



## Full wwPDB EM Validation Report ⓘ

May 12, 2025 – 10:11 PM EDT

PDB ID : 8TU2 / pdb\_00008tu2  
EMDB ID : EMD-41616  
Title : The Capsid of Rat Bocavirus  
Authors : Velez, M.; Mietzsch, M.; McKenna, R.  
Deposited on : 2023-08-15  
Resolution : 2.52 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev118  
MolProbity : 4-5-2 with Phenix2.0rc1  
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.43.1

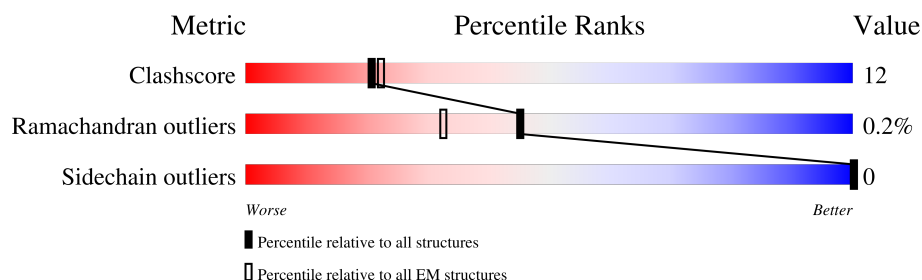
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 2.52 Å.

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









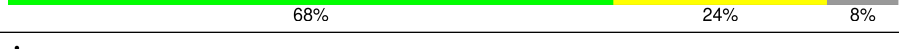
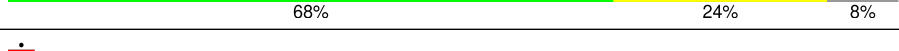
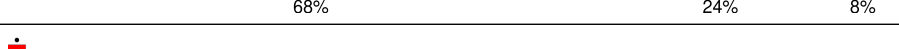
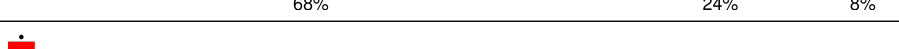
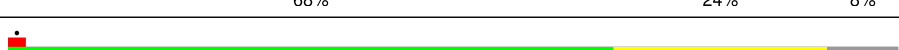

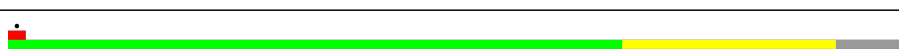

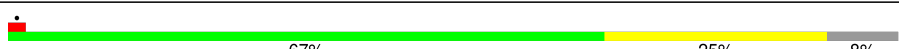





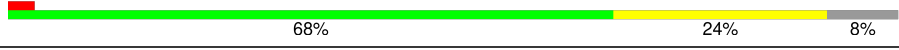
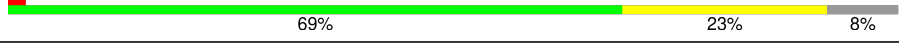



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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

Mol	Chain	Length	Quality of chain
1	1	567	
1	2	567	
1	3	567	
1	4	567	
1	5	567	
1	6	567	
1	7	567	
1	8	567	







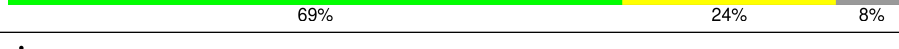
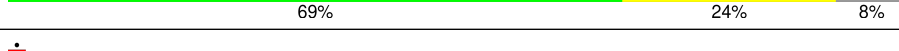
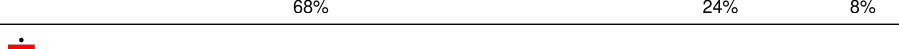
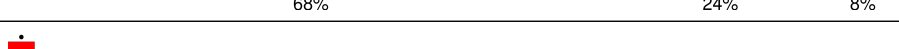
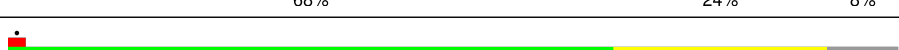

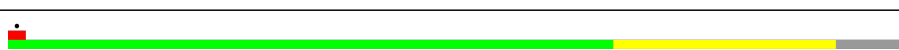

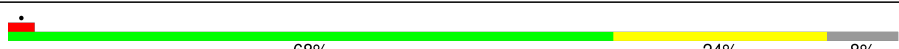





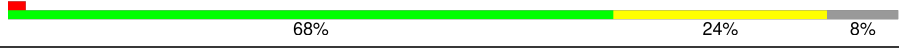
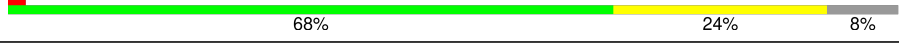



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Mol	Chain	Length	Quality of chain
1	A	567	
1	B	567	
1	C	567	
1	D	567	
1	E	567	
1	F	567	
1	G	567	
1	H	567	
1	I	567	
1	J	567	
1	K	567	
1	L	567	
1	M	567	
1	N	567	
1	O	567	
1	P	567	
1	Q	567	
1	R	567	
1	S	567	
1	T	567	
1	U	567	
1	V	567	
1	W	567	
1	X	567	
1	Y	567	


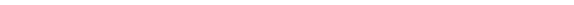
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Mol	Chain	Length	Quality of chain
1	Z	567	
1	a	567	
1	b	567	
1	c	567	
1	d	567	
1	e	567	
1	f	567	
1	g	567	
1	h	567	
1	i	567	
1	j	567	
1	k	567	
1	l	567	
1	m	567	
1	n	567	
1	o	567	
1	p	567	
1	q	567	
1	r	567	
1	s	567	
1	t	567	
1	u	567	
1	v	567	
1	w	567	
1	x	567	

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Mol	Chain	Length	Quality of chain
1	y	567	
1	z	567	

## 2 Entry composition [i](#)

There is only 1 type of molecule in this entry. The entry contains 253980 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called VP2.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	B	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	C	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	D	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	E	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	F	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	G	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	H	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	I	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	J	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	K	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	L	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	M	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	N	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	O	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	P	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		
1	Q	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	R	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	S	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	T	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	U	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	V	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	W	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	X	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	Y	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	Z	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	1	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	2	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	3	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	4	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	5	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	6	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	a	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	b	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	c	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	d	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	e	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	f	524	Total 4233	C 2661	N 735	O 818	S 19	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	g	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	h	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	i	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	j	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	k	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	l	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	m	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	n	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	o	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	p	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	q	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	r	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	s	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	t	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	u	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	v	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	w	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	x	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	y	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	z	524	Total 4233	C 2661	N 735	O 818	S 19	0	0
1	7	524	Total 4233	C 2661	N 735	O 818	S 19	0	0

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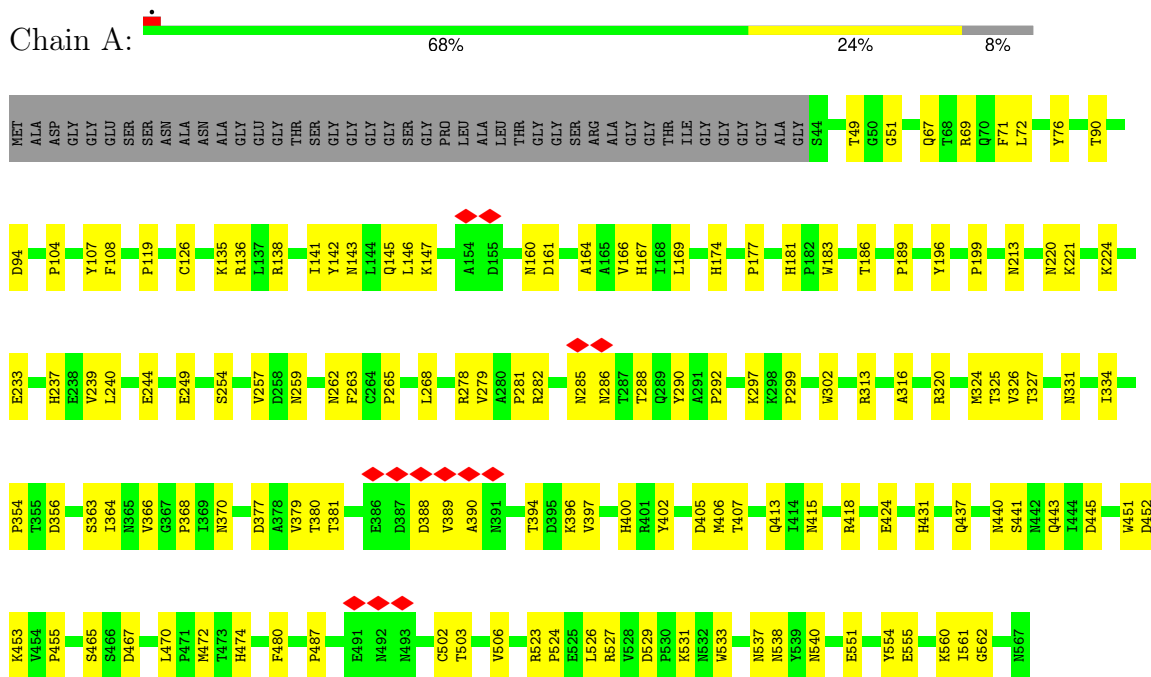
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Mol	Chain	Residues	Atoms					AltConf	Trace
1	8	524	Total	C	N	O	S	0	0
			4233	2661	735	818	19		

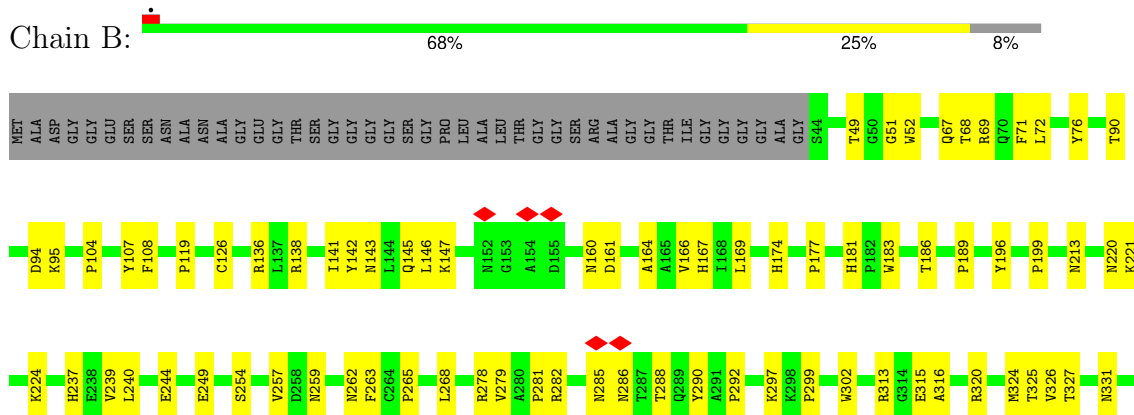
### 3 Residue-property plots

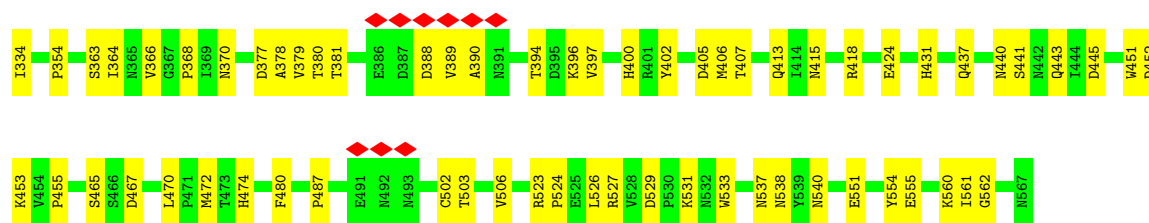
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

#### • Molecule 1: VP2

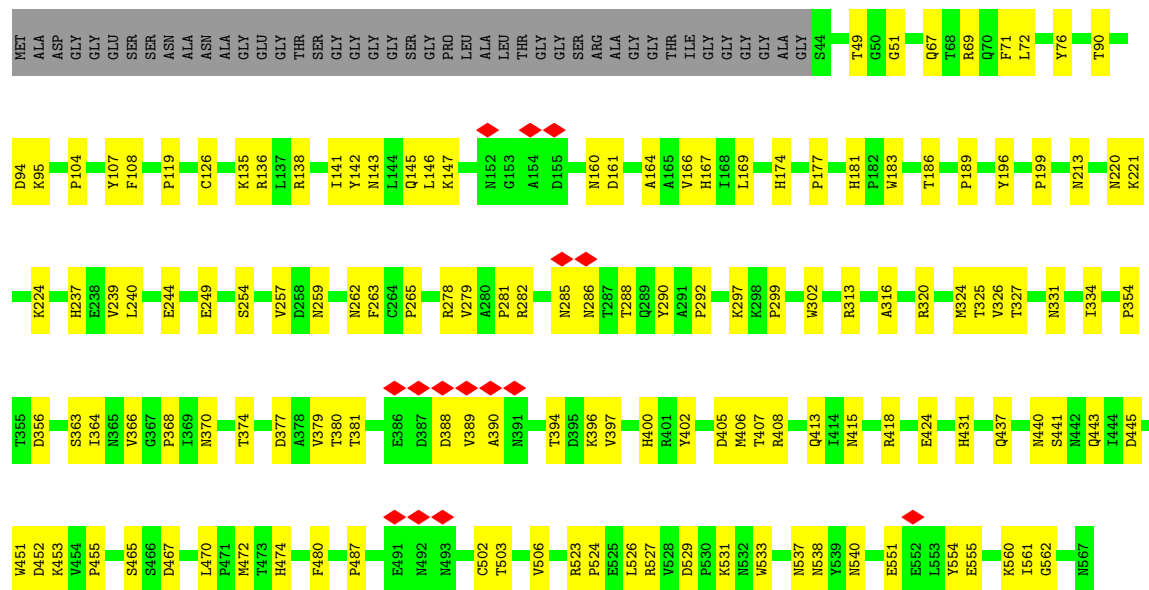


#### • Molecule 1: VP2

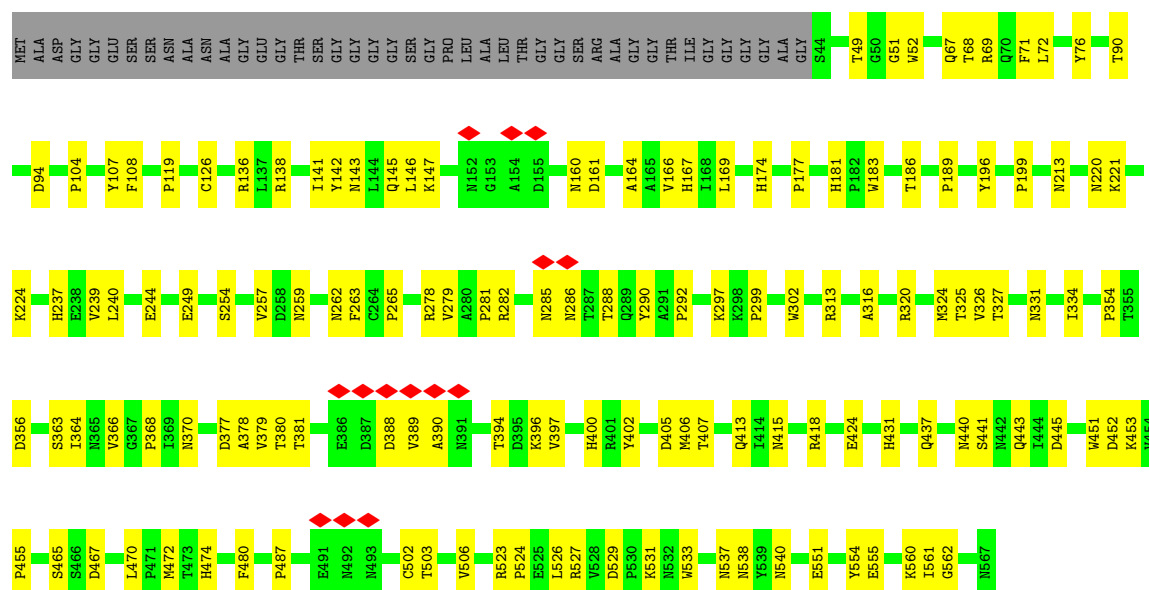




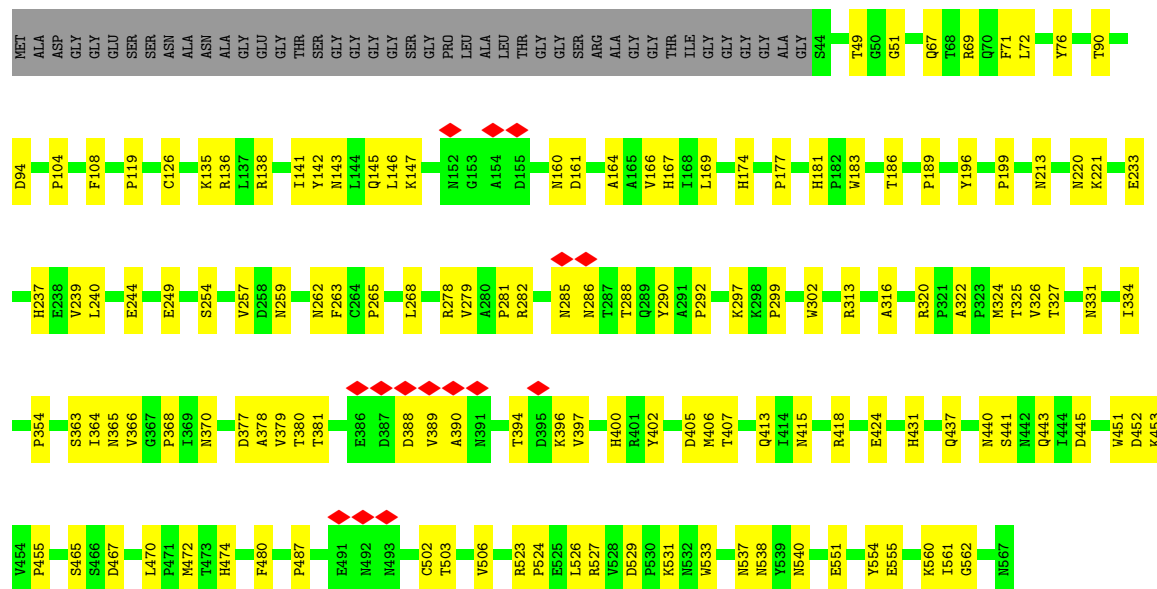
• Molecule 1: VP2



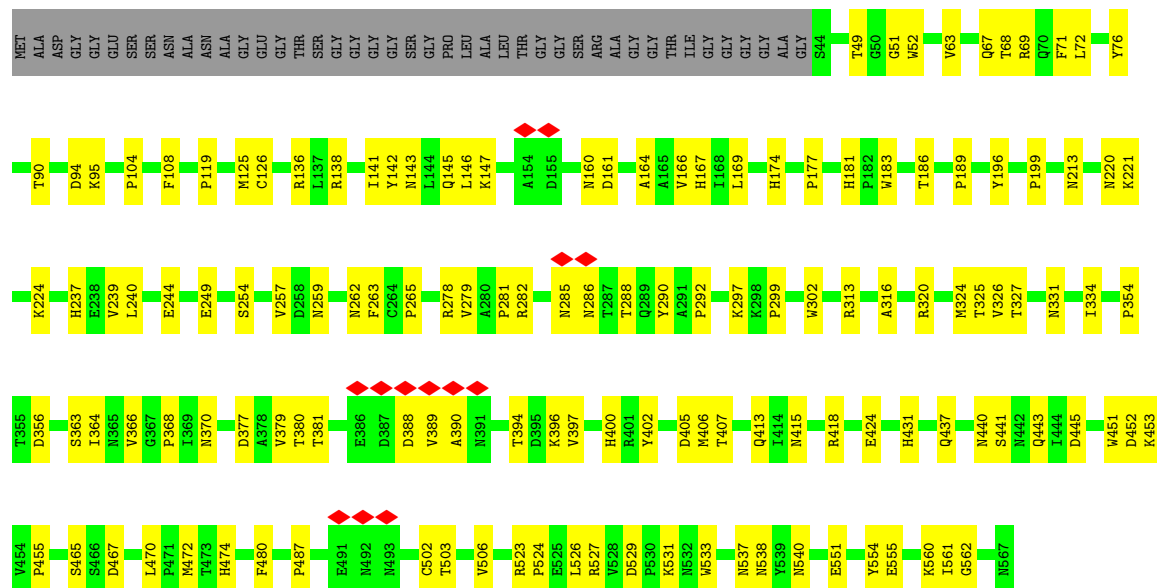
• Molecule 1: VP2



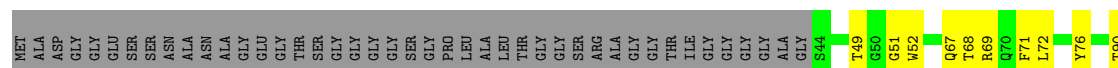
## Chain E:

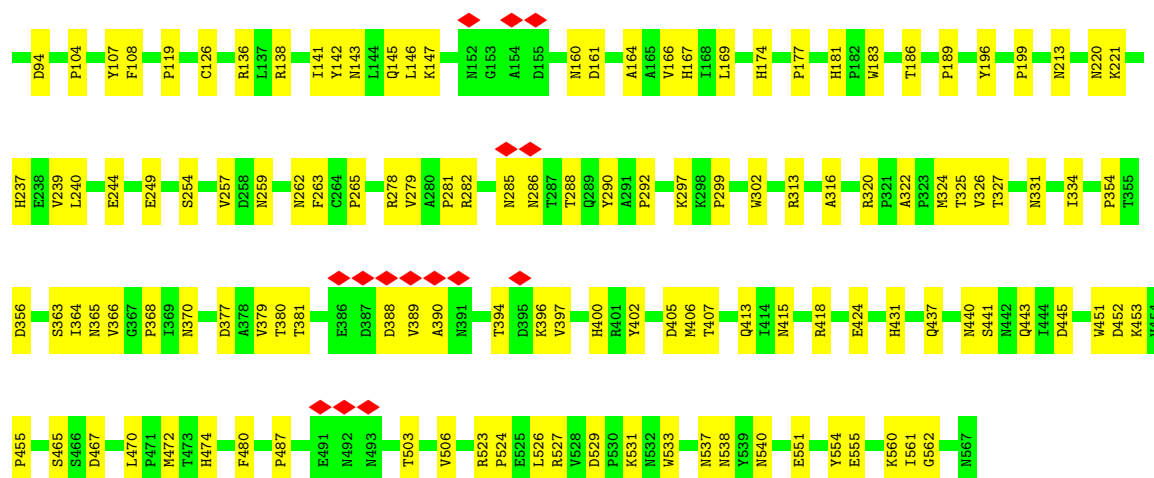


## Chain F:



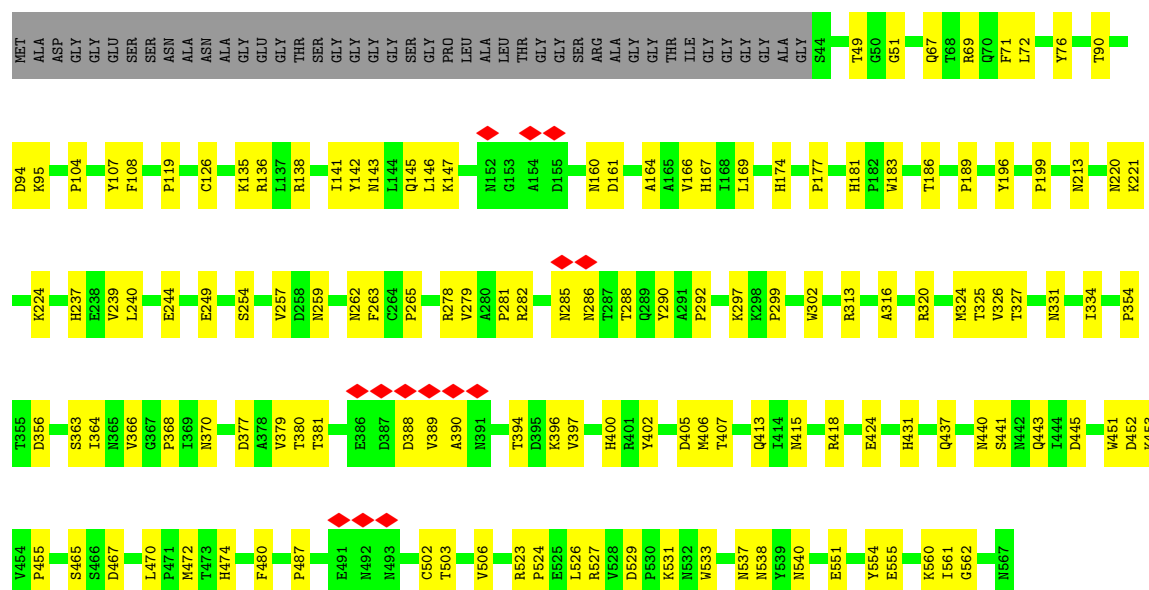
## Chain G:





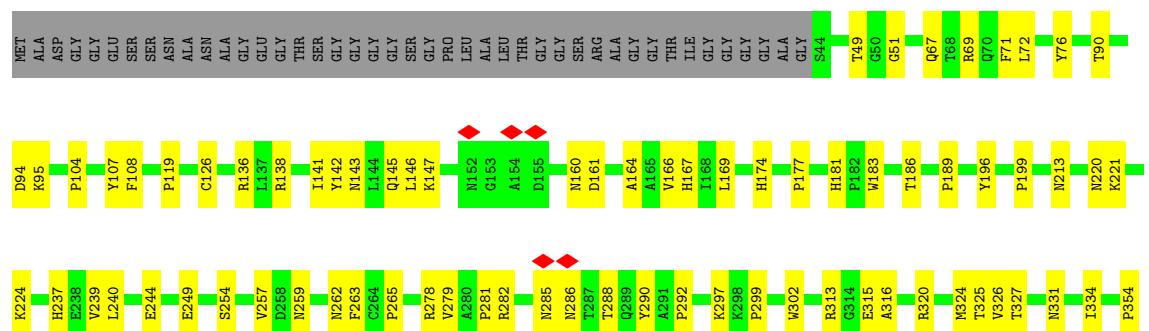
• Molecule 1: VP2

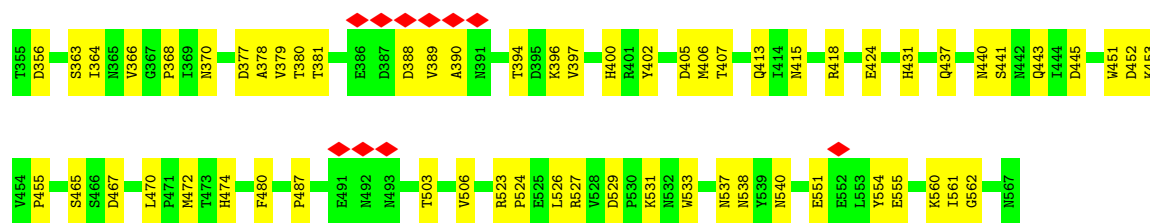
Chain H: 68% 24% 8%



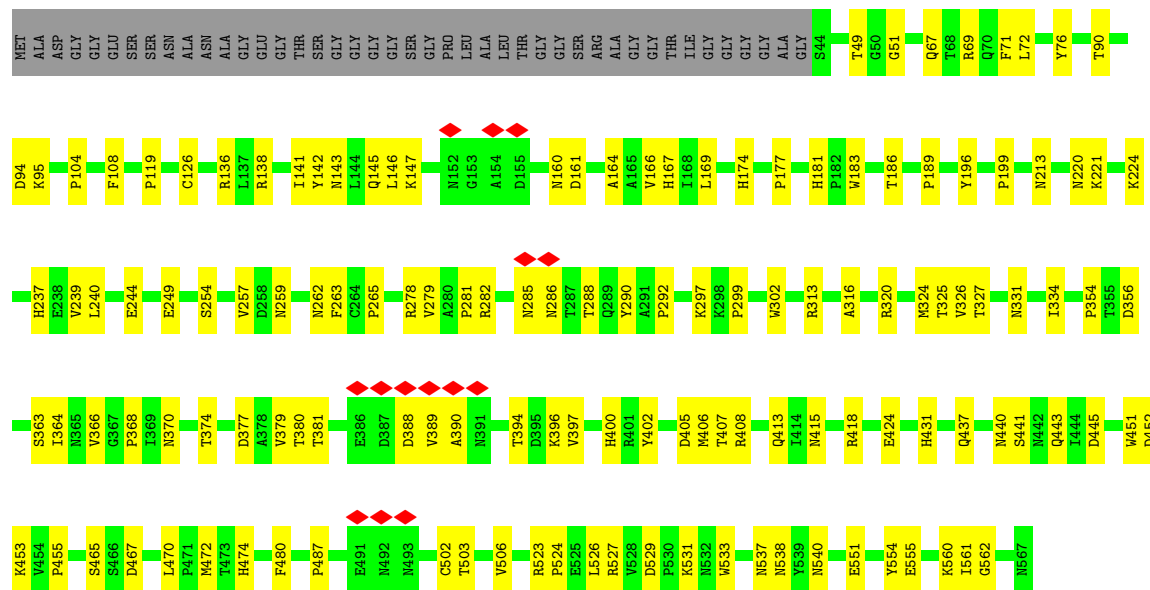
• Molecule 1: VP2

Chain I: 68% 24% 8%

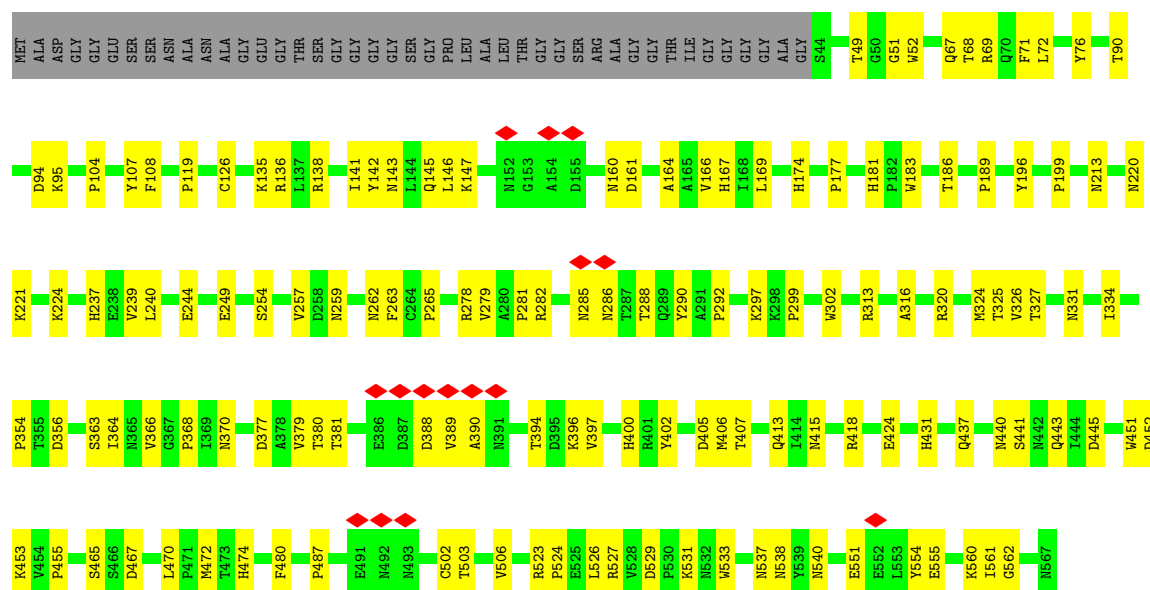




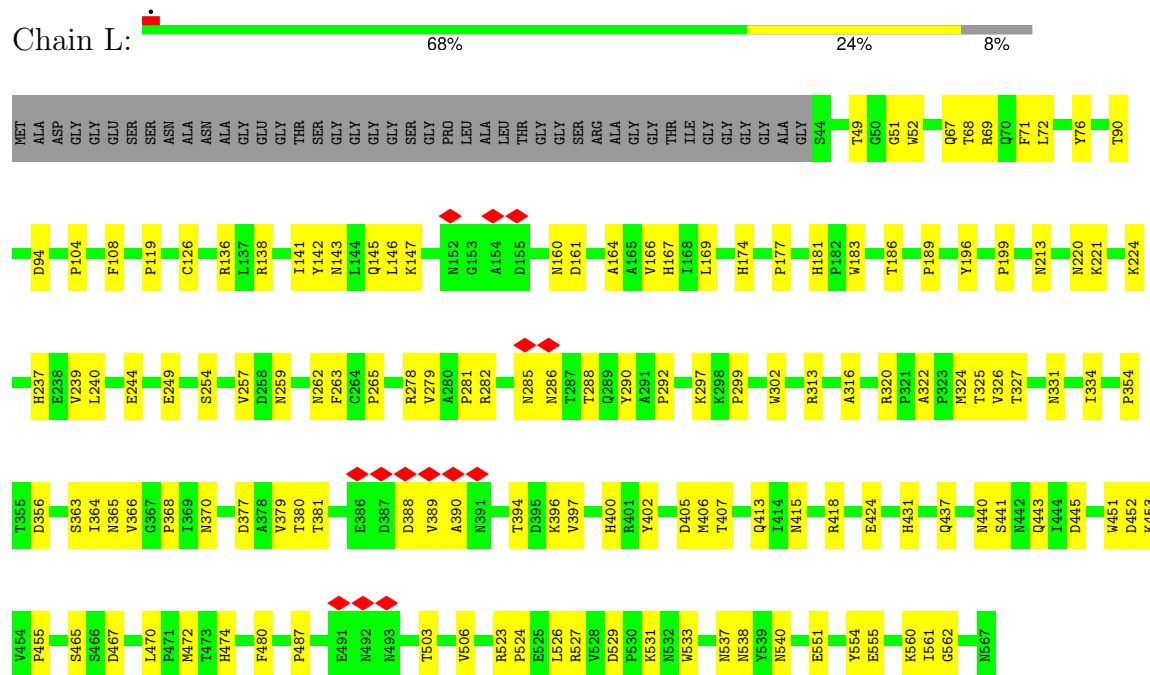
• Molecule 1: VP2



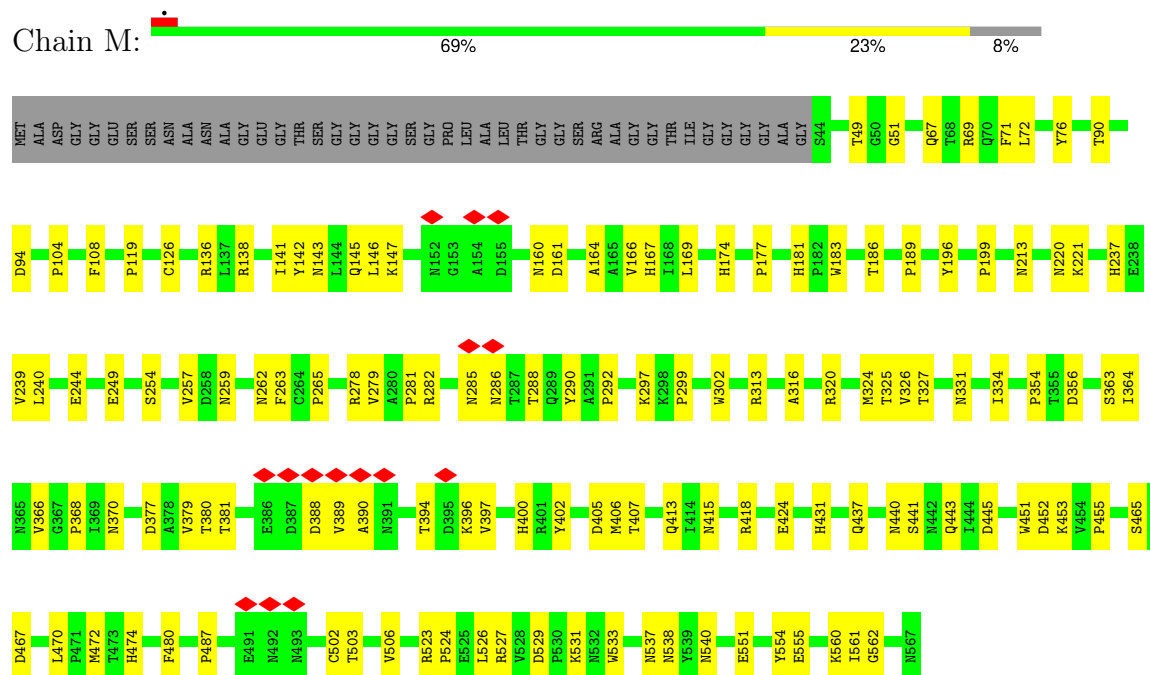
• Molecule 1: VP2



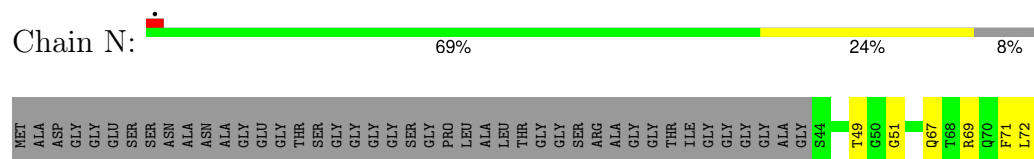
- Molecule 1: VP2

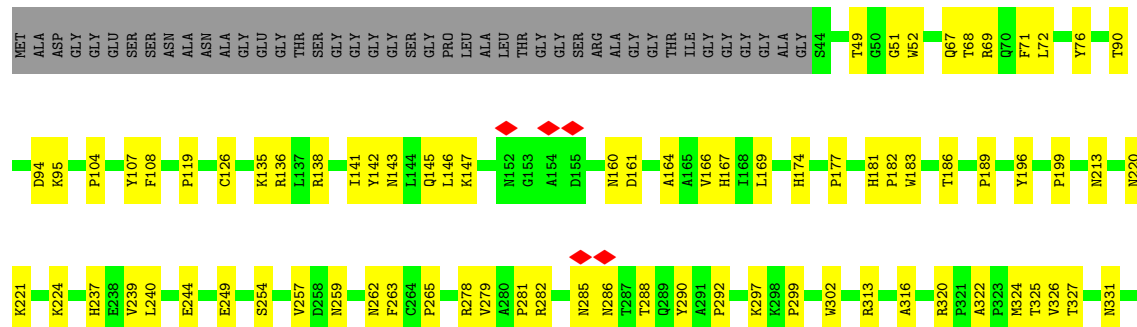


- Molecule 1: VP2

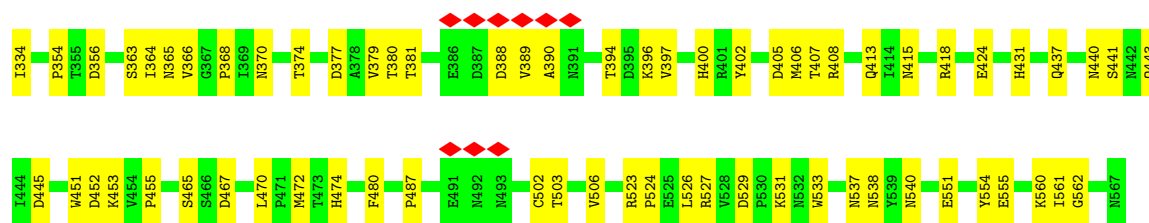


- Molecule 1: VP2



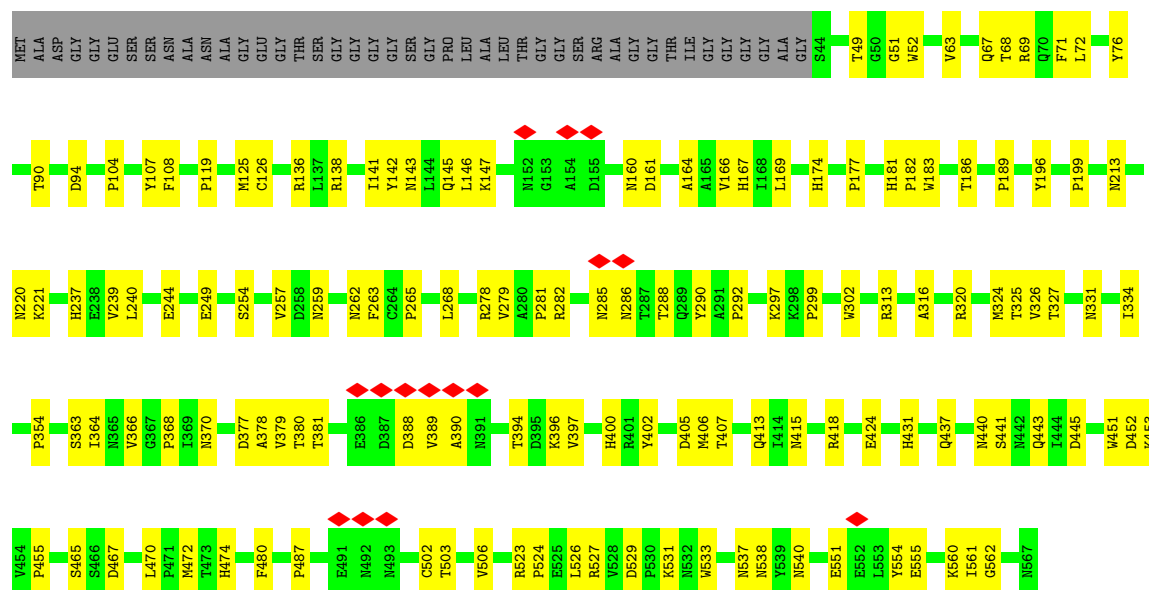






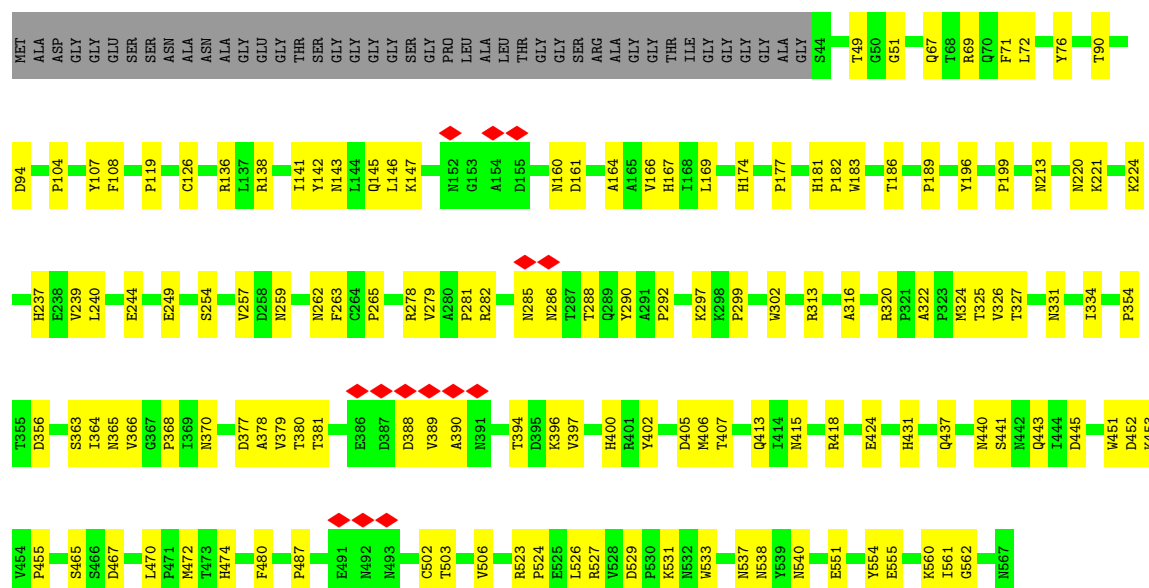
• Molecule 1: VP2

Chain Q: 68% 25% 8%



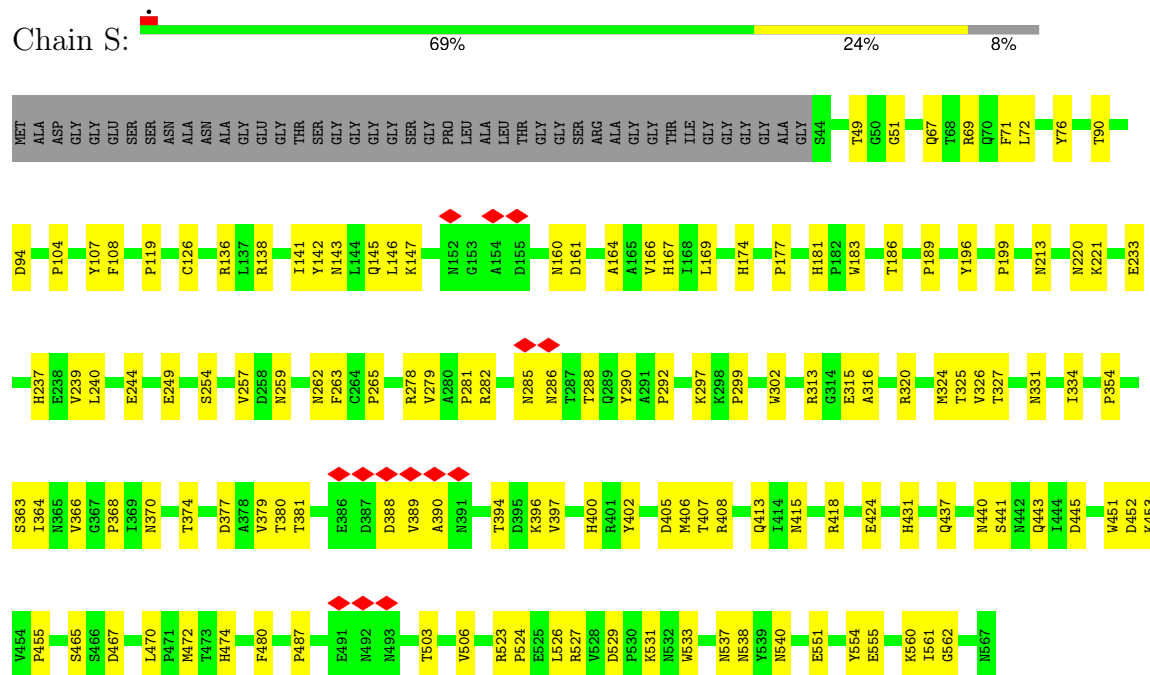
• Molecule 1: VP2

Chain R: 68% 24% 8%



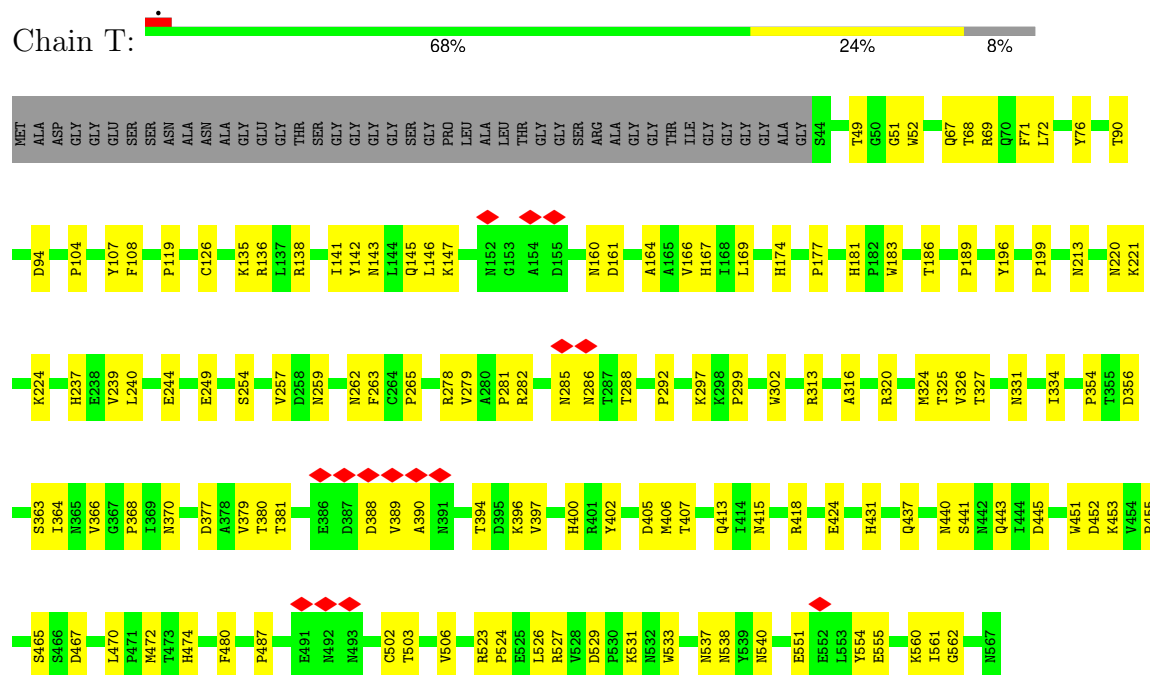
- Molecule 1: VP2

Chain S:



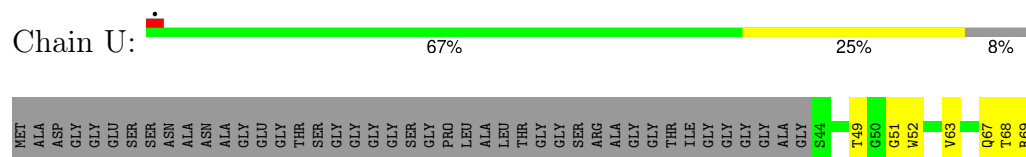
- Molecule 1: VP2

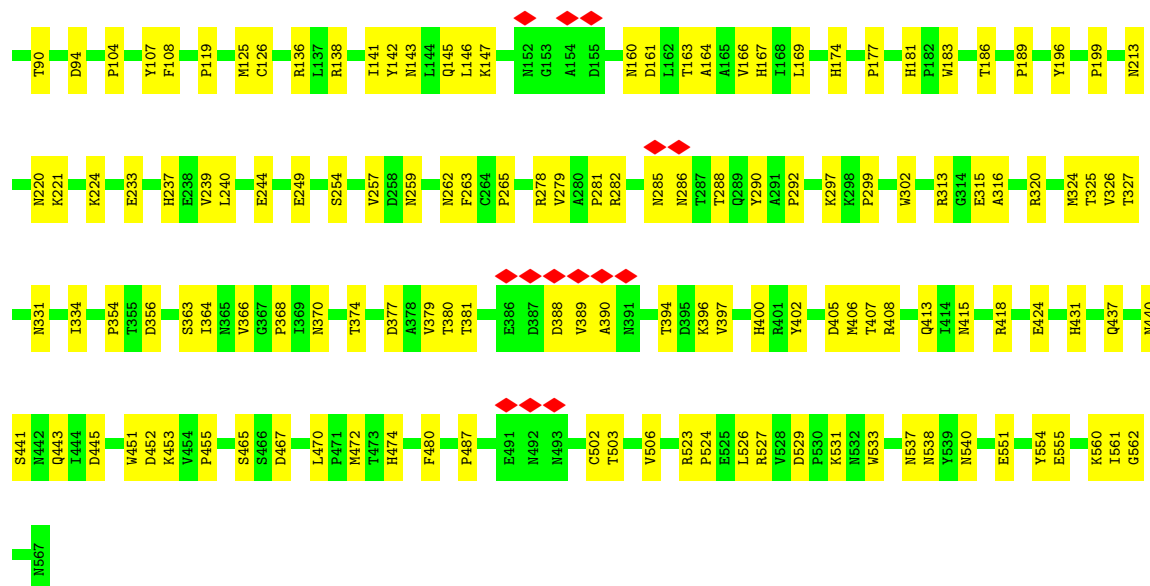
Chain T:



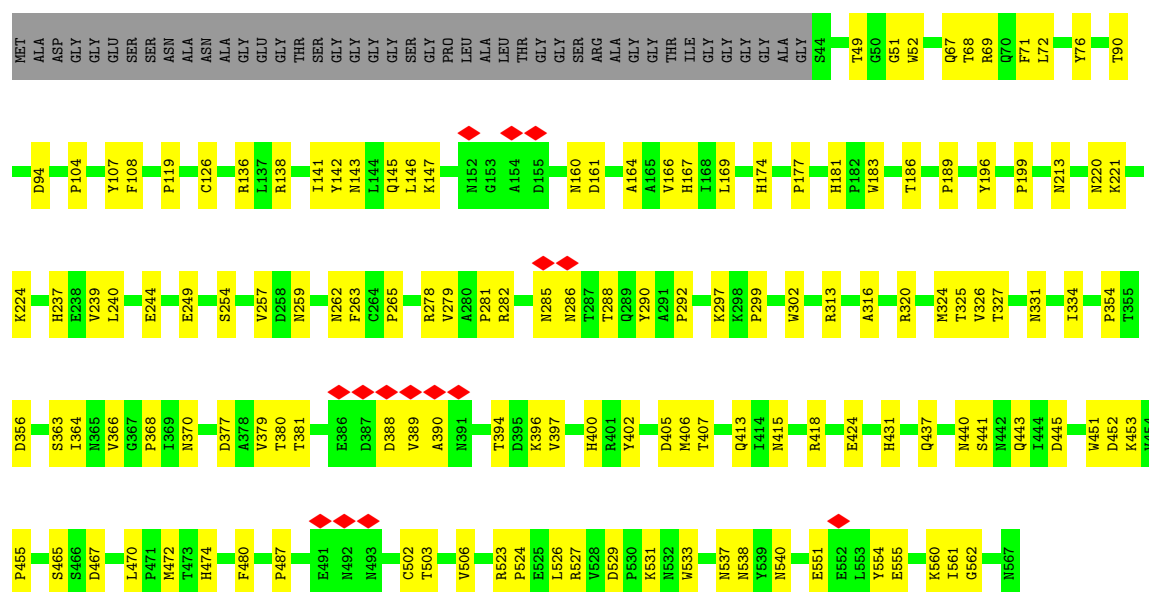
- Molecule 1: VP2

Chain U:

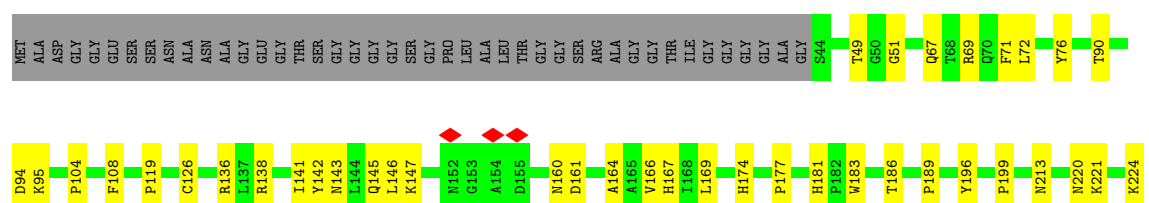


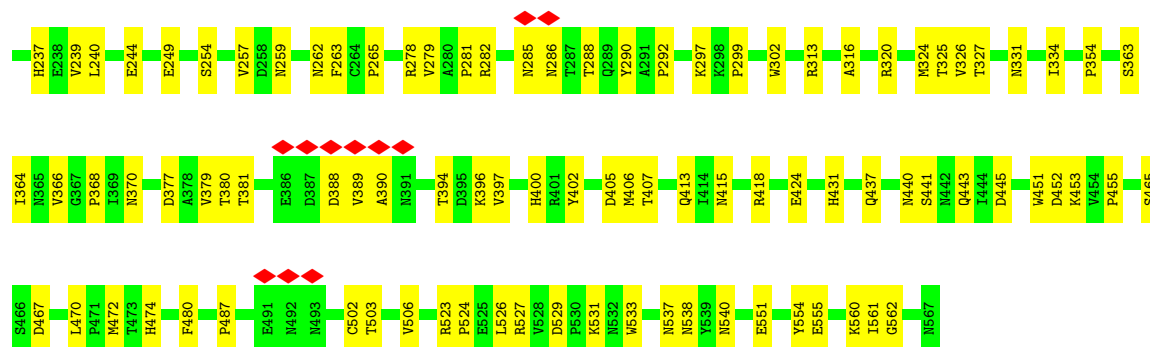


• Molecule 1: VP2



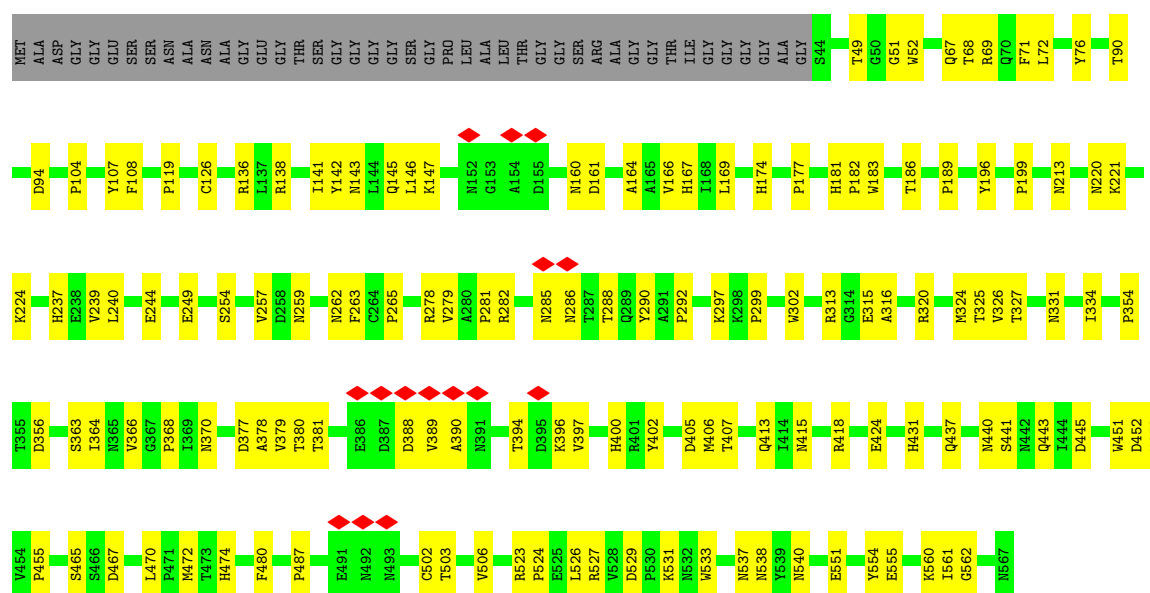
• Molecule 1: VP2





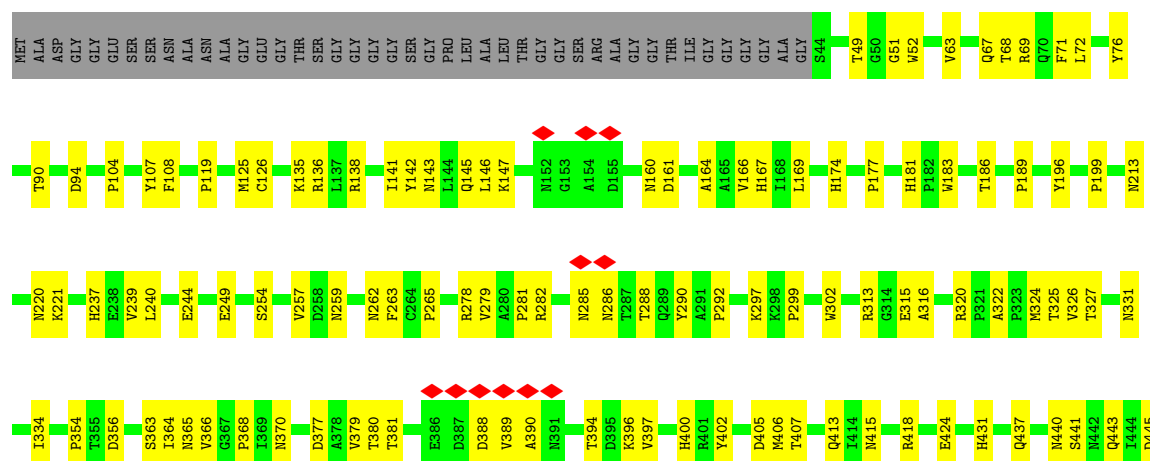
• Molecule 1: VP2

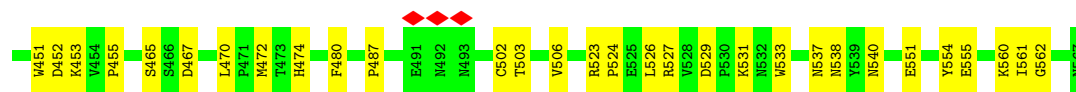
Chain X:



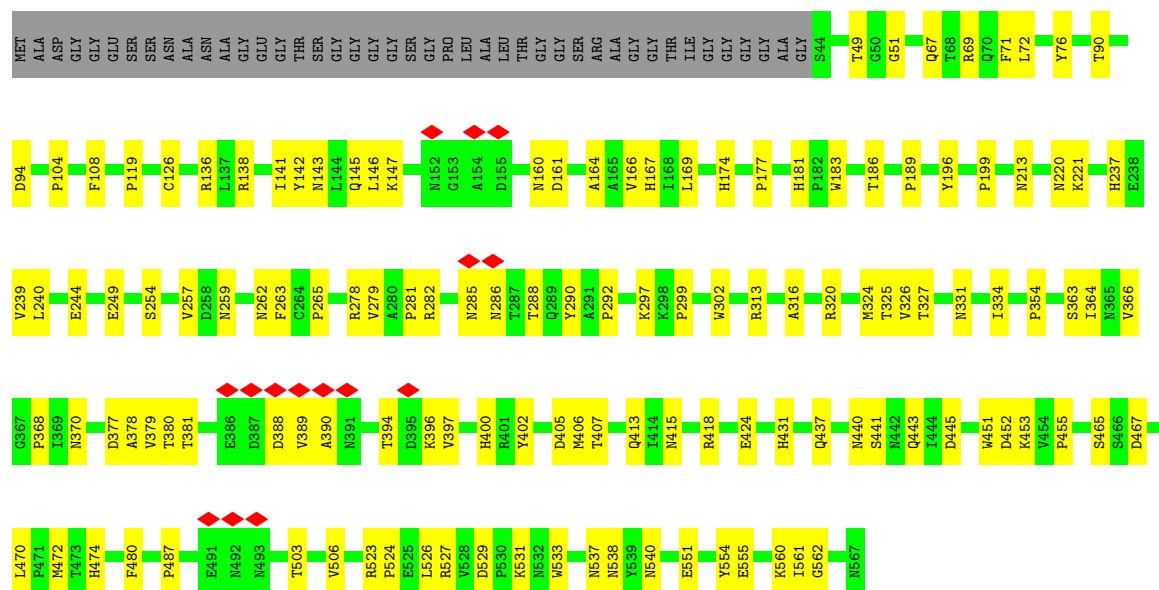
• Molecule 1: VP2

Chain Y:

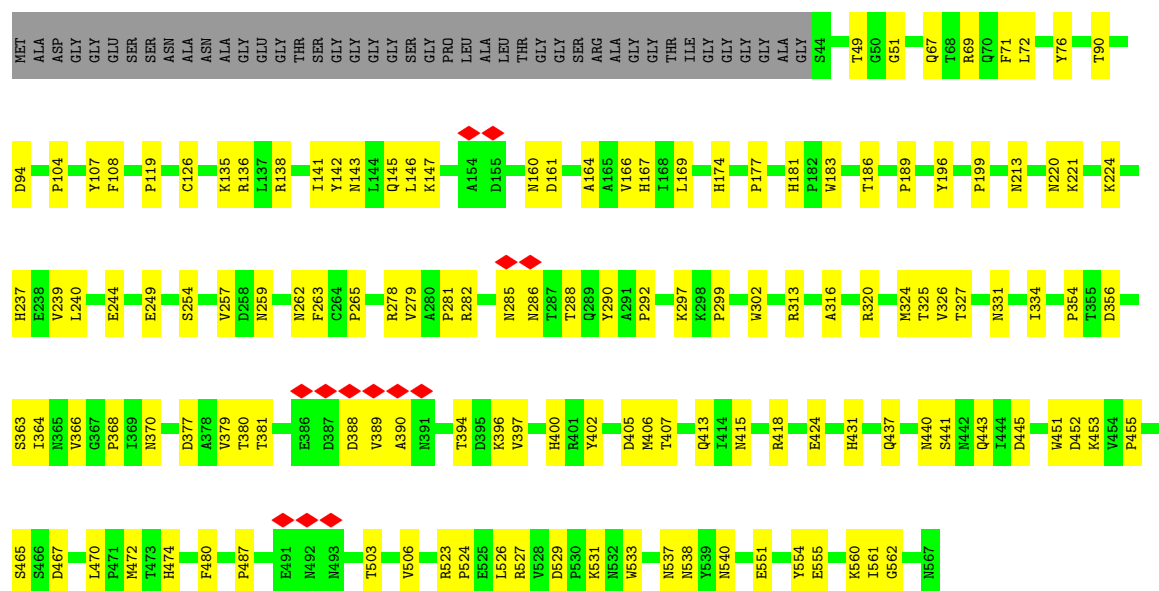




• Molecule 1: VP2

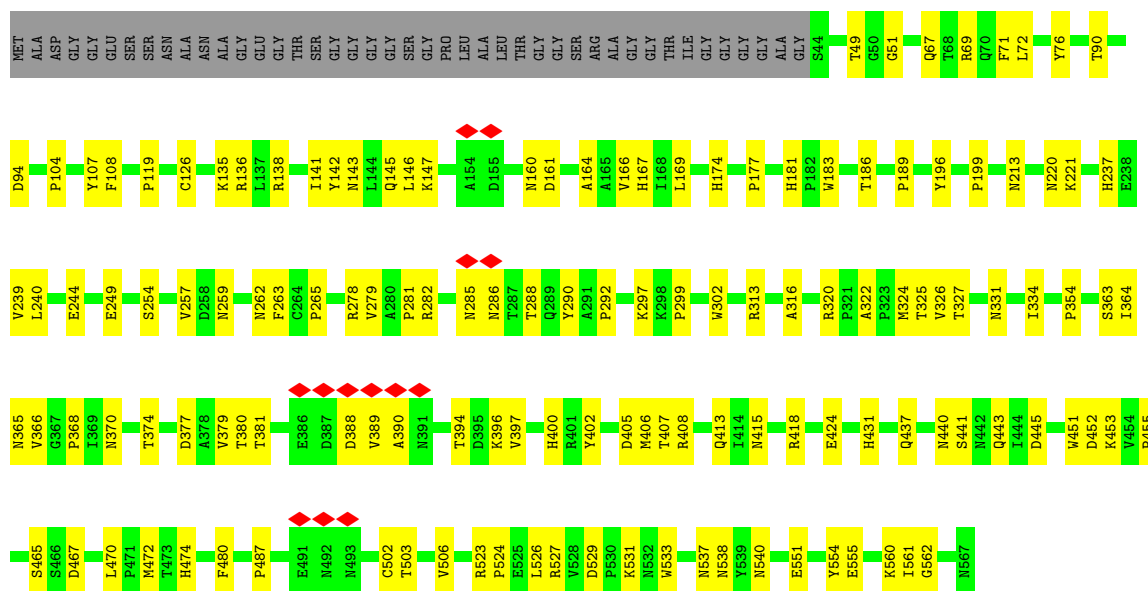


• Molecule 1: VP2

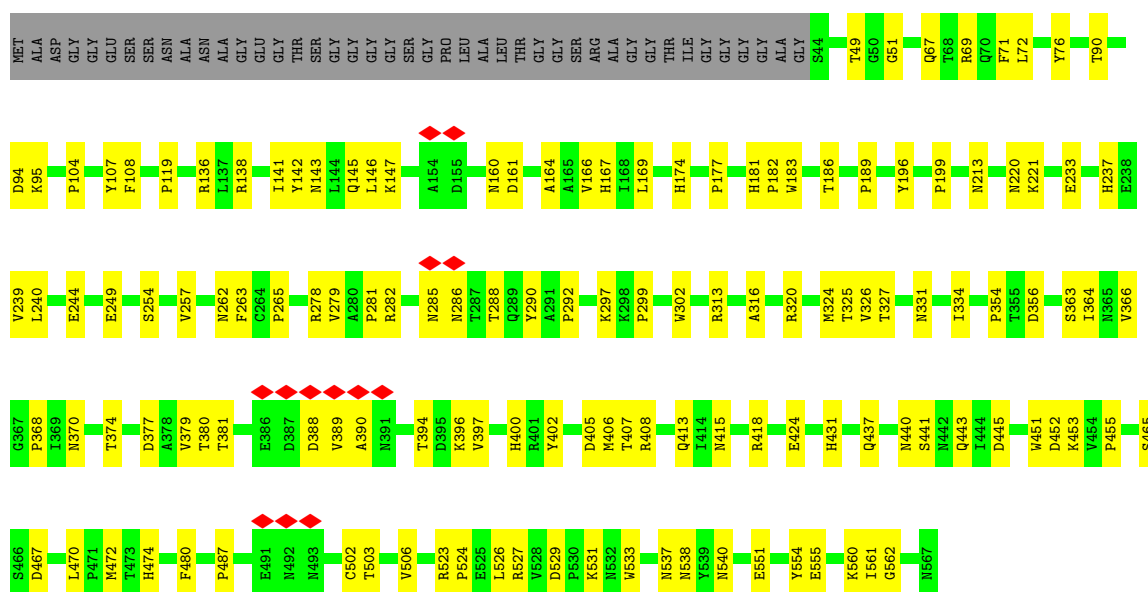


• Molecule 1: VP2

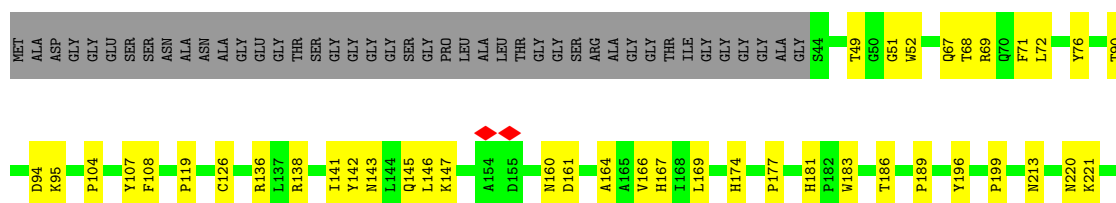


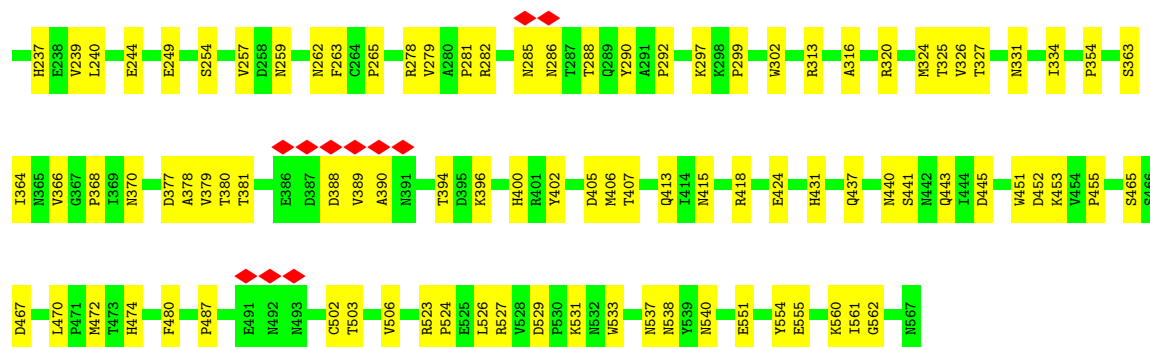


Chain 3:



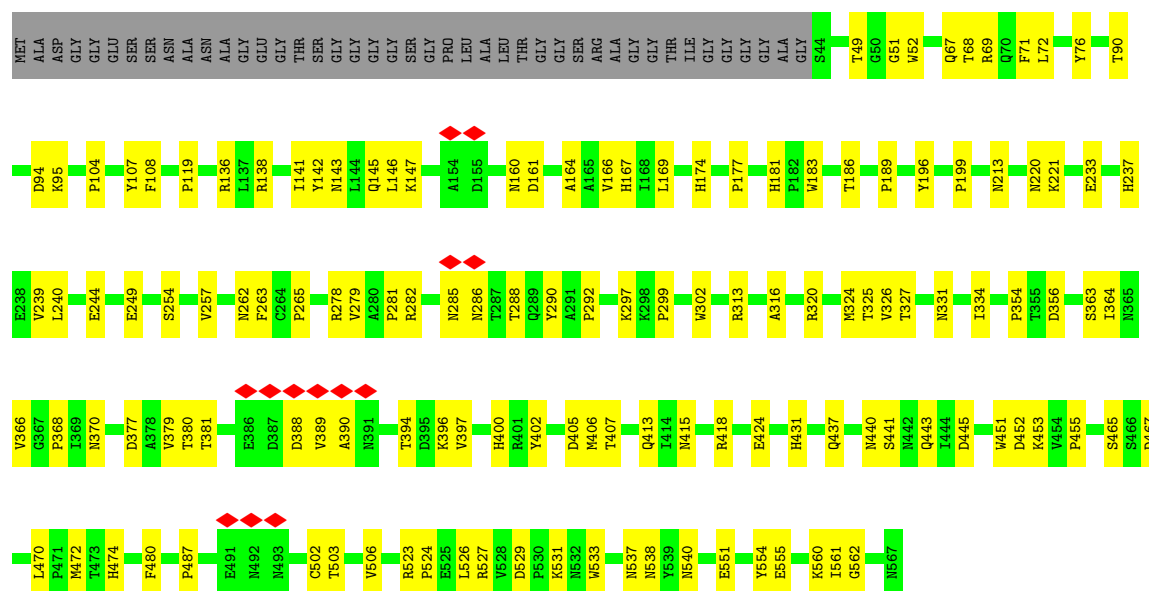
Chain 4:





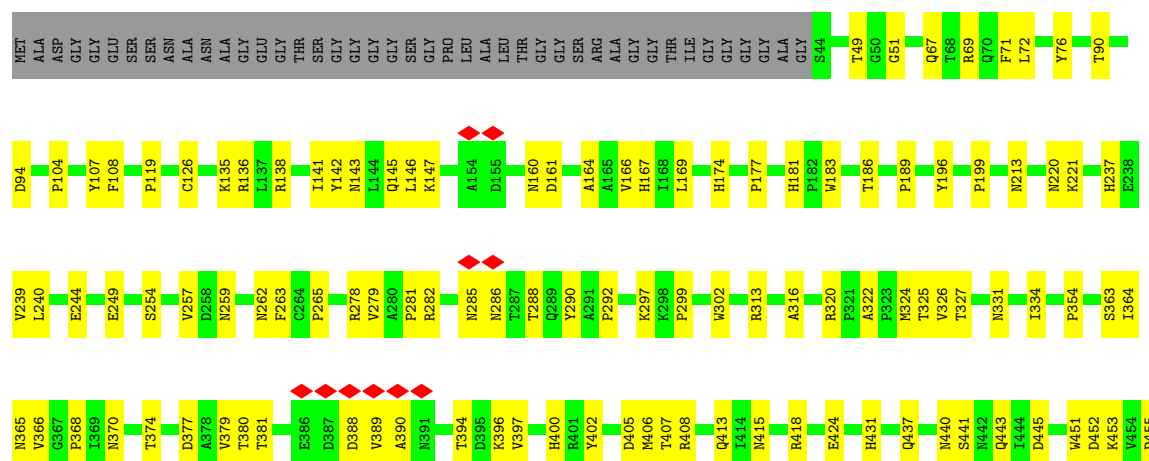
• Molecule 1: VP2

Chain 5: 69% 24% 8%



• Molecule 1: VP2

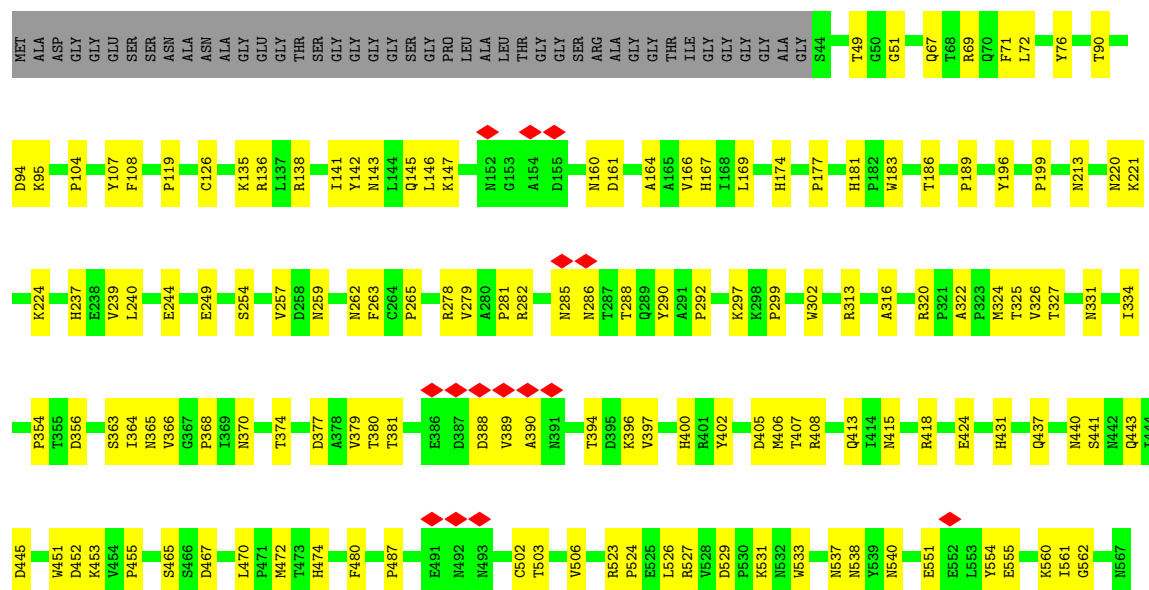
Chain 6: 68% 24% 8%





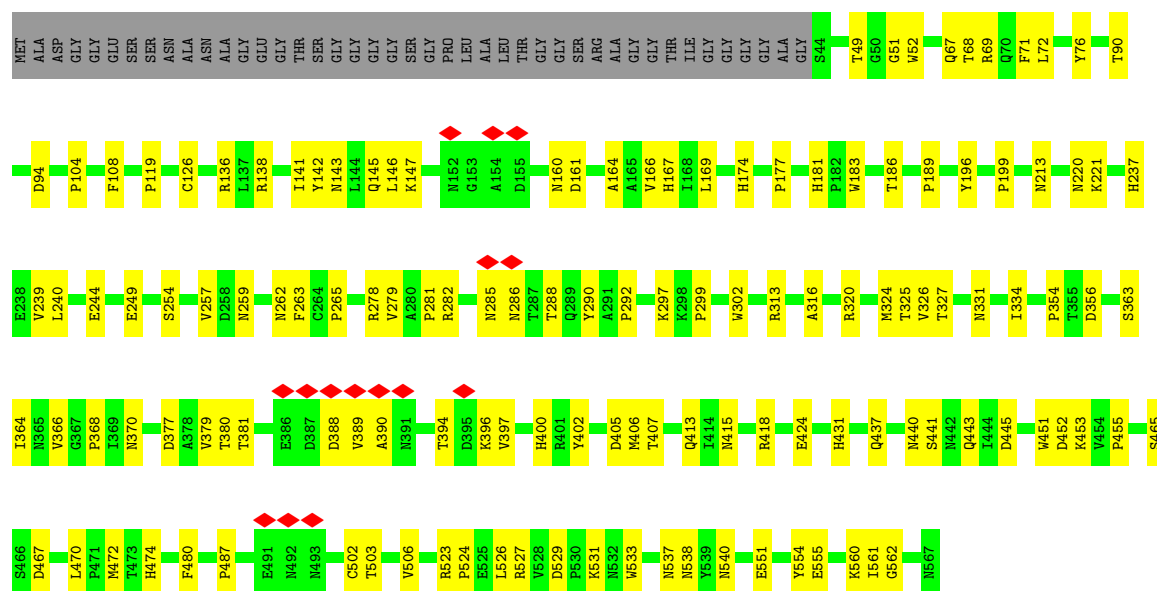
- Molecule 1: VP2

Chain a: 68% 25% 8%



- Molecule 1: VP2

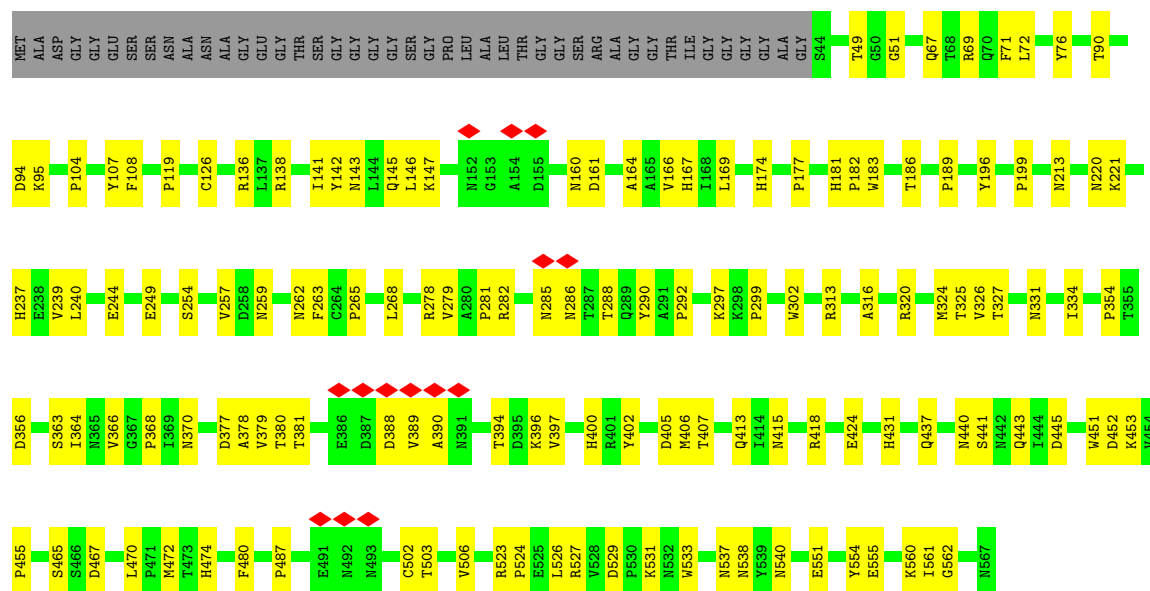
Chain b: 69% 24% 8%



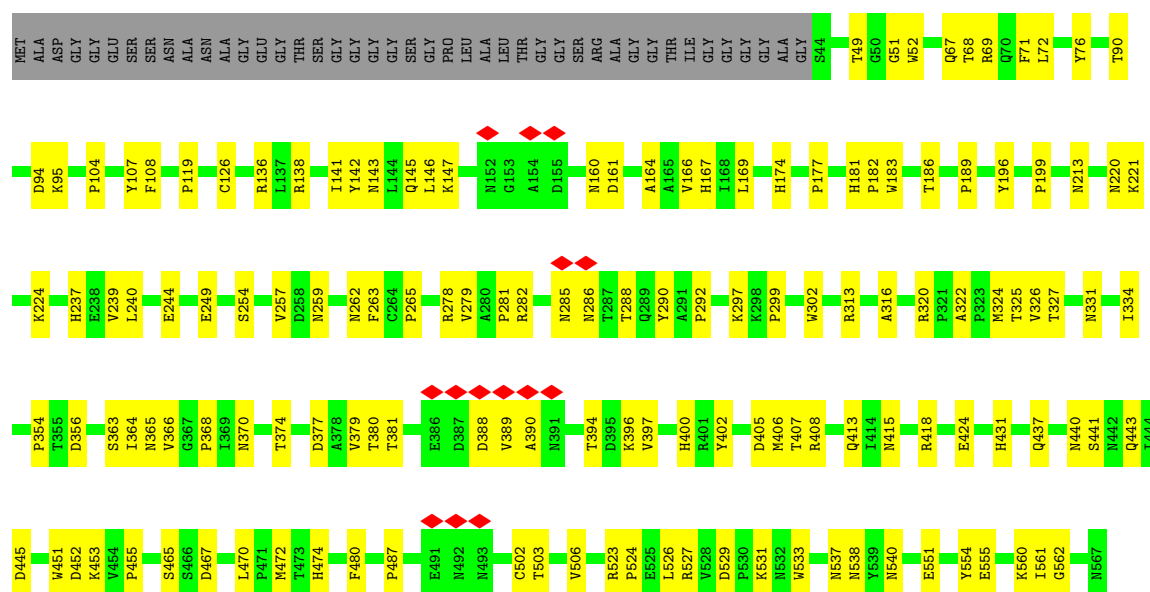
- Molecule 1: VP2

Chain c: 68% 24% 8%

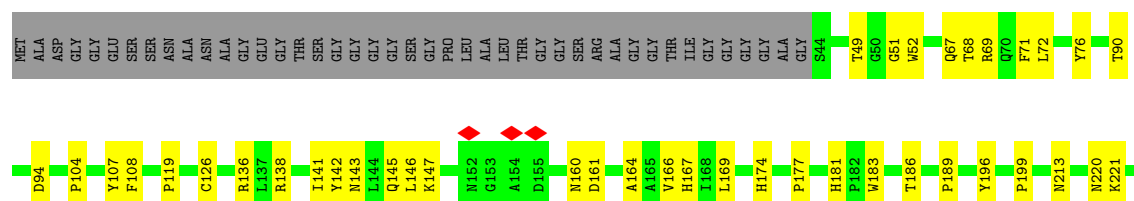


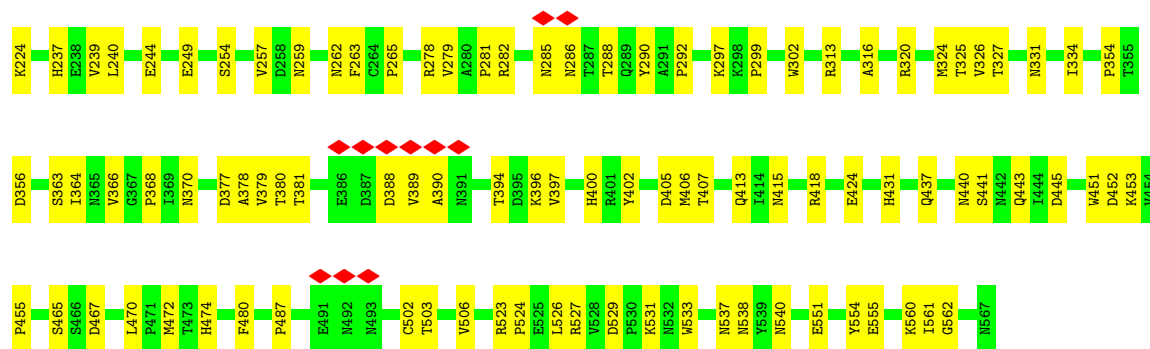


• Molecule 1: VP2



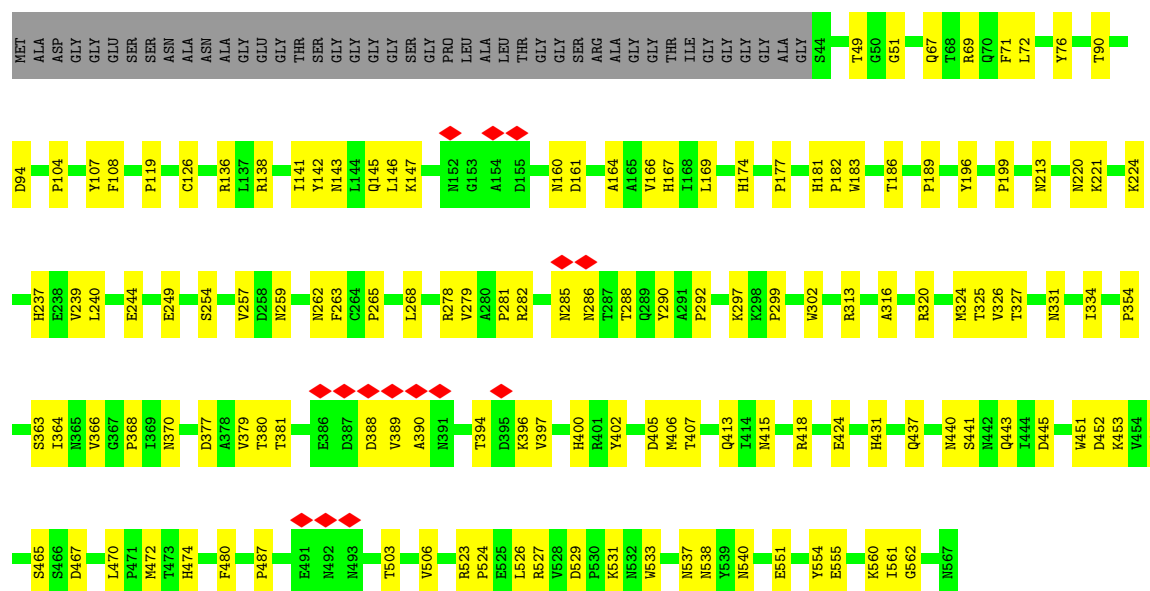
• Molecule 1: VP2





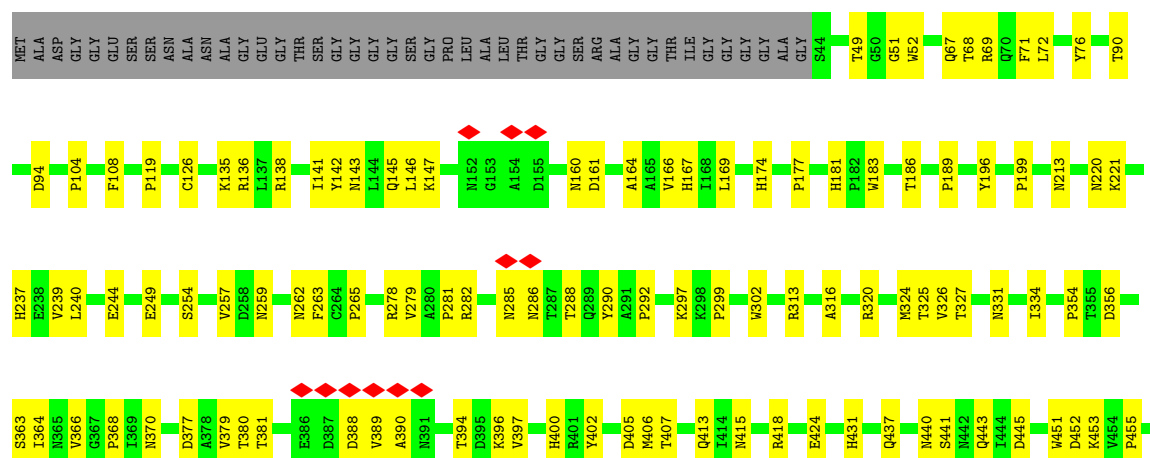
• Molecule 1: VP2

Chain f: 69% 24% 8%



• Molecule 1: VP2

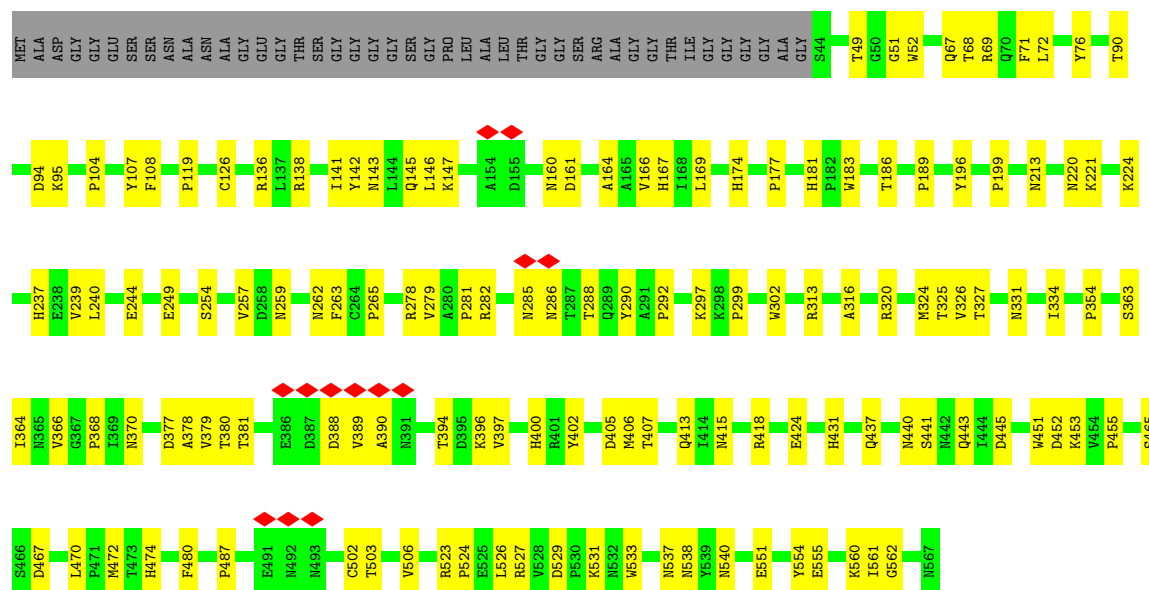
Chain g: 69% 24% 8%





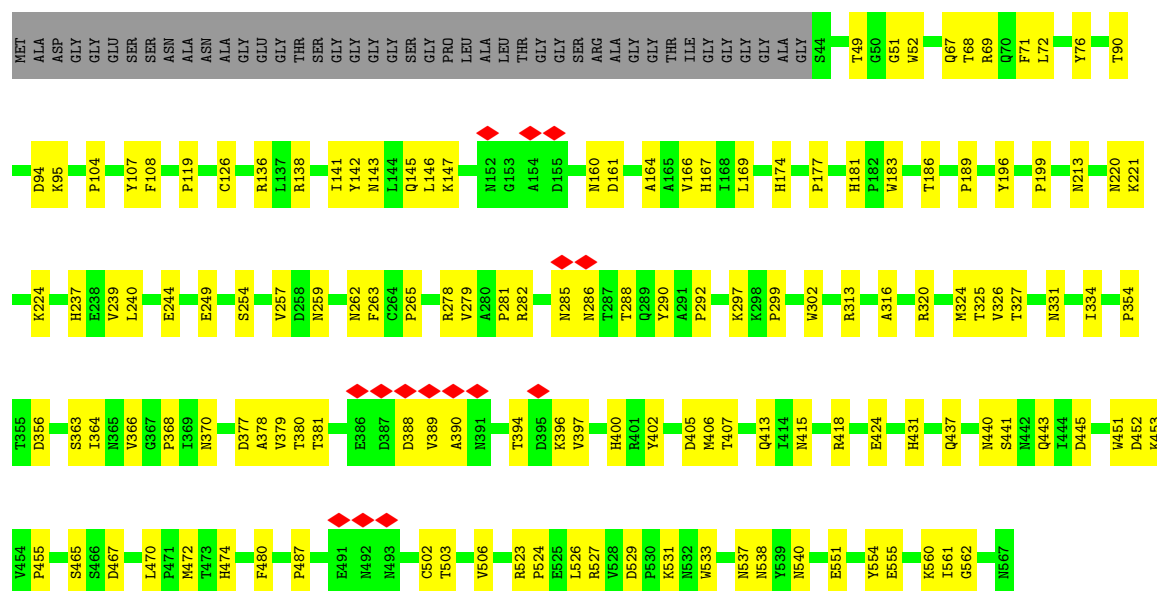
• Molecule 1: VP2

Chain h: 68% 24% 8%



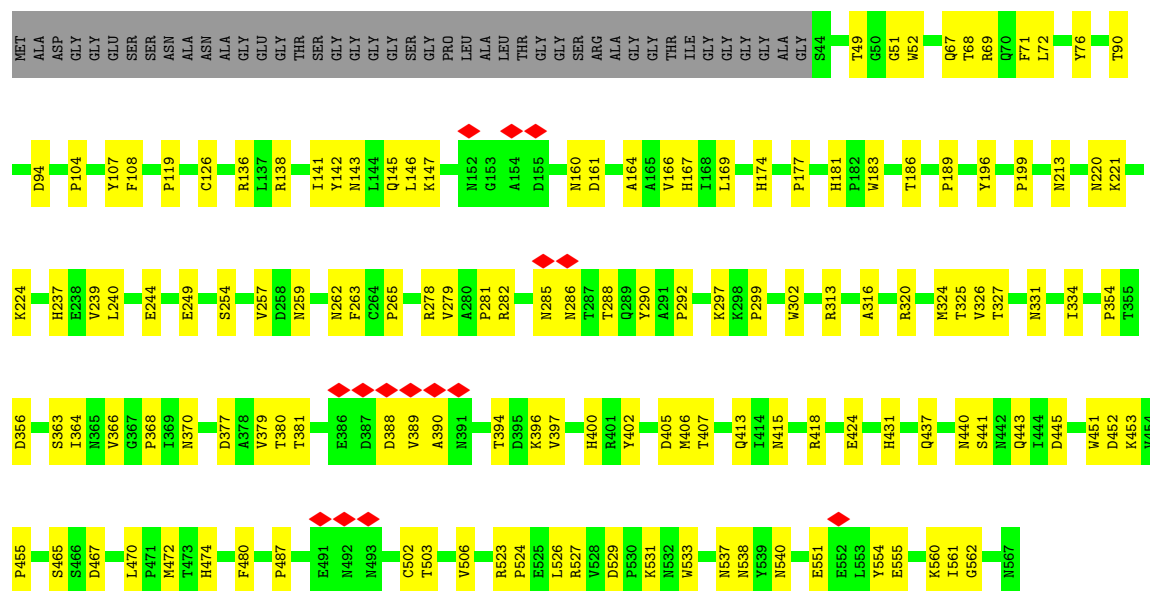
• Molecule 1: VP2

Chain i: 68% 24% 8%

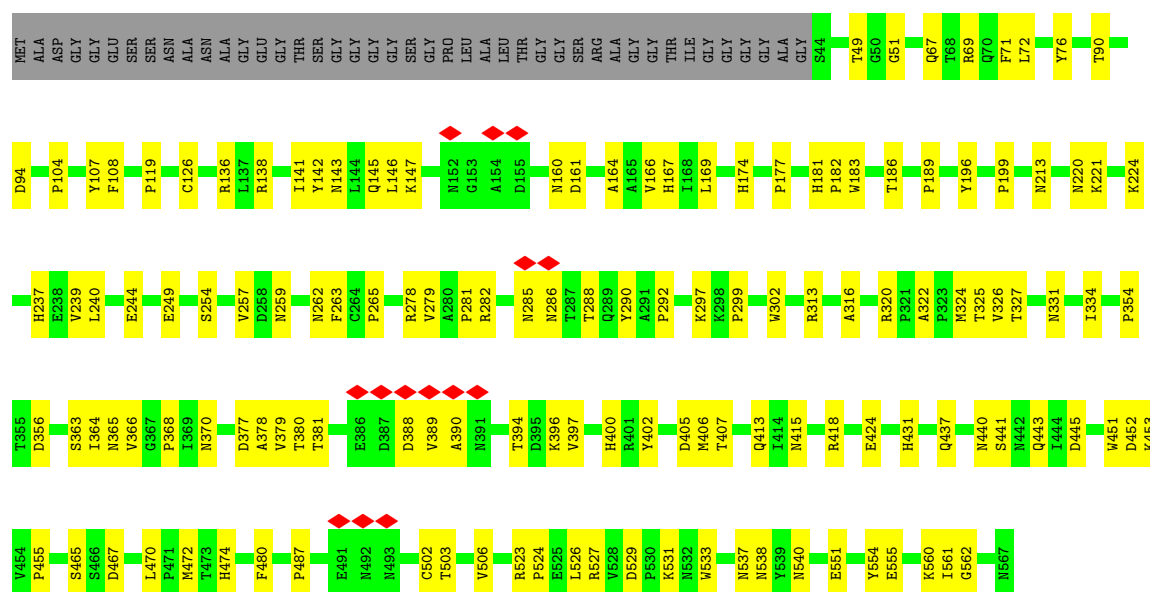


• Molecule 1: VP2

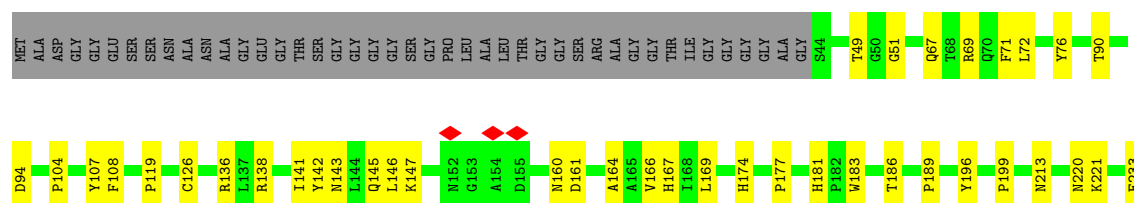
Chain j: 68% 24% 8%

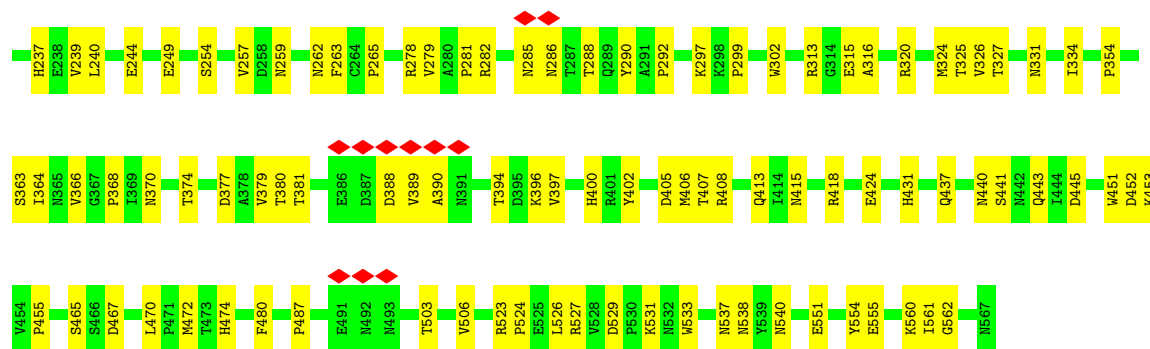


• Molecule 1: VP2

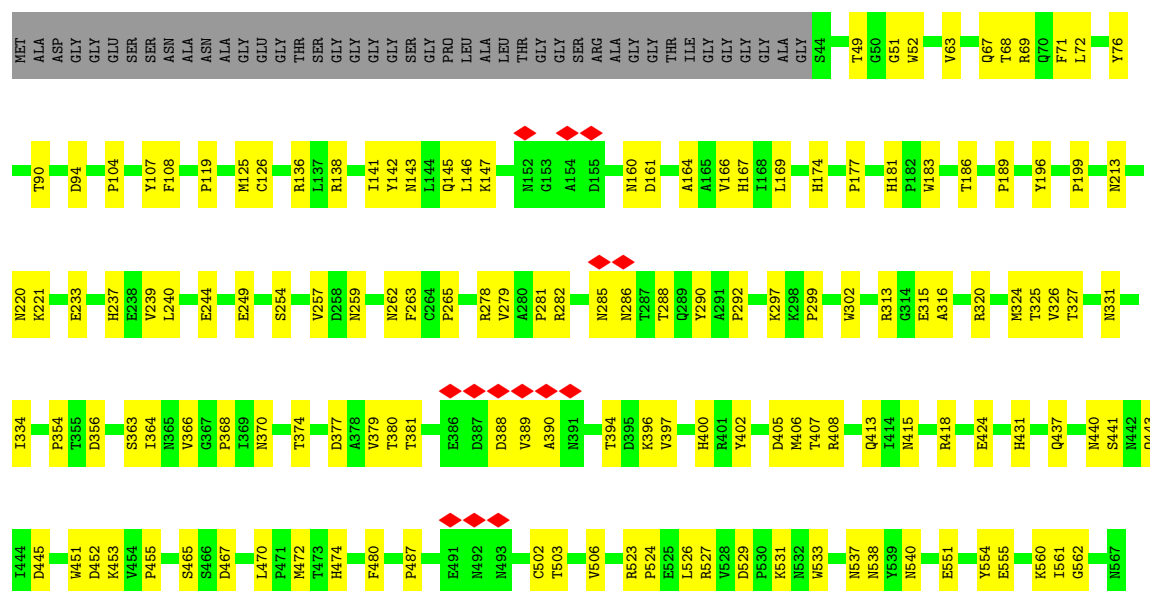


• Molecule 1: VP2

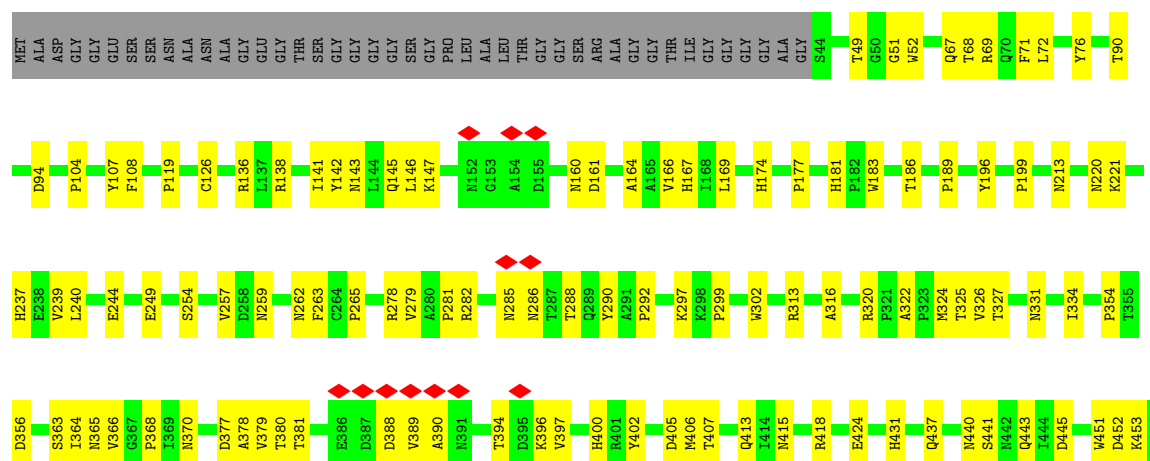




• Molecule 1: VP2

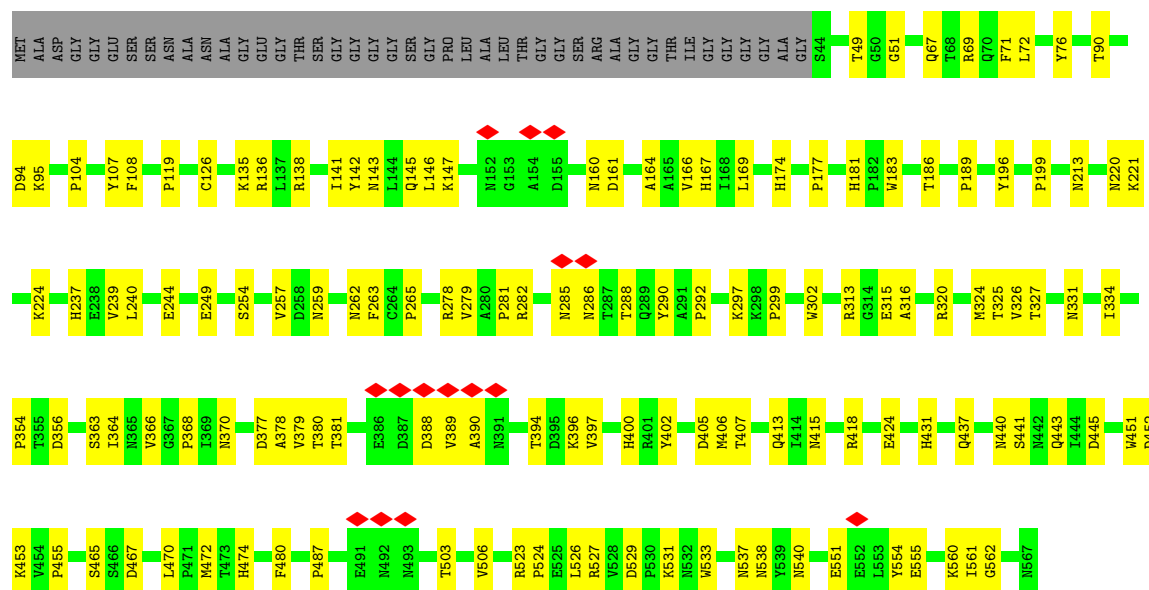


• Molecule 1: VP2

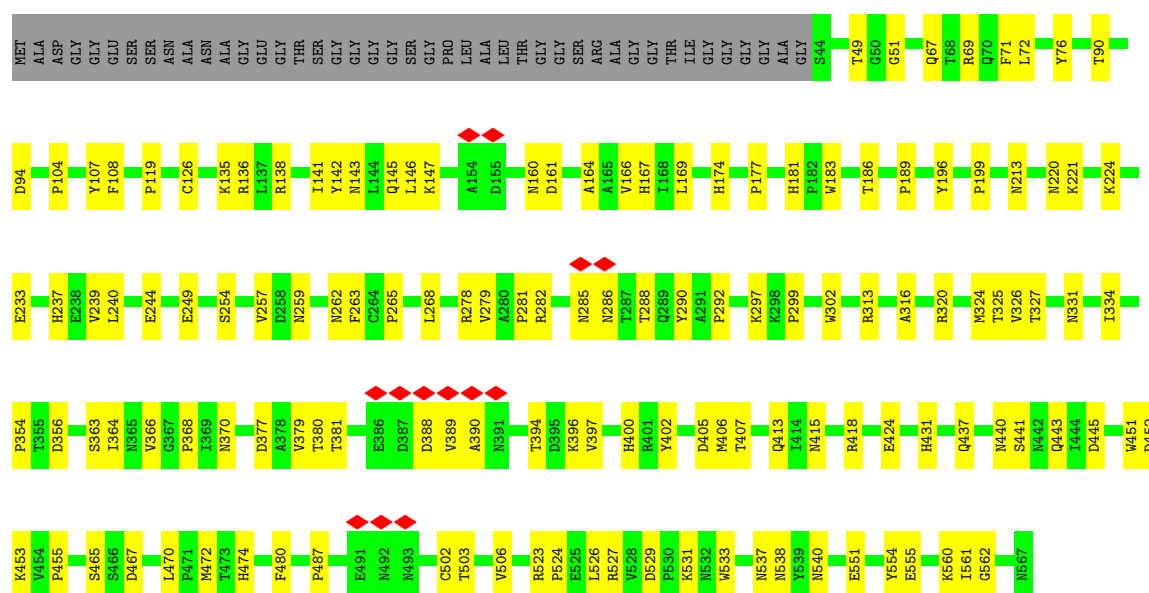




• Molecule 1: VP2

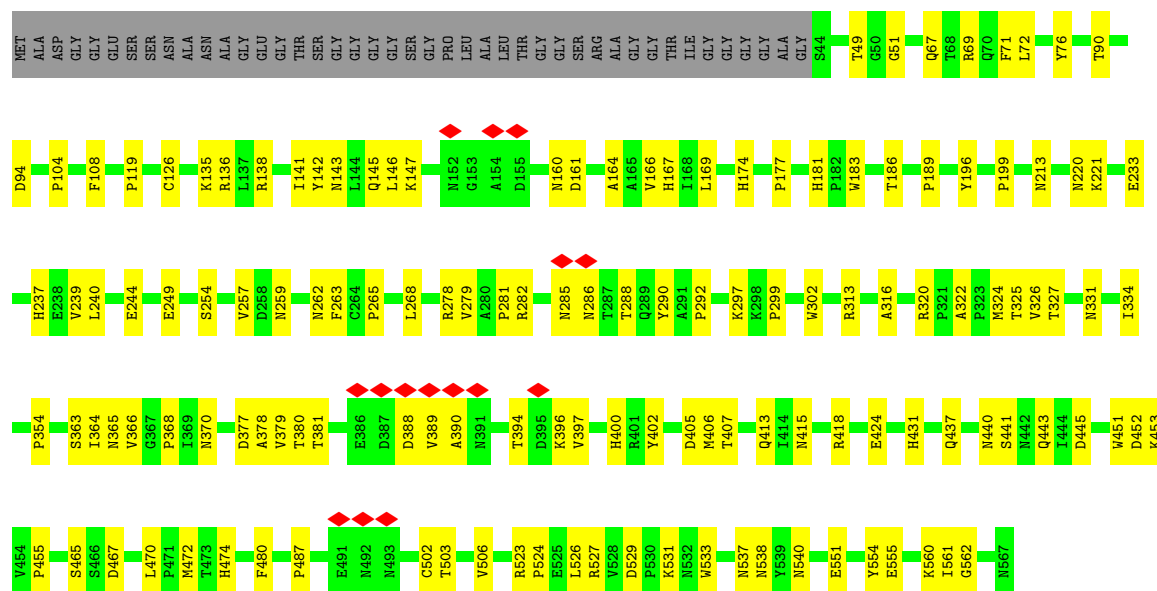


• Molecule 1: VP2

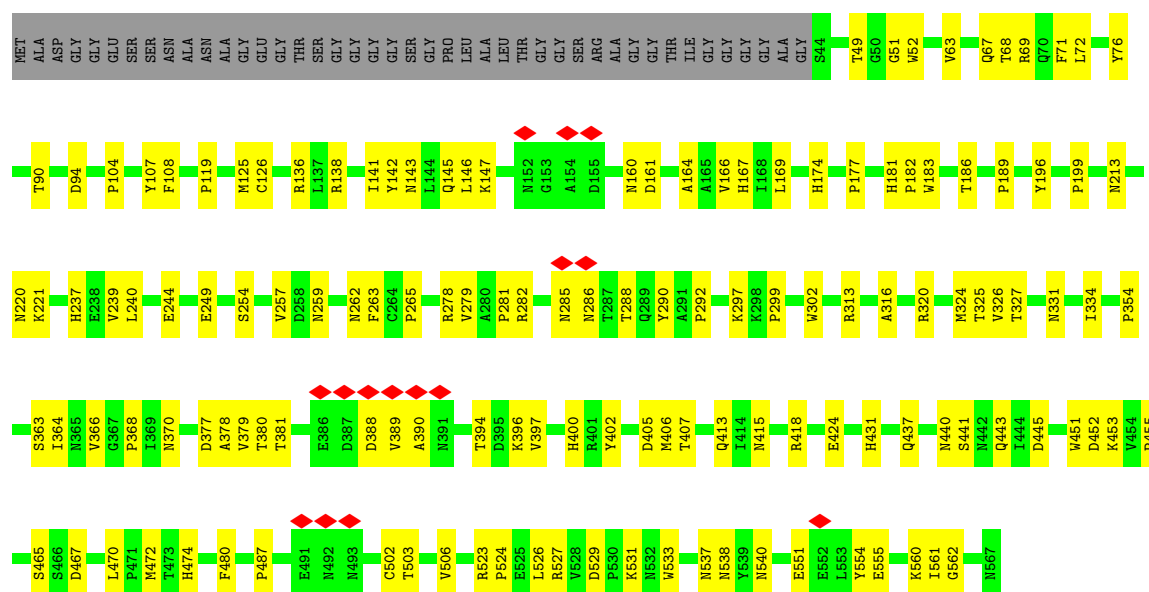


• Molecule 1: VP2

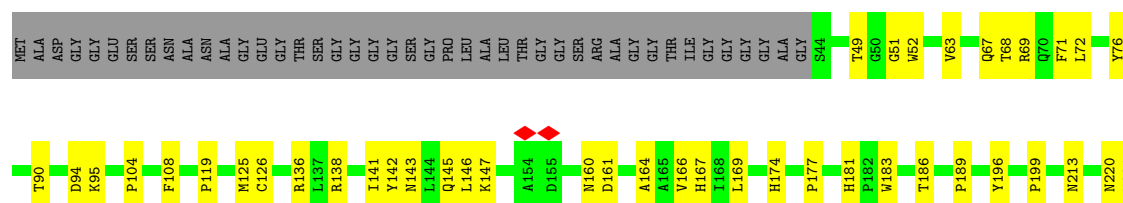


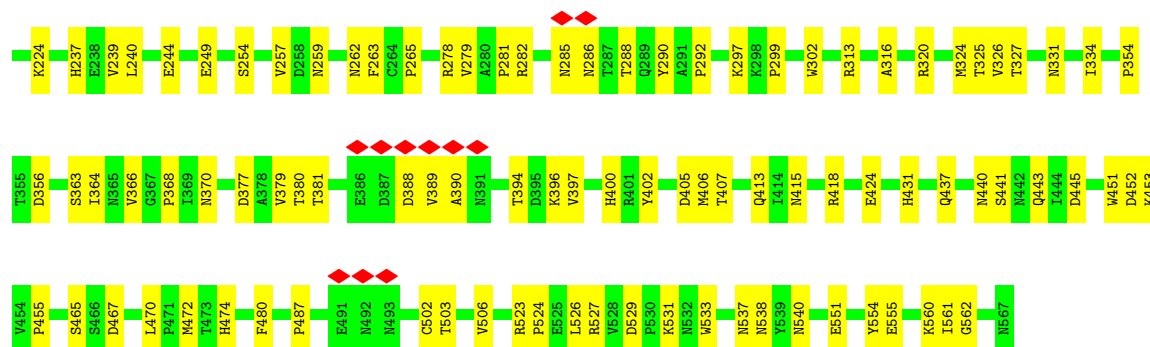


- Molecule 1: VP2

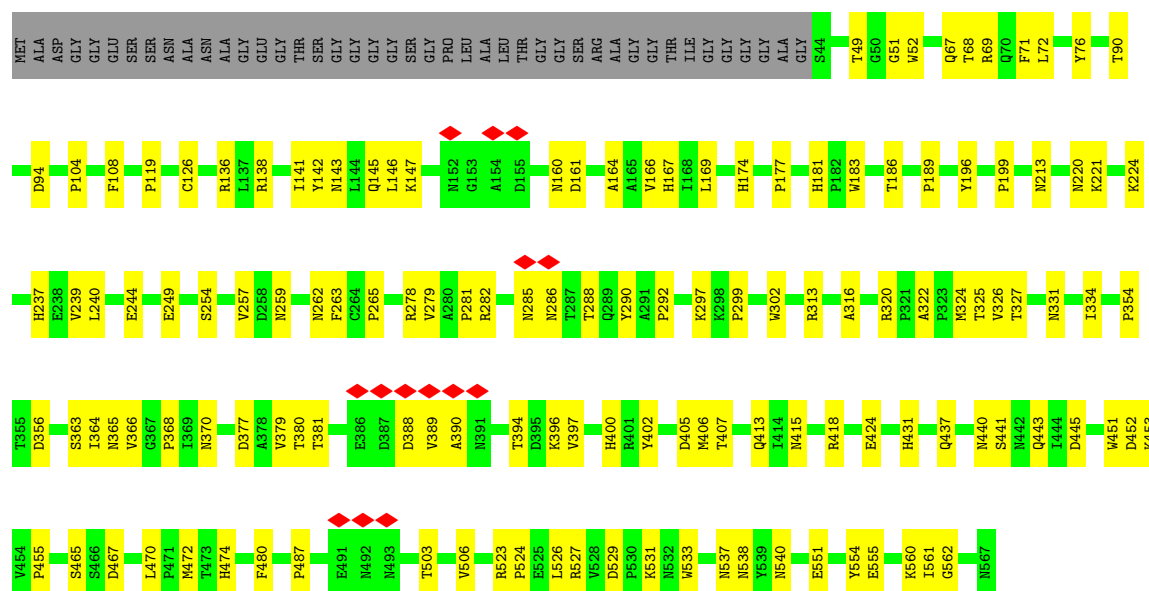


- Molecule 1: VP2

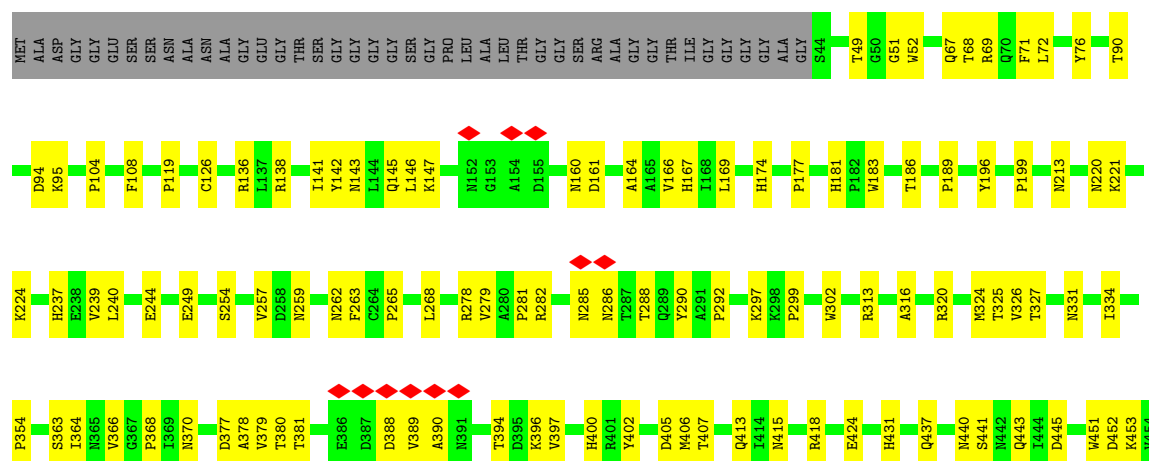




• Molecule 1: VP2



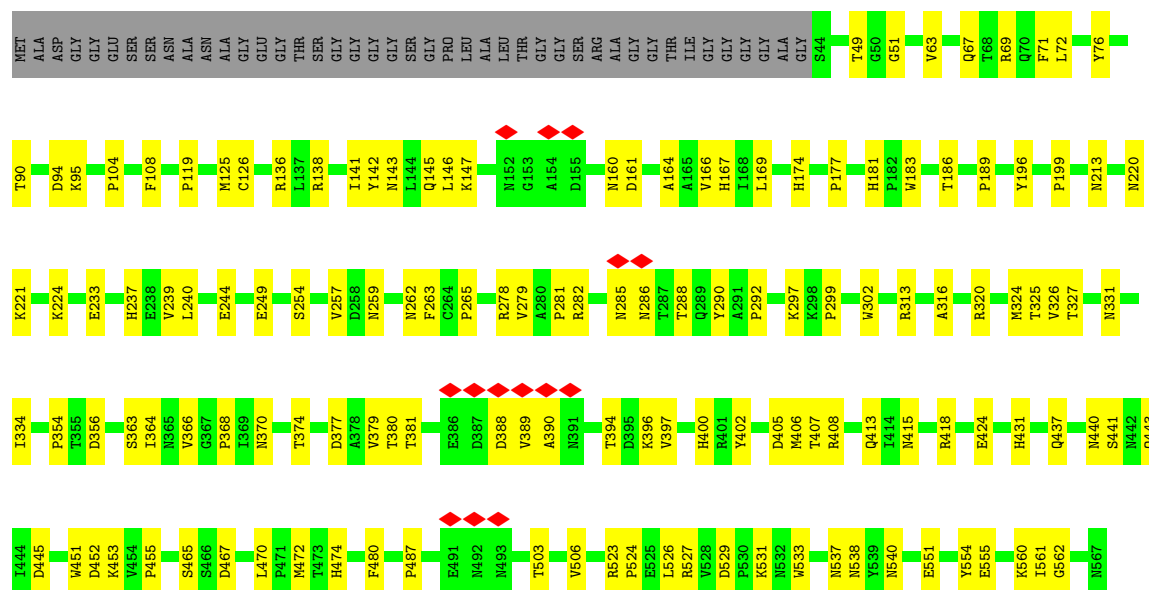
• Molecule 1: VP2



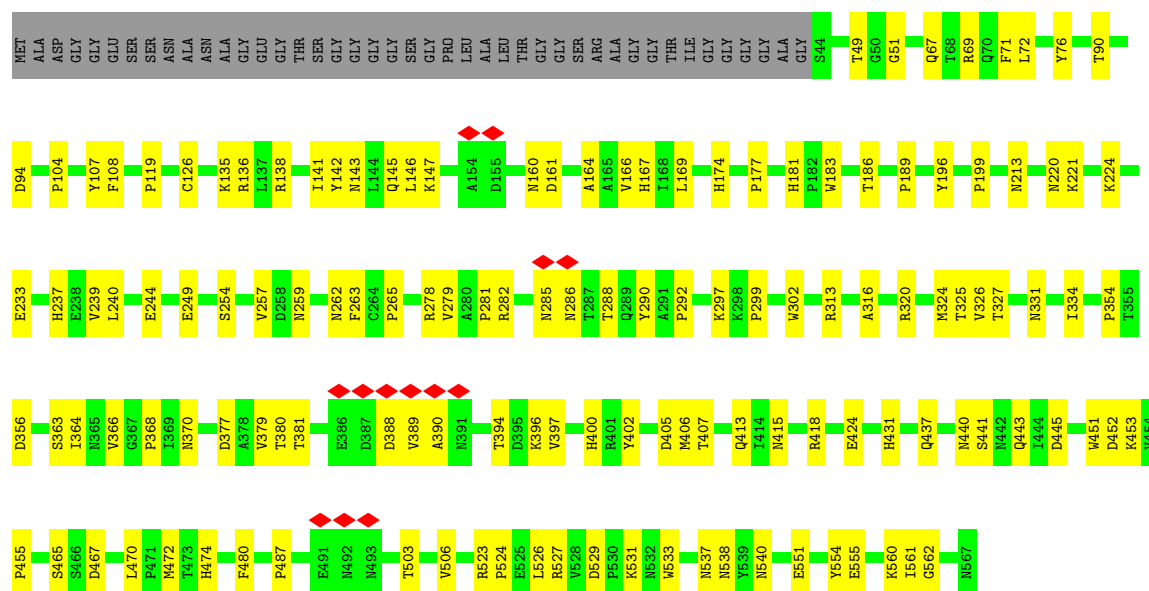




• Molecule 1: VP2

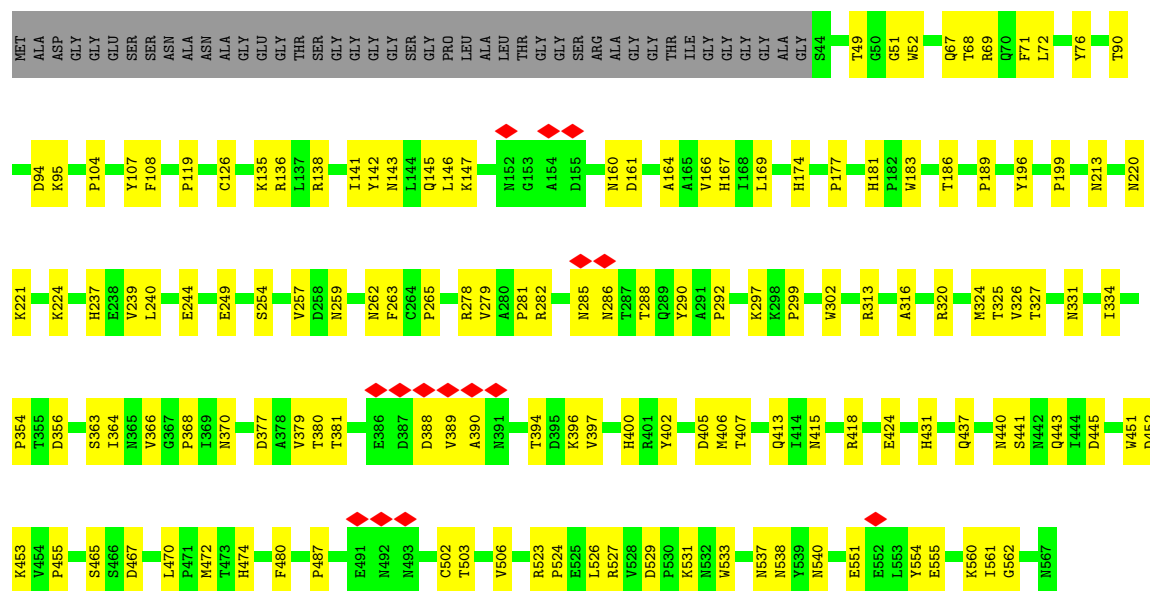


• Molecule 1: VP2

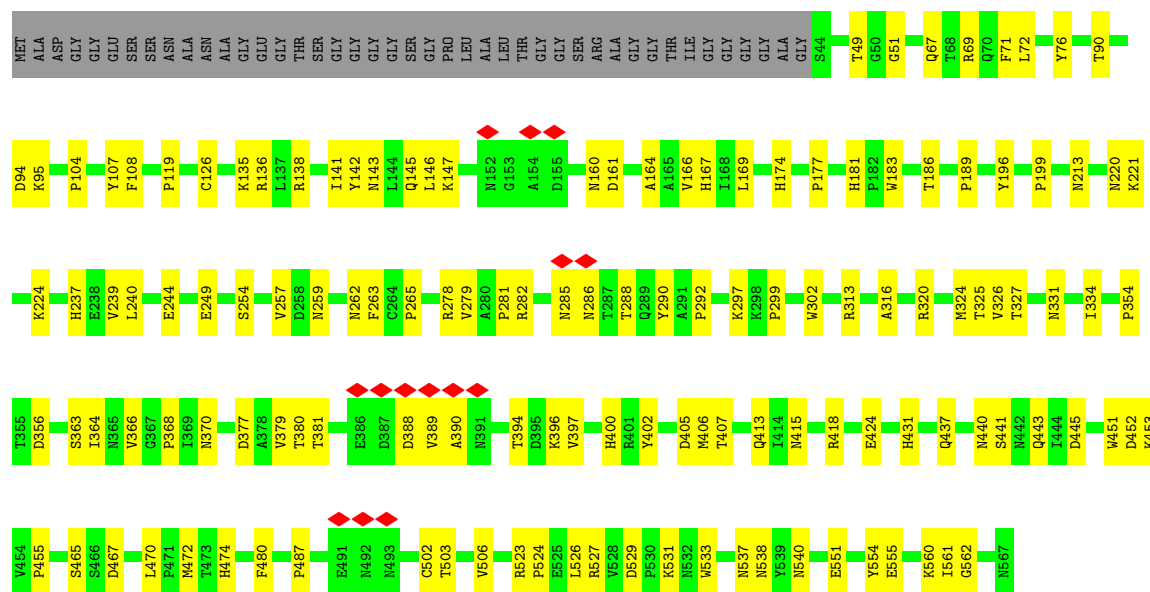


• Molecule 1: VP2

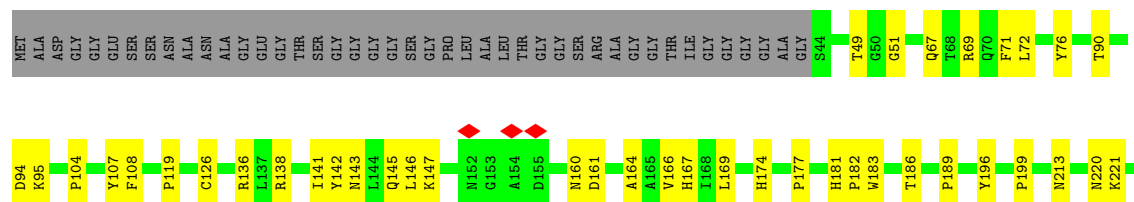


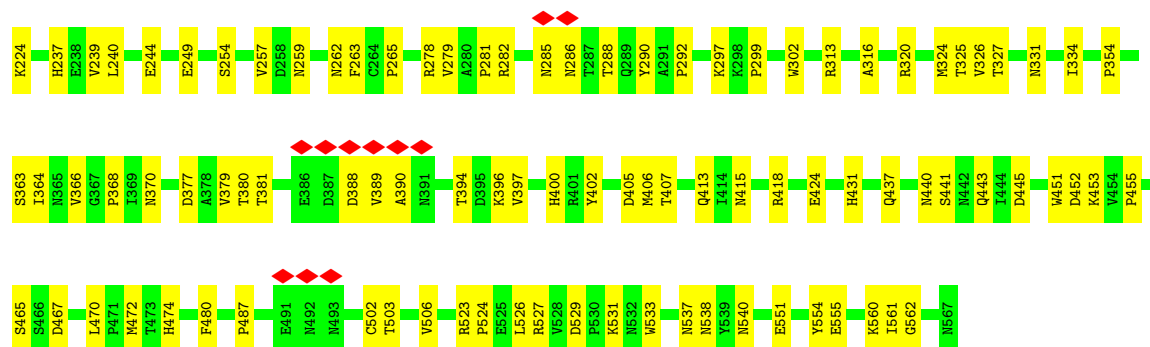


• Molecule 1: VP2



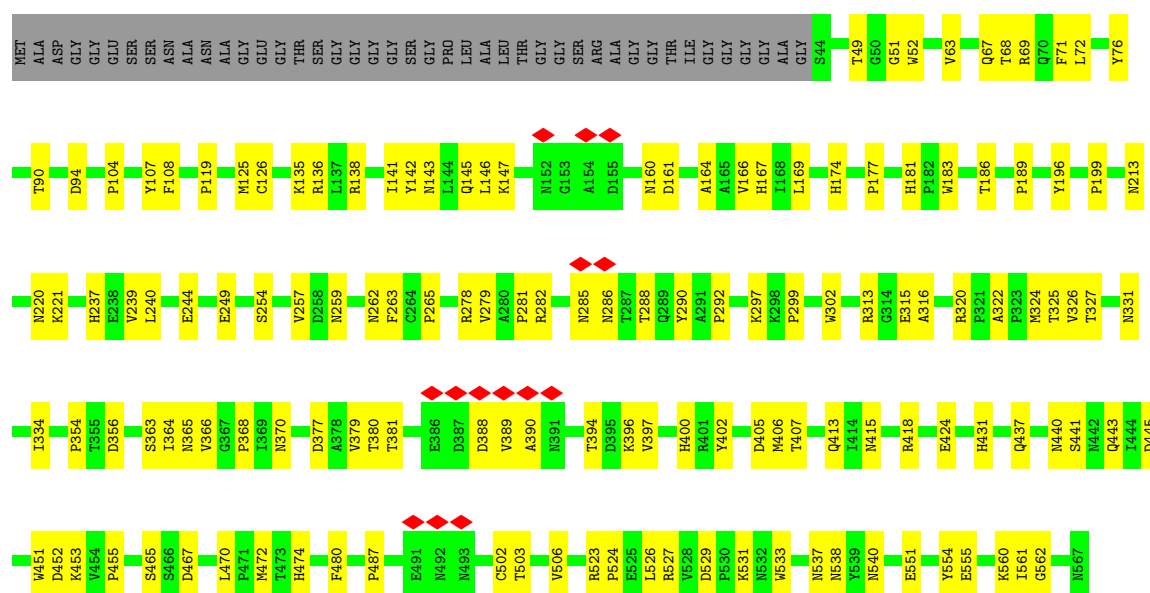
• Molecule 1: VP2





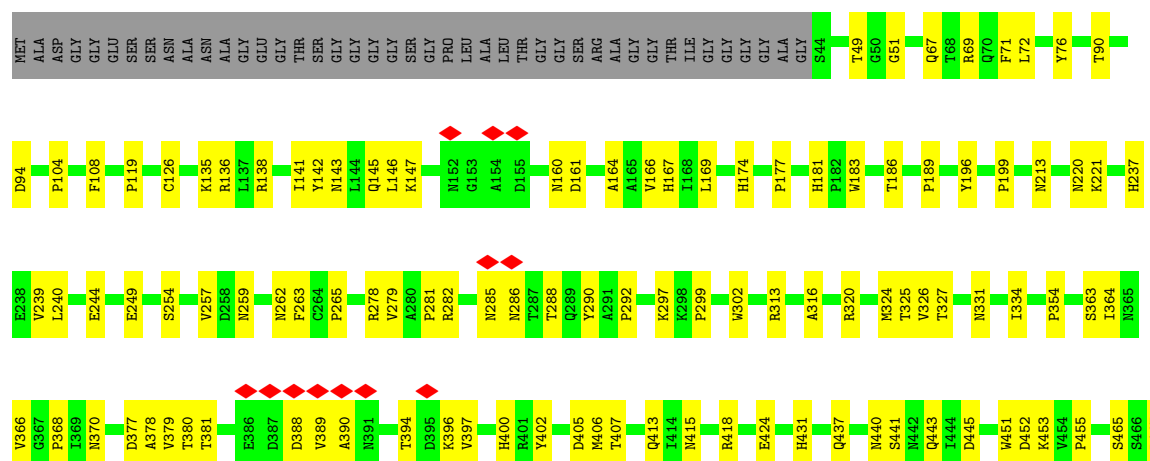
• Molecule 1: VP2

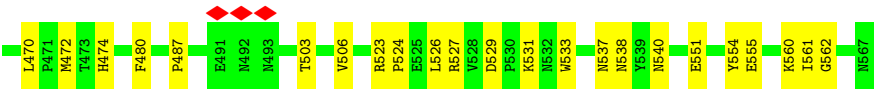
Chain 7: 68% 25% 8%



• Molecule 1: VP2

Chain 8: 69% 23% 8%





## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	9199	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	50	Depositor
Minimum defocus (nm)	400	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	Not provided	
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	16.708	Depositor
Minimum map value	-8.411	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	2	Depositor
Map size (Å)	386.82, 386.82, 386.82	wwPDB
Map dimensions	420, 420, 420	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.921, 0.921, 0.921	Depositor

## 5 Model quality [i](#)

### 5.1 Standard geometry [i](#)

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	1	0.41	0/4363	0.55	1/5971 (0.0%)
1	2	0.41	0/4363	0.55	1/5971 (0.0%)
1	3	0.41	0/4363	0.55	1/5971 (0.0%)
1	4	0.41	0/4363	0.55	1/5971 (0.0%)
1	5	0.41	0/4363	0.55	1/5971 (0.0%)
1	6	0.41	0/4363	0.55	1/5971 (0.0%)
1	7	0.41	0/4363	0.55	1/5971 (0.0%)
1	8	0.41	0/4363	0.55	1/5971 (0.0%)
1	A	0.41	0/4363	0.55	1/5971 (0.0%)
1	B	0.41	0/4363	0.55	1/5971 (0.0%)
1	C	0.41	0/4363	0.55	1/5971 (0.0%)
1	D	0.41	0/4363	0.55	1/5971 (0.0%)
1	E	0.41	0/4363	0.55	1/5971 (0.0%)
1	F	0.41	0/4363	0.55	1/5971 (0.0%)
1	G	0.41	0/4363	0.55	1/5971 (0.0%)
1	H	0.41	0/4363	0.55	1/5971 (0.0%)
1	I	0.41	0/4363	0.55	1/5971 (0.0%)
1	J	0.41	0/4363	0.55	1/5971 (0.0%)
1	K	0.41	0/4363	0.55	1/5971 (0.0%)
1	L	0.41	0/4363	0.55	1/5971 (0.0%)
1	M	0.41	0/4363	0.55	1/5971 (0.0%)
1	N	0.41	0/4363	0.55	1/5971 (0.0%)
1	O	0.41	0/4363	0.55	1/5971 (0.0%)
1	P	0.41	0/4363	0.55	1/5971 (0.0%)
1	Q	0.41	0/4363	0.55	1/5971 (0.0%)
1	R	0.41	0/4363	0.55	1/5971 (0.0%)
1	S	0.41	0/4363	0.55	1/5971 (0.0%)
1	T	0.41	0/4363	0.55	1/5971 (0.0%)
1	U	0.41	0/4363	0.55	1/5971 (0.0%)
1	V	0.41	0/4363	0.55	1/5971 (0.0%)
1	W	0.41	0/4363	0.55	1/5971 (0.0%)
1	X	0.41	0/4363	0.55	1/5971 (0.0%)
1	Y	0.41	0/4363	0.55	1/5971 (0.0%)
1	Z	0.41	0/4363	0.55	1/5971 (0.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
1	a	0.41	0/4363	0.55	1/5971 (0.0%)
1	b	0.41	0/4363	0.55	1/5971 (0.0%)
1	c	0.41	0/4363	0.55	1/5971 (0.0%)
1	d	0.41	0/4363	0.55	1/5971 (0.0%)
1	e	0.41	0/4363	0.55	1/5971 (0.0%)
1	f	0.41	0/4363	0.55	1/5971 (0.0%)
1	g	0.41	0/4363	0.55	1/5971 (0.0%)
1	h	0.41	0/4363	0.55	1/5971 (0.0%)
1	i	0.41	0/4363	0.55	1/5971 (0.0%)
1	j	0.41	0/4363	0.55	1/5971 (0.0%)
1	k	0.41	0/4363	0.55	1/5971 (0.0%)
1	l	0.41	0/4363	0.55	1/5971 (0.0%)
1	m	0.41	0/4363	0.55	1/5971 (0.0%)
1	n	0.41	0/4363	0.55	1/5971 (0.0%)
1	o	0.41	0/4363	0.55	1/5971 (0.0%)
1	p	0.41	0/4363	0.55	1/5971 (0.0%)
1	q	0.41	0/4363	0.55	1/5971 (0.0%)
1	r	0.41	0/4363	0.55	1/5971 (0.0%)
1	s	0.41	0/4363	0.55	1/5971 (0.0%)
1	t	0.41	0/4363	0.55	1/5971 (0.0%)
1	u	0.41	0/4363	0.55	1/5971 (0.0%)
1	v	0.41	0/4363	0.55	1/5971 (0.0%)
1	w	0.41	0/4363	0.55	1/5971 (0.0%)
1	x	0.41	0/4363	0.55	1/5971 (0.0%)
1	y	0.41	0/4363	0.55	1/5971 (0.0%)
1	z	0.40	0/4363	0.55	1/5971 (0.0%)
All	All	0.41	0/261780	0.55	60/358260 (0.0%)

There are no bond length outliers.

All (60) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	l	177	PRO	N-CA-C	5.84	121.44	113.84
1	5	177	PRO	N-CA-C	5.83	121.42	113.84
1	6	177	PRO	N-CA-C	5.83	121.42	113.84
1	2	177	PRO	N-CA-C	5.83	121.41	113.84
1	3	177	PRO	N-CA-C	5.83	121.41	113.84
1	i	177	PRO	N-CA-C	5.82	121.41	113.84
1	H	177	PRO	N-CA-C	5.82	121.40	113.84
1	I	177	PRO	N-CA-C	5.82	121.40	113.84
1	K	177	PRO	N-CA-C	5.82	121.40	113.84
1	P	177	PRO	N-CA-C	5.82	121.40	113.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	d	177	PRO	N-CA-C	5.82	121.40	113.84
1	g	177	PRO	N-CA-C	5.82	121.40	113.84
1	x	177	PRO	N-CA-C	5.82	121.40	113.84
1	y	177	PRO	N-CA-C	5.82	121.40	113.84
1	G	177	PRO	N-CA-C	5.82	121.40	113.84
1	M	177	PRO	N-CA-C	5.82	121.40	113.84
1	N	177	PRO	N-CA-C	5.82	121.40	113.84
1	S	177	PRO	N-CA-C	5.82	121.40	113.84
1	X	177	PRO	N-CA-C	5.82	121.40	113.84
1	Y	177	PRO	N-CA-C	5.82	121.40	113.84
1	b	177	PRO	N-CA-C	5.82	121.40	113.84
1	v	177	PRO	N-CA-C	5.82	121.40	113.84
1	Q	177	PRO	N-CA-C	5.81	121.40	113.84
1	o	177	PRO	N-CA-C	5.81	121.40	113.84
1	r	177	PRO	N-CA-C	5.81	121.40	113.84
1	D	177	PRO	N-CA-C	5.81	121.40	113.84
1	W	177	PRO	N-CA-C	5.81	121.40	113.84
1	e	177	PRO	N-CA-C	5.81	121.40	113.84
1	z	177	PRO	N-CA-C	5.81	121.40	113.84
1	C	177	PRO	N-CA-C	5.81	121.39	113.84
1	c	177	PRO	N-CA-C	5.81	121.39	113.84
1	7	177	PRO	N-CA-C	5.81	121.39	113.84
1	A	177	PRO	N-CA-C	5.80	121.39	113.84
1	U	177	PRO	N-CA-C	5.80	121.38	113.84
1	m	177	PRO	N-CA-C	5.80	121.38	113.84
1	t	177	PRO	N-CA-C	5.80	121.38	113.84
1	F	177	PRO	N-CA-C	5.80	121.38	113.84
1	J	177	PRO	N-CA-C	5.80	121.38	113.84
1	p	177	PRO	N-CA-C	5.80	121.38	113.84
1	s	177	PRO	N-CA-C	5.80	121.38	113.84
1	O	177	PRO	N-CA-C	5.79	121.36	113.84
1	Z	177	PRO	N-CA-C	5.79	121.36	113.84
1	8	177	PRO	N-CA-C	5.79	121.36	113.84
1	V	177	PRO	N-CA-C	5.78	121.36	113.84
1	a	177	PRO	N-CA-C	5.78	121.36	113.84
1	f	177	PRO	N-CA-C	5.78	121.36	113.84
1	j	177	PRO	N-CA-C	5.78	121.36	113.84
1	B	177	PRO	N-CA-C	5.78	121.35	113.84
1	L	177	PRO	N-CA-C	5.78	121.35	113.84
1	l	177	PRO	N-CA-C	5.78	121.35	113.84
1	4	177	PRO	N-CA-C	5.78	121.35	113.84
1	h	177	PRO	N-CA-C	5.78	121.35	113.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	w	177	PRO	N-CA-C	5.78	121.35	113.84
1	R	177	PRO	N-CA-C	5.78	121.35	113.84
1	T	177	PRO	N-CA-C	5.78	121.35	113.84
1	k	177	PRO	N-CA-C	5.78	121.35	113.84
1	u	177	PRO	N-CA-C	5.78	121.35	113.84
1	E	177	PRO	N-CA-C	5.77	121.35	113.84
1	n	177	PRO	N-CA-C	5.77	121.35	113.84
1	q	177	PRO	N-CA-C	5.77	121.35	113.84

There are no chirality outliers.

There are no planarity outliers.

## 5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1	4233	0	3970	117	0
1	2	4233	0	3970	119	0
1	3	4233	0	3970	120	0
1	4	4233	0	3970	119	0
1	5	4233	0	3970	119	0
1	6	4233	0	3970	119	0
1	7	4233	0	3970	121	0
1	8	4233	0	3970	116	0
1	A	4233	0	3970	123	0
1	B	4233	0	3970	121	0
1	C	4233	0	3970	121	0
1	D	4233	0	3970	122	0
1	E	4233	0	3970	121	0
1	F	4233	0	3970	121	0
1	G	4233	0	3970	119	0
1	H	4233	0	3970	119	0
1	I	4233	0	3970	121	0
1	J	4233	0	3970	121	0
1	K	4233	0	3970	123	0
1	L	4233	0	3970	120	0
1	M	4233	0	3970	117	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	N	4233	0	3970	120	0
1	O	4233	0	3970	120	0
1	P	4233	0	3970	124	0
1	Q	4233	0	3970	122	0
1	R	4233	0	3970	120	0
1	S	4233	0	3970	118	0
1	T	4233	0	3970	121	0
1	U	4233	0	3970	124	0
1	V	4233	0	3970	120	0
1	W	4233	0	3970	118	0
1	X	4233	0	3970	122	0
1	Y	4233	0	3970	121	0
1	Z	4233	0	3970	115	0
1	a	4233	0	3970	121	0
1	b	4233	0	3970	118	0
1	c	4233	0	3970	123	0
1	d	4233	0	3970	123	0
1	e	4233	0	3970	122	0
1	f	4233	0	3970	120	0
1	g	4233	0	3970	117	0
1	h	4233	0	3970	119	0
1	i	4233	0	3970	121	0
1	j	4233	0	3970	120	0
1	k	4233	0	3970	120	0
1	l	4233	0	3970	119	0
1	m	4233	0	3970	122	0
1	n	4233	0	3970	120	0
1	o	4233	0	3970	123	0
1	p	4233	0	3970	122	0
1	q	4233	0	3970	121	0
1	r	4233	0	3970	121	0
1	s	4233	0	3970	120	0
1	t	4233	0	3970	120	0
1	u	4233	0	3970	118	0
1	v	4233	0	3970	122	0
1	w	4233	0	3970	118	0
1	x	4233	0	3970	122	0
1	y	4233	0	3970	119	0
1	z	4233	0	3970	121	0
All	All	253980	0	238200	5806	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 12.

All (5806) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:262:ASN:HD22	1:H:440:ASN:HD21	1.18	0.92
1:y:262:ASN:HD22	1:y:440:ASN:HD21	1.18	0.92
1:G:262:ASN:HD22	1:G:440:ASN:HD21	1.18	0.91
1:n:262:ASN:HD22	1:n:440:ASN:HD21	1.18	0.91
1:X:262:ASN:HD22	1:X:440:ASN:HD21	1.18	0.91
1:i:262:ASN:HD22	1:i:440:ASN:HD21	1.18	0.91
1:B:262:ASN:HD22	1:B:440:ASN:HD21	1.18	0.91
1:M:262:ASN:HD22	1:M:440:ASN:HD21	1.18	0.91
1:b:262:ASN:HD22	1:b:440:ASN:HD21	1.18	0.91
1:u:262:ASN:HD22	1:u:440:ASN:HD21	1.18	0.91
1:J:262:ASN:HD22	1:J:440:ASN:HD21	1.18	0.91
1:P:262:ASN:HD22	1:P:440:ASN:HD21	1.18	0.90
1:R:380:THR:O	1:U:278:ARG:NH1	2.04	0.90
1:k:380:THR:O	1:m:278:ARG:NH1	2.04	0.90
1:u:278:ARG:NH1	1:v:380:THR:O	2.05	0.90
1:v:262:ASN:HD22	1:v:440:ASN:HD21	1.19	0.90
1:B:278:ARG:NH1	1:J:380:THR:O	2.05	0.90
1:K:262:ASN:HD22	1:K:440:ASN:HD21	1.18	0.90
1:m:262:ASN:HD22	1:m:440:ASN:HD21	1.18	0.90
1:d:262:ASN:HD22	1:d:440:ASN:HD21	1.18	0.90
1:q:262:ASN:HD22	1:q:440:ASN:HD21	1.18	0.90
1:t:262:ASN:HD22	1:t:440:ASN:HD21	1.18	0.90
1:x:262:ASN:HD22	1:x:440:ASN:HD21	1.18	0.90
1:Z:278:ARG:NH1	1:x:380:THR:O	2.05	0.90
1:n:278:ARG:NH1	1:o:380:THR:O	2.04	0.90
1:t:278:ARG:NH1	1:u:380:THR:O	2.04	0.90
1:B:380:THR:O	1:L:278:ARG:NH1	2.04	0.90
1:K:380:THR:O	1:8:278:ARG:NH1	2.05	0.90
1:L:262:ASN:HD22	1:L:440:ASN:HD21	1.18	0.90
1:S:278:ARG:NH1	1:U:380:THR:O	2.04	0.90
1:T:380:THR:O	1:f:278:ARG:NH1	2.05	0.90
1:U:262:ASN:HD22	1:U:440:ASN:HD21	1.18	0.90
1:l:278:ARG:NH1	1:m:380:THR:O	2.04	0.90
1:A:380:THR:O	1:I:278:ARG:NH1	2.05	0.90
1:C:380:THR:O	1:M:278:ARG:NH1	2.04	0.90
1:E:262:ASN:HD22	1:E:440:ASN:HD21	1.18	0.90
1:G:278:ARG:NH1	1:I:380:THR:O	2.04	0.90
1:1:278:ARG:NH1	1:8:380:THR:O	2.05	0.90
1:h:262:ASN:HD22	1:h:440:ASN:HD21	1.18	0.90
1:D:380:THR:O	1:P:278:ARG:NH1	2.05	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:278:ARG:NH1	1:g:380:THR:O	2.05	0.90
1:a:380:THR:O	1:b:278:ARG:NH1	2.04	0.90
1:o:278:ARG:NH1	1:p:380:THR:O	2.05	0.90
1:V:262:ASN:HD22	1:V:440:ASN:HD21	1.18	0.90
1:Z:380:THR:O	1:w:278:ARG:NH1	2.05	0.90
1:4:262:ASN:HD22	1:4:440:ASN:HD21	1.18	0.90
1:d:278:ARG:NH1	1:e:380:THR:O	2.05	0.90
1:D:278:ARG:NH1	1:N:380:THR:O	2.05	0.90
1:N:278:ARG:NH1	1:P:380:THR:O	2.05	0.90
1:c:380:THR:O	1:e:278:ARG:NH1	2.05	0.90
1:t:380:THR:O	1:v:278:ARG:NH1	2.04	0.90
1:z:278:ARG:NH1	1:7:380:THR:O	2.05	0.90
1:V:380:THR:O	1:X:278:ARG:NH1	2.04	0.90
1:W:278:ARG:NH1	1:Y:380:THR:O	2.05	0.90
1:6:278:ARG:NH1	1:b:380:THR:O	2.05	0.90
1:c:278:ARG:NH1	1:d:380:THR:O	2.05	0.90
1:H:380:THR:O	1:Y:278:ARG:NH1	2.05	0.89
1:J:278:ARG:NH1	1:L:380:THR:O	2.05	0.89
1:M:380:THR:O	1:2:278:ARG:NH1	2.05	0.89
1:W:262:ASN:HD22	1:W:440:ASN:HD21	1.18	0.89
1:3:278:ARG:NH1	1:i:380:THR:O	2.05	0.89
1:i:278:ARG:NH1	1:j:380:THR:O	2.04	0.89
1:j:262:ASN:HD22	1:j:440:ASN:HD21	1.18	0.89
1:z:262:ASN:HD22	1:z:440:ASN:HD21	1.18	0.89
1:C:262:ASN:HD22	1:C:440:ASN:HD21	1.18	0.89
1:g:278:ARG:NH1	1:h:380:THR:O	2.05	0.89
1:X:380:THR:O	1:5:278:ARG:NH1	2.05	0.89
1:y:380:THR:O	1:7:278:ARG:NH1	2.05	0.89
1:T:278:ARG:NH1	1:4:380:THR:O	2.05	0.89
1:w:262:ASN:HD22	1:w:440:ASN:HD21	1.18	0.89
1:w:380:THR:O	1:x:278:ARG:NH1	2.05	0.89
1:K:278:ARG:NH1	1:1:380:THR:O	2.05	0.89
1:a:262:ASN:HD22	1:a:440:ASN:HD21	1.18	0.89
1:q:380:THR:O	1:s:278:ARG:NH1	2.05	0.89
1:E:380:THR:O	1:F:278:ARG:NH1	2.05	0.89
1:F:380:THR:O	1:Q:278:ARG:NH1	2.05	0.89
1:Q:262:ASN:HD22	1:Q:440:ASN:HD21	1.18	0.89
1:6:380:THR:O	1:a:278:ARG:NH1	2.05	0.89
1:q:278:ARG:NH1	1:r:380:THR:O	2.04	0.89
1:1:262:ASN:HD22	1:1:440:ASN:HD21	1.18	0.89
1:C:278:ARG:NH1	1:2:380:THR:O	2.05	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:278:ARG:NH1	1:Q:380:THR:O	2.04	0.89
1:r:278:ARG:NH1	1:s:380:THR:O	2.05	0.89
1:O:380:THR:O	1:h:278:ARG:NH1	2.05	0.89
1:4:278:ARG:NH1	1:f:380:THR:O	2.05	0.89
1:2:262:ASN:HD22	1:2:440:ASN:HD21	1.18	0.88
1:6:262:ASN:HD22	1:6:440:ASN:HD21	1.18	0.88
1:r:262:ASN:HD22	1:r:440:ASN:HD21	1.18	0.88
1:A:278:ARG:NH1	1:G:380:THR:O	2.05	0.88
1:V:278:ARG:NH1	1:5:380:THR:O	2.05	0.88
1:n:380:THR:O	1:p:278:ARG:NH1	2.05	0.88
1:H:278:ARG:NH1	1:W:380:THR:O	2.05	0.88
1:3:380:THR:O	1:j:278:ARG:NH1	2.05	0.88
1:y:278:ARG:NH1	1:z:380:THR:O	2.05	0.88
1:R:278:ARG:NH1	1:S:380:THR:O	2.05	0.88
1:A:262:ASN:HD22	1:A:440:ASN:HD21	1.18	0.88
1:p:262:ASN:HD22	1:p:440:ASN:HD21	1.18	0.88
1:Z:262:ASN:HD22	1:Z:440:ASN:HD21	1.18	0.88
1:k:278:ARG:NH1	1:l:380:THR:O	2.05	0.88
1:5:262:ASN:HD22	1:5:440:ASN:HD21	1.18	0.88
1:N:262:ASN:HD22	1:N:440:ASN:HD21	1.18	0.87
1:3:262:ASN:HD22	1:3:440:ASN:HD21	1.18	0.87
1:8:262:ASN:HD22	1:8:440:ASN:HD21	1.18	0.87
1:c:262:ASN:HD22	1:c:440:ASN:HD21	1.18	0.87
1:F:262:ASN:HD22	1:F:440:ASN:HD21	1.18	0.87
1:7:262:ASN:HD22	1:7:440:ASN:HD21	1.18	0.87
1:Y:262:ASN:HD22	1:Y:440:ASN:HD21	1.18	0.86
1:R:262:ASN:HD22	1:R:440:ASN:HD21	1.18	0.86
1:k:262:ASN:HD22	1:k:440:ASN:HD21	1.18	0.86
1:s:262:ASN:HD22	1:s:440:ASN:HD21	1.18	0.86
1:S:262:ASN:HD22	1:S:440:ASN:HD21	1.18	0.86
1:l:262:ASN:HD22	1:l:440:ASN:HD21	1.19	0.86
1:I:262:ASN:HD22	1:I:440:ASN:HD21	1.18	0.86
1:T:262:ASN:HD22	1:T:440:ASN:HD21	1.18	0.86
1:o:262:ASN:HD22	1:o:440:ASN:HD21	1.18	0.86
1:D:262:ASN:HD22	1:D:440:ASN:HD21	1.18	0.85
1:e:262:ASN:HD22	1:e:440:ASN:HD21	1.18	0.85
1:g:262:ASN:HD22	1:g:440:ASN:HD21	1.18	0.85
1:O:262:ASN:HD22	1:O:440:ASN:HD21	1.18	0.84
1:f:262:ASN:HD22	1:f:440:ASN:HD21	1.18	0.84
1:n:220:ASN:HD21	1:n:334:ILE:H	1.27	0.83
1:G:220:ASN:HD21	1:G:334:ILE:H	1.27	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:220:ASN:HD21	1:H:334:ILE:H	1.27	0.82
1:J:220:ASN:HD21	1:J:334:ILE:H	1.27	0.82
1:X:220:ASN:HD21	1:X:334:ILE:H	1.27	0.82
1:3:220:ASN:HD21	1:3:334:ILE:H	1.27	0.82
1:5:220:ASN:HD21	1:5:334:ILE:H	1.27	0.82
1:S:220:ASN:HD21	1:S:334:ILE:H	1.27	0.82
1:4:220:ASN:HD21	1:4:334:ILE:H	1.27	0.82
1:i:220:ASN:HD21	1:i:334:ILE:H	1.27	0.82
1:y:220:ASN:HD21	1:y:334:ILE:H	1.27	0.82
1:v:220:ASN:HD21	1:v:334:ILE:H	1.27	0.82
1:h:220:ASN:HD21	1:h:334:ILE:H	1.27	0.82
1:l:220:ASN:HD21	1:l:334:ILE:H	1.27	0.82
1:V:220:ASN:HD21	1:V:334:ILE:H	1.27	0.82
1:j:220:ASN:HD21	1:j:334:ILE:H	1.27	0.82
1:6:220:ASN:HD21	1:6:334:ILE:H	1.27	0.82
1:a:220:ASN:HD21	1:a:334:ILE:H	1.27	0.82
1:C:220:ASN:HD21	1:C:334:ILE:H	1.27	0.82
1:2:220:ASN:HD21	1:2:334:ILE:H	1.27	0.82
1:e:220:ASN:HD21	1:e:334:ILE:H	1.27	0.82
1:s:220:ASN:HD21	1:s:334:ILE:H	1.27	0.82
1:T:220:ASN:HD21	1:T:334:ILE:H	1.27	0.82
1:D:220:ASN:HD21	1:D:334:ILE:H	1.27	0.81
1:g:220:ASN:HD21	1:g:334:ILE:H	1.27	0.81
1:F:220:ASN:HD21	1:F:334:ILE:H	1.27	0.81
1:7:220:ASN:HD21	1:7:334:ILE:H	1.27	0.81
1:p:220:ASN:HD21	1:p:334:ILE:H	1.27	0.81
1:A:220:ASN:HD21	1:A:334:ILE:H	1.27	0.81
1:Y:220:ASN:HD21	1:Y:334:ILE:H	1.27	0.81
1:b:220:ASN:HD21	1:b:334:ILE:H	1.27	0.81
1:M:220:ASN:HD21	1:M:334:ILE:H	1.27	0.81
1:E:220:ASN:HD21	1:E:334:ILE:H	1.27	0.81
1:q:220:ASN:HD21	1:q:334:ILE:H	1.27	0.81
1:z:220:ASN:HD21	1:z:334:ILE:H	1.27	0.81
1:Z:220:ASN:HD21	1:Z:334:ILE:H	1.27	0.81
1:8:220:ASN:HD21	1:8:334:ILE:H	1.27	0.81
1:W:220:ASN:HD21	1:W:334:ILE:H	1.27	0.80
1:T:297:LYS:HG2	1:4:363:SER:HB2	1.63	0.80
1:H:396:LYS:NZ	1:H:551:GLU:O	2.15	0.80
1:R:396:LYS:NZ	1:R:551:GLU:O	2.15	0.80
1:X:396:LYS:NZ	1:X:551:GLU:O	2.15	0.80
1:i:396:LYS:NZ	1:i:551:GLU:O	2.15	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:396:LYS:NZ	1:D:551:GLU:O	2.15	0.80
1:K:396:LYS:NZ	1:K:551:GLU:O	2.15	0.80
1:P:220:ASN:HD21	1:P:334:ILE:H	1.27	0.80
1:4:396:LYS:NZ	1:4:551:GLU:O	2.15	0.80
1:e:396:LYS:NZ	1:e:551:GLU:O	2.15	0.80
1:k:396:LYS:NZ	1:k:551:GLU:O	2.15	0.80
1:x:396:LYS:NZ	1:x:551:GLU:O	2.15	0.80
1:y:396:LYS:NZ	1:y:551:GLU:O	2.15	0.80
1:W:396:LYS:NZ	1:W:551:GLU:O	2.15	0.80
1:Y:396:LYS:NZ	1:Y:551:GLU:O	2.15	0.80
1:1:396:LYS:NZ	1:1:551:GLU:O	2.15	0.80
1:h:396:LYS:NZ	1:h:551:GLU:O	2.15	0.80
1:w:396:LYS:NZ	1:w:551:GLU:O	2.15	0.80
1:z:396:LYS:NZ	1:z:551:GLU:O	2.15	0.80
1:7:396:LYS:NZ	1:7:551:GLU:O	2.15	0.80
1:N:396:LYS:NZ	1:N:551:GLU:O	2.15	0.80
1:c:396:LYS:NZ	1:c:551:GLU:O	2.15	0.80
1:d:220:ASN:HD21	1:d:334:ILE:H	1.27	0.80
1:l:396:LYS:NZ	1:l:551:GLU:O	2.15	0.80
1:O:396:LYS:NZ	1:O:551:GLU:O	2.15	0.80
1:Q:396:LYS:NZ	1:Q:551:GLU:O	2.15	0.80
1:S:396:LYS:NZ	1:S:551:GLU:O	2.15	0.80
1:T:396:LYS:NZ	1:T:551:GLU:O	2.15	0.80
1:f:396:LYS:NZ	1:f:551:GLU:O	2.15	0.80
1:g:396:LYS:NZ	1:g:551:GLU:O	2.15	0.80
1:r:396:LYS:NZ	1:r:551:GLU:O	2.15	0.80
1:F:396:LYS:NZ	1:F:551:GLU:O	2.15	0.80
1:s:396:LYS:NZ	1:s:551:GLU:O	2.15	0.80
1:t:220:ASN:HD21	1:t:334:ILE:H	1.27	0.80
1:V:396:LYS:NZ	1:V:551:GLU:O	2.15	0.80
1:j:396:LYS:NZ	1:j:551:GLU:O	2.15	0.80
1:n:396:LYS:NZ	1:n:551:GLU:O	2.15	0.80
1:G:396:LYS:NZ	1:G:551:GLU:O	2.15	0.79
1:C:396:LYS:NZ	1:C:551:GLU:O	2.15	0.79
1:I:396:LYS:NZ	1:I:551:GLU:O	2.15	0.79
1:J:396:LYS:NZ	1:J:551:GLU:O	2.15	0.79
1:L:396:LYS:NZ	1:L:551:GLU:O	2.15	0.79
1:3:396:LYS:NZ	1:3:551:GLU:O	2.15	0.79
1:5:396:LYS:NZ	1:5:551:GLU:O	2.15	0.79
1:k:220:ASN:HD21	1:k:334:ILE:H	1.27	0.79
1:m:220:ASN:HD21	1:m:334:ILE:H	1.27	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:o:396:LYS:NZ	1:o:551:GLU:O	2.15	0.79
1:v:396:LYS:NZ	1:v:551:GLU:O	2.15	0.79
1:8:396:LYS:NZ	1:8:551:GLU:O	2.15	0.79
1:E:396:LYS:NZ	1:E:551:GLU:O	2.15	0.79
1:I:220:ASN:HD21	1:I:334:ILE:H	1.27	0.79
1:U:220:ASN:HD21	1:U:334:ILE:H	1.27	0.79
1:a:396:LYS:NZ	1:a:551:GLU:O	2.15	0.79
1:o:220:ASN:HD21	1:o:334:ILE:H	1.27	0.79
1:q:396:LYS:NZ	1:q:551:GLU:O	2.15	0.79
1:P:396:LYS:NZ	1:P:551:GLU:O	2.15	0.79
1:Z:396:LYS:NZ	1:Z:551:GLU:O	2.15	0.79
1:d:396:LYS:NZ	1:d:551:GLU:O	2.15	0.79
1:f:220:ASN:HD21	1:f:334:ILE:H	1.27	0.79
1:p:396:LYS:NZ	1:p:551:GLU:O	2.15	0.79
1:t:396:LYS:NZ	1:t:551:GLU:O	2.15	0.79
1:A:396:LYS:NZ	1:A:551:GLU:O	2.15	0.79
1:R:220:ASN:HD21	1:R:334:ILE:H	1.27	0.79
1:T:363:SER:HB2	1:f:297:LYS:HG2	1.64	0.79
1:l:220:ASN:HD21	1:l:334:ILE:H	1.27	0.79
1:2:396:LYS:NZ	1:2:551:GLU:O	2.15	0.79
1:L:220:ASN:HD21	1:L:334:ILE:H	1.27	0.79
1:M:396:LYS:NZ	1:M:551:GLU:O	2.15	0.79
1:6:396:LYS:NZ	1:6:551:GLU:O	2.15	0.79
1:b:396:LYS:NZ	1:b:551:GLU:O	2.15	0.79
1:r:220:ASN:HD21	1:r:334:ILE:H	1.27	0.79
1:w:220:ASN:HD21	1:w:334:ILE:H	1.27	0.79
1:k:363:SER:HB2	1:m:297:LYS:HG2	1.65	0.79
1:O:220:ASN:HD21	1:O:334:ILE:H	1.27	0.79
1:Q:220:ASN:HD21	1:Q:334:ILE:H	1.27	0.79
1:U:396:LYS:NZ	1:U:551:GLU:O	2.15	0.79
1:t:363:SER:HB2	1:v:297:LYS:HG2	1.65	0.79
1:x:220:ASN:HD21	1:x:334:ILE:H	1.27	0.79
1:D:363:SER:HB2	1:P:297:LYS:HG2	1.65	0.79
1:J:297:LYS:HG2	1:L:363:SER:HB2	1.65	0.79
1:K:220:ASN:HD21	1:K:334:ILE:H	1.27	0.79
1:R:363:SER:HB2	1:U:297:LYS:HG2	1.65	0.79
1:m:396:LYS:NZ	1:m:551:GLU:O	2.15	0.79
1:u:396:LYS:NZ	1:u:551:GLU:O	2.15	0.79
1:B:220:ASN:HD21	1:B:334:ILE:H	1.27	0.78
1:B:396:LYS:NZ	1:B:551:GLU:O	2.15	0.78
1:K:297:LYS:HG2	1:l:363:SER:HB2	1.65	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:297:LYS:HG2	1:e:363:SER:HB2	1.65	0.78
1:w:363:SER:HB2	1:x:297:LYS:HG2	1.65	0.78
1:M:363:SER:HB2	1:2:297:LYS:HG2	1.65	0.78
1:6:297:LYS:HG2	1:b:363:SER:HB2	1.65	0.78
1:E:297:LYS:HG2	1:Q:363:SER:HB2	1.66	0.78
1:X:363:SER:HB2	1:5:297:LYS:HG2	1.65	0.78
1:3:297:LYS:HG2	1:i:363:SER:HB2	1.65	0.78
1:3:363:SER:HB2	1:j:297:LYS:HG2	1.66	0.78
1:N:297:LYS:HG2	1:P:363:SER:HB2	1.65	0.78
1:V:297:LYS:HG2	1:5:363:SER:HB2	1.65	0.78
1:Z:363:SER:HB2	1:w:297:LYS:HG2	1.65	0.78
1:q:297:LYS:HG2	1:r:363:SER:HB2	1.66	0.78
1:S:297:LYS:HG2	1:U:363:SER:HB2	1.65	0.78
1:c:297:LYS:HG2	1:d:363:SER:HB2	1.65	0.78
1:l:297:LYS:HG2	1:m:363:SER:HB2	1.65	0.78
1:u:220:ASN:HD21	1:u:334:ILE:H	1.27	0.78
1:B:363:SER:HB2	1:L:297:LYS:HG2	1.65	0.78
1:1:297:LYS:HG2	1:8:363:SER:HB2	1.65	0.78
1:t:297:LYS:HG2	1:u:363:SER:HB2	1.65	0.78
1:g:297:LYS:HG2	1:h:363:SER:HB2	1.65	0.78
1:E:363:SER:HB2	1:F:297:LYS:HG2	1.65	0.78
1:q:363:SER:HB2	1:s:297:LYS:HG2	1.65	0.78
1:A:297:LYS:HG2	1:G:363:SER:HB2	1.65	0.78
1:B:297:LYS:HG2	1:J:363:SER:HB2	1.65	0.78
1:R:297:LYS:HG2	1:S:363:SER:HB2	1.65	0.78
1:n:363:SER:HB2	1:p:297:LYS:HG2	1.65	0.78
1:H:297:LYS:HG2	1:W:363:SER:HB2	1.65	0.78
1:O:297:LYS:HG2	1:g:363:SER:HB2	1.65	0.78
1:c:220:ASN:HD21	1:c:334:ILE:H	1.27	0.78
1:u:297:LYS:HG2	1:v:363:SER:HB2	1.65	0.78
1:k:297:LYS:HG2	1:l:363:SER:HB2	1.65	0.77
1:y:297:LYS:HG2	1:z:363:SER:HB2	1.65	0.77
1:c:363:SER:HB2	1:e:297:LYS:HG2	1.65	0.77
1:D:297:LYS:HG2	1:N:363:SER:HB2	1.65	0.77
1:N:220:ASN:HD21	1:N:334:ILE:H	1.27	0.77
1:a:363:SER:HB2	1:b:297:LYS:HG2	1.65	0.77
1:z:297:LYS:HG2	1:7:363:SER:HB2	1.65	0.77
1:C:297:LYS:HG2	1:2:363:SER:HB2	1.65	0.77
1:V:363:SER:HB2	1:X:297:LYS:HG2	1.65	0.77
1:6:363:SER:HB2	1:a:297:LYS:HG2	1.65	0.77
1:C:363:SER:HB2	1:M:297:LYS:HG2	1.65	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:297:LYS:HG2	1:Y:363:SER:HB2	1.65	0.77
1:i:297:LYS:HG2	1:j:363:SER:HB2	1.65	0.77
1:G:297:LYS:HG2	1:I:363:SER:HB2	1.66	0.77
1:H:363:SER:HB2	1:Y:297:LYS:HG2	1.65	0.77
1:n:297:LYS:HG2	1:o:363:SER:HB2	1.66	0.77
1:y:363:SER:HB2	1:7:297:LYS:HG2	1.65	0.77
1:F:363:SER:HB2	1:Q:297:LYS:HG2	1.67	0.76
1:Z:297:LYS:HG2	1:x:363:SER:HB2	1.65	0.76
1:A:363:SER:HB2	1:I:297:LYS:HG2	1.67	0.76
1:M:262:ASN:ND2	1:M:440:ASN:HD21	1.84	0.76
1:b:262:ASN:ND2	1:b:440:ASN:HD21	1.84	0.76
1:o:297:LYS:HG2	1:p:363:SER:HB2	1.67	0.76
1:r:297:LYS:HG2	1:s:363:SER:HB2	1.67	0.76
1:K:363:SER:HB2	1:8:297:LYS:HG2	1.65	0.76
1:k:262:ASN:ND2	1:k:440:ASN:HD21	1.84	0.76
1:r:262:ASN:ND2	1:r:440:ASN:HD21	1.84	0.76
1:Q:262:ASN:ND2	1:Q:440:ASN:HD21	1.84	0.76
1:R:262:ASN:ND2	1:R:440:ASN:HD21	1.84	0.76
1:N:262:ASN:ND2	1:N:440:ASN:HD21	1.84	0.76
1:r:377:ASP:HB2	1:s:331:ASN:HD22	1.50	0.76
1:F:331:ASN:HD22	1:Q:377:ASP:HB2	1.50	0.76
1:c:262:ASN:ND2	1:c:440:ASN:HD21	1.84	0.76
1:w:262:ASN:ND2	1:w:440:ASN:HD21	1.84	0.76
1:I:262:ASN:ND2	1:I:440:ASN:HD21	1.84	0.76
1:1:262:ASN:ND2	1:1:440:ASN:HD21	1.84	0.76
1:o:262:ASN:ND2	1:o:440:ASN:HD21	1.84	0.76
1:O:363:SER:HB2	1:h:297:LYS:HG2	1.65	0.76
1:P:262:ASN:ND2	1:P:440:ASN:HD21	1.84	0.76
1:4:262:ASN:ND2	1:4:440:ASN:HD21	1.84	0.76
1:d:262:ASN:ND2	1:d:440:ASN:HD21	1.84	0.76
1:C:262:ASN:ND2	1:C:440:ASN:HD21	1.84	0.76
1:O:262:ASN:ND2	1:O:440:ASN:HD21	1.84	0.76
1:4:297:LYS:HG2	1:f:363:SER:HB2	1.66	0.76
1:y:262:ASN:ND2	1:y:440:ASN:HD21	1.84	0.76
1:z:262:ASN:ND2	1:z:440:ASN:HD21	1.84	0.76
1:W:262:ASN:ND2	1:W:440:ASN:HD21	1.84	0.75
1:3:262:ASN:ND2	1:3:440:ASN:HD21	1.84	0.75
1:a:262:ASN:ND2	1:a:440:ASN:HD21	1.84	0.75
1:f:262:ASN:ND2	1:f:440:ASN:HD21	1.84	0.75
1:h:262:ASN:ND2	1:h:440:ASN:HD21	1.84	0.75
1:8:262:ASN:ND2	1:8:440:ASN:HD21	1.84	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:262:ASN:ND2	1:H:440:ASN:HD21	1.84	0.75
1:Z:262:ASN:ND2	1:Z:440:ASN:HD21	1.84	0.75
1:5:262:ASN:ND2	1:5:440:ASN:HD21	1.84	0.75
1:p:262:ASN:ND2	1:p:440:ASN:HD21	1.84	0.75
1:A:262:ASN:ND2	1:A:440:ASN:HD21	1.84	0.75
1:B:262:ASN:ND2	1:B:440:ASN:HD21	1.84	0.75
1:G:262:ASN:ND2	1:G:440:ASN:HD21	1.84	0.75
1:l:262:ASN:ND2	1:l:440:ASN:HD21	1.84	0.75
1:n:262:ASN:ND2	1:n:440:ASN:HD21	1.84	0.75
1:u:262:ASN:ND2	1:u:440:ASN:HD21	1.84	0.75
1:K:262:ASN:ND2	1:K:440:ASN:HD21	1.84	0.75
1:S:262:ASN:ND2	1:S:440:ASN:HD21	1.84	0.75
1:U:262:ASN:ND2	1:U:440:ASN:HD21	1.84	0.75
1:D:262:ASN:ND2	1:D:440:ASN:HD21	1.84	0.75
1:2:262:ASN:ND2	1:2:440:ASN:HD21	1.84	0.75
1:m:262:ASN:ND2	1:m:440:ASN:HD21	1.84	0.75
1:o:377:ASP:HB2	1:p:331:ASN:HD22	1.50	0.75
1:x:262:ASN:ND2	1:x:440:ASN:HD21	1.84	0.75
1:K:377:ASP:HB2	1:1:331:ASN:HD22	1.52	0.75
1:T:377:ASP:HB2	1:4:331:ASN:HD22	1.52	0.75
1:V:262:ASN:ND2	1:V:440:ASN:HD21	1.84	0.75
1:6:262:ASN:ND2	1:6:440:ASN:HD21	1.84	0.75
1:e:262:ASN:ND2	1:e:440:ASN:HD21	1.84	0.75
1:w:331:ASN:HD22	1:x:377:ASP:HB2	1.52	0.75
1:A:331:ASN:HD22	1:I:377:ASP:HB2	1.51	0.74
1:C:331:ASN:HD22	1:M:377:ASP:HB2	1.52	0.74
1:O:377:ASP:HB2	1:g:331:ASN:HD22	1.52	0.74
1:j:262:ASN:ND2	1:j:440:ASN:HD21	1.84	0.74
1:J:262:ASN:ND2	1:J:440:ASN:HD21	1.84	0.74
1:a:331:ASN:HD22	1:b:377:ASP:HB2	1.52	0.74
1:v:262:ASN:ND2	1:v:440:ASN:HD21	1.84	0.74
1:G:377:ASP:HB2	1:I:331:ASN:HD22	1.52	0.74
1:t:262:ASN:ND2	1:t:440:ASN:HD21	1.84	0.74
1:C:377:ASP:HB2	1:2:331:ASN:HD22	1.53	0.74
1:n:377:ASP:HB2	1:o:331:ASN:HD22	1.52	0.74
1:F:262:ASN:ND2	1:F:440:ASN:HD21	1.84	0.74
1:L:262:ASN:ND2	1:L:440:ASN:HD21	1.84	0.74
1:6:331:ASN:HD22	1:a:377:ASP:HB2	1.53	0.74
1:c:331:ASN:HD22	1:e:377:ASP:HB2	1.52	0.74
1:s:262:ASN:ND2	1:s:440:ASN:HD21	1.84	0.74
1:D:377:ASP:HB2	1:N:331:ASN:HD22	1.52	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:262:ASN:ND2	1:E:440:ASN:HD21	1.84	0.74
1:H:331:ASN:HD22	1:Y:377:ASP:HB2	1.52	0.74
1:q:262:ASN:ND2	1:q:440:ASN:HD21	1.84	0.74
1:t:377:ASP:HB2	1:u:331:ASN:HD22	1.52	0.74
1:K:331:ASN:HD22	1:8:377:ASP:HB2	1.52	0.74
1:Z:377:ASP:HB2	1:x:331:ASN:HD22	1.52	0.74
1:i:262:ASN:ND2	1:i:440:ASN:HD21	1.84	0.74
1:y:331:ASN:HD22	1:7:377:ASP:HB2	1.52	0.74
1:7:262:ASN:ND2	1:7:440:ASN:HD21	1.84	0.74
1:B:377:ASP:HB2	1:J:331:ASN:HD22	1.52	0.74
1:O:331:ASN:HD22	1:h:377:ASP:HB2	1.52	0.74
1:T:262:ASN:ND2	1:T:440:ASN:HD21	1.84	0.74
1:X:262:ASN:ND2	1:X:440:ASN:HD21	1.84	0.74
1:4:377:ASP:HB2	1:f:331:ASN:HD22	1.52	0.74
1:g:262:ASN:ND2	1:g:440:ASN:HD21	1.84	0.74
1:Y:262:ASN:ND2	1:Y:440:ASN:HD21	1.84	0.74
1:i:377:ASP:HB2	1:j:331:ASN:HD22	1.52	0.74
1:k:377:ASP:HB2	1:l:331:ASN:HD22	1.53	0.74
1:B:331:ASN:HD22	1:L:377:ASP:HB2	1.53	0.74
1:N:377:ASP:HB2	1:P:331:ASN:HD22	1.52	0.74
1:R:377:ASP:HB2	1:S:331:ASN:HD22	1.53	0.74
1:c:377:ASP:HB2	1:d:331:ASN:HD22	1.52	0.74
1:q:331:ASN:HD22	1:s:377:ASP:HB2	1.53	0.74
1:D:331:ASN:HD22	1:P:377:ASP:HB2	1.53	0.73
1:E:331:ASN:HD22	1:F:377:ASP:HB2	1.53	0.73
1:V:331:ASN:HD22	1:X:377:ASP:HB2	1.52	0.73
1:V:377:ASP:HB2	1:5:331:ASN:HD22	1.53	0.73
1:3:331:ASN:HD22	1:j:377:ASP:HB2	1.53	0.73
1:d:377:ASP:HB2	1:e:331:ASN:HD22	1.53	0.73
1:H:377:ASP:HB2	1:W:331:ASN:HD22	1.53	0.73
1:Z:331:ASN:HD22	1:w:377:ASP:HB2	1.52	0.73
1:1:377:ASP:HB2	1:8:331:ASN:HD22	1.52	0.73
1:g:377:ASP:HB2	1:h:331:ASN:HD22	1.52	0.73
1:u:377:ASP:HB2	1:v:331:ASN:HD22	1.53	0.73
1:y:377:ASP:HB2	1:z:331:ASN:HD22	1.53	0.73
1:n:331:ASN:HD22	1:p:377:ASP:HB2	1.53	0.73
1:q:377:ASP:HB2	1:r:331:ASN:HD22	1.52	0.73
1:A:377:ASP:HB2	1:G:331:ASN:HD22	1.53	0.73
1:J:377:ASP:HB2	1:L:331:ASN:HD22	1.52	0.73
1:3:377:ASP:HB2	1:i:331:ASN:HD22	1.53	0.73
1:t:331:ASN:HD22	1:v:377:ASP:HB2	1.52	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:377:ASP:HB2	1:Y:331:ASN:HD22	1.52	0.73
1:X:331:ASN:HD22	1:5:377:ASP:HB2	1.53	0.73
1:E:377:ASP:HB2	1:Q:331:ASN:HD22	1.52	0.73
1:z:377:ASP:HB2	1:7:331:ASN:HD22	1.52	0.73
1:T:331:ASN:HD22	1:f:377:ASP:HB2	1.54	0.73
1:l:377:ASP:HB2	1:m:331:ASN:HD22	1.52	0.72
1:R:331:ASN:HD22	1:U:377:ASP:HB2	1.52	0.72
1:S:377:ASP:HB2	1:U:331:ASN:HD22	1.52	0.72
1:k:331:ASN:HD22	1:m:377:ASP:HB2	1.52	0.72
1:M:331:ASN:HD22	1:2:377:ASP:HB2	1.53	0.72
1:q:465:SER:OG	1:q:467:ASP:OD1	2.08	0.72
1:E:465:SER:OG	1:E:467:ASP:OD1	2.08	0.71
1:Z:465:SER:OG	1:Z:467:ASP:OD1	2.08	0.71
1:6:377:ASP:HB2	1:b:331:ASN:HD22	1.53	0.71
1:8:465:SER:OG	1:8:467:ASP:OD1	2.08	0.71
1:D:465:SER:OG	1:D:467:ASP:OD1	2.08	0.71
1:P:465:SER:OG	1:P:467:ASP:OD1	2.08	0.71
1:2:465:SER:OG	1:2:467:ASP:OD1	2.08	0.71
1:6:465:SER:OG	1:6:467:ASP:OD1	2.08	0.71
1:d:465:SER:OG	1:d:467:ASP:OD1	2.08	0.71
1:g:465:SER:OG	1:g:467:ASP:OD1	2.08	0.71
1:k:465:SER:OG	1:k:467:ASP:OD1	2.08	0.71
1:R:465:SER:OG	1:R:467:ASP:OD1	2.08	0.71
1:T:465:SER:OG	1:T:467:ASP:OD1	2.08	0.71
1:e:465:SER:OG	1:e:467:ASP:OD1	2.08	0.71
1:J:465:SER:OG	1:J:467:ASP:OD1	2.08	0.71
1:X:465:SER:OG	1:X:467:ASP:OD1	2.08	0.71
1:i:465:SER:OG	1:i:467:ASP:OD1	2.08	0.71
1:v:465:SER:OG	1:v:467:ASP:OD1	2.08	0.71
1:I:465:SER:OG	1:I:467:ASP:OD1	2.08	0.71
1:Q:465:SER:OG	1:Q:467:ASP:OD1	2.08	0.71
1:Y:465:SER:OG	1:Y:467:ASP:OD1	2.08	0.71
1:f:465:SER:OG	1:f:467:ASP:OD1	2.08	0.71
1:o:465:SER:OG	1:o:467:ASP:OD1	2.08	0.71
1:r:465:SER:OG	1:r:467:ASP:OD1	2.08	0.71
1:7:465:SER:OG	1:7:467:ASP:OD1	2.08	0.71
1:F:465:SER:OG	1:F:467:ASP:OD1	2.08	0.70
1:V:138:ARG:HG2	1:V:249:GLU:HG2	1.74	0.70
1:Y:138:ARG:HG2	1:Y:249:GLU:HG2	1.73	0.70
1:7:138:ARG:HG2	1:7:249:GLU:HG2	1.73	0.70
1:O:465:SER:OG	1:O:467:ASP:OD1	2.08	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:138:ARG:HG2	1:j:249:GLU:HG2	1.74	0.70
1:o:138:ARG:HG2	1:o:249:GLU:HG2	1.74	0.70
1:s:465:SER:OG	1:s:467:ASP:OD1	2.08	0.70
1:B:138:ARG:HG2	1:B:249:GLU:HG2	1.73	0.70
1:I:138:ARG:HG2	1:I:249:GLU:HG2	1.74	0.70
1:M:465:SER:OG	1:M:467:ASP:OD1	2.08	0.70
1:S:465:SER:OG	1:S:467:ASP:OD1	2.08	0.70
1:V:465:SER:OG	1:V:467:ASP:OD1	2.08	0.70
1:c:138:ARG:HG2	1:c:249:GLU:HG2	1.73	0.70
1:j:465:SER:OG	1:j:467:ASP:OD1	2.08	0.70
1:N:138:ARG:HG2	1:N:249:GLU:HG2	1.73	0.70
1:O:138:ARG:HG2	1:O:249:GLU:HG2	1.74	0.70
1:U:465:SER:OG	1:U:467:ASP:OD1	2.08	0.70
1:4:465:SER:OG	1:4:467:ASP:OD1	2.08	0.70
1:b:465:SER:OG	1:b:467:ASP:OD1	2.08	0.70
1:l:465:SER:OG	1:l:467:ASP:OD1	2.08	0.70
1:b:138:ARG:HG2	1:b:249:GLU:HG2	1.74	0.70
1:f:138:ARG:HG2	1:f:249:GLU:HG2	1.74	0.70
1:h:465:SER:OG	1:h:467:ASP:OD1	2.08	0.70
1:p:465:SER:OG	1:p:467:ASP:OD1	2.08	0.70
1:C:138:ARG:HG2	1:C:249:GLU:HG2	1.74	0.70
1:K:51:GLY:HA2	1:L:239:VAL:HG22	1.74	0.70
1:K:465:SER:OG	1:K:467:ASP:OD1	2.08	0.70
1:M:138:ARG:HG2	1:M:249:GLU:HG2	1.74	0.70
1:N:465:SER:OG	1:N:467:ASP:OD1	2.08	0.70
1:c:465:SER:OG	1:c:467:ASP:OD1	2.08	0.70
1:k:138:ARG:HG2	1:k:249:GLU:HG2	1.73	0.70
1:m:465:SER:OG	1:m:467:ASP:OD1	2.08	0.70
1:u:138:ARG:HG2	1:u:249:GLU:HG2	1.74	0.70
1:y:465:SER:OG	1:y:467:ASP:OD1	2.08	0.70
1:A:465:SER:OG	1:A:467:ASP:OD1	2.08	0.70
1:F:138:ARG:HG2	1:F:249:GLU:HG2	1.74	0.70
1:G:465:SER:OG	1:G:467:ASP:OD1	2.08	0.70
1:X:138:ARG:HG2	1:X:249:GLU:HG2	1.74	0.70
1:1:138:ARG:HG2	1:1:249:GLU:HG2	1.74	0.70
1:a:138:ARG:HG2	1:a:249:GLU:HG2	1.74	0.70
1:a:465:SER:OG	1:a:467:ASP:OD1	2.08	0.70
1:n:465:SER:OG	1:n:467:ASP:OD1	2.08	0.70
1:t:239:VAL:HG22	1:x:51:GLY:HA2	1.74	0.70
1:t:465:SER:OG	1:t:467:ASP:OD1	2.08	0.70
1:x:465:SER:OG	1:x:467:ASP:OD1	2.08	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:465:SER:OG	1:C:467:ASP:OD1	2.08	0.70
1:L:465:SER:OG	1:L:467:ASP:OD1	2.08	0.70
1:R:138:ARG:HG2	1:R:249:GLU:HG2	1.74	0.70
1:2:138:ARG:HG2	1:2:249:GLU:HG2	1.74	0.70
1:4:138:ARG:HG2	1:4:249:GLU:HG2	1.74	0.70
1:5:465:SER:OG	1:5:467:ASP:OD1	2.08	0.70
1:6:138:ARG:HG2	1:6:249:GLU:HG2	1.74	0.70
1:h:138:ARG:HG2	1:h:249:GLU:HG2	1.74	0.70
1:i:138:ARG:HG2	1:i:249:GLU:HG2	1.74	0.70
1:s:138:ARG:HG2	1:s:249:GLU:HG2	1.74	0.70
1:u:465:SER:OG	1:u:467:ASP:OD1	2.08	0.70
1:B:465:SER:OG	1:B:467:ASP:OD1	2.08	0.70
1:H:465:SER:OG	1:H:467:ASP:OD1	2.08	0.70
1:K:138:ARG:HG2	1:K:249:GLU:HG2	1.74	0.70
1:Z:138:ARG:HG2	1:Z:249:GLU:HG2	1.74	0.70
1:1:465:SER:OG	1:1:467:ASP:OD1	2.08	0.70
1:3:465:SER:OG	1:3:467:ASP:OD1	2.08	0.70
1:w:138:ARG:HG2	1:w:249:GLU:HG2	1.74	0.70
1:x:138:ARG:HG2	1:x:249:GLU:HG2	1.74	0.70
1:8:138:ARG:HG2	1:8:249:GLU:HG2	1.74	0.70
1:W:465:SER:OG	1:W:467:ASP:OD1	2.08	0.70
1:z:138:ARG:HG2	1:z:249:GLU:HG2	1.74	0.70
1:W:138:ARG:HG2	1:W:249:GLU:HG2	1.74	0.69
1:w:465:SER:OG	1:w:467:ASP:OD1	2.08	0.69
1:z:465:SER:OG	1:z:467:ASP:OD1	2.08	0.69
1:H:239:VAL:HG22	1:Z:51:GLY:HA2	1.75	0.69
1:X:174:HIS:HD2	1:X:474:HIS:HD2	1.41	0.69
1:i:174:HIS:HD2	1:i:474:HIS:HD2	1.41	0.69
1:y:239:VAL:HG22	1:8:51:GLY:HA2	1.75	0.69
1:M:51:GLY:HA2	1:N:239:VAL:HG22	1.74	0.69
1:T:51:GLY:HA2	1:U:239:VAL:HG22	1.73	0.69
1:a:51:GLY:HA2	1:u:239:VAL:HG22	1.74	0.69
1:b:51:GLY:HA2	1:c:239:VAL:HG22	1.74	0.69
1:e:239:VAL:HG22	1:q:51:GLY:HA2	1.75	0.69
1:n:239:VAL:HG22	1:s:51:GLY:HA2	1.74	0.69
1:r:138:ARG:HG2	1:r:249:GLU:HG2	1.74	0.69
1:B:239:VAL:HG22	1:C:51:GLY:HA2	1.74	0.69
1:D:239:VAL:HG22	1:E:51:GLY:HA2	1.75	0.69
1:H:138:ARG:HG2	1:H:249:GLU:HG2	1.74	0.69
1:I:174:HIS:HD2	1:I:474:HIS:HD2	1.41	0.69
1:Q:138:ARG:HG2	1:Q:249:GLU:HG2	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:138:ARG:HG2	1:T:249:GLU:HG2	1.74	0.69
1:Y:174:HIS:HD2	1:Y:474:HIS:HD2	1.41	0.69
1:o:174:HIS:HD2	1:o:474:HIS:HD2	1.41	0.69
1:v:138:ARG:HG2	1:v:249:GLU:HG2	1.73	0.69
1:7:174:HIS:HD2	1:7:474:HIS:HD2	1.41	0.69
1:F:51:GLY:HA2	1:G:239:VAL:HG22	1.74	0.69
1:F:174:HIS:HD2	1:F:474:HIS:HD2	1.41	0.69
1:J:138:ARG:HG2	1:J:249:GLU:HG2	1.74	0.69
1:W:174:HIS:HD2	1:W:474:HIS:HD2	1.41	0.69
1:g:138:ARG:HG2	1:g:249:GLU:HG2	1.74	0.69
1:p:51:GLY:HA2	1:q:239:VAL:HG22	1.74	0.69
1:q:138:ARG:HG2	1:q:249:GLU:HG2	1.74	0.69
1:E:138:ARG:HG2	1:E:249:GLU:HG2	1.74	0.69
1:E:174:HIS:HD2	1:E:474:HIS:HD2	1.41	0.69
1:G:174:HIS:HD2	1:G:474:HIS:HD2	1.41	0.69
1:R:239:VAL:HG22	1:V:51:GLY:HA2	1.74	0.69
1:k:174:HIS:HD2	1:k:474:HIS:HD2	1.41	0.69
1:y:138:ARG:HG2	1:y:249:GLU:HG2	1.74	0.69
1:z:174:HIS:HD2	1:z:474:HIS:HD2	1.41	0.69
1:A:51:GLY:HA2	1:E:239:VAL:HG22	1.74	0.69
1:H:51:GLY:HA2	1:I:239:VAL:HG22	1.75	0.69
1:K:174:HIS:HD2	1:K:474:HIS:HD2	1.41	0.69
1:N:51:GLY:HA2	1:g:239:VAL:HG22	1.75	0.69
1:R:174:HIS:HD2	1:R:474:HIS:HD2	1.41	0.69
1:6:174:HIS:HD2	1:6:474:HIS:HD2	1.41	0.69
1:j:51:GLY:HA2	1:k:239:VAL:HG22	1.74	0.69
1:n:174:HIS:HD2	1:n:474:HIS:HD2	1.41	0.69
1:q:174:HIS:HD2	1:q:474:HIS:HD2	1.41	0.69
1:r:174:HIS:HD2	1:r:474:HIS:HD2	1.41	0.69
1:s:174:HIS:HD2	1:s:474:HIS:HD2	1.41	0.69
1:x:174:HIS:HD2	1:x:474:HIS:HD2	1.41	0.69
1:Q:174:HIS:HD2	1:Q:474:HIS:HD2	1.41	0.69
1:d:138:ARG:HG2	1:d:249:GLU:HG2	1.74	0.69
1:o:239:VAL:HG22	1:y:51:GLY:HA2	1.75	0.69
1:L:51:GLY:HA2	1:2:239:VAL:HG22	1.75	0.69
1:L:138:ARG:HG2	1:L:249:GLU:HG2	1.74	0.69
1:2:174:HIS:HD2	1:2:474:HIS:HD2	1.41	0.69
1:m:138:ARG:HG2	1:m:249:GLU:HG2	1.74	0.69
1:M:174:HIS:HD2	1:M:474:HIS:HD2	1.41	0.68
1:O:51:GLY:HA2	1:P:239:VAL:HG22	1.75	0.68
1:P:138:ARG:HG2	1:P:249:GLU:HG2	1.74	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:239:VAL:HG22	1:t:51:GLY:HA2	1.75	0.68
1:d:239:VAL:HG22	1:f:51:GLY:HA2	1.75	0.68
1:J:51:GLY:HA2	1:1:239:VAL:HG22	1.75	0.68
1:U:138:ARG:HG2	1:U:249:GLU:HG2	1.74	0.68
1:U:174:HIS:HD2	1:U:474:HIS:HD2	1.41	0.68
1:3:138:ARG:HG2	1:3:249:GLU:HG2	1.74	0.68
1:3:174:HIS:HD2	1:3:474:HIS:HD2	1.41	0.68
1:5:138:ARG:HG2	1:5:249:GLU:HG2	1.74	0.68
1:5:174:HIS:HD2	1:5:474:HIS:HD2	1.41	0.68
1:b:174:HIS:HD2	1:b:474:HIS:HD2	1.41	0.68
1:v:51:GLY:HA2	1:w:239:VAL:HG22	1.75	0.68
1:A:174:HIS:HD2	1:A:474:HIS:HD2	1.41	0.68
1:M:239:VAL:HG22	1:3:51:GLY:HA2	1.74	0.68
1:Q:141:ILE:HG12	1:Q:506:VAL:HG22	1.76	0.68
1:T:239:VAL:HG22	1:c:51:GLY:HA2	1.75	0.68
1:3:141:ILE:HG12	1:3:506:VAL:HG22	1.76	0.68
1:5:141:ILE:HG12	1:5:506:VAL:HG22	1.76	0.68
1:g:51:GLY:HA2	1:m:239:VAL:HG22	1.74	0.68
1:t:138:ARG:HG2	1:t:249:GLU:HG2	1.74	0.68
1:D:174:HIS:HD2	1:D:474:HIS:HD2	1.41	0.68
1:F:239:VAL:HG22	1:R:51:GLY:HA2	1.75	0.68
1:V:239:VAL:HG22	1:W:51:GLY:HA2	1.75	0.68
1:i:51:GLY:HA2	1:7:239:VAL:HG22	1.74	0.68
1:k:51:GLY:HA2	1:s:239:VAL:HG22	1.75	0.68
1:l:138:ARG:HG2	1:l:249:GLU:HG2	1.74	0.68
1:m:174:HIS:HD2	1:m:474:HIS:HD2	1.41	0.68
1:p:174:HIS:HD2	1:p:474:HIS:HD2	1.41	0.68
1:r:141:ILE:HG12	1:r:506:VAL:HG22	1.76	0.68
1:t:141:ILE:HG12	1:t:506:VAL:HG22	1.76	0.68
1:y:174:HIS:HD2	1:y:474:HIS:HD2	1.41	0.68
1:8:141:ILE:HG12	1:8:506:VAL:HG22	1.76	0.68
1:B:141:ILE:HG12	1:B:506:VAL:HG22	1.76	0.68
1:L:141:ILE:HG12	1:L:506:VAL:HG22	1.76	0.68
1:M:141:ILE:HG12	1:M:506:VAL:HG22	1.76	0.68
1:S:138:ARG:HG2	1:S:249:GLU:HG2	1.73	0.68
1:X:51:GLY:HA2	1:Y:239:VAL:HG22	1.74	0.68
1:Z:141:ILE:HG12	1:Z:506:VAL:HG22	1.76	0.68
1:5:51:GLY:HA2	1:b:239:VAL:HG22	1.74	0.68
1:b:141:ILE:HG12	1:b:506:VAL:HG22	1.76	0.68
1:j:239:VAL:HG22	1:z:51:GLY:HA2	1.75	0.68
1:p:138:ARG:HG2	1:p:249:GLU:HG2	1.74	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:141:ILE:HG12	1:u:506:VAL:HG22	1.76	0.68
1:A:138:ARG:HG2	1:A:249:GLU:HG2	1.74	0.68
1:A:141:ILE:HG12	1:A:506:VAL:HG22	1.76	0.68
1:G:138:ARG:HG2	1:G:249:GLU:HG2	1.74	0.68
1:H:174:HIS:HD2	1:H:474:HIS:HD2	1.41	0.68
1:e:138:ARG:HG2	1:e:249:GLU:HG2	1.74	0.68
1:e:174:HIS:HD2	1:e:474:HIS:HD2	1.41	0.68
1:n:138:ARG:HG2	1:n:249:GLU:HG2	1.74	0.68
1:p:141:ILE:HG12	1:p:506:VAL:HG22	1.76	0.68
1:D:141:ILE:HG12	1:D:506:VAL:HG22	1.76	0.68
1:I:51:GLY:HA2	1:J:239:VAL:HG22	1.74	0.68
1:K:141:ILE:HG12	1:K:506:VAL:HG22	1.76	0.68
1:P:51:GLY:HA2	1:Q:239:VAL:HG22	1.75	0.68
1:x:141:ILE:HG12	1:x:506:VAL:HG22	1.76	0.68
1:D:138:ARG:HG2	1:D:249:GLU:HG2	1.74	0.68
1:V:141:ILE:HG12	1:V:506:VAL:HG22	1.76	0.68
1:d:51:GLY:HA2	1:r:239:VAL:HG22	1.75	0.68
1:e:141:ILE:HG12	1:e:506:VAL:HG22	1.76	0.68
1:A:239:VAL:HG22	1:B:51:GLY:HA2	1.75	0.68
1:U:51:GLY:HA2	1:5:239:VAL:HG22	1.75	0.68
1:l:239:VAL:HG22	1:r:51:GLY:HA2	1.74	0.68
1:n:51:GLY:HA2	1:z:239:VAL:HG22	1.75	0.68
1:o:51:GLY:HA2	1:v:239:VAL:HG22	1.74	0.68
1:p:239:VAL:HG22	1:u:51:GLY:HA2	1.75	0.68
1:U:141:ILE:HG12	1:U:506:VAL:HG22	1.76	0.68
1:1:141:ILE:HG12	1:1:506:VAL:HG22	1.76	0.68
1:j:141:ILE:HG12	1:j:506:VAL:HG22	1.76	0.68
1:m:141:ILE:HG12	1:m:506:VAL:HG22	1.76	0.68
1:G:51:GLY:HA2	1:W:239:VAL:HG22	1.75	0.67
1:O:239:VAL:HG22	1:4:51:GLY:HA2	1.75	0.67
1:Q:51:GLY:HA2	1:S:239:VAL:HG22	1.74	0.67
1:3:239:VAL:HG22	1:m:51:GLY:HA2	1.75	0.67
1:8:174:HIS:HD2	1:8:474:HIS:HD2	1.41	0.67
1:O:174:HIS:HD2	1:O:474:HIS:HD2	1.41	0.67
1:Z:174:HIS:HD2	1:Z:474:HIS:HD2	1.41	0.67
1:2:141:ILE:HG12	1:2:506:VAL:HG22	1.76	0.67
1:6:141:ILE:HG12	1:6:506:VAL:HG22	1.76	0.67
1:f:239:VAL:HG22	1:h:51:GLY:HA2	1.75	0.67
1:w:141:ILE:HG12	1:w:506:VAL:HG22	1.76	0.67
1:O:141:ILE:HG12	1:O:506:VAL:HG22	1.76	0.67
1:Y:51:GLY:HA2	1:x:239:VAL:HG22	1.75	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:239:VAL:HG22	1:e:51:GLY:HA2	1.75	0.67
1:f:141:ILE:HG12	1:f:506:VAL:HG22	1.76	0.67
1:f:174:HIS:HD2	1:f:474:HIS:HD2	1.41	0.67
1:l:141:ILE:HG12	1:l:506:VAL:HG22	1.76	0.67
1:n:141:ILE:HG12	1:n:506:VAL:HG22	1.76	0.67
1:C:174:HIS:HD2	1:C:474:HIS:HD2	1.41	0.67
1:C:239:VAL:HG22	1:D:51:GLY:HA2	1.75	0.67
1:G:141:ILE:HG12	1:G:506:VAL:HG22	1.76	0.67
1:K:239:VAL:HG22	1:7:51:GLY:HA2	1.75	0.67
1:P:141:ILE:HG12	1:P:506:VAL:HG22	1.76	0.67
1:X:141:ILE:HG12	1:X:506:VAL:HG22	1.76	0.67
1:a:174:HIS:HD2	1:a:474:HIS:HD2	1.41	0.67
1:d:141:ILE:HG12	1:d:506:VAL:HG22	1.76	0.67
1:i:141:ILE:HG12	1:i:506:VAL:HG22	1.76	0.67
1:v:174:HIS:HD2	1:v:474:HIS:HD2	1.41	0.67
1:I:141:ILE:HG12	1:I:506:VAL:HG22	1.76	0.67
1:J:174:HIS:HD2	1:J:474:HIS:HD2	1.41	0.67
1:S:141:ILE:HG12	1:S:506:VAL:HG22	1.76	0.67
1:2:51:GLY:HA2	1:i:239:VAL:HG22	1.74	0.67
1:o:141:ILE:HG12	1:o:506:VAL:HG22	1.76	0.67
1:H:141:ILE:HG12	1:H:506:VAL:HG22	1.76	0.67
1:Z:239:VAL:HG22	1:1:51:GLY:HA2	1.75	0.67
1:4:174:HIS:HD2	1:4:474:HIS:HD2	1.41	0.67
1:d:174:HIS:HD2	1:d:474:HIS:HD2	1.41	0.67
1:y:141:ILE:HG12	1:y:506:VAL:HG22	1.76	0.67
1:L:174:HIS:HD2	1:L:474:HIS:HD2	1.41	0.67
1:N:174:HIS:HD2	1:N:474:HIS:HD2	1.41	0.67
1:P:174:HIS:HD2	1:P:474:HIS:HD2	1.41	0.67
1:T:141:ILE:HG12	1:T:506:VAL:HG22	1.76	0.67
1:X:239:VAL:HG22	1:6:51:GLY:HA2	1.74	0.67
1:h:174:HIS:HD2	1:h:474:HIS:HD2	1.41	0.67
1:t:174:HIS:HD2	1:t:474:HIS:HD2	1.41	0.67
1:w:51:GLY:HA2	1:8:239:VAL:HG22	1.75	0.67
1:S:174:HIS:HD2	1:S:474:HIS:HD2	1.41	0.67
1:1:174:HIS:HD2	1:1:474:HIS:HD2	1.41	0.67
1:c:174:HIS:HD2	1:c:474:HIS:HD2	1.41	0.67
1:g:174:HIS:HD2	1:g:474:HIS:HD2	1.41	0.67
1:j:174:HIS:HD2	1:j:474:HIS:HD2	1.41	0.67
1:l:174:HIS:HD2	1:l:474:HIS:HD2	1.41	0.67
1:w:174:HIS:HD2	1:w:474:HIS:HD2	1.41	0.67
1:R:141:ILE:HG12	1:R:506:VAL:HG22	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:174:HIS:HD2	1:T:474:HIS:HD2	1.41	0.67
1:g:141:ILE:HG12	1:g:506:VAL:HG22	1.76	0.67
1:h:239:VAL:HG22	1:l:51:GLY:HA2	1.75	0.67
1:k:141:ILE:HG12	1:k:506:VAL:HG22	1.76	0.67
1:W:141:ILE:HG12	1:W:506:VAL:HG22	1.76	0.66
1:F:141:ILE:HG12	1:F:506:VAL:HG22	1.76	0.66
1:V:174:HIS:HD2	1:V:474:HIS:HD2	1.41	0.66
1:z:141:ILE:HG12	1:z:506:VAL:HG22	1.76	0.66
1:C:141:ILE:HG12	1:C:506:VAL:HG22	1.76	0.66
1:S:51:GLY:HA2	1:4:239:VAL:HG22	1.75	0.66
1:a:141:ILE:HG12	1:a:506:VAL:HG22	1.76	0.66
1:s:141:ILE:HG12	1:s:506:VAL:HG22	1.76	0.66
1:7:141:ILE:HG12	1:7:506:VAL:HG22	1.76	0.66
1:Y:141:ILE:HG12	1:Y:506:VAL:HG22	1.76	0.66
1:u:174:HIS:HD2	1:u:474:HIS:HD2	1.41	0.66
1:c:141:ILE:HG12	1:c:506:VAL:HG22	1.76	0.66
1:N:141:ILE:HG12	1:N:506:VAL:HG22	1.76	0.66
1:q:141:ILE:HG12	1:q:506:VAL:HG22	1.76	0.66
1:B:174:HIS:HD2	1:B:474:HIS:HD2	1.41	0.66
1:4:141:ILE:HG12	1:4:506:VAL:HG22	1.76	0.66
1:E:141:ILE:HG12	1:E:506:VAL:HG22	1.76	0.66
1:h:141:ILE:HG12	1:h:506:VAL:HG22	1.76	0.66
1:v:141:ILE:HG12	1:v:506:VAL:HG22	1.76	0.65
1:J:141:ILE:HG12	1:J:506:VAL:HG22	1.76	0.65
1:3:262:ASN:HD22	1:3:440:ASN:ND2	1.94	0.65
1:4:262:ASN:HD22	1:4:440:ASN:ND2	1.94	0.65
1:5:262:ASN:HD22	1:5:440:ASN:ND2	1.94	0.65
1:w:262:ASN:HD22	1:w:440:ASN:ND2	1.94	0.65
1:h:262:ASN:HD22	1:h:440:ASN:ND2	1.94	0.65
1:i:262:ASN:HD22	1:i:440:ASN:ND2	1.94	0.65
1:X:262:ASN:HD22	1:X:440:ASN:ND2	1.94	0.65
1:x:262:ASN:HD22	1:x:440:ASN:ND2	1.94	0.65
1:K:262:ASN:HD22	1:K:440:ASN:ND2	1.94	0.65
1:j:67:GLN:HE21	1:j:69:ARG:HH12	1.45	0.65
1:V:67:GLN:HE21	1:V:69:ARG:HH12	1.45	0.65
1:3:67:GLN:HE21	1:3:69:ARG:HH12	1.46	0.65
1:C:169:LEU:HD23	1:C:237:HIS:HB3	1.80	0.64
1:5:67:GLN:HE21	1:5:69:ARG:HH12	1.46	0.64
1:a:169:LEU:HD23	1:a:237:HIS:HB3	1.80	0.64
1:D:67:GLN:HE21	1:D:69:ARG:HH12	1.46	0.64
1:q:67:GLN:HE21	1:q:69:ARG:HH12	1.45	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:169:LEU:HD23	1:L:237:HIS:HB3	1.80	0.64
1:N:67:GLN:HE21	1:N:69:ARG:HH12	1.45	0.64
1:O:67:GLN:HE21	1:O:69:ARG:HH12	1.46	0.64
1:T:67:GLN:HE21	1:T:69:ARG:HH12	1.46	0.64
1:b:67:GLN:HE21	1:b:69:ARG:HH12	1.45	0.64
1:c:67:GLN:HE21	1:c:69:ARG:HH12	1.45	0.64
1:e:67:GLN:HE21	1:e:69:ARG:HH12	1.46	0.64
1:e:262:ASN:HD22	1:e:440:ASN:ND2	1.94	0.64
1:f:67:GLN:HE21	1:f:69:ARG:HH12	1.45	0.64
1:g:67:GLN:HE21	1:g:69:ARG:HH12	1.45	0.64
1:t:169:LEU:HD23	1:t:237:HIS:HB3	1.80	0.64
1:D:262:ASN:HD22	1:D:440:ASN:ND2	1.94	0.64
1:E:67:GLN:HE21	1:E:69:ARG:HH12	1.45	0.64
1:M:67:GLN:HE21	1:M:69:ARG:HH12	1.45	0.64
1:b:169:LEU:HD23	1:b:237:HIS:HB3	1.80	0.64
1:o:262:ASN:HD22	1:o:440:ASN:ND2	1.94	0.64
1:J:169:LEU:HD23	1:J:237:HIS:HB3	1.80	0.64
1:M:169:LEU:HD23	1:M:237:HIS:HB3	1.80	0.64
1:O:262:ASN:HD22	1:O:440:ASN:ND2	1.94	0.64
1:P:67:GLN:HE21	1:P:69:ARG:HH12	1.45	0.64
1:U:169:LEU:HD23	1:U:237:HIS:HB3	1.80	0.64
1:W:67:GLN:HE21	1:W:69:ARG:HH12	1.46	0.64
1:4:169:LEU:HD23	1:4:237:HIS:HB3	1.80	0.64
1:d:67:GLN:HE21	1:d:69:ARG:HH12	1.45	0.64
1:f:262:ASN:HD22	1:f:440:ASN:ND2	1.94	0.64
1:h:169:LEU:HD23	1:h:237:HIS:HB3	1.80	0.64
1:l:67:GLN:HE21	1:l:69:ARG:HH12	1.45	0.64
1:v:169:LEU:HD23	1:v:237:HIS:HB3	1.80	0.64
1:z:67:GLN:HE21	1:z:69:ARG:HH12	1.46	0.64
1:H:262:ASN:HD22	1:H:440:ASN:ND2	1.94	0.64
1:I:262:ASN:HD22	1:I:440:ASN:ND2	1.94	0.64
1:S:67:GLN:HE21	1:S:69:ARG:HH12	1.45	0.64
1:4:67:GLN:HE21	1:4:69:ARG:HH12	1.45	0.64
1:s:169:LEU:HD23	1:s:237:HIS:HB3	1.80	0.64
1:y:169:LEU:HD23	1:y:237:HIS:HB3	1.80	0.64
1:y:262:ASN:HD22	1:y:440:ASN:ND2	1.94	0.64
1:F:169:LEU:HD23	1:F:237:HIS:HB3	1.80	0.64
1:H:169:LEU:HD23	1:H:237:HIS:HB3	1.80	0.64
1:Q:67:GLN:HE21	1:Q:69:ARG:HH12	1.45	0.64
1:R:262:ASN:HD22	1:R:440:ASN:ND2	1.94	0.64
1:k:262:ASN:HD22	1:k:440:ASN:ND2	1.94	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:169:LEU:HD23	1:m:237:HIS:HB3	1.80	0.64
1:r:67:GLN:HE21	1:r:69:ARG:HH12	1.45	0.64
1:F:67:GLN:HE21	1:F:69:ARG:HH12	1.45	0.64
1:G:67:GLN:HE21	1:G:69:ARG:HH12	1.45	0.64
1:J:67:GLN:HE21	1:J:69:ARG:HH12	1.45	0.64
1:h:67:GLN:HE21	1:h:69:ARG:HH12	1.46	0.64
1:n:67:GLN:HE21	1:n:69:ARG:HH12	1.45	0.64
1:o:67:GLN:HE21	1:o:69:ARG:HH12	1.45	0.64
1:u:169:LEU:HD23	1:u:237:HIS:HB3	1.80	0.64
1:v:67:GLN:HE21	1:v:69:ARG:HH12	1.45	0.64
1:B:169:LEU:HD23	1:B:237:HIS:HB3	1.80	0.63
1:I:67:GLN:HE21	1:I:69:ARG:HH12	1.45	0.63
1:L:67:GLN:HE21	1:L:69:ARG:HH12	1.45	0.63
1:Z:67:GLN:HE21	1:Z:69:ARG:HH12	1.46	0.63
1:n:169:LEU:HD23	1:n:237:HIS:HB3	1.80	0.63
1:r:262:ASN:HD22	1:r:440:ASN:ND2	1.94	0.63
1:t:67:GLN:HE21	1:t:69:ARG:HH12	1.45	0.63
1:t:262:ASN:HD22	1:t:440:ASN:ND2	1.94	0.63
1:K:67:GLN:HE21	1:K:69:ARG:HH12	1.45	0.63
1:s:67:GLN:HE21	1:s:69:ARG:HH12	1.45	0.63
1:8:67:GLN:HE21	1:8:69:ARG:HH12	1.46	0.63
1:B:67:GLN:HE21	1:B:69:ARG:HH12	1.45	0.63
1:G:169:LEU:HD23	1:G:237:HIS:HB3	1.80	0.63
1:P:169:LEU:HD23	1:P:237:HIS:HB3	1.80	0.63
1:Q:262:ASN:HD22	1:Q:440:ASN:ND2	1.94	0.63
1:R:67:GLN:HE21	1:R:69:ARG:HH12	1.46	0.63
1:6:67:GLN:HE21	1:6:69:ARG:HH12	1.46	0.63
1:k:67:GLN:HE21	1:k:69:ARG:HH12	1.45	0.63
1:m:67:GLN:HE21	1:m:69:ARG:HH12	1.45	0.63
1:D:169:LEU:HD23	1:D:237:HIS:HB3	1.80	0.63
1:L:262:ASN:HD22	1:L:440:ASN:ND2	1.94	0.63
1:U:67:GLN:HE21	1:U:69:ARG:HH12	1.45	0.63
1:2:67:GLN:HE21	1:2:69:ARG:HH12	1.46	0.63
1:d:169:LEU:HD23	1:d:237:HIS:HB3	1.80	0.63
1:e:169:LEU:HD23	1:e:237:HIS:HB3	1.80	0.63
1:m:262:ASN:HD22	1:m:440:ASN:ND2	1.94	0.63
1:x:67:GLN:HE21	1:x:69:ARG:HH12	1.45	0.63
1:Q:119:PRO:HB2	1:R:524:PRO:HD3	1.81	0.63
1:S:262:ASN:HD22	1:S:440:ASN:ND2	1.94	0.63
1:U:262:ASN:HD22	1:U:440:ASN:ND2	1.94	0.63
1:g:169:LEU:HD23	1:g:237:HIS:HB3	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:67:GLN:HE21	1:u:69:ARG:HH12	1.46	0.63
1:z:262:ASN:HD22	1:z:440:ASN:ND2	1.94	0.63
1:W:262:ASN:HD22	1:W:440:ASN:ND2	1.94	0.63
1:1:67:GLN:HE21	1:1:69:ARG:HH12	1.46	0.63
1:k:524:PRO:HD3	1:r:119:PRO:HB2	1.81	0.63
1:l:262:ASN:HD22	1:l:440:ASN:ND2	1.94	0.63
1:y:67:GLN:HE21	1:y:69:ARG:HH12	1.45	0.63
1:H:67:GLN:HE21	1:H:69:ARG:HH12	1.45	0.63
1:T:169:LEU:HD23	1:T:237:HIS:HB3	1.80	0.63
1:3:169:LEU:HD23	1:3:237:HIS:HB3	1.80	0.63
1:V:169:LEU:HD23	1:V:237:HIS:HB3	1.80	0.63
1:1:169:LEU:HD23	1:1:237:HIS:HB3	1.80	0.63
1:5:169:LEU:HD23	1:5:237:HIS:HB3	1.80	0.63
1:w:169:LEU:HD23	1:w:237:HIS:HB3	1.80	0.63
1:C:67:GLN:HE21	1:C:69:ARG:HH12	1.45	0.63
1:C:119:PRO:HB2	1:L:524:PRO:HD3	1.81	0.63
1:a:67:GLN:HE21	1:a:69:ARG:HH12	1.45	0.63
1:j:169:LEU:HD23	1:j:237:HIS:HB3	1.80	0.63
1:p:262:ASN:HD22	1:p:440:ASN:ND2	1.94	0.63
1:w:67:GLN:HE21	1:w:69:ARG:HH12	1.46	0.63
1:C:524:PRO:HD3	1:L:119:PRO:HB2	1.81	0.62
1:E:524:PRO:HD3	1:P:119:PRO:HB2	1.81	0.62
1:O:169:LEU:HD23	1:O:237:HIS:HB3	1.80	0.62
1:W:169:LEU:HD23	1:W:237:HIS:HB3	1.80	0.62
1:a:119:PRO:HB2	1:t:524:PRO:HD3	1.81	0.62
1:d:119:PRO:HB2	1:q:524:PRO:HD3	1.81	0.62
1:r:169:LEU:HD23	1:r:237:HIS:HB3	1.80	0.62
1:z:169:LEU:HD23	1:z:237:HIS:HB3	1.80	0.62
1:A:169:LEU:HD23	1:A:237:HIS:HB3	1.80	0.62
1:A:262:ASN:HD22	1:A:440:ASN:ND2	1.94	0.62
1:I:169:LEU:HD23	1:I:237:HIS:HB3	1.80	0.62
1:6:169:LEU:HD23	1:6:237:HIS:HB3	1.80	0.62
1:a:524:PRO:HD3	1:t:119:PRO:HB2	1.81	0.62
1:s:262:ASN:HD22	1:s:440:ASN:ND2	1.94	0.62
1:Q:524:PRO:HD3	1:R:119:PRO:HB2	1.82	0.62
1:W:524:PRO:HD3	1:X:119:PRO:HB2	1.81	0.62
1:Y:67:GLN:HE21	1:Y:69:ARG:HH12	1.45	0.62
1:2:119:PRO:HB2	1:3:524:PRO:HD3	1.82	0.62
1:4:119:PRO:HB2	1:h:524:PRO:HD3	1.81	0.62
1:5:524:PRO:HD3	1:6:119:PRO:HB2	1.82	0.62
1:f:169:LEU:HD23	1:f:237:HIS:HB3	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:i:119:PRO:HB2	1:z:524:PRO:HD3	1.82	0.62
1:k:119:PRO:HB2	1:r:524:PRO:HD3	1.82	0.62
1:n:119:PRO:HB2	1:y:524:PRO:HD3	1.81	0.62
1:7:67:GLN:HE21	1:7:69:ARG:HH12	1.45	0.62
1:G:119:PRO:HB2	1:H:524:PRO:HD3	1.81	0.62
1:Q:169:LEU:HD23	1:Q:237:HIS:HB3	1.80	0.62
1:X:67:GLN:HE21	1:X:69:ARG:HH12	1.45	0.62
1:Z:169:LEU:HD23	1:Z:237:HIS:HB3	1.80	0.62
1:2:169:LEU:HD23	1:2:237:HIS:HB3	1.80	0.62
1:i:67:GLN:HE21	1:i:69:ARG:HH12	1.46	0.62
1:k:169:LEU:HD23	1:k:237:HIS:HB3	1.80	0.62
1:o:169:LEU:HD23	1:o:237:HIS:HB3	1.80	0.62
1:p:169:LEU:HD23	1:p:237:HIS:HB3	1.80	0.62
1:v:524:PRO:HD3	1:x:119:PRO:HB2	1.81	0.62
1:8:169:LEU:HD23	1:8:237:HIS:HB3	1.80	0.62
1:F:262:ASN:HD22	1:F:440:ASN:ND2	1.94	0.62
1:J:524:PRO:HD3	1:K:119:PRO:HB2	1.81	0.62
1:R:169:LEU:HD23	1:R:237:HIS:HB3	1.80	0.62
1:U:524:PRO:HD3	1:V:119:PRO:HB2	1.81	0.62
1:V:418:ARG:NE	1:V:424:GLU:OE2	2.31	0.62
1:Y:169:LEU:HD23	1:Y:237:HIS:HB3	1.80	0.62
1:4:524:PRO:HD3	1:h:119:PRO:HB2	1.82	0.62
1:g:262:ASN:HD22	1:g:440:ASN:ND2	1.94	0.62
1:n:262:ASN:HD22	1:n:440:ASN:ND2	1.94	0.62
1:B:119:PRO:HB2	1:I:524:PRO:HD3	1.82	0.62
1:G:262:ASN:HD22	1:G:440:ASN:ND2	1.94	0.62
1:H:146:LEU:HD11	1:H:166:VAL:HG23	1.82	0.62
1:X:169:LEU:HD23	1:X:237:HIS:HB3	1.80	0.62
1:3:186:THR:HB	1:3:199:PRO:HG3	1.82	0.62
1:g:524:PRO:HD3	1:l:119:PRO:HB2	1.81	0.62
1:i:169:LEU:HD23	1:i:237:HIS:HB3	1.80	0.62
1:o:524:PRO:HD3	1:u:119:PRO:HB2	1.82	0.62
1:v:146:LEU:HD11	1:v:166:VAL:HG23	1.82	0.62
1:x:169:LEU:HD23	1:x:237:HIS:HB3	1.80	0.62
1:y:146:LEU:HD11	1:y:166:VAL:HG23	1.82	0.62
1:7:262:ASN:HD22	1:7:440:ASN:ND2	1.94	0.62
1:A:146:LEU:HD11	1:A:166:VAL:HG23	1.82	0.62
1:F:186:THR:HB	1:F:199:PRO:HG3	1.82	0.62
1:J:146:LEU:HD11	1:J:166:VAL:HG23	1.82	0.62
1:S:119:PRO:HB2	1:T:524:PRO:HD3	1.82	0.62
1:T:262:ASN:HD22	1:T:440:ASN:ND2	1.94	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:186:THR:HB	1:5:199:PRO:HG3	1.82	0.62
1:d:262:ASN:HD22	1:d:440:ASN:ND2	1.94	0.62
1:i:524:PRO:HD3	1:z:119:PRO:HB2	1.81	0.62
1:j:119:PRO:HB2	1:m:524:PRO:HD3	1.81	0.62
1:j:146:LEU:HD11	1:j:166:VAL:HG23	1.82	0.62
1:l:169:LEU:HD23	1:l:237:HIS:HB3	1.80	0.62
1:p:146:LEU:HD11	1:p:166:VAL:HG23	1.82	0.62
1:s:186:THR:HB	1:s:199:PRO:HG3	1.82	0.62
1:v:119:PRO:HB2	1:x:524:PRO:HD3	1.81	0.62
1:J:119:PRO:HB2	1:K:524:PRO:HD3	1.82	0.62
1:K:169:LEU:HD23	1:K:237:HIS:HB3	1.80	0.62
1:P:146:LEU:HD11	1:P:166:VAL:HG23	1.82	0.62
1:S:186:THR:HB	1:S:199:PRO:HG3	1.82	0.62
1:Y:146:LEU:HD11	1:Y:166:VAL:HG23	1.82	0.62
1:Y:262:ASN:HD22	1:Y:440:ASN:ND2	1.94	0.62
1:d:146:LEU:HD11	1:d:166:VAL:HG23	1.82	0.62
1:d:524:PRO:HD3	1:q:119:PRO:HB2	1.81	0.62
1:f:418:ARG:NE	1:f:424:GLU:OE2	2.31	0.62
1:l:186:THR:HB	1:l:199:PRO:HG3	1.82	0.62
1:7:146:LEU:HD11	1:7:166:VAL:HG23	1.82	0.62
1:7:169:LEU:HD23	1:7:237:HIS:HB3	1.80	0.62
1:D:186:THR:HB	1:D:199:PRO:HG3	1.82	0.62
1:E:119:PRO:HB2	1:P:524:PRO:HD3	1.81	0.62
1:K:146:LEU:HD11	1:K:166:VAL:HG23	1.82	0.62
1:N:169:LEU:HD23	1:N:237:HIS:HB3	1.80	0.62
1:O:146:LEU:HD11	1:O:166:VAL:HG23	1.82	0.62
1:O:418:ARG:NE	1:O:424:GLU:OE2	2.31	0.62
1:P:262:ASN:HD22	1:P:440:ASN:ND2	1.94	0.62
1:S:169:LEU:HD23	1:S:237:HIS:HB3	1.80	0.62
1:T:146:LEU:HD11	1:T:166:VAL:HG23	1.82	0.62
1:W:119:PRO:HB2	1:X:524:PRO:HD3	1.81	0.62
1:Y:524:PRO:HD3	1:Z:119:PRO:HB2	1.82	0.62
1:e:186:THR:HB	1:e:199:PRO:HG3	1.82	0.62
1:g:146:LEU:HD11	1:g:166:VAL:HG23	1.82	0.62
1:x:146:LEU:HD11	1:x:166:VAL:HG23	1.82	0.62
1:7:119:PRO:HB2	1:8:524:PRO:HD3	1.82	0.62
1:B:146:LEU:HD11	1:B:166:VAL:HG23	1.82	0.62
1:I:146:LEU:HD11	1:I:166:VAL:HG23	1.82	0.62
1:V:146:LEU:HD11	1:V:166:VAL:HG23	1.82	0.62
1:Y:119:PRO:HB2	1:Z:524:PRO:HD3	1.82	0.62
1:2:524:PRO:HD3	1:3:119:PRO:HB2	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:169:LEU:HD23	1:c:237:HIS:HB3	1.80	0.62
1:o:146:LEU:HD11	1:o:166:VAL:HG23	1.82	0.62
1:w:146:LEU:HD11	1:w:166:VAL:HG23	1.82	0.62
1:7:524:PRO:HD3	1:8:119:PRO:HB2	1.82	0.62
1:8:186:THR:HB	1:8:199:PRO:HG3	1.82	0.62
1:Q:186:THR:HB	1:Q:199:PRO:HG3	1.82	0.61
1:T:186:THR:HB	1:T:199:PRO:HG3	1.82	0.61
1:Z:186:THR:HB	1:Z:199:PRO:HG3	1.82	0.61
1:5:119:PRO:HB2	1:6:524:PRO:HD3	1.82	0.61
1:f:146:LEU:HD11	1:f:166:VAL:HG23	1.82	0.61
1:g:186:THR:HB	1:g:199:PRO:HG3	1.82	0.61
1:r:186:THR:HB	1:r:199:PRO:HG3	1.82	0.61
1:E:169:LEU:HD23	1:E:237:HIS:HB3	1.80	0.61
1:Q:146:LEU:HD11	1:Q:166:VAL:HG23	1.82	0.61
1:1:146:LEU:HD11	1:1:166:VAL:HG23	1.82	0.61
1:e:418:ARG:NE	1:e:424:GLU:OE2	2.31	0.61
1:m:186:THR:HB	1:m:199:PRO:HG3	1.82	0.61
1:o:119:PRO:HB2	1:u:524:PRO:HD3	1.81	0.61
1:r:146:LEU:HD11	1:r:166:VAL:HG23	1.82	0.61
1:t:186:THR:HB	1:t:199:PRO:HG3	1.82	0.61
1:B:524:PRO:HD3	1:I:119:PRO:HB2	1.81	0.61
1:J:186:THR:HB	1:J:199:PRO:HG3	1.82	0.61
1:L:186:THR:HB	1:L:199:PRO:HG3	1.82	0.61
1:U:119:PRO:HB2	1:V:524:PRO:HD3	1.81	0.61
1:U:186:THR:HB	1:U:199:PRO:HG3	1.82	0.61
1:V:186:THR:HB	1:V:199:PRO:HG3	1.82	0.61
1:h:186:THR:HB	1:h:199:PRO:HG3	1.82	0.61
1:j:186:THR:HB	1:j:199:PRO:HG3	1.82	0.61
1:k:146:LEU:HD11	1:k:166:VAL:HG23	1.82	0.61
1:p:67:GLN:HE21	1:p:69:ARG:HH12	1.45	0.61
1:q:169:LEU:HD23	1:q:237:HIS:HB3	1.80	0.61
1:t:146:LEU:HD11	1:t:166:VAL:HG23	1.82	0.61
1:u:146:LEU:HD11	1:u:166:VAL:HG23	1.82	0.61
1:v:186:THR:HB	1:v:199:PRO:HG3	1.82	0.61
1:D:418:ARG:NE	1:D:424:GLU:OE2	2.31	0.61
1:K:186:THR:HB	1:K:199:PRO:HG3	1.82	0.61
1:K:418:ARG:NE	1:K:424:GLU:OE2	2.31	0.61
1:N:524:PRO:HD3	1:O:119:PRO:HB2	1.82	0.61
1:R:146:LEU:HD11	1:R:166:VAL:HG23	1.82	0.61
1:1:186:THR:HB	1:1:199:PRO:HG3	1.82	0.61
1:3:146:LEU:HD11	1:3:166:VAL:HG23	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:4:186:THR:HB	1:4:199:PRO:HG3	1.82	0.61
1:c:524:PRO:HD3	1:f:119:PRO:HB2	1.82	0.61
1:f:186:THR:HB	1:f:199:PRO:HG3	1.82	0.61
1:j:524:PRO:HD3	1:m:119:PRO:HB2	1.81	0.61
1:A:67:GLN:HE21	1:A:69:ARG:HH12	1.45	0.61
1:A:161:ASP:OD1	1:B:160:ASN:ND2	2.34	0.61
1:G:146:LEU:HD11	1:G:166:VAL:HG23	1.82	0.61
1:L:146:LEU:HD11	1:L:166:VAL:HG23	1.82	0.61
1:O:186:THR:HB	1:O:199:PRO:HG3	1.82	0.61
1:S:146:LEU:HD11	1:S:166:VAL:HG23	1.82	0.61
1:W:146:LEU:HD11	1:W:166:VAL:HG23	1.82	0.61
1:5:146:LEU:HD11	1:5:166:VAL:HG23	1.82	0.61
1:h:418:ARG:NE	1:h:424:GLU:OE2	2.31	0.61
1:l:146:LEU:HD11	1:l:166:VAL:HG23	1.82	0.61
1:p:161:ASP:OD1	1:u:160:ASN:ND2	2.34	0.61
1:x:186:THR:HB	1:x:199:PRO:HG3	1.82	0.61
1:z:146:LEU:HD11	1:z:166:VAL:HG23	1.82	0.61
1:N:119:PRO:HB2	1:O:524:PRO:HD3	1.82	0.61
1:Q:160:ASN:ND2	1:S:161:ASP:OD1	2.34	0.61
1:2:186:THR:HB	1:2:199:PRO:HG3	1.82	0.61
1:6:186:THR:HB	1:6:199:PRO:HG3	1.82	0.61
1:b:146:LEU:HD11	1:b:166:VAL:HG23	1.82	0.61
1:n:146:LEU:HD11	1:n:166:VAL:HG23	1.82	0.61
1:v:160:ASN:ND2	1:w:161:ASP:OD1	2.34	0.61
1:w:186:THR:HB	1:w:199:PRO:HG3	1.82	0.61
1:x:418:ARG:NE	1:x:424:GLU:OE2	2.31	0.61
1:y:186:THR:HB	1:y:199:PRO:HG3	1.82	0.61
1:A:186:THR:HB	1:A:199:PRO:HG3	1.82	0.61
1:E:186:THR:HB	1:E:199:PRO:HG3	1.82	0.61
1:G:186:THR:HB	1:G:199:PRO:HG3	1.82	0.61
1:G:524:PRO:HD3	1:H:119:PRO:HB2	1.81	0.61
1:M:146:LEU:HD11	1:M:166:VAL:HG23	1.82	0.61
1:N:220:ASN:ND2	1:N:334:ILE:H	1.99	0.61
1:Q:418:ARG:NE	1:Q:424:GLU:OE2	2.31	0.61
1:1:524:PRO:HD3	1:w:119:PRO:HB2	1.81	0.61
1:2:146:LEU:HD11	1:2:166:VAL:HG23	1.82	0.61
1:3:418:ARG:NE	1:3:424:GLU:OE2	2.31	0.61
1:5:418:ARG:NE	1:5:424:GLU:OE2	2.31	0.61
1:6:146:LEU:HD11	1:6:166:VAL:HG23	1.82	0.61
1:a:220:ASN:ND2	1:a:334:ILE:H	1.99	0.61
1:b:119:PRO:HB2	1:e:524:PRO:HD3	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:524:PRO:HD3	1:e:119:PRO:HB2	1.81	0.61
1:c:119:PRO:HB2	1:f:524:PRO:HD3	1.82	0.61
1:i:146:LEU:HD11	1:i:166:VAL:HG23	1.82	0.61
1:l:161:ASP:OD1	1:r:160:ASN:ND2	2.34	0.61
1:n:186:THR:HB	1:n:199:PRO:HG3	1.82	0.61
1:p:186:THR:HB	1:p:199:PRO:HG3	1.82	0.61
1:q:186:THR:HB	1:q:199:PRO:HG3	1.82	0.61
1:u:262:ASN:HD22	1:u:440:ASN:ND2	1.94	0.61
1:C:220:ASN:ND2	1:C:334:ILE:H	1.99	0.61
1:D:119:PRO:HB2	1:M:524:PRO:HD3	1.81	0.61
1:D:146:LEU:HD11	1:D:166:VAL:HG23	1.82	0.61
1:H:161:ASP:OD1	1:Z:160:ASN:ND2	2.34	0.61
1:H:186:THR:HB	1:H:199:PRO:HG3	1.82	0.61
1:X:146:LEU:HD11	1:X:166:VAL:HG23	1.82	0.61
1:4:418:ARG:NE	1:4:424:GLU:OE2	2.31	0.61
1:c:220:ASN:ND2	1:c:334:ILE:H	1.99	0.61
1:r:418:ARG:NE	1:r:424:GLU:OE2	2.31	0.61
1:y:161:ASP:OD1	1:8:160:ASN:ND2	2.34	0.61
1:8:262:ASN:HD22	1:8:440:ASN:ND2	1.94	0.61
1:C:161:ASP:OD1	1:D:160:ASN:ND2	2.34	0.61
1:N:146:LEU:HD11	1:N:166:VAL:HG23	1.82	0.61
1:P:160:ASN:ND2	1:Q:161:ASP:OD1	2.34	0.61
1:T:161:ASP:OD1	1:c:160:ASN:ND2	2.33	0.61
1:Y:370:ASN:ND2	1:Y:377:ASP:OD1	2.34	0.61
1:1:119:PRO:HB2	1:w:524:PRO:HD3	1.81	0.61
1:a:161:ASP:OD1	1:e:160:ASN:ND2	2.34	0.61
1:c:146:LEU:HD11	1:c:166:VAL:HG23	1.82	0.61
1:d:160:ASN:ND2	1:r:161:ASP:OD1	2.34	0.61
1:e:146:LEU:HD11	1:e:166:VAL:HG23	1.82	0.61
1:n:524:PRO:HD3	1:y:119:PRO:HB2	1.81	0.61
1:7:370:ASN:ND2	1:7:377:ASP:OD1	2.34	0.61
1:A:160:ASN:ND2	1:E:161:ASP:OD1	2.34	0.61
1:D:524:PRO:HD3	1:M:119:PRO:HB2	1.81	0.61
1:E:146:LEU:HD11	1:E:166:VAL:HG23	1.82	0.61
1:J:160:ASN:ND2	1:1:161:ASP:OD1	2.34	0.61
1:J:370:ASN:ND2	1:J:377:ASP:OD1	2.34	0.61
1:M:160:ASN:ND2	1:N:161:ASP:OD1	2.34	0.61
1:U:370:ASN:ND2	1:U:377:ASP:OD1	2.34	0.61
1:W:186:THR:HB	1:W:199:PRO:HG3	1.82	0.61
1:Z:146:LEU:HD11	1:Z:166:VAL:HG23	1.82	0.61
1:Z:262:ASN:HD22	1:Z:440:ASN:ND2	1.94	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:160:ASN:ND2	1:b:161:ASP:OD1	2.34	0.61
1:b:160:ASN:ND2	1:c:161:ASP:OD1	2.34	0.61
1:d:186:THR:HB	1:d:199:PRO:HG3	1.82	0.61
1:d:220:ASN:ND2	1:d:334:ILE:H	1.99	0.61
1:m:370:ASN:ND2	1:m:377:ASP:OD1	2.34	0.61
1:p:160:ASN:ND2	1:q:161:ASP:OD1	2.34	0.61
1:v:370:ASN:ND2	1:v:377:ASP:OD1	2.34	0.61
1:A:119:PRO:HB2	1:F:524:PRO:HD3	1.82	0.60
1:B:186:THR:HB	1:B:199:PRO:HG3	1.82	0.60
1:B:262:ASN:HD22	1:B:440:ASN:ND2	1.94	0.60
1:C:186:THR:HB	1:C:199:PRO:HG3	1.82	0.60
1:F:370:ASN:ND2	1:F:377:ASP:OD1	2.34	0.60
1:G:160:ASN:ND2	1:W:161:ASP:OD1	2.34	0.60
1:I:370:ASN:ND2	1:I:377:ASP:OD1	2.34	0.60
1:M:161:ASP:OD1	1:3:160:ASN:ND2	2.34	0.60
1:P:186:THR:HB	1:P:199:PRO:HG3	1.82	0.60
1:P:220:ASN:ND2	1:P:334:ILE:H	1.99	0.60
1:R:220:ASN:ND2	1:R:334:ILE:H	1.99	0.60
1:X:161:ASP:OD1	1:6:160:ASN:ND2	2.34	0.60
1:X:186:THR:HB	1:X:199:PRO:HG3	1.82	0.60
1:Z:418:ARG:NE	1:Z:424:GLU:OE2	2.31	0.60
1:1:370:ASN:ND2	1:1:377:ASP:OD1	2.34	0.60
1:2:160:ASN:ND2	1:i:161:ASP:OD1	2.34	0.60
1:2:220:ASN:ND2	1:2:334:ILE:H	1.99	0.60
1:6:220:ASN:ND2	1:6:334:ILE:H	1.99	0.60
1:a:186:THR:HB	1:a:199:PRO:HG3	1.82	0.60
1:c:262:ASN:HD22	1:c:440:ASN:ND2	1.94	0.60
1:d:370:ASN:ND2	1:d:377:ASP:OD1	2.34	0.60
1:k:186:THR:HB	1:k:199:PRO:HG3	1.82	0.60
1:n:160:ASN:ND2	1:z:161:ASP:OD1	2.34	0.60
1:q:146:LEU:HD11	1:q:166:VAL:HG23	1.82	0.60
1:s:370:ASN:ND2	1:s:377:ASP:OD1	2.34	0.60
1:u:186:THR:HB	1:u:199:PRO:HG3	1.82	0.60
1:w:370:ASN:ND2	1:w:377:ASP:OD1	2.34	0.60
1:8:418:ARG:NE	1:8:424:GLU:OE2	2.31	0.60
1:C:146:LEU:HD11	1:C:166:VAL:HG23	1.82	0.60
1:H:370:ASN:ND2	1:H:377:ASP:OD1	2.34	0.60
1:L:370:ASN:ND2	1:L:377:ASP:OD1	2.34	0.60
1:P:370:ASN:ND2	1:P:377:ASP:OD1	2.34	0.60
1:P:418:ARG:NE	1:P:424:GLU:OE2	2.31	0.60
1:R:186:THR:HB	1:R:199:PRO:HG3	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:370:ASN:ND2	1:X:377:ASP:OD1	2.34	0.60
1:X:418:ARG:NE	1:X:424:GLU:OE2	2.31	0.60
1:Z:370:ASN:ND2	1:Z:377:ASP:OD1	2.34	0.60
1:b:220:ASN:ND2	1:b:334:ILE:H	1.99	0.60
1:i:370:ASN:ND2	1:i:377:ASP:OD1	2.34	0.60
1:k:220:ASN:ND2	1:k:334:ILE:H	1.99	0.60
1:o:370:ASN:ND2	1:o:377:ASP:OD1	2.34	0.60
1:p:119:PRO:HB2	1:s:524:PRO:HD3	1.82	0.60
1:s:146:LEU:HD11	1:s:166:VAL:HG23	1.82	0.60
1:t:370:ASN:ND2	1:t:377:ASP:OD1	2.34	0.60
1:y:370:ASN:ND2	1:y:377:ASP:OD1	2.34	0.60
1:z:186:THR:HB	1:z:199:PRO:HG3	1.82	0.60
1:8:146:LEU:HD11	1:8:166:VAL:HG23	1.82	0.60
1:8:370:ASN:ND2	1:8:377:ASP:OD1	2.34	0.60
1:A:524:PRO:HD3	1:F:119:PRO:HB2	1.82	0.60
1:F:146:LEU:HD11	1:F:166:VAL:HG23	1.82	0.60
1:M:220:ASN:ND2	1:M:334:ILE:H	1.99	0.60
1:O:161:ASP:OD1	1:4:160:ASN:ND2	2.34	0.60
1:T:415:ASN:HB3	1:4:313:ARG:HG3	1.83	0.60
1:4:220:ASN:ND2	1:4:334:ILE:H	1.99	0.60
1:a:146:LEU:HD11	1:a:166:VAL:HG23	1.82	0.60
1:b:262:ASN:HD22	1:b:440:ASN:ND2	1.94	0.60
1:p:524:PRO:HD3	1:s:119:PRO:HB2	1.82	0.60
1:q:418:ARG:NE	1:q:424:GLU:OE2	2.31	0.60
1:D:161:ASP:OD1	1:E:160:ASN:ND2	2.34	0.60
1:N:262:ASN:HD22	1:N:440:ASN:ND2	1.94	0.60
1:d:418:ARG:NE	1:d:424:GLU:OE2	2.31	0.60
1:f:161:ASP:OD1	1:h:160:ASN:ND2	2.34	0.60
1:h:146:LEU:HD11	1:h:166:VAL:HG23	1.82	0.60
1:i:186:THR:HB	1:i:199:PRO:HG3	1.82	0.60
1:i:418:ARG:NE	1:i:424:GLU:OE2	2.31	0.60
1:E:418:ARG:NE	1:E:424:GLU:OE2	2.31	0.60
1:M:370:ASN:ND2	1:M:377:ASP:OD1	2.34	0.60
1:Z:161:ASP:OD1	1:1:160:ASN:ND2	2.34	0.60
1:2:370:ASN:ND2	1:2:377:ASP:OD1	2.34	0.60
1:4:146:LEU:HD11	1:4:166:VAL:HG23	1.82	0.60
1:6:370:ASN:ND2	1:6:377:ASP:OD1	2.34	0.60
1:e:161:ASP:OD1	1:q:160:ASN:ND2	2.34	0.60
1:h:220:ASN:ND2	1:h:334:ILE:H	1.99	0.60
1:n:161:ASP:OD1	1:s:160:ASN:ND2	2.34	0.60
1:q:370:ASN:ND2	1:q:377:ASP:OD1	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:w:160:ASN:ND2	1:8:161:ASP:OD1	2.34	0.60
1:A:418:ARG:NE	1:A:424:GLU:OE2	2.31	0.60
1:E:370:ASN:ND2	1:E:377:ASP:OD1	2.34	0.60
1:F:160:ASN:ND2	1:G:161:ASP:OD1	2.34	0.60
1:J:220:ASN:ND2	1:J:334:ILE:H	1.99	0.60
1:M:262:ASN:HD22	1:M:440:ASN:ND2	1.94	0.60
1:N:186:THR:HB	1:N:199:PRO:HG3	1.82	0.60
1:R:161:ASP:OD1	1:V:160:ASN:ND2	2.34	0.60
1:Y:160:ASN:ND2	1:x:161:ASP:OD1	2.35	0.60
1:b:370:ASN:ND2	1:b:377:ASP:OD1	2.34	0.60
1:g:119:PRO:HB2	1:l:524:PRO:HD3	1.81	0.60
1:j:160:ASN:ND2	1:k:161:ASP:OD1	2.34	0.60
1:k:370:ASN:ND2	1:k:377:ASP:OD1	2.34	0.60
1:u:370:ASN:ND2	1:u:377:ASP:OD1	2.34	0.60
1:B:161:ASP:OD1	1:C:160:ASN:ND2	2.34	0.60
1:H:418:ARG:NE	1:H:424:GLU:OE2	2.31	0.60
1:K:161:ASP:OD1	1:7:160:ASN:ND2	2.35	0.60
1:N:370:ASN:ND2	1:N:377:ASP:OD1	2.34	0.60
1:Y:186:THR:HB	1:Y:199:PRO:HG3	1.82	0.60
1:c:186:THR:HB	1:c:199:PRO:HG3	1.82	0.60
1:h:370:ASN:ND2	1:h:377:ASP:OD1	2.34	0.60
1:m:146:LEU:HD11	1:m:166:VAL:HG23	1.82	0.60
1:p:370:ASN:ND2	1:p:377:ASP:OD1	2.34	0.60
1:7:186:THR:HB	1:7:199:PRO:HG3	1.82	0.60
1:A:370:ASN:ND2	1:A:377:ASP:OD1	2.34	0.60
1:B:370:ASN:ND2	1:B:377:ASP:OD1	2.34	0.60
1:G:370:ASN:ND2	1:G:377:ASP:OD1	2.34	0.60
1:R:370:ASN:ND2	1:R:377:ASP:OD1	2.34	0.60
1:T:370:ASN:ND2	1:T:377:ASP:OD1	2.34	0.60
1:U:146:LEU:HD11	1:U:166:VAL:HG23	1.82	0.60
1:V:370:ASN:ND2	1:V:377:ASP:OD1	2.34	0.60
1:4:370:ASN:ND2	1:4:377:ASP:OD1	2.34	0.60
1:5:370:ASN:ND2	1:5:377:ASP:OD1	2.34	0.60
1:c:370:ASN:ND2	1:c:377:ASP:OD1	2.34	0.60
1:d:161:ASP:OD1	1:f:160:ASN:ND2	2.34	0.60
1:g:370:ASN:ND2	1:g:377:ASP:OD1	2.34	0.60
1:n:370:ASN:ND2	1:n:377:ASP:OD1	2.34	0.60
1:O:160:ASN:ND2	1:P:161:ASP:OD1	2.34	0.60
1:O:370:ASN:ND2	1:O:377:ASP:OD1	2.34	0.60
1:3:370:ASN:ND2	1:3:377:ASP:OD1	2.34	0.60
1:j:370:ASN:ND2	1:j:377:ASP:OD1	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:418:ARG:NE	1:p:424:GLU:OE2	2.31	0.60
1:v:220:ASN:ND2	1:v:334:ILE:H	1.99	0.60
1:y:418:ARG:NE	1:y:424:GLU:OE2	2.31	0.60
1:z:370:ASN:ND2	1:z:377:ASP:OD1	2.34	0.60
1:8:220:ASN:ND2	1:8:334:ILE:H	1.99	0.60
1:J:262:ASN:HD22	1:J:440:ASN:ND2	1.94	0.60
1:S:524:PRO:HD3	1:T:119:PRO:HB2	1.81	0.60
1:U:160:ASN:ND2	1:5:161:ASP:OD1	2.34	0.60
1:X:160:ASN:ND2	1:Y:161:ASP:OD1	2.34	0.60
1:Y:220:ASN:ND2	1:Y:334:ILE:H	1.99	0.60
1:a:160:ASN:ND2	1:u:161:ASP:OD1	2.34	0.60
1:f:220:ASN:ND2	1:f:334:ILE:H	1.99	0.60
1:f:370:ASN:ND2	1:f:377:ASP:OD1	2.34	0.60
1:g:220:ASN:ND2	1:g:334:ILE:H	1.99	0.60
1:E:90:THR:HB	1:E:94:ASP:O	2.03	0.59
1:M:186:THR:HB	1:M:199:PRO:HG3	1.82	0.59
1:O:220:ASN:ND2	1:O:334:ILE:H	1.99	0.59
1:W:370:ASN:ND2	1:W:377:ASP:OD1	2.34	0.59
1:Z:220:ASN:ND2	1:Z:334:ILE:H	1.99	0.59
1:3:161:ASP:OD1	1:m:160:ASN:ND2	2.34	0.59
1:g:415:ASN:HB3	1:h:313:ARG:HG3	1.84	0.59
1:i:160:ASN:ND2	1:7:161:ASP:OD1	2.34	0.59
1:j:262:ASN:HD22	1:j:440:ASN:ND2	1.94	0.59
1:o:161:ASP:OD1	1:y:160:ASN:ND2	2.34	0.59
1:q:90:THR:HB	1:q:94:ASP:O	2.03	0.59
1:t:220:ASN:ND2	1:t:334:ILE:H	1.99	0.59
1:I:186:THR:HB	1:I:199:PRO:HG3	1.82	0.59
1:L:220:ASN:ND2	1:L:334:ILE:H	1.99	0.59
1:M:418:ARG:NE	1:M:424:GLU:OE2	2.31	0.59
1:T:220:ASN:ND2	1:T:334:ILE:H	1.99	0.59
1:V:262:ASN:HD22	1:V:440:ASN:ND2	1.94	0.59
1:5:220:ASN:ND2	1:5:334:ILE:H	1.99	0.59
1:g:160:ASN:ND2	1:m:161:ASP:OD1	2.34	0.59
1:q:262:ASN:HD22	1:q:440:ASN:ND2	1.94	0.59
1:v:262:ASN:HD22	1:v:440:ASN:ND2	1.94	0.59
1:7:220:ASN:ND2	1:7:334:ILE:H	1.99	0.59
1:H:90:THR:HB	1:H:94:ASP:O	2.03	0.59
1:H:160:ASN:ND2	1:I:161:ASP:OD1	2.34	0.59
1:K:370:ASN:ND2	1:K:377:ASP:OD1	2.34	0.59
1:N:160:ASN:ND2	1:g:161:ASP:OD1	2.35	0.59
1:Q:90:THR:HB	1:Q:94:ASP:O	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:90:THR:HB	1:S:94:ASP:O	2.03	0.59
1:S:160:ASN:ND2	1:4:161:ASP:OD1	2.34	0.59
1:3:220:ASN:ND2	1:3:334:ILE:H	1.99	0.59
1:a:370:ASN:ND2	1:a:377:ASP:OD1	2.34	0.59
1:b:186:THR:HB	1:b:199:PRO:HG3	1.82	0.59
1:h:161:ASP:OD1	1:l:160:ASN:ND2	2.34	0.59
1:j:90:THR:HB	1:j:94:ASP:O	2.03	0.59
1:l:90:THR:HB	1:l:94:ASP:O	2.03	0.59
1:x:370:ASN:ND2	1:x:377:ASP:OD1	2.34	0.59
1:y:90:THR:HB	1:y:94:ASP:O	2.03	0.59
1:C:370:ASN:ND2	1:C:377:ASP:OD1	2.34	0.59
1:F:161:ASP:OD1	1:R:160:ASN:ND2	2.34	0.59
1:K:313:ARG:HG3	1:8:415:ASN:HB3	1.85	0.59
1:K:415:ASN:HB3	1:l:313:ARG:HG3	1.84	0.59
1:Q:370:ASN:ND2	1:Q:377:ASP:OD1	2.34	0.59
1:S:370:ASN:ND2	1:S:377:ASP:OD1	2.34	0.59
1:S:415:ASN:HB3	1:U:313:ARG:HG3	1.85	0.59
1:V:220:ASN:ND2	1:V:334:ILE:H	1.99	0.59
1:W:220:ASN:ND2	1:W:334:ILE:H	1.99	0.59
1:Z:415:ASN:HB3	1:x:313:ARG:HG3	1.85	0.59
1:l:415:ASN:HB3	1:m:313:ARG:HG3	1.85	0.59
1:o:160:ASN:ND2	1:v:161:ASP:OD1	2.34	0.59
1:o:186:THR:HB	1:o:199:PRO:HG3	1.82	0.59
1:r:90:THR:HB	1:r:94:ASP:O	2.03	0.59
1:w:90:THR:HB	1:w:94:ASP:O	2.03	0.59
1:E:262:ASN:HD22	1:E:440:ASN:ND2	1.94	0.59
1:I:160:ASN:ND2	1:J:161:ASP:OD1	2.34	0.59
1:N:418:ARG:NE	1:N:424:GLU:OE2	2.31	0.59
1:R:90:THR:HB	1:R:94:ASP:O	2.03	0.59
1:V:90:THR:HB	1:V:94:ASP:O	2.03	0.59
1:1:90:THR:HB	1:1:94:ASP:O	2.03	0.59
1:b:418:ARG:NE	1:b:424:GLU:OE2	2.31	0.59
1:e:370:ASN:ND2	1:e:377:ASP:OD1	2.34	0.59
1:k:160:ASN:ND2	1:s:161:ASP:OD1	2.34	0.59
1:l:370:ASN:ND2	1:l:377:ASP:OD1	2.34	0.59
1:n:90:THR:HB	1:n:94:ASP:O	2.03	0.59
1:r:370:ASN:ND2	1:r:377:ASP:OD1	2.34	0.59
1:w:313:ARG:HG3	1:x:415:ASN:HB3	1.84	0.59
1:A:313:ARG:HG3	1:I:415:ASN:HB3	1.84	0.59
1:D:370:ASN:ND2	1:D:377:ASP:OD1	2.34	0.59
1:G:90:THR:HB	1:G:94:ASP:O	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:160:ASN:ND2	1:L:161:ASP:OD1	2.34	0.59
1:X:313:ARG:HG3	1:5:415:ASN:HB3	1.85	0.59
1:3:415:ASN:HB3	1:i:313:ARG:HG3	1.85	0.59
1:6:161:ASP:OD1	1:t:160:ASN:ND2	2.34	0.59
1:c:90:THR:HB	1:c:94:ASP:O	2.03	0.59
1:k:90:THR:HB	1:k:94:ASP:O	2.03	0.59
1:o:415:ASN:HB3	1:p:313:ARG:HG3	1.84	0.59
1:p:90:THR:HB	1:p:94:ASP:O	2.03	0.59
1:z:220:ASN:ND2	1:z:334:ILE:H	1.99	0.59
1:A:90:THR:HB	1:A:94:ASP:O	2.03	0.59
1:D:220:ASN:ND2	1:D:334:ILE:H	1.99	0.59
1:I:90:THR:HB	1:I:94:ASP:O	2.03	0.59
1:L:160:ASN:ND2	1:2:161:ASP:OD1	2.34	0.59
1:N:90:THR:HB	1:N:94:ASP:O	2.03	0.59
1:P:90:THR:HB	1:P:94:ASP:O	2.03	0.59
1:T:160:ASN:ND2	1:U:161:ASP:OD1	2.34	0.59
1:4:90:THR:HB	1:4:94:ASP:O	2.03	0.59
1:c:415:ASN:HB3	1:d:313:ARG:HG3	1.84	0.59
1:j:220:ASN:ND2	1:j:334:ILE:H	1.99	0.59
1:p:220:ASN:ND2	1:p:334:ILE:H	1.99	0.59
1:t:161:ASP:OD1	1:x:160:ASN:ND2	2.34	0.59
1:t:415:ASN:HB3	1:u:313:ARG:HG3	1.84	0.59
1:8:90:THR:HB	1:8:94:ASP:O	2.03	0.59
1:A:220:ASN:ND2	1:A:334:ILE:H	1.99	0.59
1:B:313:ARG:HG3	1:L:415:ASN:HB3	1.84	0.59
1:D:415:ASN:HB3	1:N:313:ARG:HG3	1.85	0.59
1:N:415:ASN:HB3	1:P:313:ARG:HG3	1.84	0.59
1:Z:90:THR:HB	1:Z:94:ASP:O	2.03	0.59
1:b:90:THR:HB	1:b:94:ASP:O	2.03	0.59
1:c:313:ARG:HG3	1:e:415:ASN:HB3	1.85	0.59
1:c:418:ARG:NE	1:c:424:GLU:OE2	2.31	0.59
1:o:90:THR:HB	1:o:94:ASP:O	2.03	0.59
1:v:418:ARG:NE	1:v:424:GLU:OE2	2.31	0.59
1:C:90:THR:HB	1:C:94:ASP:O	2.03	0.59
1:C:313:ARG:HG3	1:M:415:ASN:HB3	1.84	0.59
1:X:90:THR:HB	1:X:94:ASP:O	2.03	0.59
1:d:90:THR:HB	1:d:94:ASP:O	2.03	0.59
1:M:90:THR:HB	1:M:94:ASP:O	2.03	0.59
1:T:90:THR:HB	1:T:94:ASP:O	2.03	0.59
1:a:90:THR:HB	1:a:94:ASP:O	2.03	0.59
1:e:220:ASN:ND2	1:e:334:ILE:H	1.99	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:90:THR:HB	1:h:94:ASP:O	2.03	0.59
1:i:90:THR:HB	1:i:94:ASP:O	2.03	0.59
1:l:418:ARG:NE	1:l:424:GLU:OE2	2.31	0.59
1:m:90:THR:HB	1:m:94:ASP:O	2.03	0.59
1:v:90:THR:HB	1:v:94:ASP:O	2.03	0.59
1:x:90:THR:HB	1:x:94:ASP:O	2.03	0.59
1:z:90:THR:HB	1:z:94:ASP:O	2.03	0.59
1:B:90:THR:HB	1:B:94:ASP:O	2.03	0.58
1:D:90:THR:HB	1:D:94:ASP:O	2.03	0.58
1:G:415:ASN:HB3	1:I:313:ARG:HG3	1.85	0.58
1:J:90:THR:HB	1:J:94:ASP:O	2.03	0.58
1:J:418:ARG:NE	1:J:424:GLU:OE2	2.31	0.58
1:U:90:THR:HB	1:U:94:ASP:O	2.03	0.58
1:W:90:THR:HB	1:W:94:ASP:O	2.03	0.58
1:3:90:THR:HB	1:3:94:ASP:O	2.03	0.58
1:5:90:THR:HB	1:5:94:ASP:O	2.03	0.58
1:a:313:ARG:HG3	1:b:415:ASN:HB3	1.84	0.58
1:g:90:THR:HB	1:g:94:ASP:O	2.03	0.58
1:n:415:ASN:HB3	1:o:313:ARG:HG3	1.85	0.58
1:D:405:ASP:OD2	1:D:407:THR:OG1	2.22	0.58
1:I:418:ARG:NE	1:I:424:GLU:OE2	2.31	0.58
1:K:90:THR:HB	1:K:94:ASP:O	2.03	0.58
1:L:90:THR:HB	1:L:94:ASP:O	2.03	0.58
1:T:405:ASP:OD2	1:T:407:THR:OG1	2.22	0.58
1:V:161:ASP:OD1	1:W:160:ASN:ND2	2.34	0.58
1:V:415:ASN:HB3	1:5:313:ARG:HG3	1.85	0.58
1:1:262:ASN:HD22	1:1:440:ASN:ND2	1.94	0.58
1:3:313:ARG:HG3	1:j:415:ASN:HB3	1.85	0.58
1:e:405:ASP:OD2	1:e:407:THR:OG1	2.22	0.58
1:g:405:ASP:OD2	1:g:407:THR:OG1	2.22	0.58
1:o:418:ARG:NE	1:o:424:GLU:OE2	2.31	0.58
1:q:405:ASP:OD2	1:q:407:THR:OG1	2.22	0.58
1:u:90:THR:HB	1:u:94:ASP:O	2.03	0.58
1:S:418:ARG:NE	1:S:424:GLU:OE2	2.31	0.58
1:Z:313:ARG:HG3	1:w:415:ASN:HB3	1.85	0.58
1:1:415:ASN:HB3	1:8:313:ARG:HG3	1.85	0.58
1:e:90:THR:HB	1:e:94:ASP:O	2.03	0.58
1:j:161:ASP:OD1	1:z:160:ASN:ND2	2.34	0.58
1:m:405:ASP:OD2	1:m:407:THR:OG1	2.22	0.58
1:u:405:ASP:OD2	1:u:407:THR:OG1	2.21	0.58
1:G:418:ARG:NE	1:G:424:GLU:OE2	2.31	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:313:ARG:HG3	1:Y:415:ASN:HB3	1.84	0.58
1:L:418:ARG:NE	1:L:424:GLU:OE2	2.31	0.58
1:X:405:ASP:OD2	1:X:407:THR:OG1	2.22	0.58
1:a:262:ASN:HD22	1:a:440:ASN:ND2	1.94	0.58
1:i:405:ASP:OD2	1:i:407:THR:OG1	2.22	0.58
1:u:418:ARG:NE	1:u:424:GLU:OE2	2.31	0.58
1:t:90:THR:HB	1:t:94:ASP:O	2.03	0.58
1:w:418:ARG:NE	1:w:424:GLU:OE2	2.31	0.58
1:y:313:ARG:HG3	1:7:415:ASN:HB3	1.84	0.58
1:7:90:THR:HB	1:7:94:ASP:O	2.03	0.58
1:E:220:ASN:ND2	1:E:334:ILE:H	1.99	0.58
1:F:90:THR:HB	1:F:94:ASP:O	2.03	0.58
1:O:90:THR:HB	1:O:94:ASP:O	2.03	0.58
1:P:405:ASP:OD2	1:P:407:THR:OG1	2.22	0.58
1:R:415:ASN:HB3	1:S:313:ARG:HG3	1.84	0.58
1:Y:90:THR:HB	1:Y:94:ASP:O	2.03	0.58
1:s:90:THR:HB	1:s:94:ASP:O	2.03	0.58
1:z:415:ASN:HB3	1:7:313:ARG:HG3	1.85	0.58
1:J:415:ASN:HB3	1:L:313:ARG:HG3	1.85	0.58
1:W:415:ASN:HB3	1:Y:313:ARG:HG3	1.85	0.58
1:k:415:ASN:HB3	1:l:313:ARG:HG3	1.85	0.58
1:t:313:ARG:HG3	1:v:415:ASN:HB3	1.85	0.58
1:t:418:ARG:NE	1:t:424:GLU:OE2	2.31	0.58
1:E:415:ASN:HB3	1:Q:313:ARG:HG3	1.85	0.58
1:O:415:ASN:HB3	1:g:313:ARG:HG3	1.85	0.58
1:f:90:THR:HB	1:f:94:ASP:O	2.03	0.58
1:k:313:ARG:HG3	1:m:415:ASN:HB3	1.84	0.58
1:o:405:ASP:OD2	1:o:407:THR:OG1	2.22	0.58
1:q:415:ASN:HB3	1:r:313:ARG:HG3	1.85	0.58
1:C:262:ASN:HD22	1:C:440:ASN:ND2	1.94	0.58
1:C:415:ASN:HB3	1:2:313:ARG:HG3	1.85	0.58
1:F:313:ARG:HG3	1:Q:415:ASN:HB3	1.84	0.58
1:I:405:ASP:OD2	1:I:407:THR:OG1	2.22	0.58
1:U:400:HIS:HA	1:U:443:GLN:HE21	1.69	0.58
1:W:405:ASP:OD2	1:W:407:THR:OG1	2.22	0.58
1:Y:400:HIS:HA	1:Y:443:GLN:HE21	1.69	0.58
1:Z:405:ASP:OD2	1:Z:407:THR:OG1	2.22	0.58
1:1:418:ARG:NE	1:1:424:GLU:OE2	2.31	0.58
1:6:313:ARG:HG3	1:a:415:ASN:HB3	1.85	0.58
1:d:415:ASN:HB3	1:e:313:ARG:HG3	1.85	0.58
1:q:220:ASN:ND2	1:q:334:ILE:H	1.99	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:z:405:ASP:OD2	1:z:407:THR:OG1	2.22	0.58
1:7:400:HIS:HA	1:7:443:GLN:HE21	1.69	0.58
1:D:313:ARG:HG3	1:P:415:ASN:HB3	1.85	0.58
1:R:313:ARG:HG3	1:U:415:ASN:HB3	1.84	0.58
1:1:220:ASN:ND2	1:1:334:ILE:H	1.99	0.58
1:l:400:HIS:HA	1:l:443:GLN:HE21	1.69	0.58
1:8:405:ASP:OD2	1:8:407:THR:OG1	2.22	0.58
1:D:108:PHE:CE1	1:D:506:VAL:HG21	2.40	0.57
1:M:313:ARG:HG3	1:2:415:ASN:HB3	1.85	0.57
1:S:400:HIS:HA	1:S:443:GLN:HE21	1.69	0.57
1:V:400:HIS:HA	1:V:443:GLN:HE21	1.69	0.57
1:X:400:HIS:HA	1:X:443:GLN:HE21	1.69	0.57
1:Z:400:HIS:HA	1:Z:443:GLN:HE21	1.69	0.57
1:6:415:ASN:HB3	1:b:313:ARG:HG3	1.85	0.57
1:a:400:HIS:HA	1:a:443:GLN:HE21	1.69	0.57
1:i:400:HIS:HA	1:i:443:GLN:HE21	1.69	0.57
1:m:400:HIS:HA	1:m:443:GLN:HE21	1.69	0.57
1:q:313:ARG:HG3	1:s:415:ASN:HB3	1.85	0.57
1:r:415:ASN:HB3	1:s:313:ARG:HG3	1.84	0.57
1:z:108:PHE:CE1	1:z:506:VAL:HG21	2.39	0.57
1:z:418:ARG:NE	1:z:424:GLU:OE2	2.31	0.57
1:8:400:HIS:HA	1:8:443:GLN:HE21	1.69	0.57
1:A:415:ASN:HB3	1:G:313:ARG:HG3	1.85	0.57
1:B:108:PHE:CE1	1:B:506:VAL:HG21	2.39	0.57
1:C:108:PHE:CE1	1:C:506:VAL:HG21	2.39	0.57
1:C:400:HIS:HA	1:C:443:GLN:HE21	1.69	0.57
1:G:400:HIS:HA	1:G:443:GLN:HE21	1.69	0.57
1:H:108:PHE:CE1	1:H:506:VAL:HG21	2.40	0.57
1:L:400:HIS:HA	1:L:443:GLN:HE21	1.69	0.57
1:N:285:ASN:OD1	1:N:286:ASN:N	2.38	0.57
1:W:108:PHE:CE1	1:W:506:VAL:HG21	2.40	0.57
1:1:405:ASP:OD2	1:1:407:THR:OG1	2.22	0.57
1:a:108:PHE:CE1	1:a:506:VAL:HG21	2.39	0.57
1:c:285:ASN:OD1	1:c:286:ASN:N	2.38	0.57
1:e:108:PHE:CE1	1:e:506:VAL:HG21	2.40	0.57
1:g:108:PHE:CE1	1:g:506:VAL:HG21	2.39	0.57
1:n:313:ARG:HG3	1:p:415:ASN:HB3	1.85	0.57
1:r:220:ASN:ND2	1:r:334:ILE:H	1.99	0.57
1:t:400:HIS:HA	1:t:443:GLN:HE21	1.69	0.57
1:w:220:ASN:ND2	1:w:334:ILE:H	1.99	0.57
1:y:108:PHE:CE1	1:y:506:VAL:HG21	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:313:ARG:HG3	1:F:415:ASN:HB3	1.85	0.57
1:F:400:HIS:HA	1:F:443:GLN:HE21	1.69	0.57
1:G:220:ASN:ND2	1:G:334:ILE:H	1.99	0.57
1:J:400:HIS:HA	1:J:443:GLN:HE21	1.69	0.57
1:M:285:ASN:OD1	1:M:286:ASN:N	2.38	0.57
1:Q:527:ARG:N	1:R:529:ASP:OD1	2.38	0.57
1:R:108:PHE:CE1	1:R:506:VAL:HG21	2.40	0.57
1:T:108:PHE:CE1	1:T:506:VAL:HG21	2.40	0.57
1:b:285:ASN:OD1	1:b:286:ASN:N	2.38	0.57
1:i:108:PHE:CE1	1:i:506:VAL:HG21	2.40	0.57
1:j:400:HIS:HA	1:j:443:GLN:HE21	1.69	0.57
1:k:108:PHE:CE1	1:k:506:VAL:HG21	2.40	0.57
1:k:400:HIS:HA	1:k:443:GLN:HE21	1.69	0.57
1:k:529:ASP:OD1	1:r:527:ARG:N	2.38	0.57
1:n:400:HIS:HA	1:n:443:GLN:HE21	1.69	0.57
1:s:400:HIS:HA	1:s:443:GLN:HE21	1.69	0.57
1:u:108:PHE:CE1	1:u:506:VAL:HG21	2.40	0.57
1:A:108:PHE:CE1	1:A:506:VAL:HG21	2.40	0.57
1:C:529:ASP:OD1	1:L:527:ARG:N	2.38	0.57
1:D:400:HIS:HA	1:D:443:GLN:HE21	1.69	0.57
1:L:285:ASN:OD1	1:L:286:ASN:N	2.38	0.57
1:Q:220:ASN:ND2	1:Q:334:ILE:H	1.99	0.57
1:R:400:HIS:HA	1:R:443:GLN:HE21	1.69	0.57
1:V:313:ARG:HG3	1:X:415:ASN:HB3	1.84	0.57
1:X:108:PHE:CE1	1:X:506:VAL:HG21	2.40	0.57
1:5:400:HIS:HA	1:5:443:GLN:HE21	1.69	0.57
1:6:262:ASN:HD22	1:6:440:ASN:ND2	1.94	0.57
1:a:529:ASP:OD1	1:t:527:ARG:N	2.38	0.57
1:h:285:ASN:OD1	1:h:286:ASN:N	2.38	0.57
1:i:415:ASN:HB3	1:j:313:ARG:HG3	1.84	0.57
1:k:285:ASN:OD1	1:k:286:ASN:N	2.38	0.57
1:n:220:ASN:ND2	1:n:334:ILE:H	1.99	0.57
1:n:405:ASP:OD2	1:n:407:THR:OG1	2.22	0.57
1:p:108:PHE:CE1	1:p:506:VAL:HG21	2.39	0.57
1:t:285:ASN:OD1	1:t:286:ASN:N	2.38	0.57
1:v:400:HIS:HA	1:v:443:GLN:HE21	1.69	0.57
1:w:405:ASP:OD2	1:w:407:THR:OG1	2.22	0.57
1:x:220:ASN:ND2	1:x:334:ILE:H	1.99	0.57
1:y:415:ASN:HB3	1:z:313:ARG:HG3	1.85	0.57
1:F:285:ASN:OD1	1:F:286:ASN:N	2.38	0.57
1:G:405:ASP:OD2	1:G:407:THR:OG1	2.22	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:285:ASN:OD1	1:R:286:ASN:N	2.38	0.57
1:S:527:ARG:N	1:T:529:ASP:OD1	2.37	0.57
1:T:418:ARG:NE	1:T:424:GLU:OE2	2.31	0.57
1:U:527:ARG:N	1:V:529:ASP:OD1	2.38	0.57
1:V:285:ASN:OD1	1:V:286:ASN:N	2.38	0.57
1:W:418:ARG:NE	1:W:424:GLU:OE2	2.31	0.57
1:2:262:ASN:HD22	1:2:440:ASN:ND2	1.94	0.57
1:2:400:HIS:HA	1:2:443:GLN:HE21	1.69	0.57
1:4:108:PHE:CE1	1:4:506:VAL:HG21	2.40	0.57
1:6:108:PHE:CE1	1:6:506:VAL:HG21	2.40	0.57
1:6:400:HIS:HA	1:6:443:GLN:HE21	1.69	0.57
1:e:400:HIS:HA	1:e:443:GLN:HE21	1.69	0.57
1:j:529:ASP:OD1	1:m:527:ARG:N	2.38	0.57
1:r:285:ASN:OD1	1:r:286:ASN:N	2.38	0.57
1:B:220:ASN:ND2	1:B:334:ILE:H	1.99	0.57
1:H:285:ASN:OD1	1:H:286:ASN:N	2.38	0.57
1:H:415:ASN:HB3	1:W:313:ARG:HG3	1.85	0.57
1:K:220:ASN:ND2	1:K:334:ILE:H	1.99	0.57
1:Q:285:ASN:OD1	1:Q:286:ASN:N	2.38	0.57
1:U:108:PHE:CE1	1:U:506:VAL:HG21	2.39	0.57
1:U:220:ASN:ND2	1:U:334:ILE:H	1.99	0.57
1:W:285:ASN:OD1	1:W:286:ASN:N	2.38	0.57
1:1:441:SER:O	1:1:560:LYS:NZ	2.38	0.57
1:2:90:THR:HB	1:2:94:ASP:O	2.03	0.57
1:2:108:PHE:CE1	1:2:506:VAL:HG21	2.40	0.57
1:3:400:HIS:HA	1:3:443:GLN:HE21	1.69	0.57
1:4:285:ASN:OD1	1:4:286:ASN:N	2.38	0.57
1:d:108:PHE:CE1	1:d:506:VAL:HG21	2.40	0.57
1:h:108:PHE:CE1	1:h:506:VAL:HG21	2.40	0.57
1:j:285:ASN:OD1	1:j:286:ASN:N	2.38	0.57
1:m:108:PHE:CE1	1:m:506:VAL:HG21	2.39	0.57
1:m:220:ASN:ND2	1:m:334:ILE:H	1.99	0.57
1:m:285:ASN:OD1	1:m:286:ASN:N	2.38	0.57
1:q:441:SER:O	1:q:560:LYS:NZ	2.38	0.57
1:s:285:ASN:OD1	1:s:286:ASN:N	2.38	0.57
1:t:441:SER:O	1:t:560:LYS:NZ	2.38	0.57
1:w:441:SER:O	1:w:560:LYS:NZ	2.38	0.57
1:y:285:ASN:OD1	1:y:286:ASN:N	2.38	0.57
1:C:441:SER:O	1:C:560:LYS:NZ	2.38	0.57
1:E:441:SER:O	1:E:560:LYS:NZ	2.38	0.57
1:E:529:ASP:OD1	1:P:527:ARG:N	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:441:SER:O	1:J:560:LYS:NZ	2.38	0.57
1:L:441:SER:O	1:L:560:LYS:NZ	2.38	0.57
1:O:285:ASN:OD1	1:O:286:ASN:N	2.38	0.57
1:P:108:PHE:CE1	1:P:506:VAL:HG21	2.40	0.57
1:Q:400:HIS:HA	1:Q:443:GLN:HE21	1.69	0.57
1:S:220:ASN:ND2	1:S:334:ILE:H	1.99	0.57
1:U:285:ASN:OD1	1:U:286:ASN:N	2.38	0.57
1:4:400:HIS:HA	1:4:443:GLN:HE21	1.69	0.57
1:6:405:ASP:OD2	1:6:407:THR:OG1	2.22	0.57
1:b:400:HIS:HA	1:b:443:GLN:HE21	1.69	0.57
1:h:400:HIS:HA	1:h:443:GLN:HE21	1.69	0.57
1:v:441:SER:O	1:v:560:LYS:NZ	2.38	0.57
1:w:108:PHE:CE1	1:w:506:VAL:HG21	2.40	0.57
1:x:108:PHE:CE1	1:x:506:VAL:HG21	2.39	0.57
1:z:285:ASN:OD1	1:z:286:ASN:N	2.38	0.57
1:B:415:ASN:HB3	1:J:313:ARG:HG3	1.84	0.57
1:G:108:PHE:CE1	1:G:506:VAL:HG21	2.39	0.57
1:H:220:ASN:ND2	1:H:334:ILE:H	1.99	0.57
1:I:220:ASN:ND2	1:I:334:ILE:H	1.99	0.57
1:J:108:PHE:CE1	1:J:506:VAL:HG21	2.39	0.57
1:J:285:ASN:OD1	1:J:286:ASN:N	2.38	0.57
1:K:441:SER:O	1:K:560:LYS:NZ	2.38	0.57
1:M:400:HIS:HA	1:M:443:GLN:HE21	1.69	0.57
1:S:108:PHE:CE1	1:S:506:VAL:HG21	2.40	0.57
1:U:441:SER:O	1:U:560:LYS:NZ	2.38	0.57
1:1:108:PHE:CE1	1:1:506:VAL:HG21	2.40	0.57
1:2:405:ASP:OD2	1:2:407:THR:OG1	2.22	0.57
1:2:418:ARG:NE	1:2:424:GLU:OE2	2.31	0.57
1:3:108:PHE:CE1	1:3:506:VAL:HG21	2.40	0.57
1:6:90:THR:HB	1:6:94:ASP:O	2.03	0.57
1:6:418:ARG:NE	1:6:424:GLU:OE2	2.31	0.57
1:a:441:SER:O	1:a:560:LYS:NZ	2.38	0.57
1:c:405:ASP:OD2	1:c:407:THR:OG1	2.22	0.57
1:d:527:ARG:N	1:q:529:ASP:OD1	2.38	0.57
1:f:285:ASN:OD1	1:f:286:ASN:N	2.38	0.57
1:g:418:ARG:NE	1:g:424:GLU:OE2	2.31	0.57
1:n:285:ASN:OD1	1:n:286:ASN:N	2.38	0.57
1:r:400:HIS:HA	1:r:443:GLN:HE21	1.69	0.57
1:u:220:ASN:ND2	1:u:334:ILE:H	1.99	0.57
1:x:441:SER:O	1:x:560:LYS:NZ	2.38	0.57
1:y:220:ASN:ND2	1:y:334:ILE:H	1.99	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:418:ARG:NE	1:B:424:GLU:OE2	2.31	0.57
1:G:285:ASN:OD1	1:G:286:ASN:N	2.38	0.57
1:J:529:ASP:OD1	1:K:527:ARG:N	2.38	0.57
1:K:108:PHE:CE1	1:K:506:VAL:HG21	2.40	0.57
1:M:394:THR:OG1	1:2:288:THR:O	2.22	0.57
1:N:108:PHE:CE1	1:N:506:VAL:HG21	2.39	0.57
1:O:313:ARG:HG3	1:h:415:ASN:HB3	1.85	0.57
1:S:529:ASP:OD1	1:T:527:ARG:N	2.37	0.57
1:U:529:ASP:OD1	1:V:527:ARG:N	2.38	0.57
1:3:441:SER:O	1:3:560:LYS:NZ	2.38	0.57
1:4:288:THR:O	1:f:394:THR:OG1	2.22	0.57
1:5:108:PHE:CE1	1:5:506:VAL:HG21	2.40	0.57
1:5:441:SER:O	1:5:560:LYS:NZ	2.38	0.57
1:5:529:ASP:OD1	1:6:527:ARG:N	2.38	0.57
1:d:400:HIS:HA	1:d:443:GLN:HE21	1.69	0.57
1:j:527:ARG:N	1:m:529:ASP:OD1	2.38	0.57
1:l:108:PHE:CE1	1:l:506:VAL:HG21	2.40	0.57
1:m:441:SER:O	1:m:560:LYS:NZ	2.38	0.57
1:n:108:PHE:CE1	1:n:506:VAL:HG21	2.39	0.57
1:v:527:ARG:N	1:x:529:ASP:OD1	2.38	0.57
1:v:529:ASP:OD1	1:x:527:ARG:N	2.38	0.57
1:y:405:ASP:OD2	1:y:407:THR:OG1	2.22	0.57
1:7:108:PHE:CE1	1:7:506:VAL:HG21	2.39	0.57
1:C:527:ARG:N	1:L:529:ASP:OD1	2.38	0.57
1:D:527:ARG:N	1:M:529:ASP:OD1	2.38	0.57
1:E:108:PHE:CE1	1:E:506:VAL:HG21	2.39	0.57
1:E:285:ASN:OD1	1:E:286:ASN:N	2.38	0.57
1:J:527:ARG:N	1:K:529:ASP:OD1	2.38	0.57
1:K:400:HIS:HA	1:K:443:GLN:HE21	1.69	0.57
1:O:394:THR:OG1	1:h:288:THR:O	2.22	0.57
1:P:400:HIS:HA	1:P:443:GLN:HE21	1.69	0.57
1:S:285:ASN:OD1	1:S:286:ASN:N	2.38	0.57
1:Y:108:PHE:CE1	1:Y:506:VAL:HG21	2.39	0.57
1:Y:441:SER:O	1:Y:560:LYS:NZ	2.38	0.57
1:3:285:ASN:OD1	1:3:286:ASN:N	2.38	0.57
1:4:415:ASN:HB3	1:f:313:ARG:HG3	1.85	0.57
1:5:527:ARG:N	1:6:529:ASP:OD1	2.38	0.57
1:c:108:PHE:CE1	1:c:506:VAL:HG21	2.39	0.57
1:o:220:ASN:ND2	1:o:334:ILE:H	1.99	0.57
1:q:285:ASN:OD1	1:q:286:ASN:N	2.38	0.57
1:v:285:ASN:OD1	1:v:286:ASN:N	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:7:441:SER:O	1:7:560:LYS:NZ	2.38	0.57
1:H:405:ASP:OD2	1:H:407:THR:OG1	2.21	0.56
1:K:285:ASN:OD1	1:K:286:ASN:N	2.38	0.56
1:N:405:ASP:OD2	1:N:407:THR:OG1	2.22	0.56
1:T:285:ASN:OD1	1:T:286:ASN:N	2.38	0.56
1:T:400:HIS:HA	1:T:443:GLN:HE21	1.69	0.56
1:T:441:SER:O	1:T:560:LYS:NZ	2.38	0.56
1:U:418:ARG:NE	1:U:424:GLU:OE2	2.31	0.56
1:W:529:ASP:OD1	1:X:527:ARG:N	2.38	0.56
1:2:527:ARG:N	1:3:529:ASP:OD1	2.38	0.56
1:a:285:ASN:OD1	1:a:286:ASN:N	2.38	0.56
1:a:418:ARG:NE	1:a:424:GLU:OE2	2.31	0.56
1:a:527:ARG:N	1:t:529:ASP:OD1	2.38	0.56
1:b:529:ASP:OD1	1:e:527:ARG:N	2.38	0.56
1:d:285:ASN:OD1	1:d:286:ASN:N	2.38	0.56
1:d:441:SER:O	1:d:560:LYS:NZ	2.38	0.56
1:e:285:ASN:OD1	1:e:286:ASN:N	2.38	0.56
1:g:285:ASN:OD1	1:g:286:ASN:N	2.38	0.56
1:g:441:SER:O	1:g:560:LYS:NZ	2.38	0.56
1:i:527:ARG:N	1:z:529:ASP:OD1	2.38	0.56
1:l:220:ASN:ND2	1:l:334:ILE:H	1.99	0.56
1:l:285:ASN:OD1	1:l:286:ASN:N	2.38	0.56
1:n:529:ASP:OD1	1:y:527:ARG:N	2.38	0.56
1:u:415:ASN:HB3	1:v:313:ARG:HG3	1.84	0.56
1:v:108:PHE:CE1	1:v:506:VAL:HG21	2.40	0.56
1:x:285:ASN:OD1	1:x:286:ASN:N	2.38	0.56
1:7:418:ARG:NE	1:7:424:GLU:OE2	2.31	0.56
1:D:285:ASN:OD1	1:D:286:ASN:N	2.38	0.56
1:F:220:ASN:ND2	1:F:334:ILE:H	1.99	0.56
1:G:529:ASP:OD1	1:H:527:ARG:N	2.38	0.56
1:P:285:ASN:OD1	1:P:286:ASN:N	2.38	0.56
1:P:441:SER:O	1:P:560:LYS:NZ	2.38	0.56
1:Y:418:ARG:NE	1:Y:424:GLU:OE2	2.31	0.56
1:Y:527:ARG:N	1:Z:529:ASP:OD1	2.38	0.56
1:2:529:ASP:OD1	1:3:527:ARG:N	2.38	0.56
1:5:285:ASN:OD1	1:5:286:ASN:N	2.38	0.56
1:g:400:HIS:HA	1:g:443:GLN:HE21	1.69	0.56
1:q:108:PHE:CE1	1:q:506:VAL:HG21	2.39	0.56
1:u:400:HIS:HA	1:u:443:GLN:HE21	1.69	0.56
1:x:400:HIS:HA	1:x:443:GLN:HE21	1.69	0.56
1:7:527:ARG:N	1:8:529:ASP:OD1	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:8:108:PHE:CE1	1:8:506:VAL:HG21	2.40	0.56
1:A:441:SER:O	1:A:560:LYS:NZ	2.38	0.56
1:B:400:HIS:HA	1:B:443:GLN:HE21	1.69	0.56
1:B:527:ARG:N	1:I:529:ASP:OD1	2.38	0.56
1:C:285:ASN:OD1	1:C:286:ASN:N	2.38	0.56
1:E:527:ARG:N	1:P:529:ASP:OD1	2.38	0.56
1:F:108:PHE:CE1	1:F:506:VAL:HG21	2.39	0.56
1:H:441:SER:O	1:H:560:LYS:NZ	2.38	0.56
1:M:108:PHE:CE1	1:M:506:VAL:HG21	2.40	0.56
1:N:441:SER:O	1:N:560:LYS:NZ	2.38	0.56
1:N:529:ASP:OD1	1:O:527:ARG:N	2.38	0.56
1:Q:441:SER:O	1:Q:560:LYS:NZ	2.38	0.56
1:T:313:ARG:HG3	1:f:415:ASN:HB3	1.86	0.56
1:V:108:PHE:CE1	1:V:506:VAL:HG21	2.39	0.56
1:V:441:SER:O	1:V:560:LYS:NZ	2.38	0.56
1:X:441:SER:O	1:X:560:LYS:NZ	2.38	0.56
1:Z:108:PHE:CE1	1:Z:506:VAL:HG21	2.40	0.56
1:1:400:HIS:HA	1:1:443:GLN:HE21	1.69	0.56
1:1:527:ARG:N	1:w:529:ASP:OD1	2.38	0.56
1:1:529:ASP:OD1	1:w:527:ARG:N	2.38	0.56
1:4:441:SER:O	1:4:560:LYS:NZ	2.38	0.56
1:4:527:ARG:N	1:h:529:ASP:OD1	2.38	0.56
1:4:529:ASP:OD1	1:h:527:ARG:N	2.38	0.56
1:b:108:PHE:CE1	1:b:506:VAL:HG21	2.40	0.56
1:c:441:SER:O	1:c:560:LYS:NZ	2.38	0.56
1:c:529:ASP:OD1	1:f:527:ARG:N	2.38	0.56
1:g:529:ASP:OD1	1:l:527:ARG:N	2.38	0.56
1:h:441:SER:O	1:h:560:LYS:NZ	2.38	0.56
1:i:285:ASN:OD1	1:i:286:ASN:N	2.38	0.56
1:i:441:SER:O	1:i:560:LYS:NZ	2.38	0.56
1:k:527:ARG:N	1:r:529:ASP:OD1	2.38	0.56
1:m:418:ARG:NE	1:m:424:GLU:OE2	2.31	0.56
1:o:529:ASP:OD1	1:u:527:ARG:N	2.38	0.56
1:r:441:SER:O	1:r:560:LYS:NZ	2.38	0.56
1:s:108:PHE:CE1	1:s:506:VAL:HG21	2.39	0.56
1:t:394:THR:OG1	1:v:288:THR:O	2.22	0.56
1:t:405:ASP:OD2	1:t:407:THR:OG1	2.22	0.56
1:w:285:ASN:OD1	1:w:286:ASN:N	2.38	0.56
1:w:400:HIS:HA	1:w:443:GLN:HE21	1.69	0.56
1:8:285:ASN:OD1	1:8:286:ASN:N	2.38	0.56
1:B:285:ASN:OD1	1:B:286:ASN:N	2.38	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:I:285:ASN:OD1	1:I:286:ASN:N	2.38	0.56
1:L:405:ASP:OD2	1:L:407:THR:OG1	2.22	0.56
1:N:527:ARG:N	1:O:529:ASP:OD1	2.38	0.56
1:O:108:PHE:CE1	1:O:506:VAL:HG21	2.40	0.56
1:1:285:ASN:OD1	1:1:286:ASN:N	2.38	0.56
1:c:527:ARG:N	1:f:529:ASP:OD1	2.38	0.56
1:d:529:ASP:OD1	1:q:527:ARG:N	2.38	0.56
1:f:108:PHE:CE1	1:f:506:VAL:HG21	2.39	0.56
1:j:108:PHE:CE1	1:j:506:VAL:HG21	2.40	0.56
1:j:441:SER:O	1:j:560:LYS:NZ	2.38	0.56
1:o:285:ASN:OD1	1:o:286:ASN:N	2.38	0.56
1:q:400:HIS:HA	1:q:443:GLN:HE21	1.69	0.56
1:u:285:ASN:OD1	1:u:286:ASN:N	2.38	0.56
1:u:288:THR:O	1:v:394:THR:OG1	2.22	0.56
1:x:405:ASP:OD2	1:x:407:THR:OG1	2.22	0.56
1:y:400:HIS:HA	1:y:443:GLN:HE21	1.69	0.56
1:y:441:SER:O	1:y:560:LYS:NZ	2.38	0.56
1:A:285:ASN:OD1	1:A:286:ASN:N	2.38	0.56
1:A:527:ARG:N	1:F:529:ASP:OD1	2.39	0.56
1:B:441:SER:O	1:B:560:LYS:NZ	2.38	0.56
1:C:418:ARG:NE	1:C:424:GLU:OE2	2.31	0.56
1:E:394:THR:OG1	1:F:288:THR:O	2.22	0.56
1:E:400:HIS:HA	1:E:443:GLN:HE21	1.69	0.56
1:L:108:PHE:CE1	1:L:506:VAL:HG21	2.40	0.56
1:N:400:HIS:HA	1:N:443:GLN:HE21	1.69	0.56
1:Q:529:ASP:OD1	1:R:527:ARG:N	2.38	0.56
1:V:405:ASP:OD2	1:V:407:THR:OG1	2.22	0.56
1:W:527:ARG:N	1:X:529:ASP:OD1	2.38	0.56
1:X:285:ASN:OD1	1:X:286:ASN:N	2.38	0.56
1:Z:285:ASN:OD1	1:Z:286:ASN:N	2.38	0.56
1:c:400:HIS:HA	1:c:443:GLN:HE21	1.69	0.56
1:k:441:SER:O	1:k:560:LYS:NZ	2.38	0.56
1:o:527:ARG:N	1:u:529:ASP:OD1	2.38	0.56
1:p:285:ASN:OD1	1:p:286:ASN:N	2.38	0.56
1:p:405:ASP:OD2	1:p:407:THR:OG1	2.22	0.56
1:p:441:SER:O	1:p:560:LYS:NZ	2.38	0.56
1:q:394:THR:OG1	1:s:288:THR:O	2.22	0.56
1:s:220:ASN:ND2	1:s:334:ILE:H	1.99	0.56
1:s:441:SER:O	1:s:560:LYS:NZ	2.38	0.56
1:t:108:PHE:CE1	1:t:506:VAL:HG21	2.39	0.56
1:A:400:HIS:HA	1:A:443:GLN:HE21	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:288:THR:O	1:J:394:THR:OG1	2.22	0.56
1:B:529:ASP:OD1	1:I:527:ARG:N	2.38	0.56
1:D:529:ASP:OD1	1:M:527:ARG:N	2.38	0.56
1:H:400:HIS:HA	1:H:443:GLN:HE21	1.69	0.56
1:I:108:PHE:CE1	1:I:506:VAL:HG21	2.40	0.56
1:O:288:THR:O	1:g:394:THR:OG1	2.22	0.56
1:O:400:HIS:HA	1:O:443:GLN:HE21	1.69	0.56
1:R:441:SER:O	1:R:560:LYS:NZ	2.38	0.56
1:W:441:SER:O	1:W:560:LYS:NZ	2.38	0.56
1:b:527:ARG:N	1:e:529:ASP:OD1	2.38	0.56
1:b:538:ASN:H	1:e:523:ARG:HH21	1.54	0.56
1:g:527:ARG:N	1:l:529:ASP:OD1	2.38	0.56
1:i:529:ASP:OD1	1:z:527:ARG:N	2.38	0.56
1:p:400:HIS:HA	1:p:443:GLN:HE21	1.69	0.56
1:p:527:ARG:N	1:s:529:ASP:OD1	2.39	0.56
1:r:108:PHE:CE1	1:r:506:VAL:HG21	2.40	0.56
1:u:441:SER:O	1:u:560:LYS:NZ	2.38	0.56
1:D:523:ARG:HH21	1:M:538:ASN:H	1.54	0.56
1:F:441:SER:O	1:F:560:LYS:NZ	2.38	0.56
1:G:441:SER:O	1:G:560:LYS:NZ	2.38	0.56
1:G:527:ARG:N	1:H:529:ASP:OD1	2.38	0.56
1:H:394:THR:OG1	1:Y:288:THR:O	2.23	0.56
1:J:538:ASN:H	1:K:523:ARG:HH21	1.54	0.56
1:Q:108:PHE:CE1	1:Q:506:VAL:HG21	2.40	0.56
1:S:67:GLN:NE2	1:S:69:ARG:HH12	2.04	0.56
1:S:441:SER:O	1:S:560:LYS:NZ	2.38	0.56
1:W:400:HIS:HA	1:W:443:GLN:HE21	1.69	0.56
1:Y:529:ASP:OD1	1:Z:527:ARG:N	2.38	0.56
1:2:285:ASN:OD1	1:2:286:ASN:N	2.38	0.56
1:l:67:GLN:NE2	1:l:69:ARG:HH12	2.04	0.56
1:o:108:PHE:CE1	1:o:506:VAL:HG21	2.40	0.56
1:o:400:HIS:HA	1:o:443:GLN:HE21	1.69	0.56
1:v:538:ASN:H	1:x:523:ARG:HH21	1.54	0.56
1:z:441:SER:O	1:z:560:LYS:NZ	2.38	0.56
1:7:529:ASP:OD1	1:8:527:ARG:N	2.38	0.56
1:A:405:ASP:OD2	1:A:407:THR:OG1	2.22	0.56
1:E:523:ARG:HH21	1:P:538:ASN:H	1.54	0.56
1:N:67:GLN:NE2	1:N:69:ARG:HH12	2.04	0.56
1:O:441:SER:O	1:O:560:LYS:NZ	2.38	0.56
1:S:538:ASN:H	1:T:523:ARG:HH21	1.54	0.56
1:U:538:ASN:H	1:V:523:ARG:HH21	1.54	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Z:441:SER:O	1:Z:560:LYS:NZ	2.38	0.56
1:4:67:GLN:NE2	1:4:69:ARG:HH12	2.04	0.56
1:6:285:ASN:OD1	1:6:286:ASN:N	2.38	0.56
1:d:538:ASN:H	1:q:523:ARG:HH21	1.54	0.56
1:f:441:SER:O	1:f:560:LYS:NZ	2.38	0.56
1:i:220:ASN:ND2	1:i:334:ILE:H	1.99	0.56
1:j:523:ARG:HH21	1:m:538:ASN:H	1.54	0.56
1:l:441:SER:O	1:l:560:LYS:NZ	2.38	0.56
1:n:441:SER:O	1:n:560:LYS:NZ	2.38	0.56
1:o:441:SER:O	1:o:560:LYS:NZ	2.38	0.56
1:G:67:GLN:NE2	1:G:69:ARG:HH12	2.04	0.56
1:I:400:HIS:HA	1:I:443:GLN:HE21	1.69	0.56
1:I:441:SER:O	1:I:560:LYS:NZ	2.38	0.56
1:Q:523:ARG:HH21	1:R:538:ASN:H	1.54	0.56
1:T:316:ALA:HA	1:f:282:ARG:HD3	1.88	0.56
1:U:523:ARG:HH21	1:V:538:ASN:H	1.54	0.56
1:c:67:GLN:NE2	1:c:69:ARG:HH12	2.04	0.56
1:f:400:HIS:HA	1:f:443:GLN:HE21	1.69	0.56
1:h:67:GLN:NE2	1:h:69:ARG:HH12	2.04	0.56
1:n:67:GLN:NE2	1:n:69:ARG:HH12	2.04	0.56
1:n:527:ARG:N	1:y:529:ASP:OD1	2.38	0.56
1:y:394:THR:OG1	1:7:288:THR:O	2.23	0.56
1:8:441:SER:O	1:8:560:LYS:NZ	2.38	0.56
1:C:67:GLN:NE2	1:C:69:ARG:HH12	2.04	0.56
1:C:405:ASP:OD2	1:C:407:THR:OG1	2.22	0.56
1:G:523:ARG:HH21	1:H:538:ASN:H	1.54	0.56
1:G:538:ASN:H	1:H:523:ARG:HH21	1.54	0.56
1:H:288:THR:O	1:W:394:THR:OG1	2.22	0.56
1:a:67:GLN:NE2	1:a:69:ARG:HH12	2.04	0.56
1:j:418:ARG:NE	1:j:424:GLU:OE2	2.31	0.56
1:k:538:ASN:H	1:r:523:ARG:HH21	1.54	0.56
1:n:523:ARG:HH21	1:y:538:ASN:H	1.54	0.56
1:w:67:GLN:NE2	1:w:69:ARG:HH12	2.04	0.56
1:7:285:ASN:OD1	1:7:286:ASN:N	2.38	0.56
1:X:220:ASN:ND2	1:X:334:ILE:H	1.99	0.55
1:Y:285:ASN:OD1	1:Y:286:ASN:N	2.38	0.55
1:1:67:GLN:NE2	1:1:69:ARG:HH12	2.04	0.55
1:g:523:ARG:HH21	1:l:538:ASN:H	1.54	0.55
1:j:538:ASN:H	1:m:523:ARG:HH21	1.54	0.55
1:n:538:ASN:H	1:y:523:ARG:HH21	1.54	0.55
1:p:529:ASP:OD1	1:s:527:ARG:N	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:v:67:GLN:NE2	1:v:69:ARG:HH12	2.04	0.55
1:z:400:HIS:HA	1:z:443:GLN:HE21	1.69	0.55
1:A:529:ASP:OD1	1:F:527:ARG:N	2.39	0.55
1:D:441:SER:O	1:D:560:LYS:NZ	2.38	0.55
1:D:538:ASN:H	1:M:523:ARG:HH21	1.55	0.55
1:F:405:ASP:OD2	1:F:407:THR:OG1	2.22	0.55
1:H:67:GLN:NE2	1:H:69:ARG:HH12	2.04	0.55
1:J:67:GLN:NE2	1:J:69:ARG:HH12	2.04	0.55
1:K:377:ASP:O	1:K:381:THR:OG1	2.19	0.55
1:O:405:ASP:OD2	1:O:407:THR:OG1	2.22	0.55
1:P:67:GLN:NE2	1:P:69:ARG:HH12	2.04	0.55
1:6:441:SER:O	1:6:560:LYS:NZ	2.38	0.55
1:a:405:ASP:OD2	1:a:407:THR:OG1	2.22	0.55
1:b:441:SER:O	1:b:560:LYS:NZ	2.38	0.55
1:b:523:ARG:HH21	1:e:538:ASN:H	1.55	0.55
1:d:67:GLN:NE2	1:d:69:ARG:HH12	2.04	0.55
1:e:441:SER:O	1:e:560:LYS:NZ	2.38	0.55
1:k:405:ASP:OD2	1:k:407:THR:OG1	2.21	0.55
1:r:67:GLN:NE2	1:r:69:ARG:HH12	2.04	0.55
1:s:405:ASP:OD2	1:s:407:THR:OG1	2.22	0.55
1:w:394:THR:OG1	1:x:288:THR:O	2.22	0.55
1:K:288:THR:O	1:1:394:THR:OG1	2.22	0.55
1:Q:67:GLN:NE2	1:Q:69:ARG:HH12	2.04	0.55
1:b:67:GLN:NE2	1:b:69:ARG:HH12	2.04	0.55
1:m:67:GLN:NE2	1:m:69:ARG:HH12	2.04	0.55
1:y:67:GLN:NE2	1:y:69:ARG:HH12	2.04	0.55
1:C:523:ARG:HH21	1:L:538:ASN:H	1.54	0.55
1:D:67:GLN:NE2	1:D:69:ARG:HH12	2.04	0.55
1:M:67:GLN:NE2	1:M:69:ARG:HH12	2.04	0.55
1:M:441:SER:O	1:M:560:LYS:NZ	2.38	0.55
1:O:136:ARG:HH11	1:O:138:ARG:HH12	1.55	0.55
1:T:282:ARG:HD3	1:4:316:ALA:HA	1.88	0.55
1:U:67:GLN:NE2	1:U:69:ARG:HH12	2.04	0.55
1:2:441:SER:O	1:2:560:LYS:NZ	2.38	0.55
1:2:523:ARG:HH21	1:3:538:ASN:H	1.55	0.55
1:a:523:ARG:HH21	1:t:538:ASN:H	1.54	0.55
1:e:67:GLN:NE2	1:e:69:ARG:HH12	2.04	0.55
1:f:405:ASP:OD2	1:f:407:THR:OG1	2.22	0.55
1:x:377:ASP:O	1:x:381:THR:OG1	2.19	0.55
1:E:136:ARG:HH11	1:E:138:ARG:HH12	1.55	0.55
1:S:136:ARG:HH11	1:S:138:ARG:HH12	1.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:67:GLN:NE2	1:X:69:ARG:HH12	2.04	0.55
1:5:538:ASN:H	1:6:523:ARG:HH21	1.55	0.55
1:f:136:ARG:HH11	1:f:138:ARG:HH12	1.55	0.55
1:q:136:ARG:HH11	1:q:138:ARG:HH12	1.55	0.55
1:s:67:GLN:NE2	1:s:69:ARG:HH12	2.04	0.55
1:F:67:GLN:NE2	1:F:69:ARG:HH12	2.04	0.55
1:W:523:ARG:HH21	1:X:538:ASN:H	1.54	0.55
1:a:538:ASN:H	1:t:523:ARG:HH21	1.54	0.55
1:h:405:ASP:OD2	1:h:407:THR:OG1	2.22	0.55
1:i:538:ASN:H	1:z:523:ARG:HH21	1.54	0.55
1:o:136:ARG:HH11	1:o:138:ARG:HH12	1.55	0.55
1:r:136:ARG:HH11	1:r:138:ARG:HH12	1.55	0.55
1:C:538:ASN:H	1:L:523:ARG:HH21	1.54	0.55
1:I:136:ARG:HH11	1:I:138:ARG:HH12	1.55	0.55
1:Q:136:ARG:HH11	1:Q:138:ARG:HH12	1.55	0.55
1:1:288:THR:O	1:8:394:THR:OG1	2.22	0.55
1:l:136:ARG:HH11	1:l:138:ARG:HH12	1.55	0.55
1:n:418:ARG:NE	1:n:424:GLU:OE2	2.31	0.55
1:8:136:ARG:HH11	1:8:138:ARG:HH12	1.55	0.55
1:A:136:ARG:HH11	1:A:138:ARG:HH12	1.55	0.55
1:M:377:ASP:O	1:M:381:THR:OG1	2.19	0.55
1:R:67:GLN:NE2	1:R:69:ARG:HH12	2.04	0.55
1:S:523:ARG:HH21	1:T:538:ASN:H	1.55	0.55
1:Z:136:ARG:HH11	1:Z:138:ARG:HH12	1.55	0.55
1:4:405:ASP:OD2	1:4:407:THR:OG1	2.22	0.55
1:4:523:ARG:HH21	1:h:538:ASN:H	1.55	0.55
1:b:405:ASP:OD2	1:b:407:THR:OG1	2.22	0.55
1:g:377:ASP:O	1:g:381:THR:OG1	2.19	0.55
1:i:67:GLN:NE2	1:i:69:ARG:HH12	2.04	0.55
1:k:67:GLN:NE2	1:k:69:ARG:HH12	2.04	0.55
1:r:405:ASP:OD2	1:r:407:THR:OG1	2.22	0.55
1:u:377:ASP:O	1:u:381:THR:OG1	2.19	0.55
1:A:67:GLN:NE2	1:A:69:ARG:HH12	2.04	0.55
1:K:67:GLN:NE2	1:K:69:ARG:HH12	2.04	0.55
1:W:67:GLN:NE2	1:W:69:ARG:HH12	2.04	0.55
1:4:538:ASN:H	1:h:523:ARG:HH21	1.55	0.55
1:g:538:ASN:H	1:l:523:ARG:HH21	1.54	0.55
1:p:136:ARG:HH11	1:p:138:ARG:HH12	1.55	0.55
1:u:67:GLN:NE2	1:u:69:ARG:HH12	2.04	0.55
1:z:67:GLN:NE2	1:z:69:ARG:HH12	2.04	0.55
1:B:67:GLN:NE2	1:B:69:ARG:HH12	2.04	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:405:ASP:OD2	1:Q:407:THR:OG1	2.22	0.55
1:W:136:ARG:HH11	1:W:138:ARG:HH12	1.55	0.55
1:Z:394:THR:OG1	1:w:288:THR:O	2.22	0.55
1:3:67:GLN:NE2	1:3:69:ARG:HH12	2.04	0.55
1:4:136:ARG:HH11	1:4:138:ARG:HH12	1.55	0.55
1:b:377:ASP:O	1:b:381:THR:OG1	2.19	0.55
1:c:538:ASN:H	1:f:523:ARG:HH21	1.54	0.55
1:h:136:ARG:HH11	1:h:138:ARG:HH12	1.55	0.55
1:j:377:ASP:O	1:j:381:THR:OG1	2.19	0.55
1:p:67:GLN:NE2	1:p:69:ARG:HH12	2.04	0.55
1:x:136:ARG:HH11	1:x:138:ARG:HH12	1.55	0.55
1:B:377:ASP:O	1:B:381:THR:OG1	2.19	0.54
1:K:136:ARG:HH11	1:K:138:ARG:HH12	1.55	0.54
1:M:405:ASP:OD2	1:M:407:THR:OG1	2.22	0.54
1:N:538:ASN:H	1:O:523:ARG:HH21	1.54	0.54
1:V:67:GLN:NE2	1:V:69:ARG:HH12	2.04	0.54
1:W:538:ASN:H	1:X:523:ARG:HH21	1.55	0.54
1:3:405:ASP:OD2	1:3:407:THR:OG1	2.22	0.54
1:i:523:ARG:HH21	1:z:538:ASN:H	1.55	0.54
1:k:418:ARG:NE	1:k:424:GLU:OE2	2.31	0.54
1:o:523:ARG:HH21	1:u:538:ASN:H	1.54	0.54
1:x:67:GLN:NE2	1:x:69:ARG:HH12	2.04	0.54
1:z:136:ARG:HH11	1:z:138:ARG:HH12	1.55	0.54
1:B:538:ASN:H	1:I:523:ARG:HH21	1.54	0.54
1:E:67:GLN:NE2	1:E:69:ARG:HH12	2.04	0.54
1:F:136:ARG:HH11	1:F:138:ARG:HH12	1.55	0.54
1:I:67:GLN:NE2	1:I:69:ARG:HH12	2.04	0.54
1:5:67:GLN:NE2	1:5:69:ARG:HH12	2.04	0.54
1:5:405:ASP:OD2	1:5:407:THR:OG1	2.22	0.54
1:d:288:THR:O	1:e:394:THR:OG1	2.22	0.54
1:q:67:GLN:NE2	1:q:69:ARG:HH12	2.04	0.54
1:u:174:HIS:HD2	1:u:474:HIS:CD2	2.25	0.54
1:B:174:HIS:HD2	1:B:474:HIS:CD2	2.25	0.54
1:V:136:ARG:HH11	1:V:138:ARG:HH12	1.55	0.54
1:W:288:THR:O	1:Y:394:THR:OG1	2.22	0.54
1:5:136:ARG:HH11	1:5:138:ARG:HH12	1.55	0.54
1:j:67:GLN:NE2	1:j:69:ARG:HH12	2.04	0.54
1:j:136:ARG:HH11	1:j:138:ARG:HH12	1.55	0.54
1:n:136:ARG:HH11	1:n:138:ARG:HH12	1.55	0.54
1:o:67:GLN:NE2	1:o:69:ARG:HH12	2.04	0.54
1:p:538:ASN:H	1:s:523:ARG:HH21	1.55	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:8:67:GLN:NE2	1:8:69:ARG:HH12	2.04	0.54
1:G:136:ARG:HH11	1:G:138:ARG:HH12	1.55	0.54
1:N:523:ARG:HH21	1:O:538:ASN:H	1.54	0.54
1:R:418:ARG:NE	1:R:424:GLU:OE2	2.31	0.54
1:V:377:ASP:O	1:V:381:THR:OG1	2.19	0.54
1:Z:67:GLN:NE2	1:Z:69:ARG:HH12	2.04	0.54
1:3:136:ARG:HH11	1:3:138:ARG:HH12	1.55	0.54
1:f:67:GLN:NE2	1:f:69:ARG:HH12	2.04	0.54
1:s:136:ARG:HH11	1:s:138:ARG:HH12	1.55	0.54
1:A:538:ASN:H	1:F:523:ARG:HH21	1.55	0.54
1:B:282:ARG:HD3	1:J:316:ALA:HA	1.90	0.54
1:C:394:THR:OG1	1:M:288:THR:O	2.22	0.54
1:J:136:ARG:HH11	1:J:138:ARG:HH12	1.55	0.54
1:U:136:ARG:HH11	1:U:138:ARG:HH12	1.55	0.54
1:W:181:HIS:CE1	1:W:183:TRP:HB2	2.43	0.54
1:X:316:ALA:HA	1:5:282:ARG:HD3	1.90	0.54
1:3:282:ARG:HD3	1:i:316:ALA:HA	1.90	0.54
1:k:523:ARG:HH21	1:r:538:ASN:H	1.55	0.54
1:q:377:ASP:O	1:q:381:THR:OG1	2.19	0.54
1:v:136:ARG:HH11	1:v:138:ARG:HH12	1.55	0.54
1:y:136:ARG:HH11	1:y:138:ARG:HH12	1.55	0.54
1:z:288:THR:O	1:7:394:THR:OG1	2.22	0.54
1:E:174:HIS:HD2	1:E:474:HIS:CD2	2.25	0.54
1:L:181:HIS:CE1	1:L:183:TRP:HB2	2.43	0.54
1:Y:67:GLN:NE2	1:Y:69:ARG:HH12	2.04	0.54
1:Y:136:ARG:HH11	1:Y:138:ARG:HH12	1.55	0.54
1:l:136:ARG:HH11	1:l:138:ARG:HH12	1.55	0.54
1:c:282:ARG:HD3	1:d:316:ALA:HA	1.90	0.54
1:c:523:ARG:HH21	1:f:538:ASN:H	1.54	0.54
1:g:174:HIS:HD2	1:g:474:HIS:CD2	2.25	0.54
1:l:405:ASP:OD2	1:l:407:THR:OG1	2.22	0.54
1:z:181:HIS:CE1	1:z:183:TRP:HB2	2.43	0.54
1:B:136:ARG:HH11	1:B:138:ARG:HH12	1.55	0.54
1:H:136:ARG:HH11	1:H:138:ARG:HH12	1.55	0.54
1:K:405:ASP:OD2	1:K:407:THR:OG1	2.22	0.54
1:N:282:ARG:HD3	1:P:316:ALA:HA	1.90	0.54
1:O:67:GLN:NE2	1:O:69:ARG:HH12	2.04	0.54
1:Q:538:ASN:H	1:R:523:ARG:HH21	1.55	0.54
1:S:405:ASP:OD2	1:S:407:THR:OG1	2.22	0.54
1:l:538:ASN:H	1:w:523:ARG:HH21	1.54	0.54
1:6:67:GLN:NE2	1:6:69:ARG:HH12	2.04	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:282:ARG:HD3	1:b:316:ALA:HA	1.90	0.54
1:a:394:THR:OG1	1:b:288:THR:O	2.22	0.54
1:m:136:ARG:HH11	1:m:138:ARG:HH12	1.55	0.54
1:o:181:HIS:CE1	1:o:183:TRP:HB2	2.43	0.54
1:w:136:ARG:HH11	1:w:138:ARG:HH12	1.55	0.54
1:7:67:GLN:NE2	1:7:69:ARG:HH12	2.04	0.54
1:D:174:HIS:HD2	1:D:474:HIS:CD2	2.25	0.54
1:E:181:HIS:CE1	1:E:183:TRP:HB2	2.43	0.54
1:I:181:HIS:CE1	1:I:183:TRP:HB2	2.43	0.54
1:J:181:HIS:CE1	1:J:183:TRP:HB2	2.43	0.54
1:L:67:GLN:NE2	1:L:69:ARG:HH12	2.04	0.54
1:M:316:ALA:HA	1:2:282:ARG:HD3	1.90	0.54
1:T:174:HIS:HD2	1:T:474:HIS:CD2	2.25	0.54
1:T:181:HIS:CE1	1:T:183:TRP:HB2	2.43	0.54
1:l:523:ARG:HH21	1:w:538:ASN:H	1.54	0.54
1:3:181:HIS:CE1	1:3:183:TRP:HB2	2.43	0.54
1:5:174:HIS:HD2	1:5:474:HIS:CD2	2.25	0.54
1:5:181:HIS:CE1	1:5:183:TRP:HB2	2.43	0.54
1:d:136:ARG:HH11	1:d:138:ARG:HH12	1.55	0.54
1:l:282:ARG:HD3	1:m:316:ALA:HA	1.90	0.54
1:q:174:HIS:HD2	1:q:474:HIS:CD2	2.25	0.54
1:q:181:HIS:CE1	1:q:183:TRP:HB2	2.43	0.54
1:t:181:HIS:CE1	1:t:183:TRP:HB2	2.43	0.54
1:t:288:THR:O	1:u:394:THR:OG1	2.23	0.54
1:u:136:ARG:HH11	1:u:138:ARG:HH12	1.55	0.54
1:u:282:ARG:HD3	1:v:316:ALA:HA	1.90	0.54
1:A:181:HIS:CE1	1:A:183:TRP:HB2	2.43	0.54
1:B:316:ALA:HA	1:L:282:ARG:HD3	1.89	0.54
1:B:394:THR:OG1	1:L:288:THR:O	2.23	0.54
1:E:377:ASP:O	1:E:381:THR:OG1	2.19	0.54
1:E:538:ASN:H	1:P:523:ARG:HH21	1.54	0.54
1:G:288:THR:O	1:I:394:THR:OG1	2.22	0.54
1:H:181:HIS:CE1	1:H:183:TRP:HB2	2.43	0.54
1:J:174:HIS:HD2	1:J:474:HIS:CD2	2.25	0.54
1:U:181:HIS:CE1	1:U:183:TRP:HB2	2.43	0.54
1:Y:181:HIS:CE1	1:Y:183:TRP:HB2	2.43	0.54
1:2:67:GLN:NE2	1:2:69:ARG:HH12	2.04	0.54
1:a:136:ARG:HH11	1:a:138:ARG:HH12	1.55	0.54
1:c:181:HIS:CE1	1:c:183:TRP:HB2	2.43	0.54
1:e:174:HIS:HD2	1:e:474:HIS:CD2	2.25	0.54
1:g:181:HIS:CE1	1:g:183:TRP:HB2	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:181:HIS:CE1	1:m:183:TRP:HB2	2.43	0.54
1:p:181:HIS:CE1	1:p:183:TRP:HB2	2.43	0.54
1:t:67:GLN:NE2	1:t:69:ARG:HH12	2.04	0.54
1:v:181:HIS:CE1	1:v:183:TRP:HB2	2.43	0.54
1:w:181:HIS:CE1	1:w:183:TRP:HB2	2.43	0.54
1:7:136:ARG:HH11	1:7:138:ARG:HH12	1.55	0.54
1:C:136:ARG:HH11	1:C:138:ARG:HH12	1.55	0.54
1:F:418:ARG:NE	1:F:424:GLU:OE2	2.31	0.54
1:N:181:HIS:CE1	1:N:183:TRP:HB2	2.43	0.54
1:P:136:ARG:HH11	1:P:138:ARG:HH12	1.55	0.54
1:S:282:ARG:HD3	1:U:316:ALA:HA	1.90	0.54
1:Y:523:ARG:HH21	1:Z:538:ASN:H	1.54	0.54
1:Z:181:HIS:CE1	1:Z:183:TRP:HB2	2.43	0.54
1:1:181:HIS:CE1	1:1:183:TRP:HB2	2.43	0.54
1:3:174:HIS:HD2	1:3:474:HIS:CD2	2.25	0.54
1:i:181:HIS:CE1	1:i:183:TRP:HB2	2.43	0.54
1:k:316:ALA:HA	1:m:282:ARG:HD3	1.89	0.54
1:k:377:ASP:O	1:k:381:THR:OG1	2.19	0.54
1:l:181:HIS:CE1	1:l:183:TRP:HB2	2.43	0.54
1:r:377:ASP:O	1:r:381:THR:OG1	2.19	0.54
1:t:282:ARG:HD3	1:u:316:ALA:HA	1.90	0.54
1:t:316:ALA:HA	1:v:282:ARG:HD3	1.90	0.54
1:v:174:HIS:HD2	1:v:474:HIS:CD2	2.25	0.54
1:y:181:HIS:CE1	1:y:183:TRP:HB2	2.43	0.54
1:7:181:HIS:CE1	1:7:183:TRP:HB2	2.43	0.54
1:F:181:HIS:CE1	1:F:183:TRP:HB2	2.43	0.53
1:H:379:VAL:HG13	1:H:380:THR:HG23	1.90	0.53
1:M:181:HIS:CE1	1:M:183:TRP:HB2	2.43	0.53
1:M:379:VAL:HG13	1:M:380:THR:HG23	1.91	0.53
1:S:181:HIS:CE1	1:S:183:TRP:HB2	2.43	0.53
1:V:379:VAL:HG13	1:V:380:THR:HG23	1.91	0.53
1:X:181:HIS:CE1	1:X:183:TRP:HB2	2.43	0.53
1:b:379:VAL:HG13	1:b:380:THR:HG23	1.91	0.53
1:j:379:VAL:HG13	1:j:380:THR:HG23	1.90	0.53
1:n:288:THR:O	1:o:394:THR:OG1	2.22	0.53
1:y:379:VAL:HG13	1:y:380:THR:HG23	1.90	0.53
1:z:282:ARG:HD3	1:7:316:ALA:HA	1.90	0.53
1:8:181:HIS:CE1	1:8:183:TRP:HB2	2.43	0.53
1:A:523:ARG:HH21	1:F:538:ASN:H	1.55	0.53
1:B:379:VAL:HG13	1:B:380:THR:HG23	1.91	0.53
1:D:181:HIS:CE1	1:D:183:TRP:HB2	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:379:VAL:HG13	1:J:380:THR:HG23	1.91	0.53
1:L:451:TRP:HB3	1:L:472:MET:HE3	1.91	0.53
1:O:282:ARG:HD3	1:g:316:ALA:HA	1.91	0.53
1:O:379:VAL:HG13	1:O:380:THR:HG23	1.91	0.53
1:R:316:ALA:HA	1:U:282:ARG:HD3	1.90	0.53
1:V:288:THR:O	1:5:394:THR:OG1	2.21	0.53
1:W:282:ARG:HD3	1:Y:316:ALA:HA	1.90	0.53
1:X:379:VAL:HG13	1:X:380:THR:HG23	1.91	0.53
1:2:538:ASN:H	1:3:523:ARG:HH21	1.54	0.53
1:5:523:ARG:HH21	1:6:538:ASN:H	1.55	0.53
1:b:181:HIS:CE1	1:b:183:TRP:HB2	2.43	0.53
1:d:523:ARG:HH21	1:q:538:ASN:H	1.54	0.53
1:e:181:HIS:CE1	1:e:183:TRP:HB2	2.43	0.53
1:f:379:VAL:HG13	1:f:380:THR:HG23	1.91	0.53
1:i:379:VAL:HG13	1:i:380:THR:HG23	1.90	0.53
1:n:324:MET:HB3	1:n:366:VAL:HB	1.91	0.53
1:p:523:ARG:HH21	1:s:538:ASN:H	1.55	0.53
1:s:181:HIS:CE1	1:s:183:TRP:HB2	2.43	0.53
1:s:418:ARG:NE	1:s:424:GLU:OE2	2.31	0.53
1:u:379:VAL:HG13	1:u:380:THR:HG23	1.91	0.53
1:v:523:ARG:HH21	1:x:538:ASN:H	1.54	0.53
1:A:451:TRP:HB3	1:A:472:MET:HE3	1.91	0.53
1:B:523:ARG:HH21	1:I:538:ASN:H	1.55	0.53
1:D:324:MET:HB3	1:D:366:VAL:HB	1.91	0.53
1:E:379:VAL:HG13	1:E:380:THR:HG23	1.90	0.53
1:G:324:MET:HB3	1:G:366:VAL:HB	1.91	0.53
1:J:282:ARG:HD3	1:L:316:ALA:HA	1.91	0.53
1:K:282:ARG:HD3	1:1:316:ALA:HA	1.91	0.53
1:L:174:HIS:HD2	1:L:474:HIS:CD2	2.25	0.53
1:S:379:VAL:HG13	1:S:380:THR:HG23	1.90	0.53
1:Z:282:ARG:HD3	1:x:316:ALA:HA	1.91	0.53
1:4:379:VAL:HG13	1:4:380:THR:HG23	1.90	0.53
1:6:181:HIS:CE1	1:6:183:TRP:HB2	2.43	0.53
1:p:451:TRP:HB3	1:p:472:MET:HE3	1.91	0.53
1:t:174:HIS:HD2	1:t:474:HIS:CD2	2.25	0.53
1:v:379:VAL:HG13	1:v:380:THR:HG23	1.91	0.53
1:w:316:ALA:HA	1:x:282:ARG:HD3	1.91	0.53
1:7:523:ARG:HH21	1:8:538:ASN:H	1.54	0.53
1:D:379:VAL:HG13	1:D:380:THR:HG23	1.91	0.53
1:E:316:ALA:HA	1:F:282:ARG:HD3	1.91	0.53
1:K:316:ALA:HA	1:8:282:ARG:HD3	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:324:MET:HB3	1:M:366:VAL:HB	1.91	0.53
1:O:181:HIS:CE1	1:O:183:TRP:HB2	2.43	0.53
1:Q:377:ASP:O	1:Q:381:THR:OG1	2.19	0.53
1:R:377:ASP:O	1:R:381:THR:OG1	2.19	0.53
1:W:451:TRP:HB3	1:W:472:MET:HE3	1.91	0.53
1:1:324:MET:HB3	1:1:366:VAL:HB	1.91	0.53
1:1:379:VAL:HG13	1:1:380:THR:HG23	1.91	0.53
1:2:181:HIS:CE1	1:2:183:TRP:HB2	2.43	0.53
1:3:451:TRP:HB3	1:3:472:MET:HE3	1.91	0.53
1:6:379:VAL:HG13	1:6:380:THR:HG23	1.90	0.53
1:b:324:MET:HB3	1:b:366:VAL:HB	1.91	0.53
1:c:451:TRP:HB3	1:c:472:MET:HE3	1.91	0.53
1:d:405:ASP:OD2	1:d:407:THR:OG1	2.21	0.53
1:e:324:MET:HB3	1:e:366:VAL:HB	1.91	0.53
1:g:67:GLN:NE2	1:g:69:ARG:HH12	2.04	0.53
1:g:324:MET:HB3	1:g:366:VAL:HB	1.91	0.53
1:l:379:VAL:HG13	1:l:380:THR:HG23	1.91	0.53
1:n:316:ALA:HA	1:p:282:ARG:HD3	1.91	0.53
1:q:379:VAL:HG13	1:q:380:THR:HG23	1.90	0.53
1:t:451:TRP:HB3	1:t:472:MET:HE3	1.91	0.53
1:w:324:MET:HB3	1:w:366:VAL:HB	1.91	0.53
1:A:282:ARG:HD3	1:G:316:ALA:HA	1.91	0.53
1:B:181:HIS:CE1	1:B:183:TRP:HB2	2.43	0.53
1:J:523:ARG:HH21	1:K:538:ASN:H	1.55	0.53
1:L:379:VAL:HG13	1:L:380:THR:HG23	1.90	0.53
1:N:451:TRP:HB3	1:N:472:MET:HE3	1.91	0.53
1:T:67:GLN:NE2	1:T:69:ARG:HH12	2.04	0.53
1:X:324:MET:HB3	1:X:366:VAL:HB	1.91	0.53
1:2:379:VAL:HG13	1:2:380:THR:HG23	1.90	0.53
1:3:394:THR:OG1	1:j:288:THR:O	2.21	0.53
1:5:451:TRP:HB3	1:5:472:MET:HE3	1.91	0.53
1:d:174:HIS:HD2	1:d:474:HIS:CD2	2.25	0.53
1:e:379:VAL:HG13	1:e:380:THR:HG23	1.91	0.53
1:h:379:VAL:HG13	1:h:380:THR:HG23	1.91	0.53
1:j:181:HIS:CE1	1:j:183:TRP:HB2	2.43	0.53
1:k:282:ARG:HD3	1:l:316:ALA:HA	1.90	0.53
1:q:316:ALA:HA	1:s:282:ARG:HD3	1.91	0.53
1:r:379:VAL:HG13	1:r:380:THR:HG23	1.91	0.53
1:u:181:HIS:CE1	1:u:183:TRP:HB2	2.43	0.53
1:v:324:MET:HB3	1:v:366:VAL:HB	1.91	0.53
1:v:405:ASP:OD2	1:v:407:THR:OG1	2.21	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:w:379:VAL:HG13	1:w:380:THR:HG23	1.91	0.53
1:x:181:HIS:CE1	1:x:183:TRP:HB2	2.43	0.53
1:z:451:TRP:HB3	1:z:472:MET:HE3	1.91	0.53
1:C:181:HIS:CE1	1:C:183:TRP:HB2	2.43	0.53
1:E:324:MET:HB3	1:E:366:VAL:HB	1.91	0.53
1:J:405:ASP:OD2	1:J:407:THR:OG1	2.22	0.53
1:P:181:HIS:CE1	1:P:183:TRP:HB2	2.43	0.53
1:P:324:MET:HB3	1:P:366:VAL:HB	1.91	0.53
1:Q:324:MET:HB3	1:Q:366:VAL:HB	1.91	0.53
1:Q:379:VAL:HG13	1:Q:380:THR:HG23	1.91	0.53
1:R:282:ARG:HD3	1:S:316:ALA:HA	1.90	0.53
1:T:324:MET:HB3	1:T:366:VAL:HB	1.91	0.53
1:V:181:HIS:CE1	1:V:183:TRP:HB2	2.43	0.53
1:Y:379:VAL:HG13	1:Y:380:THR:HG23	1.91	0.53
1:5:324:MET:HB3	1:5:366:VAL:HB	1.91	0.53
1:c:288:THR:O	1:d:394:THR:OG1	2.23	0.53
1:f:181:HIS:CE1	1:f:183:TRP:HB2	2.43	0.53
1:i:324:MET:HB3	1:i:366:VAL:HB	1.91	0.53
1:n:379:VAL:HG13	1:n:380:THR:HG23	1.90	0.53
1:o:538:ASN:H	1:u:523:ARG:HH21	1.55	0.53
1:7:379:VAL:HG13	1:7:380:THR:HG23	1.91	0.53
1:B:451:TRP:HB3	1:B:472:MET:HE3	1.91	0.53
1:C:379:VAL:HG13	1:C:380:THR:HG23	1.91	0.53
1:G:379:VAL:HG13	1:G:380:THR:HG23	1.90	0.53
1:I:324:MET:HB3	1:I:366:VAL:HB	1.91	0.53
1:J:324:MET:HB3	1:J:366:VAL:HB	1.91	0.53
1:K:181:HIS:CE1	1:K:183:TRP:HB2	2.43	0.53
1:L:71:PHE:CD2	1:L:506:VAL:HG23	2.44	0.53
1:M:451:TRP:HB3	1:M:472:MET:HE3	1.91	0.53
1:N:288:THR:O	1:P:394:THR:OG1	2.23	0.53
1:P:71:PHE:CD2	1:P:506:VAL:HG23	2.44	0.53
1:P:174:HIS:HD2	1:P:474:HIS:CD2	2.25	0.53
1:S:324:MET:HB3	1:S:366:VAL:HB	1.91	0.53
1:X:71:PHE:CD2	1:X:506:VAL:HG23	2.44	0.53
1:3:324:MET:HB3	1:3:366:VAL:HB	1.91	0.53
1:a:181:HIS:CE1	1:a:183:TRP:HB2	2.43	0.53
1:b:451:TRP:HB3	1:b:472:MET:HE3	1.91	0.53
1:d:324:MET:HB3	1:d:366:VAL:HB	1.91	0.53
1:l:324:MET:HB3	1:l:366:VAL:HB	1.91	0.53
1:o:324:MET:HB3	1:o:366:VAL:HB	1.91	0.53
1:p:377:ASP:O	1:p:381:THR:OG1	2.19	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:q:324:MET:HB3	1:q:366:VAL:HB	1.91	0.53
1:r:324:MET:HB3	1:r:366:VAL:HB	1.91	0.53
1:t:71:PHE:CD2	1:t:506:VAL:HG23	2.44	0.53
1:t:379:VAL:HG13	1:t:380:THR:HG23	1.91	0.53
1:u:451:TRP:HB3	1:u:472:MET:HE3	1.91	0.53
1:x:71:PHE:CD2	1:x:506:VAL:HG23	2.44	0.53
1:y:377:ASP:O	1:y:381:THR:OG1	2.19	0.53
1:I:451:TRP:HB3	1:I:472:MET:HE3	1.91	0.53
1:K:71:PHE:CD2	1:K:506:VAL:HG23	2.44	0.53
1:K:324:MET:HB3	1:K:366:VAL:HB	1.91	0.53
1:L:136:ARG:HH11	1:L:138:ARG:HH12	1.55	0.53
1:M:71:PHE:CD2	1:M:506:VAL:HG23	2.44	0.53
1:M:136:ARG:HH11	1:M:138:ARG:HH12	1.55	0.53
1:T:136:ARG:HH11	1:T:138:ARG:HH12	1.55	0.53
1:T:455:PRO:HD3	1:f:302:TRP:CE2	2.44	0.53
1:Y:71:PHE:CD2	1:Y:506:VAL:HG23	2.44	0.53
1:Z:71:PHE:CD2	1:Z:506:VAL:HG23	2.44	0.53
1:b:71:PHE:CD2	1:b:506:VAL:HG23	2.44	0.53
1:d:71:PHE:CD2	1:d:506:VAL:HG23	2.44	0.53
1:d:181:HIS:CE1	1:d:183:TRP:HB2	2.43	0.53
1:g:136:ARG:HH11	1:g:138:ARG:HH12	1.55	0.53
1:h:181:HIS:CE1	1:h:183:TRP:HB2	2.43	0.53
1:i:71:PHE:CD2	1:i:506:VAL:HG23	2.44	0.53
1:o:451:TRP:HB3	1:o:472:MET:HE3	1.91	0.53
1:s:451:TRP:HB3	1:s:472:MET:HE3	1.91	0.53
1:x:324:MET:HB3	1:x:366:VAL:HB	1.91	0.53
1:7:71:PHE:CD2	1:7:506:VAL:HG23	2.44	0.53
1:8:71:PHE:CD2	1:8:506:VAL:HG23	2.44	0.53
1:8:451:TRP:HB3	1:8:472:MET:HE3	1.91	0.53
1:C:71:PHE:CD2	1:C:506:VAL:HG23	2.44	0.53
1:C:526:LEU:O	1:C:562:GLY:HA3	2.09	0.53
1:D:288:THR:O	1:N:394:THR:OG1	2.22	0.53
1:F:451:TRP:HB3	1:F:472:MET:HE3	1.91	0.53
1:G:71:PHE:CD2	1:G:506:VAL:HG23	2.44	0.53
1:H:324:MET:HB3	1:H:366:VAL:HB	1.91	0.53
1:H:377:ASP:O	1:H:381:THR:OG1	2.19	0.53
1:Q:181:HIS:CE1	1:Q:183:TRP:HB2	2.43	0.53
1:R:71:PHE:CD2	1:R:506:VAL:HG23	2.44	0.53
1:Z:451:TRP:HB3	1:Z:472:MET:HE3	1.91	0.53
1:1:71:PHE:CD2	1:1:506:VAL:HG23	2.44	0.53
1:a:71:PHE:CD2	1:a:506:VAL:HG23	2.44	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:379:VAL:HG13	1:a:380:THR:HG23	1.91	0.53
1:c:394:THR:OG1	1:e:288:THR:O	2.22	0.53
1:d:379:VAL:HG13	1:d:380:THR:HG23	1.90	0.53
1:n:71:PHE:CD2	1:n:506:VAL:HG23	2.44	0.53
1:r:181:HIS:CE1	1:r:183:TRP:HB2	2.43	0.53
1:w:71:PHE:CD2	1:w:506:VAL:HG23	2.44	0.53
1:A:377:ASP:O	1:A:381:THR:OG1	2.19	0.53
1:G:451:TRP:HB3	1:G:472:MET:HE3	1.91	0.53
1:H:71:PHE:CD2	1:H:506:VAL:HG23	2.44	0.53
1:N:537:ASN:OD1	1:N:540:ASN:HB3	2.09	0.53
1:O:526:LEU:O	1:O:562:GLY:HA3	2.09	0.53
1:O:537:ASN:OD1	1:O:540:ASN:HB3	2.09	0.53
1:U:324:MET:HB3	1:U:366:VAL:HB	1.91	0.53
1:V:324:MET:HB3	1:V:366:VAL:HB	1.91	0.53
1:1:537:ASN:OD1	1:1:540:ASN:HB3	2.10	0.53
1:3:71:PHE:CD2	1:3:506:VAL:HG23	2.44	0.53
1:4:181:HIS:CE1	1:4:183:TRP:HB2	2.43	0.53
1:6:136:ARG:HH11	1:6:138:ARG:HH12	1.55	0.53
1:a:526:LEU:O	1:a:562:GLY:HA3	2.10	0.53
1:b:136:ARG:HH11	1:b:138:ARG:HH12	1.55	0.53
1:b:174:HIS:HD2	1:b:474:HIS:CD2	2.25	0.53
1:c:537:ASN:OD1	1:c:540:ASN:HB3	2.09	0.53
1:f:526:LEU:O	1:f:562:GLY:HA3	2.09	0.53
1:f:537:ASN:OD1	1:f:540:ASN:HB3	2.09	0.53
1:j:324:MET:HB3	1:j:366:VAL:HB	1.91	0.53
1:j:537:ASN:OD1	1:j:540:ASN:HB3	2.10	0.53
1:k:71:PHE:CD2	1:k:506:VAL:HG23	2.44	0.53
1:k:181:HIS:CE1	1:k:183:TRP:HB2	2.43	0.53
1:w:451:TRP:HB3	1:w:472:MET:HE3	1.91	0.53
1:w:537:ASN:OD1	1:w:540:ASN:HB3	2.10	0.53
1:y:71:PHE:CD2	1:y:506:VAL:HG23	2.44	0.53
1:y:324:MET:HB3	1:y:366:VAL:HB	1.91	0.53
1:y:526:LEU:O	1:y:562:GLY:HA3	2.09	0.53
1:H:282:ARG:HD3	1:W:316:ALA:HA	1.90	0.52
1:H:526:LEU:O	1:H:562:GLY:HA3	2.09	0.52
1:K:451:TRP:HB3	1:K:472:MET:HE3	1.91	0.52
1:P:379:VAL:HG13	1:P:380:THR:HG23	1.90	0.52
1:Q:71:PHE:CD2	1:Q:506:VAL:HG23	2.44	0.52
1:V:282:ARG:HD3	1:5:316:ALA:HA	1.91	0.52
1:V:537:ASN:OD1	1:V:540:ASN:HB3	2.10	0.52
1:1:451:TRP:HB3	1:1:472:MET:HE3	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:136:ARG:HH11	1:2:138:ARG:HH12	1.55	0.52
1:3:379:VAL:HG13	1:3:380:THR:HG23	1.90	0.52
1:3:526:LEU:O	1:3:562:GLY:HA3	2.09	0.52
1:4:537:ASN:OD1	1:4:540:ASN:HB3	2.09	0.52
1:5:71:PHE:CD2	1:5:506:VAL:HG23	2.44	0.52
1:5:526:LEU:O	1:5:562:GLY:HA3	2.09	0.52
1:c:316:ALA:HA	1:e:282:ARG:HD3	1.90	0.52
1:h:324:MET:HB3	1:h:366:VAL:HB	1.91	0.52
1:m:324:MET:HB3	1:m:366:VAL:HB	1.91	0.52
1:n:181:HIS:CE1	1:n:183:TRP:HB2	2.43	0.52
1:t:136:ARG:HH11	1:t:138:ARG:HH12	1.55	0.52
1:A:71:PHE:CD2	1:A:506:VAL:HG23	2.44	0.52
1:B:526:LEU:O	1:B:562:GLY:HA3	2.09	0.52
1:D:282:ARG:HD3	1:N:316:ALA:HA	1.90	0.52
1:D:316:ALA:HA	1:P:282:ARG:HD3	1.90	0.52
1:D:537:ASN:OD1	1:D:540:ASN:HB3	2.10	0.52
1:E:282:ARG:HD3	1:Q:316:ALA:HA	1.90	0.52
1:E:405:ASP:OD2	1:E:407:THR:OG1	2.22	0.52
1:F:537:ASN:OD1	1:F:540:ASN:HB3	2.10	0.52
1:J:451:TRP:HB3	1:J:472:MET:HE3	1.91	0.52
1:M:537:ASN:OD1	1:M:540:ASN:HB3	2.10	0.52
1:N:136:ARG:HH11	1:N:138:ARG:HH12	1.55	0.52
1:O:451:TRP:HB3	1:O:472:MET:HE3	1.91	0.52
1:P:537:ASN:OD1	1:P:540:ASN:HB3	2.10	0.52
1:R:181:HIS:CE1	1:R:183:TRP:HB2	2.43	0.52
1:U:379:VAL:HG13	1:U:380:THR:HG23	1.91	0.52
1:U:526:LEU:O	1:U:562:GLY:HA3	2.10	0.52
1:W:324:MET:HB3	1:W:366:VAL:HB	1.91	0.52
1:Y:538:ASN:H	1:Z:523:ARG:HH21	1.54	0.52
1:2:71:PHE:CD2	1:2:506:VAL:HG23	2.44	0.52
1:3:316:ALA:HA	1:j:282:ARG:HD3	1.91	0.52
1:4:71:PHE:CD2	1:4:506:VAL:HG23	2.44	0.52
1:4:324:MET:HB3	1:4:366:VAL:HB	1.91	0.52
1:5:379:VAL:HG13	1:5:380:THR:HG23	1.90	0.52
1:b:537:ASN:OD1	1:b:540:ASN:HB3	2.10	0.52
1:d:282:ARG:HD3	1:e:316:ALA:HA	1.90	0.52
1:d:537:ASN:OD1	1:d:540:ASN:HB3	2.10	0.52
1:e:537:ASN:OD1	1:e:540:ASN:HB3	2.10	0.52
1:f:324:MET:HB3	1:f:366:VAL:HB	1.91	0.52
1:f:451:TRP:HB3	1:f:472:MET:HE3	1.91	0.52
1:h:526:LEU:O	1:h:562:GLY:HA3	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:h:537:ASN:OD1	1:h:540:ASN:HB3	2.10	0.52
1:j:71:PHE:CD2	1:j:506:VAL:HG23	2.44	0.52
1:k:136:ARG:HH11	1:k:138:ARG:HH12	1.55	0.52
1:m:526:LEU:O	1:m:562:GLY:HA3	2.09	0.52
1:n:451:TRP:HB3	1:n:472:MET:HE3	1.91	0.52
1:n:526:LEU:O	1:n:562:GLY:HA3	2.10	0.52
1:o:71:PHE:CD2	1:o:506:VAL:HG23	2.44	0.52
1:r:71:PHE:CD2	1:r:506:VAL:HG23	2.44	0.52
1:s:537:ASN:OD1	1:s:540:ASN:HB3	2.10	0.52
1:t:487:PRO:HD2	1:x:503:THR:HG21	1.92	0.52
1:z:324:MET:HB3	1:z:366:VAL:HB	1.91	0.52
1:8:537:ASN:OD1	1:8:540:ASN:HB3	2.09	0.52
1:G:181:HIS:CE1	1:G:183:TRP:HB2	2.43	0.52
1:G:526:LEU:O	1:G:562:GLY:HA3	2.10	0.52
1:G:537:ASN:OD1	1:G:540:ASN:HB3	2.10	0.52
1:H:174:HIS:HD2	1:H:474:HIS:CD2	2.25	0.52
1:I:71:PHE:CD2	1:I:506:VAL:HG23	2.44	0.52
1:K:503:THR:HG21	1:L:487:PRO:HD2	1.92	0.52
1:K:537:ASN:OD1	1:K:540:ASN:HB3	2.10	0.52
1:M:174:HIS:HD2	1:M:474:HIS:CD2	2.25	0.52
1:R:526:LEU:O	1:R:562:GLY:HA3	2.10	0.52
1:S:451:TRP:HB3	1:S:472:MET:HE3	1.91	0.52
1:V:71:PHE:CD2	1:V:506:VAL:HG23	2.44	0.52
1:X:537:ASN:OD1	1:X:540:ASN:HB3	2.10	0.52
1:Z:537:ASN:OD1	1:Z:540:ASN:HB3	2.09	0.52
1:4:526:LEU:O	1:4:562:GLY:HA3	2.10	0.52
1:6:71:PHE:CD2	1:6:506:VAL:HG23	2.44	0.52
1:h:71:PHE:CD2	1:h:506:VAL:HG23	2.44	0.52
1:k:174:HIS:HD2	1:k:474:HIS:CD2	2.25	0.52
1:k:526:LEU:O	1:k:562:GLY:HA3	2.10	0.52
1:n:537:ASN:OD1	1:n:540:ASN:HB3	2.10	0.52
1:p:71:PHE:CD2	1:p:506:VAL:HG23	2.44	0.52
1:p:324:MET:HB3	1:p:366:VAL:HB	1.91	0.52
1:u:526:LEU:O	1:u:562:GLY:HA3	2.10	0.52
1:v:451:TRP:HB3	1:v:472:MET:HE3	1.91	0.52
1:x:451:TRP:HB3	1:x:472:MET:HE3	1.91	0.52
1:x:537:ASN:OD1	1:x:540:ASN:HB3	2.10	0.52
1:y:282:ARG:HD3	1:z:316:ALA:HA	1.90	0.52
1:y:316:ALA:HA	1:7:282:ARG:HD3	1.90	0.52
1:z:126:CYS:O	1:z:259:ASN:ND2	2.39	0.52
1:A:324:MET:HB3	1:A:366:VAL:HB	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:316:ALA:HA	1:M:282:ARG:HD3	1.90	0.52
1:D:136:ARG:HH11	1:D:138:ARG:HH12	1.55	0.52
1:E:526:LEU:O	1:E:562:GLY:HA3	2.10	0.52
1:H:316:ALA:HA	1:Y:282:ARG:HD3	1.90	0.52
1:K:379:VAL:HG13	1:K:380:THR:HG23	1.91	0.52
1:R:136:ARG:HH11	1:R:138:ARG:HH12	1.55	0.52
1:R:451:TRP:HB3	1:R:472:MET:HE3	1.91	0.52
1:V:316:ALA:HA	1:X:282:ARG:HD3	1.90	0.52
1:X:526:LEU:O	1:X:562:GLY:HA3	2.09	0.52
1:6:377:ASP:O	1:6:381:THR:OG1	2.19	0.52
1:c:136:ARG:HH11	1:c:138:ARG:HH12	1.55	0.52
1:d:377:ASP:O	1:d:381:THR:OG1	2.19	0.52
1:d:526:LEU:O	1:d:562:GLY:HA3	2.09	0.52
1:e:71:PHE:CD2	1:e:506:VAL:HG23	2.44	0.52
1:i:282:ARG:HD3	1:j:316:ALA:HA	1.90	0.52
1:i:526:LEU:O	1:i:562:GLY:HA3	2.09	0.52
1:i:537:ASN:OD1	1:i:540:ASN:HB3	2.10	0.52
1:j:503:THR:HG21	1:k:487:PRO:HD2	1.92	0.52
1:l:451:TRP:HB3	1:l:472:MET:HE3	1.91	0.52
1:m:379:VAL:HG13	1:m:380:THR:HG23	1.91	0.52
1:q:71:PHE:CD2	1:q:506:VAL:HG23	2.44	0.52
1:q:282:ARG:HD3	1:r:316:ALA:HA	1.90	0.52
1:r:281:PRO:HG3	1:s:379:VAL:HG22	1.91	0.52
1:x:379:VAL:HG13	1:x:380:THR:HG23	1.91	0.52
1:y:174:HIS:HD2	1:y:474:HIS:CD2	2.25	0.52
1:7:538:ASN:H	1:8:523:ARG:HH21	1.54	0.52
1:D:71:PHE:CD2	1:D:506:VAL:HG23	2.44	0.52
1:E:71:PHE:CD2	1:E:506:VAL:HG23	2.44	0.52
1:E:451:TRP:HB3	1:E:472:MET:HE3	1.91	0.52
1:E:537:ASN:OD1	1:E:540:ASN:HB3	2.10	0.52
1:F:379:VAL:HG22	1:Q:281:PRO:HG3	1.91	0.52
1:L:526:LEU:O	1:L:562:GLY:HA3	2.09	0.52
1:N:379:VAL:HG13	1:N:380:THR:HG23	1.91	0.52
1:N:526:LEU:O	1:N:562:GLY:HA3	2.09	0.52
1:O:316:ALA:HA	1:h:282:ARG:HD3	1.91	0.52
1:O:324:MET:HB3	1:O:366:VAL:HB	1.91	0.52
1:P:526:LEU:O	1:P:562:GLY:HA3	2.09	0.52
1:R:174:HIS:HD2	1:R:474:HIS:CD2	2.25	0.52
1:R:324:MET:HB3	1:R:366:VAL:HB	1.91	0.52
1:R:487:PRO:HD2	1:V:503:THR:HG21	1.92	0.52
1:U:71:PHE:CD2	1:U:506:VAL:HG23	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:136:ARG:HH11	1:X:138:ARG:HH12	1.55	0.52
1:4:282:ARG:HD3	1:f:316:ALA:HA	1.91	0.52
1:a:377:ASP:O	1:a:381:THR:OG1	2.19	0.52
1:f:71:PHE:CD2	1:f:506:VAL:HG23	2.44	0.52
1:g:282:ARG:HD3	1:h:316:ALA:HA	1.91	0.52
1:k:451:TRP:HB3	1:k:472:MET:HE3	1.91	0.52
1:m:71:PHE:CD2	1:m:506:VAL:HG23	2.44	0.52
1:o:503:THR:HG21	1:v:487:PRO:HD2	1.92	0.52
1:q:526:LEU:O	1:q:562:GLY:HA3	2.10	0.52
1:q:537:ASN:OD1	1:q:540:ASN:HB3	2.10	0.52
1:s:324:MET:HB3	1:s:366:VAL:HB	1.91	0.52
1:t:526:LEU:O	1:t:562:GLY:HA3	2.09	0.52
1:v:537:ASN:OD1	1:v:540:ASN:HB3	2.10	0.52
1:7:451:TRP:HB3	1:7:472:MET:HE3	1.91	0.52
1:8:126:CYS:O	1:8:259:ASN:ND2	2.39	0.52
1:A:394:THR:OG1	1:I:288:THR:O	2.20	0.52
1:A:526:LEU:O	1:A:562:GLY:HA3	2.09	0.52
1:C:324:MET:HB3	1:C:366:VAL:HB	1.91	0.52
1:C:537:ASN:OD1	1:C:540:ASN:HB3	2.10	0.52
1:F:324:MET:HB3	1:F:366:VAL:HB	1.91	0.52
1:I:503:THR:HG21	1:J:487:PRO:HD2	1.92	0.52
1:J:537:ASN:OD1	1:J:540:ASN:HB3	2.10	0.52
1:O:71:PHE:CD2	1:O:506:VAL:HG23	2.44	0.52
1:T:379:VAL:HG13	1:T:380:THR:HG23	1.91	0.52
1:U:377:ASP:O	1:U:381:THR:OG1	2.19	0.52
1:V:281:PRO:HG3	1:5:379:VAL:HG22	1.92	0.52
1:W:126:CYS:O	1:W:259:ASN:ND2	2.39	0.52
1:Y:126:CYS:O	1:Y:259:ASN:ND2	2.39	0.52
1:Y:451:TRP:HB3	1:Y:472:MET:HE3	1.91	0.52
1:Y:537:ASN:OD1	1:Y:540:ASN:HB3	2.09	0.52
1:3:379:VAL:HG22	1:j:281:PRO:HG3	1.92	0.52
1:5:537:ASN:OD1	1:5:540:ASN:HB3	2.10	0.52
1:c:71:PHE:CD2	1:c:506:VAL:HG23	2.44	0.52
1:c:379:VAL:HG13	1:c:380:THR:HG23	1.91	0.52
1:c:526:LEU:O	1:c:562:GLY:HA3	2.10	0.52
1:j:174:HIS:HD2	1:j:474:HIS:CD2	2.25	0.52
1:o:537:ASN:OD1	1:o:540:ASN:HB3	2.10	0.52
1:p:526:LEU:O	1:p:562:GLY:HA3	2.09	0.52
1:p:537:ASN:OD1	1:p:540:ASN:HB3	2.10	0.52
1:q:451:TRP:HB3	1:q:472:MET:HE3	1.91	0.52
1:s:71:PHE:CD2	1:s:506:VAL:HG23	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:s:379:VAL:HG13	1:s:380:THR:HG23	1.91	0.52
1:u:324:MET:HB3	1:u:366:VAL:HB	1.91	0.52
1:z:379:VAL:HG13	1:z:380:THR:HG23	1.90	0.52
1:A:503:THR:HG21	1:E:487:PRO:HD2	1.92	0.52
1:A:537:ASN:OD1	1:A:540:ASN:HB3	2.10	0.52
1:C:281:PRO:HG3	1:2:379:VAL:HG22	1.92	0.52
1:E:529:ASP:OD2	1:E:531:LYS:HG3	2.10	0.52
1:F:71:PHE:CD2	1:F:506:VAL:HG23	2.44	0.52
1:I:379:VAL:HG13	1:I:380:THR:HG23	1.91	0.52
1:N:302:TRP:CE2	1:P:455:PRO:HD3	2.45	0.52
1:P:451:TRP:HB3	1:P:472:MET:HE3	1.91	0.52
1:T:71:PHE:CD2	1:T:506:VAL:HG23	2.44	0.52
1:V:174:HIS:HD2	1:V:474:HIS:CD2	2.25	0.52
1:V:526:LEU:O	1:V:562:GLY:HA3	2.10	0.52
1:W:379:VAL:HG13	1:W:380:THR:HG23	1.91	0.52
1:Z:379:VAL:HG22	1:w:281:PRO:HG3	1.92	0.52
1:1:281:PRO:HG3	1:8:379:VAL:HG22	1.92	0.52
1:2:174:HIS:HD2	1:2:474:HIS:CD2	2.25	0.52
1:3:537:ASN:OD1	1:3:540:ASN:HB3	2.10	0.52
1:4:529:ASP:OD2	1:4:531:LYS:HG3	2.10	0.52
1:6:526:LEU:O	1:6:562:GLY:HA3	2.09	0.52
1:a:316:ALA:HA	1:b:282:ARG:HD3	1.90	0.52
1:a:537:ASN:OD1	1:a:540:ASN:HB3	2.10	0.52
1:c:302:TRP:CE2	1:d:455:PRO:HD3	2.45	0.52
1:e:136:ARG:HH11	1:e:138:ARG:HH12	1.55	0.52
1:g:71:PHE:CD2	1:g:506:VAL:HG23	2.44	0.52
1:g:379:VAL:HG13	1:g:380:THR:HG23	1.91	0.52
1:i:136:ARG:HH11	1:i:138:ARG:HH12	1.55	0.52
1:j:526:LEU:O	1:j:562:GLY:HA3	2.09	0.52
1:k:324:MET:HB3	1:k:366:VAL:HB	1.91	0.52
1:k:537:ASN:OD1	1:k:540:ASN:HB3	2.10	0.52
1:o:288:THR:O	1:p:394:THR:OG1	2.21	0.52
1:o:526:LEU:O	1:o:562:GLY:HA3	2.09	0.52
1:r:451:TRP:HB3	1:r:472:MET:HE3	1.91	0.52
1:7:537:ASN:OD1	1:7:540:ASN:HB3	2.09	0.52
1:D:451:TRP:HB3	1:D:472:MET:HE3	1.91	0.52
1:E:379:VAL:HG22	1:F:281:PRO:HG3	1.92	0.52
1:F:379:VAL:HG13	1:F:380:THR:HG23	1.91	0.52
1:I:174:HIS:CD2	1:I:474:HIS:HD2	2.26	0.52
1:I:537:ASN:OD1	1:I:540:ASN:HB3	2.10	0.52
1:J:71:PHE:CD2	1:J:506:VAL:HG23	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:71:PHE:CD2	1:N:506:VAL:HG23	2.44	0.52
1:N:324:MET:HB3	1:N:366:VAL:HB	1.91	0.52
1:O:302:TRP:CE2	1:g:455:PRO:HD3	2.45	0.52
1:O:487:PRO:HD2	1:4:503:THR:HG21	1.92	0.52
1:P:377:ASP:O	1:P:381:THR:OG1	2.19	0.52
1:Q:537:ASN:OD1	1:Q:540:ASN:HB3	2.10	0.52
1:R:537:ASN:OD1	1:R:540:ASN:HB3	2.10	0.52
1:T:451:TRP:HB3	1:T:472:MET:HE3	1.91	0.52
1:T:526:LEU:O	1:T:562:GLY:HA3	2.09	0.52
1:U:451:TRP:HB3	1:U:472:MET:HE3	1.91	0.52
1:W:529:ASP:OD2	1:W:531:LYS:HG3	2.10	0.52
1:X:379:VAL:HG22	1:5:281:PRO:HG3	1.92	0.52
1:Z:126:CYS:O	1:Z:259:ASN:ND2	2.39	0.52
1:2:324:MET:HB3	1:2:366:VAL:HB	1.91	0.52
1:2:526:LEU:O	1:2:562:GLY:HA3	2.09	0.52
1:3:281:PRO:HG3	1:i:379:VAL:HG22	1.92	0.52
1:6:324:MET:HB3	1:6:366:VAL:HB	1.91	0.52
1:6:379:VAL:HG22	1:a:281:PRO:HG3	1.92	0.52
1:a:324:MET:HB3	1:a:366:VAL:HB	1.91	0.52
1:d:451:TRP:HB3	1:d:472:MET:HE3	1.91	0.52
1:e:377:ASP:O	1:e:381:THR:OG1	2.19	0.52
1:h:529:ASP:OD2	1:h:531:LYS:HG3	2.10	0.52
1:k:379:VAL:HG13	1:k:380:THR:HG23	1.91	0.52
1:l:529:ASP:OD2	1:l:531:LYS:HG3	2.10	0.52
1:m:377:ASP:O	1:m:381:THR:OG1	2.19	0.52
1:m:451:TRP:HB3	1:m:472:MET:HE3	1.91	0.52
1:n:281:PRO:HG3	1:o:379:VAL:HG22	1.92	0.52
1:o:174:HIS:CD2	1:o:474:HIS:HD2	2.26	0.52
1:o:379:VAL:HG13	1:o:380:THR:HG23	1.91	0.52
1:p:503:THR:HG21	1:q:487:PRO:HD2	1.92	0.52
1:q:379:VAL:HG22	1:s:281:PRO:HG3	1.92	0.52
1:q:529:ASP:OD2	1:q:531:LYS:HG3	2.10	0.52
1:r:537:ASN:OD1	1:r:540:ASN:HB3	2.10	0.52
1:v:71:PHE:CD2	1:v:506:VAL:HG23	2.44	0.52
1:w:174:HIS:HD2	1:w:474:HIS:CD2	2.25	0.52
1:z:71:PHE:CD2	1:z:506:VAL:HG23	2.44	0.52
1:z:529:ASP:OD2	1:z:531:LYS:HG3	2.10	0.52
1:7:126:CYS:O	1:7:259:ASN:ND2	2.39	0.52
1:7:526:LEU:O	1:7:562:GLY:HA3	2.09	0.52
1:B:324:MET:HB3	1:B:366:VAL:HB	1.91	0.52
1:B:455:PRO:HD3	1:L:302:TRP:CE2	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:377:ASP:O	1:C:381:THR:OG1	2.19	0.52
1:G:281:PRO:HG3	1:I:379:VAL:HG22	1.92	0.52
1:H:487:PRO:HD2	1:Z:503:THR:HG21	1.92	0.52
1:L:324:MET:HB3	1:L:366:VAL:HB	1.91	0.52
1:P:503:THR:HG21	1:Q:487:PRO:HD2	1.92	0.52
1:Q:451:TRP:HB3	1:Q:472:MET:HE3	1.91	0.52
1:S:529:ASP:OD2	1:S:531:LYS:HG3	2.10	0.52
1:V:302:TRP:CE2	1:5:455:PRO:HD3	2.45	0.52
1:V:451:TRP:HB3	1:V:472:MET:HE3	1.91	0.52
1:W:71:PHE:CD2	1:W:506:VAL:HG23	2.44	0.52
1:Y:526:LEU:O	1:Y:562:GLY:HA3	2.09	0.52
1:Z:529:ASP:OD2	1:Z:531:LYS:HG3	2.10	0.52
1:3:455:PRO:HD3	1:j:302:TRP:CE2	2.45	0.52
1:6:174:HIS:HD2	1:6:474:HIS:CD2	2.25	0.52
1:c:324:MET:HB3	1:c:366:VAL:HB	1.91	0.52
1:c:379:VAL:HG22	1:e:281:PRO:HG3	1.92	0.52
1:d:503:THR:HG21	1:r:487:PRO:HD2	1.92	0.52
1:e:451:TRP:HB3	1:e:472:MET:HE3	1.91	0.52
1:g:526:LEU:O	1:g:562:GLY:HA3	2.09	0.52
1:l:71:PHE:CD2	1:l:506:VAL:HG23	2.44	0.52
1:y:487:PRO:HD2	1:8:503:THR:HG21	1.92	0.52
1:8:526:LEU:O	1:8:562:GLY:HA3	2.09	0.52
1:B:487:PRO:HD2	1:C:503:THR:HG21	1.92	0.52
1:B:537:ASN:OD1	1:B:540:ASN:HB3	2.10	0.52
1:D:281:PRO:HG3	1:N:379:VAL:HG22	1.92	0.52
1:E:302:TRP:CE2	1:Q:455:PRO:HD3	2.45	0.52
1:G:503:THR:HG21	1:W:487:PRO:HD2	1.92	0.52
1:I:526:LEU:O	1:I:562:GLY:HA3	2.10	0.52
1:L:537:ASN:OD1	1:L:540:ASN:HB3	2.10	0.52
1:S:71:PHE:CD2	1:S:506:VAL:HG23	2.44	0.52
1:T:302:TRP:CE2	1:4:455:PRO:HD3	2.44	0.52
1:T:537:ASN:OD1	1:T:540:ASN:HB3	2.10	0.52
1:X:451:TRP:HB3	1:X:472:MET:HE3	1.91	0.52
1:Z:379:VAL:HG13	1:Z:380:THR:HG23	1.91	0.52
1:1:174:HIS:HD2	1:1:474:HIS:CD2	2.25	0.52
1:f:487:PRO:HD2	1:h:503:THR:HG21	1.92	0.52
1:g:451:TRP:HB3	1:g:472:MET:HE3	1.91	0.52
1:g:503:THR:HG21	1:m:487:PRO:HD2	1.92	0.52
1:g:537:ASN:OD1	1:g:540:ASN:HB3	2.10	0.52
1:j:451:TRP:HB3	1:j:472:MET:HE3	1.91	0.52
1:n:379:VAL:HG22	1:p:281:PRO:HG3	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:503:THR:HG21	1:z:487:PRO:HD2	1.92	0.52
1:q:302:TRP:CE2	1:r:455:PRO:HD3	2.45	0.52
1:t:302:TRP:CE2	1:u:455:PRO:HD3	2.45	0.52
1:t:324:MET:HB3	1:t:366:VAL:HB	1.91	0.52
1:u:537:ASN:OD1	1:u:540:ASN:HB3	2.10	0.52
1:x:174:HIS:HD2	1:x:474:HIS:CD2	2.25	0.52
1:z:281:PRO:HG3	1:7:379:VAL:HG22	1.92	0.52
1:8:529:ASP:OD2	1:8:531:LYS:HG3	2.10	0.52
1:B:529:ASP:OD2	1:B:531:LYS:HG3	2.10	0.51
1:E:288:THR:O	1:Q:394:THR:OG1	2.22	0.51
1:E:455:PRO:HD3	1:F:302:TRP:CE2	2.45	0.51
1:H:537:ASN:OD1	1:H:540:ASN:HB3	2.10	0.51
1:K:526:LEU:O	1:K:562:GLY:HA3	2.09	0.51
1:M:455:PRO:HD3	1:2:302:TRP:CE2	2.45	0.51
1:N:174:HIS:HD2	1:N:474:HIS:CD2	2.25	0.51
1:R:379:VAL:HG13	1:R:380:THR:HG23	1.91	0.51
1:W:281:PRO:HG3	1:Y:379:VAL:HG22	1.92	0.51
1:W:526:LEU:O	1:W:562:GLY:HA3	2.10	0.51
1:Z:302:TRP:CE2	1:x:455:PRO:HD3	2.45	0.51
1:Z:487:PRO:HD2	1:1:503:THR:HG21	1.92	0.51
1:Z:526:LEU:O	1:Z:562:GLY:HA3	2.09	0.51
1:4:174:HIS:HD2	1:4:474:HIS:CD2	2.25	0.51
1:6:302:TRP:CE2	1:b:455:PRO:HD3	2.45	0.51
1:6:451:TRP:HB3	1:6:472:MET:HE3	1.91	0.51
1:a:174:HIS:HD2	1:a:474:HIS:CD2	2.25	0.51
1:a:451:TRP:HB3	1:a:472:MET:HE3	1.91	0.51
1:a:503:THR:HG21	1:u:487:PRO:HD2	1.92	0.51
1:c:174:HIS:HD2	1:c:474:HIS:CD2	2.25	0.51
1:i:451:TRP:HB3	1:i:472:MET:HE3	1.91	0.51
1:m:529:ASP:OD2	1:m:531:LYS:HG3	2.10	0.51
1:m:537:ASN:OD1	1:m:540:ASN:HB3	2.10	0.51
1:n:529:ASP:OD2	1:n:531:LYS:HG3	2.10	0.51
1:u:529:ASP:OD2	1:u:531:LYS:HG3	2.10	0.51
1:w:503:THR:HG21	1:8:487:PRO:HD2	1.92	0.51
1:w:526:LEU:O	1:w:562:GLY:HA3	2.09	0.51
1:w:529:ASP:OD2	1:w:531:LYS:HG3	2.10	0.51
1:y:174:HIS:CD2	1:y:474:HIS:HD2	2.26	0.51
1:y:451:TRP:HB3	1:y:472:MET:HE3	1.91	0.51
1:z:526:LEU:O	1:z:562:GLY:HA3	2.10	0.51
1:8:379:VAL:HG13	1:8:380:THR:HG23	1.91	0.51
1:A:281:PRO:HG3	1:G:379:VAL:HG22	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:316:ALA:HA	1:I:282:ARG:HD3	1.92	0.51
1:A:529:ASP:OD2	1:A:531:LYS:HG3	2.10	0.51
1:C:174:HIS:HD2	1:C:474:HIS:CD2	2.25	0.51
1:C:451:TRP:HB3	1:C:472:MET:HE3	1.91	0.51
1:D:377:ASP:O	1:D:381:THR:OG1	2.19	0.51
1:G:282:ARG:HD3	1:I:316:ALA:HA	1.91	0.51
1:G:529:ASP:OD2	1:G:531:LYS:HG3	2.10	0.51
1:H:281:PRO:HG3	1:W:379:VAL:HG22	1.92	0.51
1:H:455:PRO:HD3	1:Y:302:TRP:CE2	2.45	0.51
1:I:126:CYS:O	1:I:259:ASN:ND2	2.39	0.51
1:I:529:ASP:OD2	1:I:531:LYS:HG3	2.10	0.51
1:J:288:THR:O	1:L:394:THR:OG1	2.22	0.51
1:J:529:ASP:OD2	1:J:531:LYS:HG3	2.10	0.51
1:K:281:PRO:HG3	1:1:379:VAL:HG22	1.92	0.51
1:K:455:PRO:HD3	1:8:302:TRP:CE2	2.45	0.51
1:M:526:LEU:O	1:M:562:GLY:HA3	2.09	0.51
1:N:377:ASP:O	1:N:381:THR:OG1	2.19	0.51
1:Q:526:LEU:O	1:Q:562:GLY:HA3	2.09	0.51
1:U:529:ASP:OD2	1:U:531:LYS:HG3	2.10	0.51
1:X:377:ASP:O	1:X:381:THR:OG1	2.19	0.51
1:Z:281:PRO:HG3	1:x:379:VAL:HG22	1.92	0.51
1:1:529:ASP:OD2	1:1:531:LYS:HG3	2.10	0.51
1:2:451:TRP:HB3	1:2:472:MET:HE3	1.91	0.51
1:2:529:ASP:OD2	1:2:531:LYS:HG3	2.10	0.51
1:3:302:TRP:CE2	1:i:455:PRO:HD3	2.45	0.51
1:4:302:TRP:CE2	1:f:455:PRO:HD3	2.45	0.51
1:4:451:TRP:HB3	1:4:472:MET:HE3	1.91	0.51
1:b:526:LEU:O	1:b:562:GLY:HA3	2.09	0.51
1:c:174:HIS:CD2	1:c:474:HIS:HD2	2.26	0.51
1:c:377:ASP:O	1:c:381:THR:OG1	2.19	0.51
1:h:451:TRP:HB3	1:h:472:MET:HE3	1.91	0.51
1:k:455:PRO:HD3	1:m:302:TRP:CE2	2.45	0.51
1:n:282:ARG:HD3	1:o:316:ALA:HA	1.90	0.51
1:o:282:ARG:HD3	1:p:316:ALA:HA	1.92	0.51
1:q:455:PRO:HD3	1:s:302:TRP:CE2	2.45	0.51
1:t:537:ASN:OD1	1:t:540:ASN:HB3	2.10	0.51
1:x:526:LEU:O	1:x:562:GLY:HA3	2.09	0.51
1:y:281:PRO:HG3	1:z:379:VAL:HG22	1.92	0.51
1:y:455:PRO:HD3	1:7:302:TRP:CE2	2.45	0.51
1:y:537:ASN:OD1	1:y:540:ASN:HB3	2.10	0.51
1:A:379:VAL:HG13	1:A:380:THR:HG23	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:281:PRO:HG3	1:J:379:VAL:HG22	1.92	0.51
1:H:451:TRP:HB3	1:H:472:MET:HE3	1.91	0.51
1:H:529:ASP:OD2	1:H:531:LYS:HG3	2.10	0.51
1:J:526:LEU:O	1:J:562:GLY:HA3	2.09	0.51
1:K:174:HIS:HD2	1:K:474:HIS:CD2	2.25	0.51
1:K:379:VAL:HG22	1:8:281:PRO:HG3	1.92	0.51
1:O:455:PRO:HD3	1:h:302:TRP:CE2	2.45	0.51
1:O:529:ASP:OD2	1:O:531:LYS:HG3	2.10	0.51
1:Q:503:THR:HG21	1:S:487:PRO:HD2	1.92	0.51
1:R:379:VAL:HG22	1:U:281:PRO:HG3	1.93	0.51
1:R:455:PRO:HD3	1:U:302:TRP:CE2	2.45	0.51
1:U:537:ASN:OD1	1:U:540:ASN:HB3	2.10	0.51
1:X:455:PRO:HD3	1:5:302:TRP:CE2	2.45	0.51
1:1:526:LEU:O	1:1:562:GLY:HA3	2.09	0.51
1:6:529:ASP:OD2	1:6:531:LYS:HG3	2.10	0.51
1:h:174:HIS:HD2	1:h:474:HIS:CD2	2.25	0.51
1:i:174:HIS:HD2	1:i:474:HIS:CD2	2.25	0.51
1:j:529:ASP:OD2	1:j:531:LYS:HG3	2.10	0.51
1:k:379:VAL:HG22	1:m:281:PRO:HG3	1.93	0.51
1:l:487:PRO:HD2	1:r:503:THR:HG21	1.92	0.51
1:o:126:CYS:O	1:o:259:ASN:ND2	2.39	0.51
1:o:302:TRP:CE2	1:p:455:PRO:HD3	2.46	0.51
1:o:529:ASP:OD2	1:o:531:LYS:HG3	2.10	0.51
1:p:529:ASP:OD2	1:p:531:LYS:HG3	2.10	0.51
1:r:526:LEU:O	1:r:562:GLY:HA3	2.09	0.51
1:u:281:PRO:HG3	1:v:379:VAL:HG22	1.92	0.51
1:v:526:LEU:O	1:v:562:GLY:HA3	2.10	0.51
1:w:379:VAL:HG22	1:x:281:PRO:HG3	1.92	0.51
1:A:302:TRP:CE2	1:G:455:PRO:HD3	2.45	0.51
1:A:455:PRO:HD3	1:I:302:TRP:CE2	2.46	0.51
1:B:487:PRO:HB2	1:C:72:LEU:HD12	1.93	0.51
1:D:455:PRO:HD3	1:P:302:TRP:CE2	2.45	0.51
1:H:174:HIS:CD2	1:H:474:HIS:HD2	2.26	0.51
1:J:281:PRO:HG3	1:L:379:VAL:HG22	1.92	0.51
1:K:529:ASP:OD2	1:K:531:LYS:HG3	2.10	0.51
1:N:174:HIS:CD2	1:N:474:HIS:HD2	2.26	0.51
1:S:302:TRP:CE2	1:U:455:PRO:HD3	2.45	0.51
1:T:487:PRO:HD2	1:c:503:THR:HG21	1.93	0.51
1:U:405:ASP:OD2	1:U:407:THR:OG1	2.22	0.51
1:V:529:ASP:OD2	1:V:531:LYS:HG3	2.10	0.51
1:W:537:ASN:OD1	1:W:540:ASN:HB3	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:529:ASP:OD2	1:d:531:LYS:HG3	2.10	0.51
1:f:529:ASP:OD2	1:f:531:LYS:HG3	2.10	0.51
1:i:288:THR:O	1:j:394:THR:OG1	2.22	0.51
1:i:377:ASP:O	1:i:381:THR:OG1	2.19	0.51
1:l:526:LEU:O	1:l:562:GLY:HA3	2.10	0.51
1:n:174:HIS:CD2	1:n:474:HIS:HD2	2.26	0.51
1:p:379:VAL:HG13	1:p:380:THR:HG23	1.91	0.51
1:t:379:VAL:HG22	1:v:281:PRO:HG3	1.92	0.51
1:u:71:PHE:CD2	1:u:506:VAL:HG23	2.44	0.51
1:v:529:ASP:OD2	1:v:531:LYS:HG3	2.10	0.51
1:y:529:ASP:OD2	1:y:531:LYS:HG3	2.10	0.51
1:B:71:PHE:CD2	1:B:506:VAL:HG23	2.44	0.51
1:B:302:TRP:CE2	1:J:455:PRO:HD3	2.45	0.51
1:D:302:TRP:CE2	1:N:455:PRO:HD3	2.45	0.51
1:D:487:PRO:HB2	1:E:72:LEU:HD12	1.93	0.51
1:F:526:LEU:O	1:F:562:GLY:HA3	2.09	0.51
1:K:394:THR:OG1	1:8:288:THR:O	2.22	0.51
1:L:257:VAL:HG23	1:L:470:LEU:HD11	1.93	0.51
1:M:529:ASP:OD2	1:M:531:LYS:HG3	2.10	0.51
1:P:529:ASP:OD2	1:P:531:LYS:HG3	2.10	0.51
1:S:526:LEU:O	1:S:562:GLY:HA3	2.09	0.51
1:T:503:THR:HG21	1:U:487:PRO:HD2	1.92	0.51
1:V:394:THR:OG1	1:X:288:THR:O	2.22	0.51
1:W:302:TRP:CE2	1:Y:455:PRO:HD3	2.45	0.51
1:X:174:HIS:HD2	1:X:474:HIS:CD2	2.25	0.51
1:Z:316:ALA:HA	1:w:282:ARG:HD3	1.91	0.51
1:Z:455:PRO:HD3	1:w:302:TRP:CE2	2.45	0.51
1:1:282:ARG:HD3	1:8:316:ALA:HA	1.91	0.51
1:c:455:PRO:HD3	1:e:302:TRP:CE2	2.45	0.51
1:d:302:TRP:CE2	1:e:455:PRO:HD3	2.45	0.51
1:e:487:PRO:HB2	1:q:72:LEU:HD12	1.93	0.51
1:l:302:TRP:CE2	1:m:455:PRO:HD3	2.45	0.51
1:n:302:TRP:CE2	1:o:455:PRO:HD3	2.45	0.51
1:o:281:PRO:HG3	1:p:379:VAL:HG22	1.91	0.51
1:p:174:HIS:CD2	1:p:474:HIS:HD2	2.26	0.51
1:q:288:THR:O	1:r:394:THR:OG1	2.22	0.51
1:s:526:LEU:O	1:s:562:GLY:HA3	2.09	0.51
1:z:537:ASN:OD1	1:z:540:ASN:HB3	2.10	0.51
1:D:379:VAL:HG22	1:P:281:PRO:HG3	1.92	0.51
1:G:174:HIS:CD2	1:G:474:HIS:HD2	2.26	0.51
1:G:302:TRP:CE2	1:I:455:PRO:HD3	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Z:288:THR:O	1:x:394:THR:OG1	2.22	0.51
1:1:302:TRP:CE2	1:8:455:PRO:HD3	2.45	0.51
1:4:257:VAL:HG23	1:4:470:LEU:HD11	1.93	0.51
1:a:72:LEU:HD12	1:u:487:PRO:HB2	1.93	0.51
1:b:529:ASP:OD2	1:b:531:LYS:HG3	2.10	0.51
1:d:281:PRO:HG3	1:e:379:VAL:HG22	1.92	0.51
1:g:174:HIS:CD2	1:g:474:HIS:HD2	2.26	0.51
1:j:72:LEU:HD12	1:k:487:PRO:HB2	1.93	0.51
1:n:455:PRO:HD3	1:p:302:TRP:CE2	2.45	0.51
1:s:529:ASP:OD2	1:s:531:LYS:HG3	2.10	0.51
1:t:257:VAL:HG23	1:t:470:LEU:HD11	1.93	0.51
1:x:529:ASP:OD2	1:x:531:LYS:HG3	2.10	0.51
1:y:288:THR:O	1:z:394:THR:OG1	2.22	0.51
1:z:302:TRP:CE2	1:7:455:PRO:HD3	2.45	0.51
1:z:377:ASP:O	1:z:381:THR:OG1	2.19	0.51
1:8:324:MET:HB3	1:8:366:VAL:HB	1.91	0.51
1:A:174:HIS:HD2	1:A:474:HIS:CD2	2.25	0.51
1:A:174:HIS:CD2	1:A:474:HIS:HD2	2.26	0.51
1:A:379:VAL:HG22	1:I:281:PRO:HG3	1.91	0.51
1:F:529:ASP:OD2	1:F:531:LYS:HG3	2.10	0.51
1:J:302:TRP:CE2	1:L:455:PRO:HD3	2.45	0.51
1:Q:529:ASP:OD2	1:Q:531:LYS:HG3	2.10	0.51
1:S:377:ASP:O	1:S:381:THR:OG1	2.19	0.51
1:S:503:THR:HG21	1:4:487:PRO:HD2	1.93	0.51
1:T:174:HIS:CD2	1:T:474:HIS:HD2	2.26	0.51
1:V:257:VAL:HG23	1:V:470:LEU:HD11	1.93	0.51
1:V:455:PRO:HD3	1:X:302:TRP:CE2	2.46	0.51
1:Z:257:VAL:HG23	1:Z:470:LEU:HD11	1.93	0.51
1:2:537:ASN:OD1	1:2:540:ASN:HB3	2.10	0.51
1:h:257:VAL:HG23	1:h:470:LEU:HD11	1.93	0.51
1:h:487:PRO:HD2	1:l:503:THR:HG21	1.93	0.51
1:i:257:VAL:HG23	1:i:470:LEU:HD11	1.93	0.51
1:i:503:THR:HG21	1:7:487:PRO:HD2	1.93	0.51
1:j:257:VAL:HG23	1:j:470:LEU:HD11	1.93	0.51
1:l:377:ASP:O	1:l:381:THR:OG1	2.19	0.51
1:l:537:ASN:OD1	1:l:540:ASN:HB3	2.10	0.51
1:o:72:LEU:HD12	1:v:487:PRO:HB2	1.93	0.51
1:p:174:HIS:HD2	1:p:474:HIS:CD2	2.25	0.51
1:r:282:ARG:HD3	1:s:316:ALA:HA	1.92	0.51
1:8:257:VAL:HG23	1:8:470:LEU:HD11	1.93	0.51
1:C:257:VAL:HG23	1:C:470:LEU:HD11	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:379:VAL:HG22	1:M:281:PRO:HG3	1.92	0.51
1:C:529:ASP:OD2	1:C:531:LYS:HG3	2.10	0.51
1:F:316:ALA:HA	1:Q:282:ARG:HD3	1.92	0.51
1:I:72:LEU:HD12	1:J:487:PRO:HB2	1.93	0.51
1:N:503:THR:HG21	1:g:487:PRO:HD2	1.93	0.51
1:R:487:PRO:HB2	1:V:72:LEU:HD12	1.93	0.51
1:S:537:ASN:OD1	1:S:540:ASN:HB3	2.10	0.51
1:U:503:THR:HG21	1:5:487:PRO:HD2	1.93	0.51
1:X:257:VAL:HG23	1:X:470:LEU:HD11	1.93	0.51
1:Y:324:MET:HB3	1:Y:366:VAL:HB	1.91	0.51
1:Z:324:MET:HB3	1:Z:366:VAL:HB	1.91	0.51
1:3:487:PRO:HD2	1:m:503:THR:HG21	1.93	0.51
1:4:281:PRO:HG3	1:f:379:VAL:HG22	1.92	0.51
1:6:455:PRO:HD3	1:a:302:TRP:CE2	2.45	0.51
1:u:302:TRP:CE2	1:v:455:PRO:HD3	2.46	0.51
1:x:174:HIS:CD2	1:x:474:HIS:HD2	2.26	0.51
1:B:257:VAL:HG23	1:B:470:LEU:HD11	1.93	0.51
1:B:379:VAL:HG22	1:L:281:PRO:HG3	1.93	0.51
1:C:302:TRP:CE2	1:2:455:PRO:HD3	2.45	0.51
1:G:257:VAL:HG23	1:G:470:LEU:HD11	1.93	0.51
1:H:302:TRP:CE2	1:W:455:PRO:HD3	2.45	0.51
1:O:379:VAL:HG22	1:h:281:PRO:HG3	1.92	0.51
1:R:529:ASP:OD2	1:R:531:LYS:HG3	2.10	0.51
1:2:257:VAL:HG23	1:2:470:LEU:HD11	1.93	0.51
1:6:257:VAL:HG23	1:6:470:LEU:HD11	1.93	0.51
1:6:537:ASN:OD1	1:6:540:ASN:HB3	2.10	0.51
1:a:257:VAL:HG23	1:a:470:LEU:HD11	1.93	0.51
1:a:529:ASP:OD2	1:a:531:LYS:HG3	2.10	0.51
1:e:257:VAL:HG23	1:e:470:LEU:HD11	1.93	0.51
1:e:526:LEU:O	1:e:562:GLY:HA3	2.10	0.51
1:i:281:PRO:HG3	1:j:379:VAL:HG22	1.92	0.51
1:i:302:TRP:CE2	1:j:455:PRO:HD3	2.46	0.51
1:l:257:VAL:HG23	1:l:470:LEU:HD11	1.93	0.51
1:n:257:VAL:HG23	1:n:470:LEU:HD11	1.93	0.51
1:r:529:ASP:OD2	1:r:531:LYS:HG3	2.10	0.51
1:t:455:PRO:HD3	1:v:302:TRP:CE2	2.45	0.51
1:u:257:VAL:HG23	1:u:470:LEU:HD11	1.93	0.51
1:w:257:VAL:HG23	1:w:470:LEU:HD11	1.93	0.51
1:y:302:TRP:CE2	1:z:455:PRO:HD3	2.45	0.51
1:C:288:THR:O	1:2:394:THR:OG1	2.21	0.51
1:C:455:PRO:HD3	1:M:302:TRP:CE2	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:257:VAL:HG23	1:D:470:LEU:HD11	1.93	0.51
1:D:526:LEU:O	1:D:562:GLY:HA3	2.10	0.51
1:E:281:PRO:HG3	1:Q:379:VAL:HG22	1.92	0.51
1:F:487:PRO:HD2	1:R:503:THR:HG21	1.92	0.51
1:H:72:LEU:HD12	1:I:487:PRO:HB2	1.93	0.51
1:H:487:PRO:HB2	1:Z:72:LEU:HD12	1.93	0.51
1:K:302:TRP:CE2	1:I:455:PRO:HD3	2.45	0.51
1:R:257:VAL:HG23	1:R:470:LEU:HD11	1.93	0.51
1:R:302:TRP:CE2	1:S:455:PRO:HD3	2.46	0.51
1:S:257:VAL:HG23	1:S:470:LEU:HD11	1.93	0.51
1:T:529:ASP:OD2	1:T:531:LYS:HG3	2.10	0.51
1:V:379:VAL:HG22	1:X:281:PRO:HG3	1.92	0.51
1:V:487:PRO:HB2	1:W:72:LEU:HD12	1.93	0.51
1:X:503:THR:HG21	1:Y:487:PRO:HD2	1.93	0.51
1:I:257:VAL:HG23	1:I:470:LEU:HD11	1.93	0.51
1:a:379:VAL:HG22	1:b:281:PRO:HG3	1.92	0.51
1:f:174:HIS:HD2	1:f:474:HIS:CD2	2.25	0.51
1:i:529:ASP:OD2	1:i:531:LYS:HG3	2.10	0.51
1:j:487:PRO:HB2	1:z:72:LEU:HD12	1.93	0.51
1:k:126:CYS:O	1:k:259:ASN:ND2	2.39	0.51
1:k:503:THR:HG21	1:s:487:PRO:HD2	1.92	0.51
1:t:281:PRO:HG3	1:u:379:VAL:HG22	1.93	0.51
1:w:72:LEU:HD12	1:8:487:PRO:HB2	1.93	0.51
1:7:257:VAL:HG23	1:7:470:LEU:HD11	1.93	0.51
1:7:324:MET:HB3	1:7:366:VAL:HB	1.91	0.51
1:F:72:LEU:HD12	1:G:487:PRO:HB2	1.93	0.50
1:H:379:VAL:HG22	1:Y:281:PRO:HG3	1.93	0.50
1:I:377:ASP:O	1:I:381:THR:OG1	2.19	0.50
1:J:503:THR:HG21	1:I:487:PRO:HD2	1.93	0.50
1:K:174:HIS:CD2	1:K:474:HIS:HD2	2.26	0.50
1:T:487:PRO:HB2	1:c:72:LEU:HD12	1.93	0.50
1:W:377:ASP:O	1:W:381:THR:OG1	2.19	0.50
1:Y:257:VAL:HG23	1:Y:470:LEU:HD11	1.93	0.50
1:Z:487:PRO:HB2	1:I:72:LEU:HD12	1.93	0.50
1:6:316:ALA:HA	1:a:282:ARG:HD3	1.91	0.50
1:a:455:PRO:HD3	1:b:302:TRP:CE2	2.46	0.50
1:a:487:PRO:HD2	1:e:503:THR:HG21	1.93	0.50
1:c:529:ASP:OD2	1:c:531:LYS:HG3	2.10	0.50
1:e:487:PRO:HD2	1:q:503:THR:HG21	1.92	0.50
1:g:281:PRO:HG3	1:h:379:VAL:HG22	1.92	0.50
1:k:257:VAL:HG23	1:k:470:LEU:HD11	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:281:PRO:HG3	1:l:379:VAL:HG22	1.92	0.50
1:k:529:ASP:OD2	1:k:531:LYS:HG3	2.10	0.50
1:m:257:VAL:HG23	1:m:470:LEU:HD11	1.93	0.50
1:n:487:PRO:HB2	1:s:72:LEU:HD12	1.93	0.50
1:o:487:PRO:HB2	1:y:72:LEU:HD12	1.93	0.50
1:q:281:PRO:HG3	1:r:379:VAL:HG22	1.92	0.50
1:7:174:HIS:CD2	1:7:474:HIS:HD2	2.26	0.50
1:B:174:HIS:CD2	1:B:474:HIS:HD2	2.26	0.50
1:C:487:PRO:HD2	1:D:503:THR:HG21	1.93	0.50
1:D:487:PRO:HD2	1:E:503:THR:HG21	1.92	0.50
1:D:529:ASP:OD2	1:D:531:LYS:HG3	2.10	0.50
1:H:388:ASP:C	1:H:390:ALA:H	2.20	0.50
1:H:503:THR:HG21	1:I:487:PRO:HD2	1.92	0.50
1:K:487:PRO:HD2	1:7:503:THR:HG21	1.93	0.50
1:N:529:ASP:OD2	1:N:531:LYS:HG3	2.10	0.50
1:O:126:CYS:O	1:O:259:ASN:ND2	2.39	0.50
1:O:174:HIS:HD2	1:O:474:HIS:CD2	2.25	0.50
1:R:126:CYS:O	1:R:259:ASN:ND2	2.39	0.50
1:R:281:PRO:HG3	1:S:379:VAL:HG22	1.92	0.50
1:U:257:VAL:HG23	1:U:470:LEU:HD11	1.93	0.50
1:X:529:ASP:OD2	1:X:531:LYS:HG3	2.10	0.50
1:Y:503:THR:HG21	1:x:487:PRO:HD2	1.93	0.50
1:3:377:ASP:O	1:3:381:THR:OG1	2.19	0.50
1:5:377:ASP:O	1:5:381:THR:OG1	2.19	0.50
1:g:302:TRP:CE2	1:h:455:PRO:HD3	2.45	0.50
1:g:529:ASP:OD2	1:g:531:LYS:HG3	2.10	0.50
1:k:302:TRP:CE2	1:l:455:PRO:HD3	2.46	0.50
1:u:174:HIS:CD2	1:u:474:HIS:HD2	2.26	0.50
1:v:503:THR:HG21	1:w:487:PRO:HD2	1.93	0.50
1:w:455:PRO:HD3	1:x:302:TRP:CE2	2.45	0.50
1:x:257:VAL:HG23	1:x:470:LEU:HD11	1.93	0.50
1:y:379:VAL:HG22	1:7:281:PRO:HG3	1.93	0.50
1:y:388:ASP:C	1:y:390:ALA:H	2.20	0.50
1:y:487:PRO:HB2	1:8:72:LEU:HD12	1.93	0.50
1:8:388:ASP:C	1:8:390:ALA:H	2.20	0.50
1:A:257:VAL:HG23	1:A:470:LEU:HD11	1.93	0.50
1:C:282:ARG:HD3	1:2:316:ALA:HA	1.91	0.50
1:F:455:PRO:HD3	1:Q:302:TRP:CE2	2.46	0.50
1:G:174:HIS:HD2	1:G:474:HIS:CD2	2.25	0.50
1:J:174:HIS:CD2	1:J:474:HIS:HD2	2.26	0.50
1:K:257:VAL:HG23	1:K:470:LEU:HD11	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:174:HIS:CD2	1:O:474:HIS:HD2	2.26	0.50
1:O:503:THR:HG21	1:P:487:PRO:HD2	1.92	0.50
1:S:281:PRO:HG3	1:U:379:VAL:HG22	1.92	0.50
1:T:72:LEU:HD12	1:U:487:PRO:HB2	1.92	0.50
1:T:388:ASP:C	1:T:390:ALA:H	2.20	0.50
1:U:72:LEU:HD12	1:5:487:PRO:HB2	1.93	0.50
1:Z:388:ASP:C	1:Z:390:ALA:H	2.20	0.50
1:2:503:THR:HG21	1:i:487:PRO:HD2	1.93	0.50
1:3:388:ASP:C	1:3:390:ALA:H	2.20	0.50
1:5:388:ASP:C	1:5:390:ALA:H	2.20	0.50
1:5:529:ASP:OD2	1:5:531:LYS:HG3	2.10	0.50
1:d:487:PRO:HD2	1:f:503:THR:HG21	1.92	0.50
1:e:529:ASP:OD2	1:e:531:LYS:HG3	2.10	0.50
1:g:288:THR:O	1:h:394:THR:OG1	2.22	0.50
1:g:388:ASP:C	1:g:390:ALA:H	2.20	0.50
1:i:174:HIS:CD2	1:i:474:HIS:HD2	2.26	0.50
1:o:388:ASP:C	1:o:390:ALA:H	2.20	0.50
1:r:302:TRP:CE2	1:s:455:PRO:HD3	2.46	0.50
1:t:487:PRO:HB2	1:x:72:LEU:HD12	1.93	0.50
1:v:174:HIS:CD2	1:v:474:HIS:HD2	2.26	0.50
1:B:388:ASP:C	1:B:390:ALA:H	2.20	0.50
1:I:388:ASP:C	1:I:390:ALA:H	2.20	0.50
1:L:503:THR:HG21	1:2:487:PRO:HD2	1.93	0.50
1:Q:72:LEU:HD12	1:S:487:PRO:HB2	1.93	0.50
1:T:257:VAL:HG23	1:T:470:LEU:HD11	1.93	0.50
1:U:388:ASP:C	1:U:390:ALA:H	2.20	0.50
1:X:388:ASP:C	1:X:390:ALA:H	2.20	0.50
1:X:487:PRO:HD2	1:6:503:THR:HG21	1.93	0.50
1:Y:174:HIS:CD2	1:Y:474:HIS:HD2	2.26	0.50
1:Y:529:ASP:OD2	1:Y:531:LYS:HG3	2.10	0.50
1:3:487:PRO:HB2	1:m:72:LEU:HD12	1.93	0.50
1:4:402:TYR:H	1:4:443:GLN:NE2	2.10	0.50
1:6:394:THR:OG1	1:a:288:THR:O	2.21	0.50
1:6:487:PRO:HD2	1:t:503:THR:HG21	1.93	0.50
1:i:388:ASP:C	1:i:390:ALA:H	2.20	0.50
1:l:487:PRO:HB2	1:r:72:LEU:HD12	1.93	0.50
1:m:388:ASP:C	1:m:390:ALA:H	2.20	0.50
1:o:487:PRO:HD2	1:y:503:THR:HG21	1.92	0.50
1:p:257:VAL:HG23	1:p:470:LEU:HD11	1.93	0.50
1:v:72:LEU:HD12	1:w:487:PRO:HB2	1.93	0.50
1:7:388:ASP:C	1:7:390:ALA:H	2.20	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:8:377:ASP:O	1:8:381:THR:OG1	2.19	0.50
1:E:388:ASP:C	1:E:390:ALA:H	2.20	0.50
1:F:377:ASP:O	1:F:381:THR:OG1	2.19	0.50
1:G:326:VAL:HB	1:G:364:ILE:HG21	1.94	0.50
1:J:388:ASP:C	1:J:390:ALA:H	2.20	0.50
1:K:72:LEU:HD12	1:L:487:PRO:HB2	1.93	0.50
1:L:529:ASP:OD2	1:L:531:LYS:HG3	2.10	0.50
1:O:281:PRO:HG3	1:g:379:VAL:HG22	1.92	0.50
1:S:174:HIS:CD2	1:S:474:HIS:HD2	2.26	0.50
1:V:402:TYR:H	1:V:443:GLN:NE2	2.10	0.50
1:X:174:HIS:CD2	1:X:474:HIS:HD2	2.26	0.50
1:X:394:THR:OG1	1:5:288:THR:O	2.23	0.50
1:Y:388:ASP:C	1:Y:390:ALA:H	2.20	0.50
1:3:174:HIS:CD2	1:3:474:HIS:HD2	2.26	0.50
1:3:529:ASP:OD2	1:3:531:LYS:HG3	2.10	0.50
1:5:72:LEU:HD12	1:b:487:PRO:HB2	1.93	0.50
1:b:72:LEU:HD12	1:c:487:PRO:HB2	1.93	0.50
1:c:257:VAL:HG23	1:c:470:LEU:HD11	1.93	0.50
1:f:174:HIS:CD2	1:f:474:HIS:HD2	2.26	0.50
1:j:402:TYR:H	1:j:443:GLN:NE2	2.10	0.50
1:k:388:ASP:C	1:k:390:ALA:H	2.20	0.50
1:l:174:HIS:CD2	1:l:474:HIS:HD2	2.26	0.50
1:l:281:PRO:HG3	1:m:379:VAL:HG22	1.92	0.50
1:m:402:TYR:H	1:m:443:GLN:NE2	2.10	0.50
1:q:388:ASP:C	1:q:390:ALA:H	2.20	0.50
1:r:402:TYR:H	1:r:443:GLN:NE2	2.10	0.50
1:v:388:ASP:C	1:v:390:ALA:H	2.20	0.50
1:C:326:VAL:HB	1:C:364:ILE:HG21	1.94	0.50
1:F:388:ASP:C	1:F:390:ALA:H	2.20	0.50
1:M:72:LEU:HD12	1:N:487:PRO:HB2	1.93	0.50
1:M:487:PRO:HB2	1:3:72:LEU:HD12	1.93	0.50
1:M:487:PRO:HD2	1:3:503:THR:HG21	1.93	0.50
1:N:257:VAL:HG23	1:N:470:LEU:HD11	1.93	0.50
1:Q:402:TYR:H	1:Q:443:GLN:NE2	2.10	0.50
1:U:402:TYR:H	1:U:443:GLN:NE2	2.10	0.50
1:5:503:THR:HG21	1:b:487:PRO:HD2	1.93	0.50
1:6:281:PRO:HG3	1:b:379:VAL:HG22	1.92	0.50
1:a:326:VAL:HB	1:a:364:ILE:HG21	1.94	0.50
1:g:257:VAL:HG23	1:g:470:LEU:HD11	1.93	0.50
1:k:72:LEU:HD12	1:s:487:PRO:HB2	1.93	0.50
1:n:174:HIS:HD2	1:n:474:HIS:CD2	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:326:VAL:HB	1:n:364:ILE:HG21	1.94	0.50
1:q:402:TYR:H	1:q:443:GLN:NE2	2.10	0.50
1:t:529:ASP:OD2	1:t:531:LYS:HG3	2.10	0.50
1:7:529:ASP:OD2	1:7:531:LYS:HG3	2.10	0.50
1:E:257:VAL:HG23	1:E:470:LEU:HD11	1.93	0.50
1:E:402:TYR:H	1:E:443:GLN:NE2	2.10	0.50
1:F:487:PRO:HB2	1:R:72:LEU:HD12	1.93	0.50
1:J:72:LEU:HD12	1:1:487:PRO:HB2	1.93	0.50
1:M:379:VAL:HG22	1:2:281:PRO:HG3	1.92	0.50
1:P:72:LEU:HD12	1:Q:487:PRO:HB2	1.93	0.50
1:P:257:VAL:HG23	1:P:470:LEU:HD11	1.93	0.50
1:R:388:ASP:C	1:R:390:ALA:H	2.20	0.50
1:T:379:VAL:HG22	1:f:281:PRO:HG3	1.92	0.50
1:1:174:HIS:CD2	1:1:474:HIS:HD2	2.26	0.50
1:b:257:VAL:HG23	1:b:470:LEU:HD11	1.93	0.50
1:d:72:LEU:HD12	1:r:487:PRO:HB2	1.93	0.50
1:d:257:VAL:HG23	1:d:470:LEU:HD11	1.93	0.50
1:h:402:TYR:H	1:h:443:GLN:NE2	2.10	0.50
1:q:257:VAL:HG23	1:q:470:LEU:HD11	1.93	0.50
1:s:402:TYR:H	1:s:443:GLN:NE2	2.10	0.50
1:u:388:ASP:C	1:u:390:ALA:H	2.20	0.50
1:z:257:VAL:HG23	1:z:470:LEU:HD11	1.93	0.50
1:F:402:TYR:H	1:F:443:GLN:NE2	2.10	0.50
1:Q:388:ASP:C	1:Q:390:ALA:H	2.20	0.50
1:S:72:LEU:HD12	1:4:487:PRO:HB2	1.93	0.50
1:S:326:VAL:HB	1:S:364:ILE:HG21	1.94	0.50
1:W:257:VAL:HG23	1:W:470:LEU:HD11	1.93	0.50
1:X:326:VAL:HB	1:X:364:ILE:HG21	1.94	0.50
1:Z:377:ASP:O	1:Z:381:THR:OG1	2.19	0.50
1:3:288:THR:O	1:i:394:THR:OG1	2.22	0.50
1:5:174:HIS:CD2	1:5:474:HIS:HD2	2.26	0.50
1:b:402:TYR:H	1:b:443:GLN:NE2	2.10	0.50
1:c:281:PRO:HG3	1:d:379:VAL:HG22	1.93	0.50
1:c:402:TYR:H	1:c:443:GLN:NE2	2.10	0.50
1:i:326:VAL:HB	1:i:364:ILE:HG21	1.94	0.50
1:l:326:VAL:HB	1:l:364:ILE:HG21	1.94	0.50
1:l:402:TYR:H	1:l:443:GLN:NE2	2.10	0.50
1:m:174:HIS:HD2	1:m:474:HIS:CD2	2.25	0.50
1:n:72:LEU:HD12	1:z:487:PRO:HB2	1.93	0.50
1:o:257:VAL:HG23	1:o:470:LEU:HD11	1.93	0.50
1:p:487:PRO:HB2	1:u:72:LEU:HD12	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:r:388:ASP:C	1:r:390:ALA:H	2.20	0.50
1:v:257:VAL:HG23	1:v:470:LEU:HD11	1.93	0.50
1:w:388:ASP:C	1:w:390:ALA:H	2.20	0.50
1:z:388:ASP:C	1:z:390:ALA:H	2.20	0.50
1:A:388:ASP:C	1:A:390:ALA:H	2.20	0.50
1:A:402:TYR:H	1:A:443:GLN:NE2	2.10	0.50
1:A:487:PRO:HD2	1:B:503:THR:HG21	1.92	0.50
1:F:503:THR:HG21	1:G:487:PRO:HD2	1.92	0.50
1:G:72:LEU:HD12	1:W:487:PRO:HB2	1.93	0.50
1:J:257:VAL:HG23	1:J:470:LEU:HD11	1.93	0.50
1:M:257:VAL:HG23	1:M:470:LEU:HD11	1.93	0.50
1:N:402:TYR:H	1:N:443:GLN:NE2	2.10	0.50
1:O:72:LEU:HD12	1:P:487:PRO:HB2	1.93	0.50
1:P:326:VAL:HB	1:P:364:ILE:HG21	1.94	0.50
1:S:402:TYR:H	1:S:443:GLN:NE2	2.10	0.50
1:U:174:HIS:HD2	1:U:474:HIS:CD2	2.25	0.50
1:W:388:ASP:C	1:W:390:ALA:H	2.20	0.50
1:d:326:VAL:HB	1:d:364:ILE:HG21	1.94	0.50
1:d:402:TYR:H	1:d:443:GLN:NE2	2.10	0.50
1:h:487:PRO:HB2	1:l:72:LEU:HD12	1.93	0.50
1:p:388:ASP:C	1:p:390:ALA:H	2.20	0.50
1:p:487:PRO:HD2	1:u:503:THR:HG21	1.92	0.50
1:v:377:ASP:O	1:v:381:THR:OG1	2.19	0.50
1:B:405:ASP:OD2	1:B:407:THR:OG1	2.22	0.49
1:F:394:THR:OG1	1:Q:288:THR:O	2.21	0.49
1:I:257:VAL:HG23	1:I:470:LEU:HD11	1.93	0.49
1:M:174:HIS:CD2	1:M:474:HIS:HD2	2.26	0.49
1:M:402:TYR:H	1:M:443:GLN:NE2	2.10	0.49
1:N:281:PRO:HG3	1:P:379:VAL:HG22	1.93	0.49
1:N:326:VAL:HB	1:N:364:ILE:HG21	1.94	0.49
1:P:402:TYR:H	1:P:443:GLN:NE2	2.10	0.49
1:S:388:ASP:C	1:S:390:ALA:H	2.20	0.49
1:Y:377:ASP:O	1:Y:381:THR:OG1	2.19	0.49
1:4:326:VAL:HB	1:4:364:ILE:HG21	1.94	0.49
1:b:174:HIS:CD2	1:b:474:HIS:HD2	2.26	0.49
1:d:487:PRO:HB2	1:f:72:LEU:HD12	1.93	0.49
1:f:402:TYR:H	1:f:443:GLN:NE2	2.10	0.49
1:g:72:LEU:HD12	1:m:487:PRO:HB2	1.93	0.49
1:i:402:TYR:H	1:i:443:GLN:NE2	2.10	0.49
1:j:487:PRO:HD2	1:z:503:THR:HG21	1.93	0.49
1:l:388:ASP:C	1:l:390:ALA:H	2.20	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:402:TYR:H	1:p:443:GLN:NE2	2.10	0.49
1:u:402:TYR:H	1:u:443:GLN:NE2	2.10	0.49
1:w:174:HIS:CD2	1:w:474:HIS:HD2	2.26	0.49
1:A:487:PRO:HB2	1:B:72:LEU:HD12	1.93	0.49
1:B:402:TYR:H	1:B:443:GLN:NE2	2.10	0.49
1:E:326:VAL:HB	1:E:364:ILE:HG21	1.94	0.49
1:K:388:ASP:C	1:K:390:ALA:H	2.20	0.49
1:L:402:TYR:H	1:L:443:GLN:NE2	2.10	0.49
1:O:257:VAL:HG23	1:O:470:LEU:HD11	1.93	0.49
1:U:126:CYS:O	1:U:259:ASN:ND2	2.39	0.49
1:V:487:PRO:HD2	1:W:503:THR:HG21	1.93	0.49
1:X:402:TYR:H	1:X:443:GLN:NE2	2.10	0.49
1:Z:174:HIS:CD2	1:Z:474:HIS:HD2	2.26	0.49
1:1:388:ASP:C	1:1:390:ALA:H	2.20	0.49
1:2:388:ASP:C	1:2:390:ALA:H	2.20	0.49
1:3:257:VAL:HG23	1:3:470:LEU:HD11	1.93	0.49
1:c:326:VAL:HB	1:c:364:ILE:HG21	1.94	0.49
1:p:72:LEU:HD12	1:q:487:PRO:HB2	1.93	0.49
1:q:326:VAL:HB	1:q:364:ILE:HG21	1.94	0.49
1:t:402:TYR:H	1:t:443:GLN:NE2	2.10	0.49
1:B:313:ARG:CZ	1:B:320:ARG:HH21	2.26	0.49
1:H:313:ARG:CZ	1:H:320:ARG:HH21	2.26	0.49
1:H:402:TYR:H	1:H:443:GLN:NE2	2.10	0.49
1:I:313:ARG:CZ	1:I:320:ARG:HH21	2.26	0.49
1:K:313:ARG:CZ	1:K:320:ARG:HH21	2.26	0.49
1:K:326:VAL:HB	1:K:364:ILE:HG21	1.94	0.49
1:L:49:THR:HG1	1:L:143:ASN:H	1.60	0.49
1:N:72:LEU:HD12	1:g:487:PRO:HB2	1.94	0.49
1:O:402:TYR:H	1:O:443:GLN:NE2	2.10	0.49
1:S:126:CYS:O	1:S:259:ASN:ND2	2.39	0.49
1:W:313:ARG:CZ	1:W:320:ARG:HH21	2.26	0.49
1:4:388:ASP:C	1:4:390:ALA:H	2.20	0.49
1:5:257:VAL:HG23	1:5:470:LEU:HD11	1.93	0.49
1:6:487:PRO:HB2	1:t:72:LEU:HD12	1.93	0.49
1:f:257:VAL:HG23	1:f:470:LEU:HD11	1.93	0.49
1:g:313:ARG:CZ	1:g:320:ARG:HH21	2.26	0.49
1:h:326:VAL:HB	1:h:364:ILE:HG21	1.94	0.49
1:h:388:ASP:C	1:h:390:ALA:H	2.20	0.49
1:i:313:ARG:CZ	1:i:320:ARG:HH21	2.26	0.49
1:l:126:CYS:O	1:l:259:ASN:ND2	2.39	0.49
1:n:402:TYR:H	1:n:443:GLN:NE2	2.10	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:487:PRO:HD2	1:s:503:THR:HG21	1.92	0.49
1:p:326:VAL:HB	1:p:364:ILE:HG21	1.94	0.49
1:q:313:ARG:CZ	1:q:320:ARG:HH21	2.26	0.49
1:r:288:THR:O	1:s:394:THR:OG1	2.21	0.49
1:s:174:HIS:HD2	1:s:474:HIS:CD2	2.25	0.49
1:u:313:ARG:CZ	1:u:320:ARG:HH21	2.26	0.49
1:x:388:ASP:C	1:x:390:ALA:H	2.20	0.49
1:y:313:ARG:CZ	1:y:320:ARG:HH21	2.26	0.49
1:8:174:HIS:CD2	1:8:474:HIS:HD2	2.26	0.49
1:A:72:LEU:HD12	1:E:487:PRO:HB2	1.93	0.49
1:A:288:THR:O	1:G:394:THR:OG1	2.22	0.49
1:A:326:VAL:HB	1:A:364:ILE:HG21	1.94	0.49
1:D:388:ASP:C	1:D:390:ALA:H	2.20	0.49
1:E:313:ARG:CZ	1:E:320:ARG:HH21	2.26	0.49
1:J:402:TYR:H	1:J:443:GLN:NE2	2.10	0.49
1:L:72:LEU:HD12	1:2:487:PRO:HB2	1.93	0.49
1:V:174:HIS:CD2	1:V:474:HIS:HD2	2.26	0.49
1:X:313:ARG:CZ	1:X:320:ARG:HH21	2.26	0.49
1:Y:445:ASP:OD2	1:Y:554:TYR:OH	2.30	0.49
1:1:313:ARG:CZ	1:1:320:ARG:HH21	2.26	0.49
1:5:313:ARG:CZ	1:5:320:ARG:HH21	2.26	0.49
1:e:388:ASP:C	1:e:390:ALA:H	2.20	0.49
1:o:313:ARG:CZ	1:o:320:ARG:HH21	2.26	0.49
1:t:388:ASP:C	1:t:390:ALA:H	2.20	0.49
1:w:313:ARG:CZ	1:w:320:ARG:HH21	2.26	0.49
1:x:313:ARG:CZ	1:x:320:ARG:HH21	2.26	0.49
1:x:326:VAL:HB	1:x:364:ILE:HG21	1.94	0.49
1:y:402:TYR:H	1:y:443:GLN:NE2	2.10	0.49
1:z:313:ARG:CZ	1:z:320:ARG:HH21	2.26	0.49
1:7:377:ASP:O	1:7:381:THR:OG1	2.19	0.49
1:A:313:ARG:CZ	1:A:320:ARG:HH21	2.26	0.49
1:G:402:TYR:H	1:G:443:GLN:NE2	2.10	0.49
1:J:377:ASP:O	1:J:381:THR:OG1	2.19	0.49
1:L:388:ASP:C	1:L:390:ALA:H	2.20	0.49
1:T:313:ARG:CZ	1:T:320:ARG:HH21	2.26	0.49
1:T:402:TYR:H	1:T:443:GLN:NE2	2.10	0.49
1:3:313:ARG:CZ	1:3:320:ARG:HH21	2.26	0.49
1:b:388:ASP:C	1:b:390:ALA:H	2.20	0.49
1:c:313:ARG:CZ	1:c:320:ARG:HH21	2.26	0.49
1:i:72:LEU:HD12	1:7:487:PRO:HB2	1.93	0.49
1:k:402:TYR:H	1:k:443:GLN:NE2	2.10	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:313:ARG:CZ	1:l:320:ARG:HH21	2.26	0.49
1:n:394:THR:OG1	1:p:288:THR:O	2.22	0.49
1:t:313:ARG:CZ	1:t:320:ARG:HH21	2.26	0.49
1:v:402:TYR:H	1:v:443:GLN:NE2	2.10	0.49
1:C:487:PRO:HB2	1:D:72:LEU:HD12	1.93	0.49
1:L:313:ARG:CZ	1:L:320:ARG:HH21	2.26	0.49
1:N:313:ARG:CZ	1:N:320:ARG:HH21	2.26	0.49
1:R:326:VAL:HB	1:R:364:ILE:HG21	1.94	0.49
1:R:402:TYR:H	1:R:443:GLN:NE2	2.10	0.49
1:S:313:ARG:CZ	1:S:320:ARG:HH21	2.26	0.49
1:V:388:ASP:C	1:V:390:ALA:H	2.20	0.49
1:X:72:LEU:HD12	1:Y:487:PRO:HB2	1.93	0.49
1:Y:326:VAL:HB	1:Y:364:ILE:HG21	1.94	0.49
1:a:487:PRO:HB2	1:e:72:LEU:HD12	1.93	0.49
1:e:126:CYS:O	1:e:259:ASN:ND2	2.39	0.49
1:k:326:VAL:HB	1:k:364:ILE:HG21	1.94	0.49
1:m:126:CYS:O	1:m:259:ASN:ND2	2.39	0.49
1:o:402:TYR:H	1:o:443:GLN:NE2	2.10	0.49
1:p:313:ARG:CZ	1:p:320:ARG:HH21	2.26	0.49
1:s:388:ASP:C	1:s:390:ALA:H	2.20	0.49
1:t:49:THR:HG1	1:t:143:ASN:H	1.60	0.49
1:8:402:TYR:H	1:8:443:GLN:NE2	2.10	0.49
1:D:402:TYR:H	1:D:443:GLN:NE2	2.10	0.49
1:F:174:HIS:HD2	1:F:474:HIS:CD2	2.25	0.49
1:G:388:ASP:C	1:G:390:ALA:H	2.20	0.49
1:I:402:TYR:H	1:I:443:GLN:NE2	2.10	0.49
1:M:503:THR:HG21	1:N:487:PRO:HD2	1.93	0.49
1:Q:313:ARG:CZ	1:Q:320:ARG:HH21	2.26	0.49
1:S:445:ASP:OD2	1:S:554:TYR:OH	2.30	0.49
1:T:394:THR:OG1	1:f:288:THR:O	2.24	0.49
1:U:313:ARG:CZ	1:U:320:ARG:HH21	2.26	0.49
1:Z:402:TYR:H	1:Z:443:GLN:NE2	2.10	0.49
1:1:402:TYR:H	1:1:443:GLN:NE2	2.10	0.49
1:6:326:VAL:HB	1:6:364:ILE:HG21	1.94	0.49
1:b:503:THR:HG21	1:c:487:PRO:HD2	1.93	0.49
1:e:402:TYR:H	1:e:443:GLN:NE2	2.10	0.49
1:f:487:PRO:HB2	1:h:72:LEU:HD12	1.93	0.49
1:g:402:TYR:H	1:g:443:GLN:NE2	2.10	0.49
1:j:174:HIS:CD2	1:j:474:HIS:HD2	2.26	0.49
1:m:313:ARG:CZ	1:m:320:ARG:HH21	2.26	0.49
1:n:313:ARG:CZ	1:n:320:ARG:HH21	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:388:ASP:C	1:n:390:ALA:H	2.20	0.49
1:r:313:ARG:CZ	1:r:320:ARG:HH21	2.26	0.49
1:7:313:ARG:CZ	1:7:320:ARG:HH21	2.26	0.49
1:8:174:HIS:HD2	1:8:474:HIS:CD2	2.25	0.49
1:D:126:CYS:O	1:D:259:ASN:ND2	2.39	0.49
1:D:445:ASP:OD2	1:D:554:TYR:OH	2.30	0.49
1:F:313:ARG:CZ	1:F:320:ARG:HH21	2.26	0.49
1:I:174:HIS:HD2	1:I:474:HIS:CD2	2.25	0.49
1:J:326:VAL:HB	1:J:364:ILE:HG21	1.94	0.49
1:O:487:PRO:HB2	1:4:72:LEU:HD12	1.93	0.49
1:V:326:VAL:HB	1:V:364:ILE:HG21	1.94	0.49
1:X:487:PRO:HB2	1:6:72:LEU:HD12	1.93	0.49
1:Y:313:ARG:CZ	1:Y:320:ARG:HH21	2.26	0.49
1:Z:174:HIS:HD2	1:Z:474:HIS:CD2	2.25	0.49
1:1:181:HIS:HE1	1:1:183:TRP:HB2	1.78	0.49
1:2:326:VAL:HB	1:2:364:ILE:HG21	1.94	0.49
1:3:136:ARG:HE	1:3:138:ARG:NH1	2.11	0.49
1:3:326:VAL:HB	1:3:364:ILE:HG21	1.94	0.49
1:b:136:ARG:HE	1:b:138:ARG:NH1	2.11	0.49
1:j:326:VAL:HB	1:j:364:ILE:HG21	1.94	0.49
1:l:445:ASP:OD2	1:l:554:TYR:OH	2.30	0.49
1:q:445:ASP:OD2	1:q:554:TYR:OH	2.30	0.49
1:v:326:VAL:HB	1:v:364:ILE:HG21	1.94	0.49
1:7:326:VAL:HB	1:7:364:ILE:HG21	1.94	0.49
1:C:402:TYR:H	1:C:443:GLN:NE2	2.10	0.49
1:E:445:ASP:OD2	1:E:554:TYR:OH	2.30	0.49
1:F:326:VAL:HB	1:F:364:ILE:HG21	1.94	0.49
1:G:313:ARG:CZ	1:G:320:ARG:HH21	2.26	0.49
1:I:136:ARG:HE	1:I:138:ARG:NH1	2.11	0.49
1:L:326:VAL:HB	1:L:364:ILE:HG21	1.94	0.49
1:M:136:ARG:HE	1:M:138:ARG:NH1	2.11	0.49
1:M:388:ASP:C	1:M:390:ALA:H	2.20	0.49
1:P:313:ARG:CZ	1:P:320:ARG:HH21	2.26	0.49
1:U:326:VAL:HB	1:U:364:ILE:HG21	1.94	0.49
1:2:72:LEU:HD12	1:i:487:PRO:HB2	1.93	0.49
1:2:136:ARG:HE	1:2:138:ARG:NH1	2.11	0.49
1:2:402:TYR:H	1:2:443:GLN:NE2	2.10	0.49
1:5:136:ARG:HE	1:5:138:ARG:NH1	2.11	0.49
1:5:402:TYR:H	1:5:443:GLN:NE2	2.10	0.49
1:6:136:ARG:HE	1:6:138:ARG:NH1	2.11	0.49
1:6:402:TYR:H	1:6:443:GLN:NE2	2.10	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:445:ASP:OD2	1:6:554:TYR:OH	2.30	0.49
1:a:136:ARG:HE	1:a:138:ARG:NH1	2.11	0.49
1:d:313:ARG:CZ	1:d:320:ARG:HH21	2.26	0.49
1:e:326:VAL:HB	1:e:364:ILE:HG21	1.94	0.49
1:e:445:ASP:OD2	1:e:554:TYR:OH	2.30	0.49
1:m:326:VAL:HB	1:m:364:ILE:HG21	1.94	0.49
1:o:174:HIS:HD2	1:o:474:HIS:CD2	2.25	0.49
1:s:257:VAL:HG23	1:s:470:LEU:HD11	1.93	0.49
1:s:313:ARG:CZ	1:s:320:ARG:HH21	2.26	0.49
1:s:326:VAL:HB	1:s:364:ILE:HG21	1.94	0.49
1:w:181:HIS:HE1	1:w:183:TRP:HB2	1.78	0.49
1:w:402:TYR:H	1:w:443:GLN:NE2	2.10	0.49
1:7:402:TYR:H	1:7:443:GLN:NE2	2.10	0.49
1:D:326:VAL:HB	1:D:364:ILE:HG21	1.94	0.49
1:F:257:VAL:HG23	1:F:470:LEU:HD11	1.93	0.49
1:K:402:TYR:H	1:K:443:GLN:NE2	2.10	0.49
1:R:136:ARG:HE	1:R:138:ARG:NH1	2.11	0.49
1:X:136:ARG:HE	1:X:138:ARG:NH1	2.11	0.49
1:Y:136:ARG:HE	1:Y:138:ARG:NH1	2.11	0.49
1:Z:136:ARG:HE	1:Z:138:ARG:NH1	2.11	0.49
1:2:181:HIS:HE1	1:2:183:TRP:HB2	1.78	0.49
1:5:326:VAL:HB	1:5:364:ILE:HG21	1.94	0.49
1:a:181:HIS:HE1	1:a:183:TRP:HB2	1.78	0.49
1:a:402:TYR:H	1:a:443:GLN:NE2	2.10	0.49
1:b:326:VAL:HB	1:b:364:ILE:HG21	1.94	0.49
1:e:181:HIS:HE1	1:e:183:TRP:HB2	1.78	0.49
1:f:313:ARG:CZ	1:f:320:ARG:HH21	2.26	0.49
1:j:388:ASP:C	1:j:390:ALA:H	2.20	0.49
1:t:326:VAL:HB	1:t:364:ILE:HG21	1.94	0.49
1:t:445:ASP:OD2	1:t:554:TYR:OH	2.30	0.49
1:y:257:VAL:HG23	1:y:470:LEU:HD11	1.93	0.49
1:C:136:ARG:HE	1:C:138:ARG:NH1	2.11	0.48
1:D:136:ARG:HE	1:D:138:ARG:NH1	2.11	0.48
1:D:181:HIS:HE1	1:D:183:TRP:HB2	1.78	0.48
1:J:313:ARG:CZ	1:J:320:ARG:HH21	2.26	0.48
1:L:181:HIS:HE1	1:L:183:TRP:HB2	1.78	0.48
1:L:445:ASP:OD2	1:L:554:TYR:OH	2.30	0.48
1:M:313:ARG:CZ	1:M:320:ARG:HH21	2.26	0.48
1:M:326:VAL:HB	1:M:364:ILE:HG21	1.94	0.48
1:O:388:ASP:C	1:O:390:ALA:H	2.20	0.48
1:P:126:CYS:O	1:P:259:ASN:ND2	2.39	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:174:HIS:HD2	1:S:474:HIS:CD2	2.25	0.48
1:U:136:ARG:HE	1:U:138:ARG:NH1	2.11	0.48
1:W:181:HIS:HE1	1:W:183:TRP:HB2	1.78	0.48
1:Y:402:TYR:H	1:Y:443:GLN:NE2	2.10	0.48
1:2:445:ASP:OD2	1:2:554:TYR:OH	2.30	0.48
1:3:402:TYR:H	1:3:443:GLN:NE2	2.10	0.48
1:6:181:HIS:HE1	1:6:183:TRP:HB2	1.78	0.48
1:b:313:ARG:CZ	1:b:320:ARG:HH21	2.26	0.48
1:f:181:HIS:HE1	1:f:183:TRP:HB2	1.78	0.48
1:f:388:ASP:C	1:f:390:ALA:H	2.20	0.48
1:g:326:VAL:HB	1:g:364:ILE:HG21	1.94	0.48
1:i:136:ARG:HE	1:i:138:ARG:NH1	2.11	0.48
1:k:136:ARG:HE	1:k:138:ARG:NH1	2.11	0.48
1:l:136:ARG:HE	1:l:138:ARG:NH1	2.11	0.48
1:m:136:ARG:HE	1:m:138:ARG:NH1	2.11	0.48
1:n:377:ASP:O	1:n:381:THR:OG1	2.19	0.48
1:o:136:ARG:HE	1:o:138:ARG:NH1	2.11	0.48
1:r:136:ARG:HE	1:r:138:ARG:NH1	2.11	0.48
1:r:257:VAL:HG23	1:r:470:LEU:HD11	1.93	0.48
1:7:136:ARG:HE	1:7:138:ARG:NH1	2.11	0.48
1:8:136:ARG:HE	1:8:138:ARG:NH1	2.11	0.48
1:C:181:HIS:HE1	1:C:183:TRP:HB2	1.78	0.48
1:C:313:ARG:CZ	1:C:320:ARG:HH21	2.26	0.48
1:C:413:GLN:HB2	1:2:325:THR:OG1	2.13	0.48
1:F:325:THR:OG1	1:Q:413:GLN:HB2	2.13	0.48
1:H:257:VAL:HG23	1:H:470:LEU:HD11	1.93	0.48
1:K:413:GLN:HB2	1:1:325:THR:OG1	2.14	0.48
1:N:181:HIS:HE1	1:N:183:TRP:HB2	1.78	0.48
1:Q:136:ARG:HE	1:Q:138:ARG:NH1	2.11	0.48
1:R:313:ARG:CZ	1:R:320:ARG:HH21	2.26	0.48
1:S:136:ARG:HE	1:S:138:ARG:NH1	2.11	0.48
1:T:326:VAL:HB	1:T:364:ILE:HG21	1.94	0.48
1:U:181:HIS:HE1	1:U:183:TRP:HB2	1.78	0.48
1:Z:181:HIS:HE1	1:Z:183:TRP:HB2	1.78	0.48
1:3:181:HIS:HE1	1:3:183:TRP:HB2	1.78	0.48
1:4:136:ARG:HE	1:4:138:ARG:NH1	2.11	0.48
1:6:325:THR:OG1	1:a:413:GLN:HB2	2.13	0.48
1:c:181:HIS:HE1	1:c:183:TRP:HB2	1.78	0.48
1:h:136:ARG:HE	1:h:138:ARG:NH1	2.11	0.48
1:r:174:HIS:HD2	1:r:474:HIS:CD2	2.25	0.48
1:s:174:HIS:CD2	1:s:474:HIS:HD2	2.26	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:x:402:TYR:H	1:x:443:GLN:NE2	2.10	0.48
1:z:181:HIS:HE1	1:z:183:TRP:HB2	1.78	0.48
1:z:326:VAL:HB	1:z:364:ILE:HG21	1.94	0.48
1:z:402:TYR:H	1:z:443:GLN:NE2	2.10	0.48
1:H:326:VAL:HB	1:H:364:ILE:HG21	1.94	0.48
1:O:181:HIS:HE1	1:O:183:TRP:HB2	1.78	0.48
1:O:313:ARG:CZ	1:O:320:ARG:HH21	2.26	0.48
1:P:388:ASP:C	1:P:390:ALA:H	2.20	0.48
1:Q:174:HIS:HD2	1:Q:474:HIS:CD2	2.25	0.48
1:Q:257:VAL:HG23	1:Q:470:LEU:HD11	1.93	0.48
1:Q:326:VAL:HB	1:Q:364:ILE:HG21	1.94	0.48
1:W:326:VAL:HB	1:W:364:ILE:HG21	1.94	0.48
1:Y:72:LEU:HD12	1:x:487:PRO:HB2	1.94	0.48
1:Z:326:VAL:HB	1:Z:364:ILE:HG21	1.94	0.48
1:5:181:HIS:HE1	1:5:183:TRP:HB2	1.78	0.48
1:a:313:ARG:CZ	1:a:320:ARG:HH21	2.26	0.48
1:a:388:ASP:C	1:a:390:ALA:H	2.20	0.48
1:d:388:ASP:C	1:d:390:ALA:H	2.20	0.48
1:e:136:ARG:HE	1:e:138:ARG:NH1	2.11	0.48
1:k:181:HIS:HE1	1:k:183:TRP:HB2	1.78	0.48
1:k:313:ARG:CZ	1:k:320:ARG:HH21	2.26	0.48
1:n:126:CYS:O	1:n:259:ASN:ND2	2.39	0.48
1:r:413:GLN:HB2	1:s:325:THR:OG1	2.13	0.48
1:t:181:HIS:HE1	1:t:183:TRP:HB2	1.78	0.48
1:v:313:ARG:CZ	1:v:320:ARG:HH21	2.26	0.48
1:w:325:THR:OG1	1:x:413:GLN:HB2	2.14	0.48
1:z:136:ARG:HE	1:z:138:ARG:NH1	2.11	0.48
1:8:181:HIS:HE1	1:8:183:TRP:HB2	1.78	0.48
1:A:181:HIS:HE1	1:A:183:TRP:HB2	1.78	0.48
1:B:326:VAL:HB	1:B:364:ILE:HG21	1.94	0.48
1:G:126:CYS:O	1:G:259:ASN:ND2	2.39	0.48
1:K:487:PRO:HB2	1:7:72:LEU:HD12	1.94	0.48
1:R:181:HIS:HE1	1:R:183:TRP:HB2	1.78	0.48
1:T:136:ARG:HE	1:T:138:ARG:NH1	2.11	0.48
1:W:136:ARG:HE	1:W:138:ARG:NH1	2.11	0.48
1:W:402:TYR:H	1:W:443:GLN:NE2	2.10	0.48
1:d:126:CYS:O	1:d:259:ASN:ND2	2.39	0.48
1:f:136:ARG:HE	1:f:138:ARG:NH1	2.11	0.48
1:m:181:HIS:HE1	1:m:183:TRP:HB2	1.78	0.48
1:n:181:HIS:HE1	1:n:183:TRP:HB2	1.78	0.48
1:p:181:HIS:HE1	1:p:183:TRP:HB2	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:q:174:HIS:CD2	1:q:474:HIS:HD2	2.26	0.48
1:q:413:GLN:HB2	1:r:325:THR:OG1	2.14	0.48
1:r:326:VAL:HB	1:r:364:ILE:HG21	1.94	0.48
1:u:326:VAL:HB	1:u:364:ILE:HG21	1.94	0.48
1:y:326:VAL:HB	1:y:364:ILE:HG21	1.94	0.48
1:8:326:VAL:HB	1:8:364:ILE:HG21	1.94	0.48
1:B:445:ASP:OD2	1:B:554:TYR:OH	2.30	0.48
1:E:413:GLN:HB2	1:Q:325:THR:OG1	2.14	0.48
1:G:181:HIS:HE1	1:G:183:TRP:HB2	1.78	0.48
1:H:413:GLN:HB2	1:W:325:THR:OG1	2.14	0.48
1:O:136:ARG:HE	1:O:138:ARG:NH1	2.11	0.48
1:1:413:GLN:HB2	1:8:325:THR:OG1	2.14	0.48
1:b:181:HIS:HE1	1:b:183:TRP:HB2	1.78	0.48
1:f:326:VAL:HB	1:f:364:ILE:HG21	1.94	0.48
1:g:413:GLN:HB2	1:h:325:THR:OG1	2.14	0.48
1:l:174:HIS:HD2	1:l:474:HIS:CD2	2.25	0.48
1:y:413:GLN:HB2	1:z:325:THR:OG1	2.14	0.48
1:C:388:ASP:C	1:C:390:ALA:H	2.20	0.48
1:D:325:THR:OG1	1:P:413:GLN:HB2	2.14	0.48
1:F:174:HIS:CD2	1:F:474:HIS:HD2	2.26	0.48
1:G:377:ASP:O	1:G:381:THR:OG1	2.19	0.48
1:O:326:VAL:HB	1:O:364:ILE:HG21	1.94	0.48
1:R:325:THR:OG1	1:U:413:GLN:HB2	2.14	0.48
1:V:325:THR:OG1	1:X:413:GLN:HB2	2.14	0.48
1:W:413:GLN:HB2	1:Y:325:THR:OG1	2.14	0.48
1:Z:325:THR:OG1	1:w:413:GLN:HB2	2.14	0.48
1:1:326:VAL:HB	1:1:364:ILE:HG21	1.94	0.48
1:4:313:ARG:CZ	1:4:320:ARG:HH21	2.26	0.48
1:6:388:ASP:C	1:6:390:ALA:H	2.20	0.48
1:c:136:ARG:HE	1:c:138:ARG:NH1	2.11	0.48
1:c:413:GLN:HB2	1:d:325:THR:OG1	2.14	0.48
1:d:136:ARG:HE	1:d:138:ARG:NH1	2.11	0.48
1:d:413:GLN:HB2	1:e:325:THR:OG1	2.14	0.48
1:g:136:ARG:HE	1:g:138:ARG:NH1	2.11	0.48
1:k:325:THR:OG1	1:m:413:GLN:HB2	2.14	0.48
1:u:445:ASP:OD2	1:u:554:TYR:OH	2.30	0.48
1:w:326:VAL:HB	1:w:364:ILE:HG21	1.94	0.48
1:z:413:GLN:HB2	1:7:325:THR:OG1	2.14	0.48
1:E:174:HIS:CD2	1:E:474:HIS:HD2	2.26	0.48
1:F:136:ARG:HE	1:F:138:ARG:NH1	2.11	0.48
1:K:181:HIS:HE1	1:K:183:TRP:HB2	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:181:HIS:HE1	1:M:183:TRP:HB2	1.78	0.48
1:N:136:ARG:HE	1:N:138:ARG:NH1	2.11	0.48
1:N:388:ASP:C	1:N:390:ALA:H	2.20	0.48
1:N:413:GLN:HB2	1:P:325:THR:OG1	2.14	0.48
1:P:136:ARG:HE	1:P:138:ARG:NH1	2.11	0.48
1:4:377:ASP:O	1:4:381:THR:OG1	2.19	0.48
1:c:388:ASP:C	1:c:390:ALA:H	2.20	0.48
1:c:445:ASP:OD2	1:c:554:TYR:OH	2.30	0.48
1:d:445:ASP:OD2	1:d:554:TYR:OH	2.30	0.48
1:h:313:ARG:CZ	1:h:320:ARG:HH21	2.26	0.48
1:i:413:GLN:HB2	1:j:325:THR:OG1	2.14	0.48
1:l:181:HIS:HE1	1:l:183:TRP:HB2	1.78	0.48
1:A:325:THR:OG1	1:I:413:GLN:HB2	2.13	0.48
1:L:136:ARG:HE	1:L:138:ARG:NH1	2.11	0.48
1:N:445:ASP:OD2	1:N:554:TYR:OH	2.30	0.48
1:O:325:THR:OG1	1:h:413:GLN:HB2	2.14	0.48
1:T:181:HIS:HE1	1:T:183:TRP:HB2	1.78	0.48
1:1:67:GLN:HE21	1:1:69:ARG:NH1	2.12	0.48
1:h:181:HIS:HE1	1:h:183:TRP:HB2	1.78	0.48
1:k:174:HIS:CD2	1:k:474:HIS:HD2	2.26	0.48
1:q:136:ARG:HE	1:q:138:ARG:NH1	2.11	0.48
1:r:181:HIS:HE1	1:r:183:TRP:HB2	1.78	0.48
1:s:136:ARG:HE	1:s:138:ARG:NH1	2.11	0.48
1:w:67:GLN:HE21	1:w:69:ARG:NH1	2.12	0.48
1:w:136:ARG:HE	1:w:138:ARG:NH1	2.11	0.48
1:x:181:HIS:HE1	1:x:183:TRP:HB2	1.78	0.48
1:E:325:THR:OG1	1:F:413:GLN:HB2	2.14	0.48
1:I:181:HIS:HE1	1:I:183:TRP:HB2	1.78	0.48
1:P:445:ASP:OD2	1:P:554:TYR:OH	2.30	0.48
1:S:181:HIS:HE1	1:S:183:TRP:HB2	1.78	0.48
1:Z:413:GLN:HB2	1:x:325:THR:OG1	2.14	0.48
1:1:136:ARG:HE	1:1:138:ARG:NH1	2.11	0.48
1:4:181:HIS:HE1	1:4:183:TRP:HB2	1.78	0.48
1:g:181:HIS:HE1	1:g:183:TRP:HB2	1.78	0.48
1:l:413:GLN:HB2	1:m:325:THR:OG1	2.14	0.48
1:o:413:GLN:HB2	1:p:325:THR:OG1	2.13	0.48
1:q:325:THR:OG1	1:s:413:GLN:HB2	2.14	0.48
1:t:136:ARG:HE	1:t:138:ARG:NH1	2.11	0.48
1:v:126:CYS:O	1:v:259:ASN:ND2	2.39	0.48
1:8:49:THR:HG1	1:8:143:ASN:H	1.62	0.48
1:D:394:THR:OG1	1:P:288:THR:O	2.22	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:136:ARG:HE	1:E:138:ARG:NH1	2.11	0.48
1:J:413:GLN:HB2	1:L:325:THR:OG1	2.14	0.48
1:K:325:THR:OG1	1:8:413:GLN:HB2	2.14	0.48
1:Q:181:HIS:HE1	1:Q:183:TRP:HB2	1.78	0.48
1:R:413:GLN:HB2	1:S:325:THR:OG1	2.14	0.48
1:S:413:GLN:HB2	1:U:325:THR:OG1	2.14	0.48
1:W:174:HIS:HD2	1:W:474:HIS:CD2	2.25	0.48
1:X:67:GLN:HE21	1:X:69:ARG:NH1	2.12	0.48
1:4:413:GLN:HB2	1:f:325:THR:OG1	2.14	0.48
1:a:325:THR:OG1	1:b:413:GLN:HB2	2.14	0.48
1:e:313:ARG:CZ	1:e:320:ARG:HH21	2.26	0.48
1:k:413:GLN:HB2	1:l:325:THR:OG1	2.14	0.48
1:w:126:CYS:O	1:w:259:ASN:ND2	2.39	0.48
1:8:313:ARG:CZ	1:8:320:ARG:HH21	2.26	0.48
1:A:136:ARG:HE	1:A:138:ARG:NH1	2.11	0.47
1:C:325:THR:OG1	1:M:413:GLN:HB2	2.14	0.47
1:D:313:ARG:CZ	1:D:320:ARG:HH21	2.26	0.47
1:G:136:ARG:HE	1:G:138:ARG:NH1	2.11	0.47
1:I:67:GLN:HE21	1:I:69:ARG:NH1	2.12	0.47
1:J:126:CYS:O	1:J:259:ASN:ND2	2.39	0.47
1:T:281:PRO:HG3	1:4:379:VAL:HG22	1.94	0.47
1:Y:174:HIS:HD2	1:Y:474:HIS:CD2	2.25	0.47
1:6:313:ARG:CZ	1:6:320:ARG:HH21	2.26	0.47
1:f:377:ASP:O	1:f:381:THR:OG1	2.19	0.47
1:o:181:HIS:HE1	1:o:183:TRP:HB2	1.78	0.47
1:u:136:ARG:HE	1:u:138:ARG:NH1	2.11	0.47
1:7:405:ASP:OD2	1:7:407:THR:OG1	2.22	0.47
1:A:67:GLN:HE21	1:A:69:ARG:NH1	2.12	0.47
1:H:325:THR:OG1	1:Y:413:GLN:HB2	2.14	0.47
1:L:377:ASP:O	1:L:381:THR:OG1	2.19	0.47
1:R:174:HIS:CD2	1:R:474:HIS:HD2	2.26	0.47
1:Z:313:ARG:CZ	1:Z:320:ARG:HH21	2.26	0.47
1:i:67:GLN:HE21	1:i:69:ARG:NH1	2.12	0.47
1:n:413:GLN:HB2	1:o:325:THR:OG1	2.14	0.47
1:o:67:GLN:HE21	1:o:69:ARG:NH1	2.12	0.47
1:p:136:ARG:HE	1:p:138:ARG:NH1	2.11	0.47
1:t:413:GLN:HB2	1:u:325:THR:OG1	2.14	0.47
1:w:377:ASP:O	1:w:381:THR:OG1	2.19	0.47
1:y:325:THR:OG1	1:7:413:GLN:HB2	2.14	0.47
1:B:136:ARG:HE	1:B:138:ARG:NH1	2.11	0.47
1:B:325:THR:OG1	1:L:413:GLN:HB2	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:136:ARG:HE	1:H:138:ARG:NH1	2.11	0.47
1:X:325:THR:OG1	1:5:413:GLN:HB2	2.14	0.47
1:1:126:CYS:O	1:1:259:ASN:ND2	2.39	0.47
1:2:313:ARG:CZ	1:2:320:ARG:HH21	2.26	0.47
1:3:413:GLN:HB2	1:i:325:THR:OG1	2.14	0.47
1:4:174:HIS:CD2	1:4:474:HIS:HD2	2.26	0.47
1:f:49:THR:HG1	1:f:143:ASN:H	1.61	0.47
1:k:67:GLN:HE21	1:k:69:ARG:NH1	2.12	0.47
1:n:136:ARG:HE	1:n:138:ARG:NH1	2.11	0.47
1:p:67:GLN:HE21	1:p:69:ARG:NH1	2.12	0.47
1:t:325:THR:OG1	1:v:413:GLN:HB2	2.14	0.47
1:7:174:HIS:HD2	1:7:474:HIS:CD2	2.25	0.47
1:G:413:GLN:HB2	1:I:325:THR:OG1	2.14	0.47
1:J:67:GLN:HE21	1:J:69:ARG:NH1	2.12	0.47
1:T:413:GLN:HB2	1:4:325:THR:OG1	2.15	0.47
1:V:136:ARG:HE	1:V:138:ARG:NH1	2.11	0.47
1:V:413:GLN:HB2	1:5:325:THR:OG1	2.13	0.47
1:Y:405:ASP:OD2	1:Y:407:THR:OG1	2.22	0.47
1:6:126:CYS:O	1:6:259:ASN:ND2	2.39	0.47
1:6:288:THR:O	1:b:394:THR:OG1	2.23	0.47
1:o:377:ASP:O	1:o:381:THR:OG1	2.19	0.47
1:x:136:ARG:HE	1:x:138:ARG:NH1	2.11	0.47
1:y:136:ARG:HE	1:y:138:ARG:NH1	2.11	0.47
1:z:174:HIS:HD2	1:z:474:HIS:CD2	2.25	0.47
1:C:174:HIS:CD2	1:C:474:HIS:HD2	2.26	0.47
1:I:326:VAL:HB	1:I:364:ILE:HG21	1.94	0.47
1:J:136:ARG:HE	1:J:138:ARG:NH1	2.11	0.47
1:J:181:HIS:HE1	1:J:183:TRP:HB2	1.78	0.47
1:K:136:ARG:HE	1:K:138:ARG:NH1	2.11	0.47
1:L:126:CYS:O	1:L:259:ASN:ND2	2.39	0.47
1:R:67:GLN:HE21	1:R:69:ARG:NH1	2.12	0.47
1:2:126:CYS:O	1:2:259:ASN:ND2	2.39	0.47
1:4:445:ASP:OD2	1:4:554:TYR:OH	2.30	0.47
1:j:136:ARG:HE	1:j:138:ARG:NH1	2.11	0.47
1:o:326:VAL:HB	1:o:364:ILE:HG21	1.94	0.47
1:r:174:HIS:CD2	1:r:474:HIS:HD2	2.26	0.47
1:v:67:GLN:HE21	1:v:69:ARG:NH1	2.12	0.47
1:B:240:LEU:HD22	1:B:244:GLU:HB3	1.97	0.47
1:D:174:HIS:CD2	1:D:474:HIS:HD2	2.26	0.47
1:G:67:GLN:HE21	1:G:69:ARG:NH1	2.12	0.47
1:I:240:LEU:HD22	1:I:244:GLU:HB3	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Y:67:GLN:HE21	1:Y:69:ARG:NH1	2.12	0.47
1:2:240:LEU:HD22	1:2:244:GLU:HB3	1.97	0.47
1:3:325:THR:OG1	1:j:413:GLN:HB2	2.13	0.47
1:6:240:LEU:HD22	1:6:244:GLU:HB3	1.97	0.47
1:a:174:HIS:CD2	1:a:474:HIS:HD2	2.26	0.47
1:h:174:HIS:CD2	1:h:474:HIS:HD2	2.26	0.47
1:t:377:ASP:O	1:t:381:THR:OG1	2.19	0.47
1:u:240:LEU:HD22	1:u:244:GLU:HB3	1.97	0.47
1:v:136:ARG:HE	1:v:138:ARG:NH1	2.11	0.47
1:A:240:LEU:HD22	1:A:244:GLU:HB3	1.97	0.47
1:B:413:GLN:HB2	1:J:325:THR:OG1	2.14	0.47
1:F:240:LEU:HD22	1:F:244:GLU:HB3	1.97	0.47
1:G:445:ASP:OD2	1:G:554:TYR:OH	2.30	0.47
1:H:240:LEU:HD22	1:H:244:GLU:HB3	1.97	0.47
1:M:325:THR:OG1	1:2:413:GLN:HB2	2.14	0.47
1:O:377:ASP:O	1:O:381:THR:OG1	2.19	0.47
1:Q:174:HIS:CD2	1:Q:474:HIS:HD2	2.26	0.47
1:R:394:THR:OG1	1:U:288:THR:O	2.23	0.47
1:V:67:GLN:HE21	1:V:69:ARG:NH1	2.12	0.47
1:1:377:ASP:O	1:1:381:THR:OG1	2.19	0.47
1:6:174:HIS:CD2	1:6:474:HIS:HD2	2.26	0.47
1:e:174:HIS:CD2	1:e:474:HIS:HD2	2.26	0.47
1:h:445:ASP:OD2	1:h:554:TYR:OH	2.30	0.47
1:j:67:GLN:HE21	1:j:69:ARG:NH1	2.12	0.47
1:j:313:ARG:CZ	1:j:320:ARG:HH21	2.26	0.47
1:n:67:GLN:HE21	1:n:69:ARG:NH1	2.12	0.47
1:n:445:ASP:OD2	1:n:554:TYR:OH	2.30	0.47
1:o:240:LEU:HD22	1:o:244:GLU:HB3	1.97	0.47
1:s:240:LEU:HD22	1:s:244:GLU:HB3	1.97	0.47
1:v:181:HIS:HE1	1:v:183:TRP:HB2	1.78	0.47
1:y:240:LEU:HD22	1:y:244:GLU:HB3	1.97	0.47
1:z:49:THR:HG1	1:z:143:ASN:H	1.61	0.47
1:7:67:GLN:HE21	1:7:69:ARG:NH1	2.12	0.47
1:F:126:CYS:O	1:F:259:ASN:ND2	2.39	0.47
1:V:181:HIS:HE1	1:V:183:TRP:HB2	1.78	0.47
1:V:313:ARG:CZ	1:V:320:ARG:HH21	2.26	0.47
1:2:174:HIS:CD2	1:2:474:HIS:HD2	2.26	0.47
1:6:413:GLN:HB2	1:b:325:THR:OG1	2.14	0.47
1:a:240:LEU:HD22	1:a:244:GLU:HB3	1.97	0.47
1:i:240:LEU:HD22	1:i:244:GLU:HB3	1.97	0.47
1:p:240:LEU:HD22	1:p:244:GLU:HB3	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:413:GLN:HB2	1:v:325:THR:OG1	2.14	0.47
1:A:413:GLN:HB2	1:G:325:THR:OG1	2.14	0.47
1:C:240:LEU:HD22	1:C:244:GLU:HB3	1.97	0.47
1:F:181:HIS:HE1	1:F:183:TRP:HB2	1.78	0.47
1:K:240:LEU:HD22	1:K:244:GLU:HB3	1.97	0.47
1:O:413:GLN:HB2	1:g:325:THR:OG1	2.14	0.47
1:S:240:LEU:HD22	1:S:244:GLU:HB3	1.97	0.47
1:X:240:LEU:HD22	1:X:244:GLU:HB3	1.97	0.47
1:4:240:LEU:HD22	1:4:244:GLU:HB3	1.97	0.47
1:b:445:ASP:OD2	1:b:554:TYR:OH	2.30	0.47
1:k:394:THR:OG1	1:m:288:THR:O	2.23	0.47
1:l:240:LEU:HD22	1:l:244:GLU:HB3	1.97	0.47
1:q:181:HIS:HE1	1:q:183:TRP:HB2	1.78	0.47
1:t:126:CYS:O	1:t:259:ASN:ND2	2.39	0.47
1:x:240:LEU:HD22	1:x:244:GLU:HB3	1.97	0.47
1:7:181:HIS:HE1	1:7:183:TRP:HB2	1.78	0.47
1:8:67:GLN:HE21	1:8:69:ARG:NH1	2.12	0.47
1:E:67:GLN:HE21	1:E:69:ARG:NH1	2.12	0.47
1:E:181:HIS:HE1	1:E:183:TRP:HB2	1.78	0.47
1:H:452:ASP:OD1	1:H:453:LYS:N	2.48	0.47
1:L:67:GLN:HE21	1:L:69:ARG:NH1	2.12	0.47
1:5:445:ASP:OD2	1:5:554:TYR:OH	2.30	0.47
1:h:240:LEU:HD22	1:h:244:GLU:HB3	1.97	0.47
1:n:325:THR:OG1	1:p:413:GLN:HB2	2.14	0.47
1:t:67:GLN:HE21	1:t:69:ARG:NH1	2.12	0.47
1:C:445:ASP:OD2	1:C:554:TYR:OH	2.30	0.46
1:Q:67:GLN:HE21	1:Q:69:ARG:NH1	2.12	0.46
1:Y:181:HIS:HE1	1:Y:183:TRP:HB2	1.78	0.46
1:Z:67:GLN:HE21	1:Z:69:ARG:NH1	2.12	0.46
1:3:445:ASP:OD2	1:3:554:TYR:OH	2.30	0.46
1:j:126:CYS:O	1:j:259:ASN:ND2	2.39	0.46
1:j:181:HIS:HE1	1:j:183:TRP:HB2	1.78	0.46
1:q:67:GLN:HE21	1:q:69:ARG:NH1	2.12	0.46
1:r:445:ASP:OD2	1:r:554:TYR:OH	2.30	0.46
1:s:181:HIS:HE1	1:s:183:TRP:HB2	1.78	0.46
1:y:452:ASP:OD1	1:y:453:LYS:N	2.48	0.46
1:z:240:LEU:HD22	1:z:244:GLU:HB3	1.97	0.46
1:M:445:ASP:OD2	1:M:554:TYR:OH	2.30	0.46
1:N:240:LEU:HD22	1:N:244:GLU:HB3	1.97	0.46
1:S:452:ASP:OD1	1:S:453:LYS:N	2.49	0.46
1:5:240:LEU:HD22	1:5:244:GLU:HB3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:452:ASP:OD1	1:l:453:LYS:N	2.49	0.46
1:s:126:CYS:O	1:s:259:ASN:ND2	2.39	0.46
1:t:240:LEU:HD22	1:t:244:GLU:HB3	1.97	0.46
1:A:452:ASP:OD1	1:A:453:LYS:N	2.49	0.46
1:C:533:TRP:CZ3	1:C:538:ASN:HB3	2.51	0.46
1:J:533:TRP:CZ3	1:J:538:ASN:HB3	2.51	0.46
1:L:240:LEU:HD22	1:L:244:GLU:HB3	1.97	0.46
1:O:533:TRP:CZ3	1:O:538:ASN:HB3	2.51	0.46
1:R:452:ASP:OD1	1:R:453:LYS:N	2.49	0.46
1:W:67:GLN:HE21	1:W:69:ARG:NH1	2.12	0.46
1:W:240:LEU:HD22	1:W:244:GLU:HB3	1.97	0.46
1:3:240:LEU:HD22	1:3:244:GLU:HB3	1.97	0.46
1:6:533:TRP:CZ3	1:6:538:ASN:HB3	2.51	0.46
1:c:240:LEU:HD22	1:c:244:GLU:HB3	1.97	0.46
1:e:325:THR:OG1	1:e:413:GLN:HB2	2.14	0.46
1:e:452:ASP:OD1	1:e:453:LYS:N	2.49	0.46
1:f:533:TRP:CZ3	1:f:538:ASN:HB3	2.51	0.46
1:p:452:ASP:OD1	1:p:453:LYS:N	2.49	0.46
1:r:67:GLN:HE21	1:r:69:ARG:NH1	2.12	0.46
1:y:181:HIS:HE1	1:y:183:TRP:HB2	1.78	0.46
1:z:67:GLN:HE21	1:z:69:ARG:NH1	2.12	0.46
1:D:452:ASP:OD1	1:D:453:LYS:N	2.49	0.46
1:E:240:LEU:HD22	1:E:244:GLU:HB3	1.97	0.46
1:F:533:TRP:CZ3	1:F:538:ASN:HB3	2.51	0.46
1:G:533:TRP:CZ3	1:G:538:ASN:HB3	2.51	0.46
1:N:452:ASP:OD1	1:N:453:LYS:N	2.49	0.46
1:Q:240:LEU:HD22	1:Q:244:GLU:HB3	1.97	0.46
1:Q:445:ASP:OD2	1:Q:554:TYR:OH	2.30	0.46
1:T:533:TRP:CZ3	1:T:538:ASN:HB3	2.51	0.46
1:U:213:ASN:OD1	1:U:221:LYS:HE2	2.16	0.46
1:W:174:HIS:CD2	1:W:474:HIS:HD2	2.26	0.46
1:W:533:TRP:CZ3	1:W:538:ASN:HB3	2.51	0.46
1:Z:213:ASN:OD1	1:Z:221:LYS:HE2	2.16	0.46
1:2:533:TRP:CZ3	1:2:538:ASN:HB3	2.51	0.46
1:a:445:ASP:OD2	1:a:554:TYR:OH	2.30	0.46
1:a:533:TRP:CZ3	1:a:538:ASN:HB3	2.51	0.46
1:c:452:ASP:OD1	1:c:453:LYS:N	2.49	0.46
1:d:533:TRP:CZ3	1:d:538:ASN:HB3	2.51	0.46
1:g:533:TRP:CZ3	1:g:538:ASN:HB3	2.51	0.46
1:k:452:ASP:OD1	1:k:453:LYS:N	2.49	0.46
1:n:533:TRP:CZ3	1:n:538:ASN:HB3	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:o:49:THR:HG1	1:o:143:ASN:H	1.61	0.46
1:r:240:LEU:HD22	1:r:244:GLU:HB3	1.97	0.46
1:s:533:TRP:CZ3	1:s:538:ASN:HB3	2.51	0.46
1:y:67:GLN:HE21	1:y:69:ARG:NH1	2.12	0.46
1:z:533:TRP:CZ3	1:z:538:ASN:HB3	2.51	0.46
1:7:452:ASP:OD1	1:7:453:LYS:N	2.49	0.46
1:8:213:ASN:OD1	1:8:221:LYS:HE2	2.16	0.46
1:8:533:TRP:CZ3	1:8:538:ASN:HB3	2.51	0.46
1:G:240:LEU:HD22	1:G:244:GLU:HB3	1.97	0.46
1:K:213:ASN:OD1	1:K:221:LYS:HE2	2.16	0.46
1:O:452:ASP:OD1	1:O:453:LYS:N	2.49	0.46
1:P:240:LEU:HD22	1:P:244:GLU:HB3	1.97	0.46
1:P:533:TRP:CZ3	1:P:538:ASN:HB3	2.51	0.46
1:S:67:GLN:HE21	1:S:69:ARG:NH1	2.12	0.46
1:V:126:CYS:O	1:V:259:ASN:ND2	2.39	0.46
1:V:533:TRP:CZ3	1:V:538:ASN:HB3	2.51	0.46
1:W:213:ASN:OD1	1:W:221:LYS:HE2	2.16	0.46
1:Y:240:LEU:HD22	1:Y:244:GLU:HB3	1.97	0.46
1:Y:452:ASP:OD1	1:Y:453:LYS:N	2.49	0.46
1:Z:533:TRP:CZ3	1:Z:538:ASN:HB3	2.51	0.46
1:3:213:ASN:OD1	1:3:221:LYS:HE2	2.16	0.46
1:5:213:ASN:OD1	1:5:221:LYS:HE2	2.16	0.46
1:d:240:LEU:HD22	1:d:244:GLU:HB3	1.97	0.46
1:f:452:ASP:OD1	1:f:453:LYS:N	2.49	0.46
1:m:213:ASN:OD1	1:m:221:LYS:HE2	2.16	0.46
1:p:213:ASN:OD1	1:p:221:LYS:HE2	2.16	0.46
1:v:240:LEU:HD22	1:v:244:GLU:HB3	1.97	0.46
1:v:452:ASP:OD1	1:v:453:LYS:N	2.49	0.46
1:v:533:TRP:CZ3	1:v:538:ASN:HB3	2.51	0.46
1:x:213:ASN:OD1	1:x:221:LYS:HE2	2.16	0.46
1:7:240:LEU:HD22	1:7:244:GLU:HB3	1.97	0.46
1:A:213:ASN:OD1	1:A:221:LYS:HE2	2.16	0.46
1:B:67:GLN:HE21	1:B:69:ARG:NH1	2.12	0.46
1:D:413:GLN:HB2	1:N:325:THR:OG1	2.14	0.46
1:E:533:TRP:CZ3	1:E:538:ASN:HB3	2.51	0.46
1:H:67:GLN:HE21	1:H:69:ARG:NH1	2.12	0.46
1:J:452:ASP:OD1	1:J:453:LYS:N	2.49	0.46
1:M:533:TRP:CZ3	1:M:538:ASN:HB3	2.51	0.46
1:S:533:TRP:CZ3	1:S:538:ASN:HB3	2.51	0.46
1:T:213:ASN:OD1	1:T:221:LYS:HE2	2.16	0.46
1:T:240:LEU:HD22	1:T:244:GLU:HB3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:445:ASP:OD2	1:W:554:TYR:OH	2.30	0.46
1:e:240:LEU:HD22	1:e:244:GLU:HB3	1.97	0.46
1:f:67:GLN:HE21	1:f:69:ARG:NH1	2.12	0.46
1:g:213:ASN:OD1	1:g:221:LYS:HE2	2.16	0.46
1:j:533:TRP:CZ3	1:j:538:ASN:HB3	2.51	0.46
1:l:533:TRP:CZ3	1:l:538:ASN:HB3	2.51	0.46
1:o:452:ASP:OD1	1:o:453:LYS:N	2.48	0.46
1:q:240:LEU:HD22	1:q:244:GLU:HB3	1.97	0.46
1:q:533:TRP:CZ3	1:q:538:ASN:HB3	2.51	0.46
1:t:174:HIS:CD2	1:t:474:HIS:HD2	2.26	0.46
1:u:67:GLN:HE21	1:u:69:ARG:NH1	2.12	0.46
1:z:213:ASN:OD1	1:z:221:LYS:HE2	2.16	0.46
1:H:181:HIS:HE1	1:H:183:TRP:HB2	1.78	0.46
1:H:533:TRP:CZ3	1:H:538:ASN:HB3	2.51	0.46
1:I:452:ASP:OD1	1:I:453:LYS:N	2.49	0.46
1:P:213:ASN:OD1	1:P:221:LYS:HE2	2.16	0.46
1:Q:533:TRP:CZ3	1:Q:538:ASN:HB3	2.51	0.46
1:R:240:LEU:HD22	1:R:244:GLU:HB3	1.97	0.46
1:V:213:ASN:OD1	1:V:221:LYS:HE2	2.16	0.46
1:4:126:CYS:O	1:4:259:ASN:ND2	2.39	0.46
1:b:533:TRP:CZ3	1:b:538:ASN:HB3	2.51	0.46
1:d:213:ASN:OD1	1:d:221:LYS:HE2	2.16	0.46
1:f:213:ASN:OD1	1:f:221:LYS:HE2	2.16	0.46
1:g:240:LEU:HD22	1:g:244:GLU:HB3	1.97	0.46
1:j:213:ASN:OD1	1:j:221:LYS:HE2	2.16	0.46
1:j:452:ASP:OD1	1:j:453:LYS:N	2.49	0.46
1:k:240:LEU:HD22	1:k:244:GLU:HB3	1.97	0.46
1:k:533:TRP:CZ3	1:k:538:ASN:HB3	2.51	0.46
1:l:67:GLN:HE21	1:l:69:ARG:NH1	2.12	0.46
1:n:240:LEU:HD22	1:n:244:GLU:HB3	1.97	0.46
1:z:174:HIS:CD2	1:z:474:HIS:HD2	2.26	0.46
1:z:445:ASP:OD2	1:z:554:TYR:OH	2.30	0.46
1:A:533:TRP:CZ3	1:A:538:ASN:HB3	2.51	0.46
1:B:181:HIS:HE1	1:B:183:TRP:HB2	1.78	0.46
1:C:452:ASP:OD1	1:C:453:LYS:N	2.49	0.46
1:D:240:LEU:HD22	1:D:244:GLU:HB3	1.97	0.46
1:E:49:THR:OG1	1:E:142:TYR:HB2	2.16	0.46
1:F:445:ASP:OD2	1:F:554:TYR:OH	2.30	0.46
1:J:240:LEU:HD22	1:J:244:GLU:HB3	1.97	0.46
1:N:49:THR:OG1	1:N:142:TYR:HB2	2.16	0.46
1:O:67:GLN:HE21	1:O:69:ARG:NH1	2.12	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:213:ASN:OD1	1:O:221:LYS:HE2	2.16	0.46
1:R:49:THR:OG1	1:R:142:TYR:HB2	2.16	0.46
1:R:533:TRP:CZ3	1:R:538:ASN:HB3	2.51	0.46
1:U:452:ASP:OD1	1:U:453:LYS:N	2.49	0.46
1:V:452:ASP:OD1	1:V:453:LYS:N	2.49	0.46
1:1:49:THR:OG1	1:1:142:TYR:HB2	2.16	0.46
1:4:213:ASN:OD1	1:4:221:LYS:HE2	2.16	0.46
1:c:49:THR:OG1	1:c:142:TYR:HB2	2.16	0.46
1:g:445:ASP:OD2	1:g:554:TYR:OH	2.30	0.46
1:h:213:ASN:OD1	1:h:221:LYS:HE2	2.16	0.46
1:p:263:PHE:O	1:p:406:MET:HG3	2.16	0.46
1:q:49:THR:OG1	1:q:142:TYR:HB2	2.16	0.46
1:r:533:TRP:CZ3	1:r:538:ASN:HB3	2.51	0.46
1:s:67:GLN:HE21	1:s:69:ARG:NH1	2.12	0.46
1:w:49:THR:OG1	1:w:142:TYR:HB2	2.16	0.46
1:y:126:CYS:O	1:y:259:ASN:ND2	2.39	0.46
1:y:533:TRP:CZ3	1:y:538:ASN:HB3	2.51	0.46
1:A:263:PHE:O	1:A:406:MET:HG3	2.16	0.46
1:B:49:THR:OG1	1:B:142:TYR:HB2	2.16	0.46
1:F:67:GLN:HE21	1:F:69:ARG:NH1	2.12	0.46
1:F:452:ASP:OD1	1:F:453:LYS:N	2.49	0.46
1:H:126:CYS:O	1:H:259:ASN:ND2	2.39	0.46
1:H:213:ASN:OD1	1:H:221:LYS:HE2	2.16	0.46
1:I:213:ASN:OD1	1:I:221:LYS:HE2	2.16	0.46
1:T:445:ASP:OD2	1:T:554:TYR:OH	2.30	0.46
1:3:533:TRP:CZ3	1:3:538:ASN:HB3	2.51	0.46
1:5:533:TRP:CZ3	1:5:538:ASN:HB3	2.51	0.46
1:a:452:ASP:OD1	1:a:453:LYS:N	2.49	0.46
1:c:213:ASN:OD1	1:c:221:LYS:HE2	2.16	0.46
1:c:533:TRP:CZ3	1:c:538:ASN:HB3	2.51	0.46
1:d:174:HIS:CD2	1:d:474:HIS:HD2	2.26	0.46
1:j:240:LEU:HD22	1:j:244:GLU:HB3	1.97	0.46
1:k:49:THR:OG1	1:k:142:TYR:HB2	2.16	0.46
1:m:452:ASP:OD1	1:m:453:LYS:N	2.49	0.46
1:m:533:TRP:CZ3	1:m:538:ASN:HB3	2.51	0.46
1:p:533:TRP:CZ3	1:p:538:ASN:HB3	2.51	0.46
1:s:377:ASP:O	1:s:381:THR:OG1	2.19	0.46
1:s:445:ASP:OD2	1:s:554:TYR:OH	2.30	0.46
1:s:452:ASP:OD1	1:s:453:LYS:N	2.49	0.46
1:t:263:PHE:O	1:t:406:MET:HG3	2.16	0.46
1:u:49:THR:OG1	1:u:142:TYR:HB2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:213:ASN:OD1	1:E:221:LYS:HE2	2.16	0.46
1:G:263:PHE:O	1:G:406:MET:HG3	2.16	0.46
1:L:174:HIS:CD2	1:L:474:HIS:HD2	2.26	0.46
1:L:263:PHE:O	1:L:406:MET:HG3	2.16	0.46
1:N:213:ASN:OD1	1:N:221:LYS:HE2	2.16	0.46
1:N:533:TRP:CZ3	1:N:538:ASN:HB3	2.51	0.46
1:P:174:HIS:CD2	1:P:474:HIS:HD2	2.26	0.46
1:U:263:PHE:O	1:U:406:MET:HG3	2.16	0.46
1:U:533:TRP:CZ3	1:U:538:ASN:HB3	2.51	0.46
1:V:240:LEU:HD22	1:V:244:GLU:HB3	1.97	0.46
1:X:533:TRP:CZ3	1:X:538:ASN:HB3	2.51	0.46
1:4:49:THR:OG1	1:4:142:TYR:HB2	2.16	0.46
1:f:49:THR:OG1	1:f:142:TYR:HB2	2.16	0.46
1:h:49:THR:OG1	1:h:142:TYR:HB2	2.16	0.46
1:i:533:TRP:CZ3	1:i:538:ASN:HB3	2.51	0.46
1:m:263:PHE:O	1:m:406:MET:HG3	2.16	0.46
1:n:263:PHE:O	1:n:406:MET:HG3	2.16	0.46
1:o:49:THR:OG1	1:o:142:TYR:HB2	2.16	0.46
1:o:213:ASN:OD1	1:o:221:LYS:HE2	2.16	0.46
1:y:213:ASN:OD1	1:y:221:LYS:HE2	2.16	0.46
1:H:49:THR:OG1	1:H:142:TYR:HB2	2.16	0.45
1:H:445:ASP:OD2	1:H:554:TYR:OH	2.30	0.45
1:I:49:THR:OG1	1:I:142:TYR:HB2	2.16	0.45
1:K:49:THR:OG1	1:K:142:TYR:HB2	2.16	0.45
1:K:263:PHE:O	1:K:406:MET:HG3	2.16	0.45
1:K:279:VAL:HA	1:K:292:PRO:HA	1.98	0.45
1:M:240:LEU:HD22	1:M:244:GLU:HB3	1.97	0.45
1:M:263:PHE:O	1:M:406:MET:HG3	2.16	0.45
1:N:263:PHE:O	1:N:406:MET:HG3	2.16	0.45
1:O:49:THR:OG1	1:O:142:TYR:HB2	2.16	0.45
1:Q:452:ASP:OD1	1:Q:453:LYS:N	2.48	0.45
1:U:67:GLN:HE21	1:U:69:ARG:NH1	2.12	0.45
1:2:49:THR:OG1	1:2:142:TYR:HB2	2.16	0.45
1:2:213:ASN:OD1	1:2:221:LYS:HE2	2.16	0.45
1:6:49:THR:OG1	1:6:142:TYR:HB2	2.16	0.45
1:a:213:ASN:OD1	1:a:221:LYS:HE2	2.16	0.45
1:b:263:PHE:O	1:b:406:MET:HG3	2.16	0.45
1:c:263:PHE:O	1:c:406:MET:HG3	2.16	0.45
1:j:405:ASP:OD2	1:j:407:THR:OG1	2.21	0.45
1:n:213:ASN:OD1	1:n:221:LYS:HE2	2.16	0.45
1:q:213:ASN:OD1	1:q:221:LYS:HE2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:r:452:ASP:OD1	1:r:453:LYS:N	2.48	0.45
1:u:181:HIS:HE1	1:u:183:TRP:HB2	1.78	0.45
1:x:49:THR:OG1	1:x:142:TYR:HB2	2.16	0.45
1:B:533:TRP:CZ3	1:B:538:ASN:HB3	2.51	0.45
1:C:213:ASN:OD1	1:C:221:LYS:HE2	2.16	0.45
1:D:279:VAL:HA	1:D:292:PRO:HA	1.99	0.45
1:G:213:ASN:OD1	1:G:221:LYS:HE2	2.16	0.45
1:K:533:TRP:CZ3	1:K:538:ASN:HB3	2.51	0.45
1:R:279:VAL:HA	1:R:292:PRO:HA	1.99	0.45
1:T:288:THR:O	1:4:394:THR:OG1	2.25	0.45
1:U:279:VAL:HA	1:U:292:PRO:HA	1.99	0.45
1:X:49:THR:OG1	1:X:142:TYR:HB2	2.16	0.45
1:6:213:ASN:OD1	1:6:221:LYS:HE2	2.16	0.45
1:b:240:LEU:HD22	1:b:244:GLU:HB3	1.97	0.45
1:h:263:PHE:O	1:h:406:MET:HG3	2.16	0.45
1:i:445:ASP:OD2	1:i:554:TYR:OH	2.30	0.45
1:j:263:PHE:O	1:j:406:MET:HG3	2.16	0.45
1:k:279:VAL:HA	1:k:292:PRO:HA	1.99	0.45
1:m:279:VAL:HA	1:m:292:PRO:HA	1.98	0.45
1:o:279:VAL:HA	1:o:292:PRO:HA	1.99	0.45
1:x:263:PHE:O	1:x:406:MET:HG3	2.16	0.45
1:x:279:VAL:HA	1:x:292:PRO:HA	1.99	0.45
1:x:533:TRP:CZ3	1:x:538:ASN:HB3	2.51	0.45
1:y:49:THR:OG1	1:y:142:TYR:HB2	2.16	0.45
1:z:49:THR:OG1	1:z:142:TYR:HB2	2.16	0.45
1:I:279:VAL:HA	1:I:292:PRO:HA	1.99	0.45
1:K:67:GLN:HE21	1:K:69:ARG:NH1	2.12	0.45
1:L:533:TRP:CZ3	1:L:538:ASN:HB3	2.51	0.45
1:M:126:CYS:O	1:M:259:ASN:ND2	2.39	0.45
1:M:213:ASN:OD1	1:M:221:LYS:HE2	2.16	0.45
1:O:240:LEU:HD22	1:O:244:GLU:HB3	1.97	0.45
1:O:263:PHE:O	1:O:406:MET:HG3	2.16	0.45
1:O:445:ASP:OD2	1:O:554:TYR:OH	2.30	0.45
1:S:49:THR:OG1	1:S:142:TYR:HB2	2.16	0.45
1:V:263:PHE:O	1:V:406:MET:HG3	2.16	0.45
1:W:49:THR:OG1	1:W:142:TYR:HB2	2.17	0.45
1:X:181:HIS:HE1	1:X:183:TRP:HB2	1.78	0.45
1:Z:445:ASP:OD2	1:Z:554:TYR:OH	2.30	0.45
1:4:263:PHE:O	1:4:406:MET:HG3	2.16	0.45
1:b:213:ASN:OD1	1:b:221:LYS:HE2	2.16	0.45
1:b:452:ASP:OD1	1:b:453:LYS:N	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:279:VAL:HA	1:c:292:PRO:HA	1.99	0.45
1:d:67:GLN:HE21	1:d:69:ARG:NH1	2.12	0.45
1:e:279:VAL:HA	1:e:292:PRO:HA	1.99	0.45
1:f:240:LEU:HD22	1:f:244:GLU:HB3	1.97	0.45
1:i:49:THR:OG1	1:i:142:TYR:HB2	2.16	0.45
1:l:49:THR:OG1	1:l:142:TYR:HB2	2.16	0.45
1:m:240:LEU:HD22	1:m:244:GLU:HB3	1.97	0.45
1:r:213:ASN:OD1	1:r:221:LYS:HE2	2.16	0.45
1:r:263:PHE:O	1:r:406:MET:HG3	2.16	0.45
1:u:533:TRP:CZ3	1:u:538:ASN:HB3	2.51	0.45
1:v:213:ASN:OD1	1:v:221:LYS:HE2	2.16	0.45
1:v:263:PHE:O	1:v:406:MET:HG3	2.16	0.45
1:A:49:THR:OG1	1:A:142:TYR:HB2	2.16	0.45
1:B:279:VAL:HA	1:B:292:PRO:HA	1.99	0.45
1:M:452:ASP:OD1	1:M:453:LYS:N	2.49	0.45
1:N:279:VAL:HA	1:N:292:PRO:HA	1.99	0.45
1:O:279:VAL:HA	1:O:292:PRO:HA	1.99	0.45
1:Q:213:ASN:OD1	1:Q:221:LYS:HE2	2.16	0.45
1:Q:263:PHE:O	1:Q:406:MET:HG3	2.16	0.45
1:S:288:THR:O	1:U:394:THR:OG1	2.22	0.45
1:U:240:LEU:HD22	1:U:244:GLU:HB3	1.97	0.45
1:U:445:ASP:OD2	1:U:554:TYR:OH	2.30	0.45
1:V:49:THR:OG1	1:V:142:TYR:HB2	2.16	0.45
1:X:452:ASP:OD1	1:X:453:LYS:N	2.49	0.45
1:1:533:TRP:CZ3	1:1:538:ASN:HB3	2.51	0.45
1:3:67:GLN:HE21	1:3:69:ARG:NH1	2.12	0.45
1:f:263:PHE:O	1:f:406:MET:HG3	2.16	0.45
1:g:49:THR:OG1	1:g:142:TYR:HB2	2.16	0.45
1:g:533:TRP:HA	1:g:555:GLU:OE1	2.17	0.45
1:m:67:GLN:HE21	1:m:69:ARG:NH1	2.12	0.45
1:t:213:ASN:OD1	1:t:221:LYS:HE2	2.16	0.45
1:t:533:TRP:CZ3	1:t:538:ASN:HB3	2.51	0.45
1:u:279:VAL:HA	1:u:292:PRO:HA	1.99	0.45
1:7:263:PHE:O	1:7:406:MET:HG3	2.16	0.45
1:7:533:TRP:CZ3	1:7:538:ASN:HB3	2.51	0.45
1:8:445:ASP:OD2	1:8:554:TYR:OH	2.30	0.45
1:B:213:ASN:OD1	1:B:221:LYS:HE2	2.16	0.45
1:E:533:TRP:HA	1:E:555:GLU:OE1	2.17	0.45
1:F:49:THR:OG1	1:F:142:TYR:HB2	2.16	0.45
1:F:263:PHE:O	1:F:406:MET:HG3	2.16	0.45
1:J:49:THR:OG1	1:J:142:TYR:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:213:ASN:OD1	1:J:221:LYS:HE2	2.16	0.45
1:J:263:PHE:O	1:J:406:MET:HG3	2.17	0.45
1:K:445:ASP:OD2	1:K:554:TYR:OH	2.30	0.45
1:L:49:THR:OG1	1:L:142:TYR:HB2	2.16	0.45
1:L:213:ASN:OD1	1:L:221:LYS:HE2	2.16	0.45
1:L:279:VAL:HA	1:L:292:PRO:HA	1.99	0.45
1:P:67:GLN:HE21	1:P:69:ARG:NH1	2.12	0.45
1:T:49:THR:OG1	1:T:142:TYR:HB2	2.16	0.45
1:T:533:TRP:HA	1:T:555:GLU:OE1	2.17	0.45
1:X:279:VAL:HA	1:X:292:PRO:HA	1.99	0.45
1:X:445:ASP:OD2	1:X:554:TYR:OH	2.30	0.45
1:Y:263:PHE:O	1:Y:406:MET:HG3	2.16	0.45
1:2:279:VAL:HA	1:2:292:PRO:HA	1.99	0.45
1:6:279:VAL:HA	1:6:292:PRO:HA	1.99	0.45
1:b:126:CYS:O	1:b:259:ASN:ND2	2.39	0.45
1:f:279:VAL:HA	1:f:292:PRO:HA	1.99	0.45
1:h:67:GLN:HE21	1:h:69:ARG:NH1	2.12	0.45
1:i:279:VAL:HA	1:i:292:PRO:HA	1.99	0.45
1:j:49:THR:OG1	1:j:142:TYR:HB2	2.16	0.45
1:l:213:ASN:OD1	1:l:221:LYS:HE2	2.16	0.45
1:m:445:ASP:OD2	1:m:554:TYR:OH	2.30	0.45
1:p:49:THR:OG1	1:p:142:TYR:HB2	2.16	0.45
1:q:533:TRP:HA	1:q:555:GLU:OE1	2.17	0.45
1:s:49:THR:OG1	1:s:142:TYR:HB2	2.16	0.45
1:t:49:THR:OG1	1:t:142:TYR:HB2	2.16	0.45
1:v:49:THR:OG1	1:v:142:TYR:HB2	2.16	0.45
1:w:533:TRP:CZ3	1:w:538:ASN:HB3	2.51	0.45
1:x:67:GLN:HE21	1:x:69:ARG:NH1	2.12	0.45
1:z:533:TRP:HA	1:z:555:GLU:OE1	2.17	0.45
1:C:533:TRP:HA	1:C:555:GLU:OE1	2.17	0.45
1:D:533:TRP:CZ3	1:D:538:ASN:HB3	2.51	0.45
1:F:213:ASN:OD1	1:F:221:LYS:HE2	2.16	0.45
1:H:263:PHE:O	1:H:406:MET:HG3	2.16	0.45
1:P:49:THR:OG1	1:P:142:TYR:HB2	2.16	0.45
1:S:263:PHE:O	1:S:406:MET:HG3	2.16	0.45
1:S:533:TRP:HA	1:S:555:GLU:OE1	2.17	0.45
1:W:533:TRP:HA	1:W:555:GLU:OE1	2.17	0.45
1:Y:533:TRP:HA	1:Y:555:GLU:OE1	2.17	0.45
1:Y:533:TRP:CZ3	1:Y:538:ASN:HB3	2.51	0.45
1:3:279:VAL:HA	1:3:292:PRO:HA	1.99	0.45
1:5:279:VAL:HA	1:5:292:PRO:HA	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:533:TRP:HA	1:a:555:GLU:OE1	2.17	0.45
1:b:279:VAL:HA	1:b:292:PRO:HA	1.99	0.45
1:f:445:ASP:OD2	1:f:554:TYR:OH	2.30	0.45
1:i:181:HIS:HE1	1:i:183:TRP:HB2	1.78	0.45
1:l:279:VAL:HA	1:l:292:PRO:HA	1.99	0.45
1:l:533:TRP:HA	1:l:555:GLU:OE1	2.17	0.45
1:s:263:PHE:O	1:s:406:MET:HG3	2.16	0.45
1:t:279:VAL:HA	1:t:292:PRO:HA	1.99	0.45
1:u:263:PHE:O	1:u:406:MET:HG3	2.16	0.45
1:w:263:PHE:O	1:w:406:MET:HG3	2.16	0.45
1:y:263:PHE:O	1:y:406:MET:HG3	2.16	0.45
1:7:533:TRP:HA	1:7:555:GLU:OE1	2.17	0.45
1:C:49:THR:OG1	1:C:142:TYR:HB2	2.16	0.45
1:E:263:PHE:O	1:E:406:MET:HG3	2.16	0.45
1:G:279:VAL:HA	1:G:292:PRO:HA	1.99	0.45
1:M:279:VAL:HA	1:M:292:PRO:HA	1.98	0.45
1:Q:533:TRP:HA	1:Q:555:GLU:OE1	2.17	0.45
1:R:288:THR:O	1:S:394:THR:OG1	2.22	0.45
1:T:145:GLN:NE2	1:U:164:ALA:HA	2.32	0.45
1:X:213:ASN:OD1	1:X:221:LYS:HE2	2.16	0.45
1:Y:49:THR:OG1	1:Y:142:TYR:HB2	2.16	0.45
1:1:213:ASN:OD1	1:1:221:LYS:HE2	2.16	0.45
1:1:240:LEU:HD22	1:1:244:GLU:HB3	1.97	0.45
1:1:263:PHE:O	1:1:406:MET:HG3	2.16	0.45
1:2:263:PHE:O	1:2:406:MET:HG3	2.16	0.45
1:3:533:TRP:HA	1:3:555:GLU:OE1	2.17	0.45
1:4:67:GLN:HE21	1:4:69:ARG:NH1	2.12	0.45
1:5:533:TRP:HA	1:5:555:GLU:OE1	2.17	0.45
1:a:279:VAL:HA	1:a:292:PRO:HA	1.99	0.45
1:b:49:THR:OG1	1:b:142:TYR:HB2	2.16	0.45
1:d:49:THR:OG1	1:d:142:TYR:HB2	2.16	0.45
1:e:213:ASN:OD1	1:e:221:LYS:HE2	2.16	0.45
1:e:533:TRP:CZ3	1:e:538:ASN:HB3	2.51	0.45
1:j:279:VAL:HA	1:j:292:PRO:HA	1.99	0.45
1:n:279:VAL:HA	1:n:292:PRO:HA	1.99	0.45
1:r:533:TRP:HA	1:r:555:GLU:OE1	2.17	0.45
1:s:213:ASN:OD1	1:s:221:LYS:HE2	2.16	0.45
1:u:213:ASN:OD1	1:u:221:LYS:HE2	2.16	0.45
1:u:533:TRP:HA	1:u:555:GLU:OE1	2.17	0.45
1:7:213:ASN:OD1	1:7:221:LYS:HE2	2.16	0.45
1:7:279:VAL:HA	1:7:292:PRO:HA	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:263:PHE:O	1:B:406:MET:HG3	2.17	0.45
1:B:533:TRP:HA	1:B:555:GLU:OE1	2.17	0.45
1:C:279:VAL:HA	1:C:292:PRO:HA	1.99	0.45
1:H:533:TRP:HA	1:H:555:GLU:OE1	2.17	0.45
1:I:533:TRP:CZ3	1:I:538:ASN:HB3	2.51	0.45
1:L:452:ASP:OD1	1:L:453:LYS:N	2.49	0.45
1:M:49:THR:OG1	1:M:142:TYR:HB2	2.16	0.45
1:M:533:TRP:HA	1:M:555:GLU:OE1	2.17	0.45
1:S:213:ASN:OD1	1:S:221:LYS:HE2	2.16	0.45
1:S:279:VAL:HA	1:S:292:PRO:HA	1.99	0.45
1:T:325:THR:OG1	1:f:413:GLN:HB2	2.16	0.45
1:V:279:VAL:HA	1:V:292:PRO:HA	1.99	0.45
1:W:279:VAL:HA	1:W:292:PRO:HA	1.99	0.45
1:Y:213:ASN:OD1	1:Y:221:LYS:HE2	2.16	0.45
1:Y:279:VAL:HA	1:Y:292:PRO:HA	1.99	0.45
1:Z:240:LEU:HD22	1:Z:244:GLU:HB3	1.97	0.45
1:5:49:THR:OG1	1:5:142:TYR:HB2	2.16	0.45
1:b:533:TRP:HA	1:b:555:GLU:OE1	2.17	0.45
1:d:181:HIS:HE1	1:d:183:TRP:HB2	1.78	0.45
1:k:288:THR:O	1:l:394:THR:OG1	2.22	0.45
1:l:263:PHE:O	1:l:406:MET:HG3	2.16	0.45
1:n:49:THR:OG1	1:n:142:TYR:HB2	2.16	0.45
1:o:533:TRP:CZ3	1:o:538:ASN:HB3	2.51	0.45
1:w:533:TRP:HA	1:w:555:GLU:OE1	2.17	0.45
1:x:445:ASP:OD2	1:x:554:TYR:OH	2.30	0.45
1:7:49:THR:OG1	1:7:142:TYR:HB2	2.16	0.45
1:8:240:LEU:HD22	1:8:244:GLU:HB3	1.97	0.45
1:8:533:TRP:HA	1:8:555:GLU:OE1	2.17	0.45
1:A:239:VAL:HG21	1:B:143:ASN:ND2	2.32	0.45
1:D:49:THR:OG1	1:D:142:TYR:HB2	2.17	0.45
1:D:213:ASN:OD1	1:D:221:LYS:HE2	2.16	0.45
1:D:263:PHE:O	1:D:406:MET:HG3	2.16	0.45
1:G:49:THR:OG1	1:G:142:TYR:HB2	2.16	0.45
1:I:445:ASP:OD2	1:I:554:TYR:OH	2.30	0.45
1:L:533:TRP:HA	1:L:555:GLU:OE1	2.17	0.45
1:N:67:GLN:HE21	1:N:69:ARG:NH1	2.12	0.45
1:P:181:HIS:HE1	1:P:183:TRP:HB2	1.78	0.45
1:T:263:PHE:O	1:T:406:MET:HG3	2.17	0.45
1:T:302:TRP:CZ2	1:4:455:PRO:HD3	2.52	0.45
1:T:368:PRO:HD3	1:f:278:ARG:NH1	2.32	0.45
1:U:533:TRP:HA	1:U:555:GLU:OE1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:533:TRP:HA	1:V:555:GLU:OE1	2.17	0.45
1:Z:533:TRP:HA	1:Z:555:GLU:OE1	2.17	0.45
1:1:445:ASP:OD2	1:1:554:TYR:OH	2.30	0.45
1:1:533:TRP:HA	1:1:555:GLU:OE1	2.17	0.45
1:3:49:THR:OG1	1:3:142:TYR:HB2	2.16	0.45
1:4:533:TRP:CZ3	1:4:538:ASN:HB3	2.51	0.45
1:5:263:PHE:O	1:5:406:MET:HG3	2.16	0.45
1:6:263:PHE:O	1:6:406:MET:HG3	2.16	0.45
1:a:49:THR:OG1	1:a:142:TYR:HB2	2.16	0.45
1:d:263:PHE:O	1:d:406:MET:HG3	2.16	0.45
1:e:49:THR:OG1	1:e:142:TYR:HB2	2.17	0.45
1:g:263:PHE:O	1:g:406:MET:HG3	2.16	0.45
1:h:533:TRP:HA	1:h:555:GLU:OE1	2.17	0.45
1:i:213:ASN:OD1	1:i:221:LYS:HE2	2.16	0.45
1:j:533:TRP:HA	1:j:555:GLU:OE1	2.17	0.45
1:l:288:THR:O	1:m:394:THR:OG1	2.22	0.45
1:o:445:ASP:OD2	1:o:554:TYR:OH	2.30	0.45
1:o:533:TRP:HA	1:o:555:GLU:OE1	2.17	0.45
1:q:263:PHE:O	1:q:406:MET:HG3	2.16	0.45
1:t:452:ASP:OD1	1:t:453:LYS:N	2.49	0.45
1:u:452:ASP:OD1	1:u:453:LYS:N	2.49	0.45
1:w:213:ASN:OD1	1:w:221:LYS:HE2	2.16	0.45
1:w:240:LEU:HD22	1:w:244:GLU:HB3	1.97	0.45
1:w:279:VAL:HA	1:w:292:PRO:HA	1.98	0.45
1:x:452:ASP:OD1	1:x:453:LYS:N	2.48	0.45
1:y:533:TRP:HA	1:y:555:GLU:OE1	2.17	0.45
1:z:279:VAL:HA	1:z:292:PRO:HA	1.99	0.45
1:B:452:ASP:OD1	1:B:453:LYS:N	2.49	0.45
1:I:533:TRP:HA	1:I:555:GLU:OE1	2.17	0.45
1:P:135:LYS:HA	1:P:135:LYS:HD2	1.82	0.45
1:P:263:PHE:O	1:P:406:MET:HG3	2.16	0.45
1:P:533:TRP:HA	1:P:555:GLU:OE1	2.17	0.45
1:Z:279:VAL:HA	1:Z:292:PRO:HA	1.99	0.45
1:1:279:VAL:HA	1:1:292:PRO:HA	1.99	0.45
1:4:533:TRP:HA	1:4:555:GLU:OE1	2.17	0.45
1:6:67:GLN:HE21	1:6:69:ARG:NH1	2.12	0.45
1:6:167:HIS:ND1	1:6:237:HIS:HE1	2.15	0.45
1:e:263:PHE:O	1:e:406:MET:HG3	2.16	0.45
1:f:126:CYS:O	1:f:259:ASN:ND2	2.39	0.45
1:h:533:TRP:CZ3	1:h:538:ASN:HB3	2.51	0.45
1:m:533:TRP:HA	1:m:555:GLU:OE1	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:279:VAL:HA	1:p:292:PRO:HA	1.98	0.45
1:r:49:THR:OG1	1:r:142:TYR:HB2	2.16	0.45
1:t:533:TRP:HA	1:t:555:GLU:OE1	2.17	0.45
1:v:143:ASN:ND2	1:w:239:VAL:HG21	2.32	0.45
1:8:279:VAL:HA	1:8:292:PRO:HA	1.99	0.45
1:A:279:VAL:HA	1:A:292:PRO:HA	1.99	0.44
1:C:167:HIS:ND1	1:C:237:HIS:HE1	2.16	0.44
1:I:189:PRO:HD3	1:I:196:TYR:CD1	2.52	0.44
1:K:189:PRO:HD3	1:K:196:TYR:CD1	2.52	0.44
1:K:452:ASP:OD1	1:K:453:LYS:N	2.48	0.44
1:M:145:GLN:NE2	1:N:164:ALA:HA	2.33	0.44
1:P:167:HIS:ND1	1:P:237:HIS:HE1	2.15	0.44
1:Q:49:THR:OG1	1:Q:142:TYR:HB2	2.16	0.44
1:R:213:ASN:OD1	1:R:221:LYS:HE2	2.16	0.44
1:R:445:ASP:OD2	1:R:554:TYR:OH	2.30	0.44
1:T:126:CYS:O	1:T:259:ASN:ND2	2.39	0.44
1:U:189:PRO:HD3	1:U:196:TYR:CD1	2.52	0.44
1:V:402:TYR:HD2	1:V:443:GLN:HE22	1.66	0.44
1:X:263:PHE:O	1:X:406:MET:HG3	2.16	0.44
1:X:533:TRP:HA	1:X:555:GLU:OE1	2.17	0.44
1:2:67:GLN:HE21	1:2:69:ARG:NH1	2.12	0.44
1:2:189:PRO:HD3	1:2:196:TYR:CD1	2.53	0.44
1:2:533:TRP:HA	1:2:555:GLU:OE1	2.17	0.44
1:3:263:PHE:O	1:3:406:MET:HG3	2.16	0.44
1:6:189:PRO:HD3	1:6:196:TYR:CD1	2.53	0.44
1:a:167:HIS:ND1	1:a:237:HIS:HE1	2.16	0.44
1:d:167:HIS:ND1	1:d:237:HIS:HE1	2.16	0.44
1:d:533:TRP:HA	1:d:555:GLU:OE1	2.17	0.44
1:i:145:GLN:NE2	1:7:164:ALA:HA	2.33	0.44
1:i:263:PHE:O	1:i:406:MET:HG3	2.16	0.44
1:k:167:HIS:ND1	1:k:237:HIS:HE1	2.16	0.44
1:k:445:ASP:OD2	1:k:554:TYR:OH	2.30	0.44
1:m:189:PRO:HD3	1:m:196:TYR:CD1	2.52	0.44
1:o:189:PRO:HD3	1:o:196:TYR:CD1	2.52	0.44
1:p:239:VAL:HG21	1:u:143:ASN:ND2	2.33	0.44
1:s:189:PRO:HD3	1:s:196:TYR:CD1	2.52	0.44
1:x:189:PRO:HD3	1:x:196:TYR:CD1	2.52	0.44
1:C:263:PHE:O	1:C:406:MET:HG3	2.16	0.44
1:F:189:PRO:HD3	1:F:196:TYR:CD1	2.52	0.44
1:F:278:ARG:HD3	1:F:299:PRO:HG2	2.00	0.44
1:I:263:PHE:O	1:I:406:MET:HG3	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:278:ARG:HD3	1:L:299:PRO:HG2	2.00	0.44
1:L:402:TYR:HD2	1:L:443:GLN:HE22	1.66	0.44
1:Q:278:ARG:HD3	1:Q:299:PRO:HG2	2.00	0.44
1:R:167:HIS:ND1	1:R:237:HIS:HE1	2.16	0.44
1:X:145:GLN:NE2	1:Y:164:ALA:HA	2.33	0.44
1:Z:189:PRO:HD3	1:Z:196:TYR:CD1	2.52	0.44
1:2:167:HIS:ND1	1:2:237:HIS:HE1	2.16	0.44
1:3:189:PRO:HD3	1:3:196:TYR:CD1	2.52	0.44
1:5:189:PRO:HD3	1:5:196:TYR:CD1	2.53	0.44
1:6:533:TRP:HA	1:6:555:GLU:OE1	2.17	0.44
1:b:145:GLN:NE2	1:c:164:ALA:HA	2.33	0.44
1:c:67:GLN:HE21	1:c:69:ARG:NH1	2.12	0.44
1:i:533:TRP:HA	1:i:555:GLU:OE1	2.17	0.44
1:j:402:TYR:HD2	1:j:443:GLN:HE22	1.66	0.44
1:k:213:ASN:OD1	1:k:221:LYS:HE2	2.16	0.44
1:m:49:THR:OG1	1:m:142:TYR:HB2	2.16	0.44
1:p:167:HIS:ND1	1:p:237:HIS:HE1	2.15	0.44
1:s:278:ARG:HD3	1:s:299:PRO:HG2	2.00	0.44
1:t:278:ARG:HD3	1:t:299:PRO:HG2	2.00	0.44
1:u:189:PRO:HD3	1:u:196:TYR:CD1	2.52	0.44
1:B:147:LYS:HA	1:B:160:ASN:HA	2.00	0.44
1:B:167:HIS:ND1	1:B:237:HIS:HE1	2.16	0.44
1:B:189:PRO:HD3	1:B:196:TYR:CD1	2.52	0.44
1:D:402:TYR:HD2	1:D:443:GLN:HE22	1.66	0.44
1:G:167:HIS:ND1	1:G:237:HIS:HE1	2.16	0.44
1:G:402:TYR:HD2	1:G:443:GLN:HE22	1.66	0.44
1:I:143:ASN:ND2	1:J:239:VAL:HG21	2.32	0.44
1:I:278:ARG:HD3	1:I:299:PRO:HG2	2.00	0.44
1:P:147:LYS:HA	1:P:160:ASN:HA	2.00	0.44
1:Q:143:ASN:ND2	1:S:239:VAL:HG21	2.32	0.44
1:S:402:TYR:HD2	1:S:443:GLN:HE22	1.66	0.44
1:U:49:THR:OG1	1:U:142:TYR:HB2	2.16	0.44
1:V:445:ASP:OD2	1:V:554:TYR:OH	2.30	0.44
1:W:452:ASP:OD1	1:W:453:LYS:N	2.49	0.44
1:a:263:PHE:O	1:a:406:MET:HG3	2.16	0.44
1:c:533:TRP:HA	1:c:555:GLU:OE1	2.17	0.44
1:d:147:LYS:HA	1:d:160:ASN:HA	2.00	0.44
1:e:402:TYR:HD2	1:e:443:GLN:HE22	1.66	0.44
1:i:147:LYS:HA	1:i:160:ASN:HA	2.00	0.44
1:i:167:HIS:ND1	1:i:237:HIS:HE1	2.15	0.44
1:j:445:ASP:OD2	1:j:554:TYR:OH	2.30	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:402:TYR:HD2	1:l:443:GLN:HE22	1.66	0.44
1:n:167:HIS:ND1	1:n:237:HIS:HE1	2.16	0.44
1:n:402:TYR:HD2	1:n:443:GLN:HE22	1.66	0.44
1:r:278:ARG:HD3	1:r:299:PRO:HG2	2.00	0.44
1:t:189:PRO:HD3	1:t:196:TYR:CD1	2.53	0.44
1:t:239:VAL:HG21	1:x:143:ASN:ND2	2.33	0.44
1:t:402:TYR:HD2	1:t:443:GLN:HE22	1.66	0.44
1:u:147:LYS:HA	1:u:160:ASN:HA	2.00	0.44
1:u:167:HIS:ND1	1:u:237:HIS:HE1	2.16	0.44
1:w:445:ASP:OD2	1:w:554:TYR:OH	2.30	0.44
1:x:402:TYR:HD2	1:x:443:GLN:HE22	1.66	0.44
1:z:189:PRO:HD3	1:z:196:TYR:CD1	2.53	0.44
1:8:189:PRO:HD3	1:8:196:TYR:CD1	2.52	0.44
1:8:452:ASP:OD1	1:8:453:LYS:N	2.49	0.44
1:A:167:HIS:ND1	1:A:237:HIS:HE1	2.16	0.44
1:A:445:ASP:OD2	1:A:554:TYR:OH	2.30	0.44
1:D:533:TRP:HA	1:D:555:GLU:OE1	2.17	0.44
1:D:561:ILE:HG23	1:D:562:GLY:N	2.33	0.44
1:F:147:LYS:HA	1:F:160:ASN:HA	2.00	0.44
1:H:167:HIS:ND1	1:H:237:HIS:HE1	2.15	0.44
1:H:278:ARG:HD3	1:H:299:PRO:HG2	2.00	0.44
1:I:561:ILE:HG23	1:I:562:GLY:N	2.33	0.44
1:J:143:ASN:ND2	1:1:239:VAL:HG21	2.33	0.44
1:K:402:TYR:HD2	1:K:443:GLN:HE22	1.66	0.44
1:L:189:PRO:HD3	1:L:196:TYR:CD1	2.52	0.44
1:N:189:PRO:HD3	1:N:196:TYR:CD1	2.53	0.44
1:N:533:TRP:HA	1:N:555:GLU:OE1	2.17	0.44
1:O:143:ASN:ND2	1:P:239:VAL:HG21	2.32	0.44
1:S:143:ASN:ND2	1:4:239:VAL:HG21	2.32	0.44
1:S:167:HIS:ND1	1:S:237:HIS:HE1	2.15	0.44
1:S:189:PRO:HD3	1:S:196:TYR:CD1	2.52	0.44
1:V:147:LYS:HA	1:V:160:ASN:HA	2.00	0.44
1:V:239:VAL:HG21	1:W:143:ASN:ND2	2.33	0.44
1:W:189:PRO:HD3	1:W:196:TYR:CD1	2.53	0.44
1:X:147:LYS:HA	1:X:160:ASN:HA	2.00	0.44
1:X:167:HIS:ND1	1:X:237:HIS:HE1	2.15	0.44
1:X:239:VAL:HG21	1:6:143:ASN:ND2	2.33	0.44
1:2:143:ASN:ND2	1:i:239:VAL:HG21	2.33	0.44
1:c:189:PRO:HD3	1:c:196:TYR:CD1	2.53	0.44
1:e:561:ILE:HG23	1:e:562:GLY:N	2.33	0.44
1:g:126:CYS:O	1:g:259:ASN:ND2	2.39	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:279:VAL:HA	1:g:292:PRO:HA	1.99	0.44
1:j:189:PRO:HD3	1:j:196:TYR:CD1	2.52	0.44
1:j:239:VAL:HG21	1:z:143:ASN:ND2	2.33	0.44
1:l:189:PRO:HD3	1:l:196:TYR:CD1	2.53	0.44
1:l:239:VAL:HG21	1:r:143:ASN:ND2	2.32	0.44
1:l:278:ARG:HD3	1:l:299:PRO:HG2	2.00	0.44
1:m:167:HIS:ND1	1:m:237:HIS:HE1	2.16	0.44
1:o:143:ASN:ND2	1:v:239:VAL:HG21	2.32	0.44
1:o:278:ARG:HD3	1:o:299:PRO:HG2	2.00	0.44
1:o:561:ILE:HG23	1:o:562:GLY:N	2.33	0.44
1:q:189:PRO:HD3	1:q:196:TYR:CD1	2.52	0.44
1:s:147:LYS:HA	1:s:160:ASN:HA	2.00	0.44
1:y:278:ARG:HD3	1:y:299:PRO:HG2	2.00	0.44
1:z:452:ASP:OD1	1:z:453:LYS:N	2.49	0.44
1:7:189:PRO:HD3	1:7:196:TYR:CD1	2.53	0.44
1:A:49:THR:HG1	1:A:143:ASN:H	1.66	0.44
1:A:147:LYS:HA	1:A:160:ASN:HA	2.00	0.44
1:C:239:VAL:HG21	1:D:143:ASN:ND2	2.33	0.44
1:D:278:ARG:HD3	1:D:299:PRO:HG2	2.00	0.44
1:E:189:PRO:HD3	1:E:196:TYR:CD1	2.52	0.44
1:E:455:PRO:HD3	1:F:302:TRP:CZ2	2.53	0.44
1:F:167:HIS:ND1	1:F:237:HIS:HE1	2.15	0.44
1:F:279:VAL:HA	1:F:292:PRO:HA	1.98	0.44
1:G:145:GLN:NE2	1:W:164:ALA:HA	2.33	0.44
1:H:279:VAL:HA	1:H:292:PRO:HA	1.99	0.44
1:I:167:HIS:ND1	1:I:237:HIS:HE1	2.16	0.44
1:J:402:TYR:HD2	1:J:443:GLN:HE22	1.66	0.44
1:K:143:ASN:ND2	1:L:239:VAL:HG21	2.33	0.44
1:K:561:ILE:HG23	1:K:562:GLY:N	2.33	0.44
1:L:561:ILE:HG23	1:L:562:GLY:N	2.33	0.44
1:M:402:TYR:HD2	1:M:443:GLN:HE22	1.66	0.44
1:M:561:ILE:HG23	1:M:562:GLY:N	2.33	0.44
1:N:126:CYS:O	1:N:259:ASN:ND2	2.39	0.44
1:P:189:PRO:HD3	1:P:196:TYR:CD1	2.53	0.44
1:P:402:TYR:HD2	1:P:443:GLN:HE22	1.66	0.44
1:Q:126:CYS:O	1:Q:259:ASN:ND2	2.39	0.44
1:R:263:PHE:O	1:R:406:MET:HG3	2.16	0.44
1:S:561:ILE:HG23	1:S:562:GLY:N	2.33	0.44
1:T:452:ASP:OD1	1:T:453:LYS:N	2.49	0.44
1:U:167:HIS:ND1	1:U:237:HIS:HE1	2.16	0.44
1:V:189:PRO:HD3	1:V:196:TYR:CD1	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:278:ARG:HD3	1:V:299:PRO:HG2	2.00	0.44
1:Y:147:LYS:HA	1:Y:160:ASN:HA	2.00	0.44
1:Y:189:PRO:HD3	1:Y:196:TYR:CD1	2.53	0.44
1:Y:278:ARG:HD3	1:Y:299:PRO:HG2	2.00	0.44
1:Z:452:ASP:OD1	1:Z:453:LYS:N	2.49	0.44
1:1:278:ARG:HD3	1:1:299:PRO:HG2	2.00	0.44
1:3:164:ALA:HA	1:m:145:GLN:NE2	2.33	0.44
1:5:67:GLN:HE21	1:5:69:ARG:NH1	2.12	0.44
1:a:126:CYS:O	1:a:259:ASN:ND2	2.39	0.44
1:a:189:PRO:HD3	1:a:196:TYR:CD1	2.52	0.44
1:a:239:VAL:HG21	1:e:143:ASN:ND2	2.33	0.44
1:b:561:ILE:HG23	1:b:562:GLY:N	2.33	0.44
1:d:189:PRO:HD3	1:d:196:TYR:CD1	2.53	0.44
1:d:239:VAL:HG21	1:f:143:ASN:ND2	2.32	0.44
1:e:533:TRP:HA	1:e:555:GLU:OE1	2.17	0.44
1:f:147:LYS:HA	1:f:160:ASN:HA	2.00	0.44
1:j:147:LYS:HA	1:j:160:ASN:HA	2.00	0.44
1:j:278:ARG:HD3	1:j:299:PRO:HG2	2.00	0.44
1:k:263:PHE:O	1:k:406:MET:HG3	2.17	0.44
1:l:167:HIS:ND1	1:l:237:HIS:HE1	2.16	0.44
1:l:561:ILE:HG23	1:l:562:GLY:N	2.33	0.44
1:n:145:GLN:NE2	1:z:164:ALA:HA	2.33	0.44
1:o:167:HIS:ND1	1:o:237:HIS:HE1	2.16	0.44
1:o:263:PHE:O	1:o:406:MET:HG3	2.16	0.44
1:p:445:ASP:OD2	1:p:554:TYR:OH	2.30	0.44
1:q:455:PRO:HD3	1:s:302:TRP:CZ2	2.53	0.44
1:s:167:HIS:ND1	1:s:237:HIS:HE1	2.15	0.44
1:t:561:ILE:HG23	1:t:562:GLY:N	2.33	0.44
1:v:402:TYR:HD2	1:v:443:GLN:HE22	1.66	0.44
1:w:49:THR:HG1	1:w:143:ASN:H	1.64	0.44
1:w:278:ARG:HD3	1:w:299:PRO:HG2	2.00	0.44
1:w:452:ASP:OD1	1:w:453:LYS:N	2.48	0.44
1:y:167:HIS:ND1	1:y:237:HIS:HE1	2.15	0.44
1:y:279:VAL:HA	1:y:292:PRO:HA	1.99	0.44
1:y:402:TYR:HD2	1:y:443:GLN:HE22	1.66	0.44
1:7:278:ARG:HD3	1:7:299:PRO:HG2	2.00	0.44
1:A:402:TYR:HD2	1:A:443:GLN:HE22	1.66	0.44
1:B:278:ARG:HD3	1:B:299:PRO:HG2	2.00	0.44
1:C:126:CYS:O	1:C:259:ASN:ND2	2.39	0.44
1:C:189:PRO:HD3	1:C:196:TYR:CD1	2.52	0.44
1:H:189:PRO:HD3	1:H:196:TYR:CD1	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:402:TYR:HD2	1:H:443:GLN:HE22	1.66	0.44
1:I:147:LYS:HA	1:I:160:ASN:HA	2.00	0.44
1:N:278:ARG:HD3	1:N:299:PRO:HG2	2.00	0.44
1:N:561:ILE:HG23	1:N:562:GLY:N	2.33	0.44
1:O:147:LYS:HA	1:O:160:ASN:HA	2.00	0.44
1:O:167:HIS:ND1	1:O:237:HIS:HE1	2.15	0.44
1:O:561:ILE:HG23	1:O:562:GLY:N	2.33	0.44
1:R:533:TRP:HA	1:R:555:GLU:OE1	2.17	0.44
1:S:278:ARG:HD3	1:S:299:PRO:HG2	2.00	0.44
1:T:143:ASN:ND2	1:U:239:VAL:HG21	2.33	0.44
1:T:279:VAL:HA	1:T:292:PRO:HA	1.99	0.44
1:U:145:GLN:NE2	1:5:164:ALA:HA	2.33	0.44
1:W:167:HIS:ND1	1:W:237:HIS:HE1	2.16	0.44
1:X:143:ASN:ND2	1:Y:239:VAL:HG21	2.33	0.44
1:Z:147:LYS:HA	1:Z:160:ASN:HA	2.00	0.44
1:Z:167:HIS:ND1	1:Z:237:HIS:HE1	2.15	0.44
1:1:167:HIS:ND1	1:1:237:HIS:HE1	2.16	0.44
1:2:278:ARG:HD3	1:2:299:PRO:HG2	2.00	0.44
1:4:189:PRO:HD3	1:4:196:TYR:CD1	2.52	0.44
1:4:402:TYR:HD2	1:4:443:GLN:HE22	1.66	0.44
1:b:278:ARG:HD3	1:b:299:PRO:HG2	2.00	0.44
1:b:402:TYR:HD2	1:b:443:GLN:HE22	1.66	0.44
1:c:147:LYS:HA	1:c:160:ASN:HA	2.00	0.44
1:d:278:ARG:HD3	1:d:299:PRO:HG2	2.00	0.44
1:d:402:TYR:HD2	1:d:443:GLN:HE22	1.66	0.44
1:d:452:ASP:OD1	1:d:453:LYS:N	2.48	0.44
1:e:167:HIS:ND1	1:e:237:HIS:HE1	2.15	0.44
1:e:278:ARG:HD3	1:e:299:PRO:HG2	2.00	0.44
1:f:167:HIS:ND1	1:f:237:HIS:HE1	2.16	0.44
1:f:561:ILE:HG23	1:f:562:GLY:N	2.33	0.44
1:g:452:ASP:OD1	1:g:453:LYS:N	2.48	0.44
1:h:189:PRO:HD3	1:h:196:TYR:CD1	2.52	0.44
1:h:377:ASP:O	1:h:381:THR:OG1	2.19	0.44
1:h:402:TYR:HD2	1:h:443:GLN:HE22	1.66	0.44
1:i:143:ASN:ND2	1:7:239:VAL:HG21	2.33	0.44
1:i:561:ILE:HG23	1:i:562:GLY:N	2.33	0.44
1:k:147:LYS:HA	1:k:160:ASN:HA	2.00	0.44
1:p:147:LYS:HA	1:p:160:ASN:HA	2.00	0.44
1:s:279:VAL:HA	1:s:292:PRO:HA	1.98	0.44
1:u:278:ARG:HD3	1:u:299:PRO:HG2	2.00	0.44
1:x:561:ILE:HG23	1:x:562:GLY:N	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:y:189:PRO:HD3	1:y:196:TYR:CD1	2.53	0.44
1:z:167:HIS:ND1	1:z:237:HIS:HE1	2.15	0.44
1:z:263:PHE:O	1:z:406:MET:HG3	2.16	0.44
1:7:147:LYS:HA	1:7:160:ASN:HA	2.00	0.44
1:C:561:ILE:HG23	1:C:562:GLY:N	2.33	0.44
1:E:452:ASP:OD1	1:E:453:LYS:N	2.49	0.44
1:F:533:TRP:HA	1:F:555:GLU:OE1	2.17	0.44
1:F:561:ILE:HG23	1:F:562:GLY:N	2.33	0.44
1:H:561:ILE:HG23	1:H:562:GLY:N	2.33	0.44
1:J:147:LYS:HA	1:J:160:ASN:HA	2.00	0.44
1:K:95:LYS:HE3	1:K:95:LYS:HB3	1.87	0.44
1:K:147:LYS:HA	1:K:160:ASN:HA	2.00	0.44
1:M:189:PRO:HD3	1:M:196:TYR:CD1	2.53	0.44
1:M:278:ARG:HD3	1:M:299:PRO:HG2	2.00	0.44
1:N:147:LYS:HA	1:N:160:ASN:HA	2.00	0.44
1:O:189:PRO:HD3	1:O:196:TYR:CD1	2.52	0.44
1:P:278:ARG:HD3	1:P:299:PRO:HG2	2.00	0.44
1:R:147:LYS:HA	1:R:160:ASN:HA	2.00	0.44
1:T:147:LYS:HA	1:T:160:ASN:HA	2.00	0.44
1:T:455:PRO:HD3	1:f:302:TRP:CZ2	2.53	0.44
1:W:302:TRP:CZ2	1:Y:455:PRO:HD3	2.53	0.44
1:X:126:CYS:O	1:X:259:ASN:ND2	2.39	0.44
1:X:561:ILE:HG23	1:X:562:GLY:N	2.33	0.44
1:Y:167:HIS:ND1	1:Y:237:HIS:HE1	2.15	0.44
1:1:452:ASP:OD1	1:1:453:LYS:N	2.48	0.44
1:5:402:TYR:HD2	1:5:443:GLN:HE22	1.66	0.44
1:6:239:VAL:HG21	1:t:143:ASN:ND2	2.33	0.44
1:6:278:ARG:HD3	1:6:299:PRO:HG2	2.00	0.44
1:c:278:ARG:HD3	1:c:299:PRO:HG2	2.00	0.44
1:c:561:ILE:HG23	1:c:562:GLY:N	2.33	0.44
1:f:189:PRO:HD3	1:f:196:TYR:CD1	2.52	0.44
1:g:143:ASN:ND2	1:m:239:VAL:HG21	2.33	0.44
1:h:239:VAL:HG21	1:l:143:ASN:ND2	2.32	0.44
1:k:533:TRP:HA	1:k:555:GLU:OE1	2.17	0.44
1:n:239:VAL:HG21	1:s:143:ASN:ND2	2.32	0.44
1:n:452:ASP:OD1	1:n:453:LYS:N	2.49	0.44
1:o:147:LYS:HA	1:o:160:ASN:HA	2.00	0.44
1:p:402:TYR:HD2	1:p:443:GLN:HE22	1.66	0.44
1:p:533:TRP:HA	1:p:555:GLU:OE1	2.17	0.44
1:s:533:TRP:HA	1:s:555:GLU:OE1	2.17	0.44
1:w:167:HIS:ND1	1:w:237:HIS:HE1	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:x:533:TRP:HA	1:x:555:GLU:OE1	2.17	0.44
1:z:302:TRP:CZ2	1:7:455:PRO:HD3	2.53	0.44
1:8:49:THR:OG1	1:8:142:TYR:HB2	2.16	0.44
1:8:147:LYS:HA	1:8:160:ASN:HA	2.00	0.44
1:8:167:HIS:ND1	1:8:237:HIS:HE1	2.15	0.44
1:A:533:TRP:HA	1:A:555:GLU:OE1	2.17	0.44
1:D:167:HIS:ND1	1:D:237:HIS:HE1	2.15	0.44
1:E:279:VAL:HA	1:E:292:PRO:HA	1.99	0.44
1:E:402:TYR:HD2	1:E:443:GLN:HE22	1.66	0.44
1:F:143:ASN:ND2	1:G:239:VAL:HG21	2.32	0.44
1:G:452:ASP:OD1	1:G:453:LYS:N	2.48	0.44
1:H:239:VAL:HG21	1:Z:143:ASN:ND2	2.32	0.44
1:J:189:PRO:HD3	1:J:196:TYR:CD1	2.53	0.44
1:J:279:VAL:HA	1:J:292:PRO:HA	1.99	0.44
1:K:145:GLN:NE2	1:L:164:ALA:HA	2.33	0.44
1:L:143:ASN:ND2	1:2:239:VAL:HG21	2.33	0.44
1:M:147:LYS:HA	1:M:160:ASN:HA	2.00	0.44
1:O:278:ARG:HD3	1:O:299:PRO:HG2	2.00	0.44
1:P:452:ASP:OD1	1:P:453:LYS:N	2.48	0.44
1:Q:279:VAL:HA	1:Q:292:PRO:HA	1.99	0.44
1:R:189:PRO:HD3	1:R:196:TYR:CD1	2.52	0.44
1:S:145:GLN:NE2	1:4:164:ALA:HA	2.33	0.44
1:S:147:LYS:HA	1:S:160:ASN:HA	2.00	0.44
1:T:164:ALA:HA	1:c:145:GLN:NE2	2.33	0.44
1:T:189:PRO:HD3	1:T:196:TYR:CD1	2.52	0.44
1:W:263:PHE:O	1:W:406:MET:HG3	2.16	0.44
1:Z:49:THR:OG1	1:Z:142:TYR:HB2	2.16	0.44
1:3:402:TYR:HD2	1:3:443:GLN:HE22	1.66	0.44
1:4:167:HIS:ND1	1:4:237:HIS:HE1	2.15	0.44
1:4:561:ILE:HG23	1:4:562:GLY:N	2.33	0.44
1:a:67:GLN:HE21	1:a:69:ARG:NH1	2.12	0.44
1:a:561:ILE:HG23	1:a:562:GLY:N	2.33	0.44
1:b:147:LYS:HA	1:b:160:ASN:HA	2.00	0.44
1:b:189:PRO:HD3	1:b:196:TYR:CD1	2.53	0.44
1:g:67:GLN:HE21	1:g:69:ARG:NH1	2.12	0.44
1:g:145:GLN:NE2	1:m:164:ALA:HA	2.33	0.44
1:g:189:PRO:HD3	1:g:196:TYR:CD1	2.52	0.44
1:h:164:ALA:HA	1:l:145:GLN:NE2	2.33	0.44
1:k:189:PRO:HD3	1:k:196:TYR:CD1	2.52	0.44
1:l:147:LYS:HA	1:l:160:ASN:HA	2.00	0.44
1:l:164:ALA:HA	1:r:145:GLN:NE2	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:n:278:ARG:HD3	1:n:299:PRO:HG2	2.00	0.44
1:q:279:VAL:HA	1:q:292:PRO:HA	1.99	0.44
1:q:402:TYR:HD2	1:q:443:GLN:HE22	1.66	0.44
1:s:561:ILE:HG23	1:s:562:GLY:N	2.33	0.44
1:t:164:ALA:HA	1:x:145:GLN:NE2	2.33	0.44
1:u:126:CYS:O	1:u:259:ASN:ND2	2.39	0.44
1:u:402:TYR:HD2	1:u:443:GLN:HE22	1.66	0.44
1:v:189:PRO:HD3	1:v:196:TYR:CD1	2.53	0.44
1:v:279:VAL:HA	1:v:292:PRO:HA	1.99	0.44
1:x:95:LYS:HE3	1:x:95:LYS:HB3	1.87	0.44
1:x:147:LYS:HA	1:x:160:ASN:HA	2.00	0.44
1:y:239:VAL:HG21	1:8:143:ASN:ND2	2.32	0.44
1:y:561:ILE:HG23	1:y:562:GLY:N	2.33	0.44
1:7:167:HIS:ND1	1:7:237:HIS:HE1	2.15	0.44
1:A:455:PRO:HD3	1:I:302:TRP:CZ2	2.53	0.44
1:A:561:ILE:HG23	1:A:562:GLY:N	2.33	0.44
1:B:402:TYR:HD2	1:B:443:GLN:HE22	1.66	0.44
1:D:189:PRO:HD3	1:D:196:TYR:CD1	2.53	0.44
1:F:455:PRO:HD3	1:Q:302:TRP:CZ2	2.53	0.44
1:G:143:ASN:ND2	1:W:239:VAL:HG21	2.32	0.44
1:G:278:ARG:HD3	1:G:299:PRO:HG2	2.00	0.44
1:H:455:PRO:HD3	1:Y:302:TRP:CZ2	2.53	0.44
1:J:167:HIS:ND1	1:J:237:HIS:HE1	2.16	0.44
1:K:533:TRP:HA	1:K:555:GLU:OE1	2.17	0.44
1:Q:145:GLN:NE2	1:S:164:ALA:HA	2.33	0.44
1:5:452:ASP:OD1	1:5:453:LYS:N	2.48	0.44
1:d:561:ILE:HG23	1:d:562:GLY:N	2.33	0.44
1:f:278:ARG:HD3	1:f:299:PRO:HG2	2.00	0.44
1:g:147:LYS:HA	1:g:160:ASN:HA	2.00	0.44
1:h:561:ILE:HG23	1:h:562:GLY:N	2.33	0.44
1:n:147:LYS:HA	1:n:160:ASN:HA	2.00	0.44
1:o:302:TRP:CZ2	1:p:455:PRO:HD3	2.53	0.44
1:p:278:ARG:HD3	1:p:299:PRO:HG2	2.00	0.44
1:p:561:ILE:HG23	1:p:562:GLY:N	2.33	0.44
1:q:452:ASP:OD1	1:q:453:LYS:N	2.49	0.44
1:r:126:CYS:O	1:r:259:ASN:ND2	2.39	0.44
1:r:279:VAL:HA	1:r:292:PRO:HA	1.99	0.44
1:r:302:TRP:CZ2	1:s:455:PRO:HD3	2.53	0.44
1:v:147:LYS:HA	1:v:160:ASN:HA	2.00	0.44
1:v:167:HIS:ND1	1:v:237:HIS:HE1	2.15	0.44
1:7:561:ILE:HG23	1:7:562:GLY:N	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:143:ASN:ND2	1:E:239:VAL:HG21	2.32	0.43
1:A:278:ARG:HD3	1:A:299:PRO:HG2	2.00	0.43
1:E:302:TRP:CZ2	1:Q:455:PRO:HD3	2.53	0.43
1:G:147:LYS:HA	1:G:160:ASN:HA	2.00	0.43
1:G:533:TRP:HA	1:G:555:GLU:OE1	2.17	0.43
1:G:561:ILE:HG23	1:G:562:GLY:N	2.33	0.43
1:M:167:HIS:ND1	1:M:237:HIS:HE1	2.16	0.43
1:M:239:VAL:HG21	1:3:143:ASN:ND2	2.33	0.43
1:P:561:ILE:HG23	1:P:562:GLY:N	2.33	0.43
1:W:561:ILE:HG23	1:W:562:GLY:N	2.33	0.43
1:X:189:PRO:HD3	1:X:196:TYR:CD1	2.53	0.43
1:X:278:ARG:HD3	1:X:299:PRO:HG2	2.00	0.43
1:Y:561:ILE:HG23	1:Y:562:GLY:N	2.33	0.43
1:Z:263:PHE:O	1:Z:406:MET:HG3	2.16	0.43
1:Z:561:ILE:HG23	1:Z:562:GLY:N	2.33	0.43
1:1:189:PRO:HD3	1:1:196:TYR:CD1	2.53	0.43
1:2:377:ASP:O	1:2:381:THR:OG1	2.19	0.43
1:3:167:HIS:ND1	1:3:237:HIS:HE1	2.16	0.43
1:5:167:HIS:ND1	1:5:237:HIS:HE1	2.15	0.43
1:c:126:CYS:O	1:c:259:ASN:ND2	2.39	0.43
1:e:164:ALA:HA	1:q:145:GLN:NE2	2.33	0.43
1:e:189:PRO:HD3	1:e:196:TYR:CD1	2.53	0.43
1:h:167:HIS:ND1	1:h:237:HIS:HE1	2.16	0.43
1:l:239:VAL:HG21	1:r:143:ASN:HD21	1.83	0.43
1:p:143:ASN:ND2	1:q:239:VAL:HG21	2.32	0.43
1:q:302:TRP:CZ2	1:r:455:PRO:HD3	2.53	0.43
1:t:167:HIS:ND1	1:t:237:HIS:HE1	2.16	0.43
1:y:164:ALA:HA	1:8:145:GLN:NE2	2.33	0.43
1:y:455:PRO:HD3	1:7:302:TRP:CZ2	2.53	0.43
1:z:561:ILE:HG23	1:z:562:GLY:N	2.33	0.43
1:8:561:ILE:HG23	1:8:562:GLY:N	2.33	0.43
1:C:67:GLN:HE21	1:C:69:ARG:NH1	2.12	0.43
1:D:164:ALA:HA	1:E:145:GLN:NE2	2.33	0.43
1:F:143:ASN:HD21	1:G:239:VAL:HG21	1.83	0.43
1:H:164:ALA:HA	1:Z:145:GLN:NE2	2.33	0.43
1:H:239:VAL:HG21	1:Z:143:ASN:HD21	1.84	0.43
1:K:239:VAL:HG21	1:7:143:ASN:ND2	2.33	0.43
1:L:145:GLN:NE2	1:2:164:ALA:HA	2.33	0.43
1:L:167:HIS:ND1	1:L:237:HIS:HE1	2.16	0.43
1:Q:143:ASN:HD21	1:S:239:VAL:HG21	1.83	0.43
1:R:455:PRO:HD3	1:U:302:TRP:CZ2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:239:VAL:HG21	1:c:143:ASN:ND2	2.32	0.43
1:T:377:ASP:O	1:T:381:THR:OG1	2.19	0.43
1:W:95:LYS:HE3	1:W:95:LYS:HB3	1.87	0.43
1:Y:143:ASN:ND2	1:x:239:VAL:HG21	2.33	0.43
1:1:49:THR:HG1	1:1:143:ASN:H	1.64	0.43
1:5:143:ASN:ND2	1:b:239:VAL:HG21	2.33	0.43
1:6:164:ALA:HA	1:t:145:GLN:NE2	2.33	0.43
1:f:533:TRP:HA	1:f:555:GLU:OE1	2.17	0.43
1:g:135:LYS:HA	1:g:135:LYS:HD2	1.82	0.43
1:g:143:ASN:HD21	1:m:239:VAL:HG21	1.84	0.43
1:i:126:CYS:O	1:i:259:ASN:ND2	2.39	0.43
1:i:189:PRO:HD3	1:i:196:TYR:CD1	2.53	0.43
1:i:278:ARG:HD3	1:i:299:PRO:HG2	2.00	0.43
1:k:143:ASN:ND2	1:s:239:VAL:HG21	2.32	0.43
1:k:455:PRO:HD3	1:m:302:TRP:CZ2	2.53	0.43
1:m:402:TYR:HD2	1:m:443:GLN:HE22	1.66	0.43
1:n:143:ASN:ND2	1:z:239:VAL:HG21	2.32	0.43
1:n:189:PRO:HD3	1:n:196:TYR:CD1	2.53	0.43
1:n:455:PRO:HD3	1:p:302:TRP:CZ2	2.53	0.43
1:n:551:GLU:OE1	1:n:551:GLU:N	2.52	0.43
1:n:561:ILE:HG23	1:n:562:GLY:N	2.33	0.43
1:p:189:PRO:HD3	1:p:196:TYR:CD1	2.52	0.43
1:y:239:VAL:HG21	1:8:143:ASN:HD21	1.84	0.43
1:A:145:GLN:NE2	1:E:164:ALA:HA	2.34	0.43
1:A:189:PRO:HD3	1:A:196:TYR:CD1	2.53	0.43
1:A:302:TRP:CZ2	1:G:455:PRO:HD3	2.53	0.43
1:B:455:PRO:HD3	1:L:302:TRP:CZ2	2.53	0.43
1:C:278:ARG:NH1	1:2:368:PRO:HD3	2.34	0.43
1:C:402:TYR:HD2	1:C:443:GLN:HE22	1.66	0.43
1:C:551:GLU:OE1	1:C:551:GLU:N	2.52	0.43
1:D:239:VAL:HG21	1:E:143:ASN:HD21	1.84	0.43
1:E:551:GLU:OE1	1:E:551:GLU:N	2.52	0.43
1:G:189:PRO:HD3	1:G:196:TYR:CD1	2.52	0.43
1:G:551:GLU:N	1:G:551:GLU:OE1	2.52	0.43
1:J:302:TRP:CZ2	1:L:455:PRO:HD3	2.53	0.43
1:J:533:TRP:HA	1:J:555:GLU:OE1	2.17	0.43
1:L:147:LYS:HA	1:L:160:ASN:HA	2.00	0.43
1:N:302:TRP:CZ2	1:P:455:PRO:HD3	2.53	0.43
1:O:533:TRP:HA	1:O:555:GLU:OE1	2.17	0.43
1:P:279:VAL:HA	1:P:292:PRO:HA	1.99	0.43
1:P:551:GLU:OE1	1:P:551:GLU:N	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:67:GLN:HE21	1:T:69:ARG:NH1	2.12	0.43
1:T:143:ASN:HD21	1:U:239:VAL:HG21	1.83	0.43
1:U:143:ASN:ND2	1:5:239:VAL:HG21	2.33	0.43
1:U:402:TYR:HD2	1:U:443:GLN:HE22	1.66	0.43
1:W:278:ARG:HD3	1:W:299:PRO:HG2	2.00	0.43
1:3:452:ASP:OD1	1:3:453:LYS:N	2.48	0.43
1:3:551:GLU:OE1	1:3:551:GLU:N	2.52	0.43
1:4:279:VAL:HA	1:4:292:PRO:HA	1.99	0.43
1:6:368:PRO:HD3	1:a:278:ARG:NH1	2.34	0.43
1:a:551:GLU:OE1	1:a:551:GLU:N	2.52	0.43
1:b:167:HIS:ND1	1:b:237:HIS:HE1	2.15	0.43
1:c:302:TRP:CZ2	1:d:455:PRO:HD3	2.53	0.43
1:d:279:VAL:HA	1:d:292:PRO:HA	1.99	0.43
1:e:67:GLN:HE21	1:e:69:ARG:NH1	2.12	0.43
1:e:239:VAL:HG21	1:q:143:ASN:HD21	1.84	0.43
1:f:239:VAL:HG21	1:h:143:ASN:ND2	2.33	0.43
1:f:402:TYR:HD2	1:f:443:GLN:HE22	1.66	0.43
1:h:452:ASP:OD1	1:h:453:LYS:N	2.48	0.43
1:i:452:ASP:OD1	1:i:453:LYS:N	2.49	0.43
1:k:143:ASN:HD21	1:s:239:VAL:HG21	1.84	0.43
1:n:239:VAL:HG21	1:s:143:ASN:HD21	1.83	0.43
1:n:302:TRP:CZ2	1:o:455:PRO:HD3	2.53	0.43
1:n:533:TRP:HA	1:n:555:GLU:OE1	2.17	0.43
1:p:145:GLN:NE2	1:q:164:ALA:HA	2.34	0.43
1:t:147:LYS:HA	1:t:160:ASN:HA	2.00	0.43
1:t:302:TRP:CZ2	1:u:455:PRO:HD3	2.53	0.43
1:v:278:ARG:HD3	1:v:299:PRO:HG2	2.00	0.43
1:w:189:PRO:HD3	1:w:196:TYR:CD1	2.53	0.43
1:y:135:LYS:HA	1:y:135:LYS:HD2	1.82	0.43
1:y:445:ASP:OD2	1:y:554:TYR:OH	2.30	0.43
1:z:278:ARG:HD3	1:z:299:PRO:HG2	2.00	0.43
1:8:263:PHE:O	1:8:406:MET:HG3	2.16	0.43
1:A:239:VAL:HG21	1:B:143:ASN:HD21	1.83	0.43
1:B:126:CYS:O	1:B:259:ASN:ND2	2.39	0.43
1:B:164:ALA:HA	1:C:145:GLN:NE2	2.33	0.43
1:B:239:VAL:HG21	1:C:143:ASN:ND2	2.32	0.43
1:D:67:GLN:HE21	1:D:69:ARG:NH1	2.12	0.43
1:E:368:PRO:HD3	1:F:278:ARG:NH1	2.34	0.43
1:F:239:VAL:HG21	1:R:143:ASN:ND2	2.33	0.43
1:F:239:VAL:HG21	1:R:143:ASN:HD21	1.84	0.43
1:G:302:TRP:CZ2	1:I:455:PRO:HD3	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:302:TRP:CZ2	1:1:455:PRO:HD3	2.53	0.43
1:M:368:PRO:HD3	1:2:278:ARG:NH1	2.34	0.43
1:N:402:TYR:HD2	1:N:443:GLN:HE22	1.66	0.43
1:O:402:TYR:HD2	1:O:443:GLN:HE22	1.66	0.43
1:U:265:PRO:HG3	1:U:406:MET:HB3	2.01	0.43
1:U:551:GLU:OE1	1:U:551:GLU:N	2.52	0.43
1:V:561:ILE:HG23	1:V:562:GLY:N	2.33	0.43
1:Y:402:TYR:HD2	1:Y:443:GLN:HE22	1.66	0.43
1:3:239:VAL:HG21	1:m:143:ASN:ND2	2.33	0.43
1:4:452:ASP:OD1	1:4:453:LYS:N	2.49	0.43
1:5:551:GLU:OE1	1:5:551:GLU:N	2.52	0.43
1:6:278:ARG:NH1	1:b:368:PRO:HD3	2.34	0.43
1:d:239:VAL:HG21	1:f:143:ASN:HD21	1.84	0.43
1:d:551:GLU:OE1	1:d:551:GLU:N	2.52	0.43
1:f:164:ALA:HA	1:h:145:GLN:NE2	2.33	0.43
1:g:167:HIS:ND1	1:g:237:HIS:HE1	2.16	0.43
1:g:402:TYR:HD2	1:g:443:GLN:HE22	1.66	0.43
1:h:279:VAL:HA	1:h:292:PRO:HA	1.99	0.43
1:m:174:HIS:CD2	1:m:474:HIS:HD2	2.26	0.43
1:m:551:GLU:N	1:m:551:GLU:OE1	2.52	0.43
1:o:164:ALA:HA	1:y:145:GLN:NE2	2.33	0.43
1:q:551:GLU:OE1	1:q:551:GLU:N	2.52	0.43
1:r:561:ILE:HG23	1:r:562:GLY:N	2.33	0.43
1:t:239:VAL:HG21	1:x:143:ASN:HD21	1.84	0.43
1:v:533:TRP:HA	1:v:555:GLU:OE1	2.17	0.43
1:w:455:PRO:HD3	1:x:302:TRP:CZ2	2.54	0.43
1:z:402:TYR:HD2	1:z:443:GLN:HE22	1.66	0.43
1:B:561:ILE:HG23	1:B:562:GLY:N	2.33	0.43
1:D:147:LYS:HA	1:D:160:ASN:HA	2.00	0.43
1:D:302:TRP:CZ2	1:N:455:PRO:HD3	2.53	0.43
1:D:368:PRO:HD3	1:P:278:ARG:NH1	2.34	0.43
1:D:455:PRO:HD3	1:P:302:TRP:CZ2	2.53	0.43
1:D:551:GLU:N	1:D:551:GLU:OE1	2.52	0.43
1:F:164:ALA:HA	1:R:145:GLN:NE2	2.33	0.43
1:J:278:ARG:HD3	1:J:299:PRO:HG2	2.00	0.43
1:K:143:ASN:HD21	1:L:239:VAL:HG21	1.84	0.43
1:K:455:PRO:HD3	1:8:302:TRP:CZ2	2.53	0.43
1:L:254:SER:OG	1:L:470:LEU:HB3	2.19	0.43
1:O:143:ASN:HD21	1:P:239:VAL:HG21	1.84	0.43
1:O:164:ALA:HA	1:4:145:GLN:NE2	2.34	0.43
1:O:239:VAL:HG21	1:4:143:ASN:ND2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:P:145:GLN:NE2	1:Q:164:ALA:HA	2.33	0.43
1:Q:561:ILE:HG23	1:Q:562:GLY:N	2.33	0.43
1:V:164:ALA:HA	1:W:145:GLN:NE2	2.33	0.43
1:V:167:HIS:ND1	1:V:237:HIS:HE1	2.16	0.43
1:Z:551:GLU:N	1:Z:551:GLU:OE1	2.52	0.43
1:5:561:ILE:HG23	1:5:562:GLY:N	2.33	0.43
1:a:402:TYR:HD2	1:a:443:GLN:HE22	1.66	0.43
1:d:278:ARG:NH1	1:e:368:PRO:HD3	2.34	0.43
1:j:164:ALA:HA	1:z:145:GLN:NE2	2.33	0.43
1:l:551:GLU:OE1	1:l:551:GLU:N	2.52	0.43
1:o:143:ASN:HD21	1:v:239:VAL:HG21	1.83	0.43
1:p:143:ASN:HD21	1:q:239:VAL:HG21	1.83	0.43
1:p:239:VAL:HG21	1:u:143:ASN:HD21	1.84	0.43
1:q:368:PRO:HD3	1:s:278:ARG:NH1	2.34	0.43
1:q:561:ILE:HG23	1:q:562:GLY:N	2.33	0.43
1:r:147:LYS:HA	1:r:160:ASN:HA	2.00	0.43
1:r:189:PRO:HD3	1:r:196:TYR:CD1	2.52	0.43
1:s:551:GLU:OE1	1:s:551:GLU:N	2.52	0.43
1:t:254:SER:OG	1:t:470:LEU:HB3	2.19	0.43
1:w:143:ASN:ND2	1:8:239:VAL:HG21	2.33	0.43
1:w:147:LYS:HA	1:w:160:ASN:HA	2.00	0.43
1:w:561:ILE:HG23	1:w:562:GLY:N	2.33	0.43
1:x:278:ARG:HD3	1:x:299:PRO:HG2	2.00	0.43
1:y:302:TRP:CZ2	1:z:455:PRO:HD3	2.53	0.43
1:z:95:LYS:HE3	1:z:95:LYS:HB3	1.87	0.43
1:z:551:GLU:N	1:z:551:GLU:OE1	2.52	0.43
1:8:551:GLU:OE1	1:8:551:GLU:N	2.52	0.43
1:B:302:TRP:CZ2	1:J:455:PRO:HD3	2.53	0.43
1:E:147:LYS:HA	1:E:160:ASN:HA	2.00	0.43
1:E:561:ILE:HG23	1:E:562:GLY:N	2.33	0.43
1:F:145:GLN:NE2	1:G:164:ALA:HA	2.34	0.43
1:F:402:TYR:HD2	1:F:443:GLN:HE22	1.66	0.43
1:F:551:GLU:OE1	1:F:551:GLU:N	2.52	0.43
1:G:278:ARG:NH1	1:I:368:PRO:HD3	2.34	0.43
1:H:145:GLN:NE2	1:I:164:ALA:HA	2.34	0.43
1:H:302:TRP:CZ2	1:W:455:PRO:HD3	2.53	0.43
1:K:126:CYS:O	1:K:259:ASN:ND2	2.39	0.43
1:K:167:HIS:ND1	1:K:237:HIS:HE1	2.16	0.43
1:M:67:GLN:HE21	1:M:69:ARG:NH1	2.12	0.43
1:N:265:PRO:HG3	1:N:406:MET:HB3	2.01	0.43
1:O:239:VAL:HG21	1:4:143:ASN:HD21	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:O:265:PRO:HG3	1:O:406:MET:HB3	2.01	0.43
1:O:278:ARG:NH1	1:g:368:PRO:HD3	2.34	0.43
1:O:302:TRP:CZ2	1:g:455:PRO:HD3	2.53	0.43
1:Q:147:LYS:HA	1:Q:160:ASN:HA	2.00	0.43
1:Q:189:PRO:HD3	1:Q:196:TYR:CD1	2.52	0.43
1:R:265:PRO:HG3	1:R:406:MET:HB3	2.01	0.43
1:R:402:TYR:HD2	1:R:443:GLN:HE22	1.66	0.43
1:S:551:GLU:OE1	1:S:551:GLU:N	2.52	0.43
1:T:402:TYR:HD2	1:T:443:GLN:HE22	1.66	0.43
1:W:402:TYR:HD2	1:W:443:GLN:HE22	1.66	0.43
1:X:254:SER:OG	1:X:470:LEU:HB3	2.19	0.43
1:Z:239:VAL:HG21	1:1:143:ASN:ND2	2.33	0.43
1:Z:239:VAL:HG21	1:1:143:ASN:HD21	1.84	0.43
1:Z:302:TRP:CZ2	1:x:455:PRO:HD3	2.53	0.43
1:1:147:LYS:HA	1:1:160:ASN:HA	2.00	0.43
1:1:402:TYR:HD2	1:1:443:GLN:HE22	1.66	0.43
1:2:145:GLN:NE2	1:i:164:ALA:HA	2.33	0.43
1:3:265:PRO:HG3	1:3:406:MET:HB3	2.01	0.43
1:3:561:ILE:HG23	1:3:562:GLY:N	2.33	0.43
1:5:265:PRO:HG3	1:5:406:MET:HB3	2.01	0.43
1:a:278:ARG:HD3	1:a:299:PRO:HG2	2.00	0.43
1:b:254:SER:OG	1:b:470:LEU:HB3	2.19	0.43
1:b:265:PRO:HG3	1:b:406:MET:HB3	2.01	0.43
1:c:265:PRO:HG3	1:c:406:MET:HB3	2.01	0.43
1:c:402:TYR:HD2	1:c:443:GLN:HE22	1.66	0.43
1:c:455:PRO:HD3	1:e:302:TRP:CZ2	2.53	0.43
1:d:145:GLN:NE2	1:r:164:ALA:HA	2.33	0.43
1:d:302:TRP:CZ2	1:e:455:PRO:HD3	2.53	0.43
1:e:147:LYS:HA	1:e:160:ASN:HA	2.00	0.43
1:e:239:VAL:HG21	1:q:143:ASN:ND2	2.32	0.43
1:e:551:GLU:OE1	1:e:551:GLU:N	2.52	0.43
1:g:561:ILE:HG23	1:g:562:GLY:N	2.33	0.43
1:h:147:LYS:HA	1:h:160:ASN:HA	2.00	0.43
1:j:551:GLU:N	1:j:551:GLU:OE1	2.52	0.43
1:j:561:ILE:HG23	1:j:562:GLY:N	2.33	0.43
1:k:402:TYR:HD2	1:k:443:GLN:HE22	1.66	0.43
1:m:265:PRO:HG3	1:m:406:MET:HB3	2.01	0.43
1:m:561:ILE:HG23	1:m:562:GLY:N	2.33	0.43
1:n:164:ALA:HA	1:s:145:GLN:NE2	2.34	0.43
1:o:135:LYS:HD2	1:o:135:LYS:HA	1.82	0.43
1:o:239:VAL:HG21	1:y:143:ASN:ND2	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:q:147:LYS:HA	1:q:160:ASN:HA	2.00	0.43
1:r:167:HIS:ND1	1:r:237:HIS:HE1	2.16	0.43
1:t:455:PRO:HD3	1:v:302:TRP:CZ2	2.53	0.43
1:u:561:ILE:HG23	1:u:562:GLY:N	2.33	0.43
1:v:561:ILE:HG23	1:v:562:GLY:N	2.33	0.43
1:w:143:ASN:HD21	1:8:239:VAL:HG21	1.84	0.43
1:7:402:TYR:HD2	1:7:443:GLN:HE22	1.66	0.43
1:7:551:GLU:N	1:7:551:GLU:OE1	2.52	0.43
1:A:143:ASN:HD21	1:E:239:VAL:HG21	1.83	0.43
1:A:164:ALA:HA	1:B:145:GLN:NE2	2.33	0.43
1:A:551:GLU:OE1	1:A:551:GLU:N	2.52	0.43
1:B:265:PRO:HG3	1:B:406:MET:HB3	2.01	0.43
1:H:143:ASN:ND2	1:I:239:VAL:HG21	2.33	0.43
1:H:254:SER:OG	1:H:470:LEU:HB3	2.19	0.43
1:I:143:ASN:HD21	1:J:239:VAL:HG21	1.83	0.43
1:I:265:PRO:HG3	1:I:406:MET:HB3	2.01	0.43
1:J:561:ILE:HG23	1:J:562:GLY:N	2.33	0.43
1:K:278:ARG:HD3	1:K:299:PRO:HG2	2.00	0.43
1:L:551:GLU:N	1:L:551:GLU:OE1	2.52	0.43
1:M:164:ALA:HA	1:3:145:GLN:NE2	2.33	0.43
1:M:265:PRO:HG3	1:M:406:MET:HB3	2.01	0.43
1:N:145:GLN:NE2	1:g:164:ALA:HA	2.34	0.43
1:P:143:ASN:ND2	1:Q:239:VAL:HG21	2.33	0.43
1:Q:167:HIS:ND1	1:Q:237:HIS:HE1	2.16	0.43
1:Q:265:PRO:HG3	1:Q:406:MET:HB3	2.01	0.43
1:R:278:ARG:HD3	1:R:299:PRO:HG2	2.00	0.43
1:S:254:SER:OG	1:S:470:LEU:HB3	2.19	0.43
1:T:167:HIS:ND1	1:T:237:HIS:HE1	2.16	0.43
1:T:265:PRO:HG3	1:T:406:MET:HB3	2.01	0.43
1:T:561:ILE:HG23	1:T:562:GLY:N	2.33	0.43
1:U:143:ASN:HD21	1:5:239:VAL:HG21	1.84	0.43
1:U:254:SER:OG	1:U:470:LEU:HB3	2.19	0.43
1:V:551:GLU:OE1	1:V:551:GLU:N	2.52	0.43
1:W:551:GLU:N	1:W:551:GLU:OE1	2.52	0.43
1:X:164:ALA:HA	1:6:145:GLN:NE2	2.33	0.43
1:X:402:TYR:HD2	1:X:443:GLN:HE22	1.66	0.43
1:Y:551:GLU:OE1	1:Y:551:GLU:N	2.52	0.43
1:1:561:ILE:HG23	1:1:562:GLY:N	2.33	0.43
1:2:135:LYS:HA	1:2:135:LYS:HD2	1.82	0.43
1:2:561:ILE:HG23	1:2:562:GLY:N	2.33	0.43
1:3:239:VAL:HG21	1:m:143:ASN:HD21	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:4:147:LYS:HA	1:4:160:ASN:HA	2.00	0.43
1:4:551:GLU:N	1:4:551:GLU:OE1	2.52	0.43
1:5:145:GLN:NE2	1:b:164:ALA:HA	2.33	0.43
1:6:561:ILE:HG23	1:6:562:GLY:N	2.33	0.43
1:a:143:ASN:ND2	1:u:239:VAL:HG21	2.33	0.43
1:a:145:GLN:NE2	1:u:164:ALA:HA	2.33	0.43
1:d:143:ASN:ND2	1:r:239:VAL:HG21	2.33	0.43
1:f:239:VAL:HG21	1:h:143:ASN:HD21	1.84	0.43
1:f:265:PRO:HG3	1:f:406:MET:HB3	2.01	0.43
1:h:551:GLU:OE1	1:h:551:GLU:N	2.52	0.43
1:i:254:SER:OG	1:i:470:LEU:HB3	2.19	0.43
1:j:167:HIS:ND1	1:j:237:HIS:HE1	2.16	0.43
1:k:145:GLN:NE2	1:s:164:ALA:HA	2.33	0.43
1:k:265:PRO:HG3	1:k:406:MET:HB3	2.01	0.43
1:l:254:SER:OG	1:l:470:LEU:HB3	2.19	0.43
1:m:254:SER:OG	1:m:470:LEU:HB3	2.19	0.43
1:n:278:ARG:NH1	1:o:368:PRO:HD3	2.34	0.43
1:r:265:PRO:HG3	1:r:406:MET:HB3	2.01	0.43
1:s:402:TYR:HD2	1:s:443:GLN:HE22	1.66	0.43
1:t:551:GLU:OE1	1:t:551:GLU:N	2.52	0.43
1:u:254:SER:OG	1:u:470:LEU:HB3	2.19	0.43
1:u:302:TRP:CZ2	1:v:455:PRO:HD3	2.53	0.43
1:w:402:TYR:HD2	1:w:443:GLN:HE22	1.66	0.43
1:C:278:ARG:HD3	1:C:299:PRO:HG2	2.00	0.43
1:D:239:VAL:HG21	1:E:143:ASN:ND2	2.32	0.43
1:E:254:SER:OG	1:E:470:LEU:HB3	2.19	0.43
1:E:278:ARG:NH1	1:Q:368:PRO:HD3	2.34	0.43
1:H:147:LYS:HA	1:H:160:ASN:HA	2.00	0.43
1:J:265:PRO:HG3	1:J:406:MET:HB3	2.01	0.43
1:M:254:SER:OG	1:M:470:LEU:HB3	2.19	0.43
1:R:164:ALA:HA	1:V:145:GLN:NE2	2.33	0.43
1:R:239:VAL:HG21	1:V:143:ASN:ND2	2.33	0.43
1:R:278:ARG:NH1	1:S:368:PRO:HD3	2.34	0.43
1:R:551:GLU:N	1:R:551:GLU:OE1	2.52	0.43
1:T:551:GLU:OE1	1:T:551:GLU:N	2.52	0.43
1:U:147:LYS:HA	1:U:160:ASN:HA	2.00	0.43
1:U:174:HIS:CD2	1:U:474:HIS:HD2	2.26	0.43
1:U:278:ARG:HD3	1:U:299:PRO:HG2	2.00	0.43
1:U:561:ILE:HG23	1:U:562:GLY:N	2.33	0.43
1:V:265:PRO:HG3	1:V:406:MET:HB3	2.01	0.43
1:V:455:PRO:HD3	1:X:302:TRP:CZ2	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3:455:PRO:HD3	1:j:302:TRP:CZ2	2.54	0.43
1:5:147:LYS:HA	1:5:160:ASN:HA	2.00	0.43
1:6:452:ASP:OD1	1:6:453:LYS:N	2.48	0.43
1:b:67:GLN:HE21	1:b:69:ARG:NH1	2.12	0.43
1:b:143:ASN:ND2	1:c:239:VAL:HG21	2.33	0.43
1:g:265:PRO:HG3	1:g:406:MET:HB3	2.01	0.43
1:g:551:GLU:N	1:g:551:GLU:OE1	2.52	0.43
1:i:302:TRP:CZ2	1:j:455:PRO:HD3	2.54	0.43
1:i:402:TYR:HD2	1:i:443:GLN:HE22	1.66	0.43
1:i:551:GLU:OE1	1:i:551:GLU:N	2.52	0.43
1:j:145:GLN:NE2	1:k:164:ALA:HA	2.33	0.43
1:j:265:PRO:HG3	1:j:406:MET:HB3	2.01	0.43
1:k:278:ARG:NH1	1:l:368:PRO:HD3	2.34	0.43
1:k:551:GLU:OE1	1:k:551:GLU:N	2.52	0.43
1:m:147:LYS:HA	1:m:160:ASN:HA	2.00	0.43
1:m:278:ARG:HD3	1:m:299:PRO:HG2	2.00	0.43
1:p:265:PRO:HG3	1:p:406:MET:HB3	2.01	0.43
1:p:551:GLU:OE1	1:p:551:GLU:N	2.52	0.43
1:u:265:PRO:HG3	1:u:406:MET:HB3	2.01	0.43
1:v:143:ASN:HD21	1:w:239:VAL:HG21	1.84	0.43
1:v:265:PRO:HG3	1:v:406:MET:HB3	2.01	0.43
1:v:551:GLU:OE1	1:v:551:GLU:N	2.52	0.43
1:x:167:HIS:ND1	1:x:237:HIS:HE1	2.16	0.43
1:y:254:SER:OG	1:y:470:LEU:HB3	2.19	0.43
1:A:265:PRO:HG3	1:A:406:MET:HB3	2.01	0.43
1:B:254:SER:OG	1:B:470:LEU:HB3	2.19	0.43
1:B:551:GLU:OE1	1:B:551:GLU:N	2.52	0.43
1:C:164:ALA:HA	1:D:145:GLN:NE2	2.33	0.43
1:C:302:TRP:CZ2	1:2:455:PRO:HD3	2.54	0.43
1:H:143:ASN:HD21	1:I:239:VAL:HG21	1.84	0.43
1:H:368:PRO:HD3	1:Y:278:ARG:NH1	2.34	0.43
1:I:254:SER:OG	1:I:470:LEU:HB3	2.19	0.43
1:I:551:GLU:OE1	1:I:551:GLU:N	2.52	0.43
1:J:278:ARG:NH1	1:L:368:PRO:HD3	2.34	0.43
1:J:551:GLU:N	1:J:551:GLU:OE1	2.52	0.43
1:K:368:PRO:HD3	1:8:278:ARG:NH1	2.34	0.43
1:M:143:ASN:ND2	1:N:239:VAL:HG21	2.33	0.43
1:N:551:GLU:OE1	1:N:551:GLU:N	2.52	0.43
1:O:455:PRO:HD3	1:h:302:TRP:CZ2	2.54	0.43
1:R:302:TRP:CZ2	1:S:455:PRO:HD3	2.53	0.43
1:T:135:LYS:HA	1:T:135:LYS:HD2	1.82	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:302:TRP:CZ2	1:5:455:PRO:HD3	2.54	0.43
1:X:551:GLU:OE1	1:X:551:GLU:N	2.52	0.43
1:Z:278:ARG:NH1	1:x:368:PRO:HD3	2.34	0.43
1:1:254:SER:OG	1:1:470:LEU:HB3	2.19	0.43
1:1:265:PRO:HG3	1:1:406:MET:HB3	2.01	0.43
1:1:302:TRP:CZ2	1:8:455:PRO:HD3	2.54	0.43
1:2:402:TYR:HD2	1:2:443:GLN:HE22	1.66	0.43
1:4:302:TRP:CZ2	1:f:455:PRO:HD3	2.53	0.43
1:6:147:LYS:HA	1:6:160:ASN:HA	2.00	0.43
1:6:402:TYR:HD2	1:6:443:GLN:HE22	1.66	0.43
1:6:455:PRO:HD3	1:a:302:TRP:CZ2	2.54	0.43
1:6:551:GLU:OE1	1:6:551:GLU:N	2.52	0.43
1:c:167:HIS:ND1	1:c:237:HIS:HE1	2.15	0.43
1:g:302:TRP:CZ2	1:h:455:PRO:HD3	2.53	0.43
1:h:126:CYS:O	1:h:259:ASN:ND2	2.39	0.43
1:j:143:ASN:ND2	1:k:239:VAL:HG21	2.33	0.43
1:k:278:ARG:HD3	1:k:299:PRO:HG2	2.00	0.43
1:l:278:ARG:NH1	1:m:368:PRO:HD3	2.34	0.43
1:o:265:PRO:HG3	1:o:406:MET:HB3	2.01	0.43
1:o:551:GLU:N	1:o:551:GLU:OE1	2.52	0.43
1:q:278:ARG:NH1	1:r:368:PRO:HD3	2.34	0.43
1:r:551:GLU:N	1:r:551:GLU:OE1	2.52	0.43
1:u:551:GLU:N	1:u:551:GLU:OE1	2.52	0.43
1:w:254:SER:OG	1:w:470:LEU:HB3	2.19	0.43
1:y:147:LYS:HA	1:y:160:ASN:HA	2.00	0.43
1:y:368:PRO:HD3	1:7:278:ARG:NH1	2.34	0.43
1:C:290:TYR:CE2	1:2:397:VAL:HG11	2.54	0.43
1:D:278:ARG:NH1	1:N:368:PRO:HD3	2.34	0.43
1:H:135:LYS:HA	1:H:135:LYS:HD2	1.82	0.43
1:J:143:ASN:HD21	1:1:239:VAL:HG21	1.84	0.43
1:J:431:HIS:HE1	1:J:437:GLN:HE21	1.67	0.43
1:K:254:SER:OG	1:K:470:LEU:HB3	2.19	0.43
1:N:167:HIS:ND1	1:N:237:HIS:HE1	2.15	0.43
1:N:278:ARG:NH1	1:P:368:PRO:HD3	2.34	0.43
1:P:254:SER:OG	1:P:470:LEU:HB3	2.19	0.43
1:Q:551:GLU:OE1	1:Q:551:GLU:N	2.52	0.43
1:S:278:ARG:NH1	1:U:368:PRO:HD3	2.34	0.43
1:T:239:VAL:HG21	1:c:143:ASN:HD21	1.84	0.43
1:2:147:LYS:HA	1:2:160:ASN:HA	2.00	0.43
1:2:265:PRO:HG3	1:2:406:MET:HB3	2.01	0.43
1:2:452:ASP:OD1	1:2:453:LYS:N	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:551:GLU:OE1	1:2:551:GLU:N	2.52	0.43
1:3:147:LYS:HA	1:3:160:ASN:HA	2.00	0.43
1:6:265:PRO:HG3	1:6:406:MET:HB3	2.01	0.43
1:6:397:VAL:HG11	1:a:290:TYR:CE2	2.54	0.43
1:c:278:ARG:NH1	1:d:368:PRO:HD3	2.34	0.43
1:c:551:GLU:OE1	1:c:551:GLU:N	2.52	0.43
1:d:254:SER:OG	1:d:470:LEU:HB3	2.19	0.43
1:l:302:TRP:CZ2	1:m:455:PRO:HD3	2.53	0.43
1:o:239:VAL:HG21	1:y:143:ASN:HD21	1.84	0.43
1:o:254:SER:OG	1:o:470:LEU:HB3	2.19	0.43
1:p:164:ALA:HA	1:u:145:GLN:NE2	2.33	0.43
1:q:254:SER:OG	1:q:470:LEU:HB3	2.19	0.43
1:v:145:GLN:NE2	1:w:164:ALA:HA	2.33	0.43
1:w:265:PRO:HG3	1:w:406:MET:HB3	2.01	0.43
1:x:126:CYS:O	1:x:259:ASN:ND2	2.39	0.43
1:x:254:SER:OG	1:x:470:LEU:HB3	2.19	0.43
1:A:290:TYR:CE2	1:G:397:VAL:HG11	2.54	0.42
1:B:368:PRO:HD3	1:L:278:ARG:NH1	2.34	0.42
1:G:143:ASN:HD21	1:W:239:VAL:HG21	1.84	0.42
1:J:145:GLN:NE2	1:1:164:ALA:HA	2.33	0.42
1:R:431:HIS:HE1	1:R:437:GLN:HE21	1.67	0.42
1:S:302:TRP:CZ2	1:U:455:PRO:HD3	2.53	0.42
1:V:431:HIS:HE1	1:V:437:GLN:HE21	1.67	0.42
1:W:147:LYS:HA	1:W:160:ASN:HA	2.00	0.42
1:X:368:PRO:HD3	1:5:278:ARG:NH1	2.34	0.42
1:Z:164:ALA:HA	1:1:145:GLN:NE2	2.34	0.42
1:Z:455:PRO:HD3	1:w:302:TRP:CZ2	2.54	0.42
1:1:76:TYR:HB2	1:1:104:PRO:O	2.19	0.42
1:a:164:ALA:HA	1:e:145:GLN:NE2	2.33	0.42
1:c:368:PRO:HD3	1:e:278:ARG:NH1	2.34	0.42
1:d:265:PRO:HG3	1:d:406:MET:HB3	2.01	0.42
1:e:254:SER:OG	1:e:470:LEU:HB3	2.19	0.42
1:f:431:HIS:HE1	1:f:437:GLN:HE21	1.67	0.42
1:k:302:TRP:CZ2	1:l:455:PRO:HD3	2.54	0.42
1:n:397:VAL:HG11	1:p:290:TYR:CE2	2.55	0.42
1:q:278:ARG:HD3	1:q:299:PRO:HG2	2.00	0.42
1:r:402:TYR:HD2	1:r:443:GLN:HE22	1.66	0.42
1:v:431:HIS:HE1	1:v:437:GLN:HE21	1.67	0.42
1:w:76:TYR:HB2	1:w:104:PRO:O	2.19	0.42
1:w:145:GLN:NE2	1:8:164:ALA:HA	2.34	0.42
1:w:368:PRO:HD3	1:x:278:ARG:NH1	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:76:TYR:HB2	1:A:104:PRO:O	2.20	0.42
1:B:278:ARG:NH1	1:J:368:PRO:HD3	2.34	0.42
1:D:254:SER:OG	1:D:470:LEU:HB3	2.19	0.42
1:E:278:ARG:HD3	1:E:299:PRO:HG2	2.00	0.42
1:K:278:ARG:NH1	1:I:368:PRO:HD3	2.34	0.42
1:O:431:HIS:HE1	1:O:437:GLN:HE21	1.67	0.42
1:P:76:TYR:HB2	1:P:104:PRO:O	2.20	0.42
1:P:265:PRO:HG3	1:P:406:MET:HB3	2.01	0.42
1:R:239:VAL:HG21	1:V:143:ASN:HD21	1.83	0.42
1:R:405:ASP:OD2	1:R:407:THR:OG1	2.21	0.42
1:X:143:ASN:HD21	1:Y:239:VAL:HG21	1.84	0.42
1:X:455:PRO:HD3	1:5:302:TRP:CZ2	2.54	0.42
1:1:551:GLU:OE1	1:1:551:GLU:N	2.52	0.42
1:6:302:TRP:CZ2	1:b:455:PRO:HD3	2.54	0.42
1:a:455:PRO:HD3	1:b:302:TRP:CZ2	2.54	0.42
1:b:143:ASN:HD21	1:c:239:VAL:HG21	1.84	0.42
1:b:551:GLU:N	1:b:551:GLU:OE1	2.52	0.42
1:d:76:TYR:HB2	1:d:104:PRO:O	2.20	0.42
1:f:551:GLU:OE1	1:f:551:GLU:N	2.52	0.42
1:i:431:HIS:HE1	1:i:437:GLN:HE21	1.67	0.42
1:k:431:HIS:HE1	1:k:437:GLN:HE21	1.67	0.42
1:o:402:TYR:HD2	1:o:443:GLN:HE22	1.66	0.42
1:p:76:TYR:HB2	1:p:104:PRO:O	2.20	0.42
1:q:167:HIS:ND1	1:q:237:HIS:HE1	2.16	0.42
1:t:278:ARG:NH1	1:u:368:PRO:HD3	2.34	0.42
1:z:147:LYS:HA	1:z:160:ASN:HA	2.00	0.42
1:7:445:ASP:OD2	1:7:554:TYR:OH	2.30	0.42
1:A:368:PRO:HD3	1:I:278:ARG:NH1	2.34	0.42
1:B:76:TYR:HB2	1:B:104:PRO:O	2.20	0.42
1:C:147:LYS:HA	1:C:160:ASN:HA	2.00	0.42
1:C:455:PRO:HD3	1:M:302:TRP:CZ2	2.54	0.42
1:E:167:HIS:ND1	1:E:237:HIS:HE1	2.16	0.42
1:I:145:GLN:NE2	1:J:164:ALA:HA	2.33	0.42
1:K:239:VAL:HG21	1:7:143:ASN:HD21	1.85	0.42
1:K:265:PRO:HG3	1:K:406:MET:HB3	2.01	0.42
1:M:143:ASN:HD21	1:N:239:VAL:HG21	1.84	0.42
1:M:455:PRO:HD3	1:2:302:TRP:CZ2	2.54	0.42
1:M:551:GLU:OE1	1:M:551:GLU:N	2.52	0.42
1:N:143:ASN:ND2	1:g:239:VAL:HG21	2.33	0.42
1:N:254:SER:OG	1:N:470:LEU:HB3	2.19	0.42
1:O:551:GLU:N	1:O:551:GLU:OE1	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:76:TYR:HB2	1:Q:104:PRO:O	2.20	0.42
1:Q:402:TYR:HD2	1:Q:443:GLN:HE22	1.66	0.42
1:T:278:ARG:NH1	1:4:368:PRO:HD3	2.34	0.42
1:V:254:SER:OG	1:V:470:LEU:HB3	2.19	0.42
1:X:49:THR:HG1	1:X:143:ASN:H	1.66	0.42
1:X:431:HIS:HE1	1:X:437:GLN:HE21	1.67	0.42
1:Y:143:ASN:HD21	1:x:239:VAL:HG21	1.85	0.42
1:Z:254:SER:OG	1:Z:470:LEU:HB3	2.19	0.42
1:Z:397:VAL:HG11	1:w:290:TYR:CE2	2.55	0.42
1:1:290:TYR:CE2	1:8:397:VAL:HG11	2.55	0.42
1:2:254:SER:OG	1:2:470:LEU:HB3	2.19	0.42
1:3:278:ARG:NH1	1:i:368:PRO:HD3	2.34	0.42
1:3:302:TRP:CZ2	1:i:455:PRO:HD3	2.54	0.42
1:5:143:ASN:HD21	1:b:239:VAL:HG21	1.84	0.42
1:c:254:SER:OG	1:c:470:LEU:HB3	2.19	0.42
1:f:254:SER:OG	1:f:470:LEU:HB3	2.19	0.42
1:h:278:ARG:HD3	1:h:299:PRO:HG2	2.00	0.42
1:i:49:THR:HG1	1:i:143:ASN:H	1.66	0.42
1:i:143:ASN:HD21	1:7:239:VAL:HG21	1.84	0.42
1:i:278:ARG:NH1	1:j:368:PRO:HD3	2.34	0.42
1:j:143:ASN:HD21	1:k:239:VAL:HG21	1.84	0.42
1:j:431:HIS:HE1	1:j:437:GLN:HE21	1.67	0.42
1:l:76:TYR:HB2	1:l:104:PRO:O	2.20	0.42
1:l:265:PRO:HG3	1:l:406:MET:HB3	2.01	0.42
1:n:143:ASN:HD21	1:z:239:VAL:HG21	1.84	0.42
1:n:431:HIS:HE1	1:n:437:GLN:HE21	1.67	0.42
1:r:254:SER:OG	1:r:470:LEU:HB3	2.19	0.42
1:r:278:ARG:NH1	1:s:368:PRO:HD3	2.34	0.42
1:t:368:PRO:HD3	1:v:278:ARG:NH1	2.34	0.42
1:u:76:TYR:HB2	1:u:104:PRO:O	2.20	0.42
1:u:278:ARG:NH1	1:v:368:PRO:HD3	2.34	0.42
1:w:551:GLU:OE1	1:w:551:GLU:N	2.52	0.42
1:x:265:PRO:HG3	1:x:406:MET:HB3	2.01	0.42
1:x:551:GLU:OE1	1:x:551:GLU:N	2.52	0.42
1:y:551:GLU:OE1	1:y:551:GLU:N	2.52	0.42
1:A:397:VAL:HG11	1:I:290:TYR:CE2	2.54	0.42
1:F:368:PRO:HD3	1:Q:278:ARG:NH1	2.34	0.42
1:G:265:PRO:HG3	1:G:406:MET:HB3	2.01	0.42
1:G:431:HIS:HE1	1:G:437:GLN:HE21	1.67	0.42
1:H:278:ARG:NH1	1:W:368:PRO:HD3	2.34	0.42
1:H:431:HIS:HE1	1:H:437:GLN:HE21	1.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:551:GLU:OE1	1:H:551:GLU:N	2.52	0.42
1:K:76:TYR:HB2	1:K:104:PRO:O	2.20	0.42
1:K:551:GLU:OE1	1:K:551:GLU:N	2.52	0.42
1:M:239:VAL:HG21	1:3:143:ASN:HD21	1.84	0.42
1:O:397:VAL:HG11	1:h:290:TYR:CE2	2.55	0.42
1:Q:254:SER:OG	1:Q:470:LEU:HB3	2.19	0.42
1:R:561:ILE:HG23	1:R:562:GLY:N	2.33	0.42
1:S:76:TYR:HB2	1:S:104:PRO:O	2.20	0.42
1:S:265:PRO:HG3	1:S:406:MET:HB3	2.01	0.42
1:U:431:HIS:HE1	1:U:437:GLN:HE21	1.67	0.42
1:V:278:ARG:NH1	1:5:368:PRO:HD3	2.34	0.42
1:V:368:PRO:HD3	1:X:278:ARG:NH1	2.34	0.42
1:W:254:SER:OG	1:W:470:LEU:HB3	2.19	0.42
1:W:278:ARG:NH1	1:Y:368:PRO:HD3	2.34	0.42
1:Y:254:SER:OG	1:Y:470:LEU:HB3	2.19	0.42
1:Z:265:PRO:HG3	1:Z:406:MET:HB3	2.01	0.42
1:3:368:PRO:HD3	1:j:278:ARG:NH1	2.34	0.42
1:3:397:VAL:HG11	1:j:290:TYR:CE2	2.54	0.42
1:4:278:ARG:HD3	1:4:299:PRO:HG2	2.00	0.42
1:4:290:TYR:CE2	1:f:397:VAL:HG11	2.55	0.42
1:5:254:SER:OG	1:5:470:LEU:HB3	2.19	0.42
1:6:135:LYS:HA	1:6:135:LYS:HD2	1.82	0.42
1:6:254:SER:OG	1:6:470:LEU:HB3	2.19	0.42
1:a:135:LYS:HA	1:a:135:LYS:HD2	1.82	0.42
1:a:147:LYS:HA	1:a:160:ASN:HA	2.00	0.42
1:g:278:ARG:HD3	1:g:299:PRO:HG2	2.00	0.42
1:j:254:SER:OG	1:j:470:LEU:HB3	2.19	0.42
1:k:561:ILE:HG23	1:k:562:GLY:N	2.33	0.42
1:p:135:LYS:HA	1:p:135:LYS:HD2	1.82	0.42
1:r:76:TYR:HB2	1:r:104:PRO:O	2.20	0.42
1:r:431:HIS:HE1	1:r:437:GLN:HE21	1.67	0.42
1:z:181:HIS:HA	1:z:182:PRO:HD3	1.95	0.42
1:z:254:SER:OG	1:z:470:LEU:HB3	2.19	0.42
1:z:278:ARG:NH1	1:7:368:PRO:HD3	2.34	0.42
1:8:265:PRO:HG3	1:8:406:MET:HB3	2.01	0.42
1:B:431:HIS:HE1	1:B:437:GLN:HE21	1.67	0.42
1:C:76:TYR:HB2	1:C:104:PRO:O	2.20	0.42
1:I:76:TYR:HB2	1:I:104:PRO:O	2.20	0.42
1:I:402:TYR:HD2	1:I:443:GLN:HE22	1.66	0.42
1:J:76:TYR:HB2	1:J:104:PRO:O	2.20	0.42
1:O:254:SER:OG	1:O:470:LEU:HB3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:143:ASN:HD21	1:4:239:VAL:HG21	1.84	0.42
1:V:76:TYR:HB2	1:V:104:PRO:O	2.20	0.42
1:Z:278:ARG:HD3	1:Z:299:PRO:HG2	2.00	0.42
1:3:254:SER:OG	1:3:470:LEU:HB3	2.19	0.42
1:4:254:SER:OG	1:4:470:LEU:HB3	2.19	0.42
1:5:278:ARG:HD3	1:5:299:PRO:HG2	2.00	0.42
1:a:76:TYR:HB2	1:a:104:PRO:O	2.20	0.42
1:a:239:VAL:HG21	1:e:143:ASN:HD21	1.84	0.42
1:d:164:ALA:HA	1:f:145:GLN:NE2	2.33	0.42
1:j:76:TYR:HB2	1:j:104:PRO:O	2.20	0.42
1:m:431:HIS:HE1	1:m:437:GLN:HE21	1.67	0.42
1:o:76:TYR:HB2	1:o:104:PRO:O	2.20	0.42
1:o:290:TYR:CE2	1:p:397:VAL:HG11	2.54	0.42
1:q:126:CYS:O	1:q:259:ASN:ND2	2.39	0.42
1:v:76:TYR:HB2	1:v:104:PRO:O	2.20	0.42
1:v:254:SER:OG	1:v:470:LEU:HB3	2.19	0.42
1:x:76:TYR:HB2	1:x:104:PRO:O	2.20	0.42
1:y:278:ARG:NH1	1:z:368:PRO:HD3	2.34	0.42
1:z:431:HIS:HE1	1:z:437:GLN:HE21	1.67	0.42
1:7:254:SER:OG	1:7:470:LEU:HB3	2.19	0.42
1:8:254:SER:OG	1:8:470:LEU:HB3	2.19	0.42
1:8:402:TYR:HD2	1:8:443:GLN:HE22	1.66	0.42
1:A:278:ARG:NH1	1:G:368:PRO:HD3	2.34	0.42
1:E:126:CYS:O	1:E:259:ASN:ND2	2.39	0.42
1:E:265:PRO:HG3	1:E:406:MET:HB3	2.01	0.42
1:J:254:SER:OG	1:J:470:LEU:HB3	2.19	0.42
1:M:76:TYR:HB2	1:M:104:PRO:O	2.20	0.42
1:O:145:GLN:NE2	1:P:164:ALA:HA	2.33	0.42
1:Q:431:HIS:HE1	1:Q:437:GLN:HE21	1.67	0.42
1:R:76:TYR:HB2	1:R:104:PRO:O	2.20	0.42
1:T:76:TYR:HB2	1:T:104:PRO:O	2.20	0.42
1:T:327:THR:HG21	1:T:354:PRO:HB3	2.02	0.42
1:V:290:TYR:CE2	1:5:397:VAL:HG11	2.54	0.42
1:Z:402:TYR:HD2	1:Z:443:GLN:HE22	1.66	0.42
1:1:327:THR:HG21	1:1:354:PRO:HB3	2.02	0.42
1:2:76:TYR:HB2	1:2:104:PRO:O	2.20	0.42
1:3:76:TYR:HB2	1:3:104:PRO:O	2.20	0.42
1:3:95:LYS:HE3	1:3:95:LYS:HB3	1.87	0.42
1:3:278:ARG:HD3	1:3:299:PRO:HG2	2.00	0.42
1:5:76:TYR:HB2	1:5:104:PRO:O	2.20	0.42
1:6:76:TYR:HB2	1:6:104:PRO:O	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:254:SER:OG	1:a:470:LEU:HB3	2.19	0.42
1:c:327:THR:HG21	1:c:354:PRO:HB3	2.02	0.42
1:f:76:TYR:HB2	1:f:104:PRO:O	2.20	0.42
1:g:76:TYR:HB2	1:g:104:PRO:O	2.20	0.42
1:h:239:VAL:HG21	1:l:143:ASN:HD21	1.84	0.42
1:h:254:SER:OG	1:h:470:LEU:HB3	2.19	0.42
1:n:265:PRO:HG3	1:n:406:MET:HB3	2.01	0.42
1:n:368:PRO:HD3	1:p:278:ARG:NH1	2.34	0.42
1:o:278:ARG:NH1	1:p:368:PRO:HD3	2.34	0.42
1:u:431:HIS:HE1	1:u:437:GLN:HE21	1.67	0.42
1:v:95:LYS:HE3	1:v:95:LYS:HB3	1.87	0.42
1:y:76:TYR:HB2	1:y:104:PRO:O	2.20	0.42
1:y:431:HIS:HE1	1:y:437:GLN:HE21	1.67	0.42
1:A:331:ASN:HD21	1:I:378:ALA:H	1.68	0.42
1:B:239:VAL:HG21	1:C:143:ASN:HD21	1.83	0.42
1:B:327:THR:HG21	1:B:354:PRO:HB3	2.02	0.42
1:C:239:VAL:HG21	1:D:143:ASN:HD21	1.84	0.42
1:C:254:SER:OG	1:C:470:LEU:HB3	2.19	0.42
1:E:431:HIS:HE1	1:E:437:GLN:HE21	1.67	0.42
1:H:76:TYR:HB2	1:H:104:PRO:O	2.20	0.42
1:H:327:THR:HG21	1:H:354:PRO:HB3	2.02	0.42
1:K:164:ALA:HA	1:7:145:GLN:NE2	2.34	0.42
1:N:143:ASN:HD21	1:g:239:VAL:HG21	1.85	0.42
1:N:327:THR:HG21	1:N:354:PRO:HB3	2.02	0.42
1:O:76:TYR:HB2	1:O:104:PRO:O	2.20	0.42
1:O:368:PRO:HD3	1:h:278:ARG:NH1	2.34	0.42
1:T:278:ARG:HD3	1:T:299:PRO:HG2	2.00	0.42
1:W:265:PRO:HG3	1:W:406:MET:HB3	2.01	0.42
1:W:431:HIS:HE1	1:W:437:GLN:HE21	1.67	0.42
1:X:76:TYR:HB2	1:X:104:PRO:O	2.20	0.42
1:Y:145:GLN:NE2	1:x:164:ALA:HA	2.34	0.42
1:3:327:THR:HG21	1:3:354:PRO:HB3	2.02	0.42
1:b:76:TYR:HB2	1:b:104:PRO:O	2.20	0.42
1:c:431:HIS:HE1	1:c:437:GLN:HE21	1.67	0.42
1:g:278:ARG:NH1	1:h:368:PRO:HD3	2.34	0.42
1:j:327:THR:HG21	1:j:354:PRO:HB3	2.02	0.42
1:k:368:PRO:HD3	1:m:278:ARG:NH1	2.34	0.42
1:m:327:THR:HG21	1:m:354:PRO:HB3	2.02	0.42
1:o:378:ALA:H	1:p:331:ASN:HD21	1.68	0.42
1:q:265:PRO:HG3	1:q:406:MET:HB3	2.01	0.42
1:q:431:HIS:HE1	1:q:437:GLN:HE21	1.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:s:254:SER:OG	1:s:470:LEU:HB3	2.19	0.42
1:u:327:THR:HG21	1:u:354:PRO:HB3	2.02	0.42
1:w:327:THR:HG21	1:w:354:PRO:HB3	2.02	0.42
1:y:327:THR:HG21	1:y:354:PRO:HB3	2.02	0.42
1:7:431:HIS:HE1	1:7:437:GLN:HE21	1.67	0.42
1:8:278:ARG:HD3	1:8:299:PRO:HG2	2.00	0.42
1:D:265:PRO:HG3	1:D:406:MET:HB3	2.01	0.42
1:F:397:VAL:HG11	1:Q:290:TYR:CE2	2.54	0.42
1:G:327:THR:HG21	1:G:354:PRO:HB3	2.02	0.42
1:I:147:LYS:HD3	1:I:160:ASN:HB3	2.02	0.42
1:J:445:ASP:OD2	1:J:554:TYR:OH	2.30	0.42
1:L:265:PRO:HG3	1:L:406:MET:HB3	2.01	0.42
1:P:147:LYS:HD3	1:P:160:ASN:HB3	2.02	0.42
1:P:431:HIS:HE1	1:P:437:GLN:HE21	1.67	0.42
1:R:181:HIS:HA	1:R:182:PRO:HD3	1.95	0.42
1:S:431:HIS:HE1	1:S:437:GLN:HE21	1.67	0.42
1:U:327:THR:HG21	1:U:354:PRO:HB3	2.02	0.42
1:V:327:THR:HG21	1:V:354:PRO:HB3	2.02	0.42
1:W:76:TYR:HB2	1:W:104:PRO:O	2.20	0.42
1:X:239:VAL:HG21	1:6:143:ASN:HD21	1.84	0.42
1:Y:431:HIS:HE1	1:Y:437:GLN:HE21	1.67	0.42
1:1:278:ARG:NH1	1:8:368:PRO:HD3	2.34	0.42
1:2:431:HIS:HE1	1:2:437:GLN:HE21	1.67	0.42
1:4:278:ARG:NH1	1:f:368:PRO:HD3	2.34	0.42
1:5:327:THR:HG21	1:5:354:PRO:HB3	2.02	0.42
1:6:239:VAL:HG21	1:t:143:ASN:HD21	1.84	0.42
1:d:147:LYS:HD3	1:d:160:ASN:HB3	2.02	0.42
1:d:431:HIS:HE1	1:d:437:GLN:HE21	1.67	0.42
1:g:327:THR:HG21	1:g:354:PRO:HB3	2.02	0.42
1:i:76:TYR:HB2	1:i:104:PRO:O	2.20	0.42
1:i:265:PRO:HG3	1:i:406:MET:HB3	2.01	0.42
1:k:76:TYR:HB2	1:k:104:PRO:O	2.20	0.42
1:o:145:GLN:NE2	1:v:164:ALA:HA	2.33	0.42
1:t:265:PRO:HG3	1:t:406:MET:HB3	2.01	0.42
1:t:431:HIS:HE1	1:t:437:GLN:HE21	1.67	0.42
1:z:147:LYS:HD3	1:z:160:ASN:HB3	2.02	0.42
1:8:147:LYS:HD3	1:8:160:ASN:HB3	2.02	0.42
1:A:126:CYS:O	1:A:259:ASN:ND2	2.39	0.42
1:A:135:LYS:HA	1:A:135:LYS:HD2	1.82	0.42
1:D:397:VAL:HG11	1:P:290:TYR:CE2	2.55	0.42
1:F:254:SER:OG	1:F:470:LEU:HB3	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:254:SER:OG	1:G:470:LEU:HB3	2.19	0.42
1:G:290:TYR:CE2	1:I:397:VAL:HG11	2.55	0.42
1:L:143:ASN:HD21	1:2:239:VAL:HG21	1.84	0.42
1:N:431:HIS:HE1	1:N:437:GLN:HE21	1.67	0.42
1:P:181:HIS:HA	1:P:182:PRO:HD3	1.95	0.42
1:R:368:PRO:HD3	1:U:278:ARG:NH1	2.34	0.42
1:W:147:LYS:HD3	1:W:160:ASN:HB3	2.02	0.42
1:Z:147:LYS:HD3	1:Z:160:ASN:HB3	2.02	0.42
1:Z:368:PRO:HD3	1:w:278:ARG:NH1	2.34	0.42
1:2:143:ASN:HD21	1:i:239:VAL:HG21	1.84	0.42
1:6:431:HIS:HE1	1:6:437:GLN:HE21	1.67	0.42
1:a:143:ASN:HD21	1:u:239:VAL:HG21	1.83	0.42
1:a:368:PRO:HD3	1:b:278:ARG:NH1	2.34	0.42
1:d:290:TYR:CE2	1:e:397:VAL:HG11	2.55	0.42
1:h:147:LYS:HD3	1:h:160:ASN:HB3	2.02	0.42
1:h:265:PRO:HG3	1:h:406:MET:HB3	2.01	0.42
1:k:254:SER:OG	1:k:470:LEU:HB3	2.19	0.42
1:l:431:HIS:HE1	1:l:437:GLN:HE21	1.67	0.42
1:m:76:TYR:HB2	1:m:104:PRO:O	2.20	0.42
1:n:290:TYR:CE2	1:o:397:VAL:HG11	2.55	0.42
1:n:327:THR:HG21	1:n:354:PRO:HB3	2.02	0.42
1:o:147:LYS:HD3	1:o:160:ASN:HB3	2.02	0.42
1:q:327:THR:HG21	1:q:354:PRO:HB3	2.02	0.42
1:q:397:VAL:HG11	1:s:290:TYR:CE2	2.55	0.42
1:r:290:TYR:CE2	1:s:397:VAL:HG11	2.54	0.42
1:v:147:LYS:HD3	1:v:160:ASN:HB3	2.02	0.42
1:z:76:TYR:HB2	1:z:104:PRO:O	2.20	0.42
1:z:265:PRO:HG3	1:z:406:MET:HB3	2.01	0.42
1:C:135:LYS:HA	1:C:135:LYS:HD2	1.82	0.42
1:C:265:PRO:HG3	1:C:406:MET:HB3	2.01	0.42
1:C:368:PRO:HD3	1:M:278:ARG:NH1	2.34	0.42
1:E:327:THR:HG21	1:E:354:PRO:HB3	2.02	0.42
1:E:397:VAL:HG11	1:F:290:TYR:CE2	2.55	0.42
1:I:95:LYS:HE3	1:I:95:LYS:HB3	1.87	0.42
1:J:95:LYS:HE3	1:J:95:LYS:HB3	1.87	0.42
1:K:290:TYR:CE2	1:1:397:VAL:HG11	2.55	0.42
1:L:431:HIS:HE1	1:L:437:GLN:HE21	1.67	0.42
1:N:76:TYR:HB2	1:N:104:PRO:O	2.20	0.42
1:R:147:LYS:HD3	1:R:160:ASN:HB3	2.02	0.42
1:R:254:SER:OG	1:R:470:LEU:HB3	2.19	0.42
1:T:169:LEU:HD12	1:T:480:PHE:CD2	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:265:PRO:HG3	1:X:406:MET:HB3	2.01	0.42
1:4:147:LYS:HD3	1:4:160:ASN:HB3	2.02	0.42
1:5:95:LYS:HE3	1:5:95:LYS:HB3	1.87	0.42
1:a:265:PRO:HG3	1:a:406:MET:HB3	2.01	0.42
1:d:143:ASN:HD21	1:r:239:VAL:HG21	1.84	0.42
1:e:265:PRO:HG3	1:e:406:MET:HB3	2.01	0.42
1:g:167:HIS:ND1	1:g:239:VAL:HG12	2.35	0.42
1:l:167:HIS:ND1	1:l:239:VAL:HG12	2.35	0.42
1:q:76:TYR:HB2	1:q:104:PRO:O	2.20	0.42
1:r:147:LYS:HD3	1:r:160:ASN:HB3	2.02	0.42
1:s:167:HIS:ND1	1:s:239:VAL:HG12	2.35	0.42
1:v:445:ASP:OD2	1:v:554:TYR:OH	2.30	0.42
1:w:397:VAL:HG11	1:x:290:TYR:CE2	2.55	0.42
1:A:224:LYS:HE3	1:B:537:ASN:HB2	2.02	0.41
1:C:95:LYS:HE3	1:C:95:LYS:HB3	1.87	0.41
1:E:76:TYR:HB2	1:E:104:PRO:O	2.20	0.41
1:F:167:HIS:ND1	1:F:239:VAL:HG12	2.35	0.41
1:F:224:LYS:HE3	1:R:537:ASN:HB2	2.02	0.41
1:F:331:ASN:HD21	1:Q:378:ALA:H	1.68	0.41
1:J:147:LYS:HD3	1:J:160:ASN:HB3	2.02	0.41
1:K:327:THR:HG21	1:K:354:PRO:HB3	2.02	0.41
1:N:169:LEU:HD12	1:N:480:PHE:CD2	2.55	0.41
1:Q:147:LYS:HD3	1:Q:160:ASN:HB3	2.02	0.41
1:S:167:HIS:ND1	1:S:239:VAL:HG12	2.35	0.41
1:T:167:HIS:ND1	1:T:239:VAL:HG12	2.35	0.41
1:U:76:TYR:HB2	1:U:104:PRO:O	2.20	0.41
1:W:290:TYR:CE2	1:Y:397:VAL:HG11	2.55	0.41
1:Y:167:HIS:ND1	1:Y:239:VAL:HG12	2.35	0.41
1:Y:265:PRO:HG3	1:Y:406:MET:HB3	2.01	0.41
1:Z:169:LEU:HD12	1:Z:480:PHE:CD2	2.55	0.41
1:1:147:LYS:HD3	1:1:160:ASN:HB3	2.02	0.41
1:1:167:HIS:ND1	1:1:239:VAL:HG12	2.35	0.41
1:4:265:PRO:HG3	1:4:406:MET:HB3	2.01	0.41
1:c:76:TYR:HB2	1:c:104:PRO:O	2.20	0.41
1:c:169:LEU:HD12	1:c:480:PHE:CD2	2.55	0.41
1:g:169:LEU:HD12	1:g:480:PHE:CD2	2.55	0.41
1:h:327:THR:HG21	1:h:354:PRO:HB3	2.02	0.41
1:k:147:LYS:HD3	1:k:160:ASN:HB3	2.02	0.41
1:n:167:HIS:ND1	1:n:239:VAL:HG12	2.35	0.41
1:n:254:SER:OG	1:n:470:LEU:HB3	2.19	0.41
1:r:378:ALA:H	1:s:331:ASN:HD21	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:t:76:TYR:HB2	1:t:104:PRO:O	2.20	0.41
1:t:167:HIS:ND1	1:t:239:VAL:HG12	2.35	0.41
1:w:147:LYS:HD3	1:w:160:ASN:HB3	2.02	0.41
1:w:167:HIS:ND1	1:w:239:VAL:HG12	2.35	0.41
1:x:327:THR:HG21	1:x:354:PRO:HB3	2.02	0.41
1:y:265:PRO:HG3	1:y:406:MET:HB3	2.01	0.41
1:8:169:LEU:HD12	1:8:480:PHE:CD2	2.55	0.41
1:D:167:HIS:ND1	1:D:239:VAL:HG12	2.35	0.41
1:G:167:HIS:ND1	1:G:239:VAL:HG12	2.35	0.41
1:H:265:PRO:HG3	1:H:406:MET:HB3	2.01	0.41
1:L:167:HIS:ND1	1:L:239:VAL:HG12	2.35	0.41
1:L:169:LEU:HD12	1:L:480:PHE:CD2	2.55	0.41
1:M:167:HIS:ND1	1:M:239:VAL:HG12	2.35	0.41
1:O:147:LYS:HD3	1:O:160:ASN:HB3	2.02	0.41
1:O:290:TYR:CE2	1:g:397:VAL:HG11	2.55	0.41
1:P:143:ASN:HD21	1:Q:239:VAL:HG21	1.84	0.41
1:P:169:LEU:HD12	1:P:480:PHE:CD2	2.55	0.41
1:T:254:SER:OG	1:T:470:LEU:HB3	2.19	0.41
1:T:431:HIS:HE1	1:T:437:GLN:HE21	1.67	0.41
1:T:537:ASN:HB2	1:U:224:LYS:HE3	2.01	0.41
1:X:397:VAL:HG11	1:5:290:TYR:CE2	2.55	0.41
1:Y:76:TYR:HB2	1:Y:104:PRO:O	2.20	0.41
1:2:169:LEU:HD12	1:2:480:PHE:CD2	2.55	0.41
1:6:169:LEU:HD12	1:6:480:PHE:CD2	2.55	0.41
1:b:167:HIS:ND1	1:b:239:VAL:HG12	2.35	0.41
1:b:327:THR:HG21	1:b:354:PRO:HB3	2.02	0.41
1:d:169:LEU:HD12	1:d:480:PHE:CD2	2.55	0.41
1:d:181:HIS:HA	1:d:182:PRO:HD3	1.95	0.41
1:j:169:LEU:HD12	1:j:480:PHE:CD2	2.55	0.41
1:k:181:HIS:HA	1:k:182:PRO:HD3	1.95	0.41
1:k:537:ASN:HB2	1:s:224:LYS:HE3	2.02	0.41
1:o:167:HIS:ND1	1:o:239:VAL:HG12	2.35	0.41
1:p:126:CYS:O	1:p:259:ASN:ND2	2.39	0.41
1:z:290:TYR:CE2	1:7:397:VAL:HG11	2.55	0.41
1:7:76:TYR:HB2	1:7:104:PRO:O	2.20	0.41
1:7:167:HIS:ND1	1:7:239:VAL:HG12	2.35	0.41
1:A:254:SER:OG	1:A:470:LEU:HB3	2.19	0.41
1:H:95:LYS:HB3	1:H:95:LYS:HE3	1.87	0.41
1:I:167:HIS:ND1	1:I:239:VAL:HG12	2.35	0.41
1:I:431:HIS:HE1	1:I:437:GLN:HE21	1.67	0.41
1:K:431:HIS:HE1	1:K:437:GLN:HE21	1.67	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:M:327:THR:HG21	1:M:354:PRO:HB3	2.02	0.41
1:O:169:LEU:HD12	1:O:480:PHE:CD2	2.55	0.41
1:P:95:LYS:HB3	1:P:95:LYS:HE3	1.87	0.41
1:V:147:LYS:HD3	1:V:160:ASN:HB3	2.02	0.41
1:V:169:LEU:HD12	1:V:480:PHE:CD2	2.55	0.41
1:X:147:LYS:HD3	1:X:160:ASN:HB3	2.02	0.41
1:3:147:LYS:HD3	1:3:160:ASN:HB3	2.02	0.41
1:3:169:LEU:HD12	1:3:480:PHE:CD2	2.55	0.41
1:3:290:TYR:CE2	1:i:397:VAL:HG11	2.55	0.41
1:5:169:LEU:HD12	1:5:480:PHE:CD2	2.55	0.41
1:e:76:TYR:HB2	1:e:104:PRO:O	2.20	0.41
1:e:167:HIS:ND1	1:e:239:VAL:HG12	2.35	0.41
1:f:147:LYS:HD3	1:f:160:ASN:HB3	2.02	0.41
1:h:76:TYR:HB2	1:h:104:PRO:O	2.19	0.41
1:j:147:LYS:HD3	1:j:160:ASN:HB3	2.02	0.41
1:p:224:LYS:HE3	1:u:537:ASN:HB2	2.02	0.41
1:p:254:SER:OG	1:p:470:LEU:HB3	2.19	0.41
1:t:169:LEU:HD12	1:t:480:PHE:CD2	2.55	0.41
1:u:290:TYR:CE2	1:v:397:VAL:HG11	2.55	0.41
1:7:265:PRO:HG3	1:7:406:MET:HB3	2.01	0.41
1:A:431:HIS:HE1	1:A:437:GLN:HE21	1.67	0.41
1:B:290:TYR:CE2	1:J:397:VAL:HG11	2.56	0.41
1:C:167:HIS:ND1	1:C:239:VAL:HG12	2.35	0.41
1:D:76:TYR:HB2	1:D:104:PRO:O	2.20	0.41
1:D:169:LEU:HD12	1:D:480:PHE:CD2	2.56	0.41
1:D:290:TYR:CE2	1:N:397:VAL:HG11	2.55	0.41
1:E:290:TYR:CE2	1:Q:397:VAL:HG11	2.55	0.41
1:F:265:PRO:HG3	1:F:406:MET:HB3	2.01	0.41
1:K:167:HIS:ND1	1:K:239:VAL:HG12	2.35	0.41
1:L:76:TYR:HB2	1:L:104:PRO:O	2.20	0.41
1:M:431:HIS:HE1	1:M:437:GLN:HE21	1.67	0.41
1:S:169:LEU:HD12	1:S:480:PHE:CD2	2.55	0.41
1:T:145:GLN:HE22	1:U:164:ALA:HA	1.86	0.41
1:V:167:HIS:ND1	1:V:239:VAL:HG12	2.35	0.41
1:W:169:LEU:HD12	1:W:480:PHE:CD2	2.56	0.41
1:Z:431:HIS:HE1	1:Z:437:GLN:HE21	1.67	0.41
1:4:327:THR:HG21	1:4:354:PRO:HB3	2.02	0.41
1:5:147:LYS:HD3	1:5:160:ASN:HB3	2.02	0.41
1:5:431:HIS:HE1	1:5:437:GLN:HE21	1.67	0.41
1:b:431:HIS:HE1	1:b:437:GLN:HE21	1.67	0.41
1:c:397:VAL:HG11	1:e:290:TYR:CE2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:169:LEU:HD12	1:e:480:PHE:CD2	2.56	0.41
1:f:167:HIS:ND1	1:f:239:VAL:HG12	2.35	0.41
1:f:169:LEU:HD12	1:f:480:PHE:CD2	2.56	0.41
1:g:254:SER:OG	1:g:470:LEU:HB3	2.19	0.41
1:h:224:LYS:HE3	1:l:537:ASN:HB2	2.03	0.41
1:i:147:LYS:HD3	1:i:160:ASN:HB3	2.02	0.41
1:l:169:LEU:HD12	1:l:480:PHE:CD2	2.55	0.41
1:n:76:TYR:HB2	1:n:104:PRO:O	2.20	0.41
1:o:431:HIS:HE1	1:o:437:GLN:HE21	1.67	0.41
1:p:167:HIS:ND1	1:p:239:VAL:HG12	2.35	0.41
1:p:431:HIS:HE1	1:p:437:GLN:HE21	1.67	0.41
1:q:290:TYR:CE2	1:r:397:VAL:HG11	2.55	0.41
1:r:167:HIS:ND1	1:r:239:VAL:HG12	2.35	0.41
1:x:167:HIS:ND1	1:x:239:VAL:HG12	2.35	0.41
1:8:431:HIS:HE1	1:8:437:GLN:HE21	1.67	0.41
1:A:167:HIS:ND1	1:A:239:VAL:HG12	2.35	0.41
1:C:107:TYR:O	1:C:199:PRO:HD2	2.21	0.41
1:G:76:TYR:HB2	1:G:104:PRO:O	2.20	0.41
1:H:167:HIS:ND1	1:H:239:VAL:HG12	2.35	0.41
1:K:169:LEU:HD12	1:K:480:PHE:CD2	2.55	0.41
1:M:169:LEU:HD12	1:M:480:PHE:CD2	2.55	0.41
1:N:107:TYR:O	1:N:199:PRO:HD2	2.21	0.41
1:N:167:HIS:ND1	1:N:239:VAL:HG12	2.35	0.41
1:O:167:HIS:ND1	1:O:239:VAL:HG12	2.35	0.41
1:Q:167:HIS:ND1	1:Q:239:VAL:HG12	2.35	0.41
1:R:107:TYR:O	1:R:199:PRO:HD2	2.21	0.41
1:R:169:LEU:HD12	1:R:480:PHE:CD2	2.55	0.41
1:S:537:ASN:HB2	1:4:224:LYS:HE3	2.03	0.41
1:X:327:THR:HG21	1:X:354:PRO:HB3	2.02	0.41
1:Z:290:TYR:CE2	1:x:397:VAL:HG11	2.55	0.41
1:3:431:HIS:HE1	1:3:437:GLN:HE21	1.67	0.41
1:4:76:TYR:HB2	1:4:104:PRO:O	2.20	0.41
1:a:167:HIS:ND1	1:a:239:VAL:HG12	2.35	0.41
1:b:169:LEU:HD12	1:b:480:PHE:CD2	2.55	0.41
1:c:107:TYR:O	1:c:199:PRO:HD2	2.21	0.41
1:c:167:HIS:ND1	1:c:239:VAL:HG12	2.35	0.41
1:d:95:LYS:HB3	1:d:95:LYS:HE3	1.87	0.41
1:e:147:LYS:HD3	1:e:160:ASN:HB3	2.02	0.41
1:g:431:HIS:HE1	1:g:437:GLN:HE21	1.67	0.41
1:j:167:HIS:ND1	1:j:239:VAL:HG12	2.35	0.41
1:k:107:TYR:O	1:k:199:PRO:HD2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:169:LEU:HD12	1:k:480:PHE:CD2	2.55	0.41
1:l:290:TYR:CE2	1:m:397:VAL:HG11	2.55	0.41
1:n:147:LYS:HD3	1:n:160:ASN:HB3	2.02	0.41
1:o:95:LYS:HE3	1:o:95:LYS:HB3	1.87	0.41
1:p:327:THR:HG21	1:p:354:PRO:HB3	2.02	0.41
1:s:169:LEU:HD12	1:s:480:PHE:CD2	2.56	0.41
1:v:537:ASN:HB2	1:w:224:LYS:HE3	2.03	0.41
1:x:169:LEU:HD12	1:x:480:PHE:CD2	2.55	0.41
1:y:95:LYS:HE3	1:y:95:LYS:HB3	1.87	0.41
1:y:167:HIS:ND1	1:y:239:VAL:HG12	2.35	0.41
1:z:169:LEU:HD12	1:z:480:PHE:CD2	2.56	0.41
1:8:76:TYR:HB2	1:8:104:PRO:O	2.20	0.41
1:A:327:THR:HG21	1:A:354:PRO:HB3	2.02	0.41
1:B:224:LYS:HE3	1:C:537:ASN:HB2	2.03	0.41
1:C:431:HIS:HE1	1:C:437:GLN:HE21	1.67	0.41
1:D:147:LYS:HD3	1:D:160:ASN:HB3	2.02	0.41
1:D:224:LYS:HE3	1:E:537:ASN:HB2	2.03	0.41
1:D:327:THR:HG21	1:D:354:PRO:HB3	2.02	0.41
1:E:135:LYS:HD2	1:E:135:LYS:HA	1.82	0.41
1:F:169:LEU:HD12	1:F:480:PHE:CD2	2.56	0.41
1:G:147:LYS:HD3	1:G:160:ASN:HB3	2.02	0.41
1:H:397:VAL:HG11	1:Y:290:TYR:CE2	2.56	0.41
1:J:537:ASN:HB2	1:I:224:LYS:HE3	2.03	0.41
1:K:397:VAL:HG11	1:8:290:TYR:CE2	2.55	0.41
1:Q:169:LEU:HD12	1:Q:480:PHE:CD2	2.55	0.41
1:S:290:TYR:CE2	1:U:397:VAL:HG11	2.56	0.41
1:Y:107:TYR:O	1:Y:199:PRO:HD2	2.21	0.41
1:4:49:THR:HG1	1:4:143:ASN:H	1.66	0.41
1:4:95:LYS:HE3	1:4:95:LYS:HB3	1.87	0.41
1:a:107:TYR:O	1:a:199:PRO:HD2	2.21	0.41
1:a:147:LYS:HD3	1:a:160:ASN:HB3	2.02	0.41
1:a:537:ASN:HB2	1:u:224:LYS:HE3	2.03	0.41
1:d:327:THR:HG21	1:d:354:PRO:HB3	2.02	0.41
1:e:224:LYS:HE3	1:q:537:ASN:HB2	2.03	0.41
1:i:167:HIS:ND1	1:i:239:VAL:HG12	2.35	0.41
1:i:327:THR:HG21	1:i:354:PRO:HB3	2.02	0.41
1:r:169:LEU:HD12	1:r:480:PHE:CD2	2.55	0.41
1:s:265:PRO:HG3	1:s:406:MET:HB3	2.01	0.41
1:x:431:HIS:HE1	1:x:437:GLN:HE21	1.67	0.41
1:y:397:VAL:HG11	1:7:290:TYR:CE2	2.56	0.41
1:7:107:TYR:O	1:7:199:PRO:HD2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:147:LYS:HD3	1:B:160:ASN:HB3	2.02	0.41
1:C:147:LYS:HD3	1:C:160:ASN:HB3	2.02	0.41
1:C:320:ARG:HH12	1:C:356:ASP:HB3	1.86	0.41
1:F:76:TYR:HB2	1:F:104:PRO:O	2.20	0.41
1:H:224:LYS:HE3	1:Z:537:ASN:HB2	2.03	0.41
1:I:320:ARG:HH12	1:I:356:ASP:HB3	1.86	0.41
1:N:147:LYS:HD3	1:N:160:ASN:HB3	2.02	0.41
1:P:320:ARG:HH12	1:P:356:ASP:HB3	1.86	0.41
1:P:327:THR:HG21	1:P:354:PRO:HB3	2.02	0.41
1:Q:327:THR:HG21	1:Q:354:PRO:HB3	2.02	0.41
1:R:397:VAL:HG11	1:U:290:TYR:CE2	2.56	0.41
1:S:327:THR:HG21	1:S:354:PRO:HB3	2.02	0.41
1:T:320:ARG:HH12	1:T:356:ASP:HB3	1.86	0.41
1:U:107:TYR:O	1:U:199:PRO:HD2	2.21	0.41
1:U:147:LYS:HD3	1:U:160:ASN:HB3	2.02	0.41
1:U:167:HIS:ND1	1:U:239:VAL:HG12	2.35	0.41
1:V:397:VAL:HG11	1:X:290:TYR:CE2	2.56	0.41
1:X:167:HIS:ND1	1:X:239:VAL:HG12	2.35	0.41
1:Z:76:TYR:HB2	1:Z:104:PRO:O	2.20	0.41
1:1:320:ARG:HH12	1:1:356:ASP:HB3	1.86	0.41
1:6:167:HIS:ND1	1:6:239:VAL:HG12	2.35	0.41
1:a:320:ARG:HH12	1:a:356:ASP:HB3	1.86	0.41
1:a:431:HIS:HE1	1:a:437:GLN:HE21	1.67	0.41
1:d:320:ARG:HH12	1:d:356:ASP:HB3	1.86	0.41
1:g:320:ARG:HH12	1:g:356:ASP:HB3	1.86	0.41
1:i:290:TYR:CE2	1:j:397:VAL:HG11	2.56	0.41
1:k:397:VAL:HG11	1:m:290:TYR:CE2	2.56	0.41
1:l:327:THR:HG21	1:l:354:PRO:HB3	2.02	0.41
1:m:107:TYR:O	1:m:199:PRO:HD2	2.21	0.41
1:o:224:LYS:HE3	1:y:537:ASN:HB2	2.03	0.41
1:o:320:ARG:HH12	1:o:356:ASP:HB3	1.86	0.41
1:o:537:ASN:HB2	1:v:224:LYS:HE3	2.03	0.41
1:q:167:HIS:ND1	1:q:239:VAL:HG12	2.35	0.41
1:q:169:LEU:HD12	1:q:480:PHE:CD2	2.55	0.41
1:s:76:TYR:HB2	1:s:104:PRO:O	2.20	0.41
1:u:147:LYS:HD3	1:u:160:ASN:HB3	2.02	0.41
1:w:320:ARG:HH12	1:w:356:ASP:HB3	1.86	0.41
1:y:224:LYS:HE3	1:8:537:ASN:HB2	2.03	0.41
1:B:169:LEU:HD12	1:B:480:PHE:CD2	2.55	0.41
1:E:167:HIS:ND1	1:E:239:VAL:HG12	2.35	0.41
1:E:169:LEU:HD12	1:E:480:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:95:LYS:HB3	1:F:95:LYS:HE3	1.87	0.41
1:F:431:HIS:HE1	1:F:437:GLN:HE21	1.67	0.41
1:H:320:ARG:HH12	1:H:356:ASP:HB3	1.86	0.41
1:H:537:ASN:HB2	1:I:224:LYS:HE3	2.03	0.41
1:I:537:ASN:HB2	1:J:224:LYS:HE3	2.03	0.41
1:L:327:THR:HG21	1:L:354:PRO:HB3	2.02	0.41
1:M:397:VAL:HG11	1:2:290:TYR:CE2	2.55	0.41
1:O:224:LYS:HE3	1:4:537:ASN:HB2	2.03	0.41
1:R:320:ARG:HH12	1:R:356:ASP:HB3	1.86	0.41
1:S:107:TYR:O	1:S:199:PRO:HD2	2.21	0.41
1:S:313:ARG:NH1	1:S:315:GLU:OE2	2.49	0.41
1:X:320:ARG:HH12	1:X:356:ASP:HB3	1.86	0.41
1:Z:49:THR:HG1	1:Z:143:ASN:H	1.65	0.41
1:Z:167:HIS:ND1	1:Z:239:VAL:HG12	2.35	0.41
1:Z:327:THR:HG21	1:Z:354:PRO:HB3	2.02	0.41
1:2:107:TYR:O	1:2:199:PRO:HD2	2.21	0.41
1:2:167:HIS:ND1	1:2:239:VAL:HG12	2.35	0.41
1:3:167:HIS:ND1	1:3:239:VAL:HG12	2.35	0.41
1:4:167:HIS:ND1	1:4:239:VAL:HG12	2.35	0.41
1:4:431:HIS:HE1	1:4:437:GLN:HE21	1.67	0.41
1:6:290:TYR:CE2	1:b:397:VAL:HG11	2.55	0.41
1:e:327:THR:HG21	1:e:354:PRO:HB3	2.02	0.41
1:f:107:TYR:O	1:f:199:PRO:HD2	2.21	0.41
1:f:224:LYS:HE3	1:h:537:ASN:HB2	2.03	0.41
1:g:290:TYR:CE2	1:h:397:VAL:HG11	2.55	0.41
1:h:431:HIS:HE1	1:h:437:GLN:HE21	1.67	0.41
1:l:107:TYR:O	1:l:199:PRO:HD2	2.21	0.41
1:m:147:LYS:HD3	1:m:160:ASN:HB3	2.02	0.41
1:m:167:HIS:ND1	1:m:239:VAL:HG12	2.35	0.41
1:p:320:ARG:HH12	1:p:356:ASP:HB3	1.86	0.41
1:r:327:THR:HG21	1:r:354:PRO:HB3	2.02	0.41
1:s:320:ARG:HH12	1:s:356:ASP:HB3	1.86	0.41
1:y:290:TYR:CE2	1:z:397:VAL:HG11	2.55	0.41
1:y:320:ARG:HH12	1:y:356:ASP:HB3	1.86	0.41
1:z:327:THR:HG21	1:z:354:PRO:HB3	2.02	0.41
1:A:320:ARG:HH12	1:A:356:ASP:HB3	1.86	0.41
1:D:320:ARG:HH12	1:D:356:ASP:HB3	1.86	0.41
1:F:147:LYS:HD3	1:F:160:ASN:HB3	2.02	0.41
1:F:320:ARG:HH12	1:F:356:ASP:HB3	1.86	0.41
1:H:290:TYR:CE2	1:W:397:VAL:HG11	2.55	0.41
1:I:169:LEU:HD12	1:I:480:PHE:CD2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:167:HIS:ND1	1:J:239:VAL:HG12	2.35	0.41
1:J:169:LEU:HD12	1:J:480:PHE:CD2	2.55	0.41
1:J:320:ARG:HH12	1:J:356:ASP:HB3	1.86	0.41
1:K:147:LYS:HD3	1:K:160:ASN:HB3	2.02	0.41
1:L:320:ARG:HH12	1:L:356:ASP:HB3	1.86	0.41
1:O:107:TYR:O	1:O:199:PRO:HD2	2.21	0.41
1:P:166:VAL:HG21	1:P:502:CYS:SG	2.61	0.41
1:Q:181:HIS:HA	1:Q:182:PRO:HD3	1.95	0.41
1:R:290:TYR:CE2	1:S:397:VAL:HG11	2.55	0.41
1:T:166:VAL:HG21	1:T:502:CYS:SG	2.61	0.41
1:U:145:GLN:HE22	1:5:164:ALA:HA	1.86	0.41
1:V:224:LYS:HE3	1:W:537:ASN:HB2	2.03	0.41
1:V:320:ARG:HH12	1:V:356:ASP:HB3	1.86	0.41
1:V:331:ASN:HD21	1:X:378:ALA:H	1.69	0.41
1:W:327:THR:HG21	1:W:354:PRO:HB3	2.02	0.41
1:X:107:TYR:O	1:X:199:PRO:HD2	2.21	0.41
1:Y:169:LEU:HD12	1:Y:480:PHE:CD2	2.55	0.41
1:Y:327:THR:HG21	1:Y:354:PRO:HB3	2.02	0.41
1:1:135:LYS:HD2	1:1:135:LYS:HA	1.82	0.41
1:1:169:LEU:HD12	1:1:480:PHE:CD2	2.55	0.41
1:1:431:HIS:HE1	1:1:437:GLN:HE21	1.67	0.41
1:2:49:THR:HG1	1:2:143:ASN:H	1.67	0.41
1:2:327:THR:HG21	1:2:354:PRO:HB3	2.02	0.41
1:3:107:TYR:O	1:3:199:PRO:HD2	2.21	0.41
1:3:164:ALA:HA	1:m:145:GLN:HE22	1.86	0.41
1:4:169:LEU:HD12	1:4:480:PHE:CD2	2.55	0.41
1:5:107:TYR:O	1:5:199:PRO:HD2	2.21	0.41
1:5:167:HIS:ND1	1:5:239:VAL:HG12	2.35	0.41
1:6:49:THR:HG1	1:6:143:ASN:H	1.67	0.41
1:6:107:TYR:O	1:6:199:PRO:HD2	2.21	0.41
1:c:147:LYS:HD3	1:c:160:ASN:HB3	2.02	0.41
1:c:290:TYR:CE2	1:d:397:VAL:HG11	2.56	0.41
1:d:166:VAL:HG21	1:d:502:CYS:SG	2.61	0.41
1:d:224:LYS:HE3	1:f:537:ASN:HB2	2.03	0.41
1:e:320:ARG:HH12	1:e:356:ASP:HB3	1.86	0.41
1:h:167:HIS:ND1	1:h:239:VAL:HG12	2.35	0.41
1:h:169:LEU:HD12	1:h:480:PHE:CD2	2.55	0.41
1:i:107:TYR:O	1:i:199:PRO:HD2	2.21	0.41
1:i:320:ARG:HH12	1:i:356:ASP:HB3	1.86	0.41
1:i:378:ALA:H	1:j:331:ASN:HD21	1.69	0.41
1:j:224:LYS:HE3	1:z:537:ASN:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:239:VAL:HG21	1:z:143:ASN:HD21	1.84	0.41
1:j:320:ARG:HH12	1:j:356:ASP:HB3	1.86	0.41
1:k:320:ARG:HH12	1:k:356:ASP:HB3	1.86	0.41
1:l:313:ARG:NH1	1:l:315:GLU:OE2	2.49	0.41
1:o:169:LEU:HD12	1:o:480:PHE:CD2	2.55	0.41
1:p:147:LYS:HD3	1:p:160:ASN:HB3	2.02	0.41
1:r:107:TYR:O	1:r:199:PRO:HD2	2.21	0.41
1:s:147:LYS:HD3	1:s:160:ASN:HB3	2.02	0.41
1:s:431:HIS:HE1	1:s:437:GLN:HE21	1.67	0.41
1:t:224:LYS:HE3	1:x:537:ASN:HB2	2.03	0.41
1:t:327:THR:HG21	1:t:354:PRO:HB3	2.02	0.41
1:u:169:LEU:HD12	1:u:480:PHE:CD2	2.55	0.41
1:v:167:HIS:ND1	1:v:239:VAL:HG12	2.35	0.41
1:v:320:ARG:HH12	1:v:356:ASP:HB3	1.86	0.41
1:v:327:THR:HG21	1:v:354:PRO:HB3	2.02	0.41
1:w:135:LYS:HD2	1:w:135:LYS:HA	1.82	0.41
1:w:169:LEU:HD12	1:w:480:PHE:CD2	2.55	0.41
1:w:431:HIS:HE1	1:w:437:GLN:HE21	1.67	0.41
1:x:147:LYS:HD3	1:x:160:ASN:HB3	2.02	0.41
1:y:107:TYR:O	1:y:199:PRO:HD2	2.21	0.41
1:7:169:LEU:HD12	1:7:480:PHE:CD2	2.55	0.41
1:8:167:HIS:ND1	1:8:239:VAL:HG12	2.35	0.41
1:8:327:THR:HG21	1:8:354:PRO:HB3	2.02	0.41
1:B:95:LYS:HE3	1:B:95:LYS:HB3	1.87	0.41
1:B:397:VAL:HG11	1:L:290:TYR:CE2	2.56	0.41
1:D:378:ALA:H	1:N:331:ASN:HD21	1.69	0.41
1:E:166:VAL:HG21	1:E:502:CYS:SG	2.61	0.41
1:G:537:ASN:HB2	1:W:224:LYS:HE3	2.03	0.41
1:I:107:TYR:O	1:I:199:PRO:HD2	2.21	0.41
1:I:313:ARG:NH1	1:I:315:GLU:OE2	2.49	0.41
1:J:290:TYR:CE2	1:L:397:VAL:HG11	2.55	0.41
1:J:327:THR:HG21	1:J:354:PRO:HB3	2.02	0.41
1:K:224:LYS:HE3	1:7:537:ASN:HB2	2.03	0.41
1:K:537:ASN:HB2	1:L:224:LYS:HE3	2.03	0.41
1:M:145:GLN:HE22	1:N:164:ALA:HA	1.86	0.41
1:M:320:ARG:HH12	1:M:356:ASP:HB3	1.86	0.41
1:N:290:TYR:CE2	1:P:397:VAL:HG11	2.56	0.41
1:O:327:THR:HG21	1:O:354:PRO:HB3	2.02	0.41
1:O:537:ASN:HB2	1:P:224:LYS:HE3	2.03	0.41
1:P:107:TYR:O	1:P:199:PRO:HD2	2.21	0.41
1:Q:107:TYR:O	1:Q:199:PRO:HD2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:169:LEU:HD12	1:U:480:PHE:CD2	2.55	0.41
1:U:313:ARG:NH1	1:U:315:GLU:OE2	2.49	0.41
1:3:166:VAL:HG21	1:3:502:CYS:SG	2.61	0.41
1:5:166:VAL:HG21	1:5:502:CYS:SG	2.61	0.41
1:6:327:THR:HG21	1:6:354:PRO:HB3	2.02	0.41
1:c:331:ASN:HD21	1:e:378:ALA:H	1.69	0.41
1:g:166:VAL:HG21	1:g:502:CYS:SG	2.61	0.41
1:h:95:LYS:HE3	1:h:95:LYS:HB3	1.87	0.41
1:k:290:TYR:CE2	1:l:397:VAL:HG11	2.55	0.41
1:n:169:LEU:HD12	1:n:480:PHE:CD2	2.55	0.41
1:n:537:ASN:HB2	1:z:224:LYS:HE3	2.03	0.41
1:o:107:TYR:O	1:o:199:PRO:HD2	2.21	0.41
1:q:135:LYS:HD2	1:q:135:LYS:HA	1.82	0.41
1:q:166:VAL:HG21	1:q:502:CYS:SG	2.61	0.41
1:s:95:LYS:HB3	1:s:95:LYS:HE3	1.87	0.41
1:t:320:ARG:HH12	1:t:356:ASP:HB3	1.86	0.41
1:u:166:VAL:HG21	1:u:502:CYS:SG	2.61	0.41
1:v:169:LEU:HD12	1:v:480:PHE:CD2	2.55	0.41
1:z:167:HIS:ND1	1:z:239:VAL:HG12	2.35	0.41
1:7:327:THR:HG21	1:7:354:PRO:HB3	2.02	0.41
1:A:147:LYS:HD3	1:A:160:ASN:HB3	2.02	0.40
1:B:166:VAL:HG21	1:B:502:CYS:SG	2.61	0.40
1:E:147:LYS:HD3	1:E:160:ASN:HB3	2.02	0.40
1:E:322:ALA:HB2	1:E:365:ASN:HB3	2.03	0.40
1:E:378:ALA:H	1:Q:331:ASN:HD21	1.69	0.40
1:G:107:TYR:O	1:G:199:PRO:HD2	2.21	0.40
1:G:169:LEU:HD12	1:G:480:PHE:CD2	2.55	0.40
1:G:322:ALA:HB2	1:G:365:ASN:HB3	2.03	0.40
1:H:107:TYR:O	1:H:199:PRO:HD2	2.21	0.40
1:H:147:LYS:HD3	1:H:160:ASN:HB3	2.02	0.40
1:K:107:TYR:O	1:K:199:PRO:HD2	2.21	0.40
1:K:320:ARG:HH12	1:K:356:ASP:HB3	1.86	0.40
1:M:147:LYS:HD3	1:M:160:ASN:HB3	2.02	0.40
1:M:166:VAL:HG21	1:M:502:CYS:SG	2.61	0.40
1:N:166:VAL:HG21	1:N:502:CYS:SG	2.61	0.40
1:N:181:HIS:HA	1:N:182:PRO:HD3	1.95	0.40
1:R:224:LYS:HE3	1:V:537:ASN:HB2	2.03	0.40
1:S:374:THR:HG22	1:S:408:ARG:NH1	2.37	0.40
1:U:320:ARG:HH12	1:U:356:ASP:HB3	1.86	0.40
1:V:239:VAL:HG21	1:W:143:ASN:HD21	1.84	0.40
1:W:167:HIS:ND1	1:W:239:VAL:HG12	2.35	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Y:52:TRP:CE2	1:Y:68:THR:HB	2.57	0.40
1:Y:313:ARG:NH1	1:Y:315:GLU:OE2	2.49	0.40
1:Y:537:ASN:HB2	1:x:224:LYS:HE3	2.03	0.40
1:6:166:VAL:HG21	1:6:502:CYS:SG	2.61	0.40
1:a:397:VAL:HG11	1:b:290:TYR:CE2	2.56	0.40
1:b:145:GLN:HE22	1:c:164:ALA:HA	1.86	0.40
1:b:166:VAL:HG21	1:b:502:CYS:SG	2.61	0.40
1:b:320:ARG:HH12	1:b:356:ASP:HB3	1.86	0.40
1:d:167:HIS:ND1	1:d:239:VAL:HG12	2.35	0.40
1:e:107:TYR:O	1:e:199:PRO:HD2	2.21	0.40
1:e:164:ALA:HA	1:q:145:GLN:HE22	1.86	0.40
1:e:431:HIS:HE1	1:e:437:GLN:HE21	1.67	0.40
1:i:166:VAL:HG21	1:i:502:CYS:SG	2.61	0.40
1:j:537:ASN:HB2	1:k:224:LYS:HE3	2.03	0.40
1:k:327:THR:HG21	1:k:354:PRO:HB3	2.02	0.40
1:n:107:TYR:O	1:n:199:PRO:HD2	2.21	0.40
1:n:322:ALA:HB2	1:n:365:ASN:HB3	2.03	0.40
1:o:327:THR:HG21	1:o:354:PRO:HB3	2.02	0.40
1:q:322:ALA:HB2	1:q:365:ASN:HB3	2.03	0.40
1:q:378:ALA:H	1:r:331:ASN:HD21	1.69	0.40
1:t:147:LYS:HD3	1:t:160:ASN:HB3	2.02	0.40
1:t:290:TYR:CE2	1:u:397:VAL:HG11	2.56	0.40
1:x:135:LYS:HA	1:x:135:LYS:HD2	1.82	0.40
1:x:166:VAL:HG21	1:x:502:CYS:SG	2.61	0.40
1:y:169:LEU:HD12	1:y:480:PHE:CD2	2.55	0.40
1:7:52:TRP:CE2	1:7:68:THR:HB	2.57	0.40
1:7:147:LYS:HD3	1:7:160:ASN:HB3	2.02	0.40
1:A:107:TYR:O	1:A:199:PRO:HD2	2.21	0.40
1:A:166:VAL:HG21	1:A:502:CYS:SG	2.61	0.40
1:A:268:LEU:HD13	1:G:364:ILE:HG12	2.04	0.40
1:A:331:ASN:ND2	1:I:378:ALA:H	2.20	0.40
1:C:166:VAL:HG21	1:C:502:CYS:SG	2.61	0.40
1:C:397:VAL:HG11	1:M:290:TYR:CE2	2.56	0.40
1:D:107:TYR:O	1:D:199:PRO:HD2	2.21	0.40
1:D:136:ARG:HE	1:D:138:ARG:HH11	1.70	0.40
1:D:164:ALA:HA	1:E:145:GLN:HE22	1.86	0.40
1:G:145:GLN:HE22	1:W:164:ALA:HA	1.86	0.40
1:H:169:LEU:HD12	1:H:480:PHE:CD2	2.55	0.40
1:J:451:TRP:CB	1:J:472:MET:HE3	2.52	0.40
1:L:451:TRP:CB	1:L:472:MET:HE3	2.52	0.40
1:O:181:HIS:HA	1:O:182:PRO:HD3	1.95	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:166:VAL:HG21	1:Q:502:CYS:SG	2.61	0.40
1:R:167:HIS:ND1	1:R:239:VAL:HG12	2.35	0.40
1:R:327:THR:HG21	1:R:354:PRO:HB3	2.02	0.40
1:T:397:VAL:HG11	1:f:290:TYR:CE2	2.56	0.40
1:U:374:THR:HG22	1:U:408:ARG:NH1	2.37	0.40
1:X:166:VAL:HG21	1:X:502:CYS:SG	2.61	0.40
1:X:169:LEU:HD12	1:X:480:PHE:CD2	2.55	0.40
1:X:181:HIS:HA	1:X:182:PRO:HD3	1.95	0.40
1:X:224:LYS:HE3	1:6:537:ASN:HB2	2.03	0.40
1:2:166:VAL:HG21	1:2:502:CYS:SG	2.61	0.40
1:2:537:ASN:HB2	1:i:224:LYS:HE3	2.03	0.40
1:5:320:ARG:HH12	1:5:356:ASP:HB3	1.86	0.40
1:a:95:LYS:HE3	1:a:95:LYS:HB3	1.87	0.40
1:a:327:THR:HG21	1:a:354:PRO:HB3	2.02	0.40
1:b:147:LYS:HD3	1:b:160:ASN:HB3	2.02	0.40
1:c:166:VAL:HG21	1:c:502:CYS:SG	2.61	0.40
1:c:320:ARG:HH12	1:c:356:ASP:HB3	1.86	0.40
1:c:451:TRP:CB	1:c:472:MET:HE3	2.52	0.40
1:d:107:TYR:O	1:d:199:PRO:HD2	2.21	0.40
1:d:374:THR:HG22	1:d:408:ARG:NH1	2.37	0.40
1:f:327:THR:HG21	1:f:354:PRO:HB3	2.02	0.40
1:h:107:TYR:O	1:h:199:PRO:HD2	2.21	0.40
1:k:166:VAL:HG21	1:k:502:CYS:SG	2.61	0.40
1:l:374:THR:HG22	1:l:408:ARG:NH1	2.37	0.40
1:m:169:LEU:HD12	1:m:480:PHE:CD2	2.55	0.40
1:m:320:ARG:HH12	1:m:356:ASP:HB3	1.86	0.40
1:m:374:THR:HG22	1:m:408:ARG:NH1	2.37	0.40
1:n:145:GLN:HE22	1:z:164:ALA:HA	1.86	0.40
1:p:107:TYR:O	1:p:199:PRO:HD2	2.21	0.40
1:p:166:VAL:HG21	1:p:502:CYS:SG	2.61	0.40
1:q:147:LYS:HD3	1:q:160:ASN:HB3	2.02	0.40
1:r:166:VAL:HG21	1:r:502:CYS:SG	2.61	0.40
1:v:374:THR:HG22	1:v:408:ARG:NH1	2.37	0.40
1:x:107:TYR:O	1:x:199:PRO:HD2	2.21	0.40
1:x:320:ARG:HH12	1:x:356:ASP:HB3	1.86	0.40
1:y:147:LYS:HD3	1:y:160:ASN:HB3	2.02	0.40
1:z:136:ARG:HE	1:z:138:ARG:HH11	1.70	0.40
1:7:320:ARG:HH12	1:7:356:ASP:HB3	1.86	0.40
1:8:135:LYS:HA	1:8:135:LYS:HD2	1.82	0.40
1:A:233:GLU:OE1	1:A:233:GLU:N	2.54	0.40
1:B:378:ALA:H	1:J:331:ASN:HD21	1.70	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:327:THR:HG21	1:C:354:PRO:HB3	2.02	0.40
1:D:166:VAL:HG21	1:D:502:CYS:SG	2.61	0.40
1:D:431:HIS:HE1	1:D:437:GLN:HE21	1.67	0.40
1:D:451:TRP:CB	1:D:472:MET:HE3	2.52	0.40
1:E:268:LEU:HD13	1:Q:364:ILE:HG12	2.04	0.40
1:F:52:TRP:CE2	1:F:68:THR:HB	2.57	0.40
1:F:327:THR:HG21	1:F:354:PRO:HB3	2.02	0.40
1:J:374:THR:HG22	1:J:408:ARG:NH1	2.37	0.40
1:K:52:TRP:CE2	1:K:68:THR:HB	2.57	0.40
1:K:166:VAL:HG21	1:K:502:CYS:SG	2.61	0.40
1:L:147:LYS:HD3	1:L:160:ASN:HB3	2.02	0.40
1:N:451:TRP:CB	1:N:472:MET:HE3	2.52	0.40
1:P:167:HIS:ND1	1:P:239:VAL:HG12	2.35	0.40
1:P:374:THR:HG22	1:P:408:ARG:NH1	2.37	0.40
1:Q:52:TRP:CE2	1:Q:68:THR:HB	2.57	0.40
1:R:166:VAL:HG21	1:R:502:CYS:SG	2.61	0.40
1:R:378:ALA:H	1:S:331:ASN:HD21	1.70	0.40
1:T:52:TRP:CE2	1:T:68:THR:HB	2.57	0.40
1:T:147:LYS:HD3	1:T:160:ASN:HB3	2.02	0.40
1:U:233:GLU:OE1	1:U:233:GLU:N	2.54	0.40
1:V:107:TYR:O	1:V:199:PRO:HD2	2.21	0.40
1:W:136:ARG:HE	1:W:138:ARG:HH11	1.70	0.40
1:W:166:VAL:HG21	1:W:502:CYS:SG	2.61	0.40
1:Y:135:LYS:HD2	1:Y:135:LYS:HA	1.82	0.40
1:Y:147:LYS:HD3	1:Y:160:ASN:HB3	2.02	0.40
1:Y:320:ARG:HH12	1:Y:356:ASP:HB3	1.86	0.40
1:1:107:TYR:O	1:1:199:PRO:HD2	2.21	0.40
1:2:322:ALA:HB2	1:2:365:ASN:HB3	2.04	0.40
1:2:374:THR:HG22	1:2:408:ARG:NH1	2.37	0.40
1:3:233:GLU:OE1	1:3:233:GLU:N	2.54	0.40
1:4:52:TRP:CE2	1:4:68:THR:HB	2.57	0.40
1:4:107:TYR:O	1:4:199:PRO:HD2	2.21	0.40
1:4:378:ALA:H	1:f:331:ASN:HD21	1.69	0.40
1:5:145:GLN:HE22	1:b:164:ALA:HA	1.87	0.40
1:6:374:THR:HG22	1:6:408:ARG:NH1	2.37	0.40
1:a:166:VAL:HG21	1:a:502:CYS:SG	2.61	0.40
1:c:95:LYS:HE3	1:c:95:LYS:HB3	1.87	0.40
1:e:136:ARG:HE	1:e:138:ARG:HH11	1.70	0.40
1:e:166:VAL:HG21	1:e:502:CYS:SG	2.61	0.40
1:e:451:TRP:CB	1:e:472:MET:HE3	2.52	0.40
1:f:181:HIS:HA	1:f:182:PRO:HD3	1.95	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:52:TRP:CE2	1:g:68:THR:HB	2.57	0.40
1:g:147:LYS:HD3	1:g:160:ASN:HB3	2.02	0.40
1:h:52:TRP:CE2	1:h:68:THR:HB	2.57	0.40
1:i:52:TRP:CE2	1:i:68:THR:HB	2.57	0.40
1:i:169:LEU:HD12	1:i:480:PHE:CD2	2.55	0.40
1:j:107:TYR:O	1:j:199:PRO:HD2	2.21	0.40
1:j:451:TRP:CB	1:j:472:MET:HE3	2.52	0.40
1:k:378:ALA:H	1:l:331:ASN:HD21	1.70	0.40
1:m:313:ARG:NH1	1:m:315:GLU:OE2	2.49	0.40
1:n:320:ARG:HH12	1:n:356:ASP:HB3	1.86	0.40
1:n:364:ILE:HG12	1:p:268:LEU:HD13	2.04	0.40
1:o:378:ALA:H	1:p:331:ASN:ND2	2.20	0.40
1:r:52:TRP:CE2	1:r:68:THR:HB	2.57	0.40
1:r:181:HIS:HA	1:r:182:PRO:HD3	1.95	0.40
1:s:52:TRP:CE2	1:s:68:THR:HB	2.57	0.40
1:t:136:ARG:HE	1:t:138:ARG:HH11	1.70	0.40
1:u:52:TRP:CE2	1:u:68:THR:HB	2.57	0.40
1:v:451:TRP:CB	1:v:472:MET:HE3	2.52	0.40
1:x:52:TRP:CE2	1:x:68:THR:HB	2.57	0.40
1:z:166:VAL:HG21	1:z:502:CYS:SG	2.61	0.40
1:A:169:LEU:HD12	1:A:480:PHE:CD2	2.55	0.40
1:B:52:TRP:CE2	1:B:68:THR:HB	2.57	0.40
1:B:164:ALA:HA	1:C:145:GLN:HE22	1.87	0.40
1:B:268:LEU:HD13	1:J:364:ILE:HG12	2.04	0.40
1:C:374:THR:HG22	1:C:408:ARG:NH1	2.37	0.40
1:D:52:TRP:CE2	1:D:68:THR:HB	2.57	0.40
1:E:451:TRP:CB	1:E:472:MET:HE3	2.52	0.40
1:F:63:VAL:HG21	1:F:125:MET:SD	2.62	0.40
1:G:320:ARG:HH12	1:G:356:ASP:HB3	1.86	0.40
1:K:145:GLN:HE22	1:L:164:ALA:HA	1.87	0.40
1:L:52:TRP:CE2	1:L:68:THR:HB	2.57	0.40
1:L:322:ALA:HB2	1:L:365:ASN:HB3	2.03	0.40
1:M:164:ALA:HA	1:3:145:GLN:HE22	1.87	0.40
1:N:320:ARG:HH12	1:N:356:ASP:HB3	1.86	0.40
1:N:378:ALA:H	1:P:331:ASN:HD21	1.70	0.40
1:O:136:ARG:HE	1:O:138:ARG:HH11	1.70	0.40
1:O:331:ASN:HD21	1:h:378:ALA:H	1.70	0.40
1:P:52:TRP:CE2	1:P:68:THR:HB	2.57	0.40
1:P:322:ALA:HB2	1:P:365:ASN:HB3	2.04	0.40
1:S:451:TRP:CB	1:S:472:MET:HE3	2.52	0.40
1:T:107:TYR:O	1:T:199:PRO:HD2	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:145:GLN:HE21	1:U:163:THR:C	2.30	0.40
1:U:63:VAL:HG21	1:U:125:MET:SD	2.62	0.40
1:U:166:VAL:HG21	1:U:502:CYS:SG	2.61	0.40
1:V:52:TRP:CE2	1:V:68:THR:HB	2.57	0.40
1:V:166:VAL:HG21	1:V:502:CYS:SG	2.61	0.40
1:V:451:TRP:CB	1:V:472:MET:HE3	2.52	0.40
1:X:52:TRP:CE2	1:X:68:THR:HB	2.57	0.40
1:Y:166:VAL:HG21	1:Y:502:CYS:SG	2.61	0.40
1:2:145:GLN:HE22	1:i:164:ALA:HA	1.87	0.40
1:3:181:HIS:HA	1:3:182:PRO:HD3	1.95	0.40
1:3:320:ARG:HH12	1:3:356:ASP:HB3	1.86	0.40
1:4:166:VAL:HG21	1:4:502:CYS:SG	2.61	0.40
1:5:52:TRP:CE2	1:5:68:THR:HB	2.57	0.40
1:5:233:GLU:OE1	1:5:233:GLU:N	2.54	0.40
1:a:224:LYS:HE3	1:e:537:ASN:HB2	2.03	0.40
1:a:374:THR:HG22	1:a:408:ARG:NH1	2.37	0.40
1:c:181:HIS:HA	1:c:182:PRO:HD3	1.95	0.40
1:d:52:TRP:CE2	1:d:68:THR:HB	2.57	0.40
1:e:52:TRP:CE2	1:e:68:THR:HB	2.57	0.40
1:f:136:ARG:HE	1:f:138:ARG:HH11	1.70	0.40
1:h:166:VAL:HG21	1:h:502:CYS:SG	2.61	0.40
1:i:95:LYS:HE3	1:i:95:LYS:HB3	1.87	0.40
1:k:167:HIS:ND1	1:k:239:VAL:HG12	2.35	0.40
1:m:63:VAL:HG21	1:m:125:MET:SD	2.62	0.40
1:m:233:GLU:OE1	1:m:233:GLU:N	2.54	0.40
1:o:313:ARG:NH1	1:o:315:GLU:OE2	2.49	0.40
1:p:169:LEU:HD12	1:p:480:PHE:CD2	2.56	0.40
1:p:233:GLU:OE1	1:p:233:GLU:N	2.54	0.40
1:q:268:LEU:HD13	1:r:364:ILE:HG12	2.04	0.40
1:s:63:VAL:HG21	1:s:125:MET:SD	2.62	0.40
1:s:327:THR:HG21	1:s:354:PRO:HB3	2.02	0.40
1:t:52:TRP:CE2	1:t:68:THR:HB	2.57	0.40
1:t:164:ALA:HA	1:x:145:GLN:HE22	1.87	0.40
1:t:322:ALA:HB2	1:t:365:ASN:HB3	2.04	0.40
1:t:451:TRP:CB	1:t:472:MET:HE3	2.52	0.40
1:u:95:LYS:HE3	1:u:95:LYS:HB3	1.87	0.40
1:u:378:ALA:H	1:v:331:ASN:HD21	1.70	0.40
1:v:233:GLU:OE1	1:v:233:GLU:N	2.54	0.40
1:w:107:TYR:O	1:w:199:PRO:HD2	2.21	0.40
1:7:135:LYS:HD2	1:7:135:LYS:HA	1.82	0.40
1:7:166:VAL:HG21	1:7:502:CYS:SG	2.61	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:7:313:ARG:NH1	1:7:315:GLU:OE2	2.49	0.40
1:A:136:ARG:HE	1:A:138:ARG:HH11	1.70	0.40
1:B:107:TYR:O	1:B:199:PRO:HD2	2.21	0.40
1:B:313:ARG:NH1	1:B:315:GLU:OE2	2.49	0.40
1:C:169:LEU:HD12	1:C:480:PHE:CD2	2.55	0.40
1:C:224:LYS:HE3	1:D:537:ASN:HB2	2.03	0.40
1:E:233:GLU:OE1	1:E:233:GLU:N	2.54	0.40
1:F:166:VAL:HG21	1:F:502:CYS:SG	2.61	0.40
1:F:331:ASN:ND2	1:Q:378:ALA:H	2.20	0.40
1:F:364:ILE:HG12	1:Q:268:LEU:HD13	2.04	0.40
1:G:52:TRP:CE2	1:G:68:THR:HB	2.57	0.40
1:H:166:VAL:HG21	1:H:502:CYS:SG	2.61	0.40
1:I:327:THR:HG21	1:I:354:PRO:HB3	2.02	0.40
1:I:451:TRP:CB	1:I:472:MET:HE3	2.52	0.40
1:J:166:VAL:HG21	1:J:502:CYS:SG	2.61	0.40
1:K:135:LYS:HA	1:K:135:LYS:HD2	1.82	0.40
1:K:136:ARG:HE	1:K:138:ARG:HH11	1.70	0.40
1:K:331:ASN:HD21	1:8:378:ALA:H	1.69	0.40
1:L:136:ARG:HE	1:L:138:ARG:HH11	1.70	0.40
1:M:451:TRP:CB	1:M:472:MET:HE3	2.52	0.40
1:O:145:GLN:HE22	1:P:164:ALA:HA	1.87	0.40
1:O:320:ARG:HH12	1:O:356:ASP:HB3	1.86	0.40
1:Q:63:VAL:HG21	1:Q:125:MET:SD	2.62	0.40
1:R:322:ALA:HB2	1:R:365:ASN:HB3	2.04	0.40
1:S:233:GLU:OE1	1:S:233:GLU:N	2.54	0.40
1:T:224:LYS:HE3	1:c:537:ASN:HB2	2.03	0.40
1:T:364:ILE:HG12	1:f:268:LEU:HD13	2.03	0.40
1:U:52:TRP:CE2	1:U:68:THR:HB	2.57	0.40
1:X:164:ALA:HA	1:6:145:GLN:HE22	1.87	0.40
1:X:313:ARG:NH1	1:X:315:GLU:OE2	2.49	0.40
1:Y:63:VAL:HG21	1:Y:125:MET:SD	2.62	0.40
1:Y:322:ALA:HB2	1:Y:365:ASN:HB3	2.04	0.40
1:Z:378:ALA:H	1:x:331:ASN:HD21	1.69	0.40
1:3:374:THR:HG22	1:3:408:ARG:NH1	2.37	0.40
1:6:322:ALA:HB2	1:6:365:ASN:HB3	2.04	0.40
1:a:169:LEU:HD12	1:a:480:PHE:CD2	2.55	0.40
1:a:322:ALA:HB2	1:a:365:ASN:HB3	2.04	0.40
1:b:52:TRP:CE2	1:b:68:THR:HB	2.57	0.40
1:b:451:TRP:CB	1:b:472:MET:HE3	2.52	0.40
1:c:268:LEU:HD13	1:d:364:ILE:HG12	2.04	0.40
1:c:378:ALA:H	1:d:331:ASN:HD21	1.70	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:322:ALA:HB2	1:d:365:ASN:HB3	2.04	0.40
1:g:145:GLN:HE22	1:m:164:ALA:HA	1.87	0.40
1:j:52:TRP:CE2	1:j:68:THR:HB	2.57	0.40
1:j:166:VAL:HG21	1:j:502:CYS:SG	2.61	0.40
1:k:322:ALA:HB2	1:k:365:ASN:HB3	2.04	0.40
1:l:147:LYS:HD3	1:l:160:ASN:HB3	2.02	0.40
1:l:233:GLU:OE1	1:l:233:GLU:N	2.54	0.40
1:l:451:TRP:CB	1:l:472:MET:HE3	2.52	0.40
1:m:52:TRP:CE2	1:m:68:THR:HB	2.57	0.40
1:m:166:VAL:HG21	1:m:502:CYS:SG	2.61	0.40
1:n:52:TRP:CE2	1:n:68:THR:HB	2.57	0.40
1:n:378:ALA:H	1:o:331:ASN:HD21	1.69	0.40
1:p:136:ARG:HE	1:p:138:ARG:HH11	1.70	0.40
1:q:233:GLU:OE1	1:q:233:GLU:N	2.54	0.40
1:q:451:TRP:CB	1:q:472:MET:HE3	2.52	0.40
1:r:63:VAL:HG21	1:r:125:MET:SD	2.62	0.40
1:r:378:ALA:H	1:s:331:ASN:ND2	2.20	0.40
1:s:166:VAL:HG21	1:s:502:CYS:SG	2.61	0.40
1:t:397:VAL:HG11	1:v:290:TYR:CE2	2.55	0.40
1:u:268:LEU:HD13	1:v:364:ILE:HG12	2.04	0.40
1:v:63:VAL:HG21	1:v:125:MET:SD	2.62	0.40
1:w:233:GLU:OE1	1:w:233:GLU:N	2.54	0.40
1:y:166:VAL:HG21	1:y:502:CYS:SG	2.61	0.40
1:z:107:TYR:O	1:z:199:PRO:HD2	2.21	0.40
1:7:63:VAL:HG21	1:7:125:MET:SD	2.62	0.40
1:7:322:ALA:HB2	1:7:365:ASN:HB3	2.04	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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

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



Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	1	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	2	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	3	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	4	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	5	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	6	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	7	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	8	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	A	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	B	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	C	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	D	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	E	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	F	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	G	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	H	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	I	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	J	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	K	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	L	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	M	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	N	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	O	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	P	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	Q	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	R	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	S	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	T	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	U	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	V	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	W	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	X	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Y	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	Z	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	a	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	b	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	c	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	d	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	e	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	f	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	g	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	h	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	i	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	j	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	k	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	l	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	m	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	n	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	o	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	p	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	q	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	r	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	s	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	t	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	u	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	v	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	w	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	x	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	y	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
1	z	522/567 (92%)	514 (98%)	7 (1%)	1 (0%)	44	62
All	All	31320/34020 (92%)	30840 (98%)	420 (1%)	60 (0%)	45	62

All (60) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	389	VAL
1	B	389	VAL
1	C	389	VAL
1	D	389	VAL
1	E	389	VAL
1	F	389	VAL
1	G	389	VAL
1	H	389	VAL
1	I	389	VAL
1	J	389	VAL
1	K	389	VAL
1	L	389	VAL
1	M	389	VAL
1	N	389	VAL
1	O	389	VAL
1	P	389	VAL
1	Q	389	VAL
1	R	389	VAL
1	S	389	VAL
1	T	389	VAL
1	U	389	VAL
1	V	389	VAL
1	W	389	VAL
1	X	389	VAL
1	Y	389	VAL
1	Z	389	VAL
1	1	389	VAL
1	2	389	VAL
1	3	389	VAL
1	4	389	VAL
1	5	389	VAL
1	6	389	VAL
1	a	389	VAL
1	b	389	VAL
1	c	389	VAL
1	d	389	VAL
1	e	389	VAL
1	f	389	VAL
1	g	389	VAL
1	h	389	VAL
1	i	389	VAL
1	j	389	VAL
1	k	389	VAL

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Mol	Chain	Res	Type
1	l	389	VAL
1	m	389	VAL
1	n	389	VAL
1	o	389	VAL
1	p	389	VAL
1	q	389	VAL
1	r	389	VAL
1	s	389	VAL
1	t	389	VAL
1	u	389	VAL
1	v	389	VAL
1	w	389	VAL
1	x	389	VAL
1	y	389	VAL
1	z	389	VAL
1	7	389	VAL
1	8	389	VAL

### 5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	1	464/483 (96%)	464 (100%)	0	100	100
1	2	464/483 (96%)	464 (100%)	0	100	100
1	3	464/483 (96%)	464 (100%)	0	100	100
1	4	464/483 (96%)	464 (100%)	0	100	100
1	5	464/483 (96%)	464 (100%)	0	100	100
1	6	464/483 (96%)	464 (100%)	0	100	100
1	7	464/483 (96%)	464 (100%)	0	100	100
1	8	464/483 (96%)	464 (100%)	0	100	100
1	A	464/483 (96%)	464 (100%)	0	100	100
1	B	464/483 (96%)	464 (100%)	0	100	100
1	C	464/483 (96%)	464 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	D	464/483 (96%)	464 (100%)	0	100	100
1	E	464/483 (96%)	464 (100%)	0	100	100
1	F	464/483 (96%)	464 (100%)	0	100	100
1	G	464/483 (96%)	464 (100%)	0	100	100
1	H	464/483 (96%)	464 (100%)	0	100	100
1	I	464/483 (96%)	464 (100%)	0	100	100
1	J	464/483 (96%)	464 (100%)	0	100	100
1	K	464/483 (96%)	464 (100%)	0	100	100
1	L	464/483 (96%)	464 (100%)	0	100	100
1	M	464/483 (96%)	464 (100%)	0	100	100
1	N	464/483 (96%)	464 (100%)	0	100	100
1	O	464/483 (96%)	464 (100%)	0	100	100
1	P	464/483 (96%)	464 (100%)	0	100	100
1	Q	464/483 (96%)	464 (100%)	0	100	100
1	R	464/483 (96%)	464 (100%)	0	100	100
1	S	464/483 (96%)	464 (100%)	0	100	100
1	T	464/483 (96%)	464 (100%)	0	100	100
1	U	464/483 (96%)	464 (100%)	0	100	100
1	V	464/483 (96%)	464 (100%)	0	100	100
1	W	464/483 (96%)	464 (100%)	0	100	100
1	X	464/483 (96%)	464 (100%)	0	100	100
1	Y	464/483 (96%)	464 (100%)	0	100	100
1	Z	464/483 (96%)	464 (100%)	0	100	100
1	a	464/483 (96%)	464 (100%)	0	100	100
1	b	464/483 (96%)	464 (100%)	0	100	100
1	c	464/483 (96%)	464 (100%)	0	100	100
1	d	464/483 (96%)	464 (100%)	0	100	100
1	e	464/483 (96%)	464 (100%)	0	100	100
1	f	464/483 (96%)	464 (100%)	0	100	100
1	g	464/483 (96%)	464 (100%)	0	100	100
1	h	464/483 (96%)	464 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	i	464/483 (96%)	464 (100%)	0	100	100
1	j	464/483 (96%)	464 (100%)	0	100	100
1	k	464/483 (96%)	464 (100%)	0	100	100
1	l	464/483 (96%)	464 (100%)	0	100	100
1	m	464/483 (96%)	464 (100%)	0	100	100
1	n	464/483 (96%)	464 (100%)	0	100	100
1	o	464/483 (96%)	464 (100%)	0	100	100
1	p	464/483 (96%)	464 (100%)	0	100	100
1	q	464/483 (96%)	464 (100%)	0	100	100
1	r	464/483 (96%)	464 (100%)	0	100	100
1	s	464/483 (96%)	464 (100%)	0	100	100
1	t	464/483 (96%)	464 (100%)	0	100	100
1	u	464/483 (96%)	464 (100%)	0	100	100
1	v	464/483 (96%)	464 (100%)	0	100	100
1	w	464/483 (96%)	464 (100%)	0	100	100
1	x	464/483 (96%)	464 (100%)	0	100	100
1	y	464/483 (96%)	464 (100%)	0	100	100
1	z	464/483 (96%)	464 (100%)	0	100	100
All	All	27840/28980 (96%)	27840 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1109) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	67	GLN
1	A	79	HIS
1	A	93	ASN
1	A	145	GLN
1	A	159	ASN
1	A	174	HIS
1	A	181	HIS
1	A	220	ASN
1	A	237	HIS
1	A	262	ASN

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Mol	Chain	Res	Type
1	A	286	ASN
1	A	331	ASN
1	A	365	ASN
1	A	400	HIS
1	A	410	ASN
1	A	431	HIS
1	A	443	GLN
1	A	474	HIS
1	A	493	ASN
1	B	67	GLN
1	B	79	HIS
1	B	120	GLN
1	B	145	GLN
1	B	159	ASN
1	B	174	HIS
1	B	181	HIS
1	B	220	ASN
1	B	237	HIS
1	B	262	ASN
1	B	331	ASN
1	B	365	ASN
1	B	400	HIS
1	B	431	HIS
1	B	443	GLN
1	B	474	HIS
1	B	493	ASN
1	C	67	GLN
1	C	79	HIS
1	C	93	ASN
1	C	120	GLN
1	C	145	GLN
1	C	159	ASN
1	C	174	HIS
1	C	181	HIS
1	C	220	ASN
1	C	237	HIS
1	C	262	ASN
1	C	331	ASN
1	C	365	ASN
1	C	400	HIS
1	C	410	ASN
1	C	431	HIS

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Mol	Chain	Res	Type
1	C	443	GLN
1	C	474	HIS
1	C	493	ASN
1	D	67	GLN
1	D	79	HIS
1	D	120	GLN
1	D	145	GLN
1	D	159	ASN
1	D	174	HIS
1	D	181	HIS
1	D	220	ASN
1	D	237	HIS
1	D	262	ASN
1	D	331	ASN
1	D	365	ASN
1	D	400	HIS
1	D	410	ASN
1	D	431	HIS
1	D	443	GLN
1	D	474	HIS
1	D	493	ASN
1	E	67	GLN
1	E	79	HIS
1	E	93	ASN
1	E	120	GLN
1	E	145	GLN
1	E	159	ASN
1	E	174	HIS
1	E	181	HIS
1	E	220	ASN
1	E	237	HIS
1	E	262	ASN
1	E	331	ASN
1	E	365	ASN
1	E	400	HIS
1	E	431	HIS
1	E	443	GLN
1	E	474	HIS
1	E	493	ASN
1	F	67	GLN
1	F	79	HIS
1	F	93	ASN

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Mol	Chain	Res	Type
1	F	120	GLN
1	F	145	GLN
1	F	159	ASN
1	F	174	HIS
1	F	181	HIS
1	F	220	ASN
1	F	237	HIS
1	F	262	ASN
1	F	331	ASN
1	F	365	ASN
1	F	400	HIS
1	F	410	ASN
1	F	431	HIS
1	F	443	GLN
1	F	474	HIS
1	F	493	ASN
1	G	67	GLN
1	G	79	HIS
1	G	93	ASN
1	G	145	GLN
1	G	159	ASN
1	G	174	HIS
1	G	181	HIS
1	G	220	ASN
1	G	237	HIS
1	G	262	ASN
1	G	286	ASN
1	G	331	ASN
1	G	365	ASN
1	G	400	HIS
1	G	410	ASN
1	G	431	HIS
1	G	443	GLN
1	G	474	HIS
1	G	493	ASN
1	H	67	GLN
1	H	79	HIS
1	H	93	ASN
1	H	120	GLN
1	H	145	GLN
1	H	159	ASN
1	H	174	HIS

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Mol	Chain	Res	Type
1	H	181	HIS
1	H	220	ASN
1	H	237	HIS
1	H	262	ASN
1	H	331	ASN
1	H	400	HIS
1	H	410	ASN
1	H	431	HIS
1	H	443	GLN
1	H	474	HIS
1	H	493	ASN
1	I	67	GLN
1	I	79	HIS
1	I	93	ASN
1	I	120	GLN
1	I	145	GLN
1	I	159	ASN
1	I	174	HIS
1	I	181	HIS
1	I	220	ASN
1	I	237	HIS
1	I	262	ASN
1	I	331	ASN
1	I	365	ASN
1	I	400	HIS
1	I	410	ASN
1	I	431	HIS
1	I	443	GLN
1	I	474	HIS
1	I	493	ASN
1	J	67	GLN
1	J	79	HIS
1	J	93	ASN
1	J	120	GLN
1	J	145	GLN
1	J	159	ASN
1	J	174	HIS
1	J	181	HIS
1	J	220	ASN
1	J	237	HIS
1	J	262	ASN
1	J	331	ASN

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Mol	Chain	Res	Type
1	J	365	ASN
1	J	400	HIS
1	J	410	ASN
1	J	431	HIS
1	J	443	GLN
1	J	474	HIS
1	J	493	ASN
1	K	67	GLN
1	K	79	HIS
1	K	93	ASN
1	K	120	GLN
1	K	145	GLN
1	K	159	ASN
1	K	174	HIS
1	K	181	HIS
1	K	220	ASN
1	K	237	HIS
1	K	262	ASN
1	K	331	ASN
1	K	365	ASN
1	K	400	HIS
1	K	431	HIS
1	K	443	GLN
1	K	474	HIS
1	K	493	ASN
1	L	67	GLN
1	L	79	HIS
1	L	93	ASN
1	L	120	GLN
1	L	145	GLN
1	L	159	ASN
1	L	174	HIS
1	L	181	HIS
1	L	220	ASN
1	L	237	HIS
1	L	262	ASN
1	L	331	ASN
1	L	400	HIS
1	L	410	ASN
1	L	431	HIS
1	L	443	GLN
1	L	474	HIS

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Mol	Chain	Res	Type
1	L	493	ASN
1	M	67	GLN
1	M	79	HIS
1	M	93	ASN
1	M	120	GLN
1	M	145	GLN
1	M	159	ASN
1	M	174	HIS
1	M	181	HIS
1	M	220	ASN
1	M	237	HIS
1	M	262	ASN
1	M	331	ASN
1	M	365	ASN
1	M	400	HIS
1	M	410	ASN
1	M	431	HIS
1	M	443	GLN
1	M	474	HIS
1	M	493	ASN
1	N	67	GLN
1	N	79	HIS
1	N	93	ASN
1	N	120	GLN
1	N	145	GLN
1	N	159	ASN
1	N	174	HIS
1	N	181	HIS
1	N	220	ASN
1	N	237	HIS
1	N	262	ASN
1	N	331	ASN
1	N	400	HIS
1	N	410	ASN
1	N	431	HIS
1	N	443	GLN
1	N	474	HIS
1	N	493	ASN
1	O	67	GLN
1	O	79	HIS
1	O	93	ASN
1	O	120	GLN

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Mol	Chain	Res	Type
1	O	145	GLN
1	O	159	ASN
1	O	174	HIS
1	O	181	HIS
1	O	220	ASN
1	O	237	HIS
1	O	262	ASN
1	O	331	ASN
1	O	365	ASN
1	O	400	HIS
1	O	410	ASN
1	O	431	HIS
1	O	443	GLN
1	O	474	HIS
1	O	493	ASN
1	P	67	GLN
1	P	79	HIS
1	P	93	ASN
1	P	145	GLN
1	P	159	ASN
1	P	174	HIS
1	P	181	HIS
1	P	220	ASN
1	P	237	HIS
1	P	262	ASN
1	P	286	ASN
1	P	331	ASN
1	P	365	ASN
1	P	400	HIS
1	P	431	HIS
1	P	443	GLN
1	P	474	HIS
1	P	493	ASN
1	Q	67	GLN
1	Q	79	HIS
1	Q	93	ASN
1	Q	120	GLN
1	Q	145	GLN
1	Q	159	ASN
1	Q	174	HIS
1	Q	181	HIS
1	Q	220	ASN

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Mol	Chain	Res	Type
1	Q	237	HIS
1	Q	262	ASN
1	Q	331	ASN
1	Q	365	ASN
1	Q	400	HIS
1	Q	431	HIS
1	Q	443	GLN
1	Q	474	HIS
1	Q	493	ASN
1	R	67	GLN
1	R	79	HIS
1	R	93	ASN
1	R	120	GLN
1	R	145	GLN
1	R	159	ASN
1	R	174	HIS
1	R	181	HIS
1	R	220	ASN
1	R	237	HIS
1	R	262	ASN
1	R	286	ASN
1	R	331	ASN
1	R	365	ASN
1	R	400	HIS
1	R	431	HIS
1	R	443	GLN
1	R	474	HIS
1	R	493	ASN
1	S	67	GLN
1	S	79	HIS
1	S	145	GLN
1	S	159	ASN
1	S	174	HIS
1	S	181	HIS
1	S	220	ASN
1	S	237	HIS
1	S	262	ASN
1	S	286	ASN
1	S	331	ASN
1	S	365	ASN
1	S	400	HIS
1	S	410	ASN

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Mol	Chain	Res	Type
1	S	431	HIS
1	S	443	GLN
1	S	474	HIS
1	S	493	ASN
1	T	67	GLN
1	T	79	HIS
1	T	93	ASN
1	T	120	GLN
1	T	145	GLN
1	T	159	ASN
1	T	174	HIS
1	T	181	HIS
1	T	220	ASN
1	T	237	HIS
1	T	262	ASN
1	T	331	ASN
1	T	365	ASN
1	T	400	HIS
1	T	410	ASN
1	T	431	HIS
1	T	443	GLN
1	T	474	HIS
1	T	493	ASN
1	U	67	GLN
1	U	79	HIS
1	U	93	ASN
1	U	120	GLN
1	U	145	GLN
1	U	159	ASN
1	U	174	HIS
1	U	181	HIS
1	U	220	ASN
1	U	237	HIS
1	U	262	ASN
1	U	331	ASN
1	U	365	ASN
1	U	400	HIS
1	U	410	ASN
1	U	431	HIS
1	U	443	GLN
1	U	474	HIS
1	U	493	ASN

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Mol	Chain	Res	Type
1	V	67	GLN
1	V	79	HIS
1	V	93	ASN
1	V	120	GLN
1	V	145	GLN
1	V	159	ASN
1	V	174	HIS
1	V	181	HIS
1	V	220	ASN
1	V	237	HIS
1	V	262	ASN
1	V	331	ASN
1	V	365	ASN
1	V	400	HIS
1	V	410	ASN
1	V	431	HIS
1	V	443	GLN
1	V	474	HIS
1	V	493	ASN
1	W	67	GLN
1	W	79	HIS
1	W	93	ASN
1	W	120	GLN
1	W	145	GLN
1	W	159	ASN
1	W	174	HIS
1	W	181	HIS
1	W	220	ASN
1	W	237	HIS
1	W	262	ASN
1	W	331	ASN
1	W	365	ASN
1	W	400	HIS
1	W	431	HIS
1	W	443	GLN
1	W	474	HIS
1	W	493	ASN
1	X	67	GLN
1	X	79	HIS
1	X	93	ASN
1	X	120	GLN
1	X	145	GLN

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Mol	Chain	Res	Type
1	X	159	ASN
1	X	174	HIS
1	X	181	HIS
1	X	220	ASN
1	X	237	HIS
1	X	262	ASN
1	X	331	ASN
1	X	365	ASN
1	X	400	HIS
1	X	410	ASN
1	X	431	HIS
1	X	443	GLN
1	X	474	HIS
1	X	493	ASN
1	Y	67	GLN
1	Y	79	HIS
1	Y	93	ASN
1	Y	120	GLN
1	Y	145	GLN
1	Y	159	ASN
1	Y	174	HIS
1	Y	181	HIS
1	Y	220	ASN
1	Y	237	HIS
1	Y	262	ASN
1	Y	331	ASN
1	Y	400	HIS
1	Y	410	ASN
1	Y	431	HIS
1	Y	443	GLN
1	Y	474	HIS
1	Y	493	ASN
1	Z	67	GLN
1	Z	79	HIS
1	Z	93	ASN
1	Z	120	GLN
1	Z	145	GLN
1	Z	159	ASN
1	Z	174	HIS
1	Z	181	HIS
1	Z	220	ASN
1	Z	237	HIS

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Mol	Chain	Res	Type
1	Z	262	ASN
1	Z	331	ASN
1	Z	365	ASN
1	Z	400	HIS
1	Z	410	ASN
1	Z	431	HIS
1	Z	443	GLN
1	Z	474	HIS
1	Z	493	ASN
1	1	67	GLN
1	1	79	HIS
1	1	93	ASN
1	1	120	GLN
1	1	145	GLN
1	1	159	ASN
1	1	174	HIS
1	1	181	HIS
1	1	220	ASN
1	1	237	HIS
1	1	262	ASN
1	1	331	ASN
1	1	400	HIS
1	1	410	ASN
1	1	431	HIS
1	1	443	GLN
1	1	474	HIS
1	1	493	ASN
1	2	67	GLN
1	2	79	HIS
1	2	93	ASN
1	2	120	GLN
1	2	145	GLN
1	2	159	ASN
1	2	174	HIS
1	2	181	HIS
1	2	220	ASN
1	2	237	HIS
1	2	262	ASN
1	2	331	ASN
1	2	400	HIS
1	2	410	ASN
1	2	431	HIS

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Mol	Chain	Res	Type
1	2	443	GLN
1	2	474	HIS
1	2	493	ASN
1	3	67	GLN
1	3	79	HIS
1	3	93	ASN
1	3	120	GLN
1	3	145	GLN
1	3	159	ASN
1	3	174	HIS
1	3	181	HIS
1	3	220	ASN
1	3	237	HIS
1	3	262	ASN
1	3	331	ASN
1	3	365	ASN
1	3	400	HIS
1	3	410	ASN
1	3	431	HIS
1	3	443	GLN
1	3	474	HIS
1	3	493	ASN
1	4	67	GLN
1	4	79	HIS
1	4	93	ASN
1	4	120	GLN
1	4	145	GLN
1	4	159	ASN
1	4	174	HIS
1	4	181	HIS
1	4	220	ASN
1	4	237	HIS
1	4	262	ASN
1	4	331	ASN
1	4	400	HIS
1	4	410	ASN
1	4	431	HIS
1	4	443	GLN
1	4	474	HIS
1	4	493	ASN
1	5	67	GLN
1	5	79	HIS

*Continued on next page...*

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Mol	Chain	Res	Type
1	5	93	ASN
1	5	120	GLN
1	5	145	GLN
1	5	159	ASN
1	5	174	HIS
1	5	181	HIS
1	5	220	ASN
1	5	237	HIS
1	5	262	ASN
1	5	331	ASN
1	5	365	ASN
1	5	400	HIS
1	5	410	ASN
1	5	431	HIS
1	5	443	GLN
1	5	474	HIS
1	5	493	ASN
1	6	67	GLN
1	6	79	HIS
1	6	93	ASN
1	6	120	GLN
1	6	145	GLN
1	6	159	ASN
1	6	174	HIS
1	6	181	HIS
1	6	220	ASN
1	6	237	HIS
1	6	262	ASN
1	6	286	ASN
1	6	331	ASN
1	6	365	ASN
1	6	400	HIS
1	6	410	ASN
1	6	431	HIS
1	6	443	GLN
1	6	474	HIS
1	6	493	ASN
1	a	67	GLN
1	a	79	HIS
1	a	93	ASN
1	a	145	GLN
1	a	159	ASN

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Mol	Chain	Res	Type
1	a	174	HIS
1	a	181	HIS
1	a	220	ASN
1	a	237	HIS
1	a	262	ASN
1	a	331	ASN
1	a	365	ASN
1	a	400	HIS
1	a	410	ASN
1	a	431	HIS
1	a	443	GLN
1	a	474	HIS
1	a	493	ASN
1	b	67	GLN
1	b	79	HIS
1	b	93	ASN
1	b	120	GLN
1	b	145	GLN
1	b	159	ASN
1	b	174	HIS
1	b	181	HIS
1	b	220	ASN
1	b	237	HIS
1	b	262	ASN
1	b	331	ASN
1	b	365	ASN
1	b	400	HIS
1	b	410	ASN
1	b	431	HIS
1	b	443	GLN
1	b	474	HIS
1	b	493	ASN
1	c	67	GLN
1	c	79	HIS
1	c	93	ASN
1	c	120	GLN
1	c	145	GLN
1	c	159	ASN
1	c	174	HIS
1	c	181	HIS
1	c	220	ASN
1	c	237	HIS

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Mol	Chain	Res	Type
1	c	262	ASN
1	c	331	ASN
1	c	400	HIS
1	c	410	ASN
1	c	431	HIS
1	c	443	GLN
1	c	474	HIS
1	c	493	ASN
1	d	67	GLN
1	d	79	HIS
1	d	93	ASN
1	d	145	GLN
1	d	159	ASN
1	d	174	HIS
1	d	181	HIS
1	d	220	ASN
1	d	237	HIS
1	d	262	ASN
1	d	286	ASN
1	d	331	ASN
1	d	365	ASN
1	d	400	HIS
1	d	431	HIS
1	d	443	GLN
1	d	474	HIS
1	d	493	ASN
1	e	67	GLN
1	e	79	HIS
1	e	93	ASN
1	e	120	GLN
1	e	145	GLN
1	e	159	ASN
1	e	174	HIS
1	e	181	HIS
1	e	220	ASN
1	e	237	HIS
1	e	262	ASN
1	e	331	ASN
1	e	365	ASN
1	e	400	HIS
1	e	410	ASN
1	e	431	HIS

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Mol	Chain	Res	Type
1	e	443	GLN
1	e	474	HIS
1	e	493	ASN
1	f	67	GLN
1	f	79	HIS
1	f	93	ASN
1	f	120	GLN
1	f	145	GLN
1	f	159	ASN
1	f	174	HIS
1	f	181	HIS
1	f	220	ASN
1	f	237	HIS
1	f	262	ASN
1	f	331	ASN
1	f	365	ASN
1	f	400	HIS
1	f	410	ASN
1	f	431	HIS
1	f	443	GLN
1	f	474	HIS
1	f	493	ASN
1	g	67	GLN
1	g	79	HIS
1	g	93	ASN
1	g	120	GLN
1	g	145	GLN
1	g	159	ASN
1	g	174	HIS
1	g	181	HIS
1	g	220	ASN
1	g	237	HIS
1	g	262	ASN
1	g	331	ASN
1	g	365	ASN
1	g	400	HIS
1	g	410	ASN
1	g	431	HIS
1	g	443	GLN
1	g	474	HIS
1	g	493	ASN
1	h	67	GLN

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Mol	Chain	Res	Type
1	h	79	HIS
1	h	120	GLN
1	h	145	GLN
1	h	159	ASN
1	h	174	HIS
1	h	181	HIS
1	h	220	ASN
1	h	237	HIS
1	h	262	ASN
1	h	331	ASN
1	h	400	HIS
1	h	410	ASN
1	h	431	HIS
1	h	443	GLN
1	h	474	HIS
1	h	493	ASN
1	i	67	GLN
1	i	79	HIS
1	i	93	ASN
1	i	120	GLN
1	i	145	GLN
1	i	159	ASN
1	i	174	HIS
1	i	181	HIS
1	i	220	ASN
1	i	237	HIS
1	i	262	ASN
1	i	331	ASN
1	i	365	ASN
1	i	400	HIS
1	i	410	ASN
1	i	431	HIS
1	i	443	GLN
1	i	474	HIS
1	i	493	ASN
1	j	67	GLN
1	j	79	HIS
1	j	93	ASN
1	j	120	GLN
1	j	145	GLN
1	j	159	ASN
1	j	174	HIS

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Mol	Chain	Res	Type
1	j	181	HIS
1	j	220	ASN
1	j	237	HIS
1	j	262	ASN
1	j	331	ASN
1	j	365	ASN
1	j	400	HIS
1	j	410	ASN
1	j	431	HIS
1	j	443	GLN
1	j	474	HIS
1	j	493	ASN
1	k	67	GLN
1	k	79	HIS
1	k	93	ASN
1	k	120	GLN
1	k	145	GLN
1	k	159	ASN
1	k	174	HIS
1	k	181	HIS
1	k	220	ASN
1	k	237	HIS
1	k	262	ASN
1	k	286	ASN
1	k	331	ASN
1	k	365	ASN
1	k	400	HIS
1	k	410	ASN
1	k	431	HIS
1	k	443	GLN
1	k	474	HIS
1	k	493	ASN
1	l	67	GLN
1	l	79	HIS
1	l	120	GLN
1	l	145	GLN
1	l	159	ASN
1	l	174	HIS
1	l	181	HIS
1	l	220	ASN
1	l	237	HIS
1	l	262	ASN

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Mol	Chain	Res	Type
1	l	331	ASN
1	l	365	ASN
1	l	400	HIS
1	l	410	ASN
1	l	431	HIS
1	l	443	GLN
1	l	474	HIS
1	l	493	ASN
1	m	67	GLN
1	m	79	HIS
1	m	93	ASN
1	m	120	GLN
1	m	145	GLN
1	m	159	ASN
1	m	174	HIS
1	m	181	HIS
1	m	220	ASN
1	m	237	HIS
1	m	262	ASN
1	m	331	ASN
1	m	365	ASN
1	m	400	HIS
1	m	410	ASN
1	m	431	HIS
1	m	443	GLN
1	m	474	HIS
1	m	493	ASN
1	n	67	GLN
1	n	79	HIS
1	n	93	ASN
1	n	120	GLN
1	n	145	GLN
1	n	159	ASN
1	n	174	HIS
1	n	181	HIS
1	n	220	ASN
1	n	237	HIS
1	n	262	ASN
1	n	331	ASN
1	n	365	ASN
1	n	400	HIS
1	n	410	ASN

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Mol	Chain	Res	Type
1	n	431	HIS
1	n	443	GLN
1	n	474	HIS
1	n	493	ASN
1	o	67	GLN
1	o	79	HIS
1	o	93	ASN
1	o	120	GLN
1	o	145	GLN
1	o	159	ASN
1	o	174	HIS
1	o	181	HIS
1	o	220	ASN
1	o	237	HIS
1	o	262	ASN
1	o	331	ASN
1	o	365	ASN
1	o	400	HIS
1	o	410	ASN
1	o	431	HIS
1	o	443	GLN
1	o	474	HIS
1	o	493	ASN
1	p	67	GLN
1	p	79	HIS
1	p	93	ASN
1	p	145	GLN
1	p	159	ASN
1	p	174	HIS
1	p	181	HIS
1	p	220	ASN
1	p	237	HIS
1	p	262	ASN
1	p	286	ASN
1	p	331	ASN
1	p	365	ASN
1	p	400	HIS
1	p	410	ASN
1	p	431	HIS
1	p	443	GLN
1	p	474	HIS
1	p	493	ASN

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Mol	Chain	Res	Type
1	q	67	GLN
1	q	79	HIS
1	q	93	ASN
1	q	120	GLN
1	q	145	GLN
1	q	159	ASN
1	q	174	HIS
1	q	181	HIS
1	q	220	ASN
1	q	237	HIS
1	q	262	ASN
1	q	331	ASN
1	q	365	ASN
1	q	400	HIS
1	q	431	HIS
1	q	443	GLN
1	q	474	HIS
1	q	493	ASN
1	r	67	GLN
1	r	79	HIS
1	r	93	ASN
1	r	120	GLN
1	r	145	GLN
1	r	159	ASN
1	r	174	HIS
1	r	181	HIS
1	r	220	ASN
1	r	237	HIS
1	r	262	ASN
1	r	331	ASN
1	r	365	ASN
1	r	400	HIS
1	r	431	HIS
1	r	443	GLN
1	r	474	HIS
1	r	493	ASN
1	s	67	GLN
1	s	79	HIS
1	s	93	ASN
1	s	120	GLN
1	s	145	GLN
1	s	159	ASN

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Mol	Chain	Res	Type
1	s	174	HIS
1	s	181	HIS
1	s	220	ASN
1	s	237	HIS
1	s	262	ASN
1	s	331	ASN
1	s	365	ASN
1	s	400	HIS
1	s	410	ASN
1	s	431	HIS
1	s	443	GLN
1	s	474	HIS
1	s	493	ASN
1	t	67	GLN
1	t	79	HIS
1	t	93	ASN
1	t	120	GLN
1	t	145	GLN
1	t	159	ASN
1	t	174	HIS
1	t	181	HIS
1	t	220	ASN
1	t	237	HIS
1	t	262	ASN
1	t	331	ASN
1	t	400	HIS
1	t	410	ASN
1	t	431	HIS
1	t	443	GLN
1	t	474	HIS
1	t	493	ASN
1	u	67	GLN
1	u	79	HIS
1	u	93	ASN
1	u	120	GLN
1	u	145	GLN
1	u	159	ASN
1	u	174	HIS
1	u	181	HIS
1	u	220	ASN
1	u	237	HIS
1	u	262	ASN

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Mol	Chain	Res	Type
1	u	331	ASN
1	u	365	ASN
1	u	400	HIS
1	u	431	HIS
1	u	443	GLN
1	u	474	HIS
1	u	493	ASN
1	v	67	GLN
1	v	79	HIS
1	v	93	ASN
1	v	120	GLN
1	v	145	GLN
1	v	159	ASN
1	v	174	HIS
1	v	181	HIS
1	v	220	ASN
1	v	237	HIS
1	v	262	ASN
1	v	331	ASN
1	v	365	ASN
1	v	400	HIS
1	v	431	HIS
1	v	443	GLN
1	v	474	HIS
1	v	493	ASN
1	w	67	GLN
1	w	79	HIS
1	w	93	ASN
1	w	120	GLN
1	w	145	GLN
1	w	159	ASN
1	w	174	HIS
1	w	181	HIS
1	w	220	ASN
1	w	237	HIS
1	w	262	ASN
1	w	331	ASN
1	w	365	ASN
1	w	400	HIS
1	w	410	ASN
1	w	431	HIS
1	w	443	GLN

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Mol	Chain	Res	Type
1	w	474	HIS
1	w	493	ASN
1	x	67	GLN
1	x	79	HIS
1	x	93	ASN
1	x	120	GLN
1	x	145	GLN
1	x	159	ASN
1	x	174	HIS
1	x	181	HIS
1	x	220	ASN
1	x	237	HIS
1	x	262	ASN
1	x	331	ASN
1	x	365	ASN
1	x	400	HIS
1	x	431	HIS
1	x	443	GLN
1	x	474	HIS
1	x	493	ASN
1	y	67	GLN
1	y	79	HIS
1	y	93	ASN
1	y	120	GLN
1	y	145	GLN
1	y	159	ASN
1	y	174	HIS
1	y	181	HIS
1	y	220	ASN
1	y	237	HIS
1	y	262	ASN
1	y	331	ASN
1	y	400	HIS
1	y	431	HIS
1	y	443	GLN
1	y	474	HIS
1	y	493	ASN
1	z	67	GLN
1	z	79	HIS
1	z	93	ASN
1	z	120	GLN
1	z	145	GLN

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Mol	Chain	Res	Type
1	z	159	ASN
1	z	174	HIS
1	z	181	HIS
1	z	220	ASN
1	z	237	HIS
1	z	262	ASN
1	z	331	ASN
1	z	365	ASN
1	z	400	HIS
1	z	431	HIS
1	z	443	GLN
1	z	474	HIS
1	z	493	ASN
1	7	67	GLN
1	7	79	HIS
1	7	93	ASN
1	7	120	GLN
1	7	145	GLN
1	7	159	ASN
1	7	174	HIS
1	7	181	HIS
1	7	220	ASN
1	7	237	HIS
1	7	262	ASN
1	7	331	ASN
1	7	400	HIS
1	7	410	ASN
1	7	431	HIS
1	7	443	GLN
1	7	474	HIS
1	7	493	ASN
1	8	67	GLN
1	8	79	HIS
1	8	93	ASN
1	8	145	GLN
1	8	159	ASN
1	8	174	HIS
1	8	181	HIS
1	8	220	ASN
1	8	237	HIS
1	8	262	ASN
1	8	331	ASN

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Mol	Chain	Res	Type
1	8	365	ASN
1	8	400	HIS
1	8	410	ASN
1	8	431	HIS
1	8	443	GLN
1	8	474	HIS
1	8	493	ASN

### 5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

### 5.5 Carbohydrates ⓘ

There are no oligosaccharides in this entry.

### 5.6 Ligand geometry ⓘ

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.

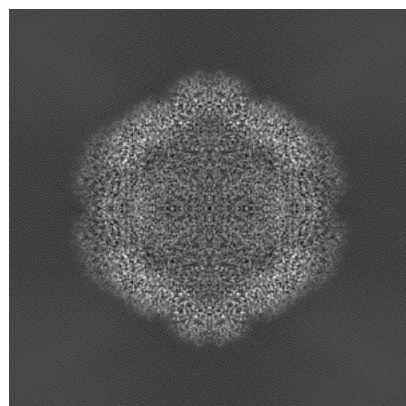
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-41616. These allow visual inspection of the internal detail of the map and identification of artifacts.

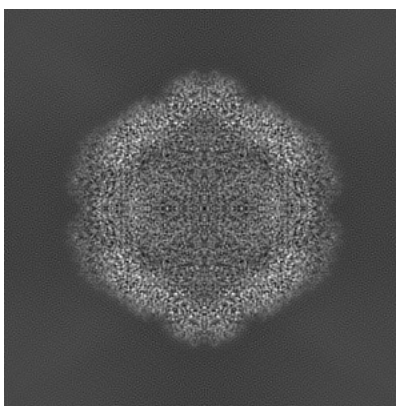
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

### 6.1 Orthogonal projections [i](#)

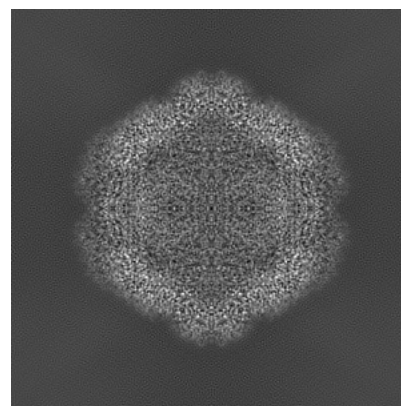
#### 6.1.1 Primary map



X

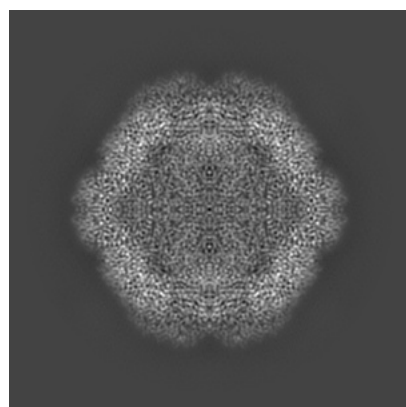


Y

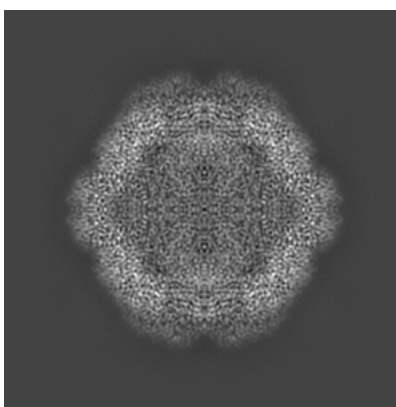


Z

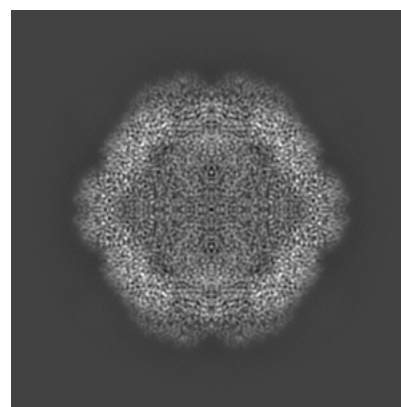
#### 6.1.2 Raw map



X



Y

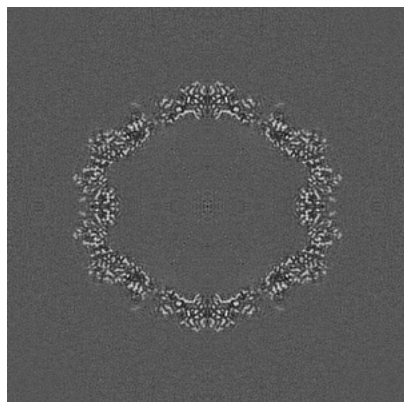


Z

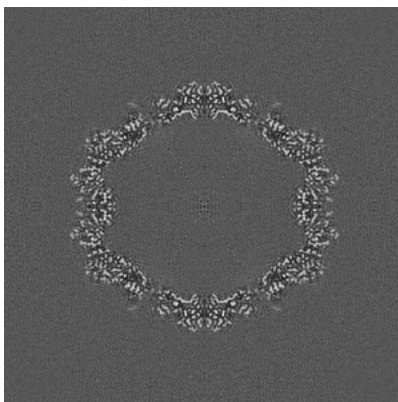
The images above show the map projected in three orthogonal directions.

## 6.2 Central slices [i](#)

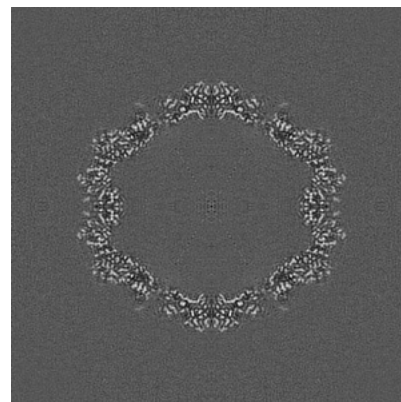
### 6.2.1 Primary map



X Index: 210

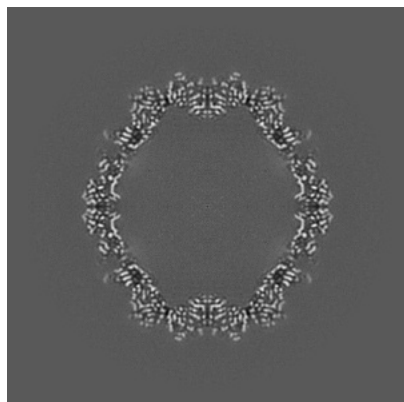


Y Index: 210

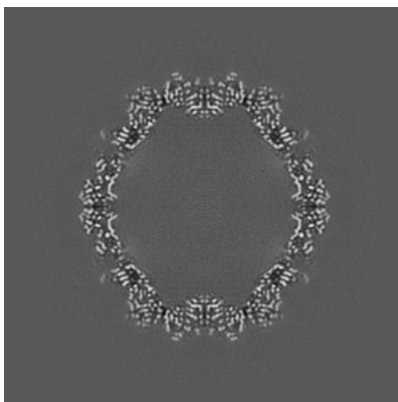


Z Index: 210

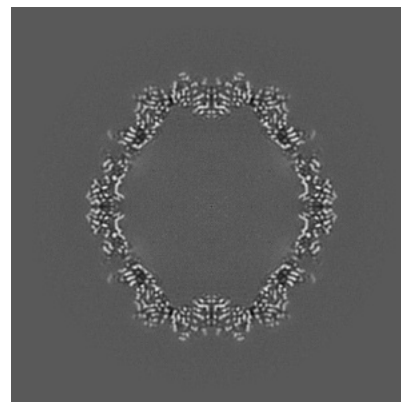
### 6.2.2 Raw map



X Index: 210



Y Index: 210

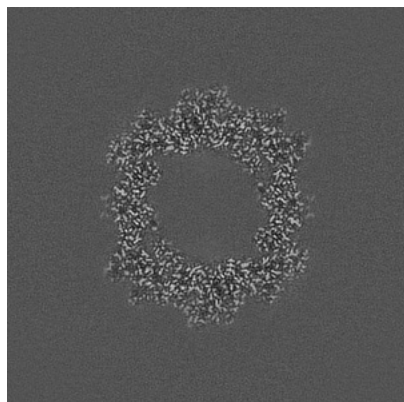


Z Index: 210

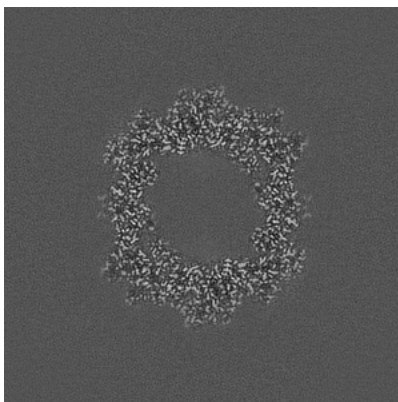
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

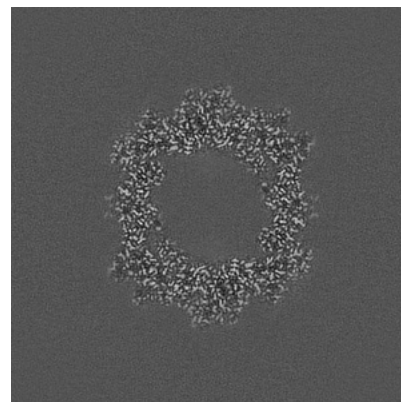
### 6.3.1 Primary map



X Index: 283

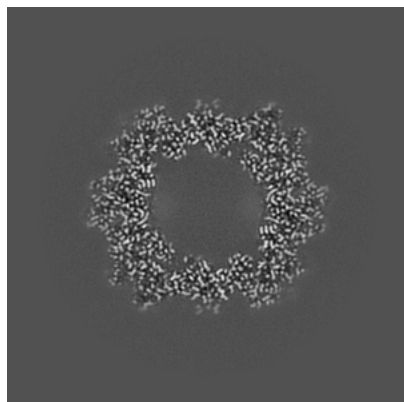


Y Index: 283

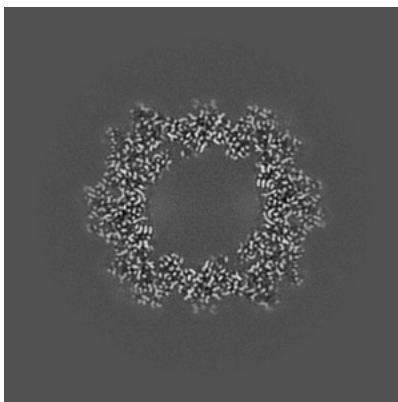


Z Index: 283

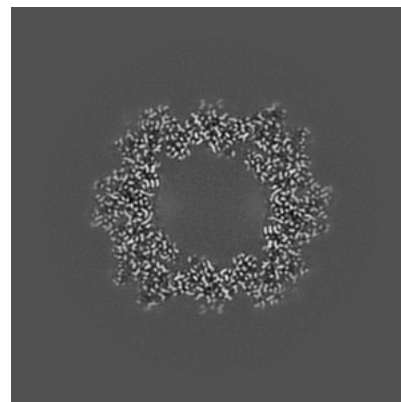
### 6.3.2 Raw map



X Index: 283



Y Index: 137

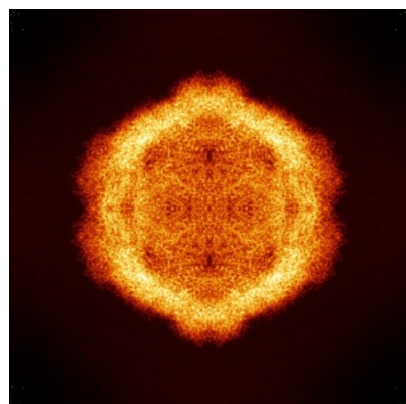


Z Index: 283

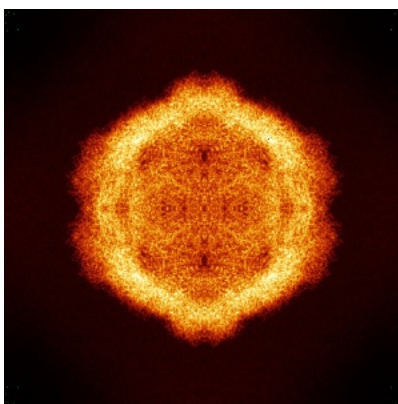
The images above show the largest variance slices of the map in three orthogonal directions.

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

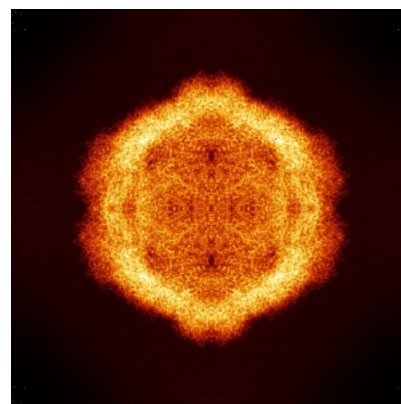
### 6.4.1 Primary map



X

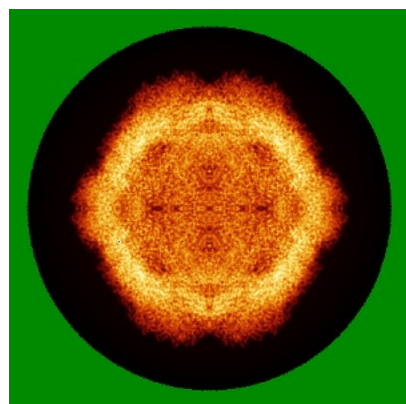


Y

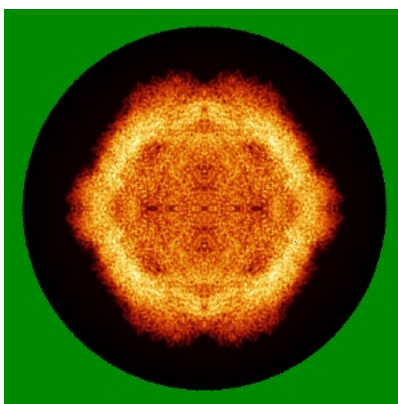


Z

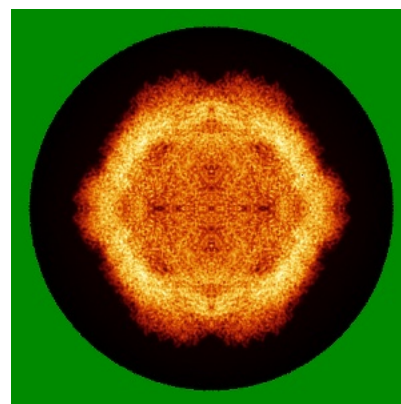
### 6.4.2 Raw map



X



Y



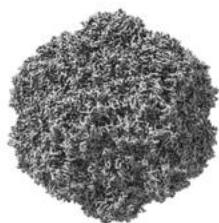
Z

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

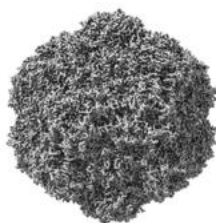


## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



X



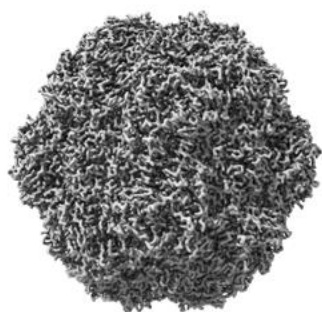
Y



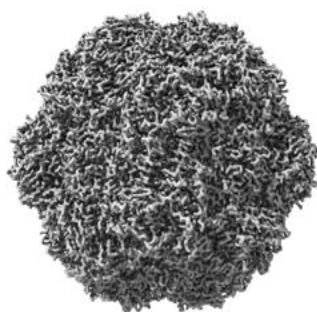
Z

The images above show the 3D surface view of the map at the recommended contour level 2.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

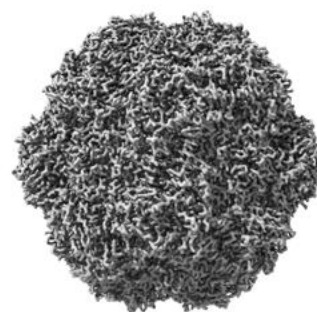
### 6.5.2 Raw map



X



Y



Z

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

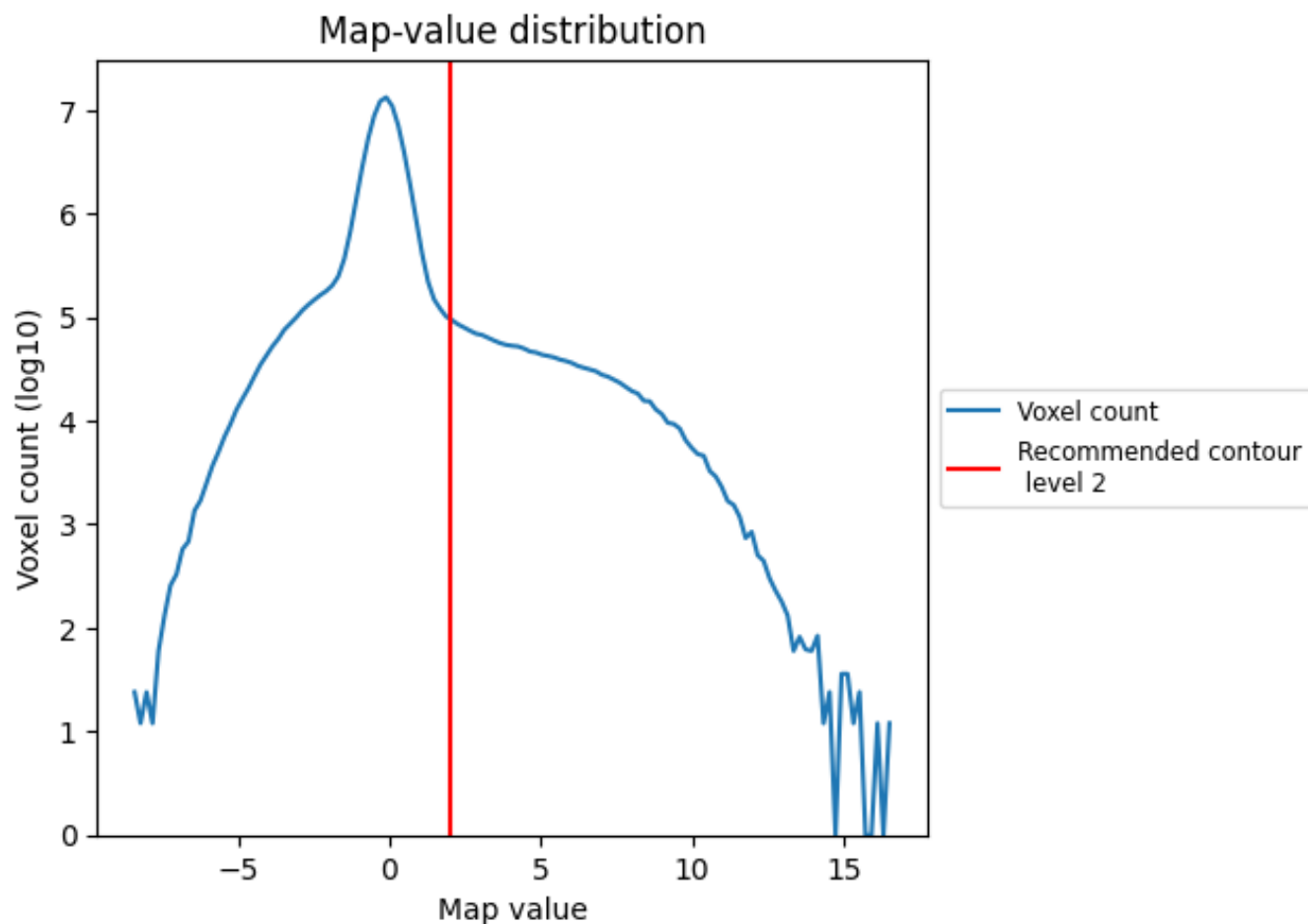
## 6.6 Mask visualisation [i](#)

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

## 7 Map analysis [i](#)

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

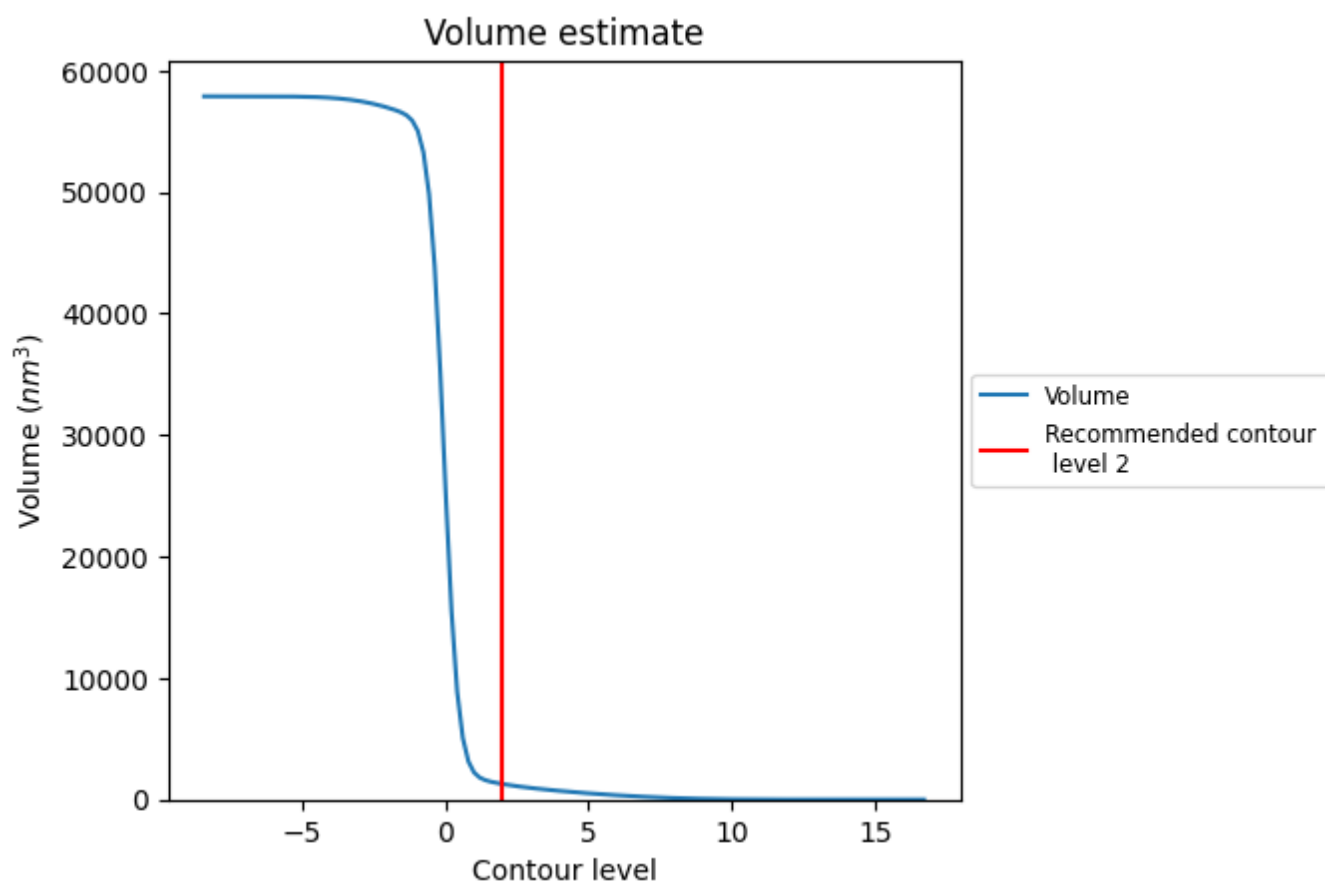
### 7.1 Map-value distribution [i](#)



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



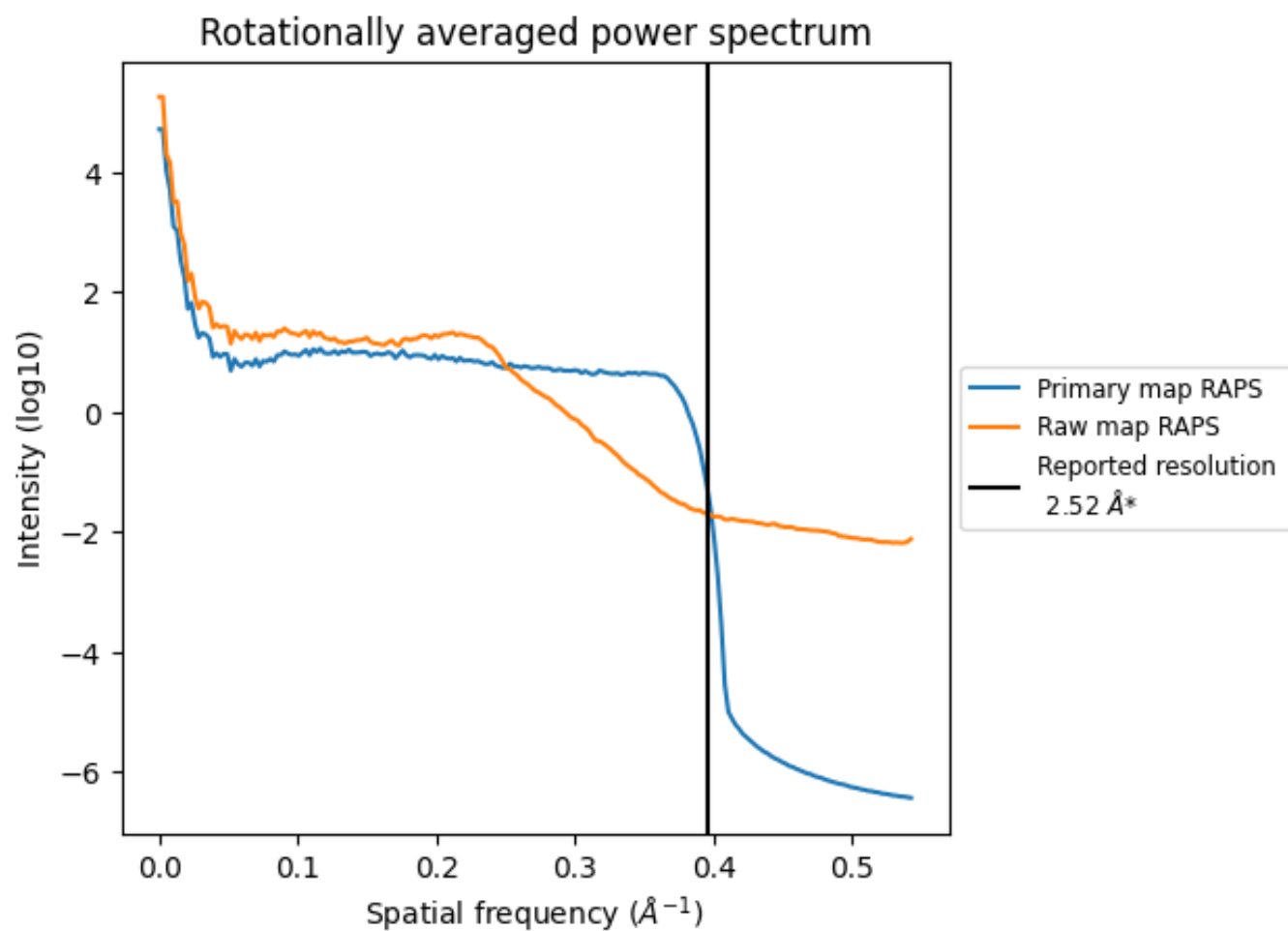
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1278 nm<sup>3</sup>; this corresponds to an approximate mass of 1155 kDa.

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

### 7.3 Rotationally averaged power spectrum ⓘ

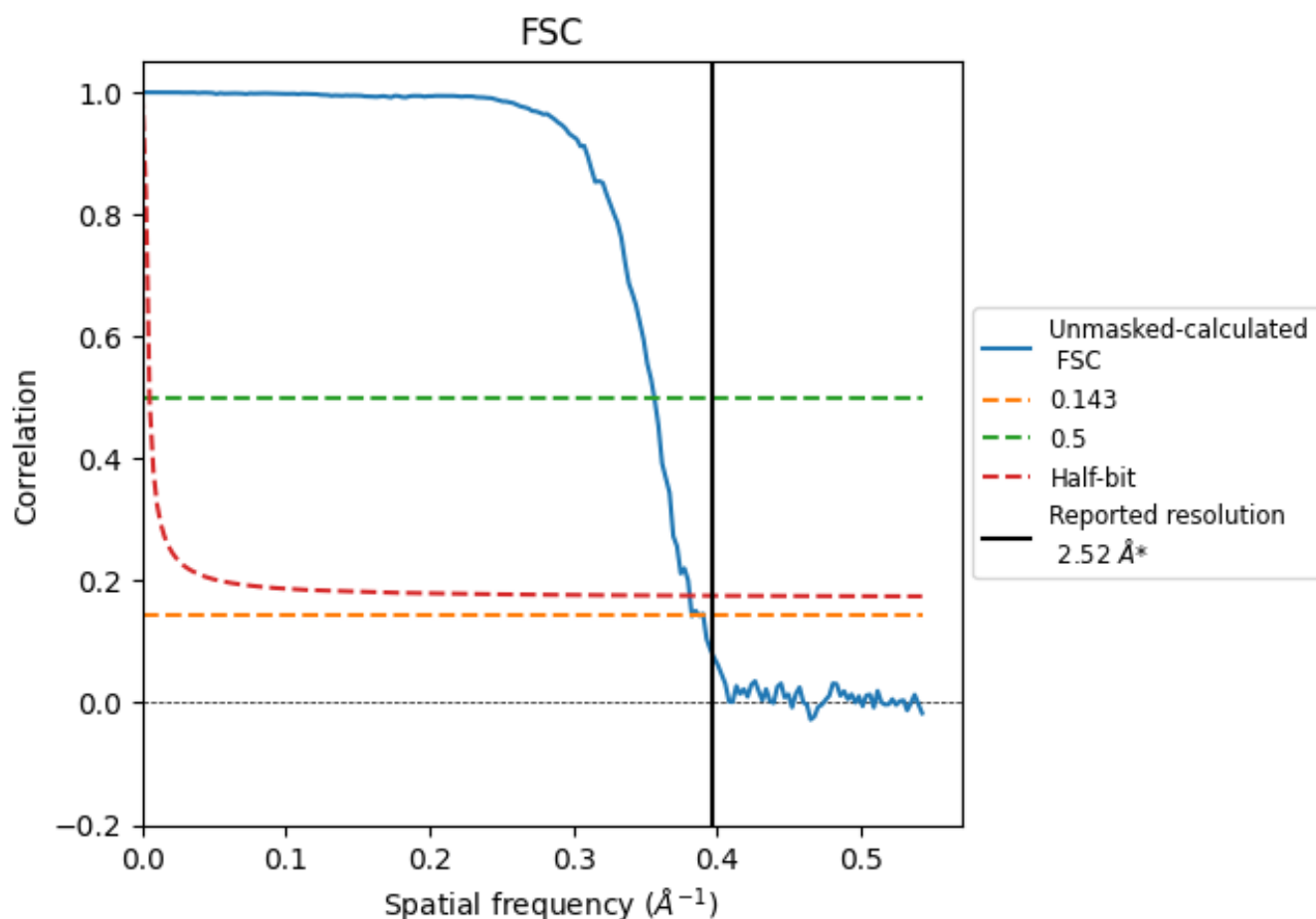


\*Reported resolution corresponds to spatial frequency of  $0.397 \text{ \AA}^{-1}$

## 8 Fourier-Shell correlation [i](#)

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

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of  $0.397 \text{ \AA}^{-1}$

## 8.2 Resolution estimates [i](#)

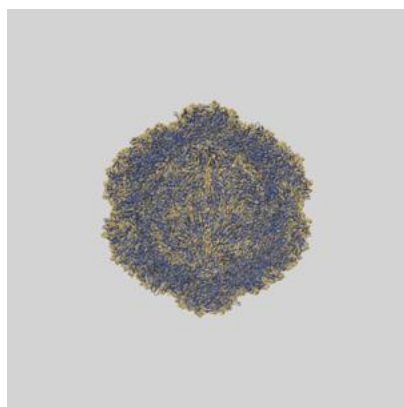
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.52	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	2.61	2.81	2.62

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

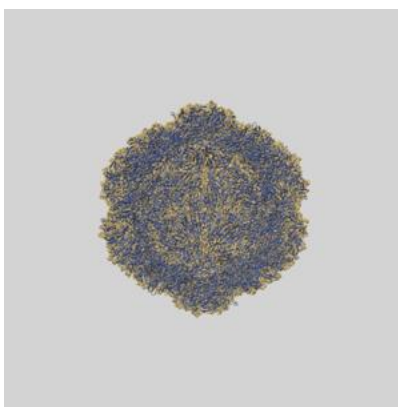
## 9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-41616 and PDB model 8TU2. Per-residue inclusion information can be found in [section 3](#) on [page 10](#).

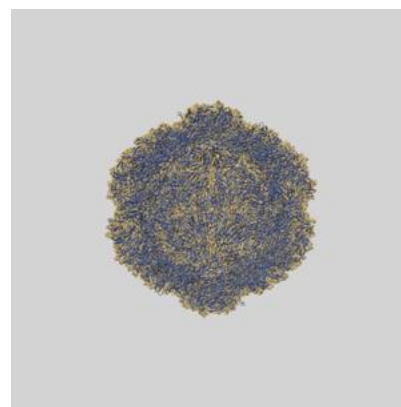
### 9.1 Map-model overlay [i](#)



X



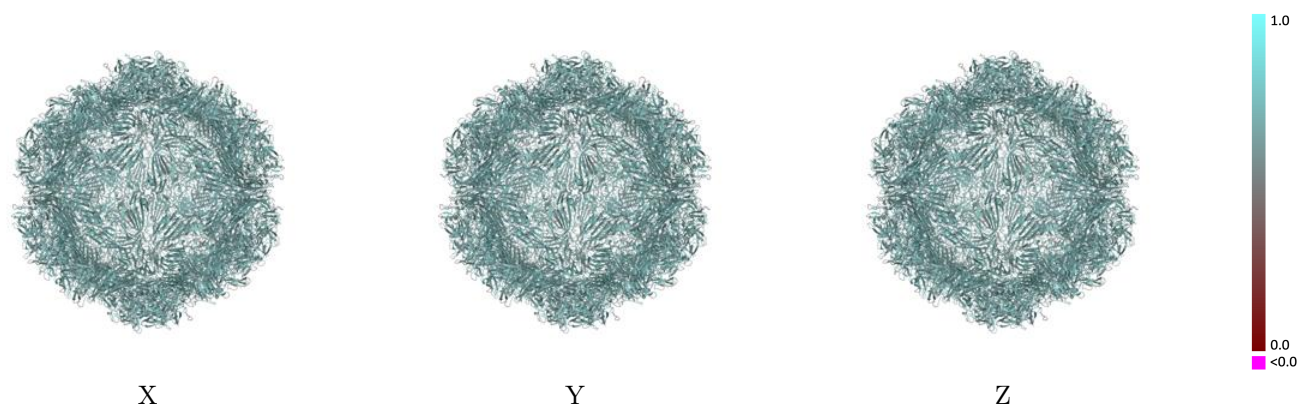
Y



Z

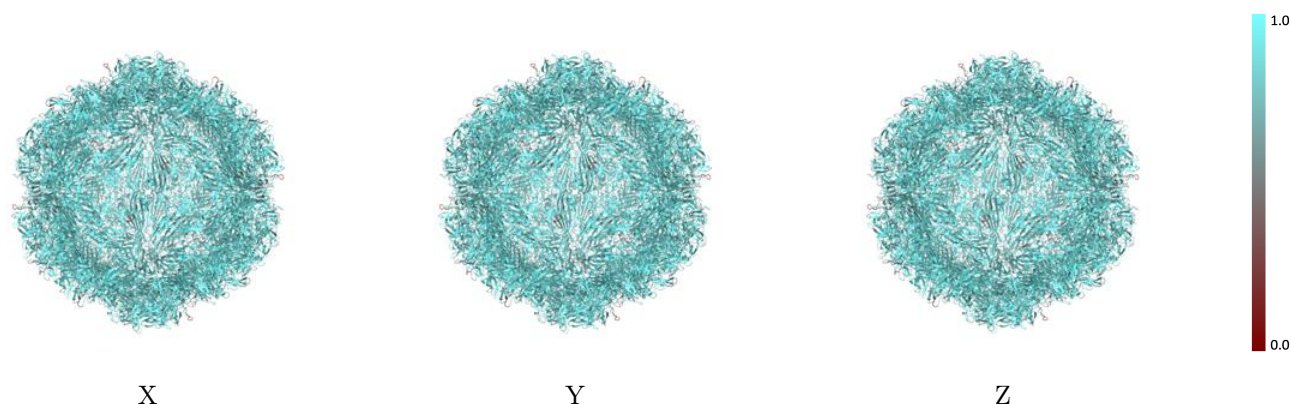
The images above show the 3D surface view of the map at the recommended contour level 2.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



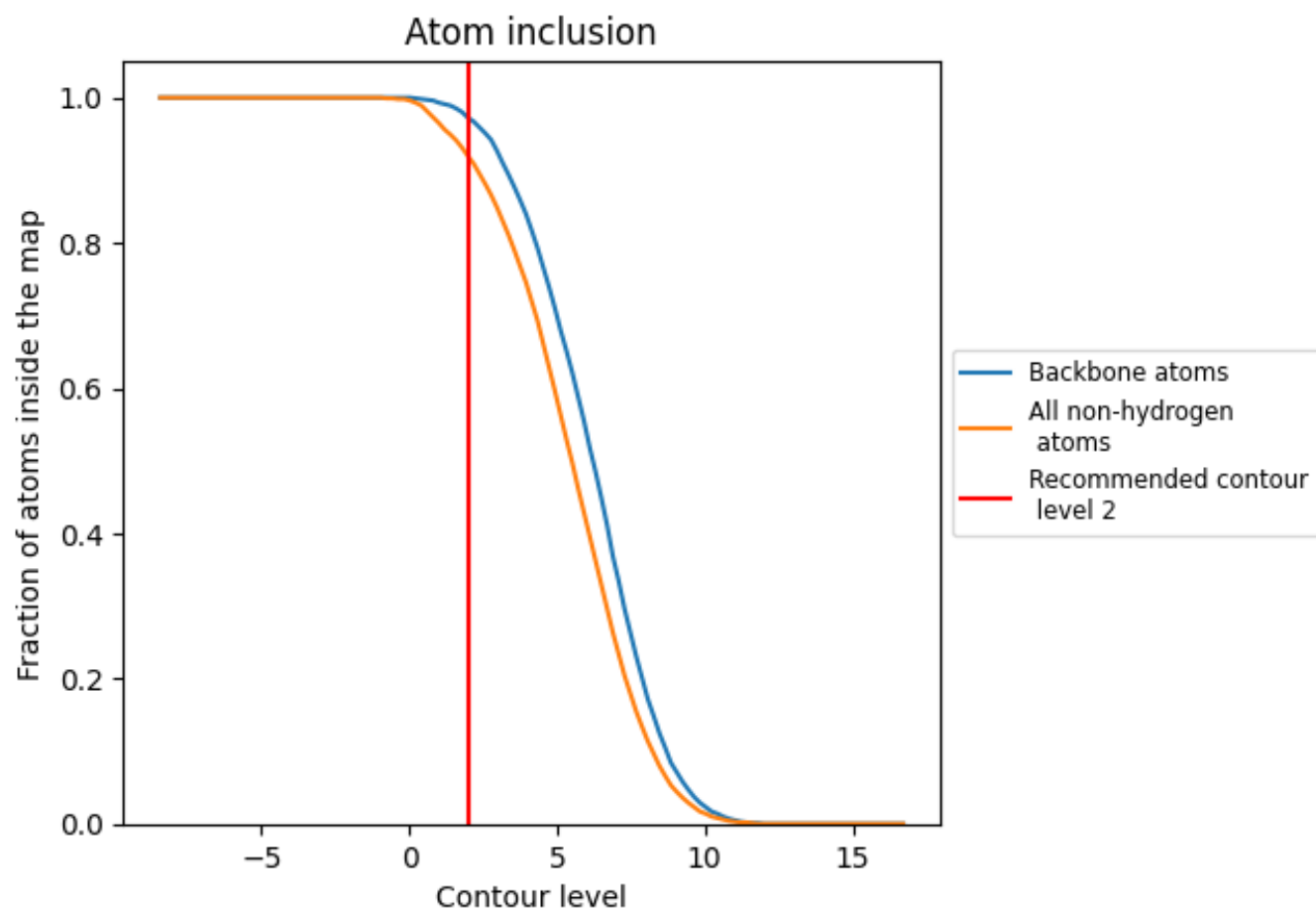
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

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



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (2).







































































## 9.4 Atom inclusion [i](#)



At the recommended contour level, 97% of all backbone atoms, 92% of all non-hydrogen atoms, are inside the map.

## 9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (2) and Q-score for the entire model and for each chain.












































Chain	Atom inclusion	Q-score
All	 0.9190	 0.6630
1	 0.9190	 0.6630
2	 0.9190	 0.6630
3	 0.9190	 0.6620
4	 0.9190	 0.6630
5	 0.9190	 0.6630
6	 0.9190	 0.6630
7	 0.9190	 0.6640
8	 0.9180	 0.6640
A	 0.9190	 0.6630
B	 0.9220	 0.6630
C	 0.9190	 0.6630
D	 0.9190	 0.6630
E	 0.9180	 0.6620
F	 0.9190	 0.6630
G	 0.9180	 0.6630
H	 0.9190	 0.6630
I	 0.9190	 0.6630
J	 0.9220	 0.6630
K	 0.9190	 0.6620
L	 0.9220	 0.6630
M	 0.9190	 0.6630
N	 0.9190	 0.6650
O	 0.9180	 0.6630
P	 0.9190	 0.6640
Q	 0.9190	 0.6640
R	 0.9220	 0.6630
S	 0.9220	 0.6630
T	 0.9190	 0.6640
U	 0.9220	 0.6630
V	 0.9190	 0.6630
W	 0.9190	 0.6640
X	 0.9190	 0.6630
Y	 0.9190	 0.6640
Z	 0.9180	 0.6630



*Continued on next page...*



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Chain	Atom inclusion	Q-score
a	 0.9190	 0.6630
b	 0.9190	 0.6630
c	 0.9190	 0.6640
d	 0.9190	 0.6640
e	 0.9190	 0.6640
f	 0.9180	 0.6630
g	 0.9190	 0.6640
h	 0.9190	 0.6630
i	 0.9190	 0.6630
j	 0.9190	 0.6640
k	 0.9220	 0.6630
l	 0.9220	 0.6630
m	 0.9220	 0.6620
n	 0.9180	 0.6630
o	 0.9190	 0.6630
p	 0.9190	 0.6630
q	 0.9180	 0.6620
r	 0.9190	 0.6630
s	 0.9190	 0.6630
t	 0.9220	 0.6630
u	 0.9220	 0.6640
v	 0.9220	 0.6630
w	 0.9190	 0.6630
x	 0.9190	 0.6630
y	 0.9190	 0.6630
z	 0.9190	 0.6640