:86:PRO:O	1:CR:88:TYR:C	2.52	0.47
1:CI:379:VAL:CG1	1:CI:380:SER:N	2.70	0.47
1:BO:272:TYR:CD2	1:BR:55:ARG:NE	2.82	0.47
1:BJ:189:PHE:CE2	1:BJ:249:LEU:HD21	2.47	0.47
1:CE:189:PHE:HD2	1:CE:247:ILE:CD1	2.27	0.47
1:BG:272:TYR:CD2	1:CG:55:ARG:HD3	2.48	0.47
1:AB:55:ARG:NE	1:BB:272:TYR:CE2	2.82	0.47
1:BH:454:ASN:HD21	1:BH:456:ALA:HB3	1.78	0.47
1:CO:454:ASN:ND2	1:CO:456:ALA:H	2.09	0.47
1:AH:454:ASN:ND2	1:AH:456:ALA:H	2.08	0.47
1:CB:30:SER:O	1:CB:33:LYS:HB2	2.14	0.47
1:AE:203:THR:CB	1:AE:300:GLN:HG3	2.43	0.47
1:AH:201:GLY:HA3	1:AH:300:GLN:HG2	1.96	0.47
1:BT:5:ARG:HD3	1:CA:263:ASN:HD22	1.78	0.47
1:CR:239:ILE:HD12	1:CR:275:GLU:HA	1.96	0.47
1:CL:252:VAL:HG22	1:CL:253:SER:N	2.28	0.47
1:CE:232:THR:HB	1:CE:334:VAL:HG23	1.95	0.47
1:AN:379:VAL:HG11	1:AN:381:MET:HE1	1.96	0.47
1:AR:263:ASN:O	1:AR:267:LYS:HG3	2.13	0.47
1:AQ:379:VAL:HG11	1:AQ:381:MET:HE1	1.96	0.47
1:BG:58:ALA:HB2	1:BG:102:GLY:HA3	1.95	0.47
1:CL:226:VAL:HG13	1:CL:228:GLY:H	1.79	0.47
1:AG:254:GLU:OE1	1:AG:259:THR:HG22	2.14	0.47
1:AI:191:LEU:CD2	1:AI:191:LEU:N	2.76	0.47
1:BH:454:ASN:ND2	1:BH:456:ALA:H	2.04	0.47
1:AP:454:ASN:HD21	1:AP:456:ALA:HB3	1.78	0.47
1:CP:30:SER:O	1:CP:33:LYS:HB2	2.14	0.47
1:BF:284:ARG:CG	1:BF:284:ARG:NH1	2.70	0.47
1:AK:442:GLN:HG2	1:AL:412:PHE:CD1	2.49	0.47
1:BB:79:ARG:CG	1:BB:79:ARG:HH11	2.26	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AP:79:ARG:CG	1:AP:79:ARG:HH11	2.27	0.47
1:BN:237:VAL:HG23	1:BN:279:PHE:CD2	2.49	0.47
1:CH:170:PHE:HD1	1:CH:389:MET:CE	2.27	0.47
1:BI:393:HIS:CG	1:BI:496:PHE:HB3	2.50	0.47
1:CR:404:LEU:HD22	1:CR:486:VAL:HG22	1.94	0.47
1:AI:414:LYS:HA	1:AJ:411:GLU:HB3	1.95	0.47
1:AB:226:VAL:HG13	1:AB:228:GLY:H	1.80	0.47
1:AO:300:GLN:HE21	1:AO:300:GLN:HB2	1.47	0.47
1:CK:398:GLY:HA3	1:CK:494:PHE:CD2	2.48	0.47
1:AH:61:PHE:CZ	1:AK:243:ILE:HD13	2.49	0.47
1:AJ:18:ARG:HD2	1:AJ:19:TYR:O	2.13	0.47
1:CJ:237:VAL:HG23	1:CJ:279:PHE:CD2	2.50	0.47
1:AM:239:ILE:HG12	1:AM:326:ILE:CD1	2.44	0.47
1:AD:191:LEU:N	1:AD:191:LEU:CD2	2.74	0.47
1:AJ:189:PHE:CE2	1:AJ:249:LEU:HD21	2.46	0.47
1:CH:189:PHE:HD2	1:CH:247:ILE:HD11	1.79	0.47
1:BJ:55:ARG:HD3	1:CL:272:TYR:HD2	1.78	0.47
1:BF:272:TYR:CE2	1:CK:55:ARG:CZ	2.97	0.47
1:CA:454:ASN:HD21	1:CA:456:ALA:HB3	1.79	0.47
1:CA:454:ASN:ND2	1:CA:456:ALA:H	2.08	0.47
1:BI:74:ASN:ND2	1:BI:77:THR:OG1	2.48	0.47
1:AF:237:VAL:HG23	1:AF:279:PHE:CD2	2.49	0.47
1:BM:170:PHE:HD1	1:BM:389:MET:CE	2.27	0.47
1:CS:379:VAL:HG11	1:CS:381:MET:HE1	1.96	0.47
1:BQ:232:THR:HB	1:BQ:334:VAL:HG23	1.96	0.47
1:CE:263:ASN:HD22	1:CM:5:ARG:HD3	1.79	0.47
1:AK:162:PHE:CD2	1:AK:163:LEU:HD13	2.49	0.47
1:CI:61:PHE:CD2	1:CI:243:ILE:HD11	2.49	0.47
1:CJ:239:ILE:HG12	1:CJ:326:ILE:CD1	2.43	0.47
1:BA:162:PHE:CD2	1:BA:163:LEU:HD13	2.49	0.47
1:BC:300:GLN:HE21	1:BC:300:GLN:HB2	1.55	0.47
1:AI:379:VAL:HG11	1:AI:381:MET:HE1	1.96	0.47
1:AI:272:TYR:N	1:AI:272:TYR:CD1	2.83	0.47
1:BD:191:LEU:HD23	1:BD:191:LEU:N	2.17	0.47
1:AF:189:PHE:HD2	1:AF:247:ILE:CD1	2.27	0.47
1:AJ:55:ARG:HD3	1:BL:272:TYR:HD2	1.78	0.47
1:BM:189:PHE:HD2	1:BM:247:ILE:CD1	2.28	0.47
1:AJ:454:ASN:ND2	1:AJ:456:ALA:H	2.09	0.47
1:BP:30:SER:O	1:BP:33:LYS:HB2	2.13	0.47
1:AD:74:ASN:ND2	1:AD:77:THR:OG1	2.48	0.47
1:BC:284:ARG:CG	1:BC:284:ARG:NH1	2.72	0.47
1:CK:189:PHE:HE1	1:CK:198:ARG:CG	2.27	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:189:PHE:HD2	1:CA:247:ILE:HD11	1.80	0.47
1:AH:18:ARG:HG2	1:AH:20:LEU:HD23	1.96	0.47
1:BR:170:PHE:HD1	1:BR:389:MET:CE	2.27	0.47
1:CO:203:THR:HB	1:CO:300:GLN:HG3	1.96	0.47
1:CB:162:PHE:CD2	1:CB:163:LEU:HD13	2.50	0.47
1:BD:162:PHE:CD2	1:BD:163:LEU:HD13	2.49	0.47
1:BG:239:ILE:HG12	1:BG:326:ILE:CD1	2.45	0.47
1:BE:170:PHE:HD1	1:BE:389:MET:CE	2.28	0.47
1:BB:404:LEU:HD22	1:BB:486:VAL:HG22	1.95	0.47
1:BG:162:PHE:CD2	1:BG:163:LEU:HD13	2.50	0.47
1:CB:58:ALA:HB2	1:CB:102:GLY:HA3	1.96	0.47
1:BC:393:HIS:CG	1:BC:496:PHE:HB3	2.49	0.47
1:AP:398:GLY:HA3	1:AP:494:PHE:CD2	2.49	0.47
1:AS:239:ILE:HG12	1:AS:326:ILE:CD1	2.44	0.47
1:CN:75:ARG:NH2	1:CN:391:ALA:O	2.47	0.47
1:AF:407:SER:HB3	1:AJ:418:SER:HB3	1.96	0.47
1:BD:239:ILE:HG12	1:BD:326:ILE:CD1	2.45	0.47
1:CE:393:HIS:CG	1:CE:496:PHE:HB3	2.49	0.47
1:AG:258:THR:O	1:AG:259:THR:O	2.33	0.47
1:AC:272:TYR:HE2	1:BA:55:ARG:NE	2.12	0.47
1:CH:79:ARG:HH11	1:CH:79:ARG:CG	2.19	0.47
1:CS:272:TYR:N	1:CS:272:TYR:CD1	2.81	0.47
1:BF:189:PHE:HD2	1:BF:247:ILE:CD1	2.28	0.47
1:BE:454:ASN:ND2	1:BE:456:ALA:H	2.08	0.47
1:BQ:454:ASN:ND2	1:BQ:456:ALA:H	2.09	0.47
1:AS:189:PHE:HD2	1:AS:247:ILE:HD11	1.78	0.47
1:BT:239:ILE:HD12	1:BT:275:GLU:HA	1.96	0.47
1:CE:232:THR:HB	1:CE:334:VAL:CG2	2.45	0.47
1:AG:226:VAL:HG13	1:AG:228:GLY:H	1.80	0.47
1:CG:58:ALA:HB2	1:CG:102:GLY:HA3	1.97	0.47
1:CM:232:THR:HB	1:CM:334:VAL:CG2	2.45	0.47
1:CA:234:ARG:HG2	1:CA:280:GLU:HG2	1.97	0.47
1:BS:393:HIS:CG	1:BS:496:PHE:HB3	2.50	0.47
1:AL:243:ILE:HD13	1:CJ:61:PHE:CZ	2.48	0.47
1:CJ:393:HIS:CG	1:CJ:496:PHE:HB3	2.50	0.47
1:CE:58:ALA:HB2	1:CE:102:GLY:HA3	1.96	0.47
1:BH:234:ARG:HG2	1:BH:280:GLU:HG2	1.97	0.47
1:CB:239:ILE:HD12	1:CB:275:GLU:HA	1.97	0.47
1:CO:272:TYR:HD1	1:CO:272:TYR:N	2.13	0.47
1:AK:191:LEU:CD2	1:AK:191:LEU:N	2.74	0.47
1:BJ:189:PHE:HD2	1:BJ:247:ILE:HD11	1.80	0.47
1:AE:189:PHE:HD2	1:AE:247:ILE:HD11	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AE:189:PHE:CE2	1:AE:249:LEU:HD21	2.43	0.47
1:AR:272:TYR:N	1:AR:272:TYR:HD1	2.12	0.47
1:AN:272:TYR:N	1:AN:272:TYR:CD1	2.83	0.47
1:BB:55:ARG:HD3	1:CB:272:TYR:CD2	2.49	0.47
1:BH:189:PHE:HD2	1:BH:247:ILE:CD1	2.27	0.47
1:CI:272:TYR:CD2	1:CO:55:ARG:CZ	2.97	0.47
1:BE:454:ASN:HD21	1:BE:456:ALA:HB3	1.79	0.47
1:BK:30:SER:O	1:BK:33:LYS:HB2	2.15	0.47
1:BH:30:SER:O	1:BH:33:LYS:HB2	2.14	0.47
1:CT:189:PHE:CE2	1:CT:249:LEU:HD21	2.50	0.47
1:CS:189:PHE:HD2	1:CS:247:ILE:HD11	1.80	0.47
1:BT:189:PHE:CE2	1:BT:249:LEU:HD21	2.49	0.47
1:AI:30:SER:O	1:AI:33:LYS:HB2	2.14	0.47
1:AS:189:PHE:HE2	1:AS:249:LEU:HD21	1.80	0.47
1:AE:162:PHE:CD2	1:AE:163:LEU:HD13	2.50	0.47
1:CK:263:ASN:O	1:CK:267:LYS:HG3	2.15	0.47
1:AQ:234:ARG:HG2	1:AQ:280:GLU:HG2	1.94	0.47
1:BF:288:HIS:HD2	1:BF:337:ASP:OD2	1.97	0.47
1:AQ:162:PHE:CD2	1:AQ:163:LEU:HD13	2.50	0.47
1:CR:234:ARG:HG2	1:CR:280:GLU:HG2	1.97	0.47
1:AI:162:PHE:CD2	1:AI:163:LEU:HD13	2.49	0.47
1:BL:232:THR:HB	1:BL:334:VAL:CG2	2.45	0.47
1:CA:171:ASP:HA	1:CA:172:PRO:HD3	1.77	0.47
1:CB:252:VAL:HG22	1:CB:253:SER:N	2.30	0.47
1:BA:43:ALA:HB1	1:BA:158:GLU:HA	1.95	0.47
1:CK:442:GLN:HE21	1:CL:412:PHE:HB2	1.78	0.47
1:AL:170:PHE:HD1	1:AL:389:MET:CE	2.28	0.47
1:AG:437:HIS:CE1	1:AH:405:GLN:NE2	2.83	0.47
1:CI:393:HIS:CG	1:CI:496:PHE:HB3	2.50	0.47
1:AI:234:ARG:HG2	1:AI:280:GLU:HG2	1.97	0.47
1:AM:170:PHE:HD1	1:AM:389:MET:HE2	1.80	0.47
1:AS:226:VAL:HG13	1:AS:228:GLY:H	1.80	0.47
1:BR:239:ILE:HD12	1:BR:275:GLU:HA	1.96	0.47
1:AF:226:VAL:HG13	1:AF:228:GLY:H	1.78	0.47
1:BT:256:ASN:HD22	1:BT:302:ASP:HA	1.79	0.47
1:BK:191:LEU:HD23	1:BK:191:LEU:N	2.19	0.47
1:AC:55:ARG:CZ	1:AT:272:TYR:CD2	2.98	0.47
1:BB:189:PHE:HD2	1:BB:247:ILE:HD11	1.79	0.47
1:AI:189:PHE:CE2	1:AI:249:LEU:HD21	2.46	0.47
1:BC:55:ARG:CD	1:BT:272:TYR:HE2	2.28	0.47
1:AM:189:PHE:CE1	1:AM:198:ARG:HG2	2.50	0.47
1:AH:189:PHE:CE1	1:AH:198:ARG:HG2	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BS:454:ASN:HD21	1:BS:456:ALA:HB3	1.79	0.47
1:AR:22:THR:OG1	1:AR:131:HIS:CD2	2.60	0.47
1:AT:454:ASN:ND2	1:AT:456:ALA:H	2.09	0.47
1:CJ:170:PHE:HD1	1:CJ:389:MET:HE2	1.80	0.47
1:CN:170:PHE:HD1	1:CN:389:MET:HE2	1.80	0.47
1:CF:232:THR:HB	1:CF:334:VAL:HG23	1.97	0.47
1:AG:61:PHE:CD2	1:AG:243:ILE:HD11	2.50	0.47
1:BH:162:PHE:CD2	1:BH:163:LEU:HD13	2.50	0.47
1:CE:239:ILE:HG12	1:CE:326:ILE:CD1	2.44	0.47
1:CG:234:ARG:HG2	1:CG:280:GLU:HG2	1.97	0.47
1:BL:393:HIS:CG	1:BL:496:PHE:HB3	2.50	0.47
1:BL:201:GLY:HA3	1:BL:300:GLN:HG2	1.96	0.47
1:CB:404:LEU:HD22	1:CB:486:VAL:HG22	1.96	0.47
1:AM:234:ARG:HG2	1:AM:280:GLU:HG2	1.96	0.47
1:AH:379:VAL:HG11	1:AH:381:MET:HE1	1.96	0.47
1:AJ:232:THR:HB	1:AJ:334:VAL:HG23	1.97	0.47
1:CC:379:VAL:HG11	1:CC:381:MET:HE1	1.97	0.47
1:AB:272:TYR:CE2	1:CB:55:ARG:HD3	2.50	0.47
1:BP:272:TYR:N	1:BP:272:TYR:CD1	2.83	0.47
1:CQ:272:TYR:CD1	1:CQ:272:TYR:N	2.83	0.47
1:BC:191:LEU:N	1:BC:191:LEU:CD2	2.76	0.47
1:AH:191:LEU:HD23	1:AH:191:LEU:N	2.22	0.47
1:BL:191:LEU:CD2	1:BL:191:LEU:N	2.76	0.47
1:AF:189:PHE:CE2	1:AF:249:LEU:HD21	2.42	0.47
1:AD:250:TRP:HZ3	1:AD:272:TYR:CE1	2.29	0.47
1:BP:22:THR:OG1	1:BP:131:HIS:CD2	2.58	0.47
1:BE:272:TYR:HE2	1:BM:55:ARG:NE	2.09	0.47
1:AP:30:SER:O	1:AP:33:LYS:HB2	2.14	0.47
1:CO:30:SER:O	1:CO:33:LYS:HB2	2.15	0.47
1:CQ:189:PHE:CE2	1:CQ:249:LEU:HD21	2.50	0.47
1:AO:239:ILE:HD12	1:AO:275:GLU:HA	1.97	0.47
1:CL:170:PHE:HD1	1:CL:389:MET:CE	2.28	0.47
1:CH:239:ILE:HD12	1:CH:275:GLU:HA	1.96	0.47
1:CL:239:ILE:HG12	1:CL:326:ILE:CD1	2.45	0.47
1:BC:437:HIS:CE1	1:BD:405:GLN:NE2	2.83	0.47
1:CD:239:ILE:HG12	1:CD:326:ILE:CD1	2.45	0.47
1:CR:379:VAL:HG11	1:CR:381:MET:HE1	1.97	0.47
1:BQ:10:ILE:HG21	1:BQ:146:TRP:CZ2	2.50	0.47
1:AA:11:PRO:HG2	1:AA:18:ARG:HD2	1.96	0.47
1:BK:232:THR:HB	1:BK:334:VAL:HG23	1.97	0.47
1:AJ:237:VAL:HG23	1:AJ:279:PHE:CD2	2.50	0.47
1:CR:10:ILE:HG21	1:CR:146:TRP:CZ2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AE:239:ILE:HG12	1:AE:326:ILE:CD1	2.45	0.47
1:AB:272:TYR:CD2	1:CB:55:ARG:HD3	2.49	0.47
1:AK:55:ARG:CZ	1:CF:272:TYR:CD2	2.98	0.47
1:CT:191:LEU:CD2	1:CT:191:LEU:N	2.76	0.47
1:BI:272:TYR:N	1:BI:272:TYR:CD1	2.83	0.47
1:AD:272:TYR:CD1	1:AD:272:TYR:N	2.82	0.47
1:AE:454:ASN:HD21	1:AE:456:ALA:HB3	1.80	0.47
1:BC:188:PHE:C	1:BC:189:PHE:HD1	2.17	0.47
1:BC:30:SER:O	1:BC:33:LYS:HB2	2.15	0.47
1:AG:30:SER:O	1:AG:33:LYS:HB2	2.14	0.47
1:CC:188:PHE:C	1:CC:189:PHE:HD1	2.19	0.47
1:AF:239:ILE:HD12	1:AF:275:GLU:HA	1.96	0.47
1:AB:61:PHE:CE2	1:AB:243:ILE:HD11	2.50	0.47
1:BB:25:ILE:HG23	1:BB:152:LEU:HD11	1.97	0.47
1:AN:25:ILE:HG23	1:AN:152:LEU:HD11	1.96	0.47
1:BH:256:ASN:HD22	1:BH:302:ASP:HA	1.80	0.47
1:AF:442:GLN:HE21	1:AG:412:PHE:HB2	1.80	0.47
1:AL:393:HIS:CG	1:AL:496:PHE:HB3	2.50	0.47
1:CM:263:ASN:O	1:CM:267:LYS:HG3	2.15	0.47
1:BN:440:ALA:HB3	1:BO:444:LEU:HD13	1.97	0.47
1:CA:226:VAL:HG13	1:CA:228:GLY:H	1.79	0.47
1:CE:234:ARG:HG2	1:CE:280:GLU:HG2	1.97	0.47
1:CM:393:HIS:CG	1:CM:496:PHE:HB3	2.50	0.47
1:CT:239:ILE:HG12	1:CT:326:ILE:CD1	2.45	0.47
1:CC:250:TRP:CZ3	1:CC:272:TYR:CD1	3.03	0.46
1:AA:55:ARG:HD3	1:CC:272:TYR:CE2	2.50	0.46
1:AO:292:ALA:C	1:AO:293:ARG:CG	2.80	0.46
1:AI:189:PHE:HD2	1:AI:247:ILE:CD1	2.28	0.46
1:AN:454:ASN:HD21	1:AN:456:ALA:HB3	1.80	0.46
1:BP:189:PHE:HD2	1:BP:247:ILE:HD11	1.80	0.46
1:AO:454:ASN:HD21	1:AO:456:ALA:HB3	1.80	0.46
1:BE:30:SER:O	1:BE:33:LYS:HB2	2.15	0.46
1:CG:454:ASN:HD21	1:CG:456:ALA:HB3	1.80	0.46
1:AO:239:ILE:HG23	1:AO:324:LEU:HD21	1.96	0.46
1:AN:393:HIS:CG	1:AN:496:PHE:HB3	2.50	0.46
1:AT:379:VAL:HG11	1:AT:381:MET:HE1	1.96	0.46
1:AJ:75:ARG:NH2	1:AJ:391:ALA:O	2.47	0.46
1:AS:393:HIS:CG	1:AS:496:PHE:HB3	2.50	0.46
1:CI:67:VAL:HG23	1:CI:135:LEU:HB2	1.96	0.46
1:BK:379:VAL:HG11	1:BK:381:MET:HE1	1.95	0.46
1:AP:263:ASN:O	1:AP:267:LYS:HG3	2.15	0.46
1:CK:79:ARG:HH11	1:CK:79:ARG:HG3	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BT:232:THR:HB	1:BT:334:VAL:CG2	2.44	0.46
1:CI:162:PHE:CD2	1:CI:163:LEU:HD13	2.49	0.46
1:CP:43:ALA:HB1	1:CP:158:GLU:HA	1.96	0.46
1:AG:263:ASN:ND2	1:BG:32:PHE:HD1	2.14	0.46
1:CE:191:LEU:CD2	1:CE:191:LEU:N	2.75	0.46
1:AN:189:PHE:HD2	1:AN:247:ILE:CD1	2.27	0.46
1:BR:454:ASN:HD21	1:BR:456:ALA:HB3	1.79	0.46
1:CL:189:PHE:HE2	1:CL:249:LEU:HD21	1.80	0.46
1:BC:189:PHE:HD2	1:BC:247:ILE:HD11	1.80	0.46
1:AI:454:ASN:HD21	1:AI:456:ALA:HB3	1.80	0.46
1:BO:170:PHE:HD1	1:BO:389:MET:CE	2.28	0.46
1:AH:393:HIS:CG	1:AH:496:PHE:HB3	2.50	0.46
1:AN:18:ARG:HG3	1:AN:19:TYR:N	2.30	0.46
1:BA:379:VAL:HG11	1:BA:381:MET:HE1	1.97	0.46
1:AF:252:VAL:HG22	1:AF:253:SER:N	2.29	0.46
1:AP:25:ILE:HG23	1:AP:152:LEU:HD11	1.97	0.46
1:CF:405:GLN:NE2	1:CJ:437:HIS:CE1	2.83	0.46
1:CK:237:VAL:HG23	1:CK:279:PHE:CD2	2.49	0.46
1:CD:20:LEU:HB2	1:CD:132:PHE:O	2.16	0.46
1:AE:75:ARG:NH2	1:AE:391:ALA:O	2.47	0.46
1:AN:5:ARG:HD3	1:AS:263:ASN:HD22	1.80	0.46
1:AS:263:ASN:O	1:AS:267:LYS:HG3	2.15	0.46
1:CP:232:THR:HB	1:CP:334:VAL:CG2	2.45	0.46
1:BE:75:ARG:NH2	1:BE:391:ALA:O	2.49	0.46
1:AL:436:SER:O	1:AM:487:LEU:HD21	2.15	0.46
1:AB:232:THR:HB	1:AB:334:VAL:HG23	1.97	0.46
1:AD:162:PHE:CD2	1:AD:163:LEU:HD13	2.50	0.46
1:AG:264:GLU:O	1:AG:267:LYS:CB	2.64	0.46
1:CJ:250:TRP:CE3	1:CJ:272:TYR:CD1	3.03	0.46
1:AR:189:PHE:HD2	1:AR:247:ILE:HD11	1.79	0.46
1:AD:55:ARG:CZ	1:AN:272:TYR:CE2	2.99	0.46
1:BH:189:PHE:CE1	1:BH:198:ARG:HG2	2.48	0.46
1:AB:189:PHE:CE2	1:AB:249:LEU:HD21	2.46	0.46
1:BH:272:TYR:CD1	1:BH:272:TYR:N	2.83	0.46
1:AQ:189:PHE:CE2	1:AQ:249:LEU:HD21	2.49	0.46
1:AC:189:PHE:HE2	1:AC:249:LEU:CD2	2.28	0.46
1:AP:444:LEU:HD13	1:AT:440:ALA:CB	2.45	0.46
1:AM:239:ILE:HD12	1:AM:275:GLU:HA	1.97	0.46
1:BA:371:ASP:OD1	1:BA:381:MET:HG2	2.16	0.46
1:CP:58:ALA:HB2	1:CP:102:GLY:HA3	1.98	0.46
1:BR:226:VAL:HG13	1:BR:228:GLY:H	1.80	0.46
1:BH:442:GLN:HE21	1:BI:412:PHE:HB2	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CL:404:LEU:HD23	1:CL:404:LEU:N	2.31	0.46
1:AR:423:LYS:HE2	1:AR:449:GLU:O	2.15	0.46
1:CB:170:PHE:HD1	1:CB:389:MET:CE	2.28	0.46
1:BL:14:CYS:H	1:BL:138:ASN:HD21	1.62	0.46
1:CR:442:GLN:HE21	1:CS:412:PHE:HB2	1.78	0.46
1:CD:79:ARG:NH1	1:CD:79:ARG:CG	2.71	0.46
1:AC:272:TYR:CE2	1:BA:55:ARG:HD3	2.50	0.46
1:AG:189:PHE:CE1	1:AG:198:ARG:HG2	2.50	0.46
1:AJ:454:ASN:HD21	1:AJ:456:ALA:HB3	1.81	0.46
1:AJ:284:ARG:CG	1:AJ:284:ARG:NH1	2.75	0.46
1:BL:239:ILE:HD12	1:BL:275:GLU:HA	1.98	0.46
1:BG:18:ARG:HG2	1:BG:20:LEU:HD23	1.98	0.46
1:AG:162:PHE:CD1	1:AH:287:TYR:HA	2.50	0.46
1:BR:232:THR:HB	1:BR:334:VAL:CG2	2.45	0.46
1:CB:239:ILE:HG12	1:CB:326:ILE:CD1	2.46	0.46
1:BK:171:ASP:HA	1:BK:172:PRO:HD3	1.81	0.46
1:AJ:58:ALA:HB2	1:AJ:102:GLY:HA3	1.97	0.46
1:AL:239:ILE:HD12	1:AL:275:GLU:HA	1.98	0.46
1:CT:18:ARG:HG3	1:CT:19:TYR:N	2.30	0.46
1:BC:263:ASN:O	1:BC:267:LYS:HG3	2.16	0.46
1:AH:239:ILE:HD12	1:AH:275:GLU:HA	1.98	0.46
1:AN:237:VAL:HG23	1:AN:279:PHE:CD2	2.51	0.46
1:CF:234:ARG:HG2	1:CF:280:GLU:HG2	1.98	0.46
1:CF:237:VAL:HG23	1:CF:279:PHE:CD2	2.50	0.46
1:CB:203:THR:HB	1:CB:300:GLN:HG3	1.97	0.46
1:CO:25:ILE:HG23	1:CO:152:LEU:HD11	1.97	0.46
1:BF:442:GLN:HE21	1:BG:412:PHE:HB2	1.80	0.46
1:AD:226:VAL:HG13	1:AD:228:GLY:H	1.80	0.46
1:BG:43:ALA:HB1	1:BG:158:GLU:HA	1.97	0.46
1:AC:43:ALA:HB1	1:AC:158:GLU:HA	1.98	0.46
1:CI:10:ILE:HG21	1:CI:146:TRP:CZ2	2.50	0.46
1:AM:232:THR:HB	1:AM:334:VAL:CG2	2.45	0.46
1:CO:170:PHE:HD1	1:CO:389:MET:CE	2.29	0.46
1:AG:79:ARG:NH1	1:AG:79:ARG:CG	2.72	0.46
1:CS:454:ASN:HD21	1:CS:456:ALA:HB3	1.81	0.46
1:CK:272:TYR:CD1	1:CK:272:TYR:N	2.84	0.46
1:CD:454:ASN:HD21	1:CD:456:ALA:HB3	1.79	0.46
1:BM:189:PHE:HD2	1:BM:247:ILE:HD11	1.80	0.46
1:CP:189:PHE:HE2	1:CP:249:LEU:HD21	1.80	0.46
1:BP:14:CYS:H	1:BP:138:ASN:ND2	2.11	0.46
1:AJ:203:THR:HB	1:AJ:300:GLN:CG	2.45	0.46
1:CG:379:VAL:HG11	1:CG:381:MET:HE1	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CH:379:VAL:HG11	1:CH:381:MET:HE1	1.97	0.46
1:BA:393:HIS:CG	1:BA:496:PHE:HB3	2.50	0.46
1:AM:379:VAL:HG11	1:AM:381:MET:HE1	1.97	0.46
1:BD:404:LEU:HD22	1:BD:486:VAL:HG22	1.96	0.46
1:AS:237:VAL:HG23	1:AS:279:PHE:CD2	2.50	0.46
1:CL:234:ARG:HG2	1:CL:280:GLU:HG2	1.97	0.46
1:BO:379:VAL:HG11	1:BO:381:MET:HE1	1.98	0.46
1:BF:393:HIS:CG	1:BF:496:PHE:HB3	2.50	0.46
1:CA:162:PHE:CD2	1:CA:163:LEU:HD13	2.51	0.46
1:AJ:272:TYR:HD2	1:AQ:55:ARG:HD3	1.78	0.46
1:AP:272:TYR:CD2	1:BE:55:ARG:CZ	2.98	0.46
1:BB:189:PHE:CE2	1:BB:249:LEU:HD21	2.43	0.46
1:BR:191:LEU:N	1:BR:191:LEU:CD2	2.77	0.46
1:BF:272:TYR:HE2	1:CK:55:ARG:NE	2.10	0.46
1:CJ:454:ASN:HD21	1:CJ:456:ALA:HB3	1.80	0.46
1:AT:454:ASN:HD21	1:AT:456:ALA:HB3	1.80	0.46
1:BR:30:SER:O	1:BR:33:LYS:HB2	2.15	0.46
1:BM:30:SER:O	1:BM:33:LYS:HB2	2.15	0.46
1:BQ:239:ILE:HD12	1:BQ:275:GLU:HA	1.97	0.46
1:BL:232:THR:HB	1:BL:334:VAL:HG23	1.97	0.46
1:CE:75:ARG:NH2	1:CE:391:ALA:O	2.48	0.46
1:BT:423:LYS:HE2	1:BT:449:GLU:O	2.16	0.46
1:BT:43:ALA:HB1	1:BT:158:GLU:HA	1.97	0.46
1:AG:234:ARG:HG2	1:AG:280:GLU:HG2	1.98	0.46
1:CM:162:PHE:CD2	1:CM:163:LEU:HD13	2.50	0.46
1:CE:61:PHE:CD2	1:CE:243:ILE:HD11	2.50	0.46
1:CP:14:CYS:H	1:CP:138:ASN:HD21	1.62	0.46
1:BT:393:HIS:CG	1:BT:496:PHE:HB3	2.51	0.46
1:AH:442:GLN:HE21	1:AI:412:PHE:HB2	1.81	0.46
1:CE:170:PHE:HD1	1:CE:389:MET:CE	2.29	0.46
1:BI:252:VAL:HG22	1:BI:253:SER:N	2.30	0.46
1:BF:58:ALA:HB2	1:BF:102:GLY:HA3	1.97	0.46
1:CG:442:GLN:HE21	1:CH:412:PHE:HB2	1.81	0.46
1:AG:393:HIS:CG	1:AG:496:PHE:HB3	2.51	0.46
1:BR:263:ASN:O	1:BR:267:LYS:HG3	2.14	0.46
1:AR:234:ARG:HG2	1:AR:280:GLU:HG2	1.98	0.46
1:BS:16:ALA:O	1:BS:17:ASN:HB2	2.16	0.46
1:AL:162:PHE:CD2	1:AL:163:LEU:HD13	2.51	0.46
1:CN:207:VAL:HA	1:CN:208:PRO:HD3	1.80	0.46
1:AC:263:ASN:HD22	1:BA:5:ARG:HD3	1.80	0.46
1:CF:191:LEU:N	1:CF:191:LEU:CD2	2.75	0.46
1:AH:189:PHE:HD2	1:AH:247:ILE:HD11	1.79	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BM:272:TYR:N	1:BM:272:TYR:CD1	2.82	0.46
1:BM:454:ASN:HD21	1:BM:456:ALA:HB3	1.80	0.46
1:BA:284:ARG:NH1	1:BA:284:ARG:CG	2.68	0.46
1:CK:189:PHE:HD2	1:CK:247:ILE:HD11	1.80	0.46
1:CQ:393:HIS:CG	1:CQ:496:PHE:HB3	2.51	0.46
1:CE:263:ASN:O	1:CE:267:LYS:HG3	2.16	0.46
1:CI:61:PHE:CE2	1:CI:243:ILE:HD11	2.50	0.46
1:AE:239:ILE:HD12	1:AE:275:GLU:HA	1.98	0.46
1:AT:239:ILE:HD12	1:AT:275:GLU:HA	1.98	0.46
1:CP:393:HIS:CG	1:CP:496:PHE:HB3	2.51	0.46
1:BN:182:LEU:HG	1:BN:330:ILE:HB	1.97	0.46
1:AD:237:VAL:HG23	1:AD:279:PHE:CD2	2.50	0.46
1:AS:404:LEU:HD22	1:AS:486:VAL:HG22	1.98	0.46
1:AG:170:PHE:HD1	1:AG:389:MET:CE	2.29	0.46
1:AF:324:LEU:C	1:AF:324:LEU:HD23	2.36	0.46
1:BE:379:VAL:HG11	1:BE:381:MET:HE1	1.98	0.46
1:AA:162:PHE:CD2	1:AA:163:LEU:HD13	2.51	0.46
1:AR:237:VAL:HG23	1:AR:279:PHE:CD2	2.50	0.46
1:AJ:43:ALA:HB1	1:AJ:158:GLU:HA	1.98	0.46
1:CC:250:TRP:HE3	1:CC:272:TYR:CD1	2.33	0.46
1:BO:250:TRP:CZ3	1:BO:272:TYR:CD1	3.04	0.46
1:BK:191:LEU:CD2	1:BK:191:LEU:N	2.76	0.46
1:AM:454:ASN:HD21	1:AM:456:ALA:HB3	1.80	0.46
1:CI:189:PHE:CE2	1:CI:249:LEU:HD21	2.41	0.46
1:AF:189:PHE:HD2	1:AF:247:ILE:HD11	1.80	0.46
1:BD:189:PHE:CE2	1:BD:249:LEU:HD21	2.50	0.46
1:CD:30:SER:O	1:CD:33:LYS:HB2	2.15	0.46
1:AG:270:GLY:O	1:AG:271:VAL:HG13	2.16	0.46
1:BD:170:PHE:HD1	1:BD:389:MET:HE2	1.81	0.46
1:AM:232:THR:HB	1:AM:334:VAL:HG23	1.98	0.46
1:AK:234:ARG:HG2	1:AK:280:GLU:HG2	1.98	0.46
1:BM:252:VAL:HG22	1:BM:253:SER:N	2.31	0.46
1:AH:234:ARG:HG2	1:AH:280:GLU:HG2	1.98	0.46
1:CK:234:ARG:HG2	1:CK:280:GLU:HG2	1.96	0.46
1:AS:14:CYS:H	1:AS:138:ASN:HD21	1.64	0.46
1:BH:16:ALA:O	1:BH:17:ASN:HB2	2.15	0.46
1:AC:237:VAL:HG23	1:AC:279:PHE:CD2	2.50	0.46
1:AP:61:PHE:CD2	1:AP:243:ILE:HD11	2.51	0.46
1:BD:226:VAL:HG13	1:BD:228:GLY:H	1.80	0.46
1:AH:191:LEU:CD2	1:AH:191:LEU:N	2.77	0.46
1:CG:272:TYR:HD1	1:CG:272:TYR:N	2.13	0.46
1:CC:55:ARG:CZ	1:CT:272:TYR:CD2	2.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CT:272:TYR:N	1:CT:272:TYR:HD1	2.14	0.46
1:AE:272:TYR:N	1:AE:272:TYR:CD1	2.84	0.46
1:BE:272:TYR:CD1	1:BE:272:TYR:N	2.84	0.46
1:AA:189:PHE:HD2	1:AA:247:ILE:HD11	1.81	0.46
1:CG:454:ASN:ND2	1:CG:456:ALA:H	2.08	0.46
1:CK:30:SER:O	1:CK:33:LYS:HB2	2.15	0.46
1:AQ:454:ASN:ND2	1:AQ:456:ALA:H	2.10	0.46
1:AL:14:CYS:HB3	1:AL:64:LEU:HD21	1.98	0.46
1:BN:30:SER:O	1:BN:33:LYS:HB2	2.15	0.46
1:CL:79:ARG:HH11	1:CL:79:ARG:CG	2.27	0.46
1:AP:189:PHE:CE1	1:AP:198:ARG:CG	2.99	0.46
1:CJ:239:ILE:HD12	1:CJ:275:GLU:HA	1.98	0.46
1:BI:5:ARG:HD3	1:BR:263:ASN:HD22	1.81	0.46
1:AG:170:PHE:HD1	1:AG:389:MET:HE2	1.81	0.46
1:CM:226:VAL:HG13	1:CM:228:GLY:H	1.80	0.46
1:AN:162:PHE:CD2	1:AN:163:LEU:HD13	2.51	0.46
1:AA:393:HIS:CG	1:AA:496:PHE:HB3	2.51	0.46
1:CI:373:THR:HG22	1:CI:374:SER:N	2.29	0.46
1:AK:203:THR:HB	1:AK:300:GLN:HG3	1.97	0.46
1:BG:232:THR:HB	1:BG:334:VAL:CG2	2.45	0.46
1:BO:11:PRO:HG2	1:BO:18:ARG:CD	2.46	0.46
1:CR:393:HIS:CG	1:CR:496:PHE:HB3	2.51	0.46
1:BA:234:ARG:HG2	1:BA:280:GLU:HG2	1.97	0.46
1:AR:170:PHE:HD1	1:AR:389:MET:CE	2.29	0.46
1:AO:393:HIS:CG	1:AO:496:PHE:HB3	2.51	0.46
1:AM:14:CYS:H	1:AM:138:ASN:HD21	1.64	0.46
1:AS:171:ASP:HA	1:AS:172:PRO:HD3	1.77	0.46
1:CR:182:LEU:HG	1:CR:330:ILE:HB	1.97	0.46
1:BN:255:TRP:CE3	1:BN:285:SER:HB2	2.51	0.46
1:CN:379:VAL:HG11	1:CN:381:MET:HE1	1.97	0.46
1:BL:237:VAL:HG23	1:BL:279:PHE:CD2	2.50	0.46
1:AT:171:ASP:HA	1:AT:172:PRO:HD3	1.76	0.46
1:AT:263:ASN:O	1:AT:267:LYS:HG3	2.15	0.46
1:AI:18:ARG:NH1	1:AI:18:ARG:HB2	2.31	0.46
1:BL:25:ILE:HG23	1:BL:152:LEU:HD11	1.98	0.46
1:BT:18:ARG:HG3	1:BT:19:TYR:N	2.31	0.46
1:AL:25:ILE:HG23	1:AL:152:LEU:HD11	1.97	0.46
1:AG:263:ASN:ND2	1:BG:32:PHE:CG	2.83	0.46
1:BJ:250:TRP:CZ3	1:BJ:272:TYR:CD1	3.04	0.46
1:CR:191:LEU:N	1:CR:191:LEU:CD2	2.76	0.46
1:AE:189:PHE:HD2	1:AE:247:ILE:CD1	2.28	0.46
1:AN:189:PHE:CE1	1:AN:198:ARG:HG2	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BH:189:PHE:HE1	1:BH:198:ARG:HG2	1.77	0.46
1:BG:189:PHE:CE1	1:BG:198:ARG:HG2	2.51	0.46
1:CI:272:TYR:HD1	1:CI:272:TYR:N	2.14	0.46
1:AQ:30:SER:O	1:AQ:33:LYS:HB2	2.15	0.46
1:BH:239:ILE:HD12	1:BH:275:GLU:HA	1.96	0.46
1:AH:239:ILE:HG12	1:AH:326:ILE:CD1	2.46	0.46
1:BG:393:HIS:CG	1:BG:496:PHE:HB3	2.51	0.46
1:AK:379:VAL:HG11	1:AK:381:MET:HE1	1.96	0.46
1:CK:162:PHE:CD2	1:CK:163:LEU:HD13	2.50	0.46
1:CK:171:ASP:HA	1:CK:172:PRO:HD3	1.79	0.46
1:CC:252:VAL:HG22	1:CC:253:SER:N	2.31	0.46
1:CN:232:THR:HB	1:CN:334:VAL:CG2	2.46	0.46
1:AC:393:HIS:CG	1:AC:496:PHE:HB3	2.51	0.46
1:BG:25:ILE:HG23	1:BG:152:LEU:HD11	1.96	0.46
1:AI:171:ASP:HA	1:AI:172:PRO:HD3	1.77	0.46
1:AL:437:HIS:CE1	1:AM:405:GLN:NE2	2.84	0.46
1:CR:162:PHE:CD2	1:CR:163:LEU:HD13	2.51	0.46
1:BJ:263:ASN:O	1:BJ:267:LYS:HG3	2.16	0.46
1:AP:272:TYR:N	1:AP:272:TYR:HD1	2.15	0.45
1:AT:272:TYR:N	1:AT:272:TYR:CD1	2.83	0.45
1:CF:272:TYR:N	1:CF:272:TYR:CD1	2.85	0.45
1:AF:454:ASN:HD21	1:AF:456:ALA:HB3	1.80	0.45
1:BG:272:TYR:N	1:BG:272:TYR:HD1	2.14	0.45
1:BI:189:PHE:HD2	1:BI:247:ILE:CD1	2.29	0.45
1:BM:272:TYR:HD1	1:BM:272:TYR:N	2.14	0.45
1:BK:189:PHE:CE2	1:BK:249:LEU:HD21	2.51	0.45
1:AD:189:PHE:CE2	1:AD:249:LEU:HD21	2.51	0.45
1:BG:79:ARG:HG3	1:BG:79:ARG:NH1	2.30	0.45
1:AQ:284:ARG:CG	1:AQ:284:ARG:NH1	2.74	0.45
1:CJ:263:ASN:O	1:CJ:267:LYS:HG3	2.16	0.45
1:AN:239:ILE:HD12	1:AN:275:GLU:HA	1.97	0.45
1:CF:393:HIS:CG	1:CF:496:PHE:HB3	2.52	0.45
1:CA:444:LEU:HD13	1:CE:440:ALA:CB	2.46	0.45
1:CF:404:LEU:HD22	1:CF:486:VAL:HG22	1.98	0.45
1:AT:395:LEU:HB2	1:AT:497:TYR:HB2	1.98	0.45
1:AH:418:SER:HB3	1:AI:407:SER:HB3	1.98	0.45
1:CL:162:PHE:CD2	1:CL:163:LEU:HD13	2.51	0.45
1:BE:25:ILE:HG23	1:BE:152:LEU:HD11	1.98	0.45
1:BN:28:MET:HE2	1:BN:152:LEU:HG	1.97	0.45
1:BO:162:PHE:CD2	1:BO:163:LEU:HD13	2.51	0.45
1:AT:404:LEU:HD22	1:AT:486:VAL:HG22	1.97	0.45
1:BB:393:HIS:CG	1:BB:496:PHE:HB3	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AT:226:VAL:HG13	1:AT:228:GLY:H	1.81	0.45
1:AB:269:PRO:HG2	1:AB:269:PRO:O	2.16	0.45
1:CB:318:SER:HA	1:CB:319:GLY:HA2	1.76	0.45
1:CK:226:VAL:HG13	1:CK:228:GLY:H	1.81	0.45
1:AA:237:VAL:HG23	1:AA:279:PHE:CD2	2.51	0.45
1:AK:272:TYR:HD1	1:AK:272:TYR:N	2.13	0.45
1:BP:272:TYR:CD2	1:CE:55:ARG:NH1	2.84	0.45
1:AI:144:ALA:CB	1:AR:191:LEU:O	2.64	0.45
1:AN:189:PHE:HD2	1:AN:247:ILE:HD11	1.80	0.45
1:BR:189:PHE:CE2	1:BR:249:LEU:HD21	2.48	0.45
1:BO:454:ASN:HD21	1:BO:456:ALA:HB3	1.80	0.45
1:AS:30:SER:O	1:AS:33:LYS:HB2	2.16	0.45
1:BS:30:SER:O	1:BS:33:LYS:HB2	2.16	0.45
1:AC:189:PHE:HD2	1:AC:247:ILE:HD11	1.80	0.45
1:AA:239:ILE:HD12	1:AA:275:GLU:HA	1.97	0.45
1:CA:170:PHE:HD1	1:CA:389:MET:HE2	1.80	0.45
1:BF:440:ALA:HB3	1:BG:444:LEU:HD13	1.98	0.45
1:CN:232:THR:HB	1:CN:334:VAL:HG23	1.99	0.45
1:BB:423:LYS:HE2	1:BB:449:GLU:O	2.16	0.45
1:BH:393:HIS:CG	1:BH:496:PHE:HB3	2.51	0.45
1:CH:201:GLY:HA3	1:CH:300:GLN:HG2	1.98	0.45
1:CC:170:PHE:HD1	1:CC:389:MET:CE	2.30	0.45
1:CS:58:ALA:HB2	1:CS:102:GLY:HA3	1.97	0.45
1:AG:442:GLN:HE21	1:AH:412:PHE:HB2	1.81	0.45
1:CA:393:HIS:CG	1:CA:496:PHE:HB3	2.52	0.45
1:AK:263:ASN:O	1:AK:267:LYS:HG3	2.15	0.45
1:CJ:234:ARG:HG2	1:CJ:280:GLU:HG2	1.98	0.45
1:CA:232:THR:HB	1:CA:334:VAL:CG2	2.46	0.45
1:AI:16:ALA:O	1:AI:17:ASN:HB2	2.17	0.45
1:BP:73:TYR:CZ	1:BP:394:GLY:HA3	2.51	0.45
1:CR:263:ASN:O	1:CR:267:LYS:HG3	2.16	0.45
1:BQ:170:PHE:HD1	1:BQ:389:MET:CE	2.30	0.45
1:AG:263:ASN:ND2	1:BG:32:PHE:N	2.51	0.45
1:AO:250:TRP:CE3	1:AO:272:TYR:CD1	3.04	0.45
1:AG:144:ALA:HB3	1:CG:191:LEU:O	2.17	0.45
1:BP:79:ARG:NH1	1:BP:79:ARG:CG	2.60	0.45
1:BP:454:ASN:HD21	1:BP:456:ALA:HB3	1.81	0.45
1:CT:30:SER:O	1:CT:33:LYS:HB2	2.16	0.45
1:BI:239:ILE:HD12	1:BI:275:GLU:HA	1.98	0.45
1:CF:162:PHE:CD1	1:CG:287:TYR:HA	2.51	0.45
1:AD:170:PHE:HD1	1:AD:389:MET:HE2	1.81	0.45
1:BL:162:PHE:CD2	1:BL:163:LEU:HD13	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CI:170:PHE:HD1	1:CI:389:MET:CE	2.29	0.45
1:CO:226:VAL:HG13	1:CO:228:GLY:H	1.81	0.45
1:BS:75:ARG:NH2	1:BS:391:ALA:O	2.49	0.45
1:CO:234:ARG:HG2	1:CO:280:GLU:HG2	1.97	0.45
1:BL:58:ALA:HB2	1:BL:102:GLY:HA3	1.98	0.45
1:CG:232:THR:HB	1:CG:334:VAL:HG23	1.97	0.45
1:BE:237:VAL:HG23	1:BE:279:PHE:CD2	2.52	0.45
1:AL:203:THR:HB	1:AL:300:GLN:HG3	1.98	0.45
1:AT:318:SER:HA	1:AT:319:GLY:HA2	1.78	0.45
1:AP:18:ARG:HH11	1:AP:18:ARG:CG	2.29	0.45
1:AP:18:ARG:HG3	1:AP:18:ARG:HH11	1.81	0.45
1:BH:25:ILE:HG23	1:BH:152:LEU:HD11	1.98	0.45
1:BT:237:VAL:HG23	1:BT:279:PHE:CD2	2.51	0.45
1:AS:170:PHE:HD1	1:AS:389:MET:CE	2.28	0.45
1:BM:379:VAL:HG11	1:BM:381:MET:HE1	1.98	0.45
1:AG:201:GLY:HA3	1:AG:300:GLN:HG2	1.99	0.45
1:BL:454:ASN:HD21	1:BL:456:ALA:HB3	1.80	0.45
1:BC:454:ASN:HD21	1:BC:456:ALA:HB3	1.82	0.45
1:CI:454:ASN:HD21	1:CI:456:ALA:HB3	1.81	0.45
1:AC:189:PHE:HE1	1:AC:198:ARG:CG	2.27	0.45
1:CQ:189:PHE:HD2	1:CQ:247:ILE:HD11	1.81	0.45
1:BT:170:PHE:HD1	1:BT:389:MET:HE2	1.81	0.45
1:BN:14:CYS:HB3	1:BN:64:LEU:HD21	1.97	0.45
1:CD:440:ALA:CB	1:CE:444:LEU:HD13	2.46	0.45
1:BG:239:ILE:HD12	1:BG:275:GLU:HA	1.99	0.45
1:AI:18:ARG:HG3	1:AI:19:TYR:O	2.16	0.45
1:CC:234:ARG:HG2	1:CC:280:GLU:HG2	1.99	0.45
1:AM:171:ASP:HA	1:AM:172:PRO:HD3	1.79	0.45
1:AF:232:THR:HB	1:AF:334:VAL:CG2	2.46	0.45
1:AK:239:ILE:HG12	1:AK:326:ILE:CD1	2.46	0.45
1:CA:379:VAL:HG11	1:CA:381:MET:HE1	1.98	0.45
1:BO:252:VAL:HG22	1:BO:253:SER:N	2.31	0.45
1:BD:393:HIS:CG	1:BD:496:PHE:HB3	2.52	0.45
1:AK:226:VAL:HG13	1:AK:228:GLY:H	1.81	0.45
1:BO:234:ARG:HG2	1:BO:280:GLU:HG2	1.97	0.45
1:AT:232:THR:HB	1:AT:334:VAL:HG23	1.98	0.45
1:BI:16:ALA:O	1:BI:17:ASN:HB2	2.16	0.45
1:CS:324:LEU:HD23	1:CS:324:LEU:C	2.36	0.45
1:CT:226:VAL:HG13	1:CT:228:GLY:H	1.81	0.45
1:CH:232:THR:HB	1:CH:334:VAL:HG23	1.99	0.45
1:CI:354:SER:O	1:CI:378:ARG:HB3	2.16	0.45
1:CQ:272:TYR:N	1:CQ:272:TYR:HD1	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CN:189:PHE:CE1	1:CN:198:ARG:HG2	2.51	0.45
1:CJ:189:PHE:HE1	1:CJ:198:ARG:HG2	1.79	0.45
1:BC:55:ARG:HD3	1:BT:272:TYR:CD2	2.52	0.45
1:BC:55:ARG:HD3	1:BT:272:TYR:CE2	2.51	0.45
1:AN:272:TYR:HD1	1:AN:272:TYR:N	2.14	0.45
1:BR:189:PHE:HD2	1:BR:247:ILE:HD11	1.81	0.45
1:AA:189:PHE:CE2	1:AA:249:LEU:HD21	2.51	0.45
1:CT:14:CYS:HB3	1:CT:64:LEU:HD21	1.97	0.45
1:CH:30:SER:O	1:CH:33:LYS:HB2	2.16	0.45
1:BD:14:CYS:H	1:BD:138:ASN:ND2	2.14	0.45
1:BQ:232:THR:HB	1:BQ:334:VAL:CG2	2.46	0.45
1:CA:232:THR:HB	1:CA:334:VAL:HG23	1.99	0.45
1:CS:263:ASN:O	1:CS:267:LYS:HG3	2.16	0.45
1:CN:239:ILE:HD12	1:CN:275:GLU:HA	1.97	0.45
1:CM:234:ARG:HG2	1:CM:280:GLU:HG2	1.98	0.45
1:AC:379:VAL:HG11	1:AC:381:MET:HE1	1.98	0.45
1:BG:234:ARG:HG2	1:BG:280:GLU:HG2	1.99	0.45
1:BH:404:LEU:HD22	1:BH:486:VAL:HG22	1.99	0.45
1:AC:73:TYR:O	1:AC:75:ARG:HG2	2.16	0.45
1:AJ:226:VAL:HG13	1:AJ:228:GLY:H	1.82	0.45
1:BP:442:GLN:HE21	1:BQ:412:PHE:HB2	1.82	0.45
1:AJ:234:ARG:HG2	1:AJ:280:GLU:HG2	1.98	0.45
1:CF:263:ASN:O	1:CF:267:LYS:HG3	2.16	0.45
1:BD:237:VAL:HG23	1:BD:279:PHE:CD2	2.51	0.45
1:AQ:207:VAL:HA	1:AQ:208:PRO:HD3	1.84	0.45
1:CI:361:GLU:OE1	1:CI:376:THR:HG23	2.17	0.45
1:AT:272:TYR:N	1:AT:272:TYR:HD1	2.14	0.45
1:AJ:189:PHE:HD2	1:AJ:247:ILE:HD11	1.82	0.45
1:AC:272:TYR:CD1	1:AC:272:TYR:N	2.85	0.45
1:AB:74:ASN:ND2	1:AB:77:THR:OG1	2.50	0.45
1:CL:22:THR:OG1	1:CL:131:HIS:CD2	2.63	0.45
1:AS:189:PHE:CE2	1:AS:249:LEU:HD21	2.51	0.45
1:AE:30:SER:O	1:AE:33:LYS:HB2	2.16	0.45
1:CQ:30:SER:O	1:CQ:33:LYS:HB2	2.16	0.45
1:CE:79:ARG:HH11	1:CE:79:ARG:CG	2.28	0.45
1:AR:393:HIS:CG	1:AR:496:PHE:HB3	2.52	0.45
1:AT:234:ARG:HG2	1:AT:280:GLU:HG2	1.97	0.45
1:CJ:20:LEU:HB2	1:CJ:132:PHE:O	2.16	0.45
1:CB:371:ASP:OD1	1:CB:381:MET:HG2	2.16	0.45
1:CJ:207:VAL:HA	1:CJ:208:PRO:HD3	1.83	0.45
1:CP:18:ARG:HG3	1:CP:18:ARG:HH11	1.82	0.45
1:BJ:237:VAL:HG23	1:BJ:279:PHE:CD2	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CK:393:HIS:CG	1:CK:496:PHE:HB3	2.52	0.45
1:BN:393:HIS:CG	1:BN:496:PHE:HB3	2.51	0.45
1:CG:263:ASN:O	1:CG:267:LYS:HG3	2.15	0.45
1:AF:75:ARG:NH2	1:AF:391:ALA:O	2.49	0.45
1:AC:18:ARG:HG2	1:AC:20:LEU:HD23	1.98	0.45
1:CH:237:VAL:HG23	1:CH:279:PHE:CD2	2.51	0.45
1:BE:226:VAL:HG13	1:BE:228:GLY:H	1.81	0.45
1:CI:189:PHE:HD2	1:CI:247:ILE:HD11	1.81	0.45
1:BL:272:TYR:N	1:BL:272:TYR:CD1	2.85	0.45
1:AM:272:TYR:N	1:AM:272:TYR:CD1	2.85	0.45
1:BQ:272:TYR:CD1	1:BQ:272:TYR:N	2.84	0.45
1:BP:189:PHE:CE2	1:BP:249:LEU:HD21	2.52	0.45
1:BC:189:PHE:HE1	1:BC:198:ARG:CG	2.26	0.45
1:BP:74:ASN:ND2	1:BP:77:THR:OG1	2.50	0.45
1:AP:412:PHE:HB2	1:AT:442:GLN:NE2	2.31	0.45
1:AI:393:HIS:CG	1:AI:496:PHE:HB3	2.52	0.45
1:CB:170:PHE:HD1	1:CB:389:MET:HE2	1.82	0.45
1:CP:379:VAL:HG11	1:CP:381:MET:HE1	1.99	0.45
1:AB:379:VAL:HG11	1:AB:381:MET:HE1	1.99	0.45
1:BL:252:VAL:HG22	1:BL:253:SER:N	2.31	0.45
1:CQ:58:ALA:HB2	1:CQ:102:GLY:HA3	1.98	0.45
1:CI:43:ALA:HB1	1:CI:158:GLU:HA	1.97	0.45
1:AM:440:ALA:CB	1:AN:444:LEU:HD13	2.47	0.45
1:AG:371:ASP:OD1	1:AG:381:MET:HG2	2.17	0.45
1:AH:232:THR:HB	1:AH:334:VAL:HG23	1.99	0.45
1:CL:237:VAL:HG23	1:CL:279:PHE:CD2	2.52	0.45
1:BQ:237:VAL:HG23	1:BQ:279:PHE:CD2	2.52	0.45
1:AQ:252:VAL:HG22	1:AQ:253:SER:N	2.32	0.45
1:AR:61:PHE:CD2	1:AR:243:ILE:HD11	2.52	0.45
1:AD:203:THR:HB	1:AD:300:GLN:HG3	1.99	0.45
1:AJ:162:PHE:CD2	1:AJ:163:LEU:HD13	2.52	0.45
1:CQ:25:ILE:HG23	1:CQ:152:LEU:HD11	1.98	0.45
1:CE:197:LEU:HD13	1:CE:309:TYR:CZ	2.51	0.45
1:BE:393:HIS:CG	1:BE:496:PHE:HB3	2.51	0.45
1:BM:75:ARG:NH2	1:BM:391:ALA:O	2.50	0.45
1:AS:182:LEU:C	1:AS:182:LEU:HD12	2.37	0.45
1:BT:25:ILE:HG23	1:BT:152:LEU:HD11	1.99	0.45
1:CP:237:VAL:HG23	1:CP:279:PHE:CD2	2.51	0.45
1:CH:263:ASN:O	1:CH:267:LYS:HG3	2.17	0.45
1:CS:162:PHE:CD2	1:CS:163:LEU:HD13	2.51	0.45
1:BR:272:TYR:N	1:BR:272:TYR:CD1	2.85	0.45
1:AP:272:TYR:CD1	1:AP:272:TYR:N	2.85	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CG:189:PHE:CE2	1:CG:249:LEU:HD21	2.44	0.45
1:AI:189:PHE:CE1	1:AI:198:ARG:HG2	2.51	0.45
1:CJ:189:PHE:CE1	1:CJ:198:ARG:HG2	2.52	0.45
1:BG:189:PHE:HD2	1:BG:247:ILE:HD11	1.82	0.45
1:AQ:74:ASN:ND2	1:AQ:77:THR:OG1	2.49	0.45
1:AK:418:SER:HB3	1:AL:407:SER:CB	2.47	0.45
1:CH:371:ASP:OD1	1:CH:381:MET:HG2	2.16	0.45
1:AH:232:THR:HB	1:AH:334:VAL:CG2	2.47	0.45
1:AG:404:LEU:HD22	1:AG:486:VAL:HG22	1.98	0.45
1:BC:162:PHE:CD2	1:BC:163:LEU:HD13	2.52	0.45
1:AF:379:VAL:HG11	1:AF:381:MET:HE1	1.99	0.45
1:CC:232:THR:HB	1:CC:334:VAL:HG23	1.99	0.45
1:BN:232:THR:HB	1:BN:334:VAL:CG2	2.47	0.45
1:AB:393:HIS:CG	1:AB:496:PHE:HB3	2.51	0.45
1:AF:171:ASP:HA	1:AF:172:PRO:HD3	1.79	0.45
1:CP:67:VAL:HG23	1:CP:135:LEU:HB2	1.98	0.45
1:CH:226:VAL:HG13	1:CH:228:GLY:H	1.82	0.45
1:BO:263:ASN:O	1:BO:267:LYS:HG3	2.17	0.45
1:BA:237:VAL:HG23	1:BA:279:PHE:CD2	2.51	0.45
1:AE:207:VAL:HA	1:AE:208:PRO:HD3	1.82	0.45
1:AA:79:ARG:HH11	1:AA:79:ARG:HG3	1.82	0.45
1:AL:234:ARG:HG2	1:AL:280:GLU:HG2	1.99	0.45
1:BD:58:ALA:HB2	1:BD:102:GLY:HA3	1.99	0.45
1:BF:404:LEU:HD22	1:BF:486:VAL:HG22	1.97	0.45
1:CM:77:THR:O	1:CM:81:THR:HG23	2.16	0.45
1:AM:43:ALA:HB1	1:AM:158:GLU:HA	1.99	0.45
1:AJ:25:ILE:HG23	1:AJ:152:LEU:HD11	1.99	0.45
1:AP:203:THR:HB	1:AP:300:GLN:HG3	1.97	0.45
1:BM:234:ARG:HG2	1:BM:280:GLU:HG2	1.97	0.45
1:BN:318:SER:HA	1:BN:319:GLY:HA2	1.80	0.45
1:AN:430:MET:HE1	1:AO:296:ALA:HA	1.98	0.45
1:AS:250:TRP:CZ3	1:AS:272:TYR:CD1	3.05	0.45
1:BE:189:PHE:HD2	1:BE:247:ILE:CD1	2.30	0.45
1:CM:189:PHE:CE2	1:CM:249:LEU:HD21	2.45	0.45
1:BR:189:PHE:HD2	1:BR:247:ILE:CD1	2.30	0.45
1:BT:454:ASN:HD21	1:BT:456:ALA:HB3	1.82	0.45
1:CR:77:THR:O	1:CR:81:THR:CG2	2.65	0.45
1:CM:22:THR:OG1	1:CM:131:HIS:CD2	2.63	0.45
1:CI:38:GLU:CB	1:CQ:35:VAL:HG23	2.46	0.45
1:AO:189:PHE:HE2	1:AO:249:LEU:HD21	1.82	0.45
1:CJ:79:ARG:HH11	1:CJ:79:ARG:CG	2.29	0.45
1:AS:25:ILE:HG23	1:AS:152:LEU:HD11	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BC:18:ARG:HG3	1:BC:19:TYR:N	2.31	0.45
1:AJ:393:HIS:CG	1:AJ:496:PHE:HB3	2.51	0.45
1:CB:442:GLN:HE21	1:CC:412:PHE:HB2	1.82	0.45
1:CG:207:VAL:HA	1:CG:208:PRO:HD3	1.82	0.45
1:AE:170:PHE:HD1	1:AE:389:MET:CE	2.29	0.45
1:BB:371:ASP:OD1	1:BB:381:MET:HG2	2.17	0.45
1:BP:237:VAL:HG23	1:BP:279:PHE:CD2	2.51	0.45
1:BH:226:VAL:HG13	1:BH:228:GLY:H	1.82	0.45
1:CF:238:HIS:HE1	1:CF:329:GLN:OE1	2.00	0.45
1:BH:10:ILE:HD13	1:BH:20:LEU:HD13	1.99	0.45
1:AN:170:PHE:HD1	1:AN:389:MET:CE	2.30	0.45
1:CN:440:ALA:CB	1:CO:444:LEU:HD13	2.47	0.45
1:BD:61:PHE:CZ	1:BN:243:ILE:HD13	2.51	0.45
1:CO:252:VAL:HG22	1:CO:253:SER:N	2.32	0.45
1:CR:437:HIS:CE1	1:CS:405:GLN:NE2	2.85	0.45
1:BB:237:VAL:HG23	1:BB:279:PHE:CD2	2.51	0.45
1:AO:207:VAL:HA	1:AO:208:PRO:HD3	1.86	0.45
1:CM:395:LEU:HB2	1:CM:497:TYR:HB2	1.99	0.45
1:CM:300:GLN:HB2	1:CM:300:GLN:HE21	1.54	0.45
1:AO:299:SER:O	1:AO:301:ARG:N	2.50	0.45
1:AA:272:TYR:CD2	1:CT:55:ARG:CD	2.99	0.45
1:CH:74:ASN:ND2	1:CH:77:THR:OG1	2.50	0.45
1:AL:263:ASN:O	1:AL:267:LYS:HG3	2.17	0.45
1:CF:170:PHE:HD1	1:CF:389:MET:HE2	1.82	0.45
1:BK:232:THR:HB	1:BK:334:VAL:CG2	2.46	0.45
1:CA:163:LEU:HD12	1:CA:163:LEU:HA	1.86	0.45
1:AT:239:ILE:HG12	1:AT:326:ILE:CD1	2.47	0.45
1:BM:423:LYS:HE2	1:BM:449:GLU:O	2.17	0.45
1:CS:423:LYS:HE2	1:CS:449:GLU:O	2.17	0.45
1:AE:171:ASP:HA	1:AE:172:PRO:HD3	1.79	0.45
1:BM:263:ASN:O	1:BM:267:LYS:HG3	2.17	0.45
1:AH:182:LEU:HG	1:AH:330:ILE:HB	1.98	0.45
1:CD:16:ALA:O	1:CD:17:ASN:HB2	2.16	0.45
1:AI:237:VAL:HG23	1:AI:279:PHE:CD2	2.52	0.45
1:CE:162:PHE:CD2	1:CE:163:LEU:HD13	2.52	0.45
1:BF:379:VAL:HG12	1:BF:381:MET:HE2	1.99	0.45
1:BJ:232:THR:HB	1:BJ:334:VAL:HG23	1.98	0.45
1:AD:234:ARG:HG2	1:AD:280:GLU:HG2	1.98	0.45
1:BI:170:PHE:HD1	1:BI:389:MET:CE	2.30	0.45
1:BJ:163:LEU:HD12	1:BJ:163:LEU:HA	1.84	0.45
1:CJ:232:THR:HB	1:CJ:334:VAL:HG23	1.99	0.45
1:BD:234:ARG:HG2	1:BD:280:GLU:HG2	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AC:423:LYS:HE2	1:AC:449:GLU:O	2.17	0.45
1:CT:393:HIS:CG	1:CT:496:PHE:HB3	2.51	0.45
1:CD:79:ARG:NH1	1:CD:79:ARG:HG3	2.14	0.44
1:CD:191:LEU:CD2	1:CD:191:LEU:N	2.77	0.44
1:AS:454:ASN:HD21	1:AS:456:ALA:HB3	1.82	0.44
1:BL:74:ASN:ND2	1:BL:77:THR:OG1	2.50	0.44
1:AK:30:SER:O	1:AK:33:LYS:HB2	2.17	0.44
1:CO:239:ILE:HD12	1:CO:275:GLU:HA	2.00	0.44
1:AR:10:ILE:HG21	1:AR:146:TRP:CE2	2.52	0.44
1:BA:239:ILE:HD12	1:BA:275:GLU:HA	1.98	0.44
1:BJ:239:ILE:HD12	1:BJ:275:GLU:HA	2.00	0.44
1:CP:232:THR:HB	1:CP:334:VAL:HG23	1.98	0.44
1:BJ:232:THR:HB	1:BJ:334:VAL:CG2	2.47	0.44
1:CC:25:ILE:HG23	1:CC:152:LEU:HD11	1.99	0.44
1:BQ:203:THR:HB	1:BQ:300:GLN:HG3	1.99	0.44
1:AS:207:VAL:HA	1:AS:208:PRO:HD3	1.83	0.44
1:CT:170:PHE:HD1	1:CT:389:MET:CE	2.30	0.44
1:AH:237:VAL:HG23	1:AH:279:PHE:CD2	2.53	0.44
1:BN:162:PHE:CD2	1:BN:163:LEU:HD13	2.52	0.44
1:AF:170:PHE:HD1	1:AF:389:MET:CE	2.30	0.44
1:AO:234:ARG:HG2	1:AO:280:GLU:HG2	1.99	0.44
1:BE:234:ARG:HG2	1:BE:280:GLU:HG2	1.98	0.44
1:AK:182:LEU:HG	1:AK:330:ILE:HB	1.99	0.44
1:AR:25:ILE:HG23	1:AR:152:LEU:HD11	1.99	0.44
1:BH:423:LYS:HE2	1:BH:449:GLU:O	2.16	0.44
1:AP:393:HIS:CG	1:AP:496:PHE:HB3	2.51	0.44
1:CO:379:VAL:HG11	1:CO:381:MET:HE1	1.98	0.44
1:BP:250:TRP:CZ3	1:BP:272:TYR:CD1	3.05	0.44
1:CA:272:TYR:N	1:CA:272:TYR:CD1	2.85	0.44
1:CB:272:TYR:N	1:CB:272:TYR:CD1	2.85	0.44
1:BN:272:TYR:CD1	1:BN:272:TYR:N	2.86	0.44
1:BO:189:PHE:CE2	1:BO:249:LEU:HD21	2.52	0.44
1:BC:239:ILE:HD12	1:BC:275:GLU:HA	1.99	0.44
1:CS:239:ILE:HD12	1:CS:275:GLU:HA	1.99	0.44
1:AR:162:PHE:CD1	1:AS:287:TYR:HA	2.53	0.44
1:BS:232:THR:HB	1:BS:334:VAL:CG2	2.46	0.44
1:AA:18:ARG:HG3	1:AA:19:TYR:N	2.32	0.44
1:CN:239:ILE:HG12	1:CN:326:ILE:CD1	2.47	0.44
1:BF:379:VAL:HG11	1:BF:381:MET:HE1	2.00	0.44
1:BE:232:THR:HB	1:BE:334:VAL:CG2	2.47	0.44
1:BG:263:ASN:O	1:BG:267:LYS:HG3	2.17	0.44
1:CK:423:LYS:HE2	1:CK:449:GLU:O	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BR:203:THR:HB	1:BR:300:GLN:HG3	1.99	0.44
1:AE:237:VAL:HG23	1:AE:279:PHE:CD2	2.53	0.44
1:BP:232:THR:HB	1:BP:334:VAL:CG2	2.47	0.44
1:CC:18:ARG:HG3	1:CC:19:TYR:N	2.31	0.44
1:BM:393:HIS:CG	1:BM:496:PHE:HB3	2.52	0.44
1:AH:35:VAL:O	1:AH:39:LYS:HG3	2.18	0.44
1:CL:393:HIS:CG	1:CL:496:PHE:HB3	2.52	0.44
1:BM:207:VAL:HA	1:BM:208:PRO:HD3	1.86	0.44
1:CQ:162:PHE:CD2	1:CQ:163:LEU:HD13	2.52	0.44
1:BE:207:VAL:HA	1:BE:208:PRO:HD3	1.83	0.44
1:BM:58:ALA:HB2	1:BM:102:GLY:HA3	1.99	0.44
1:AK:414:LYS:HA	1:AL:411:GLU:HB3	1.99	0.44
1:BI:234:ARG:HG2	1:BI:280:GLU:HG2	1.98	0.44
1:AI:272:TYR:HD1	1:AI:272:TYR:N	2.15	0.44
1:BO:250:TRP:HZ3	1:BO:272:TYR:CE1	2.25	0.44
1:BJ:272:TYR:CD2	1:BQ:55:ARG:NE	2.83	0.44
1:BN:191:LEU:CD2	1:BN:191:LEU:N	2.77	0.44
1:BB:55:ARG:NH1	1:CB:272:TYR:CD2	2.85	0.44
1:BQ:272:TYR:HD1	1:BQ:272:TYR:N	2.15	0.44
1:BG:454:ASN:ND2	1:BG:456:ALA:H	2.11	0.44
1:AT:79:ARG:HH11	1:AT:79:ARG:CG	2.29	0.44
1:CP:239:ILE:HD12	1:CP:275:GLU:HA	1.98	0.44
1:CF:371:ASP:OD1	1:CF:381:MET:HG2	2.17	0.44
1:AJ:108:ILE:HG23	1:AJ:113:LEU:HD12	2.00	0.44
1:AA:207:VAL:HA	1:AA:208:PRO:HD3	1.82	0.44
1:AG:423:LYS:HE2	1:AG:449:GLU:O	2.17	0.44
1:CM:241:ALA:HB1	1:CM:242:PRO:HD2	1.99	0.44
1:CQ:300:GLN:HE21	1:CQ:300:GLN:HB2	1.58	0.44
1:CM:379:VAL:HG11	1:CM:381:MET:HE1	1.99	0.44
1:AE:234:ARG:HG2	1:AE:280:GLU:HG2	1.99	0.44
1:BF:11:PRO:HG2	1:BF:18:ARG:CD	2.48	0.44
1:BJ:75:ARG:NH2	1:BJ:391:ALA:O	2.49	0.44
1:CB:207:VAL:HA	1:CB:208:PRO:HD3	1.82	0.44
1:CL:324:LEU:HD23	1:CL:324:LEU:C	2.37	0.44
1:AM:207:VAL:HA	1:AM:208:PRO:HD3	1.82	0.44
1:CG:423:LYS:HE2	1:CG:449:GLU:O	2.17	0.44
1:AK:232:THR:HB	1:AK:334:VAL:HG23	1.99	0.44
1:BC:234:ARG:HG2	1:BC:280:GLU:HG2	2.00	0.44
1:BG:170:PHE:HD1	1:BG:389:MET:HE2	1.83	0.44
1:BO:393:HIS:CG	1:BO:496:PHE:HB3	2.52	0.44
1:CN:263:ASN:O	1:CN:267:LYS:HG3	2.18	0.44
1:AA:42:THR:OG1	1:AB:267:LYS:O	2.26	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CS:191:LEU:CD2	1:CS:191:LEU:N	2.77	0.44
1:AG:55:ARG:HD3	1:CG:272:TYR:HD2	1.76	0.44
1:AE:272:TYR:N	1:AE:272:TYR:HD1	2.15	0.44
1:AG:189:PHE:HD2	1:AG:247:ILE:HD11	1.81	0.44
1:AQ:272:TYR:CD2	1:BL:55:ARG:CZ	3.01	0.44
1:BL:30:SER:O	1:BL:33:LYS:HB2	2.16	0.44
1:AS:188:PHE:C	1:AS:189:PHE:HD1	2.20	0.44
1:BO:22:THR:OG1	1:BO:131:HIS:CD2	2.65	0.44
1:CI:30:SER:O	1:CI:33:LYS:HB2	2.18	0.44
1:CA:189:PHE:HE2	1:CA:249:LEU:HD21	1.82	0.44
1:BM:18:ARG:HG2	1:BM:20:LEU:HD23	2.00	0.44
1:BM:74:ASN:ND2	1:BM:77:THR:OG1	2.51	0.44
1:CI:14:CYS:H	1:CI:138:ASN:ND2	2.15	0.44
1:CK:170:PHE:HD1	1:CK:389:MET:HE2	1.82	0.44
1:AC:75:ARG:NH2	1:AC:391:ALA:O	2.51	0.44
1:BH:11:PRO:HG2	1:BH:18:ARG:HD2	1.99	0.44
1:CK:25:ILE:HG23	1:CK:152:LEU:HD11	1.99	0.44
1:AM:423:LYS:HE2	1:AM:449:GLU:O	2.18	0.44
1:BO:318:SER:HA	1:BO:319:GLY:HA2	1.80	0.44
1:AN:436:SER:O	1:AO:487:LEU:HD21	2.17	0.44
1:CG:393:HIS:CG	1:CG:496:PHE:HB3	2.52	0.44
1:CR:318:SER:HA	1:CR:319:GLY:HA2	1.81	0.44
1:CF:407:SER:HB3	1:CJ:418:SER:HB3	1.99	0.44
1:AP:162:PHE:CD2	1:AP:163:LEU:HD13	2.53	0.44
1:CP:404:LEU:HD22	1:CP:486:VAL:HG22	1.99	0.44
1:BE:171:ASP:HA	1:BE:172:PRO:HD3	1.78	0.44
1:BS:237:VAL:HG23	1:BS:279:PHE:CD2	2.53	0.44
1:CG:11:PRO:HG2	1:CG:18:ARG:HD2	2.00	0.44
1:CH:252:VAL:HG22	1:CH:253:SER:N	2.33	0.44
1:CG:434:GLY:O	1:CH:349:VAL:HG23	2.18	0.44
1:AS:423:LYS:HE2	1:AS:449:GLU:O	2.18	0.44
1:BL:238:HIS:HE1	1:BL:329:GLN:OE1	2.01	0.44
1:BF:202:LEU:HB2	1:BF:304:SER:O	2.17	0.44
1:CB:234:ARG:HG2	1:CB:280:GLU:HG2	2.00	0.44
1:BC:61:PHE:CD2	1:BC:243:ILE:HD11	2.53	0.44
1:AL:171:ASP:HA	1:AL:172:PRO:HD3	1.79	0.44
1:AO:299:SER:C	1:AO:301:ARG:N	2.68	0.44
1:AP:272:TYR:CE2	1:BE:55:ARG:CZ	3.00	0.44
1:CJ:191:LEU:O	1:CQ:144:ALA:HB3	2.17	0.44
1:CK:272:TYR:HD1	1:CK:272:TYR:N	2.16	0.44
1:AM:189:PHE:HD2	1:AM:247:ILE:CD1	2.31	0.44
1:CS:189:PHE:CE2	1:CS:249:LEU:HD21	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CK:188:PHE:C	1:CK:189:PHE:HD1	2.21	0.44
1:AA:14:CYS:H	1:AA:138:ASN:ND2	2.12	0.44
1:BE:232:THR:HB	1:BE:334:VAL:HG23	2.00	0.44
1:CH:234:ARG:HG2	1:CH:280:GLU:HG2	2.00	0.44
1:BM:232:THR:HB	1:BM:334:VAL:HG23	2.00	0.44
1:BN:234:ARG:HG2	1:BN:280:GLU:HG2	2.00	0.44
1:CT:162:PHE:CD2	1:CT:163:LEU:HD13	2.53	0.44
1:CC:43:ALA:HB1	1:CC:158:GLU:HA	1.99	0.44
1:AI:404:LEU:HD22	1:AI:486:VAL:HG22	1.99	0.44
1:BP:239:ILE:HD12	1:BP:275:GLU:HA	2.00	0.44
1:BP:234:ARG:HG2	1:BP:280:GLU:HG2	2.00	0.44
1:AK:393:HIS:CG	1:AK:496:PHE:HB3	2.52	0.44
1:BM:237:VAL:HG23	1:BM:279:PHE:CD2	2.52	0.44
1:AN:234:ARG:HG2	1:AN:280:GLU:HG2	1.99	0.44
1:BI:25:ILE:HG23	1:BI:152:LEU:HD11	1.99	0.44
1:AO:237:VAL:HG23	1:AO:279:PHE:CD2	2.53	0.44
1:AH:252:VAL:HG22	1:AH:253:SER:N	2.32	0.44
1:AL:237:VAL:HG23	1:AL:279:PHE:CD2	2.52	0.44
1:AD:393:HIS:CG	1:AD:496:PHE:HB3	2.52	0.44
1:AA:263:ASN:O	1:AA:267:LYS:HG3	2.17	0.44
1:AD:232:THR:HB	1:AD:334:VAL:HG23	2.00	0.44
1:AE:404:LEU:HD22	1:AE:486:VAL:HG22	1.98	0.44
1:CD:203:THR:HB	1:CD:300:GLN:HG3	1.98	0.44
1:CB:237:VAL:HG23	1:CB:279:PHE:CD2	2.53	0.44
1:CN:398:GLY:HA3	1:CN:494:PHE:CD2	2.52	0.44
1:BR:237:VAL:HG23	1:BR:279:PHE:CD2	2.52	0.44
1:BC:182:LEU:HG	1:BC:330:ILE:HB	1.98	0.44
1:BF:203:THR:HB	1:BF:300:GLN:HG3	1.99	0.44
1:AL:191:LEU:O	1:CJ:144:ALA:HB3	2.18	0.44
1:CO:191:LEU:N	1:CO:191:LEU:CD2	2.76	0.44
1:CE:189:PHE:HD2	1:CE:247:ILE:HD11	1.81	0.44
1:CO:79:ARG:CG	1:CO:79:ARG:NH1	2.79	0.44
1:AT:189:PHE:CE2	1:AT:249:LEU:HD21	2.52	0.44
1:AK:454:ASN:HD21	1:AK:456:ALA:HB3	1.83	0.44
1:CA:189:PHE:CE2	1:CA:249:LEU:HD21	2.53	0.44
1:AG:14:CYS:H	1:AG:138:ASN:ND2	2.15	0.44
1:CF:239:ILE:HD12	1:CF:275:GLU:HA	1.99	0.44
1:BB:10:ILE:HA	1:BB:11:PRO:HD3	1.80	0.44
1:BK:239:ILE:HD12	1:BK:275:GLU:HA	2.00	0.44
1:BE:263:ASN:O	1:BE:267:LYS:HG3	2.18	0.44
1:BN:440:ALA:CB	1:BO:444:LEU:HD13	2.47	0.44
1:CB:393:HIS:CG	1:CB:496:PHE:HB3	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CT:423:LYS:HE2	1:CT:449:GLU:O	2.18	0.44
1:AE:232:THR:HB	1:AE:334:VAL:CG2	2.48	0.44
1:BQ:393:HIS:CG	1:BQ:496:PHE:HB3	2.53	0.44
1:CT:171:ASP:HA	1:CT:172:PRO:HD3	1.79	0.44
1:BP:226:VAL:HG13	1:BP:228:GLY:H	1.82	0.44
1:AF:263:ASN:O	1:AF:267:LYS:HG3	2.16	0.44
1:AO:379:VAL:HG11	1:AO:381:MET:HE1	1.99	0.44
1:CT:79:ARG:HG3	1:CT:79:ARG:HH11	1.83	0.44
1:CT:207:VAL:HA	1:CT:208:PRO:HD3	1.84	0.44
1:AN:207:VAL:HA	1:AN:208:PRO:HD3	1.83	0.44
1:CC:393:HIS:CG	1:CC:496:PHE:HB3	2.52	0.44
1:AF:393:HIS:CG	1:AF:496:PHE:HB3	2.52	0.44
1:BQ:263:ASN:O	1:BQ:267:LYS:HG3	2.17	0.44
1:BT:12:LYS:HB3	1:BT:144:ALA:C	2.37	0.44
1:CH:423:LYS:HE2	1:CH:449:GLU:O	2.18	0.44
1:CQ:171:ASP:HA	1:CQ:172:PRO:HD3	1.78	0.44
1:BA:263:ASN:O	1:BA:267:LYS:HG3	2.17	0.44
1:BJ:189:PHE:HD2	1:BJ:247:ILE:CD1	2.30	0.44
1:CB:189:PHE:CE2	1:CB:249:LEU:HD21	2.48	0.44
1:BI:191:LEU:CD2	1:BI:191:LEU:N	2.74	0.44
1:BT:272:TYR:CD1	1:BT:272:TYR:N	2.86	0.44
1:BG:74:ASN:ND2	1:BG:77:THR:OG1	2.51	0.44
1:AM:30:SER:O	1:AM:33:LYS:HB2	2.16	0.44
1:CP:189:PHE:CE2	1:CP:249:LEU:HD21	2.53	0.44
1:CC:189:PHE:HD2	1:CC:247:ILE:HD11	1.82	0.44
1:CQ:239:ILE:HD12	1:CQ:275:GLU:HA	1.99	0.44
1:AJ:170:PHE:HD1	1:AJ:389:MET:HE2	1.82	0.44
1:CR:239:ILE:HG12	1:CR:326:ILE:CD1	2.48	0.44
1:AE:232:THR:HB	1:AE:334:VAL:HG23	1.98	0.44
1:CD:226:VAL:HG13	1:CD:228:GLY:H	1.82	0.44
1:AA:170:PHE:HD1	1:AA:389:MET:CE	2.31	0.44
1:CD:237:VAL:HG23	1:CD:279:PHE:CD2	2.53	0.44
1:CQ:75:ARG:NH2	1:CQ:391:ALA:O	2.48	0.44
1:AT:393:HIS:CG	1:AT:496:PHE:HB3	2.52	0.44
1:AP:38:GLU:HB2	1:BL:35:VAL:HG22	2.00	0.44
1:CI:299:SER:OG	1:CI:301:ARG:HG2	2.18	0.44
1:BF:25:ILE:HG23	1:BF:152:LEU:HD11	1.99	0.44
1:AG:252:VAL:HG22	1:AG:253:SER:N	2.33	0.44
1:BP:289:ARG:NH1	1:BP:337:ASP:OD1	2.51	0.44
1:BK:393:HIS:CG	1:BK:496:PHE:HB3	2.52	0.44
1:BQ:234:ARG:HG2	1:BQ:280:GLU:HG2	2.00	0.44
1:BF:423:LYS:HE2	1:BF:449:GLU:O	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CK:58:ALA:HB2	1:CK:102:GLY:HA3	1.99	0.44
1:AL:324:LEU:C	1:AL:324:LEU:HD23	2.38	0.44
1:BJ:182:LEU:HG	1:BJ:330:ILE:HB	1.99	0.44
1:BL:404:LEU:HD22	1:BL:486:VAL:HG22	1.99	0.44
1:CQ:252:VAL:HG22	1:CQ:253:SER:N	2.33	0.44
1:BK:162:PHE:CD2	1:BK:163:LEU:HD13	2.53	0.44
1:AI:272:TYR:CD2	1:AO:55:ARG:NH1	2.86	0.44
1:AI:250:TRP:HZ3	1:AI:272:TYR:CE1	2.31	0.44
1:AJ:250:TRP:HZ3	1:AJ:272:TYR:CE1	2.29	0.44
1:CF:189:PHE:HD2	1:CF:247:ILE:HD11	1.81	0.44
1:AJ:55:ARG:CZ	1:BL:272:TYR:CE2	3.01	0.44
1:AF:272:TYR:CD1	1:AF:272:TYR:N	2.84	0.44
1:AA:272:TYR:HD1	1:AA:272:TYR:N	2.15	0.44
1:BC:272:TYR:CD1	1:BC:272:TYR:N	2.85	0.44
1:CO:74:ASN:ND2	1:CO:77:THR:OG1	2.51	0.44
1:BB:239:ILE:HD12	1:BB:275:GLU:HA	2.00	0.44
1:AK:170:PHE:HD1	1:AK:389:MET:HE2	1.83	0.44
1:AF:162:PHE:CD1	1:AG:287:TYR:HA	2.53	0.44
1:CA:239:ILE:HD12	1:CA:275:GLU:HA	2.00	0.44
1:AT:170:PHE:HD1	1:AT:389:MET:HE2	1.82	0.44
1:AJ:239:ILE:HG12	1:AJ:326:ILE:CD1	2.48	0.44
1:AJ:232:THR:HB	1:AJ:334:VAL:CG2	2.47	0.44
1:BP:288:HIS:HD2	1:BP:337:ASP:OD2	2.00	0.44
1:CI:237:VAL:HG23	1:CI:279:PHE:CD2	2.53	0.44
1:CC:423:LYS:HE2	1:CC:449:GLU:O	2.18	0.44
1:AH:423:LYS:HE2	1:AH:449:GLU:O	2.18	0.44
1:BT:58:ALA:HB2	1:BT:102:GLY:HA3	2.00	0.44
1:BN:434:GLY:O	1:BO:349:VAL:HG23	2.18	0.44
1:AI:25:ILE:HG23	1:AI:152:LEU:HD11	1.98	0.44
1:CS:393:HIS:CG	1:CS:496:PHE:HB3	2.53	0.44
1:BQ:423:LYS:HE2	1:BQ:449:GLU:O	2.18	0.44
1:AH:324:LEU:HD23	1:AH:324:LEU:C	2.38	0.44
1:BS:263:ASN:O	1:BS:267:LYS:HG3	2.18	0.44
1:AG:262:TRP:C	1:AG:264:GLU:N	2.67	0.44
1:CR:86:PRO:HA	1:CR:89:THR:OG1	2.17	0.44
1:AD:55:ARG:CZ	1:AN:272:TYR:CD2	3.01	0.44
1:AH:272:TYR:CD1	1:AH:272:TYR:N	2.85	0.44
1:AF:272:TYR:N	1:AF:272:TYR:HD1	2.16	0.44
1:CL:272:TYR:CD1	1:CL:272:TYR:N	2.84	0.44
1:BS:189:PHE:CE2	1:BS:249:LEU:HD21	2.53	0.44
1:BB:16:ALA:O	1:BB:17:ASN:CB	2.64	0.44
1:CL:14:CYS:H	1:CL:138:ASN:ND2	2.12	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AC:188:PHE:C	1:AC:189:PHE:HD1	2.20	0.44
1:BM:239:ILE:HD12	1:BM:275:GLU:HA	1.99	0.44
1:BA:170:PHE:HD1	1:BA:389:MET:HE2	1.83	0.44
1:BB:234:ARG:CG	1:BB:280:GLU:HG2	2.48	0.44
1:BE:11:PRO:HG2	1:BE:18:ARG:CD	2.48	0.44
1:BD:163:LEU:HD12	1:BD:163:LEU:HA	1.87	0.44
1:CQ:43:ALA:HB1	1:CQ:158:GLU:HA	1.99	0.44
1:AC:440:ALA:CB	1:AD:444:LEU:HD13	2.48	0.44
1:AM:25:ILE:HG23	1:AM:152:LEU:HD11	2.00	0.44
1:CD:232:THR:HB	1:CD:334:VAL:CG2	2.48	0.44
1:AO:252:VAL:HG22	1:AO:253:SER:N	2.33	0.44
1:BA:404:LEU:HD22	1:BA:486:VAL:HG22	1.98	0.44
1:AO:171:ASP:HA	1:AO:172:PRO:HD3	1.81	0.44
1:CN:423:LYS:HE2	1:CN:449:GLU:O	2.17	0.44
1:AF:234:ARG:HG2	1:AF:280:GLU:HG2	1.99	0.44
1:AE:393:HIS:CG	1:AE:496:PHE:HB3	2.53	0.44
1:AP:170:PHE:HD1	1:AP:389:MET:CE	2.30	0.44
1:AC:232:THR:HB	1:AC:334:VAL:HG23	2.00	0.44
1:AK:423:LYS:HE2	1:AK:449:GLU:O	2.18	0.44
1:BA:444:LEU:HD13	1:BE:440:ALA:CB	2.48	0.44
1:CO:272:TYR:N	1:CO:272:TYR:CD1	2.84	0.43
1:BB:250:TRP:HZ3	1:BB:272:TYR:HE1	1.63	0.43
1:BK:272:TYR:CD1	1:BK:272:TYR:N	2.86	0.43
1:BH:272:TYR:HD1	1:BH:272:TYR:N	2.15	0.43
1:CH:272:TYR:N	1:CH:272:TYR:CD1	2.86	0.43
1:CI:272:TYR:HD2	1:CO:55:ARG:HD3	1.82	0.43
1:AQ:272:TYR:CE2	1:BL:55:ARG:CZ	3.01	0.43
1:AB:454:ASN:ND2	1:AB:456:ALA:H	2.10	0.43
1:AL:189:PHE:CE2	1:AL:249:LEU:HD21	2.50	0.43
1:BO:14:CYS:H	1:BO:138:ASN:ND2	2.14	0.43
1:CE:239:ILE:HD12	1:CE:275:GLU:HA	2.00	0.43
1:BT:232:THR:HB	1:BT:334:VAL:HG23	2.00	0.43
1:AK:239:ILE:HD12	1:AK:275:GLU:HA	2.00	0.43
1:BM:232:THR:HB	1:BM:334:VAL:CG2	2.47	0.43
1:AI:207:VAL:HA	1:AI:208:PRO:HD3	1.84	0.43
1:CK:252:VAL:HG22	1:CK:253:SER:N	2.33	0.43
1:CR:226:VAL:HG13	1:CR:228:GLY:H	1.83	0.43
1:CC:171:ASP:HA	1:CC:172:PRO:HD3	1.79	0.43
1:BI:203:THR:HB	1:BI:300:GLN:HG3	2.00	0.43
1:AI:232:THR:HB	1:AI:334:VAL:HG23	1.98	0.43
1:BR:25:ILE:HG23	1:BR:152:LEU:HD11	2.00	0.43
1:BK:404:LEU:HD22	1:BK:486:VAL:HG22	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BN:108:ILE:HG23	1:BN:113:LEU:HD12	2.00	0.43
1:AN:238:HIS:HE1	1:AN:329:GLN:OE1	2.01	0.43
1:BJ:191:LEU:HD23	1:BJ:191:LEU:N	2.13	0.43
1:AT:55:ARG:HD3	1:BA:272:TYR:HD2	1.81	0.43
1:CR:272:TYR:CD1	1:CR:272:TYR:N	2.86	0.43
1:CL:30:SER:O	1:CL:33:LYS:HB2	2.17	0.43
1:CG:79:ARG:NH1	1:CG:79:ARG:CG	2.70	0.43
1:CO:454:ASN:HD21	1:CO:456:ALA:HB3	1.82	0.43
1:AM:22:THR:OG1	1:AM:131:HIS:CD2	2.63	0.43
1:AL:22:THR:OG1	1:AL:131:HIS:CD2	2.63	0.43
1:AN:30:SER:O	1:AN:33:LYS:HB2	2.19	0.43
1:CA:18:ARG:HG3	1:CA:19:TYR:N	2.32	0.43
1:AN:263:ASN:O	1:AN:267:LYS:HG3	2.17	0.43
1:AP:239:ILE:HD12	1:AP:275:GLU:HA	2.00	0.43
1:BO:239:ILE:HD12	1:BO:275:GLU:HA	1.99	0.43
1:BI:381:MET:HB2	1:BI:381:MET:HE2	1.84	0.43
1:CQ:237:VAL:HG23	1:CQ:279:PHE:CD2	2.52	0.43
1:BS:395:LEU:HB2	1:BS:497:TYR:HB2	2.00	0.43
1:AC:404:LEU:HD22	1:AC:486:VAL:HG22	1.99	0.43
1:BF:252:VAL:HG22	1:BF:253:SER:N	2.33	0.43
1:CA:58:ALA:HB2	1:CA:102:GLY:HA3	2.00	0.43
1:BC:108:ILE:HG23	1:BC:113:LEU:HD12	2.00	0.43
1:CN:15:GLN:HA	1:CN:15:GLN:OE1	2.17	0.43
1:BB:232:THR:HB	1:BB:334:VAL:CG2	2.48	0.43
1:CP:28:MET:HE2	1:CP:152:LEU:HG	2.00	0.43
1:AB:442:GLN:HE21	1:AC:412:PHE:HB2	1.83	0.43
1:CT:237:VAL:HG23	1:CT:279:PHE:CD2	2.53	0.43
1:AL:440:ALA:HB3	1:AM:444:LEU:HD13	2.00	0.43
1:AS:191:LEU:CD2	1:AS:191:LEU:N	2.79	0.43
1:CF:189:PHE:HE1	1:CF:198:ARG:HG2	1.76	0.43
1:AC:272:TYR:N	1:AC:272:TYR:HD1	2.16	0.43
1:AC:22:THR:OG1	1:AC:131:HIS:CD2	2.66	0.43
1:AB:256:ASN:C	1:AB:256:ASN:HD22	2.22	0.43
1:BH:14:CYS:H	1:BH:138:ASN:ND2	2.13	0.43
1:AR:77:THR:O	1:AR:81:THR:HG23	2.18	0.43
1:BC:239:ILE:HG23	1:BC:324:LEU:HD21	2.00	0.43
1:AT:163:LEU:HA	1:AT:163:LEU:HD12	1.85	0.43
1:AQ:371:ASP:OD1	1:AQ:381:MET:HG2	2.18	0.43
1:BH:163:LEU:HD12	1:BH:163:LEU:HA	1.85	0.43
1:CJ:232:THR:HB	1:CJ:334:VAL:CG2	2.47	0.43
1:AG:237:VAL:HG23	1:AG:279:PHE:CD2	2.54	0.43
1:CI:234:ARG:HG2	1:CI:280:GLU:HG2	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BF:237:VAL:HG23	1:BF:279:PHE:CD2	2.54	0.43
1:AB:202:LEU:HB2	1:AB:304:SER:O	2.19	0.43
1:CG:237:VAL:HG23	1:CG:279:PHE:CD2	2.53	0.43
1:CH:404:LEU:HD22	1:CH:486:VAL:HG22	1.99	0.43
1:CE:171:ASP:HA	1:CE:172:PRO:HD3	1.80	0.43
1:CO:182:LEU:C	1:CO:182:LEU:HD12	2.38	0.43
1:CB:324:LEU:C	1:CB:324:LEU:HD23	2.37	0.43
1:BB:226:VAL:HG13	1:BB:228:GLY:H	1.84	0.43
1:BL:67:VAL:HG23	1:BL:135:LEU:HB2	1.98	0.43
1:CR:232:THR:HB	1:CR:334:VAL:HG23	2.00	0.43
1:CI:239:ILE:HG12	1:CI:326:ILE:CD1	2.48	0.43
1:CA:237:VAL:HG23	1:CA:279:PHE:CD2	2.53	0.43
1:CS:237:VAL:HG23	1:CS:279:PHE:CD2	2.53	0.43
1:BI:35:VAL:HG22	1:BQ:38:GLU:HB2	1.99	0.43
1:AA:43:ALA:HB1	1:AA:158:GLU:HA	2.00	0.43
1:AB:38:GLU:HB2	1:BA:35:VAL:HG22	2.00	0.43
1:AH:55:ARG:NH1	1:AK:272:TYR:CD2	2.86	0.43
1:AO:250:TRP:CZ3	1:AO:272:TYR:CD1	3.07	0.43
1:AO:272:TYR:CD2	1:AR:55:ARG:CZ	3.01	0.43
1:AM:454:ASN:C	1:AM:454:ASN:HD22	2.22	0.43
1:AH:272:TYR:HD1	1:AH:272:TYR:N	2.16	0.43
1:AT:30:SER:O	1:AT:33:LYS:HB2	2.19	0.43
1:AB:454:ASN:HD21	1:AB:456:ALA:HB3	1.82	0.43
1:AS:74:ASN:ND2	1:AS:77:THR:OG1	2.52	0.43
1:BD:454:ASN:HD21	1:BD:456:ALA:HB3	1.82	0.43
1:BD:454:ASN:ND2	1:BD:456:ALA:H	2.14	0.43
1:AG:38:GLU:HB2	1:CF:35:VAL:CG2	2.49	0.43
1:CP:170:PHE:HD1	1:CP:389:MET:CE	2.30	0.43
1:AA:8:ILE:HG22	1:AA:10:ILE:CD1	2.49	0.43
1:CG:232:THR:HB	1:CG:334:VAL:CG2	2.48	0.43
1:AC:232:THR:HB	1:AC:334:VAL:CG2	2.49	0.43
1:CP:25:ILE:HG23	1:CP:152:LEU:HD11	2.01	0.43
1:BD:423:LYS:HE2	1:BD:449:GLU:O	2.17	0.43
1:AP:318:SER:HA	1:AP:319:GLY:HA2	1.76	0.43
1:CO:207:VAL:HA	1:CO:208:PRO:HD3	1.83	0.43
1:AF:423:LYS:HE2	1:AF:449:GLU:O	2.18	0.43
1:AJ:207:VAL:HA	1:AJ:208:PRO:HD3	1.80	0.43
1:BO:61:PHE:CD2	1:BO:243:ILE:HD11	2.53	0.43
1:BT:371:ASP:OD1	1:BT:381:MET:HG2	2.19	0.43
1:AO:263:ASN:O	1:AO:267:LYS:HG3	2.17	0.43
1:CE:423:LYS:HE2	1:CE:449:GLU:O	2.17	0.43
1:AN:300:GLN:HB2	1:AN:300:GLN:HE21	1.60	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BQ:324:LEU:HD23	1:BQ:324:LEU:C	2.39	0.43
1:BT:318:SER:HA	1:BT:319:GLY:HA2	1.81	0.43
1:CP:256:ASN:HD22	1:CP:302:ASP:HA	1.84	0.43
1:CI:324:LEU:HD23	1:CI:324:LEU:C	2.38	0.43
1:AO:401:ASP:O	1:AO:488:CYS:HA	2.19	0.43
1:CE:371:ASP:OD1	1:CE:381:MET:HG2	2.18	0.43
1:BI:11:PRO:HG2	1:BI:18:ARG:HD2	2.00	0.43
1:BT:314:PRO:HB3	1:BT:324:LEU:HD13	2.01	0.43
1:AR:252:VAL:HG22	1:AR:253:SER:N	2.33	0.43
1:AK:252:VAL:HG22	1:AK:253:SER:N	2.33	0.43
1:AC:252:VAL:HG22	1:AC:253:SER:N	2.33	0.43
1:BJ:10:ILE:CD1	1:BJ:20:LEU:HD13	2.49	0.43
1:AA:55:ARG:CZ	1:CC:272:TYR:CD2	3.02	0.43
1:CO:250:TRP:CE3	1:CO:272:TYR:CD1	3.07	0.43
1:AL:55:ARG:HD3	1:CQ:272:TYR:HD2	1.80	0.43
1:BP:55:ARG:CZ	1:CM:272:TYR:CE2	3.01	0.43
1:CJ:189:PHE:HD2	1:CJ:247:ILE:HD11	1.83	0.43
1:BP:79:ARG:NH1	1:BP:79:ARG:HG3	2.26	0.43
1:BG:189:PHE:HD2	1:BG:247:ILE:CD1	2.31	0.43
1:AF:55:ARG:CZ	1:BH:272:TYR:CE2	3.01	0.43
1:BI:189:PHE:CE2	1:BI:249:LEU:HD21	2.45	0.43
1:CL:272:TYR:N	1:CL:272:TYR:HD1	2.16	0.43
1:AA:454:ASN:HD21	1:AA:456:ALA:HB3	1.84	0.43
1:BF:170:PHE:HD1	1:BF:389:MET:HE2	1.83	0.43
1:CD:239:ILE:HD12	1:CD:275:GLU:HA	1.99	0.43
1:CH:232:THR:HB	1:CH:334:VAL:CG2	2.49	0.43
1:AB:371:ASP:OD1	1:AB:381:MET:HG2	2.19	0.43
1:BC:18:ARG:HG2	1:BC:20:LEU:HD23	2.01	0.43
1:AK:232:THR:HB	1:AK:334:VAL:CG2	2.49	0.43
1:BO:61:PHE:CE2	1:BO:243:ILE:HD11	2.53	0.43
1:AK:237:VAL:HG23	1:AK:279:PHE:CD2	2.54	0.43
1:AQ:226:VAL:HG13	1:AQ:228:GLY:H	1.83	0.43
1:BB:203:THR:HB	1:BB:300:GLN:HG3	2.00	0.43
1:BK:170:PHE:HD1	1:BK:389:MET:CE	2.32	0.43
1:CP:226:VAL:HG13	1:CP:228:GLY:H	1.82	0.43
1:AR:440:ALA:CB	1:AS:444:LEU:HD13	2.49	0.43
1:BG:404:LEU:N	1:BG:404:LEU:HD23	2.32	0.43
1:CO:404:LEU:N	1:CO:404:LEU:HD23	2.32	0.43
1:AC:300:GLN:HE21	1:AC:300:GLN:HB2	1.53	0.43
1:BB:238:HIS:HE1	1:BB:329:GLN:OE1	2.02	0.43
1:BL:226:VAL:HG13	1:BL:228:GLY:H	1.82	0.43
1:CJ:324:LEU:HD23	1:CJ:324:LEU:C	2.39	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CJ:25:ILE:HG23	1:CJ:152:LEU:HD11	2.01	0.43
1:AF:404:LEU:HD22	1:AF:486:VAL:HG22	2.00	0.43
1:BH:379:VAL:HG11	1:BH:381:MET:HE1	2.00	0.43
1:AG:254:GLU:OE1	1:AG:259:THR:CG2	2.67	0.43
1:CJ:250:TRP:HZ3	1:CJ:272:TYR:HE1	1.58	0.43
1:AE:55:ARG:NH1	1:CP:272:TYR:CD2	2.86	0.43
1:BP:55:ARG:NE	1:CM:272:TYR:HE2	2.10	0.43
1:BD:272:TYR:CE2	1:BS:55:ARG:CZ	3.01	0.43
1:BH:189:PHE:HD2	1:BH:247:ILE:HD11	1.83	0.43
1:BI:272:TYR:N	1:BI:272:TYR:HD1	2.16	0.43
1:AM:189:PHE:HD2	1:AM:247:ILE:HD11	1.83	0.43
1:BF:189:PHE:HD2	1:BF:247:ILE:HD11	1.82	0.43
1:AO:189:PHE:CE2	1:AO:249:LEU:HD21	2.53	0.43
1:CR:14:CYS:H	1:CR:138:ASN:ND2	2.15	0.43
1:AK:61:PHE:CD2	1:AK:243:ILE:HD11	2.54	0.43
1:AQ:234:ARG:CG	1:AQ:280:GLU:HG2	2.49	0.43
1:CT:239:ILE:HD12	1:CT:275:GLU:HA	2.01	0.43
1:AB:43:ALA:HB1	1:AB:158:GLU:HA	2.01	0.43
1:AO:423:LYS:HE2	1:AO:449:GLU:O	2.18	0.43
1:BC:423:LYS:HE2	1:BC:449:GLU:O	2.19	0.43
1:AC:226:VAL:HG13	1:AC:228:GLY:H	1.83	0.43
1:CL:58:ALA:HB2	1:CL:102:GLY:HA3	2.00	0.43
1:BJ:201:GLY:HA3	1:BJ:300:GLN:HG2	2.00	0.43
1:CS:170:PHE:HD1	1:CS:389:MET:CE	2.31	0.43
1:BP:182:LEU:HG	1:BP:330:ILE:HB	1.99	0.43
1:BC:379:VAL:HG11	1:BC:381:MET:HE1	1.99	0.43
1:AB:404:LEU:HD22	1:AB:486:VAL:HG22	2.00	0.43
1:CG:252:VAL:HG22	1:CG:253:SER:N	2.34	0.43
1:AC:234:ARG:HG2	1:AC:280:GLU:HG2	2.00	0.43
1:CA:318:SER:HA	1:CA:319:GLY:HA2	1.77	0.43
1:BS:28:MET:HE2	1:BS:152:LEU:HG	2.01	0.43
1:AK:10:ILE:HA	1:AK:11:PRO:HD3	1.88	0.43
1:AM:237:VAL:HG23	1:AM:279:PHE:CD2	2.54	0.43
1:CB:226:VAL:HG13	1:CB:228:GLY:H	1.84	0.43
1:BP:379:VAL:HG11	1:BP:381:MET:HE1	2.00	0.43
1:BO:250:TRP:HE3	1:BO:272:TYR:CD1	2.36	0.43
1:BH:15:GLN:NE2	1:BH:15:GLN:CA	2.80	0.43
1:AD:55:ARG:NE	1:AN:272:TYR:HE2	2.11	0.43
1:BF:272:TYR:CD1	1:BF:272:TYR:N	2.84	0.43
1:CO:188:PHE:C	1:CO:189:PHE:HD1	2.22	0.43
1:CA:79:ARG:HG3	1:CA:79:ARG:NH1	2.29	0.43
1:AN:14:CYS:H	1:AN:138:ASN:ND2	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AI:239:ILE:HD12	1:AI:275:GLU:HA	2.01	0.43
1:AR:442:GLN:NE2	1:AS:412:PHE:HB2	2.34	0.43
1:CP:163:LEU:HD12	1:CP:163:LEU:HA	1.90	0.43
1:BN:232:THR:HB	1:BN:334:VAL:HG23	2.00	0.43
1:BC:11:PRO:HG2	1:BC:18:ARG:HD2	2.00	0.43
1:BP:207:VAL:HA	1:BP:208:PRO:HD3	1.83	0.43
1:BB:263:ASN:O	1:BB:267:LYS:HG3	2.18	0.43
1:CD:234:ARG:HG2	1:CD:280:GLU:HG2	1.99	0.43
1:BK:440:ALA:CB	1:BL:444:LEU:HD13	2.48	0.43
1:CN:404:LEU:HD22	1:CN:486:VAL:HG22	2.00	0.43
1:BG:318:SER:HA	1:BG:319:GLY:HA2	1.81	0.43
1:CE:324:LEU:HA	1:CE:325:PRO:HD3	1.85	0.43
1:AH:171:ASP:HA	1:AH:172:PRO:HD3	1.78	0.43
1:BF:232:THR:HB	1:BF:334:VAL:HG23	2.00	0.43
1:CE:43:ALA:HB1	1:CE:158:GLU:HA	2.00	0.43
1:BF:437:HIS:CE1	1:BG:405:GLN:NE2	2.87	0.43
1:AE:255:TRP:CE3	1:AE:285:SER:HB2	2.53	0.43
1:BO:423:LYS:HE2	1:BO:449:GLU:O	2.19	0.43
1:CE:25:ILE:HG23	1:CE:152:LEU:HD11	2.01	0.43
1:AQ:237:VAL:HG23	1:AQ:279:PHE:CD2	2.54	0.43
1:BT:226:VAL:HG13	1:BT:228:GLY:H	1.83	0.43
1:BK:234:ARG:HG2	1:BK:280:GLU:HG2	1.99	0.43
1:CK:232:THR:HB	1:CK:334:VAL:CG2	2.49	0.43
1:BE:404:LEU:HD22	1:BE:486:VAL:HG22	2.00	0.43
1:BI:55:ARG:CD	1:BR:272:TYR:CD2	2.98	0.43
1:AR:55:ARG:HH11	1:AR:55:ARG:HG2	1.83	0.43
1:CD:272:TYR:CD2	1:CS:55:ARG:CD	2.97	0.43
1:CB:272:TYR:N	1:CB:272:TYR:HD1	2.16	0.43
1:CH:79:ARG:NH1	1:CH:79:ARG:CG	2.77	0.43
1:CH:272:TYR:N	1:CH:272:TYR:HD1	2.17	0.43
1:AE:272:TYR:CE2	1:AM:55:ARG:CZ	3.01	0.43
1:CI:272:TYR:CE2	1:CO:55:ARG:CZ	3.01	0.43
1:CI:272:TYR:CE2	1:CO:55:ARG:HD3	2.52	0.43
1:CB:79:ARG:NH1	1:CB:79:ARG:HG3	2.30	0.43
1:CD:189:PHE:HE2	1:CD:249:LEU:CD2	2.31	0.43
1:CF:324:LEU:C	1:CF:324:LEU:HD23	2.39	0.43
1:AL:418:SER:HB3	1:AM:407:SER:CB	2.49	0.43
1:AQ:170:PHE:HD1	1:AQ:389:MET:HE2	1.84	0.43
1:AK:440:ALA:CB	1:AL:444:LEU:HD13	2.49	0.43
1:BI:300:GLN:HE21	1:BI:300:GLN:HB2	1.61	0.43
1:AR:440:ALA:HB3	1:AS:444:LEU:HD13	2.01	0.43
1:BG:423:LYS:HE2	1:BG:449:GLU:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BN:437:HIS:CE1	1:BO:405:GLN:NE2	2.86	0.43
1:BP:300:GLN:HE21	1:BP:300:GLN:HB2	1.58	0.43
1:AT:237:VAL:HG23	1:AT:279:PHE:CD2	2.54	0.43
1:BO:237:VAL:HG23	1:BO:279:PHE:CD2	2.53	0.43
1:AC:170:PHE:HD1	1:AC:389:MET:CE	2.31	0.43
1:AC:170:PHE:HD1	1:AC:389:MET:HE2	1.82	0.43
1:CL:423:LYS:HE2	1:CL:449:GLU:O	2.18	0.43
1:AT:207:VAL:HA	1:AT:208:PRO:HD3	1.85	0.43
1:BK:207:VAL:HA	1:BK:208:PRO:HD3	1.86	0.43
1:AL:404:LEU:N	1:AL:404:LEU:HD23	2.34	0.43
1:BI:404:LEU:N	1:BI:404:LEU:HD23	2.33	0.43
1:AA:423:LYS:HE2	1:AA:449:GLU:O	2.18	0.43
1:BL:234:ARG:HG2	1:BL:280:GLU:HG2	2.00	0.43
1:BL:437:HIS:CE1	1:BM:405:GLN:NE2	2.86	0.43
1:CA:423:LYS:HE2	1:CA:449:GLU:O	2.19	0.43
1:BP:393:HIS:CG	1:BP:496:PHE:HB3	2.54	0.43
1:BE:189:PHE:HD2	1:BE:247:ILE:HD11	1.83	0.43
1:CM:189:PHE:HD2	1:CM:247:ILE:HD11	1.84	0.43
1:AB:189:PHE:HD2	1:AB:247:ILE:HD11	1.83	0.43
1:BQ:272:TYR:CE2	1:CL:55:ARG:CZ	3.02	0.43
1:CF:22:THR:OG1	1:CF:131:HIS:CD2	2.63	0.43
1:CL:9:TYR:HE1	1:CL:147:GLN:NE2	2.12	0.43
1:CD:189:PHE:HD2	1:CD:247:ILE:HD11	1.83	0.43
1:CD:418:SER:HB3	1:CE:407:SER:CB	2.49	0.43
1:BS:239:ILE:HD12	1:BS:275:GLU:HA	2.01	0.43
1:BF:239:ILE:HD12	1:BF:275:GLU:HA	1.99	0.43
1:CA:263:ASN:O	1:CA:267:LYS:HG3	2.18	0.43
1:AT:232:THR:HB	1:AT:334:VAL:CG2	2.48	0.43
1:BC:18:ARG:HB2	1:BC:18:ARG:NH1	2.34	0.43
1:BP:201:GLY:HA3	1:BP:300:GLN:HG2	1.99	0.43
1:AM:10:ILE:HA	1:AM:11:PRO:HD3	1.89	0.43
1:CM:423:LYS:HE2	1:CM:449:GLU:O	2.19	0.43
1:BA:487:LEU:HD21	1:BE:436:SER:O	2.19	0.43
1:CD:162:PHE:CD2	1:CD:163:LEU:HD13	2.53	0.43
1:CO:232:THR:HB	1:CO:334:VAL:CG2	2.49	0.43
1:CP:318:SER:HA	1:CP:319:GLY:HA2	1.75	0.43
1:BR:14:CYS:H	1:BR:138:ASN:HD21	1.65	0.43
1:AQ:440:ALA:HB3	1:AR:444:LEU:HD13	2.00	0.43
1:BK:226:VAL:HG13	1:BK:228:GLY:H	1.83	0.43
1:CD:379:VAL:HG11	1:CD:381:MET:HE1	2.00	0.43
1:BH:171:ASP:HA	1:BH:172:PRO:HD3	1.78	0.43
1:BM:404:LEU:HD22	1:BM:486:VAL:HG22	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CN:171:ASP:HA	1:CN:172:PRO:HD3	1.78	0.43
1:CI:378:ARG:CD	1:CI:379:VAL:H	2.31	0.43
1:CN:189:PHE:CE2	1:CN:249:LEU:HD21	2.44	0.43
1:AN:189:PHE:HE1	1:AN:198:ARG:HG2	1.78	0.43
1:CF:272:TYR:HD1	1:CF:272:TYR:N	2.16	0.43
1:BA:191:LEU:N	1:BA:191:LEU:CD2	2.77	0.43
1:AD:55:ARG:HD3	1:AN:272:TYR:HD2	1.83	0.43
1:AC:272:TYR:CD2	1:BA:55:ARG:HD3	2.54	0.43
1:BE:272:TYR:HD1	1:BE:272:TYR:N	2.16	0.43
1:CP:454:ASN:HD21	1:CP:456:ALA:HB3	1.84	0.43
1:BP:232:THR:HB	1:BP:334:VAL:HG23	2.01	0.43
1:CC:18:ARG:HG2	1:CC:20:LEU:HD23	2.01	0.43
1:AI:232:THR:HB	1:AI:334:VAL:CG2	2.48	0.43
1:AB:404:LEU:HD23	1:AB:404:LEU:N	2.34	0.43
1:BK:440:ALA:HB3	1:BL:444:LEU:HD13	2.01	0.43
1:CD:404:LEU:HD22	1:CD:486:VAL:HG22	2.00	0.43
1:AK:437:HIS:CE1	1:AL:405:GLN:NE2	2.87	0.43
1:BC:170:PHE:HD1	1:BC:389:MET:CE	2.32	0.43
1:AN:423:LYS:HE2	1:AN:449:GLU:O	2.19	0.43
1:CD:25:ILE:HG23	1:CD:152:LEU:HD11	2.01	0.43
1:AK:404:LEU:HD22	1:AK:486:VAL:HG22	2.00	0.43
1:CE:252:VAL:HG22	1:CE:253:SER:N	2.33	0.43
1:CE:256:ASN:HD22	1:CE:302:ASP:HA	1.84	0.43
1:AP:171:ASP:HA	1:AP:172:PRO:HD3	1.79	0.43
1:AQ:404:LEU:N	1:AQ:404:LEU:HD23	2.34	0.43
1:CQ:423:LYS:HE2	1:CQ:449:GLU:O	2.19	0.43
1:BD:207:VAL:HA	1:BD:208:PRO:HD3	1.81	0.43
1:BJ:25:ILE:HG23	1:BJ:152:LEU:HD11	2.01	0.43
1:AJ:263:ASN:O	1:AJ:267:LYS:HG3	2.18	0.43
1:BS:11:PRO:HG2	1:BS:18:ARG:HD2	2.01	0.43
1:AG:436:SER:O	1:AH:487:LEU:HD21	2.18	0.43
1:BK:252:VAL:HG22	1:BK:253:SER:N	2.33	0.43
1:BL:423:LYS:HE2	1:BL:449:GLU:O	2.18	0.43
1:BT:252:VAL:HG22	1:BT:253:SER:N	2.33	0.43
1:CO:58:ALA:HB2	1:CO:102:GLY:HA3	1.99	0.43
1:AT:191:LEU:N	1:AT:191:LEU:HD23	2.21	0.42
1:CM:189:PHE:HE1	1:CM:198:ARG:HG2	1.76	0.42
1:BF:189:PHE:CE2	1:BF:249:LEU:HD21	2.49	0.42
1:AD:272:TYR:HD2	1:AS:55:ARG:HD3	1.81	0.42
1:CC:454:ASN:HD21	1:CC:456:ALA:HB3	1.82	0.42
1:BO:454:ASN:ND2	1:BO:456:ALA:H	2.12	0.42
1:CA:188:PHE:C	1:CA:189:PHE:HD1	2.21	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CD:14:CYS:H	1:CD:138:ASN:ND2	2.13	0.42
1:AI:442:GLN:NE2	1:AJ:412:PHE:HB2	2.34	0.42
1:AM:170:PHE:HD1	1:AM:389:MET:CE	2.32	0.42
1:AB:232:THR:HB	1:AB:334:VAL:CG2	2.49	0.42
1:BN:163:LEU:HA	1:BN:163:LEU:HD12	1.89	0.42
1:AP:163:LEU:HA	1:AP:163:LEU:HD12	1.90	0.42
1:AD:11:PRO:HG2	1:AD:18:ARG:CD	2.48	0.42
1:AR:207:VAL:HA	1:AR:208:PRO:HD3	1.84	0.42
1:BF:226:VAL:HG13	1:BF:228:GLY:H	1.84	0.42
1:AD:10:ILE:CD1	1:AD:20:LEU:HD13	2.49	0.42
1:BH:252:VAL:HG22	1:BH:253:SER:N	2.33	0.42
1:AE:263:ASN:O	1:AE:267:LYS:HG3	2.19	0.42
1:AL:9:TYR:CE1	1:AL:147:GLN:NE2	2.87	0.42
1:BL:372:PHE:H	1:BL:381:MET:HE1	1.84	0.42
1:CO:243:ILE:HD13	1:CR:61:PHE:CZ	2.54	0.42
1:BA:324:LEU:C	1:BA:324:LEU:HD23	2.39	0.42
1:BG:324:LEU:HD23	1:BG:324:LEU:C	2.40	0.42
1:CH:25:ILE:HG23	1:CH:152:LEU:HD11	2.01	0.42
1:CI:25:ILE:HG23	1:CI:152:LEU:HD11	2.01	0.42
1:CL:318:SER:HA	1:CL:319:GLY:HA2	1.79	0.42
1:BP:250:TRP:HZ3	1:BP:272:TYR:CE1	2.27	0.42
1:AJ:272:TYR:CD2	1:AQ:55:ARG:CD	3.00	0.42
1:CN:191:LEU:CD2	1:CN:191:LEU:N	2.75	0.42
1:CB:189:PHE:HD2	1:CB:247:ILE:HD11	1.83	0.42
1:AI:55:ARG:HD2	1:AR:272:TYR:HE2	1.81	0.42
1:BR:79:ARG:NH1	1:BR:79:ARG:CG	2.77	0.42
1:AF:55:ARG:CZ	1:BH:272:TYR:CD2	3.02	0.42
1:AK:189:PHE:HE2	1:AK:249:LEU:HD21	1.84	0.42
1:CL:189:PHE:CE2	1:CL:249:LEU:HD21	2.54	0.42
1:CP:454:ASN:ND2	1:CP:456:ALA:H	2.13	0.42
1:BG:11:PRO:HG2	1:BG:18:ARG:CD	2.49	0.42
1:BG:381:MET:HB2	1:BG:381:MET:HE2	1.80	0.42
1:AT:25:ILE:HG23	1:AT:152:LEU:HD11	2.01	0.42
1:AG:234:ARG:CG	1:AG:280:GLU:HG2	2.49	0.42
1:AC:18:ARG:HG3	1:AC:19:TYR:N	2.34	0.42
1:CC:232:THR:HB	1:CC:334:VAL:CG2	2.50	0.42
1:AC:404:LEU:HD23	1:AC:404:LEU:N	2.34	0.42
1:BK:263:ASN:O	1:BK:267:LYS:HG3	2.20	0.42
1:BA:226:VAL:HG13	1:BA:228:GLY:H	1.84	0.42
1:AH:404:LEU:HD22	1:AH:486:VAL:HG22	2.00	0.42
1:AP:234:ARG:HG2	1:AP:280:GLU:HG2	2.01	0.42
1:CH:393:HIS:CG	1:CH:496:PHE:HB3	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BG:237:VAL:HG23	1:BG:279:PHE:CD2	2.54	0.42
1:BS:207:VAL:HA	1:BS:208:PRO:HD3	1.85	0.42
1:AP:423:LYS:HE2	1:AP:449:GLU:O	2.19	0.42
1:CF:300:GLN:HE21	1:CF:300:GLN:HB2	1.57	0.42
1:AM:182:LEU:C	1:AM:182:LEU:HD12	2.39	0.42
1:CF:25:ILE:HG23	1:CF:152:LEU:HD11	2.01	0.42
1:CR:418:SER:HB3	1:CS:407:SER:HB3	2.01	0.42
1:AE:61:PHE:CZ	1:CP:243:ILE:HD13	2.54	0.42
1:CM:207:VAL:HA	1:CM:208:PRO:HD3	1.85	0.42
1:CI:263:ASN:O	1:CI:267:LYS:HG3	2.18	0.42
1:AL:423:LYS:HE2	1:AL:449:GLU:O	2.19	0.42
1:AL:272:TYR:N	1:AL:272:TYR:CD1	2.86	0.42
1:AE:55:ARG:CD	1:CP:272:TYR:CD2	2.98	0.42
1:BF:191:LEU:N	1:BF:191:LEU:HD23	2.19	0.42
1:CN:272:TYR:CD1	1:CN:272:TYR:N	2.87	0.42
1:AC:272:TYR:CE2	1:BA:55:ARG:CZ	3.03	0.42
1:CE:22:THR:OG1	1:CE:131:HIS:CD2	2.58	0.42
1:BH:33:LYS:CG	1:BH:33:LYS:O	2.62	0.42
1:AR:74:ASN:ND2	1:AR:77:THR:OG1	2.52	0.42
1:BG:15:GLN:NE2	1:BG:15:GLN:HA	2.30	0.42
1:BM:203:THR:CB	1:BM:300:GLN:HG3	2.49	0.42
1:BO:11:PRO:HG2	1:BO:18:ARG:HD2	2.01	0.42
1:CO:234:ARG:CG	1:CO:280:GLU:HG2	2.50	0.42
1:BI:234:ARG:CG	1:BI:280:GLU:HG2	2.49	0.42
1:BK:25:ILE:HG23	1:BK:152:LEU:HD11	2.01	0.42
1:BP:170:PHE:HD1	1:BP:389:MET:CE	2.32	0.42
1:BD:263:ASN:O	1:BD:267:LYS:HG3	2.19	0.42
1:AL:395:LEU:HB2	1:AL:497:TYR:HB2	2.01	0.42
1:AJ:318:SER:HA	1:AJ:319:GLY:HA2	1.80	0.42
1:AQ:182:LEU:HD12	1:AQ:182:LEU:C	2.40	0.42
1:BM:182:LEU:HD12	1:BM:182:LEU:C	2.39	0.42
1:AA:232:THR:HB	1:AA:334:VAL:HG23	2.01	0.42
1:BF:75:ARG:NH2	1:BF:391:ALA:O	2.50	0.42
1:AJ:285:SER:HA	1:AJ:286:PRO:HD3	1.91	0.42
1:BL:7:VAL:HG12	1:BL:9:TYR:CE2	2.55	0.42
1:BF:272:TYR:HD1	1:BF:272:TYR:N	2.17	0.42
1:AQ:272:TYR:CD1	1:AQ:272:TYR:N	2.85	0.42
1:BA:189:PHE:HD2	1:BA:247:ILE:CD1	2.33	0.42
1:CO:189:PHE:CE2	1:CO:249:LEU:HD21	2.53	0.42
1:BF:79:ARG:CG	1:BF:79:ARG:NH1	2.80	0.42
1:AP:188:PHE:C	1:AP:189:PHE:HD1	2.22	0.42
1:AH:14:CYS:H	1:AH:138:ASN:ND2	2.16	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CM:324:LEU:HA	1:CM:325:PRO:HD3	1.89	0.42
1:BS:239:ILE:HG23	1:BS:324:LEU:HD21	2.02	0.42
1:BD:300:GLN:HE21	1:BD:300:GLN:HB2	1.51	0.42
1:AI:404:LEU:HD23	1:AI:404:LEU:N	2.34	0.42
1:AC:440:ALA:HB3	1:AD:444:LEU:HD13	2.02	0.42
1:CN:404:LEU:HD23	1:CN:404:LEU:N	2.35	0.42
1:CJ:171:ASP:HA	1:CJ:172:PRO:HD3	1.78	0.42
1:AN:252:VAL:HG22	1:AN:253:SER:N	2.34	0.42
1:CE:237:VAL:HG23	1:CE:279:PHE:CD2	2.54	0.42
1:BA:73:TYR:CE2	1:BA:394:GLY:HA3	2.54	0.42
1:BP:25:ILE:HG23	1:BP:152:LEU:HD11	2.01	0.42
1:CD:43:ALA:HB1	1:CD:158:GLU:HA	2.00	0.42
1:AA:404:LEU:HD22	1:AA:486:VAL:HG22	2.00	0.42
1:CJ:404:LEU:HD22	1:CJ:486:VAL:HG22	1.99	0.42
1:CP:234:ARG:HG2	1:CP:280:GLU:HG2	1.99	0.42
1:BJ:324:LEU:HA	1:BJ:325:PRO:HD3	1.84	0.42
1:AS:202:LEU:HD23	1:AS:202:LEU:HA	1.92	0.42
1:BO:175:PHE:O	1:BO:175:PHE:CD2	2.72	0.42
1:AF:347:TYR:O	1:AJ:435:PRO:HB3	2.18	0.42
1:BA:423:LYS:HE2	1:BA:449:GLU:O	2.19	0.42
1:BJ:423:LYS:HE2	1:BJ:449:GLU:O	2.18	0.42
1:CP:171:ASP:HA	1:CP:172:PRO:HD3	1.76	0.42
1:CT:234:ARG:HG2	1:CT:280:GLU:HG2	2.01	0.42
1:CJ:252:VAL:HG22	1:CJ:253:SER:N	2.35	0.42
1:AG:265:LEU:C	1:AG:265:LEU:CD1	2.51	0.42
1:AO:229:MET:O	1:AO:290:THR:HG22	2.19	0.42
1:CL:191:LEU:N	1:CL:191:LEU:HD23	2.19	0.42
1:BS:272:TYR:N	1:BS:272:TYR:CD1	2.88	0.42
1:CJ:22:THR:OG1	1:CJ:131:HIS:CD2	2.60	0.42
1:CA:36:GLN:HE22	1:CA:156:LEU:H	1.64	0.42
1:AI:454:ASN:ND2	1:AI:456:ALA:H	2.12	0.42
1:BD:188:PHE:C	1:BD:189:PHE:HD1	2.23	0.42
1:AP:189:PHE:HD2	1:AP:247:ILE:HD11	1.83	0.42
1:CA:19:TYR:CZ	1:CA:81:THR:HG22	2.55	0.42
1:CH:14:CYS:H	1:CH:138:ASN:ND2	2.18	0.42
1:BE:170:PHE:HD1	1:BE:389:MET:HE2	1.84	0.42
1:AJ:163:LEU:HD12	1:AJ:163:LEU:HA	1.88	0.42
1:AA:300:GLN:HB2	1:AA:300:GLN:HE21	1.61	0.42
1:BP:404:LEU:HD22	1:BP:486:VAL:HG22	2.01	0.42
1:AQ:423:LYS:HE2	1:AQ:449:GLU:O	2.20	0.42
1:BM:171:ASP:HA	1:BM:172:PRO:HD3	1.79	0.42
1:AR:226:VAL:HG13	1:AR:228:GLY:H	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CC:263:ASN:O	1:CC:267:LYS:HG3	2.19	0.42
1:CM:252:VAL:HG22	1:CM:253:SER:N	2.35	0.42
1:AE:379:VAL:HG11	1:AE:381:MET:HE1	2.01	0.42
1:CR:324:LEU:HD23	1:CR:324:LEU:C	2.40	0.42
1:AK:340:LEU:HA	1:AK:340:LEU:HD23	1.89	0.42
1:AM:324:LEU:C	1:AM:324:LEU:HD23	2.40	0.42
1:BI:182:LEU:C	1:BI:182:LEU:HD12	2.40	0.42
1:BT:182:LEU:HD12	1:BT:182:LEU:C	2.39	0.42
1:BK:423:LYS:HE2	1:BK:449:GLU:O	2.19	0.42
1:BR:182:LEU:HG	1:BR:330:ILE:HB	2.01	0.42
1:AO:295:LEU:O	1:AO:296:ALA:C	2.57	0.42
1:CR:79:ARG:NH1	1:CR:79:ARG:HG3	2.15	0.42
1:CP:250:TRP:CE3	1:CP:272:TYR:CD1	3.08	0.42
1:AT:55:ARG:CZ	1:BA:272:TYR:CE2	3.03	0.42
1:AQ:272:TYR:HD1	1:AQ:272:TYR:N	2.18	0.42
1:AF:74:ASN:ND2	1:AF:77:THR:OG1	2.53	0.42
1:AK:14:CYS:HB3	1:AK:64:LEU:HD21	2.01	0.42
1:AE:74:ASN:ND2	1:AE:77:THR:OG1	2.53	0.42
1:AC:74:ASN:ND2	1:AC:77:THR:OG1	2.53	0.42
1:CF:284:ARG:CG	1:CF:284:ARG:NH1	2.74	0.42
1:AQ:79:ARG:HG3	1:AQ:79:ARG:NH1	2.32	0.42
1:AA:239:ILE:HG23	1:AA:324:LEU:HD21	2.01	0.42
1:AD:239:ILE:HD12	1:AD:275:GLU:HA	2.01	0.42
1:AK:61:PHE:CE2	1:AK:243:ILE:HD11	2.55	0.42
1:AL:239:ILE:HG12	1:AL:326:ILE:CD1	2.50	0.42
1:CL:162:PHE:CD1	1:CM:287:TYR:HA	2.54	0.42
1:AB:372:PHE:H	1:AB:381:MET:HE1	1.85	0.42
1:AF:371:ASP:OD1	1:AF:381:MET:HG2	2.20	0.42
1:AJ:263:ASN:HD22	1:AQ:5:ARG:HD3	1.84	0.42
1:BO:25:ILE:HD12	1:BO:128:PRO:HB2	2.01	0.42
1:AK:324:LEU:HD23	1:AK:324:LEU:C	2.40	0.42
1:AF:241:ALA:HB1	1:AF:242:PRO:HD2	2.02	0.42
1:AG:418:SER:HB3	1:AH:407:SER:HB3	2.02	0.42
1:BC:171:ASP:HA	1:BC:172:PRO:HD3	1.78	0.42
1:AL:379:VAL:HG11	1:AL:381:MET:HE1	2.02	0.42
1:BF:418:SER:HB3	1:BG:407:SER:HB3	2.01	0.42
1:CN:237:VAL:HG23	1:CN:279:PHE:CD2	2.54	0.42
1:BR:404:LEU:HD22	1:BR:486:VAL:HG22	2.01	0.42
1:CJ:300:GLN:HB2	1:CJ:300:GLN:HE21	1.59	0.42
1:AQ:340:LEU:HD23	1:AQ:340:LEU:HA	1.86	0.42
1:BS:300:GLN:HB2	1:BS:300:GLN:HE21	1.57	0.42
1:CO:263:ASN:O	1:CO:267:LYS:HG3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AB:423:LYS:HE2	1:AB:449:GLU:O	2.20	0.42
1:AL:232:THR:HB	1:AL:334:VAL:HG23	2.01	0.42
1:AJ:423:LYS:HE2	1:AJ:449:GLU:O	2.20	0.42
1:CM:108:ILE:HG23	1:CM:113:LEU:HD12	2.02	0.42
1:AN:55:ARG:CD	1:AS:272:TYR:CD2	3.00	0.42
1:CD:250:TRP:CE3	1:CD:272:TYR:CD1	3.07	0.42
1:AF:191:LEU:CD2	1:AF:191:LEU:N	2.78	0.42
1:AI:55:ARG:NE	1:AR:272:TYR:CD2	2.87	0.42
1:AL:454:ASN:HD21	1:AL:456:ALA:HB3	1.84	0.42
1:CR:83:SER:OG	1:CR:84:ALA:N	2.50	0.42
1:CG:22:THR:OG1	1:CG:131:HIS:CD2	2.61	0.42
1:AA:10:ILE:HG21	1:AA:146:TRP:CZ2	2.54	0.42
1:BM:170:PHE:HD1	1:BM:389:MET:HE2	1.85	0.42
1:BN:25:ILE:HG23	1:BN:152:LEU:HD11	2.01	0.42
1:AF:232:THR:HB	1:AF:334:VAL:HG23	2.01	0.42
1:AM:10:ILE:HG21	1:AM:146:TRP:CZ2	2.54	0.42
1:AK:285:SER:HA	1:AK:286:PRO:HD3	1.93	0.42
1:CM:237:VAL:HG23	1:CM:279:PHE:CD2	2.55	0.42
1:CE:20:LEU:HB2	1:CE:132:PHE:O	2.19	0.42
1:CD:423:LYS:HE2	1:CD:449:GLU:O	2.20	0.42
1:AP:255:TRP:CE3	1:AP:285:SER:HB2	2.55	0.42
1:CK:318:SER:HA	1:CK:319:GLY:HA2	1.77	0.42
1:BI:237:VAL:HG23	1:BI:279:PHE:CD2	2.54	0.42
1:AF:318:SER:HA	1:AF:319:GLY:HA2	1.82	0.42
1:CS:252:VAL:HG22	1:CS:253:SER:N	2.35	0.42
1:AD:191:LEU:HD23	1:AD:191:LEU:N	2.18	0.42
1:AN:79:ARG:NH1	1:AN:79:ARG:CG	2.74	0.42
1:AJ:272:TYR:CD1	1:AJ:272:TYR:N	2.86	0.42
1:CE:189:PHE:CE1	1:CE:198:ARG:HG2	2.53	0.42
1:AH:272:TYR:HD2	1:CF:55:ARG:HD3	1.79	0.42
1:AA:272:TYR:CD2	1:CT:55:ARG:CZ	3.03	0.42
1:AA:36:GLN:HE22	1:AA:156:LEU:H	1.68	0.42
1:BT:14:CYS:H	1:BT:138:ASN:ND2	2.14	0.42
1:AP:189:PHE:HE2	1:AP:249:LEU:CD2	2.33	0.42
1:CA:234:ARG:CG	1:CA:280:GLU:HG2	2.49	0.42
1:CL:239:ILE:HD12	1:CL:275:GLU:HA	2.01	0.42
1:CE:234:ARG:CG	1:CE:280:GLU:HG2	2.50	0.42
1:CI:373:THR:CG2	1:CI:374:SER:N	2.83	0.42
1:CM:201:GLY:HA3	1:CM:300:GLN:HG2	2.02	0.42
1:AD:232:THR:HB	1:AD:334:VAL:CG2	2.49	0.42
1:BR:28:MET:CE	1:BR:152:LEU:HG	2.50	0.42
1:CR:232:THR:HB	1:CR:334:VAL:CG2	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CI:324:LEU:HA	1:CI:325:PRO:HD3	1.88	0.42
1:BL:207:VAL:HA	1:BL:208:PRO:HD3	1.87	0.42
1:CO:108:ILE:HG23	1:CO:113:LEU:HD12	2.02	0.42
1:CG:395:LEU:HB2	1:CG:497:TYR:HB2	2.02	0.42
1:BN:423:LYS:HE2	1:BN:449:GLU:O	2.20	0.42
1:CH:207:VAL:HA	1:CH:208:PRO:HD3	1.84	0.42
1:BD:185:PRO:HA	1:BD:186:PRO:HD3	1.91	0.42
1:CO:237:VAL:HG23	1:CO:279:PHE:CD2	2.55	0.42
1:CN:162:PHE:CD2	1:CN:163:LEU:HD13	2.55	0.42
1:CD:324:LEU:HD23	1:CD:324:LEU:C	2.40	0.42
1:BE:182:LEU:C	1:BE:182:LEU:HD12	2.40	0.42
1:CF:20:LEU:HB2	1:CF:132:PHE:O	2.19	0.42
1:BC:318:SER:HA	1:BC:319:GLY:HA2	1.78	0.42
1:CB:418:SER:HB3	1:CC:407:SER:HB3	2.01	0.42
1:CC:226:VAL:HG13	1:CC:228:GLY:H	1.85	0.42
1:AA:234:ARG:HG2	1:AA:280:GLU:HG2	2.01	0.42
1:AB:185:PRO:HA	1:AB:186:PRO:HD3	1.92	0.42
1:AQ:108:ILE:HG23	1:AQ:113:LEU:HD12	2.00	0.42
1:AI:79:ARG:CG	1:AI:79:ARG:NH1	2.79	0.42
1:BK:272:TYR:HD1	1:BK:272:TYR:N	2.17	0.42
1:BN:55:ARG:CZ	1:BS:272:TYR:CE2	3.03	0.42
1:AQ:77:THR:O	1:AQ:81:THR:HG23	2.20	0.42
1:BF:14:CYS:H	1:BF:138:ASN:ND2	2.14	0.42
1:CF:379:VAL:CG1	1:CF:381:MET:CE	2.98	0.42
1:CO:372:PHE:H	1:CO:381:MET:HE1	1.85	0.42
1:BG:170:PHE:HD1	1:BG:389:MET:CE	2.33	0.42
1:BB:300:GLN:HB2	1:BB:300:GLN:HE21	1.67	0.42
1:CJ:404:LEU:HD23	1:CJ:404:LEU:N	2.35	0.42
1:BI:285:SER:HA	1:BI:286:PRO:HD3	1.89	0.42
1:AN:442:GLN:HE21	1:AO:412:PHE:HB2	1.85	0.42
1:AT:324:LEU:HA	1:AT:325:PRO:HD3	1.87	0.42
1:CS:28:MET:HE2	1:CS:152:LEU:HG	2.02	0.42
1:CJ:185:PRO:HA	1:CJ:186:PRO:HD3	1.88	0.42
1:BH:318:SER:HA	1:BH:319:GLY:HA2	1.78	0.42
1:BS:108:ILE:HG23	1:BS:113:LEU:HD12	2.02	0.42
1:CC:237:VAL:HG23	1:CC:279:PHE:CD2	2.54	0.42
1:BD:375:ASN:OD1	1:BD:376:THR:HG23	2.19	0.42
1:AI:423:LYS:HE2	1:AI:449:GLU:O	2.19	0.42
1:CF:43:ALA:HB1	1:CF:158:GLU:HA	2.01	0.42
1:CE:185:PRO:HA	1:CE:186:PRO:HD3	1.92	0.42
1:BG:175:PHE:O	1:BG:175:PHE:CD2	2.73	0.42
1:CQ:175:PHE:O	1:CQ:175:PHE:CD2	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AQ:263:ASN:O	1:AQ:267:LYS:HG3	2.19	0.42
1:BK:237:VAL:HG23	1:BK:279:PHE:CD2	2.55	0.42
1:CS:232:THR:HB	1:CS:334:VAL:HG23	2.02	0.42
1:AH:58:ALA:HB2	1:AH:102:GLY:HA3	2.02	0.42
1:CI:285:SER:HA	1:CI:286:PRO:HD3	1.92	0.42
1:BB:252:VAL:HG22	1:BB:253:SER:N	2.35	0.42
1:BC:232:THR:HB	1:BC:334:VAL:HG23	2.02	0.42
1:AA:285:SER:HA	1:AA:286:PRO:HD3	1.92	0.42
1:AS:379:VAL:HG11	1:AS:381:MET:HE1	2.02	0.42
1:BD:324:LEU:C	1:BD:324:LEU:HD23	2.40	0.42
1:AG:191:LEU:O	1:BG:144:ALA:HB3	2.20	0.42
1:AM:191:LEU:HD23	1:AM:191:LEU:N	2.16	0.42
1:AC:55:ARG:HD3	1:AT:272:TYR:HD2	1.82	0.42
1:BQ:189:PHE:CE2	1:BQ:249:LEU:HD21	2.52	0.42
1:BL:33:LYS:HE2	1:BL:33:LYS:HB2	1.96	0.42
1:CL:188:PHE:C	1:CL:189:PHE:HD1	2.22	0.42
1:CO:239:ILE:HG23	1:CO:324:LEU:HD21	2.01	0.42
1:BD:371:ASP:OD1	1:BD:381:MET:HG2	2.20	0.42
1:BD:239:ILE:HD12	1:BD:275:GLU:HA	2.02	0.42
1:CM:232:THR:HB	1:CM:334:VAL:HG23	2.00	0.42
1:AT:379:VAL:CG1	1:AT:381:MET:CE	2.98	0.42
1:AT:379:VAL:HG12	1:AT:381:MET:HE2	2.01	0.42
1:CI:170:PHE:HD1	1:CI:389:MET:HE2	1.85	0.42
1:BB:232:THR:HB	1:BB:334:VAL:HG23	2.01	0.42
1:CJ:324:LEU:HA	1:CJ:325:PRO:HD3	1.88	0.42
1:AE:379:VAL:HG12	1:AE:381:MET:HE2	2.00	0.42
1:AL:232:THR:HB	1:AL:334:VAL:CG2	2.50	0.42
1:CT:182:LEU:HG	1:CT:330:ILE:HB	2.02	0.42
1:AE:252:VAL:HG22	1:AE:253:SER:N	2.35	0.42
1:AP:237:VAL:HG23	1:AP:279:PHE:CD2	2.55	0.42
1:CM:182:LEU:C	1:CM:182:LEU:HD12	2.40	0.42
1:CC:16:ALA:O	1:CC:17:ASN:HB2	2.20	0.42
1:AB:207:VAL:HA	1:AB:208:PRO:HD3	1.83	0.42
1:BP:324:LEU:C	1:BP:324:LEU:HD23	2.40	0.42
1:BA:412:PHE:HB2	1:BE:442:GLN:HE21	1.85	0.42
1:CR:436:SER:O	1:CS:487:LEU:HD21	2.19	0.42
1:CK:108:ILE:HG23	1:CK:113:LEU:HD12	2.01	0.42
1:AD:340:LEU:HD23	1:AD:340:LEU:HA	1.92	0.42
1:BJ:202:LEU:HD23	1:BJ:202:LEU:HA	1.87	0.42
1:CP:252:VAL:HG22	1:CP:253:SER:N	2.35	0.42
1:CP:423:LYS:HE2	1:CP:449:GLU:O	2.20	0.42
1:AP:379:VAL:HG12	1:AP:381:MET:HE2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CN:234:ARG:HG2	1:CN:280:GLU:HG2	2.01	0.42
1:CL:207:VAL:HA	1:CL:208:PRO:HD3	1.85	0.42
1:AT:16:ALA:O	1:AT:17:ASN:HB2	2.20	0.42
1:BA:252:VAL:HG22	1:BA:253:SER:N	2.34	0.42
1:BR:171:ASP:HA	1:BR:172:PRO:HD3	1.78	0.42
1:AA:182:LEU:HG	1:AA:330:ILE:HB	2.02	0.42
1:AB:237:VAL:HG23	1:AB:279:PHE:CD2	2.55	0.42
1:BR:371:ASP:OD1	1:BR:381:MET:HG2	2.20	0.42
1:AG:259:THR:OG1	1:AG:260:MET:N	2.53	0.41
1:BI:55:ARG:HD3	1:BR:272:TYR:HD2	1.79	0.41
1:AI:189:PHE:HD2	1:AI:247:ILE:HD11	1.85	0.41
1:CF:189:PHE:CE2	1:CF:249:LEU:HD21	2.47	0.41
1:BC:22:THR:OG1	1:BC:131:HIS:CD2	2.59	0.41
1:CK:189:PHE:CE2	1:CK:249:LEU:HD21	2.55	0.41
1:CS:203:THR:CB	1:CS:300:GLN:HG3	2.49	0.41
1:CG:324:LEU:C	1:CG:324:LEU:HD23	2.40	0.41
1:BT:234:ARG:CG	1:BT:280:GLU:HG2	2.49	0.41
1:BA:163:LEU:HD21	1:BA:458:ALA:HB2	2.01	0.41
1:CE:170:PHE:HD1	1:CE:389:MET:HE2	1.85	0.41
1:AH:32:PHE:CZ	1:AK:267:LYS:HG2	2.55	0.41
1:AF:381:MET:HB2	1:AF:381:MET:HE2	1.87	0.41
1:BF:232:THR:HB	1:BF:334:VAL:CG2	2.50	0.41
1:BA:73:TYR:CZ	1:BA:394:GLY:HA3	2.55	0.41
1:AJ:48:PRO:HG2	1:AJ:50:PHE:CZ	2.55	0.41
1:CA:440:ALA:CB	1:CB:444:LEU:HD13	2.49	0.41
1:AM:263:ASN:O	1:AM:267:LYS:HG3	2.20	0.41
1:CB:256:ASN:HD22	1:CB:302:ASP:HA	1.85	0.41
1:AF:182:LEU:HG	1:AF:330:ILE:HB	2.02	0.41
1:CL:232:THR:HB	1:CL:334:VAL:CG2	2.51	0.41
1:BD:285:SER:HA	1:BD:286:PRO:HD3	1.90	0.41
1:BE:175:PHE:O	1:BE:175:PHE:CD2	2.73	0.41
1:BF:15:GLN:HE21	1:BF:15:GLN:HA	1.84	0.41
1:CS:318:SER:HA	1:CS:319:GLY:HA2	1.81	0.41
1:BN:404:LEU:HD22	1:BN:486:VAL:HG22	2.01	0.41
1:CI:232:THR:HB	1:CI:334:VAL:CG2	2.50	0.41
1:AT:252:VAL:HG22	1:AT:253:SER:N	2.35	0.41
1:AR:43:ALA:HB1	1:AR:158:GLU:HA	2.02	0.41
1:BQ:371:ASP:OD1	1:BQ:381:MET:HG2	2.20	0.41
1:CN:393:HIS:CG	1:CN:496:PHE:HB3	2.54	0.41
1:CA:272:TYR:N	1:CA:272:TYR:HD1	2.17	0.41
1:CD:55:ARG:CD	1:CN:272:TYR:CD2	2.97	0.41
1:AB:259:THR:HG22	1:AB:259:THR:O	2.15	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BG:33:LYS:O	1:BG:33:LYS:CG	2.62	0.41
1:BE:16:ALA:O	1:BE:17:ASN:CB	2.64	0.41
1:CP:188:PHE:C	1:CP:189:PHE:HD1	2.24	0.41
1:CH:442:GLN:NE2	1:CI:412:PHE:HB2	2.35	0.41
1:CR:10:ILE:HA	1:CR:11:PRO:HD3	1.88	0.41
1:AH:234:ARG:CG	1:AH:280:GLU:HG2	2.50	0.41
1:CS:324:LEU:HA	1:CS:325:PRO:HD3	1.85	0.41
1:AC:381:MET:HB2	1:AC:381:MET:HE2	1.86	0.41
1:BF:379:VAL:CG1	1:BF:381:MET:HE2	2.50	0.41
1:BJ:162:PHE:CD2	1:BJ:163:LEU:HD13	2.55	0.41
1:CI:239:ILE:HD12	1:CI:275:GLU:HA	2.00	0.41
1:BT:379:VAL:HG12	1:BT:381:MET:HE2	2.01	0.41
1:AK:324:LEU:HA	1:AK:325:PRO:HD3	1.89	0.41
1:BR:234:ARG:HG2	1:BR:280:GLU:HG2	2.01	0.41
1:AJ:379:VAL:HG11	1:AJ:381:MET:HE1	2.01	0.41
1:AF:43:ALA:HB1	1:AF:158:GLU:HA	2.02	0.41
1:BM:255:TRP:CE3	1:BM:285:SER:HB2	2.55	0.41
1:AK:52:ILE:HD11	1:AK:108:ILE:HD12	2.03	0.41
1:BF:182:LEU:HG	1:BF:330:ILE:HB	2.02	0.41
1:AK:207:VAL:HA	1:AK:208:PRO:HD3	1.82	0.41
1:CF:423:LYS:HE2	1:CF:449:GLU:O	2.19	0.41
1:CG:175:PHE:O	1:CG:175:PHE:CD2	2.74	0.41
1:BL:318:SER:HA	1:BL:319:GLY:HA2	1.77	0.41
1:CQ:182:LEU:HD12	1:CQ:182:LEU:C	2.41	0.41
1:BO:272:TYR:CD2	1:BR:55:ARG:NH1	2.87	0.41
1:BR:272:TYR:N	1:BR:272:TYR:HD1	2.18	0.41
1:BP:272:TYR:HD2	1:CE:55:ARG:HD3	1.77	0.41
1:AP:250:TRP:HZ3	1:AP:272:TYR:CE1	2.33	0.41
1:CJ:191:LEU:N	1:CJ:191:LEU:CD2	2.78	0.41
1:CR:272:TYR:N	1:CR:272:TYR:HD1	2.18	0.41
1:CN:14:CYS:HB3	1:CN:64:LEU:HD21	2.01	0.41
1:BL:239:ILE:HG23	1:BL:324:LEU:HD21	2.01	0.41
1:AC:163:LEU:HD12	1:AC:163:LEU:HA	1.90	0.41
1:AE:163:LEU:HA	1:AE:163:LEU:HD12	1.88	0.41
1:BR:239:ILE:HG12	1:BR:326:ILE:CD1	2.50	0.41
1:CQ:162:PHE:CD1	1:CR:287:TYR:HA	2.56	0.41
1:CP:28:MET:CE	1:CP:152:LEU:HG	2.51	0.41
1:BP:324:LEU:HA	1:BP:325:PRO:HD3	1.84	0.41
1:AD:423:LYS:HE2	1:AD:449:GLU:O	2.19	0.41
1:AD:171:ASP:HA	1:AD:172:PRO:HD3	1.78	0.41
1:AJ:61:PHE:CD2	1:AJ:243:ILE:HD11	2.55	0.41
1:AE:423:LYS:HE2	1:AE:449:GLU:O	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CQ:395:LEU:HB2	1:CQ:497:TYR:HB2	2.01	0.41
1:AD:371:ASP:OD1	1:AD:381:MET:HG2	2.20	0.41
1:BR:395:LEU:HB2	1:BR:497:TYR:HB2	2.01	0.41
1:CL:440:ALA:CB	1:CM:444:LEU:HD13	2.50	0.41
1:BI:20:LEU:HB2	1:BI:132:PHE:O	2.20	0.41
1:CD:48:PRO:HG2	1:CD:50:PHE:CZ	2.56	0.41
1:CP:444:LEU:HD13	1:CT:440:ALA:CB	2.50	0.41
1:CH:437:HIS:CE1	1:CI:405:GLN:NE2	2.88	0.41
1:BO:73:TYR:CE2	1:BO:394:GLY:HA3	2.56	0.41
1:AN:418:SER:HB3	1:AO:407:SER:HB3	2.01	0.41
1:AO:294:LEU:CD1	1:AO:299:SER:HA	2.49	0.41
1:BD:55:ARG:HD3	1:BN:272:TYR:HD2	1.78	0.41
1:BG:454:ASN:HD21	1:BG:456:ALA:HB3	1.84	0.41
1:AH:15:GLN:CA	1:AH:15:GLN:HE21	2.24	0.41
1:CS:79:ARG:HH11	1:CS:79:ARG:CG	2.33	0.41
1:AL:442:GLN:NE2	1:AM:412:PHE:HB2	2.34	0.41
1:CF:14:CYS:H	1:CF:138:ASN:ND2	2.18	0.41
1:AR:379:VAL:HG12	1:AR:381:MET:HE2	2.02	0.41
1:AM:163:LEU:HD12	1:AM:163:LEU:HA	1.82	0.41
1:BD:38:GLU:HB3	1:BM:35:VAL:HG23	2.02	0.41
1:AI:267:LYS:HG2	1:AO:32:PHE:CZ	2.55	0.41
1:BG:232:THR:HB	1:BG:334:VAL:HG23	2.00	0.41
1:AJ:234:ARG:CG	1:AJ:280:GLU:HG2	2.50	0.41
1:BI:25:ILE:HD12	1:BI:128:PRO:HB2	2.02	0.41
1:CD:232:THR:HB	1:CD:334:VAL:HG23	2.02	0.41
1:CD:371:ASP:OD1	1:CD:381:MET:HG2	2.20	0.41
1:BO:25:ILE:HG23	1:BO:152:LEU:HD11	2.02	0.41
1:BB:170:PHE:HD1	1:BB:389:MET:CE	2.33	0.41
1:CQ:234:ARG:HG2	1:CQ:280:GLU:HG2	2.03	0.41
1:AP:222:LEU:O	1:AP:225:CYS:HB2	2.21	0.41
1:CH:285:SER:HA	1:CH:286:PRO:HD3	1.93	0.41
1:AG:182:LEU:HG	1:AG:330:ILE:HB	2.03	0.41
1:AI:318:SER:HA	1:AI:319:GLY:HA2	1.78	0.41
1:AR:182:LEU:HG	1:AR:330:ILE:HB	2.02	0.41
1:CT:379:VAL:HG11	1:CT:381:MET:HE1	2.02	0.41
1:BI:238:HIS:HE1	1:BI:329:GLN:OE1	2.04	0.41
1:BN:202:LEU:HD23	1:BN:202:LEU:HA	1.93	0.41
1:CQ:45:LEU:HD23	1:CQ:45:LEU:HA	1.88	0.41
1:CB:182:LEU:C	1:CB:182:LEU:HD12	2.40	0.41
1:CP:324:LEU:C	1:CP:324:LEU:HD23	2.40	0.41
1:AN:77:THR:O	1:AN:81:THR:HG23	2.20	0.41
1:AO:202:LEU:HB2	1:AO:304:SER:O	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AC:25:ILE:HG23	1:AC:152:LEU:HD11	2.01	0.41
1:BS:252:VAL:HG22	1:BS:253:SER:N	2.36	0.41
1:BA:18:ARG:HG3	1:BA:19:TYR:N	2.34	0.41
1:CF:475:LEU:HB3	1:CF:478:ALA:HB2	2.02	0.41
1:CP:255:TRP:CG	1:CP:286:PRO:HD3	2.56	0.41
1:AC:171:ASP:HA	1:AC:172:PRO:HD3	1.81	0.41
1:CB:423:LYS:HE2	1:CB:449:GLU:O	2.20	0.41
1:BN:226:VAL:HG13	1:BN:228:GLY:H	1.86	0.41
1:AM:272:TYR:CE2	1:CP:55:ARG:CZ	3.04	0.41
1:AM:272:TYR:N	1:AM:272:TYR:HD1	2.18	0.41
1:CD:22:THR:OG1	1:CD:131:HIS:CD2	2.58	0.41
1:AK:188:PHE:C	1:AK:189:PHE:HD1	2.24	0.41
1:AE:22:THR:OG1	1:AE:131:HIS:CD2	2.60	0.41
1:CR:77:THR:HA	1:CR:80:ILE:HD11	2.03	0.41
1:BA:22:THR:OG1	1:BA:131:HIS:CD2	2.61	0.41
1:BQ:454:ASN:HD21	1:BQ:456:ALA:HB3	1.85	0.41
1:AK:33:LYS:HE2	1:AK:33:LYS:HB2	1.97	0.41
1:BD:189:PHE:HE1	1:BD:198:ARG:CG	2.27	0.41
1:CC:189:PHE:HE2	1:CC:249:LEU:HD21	1.85	0.41
1:CF:239:ILE:HG23	1:CF:324:LEU:HD21	2.02	0.41
1:CH:10:ILE:HA	1:CH:11:PRO:HD3	1.86	0.41
1:BK:239:ILE:HG23	1:BK:324:LEU:HD21	2.02	0.41
1:AS:182:LEU:HG	1:AS:330:ILE:HB	2.03	0.41
1:CK:232:THR:HB	1:CK:334:VAL:HG23	2.02	0.41
1:CO:232:THR:HB	1:CO:334:VAL:HG23	2.02	0.41
1:AT:324:LEU:HD23	1:AT:324:LEU:C	2.40	0.41
1:BR:379:VAL:HG11	1:BR:381:MET:HE1	2.02	0.41
1:CL:232:THR:HB	1:CL:334:VAL:HG23	2.01	0.41
1:CP:444:LEU:HD13	1:CT:440:ALA:HB3	2.02	0.41
1:BA:11:PRO:HG2	1:BA:18:ARG:CD	2.51	0.41
1:CJ:423:LYS:HE2	1:CJ:449:GLU:O	2.20	0.41
1:BG:300:GLN:HB2	1:BG:300:GLN:HE21	1.60	0.41
1:BJ:234:ARG:HG2	1:BJ:280:GLU:HG2	2.02	0.41
1:CF:226:VAL:HG13	1:CF:228:GLY:H	1.85	0.41
1:BE:252:VAL:HG22	1:BE:253:SER:N	2.36	0.41
1:AD:43:ALA:HB1	1:AD:158:GLU:HA	2.02	0.41
1:BG:238:HIS:HE1	1:BG:329:GLN:OE1	2.03	0.41
1:CT:324:LEU:HD23	1:CT:324:LEU:C	2.41	0.41
1:BN:379:VAL:HG11	1:BN:381:MET:HE1	2.03	0.41
1:AN:226:VAL:HG13	1:AN:228:GLY:H	1.85	0.41
1:AQ:58:ALA:HB2	1:AQ:102:GLY:HA3	2.02	0.41
1:AH:207:VAL:HA	1:AH:208:PRO:HD3	1.83	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AT:55:ARG:CZ	1:BA:272:TYR:CD2	3.04	0.41
1:AS:22:THR:OG1	1:AS:131:HIS:CD2	2.63	0.41
1:CP:22:THR:OG1	1:CP:131:HIS:CD2	2.64	0.41
1:AO:79:ARG:NH1	1:AO:79:ARG:CG	2.84	0.41
1:AQ:188:PHE:C	1:AQ:189:PHE:HD1	2.24	0.41
1:CS:234:ARG:CG	1:CS:280:GLU:HG2	2.51	0.41
1:CC:239:ILE:HD12	1:CC:275:GLU:HA	2.01	0.41
1:AS:239:ILE:HD12	1:AS:275:GLU:HA	2.02	0.41
1:AQ:163:LEU:HA	1:AQ:163:LEU:HD12	1.87	0.41
1:AC:263:ASN:O	1:AC:267:LYS:HG3	2.20	0.41
1:BG:25:ILE:HD12	1:BG:128:PRO:HB2	2.03	0.41
1:BO:234:ARG:CG	1:BO:280:GLU:HG2	2.50	0.41
1:AD:379:VAL:HG11	1:AD:381:MET:HE1	2.02	0.41
1:AA:379:VAL:HG11	1:AA:381:MET:HE1	2.03	0.41
1:BT:263:ASN:O	1:BT:267:LYS:HG3	2.20	0.41
1:BJ:371:ASP:OD1	1:BJ:381:MET:HG2	2.19	0.41
1:CI:20:LEU:HB2	1:CI:132:PHE:O	2.21	0.41
1:CN:226:VAL:HG13	1:CN:228:GLY:H	1.85	0.41
1:BC:28:MET:HE2	1:BC:152:LEU:HG	2.02	0.41
1:AG:232:THR:HB	1:AG:334:VAL:HG23	2.01	0.41
1:AG:25:ILE:HG23	1:AG:152:LEU:HD11	2.03	0.41
1:AR:318:SER:HA	1:AR:319:GLY:HA2	1.75	0.41
1:AQ:241:ALA:HB1	1:AQ:242:PRO:HD2	2.03	0.41
1:AG:285:SER:HA	1:AG:286:PRO:HD3	1.94	0.41
1:BT:300:GLN:HB2	1:BT:300:GLN:HE21	1.57	0.41
1:AC:443:LYS:HD3	1:AC:443:LYS:HA	1.93	0.41
1:BN:340:LEU:HA	1:BN:340:LEU:HD23	1.87	0.41
1:BI:324:LEU:HD23	1:BI:324:LEU:C	2.40	0.41
1:CO:10:ILE:HA	1:CO:11:PRO:HD3	1.82	0.41
1:BI:263:ASN:O	1:BI:267:LYS:HG3	2.20	0.41
1:AB:171:ASP:HA	1:AB:172:PRO:HD3	1.79	0.41
1:CK:12:LYS:HB3	1:CK:144:ALA:C	2.41	0.41
1:BS:423:LYS:HE2	1:BS:449:GLU:O	2.20	0.41
1:BJ:79:ARG:CG	1:BJ:79:ARG:NH1	2.73	0.41
1:CL:191:LEU:N	1:CL:191:LEU:CD2	2.75	0.41
1:BL:272:TYR:N	1:BL:272:TYR:HD1	2.19	0.41
1:AK:189:PHE:CE2	1:AK:249:LEU:HD21	2.55	0.41
1:CE:454:ASN:ND2	1:CE:456:ALA:HB3	2.36	0.41
1:AB:79:ARG:CG	1:AB:79:ARG:NH1	2.82	0.41
1:AE:300:GLN:HB2	1:AE:300:GLN:HE21	1.72	0.41
1:BM:300:GLN:HE21	1:BM:300:GLN:HB2	1.66	0.41
1:AF:163:LEU:HD12	1:AF:163:LEU:HA	1.90	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AS:234:ARG:CG	1:AS:280:GLU:HG2	2.51	0.41
1:BT:11:PRO:HG2	1:BT:18:ARG:HD2	2.03	0.41
1:CP:379:VAL:HG12	1:CP:381:MET:HE2	2.02	0.41
1:BI:52:ILE:HG12	1:BI:152:LEU:CD2	2.51	0.41
1:CI:234:ARG:CG	1:CI:280:GLU:HG2	2.51	0.41
1:BP:28:MET:HE2	1:BP:152:LEU:HG	2.03	0.41
1:AA:203:THR:HB	1:AA:300:GLN:HG3	2.02	0.41
1:CI:232:THR:HB	1:CI:334:VAL:HG23	2.03	0.41
1:AG:182:LEU:C	1:AG:182:LEU:HD12	2.40	0.41
1:CM:20:LEU:HB2	1:CM:132:PHE:O	2.21	0.41
1:AA:108:ILE:HG23	1:AA:113:LEU:HD12	2.02	0.41
1:BB:35:VAL:HG22	1:CA:38:GLU:HB2	2.03	0.41
1:AQ:318:SER:HA	1:AQ:319:GLY:HA2	1.80	0.41
1:AP:232:THR:HB	1:AP:334:VAL:CG2	2.51	0.41
1:CG:404:LEU:HD22	1:CG:486:VAL:HG22	2.02	0.41
1:CS:401:ASP:O	1:CS:488:CYS:HA	2.21	0.41
1:AB:18:ARG:HB2	1:AB:18:ARG:NH1	2.36	0.41
1:BB:202:LEU:HD23	1:BB:202:LEU:HA	1.95	0.41
1:CG:170:PHE:HD1	1:CG:389:MET:CE	2.34	0.41
1:AB:257:GLY:O	1:AB:258:THR:HG22	2.20	0.41
1:BH:237:VAL:HG23	1:BH:279:PHE:CD2	2.54	0.41
1:BR:423:LYS:HE2	1:BR:449:GLU:O	2.21	0.41
1:AN:414:LYS:HA	1:AO:411:GLU:HB3	2.02	0.41
1:CD:250:TRP:CZ3	1:CD:272:TYR:CD1	3.08	0.41
1:BL:191:LEU:HD23	1:BL:191:LEU:N	2.22	0.41
1:AT:55:ARG:NE	1:BA:272:TYR:HE2	2.10	0.41
1:AS:454:ASN:ND2	1:AS:456:ALA:H	2.09	0.41
1:BL:79:ARG:NH1	1:BL:79:ARG:CG	2.83	0.41
1:CR:14:CYS:HB3	1:CR:64:LEU:HD21	2.01	0.41
1:AR:239:ILE:HD12	1:AR:275:GLU:HA	2.02	0.41
1:CH:162:PHE:CD1	1:CI:287:TYR:HA	2.56	0.41
1:CG:371:ASP:OD1	1:CG:381:MET:HG2	2.21	0.41
1:BE:371:ASP:OD1	1:BE:381:MET:HG2	2.21	0.41
1:CB:379:VAL:HG12	1:CB:381:MET:HE2	2.03	0.41
1:AH:182:LEU:HD12	1:AH:182:LEU:C	2.41	0.41
1:CP:404:LEU:N	1:CP:404:LEU:HD23	2.36	0.41
1:AA:232:THR:HB	1:AA:334:VAL:CG2	2.50	0.41
1:AE:371:ASP:OD1	1:AE:381:MET:HG2	2.20	0.41
1:CI:255:TRP:CE3	1:CI:285:SER:HB2	2.56	0.41
1:AN:241:ALA:HB1	1:AN:242:PRO:HD2	2.03	0.41
1:BA:407:SER:HB3	1:BE:418:SER:HB3	2.01	0.41
1:AQ:324:LEU:HA	1:AQ:325:PRO:HD3	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:BO:182:LEU:HG	1:BO:330:ILE:HB	2.02	0.41
1:AK:202:LEU:HB2	1:AK:304:SER:O	2.21	0.41
1:AH:256:ASN:HD22	1:AH:302:ASP:HA	1.86	0.41
1:BH:335:ARG:N	1:BH:336:PRO:HD3	2.36	0.41
1:CJ:202:LEU:HB2	1:CJ:304:SER:O	2.21	0.41
1:BI:232:THR:HB	1:BI:334:VAL:CG2	2.49	0.41
1:AC:324:LEU:HD23	1:AC:324:LEU:C	2.42	0.41
1:AI:182:LEU:C	1:AI:182:LEU:HD12	2.41	0.41
1:BF:285:SER:HA	1:BF:286:PRO:HD3	1.92	0.41
1:AS:252:VAL:HG22	1:AS:253:SER:N	2.35	0.41
1:AQ:285:SER:HA	1:AQ:286:PRO:HD3	1.93	0.41
1:BT:241:ALA:HB1	1:BT:242:PRO:HD2	2.03	0.41
1:AM:436:SER:O	1:AN:487:LEU:HD21	2.21	0.41
1:AN:430:MET:HE1	1:AO:296:ALA:CA	2.50	0.41
1:CR:85:ASP:O	1:CR:86:PRO:C	2.57	0.41
1:BL:7:VAL:CG1	1:BL:9:TYR:CE2	3.04	0.41
1:BQ:191:LEU:HD23	1:BQ:191:LEU:N	2.20	0.41
1:CR:189:PHE:HD2	1:CR:247:ILE:HD11	1.86	0.41
1:CD:55:ARG:CZ	1:CN:272:TYR:CD2	3.04	0.41
1:CN:272:TYR:N	1:CN:272:TYR:HD1	2.18	0.41
1:AE:272:TYR:CD2	1:AM:55:ARG:CZ	3.04	0.41
1:BR:189:PHE:CE1	1:BR:198:ARG:HG2	2.56	0.41
1:BN:55:ARG:CZ	1:BS:272:TYR:CD2	3.04	0.41
1:AS:77:THR:O	1:AS:81:THR:HG23	2.21	0.41
1:CC:189:PHE:HE1	1:CC:198:ARG:CG	2.30	0.41
1:AB:58:ALA:HB2	1:AB:102:GLY:CA	2.50	0.41
1:AN:289:ARG:NH1	1:AN:337:ASP:OD1	2.54	0.41
1:AG:38:GLU:CB	1:CF:35:VAL:CG2	2.99	0.41
1:AF:203:THR:HB	1:AF:300:GLN:CG	2.51	0.41
1:CM:14:CYS:H	1:CM:138:ASN:ND2	2.18	0.41
1:CM:239:ILE:HG23	1:CM:324:LEU:HD21	2.02	0.41
1:BN:442:GLN:NE2	1:BO:412:PHE:HB2	2.34	0.41
1:AI:61:PHE:CD2	1:AI:243:ILE:HD11	2.55	0.41
1:CG:239:ILE:HG23	1:CG:324:LEU:HD21	2.02	0.41
1:BD:11:PRO:HG2	1:BD:18:ARG:HD2	2.02	0.41
1:AR:371:ASP:OD1	1:AR:381:MET:HG2	2.21	0.41
1:AM:162:PHE:CD1	1:AN:287:TYR:HA	2.56	0.41
1:CK:371:ASP:OD1	1:CK:381:MET:HG2	2.21	0.41
1:AQ:170:PHE:HB2	1:AQ:496:PHE:HE1	1.85	0.41
1:CQ:170:PHE:HB2	1:CQ:496:PHE:HE1	1.85	0.41
1:AI:379:VAL:CG1	1:AI:381:MET:CE	2.99	0.41
1:AT:371:ASP:OD1	1:AT:381:MET:HG2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CR:162:PHE:CD1	1:CS:287:TYR:HA	2.56	0.41
1:AL:300:GLN:HE21	1:AL:300:GLN:HB2	1.67	0.41
1:AF:287:TYR:HA	1:AJ:162:PHE:CD1	2.55	0.41
1:BF:379:VAL:CG1	1:BF:381:MET:CE	2.99	0.41
1:BT:324:LEU:HA	1:BT:325:PRO:HD3	1.88	0.41
1:BT:379:VAL:HG11	1:BT:381:MET:HE1	2.02	0.41
1:AA:404:LEU:N	1:AA:404:LEU:HD23	2.36	0.41
1:AL:372:PHE:H	1:AL:381:MET:HE1	1.85	0.41
1:AL:379:VAL:HG12	1:AL:381:MET:HE2	2.03	0.41
1:CS:232:THR:HB	1:CS:334:VAL:CG2	2.51	0.41
1:AP:379:VAL:HG11	1:AP:381:MET:HE1	2.02	0.41
1:CQ:182:LEU:HG	1:CQ:330:ILE:HB	2.02	0.41
1:BJ:379:VAL:HG11	1:BJ:381:MET:HE1	2.02	0.41
1:BT:20:LEU:HB2	1:BT:132:PHE:O	2.21	0.41
1:AG:239:ILE:HG12	1:AG:326:ILE:CD1	2.50	0.41
1:BO:232:THR:HB	1:BO:334:VAL:HG23	2.03	0.41
1:CT:25:ILE:HG23	1:CT:152:LEU:HD11	2.03	0.41
1:CQ:207:VAL:HA	1:CQ:208:PRO:HD3	1.83	0.41
1:CD:10:ILE:HA	1:CD:11:PRO:HD3	1.89	0.41
1:BL:170:PHE:HD1	1:BL:389:MET:CE	2.33	0.41
1:BR:318:SER:HA	1:BR:319:GLY:HA2	1.76	0.41
1:AO:58:ALA:HB2	1:AO:102:GLY:HA3	2.01	0.41
1:CK:412:PHE:HB2	1:CO:442:GLN:HE21	1.86	0.41
1:CL:43:ALA:HB1	1:CL:158:GLU:HA	2.02	0.41
1:AD:108:ILE:HG23	1:AD:113:LEU:HD12	2.03	0.41
1:BQ:340:LEU:HD23	1:BQ:340:LEU:HA	1.88	0.41
1:CK:202:LEU:HD23	1:CK:202:LEU:HA	1.87	0.41
1:AN:202:LEU:HD23	1:AN:202:LEU:HA	1.90	0.41
1:CA:202:LEU:HA	1:CA:202:LEU:HD23	1.94	0.41
1:BR:324:LEU:C	1:BR:324:LEU:HD23	2.41	0.41
1:AI:252:VAL:HG22	1:AI:253:SER:N	2.36	0.41
1:CP:263:ASN:O	1:CP:267:LYS:HG3	2.20	0.41
1:BE:201:GLY:HA3	1:BE:300:GLN:HG2	2.02	0.41
1:AG:207:VAL:HA	1:AG:208:PRO:HD3	1.81	0.41
1:BT:20:LEU:HD11	1:BT:66:TRP:CD1	2.56	0.41
1:BS:37:TYR:O	1:BS:40:TRP:HB3	2.21	0.41
1:CR:285:SER:HA	1:CR:286:PRO:HD3	1.91	0.41
1:CJ:182:LEU:HG	1:CJ:330:ILE:HB	2.03	0.41
1:BF:324:LEU:HD23	1:BF:324:LEU:C	2.42	0.41
1:AG:43:ALA:HB1	1:AG:158:GLU:HA	2.03	0.41
1:AC:14:CYS:H	1:AC:138:ASN:HD21	1.67	0.41
1:CI:75:ARG:NH2	1:CI:391:ALA:O	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:238:HIS:HE1	1:AA:329:GLN:OE1	2.04	0.41
1:AJ:175:PHE:CD2	1:AJ:175:PHE:O	2.74	0.41
1:CA:324:LEU:C	1:CA:324:LEU:HD23	2.41	0.41
1:CM:58:ALA:HB2	1:CM:102:GLY:HA3	2.02	0.41
1:AJ:171:ASP:HA	1:AJ:172:PRO:HD3	1.78	0.41
1:BN:207:VAL:HA	1:BN:208:PRO:HD3	1.83	0.41
1:AC:256:ASN:HD22	1:AC:302:ASP:HA	1.85	0.41
1:BF:108:ILE:HG23	1:BF:113:LEU:HD12	2.02	0.41
1:CH:182:LEU:HD12	1:CH:182:LEU:C	2.40	0.41
1:BP:250:TRP:HE3	1:BP:272:TYR:CD1	2.39	0.41
1:BB:191:LEU:N	1:BB:191:LEU:CD2	2.73	0.41
1:AE:197:LEU:HD21	1:AE:258:THR:HG21	2.02	0.41
1:AM:272:TYR:CD2	1:CP:55:ARG:CZ	3.04	0.41
1:AC:454:ASN:ND2	1:AC:456:ALA:HB3	2.36	0.41
1:CI:22:THR:OG1	1:CI:131:HIS:CD2	2.62	0.41
1:AL:188:PHE:C	1:AL:189:PHE:HD1	2.24	0.41
1:CG:74:ASN:ND2	1:CG:77:THR:OG1	2.54	0.41
1:CL:234:ARG:CG	1:CL:280:GLU:HG2	2.51	0.41
1:CE:61:PHE:CE2	1:CE:243:ILE:HD11	2.56	0.41
1:BH:18:ARG:HG2	1:BH:20:LEU:HD23	2.03	0.41
1:AD:234:ARG:CG	1:AD:280:GLU:HG2	2.51	0.41
1:AO:381:MET:HE2	1:AO:381:MET:HB2	1.85	0.41
1:AB:202:LEU:HD23	1:AB:202:LEU:HA	1.88	0.41
1:BP:182:LEU:C	1:BP:182:LEU:HD12	2.42	0.41
1:BR:379:VAL:HG12	1:BR:381:MET:HE2	2.03	0.41
1:BJ:234:ARG:CG	1:BJ:280:GLU:HG2	2.51	0.41
1:BL:170:PHE:HD1	1:BL:389:MET:HE2	1.86	0.41
1:BS:285:SER:HA	1:BS:286:PRO:HD3	1.95	0.41
1:BT:185:PRO:HA	1:BT:186:PRO:HD3	1.94	0.41
1:BT:285:SER:HA	1:BT:286:PRO:HD3	1.92	0.41
1:CD:252:VAL:HG22	1:CD:253:SER:N	2.35	0.41
1:CR:108:ILE:HG23	1:CR:113:LEU:HD12	2.03	0.41
1:BQ:226:VAL:HG13	1:BQ:228:GLY:H	1.86	0.41
1:AP:252:VAL:HG22	1:AP:253:SER:N	2.36	0.41
1:CF:252:VAL:HG22	1:CF:253:SER:N	2.36	0.41
1:BE:423:LYS:HE2	1:BE:449:GLU:O	2.20	0.41
1:BF:263:ASN:O	1:BF:267:LYS:HG3	2.21	0.41
1:AD:324:LEU:C	1:AD:324:LEU:HD23	2.41	0.41
1:AL:340:LEU:HA	1:AL:340:LEU:HD23	1.94	0.41
1:AE:324:LEU:HD23	1:AE:324:LEU:C	2.41	0.41
1:AD:182:LEU:HD12	1:AD:182:LEU:C	2.42	0.41
1:BD:175:PHE:O	1:BD:175:PHE:CD2	2.74	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CS:202:LEU:HA	1:CS:202:LEU:HD23	1.90	0.41
1:AS:11:PRO:HG2	1:AS:18:ARG:CD	2.51	0.41
1:BF:48:PRO:HG2	1:BF:50:PHE:CZ	2.56	0.41
1:BR:252:VAL:HG22	1:BR:253:SER:N	2.36	0.41
1:CF:48:PRO:HG2	1:CF:50:PHE:CZ	2.56	0.41
1:AB:263:ASN:ND2	1:CB:32:PHE:HA	2.34	0.40
1:AL:250:TRP:HZ3	1:AL:272:TYR:HE1	1.64	0.40
1:BN:189:PHE:CE2	1:BN:249:LEU:HD21	2.48	0.40
1:AF:189:PHE:CE1	1:AF:198:ARG:HG2	2.55	0.40
1:AJ:55:ARG:CZ	1:BL:272:TYR:CD2	3.04	0.40
1:BE:272:TYR:CD2	1:BM:55:ARG:CZ	3.03	0.40
1:CP:79:ARG:CG	1:CP:79:ARG:NH1	2.78	0.40
1:CC:189:PHE:CE2	1:CC:249:LEU:HD21	2.56	0.40
1:AC:189:PHE:CE2	1:AC:249:LEU:HD21	2.56	0.40
1:CB:14:CYS:H	1:CB:138:ASN:ND2	2.18	0.40
1:AI:418:SER:HB3	1:AJ:407:SER:CB	2.50	0.40
1:AT:18:ARG:HG3	1:AT:19:TYR:N	2.35	0.40
1:AM:203:THR:CB	1:AM:300:GLN:HG3	2.51	0.40
1:AQ:379:VAL:CG1	1:AQ:381:MET:CE	2.99	0.40
1:BC:201:GLY:HA3	1:BC:300:GLN:HG2	2.03	0.40
1:AA:11:PRO:HG2	1:AA:18:ARG:CD	2.51	0.40
1:BO:371:ASP:OD1	1:BO:381:MET:HG2	2.21	0.40
1:AL:28:MET:CE	1:AL:152:LEU:HG	2.51	0.40
1:BP:239:ILE:HG12	1:BP:326:ILE:CD1	2.51	0.40
1:CM:182:LEU:HG	1:CM:330:ILE:HB	2.03	0.40
1:AF:182:LEU:HD12	1:AF:182:LEU:C	2.42	0.40
1:CH:182:LEU:HG	1:CH:330:ILE:HB	2.02	0.40
1:BO:226:VAL:HG13	1:BO:228:GLY:H	1.85	0.40
1:CT:252:VAL:HG22	1:CT:253:SER:N	2.35	0.40
1:AB:170:PHE:HD1	1:AB:389:MET:CE	2.33	0.40
1:CD:182:LEU:HG	1:CD:330:ILE:HB	2.03	0.40
1:AQ:414:LYS:HA	1:AR:411:GLU:HB3	2.03	0.40
1:AI:440:ALA:CB	1:AJ:444:LEU:HD13	2.50	0.40
1:CO:175:PHE:O	1:CO:175:PHE:CD2	2.75	0.40
1:BL:340:LEU:HA	1:BL:340:LEU:HD23	1.92	0.40
1:AI:202:LEU:HD23	1:AI:202:LEU:HA	1.87	0.40
1:BO:324:LEU:HD23	1:BO:324:LEU:C	2.41	0.40
1:AC:202:LEU:HD23	1:AC:202:LEU:HA	1.91	0.40
1:CS:226:VAL:HG13	1:CS:228:GLY:H	1.85	0.40
1:BG:48:PRO:HG2	1:BG:50:PHE:CZ	2.56	0.40
1:AL:252:VAL:HG22	1:AL:253:SER:N	2.36	0.40
1:CK:10:ILE:HG21	1:CK:146:TRP:CZ2	2.55	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CO:9:TYR:HE1	1:CO:147:GLN:HE21	1.69	0.40
1:BG:272:TYR:CD2	1:CG:55:ARG:NH1	2.89	0.40
1:BN:272:TYR:HD1	1:BN:272:TYR:N	2.18	0.40
1:BF:272:TYR:HD2	1:CK:55:ARG:HD3	1.80	0.40
1:BR:454:ASN:C	1:BR:454:ASN:HD22	2.25	0.40
1:BQ:36:GLN:HE22	1:BQ:156:LEU:H	1.63	0.40
1:BM:22:THR:OG1	1:BM:131:HIS:CD2	2.65	0.40
1:AO:324:LEU:C	1:AO:324:LEU:HD23	2.41	0.40
1:CE:11:PRO:HG2	1:CE:18:ARG:HD2	2.03	0.40
1:AS:163:LEU:HD12	1:AS:163:LEU:HA	1.90	0.40
1:AR:379:VAL:CG1	1:AR:381:MET:CE	2.99	0.40
1:CF:379:VAL:HG12	1:CF:381:MET:HE2	2.03	0.40
1:CB:300:GLN:HE21	1:CB:300:GLN:HB2	1.69	0.40
1:CA:444:LEU:HD13	1:CE:440:ALA:HB3	2.03	0.40
1:CC:170:PHE:HD1	1:CC:389:MET:HE2	1.86	0.40
1:BP:73:TYR:CE2	1:BP:394:GLY:HA3	2.56	0.40
1:AT:234:ARG:CG	1:AT:280:GLU:HG2	2.51	0.40
1:CE:197:LEU:HD13	1:CE:309:TYR:CE1	2.56	0.40
1:CQ:203:THR:HB	1:CQ:300:GLN:HG3	2.03	0.40
1:CH:28:MET:CE	1:CH:152:LEU:HG	2.51	0.40
1:BK:28:MET:HE2	1:BK:152:LEU:HG	2.04	0.40
1:BJ:185:PRO:HA	1:BJ:186:PRO:HD3	1.95	0.40
1:AI:203:THR:HB	1:AI:300:GLN:HG3	2.02	0.40
1:BE:238:HIS:HE1	1:BE:329:GLN:OE1	2.04	0.40
1:BL:263:ASN:O	1:BL:267:LYS:HG3	2.21	0.40
1:BD:25:ILE:HG23	1:BD:152:LEU:HD11	2.02	0.40
1:BA:401:ASP:O	1:BA:488:CYS:HA	2.21	0.40
1:AK:47:MET:HG2	1:AK:117:ALA:HB2	2.03	0.40
1:BP:437:HIS:CE1	1:BQ:405:GLN:NE2	2.89	0.40
1:AO:170:PHE:HD1	1:AO:389:MET:CE	2.33	0.40
1:AB:175:PHE:O	1:AB:175:PHE:CD2	2.75	0.40
1:BE:324:LEU:HD23	1:BE:324:LEU:C	2.42	0.40
1:CD:175:PHE:O	1:CD:175:PHE:CD2	2.74	0.40
1:CQ:335:ARG:N	1:CQ:336:PRO:HD3	2.36	0.40
1:AH:434:GLY:O	1:AI:349:VAL:HG23	2.21	0.40
1:AD:236:ARG:HA	1:AD:278:SER:HA	2.03	0.40
1:AM:393:HIS:CG	1:AM:496:PHE:HB3	2.57	0.40
1:BH:35:VAL:O	1:BH:39:LYS:HG3	2.21	0.40
1:BS:171:ASP:HA	1:BS:172:PRO:HD3	1.80	0.40
1:CR:171:ASP:HA	1:CR:172:PRO:HD3	1.78	0.40
1:CE:191:LEU:N	1:CE:191:LEU:HD23	2.18	0.40
1:AJ:272:TYR:N	1:AJ:272:TYR:HD1	2.20	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AO:188:PHE:C	1:AO:189:PHE:HD1	2.23	0.40
1:BQ:28:MET:HE2	1:BQ:152:LEU:HG	2.02	0.40
1:AT:28:MET:CE	1:AT:152:LEU:HG	2.51	0.40
1:BA:163:LEU:HA	1:BA:163:LEU:HD12	1.91	0.40
1:AS:326:ILE:HD13	1:AS:326:ILE:HA	1.94	0.40
1:AL:443:LYS:HE2	1:AM:444:LEU:HB2	2.03	0.40
1:AE:379:VAL:CG1	1:AE:381:MET:HE2	2.51	0.40
1:AP:285:SER:HA	1:AP:286:PRO:HD3	1.91	0.40
1:BO:182:LEU:HD12	1:BO:182:LEU:C	2.42	0.40
1:CF:429:ALA:HB3	1:CG:296:ALA:HB2	2.03	0.40
1:CQ:379:VAL:HG11	1:CQ:381:MET:HE1	2.04	0.40
1:AD:25:ILE:HD12	1:AD:128:PRO:HB2	2.04	0.40
1:AC:318:SER:HA	1:AC:319:GLY:HA2	1.81	0.40
1:CM:25:ILE:HG23	1:CM:152:LEU:HD11	2.03	0.40
1:CK:440:ALA:CB	1:CL:444:LEU:HD13	2.52	0.40
1:CO:241:ALA:HB1	1:CO:242:PRO:HD2	2.03	0.40
1:AF:285:SER:HA	1:AF:286:PRO:HD3	1.96	0.40
1:AN:175:PHE:CD2	1:AN:175:PHE:O	2.74	0.40
1:BE:340:LEU:HA	1:BE:340:LEU:HD23	1.90	0.40
1:AE:182:LEU:C	1:AE:182:LEU:HD12	2.42	0.40
1:CK:395:LEU:HB2	1:CK:497:TYR:HB2	2.03	0.40
1:BO:47:MET:HG2	1:BO:117:ALA:HB2	2.03	0.40
1:BF:475:LEU:HB3	1:BF:478:ALA:HB2	2.03	0.40
1:BD:232:THR:HB	1:BD:334:VAL:CG2	2.51	0.40
1:CR:434:GLY:O	1:CS:349:VAL:HG23	2.22	0.40
1:AG:272:TYR:CE2	1:BG:55:ARG:HD3	2.55	0.40
1:BJ:250:TRP:HE3	1:BJ:272:TYR:CD1	2.39	0.40
1:BT:55:ARG:NH1	1:CA:272:TYR:CD2	2.90	0.40
1:CJ:189:PHE:CE2	1:CJ:249:LEU:HD21	2.46	0.40
1:CI:189:PHE:CE1	1:CI:198:ARG:HG2	2.55	0.40
1:BL:189:PHE:HE2	1:BL:249:LEU:HD21	1.86	0.40
1:CT:189:PHE:HD2	1:CT:247:ILE:CD1	2.35	0.40
1:CF:33:LYS:HE2	1:CF:33:LYS:HB2	1.96	0.40
1:BF:30:SER:HA	1:BF:37:TYR:CD1	2.57	0.40
1:AI:170:PHE:HB2	1:AI:496:PHE:HE1	1.86	0.40
1:CC:163:LEU:HA	1:CC:163:LEU:HD12	1.88	0.40
1:CI:163:LEU:HD12	1:CI:163:LEU:HA	1.85	0.40
1:BN:182:LEU:HD12	1:BN:182:LEU:C	2.41	0.40
1:AP:61:PHE:CE2	1:AP:243:ILE:HD11	2.57	0.40
1:BA:404:LEU:HD23	1:BA:404:LEU:N	2.37	0.40
1:BT:372:PHE:H	1:BT:381:MET:HE1	1.86	0.40
1:BE:404:LEU:N	1:BE:404:LEU:HD23	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:440:ALA:HB3	1:CB:444:LEU:HD13	2.04	0.40
1:BF:324:LEU:HA	1:BF:325:PRO:HD3	1.83	0.40
1:AO:170:PHE:HD1	1:AO:389:MET:HE2	1.87	0.40
1:AF:418:SER:HB3	1:AG:407:SER:HB3	2.03	0.40
1:BQ:108:ILE:HG23	1:BQ:113:LEU:HD12	2.03	0.40
1:CE:404:LEU:HD22	1:CE:486:VAL:HG22	2.02	0.40
1:BA:20:LEU:HB2	1:BA:132:PHE:O	2.21	0.40
1:CP:207:VAL:HA	1:CP:208:PRO:HD3	1.86	0.40
1:AN:20:LEU:HB2	1:AN:132:PHE:O	2.21	0.40
1:CR:75:ARG:NH2	1:CR:391:ALA:O	2.54	0.40
1:AA:318:SER:HA	1:AA:319:GLY:HA2	1.82	0.40
1:CD:263:ASN:O	1:CD:267:LYS:HG3	2.21	0.40
1:AQ:10:ILE:HA	1:AQ:11:PRO:HD3	1.84	0.40
1:AJ:324:LEU:HA	1:AJ:325:PRO:HD3	1.86	0.40
1:CQ:404:LEU:HD22	1:CQ:486:VAL:HG22	2.03	0.40
1:CQ:340:LEU:HD23	1:CQ:340:LEU:HA	1.93	0.40
1:CK:324:LEU:HD23	1:CK:324:LEU:C	2.42	0.40
1:AB:45:LEU:HD23	1:AB:45:LEU:HA	1.93	0.40
1:AG:324:LEU:HD23	1:AG:324:LEU:C	2.42	0.40
1:CA:182:LEU:C	1:CA:182:LEU:HD12	2.42	0.40
1:CK:175:PHE:CD2	1:CK:175:PHE:O	2.74	0.40
1:CR:423:LYS:HE2	1:CR:449:GLU:O	2.21	0.40
1:CK:404:LEU:HD22	1:CK:486:VAL:HG22	2.02	0.40
1:BF:395:LEU:HB2	1:BF:497:TYR:HB2	2.03	0.40
1:BM:318:SER:HA	1:BM:319:GLY:HA2	1.78	0.40
1:CR:252:VAL:HG22	1:CR:253:SER:N	2.36	0.40
1:AH:395:LEU:HB2	1:AH:497:TYR:HB2	2.04	0.40
1:AN:308:PHE:CZ	1:AN:328:VAL:HG21	2.56	0.40
1:CA:252:VAL:HG22	1:CA:253:SER:N	2.36	0.40
1:CI:354:SER:H	1:CI:378:ARG:HB3	1.86	0.40
1:CJ:250:TRP:CZ3	1:CJ:272:TYR:CD1	3.08	0.40
1:BN:189:PHE:HD2	1:BN:247:ILE:HD11	1.86	0.40
1:AF:22:THR:OG1	1:AF:131:HIS:CD2	2.60	0.40
1:AQ:22:THR:OG1	1:AQ:131:HIS:CD2	2.63	0.40
1:BH:22:THR:OG1	1:BH:131:HIS:CD2	2.64	0.40
1:BT:188:PHE:C	1:BT:189:PHE:HD1	2.25	0.40
1:CC:22:THR:OG1	1:CC:131:HIS:CD2	2.66	0.40
1:CD:126:GLU:HG3	1:CD:127:SER:H	1.85	0.40
1:CO:326:ILE:HA	1:CO:326:ILE:HD13	1.90	0.40
1:CJ:163:LEU:HA	1:CJ:163:LEU:HD12	1.85	0.40
1:BG:163:LEU:HD12	1:BG:163:LEU:HA	1.93	0.40
1:CB:170:PHE:HB2	1:CB:496:PHE:HE1	1.86	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AO:234:ARG:CG	1:AO:280:GLU:HG2	2.52	0.40
1:BI:379:VAL:HG11	1:BI:381:MET:HE1	2.03	0.40
1:BI:35:VAL:HG23	1:BQ:38:GLU:HB3	2.04	0.40
1:BC:232:THR:HB	1:BC:334:VAL:CG2	2.52	0.40
1:BD:314:PRO:HB3	1:BD:324:LEU:HD13	2.04	0.40
1:BG:203:THR:HB	1:BG:300:GLN:HG3	2.04	0.40
1:BR:255:TRP:CE3	1:BR:285:SER:HB2	2.56	0.40
1:CM:404:LEU:HD22	1:CM:486:VAL:HG22	2.04	0.40
1:CG:48:PRO:HG2	1:CG:50:PHE:CZ	2.56	0.40
1:CC:61:PHE:CD2	1:CC:243:ILE:HD11	2.57	0.40
1:AT:10:ILE:HG21	1:AT:146:TRP:CZ2	2.57	0.40
1:CL:255:TRP:CG	1:CL:286:PRO:HD3	2.57	0.40
1:BA:207:VAL:HA	1:BA:208:PRO:HD3	1.86	0.40
1:AF:185:PRO:HA	1:AF:186:PRO:HD3	1.90	0.40
1:CO:423:LYS:HE2	1:CO:449:GLU:O	2.21	0.40
1:CN:182:LEU:HG	1:CN:330:ILE:HB	2.04	0.40
1:CH:175:PHE:CD2	1:CH:175:PHE:O	2.75	0.40
1:BS:182:LEU:HD12	1:BS:182:LEU:C	2.41	0.40
1:CC:340:LEU:HA	1:CC:340:LEU:HD23	1.92	0.40
1:CH:241:ALA:HB1	1:CH:242:PRO:HD2	2.03	0.40
1:AN:108:ILE:HG23	1:AN:113:LEU:HD12	2.03	0.40
1:BQ:171:ASP:HA	1:BQ:172:PRO:HD3	1.80	0.40
1:CG:440:ALA:HB3	1:CH:444:LEU:HD13	2.03	0.40
1:AQ:48:PRO:HG2	1:AQ:50:PHE:CZ	2.57	0.40
1:CI:423:LYS:HE2	1:CI:449:GLU:O	2.21	0.40
1:AA:61:PHE:CD2	1:AA:243:ILE:HD11	2.56	0.40
1:AM:418:SER:HB3	1:AN:407:SER:HB3	2.04	0.40
1:AP:395:LEU:HB2	1:AP:497:TYR:HB2	2.03	0.40
1:BC:238:HIS:HE1	1:BC:329:GLN:OE1	2.05	0.40
1:CH:434:GLY:O	1:CI:349:VAL:HG23	2.22	0.40
1:CH:314:PRO:HB3	1:CH:324:LEU:HD13	2.04	0.40

All (12) 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	Distance(Å)	Clash(Å)
1:BG:18:ARG:NH2	1:CJ:297:GLY:CA[2_646]	1.46	0.74
1:BD:463:ARG:NH2	1:CB:145:ASP:OD2[2_545]	1.54	0.66
1:AI:463:ARG:NH2	1:AM:360:LYS:CE[2_546]	1.57	0.63
1:AJ:301:ARG:NH2	1:AN:411:GLU:OE2[2_546]	1.59	0.61
1:AG:15:GLN:OE1	1:CI:81:THR:OG1[2_646]	1.80	0.40
1:AI:129:ARG:NH1	1:AM:355:GLU:OE1[2_546]	1.85	0.35

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AI:375:ASN:ND2	1:AM:429:ALA:CB[2_546]	1.92	0.28
1:BD:463:ARG:NH2	1:CB:145:ASP:CG[2_545]	1.98	0.22
1:AI:126:GLU:OE2	1:AM:357:THR:CG2[2_546]	2.01	0.19
1:BE:212:THR:OG1	1:CB:212:THR:OG1[2_545]	2.05	0.15
1:AI:126:GLU:CD	1:AM:357:THR:CG2[2_546]	2.09	0.11
1:BG:18:ARG:NH2	1:CJ:297:GLY:N[2_646]	2.12	0.08

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	AA	502/504 (100%)	478 (95%)	23 (5%)	1 (0%)	56	94
1	AB	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94
1	AC	502/504 (100%)	480 (96%)	20 (4%)	2 (0%)	43	90
1	AD	502/504 (100%)	482 (96%)	20 (4%)	0	100	100
1	AE	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	AF	502/504 (100%)	482 (96%)	20 (4%)	0	100	100
1	AG	502/504 (100%)	480 (96%)	18 (4%)	4 (1%)	27	83
1	AH	502/504 (100%)	481 (96%)	19 (4%)	2 (0%)	43	90
1	AI	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	AJ	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	AK	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	AL	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	AM	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	AN	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	AO	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94
1	AP	502/504 (100%)	483 (96%)	19 (4%)	0	100	100
1	AQ	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AR	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94
1	AS	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	AT	502/504 (100%)	484 (96%)	17 (3%)	1 (0%)	56	94
1	BA	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	BB	502/504 (100%)	481 (96%)	19 (4%)	2 (0%)	43	90
1	BC	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BD	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	BE	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BF	502/504 (100%)	481 (96%)	19 (4%)	2 (0%)	43	90
1	BG	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	BH	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	BI	502/504 (100%)	479 (95%)	23 (5%)	0	100	100
1	BJ	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BK	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94
1	BL	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	BM	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BN	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BO	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	BP	502/504 (100%)	479 (95%)	21 (4%)	2 (0%)	43	90
1	BQ	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BR	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BS	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	BT	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	CA	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	CB	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94
1	CC	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	CD	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	CE	502/504 (100%)	483 (96%)	18 (4%)	1 (0%)	56	94
1	CF	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	CG	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	CH	502/504 (100%)	481 (96%)	21 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	CI	502/504 (100%)	481 (96%)	19 (4%)	2 (0%)	43	90
1	CJ	502/504 (100%)	484 (96%)	17 (3%)	1 (0%)	56	94
1	CK	502/504 (100%)	482 (96%)	19 (4%)	1 (0%)	56	94
1	CL	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	CM	502/504 (100%)	480 (96%)	20 (4%)	2 (0%)	43	90
1	CN	502/504 (100%)	482 (96%)	20 (4%)	0	100	100
1	CO	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	CP	502/504 (100%)	480 (96%)	21 (4%)	1 (0%)	56	94
1	CQ	502/504 (100%)	482 (96%)	18 (4%)	2 (0%)	43	90
1	CR	502/504 (100%)	479 (95%)	21 (4%)	2 (0%)	43	90
1	CS	502/504 (100%)	481 (96%)	20 (4%)	1 (0%)	56	94
1	CT	502/504 (100%)	479 (95%)	22 (4%)	1 (0%)	56	94
All	All	30120/30240 (100%)	28873 (96%)	1181 (4%)	66 (0%)	56	94

All (66) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	BP	82	ALA
1	CR	87	VAL
1	AG	273	VAL
1	CI	377	CYS
1	BM	17	ASN
1	AC	78	SER
1	BB	17	ASN
1	BD	17	ASN
1	BF	78	SER
1	CM	17	ASN
1	AG	269	PRO
1	AH	17	ASN
1	BA	498	GLY
1	AG	17	ASN
1	AN	498	GLY
1	AT	498	GLY
1	BG	498	GLY
1	BP	498	GLY
1	BT	498	GLY
1	CF	498	GLY
1	CG	498	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CI	78	SER
1	CQ	17	ASN
1	CT	498	GLY
1	AE	498	GLY
1	AQ	498	GLY
1	BF	498	GLY
1	BK	498	GLY
1	BL	498	GLY
1	CK	498	GLY
1	CL	498	GLY
1	CM	498	GLY
1	CO	498	GLY
1	CR	498	GLY
1	AA	498	GLY
1	AG	498	GLY
1	AK	498	GLY
1	AM	498	GLY
1	BC	498	GLY
1	BE	498	GLY
1	BJ	498	GLY
1	BN	498	GLY
1	BO	498	GLY
1	CD	498	GLY
1	AJ	498	GLY
1	AS	498	GLY
1	BH	498	GLY
1	BR	498	GLY
1	BS	498	GLY
1	CB	498	GLY
1	CP	498	GLY
1	CS	498	GLY
1	AH	498	GLY
1	AI	498	GLY
1	AO	498	GLY
1	AR	498	GLY
1	BB	498	GLY
1	CA	498	GLY
1	CE	498	GLY
1	CJ	498	GLY
1	CQ	498	GLY
1	AB	498	GLY
1	AC	498	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AL	498	GLY
1	BQ	498	GLY
1	CC	498	GLY

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	AA	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	AB	430/430 (100%)	402 (94%)	28 (6%)	24	73
1	AC	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	AD	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	AE	430/430 (100%)	409 (95%)	21 (5%)	35	82
1	AF	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	AG	430/430 (100%)	403 (94%)	27 (6%)	25	75
1	AH	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	AI	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	AJ	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	AK	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	AL	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	AM	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	AN	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	AO	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	AP	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	AQ	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	AR	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	AS	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	AT	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	BA	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BB	430/430 (100%)	405 (94%)	25 (6%)	28	76

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	BC	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BD	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BE	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BF	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	BG	430/430 (100%)	408 (95%)	22 (5%)	33	81
1	BH	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	BI	430/430 (100%)	408 (95%)	22 (5%)	33	81
1	BJ	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	BK	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	BL	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	BM	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	BN	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	BO	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BP	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BQ	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	BR	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	BS	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	BT	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	CA	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CB	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CC	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CD	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	CE	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CF	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	CG	430/430 (100%)	409 (95%)	21 (5%)	35	82
1	CH	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	CI	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	CJ	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CK	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	CL	430/430 (100%)	406 (94%)	24 (6%)	30	78
1	CM	430/430 (100%)	403 (94%)	27 (6%)	25	75

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	CN	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CO	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CP	430/430 (100%)	405 (94%)	25 (6%)	28	76
1	CQ	430/430 (100%)	403 (94%)	27 (6%)	25	75
1	CR	430/430 (100%)	404 (94%)	26 (6%)	27	76
1	CS	430/430 (100%)	407 (95%)	23 (5%)	32	80
1	CT	430/430 (100%)	405 (94%)	25 (6%)	28	76
All	All	25800/25800 (100%)	24348 (94%)	1452 (6%)	30	78

All (1452) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AA	105	SER
1	AA	129	ARG
1	AA	160	THR
1	AA	161	SER
1	AA	163	LEU
1	AA	167	THR
1	AA	182	LEU
1	AA	191	LEU
1	AA	199	SER
1	AA	226	VAL
1	AA	229	MET
1	AA	243	ILE
1	AA	260	MET
1	AA	272	TYR
1	AA	284	ARG
1	AA	289	ARG
1	AA	301	ARG
1	AA	378	ARG
1	AA	384	ASN
1	AA	449	GLU
1	AA	454	ASN
1	AA	475	LEU
1	AA	504	VAL
1	AB	79	ARG
1	AB	105	SER
1	AB	129	ARG
1	AB	160	THR
1	AB	161	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AB	163	LEU
1	AB	167	THR
1	AB	182	LEU
1	AB	191	LEU
1	AB	199	SER
1	AB	226	VAL
1	AB	243	ILE
1	AB	258	THR
1	AB	261	ASP
1	AB	265	LEU
1	AB	272	TYR
1	AB	284	ARG
1	AB	289	ARG
1	AB	299	SER
1	AB	300	GLN
1	AB	301	ARG
1	AB	336	PRO
1	AB	378	ARG
1	AB	384	ASN
1	AB	449	GLU
1	AB	454	ASN
1	AB	475	LEU
1	AB	504	VAL
1	AC	18	ARG
1	AC	105	SER
1	AC	129	ARG
1	AC	160	THR
1	AC	161	SER
1	AC	163	LEU
1	AC	167	THR
1	AC	182	LEU
1	AC	191	LEU
1	AC	199	SER
1	AC	226	VAL
1	AC	243	ILE
1	AC	260	MET
1	AC	272	TYR
1	AC	284	ARG
1	AC	289	ARG
1	AC	300	GLN
1	AC	301	ARG
1	AC	378	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AC	384	ASN
1	AC	449	GLU
1	AC	454	ASN
1	AC	475	LEU
1	AC	504	VAL
1	AD	15	GLN
1	AD	57	PRO
1	AD	79	ARG
1	AD	105	SER
1	AD	129	ARG
1	AD	160	THR
1	AD	161	SER
1	AD	163	LEU
1	AD	167	THR
1	AD	182	LEU
1	AD	191	LEU
1	AD	199	SER
1	AD	226	VAL
1	AD	229	MET
1	AD	243	ILE
1	AD	260	MET
1	AD	272	TYR
1	AD	284	ARG
1	AD	289	ARG
1	AD	301	ARG
1	AD	378	ARG
1	AD	384	ASN
1	AD	449	GLU
1	AD	454	ASN
1	AD	475	LEU
1	AD	504	VAL
1	AE	10	ILE
1	AE	105	SER
1	AE	160	THR
1	AE	161	SER
1	AE	163	LEU
1	AE	167	THR
1	AE	191	LEU
1	AE	199	SER
1	AE	226	VAL
1	AE	243	ILE
1	AE	260	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AE	272	TYR
1	AE	284	ARG
1	AE	289	ARG
1	AE	301	ARG
1	AE	378	ARG
1	AE	384	ASN
1	AE	449	GLU
1	AE	454	ASN
1	AE	475	LEU
1	AE	504	VAL
1	AF	79	ARG
1	AF	105	SER
1	AF	129	ARG
1	AF	160	THR
1	AF	161	SER
1	AF	163	LEU
1	AF	167	THR
1	AF	182	LEU
1	AF	191	LEU
1	AF	199	SER
1	AF	226	VAL
1	AF	243	ILE
1	AF	260	MET
1	AF	272	TYR
1	AF	284	ARG
1	AF	289	ARG
1	AF	301	ARG
1	AF	378	ARG
1	AF	384	ASN
1	AF	449	GLU
1	AF	454	ASN
1	AF	475	LEU
1	AF	504	VAL
1	AG	10	ILE
1	AG	79	ARG
1	AG	105	SER
1	AG	129	ARG
1	AG	160	THR
1	AG	161	SER
1	AG	163	LEU
1	AG	167	THR
1	AG	182	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AG	191	LEU
1	AG	199	SER
1	AG	226	VAL
1	AG	243	ILE
1	AG	258	THR
1	AG	259	THR
1	AG	269	PRO
1	AG	276	ASP
1	AG	284	ARG
1	AG	289	ARG
1	AG	300	GLN
1	AG	301	ARG
1	AG	378	ARG
1	AG	384	ASN
1	AG	449	GLU
1	AG	454	ASN
1	AG	475	LEU
1	AG	504	VAL
1	AH	15	GLN
1	AH	18	ARG
1	AH	105	SER
1	AH	129	ARG
1	AH	160	THR
1	AH	161	SER
1	AH	163	LEU
1	AH	167	THR
1	AH	182	LEU
1	AH	191	LEU
1	AH	199	SER
1	AH	226	VAL
1	AH	243	ILE
1	AH	260	MET
1	AH	272	TYR
1	AH	284	ARG
1	AH	289	ARG
1	AH	300	GLN
1	AH	378	ARG
1	AH	384	ASN
1	AH	449	GLU
1	AH	454	ASN
1	AH	475	LEU
1	AH	504	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AI	18	ARG
1	AI	79	ARG
1	AI	105	SER
1	AI	129	ARG
1	AI	160	THR
1	AI	161	SER
1	AI	163	LEU
1	AI	167	THR
1	AI	182	LEU
1	AI	191	LEU
1	AI	199	SER
1	AI	226	VAL
1	AI	243	ILE
1	AI	260	MET
1	AI	272	TYR
1	AI	284	ARG
1	AI	289	ARG
1	AI	300	GLN
1	AI	301	ARG
1	AI	378	ARG
1	AI	384	ASN
1	AI	449	GLU
1	AI	454	ASN
1	AI	475	LEU
1	AI	504	VAL
1	AJ	18	ARG
1	AJ	105	SER
1	AJ	129	ARG
1	AJ	160	THR
1	AJ	161	SER
1	AJ	163	LEU
1	AJ	167	THR
1	AJ	182	LEU
1	AJ	191	LEU
1	AJ	199	SER
1	AJ	226	VAL
1	AJ	229	MET
1	AJ	243	ILE
1	AJ	272	TYR
1	AJ	284	ARG
1	AJ	289	ARG
1	AJ	301	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AJ	378	ARG
1	AJ	384	ASN
1	AJ	449	GLU
1	AJ	454	ASN
1	AJ	475	LEU
1	AJ	504	VAL
1	AK	18	ARG
1	AK	105	SER
1	AK	129	ARG
1	AK	160	THR
1	AK	161	SER
1	AK	163	LEU
1	AK	167	THR
1	AK	182	LEU
1	AK	191	LEU
1	AK	199	SER
1	AK	226	VAL
1	AK	229	MET
1	AK	243	ILE
1	AK	260	MET
1	AK	272	TYR
1	AK	284	ARG
1	AK	289	ARG
1	AK	300	GLN
1	AK	301	ARG
1	AK	336	PRO
1	AK	378	ARG
1	AK	384	ASN
1	AK	449	GLU
1	AK	454	ASN
1	AK	475	LEU
1	AK	504	VAL
1	AL	10	ILE
1	AL	57	PRO
1	AL	79	ARG
1	AL	105	SER
1	AL	129	ARG
1	AL	160	THR
1	AL	161	SER
1	AL	163	LEU
1	AL	167	THR
1	AL	182	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AL	191	LEU
1	AL	199	SER
1	AL	226	VAL
1	AL	243	ILE
1	AL	260	MET
1	AL	272	TYR
1	AL	284	ARG
1	AL	289	ARG
1	AL	299	SER
1	AL	301	ARG
1	AL	378	ARG
1	AL	384	ASN
1	AL	449	GLU
1	AL	454	ASN
1	AL	475	LEU
1	AL	504	VAL
1	AM	11	PRO
1	AM	18	ARG
1	AM	105	SER
1	AM	129	ARG
1	AM	160	THR
1	AM	161	SER
1	AM	163	LEU
1	AM	167	THR
1	AM	182	LEU
1	AM	191	LEU
1	AM	199	SER
1	AM	226	VAL
1	AM	243	ILE
1	AM	260	MET
1	AM	272	TYR
1	AM	284	ARG
1	AM	289	ARG
1	AM	301	ARG
1	AM	378	ARG
1	AM	384	ASN
1	AM	449	GLU
1	AM	454	ASN
1	AM	475	LEU
1	AM	504	VAL
1	AN	10	ILE
1	AN	79	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AN	105	SER
1	AN	129	ARG
1	AN	160	THR
1	AN	161	SER
1	AN	163	LEU
1	AN	167	THR
1	AN	182	LEU
1	AN	191	LEU
1	AN	199	SER
1	AN	226	VAL
1	AN	243	ILE
1	AN	260	MET
1	AN	272	TYR
1	AN	284	ARG
1	AN	289	ARG
1	AN	301	ARG
1	AN	378	ARG
1	AN	384	ASN
1	AN	449	GLU
1	AN	454	ASN
1	AN	475	LEU
1	AN	504	VAL
1	AO	105	SER
1	AO	129	ARG
1	AO	160	THR
1	AO	161	SER
1	AO	163	LEU
1	AO	167	THR
1	AO	182	LEU
1	AO	191	LEU
1	AO	199	SER
1	AO	226	VAL
1	AO	243	ILE
1	AO	260	MET
1	AO	272	TYR
1	AO	284	ARG
1	AO	290	THR
1	AO	294	LEU
1	AO	300	GLN
1	AO	301	ARG
1	AO	378	ARG
1	AO	384	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AO	449	GLU
1	AO	454	ASN
1	AO	475	LEU
1	AO	504	VAL
1	AP	79	ARG
1	AP	105	SER
1	AP	129	ARG
1	AP	160	THR
1	AP	161	SER
1	AP	163	LEU
1	AP	167	THR
1	AP	182	LEU
1	AP	191	LEU
1	AP	199	SER
1	AP	226	VAL
1	AP	243	ILE
1	AP	260	MET
1	AP	272	TYR
1	AP	284	ARG
1	AP	289	ARG
1	AP	301	ARG
1	AP	378	ARG
1	AP	384	ASN
1	AP	449	GLU
1	AP	454	ASN
1	AP	475	LEU
1	AP	504	VAL
1	AQ	10	ILE
1	AQ	105	SER
1	AQ	129	ARG
1	AQ	160	THR
1	AQ	161	SER
1	AQ	163	LEU
1	AQ	167	THR
1	AQ	182	LEU
1	AQ	191	LEU
1	AQ	199	SER
1	AQ	226	VAL
1	AQ	243	ILE
1	AQ	260	MET
1	AQ	272	TYR
1	AQ	284	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AQ	285	SER
1	AQ	289	ARG
1	AQ	301	ARG
1	AQ	336	PRO
1	AQ	378	ARG
1	AQ	384	ASN
1	AQ	449	GLU
1	AQ	454	ASN
1	AQ	475	LEU
1	AQ	504	VAL
1	AR	75	ARG
1	AR	105	SER
1	AR	129	ARG
1	AR	160	THR
1	AR	161	SER
1	AR	163	LEU
1	AR	167	THR
1	AR	182	LEU
1	AR	191	LEU
1	AR	199	SER
1	AR	226	VAL
1	AR	243	ILE
1	AR	260	MET
1	AR	272	TYR
1	AR	284	ARG
1	AR	289	ARG
1	AR	300	GLN
1	AR	301	ARG
1	AR	378	ARG
1	AR	384	ASN
1	AR	449	GLU
1	AR	454	ASN
1	AR	475	LEU
1	AR	504	VAL
1	AS	10	ILE
1	AS	105	SER
1	AS	129	ARG
1	AS	160	THR
1	AS	161	SER
1	AS	163	LEU
1	AS	167	THR
1	AS	182	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AS	191	LEU
1	AS	199	SER
1	AS	226	VAL
1	AS	229	MET
1	AS	243	ILE
1	AS	260	MET
1	AS	272	TYR
1	AS	284	ARG
1	AS	289	ARG
1	AS	301	ARG
1	AS	305	SER
1	AS	378	ARG
1	AS	384	ASN
1	AS	449	GLU
1	AS	454	ASN
1	AS	475	LEU
1	AS	504	VAL
1	AT	105	SER
1	AT	129	ARG
1	AT	160	THR
1	AT	161	SER
1	AT	163	LEU
1	AT	167	THR
1	AT	182	LEU
1	AT	191	LEU
1	AT	199	SER
1	AT	226	VAL
1	AT	229	MET
1	AT	243	ILE
1	AT	260	MET
1	AT	272	TYR
1	AT	284	ARG
1	AT	289	ARG
1	AT	300	GLN
1	AT	301	ARG
1	AT	378	ARG
1	AT	384	ASN
1	AT	449	GLU
1	AT	454	ASN
1	AT	475	LEU
1	AT	504	VAL
1	BA	79	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BA	105	SER
1	BA	129	ARG
1	BA	160	THR
1	BA	161	SER
1	BA	163	LEU
1	BA	167	THR
1	BA	182	LEU
1	BA	191	LEU
1	BA	199	SER
1	BA	226	VAL
1	BA	243	ILE
1	BA	260	MET
1	BA	272	TYR
1	BA	284	ARG
1	BA	289	ARG
1	BA	301	ARG
1	BA	378	ARG
1	BA	384	ASN
1	BA	449	GLU
1	BA	454	ASN
1	BA	475	LEU
1	BA	504	VAL
1	BB	79	ARG
1	BB	105	SER
1	BB	129	ARG
1	BB	160	THR
1	BB	161	SER
1	BB	163	LEU
1	BB	167	THR
1	BB	182	LEU
1	BB	191	LEU
1	BB	199	SER
1	BB	226	VAL
1	BB	243	ILE
1	BB	260	MET
1	BB	272	TYR
1	BB	284	ARG
1	BB	289	ARG
1	BB	300	GLN
1	BB	301	ARG
1	BB	336	PRO
1	BB	378	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BB	384	ASN
1	BB	449	GLU
1	BB	454	ASN
1	BB	475	LEU
1	BB	504	VAL
1	BC	18	ARG
1	BC	105	SER
1	BC	129	ARG
1	BC	160	THR
1	BC	161	SER
1	BC	163	LEU
1	BC	167	THR
1	BC	182	LEU
1	BC	191	LEU
1	BC	199	SER
1	BC	226	VAL
1	BC	243	ILE
1	BC	260	MET
1	BC	272	TYR
1	BC	284	ARG
1	BC	289	ARG
1	BC	301	ARG
1	BC	378	ARG
1	BC	384	ASN
1	BC	449	GLU
1	BC	454	ASN
1	BC	475	LEU
1	BC	504	VAL
1	BD	105	SER
1	BD	129	ARG
1	BD	160	THR
1	BD	161	SER
1	BD	163	LEU
1	BD	167	THR
1	BD	182	LEU
1	BD	191	LEU
1	BD	199	SER
1	BD	226	VAL
1	BD	243	ILE
1	BD	260	MET
1	BD	272	TYR
1	BD	284	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BD	289	ARG
1	BD	300	GLN
1	BD	301	ARG
1	BD	378	ARG
1	BD	384	ASN
1	BD	449	GLU
1	BD	454	ASN
1	BD	475	LEU
1	BD	504	VAL
1	BE	105	SER
1	BE	129	ARG
1	BE	160	THR
1	BE	161	SER
1	BE	163	LEU
1	BE	167	THR
1	BE	182	LEU
1	BE	191	LEU
1	BE	199	SER
1	BE	226	VAL
1	BE	243	ILE
1	BE	260	MET
1	BE	272	TYR
1	BE	284	ARG
1	BE	289	ARG
1	BE	300	GLN
1	BE	301	ARG
1	BE	378	ARG
1	BE	384	ASN
1	BE	449	GLU
1	BE	454	ASN
1	BE	475	LEU
1	BE	504	VAL
1	BF	10	ILE
1	BF	18	ARG
1	BF	79	ARG
1	BF	105	SER
1	BF	129	ARG
1	BF	160	THR
1	BF	161	SER
1	BF	163	LEU
1	BF	167	THR
1	BF	182	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BF	191	LEU
1	BF	199	SER
1	BF	226	VAL
1	BF	243	ILE
1	BF	260	MET
1	BF	272	TYR
1	BF	284	ARG
1	BF	289	ARG
1	BF	299	SER
1	BF	301	ARG
1	BF	378	ARG
1	BF	384	ASN
1	BF	449	GLU
1	BF	454	ASN
1	BF	475	LEU
1	BF	504	VAL
1	BG	105	SER
1	BG	129	ARG
1	BG	160	THR
1	BG	161	SER
1	BG	163	LEU
1	BG	167	THR
1	BG	182	LEU
1	BG	191	LEU
1	BG	199	SER
1	BG	226	VAL
1	BG	229	MET
1	BG	243	ILE
1	BG	260	MET
1	BG	272	TYR
1	BG	284	ARG
1	BG	289	ARG
1	BG	301	ARG
1	BG	378	ARG
1	BG	384	ASN
1	BG	454	ASN
1	BG	475	LEU
1	BG	504	VAL
1	BH	15	GLN
1	BH	18	ARG
1	BH	105	SER
1	BH	129	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BH	160	THR
1	BH	161	SER
1	BH	163	LEU
1	BH	167	THR
1	BH	182	LEU
1	BH	191	LEU
1	BH	199	SER
1	BH	226	VAL
1	BH	229	MET
1	BH	243	ILE
1	BH	260	MET
1	BH	272	TYR
1	BH	284	ARG
1	BH	289	ARG
1	BH	301	ARG
1	BH	305	SER
1	BH	378	ARG
1	BH	384	ASN
1	BH	449	GLU
1	BH	454	ASN
1	BH	475	LEU
1	BH	504	VAL
1	BI	105	SER
1	BI	129	ARG
1	BI	160	THR
1	BI	161	SER
1	BI	163	LEU
1	BI	167	THR
1	BI	182	LEU
1	BI	191	LEU
1	BI	199	SER
1	BI	226	VAL
1	BI	243	ILE
1	BI	260	MET
1	BI	272	TYR
1	BI	284	ARG
1	BI	289	ARG
1	BI	301	ARG
1	BI	378	ARG
1	BI	384	ASN
1	BI	449	GLU
1	BI	454	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BI	475	LEU
1	BI	504	VAL
1	BJ	18	ARG
1	BJ	79	ARG
1	BJ	105	SER
1	BJ	129	ARG
1	BJ	160	THR
1	BJ	161	SER
1	BJ	163	LEU
1	BJ	167	THR
1	BJ	182	LEU
1	BJ	191	LEU
1	BJ	199	SER
1	BJ	226	VAL
1	BJ	243	ILE
1	BJ	260	MET
1	BJ	272	TYR
1	BJ	284	ARG
1	BJ	289	ARG
1	BJ	301	ARG
1	BJ	378	ARG
1	BJ	384	ASN
1	BJ	449	GLU
1	BJ	454	ASN
1	BJ	475	LEU
1	BJ	504	VAL
1	BK	18	ARG
1	BK	105	SER
1	BK	129	ARG
1	BK	160	THR
1	BK	161	SER
1	BK	163	LEU
1	BK	167	THR
1	BK	182	LEU
1	BK	191	LEU
1	BK	199	SER
1	BK	226	VAL
1	BK	229	MET
1	BK	243	ILE
1	BK	260	MET
1	BK	272	TYR
1	BK	284	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BK	289	ARG
1	BK	299	SER
1	BK	300	GLN
1	BK	301	ARG
1	BK	378	ARG
1	BK	384	ASN
1	BK	449	GLU
1	BK	454	ASN
1	BK	475	LEU
1	BK	504	VAL
1	BL	79	ARG
1	BL	105	SER
1	BL	129	ARG
1	BL	160	THR
1	BL	161	SER
1	BL	163	LEU
1	BL	167	THR
1	BL	182	LEU
1	BL	191	LEU
1	BL	199	SER
1	BL	226	VAL
1	BL	229	MET
1	BL	243	ILE
1	BL	260	MET
1	BL	272	TYR
1	BL	284	ARG
1	BL	289	ARG
1	BL	299	SER
1	BL	300	GLN
1	BL	301	ARG
1	BL	378	ARG
1	BL	384	ASN
1	BL	449	GLU
1	BL	454	ASN
1	BL	475	LEU
1	BL	504	VAL
1	BM	18	ARG
1	BM	57	PRO
1	BM	79	ARG
1	BM	105	SER
1	BM	129	ARG
1	BM	160	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BM	161	SER
1	BM	163	LEU
1	BM	167	THR
1	BM	182	LEU
1	BM	191	LEU
1	BM	199	SER
1	BM	226	VAL
1	BM	243	ILE
1	BM	260	MET
1	BM	272	TYR
1	BM	284	ARG
1	BM	289	ARG
1	BM	300	GLN
1	BM	301	ARG
1	BM	378	ARG
1	BM	384	ASN
1	BM	449	GLU
1	BM	454	ASN
1	BM	475	LEU
1	BM	504	VAL
1	BN	18	ARG
1	BN	105	SER
1	BN	129	ARG
1	BN	160	THR
1	BN	161	SER
1	BN	163	LEU
1	BN	167	THR
1	BN	182	LEU
1	BN	191	LEU
1	BN	199	SER
1	BN	226	VAL
1	BN	229	MET
1	BN	243	ILE
1	BN	260	MET
1	BN	272	TYR
1	BN	284	ARG
1	BN	285	SER
1	BN	289	ARG
1	BN	301	ARG
1	BN	378	ARG
1	BN	384	ASN
1	BN	449	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BN	454	ASN
1	BN	475	LEU
1	BN	504	VAL
1	BO	15	GLN
1	BO	105	SER
1	BO	129	ARG
1	BO	160	THR
1	BO	161	SER
1	BO	163	LEU
1	BO	167	THR
1	BO	182	LEU
1	BO	191	LEU
1	BO	199	SER
1	BO	226	VAL
1	BO	243	ILE
1	BO	260	MET
1	BO	284	ARG
1	BO	289	ARG
1	BO	301	ARG
1	BO	336	PRO
1	BO	378	ARG
1	BO	384	ASN
1	BO	449	GLU
1	BO	454	ASN
1	BO	475	LEU
1	BO	504	VAL
1	BP	79	ARG
1	BP	105	SER
1	BP	160	THR
1	BP	161	SER
1	BP	163	LEU
1	BP	167	THR
1	BP	182	LEU
1	BP	191	LEU
1	BP	199	SER
1	BP	226	VAL
1	BP	243	ILE
1	BP	260	MET
1	BP	272	TYR
1	BP	284	ARG
1	BP	289	ARG
1	BP	300	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BP	301	ARG
1	BP	378	ARG
1	BP	384	ASN
1	BP	449	GLU
1	BP	454	ASN
1	BP	475	LEU
1	BP	504	VAL
1	BQ	18	ARG
1	BQ	105	SER
1	BQ	129	ARG
1	BQ	160	THR
1	BQ	161	SER
1	BQ	163	LEU
1	BQ	167	THR
1	BQ	182	LEU
1	BQ	191	LEU
1	BQ	199	SER
1	BQ	226	VAL
1	BQ	229	MET
1	BQ	243	ILE
1	BQ	260	MET
1	BQ	272	TYR
1	BQ	284	ARG
1	BQ	289	ARG
1	BQ	301	ARG
1	BQ	378	ARG
1	BQ	384	ASN
1	BQ	404	LEU
1	BQ	449	GLU
1	BQ	454	ASN
1	BQ	475	LEU
1	BQ	504	VAL
1	BR	79	ARG
1	BR	105	SER
1	BR	160	THR
1	BR	161	SER
1	BR	163	LEU
1	BR	167	THR
1	BR	182	LEU
1	BR	191	LEU
1	BR	199	SER
1	BR	226	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BR	243	ILE
1	BR	260	MET
1	BR	272	TYR
1	BR	284	ARG
1	BR	289	ARG
1	BR	299	SER
1	BR	301	ARG
1	BR	378	ARG
1	BR	384	ASN
1	BR	449	GLU
1	BR	454	ASN
1	BR	475	LEU
1	BR	504	VAL
1	BS	79	ARG
1	BS	105	SER
1	BS	129	ARG
1	BS	160	THR
1	BS	161	SER
1	BS	163	LEU
1	BS	167	THR
1	BS	182	LEU
1	BS	191	LEU
1	BS	199	SER
1	BS	226	VAL
1	BS	243	ILE
1	BS	260	MET
1	BS	284	ARG
1	BS	289	ARG
1	BS	299	SER
1	BS	301	ARG
1	BS	336	PRO
1	BS	378	ARG
1	BS	384	ASN
1	BS	449	GLU
1	BS	454	ASN
1	BS	475	LEU
1	BS	504	VAL
1	BT	105	SER
1	BT	129	ARG
1	BT	160	THR
1	BT	161	SER
1	BT	163	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BT	167	THR
1	BT	182	LEU
1	BT	191	LEU
1	BT	199	SER
1	BT	226	VAL
1	BT	243	ILE
1	BT	260	MET
1	BT	272	TYR
1	BT	284	ARG
1	BT	289	ARG
1	BT	299	SER
1	BT	300	GLN
1	BT	301	ARG
1	BT	378	ARG
1	BT	384	ASN
1	BT	449	GLU
1	BT	454	ASN
1	BT	475	LEU
1	BT	504	VAL
1	CA	10	ILE
1	CA	18	ARG
1	CA	105	SER
1	CA	129	ARG
1	CA	160	THR
1	CA	161	SER
1	CA	163	LEU
1	CA	167	THR
1	CA	182	LEU
1	CA	191	LEU
1	CA	226	VAL
1	CA	243	ILE
1	CA	260	MET
1	CA	272	TYR
1	CA	284	ARG
1	CA	289	ARG
1	CA	301	ARG
1	CA	378	ARG
1	CA	384	ASN
1	CA	449	GLU
1	CA	454	ASN
1	CA	475	LEU
1	CA	504	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CB	105	SER
1	CB	129	ARG
1	CB	160	THR
1	CB	161	SER
1	CB	163	LEU
1	CB	167	THR
1	CB	182	LEU
1	CB	191	LEU
1	CB	199	SER
1	CB	226	VAL
1	CB	243	ILE
1	CB	260	MET
1	CB	272	TYR
1	CB	284	ARG
1	CB	289	ARG
1	CB	300	GLN
1	CB	301	ARG
1	CB	378	ARG
1	CB	384	ASN
1	CB	449	GLU
1	CB	454	ASN
1	CB	475	LEU
1	CB	504	VAL
1	CC	105	SER
1	CC	129	ARG
1	CC	160	THR
1	CC	161	SER
1	CC	163	LEU
1	CC	167	THR
1	CC	182	LEU
1	CC	191	LEU
1	CC	199	SER
1	CC	226	VAL
1	CC	243	ILE
1	CC	260	MET
1	CC	272	TYR
1	CC	284	ARG
1	CC	289	ARG
1	CC	300	GLN
1	CC	301	ARG
1	CC	378	ARG
1	CC	384	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CC	449	GLU
1	CC	454	ASN
1	CC	475	LEU
1	CC	504	VAL
1	CD	79	ARG
1	CD	105	SER
1	CD	129	ARG
1	CD	160	THR
1	CD	161	SER
1	CD	163	LEU
1	CD	167	THR
1	CD	182	LEU
1	CD	191	LEU
1	CD	199	SER
1	CD	226	VAL
1	CD	229	MET
1	CD	243	ILE
1	CD	260	MET
1	CD	272	TYR
1	CD	284	ARG
1	CD	289	ARG
1	CD	301	ARG
1	CD	378	ARG
1	CD	384	ASN
1	CD	449	GLU
1	CD	454	ASN
1	CD	475	LEU
1	CD	504	VAL
1	CE	79	ARG
1	CE	105	SER
1	CE	129	ARG
1	CE	160	THR
1	CE	161	SER
1	CE	163	LEU
1	CE	167	THR
1	CE	182	LEU
1	CE	191	LEU
1	CE	199	SER
1	CE	226	VAL
1	CE	243	ILE
1	CE	260	MET
1	CE	272	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CE	284	ARG
1	CE	289	ARG
1	CE	301	ARG
1	CE	378	ARG
1	CE	384	ASN
1	CE	449	GLU
1	CE	454	ASN
1	CE	475	LEU
1	CE	504	VAL
1	CF	79	ARG
1	CF	105	SER
1	CF	129	ARG
1	CF	160	THR
1	CF	161	SER
1	CF	163	LEU
1	CF	167	THR
1	CF	182	LEU
1	CF	191	LEU
1	CF	199	SER
1	CF	226	VAL
1	CF	243	ILE
1	CF	260	MET
1	CF	272	TYR
1	CF	284	ARG
1	CF	289	ARG
1	CF	300	GLN
1	CF	301	ARG
1	CF	378	ARG
1	CF	384	ASN
1	CF	449	GLU
1	CF	454	ASN
1	CF	475	LEU
1	CF	504	VAL
1	CG	79	ARG
1	CG	105	SER
1	CG	129	ARG
1	CG	160	THR
1	CG	161	SER
1	CG	163	LEU
1	CG	167	THR
1	CG	191	LEU
1	CG	199	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CG	226	VAL
1	CG	243	ILE
1	CG	260	MET
1	CG	272	TYR
1	CG	284	ARG
1	CG	289	ARG
1	CG	301	ARG
1	CG	378	ARG
1	CG	384	ASN
1	CG	454	ASN
1	CG	475	LEU
1	CG	504	VAL
1	CH	10	ILE
1	CH	15	GLN
1	CH	105	SER
1	CH	129	ARG
1	CH	160	THR
1	CH	161	SER
1	CH	163	LEU
1	CH	167	THR
1	CH	182	LEU
1	CH	191	LEU
1	CH	199	SER
1	CH	226	VAL
1	CH	229	MET
1	CH	243	ILE
1	CH	260	MET
1	CH	272	TYR
1	CH	284	ARG
1	CH	289	ARG
1	CH	301	ARG
1	CH	378	ARG
1	CH	384	ASN
1	CH	449	GLU
1	CH	454	ASN
1	CH	475	LEU
1	CH	504	VAL
1	CI	79	ARG
1	CI	105	SER
1	CI	129	ARG
1	CI	160	THR
1	CI	161	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CI	163	LEU
1	CI	167	THR
1	CI	182	LEU
1	CI	191	LEU
1	CI	199	SER
1	CI	226	VAL
1	CI	243	ILE
1	CI	260	MET
1	CI	272	TYR
1	CI	284	ARG
1	CI	289	ARG
1	CI	299	SER
1	CI	300	GLN
1	CI	301	ARG
1	CI	377	CYS
1	CI	384	ASN
1	CI	449	GLU
1	CI	454	ASN
1	CI	475	LEU
1	CI	504	VAL
1	CJ	18	ARG
1	CJ	105	SER
1	CJ	129	ARG
1	CJ	160	THR
1	CJ	161	SER
1	CJ	163	LEU
1	CJ	182	LEU
1	CJ	191	LEU
1	CJ	199	SER
1	CJ	226	VAL
1	CJ	243	ILE
1	CJ	260	MET
1	CJ	272	TYR
1	CJ	284	ARG
1	CJ	289	ARG
1	CJ	300	GLN
1	CJ	301	ARG
1	CJ	378	ARG
1	CJ	384	ASN
1	CJ	449	GLU
1	CJ	454	ASN
1	CJ	475	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CJ	504	VAL
1	CK	18	ARG
1	CK	77	THR
1	CK	105	SER
1	CK	129	ARG
1	CK	160	THR
1	CK	161	SER
1	CK	163	LEU
1	CK	167	THR
1	CK	182	LEU
1	CK	191	LEU
1	CK	199	SER
1	CK	226	VAL
1	CK	243	ILE
1	CK	260	MET
1	CK	272	TYR
1	CK	284	ARG
1	CK	289	ARG
1	CK	301	ARG
1	CK	378	ARG
1	CK	384	ASN
1	CK	449	GLU
1	CK	454	ASN
1	CK	475	LEU
1	CK	504	VAL
1	CL	105	SER
1	CL	129	ARG
1	CL	160	THR
1	CL	161	SER
1	CL	163	LEU
1	CL	167	THR
1	CL	182	LEU
1	CL	191	LEU
1	CL	199	SER
1	CL	226	VAL
1	CL	229	MET
1	CL	243	ILE
1	CL	260	MET
1	CL	272	TYR
1	CL	284	ARG
1	CL	289	ARG
1	CL	299	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CL	301	ARG
1	CL	378	ARG
1	CL	384	ASN
1	CL	449	GLU
1	CL	454	ASN
1	CL	475	LEU
1	CL	504	VAL
1	CM	10	ILE
1	CM	18	ARG
1	CM	57	PRO
1	CM	79	ARG
1	CM	105	SER
1	CM	129	ARG
1	CM	160	THR
1	CM	161	SER
1	CM	163	LEU
1	CM	167	THR
1	CM	182	LEU
1	CM	191	LEU
1	CM	199	SER
1	CM	226	VAL
1	CM	243	ILE
1	CM	260	MET
1	CM	272	TYR
1	CM	284	ARG
1	CM	289	ARG
1	CM	299	SER
1	CM	301	ARG
1	CM	378	ARG
1	CM	384	ASN
1	CM	449	GLU
1	CM	454	ASN
1	CM	475	LEU
1	CM	504	VAL
1	CN	105	SER
1	CN	160	THR
1	CN	161	SER
1	CN	163	LEU
1	CN	167	THR
1	CN	182	LEU
1	CN	191	LEU
1	CN	199	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CN	226	VAL
1	CN	229	MET
1	CN	243	ILE
1	CN	260	MET
1	CN	272	TYR
1	CN	284	ARG
1	CN	289	ARG
1	CN	301	ARG
1	CN	336	PRO
1	CN	378	ARG
1	CN	384	ASN
1	CN	449	GLU
1	CN	454	ASN
1	CN	475	LEU
1	CN	504	VAL
1	CO	57	PRO
1	CO	79	ARG
1	CO	105	SER
1	CO	160	THR
1	CO	161	SER
1	CO	163	LEU
1	CO	167	THR
1	CO	191	LEU
1	CO	199	SER
1	CO	226	VAL
1	CO	243	ILE
1	CO	260	MET
1	CO	272	TYR
1	CO	284	ARG
1	CO	289	ARG
1	CO	301	ARG
1	CO	336	PRO
1	CO	378	ARG
1	CO	384	ASN
1	CO	449	GLU
1	CO	454	ASN
1	CO	475	LEU
1	CO	504	VAL
1	CP	10	ILE
1	CP	79	ARG
1	CP	105	SER
1	CP	129	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CP	160	THR
1	CP	161	SER
1	CP	163	LEU
1	CP	167	THR
1	CP	182	LEU
1	CP	191	LEU
1	CP	199	SER
1	CP	226	VAL
1	CP	243	ILE
1	CP	260	MET
1	CP	272	TYR
1	CP	284	ARG
1	CP	289	ARG
1	CP	300	GLN
1	CP	301	ARG
1	CP	378	ARG
1	CP	384	ASN
1	CP	449	GLU
1	CP	454	ASN
1	CP	475	LEU
1	CP	504	VAL
1	CQ	18	ARG
1	CQ	57	PRO
1	CQ	105	SER
1	CQ	129	ARG
1	CQ	160	THR
1	CQ	161	SER
1	CQ	163	LEU
1	CQ	167	THR
1	CQ	182	LEU
1	CQ	191	LEU
1	CQ	199	SER
1	CQ	226	VAL
1	CQ	229	MET
1	CQ	243	ILE
1	CQ	260	MET
1	CQ	272	TYR
1	CQ	284	ARG
1	CQ	289	ARG
1	CQ	300	GLN
1	CQ	301	ARG
1	CQ	336	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CQ	378	ARG
1	CQ	384	ASN
1	CQ	449	GLU
1	CQ	454	ASN
1	CQ	475	LEU
1	CQ	504	VAL
1	CR	78	SER
1	CR	79	ARG
1	CR	85	ASP
1	CR	105	SER
1	CR	160	THR
1	CR	161	SER
1	CR	163	LEU
1	CR	167	THR
1	CR	182	LEU
1	CR	191	LEU
1	CR	199	SER
1	CR	226	VAL
1	CR	229	MET
1	CR	243	ILE
1	CR	260	MET
1	CR	272	TYR
1	CR	284	ARG
1	CR	289	ARG
1	CR	299	SER
1	CR	301	ARG
1	CR	378	ARG
1	CR	384	ASN
1	CR	449	GLU
1	CR	454	ASN
1	CR	475	LEU
1	CR	504	VAL
1	CS	105	SER
1	CS	160	THR
1	CS	161	SER
1	CS	163	LEU
1	CS	167	THR
1	CS	182	LEU
1	CS	191	LEU
1	CS	199	SER
1	CS	226	VAL
1	CS	229	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CS	243	ILE
1	CS	260	MET
1	CS	272	TYR
1	CS	284	ARG
1	CS	289	ARG
1	CS	299	SER
1	CS	301	ARG
1	CS	378	ARG
1	CS	384	ASN
1	CS	449	GLU
1	CS	454	ASN
1	CS	475	LEU
1	CS	504	VAL
1	CT	105	SER
1	CT	129	ARG
1	CT	160	THR
1	CT	161	SER
1	CT	163	LEU
1	CT	167	THR
1	CT	182	LEU
1	CT	191	LEU
1	CT	199	SER
1	CT	226	VAL
1	CT	229	MET
1	CT	243	ILE
1	CT	260	MET
1	CT	272	TYR
1	CT	284	ARG
1	CT	289	ARG
1	CT	299	SER
1	CT	301	ARG
1	CT	336	PRO
1	CT	378	ARG
1	CT	384	ASN
1	CT	449	GLU
1	CT	454	ASN
1	CT	475	LEU
1	CT	504	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (653) such sidechains are listed below:

Mol	Chain	Res	Type
1	AA	36	GLN
1	AA	74	ASN
1	AA	131	HIS
1	AA	138	ASN
1	AA	238	HIS
1	AA	256	ASN
1	AA	263	ASN
1	AA	288	HIS
1	AA	300	GLN
1	AA	454	ASN
1	AB	36	GLN
1	AB	74	ASN
1	AB	131	HIS
1	AB	138	ASN
1	AB	147	GLN
1	AB	238	HIS
1	AB	256	ASN
1	AB	263	ASN
1	AB	288	HIS
1	AB	300	GLN
1	AB	454	ASN
1	AC	36	GLN
1	AC	74	ASN
1	AC	131	HIS
1	AC	138	ASN
1	AC	238	HIS
1	AC	256	ASN
1	AC	263	ASN
1	AC	288	HIS
1	AC	300	GLN
1	AC	437	HIS
1	AC	454	ASN
1	AD	36	GLN
1	AD	74	ASN
1	AD	131	HIS
1	AD	138	ASN
1	AD	147	GLN
1	AD	238	HIS
1	AD	256	ASN
1	AD	263	ASN
1	AD	288	HIS
1	AD	454	ASN
1	AE	36	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AE	74	ASN
1	AE	131	HIS
1	AE	138	ASN
1	AE	147	GLN
1	AE	238	HIS
1	AE	256	ASN
1	AE	263	ASN
1	AE	288	HIS
1	AE	454	ASN
1	AF	15	GLN
1	AF	36	GLN
1	AF	74	ASN
1	AF	131	HIS
1	AF	138	ASN
1	AF	147	GLN
1	AF	238	HIS
1	AF	256	ASN
1	AF	263	ASN
1	AF	288	HIS
1	AF	300	GLN
1	AF	437	HIS
1	AF	454	ASN
1	AG	15	GLN
1	AG	36	GLN
1	AG	74	ASN
1	AG	131	HIS
1	AG	138	ASN
1	AG	147	GLN
1	AG	238	HIS
1	AG	256	ASN
1	AG	288	HIS
1	AG	300	GLN
1	AG	454	ASN
1	AH	15	GLN
1	AH	36	GLN
1	AH	74	ASN
1	AH	131	HIS
1	AH	138	ASN
1	AH	238	HIS
1	AH	256	ASN
1	AH	263	ASN
1	AH	288	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AH	300	GLN
1	AH	454	ASN
1	AI	36	GLN
1	AI	74	ASN
1	AI	131	HIS
1	AI	138	ASN
1	AI	147	GLN
1	AI	238	HIS
1	AI	256	ASN
1	AI	263	ASN
1	AI	288	HIS
1	AI	300	GLN
1	AI	437	HIS
1	AI	454	ASN
1	AJ	15	GLN
1	AJ	36	GLN
1	AJ	74	ASN
1	AJ	131	HIS
1	AJ	138	ASN
1	AJ	147	GLN
1	AJ	238	HIS
1	AJ	256	ASN
1	AJ	263	ASN
1	AJ	288	HIS
1	AJ	454	ASN
1	AK	36	GLN
1	AK	74	ASN
1	AK	131	HIS
1	AK	138	ASN
1	AK	147	GLN
1	AK	238	HIS
1	AK	256	ASN
1	AK	263	ASN
1	AK	288	HIS
1	AK	300	GLN
1	AK	454	ASN
1	AL	36	GLN
1	AL	74	ASN
1	AL	131	HIS
1	AL	138	ASN
1	AL	147	GLN
1	AL	238	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AL	256	ASN
1	AL	263	ASN
1	AL	288	HIS
1	AL	454	ASN
1	AM	36	GLN
1	AM	74	ASN
1	AM	131	HIS
1	AM	138	ASN
1	AM	238	HIS
1	AM	256	ASN
1	AM	263	ASN
1	AM	288	HIS
1	AM	454	ASN
1	AN	36	GLN
1	AN	74	ASN
1	AN	131	HIS
1	AN	138	ASN
1	AN	238	HIS
1	AN	256	ASN
1	AN	263	ASN
1	AN	288	HIS
1	AN	300	GLN
1	AN	437	HIS
1	AN	454	ASN
1	AO	36	GLN
1	AO	74	ASN
1	AO	131	HIS
1	AO	138	ASN
1	AO	238	HIS
1	AO	256	ASN
1	AO	263	ASN
1	AO	288	HIS
1	AO	300	GLN
1	AO	454	ASN
1	AP	36	GLN
1	AP	74	ASN
1	AP	131	HIS
1	AP	138	ASN
1	AP	147	GLN
1	AP	238	HIS
1	AP	256	ASN
1	AP	263	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AP	288	HIS
1	AP	300	GLN
1	AP	437	HIS
1	AP	454	ASN
1	AQ	36	GLN
1	AQ	74	ASN
1	AQ	131	HIS
1	AQ	138	ASN
1	AQ	238	HIS
1	AQ	256	ASN
1	AQ	263	ASN
1	AQ	288	HIS
1	AQ	300	GLN
1	AQ	454	ASN
1	AR	36	GLN
1	AR	74	ASN
1	AR	131	HIS
1	AR	138	ASN
1	AR	147	GLN
1	AR	238	HIS
1	AR	256	ASN
1	AR	263	ASN
1	AR	288	HIS
1	AR	300	GLN
1	AR	437	HIS
1	AR	454	ASN
1	AS	36	GLN
1	AS	74	ASN
1	AS	131	HIS
1	AS	138	ASN
1	AS	147	GLN
1	AS	238	HIS
1	AS	256	ASN
1	AS	263	ASN
1	AS	288	HIS
1	AS	300	GLN
1	AS	437	HIS
1	AS	454	ASN
1	AT	36	GLN
1	AT	74	ASN
1	AT	131	HIS
1	AT	138	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AT	147	GLN
1	AT	238	HIS
1	AT	256	ASN
1	AT	263	ASN
1	AT	288	HIS
1	AT	300	GLN
1	AT	454	ASN
1	BA	36	GLN
1	BA	74	ASN
1	BA	131	HIS
1	BA	138	ASN
1	BA	238	HIS
1	BA	256	ASN
1	BA	263	ASN
1	BA	288	HIS
1	BA	300	GLN
1	BA	454	ASN
1	BB	36	GLN
1	BB	74	ASN
1	BB	131	HIS
1	BB	138	ASN
1	BB	147	GLN
1	BB	238	HIS
1	BB	256	ASN
1	BB	263	ASN
1	BB	288	HIS
1	BB	300	GLN
1	BB	454	ASN
1	BC	36	GLN
1	BC	74	ASN
1	BC	131	HIS
1	BC	138	ASN
1	BC	147	GLN
1	BC	238	HIS
1	BC	256	ASN
1	BC	263	ASN
1	BC	288	HIS
1	BC	300	GLN
1	BC	454	ASN
1	BD	36	GLN
1	BD	74	ASN
1	BD	131	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BD	138	ASN
1	BD	147	GLN
1	BD	238	HIS
1	BD	256	ASN
1	BD	263	ASN
1	BD	288	HIS
1	BD	300	GLN
1	BD	454	ASN
1	BE	36	GLN
1	BE	74	ASN
1	BE	131	HIS
1	BE	138	ASN
1	BE	147	GLN
1	BE	238	HIS
1	BE	256	ASN
1	BE	263	ASN
1	BE	288	HIS
1	BE	300	GLN
1	BE	437	HIS
1	BE	454	ASN
1	BF	15	GLN
1	BF	36	GLN
1	BF	74	ASN
1	BF	131	HIS
1	BF	138	ASN
1	BF	147	GLN
1	BF	238	HIS
1	BF	256	ASN
1	BF	263	ASN
1	BF	288	HIS
1	BF	300	GLN
1	BF	437	HIS
1	BF	454	ASN
1	BG	15	GLN
1	BG	36	GLN
1	BG	74	ASN
1	BG	131	HIS
1	BG	138	ASN
1	BG	238	HIS
1	BG	256	ASN
1	BG	263	ASN
1	BG	288	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BG	300	GLN
1	BG	454	ASN
1	BH	15	GLN
1	BH	36	GLN
1	BH	74	ASN
1	BH	131	HIS
1	BH	138	ASN
1	BH	147	GLN
1	BH	238	HIS
1	BH	256	ASN
1	BH	263	ASN
1	BH	288	HIS
1	BH	454	ASN
1	BI	36	GLN
1	BI	74	ASN
1	BI	131	HIS
1	BI	138	ASN
1	BI	238	HIS
1	BI	256	ASN
1	BI	263	ASN
1	BI	288	HIS
1	BI	300	GLN
1	BI	454	ASN
1	BJ	36	GLN
1	BJ	74	ASN
1	BJ	131	HIS
1	BJ	138	ASN
1	BJ	147	GLN
1	BJ	238	HIS
1	BJ	256	ASN
1	BJ	263	ASN
1	BJ	288	HIS
1	BJ	454	ASN
1	BK	36	GLN
1	BK	74	ASN
1	BK	131	HIS
1	BK	138	ASN
1	BK	147	GLN
1	BK	238	HIS
1	BK	256	ASN
1	BK	263	ASN
1	BK	288	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BK	454	ASN
1	BL	15	GLN
1	BL	36	GLN
1	BL	74	ASN
1	BL	131	HIS
1	BL	138	ASN
1	BL	147	GLN
1	BL	238	HIS
1	BL	256	ASN
1	BL	263	ASN
1	BL	288	HIS
1	BL	300	GLN
1	BL	437	HIS
1	BL	454	ASN
1	BM	36	GLN
1	BM	74	ASN
1	BM	131	HIS
1	BM	138	ASN
1	BM	238	HIS
1	BM	256	ASN
1	BM	263	ASN
1	BM	288	HIS
1	BM	300	GLN
1	BM	454	ASN
1	BN	36	GLN
1	BN	74	ASN
1	BN	131	HIS
1	BN	138	ASN
1	BN	238	HIS
1	BN	256	ASN
1	BN	263	ASN
1	BN	288	HIS
1	BN	454	ASN
1	BO	15	GLN
1	BO	36	GLN
1	BO	74	ASN
1	BO	131	HIS
1	BO	138	ASN
1	BO	147	GLN
1	BO	238	HIS
1	BO	256	ASN
1	BO	263	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BO	288	HIS
1	BO	300	GLN
1	BO	437	HIS
1	BO	454	ASN
1	BP	36	GLN
1	BP	74	ASN
1	BP	131	HIS
1	BP	138	ASN
1	BP	147	GLN
1	BP	238	HIS
1	BP	256	ASN
1	BP	263	ASN
1	BP	288	HIS
1	BP	300	GLN
1	BP	437	HIS
1	BP	454	ASN
1	BQ	36	GLN
1	BQ	74	ASN
1	BQ	131	HIS
1	BQ	138	ASN
1	BQ	147	GLN
1	BQ	238	HIS
1	BQ	256	ASN
1	BQ	263	ASN
1	BQ	288	HIS
1	BQ	437	HIS
1	BQ	454	ASN
1	BR	36	GLN
1	BR	74	ASN
1	BR	131	HIS
1	BR	138	ASN
1	BR	147	GLN
1	BR	238	HIS
1	BR	256	ASN
1	BR	263	ASN
1	BR	288	HIS
1	BR	300	GLN
1	BR	437	HIS
1	BR	454	ASN
1	BS	36	GLN
1	BS	74	ASN
1	BS	131	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	BS	138	ASN
1	BS	147	GLN
1	BS	238	HIS
1	BS	256	ASN
1	BS	263	ASN
1	BS	288	HIS
1	BS	300	GLN
1	BS	454	ASN
1	BT	36	GLN
1	BT	74	ASN
1	BT	131	HIS
1	BT	138	ASN
1	BT	147	GLN
1	BT	238	HIS
1	BT	256	ASN
1	BT	263	ASN
1	BT	288	HIS
1	BT	300	GLN
1	BT	454	ASN
1	CA	36	GLN
1	CA	74	ASN
1	CA	131	HIS
1	CA	138	ASN
1	CA	147	GLN
1	CA	238	HIS
1	CA	256	ASN
1	CA	263	ASN
1	CA	288	HIS
1	CA	454	ASN
1	CB	36	GLN
1	CB	74	ASN
1	CB	131	HIS
1	CB	138	ASN
1	CB	238	HIS
1	CB	256	ASN
1	CB	263	ASN
1	CB	288	HIS
1	CB	300	GLN
1	CB	454	ASN
1	CC	36	GLN
1	CC	74	ASN
1	CC	131	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CC	147	GLN
1	CC	238	HIS
1	CC	256	ASN
1	CC	263	ASN
1	CC	288	HIS
1	CC	300	GLN
1	CC	454	ASN
1	CD	36	GLN
1	CD	74	ASN
1	CD	131	HIS
1	CD	138	ASN
1	CD	147	GLN
1	CD	238	HIS
1	CD	256	ASN
1	CD	263	ASN
1	CD	288	HIS
1	CD	454	ASN
1	CE	36	GLN
1	CE	74	ASN
1	CE	131	HIS
1	CE	138	ASN
1	CE	238	HIS
1	CE	256	ASN
1	CE	263	ASN
1	CE	288	HIS
1	CE	454	ASN
1	CF	36	GLN
1	CF	74	ASN
1	CF	131	HIS
1	CF	138	ASN
1	CF	147	GLN
1	CF	238	HIS
1	CF	256	ASN
1	CF	263	ASN
1	CF	288	HIS
1	CF	300	GLN
1	CF	454	ASN
1	CG	36	GLN
1	CG	74	ASN
1	CG	131	HIS
1	CG	138	ASN
1	CG	147	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CG	238	HIS
1	CG	256	ASN
1	CG	263	ASN
1	CG	288	HIS
1	CG	300	GLN
1	CG	454	ASN
1	CH	15	GLN
1	CH	36	GLN
1	CH	74	ASN
1	CH	131	HIS
1	CH	138	ASN
1	CH	238	HIS
1	CH	256	ASN
1	CH	263	ASN
1	CH	288	HIS
1	CH	454	ASN
1	CI	36	GLN
1	CI	74	ASN
1	CI	131	HIS
1	CI	138	ASN
1	CI	147	GLN
1	CI	238	HIS
1	CI	256	ASN
1	CI	263	ASN
1	CI	288	HIS
1	CI	300	GLN
1	CI	437	HIS
1	CI	454	ASN
1	CJ	15	GLN
1	CJ	36	GLN
1	CJ	74	ASN
1	CJ	131	HIS
1	CJ	138	ASN
1	CJ	238	HIS
1	CJ	256	ASN
1	CJ	263	ASN
1	CJ	288	HIS
1	CJ	300	GLN
1	CJ	437	HIS
1	CJ	454	ASN
1	CK	36	GLN
1	CK	74	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CK	131	HIS
1	CK	138	ASN
1	CK	147	GLN
1	CK	238	HIS
1	CK	256	ASN
1	CK	263	ASN
1	CK	288	HIS
1	CK	454	ASN
1	CL	36	GLN
1	CL	74	ASN
1	CL	131	HIS
1	CL	138	ASN
1	CL	147	GLN
1	CL	238	HIS
1	CL	256	ASN
1	CL	263	ASN
1	CL	288	HIS
1	CL	454	ASN
1	CM	36	GLN
1	CM	74	ASN
1	CM	131	HIS
1	CM	138	ASN
1	CM	238	HIS
1	CM	256	ASN
1	CM	263	ASN
1	CM	288	HIS
1	CM	454	ASN
1	CN	36	GLN
1	CN	74	ASN
1	CN	131	HIS
1	CN	138	ASN
1	CN	147	GLN
1	CN	238	HIS
1	CN	256	ASN
1	CN	263	ASN
1	CN	288	HIS
1	CN	300	GLN
1	CN	454	ASN
1	CO	36	GLN
1	CO	74	ASN
1	CO	131	HIS
1	CO	138	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CO	147	GLN
1	CO	238	HIS
1	CO	256	ASN
1	CO	263	ASN
1	CO	288	HIS
1	CO	300	GLN
1	CO	454	ASN
1	CP	36	GLN
1	CP	74	ASN
1	CP	131	HIS
1	CP	138	ASN
1	CP	147	GLN
1	CP	238	HIS
1	CP	256	ASN
1	CP	263	ASN
1	CP	288	HIS
1	CP	300	GLN
1	CP	437	HIS
1	CP	454	ASN
1	CQ	36	GLN
1	CQ	74	ASN
1	CQ	131	HIS
1	CQ	138	ASN
1	CQ	147	GLN
1	CQ	238	HIS
1	CQ	256	ASN
1	CQ	263	ASN
1	CQ	288	HIS
1	CQ	300	GLN
1	CQ	454	ASN
1	CR	36	GLN
1	CR	74	ASN
1	CR	131	HIS
1	CR	138	ASN
1	CR	147	GLN
1	CR	238	HIS
1	CR	256	ASN
1	CR	263	ASN
1	CR	288	HIS
1	CR	300	GLN
1	CR	454	ASN
1	CS	36	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CS	74	ASN
1	CS	131	HIS
1	CS	138	ASN
1	CS	147	GLN
1	CS	238	HIS
1	CS	256	ASN
1	CS	263	ASN
1	CS	288	HIS
1	CS	454	ASN
1	CT	15	GLN
1	CT	36	GLN
1	CT	74	ASN
1	CT	131	HIS
1	CT	138	ASN
1	CT	147	GLN
1	CT	238	HIS
1	CT	256	ASN
1	CT	263	ASN
1	CT	288	HIS
1	CT	300	GLN
1	CT	437	HIS
1	CT	454	ASN

5.3.3 RNA ⓘ

There are no RNA chains in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

There are no ligands in this entry.

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

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	AA	504/504 (100%)	0.41	3 (0%) 86 69	51, 87, 117, 148	0
1	AB	504/504 (100%)	0.42	2 (0%) 90 78	55, 90, 122, 148	0
1	AC	504/504 (100%)	0.35	1 (0%) 93 86	42, 76, 104, 147	0
1	AD	504/504 (100%)	0.36	0 100 100	33, 68, 99, 130	0
1	AE	504/504 (100%)	0.34	0 100 100	46, 75, 105, 119	0
1	AF	504/504 (100%)	0.37	0 100 100	41, 80, 110, 166	0
1	AG	504/504 (100%)	0.35	1 (0%) 93 86	46, 83, 118, 165	0
1	AH	504/504 (100%)	0.34	0 100 100	44, 74, 105, 131	0
1	AI	504/504 (100%)	0.35	0 100 100	29, 65, 98, 141	0
1	AJ	504/504 (100%)	0.32	0 100 100	34, 67, 99, 137	0
1	AK	504/504 (100%)	0.31	2 (0%) 90 78	37, 72, 104, 142	0
1	AL	504/504 (100%)	0.34	0 100 100	31, 67, 94, 131	0
1	AM	504/504 (100%)	0.35	0 100 100	32, 65, 96, 117	0
1	AN	504/504 (100%)	0.34	0 100 100	29, 64, 94, 128	0
1	AO	504/504 (100%)	0.35	0 100 100	34, 66, 93, 124	0
1	AP	504/504 (100%)	0.30	0 100 100	34, 69, 97, 124	0
1	AQ	504/504 (100%)	0.31	0 100 100	28, 60, 88, 111	0
1	AR	504/504 (100%)	0.30	0 100 100	23, 57, 89, 120	0
1	AS	504/504 (100%)	0.27	0 100 100	30, 60, 92, 124	0
1	AT	504/504 (100%)	0.31	0 100 100	35, 69, 100, 141	0
1	BA	504/504 (100%)	0.47	3 (0%) 86 69	47, 90, 125, 207	0
1	BB	504/504 (100%)	0.57	10 (1%) 62 39	67, 105, 138, 173	0
1	BC	504/504 (100%)	0.67	18 (3%) 41 26	71, 114, 149, 205	0
1	BD	504/504 (100%)	0.61	14 (2%) 50 31	62, 104, 133, 170	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	BE	504/504 (100%)	0.50	2 (0%) 90 78	48, 89, 122, 158	0
1	BF	504/504 (100%)	0.62	8 (1%) 68 45	63, 99, 131, 191	0
1	BG	504/504 (100%)	0.53	2 (0%) 90 78	59, 93, 125, 154	0
1	BH	504/504 (100%)	0.62	10 (1%) 62 39	48, 95, 130, 160	0
1	BI	504/504 (100%)	0.56	3 (0%) 86 69	65, 108, 143, 170	0
1	BJ	504/504 (100%)	0.64	8 (1%) 68 45	70, 109, 140, 195	0
1	BK	504/504 (100%)	0.43	2 (0%) 90 78	47, 85, 116, 178	0
1	BL	504/504 (100%)	0.46	2 (0%) 90 78	42, 75, 105, 152	0
1	BM	504/504 (100%)	0.55	6 (1%) 75 52	45, 85, 121, 181	0
1	BN	504/504 (100%)	0.57	10 (1%) 62 39	59, 98, 129, 176	0
1	BO	504/504 (100%)	0.49	2 (0%) 90 78	56, 98, 127, 161	0
1	BP	504/504 (100%)	0.82	36 (7%) 16 11	77, 124, 163, 199	0
1	BQ	504/504 (100%)	0.70	22 (4%) 33 21	78, 122, 162, 199	0
1	BR	504/504 (100%)	0.70	18 (3%) 41 26	76, 116, 149, 189	0
1	BS	504/504 (100%)	0.70	20 (3%) 36 23	73, 117, 152, 210	0
1	BT	504/504 (100%)	0.90	52 (10%) 7 7	87, 127, 161, 200	0
1	CA	504/504 (100%)	0.69	22 (4%) 33 21	76, 120, 153, 177	0
1	CB	504/504 (100%)	0.62	12 (2%) 56 35	68, 106, 141, 177	0
1	CC	504/504 (100%)	0.66	7 (1%) 72 48	55, 102, 137, 204	0
1	CD	504/504 (100%)	0.61	8 (1%) 68 45	68, 105, 141, 173	0
1	CE	504/504 (100%)	0.69	21 (4%) 35 22	72, 119, 149, 191	0
1	CF	504/504 (100%)	0.43	1 (0%) 93 86	41, 85, 115, 151	0
1	CG	504/504 (100%)	0.47	2 (0%) 90 78	57, 88, 121, 163	0
1	CH	504/504 (100%)	0.47	1 (0%) 93 86	58, 90, 124, 179	0
1	CI	504/504 (100%)	0.47	1 (0%) 93 86	44, 84, 121, 188	0
1	CJ	504/504 (100%)	0.40	0 100 100	44, 77, 110, 151	0
1	CK	504/504 (100%)	0.54	6 (1%) 75 52	61, 103, 133, 150	0
1	CL	504/504 (100%)	0.64	16 (3%) 45 28	68, 114, 148, 184	0
1	CM	504/504 (100%)	0.61	14 (2%) 50 31	64, 111, 141, 187	0
1	CN	504/504 (100%)	0.46	1 (0%) 93 86	62, 97, 127, 171	0
1	CO	504/504 (100%)	0.54	4 (0%) 83 63	59, 91, 126, 157	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	CP	504/504 (100%)	0.38	0 100 100	41, 73, 105, 133	0
1	CQ	504/504 (100%)	0.42	1 (0%) 93 86	46, 76, 112, 171	0
1	CR	504/504 (100%)	0.49	2 (0%) 90 78	45, 84, 114, 172	0
1	CS	504/504 (100%)	0.49	1 (0%) 93 86	45, 86, 119, 153	0
1	CT	504/504 (100%)	0.42	0 100 100	52, 82, 111, 136	0
All	All	30240/30240 (100%)	0.49	377 (1%) 75 52	23, 89, 135, 210	0

All (377) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	CC	405	GLN	4.2
1	BT	6	GLY	4.1
1	BC	383	GLU	4.1
1	CL	432	LEU	4.1
1	BC	56	LEU	4.0
1	CM	274	GLU	3.8
1	BQ	68	MET	3.5
1	BP	437	HIS	3.5
1	BT	236	ARG	3.4
1	BP	147	GLN	3.4
1	BP	449	GLU	3.4
1	BT	150	VAL	3.4
1	BP	151	GLU	3.3
1	BT	229	MET	3.3
1	BT	362	GLU	3.3
1	BT	25	ILE	3.3
1	BT	28	MET	3.2
1	BT	37	TYR	3.1
1	CD	408	LEU	3.1
1	BD	116	HIS	3.1
1	BN	152	LEU	3.1
1	BT	365	ILE	3.0
1	BT	68	MET	3.0
1	BT	148	ALA	3.0
1	BP	125	PHE	3.0
1	BP	5	ARG	3.0
1	BT	202	LEU	2.9
1	BC	364	GLU	2.9
1	BN	125	PHE	2.9
1	BP	152	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BC	73	TYR	2.9
1	BS	326	ILE	2.9
1	BR	118	MET	2.9
1	BM	152	LEU	2.9
1	BR	280	GLU	2.9
1	BT	130	LEU	2.9
1	BD	189	PHE	2.9
1	CE	70	PHE	2.8
1	BB	152	LEU	2.8
1	BP	471	MET	2.8
1	CA	25	ILE	2.8
1	CL	423	LYS	2.8
1	BT	251	VAL	2.8
1	BP	364	GLU	2.8
1	CR	157	GLU	2.8
1	BB	426	GLY	2.8
1	BP	2	LEU	2.8
1	CA	460	PRO	2.8
1	BP	4	GLY	2.8
1	BR	114	CYS	2.8
1	CM	293	ARG	2.8
1	BT	363	ILE	2.8
1	CL	55	ARG	2.8
1	BT	54	ILE	2.8
1	BN	114	CYS	2.8
1	BT	55	ARG	2.8
1	BT	3	ALA	2.7
1	BQ	247	ILE	2.7
1	BQ	311	ILE	2.7
1	BQ	312	ALA	2.7
1	CL	473	ILE	2.7
1	BT	151	GLU	2.7
1	BP	372	PHE	2.7
1	CB	363	ILE	2.7
1	BP	443	LYS	2.7
1	BD	324	LEU	2.6
1	CM	247	ILE	2.6
1	BR	135	LEU	2.6
1	CC	482	LYS	2.6
1	CB	229	MET	2.6
1	CB	324	LEU	2.6
1	CB	437	HIS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BB	280	GLU	2.6
1	BT	29	ILE	2.6
1	BC	148	ALA	2.6
1	CA	229	MET	2.6
1	BT	473	ILE	2.6
1	BN	504	VAL	2.6
1	BQ	485	ARG	2.6
1	CA	244	PHE	2.6
1	BB	114	CYS	2.6
1	CK	152	LEU	2.6
1	BF	459	ASN	2.6
1	BQ	408	LEU	2.6
1	BS	475	LEU	2.6
1	CE	485	ARG	2.6
1	CB	135	LEU	2.5
1	BF	110	TYR	2.5
1	CL	433	ASP	2.5
1	BR	249	LEU	2.5
1	CL	152	LEU	2.5
1	CM	37	TYR	2.5
1	BB	408	LEU	2.5
1	BF	116	HIS	2.5
1	BT	306	LEU	2.5
1	BS	283	ILE	2.5
1	BH	229	MET	2.5
1	BS	247	ILE	2.5
1	BT	360	LYS	2.5
1	BC	227	LEU	2.5
1	BQ	45	LEU	2.5
1	CA	184	CYS	2.5
1	BT	378	ARG	2.5
1	CO	118	MET	2.5
1	BE	437	HIS	2.5
1	CE	274	GLU	2.5
1	CB	249	LEU	2.5
1	CD	403	LYS	2.5
1	BT	5	ARG	2.5
1	BC	295	LEU	2.5
1	BP	135	LEU	2.5
1	CA	61	PHE	2.5
1	CE	156	LEU	2.5
1	BC	240	CYS	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BT	152	LEU	2.5
1	CL	326	ILE	2.5
1	BM	114	CYS	2.5
1	BF	48	PRO	2.5
1	BJ	202	LEU	2.5
1	BH	118	MET	2.4
1	CA	458	ALA	2.4
1	BT	353	PHE	2.4
1	BD	308	PHE	2.4
1	BJ	110	TYR	2.4
1	BD	113	LEU	2.4
1	BQ	405	GLN	2.4
1	BF	458	ALA	2.4
1	CE	157	GLU	2.4
1	BL	229	MET	2.4
1	BT	475	LEU	2.4
1	CL	424	LEU	2.4
1	CL	184	CYS	2.4
1	AG	189	PHE	2.4
1	BA	326	ILE	2.4
1	CA	372	PHE	2.4
1	CL	151	GLU	2.4
1	AA	504	VAL	2.4
1	BC	306	LEU	2.4
1	BD	229	MET	2.4
1	BP	150	VAL	2.4
1	BQ	406	TRP	2.4
1	BP	148	ALA	2.4
1	BQ	229	MET	2.4
1	BT	333	ILE	2.4
1	CE	152	LEU	2.4
1	BT	116	HIS	2.4
1	BJ	229	MET	2.4
1	BR	68	MET	2.4
1	CL	108	ILE	2.4
1	BM	129	ARG	2.4
1	BB	389	MET	2.4
1	CM	239	ILE	2.4
1	BP	436	SER	2.4
1	BR	229	MET	2.4
1	BH	129	ARG	2.4
1	BJ	204	LEU	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BH	3	ALA	2.4
1	BO	229	MET	2.4
1	BB	165	LYS	2.4
1	BC	484	LEU	2.4
1	BT	315	ILE	2.4
1	CE	326	ILE	2.4
1	BP	504	VAL	2.3
1	BS	389	MET	2.3
1	BP	464	PHE	2.3
1	BQ	426	GLY	2.3
1	BS	8	ILE	2.3
1	BS	234	ARG	2.3
1	BN	229	MET	2.3
1	BS	294	LEU	2.3
1	CM	130	LEU	2.3
1	BS	96	LEU	2.3
1	CB	365	ILE	2.3
1	CD	287	TYR	2.3
1	CA	312	ALA	2.3
1	BD	196	ALA	2.3
1	BP	68	MET	2.3
1	BD	274	GLU	2.3
1	BT	227	LEU	2.3
1	BN	156	LEU	2.3
1	BE	369	PHE	2.3
1	BN	310	ALA	2.3
1	BT	247	ILE	2.3
1	CD	216	TYR	2.3
1	BQ	55	ARG	2.3
1	BD	73	TYR	2.3
1	BP	315	ILE	2.3
1	CC	485	ARG	2.3
1	AB	426	GLY	2.3
1	BS	148	ALA	2.3
1	AC	229	MET	2.3
1	BQ	6	GLY	2.3
1	CM	249	LEU	2.3
1	BG	460	PRO	2.3
1	BP	467	TYR	2.3
1	CK	25	ILE	2.3
1	CM	152	LEU	2.3
1	CM	315	ILE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BN	381	MET	2.3
1	BJ	311	ILE	2.3
1	BC	66	TRP	2.3
1	BF	66	TRP	2.3
1	BT	420	THR	2.3
1	CR	214	LYS	2.3
1	CH	383	GLU	2.3
1	CB	326	ILE	2.3
1	CE	148	ALA	2.3
1	BC	229	MET	2.2
1	CG	165	LYS	2.2
1	BP	155	GLU	2.2
1	BP	274	GLU	2.2
1	CA	107	GLU	2.2
1	CE	113	LEU	2.2
1	BQ	412	PHE	2.2
1	CK	110	TYR	2.2
1	CM	118	MET	2.2
1	CB	187	ILE	2.2
1	CL	330	ILE	2.2
1	BC	338	LEU	2.2
1	BK	229	MET	2.2
1	BS	68	MET	2.2
1	BT	113	LEU	2.2
1	CE	329	GLN	2.2
1	BR	25	ILE	2.2
1	BI	202	LEU	2.2
1	BR	310	ALA	2.2
1	CE	499	ARG	2.2
1	BT	308	PHE	2.2
1	BC	55	ARG	2.2
1	BR	236	ARG	2.2
1	BP	52	ILE	2.2
1	BC	107	GLU	2.2
1	BT	155	GLU	2.2
1	BH	156	LEU	2.2
1	BP	204	LEU	2.2
1	BT	361	GLU	2.2
1	CC	467	TYR	2.2
1	CE	110	TYR	2.2
1	BJ	330	ILE	2.2
1	BT	372	PHE	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BQ	445	GLU	2.2
1	CA	130	LEU	2.2
1	CO	234	ARG	2.2
1	CD	276	ASP	2.2
1	BJ	165	LYS	2.2
1	BR	315	ILE	2.2
1	BT	326	ILE	2.2
1	BP	47	MET	2.2
1	BP	249	LEU	2.2
1	CB	308	PHE	2.2
1	BP	393	HIS	2.2
1	BS	237	VAL	2.2
1	BS	249	LEU	2.2
1	BR	245	TYR	2.2
1	BH	282	LYS	2.2
1	BQ	39	LYS	2.2
1	CO	306	LEU	2.2
1	BH	283	ILE	2.2
1	BP	14	CYS	2.2
1	BC	382	GLY	2.2
1	BQ	274	GLU	2.2
1	CA	66	TRP	2.2
1	BT	369	PHE	2.2
1	CG	93	PRO	2.2
1	BT	330	ILE	2.2
1	CB	165	LYS	2.2
1	BM	148	ALA	2.2
1	BQ	324	LEU	2.2
1	CM	216	TYR	2.2
1	BD	310	ALA	2.1
1	BR	70	PHE	2.1
1	BO	130	LEU	2.1
1	BS	484	LEU	2.1
1	CI	229	MET	2.1
1	CD	473	ILE	2.1
1	BH	162	PHE	2.1
1	BR	311	ILE	2.1
1	BS	311	ILE	2.1
1	CA	324	LEU	2.1
1	CK	229	MET	2.1
1	BS	250	TRP	2.1
1	BT	114	CYS	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	AB	155	GLU	2.1
1	AK	274	GLU	2.1
1	BT	52	ILE	2.1
1	CL	431	GLY	2.1
1	BP	149	VAL	2.1
1	BA	229	MET	2.1
1	BS	309	TYR	2.1
1	CE	403	LYS	2.1
1	CN	107	GLU	2.1
1	BT	66	TRP	2.1
1	BT	70	PHE	2.1
1	CK	114	CYS	2.1
1	BP	66	TRP	2.1
1	BQ	150	VAL	2.1
1	BT	464	PHE	2.1
1	CA	370	PHE	2.1
1	CE	55	ARG	2.1
1	BD	265	LEU	2.1
1	BH	152	LEU	2.1
1	BS	132	PHE	2.1
1	CA	50	PHE	2.1
1	BR	372	PHE	2.1
1	CL	150	VAL	2.1
1	CK	1	GLY	2.1
1	BS	279	PHE	2.1
1	BD	360	LYS	2.1
1	BQ	146	TRP	2.1
1	CE	306	LEU	2.1
1	BF	162	PHE	2.1
1	BK	329	GLN	2.1
1	BD	110	TYR	2.1
1	BR	309	TYR	2.1
1	AA	1	GLY	2.1
1	CF	125	PHE	2.1
1	CO	364	GLU	2.1
1	CQ	156	LEU	2.1
1	BR	369	PHE	2.1
1	CM	248	VAL	2.1
1	BP	8	ILE	2.1
1	CC	481	ILE	2.1
1	BN	312	ALA	2.1
1	BA	364	GLU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	BM	116	HIS	2.1
1	BJ	184	CYS	2.1
1	CA	326	ILE	2.1
1	BT	412	PHE	2.1
1	BT	453	GLY	2.1
1	CS	4	GLY	2.1
1	BC	88	TYR	2.1
1	BT	467	TYR	2.1
1	BT	364	GLU	2.1
1	CA	350	TRP	2.1
1	CL	238	HIS	2.1
1	BT	328	VAL	2.1
1	BD	197	LEU	2.1
1	BP	110	TYR	2.1
1	CD	229	MET	2.0
1	BQ	372	PHE	2.0
1	CA	308	PHE	2.0
1	CA	330	ILE	2.0
1	CA	156	LEU	2.0
1	BH	54	ILE	2.0
1	BP	365	ILE	2.0
1	CC	25	ILE	2.0
1	BI	306	LEU	2.0
1	CB	504	VAL	2.0
1	CE	351	VAL	2.0
1	CL	51	LYS	2.0
1	BI	247	ILE	2.0
1	BM	110	TYR	2.0
1	BR	125	PHE	2.0
1	AK	229	MET	2.0
1	BG	118	MET	2.0
1	BN	487	LEU	2.0
1	CM	46	VAL	2.0
1	CE	1	GLY	2.0
1	BB	481	ILE	2.0
1	BQ	315	ILE	2.0
1	CA	396	HIS	2.0
1	BP	420	THR	2.0
1	BB	467	TYR	2.0
1	BL	306	LEU	2.0
1	CE	68	MET	2.0
1	CE	227	LEU	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CM	227	LEU	2.0
1	CC	433	ASP	2.0
1	CE	101	LEU	2.0
1	BF	114	CYS	2.0
1	BS	146	TRP	2.0
1	AA	332	GLU	2.0
1	CD	404	LEU	2.0
1	BC	245	TYR	2.0
1	CA	148	ALA	2.0
1	BB	55	ARG	2.0
1	CE	162	PHE	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 carbohydrates in this entry.

6.4 Ligands ⓘ

There are no ligands in this entry.

6.5 Other polymers ⓘ

There are no such residues in this entry.