



Full wwPDB EM Validation Report ⓘ

Mar 20, 2026 – 12:56 AM UTC

PDB ID : 9CGM / pdb_00009cgm
EMDB ID : EMD-45583
Title : The Structure of Spiroplasma Virus 4
Authors : Mietzsch, M.; McKenna, R.
Deposited on : 2024-06-30
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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

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

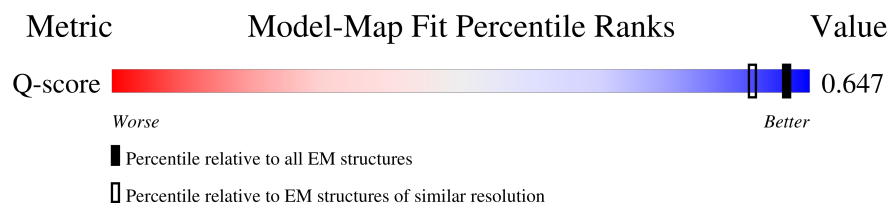
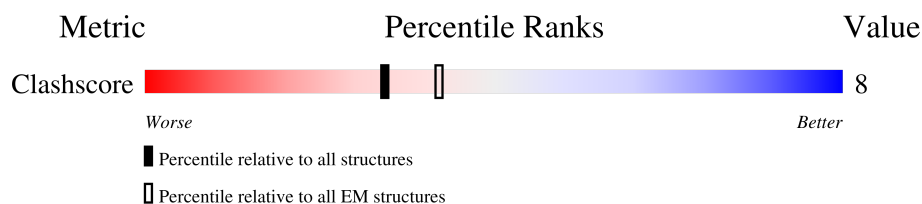
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

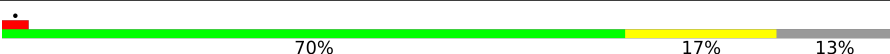
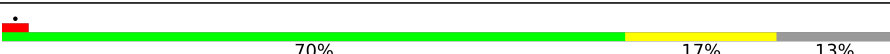
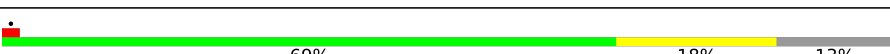
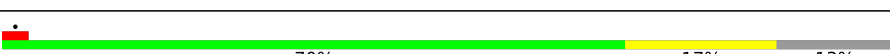
The reported resolution of this entry is 2.52 Å.

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.



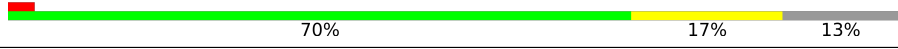
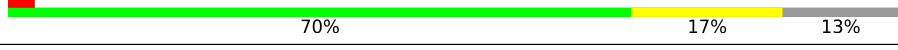
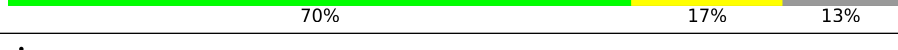
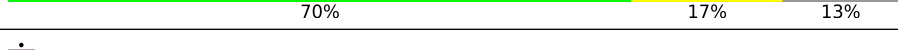
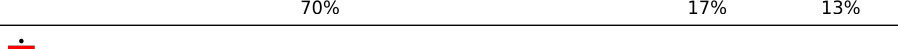
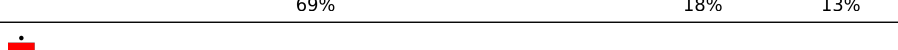
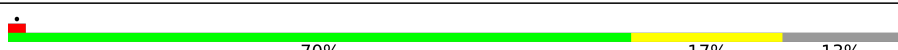
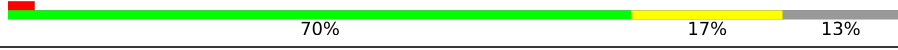
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Q-score	-	25397	7226 (2.02 - 3.02)

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

Mol	Chain	Length	Quality of chain
1	1	553	 70% 17% 13%
1	2	553	 70% 17% 13%
1	3	553	 70% 17% 13%
1	4	553	 70% 17% 13%
1	5	553	 69% 18% 13%
1	6	553	 70% 17% 13%

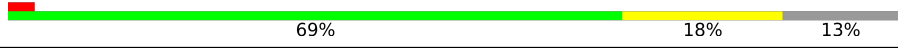
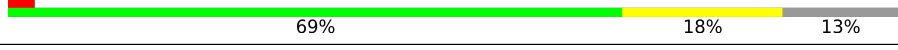
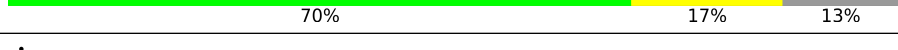
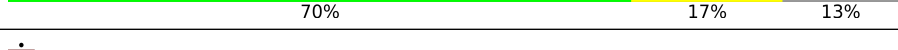
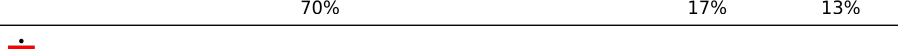
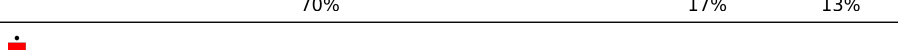
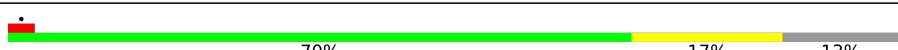
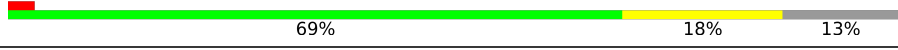
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Mol	Chain	Length	Quality of chain
1	7	553	
1	8	553	
1	A	553	
1	B	553	
1	C	553	
1	D	553	
1	E	553	
1	F	553	
1	G	553	
1	H	553	
1	I	553	
1	J	553	
1	K	553	
1	L	553	
1	M	553	
1	N	553	
1	O	553	
1	P	553	
1	Q	553	
1	R	553	
1	S	553	
1	T	553	
1	U	553	
1	V	553	
1	W	553	

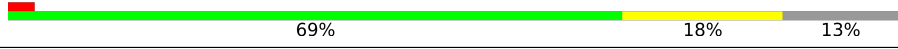
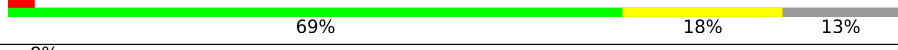
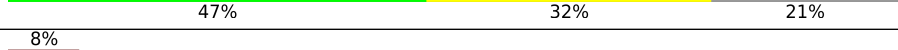
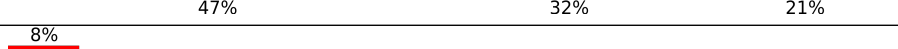
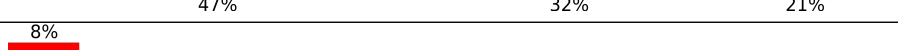
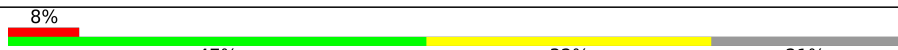
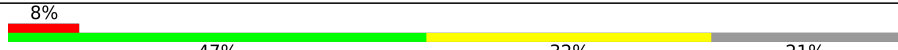
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Mol	Chain	Length	Quality of chain
1	X	553	
1	Y	553	
1	Z	553	
1	a	553	
1	b	553	
1	c	553	
1	d	553	
1	e	553	
1	f	553	
1	g	553	
1	h	553	
1	i	553	
1	j	553	
1	k	553	
1	l	553	
1	m	553	
1	n	553	
1	o	553	
1	p	553	
1	q	553	
1	r	553	
1	s	553	
1	t	553	
1	u	553	
1	v	553	

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Mol	Chain	Length	Quality of chain
1	w	553	
1	x	553	
1	y	553	
1	z	553	
2	0	38	
2	12	38	
2	22	38	
2	32	38	
2	42	38	
2	52	38	
2	62	38	
2	72	38	
2	82	38	
2	9	38	
2	C2	38	
2	D2	38	
2	E2	38	
2	F2	38	
2	G2	38	
2	H2	38	
2	I2	38	
2	J2	38	
2	K2	38	
2	L2	38	
2	M2	38	

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Mol	Chain	Length	Quality of chain			
2	N2	38	8%	47%	32%	21%
2	O2	38	8%	47%	32%	21%
2	P2	38	8%	47%	32%	21%
2	Q2	38	8%	47%	32%	21%
2	R2	38	8%	47%	32%	21%
2	S2	38	8%	47%	32%	21%
2	T2	38	8%	47%	32%	21%
2	U2	38	8%	47%	32%	21%
2	V2	38	8%	47%	32%	21%
2	W2	38	8%	47%	32%	21%
2	X2	38	8%	47%	32%	21%
2	Y2	38	8%	47%	32%	21%
2	Z2	38	8%	53%	26%	21%
2	a2	38	8%	47%	32%	21%
2	b2	38	8%	47%	32%	21%
2	c2	38	8%	47%	32%	21%
2	d2	38	8%	47%	32%	21%
2	e2	38	8%	47%	32%	21%
2	f2	38	8%	47%	32%	21%
2	g2	38	8%	47%	32%	21%
2	h2	38	8%	47%	32%	21%
2	i2	38	8%	47%	32%	21%
2	j2	38	8%	47%	32%	21%
2	k2	38	8%	47%	32%	21%
2	l2	38	8%	47%	32%	21%

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Mol	Chain	Length	Quality of chain
2	m2	38	
2	n2	38	
2	o2	38	
2	p2	38	
2	q2	38	
2	r2	38	
2	s2	38	
2	t2	38	
2	u2	38	
2	v2	38	
2	w2	38	
2	x2	38	
2	y2	38	
2	z2	38	

2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 246420 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 Capsid protein VP1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	B	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	C	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	D	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	E	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	F	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	G	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	H	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	I	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	J	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	K	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	L	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	M	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	N	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	O	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	P	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	Q	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	R	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	S	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	T	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	U	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	V	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	W	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	X	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	Y	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	Z	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	a	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	b	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	c	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	d	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	e	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	f	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	g	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	h	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	i	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	j	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	k	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	l	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	m	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	n	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	o	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	p	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	q	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	r	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	s	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	t	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	u	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	v	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	w	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	x	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	y	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	z	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	1	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	2	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	3	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	4	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	5	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	6	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		
1	7	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	8	482	Total	C	N	O	S	0	0
			3853	2458	665	716	14		

- Molecule 2 is a protein called DNA binding protein ORF8.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	0	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	9	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	C2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	D2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	E2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	F2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	G2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	H2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	I2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	J2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	K2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	L2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	M2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	N2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	O2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	P2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	Q2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	R2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
2	S2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	T2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	U2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	V2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	W2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	X2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	Y2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	Z2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	a2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	b2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	c2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	d2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	e2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	f2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	g2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	h2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	i2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	j2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	k2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	l2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	m2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		

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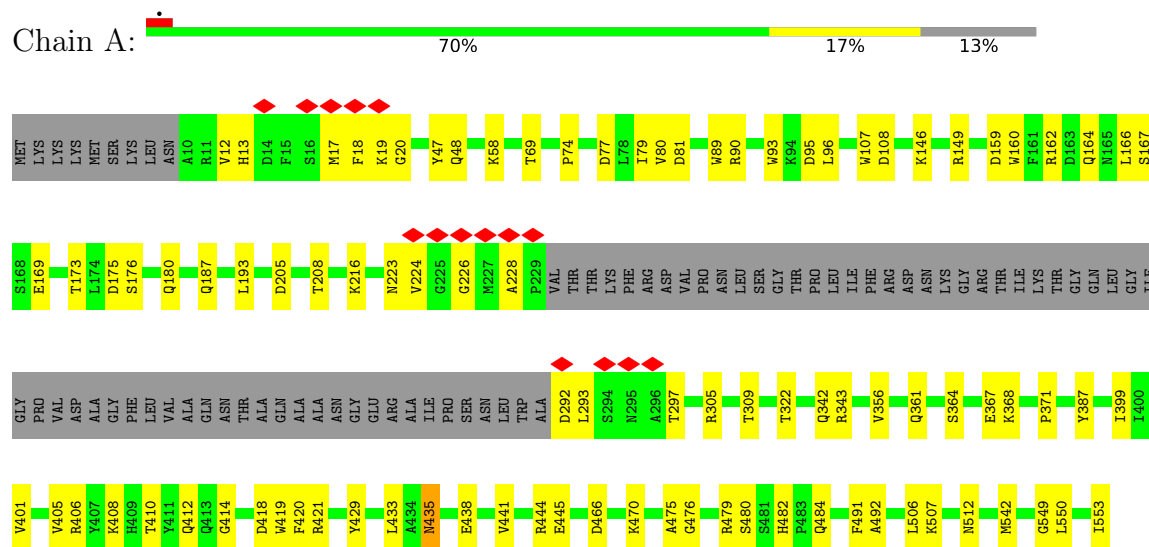
Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
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			254	155	61	37	1		
2	o2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	p2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	q2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	r2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	s2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	t2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	u2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	v2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	w2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	x2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	y2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	z2	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	12	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	22	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	32	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	42	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	52	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	62	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	72	30	Total	C	N	O	S	0	0
			254	155	61	37	1		
2	82	30	Total	C	N	O	S	0	0
			254	155	61	37	1		

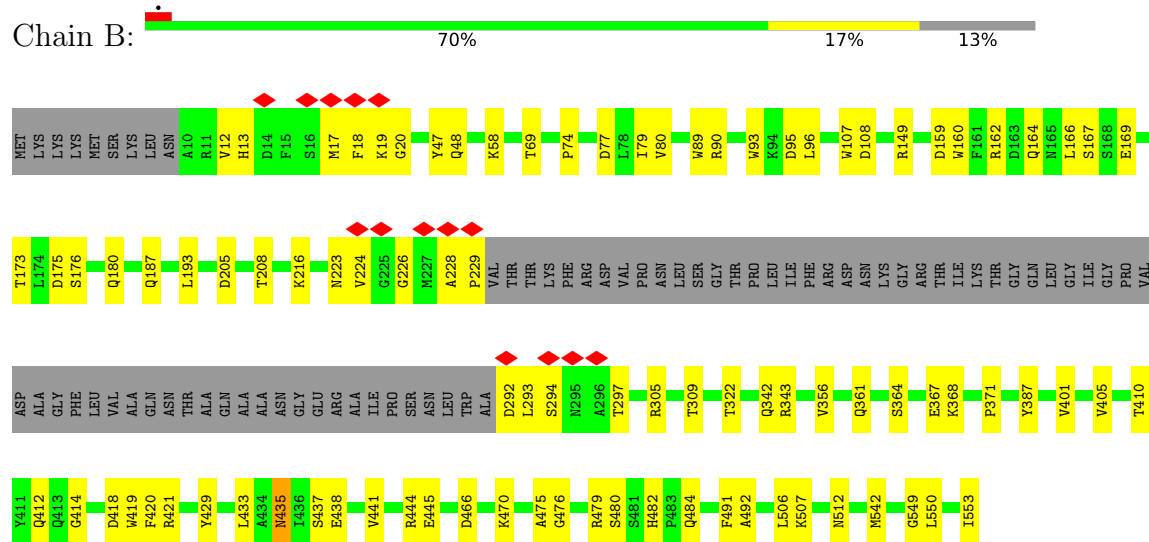
3 Residue-property plots

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.

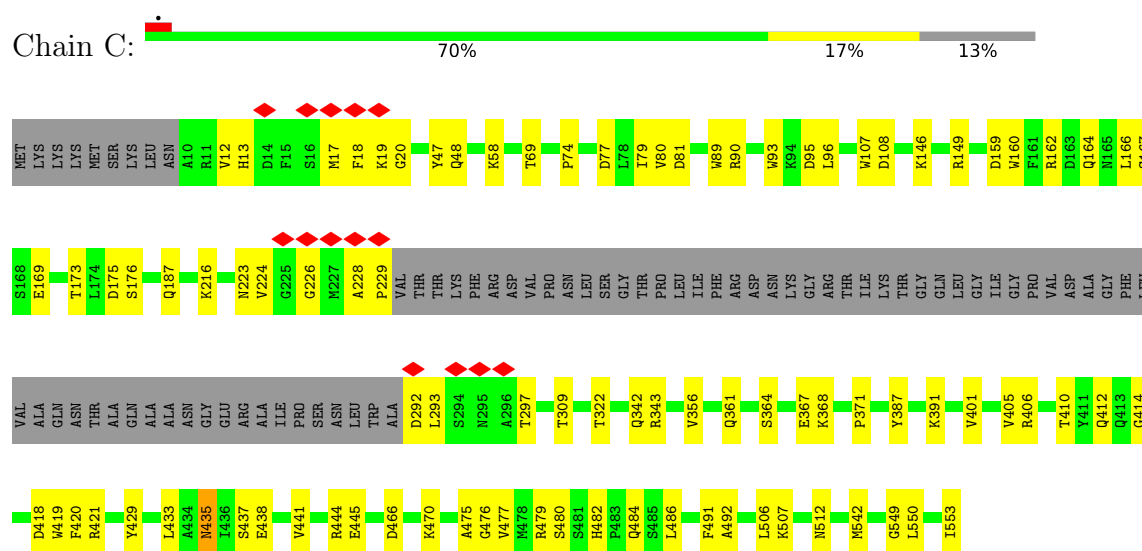
• Molecule 1: Capsid protein VP1



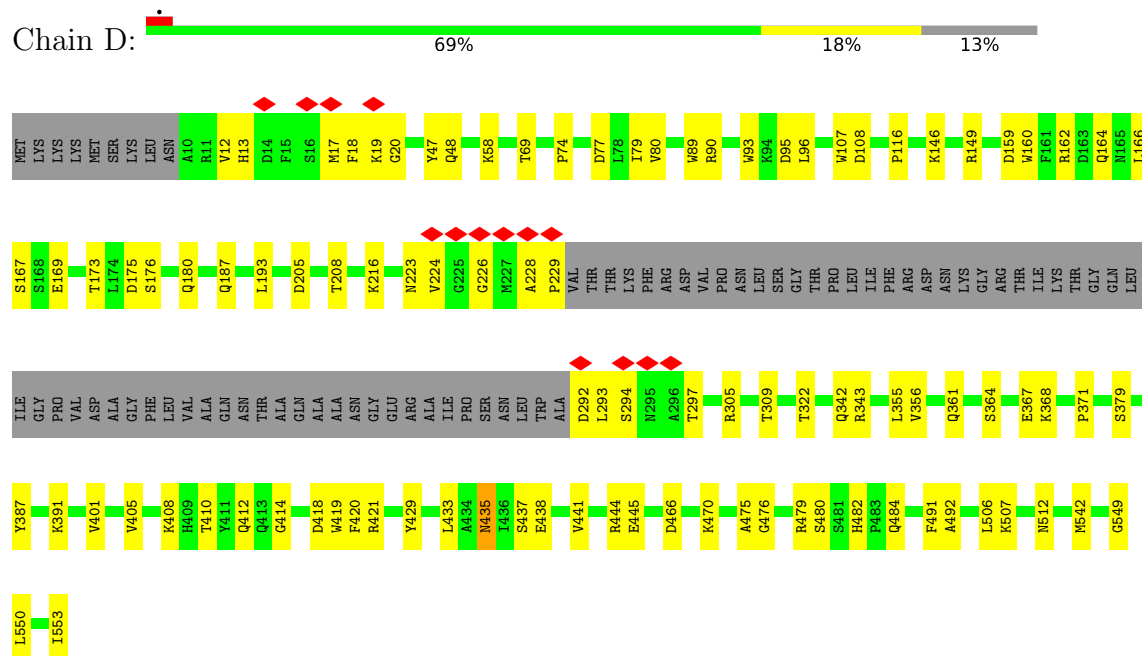
• Molecule 1: Capsid protein VP1



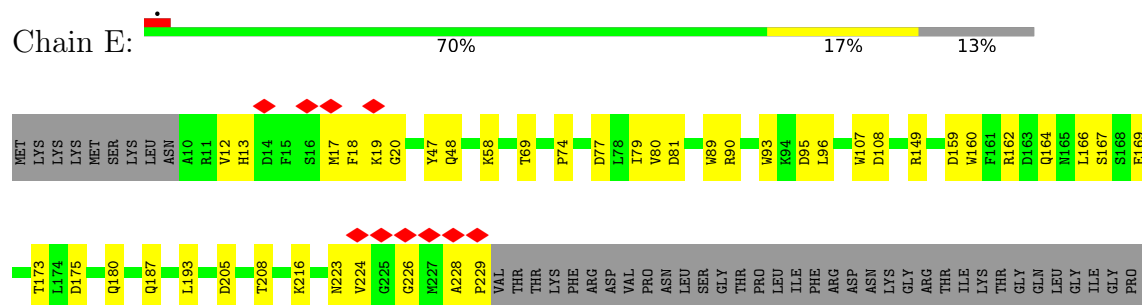
• Molecule 1: Capsid protein VP1

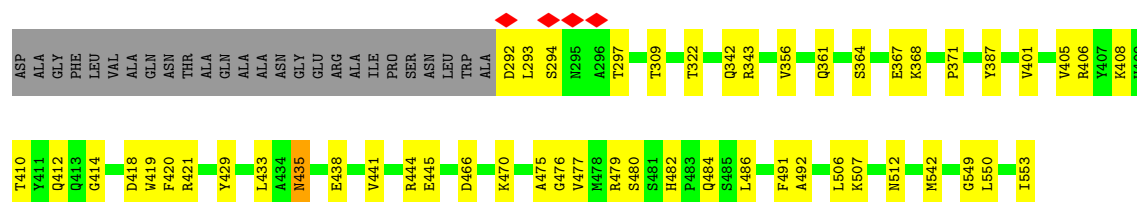


- Molecule 1: Capsid protein VP1

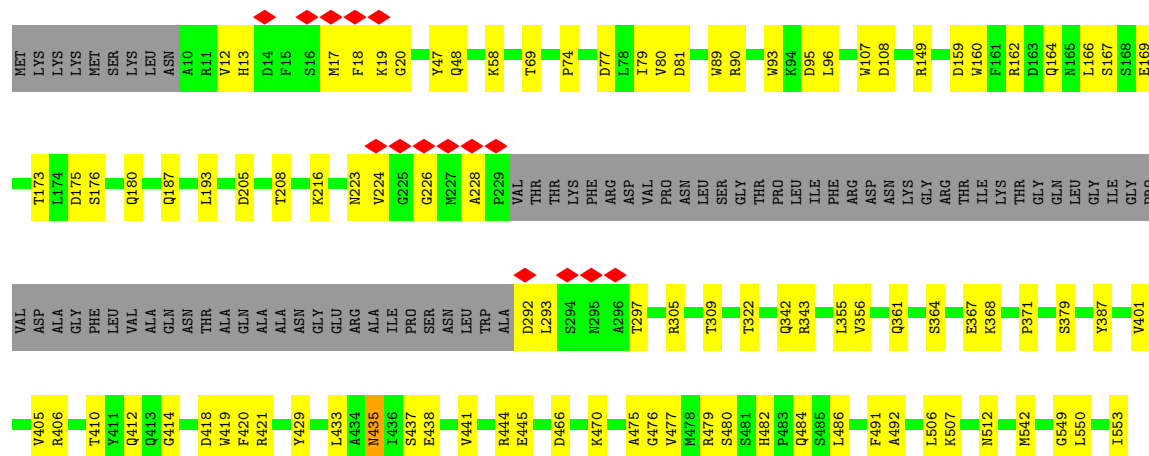


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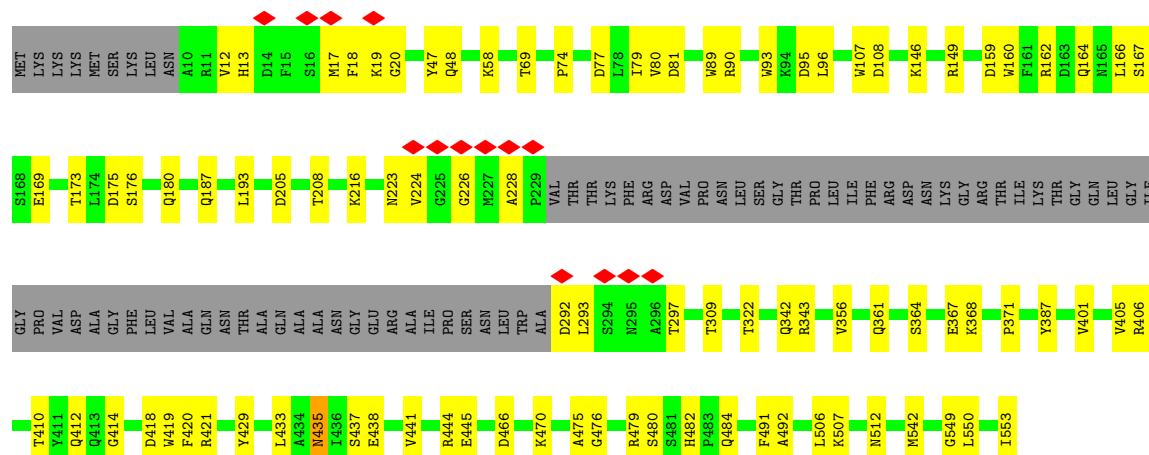




• Molecule 1: Capsid protein VP1

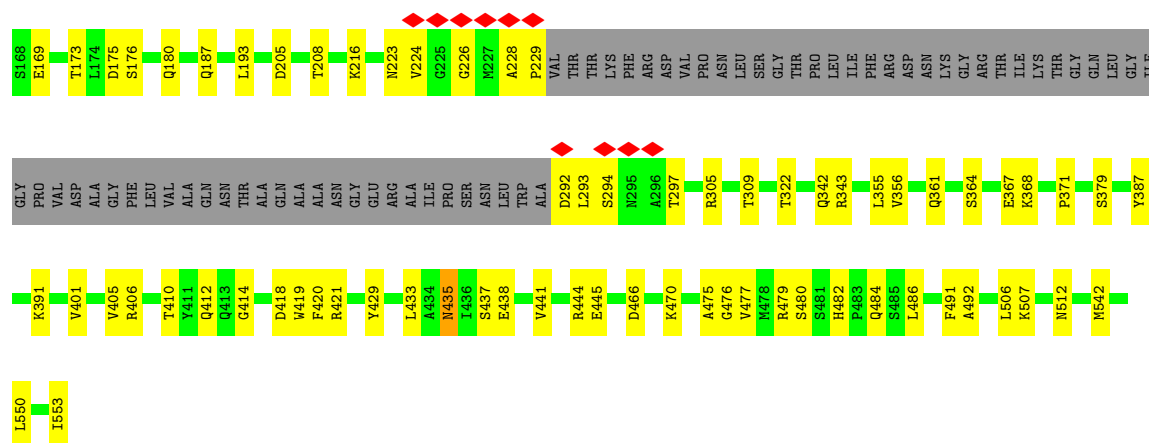


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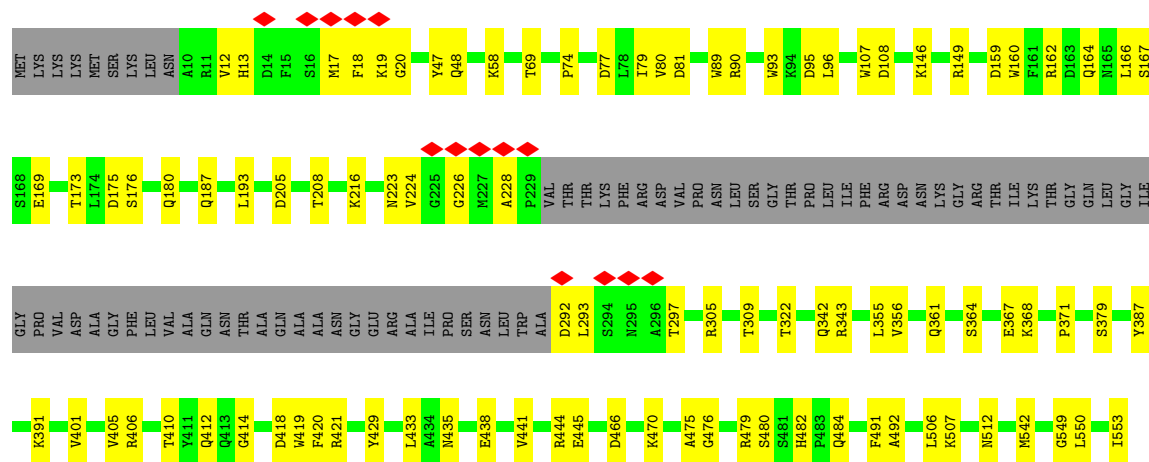


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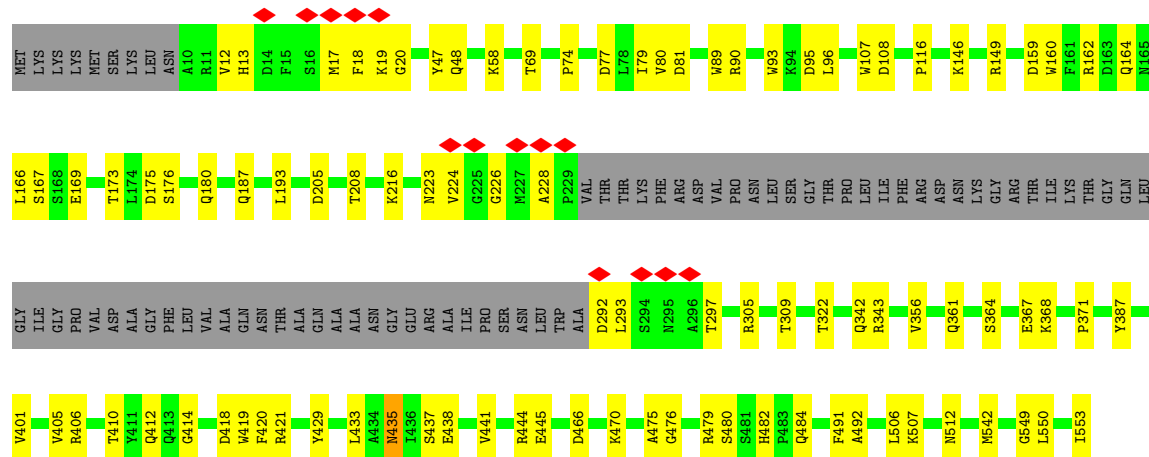




• Molecule 1: Capsid protein VP1

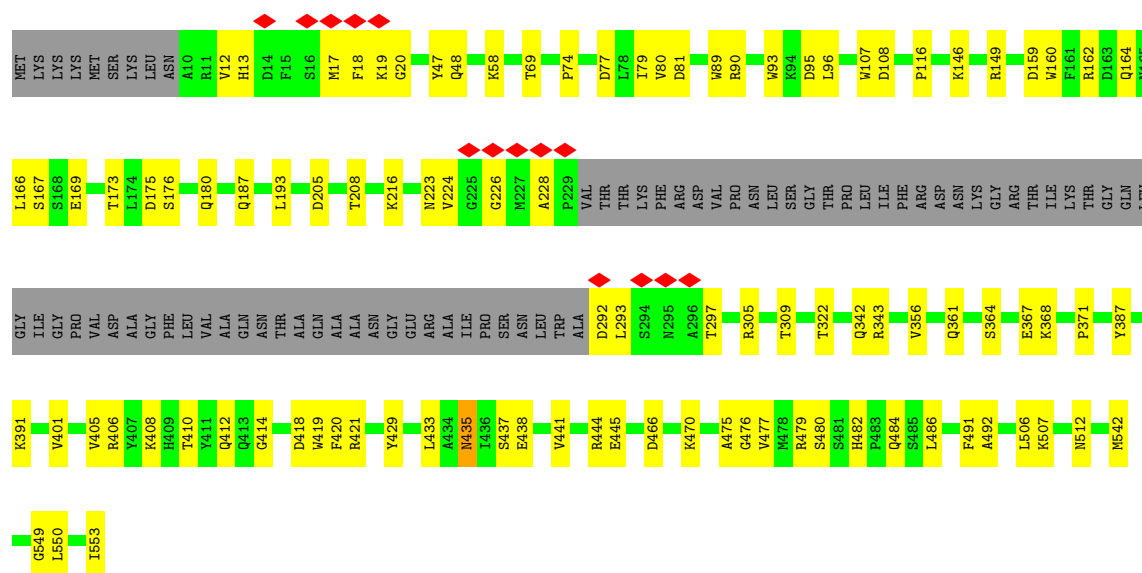


• Molecule 1: Capsid protein VP1



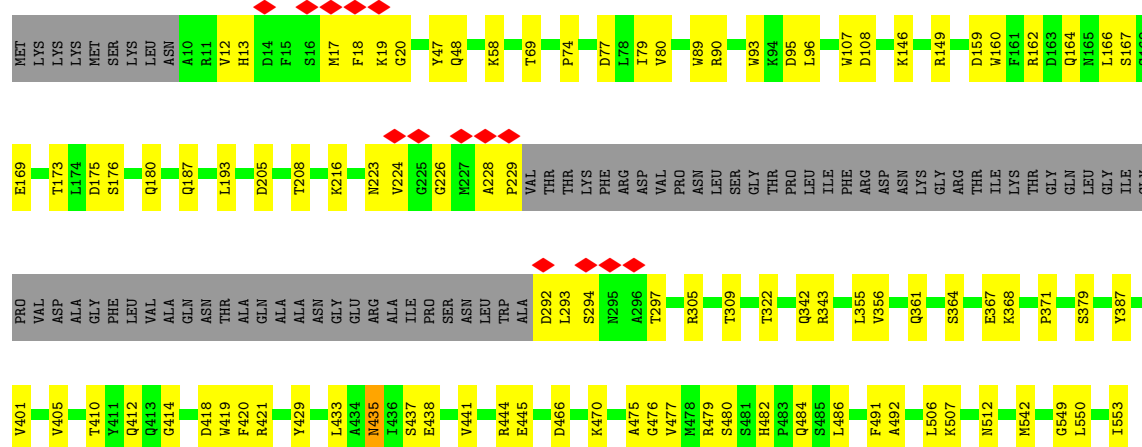
• Molecule 1: Capsid protein VP1

Chain K:  69% 18% 13%



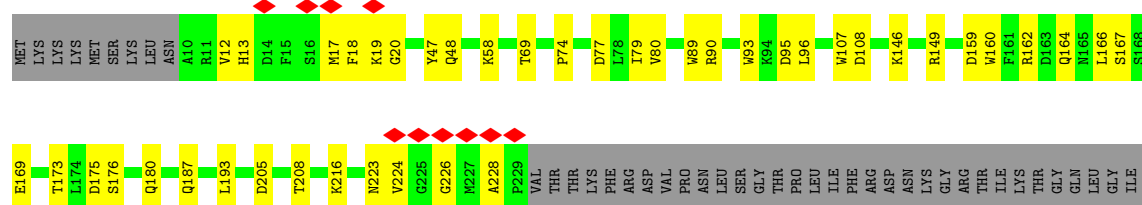
• Molecule 1: Capsid protein VP1

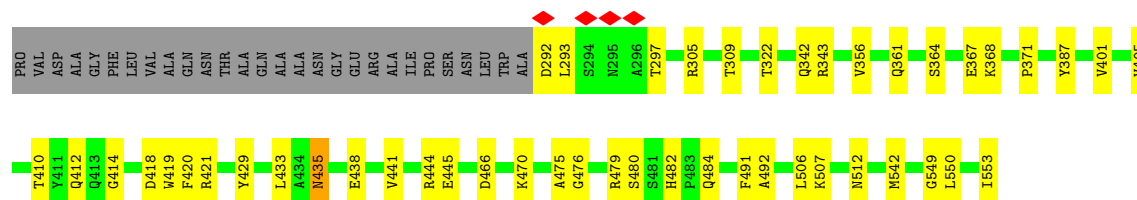
Chain L:  69% 18% 13%



• Molecule 1: Capsid protein VP1

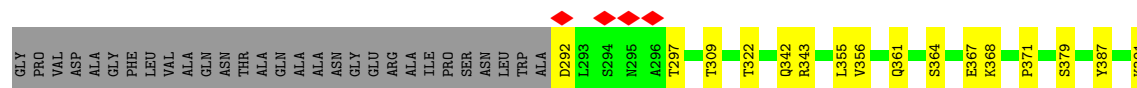
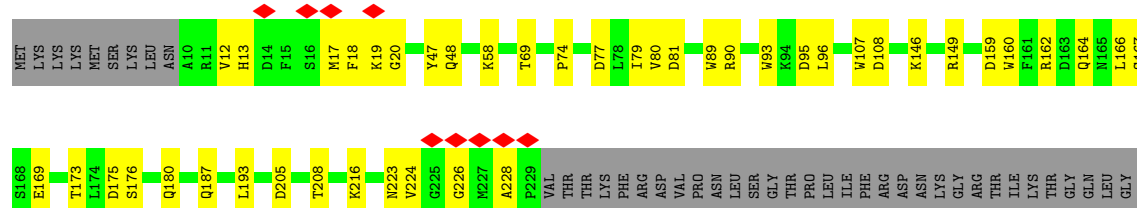
Chain M:  71% 16% 13%





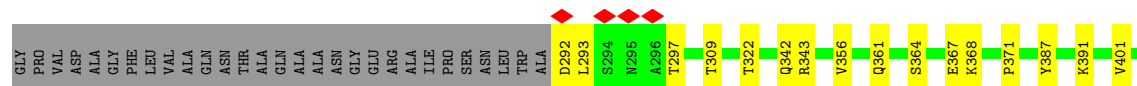
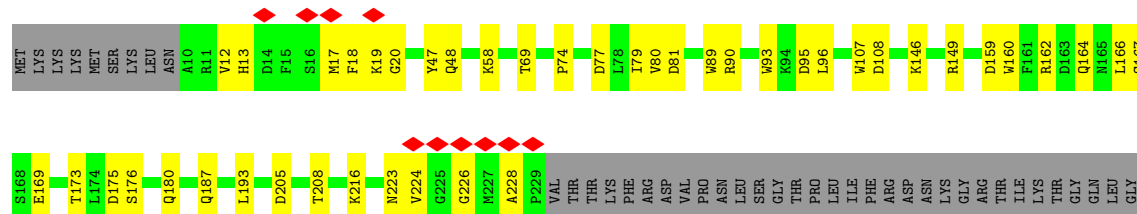
- Molecule 1: Capsid protein VP1

Chain N: 70% 17% 13%



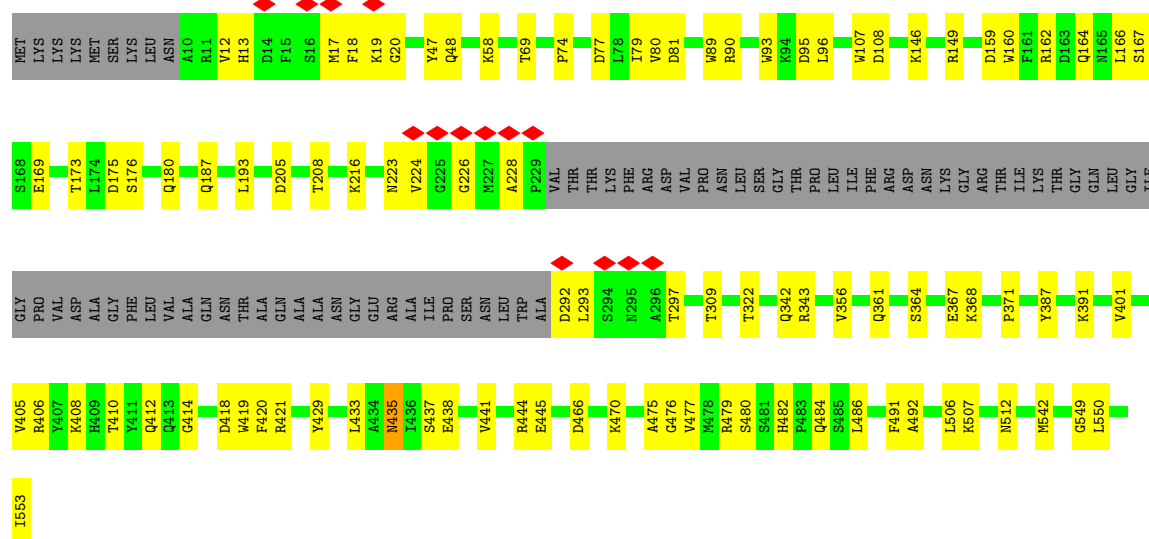
- Molecule 1: Capsid protein VP1

Chain O: 70% 17% 13%



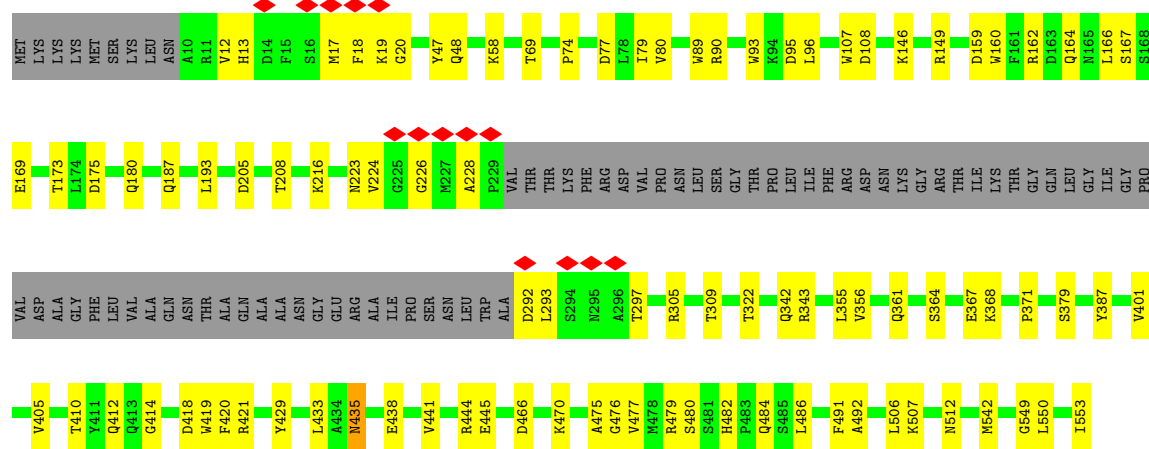
- Molecule 1: Capsid protein VP1

Chain P: 



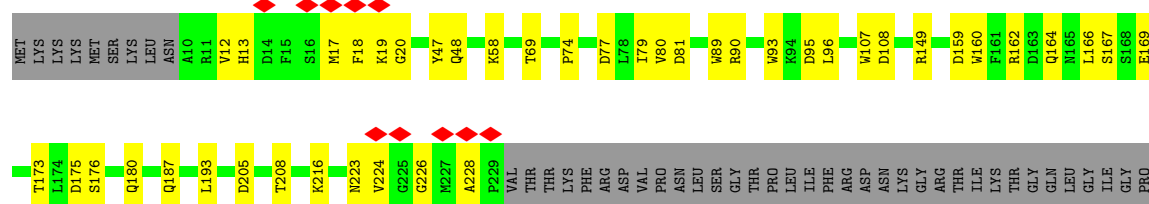
• Molecule 1: Capsid protein VP1

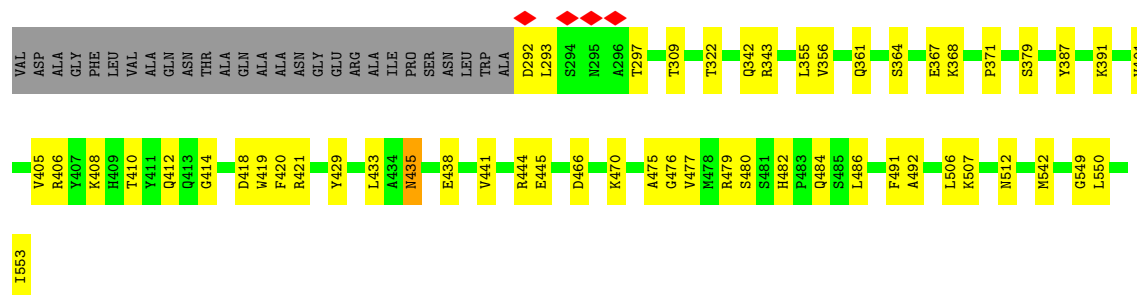
Chain Q: 



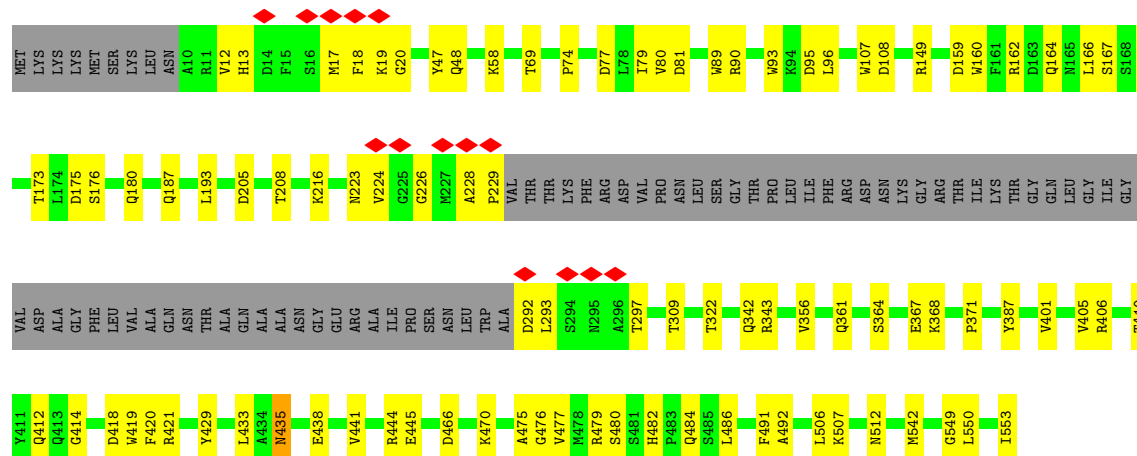
• Molecule 1: Capsid protein VP1

Chain R: 

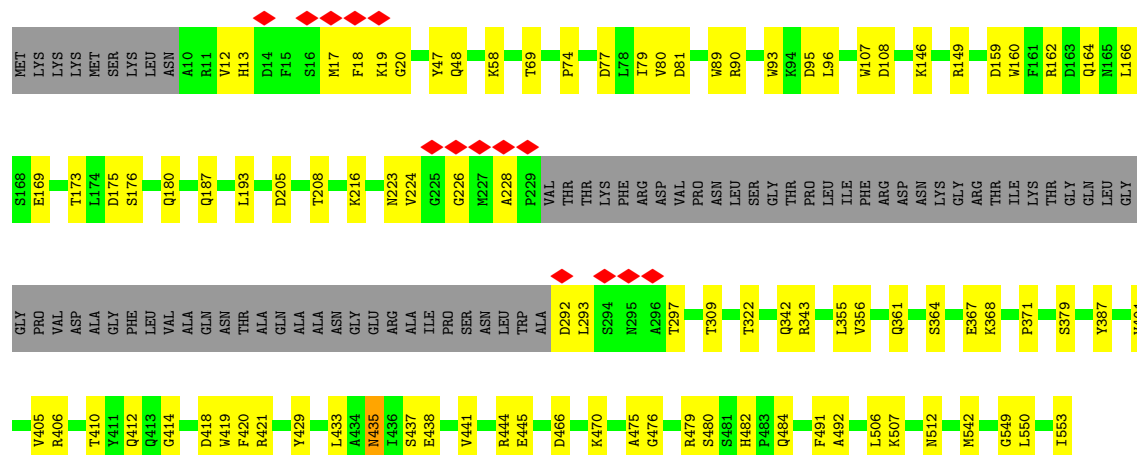




• Molecule 1: Capsid protein VP1

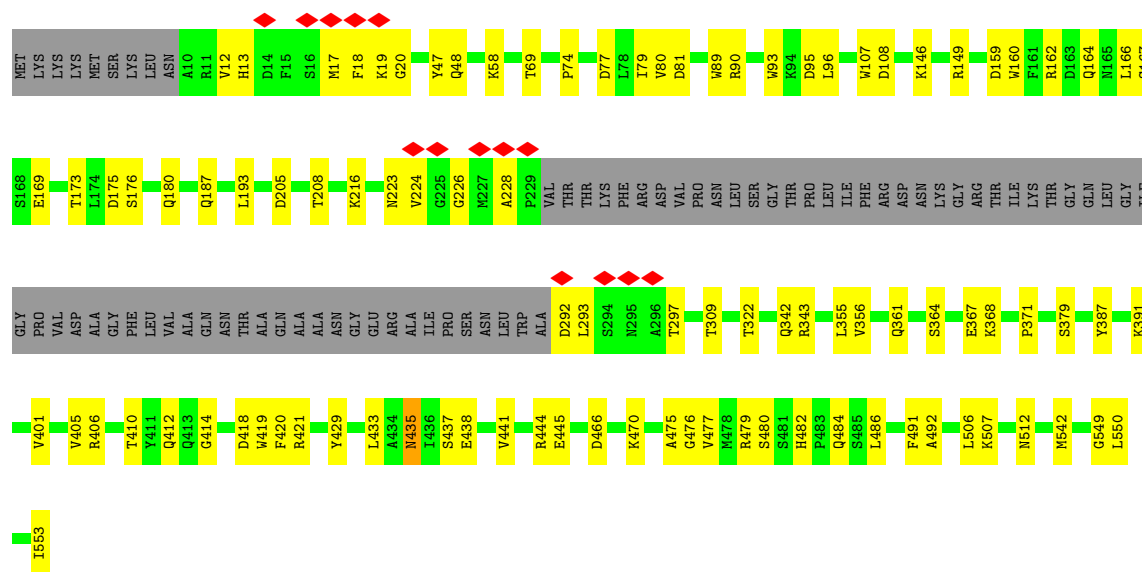


• Molecule 1: Capsid protein VP1

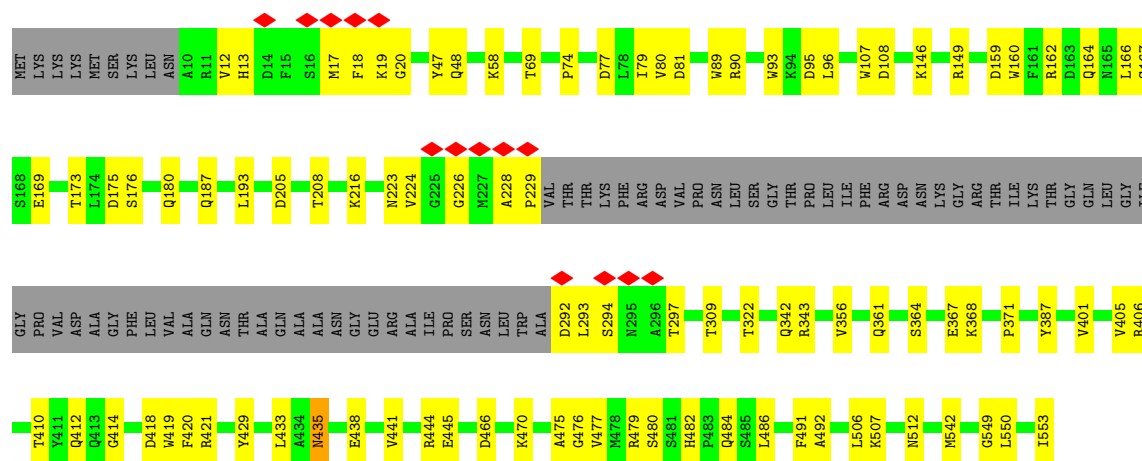


• Molecule 1: Capsid protein VP1

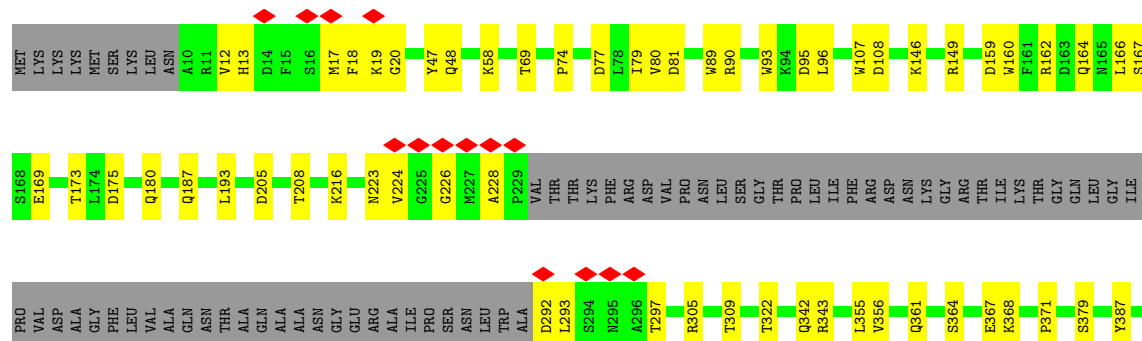




• Molecule 1: Capsid protein VP1



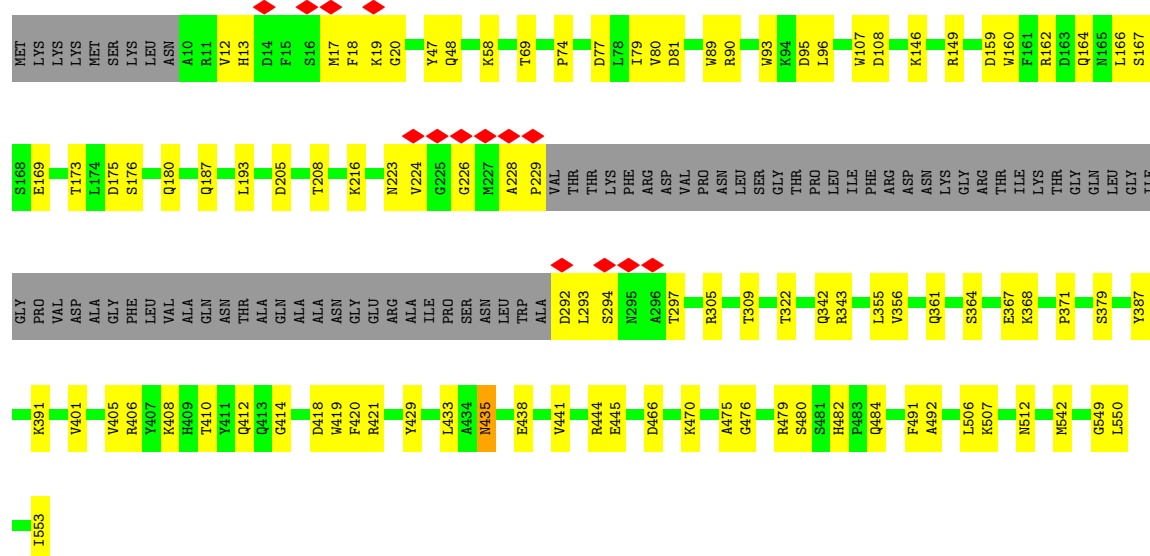
• Molecule 1: Capsid protein VP1





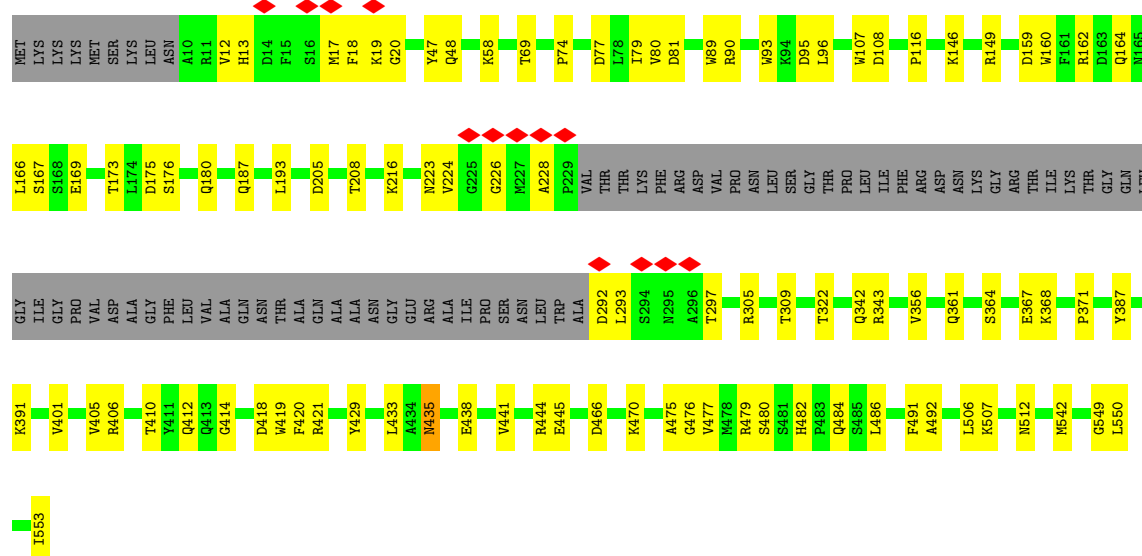
• Molecule 1: Capsid protein VP1

Chain X: 69% 18% 13%



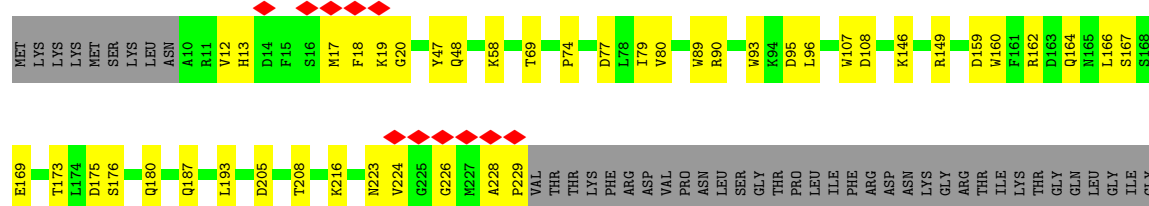
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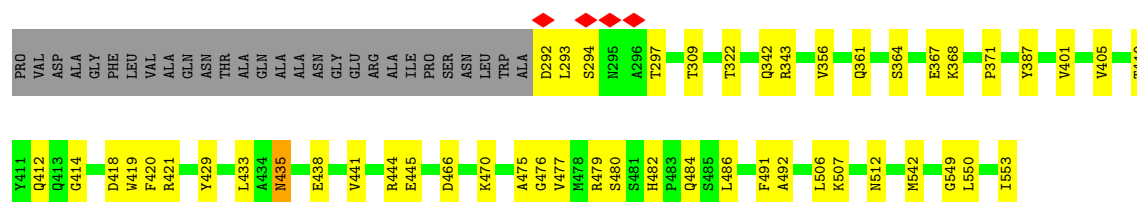
Chain Y: 70% 17% 13%



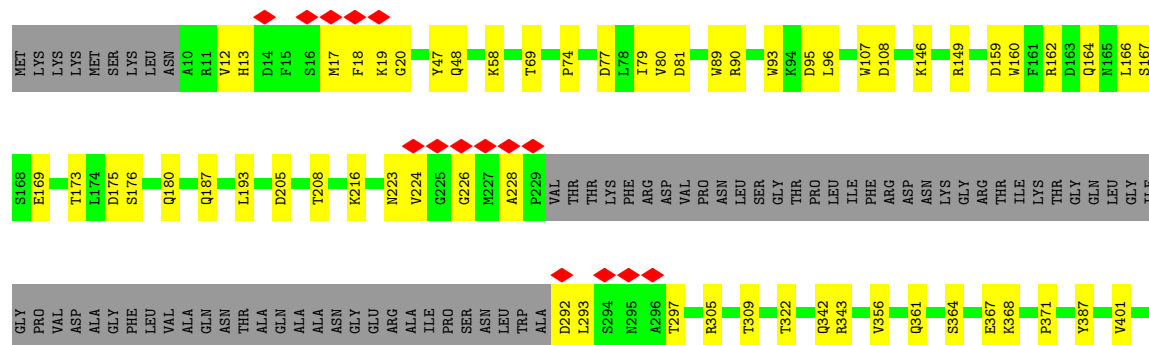
• Molecule 1: Capsid protein VP1

Chain Z: 69% 18% 13%

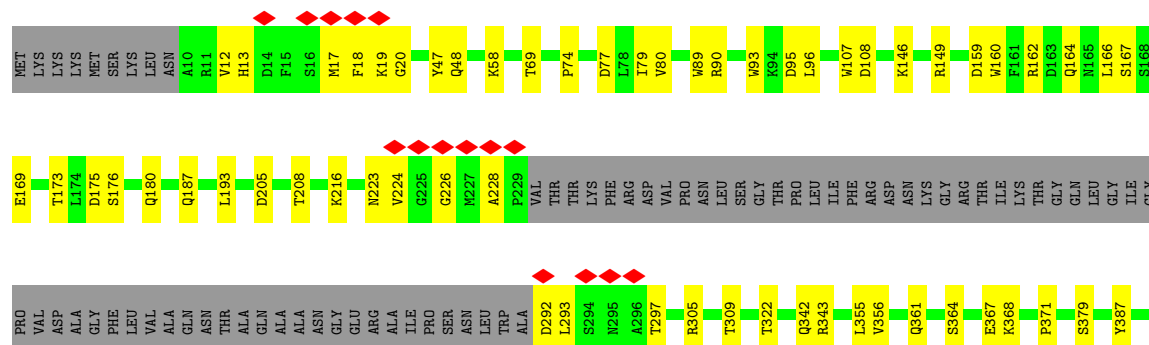




• Molecule 1: Capsid protein VP1

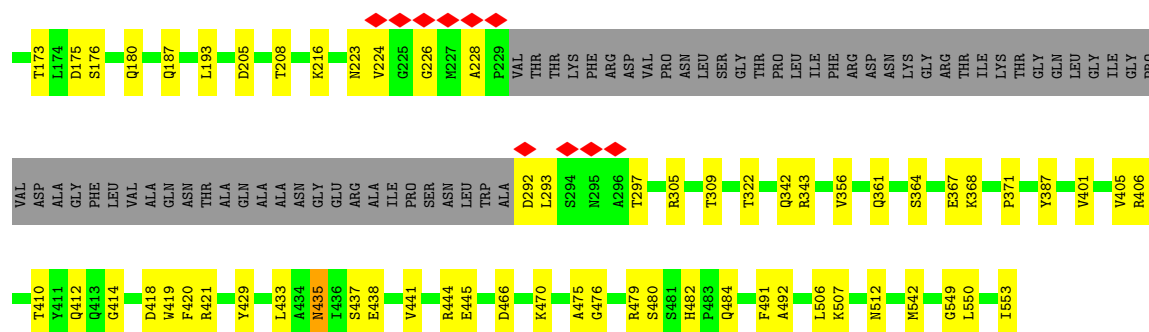


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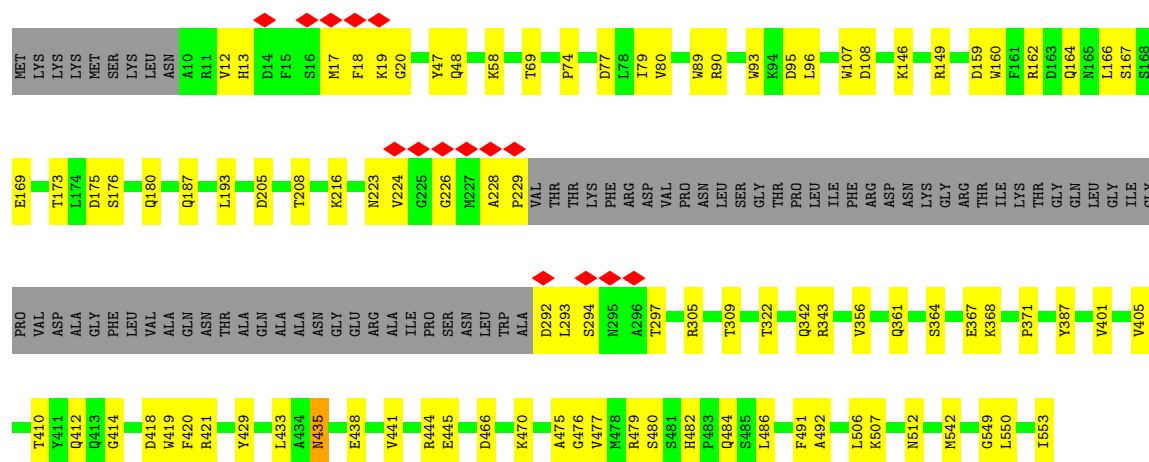


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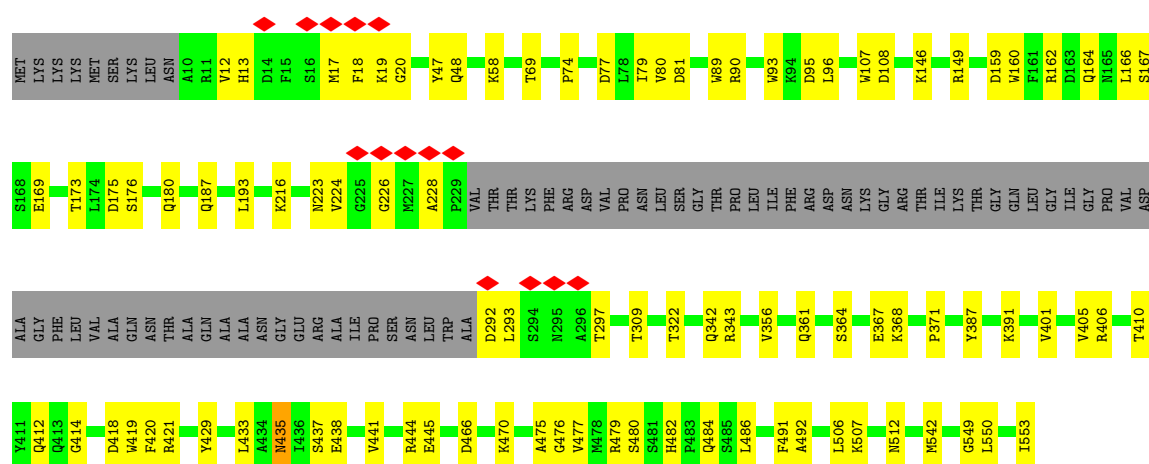




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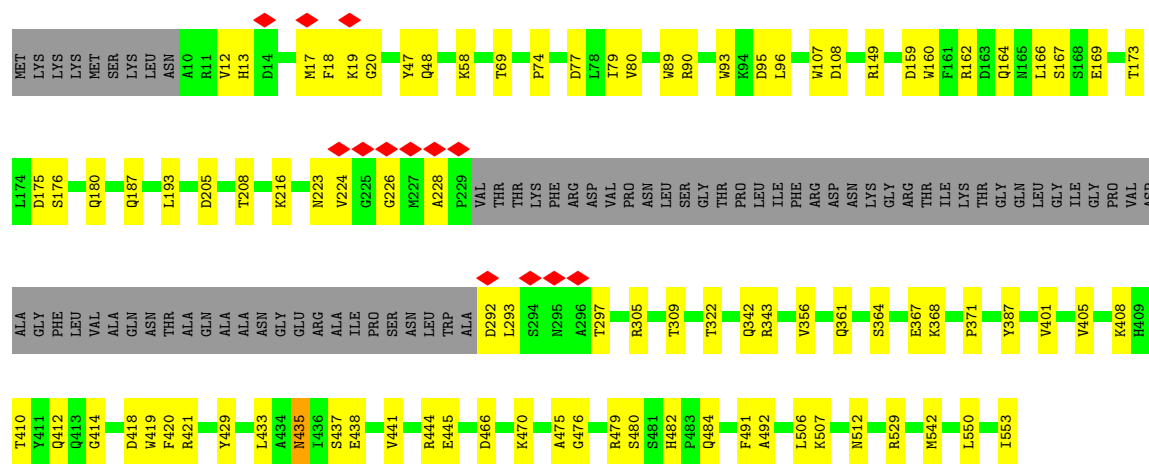


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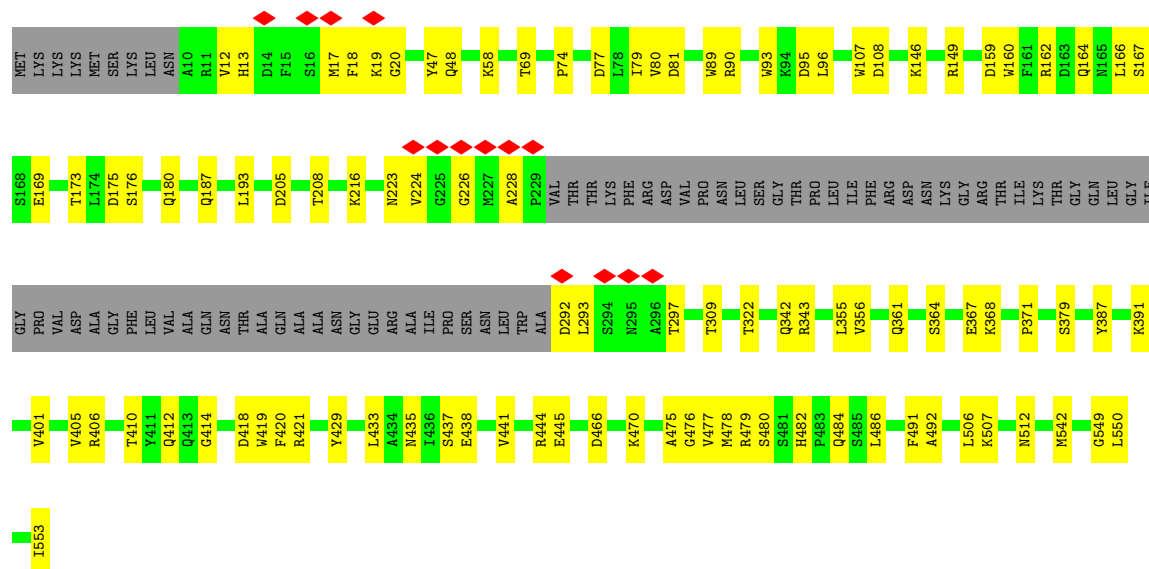


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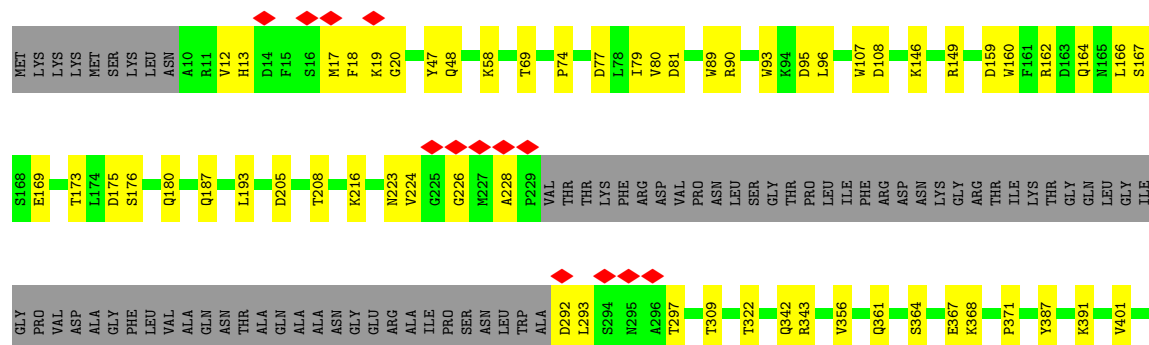




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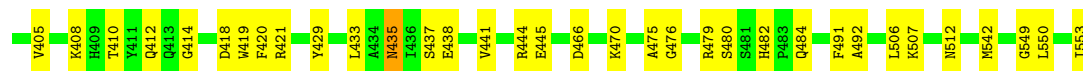
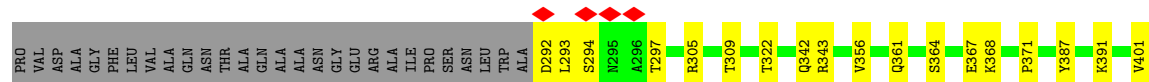
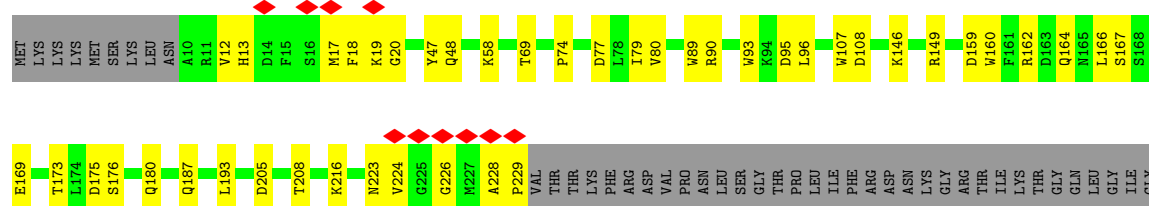


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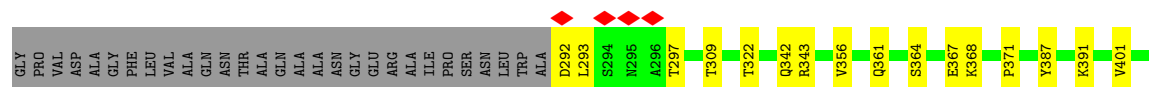
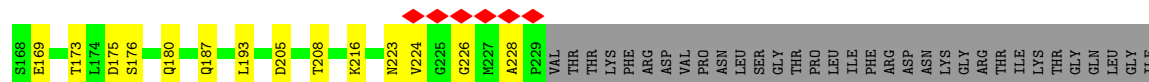




• Molecule 1: Capsid protein VP1

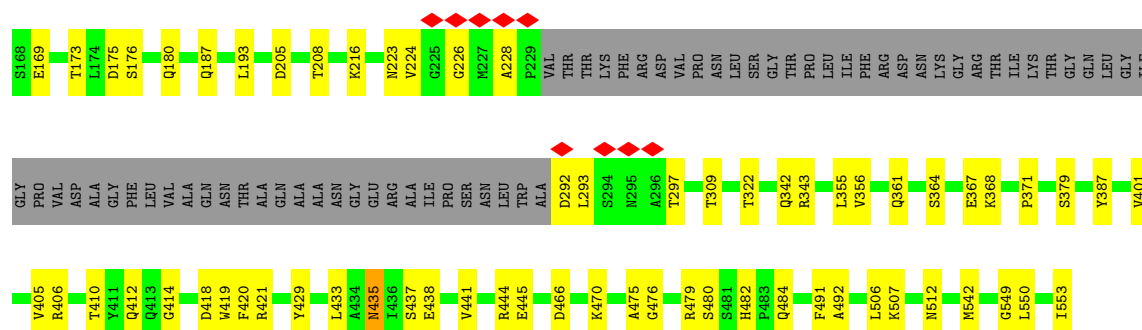


• Molecule 1: Capsid protein VP1

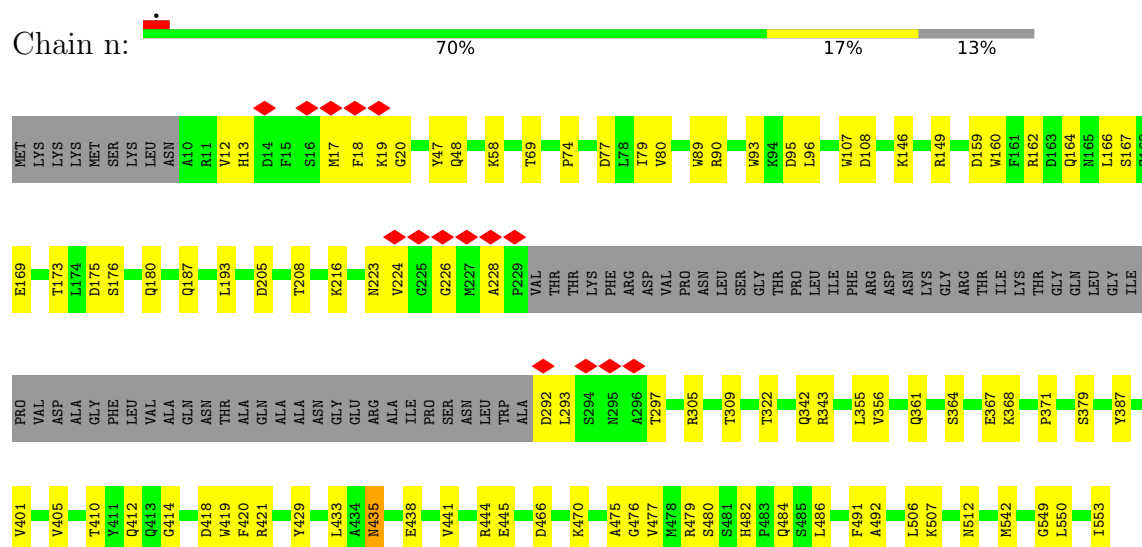


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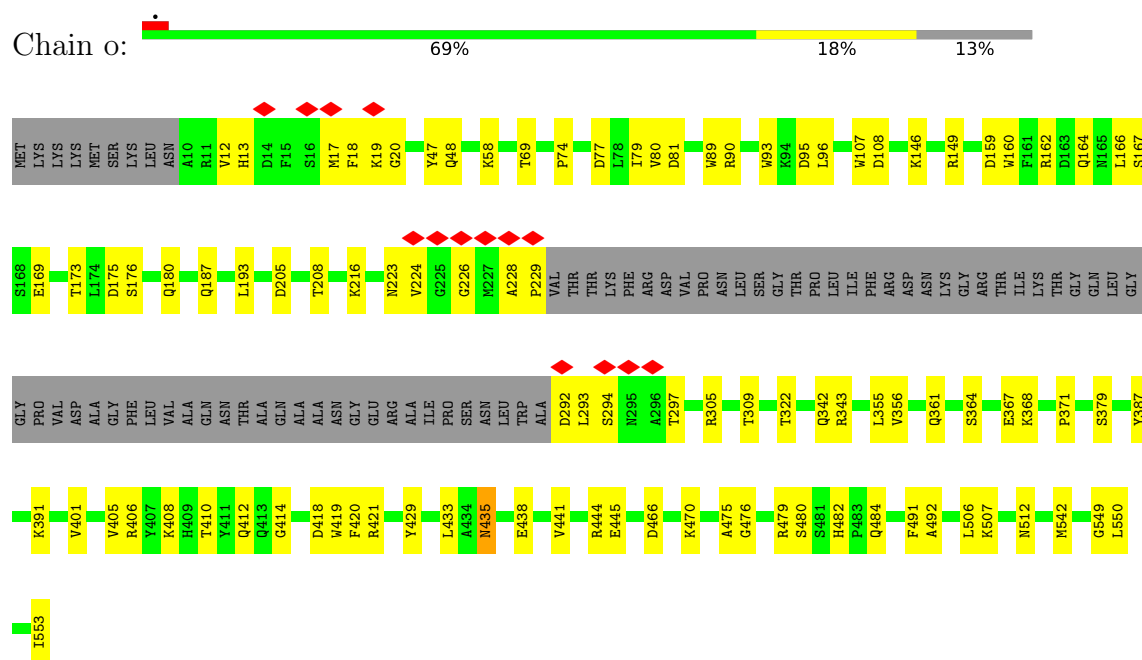




- Molecule 1: Capsid protein VP1

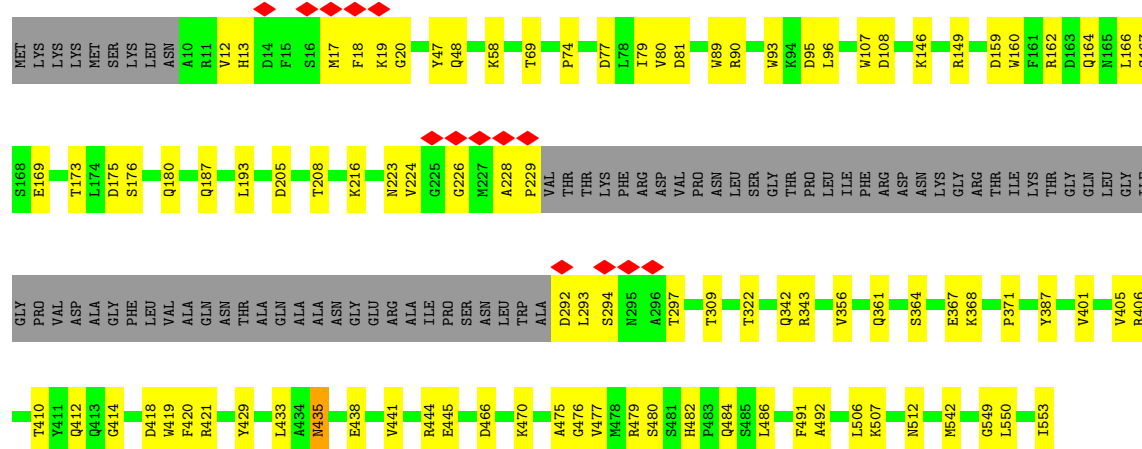


- Molecule 1: Capsid protein VP1



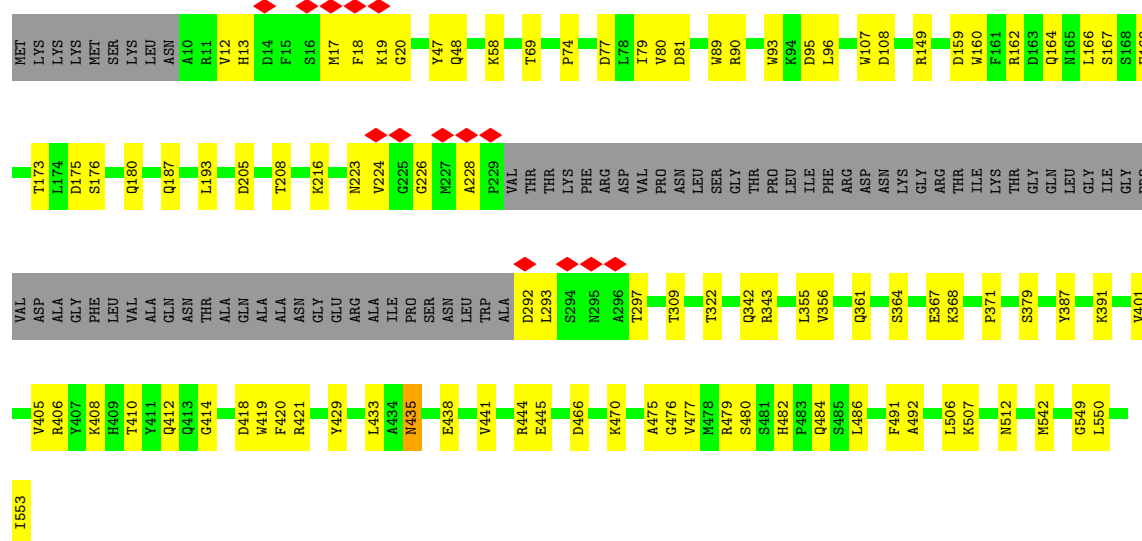
- Molecule 1: Capsid protein VP1

Chain p: 



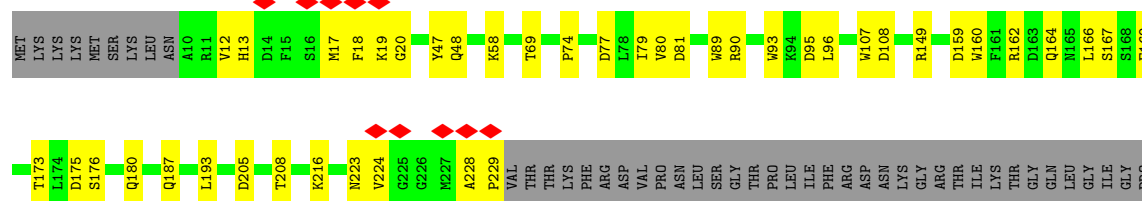
• Molecule 1: Capsid protein VP1

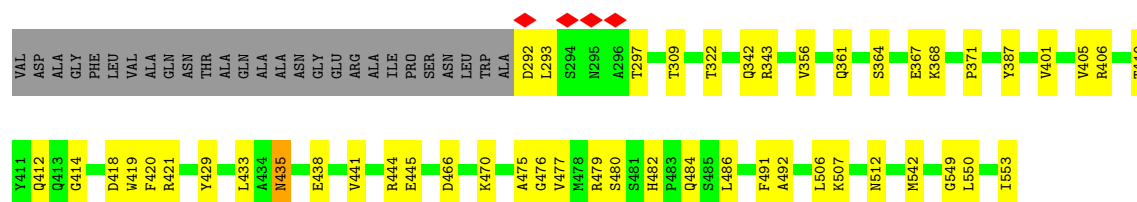
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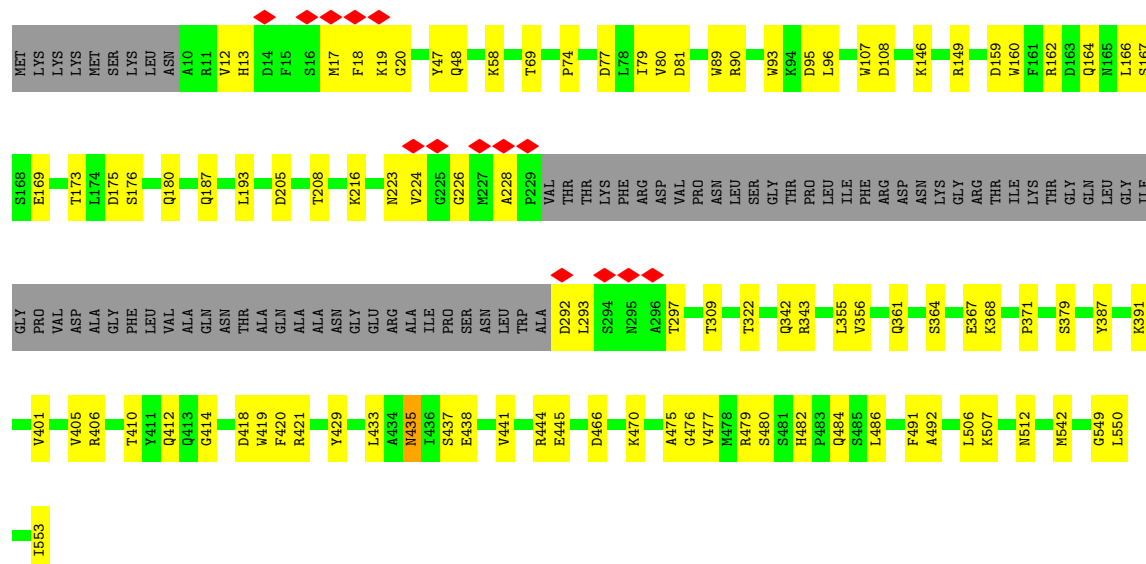
• Molecule 1: Capsid protein VP1

Chain r: 

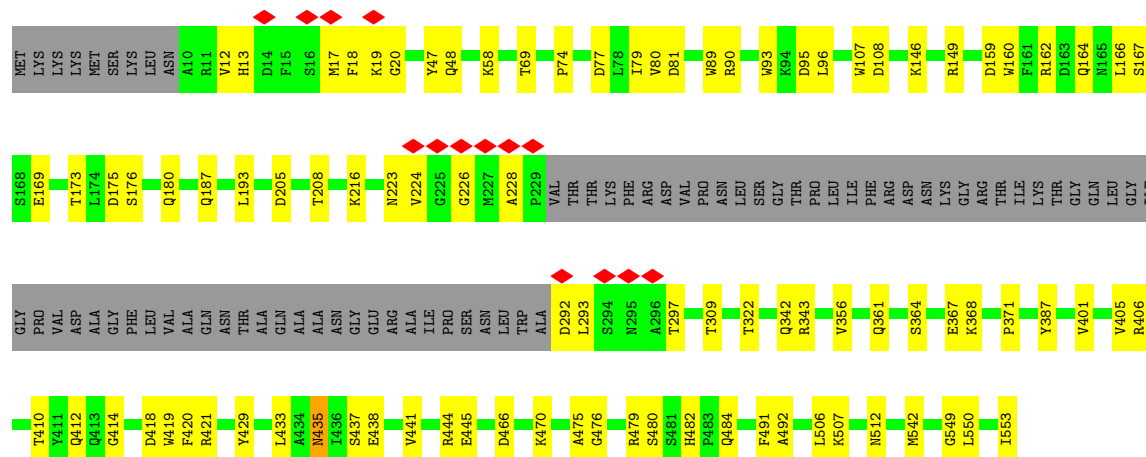




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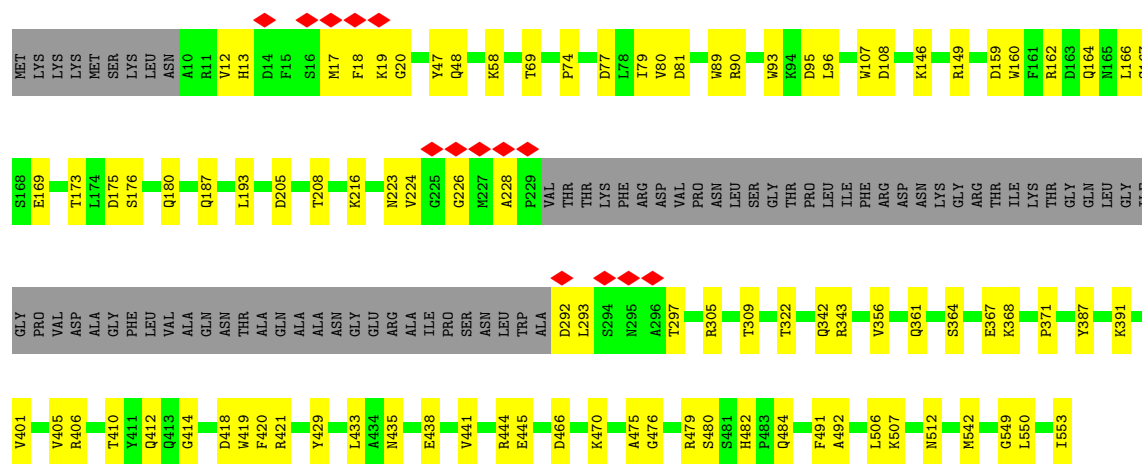


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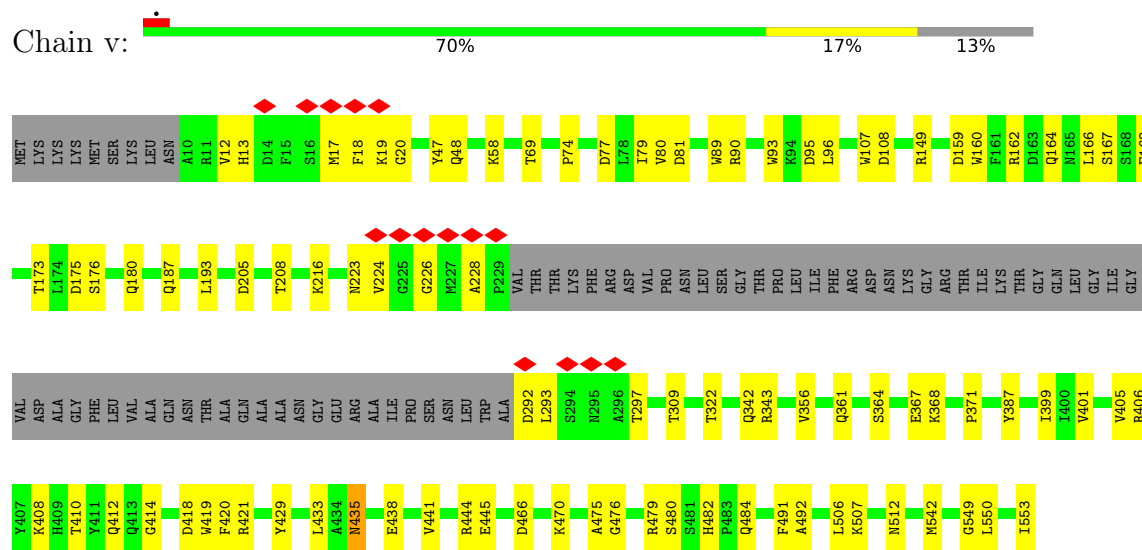


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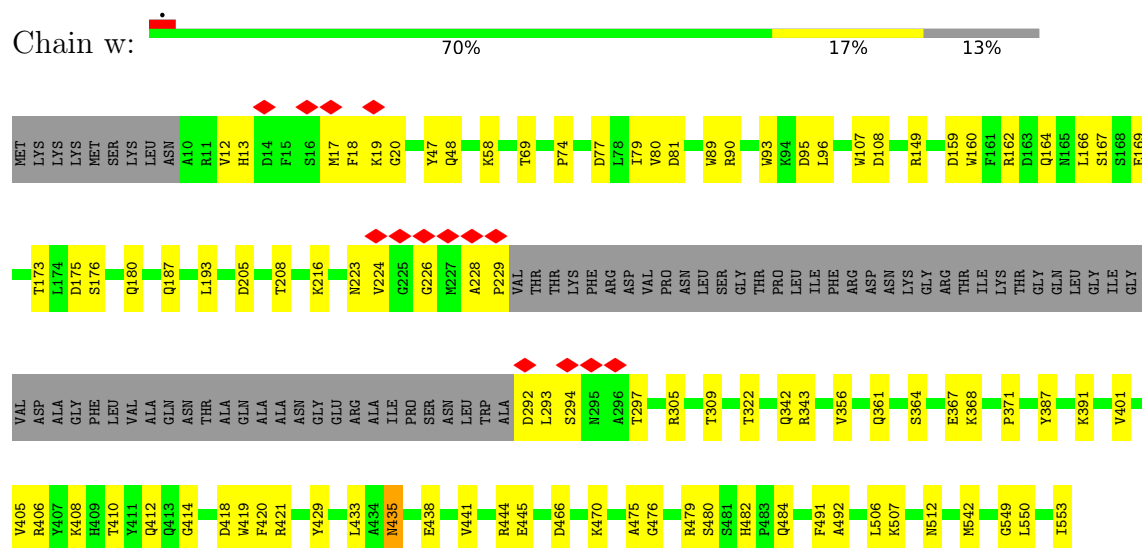




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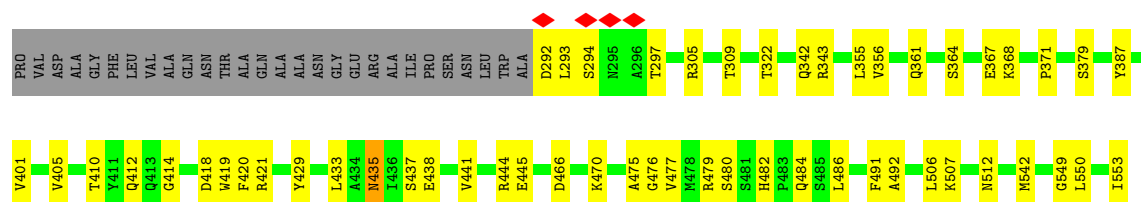


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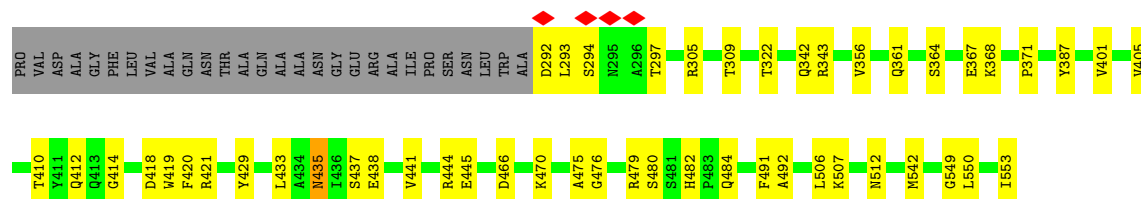
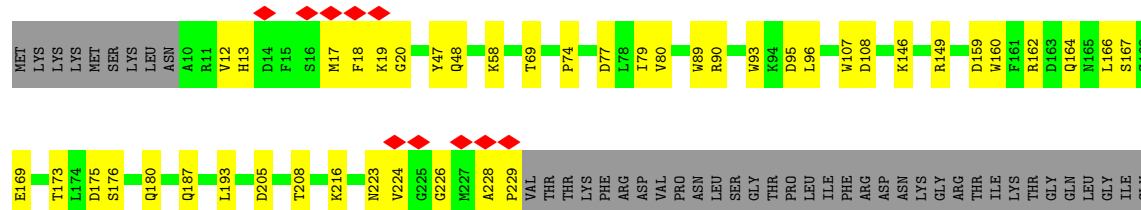


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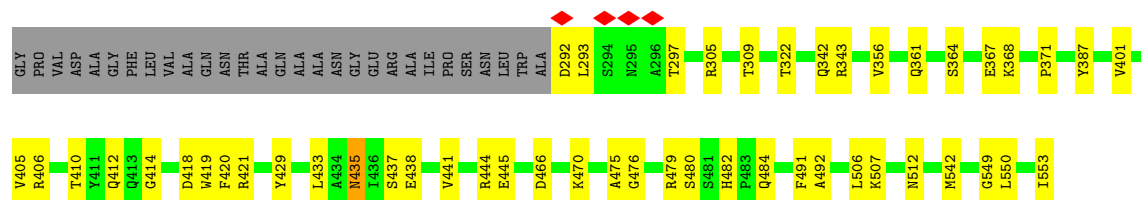
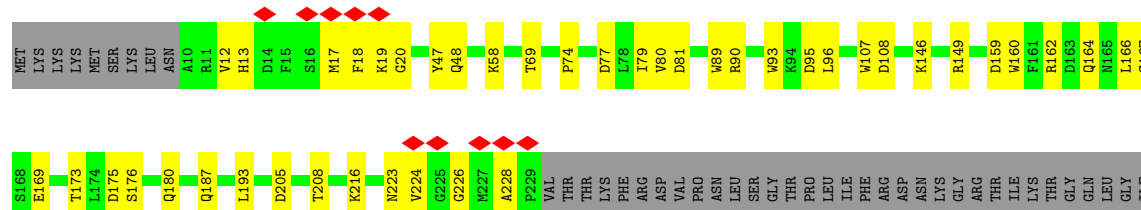




• Molecule 1: Capsid protein VP1

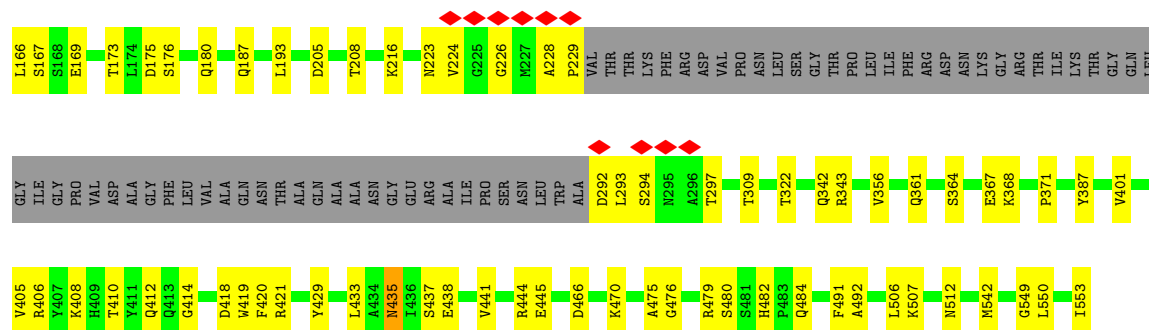


• Molecule 1: Capsid protein VP1

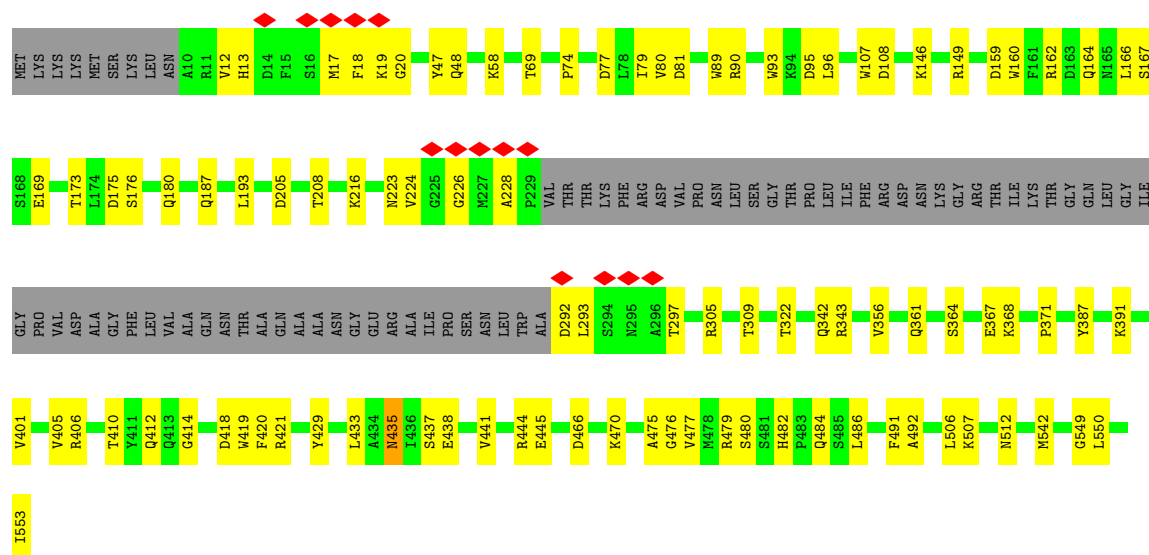


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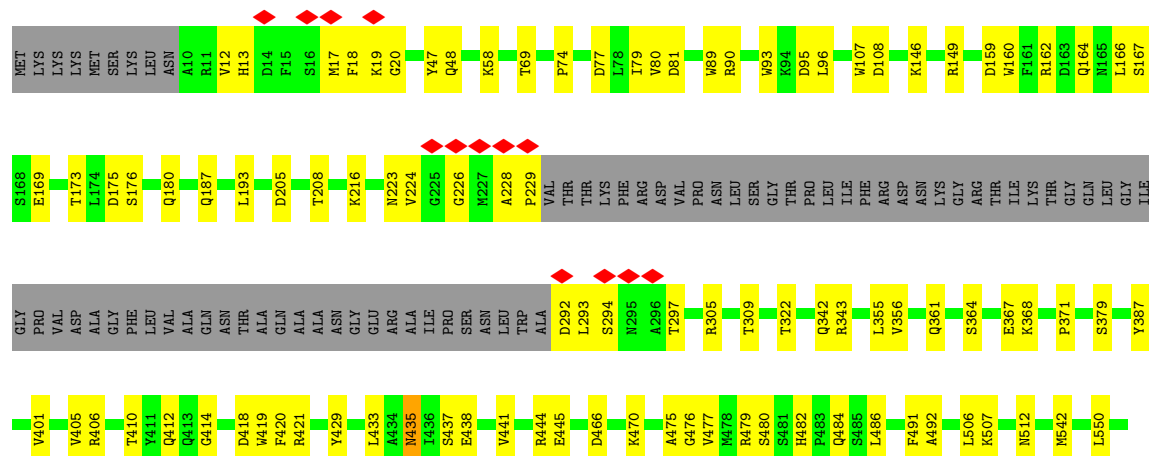




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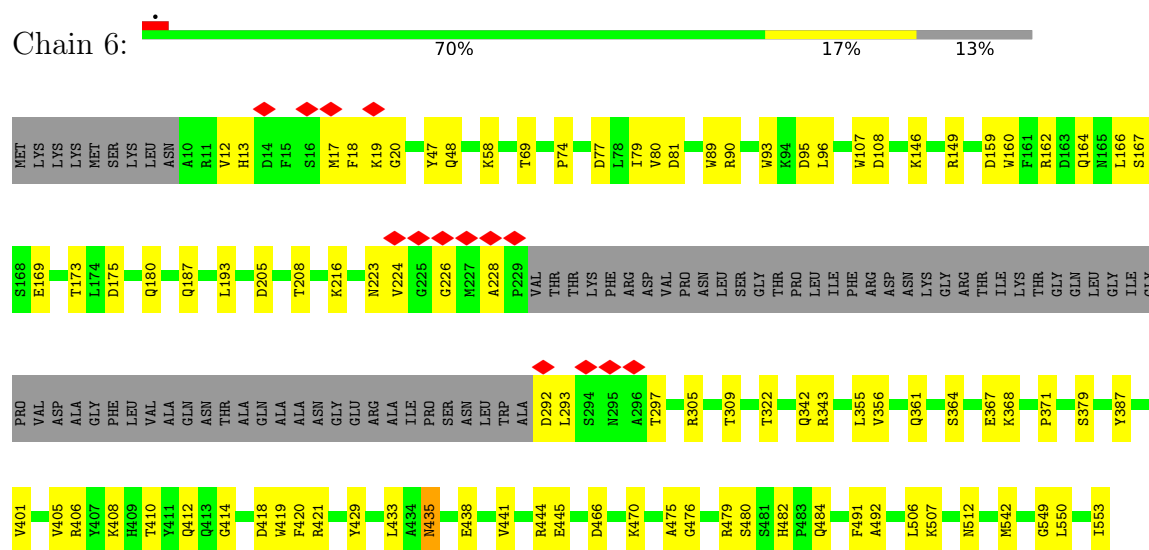
• Molecule 1: Capsid protein VP1



I553

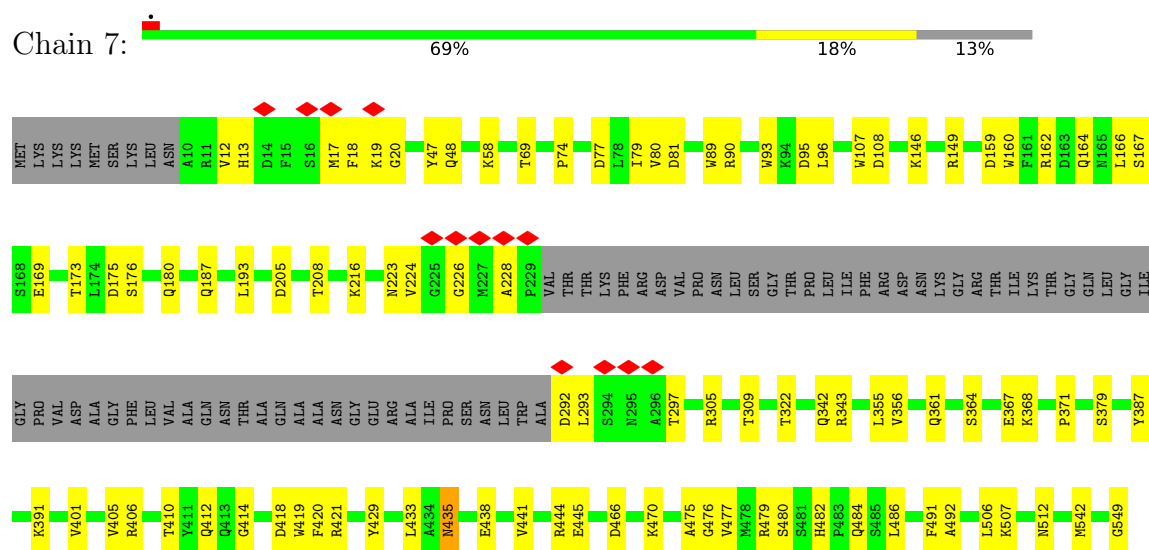
- Molecule 1: Capsid protein VP1

Chain 6:



- Molecule 1: Capsid protein VP1

Chain 7:

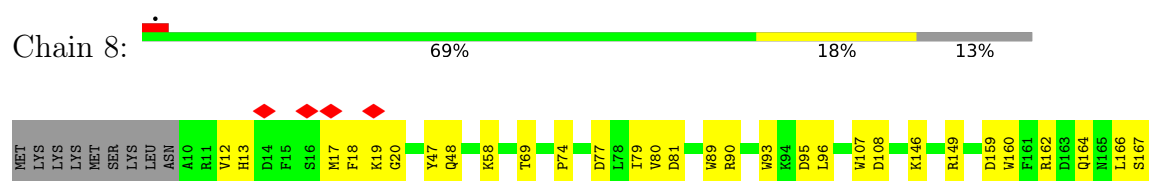


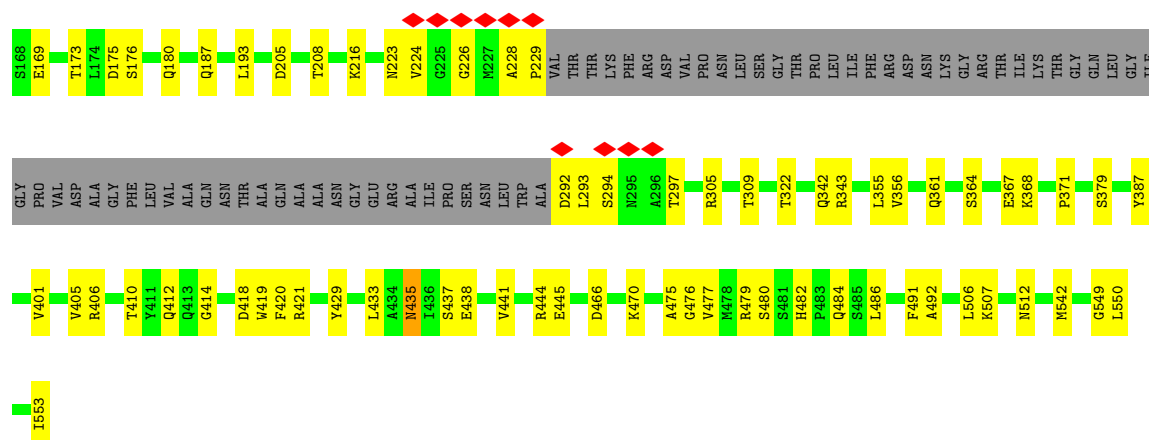
L550

I553

- Molecule 1: Capsid protein VP1

Chain 8:





• Molecule 2: DNA binding protein ORF8



• Molecule 2: DNA binding protein ORF8



• Molecule 2: DNA binding protein ORF8

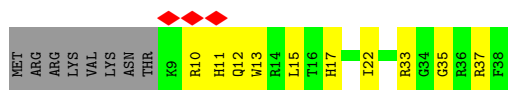


• Molecule 2: DNA binding protein ORF8

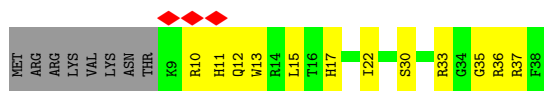


• Molecule 2: DNA binding protein ORF8

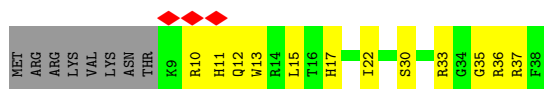




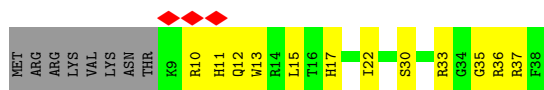
- Molecule 2: DNA binding protein ORF8



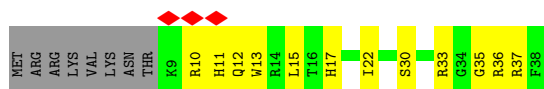
- Molecule 2: DNA binding protein ORF8



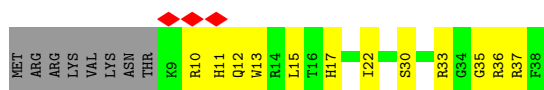
- Molecule 2: DNA binding protein ORF8



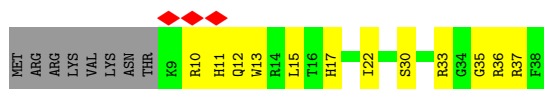
- Molecule 2: DNA binding protein ORF8



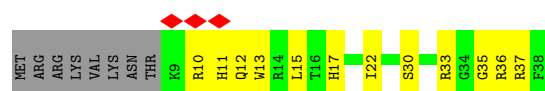
- Molecule 2: DNA binding protein ORF8



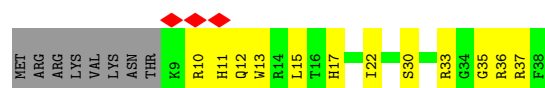
- Molecule 2: DNA binding protein ORF8



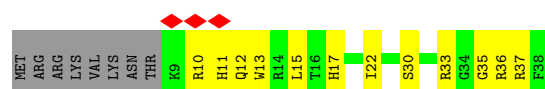
- Molecule 2: DNA binding protein ORF8



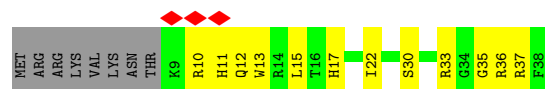
- Molecule 2: DNA binding protein ORF8



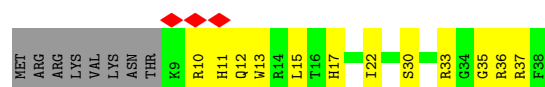
- Molecule 2: DNA binding protein ORF8



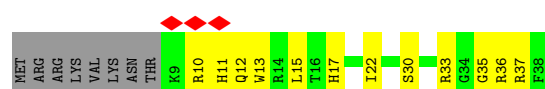
- Molecule 2: DNA binding protein ORF8



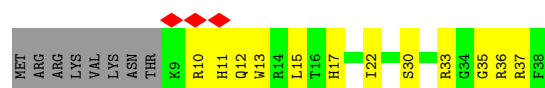
- Molecule 2: DNA binding protein ORF8



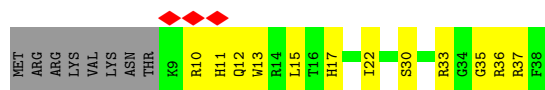
- Molecule 2: DNA binding protein ORF8



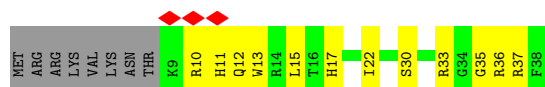
- Molecule 2: DNA binding protein ORF8



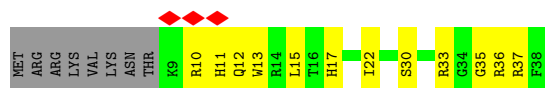
• Molecule 2: DNA binding protein ORF8



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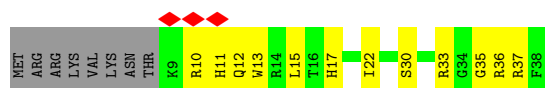
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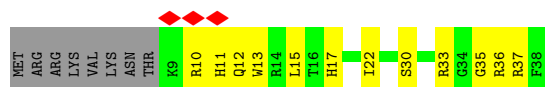
• Molecule 2: DNA binding protein ORF8



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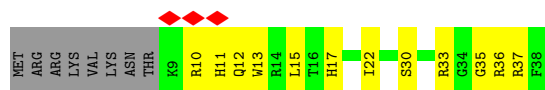


• Molecule 2: DNA binding protein ORF8

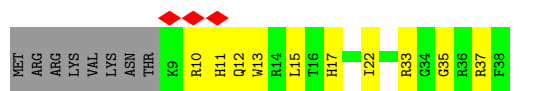


• Molecule 2: DNA binding protein ORF8

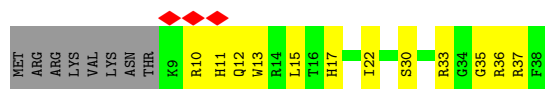




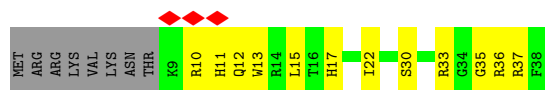
- Molecule 2: DNA binding protein ORF8



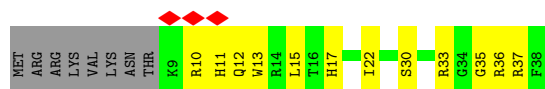
- Molecule 2: DNA binding protein ORF8



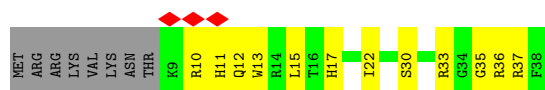
- Molecule 2: DNA binding protein ORF8



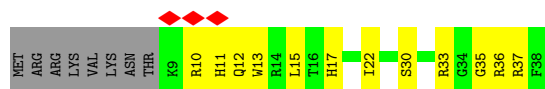
- Molecule 2: DNA binding protein ORF8



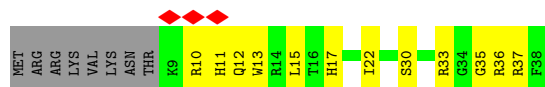
- Molecule 2: DNA binding protein ORF8



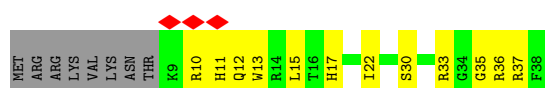
- Molecule 2: DNA binding protein ORF8



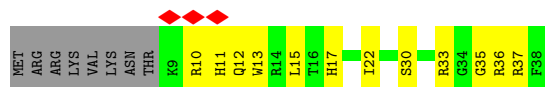
- Molecule 2: DNA binding protein ORF8



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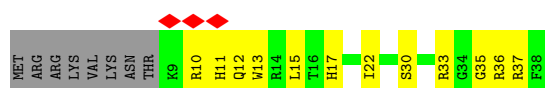
- Molecule 2: DNA binding protein ORF8



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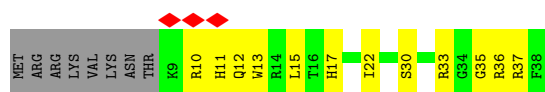


- Molecule 2: DNA binding protein ORF8

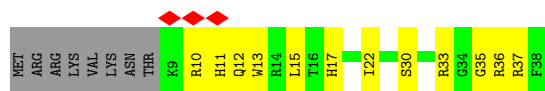


- Molecule 2: DNA binding protein ORF8

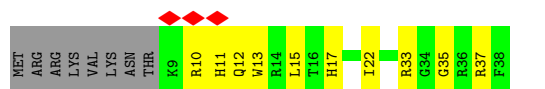




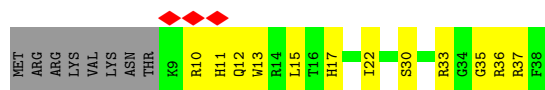
- Molecule 2: DNA binding protein ORF8



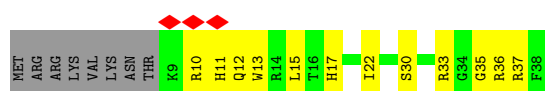
- Molecule 2: DNA binding protein ORF8



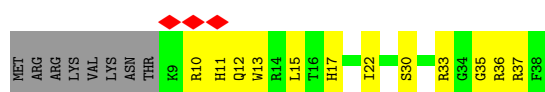
- Molecule 2: DNA binding protein ORF8



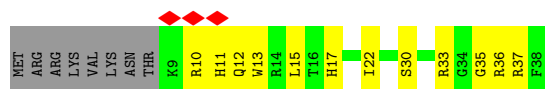
- Molecule 2: DNA binding protein ORF8



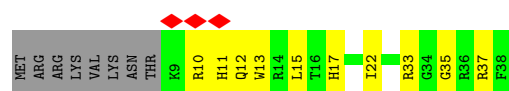
- Molecule 2: DNA binding protein ORF8



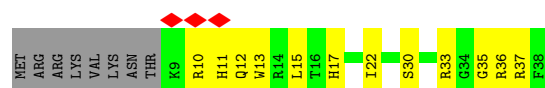
- Molecule 2: DNA binding protein ORF8



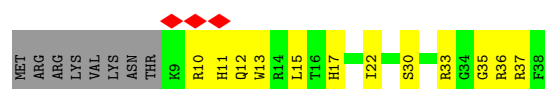
- Molecule 2: DNA binding protein ORF8



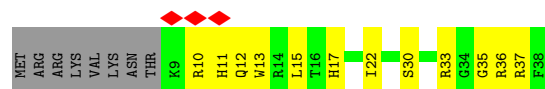
- Molecule 2: DNA binding protein ORF8



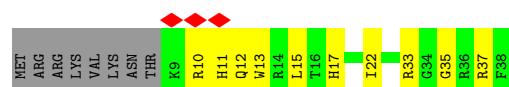
- Molecule 2: DNA binding protein ORF8



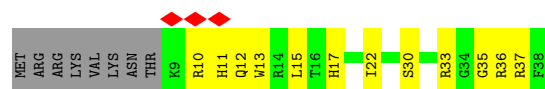
- Molecule 2: DNA binding protein ORF8



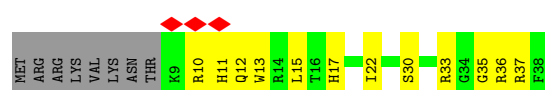
- Molecule 2: DNA binding protein ORF8



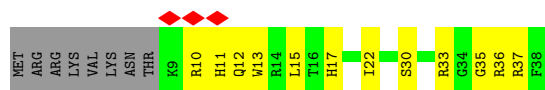
- Molecule 2: DNA binding protein ORF8



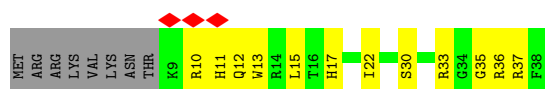
- Molecule 2: DNA binding protein ORF8



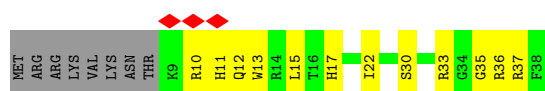
• Molecule 2: DNA binding protein ORF8



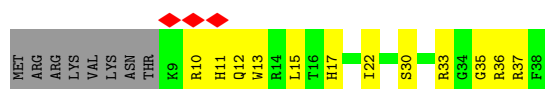
• Molecule 2: DNA binding protein ORF8



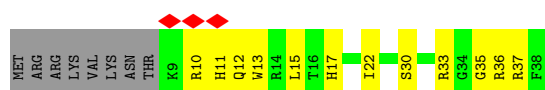
• Molecule 2: DNA binding protein ORF8



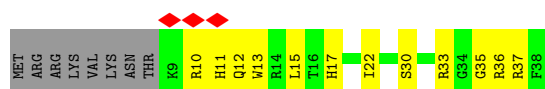
• Molecule 2: DNA binding protein ORF8



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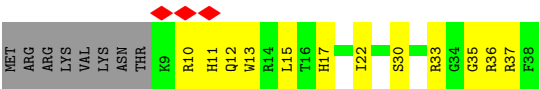


• Molecule 2: DNA binding protein ORF8

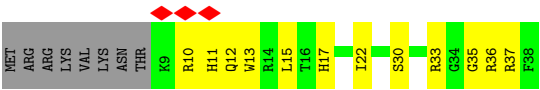


• Molecule 2: DNA binding protein ORF8

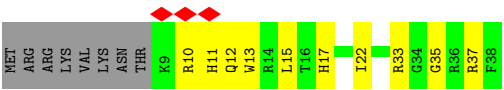




• Molecule 2: DNA binding protein ORF8



• Molecule 2: DNA binding protein ORF8



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, I	Depositor
Number of particles used	77204	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 ($e^-/\text{\AA}^2$)	34	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	23.707	Depositor
Minimum map value	-14.782	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	2	Depositor
Map size ($\text{\AA}$)	583.55, 583.55, 583.55	wwPDB
Map dimensions	550, 550, 550	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.061, 1.061, 1.061	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	0.40	0/3961	0.56	2/5385 (0.0%)
1	2	0.40	0/3961	0.56	2/5385 (0.0%)
1	3	0.40	0/3961	0.56	2/5385 (0.0%)
1	4	0.40	0/3961	0.56	2/5385 (0.0%)
1	5	0.40	0/3961	0.56	2/5385 (0.0%)
1	6	0.40	0/3961	0.56	2/5385 (0.0%)
1	7	0.40	0/3961	0.56	2/5385 (0.0%)
1	8	0.40	0/3961	0.56	2/5385 (0.0%)
1	A	0.40	0/3961	0.56	2/5385 (0.0%)
1	B	0.40	0/3961	0.56	2/5385 (0.0%)
1	C	0.40	0/3961	0.56	2/5385 (0.0%)
1	D	0.40	0/3961	0.56	2/5385 (0.0%)
1	E	0.40	0/3961	0.56	2/5385 (0.0%)
1	F	0.40	0/3961	0.56	2/5385 (0.0%)
1	G	0.40	0/3961	0.56	2/5385 (0.0%)
1	H	0.40	0/3961	0.56	2/5385 (0.0%)
1	I	0.40	0/3961	0.56	2/5385 (0.0%)
1	J	0.40	0/3961	0.56	2/5385 (0.0%)
1	K	0.40	0/3961	0.56	2/5385 (0.0%)
1	L	0.40	0/3961	0.56	2/5385 (0.0%)
1	M	0.40	0/3961	0.56	2/5385 (0.0%)
1	N	0.40	0/3961	0.56	2/5385 (0.0%)
1	O	0.40	0/3961	0.56	2/5385 (0.0%)
1	P	0.40	0/3961	0.56	2/5385 (0.0%)
1	Q	0.40	0/3961	0.56	2/5385 (0.0%)
1	R	0.40	0/3961	0.56	2/5385 (0.0%)
1	S	0.40	0/3961	0.56	2/5385 (0.0%)
1	T	0.40	0/3961	0.56	2/5385 (0.0%)
1	U	0.40	0/3961	0.56	2/5385 (0.0%)
1	V	0.40	0/3961	0.56	2/5385 (0.0%)
1	W	0.40	0/3961	0.56	2/5385 (0.0%)
1	X	0.40	0/3961	0.56	2/5385 (0.0%)
1	Y	0.40	0/3961	0.56	2/5385 (0.0%)
1	Z	0.40	0/3961	0.56	2/5385 (0.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	a	0.40	0/3961	0.56	2/5385 (0.0%)
1	b	0.40	0/3961	0.56	2/5385 (0.0%)
1	c	0.40	0/3961	0.56	2/5385 (0.0%)
1	d	0.40	0/3961	0.56	2/5385 (0.0%)
1	e	0.40	0/3961	0.56	2/5385 (0.0%)
1	f	0.40	0/3961	0.56	2/5385 (0.0%)
1	g	0.40	0/3961	0.56	2/5385 (0.0%)
1	h	0.40	0/3961	0.56	2/5385 (0.0%)
1	i	0.40	0/3961	0.56	2/5385 (0.0%)
1	j	0.40	0/3961	0.56	2/5385 (0.0%)
1	k	0.40	0/3961	0.56	2/5385 (0.0%)
1	l	0.40	0/3961	0.56	2/5385 (0.0%)
1	m	0.40	0/3961	0.56	2/5385 (0.0%)
1	n	0.40	0/3961	0.56	2/5385 (0.0%)
1	o	0.40	0/3961	0.56	2/5385 (0.0%)
1	p	0.40	0/3961	0.56	2/5385 (0.0%)
1	q	0.40	0/3961	0.56	2/5385 (0.0%)
1	r	0.40	0/3961	0.56	2/5385 (0.0%)
1	s	0.40	0/3961	0.56	2/5385 (0.0%)
1	t	0.40	0/3961	0.56	2/5385 (0.0%)
1	u	0.40	0/3961	0.56	2/5385 (0.0%)
1	v	0.40	0/3961	0.56	2/5385 (0.0%)
1	w	0.40	0/3961	0.56	2/5385 (0.0%)
1	x	0.40	0/3961	0.56	2/5385 (0.0%)
1	y	0.40	0/3961	0.56	2/5385 (0.0%)
1	z	0.40	0/3961	0.56	2/5385 (0.0%)
2	0	0.43	0/260	0.75	1/345 (0.3%)
2	12	0.43	0/260	0.75	1/345 (0.3%)
2	22	0.43	0/260	0.75	1/345 (0.3%)
2	32	0.43	0/260	0.75	1/345 (0.3%)
2	42	0.43	0/260	0.75	1/345 (0.3%)
2	52	0.43	0/260	0.75	1/345 (0.3%)
2	62	0.43	0/260	0.75	1/345 (0.3%)
2	72	0.43	0/260	0.75	1/345 (0.3%)
2	82	0.43	0/260	0.75	1/345 (0.3%)
2	9	0.43	0/260	0.75	1/345 (0.3%)
2	C2	0.43	0/260	0.75	1/345 (0.3%)
2	D2	0.43	0/260	0.75	1/345 (0.3%)
2	E2	0.43	0/260	0.75	1/345 (0.3%)
2	F2	0.43	0/260	0.75	1/345 (0.3%)
2	G2	0.43	0/260	0.75	1/345 (0.3%)
2	H2	0.43	0/260	0.75	1/345 (0.3%)
2	I2	0.43	0/260	0.75	1/345 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
2	J2	0.43	0/260	0.75	1/345 (0.3%)
2	K2	0.43	0/260	0.75	1/345 (0.3%)
2	L2	0.43	0/260	0.75	1/345 (0.3%)
2	M2	0.43	0/260	0.75	1/345 (0.3%)
2	N2	0.43	0/260	0.75	1/345 (0.3%)
2	O2	0.43	0/260	0.75	1/345 (0.3%)
2	P2	0.43	0/260	0.75	1/345 (0.3%)
2	Q2	0.43	0/260	0.75	1/345 (0.3%)
2	R2	0.43	0/260	0.75	1/345 (0.3%)
2	S2	0.43	0/260	0.75	1/345 (0.3%)
2	T2	0.43	0/260	0.75	1/345 (0.3%)
2	U2	0.43	0/260	0.75	1/345 (0.3%)
2	V2	0.43	0/260	0.75	1/345 (0.3%)
2	W2	0.43	0/260	0.75	1/345 (0.3%)
2	X2	0.43	0/260	0.75	1/345 (0.3%)
2	Y2	0.43	0/260	0.75	1/345 (0.3%)
2	Z2	0.43	0/260	0.75	1/345 (0.3%)
2	a2	0.43	0/260	0.75	1/345 (0.3%)
2	b2	0.43	0/260	0.75	1/345 (0.3%)
2	c2	0.43	0/260	0.75	1/345 (0.3%)
2	d2	0.43	0/260	0.75	1/345 (0.3%)
2	e2	0.43	0/260	0.75	1/345 (0.3%)
2	f2	0.43	0/260	0.75	1/345 (0.3%)
2	g2	0.43	0/260	0.75	1/345 (0.3%)
2	h2	0.43	0/260	0.75	1/345 (0.3%)
2	i2	0.43	0/260	0.75	1/345 (0.3%)
2	j2	0.43	0/260	0.75	1/345 (0.3%)
2	k2	0.43	0/260	0.75	1/345 (0.3%)
2	l2	0.43	0/260	0.75	1/345 (0.3%)
2	m2	0.43	0/260	0.75	1/345 (0.3%)
2	n2	0.43	0/260	0.75	1/345 (0.3%)
2	o2	0.43	0/260	0.75	1/345 (0.3%)
2	p2	0.43	0/260	0.75	1/345 (0.3%)
2	q2	0.43	0/260	0.75	1/345 (0.3%)
2	r2	0.43	0/260	0.75	1/345 (0.3%)
2	s2	0.43	0/260	0.75	1/345 (0.3%)
2	t2	0.43	0/260	0.75	1/345 (0.3%)
2	u2	0.43	0/260	0.75	1/345 (0.3%)
2	v2	0.43	0/260	0.75	1/345 (0.3%)
2	w2	0.43	0/260	0.75	1/345 (0.3%)
2	x2	0.43	0/260	0.75	1/345 (0.3%)
2	y2	0.43	0/260	0.75	1/345 (0.3%)
2	z2	0.43	0/260	0.75	1/345 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
All	All	0.40	0/253260	0.57	180/343800 (0.1%)

There are no bond length outliers.

All (180) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	297	THR	CB-CA-C	-5.99	109.09	117.23
1	R	297	THR	CB-CA-C	-5.99	109.09	117.23
1	7	297	THR	CB-CA-C	-5.97	109.11	117.23
1	U	297	THR	CB-CA-C	-5.97	109.11	117.23
1	h	297	THR	CB-CA-C	-5.97	109.11	117.23
1	q	297	THR	CB-CA-C	-5.97	109.11	117.23
1	z	297	THR	CB-CA-C	-5.97	109.11	117.23
1	l	297	THR	CB-CA-C	-5.97	109.11	117.23
1	C	297	THR	CB-CA-C	-5.97	109.11	117.23
1	K	297	THR	CB-CA-C	-5.97	109.11	117.23
1	T	297	THR	CB-CA-C	-5.97	109.11	117.23
1	V	297	THR	CB-CA-C	-5.97	109.12	117.23
1	g	297	THR	CB-CA-C	-5.97	109.11	117.23
1	p	297	THR	CB-CA-C	-5.97	109.11	117.23
1	4	297	THR	CB-CA-C	-5.97	109.11	117.23
1	6	297	THR	CB-CA-C	-5.97	109.12	117.23
1	N	297	THR	CB-CA-C	-5.96	109.12	117.23
1	Y	297	THR	CB-CA-C	-5.96	109.12	117.23
1	G	297	THR	CB-CA-C	-5.96	109.12	117.23
1	Q	297	THR	CB-CA-C	-5.96	109.13	117.23
1	X	297	THR	CB-CA-C	-5.96	109.13	117.23
1	l	297	THR	CB-CA-C	-5.96	109.13	117.23
1	o	297	THR	CB-CA-C	-5.96	109.13	117.23
1	t	297	THR	CB-CA-C	-5.96	109.13	117.23
1	x	297	THR	CB-CA-C	-5.96	109.13	117.23
1	A	297	THR	CB-CA-C	-5.95	109.14	117.23
1	F	297	THR	CB-CA-C	-5.95	109.14	117.23
1	M	297	THR	CB-CA-C	-5.95	109.14	117.23
1	a	297	THR	CB-CA-C	-5.95	109.14	117.23
1	b	297	THR	CB-CA-C	-5.95	109.14	117.23
1	c	297	THR	CB-CA-C	-5.95	109.14	117.23
1	d	297	THR	CB-CA-C	-5.95	109.14	117.23
1	e	297	THR	CB-CA-C	-5.95	109.14	117.23
1	f	297	THR	CB-CA-C	-5.95	109.14	117.23
1	n	297	THR	CB-CA-C	-5.95	109.14	117.23
1	v	297	THR	CB-CA-C	-5.95	109.14	117.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	w	297	THR	CB-CA-C	-5.95	109.14	117.23
1	3	297	THR	CB-CA-C	-5.95	109.14	117.23
1	y	297	THR	CB-CA-C	-5.95	109.14	117.23
1	L	297	THR	CB-CA-C	-5.94	109.15	117.23
1	r	297	THR	CB-CA-C	-5.94	109.15	117.23
1	2	297	THR	CB-CA-C	-5.94	109.15	117.23
1	E	297	THR	CB-CA-C	-5.94	109.15	117.23
1	k	297	THR	CB-CA-C	-5.94	109.15	117.23
1	J	297	THR	CB-CA-C	-5.94	109.16	117.23
1	S	297	THR	CB-CA-C	-5.94	109.16	117.23
1	m	297	THR	CB-CA-C	-5.93	109.16	117.23
1	I	297	THR	CB-CA-C	-5.93	109.16	117.23
1	i	297	THR	CB-CA-C	-5.92	109.17	117.23
1	D	297	THR	CB-CA-C	-5.92	109.18	117.23
1	H	297	THR	CB-CA-C	-5.92	109.18	117.23
1	P	297	THR	CB-CA-C	-5.92	109.18	117.23
1	W	297	THR	CB-CA-C	-5.92	109.18	117.23
1	j	297	THR	CB-CA-C	-5.92	109.18	117.23
1	5	297	THR	CB-CA-C	-5.92	109.18	117.23
1	u	297	THR	CB-CA-C	-5.92	109.18	117.23
1	O	297	THR	CB-CA-C	-5.92	109.19	117.23
1	Z	297	THR	CB-CA-C	-5.92	109.19	117.23
1	8	297	THR	CB-CA-C	-5.92	109.19	117.23
1	s	297	THR	CB-CA-C	-5.91	109.19	117.23
1	I	435	ASN	N-CA-C	5.69	119.77	112.26
1	u	435	ASN	N-CA-C	5.69	119.77	112.26
1	x	435	ASN	N-CA-C	5.69	119.77	112.26
1	6	435	ASN	N-CA-C	5.68	119.76	112.26
1	D	435	ASN	N-CA-C	5.68	119.76	112.26
1	H	435	ASN	N-CA-C	5.68	119.76	112.26
1	N	435	ASN	N-CA-C	5.68	119.76	112.26
1	P	435	ASN	N-CA-C	5.68	119.76	112.26
1	W	435	ASN	N-CA-C	5.68	119.76	112.26
1	i	435	ASN	N-CA-C	5.68	119.76	112.26
1	k	435	ASN	N-CA-C	5.68	119.76	112.26
1	5	435	ASN	N-CA-C	5.68	119.76	112.26
1	7	435	ASN	N-CA-C	5.68	119.76	112.26
1	J	435	ASN	N-CA-C	5.67	119.75	112.26
1	O	435	ASN	N-CA-C	5.67	119.75	112.26
1	Z	435	ASN	N-CA-C	5.67	119.75	112.26
1	l	435	ASN	N-CA-C	5.67	119.75	112.26
1	g	435	ASN	N-CA-C	5.67	119.74	112.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	m	435	ASN	N-CA-C	5.67	119.74	112.26
1	p	435	ASN	N-CA-C	5.67	119.74	112.26
1	C	435	ASN	N-CA-C	5.66	119.73	112.26
1	V	435	ASN	N-CA-C	5.66	119.73	112.26
1	j	435	ASN	N-CA-C	5.66	119.73	112.26
1	A	435	ASN	N-CA-C	5.66	119.73	112.26
1	F	435	ASN	N-CA-C	5.66	119.73	112.26
1	M	435	ASN	N-CA-C	5.66	119.73	112.26
1	Q	435	ASN	N-CA-C	5.66	119.73	112.26
1	a	435	ASN	N-CA-C	5.66	119.73	112.26
1	b	435	ASN	N-CA-C	5.66	119.73	112.26
1	c	435	ASN	N-CA-C	5.66	119.73	112.26
1	d	435	ASN	N-CA-C	5.66	119.73	112.26
1	e	435	ASN	N-CA-C	5.66	119.73	112.26
1	f	435	ASN	N-CA-C	5.66	119.73	112.26
1	n	435	ASN	N-CA-C	5.66	119.73	112.26
1	v	435	ASN	N-CA-C	5.66	119.73	112.26
1	y	435	ASN	N-CA-C	5.66	119.73	112.26
1	3	435	ASN	N-CA-C	5.66	119.73	112.26
1	L	435	ASN	N-CA-C	5.65	119.72	112.26
1	S	435	ASN	N-CA-C	5.65	119.72	112.26
1	U	435	ASN	N-CA-C	5.65	119.72	112.26
1	r	435	ASN	N-CA-C	5.65	119.72	112.26
1	s	435	ASN	N-CA-C	5.65	119.72	112.26
1	z	435	ASN	N-CA-C	5.65	119.72	112.26
1	2	435	ASN	N-CA-C	5.65	119.72	112.26
1	T	435	ASN	N-CA-C	5.65	119.72	112.26
1	Y	435	ASN	N-CA-C	5.65	119.72	112.26
1	G	435	ASN	N-CA-C	5.65	119.72	112.26
1	X	435	ASN	N-CA-C	5.65	119.72	112.26
1	t	435	ASN	N-CA-C	5.65	119.72	112.26
1	w	435	ASN	N-CA-C	5.65	119.72	112.26
1	E	435	ASN	N-CA-C	5.64	119.71	112.26
1	h	435	ASN	N-CA-C	5.64	119.71	112.26
1	o	435	ASN	N-CA-C	5.64	119.71	112.26
1	4	435	ASN	N-CA-C	5.63	119.70	112.26
1	B	435	ASN	N-CA-C	5.63	119.69	112.26
1	R	435	ASN	N-CA-C	5.63	119.69	112.26
1	q	435	ASN	N-CA-C	5.63	119.69	112.26
1	1	435	ASN	N-CA-C	5.63	119.69	112.26
1	K	435	ASN	N-CA-C	5.63	119.69	112.26
1	8	435	ASN	N-CA-C	5.60	119.66	112.26

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	w2	15	LEU	N-CA-C	5.15	119.25	112.92
2	b2	15	LEU	N-CA-C	5.14	119.25	112.92
2	f2	15	LEU	N-CA-C	5.13	119.23	112.92
2	i2	15	LEU	N-CA-C	5.13	119.23	112.92
2	F2	15	LEU	N-CA-C	5.13	119.23	112.92
2	d2	15	LEU	N-CA-C	5.12	119.22	112.92
2	32	15	LEU	N-CA-C	5.12	119.22	112.92
2	e2	15	LEU	N-CA-C	5.12	119.22	112.92
2	9	15	LEU	N-CA-C	5.12	119.22	112.92
2	E2	15	LEU	N-CA-C	5.12	119.22	112.92
2	G2	15	LEU	N-CA-C	5.12	119.22	112.92
2	R2	15	LEU	N-CA-C	5.12	119.22	112.92
2	U2	15	LEU	N-CA-C	5.12	119.22	112.92
2	q2	15	LEU	N-CA-C	5.12	119.22	112.92
2	l2	15	LEU	N-CA-C	5.12	119.22	112.92
2	82	15	LEU	N-CA-C	5.12	119.21	112.92
2	c2	15	LEU	N-CA-C	5.11	119.21	112.92
2	X2	15	LEU	N-CA-C	5.11	119.21	112.92
2	j2	15	LEU	N-CA-C	5.11	119.21	112.92
2	M2	15	LEU	N-CA-C	5.11	119.20	112.92
2	s2	15	LEU	N-CA-C	5.11	119.20	112.92
2	t2	15	LEU	N-CA-C	5.11	119.20	112.92
2	v2	15	LEU	N-CA-C	5.11	119.20	112.92
2	z2	15	LEU	N-CA-C	5.11	119.20	112.92
2	m2	15	LEU	N-CA-C	5.11	119.20	112.92
2	a2	15	LEU	N-CA-C	5.10	119.19	112.92
2	0	15	LEU	N-CA-C	5.10	119.19	112.92
2	D2	15	LEU	N-CA-C	5.10	119.19	112.92
2	H2	15	LEU	N-CA-C	5.10	119.19	112.92
2	P2	15	LEU	N-CA-C	5.10	119.19	112.92
2	V2	15	LEU	N-CA-C	5.10	119.19	112.92
2	W2	15	LEU	N-CA-C	5.10	119.19	112.92
2	k2	15	LEU	N-CA-C	5.10	119.19	112.92
2	p2	15	LEU	N-CA-C	5.10	119.19	112.92
2	52	15	LEU	N-CA-C	5.10	119.19	112.92
2	62	15	LEU	N-CA-C	5.10	119.19	112.92
2	J2	15	LEU	N-CA-C	5.09	119.18	112.92
2	r2	15	LEU	N-CA-C	5.09	119.18	112.92
2	22	15	LEU	N-CA-C	5.09	119.18	112.92
2	Z2	15	LEU	N-CA-C	5.09	119.18	112.92
2	o2	15	LEU	N-CA-C	5.09	119.18	112.92
2	h2	15	LEU	N-CA-C	5.09	119.18	112.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	I2	15	LEU	N-CA-C	5.09	119.18	112.92
2	K2	15	LEU	N-CA-C	5.09	119.18	112.92
2	O2	15	LEU	N-CA-C	5.09	119.18	112.92
2	Q2	15	LEU	N-CA-C	5.09	119.18	112.92
2	T2	15	LEU	N-CA-C	5.09	119.18	112.92
2	u2	15	LEU	N-CA-C	5.09	119.18	112.92
2	x2	15	LEU	N-CA-C	5.09	119.18	112.92
2	C2	15	LEU	N-CA-C	5.08	119.17	112.92
2	g2	15	LEU	N-CA-C	5.08	119.17	112.92
2	l2	15	LEU	N-CA-C	5.08	119.17	112.92
2	42	15	LEU	N-CA-C	5.08	119.17	112.92
2	L2	15	LEU	N-CA-C	5.08	119.17	112.92
2	y2	15	LEU	N-CA-C	5.08	119.17	112.92
2	N2	15	LEU	N-CA-C	5.08	119.16	112.92
2	Y2	15	LEU	N-CA-C	5.08	119.16	112.92
2	72	15	LEU	N-CA-C	5.08	119.16	112.92
2	n2	15	LEU	N-CA-C	5.06	119.14	112.92
2	S2	15	LEU	N-CA-C	5.05	119.13	112.92

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	3853	0	3742	78	0
1	2	3853	0	3742	74	0
1	3	3853	0	3742	78	0
1	4	3853	0	3742	77	0
1	5	3853	0	3742	76	0
1	6	3853	0	3742	74	0
1	7	3853	0	3742	76	0
1	8	3853	0	3742	78	0
1	A	3853	0	3742	77	0
1	B	3853	0	3742	77	0
1	C	3853	0	3742	76	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	D	3853	0	3742	78	0
1	E	3853	0	3742	74	0
1	F	3853	0	3742	76	0
1	G	3853	0	3742	74	0
1	H	3853	0	3742	77	0
1	I	3853	0	3742	74	0
1	J	3853	0	3742	75	0
1	K	3853	0	3742	79	0
1	L	3853	0	3742	79	0
1	M	3853	0	3742	75	0
1	N	3853	0	3742	76	0
1	O	3853	0	3742	78	0
1	P	3853	0	3742	76	0
1	Q	3853	0	3742	74	0
1	R	3853	0	3742	78	0
1	S	3853	0	3742	73	0
1	T	3853	0	3742	75	0
1	U	3853	0	3742	77	0
1	V	3853	0	3742	76	0
1	W	3853	0	3742	74	0
1	X	3853	0	3742	78	0
1	Y	3853	0	3742	76	0
1	Z	3853	0	3742	78	0
1	a	3853	0	3742	79	0
1	b	3853	0	3742	74	0
1	c	3853	0	3742	76	0
1	d	3853	0	3742	75	0
1	e	3853	0	3742	75	0
1	f	3853	0	3742	75	0
1	g	3853	0	3742	76	0
1	h	3853	0	3742	74	0
1	i	3853	0	3742	76	0
1	j	3853	0	3742	75	0
1	k	3853	0	3742	75	0
1	l	3853	0	3742	79	0
1	m	3853	0	3742	75	0
1	n	3853	0	3742	76	0
1	o	3853	0	3742	78	0
1	p	3853	0	3742	76	0
1	q	3853	0	3742	78	0
1	r	3853	0	3742	72	0
1	s	3853	0	3742	76	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	t	3853	0	3742	76	0
1	u	3853	0	3742	73	0
1	v	3853	0	3742	76	0
1	w	3853	0	3742	75	0
1	x	3853	0	3742	75	0
1	y	3853	0	3742	77	0
1	z	3853	0	3742	78	0
2	0	254	0	263	10	0
2	12	254	0	263	10	0
2	22	254	0	263	10	0
2	32	254	0	263	10	0
2	42	254	0	263	10	0
2	52	254	0	263	10	0
2	62	254	0	263	10	0
2	72	254	0	263	10	0
2	82	254	0	263	9	0
2	9	254	0	263	10	0
2	C2	254	0	263	10	0
2	D2	254	0	263	10	0
2	E2	254	0	263	9	0
2	F2	254	0	263	10	0
2	G2	254	0	263	10	0
2	H2	254	0	263	10	0
2	I2	254	0	263	10	0
2	J2	254	0	263	10	0
2	K2	254	0	263	10	0
2	L2	254	0	263	10	0
2	M2	254	0	263	10	0
2	N2	254	0	263	10	0
2	O2	254	0	263	10	0
2	P2	254	0	263	10	0
2	Q2	254	0	263	10	0
2	R2	254	0	263	10	0
2	S2	254	0	263	10	0
2	T2	254	0	263	10	0
2	U2	254	0	263	10	0
2	V2	254	0	263	10	0
2	W2	254	0	263	10	0
2	X2	254	0	263	10	0
2	Y2	254	0	263	10	0
2	Z2	254	0	263	9	0
2	a2	254	0	263	10	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	b2	254	0	263	10	0
2	c2	254	0	263	10	0
2	d2	254	0	263	10	0
2	e2	254	0	263	10	0
2	f2	254	0	263	10	0
2	g2	254	0	263	10	0
2	h2	254	0	263	10	0
2	i2	254	0	263	10	0
2	j2	254	0	263	10	0
2	k2	254	0	263	10	0
2	l2	254	0	263	10	0
2	m2	254	0	263	10	0
2	n2	254	0	263	9	0
2	o2	254	0	263	10	0
2	p2	254	0	263	10	0
2	q2	254	0	263	10	0
2	r2	254	0	263	10	0
2	s2	254	0	263	9	0
2	t2	254	0	263	10	0
2	u2	254	0	263	10	0
2	v2	254	0	263	10	0
2	w2	254	0	263	9	0
2	x2	254	0	263	10	0
2	y2	254	0	263	10	0
2	z2	254	0	263	10	0
All	All	246420	0	240300	3959	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 8.

All (3959) 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:s:17:MET:HG2	1:s:19:LYS:H	1.43	0.84
1:Q:17:MET:HG2	1:Q:19:LYS:H	1.42	0.84
1:U:17:MET:HG2	1:U:19:LYS:H	1.43	0.84
1:a:17:MET:HG2	1:a:19:LYS:H	1.43	0.84
1:q:17:MET:HG2	1:q:19:LYS:H	1.43	0.84
1:3:17:MET:HG2	1:3:19:LYS:H	1.43	0.84
1:R:17:MET:HG2	1:R:19:LYS:H	1.43	0.84
1:Y:17:MET:HG2	1:Y:19:LYS:H	1.43	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:x:17:MET:HG2	1:x:19:LYS:H	1.43	0.84
1:y:17:MET:HG2	1:y:19:LYS:H	1.43	0.84
1:F:17:MET:HG2	1:F:19:LYS:H	1.43	0.84
1:7:17:MET:HG2	1:7:19:LYS:H	1.43	0.84
1:E:17:MET:HG2	1:E:19:LYS:H	1.43	0.84
1:w:17:MET:HG2	1:w:19:LYS:H	1.43	0.84
1:e:17:MET:HG2	1:e:19:LYS:H	1.43	0.84
1:o:17:MET:HG2	1:o:19:LYS:H	1.43	0.84
1:C:17:MET:HG2	1:C:19:LYS:H	1.43	0.84
1:X:17:MET:HG2	1:X:19:LYS:H	1.43	0.84
1:c:17:MET:HG2	1:c:19:LYS:H	1.43	0.84
1:A:17:MET:HG2	1:A:19:LYS:H	1.43	0.84
1:g:17:MET:HG2	1:g:19:LYS:H	1.43	0.84
1:n:17:MET:HG2	1:n:19:LYS:H	1.43	0.84
1:v:17:MET:HG2	1:v:19:LYS:H	1.43	0.84
1:H:17:MET:HG2	1:H:19:LYS:H	1.42	0.83
1:L:17:MET:HG2	1:L:19:LYS:H	1.43	0.83
1:t:17:MET:HG2	1:t:19:LYS:H	1.43	0.83
1:z:17:MET:HG2	1:z:19:LYS:H	1.43	0.83
1:5:17:MET:HG2	1:5:19:LYS:H	1.43	0.83
1:K:17:MET:HG2	1:K:19:LYS:H	1.43	0.83
1:d:17:MET:HG2	1:d:19:LYS:H	1.43	0.83
1:4:17:MET:HG2	1:4:19:LYS:H	1.43	0.83
1:G:17:MET:HG2	1:G:19:LYS:H	1.43	0.83
1:u:17:MET:HG2	1:u:19:LYS:H	1.43	0.83
1:I:17:MET:HG2	1:I:19:LYS:H	1.43	0.83
1:m:17:MET:HG2	1:m:19:LYS:H	1.43	0.83
1:r:17:MET:HG2	1:r:19:LYS:H	1.43	0.83
1:P:17:MET:HG2	1:P:19:LYS:H	1.42	0.83
1:S:17:MET:HG2	1:S:19:LYS:H	1.43	0.83
1:T:17:MET:HG2	1:T:19:LYS:H	1.43	0.83
1:B:17:MET:HG2	1:B:19:LYS:H	1.43	0.83
1:O:17:MET:HG2	1:O:19:LYS:H	1.43	0.83
1:j:17:MET:HG2	1:j:19:LYS:H	1.43	0.83
1:i:17:MET:HG2	1:i:19:LYS:H	1.42	0.82
1:W:17:MET:HG2	1:W:19:LYS:H	1.43	0.82
1:1:17:MET:HG2	1:1:19:LYS:H	1.43	0.82
1:N:17:MET:HG2	1:N:19:LYS:H	1.43	0.82
1:6:17:MET:HG2	1:6:19:LYS:H	1.42	0.82
1:J:17:MET:HG2	1:J:19:LYS:H	1.43	0.82
1:l:17:MET:HG2	1:l:19:LYS:H	1.43	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:17:MET:HG2	1:k:19:LYS:H	1.43	0.82
1:2:17:MET:HG2	1:2:19:LYS:H	1.43	0.82
1:Z:17:MET:HG2	1:Z:19:LYS:H	1.43	0.82
1:8:17:MET:HG2	1:8:19:LYS:H	1.43	0.82
1:D:17:MET:HG2	1:D:19:LYS:H	1.43	0.82
1:h:17:MET:HG2	1:h:19:LYS:H	1.43	0.82
1:M:17:MET:HG2	1:M:19:LYS:H	1.43	0.82
1:p:17:MET:HG2	1:p:19:LYS:H	1.43	0.80
1:V:17:MET:HG2	1:V:19:LYS:H	1.43	0.80
1:f:17:MET:HG2	1:f:19:LYS:H	1.43	0.80
1:b:17:MET:HG2	1:b:19:LYS:H	1.43	0.80
1:h:149:ARG:NH2	1:i:418:ASP:OD2	2.18	0.77
1:l:418:ASP:OD2	1:n:149:ARG:NH2	2.21	0.73
1:f:418:ASP:OD2	1:z:149:ARG:NH2	2.22	0.73
1:L:149:ARG:NH2	1:b:418:ASP:OD2	2.22	0.73
1:N:149:ARG:NH2	1:m:418:ASP:OD2	2.22	0.73
1:T:418:ASP:OD2	1:i:149:ARG:NH2	2.22	0.73
1:J:149:ARG:NH2	1:a:418:ASP:OD2	2.22	0.73
1:O:149:ARG:NH2	1:P:418:ASP:OD2	2.22	0.73
1:O:418:ASP:OD2	1:d:149:ARG:NH2	2.22	0.73
1:S:149:ARG:NH2	1:d:418:ASP:OD2	2.21	0.73
1:c:418:ASP:OD2	1:s:149:ARG:NH2	2.22	0.73
1:j:418:ASP:OD2	1:l:149:ARG:NH2	2.22	0.73
1:r:418:ASP:OD2	1:x:149:ARG:NH2	2.22	0.73
1:u:418:ASP:OD2	1:5:149:ARG:NH2	2.22	0.73
1:H:149:ARG:NH2	1:I:418:ASP:OD2	2.22	0.73
1:U:149:ARG:NH2	1:e:418:ASP:OD2	2.22	0.73
1:Y:149:ARG:NH2	1:4:418:ASP:OD2	2.22	0.73
1:2:149:ARG:NH2	1:3:418:ASP:OD2	2.22	0.73
1:K:418:ASP:OD2	1:7:149:ARG:NH2	2.22	0.73
1:M:149:ARG:NH2	1:N:418:ASP:OD2	2.22	0.73
1:Q:149:ARG:NH2	1:S:418:ASP:OD2	2.22	0.73
1:V:418:ASP:OD2	1:W:149:ARG:NH2	2.22	0.73
1:n:418:ASP:OD2	1:r:149:ARG:NH2	2.22	0.73
1:p:418:ASP:OD2	1:6:149:ARG:NH2	2.22	0.73
1:H:418:ASP:OD2	1:Z:149:ARG:NH2	2.22	0.73
1:X:149:ARG:NH2	1:Y:418:ASP:OD2	2.22	0.73
1:t:149:ARG:NH2	1:6:418:ASP:OD2	2.21	0.73
1:B:418:ASP:OD2	1:C:149:ARG:NH2	2.22	0.73
1:K:149:ARG:NH2	1:L:418:ASP:OD2	2.22	0.73
1:M:418:ASP:OD2	1:c:149:ARG:NH2	2.22	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:149:ARG:NH2	1:x:418:ASP:OD2	2.22	0.73
1:o:149:ARG:NH2	1:7:418:ASP:OD2	2.22	0.73
1:z:418:ASP:OD2	1:4:149:ARG:NH2	2.22	0.73
1:C:418:ASP:OD2	1:D:149:ARG:NH2	2.22	0.73
1:P:149:ARG:NH2	1:Q:418:ASP:OD2	2.22	0.73
1:X:418:ASP:OD2	1:f:149:ARG:NH2	2.22	0.73
1:b:149:ARG:NH2	1:o:418:ASP:OD2	2.22	0.73
1:g:149:ARG:NH2	1:1:418:ASP:OD2	2.22	0.73
1:5:418:ASP:OD2	1:8:149:ARG:NH2	2.22	0.73
1:g:418:ASP:OD2	1:k:149:ARG:NH2	2.22	0.72
1:t:418:ASP:OD2	1:y:149:ARG:NH2	2.22	0.72
1:C:216:LYS:HG2	1:H:108:ASP:HB3	1.71	0.72
1:R:418:ASP:OD2	1:V:149:ARG:NH2	2.22	0.72
1:j:108:ASP:HB3	1:p:216:LYS:HG2	1.71	0.72
1:p:149:ARG:NH2	1:q:418:ASP:OD2	2.22	0.72
1:D:418:ASP:OD2	1:E:149:ARG:NH2	2.22	0.72
1:G:149:ARG:NH2	1:W:418:ASP:OD2	2.22	0.72
1:I:216:LYS:HG2	1:7:108:ASP:HB3	1.71	0.72
1:P:108:ASP:HB3	1:V:216:LYS:HG2	1.71	0.72
1:Y:108:ASP:HB3	1:u:216:LYS:HG2	1.72	0.72
1:e:216:LYS:HG2	1:w:108:ASP:HB3	1.71	0.72
1:g:216:LYS:HG2	1:5:108:ASP:HB3	1.71	0.72
1:F:149:ARG:NH2	1:G:418:ASP:OD2	2.22	0.72
1:N:108:ASP:HB3	1:x:216:LYS:HG2	1.71	0.72
1:k:418:ASP:OD2	1:w:149:ARG:NH2	2.22	0.72
1:E:108:ASP:HB3	1:c:216:LYS:HG2	1.72	0.72
1:G:108:ASP:HB3	1:f:216:LYS:HG2	1.72	0.72
1:Q:216:LYS:HG2	1:i:108:ASP:HB3	1.71	0.72
1:v:149:ARG:NH2	1:w:418:ASP:OD2	2.22	0.72
1:q:149:ARG:NH2	1:y:418:ASP:OD2	2.22	0.72
1:u:149:ARG:NH2	1:2:418:ASP:OD2	2.22	0.72
1:A:149:ARG:NH2	1:E:418:ASP:OD2	2.22	0.72
1:F:418:ASP:OD2	1:R:149:ARG:NH2	2.22	0.72
1:I:108:ASP:HB3	1:7:216:LYS:HG2	1.72	0.72
1:I:149:ARG:NH2	1:J:418:ASP:OD2	2.22	0.72
1:L:108:ASP:HB3	1:s:216:LYS:HG2	1.72	0.72
1:T:149:ARG:NH2	1:U:418:ASP:OD2	2.22	0.72
1:U:216:LYS:HG2	1:z:108:ASP:HB3	1.72	0.72
1:Y:216:LYS:HG2	1:u:108:ASP:HB3	1.72	0.72
1:m:149:ARG:NH2	1:s:418:ASP:OD2	2.22	0.72
1:3:149:ARG:NH2	1:8:418:ASP:OD2	2.22	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Z:418:ASP:OD2	1:a:149:ARG:NH2	2.22	0.72
1:b:216:LYS:HG2	1:t:108:ASP:HB3	1.72	0.72
1:j:216:LYS:HG2	1:p:108:ASP:HB3	1.72	0.72
1:A:216:LYS:HG2	1:O:108:ASP:HB3	1.72	0.72
1:N:216:LYS:HG2	1:x:108:ASP:HB3	1.72	0.72
1:P:216:LYS:HG2	1:V:108:ASP:HB3	1.72	0.72
1:v:418:ASP:OD2	1:1:149:ARG:NH2	2.22	0.72
1:A:418:ASP:OD2	1:B:149:ARG:NH2	2.22	0.71
1:l:108:ASP:HB3	1:v:216:LYS:HG2	1.72	0.71
1:D:108:ASP:HB3	1:K:216:LYS:HG2	1.72	0.71
1:k:108:ASP:HB3	1:4:216:LYS:HG2	1.72	0.71
1:q:216:LYS:HG2	1:1:108:ASP:HB3	1.72	0.71
1:B:108:ASP:HB3	1:R:216:LYS:HG2	1.72	0.71
1:Q:108:ASP:HB3	1:i:216:LYS:HG2	1.72	0.71
1:T:216:LYS:HG2	1:W:108:ASP:HB3	1.72	0.71
1:F:108:ASP:HB3	1:Z:216:LYS:HG2	1.72	0.71
1:J:108:ASP:HB3	1:2:216:LYS:HG2	1.72	0.71
1:J:216:LYS:HG2	1:2:108:ASP:HB3	1.72	0.71
1:m:216:LYS:HG2	1:6:108:ASP:HB3	1.72	0.71
1:y:108:ASP:HB3	1:8:216:LYS:HG2	1.72	0.71
1:S:108:ASP:HB3	1:r:216:LYS:HG2	1.72	0.71
1:T:159:ASP:O	1:T:343:ARG:NH2	2.24	0.71
1:q:108:ASP:HB3	1:1:216:LYS:HG2	1.72	0.71
1:B:159:ASP:O	1:B:343:ARG:NH2	2.24	0.71
1:B:216:LYS:HG2	1:R:108:ASP:HB3	1.72	0.71
1:G:159:ASP:O	1:G:343:ARG:NH2	2.24	0.71
1:S:216:LYS:HG2	1:r:108:ASP:HB3	1.72	0.71
1:h:216:LYS:HG2	1:n:108:ASP:HB3	1.71	0.71
1:m:108:ASP:HB3	1:6:216:LYS:HG2	1.72	0.71
1:t:159:ASP:O	1:t:343:ARG:NH2	2.24	0.71
1:1:159:ASP:O	1:1:343:ARG:NH2	2.24	0.71
1:L:216:LYS:HG2	1:s:108:ASP:HB3	1.72	0.71
1:P:159:ASP:O	1:P:343:ARG:NH2	2.24	0.71
1:U:108:ASP:HB3	1:z:216:LYS:HG2	1.72	0.71
1:m:159:ASP:O	1:m:343:ARG:NH2	2.24	0.71
1:R:159:ASP:O	1:R:343:ARG:NH2	2.24	0.71
1:T:108:ASP:HB3	1:W:216:LYS:HG2	1.72	0.71
1:c:159:ASP:O	1:c:343:ARG:NH2	2.24	0.71
1:e:159:ASP:O	1:e:343:ARG:NH2	2.24	0.71
1:3:159:ASP:O	1:3:343:ARG:NH2	2.24	0.71
1:A:159:ASP:O	1:A:343:ARG:NH2	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:159:ASP:O	1:a:343:ARG:NH2	2.24	0.71
1:g:159:ASP:O	1:g:343:ARG:NH2	2.24	0.71
1:j:159:ASP:O	1:j:343:ARG:NH2	2.24	0.71
1:q:159:ASP:O	1:q:343:ARG:NH2	2.24	0.71
1:v:159:ASP:O	1:v:343:ARG:NH2	2.24	0.71
1:5:159:ASP:O	1:5:343:ARG:NH2	2.24	0.71
1:C:159:ASP:O	1:C:343:ARG:NH2	2.24	0.70
1:H:159:ASP:O	1:H:343:ARG:NH2	2.24	0.70
1:M:108:ASP:HB3	1:d:216:LYS:HG2	1.72	0.70
1:o:216:LYS:HG2	1:3:108:ASP:HB3	1.72	0.70
1:E:216:LYS:HG2	1:c:108:ASP:HB3	1.73	0.70
1:d:159:ASP:O	1:d:343:ARG:NH2	2.24	0.70
1:n:159:ASP:O	1:n:343:ARG:NH2	2.24	0.70
1:y:216:LYS:HG2	1:8:108:ASP:HB3	1.72	0.70
1:b:108:ASP:HB3	1:t:216:LYS:HG2	1.72	0.70
1:f:159:ASP:O	1:f:343:ARG:NH2	2.24	0.70
1:C:108:ASP:HB3	1:H:216:LYS:HG2	1.72	0.70
1:E:159:ASP:O	1:E:343:ARG:NH2	2.24	0.70
1:G:216:LYS:HG2	1:f:108:ASP:HB3	1.73	0.70
1:I:159:ASP:O	1:I:343:ARG:NH2	2.24	0.70
1:b:159:ASP:O	1:b:343:ARG:NH2	2.24	0.70
1:e:108:ASP:HB3	1:w:216:LYS:HG2	1.73	0.70
1:g:108:ASP:HB3	1:5:216:LYS:HG2	1.72	0.70
1:u:159:ASP:O	1:u:343:ARG:NH2	2.24	0.70
1:w:159:ASP:O	1:w:343:ARG:NH2	2.24	0.70
1:7:159:ASP:O	1:7:343:ARG:NH2	2.24	0.70
1:F:216:LYS:HG2	1:Z:108:ASP:HB3	1.72	0.70
1:N:159:ASP:O	1:N:343:ARG:NH2	2.24	0.70
1:X:216:LYS:HG2	1:a:108:ASP:HB3	1.72	0.70
1:k:159:ASP:O	1:k:343:ARG:NH2	2.24	0.70
1:o:108:ASP:HB3	1:3:216:LYS:HG2	1.72	0.70
1:z:159:ASP:O	1:z:343:ARG:NH2	2.24	0.70
1:I:58:LYS:HE2	1:I:387:TYR:CE1	2.27	0.70
1:L:159:ASP:O	1:L:343:ARG:NH2	2.24	0.70
1:O:58:LYS:HE2	1:O:387:TYR:CE1	2.27	0.70
1:Y:159:ASP:O	1:Y:343:ARG:NH2	2.24	0.70
1:i:159:ASP:O	1:i:343:ARG:NH2	2.24	0.70
1:l:58:LYS:HE2	1:l:387:TYR:CE1	2.27	0.70
1:u:58:LYS:HE2	1:u:387:TYR:CE1	2.27	0.70
1:x:159:ASP:O	1:x:343:ARG:NH2	2.24	0.70
1:B:58:LYS:HE2	1:B:387:TYR:CE1	2.27	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:58:LYS:HE2	1:C:387:TYR:CE1	2.27	0.70
1:D:159:ASP:O	1:D:343:ARG:NH2	2.24	0.70
1:Q:58:LYS:HE2	1:Q:387:TYR:CE1	2.27	0.70
1:Q:159:ASP:O	1:Q:343:ARG:NH2	2.24	0.70
1:X:108:ASP:HB3	1:a:216:LYS:HG2	1.72	0.70
1:g:58:LYS:HE2	1:g:387:TYR:CE1	2.27	0.70
1:x:58:LYS:HE2	1:x:387:TYR:CE1	2.27	0.70
1:l:58:LYS:HE2	1:l:387:TYR:CE1	2.27	0.70
1:6:159:ASP:O	1:6:343:ARG:NH2	2.24	0.70
1:V:159:ASP:O	1:V:343:ARG:NH2	2.24	0.70
1:W:159:ASP:O	1:W:343:ARG:NH2	2.24	0.70
1:c:58:LYS:HE2	1:c:387:TYR:CE1	2.27	0.70
1:d:58:LYS:HE2	1:d:387:TYR:CE1	2.27	0.70
1:L:58:LYS:HE2	1:L:387:TYR:CE1	2.27	0.70
1:T:58:LYS:HE2	1:T:387:TYR:CE1	2.27	0.70
1:e:58:LYS:HE2	1:e:387:TYR:CE1	2.27	0.70
1:n:58:LYS:HE2	1:n:387:TYR:CE1	2.27	0.70
1:p:159:ASP:O	1:p:343:ARG:NH2	2.24	0.70
1:D:216:LYS:HG2	1:K:108:ASP:HB3	1.72	0.69
1:X:58:LYS:HE2	1:X:387:TYR:CE1	2.27	0.69
1:X:159:ASP:O	1:X:343:ARG:NH2	2.24	0.69
1:m:58:LYS:HE2	1:m:387:TYR:CE1	2.27	0.69
1:o:58:LYS:HE2	1:o:387:TYR:CE1	2.27	0.69
1:q:58:LYS:HE2	1:q:387:TYR:CE1	2.27	0.69
1:z:58:LYS:HE2	1:z:387:TYR:CE1	2.27	0.69
1:A:108:ASP:HB3	1:O:216:LYS:HG2	1.72	0.69
1:H:58:LYS:HE2	1:H:387:TYR:CE1	2.27	0.69
1:K:58:LYS:HE2	1:K:387:TYR:CE1	2.27	0.69
1:K:159:ASP:O	1:K:343:ARG:NH2	2.24	0.69
1:R:58:LYS:HE2	1:R:387:TYR:CE1	2.27	0.69
1:U:58:LYS:HE2	1:U:387:TYR:CE1	2.27	0.69
1:k:216:LYS:HG2	1:4:108:ASP:HB3	1.72	0.69
1:o:159:ASP:O	1:o:343:ARG:NH2	2.24	0.69
1:v:58:LYS:HE2	1:v:387:TYR:CE1	2.27	0.69
1:4:58:LYS:HE2	1:4:387:TYR:CE1	2.27	0.69
1:4:159:ASP:O	1:4:343:ARG:NH2	2.24	0.69
1:5:58:LYS:HE2	1:5:387:TYR:CE1	2.27	0.69
1:A:58:LYS:HE2	1:A:387:TYR:CE1	2.27	0.69
1:J:159:ASP:O	1:J:343:ARG:NH2	2.24	0.69
1:S:58:LYS:HE2	1:S:387:TYR:CE1	2.27	0.69
1:U:159:ASP:O	1:U:343:ARG:NH2	2.24	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:W:58:LYS:HE2	1:W:387:TYR:CE1	2.27	0.69
1:Z:159:ASP:O	1:Z:343:ARG:NH2	2.24	0.69
1:j:58:LYS:HE2	1:j:387:TYR:CE1	2.27	0.69
1:l:216:LYS:HG2	1:v:108:ASP:HB3	1.72	0.69
1:M:216:LYS:HG2	1:d:108:ASP:HB3	1.72	0.69
1:P:58:LYS:HE2	1:P:387:TYR:CE1	2.27	0.69
1:h:58:LYS:HE2	1:h:387:TYR:CE1	2.27	0.69
1:r:58:LYS:HE2	1:r:387:TYR:CE1	2.27	0.69
1:s:58:LYS:HE2	1:s:387:TYR:CE1	2.27	0.69
1:s:159:ASP:O	1:s:343:ARG:NH2	2.24	0.69
1:8:58:LYS:HE2	1:8:387:TYR:CE1	2.27	0.69
1:8:159:ASP:O	1:8:343:ARG:NH2	2.24	0.69
1:M:58:LYS:HE2	1:M:387:TYR:CE1	2.27	0.69
1:Z:58:LYS:HE2	1:Z:387:TYR:CE1	2.27	0.69
1:l:159:ASP:O	1:l:343:ARG:NH2	2.24	0.69
1:y:58:LYS:HE2	1:y:387:TYR:CE1	2.27	0.69
1:6:58:LYS:HE2	1:6:387:TYR:CE1	2.27	0.69
1:F:58:LYS:HE2	1:F:387:TYR:CE1	2.27	0.69
1:G:58:LYS:HE2	1:G:387:TYR:CE1	2.27	0.69
1:Y:58:LYS:HE2	1:Y:387:TYR:CE1	2.27	0.69
1:h:159:ASP:O	1:h:343:ARG:NH2	2.24	0.69
1:2:159:ASP:O	1:2:343:ARG:NH2	2.24	0.69
1:J:58:LYS:HE2	1:J:387:TYR:CE1	2.27	0.69
1:M:159:ASP:O	1:M:343:ARG:NH2	2.24	0.69
1:2:58:LYS:HE2	1:2:387:TYR:CE1	2.27	0.69
1:7:58:LYS:HE2	1:7:387:TYR:CE1	2.27	0.69
1:D:58:LYS:HE2	1:D:387:TYR:CE1	2.27	0.69
1:O:159:ASP:O	1:O:343:ARG:NH2	2.24	0.69
1:a:58:LYS:HE2	1:a:387:TYR:CE1	2.27	0.69
1:b:58:LYS:HE2	1:b:387:TYR:CE1	2.27	0.69
1:f:58:LYS:HE2	1:f:387:TYR:CE1	2.27	0.69
1:p:58:LYS:HE2	1:p:387:TYR:CE1	2.27	0.69
1:t:58:LYS:HE2	1:t:387:TYR:CE1	2.27	0.69
1:E:58:LYS:HE2	1:E:387:TYR:CE1	2.27	0.69
1:F:159:ASP:O	1:F:343:ARG:NH2	2.24	0.69
1:V:58:LYS:HE2	1:V:387:TYR:CE1	2.27	0.69
1:k:58:LYS:HE2	1:k:387:TYR:CE1	2.27	0.69
1:r:159:ASP:O	1:r:343:ARG:NH2	2.24	0.69
1:w:58:LYS:HE2	1:w:387:TYR:CE1	2.27	0.69
1:y:159:ASP:O	1:y:343:ARG:NH2	2.24	0.69
1:3:58:LYS:HE2	1:3:387:TYR:CE1	2.27	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:159:ASP:O	1:S:343:ARG:NH2	2.24	0.69
1:e:149:ARG:NH2	1:h:418:ASP:OD2	2.26	0.69
1:h:108:ASP:HB3	1:n:216:LYS:HG2	1.74	0.68
1:i:58:LYS:HE2	1:i:387:TYR:CE1	2.27	0.68
1:N:58:LYS:HE2	1:N:387:TYR:CE1	2.27	0.68
1:C:107:TRP:HA	1:C:107:TRP:CE3	2.29	0.68
1:U:107:TRP:HA	1:U:107:TRP:CE3	2.29	0.68
1:b:107:TRP:HA	1:b:107:TRP:CE3	2.29	0.68
1:f:107:TRP:CE3	1:f:107:TRP:HA	2.29	0.68
1:s:107:TRP:CE3	1:s:107:TRP:HA	2.29	0.68
1:Y:107:TRP:HA	1:Y:107:TRP:CE3	2.29	0.68
1:g:107:TRP:HA	1:g:107:TRP:CE3	2.29	0.68
1:N:107:TRP:HA	1:N:107:TRP:CE3	2.29	0.68
1:d:107:TRP:HA	1:d:107:TRP:CE3	2.29	0.68
1:7:107:TRP:HA	1:7:107:TRP:CE3	2.29	0.68
1:T:107:TRP:HA	1:T:107:TRP:CE3	2.29	0.68
1:h:107:TRP:CE3	1:h:107:TRP:HA	2.29	0.68
1:i:107:TRP:HA	1:i:107:TRP:CE3	2.29	0.68
1:n:107:TRP:CE3	1:n:107:TRP:HA	2.29	0.68
1:M:107:TRP:HA	1:M:107:TRP:CE3	2.29	0.68
1:m:107:TRP:HA	1:m:107:TRP:CE3	2.29	0.68
1:c:107:TRP:CE3	1:c:107:TRP:HA	2.29	0.68
1:B:107:TRP:HA	1:B:107:TRP:CE3	2.29	0.67
1:J:107:TRP:HA	1:J:107:TRP:CE3	2.29	0.67
1:K:107:TRP:CE3	1:K:107:TRP:HA	2.29	0.67
1:O:107:TRP:HA	1:O:107:TRP:CE3	2.29	0.67
1:1:107:TRP:HA	1:1:107:TRP:CE3	2.29	0.67
1:4:107:TRP:HA	1:4:107:TRP:CE3	2.29	0.67
1:D:107:TRP:HA	1:D:107:TRP:CE3	2.29	0.67
1:F:107:TRP:HA	1:F:107:TRP:CE3	2.29	0.67
1:k:107:TRP:CE3	1:k:107:TRP:HA	2.29	0.67
1:y:107:TRP:HA	1:y:107:TRP:CE3	2.29	0.67
1:2:107:TRP:HA	1:2:107:TRP:CE3	2.29	0.67
1:A:107:TRP:HA	1:A:107:TRP:CE3	2.29	0.67
1:Q:107:TRP:HA	1:Q:107:TRP:CE3	2.29	0.67
1:l:107:TRP:HA	1:l:107:TRP:CE3	2.29	0.67
1:v:107:TRP:CE3	1:v:107:TRP:HA	2.29	0.67
1:I:412:GLN:HE22	1:I:480:SER:HB2	1.60	0.67
1:N:412:GLN:HE22	1:N:480:SER:HB2	1.60	0.67
1:O:412:GLN:HE22	1:O:480:SER:HB2	1.60	0.67
1:i:412:GLN:HE22	1:i:480:SER:HB2	1.60	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:r:412:GLN:HE22	1:r:480:SER:HB2	1.60	0.67
1:u:107:TRP:HA	1:u:107:TRP:CE3	2.29	0.67
1:R:412:GLN:HE22	1:R:480:SER:HB2	1.60	0.67
1:l:412:GLN:HE22	1:l:480:SER:HB2	1.60	0.67
1:p:412:GLN:HE22	1:p:480:SER:HB2	1.60	0.67
1:q:412:GLN:HE22	1:q:480:SER:HB2	1.60	0.67
1:u:412:GLN:HE22	1:u:480:SER:HB2	1.60	0.67
1:A:412:GLN:HE22	1:A:480:SER:HB2	1.60	0.67
1:H:107:TRP:CE3	1:H:107:TRP:HA	2.29	0.67
1:S:412:GLN:HE22	1:S:480:SER:HB2	1.60	0.67
1:W:412:GLN:HE22	1:W:480:SER:HB2	1.60	0.67
1:x:107:TRP:HA	1:x:107:TRP:CE3	2.29	0.67
1:I:107:TRP:HA	1:I:107:TRP:CE3	2.29	0.67
1:V:412:GLN:HE22	1:V:480:SER:HB2	1.60	0.67
1:3:107:TRP:HA	1:3:107:TRP:CE3	2.29	0.67
1:6:412:GLN:HE22	1:6:480:SER:HB2	1.60	0.67
1:a:412:GLN:HE22	1:a:480:SER:HB2	1.60	0.67
1:e:107:TRP:HA	1:e:107:TRP:CE3	2.29	0.67
1:z:412:GLN:HE22	1:z:480:SER:HB2	1.60	0.67
1:E:107:TRP:CE3	1:E:107:TRP:HA	2.29	0.67
1:a:107:TRP:HA	1:a:107:TRP:CE3	2.29	0.67
1:v:412:GLN:HE22	1:v:480:SER:HB2	1.60	0.67
1:5:107:TRP:CE3	1:5:107:TRP:HA	2.29	0.67
1:L:107:TRP:HA	1:L:107:TRP:CE3	2.29	0.66
1:M:412:GLN:HE22	1:M:480:SER:HB2	1.60	0.66
1:S:107:TRP:CE3	1:S:107:TRP:HA	2.29	0.66
1:V:107:TRP:HA	1:V:107:TRP:CE3	2.29	0.66
1:h:412:GLN:HE22	1:h:480:SER:HB2	1.60	0.66
1:n:412:GLN:HE22	1:n:480:SER:HB2	1.60	0.66
1:p:107:TRP:HA	1:p:107:TRP:CE3	2.29	0.66
1:z:107:TRP:HA	1:z:107:TRP:CE3	2.29	0.66
1:3:412:GLN:HE22	1:3:480:SER:HB2	1.60	0.66
1:L:412:GLN:HE22	1:L:480:SER:HB2	1.60	0.66
1:P:412:GLN:HE22	1:P:480:SER:HB2	1.60	0.66
1:W:107:TRP:HA	1:W:107:TRP:CE3	2.29	0.66
1:X:412:GLN:HE22	1:X:480:SER:HB2	1.60	0.66
1:d:412:GLN:HE22	1:d:480:SER:HB2	1.60	0.66
1:w:107:TRP:HA	1:w:107:TRP:CE3	2.29	0.66
1:6:107:TRP:HA	1:6:107:TRP:CE3	2.29	0.66
1:Y:412:GLN:HE22	1:Y:480:SER:HB2	1.60	0.66
1:o:412:GLN:HE22	1:o:480:SER:HB2	1.60	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:r:107:TRP:HA	1:r:107:TRP:CE3	2.29	0.66
1:5:412:GLN:HE22	1:5:480:SER:HB2	1.60	0.66
1:H:412:GLN:HE22	1:H:480:SER:HB2	1.60	0.66
1:R:107:TRP:HA	1:R:107:TRP:CE3	2.29	0.66
1:j:107:TRP:HA	1:j:107:TRP:CE3	2.29	0.66
1:j:412:GLN:HE22	1:j:480:SER:HB2	1.60	0.66
1:q:107:TRP:HA	1:q:107:TRP:CE3	2.29	0.66
1:J:412:GLN:HE22	1:J:480:SER:HB2	1.60	0.66
1:P:107:TRP:CE3	1:P:107:TRP:HA	2.29	0.66
1:m:412:GLN:HE22	1:m:480:SER:HB2	1.60	0.66
1:2:412:GLN:HE22	1:2:480:SER:HB2	1.60	0.66
1:7:412:GLN:HE22	1:7:480:SER:HB2	1.60	0.66
1:T:412:GLN:HE22	1:T:480:SER:HB2	1.60	0.66
1:x:412:GLN:HE22	1:x:480:SER:HB2	1.60	0.66
1:Q:412:GLN:HE22	1:Q:480:SER:HB2	1.60	0.66
1:D:412:GLN:HE22	1:D:480:SER:HB2	1.60	0.66
1:G:107:TRP:HA	1:G:107:TRP:CE3	2.29	0.66
1:K:412:GLN:HE22	1:K:480:SER:HB2	1.60	0.66
1:4:412:GLN:HE22	1:4:480:SER:HB2	1.60	0.66
1:o:107:TRP:HA	1:o:107:TRP:CE3	2.29	0.65
1:t:107:TRP:HA	1:t:107:TRP:CE3	2.29	0.65
1:Z:107:TRP:HA	1:Z:107:TRP:CE3	2.29	0.65
1:g:412:GLN:HE22	1:g:480:SER:HB2	1.60	0.65
1:X:107:TRP:CE3	1:X:107:TRP:HA	2.29	0.65
1:k:412:GLN:HE22	1:k:480:SER:HB2	1.60	0.65
1:Z:412:GLN:HE22	1:Z:480:SER:HB2	1.60	0.65
1:c:412:GLN:HE22	1:c:480:SER:HB2	1.60	0.65
1:e:412:GLN:HE22	1:e:480:SER:HB2	1.60	0.65
1:w:412:GLN:HE22	1:w:480:SER:HB2	1.60	0.65
1:y:412:GLN:HE22	1:y:480:SER:HB2	1.60	0.65
1:8:107:TRP:CE3	1:8:107:TRP:HA	2.29	0.65
1:8:412:GLN:HE22	1:8:480:SER:HB2	1.60	0.65
1:B:412:GLN:HE22	1:B:480:SER:HB2	1.60	0.65
1:C:412:GLN:HE22	1:C:480:SER:HB2	1.60	0.65
1:F:412:GLN:HE22	1:F:480:SER:HB2	1.60	0.65
1:E:412:GLN:HE22	1:E:480:SER:HB2	1.60	0.65
1:U:412:GLN:HE22	1:U:480:SER:HB2	1.60	0.65
1:1:412:GLN:HE22	1:1:480:SER:HB2	1.60	0.65
1:f:412:GLN:HE22	1:f:480:SER:HB2	1.60	0.65
1:b:412:GLN:HE22	1:b:480:SER:HB2	1.60	0.64
1:s:412:GLN:HE22	1:s:480:SER:HB2	1.60	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:t:412:GLN:HE22	1:t:480:SER:HB2	1.60	0.64
1:G:412:GLN:HE22	1:G:480:SER:HB2	1.60	0.64
1:O:48:GLN:O	1:P:470:LYS:NZ	2.33	0.62
1:X:48:GLN:O	1:Y:470:LYS:NZ	2.33	0.62
1:j:470:LYS:NZ	1:l:48:GLN:O	2.33	0.62
1:u:48:GLN:O	1:2:470:LYS:NZ	2.33	0.62
1:D:470:LYS:NZ	1:E:48:GLN:O	2.32	0.62
1:l:470:LYS:NZ	1:n:48:GLN:O	2.33	0.62
1:I:77:ASP:OD1	2:I2:17:HIS:CE1	2.54	0.61
1:Y:77:ASP:OD1	2:Y2:17:HIS:CE1	2.54	0.61
1:u:77:ASP:OD1	2:u2:17:HIS:CE1	2.54	0.61
1:X:77:ASP:OD1	2:X2:17:HIS:CE1	2.54	0.61
1:g:470:LYS:NZ	1:k:48:GLN:O	2.33	0.61
1:k:470:LYS:NZ	1:w:48:GLN:O	2.33	0.61
1:n:77:ASP:OD1	2:n2:17:HIS:CE1	2.54	0.61
1:o:77:ASP:OD1	2:o2:17:HIS:CE1	2.54	0.61
1:7:77:ASP:OD1	2:72:17:HIS:CE1	2.54	0.61
1:C:470:LYS:NZ	1:D:48:GLN:O	2.33	0.61
1:D:77:ASP:OD1	2:D2:17:HIS:CE1	2.54	0.61
1:F:48:GLN:O	1:G:470:LYS:NZ	2.33	0.61
1:H:77:ASP:OD1	2:H2:17:HIS:CE1	2.54	0.61
1:V:77:ASP:OD1	2:V2:17:HIS:CE1	2.54	0.61
1:Z:77:ASP:OD1	2:Z2:17:HIS:CE1	2.54	0.61
1:k:77:ASP:OD1	2:k2:17:HIS:CE1	2.54	0.61
1:5:77:ASP:OD1	2:52:17:HIS:CE1	2.54	0.61
1:K:77:ASP:OD1	2:K2:17:HIS:CE1	2.54	0.61
1:d:77:ASP:OD1	2:d2:17:HIS:CE1	2.54	0.61
1:p:77:ASP:OD1	2:p2:17:HIS:CE1	2.54	0.61
1:8:77:ASP:OD1	2:82:17:HIS:CE1	2.54	0.61
1:E:77:ASP:OD1	2:E2:17:HIS:CE1	2.54	0.61
1:F:77:ASP:OD1	2:F2:17:HIS:CE1	2.54	0.61
1:4:77:ASP:OD1	2:42:17:HIS:CE1	2.54	0.61
1:A:77:ASP:OD1	2:0:17:HIS:CE1	2.54	0.61
1:B:77:ASP:OD1	2:9:17:HIS:CE1	2.54	0.61
1:N:77:ASP:OD1	2:N2:17:HIS:CE1	2.54	0.61
1:i:77:ASP:OD1	2:i2:17:HIS:CE1	2.54	0.61
1:w:77:ASP:OD1	2:w2:17:HIS:CE1	2.54	0.61
1:y:77:ASP:OD1	2:y2:17:HIS:CE1	2.54	0.61
1:r:77:ASP:OD1	2:r2:17:HIS:CE1	2.54	0.61
1:t:470:LYS:NZ	1:y:48:GLN:O	2.33	0.61
1:l:77:ASP:OD1	2:l2:17:HIS:CE1	2.54	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:48:GLN:O	1:E:470:LYS:NZ	2.33	0.61
1:G:77:ASP:OD1	2:G2:17:HIS:CE1	2.54	0.61
1:S:77:ASP:OD1	2:S2:17:HIS:CE1	2.54	0.61
1:Y:107:TRP:HA	1:Y:107:TRP:HE3	1.66	0.61
1:l:77:ASP:OD1	2:l2:17:HIS:CE1	2.54	0.61
1:x:77:ASP:OD1	2:x2:17:HIS:CE1	2.54	0.61
1:O:77:ASP:OD1	2:O2:17:HIS:CE1	2.54	0.61
1:O:107:TRP:HA	1:O:107:TRP:HE3	1.66	0.61
1:P:48:GLN:O	1:Q:470:LYS:NZ	2.33	0.61
1:U:77:ASP:OD1	2:U2:17:HIS:CE1	2.54	0.61
1:o:48:GLN:O	1:7:470:LYS:NZ	2.33	0.61
1:s:77:ASP:OD1	2:s2:17:HIS:CE1	2.54	0.61
1:t:77:ASP:OD1	2:t2:17:HIS:CE1	2.54	0.61
1:v:470:LYS:NZ	1:1:48:GLN:O	2.33	0.61
1:7:107:TRP:HA	1:7:107:TRP:HE3	1.66	0.61
1:H:470:LYS:NZ	1:Z:48:GLN:O	2.33	0.60
1:M:470:LYS:NZ	1:c:48:GLN:O	2.33	0.60
1:Q:77:ASP:OD1	2:Q2:17:HIS:CE1	2.54	0.60
1:T:77:ASP:OD1	2:T2:17:HIS:CE1	2.54	0.60
1:d:107:TRP:HA	1:d:107:TRP:HE3	1.66	0.60
1:l:107:TRP:HA	1:l:107:TRP:HE3	1.66	0.60
1:5:470:LYS:NZ	1:8:48:GLN:O	2.33	0.60
1:c:77:ASP:OD1	2:c2:17:HIS:CE1	2.54	0.60
1:j:77:ASP:OD1	2:j2:17:HIS:CE1	2.54	0.60
1:m:77:ASP:OD1	2:m2:17:HIS:CE1	2.54	0.60
1:n:107:TRP:HA	1:n:107:TRP:HE3	1.66	0.60
1:v:77:ASP:OD1	2:v2:17:HIS:CE1	2.54	0.60
1:2:77:ASP:OD1	2:22:17:HIS:CE1	2.54	0.60
1:P:77:ASP:OD1	2:P2:17:HIS:CE1	2.54	0.60
1:b:77:ASP:OD1	2:b2:17:HIS:CE1	2.54	0.60
1:e:77:ASP:OD1	2:e2:17:HIS:CE1	2.54	0.60
1:f:470:LYS:NZ	1:z:48:GLN:O	2.33	0.60
1:h:77:ASP:OD1	2:h2:17:HIS:CE1	2.54	0.60
1:C:77:ASP:OD1	2:C2:17:HIS:CE1	2.54	0.60
1:J:77:ASP:OD1	2:J2:17:HIS:CE1	2.54	0.60
1:J:107:TRP:HA	1:J:107:TRP:HE3	1.66	0.60
1:L:48:GLN:O	1:b:470:LYS:NZ	2.33	0.60
1:M:77:ASP:OD1	2:M2:17:HIS:CE1	2.54	0.60
1:R:77:ASP:OD1	2:R2:17:HIS:CE1	2.54	0.60
1:q:77:ASP:OD1	2:q2:17:HIS:CE1	2.54	0.60
1:u:470:LYS:NZ	1:5:48:GLN:O	2.33	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:v:48:GLN:O	1:w:470:LYS:NZ	2.33	0.60
1:P:107:TRP:HA	1:P:107:TRP:HE3	1.66	0.60
1:V:470:LYS:NZ	1:W:48:GLN:O	2.33	0.60
1:Y:77:ASP:OD1	2:Y2:17:HIS:HE1	1.85	0.60
1:f:77:ASP:OD1	2:f2:17:HIS:CE1	2.54	0.60
1:g:77:ASP:OD1	2:g2:17:HIS:CE1	2.54	0.60
1:x:107:TRP:HA	1:x:107:TRP:HE3	1.66	0.60
1:z:77:ASP:OD1	2:z2:17:HIS:CE1	2.54	0.60
1:F:77:ASP:OD1	2:F2:17:HIS:HE1	1.85	0.60
1:K:77:ASP:OD1	2:K2:17:HIS:HE1	1.85	0.60
1:M:77:ASP:OD1	2:M2:17:HIS:HE1	1.85	0.60
1:Q:107:TRP:HA	1:Q:107:TRP:HE3	1.66	0.60
1:S:77:ASP:OD1	2:S2:17:HIS:HE1	1.85	0.60
1:h:309:THR:HB	1:l:433:LEU:HD23	1.82	0.60
1:q:77:ASP:OD1	2:q2:17:HIS:HE1	1.85	0.60
1:r:77:ASP:OD1	2:r2:17:HIS:HE1	1.85	0.60
1:y:77:ASP:OD1	2:y2:17:HIS:HE1	1.85	0.60
1:4:77:ASP:OD1	2:42:17:HIS:HE1	1.85	0.60
1:7:77:ASP:OD1	2:72:17:HIS:HE1	1.85	0.60
1:E:107:TRP:HA	1:E:107:TRP:HE3	1.66	0.60
1:L:77:ASP:OD1	2:L2:17:HIS:CE1	2.54	0.60
1:L:162:ARG:NH1	1:L:167:SER:O	2.35	0.60
1:O:77:ASP:OD1	2:O2:17:HIS:HE1	1.85	0.60
1:R:77:ASP:OD1	2:R2:17:HIS:HE1	1.85	0.60
1:R:162:ARG:NH1	1:R:167:SER:O	2.35	0.60
1:W:77:ASP:OD1	2:W2:17:HIS:CE1	2.54	0.60
1:a:77:ASP:OD1	2:a2:17:HIS:CE1	2.54	0.60
1:d:77:ASP:OD1	2:d2:17:HIS:HE1	1.85	0.60
1:e:162:ARG:NH1	1:e:167:SER:O	2.35	0.60
1:j:107:TRP:HA	1:j:107:TRP:HE3	1.66	0.60
1:l:77:ASP:OD1	2:l2:17:HIS:HE1	1.85	0.60
1:n:77:ASP:OD1	2:n2:17:HIS:HE1	1.85	0.60
1:o:162:ARG:NH1	1:o:167:SER:O	2.35	0.60
1:q:162:ARG:NH1	1:q:167:SER:O	2.35	0.60
1:s:77:ASP:OD1	2:s2:17:HIS:HE1	1.85	0.60
1:z:162:ARG:NH1	1:z:167:SER:O	2.35	0.60
1:A:162:ARG:NH1	1:A:167:SER:O	2.35	0.60
1:Q:162:ARG:NH1	1:Q:167:SER:O	2.35	0.60
1:T:162:ARG:NH1	1:T:167:SER:O	2.35	0.60
1:U:77:ASP:OD1	2:U2:17:HIS:HE1	1.85	0.60
1:X:162:ARG:NH1	1:X:167:SER:O	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:162:ARG:NH1	1:c:167:SER:O	2.35	0.60
1:e:69:THR:HG21	1:h:371:PRO:HG2	1.84	0.60
1:m:162:ARG:NH1	1:m:167:SER:O	2.35	0.60
1:w:107:TRP:HA	1:w:107:TRP:HE3	1.66	0.60
1:J:77:ASP:OD1	2:J2:17:HIS:HE1	1.85	0.60
1:L:107:TRP:HA	1:L:107:TRP:HE3	1.66	0.60
1:T:470:LYS:NZ	1:i:48:GLN:O	2.33	0.60
1:h:77:ASP:OD1	2:h2:17:HIS:HE1	1.85	0.60
1:p:470:LYS:NZ	1:6:48:GLN:O	2.33	0.60
1:q:107:TRP:HA	1:q:107:TRP:HE3	1.66	0.60
1:t:107:TRP:HA	1:t:107:TRP:HE3	1.66	0.60
1:v:162:ARG:NH1	1:v:167:SER:O	2.35	0.60
1:x:162:ARG:NH1	1:x:167:SER:O	2.35	0.60
1:z:107:TRP:HA	1:z:107:TRP:HE3	1.66	0.60
1:1:107:TRP:HA	1:1:107:TRP:HE3	1.66	0.60
1:2:77:ASP:OD1	2:22:17:HIS:HE1	1.85	0.60
1:3:77:ASP:OD1	2:32:17:HIS:CE1	2.54	0.60
1:6:77:ASP:OD1	2:62:17:HIS:CE1	2.54	0.60
1:6:107:TRP:HA	1:6:107:TRP:HE3	1.66	0.60
1:E:77:ASP:OD1	2:E2:17:HIS:HE1	1.85	0.60
1:J:162:ARG:NH1	1:J:167:SER:O	2.35	0.60
1:P:77:ASP:OD1	2:P2:17:HIS:HE1	1.85	0.60
1:R:107:TRP:HA	1:R:107:TRP:HE3	1.66	0.60
1:T:107:TRP:HA	1:T:107:TRP:HE3	1.66	0.60
1:U:48:GLN:O	1:e:470:LYS:NZ	2.33	0.60
1:W:162:ARG:NH1	1:W:167:SER:O	2.35	0.60
1:c:470:LYS:NZ	1:s:48:GLN:O	2.33	0.60
1:f:162:ARG:NH1	1:f:167:SER:O	2.35	0.60
1:j:77:ASP:OD1	2:j2:17:HIS:HE1	1.85	0.60
1:z:77:ASP:OD1	2:z2:17:HIS:HE1	1.85	0.60
1:1:162:ARG:NH1	1:1:167:SER:O	2.35	0.60
1:6:162:ARG:NH1	1:6:167:SER:O	2.35	0.60
1:B:107:TRP:HA	1:B:107:TRP:HE3	1.66	0.59
1:B:162:ARG:NH1	1:B:167:SER:O	2.35	0.59
1:D:77:ASP:OD1	2:D2:17:HIS:HE1	1.85	0.59
1:F:107:TRP:HA	1:F:107:TRP:HE3	1.66	0.59
1:L:77:ASP:OD1	2:L2:17:HIS:HE1	1.85	0.59
1:N:48:GLN:O	1:m:470:LYS:NZ	2.33	0.59
1:W:107:TRP:HA	1:W:107:TRP:HE3	1.66	0.59
1:b:162:ARG:NH1	1:b:167:SER:O	2.35	0.59
1:e:48:GLN:O	1:h:470:LYS:NZ	2.34	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:107:TRP:HA	1:m:107:TRP:HE3	1.66	0.59
1:p:107:TRP:HA	1:p:107:TRP:HE3	1.67	0.59
1:q:48:GLN:O	1:y:470:LYS:NZ	2.33	0.59
1:w:162:ARG:NH1	1:w:167:SER:O	2.35	0.59
1:y:107:TRP:HA	1:y:107:TRP:HE3	1.66	0.59
1:2:107:TRP:HA	1:2:107:TRP:HE3	1.66	0.59
1:2:162:ARG:NH1	1:2:167:SER:O	2.35	0.59
1:A:107:TRP:HA	1:A:107:TRP:HE3	1.66	0.59
1:C:162:ARG:NH1	1:C:167:SER:O	2.35	0.59
1:G:77:ASP:OD1	2:G2:17:HIS:HE1	1.85	0.59
1:G:107:TRP:HA	1:G:107:TRP:HE3	1.66	0.59
1:G:162:ARG:NH1	1:G:167:SER:O	2.35	0.59
1:N:107:TRP:HA	1:N:107:TRP:HE3	1.66	0.59
1:V:107:TRP:HA	1:V:107:TRP:HE3	1.66	0.59
1:Z:107:TRP:HA	1:Z:107:TRP:HE3	1.66	0.59
1:e:542:MET:HG2	1:h:429:TYR:CZ	2.38	0.59
1:h:107:TRP:HA	1:h:107:TRP:HE3	1.66	0.59
1:i:107:TRP:HA	1:i:107:TRP:HE3	1.66	0.59
1:t:162:ARG:NH1	1:t:167:SER:O	2.35	0.59
1:w:77:ASP:OD1	2:w2:17:HIS:HE1	1.85	0.59
1:E:162:ARG:NH1	1:E:167:SER:O	2.35	0.59
1:Z:77:ASP:OD1	2:Z2:17:HIS:HE1	1.85	0.59
1:k:77:ASP:OD1	2:k2:17:HIS:HE1	1.85	0.59
1:r:107:TRP:HA	1:r:107:TRP:HE3	1.66	0.59
1:t:77:ASP:OD1	2:t2:17:HIS:HE1	1.85	0.59
1:5:77:ASP:OD1	2:52:17:HIS:HE1	1.85	0.59
1:8:107:TRP:HA	1:8:107:TRP:HE3	1.66	0.59
1:M:107:TRP:HA	1:M:107:TRP:HE3	1.66	0.59
1:S:107:TRP:HA	1:S:107:TRP:HE3	1.66	0.59
1:c:77:ASP:OD1	2:c2:17:HIS:HE1	1.85	0.59
1:e:77:ASP:OD1	2:e2:17:HIS:HE1	1.85	0.59
1:g:162:ARG:NH1	1:g:167:SER:O	2.35	0.59
1:v:107:TRP:HA	1:v:107:TRP:HE3	1.66	0.59
1:3:107:TRP:HA	1:3:107:TRP:HE3	1.66	0.59
1:8:77:ASP:OD1	2:82:17:HIS:HE1	1.85	0.59
1:C:77:ASP:OD1	2:C2:17:HIS:HE1	1.85	0.59
1:H:77:ASP:OD1	2:H2:17:HIS:HE1	1.85	0.59
1:H:162:ARG:NH1	1:H:167:SER:O	2.35	0.59
1:Q:48:GLN:O	1:S:470:LYS:NZ	2.33	0.59
1:T:48:GLN:O	1:U:470:LYS:NZ	2.33	0.59
1:b:48:GLN:O	1:o:470:LYS:NZ	2.33	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:c:107:TRP:HA	1:c:107:TRP:HE3	1.66	0.59
1:d:162:ARG:NH1	1:d:167:SER:O	2.35	0.59
1:g:77:ASP:OD1	2:g2:17:HIS:HE1	1.85	0.59
1:i:162:ARG:NH1	1:i:167:SER:O	2.35	0.59
1:6:77:ASP:OD1	2:62:17:HIS:HE1	1.85	0.59
1:D:162:ARG:NH1	1:D:167:SER:O	2.35	0.59
1:N:162:ARG:NH1	1:N:167:SER:O	2.35	0.59
1:P:162:ARG:NH1	1:P:167:SER:O	2.35	0.59
1:T:77:ASP:OD1	2:T2:17:HIS:HE1	1.85	0.59
1:a:107:TRP:HA	1:a:107:TRP:HE3	1.66	0.59
1:j:162:ARG:NH1	1:j:167:SER:O	2.35	0.59
1:n:162:ARG:NH1	1:n:167:SER:O	2.35	0.59
1:3:162:ARG:NH1	1:3:167:SER:O	2.35	0.59
1:5:162:ARG:NH1	1:5:167:SER:O	2.35	0.59
1:D:107:TRP:HA	1:D:107:TRP:HE3	1.66	0.59
1:K:162:ARG:NH1	1:K:167:SER:O	2.35	0.59
1:W:77:ASP:OD1	2:W2:17:HIS:HE1	1.85	0.59
1:a:162:ARG:NH1	1:a:167:SER:O	2.35	0.59
1:k:107:TRP:HA	1:k:107:TRP:HE3	1.66	0.59
1:k:162:ARG:NH1	1:k:167:SER:O	2.35	0.59
1:s:162:ARG:NH1	1:s:167:SER:O	2.35	0.59
1:M:162:ARG:NH1	1:M:167:SER:O	2.35	0.59
1:U:162:ARG:NH1	1:U:167:SER:O	2.35	0.59
1:V:77:ASP:OD1	2:V2:17:HIS:HE1	1.85	0.59
1:X:470:LYS:NZ	1:f:48:GLN:O	2.33	0.59
1:Y:162:ARG:NH1	1:Y:167:SER:O	2.35	0.59
1:m:48:GLN:O	1:s:470:LYS:NZ	2.33	0.59
1:m:77:ASP:OD1	2:m2:17:HIS:HE1	1.85	0.59
1:4:162:ARG:NH1	1:4:167:SER:O	2.35	0.59
1:H:48:GLN:O	1:I:470:LYS:NZ	2.33	0.59
1:I:77:ASP:OD1	2:I2:17:HIS:HE1	1.85	0.59
1:O:162:ARG:NH1	1:O:167:SER:O	2.35	0.59
1:V:162:ARG:NH1	1:V:167:SER:O	2.35	0.59
1:h:162:ARG:NH1	1:h:167:SER:O	2.35	0.59
1:p:77:ASP:OD1	2:p2:17:HIS:HE1	1.85	0.59
1:u:77:ASP:OD1	2:u2:17:HIS:HE1	1.85	0.59
1:b:107:TRP:HA	1:b:107:TRP:HE3	1.66	0.59
1:f:107:TRP:HA	1:f:107:TRP:HE3	1.66	0.59
1:h:542:MET:HG2	1:i:429:TYR:CZ	2.37	0.59
1:j:48:GLN:O	1:x:470:LYS:NZ	2.33	0.59
1:l:162:ARG:NH1	1:l:167:SER:O	2.35	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:o:107:TRP:HA	1:o:107:TRP:HE3	1.66	0.59
1:p:162:ARG:NH1	1:p:167:SER:O	2.35	0.59
1:r:470:LYS:NZ	1:x:48:GLN:O	2.33	0.59
1:7:162:ARG:NH1	1:7:167:SER:O	2.35	0.59
1:8:162:ARG:NH1	1:8:167:SER:O	2.35	0.59
1:B:77:ASP:OD1	2:9:17:HIS:HE1	1.85	0.58
1:X:107:TRP:HA	1:X:107:TRP:HE3	1.66	0.58
1:Z:162:ARG:NH1	1:Z:167:SER:O	2.35	0.58
1:y:162:ARG:NH1	1:y:167:SER:O	2.35	0.58
1:D:166:LEU:HD12	1:D:506:LEU:HD22	1.85	0.58
1:I:162:ARG:NH1	1:I:167:SER:O	2.35	0.58
1:S:162:ARG:NH1	1:S:167:SER:O	2.35	0.58
1:Z:470:LYS:NZ	1:a:48:GLN:O	2.33	0.58
1:g:107:TRP:HA	1:g:107:TRP:HE3	1.67	0.58
1:k:166:LEU:HD12	1:k:506:LEU:HD22	1.85	0.58
1:1:77:ASP:OD1	2:12:17:HIS:HE1	1.85	0.58
1:3:48:GLN:O	1:8:470:LYS:NZ	2.33	0.58
1:C:107:TRP:HA	1:C:107:TRP:HE3	1.66	0.58
1:E:166:LEU:HD12	1:E:506:LEU:HD22	1.86	0.58
1:F:162:ARG:NH1	1:F:167:SER:O	2.35	0.58
1:i:77:ASP:OD1	2:i2:17:HIS:HE1	1.85	0.58
1:r:162:ARG:NH1	1:r:167:SER:O	2.35	0.58
1:v:77:ASP:OD1	2:v2:17:HIS:HE1	1.85	0.58
1:2:166:LEU:HD12	1:2:506:LEU:HD22	1.86	0.58
1:G:90:ARG:HH12	1:G:342:GLN:HE21	1.52	0.58
1:J:166:LEU:HD12	1:J:506:LEU:HD22	1.86	0.58
1:W:90:ARG:HH12	1:W:342:GLN:HE21	1.52	0.58
1:s:166:LEU:HD12	1:s:506:LEU:HD22	1.85	0.58
1:y:166:LEU:HD12	1:y:506:LEU:HD22	1.86	0.58
1:J:48:GLN:O	1:a:470:LYS:NZ	2.33	0.58
1:N:77:ASP:OD1	2:N2:17:HIS:HE1	1.85	0.58
1:O:90:ARG:HH12	1:O:342:GLN:HE21	1.52	0.58
1:t:90:ARG:HH12	1:t:342:GLN:HE21	1.52	0.58
1:u:162:ARG:NH1	1:u:167:SER:O	2.35	0.58
1:w:166:LEU:HD12	1:w:506:LEU:HD22	1.86	0.58
1:2:48:GLN:O	1:3:470:LYS:NZ	2.33	0.58
1:6:90:ARG:HH12	1:6:342:GLN:HE21	1.52	0.58
1:F:166:LEU:HD12	1:F:506:LEU:HD22	1.86	0.58
1:N:166:LEU:HD12	1:N:506:LEU:HD22	1.86	0.58
1:P:166:LEU:HD12	1:P:506:LEU:HD22	1.85	0.58
1:U:166:LEU:HD12	1:U:506:LEU:HD22	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:77:ASP:OD1	2:a2:17:HIS:HE1	1.85	0.58
1:c:166:LEU:HD12	1:c:506:LEU:HD22	1.86	0.58
1:e:166:LEU:HD12	1:e:506:LEU:HD22	1.86	0.58
1:l:90:ARG:HH12	1:l:342:GLN:HE21	1.52	0.58
1:A:166:LEU:HD12	1:A:506:LEU:HD22	1.86	0.58
1:I:90:ARG:HH12	1:I:342:GLN:HE21	1.52	0.58
1:T:90:ARG:HH12	1:T:342:GLN:HE21	1.52	0.58
1:i:166:LEU:HD12	1:i:506:LEU:HD22	1.86	0.58
1:m:90:ARG:HH12	1:m:342:GLN:HE21	1.52	0.58
1:s:90:ARG:HH12	1:s:342:GLN:HE21	1.52	0.58
1:w:90:ARG:HH12	1:w:342:GLN:HE21	1.52	0.58
1:A:371:PRO:HG2	1:B:69:THR:HG21	1.86	0.58
1:E:90:ARG:HH12	1:E:342:GLN:HE21	1.52	0.58
1:F:470:LYS:NZ	1:R:48:GLN:O	2.33	0.58
1:K:90:ARG:HH12	1:K:342:GLN:HE21	1.52	0.58
1:Q:77:ASP:OD1	2:Q2:17:HIS:HE1	1.85	0.58
1:S:48:GLN:O	1:d:470:LYS:NZ	2.33	0.58
1:U:90:ARG:HH12	1:U:342:GLN:HE21	1.52	0.58
1:j:166:LEU:HD12	1:j:506:LEU:HD22	1.86	0.58
1:t:371:PRO:HG2	1:y:69:THR:HG21	1.86	0.58
1:u:90:ARG:HH12	1:u:342:GLN:HE21	1.52	0.58
1:v:166:LEU:HD12	1:v:506:LEU:HD22	1.86	0.58
1:3:77:ASP:OD1	2:32:17:HIS:HE1	1.85	0.58
1:8:90:ARG:HH12	1:8:342:GLN:HE21	1.52	0.58
1:C:166:LEU:HD12	1:C:506:LEU:HD22	1.85	0.58
1:F:58:LYS:HE2	1:F:387:TYR:HE1	1.69	0.58
1:T:371:PRO:HG2	1:i:69:THR:HG21	1.86	0.58
1:Y:166:LEU:HD12	1:Y:506:LEU:HD22	1.86	0.58
1:Z:90:ARG:HH12	1:Z:342:GLN:HE21	1.52	0.58
1:g:166:LEU:HD12	1:g:506:LEU:HD22	1.85	0.58
1:l:166:LEU:HD12	1:l:506:LEU:HD22	1.85	0.58
1:u:58:LYS:HE2	1:u:387:TYR:HE1	1.69	0.58
1:x:77:ASP:OD1	2:x2:17:HIS:HE1	1.85	0.58
1:y:58:LYS:HE2	1:y:387:TYR:HE1	1.69	0.58
1:4:90:ARG:HH12	1:4:342:GLN:HE21	1.52	0.58
1:4:107:TRP:HA	1:4:107:TRP:HE3	1.66	0.58
1:7:166:LEU:HD12	1:7:506:LEU:HD22	1.85	0.58
1:J:69:THR:HG21	1:a:371:PRO:HG2	1.86	0.58
1:K:107:TRP:HA	1:K:107:TRP:HE3	1.66	0.58
1:K:166:LEU:HD12	1:K:506:LEU:HD22	1.86	0.58
1:P:58:LYS:HE2	1:P:387:TYR:HE1	1.69	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Q:58:LYS:HE2	1:Q:387:TYR:HE1	1.69	0.58
1:T:166:LEU:HD12	1:T:506:LEU:HD22	1.86	0.58
1:V:58:LYS:HE2	1:V:387:TYR:HE1	1.69	0.58
1:f:77:ASP:OD1	2:f2:17:HIS:HE1	1.85	0.58
1:m:166:LEU:HD12	1:m:506:LEU:HD22	1.86	0.58
1:n:470:LYS:NZ	1:r:48:GLN:O	2.33	0.58
1:p:58:LYS:HE2	1:p:387:TYR:HE1	1.69	0.58
1:x:58:LYS:HE2	1:x:387:TYR:HE1	1.69	0.58
1:B:371:PRO:HG2	1:C:69:THR:HG21	1.86	0.57
1:C:371:PRO:HG2	1:D:69:THR:HG21	1.86	0.57
1:H:371:PRO:HG2	1:Z:69:THR:HG21	1.86	0.57
1:I:58:LYS:HE2	1:I:387:TYR:HE1	1.69	0.57
1:b:77:ASP:OD1	2:b2:17:HIS:HE1	1.85	0.57
1:g:69:THR:HG21	1:1:371:PRO:HG2	1.86	0.57
1:j:58:LYS:HE2	1:j:387:TYR:HE1	1.69	0.57
1:v:90:ARG:HH12	1:v:342:GLN:HE21	1.52	0.57
1:v:371:PRO:HG2	1:1:69:THR:HG21	1.86	0.57
1:x:90:ARG:HH12	1:x:342:GLN:HE21	1.52	0.57
1:2:69:THR:HG21	1:3:371:PRO:HG2	1.86	0.57
1:4:166:LEU:HD12	1:4:506:LEU:HD22	1.86	0.57
1:A:58:LYS:HE2	1:A:387:TYR:HE1	1.69	0.57
1:A:90:ARG:HH12	1:A:342:GLN:HE21	1.52	0.57
1:G:166:LEU:HD12	1:G:506:LEU:HD22	1.86	0.57
1:M:371:PRO:HG2	1:c:69:THR:HG21	1.86	0.57
1:N:69:THR:HG21	1:m:371:PRO:HG2	1.86	0.57
1:O:166:LEU:HD12	1:O:506:LEU:HD22	1.86	0.57
1:S:166:LEU:HD12	1:S:506:LEU:HD22	1.86	0.57
1:U:107:TRP:HA	1:U:107:TRP:HE3	1.66	0.57
1:X:77:ASP:OD1	2:X2:17:HIS:HE1	1.85	0.57
1:c:90:ARG:HH12	1:c:342:GLN:HE21	1.52	0.57
1:e:90:ARG:HH12	1:e:342:GLN:HE21	1.52	0.57
1:g:371:PRO:HG2	1:k:69:THR:HG21	1.86	0.57
1:n:371:PRO:HG2	1:r:69:THR:HG21	1.86	0.57
1:o:77:ASP:OD1	2:o2:17:HIS:HE1	1.85	0.57
1:t:166:LEU:HD12	1:t:506:LEU:HD22	1.85	0.57
1:v:58:LYS:HE2	1:v:387:TYR:HE1	1.69	0.57
1:5:371:PRO:HG2	1:8:69:THR:HG21	1.87	0.57
1:H:58:LYS:HE2	1:H:387:TYR:HE1	1.69	0.57
1:H:90:ARG:HH12	1:H:342:GLN:HE21	1.52	0.57
1:N:58:LYS:HE2	1:N:387:TYR:HE1	1.69	0.57
1:Q:90:ARG:HH12	1:Q:342:GLN:HE21	1.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:69:THR:HG21	1:d:371:PRO:HG2	1.86	0.57
1:R:371:PRO:HG2	1:V:69:THR:HG21	1.86	0.57
1:Z:58:LYS:HE2	1:Z:387:TYR:HE1	1.69	0.57
1:h:166:LEU:HD12	1:h:506:LEU:HD22	1.86	0.57
1:r:166:LEU:HD12	1:r:506:LEU:HD22	1.86	0.57
1:v:542:MET:HG2	1:w:429:TYR:CZ	2.40	0.57
1:5:58:LYS:HE2	1:5:387:TYR:HE1	1.69	0.57
1:5:90:ARG:HH12	1:5:342:GLN:HE21	1.52	0.57
1:F:69:THR:HG21	1:G:371:PRO:HG2	1.87	0.57
1:H:69:THR:HG21	1:I:371:PRO:HG2	1.86	0.57
1:I:166:LEU:HD12	1:I:506:LEU:HD22	1.85	0.57
1:J:90:ARG:HH12	1:J:342:GLN:HE21	1.52	0.57
1:K:58:LYS:HE2	1:K:387:TYR:HE1	1.69	0.57
1:M:48:GLN:O	1:N:470:LYS:NZ	2.33	0.57
1:M:166:LEU:HD12	1:M:506:LEU:HD22	1.86	0.57
1:P:69:THR:HG21	1:Q:371:PRO:HG2	1.86	0.57
1:V:166:LEU:HD12	1:V:506:LEU:HD22	1.85	0.57
1:X:371:PRO:HG2	1:f:69:THR:HG21	1.86	0.57
1:b:166:LEU:HD12	1:b:506:LEU:HD22	1.86	0.57
1:h:433:LEU:HD23	1:w:309:THR:HB	1.85	0.57
1:i:58:LYS:HE2	1:i:387:TYR:HE1	1.69	0.57
1:o:58:LYS:HE2	1:o:387:TYR:HE1	1.69	0.57
1:o:69:THR:HG21	1:7:371:PRO:HG2	1.86	0.57
1:p:69:THR:HG21	1:q:371:PRO:HG2	1.86	0.57
1:p:166:LEU:HD12	1:p:506:LEU:HD22	1.85	0.57
1:s:107:TRP:HA	1:s:107:TRP:HE3	1.66	0.57
1:u:166:LEU:HD12	1:u:506:LEU:HD22	1.86	0.57
1:2:90:ARG:HH12	1:2:342:GLN:HE21	1.52	0.57
1:4:58:LYS:HE2	1:4:387:TYR:HE1	1.69	0.57
1:8:58:LYS:HE2	1:8:387:TYR:HE1	1.69	0.57
1:M:58:LYS:HE2	1:M:387:TYR:HE1	1.69	0.57
1:M:69:THR:HG21	1:N:371:PRO:HG2	1.87	0.57
1:O:69:THR:HG21	1:P:371:PRO:HG2	1.86	0.57
1:X:58:LYS:HE2	1:X:387:TYR:HE1	1.69	0.57
1:X:69:THR:HG21	1:Y:371:PRO:HG2	1.87	0.57
1:a:166:LEU:HD12	1:a:506:LEU:HD22	1.85	0.57
1:f:166:LEU:HD12	1:f:506:LEU:HD22	1.86	0.57
1:h:58:LYS:HE2	1:h:387:TYR:HE1	1.69	0.57
1:j:69:THR:HG21	1:x:371:PRO:HG2	1.86	0.57
1:j:371:PRO:HG2	1:l:69:THR:HG21	1.86	0.57
1:k:371:PRO:HG2	1:w:69:THR:HG21	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:x:166:LEU:HD12	1:x:506:LEU:HD22	1.85	0.57
1:D:371:PRO:HG2	1:E:69:THR:HG21	1.86	0.57
1:b:69:THR:HG21	1:o:371:PRO:HG2	1.86	0.57
1:d:166:LEU:HD12	1:d:506:LEU:HD22	1.86	0.57
1:h:90:ARG:HH12	1:h:342:GLN:HE21	1.52	0.57
1:n:166:LEU:HD12	1:n:506:LEU:HD22	1.86	0.57
1:u:371:PRO:HG2	1:5:69:THR:HG21	1.86	0.57
1:1:58:LYS:HE2	1:1:387:TYR:HE1	1.69	0.57
1:3:69:THR:HG21	1:8:371:PRO:HG2	1.86	0.57
1:3:166:LEU:HD12	1:3:506:LEU:HD22	1.86	0.57
1:B:58:LYS:HE2	1:B:387:TYR:HE1	1.69	0.57
1:F:542:MET:HG2	1:G:429:TYR:CZ	2.40	0.57
1:M:90:ARG:HH12	1:M:342:GLN:HE21	1.52	0.57
1:Z:371:PRO:HG2	1:a:69:THR:HG21	1.86	0.57
1:k:90:ARG:HH12	1:k:342:GLN:HE21	1.52	0.57
1:5:107:TRP:HA	1:5:107:TRP:HE3	1.66	0.57
1:5:166:LEU:HD12	1:5:506:LEU:HD22	1.85	0.57
1:A:69:THR:HG21	1:E:371:PRO:HG2	1.87	0.57
1:A:542:MET:HG2	1:E:429:TYR:CZ	2.40	0.57
1:B:470:LYS:NZ	1:C:48:GLN:O	2.33	0.57
1:D:90:ARG:HH12	1:D:342:GLN:HE21	1.52	0.57
1:H:166:LEU:HD12	1:H:506:LEU:HD22	1.86	0.57
1:J:433:LEU:HD23	1:7:309:THR:HB	1.87	0.57
1:Q:166:LEU:HD12	1:Q:506:LEU:HD22	1.86	0.57
1:R:90:ARG:HH12	1:R:342:GLN:HE21	1.52	0.57
1:Y:309:THR:HB	1:2:433:LEU:HD23	1.87	0.57
1:d:58:LYS:HE2	1:d:387:TYR:HE1	1.69	0.57
1:n:58:LYS:HE2	1:n:387:TYR:HE1	1.69	0.57
1:o:90:ARG:HH12	1:o:342:GLN:HE21	1.52	0.57
1:o:166:LEU:HD12	1:o:506:LEU:HD22	1.86	0.57
1:r:58:LYS:HE2	1:r:387:TYR:HE1	1.69	0.57
1:B:166:LEU:HD12	1:B:506:LEU:HD22	1.86	0.57
1:Q:69:THR:HG21	1:S:371:PRO:HG2	1.86	0.57
1:S:58:LYS:HE2	1:S:387:TYR:HE1	1.69	0.57
1:g:48:GLN:O	1:1:470:LYS:NZ	2.33	0.57
1:p:371:PRO:HG2	1:6:69:THR:HG21	1.86	0.57
1:r:371:PRO:HG2	1:x:69:THR:HG21	1.86	0.57
1:t:429:TYR:CZ	1:y:542:MET:HG2	2.40	0.57
1:y:90:ARG:HH12	1:y:342:GLN:HE21	1.52	0.57
1:6:166:LEU:HD12	1:6:506:LEU:HD22	1.86	0.57
1:A:77:ASP:OD1	2:0:17:HIS:HE1	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:69:THR:HG21	1:W:371:PRO:HG2	1.86	0.56
1:R:166:LEU:HD12	1:R:506:LEU:HD22	1.86	0.56
1:V:371:PRO:HG2	1:W:69:THR:HG21	1.86	0.56
1:W:166:LEU:HD12	1:W:506:LEU:HD22	1.86	0.56
1:X:90:ARG:HH12	1:X:342:GLN:HE21	1.52	0.56
1:q:90:ARG:HH12	1:q:342:GLN:HE21	1.52	0.56
1:1:166:LEU:HD12	1:1:506:LEU:HD22	1.86	0.56
1:A:433:LEU:HD23	1:R:309:THR:HB	1.87	0.56
1:F:90:ARG:HH12	1:F:342:GLN:HE21	1.52	0.56
1:F:429:TYR:CZ	1:R:542:MET:HG2	2.40	0.56
1:G:309:THR:HB	1:X:433:LEU:HD23	1.87	0.56
1:H:107:TRP:HA	1:H:107:TRP:HE3	1.66	0.56
1:I:69:THR:HG21	1:J:371:PRO:HG2	1.86	0.56
1:Q:553:ILE:HG22	1:h:550:LEU:H	1.70	0.56
1:U:69:THR:HG21	1:e:371:PRO:HG2	1.86	0.56
1:c:371:PRO:HG2	1:s:69:THR:HG21	1.86	0.56
1:q:542:MET:HG2	1:y:429:TYR:CZ	2.41	0.56
1:1:90:ARG:HH12	1:1:342:GLN:HE21	1.52	0.56
1:B:90:ARG:HH12	1:B:342:GLN:HE21	1.52	0.56
1:I:48:GLN:O	1:J:470:LYS:NZ	2.33	0.56
1:J:542:MET:HG2	1:a:429:TYR:CZ	2.41	0.56
1:K:69:THR:HG21	1:L:371:PRO:HG2	1.86	0.56
1:L:166:LEU:HD12	1:L:506:LEU:HD22	1.86	0.56
1:O:371:PRO:HG2	1:d:69:THR:HG21	1.86	0.56
1:O:542:MET:HG2	1:P:429:TYR:CZ	2.41	0.56
1:V:90:ARG:HH12	1:V:342:GLN:HE21	1.52	0.56
1:X:166:LEU:HD12	1:X:506:LEU:HD22	1.86	0.56
1:e:107:TRP:HA	1:e:107:TRP:HE3	1.66	0.56
1:j:429:TYR:CZ	1:l:542:MET:HG2	2.40	0.56
1:q:166:LEU:HD12	1:q:506:LEU:HD22	1.86	0.56
1:r:90:ARG:HH12	1:r:342:GLN:HE21	1.52	0.56
1:u:69:THR:HG21	1:2:371:PRO:HG2	1.86	0.56
1:v:69:THR:HG21	1:w:371:PRO:HG2	1.87	0.56
1:z:166:LEU:HD12	1:z:506:LEU:HD22	1.86	0.56
1:z:371:PRO:HG2	1:4:69:THR:HG21	1.86	0.56
1:8:166:LEU:HD12	1:8:506:LEU:HD22	1.86	0.56
1:E:433:LEU:HD23	1:O:309:THR:HB	1.88	0.56
1:I:542:MET:HG2	1:J:429:TYR:CZ	2.41	0.56
1:J:309:THR:HB	1:3:433:LEU:HD23	1.88	0.56
1:P:90:ARG:HH12	1:P:342:GLN:HE21	1.52	0.56
1:S:90:ARG:HH12	1:S:342:GLN:HE21	1.52	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:69:THR:HG21	1:U:371:PRO:HG2	1.86	0.56
1:Z:166:LEU:HD12	1:Z:506:LEU:HD22	1.86	0.56
1:l:371:PRO:HG2	1:n:69:THR:HG21	1.87	0.56
1:o:433:LEU:HD23	1:t:309:THR:HB	1.88	0.56
1:q:309:THR:HB	1:v:433:LEU:HD23	1.88	0.56
1:F:371:PRO:HG2	1:R:69:THR:HG21	1.86	0.56
1:M:429:TYR:CZ	1:c:542:MET:HG2	2.40	0.56
1:N:542:MET:HG2	1:m:429:TYR:CZ	2.41	0.56
1:T:429:TYR:CZ	1:i:542:MET:HG2	2.41	0.56
1:T:542:MET:HG2	1:U:429:TYR:CZ	2.41	0.56
1:Y:90:ARG:HH12	1:Y:342:GLN:HE21	1.52	0.56
1:a:433:LEU:HD23	1:2:309:THR:HB	1.88	0.56
1:f:371:PRO:HG2	1:z:69:THR:HG21	1.86	0.56
1:j:90:ARG:HH12	1:j:342:GLN:HE21	1.52	0.56
1:k:429:TYR:CZ	1:w:542:MET:HG2	2.41	0.56
1:p:90:ARG:HH12	1:p:342:GLN:HE21	1.52	0.56
1:q:69:THR:HG21	1:y:371:PRO:HG2	1.86	0.56
1:u:542:MET:HG2	1:2:429:TYR:CZ	2.41	0.56
1:2:542:MET:HG2	1:3:429:TYR:CZ	2.41	0.56
1:7:90:ARG:HH12	1:7:342:GLN:HE21	1.52	0.56
1:A:429:TYR:CZ	1:B:542:MET:HG2	2.41	0.56
1:D:429:TYR:CZ	1:E:542:MET:HG2	2.41	0.56
1:H:542:MET:HG2	1:I:429:TYR:CZ	2.41	0.56
1:L:69:THR:HG21	1:b:371:PRO:HG2	1.86	0.56
1:X:542:MET:HG2	1:Y:429:TYR:CZ	2.40	0.56
1:m:69:THR:HG21	1:s:371:PRO:HG2	1.86	0.56
1:m:542:MET:HG2	1:s:429:TYR:CZ	2.41	0.56
1:q:58:LYS:HE2	1:q:387:TYR:HE1	1.69	0.56
1:E:80:VAL:HG22	1:E:405:VAL:HG22	1.88	0.56
1:H:475:ALA:HA	1:H:479:ARG:HH21	1.71	0.56
1:I:107:TRP:HA	1:I:107:TRP:HE3	1.66	0.56
1:L:90:ARG:HH12	1:L:342:GLN:HE21	1.52	0.56
1:U:542:MET:HG2	1:e:429:TYR:CZ	2.41	0.56
1:Y:58:LYS:HE2	1:Y:387:TYR:HE1	1.69	0.56
1:a:90:ARG:HH12	1:a:342:GLN:HE21	1.52	0.56
1:f:429:TYR:CZ	1:z:542:MET:HG2	2.41	0.56
1:g:429:TYR:CZ	1:k:542:MET:HG2	2.41	0.56
1:i:433:LEU:HD23	1:n:309:THR:HB	1.88	0.56
1:m:309:THR:HB	1:p:433:LEU:HD23	1.88	0.56
1:o:80:VAL:HG22	1:o:405:VAL:HG22	1.88	0.56
1:t:433:LEU:HD23	1:8:309:THR:HB	1.88	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:429:TYR:CZ	1:5:542:MET:HG2	2.41	0.56
1:z:90:ARG:HH12	1:z:342:GLN:HE21	1.52	0.56
1:7:58:LYS:HE2	1:7:387:TYR:HE1	1.69	0.56
1:B:80:VAL:HG22	1:B:405:VAL:HG22	1.88	0.56
1:B:309:THR:HB	1:F:433:LEU:HD23	1.88	0.56
1:C:90:ARG:HH12	1:C:342:GLN:HE21	1.52	0.56
1:C:429:TYR:CZ	1:D:542:MET:HG2	2.41	0.56
1:L:542:MET:HG2	1:b:429:TYR:CZ	2.41	0.56
1:M:475:ALA:HA	1:M:479:ARG:HH21	1.71	0.56
1:N:433:LEU:HD23	1:d:309:THR:HB	1.88	0.56
1:P:309:THR:HB	1:R:433:LEU:HD23	1.88	0.56
1:R:58:LYS:HE2	1:R:387:TYR:HE1	1.69	0.56
1:T:309:THR:HB	1:V:433:LEU:HD23	1.88	0.56
1:V:429:TYR:CZ	1:W:542:MET:HG2	2.41	0.56
1:X:80:VAL:HG22	1:X:405:VAL:HG22	1.88	0.56
1:Y:69:THR:HG21	1:4:371:PRO:HG2	1.86	0.56
1:b:90:ARG:HH12	1:b:342:GLN:HE21	1.52	0.56
1:b:542:MET:HG2	1:o:429:TYR:CZ	2.40	0.56
1:c:429:TYR:CZ	1:s:542:MET:HG2	2.41	0.56
1:g:309:THR:HB	1:u:433:LEU:HD23	1.88	0.56
1:h:475:ALA:HA	1:h:479:ARG:HH21	1.71	0.56
1:p:429:TYR:CZ	1:6:542:MET:HG2	2.41	0.56
1:t:69:THR:HG21	1:6:371:PRO:HG2	1.87	0.56
1:v:429:TYR:CZ	1:1:542:MET:HG2	2.41	0.56
1:w:80:VAL:HG22	1:w:405:VAL:HG22	1.88	0.56
1:1:80:VAL:HG22	1:1:405:VAL:HG22	1.88	0.56
1:3:90:ARG:HH12	1:3:342:GLN:HE21	1.52	0.56
1:A:309:THR:HB	1:P:433:LEU:HD23	1.88	0.56
1:B:429:TYR:CZ	1:C:542:MET:HG2	2.41	0.56
1:C:309:THR:HB	1:I:433:LEU:HD23	1.88	0.56
1:E:309:THR:HB	1:M:433:LEU:HD23	1.87	0.56
1:G:433:LEU:HD23	1:Z:309:THR:HB	1.88	0.56
1:G:475:ALA:HA	1:G:479:ARG:HH21	1.71	0.56
1:K:371:PRO:HG2	1:7:69:THR:HG21	1.86	0.56
1:O:475:ALA:HA	1:O:479:ARG:HH21	1.71	0.56
1:S:475:ALA:HA	1:S:479:ARG:HH21	1.71	0.56
1:T:58:LYS:HE2	1:T:387:TYR:HE1	1.69	0.56
1:U:309:THR:HB	1:f:433:LEU:HD23	1.88	0.56
1:X:429:TYR:CZ	1:f:542:MET:HG2	2.40	0.56
1:Y:542:MET:HG2	1:4:429:TYR:CZ	2.41	0.56
1:Z:429:TYR:CZ	1:a:542:MET:HG2	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:80:VAL:HG22	1:b:405:VAL:HG22	1.88	0.56
1:f:90:ARG:HH12	1:f:342:GLN:HE21	1.52	0.56
1:g:90:ARG:HH12	1:g:342:GLN:HE21	1.52	0.56
1:g:542:MET:HG2	1:1:429:TYR:CZ	2.41	0.56
1:j:309:THR:HB	1:q:433:LEU:HD23	1.88	0.56
1:l:475:ALA:HA	1:l:479:ARG:HH21	1.71	0.56
1:o:542:MET:HG2	1:7:429:TYR:CZ	2.40	0.56
1:r:475:ALA:HA	1:r:479:ARG:HH21	1.71	0.56
1:t:475:ALA:HA	1:t:479:ARG:HH21	1.71	0.56
1:u:475:ALA:HA	1:u:479:ARG:HH21	1.71	0.56
1:1:475:ALA:HA	1:1:479:ARG:HH21	1.71	0.56
1:3:542:MET:HG2	1:8:429:TYR:CZ	2.40	0.56
1:5:475:ALA:HA	1:5:479:ARG:HH21	1.71	0.56
1:B:475:ALA:HA	1:B:479:ARG:HH21	1.71	0.56
1:D:475:ALA:HA	1:D:479:ARG:HH21	1.71	0.56
1:E:475:ALA:HA	1:E:479:ARG:HH21	1.71	0.56
1:K:429:TYR:CZ	1:7:542:MET:HG2	2.41	0.56
1:Y:80:VAL:HG22	1:Y:405:VAL:HG22	1.88	0.56
1:e:309:THR:HB	1:k:433:LEU:HD23	1.88	0.56
1:f:80:VAL:HG22	1:f:405:VAL:HG22	1.88	0.56
1:l:429:TYR:CZ	1:n:542:MET:HG2	2.40	0.56
1:t:58:LYS:HE2	1:t:387:TYR:HE1	1.69	0.56
1:u:107:TRP:HA	1:u:107:TRP:HE3	1.66	0.56
1:v:475:ALA:HA	1:v:479:ARG:HH21	1.71	0.56
1:y:309:THR:HB	1:5:433:LEU:HD23	1.88	0.56
1:y:433:LEU:HD23	1:1:309:THR:HB	1.88	0.56
1:A:475:ALA:HA	1:A:479:ARG:HH21	1.71	0.55
1:D:433:LEU:HD23	1:c:309:THR:HB	1.88	0.55
1:H:429:TYR:CZ	1:Z:542:MET:HG2	2.41	0.55
1:I:475:ALA:HA	1:I:479:ARG:HH21	1.71	0.55
1:O:429:TYR:CZ	1:d:542:MET:HG2	2.40	0.55
1:Q:475:ALA:HA	1:Q:479:ARG:HH21	1.71	0.55
1:R:429:TYR:CZ	1:V:542:MET:HG2	2.41	0.55
1:W:475:ALA:HA	1:W:479:ARG:HH21	1.71	0.55
1:a:475:ALA:HA	1:a:479:ARG:HH21	1.71	0.55
1:b:475:ALA:HA	1:b:479:ARG:HH21	1.71	0.55
1:d:90:ARG:HH12	1:d:342:GLN:HE21	1.52	0.55
1:g:433:LEU:HD23	1:4:309:THR:HB	1.88	0.55
1:g:475:ALA:HA	1:g:479:ARG:HH21	1.71	0.55
1:h:48:GLN:O	1:i:470:LYS:NZ	2.34	0.55
1:k:475:ALA:HA	1:k:479:ARG:HH21	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:m:58:LYS:HE2	1:m:387:TYR:HE1	1.69	0.55
1:p:542:MET:HG2	1:q:429:TYR:CZ	2.41	0.55
1:s:475:ALA:HA	1:s:479:ARG:HH21	1.71	0.55
1:w:475:ALA:HA	1:w:479:ARG:HH21	1.71	0.55
1:x:475:ALA:HA	1:x:479:ARG:HH21	1.71	0.55
1:z:80:VAL:HG22	1:z:405:VAL:HG22	1.88	0.55
1:1:433:LEU:HD23	1:5:309:THR:HB	1.88	0.55
1:6:475:ALA:HA	1:6:479:ARG:HH21	1.71	0.55
1:7:80:VAL:HG22	1:7:405:VAL:HG22	1.88	0.55
1:B:433:LEU:HD23	1:H:309:THR:HB	1.88	0.55
1:C:475:ALA:HA	1:C:479:ARG:HH21	1.71	0.55
1:F:309:THR:HB	1:H:433:LEU:HD23	1.88	0.55
1:G:58:LYS:HE2	1:G:387:TYR:HE1	1.69	0.55
1:H:80:VAL:HG22	1:H:405:VAL:HG22	1.88	0.55
1:J:58:LYS:HE2	1:J:387:TYR:HE1	1.69	0.55
1:K:80:VAL:HG22	1:K:405:VAL:HG22	1.88	0.55
1:L:80:VAL:HG22	1:L:405:VAL:HG22	1.88	0.55
1:S:433:LEU:HD23	1:i:309:THR:HB	1.87	0.55
1:U:475:ALA:HA	1:U:479:ARG:HH21	1.71	0.55
1:b:433:LEU:HD23	1:s:309:THR:HB	1.88	0.55
1:d:80:VAL:HG22	1:d:405:VAL:HG22	1.88	0.55
1:f:475:ALA:HA	1:f:479:ARG:HH21	1.71	0.55
1:l:309:THR:HB	1:w:433:LEU:HD23	1.89	0.55
1:n:80:VAL:HG22	1:n:405:VAL:HG22	1.88	0.55
1:n:90:ARG:HH12	1:n:342:GLN:HE21	1.52	0.55
1:5:429:TYR:CZ	1:8:542:MET:HG2	2.41	0.55
1:D:309:THR:HB	1:L:433:LEU:HD23	1.88	0.55
1:J:475:ALA:HA	1:J:479:ARG:HH21	1.71	0.55
1:M:542:MET:HG2	1:N:429:TYR:CZ	2.40	0.55
1:P:542:MET:HG2	1:Q:429:TYR:CZ	2.41	0.55
1:Q:80:VAL:HG22	1:Q:405:VAL:HG22	1.88	0.55
1:Q:542:MET:HG2	1:S:429:TYR:CZ	2.41	0.55
1:a:80:VAL:HG22	1:a:405:VAL:HG22	1.88	0.55
1:c:475:ALA:HA	1:c:479:ARG:HH21	1.71	0.55
1:e:475:ALA:HA	1:e:479:ARG:HH21	1.71	0.55
1:h:80:VAL:HG22	1:h:405:VAL:HG22	1.88	0.55
1:i:90:ARG:HH12	1:i:342:GLN:HE21	1.52	0.55
1:k:309:THR:HB	1:z:433:LEU:HD23	1.88	0.55
1:t:542:MET:HG2	1:6:429:TYR:CZ	2.40	0.55
1:2:475:ALA:HA	1:2:479:ARG:HH21	1.71	0.55
1:3:58:LYS:HE2	1:3:387:TYR:HE1	1.69	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3:80:VAL:HG22	1:3:405:VAL:HG22	1.88	0.55
1:3:475:ALA:HA	1:3:479:ARG:HH21	1.71	0.55
1:4:80:VAL:HG22	1:4:405:VAL:HG22	1.88	0.55
1:5:80:VAL:HG22	1:5:405:VAL:HG22	1.88	0.55
1:8:475:ALA:HA	1:8:479:ARG:HH21	1.71	0.55
1:C:433:LEU:HD23	1:K:309:THR:HB	1.88	0.55
1:M:80:VAL:HG22	1:M:405:VAL:HG22	1.88	0.55
1:N:309:THR:HB	1:r:433:LEU:HD23	1.87	0.55
1:W:80:VAL:HG22	1:W:405:VAL:HG22	1.88	0.55
1:Z:475:ALA:HA	1:Z:479:ARG:HH21	1.71	0.55
1:j:433:LEU:HD23	1:v:309:THR:HB	1.88	0.55
1:m:433:LEU:HD23	1:x:309:THR:HB	1.88	0.55
1:r:429:TYR:CZ	1:x:542:MET:HG2	2.41	0.55
1:x:80:VAL:HG22	1:x:405:VAL:HG22	1.88	0.55
1:z:429:TYR:CZ	1:4:542:MET:HG2	2.41	0.55
1:2:58:LYS:HE2	1:2:387:TYR:HE1	1.69	0.55
1:C:58:LYS:HE2	1:C:387:TYR:HE1	1.69	0.55
1:K:542:MET:HG2	1:L:429:TYR:CZ	2.41	0.55
1:L:58:LYS:HE2	1:L:387:TYR:HE1	1.69	0.55
1:O:80:VAL:HG22	1:O:405:VAL:HG22	1.88	0.55
1:O:470:LYS:NZ	1:d:48:GLN:O	2.33	0.55
1:Q:309:THR:HB	1:T:433:LEU:HD23	1.88	0.55
1:S:542:MET:HG2	1:d:429:TYR:CZ	2.41	0.55
1:V:80:VAL:HG22	1:V:405:VAL:HG22	1.88	0.55
1:j:542:MET:HG2	1:x:429:TYR:CZ	2.41	0.55
1:m:475:ALA:HA	1:m:479:ARG:HH21	1.71	0.55
1:n:429:TYR:CZ	1:r:542:MET:HG2	2.41	0.55
1:p:48:GLN:O	1:q:470:LYS:NZ	2.33	0.55
1:p:80:VAL:HG22	1:p:405:VAL:HG22	1.88	0.55
1:2:80:VAL:HG22	1:2:405:VAL:HG22	1.88	0.55
1:6:80:VAL:HG22	1:6:405:VAL:HG22	1.88	0.55
1:J:80:VAL:HG22	1:J:405:VAL:HG22	1.88	0.55
1:R:470:LYS:NZ	1:V:48:GLN:O	2.33	0.55
1:T:475:ALA:HA	1:T:479:ARG:HH21	1.71	0.55
1:V:475:ALA:HA	1:V:479:ARG:HH21	1.71	0.55
1:c:58:LYS:HE2	1:c:387:TYR:HE1	1.69	0.55
1:l:80:VAL:HG22	1:l:405:VAL:HG22	1.88	0.55
1:n:475:ALA:HA	1:n:479:ARG:HH21	1.71	0.55
1:q:80:VAL:HG22	1:q:405:VAL:HG22	1.88	0.55
1:D:80:VAL:HG22	1:D:405:VAL:HG22	1.88	0.55
1:G:80:VAL:HG22	1:G:405:VAL:HG22	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:542:MET:HG2	1:W:429:TYR:CZ	2.41	0.55
1:N:90:ARG:HH12	1:N:342:GLN:HE21	1.52	0.55
1:R:80:VAL:HG22	1:R:405:VAL:HG22	1.88	0.55
1:U:80:VAL:HG22	1:U:405:VAL:HG22	1.88	0.55
1:a:58:LYS:HE2	1:a:387:TYR:HE1	1.69	0.55
1:d:475:ALA:HA	1:d:479:ARG:HH21	1.71	0.55
1:g:58:LYS:HE2	1:g:387:TYR:HE1	1.69	0.55
1:p:475:ALA:HA	1:p:479:ARG:HH21	1.71	0.55
1:w:58:LYS:HE2	1:w:387:TYR:HE1	1.69	0.55
1:N:80:VAL:HG22	1:N:405:VAL:HG22	1.88	0.55
1:Q:433:LEU:HD23	1:V:309:THR:HB	1.88	0.55
1:W:58:LYS:HE2	1:W:387:TYR:HE1	1.69	0.55
1:k:80:VAL:HG22	1:k:405:VAL:HG22	1.88	0.55
1:p:309:THR:HB	1:x:433:LEU:HD23	1.88	0.55
1:r:80:VAL:HG22	1:r:405:VAL:HG22	1.88	0.55
1:s:80:VAL:HG22	1:s:405:VAL:HG22	1.88	0.55
1:t:80:VAL:HG22	1:t:405:VAL:HG22	1.88	0.55
1:z:58:LYS:HE2	1:z:387:TYR:HE1	1.69	0.55
1:F:475:ALA:HA	1:F:479:ARG:HH21	1.71	0.55
1:I:309:THR:HB	1:K:433:LEU:HD23	1.88	0.55
1:P:475:ALA:HA	1:P:479:ARG:HH21	1.71	0.55
1:S:80:VAL:HG22	1:S:405:VAL:HG22	1.88	0.55
1:e:58:LYS:HE2	1:e:387:TYR:HE1	1.69	0.55
1:i:80:VAL:HG22	1:i:405:VAL:HG22	1.88	0.55
1:y:475:ALA:HA	1:y:479:ARG:HH21	1.71	0.55
1:z:475:ALA:HA	1:z:479:ARG:HH21	1.71	0.55
1:6:58:LYS:HE2	1:6:387:TYR:HE1	1.69	0.55
1:C:80:VAL:HG22	1:C:405:VAL:HG22	1.88	0.55
1:E:58:LYS:HE2	1:E:387:TYR:HE1	1.69	0.55
1:G:48:GLN:O	1:W:470:LYS:NZ	2.32	0.55
1:S:309:THR:HB	1:n:433:LEU:HD23	1.88	0.55
1:U:433:LEU:HD23	1:W:309:THR:HB	1.88	0.55
1:e:433:LEU:HD23	1:z:309:THR:HB	1.88	0.55
1:u:309:THR:HB	1:4:433:LEU:HD23	1.88	0.55
1:L:475:ALA:HA	1:L:479:ARG:HH21	1.71	0.54
1:N:475:ALA:HA	1:N:479:ARG:HH21	1.71	0.54
1:f:58:LYS:HE2	1:f:387:TYR:HE1	1.69	0.54
1:h:69:THR:HG21	1:i:371:PRO:HG2	1.89	0.54
1:j:80:VAL:HG22	1:j:405:VAL:HG22	1.88	0.54
1:s:433:LEU:HD23	1:6:309:THR:HB	1.88	0.54
1:3:309:THR:HB	1:7:433:LEU:HD23	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:309:THR:HB	1:c:433:LEU:HD23	1.88	0.54
1:Y:433:LEU:HD23	1:a:309:THR:HB	1.88	0.54
1:b:58:LYS:HE2	1:b:387:TYR:HE1	1.69	0.54
1:d:433:LEU:HD23	1:r:309:THR:HB	1.88	0.54
1:g:80:VAL:HG22	1:g:405:VAL:HG22	1.88	0.54
1:j:475:ALA:HA	1:j:479:ARG:HH21	1.71	0.54
1:o:309:THR:HB	1:8:433:LEU:HD23	1.88	0.54
1:Y:48:GLN:O	1:4:470:LYS:NZ	2.33	0.54
1:q:475:ALA:HA	1:q:479:ARG:HH21	1.71	0.54
1:u:80:VAL:HG22	1:u:405:VAL:HG22	1.88	0.54
1:l:80:VAL:HG22	1:l:405:VAL:HG22	1.88	0.54
1:O:58:LYS:HE2	1:O:387:TYR:HE1	1.69	0.54
1:P:80:VAL:HG22	1:P:405:VAL:HG22	1.88	0.54
1:R:475:ALA:HA	1:R:479:ARG:HH21	1.71	0.54
1:X:309:THR:HB	1:Z:433:LEU:HD23	1.88	0.54
1:X:475:ALA:HA	1:X:479:ARG:HH21	1.71	0.54
1:e:80:VAL:HG22	1:e:405:VAL:HG22	1.88	0.54
1:l:58:LYS:HE2	1:l:387:TYR:HE1	1.69	0.54
1:o:475:ALA:HA	1:o:479:ARG:HH21	1.71	0.54
1:7:475:ALA:HA	1:7:479:ARG:HH21	1.71	0.54
1:K:475:ALA:HA	1:K:479:ARG:HH21	1.71	0.54
1:c:80:VAL:HG22	1:c:405:VAL:HG22	1.88	0.54
1:i:475:ALA:HA	1:i:479:ARG:HH21	1.71	0.54
1:y:80:VAL:HG22	1:y:405:VAL:HG22	1.88	0.54
1:K:470:LYS:NZ	1:7:48:GLN:O	2.33	0.54
1:M:309:THR:HB	1:O:433:LEU:HD23	1.88	0.54
1:Y:475:ALA:HA	1:Y:479:ARG:HH21	1.71	0.54
1:b:309:THR:HB	1:6:433:LEU:HD23	1.88	0.54
1:t:48:GLN:O	1:6:470:LYS:NZ	2.33	0.54
1:4:475:ALA:HA	1:4:479:ARG:HH21	1.71	0.54
1:F:80:VAL:HG22	1:F:405:VAL:HG22	1.88	0.54
1:A:80:VAL:HG22	1:A:405:VAL:HG22	1.88	0.54
1:U:58:LYS:HE2	1:U:387:TYR:HE1	1.69	0.54
1:W:433:LEU:HD23	1:f:309:THR:HB	1.88	0.54
1:v:80:VAL:HG22	1:v:405:VAL:HG22	1.88	0.54
1:s:58:LYS:HE2	1:s:387:TYR:HE1	1.69	0.53
1:8:80:VAL:HG22	1:8:405:VAL:HG22	1.88	0.53
1:T:80:VAL:HG22	1:T:405:VAL:HG22	1.88	0.53
1:Z:80:VAL:HG22	1:Z:405:VAL:HG22	1.88	0.53
2:a2:10:ARG:HG3	2:a2:11:HIS:H	1.74	0.53
2:q2:10:ARG:HG3	2:q2:11:HIS:H	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:H2:10:ARG:HG3	2:H2:11:HIS:H	1.74	0.53
2:R2:10:ARG:HG3	2:R2:11:HIS:H	1.74	0.53
2:32:10:ARG:HG3	2:32:11:HIS:H	1.74	0.53
2:52:10:ARG:HG3	2:52:11:HIS:H	1.74	0.53
1:m:80:VAL:HG22	1:m:405:VAL:HG22	1.88	0.53
2:9:10:ARG:HG3	2:9:11:HIS:H	1.74	0.53
2:D2:10:ARG:HG3	2:D2:11:HIS:H	1.74	0.53
2:N2:10:ARG:HG3	2:N2:11:HIS:H	1.74	0.53
2:T2:10:ARG:HG3	2:T2:11:HIS:H	1.74	0.53
2:c2:10:ARG:HG3	2:c2:11:HIS:H	1.74	0.53
2:k2:10:ARG:HG3	2:k2:11:HIS:H	1.74	0.53
2:m2:10:ARG:HG3	2:m2:11:HIS:H	1.74	0.53
2:12:10:ARG:HG3	2:12:11:HIS:H	1.74	0.53
1:k:550:LEU:H	1:5:553:ILE:HG22	1.74	0.53
2:X2:10:ARG:HG3	2:X2:11:HIS:H	1.74	0.53
2:Z2:10:ARG:HG3	2:Z2:11:HIS:H	1.74	0.53
2:i2:10:ARG:HG3	2:i2:11:HIS:H	1.74	0.53
2:n2:10:ARG:HG3	2:n2:11:HIS:H	1.74	0.53
2:o2:10:ARG:HG3	2:o2:11:HIS:H	1.74	0.53
2:u2:10:ARG:HG3	2:u2:11:HIS:H	1.74	0.53
2:82:10:ARG:HG3	2:82:11:HIS:H	1.74	0.53
1:D:550:LEU:H	1:H:553:ILE:HG22	1.74	0.53
1:K:48:GLN:O	1:L:470:LYS:NZ	2.33	0.53
1:y:553:ILE:HG22	1:3:550:LEU:H	1.74	0.53
1:5:17:MET:HE3	1:5:19:LYS:HA	1.91	0.53
2:U2:10:ARG:HG3	2:U2:11:HIS:H	1.74	0.53
2:V2:10:ARG:HG3	2:V2:11:HIS:H	1.74	0.53
1:F:553:ILE:HG22	1:a:550:LEU:H	1.74	0.53
1:e:149:ARG:HD2	1:h:419:TRP:CH2	2.44	0.53
1:l:553:ILE:HG22	1:1:550:LEU:H	1.74	0.53
2:I2:10:ARG:HG3	2:I2:11:HIS:H	1.74	0.53
2:d2:10:ARG:HG3	2:d2:11:HIS:H	1.74	0.53
2:e2:10:ARG:HG3	2:e2:11:HIS:H	1.74	0.53
2:p2:10:ARG:HG3	2:p2:11:HIS:H	1.74	0.53
2:s2:10:ARG:HG3	2:s2:11:HIS:H	1.74	0.53
2:t2:10:ARG:HG3	2:t2:11:HIS:H	1.74	0.53
1:A:79:ILE:HD11	2:0:22:ILE:HD13	1.91	0.53
1:H:17:MET:HE3	1:H:19:LYS:HA	1.91	0.53
1:N:550:LEU:H	1:6:553:ILE:HG22	1.74	0.53
1:b:17:MET:HE3	1:b:19:LYS:HA	1.91	0.53
2:G2:10:ARG:HG3	2:G2:11:HIS:H	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:62:10:ARG:HG3	2:62:11:HIS:H	1.74	0.53
1:f:17:MET:HE3	1:f:19:LYS:HA	1.91	0.52
2:C2:10:ARG:HG3	2:C2:11:HIS:H	1.74	0.52
2:M2:10:ARG:HG3	2:M2:11:HIS:H	1.74	0.52
2:h2:10:ARG:HG3	2:h2:11:HIS:H	1.74	0.52
1:B:17:MET:HE3	1:B:19:LYS:HA	1.91	0.52
1:C:17:MET:HE3	1:C:19:LYS:HA	1.91	0.52
1:Y:17:MET:HE3	1:Y:19:LYS:HA	1.91	0.52
1:g:17:MET:HE3	1:g:19:LYS:HA	1.91	0.52
1:n:550:LEU:H	1:v:553:ILE:HG22	1.74	0.52
1:q:17:MET:HE3	1:q:19:LYS:HA	1.91	0.52
1:w:550:LEU:H	1:4:553:ILE:HG22	1.74	0.52
2:W2:10:ARG:HG3	2:W2:11:HIS:H	1.74	0.52
2:l2:10:ARG:HG3	2:l2:11:HIS:H	1.74	0.52
1:E:550:LEU:H	1:K:553:ILE:HG22	1.74	0.52
1:K:17:MET:HE3	1:K:19:LYS:HA	1.91	0.52
1:L:550:LEU:H	1:t:553:ILE:HG22	1.75	0.52
1:N:17:MET:HE3	1:N:19:LYS:HA	1.91	0.52
1:P:550:LEU:H	1:i:553:ILE:HG22	1.74	0.52
1:R:17:MET:HE3	1:R:19:LYS:HA	1.91	0.52
1:R:550:LEU:H	1:Z:553:ILE:HG22	1.74	0.52
1:q:550:LEU:H	1:8:553:ILE:HG22	1.74	0.52
1:z:470:LYS:NZ	1:4:48:GLN:O	2.33	0.52
1:1:17:MET:HE3	1:1:19:LYS:HA	1.91	0.52
1:7:17:MET:HE3	1:7:19:LYS:HA	1.91	0.52
1:8:17:MET:HE3	1:8:19:LYS:HA	1.91	0.52
2:22:10:ARG:HG3	2:22:11:HIS:H	1.74	0.52
1:B:550:LEU:H	1:O:553:ILE:HG22	1.74	0.52
1:N:553:ILE:HG22	1:j:550:LEU:H	1.74	0.52
1:O:17:MET:HE3	1:O:19:LYS:HA	1.91	0.52
1:Q:17:MET:HE3	1:Q:19:LYS:HA	1.91	0.52
1:W:17:MET:HE3	1:W:19:LYS:HA	1.91	0.52
1:W:553:ILE:HG22	1:i:550:LEU:H	1.75	0.52
1:a:553:ILE:HG22	1:f:550:LEU:H	1.74	0.52
1:b:550:LEU:H	1:3:553:ILE:HG22	1.74	0.52
1:e:553:ILE:HG22	1:v:550:LEU:H	1.74	0.52
1:i:17:MET:HE3	1:i:19:LYS:HA	1.91	0.52
1:l:17:MET:HE3	1:l:19:LYS:HA	1.91	0.52
1:4:17:MET:HE3	1:4:19:LYS:HA	1.91	0.52
2:E2:10:ARG:HG3	2:E2:11:HIS:H	1.74	0.52
2:J2:10:ARG:HG3	2:J2:11:HIS:H	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:L2:10:ARG:HG3	2:L2:11:HIS:H	1.74	0.52
2:O2:10:ARG:HG3	2:O2:11:HIS:H	1.74	0.52
2:g2:10:ARG:HG3	2:g2:11:HIS:H	1.74	0.52
1:D:553:ILE:HG22	1:7:550:LEU:H	1.74	0.52
1:Y:553:ILE:HG22	1:5:550:LEU:H	1.74	0.52
1:Z:17:MET:HE3	1:Z:19:LYS:HA	1.91	0.52
1:c:17:MET:HE3	1:c:19:LYS:HA	1.91	0.52
1:e:17:MET:HE3	1:e:19:LYS:HA	1.91	0.52
1:v:17:MET:HE3	1:v:19:LYS:HA	1.91	0.52
1:x:17:MET:HE3	1:x:19:LYS:HA	1.91	0.52
2:S2:10:ARG:HG3	2:S2:11:HIS:H	1.74	0.52
2:f2:10:ARG:HG3	2:f2:11:HIS:H	1.74	0.52
2:j2:10:ARG:HG3	2:j2:11:HIS:H	1.74	0.52
2:w2:10:ARG:HG3	2:w2:11:HIS:H	1.74	0.52
1:E:17:MET:HE3	1:E:19:LYS:HA	1.91	0.52
1:F:550:LEU:H	1:f:553:ILE:HG22	1.74	0.52
1:U:550:LEU:H	1:w:553:ILE:HG22	1.75	0.52
1:Y:550:LEU:H	1:k:553:ILE:HG22	1.74	0.52
1:b:553:ILE:HG22	1:y:550:LEU:H	1.74	0.52
1:c:550:LEU:H	1:d:553:ILE:HG22	1.74	0.52
1:d:17:MET:HE3	1:d:19:LYS:HA	1.91	0.52
1:n:17:MET:HE3	1:n:19:LYS:HA	1.91	0.52
1:w:17:MET:HE3	1:w:19:LYS:HA	1.91	0.52
1:6:17:MET:HE3	1:6:19:LYS:HA	1.91	0.52
2:P2:10:ARG:HG3	2:P2:11:HIS:H	1.74	0.52
2:r2:10:ARG:HG3	2:r2:11:HIS:H	1.74	0.52
1:A:17:MET:HE3	1:A:19:LYS:HA	1.91	0.52
1:G:553:ILE:HG22	1:z:550:LEU:H	1.75	0.52
1:H:550:LEU:H	1:7:553:ILE:HG22	1.74	0.52
2:K2:10:ARG:HG3	2:K2:11:HIS:H	1.74	0.52
1:A:470:LYS:NZ	1:B:48:GLN:O	2.33	0.52
1:A:553:ILE:HG22	1:d:550:LEU:H	1.74	0.52
1:D:58:LYS:HE2	1:D:387:TYR:HE1	1.69	0.52
1:M:550:LEU:H	1:x:553:ILE:HG22	1.74	0.52
1:2:17:MET:HE3	1:2:19:LYS:HA	1.91	0.52
2:b2:10:ARG:HG3	2:b2:11:HIS:H	1.74	0.52
2:z2:10:ARG:HG3	2:z2:11:HIS:H	1.74	0.52
2:72:10:ARG:HG3	2:72:11:HIS:H	1.74	0.52
1:A:550:LEU:H	1:c:553:ILE:HG22	1.74	0.52
1:E:553:ILE:HG22	1:s:550:LEU:H	1.75	0.52
2:F2:10:ARG:HG3	2:F2:11:HIS:H	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:y2:10:ARG:HG3	2:y2:11:HIS:H	1.74	0.52
2:42:10:ARG:HG3	2:42:11:HIS:H	1.74	0.52
1:C:553:ILE:HG22	1:Z:550:LEU:H	1.74	0.52
1:V:17:MET:HE3	1:V:19:LYS:HA	1.91	0.52
1:X:550:LEU:H	1:u:553:ILE:HG22	1.74	0.52
1:e:550:LEU:H	1:n:553:ILE:HG22	1.75	0.52
1:y:17:MET:HE3	1:y:19:LYS:HA	1.91	0.52
2:Q2:10:ARG:HG3	2:Q2:11:HIS:H	1.74	0.52
2:Y2:10:ARG:HG3	2:Y2:11:HIS:H	1.74	0.52
1:B:553:ILE:HG22	1:V:550:LEU:H	1.75	0.51
1:I:553:ILE:HG22	1:o:550:LEU:H	1.74	0.51
1:J:17:MET:HE3	1:J:19:LYS:HA	1.91	0.51
1:P:17:MET:HE3	1:P:19:LYS:HA	1.91	0.51
1:j:17:MET:HE3	1:j:19:LYS:HA	1.91	0.51
1:k:58:LYS:HE2	1:k:387:TYR:HE1	1.69	0.51
1:p:17:MET:HE3	1:p:19:LYS:HA	1.91	0.51
1:p:550:LEU:H	1:l:553:ILE:HG22	1.75	0.51
1:h:437:SER:OG	1:w:305:ARG:NH2	2.33	0.51
2:x2:10:ARG:HG3	2:x2:11:HIS:H	1.74	0.51
2:0:10:ARG:HG3	2:0:11:HIS:H	1.74	0.51
1:F:17:MET:HE3	1:F:19:LYS:HA	1.91	0.51
1:M:553:ILE:HG22	1:S:550:LEU:H	1.74	0.51
1:m:553:ILE:HG22	1:t:550:LEU:H	1.74	0.51
2:v2:10:ARG:HG3	2:v2:11:HIS:H	1.74	0.51
1:L:17:MET:HE3	1:L:19:LYS:HA	1.91	0.51
1:d:228:ALA:HB3	1:r:292:ASP:N	2.26	0.51
1:g:553:ILE:HG22	1:8:550:LEU:H	1.74	0.51
1:k:17:MET:HE3	1:k:19:LYS:HA	1.91	0.51
1:D:17:MET:HE3	1:D:19:LYS:HA	1.91	0.51
1:I:17:MET:HE3	1:I:19:LYS:HA	1.91	0.51
1:L:205:ASP:H	1:L:208:THR:HG1	1.59	0.51
1:T:17:MET:HE3	1:T:19:LYS:HA	1.91	0.51
1:o:553:ILE:HG22	1:2:550:LEU:H	1.74	0.51
1:u:17:MET:HE3	1:u:19:LYS:HA	1.91	0.51
1:G:17:MET:HE3	1:G:19:LYS:HA	1.91	0.51
1:J:550:LEU:H	1:X:553:ILE:HG22	1.74	0.51
1:S:292:ASP:N	1:n:228:ALA:HB3	2.26	0.51
1:S:553:ILE:HG22	1:x:550:LEU:H	1.75	0.51
1:V:205:ASP:H	1:V:208:THR:HG1	1.59	0.51
1:m:17:MET:HE3	1:m:19:LYS:HA	1.91	0.51
1:s:17:MET:HE3	1:s:19:LYS:HA	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:t:17:MET:HE3	1:t:19:LYS:HA	1.91	0.51
1:z:17:MET:HE3	1:z:19:LYS:HA	1.91	0.51
1:C:550:LEU:H	1:R:553:ILE:HG22	1.75	0.51
1:I:550:LEU:H	1:2:553:ILE:HG22	1.75	0.51
1:O:550:LEU:H	1:V:553:ILE:HG22	1.74	0.51
1:Q:550:LEU:H	1:r:553:ILE:HG22	1.75	0.51
1:U:17:MET:HE3	1:U:19:LYS:HA	1.91	0.51
1:U:292:ASP:N	1:f:228:ALA:HB3	2.26	0.51
1:X:17:MET:HE3	1:X:19:LYS:HA	1.91	0.51
1:b:228:ALA:HB3	1:s:292:ASP:N	2.26	0.51
1:e:228:ALA:HB3	1:z:292:ASP:N	2.26	0.51
1:o:17:MET:HE3	1:o:19:LYS:HA	1.91	0.51
1:J:553:ILE:HG22	1:u:550:LEU:H	1.75	0.51
1:h:17:MET:HE3	1:h:19:LYS:HA	1.91	0.51
1:h:228:ALA:HB3	1:w:292:ASP:N	2.26	0.51
1:j:228:ALA:HB3	1:v:292:ASP:N	2.26	0.51
1:p:205:ASP:H	1:p:208:THR:HG1	1.59	0.51
1:K:550:LEU:H	1:s:553:ILE:HG22	1.75	0.51
1:L:292:ASP:N	1:c:228:ALA:HB3	2.26	0.51
1:M:17:MET:HE3	1:M:19:LYS:HA	1.91	0.51
1:U:553:ILE:HG22	1:4:550:LEU:H	1.75	0.51
1:i:228:ALA:HB3	1:n:292:ASP:N	2.26	0.51
1:G:550:LEU:H	1:T:553:ILE:HG22	1.74	0.51
1:M:12:VAL:HG12	1:M:13:HIS:N	2.26	0.51
1:M:292:ASP:N	1:O:228:ALA:HB3	2.26	0.51
1:P:12:VAL:HG12	1:P:13:HIS:N	2.26	0.51
1:P:553:ILE:HG22	1:W:550:LEU:H	1.74	0.51
1:T:292:ASP:N	1:V:228:ALA:HB3	2.26	0.51
1:b:292:ASP:N	1:6:228:ALA:HB3	2.26	0.51
1:e:292:ASP:N	1:k:228:ALA:HB3	2.26	0.51
1:g:550:LEU:H	1:q:553:ILE:HG22	1.75	0.51
1:A:292:ASP:N	1:P:228:ALA:HB3	2.27	0.50
1:D:228:ALA:HB3	1:c:292:ASP:N	2.26	0.50
1:N:292:ASP:N	1:r:228:ALA:HB3	2.27	0.50
1:W:228:ALA:HB3	1:f:292:ASP:N	2.26	0.50
1:a:12:VAL:HG12	1:a:13:HIS:N	2.26	0.50
1:h:12:VAL:HG12	1:h:13:HIS:N	2.26	0.50
1:j:12:VAL:HG12	1:j:13:HIS:N	2.26	0.50
1:l:550:LEU:H	1:p:553:ILE:HG22	1.74	0.50
1:m:292:ASP:N	1:p:228:ALA:HB3	2.26	0.50
1:t:228:ALA:HB3	1:8:292:ASP:N	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:y:228:ALA:HB3	1:1:292:ASP:N	2.26	0.50
1:3:12:VAL:HG12	1:3:13:HIS:N	2.26	0.50
1:3:17:MET:HE3	1:3:19:LYS:HA	1.91	0.50
1:B:292:ASP:N	1:F:228:ALA:HB3	2.26	0.50
1:C:292:ASP:N	1:I:228:ALA:HB3	2.27	0.50
1:N:228:ALA:HB3	1:d:292:ASP:N	2.26	0.50
1:a:17:MET:HE3	1:a:19:LYS:HA	1.91	0.50
1:g:292:ASP:N	1:u:228:ALA:HB3	2.27	0.50
1:j:553:ILE:HG22	1:6:550:LEU:H	1.74	0.50
1:r:17:MET:HE3	1:r:19:LYS:HA	1.91	0.50
1:6:12:VAL:HG12	1:6:13:HIS:N	2.26	0.50
1:E:12:VAL:HG12	1:E:13:HIS:N	2.26	0.50
1:I:12:VAL:HG12	1:I:13:HIS:N	2.26	0.50
1:J:228:ALA:HB3	1:7:292:ASP:N	2.27	0.50
1:Q:292:ASP:N	1:T:228:ALA:HB3	2.27	0.50
1:S:17:MET:HE3	1:S:19:LYS:HA	1.91	0.50
1:W:12:VAL:HG12	1:W:13:HIS:N	2.27	0.50
1:Y:292:ASP:N	1:2:228:ALA:HB3	2.27	0.50
1:Z:12:VAL:HG12	1:Z:13:HIS:N	2.26	0.50
1:k:12:VAL:HG12	1:k:13:HIS:N	2.27	0.50
1:m:228:ALA:HB3	1:x:292:ASP:N	2.27	0.50
1:z:205:ASP:H	1:z:208:THR:HG1	1.60	0.50
1:C:228:ALA:HB3	1:K:292:ASP:N	2.26	0.50
1:D:12:VAL:HG12	1:D:13:HIS:N	2.27	0.50
1:S:228:ALA:HB3	1:i:292:ASP:N	2.27	0.50
1:d:12:VAL:HG12	1:d:13:HIS:N	2.26	0.50
1:g:228:ALA:HB3	1:4:292:ASP:N	2.26	0.50
1:p:292:ASP:N	1:x:228:ALA:HB3	2.27	0.50
1:t:226:GLY:O	1:8:293:LEU:N	2.34	0.50
1:u:12:VAL:HG12	1:u:13:HIS:N	2.26	0.50
1:w:12:VAL:HG12	1:w:13:HIS:N	2.26	0.50
1:7:12:VAL:HG12	1:7:13:HIS:N	2.26	0.50
1:A:12:VAL:HG12	1:A:13:HIS:N	2.26	0.50
1:O:12:VAL:HG12	1:O:13:HIS:N	2.26	0.50
1:Q:228:ALA:HB3	1:V:292:ASP:N	2.27	0.50
1:R:12:VAL:HG12	1:R:13:HIS:N	2.26	0.50
1:U:228:ALA:HB3	1:W:292:ASP:N	2.27	0.50
1:Y:12:VAL:HG12	1:Y:13:HIS:N	2.26	0.50
1:o:228:ALA:HB3	1:t:292:ASP:N	2.26	0.50
1:s:228:ALA:HB3	1:6:292:ASP:N	2.27	0.50
1:1:12:VAL:HG12	1:1:13:HIS:N	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:12:VAL:HG12	1:B:13:HIS:N	2.26	0.50
1:J:12:VAL:HG12	1:J:13:HIS:N	2.26	0.50
1:L:553:ILE:HG22	1:m:550:LEU:H	1.75	0.50
1:Q:12:VAL:HG12	1:Q:13:HIS:N	2.26	0.50
1:T:550:LEU:H	1:z:553:ILE:HG22	1.75	0.50
1:U:12:VAL:HG12	1:U:13:HIS:N	2.26	0.50
1:n:12:VAL:HG12	1:n:13:HIS:N	2.26	0.50
1:q:12:VAL:HG12	1:q:13:HIS:N	2.26	0.50
1:s:12:VAL:HG12	1:s:13:HIS:N	2.26	0.50
1:v:12:VAL:HG12	1:v:13:HIS:N	2.26	0.50
1:x:12:VAL:HG12	1:x:13:HIS:N	2.26	0.50
1:8:12:VAL:HG12	1:8:13:HIS:N	2.27	0.50
1:L:12:VAL:HG12	1:L:13:HIS:N	2.26	0.50
1:a:228:ALA:HB3	1:2:292:ASP:N	2.26	0.50
1:b:12:VAL:HG12	1:b:13:HIS:N	2.26	0.50
1:o:292:ASP:N	1:8:228:ALA:HB3	2.26	0.50
1:z:12:VAL:HG12	1:z:13:HIS:N	2.26	0.50
1:F:292:ASP:N	1:H:228:ALA:HB3	2.26	0.50
1:M:12:VAL:HG12	1:M:13:HIS:H	1.77	0.50
1:S:12:VAL:HG12	1:S:13:HIS:H	1.77	0.50
1:T:12:VAL:HG12	1:T:13:HIS:N	2.26	0.50
1:T:12:VAL:HG12	1:T:13:HIS:H	1.77	0.50
1:Y:89:TRP:HB2	1:Y:96:LEU:HD13	1.94	0.50
1:Y:228:ALA:HB3	1:a:292:ASP:N	2.26	0.50
1:f:12:VAL:HG12	1:f:13:HIS:N	2.26	0.50
1:f:79:ILE:HD11	2:f2:22:ILE:HD13	1.94	0.50
1:i:12:VAL:HG12	1:i:13:HIS:N	2.26	0.50
1:l:12:VAL:HG12	1:l:13:HIS:N	2.27	0.50
1:m:12:VAL:HG12	1:m:13:HIS:N	2.26	0.50
1:o:12:VAL:HG12	1:o:13:HIS:N	2.26	0.50
1:s:79:ILE:HD11	2:s2:22:ILE:HD13	1.94	0.50
1:t:12:VAL:HG12	1:t:13:HIS:N	2.26	0.50
1:y:12:VAL:HG12	1:y:13:HIS:N	2.26	0.50
1:2:12:VAL:HG12	1:2:13:HIS:N	2.26	0.50
1:3:292:ASP:N	1:7:228:ALA:HB3	2.26	0.50
1:F:12:VAL:HG12	1:F:13:HIS:N	2.26	0.50
1:G:12:VAL:HG12	1:G:13:HIS:N	2.27	0.50
1:J:292:ASP:N	1:3:228:ALA:HB3	2.26	0.50
1:N:12:VAL:HG12	1:N:13:HIS:N	2.27	0.50
1:U:79:ILE:HD11	2:U2:22:ILE:HD13	1.94	0.50
1:V:12:VAL:HG12	1:V:13:HIS:H	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:292:ASP:N	1:Z:228:ALA:HB3	2.26	0.50
1:Y:12:VAL:HG12	1:Y:13:HIS:H	1.77	0.50
1:b:79:ILE:HD11	2:b2:22:ILE:HD13	1.94	0.50
1:h:12:VAL:HG12	1:h:13:HIS:H	1.77	0.50
1:o:226:GLY:O	1:t:293:LEU:N	2.33	0.50
1:p:12:VAL:HG12	1:p:13:HIS:H	1.77	0.50
1:y:292:ASP:N	1:5:228:ALA:HB3	2.26	0.50
1:1:12:VAL:HG12	1:1:13:HIS:H	1.77	0.50
1:A:89:TRP:HB2	1:A:96:LEU:HD13	1.94	0.49
1:A:228:ALA:HB3	1:R:292:ASP:N	2.26	0.49
1:B:12:VAL:HG12	1:B:13:HIS:H	1.77	0.49
1:F:89:TRP:HB2	1:F:96:LEU:HD13	1.94	0.49
1:J:12:VAL:HG12	1:J:13:HIS:H	1.77	0.49
1:K:12:VAL:HG12	1:K:13:HIS:N	2.26	0.49
1:O:12:VAL:HG12	1:O:13:HIS:H	1.77	0.49
1:X:12:VAL:HG12	1:X:13:HIS:N	2.27	0.49
1:m:12:VAL:HG12	1:m:13:HIS:H	1.77	0.49
1:m:226:GLY:O	1:x:293:LEU:N	2.34	0.49
1:r:12:VAL:HG12	1:r:13:HIS:H	1.77	0.49
1:u:89:TRP:HB2	1:u:96:LEU:HD13	1.94	0.49
1:v:89:TRP:HB2	1:v:96:LEU:HD13	1.94	0.49
1:w:79:ILE:HD11	2:w2:22:ILE:HD13	1.94	0.49
1:y:89:TRP:HB2	1:y:96:LEU:HD13	1.94	0.49
1:7:12:VAL:HG12	1:7:13:HIS:H	1.77	0.49
1:7:89:TRP:HB2	1:7:96:LEU:HD13	1.94	0.49
1:E:89:TRP:HB2	1:E:96:LEU:HD13	1.95	0.49
1:E:292:ASP:N	1:M:228:ALA:HB3	2.27	0.49
1:I:89:TRP:HB2	1:I:96:LEU:HD13	1.94	0.49
1:J:79:ILE:HD11	2:J2:22:ILE:HD13	1.94	0.49
1:L:89:TRP:HB2	1:L:96:LEU:HD13	1.94	0.49
1:P:79:ILE:HD11	2:P2:22:ILE:HD13	1.94	0.49
1:j:79:ILE:HD11	2:j2:22:ILE:HD13	1.94	0.49
1:j:292:ASP:N	1:q:228:ALA:HB3	2.27	0.49
1:j:293:LEU:N	1:q:226:GLY:O	2.34	0.49
1:o:89:TRP:HB2	1:o:96:LEU:HD13	1.94	0.49
1:q:292:ASP:N	1:v:228:ALA:HB3	2.26	0.49
1:w:89:TRP:HB2	1:w:96:LEU:HD13	1.95	0.49
1:D:292:ASP:N	1:L:228:ALA:HB3	2.27	0.49
1:E:79:ILE:HD11	2:E2:22:ILE:HD13	1.94	0.49
1:E:228:ALA:HB3	1:O:292:ASP:N	2.27	0.49
1:P:292:ASP:N	1:R:228:ALA:HB3	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:R:79:ILE:HD11	2:R2:22:ILE:HD13	1.94	0.49
1:S:12:VAL:HG12	1:S:13:HIS:N	2.26	0.49
1:W:79:ILE:HD11	2:W2:22:ILE:HD13	1.94	0.49
1:X:89:TRP:HB2	1:X:96:LEU:HD13	1.95	0.49
1:c:12:VAL:HG12	1:c:13:HIS:N	2.26	0.49
1:h:89:TRP:HB2	1:h:96:LEU:HD13	1.94	0.49
1:j:89:TRP:HB2	1:j:96:LEU:HD13	1.95	0.49
1:k:292:ASP:N	1:z:228:ALA:HB3	2.27	0.49
1:q:293:LEU:N	1:v:226:GLY:O	2.33	0.49
1:u:79:ILE:HD11	2:u2:22:ILE:HD13	1.94	0.49
1:x:12:VAL:HG12	1:x:13:HIS:H	1.77	0.49
1:z:89:TRP:HB2	1:z:96:LEU:HD13	1.94	0.49
1:2:79:ILE:HD11	2:22:22:ILE:HD13	1.94	0.49
1:C:12:VAL:HG12	1:C:13:HIS:N	2.26	0.49
1:I:79:ILE:HD11	2:I2:22:ILE:HD13	1.94	0.49
1:P:89:TRP:HB2	1:P:96:LEU:HD13	1.95	0.49
1:Q:12:VAL:HG12	1:Q:13:HIS:H	1.77	0.49
1:Q:293:LEU:N	1:T:226:GLY:O	2.34	0.49
1:U:89:TRP:HB2	1:U:96:LEU:HD13	1.94	0.49
1:X:12:VAL:HG12	1:X:13:HIS:H	1.77	0.49
1:e:12:VAL:HG12	1:e:13:HIS:N	2.27	0.49
1:g:12:VAL:HG12	1:g:13:HIS:N	2.26	0.49
1:i:12:VAL:HG12	1:i:13:HIS:H	1.77	0.49
1:l:12:VAL:HG12	1:l:13:HIS:H	1.77	0.49
1:q:79:ILE:HD11	2:q2:22:ILE:HD13	1.94	0.49
1:v:12:VAL:HG12	1:v:13:HIS:H	1.77	0.49
1:2:12:VAL:HG12	1:2:13:HIS:H	1.77	0.49
1:4:12:VAL:HG12	1:4:13:HIS:N	2.26	0.49
1:4:89:TRP:HB2	1:4:96:LEU:HD13	1.94	0.49
1:A:12:VAL:HG12	1:A:13:HIS:H	1.77	0.49
1:B:79:ILE:HD11	2:9:22:ILE:HD13	1.94	0.49
1:G:228:ALA:HB3	1:Z:292:ASP:N	2.27	0.49
1:K:89:TRP:HB2	1:K:96:LEU:HD13	1.94	0.49
1:M:89:TRP:HB2	1:M:96:LEU:HD13	1.94	0.49
1:N:12:VAL:HG12	1:N:13:HIS:H	1.77	0.49
1:P:12:VAL:HG12	1:P:13:HIS:H	1.77	0.49
1:P:408:LYS:HZ3	1:V:12:VAL:HG21	1.78	0.49
1:V:12:VAL:HG12	1:V:13:HIS:N	2.26	0.49
1:j:12:VAL:HG12	1:j:13:HIS:H	1.77	0.49
1:o:12:VAL:HG12	1:o:13:HIS:H	1.77	0.49
1:r:12:VAL:HG12	1:r:13:HIS:N	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:s:89:TRP:HB2	1:s:96:LEU:HD13	1.94	0.49
1:1:79:ILE:HD11	2:12:22:ILE:HD13	1.94	0.49
1:6:79:ILE:HD11	2:62:22:ILE:HD13	1.94	0.49
1:C:79:ILE:HD11	2:C2:22:ILE:HD13	1.94	0.49
1:G:292:ASP:N	1:X:228:ALA:HB3	2.27	0.49
1:M:79:ILE:HD11	2:M2:22:ILE:HD13	1.94	0.49
1:g:12:VAL:HG12	1:g:13:HIS:H	1.77	0.49
1:g:79:ILE:HD11	2:g2:22:ILE:HD13	1.94	0.49
1:j:408:LYS:HZ3	1:p:12:VAL:HG21	1.78	0.49
1:p:12:VAL:HG12	1:p:13:HIS:N	2.26	0.49
1:t:89:TRP:HB2	1:t:96:LEU:HD13	1.94	0.49
1:3:79:ILE:HD11	2:32:22:ILE:HD13	1.94	0.49
1:5:12:VAL:HG12	1:5:13:HIS:N	2.26	0.49
1:B:228:ALA:HB3	1:H:292:ASP:N	2.27	0.49
1:G:89:TRP:HB2	1:G:96:LEU:HD13	1.95	0.49
1:P:293:LEU:N	1:R:226:GLY:O	2.34	0.49
1:U:12:VAL:HG12	1:U:13:HIS:H	1.77	0.49
1:a:79:ILE:HD11	2:a2:22:ILE:HD13	1.94	0.49
1:c:12:VAL:HG12	1:c:13:HIS:H	1.77	0.49
1:l:79:ILE:HD11	2:l2:22:ILE:HD13	1.94	0.49
1:p:89:TRP:HB2	1:p:96:LEU:HD13	1.94	0.49
1:C:12:VAL:HG12	1:C:13:HIS:H	1.77	0.49
1:G:79:ILE:HD11	2:G2:22:ILE:HD13	1.94	0.49
1:G:293:LEU:N	1:X:226:GLY:O	2.33	0.49
1:H:12:VAL:HG12	1:H:13:HIS:H	1.77	0.49
1:H:12:VAL:HG12	1:H:13:HIS:N	2.26	0.49
1:O:89:TRP:HB2	1:O:96:LEU:HD13	1.94	0.49
1:S:79:ILE:HD11	2:S2:22:ILE:HD13	1.94	0.49
1:Z:12:VAL:HG12	1:Z:13:HIS:H	1.77	0.49
1:f:89:TRP:HB2	1:f:96:LEU:HD13	1.94	0.49
1:g:226:GLY:O	1:4:293:LEU:N	2.34	0.49
1:h:79:ILE:HD11	2:h2:22:ILE:HD13	1.94	0.49
1:h:305:ARG:NH2	1:l:437:SER:OG	2.34	0.49
1:l:292:ASP:N	1:w:228:ALA:HB3	2.27	0.49
1:s:12:VAL:HG12	1:s:13:HIS:H	1.77	0.49
1:s:187:GLN:HG3	1:s:507:LYS:HE3	1.95	0.49
1:t:79:ILE:HD11	2:t2:22:ILE:HD13	1.94	0.49
1:u:12:VAL:HG12	1:u:13:HIS:H	1.77	0.49
1:1:228:ALA:HB3	1:5:292:ASP:N	2.27	0.49
1:B:419:TRP:CH2	1:C:149:ARG:HD2	2.48	0.49
1:H:89:TRP:HB2	1:H:96:LEU:HD13	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T:89:TRP:HB2	1:T:96:LEU:HD13	1.94	0.49
1:U:205:ASP:H	1:U:208:THR:HG1	1.60	0.49
1:V:89:TRP:HB2	1:V:96:LEU:HD13	1.94	0.49
1:a:12:VAL:HG12	1:a:13:HIS:H	1.77	0.49
1:e:12:VAL:HG12	1:e:13:HIS:H	1.77	0.49
1:e:79:ILE:HD11	2:e2:22:ILE:HD13	1.94	0.49
1:g:149:ARG:HD2	1:1:419:TRP:CH2	2.48	0.49
1:l:89:TRP:HB2	1:l:96:LEU:HD13	1.95	0.49
1:o:149:ARG:HD2	1:7:419:TRP:CH2	2.48	0.49
1:p:79:ILE:HD11	2:p2:22:ILE:HD13	1.94	0.49
1:y:79:ILE:HD11	2:y2:22:ILE:HD13	1.94	0.49
1:3:12:VAL:HG12	1:3:13:HIS:H	1.77	0.49
1:4:79:ILE:HD11	2:42:22:ILE:HD13	1.94	0.49
1:8:12:VAL:HG12	1:8:13:HIS:H	1.77	0.49
1:F:79:ILE:HD11	2:F2:22:ILE:HD13	1.94	0.49
1:F:149:ARG:HD2	1:G:419:TRP:CH2	2.48	0.49
1:F:187:GLN:HG3	1:F:507:LYS:HE3	1.95	0.49
1:I:12:VAL:HG12	1:I:13:HIS:H	1.77	0.49
1:J:187:GLN:HG3	1:J:507:LYS:HE3	1.95	0.49
1:K:187:GLN:HG3	1:K:507:LYS:HE3	1.95	0.49
1:M:419:TRP:CH2	1:c:149:ARG:HD2	2.48	0.49
1:O:79:ILE:HD11	2:O2:22:ILE:HD13	1.94	0.49
1:U:187:GLN:HG3	1:U:507:LYS:HE3	1.95	0.49
1:V:79:ILE:HD11	2:V2:22:ILE:HD13	1.94	0.49
1:b:89:TRP:HB2	1:b:96:LEU:HD13	1.95	0.49
1:m:89:TRP:HB2	1:m:96:LEU:HD13	1.94	0.49
1:n:12:VAL:HG12	1:n:13:HIS:H	1.77	0.49
1:p:293:LEU:N	1:x:226:GLY:O	2.34	0.49
1:r:79:ILE:HD11	2:r2:22:ILE:HD13	1.94	0.49
1:u:293:LEU:N	1:4:226:GLY:O	2.34	0.49
1:v:79:ILE:HD11	2:v2:22:ILE:HD13	1.94	0.49
1:1:89:TRP:HB2	1:1:96:LEU:HD13	1.94	0.49
1:4:187:GLN:HG3	1:4:507:LYS:HE3	1.95	0.49
1:5:12:VAL:HG12	1:5:13:HIS:H	1.77	0.49
1:5:89:TRP:HB2	1:5:96:LEU:HD13	1.95	0.49
1:8:187:GLN:HG3	1:8:507:LYS:HE3	1.95	0.49
1:A:226:GLY:O	1:R:293:LEU:N	2.33	0.48
1:C:226:GLY:O	1:K:293:LEU:N	2.34	0.48
1:D:89:TRP:HB2	1:D:96:LEU:HD13	1.95	0.48
1:E:12:VAL:HG12	1:E:13:HIS:H	1.77	0.48
1:F:12:VAL:HG12	1:F:13:HIS:H	1.77	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:G:187:GLN:HG3	1:G:507:LYS:HE3	1.95	0.48
1:K:79:ILE:HD11	2:K2:22:ILE:HD13	1.94	0.48
1:a:355:LEU:O	1:a:379:SER:OG	2.29	0.48
1:c:79:ILE:HD11	2:c:22:ILE:HD13	1.94	0.48
1:i:79:ILE:HD11	2:i:22:ILE:HD13	1.94	0.48
1:k:89:TRP:HB2	1:k:96:LEU:HD13	1.95	0.48
1:l:12:VAL:HG21	1:v:408:LYS:HZ3	1.78	0.48
1:m:149:ARG:HD2	1:s:419:TRP:CH2	2.48	0.48
1:y:12:VAL:HG12	1:y:13:HIS:H	1.77	0.48
1:y:187:GLN:HG3	1:y:507:LYS:HE3	1.95	0.48
1:2:187:GLN:HG3	1:2:507:LYS:HE3	1.96	0.48
2:W2:12:GLN:HG2	2:W2:13:TRP:H	1.78	0.48
2:62:12:GLN:HG2	2:62:13:TRP:H	1.78	0.48
1:B:89:TRP:HB2	1:B:96:LEU:HD13	1.94	0.48
1:D:12:VAL:HG12	1:D:13:HIS:H	1.77	0.48
1:D:419:TRP:CH2	1:E:149:ARG:HD2	2.48	0.48
1:G:149:ARG:HD2	1:W:419:TRP:CH2	2.48	0.48
1:K:149:ARG:HD2	1:L:419:TRP:CH2	2.48	0.48
1:N:79:ILE:HD11	2:N2:22:ILE:HD13	1.94	0.48
1:Q:149:ARG:HD2	1:S:419:TRP:CH2	2.48	0.48
1:Q:226:GLY:O	1:V:293:LEU:N	2.34	0.48
1:R:12:VAL:HG12	1:R:13:HIS:H	1.77	0.48
1:W:226:GLY:O	1:f:293:LEU:N	2.34	0.48
1:X:149:ARG:HD2	1:Y:419:TRP:CH2	2.49	0.48
1:Z:187:GLN:HG3	1:Z:507:LYS:HE3	1.95	0.48
1:d:12:VAL:HG12	1:d:13:HIS:H	1.77	0.48
1:g:187:GLN:HG3	1:g:507:LYS:HE3	1.95	0.48
1:m:12:VAL:HG21	1:6:408:LYS:HZ3	1.78	0.48
1:t:187:GLN:HG3	1:t:507:LYS:HE3	1.96	0.48
1:t:205:ASP:N	1:t:208:THR:OG1	2.45	0.48
1:t:419:TRP:CH2	1:y:149:ARG:HD2	2.48	0.48
1:w:12:VAL:HG12	1:w:13:HIS:H	1.77	0.48
1:z:355:LEU:O	1:z:379:SER:OG	2.29	0.48
1:z:419:TRP:CH2	1:4:149:ARG:HD2	2.48	0.48
1:3:149:ARG:HD2	1:8:419:TRP:CH2	2.48	0.48
2:L2:12:GLN:HG2	2:L2:13:TRP:H	1.79	0.48
2:v2:12:GLN:HG2	2:v2:13:TRP:H	1.78	0.48
2:72:12:GLN:HG2	2:72:13:TRP:H	1.79	0.48
1:A:408:LYS:HZ3	1:O:12:VAL:HG21	1.78	0.48
2:O:12:GLN:HG2	2:O:13:TRP:H	1.79	0.48
1:B:12:VAL:HG21	1:R:408:LYS:HZ3	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:187:GLN:HG3	1:C:507:LYS:HE3	1.95	0.48
1:C:419:TRP:CH2	1:D:149:ARG:HD2	2.49	0.48
1:D:12:VAL:HG21	1:K:408:LYS:HZ3	1.78	0.48
1:F:419:TRP:CH2	1:R:149:ARG:HD2	2.48	0.48
1:G:205:ASP:N	1:G:208:THR:OG1	2.45	0.48
1:H:149:ARG:HD2	1:I:419:TRP:CH2	2.49	0.48
1:I:292:ASP:N	1:K:228:ALA:HB3	2.27	0.48
1:N:226:GLY:O	1:d:293:LEU:N	2.35	0.48
1:O:149:ARG:HD2	1:P:419:TRP:CH2	2.48	0.48
1:P:149:ARG:HD2	1:Q:419:TRP:CH2	2.48	0.48
1:T:149:ARG:HD2	1:U:419:TRP:CH2	2.48	0.48
1:X:187:GLN:HG3	1:X:507:LYS:HE3	1.95	0.48
1:Z:419:TRP:CH2	1:a:149:ARG:HD2	2.48	0.48
1:b:187:GLN:HG3	1:b:507:LYS:HE3	1.95	0.48
1:b:293:LEU:N	1:6:226:GLY:O	2.34	0.48
1:k:419:TRP:CH2	1:w:149:ARG:HD2	2.48	0.48
1:q:149:ARG:HD2	1:y:419:TRP:CH2	2.48	0.48
1:u:419:TRP:CH2	1:5:149:ARG:HD2	2.49	0.48
2:N2:12:GLN:HG2	2:N2:13:TRP:H	1.78	0.48
2:Y2:12:GLN:HG2	2:Y2:13:TRP:H	1.79	0.48
2:s2:12:GLN:HG2	2:s2:13:TRP:H	1.79	0.48
2:z2:12:GLN:HG2	2:z2:13:TRP:H	1.79	0.48
1:B:187:GLN:HG3	1:B:507:LYS:HE3	1.95	0.48
1:K:12:VAL:HG12	1:K:13:HIS:H	1.77	0.48
1:Q:79:ILE:HD11	2:Q2:22:ILE:HD13	1.94	0.48
1:Q:187:GLN:HG3	1:Q:507:LYS:HE3	1.95	0.48
1:S:89:TRP:HB2	1:S:96:LEU:HD13	1.94	0.48
1:X:408:LYS:HZ3	1:a:12:VAL:HG21	1.78	0.48
1:b:149:ARG:HD2	1:o:419:TRP:CH2	2.48	0.48
1:e:226:GLY:O	1:z:293:LEU:N	2.33	0.48
1:f:187:GLN:HG3	1:f:507:LYS:HE3	1.95	0.48
1:g:419:TRP:CH2	1:k:149:ARG:HD2	2.49	0.48
1:j:149:ARG:HD2	1:x:419:TRP:CH2	2.49	0.48
1:k:12:VAL:HG12	1:k:13:HIS:H	1.77	0.48
1:o:187:GLN:HG3	1:o:507:LYS:HE3	1.95	0.48
1:q:12:VAL:HG12	1:q:13:HIS:H	1.77	0.48
1:q:89:TRP:HB2	1:q:96:LEU:HD13	1.94	0.48
1:q:408:LYS:HZ3	1:l:12:VAL:HG21	1.79	0.48
1:r:419:TRP:CH2	1:x:149:ARG:HD2	2.48	0.48
1:u:292:ASP:N	1:4:228:ALA:HB3	2.27	0.48
1:x:187:GLN:HG3	1:x:507:LYS:HE3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:187:GLN:HG3	1:1:507:LYS:HE3	1.95	0.48
1:A:149:ARG:HD2	1:E:419:TRP:CH2	2.48	0.48
1:I:293:LEU:N	1:K:226:GLY:O	2.34	0.48
1:M:293:LEU:N	1:O:226:GLY:O	2.34	0.48
1:X:79:ILE:HD11	2:X2:22:ILE:HD13	1.94	0.48
1:X:419:TRP:CH2	1:f:149:ARG:HD2	2.48	0.48
1:a:187:GLN:HG3	1:a:507:LYS:HE3	1.95	0.48
1:c:187:GLN:HG3	1:c:507:LYS:HE3	1.95	0.48
1:j:419:TRP:CH2	1:l:149:ARG:HD2	2.49	0.48
1:n:205:ASP:H	1:n:208:THR:HG1	1.59	0.48
1:r:89:TRP:HB2	1:r:96:LEU:HD13	1.95	0.48
1:u:149:ARG:HD2	1:2:419:TRP:CH2	2.48	0.48
1:u:205:ASP:N	1:u:208:THR:OG1	2.45	0.48
1:x:79:ILE:HD11	2:x2:22:ILE:HD13	1.94	0.48
1:z:79:ILE:HD11	2:z2:22:ILE:HD13	1.94	0.48
1:3:89:TRP:HB2	1:3:96:LEU:HD13	1.94	0.48
1:4:12:VAL:HG12	1:4:13:HIS:H	1.77	0.48
2:9:12:GLN:HG2	2:9:13:TRP:H	1.78	0.48
2:U2:12:GLN:HG2	2:U2:13:TRP:H	1.79	0.48
1:E:187:GLN:HG3	1:E:507:LYS:HE3	1.95	0.48
1:E:205:ASP:H	1:E:208:THR:HG1	1.58	0.48
1:L:79:ILE:HD11	2:L2:22:ILE:HD13	1.94	0.48
1:L:293:LEU:N	1:c:226:GLY:O	2.33	0.48
1:N:89:TRP:HB2	1:N:96:LEU:HD13	1.95	0.48
1:N:187:GLN:HG3	1:N:507:LYS:HE3	1.95	0.48
1:O:419:TRP:CH2	1:d:149:ARG:HD2	2.48	0.48
1:b:12:VAL:HG12	1:b:13:HIS:H	1.77	0.48
1:e:187:GLN:HG3	1:e:507:LYS:HE3	1.95	0.48
1:i:89:TRP:HB2	1:i:96:LEU:HD13	1.95	0.48
1:i:187:GLN:HG3	1:i:507:LYS:HE3	1.96	0.48
1:k:79:ILE:HD11	2:k2:22:ILE:HD13	1.94	0.48
1:o:12:VAL:HG21	1:3:408:LYS:HZ3	1.78	0.48
1:o:79:ILE:HD11	2:o2:22:ILE:HD13	1.94	0.48
1:t:149:ARG:HD2	1:6:419:TRP:CH2	2.49	0.48
1:t:205:ASP:H	1:t:208:THR:HG1	1.60	0.48
1:z:12:VAL:HG12	1:z:13:HIS:H	1.77	0.48
1:2:205:ASP:N	1:2:208:THR:OG1	2.45	0.48
1:3:187:GLN:HG3	1:3:507:LYS:HE3	1.95	0.48
2:C2:12:GLN:HG2	2:C2:13:TRP:H	1.79	0.48
2:g2:12:GLN:HG2	2:g2:13:TRP:H	1.79	0.48
2:i2:12:GLN:HG2	2:i2:13:TRP:H	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:12:GLN:HG2	2:12:13:TRP:H	1.78	0.48
1:I:149:ARG:HD2	1:J:419:TRP:CH2	2.48	0.48
1:I:187:GLN:HG3	1:I:507:LYS:HE3	1.95	0.48
1:J:205:ASP:N	1:J:208:THR:OG1	2.45	0.48
1:M:187:GLN:HG3	1:M:507:LYS:HE3	1.95	0.48
1:Q:205:ASP:H	1:Q:208:THR:HG1	1.59	0.48
1:R:89:TRP:HB2	1:R:96:LEU:HD13	1.94	0.48
1:X:12:VAL:HG21	1:a:408:LYS:HZ3	1.78	0.48
1:Z:79:ILE:HD11	2:Z2:22:ILE:HD13	1.94	0.48
1:a:89:TRP:HB2	1:a:96:LEU:HD13	1.94	0.48
1:d:79:ILE:HD11	2:d2:22:ILE:HD13	1.94	0.48
1:e:89:TRP:HB2	1:e:96:LEU:HD13	1.94	0.48
1:h:292:ASP:N	1:l:228:ALA:HB3	2.29	0.48
1:i:226:GLY:O	1:n:293:LEU:N	2.35	0.48
1:l:408:LYS:HZ3	1:v:12:VAL:HG21	1.77	0.48
1:m:79:ILE:HD11	2:m2:22:ILE:HD13	1.94	0.48
1:n:79:ILE:HD11	2:n2:22:ILE:HD13	1.94	0.48
1:p:149:ARG:HD2	1:q:419:TRP:CH2	2.48	0.48
1:u:187:GLN:HG3	1:u:507:LYS:HE3	1.95	0.48
1:v:149:ARG:HD2	1:w:419:TRP:CH2	2.48	0.48
1:w:187:GLN:HG3	1:w:507:LYS:HE3	1.95	0.48
1:x:205:ASP:H	1:x:208:THR:HG1	1.59	0.48
1:8:79:ILE:HD11	2:82:22:ILE:HD13	1.94	0.48
2:G2:12:GLN:HG2	2:G2:13:TRP:H	1.79	0.48
2:Z2:12:GLN:HG2	2:Z2:13:TRP:H	1.78	0.48
1:D:79:ILE:HD11	2:D2:22:ILE:HD13	1.94	0.48
1:I:205:ASP:N	1:I:208:THR:OG1	2.45	0.48
1:R:419:TRP:CH2	1:V:149:ARG:HD2	2.48	0.48
1:S:187:GLN:HG3	1:S:507:LYS:HE3	1.96	0.48
1:Y:79:ILE:HD11	2:Y2:22:ILE:HD13	1.94	0.48
1:b:226:GLY:O	1:s:293:LEU:N	2.33	0.48
1:c:89:TRP:HB2	1:c:96:LEU:HD13	1.94	0.48
1:c:419:TRP:CH2	1:s:149:ARG:HD2	2.48	0.48
1:l:419:TRP:CH2	1:n:149:ARG:HD2	2.49	0.48
1:r:187:GLN:HG3	1:r:507:LYS:HE3	1.96	0.48
1:x:89:TRP:HB2	1:x:96:LEU:HD13	1.94	0.48
1:y:408:LYS:HZ3	1:8:12:VAL:HG21	1.78	0.48
1:5:79:ILE:HD11	2:52:22:ILE:HD13	1.94	0.48
1:7:79:ILE:HD11	2:72:22:ILE:HD13	1.94	0.48
1:7:187:GLN:HG3	1:7:507:LYS:HE3	1.95	0.48
2:J2:12:GLN:HG2	2:J2:13:TRP:H	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:n2:12:GLN:HG2	2:n2:13:TRP:H	1.78	0.48
2:t2:12:GLN:HG2	2:t2:13:TRP:H	1.79	0.48
1:A:12:VAL:HG21	1:O:408:LYS:HZ3	1.78	0.48
1:G:12:VAL:HG12	1:G:13:HIS:H	1.77	0.48
1:H:79:ILE:HD11	2:H2:22:ILE:HD13	1.94	0.48
1:H:205:ASP:N	1:H:208:THR:OG1	2.45	0.48
1:J:89:TRP:HB2	1:J:96:LEU:HD13	1.94	0.48
1:K:216:LYS:HE3	1:K:322:THR:OG1	2.14	0.48
1:L:12:VAL:HG12	1:L:13:HIS:H	1.77	0.48
1:L:216:LYS:HE3	1:L:322:THR:OG1	2.14	0.48
1:R:187:GLN:HG3	1:R:507:LYS:HE3	1.95	0.48
1:T:216:LYS:HE3	1:T:322:THR:OG1	2.14	0.48
1:U:149:ARG:HD2	1:e:419:TRP:CH2	2.48	0.48
1:W:89:TRP:HB2	1:W:96:LEU:HD13	1.95	0.48
1:Z:89:TRP:HB2	1:Z:96:LEU:HD13	1.94	0.48
1:e:12:VAL:HG21	1:w:408:LYS:HZ3	1.78	0.48
1:f:12:VAL:HG12	1:f:13:HIS:H	1.77	0.48
1:g:89:TRP:HB2	1:g:96:LEU:HD13	1.94	0.48
1:h:187:GLN:HG3	1:h:507:LYS:HE3	1.95	0.48
1:j:187:GLN:HG3	1:j:507:LYS:HE3	1.95	0.48
1:q:187:GLN:HG3	1:q:507:LYS:HE3	1.95	0.48
1:t:12:VAL:HG12	1:t:13:HIS:H	1.77	0.48
1:z:216:LYS:HE3	1:z:322:THR:OG1	2.14	0.48
1:4:216:LYS:HE3	1:4:322:THR:OG1	2.14	0.48
1:6:89:TRP:HB2	1:6:96:LEU:HD13	1.94	0.48
1:8:89:TRP:HB2	1:8:96:LEU:HD13	1.94	0.48
2:c2:12:GLN:HG2	2:c2:13:TRP:H	1.78	0.48
2:l2:12:GLN:HG2	2:l2:13:TRP:H	1.78	0.48
2:22:12:GLN:HG2	2:22:13:TRP:H	1.79	0.48
2:42:12:GLN:HG2	2:42:13:TRP:H	1.78	0.48
2:82:12:GLN:HG2	2:82:13:TRP:H	1.79	0.48
1:C:89:TRP:HB2	1:C:96:LEU:HD13	1.94	0.48
1:D:441:VAL:HG13	1:D:445:GLU:OE1	2.14	0.48
1:E:408:LYS:HZ3	1:c:12:VAL:HG21	1.78	0.48
1:M:216:LYS:HE3	1:M:322:THR:OG1	2.14	0.48
1:P:187:GLN:HG3	1:P:507:LYS:HE3	1.95	0.48
1:Q:89:TRP:HB2	1:Q:96:LEU:HD13	1.94	0.48
1:Q:216:LYS:HE3	1:Q:322:THR:OG1	2.14	0.48
1:R:441:VAL:HG13	1:R:445:GLU:OE1	2.14	0.48
1:T:79:ILE:HD11	2:T2:22:ILE:HD13	1.94	0.48
1:T:419:TRP:CH2	1:i:149:ARG:HD2	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Y:187:GLN:HG3	1:Y:507:LYS:HE3	1.95	0.48
1:Z:441:VAL:HG13	1:Z:445:GLU:OE1	2.14	0.48
1:d:441:VAL:HG13	1:d:445:GLU:OE1	2.14	0.48
1:f:419:TRP:CH2	1:z:149:ARG:HD2	2.48	0.48
1:h:216:LYS:HE3	1:h:322:THR:OG1	2.14	0.48
1:k:441:VAL:HG13	1:k:445:GLU:OE1	2.14	0.48
1:l:216:LYS:HE3	1:l:322:THR:OG1	2.14	0.48
1:n:89:TRP:HB2	1:n:96:LEU:HD13	1.94	0.48
1:n:441:VAL:HG13	1:n:445:GLU:OE1	2.14	0.48
1:q:441:VAL:HG13	1:q:445:GLU:OE1	2.14	0.48
1:w:441:VAL:HG13	1:w:445:GLU:OE1	2.14	0.48
1:5:205:ASP:N	1:5:208:THR:OG1	2.45	0.48
1:5:419:TRP:CH2	1:8:149:ARG:HD2	2.48	0.48
1:6:216:LYS:HE3	1:6:322:THR:OG1	2.14	0.48
2:K2:12:GLN:HG2	2:K2:13:TRP:H	1.79	0.48
2:O2:12:GLN:HG2	2:O2:13:TRP:H	1.79	0.48
2:X2:12:GLN:HG2	2:X2:13:TRP:H	1.78	0.48
2:x2:12:GLN:HG2	2:x2:13:TRP:H	1.79	0.48
2:32:12:GLN:HG2	2:32:13:TRP:H	1.79	0.48
1:C:293:LEU:N	1:I:226:GLY:O	2.34	0.47
1:E:441:VAL:HG13	1:E:445:GLU:OE1	2.14	0.47
1:H:419:TRP:CH2	1:Z:149:ARG:HD2	2.48	0.47
1:L:149:ARG:HD2	1:b:419:TRP:CH2	2.48	0.47
1:O:216:LYS:HE3	1:O:322:THR:OG1	2.14	0.47
1:Y:149:ARG:HD2	1:4:419:TRP:CH2	2.49	0.47
1:e:216:LYS:HE3	1:e:322:THR:OG1	2.14	0.47
1:m:441:VAL:HG13	1:m:445:GLU:OE1	2.14	0.47
1:n:216:LYS:HE3	1:n:322:THR:OG1	2.14	0.47
1:s:226:GLY:O	1:6:293:LEU:N	2.34	0.47
1:x:216:LYS:HE3	1:x:322:THR:OG1	2.14	0.47
1:2:89:TRP:HB2	1:2:96:LEU:HD13	1.94	0.47
1:5:187:GLN:HG3	1:5:507:LYS:HE3	1.95	0.47
1:6:12:VAL:HG12	1:6:13:HIS:H	1.77	0.47
1:6:441:VAL:HG13	1:6:445:GLU:OE1	2.14	0.47
1:8:441:VAL:HG13	1:8:445:GLU:OE1	2.14	0.47
2:d2:12:GLN:HG2	2:d2:13:TRP:H	1.79	0.47
1:A:419:TRP:CH2	1:B:149:ARG:HD2	2.48	0.47
1:B:216:LYS:HE3	1:B:322:THR:OG1	2.14	0.47
1:D:216:LYS:HE3	1:D:322:THR:OG1	2.14	0.47
1:E:216:LYS:HE3	1:E:322:THR:OG1	2.14	0.47
1:H:187:GLN:HG3	1:H:507:LYS:HE3	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:J:149:ARG:HD2	1:a:419:TRP:CH2	2.48	0.47
1:K:205:ASP:N	1:K:208:THR:OG1	2.45	0.47
1:N:149:ARG:HD2	1:m:419:TRP:CH2	2.49	0.47
1:P:216:LYS:HE3	1:P:322:THR:OG1	2.14	0.47
1:S:441:VAL:HG13	1:S:445:GLU:OE1	2.14	0.47
1:T:441:VAL:HG13	1:T:445:GLU:OE1	2.14	0.47
1:U:226:GLY:O	1:W:293:LEU:N	2.34	0.47
1:W:216:LYS:HE3	1:W:322:THR:OG1	2.14	0.47
1:W:441:VAL:HG13	1:W:445:GLU:OE1	2.14	0.47
1:c:216:LYS:HE3	1:c:322:THR:OG1	2.14	0.47
1:d:216:LYS:HE3	1:d:322:THR:OG1	2.14	0.47
1:g:293:LEU:N	1:u:226:GLY:O	2.34	0.47
1:j:216:LYS:HE3	1:j:322:THR:OG1	2.14	0.47
1:k:216:LYS:HE3	1:k:322:THR:OG1	2.14	0.47
1:m:216:LYS:HE3	1:m:322:THR:OG1	2.14	0.47
1:r:441:VAL:HG13	1:r:445:GLU:OE1	2.14	0.47
1:s:205:ASP:N	1:s:208:THR:OG1	2.45	0.47
1:u:441:VAL:HG13	1:u:445:GLU:OE1	2.14	0.47
1:w:216:LYS:HE3	1:w:322:THR:OG1	2.14	0.47
1:x:355:LEU:O	1:x:379:SER:OG	2.29	0.47
1:z:187:GLN:HG3	1:z:507:LYS:HE3	1.95	0.47
1:2:149:ARG:HD2	1:3:419:TRP:CH2	2.48	0.47
2:E2:12:GLN:HG2	2:E2:13:TRP:H	1.79	0.47
2:a2:12:GLN:HG2	2:a2:13:TRP:H	1.79	0.47
2:e2:12:GLN:HG2	2:e2:13:TRP:H	1.79	0.47
2:o2:12:GLN:HG2	2:o2:13:TRP:H	1.79	0.47
2:q2:12:GLN:HG2	2:q2:13:TRP:H	1.78	0.47
1:F:162:ARG:HD3	1:F:169:GLU:HA	1.97	0.47
1:H:216:LYS:HE3	1:H:322:THR:OG1	2.14	0.47
1:I:441:VAL:HG13	1:I:445:GLU:OE1	2.14	0.47
1:K:419:TRP:CH2	1:7:149:ARG:HD2	2.49	0.47
1:M:149:ARG:HD2	1:N:419:TRP:CH2	2.48	0.47
1:N:216:LYS:HE3	1:N:322:THR:OG1	2.14	0.47
1:W:12:VAL:HG12	1:W:13:HIS:H	1.77	0.47
1:Y:441:VAL:HG13	1:Y:445:GLU:OE1	2.14	0.47
1:Z:216:LYS:HE3	1:Z:322:THR:OG1	2.14	0.47
1:d:89:TRP:HB2	1:d:96:LEU:HD13	1.94	0.47
1:d:205:ASP:H	1:d:208:THR:HG1	1.59	0.47
1:i:216:LYS:HE3	1:i:322:THR:OG1	2.14	0.47
1:n:419:TRP:CH2	1:r:149:ARG:HD2	2.48	0.47
1:o:293:LEU:N	1:8:226:GLY:O	2.34	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:205:ASP:N	1:p:208:THR:OG1	2.45	0.47
1:p:441:VAL:HG13	1:p:445:GLU:OE1	2.14	0.47
1:1:216:LYS:HE3	1:1:322:THR:OG1	2.14	0.47
1:7:216:LYS:HE3	1:7:322:THR:OG1	2.14	0.47
2:Q2:12:GLN:HG2	2:Q2:13:TRP:H	1.79	0.47
2:R2:12:GLN:HG2	2:R2:13:TRP:H	1.78	0.47
2:w2:12:GLN:HG2	2:w2:13:TRP:H	1.79	0.47
1:A:187:GLN:HG3	1:A:507:LYS:HE3	1.95	0.47
1:J:216:LYS:HE3	1:J:322:THR:OG1	2.14	0.47
1:L:187:GLN:HG3	1:L:507:LYS:HE3	1.95	0.47
1:R:162:ARG:HD3	1:R:169:GLU:HA	1.97	0.47
1:U:205:ASP:N	1:U:208:THR:OG1	2.45	0.47
1:V:205:ASP:N	1:V:208:THR:OG1	2.45	0.47
1:V:441:VAL:HG13	1:V:445:GLU:OE1	2.14	0.47
1:X:293:LEU:N	1:Z:226:GLY:O	2.34	0.47
1:Y:216:LYS:HE3	1:Y:322:THR:OG1	2.14	0.47
1:Z:162:ARG:HD3	1:Z:169:GLU:HA	1.97	0.47
1:i:162:ARG:HD3	1:i:169:GLU:HA	1.97	0.47
1:n:187:GLN:HG3	1:n:507:LYS:HE3	1.95	0.47
1:q:162:ARG:HD3	1:q:169:GLU:HA	1.97	0.47
1:r:216:LYS:HE3	1:r:322:THR:OG1	2.14	0.47
1:s:162:ARG:HD3	1:s:169:GLU:HA	1.97	0.47
1:v:162:ARG:HD3	1:v:169:GLU:HA	1.97	0.47
1:v:187:GLN:HG3	1:v:507:LYS:HE3	1.95	0.47
1:x:205:ASP:N	1:x:208:THR:OG1	2.45	0.47
1:2:216:LYS:HE3	1:2:322:THR:OG1	2.14	0.47
1:3:441:VAL:HG13	1:3:445:GLU:OE1	2.14	0.47
1:4:205:ASP:N	1:4:208:THR:OG1	2.45	0.47
1:5:216:LYS:HE3	1:5:322:THR:OG1	2.14	0.47
1:7:441:VAL:HG13	1:7:445:GLU:OE1	2.14	0.47
1:8:162:ARG:HD3	1:8:169:GLU:HA	1.97	0.47
2:T2:12:GLN:HG2	2:T2:13:TRP:H	1.78	0.47
1:A:162:ARG:HD3	1:A:169:GLU:HA	1.97	0.47
1:E:162:ARG:HD3	1:E:169:GLU:HA	1.97	0.47
1:F:441:VAL:HG13	1:F:445:GLU:OE1	2.14	0.47
1:G:216:LYS:HE3	1:G:322:THR:OG1	2.14	0.47
1:I:216:LYS:HE3	1:I:322:THR:OG1	2.14	0.47
1:M:441:VAL:HG13	1:M:445:GLU:OE1	2.14	0.47
1:N:162:ARG:HD3	1:N:169:GLU:HA	1.97	0.47
1:O:441:VAL:HG13	1:O:445:GLU:OE1	2.14	0.47
1:Q:162:ARG:HD3	1:Q:169:GLU:HA	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:149:ARG:HD2	1:d:419:TRP:CH2	2.48	0.47
1:T:187:GLN:HG3	1:T:507:LYS:HE3	1.95	0.47
1:V:187:GLN:HG3	1:V:507:LYS:HE3	1.95	0.47
1:V:419:TRP:CH2	1:W:149:ARG:HD2	2.49	0.47
1:X:216:LYS:HE3	1:X:322:THR:OG1	2.14	0.47
1:a:441:VAL:HG13	1:a:445:GLU:OE1	2.14	0.47
1:d:162:ARG:HD3	1:d:169:GLU:HA	1.97	0.47
1:d:187:GLN:HG3	1:d:507:LYS:HE3	1.95	0.47
1:k:408:LYS:HZ3	1:4:12:VAL:HG21	1.79	0.47
1:m:187:GLN:HG3	1:m:507:LYS:HE3	1.95	0.47
1:n:162:ARG:HD3	1:n:169:GLU:HA	1.97	0.47
1:o:162:ARG:HD3	1:o:169:GLU:HA	1.97	0.47
1:o:216:LYS:HE3	1:o:322:THR:OG1	2.14	0.47
1:p:187:GLN:HG3	1:p:507:LYS:HE3	1.95	0.47
1:v:419:TRP:CH2	1:1:149:ARG:HD2	2.48	0.47
1:x:162:ARG:HD3	1:x:169:GLU:HA	1.97	0.47
1:y:162:ARG:HD3	1:y:169:GLU:HA	1.97	0.47
1:8:216:LYS:HE3	1:8:322:THR:OG1	2.14	0.47
2:V2:12:GLN:HG2	2:V2:13:TRP:H	1.79	0.47
2:m2:12:GLN:HG2	2:m2:13:TRP:H	1.79	0.47
1:D:187:GLN:HG3	1:D:507:LYS:HE3	1.95	0.47
1:Q:205:ASP:N	1:Q:208:THR:OG1	2.45	0.47
1:Q:355:LEU:O	1:Q:379:SER:OG	2.29	0.47
1:S:216:LYS:HE3	1:S:322:THR:OG1	2.14	0.47
1:U:162:ARG:HD3	1:U:169:GLU:HA	1.97	0.47
1:U:293:LEU:N	1:f:226:GLY:O	2.33	0.47
1:W:187:GLN:HG3	1:W:507:LYS:HE3	1.95	0.47
1:X:162:ARG:HD3	1:X:169:GLU:HA	1.97	0.47
1:c:162:ARG:HD3	1:c:169:GLU:HA	1.97	0.47
1:e:162:ARG:HD3	1:e:169:GLU:HA	1.97	0.47
1:h:441:VAL:HG13	1:h:445:GLU:OE1	2.14	0.47
1:i:441:VAL:HG13	1:i:445:GLU:OE1	2.14	0.47
1:l:187:GLN:HG3	1:l:507:LYS:HE3	1.95	0.47
1:m:162:ARG:HD3	1:m:169:GLU:HA	1.97	0.47
1:p:419:TRP:CH2	1:6:149:ARG:HD2	2.49	0.47
1:t:216:LYS:HE3	1:t:322:THR:OG1	2.14	0.47
1:u:162:ARG:HD3	1:u:169:GLU:HA	1.97	0.47
1:u:216:LYS:HE3	1:u:322:THR:OG1	2.14	0.47
1:v:160:TRP:O	2:v2:37:ARG:HA	2.15	0.47
1:y:441:VAL:HG13	1:y:445:GLU:OE1	2.14	0.47
1:6:187:GLN:HG3	1:6:507:LYS:HE3	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:k2:12:GLN:HG2	2:k2:13:TRP:H	1.78	0.47
1:B:441:VAL:HG13	1:B:445:GLU:OE1	2.14	0.47
1:C:160:TRP:O	2:C2:37:ARG:HA	2.15	0.47
1:D:160:TRP:O	2:D2:37:ARG:HA	2.15	0.47
1:D:408:LYS:HZ3	1:K:12:VAL:HG21	1.78	0.47
1:E:160:TRP:O	2:E2:37:ARG:HA	2.15	0.47
1:F:216:LYS:HE3	1:F:322:THR:OG1	2.14	0.47
1:H:441:VAL:HG13	1:H:445:GLU:OE1	2.14	0.47
1:I:162:ARG:HD3	1:I:169:GLU:HA	1.97	0.47
1:J:441:VAL:HG13	1:J:445:GLU:OE1	2.14	0.47
1:M:162:ARG:HD3	1:M:169:GLU:HA	1.97	0.47
1:O:160:TRP:O	2:O2:37:ARG:HA	2.15	0.47
1:O:187:GLN:HG3	1:O:507:LYS:HE3	1.95	0.47
1:Q:216:LYS:NZ	1:i:107:TRP:CE3	2.80	0.47
1:Q:441:VAL:HG13	1:Q:445:GLU:OE1	2.14	0.47
1:R:160:TRP:O	2:R2:37:ARG:HA	2.15	0.47
1:T:162:ARG:HD3	1:T:169:GLU:HA	1.97	0.47
1:X:205:ASP:N	1:X:208:THR:OG1	2.45	0.47
1:Y:162:ARG:HD3	1:Y:169:GLU:HA	1.97	0.47
1:a:162:ARG:HD3	1:a:169:GLU:HA	1.97	0.47
1:a:216:LYS:HE3	1:a:322:THR:OG1	2.14	0.47
1:c:441:VAL:HG13	1:c:445:GLU:OE1	2.14	0.47
1:e:441:VAL:HG13	1:e:445:GLU:OE1	2.14	0.47
1:g:160:TRP:O	2:g2:37:ARG:HA	2.15	0.47
1:h:162:ARG:HD3	1:h:169:GLU:HA	1.97	0.47
1:k:160:TRP:O	2:k2:37:ARG:HA	2.15	0.47
1:k:187:GLN:HG3	1:k:507:LYS:HE3	1.95	0.47
1:l:160:TRP:O	2:l2:37:ARG:HA	2.15	0.47
1:l:441:VAL:HG13	1:l:445:GLU:OE1	2.14	0.47
1:o:205:ASP:N	1:o:208:THR:OG1	2.45	0.47
1:q:160:TRP:O	2:q2:37:ARG:HA	2.15	0.47
1:w:160:TRP:O	2:w2:37:ARG:HA	2.15	0.47
1:w:162:ARG:HD3	1:w:169:GLU:HA	1.97	0.47
1:x:441:VAL:HG13	1:x:445:GLU:OE1	2.14	0.47
1:y:216:LYS:HE3	1:y:322:THR:OG1	2.14	0.47
1:1:441:VAL:HG13	1:1:445:GLU:OE1	2.14	0.47
1:2:441:VAL:HG13	1:2:445:GLU:OE1	2.14	0.47
1:3:162:ARG:HD3	1:3:169:GLU:HA	1.97	0.47
1:3:216:LYS:HE3	1:3:322:THR:OG1	2.14	0.47
1:5:441:VAL:HG13	1:5:445:GLU:OE1	2.14	0.47
1:6:162:ARG:HD3	1:6:169:GLU:HA	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:D2:12:GLN:HG2	2:D2:13:TRP:H	1.78	0.47
2:M2:12:GLN:HG2	2:M2:13:TRP:H	1.79	0.47
2:P2:12:GLN:HG2	2:P2:13:TRP:H	1.78	0.47
2:b2:12:GLN:HG2	2:b2:13:TRP:H	1.79	0.47
2:f2:12:GLN:HG2	2:f2:13:TRP:H	1.78	0.47
2:h2:12:GLN:HG2	2:h2:13:TRP:H	1.78	0.47
2:j2:12:GLN:HG2	2:j2:13:TRP:H	1.78	0.47
2:p2:12:GLN:HG2	2:p2:13:TRP:H	1.79	0.47
1:A:441:VAL:HG13	1:A:445:GLU:OE1	2.14	0.47
1:F:355:LEU:O	1:F:379:SER:OG	2.29	0.47
1:N:107:TRP:CE3	1:x:216:LYS:NZ	2.80	0.47
1:N:441:VAL:HG13	1:N:445:GLU:OE1	2.14	0.47
1:R:216:LYS:HE3	1:R:322:THR:OG1	2.14	0.47
1:U:216:LYS:HE3	1:U:322:THR:OG1	2.14	0.47
1:b:160:TRP:O	2:b2:37:ARG:HA	2.15	0.47
1:b:216:LYS:HE3	1:b:322:THR:OG1	2.14	0.47
1:f:160:TRP:O	2:f2:37:ARG:HA	2.15	0.47
1:t:441:VAL:HG13	1:t:445:GLU:OE1	2.14	0.47
1:w:205:ASP:H	1:w:208:THR:HG1	1.59	0.47
1:1:162:ARG:HD3	1:1:169:GLU:HA	1.97	0.47
1:2:162:ARG:HD3	1:2:169:GLU:HA	1.97	0.47
1:7:162:ARG:HD3	1:7:169:GLU:HA	1.97	0.47
2:S2:12:GLN:HG2	2:S2:13:TRP:H	1.79	0.47
1:A:216:LYS:HE3	1:A:322:THR:OG1	2.14	0.47
1:B:162:ARG:HD3	1:B:169:GLU:HA	1.97	0.47
1:G:441:VAL:HG13	1:G:445:GLU:OE1	2.14	0.47
1:J:162:ARG:HD3	1:J:169:GLU:HA	1.97	0.47
1:L:160:TRP:O	2:L2:37:ARG:HA	2.15	0.47
1:S:160:TRP:O	2:S2:37:ARG:HA	2.15	0.47
1:T:160:TRP:O	2:T2:37:ARG:HA	2.15	0.47
1:W:162:ARG:HD3	1:W:169:GLU:HA	1.97	0.47
1:f:216:LYS:HE3	1:f:322:THR:OG1	2.14	0.47
1:q:216:LYS:HE3	1:q:322:THR:OG1	2.14	0.47
1:r:160:TRP:O	2:r2:37:ARG:HA	2.15	0.47
1:s:160:TRP:O	2:s2:37:ARG:HA	2.15	0.47
1:s:441:VAL:HG13	1:s:445:GLU:OE1	2.14	0.47
1:v:216:LYS:HE3	1:v:322:THR:OG1	2.14	0.47
1:v:441:VAL:HG13	1:v:445:GLU:OE1	2.14	0.47
1:y:160:TRP:O	2:y2:37:ARG:HA	2.15	0.47
1:z:441:VAL:HG13	1:z:445:GLU:OE1	2.14	0.47
1:5:160:TRP:O	2:52:37:ARG:HA	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:441:VAL:HG13	1:C:445:GLU:OE1	2.14	0.47
1:F:160:TRP:O	2:F2:37:ARG:HA	2.15	0.47
1:G:160:TRP:O	2:G2:37:ARG:HA	2.15	0.47
1:H:160:TRP:O	2:H2:37:ARG:HA	2.15	0.47
1:L:355:LEU:O	1:L:379:SER:OG	2.29	0.47
1:L:441:VAL:HG13	1:L:445:GLU:OE1	2.14	0.47
1:U:160:TRP:O	2:U2:37:ARG:HA	2.15	0.47
1:U:441:VAL:HG13	1:U:445:GLU:OE1	2.14	0.47
1:Z:160:TRP:O	2:Z2:37:ARG:HA	2.15	0.47
1:Z:355:LEU:O	1:Z:379:SER:OG	2.29	0.47
1:a:160:TRP:O	2:a2:37:ARG:HA	2.15	0.47
1:d:160:TRP:O	2:d2:37:ARG:HA	2.15	0.47
1:m:160:TRP:O	2:m2:37:ARG:HA	2.15	0.47
1:n:160:TRP:O	2:n2:37:ARG:HA	2.15	0.47
1:s:216:LYS:HE3	1:s:322:THR:OG1	2.14	0.47
1:t:160:TRP:O	2:t2:37:ARG:HA	2.15	0.47
1:u:160:TRP:O	2:u2:37:ARG:HA	2.15	0.47
1:z:160:TRP:O	2:z2:37:ARG:HA	2.15	0.47
1:6:160:TRP:O	2:62:37:ARG:HA	2.15	0.47
2:r2:12:GLN:HG2	2:r2:13:TRP:H	1.78	0.47
1:C:17:MET:HG2	1:C:19:LYS:N	2.23	0.46
1:I:160:TRP:O	2:I2:37:ARG:HA	2.15	0.46
1:W:160:TRP:O	2:W2:37:ARG:HA	2.15	0.46
1:Y:160:TRP:O	2:Y2:37:ARG:HA	2.15	0.46
1:k:205:ASP:N	1:k:208:THR:OG1	2.45	0.46
1:p:216:LYS:HE3	1:p:322:THR:OG1	2.14	0.46
1:3:160:TRP:O	2:32:37:ARG:HA	2.15	0.46
1:4:162:ARG:HD3	1:4:169:GLU:HA	1.97	0.46
1:8:160:TRP:O	2:82:37:ARG:HA	2.15	0.46
2:y2:12:GLN:HG2	2:y2:13:TRP:H	1.79	0.46
1:A:17:MET:HG2	1:A:19:LYS:N	2.23	0.46
1:C:216:LYS:HE3	1:C:322:THR:OG1	2.14	0.46
1:H:162:ARG:HD3	1:H:169:GLU:HA	1.97	0.46
1:K:441:VAL:HG13	1:K:445:GLU:OE1	2.14	0.46
1:Z:205:ASP:N	1:Z:208:THR:OG1	2.45	0.46
1:e:549:GLY:O	1:h:435:ASN:HB3	2.15	0.46
1:g:216:LYS:HE3	1:g:322:THR:OG1	2.14	0.46
1:g:441:VAL:HG13	1:g:445:GLU:OE1	2.14	0.46
1:h:149:ARG:HD2	1:i:419:TRP:CH2	2.50	0.46
1:h:408:LYS:HZ3	1:n:12:VAL:HG21	1.80	0.46
1:1:160:TRP:O	2:12:37:ARG:HA	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:160:TRP:O	2:22:37:ARG:HA	2.15	0.46
1:4:441:VAL:HG13	1:4:445:GLU:OE1	2.14	0.46
1:5:162:ARG:HD3	1:5:169:GLU:HA	1.97	0.46
1:7:160:TRP:O	2:72:37:ARG:HA	2.15	0.46
2:F2:12:GLN:HG2	2:F2:13:TRP:H	1.78	0.46
1:B:160:TRP:O	2:9:37:ARG:HA	2.15	0.46
1:K:17:MET:HG2	1:K:19:LYS:N	2.22	0.46
1:K:162:ARG:HD3	1:K:169:GLU:HA	1.97	0.46
1:V:216:LYS:HE3	1:V:322:THR:OG1	2.14	0.46
1:b:441:VAL:HG13	1:b:445:GLU:OE1	2.14	0.46
1:w:205:ASP:N	1:w:208:THR:OG1	2.45	0.46
1:4:17:MET:HG2	1:4:19:LYS:N	2.22	0.46
1:8:355:LEU:O	1:8:379:SER:OG	2.29	0.46
1:D:205:ASP:N	1:D:208:THR:OG1	2.45	0.46
1:E:205:ASP:N	1:E:208:THR:OG1	2.45	0.46
1:J:160:TRP:O	2:J2:37:ARG:HA	2.15	0.46
1:L:162:ARG:HD3	1:L:169:GLU:HA	1.97	0.46
1:M:160:TRP:O	2:M2:37:ARG:HA	2.15	0.46
1:P:441:VAL:HG13	1:P:445:GLU:OE1	2.14	0.46
1:c:160:TRP:O	2:c2:37:ARG:HA	2.15	0.46
1:e:160:TRP:O	2:e2:37:ARG:HA	2.15	0.46
1:A:160:TRP:O	2:0:37:ARG:HA	2.16	0.46
1:D:226:GLY:O	1:c:293:LEU:N	2.34	0.46
1:f:441:VAL:HG13	1:f:445:GLU:OE1	2.14	0.46
1:g:17:MET:HG2	1:g:19:LYS:N	2.23	0.46
1:h:160:TRP:O	2:h2:37:ARG:HA	2.15	0.46
1:v:17:MET:HG2	1:v:19:LYS:N	2.23	0.46
1:z:162:ARG:HD3	1:z:169:GLU:HA	1.97	0.46
1:G:162:ARG:HD3	1:G:169:GLU:HA	1.97	0.46
1:T:355:LEU:O	1:T:379:SER:OG	2.29	0.46
1:V:160:TRP:O	2:V2:37:ARG:HA	2.15	0.46
1:h:553:ILE:HG22	1:r:550:LEU:H	1.80	0.46
1:j:441:VAL:HG13	1:j:445:GLU:OE1	2.14	0.46
1:o:160:TRP:O	2:o2:37:ARG:HA	2.15	0.46
1:8:205:ASP:N	1:8:208:THR:OG1	2.45	0.46
2:H2:12:GLN:HG2	2:H2:13:TRP:H	1.78	0.46
1:S:162:ARG:HD3	1:S:169:GLU:HA	1.97	0.46
1:U:223:ASN:OD1	1:U:224:VAL:N	2.49	0.46
1:d:223:ASN:OD1	1:d:224:VAL:N	2.49	0.46
1:i:160:TRP:O	2:i2:37:ARG:HA	2.15	0.46
1:j:414:GLY:HA3	1:j:445:GLU:O	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:p:160:TRP:O	2:p2:37:ARG:HA	2.15	0.46
1:r:414:GLY:HA3	1:r:445:GLU:O	2.16	0.46
1:s:223:ASN:OD1	1:s:224:VAL:N	2.49	0.46
1:t:162:ARG:HD3	1:t:169:GLU:HA	1.97	0.46
1:u:414:GLY:HA3	1:u:445:GLU:O	2.16	0.46
1:A:414:GLY:HA3	1:A:445:GLU:O	2.16	0.46
1:G:414:GLY:HA3	1:G:445:GLU:O	2.16	0.46
1:K:414:GLY:HA3	1:K:445:GLU:O	2.16	0.46
1:M:414:GLY:HA3	1:M:445:GLU:O	2.16	0.46
1:N:160:TRP:O	2:N2:37:ARG:HA	2.15	0.46
1:S:414:GLY:HA3	1:S:445:GLU:O	2.16	0.46
1:V:162:ARG:HD3	1:V:169:GLU:HA	1.97	0.46
1:X:160:TRP:O	2:X2:37:ARG:HA	2.15	0.46
1:f:17:MET:HG2	1:f:19:LYS:N	2.23	0.46
1:f:414:GLY:HA3	1:f:445:GLU:O	2.16	0.46
1:h:414:GLY:HA3	1:h:445:GLU:O	2.16	0.46
1:l:162:ARG:HD3	1:l:169:GLU:HA	1.97	0.46
1:n:223:ASN:OD1	1:n:224:VAL:N	2.49	0.46
1:o:408:LYS:HZ3	1:3:12:VAL:HG21	1.79	0.46
1:p:162:ARG:HD3	1:p:169:GLU:HA	1.97	0.46
1:v:414:GLY:HA3	1:v:445:GLU:O	2.16	0.46
1:7:223:ASN:OD1	1:7:224:VAL:N	2.49	0.46
2:I2:12:GLN:HG2	2:I2:13:TRP:H	1.79	0.46
2:u2:12:GLN:HG2	2:u2:13:TRP:H	1.79	0.46
2:52:12:GLN:HG2	2:52:13:TRP:H	1.78	0.46
1:E:293:LEU:N	1:M:226:GLY:O	2.33	0.46
1:I:355:LEU:O	1:I:379:SER:OG	2.29	0.46
1:I:414:GLY:HA3	1:I:445:GLU:O	2.16	0.46
1:O:414:GLY:HA3	1:O:445:GLU:O	2.16	0.46
1:P:160:TRP:O	2:P2:37:ARG:HA	2.15	0.46
1:Y:223:ASN:OD1	1:Y:224:VAL:N	2.49	0.46
1:Y:414:GLY:HA3	1:Y:445:GLU:O	2.16	0.46
1:b:414:GLY:HA3	1:b:445:GLU:O	2.16	0.46
1:g:414:GLY:HA3	1:g:445:GLU:O	2.16	0.46
1:h:17:MET:HG2	1:h:19:LYS:N	2.23	0.46
1:l:414:GLY:HA3	1:l:445:GLU:O	2.16	0.46
1:m:355:LEU:O	1:m:379:SER:OG	2.29	0.46
1:r:162:ARG:HD3	1:r:169:GLU:HA	1.97	0.46
1:t:414:GLY:HA3	1:t:445:GLU:O	2.16	0.46
1:7:355:LEU:O	1:7:379:SER:OG	2.29	0.46
1:7:414:GLY:HA3	1:7:445:GLU:O	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:414:GLY:HA3	1:C:445:GLU:O	2.16	0.46
1:D:162:ARG:HD3	1:D:169:GLU:HA	1.97	0.46
1:N:414:GLY:HA3	1:N:445:GLU:O	2.16	0.46
1:O:162:ARG:HD3	1:O:169:GLU:HA	1.97	0.46
1:P:162:ARG:HD3	1:P:169:GLU:HA	1.97	0.46
1:P:414:GLY:HA3	1:P:445:GLU:O	2.16	0.46
1:Q:160:TRP:O	2:Q2:37:ARG:HA	2.15	0.46
1:Q:223:ASN:OD1	1:Q:224:VAL:N	2.49	0.46
1:U:414:GLY:HA3	1:U:445:GLU:O	2.16	0.46
1:g:162:ARG:HD3	1:g:169:GLU:HA	1.97	0.46
1:j:160:TRP:O	2:j2:37:ARG:HA	2.15	0.46
1:s:414:GLY:HA3	1:s:445:GLU:O	2.16	0.46
1:x:223:ASN:OD1	1:x:224:VAL:N	2.49	0.46
1:4:414:GLY:HA3	1:4:445:GLU:O	2.16	0.46
1:A:305:ARG:NH2	1:P:437:SER:OG	2.37	0.45
1:b:17:MET:HG2	1:b:19:LYS:N	2.23	0.45
1:k:162:ARG:HD3	1:k:169:GLU:HA	1.97	0.45
1:x:160:TRP:O	2:x2:37:ARG:HA	2.15	0.45
1:y:226:GLY:O	1:l:293:LEU:N	2.33	0.45
1:z:223:ASN:OD1	1:z:224:VAL:N	2.49	0.45
1:C:162:ARG:HD3	1:C:169:GLU:HA	1.97	0.45
1:G:223:ASN:OD1	1:G:224:VAL:N	2.49	0.45
1:L:223:ASN:OD1	1:L:224:VAL:N	2.49	0.45
1:N:223:ASN:OD1	1:N:224:VAL:N	2.49	0.45
1:R:482:HIS:ND1	1:R:484:GLN:O	2.50	0.45
1:X:441:VAL:HG13	1:X:445:GLU:OE1	2.14	0.45
1:a:414:GLY:HA3	1:a:445:GLU:O	2.16	0.45
1:a:482:HIS:ND1	1:a:484:GLN:O	2.50	0.45
1:b:162:ARG:HD3	1:b:169:GLU:HA	1.97	0.45
1:c:414:GLY:HA3	1:c:445:GLU:O	2.16	0.45
1:e:293:LEU:N	1:k:226:GLY:O	2.35	0.45
1:e:414:GLY:HA3	1:e:445:GLU:O	2.16	0.45
1:f:162:ARG:HD3	1:f:169:GLU:HA	1.97	0.45
1:i:414:GLY:HA3	1:i:445:GLU:O	2.16	0.45
1:j:162:ARG:HD3	1:j:169:GLU:HA	1.97	0.45
1:l:482:HIS:ND1	1:l:484:GLN:O	2.50	0.45
1:q:414:GLY:HA3	1:q:445:GLU:O	2.16	0.45
1:q:482:HIS:ND1	1:q:484:GLN:O	2.50	0.45
1:t:223:ASN:OD1	1:t:224:VAL:N	2.49	0.45
1:3:482:HIS:ND1	1:3:484:GLN:O	2.50	0.45
1:4:223:ASN:OD1	1:4:224:VAL:N	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:438:GLU:CD	2:O:33:ARG:HH22	2.24	0.45
1:B:223:ASN:OD1	1:B:224:VAL:N	2.49	0.45
1:B:482:HIS:ND1	1:B:484:GLN:O	2.50	0.45
1:D:482:HIS:ND1	1:D:484:GLN:O	2.50	0.45
1:H:17:MET:HG2	1:H:19:LYS:N	2.22	0.45
1:H:223:ASN:OD1	1:H:224:VAL:N	2.49	0.45
1:H:414:GLY:HA3	1:H:445:GLU:O	2.16	0.45
1:I:223:ASN:OD1	1:I:224:VAL:N	2.49	0.45
1:K:223:ASN:OD1	1:K:224:VAL:N	2.49	0.45
1:M:17:MET:HG2	1:M:19:LYS:N	2.23	0.45
1:O:482:HIS:ND1	1:O:484:GLN:O	2.50	0.45
1:R:17:MET:HG2	1:R:19:LYS:N	2.22	0.45
1:R:414:GLY:HA3	1:R:445:GLU:O	2.16	0.45
1:V:482:HIS:ND1	1:V:484:GLN:O	2.50	0.45
1:X:414:GLY:HA3	1:X:445:GLU:O	2.16	0.45
1:b:482:HIS:ND1	1:b:484:GLN:O	2.50	0.45
1:f:482:HIS:ND1	1:f:484:GLN:O	2.50	0.45
1:i:223:ASN:OD1	1:i:224:VAL:N	2.49	0.45
1:i:482:HIS:ND1	1:i:484:GLN:O	2.50	0.45
1:k:482:HIS:ND1	1:k:484:GLN:O	2.50	0.45
1:n:482:HIS:ND1	1:n:484:GLN:O	2.50	0.45
1:p:482:HIS:ND1	1:p:484:GLN:O	2.50	0.45
1:u:223:ASN:OD1	1:u:224:VAL:N	2.49	0.45
1:w:17:MET:HG2	1:w:19:LYS:N	2.22	0.45
1:y:223:ASN:OD1	1:y:224:VAL:N	2.49	0.45
1:1:223:ASN:OD1	1:1:224:VAL:N	2.49	0.45
1:3:93:TRP:CE2	1:3:95:ASP:HB2	2.52	0.45
1:3:414:GLY:HA3	1:3:445:GLU:O	2.16	0.45
1:7:17:MET:HG2	1:7:19:LYS:N	2.22	0.45
1:D:355:LEU:O	1:D:379:SER:OG	2.29	0.45
1:E:17:MET:HG2	1:E:19:LYS:N	2.23	0.45
1:F:223:ASN:OD1	1:F:224:VAL:N	2.49	0.45
1:L:414:GLY:HA3	1:L:445:GLU:O	2.16	0.45
1:N:482:HIS:ND1	1:N:484:GLN:O	2.50	0.45
1:O:223:ASN:OD1	1:O:224:VAL:N	2.49	0.45
1:T:205:ASP:N	1:T:208:THR:OG1	2.45	0.45
1:d:482:HIS:ND1	1:d:484:GLN:O	2.50	0.45
1:f:223:ASN:OD1	1:f:224:VAL:N	2.49	0.45
1:o:414:GLY:HA3	1:o:445:GLU:O	2.16	0.45
1:o:441:VAL:HG13	1:o:445:GLU:OE1	2.14	0.45
1:q:205:ASP:N	1:q:208:THR:OG1	2.45	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:r:482:HIS:ND1	1:r:484:GLN:O	2.50	0.45
1:v:205:ASP:N	1:v:208:THR:OG1	2.45	0.45
1:1:482:HIS:ND1	1:1:484:GLN:O	2.50	0.45
1:5:223:ASN:OD1	1:5:224:VAL:N	2.49	0.45
1:5:414:GLY:HA3	1:5:445:GLU:O	2.16	0.45
1:8:223:ASN:OD1	1:8:224:VAL:N	2.49	0.45
1:A:223:ASN:OD1	1:A:224:VAL:N	2.49	0.45
1:A:482:HIS:ND1	1:A:484:GLN:O	2.50	0.45
1:E:223:ASN:OD1	1:E:224:VAL:N	2.49	0.45
1:M:223:ASN:OD1	1:M:224:VAL:N	2.49	0.45
1:O:205:ASP:N	1:O:208:THR:OG1	2.45	0.45
1:P:93:TRP:CE2	1:P:95:ASP:HB2	2.52	0.45
1:Q:414:GLY:HA3	1:Q:445:GLU:O	2.16	0.45
1:S:482:HIS:ND1	1:S:484:GLN:O	2.50	0.45
1:T:93:TRP:CE2	1:T:95:ASP:HB2	2.52	0.45
1:W:414:GLY:HA3	1:W:445:GLU:O	2.16	0.45
1:Z:223:ASN:OD1	1:Z:224:VAL:N	2.49	0.45
1:a:93:TRP:CE2	1:a:95:ASP:HB2	2.52	0.45
1:c:223:ASN:OD1	1:c:224:VAL:N	2.49	0.45
1:e:223:ASN:OD1	1:e:224:VAL:N	2.49	0.45
1:l:223:ASN:OD1	1:l:224:VAL:N	2.49	0.45
1:m:205:ASP:N	1:m:208:THR:OG1	2.45	0.45
1:p:414:GLY:HA3	1:p:445:GLU:O	2.16	0.45
1:v:482:HIS:ND1	1:v:484:GLN:O	2.50	0.45
1:w:223:ASN:OD1	1:w:224:VAL:N	2.49	0.45
1:z:414:GLY:HA3	1:z:445:GLU:O	2.16	0.45
1:1:93:TRP:CE2	1:1:95:ASP:HB2	2.52	0.45
1:6:414:GLY:HA3	1:6:445:GLU:O	2.16	0.45
1:B:93:TRP:CE2	1:B:95:ASP:HB2	2.52	0.45
1:D:414:GLY:HA3	1:D:445:GLU:O	2.16	0.45
1:J:223:ASN:OD1	1:J:224:VAL:N	2.49	0.45
1:P:482:HIS:ND1	1:P:484:GLN:O	2.50	0.45
1:V:93:TRP:CE2	1:V:95:ASP:HB2	2.52	0.45
1:V:414:GLY:HA3	1:V:445:GLU:O	2.16	0.45
1:Y:17:MET:HG2	1:Y:19:LYS:N	2.22	0.45
1:b:223:ASN:OD1	1:b:224:VAL:N	2.49	0.45
1:h:223:ASN:OD1	1:h:224:VAL:N	2.49	0.45
1:j:93:TRP:CE2	1:j:95:ASP:HB2	2.52	0.45
1:j:482:HIS:ND1	1:j:484:GLN:O	2.50	0.45
1:p:93:TRP:CE2	1:p:95:ASP:HB2	2.52	0.45
1:v:223:ASN:OD1	1:v:224:VAL:N	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:x:414:GLY:HA3	1:x:445:GLU:O	2.16	0.45
1:x:482:HIS:ND1	1:x:484:GLN:O	2.50	0.45
1:y:482:HIS:ND1	1:y:484:GLN:O	2.50	0.45
1:2:93:TRP:CE2	1:2:95:ASP:HB2	2.52	0.45
1:2:223:ASN:OD1	1:2:224:VAL:N	2.49	0.45
1:3:223:ASN:OD1	1:3:224:VAL:N	2.49	0.45
1:6:205:ASP:N	1:6:208:THR:OG1	2.45	0.45
1:7:205:ASP:N	1:7:208:THR:OG1	2.45	0.45
1:A:205:ASP:N	1:A:208:THR:OG1	2.45	0.45
1:B:293:LEU:N	1:F:226:GLY:O	2.33	0.45
1:F:482:HIS:ND1	1:F:484:GLN:O	2.50	0.45
1:G:107:TRP:CE3	1:f:216:LYS:NZ	2.80	0.45
1:Q:482:HIS:ND1	1:Q:484:GLN:O	2.50	0.45
1:R:223:ASN:OD1	1:R:224:VAL:N	2.49	0.45
1:T:414:GLY:HA3	1:T:445:GLU:O	2.16	0.45
1:W:205:ASP:N	1:W:208:THR:OG1	2.45	0.45
1:X:93:TRP:CE2	1:X:95:ASP:HB2	2.52	0.45
1:Z:414:GLY:HA3	1:Z:445:GLU:O	2.16	0.45
1:c:205:ASP:N	1:c:208:THR:OG1	2.45	0.45
1:j:223:ASN:OD1	1:j:224:VAL:N	2.49	0.45
1:m:93:TRP:CE2	1:m:95:ASP:HB2	2.52	0.45
1:n:414:GLY:HA3	1:n:445:GLU:O	2.16	0.45
1:o:93:TRP:CE2	1:o:95:ASP:HB2	2.52	0.45
1:o:482:HIS:ND1	1:o:484:GLN:O	2.50	0.45
1:5:17:MET:HG2	1:5:19:LYS:N	2.23	0.45
1:C:223:ASN:OD1	1:C:224:VAL:N	2.49	0.45
1:C:482:HIS:ND1	1:C:484:GLN:O	2.50	0.45
1:D:93:TRP:CE2	1:D:95:ASP:HB2	2.52	0.45
1:G:93:TRP:CE2	1:G:95:ASP:HB2	2.52	0.45
1:J:93:TRP:CE2	1:J:95:ASP:HB2	2.52	0.45
1:J:414:GLY:HA3	1:J:445:GLU:O	2.16	0.45
1:K:160:TRP:O	2:K2:37:ARG:HA	2.15	0.45
1:K:482:HIS:ND1	1:K:484:GLN:O	2.50	0.45
1:P:223:ASN:OD1	1:P:224:VAL:N	2.49	0.45
1:R:173:THR:HG22	1:R:175:ASP:H	1.82	0.45
1:R:205:ASP:N	1:R:208:THR:OG1	2.45	0.45
1:T:223:ASN:OD1	1:T:224:VAL:N	2.49	0.45
1:X:482:HIS:ND1	1:X:484:GLN:O	2.50	0.45
1:a:223:ASN:OD1	1:a:224:VAL:N	2.49	0.45
1:d:93:TRP:CE2	1:d:95:ASP:HB2	2.52	0.45
1:d:414:GLY:HA3	1:d:445:GLU:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:482:HIS:ND1	1:g:484:GLN:O	2.50	0.45
1:i:173:THR:HG22	1:i:175:ASP:H	1.82	0.45
1:k:414:GLY:HA3	1:k:445:GLU:O	2.16	0.45
1:l:205:ASP:N	1:l:208:THR:OG1	2.45	0.45
1:m:414:GLY:HA3	1:m:445:GLU:O	2.16	0.45
1:q:17:MET:HG2	1:q:19:LYS:N	2.23	0.45
1:q:223:ASN:OD1	1:q:224:VAL:N	2.49	0.45
1:r:93:TRP:CE2	1:r:95:ASP:HB2	2.52	0.45
1:4:93:TRP:CE2	1:4:95:ASP:HB2	2.52	0.45
1:4:160:TRP:O	2:42:37:ARG:HA	2.15	0.45
1:8:414:GLY:HA3	1:8:445:GLU:O	2.16	0.45
2:P2:10:ARG:HG3	2:P2:11:HIS:N	2.32	0.45
2:j2:10:ARG:HG3	2:j2:11:HIS:N	2.32	0.45
1:B:107:TRP:CE3	1:R:216:LYS:NZ	2.80	0.45
1:C:93:TRP:CE2	1:C:95:ASP:HB2	2.52	0.45
1:E:482:HIS:ND1	1:E:484:GLN:O	2.50	0.45
1:N:173:THR:HG22	1:N:175:ASP:H	1.82	0.45
1:S:93:TRP:CE2	1:S:95:ASP:HB2	2.52	0.45
1:S:223:ASN:OD1	1:S:224:VAL:N	2.49	0.45
1:U:93:TRP:CE2	1:U:95:ASP:HB2	2.52	0.45
1:Y:93:TRP:CE2	1:Y:95:ASP:HB2	2.52	0.45
1:Y:173:THR:HG22	1:Y:175:ASP:H	1.82	0.45
1:h:482:HIS:ND1	1:h:484:GLN:O	2.50	0.45
1:k:93:TRP:CE2	1:k:95:ASP:HB2	2.52	0.45
1:n:93:TRP:CE2	1:n:95:ASP:HB2	2.52	0.45
1:q:173:THR:HG22	1:q:175:ASP:H	1.82	0.45
1:r:223:ASN:OD1	1:r:224:VAL:N	2.49	0.45
1:s:93:TRP:CE2	1:s:95:ASP:HB2	2.52	0.45
1:t:93:TRP:CE2	1:t:95:ASP:HB2	2.52	0.45
1:v:173:THR:HG22	1:v:175:ASP:H	1.82	0.45
1:w:482:HIS:ND1	1:w:484:GLN:O	2.50	0.45
1:2:414:GLY:HA3	1:2:445:GLU:O	2.16	0.45
1:4:482:HIS:ND1	1:4:484:GLN:O	2.50	0.45
1:7:93:TRP:CE2	1:7:95:ASP:HB2	2.52	0.45
1:7:173:THR:HG22	1:7:175:ASP:H	1.82	0.45
2:K2:10:ARG:HG3	2:K2:11:HIS:N	2.32	0.45
2:p2:10:ARG:HG3	2:p2:11:HIS:N	2.32	0.45
1:A:173:THR:HG22	1:A:175:ASP:H	1.82	0.45
1:E:226:GLY:O	1:O:293:LEU:N	2.35	0.45
1:F:414:GLY:HA3	1:F:445:GLU:O	2.16	0.45
1:H:482:HIS:ND1	1:H:484:GLN:O	2.50	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:93:TRP:CE2	1:K:95:ASP:HB2	2.52	0.45
1:M:93:TRP:CE2	1:M:95:ASP:HB2	2.52	0.45
1:M:305:ARG:NH2	1:O:437:SER:OG	2.38	0.45
1:M:482:HIS:ND1	1:M:484:GLN:O	2.50	0.45
1:Q:93:TRP:CE2	1:Q:95:ASP:HB2	2.52	0.45
1:V:223:ASN:OD1	1:V:224:VAL:N	2.49	0.45
1:Y:205:ASP:N	1:Y:208:THR:OG1	2.45	0.45
1:Y:482:HIS:ND1	1:Y:484:GLN:O	2.50	0.45
1:b:93:TRP:CE2	1:b:95:ASP:HB2	2.52	0.45
1:g:93:TRP:CE2	1:g:95:ASP:HB2	2.52	0.45
1:g:223:ASN:OD1	1:g:224:VAL:N	2.49	0.45
1:h:93:TRP:CE2	1:h:95:ASP:HB2	2.52	0.45
1:h:205:ASP:N	1:h:208:THR:OG1	2.45	0.45
1:m:223:ASN:OD1	1:m:224:VAL:N	2.49	0.45
1:q:93:TRP:CE2	1:q:95:ASP:HB2	2.52	0.45
1:t:17:MET:HG2	1:t:19:LYS:N	2.23	0.45
1:u:93:TRP:CE2	1:u:95:ASP:HB2	2.52	0.45
1:u:482:HIS:ND1	1:u:484:GLN:O	2.50	0.45
1:x:93:TRP:CE2	1:x:95:ASP:HB2	2.52	0.45
1:6:93:TRP:CE2	1:6:95:ASP:HB2	2.52	0.45
1:7:482:HIS:ND1	1:7:484:GLN:O	2.50	0.45
2:Q2:10:ARG:HG3	2:Q2:11:HIS:N	2.32	0.45
2:V2:10:ARG:HG3	2:V2:11:HIS:N	2.32	0.45
2:x2:10:ARG:HG3	2:x2:11:HIS:N	2.32	0.45
2:42:10:ARG:HG3	2:42:11:HIS:N	2.32	0.45
2:52:10:ARG:HG3	2:52:11:HIS:N	2.32	0.45
1:E:414:GLY:HA3	1:E:445:GLU:O	2.16	0.44
1:G:17:MET:HG2	1:G:19:LYS:N	2.23	0.44
1:I:93:TRP:CE2	1:I:95:ASP:HB2	2.52	0.44
1:I:482:HIS:ND1	1:I:484:GLN:O	2.50	0.44
1:J:482:HIS:ND1	1:J:484:GLN:O	2.50	0.44
1:M:173:THR:HG22	1:M:175:ASP:H	1.82	0.44
1:M:205:ASP:N	1:M:208:THR:OG1	2.45	0.44
1:O:81:ASP:OD2	1:O:406:ARG:NH2	2.50	0.44
1:R:93:TRP:CE2	1:R:95:ASP:HB2	2.52	0.44
1:U:482:HIS:ND1	1:U:484:GLN:O	2.50	0.44
1:W:18:PHE:C	1:W:20:GLY:H	2.26	0.44
1:W:93:TRP:CE2	1:W:95:ASP:HB2	2.52	0.44
1:W:223:ASN:OD1	1:W:224:VAL:N	2.49	0.44
1:c:173:THR:HG22	1:c:175:ASP:H	1.82	0.44
1:e:93:TRP:CE2	1:e:95:ASP:HB2	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:173:THR:HG22	1:e:175:ASP:H	1.82	0.44
1:e:205:ASP:N	1:e:208:THR:OG1	2.45	0.44
1:f:93:TRP:CE2	1:f:95:ASP:HB2	2.52	0.44
1:h:173:THR:HG22	1:h:175:ASP:H	1.82	0.44
1:l:81:ASP:OD2	1:l:406:ARG:NH2	2.50	0.44
1:q:216:LYS:NZ	1:1:107:TRP:CE3	2.80	0.44
1:s:482:HIS:ND1	1:s:484:GLN:O	2.50	0.44
1:w:414:GLY:HA3	1:w:445:GLU:O	2.16	0.44
1:z:173:THR:HG22	1:z:175:ASP:H	1.82	0.44
1:2:482:HIS:ND1	1:2:484:GLN:O	2.50	0.44
1:5:482:HIS:ND1	1:5:484:GLN:O	2.50	0.44
2:9:10:ARG:HG3	2:9:11:HIS:N	2.32	0.44
2:D2:10:ARG:HG3	2:D2:11:HIS:N	2.32	0.44
2:H2:10:ARG:HG3	2:H2:11:HIS:N	2.32	0.44
2:M2:10:ARG:HG3	2:M2:11:HIS:N	2.32	0.44
2:h2:10:ARG:HG3	2:h2:11:HIS:N	2.32	0.44
2:k2:10:ARG:HG3	2:k2:11:HIS:N	2.32	0.44
2:l2:10:ARG:HG3	2:l2:11:HIS:N	2.32	0.44
2:r2:10:ARG:HG3	2:r2:11:HIS:N	2.32	0.44
2:y2:10:ARG:HG3	2:y2:11:HIS:N	2.32	0.44
1:G:164:GLN:NE2	2:G2:35:GLY:HA3	2.33	0.44
1:L:173:THR:HG22	1:L:175:ASP:H	1.82	0.44
1:M:74:PRO:HD2	1:M:356:VAL:HG11	2.00	0.44
1:M:164:GLN:NE2	2:M2:35:GLY:HA3	2.33	0.44
1:Q:476:GLY:O	1:Q:479:ARG:HG2	2.18	0.44
1:R:18:PHE:C	1:R:20:GLY:H	2.26	0.44
1:S:74:PRO:HD2	1:S:356:VAL:HG11	2.00	0.44
1:U:164:GLN:NE2	2:U2:35:GLY:HA3	2.33	0.44
1:X:164:GLN:NE2	2:X2:35:GLY:HA3	2.33	0.44
1:X:173:THR:HG22	1:X:175:ASP:H	1.82	0.44
1:Z:173:THR:HG22	1:Z:175:ASP:H	1.82	0.44
1:a:164:GLN:NE2	2:a2:35:GLY:HA3	2.33	0.44
1:b:216:LYS:NZ	1:t:107:TRP:CE3	2.80	0.44
1:c:93:TRP:CE2	1:c:95:ASP:HB2	2.52	0.44
1:d:18:PHE:C	1:d:20:GLY:H	2.26	0.44
1:d:164:GLN:NE2	2:d2:35:GLY:HA3	2.33	0.44
1:e:18:PHE:C	1:e:20:GLY:H	2.26	0.44
1:h:74:PRO:HD2	1:h:356:VAL:HG11	2.00	0.44
1:h:164:GLN:NE2	2:h2:35:GLY:HA3	2.33	0.44
1:p:223:ASN:OD1	1:p:224:VAL:N	2.49	0.44
1:s:164:GLN:NE2	2:s2:35:GLY:HA3	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:x:476:GLY:O	1:x:479:ARG:HG2	2.18	0.44
1:y:414:GLY:HA3	1:y:445:GLU:O	2.16	0.44
1:6:18:PHE:C	1:6:20:GLY:H	2.26	0.44
1:8:173:THR:HG22	1:8:175:ASP:H	1.82	0.44
2:F2:10:ARG:HG3	2:F2:11:HIS:N	2.32	0.44
2:O2:10:ARG:HG3	2:O2:11:HIS:N	2.32	0.44
2:S2:10:ARG:HG3	2:S2:11:HIS:N	2.32	0.44
2:T2:10:ARG:HG3	2:T2:11:HIS:N	2.32	0.44
2:Y2:10:ARG:HG3	2:Y2:11:HIS:N	2.32	0.44
2:12:10:ARG:HG3	2:12:11:HIS:N	2.32	0.44
1:G:553:ILE:HD12	1:G:553:ILE:HA	1.89	0.44
1:L:482:HIS:ND1	1:L:484:GLN:O	2.50	0.44
1:O:93:TRP:CE2	1:O:95:ASP:HB2	2.52	0.44
1:O:164:GLN:NE2	2:O2:35:GLY:HA3	2.33	0.44
1:Q:74:PRO:HD2	1:Q:356:VAL:HG11	2.00	0.44
1:R:74:PRO:HD2	1:R:356:VAL:HG11	2.00	0.44
1:Z:93:TRP:CE2	1:Z:95:ASP:HB2	2.52	0.44
1:a:476:GLY:O	1:a:479:ARG:HG2	2.18	0.44
1:b:476:GLY:O	1:b:479:ARG:HG2	2.18	0.44
1:c:18:PHE:C	1:c:20:GLY:H	2.26	0.44
1:f:476:GLY:O	1:f:479:ARG:HG2	2.18	0.44
1:l:93:TRP:CE2	1:l:95:ASP:HB2	2.52	0.44
1:l:164:GLN:NE2	2:l:35:GLY:HA3	2.33	0.44
1:m:482:HIS:ND1	1:m:484:GLN:O	2.50	0.44
1:n:18:PHE:C	1:n:20:GLY:H	2.26	0.44
1:n:164:GLN:NE2	2:n:35:GLY:HA3	2.33	0.44
1:o:18:PHE:C	1:o:20:GLY:H	2.26	0.44
1:o:164:GLN:NE2	2:o:35:GLY:HA3	2.33	0.44
1:p:173:THR:HG22	1:p:175:ASP:H	1.82	0.44
1:r:74:PRO:HD2	1:r:356:VAL:HG11	2.00	0.44
1:t:164:GLN:NE2	2:t:35:GLY:HA3	2.33	0.44
1:t:553:ILE:HD12	1:t:553:ILE:HA	1.90	0.44
1:v:93:TRP:CE2	1:v:95:ASP:HB2	2.52	0.44
1:z:18:PHE:C	1:z:20:GLY:H	2.26	0.44
1:4:173:THR:HG22	1:4:175:ASP:H	1.82	0.44
1:6:223:ASN:OD1	1:6:224:VAL:N	2.49	0.44
1:7:74:PRO:HD2	1:7:356:VAL:HG11	2.00	0.44
1:8:93:TRP:CE2	1:8:95:ASP:HB2	2.52	0.44
2:E2:10:ARG:HG3	2:E2:11:HIS:N	2.32	0.44
2:a2:10:ARG:HG3	2:a2:11:HIS:N	2.32	0.44
2:b2:10:ARG:HG3	2:b2:11:HIS:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:f2:10:ARG:HG3	2:f2:11:HIS:N	2.32	0.44
2:m2:10:ARG:HG3	2:m2:11:HIS:N	2.32	0.44
2:w2:10:ARG:HG3	2:w2:11:HIS:N	2.32	0.44
2:72:10:ARG:HG3	2:72:11:HIS:N	2.32	0.44
1:A:93:TRP:CE2	1:A:95:ASP:HB2	2.52	0.44
1:D:223:ASN:OD1	1:D:224:VAL:N	2.49	0.44
1:F:173:THR:HG22	1:F:175:ASP:H	1.82	0.44
1:H:476:GLY:O	1:H:479:ARG:HG2	2.18	0.44
1:J:164:GLN:NE2	2:J2:35:GLY:HA3	2.33	0.44
1:L:476:GLY:O	1:L:479:ARG:HG2	2.18	0.44
1:O:173:THR:HG22	1:O:175:ASP:H	1.82	0.44
1:P:476:GLY:O	1:P:479:ARG:HG2	2.18	0.44
1:R:355:LEU:O	1:R:379:SER:OG	2.29	0.44
1:V:173:THR:HG22	1:V:175:ASP:H	1.82	0.44
1:Y:74:PRO:HD2	1:Y:356:VAL:HG11	2.00	0.44
1:a:173:THR:HG22	1:a:175:ASP:H	1.82	0.44
1:c:476:GLY:O	1:c:479:ARG:HG2	2.18	0.44
1:c:482:HIS:ND1	1:c:484:GLN:O	2.50	0.44
1:e:476:GLY:O	1:e:479:ARG:HG2	2.18	0.44
1:k:223:ASN:OD1	1:k:224:VAL:N	2.49	0.44
1:l:173:THR:HG22	1:l:175:ASP:H	1.82	0.44
1:o:173:THR:HG22	1:o:175:ASP:H	1.82	0.44
1:q:18:PHE:C	1:q:20:GLY:H	2.26	0.44
1:q:74:PRO:HD2	1:q:356:VAL:HG11	2.00	0.44
1:w:95:ASP:OD2	1:w:176:SER:OG	2.36	0.44
1:x:74:PRO:HD2	1:x:356:VAL:HG11	2.00	0.44
1:y:173:THR:HG22	1:y:175:ASP:H	1.82	0.44
1:y:205:ASP:N	1:y:208:THR:OG1	2.45	0.44
1:z:410:THR:HG23	1:z:492:ALA:HA	2.00	0.44
1:z:482:HIS:ND1	1:z:484:GLN:O	2.50	0.44
1:1:74:PRO:HD2	1:1:356:VAL:HG11	2.00	0.44
1:1:476:GLY:O	1:1:479:ARG:HG2	2.18	0.44
1:2:164:GLN:NE2	2:22:35:GLY:HA3	2.33	0.44
1:3:164:GLN:NE2	2:32:35:GLY:HA3	2.33	0.44
1:3:476:GLY:O	1:3:479:ARG:HG2	2.18	0.44
1:4:74:PRO:HD2	1:4:356:VAL:HG11	2.00	0.44
1:5:173:THR:HG22	1:5:175:ASP:H	1.82	0.44
1:7:18:PHE:C	1:7:20:GLY:H	2.26	0.44
1:8:410:THR:HG23	1:8:492:ALA:HA	2.00	0.44
2:X2:10:ARG:HG3	2:X2:11:HIS:N	2.32	0.44
2:o2:10:ARG:HG3	2:o2:11:HIS:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:74:PRO:HD2	1:B:356:VAL:HG11	2.00	0.44
1:B:414:GLY:HA3	1:B:445:GLU:O	2.16	0.44
1:B:476:GLY:O	1:B:479:ARG:HG2	2.18	0.44
1:E:93:TRP:CE2	1:E:95:ASP:HB2	2.52	0.44
1:F:93:TRP:CE2	1:F:95:ASP:HB2	2.52	0.44
1:H:93:TRP:CE2	1:H:95:ASP:HB2	2.52	0.44
1:I:410:THR:HG23	1:I:492:ALA:HA	2.00	0.44
1:K:74:PRO:HD2	1:K:356:VAL:HG11	2.00	0.44
1:K:81:ASP:OD2	1:K:406:ARG:NH2	2.50	0.44
1:K:173:THR:HG22	1:K:175:ASP:H	1.82	0.44
1:L:410:THR:HG23	1:L:492:ALA:HA	2.00	0.44
1:N:93:TRP:CE2	1:N:95:ASP:HB2	2.52	0.44
1:O:18:PHE:C	1:O:20:GLY:H	2.26	0.44
1:P:410:THR:HG23	1:P:492:ALA:HA	2.00	0.44
1:Q:164:GLN:NE2	2:Q2:35:GLY:HA3	2.33	0.44
1:T:18:PHE:C	1:T:20:GLY:H	2.26	0.44
1:T:482:HIS:ND1	1:T:484:GLN:O	2.50	0.44
1:W:410:THR:HG23	1:W:492:ALA:HA	2.00	0.44
1:X:18:PHE:C	1:X:20:GLY:H	2.26	0.44
1:X:410:THR:HG23	1:X:492:ALA:HA	2.00	0.44
1:Z:95:ASP:OD2	1:Z:176:SER:OG	2.36	0.44
1:Z:410:THR:HG23	1:Z:492:ALA:HA	2.00	0.44
1:c:74:PRO:HD2	1:c:356:VAL:HG11	2.00	0.44
1:d:410:THR:HG23	1:d:492:ALA:HA	2.00	0.44
1:i:93:TRP:CE2	1:i:95:ASP:HB2	2.52	0.44
1:j:410:THR:HG23	1:j:492:ALA:HA	2.00	0.44
1:j:476:GLY:O	1:j:479:ARG:HG2	2.18	0.44
1:l:18:PHE:C	1:l:20:GLY:H	2.26	0.44
1:o:223:ASN:OD1	1:o:224:VAL:N	2.49	0.44
1:u:420:PHE:CZ	1:u:444:ARG:HD2	2.53	0.44
1:v:74:PRO:HD2	1:v:356:VAL:HG11	2.00	0.44
1:w:93:TRP:CE2	1:w:95:ASP:HB2	2.52	0.44
1:x:164:GLN:NE2	2:x2:35:GLY:HA3	2.33	0.44
1:y:81:ASP:OD2	1:y:406:ARG:NH2	2.50	0.44
1:y:93:TRP:CE2	1:y:95:ASP:HB2	2.52	0.44
1:z:93:TRP:CE2	1:z:95:ASP:HB2	2.52	0.44
1:z:476:GLY:O	1:z:479:ARG:HG2	2.18	0.44
1:1:414:GLY:HA3	1:1:445:GLU:O	2.16	0.44
1:2:476:GLY:O	1:2:479:ARG:HG2	2.18	0.44
1:5:93:TRP:CE2	1:5:95:ASP:HB2	2.52	0.44
1:5:476:GLY:O	1:5:479:ARG:HG2	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:6:410:THR:HG23	1:6:492:ALA:HA	2.00	0.44
1:8:95:ASP:OD2	1:8:176:SER:OG	2.36	0.44
2:U2:10:ARG:HG3	2:U2:11:HIS:N	2.32	0.44
2:s2:10:ARG:HG3	2:s2:11:HIS:N	2.32	0.44
2:32:10:ARG:HG3	2:32:11:HIS:N	2.32	0.44
1:A:74:PRO:HD2	1:A:356:VAL:HG11	2.00	0.44
1:A:107:TRP:CE3	1:O:216:LYS:NZ	2.80	0.44
1:C:173:THR:HG22	1:C:175:ASP:H	1.82	0.44
1:F:410:THR:HG23	1:F:492:ALA:HA	2.00	0.44
1:F:421:ARG:HH22	1:F:466:ASP:CG	2.26	0.44
1:G:482:HIS:ND1	1:G:484:GLN:O	2.50	0.44
1:H:173:THR:HG22	1:H:175:ASP:H	1.82	0.44
1:H:421:ARG:HH22	1:H:466:ASP:CG	2.26	0.44
1:I:420:PHE:CZ	1:I:444:ARG:HD2	2.53	0.44
1:J:410:THR:HG23	1:J:492:ALA:HA	2.00	0.44
1:J:476:GLY:O	1:J:479:ARG:HG2	2.18	0.44
1:L:18:PHE:C	1:L:20:GLY:H	2.26	0.44
1:L:93:TRP:CE2	1:L:95:ASP:HB2	2.52	0.44
1:N:420:PHE:CZ	1:N:444:ARG:HD2	2.53	0.44
1:O:74:PRO:HD2	1:O:356:VAL:HG11	2.00	0.44
1:P:18:PHE:C	1:P:20:GLY:H	2.26	0.44
1:P:74:PRO:HD2	1:P:356:VAL:HG11	2.00	0.44
1:P:164:GLN:NE2	2:P2:35:GLY:HA3	2.33	0.44
1:Q:420:PHE:CZ	1:Q:444:ARG:HD2	2.53	0.44
1:R:164:GLN:NE2	2:R2:35:GLY:HA3	2.33	0.44
1:T:17:MET:HG2	1:T:19:LYS:N	2.22	0.44
1:T:173:THR:HG22	1:T:175:ASP:H	1.82	0.44
1:T:293:LEU:N	1:V:226:GLY:O	2.34	0.44
1:U:17:MET:HG2	1:U:19:LYS:N	2.22	0.44
1:U:74:PRO:HD2	1:U:356:VAL:HG11	2.00	0.44
1:W:164:GLN:NE2	2:W2:35:GLY:HA3	2.33	0.44
1:X:223:ASN:OD1	1:X:224:VAL:N	2.49	0.44
1:Y:18:PHE:C	1:Y:20:GLY:H	2.26	0.44
1:c:410:THR:HG23	1:c:492:ALA:HA	2.00	0.44
1:e:74:PRO:HD2	1:e:356:VAL:HG11	2.00	0.44
1:e:410:THR:HG23	1:e:492:ALA:HA	2.00	0.44
1:e:482:HIS:ND1	1:e:484:GLN:O	2.50	0.44
1:i:420:PHE:CZ	1:i:444:ARG:HD2	2.53	0.44
1:j:18:PHE:C	1:j:20:GLY:H	2.26	0.44
1:j:81:ASP:OD2	1:j:406:ARG:NH2	2.50	0.44
1:j:164:GLN:NE2	2:j2:35:GLY:HA3	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:l:74:PRO:HD2	1:l:356:VAL:HG11	2.00	0.44
1:m:18:PHE:C	1:m:20:GLY:H	2.26	0.44
1:m:293:LEU:N	1:p:226:GLY:O	2.34	0.44
1:n:410:THR:HG23	1:n:492:ALA:HA	2.00	0.44
1:o:410:THR:HG23	1:o:492:ALA:HA	2.00	0.44
1:p:476:GLY:O	1:p:479:ARG:HG2	2.18	0.44
1:q:355:LEU:O	1:q:379:SER:OG	2.29	0.44
1:r:421:ARG:HH22	1:r:466:ASP:CG	2.26	0.44
1:u:410:THR:HG23	1:u:492:ALA:HA	2.00	0.44
1:x:420:PHE:CZ	1:x:444:ARG:HD2	2.53	0.44
1:y:410:THR:HG23	1:y:492:ALA:HA	2.00	0.44
1:y:420:PHE:CZ	1:y:444:ARG:HD2	2.53	0.44
1:y:421:ARG:HH22	1:y:466:ASP:CG	2.26	0.44
1:z:205:ASP:N	1:z:208:THR:OG1	2.45	0.44
1:3:173:THR:HG22	1:3:175:ASP:H	1.82	0.44
1:4:81:ASP:OD2	1:4:406:ARG:NH2	2.50	0.44
1:5:421:ARG:HH22	1:5:466:ASP:CG	2.26	0.44
2:R2:10:ARG:HG3	2:R2:11:HIS:N	2.32	0.44
2:q2:10:ARG:HG3	2:q2:11:HIS:N	2.32	0.44
2:0:10:ARG:HG3	2:0:11:HIS:N	2.32	0.44
1:F:81:ASP:OD2	1:F:406:ARG:NH2	2.50	0.44
1:F:205:ASP:N	1:F:208:THR:OG1	2.45	0.44
1:F:420:PHE:CZ	1:F:444:ARG:HD2	2.53	0.44
1:K:18:PHE:C	1:K:20:GLY:H	2.26	0.44
1:K:95:ASP:OD2	1:K:176:SER:OG	2.36	0.44
1:K:421:ARG:HH22	1:K:466:ASP:CG	2.26	0.44
1:L:107:TRP:CE3	1:s:216:LYS:NZ	2.80	0.44
1:L:421:ARG:HH22	1:L:466:ASP:CG	2.26	0.44
1:Q:410:THR:HG23	1:Q:492:ALA:HA	2.00	0.44
1:R:476:GLY:O	1:R:479:ARG:HG2	2.18	0.44
1:S:293:LEU:N	1:n:226:GLY:O	2.33	0.44
1:S:421:ARG:HH22	1:S:466:ASP:CG	2.26	0.44
1:T:74:PRO:HD2	1:T:356:VAL:HG11	2.00	0.44
1:T:164:GLN:NE2	2:T2:35:GLY:HA3	2.33	0.44
1:U:391:LYS:HE3	1:U:391:LYS:HB2	1.82	0.44
1:W:173:THR:HG22	1:W:175:ASP:H	1.82	0.44
1:X:476:GLY:O	1:X:479:ARG:HG2	2.18	0.44
1:Y:420:PHE:CZ	1:Y:444:ARG:HD2	2.53	0.44
1:a:420:PHE:CZ	1:a:444:ARG:HD2	2.53	0.44
1:g:173:THR:HG22	1:g:175:ASP:H	1.82	0.44
1:j:74:PRO:HD2	1:j:356:VAL:HG11	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:k:95:ASP:OD2	1:k:176:SER:OG	2.36	0.44
1:k:173:THR:HG22	1:k:175:ASP:H	1.82	0.44
1:l:216:LYS:NZ	1:v:107:TRP:CE3	2.80	0.44
1:m:476:GLY:O	1:m:479:ARG:HG2	2.18	0.44
1:q:164:GLN:NE2	2:q2:35:GLY:HA3	2.33	0.44
1:q:476:GLY:O	1:q:479:ARG:HG2	2.18	0.44
1:s:74:PRO:HD2	1:s:356:VAL:HG11	2.00	0.44
1:t:420:PHE:CZ	1:t:444:ARG:HD2	2.53	0.44
1:t:482:HIS:ND1	1:t:484:GLN:O	2.50	0.44
1:y:164:GLN:NE2	2:y2:35:GLY:HA3	2.33	0.44
1:z:421:ARG:HH22	1:z:466:ASP:CG	2.26	0.44
1:3:420:PHE:CZ	1:3:444:ARG:HD2	2.53	0.44
1:4:95:ASP:OD2	1:4:176:SER:OG	2.36	0.44
1:4:421:ARG:HH22	1:4:466:ASP:CG	2.26	0.44
1:6:164:GLN:NE2	2:62:35:GLY:HA3	2.33	0.44
1:6:173:THR:HG22	1:6:175:ASP:H	1.82	0.44
1:7:420:PHE:CZ	1:7:444:ARG:HD2	2.53	0.44
2:t2:10:ARG:HG3	2:t2:11:HIS:N	2.32	0.44
1:B:164:GLN:NE2	2:9:35:GLY:HA3	2.33	0.44
1:C:74:PRO:HD2	1:C:356:VAL:HG11	2.00	0.44
1:D:17:MET:HG2	1:D:19:LYS:N	2.23	0.44
1:D:95:ASP:OD2	1:D:176:SER:OG	2.36	0.44
1:D:173:THR:HG22	1:D:175:ASP:H	1.82	0.44
1:F:164:GLN:NE2	2:F2:35:GLY:HA3	2.33	0.44
1:F:476:GLY:O	1:F:479:ARG:HG2	2.18	0.44
1:G:420:PHE:CZ	1:G:444:ARG:HD2	2.53	0.44
1:H:355:LEU:O	1:H:379:SER:OG	2.29	0.44
1:J:226:GLY:O	1:7:293:LEU:N	2.34	0.44
1:L:205:ASP:N	1:L:208:THR:OG1	2.45	0.44
1:N:17:MET:HG2	1:N:19:LYS:N	2.22	0.44
1:N:95:ASP:OD2	1:N:176:SER:OG	2.36	0.44
1:O:476:GLY:O	1:O:479:ARG:HG2	2.18	0.44
1:S:18:PHE:C	1:S:20:GLY:H	2.26	0.44
1:S:164:GLN:NE2	2:S2:35:GLY:HA3	2.33	0.44
1:S:420:PHE:CZ	1:S:444:ARG:HD2	2.53	0.44
1:T:476:GLY:O	1:T:479:ARG:HG2	2.18	0.44
1:U:355:LEU:O	1:U:379:SER:OG	2.29	0.44
1:V:476:GLY:O	1:V:479:ARG:HG2	2.18	0.44
1:W:482:HIS:ND1	1:W:484:GLN:O	2.50	0.44
1:X:95:ASP:OD2	1:X:176:SER:OG	2.36	0.44
1:X:421:ARG:HH22	1:X:466:ASP:CG	2.26	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:Z:476:GLY:O	1:Z:479:ARG:HG2	2.18	0.44
1:b:164:GLN:NE2	2:b2:35:GLY:HA3	2.33	0.44
1:c:164:GLN:NE2	2:c2:35:GLY:HA3	2.33	0.44
1:d:173:THR:HG22	1:d:175:ASP:H	1.82	0.44
1:e:164:GLN:NE2	2:e2:35:GLY:HA3	2.33	0.44
1:f:164:GLN:NE2	2:f2:35:GLY:HA3	2.33	0.44
1:g:410:THR:HG23	1:g:492:ALA:HA	2.00	0.44
1:h:410:THR:HG23	1:h:492:ALA:HA	2.00	0.44
1:h:476:GLY:O	1:h:479:ARG:HG2	2.18	0.44
1:i:74:PRO:HD2	1:i:356:VAL:HG11	2.00	0.44
1:i:410:THR:HG23	1:i:492:ALA:HA	2.00	0.44
1:l:293:LEU:N	1:w:226:GLY:O	2.35	0.44
1:l:476:GLY:O	1:l:479:ARG:HG2	2.18	0.44
1:m:74:PRO:HD2	1:m:356:VAL:HG11	2.00	0.44
1:m:164:GLN:NE2	2:m2:35:GLY:HA3	2.33	0.44
1:m:173:THR:HG22	1:m:175:ASP:H	1.82	0.44
1:o:95:ASP:OD2	1:o:176:SER:OG	2.36	0.44
1:o:421:ARG:HH22	1:o:466:ASP:CG	2.26	0.44
1:o:476:GLY:O	1:o:479:ARG:HG2	2.18	0.44
1:p:164:GLN:NE2	2:p2:35:GLY:HA3	2.33	0.44
1:s:355:LEU:O	1:s:379:SER:OG	2.29	0.44
1:t:18:PHE:C	1:t:20:GLY:H	2.25	0.44
1:v:410:THR:HG23	1:v:492:ALA:HA	2.00	0.44
1:x:173:THR:HG22	1:x:175:ASP:H	1.82	0.44
1:y:18:PHE:C	1:y:20:GLY:H	2.26	0.44
1:z:17:MET:HG2	1:z:19:LYS:N	2.22	0.44
1:1:164:GLN:NE2	2:12:35:GLY:HA3	2.33	0.44
1:2:410:THR:HG23	1:2:492:ALA:HA	2.00	0.44
1:4:18:PHE:C	1:4:20:GLY:H	2.26	0.44
1:6:482:HIS:ND1	1:6:484:GLN:O	2.50	0.44
2:v2:10:ARG:HG3	2:v2:11:HIS:N	2.32	0.44
1:A:18:PHE:C	1:A:20:GLY:H	2.26	0.44
1:C:410:THR:HG23	1:C:492:ALA:HA	2.00	0.44
1:D:476:GLY:O	1:D:479:ARG:HG2	2.18	0.44
1:E:410:THR:HG23	1:E:492:ALA:HA	2.00	0.44
1:E:420:PHE:CZ	1:E:444:ARG:HD2	2.53	0.44
1:F:18:PHE:C	1:F:20:GLY:H	2.26	0.44
1:J:74:PRO:HD2	1:J:356:VAL:HG11	2.00	0.44
1:M:410:THR:HG23	1:M:492:ALA:HA	2.00	0.44
1:M:476:GLY:O	1:M:479:ARG:HG2	2.18	0.44
1:N:74:PRO:HD2	1:N:356:VAL:HG11	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:N:164:GLN:NE2	2:N2:35:GLY:HA3	2.33	0.44
1:Q:173:THR:HG22	1:Q:175:ASP:H	1.82	0.44
1:T:81:ASP:OD2	1:T:406:ARG:NH2	2.50	0.44
1:U:420:PHE:CZ	1:U:444:ARG:HD2	2.53	0.44
1:U:421:ARG:HH22	1:U:466:ASP:CG	2.26	0.44
1:V:18:PHE:C	1:V:20:GLY:H	2.26	0.44
1:V:164:GLN:NE2	2:V2:35:GLY:HA3	2.33	0.44
1:W:74:PRO:HD2	1:W:356:VAL:HG11	2.00	0.44
1:Y:476:GLY:O	1:Y:479:ARG:HG2	2.18	0.44
1:Z:164:GLN:NE2	2:Z2:35:GLY:HA3	2.33	0.44
1:b:421:ARG:HH22	1:b:466:ASP:CG	2.26	0.44
1:c:95:ASP:OD2	1:c:176:SER:OG	2.36	0.44
1:f:421:ARG:HH22	1:f:466:ASP:CG	2.26	0.44
1:g:164:GLN:NE2	2:g2:35:GLY:HA3	2.33	0.44
1:i:95:ASP:OD2	1:i:176:SER:OG	2.36	0.44
1:i:164:GLN:NE2	2:i2:35:GLY:HA3	2.33	0.44
1:k:476:GLY:O	1:k:479:ARG:HG2	2.18	0.44
1:m:17:MET:HG2	1:m:19:LYS:N	2.23	0.44
1:n:173:THR:HG22	1:n:175:ASP:H	1.82	0.44
1:p:421:ARG:HH22	1:p:466:ASP:CG	2.26	0.44
1:q:420:PHE:CZ	1:q:444:ARG:HD2	2.53	0.44
1:r:18:PHE:C	1:r:20:GLY:H	2.26	0.44
1:r:164:GLN:NE2	2:r2:35:GLY:HA3	2.33	0.44
1:s:420:PHE:CZ	1:s:444:ARG:HD2	2.53	0.44
1:t:421:ARG:HH22	1:t:466:ASP:CG	2.26	0.44
1:v:18:PHE:C	1:v:20:GLY:H	2.26	0.44
1:w:420:PHE:CZ	1:w:444:ARG:HD2	2.53	0.44
1:x:410:THR:HG23	1:x:492:ALA:HA	2.00	0.44
1:y:476:GLY:O	1:y:479:ARG:HG2	2.18	0.44
1:2:74:PRO:HD2	1:2:356:VAL:HG11	2.00	0.44
1:8:164:GLN:NE2	2:82:35:GLY:HA3	2.33	0.44
2:i2:10:ARG:HG3	2:i2:11:HIS:N	2.32	0.44
1:A:410:THR:HG23	1:A:492:ALA:HA	2.00	0.43
1:C:164:GLN:NE2	2:C2:35:GLY:HA3	2.33	0.43
1:F:17:MET:HG2	1:F:19:LYS:N	2.23	0.43
1:G:18:PHE:C	1:G:20:GLY:H	2.26	0.43
1:G:421:ARG:HH22	1:G:466:ASP:CG	2.26	0.43
1:H:164:GLN:NE2	2:H2:35:GLY:HA3	2.33	0.43
1:O:421:ARG:HH22	1:O:466:ASP:CG	2.26	0.43
1:Q:421:ARG:HH22	1:Q:466:ASP:CG	2.26	0.43
1:R:420:PHE:CZ	1:R:444:ARG:HD2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:V:421:ARG:HH22	1:V:466:ASP:CG	2.26	0.43
1:Z:74:PRO:HD2	1:Z:356:VAL:HG11	2.00	0.43
1:Z:482:HIS:ND1	1:Z:484:GLN:O	2.50	0.43
1:d:226:GLY:O	1:r:293:LEU:N	2.34	0.43
1:e:95:ASP:OD2	1:e:176:SER:OG	2.36	0.43
1:e:361:GLN:NE2	1:h:364:SER:HB3	2.32	0.43
1:g:74:PRO:HD2	1:g:356:VAL:HG11	2.00	0.43
1:g:476:GLY:O	1:g:479:ARG:HG2	2.18	0.43
1:h:420:PHE:CZ	1:h:444:ARG:HD2	2.53	0.43
1:h:553:ILE:HD12	1:h:553:ILE:HA	1.90	0.43
1:i:476:GLY:O	1:i:479:ARG:HG2	2.18	0.43
1:j:226:GLY:O	1:v:293:LEU:N	2.34	0.43
1:l:421:ARG:HH22	1:l:466:ASP:CG	2.26	0.43
1:m:81:ASP:OD2	1:m:406:ARG:NH2	2.50	0.43
1:r:420:PHE:CZ	1:r:444:ARG:HD2	2.53	0.43
1:r:476:GLY:O	1:r:479:ARG:HG2	2.18	0.43
1:s:421:ARG:HH22	1:s:466:ASP:CG	2.26	0.43
1:t:74:PRO:HD2	1:t:356:VAL:HG11	2.00	0.43
1:w:164:GLN:NE2	2:w2:35:GLY:HA3	2.33	0.43
1:w:410:THR:HG23	1:w:492:ALA:HA	2.00	0.43
1:x:18:PHE:C	1:x:20:GLY:H	2.26	0.43
1:3:18:PHE:C	1:3:20:GLY:H	2.26	0.43
1:5:164:GLN:NE2	2:52:35:GLY:HA3	2.33	0.43
1:5:355:LEU:O	1:5:379:SER:OG	2.29	0.43
1:6:74:PRO:HD2	1:6:356:VAL:HG11	2.00	0.43
1:6:476:GLY:O	1:6:479:ARG:HG2	2.18	0.43
1:7:476:GLY:O	1:7:479:ARG:HG2	2.18	0.43
1:8:74:PRO:HD2	1:8:356:VAL:HG11	2.00	0.43
1:8:205:ASP:H	1:8:208:THR:HG1	1.60	0.43
1:8:476:GLY:O	1:8:479:ARG:HG2	2.18	0.43
2:C2:10:ARG:HG3	2:C2:11:HIS:N	2.32	0.43
2:G2:10:ARG:HG3	2:G2:11:HIS:N	2.32	0.43
2:L2:10:ARG:HG3	2:L2:11:HIS:N	2.32	0.43
2:N2:10:ARG:HG3	2:N2:11:HIS:N	2.32	0.43
2:62:10:ARG:HG3	2:62:11:HIS:N	2.32	0.43
1:C:420:PHE:CZ	1:C:444:ARG:HD2	2.53	0.43
1:D:164:GLN:NE2	2:D2:35:GLY:HA3	2.33	0.43
1:E:164:GLN:NE2	2:E2:35:GLY:HA3	2.33	0.43
1:M:420:PHE:CZ	1:M:444:ARG:HD2	2.53	0.43
1:N:410:THR:HG23	1:N:492:ALA:HA	2.00	0.43
1:O:420:PHE:CZ	1:O:444:ARG:HD2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:18:PHE:C	1:U:20:GLY:H	2.26	0.43
1:U:410:THR:HG23	1:U:492:ALA:HA	2.00	0.43
1:a:18:PHE:C	1:a:20:GLY:H	2.26	0.43
1:a:410:THR:HG23	1:a:492:ALA:HA	2.00	0.43
1:d:205:ASP:N	1:d:208:THR:OG1	2.45	0.43
1:p:18:PHE:C	1:p:20:GLY:H	2.26	0.43
1:s:410:THR:HG23	1:s:492:ALA:HA	2.00	0.43
1:x:421:ARG:HH22	1:x:466:ASP:CG	2.26	0.43
1:y:17:MET:HG2	1:y:19:LYS:N	2.23	0.43
1:2:420:PHE:CZ	1:2:444:ARG:HD2	2.53	0.43
1:6:81:ASP:OD2	1:6:406:ARG:NH2	2.50	0.43
1:8:482:HIS:ND1	1:8:484:GLN:O	2.50	0.43
2:W2:10:ARG:HG3	2:W2:11:HIS:N	2.32	0.43
1:A:420:PHE:CZ	1:A:444:ARG:HD2	2.53	0.43
1:B:173:THR:HG22	1:B:175:ASP:H	1.82	0.43
1:C:421:ARG:HH22	1:C:466:ASP:CG	2.26	0.43
1:C:476:GLY:O	1:C:479:ARG:HG2	2.18	0.43
1:G:476:GLY:O	1:G:479:ARG:HG2	2.18	0.43
1:K:164:GLN:NE2	2:K2:35:GLY:HA3	2.33	0.43
1:L:17:MET:HG2	1:L:19:LYS:N	2.22	0.43
1:N:476:GLY:O	1:N:479:ARG:HG2	2.18	0.43
1:S:476:GLY:O	1:S:479:ARG:HG2	2.18	0.43
1:W:81:ASP:OD2	1:W:406:ARG:NH2	2.50	0.43
1:W:476:GLY:O	1:W:479:ARG:HG2	2.18	0.43
1:X:420:PHE:CZ	1:X:444:ARG:HD2	2.53	0.43
1:Y:293:LEU:N	1:2:226:GLY:O	2.34	0.43
1:e:421:ARG:HH22	1:e:466:ASP:CG	2.26	0.43
1:e:437:SER:OG	1:z:305:ARG:NH2	2.38	0.43
1:f:410:THR:HG23	1:f:492:ALA:HA	2.00	0.43
1:g:420:PHE:CZ	1:g:444:ARG:HD2	2.53	0.43
1:g:421:ARG:HH22	1:g:466:ASP:CG	2.26	0.43
1:i:205:ASP:N	1:i:208:THR:OG1	2.45	0.43
1:k:164:GLN:NE2	2:k2:35:GLY:HA3	2.33	0.43
1:n:205:ASP:N	1:n:208:THR:OG1	2.45	0.43
1:w:18:PHE:C	1:w:20:GLY:H	2.26	0.43
1:y:293:LEU:N	1:5:226:GLY:O	2.34	0.43
1:2:81:ASP:OD2	1:2:406:ARG:NH2	2.50	0.43
1:3:410:THR:HG23	1:3:492:ALA:HA	2.00	0.43
2:d2:10:ARG:HG3	2:d2:11:HIS:N	2.32	0.43
2:g2:10:ARG:HG3	2:g2:11:HIS:N	2.32	0.43
2:n2:10:ARG:HG3	2:n2:11:HIS:N	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:95:ASP:OD2	1:A:176:SER:OG	2.36	0.43
1:G:74:PRO:HD2	1:G:356:VAL:HG11	2.00	0.43
1:J:173:THR:HG22	1:J:175:ASP:H	1.82	0.43
1:J:420:PHE:CZ	1:J:444:ARG:HD2	2.53	0.43
1:J:421:ARG:HH22	1:J:466:ASP:CG	2.26	0.43
1:K:420:PHE:CZ	1:K:444:ARG:HD2	2.53	0.43
1:Q:18:PHE:C	1:Q:20:GLY:H	2.26	0.43
1:R:410:THR:HG23	1:R:492:ALA:HA	2.00	0.43
1:S:410:THR:HG23	1:S:492:ALA:HA	2.00	0.43
1:T:421:ARG:HH22	1:T:466:ASP:CG	2.26	0.43
1:U:95:ASP:OD2	1:U:176:SER:OG	2.36	0.43
1:Z:205:ASP:H	1:Z:208:THR:HG1	1.60	0.43
1:a:95:ASP:OD2	1:a:176:SER:OG	2.36	0.43
1:c:420:PHE:CZ	1:c:444:ARG:HD2	2.53	0.43
1:c:421:ARG:HH22	1:c:466:ASP:CG	2.26	0.43
1:e:420:PHE:CZ	1:e:444:ARG:HD2	2.53	0.43
1:f:173:THR:HG22	1:f:175:ASP:H	1.82	0.43
1:k:17:MET:HG2	1:k:19:LYS:N	2.23	0.43
1:k:420:PHE:CZ	1:k:444:ARG:HD2	2.53	0.43
1:l:420:PHE:CZ	1:l:444:ARG:HD2	2.53	0.43
1:o:305:ARG:NH2	1:8:437:SER:OG	2.38	0.43
1:q:410:THR:HG23	1:q:492:ALA:HA	2.00	0.43
1:s:18:PHE:C	1:s:20:GLY:H	2.26	0.43
1:s:95:ASP:OD2	1:s:176:SER:OG	2.36	0.43
1:s:391:LYS:HE3	1:s:391:LYS:HB2	1.82	0.43
1:u:173:THR:HG22	1:u:175:ASP:H	1.82	0.43
1:v:95:ASP:OD2	1:v:176:SER:OG	2.36	0.43
1:v:420:PHE:CZ	1:v:444:ARG:HD2	2.53	0.43
1:v:421:ARG:HH22	1:v:466:ASP:CG	2.26	0.43
1:y:305:ARG:NH2	1:5:437:SER:OG	2.38	0.43
1:z:420:PHE:CZ	1:z:444:ARG:HD2	2.53	0.43
1:1:173:THR:HG22	1:1:175:ASP:H	1.82	0.43
1:2:173:THR:HG22	1:2:175:ASP:H	1.82	0.43
2:I2:10:ARG:HG3	2:I2:11:HIS:N	2.32	0.43
2:z2:10:ARG:HG3	2:z2:11:HIS:N	2.32	0.43
1:A:164:GLN:NE2	2:0:35:GLY:HA3	2.33	0.43
1:A:421:ARG:HH22	1:A:466:ASP:CG	2.26	0.43
1:C:437:SER:OG	1:K:305:ARG:NH2	2.38	0.43
1:D:420:PHE:CZ	1:D:444:ARG:HD2	2.53	0.43
1:I:421:ARG:HH22	1:I:466:ASP:CG	2.26	0.43
1:J:81:ASP:OD2	1:J:406:ARG:NH2	2.50	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L:95:ASP:OD2	1:L:176:SER:OG	2.36	0.43
1:M:553:ILE:HD12	1:M:553:ILE:HA	1.90	0.43
1:O:95:ASP:OD2	1:O:176:SER:OG	2.36	0.43
1:P:420:PHE:CZ	1:P:444:ARG:HD2	2.53	0.43
1:b:410:THR:HG23	1:b:492:ALA:HA	2.00	0.43
1:b:420:PHE:CZ	1:b:444:ARG:HD2	2.53	0.43
1:g:437:SER:OG	1:4:305:ARG:NH2	2.38	0.43
1:j:421:ARG:HH22	1:j:466:ASP:CG	2.26	0.43
1:k:364:SER:HB3	1:w:361:GLN:NE2	2.34	0.43
1:l:95:ASP:OD2	1:l:176:SER:OG	2.36	0.43
1:m:421:ARG:HH22	1:m:466:ASP:CG	2.26	0.43
1:n:420:PHE:CZ	1:n:444:ARG:HD2	2.53	0.43
1:n:476:GLY:O	1:n:479:ARG:HG2	2.18	0.43
1:o:420:PHE:CZ	1:o:444:ARG:HD2	2.53	0.43
1:t:476:GLY:O	1:t:479:ARG:HG2	2.18	0.43
1:v:164:GLN:NE2	2:v2:35:GLY:HA3	2.33	0.43
1:w:173:THR:HG22	1:w:175:ASP:H	1.82	0.43
1:w:476:GLY:O	1:w:479:ARG:HG2	2.18	0.43
1:2:421:ARG:HH22	1:2:466:ASP:CG	2.26	0.43
1:3:95:ASP:OD2	1:3:176:SER:OG	2.36	0.43
1:4:164:GLN:NE2	2:42:35:GLY:HA3	2.33	0.43
1:E:18:PHE:C	1:E:20:GLY:H	2.26	0.43
1:E:476:GLY:O	1:E:479:ARG:HG2	2.18	0.43
1:F:293:LEU:N	1:H:226:GLY:O	2.34	0.43
1:G:173:THR:HG22	1:G:175:ASP:H	1.82	0.43
1:I:173:THR:HG22	1:I:175:ASP:H	1.82	0.43
1:L:74:PRO:HD2	1:L:356:VAL:HG11	2.00	0.43
1:L:420:PHE:CZ	1:L:444:ARG:HD2	2.53	0.43
1:N:205:ASP:N	1:N:208:THR:OG1	2.45	0.43
1:P:95:ASP:OD2	1:P:176:SER:OG	2.36	0.43
1:P:421:ARG:HH22	1:P:466:ASP:CG	2.26	0.43
1:T:95:ASP:OD2	1:T:176:SER:OG	2.36	0.43
1:T:410:THR:HG23	1:T:492:ALA:HA	2.00	0.43
1:T:553:ILE:HD12	1:T:553:ILE:HA	1.89	0.43
1:V:74:PRO:HD2	1:V:356:VAL:HG11	2.00	0.43
1:W:420:PHE:CZ	1:W:444:ARG:HD2	2.53	0.43
1:Y:164:GLN:NE2	2:Y2:35:GLY:HA3	2.33	0.43
1:Z:18:PHE:C	1:Z:20:GLY:H	2.26	0.43
1:b:173:THR:HG22	1:b:175:ASP:H	1.82	0.43
1:d:420:PHE:CZ	1:d:444:ARG:HD2	2.53	0.43
1:f:420:PHE:CZ	1:f:444:ARG:HD2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:j:95:ASP:OD2	1:j:176:SER:OG	2.36	0.43
1:j:420:PHE:CZ	1:j:444:ARG:HD2	2.53	0.43
1:m:95:ASP:OD2	1:m:176:SER:OG	2.36	0.43
1:m:410:THR:HG23	1:m:492:ALA:HA	2.00	0.43
1:r:410:THR:HG23	1:r:492:ALA:HA	2.00	0.43
1:t:173:THR:HG22	1:t:175:ASP:H	1.82	0.43
1:t:364:SER:HB3	1:y:361:GLN:NE2	2.34	0.43
1:u:421:ARG:HH22	1:u:466:ASP:CG	2.26	0.43
1:z:74:PRO:HD2	1:z:356:VAL:HG11	2.00	0.43
1:z:95:ASP:OD2	1:z:176:SER:OG	2.36	0.43
1:4:420:PHE:CZ	1:4:444:ARG:HD2	2.53	0.43
1:7:164:GLN:NE2	2:72:35:GLY:HA3	2.33	0.43
2:u2:10:ARG:HG3	2:u2:11:HIS:N	2.32	0.43
2:22:10:ARG:HG3	2:22:11:HIS:N	2.32	0.43
1:B:18:PHE:C	1:B:20:GLY:H	2.26	0.43
1:B:95:ASP:OD2	1:B:176:SER:OG	2.36	0.43
1:B:420:PHE:CZ	1:B:444:ARG:HD2	2.53	0.43
1:H:18:PHE:C	1:H:20:GLY:H	2.26	0.43
1:W:421:ARG:HH22	1:W:466:ASP:CG	2.26	0.43
1:X:74:PRO:HD2	1:X:356:VAL:HG11	2.00	0.43
1:X:305:ARG:NH2	1:Z:437:SER:OG	2.38	0.43
1:X:391:LYS:HE3	1:X:391:LYS:HB2	1.82	0.43
1:Y:421:ARG:HH22	1:Y:466:ASP:CG	2.26	0.43
1:d:17:MET:HG2	1:d:19:LYS:N	2.23	0.43
1:d:476:GLY:O	1:d:479:ARG:HG2	2.18	0.43
1:e:553:ILE:HD12	1:e:553:ILE:HA	1.89	0.43
1:f:364:SER:HB3	1:z:361:GLN:NE2	2.34	0.43
1:h:421:ARG:HH22	1:h:466:ASP:CG	2.26	0.43
1:p:74:PRO:HD2	1:p:356:VAL:HG11	2.00	0.43
1:u:476:GLY:O	1:u:479:ARG:HG2	2.18	0.43
1:1:95:ASP:OD2	1:1:176:SER:OG	2.36	0.43
1:5:18:PHE:C	1:5:20:GLY:H	2.26	0.43
1:6:420:PHE:CZ	1:6:444:ARG:HD2	2.53	0.43
1:6:421:ARG:HH22	1:6:466:ASP:CG	2.26	0.43
1:7:421:ARG:HH22	1:7:466:ASP:CG	2.26	0.43
2:Z2:10:ARG:HG3	2:Z2:11:HIS:N	2.32	0.43
1:D:410:THR:HG23	1:D:492:ALA:HA	2.00	0.43
1:E:173:THR:HG22	1:E:175:ASP:H	1.82	0.43
1:F:74:PRO:HD2	1:F:356:VAL:HG11	2.00	0.43
1:F:95:ASP:OD2	1:F:176:SER:OG	2.36	0.43
1:G:410:THR:HG23	1:G:492:ALA:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:420:PHE:CZ	1:H:444:ARG:HD2	2.53	0.43
1:K:364:SER:HB3	1:7:361:GLN:NE2	2.34	0.43
1:K:476:GLY:O	1:K:479:ARG:HG2	2.18	0.43
1:L:361:GLN:NE2	1:b:364:SER:HB3	2.34	0.43
1:M:421:ARG:HH22	1:M:466:ASP:CG	2.26	0.43
1:U:173:THR:HG22	1:U:175:ASP:H	1.82	0.43
1:U:361:GLN:NE2	1:e:364:SER:HB3	2.34	0.43
1:V:17:MET:HG2	1:V:19:LYS:N	2.23	0.43
1:Y:361:GLN:NE2	1:4:364:SER:HB3	2.34	0.43
1:b:205:ASP:N	1:b:208:THR:OG1	2.45	0.43
1:d:47:TYR:HB3	1:d:401:VAL:HB	2.01	0.43
1:f:18:PHE:C	1:f:20:GLY:H	2.26	0.43
1:f:95:ASP:OD2	1:f:176:SER:OG	2.36	0.43
1:f:205:ASP:N	1:f:208:THR:OG1	2.45	0.43
1:i:421:ARG:HH22	1:i:466:ASP:CG	2.26	0.43
1:n:47:TYR:HB3	1:n:401:VAL:HB	2.01	0.43
1:n:364:SER:HB3	1:r:361:GLN:NE2	2.34	0.43
1:o:74:PRO:HD2	1:o:356:VAL:HG11	2.00	0.43
1:s:476:GLY:O	1:s:479:ARG:HG2	2.18	0.43
1:u:305:ARG:NH2	1:4:437:SER:OG	2.38	0.43
1:w:421:ARG:HH22	1:w:466:ASP:CG	2.26	0.43
1:y:355:LEU:O	1:y:379:SER:OG	2.29	0.43
1:8:18:PHE:C	1:8:20:GLY:H	2.26	0.43
2:J2:10:ARG:HG3	2:J2:11:HIS:N	2.32	0.43
2:e2:10:ARG:HG3	2:e2:11:HIS:N	2.33	0.43
1:A:476:GLY:O	1:A:479:ARG:HG2	2.18	0.43
1:C:364:SER:HB3	1:D:361:GLN:NE2	2.34	0.43
1:D:364:SER:HB3	1:E:361:GLN:NE2	2.34	0.43
1:F:47:TYR:HB3	1:F:401:VAL:HB	2.01	0.43
1:F:305:ARG:NH2	1:H:437:SER:OG	2.38	0.43
1:H:410:THR:HG23	1:H:492:ALA:HA	2.00	0.43
1:I:164:GLN:NE2	2:I2:35:GLY:HA3	2.33	0.43
1:I:476:GLY:O	1:I:479:ARG:HG2	2.18	0.43
1:J:18:PHE:C	1:J:20:GLY:H	2.26	0.43
1:L:305:ARG:NH2	1:c:437:SER:OG	2.38	0.43
1:N:391:LYS:HE3	1:N:391:LYS:HB2	1.82	0.43
1:N:421:ARG:HH22	1:N:466:ASP:CG	2.26	0.43
1:P:173:THR:HG22	1:P:175:ASP:H	1.82	0.43
1:S:173:THR:HG22	1:S:175:ASP:H	1.82	0.43
1:S:361:GLN:NE2	1:d:364:SER:HB3	2.34	0.43
1:T:420:PHE:CZ	1:T:444:ARG:HD2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:476:GLY:O	1:U:479:ARG:HG2	2.18	0.43
1:X:355:LEU:O	1:X:379:SER:OG	2.29	0.43
1:a:17:MET:HG2	1:a:19:LYS:N	2.23	0.43
1:a:421:ARG:HH22	1:a:466:ASP:CG	2.26	0.43
1:b:95:ASP:OD2	1:b:176:SER:OG	2.36	0.43
1:c:364:SER:HB3	1:s:361:GLN:NE2	2.34	0.43
1:f:74:PRO:HD2	1:f:356:VAL:HG11	2.00	0.43
1:g:364:SER:HB3	1:k:361:GLN:NE2	2.34	0.43
1:h:18:PHE:C	1:h:20:GLY:H	2.26	0.43
1:k:421:ARG:HH22	1:k:466:ASP:CG	2.26	0.43
1:m:420:PHE:CZ	1:m:444:ARG:HD2	2.53	0.43
1:r:173:THR:HG22	1:r:175:ASP:H	1.82	0.43
1:s:173:THR:HG22	1:s:175:ASP:H	1.82	0.43
1:t:437:SER:OG	1:8:305:ARG:NH2	2.38	0.43
1:v:476:GLY:O	1:v:479:ARG:HG2	2.18	0.43
1:y:74:PRO:HD2	1:y:356:VAL:HG11	2.00	0.43
1:y:95:ASP:OD2	1:y:176:SER:OG	2.36	0.43
1:1:18:PHE:C	1:1:20:GLY:H	2.26	0.43
1:1:420:PHE:CZ	1:1:444:ARG:HD2	2.53	0.43
1:5:74:PRO:HD2	1:5:356:VAL:HG11	2.00	0.43
1:5:410:THR:HG23	1:5:492:ALA:HA	2.00	0.43
1:5:420:PHE:CZ	1:5:444:ARG:HD2	2.53	0.43
1:A:293:LEU:N	1:P:226:GLY:O	2.35	0.43
1:D:18:PHE:C	1:D:20:GLY:H	2.26	0.43
1:D:421:ARG:HH22	1:D:466:ASP:CG	2.26	0.43
1:N:361:GLN:NE2	1:m:364:SER:HB3	2.34	0.43
1:R:421:ARG:HH22	1:R:466:ASP:CG	2.26	0.43
1:Z:421:ARG:HH22	1:Z:466:ASP:CG	2.26	0.43
1:b:18:PHE:C	1:b:20:GLY:H	2.26	0.43
1:b:74:PRO:HD2	1:b:356:VAL:HG11	2.00	0.43
1:d:74:PRO:HD2	1:d:356:VAL:HG11	2.00	0.43
1:j:173:THR:HG22	1:j:175:ASP:H	1.82	0.43
1:j:553:ILE:HD12	1:j:553:ILE:HA	1.89	0.43
1:k:18:PHE:C	1:k:20:GLY:H	2.26	0.43
1:k:305:ARG:NH2	1:z:437:SER:OG	2.38	0.43
1:k:410:THR:HG23	1:k:492:ALA:HA	2.00	0.43
1:n:17:MET:HG2	1:n:19:LYS:N	2.23	0.43
1:o:355:LEU:O	1:o:379:SER:OG	2.29	0.43
1:q:391:LYS:HB2	1:q:391:LYS:HE3	1.82	0.43
1:r:47:TYR:HB3	1:r:401:VAL:HB	2.01	0.43
1:t:410:THR:HG23	1:t:492:ALA:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:164:GLN:NE2	2:u2:35:GLY:HA3	2.33	0.43
1:y:47:TYR:HB3	1:y:401:VAL:HB	2.01	0.43
1:3:421:ARG:HH22	1:3:466:ASP:CG	2.26	0.43
1:4:476:GLY:O	1:4:479:ARG:HG2	2.18	0.43
2:82:10:ARG:HG3	2:82:11:HIS:N	2.32	0.43
1:D:305:ARG:NH2	1:L:437:SER:OG	2.38	0.42
1:D:437:SER:OG	1:c:305:ARG:NH2	2.38	0.42
1:E:74:PRO:HD2	1:E:356:VAL:HG11	2.00	0.42
1:E:421:ARG:HH22	1:E:466:ASP:CG	2.26	0.42
1:F:364:SER:HB3	1:R:361:GLN:NE2	2.34	0.42
1:H:74:PRO:HD2	1:H:356:VAL:HG11	2.00	0.42
1:H:95:ASP:OD2	1:H:176:SER:OG	2.36	0.42
1:I:18:PHE:C	1:I:20:GLY:H	2.26	0.42
1:I:391:LYS:HE3	1:I:391:LYS:HB2	1.82	0.42
1:M:364:SER:HB3	1:c:361:GLN:NE2	2.34	0.42
1:O:410:THR:HG23	1:O:492:ALA:HA	2.00	0.42
1:R:95:ASP:OD2	1:R:176:SER:OG	2.36	0.42
1:S:47:TYR:HB3	1:S:401:VAL:HB	2.01	0.42
1:T:364:SER:HB3	1:i:361:GLN:NE2	2.34	0.42
1:V:364:SER:HB3	1:W:361:GLN:NE2	2.34	0.42
1:a:74:PRO:HD2	1:a:356:VAL:HG11	2.00	0.42
1:c:553:ILE:HD12	1:c:553:ILE:HA	1.89	0.42
1:l:364:SER:HB3	1:n:361:GLN:NE2	2.34	0.42
1:l:410:THR:HG23	1:l:492:ALA:HA	2.00	0.42
1:n:74:PRO:HD2	1:n:356:VAL:HG11	2.00	0.42
1:q:361:GLN:NE2	1:y:364:SER:HB3	2.34	0.42
1:q:421:ARG:HH22	1:q:466:ASP:CG	2.26	0.42
1:r:364:SER:HB3	1:x:361:GLN:NE2	2.34	0.42
1:8:420:PHE:CZ	1:8:444:ARG:HD2	2.53	0.42
1:8:421:ARG:HH22	1:8:466:ASP:CG	2.26	0.42
1:B:421:ARG:HH22	1:B:466:ASP:CG	2.26	0.42
1:D:74:PRO:HD2	1:D:356:VAL:HG11	2.00	0.42
1:J:437:SER:OG	1:7:305:ARG:NH2	2.38	0.42
1:K:410:THR:HG23	1:K:492:ALA:HA	2.00	0.42
1:N:18:PHE:C	1:N:20:GLY:H	2.26	0.42
1:P:391:LYS:HE3	1:P:391:LYS:HB2	1.82	0.42
1:P:438:GLU:CD	2:P2:33:ARG:HH22	2.28	0.42
1:U:438:GLU:CD	2:U2:33:ARG:HH22	2.28	0.42
1:X:364:SER:HB3	1:f:361:GLN:NE2	2.34	0.42
1:Z:420:PHE:CZ	1:Z:444:ARG:HD2	2.53	0.42
1:c:47:TYR:HB3	1:c:401:VAL:HB	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:e:47:TYR:HB3	1:e:401:VAL:HB	2.01	0.42
1:g:47:TYR:HB3	1:g:401:VAL:HB	2.01	0.42
1:g:438:GLU:CD	2:g2:33:ARG:HH22	2.28	0.42
1:i:18:PHE:C	1:i:20:GLY:H	2.26	0.42
1:j:438:GLU:CD	2:j2:33:ARG:HH22	2.28	0.42
1:k:74:PRO:HD2	1:k:356:VAL:HG11	2.00	0.42
1:n:421:ARG:HH22	1:n:466:ASP:CG	2.26	0.42
1:p:17:MET:HG2	1:p:19:LYS:N	2.23	0.42
1:p:364:SER:HB3	1:6:361:GLN:NE2	2.34	0.42
1:q:438:GLU:CD	2:q2:33:ARG:HH22	2.28	0.42
1:s:438:GLU:CD	2:s2:33:ARG:HH22	2.28	0.42
1:u:74:PRO:HD2	1:u:356:VAL:HG11	2.00	0.42
1:v:553:ILE:HD12	1:v:553:ILE:HA	1.89	0.42
1:1:421:ARG:HH22	1:1:466:ASP:CG	2.26	0.42
1:3:74:PRO:HD2	1:3:356:VAL:HG11	2.00	0.42
1:5:95:ASP:OD2	1:5:176:SER:OG	2.36	0.42
1:5:367:GLU:OE2	1:5:368:LYS:HG2	2.19	0.42
1:C:18:PHE:C	1:C:20:GLY:H	2.26	0.42
1:C:47:TYR:HB3	1:C:401:VAL:HB	2.01	0.42
1:C:438:GLU:CD	2:C2:33:ARG:HH22	2.28	0.42
1:H:364:SER:HB3	1:Z:361:GLN:NE2	2.35	0.42
1:I:74:PRO:HD2	1:I:356:VAL:HG11	2.00	0.42
1:I:305:ARG:NH2	1:K:437:SER:OG	2.38	0.42
1:J:12:VAL:CG1	1:J:13:HIS:H	2.33	0.42
1:J:438:GLU:CD	2:J2:33:ARG:HH22	2.28	0.42
1:R:438:GLU:CD	2:R2:33:ARG:HH22	2.28	0.42
1:V:420:PHE:CZ	1:V:444:ARG:HD2	2.53	0.42
1:Y:367:GLU:OE2	1:Y:368:LYS:HG2	2.20	0.42
1:Z:364:SER:HB3	1:a:361:GLN:NE2	2.34	0.42
1:Z:367:GLU:OE2	1:Z:368:LYS:HG2	2.20	0.42
1:b:361:GLN:NE2	1:o:364:SER:HB3	2.34	0.42
1:c:367:GLU:OE2	1:c:368:LYS:HG2	2.20	0.42
1:e:367:GLU:OE2	1:e:368:LYS:HG2	2.20	0.42
1:g:18:PHE:C	1:g:20:GLY:H	2.26	0.42
1:j:361:GLN:NE2	1:x:364:SER:HB3	2.34	0.42
1:l:438:GLU:CD	2:l2:33:ARG:HH22	2.28	0.42
1:o:391:LYS:HE3	1:o:391:LYS:HB2	1.82	0.42
1:w:74:PRO:HD2	1:w:356:VAL:HG11	2.00	0.42
1:w:438:GLU:CD	2:w2:33:ARG:HH22	2.27	0.42
1:z:47:TYR:HB3	1:z:401:VAL:HB	2.01	0.42
1:z:164:GLN:NE2	2:z2:35:GLY:HA3	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:4:410:THR:HG23	1:4:492:ALA:HA	2.00	0.42
1:7:367:GLU:OE2	1:7:368:LYS:HG2	2.20	0.42
1:8:367:GLU:OE2	1:8:368:LYS:HG2	2.20	0.42
1:B:17:MET:HG2	1:B:19:LYS:N	2.22	0.42
1:E:438:GLU:CD	2:E2:33:ARG:HH22	2.27	0.42
1:G:437:SER:OG	1:Z:305:ARG:NH2	2.38	0.42
1:H:47:TYR:HB3	1:H:401:VAL:HB	2.01	0.42
1:H:367:GLU:OE2	1:H:368:LYS:HG2	2.20	0.42
1:I:95:ASP:OD2	1:I:176:SER:OG	2.36	0.42
1:I:367:GLU:OE2	1:I:368:LYS:HG2	2.20	0.42
1:K:361:GLN:NE2	1:L:364:SER:HB3	2.34	0.42
1:L:47:TYR:HB3	1:L:401:VAL:HB	2.01	0.42
1:L:164:GLN:NE2	2:L2:35:GLY:HA3	2.33	0.42
1:M:18:PHE:C	1:M:20:GLY:H	2.26	0.42
1:M:367:GLU:OE2	1:M:368:LYS:HG2	2.20	0.42
1:O:438:GLU:CD	2:O2:33:ARG:HH22	2.28	0.42
1:P:361:GLN:NE2	1:Q:364:SER:HB3	2.34	0.42
1:Q:361:GLN:NE2	1:S:364:SER:HB3	2.34	0.42
1:R:391:LYS:HE3	1:R:391:LYS:HB2	1.82	0.42
1:S:12:VAL:CG1	1:S:13:HIS:H	2.33	0.42
1:T:361:GLN:NE2	1:U:364:SER:HB3	2.34	0.42
1:Z:12:VAL:CG1	1:Z:13:HIS:H	2.33	0.42
1:b:12:VAL:CG1	1:b:13:HIS:H	2.33	0.42
1:c:81:ASP:OD2	1:c:406:ARG:NH2	2.50	0.42
1:d:421:ARG:HH22	1:d:466:ASP:CG	2.26	0.42
1:e:305:ARG:NH2	1:k:437:SER:OG	2.38	0.42
1:f:12:VAL:CG1	1:f:13:HIS:H	2.33	0.42
1:h:367:GLU:OE2	1:h:368:LYS:HG2	2.20	0.42
1:i:17:MET:HG2	1:i:19:LYS:N	2.22	0.42
1:k:391:LYS:HB2	1:k:391:LYS:HE3	1.82	0.42
1:m:47:TYR:HB3	1:m:401:VAL:HB	2.01	0.42
1:m:361:GLN:NE2	1:s:364:SER:HB3	2.34	0.42
1:o:47:TYR:HB3	1:o:401:VAL:HB	2.01	0.42
1:p:420:PHE:CZ	1:p:444:ARG:HD2	2.53	0.42
1:q:95:ASP:OD2	1:q:176:SER:OG	2.36	0.42
1:r:17:MET:HG2	1:r:19:LYS:N	2.22	0.42
1:u:18:PHE:C	1:u:20:GLY:H	2.26	0.42
1:y:367:GLU:OE2	1:y:368:LYS:HG2	2.20	0.42
1:y:438:GLU:CD	2:y2:33:ARG:HH22	2.28	0.42
1:z:364:SER:HB3	1:4:361:GLN:NE2	2.34	0.42
1:1:12:VAL:CG1	1:1:13:HIS:H	2.33	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:2:18:PHE:C	1:2:20:GLY:H	2.26	0.42
1:2:438:GLU:CD	2:22:33:ARG:HH22	2.28	0.42
1:3:17:MET:HG2	1:3:19:LYS:N	2.23	0.42
1:3:361:GLN:NE2	1:8:364:SER:HB3	2.34	0.42
1:5:47:TYR:HB3	1:5:401:VAL:HB	2.01	0.42
1:5:364:SER:HB3	1:8:361:GLN:NE2	2.35	0.42
2:c2:10:ARG:HG3	2:c2:11:HIS:N	2.32	0.42
1:A:12:VAL:CG1	1:A:13:HIS:H	2.33	0.42
1:A:553:ILE:HD12	1:A:553:ILE:HA	1.89	0.42
1:B:12:VAL:CG1	1:B:13:HIS:H	2.33	0.42
1:B:205:ASP:N	1:B:208:THR:OG1	2.45	0.42
1:B:364:SER:HB3	1:C:361:GLN:NE2	2.35	0.42
1:F:367:GLU:OE2	1:F:368:LYS:HG2	2.20	0.42
1:F:438:GLU:CD	2:F2:33:ARG:HH22	2.28	0.42
1:K:367:GLU:OE2	1:K:368:LYS:HG2	2.20	0.42
1:M:95:ASP:OD2	1:M:176:SER:OG	2.36	0.42
1:O:364:SER:HB3	1:d:361:GLN:NE2	2.34	0.42
1:P:47:TYR:HB3	1:P:401:VAL:HB	2.01	0.42
1:T:47:TYR:HB3	1:T:401:VAL:HB	2.01	0.42
1:X:47:TYR:HB3	1:X:401:VAL:HB	2.01	0.42
1:e:438:GLU:CD	2:e2:33:ARG:HH22	2.28	0.42
1:g:361:GLN:NE2	1:1:364:SER:HB3	2.35	0.42
1:g:391:LYS:HE3	1:g:391:LYS:HB2	1.82	0.42
1:i:391:LYS:HE3	1:i:391:LYS:HB2	1.82	0.42
1:j:47:TYR:HB3	1:j:401:VAL:HB	2.01	0.42
1:j:391:LYS:HE3	1:j:391:LYS:HB2	1.82	0.42
1:l:47:TYR:HB3	1:l:401:VAL:HB	2.01	0.42
1:q:553:ILE:HD12	1:q:553:ILE:HA	1.89	0.42
1:r:12:VAL:CG1	1:r:13:HIS:H	2.33	0.42
1:u:367:GLU:OE2	1:u:368:LYS:HG2	2.20	0.42
1:y:12:VAL:CG1	1:y:13:HIS:H	2.33	0.42
1:1:205:ASP:N	1:1:208:THR:OG1	2.45	0.42
1:1:437:SER:OG	1:5:305:ARG:NH2	2.38	0.42
1:2:12:VAL:CG1	1:2:13:HIS:H	2.33	0.42
1:2:95:ASP:OD2	1:2:176:SER:OG	2.36	0.42
1:3:47:TYR:HB3	1:3:401:VAL:HB	2.01	0.42
1:4:367:GLU:OE2	1:4:368:LYS:HG2	2.20	0.42
1:7:438:GLU:CD	2:72:33:ARG:HH22	2.28	0.42
1:B:180:GLN:O	1:B:193:LEU:HD22	2.20	0.42
1:B:410:THR:HG23	1:B:492:ALA:HA	2.00	0.42
1:B:437:SER:OG	1:H:305:ARG:NH2	2.38	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:12:VAL:CG1	1:F:13:HIS:H	2.33	0.42
1:G:95:ASP:OD2	1:G:176:SER:OG	2.36	0.42
1:G:367:GLU:OE2	1:G:368:LYS:HG2	2.20	0.42
1:I:17:MET:HG2	1:I:19:LYS:N	2.23	0.42
1:L:367:GLU:OE2	1:L:368:LYS:HG2	2.19	0.42
1:M:47:TYR:HB3	1:M:401:VAL:HB	2.01	0.42
1:O:47:TYR:HB3	1:O:401:VAL:HB	2.01	0.42
1:P:553:ILE:HD12	1:P:553:ILE:HA	1.89	0.42
1:Q:367:GLU:OE2	1:Q:368:LYS:HG2	2.20	0.42
1:V:367:GLU:OE2	1:V:368:LYS:HG2	2.20	0.42
1:Y:438:GLU:CD	2:Y2:33:ARG:HH22	2.28	0.42
1:a:47:TYR:HB3	1:a:401:VAL:HB	2.01	0.42
1:c:438:GLU:CD	2:c2:33:ARG:HH22	2.28	0.42
1:e:81:ASP:OD2	1:e:406:ARG:NH2	2.50	0.42
1:h:226:GLY:O	1:w:293:LEU:N	2.36	0.42
1:h:438:GLU:CD	2:h2:33:ARG:HH22	2.28	0.42
1:k:367:GLU:OE2	1:k:368:LYS:HG2	2.19	0.42
1:u:12:VAL:CG1	1:u:13:HIS:H	2.33	0.42
1:v:12:VAL:CG1	1:v:13:HIS:H	2.33	0.42
1:x:367:GLU:OE2	1:x:368:LYS:HG2	2.20	0.42
1:1:180:GLN:O	1:1:193:LEU:HD22	2.20	0.42
1:1:410:THR:HG23	1:1:492:ALA:HA	2.00	0.42
1:1:438:GLU:CD	2:12:33:ARG:HH22	2.28	0.42
1:3:293:LEU:N	1:7:226:GLY:O	2.35	0.42
1:6:355:LEU:O	1:6:379:SER:OG	2.29	0.42
1:8:12:VAL:CG1	1:8:13:HIS:H	2.33	0.42
1:B:438:GLU:CD	2:9:33:ARG:HH22	2.28	0.42
1:D:180:GLN:O	1:D:193:LEU:HD22	2.20	0.42
1:E:47:TYR:HB3	1:E:401:VAL:HB	2.01	0.42
1:H:438:GLU:CD	2:H2:33:ARG:HH22	2.28	0.42
1:I:12:VAL:CG1	1:I:13:HIS:H	2.33	0.42
1:I:180:GLN:O	1:I:193:LEU:HD22	2.20	0.42
1:I:361:GLN:NE2	1:J:364:SER:HB3	2.34	0.42
1:J:367:GLU:OE2	1:J:368:LYS:HG2	2.20	0.42
1:N:437:SER:OG	1:d:305:ARG:NH2	2.38	0.42
1:O:180:GLN:O	1:O:193:LEU:HD22	2.20	0.42
1:S:81:ASP:OD2	1:S:406:ARG:NH2	2.50	0.42
1:S:180:GLN:O	1:S:193:LEU:HD22	2.20	0.42
1:T:438:GLU:CD	2:T2:33:ARG:HH22	2.28	0.42
1:Y:226:GLY:O	1:a:293:LEU:N	2.35	0.42
1:Y:305:ARG:NH2	1:2:437:SER:OG	2.38	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:a:226:GLY:O	1:2:293:LEU:N	2.34	0.42
1:a:367:GLU:OE2	1:a:368:LYS:HG2	2.20	0.42
1:c:12:VAL:CG1	1:c:13:HIS:H	2.33	0.42
1:c:17:MET:HG2	1:c:19:LYS:N	2.23	0.42
1:e:12:VAL:CG1	1:e:13:HIS:H	2.33	0.42
1:i:437:SER:OG	1:n:305:ARG:NH2	2.37	0.42
1:k:180:GLN:O	1:k:193:LEU:HD22	2.20	0.42
1:l:180:GLN:O	1:l:193:LEU:HD22	2.20	0.42
1:p:12:VAL:CG1	1:p:13:HIS:H	2.33	0.42
1:p:367:GLU:OE2	1:p:368:LYS:HG2	2.20	0.42
1:r:180:GLN:O	1:r:193:LEU:HD22	2.20	0.42
1:t:367:GLU:OE2	1:t:368:LYS:HG2	2.20	0.42
1:u:17:MET:HG2	1:u:19:LYS:N	2.22	0.42
1:u:95:ASP:OD2	1:u:176:SER:OG	2.36	0.42
1:u:180:GLN:O	1:u:193:LEU:HD22	2.20	0.42
1:u:391:LYS:HE3	1:u:391:LYS:HB2	1.82	0.42
1:v:364:SER:HB3	1:l:361:GLN:NE2	2.34	0.42
1:y:553:ILE:HD12	1:y:553:ILE:HA	1.89	0.42
1:z:367:GLU:OE2	1:z:368:LYS:HG2	2.20	0.42
1:3:438:GLU:CD	2:32:33:ARG:HH22	2.28	0.42
1:6:12:VAL:CG1	1:6:13:HIS:H	2.33	0.42
1:A:364:SER:HB3	1:B:361:GLN:NE2	2.34	0.42
1:B:491:PHE:O	1:B:512:ASN:HB3	2.20	0.42
1:D:367:GLU:OE2	1:D:368:LYS:HG2	2.20	0.42
1:D:391:LYS:HB2	1:D:391:LYS:HE3	1.82	0.42
1:F:180:GLN:O	1:F:193:LEU:HD22	2.20	0.42
1:F:491:PHE:O	1:F:512:ASN:HB3	2.20	0.42
1:J:95:ASP:OD2	1:J:176:SER:OG	2.36	0.42
1:M:438:GLU:CD	2:M2:33:ARG:HH22	2.28	0.42
1:Q:47:TYR:HB3	1:Q:401:VAL:HB	2.01	0.42
1:S:17:MET:HG2	1:S:19:LYS:N	2.22	0.42
1:V:12:VAL:CG1	1:V:13:HIS:H	2.33	0.42
1:Y:391:LYS:HE3	1:Y:391:LYS:HB2	1.82	0.42
1:Y:410:THR:HG23	1:Y:492:ALA:HA	2.00	0.42
1:a:437:SER:OG	1:2:305:ARG:NH2	2.38	0.42
1:a:438:GLU:CD	2:a2:33:ARG:HH22	2.28	0.42
1:d:491:PHE:O	1:d:512:ASN:HB3	2.20	0.42
1:h:47:TYR:HB3	1:h:401:VAL:HB	2.01	0.42
1:h:95:ASP:OD2	1:h:176:SER:OG	2.36	0.42
1:m:437:SER:OG	1:x:305:ARG:NH2	2.38	0.42
1:n:491:PHE:O	1:n:512:ASN:HB3	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:r:81:ASP:OD2	1:r:406:ARG:NH2	2.50	0.42
1:s:47:TYR:HB3	1:s:401:VAL:HB	2.01	0.42
1:u:361:GLN:NE2	1:2:364:SER:HB3	2.34	0.42
1:w:367:GLU:OE2	1:w:368:LYS:HG2	2.20	0.42
1:x:47:TYR:HB3	1:x:401:VAL:HB	2.01	0.42
1:y:491:PHE:O	1:y:512:ASN:HB3	2.20	0.42
1:1:226:GLY:O	1:5:293:LEU:N	2.34	0.42
1:1:491:PHE:O	1:1:512:ASN:HB3	2.20	0.42
1:2:367:GLU:OE2	1:2:368:LYS:HG2	2.20	0.42
1:3:367:GLU:OE2	1:3:368:LYS:HG2	2.20	0.42
1:6:438:GLU:CD	2:62:33:ARG:HH22	2.28	0.42
1:A:47:TYR:HB3	1:A:401:VAL:HB	2.01	0.42
1:D:12:VAL:CG1	1:D:13:HIS:H	2.33	0.42
1:E:367:GLU:OE2	1:E:368:LYS:HG2	2.20	0.42
1:H:81:ASP:OD2	1:H:406:ARG:NH2	2.50	0.42
1:H:491:PHE:O	1:H:512:ASN:HB3	2.20	0.42
1:I:438:GLU:CD	2:I2:33:ARG:HH22	2.28	0.42
1:J:305:ARG:NH2	1:3:437:SER:OG	2.38	0.42
1:J:361:GLN:NE2	1:a:364:SER:HB3	2.34	0.42
1:K:391:LYS:HB2	1:K:391:LYS:HE3	1.82	0.42
1:L:438:GLU:CD	2:L2:33:ARG:HH22	2.28	0.42
1:M:491:PHE:O	1:M:512:ASN:HB3	2.20	0.42
1:O:361:GLN:NE2	1:P:364:SER:HB3	2.35	0.42
1:U:47:TYR:HB3	1:U:401:VAL:HB	2.01	0.42
1:W:438:GLU:CD	2:W2:33:ARG:HH22	2.28	0.42
1:Y:180:GLN:O	1:Y:193:LEU:HD22	2.20	0.42
1:Y:491:PHE:O	1:Y:512:ASN:HB3	2.20	0.42
1:a:81:ASP:OD2	1:a:406:ARG:NH2	2.50	0.42
1:b:47:TYR:HB3	1:b:401:VAL:HB	2.01	0.42
1:d:367:GLU:OE2	1:d:368:LYS:HG2	2.20	0.42
1:f:47:TYR:HB3	1:f:401:VAL:HB	2.01	0.42
1:f:180:GLN:O	1:f:193:LEU:HD22	2.20	0.42
1:m:438:GLU:CD	2:m2:33:ARG:HH22	2.28	0.42
1:n:367:GLU:OE2	1:n:368:LYS:HG2	2.20	0.42
1:n:438:GLU:CD	2:n2:33:ARG:HH22	2.28	0.42
1:q:12:VAL:CG1	1:q:13:HIS:H	2.33	0.42
1:t:12:VAL:CG1	1:t:13:HIS:H	2.33	0.42
1:t:81:ASP:OD2	1:t:406:ARG:NH2	2.50	0.42
1:t:95:ASP:OD2	1:t:176:SER:OG	2.36	0.42
1:t:491:PHE:O	1:t:512:ASN:HB3	2.20	0.42
1:w:180:GLN:O	1:w:193:LEU:HD22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:y:180:GLN:O	1:y:193:LEU:HD22	2.20	0.42
1:y:437:SER:OG	1:1:305:ARG:NH2	2.38	0.42
1:z:12:VAL:CG1	1:z:13:HIS:H	2.33	0.42
1:1:17:MET:HG2	1:1:19:LYS:N	2.23	0.42
1:5:81:ASP:OD2	1:5:406:ARG:NH2	2.50	0.42
1:5:438:GLU:CD	2:52:33:ARG:HH22	2.28	0.42
1:5:491:PHE:O	1:5:512:ASN:HB3	2.20	0.42
1:7:81:ASP:OD2	1:7:406:ARG:NH2	2.50	0.42
1:7:180:GLN:O	1:7:193:LEU:HD22	2.20	0.42
1:A:435:ASN:HB3	1:B:549:GLY:O	2.20	0.42
1:G:361:GLN:NE2	1:W:364:SER:HB3	2.34	0.42
1:G:438:GLU:CD	2:G2:33:ARG:HH22	2.27	0.42
1:G:491:PHE:O	1:G:512:ASN:HB3	2.20	0.42
1:I:491:PHE:O	1:I:512:ASN:HB3	2.20	0.42
1:K:180:GLN:O	1:K:193:LEU:HD22	2.20	0.42
1:K:491:PHE:O	1:K:512:ASN:HB3	2.20	0.42
1:L:12:VAL:CG1	1:L:13:HIS:H	2.33	0.42
1:M:180:GLN:O	1:M:193:LEU:HD22	2.20	0.42
1:N:367:GLU:OE2	1:N:368:LYS:HG2	2.20	0.42
1:Q:438:GLU:CD	2:Q2:33:ARG:HH22	2.28	0.42
1:Q:491:PHE:O	1:Q:512:ASN:HB3	2.20	0.42
1:R:12:VAL:CG1	1:R:13:HIS:H	2.33	0.42
1:R:553:ILE:HD12	1:R:553:ILE:HA	1.89	0.42
1:W:12:VAL:CG1	1:W:13:HIS:H	2.33	0.42
1:W:355:LEU:O	1:W:379:SER:OG	2.29	0.42
1:W:367:GLU:OE2	1:W:368:LYS:HG2	2.20	0.42
1:X:81:ASP:OD2	1:X:406:ARG:NH2	2.50	0.42
1:Z:180:GLN:O	1:Z:193:LEU:HD22	2.20	0.42
1:a:205:ASP:N	1:a:208:THR:OG1	2.45	0.42
1:b:180:GLN:O	1:b:193:LEU:HD22	2.20	0.42
1:b:438:GLU:CD	2:b2:33:ARG:HH22	2.28	0.42
1:e:17:MET:HG2	1:e:19:LYS:N	2.23	0.42
1:g:95:ASP:OD2	1:g:176:SER:OG	2.36	0.42
1:h:361:GLN:NE2	1:i:364:SER:HB3	2.35	0.42
1:h:491:PHE:O	1:h:512:ASN:HB3	2.20	0.42
1:j:364:SER:HB3	1:l:361:GLN:NE2	2.35	0.42
1:k:12:VAL:CG1	1:k:13:HIS:H	2.33	0.42
1:o:81:ASP:OD2	1:o:406:ARG:NH2	2.50	0.42
1:p:180:GLN:O	1:p:193:LEU:HD22	2.20	0.42
1:r:205:ASP:N	1:r:208:THR:OG1	2.45	0.42
1:t:438:GLU:CD	2:t2:33:ARG:HH22	2.28	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:u:438:GLU:CD	2:u:2:33:ARG:HH22	2.28	0.42
1:u:491:PHE:O	1:u:512:ASN:HB3	2.20	0.42
1:v:47:TYR:HB3	1:v:401:VAL:HB	2.01	0.42
1:w:12:VAL:CG1	1:w:13:HIS:H	2.33	0.42
1:x:180:GLN:O	1:x:193:LEU:HD22	2.20	0.42
1:x:491:PHE:O	1:x:512:ASN:HB3	2.20	0.42
1:z:491:PHE:O	1:z:512:ASN:HB3	2.20	0.42
1:1:367:GLU:OE2	1:1:368:LYS:HG2	2.20	0.42
1:2:17:MET:HG2	1:2:19:LYS:N	2.22	0.42
1:2:361:GLN:NE2	1:3:364:SER:HB3	2.34	0.42
1:4:491:PHE:O	1:4:512:ASN:HB3	2.20	0.42
1:6:367:GLU:OE2	1:6:368:LYS:HG2	2.20	0.42
1:7:410:THR:HG23	1:7:492:ALA:HA	2.00	0.42
1:7:491:PHE:O	1:7:512:ASN:HB3	2.20	0.42
1:8:47:TYR:HB3	1:8:401:VAL:HB	2.01	0.42
1:C:12:VAL:CG1	1:C:13:HIS:H	2.33	0.41
1:C:95:ASP:OD2	1:C:176:SER:OG	2.36	0.41
1:C:391:LYS:HE3	1:C:391:LYS:HB2	1.82	0.41
1:D:438:GLU:CD	2:D:2:33:ARG:HH22	2.28	0.41
1:D:491:PHE:O	1:D:512:ASN:HB3	2.20	0.41
1:E:180:GLN:O	1:E:193:LEU:HD22	2.20	0.41
1:F:361:GLN:NE2	1:G:364:SER:HB3	2.35	0.41
1:G:12:VAL:CG1	1:G:13:HIS:H	2.33	0.41
1:J:17:MET:HG2	1:J:19:LYS:N	2.22	0.41
1:L:491:PHE:O	1:L:512:ASN:HB3	2.20	0.41
1:M:361:GLN:NE2	1:N:364:SER:HB3	2.35	0.41
1:Q:180:GLN:O	1:Q:193:LEU:HD22	2.20	0.41
1:X:367:GLU:OE2	1:X:368:LYS:HG2	2.20	0.41
1:Z:491:PHE:O	1:Z:512:ASN:HB3	2.20	0.41
1:c:180:GLN:O	1:c:193:LEU:HD22	2.20	0.41
1:d:438:GLU:CD	2:d:2:33:ARG:HH22	2.28	0.41
1:e:180:GLN:O	1:e:193:LEU:HD22	2.20	0.41
1:e:491:PHE:O	1:e:512:ASN:HB3	2.20	0.41
1:f:438:GLU:CD	2:f:2:33:ARG:HH22	2.28	0.41
1:g:12:VAL:CG1	1:g:13:HIS:H	2.33	0.41
1:i:12:VAL:CG1	1:i:13:HIS:H	2.33	0.41
1:i:367:GLU:OE2	1:i:368:LYS:HG2	2.20	0.41
1:j:146:LYS:HE3	1:x:421:ARG:O	2.20	0.41
1:k:438:GLU:CD	2:k:2:33:ARG:HH22	2.28	0.41
1:k:491:PHE:O	1:k:512:ASN:HB3	2.20	0.41
1:p:410:THR:HG23	1:p:492:ALA:HA	2.00	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:s:367:GLU:OE2	1:s:368:LYS:HG2	2.20	0.41
1:w:47:TYR:HB3	1:w:401:VAL:HB	2.01	0.41
1:x:438:GLU:CD	2:x2:33:ARG:HH22	2.28	0.41
1:z:438:GLU:CD	2:z2:33:ARG:HH22	2.28	0.41
1:3:81:ASP:OD2	1:3:406:ARG:NH2	2.50	0.41
1:3:180:GLN:O	1:3:193:LEU:HD22	2.20	0.41
1:4:180:GLN:O	1:4:193:LEU:HD22	2.20	0.41
1:4:438:GLU:CD	2:42:33:ARG:HH22	2.27	0.41
1:8:180:GLN:O	1:8:193:LEU:HD22	2.20	0.41
1:8:491:PHE:O	1:8:512:ASN:HB3	2.20	0.41
1:A:549:GLY:O	1:E:435:ASN:HB3	2.20	0.41
1:B:216:LYS:NZ	1:R:107:TRP:CE3	2.80	0.41
1:B:226:GLY:O	1:H:293:LEU:N	2.34	0.41
1:B:367:GLU:OE2	1:B:368:LYS:HG2	2.20	0.41
1:B:435:ASN:HB3	1:C:549:GLY:O	2.20	0.41
1:K:47:TYR:HB3	1:K:401:VAL:HB	2.01	0.41
1:O:17:MET:HG2	1:O:19:LYS:N	2.22	0.41
1:P:146:LYS:HE3	1:Q:421:ARG:O	2.21	0.41
1:Q:12:VAL:CG1	1:Q:13:HIS:H	2.33	0.41
1:R:367:GLU:OE2	1:R:368:LYS:HG2	2.20	0.41
1:S:438:GLU:CD	2:S2:33:ARG:HH22	2.28	0.41
1:U:12:VAL:CG1	1:U:13:HIS:H	2.33	0.41
1:U:367:GLU:OE2	1:U:368:LYS:HG2	2.20	0.41
1:V:180:GLN:O	1:V:193:LEU:HD22	2.20	0.41
1:W:17:MET:HG2	1:W:19:LYS:N	2.23	0.41
1:W:491:PHE:O	1:W:512:ASN:HB3	2.20	0.41
1:Y:81:ASP:OD2	1:Y:406:ARG:NH2	2.50	0.41
1:Z:47:TYR:HB3	1:Z:401:VAL:HB	2.01	0.41
1:Z:81:ASP:OD2	1:Z:406:ARG:NH2	2.50	0.41
1:Z:438:GLU:CD	2:Z2:33:ARG:HH22	2.27	0.41
1:a:180:GLN:O	1:a:193:LEU:HD22	2.20	0.41
1:a:491:PHE:O	1:a:512:ASN:HB3	2.20	0.41
1:c:491:PHE:O	1:c:512:ASN:HB3	2.20	0.41
1:g:367:GLU:OE2	1:g:368:LYS:HG2	2.20	0.41
1:h:180:GLN:O	1:h:193:LEU:HD22	2.20	0.41
1:l:491:PHE:O	1:l:512:ASN:HB3	2.20	0.41
1:m:549:GLY:O	1:s:435:ASN:HB3	2.20	0.41
1:o:367:GLU:OE2	1:o:368:LYS:HG2	2.20	0.41
1:p:47:TYR:HB3	1:p:401:VAL:HB	2.01	0.41
1:r:438:GLU:CD	2:r2:33:ARG:HH22	2.28	0.41
1:v:361:GLN:NE2	1:w:364:SER:HB3	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:v:438:GLU:CD	2:v:2:33:ARG:HH22	2.28	0.41
1:4:47:TYR:HB3	1:4:401:VAL:HB	2.01	0.41
1:6:491:PHE:O	1:6:512:ASN:HB3	2.20	0.41
1:C:90:ARG:NH1	1:C:342:GLN:HE21	2.18	0.41
1:C:367:GLU:OE2	1:C:368:LYS:HG2	2.20	0.41
1:E:12:VAL:CG1	1:E:13:HIS:H	2.33	0.41
1:F:553:ILE:HD12	1:F:553:ILE:HA	1.89	0.41
1:G:81:ASP:OD2	1:G:406:ARG:NH2	2.50	0.41
1:G:180:GLN:O	1:G:193:LEU:HD22	2.20	0.41
1:H:361:GLN:NE2	1:I:364:SER:HB3	2.34	0.41
1:J:293:LEU:N	1:3:226:GLY:O	2.34	0.41
1:N:12:VAL:CG1	1:N:13:HIS:H	2.33	0.41
1:Q:305:ARG:NH2	1:T:437:SER:OG	2.38	0.41
1:R:364:SER:HB3	1:V:361:GLN:NE2	2.35	0.41
1:V:47:TYR:HB3	1:V:401:VAL:HB	2.01	0.41
1:V:410:THR:HG23	1:V:492:ALA:HA	2.00	0.41
1:W:47:TYR:HB3	1:W:401:VAL:HB	2.01	0.41
1:X:361:GLN:NE2	1:Y:364:SER:HB3	2.35	0.41
1:d:355:LEU:O	1:d:379:SER:OG	2.29	0.41
1:g:90:ARG:NH1	1:g:342:GLN:HE21	2.18	0.41
1:g:549:GLY:O	1:l:435:ASN:HB3	2.20	0.41
1:h:293:LEU:N	1:l:226:GLY:O	2.34	0.41
1:i:81:ASP:OD2	1:i:406:ARG:NH2	2.50	0.41
1:l:367:GLU:OE2	1:l:368:LYS:HG2	2.20	0.41
1:n:355:LEU:O	1:n:379:SER:OG	2.29	0.41
1:o:361:GLN:NE2	1:7:364:SER:HB3	2.35	0.41
1:p:438:GLU:CD	2:p:2:33:ARG:HH22	2.28	0.41
1:q:367:GLU:OE2	1:q:368:LYS:HG2	2.20	0.41
1:t:180:GLN:O	1:t:193:LEU:HD22	2.20	0.41
1:v:180:GLN:O	1:v:193:LEU:HD22	2.20	0.41
1:1:553:ILE:HD12	1:1:553:ILE:HA	1.89	0.41
1:6:180:GLN:O	1:6:193:LEU:HD22	2.20	0.41
1:7:47:TYR:HB3	1:7:401:VAL:HB	2.01	0.41
1:7:391:LYS:HE3	1:7:391:LYS:HB2	1.82	0.41
1:8:81:ASP:OD2	1:8:406:ARG:NH2	2.50	0.41
1:A:361:GLN:NE2	1:E:364:SER:HB3	2.35	0.41
2:0:30:SER:O	2:0:36:ARG:HG2	2.21	0.41
1:B:47:TYR:HB3	1:B:401:VAL:HB	2.01	0.41
1:B:305:ARG:NH2	1:F:437:SER:OG	2.38	0.41
1:C:81:ASP:OD2	1:C:406:ARG:NH2	2.50	0.41
1:F:549:GLY:O	1:G:435:ASN:HB3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:180:GLN:O	1:H:193:LEU:HD22	2.20	0.41
1:J:47:TYR:HB3	1:J:401:VAL:HB	2.01	0.41
1:K:438:GLU:CD	2:K2:33:ARG:HH22	2.28	0.41
1:O:367:GLU:OE2	1:O:368:LYS:HG2	2.20	0.41
1:O:491:PHE:O	1:O:512:ASN:HB3	2.20	0.41
1:O:549:GLY:O	1:P:435:ASN:HB3	2.21	0.41
1:R:491:PHE:O	1:R:512:ASN:HB3	2.20	0.41
1:S:205:ASP:N	1:S:208:THR:OG1	2.45	0.41
1:S:491:PHE:O	1:S:512:ASN:HB3	2.20	0.41
1:T:12:VAL:CG1	1:T:13:HIS:H	2.33	0.41
1:T:549:GLY:O	1:U:435:ASN:HB3	2.20	0.41
1:U:146:LYS:HE3	1:e:421:ARG:O	2.21	0.41
1:V:81:ASP:OD2	1:V:406:ARG:NH2	2.50	0.41
1:V:491:PHE:O	1:V:512:ASN:HB3	2.20	0.41
1:W:180:GLN:O	1:W:193:LEU:HD22	2.20	0.41
1:Y:47:TYR:HB3	1:Y:401:VAL:HB	2.01	0.41
1:Y:95:ASP:OD2	1:Y:176:SER:OG	2.36	0.41
1:j:435:ASN:HB3	1:l:549:GLY:O	2.21	0.41
1:k:435:ASN:HB3	1:w:549:GLY:O	2.20	0.41
1:l:12:VAL:CG1	1:l:13:HIS:H	2.33	0.41
1:l:391:LYS:HE3	1:l:391:LYS:HB2	1.82	0.41
1:o:12:VAL:CG1	1:o:13:HIS:H	2.33	0.41
1:p:81:ASP:OD2	1:p:406:ARG:NH2	2.50	0.41
1:p:491:PHE:O	1:p:512:ASN:HB3	2.20	0.41
1:q:47:TYR:HB3	1:q:401:VAL:HB	2.01	0.41
1:q:107:TRP:CE3	1:1:216:LYS:NZ	2.80	0.41
1:s:12:VAL:CG1	1:s:13:HIS:H	2.33	0.41
1:s:437:SER:OG	1:6:305:ARG:NH2	2.38	0.41
1:t:361:GLN:NE2	1:6:364:SER:HB3	2.35	0.41
1:u:364:SER:HB3	1:5:361:GLN:NE2	2.34	0.41
1:v:435:ASN:HB3	1:1:549:GLY:O	2.21	0.41
1:v:549:GLY:O	1:w:435:ASN:HB3	2.21	0.41
1:x:12:VAL:CG1	1:x:13:HIS:H	2.33	0.41
1:2:180:GLN:O	1:2:193:LEU:HD22	2.20	0.41
1:3:205:ASP:N	1:3:208:THR:OG1	2.45	0.41
1:3:491:PHE:O	1:3:512:ASN:HB3	2.20	0.41
1:5:180:GLN:O	1:5:193:LEU:HD22	2.20	0.41
1:5:421:ARG:O	1:8:146:LYS:HE3	2.21	0.41
1:6:47:TYR:HB3	1:6:401:VAL:HB	2.01	0.41
1:8:438:GLU:CD	2:82:33:ARG:HH22	2.28	0.41
2:K2:30:SER:O	2:K2:36:ARG:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:m2:30:SER:O	2:m2:36:ARG:HG2	2.21	0.41
2:o2:30:SER:O	2:o2:36:ARG:HG2	2.21	0.41
2:v2:30:SER:O	2:v2:36:ARG:HG2	2.21	0.41
2:42:30:SER:O	2:42:36:ARG:HG2	2.21	0.41
1:A:180:GLN:O	1:A:193:LEU:HD22	2.20	0.41
1:G:47:TYR:HB3	1:G:401:VAL:HB	2.01	0.41
1:J:180:GLN:O	1:J:193:LEU:HD22	2.20	0.41
1:M:146:LYS:HE3	1:N:421:ARG:O	2.21	0.41
1:O:12:VAL:CG1	1:O:13:HIS:H	2.33	0.41
1:P:180:GLN:O	1:P:193:LEU:HD22	2.20	0.41
1:R:47:TYR:HB3	1:R:401:VAL:HB	2.01	0.41
1:R:180:GLN:O	1:R:193:LEU:HD22	2.20	0.41
1:U:180:GLN:O	1:U:193:LEU:HD22	2.20	0.41
1:U:437:SER:OG	1:W:305:ARG:NH2	2.38	0.41
1:V:421:ARG:O	1:W:146:LYS:HE3	2.20	0.41
1:V:438:GLU:CD	2:V2:33:ARG:HH22	2.28	0.41
1:a:90:ARG:NH1	1:a:342:GLN:HE21	2.18	0.41
1:b:491:PHE:O	1:b:512:ASN:HB3	2.20	0.41
1:d:180:GLN:O	1:d:193:LEU:HD22	2.20	0.41
1:j:180:GLN:O	1:j:193:LEU:HD22	2.20	0.41
1:o:438:GLU:CD	2:o2:33:ARG:HH22	2.28	0.41
1:p:361:GLN:NE2	1:q:364:SER:HB3	2.35	0.41
1:q:491:PHE:O	1:q:512:ASN:HB3	2.20	0.41
1:r:491:PHE:O	1:r:512:ASN:HB3	2.20	0.41
1:s:491:PHE:O	1:s:512:ASN:HB3	2.20	0.41
1:t:435:ASN:HB3	1:y:549:GLY:O	2.21	0.41
1:z:435:ASN:HB3	1:4:549:GLY:O	2.20	0.41
1:1:47:TYR:HB3	1:1:401:VAL:HB	2.01	0.41
1:3:90:ARG:NH1	1:3:342:GLN:HE21	2.18	0.41
1:4:391:LYS:HB2	1:4:391:LYS:HE3	1.82	0.41
1:6:17:MET:HG2	1:6:19:LYS:N	2.22	0.41
1:7:95:ASP:OD2	1:7:176:SER:OG	2.36	0.41
2:9:30:SER:O	2:9:36:ARG:HG2	2.21	0.41
2:O2:30:SER:O	2:O2:36:ARG:HG2	2.21	0.41
2:X2:30:SER:O	2:X2:36:ARG:HG2	2.21	0.41
2:Y2:30:SER:O	2:Y2:36:ARG:HG2	2.21	0.41
2:c2:30:SER:O	2:c2:36:ARG:HG2	2.21	0.41
2:12:30:SER:O	2:12:36:ARG:HG2	2.21	0.41
2:72:30:SER:O	2:72:36:ARG:HG2	2.21	0.41
1:A:367:GLU:OE2	1:A:368:LYS:HG2	2.20	0.41
1:D:435:ASN:HB3	1:E:549:GLY:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:421:ARG:O	1:Z:146:LYS:HE3	2.21	0.41
1:I:47:TYR:HB3	1:I:401:VAL:HB	2.01	0.41
1:K:549:GLY:O	1:L:435:ASN:HB3	2.21	0.41
1:M:90:ARG:NH1	1:M:342:GLN:HE21	2.18	0.41
1:M:216:LYS:NZ	1:d:107:TRP:CE3	2.80	0.41
1:N:47:TYR:HB3	1:N:401:VAL:HB	2.01	0.41
1:N:81:ASP:OD2	1:N:406:ARG:NH2	2.50	0.41
1:N:180:GLN:O	1:N:193:LEU:HD22	2.20	0.41
1:P:12:VAL:CG1	1:P:13:HIS:H	2.33	0.41
1:T:367:GLU:OE2	1:T:368:LYS:HG2	2.20	0.41
1:T:421:ARG:O	1:i:146:LYS:HE3	2.20	0.41
1:U:549:GLY:O	1:e:435:ASN:HB3	2.21	0.41
1:X:12:VAL:CG1	1:X:13:HIS:H	2.33	0.41
1:X:438:GLU:CD	2:X2:33:ARG:HH22	2.28	0.41
1:b:367:GLU:OE2	1:b:368:LYS:HG2	2.19	0.41
1:c:421:ARG:O	1:s:146:LYS:HE3	2.21	0.41
1:c:435:ASN:HB3	1:s:549:GLY:O	2.21	0.41
1:f:477:VAL:HG12	1:f:486:LEU:HG	2.03	0.41
1:f:491:PHE:O	1:f:512:ASN:HB3	2.20	0.41
1:g:81:ASP:OD2	1:g:406:ARG:NH2	2.50	0.41
1:g:421:ARG:O	1:k:146:LYS:HE3	2.20	0.41
1:i:47:TYR:HB3	1:i:401:VAL:HB	2.01	0.41
1:i:180:GLN:O	1:i:193:LEU:HD22	2.20	0.41
1:j:421:ARG:O	1:l:146:LYS:HE3	2.21	0.41
1:q:180:GLN:O	1:q:193:LEU:HD22	2.20	0.41
1:r:477:VAL:HG12	1:r:486:LEU:HG	2.03	0.41
1:s:180:GLN:O	1:s:193:LEU:HD22	2.20	0.41
1:t:47:TYR:HB3	1:t:401:VAL:HB	2.01	0.41
1:u:47:TYR:HB3	1:u:401:VAL:HB	2.01	0.41
1:v:367:GLU:OE2	1:v:368:LYS:HG2	2.20	0.41
1:w:491:PHE:O	1:w:512:ASN:HB3	2.20	0.41
1:z:180:GLN:O	1:z:193:LEU:HD22	2.20	0.41
1:2:47:TYR:HB3	1:2:401:VAL:HB	2.01	0.41
2:T2:30:SER:O	2:T2:36:ARG:HG2	2.21	0.41
2:b2:30:SER:O	2:b2:36:ARG:HG2	2.21	0.41
2:e2:30:SER:O	2:e2:36:ARG:HG2	2.21	0.41
2:h2:30:SER:O	2:h2:36:ARG:HG2	2.21	0.41
2:l2:30:SER:O	2:l2:36:ARG:HG2	2.21	0.41
1:C:421:ARG:O	1:D:146:LYS:HE3	2.20	0.41
1:D:47:TYR:HB3	1:D:401:VAL:HB	2.01	0.41
1:E:491:PHE:O	1:E:512:ASN:HB3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:K:146:LYS:HE3	1:L:421:ARG:O	2.21	0.41
1:L:180:GLN:O	1:L:193:LEU:HD22	2.20	0.41
1:N:549:GLY:O	1:m:435:ASN:HB3	2.21	0.41
1:O:146:LYS:HE3	1:P:421:ARG:O	2.21	0.41
1:R:81:ASP:OD2	1:R:406:ARG:NH2	2.50	0.41
1:S:367:GLU:OE2	1:S:368:LYS:HG2	2.20	0.41
1:T:435:ASN:HB3	1:i:549:GLY:O	2.21	0.41
1:T:491:PHE:O	1:T:512:ASN:HB3	2.20	0.41
1:U:491:PHE:O	1:U:512:ASN:HB3	2.20	0.41
1:X:435:ASN:HB3	1:f:549:GLY:O	2.21	0.41
1:Z:421:ARG:O	1:a:146:LYS:HE3	2.21	0.41
1:Z:435:ASN:HB3	1:a:549:GLY:O	2.21	0.41
1:b:477:VAL:HG12	1:b:486:LEU:HG	2.03	0.41
1:b:549:GLY:O	1:o:435:ASN:HB3	2.21	0.41
1:f:367:GLU:OE2	1:f:368:LYS:HG2	2.19	0.41
1:h:90:ARG:NH1	1:h:342:GLN:HE21	2.18	0.41
1:j:12:VAL:CG1	1:j:13:HIS:H	2.33	0.41
1:k:47:TYR:HB3	1:k:401:VAL:HB	2.01	0.41
1:m:12:VAL:CG1	1:m:13:HIS:H	2.33	0.41
1:m:367:GLU:OE2	1:m:368:LYS:HG2	2.20	0.41
1:m:491:PHE:O	1:m:512:ASN:HB3	2.20	0.41
1:n:95:ASP:OD2	1:n:176:SER:OG	2.36	0.41
1:n:180:GLN:O	1:n:193:LEU:HD22	2.20	0.41
1:r:421:ARG:O	1:x:146:LYS:HE3	2.21	0.41
1:u:421:ARG:O	1:5:146:LYS:HE3	2.20	0.41
1:z:421:ARG:O	1:4:146:LYS:HE3	2.21	0.41
1:3:146:LYS:HE3	1:8:421:ARG:O	2.21	0.41
1:3:549:GLY:O	1:8:435:ASN:HB3	2.21	0.41
2:M2:30:SER:O	2:M2:36:ARG:HG2	2.21	0.41
2:f2:30:SER:O	2:f2:36:ARG:HG2	2.21	0.41
2:t2:30:SER:O	2:t2:36:ARG:HG2	2.21	0.41
1:B:553:ILE:HD12	1:B:553:ILE:HA	1.89	0.41
1:G:226:GLY:O	1:Z:293:LEU:N	2.35	0.41
1:H:146:LYS:HE3	1:I:421:ARG:O	2.20	0.41
1:H:391:LYS:HB2	1:H:391:LYS:HE3	1.82	0.41
1:N:146:LYS:HE3	1:m:421:ARG:O	2.20	0.41
1:N:491:PHE:O	1:N:512:ASN:HB3	2.20	0.41
1:Q:146:LYS:HE3	1:S:421:ARG:O	2.21	0.41
1:Q:477:VAL:HG12	1:Q:486:LEU:HG	2.03	0.41
1:S:477:VAL:HG12	1:S:486:LEU:HG	2.03	0.41
1:T:146:LYS:HE3	1:U:421:ARG:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:U:477:VAL:HG12	1:U:486:LEU:HG	2.03	0.41
1:X:491:PHE:O	1:X:512:ASN:HB3	2.20	0.41
1:Y:12:VAL:CG1	1:Y:13:HIS:H	2.33	0.41
1:d:95:ASP:OD2	1:d:176:SER:OG	2.36	0.41
1:h:529:ARG:HG2	1:i:478:MET:HE2	2.03	0.41
1:i:355:LEU:O	1:i:379:SER:OG	2.29	0.41
1:l:17:MET:HG2	1:l:19:LYS:N	2.23	0.41
1:l:90:ARG:NH1	1:l:342:GLN:HE21	2.18	0.41
1:l:421:ARG:O	1:n:146:LYS:HE3	2.21	0.41
1:p:421:ARG:O	1:6:146:LYS:HE3	2.21	0.41
1:s:477:VAL:HG12	1:s:486:LEU:HG	2.03	0.41
1:u:549:GLY:O	1:2:435:ASN:HB3	2.20	0.41
1:v:81:ASP:OD2	1:v:406:ARG:NH2	2.50	0.41
1:2:491:PHE:O	1:2:512:ASN:HB3	2.20	0.41
1:3:12:VAL:CG1	1:3:13:HIS:H	2.33	0.41
2:G2:30:SER:O	2:G2:36:ARG:HG2	2.21	0.41
2:I2:30:SER:O	2:I2:36:ARG:HG2	2.21	0.41
2:R2:30:SER:O	2:R2:36:ARG:HG2	2.21	0.41
2:x2:30:SER:O	2:x2:36:ARG:HG2	2.21	0.41
2:52:30:SER:O	2:52:36:ARG:HG2	2.21	0.41
1:A:81:ASP:OD2	1:A:406:ARG:NH2	2.50	0.41
1:A:491:PHE:O	1:A:512:ASN:HB3	2.20	0.41
1:C:491:PHE:O	1:C:512:ASN:HB3	2.20	0.41
1:F:477:VAL:HG12	1:F:486:LEU:HG	2.03	0.41
1:H:477:VAL:HG12	1:H:486:LEU:HG	2.03	0.41
1:I:549:GLY:O	1:J:435:ASN:HB3	2.20	0.41
1:J:491:PHE:O	1:J:512:ASN:HB3	2.20	0.41
1:J:549:GLY:O	1:a:435:ASN:HB3	2.21	0.41
1:K:12:VAL:CG1	1:K:13:HIS:H	2.33	0.41
1:K:421:ARG:O	1:7:146:LYS:HE3	2.20	0.41
1:L:146:LYS:HE3	1:b:421:ARG:O	2.21	0.41
1:L:549:GLY:O	1:b:435:ASN:HB3	2.21	0.41
1:M:421:ARG:O	1:c:146:LYS:HE3	2.21	0.41
1:N:355:LEU:O	1:N:379:SER:OG	2.29	0.41
1:N:438:GLU:CD	2:N2:33:ARG:HH22	2.28	0.41
1:N:477:VAL:HG12	1:N:486:LEU:HG	2.03	0.41
1:O:421:ARG:O	1:d:146:LYS:HE3	2.21	0.41
1:P:205:ASP:N	1:P:208:THR:OG1	2.45	0.41
1:P:367:GLU:OE2	1:P:368:LYS:HG2	2.20	0.41
1:P:477:VAL:HG12	1:P:486:LEU:HG	2.03	0.41
1:P:549:GLY:O	1:Q:435:ASN:HB3	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:S:549:GLY:O	1:d:435:ASN:HB3	2.21	0.41
1:T:180:GLN:O	1:T:193:LEU:HD22	2.20	0.41
1:V:95:ASP:OD2	1:V:176:SER:OG	2.36	0.41
1:X:17:MET:HG2	1:X:19:LYS:N	2.23	0.41
1:X:146:LYS:HE3	1:Y:421:ARG:O	2.21	0.41
1:X:549:GLY:O	1:Y:435:ASN:HB3	2.21	0.41
1:Y:146:LYS:HE3	1:4:421:ARG:O	2.20	0.41
1:Y:477:VAL:HG12	1:Y:486:LEU:HG	2.03	0.41
1:a:12:VAL:CG1	1:a:13:HIS:H	2.33	0.41
1:d:477:VAL:HG12	1:d:486:LEU:HG	2.03	0.41
1:i:438:GLU:CD	2:i2:33:ARG:HH22	2.27	0.41
1:i:477:VAL:HG12	1:i:486:LEU:HG	2.03	0.41
1:i:491:PHE:O	1:i:512:ASN:HB3	2.20	0.41
1:j:205:ASP:N	1:j:208:THR:OG1	2.45	0.41
1:j:367:GLU:OE2	1:j:368:LYS:HG2	2.20	0.41
1:j:549:GLY:O	1:x:435:ASN:HB3	2.21	0.41
1:k:293:LEU:N	1:z:226:GLY:O	2.34	0.41
1:l:477:VAL:HG12	1:l:486:LEU:HG	2.03	0.41
1:m:146:LYS:HE3	1:s:421:ARG:O	2.21	0.41
1:n:12:VAL:CG1	1:n:13:HIS:H	2.33	0.41
1:n:435:ASN:HB3	1:r:549:GLY:O	2.21	0.41
1:n:477:VAL:HG12	1:n:486:LEU:HG	2.03	0.41
1:o:17:MET:HG2	1:o:19:LYS:N	2.23	0.41
1:o:146:LYS:HE3	1:7:421:ARG:O	2.21	0.41
1:o:491:PHE:O	1:o:512:ASN:HB3	2.20	0.41
1:o:549:GLY:O	1:7:435:ASN:HB3	2.21	0.41
1:q:81:ASP:OD2	1:q:406:ARG:NH2	2.50	0.41
1:q:549:GLY:O	1:y:435:ASN:HB3	2.21	0.41
1:r:367:GLU:OE2	1:r:368:LYS:HG2	2.20	0.41
1:s:81:ASP:OD2	1:s:406:ARG:NH2	2.50	0.41
1:t:146:LYS:HE3	1:6:421:ARG:O	2.21	0.41
1:v:491:PHE:O	1:v:512:ASN:HB3	2.20	0.41
1:x:477:VAL:HG12	1:x:486:LEU:HG	2.03	0.41
1:y:477:VAL:HG12	1:y:486:LEU:HG	2.03	0.41
1:2:146:LYS:HE3	1:3:421:ARG:O	2.21	0.41
1:4:12:VAL:CG1	1:4:13:HIS:H	2.33	0.41
1:5:477:VAL:HG12	1:5:486:LEU:HG	2.03	0.41
2:H2:30:SER:O	2:H2:36:ARG:HG2	2.21	0.41
2:J2:30:SER:O	2:J2:36:ARG:HG2	2.21	0.41
2:L2:30:SER:O	2:L2:36:ARG:HG2	2.21	0.41
2:N2:30:SER:O	2:N2:36:ARG:HG2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Q2:30:SER:O	2:Q2:36:ARG:HG2	2.21	0.41
2:V2:30:SER:O	2:V2:36:ARG:HG2	2.21	0.41
2:q2:30:SER:O	2:q2:36:ARG:HG2	2.21	0.41
2:u2:30:SER:O	2:u2:36:ARG:HG2	2.21	0.41
2:z2:30:SER:O	2:z2:36:ARG:HG2	2.21	0.41
2:22:30:SER:O	2:22:36:ARG:HG2	2.21	0.41
1:F:435:ASN:HB3	1:R:549:GLY:O	2.21	0.41
1:G:146:LYS:HE3	1:W:421:ARG:O	2.21	0.41
1:J:146:LYS:HE3	1:a:421:ARG:O	2.21	0.41
1:M:435:ASN:HB3	1:c:549:GLY:O	2.21	0.41
1:O:435:ASN:HB3	1:d:549:GLY:O	2.21	0.41
1:O:477:VAL:HG12	1:O:486:LEU:HG	2.03	0.41
1:V:435:ASN:HB3	1:W:549:GLY:O	2.21	0.41
1:f:435:ASN:HB3	1:z:549:GLY:O	2.21	0.41
1:g:491:PHE:O	1:g:512:ASN:HB3	2.20	0.41
1:m:180:GLN:O	1:m:193:LEU:HD22	2.20	0.41
1:o:180:GLN:O	1:o:193:LEU:HD22	2.20	0.41
1:p:435:ASN:HB3	1:6:549:GLY:O	2.21	0.41
1:q:477:VAL:HG12	1:q:486:LEU:HG	2.03	0.41
1:u:81:ASP:OD2	1:u:406:ARG:NH2	2.50	0.41
1:2:549:GLY:O	1:3:435:ASN:HB3	2.21	0.41
1:7:12:VAL:CG1	1:7:13:HIS:H	2.33	0.41
2:P2:30:SER:O	2:P2:36:ARG:HG2	2.21	0.41
2:a2:30:SER:O	2:a2:36:ARG:HG2	2.21	0.41
2:y2:30:SER:O	2:y2:36:ARG:HG2	2.21	0.41
1:E:81:ASP:OD2	1:E:406:ARG:NH2	2.50	0.40
1:G:549:GLY:O	1:W:435:ASN:HB3	2.21	0.40
1:H:229:PRO:HG3	1:H:294:SER:H	1.87	0.40
1:H:435:ASN:HB3	1:Z:549:GLY:O	2.21	0.40
1:I:81:ASP:OD2	1:I:406:ARG:NH2	2.50	0.40
1:I:146:LYS:HE3	1:J:421:ARG:O	2.21	0.40
1:L:229:PRO:HG3	1:L:294:SER:H	1.87	0.40
1:M:549:GLY:O	1:N:435:ASN:HB3	2.21	0.40
1:O:391:LYS:HE3	1:O:391:LYS:HB2	1.82	0.40
1:Q:549:GLY:O	1:S:435:ASN:HB3	2.20	0.40
1:R:477:VAL:HG12	1:R:486:LEU:HG	2.03	0.40
1:S:95:ASP:OD2	1:S:176:SER:OG	2.36	0.40
1:U:81:ASP:OD2	1:U:406:ARG:NH2	2.50	0.40
1:X:180:GLN:O	1:X:193:LEU:HD22	2.20	0.40
1:Z:229:PRO:HG3	1:Z:294:SER:H	1.87	0.40
1:Z:477:VAL:HG12	1:Z:486:LEU:HG	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:d:12:VAL:CG1	1:d:13:HIS:H	2.33	0.40
1:j:477:VAL:HG12	1:j:486:LEU:HG	2.03	0.40
1:p:95:ASP:OD2	1:p:176:SER:OG	2.36	0.40
1:p:146:LYS:HE3	1:q:421:ARG:O	2.21	0.40
1:u:146:LYS:HE3	1:2:421:ARG:O	2.21	0.40
1:w:81:ASP:OD2	1:w:406:ARG:NH2	2.50	0.40
1:5:229:PRO:HG3	1:5:294:SER:H	1.87	0.40
1:5:435:ASN:HB3	1:8:549:GLY:O	2.21	0.40
1:7:477:VAL:HG12	1:7:486:LEU:HG	2.03	0.40
1:8:229:PRO:HG3	1:8:294:SER:H	1.87	0.40
1:8:477:VAL:HG12	1:8:486:LEU:HG	2.03	0.40
2:F2:30:SER:O	2:F2:36:ARG:HG2	2.21	0.40
2:i:2:30:SER:O	2:i:2:36:ARG:HG2	2.21	0.40
2:j:2:30:SER:O	2:j:2:36:ARG:HG2	2.21	0.40
2:p2:30:SER:O	2:p2:36:ARG:HG2	2.21	0.40
2:32:30:SER:O	2:32:36:ARG:HG2	2.21	0.40
1:C:477:VAL:HG12	1:C:486:LEU:HG	2.03	0.40
1:K:435:ASN:HB3	1:7:549:GLY:O	2.21	0.40
1:P:81:ASP:OD2	1:P:406:ARG:NH2	2.50	0.40
1:P:491:PHE:O	1:P:512:ASN:HB3	2.20	0.40
1:R:421:ARG:O	1:V:146:LYS:HE3	2.21	0.40
1:X:421:ARG:O	1:f:146:LYS:HE3	2.21	0.40
1:f:421:ARG:O	1:z:146:LYS:HE3	2.21	0.40
1:g:146:LYS:HE3	1:1:421:ARG:O	2.21	0.40
1:g:477:VAL:HG12	1:g:486:LEU:HG	2.03	0.40
1:l:435:ASN:HB3	1:n:549:GLY:O	2.21	0.40
1:r:95:ASP:OD2	1:r:176:SER:OG	2.36	0.40
1:w:391:LYS:HB2	1:w:391:LYS:HE3	1.82	0.40
1:z:229:PRO:HG3	1:z:294:SER:H	1.87	0.40
1:z:477:VAL:HG12	1:z:486:LEU:HG	2.03	0.40
2:g2:30:SER:O	2:g2:36:ARG:HG2	2.21	0.40
1:B:421:ARG:O	1:C:146:LYS:HE3	2.21	0.40
1:D:293:LEU:N	1:L:226:GLY:O	2.34	0.40
1:E:229:PRO:HG3	1:E:294:SER:H	1.87	0.40
1:F:107:TRP:CE3	1:Z:216:LYS:NZ	2.80	0.40
1:K:477:VAL:HG12	1:K:486:LEU:HG	2.03	0.40
1:L:477:VAL:HG12	1:L:486:LEU:HG	2.03	0.40
1:M:12:VAL:CG1	1:M:13:HIS:H	2.33	0.40
1:V:477:VAL:HG12	1:V:486:LEU:HG	2.03	0.40
1:Y:549:GLY:O	1:4:435:ASN:HB3	2.21	0.40
1:a:229:PRO:HG3	1:a:294:SER:H	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:b:146:LYS:HE3	1:o:421:ARG:O	2.21	0.40
1:b:229:PRO:HG3	1:b:294:SER:H	1.87	0.40
1:f:229:PRO:HG3	1:f:294:SER:H	1.87	0.40
1:j:491:PHE:O	1:j:512:ASN:HB3	2.20	0.40
1:p:549:GLY:O	1:q:435:ASN:HB3	2.20	0.40
1:r:435:ASN:HB3	1:x:549:GLY:O	2.21	0.40
1:t:549:GLY:O	1:6:435:ASN:HB3	2.21	0.40
2:C2:30:SER:O	2:C2:36:ARG:HG2	2.21	0.40
2:D2:30:SER:O	2:D2:36:ARG:HG2	2.21	0.40
2:S2:30:SER:O	2:S2:36:ARG:HG2	2.21	0.40
2:r2:30:SER:O	2:r2:36:ARG:HG2	2.21	0.40
1:A:48:GLN:HA	1:A:399:ILE:O	2.22	0.40
1:A:146:LYS:HE3	1:E:421:ARG:O	2.21	0.40
1:B:229:PRO:HG3	1:B:294:SER:H	1.87	0.40
1:C:107:TRP:CE3	1:H:216:LYS:NZ	2.80	0.40
1:D:229:PRO:HG3	1:D:294:SER:H	1.87	0.40
1:E:477:VAL:HG12	1:E:486:LEU:HG	2.03	0.40
1:R:435:ASN:HB3	1:V:549:GLY:O	2.20	0.40
1:S:226:GLY:O	1:i:293:LEU:N	2.34	0.40
1:V:229:PRO:HG3	1:V:294:SER:H	1.87	0.40
1:X:229:PRO:HG3	1:X:294:SER:H	1.87	0.40
1:g:435:ASN:HB3	1:k:549:GLY:O	2.21	0.40
1:p:477:VAL:HG12	1:p:486:LEU:HG	2.03	0.40
1:t:421:ARG:O	1:y:146:LYS:HE3	2.21	0.40
1:w:229:PRO:HG3	1:w:294:SER:H	1.87	0.40
1:x:81:ASP:OD2	1:x:406:ARG:NH2	2.50	0.40
1:z:90:ARG:NH1	1:z:342:GLN:HE21	2.18	0.40
1:1:229:PRO:HG3	1:1:294:SER:H	1.87	0.40
1:3:229:PRO:HG3	1:3:294:SER:H	1.87	0.40
1:4:477:VAL:HG12	1:4:486:LEU:HG	2.03	0.40
2:d2:30:SER:O	2:d2:36:ARG:HG2	2.21	0.40
1:C:229:PRO:HD2	1:C:293:LEU:HA	2.04	0.40
1:C:435:ASN:HB3	1:D:549:GLY:O	2.21	0.40
1:D:116:PRO:HG3	1:D:176:SER:HA	2.04	0.40
1:J:116:PRO:HG3	1:J:176:SER:HA	2.04	0.40
1:K:116:PRO:HG3	1:K:176:SER:HA	2.04	0.40
1:L:90:ARG:NH1	1:L:342:GLN:HE21	2.18	0.40
1:S:229:PRO:HD2	1:S:293:LEU:HA	2.04	0.40
1:W:437:SER:OG	1:f:305:ARG:NH2	2.38	0.40
1:Y:116:PRO:HG3	1:Y:176:SER:HA	2.04	0.40
1:a:116:PRO:HG3	1:a:176:SER:HA	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:g:107:TRP:CE3	1:5:216:LYS:NZ	2.80	0.40
1:g:180:GLN:O	1:g:193:LEU:HD22	2.20	0.40
1:h:12:VAL:CG1	1:h:13:HIS:H	2.33	0.40
1:k:229:PRO:HG3	1:k:294:SER:H	1.87	0.40
1:n:90:ARG:NH1	1:n:342:GLN:HE21	2.18	0.40
1:o:229:PRO:HG3	1:o:294:SER:H	1.87	0.40
1:p:229:PRO:HG3	1:p:294:SER:H	1.87	0.40
1:r:229:PRO:HD2	1:r:293:LEU:HA	2.04	0.40
1:v:48:GLN:HA	1:v:399:ILE:O	2.22	0.40
1:v:421:ARG:O	1:1:146:LYS:HE3	2.21	0.40
1:3:116:PRO:HG3	1:3:176:SER:HA	2.04	0.40
2:U2:30:SER:O	2:U2:36:ARG:HG2	2.21	0.40
2:W2:30:SER:O	2:W2:36:ARG:HG2	2.21	0.40
2:k2:30:SER:O	2:k2:36:ARG:HG2	2.21	0.40
2:62:30:SER:O	2:62:36:ARG:HG2	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

There are no protein backbone outliers to report in this entry.

5.3.2 Protein sidechains [i](#)

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

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

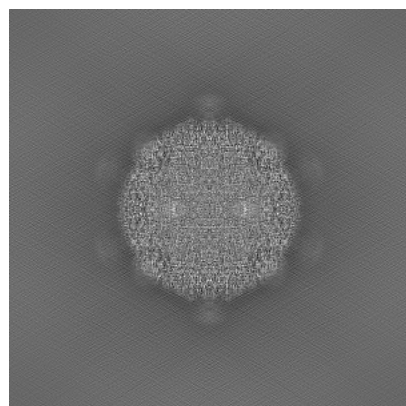
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-45583. These allow visual inspection of the internal detail of the map and identification of artifacts.

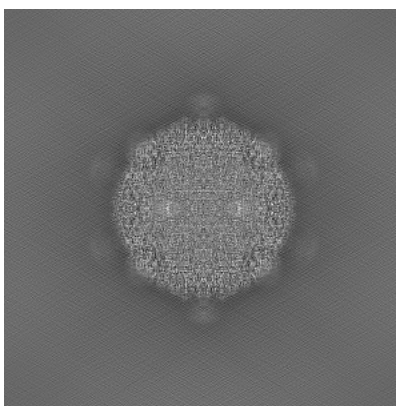
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

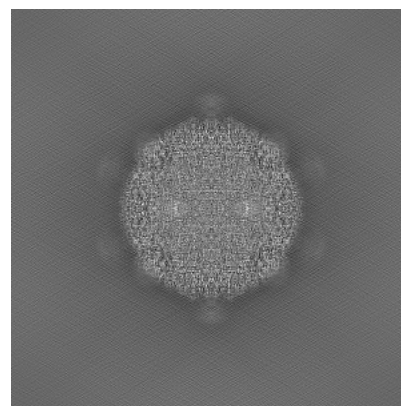
6.1.1 Primary map



X

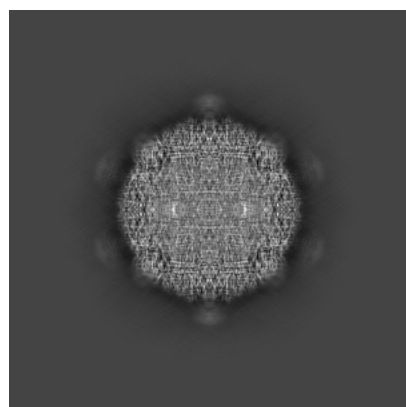


Y

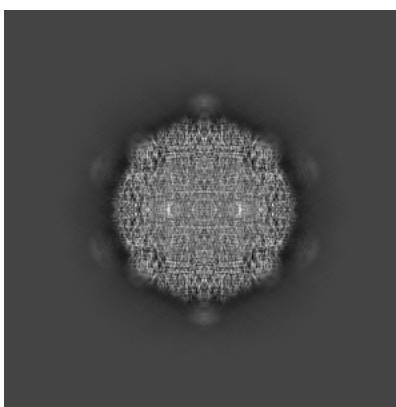


Z

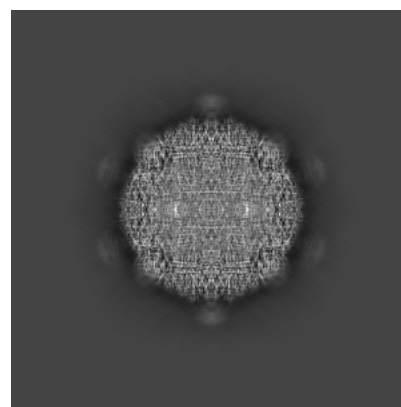
6.1.2 Raw map



X



Y

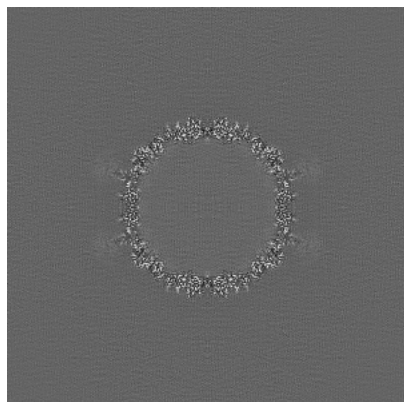


Z

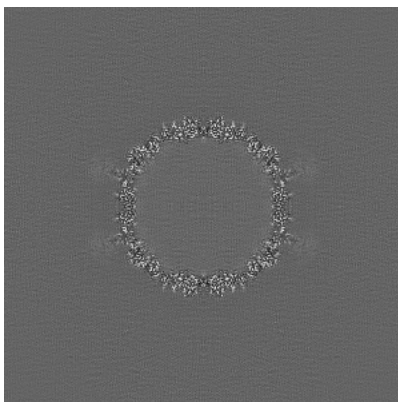
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

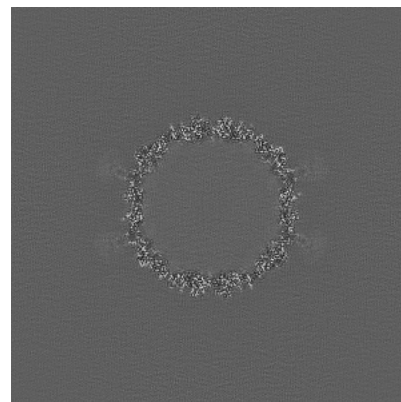
6.2.1 Primary map



X Index: 275

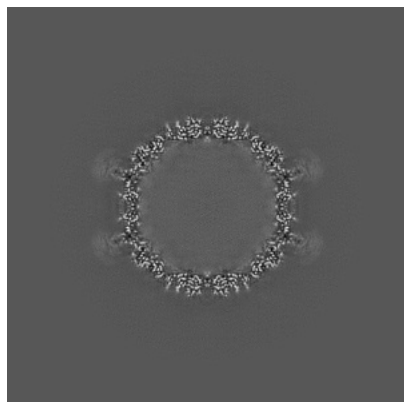


Y Index: 275

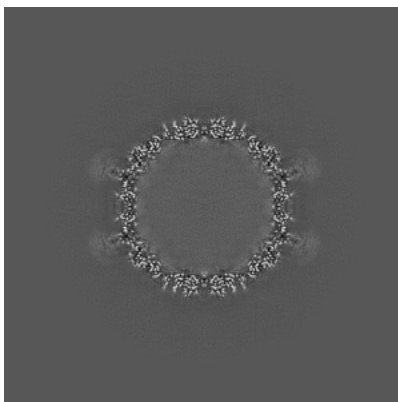


Z Index: 275

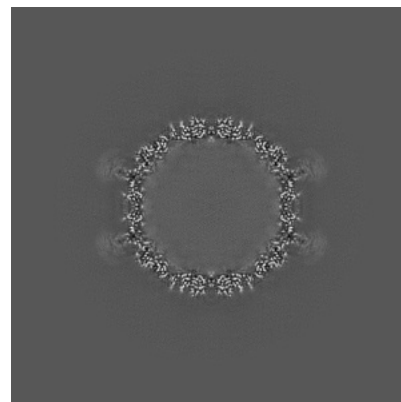
6.2.2 Raw map



X Index: 275



Y Index: 275

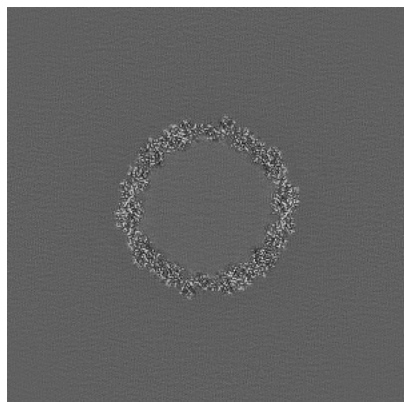


Z Index: 275

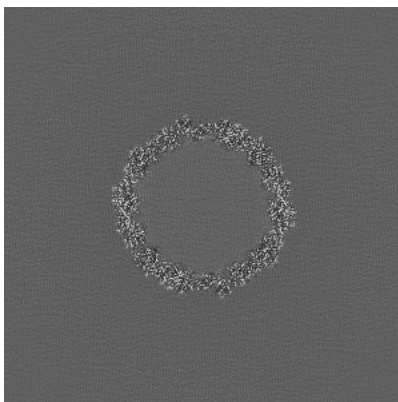
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

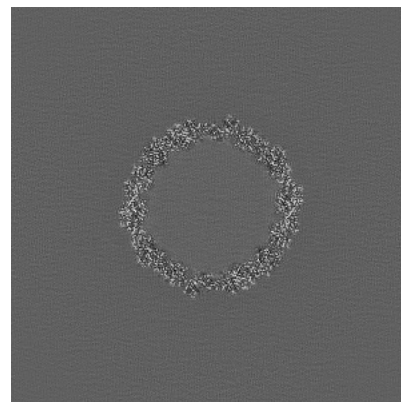
6.3.1 Primary map



X Index: 251

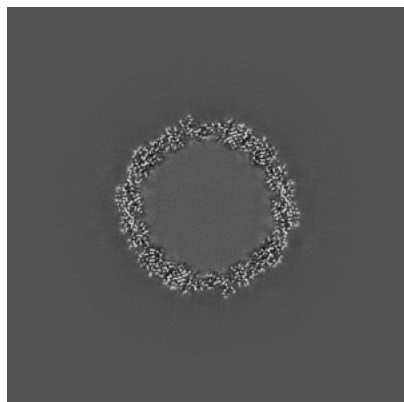


Y Index: 299

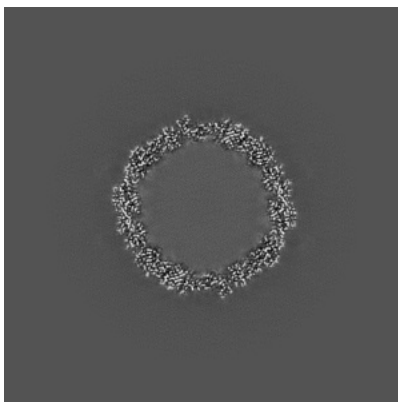


Z Index: 250

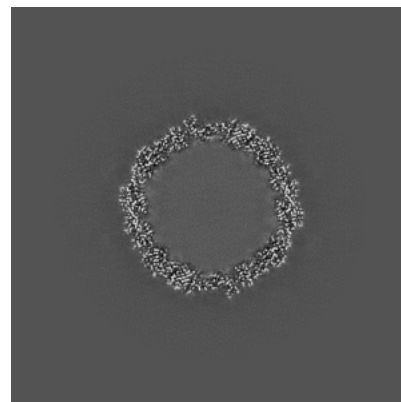
6.3.2 Raw map



X Index: 251



Y Index: 251

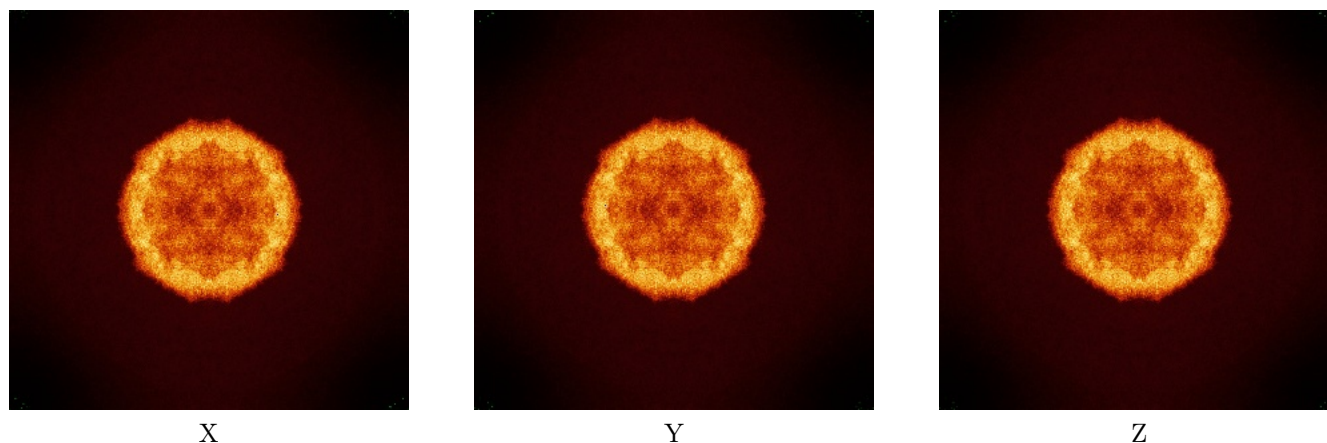


Z Index: 251

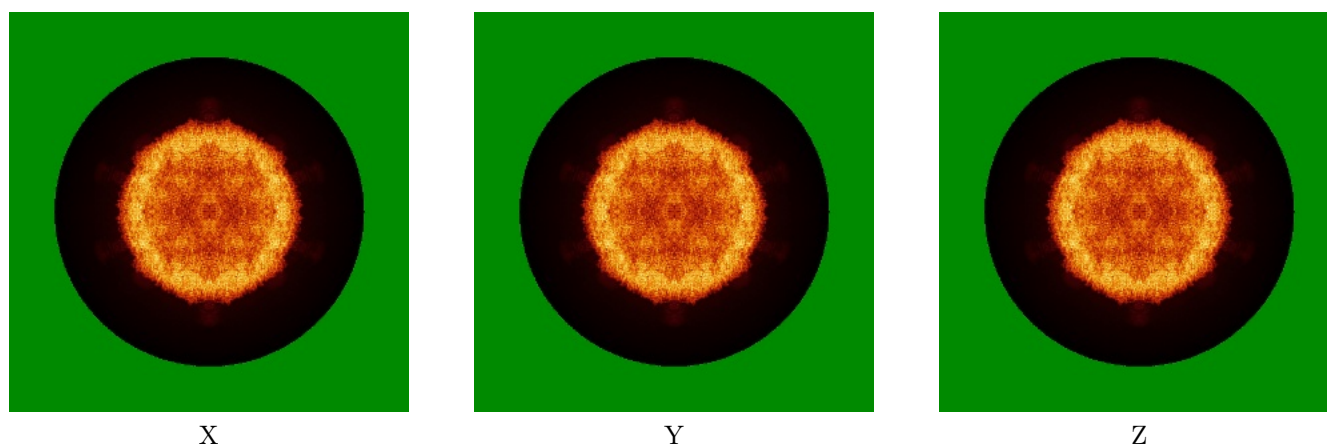
The images above show the largest variance slices of the map in three orthogonal directions.

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

6.4.1 Primary map



6.4.2 Raw map



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](#)

This section was not generated.

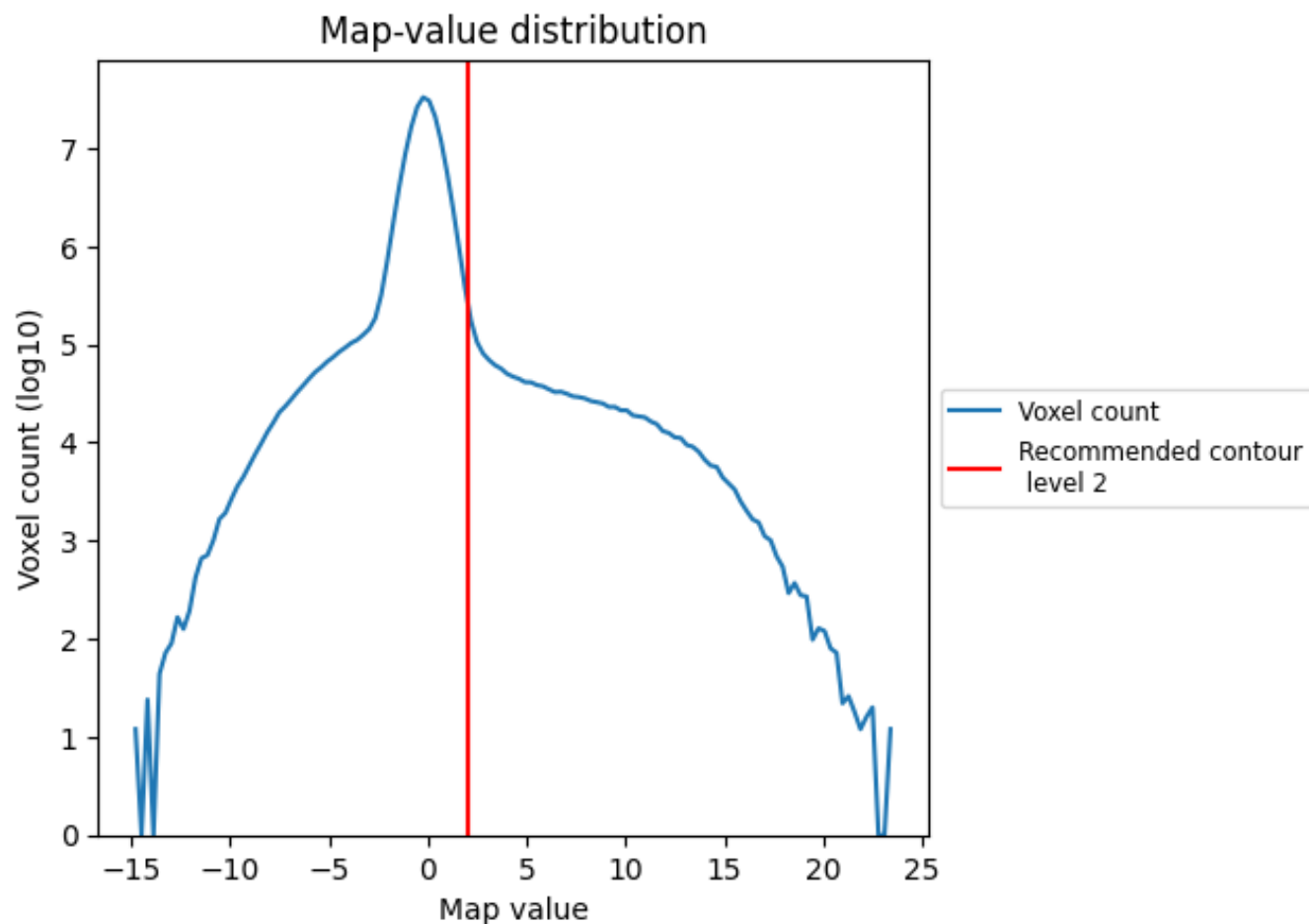
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

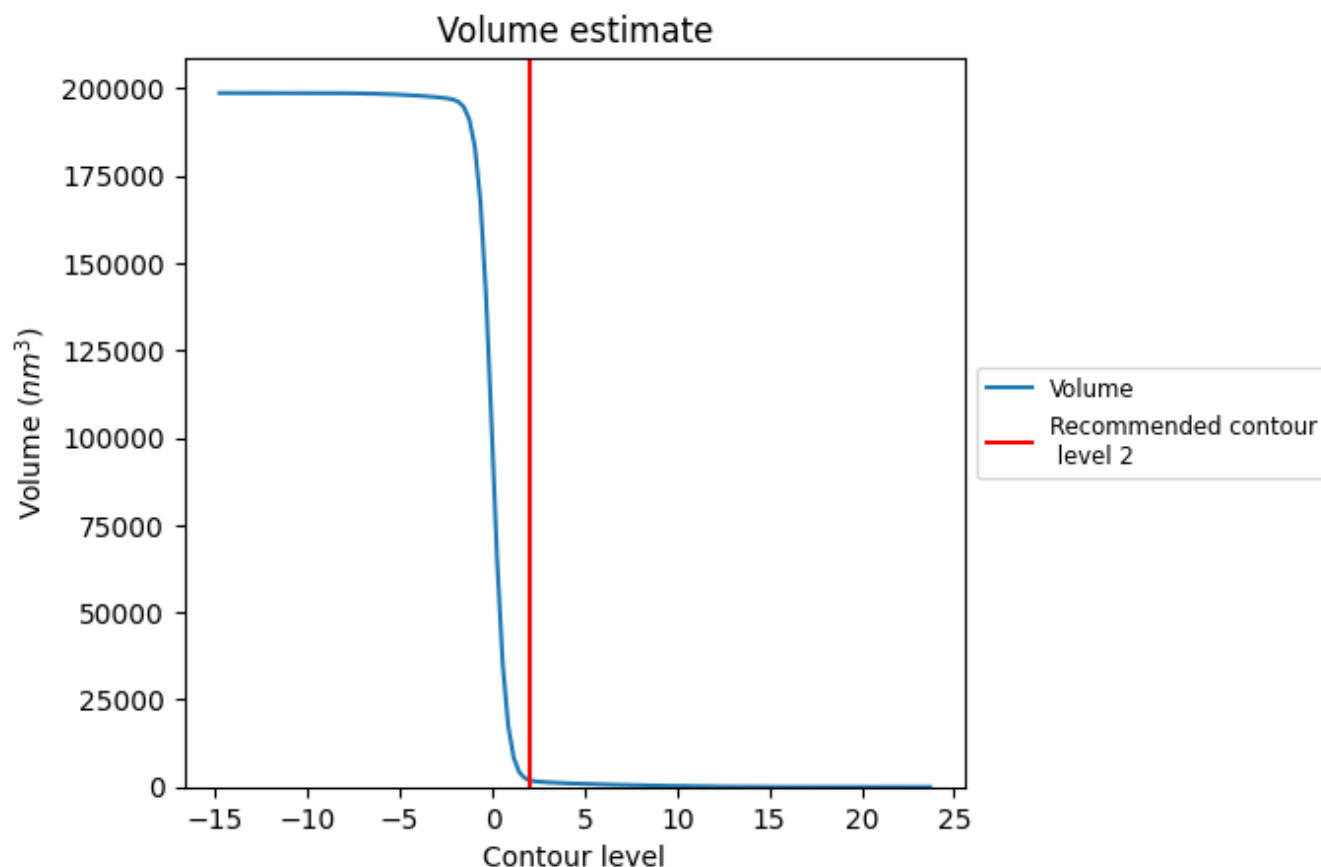
This section contains the results of statistical analysis of the map.

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.

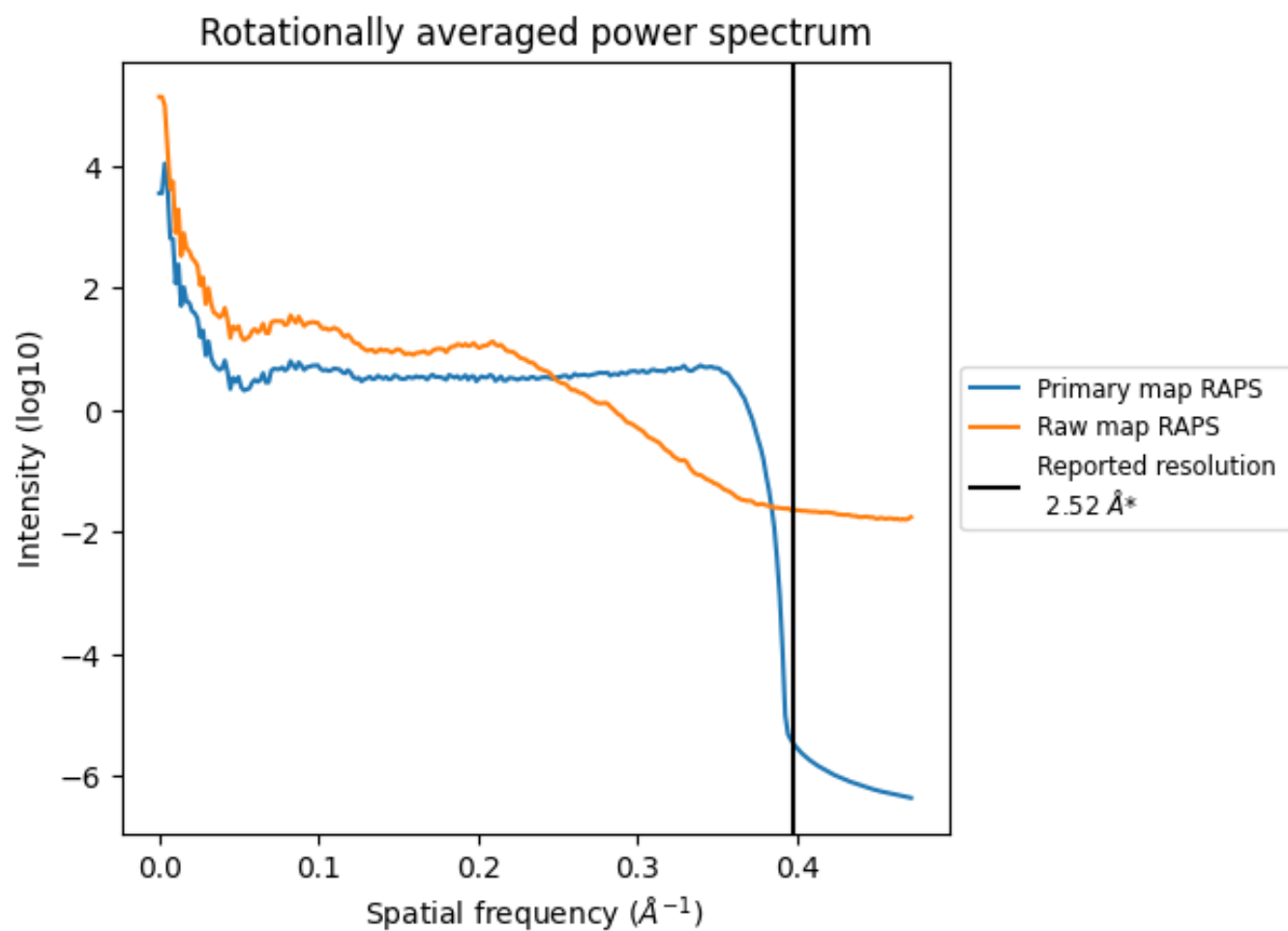
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1990 nm^3 ; this corresponds to an approximate mass of 1798 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 ⓘ

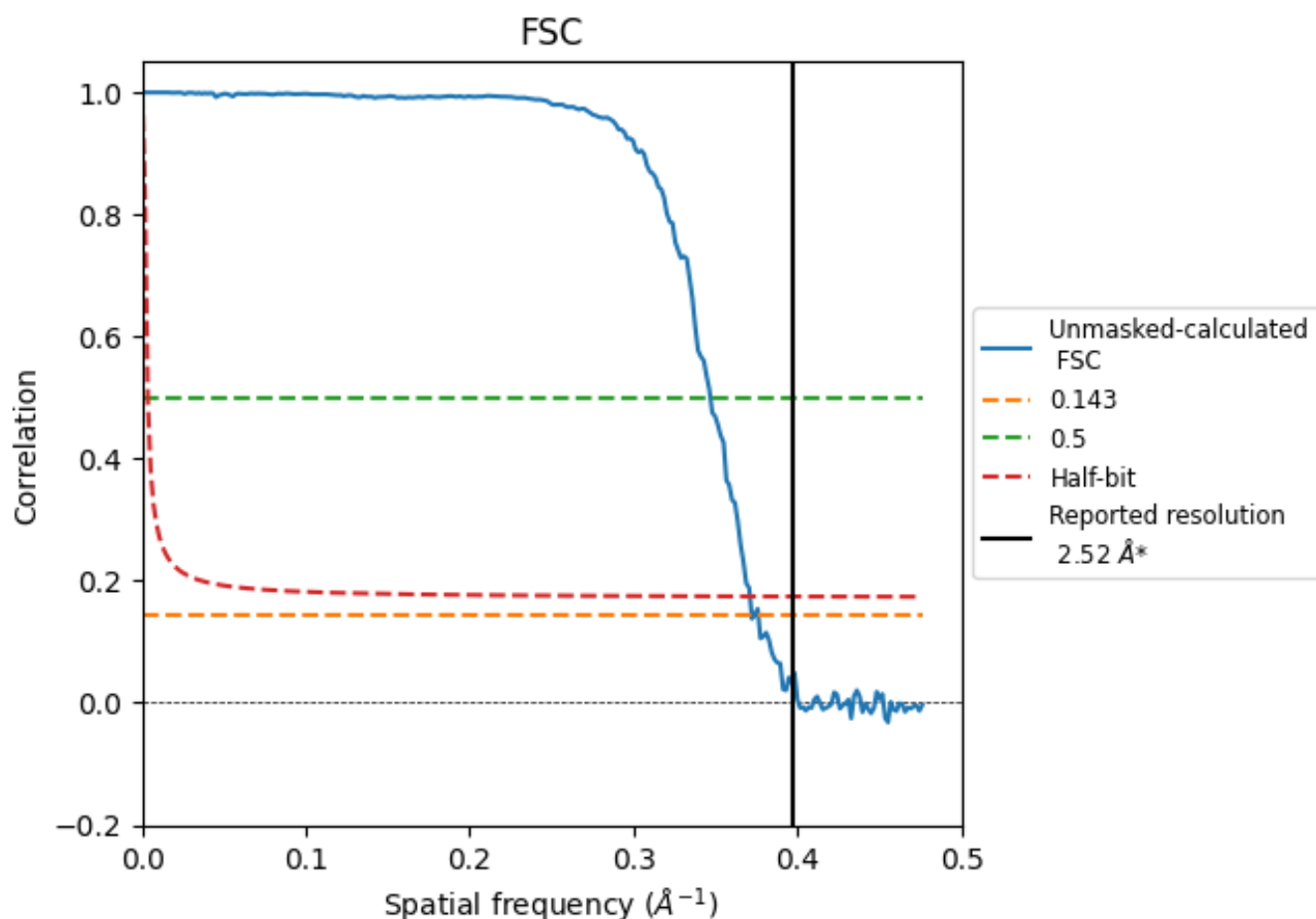


*Reported resolution corresponds to spatial frequency of 0.397 Å⁻¹

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 Å⁻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*	2.69	2.88	2.70

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

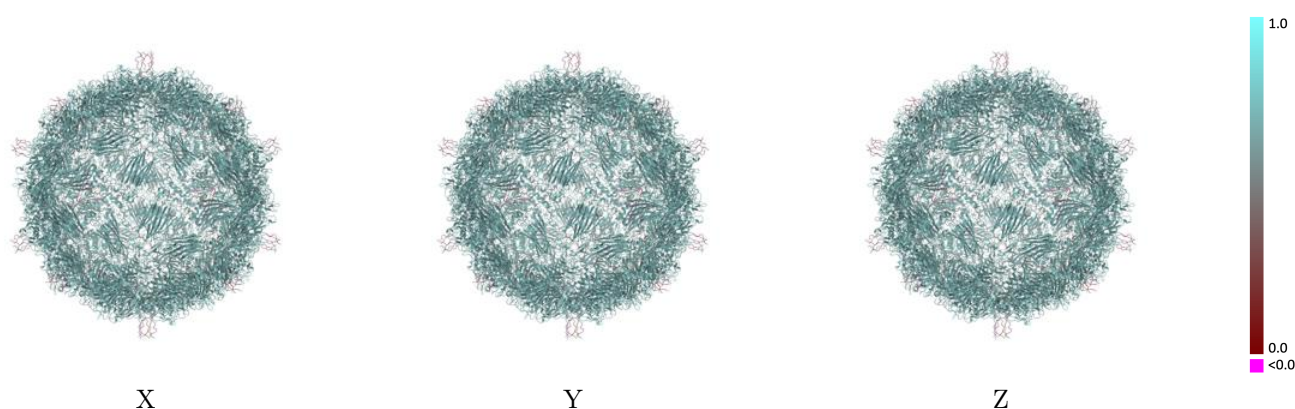
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-45583 and PDB model 9CGM. Per-residue inclusion information can be found in section 3 on page 14.

9.1 Map-model overlay [i](#)

This section was not generated.

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

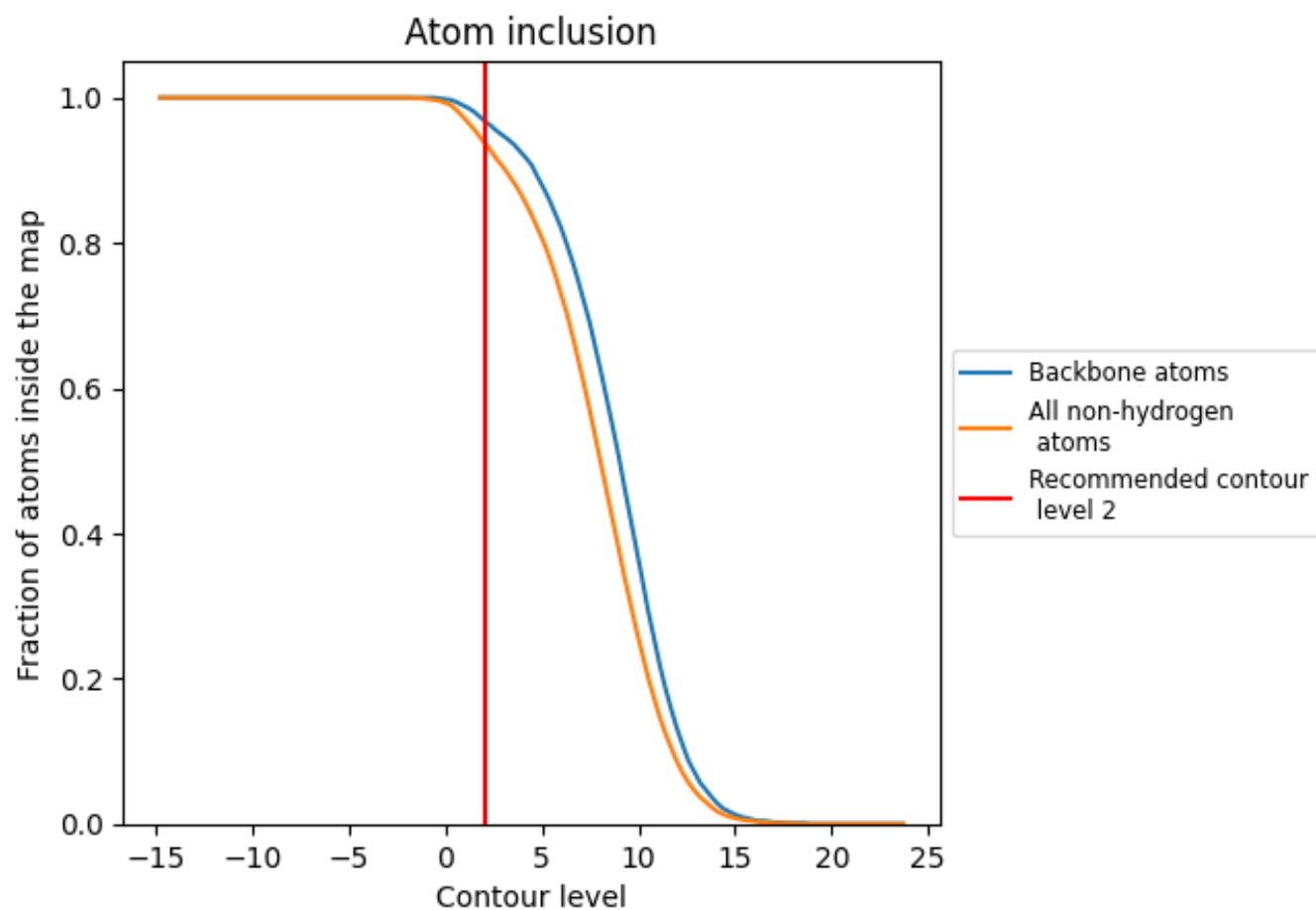


The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

This section was not generated.

9.4 Atom inclusion [i](#)



At the recommended contour level, 97% of all backbone atoms, 94% 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	 0.9380	 0.6470
0	 0.8160	 0.5870
1	 0.9460	 0.6510
12	 0.8120	 0.5890
2	 0.9460	 0.6530
22	 0.8120	 0.5880
3	 0.9450	 0.6510
32	 0.8030	 0.5900
4	 0.9470	 0.6510
42	 0.8070	 0.5860
5	 0.9480	 0.6510
52	 0.8070	 0.5880
6	 0.9470	 0.6510
62	 0.8070	 0.5920
7	 0.9470	 0.6510
72	 0.8070	 0.5900
8	 0.9490	 0.6520
82	 0.7990	 0.5820
9	 0.8120	 0.5850
A	 0.9450	 0.6510
B	 0.9460	 0.6510
C	 0.9470	 0.6510
C2	 0.8070	 0.5850
D	 0.9470	 0.6520
D2	 0.8070	 0.5880
E	 0.9490	 0.6510
E2	 0.7990	 0.5840
F	 0.9450	 0.6510
F2	 0.8030	 0.5860
G	 0.9490	 0.6510
G2	 0.7990	 0.5800
H	 0.9470	 0.6510
H2	 0.8070	 0.5840
I	 0.9470	 0.6500
I2	 0.8070	 0.5810



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Chain	Atom inclusion	Q-score
J	 0.9460	 0.6510
J2	 0.8120	 0.5850
K	 0.9470	 0.6520
K2	 0.8070	 0.5840
L	 0.9460	 0.6520
L2	 0.8120	 0.5840
M	 0.9490	 0.6520
M2	 0.7990	 0.5760
N	 0.9470	 0.6510
N2	 0.8070	 0.5870
O	 0.9490	 0.6520
O2	 0.7990	 0.5820
P	 0.9470	 0.6510
P2	 0.8070	 0.5890
Q	 0.9470	 0.6520
Q2	 0.8070	 0.5830
R	 0.9460	 0.6520
R2	 0.8120	 0.5890
S	 0.9460	 0.6510
S2	 0.8120	 0.5860
T	 0.9470	 0.6520
T2	 0.8070	 0.5870
U	 0.9460	 0.6520
U2	 0.8120	 0.5840
V	 0.9470	 0.6510
V2	 0.8070	 0.5880
W	 0.9470	 0.6510
W2	 0.8070	 0.5880
X	 0.9490	 0.6520
X2	 0.7990	 0.5830
Y	 0.9470	 0.6510
Y2	 0.8070	 0.5900
Z	 0.9490	 0.6520
Z2	 0.7990	 0.5820
a	 0.9450	 0.6520
a2	 0.8030	 0.5900
b	 0.9450	 0.6520
b2	 0.8030	 0.5910
c	 0.9450	 0.6510
c2	 0.8030	 0.5900
d	 0.9450	 0.6520
d2	 0.8030	 0.5860

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Chain	Atom inclusion	Q-score
e	 0.9450	 0.6520
e2	 0.8030	 0.5900
f	 0.9450	 0.6520
f2	 0.8030	 0.5920
g	 0.9470	 0.6510
g2	 0.8070	 0.5820
h	 0.9490	 0.6510
h2	 0.7950	 0.5770
i	 0.9470	 0.6520
i2	 0.8070	 0.5870
j	 0.9480	 0.6510
j2	 0.8070	 0.5880
k	 0.9470	 0.6510
k2	 0.8070	 0.5880
l	 0.9490	 0.6520
l2	 0.7990	 0.5820
m	 0.9470	 0.6520
m2	 0.8070	 0.5860
n	 0.9450	 0.6530
n2	 0.8030	 0.5890
o	 0.9490	 0.6510
o2	 0.7990	 0.5800
p	 0.9470	 0.6520
p2	 0.8070	 0.5860
q	 0.9460	 0.6510
q2	 0.8120	 0.5860
r	 0.9460	 0.6500
r2	 0.8120	 0.5880
s	 0.9460	 0.6510
s2	 0.8120	 0.5840
t	 0.9490	 0.6520
t2	 0.7990	 0.5830
u	 0.9470	 0.6510
u2	 0.8070	 0.5840
v	 0.9450	 0.6510
v2	 0.8070	 0.5860
w	 0.9490	 0.6510
w2	 0.7990	 0.5810
x	 0.9470	 0.6500
x2	 0.8070	 0.5840
y	 0.9450	 0.6500
y2	 0.8070	 0.5890

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Chain	Atom inclusion	Q-score
z	0.9460	0.6520
z2	0.8120	0.5830