



Full wwPDB X-ray Structure Validation Report

Feb 28, 2014 – 07:52 AM GMT

PDB ID : 3A0B
Title : Crystal structure of Br-substituted Photosystem II complex
Authors : Kawakami, K.; Umena, Y.; Kamiya, N.; Shen, J.-R.
Deposited on : 2009-03-16
Resolution : 3.70 Å(reported)

This is a full wwPDB validation report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at <http://wwpdb.org/ValidationPDFNotes.html>

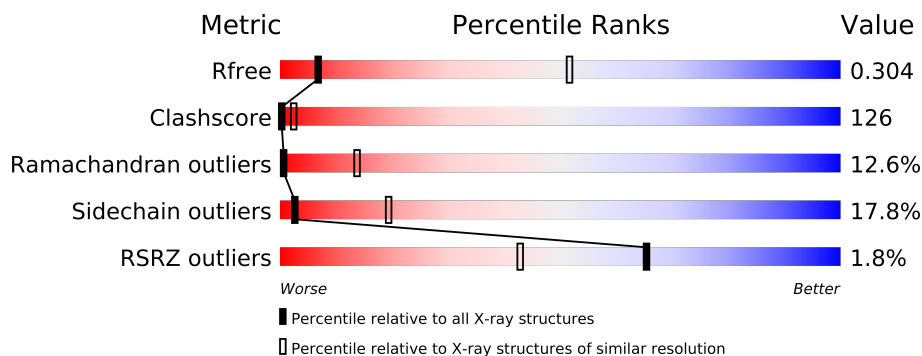
The following versions of software and data (see [references](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.15 2013
Xtriage (Phenix) : dev-1323
EDS : stable22639
Percentile statistics : 21963
Refmac : 5.8.0049
CCP4 : 6.3.0 (Settle)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)
Validation Pipeline (wwPDB-VP) : stable22683

1 Overall quality at a glance

The reported resolution of this entry is 3.70 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	66092	1098 (4.00-3.40)
Clashscore	79885	1009 (3.94-3.46)
Ramachandran outliers	78287	1016 (3.98-3.42)
Sidechain outliers	78261	1014 (3.98-3.42)
RSRZ outliers	66119	1099 (4.00-3.40)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density.

Mol	Chain	Length	Quality of chain
1	A	344	
1	a	344	
2	B	488	
2	b	488	
3	C	447	
3	c	447	
4	D	340	
4	d	340	
5	E	83	
5	e	83	
6	F	44	
6	f	44	
7	H	64	
7	h	64	

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Mol	Chain	Length	Quality of chain
8	I	35	
8	i	35	
9	J	40	
9	j	40	
10	K	36	
10	k	36	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	242	
13	o	242	
14	T	30	
14	t	30	
15	U	98	
15	u	98	
16	V	137	
16	v	137	
17	X	34	
17	x	34	
18	Y	28	
18	y	28	
19	N	24	
19	n	24	
20	Z	62	
20	z	62	

The following table lists non-polymeric compounds that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Geometry	Electron density
23	CLA	A	1003	-	X
23	CLA	A	1006	-	X
23	CLA	B	1012	-	X
23	CLA	B	1021	-	X
23	CLA	C	1025	-	X
23	CLA	C	1028	-	X
23	CLA	C	1032	-	X
23	CLA	D	1004	-	X
23	CLA	a	6007	-	X
23	CLA	b	6013	-	X
23	CLA	b	6023	-	X

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Mol	Type	Chain	Res	Geometry	Electron density
23	CLA	c	6027	-	X
23	CLA	c	6034	-	X
23	CLA	c	6037	-	X
23	CLA	d	6008	-	X
24	PHO	A	1039	-	X
24	PHO	d	6038	-	X
27	BCR	A	1044	-	X
27	BCR	B	1045	-	X
27	BCR	B	1047	-	X
27	BCR	B	1048	-	X
27	BCR	D	1050	-	X
27	BCR	H	1049	-	X
27	BCR	K	1051	-	X
27	BCR	T	6046	-	X
27	BCR	a	6044	-	X
27	BCR	b	6045	-	X
27	BCR	b	6047	-	X
27	BCR	b	6048	-	X
27	BCR	c	6054	-	X
27	BCR	d	6050	-	X
27	BCR	t	1046	-	X
27	BCR	z	6053	-	X
28	DGD	C	1056	-	X
28	DGD	C	1057	-	X
28	DGD	H	1058	-	X
28	DGD	c	6056	-	X
28	DGD	c	6057	-	X
28	DGD	h	6058	-	X
29	MGE	b	6060	-	X
29	MGE	d	6059	-	X
29	MGE	d	6062	-	X
30	LHG	A	1063	-	X
30	LHG	a	6063	-	X

2 Entry composition

There are 31 unique types of molecules in this entry. The entry contains 47988 atoms, of which 0 are hydrogen and 0 are deuterium.

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

- Molecule 1 is a protein called Photosystem Q(B) protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	335	Total	C	N	O	S	0	0	0
			2630	1720	435	460	15			
1	a	335	Total	C	N	O	S	0	0	0
			2630	1720	435	460	15			

- Molecule 2 is a protein called Photosystem II core light harvesting protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	485	Total	C	N	O	S	0	0	0
			3816	2505	635	663	13			
2	b	485	Total	C	N	O	S	0	0	0
			3816	2505	635	663	13			

- Molecule 3 is a protein called Photosystem II CP43 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	447	Total	C	N	O	S	0	0	0
			3455	2264	576	602	13			
3	c	447	Total	C	N	O	S	0	0	0
			3455	2264	576	602	13			

- Molecule 4 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	340	Total	C	N	O	S	0	0	0
			2706	1794	440	460	12			
4	d	340	Total	C	N	O	S	0	0	0
			2706	1794	440	460	12			

- Molecule 5 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	82	Total	C	N	O	0	0	0
			666	434	108	124			
5	e	82	Total	C	N	O	0	0	0
			666	434	108	124			

- Molecule 6 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	35	Total	C	N	O	S	0	0	0
			282	192	46	43	1			
6	f	35	Total	C	N	O	S	0	0	0
			282	192	46	43	1			

- Molecule 7 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	64	Total	C	N	O	S	0	0	0
			507	339	81	85	2			
7	h	64	Total	C	N	O	S	0	0	0
			507	339	81	85	2			

- Molecule 8 is a protein called Photosystem II reaction center protein I.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	35	Total	C	N	O	S	0	0	0
			287	195	45	46	1			
8	i	35	Total	C	N	O	S	0	0	0
			287	195	45	46	1			

- Molecule 9 is a protein called Photosystem II reaction center protein J.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	34	Total	C	N	O	S	0	0	0
			249	170	38	40	1			
9	j	34	Total	C	N	O	S	0	0	0
			249	170	38	40	1			

- Molecule 10 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	36	Total	C	N	O	0	0	0
			278	195	38	45			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	k	36	Total	C	N	O	0	0	0
			278	195	38	45			

- Molecule 11 is a protein called Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	S	0	0	0
			304	202	48	53	1			
11	l	37	Total	C	N	O	S	0	0	0
			304	202	48	53	1			

- Molecule 12 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	36	Total	C	N	O	S	0	0	0
			283	187	42	53	1			
12	m	36	Total	C	N	O	S	0	0	0
			283	187	42	53	1			

- Molecule 13 is a protein called Photosystem II manganese-stabilizing polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	242	Total	C	N	O	S	0	0	0
			1841	1152	311	374	4			
13	o	242	Total	C	N	O	S	0	0	0
			1841	1152	311	374	4			

- Molecule 14 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	0	0
			257	180	36	39	2			
14	t	30	Total	C	N	O	S	0	0	0
			257	180	36	39	2			

- Molecule 15 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	U	98	Total	C	N	O	0	0	0
			783	496	130	157			
15	u	98	Total	C	N	O	0	0	0
			783	496	130	157			

- Molecule 16 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			
16	v	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			

- Molecule 17 is a protein called Photosystem II reaction center protein X.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
17	X	34	Total	C	N	O	0	0	0
			246	166	36	44			
17	x	34	Total	C	N	O	0	0	0
			246	166	36	44			

- Molecule 18 is a protein called Photosystem II reaction center protein ycf12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	Y	28	Total	C	N	O	S	0	0	0
			208	137	36	32	3			
18	y	28	Total	C	N	O	S	0	0	0
			208	137	36	32	3			

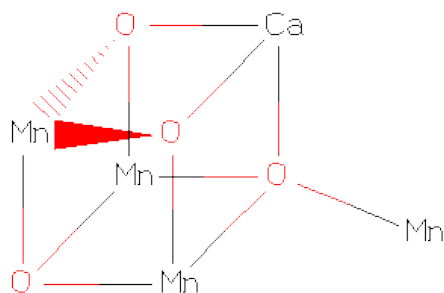
- Molecule 19 is a protein called Photosystem II reaction center protein Y.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
19	N	24	Total	C	N	O	0	0	0
			121	72	24	25			
19	n	24	Total	C	N	O	0	0	0
			121	72	24	25			

- Molecule 20 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	Z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			
20	z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			

- Molecule 21 is OXYGEN EVOLVING SYSTEM (three-letter code: OEC) (formula: CaMn_4O_4).

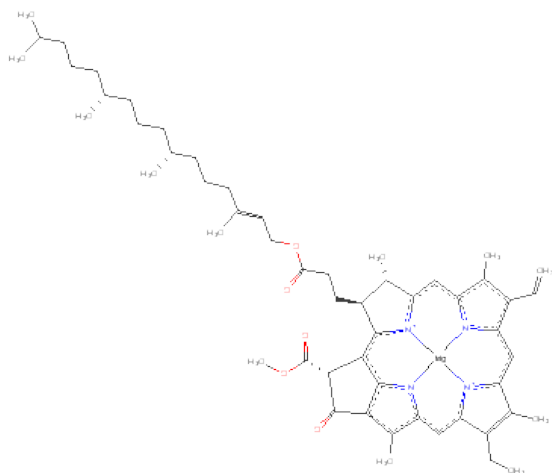


Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
21	A	1	Total	Ca	Mn	0	0
			5	1	4		
21	a	1	Total	Ca	Mn	0	0
			5	1	4		

- Molecule 22 is FE (II) ION (three-letter code: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	1	Total	Fe	0	0
			1	1		
22	a	1	Total	Fe	0	0
			1	1		

- Molecule 23 is CHLOROPHYLL A (three-letter code: CLA) (formula: C₅₅H₇₂MgN₄O₅).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	H	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	B	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	C	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

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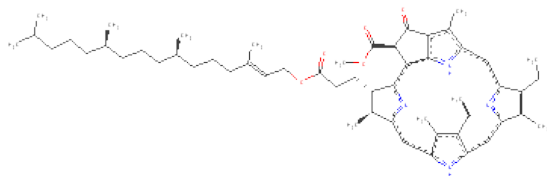
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
23	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

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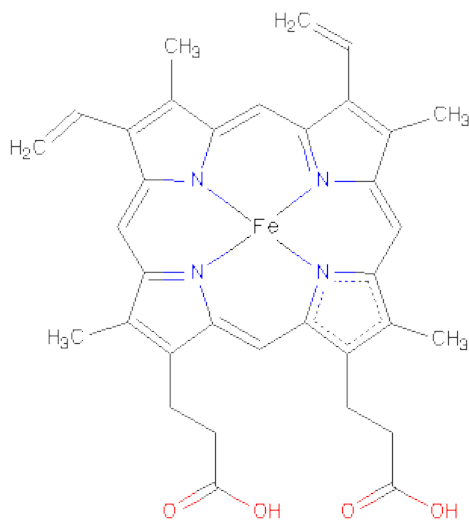
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 24 is PHEOPHYTIN A (three-letter code: PHO) (formula: C₅₅H₇₄N₄O₅).



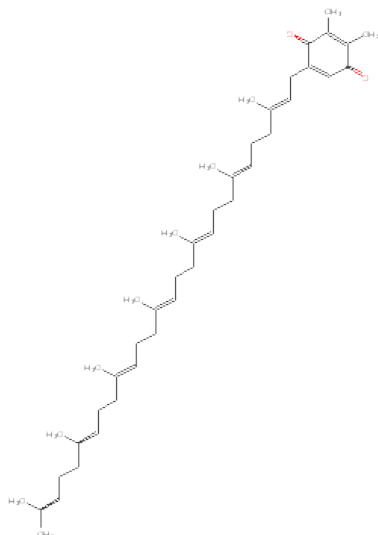
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
24	A	1	Total	C	N	O	0	0
			64	55	4	5		
24	A	1	Total	C	N	O	0	0
			64	55	4	5		
24	d	1	Total	C	N	O	0	0
			64	55	4	5		
24	a	1	Total	C	N	O	0	0
			64	55	4	5		

- Molecule 25 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



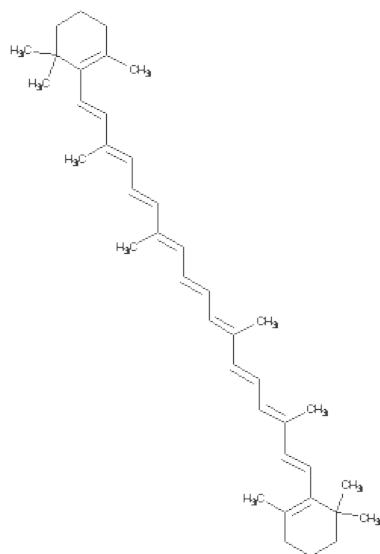
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	E	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
25	V	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
25	e	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
25	v	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 26 is 5-[(2E,6E,10E,14E,18E,22E)-3,7,11,15,19,23,27-HEPTAMETHYLOCTACOSA-2,6,10,14,18,22,26-HEPTAENYL]-2,3-DIMETHYLBENZO-1,4-QUINONE (three-letter code: PQ9) (formula: C₄₃H₆₄O₂).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
26	D	1	Total	C	O	0	0
			45	43	2		
26	A	1	Total	C	O	0	0
			45	43	2		
26	d	1	Total	C	O	0	0
			45	43	2		
26	a	1	Total	C	O	0	0
			45	43	2		

- Molecule 27 is BETA-CAROTENE (three-letter code: BCR) (formula: C₄₀H₅₆).



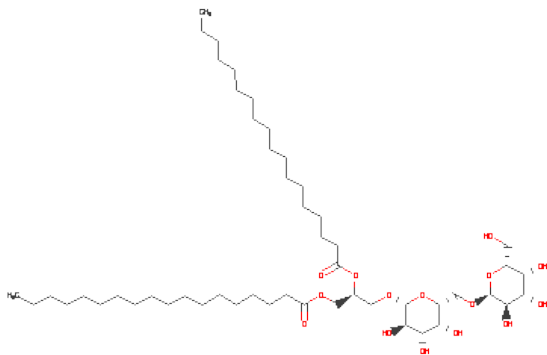
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	t	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	H	1	Total C 40 40	0	0
27	D	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	Z	1	Total C 40 40	0	0
27	C	1	Total C 40 40	0	0
27	a	1	Total C 40 40	0	0
27	b	1	Total C 40 40	0	0
27	T	1	Total C 40 40	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	b	1	Total C 40 40	0	0
27	b	1	Total C 40 40	0	0
27	h	1	Total C 40 40	0	0
27	d	1	Total C 40 40	0	0
27	k	1	Total C 40 40	0	0
27	k	1	Total C 40 40	0	0
27	z	1	Total C 40 40	0	0
27	c	1	Total C 40 40	0	0

- Molecule 28 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: C₅₁H₉₆O₁₅).



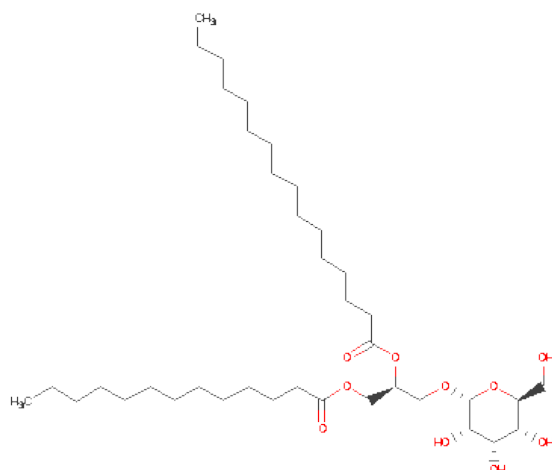
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	C	1	Total C O 66 51 15	0	0
28	C	1	Total C O 66 51 15	0	0
28	C	1	Total C O 66 51 15	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
28	H	1	Total	C	O	0	0
			66	51	15		
28	c	1	Total	C	O	0	0
			66	51	15		
28	c	1	Total	C	O	0	0
			66	51	15		
28	c	1	Total	C	O	0	0
			66	51	15		
28	h	1	Total	C	O	0	0
			66	51	15		

- Molecule 29 is (1S)-2-(ALPHA-L-ALLOPYRANOSYLOXY)-1-[(TRIDECANOYLOXY)METHYL]ETHYLPALMITATE (three-letter code: MGE) (formula: $C_{38}H_{72}O_{10}$).



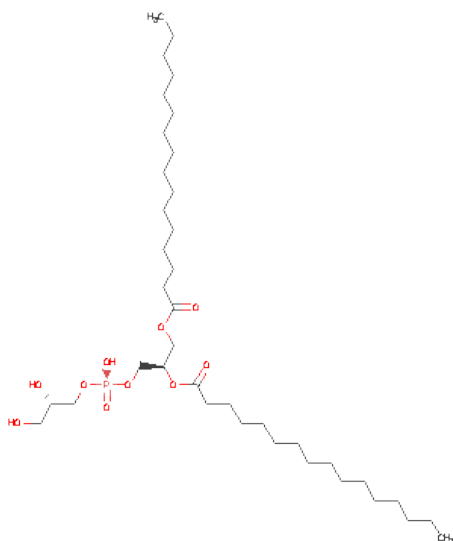
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	J	1	Total	C	O	0	0
			48	38	10		
29	B	1	Total	C	O	0	0
			48	38	10		
29	L	1	Total	C	O	0	0
			48	38	10		
29	D	1	Total	C	O	0	0
			48	38	10		
29	d	1	Total	C	O	0	0
			48	38	10		
29	b	1	Total	C	O	0	0
			48	38	10		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	d	1	Total	C	O	0	0
			48	38	10		
29	d	1	Total	C	O	0	0
			48	38	10		

- Molecule 30 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	C	O	P	0	0
			49	38	10	1		
30	a	1	Total	C	O	P	0	0
			49	38	10	1		

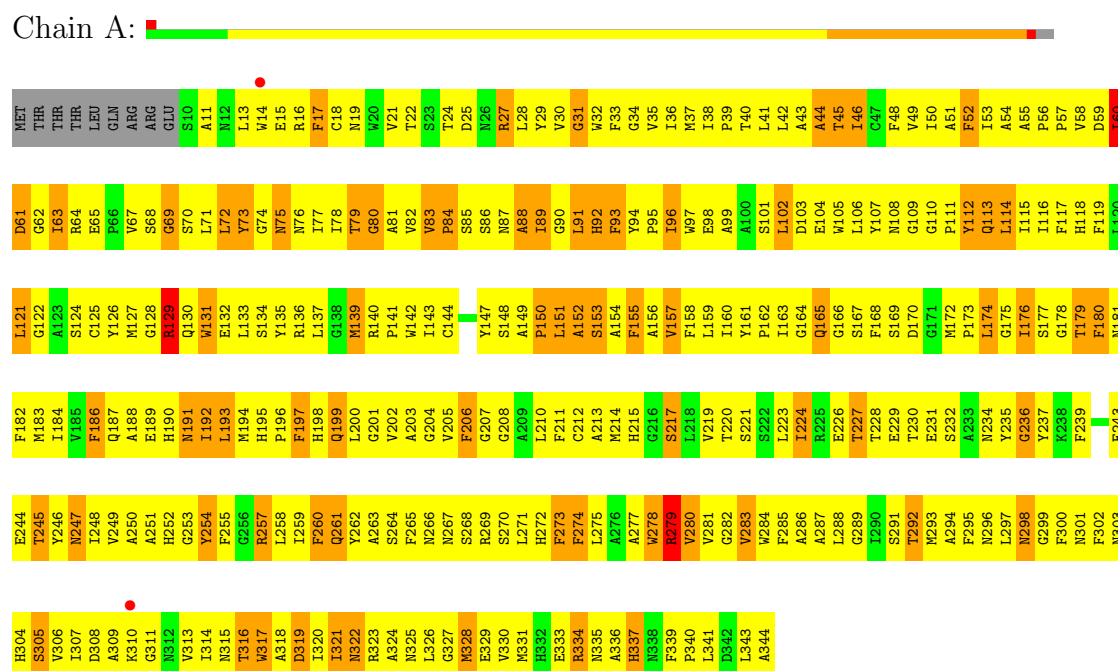
- Molecule 31 is BROMIDE ION (three-letter code: BR) (formula: Br).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
31	A	2	Total	Br	0	0
			2	2		
31	d	1	Total	Br	0	0
			1	1		
31	a	1	Total	Br	0	0
			1	1		

3 Residue-property plots

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

• Molecule 1: Photosystem Q(B) protein

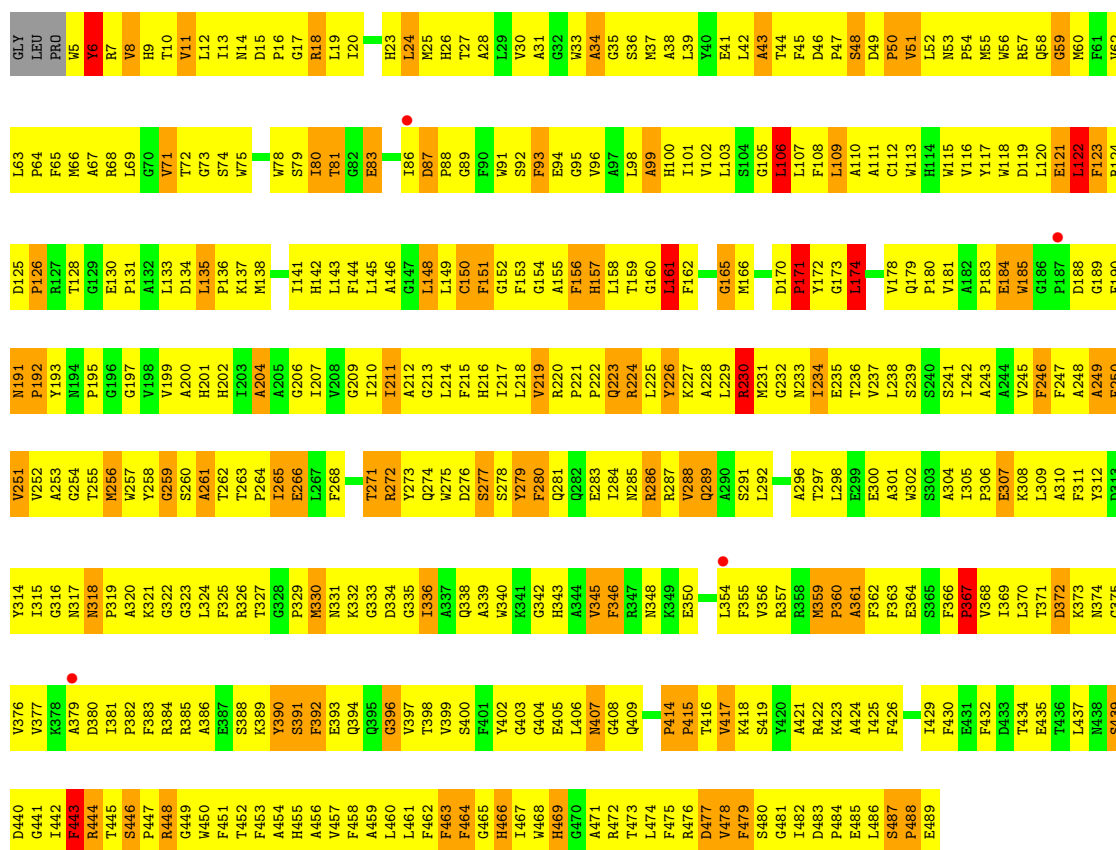


• Molecule 1: Photosystem Q(B) protein



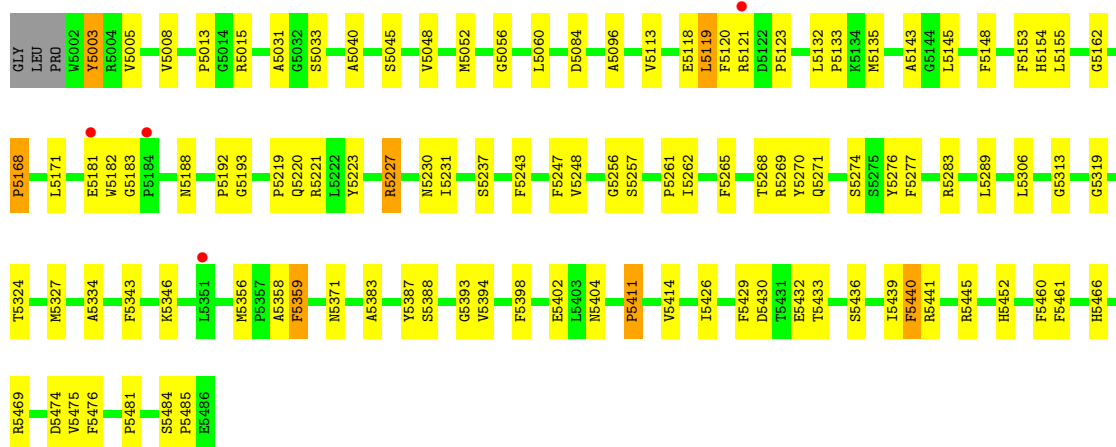
• Molecule 2: Photosystem II core light harvesting protein





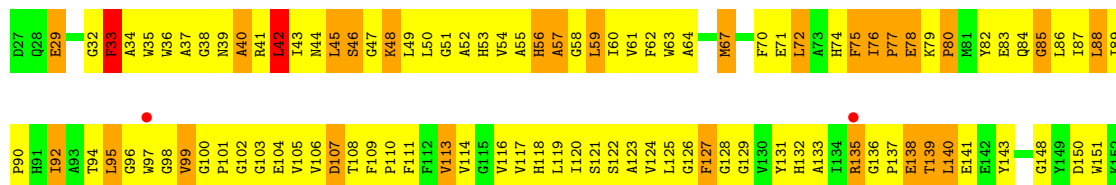
• Molecule 2: Photosystem II core light harvesting protein

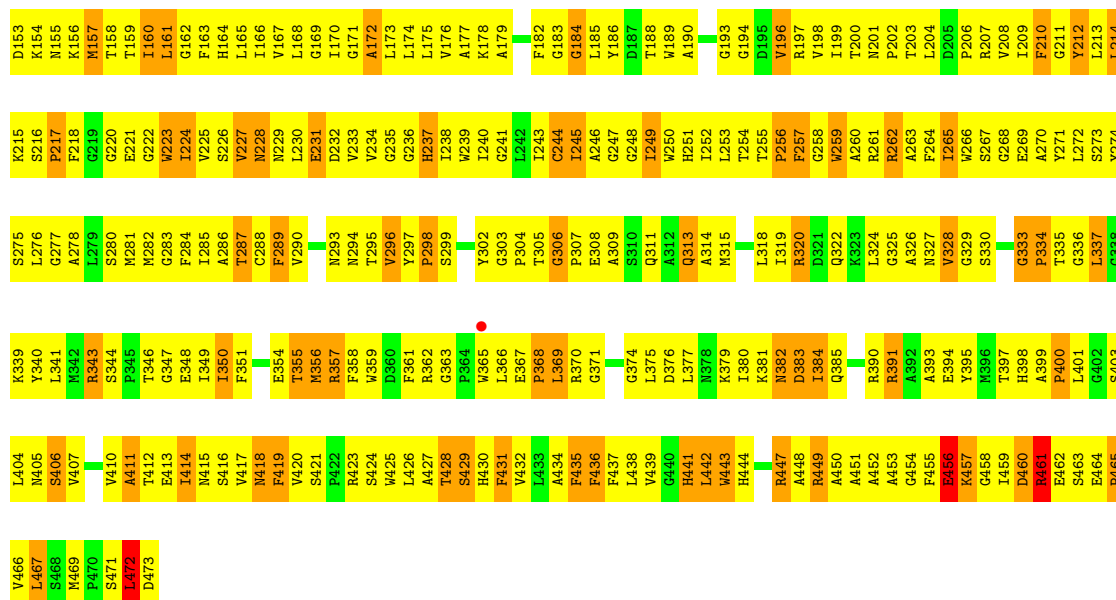
Chain b:



• Molecule 3: Photosystem II CP43 protein

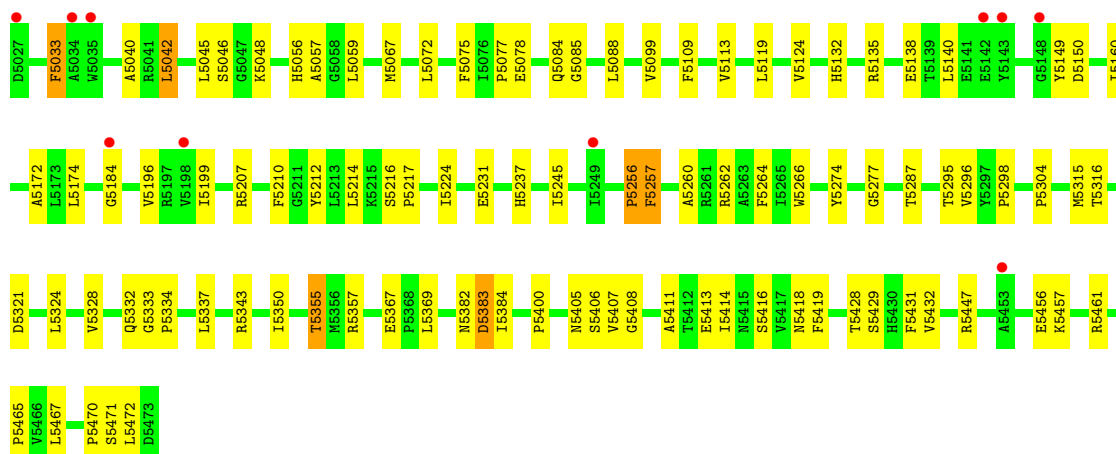
Chain C:





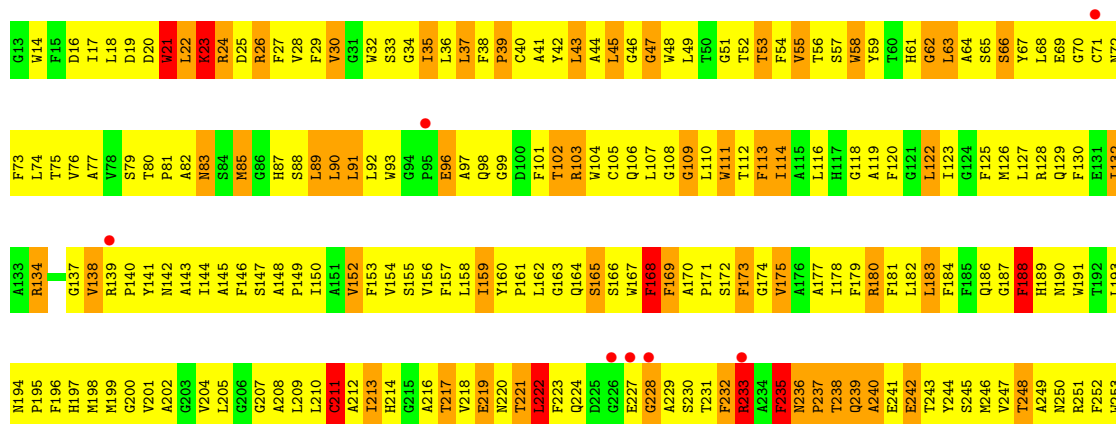
• Molecule 3: Photosystem II CP43 protein

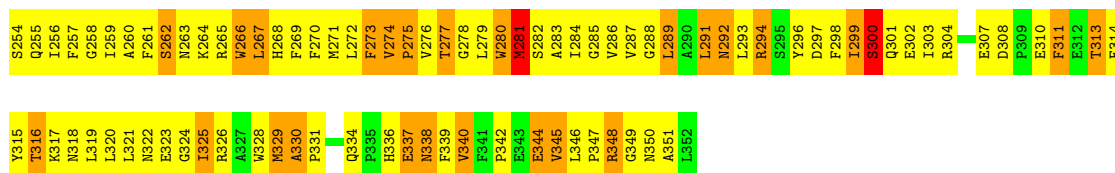
Chain c:



• Molecule 4: Photosystem II D2 protein

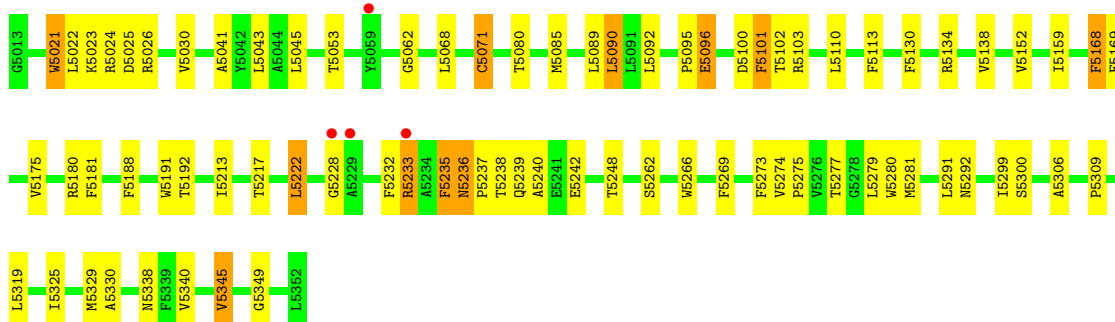
Chain D:





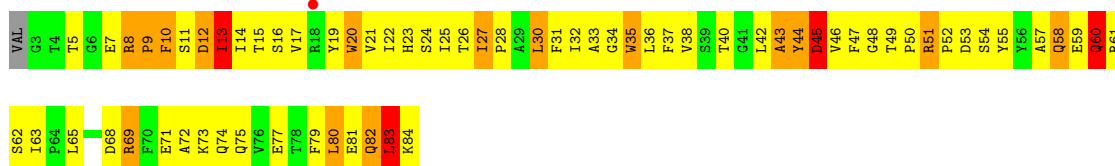
• Molecule 4: Photosystem II D2 protein

Chain d:



• Molecule 5: Cytochrome b559 subunit alpha

Chain E:



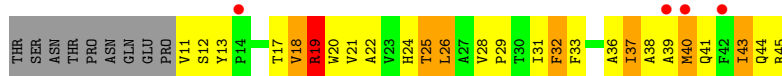
• Molecule 5: Cytochrome b559 subunit alpha

Chain e:



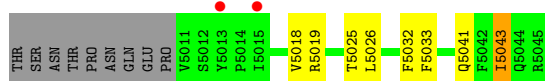
• Molecule 6: Cytochrome b559 subunit beta

Chain F:



• Molecule 6: Cytochrome b559 subunit beta

Chain f:



• Molecule 7: Photosystem II reaction center protein H

Category	Value
A2	2
R3	1
R4	1
T5	1
W6	1
L7	1
G8	1
D9	2
I10	1
L11	1
R12	1
P13	1
L14	1
N15	1
S16	1
E17	1
Y18	2
G19	1
R20	1
V21	1
A22	1
P23	1
G24	1
W25	1
G26	1
T27	1
T28	1
P29	2
L30	1
M31	1
A32	1
V33	1
F34	2
M35	1
G36	2
L37	1
F38	1
L39	1
V40	1
F41	1
L42	1
L43	1
L44	1
L45	1
L46	1
E47	1
L48	1
Y49	1
N50	1
S51	1
T52	1
L53	1
I54	1
L55	1
V58	1
M59	2
G60	1
S61	1
P62	1

- Chain h:

A5002
 E5003
 E5004
 T5005
 W5006
 D5009
 E5010
 L5011
 E5012
 E5013
 L5014
 E5017
 K5020
 V5021
 A5022
 W5025
 G5026
 V5033
 L5039
 L5045
 Y5049
 N5050
 L5055
 D5056
 K5063
 A5064
 L5065

- Chain I:

M1	E2	T3	L4	K5	I6	T7	V8	Y9	I10	V11	V12	T13	F14	F15	V16	L17	L18	F19	V20	F21	G22	F23	L24	G25	G26	D27	F28	A29	R30	N31	P32	K33	R34	K35
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

- Chain i:

- Chain J:

MET	MET	SER	GLY	GLY	R7	I8	P9	L10	M11	I12	V13	A14	T15	V16	A17	G18	M19	G20	V21	L22	V23	I24	V25	G26	L27	F28	F29	F30	G31	A32	V33	A34	G35	I36	G37	S38	S39	L40
-----	-----	-----	-----	-----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

- Chain i:

MET	R5007	
MET	L5008	
SER	P5009	
GLU	L5010	
GLY	W5011	
GLY	L5012	
	V5013	
	L5022	
	V5023	
	L5024	
	G5031	
	A5034	
	G5035	
	L5036	
	L5040	

- Chain K: 

K10	L11	P12	E13	A14	A15	A16	I17	F18	D19	P20	L21	V22	D23	V24	L25	P26	V27	I28	P29	V30	L31	F32	F33	A34	L35	A36	F37	V38	V39		V43	G44	F45
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	--	-----	-----	-----

- Chain k:



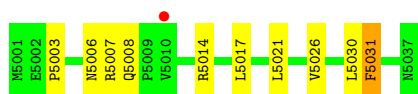
- Molecule 11: Photosystem II reaction center protein L

Chain L:



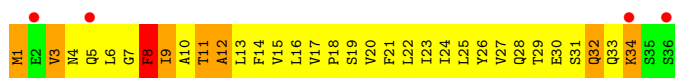
- Molecule 11: Photosystem II reaction center protein L

Chain l:



- Molecule 12: Photosystem II reaction center protein M

Chain M:



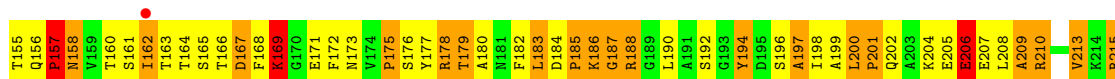
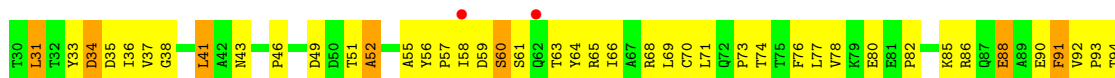
- Molecule 12: Photosystem II reaction center protein M

Chain m:



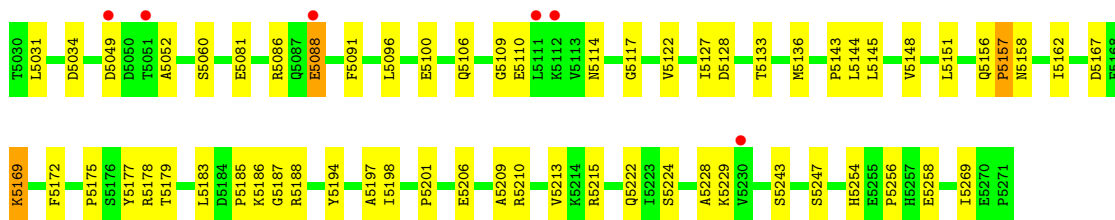
- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:



• Molecule 14: Photosystem II reaction center protein T

Chain T:



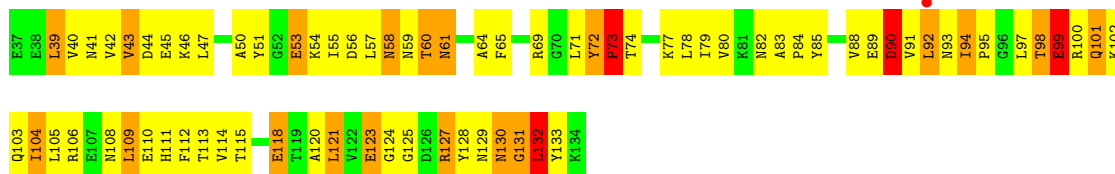
• Molecule 14: Photosystem II reaction center protein T

Chain t:



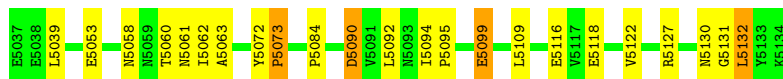
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:



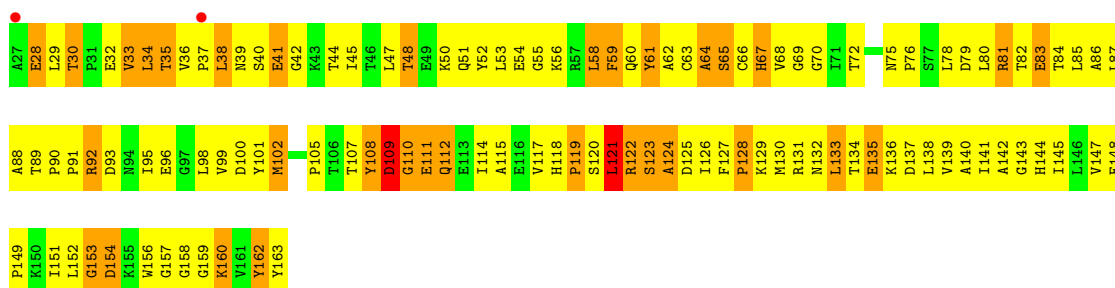
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:



• Molecule 16: Cytochrome c-550

Chain V:



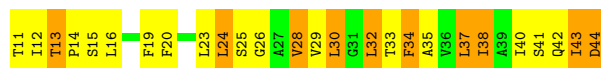
• Molecule 16: Cytochrome c-550

Chain v:



- Molecule 17: Photosystem II reaction center protein X

Chain X:



- Molecule 17: Photosystem II reaction center protein X

Chain x:



- Molecule 18: Photosystem II reaction center protein ycf12

Chain Y:



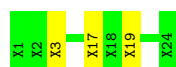
- Molecule 18: Photosystem II reaction center protein ycf12

Chain y:



- Molecule 19: Photosystem II reaction center protein Y

Chain N:



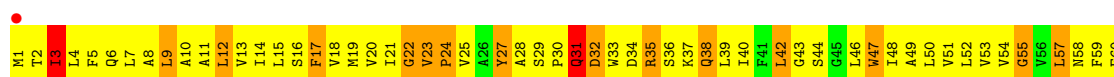
- Molecule 19: Photosystem II reaction center protein Y

Chain n:

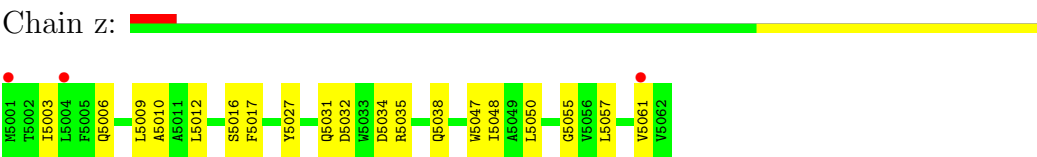
There are no outlier residues recorded for this chain.

- Molecule 20: Photosystem II reaction center protein Z

Chain Z:



- Molecule 20: Photosystem II reaction center protein Z



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	130.59Å 226.39Å 307.51Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	34.70 – 3.70 34.69 – 3.70	Depositor EDS
% Data completeness (in resolution range)	85.8 (34.70-3.70) 85.8 (34.69-3.70)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	0.08	Depositor
$\langle I/\sigma(I) \rangle$ ¹	3.23 (at 3.66Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, R_{free}	0.302 , 0.358 0.308 , 0.304	Depositor DCC
R_{free} test set	4216 reflections (5.29%)	DCC
Wilson B-factor (Å ²)	135.2	Xtriage
Anisotropy	0.584	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.21 , 53.3	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle L \rangle = 0.51$, $\langle L^2 \rangle = 0.35$	Xtriage
Outliers	2 of 83926 reflections (0.002%)	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	47988	wwPDB-VP
Average B, all atoms (Å ²)	141.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.81% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: LHG, PHO, MGE, DGD, CLA, FE2, BR, PQ9, OEC, HEM, BCR

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	A	0.51	0/2714	0.77	1/3699 (0.0%)
1	a	0.51	0/2714	0.77	0/3699
2	B	0.51	0/3951	0.79	3/5383 (0.1%)
2	b	0.51	0/3951	0.79	0/5383
3	C	0.48	0/3568	0.74	0/4858
3	c	0.49	0/3568	0.72	1/4858 (0.0%)
4	D	0.52	0/2801	0.77	1/3818 (0.0%)
4	d	0.52	0/2801	0.78	0/3818
5	E	0.46	0/685	0.74	0/933
5	e	0.50	0/685	0.76	0/933
6	F	0.50	0/291	0.77	0/397
6	f	0.58	0/291	0.69	0/397
7	H	0.52	0/520	0.81	0/708
7	h	0.50	0/520	0.82	1/708 (0.1%)
8	I	0.55	0/294	0.68	0/395
8	i	0.55	0/294	0.64	0/395
9	J	0.48	0/255	0.66	0/346
9	j	0.52	0/255	0.72	0/346
10	K	0.54	0/287	0.79	0/394
10	k	0.53	0/287	0.81	0/394
11	L	0.48	0/311	0.76	0/422
11	l	0.49	0/311	0.73	0/422
12	M	0.58	0/287	0.76	0/388
12	m	0.48	0/287	0.76	0/388
13	O	0.48	0/1872	0.79	0/2539
13	o	0.47	0/1872	0.78	0/2539
14	T	0.67	0/266	0.82	0/359
14	t	0.64	0/266	0.74	1/359 (0.3%)
15	U	0.48	0/794	0.77	0/1076
15	u	0.46	0/794	0.81	0/1076
16	V	0.50	0/1085	0.82	1/1473 (0.1%)
16	v	0.50	0/1085	0.82	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	X	0.52	0/249	0.78	0/337
17	x	0.52	0/249	0.71	0/337
18	Y	0.51	0/209	0.88	1/279 (0.4%)
18	y	0.47	0/209	0.83	0/279
20	Z	0.50	0/490	0.75	0/669
20	z	0.51	0/490	0.79	0/669
All	All	0.50	0/41858	0.77	10/56946 (0.0%)

There are no bond length outliers.

All (10) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	108	TYR	N-CA-C	-5.84	95.24	111.00
2	B	232	GLY	N-CA-C	-5.64	99.00	113.10
2	B	106	LEU	CB-CG-CD1	-5.42	101.78	111.00
18	Y	38	LEU	CA-CB-CG	5.37	127.65	115.30
14	t	5016	LEU	CA-CB-CG	5.32	127.54	115.30
2	B	466	HIS	N-CA-C	-5.16	97.06	111.00
1	A	69	GLY	N-CA-C	-5.09	100.38	113.10
7	h	5012	ARG	N-CA-C	-5.07	97.32	111.00
4	D	63	LEU	CA-CB-CG	5.05	126.92	115.30
3	c	5150	ASP	N-CA-C	-5.04	97.40	111.00

There are no chirality outliers.

There are no planarity outliers.

5.2 Close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2630	0	2528	773	0
1	a	2630	0	2528	0	0
2	B	3816	0	3680	965	0
2	b	3816	0	3680	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	C	3455	0	3376	789	0
3	c	3455	0	3376	0	0
4	D	2706	0	2608	774	0
4	d	2706	0	2608	0	0
5	E	666	0	651	140	0
5	e	666	0	651	0	0
6	F	282	0	291	74	0
6	f	282	0	291	0	0
7	H	507	0	529	130	0
7	h	507	0	529	0	0
8	I	287	0	308	77	0
8	i	287	0	305	0	0
9	J	249	0	262	63	0
9	j	249	0	262	0	0
10	K	278	0	289	115	0
10	k	278	0	289	0	0
11	L	304	0	316	100	0
11	l	304	0	313	0	0
12	M	283	0	297	58	0
12	m	283	0	294	0	0
13	O	1841	0	1799	283	0
13	o	1841	0	1799	0	0
14	T	257	0	262	90	0
14	t	257	0	259	0	0
15	U	783	0	779	148	0
15	u	783	0	779	0	0
16	V	1064	0	1072	193	0
16	v	1064	0	1072	0	0
17	X	246	0	269	46	0
17	x	246	0	269	0	0
18	Y	208	0	237	54	0
18	y	208	0	237	0	0
19	N	121	0	26	2	0
19	n	121	0	26	0	0
20	Z	479	0	516	122	0
20	z	479	0	513	0	0
21	A	5	0	0	0	0
21	a	5	0	0	0	0
22	A	1	0	0	0	0
22	a	1	0	0	0	0
23	A	195	0	216	166	0
23	B	975	0	1079	778	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
23	C	845	0	935	534	0
23	D	195	0	216	119	0
23	H	65	0	72	60	0
23	a	195	0	216	0	0
23	b	1040	0	1151	0	0
23	c	845	0	935	0	0
23	d	195	0	216	0	0
24	A	128	0	148	116	0
24	a	64	0	74	0	0
24	d	64	0	74	0	0
25	E	43	0	30	10	0
25	V	43	0	30	10	0
25	e	43	0	30	0	0
25	v	43	0	30	0	0
26	A	45	0	64	7	0
26	D	45	0	64	32	0
26	a	45	0	64	0	0
26	d	45	0	62	0	0
27	A	40	0	48	25	0
27	B	120	0	141	86	0
27	C	40	0	47	26	0
27	D	40	0	48	62	0
27	H	40	0	47	53	0
27	K	80	0	94	81	0
27	T	40	0	47	18	0
27	Z	40	0	48	41	0
27	a	40	0	48	0	0
27	b	120	0	141	0	0
27	c	40	0	47	0	0
27	d	40	0	48	0	0
27	h	40	0	47	0	0
27	k	80	0	94	0	0
27	t	40	0	47	0	0
27	z	40	0	48	0	0
28	C	198	0	288	149	0
28	H	66	0	96	32	0
28	c	198	0	288	0	0
28	h	66	0	96	0	0
29	B	48	0	72	47	0
29	D	48	0	72	23	0
29	J	48	0	72	34	0
29	L	48	0	72	33	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
29	b	48	0	72	0	0
29	d	144	0	216	0	0
30	A	49	0	74	58	0
30	a	49	0	74	0	0
31	A	2	0	0	4	0
31	a	1	0	0	0	0
31	d	1	0	0	0	0
All	All	47988	0	48413	6019	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 126.

All (6019) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:T:6046:BCR:H371	27:T:6046:BCR:C26	1.34	1.51
23:B:1009:CLA:CMB	27:H:1049:BCR:H393	1.41	1.49
23:C:1032:CLA:CED	23:C:1032:CLA:H2A	1.41	1.47
23:A:1003:CLA:H141	24:A:1038:PHO:C9	1.41	1.47
10:K:28:ILE:CG2	10:K:29:PRO:HD3	1.42	1.46
23:B:1012:CLA:HED2	23:B:1012:CLA:CAA	1.44	1.46
23:B:1019:CLA:HED2	23:B:1019:CLA:CAA	1.46	1.45
27:K:1051:BCR:H322	27:K:1052:BCR:C10	1.42	1.45
23:A:1006:CLA:H171	27:D:1050:BCR:C29	1.48	1.44
3:C:63:TRP:CZ3	23:C:1027:CLA:HBC1	1.51	1.43
23:B:1011:CLA:HBB2	23:B:1013:CLA:C20	1.49	1.42
23:B:1022:CLA:H72	23:B:1022:CLA:C14	1.45	1.42
23:C:1031:CLA:CGD	23:C:1033:CLA:H101	1.48	1.41
23:D:1005:CLA:H2A	23:D:1005:CLA:CED	1.48	1.40
27:B:1047:BCR:C34	27:B:1047:BCR:H321	1.50	1.39
24:A:1038:PHO:C19	24:A:1038:PHO:H141	1.52	1.37
29:B:1060:MGE:H251	29:B:1060:MGE:CBB	1.55	1.36
23:B:1012:CLA:HAA2	23:B:1012:CLA:CED	1.55	1.36
23:B:1010:CLA:C12	23:B:1010:CLA:H91	1.51	1.36
2:B:464:PHE:CZ	29:B:1060:MGE:H4B2	1.58	1.36
23:C:1032:CLA:HED3	23:C:1032:CLA:C2A	1.53	1.36
23:C:1034:CLA:H41	23:C:1034:CLA:C8	1.55	1.36
10:K:28:ILE:HD11	27:K:1051:BCR:C8	1.56	1.35
23:B:1014:CLA:C9	23:B:1014:CLA:H122	1.57	1.34
23:B:1019:CLA:CED	23:B:1019:CLA:H2A	1.56	1.33
23:B:1016:CLA:H52	23:H:1017:CLA:C10	1.56	1.33
27:B:1045:BCR:H371	27:B:1045:BCR:C40	1.59	1.33
27:K:1051:BCR:H371	27:K:1051:BCR:C40	1.59	1.33

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:D:1050:BCR:HC8	27:D:1050:BCR:C33	1.52	1.32
27:K:1051:BCR:C39	27:K:1051:BCR:H371	1.59	1.32
23:B:1022:CLA:HHD	23:B:1022:CLA:CBC	1.53	1.32
23:C:1028:CLA:H121	23:C:1028:CLA:C17	1.57	1.32
27:D:1050:BCR:H371	27:D:1050:BCR:C39	1.58	1.31
27:T:6046:BCR:H371	27:T:6046:BCR:C38	1.60	1.31
29:B:1060:MGE:H212	29:B:1060:MGE:CFB	1.50	1.31
27:B:1045:BCR:H371	27:B:1045:BCR:C39	1.59	1.31
10:K:28:ILE:HG22	10:K:29:PRO:CD	1.59	1.31
12:M:1:MET:N	12:M:1:MET:HE2	1.40	1.31
23:A:1003:CLA:CAB	23:A:1006:CLA:HMD2	1.58	1.31
23:C:1033:CLA:C14	23:C:1033:CLA:H18	1.60	1.31
27:A:1044:BCR:C39	27:A:1044:BCR:H371	1.60	1.30
23:B:1020:CLA:H91	23:B:1020:CLA:C12	1.59	1.30
27:A:1044:BCR:C40	27:A:1044:BCR:H371	1.59	1.30
1:A:72:LEU:O	1:A:73:TYR:CD2	1.85	1.30
23:B:1012:CLA:C9	23:B:1012:CLA:H121	1.58	1.30
27:D:1050:BCR:C40	27:D:1050:BCR:H371	1.59	1.30
27:C:1054:BCR:C38	27:C:1054:BCR:H23C	1.58	1.29
23:B:1014:CLA:O1A	23:B:1014:CLA:HMA3	1.33	1.29
23:B:1020:CLA:CMA	23:B:1020:CLA:HBA1	1.57	1.29
23:C:1033:CLA:C15	23:C:1033:CLA:H192	1.60	1.29
27:D:1050:BCR:C37	29:J:1059:MGE:H4A2	1.62	1.28
23:B:1014:CLA:H112	23:B:1014:CLA:C16	1.63	1.27
23:B:1022:CLA:H92	23:B:1022:CLA:C5	1.62	1.27
27:B:1045:BCR:C30	27:B:1045:BCR:H371	1.65	1.27
23:C:1029:CLA:C15	23:C:1029:CLA:H192	1.51	1.27
27:A:1044:BCR:C30	27:A:1044:BCR:H371	1.63	1.26
23:B:1010:CLA:C9	23:B:1010:CLA:H122	1.49	1.26
24:A:1038:PHO:H193	24:A:1038:PHO:C14	1.64	1.26
27:A:1044:BCR:C37	27:A:1044:BCR:H403	1.64	1.26
27:A:1044:BCR:H392	27:A:1044:BCR:C37	1.64	1.26
27:K:1051:BCR:C37	27:K:1051:BCR:H392	1.65	1.25
23:B:1022:CLA:H52	23:B:1022:CLA:C9	1.51	1.25
27:K:1051:BCR:H322	27:K:1052:BCR:C11	1.65	1.25
27:D:1050:BCR:C37	27:D:1050:BCR:H403	1.65	1.25
27:K:1051:BCR:H371	27:K:1051:BCR:C30	1.64	1.25
14:T:1:MET:CE	14:T:1:MET:H1	1.47	1.25
1:A:72:LEU:C	1:A:73:TYR:HD2	1.37	1.25
10:K:32:PHE:CE1	27:K:1052:BCR:H24C	1.72	1.25
27:B:1045:BCR:C37	27:B:1045:BCR:H392	1.66	1.24
27:D:1050:BCR:C30	27:D:1050:BCR:H371	1.66	1.24

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:D:1050:BCR:C37	27:D:1050:BCR:H392	1.65	1.24
27:D:1050:BCR:H373	29:J:1059:MGE:C4A	1.66	1.24
27:B:1048:BCR:H23C	27:B:1048:BCR:C38	1.63	1.24
2:B:464:PHE:CZ	29:B:1060:MGE:C4B	2.21	1.24
27:B:1045:BCR:C37	27:B:1045:BCR:H403	1.66	1.24
27:K:1051:BCR:C37	27:K:1051:BCR:H403	1.66	1.24
23:B:1009:CLA:HMB2	27:H:1049:BCR:C39	1.68	1.24
23:C:1029:CLA:C19	23:C:1029:CLA:H152	1.57	1.23
23:C:1034:CLA:C7	23:C:1034:CLA:H41	1.54	1.23
23:B:1010:CLA:OBD	23:B:1010:CLA:HED3	1.36	1.23
23:A:1006:CLA:CMB	24:A:1039:PHO:H161	1.66	1.23
23:B:1021:CLA:C17	29:B:1060:MGE:H132	1.68	1.23
23:C:1033:CLA:C19	23:C:1033:CLA:H151	1.63	1.23
23:C:1026:CLA:H51	23:C:1026:CLA:O1A	1.34	1.23
23:C:1029:CLA:HMA2	23:C:1029:CLA:CBA	1.60	1.23
1:A:72:LEU:C	1:A:73:TYR:CD2	2.12	1.23
23:B:1022:CLA:C17	23:B:1022:CLA:H141	1.67	1.22
14:T:4:ILE:O	14:T:4:ILE:HD12	1.34	1.22
23:B:1020:CLA:CBA	23:B:1020:CLA:HMA2	1.67	1.22
23:D:1008:CLA:H71	23:D:1008:CLA:C4	1.64	1.22
10:K:28:ILE:HA	10:K:31:LEU:CD1	1.70	1.21
23:C:1033:CLA:C12	23:C:1033:CLA:H91	1.66	1.21
23:B:1009:CLA:CGD	23:B:1009:CLA:HBA2	1.69	1.21
23:B:1020:CLA:H12	23:B:1023:CLA:CED	1.69	1.21
23:C:1031:CLA:O2D	23:C:1031:CLA:HAA2	1.36	1.21
27:B:1047:BCR:H343	27:B:1047:BCR:C32	1.72	1.20
23:B:1020:CLA:C13	23:B:1020:CLA:H91	1.70	1.20
23:B:1022:CLA:HED2	23:B:1022:CLA:OBD	1.39	1.20
23:A:1006:CLA:H111	28:C:1057:DGD:CIB	1.71	1.20
23:C:1031:CLA:CED	23:C:1031:CLA:HAA2	1.70	1.20
23:B:1011:CLA:CBB	23:B:1013:CLA:H171	1.71	1.20
23:B:1014:CLA:H91	23:B:1014:CLA:C12	1.71	1.20
23:B:1020:CLA:C8	23:B:1020:CLA:H13	1.54	1.19
27:B:1047:BCR:C9	27:B:1047:BCR:H321	1.71	1.19
23:C:1025:CLA:C16	23:C:1031:CLA:HMB3	1.71	1.19
23:A:1006:CLA:HBC3	23:A:1006:CLA:HHD	1.25	1.19
23:B:1014:CLA:CMA	23:B:1014:CLA:HBA1	1.69	1.19
27:Z:1053:BCR:C38	27:Z:1053:BCR:H23C	1.65	1.19
23:B:1009:CLA:H12	27:H:1049:BCR:C16	1.73	1.18
23:C:1034:CLA:C17	23:C:1034:CLA:H141	1.71	1.18
23:B:1009:CLA:HMB1	27:H:1049:BCR:H393	1.21	1.18
28:C:1056:DGD:C3E	28:C:1056:DGD:HD61	1.62	1.18

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1022:CLA:H172	23:B:1022:CLA:C14	1.71	1.18
23:B:1022:CLA:O1D	23:B:1022:CLA:HAA1	1.39	1.18
23:C:1031:CLA:H2	23:C:1031:CLA:CMA	1.70	1.18
23:B:1023:CLA:HAA2	23:B:1023:CLA:CGD	1.74	1.18
23:C:1033:CLA:C18	23:C:1033:CLA:H141	1.72	1.18
23:C:1037:CLA:HAA1	23:C:1037:CLA:O2D	1.43	1.18
23:B:1014:CLA:HHD	23:B:1014:CLA:HBC2	1.24	1.17
10:K:26:PRO:O	10:K:29:PRO:HD2	1.44	1.17
23:C:1025:CLA:CBB	23:C:1025:CLA:H93	1.75	1.17
24:A:1038:PHO:HMB3	23:D:1005:CLA:C9	1.74	1.17
10:K:32:PHE:CE1	27:K:1052:BCR:H392	1.80	1.17
23:B:1011:CLA:C3D	23:B:1013:CLA:H43	1.74	1.17
23:B:1012:CLA:H121	23:B:1012:CLA:H91	1.23	1.17
27:K:1051:BCR:H331	27:K:1051:BCR:C8	1.59	1.17
23:B:1014:CLA:C19	23:B:1014:CLA:H151	1.74	1.17
23:C:1033:CLA:HHD	23:C:1033:CLA:HBC3	1.26	1.16
10:K:39:VAL:HG22	18:Y:36:ILE:CD1	1.75	1.16
23:B:1022:CLA:C8	23:B:1022:CLA:H13	1.75	1.16
23:B:1009:CLA:HAA1	23:B:1009:CLA:O2D	1.45	1.16
23:B:1011:CLA:CBB	23:B:1013:CLA:H203	1.74	1.16
23:D:1005:CLA:H202	23:D:1005:CLA:H151	1.27	1.16
14:T:1:MET:O	14:T:4:ILE:HG22	1.46	1.16
23:C:1033:CLA:CMA	23:C:1033:CLA:HBA1	1.75	1.16
23:A:1003:CLA:H161	24:A:1038:PHO:C9	1.75	1.15
23:B:1022:CLA:CGD	23:B:1022:CLA:HAA1	1.75	1.15
30:A:1063:LHG:H161	30:A:1063:LHG:H121	1.19	1.15
23:A:1006:CLA:C17	27:D:1050:BCR:H291	1.76	1.15
1:A:279:ARG:NH2	24:A:1038:PHO:HAC1	1.62	1.15
23:B:1022:CLA:H8	23:B:1022:CLA:H13	1.23	1.15
23:C:1029:CLA:CMA	23:C:1029:CLA:HBA2	1.70	1.15
1:A:78:ILE:HA	1:A:176:ILE:HD12	1.27	1.15
23:A:1003:CLA:C16	24:A:1038:PHO:H93	1.76	1.15
23:B:1010:CLA:CMD	23:B:1011:CLA:H8	1.74	1.15
23:C:1034:CLA:H172	23:C:1034:CLA:C14	1.73	1.15
23:B:1023:CLA:C12	23:B:1023:CLA:H91	1.74	1.15
2:B:103:LEU:HB2	23:B:1014:CLA:H71	1.25	1.15
2:B:460:LEU:HA	28:H:1058:DGD:HAG1	1.16	1.15
7:H:35:MET:HG2	27:H:1049:BCR:H333	1.28	1.14
24:A:1038:PHO:H193	24:A:1038:PHO:C13	1.77	1.14
23:C:1036:CLA:H172	27:Z:1053:BCR:H373	1.19	1.14
23:C:1034:CLA:H102	23:C:1034:CLA:C4	1.78	1.14
23:C:1033:CLA:CBA	23:C:1033:CLA:HMA3	1.76	1.14

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:257:TRP:CZ3	4:D:291:LEU:HG	1.81	1.14
23:B:1011:CLA:HBB2	23:B:1013:CLA:C18	1.77	1.14
23:A:1006:CLA:C17	27:D:1050:BCR:H401	1.77	1.14
23:A:1006:CLA:H172	27:D:1050:BCR:H401	1.30	1.14
1:A:60:ILE:HG12	1:A:61:ASP:H	1.03	1.13
23:B:1022:CLA:H72	23:B:1022:CLA:H141	1.29	1.13
1:A:54:ALA:HB2	1:A:72:LEU:HD12	1.24	1.13
23:H:1017:CLA:HHD	23:H:1017:CLA:HBC2	1.27	1.13
23:C:1028:CLA:C12	23:C:1028:CLA:H172	1.77	1.12
23:C:1033:CLA:HED3	23:C:1033:CLA:OBD	1.48	1.12
3:C:62:PHE:CE2	10:K:28:ILE:HG21	1.84	1.12
10:K:28:ILE:HD11	27:K:1051:BCR:C9	1.78	1.12
23:B:1023:CLA:H91	23:B:1023:CLA:H121	1.29	1.12
2:B:271:THR:HG23	2:B:274:GLN:HB2	1.18	1.12
23:C:1034:CLA:H41	23:C:1034:CLA:C10	1.79	1.12
3:C:264:PHE:CE1	27:C:1054:BCR:H311	1.83	1.12
1:A:57:PRO:HA	1:A:68:SER:CB	1.79	1.12
23:B:1020:CLA:H12	23:B:1023:CLA:HED1	1.12	1.12
27:C:1054:BCR:H383	27:C:1054:BCR:H23C	1.18	1.12
29:D:1062:MGE:H241	14:T:13:ILE:HG21	1.31	1.12
23:B:1009:CLA:HHC	23:B:1009:CLA:HBB1	1.15	1.12
1:A:150:PRO:HA	23:A:1003:CLA:H42	1.23	1.12
23:B:1012:CLA:H12	23:B:1013:CLA:C1	1.78	1.12
23:C:1036:CLA:C17	23:C:1036:CLA:H142	1.75	1.12
23:B:1009:CLA:HMB2	27:H:1049:BCR:H393	1.13	1.12
23:C:1034:CLA:C9	23:C:1034:CLA:H142	1.79	1.11
23:D:1005:CLA:C20	23:D:1005:CLA:H151	1.81	1.11
10:K:28:ILE:CA	10:K:31:LEU:HD12	1.81	1.11
23:C:1034:CLA:HHD	23:C:1034:CLA:HBC3	1.27	1.11
23:C:1034:CLA:C9	23:C:1034:CLA:H121	1.77	1.11
23:B:1016:CLA:H52	23:H:1017:CLA:H101	1.24	1.11
23:A:1003:CLA:H161	24:A:1038:PHO:H93	1.11	1.10
23:C:1025:CLA:HAA1	23:C:1025:CLA:CGD	1.80	1.10
27:D:1050:BCR:C8	27:D:1050:BCR:H331	1.53	1.10
23:C:1025:CLA:H162	23:C:1031:CLA:HMB3	1.33	1.10
23:B:1019:CLA:HAA2	23:B:1019:CLA:CED	1.79	1.10
23:B:1022:CLA:C7	23:B:1022:CLA:C14	2.30	1.10
23:C:1036:CLA:H171	23:C:1036:CLA:H142	1.24	1.10
1:A:149:ALA:HB1	1:A:283:VAL:CG2	1.80	1.10
23:C:1034:CLA:C14	23:C:1034:CLA:H92	1.82	1.10
23:B:1009:CLA:CGD	23:B:1009:CLA:CBA	2.30	1.10
23:C:1031:CLA:C14	23:C:1031:CLA:H171	1.81	1.10

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:27:ILE:HB	5:E:28:PRO:HD3	1.21	1.10
27:T:6046:BCR:C37	27:T:6046:BCR:C38	2.30	1.10
23:A:1006:CLA:H111	28:C:1057:DGD:HBG3	1.13	1.10
2:B:38:ALA:O	2:B:42:LEU:HB2	1.52	1.10
23:H:1017:CLA:C19	23:H:1017:CLA:H152	1.81	1.09
23:C:1034:CLA:H142	23:C:1034:CLA:H92	1.10	1.09
24:A:1038:PHO:CMB	23:D:1005:CLA:H92	1.80	1.09
23:B:1014:CLA:CGA	23:B:1014:CLA:HMA3	1.81	1.09
1:A:95:PRO:HA	23:A:1007:CLA:HED1	1.12	1.09
1:A:279:ARG:HH22	24:A:1038:PHO:HAC1	1.08	1.09
23:B:1016:CLA:C5	23:H:1017:CLA:C10	2.29	1.09
23:B:1019:CLA:H62	23:B:1021:CLA:HED1	1.34	1.09
27:B:1045:BCR:H353	27:B:1047:BCR:C10	1.82	1.09
30:A:1063:LHG:H322	23:C:1034:CLA:C14	1.82	1.09
23:D:1005:CLA:HED2	23:D:1005:CLA:C2A	1.80	1.09
6:F:37:ILE:HA	6:F:40:MET:HE3	1.30	1.09
13:O:119:LEU:H	13:O:155:THR:HG22	1.14	1.09
24:A:1038:PHO:HED2	24:A:1038:PHO:CAD	1.79	1.09
1:A:95:PRO:HA	23:A:1007:CLA:CED	1.82	1.09
10:K:28:ILE:CD1	27:K:1051:BCR:C8	2.30	1.09
27:T:6046:BCR:C37	27:T:6046:BCR:C26	2.30	1.09
23:A:1007:CLA:CBC	23:A:1007:CLA:HHD	1.81	1.09
16:V:160:LYS:NZ	16:V:160:LYS:HB2	1.48	1.09
2:B:253:ALA:HB2	2:B:455:HIS:HB2	1.10	1.09
23:C:1029:CLA:C20	23:C:1030:CLA:H192	1.83	1.09
23:C:1034:CLA:C4	23:C:1034:CLA:H71	1.78	1.09
29:L:1061:MGE:H1G2	29:L:1061:MGE:O1B	1.53	1.09
23:B:1022:CLA:H171	23:B:1022:CLA:H71	1.31	1.09
10:K:39:VAL:HG22	18:Y:36:ILE:HD11	1.25	1.09
24:A:1038:PHO:CED	24:A:1038:PHO:C3D	2.30	1.08
23:B:1011:CLA:HBB1	23:B:1011:CLA:HHC	1.34	1.08
23:B:1022:CLA:C7	23:B:1022:CLA:H171	1.83	1.08
23:D:1008:CLA:H41	23:D:1008:CLA:H71	1.10	1.08
23:B:1019:CLA:CED	23:B:1019:CLA:CAA	2.30	1.08
27:B:1047:BCR:C8	27:B:1047:BCR:H321	1.66	1.08
24:A:1038:PHO:HED2	24:A:1038:PHO:C3D	1.83	1.08
23:H:1017:CLA:HBB1	27:H:1049:BCR:C32	1.84	1.08
23:C:1036:CLA:C17	23:C:1036:CLA:C14	2.31	1.08
23:A:1007:CLA:HHD	23:A:1007:CLA:HBC2	1.11	1.08
23:B:1020:CLA:H91	23:B:1020:CLA:H121	1.26	1.08
23:B:1021:CLA:H62	29:B:1060:MGE:H231	1.31	1.08
23:B:1019:CLA:C2A	23:B:1019:CLA:CED	2.31	1.08

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B:1047:BCR:C8	27:B:1047:BCR:C32	2.30	1.08
23:C:1034:CLA:C12	23:C:1034:CLA:H91	1.83	1.08
28:C:1056:DGD:C6D	28:C:1056:DGD:HE3	1.83	1.08
27:K:1051:BCR:H322	27:K:1052:BCR:H10C	1.08	1.08
23:B:1014:CLA:CMA	23:B:1014:CLA:CBA	2.29	1.08
23:B:1016:CLA:H52	23:H:1017:CLA:H102	1.28	1.08
27:B:1047:BCR:C34	27:B:1047:BCR:C32	2.30	1.08
23:C:1030:CLA:HMC2	23:C:1031:CLA:H101	1.15	1.08
23:B:1009:CLA:C2B	27:H:1049:BCR:H382	1.82	1.07
23:B:1012:CLA:C9	23:B:1012:CLA:C12	2.31	1.07
23:B:1009:CLA:H43	27:H:1049:BCR:H353	1.35	1.07
23:C:1034:CLA:C9	23:C:1034:CLA:C14	2.33	1.07
23:B:1022:CLA:CHD	23:B:1022:CLA:CBC	2.30	1.07
23:B:1020:CLA:H2	23:B:1023:CLA:HBA1	1.36	1.07
23:C:1031:CLA:HMA2	23:C:1031:CLA:C2	1.83	1.07
23:B:1020:CLA:H91	23:B:1020:CLA:C14	1.84	1.07
2:B:64:PRO:HB2	2:B:268:PHE:CE2	1.90	1.07
23:C:1030:CLA:HMC2	23:C:1031:CLA:C10	1.84	1.07
23:C:1034:CLA:C10	23:C:1034:CLA:C4	2.32	1.07
23:B:1016:CLA:C5	23:H:1017:CLA:H102	1.85	1.07
27:K:1052:BCR:H23C	27:K:1052:BCR:H382	1.11	1.07
23:B:1020:CLA:C13	23:B:1020:CLA:C9	2.32	1.07
4:D:253:TRP:HA	4:D:256:ILE:HG22	1.33	1.07
23:H:1017:CLA:H192	23:H:1017:CLA:H152	1.31	1.07
23:B:1021:CLA:H172	29:B:1060:MGE:CDA	1.84	1.06
23:C:1026:CLA:HMB1	23:C:1026:CLA:HBB1	1.31	1.06
27:H:1049:BCR:H403	27:H:1049:BCR:H23C	1.23	1.06
23:B:1020:CLA:C9	23:B:1020:CLA:H142	1.83	1.06
23:B:1021:CLA:H172	29:B:1060:MGE:H132	1.07	1.06
23:C:1032:CLA:H43	23:C:1032:CLA:O1A	1.54	1.06
23:B:1011:CLA:H42	23:B:1013:CLA:H91	1.07	1.06
23:C:1029:CLA:H201	23:C:1030:CLA:H192	1.35	1.06
3:C:45:LEU:HD22	3:C:140:LEU:H	1.08	1.06
13:O:127:ILE:HD12	13:O:127:ILE:H	1.15	1.06
23:B:1020:CLA:H8	23:B:1020:CLA:H13	1.08	1.06
23:C:1033:CLA:C9	23:C:1033:CLA:C12	2.30	1.06
23:B:1019:CLA:H193	23:B:1021:CLA:H71	1.24	1.06
23:D:1005:CLA:HED2	23:D:1005:CLA:H2A	1.08	1.06
23:H:1017:CLA:H192	23:H:1017:CLA:C15	1.86	1.06
23:B:1022:CLA:H41	23:B:1022:CLA:H93	1.11	1.06
23:C:1035:CLA:H101	27:K:1052:BCR:H403	1.35	1.06
23:B:1009:CLA:HED3	23:B:1009:CLA:H2A	1.38	1.06

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1009:CLA:H43	27:H:1049:BCR:C35	1.85	1.06
23:C:1033:CLA:H122	23:C:1033:CLA:H91	1.21	1.06
2:B:465:GLY:H	23:B:1019:CLA:CBC	1.68	1.05
23:B:1016:CLA:C14	23:D:1008:CLA:HMB2	1.86	1.05
23:B:1021:CLA:H2A	23:B:1021:CLA:O2A	1.52	1.05
28:C:1056:DGD:C6D	28:C:1056:DGD:HE5	1.86	1.05
23:C:1031:CLA:C17	23:C:1031:CLA:H141	1.86	1.05
2:B:464:PHE:O	2:B:467:ILE:HB	1.56	1.05
28:C:1056:DGD:HAV1	28:C:1057:DGD:HA82	1.31	1.05
1:A:149:ALA:HB1	1:A:283:VAL:HG22	1.33	1.05
14:T:1:MET:HE2	14:T:1:MET:H1	1.17	1.05
13:O:65:ARG:HH22	13:O:66:ILE:HG12	1.18	1.05
23:A:1003:CLA:CBB	23:A:1006:CLA:HMD2	1.86	1.04
23:B:1014:CLA:C15	23:B:1014:CLA:H193	1.84	1.04
23:B:1021:CLA:OBD	23:B:1022:CLA:HHC	1.57	1.04
23:B:1021:CLA:H193	29:B:1060:MGE:H133	1.39	1.04
2:B:24:LEU:HD13	2:B:111:ALA:HA	1.34	1.04
23:C:1034:CLA:C7	23:C:1034:CLA:C4	2.30	1.04
23:B:1012:CLA:H93	23:B:1012:CLA:H121	1.37	1.04
23:B:1014:CLA:C11	23:B:1014:CLA:H161	1.87	1.04
23:B:1016:CLA:HHD	23:B:1016:CLA:CBC	1.86	1.04
23:B:1022:CLA:HHD	23:B:1022:CLA:HBC3	1.10	1.04
10:K:32:PHE:HE1	27:K:1052:BCR:H24C	0.94	1.04
28:C:1056:DGD:HE5	28:C:1056:DGD:HD62	1.10	1.04
23:B:1010:CLA:HMD3	23:B:1011:CLA:C8	1.86	1.04
27:K:1051:BCR:C32	27:K:1052:BCR:C11	2.35	1.04
24:A:1038:PHO:C19	24:A:1038:PHO:C14	2.30	1.04
3:C:62:PHE:CE2	10:K:28:ILE:CG2	2.39	1.04
10:K:28:ILE:CD1	27:K:1051:BCR:C7	2.36	1.04
10:K:33:PHE:O	10:K:33:PHE:HD1	1.38	1.04
23:A:1006:CLA:C17	27:D:1050:BCR:C29	2.35	1.04
23:A:1003:CLA:C14	24:A:1038:PHO:C9	2.34	1.04
27:B:1047:BCR:H23C	27:B:1047:BCR:H383	1.05	1.04
2:B:25:MET:HG3	27:B:1045:BCR:H292	1.06	1.04
23:B:1012:CLA:HHD	23:B:1012:CLA:CBC	1.86	1.04
23:B:1019:CLA:O2D	23:B:1019:CLA:H2A	1.57	1.04
23:B:1019:CLA:H193	23:B:1021:CLA:H52	1.36	1.03
23:A:1003:CLA:H141	24:A:1038:PHO:H93	1.39	1.03
23:B:1019:CLA:HHC	23:B:1019:CLA:HBB1	1.05	1.03
3:C:107:ASP:OD1	3:C:110:PRO:HD3	1.57	1.03
4:D:274:VAL:HB	4:D:275:PRO:HD3	1.37	1.03
3:C:294:ASN:HB2	28:C:1055:DGD:O3E	1.59	1.03

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:A:1038:PHO:H102	24:A:1038:PHO:H143	1.37	1.03
30:A:1063:LHG:C32	23:C:1034:CLA:C14	2.35	1.03
23:B:1022:CLA:CHD	23:B:1022:CLA:HBC3	1.87	1.03
1:A:193:LEU:HD11	4:D:182:LEU:HD12	1.39	1.03
23:A:1006:CLA:H171	27:D:1050:BCR:H291	1.06	1.03
23:B:1011:CLA:H121	27:H:1049:BCR:H322	1.36	1.03
23:A:1003:CLA:H141	24:A:1038:PHO:H91	1.06	1.03
23:C:1025:CLA:HBB1	23:C:1025:CLA:H93	1.36	1.03
23:B:1024:CLA:HMC1	23:B:1024:CLA:HBC2	1.08	1.03
20:Z:15:LEU:HD22	20:Z:50:LEU:HD12	1.39	1.03
23:B:1022:CLA:C7	23:B:1022:CLA:H13	1.88	1.02
3:C:63:TRP:HZ3	23:C:1027:CLA:CBC	1.72	1.02
23:B:1014:CLA:HBA1	23:B:1014:CLA:HMA2	1.07	1.02
23:C:1034:CLA:C12	23:C:1034:CLA:C9	2.35	1.02
18:Y:39:LEU:HD21	20:Z:25:VAL:HG22	1.41	1.02
23:B:1021:CLA:OBD	23:B:1022:CLA:HMC3	1.57	1.02
27:B:1045:BCR:C37	27:B:1045:BCR:C40	2.30	1.02
3:C:169:GLY:HA3	3:C:245:ILE:HG12	1.41	1.02
10:K:28:ILE:HA	10:K:31:LEU:HD12	1.05	1.02
23:A:1006:CLA:HMB3	24:A:1039:PHO:H161	1.41	1.02
23:B:1022:CLA:C13	23:B:1022:CLA:C8	2.30	1.02
23:C:1028:CLA:H43	28:C:1057:DGD:HA22	1.37	1.02
2:B:465:GLY:H	23:B:1019:CLA:HBC1	1.23	1.02
23:B:1022:CLA:HHH	23:B:1022:CLA:HBC2	1.40	1.02
23:B:1009:CLA:H12	27:H:1049:BCR:C17	1.90	1.02
2:B:254:GLY:O	2:B:258:TYR:HD1	1.40	1.02
27:D:1050:BCR:C37	27:D:1050:BCR:C40	2.30	1.02
23:C:1030:CLA:CMC	23:C:1031:CLA:H101	1.87	1.02
23:A:1006:CLA:C2	23:A:1006:CLA:H72	1.84	1.02
30:A:1063:LHG:C32	23:C:1034:CLA:H143	1.89	1.02
23:B:1009:CLA:CMB	27:H:1049:BCR:C39	2.29	1.02
23:B:1022:CLA:H142	23:B:1022:CLA:H72	1.39	1.02
23:A:1006:CLA:H171	27:D:1050:BCR:C40	1.89	1.02
28:C:1056:DGD:HBN2	10:K:30:VAL:HG21	1.42	1.02
30:A:1063:LHG:H312	23:C:1034:CLA:C9	1.90	1.02
23:B:1014:CLA:HBB1	23:B:1014:CLA:HMB1	1.04	1.02
23:A:1003:CLA:HBC2	23:A:1003:CLA:HHH	1.39	1.01
6:F:41:GLN:NE2	9:J:27:LEU:HB3	1.74	1.01
3:C:223:TRP:HB3	3:C:224:ILE:HD13	1.41	1.01
2:B:221:PRO:HA	23:H:1017:CLA:HED2	1.39	1.01
10:K:32:PHE:CD1	27:K:1052:BCR:H392	1.95	1.01
23:A:1003:CLA:H172	24:A:1038:PHO:H43	1.42	1.01

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1011:CLA:H192	23:H:1017:CLA:H121	1.39	1.01
23:C:1026:CLA:H203	23:C:1026:CLA:ND	1.75	1.01
1:A:57:PRO:HA	1:A:68:SER:HB2	1.43	1.01
2:B:64:PRO:HB2	2:B:268:PHE:HE2	1.22	1.01
30:A:1063:LHG:H322	23:C:1034:CLA:H142	1.40	1.01
23:B:1019:CLA:HHC	23:B:1019:CLA:CBB	1.86	1.01
23:C:1031:CLA:H171	23:C:1031:CLA:H141	1.42	1.01
23:B:1016:CLA:H142	23:D:1008:CLA:CMB	1.89	1.01
27:B:1047:BCR:H343	27:B:1047:BCR:H321	1.30	1.01
23:D:1005:CLA:C20	23:D:1005:CLA:C15	2.34	1.01
13:O:111:LEU:HD13	13:O:121:PHE:HB2	1.41	1.01
23:A:1006:CLA:H171	27:D:1050:BCR:C30	1.91	1.00
30:A:1063:LHG:O4	30:A:1063:LHG:HC61	1.61	1.00
23:B:1020:CLA:C13	23:B:1020:CLA:C8	2.35	1.00
23:C:1031:CLA:O1D	23:C:1033:CLA:H101	1.60	1.00
10:K:33:PHE:C	10:K:33:PHE:CD1	2.29	1.00
2:B:27:THR:HG21	23:B:1020:CLA:H11	1.40	1.00
28:C:1056:DGD:HB61	28:C:1056:DGD:CAB	1.90	1.00
4:D:209:LEU:HD22	26:D:1042:PQ9:H192	1.41	1.00
1:A:81:ALA:CB	1:A:175:GLY:HA3	1.90	1.00
2:B:460:LEU:CA	28:H:1058:DGD:HAG1	1.90	1.00
24:A:1038:PHO:H193	24:A:1038:PHO:H141	1.12	1.00
23:B:1019:CLA:C19	23:B:1021:CLA:H52	1.90	1.00
2:B:458:PHE:CD2	23:B:1012:CLA:HMC3	1.95	1.00
2:B:456:ALA:HA	28:H:1058:DGD:CIB	1.92	1.00
27:T:6046:BCR:H382	27:T:6046:BCR:C37	1.91	1.00
23:B:1019:CLA:HBB1	23:B:1019:CLA:CHC	1.84	1.00
23:B:1014:CLA:H151	23:B:1014:CLA:H193	1.00	1.00
27:B:1047:BCR:C23	27:B:1047:BCR:H383	1.92	1.00
27:K:1051:BCR:C32	27:K:1052:BCR:C10	2.39	1.00
1:A:278:TRP:HA	1:A:278:TRP:CE3	1.95	0.99
23:C:1025:CLA:HMD2	23:C:1026:CLA:H43	1.44	0.99
23:C:1036:CLA:H172	23:C:1036:CLA:C14	1.90	0.99
20:Z:55:GLY:HA2	27:Z:1053:BCR:H311	1.40	0.99
23:D:1008:CLA:C4	23:D:1008:CLA:C7	2.39	0.99
4:D:49:LEU:HD21	29:J:1059:MGE:H7A1	1.44	0.99
24:A:1038:PHO:HBC2	24:A:1038:PHO:CHD	1.90	0.99
23:B:1012:CLA:H101	23:B:1023:CLA:H42	1.43	0.99
27:K:1051:BCR:C37	27:K:1051:BCR:C40	2.30	0.99
27:D:1050:BCR:C37	27:D:1050:BCR:C39	2.30	0.99
27:A:1044:BCR:C40	27:A:1044:BCR:C37	2.30	0.99
23:B:1020:CLA:C9	23:B:1020:CLA:C12	2.37	0.99

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:B:1047:BCR:H23C	27:B:1047:BCR:C38	1.85	0.99
13:O:65:ARG:CZ	13:O:66:ILE:H	1.74	0.99
23:B:1015:CLA:H18	29:B:1060:MGE:H8A1	1.43	0.99
10:K:28:ILE:HD13	27:K:1051:BCR:HC7	1.45	0.99
23:B:1011:CLA:C3D	23:B:1013:CLA:C4	2.39	0.99
28:C:1056:DGD:HGB2	28:C:1056:DGD:HBF1	1.43	0.98
10:K:32:PHE:CD1	27:K:1052:BCR:C39	2.45	0.98
27:A:1044:BCR:C37	27:A:1044:BCR:C39	2.30	0.98
23:B:1011:CLA:CAD	23:B:1013:CLA:H43	1.91	0.98
2:B:223:GLN:HG3	2:B:224:ARG:H	1.27	0.98
14:T:18:PHE:CD1	27:T:6046:BCR:H343	1.97	0.98
27:Z:1053:BCR:H382	27:Z:1053:BCR:C23	1.88	0.98
1:A:203:ALA:HA	23:A:1006:CLA:O1A	1.59	0.98
23:D:1008:CLA:H41	23:D:1008:CLA:C7	1.92	0.98
27:B:1045:BCR:C37	27:B:1045:BCR:C39	2.30	0.98
27:D:1050:BCR:H281	29:J:1059:MGE:H9B2	1.45	0.98
27:D:1050:BCR:H282	29:J:1059:MGE:H212	1.42	0.98
23:B:1024:CLA:HMC1	23:B:1024:CLA:CBC	1.94	0.98
7:H:35:MET:CG	27:H:1049:BCR:H333	1.93	0.98
23:A:1006:CLA:C17	27:D:1050:BCR:C40	2.41	0.98
24:A:1038:PHO:H193	24:A:1038:PHO:C15	1.92	0.98
1:A:97:TRP:HA	8:I:1:MET:SD	2.03	0.98
23:B:1014:CLA:H91	23:B:1014:CLA:H122	0.98	0.98
27:B:1048:BCR:H383	27:B:1048:BCR:C23	1.85	0.98
23:C:1034:CLA:HHD	23:C:1034:CLA:CBC	1.93	0.98
11:L:23:LEU:O	11:L:27:LEU:HB2	1.63	0.98
23:C:1034:CLA:H121	23:C:1034:CLA:H91	1.00	0.98
23:H:1017:CLA:HHD	23:H:1017:CLA:CBC	1.93	0.98
23:B:1022:CLA:H142	23:B:1022:CLA:C10	1.92	0.98
2:B:253:ALA:HB2	2:B:455:HIS:CB	1.93	0.98
24:A:1038:PHO:CED	24:A:1038:PHO:CAD	2.40	0.98
23:B:1012:CLA:HBB1	23:B:1012:CLA:HHC	1.42	0.98
23:B:1019:CLA:O1A	23:B:1019:CLA:H3A	1.62	0.98
23:H:1017:CLA:HBB1	27:H:1049:BCR:H323	1.44	0.98
23:B:1016:CLA:C20	23:D:1008:CLA:HMA2	1.93	0.97
2:B:464:PHE:HZ	29:B:1060:MGE:H4B2	1.21	0.97
27:K:1052:BCR:C38	27:K:1052:BCR:H23C	1.90	0.97
4:D:17:ILE:HG22	17:X:41:SER:HB3	1.46	0.97
13:O:127:ILE:HD12	13:O:127:ILE:N	1.79	0.97
24:A:1038:PHO:HED3	24:A:1038:PHO:C4D	1.95	0.97
3:C:63:TRP:HZ3	23:C:1027:CLA:HBC1	0.84	0.97
23:C:1033:CLA:H141	23:C:1033:CLA:H18	0.99	0.97

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:C:1056:DGD:HB21	28:C:1056:DGD:HG12	1.47	0.97
6:F:37:ILE:HG21	9:J:28:PHE:CZ	1.99	0.97
2:B:385:ARG:HD3	15:U:44:ASP:HB3	1.44	0.97
23:B:1012:CLA:C1	23:B:1013:CLA:H2	1.95	0.97
3:C:99:VAL:HG11	3:C:196:VAL:HB	1.47	0.97
23:B:1011:CLA:HHD	23:B:1014:CLA:HBB2	1.43	0.97
23:B:1013:CLA:HBB2	23:B:1023:CLA:H41	1.45	0.97
23:C:1027:CLA:HBA1	23:C:1027:CLA:CHA	1.93	0.97
2:B:256:MET:CE	2:B:448:ARG:NH1	2.28	0.97
27:K:1051:BCR:C32	27:K:1052:BCR:H10C	1.93	0.97
2:B:222:PRO:HG2	2:B:225:LEU:HD12	1.47	0.96
3:C:99:VAL:HG21	3:C:196:VAL:HG11	1.43	0.96
27:K:1051:BCR:C37	27:K:1051:BCR:C39	2.30	0.96
23:B:1022:CLA:HBB1	23:B:1022:CLA:HMB1	1.45	0.96
23:B:1011:CLA:H192	23:H:1017:CLA:C12	1.95	0.96
23:B:1020:CLA:H52	23:B:1020:CLA:O2A	1.62	0.96
23:C:1025:CLA:C4	23:C:1025:CLA:C2B	2.43	0.96
10:K:33:PHE:HD1	10:K:33:PHE:C	1.64	0.96
1:A:150:PRO:HA	23:A:1003:CLA:C4	1.95	0.96
1:A:219:VAL:HB	4:D:268:HIS:ND1	1.80	0.96
23:B:1020:CLA:C1	23:B:1023:CLA:HED1	1.95	0.96
2:B:257:TRP:CZ2	4:D:291:LEU:HD12	2.00	0.96
23:C:1033:CLA:HHD	23:C:1033:CLA:CBC	1.95	0.96
28:C:1057:DGD:HAS1	29:J:1059:MGE:CCB	1.94	0.96
23:C:1036:CLA:C17	27:Z:1053:BCR:H373	1.95	0.96
2:B:450:TRP:HB3	23:B:1015:CLA:HMB2	1.44	0.96
13:O:223:ILE:HG12	13:O:224:SER:H	1.27	0.96
30:A:1063:LHG:H271	23:C:1032:CLA:H8	1.48	0.96
23:B:1012:CLA:H11	23:B:1013:CLA:H2	1.45	0.96
2:B:464:PHE:CE2	29:B:1060:MGE:H4B2	2.01	0.96
23:B:1010:CLA:HMB1	23:B:1010:CLA:HBB1	1.47	0.96
23:B:1011:CLA:CBB	23:B:1013:CLA:C17	2.43	0.96
4:D:98:GLN:HE21	5:E:73:LYS:HE3	1.31	0.96
1:A:278:TRP:HE3	1:A:278:TRP:HA	1.30	0.96
23:B:1012:CLA:HED2	23:B:1012:CLA:C2A	1.95	0.96
3:C:51:GLY:HA3	3:C:132:HIS:HB2	1.46	0.96
23:D:1008:CLA:HBB1	23:D:1008:CLA:HMB1	1.47	0.96
2:B:354:LEU:HB3	2:B:370:LEU:HD22	1.47	0.96
23:C:1028:CLA:HHC	23:C:1028:CLA:HBB1	1.48	0.95
24:A:1038:PHO:C19	24:A:1038:PHO:H152	1.94	0.95
23:A:1006:CLA:CED	28:C:1057:DGD:HBH2	1.94	0.95
2:B:380:ASP:OD2	4:D:345:VAL:HG22	1.66	0.95

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:A:1063:LHG:H161	30:A:1063:LHG:C12	1.95	0.95
2:B:25:MET:HG3	27:B:1045:BCR:C29	1.96	0.95
4:D:164:GLN:HG3	4:D:165:SER:H	1.31	0.95
23:B:1012:CLA:H11	23:B:1013:CLA:C2	1.97	0.95
27:K:1051:BCR:C8	27:K:1051:BCR:C33	2.44	0.95
13:O:148:VAL:HG12	13:O:151:LEU:HB2	1.49	0.95
23:C:1033:CLA:H93	23:C:1033:CLA:H51	1.48	0.95
4:D:261:PHE:HE2	4:D:266:TRP:HD1	1.10	0.95
1:A:76:ASN:OD1	11:L:33:SER:HB3	1.66	0.95
14:T:1:MET:CE	14:T:1:MET:N	2.30	0.95
23:C:1034:CLA:H43	23:C:1034:CLA:H102	1.43	0.95
28:C:1055:DGD:HA72	28:C:1055:DGD:HAE1	1.48	0.95
23:B:1022:CLA:H72	23:B:1022:CLA:C17	1.97	0.95
16:V:160:LYS:NZ	16:V:160:LYS:CB	2.30	0.95
24:A:1038:PHO:HBC2	24:A:1038:PHO:HHD	1.45	0.95
23:B:1022:CLA:C7	23:B:1022:CLA:C13	2.44	0.95
6:F:41:GLN:HE22	9:J:27:LEU:C	1.69	0.95
30:A:1063:LHG:H291	23:C:1032:CLA:H8	1.47	0.95
28:C:1056:DGD:CIB	28:C:1056:DGD:CEB	2.44	0.95
3:C:63:TRP:CZ3	23:C:1027:CLA:CBC	2.46	0.95
23:B:1012:CLA:HHD	23:B:1012:CLA:HBC3	1.46	0.94
23:B:1016:CLA:C5	23:H:1017:CLA:H101	1.96	0.94
6:F:40:MET:HB3	29:J:1059:MGE:O5D	1.67	0.94
23:A:1003:CLA:C14	24:A:1038:PHO:H91	1.96	0.94
23:B:1011:CLA:C4	23:B:1013:CLA:H91	1.97	0.94
23:B:1014:CLA:H111	27:B:1048:BCR:H10C	1.49	0.94
2:B:135:LEU:HD12	2:B:135:LEU:H	1.31	0.94
27:H:1049:BCR:H403	27:H:1049:BCR:C23	1.95	0.94
1:A:29:TYR:HE2	1:A:132:GLU:HB3	1.30	0.94
23:B:1014:CLA:H112	23:B:1014:CLA:H161	0.96	0.94
27:K:1052:BCR:C23	27:K:1052:BCR:H382	1.97	0.94
23:B:1019:CLA:HAA2	23:B:1019:CLA:HED2	0.95	0.94
23:C:1031:CLA:CGD	23:C:1033:CLA:C10	2.43	0.94
16:V:120:SER:H	16:V:123:SER:HB2	1.32	0.94
23:A:1003:CLA:CAB	23:A:1006:CLA:CMD	2.45	0.94
23:B:1019:CLA:H193	23:B:1021:CLA:C7	1.97	0.94
23:B:1023:CLA:C4C	23:B:1024:CLA:HBC1	1.96	0.94
23:C:1028:CLA:H121	23:C:1028:CLA:H172	0.94	0.94
23:C:1031:CLA:C17	23:C:1031:CLA:C14	2.36	0.94
11:L:12:LEU:HD12	12:M:26:TYR:HA	1.47	0.94
24:A:1038:PHO:C10	24:A:1038:PHO:H143	1.98	0.94
1:A:140:ARG:HH22	30:A:1063:LHG:HC2	1.30	0.94

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:C:1054:BCR:C23	27:C:1054:BCR:C38	2.37	0.94
27:K:1051:BCR:H392	27:K:1051:BCR:H371	1.31	0.94
23:B:1016:CLA:H142	23:D:1008:CLA:HMB2	0.96	0.94
2:B:99:ALA:HB1	23:B:1014:CLA:H2	1.49	0.94
23:C:1025:CLA:H202	23:C:1025:CLA:H151	1.50	0.94
1:A:199:GLN:CD	1:A:200:LEU:HG	1.87	0.94
12:M:1:MET:N	12:M:1:MET:CE	2.30	0.94
24:A:1038:PHO:C19	24:A:1038:PHO:C15	2.45	0.94
23:B:1011:CLA:C19	23:H:1017:CLA:H13	1.98	0.94
1:A:96:ILE:HA	1:A:105:TRP:CD1	2.02	0.94
23:B:1012:CLA:C1	23:B:1013:CLA:C2	2.44	0.94
2:B:17:GLY:HA2	2:B:123:PHE:HE2	1.32	0.94
28:C:1056:DGD:CIB	28:C:1056:DGD:HBF1	1.97	0.93
3:C:139:THR:HG22	3:C:141:GLU:H	1.33	0.93
1:A:279:ARG:HD3	4:D:208:ALA:HB1	1.50	0.93
23:C:1033:CLA:C18	23:C:1033:CLA:C14	2.36	0.93
23:C:1025:CLA:O1D	23:C:1025:CLA:HBA2	1.67	0.93
27:Z:1053:BCR:H382	27:Z:1053:BCR:H23C	0.95	0.93
23:C:1025:CLA:C20	23:C:1031:CLA:H121	1.99	0.93
28:C:1056:DGD:C5E	28:C:1056:DGD:HD62	1.98	0.93
10:K:32:PHE:HE1	27:K:1052:BCR:C24	1.81	0.93
23:B:1023:CLA:CHD	23:B:1024:CLA:HBC1	1.97	0.93
23:C:1037:CLA:CGD	23:C:1037:CLA:CBA	2.47	0.93
28:C:1056:DGD:HBT2	28:C:1056:DGD:HB61	1.48	0.93
20:Z:61:VAL:HG23	20:Z:62:VAL:H	1.33	0.93
23:C:1029:CLA:CMA	23:C:1029:CLA:CBA	2.30	0.93
2:B:464:PHE:HB2	4:D:280:TRP:CZ2	2.04	0.93
4:D:303:ILE:HD12	4:D:304:ARG:N	1.84	0.93
30:A:1063:LHG:H312	23:C:1034:CLA:H91	1.50	0.93
28:C:1055:DGD:HAE1	28:C:1055:DGD:C7A	1.99	0.93
3:C:256:PRO:HB3	3:C:261:ARG:HH21	1.31	0.93
13:O:188:ARG:HD3	13:O:197:ALA:H	1.32	0.93
3:C:203:THR:HG21	3:C:232:ASP:HA	1.48	0.93
27:C:1054:BCR:H382	27:C:1054:BCR:H23C	1.51	0.92
3:C:259:TRP:O	3:C:262:ARG:HG2	1.69	0.92
7:H:53:LEU:HG	7:H:55:LEU:HD11	1.50	0.92
8:I:6:ILE:HD13	8:I:6:ILE:H	1.34	0.92
23:A:1003:CLA:HMB1	23:A:1003:CLA:HBB1	1.52	0.92
23:B:1013:CLA:CMC	23:B:1023:CLA:H11	1.99	0.92
1:A:188:ALA:HB2	1:A:328:MET:HG3	1.50	0.92
23:B:1020:CLA:OBD	23:B:1020:CLA:HED2	1.70	0.92
23:B:1015:CLA:H18	29:B:1060:MGE:C8A	1.99	0.92

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:43:LEU:H	4:D:43:LEU:HD22	1.35	0.92
2:B:325:PHE:CE1	11:L:34:TYR:HB3	2.03	0.92
23:B:1011:CLA:H172	23:B:1016:CLA:HBC1	1.50	0.92
3:C:184:GLY:HA3	3:C:198:VAL:HA	1.49	0.92
3:C:75:PHE:HE2	3:C:105:VAL:HG11	1.33	0.92
23:B:1020:CLA:C14	23:B:1020:CLA:C9	2.43	0.92
23:B:1022:CLA:C4	23:B:1022:CLA:H93	1.99	0.92
24:A:1038:PHO:H141	24:A:1038:PHO:H191	1.52	0.92
1:A:210:LEU:HD23	23:A:1006:CLA:H41	1.50	0.92
27:C:1054:BCR:H393	27:C:1054:BCR:H271	1.51	0.92
13:O:99:ARG:O	13:O:101:THR:HG23	1.69	0.92
23:B:1022:CLA:H142	23:B:1022:CLA:H101	1.50	0.92
1:A:200:LEU:HD13	1:A:285:PHE:CD1	2.05	0.91
23:B:1012:CLA:H12	23:B:1013:CLA:O2A	1.69	0.91
2:B:214:LEU:O	2:B:217:ILE:HG22	1.70	0.91
13:O:46:PRO:HD2	13:O:266:TYR:HD2	1.35	0.91
1:A:57:PRO:HA	1:A:68:SER:HB3	1.52	0.91
23:A:1006:CLA:H122	28:C:1057:DGD:HGB1	1.51	0.91
2:B:419:SER:HA	2:B:422:ARG:HH12	1.35	0.91
2:B:318:ASN:ND2	2:B:320:ALA:H	1.68	0.91
12:M:1:MET:HE2	12:M:1:MET:H1	1.22	0.91
23:C:1028:CLA:HBC2	23:C:1028:CLA:HHD	1.51	0.91
23:C:1037:CLA:C2B	27:Z:1053:BCR:H282	2.00	0.91
4:D:160:TYR:HB3	4:D:161:PRO:HD3	1.52	0.91
1:A:60:ILE:CG1	1:A:61:ASP:H	1.83	0.91
23:B:1009:CLA:CHC	23:B:1009:CLA:HBB1	2.00	0.91
23:B:1011:CLA:H93	23:B:1011:CLA:H122	1.52	0.91
23:C:1027:CLA:HED1	23:C:1036:CLA:C20	2.00	0.91
23:B:1023:CLA:C9	23:B:1023:CLA:C12	2.45	0.91
16:V:160:LYS:HZ2	16:V:160:LYS:HB2	1.12	0.91
13:O:105:ASP:O	13:O:127:ILE:HD11	1.71	0.91
3:C:322:GLN:HE22	3:C:381:LYS:HA	1.34	0.91
23:B:1011:CLA:HBB2	23:B:1013:CLA:H203	0.94	0.91
27:B:1048:BCR:H383	27:B:1048:BCR:H23C	0.92	0.91
23:C:1027:CLA:O1D	23:C:1036:CLA:H11	1.71	0.91
23:C:1031:CLA:HED3	23:C:1031:CLA:HAA2	1.52	0.91
1:A:279:ARG:CD	4:D:208:ALA:HB1	2.01	0.91
23:A:1007:CLA:CHD	23:A:1007:CLA:HBC2	1.99	0.90
23:B:1019:CLA:H62	23:B:1021:CLA:CED	2.00	0.90
3:C:264:PHE:CZ	27:C:1054:BCR:H311	2.06	0.90
4:D:51:GLY:HA2	4:D:55:VAL:HG23	1.53	0.90
4:D:259:ILE:HD11	14:T:21:ILE:HA	1.50	0.90

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:U:46:LYS:HE2	15:U:59:ASN:ND2	1.86	0.90
23:B:1019:CLA:C9	29:L:1061:MGE:H8A1	2.02	0.90
23:B:1022:CLA:H72	23:B:1022:CLA:H172	1.53	0.90
23:H:1017:CLA:C19	23:H:1017:CLA:C15	2.39	0.90
23:B:1009:CLA:C1	27:H:1049:BCR:C17	2.49	0.90
23:B:1012:CLA:H102	23:B:1023:CLA:O2A	1.71	0.90
3:C:113:VAL:O	3:C:117:VAL:HG23	1.71	0.90
4:D:49:LEU:O	4:D:53:THR:HG23	1.70	0.90
10:K:28:ILE:CG2	10:K:29:PRO:CD	2.30	0.90
23:B:1014:CLA:HBB1	23:B:1014:CLA:CMB	1.88	0.90
23:B:1019:CLA:C19	23:B:1021:CLA:H71	2.02	0.90
23:C:1036:CLA:H141	23:C:1036:CLA:H172	1.51	0.90
23:A:1006:CLA:HMB1	24:A:1039:PHO:H161	1.53	0.90
27:A:1044:BCR:H392	27:A:1044:BCR:H373	1.50	0.90
1:A:310:LYS:HA	16:V:29:LEU:HB3	1.51	0.90
1:A:60:ILE:HG12	1:A:61:ASP:N	1.86	0.90
23:C:1035:CLA:C10	27:K:1052:BCR:H403	2.02	0.90
2:B:463:PHE:CE1	23:B:1016:CLA:HBB1	2.06	0.90
23:C:1031:CLA:CGD	23:C:1031:CLA:HAA2	2.02	0.90
1:A:81:ALA:HB2	1:A:175:GLY:HA3	1.53	0.90
23:B:1016:CLA:HBC2	23:B:1016:CLA:HHD	1.51	0.90
2:B:12:LEU:HB3	2:B:19:LEU:HD23	1.52	0.90
27:K:1051:BCR:C32	27:K:1052:BCR:C12	2.50	0.90
23:B:1019:CLA:HED1	23:B:1019:CLA:H2A	1.52	0.90
2:B:280:PHE:CE1	2:B:312:TYR:HB3	2.06	0.90
27:A:1044:BCR:H372	27:A:1044:BCR:H403	1.51	0.90
27:D:1050:BCR:H371	27:D:1050:BCR:H392	1.29	0.90
27:K:1051:BCR:H392	27:K:1051:BCR:H373	1.54	0.90
23:B:1010:CLA:O1D	23:B:1010:CLA:H2A	1.71	0.89
23:B:1011:CLA:H42	23:B:1013:CLA:C9	2.00	0.89
23:B:1015:CLA:HBC1	27:B:1045:BCR:H342	1.54	0.89
23:B:1016:CLA:H203	23:D:1008:CLA:HMA2	1.53	0.89
15:U:94:ILE:O	15:U:97:LEU:HD13	1.72	0.89
1:A:51:ALA:O	1:A:55:ALA:HB2	1.70	0.89
23:B:1015:CLA:C4A	23:B:1015:CLA:CBA	2.50	0.89
23:B:1021:CLA:H142	23:B:1021:CLA:C20	2.01	0.89
3:C:75:PHE:HD1	3:C:84:GLN:HE22	1.20	0.89
3:C:363:GLY:O	3:C:367:GLU:HG2	1.72	0.89
2:B:464:PHE:CE2	29:B:1060:MGE:H5B1	2.07	0.89
2:B:153:PHE:CA	23:B:1014:CLA:HMC3	2.02	0.89
24:A:1038:PHO:H192	24:A:1038:PHO:H152	1.55	0.89
4:D:246:MET:SD	4:D:264:LYS:HB3	2.12	0.89

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:A:1038:PHO:HED3	24:A:1038:PHO:C3D	2.00	0.89
23:B:1014:CLA:HMB1	23:B:1014:CLA:CBB	1.98	0.89
23:C:1028:CLA:C4	28:C:1057:DGD:HA22	2.03	0.89
23:A:1006:CLA:HED2	28:C:1057:DGD:HBH2	1.51	0.89
13:O:215:ARG:H	13:O:215:ARG:HD2	1.37	0.89
2:B:326:ARG:HB3	2:B:444:ARG:HG3	1.54	0.89
5:E:38:VAL:HG11	6:F:39:ALA:HB3	1.53	0.89
20:Z:53:VAL:O	20:Z:57:LEU:HB2	1.73	0.89
23:A:1006:CLA:C11	28:C:1057:DGD:CIB	2.50	0.89
23:B:1012:CLA:H93	23:B:1012:CLA:C12	1.98	0.89
23:B:1015:CLA:NA	23:B:1015:CLA:HBA2	1.83	0.89
27:C:1054:BCR:H383	27:C:1054:BCR:C23	2.03	0.89
23:D:1005:CLA:O2A	23:D:1005:CLA:H51	1.71	0.89
1:A:25:ASP:HA	4:D:251:ARG:NH2	1.87	0.89
3:C:283:GLY:HA3	3:C:434:ALA:HB2	1.51	0.89
23:B:1010:CLA:HMD3	23:B:1011:CLA:H8	0.92	0.89
28:C:1057:DGD:HAS1	29:J:1059:MGE:H221	1.54	0.89
1:A:322:ASN:ND2	3:C:412:THR:HG22	1.88	0.89
4:D:342:PRO:HB2	4:D:345:VAL:HG23	1.54	0.88
3:C:62:PHE:HE2	10:K:28:ILE:CG2	1.85	0.88
23:A:1006:CLA:HBB1	23:A:1006:CLA:HHC	1.54	0.88
23:B:1011:CLA:HED2	23:B:1011:CLA:OBD	1.74	0.88
23:B:1023:CLA:H3A	23:B:1023:CLA:O1A	1.73	0.88
23:B:1022:CLA:C13	23:B:1022:CLA:H72	2.03	0.88
2:B:223:GLN:HG3	2:B:224:ARG:N	1.84	0.88
23:C:1025:CLA:CBB	23:C:1025:CLA:C9	2.51	0.88
28:C:1056:DGD:C6D	28:C:1056:DGD:C5E	2.52	0.88
24:A:1039:PHO:HAB	23:D:1004:CLA:H12	1.56	0.88
23:H:1017:CLA:H3A	23:H:1017:CLA:O1A	1.73	0.88
23:A:1006:CLA:H2A	23:A:1006:CLA:CED	2.04	0.88
23:B:1022:CLA:C7	23:B:1022:CLA:C17	2.50	0.88
3:C:350:ILE:HG13	3:C:359:TRP:HB2	1.56	0.88
27:D:1050:BCR:H373	27:D:1050:BCR:H392	1.56	0.88
1:A:331:MET:SD	4:D:348:ARG:HA	2.13	0.88
1:A:195:HIS:ND1	1:A:196:PRO:HD2	1.88	0.88
23:B:1021:CLA:HMB1	23:B:1021:CLA:HBB1	1.54	0.88
4:D:210:LEU:HA	4:D:213:ILE:CG2	2.03	0.88
30:A:1063:LHG:C16	30:A:1063:LHG:H121	2.04	0.88
3:C:179:ALA:HB1	3:C:199:ILE:HD13	1.55	0.88
27:D:1050:BCR:H403	27:D:1050:BCR:H371	1.32	0.88
2:B:368:VAL:HG11	2:B:381:ILE:HD12	1.54	0.88
1:A:219:VAL:HG21	4:D:268:HIS:CG	2.08	0.88

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1009:CLA:C3B	27:H:1049:BCR:H382	2.03	0.88
13:O:31:LEU:HD23	13:O:31:LEU:H	1.36	0.88
13:O:46:PRO:HD2	13:O:266:TYR:CD2	2.08	0.88
28:C:1056:DGD:CEB	28:C:1056:DGD:H3G3	2.03	0.88
5:E:27:ILE:HB	5:E:28:PRO:CD	2.03	0.88
14:T:2:GLU:O	14:T:6:TYR:CD2	2.27	0.88
18:Y:24:MET:O	18:Y:28:ILE:HG23	1.74	0.88
1:A:215:HIS:O	1:A:219:VAL:HG22	1.74	0.87
23:B:1009:CLA:C1B	27:H:1049:BCR:H382	2.03	0.87
4:D:213:ILE:O	4:D:217:THR:HB	1.74	0.87
1:A:219:VAL:CG2	4:D:268:HIS:HB3	2.04	0.87
27:B:1045:BCR:C8	27:B:1045:BCR:H331	2.02	0.87
2:B:99:ALA:O	2:B:102:VAL:HG12	1.73	0.87
27:K:1051:BCR:H403	27:K:1051:BCR:H372	1.55	0.87
3:C:135:ARG:HH12	20:Z:33:TRP:CB	1.87	0.87
2:B:454:ALA:C	2:B:456:ALA:H	1.71	0.87
23:C:1037:CLA:H101	23:C:1037:CLA:H143	1.54	0.87
8:I:31:ASN:HB2	8:I:32:PRO:HD2	1.56	0.87
12:M:1:MET:H3	12:M:1:MET:CE	1.84	0.87
3:C:63:TRP:H	23:C:1034:CLA:HED3	1.39	0.87
30:A:1063:LHG:H383	30:A:1063:LHG:H341	1.57	0.87
1:A:76:ASN:HD22	1:A:79:THR:H	1.23	0.87
23:B:1009:CLA:C1	27:H:1049:BCR:C16	2.53	0.87
9:J:21:VAL:O	9:J:25:VAL:HG13	1.75	0.87
23:B:1015:CLA:C4A	23:B:1015:CLA:HBA1	2.04	0.87
27:B:1045:BCR:H392	27:B:1045:BCR:H373	1.55	0.87
23:C:1027:CLA:CED	23:C:1036:CLA:H201	2.04	0.87
1:A:317:TRP:N	4:D:63:LEU:HD21	1.89	0.87
1:A:237:TYR:HE2	1:A:239:PHE:HA	1.37	0.87
23:B:1014:CLA:HBC2	23:B:1014:CLA:CHD	2.05	0.87
23:B:1013:CLA:CBB	23:B:1023:CLA:H41	2.05	0.87
23:B:1021:CLA:H193	29:B:1060:MGE:CDA	2.04	0.87
2:B:66:MET:HB3	2:B:71:VAL:CG1	2.05	0.87
30:A:1063:LHG:C29	23:C:1032:CLA:H8	2.03	0.87
23:B:1019:CLA:C6	23:B:1021:CLA:HED1	2.03	0.87
2:B:113:TRP:HB2	27:B:1048:BCR:H372	1.54	0.87
27:T:6046:BCR:C27	27:T:6046:BCR:H371	2.05	0.86
23:C:1031:CLA:O2D	23:C:1033:CLA:H101	1.73	0.86
15:U:72:TYR:HB3	15:U:73:PRO:HD3	1.54	0.86
23:B:1023:CLA:C14	23:B:1024:CLA:H8	2.06	0.86
2:B:253:ALA:CB	2:B:455:HIS:HB2	2.00	0.86
24:A:1038:PHO:HBC1	4:D:212:ALA:HB3	1.58	0.86

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:A:1006:CLA:H2	23:A:1006:CLA:H72	1.55	0.86
2:B:284:ILE:HG22	2:B:309:LEU:HD22	1.57	0.86
16:V:160:LYS:N	16:V:163:TYR:CE1	2.43	0.86
23:B:1020:CLA:H142	23:B:1020:CLA:H92	1.55	0.86
3:C:284:PHE:HB3	28:C:1055:DGD:HB81	1.57	0.86
3:C:45:LEU:HD22	3:C:140:LEU:N	1.90	0.86
23:D:1005:CLA:H203	23:D:1005:CLA:C15	2.04	0.86
11:L:27:LEU:HD12	12:M:14:PHE:HZ	1.38	0.86
12:M:1:MET:H3	12:M:1:MET:HE2	1.12	0.86
16:V:98:LEU:HD21	16:V:145:ILE:HG21	1.56	0.86
8:I:30:ARG:HA	8:I:30:ARG:NH1	1.90	0.86
11:L:24:ILE:HD11	12:M:18:PRO:HG2	1.57	0.86
23:C:1033:CLA:H91	23:C:1033:CLA:H121	1.55	0.86
3:C:185:LEU:HD13	3:C:230:LEU:HD11	1.57	0.86
4:D:210:LEU:HA	4:D:213:ILE:HG22	1.56	0.86
3:C:97:TRP:HE1	3:C:178:LYS:CE	1.88	0.86
23:B:1019:CLA:H93	29:L:1061:MGE:H8A1	1.57	0.86
1:A:37:MET:HG2	1:A:41:LEU:HD23	1.56	0.86
23:B:1013:CLA:HMC2	23:B:1023:CLA:H11	1.56	0.86
23:B:1019:CLA:C2A	23:B:1019:CLA:HED2	2.02	0.86
23:C:1031:CLA:H142	23:C:1031:CLA:H171	1.56	0.86
23:C:1031:CLA:HED1	23:C:1031:CLA:O1A	1.74	0.86
23:C:1033:CLA:HMA3	23:C:1033:CLA:HBA1	0.90	0.86
3:C:350:ILE:HD13	3:C:351:PHE:O	1.74	0.86
30:A:1063:LHG:C31	23:C:1034:CLA:H143	2.06	0.86
23:C:1031:CLA:H2	23:C:1031:CLA:HMA2	0.90	0.86
2:B:152:GLY:HA2	2:B:155:ALA:HB3	1.56	0.85
23:C:1031:CLA:O2D	23:C:1033:CLA:H8	1.76	0.85
3:C:281:MET:O	3:C:285:ILE:HG22	1.75	0.85
3:C:62:PHE:HE2	10:K:28:ILE:HG22	1.39	0.85
27:B:1045:BCR:H372	27:B:1045:BCR:H403	1.56	0.85
2:B:465:GLY:N	23:B:1019:CLA:CBC	2.38	0.85
23:C:1033:CLA:CMA	23:C:1033:CLA:CBA	2.44	0.85
28:C:1056:DGD:CFB	10:K:30:VAL:HG21	2.06	0.85
16:V:64:ALA:O	16:V:68:VAL:HG23	1.76	0.85
23:A:1007:CLA:H2A	23:A:1007:CLA:O1D	1.76	0.85
24:A:1038:PHO:HHH	24:A:1038:PHO:CBC	2.06	0.85
1:A:135:TYR:CZ	3:C:449:ARG:HD2	2.10	0.85
2:B:262:THR:O	2:B:264:PRO:HD3	1.76	0.85
23:C:1031:CLA:HBA2	23:C:1033:CLA:HED2	1.58	0.85
3:C:76:ILE:HG23	3:C:77:PRO:HD2	1.58	0.85
23:B:1011:CLA:C19	23:H:1017:CLA:C13	2.53	0.85

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1016:CLA:HBC3	23:B:1016:CLA:HHD	1.58	0.85
2:B:323:GLY:HA3	2:B:326:ARG:HH11	1.41	0.85
13:O:65:ARG:NH2	13:O:66:ILE:HG12	1.92	0.85
16:V:48:THR:H	16:V:51:GLN:HG2	1.39	0.85
23:C:1029:CLA:O2D	23:C:1029:CLA:H2A	1.76	0.85
3:C:250:TRP:HE1	23:C:1030:CLA:CED	1.89	0.85
2:B:171:PRO:HG3	7:H:63:LYS:HA	1.58	0.85
20:Z:3:ILE:H	20:Z:3:ILE:HD12	1.41	0.85
4:D:269:PHE:CD1	4:D:269:PHE:O	2.30	0.85
23:B:1009:CLA:CGD	23:B:1009:CLA:CAA	2.55	0.85
1:A:328:MET:HB3	4:D:325:ILE:HD11	1.55	0.85
23:A:1006:CLA:CBC	23:A:1006:CLA:HHD	2.06	0.85
1:A:60:ILE:HG22	1:A:83:VAL:HG13	1.58	0.85
23:B:1013:CLA:H141	23:B:1018:CLA:HMA2	1.56	0.85
2:B:284:ILE:HG13	2:B:285:ASN:N	1.90	0.85
28:C:1057:DGD:HB82	29:J:1059:MGE:H8B2	1.58	0.85
23:C:1032:CLA:H2A	23:C:1032:CLA:HED3	0.86	0.85
4:D:257:PHE:HA	29:D:1062:MGE:H121	1.57	0.85
4:D:251:ARG:HE	4:D:255:GLN:NE2	1.74	0.85
4:D:261:PHE:CE2	4:D:267:LEU:HB2	2.11	0.85
28:C:1056:DGD:C6D	28:C:1056:DGD:C3E	2.45	0.85
15:U:39:LEU:HD12	15:U:39:LEU:H	1.40	0.85
2:B:153:PHE:N	23:B:1014:CLA:HMC3	1.92	0.84
3:C:447:ARG:HG3	3:C:448:ALA:N	1.90	0.84
13:O:184:ASP:HB2	13:O:185:PRO:HD2	1.59	0.84
9:J:9:PRO:HG2	9:J:12:ILE:HB	1.56	0.84
1:A:173:PRO:HD2	1:A:182:PHE:HB2	1.59	0.84
23:B:1011:CLA:CBB	23:B:1013:CLA:C18	2.54	0.84
3:C:63:TRP:CE3	23:C:1027:CLA:HBC1	2.10	0.84
23:D:1005:CLA:HED2	23:D:1005:CLA:CAA	2.06	0.84
30:A:1063:LHG:C31	23:C:1034:CLA:H93	2.07	0.84
3:C:428:THR:HG23	3:C:429:SER:H	1.40	0.84
23:B:1021:CLA:C14	23:B:1021:CLA:H203	2.07	0.84
27:B:1045:BCR:H353	27:B:1047:BCR:C11	2.06	0.84
27:H:1049:BCR:C40	27:H:1049:BCR:H23C	2.02	0.84
20:Z:13:VAL:HG13	20:Z:14:ILE:N	1.92	0.84
1:A:195:HIS:ND1	1:A:197:PHE:HB2	1.92	0.84
23:B:1020:CLA:HBB1	23:B:1021:CLA:HBA2	1.57	0.84
23:B:1022:CLA:C5	23:B:1022:CLA:C9	2.30	0.84
2:B:256:MET:HE1	2:B:448:ARG:NH1	1.93	0.84
29:D:1062:MGE:O5D	11:L:15:THR:HB	1.77	0.84
23:B:1020:CLA:H91	23:B:1020:CLA:H142	1.47	0.84

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:460:LEU:HG	28:H:1058:DGD:CIA	2.08	0.84
23:C:1025:CLA:HMD2	23:C:1026:CLA:C4	2.08	0.84
23:C:1032:CLA:HHC	23:C:1032:CLA:HBB1	1.58	0.84
4:D:68:LEU:HA	6:F:40:MET:HG2	1.60	0.84
14:T:4:ILE:C	14:T:4:ILE:HD12	1.92	0.84
23:B:1024:CLA:CMC	23:B:1024:CLA:HBC2	1.96	0.84
23:C:1037:CLA:HAB	27:Z:1053:BCR:C30	2.08	0.84
27:D:1050:BCR:H403	27:D:1050:BCR:H372	1.57	0.84
23:C:1025:CLA:H161	23:C:1031:CLA:HMB3	1.56	0.84
4:D:110:LEU:O	4:D:113:PHE:HB3	1.76	0.84
4:D:261:PHE:HE2	4:D:266:TRP:CD1	1.94	0.84
10:K:28:ILE:HD13	27:K:1051:BCR:C7	2.04	0.84
13:O:68:ARG:O	13:O:267:ALA:HA	1.77	0.84
23:C:1029:CLA:HMA2	23:C:1029:CLA:HBA2	0.84	0.84
3:C:264:PHE:CE1	27:C:1054:BCR:C31	2.60	0.84
3:C:214:LEU:HD23	3:C:215:LYS:HB2	1.59	0.84
27:H:1049:BCR:H361	27:H:1049:BCR:H373	1.59	0.84
14:T:1:MET:HE2	14:T:1:MET:N	1.91	0.84
3:C:305:THR:HG22	3:C:308:GLU:HB2	1.59	0.84
1:A:219:VAL:HB	4:D:268:HIS:HD1	1.37	0.84
4:D:72:ASN:HD22	4:D:74:LEU:H	1.25	0.84
3:C:304:PRO:HB3	3:C:395:TYR:CD2	2.12	0.84
2:B:153:PHE:HA	23:B:1014:CLA:HMC3	1.59	0.83
2:B:65:PHE:O	2:B:68:ARG:HG2	1.77	0.83
23:C:1031:CLA:CAA	23:C:1031:CLA:HED3	2.08	0.83
1:A:322:ASN:HD21	3:C:412:THR:HG22	1.41	0.83
23:A:1003:CLA:C14	24:A:1038:PHO:H93	2.05	0.83
23:C:1031:CLA:CAA	23:C:1031:CLA:CED	2.55	0.83
18:Y:32:GLY:HA2	18:Y:35:ILE:HG23	1.59	0.83
6:F:11:VAL:HG12	6:F:12:SER:H	1.43	0.83
23:C:1037:CLA:CGD	23:C:1037:CLA:HBA1	2.09	0.83
28:C:1056:DGD:HE3	28:C:1056:DGD:HD61	0.87	0.83
4:D:253:TRP:HA	4:D:256:ILE:CG2	2.08	0.83
23:B:1010:CLA:HAA2	23:B:1010:CLA:O1D	1.77	0.83
23:B:1011:CLA:CBB	23:B:1013:CLA:H192	2.09	0.83
2:B:257:TRP:CZ3	4:D:291:LEU:CG	2.61	0.83
5:E:35:TRP:CE3	6:F:38:ALA:HB3	2.13	0.83
3:C:117:VAL:O	3:C:121:SER:HB2	1.79	0.83
2:B:457:VAL:HG22	4:D:284:ILE:HG23	1.57	0.83
3:C:315:MET:O	3:C:319:ILE:HG13	1.78	0.83
1:A:213:ALA:O	1:A:217:SER:HB2	1.79	0.83
28:C:1056:DGD:HA52	28:C:1056:DGD:O1A	1.78	0.83

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:V:28:GLU:HA	16:V:28:GLU:OE2	1.78	0.83
23:B:1013:CLA:HMA1	23:B:1014:CLA:HMA1	1.59	0.83
23:C:1033:CLA:H141	23:C:1033:CLA:C17	2.08	0.83
3:C:124:VAL:HG23	3:C:125:LEU:H	1.43	0.83
3:C:158:THR:O	3:C:251:HIS:HB3	1.79	0.83
3:C:288:CYS:SG	28:C:1055:DGD:HB21	2.19	0.83
5:E:35:TRP:CZ3	6:F:38:ALA:HB3	2.12	0.83
10:K:32:PHE:HE2	27:K:1051:BCR:H341	1.43	0.83
23:B:1015:CLA:HBC2	23:B:1015:CLA:HHD	1.61	0.83
23:C:1027:CLA:CGD	23:C:1036:CLA:H11	2.08	0.83
23:C:1027:CLA:HED2	23:C:1036:CLA:H201	1.60	0.83
20:Z:55:GLY:HA2	27:Z:1053:BCR:C31	2.06	0.83
1:A:42:LEU:O	1:A:46:ILE:HG23	1.78	0.83
23:C:1033:CLA:C9	23:C:1033:CLA:H121	2.09	0.83
4:D:48:TRP:HE3	4:D:49:LEU:HG	1.43	0.83
12:M:21:PHE:HA	12:M:24:ILE:HD12	1.59	0.83
4:D:303:ILE:HD12	4:D:304:ARG:H	1.43	0.83
23:B:1019:CLA:CMB	23:B:1020:CLA:C1C	2.56	0.82
23:C:1027:CLA:CED	23:C:1036:CLA:C20	2.56	0.82
3:C:184:GLY:H	3:C:198:VAL:HG22	1.44	0.82
10:K:39:VAL:CG2	18:Y:36:ILE:HD11	2.08	0.82
3:C:224:ILE:HD11	3:C:285:ILE:HD11	1.60	0.82
3:C:45:LEU:CD2	3:C:141:GLU:HG2	2.09	0.82
23:C:1034:CLA:HAA1	10:K:29:PRO:HB3	1.60	0.82
1:A:58:VAL:H	1:A:68:SER:HB2	1.43	0.82
2:B:27:THR:CG2	23:B:1020:CLA:H11	2.08	0.82
5:E:35:TRP:CZ3	6:F:38:ALA:CB	2.63	0.82
1:A:323:ARG:HH11	1:A:323:ARG:HG3	1.42	0.82
2:B:414:PRO:HB2	2:B:415:PRO:HD3	1.60	0.82
23:B:1016:CLA:H143	23:D:1008:CLA:HHB	1.61	0.82
2:B:27:THR:HG23	23:B:1013:CLA:HAC2	1.59	0.82
3:C:206:PRO:O	3:C:210:PHE:HB2	1.79	0.82
10:K:28:ILE:CD1	27:K:1051:BCR:C9	2.54	0.82
2:B:487:SER:HB3	2:B:488:PRO:HD3	1.61	0.82
1:A:60:ILE:CG2	1:A:83:VAL:HG13	2.09	0.82
23:C:1032:CLA:H92	23:C:1032:CLA:H51	1.62	0.82
4:D:134:ARG:HE	4:D:134:ARG:HA	1.43	0.82
13:O:119:LEU:H	13:O:155:THR:CG2	1.90	0.82
17:X:13:THR:HG22	17:X:15:SER:H	1.43	0.82
23:B:1021:CLA:HMC1	23:B:1021:CLA:HBC2	1.62	0.82
4:D:277:THR:HG22	4:D:278:GLY:N	1.93	0.82
1:A:116:ILE:HD11	1:A:158:PHE:HB3	1.62	0.82

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1021:CLA:OBD	23:B:1022:CLA:CMC	2.26	0.82
1:A:272:HIS:CD2	4:D:218:VAL:HG21	2.15	0.81
23:B:1012:CLA:HHD	23:B:1012:CLA:HBC2	1.62	0.81
23:B:1012:CLA:C1	23:B:1013:CLA:C1	2.58	0.81
23:B:1014:CLA:H93	23:B:1014:CLA:H122	1.59	0.81
23:B:1014:CLA:H102	27:B:1048:BCR:H311	1.62	0.81
23:C:1033:CLA:H18	23:C:1033:CLA:H143	1.62	0.81
25:E:1040:HEM:HMA3	25:E:1040:HEM:O1A	1.80	0.81
11:L:20:GLY:O	11:L:24:ILE:HG22	1.79	0.81
1:A:208:GLY:HA3	1:A:279:ARG:HD2	1.62	0.81
23:B:1023:CLA:C4D	23:B:1024:CLA:CMC	2.59	0.81
2:B:110:ALA:CB	23:B:1024:CLA:HMB2	2.09	0.81
2:B:464:PHE:CZ	29:B:1060:MGE:H4B1	2.13	0.81
4:D:207:GLY:HA3	4:D:275:PRO:HG3	1.62	0.81
23:A:1006:CLA:HMB3	24:A:1039:PHO:C16	2.09	0.81
23:B:1020:CLA:CBA	23:B:1020:CLA:CMA	2.34	0.81
2:B:257:TRP:CH2	4:D:291:LEU:CG	2.63	0.81
11:L:26:VAL:HG21	29:L:1061:MGE:H261	1.61	0.81
17:X:26:GLY:O	17:X:29:VAL:HG12	1.80	0.81
1:A:187:GLN:HB2	23:A:1003:CLA:HAC2	1.62	0.81
23:B:1014:CLA:H172	27:B:1048:BCR:H312	1.61	0.81
23:B:1020:CLA:C9	23:B:1020:CLA:H13	2.05	0.81
23:B:1024:CLA:H2A	23:B:1024:CLA:O2A	1.79	0.81
2:B:138:MET:HB3	23:B:1023:CLA:HBC3	1.61	0.81
29:L:1061:MGE:H7B1	29:L:1061:MGE:C3B	2.10	0.81
2:B:391:SER:HB3	2:B:394:GLN:CD	2.01	0.81
15:U:91:VAL:HG12	15:U:105:LEU:HD13	1.61	0.81
23:B:1023:CLA:H72	27:B:1048:BCR:C34	2.09	0.81
3:C:162:GLY:HA3	3:C:248:GLY:HA2	1.60	0.81
6:F:37:ILE:HG21	9:J:28:PHE:CE1	2.15	0.81
13:O:127:ILE:CD1	13:O:127:ILE:H	1.80	0.81
27:B:1048:BCR:H331	27:B:1048:BCR:C8	2.10	0.81
23:C:1029:CLA:H52	23:C:1029:CLA:C1C	2.11	0.81
23:C:1035:CLA:H93	27:K:1052:BCR:H402	1.60	0.81
3:C:261:ARG:HH11	3:C:261:ARG:HG2	1.45	0.81
10:K:35:LEU:O	10:K:38:VAL:HG23	1.79	0.81
23:B:1019:CLA:CBA	23:B:1019:CLA:HED2	2.10	0.81
12:M:9:ILE:HD12	12:M:9:ILE:H	1.46	0.81
3:C:78:GLU:OE1	3:C:104:GLU:HB2	1.81	0.81
1:A:247:ASN:HD22	1:A:250:ALA:H	1.27	0.81
23:A:1006:CLA:H2A	23:A:1006:CLA:O2D	1.80	0.81
6:F:29:PRO:O	6:F:32:PHE:HB3	1.79	0.81

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:K:28:ILE:HD11	27:K:1051:BCR:C7	2.04	0.81
20:Z:13:VAL:HG13	20:Z:14:ILE:H	1.46	0.81
2:B:384:ARG:HA	13:O:192:SER:OG	1.81	0.81
2:B:45:PHE:O	2:B:47:PRO:HD3	1.81	0.81
2:B:464:PHE:HB2	4:D:280:TRP:CH2	2.16	0.81
7:H:53:LEU:HG	7:H:55:LEU:CD1	2.11	0.81
12:M:18:PRO:O	12:M:21:PHE:HB3	1.81	0.81
23:C:1031:CLA:HED3	23:C:1031:CLA:H2A	1.61	0.81
28:C:1055:DGD:HB72	28:C:1055:DGD:HB22	1.61	0.81
28:C:1056:DGD:HA41	28:C:1056:DGD:O1A	1.81	0.81
1:A:223:LEU:HD21	1:A:245:THR:OG1	1.80	0.80
2:B:223:GLN:HB2	2:B:227:LYS:NZ	1.96	0.80
11:L:30:LEU:HD22	11:L:31:PHE:HD1	1.44	0.80
13:O:187:GLY:HA3	13:O:194:TYR:HD1	1.45	0.80
1:A:219:VAL:HG23	4:D:268:HIS:HB3	1.63	0.80
23:B:1012:CLA:C12	23:B:1012:CLA:H91	2.01	0.80
4:D:261:PHE:CE2	4:D:266:TRP:HD1	1.99	0.80
1:A:84:PRO:HA	1:A:112:TYR:CD2	2.15	0.80
2:B:66:MET:CG	23:B:1013:CLA:HED1	2.11	0.80
23:B:1011:CLA:H202	7:H:38:PHE:HE2	1.43	0.80
18:Y:25:ILE:O	18:Y:28:ILE:HG12	1.80	0.80
1:A:324:ALA:HB2	4:D:329:MET:SD	2.20	0.80
23:B:1022:CLA:C7	23:B:1022:CLA:H142	2.01	0.80
23:A:1006:CLA:C14	23:D:1004:CLA:H192	2.12	0.80
1:A:184:ILE:HG21	4:D:321:LEU:HD13	1.62	0.80
23:B:1009:CLA:CHA	23:B:1009:CLA:HBA2	2.11	0.80
23:B:1020:CLA:C13	23:B:1020:CLA:H8	2.02	0.80
27:B:1047:BCR:H322	27:B:1047:BCR:H343	1.63	0.80
4:D:195:PRO:HA	4:D:198:MET:CE	2.12	0.80
30:A:1063:LHG:H312	23:C:1034:CLA:H93	1.62	0.80
23:B:1012:CLA:H12	23:B:1013:CLA:C2	2.11	0.80
23:B:1013:CLA:HMA1	23:B:1014:CLA:CMA	2.11	0.80
2:B:110:ALA:HB3	23:B:1024:CLA:HMB2	1.63	0.80
2:B:17:GLY:HA2	2:B:123:PHE:CE2	2.16	0.80
28:C:1056:DGD:C4A	28:C:1056:DGD:O1A	2.30	0.80
28:C:1056:DGD:CHA	28:C:1057:DGD:HA82	2.11	0.80
3:C:367:GLU:HB2	3:C:368:PRO:HD3	1.62	0.80
23:B:1010:CLA:H101	23:H:1017:CLA:H203	1.62	0.80
23:C:1031:CLA:CED	23:C:1031:CLA:O1A	2.30	0.80
7:H:33:VAL:O	7:H:37:LEU:HD13	1.82	0.80
23:B:1022:CLA:CHA	23:B:1022:CLA:O1A	2.30	0.80
23:B:1023:CLA:O1A	23:B:1023:CLA:C3A	2.30	0.80

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1022:CLA:HMB2	27:B:1045:BCR:H401	1.62	0.80
2:B:148:LEU:N	2:B:210:ILE:HD11	1.97	0.80
23:B:1011:CLA:C12	27:H:1049:BCR:H322	2.10	0.80
2:B:118:TRP:CH2	11:L:5:PRO:HD2	2.17	0.80
3:C:75:PHE:CE2	3:C:105:VAL:HG11	2.17	0.80
2:B:257:TRP:CH2	4:D:291:LEU:CB	2.64	0.80
16:V:160:LYS:HB2	16:V:160:LYS:HZ3	1.42	0.80
23:B:1011:CLA:CED	23:B:1011:CLA:OBD	2.30	0.80
28:C:1055:DGD:C1B	28:C:1055:DGD:HB51	2.10	0.80
24:A:1039:PHO:H18	4:D:48:TRP:NE1	1.96	0.80
23:C:1035:CLA:H101	27:K:1052:BCR:C40	2.11	0.80
16:V:48:THR:N	16:V:51:GLN:HE21	1.79	0.80
1:A:142:TRP:H	4:D:220:ASN:HD21	1.30	0.79
23:B:1014:CLA:O2D	23:B:1014:CLA:CAA	2.30	0.79
25:E:1040:HEM:HBB2	25:E:1040:HEM:HMB2	1.64	0.79
1:A:149:ALA:HB1	1:A:283:VAL:HG21	1.62	0.79
23:B:1014:CLA:C19	23:B:1014:CLA:C15	2.44	0.79
2:B:103:LEU:CB	23:B:1014:CLA:H71	2.08	0.79
23:B:1021:CLA:C2A	23:B:1021:CLA:O2A	2.30	0.79
1:A:39:PRO:HB2	23:A:1007:CLA:HAB	1.64	0.79
1:A:48:PHE:HB2	1:A:115:ILE:HD13	1.62	0.79
23:B:1019:CLA:C19	23:B:1021:CLA:C7	2.60	0.79
23:B:1019:CLA:O1A	23:B:1019:CLA:C3A	2.30	0.79
23:B:1022:CLA:H41	23:B:1022:CLA:C9	2.05	0.79
2:B:25:MET:CG	27:B:1045:BCR:H292	2.03	0.79
23:C:1032:CLA:O1A	23:C:1032:CLA:C4	2.30	0.79
4:D:274:VAL:CB	4:D:275:PRO:HD3	2.11	0.79
2:B:183:PRO:HB3	2:B:200:ALA:HB2	1.61	0.79
1:A:95:PRO:CA	23:A:1007:CLA:HED1	2.05	0.79
4:D:261:PHE:CE1	26:D:1042:PQ9:H143	2.18	0.79
1:A:247:ASN:HB3	1:A:250:ALA:HB3	1.64	0.79
1:A:307:ILE:HG13	1:A:308:ASP:H	1.47	0.79
27:B:1045:BCR:C35	27:B:1047:BCR:C10	2.60	0.79
3:C:459:ILE:HD12	3:C:459:ILE:N	1.97	0.79
25:E:1040:HEM:O1A	25:E:1040:HEM:CMA	2.30	0.79
1:A:90:GLY:HA3	1:A:167:SER:HB2	1.64	0.79
2:B:133:LEU:HB3	2:B:138:MET:CE	2.13	0.79
23:C:1025:CLA:O1D	23:C:1025:CLA:CBA	2.30	0.79
23:C:1032:CLA:H152	23:C:1032:CLA:H193	1.62	0.79
5:E:38:VAL:CG1	6:F:39:ALA:HB3	2.12	0.79
3:C:347:GLY:HA3	13:O:43:ASN:HB2	1.64	0.79
23:B:1014:CLA:C11	23:B:1014:CLA:C16	2.40	0.79

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:206:PHE:CE2	23:D:1004:CLA:HBA2	2.18	0.79
29:D:1062:MGE:H3G1	11:L:15:THR:HG21	1.62	0.79
13:O:121:PHE:HB3	13:O:153:ALA:HB3	1.65	0.79
13:O:145:LEU:HD23	13:O:145:LEU:H	1.47	0.79
15:U:97:LEU:HB3	15:U:102:LYS:HG2	1.62	0.79
13:O:213:VAL:HG11	15:U:39:LEU:HD13	1.62	0.79
23:B:1009:CLA:O2D	23:B:1009:CLA:CAA	2.30	0.79
23:B:1011:CLA:HBC2	23:B:1011:CLA:HMC1	1.64	0.79
23:C:1037:CLA:O1A	23:C:1037:CLA:C4A	2.30	0.79
24:A:1039:PHO:CAB	23:D:1004:CLA:H12	2.13	0.79
30:A:1063:LHG:O4	30:A:1063:LHG:C6	2.30	0.79
1:A:81:ALA:HB1	1:A:175:GLY:HA3	1.64	0.79
23:C:1037:CLA:CHA	23:C:1037:CLA:HBA1	2.10	0.79
2:B:382:PRO:HG2	2:B:391:SER:HB2	1.63	0.79
3:C:287:THR:HG23	3:C:427:ALA:HA	1.65	0.79
3:C:384:ILE:O	3:C:384:ILE:HG23	1.83	0.79
1:A:91:LEU:HD13	1:A:166:GLY:O	1.83	0.79
23:B:1019:CLA:H193	23:B:1021:CLA:C5	2.12	0.79
8:I:27:ASP:HB3	8:I:28:PRO:HD3	1.65	0.79
20:Z:16:SER:O	20:Z:20:VAL:HG23	1.82	0.79
24:A:1038:PHO:H102	24:A:1038:PHO:C14	1.94	0.78
3:C:32:GLY:HA2	3:C:41:ARG:HH21	1.48	0.78
3:C:51:GLY:O	3:C:55:ALA:HB2	1.82	0.78
3:C:89:ILE:HB	3:C:90:PRO:HD3	1.64	0.78
1:A:90:GLY:HA2	1:A:167:SER:OG	1.84	0.78
23:B:1010:CLA:CAD	23:B:1010:CLA:HED3	2.08	0.78
3:C:157:MET:HB3	23:C:1031:CLA:HBC1	1.64	0.78
3:C:256:PRO:HB3	3:C:261:ARG:NH2	1.97	0.78
23:C:1034:CLA:HAA1	10:K:29:PRO:CB	2.13	0.78
29:L:1061:MGE:H6A1	12:M:22:LEU:HD21	1.65	0.78
13:O:169:LYS:HB3	13:O:169:LYS:HZ2	1.47	0.78
1:A:279:ARG:NH2	24:A:1038:PHO:CAC	2.44	0.78
23:B:1014:CLA:CGA	23:B:1014:CLA:CMA	2.58	0.78
23:B:1014:CLA:HMA3	23:B:1014:CLA:CBA	2.03	0.78
23:B:1023:CLA:C1D	23:B:1024:CLA:HBC2	2.12	0.78
29:L:1061:MGE:C1G	29:L:1061:MGE:O1B	2.30	0.78
3:C:346:THR:HG21	13:O:38:GLY:H	1.48	0.78
27:T:6046:BCR:H382	27:T:6046:BCR:H373	1.63	0.78
24:A:1038:PHO:CHD	24:A:1038:PHO:CBC	2.62	0.78
23:B:1021:CLA:OBD	23:B:1022:CLA:CHC	2.29	0.78
29:B:1060:MGE:H3A2	29:B:1060:MGE:H261	1.65	0.78
3:C:160:ILE:HA	3:C:163:PHE:HD2	1.48	0.78

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1011:CLA:H202	7:H:38:PHE:CE2	2.19	0.78
16:V:38:LEU:HD22	16:V:45:ILE:HB	1.65	0.78
14:T:1:MET:O	14:T:4:ILE:CG2	2.30	0.78
3:C:78:GLU:OE2	3:C:78:GLU:HA	1.83	0.78
27:B:1048:BCR:C38	27:B:1048:BCR:C23	2.38	0.78
2:B:250:PHE:HZ	28:H:1058:DGD:HAG2	1.47	0.78
23:C:1029:CLA:H201	23:C:1030:CLA:C19	2.13	0.78
1:A:344:ALA:HB1	3:C:357:ARG:HH22	1.48	0.78
23:B:1014:CLA:H2A	23:B:1014:CLA:O2D	1.83	0.78
2:B:91:TRP:HB3	23:B:1014:CLA:HED2	1.64	0.78
23:C:1029:CLA:H111	23:C:1029:CLA:H192	1.64	0.78
23:A:1003:CLA:C2D	23:D:1005:CLA:HBC1	2.14	0.78
1:A:279:ARG:HD3	4:D:208:ALA:CB	2.14	0.78
2:B:12:LEU:CB	2:B:19:LEU:HD23	2.13	0.78
2:B:156:PHE:N	2:B:156:PHE:HD2	1.81	0.78
2:B:460:LEU:HA	28:H:1058:DGD:CIA	2.08	0.78
23:C:1034:CLA:H172	23:C:1034:CLA:H141	0.84	0.78
1:A:278:TRP:HH2	28:C:1057:DGD:CIA	1.97	0.78
27:D:1050:BCR:C21	29:J:1059:MGE:H3A1	2.13	0.78
2:B:456:ALA:HA	28:H:1058:DGD:HBG2	1.65	0.78
12:M:32:GLN:HA	12:M:32:GLN:HE21	1.48	0.78
23:A:1006:CLA:C2	23:A:1006:CLA:C7	2.62	0.78
23:B:1016:CLA:C4A	23:B:1016:CLA:O1A	2.32	0.78
23:B:1022:CLA:HED2	23:B:1022:CLA:CAD	2.14	0.78
2:B:464:PHE:CB	4:D:280:TRP:CH2	2.67	0.78
6:F:40:MET:HA	6:F:43:ILE:HD11	1.66	0.78
1:A:116:ILE:HG23	1:A:117:PHE:HD2	1.49	0.78
2:B:102:VAL:HG13	23:B:1014:CLA:H92	1.66	0.78
23:C:1037:CLA:C10	23:C:1037:CLA:H143	2.14	0.78
3:C:96:GLY:HA2	3:C:99:VAL:HG13	1.66	0.78
3:C:99:VAL:HG21	3:C:196:VAL:CG1	2.14	0.78
4:D:186:GLN:HB2	23:D:1004:CLA:HBC1	1.65	0.78
10:K:39:VAL:HG22	18:Y:36:ILE:HD12	1.63	0.78
23:C:1036:CLA:H193	27:Z:1053:BCR:C37	2.14	0.78
1:A:255:PHE:HB3	1:A:264:SER:OG	1.83	0.78
23:B:1020:CLA:C9	23:B:1020:CLA:H121	2.10	0.77
3:C:48:LYS:HD2	3:C:133:ALA:O	1.84	0.77
4:D:93:TRP:HZ2	23:D:1008:CLA:O1A	1.66	0.77
10:K:32:PHE:CE1	27:K:1052:BCR:C39	2.65	0.77
15:U:58:ASN:HD22	15:U:58:ASN:N	1.82	0.77
2:B:74:SER:HB2	2:B:94:GLU:OE1	1.84	0.77
23:B:1011:CLA:C1D	23:B:1013:CLA:H51	2.14	0.77

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:63:TRP:HB2	23:C:1034:CLA:CED	2.14	0.77
4:D:195:PRO:HA	4:D:198:MET:HE2	1.65	0.77
3:C:357:ARG:HH11	3:C:357:ARG:HB3	1.49	0.77
2:B:152:GLY:C	23:B:1014:CLA:HMC1	2.05	0.77
23:C:1031:CLA:O2D	23:C:1033:CLA:C10	2.33	0.77
3:C:337:LEU:HA	13:O:131:PRO:HG3	1.64	0.77
23:B:1019:CLA:C2A	23:B:1019:CLA:O2D	2.30	0.77
23:C:1029:CLA:C4	23:C:1029:CLA:H191	2.15	0.77
23:H:1017:CLA:H193	23:H:1017:CLA:H152	1.65	0.77
12:M:11:THR:HG22	12:M:12:ALA:N	1.99	0.77
4:D:281:MET:HA	4:D:281:MET:CE	2.13	0.77
1:A:247:ASN:ND2	1:A:250:ALA:H	1.82	0.77
13:O:58:ILE:HG12	13:O:160:THR:O	1.85	0.77
1:A:134:SER:HB3	1:A:141:PRO:HA	1.65	0.77
1:A:215:HIS:O	1:A:219:VAL:HG13	1.85	0.77
2:B:192:PRO:HG2	7:H:49:TYR:CE1	2.18	0.77
23:C:1025:CLA:C4	23:C:1025:CLA:C1B	2.62	0.77
3:C:166:ILE:HA	3:C:245:ILE:HD13	1.64	0.77
3:C:135:ARG:HH12	20:Z:33:TRP:HB3	1.49	0.77
20:Z:37:LYS:NZ	20:Z:38:GLN:HG2	1.99	0.77
1:A:37:MET:HG2	1:A:41:LEU:CD2	2.15	0.77
23:B:1022:CLA:CHD	23:B:1022:CLA:HBC2	2.05	0.77
2:B:465:GLY:HA2	2:B:468:TRP:H	1.50	0.77
23:C:1025:CLA:CMD	23:C:1026:CLA:C4	2.62	0.77
10:K:32:PHE:CE1	27:K:1052:BCR:C21	2.68	0.77
20:Z:9:LEU:C	20:Z:11:ALA:H	1.87	0.77
13:O:173:ASN:OD1	13:O:220:LYS:HE2	1.84	0.77
23:A:1003:CLA:C3D	23:D:1005:CLA:HBC1	2.14	0.77
23:B:1012:CLA:CHD	23:B:1012:CLA:CBC	2.63	0.77
2:B:66:MET:HB3	2:B:71:VAL:HG13	1.67	0.77
23:C:1025:CLA:H43	23:C:1025:CLA:C1B	2.14	0.77
23:B:1011:CLA:C4D	23:B:1013:CLA:H41	2.14	0.77
2:B:448:ARG:HH11	2:B:448:ARG:HB2	1.50	0.77
23:C:1028:CLA:O2A	28:C:1056:DGD:HG11	1.85	0.77
27:D:1050:BCR:H373	29:J:1059:MGE:H4A2	0.81	0.77
1:A:90:GLY:CA	1:A:167:SER:HB2	2.14	0.76
23:B:1010:CLA:CMD	23:B:1011:CLA:C8	2.53	0.76
23:C:1025:CLA:CMD	23:C:1026:CLA:H43	2.15	0.76
27:C:1054:BCR:H393	27:C:1054:BCR:C27	2.14	0.76
28:C:1056:DGD:HBG3	28:C:1056:DGD:HB2	1.67	0.76
3:C:311:GLN:NE2	3:C:351:PHE:HD2	1.83	0.76
3:C:88:LEU:HD21	23:C:1027:CLA:CBC	2.14	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:K:39:VAL:CG2	18:Y:36:ILE:CD1	2.62	0.76
15:U:82:ASN:HB2	15:U:85:TYR:OH	1.86	0.76
16:V:85:LEU:HB3	16:V:92:ARG:O	1.85	0.76
23:B:1016:CLA:CHA	23:B:1016:CLA:HBA1	2.14	0.76
2:B:120:LEU:O	2:B:123:PHE:HB2	1.84	0.76
23:C:1032:CLA:C1A	23:C:1032:CLA:HED3	2.14	0.76
3:C:95:LEU:N	3:C:95:LEU:HD22	1.99	0.76
27:K:1052:BCR:H331	27:K:1052:BCR:C8	2.16	0.76
2:B:423:LYS:O	2:B:429:ILE:HG13	1.85	0.76
13:O:129:PHE:O	13:O:130:GLN:HG2	1.84	0.76
1:A:279:ARG:HH22	24:A:1038:PHO:CAC	1.94	0.76
1:A:27:ARG:O	1:A:28:LEU:HD23	1.86	0.76
23:B:1016:CLA:CGA	23:B:1016:CLA:C1A	2.63	0.76
2:B:426:PHE:HZ	13:O:201:PRO:HB3	1.50	0.76
1:A:196:PRO:HB2	28:C:1057:DGD:HA81	1.66	0.76
3:C:239:TRP:O	3:C:243:ILE:HG13	1.85	0.76
7:H:22:ALA:HB1	7:H:23:PRO:HD2	1.66	0.76
3:C:305:THR:CG2	3:C:308:GLU:HB2	2.16	0.76
1:A:210:LEU:CD2	23:A:1006:CLA:H41	2.16	0.76
3:C:343:ARG:HH11	3:C:343:ARG:HG3	1.50	0.76
27:D:1050:BCR:C21	29:J:1059:MGE:C3A	2.64	0.76
6:F:41:GLN:HE22	9:J:27:LEU:HB3	1.47	0.76
14:T:1:MET:C	14:T:4:ILE:HG22	2.05	0.76
13:O:169:LYS:HB3	13:O:169:LYS:NZ	1.99	0.76
23:B:1010:CLA:O1D	23:B:1010:CLA:C2A	2.33	0.76
23:B:1019:CLA:HMB3	23:B:1020:CLA:C1C	2.15	0.76
13:O:178:ARG:HD3	13:O:182:PHE:CD2	2.20	0.76
1:A:200:LEU:HA	1:A:203:ALA:HB3	1.66	0.76
23:B:1023:CLA:C4D	23:B:1024:CLA:HMC1	2.15	0.76
23:C:1033:CLA:CHD	23:C:1033:CLA:HBC3	2.12	0.76
23:C:1034:CLA:H43	23:C:1034:CLA:O1A	1.86	0.76
28:C:1055:DGD:HB72	28:C:1055:DGD:C3B	2.15	0.76
3:C:263:ALA:H	8:I:28:PRO:HG2	1.51	0.76
4:D:236:ASN:HB3	4:D:237:PRO:HA	1.67	0.76
4:D:251:ARG:HE	4:D:255:GLN:HE22	1.29	0.76
4:D:89:LEU:HG	4:D:91:LEU:HD13	1.68	0.76
10:K:32:PHE:HD1	27:K:1052:BCR:H393	1.49	0.76
15:U:41:ASN:HB3	15:U:44:ASP:OD2	1.86	0.76
16:V:82:THR:HA	16:V:85:LEU:HD12	1.67	0.76
4:D:72:ASN:ND2	4:D:74:LEU:H	1.83	0.76
15:U:101:GLN:O	15:U:105:LEU:HG	1.85	0.76
23:B:1012:CLA:H102	23:B:1023:CLA:C1	2.16	0.76

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1023:CLA:H122	23:B:1023:CLA:H91	1.67	0.76
3:C:34:ALA:HB2	4:D:230:SER:OG	1.85	0.76
2:B:257:TRP:CH2	4:D:291:LEU:HD12	2.20	0.76
8:I:33:LYS:HB3	8:I:35:LYS:HE3	1.67	0.76
23:C:1029:CLA:C15	23:C:1029:CLA:C19	2.30	0.76
23:C:1029:CLA:C20	23:C:1030:CLA:C19	2.64	0.76
3:C:34:ALA:O	3:C:38:GLY:HA2	1.86	0.76
7:H:12:ARG:HB3	7:H:12:ARG:HH11	1.49	0.76
1:A:99:ALA:HA	1:A:104:GLU:OE2	1.85	0.76
23:B:1022:CLA:CED	23:B:1022:CLA:OBD	2.30	0.76
2:B:113:TRP:CD1	27:B:1048:BCR:H373	2.20	0.76
23:C:1034:CLA:H41	23:C:1034:CLA:H71	1.39	0.76
14:T:2:GLU:HB2	14:T:6:TYR:HE2	1.51	0.76
13:O:151:LEU:HA	13:O:171:GLU:O	1.86	0.76
5:E:83:LEU:H	5:E:83:LEU:HD13	1.49	0.76
23:B:1013:CLA:CBB	23:B:1023:CLA:C4	2.64	0.75
2:B:156:PHE:CD2	2:B:156:PHE:N	2.53	0.75
2:B:464:PHE:CE2	29:B:1060:MGE:C4B	2.63	0.75
23:C:1025:CLA:HMB2	23:C:1025:CLA:H42	1.66	0.75
28:C:1056:DGD:HAV1	28:C:1057:DGD:C8A	2.14	0.75
4:D:148:ALA:HA	4:D:280:TRP:HD1	1.48	0.75
5:E:50:PRO:HB3	5:E:54:SER:O	1.86	0.75
10:K:32:PHE:CZ	27:K:1052:BCR:C20	2.68	0.75
13:O:73:PRO:HA	13:O:263:GLY:HA3	1.67	0.75
4:D:67:TYR:CE1	29:J:1059:MGE:H1G1	2.22	0.75
23:A:1006:CLA:CHD	23:A:1006:CLA:HBC3	2.12	0.75
1:A:82:VAL:HB	1:A:174:LEU:HG	1.68	0.75
2:B:17:GLY:CA	2:B:123:PHE:HE2	2.00	0.75
20:Z:9:LEU:HD13	20:Z:10:ALA:N	2.02	0.75
3:C:322:GLN:NE2	3:C:381:LYS:HD3	2.01	0.75
23:B:1011:CLA:H101	23:B:1011:CLA:H143	1.68	0.75
2:B:326:ARG:HB3	2:B:444:ARG:CG	2.16	0.75
3:C:76:ILE:HG23	3:C:77:PRO:CD	2.16	0.75
17:X:42:GLN:O	17:X:43:ILE:HG13	1.87	0.75
15:U:44:ASP:HA	15:U:47:LEU:HG	1.69	0.75
12:M:26:TYR:O	12:M:29:THR:HB	1.86	0.75
23:B:1011:CLA:HBB2	23:B:1013:CLA:C17	2.13	0.75
4:D:292:ASN:O	4:D:294:ARG:HD3	1.87	0.75
2:B:297:THR:HG23	2:B:300:GLU:H	1.51	0.75
2:B:238:LEU:O	2:B:242:ILE:HG13	1.87	0.75
4:D:256:ILE:HG23	4:D:257:PHE:H	1.49	0.75
17:X:43:ILE:HG22	17:X:43:ILE:O	1.86	0.75

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:328:MET:HB3	4:D:325:ILE:CD1	2.16	0.75
30:A:1063:LHG:H322	23:C:1034:CLA:C9	2.17	0.75
1:A:174:LEU:HB3	24:A:1038:PHO:H172	1.68	0.75
23:B:1021:CLA:H141	23:B:1021:CLA:H203	1.68	0.75
23:C:1027:CLA:HED1	23:C:1036:CLA:H203	1.67	0.75
23:C:1037:CLA:CAA	23:C:1037:CLA:O2D	2.30	0.75
2:B:460:LEU:HD23	4:D:280:TRP:CZ3	2.22	0.75
11:L:36:PHE:HD2	14:T:6:TYR:OH	1.70	0.75
1:A:57:PRO:HG2	13:O:141:ARG:NH1	2.02	0.75
1:A:54:ALA:CB	1:A:72:LEU:HD12	2.13	0.75
23:C:1031:CLA:CGD	23:C:1031:CLA:CAA	2.65	0.75
3:C:163:PHE:CG	23:C:1036:CLA:HBB1	2.21	0.75
3:C:236:GLY:HA3	27:C:1054:BCR:H391	1.66	0.75
24:A:1038:PHO:HHB	23:D:1005:CLA:H93	1.69	0.75
23:B:1009:CLA:HMB2	27:H:1049:BCR:H392	1.69	0.75
2:B:224:ARG:HB3	7:H:25:TRP:HB3	1.69	0.75
23:C:1025:CLA:C2B	23:C:1025:CLA:H41	2.17	0.75
3:C:179:ALA:HA	3:C:184:GLY:HA2	1.68	0.75
4:D:148:ALA:HA	4:D:280:TRP:CD1	2.22	0.75
8:I:10:ILE:O	8:I:13:THR:HG22	1.87	0.75
1:A:296:ASN:ND2	3:C:401:LEU:HG	2.02	0.75
23:B:1011:CLA:CBB	23:B:1013:CLA:C20	2.45	0.74
2:B:66:MET:HG2	23:B:1013:CLA:HED1	1.67	0.74
2:B:256:MET:HE3	2:B:448:ARG:NH1	2.00	0.74
23:C:1031:CLA:O1D	23:C:1033:CLA:H142	1.86	0.74
30:A:1063:LHG:C32	23:C:1034:CLA:H93	2.17	0.74
23:C:1037:CLA:CGD	23:C:1037:CLA:CAA	2.65	0.74
3:C:449:ARG:CZ	23:C:1029:CLA:HED2	2.16	0.74
23:D:1005:CLA:C16	29:D:1062:MGE:H261	2.16	0.74
4:D:39:PRO:HB2	23:D:1008:CLA:HMC3	1.68	0.74
3:C:262:ARG:HH11	3:C:262:ARG:HB3	1.51	0.74
4:D:148:ALA:HB2	4:D:276:VAL:HG13	1.67	0.74
5:E:19:TYR:CD1	5:E:20:TRP:HD1	2.05	0.74
7:H:11:LEU:O	7:H:14:LEU:HD13	1.87	0.74
1:A:90:GLY:C	1:A:92:HIS:H	1.88	0.74
23:B:1011:CLA:C9	23:B:1011:CLA:H122	2.17	0.74
23:B:1019:CLA:HMB2	23:B:1020:CLA:CHC	2.17	0.74
23:B:1022:CLA:O1D	23:B:1022:CLA:CAA	2.30	0.74
3:C:40:ALA:HA	23:C:1033:CLA:HMC3	1.68	0.74
23:B:1011:CLA:H191	23:H:1017:CLA:C15	2.17	0.74
4:D:325:ILE:HG22	4:D:325:ILE:O	1.86	0.74
1:A:89:ILE:HD13	13:O:99:ARG:HD2	1.69	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:C:1055:DGD:HB72	28:C:1055:DGD:C2B	2.18	0.74
3:C:160:ILE:O	3:C:163:PHE:HB2	1.88	0.74
4:D:92:LEU:HB3	4:D:93:TRP:CE3	2.22	0.74
16:V:91:PRO:O	16:V:92:ARG:HD3	1.87	0.74
1:A:142:TRP:N	4:D:220:ASN:HD21	1.85	0.74
23:B:1009:CLA:H11	27:H:1049:BCR:H351	1.69	0.74
23:B:1020:CLA:OBD	23:B:1020:CLA:CED	2.35	0.74
3:C:282:MET:HA	3:C:285:ILE:CG2	2.17	0.74
4:D:281:MET:CE	4:D:284:ILE:HD12	2.16	0.74
1:A:160:ILE:HG21	1:A:291:SER:HA	1.68	0.74
23:B:1023:CLA:HBB1	23:B:1023:CLA:HHC	1.68	0.74
4:D:18:LEU:HA	17:X:41:SER:OG	1.87	0.74
10:K:33:PHE:O	10:K:33:PHE:CD1	2.30	0.74
16:V:121:LEU:HD23	16:V:138:LEU:HD11	1.70	0.74
16:V:138:LEU:HA	16:V:141:ILE:HD12	1.69	0.74
23:C:1030:CLA:H43	27:C:1054:BCR:H323	1.67	0.74
1:A:142:TRP:N	4:D:220:ASN:ND2	2.36	0.74
1:A:328:MET:HB3	4:D:325:ILE:CG1	2.17	0.74
1:A:29:TYR:CE2	1:A:132:GLU:HB3	2.19	0.74
1:A:202:VAL:HG21	23:A:1006:CLA:OBD	1.87	0.74
23:B:1012:CLA:C10	23:B:1023:CLA:H42	2.15	0.74
2:B:226:TYR:CD2	2:B:231:MET:HG3	2.23	0.74
2:B:231:MET:HA	2:B:236:THR:HG21	1.68	0.74
23:C:1034:CLA:HBC3	23:C:1034:CLA:CHD	2.13	0.74
2:B:257:TRP:CH2	4:D:291:LEU:HB3	2.23	0.74
27:K:1051:BCR:H321	27:K:1052:BCR:C12	2.17	0.74
23:B:1012:CLA:C10	23:B:1023:CLA:O2A	2.35	0.74
23:B:1016:CLA:HMD1	23:B:1018:CLA:HAB	1.69	0.74
2:B:106:LEU:HD11	27:B:1048:BCR:C13	2.17	0.74
23:C:1025:CLA:HMB2	23:C:1025:CLA:C4	2.18	0.74
23:C:1034:CLA:C8	23:C:1034:CLA:C4	2.50	0.74
23:B:1016:CLA:HMA1	4:D:130:PHE:CE1	2.22	0.74
4:D:146:PHE:O	4:D:149:PRO:HG2	1.87	0.74
23:A:1006:CLA:H101	26:A:1043:PQ9:H441	1.70	0.74
1:A:219:VAL:CB	4:D:268:HIS:ND1	2.50	0.74
23:B:1021:CLA:HMA2	23:B:1021:CLA:O2A	1.87	0.74
23:B:1022:CLA:C4A	23:B:1022:CLA:HBA2	2.15	0.74
2:B:31:ALA:HB3	2:B:103:LEU:HD12	1.69	0.74
23:C:1025:CLA:O1D	23:C:1025:CLA:HAA1	1.86	0.74
1:A:141:PRO:HG3	3:C:447:ARG:HA	1.69	0.74
3:C:42:LEU:HG	3:C:46:SER:HB2	1.70	0.74
16:V:105:PRO:HG3	16:V:115:ALA:HA	1.69	0.74

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:V:123:SER:O	16:V:125:ASP:N	2.20	0.74
13:O:215:ARG:H	13:O:215:ARG:CD	2.01	0.74
23:B:1022:CLA:H172	23:B:1022:CLA:H141	0.80	0.73
18:Y:32:GLY:HA2	18:Y:35:ILE:CG2	2.18	0.73
20:Z:50:LEU:O	20:Z:54:VAL:HG23	1.88	0.73
2:B:5:TRP:HE3	23:B:1019:CLA:H42	1.52	0.73
3:C:286:ALA:HB2	23:C:1026:CLA:HMD3	1.69	0.73
3:C:55:ALA:HB1	27:K:1052:BCR:H371	1.70	0.73
4:D:80:THR:HG22	4:D:111:TRP:NE1	2.03	0.73
7:H:44:ILE:O	7:H:48:ILE:HG13	1.88	0.73
29:B:1060:MGE:CAA	29:L:1061:MGE:H8A2	2.18	0.73
20:Z:10:ALA:C	20:Z:13:VAL:HG12	2.08	0.73
2:B:92:SER:O	2:B:94:GLU:N	2.21	0.73
1:A:118:HIS:O	1:A:121:LEU:HD23	1.88	0.73
23:B:1012:CLA:C11	23:B:1023:CLA:O2A	2.36	0.73
4:D:149:PRO:O	4:D:152:VAL:HG12	1.88	0.73
4:D:98:GLN:HE21	5:E:73:LYS:CE	2.00	0.73
5:E:23:HIS:O	5:E:27:ILE:HG12	1.89	0.73
2:B:38:ALA:O	2:B:42:LEU:CB	2.33	0.73
18:Y:39:LEU:CD2	20:Z:25:VAL:HG22	2.17	0.73
1:A:219:VAL:HG23	1:A:220:THR:N	2.02	0.73
1:A:219:VAL:HG23	1:A:220:THR:H	1.54	0.73
23:C:1031:CLA:O2D	23:C:1033:CLA:C8	2.36	0.73
2:B:251:VAL:HG13	28:H:1058:DGD:HB51	1.69	0.73
30:A:1063:LHG:H322	23:C:1034:CLA:H93	1.70	0.73
23:B:1011:CLA:C20	7:H:38:PHE:HE2	2.01	0.73
16:V:29:LEU:H	16:V:29:LEU:HD23	1.53	0.73
27:A:1044:BCR:H331	27:A:1044:BCR:HC8	1.70	0.73
23:B:1021:CLA:C14	23:B:1021:CLA:C20	2.64	0.73
23:B:1023:CLA:H143	23:B:1024:CLA:H8	1.68	0.73
23:B:1019:CLA:OBD	29:B:1060:MGE:H2G	1.88	0.73
23:C:1032:CLA:CGA	23:C:1032:CLA:C4	2.65	0.73
5:E:38:VAL:CG1	6:F:39:ALA:CB	2.67	0.73
17:X:43:ILE:O	17:X:44:ASP:HB3	1.87	0.73
29:B:1060:MGE:O2D	29:B:1060:MGE:H3G1	1.86	0.73
23:C:1037:CLA:CGD	23:C:1037:CLA:HAA1	2.18	0.73
23:C:1029:CLA:H42	27:C:1054:BCR:H333	1.69	0.73
3:C:185:LEU:HB2	3:C:230:LEU:HD21	1.69	0.73
3:C:451:ALA:C	3:C:453:ALA:H	1.89	0.73
16:V:30:THR:OG1	16:V:32:GLU:HG2	1.88	0.73
3:C:303:GLY:C	3:C:423:ARG:HD2	2.09	0.73
23:A:1006:CLA:H2	23:A:1006:CLA:C7	2.18	0.73

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:236:GLY:HA3	27:C:1054:BCR:C39	2.18	0.73
1:A:249:VAL:HG23	4:D:238:THR:HB	1.71	0.73
4:D:267:LEU:O	4:D:271:MET:HG3	1.89	0.73
1:A:199:GLN:CD	28:C:1057:DGD:HBW2	2.09	0.73
23:B:1014:CLA:CBC	23:B:1014:CLA:HHD	2.12	0.73
23:B:1019:CLA:C19	23:B:1021:CLA:C5	2.67	0.73
1:A:74:GLY:O	1:A:76:ASN:N	2.21	0.73
23:B:1023:CLA:C1D	23:B:1024:CLA:CBC	2.67	0.73
2:B:26:HIS:O	2:B:30:VAL:HG23	1.89	0.73
2:B:460:LEU:HG	28:H:1058:DGD:HAG3	1.70	0.73
4:D:74:LEU:HA	4:D:175:VAL:HG21	1.71	0.73
10:K:28:ILE:C	10:K:31:LEU:HD12	2.09	0.73
1:A:174:LEU:HD23	1:A:174:LEU:N	2.04	0.72
23:B:1009:CLA:HAA1	23:B:1009:CLA:CGD	2.15	0.72
2:B:456:ALA:HA	28:H:1058:DGD:HBG1	1.68	0.72
27:D:1050:BCR:C22	29:J:1059:MGE:H3A1	2.19	0.72
20:Z:35:ARG:HD3	20:Z:36:SER:N	2.04	0.72
20:Z:36:SER:O	20:Z:40:ILE:HG12	1.89	0.72
13:O:73:PRO:HG3	13:O:102:THR:OG1	1.89	0.72
23:B:1009:CLA:HHC	23:B:1009:CLA:CBB	2.06	0.72
28:C:1056:DGD:HBT2	28:C:1056:DGD:HBF2	1.71	0.72
1:A:157:VAL:HG11	23:D:1005:CLA:HMC3	1.69	0.72
1:A:322:ASN:O	1:A:326:LEU:HG	1.89	0.72
24:A:1038:PHO:HMB3	23:D:1005:CLA:H92	0.83	0.72
23:B:1011:CLA:H121	27:H:1049:BCR:C32	2.15	0.72
23:B:1021:CLA:C17	29:B:1060:MGE:CDA	2.56	0.72
2:B:464:PHE:CE2	29:B:1060:MGE:C5B	2.72	0.72
13:O:179:THR:HG22	13:O:180:ALA:N	2.05	0.72
14:T:2:GLU:HB2	14:T:6:TYR:CE2	2.24	0.72
13:O:94:THR:HB	13:O:134:VAL:HB	1.71	0.72
2:B:241:SER:HB3	23:B:1020:CLA:CED	2.19	0.72
3:C:88:LEU:HD21	23:C:1027:CLA:HBC2	1.69	0.72
29:L:1061:MGE:H3B1	29:L:1061:MGE:H7B1	1.69	0.72
11:L:36:PHE:CE2	14:T:2:GLU:HA	2.24	0.72
13:O:142:ILE:N	13:O:142:ILE:HD12	2.04	0.72
3:C:307:PRO:HG3	3:C:358:PHE:CD1	2.24	0.72
23:B:1014:CLA:C12	23:B:1014:CLA:C9	2.30	0.72
3:C:218:PHE:HA	28:C:1055:DGD:HG11	1.72	0.72
10:K:32:PHE:CD1	27:K:1052:BCR:H393	2.22	0.72
2:B:241:SER:HB3	23:B:1020:CLA:HED3	1.72	0.72
1:A:279:ARG:HD3	4:D:208:ALA:CA	2.19	0.72
25:E:1040:HEM:HHA	25:E:1040:HEM:O1D	1.89	0.72

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:28:PRO:O	5:E:32:ILE:HG13	1.89	0.72
23:B:1016:CLA:C2	23:H:1017:CLA:H102	2.19	0.72
13:O:119:LEU:N	13:O:155:THR:HG22	1.98	0.72
1:A:279:ARG:O	1:A:283:VAL:CG1	2.37	0.72
23:B:1011:CLA:CGA	23:B:1011:CLA:H3A	2.18	0.72
23:C:1031:CLA:HED3	23:C:1031:CLA:C2A	2.19	0.72
23:C:1030:CLA:H43	27:C:1054:BCR:C32	2.19	0.72
1:A:215:HIS:O	1:A:219:VAL:CG2	2.37	0.72
1:A:309:ALA:O	16:V:29:LEU:HD22	1.90	0.72
2:B:223:GLN:HB2	2:B:227:LYS:HZ2	1.53	0.72
23:C:1034:CLA:CHD	23:C:1034:CLA:CBC	2.67	0.72
3:C:282:MET:HG2	23:C:1025:CLA:H71	1.72	0.72
23:D:1004:CLA:CAB	23:D:1005:CLA:HMD2	2.20	0.72
13:O:188:ARG:CD	13:O:197:ALA:H	2.01	0.72
4:D:232:PHE:O	4:D:232:PHE:CD2	2.43	0.72
23:B:1009:CLA:CBD	23:B:1009:CLA:HBA2	2.18	0.72
30:A:1063:LHG:C31	23:C:1034:CLA:C9	2.63	0.72
5:E:10:PHE:O	5:E:12:ASP:N	2.22	0.72
12:M:20:VAL:O	12:M:24:ILE:HG13	1.90	0.72
27:T:6046:BCR:HC42	27:T:6046:BCR:H312	1.71	0.72
15:U:72:TYR:HB3	15:U:73:PRO:CD	2.19	0.72
16:V:109:ASP:O	16:V:109:ASP:OD2	2.08	0.72
5:E:83:LEU:HD22	5:E:84:LYS:H	1.55	0.72
4:D:57:SER:OG	4:D:79:SER:HB2	1.88	0.72
1:A:13:LEU:HD22	1:A:13:LEU:H	1.54	0.72
1:A:33:PHE:HB2	1:A:129:ARG:HB2	1.72	0.72
23:B:1009:CLA:HAA1	23:B:1009:CLA:CED	2.18	0.72
23:C:1031:CLA:H141	23:C:1031:CLA:H172	1.68	0.72
3:C:42:LEU:HD22	3:C:151:TRP:CH2	2.25	0.72
23:H:1017:CLA:HBB1	27:H:1049:BCR:H321	1.71	0.72
23:A:1003:CLA:C17	24:A:1038:PHO:H43	2.17	0.71
1:A:219:VAL:HG21	4:D:268:HIS:CB	2.19	0.71
2:B:362:PHE:CE1	4:D:184:PHE:HZ	2.08	0.71
2:B:440:ASP:OD2	2:B:441:GLY:N	2.23	0.71
3:C:128:GLY:HA3	23:C:1037:CLA:CAC	2.20	0.71
4:D:89:LEU:HD22	7:H:50:ASN:OD1	1.89	0.71
18:Y:39:LEU:HD21	20:Z:25:VAL:CG2	2.18	0.71
7:H:54:ILE:O	17:X:13:THR:HG21	1.90	0.71
6:F:26:LEU:H	6:F:26:LEU:HD13	1.55	0.71
1:A:210:LEU:HD12	1:A:210:LEU:O	1.90	0.71
1:A:237:TYR:CE2	1:A:239:PHE:HA	2.25	0.71
23:C:1029:CLA:HBD	23:C:1029:CLA:HAA1	1.71	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1027:CLA:HED1	23:C:1036:CLA:C19	2.20	0.71
3:C:424:SER:O	3:C:428:THR:HG22	1.89	0.71
4:D:197:HIS:O	4:D:201:VAL:HG23	1.89	0.71
4:D:45:LEU:C	4:D:45:LEU:HD13	2.10	0.71
4:D:65:SER:HB3	4:D:77:ALA:O	1.90	0.71
7:H:40:VAL:O	7:H:44:ILE:HG23	1.90	0.71
8:I:8:VAL:O	8:I:12:VAL:HG23	1.90	0.71
3:C:72:LEU:HD11	10:K:12:PRO:HD3	1.72	0.71
1:A:116:ILE:HG23	1:A:117:PHE:CD2	2.25	0.71
1:A:43:ALA:HA	27:A:1044:BCR:C16	2.20	0.71
2:B:280:PHE:CZ	2:B:312:TYR:HB3	2.25	0.71
23:C:1029:CLA:HHD	23:C:1029:CLA:HBC3	1.71	0.71
4:D:80:THR:HG23	4:D:172:SER:OG	1.90	0.71
4:D:90:LEU:HA	4:D:96:GLU:HG3	1.70	0.71
4:D:302:GLU:OE1	13:O:186:LYS:HD2	1.91	0.71
1:A:129:ARG:NH2	4:D:256:ILE:HG13	2.05	0.71
1:A:279:ARG:O	1:A:283:VAL:HG12	1.90	0.71
23:B:1012:CLA:H2A	23:B:1012:CLA:HED2	1.70	0.71
23:C:1025:CLA:CAA	23:C:1025:CLA:CGD	2.65	0.71
3:C:318:LEU:CD2	3:C:328:VAL:HG11	2.20	0.71
4:D:274:VAL:HG22	26:D:1042:PQ9:H262	1.72	0.71
16:V:143:GLY:O	16:V:147:VAL:HG23	1.90	0.71
2:B:230:ARG:NH1	2:B:230:ARG:HA	2.04	0.71
3:C:377:LEU:HA	3:C:380:ILE:CG2	2.20	0.71
2:B:241:SER:O	2:B:245:VAL:HG23	1.89	0.71
2:B:277:SER:C	2:B:279:TYR:H	1.91	0.71
11:L:24:ILE:CD1	12:M:18:PRO:HG2	2.21	0.71
13:O:108:GLN:O	13:O:123:GLU:HA	1.90	0.71
30:A:1063:LHG:H291	23:C:1032:CLA:C8	2.21	0.71
1:A:21:VAL:HG23	1:A:22:THR:HG23	1.72	0.71
23:B:1024:CLA:HMB3	27:B:1048:BCR:H351	1.73	0.71
2:B:254:GLY:O	2:B:258:TYR:CD1	2.33	0.71
1:A:269:ARG:HE	4:D:243:THR:CG2	2.03	0.71
20:Z:15:LEU:HD22	20:Z:50:LEU:CD1	2.19	0.71
2:B:311:PHE:HA	2:B:430:PHE:CZ	2.26	0.71
3:C:464:GLU:OE2	3:C:467:LEU:HD12	1.90	0.71
3:C:45:LEU:HD21	3:C:141:GLU:HG2	1.70	0.71
23:D:1005:CLA:H203	23:D:1005:CLA:H152	1.71	0.71
4:D:134:ARG:HE	4:D:134:ARG:CA	2.04	0.71
5:E:17:VAL:HG13	9:J:7:ARG:N	2.06	0.71
6:F:41:GLN:HE21	9:J:27:LEU:HB3	1.54	0.71
13:O:105:ASP:O	13:O:127:ILE:CD1	2.38	0.71

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:105:ASP:O	13:O:106:GLN:HB2	1.91	0.71
1:A:140:ARG:C	4:D:220:ASN:HD22	1.93	0.71
1:A:72:LEU:O	1:A:73:TYR:CE2	2.43	0.71
2:B:173:GLY:HA3	2:B:312:TYR:CE1	2.26	0.71
2:B:465:GLY:HA3	23:B:1019:CLA:CBC	2.20	0.71
23:C:1026:CLA:H203	23:C:1026:CLA:C4D	2.21	0.71
23:C:1034:CLA:H41	23:C:1034:CLA:H8	1.67	0.71
3:C:140:LEU:HB3	3:C:148:GLY:HA2	1.73	0.71
3:C:450:ALA:O	3:C:454:GLY:N	2.24	0.71
3:C:53:HIS:HB2	23:C:1036:CLA:CMD	2.20	0.71
23:D:1005:CLA:C2A	23:D:1005:CLA:CED	2.43	0.71
23:B:1016:CLA:C20	23:D:1008:CLA:CMA	2.68	0.71
4:D:93:TRP:CZ2	23:D:1008:CLA:O1A	2.43	0.71
2:B:380:ASP:OD1	2:B:390:TYR:HB2	1.90	0.71
11:L:12:LEU:HD12	12:M:26:TYR:CA	2.20	0.71
12:M:29:THR:HG22	12:M:30:GLU:OE1	1.90	0.71
15:U:92:LEU:HD12	15:U:92:LEU:H	1.54	0.71
16:V:135:GLU:O	16:V:139:VAL:HG22	1.89	0.71
1:A:140:ARG:HH22	30:A:1063:LHG:C2	2.03	0.71
1:A:159:LEU:HG	1:A:163:ILE:HD11	1.72	0.71
23:B:1009:CLA:O2A	27:H:1049:BCR:C17	2.38	0.71
10:K:28:ILE:CD1	27:K:1051:BCR:HC7	2.11	0.71
2:B:391:SER:HB3	2:B:394:GLN:NE2	2.06	0.71
1:A:174:LEU:H	1:A:174:LEU:HD23	1.56	0.71
1:A:307:ILE:HD11	1:A:311:GLY:O	1.91	0.71
2:B:157:HIS:ND1	2:B:158:LEU:HD23	2.06	0.71
2:B:441:GLY:O	2:B:442:ILE:HD13	1.91	0.71
23:C:1027:CLA:O2A	23:C:1027:CLA:HMA2	1.91	0.71
3:C:164:HIS:O	3:C:168:LEU:HG	1.90	0.71
1:A:288:LEU:HD11	3:C:435:PHE:CD2	2.25	0.71
4:D:39:PRO:O	4:D:43:LEU:HD22	1.91	0.71
2:B:391:SER:O	2:B:394:GLN:HG3	1.90	0.71
16:V:105:PRO:CG	16:V:115:ALA:HA	2.21	0.71
13:O:59:ASP:OD1	13:O:61:SER:HB3	1.91	0.71
1:A:33:PHE:CD2	1:A:128:GLY:HA3	2.26	0.70
1:A:157:VAL:HG22	1:A:182:PHE:CE2	2.26	0.70
23:B:1021:CLA:H202	23:B:1021:CLA:H142	1.72	0.70
1:A:217:SER:OG	4:D:142:ASN:HA	1.90	0.70
4:D:129:GLN:HB2	4:D:143:ALA:HB2	1.72	0.70
23:H:1017:CLA:CHD	23:H:1017:CLA:CBC	2.68	0.70
13:O:123:GLU:OE1	13:O:150:ASN:N	2.23	0.70
16:V:47:LEU:HA	16:V:51:GLN:NE2	2.04	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:147:TYR:O	1:A:150:PRO:HG2	1.90	0.70
23:B:1011:CLA:HBB1	23:B:1013:CLA:H171	1.70	0.70
2:B:138:MET:SD	23:B:1023:CLA:HBC2	2.30	0.70
3:C:48:LYS:HD2	3:C:133:ALA:C	2.12	0.70
4:D:210:LEU:CA	4:D:213:ILE:HG22	2.21	0.70
29:J:1059:MGE:H2A2	29:J:1059:MGE:H5B1	1.72	0.70
13:O:65:ARG:HE	13:O:110:GLU:HA	1.57	0.70
3:C:202:PRO:HB2	3:C:235:GLY:HA2	1.70	0.70
2:B:86:ILE:O	2:B:87:ASP:HB3	1.90	0.70
1:A:64:ARG:O	13:O:178:ARG:NH2	2.23	0.70
1:A:95:PRO:HG2	1:A:98:GLU:HG2	1.74	0.70
23:B:1016:CLA:CHD	23:B:1016:CLA:CBC	2.62	0.70
23:B:1016:CLA:H2	23:H:1017:CLA:H102	1.74	0.70
3:C:197:ARG:HG2	3:C:198:VAL:N	2.05	0.70
3:C:199:ILE:H	3:C:199:ILE:HD12	1.54	0.70
4:D:209:LEU:HD23	4:D:209:LEU:C	2.11	0.70
6:F:17:THR:O	6:F:20:TRP:HB3	1.91	0.70
13:O:69:LEU:HB3	13:O:107:ILE:HB	1.74	0.70
16:V:48:THR:H	16:V:51:GLN:CG	2.03	0.70
2:B:288:VAL:O	2:B:292:LEU:HB2	1.91	0.70
23:A:1006:CLA:HED2	23:A:1006:CLA:HAA2	1.73	0.70
23:B:1019:CLA:C5	23:B:1021:CLA:HED1	2.21	0.70
2:B:223:GLN:HG2	7:H:24:GLY:CA	2.21	0.70
3:C:162:GLY:HA2	3:C:165:LEU:HD12	1.73	0.70
1:A:25:ASP:HA	4:D:251:ARG:HH22	1.54	0.70
3:C:126:GLY:CA	27:K:1052:BCR:H363	2.21	0.70
4:D:258:GLY:O	4:D:259:ILE:HD13	1.91	0.70
15:U:58:ASN:CG	15:U:114:VAL:HG13	2.12	0.70
23:B:1009:CLA:HED3	23:B:1009:CLA:C2A	2.20	0.70
23:B:1011:CLA:H172	23:B:1016:CLA:CBC	2.21	0.70
2:B:193:TYR:O	2:B:195:PRO:HD3	1.92	0.70
4:D:199:MET:HG2	26:D:1042:PQ9:H351	1.74	0.70
2:B:417:VAL:HG12	2:B:418:LYS:N	2.07	0.70
2:B:357:ARG:HH11	2:B:357:ARG:HG3	1.56	0.70
1:A:113:GLN:HA	1:A:116:ILE:HG22	1.73	0.70
1:A:99:ALA:CB	1:A:105:TRP:HB2	2.22	0.70
23:B:1011:CLA:HBB2	23:B:1013:CLA:C19	2.22	0.70
3:C:283:GLY:O	3:C:286:ALA:HB3	1.92	0.70
23:D:1005:CLA:O2D	23:D:1005:CLA:H2A	1.89	0.70
1:A:184:ILE:CG2	4:D:321:LEU:HD13	2.21	0.70
23:B:1012:CLA:HAA2	23:B:1012:CLA:HED2	0.73	0.70
2:B:191:ASN:HD21	2:B:193:TYR:HD2	1.37	0.70

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:59:GLY:N	2:B:329:PRO:HB3	2.06	0.70
23:C:1031:CLA:O1D	23:C:1033:CLA:C10	2.39	0.70
23:D:1005:CLA:H72	29:D:1062:MGE:H202	1.72	0.70
3:C:203:THR:N	3:C:235:GLY:HA3	2.07	0.70
15:U:98:THR:HG23	15:U:101:GLN:OE1	1.91	0.70
4:D:330:ALA:HB3	4:D:331:PRO:HD3	1.73	0.70
3:C:349:ILE:N	3:C:349:ILE:HD12	2.06	0.70
7:H:43:LEU:HD23	7:H:43:LEU:O	1.91	0.70
1:A:128:GLY:C	1:A:130:GLN:H	1.95	0.70
2:B:27:THR:CG2	23:B:1013:CLA:HAC2	2.21	0.70
23:B:1019:CLA:H51	23:B:1021:CLA:HED1	1.74	0.70
23:B:1023:CLA:C9	23:B:1023:CLA:H121	2.08	0.70
2:B:135:LEU:HD12	2:B:135:LEU:N	2.06	0.70
2:B:191:ASN:HD22	2:B:192:PRO:CD	2.05	0.70
3:C:107:ASP:OD1	3:C:109:PHE:HB3	1.90	0.70
4:D:110:LEU:O	4:D:114:ILE:HG13	1.92	0.70
20:Z:37:LYS:O	20:Z:40:ILE:HB	1.92	0.70
13:O:92:VAL:CG2	13:O:93:PRO:HD2	2.21	0.70
23:A:1007:CLA:CHD	23:A:1007:CLA:CBC	2.56	0.70
27:B:1047:BCR:H321	27:B:1047:BCR:H342	1.69	0.70
2:B:31:ALA:HB2	23:B:1013:CLA:HBC3	1.74	0.70
23:B:1012:CLA:HMB1	23:B:1015:CLA:HMC3	1.74	0.70
2:B:7:ARG:HD3	23:B:1019:CLA:HED3	1.74	0.70
3:C:97:TRP:HE1	3:C:178:LYS:HE3	1.56	0.70
8:I:13:THR:CG2	8:I:14:PHE:N	2.54	0.70
13:O:123:GLU:HG2	13:O:124:GLU:N	2.07	0.70
15:U:99:GLU:H	15:U:99:GLU:CD	1.95	0.70
11:L:14:ARG:HE	14:T:25:GLU:HB3	1.56	0.70
1:A:124:SER:O	1:A:127:MET:HB3	1.92	0.69
23:B:1015:CLA:HBC1	27:B:1045:BCR:C34	2.22	0.69
23:B:1012:CLA:H112	23:B:1023:CLA:CGA	2.22	0.69
2:B:5:TRP:CG	2:B:6:TYR:N	2.59	0.69
2:B:362:PHE:HE1	4:D:184:PHE:CZ	2.10	0.69
13:O:141:ARG:HG3	13:O:141:ARG:HH11	1.57	0.69
2:B:382:PRO:HB3	4:D:344:GLU:HB2	1.74	0.69
2:B:417:VAL:CG1	2:B:418:LYS:N	2.55	0.69
16:V:70:GLY:HA3	16:V:156:TRP:O	1.92	0.69
16:V:48:THR:H	16:V:51:GLN:HE21	1.38	0.69
1:A:219:VAL:HG11	4:D:268:HIS:CE1	2.27	0.69
23:B:1009:CLA:HBC2	23:B:1009:CLA:HMC1	1.72	0.69
23:D:1008:CLA:H71	23:D:1008:CLA:H43	1.71	0.69
12:M:16:LEU:O	12:M:20:VAL:HG12	1.92	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:Z:1053:BCR:C38	27:Z:1053:BCR:C23	2.41	0.69
13:O:119:LEU:HG	13:O:155:THR:HG21	1.74	0.69
13:O:223:ILE:HG12	13:O:224:SER:N	2.04	0.69
3:C:203:THR:CG2	3:C:232:ASP:HA	2.22	0.69
16:V:30:THR:O	16:V:34:LEU:HD13	1.91	0.69
30:A:1063:LHG:C27	23:C:1032:CLA:H8	2.20	0.69
1:A:106:LEU:HD21	27:A:1044:BCR:H383	1.74	0.69
23:B:1011:CLA:C4D	23:B:1013:CLA:C4	2.70	0.69
2:B:257:TRP:CE2	4:D:291:LEU:HD12	2.27	0.69
23:B:1010:CLA:CAA	23:B:1010:CLA:O1D	2.40	0.69
23:B:1023:CLA:H172	23:B:1023:CLA:H122	1.73	0.69
28:C:1056:DGD:C6B	28:C:1056:DGD:CAB	2.63	0.69
28:C:1056:DGD:C5A	28:C:1056:DGD:O1A	2.39	0.69
16:V:62:ALA:HB1	25:V:1041:HEM:HBB1	1.74	0.69
2:B:158:LEU:HB2	2:B:199:VAL:HG13	1.73	0.69
2:B:460:LEU:HG	28:H:1058:DGD:HAG1	1.74	0.69
23:C:1032:CLA:CAB	23:C:1034:CLA:HMC3	2.23	0.69
28:C:1055:DGD:HG32	28:C:1055:DGD:O2D	1.92	0.69
3:C:32:GLY:HA2	3:C:41:ARG:NH2	2.08	0.69
4:D:92:LEU:HA	4:D:104:TRP:CD1	2.27	0.69
2:B:38:ALA:O	2:B:42:LEU:N	2.23	0.69
1:A:33:PHE:CE2	1:A:128:GLY:HA3	2.26	0.69
23:B:1012:CLA:O1A	23:B:1013:CLA:C4D	2.40	0.69
2:B:153:PHE:N	23:B:1014:CLA:CMC	2.54	0.69
23:B:1019:CLA:CMB	23:B:1020:CLA:CHC	2.71	0.69
3:C:54:VAL:HG13	23:C:1036:CLA:HED1	1.74	0.69
23:A:1003:CLA:CAD	23:D:1005:CLA:HAC2	2.22	0.69
4:D:256:ILE:HG23	4:D:257:PHE:N	2.08	0.69
1:A:188:ALA:CB	1:A:328:MET:HG3	2.20	0.69
16:V:120:SER:O	16:V:123:SER:N	2.25	0.69
15:U:39:LEU:HD12	15:U:39:LEU:N	2.07	0.69
1:A:278:TRP:HH2	28:C:1057:DGD:HAG1	1.58	0.69
1:A:58:VAL:N	1:A:68:SER:HB2	2.08	0.69
23:B:1011:CLA:CBB	23:B:1013:CLA:C19	2.70	0.69
2:B:207:ILE:O	2:B:210:ILE:HB	1.92	0.69
2:B:26:HIS:HB2	23:B:1020:CLA:HMB2	1.74	0.69
3:C:230:LEU:HD12	3:C:233:VAL:HG11	1.74	0.69
3:C:63:TRP:N	23:C:1034:CLA:HED3	2.07	0.69
11:L:7:ARG:HA	11:L:7:ARG:HE	1.58	0.69
2:B:368:VAL:HG13	2:B:368:VAL:O	1.91	0.69
1:A:118:HIS:HA	1:A:121:LEU:CD2	2.23	0.69
1:A:99:ALA:HB3	1:A:105:TRP:HB2	1.75	0.69

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:170:ASP:O	2:B:172:TYR:N	2.25	0.69
2:B:362:PHE:CE1	4:D:184:PHE:CZ	2.80	0.69
27:A:1044:BCR:H392	27:A:1044:BCR:H371	1.30	0.69
1:A:54:ALA:HB2	1:A:72:LEU:CD1	2.14	0.69
23:B:1023:CLA:ND	23:B:1024:CLA:HBC2	2.08	0.69
23:B:1011:CLA:H192	23:H:1017:CLA:C13	2.20	0.69
16:V:154:ASP:C	16:V:156:TRP:H	1.93	0.69
16:V:142:ALA:O	16:V:145:ILE:HB	1.93	0.69
15:U:85:TYR:O	15:U:114:VAL:HG11	1.91	0.69
3:C:305:THR:HG23	3:C:308:GLU:H	1.57	0.69
2:B:487:SER:HB3	2:B:488:PRO:CD	2.22	0.69
4:D:302:GLU:HG3	13:O:199:ALA:HB1	1.75	0.69
2:B:81:THR:HG21	2:B:83:GLU:OE1	1.93	0.69
1:A:27:ARG:HB2	1:A:27:ARG:NH1	2.08	0.69
23:C:1027:CLA:HMA2	23:C:1027:CLA:CGA	2.23	0.69
23:B:1016:CLA:H202	23:D:1008:CLA:HMA2	1.75	0.69
2:B:419:SER:HA	2:B:422:ARG:NH1	2.07	0.69
13:O:186:LYS:NZ	13:O:186:LYS:HA	2.07	0.69
23:A:1006:CLA:H172	27:D:1050:BCR:C40	2.13	0.69
30:A:1063:LHG:H341	30:A:1063:LHG:C38	2.19	0.69
23:A:1006:CLA:HED3	28:C:1057:DGD:HBW1	1.74	0.69
3:C:41:ARG:O	3:C:42:LEU:HB2	1.90	0.69
4:D:123:ILE:HD11	28:H:1058:DGD:HAW2	1.75	0.69
4:D:267:LEU:HD23	4:D:267:LEU:C	2.12	0.69
1:A:178:GLY:HA2	4:D:314:PHE:CD2	2.28	0.69
2:B:271:THR:HG23	2:B:274:GLN:CB	2.11	0.69
16:V:128:PRO:HA	16:V:131:ARG:HG3	1.73	0.69
16:V:125:ASP:OD2	16:V:131:ARG:HG2	1.93	0.69
2:B:250:PHE:CD1	2:B:459:ALA:HB1	2.28	0.68
23:C:1029:CLA:H41	23:C:1029:CLA:H191	1.73	0.68
3:C:272:LEU:O	3:C:276:LEU:HB2	1.92	0.68
13:O:31:LEU:HD23	13:O:31:LEU:N	2.07	0.68
13:O:202:GLN:OE1	13:O:202:GLN:HA	1.92	0.68
1:A:321:ILE:O	1:A:325:ASN:ND2	2.27	0.68
1:A:159:LEU:O	1:A:163:ILE:HG13	1.92	0.68
23:B:1014:CLA:H112	23:B:1014:CLA:H162	1.70	0.68
2:B:191:ASN:HD22	2:B:192:PRO:HD2	1.58	0.68
2:B:257:TRP:HH2	4:D:291:LEU:HB3	1.57	0.68
1:A:228:THR:HA	2:B:480:SER:HB2	1.73	0.68
3:C:137:PRO:HB2	3:C:143:TYR:CE2	2.28	0.68
1:A:275:LEU:HB3	4:D:211:CYS:O	1.92	0.68
4:D:261:PHE:CE2	4:D:266:TRP:CD1	2.77	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:H:38:PHE:O	7:H:41:PHE:HB3	1.93	0.68
2:B:135:LEU:HA	2:B:138:MET:HE3	1.76	0.68
23:C:1025:CLA:C4	23:C:1025:CLA:CMB	2.71	0.68
3:C:137:PRO:HB2	3:C:143:TYR:CD2	2.28	0.68
3:C:186:TYR:HA	3:C:196:VAL:HA	1.76	0.68
4:D:116:LEU:O	4:D:119:ALA:HB3	1.94	0.68
2:B:421:ALA:O	2:B:424:ALA:HB3	1.92	0.68
1:A:301:ASN:HB3	3:C:407:VAL:HG21	1.76	0.68
1:A:279:ARG:CZ	1:A:279:ARG:HB3	2.23	0.68
1:A:73:TYR:HD2	1:A:73:TYR:N	1.89	0.68
23:B:1022:CLA:HMB2	27:B:1045:BCR:C40	2.24	0.68
2:B:444:ARG:HG2	2:B:444:ARG:HH11	1.59	0.68
3:C:350:ILE:HG13	3:C:359:TRP:CB	2.23	0.68
3:C:62:PHE:CE2	10:K:28:ILE:HG22	2.17	0.68
23:D:1008:CLA:H2A	23:D:1008:CLA:O1D	1.94	0.68
4:D:90:LEU:HD11	4:D:107:LEU:O	1.94	0.68
1:A:133:LEU:HD23	4:D:252:PHE:HA	1.76	0.68
4:D:42:TYR:CZ	6:F:25:THR:HG22	2.28	0.68
2:B:429:ILE:HD12	2:B:429:ILE:N	2.08	0.68
15:U:55:ILE:HG21	15:U:65:PHE:CE2	2.28	0.68
18:Y:44:GLY:HA2	20:Z:30:PRO:HD3	1.76	0.68
23:B:1013:CLA:H152	23:B:1018:CLA:HED1	1.76	0.68
2:B:450:TRP:HB3	23:B:1015:CLA:CMB	2.21	0.68
23:C:1032:CLA:H42	23:C:1032:CLA:O2A	1.93	0.68
28:C:1055:DGD:O1B	28:C:1055:DGD:HB51	1.93	0.68
3:C:48:LYS:HB2	3:C:48:LYS:HZ3	1.58	0.68
3:C:59:LEU:O	23:C:1034:CLA:HED3	1.93	0.68
27:D:1050:BCR:HC8	27:D:1050:BCR:H331	0.73	0.68
2:B:258:TYR:O	2:B:259:GLY:O	2.10	0.68
2:B:5:TRP:CD2	2:B:6:TYR:N	2.62	0.68
28:C:1055:DGD:C5B	28:C:1055:DGD:O1B	2.42	0.68
10:K:32:PHE:CE2	27:K:1051:BCR:H341	2.27	0.68
3:C:287:THR:HG23	3:C:427:ALA:CA	2.24	0.68
20:Z:17:PHE:HD2	20:Z:17:PHE:O	1.76	0.68
1:A:261:GLN:C	1:A:263:ALA:H	1.96	0.68
1:A:60:ILE:HD13	1:A:60:ILE:N	2.09	0.68
23:B:1022:CLA:C8	23:B:1022:CLA:C14	2.69	0.68
2:B:106:LEU:C	2:B:106:LEU:HD13	2.14	0.68
2:B:258:TYR:O	2:B:259:GLY:C	2.31	0.68
2:B:465:GLY:CA	23:B:1019:CLA:CBC	2.72	0.68
3:C:45:LEU:HD23	3:C:141:GLU:HG2	1.75	0.68
10:K:24:VAL:HG11	18:Y:25:ILE:HB	1.76	0.68

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:231:GLU:OE1	11:L:11:GLU:HB3	1.94	0.68
23:B:1018:CLA:C1B	23:H:1017:CLA:HMB2	2.24	0.68
4:D:90:LEU:HD13	4:D:109:GLY:HA2	1.74	0.68
4:D:83:ASN:HA	4:D:166:SER:OG	1.93	0.68
3:C:371:GLY:O	13:O:33:TYR:HB2	1.93	0.68
17:X:38:ILE:HA	17:X:41:SER:OG	1.93	0.68
20:Z:15:LEU:CD2	20:Z:50:LEU:HD12	2.21	0.68
2:B:488:PRO:HG2	2:B:489:GLU:H	1.59	0.68
2:B:138:MET:HB3	23:B:1023:CLA:CBC	2.24	0.68
2:B:141:ILE:HD12	2:B:142:HIS:N	2.09	0.68
2:B:148:LEU:HB3	2:B:210:ILE:HD11	1.75	0.68
3:C:294:ASN:HB2	28:C:1055:DGD:HO3E	1.59	0.68
4:D:217:THR:HG21	26:D:1042:PQ9:O4	1.94	0.68
5:E:38:VAL:HG11	6:F:39:ALA:CB	2.24	0.68
2:B:30:VAL:O	23:B:1013:CLA:HMD3	1.94	0.67
2:B:103:LEU:HB2	23:B:1014:CLA:C7	2.15	0.67
4:D:291:LEU:C	4:D:293:LEU:H	1.95	0.67
4:D:32:TRP:O	4:D:35:ILE:HG13	1.94	0.67
8:I:7:THR:O	8:I:11:VAL:HG23	1.93	0.67
8:I:6:ILE:HD13	8:I:6:ILE:N	2.08	0.67
10:K:39:VAL:HA	18:Y:36:ILE:CD1	2.24	0.67
1:A:243:GLU:HA	4:D:241:GLU:HB3	1.76	0.67
5:E:68:ASP:HB2	5:E:69:ARG:HH21	1.59	0.67
23:B:1012:CLA:H2A	23:B:1012:CLA:CED	2.24	0.67
23:B:1024:CLA:O2A	23:B:1024:CLA:C2A	2.42	0.67
2:B:456:ALA:CA	28:H:1058:DGD:CIB	2.70	0.67
13:O:97:VAL:HG13	13:O:98:THR:N	2.09	0.67
23:A:1007:CLA:HED3	23:A:1007:CLA:OBD	1.94	0.67
23:B:1009:CLA:H43	27:H:1049:BCR:H351	1.73	0.67
23:B:1011:CLA:H193	23:H:1017:CLA:H13	1.76	0.67
23:C:1028:CLA:H12	28:C:1056:DGD:O1A	1.94	0.67
3:C:35:TRP:O	3:C:38:GLY:N	2.27	0.67
3:C:89:ILE:HG23	3:C:111:PHE:CE2	2.29	0.67
4:D:24:ARG:HG2	4:D:24:ARG:HH21	1.57	0.67
9:J:40:LEU:N	9:J:40:LEU:HD22	2.08	0.67
10:K:19:ASP:HA	10:K:22:VAL:HG12	1.76	0.67
12:M:8:PHE:O	12:M:9:ILE:C	2.32	0.67
24:A:1038:PHO:HED3	24:A:1038:PHO:CHA	2.24	0.67
1:A:199:GLN:NE2	1:A:200:LEU:HG	2.08	0.67
23:B:1010:CLA:C12	23:B:1010:CLA:C9	2.30	0.67
2:B:5:TRP:HA	2:B:8:VAL:HB	1.76	0.67
23:C:1025:CLA:O1D	23:C:1025:CLA:CAA	2.42	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:124:VAL:HG23	3:C:125:LEU:N	2.10	0.67
3:C:270:ALA:HB1	3:C:274:TYR:CE1	2.29	0.67
4:D:89:LEU:CD2	7:H:52:THR:HG21	2.24	0.67
3:C:473:ASP:HB3	14:T:26:PRO:HG3	1.76	0.67
20:Z:48:ILE:O	20:Z:52:LEU:HG	1.94	0.67
13:O:111:LEU:CD1	13:O:121:PHE:HB2	2.21	0.67
2:B:367:PRO:HB2	4:D:345:VAL:CG1	2.25	0.67
13:O:187:GLY:HA3	13:O:194:TYR:CD1	2.27	0.67
2:B:487:SER:CB	2:B:488:PRO:CD	2.72	0.67
2:B:18:ARG:HD2	11:L:4:ASN:HD21	1.59	0.67
23:D:1005:CLA:H2A	23:D:1005:CLA:HED1	1.71	0.67
23:D:1005:CLA:HED3	26:D:1042:PQ9:H391	1.77	0.67
4:D:180:ARG:HD2	4:D:181:PHE:N	2.08	0.67
1:A:268:SER:H	4:D:236:ASN:ND2	1.92	0.67
8:I:13:THR:HG22	8:I:14:PHE:H	1.60	0.67
20:Z:49:ALA:O	20:Z:53:VAL:HG23	1.94	0.67
3:C:128:GLY:HA3	23:C:1037:CLA:HAC1	1.76	0.67
23:B:1016:CLA:H202	23:D:1008:CLA:CMA	2.24	0.67
4:D:155:SER:HA	4:D:159:ILE:CD1	2.24	0.67
2:B:422:ARG:HD2	2:B:423:LYS:NZ	2.09	0.67
1:A:73:TYR:CD2	1:A:73:TYR:N	2.58	0.67
2:B:454:ALA:C	2:B:456:ALA:N	2.47	0.67
23:C:1034:CLA:O1A	23:C:1034:CLA:C4	2.43	0.67
3:C:346:THR:HG21	3:C:348:GLU:OE1	1.94	0.67
27:D:1050:BCR:C37	29:J:1059:MGE:C4A	2.47	0.67
4:D:251:ARG:HA	4:D:254:SER:OG	1.93	0.67
20:Z:23:VAL:HB	20:Z:24:PRO:HD3	1.75	0.67
16:V:98:LEU:HD21	16:V:145:ILE:CG2	2.24	0.67
13:O:144:LEU:HD11	13:O:261:ILE:HD11	1.77	0.67
23:B:1010:CLA:CMD	23:B:1011:CLA:H102	2.25	0.67
23:B:1023:CLA:CHD	23:B:1024:CLA:CBC	2.72	0.67
2:B:219:VAL:HG12	2:B:220:ARG:N	2.10	0.67
2:B:30:VAL:HG11	23:B:1020:CLA:H111	1.75	0.67
23:C:1027:CLA:O2D	23:C:1036:CLA:H11	1.95	0.67
23:H:1017:CLA:CHD	23:H:1017:CLA:HBC2	2.13	0.67
10:K:22:VAL:HG23	10:K:25:LEU:HD22	1.77	0.67
3:C:380:ILE:O	3:C:380:ILE:HG12	1.95	0.67
23:A:1006:CLA:C2B	24:A:1039:PHO:H161	2.25	0.67
23:B:1014:CLA:O2D	23:B:1014:CLA:C2A	2.42	0.67
3:C:289:PHE:HB3	3:C:297:TYR:HE2	1.59	0.67
10:K:32:PHE:CE1	27:K:1052:BCR:C20	2.78	0.67
4:D:299:ILE:O	4:D:303:ILE:HG13	1.95	0.67

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:193:LEU:HD22	4:D:179:PHE:CD2	2.29	0.67
1:A:202:VAL:O	1:A:206:PHE:HB2	1.95	0.67
28:C:1056:DGD:HBG2	28:C:1056:DGD:HB41	1.74	0.67
4:D:164:GLN:HG3	4:D:165:SER:N	2.04	0.67
4:D:164:GLN:CG	4:D:165:SER:H	2.03	0.67
16:V:133:LEU:HD12	16:V:133:LEU:H	1.59	0.67
4:D:323:GLU:HG2	13:O:194:TYR:OH	1.95	0.67
1:A:307:ILE:HG13	1:A:308:ASP:N	2.10	0.66
23:C:1032:CLA:H43	23:C:1032:CLA:CGA	2.23	0.66
23:D:1005:CLA:H172	29:D:1062:MGE:H261	1.77	0.66
4:D:125:PHE:O	4:D:128:ARG:HB3	1.96	0.66
4:D:156:VAL:HG12	4:D:156:VAL:O	1.94	0.66
23:H:1017:CLA:H3A	23:H:1017:CLA:CGA	2.23	0.66
5:E:83:LEU:HD13	5:E:83:LEU:N	2.11	0.66
23:C:1026:CLA:H51	23:C:1026:CLA:CGA	2.22	0.66
3:C:162:GLY:CA	3:C:248:GLY:HA2	2.25	0.66
27:D:1050:BCR:C28	29:J:1059:MGE:H9B2	2.21	0.66
4:D:122:LEU:HB3	4:D:150:ILE:CD1	2.25	0.66
1:A:140:ARG:HD3	4:D:219:GLU:O	1.95	0.66
4:D:261:PHE:HE1	26:D:1042:PQ9:H143	1.59	0.66
27:K:1051:BCR:H403	27:K:1051:BCR:H371	1.32	0.66
15:U:103:GLN:O	15:U:106:ARG:N	2.28	0.66
3:C:290:VAL:HG21	3:C:426:LEU:HB2	1.78	0.66
16:V:111:GLU:O	16:V:112:GLN:HB2	1.95	0.66
1:A:71:LEU:C	1:A:73:TYR:H	1.97	0.66
26:D:1042:PQ9:H392	11:L:30:LEU:HD12	1.76	0.66
16:V:154:ASP:C	16:V:156:TRP:N	2.47	0.66
4:D:299:ILE:HG22	4:D:300:SER:N	2.09	0.66
13:O:186:LYS:HZ3	13:O:186:LYS:HA	1.60	0.66
1:A:102:LEU:O	1:A:106:LEU:HG	1.96	0.66
23:B:1013:CLA:CMC	23:B:1023:CLA:C1	2.72	0.66
2:B:165:GLY:HA3	2:B:180:PRO:HA	1.78	0.66
23:C:1032:CLA:O2A	23:C:1032:CLA:C4	2.42	0.66
3:C:36:TRP:CD1	3:C:37:ALA:N	2.64	0.66
3:C:39:ASN:O	3:C:40:ALA:CB	2.41	0.66
3:C:48:LYS:NZ	3:C:48:LYS:HB2	2.10	0.66
4:D:92:LEU:HD13	4:D:99:GLY:HA2	1.78	0.66
11:L:32:SER:O	11:L:35:PHE:HB2	1.96	0.66
13:O:176:SER:HB3	13:O:216:PHE:CE2	2.30	0.66
4:D:347:PRO:O	4:D:348:ARG:HB3	1.94	0.66
23:A:1006:CLA:H122	28:C:1057:DGD:CIB	2.23	0.66
1:A:90:GLY:O	1:A:92:HIS:N	2.28	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1010:CLA:OBD	23:B:1010:CLA:CED	2.30	0.66
23:B:1010:CLA:CMD	23:B:1011:CLA:C10	2.74	0.66
5:E:17:VAL:CG1	9:J:7:ARG:HG2	2.25	0.66
4:D:269:PHE:O	4:D:269:PHE:CG	2.49	0.66
23:A:1003:CLA:H141	24:A:1038:PHO:C8	2.24	0.66
23:B:1011:CLA:CMD	23:B:1014:CLA:CBB	2.72	0.66
2:B:463:PHE:HE1	23:B:1016:CLA:HBB1	1.59	0.66
3:C:224:ILE:HD11	3:C:285:ILE:CD1	2.26	0.66
23:D:1005:CLA:O2A	23:D:1005:CLA:C5	2.42	0.66
13:O:216:PHE:HB3	15:U:120:ALA:HB2	1.76	0.66
1:A:191:ASN:O	1:A:299:GLY:HA3	1.96	0.66
3:C:203:THR:H	3:C:235:GLY:HA3	1.61	0.66
15:U:50:ALA:HB1	15:U:113:THR:HG21	1.77	0.66
3:C:315:MET:HE2	3:C:366:LEU:CD1	2.25	0.66
20:Z:37:LYS:HD3	20:Z:38:GLN:N	2.10	0.66
16:V:81:ARG:HD3	16:V:157:GLY:HA3	1.78	0.66
1:A:157:VAL:HG22	1:A:182:PHE:HE2	1.59	0.66
2:B:250:PHE:CE1	2:B:459:ALA:HB1	2.31	0.66
2:B:451:PHE:O	2:B:455:HIS:ND1	2.27	0.66
23:C:1025:CLA:H151	23:C:1025:CLA:C20	2.13	0.66
4:D:134:ARG:HA	4:D:134:ARG:NE	2.11	0.66
4:D:24:ARG:NH2	4:D:24:ARG:HG2	2.09	0.66
2:B:460:LEU:CB	28:H:1058:DGD:HAG1	2.25	0.66
13:O:237:ILE:HG13	13:O:237:ILE:O	1.94	0.66
23:A:1003:CLA:HAB	23:A:1006:CLA:HMD2	1.70	0.66
1:A:116:ILE:HG23	1:A:117:PHE:N	2.11	0.66
23:B:1014:CLA:CBA	23:B:1014:CLA:HMA2	1.95	0.66
23:B:1014:CLA:C17	27:B:1048:BCR:H312	2.25	0.66
2:B:71:VAL:HG21	2:B:96:VAL:HG21	1.77	0.66
23:C:1030:CLA:CMB	23:C:1031:CLA:NB	2.59	0.66
3:C:159:THR:HG22	3:C:163:PHE:CE2	2.31	0.66
3:C:59:LEU:O	23:C:1034:CLA:CED	2.44	0.66
4:D:209:LEU:HD23	4:D:209:LEU:O	1.96	0.66
20:Z:10:ALA:O	20:Z:13:VAL:HG12	1.96	0.66
1:A:95:PRO:O	1:A:97:TRP:N	2.28	0.66
2:B:133:LEU:HD23	7:H:15:ASN:ND2	2.11	0.66
2:B:141:ILE:HD12	2:B:142:HIS:H	1.61	0.66
27:D:1050:BCR:H373	29:J:1059:MGE:C3A	2.26	0.66
4:D:90:LEU:HD23	4:D:96:GLU:HG3	1.77	0.66
9:J:19:MET:HA	9:J:22:ILE:HG22	1.78	0.66
16:V:158:GLY:O	16:V:162:TYR:HD2	1.78	0.66
15:U:57:LEU:HD11	15:U:112:PHE:HB3	1.78	0.66

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:75:TRP:CG	2:B:94:GLU:HG3	2.31	0.66
18:Y:19:ILE:HG23	18:Y:20:ALA:N	2.11	0.66
2:B:360:PRO:HD2	2:B:363:PHE:HD2	1.60	0.66
1:A:279:ARG:NE	4:D:208:ALA:HB1	2.09	0.66
23:B:1009:CLA:C4	27:H:1049:BCR:C35	2.68	0.66
23:B:1022:CLA:H52	23:B:1022:CLA:H92	0.70	0.66
23:C:1037:CLA:C3B	27:Z:1053:BCR:H282	2.26	0.66
3:C:162:GLY:O	3:C:166:ILE:HG12	1.96	0.66
4:D:209:LEU:HD13	26:D:1042:PQ9:C19	2.26	0.66
6:F:18:VAL:HA	6:F:21:VAL:HG23	1.78	0.66
23:B:1016:CLA:C3	23:H:1017:CLA:H102	2.25	0.66
29:B:1060:MGE:H2A2	29:L:1061:MGE:H2B1	1.76	0.66
20:Z:13:VAL:CG1	20:Z:14:ILE:H	2.09	0.66
2:B:133:LEU:HB3	2:B:138:MET:HE2	1.78	0.65
3:C:334:PRO:HD2	3:C:335:THR:HG23	1.78	0.65
4:D:72:ASN:HD22	4:D:74:LEU:N	1.93	0.65
1:A:127:MET:HG3	23:C:1029:CLA:HMB1	1.77	0.65
23:C:1032:CLA:O2D	23:C:1032:CLA:H2A	1.96	0.65
3:C:288:CYS:SG	28:C:1055:DGD:C2B	2.85	0.65
4:D:72:ASN:O	4:D:76:VAL:HG23	1.96	0.65
6:F:28:VAL:HA	6:F:31:ILE:HG22	1.77	0.65
2:B:222:PRO:HD2	23:H:1017:CLA:HED2	1.77	0.65
14:T:1:MET:O	14:T:4:ILE:N	2.29	0.65
1:A:301:ASN:ND2	3:C:407:VAL:HG11	2.11	0.65
1:A:195:HIS:CE1	1:A:197:PHE:HB2	2.31	0.65
23:B:1021:CLA:C17	23:B:1021:CLA:H142	2.25	0.65
2:B:133:LEU:HD23	7:H:15:ASN:HD21	1.60	0.65
23:C:1028:CLA:C12	23:C:1028:CLA:C17	2.41	0.65
3:C:437:PHE:CZ	23:C:1032:CLA:HBB2	2.30	0.65
30:A:1063:LHG:H321	23:C:1034:CLA:C14	2.25	0.65
3:C:95:LEU:H	3:C:95:LEU:HD22	1.61	0.65
4:D:148:ALA:HB3	4:D:149:PRO:CD	2.27	0.65
1:A:244:GLU:HG3	4:D:264:LYS:NZ	2.11	0.65
23:A:1003:CLA:H162	24:A:1038:PHO:H93	1.77	0.65
23:C:1032:CLA:CED	23:C:1032:CLA:C2A	2.33	0.65
3:C:261:ARG:NH1	3:C:261:ARG:HG2	2.12	0.65
3:C:35:TRP:C	3:C:38:GLY:H	1.99	0.65
13:O:141:ARG:HG3	13:O:141:ARG:NH1	2.11	0.65
17:X:13:THR:HG23	17:X:14:PRO:HD2	1.77	0.65
13:O:136:MET:HB2	13:O:142:ILE:HD13	1.77	0.65
16:V:111:GLU:HG3	16:V:112:GLN:H	1.61	0.65
2:B:5:TRP:CZ2	29:L:1061:MGE:H3A1	2.32	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:420:VAL:HB	3:C:425:TRP:HE1	1.62	0.65
3:C:60:ILE:HG12	23:C:1027:CLA:HMD3	1.77	0.65
14:T:7:VAL:HG12	14:T:8:PHE:N	2.11	0.65
17:X:38:ILE:HA	17:X:41:SER:CB	2.26	0.65
2:B:390:TYR:CD1	2:B:390:TYR:N	2.64	0.65
4:D:57:SER:CB	4:D:79:SER:HB2	2.27	0.65
2:B:103:LEU:O	2:B:106:LEU:HB3	1.97	0.65
23:C:1031:CLA:CBA	23:C:1033:CLA:HED2	2.26	0.65
4:D:102:THR:O	4:D:105:CYS:HB3	1.97	0.65
27:H:1049:BCR:C40	27:H:1049:BCR:C23	2.64	0.65
20:Z:46:LEU:O	20:Z:50:LEU:N	2.29	0.65
13:O:215:ARG:HH11	13:O:215:ARG:HG2	1.60	0.65
15:U:73:PRO:HG2	16:V:108:TYR:O	1.96	0.65
23:B:1016:CLA:C3A	23:B:1016:CLA:O1A	2.45	0.65
3:C:154:LYS:HE2	3:C:256:PRO:HG2	1.77	0.65
3:C:212:TYR:HE1	3:C:227:VAL:HG12	1.61	0.65
3:C:39:ASN:O	3:C:40:ALA:HB3	1.96	0.65
23:C:1027:CLA:H152	27:Z:1053:BCR:C33	2.27	0.65
4:D:259:ILE:HD11	14:T:21:ILE:CA	2.26	0.65
2:B:81:THR:HB	2:B:83:GLU:HG3	1.78	0.65
2:B:162:PHE:C	23:B:1014:CLA:HMD3	2.17	0.65
2:B:91:TRP:CE3	2:B:91:TRP:HA	2.32	0.65
23:C:1033:CLA:O1D	23:C:1033:CLA:H2A	1.96	0.65
28:C:1057:DGD:HAS1	29:J:1059:MGE:H222	1.79	0.65
1:A:284:TRP:CZ2	3:C:439:VAL:HG21	2.32	0.65
1:A:223:LEU:HG	4:D:265:ARG:CZ	2.26	0.65
4:D:89:LEU:HD22	4:D:89:LEU:H	1.60	0.65
6:F:18:VAL:C	6:F:20:TRP:H	1.99	0.65
14:T:1:MET:O	14:T:3:THR:N	2.29	0.65
1:A:300:PHE:HB3	1:A:302:PHE:HE1	1.61	0.65
20:Z:25:VAL:HG12	20:Z:29:SER:OG	1.96	0.65
4:D:304:ARG:NH1	4:D:311:PHE:HD2	1.94	0.65
1:A:96:ILE:HG13	1:A:105:TRP:CD2	2.31	0.65
23:B:1020:CLA:HMA2	23:B:1020:CLA:HBA1	0.73	0.65
23:B:1022:CLA:C8	23:B:1022:CLA:H142	2.27	0.65
2:B:64:PRO:HB2	2:B:268:PHE:CD2	2.32	0.65
23:C:1033:CLA:CHD	23:C:1033:CLA:CBC	2.69	0.65
23:C:1028:CLA:C4	28:C:1057:DGD:HA42	2.26	0.65
3:C:86:LEU:O	3:C:90:PRO:HG2	1.97	0.65
4:D:102:THR:O	4:D:106:GLN:HG3	1.96	0.65
4:D:259:ILE:CD1	14:T:21:ILE:HA	2.26	0.65
2:B:364:GLU:HG3	4:D:296:TYR:CD2	2.31	0.65

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:126:TYR:O	1:A:130:GLN:HB2	1.97	0.65
23:B:1010:CLA:C3D	23:B:1011:CLA:HMB2	2.27	0.65
2:B:133:LEU:HB3	2:B:138:MET:HE1	1.79	0.65
2:B:318:ASN:HD22	2:B:318:ASN:C	2.00	0.65
23:C:1028:CLA:CHC	23:C:1028:CLA:HBB1	2.25	0.65
4:D:24:ARG:CG	4:D:24:ARG:HH21	2.10	0.65
8:I:20:VAL:O	8:I:24:LEU:HD23	1.96	0.65
15:U:98:THR:H	15:U:101:GLN:HG3	1.61	0.65
15:U:127:ARG:HG2	15:U:127:ARG:HH11	1.61	0.65
15:U:88:VAL:HG12	15:U:109:LEU:CD1	2.27	0.65
6:F:11:VAL:HG12	6:F:12:SER:N	2.10	0.65
1:A:296:ASN:HB3	3:C:401:LEU:HA	1.78	0.65
1:A:50:ILE:HB	27:A:1044:BCR:H391	1.79	0.64
1:A:128:GLY:O	1:A:130:GLN:N	2.30	0.64
1:A:63:ILE:HG13	1:A:65:GLU:HG2	1.78	0.64
23:B:1020:CLA:H52	23:B:1020:CLA:CGA	2.26	0.64
23:B:1021:CLA:H172	23:B:1021:CLA:H142	1.79	0.64
2:B:105:GLY:C	27:B:1047:BCR:H282	2.17	0.64
2:B:59:GLY:N	2:B:329:PRO:CB	2.61	0.64
3:C:285:ILE:HG23	23:C:1025:CLA:H52	1.79	0.64
23:C:1025:CLA:H201	23:C:1031:CLA:H121	1.77	0.64
3:C:96:GLY:HA2	3:C:99:VAL:CG1	2.27	0.64
2:B:121:GLU:OE1	7:H:4:ARG:HA	1.98	0.64
9:J:10:LEU:HA	9:J:13:VAL:CG2	2.27	0.64
6:F:41:GLN:NE2	9:J:27:LEU:C	2.47	0.64
17:X:30:LEU:O	17:X:34:PHE:HB2	1.97	0.64
18:Y:31:ALA:O	18:Y:35:ILE:HG23	1.96	0.64
4:D:328:TRP:CD1	4:D:346:LEU:HD11	2.32	0.64
15:U:129:ASN:C	15:U:131:GLY:H	2.00	0.64
27:B:1045:BCR:C8	27:B:1045:BCR:C33	2.76	0.64
2:B:106:LEU:HD11	27:B:1048:BCR:C35	2.27	0.64
2:B:223:GLN:O	2:B:225:LEU:N	2.29	0.64
2:B:257:TRP:NE1	4:D:163:GLY:O	2.30	0.64
2:B:7:ARG:HA	23:B:1019:CLA:HBA1	1.79	0.64
3:C:318:LEU:HG	3:C:328:VAL:HG11	1.78	0.64
3:C:461:ARG:NH2	4:D:223:PHE:HD2	1.95	0.64
2:B:362:PHE:CE2	4:D:164:GLN:NE2	2.65	0.64
4:D:222:LEU:HA	4:D:243:THR:O	1.98	0.64
7:H:37:LEU:O	7:H:40:VAL:HG12	1.98	0.64
2:B:388:SER:HA	4:D:344:GLU:OE1	1.97	0.64
15:U:39:LEU:CD1	15:U:39:LEU:H	2.03	0.64
13:O:205:GLU:O	13:O:207:GLU:N	2.30	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:A:1003:CLA:CBD	23:D:1005:CLA:HAC2	2.26	0.64
23:B:1011:CLA:HHH	23:B:1014:CLA:CBB	2.22	0.64
2:B:66:MET:SD	23:B:1013:CLA:HED1	2.38	0.64
23:B:1023:CLA:H141	23:B:1024:CLA:H61	1.79	0.64
2:B:223:GLN:O	2:B:227:LYS:HG2	1.98	0.64
2:B:31:ALA:CB	23:B:1013:CLA:HBC3	2.27	0.64
4:D:130:PHE:HE2	4:D:140:PRO:HB2	1.62	0.64
4:D:148:ALA:HB3	4:D:149:PRO:HD3	1.79	0.64
4:D:89:LEU:H	4:D:89:LEU:CD2	2.10	0.64
5:E:19:TYR:HD1	5:E:20:TRP:HD1	1.46	0.64
29:L:1061:MGE:H9A2	12:M:18:PRO:HB3	1.80	0.64
24:A:1039:PHO:HBC3	24:A:1039:PHO:HMC1	1.78	0.64
2:B:464:PHE:HB3	4:D:280:TRP:CH2	2.31	0.64
9:J:40:LEU:HD12	16:V:56:LYS:HD3	1.79	0.64
18:Y:20:ALA:HB1	18:Y:22:LEU:HG	1.78	0.64
24:A:1039:PHO:O2D	24:A:1039:PHO:H2A	1.98	0.64
1:A:228:THR:HA	2:B:480:SER:CB	2.28	0.64
1:A:288:LEU:CD2	3:C:432:VAL:HG13	2.28	0.64
23:C:1026:CLA:H203	23:C:1026:CLA:C1D	2.26	0.64
3:C:441:HIS:C	3:C:441:HIS:CD2	2.70	0.64
4:D:191:TRP:NE1	4:D:197:HIS:CD2	2.66	0.64
1:A:130:GLN:HA	4:D:256:ILE:CD1	2.27	0.64
29:D:1062:MGE:H2A2	14:T:20:ALA:HB1	1.79	0.64
20:Z:13:VAL:CG1	20:Z:14:ILE:N	2.61	0.64
16:V:102:MET:HE1	16:V:141:ILE:HB	1.80	0.64
23:B:1015:CLA:NA	23:B:1015:CLA:CBA	2.46	0.64
23:B:1023:CLA:H72	27:B:1048:BCR:H341	1.79	0.64
2:B:15:ASP:OD1	2:B:15:ASP:O	2.15	0.64
2:B:253:ALA:O	28:H:1058:DGD:HBW2	1.97	0.64
29:D:1062:MGE:H2A2	14:T:20:ALA:CB	2.28	0.64
9:J:19:MET:HA	9:J:22:ILE:CG2	2.27	0.64
20:Z:43:GLY:O	20:Z:47:TRP:HB2	1.97	0.64
1:A:177:SER:HA	1:A:180:PHE:CD2	2.32	0.64
2:B:289:GLN:HA	2:B:289:GLN:NE2	2.11	0.64
23:A:1006:CLA:HBB1	23:D:1004:CLA:H42	1.79	0.64
24:A:1039:PHO:HBC1	4:D:275:PRO:HB3	1.79	0.64
23:B:1012:CLA:HBB1	23:B:1012:CLA:CHC	2.22	0.64
23:B:1015:CLA:HBC2	23:B:1015:CLA:CHD	2.27	0.64
2:B:10:THR:O	2:B:13:ILE:HG13	1.97	0.64
2:B:257:TRP:CE3	2:B:452:THR:HG21	2.32	0.64
2:B:68:ARG:HG3	2:B:69:LEU:N	2.12	0.64
1:A:77:ILE:HG12	14:T:6:TYR:CD1	2.32	0.64

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:A:1003:CLA:CHD	23:A:1003:CLA:HBC2	2.20	0.64
1:A:221:SER:HA	4:D:139:ARG:HB2	1.80	0.64
1:A:253:GLY:O	1:A:257:ARG:HD2	1.98	0.64
1:A:197:PHE:HE1	1:A:285:PHE:CD2	2.15	0.64
3:C:473:ASP:OXT	14:T:27:PRO:HD2	1.96	0.64
23:A:1006:CLA:C16	27:D:1050:BCR:H291	2.28	0.64
23:D:1005:CLA:H161	29:D:1062:MGE:CGB	2.28	0.64
1:A:24:THR:O	4:D:251:ARG:NH2	2.31	0.64
4:D:55:VAL:O	4:D:65:SER:HB2	1.97	0.64
12:M:18:PRO:HG2	12:M:19:SER:H	1.63	0.64
2:B:399:VAL:HG13	2:B:417:VAL:HG22	1.79	0.64
1:A:159:LEU:CG	1:A:163:ILE:HD11	2.28	0.64
1:A:76:ASN:ND2	1:A:78:ILE:H	1.95	0.64
23:B:1012:CLA:CBB	23:B:1012:CLA:HHC	2.24	0.64
3:C:53:HIS:HB2	23:C:1036:CLA:HMD1	1.80	0.64
3:C:222:GLY:O	3:C:223:TRP:C	2.36	0.64
17:X:33:THR:HG23	17:X:34:PHE:N	2.13	0.64
16:V:90:PRO:HD2	16:V:92:ARG:NH2	2.12	0.64
3:C:303:GLY:O	3:C:423:ARG:HD2	1.98	0.64
23:B:1011:CLA:CAD	23:B:1013:CLA:C4	2.72	0.63
23:B:1012:CLA:H12	23:B:1013:CLA:H11	1.74	0.63
2:B:159:THR:O	2:B:180:PRO:HB3	1.98	0.63
2:B:6:TYR:N	2:B:6:TYR:CD2	2.65	0.63
23:C:1025:CLA:H201	23:C:1031:CLA:C12	2.28	0.63
2:B:456:ALA:CA	28:H:1058:DGD:HBG2	2.27	0.63
20:Z:39:LEU:O	20:Z:42:LEU:HB3	1.99	0.63
2:B:354:LEU:HD23	2:B:370:LEU:HB3	1.80	0.63
4:D:300:SER:O	4:D:303:ILE:HD11	1.98	0.63
13:O:205:GLU:C	13:O:207:GLU:H	2.01	0.63
2:B:373:LYS:C	2:B:375:GLY:H	2.01	0.63
1:A:219:VAL:HG21	4:D:268:HIS:HB3	1.76	0.63
1:A:278:TRP:CH2	28:C:1057:DGD:HAG1	2.32	0.63
2:B:58:GLN:O	2:B:59:GLY:C	2.37	0.63
3:C:161:LEU:HD11	23:C:1030:CLA:HBB1	1.80	0.63
3:C:41:ARG:HG2	23:C:1035:CLA:HED2	1.79	0.63
3:C:439:VAL:HG13	23:C:1032:CLA:CBC	2.28	0.63
3:C:59:LEU:O	3:C:62:PHE:HB3	1.99	0.63
4:D:148:ALA:HB2	4:D:276:VAL:HA	1.81	0.63
2:B:257:TRP:CH2	4:D:291:LEU:CD1	2.81	0.63
20:Z:9:LEU:C	20:Z:11:ALA:N	2.50	0.63
2:B:429:ILE:HD12	2:B:429:ILE:H	1.62	0.63
2:B:183:PRO:HB3	2:B:200:ALA:CB	2.28	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:133:THR:HG22	13:O:134:VAL:N	2.13	0.63
16:V:111:GLU:CG	16:V:112:GLN:H	2.11	0.63
23:A:1006:CLA:HAA2	28:C:1057:DGD:HBN2	1.80	0.63
3:C:41:ARG:CG	23:C:1035:CLA:HED2	2.28	0.63
4:D:67:TYR:HE1	4:D:73:PHE:HA	1.63	0.63
4:D:91:LEU:HA	23:D:1008:CLA:HED3	1.80	0.63
23:B:1011:CLA:H191	23:H:1017:CLA:H151	1.80	0.63
11:L:22:LEU:HD21	29:L:1061:MGE:H263	1.78	0.63
13:O:65:ARG:NH1	13:O:108:GLN:HB2	2.13	0.63
23:A:1006:CLA:HAB	24:A:1039:PHO:H142	1.78	0.63
1:A:215:HIS:O	1:A:219:VAL:CG1	2.45	0.63
27:B:1048:BCR:C8	27:B:1048:BCR:C33	2.73	0.63
2:B:214:LEU:O	2:B:218:LEU:HG	1.97	0.63
2:B:66:MET:HG2	23:B:1013:CLA:CED	2.28	0.63
1:A:288:LEU:HD23	3:C:432:VAL:HG22	1.80	0.63
4:D:209:LEU:O	4:D:213:ILE:HG22	1.98	0.63
1:A:140:ARG:HB2	4:D:220:ASN:HA	1.80	0.63
4:D:261:PHE:CD2	4:D:267:LEU:HB2	2.32	0.63
4:D:54:PHE:HB3	5:E:47:PHE:CD1	2.32	0.63
14:T:1:MET:HE3	14:T:1:MET:H1	1.56	0.63
12:M:3:VAL:HG11	14:T:2:GLU:OE1	1.97	0.63
2:B:288:VAL:HG21	2:B:302:TRP:CE2	2.34	0.63
1:A:153:SER:O	1:A:156:ALA:N	2.32	0.63
1:A:278:TRP:O	1:A:281:VAL:HG12	1.98	0.63
1:A:87:ASN:O	1:A:88:ALA:C	2.37	0.63
23:B:1010:CLA:C1D	23:B:1011:CLA:HMB1	2.28	0.63
2:B:159:THR:CG2	2:B:161:LEU:HD22	2.28	0.63
23:C:1031:CLA:O2D	23:C:1031:CLA:CAA	2.30	0.63
4:D:53:THR:HG22	4:D:67:TYR:CE2	2.33	0.63
23:B:1016:CLA:H92	23:H:1017:CLA:H101	1.80	0.63
7:H:3:ARG:HH22	11:L:1:MET:N	1.96	0.63
8:I:3:THR:O	8:I:7:THR:HG23	1.99	0.63
2:B:346:PHE:HD2	2:B:346:PHE:N	1.96	0.63
13:O:215:ARG:NH1	13:O:215:ARG:HG2	2.13	0.63
1:A:147:TYR:HA	1:A:150:PRO:CG	2.28	0.63
23:B:1018:CLA:H151	23:B:1018:CLA:OBD	1.97	0.63
2:B:144:PHE:CE1	2:B:210:ILE:HG23	2.34	0.63
2:B:318:ASN:C	2:B:318:ASN:ND2	2.50	0.63
4:D:221:THR:HG23	4:D:244:TYR:HB3	1.80	0.63
1:A:316:THR:O	1:A:319:ASP:HB2	1.99	0.63
1:A:196:PRO:HA	1:A:199:GLN:HG2	1.80	0.63
23:B:1014:CLA:C11	23:B:1014:CLA:H162	2.27	0.63

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:148:LEU:CB	2:B:210:ILE:HD11	2.28	0.63
2:B:465:GLY:CA	23:B:1019:CLA:HBC2	2.29	0.63
23:C:1033:CLA:C5	23:C:1033:CLA:H93	2.26	0.63
1:A:193:LEU:HD22	4:D:179:PHE:CG	2.33	0.63
23:B:1016:CLA:HMB3	4:D:126:MET:HE2	1.79	0.63
2:B:257:TRP:HD1	2:B:273:TYR:HH	1.41	0.63
23:C:1032:CLA:H42	23:C:1032:CLA:CGA	2.27	0.63
27:D:1050:BCR:H372	29:J:1059:MGE:H6A1	1.80	0.63
4:D:150:ILE:O	4:D:154:VAL:HG23	1.98	0.63
4:D:83:ASN:H	4:D:168:PHE:HD1	1.46	0.63
23:H:1017:CLA:CBB	27:H:1049:BCR:C32	2.71	0.63
6:F:41:GLN:OE1	9:J:28:PHE:HA	1.99	0.63
20:Z:9:LEU:HD13	20:Z:10:ALA:H	1.62	0.63
1:A:188:ALA:HB2	1:A:328:MET:HE3	1.79	0.63
1:A:316:THR:C	4:D:63:LEU:HD21	2.18	0.63
2:B:417:VAL:HG12	2:B:418:LYS:H	1.62	0.63
3:C:135:ARG:HB2	20:Z:27:TYR:CD1	2.34	0.63
13:O:228:ALA:O	13:O:229:LYS:HG3	1.99	0.63
24:A:1038:PHO:C2B	23:D:1005:CLA:H52	2.29	0.63
1:A:219:VAL:CG2	4:D:268:HIS:CB	2.76	0.63
1:A:245:THR:HG22	4:D:264:LYS:HD2	1.81	0.63
23:C:1025:CLA:H203	23:C:1031:CLA:H121	1.78	0.63
28:C:1055:DGD:HB72	28:C:1055:DGD:HB32	1.79	0.63
4:D:101:PHE:O	4:D:105:CYS:HB2	1.98	0.63
4:D:103:ARG:O	4:D:106:GLN:N	2.32	0.63
4:D:218:VAL:O	4:D:221:THR:HG22	1.99	0.63
11:L:22:LEU:HD23	11:L:23:LEU:N	2.14	0.63
15:U:113:THR:HG22	15:U:114:VAL:N	2.14	0.63
20:Z:30:PRO:O	20:Z:32:ASP:N	2.31	0.63
1:A:37:MET:HB2	1:A:125:CYS:HB3	1.81	0.62
23:B:1013:CLA:H102	23:B:1018:CLA:H42	1.81	0.62
23:B:1021:CLA:HMA3	23:B:1021:CLA:H42	1.79	0.62
23:C:1028:CLA:CBB	23:C:1028:CLA:HHC	2.27	0.62
23:C:1034:CLA:C13	23:C:1034:CLA:H92	2.29	0.62
3:C:429:SER:HA	28:C:1056:DGD:HA91	1.81	0.62
28:C:1057:DGD:HA62	28:C:1057:DGD:CAA	2.29	0.62
30:A:1063:LHG:H351	3:C:436:PHE:CE1	2.34	0.62
4:D:209:LEU:CD2	26:D:1042:PQ9:H192	2.23	0.62
5:E:35:TRP:CZ3	6:F:38:ALA:HB1	2.33	0.62
4:D:68:LEU:HA	6:F:40:MET:CG	2.29	0.62
14:T:10:PHE:C	14:T:12:CYS:H	2.02	0.62
23:C:1027:CLA:H172	27:Z:1053:BCR:H10C	1.79	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:159:LEU:HD23	28:C:1055:DGD:HBW1	1.81	0.62
3:C:207:ARG:HG3	3:C:208:VAL:N	2.13	0.62
11:L:30:LEU:HD23	11:L:31:PHE:N	2.13	0.62
3:C:203:THR:HG22	3:C:231:GLU:O	1.99	0.62
2:B:364:GLU:HG3	4:D:296:TYR:HD2	1.64	0.62
1:A:235:TYR:C	1:A:237:TYR:H	2.02	0.62
1:A:279:ARG:C	1:A:283:VAL:CG1	2.68	0.62
2:B:63:LEU:N	2:B:64:PRO:HD2	2.14	0.62
3:C:207:ARG:O	3:C:211:GLY:N	2.31	0.62
3:C:50:LEU:HD22	3:C:132:HIS:CD2	2.34	0.62
3:C:95:LEU:H	3:C:95:LEU:CD2	2.12	0.62
3:C:461:ARG:NH2	4:D:223:PHE:CD2	2.68	0.62
20:Z:5:PHE:O	20:Z:8:ALA:N	2.27	0.62
13:O:167:ASP:N	13:O:167:ASP:OD2	2.30	0.62
15:U:69:ARG:HH11	15:U:69:ARG:HG3	1.64	0.62
1:A:206:PHE:CD1	24:A:1039:PHO:HBB2	2.33	0.62
30:A:1063:LHG:P	30:A:1063:LHG:C6	2.88	0.62
1:A:142:TRP:H	4:D:220:ASN:ND2	1.95	0.62
1:A:223:LEU:HD13	1:A:224:ILE:HG12	1.80	0.62
2:B:144:PHE:CE1	2:B:210:ILE:HD12	2.34	0.62
2:B:58:GLN:O	2:B:58:GLN:HG3	2.00	0.62
3:C:461:ARG:O	3:C:461:ARG:HG3	1.98	0.62
4:D:281:MET:HE3	4:D:284:ILE:HD12	1.80	0.62
9:J:17:ALA:O	9:J:20:GLY:N	2.33	0.62
10:K:19:ASP:N	10:K:20:PRO:CD	2.63	0.62
2:B:346:PHE:N	2:B:346:PHE:CD2	2.67	0.62
2:B:368:VAL:HG11	2:B:381:ILE:CD1	2.25	0.62
13:O:188:ARG:HD3	13:O:197:ALA:N	2.12	0.62
20:Z:37:LYS:HZ3	20:Z:38:GLN:HG2	1.64	0.62
3:C:377:LEU:HA	3:C:380:ILE:HG22	1.80	0.62
3:C:29:GLU:HG3	10:K:45:PHE:O	1.99	0.62
1:A:90:GLY:C	1:A:92:HIS:N	2.53	0.62
2:B:45:PHE:HB2	2:B:60:MET:SD	2.39	0.62
2:B:6:TYR:HD2	2:B:6:TYR:N	1.97	0.62
23:C:1029:CLA:H202	23:C:1030:CLA:C17	2.29	0.62
28:C:1055:DGD:CBA	28:C:1055:DGD:HA72	2.26	0.62
28:C:1055:DGD:O1B	28:C:1055:DGD:C4B	2.47	0.62
3:C:264:PHE:CZ	27:C:1054:BCR:C31	2.81	0.62
3:C:284:PHE:C	3:C:286:ALA:H	2.01	0.62
4:D:218:VAL:HG12	4:D:219:GLU:N	2.13	0.62
5:E:34:GLY:CA	6:F:32:PHE:CE2	2.81	0.62
2:B:6:TYR:OH	11:L:11:GLU:HG3	1.99	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:D:1062:MGE:H212	14:T:17:PHE:HZ	1.64	0.62
1:A:300:PHE:HB3	1:A:302:PHE:CE1	2.35	0.62
2:B:388:SER:C	2:B:394:GLN:HE22	2.03	0.62
9:J:11:TRP:CD1	9:J:11:TRP:C	2.71	0.62
16:V:72:THR:HG22	16:V:75:ASN:H	1.65	0.62
1:A:52:PHE:O	1:A:52:PHE:CD2	2.53	0.62
23:B:1009:CLA:H2A	23:B:1009:CLA:CED	2.23	0.62
3:C:40:ALA:HA	23:C:1033:CLA:CMC	2.30	0.62
4:D:48:TRP:CE3	4:D:49:LEU:HG	2.29	0.62
4:D:103:ARG:HH22	5:E:80:LEU:HD12	1.65	0.62
9:J:15:THR:O	9:J:19:MET:HG2	1.99	0.62
14:T:18:PHE:O	14:T:22:PHE:HD2	1.82	0.62
1:A:183:MET:HB3	23:A:1003:CLA:HBC3	1.82	0.62
1:A:136:ARG:O	1:A:137:LEU:HD23	1.99	0.62
23:B:1022:CLA:C13	23:B:1022:CLA:H8	1.81	0.62
23:B:1022:CLA:HMB1	23:B:1022:CLA:CBB	2.23	0.62
23:B:1023:CLA:CAA	23:B:1023:CLA:CGD	2.65	0.62
3:C:120:ILE:HG13	27:Z:1053:BCR:H343	1.81	0.62
3:C:357:ARG:HH11	3:C:357:ARG:CB	2.12	0.62
3:C:348:GLU:OE2	3:C:359:TRP:HZ3	1.82	0.62
4:D:277:THR:CG2	4:D:278:GLY:N	2.63	0.62
12:M:8:PHE:O	12:M:11:THR:N	2.32	0.62
15:U:57:LEU:C	15:U:58:ASN:HD22	2.02	0.62
23:A:1006:CLA:CMB	24:A:1039:PHO:C16	2.58	0.62
23:B:1021:CLA:C1	23:B:1021:CLA:HMA2	2.30	0.62
23:B:1015:CLA:C18	29:B:1060:MGE:H8A1	2.26	0.62
2:B:277:SER:C	2:B:279:TYR:N	2.51	0.62
2:B:319:PRO:HG3	2:B:446:SER:HB3	1.82	0.62
23:C:1037:CLA:O1A	23:C:1037:CLA:C3A	2.47	0.62
1:A:135:TYR:CD1	3:C:449:ARG:HG3	2.34	0.62
11:L:36:PHE:HD2	14:T:6:TYR:HH	1.46	0.62
1:A:184:ILE:O	1:A:328:MET:HE3	2.00	0.62
1:A:272:HIS:HB2	4:D:218:VAL:HG11	1.82	0.62
23:B:1021:CLA:C19	29:B:1060:MGE:CDA	2.78	0.62
23:A:1006:CLA:H141	23:D:1004:CLA:H192	1.81	0.62
23:A:1003:CLA:C3D	23:D:1005:CLA:CBC	2.78	0.62
4:D:201:VAL:HG21	23:D:1005:CLA:OBD	1.99	0.62
4:D:218:VAL:HG22	4:D:244:TYR:CD1	2.34	0.62
23:H:1017:CLA:H192	23:H:1017:CLA:H151	1.80	0.62
13:O:100:GLU:O	13:O:100:GLU:HG2	2.00	0.62
2:B:125:ASP:OD2	2:B:128:THR:HG22	2.00	0.62
23:A:1006:CLA:HBB1	23:A:1006:CLA:CHC	2.29	0.62

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:219:VAL:CG2	4:D:268:HIS:CG	2.80	0.62
23:B:1011:CLA:H193	23:B:1016:CLA:HAC1	1.82	0.62
23:B:1023:CLA:ND	23:B:1024:CLA:HMC1	2.14	0.62
3:C:85:GLY:N	28:C:1056:DGD:HE4	2.15	0.62
7:H:41:PHE:CE2	7:H:45:ILE:HD11	2.35	0.62
7:H:48:ILE:HG12	7:H:53:LEU:HD23	1.81	0.62
13:O:177:TYR:C	13:O:178:ARG:HG2	2.20	0.62
10:K:18:PHE:CE2	20:Z:9:LEU:HD11	2.35	0.62
2:B:380:ASP:OD2	4:D:345:VAL:CG2	2.46	0.62
16:V:120:SER:H	16:V:123:SER:CB	2.11	0.62
4:D:299:ILE:O	4:D:301:GLN:N	2.33	0.62
15:U:55:ILE:HG21	15:U:65:PHE:HE2	1.65	0.62
1:A:157:VAL:HG13	1:A:157:VAL:O	2.00	0.61
1:A:58:VAL:O	1:A:67:VAL:N	2.33	0.61
2:B:152:GLY:C	23:B:1014:CLA:CMC	2.68	0.61
2:B:99:ALA:CB	23:B:1014:CLA:H2	2.26	0.61
2:B:71:VAL:O	2:B:71:VAL:HG13	1.99	0.61
23:A:1006:CLA:C12	28:C:1057:DGD:CIB	2.78	0.61
3:C:230:LEU:O	3:C:234:VAL:HG23	2.00	0.61
3:C:269:GLU:O	3:C:272:LEU:HB3	2.00	0.61
3:C:297:TYR:HA	3:C:302:TYR:CE2	2.35	0.61
2:B:457:VAL:CG2	4:D:284:ILE:HG23	2.30	0.61
5:E:34:GLY:O	5:E:37:PHE:N	2.33	0.61
15:U:88:VAL:O	15:U:91:VAL:HG23	2.00	0.61
2:B:336:ILE:HG22	2:B:336:ILE:O	1.99	0.61
1:A:89:ILE:HD11	1:A:108:ASN:HB3	1.82	0.61
2:B:457:VAL:O	2:B:461:LEU:HG	2.00	0.61
1:A:278:TRP:HH2	28:C:1057:DGD:HAG3	1.65	0.61
3:C:126:GLY:HA2	27:K:1052:BCR:H363	1.80	0.61
3:C:82:TYR:CD2	3:C:302:TYR:O	2.53	0.61
2:B:222:PRO:HA	7:H:22:ALA:HB3	1.82	0.61
14:T:4:ILE:CD1	14:T:4:ILE:C	2.64	0.61
23:C:1036:CLA:H193	27:Z:1053:BCR:H372	1.82	0.61
13:O:265:PHE:CD1	13:O:266:TYR:N	2.68	0.61
1:A:164:GLY:HA3	1:A:294:ALA:O	2.00	0.61
1:A:223:LEU:CD2	4:D:265:ARG:HD3	2.29	0.61
1:A:65:GLU:O	1:A:65:GLU:HG3	1.99	0.61
2:B:91:TRP:HB3	23:B:1014:CLA:CED	2.31	0.61
23:B:1019:CLA:CMB	23:B:1020:CLA:NC	2.62	0.61
2:B:193:TYR:HA	2:B:261:ALA:HB2	1.81	0.61
3:C:53:HIS:CB	23:C:1036:CLA:HMD1	2.30	0.61
3:C:311:GLN:HE22	3:C:351:PHE:HD2	1.47	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:45:LEU:CD1	3:C:139:THR:HG23	2.31	0.61
23:D:1005:CLA:CED	26:D:1042:PQ9:H412	2.30	0.61
4:D:161:PRO:HG3	4:D:170:ALA:HB2	1.82	0.61
4:D:17:ILE:HG21	17:X:42:GLN:HB2	1.81	0.61
10:K:35:LEU:HD12	10:K:38:VAL:HG21	1.82	0.61
1:A:326:LEU:HD21	3:C:412:THR:HB	1.82	0.61
13:O:65:ARG:NH1	13:O:66:ILE:H	1.97	0.61
2:B:288:VAL:HG22	2:B:301:ALA:HB1	1.81	0.61
1:A:95:PRO:CA	23:A:1007:CLA:CED	2.71	0.61
30:A:1063:LHG:H271	23:C:1032:CLA:C8	2.28	0.61
23:B:1016:CLA:CMD	23:B:1018:CLA:HAB	2.30	0.61
23:D:1005:CLA:C17	29:D:1062:MGE:H261	2.30	0.61
4:D:108:GLY:O	4:D:110:LEU:N	2.33	0.61
1:A:223:LEU:HD23	4:D:265:ARG:HH11	1.65	0.61
4:D:83:ASN:HA	4:D:166:SER:CB	2.30	0.61
11:L:15:THR:O	11:L:15:THR:HG22	2.01	0.61
14:T:12:CYS:O	14:T:15:ALA:N	2.33	0.61
3:C:253:LEU:HD23	3:C:253:LEU:O	2.01	0.61
24:A:1039:PHO:H42	4:D:41:ALA:HB1	1.81	0.61
24:A:1039:PHO:HBC1	4:D:275:PRO:CB	2.30	0.61
1:A:58:VAL:HG11	1:A:83:VAL:HG12	1.82	0.61
23:B:1016:CLA:C14	23:D:1008:CLA:HHB	2.30	0.61
2:B:141:ILE:N	2:B:217:ILE:HD13	2.16	0.61
2:B:465:GLY:C	2:B:467:ILE:N	2.49	0.61
23:C:1028:CLA:CBA	23:C:1028:CLA:HMA2	2.29	0.61
3:C:443:TRP:HD1	3:C:444:HIS:CE1	2.18	0.61
29:L:1061:MGE:H9A2	12:M:18:PRO:CB	2.30	0.61
13:O:92:VAL:HG23	13:O:93:PRO:HD2	1.82	0.61
23:A:1006:CLA:HMB3	24:A:1039:PHO:H172	1.82	0.61
23:B:1011:CLA:C12	23:B:1011:CLA:C9	2.77	0.61
23:B:1011:CLA:C17	23:B:1016:CLA:CBC	2.79	0.61
2:B:68:ARG:NH2	2:B:262:THR:HB	2.16	0.61
2:B:173:GLY:HA3	2:B:312:TYR:HE1	1.63	0.61
23:B:1011:CLA:C19	23:H:1017:CLA:H121	2.24	0.61
3:C:405:ASN:O	3:C:407:VAL:HG23	2.01	0.61
13:O:114:ASN:O	13:O:116:ASP:N	2.33	0.61
1:A:57:PRO:CA	1:A:68:SER:HB2	2.27	0.61
2:B:100:HIS:O	2:B:103:LEU:HB3	2.01	0.61
2:B:121:GLU:O	2:B:123:PHE:N	2.33	0.61
2:B:58:GLN:HA	2:B:329:PRO:HB2	1.83	0.61
4:D:149:PRO:HA	4:D:152:VAL:HG12	1.81	0.61
5:E:34:GLY:HA2	6:F:32:PHE:CE2	2.35	0.61

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:91:LEU:HD21	7:H:47:GLU:OE1	2.00	0.61
23:B:1019:CLA:H91	29:L:1061:MGE:H8A1	1.83	0.61
3:C:120:ILE:HG21	27:Z:1053:BCR:H341	1.82	0.61
23:A:1006:CLA:H202	27:D:1050:BCR:H402	1.81	0.61
2:B:465:GLY:N	23:B:1019:CLA:HBC1	2.05	0.61
23:B:1021:CLA:CMA	23:B:1021:CLA:O2A	2.48	0.61
3:C:157:MET:HB3	23:C:1031:CLA:CBC	2.30	0.61
23:C:1032:CLA:CAB	23:C:1034:CLA:CMC	2.79	0.61
3:C:89:ILE:HG23	3:C:111:PHE:HE2	1.66	0.61
1:A:297:LEU:HD21	3:C:404:LEU:HA	1.83	0.61
3:C:459:ILE:HB	4:D:223:PHE:CD1	2.36	0.61
10:K:18:PHE:CE2	20:Z:9:LEU:HD21	2.36	0.61
27:Z:1053:BCR:C33	27:Z:1053:BCR:HC8	2.31	0.61
17:X:13:THR:HG22	17:X:15:SER:N	2.13	0.61
23:A:1006:CLA:HMB3	24:A:1039:PHO:C17	2.30	0.61
30:A:1063:LHG:C34	30:A:1063:LHG:H383	2.29	0.61
2:B:134:ASP:OD1	2:B:137:LYS:HD2	2.00	0.61
2:B:141:ILE:O	2:B:145:LEU:HG	2.01	0.61
2:B:193:TYR:OH	2:B:259:GLY:HA3	2.01	0.61
2:B:5:TRP:CZ2	2:B:6:TYR:HB3	2.35	0.61
3:C:285:ILE:CG2	23:C:1025:CLA:H52	2.30	0.61
3:C:97:TRP:HZ3	3:C:113:VAL:HG21	1.66	0.61
3:C:266:TRP:HE3	3:C:271:TYR:HH	1.46	0.61
4:D:119:ALA:O	4:D:123:ILE:HG12	2.00	0.61
17:X:13:THR:CG2	17:X:15:SER:H	2.10	0.61
15:U:123:GLU:O	15:U:125:GLY:N	2.33	0.61
10:K:43:VAL:O	10:K:43:VAL:HG12	2.00	0.61
2:B:144:PHE:HE1	2:B:210:ILE:HG23	1.64	0.61
23:C:1035:CLA:C10	27:K:1052:BCR:C40	2.75	0.61
4:D:152:VAL:HG11	23:D:1004:CLA:H51	1.82	0.61
4:D:201:VAL:HA	23:D:1004:CLA:HMB3	1.83	0.61
4:D:101:PHE:C	4:D:101:PHE:CD1	2.73	0.61
10:K:11:LEU:HD23	10:K:12:PRO:HD2	1.81	0.61
2:B:360:PRO:HD2	2:B:363:PHE:CD2	2.36	0.61
2:B:13:ILE:HD12	2:B:14:ASN:OD1	2.01	0.60
2:B:209:GLY:HA3	23:B:1013:CLA:H191	1.82	0.60
2:B:25:MET:O	2:B:26:HIS:C	2.39	0.60
23:C:1025:CLA:C20	23:C:1031:CLA:C12	2.79	0.60
3:C:132:HIS:HA	3:C:136:GLY:HA3	1.83	0.60
3:C:237:HIS:O	3:C:240:ILE:HG22	2.00	0.60
4:D:253:TRP:HB2	4:D:260:ALA:HB2	1.82	0.60
1:A:223:LEU:HD23	4:D:265:ARG:NH1	2.16	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:414:PRO:HB2	2:B:415:PRO:CD	2.30	0.60
1:A:140:ARG:NH2	30:A:1063:LHG:HC2	2.11	0.60
2:B:272:ARG:HD3	2:B:276:ASP:OD2	2.00	0.60
3:C:207:ARG:HG3	3:C:208:VAL:H	1.67	0.60
3:C:262:ARG:NH1	3:C:262:ARG:HB3	2.14	0.60
3:C:82:TYR:HD2	3:C:302:TYR:O	1.84	0.60
3:C:451:ALA:HA	3:C:456:GLU:HG2	1.83	0.60
26:D:1042:PQ9:H441	11:L:29:LEU:HD23	1.82	0.60
1:A:90:GLY:HA2	1:A:167:SER:CB	2.30	0.60
23:B:1020:CLA:H142	23:B:1021:CLA:HAB	1.82	0.60
2:B:33:TRP:HB2	27:B:1047:BCR:H14C	1.83	0.60
2:B:260:SER:O	2:B:263:THR:N	2.33	0.60
23:C:1032:CLA:H171	23:C:1034:CLA:H191	1.81	0.60
3:C:196:VAL:O	3:C:196:VAL:HG13	1.99	0.60
3:C:36:TRP:CG	3:C:37:ALA:N	2.69	0.60
3:C:42:LEU:HD12	3:C:49:LEU:HG	1.83	0.60
4:D:171:PRO:HG3	4:D:181:PHE:CZ	2.36	0.60
9:J:17:ALA:C	9:J:19:MET:H	2.04	0.60
2:B:390:TYR:N	2:B:390:TYR:HD1	1.99	0.60
2:B:135:LEU:HB2	2:B:136:PRO:HD3	1.82	0.60
2:B:150:CYS:HB2	23:B:1011:CLA:HMC3	1.82	0.60
23:C:1030:CLA:C2C	23:C:1031:CLA:H101	2.31	0.60
23:C:1032:CLA:HHC	23:C:1032:CLA:CBB	2.31	0.60
3:C:197:ARG:HG2	3:C:198:VAL:H	1.66	0.60
3:C:282:MET:HA	3:C:285:ILE:HG22	1.83	0.60
4:D:160:TYR:HB3	4:D:161:PRO:CD	2.29	0.60
4:D:74:LEU:HA	4:D:175:VAL:CG2	2.31	0.60
7:H:16:SER:O	7:H:18:TYR:N	2.32	0.60
8:I:15:PHE:O	8:I:18:LEU:N	2.34	0.60
13:O:120:THR:HA	13:O:153:ALA:O	2.01	0.60
15:U:46:LYS:HE2	15:U:59:ASN:HD21	1.65	0.60
3:C:365:TRP:CZ3	3:C:366:LEU:HD13	2.36	0.60
1:A:223:LEU:HG	4:D:265:ARG:NE	2.17	0.60
23:B:1016:CLA:H203	23:D:1008:CLA:CMA	2.31	0.60
23:B:1021:CLA:C18	29:B:1060:MGE:H132	2.30	0.60
2:B:135:LEU:HA	2:B:138:MET:CE	2.30	0.60
2:B:156:PHE:HA	2:B:161:LEU:HB2	1.84	0.60
2:B:20:ILE:O	2:B:24:LEU:HB2	2.01	0.60
2:B:284:ILE:CG1	2:B:285:ASN:N	2.62	0.60
2:B:36:SER:N	2:B:101:ILE:HD11	2.16	0.60
3:C:184:GLY:N	3:C:198:VAL:HG22	2.15	0.60
3:C:199:ILE:N	3:C:199:ILE:HD12	2.16	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:157:PHE:HE2	4:D:173:PHE:CE1	2.19	0.60
3:C:135:ARG:HG3	3:C:135:ARG:HH21	1.65	0.60
16:V:90:PRO:HD2	16:V:92:ARG:HH21	1.65	0.60
23:A:1007:CLA:O1D	23:A:1007:CLA:C2A	2.49	0.60
1:A:206:PHE:CZ	23:D:1004:CLA:HBA2	2.36	0.60
1:A:272:HIS:CB	4:D:218:VAL:HG11	2.31	0.60
23:B:1012:CLA:CHD	23:B:1012:CLA:HBC3	2.25	0.60
23:B:1015:CLA:C18	29:B:1060:MGE:C8A	2.78	0.60
3:C:88:LEU:CD2	23:C:1027:CLA:HBC3	2.32	0.60
23:C:1034:CLA:C14	23:C:1034:CLA:H91	2.24	0.60
28:C:1056:DGD:HBT1	28:C:1056:DGD:HB61	1.82	0.60
3:C:199:ILE:HG12	3:C:234:VAL:HG21	1.84	0.60
3:C:52:ALA:HB2	23:C:1035:CLA:HMA1	1.84	0.60
7:H:31:MET:SD	23:H:1017:CLA:HAA1	2.42	0.60
16:V:111:GLU:HG3	16:V:112:GLN:N	2.15	0.60
23:A:1006:CLA:HMD3	4:D:182:LEU:HD11	1.82	0.60
2:B:51:VAL:CG1	2:B:52:LEU:HG	2.31	0.60
4:D:28:VAL:HG13	4:D:28:VAL:O	2.01	0.60
4:D:73:PHE:CD2	4:D:74:LEU:HD23	2.36	0.60
8:I:6:ILE:CD1	8:I:6:ILE:H	2.10	0.60
8:I:6:ILE:HG12	8:I:7:THR:H	1.65	0.60
1:A:196:PRO:HB2	28:C:1057:DGD:C8A	2.32	0.60
1:A:279:ARG:HB3	1:A:279:ARG:NH2	2.16	0.60
2:B:241:SER:CB	23:B:1020:CLA:HED3	2.31	0.60
23:C:1034:CLA:O2A	23:C:1034:CLA:H42	2.01	0.60
3:C:123:ALA:O	3:C:127:PHE:N	2.33	0.60
3:C:162:GLY:HA2	3:C:165:LEU:HB2	1.83	0.60
3:C:99:VAL:HG11	3:C:196:VAL:CB	2.26	0.60
4:D:202:ALA:HA	23:D:1005:CLA:O1A	2.01	0.60
4:D:87:HIS:HA	4:D:167:TRP:CD1	2.37	0.60
7:H:38:PHE:CD1	27:H:1049:BCR:H10C	2.36	0.60
14:T:18:PHE:HB2	27:T:6046:BCR:C8	2.31	0.60
17:X:38:ILE:HA	17:X:41:SER:HB2	1.83	0.60
1:A:202:VAL:HG13	23:A:1003:CLA:HMB3	1.84	0.60
23:B:1013:CLA:HHB	23:B:1014:CLA:HMA1	1.84	0.60
23:B:1023:CLA:ND	23:B:1024:CLA:CBC	2.65	0.60
23:B:1014:CLA:C10	27:B:1048:BCR:H311	2.29	0.60
23:C:1028:CLA:HBC2	23:C:1028:CLA:CHD	2.28	0.60
3:C:95:LEU:O	3:C:185:LEU:HA	2.01	0.60
3:C:95:LEU:CD2	3:C:95:LEU:N	2.65	0.60
8:I:31:ASN:HB2	8:I:32:PRO:CD	2.30	0.60
1:A:188:ALA:HB2	1:A:328:MET:CE	2.32	0.60

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:377:LEU:CA	3:C:380:ILE:HG22	2.32	0.60
23:A:1006:CLA:CED	28:C:1057:DGD:CDB	2.78	0.60
1:A:310:LYS:HB2	16:V:28:GLU:HG3	1.84	0.60
2:B:229:LEU:O	2:B:231:MET:N	2.35	0.60
2:B:7:ARG:CA	23:B:1019:CLA:HBA1	2.31	0.60
23:C:1036:CLA:C17	27:Z:1053:BCR:C37	2.77	0.60
3:C:439:VAL:HG13	23:C:1032:CLA:HBC2	1.84	0.60
4:D:186:GLN:O	4:D:186:GLN:NE2	2.34	0.60
6:F:41:GLN:HE22	9:J:27:LEU:CB	2.15	0.60
29:L:1061:MGE:C7B	29:L:1061:MGE:C3B	2.80	0.60
1:A:161:TYR:HA	1:A:294:ALA:CB	2.32	0.60
2:B:407:ASN:OD1	2:B:408:GLY:N	2.35	0.60
2:B:343:HIS:HE1	2:B:345:VAL:HG13	1.66	0.60
23:A:1003:CLA:CBC	23:A:1003:CLA:HHD	2.25	0.59
1:A:298:ASN:OD1	1:A:298:ASN:N	2.35	0.59
2:B:30:VAL:HG12	23:B:1013:CLA:HMD2	1.83	0.59
23:C:1029:CLA:O2D	23:C:1029:CLA:C2A	2.50	0.59
30:A:1063:LHG:H321	23:C:1034:CLA:H143	1.81	0.59
30:A:1063:LHG:O1	3:C:447:ARG:NH2	2.35	0.59
23:H:1017:CLA:CBB	27:H:1049:BCR:H323	2.26	0.59
8:I:13:THR:O	8:I:17:LEU:HG	2.02	0.59
10:K:20:PRO:O	18:Y:21:GLN:HG3	2.02	0.59
15:U:56:ASP:OD1	15:U:58:ASN:N	2.33	0.59
1:A:17:PHE:O	1:A:21:VAL:HG13	2.02	0.59
1:A:79:THR:OG1	1:A:80:GLY:N	2.35	0.59
2:B:237:VAL:HG22	23:B:1020:CLA:HMD1	1.84	0.59
23:B:1024:CLA:H172	27:B:1048:BCR:H343	1.83	0.59
27:B:1047:BCR:C23	27:B:1047:BCR:C38	2.55	0.59
3:C:455:PHE:HZ	8:I:31:ASN:HB2	1.67	0.59
4:D:92:LEU:HB3	4:D:93:TRP:HE3	1.66	0.59
5:E:19:TYR:C	5:E:21:VAL:H	2.05	0.59
7:H:12:ARG:HB3	7:H:12:ARG:NH1	2.17	0.59
11:L:36:PHE:HD2	14:T:6:TYR:CZ	2.19	0.59
12:M:17:VAL:N	12:M:18:PRO:HD2	2.16	0.59
15:U:98:THR:H	15:U:101:GLN:CG	2.14	0.59
15:U:73:PRO:HD2	16:V:109:ASP:OD1	2.02	0.59
3:C:304:PRO:HG3	3:C:398:HIS:O	2.02	0.59
2:B:230:ARG:HH11	2:B:230:ARG:HA	1.65	0.59
30:A:1063:LHG:C29	23:C:1032:CLA:C8	2.79	0.59
2:B:143:LEU:HD12	2:B:213:GLY:CA	2.32	0.59
2:B:148:LEU:HG	2:B:149:LEU:N	2.16	0.59
23:C:1033:CLA:H172	23:C:1033:CLA:H141	1.84	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1034:CLA:C9	23:C:1034:CLA:C13	2.80	0.59
4:D:39:PRO:O	4:D:42:TYR:HB3	2.01	0.59
9:J:19:MET:O	9:J:23:VAL:N	2.34	0.59
3:C:367:GLU:O	3:C:370:ARG:HB3	2.01	0.59
20:Z:37:LYS:HZ2	20:Z:38:GLN:HG2	1.66	0.59
2:B:138:MET:SD	23:B:1023:CLA:CBC	2.89	0.59
2:B:320:ALA:O	4:D:292:ASN:HB2	2.03	0.59
23:C:1026:CLA:CBA	23:C:1027:CLA:HAC1	2.32	0.59
3:C:449:ARG:NH2	23:C:1029:CLA:HED2	2.17	0.59
1:A:160:ILE:HD11	28:C:1055:DGD:HBH2	1.82	0.59
3:C:61:VAL:HG21	3:C:125:LEU:HD12	1.84	0.59
3:C:140:LEU:CB	3:C:148:GLY:HA2	2.32	0.59
5:E:37:PHE:CZ	5:E:46:VAL:HG21	2.37	0.59
9:J:10:LEU:C	9:J:13:VAL:HG23	2.21	0.59
11:L:22:LEU:HD22	29:L:1061:MGE:H201	1.84	0.59
12:M:14:PHE:O	12:M:18:PRO:HG3	2.02	0.59
16:V:148:GLU:O	16:V:151:ILE:HB	2.02	0.59
2:B:39:LEU:O	2:B:43:ALA:N	2.29	0.59
1:A:132:GLU:O	1:A:136:ARG:HB2	2.02	0.59
1:A:237:TYR:CE1	4:D:264:LYS:HG2	2.38	0.59
1:A:37:MET:O	1:A:41:LEU:HD23	2.01	0.59
23:B:1012:CLA:HED3	23:B:1013:CLA:H11	1.84	0.59
23:B:1011:CLA:HMD3	23:B:1014:CLA:CBB	2.32	0.59
23:B:1016:CLA:CBD	23:B:1016:CLA:HBA1	2.31	0.59
23:B:1011:CLA:C17	23:B:1016:CLA:HBC1	2.29	0.59
2:B:226:TYR:HD2	2:B:226:TYR:O	1.85	0.59
2:B:460:LEU:CG	28:H:1058:DGD:CIA	2.80	0.59
23:A:1006:CLA:CBA	28:C:1057:DGD:HBN2	2.32	0.59
3:C:276:LEU:C	3:C:278:ALA:H	2.06	0.59
23:D:1005:CLA:C4	26:D:1042:PQ9:H191	2.32	0.59
4:D:235:PHE:CZ	4:D:243:THR:HG22	2.38	0.59
7:H:53:LEU:O	7:H:55:LEU:HD13	2.02	0.59
18:Y:39:LEU:CD2	20:Z:25:VAL:HG13	2.32	0.59
13:O:184:ASP:HB2	13:O:185:PRO:CD	2.32	0.59
15:U:72:TYR:CB	15:U:73:PRO:CD	2.80	0.59
16:V:48:THR:N	16:V:51:GLN:HG2	2.16	0.59
1:A:14:TRP:NE1	1:A:18:CYS:SG	2.76	0.59
1:A:341:LEU:HD12	3:C:313:GLN:HE22	1.68	0.59
5:E:58:GLN:OE1	5:E:58:GLN:O	2.20	0.59
2:B:24:LEU:HD13	2:B:111:ALA:CA	2.22	0.59
3:C:436:PHE:O	3:C:439:VAL:CG1	2.50	0.59
3:C:453:ALA:HB1	3:C:455:PHE:CZ	2.37	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:D:1005:CLA:HMB1	23:D:1005:CLA:HBB1	1.84	0.59
16:V:63:CYS:O	16:V:64:ALA:C	2.40	0.59
13:O:136:MET:HB2	13:O:142:ILE:CD1	2.33	0.59
5:E:13:ILE:HG23	5:E:13:ILE:O	2.02	0.59
23:A:1006:CLA:H171	27:D:1050:BCR:H292	1.71	0.59
23:B:1013:CLA:C15	23:B:1018:CLA:HED1	2.32	0.59
2:B:113:TRP:CD1	27:B:1048:BCR:C37	2.85	0.59
2:B:465:GLY:HA3	23:B:1019:CLA:HBC3	1.83	0.59
23:C:1026:CLA:HMB1	23:C:1026:CLA:CBB	2.20	0.59
4:D:249:ALA:O	4:D:252:PHE:HB3	2.02	0.59
4:D:73:PHE:HD2	4:D:74:LEU:HD23	1.68	0.59
10:K:35:LEU:C	10:K:37:PHE:H	2.06	0.59
11:L:32:SER:OG	11:L:33:SER:N	2.33	0.59
3:C:346:THR:HG21	13:O:38:GLY:N	2.16	0.59
3:C:410:VAL:O	3:C:412:THR:N	2.36	0.59
23:B:1009:CLA:C4B	27:H:1049:BCR:H382	2.33	0.59
23:B:1011:CLA:CAB	23:B:1013:CLA:H203	2.30	0.59
2:B:9:HIS:HD1	23:B:1019:CLA:H11	1.67	0.59
2:B:143:LEU:HD12	2:B:213:GLY:N	2.17	0.59
2:B:148:LEU:CA	2:B:210:ILE:HD11	2.32	0.59
3:C:167:VAL:HG11	23:C:1036:CLA:H3A	1.83	0.59
1:A:219:VAL:CG1	4:D:268:HIS:CE1	2.86	0.59
4:D:291:LEU:C	4:D:293:LEU:N	2.56	0.59
7:H:14:LEU:HD12	7:H:14:LEU:H	1.66	0.59
3:C:399:ALA:O	3:C:401:LEU:N	2.33	0.59
16:V:35:THR:O	16:V:35:THR:HG22	2.02	0.59
1:A:154:ALA:HB2	23:A:1003:CLA:H61	1.85	0.59
24:A:1039:PHO:H71	4:D:122:LEU:HD13	1.84	0.59
1:A:116:ILE:HG23	1:A:117:PHE:H	1.67	0.59
1:A:147:TYR:C	1:A:150:PRO:HG2	2.23	0.59
23:B:1009:CLA:CHA	23:B:1009:CLA:CBA	2.79	0.59
2:B:156:PHE:HB2	23:B:1014:CLA:HAC2	1.84	0.59
2:B:133:LEU:HD22	23:B:1023:CLA:HBC1	1.85	0.59
4:D:123:ILE:O	4:D:127:LEU:HD23	2.02	0.59
5:E:10:PHE:HD2	6:F:19:ARG:HH21	1.50	0.59
4:D:89:LEU:HD23	7:H:52:THR:HG21	1.82	0.59
10:K:28:ILE:N	10:K:29:PRO:HD2	2.17	0.59
14:T:1:MET:N	14:T:1:MET:HE3	2.12	0.59
1:A:322:ASN:ND2	3:C:412:THR:CG2	2.65	0.59
13:O:69:LEU:HD22	13:O:121:PHE:CZ	2.38	0.59
16:V:62:ALA:CB	25:V:1041:HEM:HBB1	2.33	0.59
16:V:98:LEU:CD2	16:V:145:ILE:HG21	2.30	0.59

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:U:89:GLU:O	15:U:91:VAL:N	2.36	0.59
15:U:92:LEU:H	15:U:92:LEU:CD1	2.16	0.59
15:U:93:ASN:O	15:U:94:ILE:C	2.42	0.59
2:B:357:ARG:HH22	4:D:337:GLU:HG2	1.67	0.59
2:B:260:SER:HB3	2:B:263:THR:OG1	2.03	0.59
2:B:478:VAL:O	2:B:480:SER:N	2.36	0.59
23:C:1033:CLA:CED	23:C:1033:CLA:OBD	2.38	0.59
3:C:175:LEU:HD12	3:C:237:HIS:CD2	2.37	0.59
3:C:88:LEU:HD21	23:C:1027:CLA:HBC3	1.84	0.59
5:E:30:LEU:HG	6:F:28:VAL:HG23	1.83	0.59
27:H:1049:BCR:H341	27:H:1049:BCR:C12	2.33	0.59
8:I:3:THR:HA	8:I:6:ILE:HD11	1.84	0.59
13:O:66:ILE:HD11	13:O:121:PHE:CE2	2.38	0.59
2:B:297:THR:O	2:B:300:GLU:N	2.36	0.59
3:C:464:GLU:HG3	3:C:467:LEU:HB2	1.85	0.59
2:B:79:SER:C	2:B:81:THR:H	2.05	0.59
2:B:304:ALA:O	2:B:306:PRO:HD3	2.03	0.59
5:E:40:THR:HG21	19:N:3:UNK:CB	2.33	0.59
23:B:1010:CLA:C4	7:H:46:LEU:HA	2.32	0.58
23:B:1019:CLA:H192	23:B:1021:CLA:H52	1.82	0.58
2:B:250:PHE:CE2	23:B:1010:CLA:H202	2.38	0.58
3:C:56:HIS:O	3:C:59:LEU:HB2	2.02	0.58
8:I:17:LEU:O	8:I:21:PHE:HB2	2.03	0.58
10:K:18:PHE:C	10:K:20:PRO:HD2	2.24	0.58
18:Y:32:GLY:CA	18:Y:35:ILE:HG23	2.31	0.58
3:C:460:ASP:O	3:C:462:GLU:N	2.36	0.58
1:A:127:MET:HB2	1:A:151:LEU:HD22	1.84	0.58
2:B:16:PRO:O	2:B:20:ILE:HG13	2.02	0.58
2:B:47:PRO:O	2:B:49:ASP:N	2.36	0.58
23:C:1028:CLA:H51	28:C:1056:DGD:HA52	1.85	0.58
3:C:428:THR:HG23	3:C:429:SER:N	2.14	0.58
1:A:24:THR:HB	3:C:469:MET:HE1	1.84	0.58
29:B:1060:MGE:H101	29:L:1061:MGE:H8A2	1.85	0.58
4:D:311:PHE:CD1	4:D:311:PHE:C	2.76	0.58
15:U:46:LYS:HE2	15:U:59:ASN:HD22	1.65	0.58
16:V:124:ALA:C	16:V:126:ILE:H	2.05	0.58
1:A:289:GLY:O	1:A:292:THR:HG22	2.03	0.58
1:A:293:MET:C	1:A:295:PHE:H	2.04	0.58
23:B:1010:CLA:CAD	23:B:1010:CLA:CED	2.79	0.58
23:B:1020:CLA:H142	23:B:1021:CLA:CAB	2.33	0.58
23:B:1022:CLA:CED	23:B:1022:CLA:CAD	2.80	0.58
27:B:1045:BCR:H353	27:B:1047:BCR:H10C	1.77	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1029:CLA:H43	23:C:1029:CLA:H191	1.84	0.58
23:C:1033:CLA:CAD	23:C:1033:CLA:HED3	2.31	0.58
3:C:171:GLY:HA2	3:C:174:LEU:HG	1.83	0.58
3:C:297:TYR:HA	3:C:302:TYR:HE2	1.67	0.58
4:D:195:PRO:HB3	11:L:30:LEU:HD21	1.84	0.58
4:D:210:LEU:O	4:D:212:ALA:N	2.36	0.58
4:D:145:ALA:HB2	4:D:272:LEU:HD11	1.83	0.58
5:E:42:LEU:O	5:E:46:VAL:HG23	2.03	0.58
18:Y:29:GLY:O	18:Y:33:PRO:CD	2.52	0.58
1:A:223:LEU:HB2	4:D:265:ARG:NH1	2.18	0.58
1:A:86:SER:O	1:A:87:ASN:C	2.41	0.58
23:B:1010:CLA:C3D	23:B:1011:CLA:CMB	2.81	0.58
2:B:478:VAL:HG12	4:D:139:ARG:HD2	1.86	0.58
3:C:166:ILE:HG23	3:C:245:ILE:CD1	2.33	0.58
27:D:1050:BCR:C22	27:D:1050:BCR:H403	2.32	0.58
4:D:24:ARG:O	4:D:26:ARG:N	2.36	0.58
5:E:17:VAL:HG11	9:J:7:ARG:HG2	1.84	0.58
17:X:35:ALA:HA	17:X:38:ILE:HD11	1.86	0.58
13:O:65:ARG:NE	13:O:110:GLU:HA	2.18	0.58
2:B:366:PHE:CG	2:B:367:PRO:HD2	2.38	0.58
16:V:122:ARG:O	16:V:123:SER:C	2.41	0.58
16:V:85:LEU:HB3	16:V:92:ARG:C	2.23	0.58
2:B:297:THR:HG23	2:B:300:GLU:N	2.19	0.58
13:O:76:PHE:C	13:O:77:LEU:HD12	2.23	0.58
3:C:249:ILE:O	3:C:249:ILE:HG22	2.02	0.58
24:A:1038:PHO:HBC1	4:D:212:ALA:CB	2.32	0.58
1:A:187:GLN:OE1	1:A:193:LEU:HB2	2.04	0.58
1:A:214:MET:O	1:A:217:SER:N	2.37	0.58
2:B:464:PHE:CD1	23:B:1019:CLA:HBC1	2.38	0.58
3:C:436:PHE:O	3:C:439:VAL:HG13	2.02	0.58
3:C:45:LEU:HD21	3:C:141:GLU:CG	2.32	0.58
1:A:269:ARG:HE	4:D:243:THR:HG21	1.67	0.58
4:D:253:TRP:CA	4:D:256:ILE:HG22	2.23	0.58
23:B:1016:CLA:H51	23:H:1017:CLA:C10	2.29	0.58
2:B:5:TRP:CH2	29:L:1061:MGE:H3A1	2.39	0.58
18:Y:39:LEU:HD21	20:Z:25:VAL:HG13	1.86	0.58
16:V:48:THR:H	16:V:51:GLN:NE2	2.01	0.58
24:A:1038:PHO:H92	23:D:1005:CLA:H192	1.85	0.58
24:A:1039:PHO:H203	24:A:1039:PHO:H141	1.86	0.58
1:A:297:LEU:HD12	3:C:428:THR:HG21	1.85	0.58
1:A:60:ILE:CD1	1:A:60:ILE:N	2.66	0.58
23:B:1010:CLA:C2D	23:B:1011:CLA:CMB	2.81	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1022:CLA:HBB1	23:B:1022:CLA:CMB	2.21	0.58
2:B:113:TRP:HB2	27:B:1048:BCR:C37	2.29	0.58
23:C:1025:CLA:H202	23:C:1025:CLA:C15	2.27	0.58
3:C:282:MET:O	3:C:286:ALA:HB2	2.04	0.58
4:D:20:ASP:HA	4:D:23:LYS:NZ	2.19	0.58
4:D:273:PHE:O	4:D:277:THR:HB	2.04	0.58
4:D:291:LEU:HD13	4:D:291:LEU:N	2.19	0.58
2:B:460:LEU:CG	28:H:1058:DGD:HAG1	2.33	0.58
13:O:66:ILE:HD12	13:O:267:ALA:HB1	1.84	0.58
3:C:33:PHE:HD1	4:D:229:ALA:HB3	1.69	0.58
2:B:80:ILE:O	2:B:80:ILE:HG13	2.04	0.58
23:A:1003:CLA:CMD	23:D:1005:CLA:HBC1	2.34	0.58
1:A:190:HIS:O	1:A:192:ILE:N	2.36	0.58
23:B:1023:CLA:H101	23:B:1024:CLA:H13	1.86	0.58
23:C:1030:CLA:HMB2	23:C:1031:CLA:NB	2.19	0.58
3:C:451:ALA:C	3:C:453:ALA:N	2.57	0.58
3:C:463:SER:O	3:C:465:PRO:HD3	2.03	0.58
3:C:70:PHE:O	3:C:74:HIS:ND1	2.37	0.58
4:D:103:ARG:HG3	4:D:103:ARG:HH11	1.68	0.58
4:D:235:PHE:HZ	4:D:242:GLU:C	2.07	0.58
10:K:24:VAL:O	10:K:27:VAL:HG12	2.03	0.58
1:A:304:HIS:O	1:A:305:SER:C	2.41	0.58
15:U:72:TYR:CB	15:U:73:PRO:HD3	2.30	0.58
1:A:248:ILE:O	1:A:251:ALA:HB3	2.04	0.58
3:C:362:ARG:HG3	3:C:362:ARG:HH11	1.68	0.58
24:A:1039:PHO:H93	4:D:118:GLY:HA3	1.86	0.58
1:A:131:TRP:CH2	23:C:1029:CLA:HMA3	2.39	0.58
2:B:263:THR:HB	2:B:448:ARG:HH22	1.69	0.58
2:B:5:TRP:CE2	2:B:6:TYR:HB3	2.39	0.58
4:D:52:THR:HG22	4:D:67:TYR:CE2	2.39	0.58
4:D:96:GLU:OE2	7:H:52:THR:HG22	2.03	0.58
27:T:6046:BCR:C4	27:T:6046:BCR:H312	2.30	0.58
16:V:64:ALA:O	16:V:65:SER:C	2.42	0.58
16:V:98:LEU:HD12	16:V:98:LEU:H	1.69	0.58
1:A:307:ILE:CG1	1:A:308:ASP:H	2.13	0.58
23:B:1016:CLA:O1D	23:B:1016:CLA:H2A	2.03	0.58
23:C:1026:CLA:HBA2	23:C:1027:CLA:HAC1	1.84	0.58
23:C:1028:CLA:HBA1	23:C:1028:CLA:HMA2	1.86	0.58
23:C:1033:CLA:C15	23:C:1036:CLA:HMD2	2.34	0.58
23:B:1018:CLA:C1B	23:H:1017:CLA:CMB	2.81	0.58
28:C:1056:DGD:HB51	9:J:29:PHE:HE1	1.68	0.58
1:A:157:VAL:CG2	1:A:182:PHE:HE2	2.16	0.58

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:60:ILE:O	1:A:86:SER:HA	2.04	0.58
2:B:234:ILE:HD12	2:B:237:VAL:CG1	2.34	0.58
2:B:272:ARG:HG2	2:B:320:ALA:HB2	1.86	0.58
2:B:256:MET:CE	2:B:448:ARG:HH12	2.14	0.58
23:C:1025:CLA:CMB	23:C:1025:CLA:H42	2.31	0.58
23:C:1032:CLA:CHC	23:C:1032:CLA:HBB1	2.32	0.58
3:C:260:ALA:HB3	3:C:261:ARG:HH22	1.69	0.58
7:H:12:ARG:HD3	7:H:16:SER:HB2	1.86	0.58
23:C:1036:CLA:H141	27:Z:1053:BCR:H373	1.85	0.58
16:V:148:GLU:HA	16:V:148:GLU:OE2	2.03	0.58
3:C:377:LEU:C	3:C:380:ILE:HG22	2.23	0.58
13:O:218:LEU:HD23	13:O:218:LEU:C	2.23	0.58
1:A:121:LEU:HD11	23:A:1007:CLA:HMB3	1.86	0.57
2:B:273:TYR:HA	2:B:276:ASP:OD2	2.03	0.57
23:C:1025:CLA:CMB	23:C:1025:CLA:H41	2.33	0.57
3:C:270:ALA:HB1	3:C:274:TYR:HE1	1.67	0.57
4:D:262:SER:O	4:D:263:ASN:HB3	2.03	0.57
5:E:10:PHE:C	5:E:12:ASP:H	2.07	0.57
5:E:34:GLY:HA2	6:F:32:PHE:CZ	2.39	0.57
5:E:34:GLY:HA3	6:F:32:PHE:CE2	2.38	0.57
5:E:53:ASP:C	5:E:53:ASP:OD2	2.43	0.57
10:K:28:ILE:HD11	27:K:1051:BCR:C10	2.32	0.57
18:Y:21:GLN:C	18:Y:23:THR:H	2.06	0.57
3:C:391:ARG:HG3	3:C:391:ARG:HH11	1.68	0.57
1:A:45:THR:O	1:A:49:VAL:HG23	2.04	0.57
1:A:58:VAL:HB	1:A:83:VAL:HG11	1.86	0.57
23:B:1012:CLA:C11	23:B:1023:CLA:CGA	2.82	0.57
2:B:154:GLY:HA2	2:B:199:VAL:HG13	1.85	0.57
3:C:61:VAL:HA	23:C:1027:CLA:HMD2	1.85	0.57
23:C:1028:CLA:H41	28:C:1057:DGD:HA42	1.85	0.57
23:C:1037:CLA:H101	23:C:1037:CLA:C14	2.31	0.57
3:C:328:VAL:HG12	3:C:340:TYR:CG	2.38	0.57
23:A:1006:CLA:C18	27:D:1050:BCR:H292	2.34	0.57
1:A:275:LEU:O	4:D:211:CYS:O	2.21	0.57
1:A:239:PHE:HE2	4:D:246:MET:O	1.88	0.57
4:D:261:PHE:CZ	4:D:267:LEU:HA	2.39	0.57
27:K:1052:BCR:C33	27:K:1052:BCR:C8	2.82	0.57
3:C:126:GLY:HA3	27:K:1052:BCR:H363	1.86	0.57
10:K:18:PHE:HE2	20:Z:9:LEU:HD11	1.68	0.57
14:T:18:PHE:CG	27:T:6046:BCR:H343	2.37	0.57
20:Z:16:SER:HB3	20:Z:47:TRP:HE1	1.69	0.57
16:V:59:PHE:CD2	16:V:63:CYS:SG	2.96	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:Z:33:TRP:O	20:Z:37:LYS:HB3	2.04	0.57
1:A:85:SER:OG	1:A:168:PHE:HB2	2.04	0.57
1:A:46:ILE:O	1:A:50:ILE:HG13	2.03	0.57
23:B:1024:CLA:C2	23:B:1024:CLA:HMA2	2.34	0.57
2:B:117:TYR:HB3	2:B:120:LEU:HD21	1.86	0.57
2:B:27:THR:O	2:B:107:LEU:HD12	2.03	0.57
3:C:346:THR:O	3:C:346:THR:HG22	2.03	0.57
4:D:147:SER:C	4:D:280:TRP:HE1	2.08	0.57
5:E:38:VAL:CG2	6:F:36:ALA:HB1	2.34	0.57
8:I:27:ASP:C	8:I:29:ALA:H	2.07	0.57
11:L:17:LEU:O	11:L:21:LEU:N	2.31	0.57
1:A:304:HIS:NE2	16:V:163:TYR:O	2.37	0.57
2:B:368:VAL:CG1	2:B:381:ILE:HB	2.34	0.57
2:B:234:ILE:HD12	2:B:237:VAL:HG11	1.86	0.57
2:B:31:ALA:HA	2:B:34:ALA:HB2	1.86	0.57
23:C:1033:CLA:C9	23:C:1033:CLA:H51	2.29	0.57
3:C:113:VAL:CG2	3:C:114:VAL:N	2.67	0.57
1:A:223:LEU:HD21	4:D:265:ARG:HD3	1.85	0.57
4:D:77:ALA:HB2	4:D:174:GLY:HA3	1.86	0.57
7:H:18:TYR:O	7:H:20:LYS:N	2.32	0.57
11:L:26:VAL:HG13	11:L:27:LEU:N	2.20	0.57
17:X:43:ILE:CG2	17:X:43:ILE:O	2.53	0.57
18:Y:21:GLN:C	18:Y:23:THR:N	2.56	0.57
2:B:392:PHE:O	2:B:393:GLU:HB2	2.05	0.57
16:V:151:ILE:HG22	16:V:152:LEU:HD23	1.86	0.57
13:O:187:GLY:HA3	13:O:194:TYR:HB2	1.87	0.57
3:C:209:ILE:N	3:C:209:ILE:HD12	2.20	0.57
13:O:59:ASP:O	13:O:60:SER:HB3	2.05	0.57
3:C:190:ALA:HB3	3:C:193:GLY:O	2.04	0.57
1:A:273:PHE:CD2	30:A:1063:LHG:HC42	2.39	0.57
1:A:27:ARG:HB2	1:A:27:ARG:HH11	1.67	0.57
23:C:1037:CLA:HAB	27:Z:1053:BCR:C39	2.35	0.57
3:C:56:HIS:C	3:C:56:HIS:ND1	2.58	0.57
4:D:214:HIS:O	4:D:217:THR:HG22	2.04	0.57
4:D:36:LEU:O	4:D:39:PRO:HD2	2.04	0.57
4:D:106:GLN:HE21	5:E:48:GLY:HA3	1.68	0.57
12:M:32:GLN:HA	12:M:32:GLN:NE2	2.17	0.57
15:U:59:ASN:N	15:U:127:ARG:NH2	2.53	0.57
1:A:331:MET:SD	4:D:348:ARG:CA	2.90	0.57
1:A:330:VAL:HB	4:D:348:ARG:HB2	1.86	0.57
3:C:243:ILE:HG22	23:C:1030:CLA:HMC1	1.87	0.57
11:L:15:THR:HA	11:L:18:TYR:HB2	1.86	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:442:ILE:HD11	13:O:200:LEU:HD23	1.87	0.57
13:O:156:GLN:HG2	13:O:167:ASP:OD2	2.05	0.57
16:V:130:MET:HA	16:V:133:LEU:HD13	1.87	0.57
15:U:82:ASN:HD21	15:U:94:ILE:HG23	1.68	0.57
3:C:249:ILE:O	3:C:249:ILE:CG2	2.53	0.57
16:V:61:TYR:CD1	16:V:61:TYR:C	2.78	0.57
23:A:1003:CLA:C16	24:A:1038:PHO:C9	2.57	0.57
1:A:166:GLY:HA3	3:C:357:ARG:NH1	2.19	0.57
2:B:454:ALA:O	2:B:458:PHE:HB2	2.05	0.57
23:C:1026:CLA:C7	23:C:1026:CLA:C4	2.80	0.57
2:B:323:GLY:C	4:D:293:LEU:HD22	2.24	0.57
5:E:22:ILE:HA	5:E:25:ILE:HD12	1.86	0.57
8:I:30:ARG:HA	8:I:30:ARG:CZ	2.34	0.57
17:X:24:LEU:HD12	17:X:24:LEU:C	2.25	0.57
23:C:1035:CLA:H151	20:Z:20:VAL:HG13	1.87	0.57
13:O:148:VAL:HG11	13:O:151:LEU:HD22	1.87	0.57
15:U:98:THR:O	15:U:101:GLN:N	2.38	0.57
3:C:315:MET:SD	3:C:319:ILE:HD11	2.45	0.57
4:D:183:LEU:HD23	4:D:183:LEU:N	2.19	0.57
23:A:1006:CLA:HHC	23:A:1006:CLA:CBB	2.29	0.57
24:A:1038:PHO:HAC2	4:D:209:LEU:HA	1.85	0.57
1:A:113:GLN:O	1:A:116:ILE:HG22	2.05	0.57
1:A:113:GLN:O	1:A:114:LEU:C	2.40	0.57
1:A:149:ALA:HB2	1:A:280:VAL:HG13	1.86	0.57
2:B:106:LEU:HD11	27:B:1048:BCR:H352	1.86	0.57
2:B:122:LEU:HB2	7:H:12:ARG:HB2	1.87	0.57
2:B:472:ARG:HG2	2:B:479:PHE:CZ	2.39	0.57
2:B:66:MET:SD	23:B:1013:CLA:CED	2.93	0.57
28:C:1056:DGD:HBT2	28:C:1056:DGD:CEB	2.35	0.57
3:C:261:ARG:CZ	3:C:261:ARG:N	2.68	0.57
3:C:336:GLY:O	13:O:131:PRO:HG3	2.05	0.57
4:D:235:PHE:CZ	4:D:243:THR:CG2	2.87	0.57
4:D:246:MET:HE1	4:D:264:LYS:N	2.20	0.57
4:D:88:SER:HA	7:H:50:ASN:ND2	2.20	0.57
5:E:19:TYR:O	5:E:21:VAL:N	2.38	0.57
11:L:30:LEU:CD2	11:L:31:PHE:N	2.68	0.57
2:B:398:THR:HA	2:B:417:VAL:HG21	1.87	0.57
15:U:58:ASN:C	15:U:127:ARG:HH21	2.08	0.57
1:A:340:PRO:HD3	15:U:133:TYR:CE2	2.40	0.57
1:A:161:TYR:HA	1:A:294:ALA:HB1	1.85	0.57
17:X:12:ILE:O	17:X:12:ILE:HG13	2.05	0.57
23:A:1006:CLA:CAA	28:C:1057:DGD:HBN2	2.34	0.57

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:81:ALA:HB1	1:A:174:LEU:O	2.05	0.57
2:B:135:LEU:CD1	2:B:135:LEU:H	2.05	0.57
23:C:1026:CLA:CMB	23:C:1026:CLA:HBB1	2.13	0.57
23:A:1006:CLA:C12	28:C:1057:DGD:HBG1	2.29	0.57
3:C:164:HIS:ND1	23:C:1031:CLA:OBD	2.37	0.57
3:C:213:LEU:HG	3:C:214:LEU:N	2.19	0.57
3:C:189:TRP:CD1	3:C:295:THR:HG22	2.39	0.57
3:C:61:VAL:HG21	3:C:125:LEU:CD1	2.35	0.57
23:B:1016:CLA:H202	23:D:1008:CLA:C3A	2.35	0.57
4:D:92:LEU:HD22	4:D:104:TRP:CG	2.40	0.57
4:D:152:VAL:HG13	4:D:153:PHE:N	2.19	0.57
2:B:223:GLN:HG2	7:H:24:GLY:C	2.25	0.57
14:T:10:PHE:O	14:T:12:CYS:N	2.37	0.57
1:A:324:ALA:O	4:D:325:ILE:HG23	2.05	0.57
13:O:225:LEU:HD23	13:O:265:PHE:CE1	2.40	0.57
25:V:1041:HEM:HBC2	25:V:1041:HEM:HH2	1.87	0.57
23:B:1011:CLA:HBB1	23:B:1013:CLA:H192	1.85	0.57
2:B:426:PHE:CZ	13:O:201:PRO:HB3	2.36	0.57
23:C:1034:CLA:H42	23:C:1034:CLA:CGA	2.34	0.57
4:D:36:LEU:HD11	4:D:120:PHE:HB3	1.87	0.57
5:E:44:TYR:CD2	5:E:51:ARG:NE	2.73	0.57
23:B:1009:CLA:C1	27:H:1049:BCR:H351	2.34	0.57
1:A:314:ILE:HD12	4:D:58:TRP:CZ3	2.39	0.57
16:V:81:ARG:HD3	16:V:157:GLY:CA	2.34	0.57
16:V:95:ILE:O	16:V:99:VAL:HG23	2.04	0.57
1:A:162:PRO:O	1:A:165:GLN:O	2.22	0.57
1:A:31:GLY:O	1:A:34:GLY:N	2.39	0.56
2:B:219:VAL:CG1	2:B:220:ARG:N	2.67	0.56
2:B:448:ARG:HH11	2:B:448:ARG:CB	2.17	0.56
3:C:284:PHE:C	3:C:286:ALA:N	2.57	0.56
3:C:311:GLN:NE2	3:C:351:PHE:CD2	2.69	0.56
3:C:354:GLU:HA	3:C:356:MET:HE2	1.85	0.56
4:D:23:LYS:HA	4:D:29:PHE:HE1	1.69	0.56
4:D:105:CYS:SG	5:E:47:PHE:HB3	2.45	0.56
25:E:1040:HEM:CBC	6:F:19:ARG:HH12	2.17	0.56
1:A:33:PHE:CE1	8:I:23:PHE:HE2	2.23	0.56
2:B:368:VAL:HG21	2:B:421:ALA:HB1	1.87	0.56
2:B:92:SER:C	2:B:94:GLU:N	2.59	0.56
3:C:204:LEU:N	3:C:204:LEU:HD22	2.20	0.56
1:A:140:ARG:NH2	30:A:1063:LHG:C1	2.68	0.56
1:A:90:GLY:CA	1:A:167:SER:CB	2.81	0.56
2:B:190:PHE:CZ	23:B:1009:CLA:HMA3	2.41	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:105:GLY:HA3	27:B:1047:BCR:H282	1.85	0.56
2:B:174:LEU:N	2:B:266:GLU:OE1	2.38	0.56
2:B:223:GLN:C	2:B:225:LEU:H	2.08	0.56
3:C:224:ILE:N	3:C:224:ILE:HD13	2.20	0.56
3:C:97:TRP:HE1	3:C:178:LYS:HE2	1.70	0.56
7:H:48:ILE:CG1	7:H:53:LEU:HD23	2.35	0.56
16:V:159:GLY:HA2	16:V:163:TYR:HE1	1.71	0.56
13:O:147:THR:OG1	13:O:148:VAL:N	2.38	0.56
15:U:71:LEU:HD11	15:U:108:ASN:ND2	2.21	0.56
1:A:41:LEU:HD12	24:A:1038:PHO:C5	2.35	0.56
1:A:106:LEU:HD21	27:A:1044:BCR:C38	2.36	0.56
1:A:116:ILE:HD11	1:A:158:PHE:CB	2.35	0.56
1:A:284:TRP:O	1:A:287:ALA:HB3	2.05	0.56
23:B:1011:CLA:HBD	23:B:1011:CLA:HAA1	1.88	0.56
23:B:1013:CLA:HMC3	23:B:1023:CLA:H11	1.87	0.56
29:B:1060:MGE:CBB	29:B:1060:MGE:CFB	2.36	0.56
29:B:1060:MGE:O2D	29:B:1060:MGE:C3G	2.53	0.56
2:B:206:GLY:O	2:B:210:ILE:HG12	2.05	0.56
2:B:259:GLY:HA2	7:H:62:TRP:CZ2	2.40	0.56
23:C:1029:CLA:CHD	23:C:1029:CLA:HBC3	2.35	0.56
3:C:250:TRP:O	3:C:254:THR:HB	2.05	0.56
4:D:199:MET:O	4:D:200:GLY:C	2.42	0.56
12:M:8:PHE:O	12:M:10:ALA:N	2.38	0.56
1:A:104:GLU:OE2	13:O:99:ARG:NH1	2.38	0.56
14:T:14:ILE:HG23	27:T:6046:BCR:H10C	1.87	0.56
17:X:24:LEU:HD12	17:X:25:SER:N	2.20	0.56
1:A:269:ARG:HH11	4:D:231:THR:HG23	1.70	0.56
23:B:1020:CLA:HBD	23:B:1020:CLA:HAA1	1.86	0.56
3:C:297:TYR:OH	23:C:1026:CLA:O1D	2.23	0.56
23:C:1033:CLA:H152	23:C:1036:CLA:HMD2	1.88	0.56
3:C:343:ARG:NH1	3:C:343:ARG:HG3	2.20	0.56
2:B:257:TRP:CZ2	4:D:291:LEU:HA	2.40	0.56
14:T:2:GLU:HA	14:T:5:THR:HB	1.87	0.56
14:T:2:GLU:O	14:T:6:TYR:HD2	1.86	0.56
4:D:324:GLY:C	4:D:326:ARG:H	2.08	0.56
16:V:162:TYR:O	16:V:163:TYR:HB2	2.05	0.56
13:O:65:ARG:HE	13:O:110:GLU:CA	2.17	0.56
15:U:80:VAL:HG13	15:U:127:ARG:HD3	1.87	0.56
16:V:85:LEU:HD22	16:V:92:ARG:O	2.05	0.56
13:O:133:THR:HG22	13:O:134:VAL:H	1.70	0.56
2:B:321:LYS:HB3	2:B:321:LYS:NZ	2.21	0.56
13:O:36:ILE:HD12	13:O:36:ILE:H	1.70	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:A:1038:PHO:HMA2	4:D:257:PHE:HE2	1.70	0.56
2:B:31:ALA:CB	2:B:103:LEU:HD12	2.34	0.56
2:B:105:GLY:CA	27:B:1047:BCR:H282	2.36	0.56
2:B:159:THR:HG21	2:B:161:LEU:CD2	2.35	0.56
23:A:1006:CLA:HAA2	28:C:1057:DGD:CFB	2.36	0.56
3:C:261:ARG:NH1	3:C:261:ARG:H	2.04	0.56
4:D:103:ARG:HG3	4:D:103:ARG:NH1	2.20	0.56
4:D:199:MET:SD	4:D:281:MET:HG2	2.45	0.56
4:D:92:LEU:CD1	4:D:99:GLY:HA2	2.34	0.56
4:D:93:TRP:N	4:D:93:TRP:CE3	2.71	0.56
8:I:26:GLY:O	8:I:30:ARG:HG2	2.05	0.56
6:F:37:ILE:CG2	9:J:28:PHE:CE1	2.87	0.56
1:A:101:SER:O	1:A:104:GLU:N	2.38	0.56
1:A:95:PRO:HD2	1:A:98:GLU:HG3	1.88	0.56
2:B:454:ALA:CB	23:B:1015:CLA:CBB	2.83	0.56
2:B:23:HIS:HE1	23:B:1018:CLA:H193	1.70	0.56
23:B:1021:CLA:HBD	23:B:1021:CLA:HAA2	1.87	0.56
2:B:117:TYR:O	2:B:120:LEU:HD21	2.05	0.56
2:B:156:PHE:HB3	2:B:162:PHE:HB3	1.88	0.56
23:C:1033:CLA:H151	23:C:1033:CLA:H192	0.71	0.56
23:C:1036:CLA:H172	27:Z:1053:BCR:C37	2.13	0.56
4:D:139:ARG:HH11	4:D:139:ARG:HG3	1.68	0.56
11:L:30:LEU:C	11:L:30:LEU:HD23	2.26	0.56
13:O:178:ARG:HD3	13:O:182:PHE:CG	2.41	0.56
15:U:100:ARG:O	15:U:103:GLN:HB3	2.04	0.56
3:C:304:PRO:HB3	3:C:395:TYR:HD2	1.66	0.56
2:B:18:ARG:NH1	11:L:4:ASN:ND2	2.53	0.56
1:A:161:TYR:HB3	1:A:162:PRO:HD3	1.88	0.56
23:B:1014:CLA:CBC	23:B:1014:CLA:CHD	2.78	0.56
2:B:108:PHE:HD2	2:B:109:LEU:HD23	1.71	0.56
2:B:121:GLU:C	2:B:123:PHE:H	2.07	0.56
28:C:1057:DGD:HBV1	28:C:1057:DGD:HAG2	1.87	0.56
3:C:265:ILE:HG13	3:C:449:ARG:HE	1.69	0.56
3:C:318:LEU:CG	3:C:328:VAL:HG11	2.36	0.56
4:D:274:VAL:HG13	26:D:1042:PQ9:C27	2.35	0.56
7:H:12:ARG:HG3	7:H:15:ASN:HB3	1.88	0.56
13:O:66:ILE:O	13:O:66:ILE:HG13	2.04	0.56
15:U:103:GLN:O	15:U:104:ILE:C	2.44	0.56
23:A:1003:CLA:H193	24:A:1038:PHO:CMA	2.35	0.56
1:A:273:PHE:CE2	1:A:277:ALA:HB2	2.41	0.56
1:A:60:ILE:CD1	1:A:60:ILE:H	2.19	0.56
1:A:91:LEU:HD21	1:A:163:ILE:HA	1.87	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1012:CLA:O1A	23:B:1013:CLA:CHA	2.53	0.56
23:B:1023:CLA:H122	23:B:1023:CLA:C17	2.25	0.56
2:B:166:MET:HE3	2:B:181:VAL:HG21	1.87	0.56
23:C:1034:CLA:O2A	23:C:1034:CLA:C4	2.53	0.56
23:C:1035:CLA:H172	20:Z:20:VAL:HA	1.88	0.56
3:C:441:HIS:HD2	3:C:442:LEU:HD23	1.69	0.56
8:I:6:ILE:HG12	8:I:7:THR:N	2.21	0.56
16:V:90:PRO:HG2	16:V:92:ARG:CZ	2.36	0.56
13:O:85:LYS:HG3	13:O:86:ARG:H	1.71	0.56
18:Y:43:ARG:O	20:Z:30:PRO:HD2	2.06	0.56
13:O:37:VAL:O	13:O:37:VAL:HG13	2.06	0.56
3:C:379:LYS:HA	3:C:383:ASP:HB2	1.87	0.56
1:A:183:MET:HB3	23:A:1003:CLA:CBC	2.34	0.56
23:A:1003:CLA:H172	24:A:1038:PHO:C4	2.28	0.56
2:B:113:TRP:HD1	27:B:1048:BCR:H373	1.67	0.56
2:B:141:ILE:HG23	2:B:217:ILE:CD1	2.35	0.56
23:C:1029:CLA:HAA1	23:C:1029:CLA:CBD	2.36	0.56
23:C:1030:CLA:HMC2	23:C:1031:CLA:C8	2.35	0.56
3:C:459:ILE:HB	4:D:223:PHE:CE1	2.41	0.56
3:C:94:THR:HG22	3:C:298:PRO:HG3	1.88	0.56
24:A:1038:PHO:HHB	23:D:1005:CLA:C9	2.34	0.56
4:D:129:GLN:OE1	4:D:143:ALA:HA	2.05	0.56
4:D:168:PHE:CD2	4:D:168:PHE:C	2.79	0.56
25:E:1040:HEM:CBB	25:E:1040:HEM:HMB2	2.34	0.56
8:I:4:LEU:HD12	8:I:4:LEU:O	2.06	0.56
1:A:94:TYR:CE2	13:O:99:ARG:NH1	2.74	0.56
15:U:58:ASN:C	15:U:127:ARG:NH2	2.60	0.56
17:X:13:THR:HG23	17:X:14:PRO:CD	2.36	0.56
16:V:36:VAL:HG23	16:V:37:PRO:N	2.21	0.56
5:E:8:ARG:HE	5:E:8:ARG:HA	1.71	0.56
1:A:22:THR:HA	1:A:29:TYR:HE1	1.70	0.56
23:B:1022:CLA:C4D	23:B:1022:CLA:O1A	2.53	0.56
23:B:1012:CLA:H102	23:B:1023:CLA:H11	1.86	0.56
2:B:12:LEU:HD13	2:B:19:LEU:HA	1.86	0.56
2:B:279:TYR:O	2:B:280:PHE:C	2.43	0.56
2:B:443:PHE:O	2:B:443:PHE:HD2	1.88	0.56
23:C:1034:CLA:C9	23:C:1034:CLA:H143	2.32	0.56
28:C:1057:DGD:CEA	29:J:1059:MGE:H222	2.36	0.56
3:C:244:CYS:HA	23:C:1030:CLA:HMC3	1.88	0.56
1:A:239:PHE:CZ	4:D:247:VAL:HG13	2.41	0.56
4:D:284:ILE:O	4:D:287:VAL:HG13	2.06	0.56
13:O:41:LEU:C	13:O:43:ASN:H	2.10	0.56

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:205:GLU:C	13:O:207:GLU:N	2.59	0.56
23:B:1013:CLA:H152	23:B:1018:CLA:CED	2.36	0.56
2:B:464:PHE:HD1	23:B:1019:CLA:HBC1	1.70	0.56
2:B:13:ILE:HD12	2:B:14:ASN:N	2.21	0.56
3:C:123:ALA:HA	27:K:1052:BCR:H351	1.88	0.56
11:L:18:TYR:HE2	14:T:20:ALA:HA	1.71	0.56
13:O:145:LEU:HD23	13:O:145:LEU:N	2.18	0.56
16:V:105:PRO:HD2	16:V:115:ALA:HB2	1.86	0.56
18:Y:19:ILE:C	18:Y:19:ILE:HD13	2.25	0.56
15:U:118:GLU:C	15:U:118:GLU:OE2	2.44	0.56
23:A:1003:CLA:CAD	23:D:1005:CLA:CBC	2.85	0.55
1:A:113:GLN:O	1:A:115:ILE:N	2.39	0.55
23:B:1010:CLA:C4D	23:B:1011:CLA:CMB	2.84	0.55
2:B:158:LEU:CD1	2:B:199:VAL:HG22	2.36	0.55
2:B:362:PHE:H	2:B:362:PHE:HD2	1.53	0.55
3:C:250:TRP:NE1	23:C:1030:CLA:CED	2.65	0.55
5:E:37:PHE:HE2	5:E:43:ALA:HA	1.71	0.55
7:H:6:TRP:CD1	7:H:10:ILE:HD11	2.41	0.55
27:T:6046:BCR:C38	27:T:6046:BCR:H373	2.25	0.55
1:A:194:MET:CE	1:A:300:PHE:HB2	2.35	0.55
15:U:109:LEU:O	15:U:111:HIS:N	2.39	0.55
16:V:89:THR:OG1	16:V:109:ASP:HA	2.05	0.55
1:A:273:PHE:CZ	1:A:277:ALA:HB2	2.41	0.55
23:B:1023:CLA:CBB	23:B:1023:CLA:HHC	2.34	0.55
2:B:191:ASN:HD22	2:B:192:PRO:N	2.03	0.55
23:C:1035:CLA:HAA1	23:C:1035:CLA:HBD	1.87	0.55
23:C:1036:CLA:H151	27:Z:1053:BCR:C36	2.36	0.55
3:C:274:TYR:H	3:C:274:TYR:HD1	1.53	0.55
5:E:23:HIS:HA	5:E:26:THR:OG1	2.06	0.55
7:H:11:LEU:O	7:H:14:LEU:HB2	2.06	0.55
12:M:4:ASN:OD1	12:M:6:LEU:HG	2.06	0.55
1:A:313:VAL:HG13	1:A:313:VAL:O	2.07	0.55
2:B:371:THR:HG23	2:B:371:THR:O	2.05	0.55
4:D:311:PHE:HD1	4:D:311:PHE:C	2.08	0.55
15:U:88:VAL:HG12	15:U:109:LEU:HD13	1.88	0.55
1:A:296:ASN:CG	3:C:401:LEU:HG	2.27	0.55
1:A:149:ALA:HA	1:A:284:TRP:CD1	2.40	0.55
23:B:1016:CLA:HBC2	23:B:1016:CLA:CHD	2.28	0.55
23:B:1018:CLA:HBD	23:B:1018:CLA:HAA2	1.87	0.55
23:B:1022:CLA:C17	23:B:1022:CLA:C14	2.39	0.55
23:B:1014:CLA:H143	27:B:1048:BCR:H10C	1.88	0.55
2:B:15:ASP:C	2:B:17:GLY:H	2.09	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:256:MET:HG3	2:B:451:PHE:CD2	2.42	0.55
1:A:288:LEU:HD23	3:C:432:VAL:HG13	1.88	0.55
3:C:459:ILE:CD1	3:C:459:ILE:N	2.68	0.55
4:D:261:PHE:CE2	4:D:267:LEU:CB	2.88	0.55
4:D:91:LEU:HA	23:D:1008:CLA:CED	2.36	0.55
13:O:162:ILE:HD12	13:O:162:ILE:H	1.71	0.55
1:A:33:PHE:CB	1:A:129:ARG:HB2	2.34	0.55
1:A:231:GLU:HG2	1:A:235:TYR:HE1	1.72	0.55
1:A:288:LEU:O	1:A:292:THR:N	2.39	0.55
2:B:156:PHE:CD1	23:B:1014:CLA:HBC1	2.41	0.55
2:B:165:GLY:CA	2:B:180:PRO:HA	2.36	0.55
2:B:246:PHE:C	2:B:246:PHE:CD1	2.79	0.55
2:B:262:THR:C	2:B:264:PRO:HD3	2.27	0.55
23:C:1034:CLA:C12	23:C:1034:CLA:H92	2.27	0.55
23:C:1028:CLA:H42	28:C:1056:DGD:HB32	1.88	0.55
3:C:262:ARG:O	3:C:263:ALA:HB3	2.07	0.55
7:H:3:ARG:HH22	11:L:1:MET:H1	1.55	0.55
10:K:35:LEU:O	10:K:37:PHE:N	2.40	0.55
13:O:120:THR:O	13:O:120:THR:HG22	2.06	0.55
2:B:354:LEU:HD22	2:B:370:LEU:HD13	1.87	0.55
16:V:64:ALA:O	16:V:66:CYS:O	2.24	0.55
2:B:384:ARG:NH1	4:D:348:ARG:HD3	2.21	0.55
2:B:315:ILE:HG23	2:B:316:GLY:N	2.21	0.55
1:A:128:GLY:C	1:A:130:GLN:N	2.60	0.55
2:B:155:ALA:O	2:B:161:LEU:HD23	2.07	0.55
23:A:1006:CLA:C11	28:C:1057:DGD:HBG3	2.07	0.55
3:C:295:THR:O	3:C:298:PRO:HD3	2.05	0.55
4:D:286:VAL:HG21	23:D:1004:CLA:HED2	1.88	0.55
4:D:80:THR:HB	4:D:81:PRO:HD2	1.89	0.55
7:H:40:VAL:CG1	7:H:41:PHE:N	2.70	0.55
10:K:32:PHE:HE2	27:K:1051:BCR:C34	2.15	0.55
1:A:57:PRO:HG2	13:O:141:ARG:HH12	1.69	0.55
13:O:179:THR:HG22	13:O:180:ALA:H	1.69	0.55
13:O:266:TYR:CD1	13:O:267:ALA:N	2.75	0.55
18:Y:19:ILE:O	18:Y:19:ILE:HD13	2.06	0.55
16:V:114:ILE:HG23	16:V:114:ILE:O	2.06	0.55
1:A:192:ILE:HD13	1:A:198:HIS:CD2	2.42	0.55
1:A:309:ALA:HB3	16:V:28:GLU:HG2	1.89	0.55
2:B:25:MET:CE	2:B:108:PHE:CD1	2.89	0.55
2:B:152:GLY:HA2	2:B:155:ALA:CB	2.34	0.55
2:B:326:ARG:CB	2:B:444:ARG:HG3	2.32	0.55
23:B:1019:CLA:H91	29:L:1061:MGE:C8A	2.37	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:V:68:VAL:C	16:V:70:GLY:H	2.08	0.55
14:T:25:GLU:O	14:T:25:GLU:HG3	2.07	0.55
1:A:339:PHE:HD2	31:A:1065:BR:BR	2.45	0.55
16:V:61:TYR:HD1	16:V:61:TYR:C	2.09	0.55
2:B:434:THR:OG1	13:O:204:LYS:HE3	2.06	0.55
1:A:126:TYR:CE2	24:A:1038:PHO:O1A	2.59	0.55
1:A:53:ILE:HG22	1:A:54:ALA:N	2.21	0.55
1:A:76:ASN:ND2	1:A:79:THR:HG23	2.21	0.55
23:B:1016:CLA:HBD	23:B:1016:CLA:HBA1	1.88	0.55
2:B:142:HIS:HA	2:B:145:LEU:HD12	1.88	0.55
2:B:226:TYR:O	2:B:226:TYR:CD2	2.60	0.55
4:D:213:ILE:HG23	4:D:214:HIS:H	1.72	0.55
4:D:89:LEU:HG	4:D:91:LEU:CD1	2.35	0.55
5:E:42:LEU:O	5:E:43:ALA:C	2.44	0.55
1:A:72:LEU:CD2	14:T:3:THR:HG21	2.37	0.55
17:X:34:PHE:O	17:X:38:ILE:HD11	2.06	0.55
2:B:422:ARG:HD2	2:B:423:LYS:HZ1	1.70	0.55
15:U:98:THR:N	15:U:101:GLN:HG3	2.22	0.55
5:E:68:ASP:CA	5:E:69:ARG:HE	2.19	0.55
1:A:210:LEU:HD23	23:A:1006:CLA:H51	1.88	0.55
23:B:1016:CLA:H202	23:D:1008:CLA:H3A	1.87	0.55
23:B:1024:CLA:C1	23:B:1024:CLA:HMA2	2.36	0.55
2:B:144:PHE:O	2:B:210:ILE:HD13	2.06	0.55
23:C:1026:CLA:C3B	23:C:1028:CLA:HBB2	2.36	0.55
1:A:155:PHE:CD1	28:C:1055:DGD:HBF2	2.42	0.55
3:C:162:GLY:O	3:C:165:LEU:HB2	2.07	0.55
3:C:248:GLY:C	3:C:250:TRP:H	2.09	0.55
4:D:155:SER:HA	4:D:159:ILE:HD11	1.88	0.55
4:D:65:SER:O	4:D:76:VAL:HG22	2.07	0.55
6:F:18:VAL:C	6:F:20:TRP:N	2.59	0.55
10:K:39:VAL:CG2	18:Y:36:ILE:HD12	2.33	0.55
13:O:150:ASN:O	13:O:151:LEU:O	2.24	0.55
16:V:120:SER:N	16:V:123:SER:HB2	2.13	0.55
2:B:348:ASN:HD21	2:B:350:GLU:HB2	1.71	0.55
23:A:1006:CLA:C18	27:D:1050:BCR:C29	2.85	0.55
27:A:1044:BCR:H403	27:A:1044:BCR:H371	1.30	0.55
1:A:199:GLN:HG3	1:A:200:LEU:H	1.72	0.55
1:A:57:PRO:HG2	13:O:141:ARG:CZ	2.37	0.55
1:A:97:TRP:HB2	8:I:1:MET:HG3	1.88	0.55
23:B:1010:CLA:C1D	23:B:1011:CLA:CMB	2.85	0.55
23:B:1020:CLA:C1	23:B:1023:CLA:CED	2.63	0.55
23:B:1023:CLA:CMA	23:B:1023:CLA:O1A	2.55	0.55

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:226:TYR:HE2	2:B:231:MET:O	1.90	0.55
2:B:229:LEU:HD21	2:B:236:THR:OG1	2.06	0.55
2:B:250:PHE:CE2	23:B:1010:CLA:C20	2.90	0.55
2:B:277:SER:O	2:B:278:SER:HB2	2.07	0.55
23:C:1027:CLA:C17	27:Z:1053:BCR:H10C	2.35	0.55
3:C:85:GLY:H	28:C:1056:DGD:HE4	1.71	0.55
3:C:254:THR:HG22	3:C:255:THR:O	2.06	0.55
4:D:168:PHE:HD2	4:D:168:PHE:C	2.10	0.55
17:X:33:THR:CG2	17:X:34:PHE:N	2.70	0.55
13:O:154:SER:O	13:O:168:PHE:HA	2.07	0.55
20:Z:62:VAL:O	20:Z:62:VAL:HG22	2.06	0.55
2:B:74:SER:HA	2:B:92:SER:HB2	1.88	0.55
4:D:331:PRO:HA	4:D:339:PHE:HB2	1.88	0.55
2:B:185:TRP:CD1	2:B:185:TRP:N	2.74	0.55
2:B:249:ALA:HB2	23:B:1012:CLA:CBC	2.37	0.55
2:B:456:ALA:CB	28:H:1058:DGD:HBG2	2.36	0.55
23:C:1036:CLA:C18	27:Z:1053:BCR:C37	2.85	0.55
28:C:1056:DGD:HBN2	10:K:30:VAL:CG2	2.28	0.55
3:C:269:GLU:OE1	3:C:447:ARG:HG2	2.07	0.55
3:C:56:HIS:ND1	3:C:57:ALA:N	2.54	0.55
3:C:63:TRP:N	23:C:1034:CLA:CED	2.69	0.55
1:A:244:GLU:HG3	4:D:264:LYS:HZ1	1.71	0.55
11:L:21:LEU:HB3	14:T:16:LEU:HD21	1.89	0.55
1:A:94:TYR:HE2	13:O:99:ARG:NH1	2.04	0.55
13:O:71:LEU:HD22	13:O:148:VAL:HG21	1.89	0.55
17:X:11:THR:O	17:X:12:ILE:HG22	2.07	0.55
11:L:16:SER:HA	11:L:19:LEU:HD12	1.88	0.55
23:B:1016:CLA:CHA	23:B:1016:CLA:CBA	2.80	0.54
23:B:1021:CLA:C18	29:B:1060:MGE:CDA	2.85	0.54
2:B:221:PRO:HA	23:H:1017:CLA:CED	2.26	0.54
2:B:248:ALA:O	2:B:252:VAL:HG23	2.07	0.54
2:B:325:PHE:CD1	11:L:34:TYR:HB3	2.42	0.54
5:E:32:ILE:O	5:E:36:LEU:HG	2.07	0.54
7:H:38:PHE:HD1	27:H:1049:BCR:H10C	1.72	0.54
11:L:18:TYR:HE2	14:T:19:PHE:O	1.90	0.54
15:U:42:VAL:HG23	15:U:43:VAL:N	2.22	0.54
13:O:31:LEU:CD2	13:O:31:LEU:N	2.70	0.54
2:B:73:GLY:HA3	2:B:88:PRO:HD2	1.89	0.54
4:D:227:GLU:O	4:D:228:GLY:O	2.24	0.54
1:A:234:ASN:O	4:D:263:ASN:ND2	2.39	0.54
2:B:159:THR:HG21	2:B:161:LEU:HD22	1.89	0.54
2:B:165:GLY:HA3	2:B:180:PRO:CA	2.37	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:276:LEU:HD22	3:C:441:HIS:HB2	1.89	0.54
4:D:72:ASN:ND2	4:D:74:LEU:HG	2.21	0.54
4:D:76:VAL:O	4:D:77:ALA:HB2	2.06	0.54
8:I:13:THR:CG2	8:I:14:PHE:H	2.18	0.54
8:I:3:THR:O	8:I:6:ILE:HD11	2.06	0.54
20:Z:12:LEU:HD11	20:Z:51:VAL:HB	1.89	0.54
2:B:397:VAL:HG22	2:B:417:VAL:HG11	1.88	0.54
9:J:8:ILE:HG22	9:J:9:PRO:HD2	1.89	0.54
1:A:119:PHE:CZ	23:A:1003:CLA:H91	2.43	0.54
1:A:130:GLN:HA	4:D:256:ILE:HD12	1.89	0.54
1:A:160:ILE:HG21	1:A:291:SER:CA	2.36	0.54
1:A:76:ASN:HD22	1:A:79:THR:HG23	1.71	0.54
2:B:458:PHE:CG	23:B:1012:CLA:HMC3	2.41	0.54
2:B:150:CYS:O	2:B:153:PHE:N	2.25	0.54
2:B:223:GLN:HB2	2:B:227:LYS:HZ3	1.72	0.54
2:B:326:ARG:HE	2:B:442:ILE:HG22	1.71	0.54
2:B:91:TRP:HE3	2:B:91:TRP:HA	1.72	0.54
23:C:1025:CLA:C2B	23:C:1025:CLA:H42	2.34	0.54
4:D:43:LEU:HD13	4:D:43:LEU:N	2.22	0.54
23:C:1037:CLA:C1B	27:Z:1053:BCR:H282	2.37	0.54
20:Z:49:ALA:C	20:Z:53:VAL:HG23	2.28	0.54
15:U:59:ASN:O	15:U:60:THR:O	2.25	0.54
3:C:314:ALA:O	3:C:315:MET:C	2.46	0.54
2:B:414:PRO:O	2:B:415:PRO:C	2.44	0.54
3:C:405:ASN:CG	3:C:405:ASN:O	2.45	0.54
13:O:56:TYR:HH	13:O:64:TYR:HE2	1.56	0.54
1:A:197:PHE:O	1:A:200:LEU:N	2.39	0.54
2:B:13:ILE:O	2:B:234:ILE:HG21	2.08	0.54
2:B:277:SER:HB3	2:B:279:TYR:HB2	1.89	0.54
2:B:461:LEU:HA	4:D:280:TRP:HZ3	1.72	0.54
2:B:9:HIS:HB2	23:B:1019:CLA:CGA	2.38	0.54
3:C:116:VAL:C	3:C:118:HIS:H	2.09	0.54
3:C:211:GLY:O	3:C:214:LEU:HB3	2.07	0.54
3:C:336:GLY:HA3	13:O:177:TYR:O	2.07	0.54
4:D:44:ALA:O	4:D:45:LEU:C	2.45	0.54
4:D:54:PHE:HB3	5:E:47:PHE:CE1	2.43	0.54
4:D:52:THR:O	4:D:66:SER:HA	2.07	0.54
9:J:10:LEU:CA	9:J:13:VAL:HG23	2.38	0.54
15:U:43:VAL:HG12	15:U:44:ASP:N	2.21	0.54
2:B:288:VAL:HG21	2:B:302:TRP:CD2	2.42	0.54
4:D:350:ASN:O	4:D:351:ALA:HB3	2.08	0.54
1:A:149:ALA:CB	1:A:283:VAL:HG22	2.23	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:281:GLN:HA	2:B:284:ILE:HG12	1.90	0.54
23:C:1034:CLA:C4	23:C:1034:CLA:CGA	2.85	0.54
3:C:211:GLY:O	3:C:212:TYR:C	2.45	0.54
3:C:72:LEU:C	3:C:72:LEU:HD13	2.28	0.54
23:D:1008:CLA:HAA1	23:D:1008:CLA:HBD	1.89	0.54
23:A:1006:CLA:H171	27:D:1050:BCR:H401	1.55	0.54
4:D:27:PHE:HB3	6:F:19:ARG:HB2	1.90	0.54
2:B:212:ALA:HB2	23:H:1017:CLA:HMC3	1.88	0.54
7:H:35:MET:HG3	27:H:1049:BCR:H333	1.85	0.54
10:K:28:ILE:HG22	10:K:29:PRO:HD3	0.62	0.54
2:B:6:TYR:CE2	11:L:11:GLU:HG3	2.43	0.54
4:D:58:TRP:O	4:D:62:GLY:HA2	2.07	0.54
16:V:130:MET:HA	16:V:133:LEU:CD1	2.37	0.54
20:Z:17:PHE:O	20:Z:21:ILE:HG13	2.07	0.54
1:A:30:VAL:O	1:A:30:VAL:HG12	2.07	0.54
3:C:100:GLY:O	3:C:103:GLY:N	2.38	0.54
23:A:1006:CLA:CBC	23:A:1006:CLA:CHD	2.77	0.54
23:A:1006:CLA:H142	23:D:1004:CLA:H192	1.88	0.54
1:A:200:LEU:O	1:A:282:GLY:HA3	2.08	0.54
1:A:261:GLN:O	1:A:263:ALA:N	2.38	0.54
23:B:1009:CLA:C3B	27:H:1049:BCR:C38	2.82	0.54
28:C:1057:DGD:HB92	28:C:1057:DGD:HA92	1.90	0.54
4:D:313:THR:H	4:D:316:THR:HG23	1.73	0.54
7:H:41:PHE:HD2	7:H:42:LEU:HD23	1.72	0.54
7:H:61:SER:OG	7:H:63:LYS:HB2	2.08	0.54
9:J:21:VAL:HG13	9:J:22:ILE:H	1.73	0.54
10:K:28:ILE:O	10:K:31:LEU:HD12	2.06	0.54
27:Z:1053:BCR:C27	27:Z:1053:BCR:H403	2.38	0.54
3:C:362:ARG:HG3	3:C:362:ARG:NH1	2.20	0.54
23:B:1010:CLA:H12	7:H:49:TYR:HD2	1.73	0.54
29:B:1060:MGE:O1B	29:B:1060:MGE:H1G1	2.07	0.54
2:B:449:GLY:O	2:B:452:THR:HB	2.07	0.54
3:C:163:PHE:CD2	23:C:1036:CLA:HBB1	2.43	0.54
3:C:42:LEU:HB3	3:C:151:TRP:HH2	1.71	0.54
23:A:1003:CLA:CHA	23:D:1005:CLA:HAC2	2.37	0.54
4:D:281:MET:HA	4:D:281:MET:HE2	1.90	0.54
4:D:21:TRP:CD1	17:X:40:ILE:HG22	2.43	0.54
1:A:223:LEU:O	1:A:224:ILE:O	2.26	0.54
2:B:9:HIS:CE1	23:B:1020:CLA:HBB2	2.42	0.54
2:B:153:PHE:HD2	2:B:202:HIS:ND1	2.06	0.54
2:B:217:ILE:HG23	2:B:218:LEU:CD2	2.38	0.54
2:B:462:PHE:CE1	23:B:1012:CLA:HAC1	2.43	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:51:VAL:HG13	2:B:52:LEU:HG	1.89	0.54
23:D:1005:CLA:H72	29:D:1062:MGE:CAB	2.36	0.54
5:E:44:TYR:O	5:E:46:VAL:N	2.40	0.54
4:D:26:ARG:NH1	6:F:17:THR:OG1	2.41	0.54
14:T:2:GLU:HG3	14:T:3:THR:N	2.22	0.54
23:C:1036:CLA:C18	27:Z:1053:BCR:H373	2.37	0.54
20:Z:3:ILE:H	20:Z:3:ILE:CD1	2.05	0.54
16:V:55:GLY:O	16:V:59:PHE:HB2	2.07	0.54
3:C:324:LEU:O	15:U:77:LYS:HG3	2.08	0.54
23:B:1015:CLA:H13	23:B:1021:CLA:H121	1.89	0.54
2:B:16:PRO:HA	2:B:19:LEU:HB3	1.89	0.54
2:B:27:THR:HG23	23:B:1013:CLA:CAC	2.36	0.54
2:B:309:LEU:O	2:B:309:LEU:HD23	2.08	0.54
2:B:235:GLU:OE2	2:B:472:ARG:HB2	2.07	0.54
3:C:171:GLY:C	3:C:173:LEU:H	2.11	0.54
3:C:60:ILE:HG12	23:C:1027:CLA:CMD	2.38	0.54
4:D:213:ILE:HG23	4:D:214:HIS:N	2.21	0.54
4:D:256:ILE:CG2	4:D:257:PHE:H	2.19	0.54
27:K:1051:BCR:H331	27:K:1051:BCR:C9	2.24	0.54
13:O:179:THR:CG2	13:O:180:ALA:N	2.71	0.54
11:L:25:LEU:HD22	14:T:13:ILE:HD13	1.89	0.54
13:O:65:ARG:CZ	13:O:66:ILE:N	2.59	0.54
16:V:108:TYR:O	16:V:109:ASP:O	2.26	0.54
3:C:349:ILE:N	3:C:349:ILE:CD1	2.71	0.54
3:C:325:GLY:C	15:U:128:TYR:CE2	2.82	0.54
5:E:75:GLN:HG3	5:E:79:PHE:HE1	1.72	0.54
16:V:54:GLU:O	16:V:58:LEU:HB2	2.08	0.54
1:A:59:ASP:OD1	1:A:64:ARG:HA	2.08	0.54
1:A:95:PRO:O	1:A:96:ILE:C	2.45	0.54
23:B:1013:CLA:HMC2	23:B:1023:CLA:C1	2.33	0.54
23:B:1016:CLA:HBC3	23:B:1016:CLA:CHD	2.32	0.54
23:B:1024:CLA:CMB	27:B:1048:BCR:H351	2.38	0.54
2:B:160:GLY:O	2:B:162:PHE:N	2.41	0.54
2:B:280:PHE:CZ	2:B:312:TYR:CD1	2.96	0.54
27:C:1054:BCR:C23	27:C:1054:BCR:H382	2.23	0.54
3:C:240:ILE:HD13	27:C:1054:BCR:C37	2.37	0.54
3:C:116:VAL:C	3:C:118:HIS:N	2.60	0.54
3:C:160:ILE:HB	23:C:1031:CLA:HMD1	1.90	0.54
3:C:162:GLY:CA	3:C:165:LEU:HB2	2.38	0.54
23:D:1005:CLA:HMA1	23:D:1005:CLA:H142	1.90	0.54
4:D:344:GLU:HG3	4:D:345:VAL:H	1.73	0.54
2:B:373:LYS:CG	2:B:374:ASN:H	2.21	0.54

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:227:VAL:HG12	13:O:228:ALA:N	2.23	0.54
2:B:315:ILE:HG12	2:B:321:LYS:HG3	1.90	0.54
24:A:1039:PHO:H18	4:D:48:TRP:CE2	2.42	0.53
2:B:9:HIS:CG	23:B:1020:CLA:HBB2	2.43	0.53
23:C:1032:CLA:C5	23:C:1032:CLA:H92	2.36	0.53
3:C:116:VAL:HG11	27:Z:1053:BCR:HC31	1.90	0.53
3:C:435:PHE:O	3:C:438:LEU:N	2.40	0.53
3:C:88:LEU:O	3:C:92:ILE:HG23	2.07	0.53
4:D:270:PHE:O	4:D:274:VAL:HG23	2.07	0.53
4:D:56:THR:HG21	5:E:50:PRO:HD3	1.89	0.53
8:I:1:MET:CE	8:I:4:LEU:HD23	2.37	0.53
20:Z:16:SER:HA	20:Z:19:MET:HB2	1.90	0.53
2:B:297:THR:HG22	2:B:300:GLU:CG	2.38	0.53
1:A:296:ASN:HB2	3:C:400:PRO:O	2.07	0.53
13:O:247:SER:OG	13:O:257:HIS:N	2.37	0.53
23:B:1014:CLA:HAA1	23:B:1014:CLA:HBD	1.89	0.53
23:B:1024:CLA:CMC	23:B:1024:CLA:CBC	2.66	0.53
27:B:1045:BCR:H403	27:B:1045:BCR:C22	2.34	0.53
2:B:272:ARG:CG	2:B:320:ALA:HB2	2.38	0.53
30:A:1063:LHG:C32	23:C:1034:CLA:C9	2.79	0.53
3:C:116:VAL:HG23	27:K:1052:BCR:HC41	1.90	0.53
3:C:54:VAL:O	3:C:54:VAL:HG12	2.09	0.53
4:D:129:GLN:CB	4:D:143:ALA:HB2	2.37	0.53
4:D:218:VAL:HA	4:D:221:THR:CG2	2.38	0.53
9:J:21:VAL:HG13	9:J:22:ILE:N	2.23	0.53
20:Z:42:LEU:HD13	20:Z:43:GLY:N	2.23	0.53
1:A:323:ARG:NH1	4:D:328:TRP:O	2.41	0.53
15:U:80:VAL:HG22	15:U:127:ARG:CZ	2.39	0.53
2:B:75:TRP:HB2	2:B:94:GLU:HG3	1.90	0.53
1:A:150:PRO:O	1:A:151:LEU:C	2.46	0.53
2:B:465:GLY:N	23:B:1019:CLA:HBC2	2.19	0.53
23:B:1020:CLA:H12	23:B:1023:CLA:O2D	2.08	0.53
23:C:1029:CLA:H111	23:C:1029:CLA:C19	2.35	0.53
23:C:1037:CLA:H191	23:C:1037:CLA:HMD2	1.91	0.53
3:C:117:VAL:HG12	3:C:117:VAL:O	2.08	0.53
3:C:46:SER:H	3:C:140:LEU:CD2	2.21	0.53
3:C:233:VAL:HG13	3:C:234:VAL:H	1.72	0.53
3:C:273:SER:O	3:C:276:LEU:N	2.38	0.53
3:C:60:ILE:CG1	23:C:1027:CLA:HMD3	2.37	0.53
4:D:158:LEU:O	4:D:162:LEU:HG	2.08	0.53
4:D:45:LEU:HD13	4:D:46:GLY:N	2.24	0.53
5:E:15:THR:OG1	9:J:10:LEU:HD23	2.08	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:370:LEU:HB2	2:B:379:ALA:O	2.07	0.53
15:U:80:VAL:CG1	15:U:127:ARG:HD3	2.38	0.53
15:U:73:PRO:HD2	16:V:109:ASP:CG	2.28	0.53
1:A:337:HIS:CB	31:A:1065:BR:BR	3.12	0.53
13:O:183:LEU:H	13:O:183:LEU:HD12	1.73	0.53
1:A:60:ILE:CG2	1:A:83:VAL:CG1	2.85	0.53
23:B:1013:CLA:H71	23:B:1018:CLA:H42	1.91	0.53
23:B:1014:CLA:C11	27:B:1048:BCR:H10C	2.32	0.53
2:B:11:VAL:O	2:B:12:LEU:HD23	2.09	0.53
2:B:247:PHE:HE1	23:B:1010:CLA:H8	1.72	0.53
2:B:457:VAL:CG1	4:D:284:ILE:HD13	2.38	0.53
3:C:155:ASN:O	3:C:156:LYS:C	2.47	0.53
23:A:1003:CLA:C3D	23:D:1005:CLA:HAC2	2.38	0.53
1:A:130:GLN:HA	4:D:256:ILE:HD11	1.90	0.53
4:D:284:ILE:O	4:D:287:VAL:N	2.40	0.53
4:D:29:PHE:CE2	4:D:132:ILE:HG12	2.43	0.53
4:D:53:THR:HG22	4:D:67:TYR:HE2	1.72	0.53
2:B:250:PHE:CZ	28:H:1058:DGD:HAG2	2.35	0.53
10:K:32:PHE:CD1	27:K:1052:BCR:H24C	2.36	0.53
11:L:25:LEU:O	11:L:28:ALA:HB3	2.09	0.53
16:V:33:VAL:HG12	16:V:34:LEU:HD12	1.90	0.53
1:A:133:LEU:HG	1:A:137:LEU:CD1	2.39	0.53
1:A:237:TYR:C	1:A:237:TYR:CD2	2.81	0.53
1:A:190:HIS:ND1	1:A:298:ASN:ND2	2.57	0.53
2:B:233:ASN:O	2:B:236:THR:HG22	2.08	0.53
2:B:444:ARG:HG2	2:B:444:ARG:NH1	2.23	0.53
2:B:65:PHE:O	2:B:68:ARG:CG	2.54	0.53
23:C:1028:CLA:O1D	23:C:1028:CLA:H2A	2.07	0.53
23:C:1033:CLA:H92	23:C:1033:CLA:H121	1.91	0.53
3:C:418:ASN:H	3:C:418:ASN:HD22	1.57	0.53
3:C:472:LEU:O	3:C:473:ASP:HB2	2.08	0.53
4:D:175:VAL:O	4:D:178:ILE:HG12	2.08	0.53
4:D:237:PRO:O	4:D:238:THR:HG22	2.08	0.53
6:F:41:GLN:HB2	9:J:31:GLY:HA3	1.90	0.53
14:T:10:PHE:C	14:T:12:CYS:N	2.61	0.53
15:U:40:VAL:HG12	15:U:41:ASN:N	2.22	0.53
23:A:1003:CLA:C17	24:A:1038:PHO:C4	2.85	0.53
1:A:223:LEU:HD13	1:A:224:ILE:CG1	2.38	0.53
2:B:68:ARG:NE	23:B:1011:CLA:HED1	2.24	0.53
23:B:1022:CLA:O1D	23:B:1022:CLA:CGA	2.57	0.53
2:B:103:LEU:HD13	2:B:103:LEU:C	2.28	0.53
2:B:462:PHE:O	2:B:463:PHE:C	2.47	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1025:CLA:H162	23:C:1031:CLA:CMB	2.23	0.53
3:C:282:MET:CG	23:C:1025:CLA:H71	2.39	0.53
23:C:1034:CLA:C17	23:C:1034:CLA:C14	2.49	0.53
3:C:245:ILE:C	3:C:247:GLY:H	2.12	0.53
3:C:429:SER:HA	28:C:1056:DGD:C9A	2.39	0.53
23:D:1005:CLA:H161	29:D:1062:MGE:H251	1.91	0.53
4:D:134:ARG:HH21	4:D:137:GLY:HA2	1.73	0.53
2:B:456:ALA:CB	28:H:1058:DGD:CIB	2.86	0.53
9:J:10:LEU:HA	9:J:13:VAL:HG21	1.91	0.53
2:B:355:PHE:HB2	2:B:371:THR:O	2.09	0.53
3:C:33:PHE:CD1	4:D:229:ALA:HB3	2.44	0.53
1:A:78:ILE:CA	1:A:176:ILE:HD12	2.18	0.53
2:B:145:LEU:O	2:B:146:ALA:C	2.47	0.53
2:B:17:GLY:CA	2:B:123:PHE:CE2	2.85	0.53
30:A:1063:LHG:H312	23:C:1034:CLA:H143	1.86	0.53
3:C:276:LEU:O	3:C:278:ALA:N	2.41	0.53
3:C:289:PHE:HB3	3:C:297:TYR:CE2	2.43	0.53
5:E:21:VAL:C	5:E:23:HIS:H	2.12	0.53
10:K:28:ILE:CB	10:K:29:PRO:HD3	2.29	0.53
3:C:369:LEU:HD13	3:C:369:LEU:O	2.09	0.53
15:U:73:PRO:HB2	16:V:109:ASP:OD2	2.09	0.53
1:A:292:THR:CG2	1:A:293:MET:N	2.72	0.53
1:A:41:LEU:HD12	24:A:1038:PHO:H51	1.89	0.53
23:B:1011:CLA:HBB1	23:B:1011:CLA:CHC	2.16	0.53
2:B:25:MET:HG2	2:B:111:ALA:CB	2.39	0.53
2:B:283:GLU:O	2:B:284:ILE:C	2.47	0.53
2:B:453:PHE:O	2:B:456:ALA:HB3	2.08	0.53
3:C:285:ILE:HG21	23:C:1025:CLA:H72	1.91	0.53
3:C:124:VAL:HG23	3:C:125:LEU:HG	1.90	0.53
3:C:429:SER:CA	28:C:1056:DGD:HA91	2.39	0.53
3:C:84:GLN:HB2	3:C:86:LEU:HD13	1.91	0.53
4:D:122:LEU:HB3	4:D:150:ILE:HD11	1.89	0.53
5:E:37:PHE:CE2	5:E:43:ALA:HA	2.44	0.53
5:E:30:LEU:CD1	6:F:32:PHE:HB2	2.38	0.53
9:J:30:TYR:C	9:J:32:ALA:H	2.12	0.53
11:L:27:LEU:CD1	12:M:14:PHE:HZ	2.15	0.53
16:V:105:PRO:HD3	16:V:120:SER:CB	2.39	0.53
13:O:92:VAL:HG22	13:O:93:PRO:HD2	1.89	0.53
2:B:476:ARG:HG3	2:B:477:ASP:N	2.24	0.53
1:A:131:TRP:CE3	1:A:132:GLU:HA	2.44	0.53
1:A:131:TRP:CE3	1:A:132:GLU:N	2.77	0.53
1:A:268:SER:CB	4:D:236:ASN:HD21	2.22	0.53

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1010:CLA:HMD2	23:B:1011:CLA:C10	2.39	0.53
2:B:258:TYR:OH	4:D:162:LEU:HB3	2.09	0.53
23:C:1026:CLA:HBA1	23:C:1027:CLA:CMC	2.39	0.53
23:C:1034:CLA:H43	23:C:1034:CLA:H71	1.83	0.53
3:C:441:HIS:CD2	3:C:442:LEU:HD23	2.43	0.53
3:C:72:LEU:HD23	3:C:108:THR:HB	1.90	0.53
4:D:291:LEU:O	4:D:293:LEU:N	2.41	0.53
8:I:13:THR:HG23	8:I:14:PHE:N	2.24	0.53
10:K:35:LEU:HD12	10:K:38:VAL:CG2	2.38	0.53
20:Z:15:LEU:O	20:Z:18:VAL:HB	2.07	0.53
20:Z:39:LEU:HD12	20:Z:42:LEU:HB2	1.91	0.53
15:U:97:LEU:HB3	15:U:102:LYS:CG	2.36	0.53
3:C:135:ARG:NH1	20:Z:33:TRP:CG	2.77	0.53
18:Y:19:ILE:CG2	18:Y:20:ALA:N	2.72	0.53
1:A:265:PHE:CZ	30:A:1063:LHG:H152	2.44	0.53
1:A:121:LEU:O	1:A:124:SER:HB2	2.08	0.53
1:A:193:LEU:O	4:D:179:PHE:CE2	2.62	0.53
2:B:465:GLY:HA3	23:B:1019:CLA:HBC2	1.88	0.53
23:C:1036:CLA:H151	27:Z:1053:BCR:H361	1.91	0.53
4:D:166:SER:OG	4:D:167:TRP:N	2.42	0.53
5:E:38:VAL:HG12	6:F:39:ALA:HB1	1.91	0.53
14:T:8:PHE:O	14:T:10:PHE:N	2.42	0.53
20:Z:12:LEU:CD1	20:Z:51:VAL:HB	2.39	0.53
13:O:188:ARG:HA	13:O:194:TYR:O	2.09	0.53
15:U:113:THR:HG22	15:U:114:VAL:H	1.73	0.53
2:B:72:THR:C	2:B:93:PHE:HE2	2.13	0.53
1:A:219:VAL:CG2	1:A:220:THR:H	2.20	0.52
1:A:219:VAL:CG2	1:A:220:THR:N	2.71	0.52
2:B:149:LEU:CG	23:B:1011:CLA:HBC1	2.39	0.52
2:B:362:PHE:HE1	4:D:184:PHE:CE1	2.27	0.52
23:C:1028:CLA:H71	28:C:1056:DGD:HA71	1.92	0.52
23:C:1029:CLA:H202	23:C:1030:CLA:H172	1.90	0.52
28:C:1056:DGD:CIB	28:C:1056:DGD:HB41	2.39	0.52
3:C:311:GLN:OE1	3:C:355:THR:HG22	2.09	0.52
4:D:180:ARG:C	4:D:180:ARG:CD	2.77	0.52
7:H:37:LEU:N	7:H:37:LEU:HD12	2.24	0.52
27:K:1052:BCR:C38	27:K:1052:BCR:C23	2.59	0.52
10:K:24:VAL:O	10:K:24:VAL:HG12	2.08	0.52
2:B:346:PHE:CG	2:B:399:VAL:HG12	2.45	0.52
2:B:367:PRO:HB2	4:D:345:VAL:HG12	1.90	0.52
2:B:75:TRP:CB	2:B:94:GLU:HG3	2.38	0.52
5:E:82:GLN:O	5:E:84:LYS:N	2.41	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:208:LEU:HD12	13:O:208:LEU:N	2.23	0.52
23:B:1011:CLA:HMD2	23:B:1014:CLA:HMB1	1.91	0.52
23:B:1022:CLA:H62	27:B:1045:BCR:C20	2.38	0.52
2:B:25:MET:HE1	2:B:108:PHE:CD1	2.43	0.52
3:C:162:GLY:C	3:C:165:LEU:HB2	2.29	0.52
25:E:1040:HEM:NC	6:F:24:HIS:CE1	2.76	0.52
23:H:1017:CLA:HAA1	23:H:1017:CLA:HBD	1.92	0.52
7:H:40:VAL:HG13	7:H:41:PHE:N	2.24	0.52
11:L:23:LEU:HB2	29:L:1061:MGE:H202	1.91	0.52
1:A:328:MET:SD	4:D:325:ILE:CD1	2.97	0.52
9:J:11:TRP:HH2	18:Y:37:PHE:HA	1.73	0.52
1:A:204:GLY:O	1:A:207:GLY:N	2.38	0.52
1:A:33:PHE:HE1	8:I:23:PHE:HE2	1.57	0.52
2:B:454:ALA:HB3	23:B:1015:CLA:CBB	2.39	0.52
2:B:9:HIS:CD2	23:B:1020:CLA:HBB2	2.44	0.52
28:C:1055:DGD:C3B	28:C:1055:DGD:C7B	2.86	0.52
4:D:314:PHE:O	4:D:317:LYS:N	2.43	0.52
2:B:44:THR:O	2:B:44:THR:HG22	2.09	0.52
2:B:26:HIS:CG	23:B:1020:CLA:HMA1	2.45	0.52
2:B:468:TRP:CD1	2:B:469:HIS:ND1	2.76	0.52
23:C:1027:CLA:HED1	23:C:1036:CLA:H192	1.91	0.52
3:C:255:THR:OG1	3:C:256:PRO:HD2	2.08	0.52
4:D:199:MET:O	4:D:202:ALA:N	2.43	0.52
8:I:4:LEU:HD12	8:I:7:THR:HG1	1.75	0.52
28:C:1057:DGD:HAF2	29:J:1059:MGE:H242	1.92	0.52
1:A:207:GLY:O	1:A:210:LEU:N	2.43	0.52
1:A:99:ALA:HB1	1:A:105:TRP:N	2.25	0.52
23:B:1023:CLA:H52	27:B:1048:BCR:H342	1.91	0.52
3:C:223:TRP:CB	3:C:224:ILE:HD13	2.27	0.52
3:C:350:ILE:HD12	3:C:356:MET:HA	1.90	0.52
4:D:175:VAL:C	4:D:177:ALA:N	2.63	0.52
2:B:456:ALA:HB1	4:D:287:VAL:HG21	1.90	0.52
5:E:43:ALA:O	5:E:46:VAL:HB	2.10	0.52
8:I:15:PHE:O	8:I:16:VAL:C	2.47	0.52
23:B:1009:CLA:CGD	23:B:1009:CLA:CGA	2.86	0.52
23:B:1014:CLA:O2D	23:B:1014:CLA:HAA1	2.08	0.52
23:B:1019:CLA:HHH	23:B:1019:CLA:HBC3	1.92	0.52
2:B:106:LEU:CD1	2:B:106:LEU:C	2.78	0.52
2:B:25:MET:HG2	2:B:111:ALA:HB1	1.92	0.52
2:B:243:ALA:HA	2:B:246:PHE:CD2	2.45	0.52
2:B:454:ALA:HB3	23:B:1015:CLA:HBB2	1.92	0.52
2:B:99:ALA:O	2:B:102:VAL:CG1	2.54	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:268:GLY:O	23:C:1033:CLA:HBC1	2.09	0.52
3:C:354:GLU:HA	3:C:356:MET:CE	2.39	0.52
4:D:87:HIS:O	4:D:167:TRP:NE1	2.43	0.52
8:I:5:LYS:O	8:I:8:VAL:HB	2.10	0.52
27:K:1051:BCR:H392	27:K:1051:BCR:C22	2.36	0.52
1:A:323:ARG:HH11	1:A:323:ARG:CG	2.16	0.52
13:O:128:ASP:O	13:O:147:THR:HA	2.09	0.52
18:Y:39:LEU:HD11	20:Z:28:ALA:HB3	1.91	0.52
3:C:203:THR:HG23	3:C:203:THR:O	2.08	0.52
20:Z:35:ARG:CD	20:Z:36:SER:N	2.73	0.52
23:A:1003:CLA:C3D	23:D:1005:CLA:CAC	2.88	0.52
23:A:1006:CLA:H18	27:D:1050:BCR:H292	1.90	0.52
1:A:25:ASP:HA	4:D:251:ARG:HH21	1.74	0.52
1:A:281:VAL:HG13	1:A:282:GLY:N	2.25	0.52
23:B:1010:CLA:H41	7:H:46:LEU:HA	1.92	0.52
2:B:217:ILE:HG23	2:B:218:LEU:HD23	1.90	0.52
2:B:453:PHE:O	2:B:456:ALA:CB	2.58	0.52
2:B:475:PHE:CE2	4:D:134:ARG:HD2	2.45	0.52
2:B:5:TRP:HB2	23:B:1019:CLA:H42	1.91	0.52
23:C:1032:CLA:H2	23:C:1035:CLA:C3C	2.40	0.52
3:C:199:ILE:CD1	3:C:199:ILE:H	2.23	0.52
4:D:128:ARG:HG3	4:D:128:ARG:HH11	1.75	0.52
4:D:144:ILE:CG2	4:D:145:ALA:N	2.73	0.52
4:D:52:THR:O	4:D:76:VAL:HG11	2.09	0.52
5:E:22:ILE:HG23	5:E:22:ILE:O	2.10	0.52
2:B:11:VAL:HG11	11:L:7:ARG:HH11	1.74	0.52
16:V:34:LEU:HB3	16:V:47:LEU:HB2	1.92	0.52
13:O:242:GLU:HA	13:O:261:ILE:O	2.10	0.52
1:A:260:PHE:O	1:A:263:ALA:HB3	2.10	0.52
23:B:1021:CLA:CMA	23:B:1021:CLA:H42	2.40	0.52
2:B:158:LEU:HD13	2:B:199:VAL:HG22	1.92	0.52
2:B:465:GLY:HA2	2:B:468:TRP:HB3	1.91	0.52
3:C:39:ASN:HD21	23:C:1033:CLA:HBB2	1.75	0.52
2:B:471:ALA:HB1	4:D:140:PRO:HG3	1.91	0.52
4:D:181:PHE:O	4:D:184:PHE:HB3	2.09	0.52
4:D:90:LEU:HD13	4:D:109:GLY:CA	2.40	0.52
7:H:13:PRO:O	7:H:16:SER:N	2.43	0.52
7:H:44:ILE:HG22	17:X:19:PHE:HZ	1.75	0.52
10:K:26:PRO:O	10:K:29:PRO:CD	2.37	0.52
14:T:1:MET:HA	14:T:4:ILE:CG2	2.40	0.52
14:T:1:MET:O	14:T:2:GLU:C	2.47	0.52
27:T:6046:BCR:C32	27:T:6046:BCR:C8	2.87	0.52

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:V:105:PRO:HD3	16:V:120:SER:HB2	1.90	0.52
1:A:131:TRP:CD2	1:A:131:TRP:C	2.83	0.52
1:A:280:VAL:HA	1:A:283:VAL:HG13	1.91	0.52
23:B:1012:CLA:CED	23:B:1012:CLA:C2A	2.77	0.52
27:B:1045:BCR:C22	27:B:1045:BCR:H392	2.35	0.52
23:A:1006:CLA:HBA1	28:C:1057:DGD:CFB	2.40	0.52
3:C:140:LEU:HB3	3:C:148:GLY:CA	2.39	0.52
3:C:156:LYS:O	3:C:160:ILE:HG13	2.10	0.52
3:C:456:GLU:O	3:C:457:LYS:CB	2.57	0.52
3:C:64:ALA:HA	23:C:1027:CLA:HBC2	1.92	0.52
9:J:18:GLY:O	9:J:22:ILE:HB	2.10	0.52
15:U:114:VAL:HG12	15:U:115:THR:N	2.25	0.52
23:A:1003:CLA:C16	24:A:1038:PHO:H62	2.40	0.52
1:A:196:PRO:C	1:A:199:GLN:HG2	2.31	0.52
1:A:92:HIS:HD2	3:C:220:GLY:N	2.08	0.52
2:B:106:LEU:CD1	27:B:1048:BCR:H352	2.39	0.52
2:B:144:PHE:HB2	2:B:213:GLY:HA3	1.92	0.52
2:B:468:TRP:HA	4:D:144:ILE:HD11	1.91	0.52
28:C:1056:DGD:C6D	28:C:1056:DGD:C4E	2.87	0.52
3:C:35:TRP:CG	3:C:36:TRP:N	2.77	0.52
10:K:28:ILE:HA	10:K:31:LEU:HD11	1.79	0.52
20:Z:39:LEU:HG	20:Z:39:LEU:O	2.10	0.52
1:A:91:LEU:HD13	1:A:167:SER:HA	1.92	0.51
1:A:83:VAL:CG2	4:D:314:PHE:HE1	2.22	0.51
23:B:1010:CLA:CMD	23:B:1011:CLA:H51	2.40	0.51
2:B:458:PHE:HB3	23:B:1012:CLA:CMC	2.40	0.51
23:B:1020:CLA:H2	23:B:1023:CLA:CBA	2.25	0.51
23:B:1023:CLA:CHA	23:B:1024:CLA:CMC	2.88	0.51
2:B:478:VAL:HG13	2:B:482:ILE:HG22	1.92	0.51
2:B:55:MET:HG3	2:B:56:TRP:N	2.24	0.51
23:C:1032:CLA:H2	23:C:1035:CLA:CAC	2.40	0.51
30:A:1063:LHG:H292	23:C:1032:CLA:H62	1.91	0.51
4:D:277:THR:HG22	4:D:278:GLY:H	1.72	0.51
4:D:68:LEU:HD23	4:D:68:LEU:O	2.10	0.51
5:E:35:TRP:HZ3	6:F:38:ALA:CB	2.20	0.51
28:C:1057:DGD:HAF2	29:J:1059:MGE:H222	1.93	0.51
10:K:35:LEU:HA	10:K:38:VAL:HG23	1.91	0.51
13:O:216:PHE:C	13:O:216:PHE:CD1	2.84	0.51
18:Y:35:ILE:C	18:Y:35:ILE:HD12	2.30	0.51
13:O:59:ASP:O	13:O:60:SER:CB	2.57	0.51
1:A:223:LEU:HD22	1:A:245:THR:O	2.10	0.51
23:B:1019:CLA:HMB1	23:B:1020:CLA:NC	2.25	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:144:PHE:CA	2:B:213:GLY:HA3	2.40	0.51
2:B:460:LEU:CD2	4:D:280:TRP:CZ3	2.92	0.51
2:B:59:GLY:H	2:B:329:PRO:CB	2.22	0.51
3:C:70:PHE:O	3:C:74:HIS:CE1	2.63	0.51
4:D:148:ALA:CB	4:D:276:VAL:HA	2.40	0.51
9:J:10:LEU:O	9:J:13:VAL:HG23	2.10	0.51
2:B:373:LYS:HD3	2:B:374:ASN:H	1.75	0.51
15:U:133:TYR:CD1	16:V:76:PRO:HG3	2.44	0.51
5:E:8:ARG:HG3	5:E:9:PRO:HD2	1.92	0.51
1:A:143:ILE:HD13	4:D:216:ALA:O	2.10	0.51
1:A:214:MET:HE1	24:A:1039:PHO:CGD	2.40	0.51
1:A:205:VAL:HG22	1:A:279:ARG:NH1	2.25	0.51
2:B:27:THR:O	2:B:27:THR:HG22	2.11	0.51
23:C:1027:CLA:CED	23:C:1036:CLA:C19	2.87	0.51
23:C:1030:CLA:CBB	23:C:1031:CLA:HMA3	2.40	0.51
3:C:250:TRP:NE1	23:C:1030:CLA:HED1	2.25	0.51
5:E:32:ILE:HD12	5:E:33:ALA:N	2.25	0.51
8:I:16:VAL:O	8:I:19:PHE:N	2.44	0.51
8:I:27:ASP:HA	8:I:30:ARG:HG2	1.93	0.51
11:L:27:LEU:HD12	12:M:14:PHE:CZ	2.30	0.51
16:V:107:THR:C	16:V:108:TYR:O	2.43	0.51
2:B:92:SER:C	2:B:94:GLU:H	2.13	0.51
15:U:69:ARG:O	15:U:71:LEU:HD12	2.10	0.51
4:D:204:VAL:O	4:D:204:VAL:HG12	2.11	0.51
23:A:1003:CLA:HAB	23:A:1006:CLA:CMD	2.31	0.51
23:B:1011:CLA:HHC	23:B:1011:CLA:CBB	2.22	0.51
23:B:1010:CLA:C2D	23:B:1011:CLA:HMB1	2.40	0.51
2:B:193:TYR:CE1	2:B:259:GLY:HA3	2.44	0.51
1:A:258:LEU:HD12	4:D:128:ARG:NH1	2.26	0.51
7:H:31:MET:SD	23:H:1017:CLA:HBA2	2.49	0.51
1:A:317:TRP:O	1:A:319:ASP:N	2.43	0.51
15:U:88:VAL:HG12	15:U:109:LEU:HD11	1.92	0.51
2:B:357:ARG:HG3	2:B:357:ARG:NH1	2.19	0.51
15:U:69:ARG:HG3	15:U:69:ARG:NH1	2.25	0.51
1:A:168:PHE:O	1:A:170:ASP:N	2.44	0.51
14:T:29:ILE:N	14:T:29:ILE:HD13	2.26	0.51
4:D:233:ARG:O	4:D:233:ARG:HD2	2.10	0.51
23:C:1032:CLA:HAA1	23:C:1032:CLA:HBD	1.92	0.51
3:C:233:VAL:HG13	3:C:234:VAL:N	2.26	0.51
4:D:168:PHE:O	4:D:170:ALA:N	2.44	0.51
6:F:28:VAL:N	6:F:29:PRO:HD2	2.25	0.51
23:A:1007:CLA:H72	8:I:13:THR:HB	1.93	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:65:ARG:NH2	13:O:66:ILE:H	2.07	0.51
2:B:389:LYS:HD2	2:B:390:TYR:CE1	2.46	0.51
2:B:340:TRP:HA	2:B:430:PHE:CD2	2.46	0.51
1:A:76:ASN:HB3	1:A:79:THR:OG1	2.11	0.51
2:B:152:GLY:CA	2:B:155:ALA:HB3	2.36	0.51
23:C:1033:CLA:C19	23:C:1033:CLA:C14	2.89	0.51
3:C:259:TRP:CZ3	3:C:260:ALA:HB2	2.45	0.51
3:C:47:GLY:O	3:C:132:HIS:HB3	2.11	0.51
24:A:1038:PHO:H143	23:D:1005:CLA:H201	1.92	0.51
4:D:267:LEU:HD23	4:D:267:LEU:O	2.11	0.51
4:D:270:PHE:CZ	26:D:1042:PQ9:H243	2.46	0.51
5:E:38:VAL:CG1	6:F:39:ALA:HB1	2.40	0.51
9:J:10:LEU:HA	9:J:13:VAL:HG23	1.92	0.51
3:C:62:PHE:CZ	10:K:28:ILE:HG21	2.42	0.51
10:K:35:LEU:C	10:K:37:PHE:N	2.63	0.51
29:B:1060:MGE:H102	29:L:1061:MGE:H8A2	1.91	0.51
13:O:97:VAL:CG1	13:O:98:THR:N	2.74	0.51
5:E:68:ASP:HB2	5:E:69:ARG:NH2	2.25	0.51
24:A:1038:PHO:CED	24:A:1038:PHO:CHA	2.86	0.51
1:A:147:TYR:CA	1:A:150:PRO:HG2	2.41	0.51
1:A:273:PHE:CG	1:A:274:PHE:N	2.79	0.51
1:A:36:ILE:HG22	1:A:125:CYS:SG	2.51	0.51
23:B:1010:CLA:HMD2	23:B:1011:CLA:H102	1.92	0.51
23:B:1023:CLA:HBB1	23:B:1023:CLA:CHC	2.38	0.51
23:B:1023:CLA:H142	23:B:1024:CLA:H8	1.88	0.51
23:C:1026:CLA:O1A	23:C:1026:CLA:C5	2.29	0.51
23:C:1033:CLA:C19	23:C:1036:CLA:CHD	2.89	0.51
3:C:267:SER:O	3:C:271:TYR:CD2	2.64	0.51
3:C:451:ALA:O	3:C:453:ALA:N	2.44	0.51
4:D:293:LEU:O	4:D:293:LEU:HD13	2.11	0.51
2:B:397:VAL:HG23	2:B:398:THR:N	2.24	0.51
3:C:366:LEU:O	3:C:369:LEU:N	2.44	0.51
2:B:80:ILE:CG1	2:B:80:ILE:O	2.59	0.51
1:A:200:LEU:HA	1:A:203:ALA:CB	2.37	0.51
2:B:256:MET:SD	2:B:268:PHE:CD1	3.04	0.51
2:B:462:PHE:CZ	23:B:1021:CLA:HMB3	2.46	0.51
3:C:161:LEU:CD1	23:C:1030:CLA:HBB1	2.40	0.51
23:C:1036:CLA:C19	27:Z:1053:BCR:C37	2.86	0.51
3:C:214:LEU:HD23	3:C:214:LEU:C	2.31	0.51
3:C:55:ALA:C	27:K:1052:BCR:H372	2.31	0.51
3:C:76:ILE:O	3:C:77:PRO:C	2.49	0.51
3:C:87:ILE:C	3:C:90:PRO:HD2	2.30	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:45:THR:HG23	23:D:1005:CLA:H191	1.92	0.51
2:B:362:PHE:CZ	4:D:169:PHE:CD1	2.99	0.51
4:D:218:VAL:HA	4:D:221:THR:HG22	1.92	0.51
14:T:1:MET:CA	14:T:4:ILE:HG22	2.40	0.51
1:A:309:ALA:HB3	16:V:28:GLU:CB	2.41	0.51
16:V:125:ASP:HB3	16:V:131:ARG:HE	1.75	0.51
3:C:229:ASN:OD1	3:C:231:GLU:HG2	2.11	0.51
15:U:112:PHE:N	15:U:112:PHE:CD2	2.76	0.51
1:A:339:PHE:HB3	3:C:313:GLN:OE1	2.11	0.51
5:E:71:GLU:HG3	5:E:74:GLN:HB3	1.93	0.51
3:C:79:LYS:HE2	3:C:83:GLU:HB3	1.92	0.51
23:B:1023:CLA:O2D	23:B:1023:CLA:HAA2	2.11	0.51
23:B:1021:CLA:H202	29:B:1060:MGE:CDA	2.40	0.51
3:C:240:ILE:HD13	27:C:1054:BCR:H372	1.92	0.51
23:D:1005:CLA:HED3	26:D:1042:PQ9:H412	1.93	0.51
4:D:189:HIS:CD2	4:D:289:LEU:HD12	2.46	0.51
27:D:1050:BCR:H372	29:J:1059:MGE:C6A	2.40	0.51
1:A:320:ILE:O	1:A:322:ASN:N	2.44	0.51
20:Z:27:TYR:CD2	20:Z:27:TYR:N	2.78	0.51
9:J:11:TRP:CD1	9:J:12:ILE:N	2.79	0.51
3:C:307:PRO:HG3	3:C:358:PHE:CE1	2.46	0.51
15:U:61:ASN:HB2	15:U:130:ASN:HB3	1.92	0.51
1:A:337:HIS:HB2	31:A:1065:BR:BR	2.66	0.51
1:A:341:LEU:O	1:A:343:LEU:HD22	2.11	0.51
3:C:43:ILE:HG23	3:C:44:ASN:H	1.74	0.51
2:B:184:GLU:O	2:B:189:GLY:HA3	2.11	0.51
1:A:227:THR:HG21	1:A:232:SER:O	2.11	0.51
1:A:140:ARG:NH2	30:A:1063:LHG:C2	2.73	0.51
23:B:1011:CLA:CED	23:B:1011:CLA:CAD	2.88	0.51
23:B:1019:CLA:HMD1	29:B:1060:MGE:O2G	2.10	0.51
23:B:1021:CLA:C17	23:B:1021:CLA:C14	2.88	0.51
23:C:1026:CLA:C2B	23:C:1028:CLA:CBB	2.89	0.51
3:C:472:LEU:O	3:C:473:ASP:CB	2.58	0.51
4:D:194:ASN:O	4:D:198:MET:HG3	2.09	0.51
29:L:1061:MGE:H2A2	29:L:1061:MGE:H2G	1.92	0.51
20:Z:51:VAL:HG13	20:Z:52:LEU:N	2.26	0.51
4:D:300:SER:HB3	11:L:37:ASN:O	2.11	0.51
13:O:215:ARG:O	13:O:251:MET:HA	2.11	0.51
3:C:305:THR:O	3:C:306:GLY:C	2.50	0.51
13:O:205:GLU:HA	13:O:208:LEU:HD13	1.92	0.51
2:B:298:LEU:HG	2:B:402:TYR:CD1	2.46	0.51
13:O:164:THR:O	13:O:165:SER:HB2	2.10	0.51

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:117:PHE:CD2	1:A:117:PHE:N	2.78	0.50
1:A:71:LEU:O	1:A:73:TYR:N	2.44	0.50
23:B:1014:CLA:H101	27:B:1048:BCR:C7	2.41	0.50
2:B:241:SER:HB3	23:B:1020:CLA:HED1	1.94	0.50
2:B:443:PHE:N	2:B:443:PHE:CD2	2.77	0.50
3:C:72:LEU:HD22	3:C:72:LEU:O	2.11	0.50
7:H:41:PHE:HB2	27:H:1049:BCR:H14C	1.92	0.50
17:X:35:ALA:HA	17:X:38:ILE:CD1	2.41	0.50
20:Z:46:LEU:HB3	20:Z:50:LEU:CD1	2.41	0.50
13:O:34:ASP:O	13:O:35:ASP:C	2.49	0.50
1:A:210:LEU:HD13	24:A:1039:PHO:NC	2.26	0.50
1:A:131:TRP:O	1:A:134:SER:HB2	2.12	0.50
1:A:228:THR:HG22	1:A:228:THR:O	2.11	0.50
3:C:456:GLU:O	3:C:457:LYS:HG3	2.11	0.50
4:D:188:PHE:CD1	4:D:188:PHE:N	2.80	0.50
4:D:188:PHE:O	4:D:294:ARG:NH2	2.44	0.50
27:H:1049:BCR:H361	27:H:1049:BCR:C37	2.36	0.50
7:H:31:MET:HB2	23:H:1017:CLA:CAD	2.40	0.50
2:B:192:PRO:HG2	7:H:49:TYR:CD1	2.46	0.50
8:I:16:VAL:HG23	8:I:17:LEU:N	2.26	0.50
1:A:194:MET:HE2	1:A:300:PHE:HB2	1.92	0.50
1:A:323:ARG:C	1:A:325:ASN:H	2.14	0.50
16:V:83:GLU:O	16:V:87:LEU:HD13	2.10	0.50
10:K:17:ILE:HD12	10:K:17:ILE:H	1.76	0.50
23:B:1016:CLA:H2	23:H:1017:CLA:C7	2.40	0.50
23:C:1030:CLA:CAB	23:C:1031:CLA:HMA3	2.41	0.50
23:C:1032:CLA:HBC2	23:C:1032:CLA:HMC1	1.93	0.50
23:C:1036:CLA:H193	27:Z:1053:BCR:H371	1.93	0.50
3:C:230:LEU:HD12	3:C:233:VAL:CG1	2.40	0.50
3:C:265:ILE:N	3:C:274:TYR:OH	2.44	0.50
3:C:286:ALA:O	3:C:288:CYS:N	2.44	0.50
3:C:55:ALA:O	27:K:1052:BCR:H372	2.12	0.50
2:B:467:ILE:HG22	4:D:144:ILE:HD12	1.92	0.50
4:D:40:CYS:C	4:D:42:TYR:H	2.13	0.50
4:D:92:LEU:O	4:D:99:GLY:HA2	2.09	0.50
2:B:389:LYS:HB3	2:B:390:TYR:CD1	2.46	0.50
4:D:342:PRO:HB2	4:D:345:VAL:CG2	2.32	0.50
16:V:140:ALA:O	16:V:141:ILE:C	2.50	0.50
16:V:52:TYR:O	16:V:53:LEU:C	2.49	0.50
4:D:299:ILE:C	4:D:301:GLN:N	2.64	0.50
13:O:208:LEU:HD12	13:O:208:LEU:H	1.77	0.50
1:A:196:PRO:CA	1:A:199:GLN:HG2	2.41	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:281:VAL:HG23	30:A:1063:LHG:H372	1.93	0.50
3:C:175:LEU:HD11	23:C:1025:CLA:C2D	2.40	0.50
23:C:1027:CLA:CED	23:C:1036:CLA:H191	2.41	0.50
23:C:1033:CLA:HAA2	23:C:1033:CLA:HBD	1.94	0.50
1:A:163:ILE:HG12	28:C:1055:DGD:O1A	2.10	0.50
3:C:110:PRO:O	3:C:113:VAL:HG22	2.11	0.50
3:C:284:PHE:O	3:C:286:ALA:N	2.45	0.50
27:D:1050:BCR:C22	27:D:1050:BCR:H392	2.36	0.50
4:D:145:ALA:HB2	4:D:272:LEU:CD1	2.42	0.50
8:I:6:ILE:O	8:I:10:ILE:HG13	2.10	0.50
13:O:180:ALA:HB2	15:U:120:ALA:O	2.12	0.50
20:Z:27:TYR:HD2	20:Z:27:TYR:N	2.08	0.50
3:C:308:GLU:HG3	3:C:361:PHE:CZ	2.46	0.50
3:C:382:ASN:C	3:C:384:ILE:H	2.15	0.50
1:A:63:ILE:CD1	1:A:65:GLU:HG2	2.42	0.50
1:A:53:ILE:HA	1:A:71:LEU:HD12	1.93	0.50
2:B:172:TYR:O	2:B:173:GLY:C	2.50	0.50
2:B:284:ILE:HG13	2:B:285:ASN:H	1.71	0.50
23:C:1037:CLA:CGD	23:C:1037:CLA:HBA2	2.41	0.50
3:C:116:VAL:O	3:C:118:HIS:N	2.45	0.50
3:C:346:THR:HB	3:C:348:GLU:HG3	1.92	0.50
3:C:418:ASN:ND2	3:C:418:ASN:C	2.65	0.50
4:D:98:GLN:NE2	5:E:73:LYS:CE	2.72	0.50
7:H:12:ARG:CD	7:H:16:SER:HB2	2.41	0.50
7:H:30:LEU:HG	23:H:1017:CLA:HMD2	1.92	0.50
9:J:24:ILE:HG23	9:J:28:PHE:CE1	2.46	0.50
13:O:97:VAL:HG13	13:O:98:THR:H	1.77	0.50
13:O:166:THR:HG22	13:O:167:ASP:N	2.26	0.50
2:B:391:SER:C	2:B:392:PHE:O	2.47	0.50
2:B:392:PHE:CE2	2:B:397:VAL:HG21	2.46	0.50
15:U:92:LEU:HD23	15:U:106:ARG:HH11	1.76	0.50
13:O:250:ASP:O	13:O:250:ASP:OD1	2.29	0.50
3:C:414:ILE:HG12	3:C:415:ASN:N	2.26	0.50
2:B:291:SER:O	2:B:296:ALA:HB3	2.11	0.50
24:A:1039:PHO:H18	4:D:48:TRP:HE1	1.77	0.50
1:A:151:LEU:HD11	1:A:155:PHE:CE2	2.47	0.50
1:A:152:ALA:O	1:A:155:PHE:HB2	2.12	0.50
23:B:1011:CLA:HMD2	23:B:1014:CLA:CBB	2.41	0.50
23:B:1020:CLA:HBB1	23:B:1021:CLA:CBA	2.37	0.50
23:B:1024:CLA:H18	27:B:1048:BCR:HC41	1.94	0.50
3:C:167:VAL:HG12	23:C:1036:CLA:H52	1.94	0.50
28:C:1057:DGD:HA62	28:C:1057:DGD:HAT2	1.93	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:212:TYR:CE1	3:C:227:VAL:HG12	2.44	0.50
3:C:250:TRP:HE1	23:C:1030:CLA:HED2	1.74	0.50
3:C:75:PHE:CZ	3:C:77:PRO:O	2.64	0.50
4:D:191:TRP:CZ2	4:D:197:HIS:HB2	2.46	0.50
10:K:39:VAL:HA	18:Y:36:ILE:HD13	1.93	0.50
1:A:314:ILE:HG23	4:D:58:TRP:HZ3	1.77	0.50
3:C:78:GLU:OE1	3:C:104:GLU:CB	2.58	0.50
3:C:200:THR:O	3:C:202:PRO:HD2	2.11	0.50
3:C:203:THR:OG1	3:C:209:ILE:HD11	2.10	0.50
15:U:50:ALA:CB	15:U:113:THR:HG21	2.40	0.50
15:U:58:ASN:O	15:U:59:ASN:OD1	2.30	0.50
15:U:59:ASN:O	15:U:60:THR:C	2.49	0.50
16:V:111:GLU:CG	16:V:112:GLN:N	2.71	0.50
15:U:74:THR:O	15:U:77:LYS:N	2.44	0.50
1:A:110:GLY:N	1:A:111:PRO:HD2	2.27	0.50
1:A:127:MET:O	1:A:130:GLN:HB3	2.11	0.50
1:A:31:GLY:HA3	1:A:132:GLU:OE1	2.11	0.50
23:B:1010:CLA:C4D	23:B:1011:CLA:HMB3	2.42	0.50
23:C:1025:CLA:HBB2	23:C:1025:CLA:C9	2.42	0.50
28:C:1057:DGD:HB92	28:C:1057:DGD:C9A	2.42	0.50
3:C:113:VAL:O	3:C:117:VAL:CG2	2.55	0.50
3:C:276:LEU:C	3:C:278:ALA:N	2.65	0.50
25:E:1040:HEM:CHD	6:F:20:TRP:HE1	2.25	0.50
5:E:36:LEU:C	5:E:38:VAL:N	2.65	0.50
10:K:37:PHE:HB3	27:K:1051:BCR:C40	2.42	0.50
7:H:40:VAL:HG21	17:X:23:LEU:HD21	1.93	0.50
20:Z:52:LEU:O	20:Z:55:GLY:HA3	2.12	0.50
3:C:78:GLU:HB3	16:V:128:PRO:HB2	1.93	0.50
16:V:105:PRO:HB3	16:V:120:SER:OG	2.12	0.50
15:U:89:GLU:C	15:U:91:VAL:H	2.15	0.50
15:U:128:TYR:CD1	15:U:128:TYR:N	2.79	0.50
30:A:1063:LHG:C16	30:A:1063:LHG:C12	2.72	0.50
1:A:198:HIS:O	1:A:202:VAL:HG23	2.12	0.50
1:A:210:LEU:CD1	24:A:1039:PHO:ND	2.75	0.50
1:A:235:TYR:O	1:A:237:TYR:N	2.40	0.50
23:B:1010:CLA:H203	4:D:159:ILE:HG23	1.94	0.50
23:B:1019:CLA:OBD	29:B:1060:MGE:C2G	2.58	0.50
2:B:279:TYR:O	2:B:281:GLN:N	2.45	0.50
2:B:450:TRP:O	2:B:451:PHE:C	2.50	0.50
2:B:482:ILE:HG21	4:D:138:VAL:HA	1.92	0.50
23:C:1034:CLA:CED	10:K:29:PRO:HG3	2.42	0.50
3:C:137:PRO:O	3:C:138:GLU:O	2.29	0.50

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:72:LEU:CD2	3:C:108:THR:HB	2.42	0.50
4:D:83:ASN:N	4:D:168:PHE:HD1	2.09	0.50
5:E:17:VAL:O	5:E:21:VAL:HG23	2.11	0.50
13:O:230:VAL:HG22	13:O:237:ILE:HG22	1.93	0.50
15:U:51:TYR:HB2	15:U:56:ASP:HB2	1.93	0.50
1:A:161:TYR:CD1	1:A:294:ALA:HA	2.47	0.50
3:C:33:PHE:HB3	4:D:229:ALA:HB3	1.93	0.50
23:B:1022:CLA:O1D	23:B:1022:CLA:O1A	2.29	0.50
2:B:27:THR:C	23:B:1013:CLA:HBC1	2.32	0.50
2:B:284:ILE:HG22	2:B:309:LEU:CD2	2.35	0.50
2:B:68:ARG:CG	2:B:69:LEU:N	2.75	0.50
23:C:1029:CLA:C5	23:C:1029:CLA:CHC	2.90	0.50
3:C:163:PHE:O	3:C:167:VAL:HG23	2.12	0.50
3:C:278:ALA:O	3:C:281:MET:HB3	2.11	0.50
6:F:22:ALA:O	6:F:25:THR:OG1	2.24	0.50
2:B:6:TYR:HE2	11:L:11:GLU:CG	2.25	0.50
16:V:102:MET:HB3	16:V:138:LEU:HD13	1.94	0.50
15:U:56:ASP:HA	15:U:113:THR:O	2.11	0.50
7:H:54:ILE:O	7:H:54:ILE:CG2	2.59	0.50
13:O:144:LEU:HD23	13:O:144:LEU:H	1.77	0.50
2:B:37:MET:HG2	2:B:62:VAL:HG21	1.94	0.50
1:A:297:LEU:CD2	3:C:404:LEU:HA	2.42	0.49
1:A:71:LEU:C	1:A:73:TYR:N	2.63	0.49
2:B:173:GLY:O	2:B:174:LEU:HD12	2.12	0.49
2:B:478:VAL:HG13	2:B:482:ILE:CG2	2.42	0.49
23:C:1032:CLA:H193	23:C:1032:CLA:C15	2.33	0.49
27:C:1054:BCR:C39	27:C:1054:BCR:C27	2.80	0.49
3:C:276:LEU:C	3:C:276:LEU:HD23	2.33	0.49
9:J:30:TYR:O	9:J:32:ALA:N	2.45	0.49
27:K:1051:BCR:H403	27:K:1051:BCR:C22	2.36	0.49
13:O:148:VAL:CG1	13:O:151:LEU:HD22	2.42	0.49
15:U:89:GLU:C	15:U:91:VAL:N	2.65	0.49
2:B:373:LYS:CD	2:B:374:ASN:H	2.25	0.49
13:O:183:LEU:N	13:O:183:LEU:HD12	2.27	0.49
3:C:150:ASP:HB3	3:C:153:ASP:HB2	1.94	0.49
1:A:293:MET:C	1:A:295:PHE:N	2.64	0.49
1:A:48:PHE:CD2	1:A:82:VAL:HG21	2.47	0.49
23:B:1021:CLA:HMA2	23:B:1021:CLA:H11	1.94	0.49
23:C:1032:CLA:C17	23:C:1034:CLA:C19	2.90	0.49
3:C:341:LEU:HD22	3:C:375:LEU:HD12	1.95	0.49
3:C:37:ALA:O	3:C:39:ASN:O	2.30	0.49
23:D:1005:CLA:C15	23:D:1005:CLA:H202	2.01	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:257:PHE:CG	4:D:257:PHE:O	2.64	0.49
4:D:80:THR:HA	4:D:111:TRP:CD1	2.47	0.49
14:T:8:PHE:C	14:T:10:PHE:N	2.66	0.49
20:Z:44:SER:O	20:Z:48:ILE:HG13	2.11	0.49
15:U:73:PRO:HB2	16:V:109:ASP:OD1	2.12	0.49
16:V:81:ARG:HD3	16:V:157:GLY:N	2.27	0.49
5:E:83:LEU:HD22	5:E:84:LYS:N	2.24	0.49
3:C:290:VAL:CG2	3:C:423:ARG:HA	2.41	0.49
3:C:377:LEU:HA	3:C:380:ILE:HG21	1.92	0.49
5:E:58:GLN:CD	5:E:58:GLN:O	2.51	0.49
1:A:130:GLN:NE2	24:A:1038:PHO:OBD	2.45	0.49
1:A:258:LEU:HA	4:D:132:ILE:CD1	2.42	0.49
2:B:150:CYS:N	23:B:1011:CLA:HBC3	2.27	0.49
2:B:255:THR:O	2:B:258:TYR:O	2.30	0.49
2:B:464:PHE:CD1	2:B:465:GLY:N	2.81	0.49
2:B:59:GLY:O	23:B:1015:CLA:CED	2.61	0.49
3:C:275:SER:HB3	23:C:1033:CLA:HED1	1.94	0.49
4:D:45:LEU:O	4:D:45:LEU:HD22	2.12	0.49
4:D:66:SER:O	4:D:71:CYS:HB2	2.12	0.49
23:B:1016:CLA:H2	23:H:1017:CLA:H71	1.94	0.49
20:Z:7:LEU:O	20:Z:11:ALA:HB2	2.12	0.49
1:A:180:PHE:CD1	1:A:180:PHE:N	2.79	0.49
1:A:303:ASN:HD21	3:C:412:THR:HA	1.76	0.49
1:A:314:ILE:HG23	4:D:58:TRP:CZ3	2.47	0.49
16:V:63:CYS:HB3	25:V:1041:HEM:CAB	2.42	0.49
3:C:326:ALA:HB2	15:U:128:TYR:CD2	2.48	0.49
3:C:326:ALA:HB2	15:U:128:TYR:CG	2.47	0.49
1:A:267:ASN:HB3	1:A:270:SER:OG	2.12	0.49
3:C:172:ALA:HB3	3:C:241:GLY:HA2	1.94	0.49
1:A:260:PHE:CE1	1:A:263:ALA:HB2	2.47	0.49
23:B:1019:CLA:C6	23:B:1021:CLA:CED	2.77	0.49
2:B:133:LEU:HA	7:H:15:ASN:HD21	1.77	0.49
2:B:160:GLY:C	2:B:162:PHE:N	2.63	0.49
3:C:171:GLY:C	3:C:173:LEU:N	2.66	0.49
3:C:269:GLU:OE1	3:C:447:ARG:CG	2.60	0.49
23:D:1005:CLA:C16	29:D:1062:MGE:CGB	2.85	0.49
4:D:113:PHE:HE2	23:D:1008:CLA:HMD3	1.77	0.49
9:J:17:ALA:O	9:J:19:MET:N	2.46	0.49
10:K:10:LYS:O	10:K:10:LYS:HG3	2.11	0.49
13:O:66:ILE:HG22	13:O:269:ILE:HA	1.94	0.49
13:O:223:ILE:CG1	13:O:224:SER:H	2.11	0.49
7:H:54:ILE:HG23	7:H:54:ILE:O	2.10	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:82:ALA:O	4:D:85:MET:HB2	2.12	0.49
13:O:206:GLU:N	13:O:206:GLU:OE1	2.40	0.49
23:A:1006:CLA:C17	27:D:1050:BCR:H292	2.35	0.49
23:A:1006:CLA:O1D	4:D:179:PHE:HZ	1.95	0.49
1:A:91:LEU:CD1	1:A:167:SER:HA	2.43	0.49
1:A:261:GLN:C	1:A:263:ALA:N	2.65	0.49
2:B:121:GLU:HB2	7:H:3:ARG:O	2.12	0.49
2:B:326:ARG:NH2	4:D:297:ASP:OD1	2.45	0.49
2:B:49:ASP:OD1	2:B:51:VAL:N	2.45	0.49
23:C:1031:CLA:HED3	23:C:1031:CLA:O1A	2.10	0.49
3:C:179:ALA:O	3:C:198:VAL:HG13	2.12	0.49
3:C:418:ASN:N	3:C:418:ASN:HD22	2.10	0.49
4:D:157:PHE:O	4:D:158:LEU:HD23	2.12	0.49
5:E:19:TYR:CE1	5:E:20:TRP:HD1	2.28	0.49
2:B:222:PRO:HB2	7:H:25:TRP:O	2.12	0.49
8:I:4:LEU:HD12	8:I:7:THR:OG1	2.12	0.49
8:I:33:LYS:HB3	8:I:35:LYS:CE	2.40	0.49
5:E:57:ALA:CB	5:E:83:LEU:HA	2.42	0.49
3:C:394:GLU:OE1	16:V:127:PHE:HE2	1.95	0.49
23:B:1009:CLA:H62	23:B:1009:CLA:H13	1.95	0.49
3:C:266:TRP:HB3	3:C:271:TYR:OH	2.13	0.49
1:A:166:GLY:HA3	3:C:357:ARG:HH11	1.77	0.49
26:D:1042:PQ9:H142	29:D:1062:MGE:H3B2	1.93	0.49
4:D:171:PRO:HG3	4:D:181:PHE:CE2	2.48	0.49
4:D:196:PHE:H	4:D:196:PHE:HD1	1.61	0.49
1:A:269:ARG:HD3	4:D:231:THR:CG2	2.43	0.49
27:H:1049:BCR:H392	27:H:1049:BCR:H23C	1.94	0.49
2:B:223:GLN:HG2	7:H:24:GLY:O	2.12	0.49
10:K:26:PRO:C	10:K:28:ILE:H	2.16	0.49
14:T:7:VAL:O	14:T:10:PHE:HB3	2.13	0.49
2:B:394:GLN:OE1	15:U:47:LEU:HD13	2.12	0.49
16:V:102:MET:O	16:V:121:LEU:HB2	2.12	0.49
16:V:55:GLY:HA3	16:V:144:HIS:HB2	1.95	0.49
4:D:304:ARG:HG3	4:D:304:ARG:O	2.12	0.49
16:V:85:LEU:O	16:V:88:ALA:HB3	2.12	0.49
9:J:11:TRP:CG	9:J:12:ILE:N	2.80	0.49
3:C:399:ALA:C	3:C:401:LEU:H	2.14	0.49
3:C:376:ASP:O	3:C:380:ILE:HG22	2.12	0.49
1:A:32:TRP:HA	1:A:32:TRP:CE3	2.47	0.49
16:V:39:ASN:ND2	16:V:41:GLU:HG2	2.28	0.49
30:A:1063:LHG:H292	23:C:1032:CLA:C7	2.42	0.49
1:A:140:ARG:NH2	30:A:1063:LHG:HC11	2.27	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:173:PRO:HG3	4:D:314:PHE:CE2	2.47	0.49
2:B:68:ARG:HG3	2:B:69:LEU:H	1.76	0.49
23:C:1026:CLA:C20	23:C:1026:CLA:C4D	2.85	0.49
23:C:1034:CLA:HED1	10:K:29:PRO:HG3	1.95	0.49
27:D:1050:BCR:H282	29:J:1059:MGE:CBB	2.30	0.49
4:D:196:PHE:CD2	4:D:284:ILE:HB	2.47	0.49
4:D:235:PHE:CE2	4:D:243:THR:HG22	2.48	0.49
11:L:24:ILE:HG23	11:L:25:LEU:N	2.28	0.49
13:O:230:VAL:HG13	13:O:237:ILE:HG22	1.94	0.49
2:B:368:VAL:HG11	2:B:381:ILE:CG1	2.43	0.49
1:A:189:GLU:O	3:C:411:ALA:HB2	2.13	0.49
1:A:195:HIS:CG	1:A:196:PRO:HD2	2.47	0.49
1:A:21:VAL:CG2	1:A:22:THR:HG23	2.41	0.49
1:A:190:HIS:ND1	1:A:298:ASN:CG	2.66	0.49
23:B:1019:CLA:H193	23:B:1021:CLA:C6	2.41	0.49
23:B:1020:CLA:C5	23:B:1020:CLA:CGA	2.90	0.49
28:C:1056:DGD:HB51	9:J:29:PHE:CE1	2.46	0.49
3:C:418:ASN:OD1	28:C:1057:DGD:HE61	2.13	0.49
23:D:1005:CLA:HBD	23:D:1005:CLA:HAA1	1.94	0.49
7:H:41:PHE:CD2	7:H:42:LEU:HD23	2.48	0.49
8:I:3:THR:CA	8:I:6:ILE:HD11	2.42	0.49
1:A:78:ILE:HD11	11:L:34:TYR:HE2	1.78	0.49
2:B:37:MET:HG2	2:B:62:VAL:CG2	2.42	0.49
2:B:54:PRO:HD2	2:B:57:ARG:HG3	1.94	0.49
1:A:273:PHE:O	1:A:275:LEU:N	2.46	0.49
27:B:1045:BCR:H341	27:B:1047:BCR:H10C	1.94	0.49
2:B:118:TRP:HD1	2:B:118:TRP:H	1.60	0.49
2:B:145:LEU:HA	2:B:148:LEU:HD23	1.95	0.49
2:B:149:LEU:HB3	23:B:1011:CLA:HBC1	1.95	0.49
2:B:150:CYS:O	2:B:151:PHE:C	2.51	0.49
3:C:60:ILE:CD1	23:C:1027:CLA:HMD3	2.42	0.49
3:C:174:LEU:O	3:C:178:LYS:N	2.46	0.49
3:C:56:HIS:O	3:C:59:LEU:N	2.46	0.49
3:C:76:ILE:HD13	3:C:77:PRO:HD2	1.93	0.49
4:D:129:GLN:CD	4:D:143:ALA:HA	2.33	0.49
4:D:180:ARG:O	4:D:181:PHE:C	2.51	0.49
10:K:26:PRO:O	10:K:28:ILE:N	2.45	0.49
20:Z:5:PHE:O	20:Z:7:LEU:N	2.46	0.49
1:A:322:ASN:HD21	3:C:412:THR:CG2	2.20	0.49
13:O:149:LYS:O	13:O:150:ASN:CB	2.61	0.49
2:B:367:PRO:HG2	2:B:367:PRO:O	2.13	0.49
2:B:390:TYR:O	2:B:391:SER:C	2.51	0.49

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:U:58:ASN:N	15:U:58:ASN:ND2	2.54	0.49
13:O:36:ILE:HD12	13:O:36:ILE:N	2.27	0.49
1:A:199:GLN:CG	1:A:200:LEU:N	2.76	0.49
1:A:50:ILE:CB	27:A:1044:BCR:H391	2.43	0.49
23:B:1024:CLA:HBD	23:B:1024:CLA:HBA2	1.95	0.49
2:B:252:VAL:HG12	2:B:451:PHE:CE2	2.48	0.49
2:B:31:ALA:O	2:B:34:ALA:HB3	2.13	0.49
23:C:1028:CLA:H43	28:C:1057:DGD:C2A	2.26	0.49
23:C:1032:CLA:C19	23:C:1032:CLA:C15	2.90	0.49
23:C:1033:CLA:C12	23:C:1033:CLA:H92	2.36	0.49
3:C:120:ILE:HG21	27:Z:1053:BCR:C34	2.43	0.49
3:C:173:LEU:O	3:C:176:VAL:HB	2.12	0.49
2:B:222:PRO:HG3	7:H:27:THR:HG23	1.95	0.49
18:Y:21:GLN:C	18:Y:21:GLN:OE1	2.52	0.49
15:U:72:TYR:CD2	15:U:73:PRO:N	2.80	0.49
2:B:483:ASP:O	2:B:485:GLU:N	2.46	0.49
13:O:90:GLU:HG3	13:O:91:PHE:N	2.27	0.49
5:E:59:GLU:OE2	5:E:59:GLU:HA	2.12	0.49
1:A:214:MET:HG3	26:A:1043:PQ9:H142	1.95	0.48
1:A:280:VAL:CA	1:A:283:VAL:HG13	2.43	0.48
1:A:279:ARG:O	1:A:283:VAL:HG13	2.13	0.48
1:A:95:PRO:O	1:A:98:GLU:N	2.45	0.48
23:B:1023:CLA:HMA2	23:B:1023:CLA:O1A	2.13	0.48
29:B:1060:MGE:H263	29:B:1060:MGE:H5A2	1.95	0.48
2:B:156:PHE:CB	2:B:162:PHE:HB3	2.42	0.48
2:B:201:HIS:O	2:B:204:ALA:HB3	2.13	0.48
23:C:1029:CLA:C7	23:C:1029:CLA:C4	2.89	0.48
3:C:124:VAL:CG2	3:C:125:LEU:H	2.21	0.48
3:C:230:LEU:C	3:C:233:VAL:HG12	2.33	0.48
3:C:455:PHE:O	3:C:458:GLY:N	2.46	0.48
1:A:139:MET:HA	3:C:459:ILE:HD11	1.94	0.48
4:D:71:CYS:HB3	4:D:76:VAL:HG22	1.94	0.48
4:D:76:VAL:HG12	4:D:77:ALA:N	2.27	0.48
9:J:17:ALA:C	9:J:19:MET:N	2.66	0.48
10:K:33:PHE:CD1	10:K:34:ALA:N	2.79	0.48
11:L:22:LEU:C	11:L:22:LEU:HD23	2.33	0.48
18:Y:31:ALA:O	18:Y:35:ILE:CG2	2.60	0.48
1:A:314:ILE:HD12	4:D:58:TRP:CH2	2.48	0.48
3:C:330:SER:HB2	13:O:149:LYS:NZ	2.28	0.48
16:V:129:LYS:O	16:V:133:LEU:HD11	2.13	0.48
1:A:340:PRO:HB3	15:U:133:TYR:CD2	2.48	0.48
3:C:201:ASN:OD1	3:C:201:ASN:O	2.31	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:279:ARG:HD3	4:D:208:ALA:C	2.33	0.48
23:B:1019:CLA:H162	23:B:1021:CLA:H52	1.95	0.48
23:B:1023:CLA:CHA	23:B:1024:CLA:HMC3	2.43	0.48
2:B:192:PRO:HG2	7:H:49:TYR:CZ	2.48	0.48
23:C:1029:CLA:H192	23:C:1029:CLA:H152	0.62	0.48
3:C:160:ILE:HB	23:C:1031:CLA:CMD	2.42	0.48
3:C:155:ASN:O	3:C:159:THR:N	2.46	0.48
3:C:171:GLY:O	3:C:173:LEU:N	2.46	0.48
3:C:240:ILE:O	3:C:244:CYS:SG	2.71	0.48
3:C:418:ASN:HB3	28:C:1057:DGD:HE2	1.95	0.48
6:F:32:PHE:C	6:F:32:PHE:CD2	2.86	0.48
23:B:1023:CLA:H193	7:H:7:LEU:HD11	1.93	0.48
15:U:99:GLU:CD	15:U:99:GLU:N	2.65	0.48
16:V:34:LEU:N	16:V:34:LEU:CD1	2.75	0.48
23:A:1006:CLA:CGA	28:C:1057:DGD:HBN2	2.43	0.48
2:B:121:GLU:C	2:B:123:PHE:N	2.67	0.48
2:B:173:GLY:O	2:B:174:LEU:CD1	2.61	0.48
4:D:37:LEU:HD13	4:D:125:PHE:HB2	1.95	0.48
4:D:37:LEU:HD22	4:D:128:ARG:HB2	1.95	0.48
4:D:191:TRP:CE2	4:D:197:HIS:HB2	2.48	0.48
4:D:21:TRP:C	4:D:21:TRP:CE3	2.86	0.48
5:E:51:ARG:O	5:E:53:ASP:N	2.45	0.48
7:H:13:PRO:O	7:H:14:LEU:C	2.52	0.48
29:D:1062:MGE:H222	29:L:1061:MGE:H262	1.96	0.48
12:M:11:THR:CG2	12:M:12:ALA:N	2.67	0.48
12:M:6:LEU:HA	12:M:9:ILE:HD13	1.95	0.48
2:B:380:ASP:O	2:B:382:PRO:HD3	2.13	0.48
11:L:37:ASN:OD1	11:L:37:ASN:OXT	2.32	0.48
15:U:82:ASN:ND2	15:U:94:ILE:HG23	2.28	0.48
15:U:129:ASN:O	15:U:131:GLY:N	2.45	0.48
16:V:124:ALA:C	16:V:126:ILE:N	2.67	0.48
16:V:40:SER:O	16:V:42:GLY:N	2.46	0.48
1:A:199:GLN:OE1	1:A:200:LEU:N	2.47	0.48
1:A:223:LEU:HB2	4:D:265:ARG:CZ	2.43	0.48
23:B:1012:CLA:CHD	23:B:1012:CLA:HBC2	2.35	0.48
23:B:1019:CLA:HMB3	23:B:1020:CLA:NC	2.27	0.48
23:B:1020:CLA:CAD	23:B:1020:CLA:CED	2.92	0.48
2:B:158:LEU:HB3	2:B:199:VAL:HG22	1.95	0.48
2:B:211:ILE:HG22	2:B:212:ALA:N	2.27	0.48
2:B:222:PRO:HD2	23:H:1017:CLA:CED	2.44	0.48
2:B:52:LEU:CD1	2:B:339:ALA:HA	2.44	0.48
3:C:95:LEU:HD21	23:C:1027:CLA:HBB2	1.96	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:449:ARG:NE	23:C:1029:CLA:CED	2.76	0.48
23:A:1006:CLA:HBA1	28:C:1057:DGD:HBN1	1.95	0.48
3:C:179:ALA:O	3:C:198:VAL:CG1	2.61	0.48
4:D:273:PHE:O	4:D:274:VAL:C	2.52	0.48
4:D:210:LEU:HD11	4:D:274:VAL:HG21	1.95	0.48
4:D:281:MET:HE3	4:D:284:ILE:CD1	2.43	0.48
4:D:90:LEU:HD23	4:D:96:GLU:CG	2.43	0.48
4:D:92:LEU:HB3	4:D:93:TRP:CZ3	2.48	0.48
1:A:97:TRP:CZ2	8:I:9:TYR:HE2	2.31	0.48
27:Z:1053:BCR:H271	27:Z:1053:BCR:H403	1.96	0.48
1:A:319:ASP:O	1:A:322:ASN:HB2	2.13	0.48
1:A:323:ARG:C	1:A:325:ASN:N	2.67	0.48
1:A:328:MET:SD	4:D:325:ILE:HD11	2.54	0.48
2:B:389:LYS:HD2	2:B:390:TYR:HE1	1.77	0.48
16:V:82:THR:O	16:V:83:GLU:C	2.52	0.48
2:B:311:PHE:CA	2:B:430:PHE:CZ	2.97	0.48
3:C:172:ALA:CB	3:C:241:GLY:HA2	2.43	0.48
16:V:118:HIS:O	16:V:119:PRO:C	2.47	0.48
1:A:11:ALA:HB1	1:A:15:GLU:HB3	1.95	0.48
1:A:223:LEU:CG	4:D:265:ARG:CZ	2.91	0.48
1:A:288:LEU:HD11	3:C:435:PHE:HD2	1.77	0.48
23:B:1011:CLA:C2D	23:B:1013:CLA:C4	2.92	0.48
2:B:5:TRP:CE3	23:B:1019:CLA:H42	2.40	0.48
23:B:1013:CLA:H72	23:B:1020:CLA:H18	1.96	0.48
23:B:1019:CLA:H51	23:B:1021:CLA:CED	2.41	0.48
23:C:1026:CLA:HBA1	23:C:1027:CLA:C2C	2.44	0.48
23:C:1028:CLA:H121	23:C:1028:CLA:H171	1.77	0.48
3:C:406:SER:CB	28:C:1056:DGD:HE1	2.44	0.48
3:C:51:GLY:CA	3:C:132:HIS:HB2	2.33	0.48
3:C:71:GLU:HB3	3:C:89:ILE:HD12	1.96	0.48
27:D:1050:BCR:C20	29:J:1059:MGE:H5A1	2.43	0.48
4:D:43:LEU:HD12	27:D:1050:BCR:HC7	1.95	0.48
4:D:261:PHE:CZ	4:D:267:LEU:HB2	2.47	0.48
5:E:34:GLY:HA3	6:F:32:PHE:CD2	2.47	0.48
10:K:19:ASP:N	10:K:20:PRO:HD2	2.28	0.48
1:A:191:ASN:HB3	1:A:194:MET:HB2	1.95	0.48
4:D:318:ASN:O	4:D:321:LEU:HB2	2.14	0.48
13:O:105:ASP:O	13:O:106:GLN:CB	2.62	0.48
18:Y:46:LEU:H	18:Y:46:LEU:HD12	1.77	0.48
1:A:63:ILE:CG1	1:A:65:GLU:HG2	2.43	0.48
23:B:1009:CLA:H12	27:H:1049:BCR:C15	2.29	0.48
2:B:326:ARG:HE	2:B:442:ILE:CG2	2.26	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:5:TRP:O	23:B:1019:CLA:H2	2.13	0.48
3:C:268:GLY:C	23:C:1033:CLA:HBC1	2.34	0.48
3:C:118:HIS:O	3:C:122:SER:N	2.43	0.48
3:C:354:GLU:O	3:C:356:MET:N	2.46	0.48
1:A:344:ALA:O	3:C:357:ARG:NH2	2.47	0.48
3:C:76:ILE:CD1	3:C:77:PRO:HD2	2.44	0.48
4:D:134:ARG:CA	4:D:134:ARG:NE	2.74	0.48
1:A:272:HIS:CG	4:D:218:VAL:HG21	2.49	0.48
4:D:72:ASN:HD21	4:D:74:LEU:HG	1.79	0.48
2:B:188:ASP:OD1	7:H:58:VAL:HA	2.14	0.48
14:T:7:VAL:CG1	14:T:8:PHE:N	2.70	0.48
4:D:321:LEU:O	4:D:324:GLY:N	2.47	0.48
2:B:416:THR:O	2:B:419:SER:HB3	2.13	0.48
16:V:128:PRO:C	16:V:130:MET:N	2.66	0.48
16:V:96:GLU:O	16:V:99:VAL:HB	2.13	0.48
3:C:299:SER:HA	3:C:303:GLY:O	2.14	0.48
13:O:239:GLY:O	13:O:264:VAL:HG13	2.13	0.48
1:A:126:TYR:CZ	24:A:1038:PHO:O1A	2.67	0.48
30:A:1063:LHG:HC82	30:A:1063:LHG:O10	2.13	0.48
1:A:122:GLY:O	1:A:125:CYS:HB2	2.12	0.48
1:A:159:LEU:CD1	1:A:163:ILE:HD11	2.43	0.48
1:A:279:ARG:CZ	4:D:208:ALA:HB1	2.44	0.48
23:B:1009:CLA:O1D	23:B:1009:CLA:O1A	2.30	0.48
23:B:1023:CLA:C4C	23:B:1024:CLA:CBC	2.83	0.48
2:B:283:GLU:O	2:B:286:ARG:N	2.46	0.48
2:B:457:VAL:O	2:B:461:LEU:CG	2.60	0.48
3:C:286:ALA:O	3:C:289:PHE:N	2.47	0.48
3:C:288:CYS:CB	28:C:1055:DGD:HB21	2.43	0.48
3:C:295:THR:C	3:C:297:TYR:H	2.17	0.48
23:D:1005:CLA:CED	26:D:1042:PQ9:H391	2.43	0.48
4:D:97:ALA:CB	4:D:104:TRP:HB2	2.44	0.48
5:E:12:ASP:O	5:E:14:ILE:N	2.47	0.48
7:H:31:MET:HB2	23:H:1017:CLA:C3D	2.44	0.48
16:V:60:GLN:HA	16:V:64:ALA:HB2	1.95	0.48
2:B:357:ARG:O	2:B:425:ILE:HD12	2.13	0.48
2:B:314:TYR:CE2	2:B:316:GLY:HA3	2.48	0.48
15:U:118:GLU:HB3	15:U:121:LEU:HB2	1.95	0.48
1:A:142:TRP:HH2	30:A:1063:LHG:HC11	1.79	0.48
1:A:265:PHE:CD1	1:A:271:LEU:HD13	2.47	0.48
2:B:318:ASN:HD22	2:B:319:PRO:N	2.10	0.48
23:C:1029:CLA:H52	23:C:1029:CLA:CHC	2.44	0.48
3:C:244:CYS:HA	23:C:1030:CLA:CMC	2.43	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:270:PHE:HZ	26:D:1042:PQ9:H243	1.78	0.48
5:E:19:TYR:HD1	5:E:20:TRP:CD1	2.29	0.48
7:H:44:ILE:HG22	17:X:19:PHE:CZ	2.48	0.48
7:H:50:ASN:O	7:H:50:ASN:ND2	2.45	0.48
8:I:30:ARG:HA	8:I:30:ARG:HH11	1.74	0.48
10:K:28:ILE:N	10:K:29:PRO:CD	2.76	0.48
20:Z:9:LEU:HD22	20:Z:9:LEU:C	2.34	0.48
1:A:315:ASN:O	4:D:63:LEU:HD23	2.13	0.48
13:O:184:ASP:CB	13:O:185:PRO:HD2	2.37	0.48
13:O:208:LEU:O	13:O:209:ALA:C	2.52	0.48
1:A:147:TYR:HA	1:A:150:PRO:HG2	1.94	0.48
1:A:195:HIS:ND1	1:A:196:PRO:CD	2.68	0.48
1:A:199:GLN:NE2	28:C:1057:DGD:HBW2	2.29	0.48
1:A:244:GLU:HG3	4:D:264:LYS:HZ2	1.79	0.48
2:B:27:THR:CB	23:B:1020:CLA:H11	2.44	0.48
2:B:113:TRP:HD1	27:B:1048:BCR:C37	2.26	0.48
2:B:150:CYS:O	2:B:152:GLY:N	2.47	0.48
2:B:444:ARG:HD2	2:B:444:ARG:N	2.29	0.48
28:C:1056:DGD:HBFB2	28:C:1056:DGD:CAB	2.34	0.48
1:A:278:TRP:CH2	28:C:1057:DGD:CIA	2.86	0.48
3:C:213:LEU:H	3:C:213:LEU:HD23	1.79	0.48
1:A:135:TYR:CE2	3:C:449:ARG:NH1	2.82	0.48
4:D:189:HIS:CG	4:D:289:LEU:HD12	2.48	0.48
4:D:196:PHE:O	4:D:197:HIS:C	2.52	0.48
4:D:267:LEU:HD23	4:D:268:HIS:CD2	2.49	0.48
11:L:15:THR:O	11:L:15:THR:CG2	2.60	0.48
11:L:30:LEU:HD22	11:L:31:PHE:CD1	2.36	0.48
12:M:15:VAL:O	12:M:15:VAL:HG12	2.14	0.48
14:T:1:MET:C	14:T:4:ILE:CG2	2.80	0.48
20:Z:3:ILE:N	20:Z:3:ILE:HD12	2.19	0.48
20:Z:46:LEU:HB3	20:Z:50:LEU:HD12	1.94	0.48
1:A:316:THR:O	1:A:317:TRP:C	2.51	0.48
16:V:152:LEU:O	16:V:153:GLY:C	2.52	0.48
4:D:298:PHE:O	4:D:299:ILE:C	2.52	0.48
2:B:92:SER:OG	2:B:94:GLU:HG2	2.14	0.48
1:A:202:VAL:HG11	23:A:1006:CLA:CAD	2.44	0.48
23:A:1003:CLA:H161	24:A:1038:PHO:H62	1.95	0.48
24:A:1038:PHO:ND	4:D:209:LEU:HD11	2.29	0.48
1:A:196:PRO:C	1:A:199:GLN:CG	2.82	0.48
1:A:201:GLY:O	1:A:205:VAL:HG23	2.14	0.48
1:A:245:THR:OG1	4:D:265:ARG:HD3	2.13	0.48
2:B:458:PHE:HD2	23:B:1012:CLA:HMC3	1.70	0.48

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1016:CLA:H92	23:B:1016:CLA:C5	2.43	0.48
23:B:1011:CLA:H171	23:B:1016:CLA:HBC3	1.95	0.48
2:B:256:MET:HE3	2:B:448:ARG:HH12	1.75	0.48
2:B:7:ARG:HA	23:B:1019:CLA:CBA	2.42	0.48
27:C:1054:BCR:H331	27:C:1054:BCR:C8	2.43	0.48
3:C:218:PHE:O	3:C:221:GLU:O	2.32	0.48
3:C:449:ARG:CZ	23:C:1029:CLA:CED	2.90	0.48
4:D:158:LEU:C	4:D:161:PRO:HD2	2.34	0.48
4:D:222:LEU:HA	4:D:244:TYR:HA	1.96	0.48
20:Z:50:LEU:HA	20:Z:53:VAL:CG2	2.44	0.48
16:V:121:LEU:CD2	16:V:138:LEU:HD11	2.43	0.48
20:Z:37:LYS:C	20:Z:37:LYS:HD3	2.34	0.48
6:F:44:GLN:O	6:F:45:ARG:HB3	2.14	0.48
6:F:45:ARG:HH11	6:F:45:ARG:HG3	1.79	0.48
23:A:1006:CLA:CBC	4:D:182:LEU:HD21	2.44	0.47
24:A:1038:PHO:H3A	24:A:1038:PHO:HBA2	1.36	0.47
23:B:1010:CLA:HBB1	23:B:1010:CLA:CMB	2.29	0.47
3:C:280:SER:OG	3:C:438:LEU:HB2	2.13	0.47
3:C:334:PRO:HA	13:O:179:THR:HB	1.94	0.47
23:A:1003:CLA:CAD	23:D:1005:CLA:CAC	2.91	0.47
23:D:1005:CLA:H161	29:D:1062:MGE:CFB	2.45	0.47
7:H:49:TYR:CG	28:H:1058:DGD:O1B	2.67	0.47
7:H:58:VAL:HG12	7:H:58:VAL:O	2.14	0.47
9:J:40:LEU:N	9:J:40:LEU:CD2	2.77	0.47
10:K:35:LEU:HA	10:K:38:VAL:CG2	2.44	0.47
20:Z:46:LEU:O	20:Z:50:LEU:HB2	2.14	0.47
25:V:1041:HEM:HMA2	25:V:1041:HEM:HBA2	1.95	0.47
15:U:57:LEU:CD1	15:U:112:PHE:HB3	2.44	0.47
15:U:46:LYS:HE3	15:U:115:THR:OG1	2.13	0.47
3:C:367:GLU:HB2	3:C:368:PRO:CD	2.38	0.47
16:V:48:THR:C	16:V:50:LYS:N	2.63	0.47
2:B:434:THR:CG2	13:O:204:LYS:HE2	2.44	0.47
5:E:74:GLN:O	5:E:77:GLU:HB3	2.14	0.47
23:A:1006:CLA:HED2	23:A:1006:CLA:CAA	2.44	0.47
1:A:199:GLN:OE1	1:A:200:LEU:HG	2.12	0.47
1:A:273:PHE:CD1	1:A:274:PHE:N	2.81	0.47
1:A:76:ASN:ND2	1:A:78:ILE:N	2.62	0.47
1:A:59:ASP:O	1:A:86:SER:HB2	2.14	0.47
23:B:1022:CLA:CAA	23:B:1022:CLA:CGD	2.68	0.47
2:B:103:LEU:HD22	2:B:107:LEU:HG	1.95	0.47
2:B:148:LEU:N	2:B:210:ILE:CD1	2.75	0.47
2:B:33:TRP:HE1	23:B:1015:CLA:CAC	2.28	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:445:THR:HG23	2:B:450:TRP:NE1	2.29	0.47
3:C:295:THR:O	3:C:297:TYR:N	2.47	0.47
4:D:139:ARG:NH1	4:D:139:ARG:HG3	2.29	0.47
4:D:212:ALA:O	4:D:213:ILE:C	2.52	0.47
4:D:281:MET:O	4:D:282:SER:C	2.52	0.47
4:D:68:LEU:CD2	5:E:44:TYR:HE1	2.26	0.47
4:D:89:LEU:N	4:D:89:LEU:CD2	2.75	0.47
2:B:460:LEU:CG	28:H:1058:DGD:HAG3	2.43	0.47
7:H:13:PRO:O	7:H:15:ASN:N	2.47	0.47
7:H:38:PHE:CZ	7:H:42:LEU:HG	2.49	0.47
23:B:1015:CLA:H93	11:L:31:PHE:HE2	1.78	0.47
14:T:16:LEU:O	14:T:16:LEU:HD13	2.14	0.47
20:Z:22:GLY:O	20:Z:24:PRO:N	2.47	0.47
1:A:323:ARG:HG3	1:A:323:ARG:NH1	2.19	0.47
13:O:71:LEU:N	13:O:71:LEU:HD12	2.29	0.47
20:Z:61:VAL:HG23	20:Z:62:VAL:N	2.14	0.47
2:B:383:PHE:CE1	13:O:194:TYR:N	2.82	0.47
13:O:136:MET:HG3	13:O:137:ALA:H	1.78	0.47
2:B:373:LYS:C	2:B:375:GLY:N	2.66	0.47
1:A:116:ILE:CG2	1:A:117:PHE:N	2.76	0.47
1:A:28:LEU:HA	4:D:255:GLN:HA	1.96	0.47
2:B:108:PHE:CD2	2:B:109:LEU:HD23	2.49	0.47
2:B:191:ASN:ND2	2:B:192:PRO:HD2	2.28	0.47
2:B:222:PRO:HG2	2:B:225:LEU:CD1	2.31	0.47
2:B:272:ARG:HD2	2:B:273:TYR:CE1	2.49	0.47
2:B:27:THR:O	2:B:107:LEU:CD1	2.62	0.47
23:C:1032:CLA:H141	23:C:1032:CLA:H162	1.71	0.47
23:C:1034:CLA:C4D	23:C:1034:CLA:H12	2.43	0.47
3:C:63:TRP:HB2	23:C:1034:CLA:O2D	2.14	0.47
23:A:1006:CLA:CBA	28:C:1057:DGD:CFB	2.92	0.47
3:C:114:VAL:HG12	3:C:118:HIS:HD2	1.78	0.47
3:C:45:LEU:HD13	3:C:139:THR:HG23	1.96	0.47
3:C:236:GLY:HA3	27:C:1054:BCR:H392	1.96	0.47
3:C:263:ALA:H	8:I:28:PRO:CG	2.22	0.47
3:C:275:SER:HB3	23:C:1033:CLA:CED	2.45	0.47
3:C:466:VAL:CG2	4:D:248:THR:HG22	2.45	0.47
3:C:57:ALA:C	3:C:60:ILE:HG22	2.35	0.47
4:D:209:LEU:CD2	4:D:209:LEU:C	2.83	0.47
4:D:76:VAL:CG1	4:D:77:ALA:N	2.77	0.47
27:D:1050:BCR:H14C	6:F:33:PHE:CE2	2.50	0.47
8:I:14:PHE:O	8:I:18:LEU:HG	2.15	0.47
11:L:26:VAL:CG1	11:L:27:LEU:N	2.77	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:M:4:ASN:O	12:M:6:LEU:N	2.47	0.47
20:Z:51:VAL:O	20:Z:55:GLY:N	2.47	0.47
3:C:327:ASN:HB3	13:O:125:ASP:OD1	2.13	0.47
13:O:187:GLY:C	13:O:194:TYR:HB2	2.34	0.47
15:U:72:TYR:CD2	15:U:73:PRO:HD3	2.49	0.47
13:O:41:LEU:C	13:O:43:ASN:N	2.66	0.47
23:A:1003:CLA:H161	24:A:1038:PHO:H92	1.85	0.47
23:A:1007:CLA:H11	8:I:9:TYR:CE2	2.50	0.47
24:A:1039:PHO:H162	24:A:1039:PHO:H203	1.58	0.47
1:A:179:THR:HG22	1:A:183:MET:SD	2.53	0.47
1:A:246:TYR:HE1	4:D:264:LYS:NZ	2.12	0.47
2:B:450:TRP:CH2	23:B:1015:CLA:H2	2.50	0.47
2:B:143:LEU:O	2:B:144:PHE:C	2.52	0.47
23:C:1025:CLA:HMB2	23:C:1025:CLA:H41	1.95	0.47
3:C:437:PHE:CZ	23:C:1026:CLA:HMC1	2.49	0.47
23:C:1034:CLA:CHA	23:C:1034:CLA:H12	2.44	0.47
3:C:245:ILE:C	3:C:247:GLY:N	2.68	0.47
3:C:346:THR:CG2	3:C:348:GLU:OE1	2.59	0.47
3:C:450:ALA:HA	3:C:453:ALA:HB3	1.96	0.47
3:C:75:PHE:CE2	3:C:105:VAL:CG1	2.95	0.47
4:D:175:VAL:O	4:D:177:ALA:N	2.47	0.47
4:D:180:ARG:HD2	4:D:180:ARG:C	2.35	0.47
4:D:252:PHE:O	4:D:256:ILE:HG22	2.14	0.47
4:D:261:PHE:CE2	4:D:267:LEU:CA	2.97	0.47
25:E:1040:HEM:NC	6:F:24:HIS:HE1	2.10	0.47
7:H:41:PHE:O	7:H:42:LEU:C	2.52	0.47
13:O:167:ASP:HA	13:O:225:LEU:O	2.14	0.47
3:C:33:PHE:CD2	3:C:33:PHE:N	2.77	0.47
13:O:37:VAL:CG1	13:O:37:VAL:O	2.62	0.47
2:B:402:TYR:CD2	2:B:402:TYR:N	2.82	0.47
2:B:338:GLN:OE1	2:B:338:GLN:HA	2.14	0.47
1:A:48:PHE:N	1:A:115:ILE:HD11	2.29	0.47
23:B:1022:CLA:H61	23:B:1022:CLA:H11	1.95	0.47
2:B:447:PRO:HA	2:B:450:TRP:HB2	1.96	0.47
2:B:45:PHE:O	2:B:47:PRO:CD	2.59	0.47
23:C:1028:CLA:C5	28:C:1056:DGD:HA52	2.44	0.47
3:C:335:THR:OG1	3:C:337:LEU:HB2	2.14	0.47
4:D:141:TYR:O	4:D:144:ILE:HG22	2.13	0.47
4:D:236:ASN:CB	4:D:237:PRO:HA	2.37	0.47
5:E:19:TYR:CD1	5:E:20:TRP:CD1	2.95	0.47
6:F:18:VAL:O	6:F:20:TRP:N	2.47	0.47
17:X:34:PHE:O	17:X:38:ILE:CD1	2.63	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:324:GLY:O	4:D:326:ARG:N	2.46	0.47
16:V:86:ALA:N	16:V:93:ASP:HB3	2.29	0.47
13:O:57:PRO:HA	13:O:161:SER:OG	2.14	0.47
1:A:107:TYR:HB2	13:O:97:VAL:CG2	2.43	0.47
1:A:279:ARG:CB	1:A:279:ARG:CZ	2.91	0.47
23:B:1019:CLA:C9	29:L:1061:MGE:C8A	2.83	0.47
23:B:1013:CLA:H72	23:B:1020:CLA:H172	1.97	0.47
2:B:443:PHE:O	2:B:443:PHE:CD2	2.68	0.47
23:C:1029:CLA:H71	23:C:1029:CLA:H191	1.95	0.47
23:D:1005:CLA:H43	26:D:1042:PQ9:H212	1.96	0.47
4:D:111:TRP:O	4:D:112:THR:C	2.51	0.47
4:D:267:LEU:CD2	4:D:268:HIS:CD2	2.97	0.47
4:D:91:LEU:HG	4:D:93:TRP:CZ2	2.49	0.47
14:T:18:PHE:HB2	27:T:6046:BCR:C9	2.44	0.47
13:O:169:LYS:CB	13:O:169:LYS:NZ	2.73	0.47
1:A:36:ILE:CD1	8:I:19:PHE:HB2	2.44	0.47
23:B:1019:CLA:HMB2	23:B:1020:CLA:C4B	2.44	0.47
23:B:1020:CLA:C14	23:B:1021:CLA:HAB	2.45	0.47
2:B:141:ILE:O	2:B:142:HIS:C	2.53	0.47
2:B:246:PHE:HB3	2:B:462:PHE:HB3	1.96	0.47
30:A:1063:LHG:H292	23:C:1032:CLA:C6	2.44	0.47
4:D:201:VAL:HG11	23:D:1005:CLA:CAD	2.45	0.47
4:D:72:ASN:ND2	4:D:73:PHE:N	2.62	0.47
8:I:27:ASP:C	8:I:29:ALA:N	2.67	0.47
29:L:1061:MGE:H3B1	29:L:1061:MGE:C7B	2.34	0.47
11:L:18:TYR:CE2	14:T:20:ALA:HA	2.48	0.47
1:A:140:ARG:HH21	30:A:1063:LHG:HC11	1.80	0.47
1:A:141:PRO:HG3	3:C:447:ARG:CA	2.40	0.47
1:A:258:LEU:O	4:D:128:ARG:NH1	2.44	0.47
1:A:93:PHE:O	1:A:95:PRO:HD3	2.15	0.47
23:B:1014:CLA:O2D	23:B:1014:CLA:HAA2	2.12	0.47
2:B:158:LEU:HD12	2:B:199:VAL:HA	1.96	0.47
2:B:143:LEU:CD1	2:B:209:GLY:O	2.63	0.47
2:B:465:GLY:H	23:B:1019:CLA:HBC2	1.65	0.47
2:B:66:MET:CG	23:B:1013:CLA:CED	2.90	0.47
23:C:1034:CLA:HBA1	23:C:1034:CLA:H3A	1.34	0.47
3:C:166:ILE:HD11	3:C:248:GLY:HA3	1.97	0.47
3:C:248:GLY:O	3:C:252:ILE:HB	2.14	0.47
3:C:443:TRP:CD1	3:C:444:HIS:CE1	3.02	0.47
4:D:42:TYR:HD2	4:D:43:LEU:HD13	1.80	0.47
4:D:27:PHE:CD2	6:F:19:ARG:HG3	2.50	0.47
11:L:23:LEU:HD12	11:L:23:LEU:O	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:L:36:PHE:CD2	14:T:6:TYR:OH	2.56	0.47
1:A:304:HIS:CD2	1:A:313:VAL:HG21	2.49	0.47
1:A:320:ILE:C	1:A:322:ASN:N	2.67	0.47
13:O:145:LEU:HG	13:O:145:LEU:O	2.14	0.47
13:O:108:GLN:O	13:O:124:GLU:N	2.46	0.47
15:U:80:VAL:C	15:U:82:ASN:N	2.68	0.47
15:U:94:ILE:HA	15:U:95:PRO:HD3	1.75	0.47
2:B:384:ARG:HH12	4:D:348:ARG:CZ	2.28	0.47
15:U:72:TYR:O	15:U:73:PRO:C	2.53	0.47
16:V:81:ARG:HH11	16:V:81:ARG:HG3	1.80	0.47
13:O:74:THR:OG1	13:O:263:GLY:HA2	2.15	0.47
1:A:13:LEU:HD22	1:A:13:LEU:N	2.28	0.47
2:B:18:ARG:HG2	2:B:115:TRP:CD1	2.49	0.47
16:V:75:ASN:HA	16:V:76:PRO:HD2	1.74	0.47
2:B:343:HIS:CE1	2:B:345:VAL:HG13	2.48	0.47
2:B:46:ASP:OD2	2:B:48:SER:OG	2.32	0.47
27:A:1044:BCR:C22	27:A:1044:BCR:H403	2.40	0.47
30:A:1063:LHG:H202	30:A:1063:LHG:H171	1.55	0.47
1:A:50:ILE:O	1:A:53:ILE:HB	2.14	0.47
23:C:1034:CLA:O1A	23:C:1034:CLA:H102	2.14	0.47
2:B:463:PHE:CD2	28:H:1058:DGD:HAV1	2.50	0.47
14:T:18:PHE:CD1	27:T:6046:BCR:C34	2.85	0.47
20:Z:49:ALA:O	20:Z:52:LEU:N	2.48	0.47
13:O:109:GLY:HA3	13:O:123:GLU:HA	1.97	0.47
16:V:102:MET:HE1	16:V:141:ILE:CG2	2.45	0.47
15:U:127:ARG:HG2	15:U:127:ARG:NH1	2.28	0.47
15:U:58:ASN:C	15:U:59:ASN:OD1	2.54	0.47
15:U:129:ASN:C	15:U:131:GLY:N	2.67	0.47
3:C:383:ASP:O	3:C:385:GLN:N	2.47	0.47
2:B:483:ASP:C	2:B:485:GLU:H	2.18	0.47
24:A:1039:PHO:HAC1	24:A:1039:PHO:HMC3	1.67	0.47
1:A:278:TRP:CA	1:A:278:TRP:CE3	2.84	0.47
23:B:1016:CLA:CGA	23:B:1016:CLA:NA	2.78	0.47
2:B:12:LEU:HB2	23:B:1020:CLA:HMC2	1.97	0.47
2:B:141:ILE:HG23	2:B:217:ILE:HD13	1.97	0.47
2:B:468:TRP:HD1	2:B:469:HIS:ND1	2.13	0.47
2:B:478:VAL:HG12	2:B:479:PHE:N	2.30	0.47
23:C:1025:CLA:HED3	23:C:1025:CLA:OBD	2.15	0.47
23:C:1031:CLA:CBA	23:C:1033:CLA:CED	2.93	0.47
1:A:333:GLU:OE1	3:C:354:GLU:OE2	2.32	0.47
3:C:374:GLY:HA2	13:O:33:TYR:CE1	2.50	0.47
3:C:62:PHE:HB2	3:C:122:SER:OG	2.15	0.47

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:D:1005:CLA:H203	23:D:1005:CLA:H151	1.70	0.47
4:D:102:THR:HG22	4:D:103:ARG:N	2.30	0.47
4:D:253:TRP:CD1	26:D:1042:PQ9:H93	2.50	0.47
4:D:252:PHE:CD1	4:D:252:PHE:C	2.88	0.47
4:D:257:PHE:CD1	4:D:257:PHE:O	2.68	0.47
1:A:246:TYR:HE1	4:D:264:LYS:HZ2	1.63	0.47
16:V:52:TYR:O	16:V:55:GLY:N	2.48	0.47
16:V:98:LEU:N	16:V:98:LEU:HD12	2.30	0.47
13:O:184:ASP:OD1	13:O:188:ARG:O	2.33	0.47
2:B:384:ARG:HA	13:O:192:SER:CB	2.45	0.47
4:D:302:GLU:CG	13:O:199:ALA:HB1	2.44	0.47
2:B:83:GLU:HG3	2:B:83:GLU:H	1.50	0.47
20:Z:31:GLN:O	20:Z:32:ASP:O	2.33	0.47
7:H:39:LEU:HD13	7:H:39:LEU:O	2.15	0.47
1:A:50:ILE:HB	27:A:1044:BCR:C39	2.44	0.47
1:A:174:LEU:H	1:A:174:LEU:CD2	2.20	0.47
1:A:92:HIS:CD2	3:C:220:GLY:N	2.82	0.47
23:B:1011:CLA:CHD	23:B:1013:CLA:H51	2.44	0.47
2:B:450:TRP:CZ3	23:B:1015:CLA:H2	2.49	0.47
2:B:135:LEU:HD13	2:B:136:PRO:HD3	1.96	0.47
2:B:256:MET:HA	2:B:256:MET:HE3	1.97	0.47
2:B:25:MET:HE3	2:B:108:PHE:CD1	2.50	0.47
2:B:266:GLU:HG3	2:B:312:TYR:OH	2.15	0.47
2:B:53:ASN:O	2:B:53:ASN:ND2	2.48	0.47
23:C:1028:CLA:HHD	23:C:1028:CLA:CBC	2.36	0.47
3:C:131:TYR:C	3:C:133:ALA:N	2.68	0.47
3:C:318:LEU:HD21	3:C:328:VAL:HG11	1.94	0.47
3:C:48:LYS:HZ1	3:C:138:GLU:CD	2.17	0.47
4:D:103:ARG:C	4:D:105:CYS:N	2.67	0.47
7:H:21:VAL:HG12	7:H:22:ALA:H	1.79	0.47
11:L:30:LEU:CD2	11:L:31:PHE:HD1	2.22	0.47
13:O:65:ARG:NH1	13:O:66:ILE:O	2.48	0.47
16:V:64:ALA:O	16:V:66:CYS:N	2.47	0.47
16:V:88:ALA:HA	16:V:108:TYR:CE1	2.49	0.47
16:V:45:ILE:HG21	16:V:95:ILE:HD12	1.97	0.47
13:O:208:LEU:O	13:O:210:ARG:N	2.48	0.47
13:O:116:ASP:OD2	13:O:157:PRO:O	2.33	0.47
13:O:239:GLY:O	13:O:264:VAL:HA	2.15	0.47
23:A:1003:CLA:H18	23:A:1003:CLA:H152	1.74	0.46
23:B:1010:CLA:HAA2	23:B:1010:CLA:CGD	2.43	0.46
2:B:273:TYR:O	2:B:277:SER:HB2	2.14	0.46
2:B:465:GLY:C	2:B:467:ILE:H	2.14	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:98:LEU:O	2:B:101:ILE:HB	2.15	0.46
3:C:222:GLY:H	3:C:226:SER:HB3	1.80	0.46
3:C:269:GLU:OE2	3:C:447:ARG:HD2	2.16	0.46
1:A:135:TYR:CE1	3:C:449:ARG:HD2	2.50	0.46
3:C:456:GLU:O	3:C:457:LYS:HB2	2.15	0.46
4:D:191:TRP:HZ3	4:D:194:ASN:ND2	2.14	0.46
5:E:38:VAL:CB	6:F:39:ALA:HB3	2.45	0.46
27:H:1049:BCR:C8	27:H:1049:BCR:H311	2.45	0.46
1:A:97:TRP:O	8:I:1:MET:HG2	2.15	0.46
8:I:16:VAL:O	8:I:20:VAL:HG23	2.14	0.46
4:D:328:TRP:NE1	4:D:346:LEU:HD11	2.30	0.46
4:D:330:ALA:O	4:D:334:GLN:N	2.42	0.46
2:B:41:GLU:CD	2:B:62:VAL:H	2.19	0.46
23:A:1007:CLA:HAC2	27:A:1044:BCR:H351	1.96	0.46
1:A:95:PRO:HG2	1:A:98:GLU:CG	2.43	0.46
1:A:96:ILE:HA	1:A:105:TRP:NE1	2.29	0.46
23:B:1018:CLA:H2A	23:B:1018:CLA:O2D	2.16	0.46
29:B:1060:MGE:H3A2	29:B:1060:MGE:CGB	2.39	0.46
2:B:256:MET:HE2	2:B:448:ARG:HG3	1.96	0.46
23:C:1032:CLA:C19	23:C:1032:CLA:H152	2.39	0.46
3:C:39:ASN:HA	23:C:1035:CLA:CED	2.44	0.46
26:D:1042:PQ9:H361	29:L:1061:MGE:H231	1.96	0.46
4:D:196:PHE:CE2	4:D:284:ILE:HB	2.49	0.46
4:D:213:ILE:HD12	4:D:213:ILE:O	2.15	0.46
4:D:253:TRP:N	4:D:253:TRP:CD1	2.82	0.46
4:D:284:ILE:O	4:D:285:GLY:C	2.52	0.46
27:D:1050:BCR:C19	29:J:1059:MGE:H5A1	2.46	0.46
9:J:23:VAL:CG1	9:J:24:ILE:N	2.78	0.46
11:L:25:LEU:HD11	14:T:12:CYS:HB3	1.98	0.46
12:M:25:LEU:HD23	12:M:25:LEU:HA	1.72	0.46
1:A:184:ILE:CB	4:D:321:LEU:HD13	2.45	0.46
13:O:70:CYS:HA	13:O:104:LEU:O	2.15	0.46
20:Z:38:GLN:C	20:Z:40:ILE:N	2.67	0.46
1:A:334:ARG:O	1:A:336:ALA:N	2.48	0.46
2:B:369:ILE:HD13	4:D:340:VAL:O	2.14	0.46
20:Z:59:PHE:HD1	20:Z:59:PHE:H	1.62	0.46
1:A:226:GLU:HG3	1:A:236:GLY:HA2	1.97	0.46
24:A:1038:PHO:C10	24:A:1038:PHO:C14	2.67	0.46
1:A:113:GLN:O	1:A:116:ILE:N	2.48	0.46
1:A:116:ILE:CG2	1:A:117:PHE:H	2.27	0.46
1:A:117:PHE:HD2	1:A:117:PHE:N	2.12	0.46
1:A:224:ILE:O	2:B:481:GLY:C	2.53	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:286:ALA:HB1	23:A:1003:CLA:O1D	2.14	0.46
2:B:71:VAL:HG21	2:B:96:VAL:CG2	2.43	0.46
23:C:1025:CLA:CHB	23:C:1025:CLA:H42	2.45	0.46
23:C:1026:CLA:C4	23:C:1026:CLA:H71	2.45	0.46
23:C:1033:CLA:H111	23:C:1033:CLA:H143	1.60	0.46
1:A:155:PHE:HE1	28:C:1055:DGD:HAT2	1.80	0.46
4:D:235:PHE:O	4:D:236:ASN:CB	2.63	0.46
5:E:21:VAL:O	5:E:25:ILE:HG13	2.15	0.46
10:K:19:ASP:OD2	10:K:20:PRO:HD3	2.15	0.46
20:Z:43:GLY:O	20:Z:47:TRP:N	2.35	0.46
4:D:298:PHE:O	4:D:301:GLN:HB2	2.15	0.46
2:B:92:SER:O	2:B:93:PHE:C	2.53	0.46
5:E:68:ASP:HA	5:E:69:ARG:HE	1.79	0.46
4:D:190:ASN:HD21	4:D:193:LEU:CD2	2.29	0.46
1:A:22:THR:HA	1:A:29:TYR:CE1	2.48	0.46
23:B:1009:CLA:CAA	23:B:1009:CLA:CED	2.91	0.46
23:B:1012:CLA:C10	23:B:1023:CLA:C1	2.90	0.46
23:B:1023:CLA:H142	23:B:1023:CLA:H112	1.59	0.46
23:B:1024:CLA:H92	23:B:1024:CLA:H62	1.67	0.46
29:B:1060:MGE:O1B	29:B:1060:MGE:C1G	2.62	0.46
2:B:257:TRP:CZ3	4:D:291:LEU:CD1	2.98	0.46
2:B:258:TYR:HH	4:D:162:LEU:C	2.18	0.46
2:B:280:PHE:CZ	2:B:312:TYR:HD1	2.33	0.46
2:B:450:TRP:O	2:B:453:PHE:N	2.42	0.46
2:B:474:LEU:C	2:B:475:PHE:HD2	2.19	0.46
3:C:404:LEU:HD12	28:C:1057:DGD:HA21	1.98	0.46
3:C:92:ILE:HD12	3:C:97:TRP:HB2	1.98	0.46
4:D:113:PHE:O	4:D:114:ILE:C	2.53	0.46
4:D:196:PHE:HA	4:D:199:MET:HE3	1.97	0.46
3:C:457:LYS:HB3	4:D:224:GLN:HG3	1.96	0.46
3:C:108:THR:HG21	10:K:10:LYS:HD2	1.96	0.46
18:Y:28:ILE:CG1	18:Y:29:GLY:N	2.78	0.46
16:V:102:MET:CE	16:V:141:ILE:HB	2.45	0.46
16:V:144:HIS:O	16:V:148:GLU:HG2	2.15	0.46
2:B:297:THR:CG2	2:B:300:GLU:HG3	2.46	0.46
5:E:69:ARG:N	5:E:69:ARG:HE	2.13	0.46
20:Z:59:PHE:CD1	20:Z:59:PHE:N	2.82	0.46
18:Y:26:ALA:O	18:Y:30:ILE:HG22	2.15	0.46
13:O:254:HIS:O	13:O:255:GLU:C	2.54	0.46
1:A:94:TYR:OH	1:A:104:GLU:HG2	2.16	0.46
1:A:131:TRP:CZ3	23:C:1029:CLA:HMA3	2.50	0.46
23:B:1012:CLA:HED3	23:B:1013:CLA:C1	2.45	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:191:ASN:HD22	2:B:191:ASN:C	2.18	0.46
2:B:55:MET:SD	2:B:64:PRO:HA	2.56	0.46
23:C:1026:CLA:OBD	23:C:1026:CLA:C9	2.63	0.46
23:C:1027:CLA:CBA	23:C:1027:CLA:CHA	2.76	0.46
23:C:1037:CLA:HMC1	23:C:1037:CLA:HBC3	1.97	0.46
3:C:469:MET:HE2	4:D:251:ARG:CZ	2.46	0.46
4:D:175:VAL:O	4:D:178:ILE:N	2.49	0.46
7:H:28:THR:O	7:H:31:MET:HB3	2.16	0.46
12:M:9:ILE:N	12:M:9:ILE:HD12	2.23	0.46
20:Z:39:LEU:O	20:Z:42:LEU:CB	2.63	0.46
16:V:120:SER:O	16:V:123:SER:CB	2.63	0.46
16:V:63:CYS:O	16:V:66:CYS:N	2.47	0.46
16:V:68:VAL:C	16:V:70:GLY:N	2.68	0.46
15:U:106:ARG:O	15:U:109:LEU:HB2	2.16	0.46
3:C:306:GLY:O	3:C:309:ALA:HB3	2.15	0.46
2:B:86:ILE:HG13	2:B:87:ASP:N	2.30	0.46
27:A:1044:BCR:H392	27:A:1044:BCR:C22	2.41	0.46
23:C:1032:CLA:C17	23:C:1034:CLA:H191	2.44	0.46
3:C:334:PRO:CD	3:C:335:THR:H	2.28	0.46
3:C:34:ALA:O	3:C:38:GLY:CA	2.61	0.46
1:A:269:ARG:HH11	4:D:231:THR:CG2	2.29	0.46
4:D:336:HIS:CD2	4:D:336:HIS:H	2.33	0.46
23:B:1010:CLA:H161	28:H:1058:DGD:HA82	1.98	0.46
27:Z:1053:BCR:H24C	27:Z:1053:BCR:H371	1.64	0.46
13:O:65:ARG:HA	13:O:65:ARG:NE	2.31	0.46
23:B:1011:CLA:HMD2	23:B:1014:CLA:HBB1	1.96	0.46
23:B:1019:CLA:H191	23:B:1021:CLA:C7	2.44	0.46
2:B:223:GLN:CD	7:H:24:GLY:HA2	2.35	0.46
2:B:229:LEU:HD23	2:B:231:MET:N	2.31	0.46
3:C:255:THR:O	3:C:256:PRO:O	2.33	0.46
23:D:1004:CLA:H61	23:D:1004:CLA:H41	1.71	0.46
4:D:209:LEU:HD13	26:D:1042:PQ9:H193	1.97	0.46
6:F:37:ILE:CA	6:F:40:MET:HE3	2.22	0.46
14:T:2:GLU:HG3	14:T:3:THR:H	1.80	0.46
23:C:1037:CLA:CHC	27:Z:1053:BCR:H383	2.45	0.46
16:V:120:SER:O	16:V:121:LEU:C	2.54	0.46
13:O:114:ASN:OD1	13:O:114:ASN:N	2.48	0.46
1:A:279:ARG:HH22	24:A:1038:PHO:HMC1	1.80	0.46
1:A:142:TRP:CG	3:C:443:TRP:CZ3	3.04	0.46
1:A:260:PHE:O	1:A:261:GLN:O	2.33	0.46
1:A:279:ARG:HA	1:A:279:ARG:NE	2.31	0.46
23:B:1010:CLA:CBD	23:B:1010:CLA:CAA	2.94	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1019:CLA:H193	23:B:1019:CLA:H162	1.55	0.46
2:B:178:VAL:O	2:B:179:GLN:HG2	2.16	0.46
2:B:19:LEU:O	2:B:19:LEU:HD13	2.16	0.46
2:B:215:PHE:CE1	2:B:219:VAL:HG21	2.51	0.46
2:B:224:ARG:HB3	7:H:25:TRP:CB	2.42	0.46
2:B:249:ALA:HB2	23:B:1012:CLA:HBC1	1.96	0.46
3:C:271:TYR:C	23:C:1033:CLA:HMD3	2.36	0.46
3:C:128:GLY:HA3	23:C:1037:CLA:HAC2	1.95	0.46
27:C:1054:BCR:C8	27:C:1054:BCR:C33	2.90	0.46
3:C:234:VAL:O	3:C:238:ILE:HG13	2.15	0.46
3:C:237:HIS:O	3:C:240:ILE:CG2	2.64	0.46
3:C:250:TRP:CD1	3:C:250:TRP:C	2.88	0.46
3:C:67:MET:O	3:C:70:PHE:HB3	2.15	0.46
4:D:152:VAL:HG23	23:D:1004:CLA:O2D	2.15	0.46
23:A:1003:CLA:C4D	23:D:1005:CLA:HAC2	2.46	0.46
27:D:1050:BCR:C8	27:D:1050:BCR:C33	2.36	0.46
27:D:1050:BCR:H281	29:J:1059:MGE:C9B	2.33	0.46
4:D:126:MET:HG3	4:D:146:PHE:HB3	1.97	0.46
4:D:236:ASN:HB3	4:D:237:PRO:CA	2.39	0.46
4:D:263:ASN:OD1	4:D:263:ASN:O	2.34	0.46
4:D:39:PRO:O	4:D:43:LEU:CD2	2.62	0.46
4:D:67:TYR:CD1	4:D:76:VAL:HG21	2.51	0.46
6:F:32:PHE:C	6:F:32:PHE:HD2	2.19	0.46
23:B:1009:CLA:C4	27:H:1049:BCR:H353	2.24	0.46
7:H:53:LEU:CG	7:H:55:LEU:HD11	2.36	0.46
15:U:40:VAL:CG1	15:U:41:ASN:N	2.78	0.46
4:D:298:PHE:O	4:D:301:GLN:N	2.29	0.46
1:A:227:THR:O	1:A:230:THR:HG23	2.16	0.46
2:B:406:LEU:HD23	2:B:409:GLN:NE2	2.31	0.46
23:B:1013:CLA:H93	23:B:1013:CLA:H62	1.71	0.46
23:B:1023:CLA:C7	27:B:1048:BCR:H341	2.46	0.46
2:B:284:ILE:CG1	2:B:285:ASN:H	2.27	0.46
23:C:1027:CLA:CED	23:C:1036:CLA:H203	2.37	0.46
3:C:234:VAL:C	3:C:236:GLY:H	2.18	0.46
3:C:453:ALA:HB1	3:C:455:PHE:CE2	2.50	0.46
3:C:86:LEU:HB3	3:C:90:PRO:HD3	1.98	0.46
2:B:457:VAL:HG13	4:D:284:ILE:HD13	1.98	0.46
7:H:32:ALA:HA	7:H:35:MET:HE2	1.97	0.46
11:L:32:SER:O	11:L:35:PHE:N	2.38	0.46
1:A:325:ASN:O	1:A:328:MET:HG2	2.16	0.46
4:D:61:HIS:O	4:D:63:LEU:N	2.49	0.46
13:O:153:ALA:HB1	13:O:168:PHE:CD2	2.51	0.46

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:422:ARG:HD2	2:B:423:LYS:HZ2	1.77	0.46
2:B:429:ILE:CD1	2:B:429:ILE:N	2.78	0.46
15:U:72:TYR:HD2	15:U:73:PRO:HD3	1.81	0.46
16:V:81:ARG:NH1	16:V:81:ARG:HG3	2.30	0.46
16:V:99:VAL:O	16:V:100:ASP:C	2.55	0.46
3:C:100:GLY:O	3:C:102:GLY:N	2.49	0.46
13:O:117:GLY:HA3	13:O:158:ASN:ND2	2.31	0.46
20:Z:1:MET:SD	20:Z:60:PHE:HD2	2.39	0.46
24:A:1038:PHO:H92	23:D:1005:CLA:C19	2.45	0.46
30:A:1063:LHG:HC62	30:A:1063:LHG:P	2.54	0.46
1:A:223:LEU:CD2	1:A:245:THR:O	2.64	0.46
1:A:268:SER:HB3	4:D:236:ASN:HD21	1.81	0.46
1:A:41:LEU:HD12	24:A:1038:PHO:H52	1.98	0.46
23:B:1010:CLA:H41	7:H:46:LEU:CA	2.46	0.46
2:B:156:PHE:HB3	2:B:162:PHE:CB	2.45	0.46
2:B:252:VAL:C	2:B:254:GLY:H	2.19	0.46
23:C:1029:CLA:H51	23:C:1029:CLA:C4B	2.46	0.46
3:C:228:ASN:O	3:C:295:THR:HG21	2.16	0.46
3:C:72:LEU:C	3:C:74:HIS:H	2.19	0.46
3:C:94:THR:HG22	3:C:298:PRO:CG	2.45	0.46
26:D:1042:PQ9:H292	26:D:1042:PQ9:H261	1.27	0.46
4:D:55:VAL:CG1	4:D:105:CYS:SG	3.04	0.46
4:D:161:PRO:HG3	4:D:170:ALA:CB	2.45	0.46
4:D:18:LEU:O	4:D:22:LEU:HG	2.16	0.46
4:D:263:ASN:OD1	4:D:266:TRP:N	2.48	0.46
5:E:45:ASP:OD1	5:E:51:ARG:NH2	2.49	0.46
14:T:15:ALA:O	14:T:17:PHE:N	2.49	0.46
20:Z:10:ALA:O	20:Z:13:VAL:CG1	2.63	0.46
2:B:422:ARG:HH11	2:B:422:ARG:HB3	1.80	0.46
25:V:1041:HEM:CBC	25:V:1041:HEM:HHD	2.45	0.46
16:V:120:SER:O	16:V:122:ARG:N	2.48	0.46
16:V:68:VAL:O	16:V:70:GLY:N	2.49	0.46
4:D:299:ILE:O	4:D:300:SER:C	2.55	0.46
1:A:243:GLU:N	1:A:243:GLU:OE1	2.48	0.46
4:D:70:GLY:O	9:J:37:GLY:HA3	2.16	0.46
1:A:150:PRO:CA	23:A:1003:CLA:C4	2.82	0.45
2:B:224:ARG:HG2	7:H:25:TRP:CD1	2.52	0.45
2:B:193:TYR:O	2:B:261:ALA:HB2	2.16	0.45
2:B:324:LEU:O	2:B:325:PHE:CD2	2.69	0.45
2:B:463:PHE:O	2:B:466:HIS:HB3	2.16	0.45
23:C:1028:CLA:H71	28:C:1056:DGD:C7A	2.46	0.45
3:C:418:ASN:HD22	3:C:418:ASN:C	2.19	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:198:MET:HE2	4:D:198:MET:HB2	1.67	0.45
1:A:126:TYR:OH	4:D:257:PHE:HB2	2.16	0.45
1:A:69:GLY:HA2	4:D:313:THR:HG22	1.98	0.45
4:D:314:PHE:O	4:D:315:TYR:C	2.55	0.45
2:B:223:GLN:CG	7:H:24:GLY:HA2	2.45	0.45
29:J:1059:MGE:H1D	29:J:1059:MGE:H6D2	1.78	0.45
10:K:10:LYS:O	10:K:10:LYS:CG	2.65	0.45
14:T:24:ARG:O	14:T:26:PRO:HD3	2.16	0.45
13:O:269:ILE:O	13:O:270:GLU:HB2	2.16	0.45
3:C:384:ILE:O	3:C:384:ILE:CG2	2.54	0.45
13:O:142:ILE:N	13:O:142:ILE:CD1	2.75	0.45
13:O:218:LEU:HD23	13:O:219:THR:N	2.31	0.45
16:V:67:HIS:ND1	16:V:80:LEU:HD11	2.30	0.45
2:B:454:ALA:CB	23:B:1015:CLA:HBB2	2.46	0.45
2:B:256:MET:HE3	2:B:448:ARG:CZ	2.46	0.45
3:C:449:ARG:NE	23:C:1029:CLA:HED2	2.30	0.45
23:C:1033:CLA:C2	23:C:1033:CLA:O1A	2.64	0.45
3:C:151:TRP:CD2	3:C:268:GLY:HA3	2.51	0.45
3:C:39:ASN:HB3	23:C:1032:CLA:HBA1	1.98	0.45
24:A:1039:PHO:H71	4:D:122:LEU:CD1	2.44	0.45
4:D:68:LEU:HD21	5:E:44:TYR:CE1	2.51	0.45
4:D:103:ARG:HD3	5:E:73:LYS:HD2	1.98	0.45
1:A:75:ASN:ND2	14:T:3:THR:OG1	2.49	0.45
18:Y:29:GLY:O	18:Y:33:PRO:HD2	2.16	0.45
18:Y:29:GLY:O	18:Y:33:PRO:HD3	2.16	0.45
1:A:322:ASN:HA	1:A:322:ASN:HD22	1.53	0.45
13:O:148:VAL:HG12	13:O:151:LEU:CB	2.33	0.45
2:B:355:PHE:C	2:B:370:LEU:HD23	2.36	0.45
2:B:416:THR:O	2:B:417:VAL:C	2.53	0.45
15:U:73:PRO:HB2	16:V:109:ASP:CG	2.37	0.45
1:A:243:GLU:HA	4:D:241:GLU:CB	2.45	0.45
2:B:18:ARG:HB3	2:B:115:TRP:CD1	2.51	0.45
15:U:78:LEU:O	15:U:79:ILE:C	2.53	0.45
27:A:1044:BCR:H373	27:A:1044:BCR:C39	2.26	0.45
1:A:119:PHE:HZ	23:A:1003:CLA:H91	1.80	0.45
1:A:160:ILE:CG2	1:A:291:SER:HA	2.44	0.45
23:B:1022:CLA:C1A	23:B:1022:CLA:O1A	2.65	0.45
2:B:120:LEU:O	2:B:121:GLU:O	2.35	0.45
2:B:149:LEU:HG	23:B:1011:CLA:HBC1	1.98	0.45
2:B:467:ILE:O	2:B:471:ALA:HB2	2.16	0.45
23:C:1027:CLA:HMA3	23:C:1027:CLA:HAA2	1.68	0.45
28:C:1055:DGD:HB61	28:C:1055:DGD:HB91	1.54	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:A:1006:CLA:CED	28:C:1057:DGD:HBW1	2.44	0.45
4:D:123:ILE:O	4:D:127:LEU:CD2	2.65	0.45
4:D:146:PHE:C	4:D:149:PRO:HD2	2.36	0.45
4:D:74:LEU:O	4:D:175:VAL:HG23	2.17	0.45
5:E:53:ASP:OD2	5:E:54:SER:N	2.49	0.45
11:L:36:PHE:CD2	14:T:6:TYR:CZ	3.04	0.45
20:Z:54:VAL:O	27:Z:1053:BCR:H313	2.16	0.45
3:C:329:GLY:O	13:O:127:ILE:HG23	2.16	0.45
2:B:429:ILE:CD1	2:B:429:ILE:H	2.28	0.45
16:V:105:PRO:HG2	16:V:115:ALA:HA	1.97	0.45
3:C:322:GLN:NE2	3:C:381:LYS:HA	2.17	0.45
3:C:369:LEU:O	3:C:369:LEU:CD1	2.65	0.45
13:O:215:ARG:N	13:O:215:ARG:CD	2.73	0.45
2:B:86:ILE:O	2:B:87:ASP:CB	2.60	0.45
2:B:315:ILE:CG2	2:B:316:GLY:N	2.79	0.45
2:B:342:GLY:CA	2:B:404:GLY:HA3	2.46	0.45
13:O:172:PHE:CD1	13:O:172:PHE:C	2.90	0.45
24:A:1038:PHO:H101	24:A:1038:PHO:H143	1.93	0.45
1:A:259:ILE:O	1:A:260:PHE:C	2.54	0.45
3:C:158:THR:O	3:C:158:THR:HG22	2.16	0.45
3:C:270:ALA:O	3:C:274:TYR:HD1	1.98	0.45
3:C:61:VAL:O	3:C:64:ALA:HB3	2.16	0.45
3:C:84:GLN:CB	3:C:86:LEU:HD13	2.46	0.45
23:D:1004:CLA:H3A	23:D:1004:CLA:HBA1	1.60	0.45
7:H:6:TRP:C	7:H:6:TRP:CD1	2.90	0.45
10:K:18:PHE:CZ	20:Z:9:LEU:HD21	2.52	0.45
11:L:24:ILE:HG23	11:L:25:LEU:H	1.80	0.45
1:A:306:VAL:CG2	1:A:316:THR:HG23	2.46	0.45
13:O:237:ILE:HD13	13:O:269:ILE:HD11	1.99	0.45
16:V:141:ILE:O	16:V:142:ALA:C	2.54	0.45
16:V:66:CYS:O	16:V:68:VAL:N	2.50	0.45
2:B:486:LEU:HD12	2:B:489:GLU:OE1	2.16	0.45
3:C:464:GLU:CG	3:C:467:LEU:HB2	2.45	0.45
3:C:249:ILE:HD12	3:C:249:ILE:N	2.31	0.45
3:C:391:ARG:HB2	3:C:391:ARG:CZ	2.45	0.45
13:O:239:GLY:O	13:O:264:VAL:CG1	2.65	0.45
23:A:1006:CLA:H111	28:C:1057:DGD:HBG2	1.86	0.45
24:A:1038:PHO:HMA2	4:D:257:PHE:CE2	2.51	0.45
26:A:1043:PQ9:H292	26:A:1043:PQ9:H261	1.50	0.45
1:A:29:TYR:CD2	1:A:133:LEU:HD13	2.51	0.45
23:B:1016:CLA:H143	23:B:1016:CLA:H162	1.62	0.45
2:B:441:GLY:O	13:O:201:PRO:HD2	2.17	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1027:CLA:HBA1	23:C:1027:CLA:CBD	2.45	0.45
28:C:1056:DGD:C2B	28:C:1056:DGD:HG12	2.01	0.45
3:C:341:LEU:HD23	3:C:351:PHE:HA	1.99	0.45
4:D:110:LEU:C	4:D:113:PHE:HB3	2.37	0.45
4:D:156:VAL:O	4:D:157:PHE:CD1	2.69	0.45
4:D:198:MET:O	26:D:1042:PQ9:H393	2.17	0.45
4:D:221:THR:HG23	4:D:244:TYR:CB	2.47	0.45
4:D:68:LEU:HD22	5:E:44:TYR:HE1	1.81	0.45
8:I:3:THR:C	8:I:6:ILE:HD11	2.36	0.45
2:B:389:LYS:HB3	2:B:390:TYR:HD1	1.81	0.45
15:U:60:THR:O	15:U:127:ARG:NH1	2.50	0.45
2:B:373:LYS:HG3	2:B:374:ASN:H	1.80	0.45
13:O:36:ILE:O	13:O:36:ILE:HG22	2.14	0.45
5:E:75:GLN:HG3	5:E:79:PHE:CE1	2.52	0.45
18:Y:42:ARG:HG2	18:Y:42:ARG:HH11	1.81	0.45
23:A:1003:CLA:HAA2	23:A:1003:CLA:HBD	1.99	0.45
24:A:1038:PHO:H92	23:D:1005:CLA:H203	1.98	0.45
1:A:176:ILE:O	1:A:179:THR:HB	2.17	0.45
1:A:258:LEU:HA	4:D:132:ILE:HD12	1.99	0.45
23:B:1012:CLA:HBA2	23:B:1012:CLA:H3A	1.42	0.45
23:B:1022:CLA:C17	23:B:1022:CLA:H71	2.19	0.45
2:B:219:VAL:CG1	2:B:220:ARG:H	2.29	0.45
2:B:442:ILE:O	2:B:443:PHE:O	2.35	0.45
2:B:68:ARG:CG	2:B:69:LEU:H	2.30	0.45
23:C:1028:CLA:H92	28:C:1056:DGD:HBW1	1.98	0.45
23:C:1036:CLA:HBC2	23:C:1036:CLA:HMC1	1.99	0.45
3:C:166:ILE:HD13	3:C:245:ILE:HA	1.98	0.45
3:C:297:TYR:O	3:C:298:PRO:C	2.55	0.45
1:A:160:ILE:HG13	3:C:431:PHE:HE1	1.81	0.45
4:D:147:SER:O	4:D:148:ALA:C	2.55	0.45
7:H:30:LEU:O	7:H:33:VAL:HG12	2.17	0.45
4:D:18:LEU:HD13	17:X:37:LEU:HB3	1.98	0.45
3:C:391:ARG:HH11	3:C:391:ARG:CG	2.29	0.45
23:A:1003:CLA:CHD	23:A:1003:CLA:CBC	2.91	0.45
24:A:1038:PHO:HED1	4:D:213:ILE:HB	1.98	0.45
1:A:140:ARG:HB2	4:D:220:ASN:CA	2.47	0.45
1:A:159:LEU:HG	1:A:163:ILE:CD1	2.45	0.45
2:B:280:PHE:O	2:B:284:ILE:HG23	2.16	0.45
2:B:95:GLY:O	2:B:99:ALA:N	2.23	0.45
3:C:131:TYR:C	3:C:133:ALA:H	2.20	0.45
3:C:95:LEU:HA	3:C:185:LEU:HD23	1.99	0.45
3:C:334:PRO:HA	13:O:179:THR:CB	2.47	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:435:PHE:O	3:C:436:PHE:C	2.54	0.45
23:A:1006:CLA:H162	27:D:1050:BCR:H291	1.98	0.45
4:D:68:LEU:CD2	5:E:44:TYR:CE1	2.99	0.45
5:E:30:LEU:HD12	6:F:31:ILE:HG23	1.98	0.45
7:H:7:LEU:HD23	7:H:7:LEU:O	2.17	0.45
8:I:13:THR:O	8:I:16:VAL:HG22	2.17	0.45
27:K:1051:BCR:C39	27:K:1051:BCR:H373	2.29	0.45
11:L:26:VAL:HG21	29:L:1061:MGE:CGB	2.39	0.45
1:A:329:GLU:OE1	3:C:412:THR:OG1	2.35	0.45
16:V:159:GLY:O	16:V:160:LYS:HB3	2.17	0.45
13:O:65:ARG:HH11	13:O:108:GLN:HB2	1.82	0.45
13:O:121:PHE:HE1	13:O:151:LEU:HD23	1.82	0.45
15:U:98:THR:O	15:U:100:ARG:N	2.49	0.45
4:D:337:GLU:O	4:D:338:ASN:C	2.55	0.45
3:C:320:ARG:O	3:C:324:LEU:HD13	2.16	0.45
13:O:91:PHE:CE1	13:O:260:LYS:HE3	2.52	0.45
23:A:1003:CLA:H112	23:A:1003:CLA:H91	1.64	0.45
1:A:151:LEU:O	1:A:152:ALA:C	2.54	0.45
23:B:1011:CLA:C2D	23:B:1013:CLA:C3	2.94	0.45
23:B:1023:CLA:H72	27:B:1048:BCR:H343	1.96	0.45
2:B:280:PHE:CE2	2:B:312:TYR:HD1	2.35	0.45
23:C:1025:CLA:H201	23:C:1031:CLA:H122	1.98	0.45
3:C:118:HIS:NE2	23:C:1027:CLA:O1A	2.49	0.45
3:C:248:GLY:C	3:C:250:TRP:N	2.69	0.45
3:C:297:TYR:HD1	3:C:302:TYR:CE2	2.34	0.45
3:C:458:GLY:C	3:C:459:ILE:HD12	2.37	0.45
7:H:12:ARG:CB	7:H:12:ARG:NH1	2.80	0.45
1:A:328:MET:HB2	4:D:321:LEU:HD22	1.98	0.45
2:B:399:VAL:HG13	2:B:417:VAL:CG2	2.46	0.45
2:B:230:ARG:O	2:B:230:ARG:HG3	2.16	0.45
18:Y:44:GLY:O	18:Y:45:ASN:C	2.55	0.45
2:B:334:ASP:O	2:B:432:PHE:CD2	2.70	0.45
13:O:234:THR:HG21	13:O:236:GLU:HG3	1.98	0.45
1:A:135:TYR:C	1:A:137:LEU:H	2.19	0.45
1:A:257:ARG:HB3	4:D:132:ILE:CG2	2.46	0.45
1:A:279:ARG:C	1:A:283:VAL:HG12	2.37	0.45
1:A:288:LEU:HD11	3:C:435:PHE:CE2	2.52	0.45
23:B:1011:CLA:C2D	23:B:1013:CLA:H43	2.41	0.45
23:B:1019:CLA:H3A	23:B:1019:CLA:CGA	2.30	0.45
23:B:1019:CLA:H41	23:B:1019:CLA:H61	1.34	0.45
2:B:6:TYR:O	23:B:1019:CLA:HAA2	2.17	0.45
23:B:1024:CLA:H102	23:B:1024:CLA:H143	1.99	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:122:LEU:HD22	2:B:122:LEU:C	2.37	0.45
2:B:188:ASP:C	2:B:190:PHE:H	2.18	0.45
2:B:201:HIS:CD2	2:B:202:HIS:N	2.85	0.45
2:B:223:GLN:C	2:B:225:LEU:N	2.69	0.45
2:B:5:TRP:O	2:B:7:ARG:N	2.49	0.45
23:C:1026:CLA:HAA1	23:C:1026:CLA:HBD	1.97	0.45
23:C:1031:CLA:HBA1	23:C:1031:CLA:H3A	1.66	0.45
1:A:159:LEU:HD11	28:C:1055:DGD:HA22	1.99	0.45
23:C:1034:CLA:H193	28:C:1057:DGD:HAF1	1.99	0.45
3:C:431:PHE:CD2	3:C:431:PHE:C	2.90	0.45
1:A:260:PHE:HB3	4:D:28:VAL:HB	1.99	0.45
23:H:1017:CLA:H92	23:H:1017:CLA:H62	1.81	0.45
8:I:3:THR:O	8:I:6:ILE:CD1	2.64	0.45
10:K:22:VAL:HA	10:K:25:LEU:HB2	1.98	0.45
28:C:1056:DGD:HBN1	10:K:30:VAL:HG21	1.94	0.45
14:T:2:GLU:C	14:T:6:TYR:CD2	2.90	0.45
13:O:145:LEU:CD2	13:O:145:LEU:N	2.79	0.45
2:B:385:ARG:HA	2:B:388:SER:OG	2.17	0.45
25:V:1041:HEM:HHC	25:V:1041:HEM:HBB2	1.98	0.45
15:U:56:ASP:C	15:U:58:ASN:H	2.20	0.45
16:V:88:ALA:O	16:V:89:THR:HG23	2.16	0.45
3:C:287:THR:HG23	3:C:427:ALA:O	2.16	0.45
2:B:18:ARG:HG2	2:B:18:ARG:HH11	1.81	0.45
3:C:249:ILE:CD1	3:C:249:ILE:N	2.80	0.45
23:B:1011:CLA:C19	23:H:1017:CLA:C15	2.85	0.45
23:B:1020:CLA:C14	23:B:1021:CLA:CAB	2.95	0.45
23:B:1021:CLA:H61	23:B:1021:CLA:H41	1.53	0.45
2:B:113:TRP:O	2:B:117:TYR:HB2	2.17	0.45
2:B:156:PHE:CB	23:B:1014:CLA:HAC2	2.47	0.45
2:B:191:ASN:ND2	2:B:193:TYR:HD2	2.09	0.45
23:C:1029:CLA:H51	23:C:1029:CLA:CHC	2.47	0.45
3:C:41:ARG:H	23:C:1035:CLA:HED1	1.81	0.45
1:A:93:PHE:CE1	28:C:1055:DGD:HAG2	2.52	0.45
3:C:110:PRO:HA	3:C:113:VAL:HG13	1.99	0.45
1:A:135:TYR:CD1	3:C:455:PHE:HE1	2.35	0.45
3:C:85:GLY:C	3:C:86:LEU:HD12	2.37	0.45
4:D:195:PRO:O	4:D:199:MET:HG3	2.17	0.45
4:D:235:PHE:O	4:D:236:ASN:OD1	2.35	0.45
5:E:35:TRP:HA	6:F:36:ALA:HA	1.98	0.45
5:E:61:ARG:NH1	16:V:153:GLY:HA2	2.32	0.45
4:D:300:SER:O	4:D:303:ILE:CD1	2.65	0.45
4:D:57:SER:HB3	4:D:79:SER:HB2	1.97	0.45

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:307:GLU:O	2:B:308:LYS:C	2.55	0.45
13:O:51:THR:O	13:O:52:ALA:HB2	2.17	0.45
23:A:1006:CLA:H92	23:A:1006:CLA:H61	1.78	0.44
1:A:202:VAL:O	1:A:206:PHE:N	2.34	0.44
1:A:297:LEU:HD11	3:C:425:TRP:CZ3	2.51	0.44
23:B:1012:CLA:H41	23:B:1012:CLA:H62	1.65	0.44
23:B:1014:CLA:CBD	23:B:1014:CLA:HAA1	2.47	0.44
2:B:272:ARG:O	2:B:276:ASP:OD2	2.35	0.44
2:B:440:ASP:OD2	2:B:442:ILE:N	2.51	0.44
23:A:1006:CLA:HED1	28:C:1057:DGD:HBH2	1.89	0.44
26:D:1042:PQ9:H61	26:D:1042:PQ9:H91	1.68	0.44
4:D:267:LEU:HD23	4:D:268:HIS:HD2	1.82	0.44
23:B:1010:CLA:H13	28:H:1058:DGD:HA82	1.97	0.44
7:H:14:LEU:CD1	7:H:14:LEU:H	2.29	0.44
11:L:25:LEU:HD22	14:T:13:ILE:CD1	2.47	0.44
12:M:11:THR:O	12:M:13:LEU:N	2.50	0.44
1:A:180:PHE:O	1:A:184:ILE:HG13	2.17	0.44
1:A:324:ALA:CA	4:D:325:ILE:HG23	2.47	0.44
4:D:61:HIS:O	4:D:62:GLY:C	2.53	0.44
13:O:70:CYS:N	13:O:266:TYR:O	2.45	0.44
16:V:102:MET:HE1	16:V:141:ILE:CB	2.47	0.44
4:D:304:ARG:HG2	4:D:311:PHE:CE2	2.51	0.44
13:O:184:ASP:O	13:O:185:PRO:C	2.54	0.44
16:V:48:THR:HB	16:V:51:GLN:H	1.82	0.44
2:B:302:TRP:CE3	2:B:305:ILE:HD12	2.52	0.44
1:A:257:ARG:O	4:D:132:ILE:HD13	2.18	0.44
1:A:44:ALA:O	1:A:45:THR:C	2.56	0.44
1:A:60:ILE:O	1:A:61:ASP:C	2.55	0.44
2:B:118:TRP:CG	2:B:119:ASP:N	2.85	0.44
2:B:442:ILE:O	2:B:443:PHE:C	2.55	0.44
23:C:1030:CLA:H142	23:C:1030:CLA:H112	1.84	0.44
3:C:123:ALA:HA	27:K:1052:BCR:C35	2.47	0.44
3:C:42:LEU:HD13	3:C:151:TRP:CH2	2.52	0.44
3:C:343:ARG:HA	3:C:348:GLU:O	2.17	0.44
3:C:451:ALA:CA	3:C:456:GLU:HG2	2.46	0.44
3:C:456:GLU:O	3:C:457:LYS:CG	2.65	0.44
24:A:1039:PHO:H91	4:D:153:PHE:CE2	2.51	0.44
4:D:195:PRO:CB	11:L:31:PHE:CE1	2.99	0.44
4:D:261:PHE:CE2	4:D:267:LEU:HA	2.52	0.44
7:H:49:TYR:C	7:H:51:SER:H	2.20	0.44
8:I:13:THR:O	8:I:14:PHE:C	2.55	0.44
23:A:1007:CLA:H11	8:I:9:TYR:CD2	2.52	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:15:THR:OG1	9:J:10:LEU:CD2	2.65	0.44
11:L:5:PRO:C	11:L:7:ARG:H	2.19	0.44
12:M:6:LEU:HA	12:M:9:ILE:CD1	2.48	0.44
1:A:57:PRO:CG	13:O:141:ARG:NH1	2.75	0.44
1:A:315:ASN:O	4:D:63:LEU:CD2	2.65	0.44
15:U:80:VAL:C	15:U:82:ASN:H	2.21	0.44
1:A:327:GLY:O	1:A:330:VAL:HG22	2.17	0.44
16:V:81:ARG:O	16:V:85:LEU:HG	2.18	0.44
2:B:87:ASP:O	2:B:88:PRO:C	2.55	0.44
2:B:130:GLU:HB2	2:B:131:PRO:HD2	1.98	0.44
23:A:1007:CLA:CMC	27:A:1044:BCR:H352	2.47	0.44
1:A:308:ASP:CG	1:A:309:ALA:H	2.21	0.44
23:B:1012:CLA:CED	23:B:1012:CLA:CAA	2.40	0.44
2:B:154:GLY:O	2:B:159:THR:OG1	2.26	0.44
2:B:475:PHE:CD1	4:D:140:PRO:HD3	2.52	0.44
3:C:439:VAL:HG22	23:C:1032:CLA:HBC1	1.98	0.44
23:D:1005:CLA:HBC2	23:D:1005:CLA:HMC1	1.98	0.44
23:B:1016:CLA:C14	23:D:1008:CLA:CMB	2.71	0.44
23:D:1008:CLA:H91	17:X:30:LEU:HD23	1.98	0.44
4:D:153:PHE:CD1	4:D:153:PHE:C	2.91	0.44
4:D:29:PHE:HE2	4:D:132:ILE:HG12	1.82	0.44
5:E:21:VAL:C	5:E:23:HIS:N	2.70	0.44
12:M:23:ILE:O	12:M:27:VAL:HG23	2.16	0.44
17:X:24:LEU:O	17:X:28:VAL:N	2.34	0.44
4:D:320:LEU:O	4:D:321:LEU:C	2.55	0.44
13:O:65:ARG:NE	13:O:110:GLU:N	2.66	0.44
2:B:381:ILE:HA	2:B:382:PRO:HD3	1.71	0.44
2:B:422:ARG:HB3	2:B:422:ARG:NH1	2.33	0.44
16:V:105:PRO:CG	16:V:115:ALA:CA	2.93	0.44
16:V:105:PRO:HG2	16:V:115:ALA:CA	2.46	0.44
16:V:133:LEU:N	16:V:133:LEU:HD12	2.29	0.44
2:B:54:PRO:HD2	2:B:57:ARG:CG	2.47	0.44
13:O:80:GLU:O	13:O:82:PRO:HD3	2.18	0.44
5:E:5:THR:C	5:E:7:GLU:H	2.19	0.44
15:U:45:GLU:O	15:U:45:GLU:HG2	2.17	0.44
1:A:205:VAL:C	1:A:207:GLY:H	2.20	0.44
1:A:254:TYR:CD2	1:A:254:TYR:C	2.91	0.44
1:A:38:ILE:HG21	27:A:1044:BCR:H333	2.00	0.44
1:A:65:GLU:O	1:A:65:GLU:CG	2.62	0.44
23:B:1012:CLA:H92	23:B:1018:CLA:H61	2.00	0.44
23:B:1021:CLA:H112	23:B:1021:CLA:H91	1.79	0.44
2:B:112:CYS:O	2:B:113:TRP:C	2.56	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1025:CLA:CED	23:C:1025:CLA:OBD	2.66	0.44
3:C:221:GLU:HA	3:C:221:GLU:OE1	2.18	0.44
6:F:28:VAL:O	6:F:31:ILE:HG22	2.17	0.44
27:H:1049:BCR:H392	27:H:1049:BCR:C23	2.47	0.44
1:A:36:ILE:HD13	8:I:19:PHE:HB2	2.00	0.44
8:I:7:THR:OG1	8:I:8:VAL:N	2.50	0.44
23:C:1035:CLA:H91	27:K:1052:BCR:H383	1.98	0.44
11:L:31:PHE:O	11:L:35:PHE:CD1	2.70	0.44
13:O:179:THR:CG2	13:O:180:ALA:H	2.29	0.44
15:U:57:LEU:HD13	15:U:91:VAL:CG2	2.48	0.44
2:B:87:ASP:O	2:B:87:ASP:CG	2.55	0.44
5:E:9:PRO:HD3	6:F:13:TYR:CD1	2.52	0.44
1:A:273:PHE:C	1:A:275:LEU:N	2.71	0.44
23:C:1030:CLA:HMB2	23:C:1031:CLA:C1B	2.47	0.44
3:C:128:GLY:CA	23:C:1037:CLA:HAC1	2.45	0.44
27:C:1054:BCR:H371	27:C:1054:BCR:H24C	1.57	0.44
3:C:217:PRO:O	28:C:1055:DGD:HG11	2.17	0.44
3:C:126:GLY:O	3:C:129:GLY:N	2.44	0.44
5:E:16:SER:HB3	5:E:19:TYR:CB	2.47	0.44
12:M:25:LEU:O	12:M:28:GLN:HG3	2.18	0.44
2:B:370:LEU:HD12	2:B:392:PHE:CZ	2.53	0.44
13:O:196:SER:O	13:O:197:ALA:C	2.55	0.44
13:O:215:ARG:HH11	13:O:215:ARG:CG	2.24	0.44
16:V:89:THR:HA	16:V:90:PRO:C	2.38	0.44
4:D:204:VAL:O	4:D:204:VAL:CG1	2.64	0.44
18:Y:38:LEU:HA	18:Y:41:VAL:HG12	1.99	0.44
1:A:76:ASN:HB3	1:A:79:THR:CG2	2.48	0.44
1:A:97:TRP:HA	8:I:1:MET:CG	2.48	0.44
2:B:464:PHE:CD1	23:B:1019:CLA:CBC	3.01	0.44
23:B:1021:CLA:H62	29:B:1060:MGE:CDB	2.22	0.44
2:B:215:PHE:CZ	2:B:219:VAL:HG21	2.53	0.44
2:B:224:ARG:O	2:B:228:ALA:HB2	2.17	0.44
2:B:257:TRP:CH2	4:D:291:LEU:HA	2.52	0.44
2:B:442:ILE:HG22	2:B:442:ILE:O	2.17	0.44
2:B:479:PHE:C	2:B:481:GLY:N	2.70	0.44
2:B:482:ILE:HD13	4:D:138:VAL:HG12	1.98	0.44
2:B:5:TRP:C	2:B:7:ARG:H	2.20	0.44
3:C:61:VAL:HG22	23:C:1027:CLA:HMD1	2.00	0.44
23:C:1026:CLA:HBB2	23:C:1034:CLA:H11	1.98	0.44
28:C:1055:DGD:HB32	28:C:1055:DGD:C7B	2.45	0.44
3:C:56:HIS:C	3:C:58:GLY:H	2.21	0.44
1:A:254:TYR:OH	4:D:129:GLN:HB3	2.17	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:475:PHE:HD1	4:D:140:PRO:HD3	1.81	0.44
4:D:287:VAL:CG2	4:D:288:GLY:N	2.80	0.44
4:D:92:LEU:HD13	4:D:92:LEU:O	2.18	0.44
2:B:223:GLN:CG	7:H:24:GLY:CA	2.94	0.44
7:H:49:TYR:CD1	28:H:1058:DGD:O1B	2.70	0.44
2:B:373:LYS:CG	2:B:374:ASN:N	2.81	0.44
23:A:1003:CLA:C19	24:A:1038:PHO:CMA	2.95	0.44
1:A:235:TYR:C	1:A:237:TYR:N	2.69	0.44
1:A:43:ALA:HA	27:A:1044:BCR:C15	2.48	0.44
1:A:63:ILE:HG22	3:C:335:THR:HG21	2.00	0.44
23:B:1012:CLA:O1A	23:B:1013:CLA:HBA1	2.17	0.44
23:B:1023:CLA:CBA	23:B:1023:CLA:O2D	2.66	0.44
3:C:333:GLY:O	13:O:179:THR:OG1	2.35	0.44
3:C:48:LYS:HD3	3:C:132:HIS:O	2.17	0.44
4:D:155:SER:HA	4:D:159:ILE:HG13	2.00	0.44
4:D:18:LEU:O	4:D:19:ASP:C	2.56	0.44
14:T:9:ILE:O	14:T:13:ILE:HG12	2.18	0.44
20:Z:22:GLY:O	20:Z:23:VAL:C	2.56	0.44
1:A:322:ASN:O	1:A:325:ASN:HB2	2.17	0.44
1:A:328:MET:CB	4:D:325:ILE:CG1	2.92	0.44
2:B:384:ARG:NH1	4:D:348:ARG:CD	2.81	0.44
2:B:297:THR:HG22	2:B:300:GLU:HB2	1.99	0.44
13:O:133:THR:CG2	13:O:134:VAL:N	2.80	0.44
16:V:135:GLU:O	16:V:136:LYS:C	2.56	0.44
2:B:357:ARG:O	2:B:425:ILE:CD1	2.65	0.44
1:A:16:ARG:O	1:A:17:PHE:C	2.56	0.44
23:B:1011:CLA:H2A	23:B:1011:CLA:O1D	2.18	0.44
23:B:1018:CLA:H102	23:B:1018:CLA:H62	1.27	0.44
2:B:20:ILE:HG12	23:B:1023:CLA:CMD	2.48	0.44
2:B:143:LEU:O	2:B:146:ALA:HB3	2.18	0.44
2:B:15:ASP:C	2:B:17:GLY:N	2.71	0.44
2:B:241:SER:O	2:B:242:ILE:C	2.56	0.44
23:C:1029:CLA:HMD2	27:C:1054:BCR:HC7	2.00	0.44
3:C:46:SER:H	3:C:140:LEU:HD22	1.83	0.44
3:C:234:VAL:C	3:C:236:GLY:N	2.70	0.44
3:C:289:PHE:CE2	3:C:293:ASN:ND2	2.84	0.44
3:C:71:GLU:O	3:C:74:HIS:N	2.49	0.44
4:D:52:THR:HG22	4:D:67:TYR:CZ	2.52	0.44
5:E:19:TYR:C	5:E:21:VAL:N	2.71	0.44
8:I:27:ASP:O	8:I:29:ALA:N	2.51	0.44
23:C:1035:CLA:H102	27:K:1052:BCR:H403	1.95	0.44
12:M:11:THR:O	12:M:12:ALA:C	2.56	0.44

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:X:29:VAL:O	17:X:33:THR:HG22	2.17	0.44
18:Y:21:GLN:O	18:Y:24:MET:N	2.50	0.44
13:O:127:ILE:CD1	13:O:127:ILE:N	2.50	0.44
13:O:65:ARG:NH1	13:O:66:ILE:N	2.66	0.44
3:C:229:ASN:CG	3:C:231:GLU:HG2	2.38	0.44
1:A:15:GLU:O	1:A:19:ASN:ND2	2.50	0.44
16:V:79:ASP:OD1	16:V:84:THR:HG21	2.17	0.44
23:B:1020:CLA:C5	23:B:1020:CLA:O2A	2.45	0.44
29:B:1060:MGE:H7B2	29:B:1060:MGE:H4B1	1.71	0.44
2:B:153:PHE:CD2	2:B:202:HIS:ND1	2.84	0.44
2:B:278:SER:O	2:B:279:TYR:C	2.57	0.44
2:B:333:GLY:O	2:B:441:GLY:N	2.51	0.44
23:C:1033:CLA:C5	23:C:1033:CLA:O2A	2.66	0.44
23:C:1036:CLA:H202	23:C:1036:CLA:H161	1.69	0.44
3:C:160:ILE:HG22	3:C:164:HIS:CE1	2.52	0.44
3:C:259:TRP:CE3	3:C:260:ALA:HB2	2.52	0.44
4:D:103:ARG:NH1	4:D:106:GLN:OE1	2.50	0.44
4:D:43:LEU:HD22	4:D:43:LEU:N	2.18	0.44
4:D:89:LEU:HA	4:D:112:THR:HG21	1.99	0.44
7:H:21:VAL:HG12	7:H:22:ALA:N	2.33	0.44
7:H:35:MET:HG2	27:H:1049:BCR:C33	2.20	0.44
3:C:55:ALA:CB	27:K:1052:BCR:H371	2.44	0.44
10:K:39:VAL:CB	18:Y:36:ILE:HD11	2.48	0.44
1:A:188:ALA:HB2	1:A:328:MET:CG	2.36	0.44
1:A:323:ARG:CG	1:A:323:ARG:NH1	2.76	0.44
4:D:322:ASN:OD1	4:D:322:ASN:N	2.49	0.44
15:U:100:ARG:O	15:U:104:ILE:HG13	2.18	0.44
15:U:82:ASN:CB	15:U:85:TYR:OH	2.60	0.44
2:B:488:PRO:HD2	2:B:489:GLU:OE2	2.18	0.44
1:A:339:PHE:CD2	31:A:1065:BR:BR	3.25	0.44
16:V:134:THR:O	16:V:137:ASP:HB2	2.17	0.44
23:A:1007:CLA:HBA1	23:A:1007:CLA:H3A	1.60	0.43
1:A:113:GLN:CA	1:A:116:ILE:HG22	2.45	0.43
1:A:200:LEU:HD22	1:A:285:PHE:HD1	1.83	0.43
23:B:1009:CLA:H62	23:B:1009:CLA:H2	1.70	0.43
23:B:1021:CLA:C19	29:B:1060:MGE:H132	2.46	0.43
2:B:165:GLY:HA3	2:B:180:PRO:N	2.32	0.43
2:B:191:ASN:O	2:B:193:TYR:N	2.50	0.43
2:B:233:ASN:C	2:B:235:GLU:N	2.71	0.43
2:B:237:VAL:HG22	23:B:1020:CLA:CMD	2.48	0.43
2:B:258:TYR:C	2:B:259:GLY:O	2.57	0.43
2:B:280:PHE:CD1	2:B:312:TYR:HB3	2.52	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:45:LEU:HD11	3:C:139:THR:HG23	2.00	0.43
3:C:436:PHE:HA	3:C:439:VAL:HG12	2.00	0.43
3:C:71:GLU:HB3	3:C:89:ILE:CD1	2.48	0.43
4:D:196:PHE:N	4:D:196:PHE:CD1	2.85	0.43
4:D:21:TRP:O	4:D:24:ARG:HB2	2.18	0.43
1:A:237:TYR:CD1	4:D:264:LYS:HG2	2.53	0.43
4:D:275:PRO:C	4:D:277:THR:N	2.72	0.43
4:D:88:SER:HA	7:H:50:ASN:HD21	1.81	0.43
6:F:41:GLN:NE2	9:J:27:LEU:O	2.51	0.43
23:H:1017:CLA:H41	23:H:1017:CLA:H62	1.79	0.43
9:J:20:GLY:O	9:J:24:ILE:HB	2.18	0.43
9:J:30:TYR:CD2	9:J:31:GLY:N	2.85	0.43
11:L:29:LEU:HD13	14:T:9:ILE:HG22	2.00	0.43
27:T:6046:BCR:H321	27:T:6046:BCR:C8	2.48	0.43
1:A:302:PHE:O	1:A:305:SER:HB3	2.18	0.43
13:O:145:LEU:O	13:O:147:THR:HG22	2.18	0.43
3:C:368:PRO:C	3:C:370:ARG:H	2.20	0.43
13:O:56:TYR:OH	13:O:64:TYR:HE2	2.00	0.43
15:U:53:GLU:HG2	15:U:54:LYS:HG3	1.99	0.43
1:A:192:ILE:HG12	1:A:293:MET:HE1	1.99	0.43
23:B:1020:CLA:H141	23:B:1021:CLA:HBB2	2.00	0.43
2:B:233:ASN:O	2:B:235:GLU:N	2.51	0.43
2:B:448:ARG:HH11	2:B:448:ARG:CG	2.31	0.43
3:C:88:LEU:HG	23:C:1027:CLA:HBC3	1.99	0.43
23:C:1036:CLA:H62	23:C:1036:CLA:H41	1.72	0.43
3:C:183:GLY:O	3:C:184:GLY:O	2.35	0.43
3:C:245:ILE:HG22	3:C:246:ALA:N	2.32	0.43
3:C:53:HIS:CE1	23:C:1033:CLA:H162	2.53	0.43
24:A:1039:PHO:HAA2	4:D:125:PHE:CZ	2.52	0.43
4:D:210:LEU:C	4:D:212:ALA:N	2.69	0.43
4:D:292:ASN:OD1	4:D:294:ARG:NH1	2.47	0.43
4:D:33:SER:OG	4:D:128:ARG:HD3	2.18	0.43
4:D:44:ALA:C	4:D:46:GLY:N	2.69	0.43
9:J:19:MET:CA	9:J:22:ILE:HG22	2.46	0.43
10:K:28:ILE:O	10:K:31:LEU:HB2	2.18	0.43
11:L:29:LEU:HD13	14:T:9:ILE:CG2	2.48	0.43
20:Z:53:VAL:C	20:Z:55:GLY:N	2.69	0.43
13:O:46:PRO:HG2	13:O:266:TYR:CE2	2.53	0.43
2:B:368:VAL:HG13	2:B:381:ILE:H	1.84	0.43
2:B:72:THR:HA	2:B:93:PHE:CZ	2.54	0.43
5:E:83:LEU:CD2	5:E:84:LYS:N	2.81	0.43
13:O:144:LEU:N	13:O:144:LEU:HD23	2.33	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:34:GLY:O	4:D:38:PHE:HB2	2.18	0.43
24:A:1039:PHO:H3A	24:A:1039:PHO:HBA2	1.53	0.43
1:A:131:TRP:CZ3	1:A:132:GLU:HA	2.53	0.43
1:A:151:LEU:HD11	1:A:155:PHE:HE2	1.83	0.43
1:A:277:ALA:O	1:A:281:VAL:HB	2.17	0.43
23:B:1020:CLA:H161	23:B:1020:CLA:H141	1.69	0.43
23:C:1028:CLA:HED3	28:C:1056:DGD:HD5	2.01	0.43
3:C:417:VAL:HG22	3:C:418:ASN:N	2.32	0.43
4:D:221:THR:CG2	4:D:244:TYR:CB	2.96	0.43
4:D:71:CYS:HB3	4:D:76:VAL:CG2	2.47	0.43
5:E:27:ILE:CB	5:E:28:PRO:CD	2.83	0.43
2:B:258:TYR:HD2	28:H:1058:DGD:HD1	1.83	0.43
1:A:306:VAL:HG23	1:A:316:THR:HG23	1.99	0.43
13:O:124:GLU:HG2	13:O:125:ASP:N	2.34	0.43
2:B:371:THR:CG2	2:B:371:THR:O	2.65	0.43
3:C:322:GLN:NE2	3:C:381:LYS:CD	2.79	0.43
3:C:135:ARG:NH1	20:Z:33:TRP:HB3	2.25	0.43
16:V:143:GLY:O	16:V:147:VAL:CG2	2.65	0.43
3:C:182:PHE:CD2	3:C:182:PHE:N	2.85	0.43
2:B:103:LEU:HD23	23:B:1014:CLA:H72	1.99	0.43
23:B:1024:CLA:O2A	23:B:1024:CLA:HMA2	2.18	0.43
2:B:102:VAL:HG13	2:B:103:LEU:N	2.33	0.43
2:B:135:LEU:HB2	2:B:136:PRO:CD	2.49	0.43
2:B:215:PHE:C	2:B:215:PHE:CD2	2.91	0.43
2:B:256:MET:HE2	2:B:256:MET:HB3	1.45	0.43
2:B:318:ASN:HD21	2:B:320:ALA:HB2	1.82	0.43
2:B:318:ASN:OD1	2:B:320:ALA:HB3	2.19	0.43
2:B:453:PHE:O	2:B:453:PHE:CG	2.70	0.43
23:C:1033:CLA:H193	23:C:1036:CLA:CHD	2.49	0.43
3:C:250:TRP:HE1	23:C:1030:CLA:HED1	1.73	0.43
3:C:52:ALA:HB1	23:C:1033:CLA:HBB1	2.00	0.43
1:A:258:LEU:HD12	4:D:128:ARG:HH11	1.83	0.43
2:B:258:TYR:OH	4:D:162:LEU:O	2.34	0.43
4:D:180:ARG:HD3	4:D:184:PHE:HB2	2.00	0.43
27:K:1051:BCR:C10	27:K:1051:BCR:H331	2.49	0.43
14:T:3:THR:HG22	14:T:4:ILE:N	2.31	0.43
17:X:28:VAL:HG12	17:X:29:VAL:N	2.34	0.43
1:A:323:ARG:HE	1:A:326:LEU:HD12	1.83	0.43
2:B:372:ASP:OD1	2:B:376:VAL:HG12	2.19	0.43
15:U:92:LEU:HD12	15:U:92:LEU:N	2.26	0.43
3:C:135:ARG:NH2	3:C:135:ARG:HG3	2.32	0.43
2:B:340:TRP:HB2	2:B:430:PHE:CE2	2.53	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:373:LYS:HD3	2:B:374:ASN:N	2.33	0.43
2:B:50:PRO:O	2:B:308:LYS:NZ	2.50	0.43
5:E:8:ARG:CB	5:E:9:PRO:HD2	2.48	0.43
24:A:1038:PHO:H93	24:A:1038:PHO:H62	1.57	0.43
1:A:214:MET:HE2	26:A:1043:PQ9:H143	2.01	0.43
23:B:1012:CLA:C1	23:B:1013:CLA:H11	2.41	0.43
2:B:101:ILE:HG23	27:B:1047:BCR:H373	2.00	0.43
2:B:455:HIS:ND1	2:B:455:HIS:N	2.67	0.43
2:B:472:ARG:HG2	2:B:479:PHE:CE2	2.54	0.43
3:C:188:THR:HG23	3:C:189:TRP:CD1	2.53	0.43
3:C:406:SER:HB3	28:C:1056:DGD:HE1	1.99	0.43
4:D:101:PHE:O	4:D:101:PHE:CD1	2.70	0.43
4:D:148:ALA:N	4:D:149:PRO:HD2	2.33	0.43
4:D:14:TRP:HA	4:D:17:ILE:HD12	1.99	0.43
4:D:195:PRO:HB2	11:L:31:PHE:CE1	2.53	0.43
4:D:253:TRP:C	4:D:255:GLN:H	2.21	0.43
4:D:210:LEU:CD1	4:D:274:VAL:HG21	2.49	0.43
5:E:43:ALA:O	5:E:44:TYR:C	2.57	0.43
8:I:9:TYR:O	8:I:10:ILE:C	2.56	0.43
2:B:325:PHE:HE1	11:L:34:TYR:HB3	1.74	0.43
1:A:107:TYR:HD1	13:O:141:ARG:CZ	2.31	0.43
18:Y:32:GLY:N	18:Y:33:PRO:CD	2.82	0.43
20:Z:14:ILE:O	20:Z:18:VAL:HG23	2.19	0.43
13:O:145:LEU:CD2	13:O:145:LEU:H	2.25	0.43
13:O:70:CYS:C	13:O:71:LEU:HD12	2.38	0.43
2:B:392:PHE:O	2:B:394:GLN:N	2.51	0.43
15:U:72:TYR:CD2	15:U:73:PRO:CD	3.01	0.43
3:C:382:ASN:C	3:C:384:ILE:N	2.72	0.43
13:O:78:VAL:HG23	13:O:94:THR:HG21	1.99	0.43
5:E:71:GLU:HG3	5:E:74:GLN:CB	2.48	0.43
8:I:34:ARG:HG3	8:I:34:ARG:HH11	1.83	0.43
1:A:292:THR:HG22	1:A:293:MET:N	2.33	0.43
23:B:1021:CLA:C19	29:B:1060:MGE:H133	2.25	0.43
2:B:122:LEU:CD1	2:B:122:LEU:N	2.82	0.43
2:B:135:LEU:CB	2:B:136:PRO:HD3	2.46	0.43
2:B:17:GLY:C	2:B:19:LEU:H	2.22	0.43
2:B:229:LEU:HD23	2:B:231:MET:H	1.82	0.43
2:B:272:ARG:HH12	4:D:164:GLN:HA	1.84	0.43
23:C:1033:CLA:H41	23:C:1033:CLA:H62	1.56	0.43
5:E:22:ILE:HD12	5:E:22:ILE:HA	1.89	0.43
9:J:19:MET:O	9:J:22:ILE:HG22	2.18	0.43
28:C:1057:DGD:HG12	9:J:33:TYR:OH	2.18	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:A:78:ILE:HG13	11:L:34:TYR:CZ	2.53	0.43
2:B:118:TRP:HH2	11:L:5:PRO:HD2	1.77	0.43
14:T:8:PHE:O	14:T:9:ILE:C	2.55	0.43
1:A:317:TRP:CE3	1:A:317:TRP:HA	2.53	0.43
16:V:128:PRO:O	16:V:129:LYS:C	2.56	0.43
16:V:145:ILE:N	16:V:145:ILE:HD12	2.34	0.43
16:V:117:VAL:O	16:V:119:PRO:HD3	2.18	0.43
5:E:63:ILE:O	5:E:65:LEU:N	2.49	0.43
4:D:239:GLN:O	4:D:240:ALA:C	2.56	0.43
23:A:1006:CLA:H193	23:A:1006:CLA:H161	1.66	0.43
23:A:1006:CLA:H3A	23:A:1006:CLA:HBA2	1.64	0.43
1:A:148:SER:OG	1:A:284:TRP:NE1	2.50	0.43
1:A:224:ILE:O	2:B:482:ILE:N	2.52	0.43
1:A:62:GLY:O	1:A:63:ILE:C	2.56	0.43
2:B:68:ARG:CZ	23:B:1011:CLA:CED	2.96	0.43
23:B:1015:CLA:H161	23:B:1015:CLA:H141	1.73	0.43
23:B:1019:CLA:CBD	23:B:1019:CLA:CAA	2.97	0.43
2:B:201:HIS:CG	2:B:202:HIS:N	2.87	0.43
2:B:65:PHE:HA	2:B:68:ARG:HD2	1.99	0.43
23:C:1032:CLA:CMA	23:C:1032:CLA:HED3	2.48	0.43
3:C:344:SER:C	3:C:346:THR:N	2.72	0.43
4:D:235:PHE:O	4:D:236:ASN:HB2	2.19	0.43
3:C:473:ASP:CB	14:T:26:PRO:HG3	2.45	0.43
15:U:97:LEU:CB	15:U:102:LYS:HG2	2.41	0.43
3:C:135:ARG:HB2	20:Z:27:TYR:HB3	2.00	0.43
2:B:18:ARG:HD3	2:B:18:ARG:H	1.83	0.43
16:V:118:HIS:HD1	16:V:118:HIS:C	2.22	0.43
1:A:159:LEU:HD11	1:A:163:ILE:HD11	2.00	0.43
1:A:79:THR:O	1:A:80:GLY:O	2.36	0.43
1:A:83:VAL:HA	1:A:84:PRO:HD3	1.74	0.43
23:B:1011:CLA:OBD	23:B:1011:CLA:HED3	2.15	0.43
23:B:1019:CLA:C19	23:B:1021:CLA:C6	2.97	0.43
23:B:1023:CLA:C11	23:B:1023:CLA:H161	2.43	0.43
29:B:1060:MGE:H102	29:B:1060:MGE:H7A1	1.60	0.43
2:B:118:TRP:N	2:B:118:TRP:CD1	2.87	0.43
2:B:222:PRO:HD3	7:H:27:THR:CG2	2.49	0.43
2:B:458:PHE:CD1	2:B:458:PHE:N	2.86	0.43
3:C:52:ALA:O	3:C:55:ALA:HB3	2.19	0.43
4:D:90:LEU:HD13	4:D:109:GLY:N	2.33	0.43
4:D:103:ARG:HD3	5:E:73:LYS:CD	2.48	0.43
27:K:1051:BCR:C1	27:K:1052:BCR:H10C	2.48	0.43
10:K:18:PHE:C	10:K:20:PRO:CD	2.87	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:Z:19:MET:O	20:Z:23:VAL:HG23	2.18	0.43
2:B:368:VAL:CG1	2:B:368:VAL:O	2.62	0.43
15:U:58:ASN:ND2	15:U:114:VAL:HG13	2.33	0.43
20:Z:40:ILE:HD13	20:Z:40:ILE:HA	1.91	0.43
2:B:488:PRO:CG	2:B:489:GLU:H	2.30	0.43
13:O:133:THR:CG2	13:O:134:VAL:H	2.32	0.43
7:H:5:THR:HG23	7:H:8:GLY:HA3	2.01	0.43
30:A:1063:LHG:C27	23:C:1032:CLA:H62	2.49	0.43
1:A:127:MET:HE1	1:A:148:SER:HA	2.00	0.43
1:A:137:LEU:O	1:A:139:MET:HG2	2.18	0.43
1:A:81:ALA:HB1	1:A:175:GLY:CA	2.40	0.43
2:B:7:ARG:CD	23:B:1019:CLA:HED3	2.46	0.43
23:B:1021:CLA:H141	23:B:1021:CLA:H161	1.81	0.43
3:C:436:PHE:HA	3:C:439:VAL:CG1	2.49	0.43
3:C:60:ILE:HG23	23:C:1027:CLA:CMD	2.49	0.43
23:D:1008:CLA:H112	23:D:1008:CLA:H143	1.58	0.43
5:E:14:ILE:HG13	5:E:15:THR:N	2.32	0.43
23:B:1011:CLA:H121	27:H:1049:BCR:H313	2.00	0.43
7:H:7:LEU:CD2	7:H:11:LEU:HD22	2.49	0.43
2:B:122:LEU:HA	7:H:12:ARG:CZ	2.49	0.43
8:I:2:GLU:O	8:I:6:ILE:CD1	2.67	0.43
9:J:39:SER:C	9:J:40:LEU:HD22	2.38	0.43
23:D:1008:CLA:H91	17:X:30:LEU:HG	2.00	0.43
1:A:317:TRP:C	1:A:319:ASP:H	2.22	0.43
15:U:50:ALA:HB1	15:U:113:THR:CG2	2.46	0.43
6:F:11:VAL:CG1	6:F:12:SER:H	2.20	0.43
2:B:275:TRP:CE2	2:B:315:ILE:HD12	2.53	0.43
20:Z:1:MET:SD	20:Z:60:PHE:CD2	3.12	0.43
1:A:257:ARG:HB3	4:D:132:ILE:HG21	2.01	0.43
1:A:58:VAL:HB	1:A:83:VAL:CG1	2.47	0.43
23:B:1012:CLA:CGA	23:B:1013:CLA:HBA2	2.49	0.43
23:B:1018:CLA:H143	23:B:1018:CLA:H111	1.74	0.43
23:B:1020:CLA:HAA1	23:B:1020:CLA:CBD	2.49	0.43
23:C:1032:CLA:H2	23:C:1035:CLA:C2C	2.49	0.43
3:C:63:TRP:CB	23:C:1034:CLA:CED	2.92	0.43
3:C:163:PHE:CD1	23:C:1036:CLA:HBB1	2.53	0.43
3:C:173:LEU:HD23	3:C:176:VAL:HG21	2.00	0.43
4:D:152:VAL:CG1	4:D:153:PHE:N	2.82	0.43
4:D:214:HIS:HA	4:D:217:THR:CG2	2.49	0.43
1:A:239:PHE:CZ	4:D:247:VAL:HA	2.54	0.43
4:D:251:ARG:HA	4:D:254:SER:HG	1.83	0.43
4:D:251:ARG:O	4:D:255:GLN:OE1	2.36	0.43

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:E:35:TRP:CD1	5:E:35:TRP:O	2.72	0.43
11:L:13:ASN:ND2	29:L:1061:MGE:O5D	2.52	0.43
12:M:8:PHE:HB3	12:M:9:ILE:H	1.68	0.43
17:X:16:LEU:O	17:X:19:PHE:HB3	2.19	0.43
1:A:315:ASN:O	4:D:63:LEU:HG	2.19	0.43
13:O:265:PHE:CG	13:O:266:TYR:N	2.87	0.43
3:C:78:GLU:HB3	16:V:128:PRO:CB	2.49	0.43
15:U:109:LEU:C	15:U:111:HIS:H	2.23	0.43
15:U:113:THR:CG2	15:U:114:VAL:H	2.32	0.43
1:A:330:VAL:HG23	1:A:331:MET:N	2.33	0.43
3:C:403:SER:OG	3:C:407:VAL:HB	2.18	0.43
15:U:55:ILE:HD11	15:U:64:ALA:O	2.19	0.43
2:B:189:GLY:O	2:B:197:GLY:HA3	2.18	0.43
1:A:113:GLN:HA	1:A:116:ILE:CG2	2.46	0.42
1:A:135:TYR:C	1:A:137:LEU:N	2.72	0.42
1:A:279:ARG:CD	4:D:208:ALA:CB	2.80	0.42
1:A:77:ILE:HB	11:L:33:SER:OG	2.19	0.42
23:B:1011:CLA:CMD	23:B:1014:CLA:HMB1	2.49	0.42
23:B:1015:CLA:HAA1	23:B:1015:CLA:HBD	2.01	0.42
2:B:103:LEU:HD23	23:B:1014:CLA:C7	2.49	0.42
23:C:1033:CLA:H122	23:C:1033:CLA:C9	2.02	0.42
23:C:1033:CLA:C19	23:C:1033:CLA:H143	2.49	0.42
23:C:1037:CLA:O1A	23:C:1037:CLA:H3A	2.19	0.42
3:C:419:PHE:CE2	3:C:421:SER:HA	2.53	0.42
27:D:1050:BCR:C40	27:D:1050:BCR:H372	2.29	0.42
4:D:17:ILE:HG22	17:X:41:SER:CB	2.33	0.42
4:D:245:SER:HB2	4:D:248:THR:OG1	2.18	0.42
25:E:1040:HEM:HMA1	25:E:1040:HEM:O1A	2.16	0.42
2:B:265:ILE:HG12	7:H:62:TRP:CZ3	2.54	0.42
8:I:15:PHE:O	8:I:18:LEU:HB2	2.19	0.42
23:C:1035:CLA:C9	27:K:1052:BCR:H402	2.42	0.42
2:B:422:ARG:C	2:B:424:ALA:H	2.22	0.42
4:D:258:GLY:C	4:D:259:ILE:HD13	2.38	0.42
15:U:113:THR:CG2	15:U:114:VAL:N	2.79	0.42
2:B:78:TRP:HB2	2:B:79:SER:H	1.70	0.42
18:Y:19:ILE:HG23	18:Y:20:ALA:H	1.84	0.42
5:E:71:GLU:O	5:E:72:ALA:C	2.57	0.42
13:O:198:ILE:O	13:O:198:ILE:HD12	2.19	0.42
24:A:1039:PHO:H61	24:A:1039:PHO:H102	1.65	0.42
1:A:40:THR:HG21	1:A:121:LEU:CD2	2.49	0.42
1:A:70:SER:OG	1:A:71:LEU:N	2.52	0.42
1:A:99:ALA:C	1:A:101:SER:H	2.22	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1011:CLA:CGA	23:B:1011:CLA:C3A	2.92	0.42
23:B:1014:CLA:H8	23:B:1014:CLA:H51	1.55	0.42
23:B:1021:CLA:CBD	23:B:1021:CLA:HAA2	2.49	0.42
23:B:1022:CLA:H13	23:B:1022:CLA:H71	1.92	0.42
2:B:137:LYS:HD3	7:H:14:LEU:O	2.19	0.42
2:B:159:THR:HB	2:B:161:LEU:HD22	2.02	0.42
2:B:210:ILE:O	2:B:211:ILE:C	2.57	0.42
2:B:229:LEU:C	2:B:229:LEU:HD23	2.39	0.42
2:B:461:LEU:HD23	4:D:280:TRP:CZ3	2.54	0.42
23:C:1030:CLA:CMB	23:C:1031:CLA:C1B	2.97	0.42
3:C:53:HIS:CB	23:C:1036:CLA:CMD	2.91	0.42
3:C:227:VAL:CG2	3:C:293:ASN:HD21	2.32	0.42
3:C:236:GLY:C	3:C:238:ILE:N	2.71	0.42
3:C:261:ARG:NH1	3:C:261:ARG:N	2.66	0.42
3:C:63:TRP:HB2	23:C:1034:CLA:HED1	1.98	0.42
4:D:22:LEU:CD1	4:D:32:TRP:CE3	3.02	0.42
5:E:51:ARG:C	5:E:53:ASP:H	2.22	0.42
3:C:465:PRO:HB3	8:I:32:PRO:HB3	2.01	0.42
10:K:11:LEU:O	10:K:12:PRO:C	2.56	0.42
10:K:31:LEU:O	10:K:34:ALA:HB3	2.19	0.42
11:L:24:ILE:CD1	12:M:18:PRO:CG	2.96	0.42
11:L:25:LEU:O	11:L:25:LEU:HD23	2.20	0.42
11:L:28:ALA:O	11:L:29:LEU:C	2.58	0.42
20:Z:49:ALA:O	20:Z:53:VAL:N	2.48	0.42
13:O:166:THR:CG2	13:O:167:ASP:N	2.82	0.42
13:O:129:PHE:O	13:O:130:GLN:CG	2.63	0.42
2:B:18:ARG:HD2	11:L:4:ASN:ND2	2.28	0.42
13:O:114:ASN:OD1	13:O:118:SER:O	2.36	0.42
5:E:8:ARG:HA	5:E:8:ARG:NE	2.32	0.42
3:C:98:GLY:O	3:C:106:VAL:HG12	2.19	0.42
1:A:131:TRP:CE3	1:A:132:GLU:CA	3.02	0.42
1:A:260:PHE:HD1	1:A:261:GLN:O	2.02	0.42
1:A:38:ILE:HG22	1:A:39:PRO:N	2.33	0.42
23:B:1015:CLA:H111	23:B:1015:CLA:H142	1.59	0.42
29:B:1060:MGE:H261	29:B:1060:MGE:C3A	2.43	0.42
2:B:226:TYR:HA	2:B:231:MET:HG2	2.01	0.42
2:B:23:HIS:CE1	23:B:1018:CLA:H193	2.51	0.42
2:B:25:MET:C	2:B:27:THR:N	2.69	0.42
3:C:197:ARG:CG	3:C:198:VAL:N	2.81	0.42
3:C:340:TYR:N	3:C:340:TYR:CD2	2.88	0.42
3:C:47:GLY:O	3:C:50:LEU:HB3	2.20	0.42
26:D:1042:PQ9:H261	26:D:1042:PQ9:H241	1.71	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:77:ALA:HB1	4:D:173:PHE:O	2.19	0.42
4:D:87:HIS:HB2	28:H:1058:DGD:O2D	2.19	0.42
12:M:17:VAL:N	12:M:18:PRO:CD	2.82	0.42
23:C:1036:CLA:C19	27:Z:1053:BCR:H372	2.47	0.42
20:Z:52:LEU:C	20:Z:55:GLY:H	2.22	0.42
1:A:153:SER:O	1:A:156:ALA:HB3	2.18	0.42
15:U:83:ALA:HB1	15:U:84:PRO:HD2	2.01	0.42
13:O:135:GLN:HG3	13:O:140:GLU:O	2.19	0.42
1:A:172:MET:HG3	1:A:172:MET:O	2.18	0.42
1:A:97:TRP:HZ3	8:I:8:VAL:HG11	1.84	0.42
23:B:1012:CLA:HBA1	23:B:1013:CLA:HBA2	2.00	0.42
23:B:1016:CLA:H172	23:H:1017:CLA:H18	2.00	0.42
2:B:51:VAL:HG12	2:B:52:LEU:HG	2.01	0.42
23:C:1027:CLA:H152	27:Z:1053:BCR:H332	2.00	0.42
28:C:1057:DGD:CHB	28:C:1057:DGD:HAG2	2.49	0.42
28:C:1057:DGD:HG31	9:J:33:TYR:CE2	2.55	0.42
3:C:248:GLY:C	3:C:252:ILE:HD12	2.39	0.42
3:C:264:PHE:CZ	27:C:1054:BCR:H321	2.55	0.42
3:C:339:LYS:HD2	3:C:340:TYR:HE2	1.84	0.42
3:C:435:PHE:O	3:C:437:PHE:N	2.52	0.42
3:C:89:ILE:N	3:C:90:PRO:CD	2.82	0.42
4:D:36:LEU:C	4:D:39:PRO:HD2	2.40	0.42
4:D:77:ALA:CB	4:D:173:PHE:O	2.68	0.42
10:K:27:VAL:HG22	10:K:27:VAL:O	2.19	0.42
11:L:18:TYR:CE2	14:T:19:PHE:O	2.70	0.42
1:A:177:SER:HA	1:A:180:PHE:CE2	2.55	0.42
2:B:354:LEU:CB	2:B:370:LEU:HD22	2.34	0.42
20:Z:61:VAL:CG2	20:Z:62:VAL:H	2.12	0.42
13:O:196:SER:O	13:O:197:ALA:O	2.37	0.42
15:U:103:GLN:O	15:U:105:LEU:N	2.52	0.42
15:U:89:GLU:O	15:U:92:LEU:HD13	2.20	0.42
17:X:11:THR:O	17:X:12:ILE:CG2	2.67	0.42
13:O:34:ASP:O	13:O:37:VAL:HG12	2.19	0.42
16:V:134:THR:H	16:V:137:ASP:HB2	1.84	0.42
17:X:32:LEU:HA	17:X:32:LEU:HD12	1.91	0.42
24:A:1038:PHO:NC	4:D:209:LEU:HD12	2.35	0.42
30:A:1063:LHG:H102	30:A:1063:LHG:O9	2.19	0.42
1:A:157:VAL:HG13	1:A:172:MET:CB	2.48	0.42
1:A:268:SER:O	1:A:271:LEU:HB3	2.19	0.42
1:A:58:VAL:HG12	1:A:59:ASP:N	2.34	0.42
23:B:1011:CLA:CMD	23:B:1014:CLA:HBB1	2.50	0.42
23:B:1024:CLA:H161	23:B:1024:CLA:H121	1.84	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:324:LEU:HA	4:D:293:LEU:CD1	2.49	0.42
2:B:53:ASN:HD21	2:B:58:GLN:NE2	2.17	0.42
23:C:1037:CLA:C10	23:C:1037:CLA:C14	2.85	0.42
3:C:210:PHE:O	3:C:213:LEU:HD21	2.18	0.42
3:C:230:LEU:HA	3:C:233:VAL:HG12	2.01	0.42
3:C:49:LEU:HA	3:C:52:ALA:HB3	2.00	0.42
3:C:59:LEU:O	23:C:1034:CLA:HED2	2.20	0.42
23:A:1006:CLA:C20	27:D:1050:BCR:H402	2.49	0.42
4:D:157:PHE:CE2	4:D:173:PHE:CE1	3.06	0.42
6:F:40:MET:HB3	29:J:1059:MGE:H1	1.81	0.42
9:J:30:TYR:C	9:J:32:ALA:N	2.73	0.42
1:A:316:THR:HG22	4:D:75:THR:HB	2.02	0.42
13:O:188:ARG:HB2	13:O:188:ARG:HE	1.41	0.42
5:E:69:ARG:N	5:E:69:ARG:NE	2.68	0.42
16:V:110:GLY:O	16:V:111:GLU:O	2.37	0.42
2:B:335:GLY:O	2:B:432:PHE:HD2	2.02	0.42
2:B:332:LYS:HA	2:B:437:LEU:HD13	2.01	0.42
19:N:17:UNK:C	19:N:19:UNK:N	2.82	0.42
1:A:234:ASN:OD1	29:L:1061:MGE:O3D	2.30	0.42
1:A:257:ARG:C	4:D:132:ILE:HD13	2.40	0.42
23:B:1023:CLA:C7	27:B:1048:BCR:C34	2.91	0.42
1:A:91:LEU:HD23	28:C:1055:DGD:O2D	2.19	0.42
3:C:295:THR:C	3:C:297:TYR:N	2.72	0.42
3:C:436:PHE:O	3:C:439:VAL:HG12	2.18	0.42
4:D:111:TRP:C	4:D:113:PHE:N	2.71	0.42
4:D:128:ARG:CG	4:D:128:ARG:HH11	2.32	0.42
27:D:1050:BCR:H363	6:F:33:PHE:HB3	2.02	0.42
7:H:13:PRO:C	7:H:15:ASN:N	2.72	0.42
9:J:31:GLY:C	29:J:1059:MGE:H3	2.23	0.42
13:O:169:LYS:HA	13:O:224:SER:HA	2.00	0.42
1:A:109:GLY:C	1:A:111:PRO:HD2	2.40	0.42
1:A:31:GLY:HA3	1:A:132:GLU:CD	2.40	0.42
1:A:181:ASN:O	1:A:182:PHE:C	2.58	0.42
1:A:197:PHE:C	1:A:199:GLN:N	2.72	0.42
1:A:257:ARG:NH2	1:A:261:GLN:OE1	2.52	0.42
2:B:156:PHE:O	2:B:160:GLY:N	2.45	0.42
2:B:256:MET:CE	2:B:268:PHE:HD1	2.33	0.42
2:B:455:HIS:H	2:B:455:HIS:HD1	1.68	0.42
23:C:1033:CLA:H193	23:C:1036:CLA:HHD	2.02	0.42
1:A:152:ALA:HA	28:C:1055:DGD:HBS2	2.02	0.42
3:C:169:GLY:O	3:C:173:LEU:HG	2.19	0.42
3:C:254:THR:HG22	3:C:255:THR:N	2.33	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:156:VAL:CG2	23:D:1004:CLA:HED2	2.50	0.42
27:D:1050:BCR:C39	29:J:1059:MGE:H6B1	2.49	0.42
4:D:251:ARG:NE	4:D:255:GLN:NE2	2.55	0.42
4:D:45:LEU:O	4:D:49:LEU:HD12	2.20	0.42
4:D:56:THR:HA	4:D:69:GLU:OE2	2.20	0.42
5:E:35:TRP:CD1	5:E:35:TRP:C	2.92	0.42
6:F:41:GLN:HE22	9:J:27:LEU:CA	2.32	0.42
8:I:13:THR:O	8:I:15:PHE:N	2.52	0.42
8:I:16:VAL:HG23	8:I:17:LEU:H	1.83	0.42
12:M:7:GLY:O	12:M:8:PHE:O	2.37	0.42
14:T:4:ILE:HG23	14:T:5:THR:N	2.35	0.42
13:O:113:VAL:HG22	13:O:119:LEU:CD2	2.50	0.42
4:D:322:ASN:O	4:D:326:ARG:HB2	2.19	0.42
4:D:63:LEU:HD23	4:D:64:ALA:N	2.34	0.42
13:O:147:THR:HG1	13:O:149:LYS:H	1.64	0.42
13:O:92:VAL:HG22	13:O:93:PRO:CD	2.49	0.42
1:A:143:ILE:CD1	4:D:216:ALA:O	2.68	0.42
24:A:1039:PHO:H143	4:D:173:PHE:CD1	2.55	0.42
1:A:27:ARG:HH11	1:A:27:ARG:CB	2.31	0.42
1:A:74:GLY:O	1:A:75:ASN:C	2.58	0.42
1:A:98:GLU:O	1:A:99:ALA:C	2.58	0.42
23:B:1011:CLA:H101	23:B:1011:CLA:C14	2.45	0.42
2:B:149:LEU:HD22	23:B:1012:CLA:H162	2.01	0.42
2:B:101:ILE:HG23	27:B:1047:BCR:C37	2.50	0.42
23:B:1023:CLA:H52	23:B:1024:CLA:H193	2.01	0.42
23:B:1024:CLA:H161	27:B:1048:BCR:H332	2.01	0.42
27:B:1045:BCR:C10	27:B:1045:BCR:H331	2.50	0.42
27:B:1045:BCR:C30	27:B:1045:BCR:C37	2.61	0.42
27:B:1048:BCR:H24C	27:B:1048:BCR:H371	1.59	0.42
2:B:461:LEU:HD23	4:D:280:TRP:HZ3	1.85	0.42
2:B:56:TRP:O	2:B:56:TRP:HE3	2.02	0.42
2:B:45:PHE:HA	2:B:58:GLN:OE1	2.19	0.42
2:B:99:ALA:HB1	23:B:1014:CLA:C2	2.36	0.42
3:C:113:VAL:HG23	3:C:114:VAL:N	2.35	0.42
3:C:178:LYS:O	3:C:183:GLY:O	2.38	0.42
3:C:258:GLY:O	3:C:262:ARG:NH2	2.53	0.42
3:C:89:ILE:CB	3:C:90:PRO:HD3	2.39	0.42
4:D:129:GLN:HE21	4:D:142:ASN:CG	2.21	0.42
4:D:150:ILE:O	4:D:154:VAL:CG2	2.66	0.42
4:D:245:SER:C	4:D:247:VAL:H	2.22	0.42
5:E:32:ILE:HA	5:E:35:TRP:HB3	2.02	0.42
1:A:310:LYS:CB	16:V:28:GLU:HG3	2.50	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:Z:5:PHE:CD1	20:Z:57:LEU:HD22	2.54	0.42
25:V:1041:HEM:CMA	25:V:1041:HEM:CBA	2.97	0.42
13:O:187:GLY:CA	13:O:194:TYR:HB2	2.50	0.42
3:C:390:ARG:O	3:C:393:ALA:HB3	2.20	0.42
1:A:33:PHE:HE1	8:I:23:PHE:CE2	2.37	0.42
1:A:96:ILE:HG23	1:A:97:TRP:N	2.34	0.42
2:B:154:GLY:HA2	2:B:158:LEU:HB2	2.02	0.42
2:B:236:THR:HG23	2:B:237:VAL:N	2.34	0.42
2:B:256:MET:SD	2:B:268:PHE:HD1	2.43	0.42
2:B:281:GLN:O	2:B:284:ILE:HG12	2.20	0.42
2:B:473:THR:HG21	23:B:1016:CLA:CED	2.50	0.42
23:C:1032:CLA:H2A	23:C:1032:CLA:HED1	1.72	0.42
23:C:1032:CLA:H2	23:C:1035:CLA:HAC1	2.01	0.42
30:A:1063:LHG:H272	23:C:1032:CLA:H62	2.02	0.42
23:C:1028:CLA:H43	28:C:1057:DGD:HA42	1.99	0.42
3:C:354:GLU:C	3:C:356:MET:H	2.23	0.42
23:D:1005:CLA:H42	26:D:1042:PQ9:H191	2.01	0.42
4:D:175:VAL:HG12	4:D:179:PHE:CZ	2.55	0.42
4:D:274:VAL:CB	4:D:275:PRO:CD	2.86	0.42
7:H:38:PHE:CD1	27:H:1049:BCR:C10	3.01	0.42
14:T:15:ALA:C	14:T:17:PHE:N	2.74	0.42
16:V:132:ASN:O	16:V:133:LEU:O	2.38	0.42
15:U:39:LEU:N	15:U:39:LEU:CD1	2.71	0.42
1:A:32:TRP:O	1:A:35:VAL:HG23	2.20	0.42
26:A:1043:PQ9:H91	26:A:1043:PQ9:H61	1.69	0.42
1:A:214:MET:HB3	26:A:1043:PQ9:H12	2.01	0.42
1:A:259:ILE:O	1:A:260:PHE:O	2.38	0.42
1:A:285:PHE:HZ	23:C:1034:CLA:H203	1.84	0.42
23:B:1023:CLA:H162	7:H:7:LEU:HD11	2.01	0.42
2:B:144:PHE:HA	2:B:213:GLY:HA3	2.02	0.42
2:B:222:PRO:CG	2:B:225:LEU:HD12	2.33	0.42
3:C:174:LEU:O	3:C:177:ALA:N	2.52	0.42
3:C:178:LYS:HD2	3:C:178:LYS:HA	1.88	0.42
3:C:270:ALA:O	3:C:274:TYR:CD1	2.72	0.42
1:A:258:LEU:HA	4:D:128:ARG:HH12	1.85	0.42
4:D:251:ARG:HG2	4:D:255:GLN:OE1	2.20	0.42
5:E:16:SER:HB3	5:E:19:TYR:HB2	2.02	0.42
10:K:37:PHE:HB3	27:K:1051:BCR:H402	2.02	0.42
29:L:1061:MGE:H263	29:L:1061:MGE:H212	2.00	0.42
13:O:97:VAL:CG1	13:O:98:THR:H	2.33	0.42
20:Z:55:GLY:CA	27:Z:1053:BCR:C31	2.89	0.42
20:Z:3:ILE:O	20:Z:5:PHE:N	2.53	0.42

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:O:65:ARG:CD	13:O:110:GLU:HA	2.50	0.42
20:Z:17:PHE:CD2	20:Z:17:PHE:O	2.65	0.42
10:K:15:TYR:OH	20:Z:58:ASN:OD1	2.32	0.42
23:A:1007:CLA:HAA1	23:A:1007:CLA:HBD	2.01	0.41
1:A:126:TYR:O	1:A:130:GLN:CB	2.67	0.41
1:A:281:VAL:CG1	1:A:282:GLY:N	2.82	0.41
1:A:37:MET:O	1:A:41:LEU:CD2	2.68	0.41
23:B:1009:CLA:C2A	23:B:1009:CLA:CED	2.94	0.41
2:B:150:CYS:CA	23:B:1011:CLA:HBC3	2.50	0.41
2:B:223:GLN:HG2	7:H:24:GLY:HA2	2.01	0.41
2:B:30:VAL:HG12	23:B:1013:CLA:CMD	2.47	0.41
3:C:449:ARG:HG2	23:C:1029:CLA:HED1	2.01	0.41
3:C:166:ILE:O	3:C:170:ILE:HG13	2.20	0.41
3:C:186:TYR:HE2	3:C:188:THR:HB	1.85	0.41
3:C:286:ALA:C	3:C:288:CYS:N	2.71	0.41
3:C:86:LEU:HD12	3:C:86:LEU:N	2.34	0.41
23:D:1005:CLA:H91	23:D:1005:CLA:H121	2.02	0.41
4:D:20:ASP:HA	4:D:23:LYS:HZ2	1.84	0.41
4:D:218:VAL:O	4:D:221:THR:CG2	2.67	0.41
4:D:313:THR:O	4:D:314:PHE:C	2.57	0.41
5:E:37:PHE:CE2	5:E:46:VAL:HG21	2.55	0.41
27:K:1052:BCR:H331	27:K:1052:BCR:C34	2.50	0.41
23:B:1022:CLA:HAC2	29:L:1061:MGE:H122	2.02	0.41
11:L:1:MET:O	11:L:1:MET:HG2	2.20	0.41
12:M:33:GLN:O	12:M:34:LYS:C	2.58	0.41
5:E:53:ASP:O	16:V:28:GLU:OE1	2.38	0.41
7:H:40:VAL:CG2	17:X:23:LEU:HD21	2.50	0.41
2:B:390:TYR:O	2:B:391:SER:O	2.38	0.41
6:F:11:VAL:CG1	6:F:12:SER:N	2.81	0.41
2:B:79:SER:C	2:B:81:THR:N	2.71	0.41
5:E:72:ALA:O	5:E:75:GLN:HB2	2.20	0.41
2:B:400:SER:HB2	2:B:402:TYR:HE2	1.85	0.41
7:H:39:LEU:HA	7:H:39:LEU:HD22	1.72	0.41
1:A:186:PHE:CE2	1:A:190:HIS:CD2	3.07	0.41
1:A:254:TYR:O	1:A:257:ARG:N	2.53	0.41
1:A:272:HIS:CD2	4:D:214:HIS:NE2	2.88	0.41
1:A:96:ILE:HG13	1:A:105:TRP:CE2	2.55	0.41
23:B:1012:CLA:H112	23:B:1023:CLA:O1A	2.20	0.41
2:B:9:HIS:ND1	23:B:1019:CLA:H11	2.34	0.41
2:B:464:PHE:CD2	29:B:1060:MGE:H5B1	2.53	0.41
2:B:118:TRP:CH2	11:L:5:PRO:CD	2.98	0.41
2:B:119:ASP:O	2:B:120:LEU:HD23	2.20	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:210:ILE:HD13	2:B:210:ILE:HA	1.91	0.41
2:B:226:TYR:CE2	2:B:231:MET:O	2.70	0.41
2:B:27:THR:OG1	23:B:1020:CLA:H11	2.20	0.41
4:D:205:LEU:HB2	23:D:1005:CLA:H12	2.02	0.41
4:D:202:ALA:HB3	26:D:1042:PQ9:H311	2.02	0.41
23:A:1006:CLA:H18	27:D:1050:BCR:C29	2.49	0.41
4:D:108:GLY:O	4:D:109:GLY:C	2.57	0.41
4:D:67:TYR:CZ	29:J:1059:MGE:H1G1	2.53	0.41
17:X:20:PHE:O	17:X:23:LEU:N	2.52	0.41
20:Z:5:PHE:HD1	20:Z:57:LEU:HD13	1.85	0.41
23:A:1006:CLA:H122	23:A:1006:CLA:H161	1.58	0.41
2:B:250:PHE:HE2	23:B:1010:CLA:C20	2.31	0.41
2:B:191:ASN:ND2	2:B:191:ASN:C	2.74	0.41
2:B:250:PHE:HZ	28:H:1058:DGD:CIA	2.25	0.41
2:B:317:ASN:HA	2:B:330:MET:HE1	2.02	0.41
2:B:478:VAL:O	2:B:479:PHE:C	2.59	0.41
2:B:59:GLY:O	23:B:1015:CLA:HED2	2.21	0.41
23:C:1025:CLA:H61	23:C:1025:CLA:H41	1.86	0.41
28:C:1056:DGD:HA72	28:C:1056:DGD:HAT1	1.20	0.41
3:C:214:LEU:HD23	3:C:214:LEU:O	2.20	0.41
3:C:428:THR:CG2	3:C:429:SER:H	2.21	0.41
23:D:1004:CLA:H93	23:D:1004:CLA:H62	1.88	0.41
26:D:1042:PQ9:H212	26:D:1042:PQ9:H191	1.97	0.41
4:D:39:PRO:HG2	4:D:40:CYS:H	1.85	0.41
7:H:15:ASN:ND2	7:H:15:ASN:O	2.53	0.41
7:H:61:SER:CB	28:H:1058:DGD:O3E	2.68	0.41
10:K:25:LEU:HB3	10:K:26:PRO:CD	2.49	0.41
16:V:141:ILE:O	16:V:144:HIS:N	2.54	0.41
16:V:151:ILE:HG22	16:V:152:LEU:N	2.35	0.41
11:L:12:LEU:C	11:L:12:LEU:HD13	2.40	0.41
13:O:92:VAL:CG2	13:O:93:PRO:CD	2.96	0.41
13:O:161:SER:O	13:O:163:THR:HG23	2.19	0.41
4:D:308:ASP:C	4:D:310:GLU:H	2.23	0.41
15:U:132:LEU:HD23	15:U:132:LEU:O	2.20	0.41
1:A:149:ALA:HA	1:A:284:TRP:HD1	1.81	0.41
2:B:5:TRP:N	2:B:5:TRP:CD1	2.88	0.41
23:C:1025:CLA:H203	23:C:1031:CLA:H152	2.01	0.41
3:C:185:LEU:O	3:C:196:VAL:HG23	2.21	0.41
3:C:289:PHE:HE2	3:C:293:ASN:HD22	1.66	0.41
3:C:431:PHE:HD2	3:C:431:PHE:C	2.23	0.41
4:D:29:PHE:CD1	4:D:30:VAL:N	2.88	0.41
8:I:4:LEU:CD1	8:I:8:VAL:HG23	2.50	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:M:11:THR:HG22	12:M:12:ALA:H	1.82	0.41
14:T:1:MET:HB2	14:T:2:GLU:H	1.40	0.41
20:Z:12:LEU:HD12	20:Z:51:VAL:CA	2.50	0.41
2:B:393:GLU:C	2:B:396:GLY:H	2.24	0.41
25:V:1041:HEM:CMA	25:V:1041:HEM:HBA2	2.50	0.41
16:V:121:LEU:HD13	16:V:121:LEU:HA	1.81	0.41
15:U:109:LEU:C	15:U:111:HIS:N	2.74	0.41
5:E:75:GLN:O	5:E:79:PHE:HD1	2.03	0.41
1:A:214:MET:SD	24:A:1039:PHO:HMD3	2.60	0.41
1:A:127:MET:CE	1:A:148:SER:HA	2.51	0.41
1:A:197:PHE:CZ	28:C:1056:DGD:HAS1	2.55	0.41
1:A:38:ILE:HB	1:A:39:PRO:HD3	2.02	0.41
23:B:1011:CLA:HED2	23:B:1011:CLA:CAD	2.48	0.41
23:B:1013:CLA:H72	23:B:1020:CLA:C17	2.50	0.41
23:C:1025:CLA:C1B	23:C:1025:CLA:H42	2.46	0.41
28:C:1055:DGD:O1B	28:C:1055:DGD:HB41	2.17	0.41
3:C:262:ARG:C	3:C:263:ALA:O	2.56	0.41
3:C:224:ILE:CD1	3:C:285:ILE:HD11	2.40	0.41
3:C:442:LEU:O	3:C:443:TRP:C	2.59	0.41
3:C:48:LYS:NZ	3:C:138:GLU:OE1	2.53	0.41
2:B:362:PHE:CE1	4:D:184:PHE:CE1	3.08	0.41
4:D:199:MET:O	4:D:202:ALA:HB3	2.20	0.41
4:D:21:TRP:O	4:D:22:LEU:C	2.58	0.41
4:D:250:ASN:OD1	4:D:251:ARG:N	2.54	0.41
8:I:2:GLU:O	8:I:6:ILE:HD13	2.21	0.41
12:M:13:LEU:HA	12:M:13:LEU:HD23	1.83	0.41
20:Z:39:LEU:HD12	20:Z:42:LEU:CB	2.50	0.41
16:V:159:GLY:HA2	16:V:163:TYR:CE1	2.52	0.41
13:O:109:GLY:HA3	13:O:123:GLU:CA	2.50	0.41
5:E:75:GLN:C	5:E:79:PHE:HD1	2.23	0.41
4:D:190:ASN:HD21	4:D:193:LEU:HD22	1.85	0.41
5:E:60:GLN:O	5:E:60:GLN:NE2	2.53	0.41
4:D:59:TYR:CD1	4:D:59:TYR:N	2.89	0.41
16:V:78:LEU:HA	16:V:78:LEU:HD23	1.74	0.41
1:A:116:ILE:O	1:A:117:PHE:C	2.58	0.41
1:A:245:THR:HG22	4:D:264:LYS:CD	2.48	0.41
1:A:42:LEU:O	1:A:43:ALA:C	2.59	0.41
2:B:133:LEU:CB	2:B:138:MET:HE1	2.49	0.41
2:B:216:HIS:HE1	23:H:1017:CLA:HMA3	1.85	0.41
2:B:220:ARG:HG3	7:H:22:ALA:HB2	2.03	0.41
2:B:284:ILE:O	2:B:287:ARG:HB2	2.20	0.41
28:C:1057:DGD:HD4	9:J:39:SER:HB3	2.03	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:C:283:GLY:HA3	3:C:434:ALA:CB	2.35	0.41
4:D:156:VAL:HG21	23:D:1004:CLA:OBD	2.20	0.41
4:D:218:VAL:O	4:D:220:ASN:N	2.53	0.41
4:D:221:THR:HG23	4:D:222:LEU:H	1.86	0.41
4:D:42:TYR:CD2	4:D:43:LEU:HD13	2.55	0.41
12:M:22:LEU:C	12:M:24:ILE:N	2.74	0.41
4:D:324:GLY:C	4:D:326:ARG:N	2.71	0.41
16:V:158:GLY:HA3	16:V:162:TYR:HE2	1.85	0.41
16:V:141:ILE:O	16:V:144:HIS:HB3	2.21	0.41
1:A:13:LEU:H	1:A:13:LEU:CD2	2.27	0.41
13:O:259:VAL:HG12	13:O:261:ILE:HG13	2.03	0.41
2:B:125:ASP:OD1	2:B:126:PRO:HD2	2.21	0.41
3:C:225:VAL:HG12	3:C:225:VAL:O	2.21	0.41
1:A:78:ILE:HD11	11:L:34:TYR:CE2	2.56	0.41
23:B:1009:CLA:C4B	27:H:1049:BCR:C38	2.98	0.41
23:B:1023:CLA:NC	23:B:1024:CLA:HBC1	2.34	0.41
27:B:1045:BCR:C39	27:B:1045:BCR:H373	2.29	0.41
2:B:257:TRP:NE1	2:B:273:TYR:OH	2.51	0.41
23:C:1025:CLA:C2D	23:C:1026:CLA:H71	2.51	0.41
3:C:222:GLY:O	3:C:223:TRP:O	2.38	0.41
3:C:350:ILE:CD1	3:C:356:MET:HA	2.51	0.41
3:C:60:ILE:HG23	3:C:61:VAL:N	2.36	0.41
4:D:91:LEU:HD12	23:D:1008:CLA:HED2	2.01	0.41
23:D:1005:CLA:H43	26:D:1042:PQ9:H191	2.01	0.41
29:D:1062:MGE:H1G2	11:L:15:THR:CG2	2.50	0.41
27:K:1051:BCR:C37	27:K:1051:BCR:C30	2.60	0.41
10:K:18:PHE:O	10:K:19:ASP:C	2.58	0.41
13:O:98:THR:HG22	13:O:99:ARG:O	2.20	0.41
4:D:299:ILE:C	4:D:301:GLN:H	2.23	0.41
2:B:230:ARG:NH1	2:B:230:ARG:CA	2.81	0.41
1:A:161:TYR:HD1	1:A:294:ALA:HA	1.86	0.41
2:B:476:ARG:CG	2:B:477:ASP:N	2.83	0.41
2:B:246:PHE:CD2	2:B:463:PHE:HA	2.55	0.41
2:B:257:TRP:CH2	4:D:291:LEU:CA	3.04	0.41
2:B:260:SER:O	2:B:262:THR:N	2.54	0.41
2:B:284:ILE:CG2	2:B:309:LEU:HD22	2.39	0.41
3:C:131:TYR:O	3:C:133:ALA:N	2.53	0.41
3:C:185:LEU:HD12	3:C:199:ILE:CD1	2.50	0.41
3:C:340:TYR:C	3:C:341:LEU:HG	2.40	0.41
3:C:374:GLY:O	3:C:375:LEU:C	2.58	0.41
3:C:56:HIS:C	3:C:58:GLY:N	2.74	0.41
3:C:74:HIS:O	3:C:75:PHE:C	2.57	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:D:122:LEU:HD12	4:D:122:LEU:HA	1.83	0.41
4:D:16:ASP:HA	4:D:19:ASP:HB3	2.03	0.41
4:D:195:PRO:HB3	11:L:31:PHE:CE1	2.56	0.41
1:A:212:CYS:HB2	4:D:207:GLY:O	2.21	0.41
4:D:189:HIS:CE1	4:D:294:ARG:NH1	2.89	0.41
4:D:55:VAL:HG11	4:D:105:CYS:SG	2.61	0.41
5:E:19:TYR:O	5:E:23:HIS:HB2	2.21	0.41
5:E:49:THR:HA	5:E:50:PRO:HD3	1.79	0.41
8:I:6:ILE:O	8:I:7:THR:C	2.57	0.41
9:J:30:TYR:CD2	9:J:30:TYR:C	2.93	0.41
14:T:15:ALA:O	14:T:18:PHE:N	2.53	0.41
16:V:29:LEU:HG	16:V:29:LEU:O	2.21	0.41
1:A:304:HIS:O	1:A:306:VAL:N	2.54	0.41
1:A:317:TRP:HA	4:D:63:LEU:HD11	2.02	0.41
2:B:354:LEU:HA	2:B:372:ASP:HA	2.03	0.41
25:V:1041:HEM:HHC	25:V:1041:HEM:CBB	2.50	0.41
16:V:149:PRO:HD3	16:V:156:TRP:CD1	2.55	0.41
15:U:98:THR:O	15:U:99:GLU:C	2.59	0.41
3:C:366:LEU:HD23	3:C:370:ARG:NH2	2.35	0.41
18:Y:19:ILE:CG2	18:Y:20:ALA:H	2.32	0.41
2:B:35:GLY:O	2:B:39:LEU:HG	2.20	0.41
2:B:307:GLU:O	2:B:310:ALA:N	2.54	0.41
13:O:55:ALA:HB1	13:O:162:ILE:O	2.20	0.41
1:A:207:GLY:HA2	23:A:1006:CLA:H43	2.02	0.41
1:A:271:LEU:HD21	26:A:1043:PQ9:C10	2.51	0.41
1:A:142:TRP:CH2	30:A:1063:LHG:HC11	2.55	0.41
1:A:160:ILE:HG13	3:C:431:PHE:CE1	2.55	0.41
1:A:207:GLY:O	1:A:211:PHE:N	2.47	0.41
23:B:1011:CLA:O2A	23:B:1011:CLA:H3A	2.21	0.41
2:B:103:LEU:C	2:B:106:LEU:HB3	2.41	0.41
2:B:136:PRO:HG3	23:B:1018:CLA:HBC1	2.03	0.41
2:B:181:VAL:HB	2:B:199:VAL:HG21	2.03	0.41
2:B:478:VAL:HG12	4:D:139:ARG:CD	2.50	0.41
23:C:1026:CLA:H3A	23:C:1026:CLA:HBA2	1.60	0.41
1:A:128:GLY:HA2	23:C:1029:CLA:HMB2	2.03	0.41
23:C:1025:CLA:C17	23:C:1031:CLA:HMB3	2.45	0.41
23:C:1032:CLA:HAB	23:C:1034:CLA:CMC	2.51	0.41
3:C:355:THR:HG22	3:C:355:THR:O	2.21	0.41
3:C:439:VAL:HG22	23:C:1032:CLA:CBC	2.50	0.41
4:D:148:ALA:HB2	4:D:276:VAL:CA	2.50	0.41
4:D:168:PHE:C	4:D:170:ALA:H	2.25	0.41
4:D:293:LEU:O	4:D:293:LEU:CD1	2.69	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:H:7:LEU:HA	7:H:10:ILE:HD12	2.02	0.41
10:K:19:ASP:HA	10:K:22:VAL:CG1	2.48	0.41
12:M:17:VAL:HB	12:M:18:PRO:HD3	2.02	0.41
14:T:18:PHE:O	14:T:22:PHE:CD2	2.68	0.41
17:X:30:LEU:HD22	17:X:30:LEU:HA	1.88	0.41
1:A:99:ALA:CB	1:A:105:TRP:N	2.83	0.41
1:A:210:LEU:HD13	24:A:1039:PHO:ND	2.35	0.41
1:A:220:THR:HG22	4:D:141:TYR:CE2	2.56	0.41
1:A:297:LEU:HD13	28:C:1056:DGD:HAW2	2.02	0.41
1:A:60:ILE:CG1	1:A:61:ASP:N	2.53	0.41
23:B:1018:CLA:CB	23:B:1018:CLA:HAA2	2.51	0.41
23:B:1019:CLA:C5	23:B:1021:CLA:CED	2.94	0.41
2:B:165:GLY:HA3	2:B:179:GLN:C	2.41	0.41
2:B:239:SER:HB2	23:B:1016:CLA:HED2	2.02	0.41
2:B:449:GLY:O	2:B:450:TRP:C	2.60	0.41
23:C:1025:CLA:H142	23:C:1025:CLA:H111	1.90	0.41
3:C:61:VAL:CA	23:C:1027:CLA:HMD2	2.49	0.41
3:C:251:HIS:CE1	23:C:1030:CLA:NA	2.88	0.41
3:C:53:HIS:HB3	23:C:1036:CLA:HMD1	2.00	0.41
3:C:293:ASN:ND2	3:C:296:VAL:HG22	2.36	0.41
26:D:1042:PQ9:H111	26:D:1042:PQ9:H152	1.80	0.41
1:A:83:VAL:HG23	4:D:314:PHE:HE1	1.85	0.41
4:D:43:LEU:O	4:D:47:GLY:N	2.50	0.41
5:E:15:THR:O	5:E:16:SER:C	2.60	0.41
13:O:216:PHE:HD1	13:O:216:PHE:O	2.04	0.41
17:X:23:LEU:HA	17:X:23:LEU:HD12	1.78	0.41
13:O:121:PHE:CB	13:O:153:ALA:HB3	2.44	0.41
18:Y:39:LEU:HD21	20:Z:25:VAL:CG1	2.49	0.41
20:Z:62:VAL:O	20:Z:62:VAL:HG13	2.21	0.41
13:O:213:VAL:O	13:O:213:VAL:HG22	2.21	0.41
3:C:305:THR:O	3:C:305:THR:HG23	2.20	0.41
2:B:359:MET:HB3	2:B:425:ILE:HG22	2.03	0.41
5:E:68:ASP:CB	5:E:69:ARG:HH21	2.30	0.41
5:E:69:ARG:NE	5:E:69:ARG:H	2.19	0.41
2:B:373:LYS:O	2:B:374:ASN:HB2	2.21	0.41
2:B:434:THR:HG23	13:O:204:LYS:HE2	2.02	0.41
3:C:394:GLU:HB2	16:V:127:PHE:HZ	1.86	0.41
1:A:252:HIS:C	1:A:252:HIS:ND1	2.74	0.41
2:B:466:HIS:NE2	23:B:1016:CLA:ND	2.69	0.41
23:B:1019:CLA:H112	23:B:1019:CLA:H143	1.54	0.41
2:B:137:LYS:O	2:B:138:MET:C	2.59	0.41
2:B:143:LEU:C	2:B:143:LEU:HD13	2.42	0.41

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:C:1027:CLA:CBA	23:C:1027:CLA:HBD	2.51	0.41
23:C:1032:CLA:C17	23:C:1034:CLA:H192	2.51	0.41
3:C:126:GLY:O	3:C:127:PHE:C	2.59	0.41
3:C:318:LEU:HD23	3:C:318:LEU:C	2.41	0.41
3:C:75:PHE:HB2	3:C:86:LEU:HD21	2.02	0.41
4:D:253:TRP:C	4:D:255:GLN:N	2.73	0.41
5:E:51:ARG:C	5:E:53:ASP:N	2.74	0.41
4:D:154:VAL:HG21	28:H:1058:DGD:HAF1	2.01	0.41
7:H:38:PHE:HD1	27:H:1049:BCR:C10	2.32	0.41
27:D:1050:BCR:C37	29:J:1059:MGE:H3A1	2.51	0.41
18:Y:35:ILE:HG13	18:Y:36:ILE:N	2.36	0.41
1:A:320:ILE:O	1:A:321:ILE:C	2.58	0.41
16:V:160:LYS:HZ3	16:V:160:LYS:CB	2.11	0.41
13:O:65:ARG:HD2	13:O:110:GLU:HA	2.02	0.41
16:V:125:ASP:HB3	16:V:131:ARG:NE	2.36	0.41
3:C:414:ILE:CG1	3:C:415:ASN:N	2.84	0.41
1:A:32:TRP:HE3	1:A:35:VAL:HG21	1.86	0.41
2:B:342:GLY:HA3	2:B:403:GLY:O	2.21	0.41
1:A:199:GLN:HG3	1:A:200:LEU:N	2.35	0.40
1:A:231:GLU:CG	1:A:235:TYR:HE1	2.33	0.40
1:A:261:GLN:O	1:A:262:TYR:HB2	2.20	0.40
1:A:293:MET:HG2	1:A:298:ASN:HA	2.02	0.40
1:A:97:TRP:CZ3	8:I:8:VAL:HG11	2.55	0.40
23:B:1012:CLA:H112	23:B:1023:CLA:O2A	2.13	0.40
2:B:25:MET:HE2	27:B:1045:BCR:H291	2.02	0.40
2:B:145:LEU:HD13	23:B:1023:CLA:HMB2	2.02	0.40
2:B:155:ALA:HB3	2:B:156:PHE:CD2	2.55	0.40
2:B:160:GLY:C	2:B:162:PHE:H	2.25	0.40
2:B:188:ASP:C	2:B:190:PHE:N	2.75	0.40
2:B:223:GLN:C	2:B:227:LYS:HG2	2.42	0.40
2:B:68:ARG:HH22	2:B:262:THR:HB	1.85	0.40
23:C:1026:CLA:H92	23:C:1026:CLA:H61	1.57	0.40
23:C:1025:CLA:HBA2	23:C:1026:CLA:H93	2.03	0.40
3:C:60:ILE:HG23	23:C:1027:CLA:HMD1	2.03	0.40
23:C:1029:CLA:H71	23:C:1029:CLA:C4	2.51	0.40
3:C:356:MET:HG2	3:C:357:ARG:N	2.37	0.40
3:C:425:TRP:CZ2	23:C:1028:CLA:O1A	2.73	0.40
1:A:288:LEU:HD21	3:C:432:VAL:HG13	2.02	0.40
2:B:257:TRP:CH2	4:D:291:LEU:HG	2.25	0.40
4:D:292:ASN:O	4:D:294:ARG:N	2.54	0.40
4:D:83:ASN:CG	4:D:336:HIS:CE1	2.95	0.40
5:E:19:TYR:CE1	5:E:20:TRP:CD1	3.07	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:B:1018:CLA:C2B	23:H:1017:CLA:HMB2	2.50	0.40
11:L:15:THR:CA	11:L:18:TYR:HB2	2.50	0.40
11:L:18:TYR:CD2	14:T:20:ALA:HB2	2.56	0.40
14:T:1:MET:HA	14:T:4:ILE:HG22	2.03	0.40
10:K:39:VAL:CA	18:Y:36:ILE:CD1	2.97	0.40
20:Z:61:VAL:CG2	20:Z:62:VAL:N	2.81	0.40
13:O:175:PRO:HB3	15:U:123:GLU:HG2	2.02	0.40
13:O:64:TYR:CD1	13:O:64:TYR:N	2.89	0.40
5:E:60:GLN:HG2	5:E:62:SER:H	1.86	0.40
1:A:101:SER:C	1:A:103:ASP:N	2.72	0.40
1:A:140:ARG:HH21	30:A:1063:LHG:C1	2.34	0.40
1:A:27:ARG:HD2	14:T:24:ARG:NH2	2.37	0.40
2:B:26:HIS:ND1	23:B:1020:CLA:HMA1	2.36	0.40
23:B:1022:CLA:C9	23:B:1022:CLA:C3	2.96	0.40
2:B:330:MET:HG2	2:B:444:ARG:O	2.21	0.40
2:B:440:ASP:C	2:B:440:ASP:OD2	2.59	0.40
3:C:88:LEU:CG	23:C:1027:CLA:HBC3	2.50	0.40
3:C:270:ALA:O	3:C:273:SER:N	2.54	0.40
3:C:59:LEU:HB3	23:C:1034:CLA:O1D	2.20	0.40
3:C:84:GLN:O	3:C:86:LEU:N	2.52	0.40
3:C:89:ILE:O	3:C:92:ILE:HG13	2.21	0.40
27:D:1050:BCR:H24C	27:D:1050:BCR:H382	1.95	0.40
23:D:1005:CLA:C7	29:D:1062:MGE:H202	2.47	0.40
4:D:148:ALA:CB	4:D:149:PRO:CD	2.94	0.40
4:D:291:LEU:CD1	4:D:291:LEU:N	2.84	0.40
4:D:45:LEU:C	4:D:45:LEU:CD1	2.82	0.40
4:D:53:THR:C	4:D:66:SER:OG	2.60	0.40
7:H:10:ILE:HG13	7:H:10:ILE:H	1.55	0.40
29:D:1062:MGE:H222	29:L:1061:MGE:CGB	2.51	0.40
12:M:14:PHE:O	12:M:14:PHE:CG	2.73	0.40
29:D:1062:MGE:H4A2	14:T:17:PHE:CD2	2.57	0.40
15:U:72:TYR:HD2	15:U:73:PRO:CD	2.34	0.40
2:B:360:PRO:O	2:B:361:ALA:C	2.59	0.40
1:A:135:TYR:O	1:A:137:LEU:N	2.54	0.40
1:A:202:VAL:HG11	23:A:1006:CLA:C3D	2.52	0.40
1:A:244:GLU:O	1:A:246:TYR:N	2.55	0.40
23:B:1019:CLA:CMB	23:B:1020:CLA:C4B	3.00	0.40
2:B:123:PHE:HD1	2:B:123:PHE:HA	1.76	0.40
2:B:223:GLN:HG2	7:H:24:GLY:N	2.36	0.40
2:B:318:ASN:HD21	2:B:320:ALA:CB	2.33	0.40
2:B:329:PRO:O	2:B:331:ASN:N	2.55	0.40
2:B:457:VAL:HG23	2:B:457:VAL:H	1.55	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:463:PHE:CE1	23:B:1016:CLA:CBB	2.93	0.40
3:C:223:TRP:HB3	3:C:224:ILE:H	1.75	0.40
1:A:87:ASN:ND2	3:C:357:ARG:CG	2.84	0.40
1:A:212:CYS:SG	4:D:271:MET:O	2.67	0.40
7:H:14:LEU:HD12	7:H:14:LEU:N	2.34	0.40
13:O:104:LEU:HD22	13:O:128:ASP:HA	2.03	0.40
13:O:167:ASP:O	13:O:168:PHE:CG	2.74	0.40
18:Y:39:LEU:CD1	20:Z:28:ALA:HB3	2.50	0.40
16:V:128:PRO:HB3	16:V:131:ARG:NE	2.36	0.40
15:U:112:PHE:N	15:U:112:PHE:HD2	2.18	0.40
13:O:250:ASP:OD1	13:O:253:ALA:HB2	2.21	0.40
1:A:247:ASN:ND2	1:A:250:ALA:CB	2.85	0.40
13:O:208:LEU:CD1	13:O:208:LEU:H	2.35	0.40
1:A:14:TRP:CD1	1:A:18:CYS:SG	3.10	0.40
2:B:306:PRO:O	2:B:307:GLU:C	2.59	0.40
1:A:202:VAL:HG12	1:A:206:PHE:CD1	2.57	0.40
27:B:1047:BCR:H371	27:B:1047:BCR:H24C	1.63	0.40
2:B:193:TYR:C	2:B:261:ALA:HB2	2.42	0.40
2:B:243:ALA:HB2	2:B:466:HIS:CE1	2.56	0.40
2:B:69:LEU:HD11	23:B:1011:CLA:HMD1	2.04	0.40
23:C:1035:CLA:HAA1	23:C:1035:CLA:CBD	2.50	0.40
3:C:293:ASN:OD1	3:C:295:THR:N	2.54	0.40
3:C:418:ASN:HD22	3:C:419:PHE:N	2.20	0.40
3:C:45:LEU:H	3:C:45:LEU:HD12	1.86	0.40
29:D:1062:MGE:H2G	29:D:1062:MGE:H1D	1.29	0.40
4:D:155:SER:HA	4:D:159:ILE:CG1	2.51	0.40
4:D:237:PRO:O	4:D:238:THR:CB	2.70	0.40
4:D:280:TRP:O	4:D:283:ALA:HB3	2.20	0.40
4:D:46:GLY:O	4:D:49:LEU:N	2.55	0.40
4:D:83:ASN:CB	4:D:336:HIS:CE1	3.04	0.40
5:E:30:LEU:HD22	5:E:30:LEU:HA	1.65	0.40
23:H:1017:CLA:HAA1	23:H:1017:CLA:CBD	2.52	0.40
23:C:1034:CLA:HMB3	10:K:33:PHE:HB2	2.03	0.40
11:L:28:ALA:HB2	12:M:15:VAL:HG22	2.04	0.40
12:M:17:VAL:HB	12:M:18:PRO:CD	2.51	0.40
20:Z:2:THR:O	20:Z:5:PHE:HB3	2.21	0.40
20:Z:7:LEU:HA	20:Z:10:ALA:HB3	2.04	0.40
15:U:58:ASN:OD1	15:U:85:TYR:N	2.54	0.40
13:O:250:ASP:O	13:O:251:MET:C	2.58	0.40
13:O:73:PRO:HG3	13:O:102:THR:HG1	1.85	0.40
18:Y:44:GLY:CA	20:Z:30:PRO:HD3	2.50	0.40
15:U:130:ASN:O	15:U:131:GLY:O	2.38	0.40

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Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:B:321:LYS:HB3	2:B:321:LYS:HZ2	1.86	0.40
2:B:476:ARG:C	2:B:476:ARG:HD2	2.41	0.40
3:C:394:GLU:CD	16:V:127:PHE:CE2	2.95	0.40
23:A:1006:CLA:HMC3	4:D:157:PHE:CE1	2.57	0.40
1:A:134:SER:CB	1:A:141:PRO:HA	2.44	0.40
1:A:310:LYS:HA	16:V:29:LEU:CB	2.35	0.40
23:B:1010:CLA:HMB1	23:B:1010:CLA:CBB	2.33	0.40
2:B:149:LEU:CB	23:B:1011:CLA:HBC1	2.51	0.40
23:B:1012:CLA:CED	23:B:1013:CLA:H11	2.49	0.40
23:B:1019:CLA:H122	23:B:1021:CLA:H102	2.04	0.40
2:B:19:LEU:HD13	2:B:19:LEU:C	2.42	0.40
2:B:67:ALA:O	2:B:68:ARG:C	2.60	0.40
23:C:1036:CLA:H151	27:Z:1053:BCR:H362	2.03	0.40
28:C:1055:DGD:HGB2	28:C:1055:DGD:HBN1	1.71	0.40
3:C:186:TYR:OH	3:C:194:GLY:HA3	2.22	0.40
23:D:1005:CLA:HMB1	23:D:1005:CLA:CBB	2.51	0.40
4:D:218:VAL:CA	4:D:221:THR:HG22	2.52	0.40
2:B:6:TYR:CZ	11:L:11:GLU:HG3	2.56	0.40
11:L:21:LEU:CD2	12:M:22:LEU:HD12	2.50	0.40
12:M:31:SER:C	12:M:33:GLN:H	2.25	0.40
4:D:58:TRP:CZ2	5:E:55:TYR:HB3	2.56	0.40
2:B:392:PHE:O	2:B:393:GLU:CB	2.69	0.40
13:O:190:LEU:HD11	15:U:42:VAL:HG22	2.03	0.40
15:U:90:ASP:O	15:U:93:ASN:HB2	2.21	0.40
3:C:397:THR:OG1	3:C:398:HIS:N	2.55	0.40
13:O:162:ILE:HG22	13:O:162:ILE:O	2.22	0.40
6:F:44:GLN:O	6:F:45:ARG:CB	2.69	0.40

There are no symmetry-related clashes.

5.3 Torsion angles

5.3.1 Protein backbone ⓘ

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	333/344 (97%)	210 (63%)	84 (25%)	39 (12%)	1 15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	a	333/344 (97%)	214 (64%)	75 (22%)	44 (13%)	0	12
2	B	483/488 (99%)	314 (65%)	109 (23%)	60 (12%)	1	14
2	b	483/488 (99%)	314 (65%)	109 (23%)	60 (12%)	1	14
3	C	445/447 (100%)	306 (69%)	89 (20%)	50 (11%)	1	16
3	c	445/447 (100%)	316 (71%)	82 (18%)	47 (11%)	1	17
4	D	338/340 (99%)	199 (59%)	87 (26%)	52 (15%)	0	8
4	d	338/340 (99%)	214 (63%)	79 (23%)	45 (13%)	0	12
5	E	80/83 (96%)	44 (55%)	22 (28%)	14 (18%)	0	6
5	e	80/83 (96%)	51 (64%)	18 (22%)	11 (14%)	0	11
6	F	33/44 (75%)	26 (79%)	6 (18%)	1 (3%)	7	59
6	f	33/44 (75%)	26 (79%)	5 (15%)	2 (6%)	2	37
7	H	62/64 (97%)	39 (63%)	15 (24%)	8 (13%)	0	13
7	h	62/64 (97%)	38 (61%)	19 (31%)	5 (8%)	1	27
8	I	33/35 (94%)	19 (58%)	8 (24%)	6 (18%)	0	5
8	i	33/35 (94%)	24 (73%)	6 (18%)	3 (9%)	1	24
9	J	32/40 (80%)	26 (81%)	2 (6%)	4 (12%)	1	14
9	j	32/40 (80%)	26 (81%)	3 (9%)	3 (9%)	1	23
10	K	34/36 (94%)	22 (65%)	8 (24%)	4 (12%)	1	15
10	k	34/36 (94%)	23 (68%)	7 (21%)	4 (12%)	1	15
11	L	35/37 (95%)	20 (57%)	12 (34%)	3 (9%)	1	25
11	l	35/37 (95%)	22 (63%)	9 (26%)	4 (11%)	1	16
12	M	34/36 (94%)	19 (56%)	8 (24%)	7 (21%)	0	3
12	m	34/36 (94%)	24 (71%)	7 (21%)	3 (9%)	1	25
13	O	240/242 (99%)	155 (65%)	47 (20%)	38 (16%)	0	7
13	o	240/242 (99%)	163 (68%)	45 (19%)	32 (13%)	0	12
14	T	28/30 (93%)	18 (64%)	5 (18%)	5 (18%)	0	5
14	t	28/30 (93%)	20 (71%)	7 (25%)	1 (4%)	5	54
15	U	96/98 (98%)	56 (58%)	24 (25%)	16 (17%)	0	7
15	u	96/98 (98%)	55 (57%)	26 (27%)	15 (16%)	0	8
16	V	135/137 (98%)	91 (67%)	25 (18%)	19 (14%)	0	11
16	v	135/137 (98%)	90 (67%)	28 (21%)	17 (13%)	0	14

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
17	X	32/34 (94%)	29 (91%)	2 (6%)	1 (3%)	7	59
17	x	32/34 (94%)	29 (91%)	2 (6%)	1 (3%)	7	59
18	Y	26/28 (93%)	19 (73%)	5 (19%)	2 (8%)	1	29
18	y	26/28 (93%)	19 (73%)	3 (12%)	4 (15%)	0	8
20	Z	60/62 (97%)	39 (65%)	10 (17%)	11 (18%)	0	5
20	z	60/62 (97%)	46 (77%)	8 (13%)	6 (10%)	1	20
All	All	5118/5250 (98%)	3365 (66%)	1106 (22%)	647 (13%)	0	14

All (647) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	60	ILE
1	A	75	ASN
1	A	79	THR
1	A	80	GLY
1	A	84	PRO
1	A	91	LEU
1	A	96	ILE
1	A	113	GLN
1	A	129	ARG
1	A	151	LEU
1	A	169	SER
1	A	224	ILE
1	A	261	GLN
1	A	279	ARG
1	A	305	SER
1	A	335	ASN
2	B	34	ALA
2	B	48	SER
2	B	87	ASP
2	B	93	PHE
2	B	121	GLU
2	B	151	PHE
2	B	157	HIS
2	B	171	PRO
2	B	224	ARG
2	B	230	ARG
2	B	279	TYR
2	B	327	THR
2	B	361	ALA

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Mol	Chain	Res	Type
2	B	407	ASN
2	B	443	PHE
2	B	478	VAL
2	B	479	PHE
2	B	487	SER
3	C	33	PHE
3	C	42	LEU
3	C	99	VAL
3	C	127	PHE
3	C	138	GLU
3	C	411	ALA
3	C	457	LYS
3	C	461	ARG
4	D	22	LEU
4	D	25	ASP
4	D	113	PHE
4	D	222	LEU
4	D	233	ARG
4	D	236	ASN
4	D	239	GLN
4	D	262	SER
4	D	299	ILE
4	D	325	ILE
4	D	330	ALA
4	D	338	ASN
5	E	9	PRO
5	E	11	SER
5	E	13	ILE
5	E	20	TRP
5	E	60	GLN
5	E	82	GLN
5	E	83	LEU
7	H	17	GLU
7	H	18	TYR
7	H	26	GLY
10	K	13	GLU
10	K	27	VAL
12	M	8	PHE
12	M	11	THR
12	M	12	ALA
12	M	34	LYS
13	O	52	ALA

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Mol	Chain	Res	Type
13	O	88	GLU
13	O	110	GLU
13	O	151	LEU
13	O	175	PRO
13	O	188	ARG
13	O	197	ALA
13	O	247	SER
14	T	2	GLU
15	U	53	GLU
15	U	60	THR
15	U	72	TYR
15	U	73	PRO
15	U	132	LEU
16	V	109	ASP
16	V	111	GLU
16	V	124	ALA
16	V	133	LEU
17	X	43	ILE
20	Z	31	GLN
20	Z	32	ASP
1	a	5031	GLY
1	a	5060	ILE
1	a	5075	ASN
1	a	5080	GLY
1	a	5084	PRO
1	a	5129	ARG
1	a	5224	ILE
1	a	5229	GLU
1	a	5261	GLN
1	a	5277	ALA
1	a	5305	SER
2	b	5045	SER
2	b	5096	ALA
2	b	5118	GLU
2	b	5119	LEU
2	b	5154	HIS
2	b	5168	PRO
2	b	5221	ARG
2	b	5227	ARG
2	b	5276	TYR
2	b	5324	THR
2	b	5358	ALA

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Mol	Chain	Res	Type
2	b	5359	PHE
2	b	5383	ALA
2	b	5388	SER
2	b	5440	PHE
2	b	5475	VAL
2	b	5476	PHE
2	b	5484	SER
3	c	5099	VAL
3	c	5138	GLU
3	c	5264	PHE
3	c	5295	THR
3	c	5407	VAL
3	c	5411	ALA
3	c	5457	LYS
3	c	5461	ARG
4	d	5021	TRP
4	d	5022	LEU
4	d	5025	ASP
4	d	5026	ARG
4	d	5090	LEU
4	d	5169	PHE
4	d	5222	LEU
4	d	5233	ARG
4	d	5235	PHE
4	d	5236	ASN
4	d	5239	GLN
4	d	5242	GLU
4	d	5262	SER
4	d	5330	ALA
4	d	5338	ASN
5	e	5009	PRO
5	e	5011	SER
5	e	5060	GLN
7	h	5026	GLY
10	k	5013	GLU
12	m	5005	GLN
13	o	5088	GLU
13	o	5106	GLN
13	o	5110	GLU
13	o	5151	LEU
13	o	5175	PRO
13	o	5188	ARG

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Mol	Chain	Res	Type
13	o	5247	SER
15	u	5053	GLU
15	u	5060	THR
15	u	5072	TYR
15	u	5073	PRO
15	u	5116	GLU
16	v	5088	ALA
16	v	5109	ASP
16	v	5122	ARG
16	v	5124	ALA
16	v	5133	LEU
1	A	44	ALA
1	A	72	LEU
1	A	88	ALA
1	A	114	LEU
1	A	150	PRO
1	A	229	GLU
1	A	260	PHE
1	A	318	ALA
2	B	6	TYR
2	B	59	GLY
2	B	89	GLY
2	B	122	LEU
2	B	150	CYS
2	B	165	GLY
2	B	174	LEU
2	B	219	VAL
2	B	259	GLY
2	B	261	ALA
2	B	280	PHE
2	B	322	GLY
2	B	330	MET
2	B	386	ALA
2	B	391	SER
2	B	396	GLY
2	B	488	PRO
3	C	40	ALA
3	C	80	PRO
3	C	184	GLY
3	C	196	VAL
3	C	217	PRO
3	C	223	TRP

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Mol	Chain	Res	Type
3	C	256	PRO
3	C	384	ILE
3	C	400	PRO
3	C	406	SER
3	C	472	LEU
4	D	23	LYS
4	D	26	ARG
4	D	109	GLY
4	D	169	PHE
4	D	211	CYS
4	D	228	GLY
4	D	235	PHE
4	D	242	GLU
4	D	274	VAL
4	D	300	SER
4	D	345	VAL
4	D	349	GLY
5	E	44	TYR
5	E	45	ASP
7	H	6	TRP
9	J	31	GLY
9	J	35	GLY
12	M	3	VAL
12	M	5	GLN
13	O	60	SER
13	O	106	GLN
13	O	115	SER
13	O	162	ILE
13	O	169	LYS
13	O	185	PRO
13	O	201	PRO
13	O	206	GLU
13	O	224	SER
13	O	256	PRO
14	T	11	ALA
15	U	90	ASP
15	U	110	GLU
15	U	124	GLY
15	U	130	ASN
15	U	131	GLY
16	V	41	GLU
16	V	67	HIS

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Mol	Chain	Res	Type
16	V	110	GLY
16	V	123	SER
16	V	153	GLY
18	Y	45	ASN
20	Z	6	GLN
20	Z	55	GLY
20	Z	61	VAL
1	a	5061	ASP
1	a	5088	ALA
1	a	5096	ILE
1	a	5100	ALA
1	a	5150	PRO
1	a	5245	THR
1	a	5260	PHE
1	a	5275	LEU
1	a	5318	ALA
1	a	5335	ASN
2	b	5003	TYR
2	b	5008	VAL
2	b	5031	ALA
2	b	5040	ALA
2	b	5056	GLY
2	b	5148	PHE
2	b	5162	GLY
2	b	5183	GLY
2	b	5231	ILE
2	b	5237	SER
2	b	5247	PHE
2	b	5261	PRO
2	b	5277	PHE
2	b	5319	GLY
2	b	5393	GLY
3	c	5040	ALA
3	c	5085	GLY
3	c	5172	ALA
3	c	5184	GLY
3	c	5217	PRO
3	c	5257	PHE
3	c	5266	TRP
3	c	5277	GLY
3	c	5333	GLY
3	c	5355	THR

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Mol	Chain	Res	Type
3	c	5383	ASP
3	c	5432	VAL
4	d	5100	ASP
4	d	5168	PHE
4	d	5228	GLY
4	d	5238	THR
4	d	5240	ALA
4	d	5274	VAL
4	d	5325	ILE
4	d	5329	MET
4	d	5345	VAL
4	d	5349	GLY
5	e	5013	ILE
5	e	5020	TRP
5	e	5044	TYR
6	f	5041	GLN
6	f	5043	ILE
7	h	5006	TRP
7	h	5014	LEU
9	j	5031	GLY
9	j	5035	GLY
11	l	5006	ASN
11	l	5030	LEU
12	m	5014	PHE
12	m	5034	LYS
13	o	5049	ASP
13	o	5052	ALA
13	o	5169	LYS
13	o	5177	TYR
13	o	5179	THR
13	o	5185	PRO
13	o	5197	ALA
13	o	5209	ALA
15	u	5063	ALA
15	u	5090	ASP
15	u	5099	GLU
15	u	5132	LEU
16	v	5041	GLU
16	v	5064	ALA
16	v	5153	GLY
16	v	5154	ASP
17	x	5043	ILE

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Mol	Chain	Res	Type
18	y	5025	ARG
20	z	5006	GLN
20	z	5050	LEU
1	A	45	THR
1	A	61	ASP
1	A	112	TYR
1	A	217	SER
1	A	245	THR
1	A	274	PHE
1	A	321	ILE
2	B	28	ALA
2	B	80	ILE
2	B	161	LEU
2	B	204	ALA
2	B	223	GLN
2	B	266	GLU
2	B	307	GLU
2	B	372	ASP
3	C	29	GLU
3	C	46	SER
3	C	75	PHE
3	C	139	THR
3	C	161	LEU
3	C	172	ALA
3	C	228	ASN
3	C	277	GLY
3	C	287	THR
3	C	355	THR
3	C	429	SER
3	C	436	PHE
3	C	452	ALA
3	C	456	GLU
3	C	471	SER
4	D	21	TRP
4	D	58	TRP
4	D	66	SER
4	D	114	ILE
4	D	165	SER
4	D	168	PHE
4	D	173	PHE
4	D	219	GLU
4	D	238	THR

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Mol	Chain	Res	Type
4	D	273	PHE
4	D	292	ASN
4	D	329	MET
5	E	31	PHE
6	F	19	ARG
7	H	19	GLY
8	I	24	LEU
9	J	18	GLY
10	K	12	PRO
10	K	36	ALA
11	L	31	PHE
13	O	49	ASP
13	O	100	GLU
13	O	116	ASP
13	O	117	GLY
13	O	146	PHE
13	O	150	ASN
13	O	209	ALA
13	O	229	LYS
13	O	232	GLY
14	T	16	LEU
14	T	26	PRO
15	U	94	ILE
15	U	99	GLU
15	U	123	GLU
16	V	64	ALA
16	V	65	SER
16	V	81	ARG
16	V	112	GLN
16	V	154	ASP
18	Y	43	ARG
20	Z	4	LEU
1	a	5045	THR
1	a	5081	ALA
1	a	5091	LEU
1	a	5168	PHE
1	a	5217	SER
1	a	5279	ARG
1	a	5280	VAL
1	a	5321	ILE
1	a	5334	ARG
2	b	5171	LEU

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Mol	Chain	Res	Type
2	b	5193	GLY
2	b	5220	GLN
2	b	5404	ASN
2	b	5433	THR
2	b	5485	PRO
3	c	5033	PHE
3	c	5042	LEU
3	c	5287	THR
3	c	5316	THR
3	c	5400	PRO
3	c	5429	SER
4	d	5041	ALA
4	d	5062	GLY
4	d	5071	CYS
4	d	5095	PRO
4	d	5096	GLU
4	d	5192	THR
4	d	5292	ASN
4	d	5300	SER
5	e	5012	ASP
5	e	5045	ASP
5	e	5082	GLN
8	i	5024	LEU
8	i	5027	ASP
10	k	5012	PRO
11	l	5031	PHE
13	o	5086	ARG
13	o	5157	PRO
13	o	5229	LYS
14	t	5026	PRO
15	u	5130	ASN
16	v	5051	GLN
16	v	5065	SER
16	v	5112	GLN
16	v	5129	LYS
20	z	5032	ASP
20	z	5055	GLY
1	A	152	ALA
1	A	153	SER
2	B	11	VAL
2	B	43	ALA
2	B	249	ALA

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Mol	Chain	Res	Type
2	B	250	PHE
2	B	392	PHE
2	B	414	PRO
3	C	57	ALA
3	C	101	PRO
3	C	212	TYR
3	C	298	PRO
3	C	435	PHE
3	C	443	TRP
3	C	465	PRO
4	D	30	VAL
4	D	188	PHE
4	D	240	ALA
4	D	275	PRO
4	D	281	MET
4	D	344	GLU
4	D	348	ARG
5	E	10	PHE
7	H	14	LEU
8	I	27	ASP
9	J	34	ALA
11	L	3	PRO
11	L	30	LEU
12	M	9	ILE
13	O	96	LEU
13	O	138	GLY
13	O	157	PRO
13	O	179	THR
13	O	251	MET
14	T	9	ILE
15	U	92	LEU
16	V	69	GLY
20	Z	23	VAL
1	a	5142	TRP
1	a	5165	GLN
1	a	5236	GLY
2	b	5052	MET
2	b	5143	ALA
2	b	5155	LEU
3	c	5057	ALA
3	c	5075	PHE
3	c	5256	PRO

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Mol	Chain	Res	Type
3	c	5260	ALA
3	c	5324	LEU
3	c	5384	ILE
4	d	5030	VAL
4	d	5101	PHE
4	d	5181	PHE
4	d	5273	PHE
4	d	5275	PRO
4	d	5277	THR
7	h	5020	LYS
7	h	5063	LYS
8	i	5010	ILE
10	k	5027	VAL
11	l	5003	PRO
13	o	5096	LEU
13	o	5100	GLU
15	u	5092	LEU
16	v	5162	TYR
18	y	5012	ILE
1	A	63	ILE
1	A	179	THR
1	A	280	VAL
2	B	50	PRO
2	B	71	VAL
2	B	234	ILE
2	B	360	PRO
2	B	439	SER
2	B	484	PRO
3	C	257	PHE
3	C	296	VAL
3	C	333	GLY
4	D	111	TRP
5	E	43	ALA
8	I	2	GLU
8	I	5	LYS
13	O	122	VAL
16	V	83	GLU
16	V	121	LEU
16	V	162	TYR
20	Z	42	LEU
1	a	5070	SER
1	a	5072	LEU

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Mol	Chain	Res	Type
1	a	5079	THR
1	a	5164	GLY
2	b	5084	ASP
2	b	5256	GLY
2	b	5257	SER
2	b	5270	TYR
2	b	5313	GLY
2	b	5327	MET
2	b	5346	LYS
2	b	5371	ASN
2	b	5439	ILE
2	b	5481	PRO
3	c	5109	PHE
3	c	5132	HIS
3	c	5471	SER
4	d	5080	THR
4	d	5306	ALA
9	j	5034	ALA
13	o	5060	SER
13	o	5187	GLY
13	o	5224	SER
13	o	5228	ALA
13	o	5243	SER
15	u	5094	ILE
18	y	5027	ASN
20	z	5010	ALA
1	A	31	GLY
1	A	176	ILE
2	B	99	ALA
3	C	216	SER
4	D	37	LEU
7	H	58	VAL
8	I	30	ARG
13	O	41	LEU
13	O	269	ILE
15	U	104	ILE
16	V	128	PRO
20	Z	3	ILE
1	a	5172	MET
1	a	5185	VAL
1	a	5293	MET
1	a	5333	GLU

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Mol	Chain	Res	Type
2	b	5192	PRO
2	b	5334	ALA
2	b	5411	PRO
2	b	5452	HIS
3	c	5046	SER
3	c	5077	PRO
4	d	5152	VAL
5	e	5072	ALA
10	k	5022	VAL
13	o	5117	GLY
13	o	5143	PRO
13	o	5201	PRO
16	v	5110	GLY
3	C	85	GLY
4	D	47	GLY
4	D	187	GLY
13	O	109	GLY
15	U	43	VAL
20	Z	24	PRO
1	a	5138	GLY
2	b	5013	PRO
2	b	5123	PRO
2	b	5133	PRO
3	c	5216	SER
3	c	5414	ILE
3	c	5465	PRO
4	d	5299	ILE
5	e	5052	PRO
13	o	5122	VAL
13	o	5162	ILE
15	u	5122	VAL
18	y	5026	GLY
1	A	236	GLY
2	B	211	ILE
2	B	367	PRO
3	C	77	PRO
4	D	62	GLY
4	D	132	ILE
4	D	152	VAL
5	E	52	PRO
3	c	5196	VAL
3	c	5199	ILE

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Mol	Chain	Res	Type
13	o	5256	PRO
15	u	5131	GLY
2	B	126	PRO
2	B	192	PRO
3	C	249	ILE
3	C	306	GLY
4	D	237	PRO
5	E	27	ILE
1	a	5327	GLY
3	c	5367	GLU
3	c	5408	GLY
3	c	5470	PRO
13	o	5109	GLY
15	u	5084	PRO
16	v	5148	GLU
20	z	5061	VAL
3	C	414	ILE
4	D	39	PRO
7	H	60	VAL
8	I	10	ILE
13	O	143	PRO
13	O	187	GLY
1	a	5066	PRO
2	b	5219	PRO
4	d	5309	PRO
16	v	5128	PRO
20	Z	22	GLY
3	c	5298	PRO
3	c	5304	PRO
4	d	5237	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	270/279 (97%)	223 (83%)	47 (17%)	3	20
1	a	270/279 (97%)	216 (80%)	54 (20%)	2	13

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	B	386/388 (100%)	330 (86%)	56 (14%)	5	31
2	b	386/388 (100%)	332 (86%)	54 (14%)	5	33
3	C	349/349 (100%)	285 (82%)	64 (18%)	2	17
3	c	349/349 (100%)	292 (84%)	57 (16%)	3	25
4	D	275/275 (100%)	224 (82%)	51 (18%)	2	17
4	d	275/275 (100%)	231 (84%)	44 (16%)	3	26
5	E	72/73 (99%)	58 (81%)	14 (19%)	2	14
5	e	72/73 (99%)	62 (86%)	10 (14%)	5	34
6	F	29/38 (76%)	21 (72%)	8 (28%)	0	5
6	f	29/38 (76%)	22 (76%)	7 (24%)	1	8
7	H	54/54 (100%)	40 (74%)	14 (26%)	1	7
7	h	54/54 (100%)	41 (76%)	13 (24%)	1	8
8	I	32/32 (100%)	26 (81%)	6 (19%)	2	16
8	i	32/32 (100%)	26 (81%)	6 (19%)	2	16
9	J	24/28 (86%)	15 (62%)	9 (38%)	0	1
9	j	24/28 (86%)	14 (58%)	10 (42%)	0	1
10	K	29/29 (100%)	21 (72%)	8 (28%)	0	5
10	k	29/29 (100%)	21 (72%)	8 (28%)	0	5
11	L	35/35 (100%)	28 (80%)	7 (20%)	2	13
11	l	35/35 (100%)	28 (80%)	7 (20%)	2	13
12	M	33/33 (100%)	30 (91%)	3 (9%)	14	57
12	m	33/33 (100%)	30 (91%)	3 (9%)	14	57
13	O	200/206 (97%)	172 (86%)	28 (14%)	5	33
13	o	200/206 (97%)	168 (84%)	32 (16%)	3	26
14	T	27/27 (100%)	19 (70%)	8 (30%)	0	5
14	t	27/27 (100%)	21 (78%)	6 (22%)	1	10
15	U	85/85 (100%)	72 (85%)	13 (15%)	4	28
15	u	85/85 (100%)	73 (86%)	12 (14%)	5	33
16	V	117/117 (100%)	97 (83%)	20 (17%)	3	22
16	v	117/117 (100%)	100 (86%)	17 (14%)	5	31
17	X	27/27 (100%)	18 (67%)	9 (33%)	0	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
17	x	27/27 (100%)	16 (59%)	11 (41%)	0	1
18	Y	21/21 (100%)	13 (62%)	8 (38%)	0	1
18	y	21/21 (100%)	14 (67%)	7 (33%)	0	3
20	Z	52/52 (100%)	41 (79%)	11 (21%)	1	11
20	z	52/52 (100%)	39 (75%)	13 (25%)	1	7
All	All	4234/4296 (99%)	3479 (82%)	755 (18%)	2	19

All (755) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	17	PHE
1	A	27	ARG
1	A	46	ILE
1	A	52	PHE
1	A	56	PRO
1	A	60	ILE
1	A	73	TYR
1	A	83	VAL
1	A	89	ILE
1	A	92	HIS
1	A	93	PHE
1	A	102	LEU
1	A	121	LEU
1	A	129	ARG
1	A	131	TRP
1	A	139	MET
1	A	144	CYS
1	A	155	PHE
1	A	157	VAL
1	A	165	GLN
1	A	174	LEU
1	A	180	PHE
1	A	186	PHE
1	A	191	ASN
1	A	192	ILE
1	A	193	LEU
1	A	197	PHE
1	A	199	GLN
1	A	206	PHE
1	A	227	THR

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Mol	Chain	Res	Type
1	A	247	ASN
1	A	254	TYR
1	A	257	ARG
1	A	266	ASN
1	A	273	PHE
1	A	278	TRP
1	A	279	ARG
1	A	283	VAL
1	A	292	THR
1	A	298	ASN
1	A	316	THR
1	A	317	TRP
1	A	319	ASP
1	A	322	ASN
1	A	328	MET
1	A	334	ARG
1	A	337	HIS
2	B	6	TYR
2	B	8	VAL
2	B	18	ARG
2	B	24	LEU
2	B	51	VAL
2	B	81	THR
2	B	83	GLU
2	B	106	LEU
2	B	109	LEU
2	B	116	VAL
2	B	122	LEU
2	B	123	PHE
2	B	124	ARG
2	B	135	LEU
2	B	148	LEU
2	B	156	PHE
2	B	161	LEU
2	B	171	PRO
2	B	174	LEU
2	B	184	GLU
2	B	185	TRP
2	B	191	ASN
2	B	226	TYR
2	B	230	ARG
2	B	246	PHE

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Mol	Chain	Res	Type
2	B	251	VAL
2	B	256	MET
2	B	265	ILE
2	B	271	THR
2	B	272	ARG
2	B	277	SER
2	B	286	ARG
2	B	288	VAL
2	B	289	GLN
2	B	318	ASN
2	B	336	ILE
2	B	345	VAL
2	B	346	PHE
2	B	356	VAL
2	B	359	MET
2	B	367	PRO
2	B	377	VAL
2	B	390	TYR
2	B	405	GLU
2	B	415	PRO
2	B	417	VAL
2	B	435	GLU
2	B	439	SER
2	B	443	PHE
2	B	444	ARG
2	B	446	SER
2	B	448	ARG
2	B	463	PHE
2	B	464	PHE
2	B	469	HIS
2	B	477	ASP
3	C	33	PHE
3	C	42	LEU
3	C	45	LEU
3	C	48	LYS
3	C	56	HIS
3	C	59	LEU
3	C	67	MET
3	C	72	LEU
3	C	76	ILE
3	C	78	GLU
3	C	80	PRO

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Mol	Chain	Res	Type
3	C	88	LEU
3	C	92	ILE
3	C	95	LEU
3	C	107	ASP
3	C	113	VAL
3	C	119	LEU
3	C	135	ARG
3	C	140	LEU
3	C	157	MET
3	C	160	ILE
3	C	210	PHE
3	C	214	LEU
3	C	224	ILE
3	C	227	VAL
3	C	231	GLU
3	C	237	HIS
3	C	244	CYS
3	C	245	ILE
3	C	257	PHE
3	C	259	TRP
3	C	262	ARG
3	C	265	ILE
3	C	289	PHE
3	C	313	GLN
3	C	320	ARG
3	C	328	VAL
3	C	334	PRO
3	C	337	LEU
3	C	343	ARG
3	C	350	ILE
3	C	356	MET
3	C	357	ARG
3	C	368	PRO
3	C	369	LEU
3	C	382	ASN
3	C	383	ASP
3	C	391	ARG
3	C	413	GLU
3	C	416	SER
3	C	418	ASN
3	C	419	PHE
3	C	428	THR

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Mol	Chain	Res	Type
3	C	430	HIS
3	C	431	PHE
3	C	441	HIS
3	C	442	LEU
3	C	447	ARG
3	C	449	ARG
3	C	456	GLU
3	C	460	ASP
3	C	461	ARG
3	C	467	LEU
3	C	472	LEU
4	D	21	TRP
4	D	23	LYS
4	D	24	ARG
4	D	35	ILE
4	D	43	LEU
4	D	45	LEU
4	D	53	THR
4	D	55	VAL
4	D	83	ASN
4	D	85	MET
4	D	89	LEU
4	D	90	LEU
4	D	91	LEU
4	D	96	GLU
4	D	102	THR
4	D	103	ARG
4	D	122	LEU
4	D	134	ARG
4	D	138	VAL
4	D	159	ILE
4	D	168	PHE
4	D	175	VAL
4	D	180	ARG
4	D	183	LEU
4	D	188	PHE
4	D	211	CYS
4	D	213	ILE
4	D	217	THR
4	D	221	THR
4	D	222	LEU
4	D	232	PHE

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Mol	Chain	Res	Type
4	D	233	ARG
4	D	235	PHE
4	D	248	THR
4	D	266	TRP
4	D	267	LEU
4	D	277	THR
4	D	279	LEU
4	D	280	TRP
4	D	281	MET
4	D	289	LEU
4	D	291	LEU
4	D	294	ARG
4	D	300	SER
4	D	307	GLU
4	D	311	PHE
4	D	313	THR
4	D	316	THR
4	D	319	LEU
4	D	337	GLU
4	D	340	VAL
5	E	8	ARG
5	E	12	ASP
5	E	13	ILE
5	E	24	SER
5	E	30	LEU
5	E	35	TRP
5	E	45	ASP
5	E	51	ARG
5	E	58	GLN
5	E	60	GLN
5	E	69	ARG
5	E	80	LEU
5	E	81	GLU
5	E	83	LEU
6	F	18	VAL
6	F	19	ARG
6	F	25	THR
6	F	26	LEU
6	F	32	PHE
6	F	37	ILE
6	F	40	MET
6	F	43	ILE

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Mol	Chain	Res	Type
7	H	4	ARG
7	H	5	THR
7	H	10	ILE
7	H	11	LEU
7	H	12	ARG
7	H	17	GLU
7	H	18	TYR
7	H	25	TRP
7	H	33	VAL
7	H	39	LEU
7	H	45	ILE
7	H	49	TYR
7	H	50	ASN
7	H	52	THR
8	I	6	ILE
8	I	13	THR
8	I	14	PHE
8	I	23	PHE
8	I	24	LEU
8	I	35	LYS
9	J	8	ILE
9	J	11	TRP
9	J	12	ILE
9	J	13	VAL
9	J	22	ILE
9	J	23	VAL
9	J	30	TYR
9	J	39	SER
9	J	40	LEU
10	K	11	LEU
10	K	19	ASP
10	K	28	ILE
10	K	31	LEU
10	K	32	PHE
10	K	33	PHE
10	K	37	PHE
10	K	38	VAL
11	L	7	ARG
11	L	8	GLN
11	L	14	ARG
11	L	21	LEU
11	L	24	ILE

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Mol	Chain	Res	Type
11	L	31	PHE
11	L	32	SER
12	M	1	MET
12	M	8	PHE
12	M	32	GLN
13	O	31	LEU
13	O	34	ASP
13	O	63	THR
13	O	88	GLU
13	O	91	PHE
13	O	100	GLU
13	O	108	GLN
13	O	120	THR
13	O	121	PHE
13	O	122	VAL
13	O	127	ILE
13	O	136	MET
13	O	144	LEU
13	O	157	PRO
13	O	158	ASN
13	O	167	ASP
13	O	169	LYS
13	O	178	ARG
13	O	183	LEU
13	O	186	LYS
13	O	194	TYR
13	O	200	LEU
13	O	206	GLU
13	O	210	ARG
13	O	213	VAL
13	O	215	ARG
13	O	251	MET
13	O	254	HIS
14	T	1	MET
14	T	3	THR
14	T	4	ILE
14	T	7	VAL
14	T	14	ILE
14	T	16	LEU
14	T	28	ARG
14	T	29	ILE
15	U	39	LEU

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Mol	Chain	Res	Type
15	U	58	ASN
15	U	61	ASN
15	U	73	PRO
15	U	90	ASP
15	U	98	THR
15	U	99	GLU
15	U	101	GLN
15	U	109	LEU
15	U	118	GLU
15	U	121	LEU
15	U	127	ARG
15	U	132	LEU
16	V	28	GLU
16	V	30	THR
16	V	33	VAL
16	V	34	LEU
16	V	35	THR
16	V	38	LEU
16	V	44	THR
16	V	48	THR
16	V	58	LEU
16	V	59	PHE
16	V	61	TYR
16	V	92	ARG
16	V	101	TYR
16	V	102	MET
16	V	109	ASP
16	V	119	PRO
16	V	121	LEU
16	V	122	ARG
16	V	135	GLU
16	V	160	LYS
17	X	13	THR
17	X	24	LEU
17	X	28	VAL
17	X	30	LEU
17	X	32	LEU
17	X	34	PHE
17	X	37	LEU
17	X	38	ILE
17	X	44	ASP
18	Y	19	ILE

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Mol	Chain	Res	Type
18	Y	21	GLN
18	Y	24	MET
18	Y	36	ILE
18	Y	37	PHE
18	Y	38	LEU
18	Y	39	LEU
18	Y	46	LEU
20	Z	3	ILE
20	Z	9	LEU
20	Z	12	LEU
20	Z	17	PHE
20	Z	27	TYR
20	Z	31	GLN
20	Z	34	ASP
20	Z	35	ARG
20	Z	38	GLN
20	Z	47	TRP
20	Z	57	LEU
1	a	5017	PHE
1	a	5027	ARG
1	a	5032	TRP
1	a	5038	ILE
1	a	5046	ILE
1	a	5048	PHE
1	a	5060	ILE
1	a	5065	GLU
1	a	5075	ASN
1	a	5089	ILE
1	a	5092	HIS
1	a	5093	PHE
1	a	5102	LEU
1	a	5121	LEU
1	a	5129	ARG
1	a	5130	GLN
1	a	5131	TRP
1	a	5133	LEU
1	a	5145	VAL
1	a	5157	VAL
1	a	5165	GLN
1	a	5172	MET
1	a	5174	LEU
1	a	5186	PHE

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Mol	Chain	Res	Type
1	a	5192	ILE
1	a	5193	LEU
1	a	5197	PHE
1	a	5199	GLN
1	a	5205	VAL
1	a	5206	PHE
1	a	5210	LEU
1	a	5215	HIS
1	a	5226	GLU
1	a	5227	THR
1	a	5232	SER
1	a	5254	TYR
1	a	5257	ARG
1	a	5260	PHE
1	a	5266	ASN
1	a	5268	SER
1	a	5269	ARG
1	a	5271	LEU
1	a	5278	TRP
1	a	5279	ARG
1	a	5283	VAL
1	a	5292	THR
1	a	5298	ASN
1	a	5316	THR
1	a	5317	TRP
1	a	5319	ASP
1	a	5322	ASN
1	a	5334	ARG
1	a	5337	HIS
1	a	5341	LEU
2	b	5003	TYR
2	b	5005	VAL
2	b	5015	ARG
2	b	5033	SER
2	b	5048	VAL
2	b	5060	LEU
2	b	5113	VAL
2	b	5119	LEU
2	b	5120	PHE
2	b	5121	ARG
2	b	5132	LEU
2	b	5135	MET

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Mol	Chain	Res	Type
2	b	5145	LEU
2	b	5153	PHE
2	b	5168	PRO
2	b	5181	GLU
2	b	5182	TRP
2	b	5188	ASN
2	b	5223	TYR
2	b	5227	ARG
2	b	5230	ASN
2	b	5243	PHE
2	b	5248	VAL
2	b	5262	ILE
2	b	5265	PHE
2	b	5268	THR
2	b	5269	ARG
2	b	5271	GLN
2	b	5274	SER
2	b	5283	ARG
2	b	5289	LEU
2	b	5306	LEU
2	b	5343	PHE
2	b	5356	MET
2	b	5359	PHE
2	b	5387	TYR
2	b	5394	VAL
2	b	5398	PHE
2	b	5402	GLU
2	b	5411	PRO
2	b	5414	VAL
2	b	5426	ILE
2	b	5429	PHE
2	b	5430	ASP
2	b	5432	GLU
2	b	5436	SER
2	b	5440	PHE
2	b	5441	ARG
2	b	5445	ARG
2	b	5460	PHE
2	b	5461	PHE
2	b	5466	HIS
2	b	5469	ARG
2	b	5474	ASP

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Mol	Chain	Res	Type
3	c	5033	PHE
3	c	5042	LEU
3	c	5045	LEU
3	c	5048	LYS
3	c	5056	HIS
3	c	5059	LEU
3	c	5067	MET
3	c	5072	LEU
3	c	5078	GLU
3	c	5084	GLN
3	c	5088	LEU
3	c	5113	VAL
3	c	5119	LEU
3	c	5124	VAL
3	c	5135	ARG
3	c	5140	LEU
3	c	5149	TYR
3	c	5160	ILE
3	c	5174	LEU
3	c	5207	ARG
3	c	5210	PHE
3	c	5212	TYR
3	c	5214	LEU
3	c	5224	ILE
3	c	5231	GLU
3	c	5237	HIS
3	c	5245	ILE
3	c	5256	PRO
3	c	5257	PHE
3	c	5262	ARG
3	c	5274	TYR
3	c	5296	VAL
3	c	5315	MET
3	c	5321	ASP
3	c	5328	VAL
3	c	5332	GLN
3	c	5334	PRO
3	c	5337	LEU
3	c	5343	ARG
3	c	5350	ILE
3	c	5355	THR
3	c	5357	ARG

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Mol	Chain	Res	Type
3	c	5369	LEU
3	c	5382	ASN
3	c	5383	ASP
3	c	5405	ASN
3	c	5406	SER
3	c	5413	GLU
3	c	5416	SER
3	c	5418	ASN
3	c	5419	PHE
3	c	5428	THR
3	c	5431	PHE
3	c	5447	ARG
3	c	5456	GLU
3	c	5467	LEU
3	c	5472	LEU
4	d	5021	TRP
4	d	5023	LYS
4	d	5024	ARG
4	d	5043	LEU
4	d	5045	LEU
4	d	5053	THR
4	d	5068	LEU
4	d	5071	CYS
4	d	5085	MET
4	d	5089	LEU
4	d	5090	LEU
4	d	5092	LEU
4	d	5096	GLU
4	d	5101	PHE
4	d	5102	THR
4	d	5103	ARG
4	d	5110	LEU
4	d	5113	PHE
4	d	5130	PHE
4	d	5134	ARG
4	d	5138	VAL
4	d	5159	ILE
4	d	5168	PHE
4	d	5175	VAL
4	d	5180	ARG
4	d	5188	PHE
4	d	5191	TRP

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Mol	Chain	Res	Type
4	d	5213	ILE
4	d	5217	THR
4	d	5222	LEU
4	d	5232	PHE
4	d	5233	ARG
4	d	5235	PHE
4	d	5236	ASN
4	d	5248	THR
4	d	5266	TRP
4	d	5269	PHE
4	d	5279	LEU
4	d	5280	TRP
4	d	5281	MET
4	d	5291	LEU
4	d	5319	LEU
4	d	5340	VAL
4	d	5345	VAL
5	e	5008	ARG
5	e	5012	ASP
5	e	5017	VAL
5	e	5030	LEU
5	e	5058	GLN
5	e	5060	GLN
5	e	5068	ASP
5	e	5069	ARG
5	e	5081	GLU
5	e	5083	LEU
6	f	5018	VAL
6	f	5019	ARG
6	f	5025	THR
6	f	5026	LEU
6	f	5032	PHE
6	f	5033	PHE
6	f	5043	ILE
7	h	5004	ARG
7	h	5005	THR
7	h	5009	ASP
7	h	5010	ILE
7	h	5011	LEU
7	h	5017	GLU
7	h	5025	TRP
7	h	5033	VAL

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Mol	Chain	Res	Type
7	h	5039	LEU
7	h	5045	ILE
7	h	5049	TYR
7	h	5050	ASN
7	h	5056	ASP
8	i	5006	ILE
8	i	5013	THR
8	i	5014	PHE
8	i	5023	PHE
8	i	5024	LEU
8	i	5035	LYS
9	j	5007	ARG
9	j	5008	ILE
9	j	5011	TRP
9	j	5012	ILE
9	j	5013	VAL
9	j	5022	ILE
9	j	5023	VAL
9	j	5024	ILE
9	j	5036	LEU
9	j	5040	LEU
10	k	5011	LEU
10	k	5012	PRO
10	k	5019	ASP
10	k	5028	ILE
10	k	5031	LEU
10	k	5032	PHE
10	k	5037	PHE
10	k	5038	VAL
11	l	5007	ARG
11	l	5008	GLN
11	l	5014	ARG
11	l	5017	LEU
11	l	5021	LEU
11	l	5026	VAL
11	l	5031	PHE
12	m	5001	MET
12	m	5008	PHE
12	m	5011	THR
13	o	5031	LEU
13	o	5034	ASP
13	o	5081	GLU

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Mol	Chain	Res	Type
13	o	5088	GLU
13	o	5091	PHE
13	o	5114	ASN
13	o	5127	ILE
13	o	5128	ASP
13	o	5133	THR
13	o	5136	MET
13	o	5144	LEU
13	o	5145	LEU
13	o	5148	VAL
13	o	5156	GLN
13	o	5157	PRO
13	o	5158	ASN
13	o	5167	ASP
13	o	5169	LYS
13	o	5172	PHE
13	o	5178	ARG
13	o	5183	LEU
13	o	5186	LYS
13	o	5194	TYR
13	o	5198	ILE
13	o	5206	GLU
13	o	5210	ARG
13	o	5213	VAL
13	o	5215	ARG
13	o	5222	GLN
13	o	5254	HIS
13	o	5258	GLU
13	o	5269	ILE
14	t	5001	MET
14	t	5004	ILE
14	t	5014	ILE
14	t	5016	LEU
14	t	5028	ARG
14	t	5029	ILE
15	u	5039	LEU
15	u	5058	ASN
15	u	5061	ASN
15	u	5062	ILE
15	u	5073	PRO
15	u	5090	ASP
15	u	5095	PRO

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Mol	Chain	Res	Type
15	u	5099	GLU
15	u	5109	LEU
15	u	5118	GLU
15	u	5127	ARG
15	u	5132	LEU
16	v	5030	THR
16	v	5036	VAL
16	v	5038	LEU
16	v	5052	TYR
16	v	5058	LEU
16	v	5059	PHE
16	v	5061	TYR
16	v	5063	CYS
16	v	5066	CYS
16	v	5067	HIS
16	v	5083	GLU
16	v	5092	ARG
16	v	5118	HIS
16	v	5121	LEU
16	v	5122	ARG
16	v	5135	GLU
16	v	5160	LYS
17	x	5011	THR
17	x	5013	THR
17	x	5023	LEU
17	x	5024	LEU
17	x	5028	VAL
17	x	5030	LEU
17	x	5032	LEU
17	x	5034	PHE
17	x	5037	LEU
17	x	5038	ILE
17	x	5042	GLN
18	y	5001	ILE
18	y	5003	GLN
18	y	5010	ILE
18	y	5018	ILE
18	y	5019	PHE
18	y	5024	ARG
18	y	5028	LEU
20	z	5003	ILE
20	z	5009	LEU

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Mol	Chain	Res	Type
20	z	5012	LEU
20	z	5016	SER
20	z	5017	PHE
20	z	5027	TYR
20	z	5031	GLN
20	z	5034	ASP
20	z	5035	ARG
20	z	5038	GLN
20	z	5047	TRP
20	z	5048	ILE
20	z	5057	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (121) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	75	ASN
1	A	76	ASN
1	A	92	HIS
1	A	165	GLN
1	A	247	ASN
1	A	303	ASN
1	A	315	ASN
1	A	322	ASN
2	B	58	GLN
2	B	114	HIS
2	B	191	ASN
2	B	201	HIS
2	B	289	GLN
2	B	318	ASN
2	B	343	HIS
2	B	348	ASN
2	B	394	GLN
2	B	395	GLN
2	B	409	GLN
3	C	44	ASN
3	C	201	ASN
3	C	322	GLN
3	C	441	HIS
4	D	72	ASN
4	D	87	HIS
4	D	98	GLN
4	D	129	GLN

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Mol	Chain	Res	Type
4	D	142	ASN
4	D	197	HIS
4	D	220	ASN
4	D	224	GLN
4	D	236	ASN
4	D	255	GLN
4	D	332	GLN
4	D	334	GLN
5	E	60	GLN
5	E	82	GLN
6	F	41	GLN
7	H	15	ASN
11	L	4	ASN
12	M	5	GLN
12	M	32	GLN
13	O	43	ASN
13	O	72	GLN
13	O	158	ASN
13	O	212	ASN
13	O	245	GLN
15	U	58	ASN
15	U	67	GLN
15	U	82	ASN
15	U	108	ASN
16	V	51	GLN
16	V	60	GLN
16	V	104	ASN
16	V	144	HIS
17	X	42	GLN
1	a	5019	ASN
1	a	5075	ASN
1	a	5076	ASN
1	a	5087	ASN
1	a	5092	HIS
1	a	5130	GLN
1	a	5165	GLN
1	a	5247	ASN
1	a	5296	ASN
1	a	5315	ASN
1	a	5322	ASN
2	b	5055	GLN
2	b	5111	HIS

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Mol	Chain	Res	Type
2	b	5176	GLN
2	b	5188	ASN
2	b	5230	ASN
2	b	5286	GLN
2	b	5340	HIS
2	b	5391	GLN
2	b	5392	GLN
3	c	5044	ASN
3	c	5118	HIS
3	c	5313	GLN
3	c	5322	GLN
3	c	5332	GLN
3	c	5398	HIS
3	c	5441	HIS
4	d	5087	HIS
4	d	5098	GLN
4	d	5164	GLN
4	d	5197	HIS
4	d	5220	ASN
4	d	5224	GLN
4	d	5236	ASN
4	d	5239	GLN
4	d	5255	GLN
4	d	5268	HIS
4	d	5322	ASN
4	d	5332	GLN
4	d	5334	GLN
4	d	5336	HIS
5	e	5060	GLN
6	f	5041	GLN
7	h	5015	ASN
11	l	5037	ASN
12	m	5005	GLN
12	m	5028	GLN
12	m	5032	GLN
12	m	5033	GLN
13	o	5108	GLN
13	o	5150	ASN
13	o	5158	ASN
13	o	5173	ASN
13	o	5212	ASN
13	o	5257	HIS

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Mol	Chain	Res	Type
15	u	5058	ASN
15	u	5067	GLN
15	u	5108	ASN
15	u	5111	HIS
15	u	5130	ASN
16	v	5051	GLN
16	v	5060	GLN
16	v	5104	ASN
17	x	5042	GLN
20	z	5006	GLN

5.3.3 RNA ⓘ

There are no RNA chains in this entry.

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

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

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 130 ligands modelled in this entry, 6 are monoatomic - leaving 124 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
21	OEC	A	1001	1,3	0,0,13	0.00	-	0,0,27	0.00	-
23	CLA	A	1003	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	A	1006	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	A	1007	-	73,73,73	2.02	18 (24%)	95,113,113	2.83	35 (36%)
24	PHO	A	1038	-	69,69,69	4.17	18 (26%)	91,99,99	2.98	25 (27%)
24	PHO	A	1039	-	69,69,69	4.20	19 (27%)	91,99,99	3.05	25 (27%)
26	PQ9	A	1043	-	45,45,45	4.56	16 (35%)	57,57,57	5.69	26 (45%)
27	BCR	A	1044	-	41,41,41	4.02	16 (39%)	56,56,56	5.93	30 (53%)
30	LHG	A	1063	-	48,48,48	0.89	2 (4%)	54,54,54	0.99	3 (5%)
23	CLA	B	1009	-	73,73,73	2.02	18 (24%)	95,113,113	2.81	33 (34%)
23	CLA	B	1010	-	73,73,73	2.05	18 (24%)	95,113,113	2.98	33 (34%)
23	CLA	B	1011	2	73,73,73	2.04	17 (23%)	95,113,113	2.78	32 (33%)
23	CLA	B	1012	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	B	1013	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	B	1014	-	73,73,73	1.95	17 (23%)	95,113,113	3.01	34 (35%)
23	CLA	B	1015	-	73,73,73	2.05	19 (26%)	95,113,113	3.10	40 (42%)
23	CLA	B	1016	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	B	1018	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	B	1019	-	73,73,73	2.08	18 (24%)	95,113,113	3.00	37 (38%)
23	CLA	B	1020	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	B	1021	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	32 (33%)
23	CLA	B	1022	-	73,73,73	2.00	18 (24%)	95,113,113	2.89	35 (36%)
23	CLA	B	1023	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	B	1024	-	73,73,73	2.02	17 (23%)	95,113,113	3.00	34 (35%)
27	BCR	B	1045	-	41,41,41	4.22	15 (36%)	56,56,56	6.22	30 (53%)
27	BCR	B	1047	-	41,41,41	4.18	16 (39%)	56,56,56	6.91	25 (44%)
27	BCR	B	1048	-	41,41,41	4.23	17 (41%)	56,56,56	6.10	26 (46%)
29	MGE	B	1060	-	48,48,48	0.91	2 (4%)	56,56,56	1.00	3 (5%)
23	CLA	C	1025	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	C	1026	-	73,73,73	1.95	17 (23%)	95,113,113	2.89	33 (34%)
23	CLA	C	1027	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	C	1028	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	C	1029	-	73,73,73	2.03	18 (24%)	95,113,113	2.90	33 (34%)
23	CLA	C	1030	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	C	1031	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	C	1032	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	C	1033	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	C	1034	-	73,73,73	2.06	18 (24%)	95,113,113	2.95	33 (34%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	C	1035	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	C	1036	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	C	1037	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
27	BCR	C	1054	-	41,41,41	4.19	17 (41%)	56,56,56	6.62	26 (46%)
28	DGD	C	1055	-	67,67,67	0.81	2 (2%)	81,81,81	0.90	3 (3%)
28	DGD	C	1056	-	67,67,67	0.81	2 (2%)	81,81,81	0.90	3 (3%)
28	DGD	C	1057	-	67,67,67	0.80	2 (2%)	81,81,81	0.90	3 (3%)
23	CLA	D	1004	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	D	1005	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	32 (33%)
23	CLA	D	1008	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
26	PQ9	D	1042	-	45,45,45	4.40	16 (35%)	57,57,57	5.84	26 (45%)
27	BCR	D	1050	-	41,41,41	4.14	16 (39%)	56,56,56	5.97	28 (50%)
29	MGE	D	1062	-	48,48,48	0.91	2 (4%)	56,56,56	1.00	3 (5%)
25	HEM	E	1040	6	49,50,50	2.27	15 (30%)	46,82,82	2.06	8 (17%)
23	CLA	H	1017	-	73,73,73	2.04	17 (23%)	95,113,113	2.80	32 (33%)
27	BCR	H	1049	-	41,41,41	4.23	15 (36%)	56,56,56	5.94	26 (46%)
28	DGD	H	1058	-	67,67,67	0.80	2 (2%)	81,81,81	0.90	3 (3%)
29	MGE	J	1059	-	48,48,48	0.91	2 (4%)	56,56,56	1.00	3 (5%)
27	BCR	K	1051	-	41,41,41	4.19	16 (39%)	56,56,56	6.16	28 (50%)
27	BCR	K	1052	-	41,41,41	4.23	15 (36%)	56,56,56	5.35	26 (46%)
29	MGE	L	1061	-	48,48,48	0.90	2 (4%)	56,56,56	1.00	3 (5%)
27	BCR	T	6046	-	41,41,41	4.24	17 (41%)	56,56,56	7.33	29 (51%)
25	HEM	V	1041	16	49,50,50	2.28	15 (30%)	46,82,82	2.07	8 (17%)
27	BCR	Z	1053	-	41,41,41	4.23	15 (36%)	56,56,56	6.18	32 (57%)
21	OEC	a	6001	1,3	0,0,13	0.00	-	0,0,27	0.00	-
23	CLA	a	6003	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	a	6006	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	a	6007	-	73,73,73	2.01	18 (24%)	95,113,113	2.83	35 (36%)
24	PHO	a	6039	-	69,69,69	4.20	19 (27%)	91,99,99	3.05	25 (27%)
26	PQ9	a	6043	-	45,45,45	4.74	21 (46%)	57,57,57	5.66	23 (40%)
27	BCR	a	6044	-	41,41,41	4.02	16 (39%)	56,56,56	5.93	30 (53%)
30	LHG	a	6063	-	48,48,48	0.89	2 (4%)	54,54,54	0.99	3 (5%)
23	CLA	b	6009	-	73,73,73	2.02	17 (23%)	95,113,113	2.81	33 (34%)
23	CLA	b	6010	-	73,73,73	2.06	18 (24%)	95,113,113	2.98	33 (34%)
23	CLA	b	6011	2	73,73,73	2.04	17 (23%)	95,113,113	2.78	32 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	b	6012	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	b	6013	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	b	6014	-	73,73,73	1.94	17 (23%)	95,113,113	3.01	34 (35%)
23	CLA	b	6015	-	73,73,73	2.05	19 (26%)	95,113,113	3.10	40 (42%)
23	CLA	b	6016	-	73,73,73	2.05	17 (23%)	95,113,113	2.78	32 (33%)
23	CLA	b	6017	-	73,73,73	2.04	17 (23%)	95,113,113	2.80	32 (33%)
23	CLA	b	6018	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	b	6019	-	73,73,73	2.08	18 (24%)	95,113,113	3.00	38 (40%)
23	CLA	b	6020	2	73,73,73	2.04	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	b	6021	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	b	6022	-	73,73,73	2.00	18 (24%)	95,113,113	2.88	35 (36%)
23	CLA	b	6023	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	b	6024	-	73,73,73	2.02	17 (23%)	95,113,113	3.01	35 (36%)
27	BCR	b	6045	-	41,41,41	4.22	15 (36%)	56,56,56	6.22	30 (53%)
27	BCR	b	6047	-	41,41,41	4.18	16 (39%)	56,56,56	6.91	25 (44%)
27	BCR	b	6048	-	41,41,41	4.23	17 (41%)	56,56,56	6.10	26 (46%)
29	MGE	b	6060	-	48,48,48	0.91	2 (4%)	56,56,56	1.00	3 (5%)
23	CLA	c	6025	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	c	6026	-	73,73,73	1.95	16 (21%)	95,113,113	2.89	33 (34%)
23	CLA	c	6027	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	c	6028	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	c	6029	-	73,73,73	2.03	19 (26%)	95,113,113	2.90	33 (34%)
23	CLA	c	6030	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	c	6031	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	32 (33%)
23	CLA	c	6032	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	31 (32%)
23	CLA	c	6033	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	c	6034	-	73,73,73	2.03	17 (23%)	95,113,113	2.86	32 (33%)
23	CLA	c	6035	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	31 (32%)
23	CLA	c	6036	-	73,73,73	2.05	17 (23%)	95,113,113	2.80	32 (33%)
23	CLA	c	6037	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	32 (33%)
27	BCR	c	6054	-	41,41,41	4.19	17 (41%)	56,56,56	6.62	26 (46%)
28	DGD	c	6055	-	67,67,67	0.81	2 (2%)	81,81,81	0.89	3 (3%)
28	DGD	c	6056	-	67,67,67	0.81	2 (2%)	81,81,81	0.90	3 (3%)
28	DGD	c	6057	-	67,67,67	0.81	2 (2%)	81,81,81	0.90	3 (3%)
23	CLA	d	6004	-	73,73,73	2.05	17 (23%)	95,113,113	2.79	31 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	d	6005	-	73,73,73	2.04	17 (23%)	95,113,113	2.78	32 (33%)
23	CLA	d	6008	-	73,73,73	2.04	17 (23%)	95,113,113	2.79	32 (33%)
24	PHO	d	6038	-	69,69,69	4.17	18 (26%)	91,99,99	2.98	25 (27%)
26	PQ9	d	6042	-	45,45,45	4.42	16 (35%)	57,57,57	5.85	27 (47%)
27	BCR	d	6050	-	41,41,41	4.14	16 (39%)	56,56,56	5.97	28 (50%)
29	MGE	d	6059	-	48,48,48	0.91	2 (4%)	56,56,56	1.00	3 (5%)
29	MGE	d	6061	-	48,48,48	0.90	2 (4%)	56,56,56	1.00	3 (5%)
29	MGE	d	6062	-	48,48,48	0.91	2 (4%)	56,56,56	0.99	3 (5%)
25	HEM	e	6040	6	49,50,50	2.26	16 (32%)	46,82,82	2.06	8 (17%)
27	BCR	h	6049	-	41,41,41	4.23	15 (36%)	56,56,56	5.94	26 (46%)
28	DGD	h	6058	-	67,67,67	0.80	2 (2%)	81,81,81	0.90	3 (3%)
27	BCR	k	6051	-	41,41,41	4.19	16 (39%)	56,56,56	6.15	28 (50%)
27	BCR	k	6052	-	41,41,41	4.24	15 (36%)	56,56,56	5.02	26 (46%)
27	BCR	t	1046	-	41,41,41	4.24	16 (39%)	56,56,56	6.31	28 (50%)
25	HEM	v	6041	-	49,50,50	2.28	15 (30%)	46,82,82	2.06	8 (17%)
27	BCR	z	6053	-	41,41,41	4.22	15 (36%)	56,56,56	6.18	32 (57%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	OEC	A	1001	1,3	-	0/0/0/54	0/0/0/5
23	CLA	A	1003	-	-	0/37/135/135	0/0/9/9
23	CLA	A	1006	-	-	0/37/135/135	0/0/9/9
23	CLA	A	1007	-	1/1/20/25	1/37/135/135	0/0/9/9
24	PHO	A	1038	-	1/1/17/22	1/48/103/103	0/0/6/6
24	PHO	A	1039	-	2/2/17/22	0/48/103/103	0/0/6/6
26	PQ9	A	1043	-	-	0/41/61/61	0/1/1/1
27	BCR	A	1044	-	-	2/29/63/63	0/2/2/2
30	LHG	A	1063	-	-	0/53/53/53	0/0/0/0
23	CLA	B	1009	-	3/3/20/25	1/37/135/135	0/0/9/9
23	CLA	B	1010	-	-	0/37/135/135	0/0/9/9
23	CLA	B	1011	2	-	0/37/135/135	0/0/9/9
23	CLA	B	1012	-	-	1/37/135/135	0/0/9/9
23	CLA	B	1013	-	-	0/37/135/135	0/0/9/9
23	CLA	B	1014	-	1/1/20/25	0/37/135/135	0/0/9/9

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	B	1015	-	-	0/37/135/135	0/0/9/9
23	CLA	B	1016	-	-	0/37/135/135	0/0/9/9
23	CLA	B	1018	-	-	0/37/135/135	0/0/9/9
23	CLA	B	1019	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	B	1020	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	B	1021	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	B	1022	-	2/2/20/25	1/37/135/135	0/0/9/9
23	CLA	B	1023	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	B	1024	-	1/1/20/25	0/37/135/135	0/0/9/9
27	BCR	B	1045	-	-	0/29/63/63	0/2/2/2
27	BCR	B	1047	-	-	2/29/63/63	0/2/2/2
27	BCR	B	1048	-	-	1/29/63/63	0/2/2/2
29	MGE	B	1060	-	-	1/43/63/63	0/1/1/1
23	CLA	C	1025	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1026	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1027	-	3/3/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1028	-	3/3/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1029	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1030	-	-	0/37/135/135	0/0/9/9
23	CLA	C	1031	-	3/3/20/25	1/37/135/135	0/0/9/9
23	CLA	C	1032	-	-	0/37/135/135	0/0/9/9
23	CLA	C	1033	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1034	-	4/4/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1035	-	-	0/37/135/135	0/0/9/9
23	CLA	C	1036	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	C	1037	-	2/2/20/25	0/37/135/135	0/0/9/9
27	BCR	C	1054	-	-	0/29/63/63	0/2/2/2
28	DGD	C	1055	-	-	0/55/95/95	0/2/2/2
28	DGD	C	1056	-	-	0/55/95/95	0/2/2/2
28	DGD	C	1057	-	-	0/55/95/95	0/2/2/2
23	CLA	D	1004	-	-	0/37/135/135	0/0/9/9
23	CLA	D	1005	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	D	1008	-	-	0/37/135/135	0/0/9/9
26	PQ9	D	1042	-	-	0/41/61/61	0/1/1/1
27	BCR	D	1050	-	-	0/29/63/63	0/2/2/2
29	MGE	D	1062	-	-	0/43/63/63	0/1/1/1
25	HEM	E	1040	6	-	0/14/114/114	0/0/8/8
23	CLA	H	1017	-	1/1/20/25	0/37/135/135	0/0/9/9
27	BCR	H	1049	-	-	0/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	DGD	H	1058	-	-	0/55/95/95	1/2/2/2
29	MGE	J	1059	-	-	0/43/63/63	0/1/1/1
27	BCR	K	1051	-	-	0/29/63/63	0/2/2/2
27	BCR	K	1052	-	-	0/29/63/63	0/2/2/2
29	MGE	L	1061	-	-	0/43/63/63	0/1/1/1
27	BCR	T	6046	-	-	0/29/63/63	0/2/2/2
25	HEM	V	1041	16	-	0/14/114/114	0/0/8/8
27	BCR	Z	1053	-	-	1/29/63/63	0/2/2/2
21	OEC	a	6001	1,3	-	0/0/0/54	0/0/0/5
23	CLA	a	6003	-	-	0/37/135/135	0/0/9/9
23	CLA	a	6006	-	-	0/37/135/135	0/0/9/9
23	CLA	a	6007	-	1/1/20/25	1/37/135/135	0/0/9/9
24	PHO	a	6039	-	2/2/17/22	0/48/103/103	0/0/6/6
26	PQ9	a	6043	-	-	0/41/61/61	0/1/1/1
27	BCR	a	6044	-	-	2/29/63/63	0/2/2/2
30	LHG	a	6063	-	-	0/53/53/53	0/0/0/0
23	CLA	b	6009	-	3/3/20/25	1/37/135/135	0/0/9/9
23	CLA	b	6010	-	-	0/37/135/135	0/0/9/9
23	CLA	b	6011	2	-	0/37/135/135	0/0/9/9
23	CLA	b	6012	-	-	1/37/135/135	0/0/9/9
23	CLA	b	6013	-	-	0/37/135/135	0/0/9/9
23	CLA	b	6014	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	b	6015	-	-	0/37/135/135	0/0/9/9
23	CLA	b	6016	-	-	0/37/135/135	0/0/9/9
23	CLA	b	6017	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	b	6018	-	-	0/37/135/135	0/0/9/9
23	CLA	b	6019	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	b	6020	2	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	b	6021	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	b	6022	-	2/2/20/25	1/37/135/135	0/0/9/9
23	CLA	b	6023	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	b	6024	-	1/1/20/25	0/37/135/135	0/0/9/9
27	BCR	b	6045	-	-	0/29/63/63	0/2/2/2
27	BCR	b	6047	-	-	2/29/63/63	0/2/2/2
27	BCR	b	6048	-	-	1/29/63/63	0/2/2/2
29	MGE	b	6060	-	-	1/43/63/63	0/1/1/1
23	CLA	c	6025	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6026	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6027	-	3/3/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6028	-	3/3/20/25	0/37/135/135	0/0/9/9

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	c	6029	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6030	-	-	0/37/135/135	0/0/9/9
23	CLA	c	6031	-	3/3/20/25	1/37/135/135	0/0/9/9
23	CLA	c	6032	-	-	0/37/135/135	0/0/9/9
23	CLA	c	6033	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6034	-	4/4/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6035	-	-	0/37/135/135	0/0/9/9
23	CLA	c	6036	-	2/2/20/25	0/37/135/135	0/0/9/9
23	CLA	c	6037	-	2/2/20/25	0/37/135/135	0/0/9/9
27	BCR	c	6054	-	-	0/29/63/63	0/2/2/2
28	DGD	c	6055	-	-	0/55/95/95	0/2/2/2
28	DGD	c	6056	-	-	0/55/95/95	0/2/2/2
28	DGD	c	6057	-	-	0/55/95/95	0/2/2/2
23	CLA	d	6004	-	-	0/37/135/135	0/0/9/9
23	CLA	d	6005	-	1/1/20/25	0/37/135/135	0/0/9/9
23	CLA	d	6008	-	-	0/37/135/135	0/0/9/9
24	PHO	d	6038	-	1/1/17/22	1/48/103/103	0/0/6/6
26	PQ9	d	6042	-	-	0/41/61/61	0/1/1/1
27	BCR	d	6050	-	-	0/29/63/63	0/2/2/2
29	MGE	d	6059	-	-	0/43/63/63	0/1/1/1
29	MGE	d	6061	-	-	0/43/63/63	0/1/1/1
29	MGE	d	6062	-	-	0/43/63/63	0/1/1/1
25	HEM	e	6040	6	-	0/14/114/114	0/0/8/8
27	BCR	h	6049	-	-	0/29/63/63	0/2/2/2
28	DGD	h	6058	-	-	0/55/95/95	1/2/2/2
27	BCR	k	6051	-	-	0/29/63/63	0/2/2/2
27	BCR	k	6052	-	-	0/29/63/63	0/2/2/2
27	BCR	t	1046	-	-	0/29/63/63	0/2/2/2
25	HEM	v	6041	-	-	0/14/114/114	0/0/8/8
27	BCR	z	6053	-	-	1/29/63/63	0/2/2/2

All (1795) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	6039	PHO	CHC-C1C	18.30	1.47	1.35
24	A	1039	PHO	CHC-C1C	18.27	1.47	1.35
24	d	6038	PHO	CHC-C1C	18.00	1.47	1.35
24	A	1038	PHO	CHC-C1C	18.00	1.47	1.35
26	a	6043	PQ9	C27-C28	17.28	1.67	1.32
26	A	1043	PQ9	C27-C28	16.47	1.66	1.32
26	D	1042	PQ9	C27-C28	16.22	1.65	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	d	6042	PQ9	C27-C28	16.18	1.65	1.32
24	A	1039	PHO	C1B-CHB	13.67	1.50	1.35
24	a	6039	PHO	C1B-CHB	13.66	1.50	1.35
24	A	1038	PHO	C1B-CHB	13.35	1.50	1.35
24	d	6038	PHO	C1B-CHB	13.32	1.50	1.35
24	A	1039	PHO	C1D-CHD	13.25	1.50	1.35
24	a	6039	PHO	C1D-CHD	13.24	1.50	1.35
24	A	1039	PHO	OBD-CAD	13.14	1.41	1.22
24	A	1038	PHO	OBD-CAD	13.13	1.41	1.22
24	a	6039	PHO	OBD-CAD	13.11	1.41	1.22
24	d	6038	PHO	OBD-CAD	13.10	1.41	1.22
24	d	6038	PHO	C1D-CHD	13.02	1.50	1.35
24	A	1038	PHO	C1D-CHD	12.96	1.49	1.35
26	a	6043	PQ9	C17-C18	11.89	1.57	1.32
26	D	1042	PQ9	C37-C38	11.80	1.56	1.32
26	a	6043	PQ9	C12-C13	11.76	1.56	1.32
26	d	6042	PQ9	C37-C38	11.35	1.55	1.32
26	a	6043	PQ9	C37-C38	11.18	1.55	1.32
26	A	1043	PQ9	C12-C13	11.16	1.55	1.32
26	A	1043	PQ9	C17-C18	11.11	1.55	1.32
26	A	1043	PQ9	C37-C38	10.26	1.53	1.32
26	d	6042	PQ9	C12-C13	10.21	1.53	1.32
26	d	6042	PQ9	C17-C18	10.20	1.53	1.32
26	D	1042	PQ9	C17-C18	9.86	1.52	1.32
26	D	1042	PQ9	C12-C13	9.80	1.52	1.32
27	b	6047	BCR	C8-C9	-9.15	1.25	1.45
27	B	1047	BCR	C8-C9	-9.14	1.25	1.45
27	B	1048	BCR	C8-C9	-9.11	1.25	1.45
27	b	6048	BCR	C8-C9	-9.11	1.25	1.45
27	k	6051	BCR	C12-C13	-9.08	1.25	1.45
27	b	6048	BCR	C12-C13	-9.08	1.25	1.45
27	B	1048	BCR	C19-C18	-9.06	1.25	1.45
27	b	6048	BCR	C19-C18	-9.06	1.25	1.45
27	B	1048	BCR	C12-C13	-9.06	1.25	1.45
27	K	1051	BCR	C12-C13	-9.05	1.25	1.45
27	k	6052	BCR	C8-C9	-9.04	1.25	1.45
27	c	6054	BCR	C12-C13	-9.03	1.25	1.45
27	b	6045	BCR	C19-C18	-9.03	1.25	1.45
27	C	1054	BCR	C12-C13	-9.03	1.25	1.45
27	k	6052	BCR	C19-C18	-9.03	1.25	1.45
27	T	6046	BCR	C12-C13	-9.03	1.25	1.45
27	t	1046	BCR	C8-C9	-9.02	1.25	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	z	6053	BCR	C8-C9	-9.02	1.25	1.45
27	T	6046	BCR	C19-C18	-9.02	1.25	1.45
27	b	6045	BCR	C8-C9	-9.02	1.25	1.45
27	h	6049	BCR	C12-C13	-9.02	1.25	1.45
27	Z	1053	BCR	C8-C9	-9.02	1.25	1.45
27	k	6052	BCR	C12-C13	-9.02	1.25	1.45
27	b	6045	BCR	C12-C13	-9.02	1.25	1.45
27	B	1045	BCR	C19-C18	-9.02	1.25	1.45
27	K	1052	BCR	C19-C18	-9.02	1.25	1.45
27	H	1049	BCR	C12-C13	-9.02	1.25	1.45
27	H	1049	BCR	C19-C18	-9.02	1.25	1.45
27	h	6049	BCR	C19-C18	-9.01	1.25	1.45
27	K	1052	BCR	C8-C9	-9.01	1.25	1.45
27	t	1046	BCR	C19-C18	-9.01	1.25	1.45
27	t	1046	BCR	C12-C13	-9.01	1.26	1.45
27	B	1045	BCR	C8-C9	-9.00	1.26	1.45
27	B	1045	BCR	C12-C13	-9.00	1.26	1.45
27	T	6046	BCR	C8-C9	-8.99	1.26	1.45
27	Z	1053	BCR	C19-C18	-8.99	1.26	1.45
27	h	6049	BCR	C8-C9	-8.99	1.26	1.45
27	K	1052	BCR	C12-C13	-8.99	1.26	1.45
27	z	6053	BCR	C19-C18	-8.99	1.26	1.45
27	H	1049	BCR	C8-C9	-8.99	1.26	1.45
27	b	6047	BCR	C12-C13	-8.98	1.26	1.45
27	B	1047	BCR	C12-C13	-8.98	1.26	1.45
27	Z	1053	BCR	C12-C13	-8.98	1.26	1.45
27	z	6053	BCR	C12-C13	-8.97	1.26	1.45
27	C	1054	BCR	C8-C9	-8.96	1.26	1.45
27	c	6054	BCR	C8-C9	-8.95	1.26	1.45
27	k	6051	BCR	C19-C18	-8.95	1.26	1.45
27	K	1051	BCR	C19-C18	-8.94	1.26	1.45
27	D	1050	BCR	C12-C13	-8.91	1.26	1.45
27	d	6050	BCR	C12-C13	-8.88	1.26	1.45
27	c	6054	BCR	C19-C18	-8.86	1.26	1.45
27	K	1051	BCR	C8-C9	-8.85	1.26	1.45
27	k	6051	BCR	C8-C9	-8.84	1.26	1.45
27	C	1054	BCR	C19-C18	-8.84	1.26	1.45
27	B	1047	BCR	C19-C18	-8.83	1.26	1.45
27	b	6047	BCR	C19-C18	-8.82	1.26	1.45
27	d	6050	BCR	C19-C18	-8.81	1.26	1.45
27	D	1050	BCR	C19-C18	-8.80	1.26	1.45
27	D	1050	BCR	C8-C9	-8.73	1.26	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	d	6050	BCR	C8-C9	-8.72	1.26	1.45
27	a	6044	BCR	C12-C13	-8.69	1.26	1.45
27	A	1044	BCR	C19-C18	-8.69	1.26	1.45
27	a	6044	BCR	C19-C18	-8.69	1.26	1.45
27	a	6044	BCR	C8-C9	-8.69	1.26	1.45
27	A	1044	BCR	C8-C9	-8.69	1.26	1.45
27	A	1044	BCR	C12-C13	-8.68	1.26	1.45
27	k	6052	BCR	C20-C21	-8.44	1.18	1.43
27	H	1049	BCR	C20-C21	-8.43	1.18	1.43
27	H	1049	BCR	C16-C17	-8.43	1.18	1.43
27	B	1045	BCR	C16-C17	-8.43	1.18	1.43
27	T	6046	BCR	C20-C21	-8.42	1.18	1.43
27	h	6049	BCR	C20-C21	-8.42	1.18	1.43
27	h	6049	BCR	C16-C17	-8.42	1.18	1.43
27	Z	1053	BCR	C16-C17	-8.42	1.18	1.43
27	b	6045	BCR	C16-C17	-8.42	1.18	1.43
27	t	1046	BCR	C16-C17	-8.41	1.18	1.43
27	K	1052	BCR	C20-C21	-8.41	1.18	1.43
27	B	1045	BCR	C20-C21	-8.41	1.18	1.43
27	T	6046	BCR	C16-C17	-8.41	1.18	1.43
27	b	6045	BCR	C20-C21	-8.40	1.18	1.43
27	z	6053	BCR	C20-C21	-8.40	1.18	1.43
27	Z	1053	BCR	C20-C21	-8.40	1.18	1.43
27	k	6052	BCR	C16-C17	-8.40	1.18	1.43
27	z	6053	BCR	C16-C17	-8.40	1.18	1.43
27	k	6051	BCR	C20-C21	-8.39	1.18	1.43
27	K	1052	BCR	C16-C17	-8.38	1.18	1.43
27	t	1046	BCR	C20-C21	-8.38	1.18	1.43
27	K	1051	BCR	C20-C21	-8.37	1.18	1.43
27	b	6048	BCR	C16-C17	-8.36	1.18	1.43
27	B	1048	BCR	C16-C17	-8.35	1.18	1.43
27	d	6050	BCR	C16-C17	-8.35	1.18	1.43
27	D	1050	BCR	C16-C17	-8.32	1.18	1.43
27	k	6051	BCR	C16-C17	-8.29	1.18	1.43
27	K	1051	BCR	C16-C17	-8.29	1.18	1.43
27	c	6054	BCR	C16-C17	-8.29	1.18	1.43
27	C	1054	BCR	C16-C17	-8.29	1.18	1.43
27	b	6047	BCR	C16-C17	-8.29	1.18	1.43
27	B	1047	BCR	C16-C17	-8.25	1.18	1.43
27	B	1048	BCR	C20-C21	-8.25	1.18	1.43
27	b	6048	BCR	C20-C21	-8.24	1.18	1.43
27	b	6047	BCR	C20-C21	-8.22	1.19	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	B	1047	BCR	C20-C21	-8.20	1.19	1.43
27	D	1050	BCR	C20-C21	-8.18	1.19	1.43
27	d	6050	BCR	C20-C21	-8.17	1.19	1.43
27	c	6054	BCR	C20-C21	-8.15	1.19	1.43
27	C	1054	BCR	C20-C21	-8.15	1.19	1.43
27	a	6044	BCR	C20-C21	-8.10	1.19	1.43
27	a	6044	BCR	C16-C17	-8.09	1.19	1.43
27	A	1044	BCR	C20-C21	-8.08	1.19	1.43
27	A	1044	BCR	C16-C17	-8.08	1.19	1.43
24	a	6039	PHO	O1D-CGD	8.03	1.41	1.21
24	d	6038	PHO	O1D-CGD	8.02	1.41	1.21
24	A	1038	PHO	O1D-CGD	7.99	1.41	1.21
24	A	1039	PHO	O1D-CGD	7.99	1.41	1.21
23	a	6007	CLA	C4D-C3D	-7.79	1.32	1.41
23	A	1007	CLA	C4D-C3D	-7.78	1.32	1.41
23	b	6010	CLA	C4D-C3D	-7.55	1.32	1.41
27	B	1048	BCR	C17-C18	-7.52	1.25	1.35
27	t	1046	BCR	C21-C22	-7.51	1.25	1.35
23	B	1010	CLA	C4D-C3D	-7.51	1.32	1.41
27	b	6048	BCR	C17-C18	-7.48	1.25	1.35
27	Z	1053	BCR	C17-C18	-7.48	1.25	1.35
27	K	1052	BCR	C17-C18	-7.48	1.25	1.35
23	c	6029	CLA	C4D-C3D	-7.47	1.32	1.41
23	C	1029	CLA	C4D-C3D	-7.47	1.32	1.41
27	b	6045	BCR	C21-C22	-7.46	1.25	1.35
27	z	6053	BCR	C17-C18	-7.46	1.25	1.35
23	b	6023	CLA	C1B-C2B	7.46	1.49	1.40
27	B	1045	BCR	C21-C22	-7.45	1.25	1.35
27	T	6046	BCR	C17-C18	-7.44	1.26	1.35
27	h	6049	BCR	C21-C22	-7.44	1.26	1.35
27	k	6052	BCR	C17-C18	-7.43	1.26	1.35
27	Z	1053	BCR	C21-C22	-7.43	1.26	1.35
27	T	6046	BCR	C21-C22	-7.42	1.26	1.35
27	t	1046	BCR	C17-C18	-7.42	1.26	1.35
27	K	1052	BCR	C21-C22	-7.42	1.26	1.35
23	B	1022	CLA	C4D-C3D	-7.41	1.32	1.41
27	B	1045	BCR	C17-C18	-7.42	1.26	1.35
23	b	6021	CLA	C1B-C2B	7.41	1.49	1.40
27	h	6049	BCR	C17-C18	-7.41	1.26	1.35
23	B	1013	CLA	C1B-C2B	7.41	1.49	1.40
27	H	1049	BCR	C21-C22	-7.41	1.26	1.35
27	b	6045	BCR	C17-C18	-7.40	1.26	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	z	6053	BCR	C21-C22	-7.40	1.26	1.35
23	b	6022	CLA	C4D-C3D	-7.40	1.32	1.41
23	C	1033	CLA	C1B-C2B	7.40	1.49	1.40
23	B	1023	CLA	C1B-C2B	7.40	1.49	1.40
23	A	1006	CLA	C1B-C2B	7.39	1.49	1.40
23	b	6024	CLA	C4D-C3D	-7.39	1.32	1.41
23	c	6036	CLA	C1B-C2B	7.39	1.49	1.40
23	B	1021	CLA	C1B-C2B	7.39	1.49	1.40
23	C	1036	CLA	C1B-C2B	7.39	1.49	1.40
23	A	1003	CLA	C1B-C2B	7.38	1.49	1.40
27	k	6052	BCR	C21-C22	-7.39	1.26	1.35
23	c	6033	CLA	C1B-C2B	7.38	1.49	1.40
27	H	1049	BCR	C17-C18	-7.39	1.26	1.35
23	b	6013	CLA	C1B-C2B	7.38	1.49	1.40
23	d	6005	CLA	C1B-C2B	7.38	1.49	1.40
23	D	1004	CLA	C1B-C2B	7.38	1.49	1.40
27	K	1051	BCR	C21-C22	-7.38	1.26	1.35
27	k	6051	BCR	C21-C22	-7.37	1.26	1.35
23	c	6031	CLA	C1B-C2B	7.36	1.49	1.40
23	a	6003	CLA	C1B-C2B	7.36	1.49	1.40
23	b	6016	CLA	C1B-C2B	7.36	1.49	1.40
24	A	1039	PHO	C3C-C2C	7.36	1.52	1.36
23	C	1027	CLA	C1B-C2B	7.36	1.49	1.40
23	B	1012	CLA	C1B-C2B	7.35	1.49	1.40
23	b	6017	CLA	C1B-C2B	7.35	1.49	1.40
26	d	6042	PQ9	C3-C2	7.35	1.55	1.34
23	C	1028	CLA	C1B-C2B	7.35	1.49	1.40
23	d	6004	CLA	C1B-C2B	7.35	1.49	1.40
23	B	1024	CLA	C4D-C3D	-7.35	1.32	1.41
23	c	6027	CLA	C1B-C2B	7.34	1.49	1.40
23	D	1005	CLA	C1B-C2B	7.34	1.49	1.40
23	a	6006	CLA	C1B-C2B	7.34	1.49	1.40
23	B	1016	CLA	C1B-C2B	7.34	1.49	1.40
24	a	6039	PHO	C3C-C2C	7.34	1.52	1.36
23	B	1020	CLA	C1B-C2B	7.33	1.49	1.40
23	B	1011	CLA	C1B-C2B	7.33	1.49	1.40
24	A	1038	PHO	C3C-C2C	7.33	1.52	1.36
23	C	1031	CLA	C1B-C2B	7.33	1.49	1.40
23	B	1018	CLA	C1B-C2B	7.33	1.49	1.40
23	c	6032	CLA	C1B-C2B	7.32	1.49	1.40
23	D	1008	CLA	C1B-C2B	7.32	1.49	1.40
23	B	1019	CLA	C4D-C3D	-7.32	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	H	1017	CLA	C1B-C2B	7.32	1.49	1.40
23	d	6008	CLA	C1B-C2B	7.32	1.49	1.40
24	d	6038	PHO	C3C-C2C	7.31	1.52	1.36
23	c	6025	CLA	C1B-C2B	7.31	1.49	1.40
23	c	6037	CLA	C1B-C2B	7.31	1.49	1.40
23	C	1032	CLA	C1B-C2B	7.31	1.49	1.40
23	C	1035	CLA	C1B-C2B	7.31	1.49	1.40
23	b	6012	CLA	C1B-C2B	7.31	1.49	1.40
27	B	1048	BCR	C21-C22	-7.31	1.26	1.35
23	C	1037	CLA	C1B-C2B	7.30	1.49	1.40
23	b	6020	CLA	C1B-C2B	7.30	1.49	1.40
27	D	1050	BCR	C17-C18	-7.30	1.26	1.35
27	b	6048	BCR	C21-C22	-7.30	1.26	1.35
23	C	1025	CLA	C1B-C2B	7.29	1.49	1.40
23	b	6019	CLA	C4D-C3D	-7.29	1.32	1.41
23	b	6018	CLA	C1B-C2B	7.29	1.49	1.40
23	B	1009	CLA	C1B-C2B	7.29	1.49	1.40
23	C	1034	CLA	C1B-C2B	7.28	1.49	1.40
27	C	1054	BCR	C17-C18	-7.28	1.26	1.35
23	c	6028	CLA	C1B-C2B	7.28	1.49	1.40
23	c	6030	CLA	C1B-C2B	7.27	1.49	1.40
23	b	6011	CLA	C1B-C2B	7.27	1.49	1.40
26	a	6043	PQ9	C3-C2	7.27	1.55	1.34
27	B	1047	BCR	C21-C22	-7.26	1.26	1.35
23	b	6009	CLA	C1B-C2B	7.26	1.49	1.40
27	d	6050	BCR	C17-C18	-7.26	1.26	1.35
23	C	1030	CLA	C1B-C2B	7.25	1.49	1.40
23	c	6035	CLA	C1B-C2B	7.24	1.49	1.40
27	c	6054	BCR	C17-C18	-7.23	1.26	1.35
27	K	1051	BCR	C17-C18	-7.23	1.26	1.35
27	k	6051	BCR	C17-C18	-7.22	1.26	1.35
24	a	6039	PHO	C2-C3	7.22	1.47	1.32
23	B	1019	CLA	C1B-C2B	7.21	1.49	1.40
27	B	1047	BCR	C17-C18	-7.21	1.26	1.35
27	b	6047	BCR	C21-C22	-7.21	1.26	1.35
23	b	6019	CLA	C1B-C2B	7.20	1.49	1.40
24	A	1039	PHO	C2-C3	7.19	1.47	1.32
26	A	1043	PQ9	C3-C2	7.17	1.54	1.34
27	b	6047	BCR	C17-C18	-7.15	1.26	1.35
23	c	6026	CLA	C4D-C3D	-7.14	1.32	1.41
23	b	6015	CLA	C4D-C3D	-7.14	1.32	1.41
24	d	6038	PHO	C2-C3	7.13	1.47	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	1038	PHO	C2-C3	7.13	1.47	1.32
23	B	1015	CLA	C4D-C3D	-7.12	1.32	1.41
23	C	1026	CLA	C4D-C3D	-7.10	1.32	1.41
27	d	6050	BCR	C21-C22	-7.10	1.26	1.35
23	c	6034	CLA	C1B-C2B	7.09	1.49	1.40
27	D	1050	BCR	C21-C22	-7.09	1.26	1.35
27	C	1054	BCR	C21-C22	-7.06	1.26	1.35
27	c	6054	BCR	C21-C22	-7.04	1.26	1.35
26	D	1042	PQ9	C3-C2	7.02	1.54	1.34
23	c	6034	CLA	C4D-C3D	-6.87	1.33	1.41
27	A	1044	BCR	C21-C22	-6.85	1.26	1.35
27	a	6044	BCR	C21-C22	-6.83	1.26	1.35
27	A	1044	BCR	C17-C18	-6.83	1.26	1.35
23	B	1024	CLA	C1B-C2B	6.80	1.48	1.40
27	a	6044	BCR	C17-C18	-6.78	1.26	1.35
23	b	6024	CLA	C1B-C2B	6.78	1.48	1.40
23	b	6014	CLA	C4D-C3D	-6.72	1.33	1.41
23	B	1014	CLA	C4D-C3D	-6.67	1.33	1.41
27	k	6052	BCR	C16-C15	-6.63	1.18	1.35
27	t	1046	BCR	C16-C15	-6.63	1.18	1.35
27	c	6054	BCR	C16-C15	-6.61	1.18	1.35
27	z	6053	BCR	C16-C15	-6.61	1.18	1.35
27	K	1052	BCR	C16-C15	-6.61	1.18	1.35
27	C	1054	BCR	C16-C15	-6.61	1.18	1.35
27	Z	1053	BCR	C16-C15	-6.60	1.18	1.35
27	T	6046	BCR	C16-C15	-6.60	1.18	1.35
27	b	6045	BCR	C16-C15	-6.59	1.18	1.35
27	B	1045	BCR	C16-C15	-6.59	1.18	1.35
27	H	1049	BCR	C16-C15	-6.59	1.18	1.35
27	h	6049	BCR	C16-C15	-6.58	1.18	1.35
23	c	6033	CLA	C4D-C3D	-6.54	1.33	1.41
26	a	6043	PQ9	C22-C23	6.54	1.46	1.32
27	k	6051	BCR	C16-C15	-6.52	1.18	1.35
26	A	1043	PQ9	C24-C23	-6.51	1.34	1.50
27	K	1051	BCR	C16-C15	-6.50	1.18	1.35
27	D	1050	BCR	C16-C15	-6.49	1.18	1.35
23	C	1037	CLA	C4D-C3D	-6.49	1.33	1.41
23	d	6004	CLA	C4D-C3D	-6.47	1.33	1.41
23	C	1033	CLA	C4D-C3D	-6.47	1.33	1.41
23	c	6037	CLA	C4D-C3D	-6.47	1.33	1.41
27	d	6050	BCR	C16-C15	-6.47	1.18	1.35
23	d	6008	CLA	C4D-C3D	-6.46	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	1034	CLA	C4D-C3D	-6.46	1.33	1.41
23	B	1012	CLA	C4D-C3D	-6.46	1.33	1.41
23	D	1004	CLA	C4D-C3D	-6.45	1.33	1.41
23	C	1031	CLA	C4D-C3D	-6.45	1.33	1.41
27	B	1048	BCR	C16-C15	-6.44	1.18	1.35
23	C	1032	CLA	C4D-C3D	-6.44	1.33	1.41
23	D	1008	CLA	C4D-C3D	-6.44	1.33	1.41
23	C	1036	CLA	C4D-C3D	-6.44	1.33	1.41
27	b	6048	BCR	C16-C15	-6.43	1.18	1.35
23	c	6027	CLA	C4D-C3D	-6.43	1.33	1.41
23	H	1017	CLA	C4D-C3D	-6.43	1.33	1.41
23	c	6035	CLA	C4D-C3D	-6.43	1.33	1.41
23	B	1011	CLA	C4D-C3D	-6.43	1.33	1.41
23	c	6028	CLA	C4D-C3D	-6.43	1.33	1.41
23	c	6032	CLA	C4D-C3D	-6.43	1.33	1.41
23	c	6031	CLA	C4D-C3D	-6.43	1.33	1.41
23	b	6011	CLA	C4D-C3D	-6.43	1.33	1.41
23	B	1016	CLA	C4D-C3D	-6.43	1.33	1.41
23	b	6009	CLA	C4D-C3D	-6.42	1.33	1.41
23	A	1003	CLA	C4D-C3D	-6.42	1.33	1.41
23	B	1018	CLA	C4D-C3D	-6.41	1.33	1.41
23	C	1029	CLA	C1B-C2B	6.41	1.48	1.40
23	c	6036	CLA	C4D-C3D	-6.41	1.33	1.41
23	b	6017	CLA	C4D-C3D	-6.41	1.33	1.41
23	b	6020	CLA	C4D-C3D	-6.41	1.33	1.41
23	B	1020	CLA	C4D-C3D	-6.41	1.33	1.41
27	B	1047	BCR	C16-C15	-6.41	1.19	1.35
23	C	1028	CLA	C4D-C3D	-6.40	1.33	1.41
23	B	1021	CLA	C4D-C3D	-6.40	1.33	1.41
23	b	6012	CLA	C4D-C3D	-6.40	1.33	1.41
23	b	6023	CLA	C4D-C3D	-6.40	1.33	1.41
23	d	6005	CLA	C4D-C3D	-6.39	1.33	1.41
23	b	6016	CLA	C4D-C3D	-6.39	1.33	1.41
23	B	1023	CLA	C4D-C3D	-6.39	1.33	1.41
23	B	1013	CLA	C4D-C3D	-6.39	1.33	1.41
23	D	1005	CLA	C4D-C3D	-6.39	1.33	1.41
23	A	1006	CLA	C4D-C3D	-6.39	1.33	1.41
23	a	6006	CLA	C4D-C3D	-6.38	1.33	1.41
27	b	6047	BCR	C16-C15	-6.38	1.19	1.35
23	C	1035	CLA	C4D-C3D	-6.38	1.33	1.41
23	B	1009	CLA	C4D-C3D	-6.38	1.33	1.41
23	c	6030	CLA	C4D-C3D	-6.38	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	1025	CLA	C4D-C3D	-6.37	1.33	1.41
23	C	1027	CLA	C4D-C3D	-6.37	1.33	1.41
23	b	6021	CLA	C4D-C3D	-6.37	1.33	1.41
23	b	6010	CLA	C1B-C2B	6.37	1.48	1.40
23	c	6025	CLA	C4D-C3D	-6.37	1.33	1.41
23	C	1030	CLA	C4D-C3D	-6.36	1.33	1.41
23	b	6018	CLA	C4D-C3D	-6.36	1.33	1.41
23	b	6013	CLA	C4D-C3D	-6.36	1.33	1.41
23	c	6029	CLA	C1B-C2B	6.36	1.48	1.40
23	a	6003	CLA	C4D-C3D	-6.36	1.33	1.41
23	B	1010	CLA	C1B-C2B	6.35	1.48	1.40
24	d	6038	PHO	O1A-CGA	6.32	1.41	1.22
24	A	1038	PHO	O1A-CGA	6.31	1.41	1.22
24	a	6039	PHO	O1A-CGA	6.30	1.41	1.22
24	A	1039	PHO	O1A-CGA	6.29	1.41	1.22
23	b	6022	CLA	C1B-C2B	6.27	1.48	1.40
23	B	1022	CLA	C1B-C2B	6.26	1.48	1.40
27	a	6044	BCR	C16-C15	-6.24	1.19	1.35
27	A	1044	BCR	C16-C15	-6.23	1.19	1.35
26	D	1042	PQ9	C9-C10	-6.20	1.37	1.51
26	A	1043	PQ9	C22-C23	6.16	1.45	1.32
23	C	1026	CLA	C1B-C2B	6.16	1.47	1.40
23	c	6026	CLA	C1B-C2B	6.14	1.47	1.40
23	b	6015	CLA	C1B-C2B	6.13	1.47	1.40
23	B	1015	CLA	C1B-C2B	6.13	1.47	1.40
26	a	6043	PQ9	C24-C23	-6.12	1.35	1.50
23	A	1007	CLA	C1B-C2B	6.07	1.47	1.40
26	d	6042	PQ9	C9-C10	-6.07	1.38	1.51
23	a	6007	CLA	C1B-C2B	6.07	1.47	1.40
26	D	1042	PQ9	C24-C23	-6.02	1.35	1.50
27	c	6054	BCR	C15-C14	-5.97	1.25	1.43
27	C	1054	BCR	C15-C14	-5.97	1.25	1.43
24	A	1038	PHO	C4D-CHA	-5.95	1.37	1.45
27	h	6049	BCR	C20-C19	-5.95	1.18	1.34
27	T	6046	BCR	C20-C19	-5.94	1.18	1.34
27	H	1049	BCR	C20-C19	-5.94	1.18	1.34
27	H	1049	BCR	C11-C12	-5.94	1.18	1.34
27	z	6053	BCR	C11-C12	-5.93	1.18	1.34
27	T	6046	BCR	C11-C12	-5.93	1.18	1.34
27	k	6052	BCR	C11-C12	-5.93	1.18	1.34
27	K	1051	BCR	C15-C14	-5.93	1.25	1.43
27	t	1046	BCR	C20-C19	-5.93	1.18	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	Z	1053	BCR	C11-C12	-5.93	1.18	1.34
27	t	1046	BCR	C11-C12	-5.93	1.18	1.34
27	h	6049	BCR	C11-C12	-5.92	1.18	1.34
27	K	1052	BCR	C15-C14	-5.92	1.25	1.43
27	b	6045	BCR	C11-C12	-5.92	1.18	1.34
27	z	6053	BCR	C15-C14	-5.91	1.25	1.43
27	Z	1053	BCR	C11-C10	-5.91	1.25	1.43
27	Z	1053	BCR	C15-C14	-5.91	1.25	1.43
27	B	1045	BCR	C20-C19	-5.91	1.18	1.34
27	z	6053	BCR	C20-C19	-5.91	1.18	1.34
27	k	6051	BCR	C15-C14	-5.91	1.25	1.43
27	k	6052	BCR	C15-C14	-5.91	1.25	1.43
27	K	1052	BCR	C11-C12	-5.91	1.18	1.34
24	d	6038	PHO	C4D-CHA	-5.91	1.37	1.45
27	b	6045	BCR	C15-C14	-5.91	1.25	1.43
27	K	1052	BCR	C11-C10	-5.91	1.25	1.43
27	b	6045	BCR	C20-C19	-5.91	1.18	1.34
27	B	1045	BCR	C11-C12	-5.91	1.18	1.34
27	Z	1053	BCR	C20-C19	-5.90	1.18	1.34
27	h	6049	BCR	C15-C14	-5.90	1.26	1.43
27	t	1046	BCR	C15-C14	-5.90	1.26	1.43
27	B	1045	BCR	C15-C14	-5.90	1.26	1.43
27	H	1049	BCR	C15-C14	-5.90	1.26	1.43
27	b	6048	BCR	C11-C10	-5.90	1.26	1.43
27	z	6053	BCR	C11-C10	-5.90	1.26	1.43
27	K	1052	BCR	C20-C19	-5.90	1.18	1.34
27	k	6052	BCR	C20-C19	-5.89	1.18	1.34
27	H	1049	BCR	C11-C10	-5.89	1.26	1.43
27	k	6051	BCR	C11-C12	-5.89	1.18	1.34
27	t	1046	BCR	C11-C10	-5.89	1.26	1.43
27	T	6046	BCR	C15-C14	-5.89	1.26	1.43
27	B	1045	BCR	C11-C10	-5.89	1.26	1.43
27	K	1051	BCR	C11-C12	-5.88	1.18	1.34
27	k	6052	BCR	C11-C10	-5.88	1.26	1.43
27	h	6049	BCR	C11-C10	-5.88	1.26	1.43
27	B	1048	BCR	C11-C10	-5.88	1.26	1.43
27	b	6048	BCR	C20-C19	-5.88	1.18	1.34
27	T	6046	BCR	C11-C10	-5.87	1.26	1.43
27	k	6051	BCR	C11-C10	-5.87	1.26	1.43
27	K	1051	BCR	C11-C10	-5.87	1.26	1.43
27	b	6045	BCR	C11-C10	-5.86	1.26	1.43
27	B	1048	BCR	C11-C12	-5.85	1.18	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	b	6047	BCR	C11-C10	-5.85	1.26	1.43
27	B	1048	BCR	C20-C19	-5.85	1.18	1.34
27	B	1047	BCR	C11-C10	-5.85	1.26	1.43
27	d	6050	BCR	C15-C14	-5.84	1.26	1.43
26	a	6043	PQ9	C9-C10	-5.84	1.38	1.51
27	c	6054	BCR	C11-C10	-5.84	1.26	1.43
27	D	1050	BCR	C15-C14	-5.84	1.26	1.43
27	d	6050	BCR	C11-C12	-5.83	1.18	1.34
26	d	6042	PQ9	C24-C23	-5.83	1.36	1.50
27	b	6048	BCR	C11-C12	-5.83	1.18	1.34
27	D	1050	BCR	C11-C12	-5.82	1.18	1.34
27	C	1054	BCR	C11-C10	-5.82	1.26	1.43
27	b	6047	BCR	C11-C12	-5.81	1.18	1.34
27	B	1047	BCR	C11-C12	-5.81	1.18	1.34
27	D	1050	BCR	C11-C10	-5.80	1.26	1.43
27	b	6048	BCR	C15-C14	-5.79	1.26	1.43
23	B	1019	CLA	C1C-NC	-5.79	1.34	1.38
27	d	6050	BCR	C11-C10	-5.79	1.26	1.43
27	b	6047	BCR	C15-C14	-5.78	1.26	1.43
26	A	1043	PQ9	C9-C10	-5.77	1.38	1.51
23	b	6019	CLA	C1C-NC	-5.77	1.34	1.38
27	B	1047	BCR	C15-C14	-5.77	1.26	1.43
27	B	1048	BCR	C15-C14	-5.77	1.26	1.43
27	C	1054	BCR	C11-C12	-5.75	1.18	1.34
25	v	6041	HEM	C3D-C2D	5.75	1.53	1.43
25	e	6040	HEM	C3D-C2D	5.74	1.53	1.43
25	V	1041	HEM	C3D-C2D	5.74	1.53	1.43
27	K	1051	BCR	C20-C19	-5.74	1.18	1.34
25	E	1040	HEM	C3D-C2D	5.74	1.53	1.43
27	c	6054	BCR	C11-C12	-5.72	1.19	1.34
27	k	6051	BCR	C20-C19	-5.70	1.19	1.34
27	c	6054	BCR	C20-C19	-5.70	1.19	1.34
27	B	1047	BCR	C20-C19	-5.69	1.19	1.34
27	C	1054	BCR	C20-C19	-5.68	1.19	1.34
27	b	6047	BCR	C20-C19	-5.67	1.19	1.34
25	v	6041	HEM	C3B-C2B	-5.66	1.33	1.43
27	D	1050	BCR	C20-C19	-5.65	1.19	1.34
27	d	6050	BCR	C20-C19	-5.65	1.19	1.34
25	e	6040	HEM	C3B-C2B	-5.65	1.33	1.43
27	A	1044	BCR	C15-C14	-5.64	1.26	1.43
25	V	1041	HEM	C3C-C2C	-5.64	1.33	1.43
25	V	1041	HEM	C3B-C2B	-5.63	1.33	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	a	6044	BCR	C15-C14	-5.63	1.26	1.43
25	E	1040	HEM	C3B-C2B	-5.63	1.33	1.43
25	v	6041	HEM	C3C-C2C	-5.61	1.34	1.43
27	A	1044	BCR	C20-C19	-5.60	1.19	1.34
23	b	6010	CLA	C1C-NC	-5.59	1.34	1.38
25	E	1040	HEM	C3C-C2C	-5.59	1.34	1.43
27	a	6044	BCR	C20-C19	-5.59	1.19	1.34
23	B	1010	CLA	C1C-NC	-5.59	1.34	1.38
25	e	6040	HEM	C3C-C2C	-5.56	1.34	1.43
27	a	6044	BCR	C11-C10	-5.56	1.27	1.43
27	A	1044	BCR	C11-C10	-5.55	1.27	1.43
27	a	6044	BCR	C11-C12	-5.53	1.19	1.34
27	A	1044	BCR	C11-C12	-5.53	1.19	1.34
26	d	6042	PQ9	C21-C22	-5.52	1.34	1.50
26	A	1043	PQ9	C29-C28	-5.48	1.37	1.50
24	A	1039	PHO	C4D-CHA	-5.46	1.38	1.45
24	a	6039	PHO	C4D-CHA	-5.44	1.38	1.45
23	B	1014	CLA	C1B-C2B	5.41	1.46	1.40
23	b	6014	CLA	C1B-C2B	5.36	1.46	1.40
26	D	1042	PQ9	C21-C22	-5.34	1.35	1.50
27	k	6052	BCR	C23-C22	-5.22	1.34	1.45
27	c	6054	BCR	C23-C22	-5.21	1.34	1.45
27	B	1048	BCR	C23-C22	-5.21	1.34	1.45
27	C	1054	BCR	C23-C22	-5.20	1.34	1.45
23	b	6011	CLA	C3B-C4B	5.20	1.48	1.40
23	b	6016	CLA	C3B-C4B	5.19	1.48	1.40
27	b	6048	BCR	C23-C22	-5.18	1.34	1.45
27	Z	1053	BCR	C23-C22	-5.17	1.34	1.45
23	C	1035	CLA	C3B-C4B	5.16	1.48	1.40
23	B	1016	CLA	C3B-C4B	5.16	1.48	1.40
23	B	1021	CLA	C3B-C4B	5.15	1.48	1.40
23	C	1034	CLA	C3B-C4B	5.15	1.48	1.40
23	B	1011	CLA	C3B-C4B	5.15	1.48	1.40
27	z	6053	BCR	C23-C22	-5.14	1.34	1.45
26	d	6042	PQ9	C22-C23	5.15	1.43	1.32
23	c	6032	CLA	C3B-C4B	5.14	1.48	1.40
27	K	1052	BCR	C23-C22	-5.14	1.34	1.45
23	C	1032	CLA	C3B-C4B	5.14	1.48	1.40
23	c	6035	CLA	C3B-C4B	5.14	1.48	1.40
23	C	1030	CLA	C3B-C4B	5.14	1.48	1.40
23	b	6020	CLA	C3B-C4B	5.14	1.48	1.40
23	b	6023	CLA	C3B-C4B	5.14	1.48	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	H	1049	BCR	C23-C22	-5.14	1.34	1.45
23	d	6008	CLA	C3B-C4B	5.14	1.48	1.40
23	B	1020	CLA	C3B-C4B	5.13	1.48	1.40
23	b	6021	CLA	C3B-C4B	5.13	1.48	1.40
23	C	1025	CLA	C3B-C4B	5.13	1.48	1.40
23	C	1027	CLA	C3B-C4B	5.13	1.48	1.40
23	c	6025	CLA	C3B-C4B	5.13	1.48	1.40
23	a	6006	CLA	C3B-C4B	5.13	1.48	1.40
23	c	6037	CLA	C3B-C4B	5.13	1.48	1.40
23	c	6028	CLA	C3B-C4B	5.13	1.48	1.40
23	B	1023	CLA	C3B-C4B	5.12	1.48	1.40
23	b	6012	CLA	C3B-C4B	5.12	1.48	1.40
23	B	1018	CLA	C3B-C4B	5.12	1.48	1.40
26	D	1042	PQ9	C22-C23	5.12	1.43	1.32
23	D	1008	CLA	C3B-C4B	5.12	1.48	1.40
23	C	1028	CLA	C3B-C4B	5.12	1.48	1.40
23	a	6003	CLA	C3B-C4B	5.12	1.48	1.40
23	c	6027	CLA	C3B-C4B	5.11	1.48	1.40
27	b	6047	BCR	C23-C22	-5.11	1.34	1.45
23	C	1036	CLA	C3B-C4B	5.11	1.48	1.40
23	c	6030	CLA	C3B-C4B	5.11	1.48	1.40
23	C	1033	CLA	C3B-C4B	5.11	1.48	1.40
23	C	1037	CLA	C3B-C4B	5.11	1.48	1.40
23	c	6036	CLA	C3B-C4B	5.11	1.48	1.40
23	B	1012	CLA	C3B-C4B	5.11	1.48	1.40
23	A	1003	CLA	C3B-C4B	5.11	1.48	1.40
23	D	1005	CLA	C3B-C4B	5.11	1.48	1.40
23	b	6018	CLA	C3B-C4B	5.11	1.48	1.40
27	h	6049	BCR	C23-C22	-5.10	1.34	1.45
27	B	1047	BCR	C23-C22	-5.10	1.34	1.45
23	b	6017	CLA	C3B-C4B	5.10	1.48	1.40
23	C	1031	CLA	C3B-C4B	5.10	1.48	1.40
26	d	6042	PQ9	C34-C33	-5.09	1.38	1.50
23	c	6033	CLA	C3B-C4B	5.09	1.48	1.40
23	A	1006	CLA	C3B-C4B	5.09	1.48	1.40
23	D	1004	CLA	C3B-C4B	5.09	1.48	1.40
27	k	6051	BCR	C23-C22	-5.08	1.34	1.45
23	b	6013	CLA	C3B-C4B	5.08	1.48	1.40
23	B	1013	CLA	C3B-C4B	5.08	1.48	1.40
23	c	6031	CLA	C3B-C4B	5.08	1.48	1.40
27	K	1051	BCR	C23-C22	-5.08	1.34	1.45
23	d	6005	CLA	C3B-C4B	5.06	1.48	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	d	6004	CLA	C3B-C4B	5.06	1.48	1.40
23	H	1017	CLA	C3B-C4B	5.06	1.48	1.40
27	d	6050	BCR	C23-C22	-5.03	1.34	1.45
23	b	6015	CLA	C3B-C4B	5.01	1.48	1.40
27	t	1046	BCR	C23-C22	-4.99	1.34	1.45
27	D	1050	BCR	C23-C22	-4.99	1.34	1.45
23	B	1015	CLA	C3B-C4B	4.99	1.48	1.40
26	D	1042	PQ9	C34-C33	-4.98	1.38	1.50
27	T	6046	BCR	C23-C22	-4.97	1.34	1.45
23	c	6034	CLA	C3C-C2C	4.96	1.47	1.36
23	c	6035	CLA	C3C-C2C	4.90	1.47	1.36
23	D	1004	CLA	C3C-C2C	4.90	1.47	1.36
23	C	1037	CLA	C3C-C2C	4.90	1.47	1.36
23	C	1031	CLA	C3C-C2C	4.90	1.47	1.36
23	c	6036	CLA	C3C-C2C	4.90	1.47	1.36
23	D	1008	CLA	C3C-C2C	4.89	1.47	1.36
23	b	6020	CLA	C3C-C2C	4.89	1.47	1.36
23	C	1035	CLA	C3C-C2C	4.89	1.47	1.36
23	C	1025	CLA	C3C-C2C	4.89	1.47	1.36
23	B	1020	CLA	C3C-C2C	4.89	1.47	1.36
23	b	6013	CLA	C3C-C2C	4.89	1.47	1.36
23	c	6030	CLA	C3C-C2C	4.89	1.47	1.36
23	C	1034	CLA	C3C-C2C	4.89	1.47	1.36
27	B	1045	BCR	C23-C22	-4.89	1.35	1.45
23	d	6008	CLA	C3C-C2C	4.88	1.47	1.36
23	b	6023	CLA	C3C-C2C	4.88	1.47	1.36
23	C	1027	CLA	C3C-C2C	4.88	1.47	1.36
27	b	6045	BCR	C23-C22	-4.88	1.35	1.45
23	c	6032	CLA	C3C-C2C	4.88	1.47	1.36
23	c	6037	CLA	C3C-C2C	4.88	1.47	1.36
23	C	1033	CLA	C3C-C2C	4.88	1.47	1.36
23	B	1012	CLA	C3C-C2C	4.88	1.47	1.36
23	A	1003	CLA	C3C-C2C	4.87	1.47	1.36
23	d	6004	CLA	C3C-C2C	4.87	1.47	1.36
23	C	1030	CLA	C3C-C2C	4.87	1.47	1.36
23	a	6006	CLA	C3C-C2C	4.87	1.47	1.36
23	B	1023	CLA	C3C-C2C	4.87	1.47	1.36
27	a	6044	BCR	C23-C22	-4.87	1.35	1.45
23	H	1017	CLA	C3C-C2C	4.87	1.47	1.36
23	B	1016	CLA	C3C-C2C	4.87	1.47	1.36
23	b	6021	CLA	C3C-C2C	4.87	1.47	1.36
23	B	1018	CLA	C3C-C2C	4.87	1.47	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	6031	CLA	C3C-C2C	4.86	1.47	1.36
23	C	1032	CLA	C3C-C2C	4.86	1.47	1.36
23	B	1021	CLA	C3C-C2C	4.86	1.47	1.36
23	C	1036	CLA	C3C-C2C	4.86	1.47	1.36
23	B	1013	CLA	C3C-C2C	4.86	1.47	1.36
23	c	6033	CLA	C3C-C2C	4.86	1.47	1.36
23	C	1028	CLA	C3C-C2C	4.86	1.47	1.36
23	b	6018	CLA	C3C-C2C	4.86	1.47	1.36
23	c	6028	CLA	C3C-C2C	4.86	1.47	1.36
23	b	6012	CLA	C3C-C2C	4.86	1.47	1.36
23	c	6025	CLA	C3C-C2C	4.86	1.47	1.36
23	a	6003	CLA	C3C-C2C	4.86	1.47	1.36
23	B	1011	CLA	C3C-C2C	4.85	1.47	1.36
23	b	6016	CLA	C3C-C2C	4.85	1.47	1.36
23	b	6011	CLA	C3C-C2C	4.84	1.47	1.36
23	D	1005	CLA	C3C-C2C	4.85	1.47	1.36
23	c	6027	CLA	C3C-C2C	4.84	1.47	1.36
27	A	1044	BCR	C23-C22	-4.84	1.35	1.45
23	A	1006	CLA	C3C-C2C	4.84	1.47	1.36
23	d	6005	CLA	C3C-C2C	4.84	1.47	1.36
23	b	6017	CLA	C3C-C2C	4.84	1.47	1.36
23	b	6020	CLA	O2D-CGD	4.83	1.45	1.33
23	b	6021	CLA	O2D-CGD	4.83	1.45	1.33
23	c	6036	CLA	O2D-CGD	4.82	1.45	1.33
23	d	6004	CLA	O2D-CGD	4.82	1.45	1.33
23	C	1033	CLA	O2D-CGD	4.82	1.45	1.33
23	B	1021	CLA	O2D-CGD	4.81	1.45	1.33
23	C	1036	CLA	O2D-CGD	4.82	1.45	1.33
23	b	6018	CLA	O2D-CGD	4.81	1.45	1.33
23	B	1011	CLA	O2D-CGD	4.81	1.45	1.33
23	b	6011	CLA	O2D-CGD	4.81	1.45	1.33
23	c	6033	CLA	O2D-CGD	4.80	1.45	1.33
23	C	1035	CLA	O2D-CGD	4.81	1.45	1.33
23	C	1030	CLA	O2D-CGD	4.80	1.45	1.33
23	B	1018	CLA	O2D-CGD	4.80	1.45	1.33
23	C	1025	CLA	O2D-CGD	4.80	1.45	1.33
23	B	1020	CLA	O2D-CGD	4.80	1.45	1.33
23	C	1034	CLA	O2D-CGD	4.80	1.45	1.33
23	A	1006	CLA	O2D-CGD	4.80	1.45	1.33
23	b	6012	CLA	O2D-CGD	4.80	1.45	1.33
23	c	6031	CLA	O2D-CGD	4.80	1.45	1.33
23	c	6035	CLA	O2D-CGD	4.80	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	1031	CLA	O2D-CGD	4.80	1.45	1.33
23	D	1004	CLA	O2D-CGD	4.80	1.45	1.33
23	c	6037	CLA	O2D-CGD	4.79	1.45	1.33
23	B	1013	CLA	O2D-CGD	4.79	1.45	1.33
23	C	1028	CLA	O2D-CGD	4.79	1.45	1.33
23	C	1037	CLA	O2D-CGD	4.79	1.45	1.33
23	c	6027	CLA	O2D-CGD	4.79	1.45	1.33
23	D	1005	CLA	O2D-CGD	4.79	1.45	1.33
23	C	1027	CLA	O2D-CGD	4.79	1.45	1.33
23	A	1003	CLA	O2D-CGD	4.79	1.45	1.33
23	c	6030	CLA	O2D-CGD	4.79	1.45	1.33
23	B	1012	CLA	O2D-CGD	4.79	1.45	1.33
23	b	6013	CLA	O2D-CGD	4.79	1.45	1.33
23	c	6028	CLA	O2D-CGD	4.78	1.45	1.33
23	a	6003	CLA	O2D-CGD	4.78	1.45	1.33
23	d	6005	CLA	O2D-CGD	4.78	1.45	1.33
23	c	6025	CLA	O2D-CGD	4.78	1.45	1.33
23	b	6016	CLA	O2D-CGD	4.78	1.45	1.33
23	c	6032	CLA	O2D-CGD	4.78	1.45	1.33
23	c	6034	CLA	O2D-CGD	4.78	1.45	1.33
23	d	6008	CLA	O2D-CGD	4.77	1.45	1.33
23	C	1032	CLA	O2D-CGD	4.77	1.45	1.33
23	H	1017	CLA	O2D-CGD	4.77	1.45	1.33
23	B	1016	CLA	O2D-CGD	4.77	1.45	1.33
23	b	6017	CLA	O2D-CGD	4.77	1.45	1.33
23	a	6006	CLA	O2D-CGD	4.77	1.45	1.33
23	B	1023	CLA	O2D-CGD	4.77	1.45	1.33
23	D	1008	CLA	O2D-CGD	4.76	1.45	1.33
23	b	6023	CLA	O2D-CGD	4.76	1.45	1.33
23	B	1009	CLA	C3C-C2C	4.76	1.46	1.36
23	A	1007	CLA	C1C-NC	-4.75	1.34	1.38
23	b	6009	CLA	C3C-C2C	4.75	1.46	1.36
23	c	6034	CLA	C3B-C4B	4.74	1.47	1.40
23	a	6007	CLA	C1C-NC	-4.74	1.34	1.38
23	B	1015	CLA	C1C-NC	-4.69	1.34	1.38
23	b	6009	CLA	O2D-CGD	4.68	1.45	1.33
23	b	6014	CLA	C3B-C4B	4.67	1.47	1.40
23	B	1014	CLA	C3B-C4B	4.67	1.47	1.40
23	B	1009	CLA	O2D-CGD	4.67	1.45	1.33
23	b	6014	CLA	C3C-C2C	4.66	1.46	1.36
23	B	1014	CLA	C3C-C2C	4.66	1.46	1.36
23	b	6015	CLA	C1C-NC	-4.66	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	a	6043	PQ9	C21-C22	-4.65	1.37	1.50
23	d	6004	CLA	OBD-CAD	4.64	1.29	1.22
23	b	6016	CLA	OBD-CAD	4.63	1.29	1.22
23	c	6035	CLA	OBD-CAD	4.63	1.29	1.22
23	c	6031	CLA	OBD-CAD	4.62	1.29	1.22
23	A	1006	CLA	OBD-CAD	4.62	1.29	1.22
23	b	6024	CLA	C1C-NC	-4.62	1.34	1.38
23	B	1019	CLA	OBD-CAD	4.61	1.29	1.22
25	e	6040	HEM	C3B-CAB	4.61	1.54	1.40
23	b	6019	CLA	OBD-CAD	4.60	1.29	1.22
25	E	1040	HEM	C3B-CAB	4.60	1.54	1.40
23	B	1016	CLA	OBD-CAD	4.60	1.29	1.22
23	b	6022	CLA	C1C-NC	-4.60	1.34	1.38
23	b	6012	CLA	OBD-CAD	4.60	1.29	1.22
23	b	6023	CLA	OBD-CAD	4.59	1.29	1.22
23	D	1004	CLA	OBD-CAD	4.59	1.29	1.22
25	V	1041	HEM	C3B-CAB	4.59	1.54	1.40
23	C	1035	CLA	OBD-CAD	4.59	1.29	1.22
23	C	1031	CLA	OBD-CAD	4.58	1.29	1.22
25	V	1041	HEM	C3C-CAC	4.58	1.54	1.40
23	B	1012	CLA	OBD-CAD	4.58	1.29	1.22
25	v	6041	HEM	C3C-CAC	4.57	1.54	1.40
25	E	1040	HEM	C3C-CAC	4.57	1.54	1.40
23	C	1029	CLA	C3C-C2C	4.58	1.46	1.36
23	c	6027	CLA	OBD-CAD	4.57	1.29	1.22
25	v	6041	HEM	C3B-CAB	4.57	1.54	1.40
23	B	1022	CLA	C1C-NC	-4.57	1.34	1.38
25	e	6040	HEM	C3C-CAC	4.57	1.54	1.40
23	c	6029	CLA	C3C-C2C	4.57	1.46	1.36
23	c	6037	CLA	OBD-CAD	4.57	1.29	1.22
23	B	1023	CLA	OBD-CAD	4.57	1.29	1.22
23	C	1027	CLA	OBD-CAD	4.57	1.29	1.22
23	B	1018	CLA	OBD-CAD	4.56	1.29	1.22
23	b	6018	CLA	OBD-CAD	4.56	1.29	1.22
23	C	1037	CLA	OBD-CAD	4.56	1.29	1.22
23	C	1028	CLA	OBD-CAD	4.55	1.29	1.22
23	b	6009	CLA	C3B-C4B	4.56	1.47	1.40
23	B	1020	CLA	OBD-CAD	4.55	1.29	1.22
23	C	1033	CLA	OBD-CAD	4.55	1.29	1.22
23	b	6020	CLA	OBD-CAD	4.55	1.29	1.22
23	C	1030	CLA	OBD-CAD	4.55	1.29	1.22
23	c	6033	CLA	OBD-CAD	4.55	1.29	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	1034	CLA	OBD-CAD	4.55	1.29	1.22
23	C	1032	CLA	OBD-CAD	4.55	1.28	1.22
23	b	6011	CLA	OBD-CAD	4.54	1.28	1.22
23	b	6019	CLA	C3C-C2C	4.54	1.46	1.36
23	H	1017	CLA	OBD-CAD	4.54	1.28	1.22
23	B	1024	CLA	C1C-NC	-4.54	1.34	1.38
23	d	6008	CLA	OBD-CAD	4.54	1.28	1.22
23	B	1019	CLA	C3C-C2C	4.54	1.46	1.36
23	B	1013	CLA	OBD-CAD	4.54	1.28	1.22
23	b	6021	CLA	OBD-CAD	4.53	1.28	1.22
23	d	6005	CLA	OBD-CAD	4.53	1.28	1.22
23	c	6028	CLA	OBD-CAD	4.53	1.28	1.22
23	C	1026	CLA	C1C-NC	-4.53	1.34	1.38
23	B	1011	CLA	OBD-CAD	4.53	1.28	1.22
23	D	1008	CLA	OBD-CAD	4.52	1.28	1.22
23	c	6036	CLA	OBD-CAD	4.52	1.28	1.22
23	C	1036	CLA	OBD-CAD	4.52	1.28	1.22
23	B	1009	CLA	C3B-C4B	4.52	1.47	1.40
23	a	6006	CLA	OBD-CAD	4.52	1.28	1.22
23	B	1021	CLA	OBD-CAD	4.52	1.28	1.22
23	C	1025	CLA	OBD-CAD	4.51	1.28	1.22
23	c	6029	CLA	C1C-NC	-4.51	1.34	1.38
23	c	6030	CLA	OBD-CAD	4.51	1.28	1.22
23	c	6032	CLA	OBD-CAD	4.51	1.28	1.22
23	A	1003	CLA	OBD-CAD	4.51	1.28	1.22
23	a	6003	CLA	OBD-CAD	4.51	1.28	1.22
23	c	6025	CLA	OBD-CAD	4.51	1.28	1.22
23	b	6017	CLA	OBD-CAD	4.50	1.28	1.22
23	c	6026	CLA	C1C-NC	-4.50	1.34	1.38
23	b	6013	CLA	OBD-CAD	4.50	1.28	1.22
23	D	1005	CLA	OBD-CAD	4.49	1.28	1.22
23	C	1029	CLA	C1C-NC	-4.48	1.34	1.38
23	b	6024	CLA	O2D-CGD	4.48	1.45	1.33
23	B	1024	CLA	O2D-CGD	4.48	1.45	1.33
23	c	6029	CLA	C3B-C4B	4.45	1.47	1.40
23	C	1029	CLA	C3B-C4B	4.44	1.47	1.40
23	a	6007	CLA	O2D-CGD	4.45	1.44	1.33
23	A	1007	CLA	O2D-CGD	4.44	1.44	1.33
23	b	6009	CLA	OBD-CAD	4.42	1.28	1.22
23	A	1007	CLA	C3C-C2C	4.42	1.46	1.36
23	B	1010	CLA	C3B-C4B	4.40	1.47	1.40
23	b	6015	CLA	C3C-C2C	4.40	1.46	1.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	a	6007	CLA	C3C-C2C	4.40	1.46	1.36
23	B	1015	CLA	C3C-C2C	4.39	1.46	1.36
23	b	6010	CLA	C3B-C4B	4.39	1.47	1.40
23	b	6010	CLA	C3C-C2C	4.36	1.46	1.36
23	B	1009	CLA	OBD-CAD	4.36	1.28	1.22
23	B	1010	CLA	C3C-C2C	4.34	1.46	1.36
23	C	1029	CLA	O2D-CGD	4.33	1.44	1.33
23	c	6029	CLA	O2D-CGD	4.33	1.44	1.33
23	C	1026	CLA	C3C-C2C	4.32	1.46	1.36
23	B	1024	CLA	C3B-C4B	4.32	1.47	1.40
26	A	1043	PQ9	C21-C22	-4.30	1.38	1.50
23	b	6024	CLA	C3B-C4B	4.30	1.47	1.40
23	b	6022	CLA	C3C-C2C	4.28	1.45	1.36
23	c	6026	CLA	C3C-C2C	4.28	1.45	1.36
23	B	1022	CLA	C3C-C2C	4.28	1.45	1.36
24	d	6038	PHO	C3D-CAD	-4.23	1.38	1.47
24	A	1038	PHO	C3D-CAD	-4.22	1.38	1.47
23	b	6022	CLA	O2D-CGD	4.21	1.44	1.33
26	A	1043	PQ9	C35-C36	-4.21	1.38	1.53
23	B	1022	CLA	O2D-CGD	4.21	1.44	1.33
23	c	6026	CLA	C3B-C4B	4.21	1.46	1.40
24	a	6039	PHO	C3D-CAD	-4.19	1.38	1.47
23	C	1026	CLA	C3B-C4B	4.18	1.46	1.40
23	b	6022	CLA	C3B-C4B	4.18	1.46	1.40
24	A	1039	PHO	C3D-CAD	-4.16	1.38	1.47
23	c	6034	CLA	OBD-CAD	4.16	1.28	1.22
25	E	1040	HEM	C4A-C3A	4.14	1.45	1.40
23	B	1022	CLA	C3B-C4B	4.12	1.46	1.40
25	V	1041	HEM	C4A-C3A	4.12	1.45	1.40
25	v	6041	HEM	C4A-C3A	4.11	1.45	1.40
23	b	6010	CLA	O2D-CGD	4.10	1.44	1.33
25	e	6040	HEM	C4A-C3A	4.09	1.45	1.40
23	B	1010	CLA	O2D-CGD	4.09	1.44	1.33
23	b	6014	CLA	O2D-CGD	4.08	1.43	1.33
23	B	1015	CLA	O2D-CGD	4.07	1.43	1.33
23	B	1014	CLA	O2D-CGD	4.07	1.43	1.33
26	a	6043	PQ9	C35-C36	-4.07	1.39	1.53
23	b	6015	CLA	O2D-CGD	4.06	1.43	1.33
23	B	1019	CLA	O2D-CGD	4.06	1.43	1.33
23	b	6019	CLA	O2D-CGD	4.05	1.43	1.33
23	B	1024	CLA	OBD-CAD	4.03	1.28	1.22
29	d	6062	MGE	O1G-C1A	4.03	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	6037	CLA	O2A-CGA	4.02	1.45	1.33
29	B	1060	MGE	O1G-C1A	4.02	1.45	1.33
23	C	1032	CLA	O2A-CGA	4.02	1.45	1.33
23	D	1005	CLA	O2A-CGA	4.02	1.45	1.33
23	C	1027	CLA	O2A-CGA	4.02	1.45	1.33
28	c	6056	DGD	O1G-C1A	4.02	1.45	1.33
23	d	6005	CLA	O2A-CGA	4.02	1.45	1.33
23	c	6032	CLA	O2A-CGA	4.02	1.45	1.33
28	C	1056	DGD	O1G-C1A	4.02	1.45	1.33
23	c	6031	CLA	O2A-CGA	4.01	1.45	1.33
23	A	1003	CLA	O2A-CGA	4.01	1.45	1.33
23	C	1037	CLA	O2A-CGA	4.01	1.45	1.33
23	b	6016	CLA	O2A-CGA	4.01	1.45	1.33
23	B	1016	CLA	O2A-CGA	4.01	1.45	1.33
29	d	6061	MGE	O1G-C1A	4.01	1.45	1.33
29	d	6059	MGE	O1G-C1A	4.01	1.45	1.33
28	c	6057	DGD	O1G-C1A	4.01	1.45	1.33
23	b	6024	CLA	OBD-CAD	4.01	1.28	1.22
28	h	6058	DGD	O1G-C1A	4.01	1.45	1.33
23	b	6023	CLA	O2A-CGA	4.01	1.45	1.33
23	c	6025	CLA	O2A-CGA	4.01	1.45	1.33
23	b	6018	CLA	O2A-CGA	4.01	1.45	1.33
28	H	1058	DGD	O1G-C1A	4.01	1.45	1.33
23	c	6028	CLA	O2A-CGA	4.01	1.45	1.33
23	b	6011	CLA	O2A-CGA	4.01	1.45	1.33
29	D	1062	MGE	O1G-C1A	4.01	1.45	1.33
23	B	1018	CLA	O2A-CGA	4.01	1.45	1.33
29	L	1061	MGE	O1G-C1A	4.01	1.45	1.33
23	C	1035	CLA	O2A-CGA	4.01	1.45	1.33
23	C	1025	CLA	O2A-CGA	4.01	1.45	1.33
23	b	6021	CLA	O2A-CGA	4.01	1.45	1.33
23	H	1017	CLA	O2A-CGA	4.01	1.45	1.33
23	b	6012	CLA	O2A-CGA	4.00	1.45	1.33
30	a	6063	LHG	O8-C23	4.00	1.45	1.33
23	B	1012	CLA	O2A-CGA	4.00	1.45	1.33
23	B	1015	CLA	OBD-CAD	4.00	1.28	1.22
23	B	1023	CLA	O2A-CGA	4.00	1.45	1.33
23	B	1021	CLA	O2A-CGA	4.00	1.45	1.33
28	C	1057	DGD	O1G-C1A	4.00	1.45	1.33
23	C	1030	CLA	O2A-CGA	4.00	1.45	1.33
23	A	1006	CLA	O2A-CGA	4.00	1.45	1.33
23	b	6020	CLA	O2A-CGA	4.00	1.45	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	J	1059	MGE	O1G-C1A	4.00	1.45	1.33
29	b	6060	MGE	O1G-C1A	4.00	1.45	1.33
23	C	1028	CLA	O2A-CGA	4.00	1.45	1.33
23	D	1008	CLA	O2A-CGA	4.00	1.45	1.33
23	c	6036	CLA	O2A-CGA	4.00	1.45	1.33
28	c	6055	DGD	O1G-C1A	4.00	1.45	1.33
23	c	6030	CLA	O2A-CGA	4.00	1.45	1.33
26	A	1043	PQ9	C34-C33	-4.00	1.40	1.50
23	C	1031	CLA	O2A-CGA	4.00	1.45	1.33
28	C	1055	DGD	O1G-C1A	4.00	1.45	1.33
23	B	1013	CLA	O2A-CGA	4.00	1.45	1.33
23	B	1020	CLA	O2A-CGA	4.00	1.45	1.33
26	a	6043	PQ9	C34-C33	-3.99	1.40	1.50
23	C	1026	CLA	OBD-CAD	4.00	1.28	1.22
23	c	6027	CLA	O2A-CGA	3.99	1.45	1.33
23	a	6006	CLA	O2A-CGA	3.99	1.45	1.33
23	b	6013	CLA	O2A-CGA	3.99	1.45	1.33
23	b	6017	CLA	O2A-CGA	3.99	1.45	1.33
23	d	6008	CLA	O2A-CGA	3.99	1.45	1.33
23	c	6035	CLA	O2A-CGA	3.99	1.45	1.33
23	C	1034	CLA	O2A-CGA	3.99	1.45	1.33
23	C	1036	CLA	O2A-CGA	3.99	1.45	1.33
23	D	1004	CLA	O2A-CGA	3.99	1.45	1.33
23	B	1011	CLA	O2A-CGA	3.98	1.45	1.33
23	a	6003	CLA	O2A-CGA	3.98	1.45	1.33
30	A	1063	LHG	O8-C23	3.98	1.45	1.33
23	C	1033	CLA	O2A-CGA	3.98	1.45	1.33
23	c	6026	CLA	OBD-CAD	3.98	1.28	1.22
23	b	6015	CLA	OBD-CAD	3.98	1.28	1.22
23	d	6004	CLA	O2A-CGA	3.97	1.45	1.33
23	c	6034	CLA	O2A-CGA	3.97	1.45	1.33
23	c	6033	CLA	O2A-CGA	3.96	1.45	1.33
23	A	1007	CLA	C3B-C4B	3.90	1.46	1.40
26	d	6042	PQ9	C35-C36	-3.89	1.39	1.53
23	B	1009	CLA	O2A-CGA	3.89	1.45	1.33
23	b	6009	CLA	O2A-CGA	3.88	1.45	1.33
23	a	6007	CLA	O2A-CGA	3.88	1.45	1.33
23	A	1007	CLA	O2A-CGA	3.87	1.45	1.33
23	b	6022	CLA	OBD-CAD	3.86	1.27	1.22
23	B	1022	CLA	OBD-CAD	3.85	1.27	1.22
23	a	6007	CLA	C3B-C4B	3.84	1.46	1.40
29	d	6059	MGE	O2G-C1B	3.83	1.45	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	C	1055	DGD	O2G-C1B	3.83	1.45	1.34
29	b	6060	MGE	O2G-C1B	3.82	1.45	1.34
29	J	1059	MGE	O2G-C1B	3.81	1.45	1.34
30	A	1063	LHG	O7-C7	3.81	1.45	1.34
29	d	6062	MGE	O2G-C1B	3.81	1.45	1.34
28	H	1058	DGD	O2G-C1B	3.81	1.45	1.34
23	B	1024	CLA	C3C-C2C	3.80	1.44	1.36
30	a	6063	LHG	O7-C7	3.80	1.45	1.34
28	c	6056	DGD	O2G-C1B	3.80	1.45	1.34
28	C	1056	DGD	O2G-C1B	3.80	1.45	1.34
28	c	6057	DGD	O2G-C1B	3.80	1.45	1.34
28	c	6055	DGD	O2G-C1B	3.80	1.45	1.34
23	b	6024	CLA	C3C-C2C	3.80	1.44	1.36
29	D	1062	MGE	O2G-C1B	3.79	1.45	1.34
29	B	1060	MGE	O2G-C1B	3.79	1.45	1.34
28	h	6058	DGD	O2G-C1B	3.79	1.45	1.34
23	B	1015	CLA	O2A-CGA	3.79	1.45	1.33
28	C	1057	DGD	O2G-C1B	3.79	1.45	1.34
29	L	1061	MGE	O2G-C1B	3.79	1.45	1.34
23	b	6015	CLA	O2A-CGA	3.79	1.45	1.33
23	b	6019	CLA	O2A-CGA	3.78	1.45	1.33
23	B	1019	CLA	O2A-CGA	3.78	1.45	1.33
29	d	6061	MGE	O2G-C1B	3.78	1.45	1.34
23	C	1026	CLA	O2D-CGD	3.77	1.43	1.33
23	c	6026	CLA	O2D-CGD	3.76	1.43	1.33
25	v	6041	HEM	C2B-C1B	3.72	1.45	1.44
23	B	1014	CLA	C1C-NC	-3.71	1.35	1.38
23	b	6010	CLA	OBD-CAD	3.69	1.27	1.22
26	A	1043	PQ9	C6-C5	3.69	1.58	1.51
23	b	6024	CLA	O2A-CGA	3.69	1.44	1.33
23	B	1024	CLA	O2A-CGA	3.68	1.44	1.33
23	c	6034	CLA	C1C-NC	-3.68	1.35	1.38
24	d	6038	PHO	C3D-C4D	-3.67	1.34	1.40
24	A	1038	PHO	C3D-C4D	-3.67	1.34	1.40
23	B	1010	CLA	OBD-CAD	3.66	1.27	1.22
26	a	6043	PQ9	C6-C5	3.63	1.58	1.51
23	c	6029	CLA	OBD-CAD	3.62	1.27	1.22
26	D	1042	PQ9	C35-C36	-3.61	1.40	1.53
23	b	6017	CLA	CHC-C1C	3.61	1.47	1.35
26	d	6042	PQ9	C6-C5	3.60	1.58	1.51
23	c	6035	CLA	CHC-C1C	3.60	1.47	1.35
23	b	6014	CLA	C1C-NC	-3.60	1.35	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	H	1017	CLA	CHC-C1C	3.60	1.47	1.35
23	C	1035	CLA	CHC-C1C	3.59	1.47	1.35
23	c	6027	CLA	CHC-C1C	3.59	1.47	1.35
23	b	6016	CLA	CHC-C1C	3.59	1.47	1.35
23	C	1028	CLA	CHC-C1C	3.59	1.47	1.35
23	B	1014	CLA	CHC-C1C	3.59	1.47	1.35
23	d	6005	CLA	CHC-C1C	3.59	1.47	1.35
23	c	6025	CLA	CHC-C1C	3.58	1.47	1.35
23	C	1034	CLA	CHC-C1C	3.58	1.47	1.35
23	B	1023	CLA	CHC-C1C	3.58	1.47	1.35
23	b	6014	CLA	CHC-C1C	3.58	1.47	1.35
23	C	1030	CLA	CHC-C1C	3.58	1.47	1.35
23	C	1029	CLA	OBD-CAD	3.58	1.27	1.22
23	D	1004	CLA	CHC-C1C	3.58	1.47	1.35
23	c	6028	CLA	CHC-C1C	3.58	1.47	1.35
23	c	6030	CLA	CHC-C1C	3.58	1.47	1.35
23	C	1033	CLA	CHC-C1C	3.58	1.47	1.35
23	c	6031	CLA	CHC-C1C	3.57	1.47	1.35
23	c	6036	CLA	CHC-C1C	3.58	1.47	1.35
23	C	1025	CLA	CHC-C1C	3.58	1.47	1.35
23	B	1018	CLA	CHC-C1C	3.57	1.47	1.35
23	D	1008	CLA	CHC-C1C	3.57	1.47	1.35
23	a	6003	CLA	CHC-C1C	3.57	1.47	1.35
23	d	6004	CLA	CHC-C1C	3.57	1.47	1.35
23	B	1020	CLA	CHC-C1C	3.57	1.47	1.35
23	B	1013	CLA	CHC-C1C	3.57	1.47	1.35
23	c	6033	CLA	CHC-C1C	3.57	1.47	1.35
23	B	1016	CLA	CHC-C1C	3.57	1.47	1.35
23	B	1014	CLA	O2A-CGA	3.57	1.44	1.33
23	b	6023	CLA	CHC-C1C	3.57	1.47	1.35
23	A	1003	CLA	CHC-C1C	3.57	1.47	1.35
23	B	1012	CLA	CHC-C1C	3.57	1.47	1.35
23	C	1032	CLA	CHC-C1C	3.56	1.47	1.35
23	D	1005	CLA	CHC-C1C	3.57	1.47	1.35
23	b	6013	CLA	CHC-C1C	3.57	1.47	1.35
23	b	6009	CLA	C1C-NC	-3.57	1.35	1.38
23	a	6006	CLA	CHC-C1C	3.56	1.47	1.35
23	b	6014	CLA	O2A-CGA	3.56	1.44	1.33
23	B	1021	CLA	CHC-C1C	3.56	1.47	1.35
23	b	6012	CLA	CHC-C1C	3.56	1.47	1.35
23	c	6032	CLA	CHC-C1C	3.56	1.47	1.35
23	B	1022	CLA	O2A-CGA	3.56	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	1027	CLA	CHC-C1C	3.56	1.47	1.35
23	b	6022	CLA	O2A-CGA	3.56	1.44	1.33
23	C	1031	CLA	CHC-C1C	3.56	1.47	1.35
23	b	6020	CLA	CHC-C1C	3.56	1.47	1.35
23	B	1011	CLA	CHC-C1C	3.56	1.47	1.35
23	d	6008	CLA	CHC-C1C	3.56	1.47	1.35
23	b	6021	CLA	CHC-C1C	3.55	1.47	1.35
23	b	6018	CLA	CHC-C1C	3.55	1.47	1.35
23	C	1037	CLA	CHC-C1C	3.55	1.47	1.35
23	A	1006	CLA	CHC-C1C	3.55	1.47	1.35
23	b	6011	CLA	CHC-C1C	3.55	1.47	1.35
23	C	1036	CLA	CHC-C1C	3.55	1.47	1.35
23	c	6037	CLA	CHC-C1C	3.55	1.47	1.35
23	B	1009	CLA	C1C-NC	-3.55	1.35	1.38
26	D	1042	PQ9	C6-C5	3.50	1.58	1.51
23	B	1014	CLA	OBD-CAD	3.49	1.27	1.22
23	c	6029	CLA	O2A-CGA	3.48	1.44	1.33
23	c	6034	CLA	CHC-C1C	3.47	1.47	1.35
23	C	1029	CLA	O2A-CGA	3.46	1.44	1.33
23	b	6014	CLA	OBD-CAD	3.45	1.27	1.22
25	V	1041	HEM	C2B-C1B	3.45	1.45	1.44
27	b	6048	BCR	C24-C25	-3.44	1.34	1.46
24	A	1039	PHO	C3D-C4D	-3.43	1.34	1.40
24	a	6039	PHO	C3D-C4D	-3.43	1.34	1.40
23	B	1010	CLA	O2A-CGA	3.42	1.44	1.33
27	B	1048	BCR	C24-C25	-3.42	1.34	1.46
23	b	6010	CLA	O2A-CGA	3.41	1.44	1.33
27	h	6049	BCR	C24-C25	-3.41	1.34	1.46
27	K	1052	BCR	C24-C25	-3.41	1.34	1.46
27	Z	1053	BCR	C24-C25	-3.41	1.34	1.46
27	c	6054	BCR	C24-C25	-3.40	1.34	1.46
23	c	6029	CLA	CHC-C1C	3.40	1.46	1.35
27	H	1049	BCR	C24-C25	-3.40	1.34	1.46
27	z	6053	BCR	C24-C25	-3.40	1.34	1.46
23	C	1029	CLA	CHC-C1C	3.39	1.46	1.35
27	k	6052	BCR	C24-C25	-3.39	1.34	1.46
27	C	1054	BCR	C24-C25	-3.38	1.34	1.46
27	B	1047	BCR	C24-C25	-3.37	1.34	1.46
27	b	6047	BCR	C24-C25	-3.37	1.34	1.46
23	C	1026	CLA	O2A-CGA	3.35	1.43	1.33
23	b	6019	CLA	C3B-C2B	3.35	1.47	1.41
23	c	6026	CLA	O2A-CGA	3.34	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6009	CLA	CHC-C1C	3.34	1.46	1.35
23	a	6007	CLA	CHC-C1C	3.33	1.46	1.35
23	B	1009	CLA	CHC-C1C	3.33	1.46	1.35
23	A	1007	CLA	CHC-C1C	3.33	1.46	1.35
23	B	1019	CLA	C3B-C2B	3.33	1.47	1.41
23	b	6015	CLA	CHC-C1C	3.32	1.46	1.35
23	B	1015	CLA	CHC-C1C	3.32	1.46	1.35
23	c	6034	CLA	C3B-C2B	3.30	1.47	1.41
23	C	1026	CLA	CHC-C1C	3.26	1.46	1.35
23	c	6026	CLA	CHC-C1C	3.26	1.46	1.35
23	b	6009	CLA	C3B-C2B	3.26	1.47	1.41
23	b	6024	CLA	CHC-C1C	3.25	1.46	1.35
23	B	1009	CLA	C3B-C2B	3.25	1.47	1.41
25	E	1040	HEM	C2B-C1B	3.23	1.45	1.44
23	b	6022	CLA	CHC-C1C	3.23	1.46	1.35
23	B	1022	CLA	CHC-C1C	3.23	1.46	1.35
23	B	1024	CLA	CHC-C1C	3.22	1.46	1.35
27	T	6046	BCR	C24-C25	-3.20	1.35	1.46
27	t	1046	BCR	C24-C25	-3.20	1.35	1.46
23	C	1031	CLA	C3B-C2B	3.18	1.47	1.41
23	c	6037	CLA	C3B-C2B	3.18	1.47	1.41
23	b	6020	CLA	C3B-C2B	3.18	1.47	1.41
23	c	6035	CLA	C3B-C2B	3.18	1.47	1.41
23	a	6003	CLA	C3B-C2B	3.17	1.47	1.41
23	D	1005	CLA	C3B-C2B	3.17	1.47	1.41
23	C	1037	CLA	C3B-C2B	3.17	1.47	1.41
23	a	6006	CLA	C3B-C2B	3.17	1.47	1.41
23	c	6031	CLA	C3B-C2B	3.16	1.46	1.41
23	d	6004	CLA	C3B-C2B	3.16	1.46	1.41
23	B	1023	CLA	C3B-C2B	3.16	1.46	1.41
23	C	1035	CLA	C3B-C2B	3.16	1.46	1.41
23	d	6005	CLA	C3B-C2B	3.15	1.46	1.41
23	B	1020	CLA	C3B-C2B	3.15	1.46	1.41
23	c	6030	CLA	C3B-C2B	3.15	1.46	1.41
23	C	1036	CLA	C3B-C2B	3.15	1.46	1.41
23	c	6027	CLA	C3B-C2B	3.15	1.46	1.41
23	C	1034	CLA	C3B-C2B	3.15	1.46	1.41
23	C	1032	CLA	C3B-C2B	3.15	1.46	1.41
23	b	6023	CLA	C3B-C2B	3.15	1.46	1.41
23	D	1008	CLA	C3B-C2B	3.15	1.46	1.41
23	H	1017	CLA	C3B-C2B	3.15	1.46	1.41
23	b	6013	CLA	C3B-C2B	3.15	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	A	1003	CLA	C3B-C2B	3.14	1.46	1.41
27	K	1051	BCR	C24-C25	-3.14	1.35	1.46
23	A	1006	CLA	C3B-C2B	3.14	1.46	1.41
23	B	1018	CLA	C3B-C2B	3.14	1.46	1.41
23	c	6028	CLA	C3B-C2B	3.14	1.46	1.41
25	e	6040	HEM	C2B-C1B	3.14	1.45	1.44
23	c	6036	CLA	C3B-C2B	3.14	1.46	1.41
23	b	6011	CLA	C3B-C2B	3.14	1.46	1.41
23	B	1011	CLA	C3B-C2B	3.14	1.46	1.41
23	C	1030	CLA	C3B-C2B	3.13	1.46	1.41
25	E	1040	HEM	FE-NA	3.13	2.05	1.92
27	k	6051	BCR	C24-C25	-3.13	1.35	1.46
25	e	6040	HEM	FE-NA	3.13	2.05	1.92
23	B	1012	CLA	C3B-C2B	3.13	1.46	1.41
23	c	6033	CLA	C3B-C2B	3.13	1.46	1.41
23	b	6018	CLA	C3B-C2B	3.13	1.46	1.41
23	D	1004	CLA	C3B-C2B	3.13	1.46	1.41
23	B	1013	CLA	C3B-C2B	3.13	1.46	1.41
23	b	6017	CLA	C3B-C2B	3.12	1.46	1.41
23	C	1028	CLA	C3B-C2B	3.12	1.46	1.41
24	d	6038	PHO	O2D-CGD	-3.12	1.24	1.33
23	b	6016	CLA	C3B-C2B	3.12	1.46	1.41
23	c	6025	CLA	C3B-C2B	3.12	1.46	1.41
23	b	6019	CLA	CHC-C1C	3.12	1.46	1.35
23	C	1033	CLA	C3B-C2B	3.12	1.46	1.41
23	B	1019	CLA	CHC-C1C	3.12	1.46	1.35
24	A	1038	PHO	O2D-CGD	-3.12	1.24	1.33
23	B	1021	CLA	C3B-C2B	3.11	1.46	1.41
23	b	6012	CLA	C3B-C2B	3.11	1.46	1.41
23	B	1016	CLA	C3B-C2B	3.11	1.46	1.41
23	C	1027	CLA	C3B-C2B	3.11	1.46	1.41
25	v	6041	HEM	FE-NA	3.11	2.05	1.92
25	V	1041	HEM	FE-NA	3.11	2.05	1.92
23	C	1025	CLA	C3B-C2B	3.10	1.46	1.41
23	c	6032	CLA	C3B-C2B	3.10	1.46	1.41
23	d	6008	CLA	C3B-C2B	3.09	1.46	1.41
27	B	1045	BCR	C24-C25	-3.09	1.35	1.46
23	b	6021	CLA	C3B-C2B	3.09	1.46	1.41
27	d	6050	BCR	C24-C25	-3.09	1.35	1.46
27	D	1050	BCR	C24-C25	-3.09	1.35	1.46
27	b	6045	BCR	C24-C25	-3.09	1.35	1.46
23	b	6010	CLA	CHC-C1C	3.07	1.45	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6015	CLA	C4A-NA	-3.07	1.32	1.39
23	c	6028	CLA	C1C-NC	-3.07	1.35	1.38
23	B	1015	CLA	C4A-NA	-3.06	1.32	1.39
23	B	1010	CLA	CHC-C1C	3.05	1.45	1.35
23	C	1028	CLA	C1C-NC	-3.01	1.35	1.38
23	a	6003	CLA	C1C-NC	-3.01	1.35	1.38
23	d	6004	CLA	C1C-NC	-3.01	1.35	1.38
23	a	6006	CLA	C1C-NC	-3.01	1.35	1.38
23	c	6027	CLA	C1C-NC	-3.01	1.35	1.38
23	b	6020	CLA	C1C-NC	-3.00	1.35	1.38
23	c	6035	CLA	C1C-NC	-3.00	1.35	1.38
23	b	6017	CLA	C1C-NC	-2.99	1.35	1.38
23	B	1013	CLA	C1C-NC	-2.99	1.35	1.38
23	c	6036	CLA	C1C-NC	-2.99	1.35	1.38
23	c	6032	CLA	C1C-NC	-2.99	1.35	1.38
23	C	1027	CLA	C1C-NC	-2.98	1.35	1.38
23	C	1035	CLA	C1C-NC	-2.98	1.35	1.38
23	b	6013	CLA	C1C-NC	-2.98	1.35	1.38
23	A	1003	CLA	C1C-NC	-2.97	1.35	1.38
23	C	1032	CLA	C1C-NC	-2.97	1.35	1.38
23	D	1004	CLA	C1C-NC	-2.97	1.35	1.38
23	d	6005	CLA	C1C-NC	-2.97	1.35	1.38
23	D	1005	CLA	C1C-NC	-2.97	1.35	1.38
23	B	1020	CLA	C1C-NC	-2.96	1.35	1.38
23	c	6025	CLA	C1C-NC	-2.96	1.35	1.38
23	A	1007	CLA	OBD-CAD	2.96	1.26	1.22
23	C	1025	CLA	C1C-NC	-2.95	1.35	1.38
23	c	6030	CLA	C1C-NC	-2.95	1.35	1.38
23	b	6019	CLA	C3B-C4B	2.95	1.44	1.40
23	b	6016	CLA	C1C-NC	-2.95	1.36	1.38
23	B	1023	CLA	C1C-NC	-2.95	1.36	1.38
23	c	6037	CLA	C1C-NC	-2.93	1.36	1.38
23	B	1019	CLA	C3B-C4B	2.93	1.44	1.40
23	C	1033	CLA	C1C-NC	-2.93	1.36	1.38
25	v	6041	HEM	FE-ND	2.93	2.08	1.97
23	B	1018	CLA	C1C-NC	-2.93	1.36	1.38
23	H	1017	CLA	C1C-NC	-2.93	1.36	1.38
23	c	6031	CLA	C1C-NC	-2.93	1.36	1.38
23	b	6012	CLA	C1C-NC	-2.92	1.36	1.38
25	V	1041	HEM	FE-ND	2.92	2.08	1.97
25	e	6040	HEM	FE-ND	2.92	2.08	1.97
23	a	6007	CLA	OBD-CAD	2.92	1.26	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6018	CLA	C1C-NC	-2.92	1.36	1.38
23	C	1036	CLA	C1C-NC	-2.92	1.36	1.38
23	B	1016	CLA	C1C-NC	-2.92	1.36	1.38
23	C	1031	CLA	C1C-NC	-2.91	1.36	1.38
23	D	1008	CLA	C1C-NC	-2.91	1.36	1.38
23	C	1030	CLA	C1C-NC	-2.91	1.36	1.38
23	b	6015	CLA	C2A-C1A	-2.91	1.47	1.52
25	E	1040	HEM	FE-ND	2.90	2.08	1.97
23	C	1037	CLA	C1C-NC	-2.89	1.36	1.38
23	B	1015	CLA	C2A-C1A	-2.89	1.47	1.52
23	B	1011	CLA	C1C-NC	-2.89	1.36	1.38
23	a	6007	CLA	C4A-NA	-2.89	1.33	1.39
24	a	6039	PHO	O2D-CGD	-2.89	1.25	1.33
23	A	1007	CLA	C4A-NA	-2.89	1.33	1.39
24	A	1039	PHO	O2D-CGD	-2.88	1.25	1.33
23	B	1014	CLA	C4A-NA	-2.88	1.33	1.39
23	C	1034	CLA	C1C-NC	-2.87	1.36	1.38
23	B	1012	CLA	C1C-NC	-2.86	1.36	1.38
26	a	6043	PQ9	C11-C12	2.86	1.55	1.50
23	b	6014	CLA	C4A-NA	-2.86	1.33	1.39
23	c	6033	CLA	C1C-NC	-2.86	1.36	1.38
23	C	1029	CLA	C4A-NA	-2.85	1.33	1.39
27	A	1044	BCR	C24-C25	-2.85	1.36	1.46
23	b	6024	CLA	C4A-NA	-2.85	1.33	1.39
24	a	6039	PHO	CBB-CAB	2.84	1.50	1.28
23	B	1024	CLA	C4A-NA	-2.84	1.33	1.39
27	a	6044	BCR	C24-C25	-2.84	1.36	1.46
24	A	1039	PHO	CBB-CAB	2.84	1.50	1.28
23	b	6011	CLA	C1C-NC	-2.84	1.36	1.38
23	B	1021	CLA	C1C-NC	-2.83	1.36	1.38
23	b	6023	CLA	C1C-NC	-2.83	1.36	1.38
23	c	6029	CLA	C4A-NA	-2.83	1.33	1.39
23	C	1030	CLA	C1D-CHD	2.83	1.47	1.38
23	C	1034	CLA	C1D-CHD	2.83	1.47	1.38
23	c	6033	CLA	C1D-CHD	2.83	1.47	1.38
23	b	6013	CLA	C1D-CHD	2.83	1.47	1.38
23	b	6017	CLA	C1D-CHD	2.83	1.47	1.38
23	A	1006	CLA	C1C-NC	-2.83	1.36	1.38
23	b	6021	CLA	C1D-CHD	2.83	1.47	1.38
23	C	1033	CLA	C1D-CHD	2.82	1.47	1.38
23	b	6011	CLA	C1D-CHD	2.82	1.47	1.38
23	B	1021	CLA	C1D-CHD	2.82	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	A	1038	PHO	CBB-CAB	2.82	1.50	1.28
23	A	1003	CLA	C1D-CHD	2.82	1.47	1.38
23	a	6003	CLA	C1D-CHD	2.82	1.47	1.38
24	d	6038	PHO	CBB-CAB	2.82	1.50	1.28
23	H	1017	CLA	C1D-CHD	2.82	1.47	1.38
23	B	1013	CLA	C1D-CHD	2.82	1.47	1.38
23	D	1004	CLA	C1D-CHD	2.82	1.47	1.38
23	d	6004	CLA	C1D-CHD	2.81	1.47	1.38
23	c	6030	CLA	C1D-CHD	2.81	1.47	1.38
23	B	1020	CLA	C1D-CHD	2.81	1.47	1.38
23	b	6020	CLA	C1D-CHD	2.81	1.47	1.38
23	b	6012	CLA	C1D-CHD	2.81	1.47	1.38
23	b	6021	CLA	C1C-NC	-2.81	1.36	1.38
23	B	1012	CLA	C1D-CHD	2.81	1.47	1.38
23	B	1011	CLA	C1D-CHD	2.81	1.47	1.38
23	B	1016	CLA	C1D-CHD	2.81	1.47	1.38
23	D	1008	CLA	C1D-CHD	2.81	1.47	1.38
23	B	1023	CLA	C1D-CHD	2.80	1.47	1.38
23	c	6032	CLA	C1D-CHD	2.80	1.47	1.38
23	d	6008	CLA	C1C-NC	-2.80	1.36	1.38
23	b	6023	CLA	C1D-CHD	2.80	1.47	1.38
23	C	1032	CLA	C1D-CHD	2.80	1.47	1.38
23	C	1025	CLA	C1D-CHD	2.80	1.47	1.38
23	A	1006	CLA	C1D-CHD	2.80	1.47	1.38
23	c	6031	CLA	C1D-CHD	2.80	1.47	1.38
23	c	6025	CLA	C1D-CHD	2.80	1.47	1.38
23	a	6006	CLA	C1D-CHD	2.80	1.47	1.38
23	c	6035	CLA	C1D-CHD	2.80	1.47	1.38
23	c	6027	CLA	C1D-CHD	2.80	1.47	1.38
23	C	1027	CLA	C1D-CHD	2.80	1.47	1.38
23	d	6008	CLA	C1D-CHD	2.79	1.47	1.38
23	c	6037	CLA	C1D-CHD	2.79	1.47	1.38
23	C	1034	CLA	O2D-CED	-2.79	1.38	1.45
23	C	1037	CLA	C1D-CHD	2.79	1.47	1.38
23	B	1018	CLA	C1D-CHD	2.79	1.47	1.38
23	C	1036	CLA	C1D-CHD	2.79	1.47	1.38
23	C	1031	CLA	C1D-CHD	2.79	1.46	1.38
23	b	6016	CLA	C1D-CHD	2.79	1.46	1.38
23	c	6036	CLA	C1D-CHD	2.79	1.46	1.38
23	C	1035	CLA	C1D-CHD	2.78	1.46	1.38
23	C	1028	CLA	C1D-CHD	2.78	1.46	1.38
23	b	6018	CLA	C1D-CHD	2.77	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	6028	CLA	C1D-CHD	2.77	1.46	1.38
26	a	6043	PQ9	C11-C2	2.77	1.53	1.51
23	b	6010	CLA	C1D-CHD	2.77	1.46	1.38
24	a	6039	PHO	C4C-C3C	2.76	1.50	1.45
23	D	1005	CLA	C1D-CHD	2.76	1.46	1.38
23	B	1010	CLA	C1D-CHD	2.75	1.46	1.38
23	c	6030	CLA	C4B-CHC	2.75	1.47	1.39
24	A	1039	PHO	C4C-C3C	2.75	1.50	1.45
23	d	6005	CLA	C1D-CHD	2.74	1.46	1.38
23	d	6008	CLA	C4B-CHC	2.74	1.47	1.39
23	b	6013	CLA	C4B-CHC	2.74	1.47	1.39
23	b	6010	CLA	C4A-NA	-2.73	1.33	1.39
23	c	6025	CLA	C4B-CHC	2.73	1.47	1.39
23	B	1010	CLA	C4A-NA	-2.72	1.33	1.39
23	c	6032	CLA	C4B-CHC	2.72	1.47	1.39
23	B	1013	CLA	C4B-CHC	2.72	1.47	1.39
23	C	1025	CLA	C4B-CHC	2.72	1.47	1.39
23	C	1030	CLA	C4B-CHC	2.72	1.47	1.39
23	C	1033	CLA	C4B-CHC	2.72	1.47	1.39
23	a	6006	CLA	C4B-CHC	2.72	1.47	1.39
23	c	6033	CLA	C4B-CHC	2.71	1.47	1.39
23	b	6010	CLA	MG-NA	-2.71	1.99	2.07
23	D	1008	CLA	C4B-CHC	2.71	1.47	1.39
24	A	1039	PHO	CHB-C4A	2.71	1.47	1.41
23	b	6012	CLA	C4B-CHC	2.71	1.47	1.39
23	B	1010	CLA	MG-NA	-2.71	1.99	2.07
27	b	6047	BCR	C1-C6	-2.71	1.49	1.53
26	A	1043	PQ9	C3-C4	2.71	1.53	1.44
23	C	1031	CLA	C4B-CHC	2.70	1.47	1.39
27	B	1047	BCR	C1-C6	-2.70	1.49	1.53
23	H	1017	CLA	C4B-CHC	2.70	1.47	1.39
23	b	6017	CLA	C4B-CHC	2.70	1.47	1.39
23	A	1006	CLA	C4B-CHC	2.70	1.47	1.39
23	C	1032	CLA	C4B-CHC	2.70	1.47	1.39
23	C	1027	CLA	C4B-CHC	2.70	1.47	1.39
23	C	1037	CLA	C4B-CHC	2.70	1.47	1.39
23	b	6020	CLA	C4B-CHC	2.70	1.47	1.39
23	B	1012	CLA	C4B-CHC	2.70	1.47	1.39
23	C	1036	CLA	C4B-CHC	2.69	1.47	1.39
23	B	1020	CLA	C4B-CHC	2.69	1.47	1.39
23	c	6036	CLA	C4B-CHC	2.69	1.47	1.39
23	b	6018	CLA	C4B-CHC	2.69	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	a	6039	PHO	CHB-C4A	2.69	1.47	1.41
23	c	6027	CLA	C4B-CHC	2.69	1.47	1.39
23	c	6037	CLA	C4B-CHC	2.69	1.47	1.39
23	B	1023	CLA	C4B-CHC	2.69	1.47	1.39
23	D	1005	CLA	C4B-CHC	2.69	1.47	1.39
23	d	6005	CLA	C4B-CHC	2.69	1.47	1.39
23	b	6023	CLA	C4B-CHC	2.68	1.47	1.39
23	A	1003	CLA	C4B-CHC	2.69	1.47	1.39
23	D	1004	CLA	C4B-CHC	2.69	1.47	1.39
23	C	1034	CLA	C4B-CHC	2.68	1.47	1.39
23	b	6021	CLA	C4B-CHC	2.68	1.47	1.39
23	B	1018	CLA	C4B-CHC	2.68	1.47	1.39
23	B	1016	CLA	C4B-CHC	2.68	1.47	1.39
26	A	1043	PQ9	C36-C37	-2.68	1.42	1.50
23	c	6031	CLA	C4B-CHC	2.68	1.47	1.39
23	B	1021	CLA	C4B-CHC	2.67	1.47	1.39
23	B	1014	CLA	C1D-CHD	2.67	1.46	1.38
23	d	6004	CLA	C4B-CHC	2.67	1.47	1.39
23	b	6014	CLA	C1D-CHD	2.67	1.46	1.38
23	B	1011	CLA	C4B-CHC	2.67	1.47	1.39
23	C	1028	CLA	C4B-CHC	2.67	1.47	1.39
23	C	1035	CLA	C4B-CHC	2.67	1.47	1.39
24	d	6038	PHO	CHB-C4A	2.66	1.47	1.41
23	a	6003	CLA	C4B-CHC	2.66	1.47	1.39
23	b	6016	CLA	C4B-CHC	2.66	1.47	1.39
24	A	1038	PHO	CHB-C4A	2.66	1.47	1.41
23	b	6019	CLA	C1B-CHB	2.66	1.47	1.39
23	c	6028	CLA	C4B-CHC	2.66	1.47	1.39
23	B	1024	CLA	C1D-CHD	2.65	1.46	1.38
23	b	6011	CLA	C4B-CHC	2.65	1.47	1.39
23	c	6035	CLA	C4B-CHC	2.65	1.47	1.39
23	B	1019	CLA	C1B-CHB	2.64	1.47	1.39
25	E	1040	HEM	FE-NB	2.64	2.07	1.97
23	b	6024	CLA	C1D-CHD	2.64	1.46	1.38
26	D	1042	PQ9	C40-C38	2.63	1.57	1.51
25	V	1041	HEM	FE-NB	2.62	2.07	1.97
23	B	1022	CLA	C1D-CHD	2.62	1.46	1.38
23	B	1009	CLA	C1D-CHD	2.62	1.46	1.38
25	e	6040	HEM	FE-NB	2.62	2.07	1.97
26	A	1043	PQ9	C11-C12	2.62	1.55	1.50
26	a	6043	PQ9	C3-C4	2.62	1.52	1.44
23	b	6009	CLA	C1D-CHD	2.61	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6022	CLA	C1D-CHD	2.61	1.46	1.38
25	v	6041	HEM	FE-NB	2.61	2.07	1.97
23	B	1014	CLA	C4B-CHC	2.60	1.47	1.39
23	d	6008	CLA	C1B-CHB	2.59	1.47	1.39
23	b	6018	CLA	C1B-CHB	2.59	1.47	1.39
23	c	6034	CLA	C1D-CHD	2.59	1.46	1.38
23	b	6014	CLA	C4B-CHC	2.59	1.47	1.39
23	c	6028	CLA	C1B-CHB	2.57	1.46	1.39
23	c	6034	CLA	C4B-CHC	2.57	1.46	1.39
23	c	6036	CLA	C1B-CHB	2.57	1.46	1.39
23	C	1035	CLA	C1B-CHB	2.57	1.46	1.39
23	c	6030	CLA	C1B-CHB	2.57	1.46	1.39
23	c	6035	CLA	C1B-CHB	2.57	1.46	1.39
23	D	1008	CLA	C1B-CHB	2.56	1.46	1.39
23	H	1017	CLA	C1B-CHB	2.56	1.46	1.39
23	C	1030	CLA	C1B-CHB	2.56	1.46	1.39
23	b	6016	CLA	C1B-CHB	2.56	1.46	1.39
24	A	1038	PHO	C3D-C2D	2.56	1.48	1.40
23	B	1018	CLA	C1B-CHB	2.56	1.46	1.39
23	c	6027	CLA	C1B-CHB	2.55	1.46	1.39
23	B	1009	CLA	C1B-CHB	2.55	1.46	1.39
23	C	1028	CLA	C1B-CHB	2.55	1.46	1.39
23	b	6017	CLA	C1B-CHB	2.55	1.46	1.39
23	b	6012	CLA	C1B-CHB	2.55	1.46	1.39
24	d	6038	PHO	C3D-C2D	2.55	1.48	1.40
23	C	1036	CLA	C1B-CHB	2.54	1.46	1.39
23	b	6009	CLA	C1B-CHB	2.54	1.46	1.39
23	d	6004	CLA	C1B-CHB	2.54	1.46	1.39
23	A	1006	CLA	C1B-CHB	2.54	1.46	1.39
23	B	1012	CLA	C1B-CHB	2.54	1.46	1.39
23	b	6011	CLA	C1B-CHB	2.54	1.46	1.39
23	C	1034	CLA	C1B-CHB	2.54	1.46	1.39
23	B	1016	CLA	C1B-CHB	2.54	1.46	1.39
23	B	1023	CLA	C1B-CHB	2.54	1.46	1.39
23	B	1021	CLA	C1B-CHB	2.53	1.46	1.39
23	C	1032	CLA	C1B-CHB	2.53	1.46	1.39
27	C	1054	BCR	C30-C25	-2.53	1.50	1.53
26	d	6042	PQ9	C40-C38	2.53	1.57	1.51
23	B	1015	CLA	C4B-CHC	2.53	1.46	1.39
23	D	1004	CLA	C1B-CHB	2.53	1.46	1.39
24	d	6038	PHO	O2A-CGA	-2.53	1.25	1.33
23	C	1031	CLA	C1B-CHB	2.53	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6020	CLA	C1B-CHB	2.52	1.46	1.39
23	a	6007	CLA	C1D-CHD	2.52	1.46	1.38
23	B	1011	CLA	C1B-CHB	2.52	1.46	1.39
23	B	1020	CLA	C1B-CHB	2.52	1.46	1.39
23	C	1025	CLA	C1B-CHB	2.52	1.46	1.39
23	C	1033	CLA	C1B-CHB	2.52	1.46	1.39
23	D	1005	CLA	C1B-CHB	2.52	1.46	1.39
23	b	6013	CLA	C1B-CHB	2.52	1.46	1.39
23	a	6006	CLA	C1B-CHB	2.52	1.46	1.39
23	b	6021	CLA	C1B-CHB	2.52	1.46	1.39
23	c	6031	CLA	C1B-CHB	2.52	1.46	1.39
23	B	1013	CLA	C1B-CHB	2.52	1.46	1.39
23	C	1037	CLA	C1B-CHB	2.51	1.46	1.39
23	c	6025	CLA	C1B-CHB	2.51	1.46	1.39
23	d	6005	CLA	C1B-CHB	2.51	1.46	1.39
23	c	6033	CLA	C1B-CHB	2.51	1.46	1.39
23	A	1007	CLA	C1D-CHD	2.51	1.46	1.38
27	c	6054	BCR	C30-C25	-2.51	1.50	1.53
23	c	6037	CLA	C1B-CHB	2.51	1.46	1.39
23	C	1029	CLA	C1D-CHD	2.51	1.46	1.38
23	B	1015	CLA	C1D-CHD	2.51	1.46	1.38
23	C	1027	CLA	C1B-CHB	2.51	1.46	1.39
23	b	6023	CLA	C1B-CHB	2.51	1.46	1.39
23	b	6022	CLA	C4A-NA	-2.50	1.33	1.39
24	A	1038	PHO	O2A-CGA	-2.50	1.25	1.33
23	b	6015	CLA	C4B-CHC	2.50	1.46	1.39
23	A	1003	CLA	C1B-CHB	2.50	1.46	1.39
23	B	1014	CLA	C3B-CAB	-2.50	1.47	1.49
24	d	6038	PHO	C4C-C3C	2.50	1.49	1.45
23	B	1022	CLA	C4A-NA	-2.50	1.33	1.39
23	c	6032	CLA	C1B-CHB	2.50	1.46	1.39
23	c	6026	CLA	C1D-CHD	2.50	1.46	1.38
23	C	1026	CLA	C1D-CHD	2.50	1.46	1.38
24	A	1038	PHO	C4C-C3C	2.49	1.49	1.45
23	b	6015	CLA	C1D-CHD	2.49	1.46	1.38
23	b	6014	CLA	C3B-CAB	-2.49	1.47	1.49
23	a	6003	CLA	C1B-CHB	2.49	1.46	1.39
23	c	6029	CLA	C1D-CHD	2.49	1.46	1.38
23	B	1009	CLA	C4B-CHC	2.49	1.46	1.39
26	D	1042	PQ9	C3-C4	2.48	1.52	1.44
23	B	1014	CLA	CHB-C4A	-2.48	1.30	1.36
23	b	6009	CLA	C4B-CHC	2.47	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	T	6046	BCR	C30-C25	-2.47	1.50	1.53
24	a	6039	PHO	C3D-C2D	2.46	1.47	1.40
23	b	6022	CLA	C3B-CAB	-2.46	1.47	1.49
23	b	6014	CLA	CHB-C4A	-2.46	1.30	1.36
26	a	6043	PQ9	C36-C37	-2.46	1.43	1.50
24	A	1039	PHO	C3D-C2D	2.45	1.47	1.40
26	d	6042	PQ9	C3-C4	2.45	1.52	1.44
23	b	6017	CLA	C1D-C2D	2.45	1.51	1.43
26	a	6043	PQ9	C29-C28	-2.44	1.44	1.50
23	c	6028	CLA	C1D-C2D	2.44	1.51	1.43
23	b	6015	CLA	MG-NA	-2.45	2.00	2.07
23	c	6031	CLA	C1D-C2D	2.44	1.51	1.43
23	c	6029	CLA	C1B-CHB	2.44	1.46	1.39
23	b	6010	CLA	C3B-C2B	2.44	1.45	1.41
23	B	1022	CLA	C4B-CHC	2.44	1.46	1.39
23	C	1029	CLA	C1B-CHB	2.44	1.46	1.39
23	B	1023	CLA	C1D-C2D	2.44	1.51	1.43
23	c	6036	CLA	C1D-C2D	2.44	1.51	1.43
23	C	1036	CLA	C1D-C2D	2.44	1.51	1.43
23	b	6022	CLA	C4B-CHC	2.43	1.46	1.39
23	d	6005	CLA	C1D-C2D	2.43	1.51	1.43
23	a	6003	CLA	C1D-C2D	2.43	1.51	1.43
24	a	6039	PHO	O2A-CGA	-2.43	1.25	1.33
24	A	1039	PHO	O2A-CGA	-2.43	1.25	1.33
23	b	6023	CLA	C1D-C2D	2.43	1.51	1.43
23	H	1017	CLA	C1D-C2D	2.43	1.51	1.43
26	D	1042	PQ9	C35-C33	2.43	1.57	1.51
23	B	1012	CLA	C1D-C2D	2.43	1.51	1.43
23	D	1005	CLA	C1D-C2D	2.43	1.51	1.43
23	b	6018	CLA	C1D-C2D	2.43	1.51	1.43
23	C	1035	CLA	C1D-C2D	2.43	1.51	1.43
23	c	6027	CLA	C1D-C2D	2.43	1.51	1.43
23	A	1003	CLA	C1D-C2D	2.43	1.51	1.43
23	B	1015	CLA	MG-NA	-2.43	2.00	2.07
23	C	1031	CLA	C1D-C2D	2.43	1.51	1.43
23	C	1028	CLA	C1D-C2D	2.43	1.51	1.43
23	b	6016	CLA	C1D-C2D	2.43	1.51	1.43
23	C	1033	CLA	C1D-C2D	2.42	1.51	1.43
23	C	1025	CLA	C1D-C2D	2.42	1.51	1.43
23	B	1010	CLA	C1A-NA	-2.42	1.26	1.32
23	B	1010	CLA	C3B-C2B	2.42	1.45	1.41
23	B	1020	CLA	C1D-C2D	2.42	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	6025	CLA	C1D-C2D	2.42	1.51	1.43
23	b	6012	CLA	C1D-C2D	2.42	1.51	1.43
23	B	1018	CLA	C1D-C2D	2.42	1.51	1.43
23	c	6033	CLA	C1D-C2D	2.42	1.51	1.43
23	B	1010	CLA	C2A-C1A	-2.42	1.47	1.52
23	D	1004	CLA	C1D-C2D	2.42	1.51	1.43
23	A	1006	CLA	C1D-C2D	2.42	1.51	1.43
23	C	1027	CLA	C1D-C2D	2.41	1.51	1.43
23	B	1016	CLA	C1D-C2D	2.41	1.51	1.43
23	b	6010	CLA	C1A-NA	-2.41	1.26	1.32
23	c	6035	CLA	C1D-C2D	2.41	1.51	1.43
23	C	1037	CLA	C1D-C2D	2.41	1.51	1.43
25	v	6041	HEM	C3D-C4D	2.41	1.45	1.44
23	B	1022	CLA	C1B-CHB	2.41	1.46	1.39
23	a	6006	CLA	C1D-C2D	2.41	1.51	1.43
23	d	6004	CLA	C1D-C2D	2.41	1.51	1.43
23	B	1013	CLA	C1D-C2D	2.41	1.51	1.43
23	b	6020	CLA	C1D-C2D	2.41	1.51	1.43
23	D	1008	CLA	C1D-C2D	2.40	1.51	1.43
23	b	6013	CLA	C1D-C2D	2.40	1.51	1.43
23	c	6030	CLA	C1D-C2D	2.40	1.51	1.43
23	d	6008	CLA	C1D-C2D	2.40	1.51	1.43
23	c	6037	CLA	C1D-C2D	2.40	1.51	1.43
23	B	1019	CLA	C1D-CHD	2.40	1.45	1.38
23	C	1030	CLA	C1D-C2D	2.40	1.51	1.43
23	b	6010	CLA	C2A-C1A	-2.40	1.48	1.52
25	e	6040	HEM	CMB-C2B	2.40	1.54	1.47
25	E	1040	HEM	CMC-C2C	2.40	1.54	1.47
23	b	6019	CLA	C2A-C1A	-2.40	1.48	1.52
23	b	6019	CLA	MG-NA	-2.40	2.00	2.07
23	B	1021	CLA	C1D-C2D	2.40	1.51	1.43
25	v	6041	HEM	CMC-C2C	2.39	1.54	1.47
25	V	1041	HEM	CMD-C2D	2.40	1.54	1.47
23	b	6019	CLA	C1D-CHD	2.40	1.45	1.38
25	e	6040	HEM	CMC-C2C	2.39	1.54	1.47
25	E	1040	HEM	CMD-C2D	2.39	1.54	1.47
23	B	1019	CLA	C2A-C1A	-2.39	1.48	1.52
23	B	1011	CLA	C1D-C2D	2.39	1.51	1.43
23	c	6034	CLA	C1B-CHB	2.39	1.46	1.39
25	v	6041	HEM	CMD-C2D	2.39	1.54	1.47
25	V	1041	HEM	CMB-C2B	2.39	1.54	1.47
25	E	1040	HEM	CMB-C2B	2.39	1.54	1.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	C	1034	CLA	C1D-C2D	2.39	1.51	1.43
23	C	1032	CLA	C1D-C2D	2.39	1.51	1.43
23	b	6022	CLA	C1B-CHB	2.39	1.46	1.39
27	d	6050	BCR	C30-C25	-2.39	1.50	1.53
23	B	1022	CLA	C3B-CAB	-2.38	1.47	1.49
25	V	1041	HEM	CMC-C2C	2.38	1.54	1.47
25	v	6041	HEM	CMB-C2B	2.38	1.54	1.47
23	b	6021	CLA	C1D-C2D	2.38	1.51	1.43
25	e	6040	HEM	CMD-C2D	2.38	1.54	1.47
23	b	6011	CLA	C1D-C2D	2.38	1.51	1.43
27	b	6048	BCR	C8-C7	-2.38	1.25	1.32
23	B	1019	CLA	MG-NA	-2.38	2.00	2.07
27	B	1048	BCR	C8-C7	-2.37	1.25	1.32
23	C	1026	CLA	C4A-NA	-2.37	1.34	1.39
23	B	1014	CLA	C1C-C2C	2.37	1.49	1.44
27	b	6045	BCR	C8-C7	-2.37	1.25	1.32
23	c	6032	CLA	C1D-C2D	2.36	1.51	1.43
27	b	6047	BCR	C8-C7	-2.36	1.25	1.32
27	Z	1053	BCR	C8-C7	-2.36	1.25	1.32
27	B	1047	BCR	C8-C7	-2.36	1.25	1.32
23	c	6026	CLA	C4A-NA	-2.36	1.34	1.39
23	c	6029	CLA	C4B-CHC	2.36	1.46	1.39
23	b	6014	CLA	C1C-C2C	2.36	1.49	1.44
23	C	1029	CLA	C4B-CHC	2.36	1.46	1.39
23	A	1007	CLA	MG-NA	-2.36	2.00	2.07
27	B	1045	BCR	C8-C7	-2.36	1.25	1.32
27	H	1049	BCR	C8-C7	-2.36	1.25	1.32
23	b	6019	CLA	C4A-NA	-2.36	1.34	1.39
27	z	6053	BCR	C8-C7	-2.36	1.25	1.32
23	B	1024	CLA	C3B-CAB	-2.35	1.47	1.49
27	K	1052	BCR	C8-C7	-2.35	1.25	1.32
23	B	1019	CLA	C4A-NA	-2.35	1.34	1.39
27	t	1046	BCR	C8-C7	-2.34	1.26	1.32
23	B	1022	CLA	C2A-C1A	-2.34	1.48	1.52
23	C	1029	CLA	C3D-C2D	2.34	1.47	1.40
27	h	6049	BCR	C8-C7	-2.34	1.26	1.32
23	a	6007	CLA	MG-NA	-2.34	2.00	2.07
23	b	6017	CLA	C3D-C2D	2.34	1.47	1.40
23	b	6022	CLA	C2A-C1A	-2.33	1.48	1.52
23	b	6010	CLA	C1D-C2D	2.33	1.51	1.43
23	B	1015	CLA	C1A-NA	-2.33	1.27	1.32
27	k	6052	BCR	C8-C7	-2.33	1.26	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	D	1050	BCR	C30-C25	-2.33	1.50	1.53
23	A	1007	CLA	C1B-CHB	2.32	1.46	1.39
23	B	1010	CLA	C1D-C2D	2.32	1.51	1.43
23	b	6024	CLA	C4B-CHC	2.32	1.46	1.39
23	c	6031	CLA	C3D-C2D	2.32	1.47	1.40
23	c	6037	CLA	C3D-C2D	2.32	1.47	1.40
23	B	1024	CLA	C4B-CHC	2.32	1.46	1.39
23	c	6033	CLA	C3D-C2D	2.32	1.47	1.40
23	C	1026	CLA	C1B-CHB	2.32	1.46	1.39
27	T	6046	BCR	C8-C7	-2.32	1.26	1.32
23	A	1003	CLA	C3D-C2D	2.32	1.47	1.40
23	B	1009	CLA	C4C-C3C	2.31	1.49	1.45
23	C	1031	CLA	C3D-C2D	2.31	1.47	1.40
23	b	6009	CLA	C4C-C3C	2.31	1.49	1.45
23	c	6026	CLA	C1B-CHB	2.31	1.46	1.39
23	b	6015	CLA	C1A-NA	-2.31	1.27	1.32
23	b	6012	CLA	C3D-C2D	2.31	1.47	1.40
23	c	6029	CLA	C3D-C2D	2.31	1.47	1.40
27	b	6048	BCR	C1-C6	-2.31	1.50	1.53
23	d	6008	CLA	C3D-C2D	2.30	1.47	1.40
23	b	6023	CLA	C3D-C2D	2.30	1.47	1.40
23	C	1037	CLA	C3D-C2D	2.30	1.47	1.40
23	b	6016	CLA	C3D-C2D	2.30	1.47	1.40
23	B	1016	CLA	C3D-C2D	2.30	1.47	1.40
23	B	1020	CLA	C3D-C2D	2.30	1.47	1.40
23	C	1034	CLA	C3D-C2D	2.30	1.47	1.40
23	a	6006	CLA	C3D-C2D	2.30	1.47	1.40
23	d	6004	CLA	C3D-C2D	2.30	1.47	1.40
23	H	1017	CLA	C3D-C2D	2.30	1.47	1.40
23	b	6018	CLA	C3D-C2D	2.30	1.47	1.40
23	A	1006	CLA	C3D-C2D	2.30	1.47	1.40
23	C	1033	CLA	C3D-C2D	2.30	1.47	1.40
23	b	6009	CLA	C1D-C2D	2.30	1.51	1.43
23	B	1019	CLA	C3D-C2D	2.30	1.47	1.40
23	B	1011	CLA	C3D-C2D	2.30	1.47	1.40
23	a	6007	CLA	C1B-CHB	2.30	1.46	1.39
23	C	1028	CLA	C3D-C2D	2.30	1.47	1.40
23	c	6030	CLA	C3D-C2D	2.30	1.47	1.40
23	c	6032	CLA	C3D-C2D	2.30	1.47	1.40
23	b	6020	CLA	C3D-C2D	2.29	1.47	1.40
23	c	6026	CLA	C3B-CAB	-2.29	1.47	1.49
23	C	1030	CLA	C3D-C2D	2.29	1.47	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	C	1054	BCR	C8-C7	-2.29	1.26	1.32
23	B	1018	CLA	C3D-C2D	2.29	1.47	1.40
23	a	6003	CLA	C3D-C2D	2.29	1.47	1.40
27	t	1046	BCR	C30-C25	-2.29	1.50	1.53
23	B	1023	CLA	C3D-C2D	2.29	1.47	1.40
23	D	1005	CLA	C3D-C2D	2.29	1.47	1.40
27	T	6046	BCR	C1-C6	-2.29	1.50	1.53
23	B	1021	CLA	C3D-C2D	2.29	1.47	1.40
23	C	1036	CLA	C3D-C2D	2.29	1.47	1.40
23	b	6021	CLA	C3D-C2D	2.28	1.47	1.40
23	B	1012	CLA	C3D-C2D	2.28	1.47	1.40
23	D	1008	CLA	C3D-C2D	2.28	1.47	1.40
26	d	6042	PQ9	C29-C28	-2.28	1.45	1.50
23	d	6005	CLA	C3D-C2D	2.28	1.47	1.40
23	C	1032	CLA	C3D-C2D	2.28	1.47	1.40
25	V	1041	HEM	C3D-C4D	2.28	1.45	1.44
23	D	1004	CLA	C3D-C2D	2.28	1.47	1.40
23	c	6028	CLA	C3D-C2D	2.28	1.47	1.40
23	b	6024	CLA	C3B-CAB	-2.28	1.47	1.49
23	C	1035	CLA	C3D-C2D	2.28	1.47	1.40
23	B	1009	CLA	C1D-C2D	2.27	1.51	1.43
23	c	6036	CLA	C3D-C2D	2.27	1.47	1.40
27	B	1048	BCR	C1-C6	-2.28	1.50	1.53
23	c	6025	CLA	C3D-C2D	2.27	1.47	1.40
23	C	1025	CLA	C3D-C2D	2.27	1.47	1.40
23	C	1029	CLA	C2A-C1A	-2.27	1.48	1.52
23	c	6035	CLA	C3D-C2D	2.27	1.47	1.40
23	b	6011	CLA	C3D-C2D	2.27	1.47	1.40
23	B	1009	CLA	C3D-C2D	2.27	1.47	1.40
23	a	6007	CLA	C3B-C2B	2.27	1.45	1.41
27	c	6054	BCR	C8-C7	-2.27	1.26	1.32
23	c	6027	CLA	C3D-C2D	2.27	1.47	1.40
23	b	6019	CLA	C3D-C2D	2.27	1.47	1.40
23	C	1027	CLA	C3D-C2D	2.27	1.47	1.40
23	B	1013	CLA	C3D-C2D	2.27	1.47	1.40
23	c	6029	CLA	C1A-NA	-2.26	1.27	1.32
23	b	6024	CLA	C1B-CHB	2.26	1.46	1.39
23	C	1029	CLA	C1A-NA	-2.26	1.27	1.32
23	b	6009	CLA	C3D-C2D	2.26	1.47	1.40
23	B	1010	CLA	C1B-CHB	2.26	1.46	1.39
23	b	6015	CLA	C3B-C2B	2.26	1.45	1.41
23	B	1015	CLA	C3B-C2B	2.26	1.45	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6010	CLA	C1B-CHB	2.26	1.46	1.39
23	C	1026	CLA	C3B-CAB	-2.25	1.47	1.49
23	b	6022	CLA	MG-NA	-2.24	2.00	2.07
23	B	1022	CLA	MG-NA	-2.24	2.00	2.07
23	B	1024	CLA	C1B-CHB	2.24	1.46	1.39
27	k	6051	BCR	C30-C25	-2.24	1.50	1.53
23	b	6013	CLA	C3D-C2D	2.24	1.47	1.40
23	A	1007	CLA	C3B-C2B	2.24	1.45	1.41
23	c	6029	CLA	MG-NA	-2.24	2.00	2.07
27	k	6051	BCR	C8-C7	-2.23	1.26	1.32
23	c	6029	CLA	C2A-C1A	-2.23	1.48	1.52
23	b	6014	CLA	MG-NA	-2.23	2.00	2.07
27	K	1051	BCR	C30-C25	-2.23	1.50	1.53
23	c	6034	CLA	C1D-C2D	2.22	1.50	1.43
23	C	1029	CLA	MG-NA	-2.22	2.00	2.07
23	c	6026	CLA	C3D-C2D	2.22	1.47	1.40
23	B	1014	CLA	MG-NA	-2.22	2.00	2.07
27	K	1051	BCR	C8-C7	-2.22	1.26	1.32
23	a	6003	CLA	C4C-C3C	2.22	1.49	1.45
25	e	6040	HEM	C2D-C1D	2.21	1.45	1.44
23	C	1026	CLA	C3D-C2D	2.21	1.47	1.40
23	c	6026	CLA	MG-NA	-2.21	2.00	2.07
23	b	6017	CLA	C4C-C3C	2.20	1.49	1.45
23	c	6034	CLA	C4A-NA	-2.20	1.34	1.39
25	E	1040	HEM	C2D-C1D	2.20	1.45	1.44
23	c	6027	CLA	C4C-C3C	2.20	1.49	1.45
23	c	6034	CLA	MG-NA	-2.19	2.00	2.07
23	b	6019	CLA	C4B-CHC	2.19	1.45	1.39
24	a	6039	PHO	C1C-C2C	2.19	1.50	1.45
23	C	1026	CLA	MG-NA	-2.19	2.00	2.07
23	b	6022	CLA	C1D-C2D	2.18	1.50	1.43
23	C	1027	CLA	C4C-C3C	2.18	1.49	1.45
23	B	1019	CLA	C4B-CHC	2.18	1.45	1.39
24	d	6038	PHO	C1C-C2C	2.18	1.50	1.45
24	A	1038	PHO	C1C-C2C	2.18	1.50	1.45
27	a	6044	BCR	C30-C25	-2.18	1.50	1.53
23	d	6005	CLA	C4C-C3C	2.17	1.49	1.45
24	A	1039	PHO	C1C-C2C	2.17	1.50	1.45
23	b	6016	CLA	C4C-C3C	2.17	1.49	1.45
23	C	1037	CLA	C4C-C3C	2.17	1.49	1.45
23	B	1021	CLA	C4C-C3C	2.17	1.49	1.45
23	B	1022	CLA	C1D-C2D	2.17	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	a	6006	CLA	C4C-C3C	2.17	1.49	1.45
23	B	1012	CLA	C4C-C3C	2.17	1.49	1.45
23	H	1017	CLA	C4C-C3C	2.17	1.49	1.45
23	c	6025	CLA	C4C-C3C	2.16	1.49	1.45
23	A	1003	CLA	C4C-C3C	2.16	1.49	1.45
23	c	6030	CLA	C4C-C3C	2.16	1.49	1.45
23	A	1007	CLA	C2A-C1A	-2.16	1.48	1.52
23	B	1016	CLA	C4C-C3C	2.16	1.49	1.45
23	B	1011	CLA	C4C-C3C	2.16	1.49	1.45
23	D	1005	CLA	C4C-C3C	2.16	1.49	1.45
23	C	1030	CLA	C4C-C3C	2.16	1.49	1.45
23	c	6037	CLA	C4C-C3C	2.16	1.49	1.45
23	A	1006	CLA	C4C-C3C	2.16	1.49	1.45
23	C	1025	CLA	C4C-C3C	2.16	1.49	1.45
23	c	6032	CLA	C4C-C3C	2.16	1.49	1.45
23	C	1028	CLA	C4C-C3C	2.15	1.49	1.45
23	C	1034	CLA	C4C-C3C	2.15	1.49	1.45
23	b	6013	CLA	C4C-C3C	2.15	1.49	1.45
23	C	1036	CLA	C4C-C3C	2.15	1.49	1.45
26	a	6043	PQ9	C5-C4	2.15	1.52	1.48
23	b	6024	CLA	C3B-C2B	2.15	1.45	1.41
23	C	1035	CLA	C4C-C3C	2.15	1.49	1.45
25	e	6040	HEM	FE-NC	2.14	2.05	1.97
23	B	1013	CLA	C4C-C3C	2.15	1.49	1.45
26	a	6043	PQ9	C26-C27	-2.14	1.44	1.50
23	b	6014	CLA	C1D-C2D	2.14	1.50	1.43
23	b	6011	CLA	C4C-C3C	2.14	1.49	1.45
23	B	1014	CLA	C1D-C2D	2.14	1.50	1.43
23	B	1015	CLA	C1B-CHB	2.14	1.45	1.39
23	b	6012	CLA	C4C-C3C	2.14	1.49	1.45
23	a	6007	CLA	C2A-C1A	-2.14	1.48	1.52
25	v	6041	HEM	FE-NC	2.14	2.05	1.97
23	b	6021	CLA	C4C-C3C	2.14	1.49	1.45
23	B	1020	CLA	C4C-C3C	2.14	1.49	1.45
23	c	6025	CLA	C1C-C2C	2.14	1.49	1.44
26	a	6043	PQ9	C20-C18	2.13	1.56	1.51
23	A	1007	CLA	C4B-CHC	2.14	1.45	1.39
25	V	1041	HEM	FE-NC	2.13	2.05	1.97
23	c	6028	CLA	C4C-C3C	2.13	1.49	1.45
23	b	6020	CLA	C4C-C3C	2.13	1.49	1.45
23	B	1018	CLA	C4C-C3C	2.13	1.49	1.45
23	B	1015	CLA	C1D-C2D	2.13	1.50	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	6035	CLA	C4C-C3C	2.13	1.49	1.45
23	b	6015	CLA	C1B-CHB	2.13	1.45	1.39
23	C	1032	CLA	C4C-C3C	2.13	1.49	1.45
23	A	1007	CLA	C3B-CAB	-2.13	1.47	1.49
23	C	1026	CLA	C4B-CHC	2.13	1.45	1.39
23	d	6004	CLA	C4C-C3C	2.13	1.49	1.45
23	C	1025	CLA	C1C-C2C	2.13	1.48	1.44
23	D	1004	CLA	C4C-C3C	2.13	1.49	1.45
23	B	1024	CLA	C3B-C2B	2.13	1.45	1.41
23	b	6015	CLA	C1D-C2D	2.13	1.50	1.43
23	b	6023	CLA	C4C-C3C	2.13	1.49	1.45
27	A	1044	BCR	C30-C25	-2.13	1.50	1.53
23	b	6018	CLA	C4C-C3C	2.12	1.48	1.45
23	D	1008	CLA	C4C-C3C	2.12	1.48	1.45
23	C	1031	CLA	C4C-C3C	2.12	1.48	1.45
23	C	1033	CLA	C1C-C2C	2.12	1.48	1.44
23	c	6033	CLA	C1C-C2C	2.12	1.48	1.44
23	B	1023	CLA	C4C-C3C	2.12	1.48	1.45
23	b	6013	CLA	C1C-C2C	2.12	1.48	1.44
23	b	6019	CLA	C3B-CAB	-2.12	1.47	1.49
23	a	6003	CLA	C1C-C2C	2.12	1.48	1.44
23	C	1032	CLA	C1C-C2C	2.12	1.48	1.44
23	A	1003	CLA	C1C-C2C	2.12	1.48	1.44
25	E	1040	HEM	FE-NC	2.12	2.05	1.97
23	a	6007	CLA	C4B-CHC	2.11	1.45	1.39
23	d	6008	CLA	C1C-C2C	2.11	1.48	1.44
23	c	6036	CLA	C4C-C3C	2.11	1.48	1.45
23	B	1012	CLA	C1C-C2C	2.11	1.48	1.44
23	B	1013	CLA	C1C-C2C	2.11	1.48	1.44
23	c	6026	CLA	C4B-CHC	2.11	1.45	1.39
23	b	6020	CLA	C1C-C2C	2.11	1.48	1.44
23	c	6036	CLA	C1C-C2C	2.11	1.48	1.44
27	A	1044	BCR	C8-C7	-2.11	1.26	1.32
23	C	1028	CLA	C1C-C2C	2.11	1.48	1.44
23	D	1008	CLA	C1C-C2C	2.11	1.48	1.44
23	d	6005	CLA	C1C-C2C	2.11	1.48	1.44
23	C	1033	CLA	C4C-C3C	2.11	1.48	1.45
23	b	6023	CLA	C1C-C2C	2.11	1.48	1.44
23	a	6006	CLA	C1C-C2C	2.11	1.48	1.44
23	C	1036	CLA	C1C-C2C	2.11	1.48	1.44
23	c	6035	CLA	C1C-C2C	2.11	1.48	1.44
23	B	1010	CLA	C4B-CHC	2.10	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	b	6021	CLA	C1C-C2C	2.11	1.48	1.44
23	c	6033	CLA	C4C-C3C	2.10	1.48	1.45
24	A	1039	PHO	C1C-NC	-2.10	1.33	1.38
23	d	6008	CLA	C4C-C3C	2.10	1.48	1.45
23	C	1027	CLA	C1C-C2C	2.10	1.48	1.44
23	b	6010	CLA	C4B-CHC	2.10	1.45	1.39
24	a	6039	PHO	C1C-NC	-2.10	1.33	1.38
23	c	6027	CLA	C1C-C2C	2.10	1.48	1.44
27	d	6050	BCR	C8-C7	-2.10	1.26	1.32
23	B	1020	CLA	C1C-C2C	2.10	1.48	1.44
23	D	1005	CLA	C1C-C2C	2.10	1.48	1.44
23	B	1021	CLA	C1C-C2C	2.10	1.48	1.44
27	B	1048	BCR	C30-C25	-2.10	1.50	1.53
23	c	6031	CLA	C4C-C3C	2.10	1.48	1.45
27	D	1050	BCR	C8-C7	-2.10	1.26	1.32
23	C	1031	CLA	C1C-C2C	2.09	1.48	1.44
23	B	1015	CLA	CHB-C4A	-2.09	1.31	1.36
23	a	6007	CLA	C3B-CAB	-2.09	1.47	1.49
23	b	6009	CLA	C4A-NA	-2.09	1.34	1.39
27	C	1054	BCR	C1-C6	-2.09	1.50	1.53
23	c	6028	CLA	C1C-C2C	2.09	1.48	1.44
23	c	6034	CLA	C3D-C2D	2.09	1.46	1.40
27	a	6044	BCR	C8-C7	-2.09	1.26	1.32
23	c	6030	CLA	C1C-C2C	2.09	1.48	1.44
23	b	6012	CLA	C1C-C2C	2.09	1.48	1.44
23	B	1009	CLA	C4A-NA	-2.09	1.34	1.39
23	c	6037	CLA	C1C-C2C	2.09	1.48	1.44
23	B	1023	CLA	C1C-C2C	2.09	1.48	1.44
23	b	6016	CLA	C1C-C2C	2.09	1.48	1.44
23	B	1016	CLA	C1C-C2C	2.09	1.48	1.44
23	C	1035	CLA	C1C-C2C	2.08	1.48	1.44
23	C	1037	CLA	C1C-C2C	2.08	1.48	1.44
23	B	1022	CLA	C1A-NA	-2.08	1.27	1.32
23	d	6004	CLA	C1C-C2C	2.08	1.48	1.44
23	c	6032	CLA	C1C-C2C	2.08	1.48	1.44
23	b	6024	CLA	MG-NA	-2.08	2.01	2.07
23	b	6018	CLA	C1C-C2C	2.08	1.48	1.44
23	C	1034	CLA	C1C-C2C	2.08	1.48	1.44
23	B	1024	CLA	MG-NA	-2.07	2.01	2.07
23	B	1018	CLA	C1C-C2C	2.07	1.48	1.44
23	b	6017	CLA	C1C-C2C	2.07	1.48	1.44
23	A	1006	CLA	C1C-C2C	2.07	1.48	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	D	1004	CLA	C1C-C2C	2.07	1.48	1.44
23	c	6031	CLA	C1C-C2C	2.07	1.48	1.44
23	C	1030	CLA	C1C-C2C	2.07	1.48	1.44
23	B	1011	CLA	C1C-C2C	2.07	1.48	1.44
23	H	1017	CLA	C1C-C2C	2.07	1.48	1.44
23	B	1019	CLA	C3B-CAB	-2.06	1.47	1.49
23	b	6022	CLA	C1A-NA	-2.06	1.27	1.32
27	b	6048	BCR	C30-C25	-2.06	1.50	1.53
23	b	6015	CLA	CHB-C4A	-2.06	1.31	1.36
23	b	6011	CLA	C1C-C2C	2.05	1.48	1.44
23	c	6029	CLA	C1D-C2D	2.05	1.50	1.43
26	d	6042	PQ9	C36-C37	-2.04	1.44	1.50
27	c	6054	BCR	C1-C6	-2.04	1.50	1.53
23	C	1029	CLA	C1D-C2D	2.04	1.50	1.43
23	a	6007	CLA	C1D-C2D	2.03	1.50	1.43
25	e	6040	HEM	C3D-C4D	2.03	1.45	1.44
26	a	6043	PQ9	C40-C38	2.02	1.56	1.51
23	b	6024	CLA	C1D-C2D	2.02	1.50	1.43
23	A	1007	CLA	C1D-C2D	2.02	1.50	1.43
23	c	6029	CLA	C3B-C2B	2.02	1.44	1.41
26	D	1042	PQ9	C11-C12	2.02	1.54	1.50
23	B	1024	CLA	C1D-C2D	2.02	1.50	1.43
23	B	1009	CLA	C1C-C2C	2.00	1.48	1.44
23	C	1026	CLA	C1D-C2D	2.00	1.50	1.43

All (3181) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B	1047	BCR	C7-C8-C9	34.32	177.56	126.22
27	b	6047	BCR	C7-C8-C9	34.28	177.50	126.22
27	C	1054	BCR	C7-C8-C9	27.78	167.78	126.22
27	c	6054	BCR	C7-C8-C9	27.76	167.74	126.22
26	d	6042	PQ9	C29-C28-C30	-27.05	74.25	115.39
27	T	6046	BCR	C7-C8-C9	26.91	166.48	126.22
26	D	1042	PQ9	C29-C28-C30	-26.46	75.15	115.39
27	B	1045	BCR	C15-C16-C17	24.54	177.66	123.36
27	b	6045	BCR	C15-C16-C17	24.52	177.62	123.36
26	a	6043	PQ9	C29-C28-C30	-24.09	78.75	115.39
26	A	1043	PQ9	C30-C28-C27	23.95	167.18	121.08
27	H	1049	BCR	C15-C16-C17	23.63	175.65	123.36
27	h	6049	BCR	C15-C16-C17	23.62	175.64	123.36
27	a	6044	BCR	C15-C16-C17	23.28	174.89	123.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	A	1044	BCR	C15-C16-C17	23.27	174.86	123.36
27	z	6053	BCR	C15-C16-C17	23.21	174.73	123.36
27	Z	1053	BCR	C15-C16-C17	23.21	174.73	123.36
27	K	1051	BCR	C15-C16-C17	23.02	174.31	123.36
27	k	6051	BCR	C15-C16-C17	22.99	174.25	123.36
26	A	1043	PQ9	C29-C28-C30	-22.99	80.43	115.39
27	b	6047	BCR	C15-C16-C17	22.91	174.06	123.36
27	B	1047	BCR	C15-C16-C17	22.91	174.06	123.36
27	C	1054	BCR	C15-C16-C17	22.83	173.88	123.36
27	c	6054	BCR	C15-C16-C17	22.81	173.83	123.36
27	H	1049	BCR	C16-C15-C14	22.78	173.78	123.36
27	h	6049	BCR	C16-C15-C14	22.77	173.75	123.36
27	b	6048	BCR	C15-C16-C17	22.55	173.27	123.36
27	B	1048	BCR	C15-C16-C17	22.54	173.25	123.36
27	t	1046	BCR	C7-C8-C9	22.14	159.34	126.22
26	a	6043	PQ9	C30-C28-C27	21.77	162.97	121.08
27	B	1048	BCR	C16-C17-C18	21.51	158.28	127.29
27	b	6048	BCR	C16-C17-C18	21.50	158.27	127.29
27	B	1045	BCR	C7-C8-C9	21.38	158.19	126.22
27	b	6045	BCR	C7-C8-C9	21.37	158.19	126.22
27	D	1050	BCR	C15-C16-C17	21.23	170.35	123.36
27	d	6050	BCR	C15-C16-C17	21.22	170.33	123.36
27	T	6046	BCR	C15-C16-C17	20.81	169.41	123.36
27	t	1046	BCR	C16-C17-C18	20.26	156.49	127.29
26	d	6042	PQ9	C29-C28-C27	-19.98	83.94	123.52
26	D	1042	PQ9	C29-C28-C27	-19.89	84.13	123.52
27	C	1054	BCR	C20-C21-C22	19.84	155.89	127.29
27	c	6054	BCR	C20-C21-C22	19.83	155.86	127.29
26	D	1042	PQ9	C30-C28-C27	19.81	159.20	121.08
26	a	6043	PQ9	C29-C28-C27	-19.79	84.33	123.52
27	K	1052	BCR	C15-C16-C17	19.70	166.95	123.36
26	d	6042	PQ9	C30-C28-C27	19.24	158.12	121.08
27	B	1048	BCR	C7-C8-C9	19.08	154.76	126.22
27	b	6048	BCR	C7-C8-C9	19.06	154.73	126.22
27	T	6046	BCR	C20-C21-C22	19.05	154.74	127.29
27	K	1051	BCR	C16-C17-C18	18.97	154.63	127.29
27	k	6051	BCR	C16-C17-C18	18.94	154.59	127.29
26	A	1043	PQ9	C29-C28-C27	-18.53	86.83	123.52
27	K	1052	BCR	C7-C8-C9	18.15	153.37	126.22
27	k	6052	BCR	C7-C8-C9	17.76	152.79	126.22
27	T	6046	BCR	C16-C15-C14	17.03	161.05	123.36
27	K	1051	BCR	C7-C8-C9	16.83	151.39	126.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	T	6046	BCR	C21-C20-C19	16.82	180.00	123.24
27	k	6051	BCR	C7-C8-C9	16.82	151.38	126.22
27	b	6045	BCR	C21-C20-C19	16.14	177.72	123.24
27	B	1045	BCR	C21-C20-C19	16.14	177.71	123.24
27	T	6046	BCR	C11-C12-C13	16.11	172.38	126.38
27	t	1046	BCR	C15-C16-C17	16.07	158.92	123.36
27	k	6051	BCR	C21-C20-C19	16.04	177.37	123.24
27	d	6050	BCR	C11-C12-C13	16.04	172.17	126.38
27	D	1050	BCR	C11-C12-C13	16.04	172.16	126.38
27	K	1051	BCR	C21-C20-C19	16.03	177.34	123.24
27	b	6047	BCR	C21-C20-C19	15.82	176.64	123.24
27	B	1047	BCR	C21-C20-C19	15.81	176.59	123.24
27	z	6053	BCR	C40-C30-C25	-15.57	84.54	110.33
27	Z	1053	BCR	C40-C30-C25	-15.57	84.55	110.33
27	A	1044	BCR	C16-C15-C14	15.53	157.72	123.36
27	a	6044	BCR	C16-C15-C14	15.51	157.68	123.36
27	A	1044	BCR	C16-C17-C18	15.24	149.25	127.29
27	a	6044	BCR	C16-C17-C18	15.22	149.22	127.29
27	D	1050	BCR	C16-C15-C14	15.22	157.04	123.36
27	d	6050	BCR	C16-C15-C14	15.21	157.02	123.36
27	B	1048	BCR	C21-C20-C19	15.12	174.27	123.24
27	b	6048	BCR	C21-C20-C19	15.12	174.25	123.24
27	k	6052	BCR	C16-C17-C18	14.84	148.68	127.29
27	t	1046	BCR	C16-C15-C14	14.59	155.64	123.36
27	z	6053	BCR	C16-C15-C14	14.57	155.61	123.36
27	Z	1053	BCR	C16-C15-C14	14.57	155.60	123.36
27	k	6052	BCR	C15-C16-C17	14.35	155.12	123.36
27	t	1046	BCR	C11-C12-C13	14.30	167.21	126.38
27	a	6044	BCR	C20-C21-C22	14.14	147.67	127.29
27	A	1044	BCR	C20-C21-C22	14.10	147.61	127.29
27	K	1052	BCR	C16-C17-C18	13.95	147.39	127.29
27	c	6054	BCR	C21-C20-C19	13.86	170.00	123.24
27	C	1054	BCR	C21-C20-C19	13.85	169.99	123.24
27	z	6053	BCR	C21-C20-C19	13.85	169.99	123.24
27	Z	1053	BCR	C21-C20-C19	13.83	169.91	123.24
27	k	6051	BCR	C16-C15-C14	13.76	153.81	123.36
27	K	1051	BCR	C16-C15-C14	13.75	153.79	123.36
27	A	1044	BCR	C21-C20-C19	13.69	169.44	123.24
27	a	6044	BCR	C21-C20-C19	13.68	169.41	123.24
27	d	6050	BCR	C20-C21-C22	13.64	146.95	127.29
27	D	1050	BCR	C20-C21-C22	13.61	146.91	127.29
24	A	1038	PHO	CAC-C3C-C4C	-13.23	108.98	125.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	d	6038	PHO	CAC-C3C-C4C	-13.23	108.99	125.17
27	d	6050	BCR	C21-C20-C19	13.19	167.76	123.24
27	D	1050	BCR	C21-C20-C19	13.19	167.76	123.24
24	A	1039	PHO	CAC-C3C-C4C	-12.82	109.48	125.17
24	a	6039	PHO	CAC-C3C-C4C	-12.82	109.49	125.17
27	Z	1053	BCR	C10-C11-C12	12.78	166.38	123.24
27	z	6053	BCR	C10-C11-C12	12.77	166.35	123.24
27	b	6045	BCR	C16-C15-C14	12.61	151.27	123.36
27	B	1045	BCR	C16-C15-C14	12.60	151.25	123.36
23	B	1014	CLA	C3B-C2B-C1B	-12.57	99.65	107.00
23	b	6014	CLA	C3B-C2B-C1B	-12.52	99.67	107.00
27	t	1046	BCR	C21-C20-C19	12.48	165.34	123.24
27	K	1051	BCR	C20-C21-C22	12.43	145.21	127.29
27	k	6051	BCR	C20-C21-C22	12.42	145.19	127.29
27	T	6046	BCR	C16-C17-C18	11.93	144.49	127.29
27	H	1049	BCR	C11-C12-C13	11.76	159.96	126.38
27	h	6049	BCR	C11-C12-C13	11.74	159.91	126.38
27	b	6045	BCR	C16-C17-C18	11.66	144.09	127.29
27	B	1045	BCR	C16-C17-C18	11.66	144.09	127.29
27	H	1049	BCR	C7-C8-C9	11.60	143.58	126.22
27	h	6049	BCR	C7-C8-C9	11.60	143.57	126.22
23	b	6024	CLA	C3B-C2B-C1B	-11.58	100.22	107.00
27	k	6052	BCR	C20-C21-C22	11.54	143.92	127.29
23	B	1024	CLA	C3B-C2B-C1B	-11.54	100.25	107.00
23	B	1009	CLA	C3B-C2B-C1B	-11.52	100.26	107.00
23	b	6009	CLA	C3B-C2B-C1B	-11.48	100.28	107.00
27	b	6045	BCR	C20-C21-C22	11.47	143.82	127.29
27	B	1045	BCR	C20-C21-C22	11.46	143.81	127.29
23	B	1019	CLA	C3B-C2B-C1B	-11.45	100.30	107.00
23	b	6019	CLA	C3B-C2B-C1B	-11.45	100.30	107.00
23	B	1015	CLA	C3B-C2B-C1B	-11.43	100.31	107.00
23	b	6015	CLA	C3B-C2B-C1B	-11.40	100.33	107.00
27	z	6053	BCR	C20-C19-C18	11.35	158.80	126.38
27	Z	1053	BCR	C20-C19-C18	11.35	158.78	126.38
23	c	6034	CLA	C3B-C2B-C1B	-11.33	100.37	107.00
23	c	6036	CLA	C3B-C2B-C1B	-11.33	100.37	107.00
27	b	6047	BCR	C20-C19-C18	11.32	158.69	126.38
27	B	1047	BCR	C20-C19-C18	11.30	158.65	126.38
23	C	1036	CLA	C3B-C2B-C1B	-11.26	100.41	107.00
23	c	6031	CLA	C3B-C2B-C1B	-11.25	100.41	107.00
23	B	1022	CLA	C3B-C2B-C1B	-11.25	100.42	107.00
23	b	6018	CLA	C3B-C2B-C1B	-11.25	100.42	107.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	1006	CLA	C3B-C2B-C1B	-11.23	100.43	107.00
23	C	1031	CLA	C3B-C2B-C1B	-11.23	100.43	107.00
23	H	1017	CLA	C3B-C2B-C1B	-11.23	100.43	107.00
23	B	1023	CLA	C3B-C2B-C1B	-11.23	100.43	107.00
23	c	6037	CLA	C3B-C2B-C1B	-11.23	100.43	107.00
27	K	1052	BCR	C20-C21-C22	11.23	143.47	127.29
23	c	6027	CLA	C3B-C2B-C1B	-11.22	100.43	107.00
23	b	6023	CLA	C3B-C2B-C1B	-11.22	100.43	107.00
23	b	6022	CLA	C3B-C2B-C1B	-11.22	100.43	107.00
23	B	1013	CLA	C3B-C2B-C1B	-11.20	100.44	107.00
23	c	6029	CLA	C3B-C2B-C1B	-11.20	100.44	107.00
23	B	1018	CLA	C3B-C2B-C1B	-11.20	100.44	107.00
23	C	1029	CLA	C3B-C2B-C1B	-11.20	100.44	107.00
23	b	6013	CLA	C3B-C2B-C1B	-11.20	100.44	107.00
23	d	6004	CLA	C3B-C2B-C1B	-11.20	100.44	107.00
23	b	6017	CLA	C3B-C2B-C1B	-11.20	100.45	107.00
23	a	6003	CLA	C3B-C2B-C1B	-11.20	100.45	107.00
23	B	1021	CLA	C3B-C2B-C1B	-11.20	100.45	107.00
23	d	6005	CLA	C3B-C2B-C1B	-11.19	100.45	107.00
23	C	1034	CLA	C3B-C2B-C1B	-11.19	100.45	107.00
23	C	1037	CLA	C3B-C2B-C1B	-11.19	100.45	107.00
23	A	1003	CLA	C3B-C2B-C1B	-11.19	100.45	107.00
23	C	1032	CLA	C3B-C2B-C1B	-11.19	100.45	107.00
23	C	1028	CLA	C3B-C2B-C1B	-11.18	100.45	107.00
23	D	1008	CLA	C3B-C2B-C1B	-11.18	100.45	107.00
23	b	6020	CLA	C3B-C2B-C1B	-11.18	100.45	107.00
27	D	1050	BCR	C10-C11-C12	11.18	160.98	123.24
23	D	1004	CLA	C3B-C2B-C1B	-11.18	100.45	107.00
23	b	6021	CLA	C3B-C2B-C1B	-11.18	100.46	107.00
23	B	1011	CLA	C3B-C2B-C1B	-11.18	100.46	107.00
23	c	6033	CLA	C3B-C2B-C1B	-11.17	100.46	107.00
27	d	6050	BCR	C10-C11-C12	11.17	160.94	123.24
23	b	6012	CLA	C3B-C2B-C1B	-11.17	100.46	107.00
23	c	6028	CLA	C3B-C2B-C1B	-11.17	100.46	107.00
23	B	1020	CLA	C3B-C2B-C1B	-11.16	100.47	107.00
23	D	1005	CLA	C3B-C2B-C1B	-11.16	100.47	107.00
23	C	1033	CLA	C3B-C2B-C1B	-11.16	100.47	107.00
23	C	1035	CLA	C3B-C2B-C1B	-11.16	100.47	107.00
23	c	6032	CLA	C3B-C2B-C1B	-11.15	100.47	107.00
23	B	1012	CLA	C3B-C2B-C1B	-11.15	100.47	107.00
23	C	1027	CLA	C3B-C2B-C1B	-11.15	100.48	107.00
23	a	6006	CLA	C3B-C2B-C1B	-11.15	100.48	107.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	6030	CLA	C3B-C2B-C1B	-11.14	100.48	107.00
23	B	1016	CLA	C3B-C2B-C1B	-11.14	100.48	107.00
23	d	6008	CLA	C3B-C2B-C1B	-11.13	100.48	107.00
23	c	6035	CLA	C3B-C2B-C1B	-11.13	100.49	107.00
23	b	6011	CLA	C3B-C2B-C1B	-11.12	100.49	107.00
23	b	6016	CLA	C3B-C2B-C1B	-11.12	100.49	107.00
23	C	1030	CLA	C3B-C2B-C1B	-11.11	100.50	107.00
23	b	6010	CLA	C3B-C2B-C1B	-11.11	100.50	107.00
23	c	6025	CLA	C3B-C2B-C1B	-11.10	100.50	107.00
23	C	1025	CLA	C3B-C2B-C1B	-11.10	100.50	107.00
27	t	1046	BCR	C20-C21-C22	11.05	143.22	127.29
23	b	6014	CLA	C2B-C1B-NB	11.04	117.75	109.41
23	B	1014	CLA	C2B-C1B-NB	11.04	117.75	109.41
23	B	1010	CLA	C3B-C2B-C1B	-11.03	100.55	107.00
27	A	1044	BCR	C11-C12-C13	11.01	157.82	126.38
27	a	6044	BCR	C11-C12-C13	11.00	157.80	126.38
27	D	1050	BCR	C20-C19-C18	10.91	157.53	126.38
27	d	6050	BCR	C20-C19-C18	10.91	157.53	126.38
23	C	1026	CLA	C3B-C2B-C1B	-10.86	100.64	107.00
23	c	6026	CLA	C3B-C2B-C1B	-10.80	100.68	107.00
23	B	1015	CLA	C2B-C1B-NB	10.75	117.53	109.41
24	a	6039	PHO	CMD-C2D-C3D	-10.74	108.04	124.97
24	A	1039	PHO	CMD-C2D-C3D	-10.75	108.04	124.97
24	d	6038	PHO	CMD-C2D-C3D	-10.73	108.06	124.97
24	A	1038	PHO	CMD-C2D-C3D	-10.72	108.07	124.97
23	b	6015	CLA	C2B-C1B-NB	10.72	117.50	109.41
23	a	6007	CLA	C3B-C2B-C1B	-10.68	100.75	107.00
23	A	1007	CLA	C3B-C2B-C1B	-10.64	100.77	107.00
27	B	1047	BCR	C20-C21-C22	10.07	141.80	127.29
27	b	6047	BCR	C20-C21-C22	10.06	141.78	127.29
27	Z	1053	BCR	C16-C17-C18	10.02	141.73	127.29
23	c	6029	CLA	C2B-C1B-NB	10.02	116.97	109.41
23	b	6024	CLA	C2B-C1B-NB	10.00	116.96	109.41
27	k	6052	BCR	C16-C15-C14	10.00	145.48	123.36
27	z	6053	BCR	C16-C17-C18	9.99	141.68	127.29
27	h	6049	BCR	C16-C17-C18	9.98	141.68	127.29
27	h	6049	BCR	C20-C21-C22	9.98	141.67	127.29
23	B	1024	CLA	C2B-C1B-NB	9.98	116.94	109.41
27	Z	1053	BCR	C20-C21-C22	9.97	141.66	127.29
27	H	1049	BCR	C20-C21-C22	9.96	141.65	127.29
27	H	1049	BCR	C16-C17-C18	9.96	141.64	127.29
23	C	1029	CLA	C2B-C1B-NB	9.96	116.93	109.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B	1047	BCR	C16-C15-C14	9.96	145.40	123.36
27	b	6047	BCR	C16-C15-C14	9.95	145.39	123.36
27	K	1052	BCR	C21-C20-C19	9.95	156.80	123.24
23	c	6036	CLA	C2B-C1B-NB	9.94	116.92	109.41
23	c	6037	CLA	C2B-C1B-NB	9.92	116.90	109.41
27	z	6053	BCR	C20-C21-C22	9.91	141.56	127.29
27	Z	1053	BCR	C11-C12-C13	9.90	154.64	126.38
23	C	1034	CLA	C2B-C1B-NB	9.90	116.89	109.41
27	z	6053	BCR	C11-C12-C13	9.89	154.63	126.38
23	b	6020	CLA	C2B-C1B-NB	9.89	116.88	109.41
23	b	6018	CLA	C2B-C1B-NB	9.88	116.87	109.41
23	D	1008	CLA	C2B-C1B-NB	9.88	116.87	109.41
23	A	1006	CLA	C2B-C1B-NB	9.88	116.87	109.41
23	C	1031	CLA	C2B-C1B-NB	9.88	116.87	109.41
23	C	1037	CLA	C2B-C1B-NB	9.87	116.87	109.41
23	c	6027	CLA	C2B-C1B-NB	9.87	116.86	109.41
23	C	1036	CLA	C2B-C1B-NB	9.87	116.86	109.41
23	H	1017	CLA	C2B-C1B-NB	9.87	116.86	109.41
23	c	6028	CLA	C2B-C1B-NB	9.87	116.86	109.41
23	C	1030	CLA	C2B-C1B-NB	9.87	116.86	109.41
23	b	6012	CLA	C2B-C1B-NB	9.86	116.86	109.41
23	d	6008	CLA	C2B-C1B-NB	9.86	116.86	109.41
23	c	6030	CLA	C2B-C1B-NB	9.86	116.86	109.41
23	B	1023	CLA	C2B-C1B-NB	9.86	116.86	109.41
23	C	1035	CLA	C2B-C1B-NB	9.86	116.86	109.41
23	b	6017	CLA	C2B-C1B-NB	9.86	116.85	109.41
23	b	6013	CLA	C2B-C1B-NB	9.85	116.85	109.41
23	b	6011	CLA	C2B-C1B-NB	9.85	116.85	109.41
23	B	1012	CLA	C2B-C1B-NB	9.85	116.85	109.41
23	c	6035	CLA	C2B-C1B-NB	9.85	116.85	109.41
23	b	6016	CLA	C2B-C1B-NB	9.85	116.85	109.41
23	B	1018	CLA	C2B-C1B-NB	9.85	116.84	109.41
23	c	6025	CLA	C2B-C1B-NB	9.84	116.84	109.41
23	c	6031	CLA	C2B-C1B-NB	9.84	116.84	109.41
23	a	6003	CLA	C2B-C1B-NB	9.84	116.84	109.41
23	d	6004	CLA	C2B-C1B-NB	9.84	116.84	109.41
23	C	1032	CLA	C2B-C1B-NB	9.83	116.84	109.41
23	C	1025	CLA	C2B-C1B-NB	9.83	116.83	109.41
23	B	1020	CLA	C2B-C1B-NB	9.82	116.83	109.41
23	B	1011	CLA	C2B-C1B-NB	9.82	116.83	109.41
23	c	6034	CLA	C2B-C1B-NB	9.82	116.83	109.41
23	D	1004	CLA	C2B-C1B-NB	9.82	116.83	109.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	6026	CLA	C2B-C1B-NB	9.82	116.83	109.41
23	C	1026	CLA	C2B-C1B-NB	9.82	116.82	109.41
23	A	1003	CLA	C2B-C1B-NB	9.81	116.82	109.41
23	C	1028	CLA	C2B-C1B-NB	9.81	116.82	109.41
23	B	1013	CLA	C2B-C1B-NB	9.81	116.82	109.41
23	D	1005	CLA	C2B-C1B-NB	9.81	116.81	109.41
23	C	1033	CLA	C2B-C1B-NB	9.81	116.81	109.41
23	B	1016	CLA	C2B-C1B-NB	9.80	116.81	109.41
23	B	1021	CLA	C2B-C1B-NB	9.80	116.81	109.41
23	b	6023	CLA	C2B-C1B-NB	9.79	116.81	109.41
23	a	6006	CLA	C2B-C1B-NB	9.79	116.80	109.41
23	c	6032	CLA	C2B-C1B-NB	9.79	116.80	109.41
23	c	6033	CLA	C2B-C1B-NB	9.78	116.80	109.41
23	d	6005	CLA	C2B-C1B-NB	9.78	116.80	109.41
23	b	6021	CLA	C2B-C1B-NB	9.78	116.79	109.41
23	C	1027	CLA	C2B-C1B-NB	9.77	116.79	109.41
23	b	6010	CLA	C2B-C1B-NB	9.77	116.79	109.41
27	K	1052	BCR	C11-C12-C13	9.77	154.26	126.38
23	B	1010	CLA	C2B-C1B-NB	9.74	116.76	109.41
27	T	6046	BCR	C20-C19-C18	9.73	154.16	126.38
23	B	1019	CLA	C1D-C2D-C3D	-9.65	98.88	106.78
23	b	6019	CLA	C1D-C2D-C3D	-9.65	98.89	106.78
27	D	1050	BCR	C16-C17-C18	9.54	141.03	127.29
27	d	6050	BCR	C16-C17-C18	9.52	141.01	127.29
23	B	1009	CLA	C2B-C1B-NB	9.50	116.58	109.41
23	b	6009	CLA	C2B-C1B-NB	9.48	116.57	109.41
24	a	6039	PHO	CMC-C2C-C1C	-9.45	109.41	125.02
27	h	6049	BCR	C21-C20-C19	9.45	155.12	123.24
27	H	1049	BCR	C21-C20-C19	9.44	155.09	123.24
24	A	1039	PHO	CMC-C2C-C1C	-9.43	109.45	125.02
27	k	6052	BCR	C21-C20-C19	9.42	155.03	123.24
23	C	1034	CLA	CED-O2D-CGD	9.34	138.26	116.02
23	B	1022	CLA	C2B-C1B-NB	9.32	116.45	109.41
23	b	6022	CLA	C2B-C1B-NB	9.31	116.44	109.41
27	c	6054	BCR	C16-C17-C18	9.28	140.67	127.29
23	a	6007	CLA	C2B-C1B-NB	9.28	116.42	109.41
23	A	1007	CLA	C2B-C1B-NB	9.28	116.42	109.41
27	C	1054	BCR	C16-C17-C18	9.27	140.65	127.29
27	b	6047	BCR	C16-C17-C18	9.27	140.64	127.29
27	B	1047	BCR	C16-C17-C18	9.26	140.63	127.29
27	B	1048	BCR	C20-C21-C22	9.23	140.59	127.29
27	b	6048	BCR	C20-C21-C22	9.21	140.57	127.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1015	CLA	C1D-C2D-C3D	-9.20	99.25	106.78
23	b	6015	CLA	C1D-C2D-C3D	-9.13	99.31	106.78
27	a	6044	BCR	C10-C11-C12	9.10	153.94	123.24
27	A	1044	BCR	C10-C11-C12	9.09	153.91	123.24
24	A	1039	PHO	CAC-C3C-C2C	-9.09	111.01	127.50
24	a	6039	PHO	CAC-C3C-C2C	-9.08	111.02	127.50
27	d	6050	BCR	C7-C8-C9	9.06	139.76	126.22
27	D	1050	BCR	C7-C8-C9	9.05	139.76	126.22
23	c	6034	CLA	C1D-C2D-C3D	-9.05	99.38	106.78
26	A	1043	PQ9	C11-C12-C13	-9.03	111.51	126.76
27	H	1049	BCR	C10-C11-C12	9.00	153.61	123.24
27	h	6049	BCR	C10-C11-C12	8.98	153.54	123.24
23	b	6010	CLA	C1D-C2D-C3D	-8.88	99.52	106.78
23	c	6026	CLA	C1D-C2D-C3D	-8.88	99.52	106.78
23	C	1026	CLA	C1D-C2D-C3D	-8.86	99.54	106.78
24	A	1038	PHO	CMC-C2C-C1C	-8.86	110.39	125.02
24	d	6038	PHO	CMC-C2C-C1C	-8.85	110.40	125.02
23	B	1010	CLA	C1D-C2D-C3D	-8.84	99.55	106.78
27	B	1045	BCR	C20-C19-C18	8.83	151.60	126.38
27	b	6045	BCR	C20-C19-C18	8.82	151.57	126.38
23	b	6024	CLA	C1D-C2D-C3D	-8.81	99.58	106.78
23	b	6009	CLA	C1D-C2D-C3D	-8.81	99.58	106.78
23	a	6007	CLA	C1D-C2D-C3D	-8.80	99.58	106.78
23	b	6017	CLA	C1D-C2D-C3D	-8.79	99.59	106.78
23	B	1024	CLA	C1D-C2D-C3D	-8.79	99.59	106.78
23	c	6033	CLA	C1D-C2D-C3D	-8.78	99.60	106.78
23	B	1009	CLA	C1D-C2D-C3D	-8.77	99.61	106.78
23	H	1017	CLA	C1D-C2D-C3D	-8.76	99.62	106.78
23	A	1007	CLA	C1D-C2D-C3D	-8.75	99.62	106.78
23	C	1033	CLA	C1D-C2D-C3D	-8.75	99.63	106.78
27	K	1052	BCR	C16-C15-C14	8.74	142.71	123.36
23	A	1003	CLA	C1D-C2D-C3D	-8.74	99.63	106.78
23	C	1036	CLA	C1D-C2D-C3D	-8.73	99.64	106.78
23	B	1016	CLA	C1D-C2D-C3D	-8.72	99.65	106.78
23	c	6031	CLA	C1D-C2D-C3D	-8.72	99.65	106.78
23	d	6004	CLA	C1D-C2D-C3D	-8.72	99.65	106.78
23	c	6036	CLA	C1D-C2D-C3D	-8.72	99.65	106.78
27	c	6054	BCR	C20-C19-C18	8.71	151.25	126.38
23	B	1020	CLA	C1D-C2D-C3D	-8.71	99.66	106.78
23	D	1004	CLA	C1D-C2D-C3D	-8.71	99.66	106.78
27	C	1054	BCR	C20-C19-C18	8.71	151.24	126.38
23	c	6030	CLA	C1D-C2D-C3D	-8.70	99.66	106.78

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6020	CLA	C1D-C2D-C3D	-8.70	99.66	106.78
23	a	6003	CLA	C1D-C2D-C3D	-8.70	99.66	106.78
23	b	6012	CLA	C1D-C2D-C3D	-8.70	99.67	106.78
23	c	6028	CLA	C1D-C2D-C3D	-8.70	99.67	106.78
23	C	1034	CLA	C1D-C2D-C3D	-8.70	99.67	106.78
23	C	1028	CLA	C1D-C2D-C3D	-8.70	99.67	106.78
23	b	6023	CLA	C1D-C2D-C3D	-8.70	99.67	106.78
23	B	1023	CLA	C1D-C2D-C3D	-8.69	99.67	106.78
23	c	6027	CLA	C1D-C2D-C3D	-8.69	99.68	106.78
23	C	1037	CLA	C1D-C2D-C3D	-8.69	99.68	106.78
23	C	1031	CLA	C1D-C2D-C3D	-8.69	99.68	106.78
23	B	1012	CLA	C1D-C2D-C3D	-8.69	99.68	106.78
23	b	6016	CLA	C1D-C2D-C3D	-8.69	99.68	106.78
23	B	1021	CLA	C1D-C2D-C3D	-8.68	99.68	106.78
23	C	1030	CLA	C1D-C2D-C3D	-8.68	99.68	106.78
23	c	6037	CLA	C1D-C2D-C3D	-8.68	99.68	106.78
23	d	6005	CLA	C1D-C2D-C3D	-8.67	99.69	106.78
23	c	6025	CLA	C1D-C2D-C3D	-8.67	99.69	106.78
23	C	1025	CLA	C1D-C2D-C3D	-8.67	99.69	106.78
23	B	1011	CLA	C1D-C2D-C3D	-8.67	99.69	106.78
23	C	1035	CLA	C1D-C2D-C3D	-8.66	99.69	106.78
23	c	6035	CLA	C1D-C2D-C3D	-8.66	99.69	106.78
23	b	6014	CLA	C1D-C2D-C3D	-8.66	99.70	106.78
23	C	1032	CLA	C1D-C2D-C3D	-8.66	99.70	106.78
23	B	1014	CLA	C1D-C2D-C3D	-8.66	99.70	106.78
23	b	6021	CLA	C1D-C2D-C3D	-8.65	99.70	106.78
23	D	1005	CLA	C1D-C2D-C3D	-8.65	99.70	106.78
23	B	1013	CLA	C1D-C2D-C3D	-8.65	99.70	106.78
23	A	1006	CLA	C1D-C2D-C3D	-8.65	99.71	106.78
23	a	6006	CLA	C1D-C2D-C3D	-8.65	99.71	106.78
23	C	1027	CLA	C1D-C2D-C3D	-8.65	99.71	106.78
23	B	1018	CLA	C1D-C2D-C3D	-8.64	99.72	106.78
23	d	6008	CLA	C1D-C2D-C3D	-8.63	99.72	106.78
23	b	6018	CLA	C1D-C2D-C3D	-8.63	99.72	106.78
23	D	1008	CLA	C1D-C2D-C3D	-8.63	99.72	106.78
23	b	6011	CLA	C1D-C2D-C3D	-8.63	99.73	106.78
23	c	6032	CLA	C1D-C2D-C3D	-8.61	99.74	106.78
23	b	6013	CLA	C1D-C2D-C3D	-8.60	99.74	106.78
25	V	1041	HEM	C3B-C4B-NB	-8.56	107.88	114.00
25	e	6040	HEM	C3B-C4B-NB	-8.54	107.89	114.00
23	C	1029	CLA	C1D-C2D-C3D	-8.53	99.80	106.78
25	E	1040	HEM	C3B-C4B-NB	-8.51	107.91	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	v	6041	HEM	C3B-C4B-NB	-8.51	107.91	114.00
23	c	6029	CLA	C1D-C2D-C3D	-8.49	99.84	106.78
27	B	1048	BCR	C11-C12-C13	8.49	150.60	126.38
27	b	6048	BCR	C11-C12-C13	8.47	150.56	126.38
26	a	6043	PQ9	C11-C12-C13	-8.47	112.45	126.76
23	b	6024	CLA	C2C-C1C-NC	8.46	117.05	110.17
23	B	1024	CLA	C2C-C1C-NC	8.45	117.04	110.17
24	a	6039	PHO	C1D-C2D-C3D	-8.42	99.66	106.89
24	A	1039	PHO	C1D-C2D-C3D	-8.39	99.69	106.89
27	c	6054	BCR	C16-C15-C14	8.36	141.87	123.36
27	k	6052	BCR	C11-C12-C13	8.35	150.21	126.38
27	C	1054	BCR	C16-C15-C14	8.34	141.81	123.36
23	B	1019	CLA	C2C-C1C-NC	8.31	116.93	110.17
23	b	6019	CLA	C2C-C1C-NC	8.28	116.90	110.17
23	b	6022	CLA	C1D-C2D-C3D	-8.25	100.03	106.78
23	B	1022	CLA	C1D-C2D-C3D	-8.22	100.06	106.78
26	d	6042	PQ9	C11-C12-C13	-8.21	112.89	126.76
23	b	6010	CLA	C2C-C1C-NC	8.17	116.82	110.17
23	B	1009	CLA	C2C-C1C-NC	8.16	116.80	110.17
23	b	6009	CLA	C2C-C1C-NC	8.15	116.80	110.17
23	B	1010	CLA	C2C-C1C-NC	8.14	116.79	110.17
23	b	6022	CLA	C2C-C1C-NC	8.12	116.78	110.17
27	b	6048	BCR	C20-C19-C18	8.12	149.56	126.38
23	B	1022	CLA	C2C-C1C-NC	8.12	116.77	110.17
27	B	1048	BCR	C20-C19-C18	8.11	149.54	126.38
24	d	6038	PHO	C1D-C2D-C3D	-8.07	99.96	106.89
24	A	1038	PHO	C1D-C2D-C3D	-8.07	99.96	106.89
23	b	6019	CLA	C2B-C1B-NB	8.01	115.46	109.41
23	B	1019	CLA	C2B-C1B-NB	8.01	115.45	109.41
23	C	1026	CLA	C2C-C1C-NC	7.92	116.61	110.17
23	c	6026	CLA	C2C-C1C-NC	7.89	116.59	110.17
23	c	6029	CLA	C2C-C1C-NC	7.88	116.58	110.17
23	C	1029	CLA	C2C-C1C-NC	7.88	116.58	110.17
27	B	1048	BCR	C16-C15-C14	7.75	140.50	123.36
27	b	6048	BCR	C16-C15-C14	7.74	140.49	123.36
26	D	1042	PQ9	C11-C12-C13	-7.70	113.75	126.76
23	c	6034	CLA	C2C-C1C-NC	7.66	116.40	110.17
23	c	6032	CLA	C2C-C1C-NC	7.65	116.39	110.17
23	C	1035	CLA	C2C-C1C-NC	7.65	116.39	110.17
27	c	6054	BCR	C10-C11-C12	7.64	149.01	123.24
24	d	6038	PHO	CAC-C3C-C2C	-7.64	113.64	127.50
27	C	1054	BCR	C10-C11-C12	7.63	148.99	123.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	1038	PHO	CAC-C3C-C2C	-7.63	113.66	127.50
23	c	6027	CLA	C2C-C1C-NC	7.63	116.37	110.17
23	H	1017	CLA	C2C-C1C-NC	7.63	116.37	110.17
23	b	6011	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	b	6017	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	B	1018	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	b	6013	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	B	1013	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	D	1008	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	c	6036	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	c	6035	CLA	C2C-C1C-NC	7.62	116.37	110.17
23	C	1030	CLA	C2C-C1C-NC	7.61	116.36	110.17
23	c	6030	CLA	C2C-C1C-NC	7.61	116.36	110.17
23	D	1004	CLA	C2C-C1C-NC	7.61	116.36	110.17
23	B	1020	CLA	C2C-C1C-NC	7.61	116.36	110.17
23	C	1028	CLA	C2C-C1C-NC	7.61	116.36	110.17
23	B	1023	CLA	C2C-C1C-NC	7.61	116.36	110.17
23	C	1032	CLA	C2C-C1C-NC	7.60	116.35	110.17
23	B	1011	CLA	C2C-C1C-NC	7.60	116.35	110.17
23	a	6006	CLA	C2C-C1C-NC	7.60	116.35	110.17
23	c	6028	CLA	C2C-C1C-NC	7.60	116.35	110.17
23	C	1034	CLA	C2C-C1C-NC	7.60	116.35	110.17
23	C	1025	CLA	C2C-C1C-NC	7.60	116.35	110.17
23	d	6008	CLA	C2C-C1C-NC	7.59	116.35	110.17
23	d	6004	CLA	C2C-C1C-NC	7.59	116.35	110.17
23	a	6003	CLA	C2C-C1C-NC	7.59	116.34	110.17
23	d	6005	CLA	C2C-C1C-NC	7.59	116.34	110.17
23	b	6020	CLA	C2C-C1C-NC	7.59	116.34	110.17
23	C	1027	CLA	C2C-C1C-NC	7.59	116.34	110.17
23	c	6025	CLA	C2C-C1C-NC	7.59	116.34	110.17
23	C	1033	CLA	C2C-C1C-NC	7.59	116.34	110.17
23	b	6016	CLA	C2C-C1C-NC	7.58	116.34	110.17
23	b	6018	CLA	C2C-C1C-NC	7.58	116.34	110.17
23	C	1037	CLA	C2C-C1C-NC	7.58	116.33	110.17
23	A	1003	CLA	C2C-C1C-NC	7.57	116.33	110.17
23	b	6023	CLA	C2C-C1C-NC	7.56	116.32	110.17
23	D	1005	CLA	C2C-C1C-NC	7.56	116.32	110.17
23	c	6037	CLA	C2C-C1C-NC	7.55	116.31	110.17
23	C	1031	CLA	C2C-C1C-NC	7.55	116.31	110.17
23	c	6033	CLA	C2C-C1C-NC	7.55	116.31	110.17
23	C	1036	CLA	C2C-C1C-NC	7.54	116.30	110.17
23	A	1006	CLA	C2C-C1C-NC	7.54	116.30	110.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1012	CLA	C2C-C1C-NC	7.54	116.30	110.17
27	t	1046	BCR	C20-C19-C18	7.54	147.90	126.38
23	b	6012	CLA	C2C-C1C-NC	7.53	116.30	110.17
23	B	1016	CLA	C2C-C1C-NC	7.53	116.30	110.17
23	c	6031	CLA	C2C-C1C-NC	7.53	116.29	110.17
23	B	1021	CLA	C2C-C1C-NC	7.52	116.28	110.17
23	b	6010	CLA	CMD-C2D-C1D	7.50	140.98	126.16
23	B	1010	CLA	CMD-C2D-C1D	7.50	140.98	126.16
23	b	6021	CLA	C2C-C1C-NC	7.49	116.26	110.17
23	B	1014	CLA	C2C-C1C-NC	7.46	116.24	110.17
23	A	1007	CLA	C2C-C1C-NC	7.44	116.22	110.17
23	a	6007	CLA	C2C-C1C-NC	7.42	116.21	110.17
23	b	6014	CLA	C2C-C1C-NC	7.40	116.19	110.17
26	D	1042	PQ9	C16-C17-C18	-7.36	111.92	127.80
27	K	1052	BCR	C10-C11-C12	7.32	147.94	123.24
26	d	6042	PQ9	C16-C17-C18	-7.29	112.08	127.80
23	B	1015	CLA	C2C-C1C-NC	7.20	116.03	110.17
23	b	6015	CLA	C2C-C1C-NC	7.20	116.03	110.17
27	B	1047	BCR	C10-C11-C12	7.06	147.05	123.24
27	b	6047	BCR	C10-C11-C12	7.05	147.04	123.24
23	b	6015	CLA	CAA-C2A-C1A	-7.01	94.14	111.62
23	B	1015	CLA	CAA-C2A-C1A	-7.00	94.14	111.62
23	B	1022	CLA	CMD-C2D-C1D	6.85	139.70	126.16
23	b	6022	CLA	CMD-C2D-C1D	6.83	139.66	126.16
27	H	1049	BCR	C20-C19-C18	6.80	145.79	126.38
27	h	6049	BCR	C20-C19-C18	6.79	145.77	126.38
27	T	6046	BCR	C10-C11-C12	6.76	146.04	123.24
23	B	1015	CLA	CMD-C2D-C1D	6.67	139.35	126.16
23	b	6015	CLA	CMD-C2D-C1D	6.66	139.33	126.16
27	Z	1053	BCR	C40-C30-C39	-6.63	85.80	108.44
27	z	6053	BCR	C40-C30-C39	-6.62	85.82	108.44
27	B	1045	BCR	C11-C12-C13	6.61	145.25	126.38
23	b	6021	CLA	CMD-C2D-C1D	6.61	139.21	126.16
23	c	6033	CLA	CMD-C2D-C1D	6.61	139.21	126.16
23	C	1034	CLA	CMD-C2D-C1D	6.60	139.21	126.16
23	b	6017	CLA	CMD-C2D-C1D	6.60	139.20	126.16
27	b	6045	BCR	C11-C12-C13	6.60	145.22	126.38
23	c	6030	CLA	CMD-C2D-C1D	6.60	139.20	126.16
23	A	1003	CLA	CMD-C2D-C1D	6.59	139.19	126.16
23	d	6004	CLA	CMD-C2D-C1D	6.59	139.19	126.16
23	B	1016	CLA	CMD-C2D-C1D	6.59	139.19	126.16
23	c	6036	CLA	CMD-C2D-C1D	6.59	139.18	126.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	H	1017	CLA	CMD-C2D-C1D	6.59	139.18	126.16
23	C	1028	CLA	CMD-C2D-C1D	6.59	139.18	126.16
23	B	1021	CLA	CMD-C2D-C1D	6.59	139.18	126.16
23	d	6005	CLA	CMD-C2D-C1D	6.59	139.18	126.16
23	a	6003	CLA	CMD-C2D-C1D	6.59	139.18	126.16
27	A	1044	BCR	C7-C8-C9	6.59	136.07	126.22
23	C	1033	CLA	CMD-C2D-C1D	6.59	139.17	126.16
23	b	6012	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	a	6006	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	D	1004	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	c	6032	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	c	6025	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	C	1030	CLA	CMD-C2D-C1D	6.58	139.16	126.16
23	B	1011	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	C	1036	CLA	CMD-C2D-C1D	6.58	139.17	126.16
23	b	6016	CLA	CMD-C2D-C1D	6.58	139.16	126.16
23	c	6035	CLA	CMD-C2D-C1D	6.58	139.16	126.16
23	c	6034	CLA	CMD-C2D-C1D	6.58	139.16	126.16
23	d	6008	CLA	CMD-C2D-C1D	6.58	139.16	126.16
23	c	6037	CLA	CMD-C2D-C1D	6.58	139.16	126.16
23	C	1025	CLA	CMD-C2D-C1D	6.57	139.15	126.16
23	c	6027	CLA	CMD-C2D-C1D	6.57	139.15	126.16
23	b	6023	CLA	CMD-C2D-C1D	6.57	139.15	126.16
23	C	1031	CLA	CMD-C2D-C1D	6.57	139.15	126.16
23	c	6031	CLA	CMD-C2D-C1D	6.57	139.14	126.16
23	b	6011	CLA	CMD-C2D-C1D	6.57	139.14	126.16
23	C	1032	CLA	CMD-C2D-C1D	6.57	139.14	126.16
23	D	1008	CLA	CMD-C2D-C1D	6.56	139.13	126.16
23	b	6020	CLA	CMD-C2D-C1D	6.56	139.13	126.16
23	D	1005	CLA	CMD-C2D-C1D	6.56	139.13	126.16
23	C	1037	CLA	CMD-C2D-C1D	6.56	139.13	126.16
23	C	1035	CLA	CMD-C2D-C1D	6.56	139.13	126.16
27	a	6044	BCR	C7-C8-C9	6.56	136.03	126.22
23	B	1023	CLA	CMD-C2D-C1D	6.56	139.13	126.16
23	B	1020	CLA	CMD-C2D-C1D	6.56	139.12	126.16
23	A	1006	CLA	CMD-C2D-C1D	6.56	139.12	126.16
23	B	1018	CLA	CMD-C2D-C1D	6.56	139.12	126.16
23	b	6018	CLA	CMD-C2D-C1D	6.56	139.12	126.16
23	C	1027	CLA	CMD-C2D-C1D	6.56	139.12	126.16
23	B	1013	CLA	CMD-C2D-C1D	6.56	139.12	126.16
23	c	6028	CLA	CMD-C2D-C1D	6.55	139.11	126.16
23	B	1012	CLA	CMD-C2D-C1D	6.55	139.10	126.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6013	CLA	CMD-C2D-C1D	6.54	139.08	126.16
27	C	1054	BCR	C11-C12-C13	6.53	145.02	126.38
27	c	6054	BCR	C11-C12-C13	6.53	145.02	126.38
27	t	1046	BCR	C10-C11-C12	6.50	145.19	123.24
27	A	1044	BCR	C20-C19-C18	6.50	144.93	126.38
23	a	6007	CLA	CMD-C2D-C1D	6.49	138.98	126.16
27	a	6044	BCR	C20-C19-C18	6.48	144.90	126.38
23	A	1007	CLA	CMD-C2D-C1D	6.48	138.96	126.16
25	V	1041	HEM	C4D-ND-C1D	6.40	111.71	105.16
25	v	6041	HEM	C4D-ND-C1D	6.39	111.70	105.16
23	b	6009	CLA	CMD-C2D-C1D	6.38	138.76	126.16
25	e	6040	HEM	C4D-ND-C1D	6.37	111.68	105.16
23	b	6024	CLA	CMD-C2D-C1D	6.37	138.75	126.16
23	B	1009	CLA	CMD-C2D-C1D	6.37	138.75	126.16
23	B	1024	CLA	CMD-C2D-C1D	6.37	138.75	126.16
25	E	1040	HEM	C4D-ND-C1D	6.35	111.66	105.16
23	B	1014	CLA	CMD-C2D-C1D	6.24	138.50	126.16
23	b	6014	CLA	CMD-C2D-C1D	6.23	138.47	126.16
27	T	6046	BCR	C30-C25-C26	-6.23	113.58	122.60
27	A	1044	BCR	C30-C25-C26	-6.14	113.71	122.60
23	b	6019	CLA	C3B-C4B-NB	6.14	114.61	108.64
27	k	6052	BCR	C20-C19-C18	6.13	143.88	126.38
23	B	1019	CLA	C3B-C4B-NB	6.12	114.59	108.64
27	a	6044	BCR	C30-C25-C26	-6.11	113.75	122.60
26	d	6042	PQ9	C39-C38-C37	-6.10	111.44	123.52
27	T	6046	BCR	C28-C27-C26	-6.06	104.55	113.74
27	T	6046	BCR	C4-C5-C6	-6.02	114.81	122.84
23	b	6019	CLA	O2D-CGD-O1D	-6.00	111.60	123.79
23	B	1019	CLA	O2D-CGD-O1D	-6.00	111.61	123.79
24	a	6039	PHO	C4D-C3D-CAD	5.98	113.98	108.14
23	b	6024	CLA	C3B-C4B-NB	5.97	114.44	108.64
23	B	1024	CLA	C3B-C4B-NB	5.96	114.44	108.64
23	c	6026	CLA	CMD-C2D-C1D	5.94	137.90	126.16
24	A	1039	PHO	C4D-C3D-CAD	5.93	113.94	108.14
23	C	1026	CLA	CMD-C2D-C1D	5.93	137.88	126.16
27	d	6050	BCR	C33-C5-C6	-5.86	117.86	124.51
23	B	1010	CLA	C3B-C4B-NB	5.85	114.33	108.64
23	b	6010	CLA	C3B-C4B-NB	5.85	114.33	108.64
27	D	1050	BCR	C33-C5-C6	-5.85	117.88	124.51
23	c	6026	CLA	C3B-C4B-NB	5.84	114.32	108.64
23	C	1026	CLA	C3B-C4B-NB	5.83	114.31	108.64
27	t	1046	BCR	C30-C25-C26	-5.83	114.17	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6009	CLA	C3B-C4B-NB	5.82	114.30	108.64
26	D	1042	PQ9	C39-C38-C37	-5.82	112.00	123.52
23	B	1009	CLA	C3B-C4B-NB	5.82	114.30	108.64
23	c	6034	CLA	C3B-C4B-NB	5.79	114.28	108.64
23	C	1029	CLA	CMD-C2D-C1D	5.71	137.45	126.16
23	c	6029	CLA	CMD-C2D-C1D	5.71	137.44	126.16
23	B	1015	CLA	C2D-C1D-ND	5.70	113.72	109.41
23	B	1015	CLA	C3B-C4B-NB	5.70	114.18	108.64
23	c	6025	CLA	C3B-C4B-NB	5.69	114.17	108.64
23	B	1019	CLA	C3C-C4C-NC	5.68	117.07	110.05
23	c	6030	CLA	C3B-C4B-NB	5.67	114.16	108.64
23	B	1012	CLA	C3B-C4B-NB	5.67	114.16	108.64
23	d	6008	CLA	C3B-C4B-NB	5.67	114.16	108.64
23	b	6013	CLA	C3B-C4B-NB	5.67	114.15	108.64
27	z	6053	BCR	C40-C30-C29	-5.67	85.77	108.73
27	Z	1053	BCR	C40-C30-C29	-5.67	85.78	108.73
23	b	6015	CLA	C3B-C4B-NB	5.67	114.15	108.64
23	D	1008	CLA	C3B-C4B-NB	5.66	114.15	108.64
23	C	1033	CLA	C3B-C4B-NB	5.66	114.15	108.64
23	a	6006	CLA	C3B-C4B-NB	5.66	114.15	108.64
23	A	1006	CLA	C3B-C4B-NB	5.66	114.14	108.64
23	C	1029	CLA	C3B-C4B-NB	5.66	114.14	108.64
23	c	6033	CLA	C3B-C4B-NB	5.66	114.14	108.64
23	b	6019	CLA	C3C-C4C-NC	5.66	117.05	110.05
23	C	1037	CLA	C3B-C4B-NB	5.65	114.14	108.64
23	C	1030	CLA	C3B-C4B-NB	5.65	114.14	108.64
23	c	6029	CLA	C3B-C4B-NB	5.65	114.13	108.64
23	c	6029	CLA	O1D-CGD-CBD	-5.65	112.84	124.42
23	C	1025	CLA	C3B-C4B-NB	5.65	114.13	108.64
23	b	6015	CLA	C2D-C1D-ND	5.65	113.67	109.41
23	b	6020	CLA	C3B-C4B-NB	5.65	114.13	108.64
23	C	1031	CLA	C3B-C4B-NB	5.65	114.13	108.64
23	c	6037	CLA	C3B-C4B-NB	5.64	114.13	108.64
23	A	1007	CLA	C3B-C4B-NB	5.64	114.12	108.64
23	B	1023	CLA	C3B-C4B-NB	5.64	114.12	108.64
23	d	6005	CLA	C3B-C4B-NB	5.64	114.12	108.64
23	b	6012	CLA	C3B-C4B-NB	5.63	114.12	108.64
23	B	1013	CLA	C3B-C4B-NB	5.63	114.12	108.64
23	A	1003	CLA	C3B-C4B-NB	5.63	114.11	108.64
23	H	1017	CLA	C3B-C4B-NB	5.63	114.11	108.64
23	b	6023	CLA	C3B-C4B-NB	5.63	114.11	108.64
23	a	6007	CLA	C3B-C4B-NB	5.63	114.11	108.64

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	6035	CLA	C3B-C4B-NB	5.62	114.11	108.64
23	B	1020	CLA	C3B-C4B-NB	5.62	114.11	108.64
23	C	1029	CLA	O1D-CGD-CBD	-5.62	112.90	124.42
23	C	1036	CLA	C3B-C4B-NB	5.62	114.11	108.64
23	c	6032	CLA	C3B-C4B-NB	5.62	114.10	108.64
23	b	6017	CLA	C3B-C4B-NB	5.62	114.10	108.64
23	c	6031	CLA	C3B-C4B-NB	5.62	114.10	108.64
23	D	1005	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	C	1035	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	C	1032	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	D	1004	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	a	6003	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	C	1034	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	d	6004	CLA	C3B-C4B-NB	5.61	114.10	108.64
23	B	1016	CLA	C3B-C4B-NB	5.61	114.09	108.64
23	C	1027	CLA	C3B-C4B-NB	5.61	114.09	108.64
23	c	6027	CLA	C3B-C4B-NB	5.60	114.09	108.64
26	a	6043	PQ9	C20-C18-C17	5.60	131.87	121.08
23	b	6016	CLA	C3B-C4B-NB	5.60	114.08	108.64
23	c	6028	CLA	C3B-C4B-NB	5.59	114.08	108.64
27	B	1045	BCR	C10-C11-C12	5.59	142.11	123.24
23	C	1028	CLA	C3B-C4B-NB	5.59	114.08	108.64
23	c	6036	CLA	C3B-C4B-NB	5.59	114.08	108.64
27	b	6045	BCR	C10-C11-C12	5.58	142.08	123.24
23	b	6021	CLA	C3B-C4B-NB	5.58	114.06	108.64
23	B	1018	CLA	C3B-C4B-NB	5.57	114.06	108.64
23	B	1021	CLA	C3B-C4B-NB	5.57	114.06	108.64
23	B	1019	CLA	CMD-C2D-C1D	5.57	137.16	126.16
27	T	6046	BCR	C1-C6-C5	-5.56	114.55	122.60
23	b	6011	CLA	C3B-C4B-NB	5.56	114.04	108.64
23	B	1011	CLA	C3B-C4B-NB	5.55	114.04	108.64
23	b	6019	CLA	CMD-C2D-C1D	5.55	137.13	126.16
27	K	1052	BCR	C20-C19-C18	5.55	142.22	126.38
26	A	1043	PQ9	C11-C2-C3	-5.53	118.43	123.77
23	c	6029	CLA	C2A-C1A-NA	5.53	117.36	111.24
23	b	6018	CLA	C3B-C4B-NB	5.53	114.01	108.64
23	b	6019	CLA	C2D-C1D-ND	5.51	113.57	109.41
23	B	1019	CLA	C2D-C1D-ND	5.50	113.56	109.41
23	C	1029	CLA	C2A-C1A-NA	5.49	117.33	111.24
27	k	6051	BCR	C10-C11-C12	5.49	141.76	123.24
27	K	1051	BCR	C10-C11-C12	5.49	141.76	123.24
26	A	1043	PQ9	C20-C18-C17	5.48	131.63	121.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	k	6052	BCR	C10-C11-C12	5.47	141.71	123.24
26	a	6043	PQ9	C11-C2-C3	-5.45	118.51	123.77
27	B	1048	BCR	C10-C11-C12	5.35	141.30	123.24
26	D	1042	PQ9	C31-C32-C33	-5.34	116.28	127.80
27	b	6048	BCR	C10-C11-C12	5.34	141.27	123.24
27	K	1051	BCR	C11-C12-C13	5.31	141.55	126.38
27	k	6051	BCR	C11-C12-C13	5.31	141.55	126.38
24	A	1039	PHO	CMC-C2C-C3C	-5.27	111.00	126.05
24	a	6039	PHO	CMC-C2C-C3C	-5.26	111.03	126.05
27	t	1046	BCR	C28-C27-C26	-5.24	105.80	113.74
27	z	6053	BCR	C39-C30-C25	5.23	119.00	110.33
27	Z	1053	BCR	C39-C30-C25	5.23	118.99	110.33
27	d	6050	BCR	C11-C10-C9	-5.21	119.78	127.29
27	D	1050	BCR	C11-C10-C9	-5.20	119.80	127.29
27	K	1051	BCR	C33-C5-C6	-5.18	118.64	124.51
27	K	1051	BCR	C15-C14-C13	-5.15	119.88	127.29
27	k	6051	BCR	C33-C5-C6	-5.14	118.67	124.51
27	T	6046	BCR	C15-C14-C13	-5.12	119.91	127.29
27	Z	1053	BCR	C29-C30-C25	5.12	118.95	110.44
27	k	6051	BCR	C15-C14-C13	-5.12	119.92	127.29
27	h	6049	BCR	C15-C14-C13	-5.11	119.92	127.29
24	d	6038	PHO	C3B-CAB-CBB	-5.10	115.38	125.95
23	B	1022	CLA	C3B-C4B-NB	5.11	113.61	108.64
24	A	1038	PHO	C3B-CAB-CBB	-5.10	115.38	125.95
27	z	6053	BCR	C29-C30-C25	5.10	118.92	110.44
27	z	6053	BCR	C11-C10-C9	-5.09	119.96	127.29
23	b	6022	CLA	C3B-C4B-NB	5.09	113.59	108.64
27	B	1047	BCR	C11-C12-C13	5.09	140.90	126.38
27	B	1045	BCR	C11-C10-C9	-5.09	119.97	127.29
27	H	1049	BCR	C11-C10-C9	-5.08	119.97	127.29
27	b	6045	BCR	C11-C10-C9	-5.08	119.97	127.29
27	H	1049	BCR	C15-C14-C13	-5.08	119.97	127.29
27	h	6049	BCR	C11-C10-C9	-5.08	119.98	127.29
27	C	1054	BCR	C15-C14-C13	-5.07	119.98	127.29
27	c	6054	BCR	C15-C14-C13	-5.07	119.98	127.29
27	b	6047	BCR	C11-C12-C13	5.07	140.86	126.38
27	k	6052	BCR	C11-C10-C9	-5.07	119.99	127.29
27	t	1046	BCR	C11-C10-C9	-5.07	119.99	127.29
27	K	1052	BCR	C15-C14-C13	-5.06	120.00	127.29
27	B	1045	BCR	C15-C14-C13	-5.05	120.02	127.29
27	K	1052	BCR	C11-C10-C9	-5.05	120.02	127.29
27	Z	1053	BCR	C11-C10-C9	-5.05	120.02	127.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	Z	1053	BCR	C15-C14-C13	-5.05	120.02	127.29
27	k	6052	BCR	C15-C14-C13	-5.05	120.02	127.29
27	t	1046	BCR	C15-C14-C13	-5.05	120.02	127.29
23	b	6014	CLA	C3B-CAB-CBB	-5.04	115.50	125.95
27	b	6045	BCR	C15-C14-C13	-5.04	120.03	127.29
27	z	6053	BCR	C15-C14-C13	-5.04	120.03	127.29
23	B	1014	CLA	C3B-CAB-CBB	-5.03	115.54	125.95
23	B	1010	CLA	O1D-CGD-CBD	-5.02	114.12	124.42
26	a	6043	PQ9	C20-C21-C22	-5.01	97.31	111.62
23	b	6010	CLA	O1D-CGD-CBD	-5.00	114.17	124.42
23	C	1026	CLA	C3C-C4C-NC	5.00	116.23	110.05
27	T	6046	BCR	C27-C26-C25	-4.99	116.18	122.84
23	B	1010	CLA	C2A-C1A-NA	4.99	116.77	111.24
23	c	6026	CLA	C3C-C4C-NC	4.97	116.20	110.05
23	b	6010	CLA	C2A-C1A-NA	4.97	116.74	111.24
27	T	6046	BCR	C33-C5-C4	4.97	122.46	113.34
24	d	6038	PHO	C4D-C3D-CAD	4.97	112.99	108.14
24	A	1038	PHO	C4D-C3D-CAD	4.96	112.98	108.14
23	b	6015	CLA	CAA-C2A-C3A	-4.96	101.32	113.04
23	b	6014	CLA	C3C-C4C-NC	4.95	116.18	110.05
27	c	6054	BCR	C33-C5-C6	-4.95	118.89	124.51
23	b	6015	CLA	O1D-CGD-CBD	-4.95	114.27	124.42
26	d	6042	PQ9	C31-C32-C33	-4.95	117.11	127.80
23	B	1015	CLA	CAA-C2A-C3A	-4.95	101.33	113.04
23	B	1015	CLA	O1D-CGD-CBD	-4.94	114.30	124.42
26	A	1043	PQ9	C14-C13-C15	4.93	122.88	115.39
23	B	1014	CLA	C3C-C4C-NC	4.93	116.14	110.05
27	C	1054	BCR	C33-C5-C6	-4.92	118.92	124.51
27	d	6050	BCR	C15-C14-C13	-4.92	120.20	127.29
27	D	1050	BCR	C15-C14-C13	-4.91	120.22	127.29
26	a	6043	PQ9	C14-C13-C12	-4.91	113.80	123.52
27	K	1051	BCR	C20-C19-C18	4.91	140.39	126.38
27	k	6051	BCR	C20-C19-C18	4.90	140.37	126.38
27	b	6048	BCR	C38-C26-C25	-4.88	118.97	124.51
26	D	1042	PQ9	C11-C2-C3	-4.87	119.07	123.77
27	B	1048	BCR	C38-C26-C25	-4.87	118.99	124.51
23	c	6034	CLA	C2D-C1D-ND	4.85	113.07	109.41
23	B	1014	CLA	O1D-CGD-CBD	-4.84	114.50	124.42
23	b	6014	CLA	O1D-CGD-CBD	-4.83	114.52	124.42
23	B	1009	CLA	C2D-C1D-ND	4.83	113.06	109.41
23	c	6026	CLA	C2D-C1D-ND	4.83	113.06	109.41
23	B	1022	CLA	C2A-C1A-NA	4.81	116.57	111.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	A	1039	PHO	C1B-C2B-C3B	-4.81	102.52	106.94
26	A	1043	PQ9	C20-C21-C22	-4.80	97.90	111.62
24	a	6039	PHO	C1B-C2B-C3B	-4.80	102.52	106.94
23	b	6022	CLA	C2A-C1A-NA	4.79	116.55	111.24
23	b	6009	CLA	C2D-C1D-ND	4.79	113.03	109.41
23	B	1019	CLA	CHD-C4C-C3C	-4.78	117.66	124.98
26	a	6043	PQ9	C19-C18-C17	-4.77	114.08	123.52
23	b	6019	CLA	CHD-C4C-C3C	-4.77	117.69	124.98
24	A	1038	PHO	CMC-C2C-C3C	-4.76	112.47	126.05
23	C	1026	CLA	C2D-C1D-ND	4.75	113.00	109.41
24	d	6038	PHO	CMC-C2C-C3C	-4.75	112.49	126.05
23	b	6017	CLA	C2D-C1D-ND	4.75	112.99	109.41
23	B	1009	CLA	C3C-C4C-NC	4.74	115.92	110.05
23	A	1007	CLA	C3C-C4C-NC	4.74	115.92	110.05
23	c	6033	CLA	C2D-C1D-ND	4.73	112.98	109.41
23	C	1033	CLA	C2D-C1D-ND	4.73	112.98	109.41
23	B	1024	CLA	CAC-C3C-C4C	4.73	131.94	124.85
23	d	6004	CLA	C2D-C1D-ND	4.73	112.98	109.41
27	k	6051	BCR	C11-C10-C9	-4.73	120.48	127.29
23	b	6024	CLA	CAC-C3C-C4C	4.73	131.93	124.85
27	K	1051	BCR	C11-C10-C9	-4.73	120.48	127.29
23	b	6021	CLA	C2D-C1D-ND	4.72	112.98	109.41
23	b	6009	CLA	C3C-C4C-NC	4.72	115.89	110.05
27	T	6046	BCR	C38-C26-C27	4.71	121.99	113.34
23	c	6032	CLA	C2D-C1D-ND	4.71	112.97	109.41
23	B	1024	CLA	C2D-C1D-ND	4.71	112.97	109.41
27	T	6046	BCR	C11-C10-C9	-4.71	120.51	127.29
27	t	1046	BCR	C27-C26-C25	-4.71	116.57	122.84
23	H	1017	CLA	C2D-C1D-ND	4.70	112.96	109.41
23	c	6030	CLA	C2D-C1D-ND	4.70	112.96	109.41
23	a	6007	CLA	C3C-C4C-NC	4.70	115.86	110.05
23	C	1032	CLA	C2D-C1D-ND	4.70	112.96	109.41
23	C	1030	CLA	C2D-C1D-ND	4.70	112.96	109.41
23	C	1034	CLA	C2D-C1D-ND	4.70	112.96	109.41
26	A	1043	PQ9	C19-C18-C17	-4.69	114.23	123.52
23	b	6023	CLA	C2D-C1D-ND	4.69	112.95	109.41
23	b	6012	CLA	C2D-C1D-ND	4.69	112.95	109.41
23	D	1004	CLA	C2D-C1D-ND	4.69	112.95	109.41
23	B	1021	CLA	C2D-C1D-ND	4.69	112.95	109.41
23	B	1016	CLA	C2D-C1D-ND	4.69	112.95	109.41
23	a	6003	CLA	C2D-C1D-ND	4.69	112.95	109.41
23	B	1020	CLA	C2D-C1D-ND	4.68	112.95	109.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6020	CLA	C2D-C1D-ND	4.68	112.95	109.41
23	B	1011	CLA	C2D-C1D-ND	4.68	112.94	109.41
23	B	1023	CLA	C2D-C1D-ND	4.68	112.94	109.41
23	b	6011	CLA	C2D-C1D-ND	4.68	112.94	109.41
23	b	6013	CLA	C2D-C1D-ND	4.68	112.94	109.41
23	b	6024	CLA	C2D-C1D-ND	4.68	112.94	109.41
26	A	1043	PQ9	C14-C13-C12	-4.67	114.26	123.52
23	C	1036	CLA	C2D-C1D-ND	4.67	112.94	109.41
23	A	1003	CLA	C2D-C1D-ND	4.67	112.94	109.41
23	c	6037	CLA	C2D-C1D-ND	4.67	112.94	109.41
27	b	6047	BCR	C38-C26-C27	4.67	121.92	113.34
23	B	1013	CLA	C2D-C1D-ND	4.67	112.93	109.41
23	d	6008	CLA	C2D-C1D-ND	4.66	112.93	109.41
27	B	1048	BCR	C24-C23-C22	-4.66	119.24	126.22
23	c	6035	CLA	C2D-C1D-ND	4.66	112.93	109.41
23	C	1028	CLA	C2D-C1D-ND	4.66	112.93	109.41
24	A	1038	PHO	OBD-CAD-CBD	-4.66	118.91	125.94
27	b	6048	BCR	C24-C23-C22	-4.66	119.24	126.22
23	c	6034	CLA	C3C-C4C-NC	4.66	115.81	110.05
27	B	1047	BCR	C38-C26-C27	4.66	121.89	113.34
24	d	6038	PHO	OBD-CAD-CBD	-4.65	118.92	125.94
23	B	1024	CLA	C3B-CAB-CBB	-4.65	116.32	125.95
23	b	6024	CLA	C3B-CAB-CBB	-4.65	116.31	125.95
23	c	6027	CLA	C2D-C1D-ND	4.65	112.92	109.41
23	c	6031	CLA	C2D-C1D-ND	4.65	112.92	109.41
27	B	1048	BCR	C33-C5-C6	-4.65	119.23	124.51
23	C	1031	CLA	C2D-C1D-ND	4.65	112.92	109.41
23	b	6014	CLA	C2D-C1D-ND	4.64	112.92	109.41
23	D	1008	CLA	C2D-C1D-ND	4.64	112.92	109.41
27	t	1046	BCR	C38-C26-C27	4.64	121.86	113.34
23	B	1012	CLA	C2D-C1D-ND	4.64	112.91	109.41
23	C	1037	CLA	C2D-C1D-ND	4.64	112.91	109.41
23	B	1014	CLA	C2D-C1D-ND	4.64	112.91	109.41
23	b	6016	CLA	C2D-C1D-ND	4.64	112.91	109.41
23	a	6006	CLA	C2D-C1D-ND	4.64	112.91	109.41
24	A	1038	PHO	C1B-C2B-C3B	-4.63	102.68	106.94
23	c	6036	CLA	C2D-C1D-ND	4.63	112.91	109.41
23	C	1027	CLA	C2D-C1D-ND	4.63	112.91	109.41
23	c	6025	CLA	C2D-C1D-ND	4.63	112.91	109.41
23	A	1007	CLA	O1D-CGD-CBD	-4.63	114.94	124.42
23	b	6015	CLA	C3C-C4C-NC	4.62	115.77	110.05
27	b	6048	BCR	C33-C5-C6	-4.62	119.27	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	6007	CLA	O1D-CGD-CBD	-4.62	114.96	124.42
23	B	1022	CLA	CAA-C2A-C1A	-4.62	100.10	111.62
23	B	1018	CLA	C2D-C1D-ND	4.62	112.90	109.41
23	b	6018	CLA	C2D-C1D-ND	4.62	112.90	109.41
23	C	1035	CLA	C2D-C1D-ND	4.61	112.89	109.41
23	b	6022	CLA	C1C-C2C-C3C	-4.61	101.45	106.95
23	d	6005	CLA	C2D-C1D-ND	4.61	112.89	109.41
23	C	1025	CLA	C2D-C1D-ND	4.61	112.89	109.41
23	A	1006	CLA	C2D-C1D-ND	4.61	112.89	109.41
23	c	6028	CLA	C2D-C1D-ND	4.61	112.89	109.41
23	b	6022	CLA	CAA-C2A-C1A	-4.61	100.12	111.62
23	D	1005	CLA	C2D-C1D-ND	4.61	112.89	109.41
27	b	6048	BCR	C11-C10-C9	-4.60	120.66	127.29
27	z	6053	BCR	C7-C8-C9	4.60	133.10	126.22
24	d	6038	PHO	C3D-C4D-ND	4.60	114.64	106.97
27	Z	1053	BCR	C7-C8-C9	4.60	133.10	126.22
24	A	1038	PHO	C3D-C4D-ND	4.60	114.64	106.97
23	B	1015	CLA	C3C-C4C-NC	4.60	115.74	110.05
26	a	6043	PQ9	C14-C13-C15	4.60	122.38	115.39
24	d	6038	PHO	C1B-C2B-C3B	-4.59	102.71	106.94
27	B	1048	BCR	C11-C10-C9	-4.59	120.68	127.29
26	D	1042	PQ9	C34-C33-C32	-4.59	114.43	123.52
23	B	1022	CLA	C1C-C2C-C3C	-4.59	101.48	106.95
24	a	6039	PHO	C3B-CAB-CBB	-4.57	116.50	125.95
27	C	1054	BCR	C24-C23-C22	-4.57	119.38	126.22
23	C	1034	CLA	C3C-C4C-NC	4.56	115.69	110.05
23	C	1033	CLA	C3C-C4C-NC	4.56	115.69	110.05
27	c	6054	BCR	C24-C23-C22	-4.55	119.41	126.22
23	H	1017	CLA	C3C-C4C-NC	4.55	115.68	110.05
23	b	6018	CLA	C3C-C4C-NC	4.55	115.68	110.05
23	C	1030	CLA	C3C-C4C-NC	4.55	115.68	110.05
23	c	6030	CLA	C3C-C4C-NC	4.55	115.67	110.05
24	A	1039	PHO	C3B-CAB-CBB	-4.55	116.54	125.95
27	B	1047	BCR	C33-C5-C6	-4.55	119.35	124.51
27	A	1044	BCR	C28-C27-C26	-4.54	106.85	113.74
23	B	1022	CLA	C3B-CAB-CBB	-4.54	116.54	125.95
23	c	6033	CLA	C3C-C4C-NC	4.54	115.67	110.05
23	d	6008	CLA	C3C-C4C-NC	4.54	115.67	110.05
23	A	1003	CLA	C3C-C4C-NC	4.54	115.67	110.05
23	c	6031	CLA	C3C-C4C-NC	4.53	115.66	110.05
23	C	1025	CLA	C3C-C4C-NC	4.53	115.66	110.05
23	b	6022	CLA	C3B-CAB-CBB	-4.53	116.57	125.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	6044	BCR	C28-C27-C26	-4.53	106.88	113.74
23	C	1031	CLA	C3C-C4C-NC	4.53	115.65	110.05
23	c	6036	CLA	C3C-C4C-NC	4.53	115.65	110.05
23	B	1018	CLA	C3C-C4C-NC	4.52	115.65	110.05
23	C	1037	CLA	C3C-C4C-NC	4.52	115.64	110.05
23	b	6017	CLA	C3C-C4C-NC	4.52	115.64	110.05
23	C	1028	CLA	C3C-C4C-NC	4.52	115.64	110.05
23	B	1012	CLA	C3C-C4C-NC	4.52	115.64	110.05
23	d	6004	CLA	C3C-C4C-NC	4.52	115.64	110.05
23	D	1008	CLA	C3C-C4C-NC	4.51	115.63	110.05
23	b	6023	CLA	C3C-C4C-NC	4.51	115.63	110.05
23	B	1023	CLA	C3C-C4C-NC	4.51	115.64	110.05
23	a	6003	CLA	C3C-C4C-NC	4.51	115.63	110.05
27	b	6047	BCR	C33-C5-C6	-4.51	119.39	124.51
23	b	6011	CLA	C3C-C4C-NC	4.51	115.63	110.05
23	C	1036	CLA	C3C-C4C-NC	4.51	115.63	110.05
23	b	6010	CLA	C2D-C1D-ND	4.51	112.81	109.41
23	B	1020	CLA	C3C-C4C-NC	4.51	115.63	110.05
23	C	1035	CLA	C3C-C4C-NC	4.51	115.63	110.05
23	a	6006	CLA	C3C-C4C-NC	4.50	115.62	110.05
23	D	1004	CLA	C3C-C4C-NC	4.50	115.62	110.05
23	b	6010	CLA	C2A-C1A-CHA	-4.50	116.04	123.83
23	B	1021	CLA	C3C-C4C-NC	4.50	115.62	110.05
23	b	6021	CLA	C3C-C4C-NC	4.50	115.62	110.05
23	B	1010	CLA	C2A-C1A-CHA	-4.50	116.04	123.83
23	c	6028	CLA	C3C-C4C-NC	4.50	115.61	110.05
23	b	6012	CLA	C3C-C4C-NC	4.50	115.61	110.05
23	B	1016	CLA	C3C-C4C-NC	4.50	115.61	110.05
23	c	6037	CLA	C3C-C4C-NC	4.49	115.61	110.05
23	C	1032	CLA	C3C-C4C-NC	4.49	115.61	110.05
23	B	1013	CLA	C3C-C4C-NC	4.50	115.61	110.05
23	b	6020	CLA	C3C-C4C-NC	4.49	115.61	110.05
23	c	6027	CLA	C3C-C4C-NC	4.49	115.61	110.05
23	C	1027	CLA	C3C-C4C-NC	4.49	115.61	110.05
23	c	6025	CLA	C3C-C4C-NC	4.49	115.60	110.05
23	c	6035	CLA	C3C-C4C-NC	4.48	115.60	110.05
23	B	1014	CLA	C3A-C4A-CHB	-4.48	115.02	124.33
23	b	6016	CLA	C3C-C4C-NC	4.48	115.59	110.05
23	D	1005	CLA	C3C-C4C-NC	4.48	115.59	110.05
23	A	1006	CLA	C3C-C4C-NC	4.48	115.59	110.05
23	B	1011	CLA	C3C-C4C-NC	4.48	115.59	110.05
27	d	6050	BCR	C24-C23-C22	4.48	132.91	126.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6013	CLA	C3C-C4C-NC	4.47	115.58	110.05
23	B	1010	CLA	C2D-C1D-ND	4.47	112.79	109.41
23	b	6014	CLA	C3A-C4A-CHB	-4.47	115.04	124.33
23	c	6032	CLA	C3C-C4C-NC	4.47	115.58	110.05
27	D	1050	BCR	C24-C23-C22	4.46	132.89	126.22
26	A	1043	PQ9	C39-C38-C37	-4.45	114.70	123.52
23	d	6005	CLA	C3C-C4C-NC	4.44	115.55	110.05
23	b	6024	CLA	CMC-C2C-C1C	4.44	131.08	124.94
27	B	1047	BCR	C11-C10-C9	-4.44	120.90	127.29
23	B	1024	CLA	CMC-C2C-C1C	4.43	131.06	124.94
26	D	1042	PQ9	C40-C38-C37	4.43	129.61	121.08
27	b	6047	BCR	C11-C10-C9	-4.42	120.92	127.29
27	c	6054	BCR	C38-C26-C27	4.41	121.44	113.34
23	b	6022	CLA	C3C-C4C-NC	4.41	115.50	110.05
23	B	1022	CLA	C3C-C4C-NC	4.40	115.49	110.05
27	C	1054	BCR	C38-C26-C27	4.40	121.41	113.34
23	C	1029	CLA	C3C-C4C-NC	4.39	115.48	110.05
23	c	6029	CLA	C3C-C4C-NC	4.39	115.48	110.05
24	A	1039	PHO	C3D-C4D-ND	4.38	114.28	106.97
24	a	6039	PHO	C3D-C4D-ND	4.38	114.27	106.97
23	c	6034	CLA	CHD-C4C-C3C	-4.38	118.28	124.98
24	d	6038	PHO	OBD-CAD-C3D	-4.38	119.63	127.96
24	A	1038	PHO	OBD-CAD-C3D	-4.38	119.63	127.96
26	d	6042	PQ9	C14-C13-C12	-4.37	114.86	123.52
23	c	6029	CLA	C1C-C2C-C3C	-4.37	101.74	106.95
23	C	1026	CLA	O1D-CGD-CBD	-4.37	115.47	124.42
27	K	1051	BCR	C30-C25-C26	-4.37	116.27	122.60
23	C	1029	CLA	C1C-C2C-C3C	-4.37	101.74	106.95
23	a	6007	CLA	C2D-C1D-ND	4.37	112.71	109.41
23	C	1029	CLA	C2D-C1D-ND	4.37	112.71	109.41
24	a	6039	PHO	O2D-CGD-CBD	4.37	120.22	111.33
23	c	6029	CLA	O2D-CGD-O1D	-4.36	114.92	123.79
23	C	1029	CLA	O2D-CGD-O1D	-4.36	114.92	123.79
23	c	6026	CLA	O1D-CGD-CBD	-4.36	115.48	124.42
24	A	1039	PHO	O2D-CGD-CBD	4.35	120.20	111.33
23	B	1024	CLA	C3C-C4C-NC	4.35	115.43	110.05
23	b	6024	CLA	C3C-C4C-NC	4.34	115.42	110.05
23	A	1007	CLA	CHD-C4C-C3C	-4.34	118.34	124.98
27	c	6054	BCR	C30-C25-C26	-4.33	116.33	122.60
23	a	6007	CLA	CHD-C4C-C3C	-4.33	118.35	124.98
27	k	6051	BCR	C30-C25-C26	-4.33	116.33	122.60
23	A	1007	CLA	C2D-C1D-ND	4.32	112.68	109.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	d	6042	PQ9	C35-C36-C37	-4.31	99.29	111.62
23	C	1026	CLA	CHD-C4C-C3C	-4.30	118.40	124.98
27	A	1044	BCR	C3-C4-C5	-4.30	107.22	113.74
27	C	1054	BCR	C30-C25-C26	-4.30	116.38	122.60
27	a	6044	BCR	C3-C4-C5	-4.29	107.24	113.74
23	A	1007	CLA	C2A-C1A-NA	4.29	115.99	111.24
23	c	6026	CLA	CHD-C4C-C3C	-4.29	118.42	124.98
23	B	1016	CLA	O2D-CGD-CBD	4.28	120.05	111.33
23	b	6016	CLA	O2D-CGD-CBD	4.28	120.04	111.33
23	b	6020	CLA	O2D-CGD-CBD	4.27	120.04	111.33
27	A	1044	BCR	C30-C25-C24	4.27	127.53	115.69
23	a	6007	CLA	C2A-C1A-NA	4.27	115.97	111.24
23	C	1027	CLA	O2D-CGD-CBD	4.27	120.03	111.33
23	D	1005	CLA	O2D-CGD-CBD	4.27	120.02	111.33
23	c	6029	CLA	C2D-C1D-ND	4.27	112.63	109.41
23	d	6005	CLA	O2D-CGD-CBD	4.27	120.02	111.33
23	c	6027	CLA	O2D-CGD-CBD	4.27	120.02	111.33
23	a	6006	CLA	O2D-CGD-CBD	4.27	120.02	111.33
27	a	6044	BCR	C30-C25-C24	4.26	127.50	115.69
26	D	1042	PQ9	C35-C36-C37	-4.26	99.44	111.62
23	B	1020	CLA	O2D-CGD-CBD	4.26	120.01	111.33
23	A	1003	CLA	O2D-CGD-CBD	4.26	120.01	111.33
23	C	1028	CLA	O2D-CGD-CBD	4.26	120.00	111.33
27	b	6045	BCR	C24-C23-C22	4.26	132.58	126.22
23	B	1013	CLA	O2D-CGD-CBD	4.26	120.00	111.33
23	D	1004	CLA	O2D-CGD-CBD	4.26	120.00	111.33
23	b	6017	CLA	O2D-CGD-CBD	4.25	120.00	111.33
23	a	6003	CLA	O2D-CGD-CBD	4.25	119.99	111.33
23	H	1017	CLA	O2D-CGD-CBD	4.25	120.00	111.33
23	c	6028	CLA	O2D-CGD-CBD	4.25	119.99	111.33
23	C	1033	CLA	O2D-CGD-CBD	4.25	119.99	111.33
23	d	6008	CLA	O2D-CGD-CBD	4.25	119.99	111.33
23	b	6018	CLA	O2D-CGD-CBD	4.25	119.99	111.33
23	c	6025	CLA	O2D-CGD-CBD	4.25	119.98	111.33
23	B	1023	CLA	O2D-CGD-CBD	4.25	119.99	111.33
23	C	1032	CLA	O2D-CGD-CBD	4.25	119.98	111.33
23	C	1036	CLA	O2D-CGD-CBD	4.25	119.98	111.33
23	C	1026	CLA	C3B-CAB-CBB	-4.25	117.16	125.95
23	c	6029	CLA	C2A-C1A-CHA	-4.24	116.48	123.83
23	b	6023	CLA	O2D-CGD-CBD	4.24	119.98	111.33
23	b	6013	CLA	O2D-CGD-CBD	4.24	119.97	111.33
23	D	1008	CLA	O2D-CGD-CBD	4.24	119.97	111.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	A	1006	CLA	O2D-CGD-CBD	4.24	119.97	111.33
23	B	1021	CLA	O2D-CGD-CBD	4.24	119.97	111.33
27	C	1054	BCR	C11-C10-C9	-4.24	121.18	127.29
23	C	1031	CLA	O2D-CGD-CBD	4.24	119.97	111.33
23	c	6036	CLA	O2D-CGD-CBD	4.24	119.96	111.33
23	d	6004	CLA	O2D-CGD-CBD	4.24	119.97	111.33
23	C	1030	CLA	O2D-CGD-CBD	4.24	119.96	111.33
23	C	1029	CLA	C2A-C1A-CHA	-4.24	116.50	123.83
23	c	6033	CLA	O2D-CGD-CBD	4.24	119.96	111.33
23	c	6035	CLA	O2D-CGD-CBD	4.24	119.96	111.33
23	c	6030	CLA	O2D-CGD-CBD	4.23	119.95	111.33
23	c	6032	CLA	O2D-CGD-CBD	4.24	119.96	111.33
23	c	6026	CLA	C3B-CAB-CBB	-4.24	117.18	125.95
23	C	1035	CLA	O2D-CGD-CBD	4.24	119.96	111.33
23	B	1018	CLA	O2D-CGD-CBD	4.23	119.95	111.33
27	B	1045	BCR	C24-C23-C22	4.23	132.55	126.22
23	c	6037	CLA	O2D-CGD-CBD	4.23	119.95	111.33
23	C	1025	CLA	O2D-CGD-CBD	4.23	119.95	111.33
23	C	1037	CLA	O2D-CGD-CBD	4.23	119.94	111.33
23	b	6021	CLA	O2D-CGD-CBD	4.23	119.94	111.33
23	c	6031	CLA	O2D-CGD-CBD	4.23	119.94	111.33
23	B	1022	CLA	C2A-C1A-CHA	-4.23	116.51	123.83
23	b	6012	CLA	O2D-CGD-CBD	4.23	119.94	111.33
23	C	1034	CLA	O2D-CGD-CBD	4.23	119.94	111.33
23	b	6010	CLA	C3C-C4C-NC	4.23	115.28	110.05
23	B	1011	CLA	O2D-CGD-CBD	4.22	119.94	111.33
26	d	6042	PQ9	C26-C27-C28	-4.23	118.68	127.80
23	b	6011	CLA	O2D-CGD-CBD	4.23	119.94	111.33
23	B	1012	CLA	O2D-CGD-CBD	4.22	119.93	111.33
23	B	1010	CLA	C3C-C4C-NC	4.22	115.27	110.05
23	b	6022	CLA	C2A-C1A-CHA	-4.21	116.53	123.83
27	c	6054	BCR	C11-C10-C9	-4.21	121.22	127.29
23	B	1024	CLA	C1-C2-C3	-4.21	118.70	126.19
23	b	6015	CLA	O2D-CGD-CBD	4.21	119.90	111.33
23	B	1015	CLA	O2D-CGD-CBD	4.21	119.90	111.33
23	b	6024	CLA	C1-C2-C3	-4.20	118.72	126.19
27	b	6047	BCR	C15-C14-C13	-4.20	121.25	127.29
23	B	1015	CLA	O2D-CGD-O1D	-4.20	115.26	123.79
27	D	1050	BCR	C38-C26-C25	-4.19	119.75	124.51
27	B	1047	BCR	C15-C14-C13	-4.19	121.26	127.29
23	b	6015	CLA	O2D-CGD-O1D	-4.19	115.29	123.79
27	h	6049	BCR	C24-C23-C22	-4.19	119.95	126.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1014	CLA	CHD-C4C-C3C	-4.18	118.58	124.98
27	z	6053	BCR	C24-C23-C22	-4.18	119.96	126.22
23	B	1022	CLA	CHD-C4C-C3C	-4.18	118.59	124.98
23	b	6014	CLA	CHD-C4C-C3C	-4.17	118.59	124.98
27	H	1049	BCR	C24-C23-C22	-4.17	119.97	126.22
23	b	6022	CLA	CHD-C4C-C3C	-4.17	118.60	124.98
27	Z	1053	BCR	C24-C23-C22	-4.17	119.97	126.22
23	B	1014	CLA	C3B-C4B-NB	4.16	112.69	108.64
23	b	6014	CLA	C3B-C4B-NB	4.16	112.69	108.64
23	b	6019	CLA	C3B-CAB-CBB	-4.15	117.35	125.95
27	d	6050	BCR	C38-C26-C25	-4.15	119.80	124.51
27	T	6046	BCR	C3-C4-C5	-4.15	107.46	113.74
23	B	1019	CLA	C3B-CAB-CBB	-4.15	117.36	125.95
27	k	6052	BCR	C24-C23-C22	-4.14	120.02	126.22
23	c	6034	CLA	C1-C2-C3	-4.14	118.82	126.19
23	b	6022	CLA	C2D-C1D-ND	4.14	112.53	109.41
27	K	1052	BCR	C24-C23-C22	-4.13	120.03	126.22
27	B	1048	BCR	C15-C14-C13	-4.13	121.34	127.29
26	d	6042	PQ9	C19-C18-C17	-4.13	115.34	123.52
23	C	1029	CLA	C1-C2-C3	-4.12	118.85	126.19
23	B	1022	CLA	C2D-C1D-ND	4.12	112.52	109.41
23	c	6029	CLA	C1-C2-C3	-4.11	118.88	126.19
27	b	6048	BCR	C15-C14-C13	-4.11	121.38	127.29
23	C	1026	CLA	O2A-CGA-CBA	4.11	124.85	111.94
23	c	6026	CLA	O2A-CGA-CBA	4.11	124.86	111.94
26	D	1042	PQ9	C14-C13-C12	-4.10	115.40	123.52
23	B	1024	CLA	C2A-C1A-NA	4.09	115.77	111.24
23	B	1022	CLA	O2A-CGA-O1A	-4.08	112.28	123.43
23	b	6022	CLA	O2A-CGA-O1A	-4.08	112.29	123.43
23	b	6024	CLA	C2A-C1A-NA	4.08	115.76	111.24
27	K	1051	BCR	C30-C25-C24	4.08	126.99	115.69
26	D	1042	PQ9	C26-C27-C28	-4.08	119.00	127.80
27	K	1051	BCR	C24-C23-C22	4.08	132.31	126.22
27	b	6047	BCR	C24-C23-C22	-4.07	120.12	126.22
27	k	6051	BCR	C30-C25-C24	4.07	126.97	115.69
23	B	1009	CLA	C2A-C1A-NA	4.07	115.75	111.24
27	k	6051	BCR	C24-C23-C22	4.07	132.30	126.22
23	B	1024	CLA	CAA-C2A-C3A	-4.06	103.44	113.04
23	b	6024	CLA	CAA-C2A-C3A	-4.05	103.46	113.04
23	B	1014	CLA	C1C-C2C-C3C	-4.05	102.13	106.95
23	b	6009	CLA	C2A-C1A-NA	4.04	115.72	111.24
23	b	6010	CLA	C1C-C2C-C3C	-4.03	102.14	106.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6013	CLA	C2A-C1A-NA	4.03	115.71	111.24
23	c	6037	CLA	C2A-C1A-NA	4.03	115.70	111.24
23	c	6028	CLA	C2A-C1A-NA	4.02	115.70	111.24
23	b	6011	CLA	C2A-C1A-NA	4.02	115.70	111.24
27	B	1047	BCR	C24-C23-C22	-4.02	120.20	126.22
27	B	1045	BCR	C30-C25-C26	-4.02	116.78	122.60
23	C	1027	CLA	C2A-C1A-NA	4.02	115.69	111.24
23	B	1013	CLA	C2A-C1A-NA	4.02	115.69	111.24
23	B	1010	CLA	C1C-C2C-C3C	-4.02	102.16	106.95
27	z	6053	BCR	C33-C5-C6	-4.01	119.95	124.51
26	d	6042	PQ9	C11-C2-C3	-4.01	119.90	123.77
27	b	6045	BCR	C30-C25-C26	-4.01	116.79	122.60
27	h	6049	BCR	C33-C5-C6	-4.01	119.96	124.51
23	b	6014	CLA	C1C-C2C-C3C	-4.01	102.17	106.95
23	c	6033	CLA	C2A-C1A-NA	4.01	115.68	111.24
23	d	6008	CLA	C2A-C1A-NA	4.01	115.68	111.24
23	c	6034	CLA	O2D-CGD-CBD	4.01	119.49	111.33
23	B	1011	CLA	C2A-C1A-NA	4.01	115.68	111.24
23	b	6010	CLA	C1-C2-C3	-4.00	119.06	126.19
23	B	1010	CLA	C1-C2-C3	-4.01	119.06	126.19
23	D	1008	CLA	C2A-C1A-NA	4.00	115.67	111.24
27	Z	1053	BCR	C33-C5-C6	-4.00	119.97	124.51
23	c	6026	CLA	O2D-CGD-O1D	-4.00	115.66	123.79
23	C	1028	CLA	C2A-C1A-NA	4.00	115.67	111.24
23	c	6030	CLA	C2A-C1A-NA	4.00	115.67	111.24
27	k	6052	BCR	C33-C5-C6	-4.00	119.97	124.51
23	A	1003	CLA	C2A-C1A-NA	4.00	115.67	111.24
23	a	6003	CLA	C2A-C1A-NA	4.00	115.67	111.24
23	C	1026	CLA	O2D-CGD-O1D	-3.99	115.67	123.79
23	B	1012	CLA	C2A-C1A-NA	3.99	115.66	111.24
23	D	1004	CLA	C2A-C1A-NA	3.99	115.67	111.24
23	B	1019	CLA	C2A-C1A-CHA	-3.99	116.92	123.83
27	z	6053	BCR	C38-C26-C25	-3.99	119.98	124.51
27	b	6045	BCR	C30-C25-C24	3.99	126.74	115.69
23	b	6014	CLA	C3A-C4A-NA	3.99	115.80	110.95
23	d	6005	CLA	C2A-C1A-NA	3.99	115.66	111.24
27	Z	1053	BCR	C38-C26-C25	-3.99	119.99	124.51
27	h	6049	BCR	C38-C26-C25	-3.99	119.99	124.51
23	C	1032	CLA	C2A-C1A-NA	3.99	115.66	111.24
23	b	6019	CLA	C2A-C1A-CHA	-3.99	116.93	123.83
23	C	1025	CLA	C2A-C1A-NA	3.99	115.66	111.24
23	B	1018	CLA	C2A-C1A-NA	3.98	115.65	111.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	1049	BCR	C33-C5-C6	-3.99	119.99	124.51
23	B	1020	CLA	C2A-C1A-NA	3.98	115.65	111.24
23	C	1035	CLA	C2A-C1A-NA	3.98	115.65	111.24
23	C	1033	CLA	C2A-C1A-NA	3.98	115.65	111.24
27	B	1048	BCR	C33-C5-C4	3.98	120.65	113.34
27	t	1046	BCR	C33-C5-C6	-3.98	119.99	124.51
23	H	1017	CLA	C2A-C1A-NA	3.98	115.65	111.24
23	a	6006	CLA	C2A-C1A-NA	3.98	115.65	111.24
23	c	6035	CLA	C2A-C1A-NA	3.98	115.65	111.24
23	C	1037	CLA	C2A-C1A-NA	3.98	115.65	111.24
23	C	1030	CLA	C2A-C1A-NA	3.98	115.65	111.24
27	B	1045	BCR	C30-C25-C24	3.98	126.71	115.69
23	B	1014	CLA	C3A-C4A-NA	3.98	115.79	110.95
23	b	6012	CLA	C2A-C1A-NA	3.97	115.64	111.24
27	b	6045	BCR	C33-C5-C6	-3.98	120.00	124.51
27	H	1049	BCR	C38-C26-C25	-3.98	120.00	124.51
23	D	1005	CLA	C2A-C1A-NA	3.97	115.64	111.24
23	B	1014	CLA	C1-C2-C3	-3.97	119.13	126.19
23	C	1034	CLA	C2A-C1A-NA	3.96	115.63	111.24
27	b	6048	BCR	C33-C5-C4	3.97	120.62	113.34
27	B	1045	BCR	C33-C5-C6	-3.96	120.01	124.51
23	B	1021	CLA	C2A-C1A-NA	3.96	115.63	111.24
27	b	6045	BCR	C38-C26-C25	-3.96	120.01	124.51
27	B	1045	BCR	C38-C26-C25	-3.96	120.01	124.51
27	K	1052	BCR	C38-C26-C25	-3.96	120.01	124.51
23	c	6036	CLA	C2A-C1A-NA	3.96	115.62	111.24
27	K	1052	BCR	C33-C5-C6	-3.96	120.02	124.51
23	A	1006	CLA	C2A-C1A-NA	3.95	115.62	111.24
23	c	6027	CLA	C2A-C1A-NA	3.95	115.62	111.24
23	B	1023	CLA	C2A-C1A-NA	3.95	115.62	111.24
23	B	1016	CLA	C2A-C1A-NA	3.96	115.62	111.24
23	C	1036	CLA	C2A-C1A-NA	3.95	115.62	111.24
23	b	6017	CLA	C2A-C1A-NA	3.95	115.61	111.24
23	b	6021	CLA	C2A-C1A-NA	3.95	115.61	111.24
23	b	6014	CLA	C1-C2-C3	-3.95	119.17	126.19
23	b	6020	CLA	C2A-C1A-NA	3.95	115.61	111.24
23	c	6032	CLA	C2A-C1A-NA	3.95	115.61	111.24
24	A	1039	PHO	C4C-C3C-C2C	-3.94	102.28	106.86
29	D	1062	MGE	O2G-C1B-C2B	3.94	120.20	111.56
23	b	6018	CLA	C2A-C1A-NA	3.94	115.61	111.24
29	d	6061	MGE	O2G-C1B-C2B	3.94	120.19	111.56
29	L	1061	MGE	O2G-C1B-C2B	3.94	120.19	111.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6024	CLA	C1C-C2C-C3C	-3.94	102.26	106.95
23	d	6004	CLA	C2A-C1A-NA	3.94	115.60	111.24
23	c	6025	CLA	C2A-C1A-NA	3.94	115.60	111.24
23	b	6016	CLA	C2A-C1A-NA	3.94	115.60	111.24
27	k	6052	BCR	C38-C26-C25	-3.94	120.04	124.51
27	B	1045	BCR	C37-C22-C23	3.93	124.45	118.09
29	B	1060	MGE	O2G-C1B-C2B	3.93	120.17	111.56
28	H	1058	DGD	O2G-C1B-C2B	3.93	120.17	111.56
29	b	6060	MGE	O2G-C1B-C2B	3.93	120.16	111.56
28	C	1056	DGD	O2G-C1B-C2B	3.93	120.16	111.56
29	d	6062	MGE	O2G-C1B-C2B	3.92	120.15	111.56
27	b	6045	BCR	C37-C22-C23	3.92	124.44	118.09
23	B	1024	CLA	C1C-C2C-C3C	-3.92	102.28	106.95
29	J	1059	MGE	O2G-C1B-C2B	3.92	120.15	111.56
28	h	6058	DGD	O2G-C1B-C2B	3.92	120.15	111.56
28	c	6056	DGD	O2G-C1B-C2B	3.92	120.14	111.56
23	C	1031	CLA	C2A-C1A-NA	3.92	115.58	111.24
30	A	1063	LHG	O7-C7-C8	3.92	120.14	111.56
28	c	6055	DGD	O2G-C1B-C2B	3.92	120.14	111.56
24	a	6039	PHO	C4C-C3C-C2C	-3.92	102.31	106.86
23	b	6023	CLA	C2A-C1A-NA	3.92	115.58	111.24
26	d	6042	PQ9	C34-C33-C32	-3.91	115.77	123.52
30	a	6063	LHG	O7-C7-C8	3.92	120.14	111.56
28	C	1055	DGD	O2G-C1B-C2B	3.91	120.13	111.56
29	d	6059	MGE	O2G-C1B-C2B	3.91	120.13	111.56
24	A	1039	PHO	OBD-CAD-C3D	-3.91	120.52	127.96
23	A	1007	CLA	C1C-C2C-C3C	-3.91	102.29	106.95
28	C	1057	DGD	O2G-C1B-C2B	3.91	120.13	111.56
23	a	6007	CLA	C1C-C2C-C3C	-3.90	102.30	106.95
23	b	6009	CLA	CHD-C4C-C3C	-3.90	119.01	124.98
28	c	6057	DGD	O2G-C1B-C2B	3.90	120.11	111.56
23	B	1009	CLA	CHD-C4C-C3C	-3.90	119.01	124.98
23	B	1014	CLA	CHB-C4A-NA	3.90	129.19	124.58
23	B	1015	CLA	CHD-C4C-C3C	-3.90	119.02	124.98
26	a	6043	PQ9	C39-C38-C37	-3.88	115.83	123.52
23	b	6015	CLA	CHD-C4C-C3C	-3.88	119.04	124.98
24	a	6039	PHO	OBD-CAD-C3D	-3.87	120.59	127.96
23	c	6031	CLA	C2A-C1A-NA	3.87	115.53	111.24
23	C	1029	CLA	CHD-C4C-C3C	-3.87	119.06	124.98
26	D	1042	PQ9	C36-C37-C38	3.87	136.15	127.80
23	c	6029	CLA	CHD-C4C-C3C	-3.87	119.06	124.98
26	a	6043	PQ9	C11-C2-C1	3.86	120.93	117.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6014	CLA	CHB-C4A-NA	3.86	129.15	124.58
26	d	6042	PQ9	C40-C38-C37	3.86	128.52	121.08
26	D	1042	PQ9	C19-C18-C17	-3.84	115.92	123.52
27	a	6044	BCR	C24-C23-C22	3.82	131.93	126.22
23	C	1026	CLA	CAA-CBA-CGA	-3.82	100.96	113.27
23	c	6026	CLA	CAA-CBA-CGA	-3.81	100.97	113.27
23	b	6013	CLA	CHD-C4C-C3C	-3.81	119.15	124.98
23	C	1034	CLA	CHD-C4C-C3C	-3.81	119.15	124.98
23	C	1025	CLA	CHD-C4C-C3C	-3.81	119.15	124.98
23	c	6030	CLA	CHD-C4C-C3C	-3.81	119.16	124.98
23	c	6034	CLA	C1C-C2C-C3C	-3.81	102.41	106.95
23	a	6003	CLA	CHD-C4C-C3C	-3.81	119.16	124.98
27	b	6047	BCR	C27-C26-C25	-3.80	117.77	122.84
23	B	1012	CLA	CHD-C4C-C3C	-3.80	119.17	124.98
27	A	1044	BCR	C24-C23-C22	3.80	131.90	126.22
23	A	1003	CLA	CHD-C4C-C3C	-3.80	119.17	124.98
23	C	1033	CLA	CHD-C4C-C3C	-3.80	119.17	124.98
23	C	1026	CLA	C1C-C2C-C3C	-3.80	102.43	106.95
23	C	1037	CLA	CHD-C4C-C3C	-3.79	119.17	124.98
23	C	1030	CLA	CHD-C4C-C3C	-3.80	119.17	124.98
23	c	6025	CLA	CHD-C4C-C3C	-3.80	119.17	124.98
27	b	6047	BCR	C28-C27-C26	-3.79	107.99	113.74
27	B	1047	BCR	C28-C27-C26	-3.79	107.99	113.74
23	c	6031	CLA	CHD-C4C-C3C	-3.79	119.18	124.98
23	c	6026	CLA	C1C-C2C-C3C	-3.79	102.43	106.95
23	b	6010	CLA	O2D-CGD-O1D	-3.79	116.09	123.79
23	b	6017	CLA	CHD-C4C-C3C	-3.79	119.18	124.98
23	B	1010	CLA	O2D-CGD-O1D	-3.79	116.09	123.79
23	c	6034	CLA	C2A-C1A-NA	3.79	115.44	111.24
23	b	6024	CLA	O2D-CGD-O1D	-3.79	116.10	123.79
23	B	1023	CLA	CHD-C4C-C3C	-3.79	119.19	124.98
23	B	1016	CLA	CHD-C4C-C3C	-3.78	119.19	124.98
23	B	1013	CLA	CHD-C4C-C3C	-3.78	119.19	124.98
23	C	1031	CLA	CHD-C4C-C3C	-3.78	119.19	124.98
23	b	6011	CLA	CHD-C4C-C3C	-3.78	119.20	124.98
23	a	6006	CLA	CHD-C4C-C3C	-3.78	119.19	124.98
23	H	1017	CLA	CHD-C4C-C3C	-3.78	119.19	124.98
23	B	1019	CLA	C1C-NC-C4C	-3.78	101.55	106.36
23	D	1004	CLA	CHD-C4C-C3C	-3.78	119.20	124.98
23	B	1024	CLA	O2D-CGD-O1D	-3.78	116.12	123.79
27	a	6044	BCR	C33-C5-C4	3.78	120.27	113.34
23	c	6037	CLA	CHD-C4C-C3C	-3.78	119.20	124.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6018	CLA	CHD-C4C-C3C	-3.78	119.20	124.98
23	C	1028	CLA	CHD-C4C-C3C	-3.77	119.20	124.98
23	c	6027	CLA	CHD-C4C-C3C	-3.77	119.20	124.98
23	B	1011	CLA	CHD-C4C-C3C	-3.77	119.21	124.98
23	c	6036	CLA	CHD-C4C-C3C	-3.77	119.21	124.98
23	C	1036	CLA	CHD-C4C-C3C	-3.77	119.21	124.98
23	d	6004	CLA	CHD-C4C-C3C	-3.77	119.21	124.98
23	B	1018	CLA	CHD-C4C-C3C	-3.77	119.21	124.98
27	B	1047	BCR	C27-C26-C25	-3.77	117.82	122.84
23	B	1019	CLA	C2A-C1A-NA	3.77	115.42	111.24
23	B	1021	CLA	CHD-C4C-C3C	-3.77	119.22	124.98
23	c	6033	CLA	CHD-C4C-C3C	-3.77	119.22	124.98
23	B	1020	CLA	CHD-C4C-C3C	-3.76	119.22	124.98
23	b	6023	CLA	CHD-C4C-C3C	-3.76	119.22	124.98
27	d	6050	BCR	C30-C25-C24	3.76	126.12	115.69
27	A	1044	BCR	C33-C5-C4	3.76	120.25	113.34
23	C	1027	CLA	CHD-C4C-C3C	-3.76	119.22	124.98
23	D	1008	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	A	1006	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	b	6012	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
27	a	6044	BCR	C15-C14-C13	-3.76	121.88	127.29
27	D	1050	BCR	C30-C25-C24	3.76	126.11	115.69
23	c	6035	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	c	6028	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	D	1005	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	C	1035	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	b	6016	CLA	CHD-C4C-C3C	-3.76	119.23	124.98
23	c	6032	CLA	CHD-C4C-C3C	-3.75	119.23	124.98
23	b	6019	CLA	C1C-NC-C4C	-3.76	101.58	106.36
23	C	1032	CLA	CHD-C4C-C3C	-3.75	119.24	124.98
23	b	6019	CLA	C2A-C1A-NA	3.75	115.39	111.24
23	b	6021	CLA	CHD-C4C-C3C	-3.75	119.25	124.98
23	d	6008	CLA	CHD-C4C-C3C	-3.74	119.25	124.98
26	d	6042	PQ9	C36-C37-C38	3.74	135.87	127.80
23	b	6020	CLA	CHD-C4C-C3C	-3.74	119.26	124.98
27	c	6054	BCR	C38-C26-C25	-3.73	120.27	124.51
23	b	6015	CLA	C2A-C1A-CHA	-3.73	117.38	123.83
27	A	1044	BCR	C15-C14-C13	-3.72	121.93	127.29
23	d	6005	CLA	CHD-C4C-C3C	-3.72	119.28	124.98
27	k	6051	BCR	C37-C22-C23	3.72	124.10	118.09
27	B	1047	BCR	C38-C26-C25	-3.71	120.30	124.51
23	B	1015	CLA	C2A-C1A-CHA	-3.71	117.40	123.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	D	1050	BCR	C33-C5-C4	3.71	120.16	113.34
27	C	1054	BCR	C38-C26-C25	-3.71	120.30	124.51
27	K	1051	BCR	C37-C22-C23	3.71	124.09	118.09
23	B	1010	CLA	O2A-CGA-O1A	-3.71	113.30	123.43
27	d	6050	BCR	C33-C5-C4	3.71	120.14	113.34
23	b	6010	CLA	O2A-CGA-O1A	-3.71	113.31	123.43
27	b	6047	BCR	C38-C26-C25	-3.70	120.31	124.51
23	B	1022	CLA	C1-C2-C3	-3.70	119.61	126.19
23	b	6022	CLA	C1-C2-C3	-3.69	119.62	126.19
23	b	6009	CLA	C1C-C2C-C3C	-3.69	102.56	106.95
27	D	1050	BCR	C30-C25-C26	-3.68	117.27	122.60
27	b	6045	BCR	C38-C26-C27	3.68	120.09	113.34
23	B	1009	CLA	C1C-C2C-C3C	-3.68	102.57	106.95
23	B	1024	CLA	O1D-CGD-CBD	-3.67	116.90	124.42
27	d	6050	BCR	C30-C25-C26	-3.67	117.28	122.60
27	K	1051	BCR	C38-C26-C25	-3.67	120.35	124.51
23	b	6024	CLA	O1D-CGD-CBD	-3.67	116.91	124.42
26	A	1043	PQ9	C31-C32-C33	-3.66	119.89	127.80
23	b	6013	CLA	C1C-C2C-C3C	-3.67	102.58	106.95
23	C	1029	CLA	C3B-CAB-CBB	-3.66	118.36	125.95
27	B	1045	BCR	C38-C26-C27	3.66	120.07	113.34
26	A	1043	PQ9	C11-C2-C1	3.66	120.73	117.10
27	k	6051	BCR	C38-C26-C25	-3.65	120.36	124.51
23	c	6029	CLA	C3B-CAB-CBB	-3.66	118.38	125.95
27	z	6053	BCR	C33-C5-C4	3.65	120.04	113.34
27	Z	1053	BCR	C38-C26-C27	3.65	120.03	113.34
27	Z	1053	BCR	C33-C5-C4	3.64	120.03	113.34
23	c	6035	CLA	C1C-C2C-C3C	-3.64	102.61	106.95
27	h	6049	BCR	C33-C5-C4	3.64	120.02	113.34
27	H	1049	BCR	C33-C5-C4	3.64	120.02	113.34
23	c	6025	CLA	C1C-C2C-C3C	-3.64	102.61	106.95
24	a	6039	PHO	OBD-CAD-CBD	-3.63	120.45	125.94
23	B	1014	CLA	CMC-C2C-C1C	3.63	129.96	124.94
23	C	1025	CLA	C1C-C2C-C3C	-3.63	102.62	106.95
23	B	1013	CLA	C1C-C2C-C3C	-3.63	102.62	106.95
27	z	6053	BCR	C38-C26-C27	3.63	120.00	113.34
25	V	1041	HEM	C2D-C1D-ND	-3.63	108.64	112.93
23	C	1032	CLA	C1C-C2C-C3C	-3.63	102.63	106.95
23	D	1004	CLA	C1C-C2C-C3C	-3.63	102.63	106.95
23	D	1008	CLA	C1C-C2C-C3C	-3.62	102.63	106.95
23	c	6036	CLA	C1C-C2C-C3C	-3.62	102.63	106.95
27	B	1045	BCR	C33-C5-C4	3.62	119.99	113.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6014	CLA	CMC-C2C-C1C	3.62	129.94	124.94
23	d	6008	CLA	C1C-C2C-C3C	-3.62	102.64	106.95
27	b	6045	BCR	C33-C5-C4	3.62	119.99	113.34
27	k	6052	BCR	C38-C26-C27	3.62	119.98	113.34
23	C	1035	CLA	C1C-C2C-C3C	-3.62	102.64	106.95
27	b	6045	BCR	C37-C22-C21	-3.62	117.78	122.92
24	A	1039	PHO	OBD-CAD-CBD	-3.62	120.48	125.94
27	K	1052	BCR	C33-C5-C4	3.62	119.98	113.34
23	B	1020	CLA	C1C-C2C-C3C	-3.62	102.64	106.95
23	c	6032	CLA	C1C-C2C-C3C	-3.61	102.64	106.95
23	C	1033	CLA	C1C-C2C-C3C	-3.61	102.65	106.95
27	k	6052	BCR	C33-C5-C4	3.61	119.97	113.34
27	B	1045	BCR	C37-C22-C21	-3.61	117.80	122.92
23	c	6030	CLA	C1C-C2C-C3C	-3.61	102.65	106.95
25	v	6041	HEM	C2D-C1D-ND	-3.60	108.67	112.93
27	K	1052	BCR	C38-C26-C27	3.61	119.96	113.34
23	B	1023	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
23	C	1028	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
27	h	6049	BCR	C38-C26-C27	3.60	119.95	113.34
23	a	6006	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
23	c	6037	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
23	c	6033	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
23	b	6020	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
25	E	1040	HEM	C2D-C1D-ND	-3.60	108.68	112.93
23	C	1031	CLA	C1C-C2C-C3C	-3.60	102.66	106.95
27	K	1051	BCR	C28-C27-C26	-3.60	108.29	113.74
23	d	6005	CLA	C1C-C2C-C3C	-3.59	102.67	106.95
27	t	1046	BCR	C33-C5-C4	3.59	119.94	113.34
23	b	6023	CLA	C1C-C2C-C3C	-3.59	102.67	106.95
27	k	6051	BCR	C28-C27-C26	-3.59	108.30	113.74
23	C	1037	CLA	C1C-C2C-C3C	-3.59	102.67	106.95
23	b	6015	CLA	C3A-C4A-CHB	-3.59	116.86	124.33
23	B	1018	CLA	C1C-C2C-C3C	-3.59	102.67	106.95
27	H	1049	BCR	C38-C26-C27	3.59	119.93	113.34
23	d	6004	CLA	C1C-C2C-C3C	-3.59	102.67	106.95
23	C	1027	CLA	C1C-C2C-C3C	-3.59	102.67	106.95
23	c	6028	CLA	C1C-C2C-C3C	-3.59	102.68	106.95
23	B	1011	CLA	C1C-C2C-C3C	-3.59	102.68	106.95
23	C	1036	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
23	c	6027	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
23	B	1012	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
23	H	1017	CLA	C1C-C2C-C3C	-3.58	102.68	106.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6017	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
23	c	6031	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
27	A	1044	BCR	C38-C26-C27	3.58	119.92	113.34
23	a	6007	CLA	O2D-CGD-O1D	-3.58	116.51	123.79
23	B	1019	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
23	C	1034	CLA	C1C-C2C-C3C	-3.58	102.68	106.95
27	a	6044	BCR	C38-C26-C27	3.58	119.91	113.34
23	c	6026	CLA	O2A-CGA-O1A	-3.58	113.66	123.43
23	b	6016	CLA	C1C-C2C-C3C	-3.58	102.69	106.95
23	C	1030	CLA	C1C-C2C-C3C	-3.57	102.69	106.95
23	b	6011	CLA	C1C-C2C-C3C	-3.57	102.69	106.95
23	B	1016	CLA	C1C-C2C-C3C	-3.57	102.69	106.95
26	a	6043	PQ9	C21-C20-C18	3.57	124.57	112.74
23	b	6021	CLA	C1C-C2C-C3C	-3.57	102.69	106.95
23	A	1007	CLA	O2D-CGD-O1D	-3.57	116.53	123.79
23	D	1005	CLA	C1C-C2C-C3C	-3.57	102.69	106.95
25	e	6040	HEM	C2D-C1D-ND	-3.57	108.71	112.93
23	A	1003	CLA	C1C-C2C-C3C	-3.57	102.70	106.95
23	C	1026	CLA	O2A-CGA-O1A	-3.57	113.68	123.43
23	B	1015	CLA	C3A-C4A-CHB	-3.57	116.91	124.33
23	b	6014	CLA	C2A-C1A-NA	3.57	115.19	111.24
23	B	1019	CLA	O1D-CGD-CBD	-3.57	117.11	124.42
23	b	6012	CLA	C1C-C2C-C3C	-3.57	102.70	106.95
23	B	1021	CLA	C1C-C2C-C3C	-3.56	102.70	106.95
27	c	6054	BCR	C33-C5-C4	3.56	119.88	113.34
27	a	6044	BCR	C4-C5-C6	-3.56	118.10	122.84
27	K	1051	BCR	C38-C26-C27	3.56	119.87	113.34
23	b	6019	CLA	O1D-CGD-CBD	-3.56	117.13	124.42
27	k	6051	BCR	C38-C26-C27	3.56	119.87	113.34
23	A	1006	CLA	C1C-C2C-C3C	-3.56	102.71	106.95
27	C	1054	BCR	C33-C5-C4	3.55	119.86	113.34
23	a	6003	CLA	C1C-C2C-C3C	-3.55	102.71	106.95
23	b	6018	CLA	C1C-C2C-C3C	-3.56	102.71	106.95
23	B	1019	CLA	CMA-C3A-C4A	-3.56	101.44	111.76
23	b	6019	CLA	CMA-C3A-C4A	-3.55	101.45	111.76
23	B	1014	CLA	C2A-C1A-NA	3.55	115.17	111.24
23	b	6019	CLA	C1C-C2C-C3C	-3.55	102.72	106.95
23	b	6024	CLA	C1C-NC-C4C	-3.54	101.85	106.36
23	c	6033	CLA	C2A-C1A-CHA	-3.54	117.71	123.83
23	B	1024	CLA	C1C-NC-C4C	-3.53	101.86	106.36
23	c	6026	CLA	C3A-C4A-CHB	-3.53	116.98	124.33
23	c	6035	CLA	C2A-C1A-CHA	-3.53	117.72	123.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1021	CLA	C2A-C1A-CHA	-3.52	117.73	123.83
23	B	1024	CLA	CHD-C4C-C3C	-3.52	119.59	124.98
23	C	1026	CLA	C3A-C4A-CHB	-3.52	117.00	124.33
23	b	6021	CLA	C2A-C1A-CHA	-3.52	117.73	123.83
23	c	6027	CLA	C2A-C1A-CHA	-3.52	117.74	123.83
23	C	1027	CLA	C2A-C1A-CHA	-3.52	117.74	123.83
23	D	1008	CLA	C2A-C1A-CHA	-3.51	117.75	123.83
23	c	6034	CLA	C2A-C1A-CHA	-3.51	117.75	123.83
23	A	1007	CLA	C2A-C1A-CHA	-3.51	117.75	123.83
24	d	6038	PHO	O2D-CGD-CBD	3.51	118.49	111.33
23	C	1033	CLA	C2A-C1A-CHA	-3.51	117.75	123.83
23	C	1035	CLA	C2A-C1A-CHA	-3.51	117.75	123.83
27	A	1044	BCR	C4-C5-C6	-3.51	118.16	122.84
24	A	1038	PHO	O2D-CGD-CBD	3.51	118.48	111.33
23	d	6008	CLA	C2A-C1A-CHA	-3.51	117.76	123.83
23	C	1026	CLA	C3A-C4A-NA	3.51	115.22	110.95
23	a	6007	CLA	C2A-C1A-CHA	-3.51	117.76	123.83
23	c	6028	CLA	C2A-C1A-CHA	-3.51	117.76	123.83
23	B	1012	CLA	C2A-C1A-CHA	-3.50	117.77	123.83
23	c	6026	CLA	C3A-C4A-NA	3.50	115.21	110.95
23	B	1020	CLA	C2A-C1A-CHA	-3.50	117.77	123.83
23	C	1028	CLA	C2A-C1A-CHA	-3.50	117.77	123.83
23	b	6024	CLA	CHD-C4C-C3C	-3.50	119.62	124.98
26	D	1042	PQ9	C35-C33-C32	3.50	127.82	121.08
23	c	6037	CLA	C2A-C1A-CHA	-3.49	117.78	123.83
23	d	6005	CLA	C2A-C1A-CHA	-3.49	117.78	123.83
23	B	1010	CLA	CMD-C2D-C3D	-3.49	119.47	124.97
23	C	1030	CLA	C2A-C1A-CHA	-3.49	117.78	123.83
23	C	1032	CLA	C2A-C1A-CHA	-3.49	117.78	123.83
23	b	6017	CLA	C2A-C1A-CHA	-3.49	117.79	123.83
23	C	1025	CLA	C2A-C1A-CHA	-3.49	117.79	123.83
23	B	1013	CLA	C2A-C1A-CHA	-3.49	117.79	123.83
23	C	1037	CLA	C2A-C1A-CHA	-3.49	117.79	123.83
23	c	6034	CLA	CMB-C2B-C3B	3.49	130.46	124.97
23	C	1031	CLA	C2A-C1A-CHA	-3.49	117.79	123.83
23	b	6010	CLA	CHD-C4C-C3C	-3.48	119.65	124.98
23	A	1003	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	D	1004	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	b	6012	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	A	1006	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	C	1036	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	d	6004	CLA	C2A-C1A-CHA	-3.48	117.80	123.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1010	CLA	CHD-C4C-C3C	-3.48	119.65	124.98
23	a	6003	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	H	1017	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	D	1005	CLA	C2A-C1A-CHA	-3.48	117.80	123.83
23	c	6030	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	B	1011	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	B	1023	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	a	6006	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	B	1015	CLA	C1C-C2C-C3C	-3.48	102.81	106.95
27	A	1044	BCR	C1-C6-C5	-3.48	117.56	122.60
23	b	6020	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	c	6032	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	B	1018	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	C	1034	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	c	6036	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	c	6025	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	b	6011	CLA	C2A-C1A-CHA	-3.48	117.81	123.83
23	B	1010	CLA	C4-C3-C5	3.47	120.67	115.39
23	b	6015	CLA	C1C-C2C-C3C	-3.47	102.81	106.95
23	b	6010	CLA	CMD-C2D-C3D	-3.47	119.50	124.97
23	B	1016	CLA	C2A-C1A-CHA	-3.47	117.82	123.83
23	b	6016	CLA	C2A-C1A-CHA	-3.47	117.83	123.83
23	b	6010	CLA	C4-C3-C5	3.47	120.66	115.39
23	c	6031	CLA	C2A-C1A-CHA	-3.47	117.83	123.83
23	b	6013	CLA	C2A-C1A-CHA	-3.47	117.83	123.83
23	b	6023	CLA	C2A-C1A-CHA	-3.46	117.84	123.83
23	b	6018	CLA	C2A-C1A-CHA	-3.46	117.85	123.83
27	a	6044	BCR	C1-C6-C5	-3.45	117.61	122.60
27	k	6051	BCR	C37-C22-C21	-3.45	118.02	122.92
23	C	1026	CLA	C1C-NC-C4C	-3.45	101.97	106.36
27	b	6047	BCR	C33-C5-C4	3.45	119.67	113.34
27	B	1047	BCR	C33-C5-C4	3.45	119.67	113.34
23	b	6014	CLA	O2D-CGD-O1D	-3.44	116.79	123.79
23	c	6026	CLA	C1C-NC-C4C	-3.44	101.97	106.36
27	K	1051	BCR	C37-C22-C21	-3.44	118.04	122.92
26	d	6042	PQ9	C40-C41-C42	3.44	121.44	111.62
23	B	1014	CLA	O2D-CGD-O1D	-3.44	116.81	123.79
24	d	6038	PHO	C1C-C2C-C3C	-3.43	102.39	106.64
24	A	1038	PHO	C1C-C2C-C3C	-3.42	102.40	106.64
27	C	1054	BCR	C27-C26-C25	-3.41	118.29	122.84
27	c	6054	BCR	C27-C26-C25	-3.41	118.29	122.84
26	A	1043	PQ9	C21-C20-C18	3.41	124.03	112.74

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	6033	CLA	C3A-C4A-CHB	-3.41	117.25	124.33
26	d	6042	PQ9	C19-C18-C20	3.40	120.56	115.39
23	a	6007	CLA	CMB-C2B-C3B	3.40	130.32	124.97
23	d	6005	CLA	C3A-C4A-CHB	-3.40	117.27	124.33
23	c	6027	CLA	C3A-C4A-CHB	-3.40	117.27	124.33
23	C	1033	CLA	C3A-C4A-CHB	-3.39	117.28	124.33
23	D	1005	CLA	C3A-C4A-CHB	-3.39	117.28	124.33
23	B	1018	CLA	C3A-C4A-CHB	-3.39	117.28	124.33
23	c	6028	CLA	C3A-C4A-CHB	-3.39	117.29	124.33
23	c	6034	CLA	C3A-C4A-CHB	-3.39	117.29	124.33
23	C	1036	CLA	C3A-C4A-CHB	-3.38	117.29	124.33
23	b	6018	CLA	C3A-C4A-CHB	-3.39	117.29	124.33
24	d	6038	PHO	C4C-C3C-C2C	-3.38	102.93	106.86
24	A	1038	PHO	C4C-C3C-C2C	-3.38	102.93	106.86
23	C	1030	CLA	C3A-C4A-CHB	-3.38	117.30	124.33
23	c	6030	CLA	C3A-C4A-CHB	-3.38	117.30	124.33
23	B	1011	CLA	C3A-C4A-CHB	-3.38	117.30	124.33
23	c	6035	CLA	C3A-C4A-CHB	-3.38	117.30	124.33
23	b	6011	CLA	C3A-C4A-CHB	-3.38	117.31	124.33
23	C	1028	CLA	C3A-C4A-CHB	-3.38	117.31	124.33
23	A	1007	CLA	CMB-C2B-C3B	3.38	130.29	124.97
23	B	1012	CLA	C3A-C4A-CHB	-3.38	117.31	124.33
23	d	6004	CLA	C3A-C4A-CHB	-3.38	117.31	124.33
23	B	1021	CLA	C3A-C4A-CHB	-3.38	117.31	124.33
23	B	1013	CLA	C3A-C4A-CHB	-3.38	117.31	124.33
23	D	1008	CLA	C3A-C4A-CHB	-3.37	117.32	124.33
23	d	6008	CLA	C3A-C4A-CHB	-3.37	117.31	124.33
23	C	1035	CLA	C3A-C4A-CHB	-3.37	117.32	124.33
23	B	1020	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	c	6031	CLA	C3A-C4A-CHB	-3.37	117.32	124.33
26	A	1043	PQ9	C15-C16-C17	-3.37	101.99	111.62
23	b	6013	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	b	6009	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	b	6020	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	c	6036	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	B	1023	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	b	6016	CLA	C3A-C4A-CHB	-3.36	117.33	124.33
23	D	1004	CLA	C3A-C4A-CHB	-3.37	117.33	124.33
23	B	1009	CLA	C3A-C4A-CHB	-3.36	117.33	124.33
23	c	6037	CLA	C3A-C4A-CHB	-3.36	117.34	124.33
23	H	1017	CLA	C3A-C4A-CHB	-3.36	117.34	124.33
23	C	1027	CLA	C3A-C4A-CHB	-3.36	117.34	124.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	1037	CLA	C3A-C4A-CHB	-3.36	117.34	124.33
23	a	6003	CLA	C3A-C4A-CHB	-3.36	117.34	124.33
23	b	6015	CLA	C2A-C1A-NA	3.36	114.96	111.24
23	B	1016	CLA	C3A-C4A-CHB	-3.36	117.34	124.33
23	A	1006	CLA	C3A-C4A-CHB	-3.36	117.35	124.33
23	C	1031	CLA	C3A-C4A-CHB	-3.36	117.35	124.33
23	C	1025	CLA	C3A-C4A-CHB	-3.36	117.35	124.33
23	b	6017	CLA	C3A-C4A-CHB	-3.36	117.35	124.33
23	B	1009	CLA	C1C-NC-C4C	-3.36	102.08	106.36
23	b	6012	CLA	C3A-C4A-CHB	-3.35	117.36	124.33
23	c	6025	CLA	C3A-C4A-CHB	-3.36	117.35	124.33
23	A	1003	CLA	C3A-C4A-CHB	-3.35	117.36	124.33
23	C	1032	CLA	C3A-C4A-CHB	-3.36	117.35	124.33
26	a	6043	PQ9	C15-C16-C17	-3.35	102.05	111.62
23	b	6021	CLA	C3A-C4A-CHB	-3.35	117.37	124.33
23	b	6023	CLA	C3A-C4A-CHB	-3.35	117.36	124.33
23	C	1034	CLA	C3A-C4A-CHB	-3.35	117.37	124.33
23	B	1009	CLA	C2A-C1A-CHA	-3.35	118.04	123.83
23	B	1015	CLA	C2A-C1A-NA	3.35	114.95	111.24
23	c	6034	CLA	CHB-C4A-NA	3.34	128.54	124.58
23	a	6006	CLA	C3A-C4A-CHB	-3.34	117.38	124.33
26	a	6043	PQ9	C31-C32-C33	-3.34	120.59	127.80
23	B	1009	CLA	C3B-CAB-CBB	-3.34	119.04	125.95
23	b	6009	CLA	C2A-C1A-CHA	-3.34	118.06	123.83
23	b	6009	CLA	C1C-NC-C4C	-3.34	102.11	106.36
23	b	6014	CLA	C4-C3-C5	3.33	120.45	115.39
23	c	6032	CLA	C3A-C4A-CHB	-3.33	117.40	124.33
23	B	1014	CLA	C4-C3-C5	3.33	120.45	115.39
23	b	6024	CLA	C3A-C4A-CHB	-3.32	117.43	124.33
23	b	6009	CLA	C3B-CAB-CBB	-3.32	119.08	125.95
27	b	6048	BCR	C3-C4-C5	-3.31	108.72	113.74
23	B	1024	CLA	C3A-C4A-CHB	-3.31	117.45	124.33
27	B	1048	BCR	C3-C4-C5	-3.31	108.73	113.74
27	A	1044	BCR	C11-C10-C9	-3.31	122.53	127.29
27	a	6044	BCR	C11-C10-C9	-3.30	122.54	127.29
27	b	6047	BCR	C30-C25-C26	-3.30	117.83	122.60
23	b	6019	CLA	CMB-C2B-C3B	3.29	130.16	124.97
27	a	6044	BCR	C37-C22-C21	-3.29	118.25	122.92
23	B	1019	CLA	CMB-C2B-C3B	3.29	130.15	124.97
27	T	6046	BCR	C37-C22-C23	3.28	123.40	118.09
26	d	6042	PQ9	C20-C21-C22	-3.28	102.24	111.62
27	B	1047	BCR	C30-C25-C26	-3.28	117.85	122.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	T	6046	BCR	C37-C22-C21	-3.27	118.27	122.92
27	A	1044	BCR	C37-C22-C21	-3.27	118.28	122.92
23	B	1009	CLA	CMB-C2B-C3B	3.27	130.12	124.97
23	B	1015	CLA	CHB-C4A-NA	3.26	128.43	124.58
27	D	1050	BCR	C37-C22-C23	3.25	123.35	118.09
23	b	6009	CLA	CMB-C2B-C3B	3.25	130.09	124.97
27	d	6050	BCR	C37-C22-C23	3.25	123.35	118.09
23	b	6015	CLA	CHB-C4A-NA	3.24	128.42	124.58
24	a	6039	PHO	C1-C2-C3	-3.22	120.45	126.19
23	c	6027	CLA	CHB-C4A-NA	3.22	128.40	124.58
26	D	1042	PQ9	C36-C35-C33	3.21	123.38	112.74
23	d	6008	CLA	CHB-C4A-NA	3.22	128.39	124.58
23	c	6030	CLA	C1-C2-C3	-3.21	120.47	126.19
23	c	6027	CLA	C1-C2-C3	-3.21	120.47	126.19
23	a	6006	CLA	C1-C2-C3	-3.21	120.47	126.19
23	C	1031	CLA	C1-C2-C3	-3.21	120.48	126.19
23	b	6018	CLA	C1-C2-C3	-3.21	120.48	126.19
23	A	1007	CLA	C3A-C4A-CHB	-3.20	117.67	124.33
23	D	1005	CLA	CHB-C4A-NA	3.20	128.37	124.58
23	c	6037	CLA	C1-C2-C3	-3.20	120.49	126.19
23	D	1008	CLA	CHB-C4A-NA	3.20	128.37	124.58
23	C	1030	CLA	C1-C2-C3	-3.20	120.50	126.19
23	c	6032	CLA	C1-C2-C3	-3.20	120.50	126.19
23	d	6008	CLA	C1-C2-C3	-3.20	120.50	126.19
23	d	6004	CLA	C1-C2-C3	-3.20	120.50	126.19
23	b	6009	CLA	CHB-C4A-NA	3.20	128.37	124.58
23	c	6035	CLA	C1-C2-C3	-3.20	120.50	126.19
23	D	1004	CLA	C1-C2-C3	-3.20	120.50	126.19
23	B	1018	CLA	C1-C2-C3	-3.20	120.50	126.19
23	C	1032	CLA	C1-C2-C3	-3.20	120.50	126.19
23	a	6007	CLA	C3A-C4A-CHB	-3.20	117.68	124.33
23	C	1036	CLA	CHB-C4A-NA	3.20	128.37	124.58
23	b	6018	CLA	CHB-C4A-NA	3.20	128.37	124.58
23	C	1027	CLA	C1-C2-C3	-3.20	120.50	126.19
23	c	6028	CLA	C1-C2-C3	-3.20	120.50	126.19
23	c	6031	CLA	C1-C2-C3	-3.20	120.50	126.19
23	B	1012	CLA	CHB-C4A-NA	3.20	128.37	124.58
23	b	6016	CLA	C1-C2-C3	-3.20	120.50	126.19
23	C	1025	CLA	C1-C2-C3	-3.20	120.50	126.19
23	A	1006	CLA	C1-C2-C3	-3.20	120.50	126.19
23	C	1028	CLA	C1-C2-C3	-3.19	120.51	126.19
24	A	1039	PHO	C1-C2-C3	-3.19	120.50	126.19

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6011	CLA	C1-C2-C3	-3.19	120.50	126.19
23	D	1008	CLA	C1-C2-C3	-3.19	120.51	126.19
23	b	6012	CLA	C1-C2-C3	-3.19	120.51	126.19
23	b	6019	CLA	C4C-C3C-C2C	-3.19	101.75	106.93
23	B	1016	CLA	C1-C2-C3	-3.19	120.51	126.19
23	B	1020	CLA	C1-C2-C3	-3.19	120.51	126.19
23	c	6036	CLA	C1-C2-C3	-3.19	120.51	126.19
23	a	6003	CLA	C1-C2-C3	-3.19	120.51	126.19
23	C	1035	CLA	C1-C2-C3	-3.19	120.51	126.19
23	C	1034	CLA	C1-C2-C3	-3.19	120.52	126.19
23	D	1005	CLA	C1-C2-C3	-3.19	120.52	126.19
23	B	1013	CLA	C1-C2-C3	-3.19	120.52	126.19
23	C	1033	CLA	C1-C2-C3	-3.19	120.52	126.19
23	C	1037	CLA	C1-C2-C3	-3.19	120.52	126.19
23	b	6017	CLA	C1-C2-C3	-3.18	120.53	126.19
23	b	6020	CLA	C1-C2-C3	-3.18	120.53	126.19
23	c	6025	CLA	C1-C2-C3	-3.18	120.53	126.19
23	B	1021	CLA	C1-C2-C3	-3.18	120.53	126.19
23	B	1009	CLA	C4-C3-C5	3.18	120.22	115.39
23	A	1003	CLA	C1-C2-C3	-3.18	120.53	126.19
23	b	6023	CLA	CHB-C4A-NA	3.18	128.34	124.58
23	A	1007	CLA	O2D-CGD-CBD	3.18	117.81	111.33
23	d	6005	CLA	CHB-C4A-NA	3.18	128.34	124.58
23	c	6025	CLA	CHB-C4A-NA	3.18	128.34	124.58
23	B	1012	CLA	C1-C2-C3	-3.18	120.53	126.19
23	a	6007	CLA	O2D-CGD-CBD	3.18	117.81	111.33
23	c	6033	CLA	CHB-C4A-NA	3.18	128.34	124.58
23	B	1019	CLA	C4C-C3C-C2C	-3.18	101.77	106.93
23	c	6033	CLA	C1-C2-C3	-3.18	120.53	126.19
23	b	6013	CLA	C1-C2-C3	-3.18	120.54	126.19
23	b	6010	CLA	CAA-CBA-CGA	-3.18	103.03	113.27
23	b	6023	CLA	C1-C2-C3	-3.18	120.54	126.19
23	c	6035	CLA	CHB-C4A-NA	3.18	128.34	124.58
23	C	1036	CLA	C1-C2-C3	-3.18	120.54	126.19
23	C	1027	CLA	CHB-C4A-NA	3.18	128.34	124.58
23	B	1011	CLA	C1-C2-C3	-3.17	120.54	126.19
23	B	1011	CLA	CHB-C4A-NA	3.17	128.34	124.58
23	B	1009	CLA	CHB-C4A-NA	3.17	128.34	124.58
23	B	1018	CLA	CHB-C4A-NA	3.17	128.34	124.58
23	c	6036	CLA	CHB-C4A-NA	3.17	128.34	124.58
23	B	1023	CLA	C1-C2-C3	-3.17	120.55	126.19
23	D	1004	CLA	CHB-C4A-NA	3.17	128.33	124.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1014	CLA	O2A-CGA-O1A	-3.17	114.78	123.43
23	d	6005	CLA	C1-C2-C3	-3.17	120.55	126.19
23	B	1010	CLA	CAA-CBA-CGA	-3.17	103.06	113.27
23	B	1010	CLA	C3B-CAB-CBB	-3.17	119.39	125.95
23	b	6014	CLA	O2A-CGA-O1A	-3.17	114.78	123.43
23	C	1033	CLA	CHB-C4A-NA	3.17	128.33	124.58
23	A	1007	CLA	CAA-C2A-C3A	-3.17	105.56	113.04
23	C	1028	CLA	CHB-C4A-NA	3.16	128.33	124.58
23	d	6004	CLA	CHB-C4A-NA	3.17	128.33	124.58
23	B	1023	CLA	CHB-C4A-NA	3.17	128.33	124.58
23	B	1014	CLA	CMA-C3A-C4A	-3.16	102.58	111.76
23	c	6028	CLA	CHB-C4A-NA	3.16	128.32	124.58
23	a	6007	CLA	CAA-C2A-C3A	-3.16	105.56	113.04
23	H	1017	CLA	C1-C2-C3	-3.16	120.57	126.19
23	b	6011	CLA	CHB-C4A-NA	3.16	128.32	124.58
23	C	1035	CLA	CHB-C4A-NA	3.16	128.32	124.58
27	d	6050	BCR	C37-C22-C21	-3.16	118.44	122.92
23	B	1010	CLA	C3A-C4A-CHB	-3.16	117.77	124.33
23	b	6014	CLA	CMA-C3A-C4A	-3.16	102.60	111.76
24	a	6039	PHO	C1C-C2C-C3C	-3.16	102.73	106.64
23	b	6021	CLA	C1-C2-C3	-3.16	120.57	126.19
23	C	1025	CLA	CHB-C4A-NA	3.16	128.32	124.58
23	b	6010	CLA	C3A-C4A-CHB	-3.16	117.77	124.33
23	C	1037	CLA	CHB-C4A-NA	3.16	128.32	124.58
23	a	6006	CLA	CHB-C4A-NA	3.15	128.31	124.58
23	b	6013	CLA	CHB-C4A-NA	3.15	128.31	124.58
23	a	6003	CLA	CHB-C4A-NA	3.15	128.31	124.58
27	t	1046	BCR	C37-C22-C21	-3.15	118.45	122.92
23	b	6009	CLA	C4-C3-C5	3.15	120.18	115.39
24	A	1039	PHO	C1C-C2C-C3C	-3.15	102.74	106.64
23	c	6032	CLA	CHB-C4A-NA	3.15	128.31	124.58
23	b	6010	CLA	C3B-CAB-CBB	-3.15	119.44	125.95
23	A	1007	CLA	CHB-C4A-NA	3.15	128.31	124.58
23	B	1021	CLA	CHB-C4A-NA	3.15	128.30	124.58
27	K	1051	BCR	C33-C5-C4	3.15	119.11	113.34
23	H	1017	CLA	CHB-C4A-NA	3.15	128.31	124.58
23	b	6012	CLA	CHB-C4A-NA	3.14	128.30	124.58
23	c	6037	CLA	CHB-C4A-NA	3.14	128.30	124.58
23	b	6017	CLA	CHB-C4A-NA	3.14	128.30	124.58
23	B	1013	CLA	CHB-C4A-NA	3.14	128.30	124.58
23	b	6022	CLA	C1C-NC-C4C	-3.14	102.36	106.36
23	b	6015	CLA	C4-C3-C5	3.14	120.16	115.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	1032	CLA	CHB-C4A-NA	3.14	128.29	124.58
23	A	1003	CLA	CHB-C4A-NA	3.13	128.29	124.58
23	C	1034	CLA	CHB-C4A-NA	3.14	128.29	124.58
23	c	6030	CLA	CHB-C4A-NA	3.13	128.29	124.58
27	k	6051	BCR	C33-C5-C4	3.13	119.09	113.34
23	C	1030	CLA	CHB-C4A-NA	3.13	128.29	124.58
23	B	1022	CLA	C1C-NC-C4C	-3.13	102.37	106.36
27	D	1050	BCR	C37-C22-C21	-3.13	118.47	122.92
23	c	6031	CLA	CHB-C4A-NA	3.13	128.28	124.58
23	c	6029	CLA	C4-C3-C5	3.13	120.14	115.39
23	A	1006	CLA	CHB-C4A-NA	3.13	128.28	124.58
23	a	6007	CLA	CHB-C4A-NA	3.13	128.28	124.58
23	b	6016	CLA	CHB-C4A-NA	3.13	128.28	124.58
23	B	1016	CLA	CHB-C4A-NA	3.13	128.28	124.58
23	B	1019	CLA	CAA-CBA-CGA	-3.12	103.20	113.27
23	b	6019	CLA	CAA-CBA-CGA	-3.12	103.21	113.27
23	B	1020	CLA	CHB-C4A-NA	3.12	128.27	124.58
27	t	1046	BCR	C37-C22-C23	3.11	123.13	118.09
23	B	1015	CLA	C4-C3-C5	3.11	120.12	115.39
27	D	1050	BCR	C34-C9-C10	-3.11	118.50	122.92
27	d	6050	BCR	C34-C9-C10	-3.11	118.50	122.92
23	b	6011	CLA	C1C-NC-C4C	-3.11	102.40	106.36
23	C	1031	CLA	CHB-C4A-NA	3.11	128.26	124.58
23	C	1029	CLA	C4-C3-C5	3.11	120.11	115.39
23	B	1019	CLA	CHB-C4A-NA	3.11	128.26	124.58
23	c	6036	CLA	CMB-C2B-C3B	3.10	129.85	124.97
23	b	6021	CLA	CHB-C4A-NA	3.10	128.25	124.58
23	b	6020	CLA	CHB-C4A-NA	3.10	128.25	124.58
23	d	6008	CLA	C1C-NC-C4C	-3.10	102.41	106.36
23	b	6018	CLA	C1C-NC-C4C	-3.10	102.41	106.36
23	b	6019	CLA	CHB-C4A-NA	3.10	128.25	124.58
23	C	1030	CLA	C1C-NC-C4C	-3.09	102.42	106.36
23	b	6014	CLA	C1C-NC-C4C	-3.09	102.42	106.36
23	b	6015	CLA	C3A-C4A-NA	3.09	114.71	110.95
23	B	1018	CLA	C1C-NC-C4C	-3.09	102.42	106.36
23	H	1017	CLA	C1C-NC-C4C	-3.09	102.42	106.36
23	B	1014	CLA	C1C-NC-C4C	-3.09	102.42	106.36
23	C	1034	CLA	C1C-NC-C4C	-3.09	102.43	106.36
23	C	1028	CLA	CMB-C2B-C3B	3.08	129.83	124.97
23	C	1033	CLA	C1C-NC-C4C	-3.08	102.43	106.36
23	c	6034	CLA	C4-C3-C5	3.08	120.08	115.39
23	b	6023	CLA	CMB-C2B-C3B	3.08	129.82	124.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6021	CLA	CMB-C2B-C3B	3.08	129.82	124.97
23	B	1013	CLA	CMB-C2B-C3B	3.08	129.82	124.97
23	D	1008	CLA	C1C-NC-C4C	-3.08	102.44	106.36
23	d	6004	CLA	CMB-C2B-C3B	3.08	129.82	124.97
23	c	6033	CLA	C1C-NC-C4C	-3.07	102.44	106.36
23	C	1036	CLA	CMB-C2B-C3B	3.08	129.81	124.97
23	b	6017	CLA	CMB-C2B-C3B	3.07	129.81	124.97
23	B	1023	CLA	C1C-NC-C4C	-3.07	102.44	106.36
23	b	6017	CLA	C1C-NC-C4C	-3.07	102.45	106.36
23	c	6027	CLA	C1C-NC-C4C	-3.07	102.45	106.36
23	c	6036	CLA	C1C-NC-C4C	-3.07	102.44	106.36
23	D	1004	CLA	CMB-C2B-C3B	3.07	129.81	124.97
27	B	1045	BCR	C28-C27-C26	-3.07	109.09	113.74
23	C	1035	CLA	C1C-NC-C4C	-3.07	102.45	106.36
23	A	1006	CLA	CMB-C2B-C3B	3.07	129.80	124.97
23	c	6030	CLA	C1C-NC-C4C	-3.07	102.45	106.36
23	c	6027	CLA	C4-C3-C5	3.07	120.05	115.39
23	b	6018	CLA	C4-C3-C5	3.07	120.06	115.39
23	C	1028	CLA	C1C-NC-C4C	-3.06	102.45	106.36
23	c	6031	CLA	C4-C3-C5	3.07	120.05	115.39
23	b	6023	CLA	C1C-NC-C4C	-3.07	102.45	106.36
23	B	1018	CLA	CMB-C2B-C3B	3.07	129.80	124.97
23	H	1017	CLA	CMB-C2B-C3B	3.06	129.80	124.97
23	C	1027	CLA	CMB-C2B-C3B	3.06	129.80	124.97
23	B	1011	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	A	1003	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	c	6036	CLA	C4-C3-C5	3.06	120.04	115.39
23	B	1016	CLA	CMB-C2B-C3B	3.06	129.79	124.97
23	B	1020	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	c	6032	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	B	1023	CLA	CMB-C2B-C3B	3.06	129.79	124.97
23	A	1003	CLA	CMB-C2B-C3B	3.06	129.79	124.97
23	a	6003	CLA	CMB-C2B-C3B	3.06	129.79	124.97
23	b	6018	CLA	CMB-C2B-C3B	3.06	129.79	124.97
23	B	1021	CLA	CMB-C2B-C3B	3.06	129.78	124.97
23	b	6012	CLA	CMB-C2B-C3B	3.06	129.79	124.97
23	c	6025	CLA	CMB-C2B-C3B	3.06	129.79	124.97
26	d	6042	PQ9	C39-C38-C40	3.06	120.04	115.39
23	a	6003	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	C	1032	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	d	6004	CLA	C1C-NC-C4C	-3.06	102.46	106.36
23	B	1013	CLA	C1C-NC-C4C	-3.06	102.46	106.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	6005	CLA	CMB-C2B-C3B	3.06	129.78	124.97
23	c	6028	CLA	C1C-NC-C4C	-3.06	102.47	106.36
23	c	6031	CLA	CMB-C2B-C3B	3.06	129.78	124.97
23	C	1025	CLA	C4-C3-C5	3.06	120.04	115.39
23	C	1036	CLA	C4-C3-C5	3.05	120.03	115.39
23	c	6027	CLA	CMB-C2B-C3B	3.05	129.78	124.97
27	B	1048	BCR	C38-C26-C27	3.05	118.94	113.34
23	c	6025	CLA	C4-C3-C5	3.05	120.03	115.39
23	B	1018	CLA	C4-C3-C5	3.05	120.03	115.39
27	b	6048	BCR	C38-C26-C27	3.05	118.94	113.34
23	c	6033	CLA	CMB-C2B-C3B	3.05	129.78	124.97
23	A	1006	CLA	C1C-NC-C4C	-3.05	102.47	106.36
27	D	1050	BCR	C38-C26-C27	3.05	118.94	113.34
23	b	6013	CLA	CMB-C2B-C3B	3.05	129.77	124.97
23	b	6016	CLA	C1C-NC-C4C	-3.05	102.47	106.36
27	b	6045	BCR	C28-C27-C26	-3.05	109.12	113.74
23	C	1025	CLA	C1C-NC-C4C	-3.05	102.47	106.36
23	C	1033	CLA	CMB-C2B-C3B	3.05	129.77	124.97
23	b	6020	CLA	C4-C3-C5	3.05	120.02	115.39
23	b	6020	CLA	C1C-NC-C4C	-3.05	102.48	106.36
23	c	6031	CLA	C1C-NC-C4C	-3.05	102.48	106.36
23	a	6006	CLA	C1C-NC-C4C	-3.05	102.48	106.36
23	B	1015	CLA	C3A-C4A-NA	3.05	114.65	110.95
23	c	6026	CLA	C2A-C1A-NA	3.05	114.61	111.24
23	b	6016	CLA	CMB-C2B-C3B	3.05	129.77	124.97
23	D	1008	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	c	6028	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	c	6028	CLA	C4-C3-C5	3.04	120.02	115.39
23	b	6021	CLA	C4-C3-C5	3.04	120.02	115.39
23	D	1004	CLA	C1C-NC-C4C	-3.05	102.48	106.36
23	C	1031	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	C	1034	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	C	1025	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	C	1037	CLA	C1C-NC-C4C	-3.04	102.48	106.36
23	D	1008	CLA	C4-C3-C5	3.04	120.02	115.39
23	b	6017	CLA	C4-C3-C5	3.04	120.02	115.39
23	B	1020	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	c	6037	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	B	1012	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	b	6019	CLA	C3B-C4B-CHC	-3.04	120.23	126.00
23	C	1037	CLA	CMB-C2B-C3B	3.04	129.76	124.97
23	B	1024	CLA	C2A-C1A-CHA	-3.04	118.57	123.83

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6012	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	C	1030	CLA	C4-C3-C5	3.04	120.01	115.39
23	B	1021	CLA	C4-C3-C5	3.04	120.01	115.39
23	d	6005	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	a	6006	CLA	CMB-C2B-C3B	3.04	129.75	124.97
23	C	1031	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	B	1012	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	H	1017	CLA	C4-C3-C5	3.04	120.01	115.39
23	C	1036	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	D	1005	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	C	1031	CLA	C4-C3-C5	3.04	120.01	115.39
23	c	6035	CLA	C1C-NC-C4C	-3.04	102.49	106.36
23	c	6032	CLA	CMB-C2B-C3B	3.04	129.75	124.97
23	b	6024	CLA	C2A-C1A-CHA	-3.04	118.58	123.83
23	C	1032	CLA	CMB-C2B-C3B	3.04	129.75	124.97
23	D	1005	CLA	CMB-C2B-C3B	3.03	129.75	124.97
23	b	6013	CLA	C4-C3-C5	3.04	120.00	115.39
23	C	1028	CLA	C4-C3-C5	3.03	120.00	115.39
23	B	1011	CLA	CMB-C2B-C3B	3.03	129.75	124.97
23	B	1011	CLA	C4-C3-C5	3.03	120.00	115.39
23	c	6025	CLA	C1C-NC-C4C	-3.03	102.49	106.36
23	C	1035	CLA	C4-C3-C5	3.03	120.00	115.39
23	C	1027	CLA	C1C-NC-C4C	-3.03	102.49	106.36
26	D	1042	PQ9	C14-C13-C15	3.03	120.00	115.39
23	B	1020	CLA	C4-C3-C5	3.03	120.00	115.39
24	a	6039	PHO	C4-C3-C5	3.03	120.00	115.39
23	B	1021	CLA	C1C-NC-C4C	-3.03	102.50	106.36
23	a	6006	CLA	C4-C3-C5	3.03	120.00	115.39
23	c	6037	CLA	C4-C3-C5	3.03	120.00	115.39
23	c	6035	CLA	C4-C3-C5	3.03	120.00	115.39
23	d	6008	CLA	CMB-C2B-C3B	3.03	129.74	124.97
23	b	6013	CLA	C1C-NC-C4C	-3.03	102.50	106.36
23	B	1013	CLA	C4-C3-C5	3.03	120.00	115.39
23	C	1033	CLA	C4-C3-C5	3.03	119.99	115.39
23	B	1015	CLA	CBA-CAA-C2A	-3.03	105.03	114.01
23	B	1023	CLA	C4-C3-C5	3.03	120.00	115.39
23	C	1037	CLA	C4-C3-C5	3.03	119.99	115.39
23	A	1006	CLA	C4-C3-C5	3.03	119.99	115.39
23	c	6030	CLA	C4-C3-C5	3.03	119.99	115.39
23	d	6008	CLA	C4-C3-C5	3.03	119.99	115.39
23	b	6011	CLA	C4-C3-C5	3.03	119.99	115.39
23	D	1004	CLA	C4-C3-C5	3.03	119.99	115.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	a	6044	BCR	C38-C26-C25	-3.02	121.08	124.51
23	C	1035	CLA	CMB-C2B-C3B	3.02	129.73	124.97
26	D	1042	PQ9	C19-C18-C20	3.02	119.99	115.39
23	b	6021	CLA	C1C-NC-C4C	-3.02	102.51	106.36
23	b	6023	CLA	C4-C3-C5	3.02	119.99	115.39
23	C	1034	CLA	C4-C3-C5	3.02	119.98	115.39
27	A	1044	BCR	C38-C26-C25	-3.02	121.08	124.51
24	A	1039	PHO	C4-C3-C5	3.02	119.98	115.39
23	D	1005	CLA	C4-C3-C5	3.02	119.98	115.39
23	B	1016	CLA	C1C-NC-C4C	-3.02	102.51	106.36
23	C	1027	CLA	C4-C3-C5	3.02	119.98	115.39
23	b	6015	CLA	CBA-CAA-C2A	-3.02	105.06	114.01
23	b	6012	CLA	C4-C3-C5	3.02	119.98	115.39
23	B	1016	CLA	C4-C3-C5	3.02	119.98	115.39
27	d	6050	BCR	C38-C26-C27	3.02	118.88	113.34
23	B	1019	CLA	C3B-C4B-CHC	-3.02	120.28	126.00
23	c	6030	CLA	CMB-C2B-C3B	3.01	129.72	124.97
23	d	6005	CLA	C4-C3-C5	3.01	119.97	115.39
23	c	6034	CLA	C1C-NC-C4C	-3.01	102.52	106.36
23	c	6037	CLA	C1C-NC-C4C	-3.01	102.52	106.36
23	b	6020	CLA	CMB-C2B-C3B	3.01	129.71	124.97
23	A	1003	CLA	C4-C3-C5	3.01	119.97	115.39
23	B	1012	CLA	C4-C3-C5	3.01	119.97	115.39
23	b	6016	CLA	C4-C3-C5	3.01	119.97	115.39
23	c	6035	CLA	CMB-C2B-C3B	3.01	129.71	124.97
23	C	1030	CLA	CMB-C2B-C3B	3.01	129.71	124.97
23	c	6033	CLA	C4-C3-C5	3.00	119.95	115.39
23	b	6011	CLA	CMB-C2B-C3B	3.00	129.69	124.97
23	B	1022	CLA	CMD-C2D-C3D	-3.00	120.25	124.97
23	d	6004	CLA	C4-C3-C5	3.00	119.94	115.39
23	C	1032	CLA	C4-C3-C5	2.99	119.94	115.39
23	c	6032	CLA	C4-C3-C5	2.99	119.94	115.39
23	b	6024	CLA	C4-C3-C5	2.99	119.94	115.39
23	a	6003	CLA	C4-C3-C5	2.99	119.94	115.39
23	C	1026	CLA	C2A-C1A-NA	2.99	114.55	111.24
23	B	1024	CLA	C4-C3-C5	2.98	119.93	115.39
23	A	1007	CLA	C1C-NC-C4C	-2.98	102.56	106.36
23	C	1029	CLA	CMB-C2B-C3B	2.98	129.67	124.97
23	c	6034	CLA	O2D-CGD-O1D	-2.98	117.74	123.79
23	c	6029	CLA	CMB-C2B-C3B	2.97	129.65	124.97
23	B	1024	CLA	C3A-C4A-NA	2.97	114.56	110.95
23	b	6010	CLA	CMB-C2B-C3B	2.97	129.64	124.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6022	CLA	CMD-C2D-C3D	-2.96	120.31	124.97
23	a	6007	CLA	C1C-NC-C4C	-2.96	102.59	106.36
23	b	6024	CLA	C3A-C4A-NA	2.95	114.54	110.95
23	a	6007	CLA	C4-C3-C5	2.95	119.88	115.39
23	B	1010	CLA	CMB-C2B-C3B	2.95	129.61	124.97
23	b	6015	CLA	C4D-ND-C1D	-2.95	103.01	106.57
23	A	1007	CLA	C4-C3-C5	2.94	119.87	115.39
23	b	6009	CLA	C1-C2-C3	-2.94	120.96	126.19
23	B	1015	CLA	C4D-ND-C1D	-2.93	103.03	106.57
23	b	6019	CLA	C3A-C4A-CHB	-2.93	118.24	124.33
23	B	1009	CLA	C1-C2-C3	-2.93	120.98	126.19
23	a	6007	CLA	C3B-CAB-CBB	-2.93	119.89	125.95
26	d	6042	PQ9	C35-C33-C32	2.92	126.71	121.08
23	B	1022	CLA	C4-C3-C5	2.92	119.83	115.39
23	B	1024	CLA	CMB-C2B-C3B	2.92	129.57	124.97
23	A	1007	CLA	C3B-CAB-CBB	-2.92	119.90	125.95
23	B	1019	CLA	C3A-C4A-CHB	-2.92	118.26	124.33
23	a	6007	CLA	O2A-CGA-CBA	2.92	121.11	111.94
23	C	1029	CLA	C1C-NC-C4C	-2.91	102.65	106.36
23	A	1007	CLA	O2A-CGA-CBA	2.91	121.11	111.94
23	c	6029	CLA	C1C-NC-C4C	-2.91	102.65	106.36
23	b	6022	CLA	C4-C3-C5	2.91	119.81	115.39
23	b	6024	CLA	CHB-C4A-NA	2.91	128.02	124.58
23	b	6024	CLA	CMB-C2B-C3B	2.91	129.55	124.97
23	d	6004	CLA	C3B-CAB-CBB	-2.90	119.94	125.95
23	d	6008	CLA	C3B-CAB-CBB	-2.90	119.95	125.95
23	c	6035	CLA	C3B-CAB-CBB	-2.90	119.95	125.95
23	B	1018	CLA	C3B-CAB-CBB	-2.89	119.96	125.95
27	A	1044	BCR	C27-C26-C25	-2.89	118.98	122.84
23	B	1020	CLA	C3B-CAB-CBB	-2.89	119.96	125.95
23	b	6012	CLA	C3B-CAB-CBB	-2.89	119.96	125.95
23	C	1035	CLA	C3B-CAB-CBB	-2.89	119.96	125.95
23	D	1004	CLA	C3B-CAB-CBB	-2.89	119.96	125.95
27	a	6044	BCR	C27-C26-C25	-2.89	118.99	122.84
23	C	1028	CLA	C3B-CAB-CBB	-2.89	119.97	125.95
23	D	1008	CLA	C3B-CAB-CBB	-2.89	119.97	125.95
23	A	1006	CLA	C3B-CAB-CBB	-2.89	119.97	125.95
23	b	6020	CLA	C3B-CAB-CBB	-2.89	119.97	125.95
23	c	6028	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	c	6027	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	b	6015	CLA	C1C-NC-C4C	-2.89	102.68	106.36
23	C	1030	CLA	C3B-CAB-CBB	-2.88	119.98	125.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6022	CLA	C3A-C4A-CHB	-2.88	118.34	124.33
23	B	1021	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	C	1034	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	c	6036	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	B	1012	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	B	1023	CLA	C3B-CAB-CBB	-2.88	119.98	125.95
23	B	1022	CLA	C3A-C4A-CHB	-2.88	118.34	124.33
23	B	1024	CLA	CHB-C4A-NA	2.88	127.99	124.58
23	b	6010	CLA	C3A-C4A-NA	2.88	114.45	110.95
23	B	1010	CLA	C3A-C4A-NA	2.88	114.45	110.95
23	b	6018	CLA	C3B-CAB-CBB	-2.88	119.99	125.95
23	c	6029	CLA	O2A-CGA-O1A	-2.88	115.58	123.43
23	B	1011	CLA	C3B-CAB-CBB	-2.88	120.00	125.95
23	c	6037	CLA	C3B-CAB-CBB	-2.88	120.00	125.95
23	C	1027	CLA	C3B-CAB-CBB	-2.88	120.00	125.95
26	d	6042	PQ9	C14-C13-C15	2.87	119.76	115.39
23	C	1029	CLA	O2A-CGA-O1A	-2.87	115.58	123.43
23	a	6003	CLA	C3B-CAB-CBB	-2.87	120.00	125.95
23	H	1017	CLA	C3B-CAB-CBB	-2.87	120.00	125.95
23	C	1036	CLA	C3B-CAB-CBB	-2.87	120.00	125.95
23	B	1016	CLA	C3B-CAB-CBB	-2.87	120.00	125.95
23	B	1013	CLA	C3B-CAB-CBB	-2.87	120.00	125.95
23	b	6010	CLA	C1C-NC-C4C	-2.87	102.70	106.36
23	b	6017	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	A	1003	CLA	C3B-CAB-CBB	-2.87	120.00	125.95
23	c	6030	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	b	6011	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	D	1005	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	b	6013	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	A	1007	CLA	CAA-C2A-C1A	-2.87	104.46	111.62
27	z	6053	BCR	C28-C27-C26	-2.87	109.39	113.74
23	C	1037	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	b	6021	CLA	C3B-CAB-CBB	-2.87	120.01	125.95
23	a	6007	CLA	CAA-C2A-C1A	-2.87	104.47	111.62
23	B	1015	CLA	C1C-NC-C4C	-2.87	102.71	106.36
23	B	1010	CLA	C1C-NC-C4C	-2.87	102.71	106.36
23	b	6016	CLA	C3B-CAB-CBB	-2.87	120.02	125.95
23	C	1025	CLA	C3B-CAB-CBB	-2.86	120.02	125.95
23	B	1022	CLA	CHB-C4A-NA	2.86	127.97	124.58
23	c	6032	CLA	C3B-CAB-CBB	-2.86	120.03	125.95
23	d	6005	CLA	C3B-CAB-CBB	-2.86	120.04	125.95
23	b	6020	CLA	C3A-C4A-NA	2.85	114.42	110.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6022	CLA	CHB-C4A-NA	2.85	127.96	124.58
23	b	6023	CLA	C3B-CAB-CBB	-2.85	120.04	125.95
23	a	6006	CLA	C3B-CAB-CBB	-2.85	120.04	125.95
23	C	1026	CLA	CMB-C2B-C3B	2.85	129.46	124.97
23	C	1033	CLA	C3B-CAB-CBB	-2.85	120.05	125.95
23	C	1031	CLA	C3B-CAB-CBB	-2.85	120.05	125.95
23	C	1032	CLA	C3B-CAB-CBB	-2.85	120.05	125.95
23	c	6031	CLA	C3B-CAB-CBB	-2.85	120.05	125.95
27	K	1052	BCR	C28-C27-C26	-2.85	109.42	113.74
23	c	6025	CLA	C3B-CAB-CBB	-2.85	120.06	125.95
23	C	1030	CLA	C3A-C4A-NA	2.84	114.41	110.95
23	c	6033	CLA	C3A-C4A-NA	2.85	114.41	110.95
23	B	1020	CLA	C3A-C4A-NA	2.84	114.41	110.95
23	c	6030	CLA	C3A-C4A-NA	2.84	114.41	110.95
27	b	6045	BCR	C3-C4-C5	-2.84	109.43	113.74
23	c	6026	CLA	CMB-C2B-C3B	2.84	129.45	124.97
23	c	6033	CLA	C3B-CAB-CBB	-2.84	120.08	125.95
27	d	6050	BCR	C3-C4-C5	-2.83	109.45	113.74
23	d	6005	CLA	C3A-C4A-NA	2.83	114.39	110.95
24	d	6038	PHO	C4-C3-C5	2.83	119.69	115.39
23	c	6031	CLA	C3A-C4A-NA	2.83	114.39	110.95
23	c	6034	CLA	C3B-CAB-CBB	-2.83	120.09	125.95
23	C	1033	CLA	C3A-C4A-NA	2.83	114.39	110.95
23	C	1031	CLA	C3A-C4A-NA	2.83	114.39	110.95
23	B	1013	CLA	C3A-C4A-NA	2.83	114.39	110.95
23	c	6028	CLA	C3A-C4A-NA	2.83	114.39	110.95
27	B	1045	BCR	C3-C4-C5	-2.83	109.46	113.74
23	B	1021	CLA	C3A-C4A-NA	2.82	114.39	110.95
23	B	1014	CLA	C2B-C1B-CHB	-2.82	120.64	126.00
23	b	6016	CLA	C3A-C4A-NA	2.83	114.39	110.95
27	z	6053	BCR	C39-C30-C29	2.82	120.16	108.73
23	b	6021	CLA	C3A-C4A-NA	2.82	114.38	110.95
23	b	6014	CLA	C2B-C1B-CHB	-2.82	120.65	126.00
27	h	6049	BCR	C3-C4-C5	-2.82	109.47	113.74
27	k	6052	BCR	C28-C27-C26	-2.82	109.46	113.74
27	Z	1053	BCR	C28-C27-C26	-2.82	109.47	113.74
23	B	1018	CLA	C3A-C4A-NA	2.82	114.38	110.95
23	B	1016	CLA	C3A-C4A-NA	2.82	114.38	110.95
24	A	1038	PHO	C4-C3-C5	2.82	119.67	115.39
26	A	1043	PQ9	C39-C38-C40	2.82	119.67	115.39
27	Z	1053	BCR	C39-C30-C29	2.82	120.14	108.73
23	b	6011	CLA	C3A-C4A-NA	2.82	114.37	110.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	H	1049	BCR	C3-C4-C5	-2.81	109.47	113.74
23	A	1006	CLA	C3A-C4A-NA	2.81	114.37	110.95
23	B	1015	CLA	CMB-C2B-C3B	2.81	129.40	124.97
27	D	1050	BCR	C3-C4-C5	-2.81	109.48	113.74
27	K	1052	BCR	C3-C4-C5	-2.81	109.48	113.74
23	C	1028	CLA	C3A-C4A-NA	2.81	114.36	110.95
24	d	6038	PHO	C1-C2-C3	-2.81	121.19	126.19
27	k	6052	BCR	C3-C4-C5	-2.81	109.49	113.74
23	B	1011	CLA	C3A-C4A-NA	2.81	114.36	110.95
23	b	6013	CLA	C3A-C4A-NA	2.81	114.36	110.95
23	d	6004	CLA	C3A-C4A-NA	2.81	114.36	110.95
23	C	1035	CLA	C3A-C4A-NA	2.81	114.36	110.95
24	A	1038	PHO	C1-C2-C3	-2.80	121.20	126.19
23	c	6037	CLA	C3A-C4A-NA	2.80	114.36	110.95
23	B	1015	CLA	C1-C2-C3	-2.80	121.20	126.19
23	H	1017	CLA	C3A-C4A-NA	2.80	114.36	110.95
23	A	1003	CLA	C3A-C4A-NA	2.80	114.35	110.95
23	c	6035	CLA	C3A-C4A-NA	2.80	114.35	110.95
23	b	6017	CLA	C3A-C4A-NA	2.80	114.35	110.95
23	C	1032	CLA	C3A-C4A-NA	2.80	114.35	110.95
23	D	1005	CLA	C3A-C4A-NA	2.80	114.35	110.95
23	C	1029	CLA	C3A-C4A-CHB	-2.79	118.52	124.33
23	a	6003	CLA	C3A-C4A-NA	2.80	114.35	110.95
23	b	6015	CLA	CMB-C2B-C3B	2.79	129.37	124.97
23	b	6019	CLA	C4-C3-C5	2.79	119.63	115.39
23	b	6019	CLA	C16-C15-C13	-2.79	107.10	115.14
23	C	1037	CLA	C3A-C4A-NA	2.79	114.34	110.95
23	b	6012	CLA	C3A-C4A-NA	2.79	114.34	110.95
23	C	1034	CLA	C3A-C4A-NA	2.79	114.34	110.95
23	C	1036	CLA	C3A-C4A-NA	2.79	114.34	110.95
23	b	6018	CLA	C3A-C4A-NA	2.79	114.34	110.95
23	B	1019	CLA	C4-C3-C5	2.79	119.63	115.39
23	B	1019	CLA	C16-C15-C13	-2.79	107.11	115.14
27	t	1046	BCR	C3-C4-C5	-2.79	109.52	113.74
23	B	1023	CLA	C3A-C4A-NA	2.79	114.34	110.95
23	A	1007	CLA	C1-C2-C3	-2.79	121.23	126.19
23	c	6027	CLA	C3A-C4A-NA	2.78	114.34	110.95
23	a	6007	CLA	C1-C2-C3	-2.78	121.23	126.19
23	C	1025	CLA	C3A-C4A-NA	2.78	114.34	110.95
23	b	6015	CLA	C1-C2-C3	-2.78	121.24	126.19
23	c	6036	CLA	C3A-C4A-NA	2.78	114.33	110.95
23	D	1004	CLA	C3A-C4A-NA	2.78	114.33	110.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1009	CLA	C3A-C4A-NA	2.78	114.33	110.95
27	D	1050	BCR	C35-C13-C14	-2.78	118.98	122.92
23	c	6029	CLA	C3A-C4A-CHB	-2.77	118.56	124.33
23	B	1012	CLA	C3A-C4A-NA	2.77	114.32	110.95
23	A	1007	CLA	CMC-C2C-C1C	2.77	128.77	124.94
23	a	6007	CLA	CMC-C2C-C1C	2.77	128.77	124.94
23	C	1027	CLA	C3A-C4A-NA	2.77	114.32	110.95
24	d	6038	PHO	C1B-NB-C4B	-2.77	102.37	108.72
27	Z	1053	BCR	C3-C4-C5	-2.77	109.54	113.74
23	D	1008	CLA	C3A-C4A-NA	2.77	114.32	110.95
24	A	1038	PHO	C1B-NB-C4B	-2.77	102.38	108.72
27	d	6050	BCR	C35-C13-C14	-2.77	118.99	122.92
27	z	6053	BCR	C3-C4-C5	-2.76	109.55	113.74
27	a	6044	BCR	C36-C18-C17	-2.76	119.00	122.92
23	b	6009	CLA	O2D-CGD-O1D	-2.76	118.18	123.79
23	B	1009	CLA	O2D-CGD-O1D	-2.76	118.18	123.79
23	a	6006	CLA	C3A-C4A-NA	2.76	114.31	110.95
27	H	1049	BCR	C28-C27-C26	-2.76	109.56	113.74
27	A	1044	BCR	C36-C18-C17	-2.76	119.00	122.92
23	b	6009	CLA	C3A-C4A-NA	2.76	114.31	110.95
23	c	6025	CLA	C3A-C4A-NA	2.76	114.30	110.95
23	d	6008	CLA	C3A-C4A-NA	2.75	114.30	110.95
27	h	6049	BCR	C28-C27-C26	-2.75	109.57	113.74
27	B	1048	BCR	C8-C7-C6	-2.75	119.20	127.32
23	b	6023	CLA	C3A-C4A-NA	2.75	114.29	110.95
23	c	6032	CLA	C3A-C4A-NA	2.75	114.29	110.95
27	b	6048	BCR	C8-C7-C6	-2.75	119.21	127.32
27	t	1046	BCR	C38-C26-C25	-2.74	121.40	124.51
23	C	1035	CLA	CMC-C2C-C1C	2.74	128.73	124.94
23	D	1004	CLA	CMC-C2C-C1C	2.74	128.73	124.94
26	A	1043	PQ9	C34-C33-C32	-2.74	118.09	123.52
23	C	1029	CLA	C3A-C4A-NA	2.74	114.28	110.95
23	c	6035	CLA	CMC-C2C-C1C	2.74	128.72	124.94
25	V	1041	HEM	C1B-NB-C4B	2.73	107.95	105.16
23	d	6004	CLA	CMC-C2C-C1C	2.73	128.71	124.94
24	A	1039	PHO	C1D-ND-C4D	-2.73	102.47	108.72
23	H	1017	CLA	CMC-C2C-C1C	2.73	128.71	124.94
23	c	6029	CLA	C3A-C4A-NA	2.73	114.27	110.95
23	b	6009	CLA	CMC-C2C-C1C	2.73	128.71	124.94
27	D	1050	BCR	C28-C27-C26	-2.73	109.61	113.74
27	d	6050	BCR	C28-C27-C26	-2.73	109.61	113.74
23	b	6020	CLA	CMC-C2C-C1C	2.72	128.70	124.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	1027	CLA	CMC-C2C-C1C	2.72	128.70	124.94
26	D	1042	PQ9	C11-C2-C1	2.72	119.80	117.10
23	c	6026	CLA	CHB-C4A-NA	2.72	127.80	124.58
23	B	1009	CLA	CMC-C2C-C1C	2.72	128.70	124.94
23	C	1034	CLA	CMC-C2C-C1C	2.72	128.70	124.94
23	b	6010	CLA	CMC-C2C-C1C	2.72	128.69	124.94
23	B	1020	CLA	CMC-C2C-C1C	2.72	128.69	124.94
23	C	1037	CLA	CMC-C2C-C1C	2.71	128.69	124.94
24	a	6039	PHO	C1D-ND-C4D	-2.72	102.49	108.72
23	b	6017	CLA	CMC-C2C-C1C	2.72	128.69	124.94
23	c	6032	CLA	CMC-C2C-C1C	2.71	128.69	124.94
23	b	6024	CLA	C4B-NB-C1B	-2.71	103.19	106.76
24	a	6039	PHO	C1B-NB-C4B	-2.71	102.50	108.72
23	C	1030	CLA	CMC-C2C-C1C	2.71	128.69	124.94
24	A	1039	PHO	C2D-C1D-ND	2.71	115.55	106.38
23	b	6016	CLA	CMC-C2C-C1C	2.71	128.69	124.94
24	a	6039	PHO	C2D-C1D-ND	2.71	115.54	106.38
23	c	6028	CLA	CMC-C2C-C1C	2.71	128.69	124.94
23	B	1024	CLA	C4B-NB-C1B	-2.71	103.19	106.76
23	c	6037	CLA	CMC-C2C-C1C	2.71	128.69	124.94
23	c	6029	CLA	O2D-CGD-CBD	2.71	116.85	111.33
24	d	6038	PHO	C1D-ND-C4D	-2.71	102.51	108.72
23	C	1025	CLA	CMC-C2C-C1C	2.71	128.68	124.94
24	A	1039	PHO	C1B-NB-C4B	-2.71	102.51	108.72
25	v	6041	HEM	C1B-NB-C4B	2.71	107.93	105.16
23	B	1023	CLA	CMC-C2C-C1C	2.71	128.68	124.94
23	B	1010	CLA	CHB-C4A-NA	2.71	127.78	124.58
23	D	1008	CLA	CMC-C2C-C1C	2.71	128.68	124.94
23	b	6023	CLA	CMC-C2C-C1C	2.71	128.68	124.94
23	B	1018	CLA	CMC-C2C-C1C	2.71	128.68	124.94
23	b	6010	CLA	CHB-C4A-NA	2.70	127.78	124.58
23	C	1028	CLA	CMC-C2C-C1C	2.70	128.68	124.94
23	d	6005	CLA	CMC-C2C-C1C	2.70	128.68	124.94
23	C	1031	CLA	CMC-C2C-C1C	2.70	128.67	124.94
23	C	1029	CLA	O2D-CGD-CBD	2.70	116.84	111.33
23	c	6030	CLA	CMC-C2C-C1C	2.70	128.67	124.94
24	A	1038	PHO	C1D-ND-C4D	-2.70	102.52	108.72
25	E	1040	HEM	C1B-NB-C4B	2.70	107.92	105.16
23	B	1013	CLA	CMC-C2C-C1C	2.70	128.67	124.94
23	c	6027	CLA	CMC-C2C-C1C	2.70	128.67	124.94
23	b	6013	CLA	CMC-C2C-C1C	2.70	128.67	124.94
23	C	1026	CLA	CHB-C4A-NA	2.70	127.77	124.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	D	1005	CLA	CMC-C2C-C1C	2.70	128.66	124.94
23	C	1033	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	a	6006	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	c	6036	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	C	1036	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	B	1016	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	A	1006	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	C	1032	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	b	6010	CLA	C4D-ND-C1D	-2.69	103.32	106.57
27	b	6047	BCR	C8-C7-C6	-2.69	119.38	127.32
23	c	6033	CLA	CMC-C2C-C1C	2.69	128.66	124.94
23	c	6031	CLA	CMC-C2C-C1C	2.69	128.65	124.94
23	A	1003	CLA	CMC-C2C-C1C	2.69	128.65	124.94
23	b	6021	CLA	CMC-C2C-C1C	2.69	128.65	124.94
27	B	1047	BCR	C8-C7-C6	-2.68	119.39	127.32
23	b	6018	CLA	CMC-C2C-C1C	2.69	128.65	124.94
23	b	6022	CLA	C6-C5-C3	-2.68	106.40	112.78
23	B	1012	CLA	CMC-C2C-C1C	2.68	128.65	124.94
23	B	1010	CLA	CMC-C2C-C1C	2.68	128.64	124.94
23	B	1021	CLA	CMC-C2C-C1C	2.68	128.64	124.94
23	c	6025	CLA	CMC-C2C-C1C	2.68	128.64	124.94
23	b	6010	CLA	CHC-C1C-C2C	-2.68	119.49	126.45
23	b	6012	CLA	CMC-C2C-C1C	2.68	128.64	124.94
23	B	1011	CLA	CMC-C2C-C1C	2.68	128.64	124.94
25	e	6040	HEM	C1B-NB-C4B	2.67	107.90	105.16
23	a	6003	CLA	CMC-C2C-C1C	2.67	128.63	124.94
23	d	6008	CLA	CMC-C2C-C1C	2.67	128.63	124.94
23	B	1010	CLA	C4D-ND-C1D	-2.67	103.34	106.57
23	c	6029	CLA	CMC-C2C-C1C	2.67	128.63	124.94
23	B	1022	CLA	C6-C5-C3	-2.67	106.43	112.78
23	B	1010	CLA	CHC-C1C-C2C	-2.67	119.52	126.45
23	b	6011	CLA	CMC-C2C-C1C	2.67	128.62	124.94
27	c	6054	BCR	C36-C18-C17	-2.66	119.14	122.92
23	C	1029	CLA	CMC-C2C-C1C	2.66	128.62	124.94
23	C	1026	CLA	O2D-CGD-CBD	2.66	116.75	111.33
27	b	6047	BCR	C30-C25-C24	2.66	123.05	115.69
27	T	6046	BCR	C29-C30-C25	-2.66	106.02	110.44
24	d	6038	PHO	C2D-C1D-ND	2.66	115.36	106.38
23	B	1015	CLA	C4B-NB-C1B	-2.66	103.26	106.76
27	B	1047	BCR	C30-C25-C24	2.66	123.05	115.69
23	B	1009	CLA	C4C-C3C-C2C	-2.65	102.62	106.93
23	c	6034	CLA	C3A-C4A-NA	2.65	114.17	110.95

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6022	CLA	CBC-CAC-C3C	-2.65	104.37	112.38
23	B	1009	CLA	O2A-CGA-CBA	2.65	120.27	111.94
27	T	6046	BCR	C2-C1-C6	-2.65	106.04	110.44
24	A	1038	PHO	C2D-C1D-ND	2.65	115.32	106.38
27	C	1054	BCR	C36-C18-C17	-2.64	119.17	122.92
27	D	1050	BCR	C36-C18-C17	-2.64	119.17	122.92
23	c	6026	CLA	O2D-CGD-CBD	2.64	116.71	111.33
23	b	6019	CLA	C1-C2-C3	-2.64	121.49	126.19
23	B	1022	CLA	CBC-CAC-C3C	-2.64	104.39	112.38
23	b	6009	CLA	C4C-C3C-C2C	-2.64	102.65	106.93
23	b	6015	CLA	C4B-NB-C1B	-2.64	103.29	106.76
23	b	6009	CLA	O2A-CGA-CBA	2.64	120.23	111.94
27	d	6050	BCR	C36-C18-C17	-2.63	119.18	122.92
28	c	6056	DGD	O1G-C1A-C2A	2.63	120.22	111.94
23	B	1019	CLA	C1-C2-C3	-2.63	121.51	126.19
29	d	6061	MGE	O1G-C1A-C2A	2.62	120.19	111.94
30	a	6063	LHG	O8-C23-C24	2.63	120.20	111.94
29	b	6060	MGE	O1G-C1A-C2A	2.62	120.20	111.94
28	C	1056	DGD	O1G-C1A-C2A	2.62	120.19	111.94
27	k	6051	BCR	C34-C9-C10	-2.62	119.20	122.92
28	c	6057	DGD	O1G-C1A-C2A	2.62	120.19	111.94
27	K	1051	BCR	C34-C9-C10	-2.62	119.20	122.92
23	B	1015	CLA	O2A-CGA-CBA	2.62	120.19	111.94
23	b	6015	CLA	O2A-CGA-CBA	2.62	120.18	111.94
28	C	1057	DGD	O1G-C1A-C2A	2.62	120.17	111.94
23	c	6026	CLA	C4B-NB-C1B	-2.62	103.32	106.76
30	A	1063	LHG	O8-C23-C24	2.62	120.17	111.94
29	L	1061	MGE	O1G-C1A-C2A	2.62	120.17	111.94
28	h	6058	DGD	O1G-C1A-C2A	2.61	120.16	111.94
24	a	6039	PHO	O2A-CGA-CBA	2.61	120.16	111.94
29	D	1062	MGE	O1G-C1A-C2A	2.61	120.16	111.94
27	T	6046	BCR	C1-C6-C7	2.61	122.92	115.69
24	A	1039	PHO	O2A-CGA-CBA	2.61	120.15	111.94
29	J	1059	MGE	O1G-C1A-C2A	2.61	120.15	111.94
23	C	1026	CLA	C4B-NB-C1B	-2.61	103.33	106.76
23	C	1026	CLA	CGD-CBD-CAD	-2.61	102.10	110.96
29	B	1060	MGE	O1G-C1A-C2A	2.61	120.15	111.94
23	c	6026	CLA	CGD-CBD-CAD	-2.61	102.09	110.96
28	H	1058	DGD	O1G-C1A-C2A	2.61	120.15	111.94
29	d	6062	MGE	O1G-C1A-C2A	2.60	120.13	111.94
28	C	1055	DGD	O1G-C1A-C2A	2.61	120.14	111.94
29	d	6059	MGE	O1G-C1A-C2A	2.60	120.12	111.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	b	6047	BCR	C37-C22-C21	-2.60	119.23	122.92
23	B	1024	CLA	CAA-C2A-C1A	-2.60	105.14	111.62
23	b	6015	CLA	C4C-C3C-C2C	-2.60	102.72	106.93
26	A	1043	PQ9	C26-C27-C28	-2.60	122.20	127.80
28	c	6055	DGD	O1G-C1A-C2A	2.60	120.11	111.94
23	B	1015	CLA	C4C-C3C-C2C	-2.59	102.72	106.93
23	B	1019	CLA	CAA-C2A-C3A	2.59	119.17	113.04
23	b	6024	CLA	CAA-C2A-C1A	-2.59	105.15	111.62
26	D	1042	PQ9	C15-C16-C17	-2.59	104.21	111.62
23	d	6008	CLA	O2A-CGA-CBA	2.59	120.09	111.94
23	C	1026	CLA	CMC-C2C-C1C	2.59	128.52	124.94
23	b	6019	CLA	CAA-C2A-C3A	2.59	119.16	113.04
23	H	1017	CLA	O2A-CGA-CBA	2.59	120.07	111.94
27	D	1050	BCR	C23-C24-C25	2.59	134.96	127.32
23	c	6029	CLA	C4B-NB-C1B	-2.58	103.36	106.76
23	c	6027	CLA	O2A-CGA-CBA	2.58	120.06	111.94
23	a	6003	CLA	O2A-CGA-CBA	2.58	120.06	111.94
23	b	6017	CLA	O2A-CGA-CBA	2.58	120.05	111.94
23	D	1008	CLA	O2A-CGA-CBA	2.58	120.05	111.94
27	B	1047	BCR	C37-C22-C21	-2.58	119.26	122.92
27	b	6047	BCR	C23-C24-C25	-2.58	119.71	127.32
23	b	6018	CLA	O2A-CGA-CBA	2.58	120.04	111.94
23	B	1011	CLA	O2A-CGA-CBA	2.57	120.04	111.94
23	b	6011	CLA	O2A-CGA-CBA	2.57	120.04	111.94
23	b	6023	CLA	O2A-CGA-CBA	2.57	120.03	111.94
27	A	1044	BCR	C33-C5-C6	-2.57	121.59	124.51
23	A	1003	CLA	O2A-CGA-CBA	2.57	120.03	111.94
23	b	6013	CLA	O2A-CGA-CBA	2.57	120.03	111.94
23	B	1016	CLA	O2A-CGA-CBA	2.57	120.03	111.94
23	B	1013	CLA	O2A-CGA-CBA	2.57	120.03	111.94
23	B	1009	CLA	CAC-C3C-C4C	2.57	128.70	124.85
23	C	1029	CLA	C4B-NB-C1B	-2.57	103.38	106.76
27	A	1044	BCR	C37-C22-C23	2.57	122.25	118.09
27	d	6050	BCR	C23-C24-C25	2.57	134.91	127.32
23	B	1021	CLA	O2A-CGA-CBA	2.57	120.02	111.94
23	c	6030	CLA	O2A-CGA-CBA	2.57	120.02	111.94
23	C	1026	CLA	C4C-C3C-C2C	-2.57	102.76	106.93
23	c	6036	CLA	O2A-CGA-CBA	2.57	120.01	111.94
23	C	1036	CLA	O2A-CGA-CBA	2.57	120.01	111.94
23	d	6004	CLA	C4D-ND-C1D	-2.57	103.47	106.57
23	b	6021	CLA	O2A-CGA-CBA	2.57	120.01	111.94
23	B	1012	CLA	O2A-CGA-CBA	2.57	120.01	111.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6009	CLA	CAC-C3C-C4C	2.57	128.69	124.85
23	B	1023	CLA	O2A-CGA-CBA	2.57	120.02	111.94
23	C	1027	CLA	O2A-CGA-CBA	2.57	120.01	111.94
23	C	1028	CLA	O2A-CGA-CBA	2.56	120.00	111.94
23	C	1037	CLA	O2A-CGA-CBA	2.56	120.00	111.94
23	C	1030	CLA	O2A-CGA-CBA	2.56	120.00	111.94
23	c	6037	CLA	O2A-CGA-CBA	2.56	120.00	111.94
24	A	1038	PHO	O2A-CGA-CBA	2.56	120.00	111.94
27	B	1047	BCR	C23-C24-C25	-2.56	119.76	127.32
23	C	1035	CLA	O2A-CGA-CBA	2.56	119.99	111.94
23	c	6035	CLA	O2A-CGA-CBA	2.56	120.00	111.94
24	d	6038	PHO	O2A-CGA-CBA	2.56	119.99	111.94
23	b	6012	CLA	O2A-CGA-CBA	2.56	119.99	111.94
23	c	6032	CLA	O2A-CGA-CBA	2.56	119.99	111.94
23	b	6019	CLA	CHB-C1B-NB	-2.56	120.31	124.58
23	b	6016	CLA	O2A-CGA-CBA	2.56	119.99	111.94
23	c	6028	CLA	O2A-CGA-CBA	2.56	119.98	111.94
23	c	6032	CLA	C4D-ND-C1D	-2.56	103.48	106.57
23	C	1034	CLA	O2A-CGA-CBA	2.56	119.98	111.94
23	c	6033	CLA	O2A-CGA-CBA	2.56	119.98	111.94
23	c	6026	CLA	CMC-C2C-C1C	2.56	128.47	124.94
23	C	1025	CLA	O2A-CGA-CBA	2.56	119.98	111.94
23	C	1033	CLA	O2A-CGA-CBA	2.55	119.97	111.94
23	B	1018	CLA	O2A-CGA-CBA	2.55	119.98	111.94
23	A	1006	CLA	O2A-CGA-CBA	2.55	119.97	111.94
23	d	6005	CLA	O2A-CGA-CBA	2.55	119.97	111.94
23	c	6025	CLA	O2A-CGA-CBA	2.55	119.96	111.94
23	a	6006	CLA	O2A-CGA-CBA	2.55	119.97	111.94
23	C	1031	CLA	O2A-CGA-CBA	2.55	119.97	111.94
23	C	1032	CLA	O2A-CGA-CBA	2.55	119.97	111.94
23	d	6004	CLA	O2A-CGA-CBA	2.55	119.97	111.94
27	a	6044	BCR	C37-C22-C23	2.55	122.22	118.09
27	a	6044	BCR	C23-C24-C25	2.55	134.85	127.32
27	A	1044	BCR	C23-C24-C25	2.55	134.85	127.32
23	D	1005	CLA	O2A-CGA-CBA	2.55	119.95	111.94
23	c	6031	CLA	O2A-CGA-CBA	2.55	119.95	111.94
23	D	1004	CLA	O2A-CGA-CBA	2.55	119.95	111.94
23	C	1033	CLA	C4D-ND-C1D	-2.54	103.49	106.57
23	C	1032	CLA	C4D-ND-C1D	-2.54	103.50	106.57
23	c	6026	CLA	C4C-C3C-C2C	-2.54	102.80	106.93
23	d	6008	CLA	C4D-ND-C1D	-2.54	103.50	106.57
23	b	6021	CLA	C4D-ND-C1D	-2.54	103.50	106.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	a	6007	CLA	C3A-C4A-NA	2.54	114.04	110.95
23	b	6018	CLA	C4D-ND-C1D	-2.54	103.50	106.57
23	B	1019	CLA	CHB-C1B-NB	-2.54	120.34	124.58
27	a	6044	BCR	C33-C5-C6	-2.54	121.63	124.51
27	B	1047	BCR	C36-C18-C17	-2.54	119.31	122.92
23	b	6023	CLA	C4D-ND-C1D	-2.54	103.50	106.57
27	b	6047	BCR	C36-C18-C17	-2.54	119.32	122.92
23	B	1020	CLA	O2A-CGA-CBA	2.54	119.92	111.94
23	c	6027	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	b	6020	CLA	O2A-CGA-CBA	2.53	119.91	111.94
23	b	6020	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	c	6037	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	B	1012	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	C	1030	CLA	C4B-NB-C1B	-2.53	103.43	106.76
23	b	6011	CLA	C4D-ND-C1D	-2.53	103.51	106.57
26	D	1042	PQ9	C40-C41-C42	2.53	118.84	111.62
23	B	1018	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	B	1023	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	D	1004	CLA	C4D-ND-C1D	-2.53	103.51	106.57
23	D	1008	CLA	C4D-ND-C1D	-2.53	103.52	106.57
23	c	6034	CLA	C4D-ND-C1D	-2.53	103.52	106.57
23	A	1007	CLA	C3A-C4A-NA	2.53	114.02	110.95
23	B	1021	CLA	C4D-ND-C1D	-2.52	103.52	106.57
23	b	6013	CLA	C4D-ND-C1D	-2.52	103.52	106.57
23	D	1008	CLA	C4B-NB-C1B	-2.52	103.44	106.76
23	A	1006	CLA	C4B-NB-C1B	-2.52	103.44	106.76
23	c	6033	CLA	C4D-ND-C1D	-2.52	103.52	106.57
27	C	1054	BCR	C35-C13-C14	-2.52	119.34	122.92
23	b	6020	CLA	C4B-NB-C1B	-2.52	103.44	106.76
23	b	6012	CLA	C4D-ND-C1D	-2.52	103.52	106.57
23	c	6035	CLA	C4D-ND-C1D	-2.52	103.52	106.57
23	C	1037	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	B	1011	CLA	C4D-ND-C1D	-2.52	103.53	106.57
23	d	6008	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	c	6030	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	c	6025	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	c	6037	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	B	1012	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	b	6013	CLA	C4B-NB-C1B	-2.52	103.45	106.76
23	a	6003	CLA	C4C-C3C-C2C	-2.52	102.85	106.93
23	C	1037	CLA	C4D-ND-C1D	-2.51	103.53	106.57
23	B	1020	CLA	C4D-ND-C1D	-2.51	103.53	106.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6012	CLA	C4B-NB-C1B	-2.51	103.45	106.76
23	C	1034	CLA	C4B-NB-C1B	-2.51	103.45	106.76
23	C	1031	CLA	C4D-ND-C1D	-2.51	103.53	106.57
23	H	1017	CLA	C4C-C3C-C2C	-2.51	102.85	106.93
23	C	1030	CLA	C4C-C3C-C2C	-2.51	102.85	106.93
23	C	1034	CLA	C4C-C3C-C2C	-2.51	102.85	106.93
23	C	1034	CLA	C4D-ND-C1D	-2.51	103.53	106.57
23	b	6017	CLA	C4C-C3C-C2C	-2.51	102.86	106.93
23	c	6034	CLA	C4C-C3C-C2C	-2.51	102.86	106.93
23	A	1003	CLA	C4C-C3C-C2C	-2.51	102.86	106.93
23	b	6015	CLA	C3B-CAB-CBB	-2.51	120.76	125.95
23	C	1026	CLA	CHC-C1C-C2C	-2.51	119.92	126.45
23	b	6018	CLA	C4C-C3C-C2C	-2.51	102.86	106.93
23	C	1025	CLA	C4B-NB-C1B	-2.51	103.46	106.76
23	c	6030	CLA	C4C-C3C-C2C	-2.51	102.86	106.93
24	d	6038	PHO	C2B-C1B-NB	2.51	114.85	106.38
23	C	1033	CLA	C4B-NB-C1B	-2.51	103.46	106.76
23	a	6003	CLA	C4D-ND-C1D	-2.51	103.54	106.57
23	H	1017	CLA	C4B-NB-C1B	-2.51	103.46	106.76
23	B	1016	CLA	C4D-ND-C1D	-2.51	103.54	106.57
23	B	1010	CLA	CAC-C3C-C4C	2.50	128.60	124.85
23	c	6030	CLA	CAC-C3C-C4C	2.50	128.60	124.85
24	A	1038	PHO	C2B-C1B-NB	2.50	114.84	106.38
23	B	1013	CLA	C4D-ND-C1D	-2.51	103.54	106.57
23	C	1037	CLA	C4C-C3C-C2C	-2.50	102.87	106.93
23	c	6030	CLA	C4D-ND-C1D	-2.50	103.54	106.57
23	C	1031	CLA	C4B-NB-C1B	-2.50	103.47	106.76
23	c	6036	CLA	CAC-C3C-C4C	2.50	128.59	124.85
23	H	1017	CLA	C4D-ND-C1D	-2.50	103.55	106.57
27	H	1049	BCR	C23-C24-C25	-2.50	119.93	127.32
23	C	1027	CLA	C4D-ND-C1D	-2.50	103.55	106.57
23	C	1037	CLA	CAC-C3C-C4C	2.50	128.59	124.85
27	h	6049	BCR	C23-C24-C25	-2.50	119.94	127.32
23	c	6036	CLA	C4B-NB-C1B	-2.50	103.47	106.76
23	B	1015	CLA	C3B-CAB-CBB	-2.50	120.78	125.95
23	d	6004	CLA	C4B-NB-C1B	-2.50	103.47	106.76
23	C	1030	CLA	C4D-ND-C1D	-2.50	103.55	106.57
23	b	6017	CLA	C4D-ND-C1D	-2.50	103.55	106.57
23	b	6010	CLA	CAC-C3C-C4C	2.50	128.59	124.85
23	C	1033	CLA	CAC-C3C-C4C	2.50	128.59	124.85
23	B	1014	CLA	C2B-C3B-CAB	-2.50	122.22	127.33
23	C	1036	CLA	C4D-ND-C1D	-2.50	103.55	106.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	1036	CLA	C4B-NB-C1B	-2.50	103.48	106.76
23	c	6026	CLA	CHC-C1C-C2C	-2.49	119.96	126.45
27	c	6054	BCR	C35-C13-C14	-2.49	119.38	122.92
23	b	6017	CLA	C4B-NB-C1B	-2.49	103.48	106.76
23	d	6005	CLA	C4B-NB-C1B	-2.49	103.48	106.76
23	c	6033	CLA	C4B-NB-C1B	-2.49	103.48	106.76
23	d	6004	CLA	C4C-C3C-C2C	-2.49	102.88	106.93
23	c	6031	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
27	h	6049	BCR	C8-C7-C6	-2.49	119.96	127.32
23	A	1003	CLA	C4D-ND-C1D	-2.49	103.56	106.57
23	c	6037	CLA	CAC-C3C-C4C	2.49	128.58	124.85
23	C	1031	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
27	B	1047	BCR	C3-C4-C5	-2.49	109.97	113.74
23	C	1027	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	b	6016	CLA	C4D-ND-C1D	-2.49	103.56	106.57
23	B	1013	CLA	C4B-NB-C1B	-2.49	103.48	106.76
23	D	1004	CLA	C4B-NB-C1B	-2.49	103.48	106.76
29	J	1059	MGE	C2G-O2G-C1B	-2.49	111.78	117.92
23	C	1034	CLA	CAC-C3C-C4C	2.49	128.58	124.85
23	C	1028	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	C	1028	CLA	C4D-ND-C1D	-2.49	103.56	106.57
23	C	1030	CLA	CAC-C3C-C4C	2.49	128.57	124.85
24	A	1039	PHO	C2B-C1B-NB	2.49	114.78	106.38
23	c	6027	CLA	C4B-NB-C1B	-2.49	103.48	106.76
23	c	6031	CLA	C4B-NB-C1B	-2.49	103.48	106.76
23	B	1016	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	C	1031	CLA	CAC-C3C-C4C	2.49	128.58	124.85
23	a	6003	CLA	C4B-NB-C1B	-2.49	103.49	106.76
23	a	6006	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	B	1018	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	B	1012	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
28	h	6058	DGD	C2G-O2G-C1B	-2.49	111.78	117.92
27	H	1049	BCR	C8-C7-C6	-2.49	119.97	127.32
30	A	1063	LHG	C5-O7-C7	-2.49	111.78	117.92
23	c	6028	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	c	6027	CLA	C4C-C3C-C2C	-2.49	102.89	106.93
23	c	6031	CLA	C4D-ND-C1D	-2.49	103.56	106.57
23	D	1005	CLA	C4D-ND-C1D	-2.49	103.56	106.57
28	C	1055	DGD	C2G-O2G-C1B	-2.49	111.78	117.92
23	C	1025	CLA	CAC-C3C-C4C	2.49	128.57	124.85
23	b	6014	CLA	C2B-C3B-CAB	-2.49	122.24	127.33
24	a	6039	PHO	C2B-C1B-NB	2.48	114.78	106.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6012	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
28	c	6057	DGD	C2G-O2G-C1B	-2.49	111.79	117.92
23	A	1003	CLA	C4B-NB-C1B	-2.48	103.49	106.76
23	a	6006	CLA	C4B-NB-C1B	-2.48	103.49	106.76
23	a	6003	CLA	CAC-C3C-C4C	2.49	128.57	124.85
29	b	6060	MGE	C2G-O2G-C1B	-2.48	111.79	117.92
28	C	1056	DGD	C2G-O2G-C1B	-2.48	111.79	117.92
27	B	1045	BCR	C8-C7-C6	-2.48	119.98	127.32
23	b	6018	CLA	CAC-C3C-C4C	2.48	128.57	124.85
23	B	1020	CLA	C4B-NB-C1B	-2.48	103.49	106.76
23	B	1021	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
23	c	6028	CLA	C4B-NB-C1B	-2.48	103.49	106.76
23	C	1033	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
29	B	1060	MGE	C2G-O2G-C1B	-2.48	111.79	117.92
23	C	1036	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
23	C	1035	CLA	C4B-NB-C1B	-2.48	103.49	106.76
23	C	1025	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
23	c	6035	CLA	C4B-NB-C1B	-2.48	103.49	106.76
29	d	6059	MGE	C2G-O2G-C1B	-2.48	111.80	117.92
23	A	1003	CLA	CAC-C3C-C4C	2.48	128.57	124.85
28	C	1057	DGD	C2G-O2G-C1B	-2.48	111.80	117.92
29	D	1062	MGE	C2G-O2G-C1B	-2.48	111.80	117.92
23	c	6037	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
27	t	1046	BCR	C8-C7-C6	-2.48	119.99	127.32
23	c	6026	CLA	C2A-C1A-CHA	-2.48	119.53	123.83
23	C	1035	CLA	C4C-C3C-C2C	-2.48	102.90	106.93
23	C	1035	CLA	C4D-ND-C1D	-2.48	103.57	106.57
23	B	1023	CLA	C4B-NB-C1B	-2.48	103.49	106.76
27	b	6045	BCR	C8-C7-C6	-2.48	119.99	127.32
27	k	6052	BCR	C8-C7-C6	-2.48	120.00	127.32
23	B	1023	CLA	CAC-C3C-C4C	2.48	128.56	124.85
27	Z	1053	BCR	C8-C7-C6	-2.48	120.00	127.32
26	d	6042	PQ9	C25-C23-C22	2.48	125.86	121.08
23	c	6036	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
27	K	1052	BCR	C23-C24-C25	-2.48	120.00	127.32
23	C	1025	CLA	C4D-ND-C1D	-2.48	103.57	106.57
27	z	6053	BCR	C23-C24-C25	-2.48	120.00	127.32
23	b	6020	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
23	D	1004	CLA	CAC-C3C-C4C	2.48	128.56	124.85
23	C	1028	CLA	CAC-C3C-C4C	2.48	128.56	124.85
23	B	1020	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
27	z	6053	BCR	C8-C7-C6	-2.48	120.01	127.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	6032	CLA	C4B-NB-C1B	-2.48	103.50	106.76
23	c	6031	CLA	CAC-C3C-C4C	2.48	128.56	124.85
23	b	6011	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
23	a	6006	CLA	C4D-ND-C1D	-2.48	103.58	106.57
23	B	1012	CLA	CAC-C3C-C4C	2.48	128.56	124.85
23	d	6004	CLA	CAC-C3C-C4C	2.48	128.56	124.85
28	H	1058	DGD	C2G-O2G-C1B	-2.48	111.81	117.92
23	b	6016	CLA	C4B-NB-C1B	-2.48	103.50	106.76
23	b	6016	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
23	C	1032	CLA	C4B-NB-C1B	-2.48	103.50	106.76
29	d	6062	MGE	C2G-O2G-C1B	-2.48	111.81	117.92
29	d	6061	MGE	C2G-O2G-C1B	-2.48	111.81	117.92
23	B	1023	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
23	D	1004	CLA	C4C-C3C-C2C	-2.48	102.91	106.93
23	D	1008	CLA	CAC-C3C-C4C	2.47	128.56	124.85
23	A	1006	CLA	C4D-ND-C1D	-2.47	103.58	106.57
27	Z	1053	BCR	C23-C24-C25	-2.47	120.01	127.32
23	c	6025	CLA	C4D-ND-C1D	-2.47	103.58	106.57
23	D	1005	CLA	C4C-C3C-C2C	-2.47	102.91	106.93
23	B	1020	CLA	CAC-C3C-C4C	2.47	128.55	124.85
23	c	6025	CLA	CAC-C3C-C4C	2.47	128.55	124.85
23	b	6011	CLA	CAC-C3C-C4C	2.47	128.55	124.85
29	L	1061	MGE	C2G-O2G-C1B	-2.47	111.82	117.92
23	H	1017	CLA	CAC-C3C-C4C	2.47	128.55	124.85
23	D	1005	CLA	C4B-NB-C1B	-2.47	103.51	106.76
23	b	6013	CLA	CAC-C3C-C4C	2.47	128.55	124.85
23	b	6020	CLA	CAC-C3C-C4C	2.47	128.55	124.85
30	a	6063	LHG	C5-O7-C7	-2.47	111.82	117.92
23	b	6024	CLA	CHC-C1C-C2C	-2.47	120.03	126.45
23	c	6033	CLA	CAC-C3C-C4C	2.47	128.55	124.85
28	c	6056	DGD	C2G-O2G-C1B	-2.47	111.83	117.92
23	A	1006	CLA	C4C-C3C-C2C	-2.47	102.92	106.93
23	c	6028	CLA	C4D-ND-C1D	-2.47	103.58	106.57
23	b	6021	CLA	C4C-C3C-C2C	-2.47	102.92	106.93
27	k	6052	BCR	C23-C24-C25	-2.47	120.03	127.32
23	c	6033	CLA	C4C-C3C-C2C	-2.47	102.92	106.93
27	K	1052	BCR	C8-C7-C6	-2.47	120.03	127.32
23	b	6019	CLA	OBD-CAD-C3D	-2.47	123.31	127.91
23	B	1016	CLA	C4B-NB-C1B	-2.47	103.51	106.76
23	d	6005	CLA	C4D-ND-C1D	-2.47	103.59	106.57
23	b	6023	CLA	C4C-C3C-C2C	-2.47	102.92	106.93
23	B	1018	CLA	CAC-C3C-C4C	2.47	128.54	124.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1018	CLA	C4B-NB-C1B	-2.47	103.52	106.76
23	C	1026	CLA	C2A-C1A-CHA	-2.47	119.56	123.83
23	C	1032	CLA	CAC-C3C-C4C	2.47	128.54	124.85
23	B	1016	CLA	CAC-C3C-C4C	2.47	128.54	124.85
28	c	6055	DGD	C2G-O2G-C1B	-2.47	111.83	117.92
26	a	6043	PQ9	C16-C17-C18	-2.46	122.48	127.80
23	C	1028	CLA	C4B-NB-C1B	-2.46	103.52	106.76
23	D	1008	CLA	C4C-C3C-C2C	-2.47	102.93	106.93
23	B	1011	CLA	C4C-C3C-C2C	-2.47	102.93	106.93
23	b	6021	CLA	CAC-C3C-C4C	2.47	128.54	124.85
23	b	6021	CLA	CMD-C2D-C3D	-2.47	121.08	124.97
23	C	1036	CLA	CAC-C3C-C4C	2.47	128.54	124.85
23	B	1021	CLA	CAC-C3C-C4C	2.46	128.54	124.85
23	c	6032	CLA	C4C-C3C-C2C	-2.46	102.93	106.93
23	C	1027	CLA	C4B-NB-C1B	-2.46	103.52	106.76
23	B	1019	CLA	OBD-CAD-C3D	-2.46	123.33	127.91
23	B	1019	CLA	C2B-C3B-CAB	2.46	132.36	127.33
27	b	6047	BCR	C3-C4-C5	-2.46	110.01	113.74
23	b	6022	CLA	C16-C15-C13	-2.46	108.05	115.14
23	d	6008	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	B	1022	CLA	C16-C15-C13	-2.46	108.05	115.14
23	B	1024	CLA	CHC-C1C-C2C	-2.46	120.05	126.45
23	b	6012	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	c	6035	CLA	C4C-C3C-C2C	-2.46	102.94	106.93
23	B	1013	CLA	C4C-C3C-C2C	-2.46	102.94	106.93
23	B	1011	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	b	6023	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	c	6032	CLA	CMD-C2D-C3D	-2.46	121.10	124.97
23	d	6008	CLA	C4C-C3C-C2C	-2.46	102.94	106.93
23	a	6006	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	B	1013	CLA	CAC-C3C-C4C	2.46	128.53	124.85
27	a	6044	BCR	C29-C30-C25	-2.46	106.35	110.44
24	A	1038	PHO	C3B-C4B-NB	2.46	111.70	107.61
23	c	6032	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	D	1005	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	C	1032	CLA	C4C-C3C-C2C	-2.45	102.95	106.93
23	b	6018	CLA	C4B-NB-C1B	-2.46	103.53	106.76
23	C	1027	CLA	CAC-C3C-C4C	2.46	128.53	124.85
23	c	6028	CLA	CAC-C3C-C4C	2.45	128.53	124.85
23	B	1009	CLA	CHC-C1C-C2C	-2.45	120.07	126.45
23	c	6036	CLA	C4D-ND-C1D	-2.45	103.60	106.57
23	C	1035	CLA	CAC-C3C-C4C	2.45	128.53	124.85

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	1054	BCR	C23-C24-C25	-2.45	120.08	127.32
23	b	6019	CLA	C2B-C3B-CAB	2.45	132.34	127.33
24	d	6038	PHO	C3B-C4B-NB	2.45	111.69	107.61
23	c	6025	CLA	C4C-C3C-C2C	-2.45	102.95	106.93
23	b	6017	CLA	CAC-C3C-C4C	2.45	128.52	124.85
23	d	6005	CLA	C4C-C3C-C2C	-2.45	102.95	106.93
23	b	6011	CLA	C4B-NB-C1B	-2.45	103.54	106.76
23	b	6009	CLA	CHC-C1C-C2C	-2.45	120.08	126.45
23	c	6035	CLA	CAC-C3C-C4C	2.45	128.52	124.85
23	b	6021	CLA	C4B-NB-C1B	-2.45	103.54	106.76
23	A	1006	CLA	CAC-C3C-C4C	2.45	128.51	124.85
23	b	6023	CLA	C4B-NB-C1B	-2.45	103.54	106.76
25	e	6040	HEM	C4C-NC-C1C	2.44	108.08	105.53
23	B	1011	CLA	C4B-NB-C1B	-2.44	103.54	106.76
23	b	6013	CLA	C4C-C3C-C2C	-2.44	102.96	106.93
23	b	6014	CLA	C4B-NB-C1B	-2.44	103.55	106.76
23	B	1014	CLA	C4B-NB-C1B	-2.44	103.55	106.76
23	a	6006	CLA	CMD-C2D-C3D	-2.44	121.12	124.97
23	C	1034	CLA	CMD-C2D-C3D	-2.44	121.12	124.97
27	c	6054	BCR	C30-C25-C24	2.44	122.45	115.69
23	c	6027	CLA	CAC-C3C-C4C	2.44	128.50	124.85
27	A	1044	BCR	C29-C30-C25	-2.44	106.38	110.44
23	d	6008	CLA	CMD-C2D-C3D	-2.44	121.12	124.97
23	b	6016	CLA	CAC-C3C-C4C	2.44	128.50	124.85
23	B	1021	CLA	C4B-NB-C1B	-2.44	103.55	106.76
27	c	6054	BCR	C23-C24-C25	-2.44	120.12	127.32
23	d	6005	CLA	CMD-C2D-C3D	-2.44	121.13	124.97
23	b	6022	CLA	CHC-C1C-C2C	-2.43	120.12	126.45
23	B	1022	CLA	CHC-C1C-C2C	-2.43	120.12	126.45
23	b	6011	CLA	CMD-C2D-C3D	-2.43	121.13	124.97
26	A	1043	PQ9	C16-C17-C18	-2.43	122.55	127.80
23	B	1021	CLA	CMD-C2D-C3D	-2.43	121.14	124.97
23	c	6030	CLA	CMD-C2D-C3D	-2.43	121.14	124.97
23	B	1011	CLA	CMD-C2D-C3D	-2.43	121.14	124.97
23	c	6025	CLA	CMD-C2D-C3D	-2.43	121.14	124.97
23	D	1008	CLA	CMD-C2D-C3D	-2.43	121.14	124.97
24	a	6039	PHO	C3B-C4B-NB	2.43	111.65	107.61
23	A	1007	CLA	CHC-C1C-C2C	-2.43	120.14	126.45
23	c	6035	CLA	CMD-C2D-C3D	-2.43	121.14	124.97
27	k	6051	BCR	C35-C13-C14	-2.43	119.47	122.92
23	C	1028	CLA	CMD-C2D-C3D	-2.42	121.15	124.97
23	C	1030	CLA	CMD-C2D-C3D	-2.42	121.15	124.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	6005	CLA	CAC-C3C-C4C	2.42	128.48	124.85
27	C	1054	BCR	C30-C25-C24	2.42	122.40	115.69
27	A	1044	BCR	C35-C13-C14	-2.42	119.48	122.92
23	B	1010	CLA	C4B-NB-C1B	-2.42	103.57	106.76
23	b	6018	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	C	1025	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	b	6010	CLA	C4B-NB-C1B	-2.42	103.58	106.76
25	v	6041	HEM	C4C-NC-C1C	2.42	108.05	105.53
23	c	6034	CLA	C4B-NB-C1B	-2.42	103.58	106.76
23	a	6003	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	c	6037	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	B	1018	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	C	1032	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	a	6007	CLA	CHC-C1C-C2C	-2.42	120.17	126.45
23	d	6004	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	b	6016	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	B	1024	CLA	CHB-C1B-NB	-2.42	120.54	124.58
23	b	6012	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	D	1005	CLA	CMD-C2D-C3D	-2.42	121.16	124.97
23	c	6036	CLA	CMD-C2D-C3D	-2.41	121.16	124.97
23	A	1006	CLA	CMD-C2D-C3D	-2.41	121.17	124.97
23	B	1016	CLA	CMD-C2D-C3D	-2.41	121.17	124.97
23	b	6022	CLA	C4D-ND-C1D	-2.41	103.65	106.57
27	a	6044	BCR	C35-C13-C14	-2.41	119.50	122.92
23	B	1024	CLA	C4D-ND-C1D	-2.41	103.66	106.57
23	b	6024	CLA	CHB-C1B-NB	-2.41	120.56	124.58
23	b	6024	CLA	C4D-ND-C1D	-2.41	103.66	106.57
23	A	1003	CLA	CMD-C2D-C3D	-2.41	121.17	124.97
23	A	1007	CLA	C4C-C3C-C2C	-2.41	103.02	106.93
23	C	1035	CLA	CMD-C2D-C3D	-2.41	121.17	124.97
23	C	1027	CLA	CMD-C2D-C3D	-2.41	121.17	124.97
23	D	1004	CLA	CMD-C2D-C3D	-2.41	121.17	124.97
23	c	6027	CLA	CMD-C2D-C3D	-2.41	121.18	124.97
26	a	6043	PQ9	C34-C33-C32	-2.41	118.76	123.52
23	C	1031	CLA	CMD-C2D-C3D	-2.41	121.18	124.97
23	b	6013	CLA	CMD-C2D-C3D	-2.40	121.18	124.97
23	B	1013	CLA	CMD-C2D-C3D	-2.40	121.18	124.97
27	K	1051	BCR	C35-C13-C14	-2.40	119.51	122.92
25	V	1041	HEM	C4C-NC-C1C	2.40	108.03	105.53
23	b	6023	CLA	CMD-C2D-C3D	-2.40	121.18	124.97
23	B	1009	CLA	C4D-ND-C1D	-2.40	103.67	106.57
24	A	1039	PHO	C3B-C4B-NB	2.40	111.61	107.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6024	CLA	CBC-CAC-C3C	-2.40	105.12	112.38
23	c	6033	CLA	CMD-C2D-C3D	-2.40	121.19	124.97
23	b	6014	CLA	C4C-C3C-C2C	-2.40	103.04	106.93
23	C	1037	CLA	CMD-C2D-C3D	-2.40	121.19	124.97
23	B	1024	CLA	CBC-CAC-C3C	-2.40	105.13	112.38
23	C	1036	CLA	CMD-C2D-C3D	-2.40	121.19	124.97
27	T	6046	BCR	C38-C26-C25	-2.39	121.79	124.51
23	C	1033	CLA	CMD-C2D-C3D	-2.39	121.20	124.97
23	b	6020	CLA	O2D-CGD-O1D	-2.39	118.93	123.79
23	B	1022	CLA	C4D-ND-C1D	-2.39	103.67	106.57
23	a	6007	CLA	C4C-C3C-C2C	-2.39	103.04	106.93
23	H	1017	CLA	CMD-C2D-C3D	-2.39	121.20	124.97
23	B	1023	CLA	CMD-C2D-C3D	-2.39	121.20	124.97
23	b	6020	CLA	CMD-C2D-C3D	-2.39	121.20	124.97
26	d	6042	PQ9	C36-C35-C33	2.39	120.65	112.74
23	b	6017	CLA	CMD-C2D-C3D	-2.39	121.21	124.97
23	c	6034	CLA	CHC-C1C-C2C	-2.39	120.24	126.45
23	c	6031	CLA	CMD-C2D-C3D	-2.39	121.21	124.97
23	b	6010	CLA	C4C-C3C-C2C	-2.38	103.06	106.93
26	d	6042	PQ9	C2-C3-C4	-2.38	114.17	122.22
23	b	6009	CLA	C4D-ND-C1D	-2.38	103.69	106.57
23	B	1010	CLA	C4C-C3C-C2C	-2.38	103.07	106.93
23	b	6018	CLA	O2D-CGD-O1D	-2.38	118.95	123.79
23	B	1023	CLA	O2D-CGD-O1D	-2.38	118.95	123.79
23	B	1020	CLA	CMD-C2D-C3D	-2.38	121.22	124.97
23	B	1014	CLA	C4C-C3C-C2C	-2.38	103.07	106.93
23	c	6028	CLA	CMD-C2D-C3D	-2.38	121.22	124.97
25	E	1040	HEM	C4C-NC-C1C	2.38	108.00	105.53
23	B	1012	CLA	CMD-C2D-C3D	-2.38	121.23	124.97
23	C	1031	CLA	O2D-CGD-O1D	-2.37	118.97	123.79
23	B	1019	CLA	CHC-C1C-C2C	-2.37	120.28	126.45
23	B	1020	CLA	O2D-CGD-O1D	-2.37	118.97	123.79
23	b	6019	CLA	CHC-C1C-C2C	-2.37	120.28	126.45
23	c	6025	CLA	O2D-CGD-O1D	-2.37	118.97	123.79
23	b	6011	CLA	O2D-CGD-O1D	-2.37	118.97	123.79
23	D	1008	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	C	1028	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	b	6016	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	C	1025	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	b	6012	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	B	1011	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	b	6024	CLA	O2D-CGD-CBD	2.37	116.15	111.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6023	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	B	1018	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	c	6036	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	C	1036	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	d	6004	CLA	O2D-CGD-O1D	-2.37	118.98	123.79
23	B	1021	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	c	6027	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	b	6021	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	d	6008	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
26	D	1042	PQ9	C2-C3-C4	-2.36	114.25	122.22
23	C	1030	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
23	b	6022	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
23	A	1006	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
23	c	6030	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	c	6033	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	C	1035	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	B	1024	CLA	O2D-CGD-CBD	2.36	116.14	111.33
23	c	6035	CLA	O2D-CGD-O1D	-2.36	118.99	123.79
23	C	1033	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
23	c	6031	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
23	c	6029	CLA	CHC-C1C-C2C	-2.36	120.32	126.45
23	c	6028	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
26	A	1043	PQ9	C40-C38-C37	2.36	125.62	121.08
23	D	1004	CLA	O2D-CGD-O1D	-2.36	119.00	123.79
23	B	1014	CLA	C2A-C1A-CHA	-2.35	119.76	123.83
23	C	1034	CLA	O2D-CGD-O1D	-2.35	119.01	123.79
23	b	6014	CLA	C2A-C1A-CHA	-2.35	119.76	123.83
23	a	6006	CLA	O2D-CGD-O1D	-2.35	119.02	123.79
23	C	1029	CLA	CHC-C1C-C2C	-2.35	120.34	126.45
26	D	1042	PQ9	C20-C21-C22	-2.35	104.90	111.62
23	C	1037	CLA	O2D-CGD-O1D	-2.35	119.02	123.79
23	D	1005	CLA	O2D-CGD-O1D	-2.35	119.02	123.79
23	b	6009	CLA	C4B-NB-C1B	-2.35	103.67	106.76
23	B	1019	CLA	C4B-C3B-CAB	-2.35	122.42	127.18
23	B	1013	CLA	O2D-CGD-O1D	-2.35	119.02	123.79
23	B	1012	CLA	O2D-CGD-O1D	-2.35	119.02	123.79
23	C	1027	CLA	O2D-CGD-O1D	-2.35	119.02	123.79
23	B	1022	CLA	O2D-CGD-O1D	-2.34	119.03	123.79
23	c	6030	CLA	CHC-C1C-C2C	-2.34	120.36	126.45
23	B	1022	CLA	CMC-C2C-C1C	2.34	128.18	124.94
23	B	1009	CLA	C4B-NB-C1B	-2.34	103.68	106.76
23	B	1016	CLA	O2D-CGD-O1D	-2.34	119.03	123.79

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	a	6043	PQ9	C2-C3-C4	-2.34	114.32	122.22
23	b	6017	CLA	CHC-C1C-C2C	-2.34	120.36	126.45
26	A	1043	PQ9	C24-C23-C22	-2.34	118.89	123.52
23	C	1025	CLA	CHC-C1C-C2C	-2.34	120.36	126.45
23	C	1035	CLA	CHC-C1C-C2C	-2.34	120.37	126.45
23	H	1017	CLA	O2D-CGD-O1D	-2.34	119.04	123.79
27	k	6051	BCR	C23-C24-C25	2.34	134.22	127.32
23	b	6022	CLA	CMC-C2C-C1C	2.34	128.17	124.94
23	d	6005	CLA	O2D-CGD-O1D	-2.34	119.05	123.79
23	H	1017	CLA	CHC-C1C-C2C	-2.34	120.38	126.45
23	b	6013	CLA	CHC-C1C-C2C	-2.34	120.38	126.45
23	c	6035	CLA	CHC-C1C-C2C	-2.34	120.38	126.45
23	C	1027	CLA	CHC-C1C-C2C	-2.34	120.38	126.45
23	b	6019	CLA	C4B-C3B-CAB	-2.33	122.45	127.18
23	B	1013	CLA	CHC-C1C-C2C	-2.33	120.38	126.45
27	K	1051	BCR	C23-C24-C25	2.33	134.21	127.32
23	b	6013	CLA	O2D-CGD-O1D	-2.33	119.05	123.79
23	D	1004	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	C	1033	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	c	6037	CLA	O2D-CGD-O1D	-2.33	119.06	123.79
23	c	6036	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	C	1030	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	B	1014	CLA	CMB-C2B-C3B	2.33	128.64	124.97
23	c	6027	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	c	6032	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	c	6025	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	A	1003	CLA	CHC-C1C-C2C	-2.33	120.39	126.45
23	C	1032	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	c	6033	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	C	1037	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	b	6020	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	D	1008	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	B	1020	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	a	6006	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	b	6015	CLA	C2B-C1B-CHB	-2.33	121.59	126.00
23	B	1018	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	C	1034	CLA	CHC-C1C-C2C	-2.33	120.40	126.45
23	b	6009	CLA	O1D-CGD-CBD	-2.33	119.66	124.42
23	b	6012	CLA	CHC-C1C-C2C	-2.32	120.41	126.45
23	a	6003	CLA	CHC-C1C-C2C	-2.32	120.41	126.45
23	C	1036	CLA	CHC-C1C-C2C	-2.32	120.41	126.45
23	B	1009	CLA	O1D-CGD-CBD	-2.32	119.66	124.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	C	1032	CLA	O2D-CGD-O1D	-2.32	119.07	123.79
23	B	1015	CLA	C2B-C1B-CHB	-2.32	121.60	126.00
23	d	6004	CLA	CHC-C1C-C2C	-2.32	120.41	126.45
23	C	1028	CLA	CHC-C1C-C2C	-2.32	120.41	126.45
23	d	6005	CLA	CHC-C1C-C2C	-2.32	120.42	126.45
23	A	1003	CLA	O2D-CGD-O1D	-2.32	119.08	123.79
23	C	1031	CLA	CHC-C1C-C2C	-2.32	120.41	126.45
23	c	6029	CLA	C6-C5-C3	-2.32	107.27	112.78
23	b	6017	CLA	O2D-CGD-O1D	-2.32	119.08	123.79
23	d	6008	CLA	CHC-C1C-C2C	-2.32	120.42	126.45
27	K	1051	BCR	C3-C4-C5	-2.32	110.23	113.74
23	a	6003	CLA	O2D-CGD-O1D	-2.32	119.08	123.79
23	D	1005	CLA	CHC-C1C-C2C	-2.32	120.42	126.45
23	B	1023	CLA	CHC-C1C-C2C	-2.32	120.42	126.45
23	c	6037	CLA	CHC-C1C-C2C	-2.32	120.43	126.45
23	B	1012	CLA	CHC-C1C-C2C	-2.32	120.43	126.45
23	B	1015	CLA	CGD-CBD-CHA	2.32	118.84	110.96
23	b	6018	CLA	CHC-C1C-C2C	-2.32	120.43	126.45
23	b	6016	CLA	CHC-C1C-C2C	-2.32	120.42	126.45
23	b	6023	CLA	CHC-C1C-C2C	-2.32	120.43	126.45
23	b	6014	CLA	CMB-C2B-C3B	2.31	128.61	124.97
23	B	1016	CLA	CHC-C1C-C2C	-2.31	120.43	126.45
23	b	6021	CLA	CHC-C1C-C2C	-2.31	120.44	126.45
23	c	6028	CLA	CHC-C1C-C2C	-2.31	120.44	126.45
27	k	6051	BCR	C3-C4-C5	-2.31	110.24	113.74
23	B	1021	CLA	CHC-C1C-C2C	-2.31	120.45	126.45
27	k	6051	BCR	C27-C26-C25	-2.31	119.77	122.84
23	b	6015	CLA	CGD-CBD-CHA	2.31	118.80	110.96
23	B	1011	CLA	CHC-C1C-C2C	-2.31	120.45	126.45
24	a	6039	PHO	O2D-CGD-O1D	-2.31	119.11	123.79
23	c	6031	CLA	CHC-C1C-C2C	-2.31	120.45	126.45
23	C	1029	CLA	C6-C5-C3	-2.31	107.30	112.78
27	B	1048	BCR	C28-C27-C26	-2.30	110.25	113.74
26	a	6043	PQ9	C39-C38-C40	2.30	118.89	115.39
26	a	6043	PQ9	C35-C36-C37	-2.30	105.04	111.62
23	A	1006	CLA	CHC-C1C-C2C	-2.30	120.47	126.45
23	c	6032	CLA	O2D-CGD-O1D	-2.30	119.12	123.79
23	C	1026	CLA	C4-C3-C2	-2.30	118.96	123.52
26	d	6042	PQ9	C24-C23-C22	-2.30	118.97	123.52
27	K	1051	BCR	C27-C26-C25	-2.30	119.78	122.84
23	b	6019	CLA	C4D-ND-C1D	-2.30	103.79	106.57
23	b	6015	CLA	CMD-C2D-C3D	-2.29	121.36	124.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	b	6011	CLA	CHC-C1C-C2C	-2.29	120.50	126.45
24	A	1039	PHO	O2D-CGD-O1D	-2.28	119.15	123.79
26	A	1043	PQ9	C2-C3-C4	-2.29	114.51	122.22
23	c	6026	CLA	C4-C3-C2	-2.28	119.00	123.52
23	b	6014	CLA	C4D-ND-C1D	-2.27	103.82	106.57
27	b	6048	BCR	C28-C27-C26	-2.27	110.30	113.74
23	B	1015	CLA	C16-C15-C13	-2.27	108.60	115.14
23	B	1015	CLA	CMD-C2D-C3D	-2.27	121.40	124.97
23	a	6007	CLA	C4D-ND-C1D	-2.27	103.83	106.57
23	B	1019	CLA	C4D-ND-C1D	-2.27	103.83	106.57
23	b	6022	CLA	C3A-C4A-NA	2.26	113.70	110.95
23	b	6015	CLA	C16-C15-C13	-2.26	108.63	115.14
27	D	1050	BCR	C8-C7-C6	-2.26	120.65	127.32
23	B	1022	CLA	C3A-C4A-NA	2.26	113.69	110.95
27	c	6054	BCR	C8-C7-C6	-2.26	120.66	127.32
23	A	1007	CLA	CMD-C2D-C3D	-2.25	121.42	124.97
23	B	1014	CLA	C4D-ND-C1D	-2.25	103.85	106.57
27	d	6050	BCR	C8-C7-C6	-2.25	120.67	127.32
23	A	1007	CLA	C4D-ND-C1D	-2.25	103.85	106.57
23	a	6007	CLA	CMD-C2D-C3D	-2.24	121.43	124.97
23	B	1022	CLA	C4B-NB-C1B	-2.24	103.81	106.76
27	C	1054	BCR	C8-C7-C6	-2.24	120.71	127.32
27	B	1045	BCR	C23-C24-C25	2.24	133.93	127.32
23	b	6022	CLA	CAA-C2A-C3A	-2.23	107.76	113.04
26	d	6042	PQ9	C15-C13-C12	2.23	125.38	121.08
25	v	6041	HEM	CBD-CAD-C3D	-2.24	109.49	114.37
23	A	1007	CLA	C4B-NB-C1B	-2.23	103.82	106.76
23	a	6007	CLA	C4B-NB-C1B	-2.23	103.82	106.76
25	V	1041	HEM	CBD-CAD-C3D	-2.23	109.50	114.37
27	b	6045	BCR	C23-C24-C25	2.23	133.90	127.32
23	c	6034	CLA	CMC-C2C-C1C	2.23	128.02	124.94
23	c	6026	CLA	C2B-C1B-CHB	-2.23	121.78	126.00
23	c	6034	CLA	CMD-C2D-C3D	-2.23	121.46	124.97
23	b	6019	CLA	C6-C5-C3	-2.22	107.49	112.78
27	C	1054	BCR	C37-C22-C21	-2.22	119.76	122.92
23	B	1009	CLA	O2A-CGA-O1A	-2.22	117.36	123.43
23	B	1019	CLA	C6-C5-C3	-2.22	107.50	112.78
27	c	6054	BCR	C37-C22-C21	-2.22	119.77	122.92
23	B	1022	CLA	CAA-C2A-C3A	-2.22	107.79	113.04
23	B	1009	CLA	C3B-C4B-CHC	-2.22	121.79	126.00
23	b	6009	CLA	C3B-C4B-CHC	-2.22	121.79	126.00
26	A	1043	PQ9	C35-C36-C37	-2.22	105.28	111.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B	1015	CLA	CHB-C1B-NB	-2.22	120.88	124.58
23	C	1026	CLA	C2B-C1B-CHB	-2.22	121.80	126.00
23	b	6022	CLA	C4B-NB-C1B	-2.21	103.85	106.76
25	E	1040	HEM	CBD-CAD-C3D	-2.21	109.54	114.37
23	C	1029	CLA	CHB-C4A-NA	2.21	127.20	124.58
26	d	6042	PQ9	C15-C16-C17	-2.21	105.30	111.62
27	b	6045	BCR	C27-C26-C25	-2.21	119.90	122.84
23	b	6009	CLA	O2A-CGA-O1A	-2.21	117.40	123.43
23	B	1010	CLA	C2B-C1B-CHB	-2.21	121.82	126.00
23	b	6010	CLA	C2B-C1B-CHB	-2.21	121.82	126.00
27	a	6044	BCR	C34-C9-C10	-2.20	119.79	122.92
23	b	6015	CLA	CHB-C1B-NB	-2.20	120.90	124.58
23	c	6034	CLA	CHB-C1B-NB	-2.20	120.90	124.58
27	A	1044	BCR	C34-C9-C10	-2.20	119.80	122.92
25	e	6040	HEM	CBD-CAD-C3D	-2.20	109.58	114.37
23	b	6020	CLA	CHB-C1B-NB	-2.20	120.91	124.58
23	c	6025	CLA	CHB-C1B-NB	-2.20	120.91	124.58
23	c	6037	CLA	CHB-C1B-NB	-2.20	120.91	124.58
23	c	6026	CLA	C4D-ND-C1D	-2.20	103.91	106.57
23	C	1034	CLA	CHB-C1B-NB	-2.20	120.91	124.58
23	c	6029	CLA	CHB-C4A-NA	2.19	127.17	124.58
23	B	1015	CLA	CHC-C1C-C2C	-2.19	120.75	126.45
27	B	1045	BCR	C27-C26-C25	-2.19	119.92	122.84
23	C	1030	CLA	CHB-C1B-NB	-2.19	120.92	124.58
23	d	6004	CLA	CHB-C1B-NB	-2.19	120.92	124.58
23	D	1008	CLA	CHB-C1B-NB	-2.19	120.93	124.58
23	C	1025	CLA	CHB-C1B-NB	-2.19	120.92	124.58
23	A	1006	CLA	CHB-C1B-NB	-2.18	120.93	124.58
23	b	6015	CLA	CHC-C1C-C2C	-2.19	120.77	126.45
27	b	6048	BCR	C34-C9-C10	-2.18	119.82	122.92
27	t	1046	BCR	C29-C30-C25	-2.18	106.81	110.44
26	a	6043	PQ9	C40-C38-C37	2.18	125.28	121.08
23	C	1037	CLA	CHB-C1B-NB	-2.18	120.94	124.58
23	C	1029	CLA	C2B-C1B-CHB	-2.18	121.87	126.00
23	c	6035	CLA	CHB-C1B-NB	-2.18	120.94	124.58
23	c	6029	CLA	C2B-C1B-CHB	-2.18	121.87	126.00
23	B	1024	CLA	C4C-C3C-C2C	-2.18	103.40	106.93
23	b	6012	CLA	CHB-C1B-NB	-2.18	120.94	124.58
23	a	6003	CLA	CHB-C1B-NB	-2.17	120.95	124.58
23	C	1031	CLA	CHB-C1B-NB	-2.17	120.95	124.58
27	B	1048	BCR	C34-C9-C10	-2.17	119.84	122.92
23	B	1018	CLA	CHB-C1B-NB	-2.17	120.95	124.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	d	6008	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	H	1017	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	B	1020	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	c	6027	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	c	6036	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	A	1007	CLA	C4-C3-C2	-2.17	119.23	123.52
23	B	1016	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	C	1032	CLA	CHB-C1B-NB	-2.17	120.96	124.58
23	C	1028	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	c	6028	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	b	6024	CLA	C4C-C3C-C2C	-2.16	103.42	106.93
23	a	6007	CLA	O2A-CGA-O1A	-2.16	117.52	123.43
23	a	6007	CLA	C4-C3-C2	-2.16	119.24	123.52
23	C	1035	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	b	6009	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	a	6006	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	C	1026	CLA	C4D-ND-C1D	-2.16	103.96	106.57
23	A	1007	CLA	O2A-CGA-O1A	-2.16	117.53	123.43
23	c	6030	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	b	6018	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	C	1027	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	b	6017	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	b	6016	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	D	1004	CLA	CHB-C1B-NB	-2.16	120.97	124.58
23	c	6032	CLA	CHB-C1B-NB	-2.16	120.98	124.58
23	B	1012	CLA	CHB-C1B-NB	-2.16	120.98	124.58
23	b	6013	CLA	CHB-C1B-NB	-2.15	120.98	124.58
23	B	1023	CLA	CHB-C1B-NB	-2.16	120.98	124.58
23	C	1033	CLA	CHB-C1B-NB	-2.15	120.98	124.58
23	c	6031	CLA	CHB-C1B-NB	-2.15	120.98	124.58
23	A	1003	CLA	CHB-C1B-NB	-2.15	120.98	124.58
23	b	6011	CLA	CHB-C1B-NB	-2.15	120.98	124.58
27	k	6052	BCR	C27-C26-C25	-2.15	119.97	122.84
23	C	1036	CLA	CHB-C1B-NB	-2.15	120.99	124.58
23	B	1009	CLA	CHB-C1B-NB	-2.15	120.99	124.58
23	c	6033	CLA	CHB-C1B-NB	-2.15	120.99	124.58
27	Z	1053	BCR	C27-C26-C25	-2.15	119.98	122.84
23	b	6021	CLA	CHB-C1B-NB	-2.15	121.00	124.58
23	b	6019	CLA	C11-C10-C8	-2.15	108.96	115.14
23	B	1019	CLA	C11-C10-C8	-2.15	108.96	115.14
23	B	1013	CLA	CHB-C1B-NB	-2.15	120.99	124.58
23	d	6005	CLA	CHB-C1B-NB	-2.14	121.00	124.58

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	D	1005	CLA	CHB-C1B-NB	-2.14	121.00	124.58
27	H	1049	BCR	C4-C5-C6	-2.14	119.99	122.84
23	B	1011	CLA	CHB-C1B-NB	-2.14	121.01	124.58
23	B	1022	CLA	CMB-C2B-C3B	2.14	128.33	124.97
23	b	6022	CLA	C6-C7-C8	-2.13	108.99	115.14
23	B	1021	CLA	CHB-C1B-NB	-2.13	121.02	124.58
27	C	1054	BCR	C29-C30-C25	-2.13	106.89	110.44
23	b	6015	CLA	CBD-CHA-C1A	2.13	131.56	128.77
27	b	6045	BCR	C24-C25-C26	-2.13	116.47	121.57
27	B	1045	BCR	C4-C5-C6	-2.13	120.00	122.84
27	K	1052	BCR	C4-C5-C6	-2.13	120.00	122.84
27	Z	1053	BCR	C4-C5-C6	-2.13	120.00	122.84
27	z	6053	BCR	C4-C5-C6	-2.13	120.00	122.84
23	b	6014	CLA	O2A-CGA-CBA	2.13	118.63	111.94
23	B	1022	CLA	C6-C7-C8	-2.13	109.01	115.14
25	E	1040	HEM	CHD-C1D-ND	2.13	126.35	124.58
27	c	6054	BCR	C29-C30-C25	-2.13	106.91	110.44
23	b	6023	CLA	CHB-C1B-NB	-2.13	121.03	124.58
23	B	1014	CLA	O2A-CGA-CBA	2.12	118.61	111.94
23	c	6034	CLA	O2A-CGA-CBA	2.12	118.62	111.94
27	z	6053	BCR	C27-C26-C25	-2.12	120.02	122.84
27	b	6045	BCR	C4-C5-C6	-2.12	120.01	122.84
25	e	6040	HEM	CHD-C1D-ND	2.12	126.34	124.58
27	T	6046	BCR	C8-C7-C6	-2.12	121.07	127.32
23	b	6022	CLA	CMB-C2B-C3B	2.12	128.30	124.97
23	b	6015	CLA	C4-C3-C2	-2.12	119.33	123.52
23	B	1022	CLA	CAC-C3C-C2C	2.12	131.34	127.50
27	b	6048	BCR	C23-C24-C25	-2.12	121.07	127.32
27	h	6049	BCR	C4-C5-C6	-2.12	120.02	122.84
25	V	1041	HEM	CHD-C1D-ND	2.11	126.34	124.58
27	B	1045	BCR	C24-C25-C26	-2.11	116.51	121.57
27	K	1052	BCR	C27-C26-C25	-2.11	120.03	122.84
23	B	1009	CLA	CMD-C2D-C3D	-2.11	121.64	124.97
23	B	1015	CLA	CBD-CHA-C1A	2.11	131.53	128.77
26	A	1043	PQ9	C41-C40-C38	-2.11	105.75	112.74
27	B	1048	BCR	C1-C6-C5	-2.11	119.55	122.60
23	b	6019	CLA	C3A-C4A-NA	2.11	113.51	110.95
27	B	1048	BCR	C23-C24-C25	-2.11	121.10	127.32
23	B	1015	CLA	C4-C3-C2	-2.10	119.35	123.52
23	b	6010	CLA	CGD-CBD-CAD	2.10	118.10	110.96
23	b	6022	CLA	CAC-C3C-C2C	2.10	131.31	127.50
23	C	1029	CLA	C6-C7-C8	-2.10	109.09	115.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	B	1048	BCR	C37-C22-C21	-2.10	119.94	122.92
23	b	6009	CLA	CMD-C2D-C3D	-2.10	121.66	124.97
24	a	6039	PHO	C2C-C1C-NC	2.10	112.80	109.72
25	e	6040	HEM	C3A-C4A-NA	-2.10	107.83	109.41
23	B	1024	CLA	CMD-C2D-C3D	-2.10	121.66	124.97
26	A	1043	PQ9	C35-C33-C32	2.10	125.12	121.08
23	c	6029	CLA	C6-C7-C8	-2.10	109.10	115.14
23	b	6014	CLA	C4B-C3B-CAB	2.09	131.41	127.18
24	A	1039	PHO	C2C-C1C-NC	2.09	112.79	109.72
25	v	6041	HEM	CHD-C1D-ND	2.09	126.32	124.58
27	K	1051	BCR	C8-C7-C6	-2.09	121.14	127.32
23	b	6024	CLA	CMD-C2D-C3D	-2.09	121.68	124.97
23	B	1010	CLA	CGD-CBD-CAD	2.09	118.06	110.96
23	B	1014	CLA	C4B-C3B-CAB	2.09	131.41	127.18
27	k	6051	BCR	C8-C7-C6	-2.09	121.15	127.32
23	b	6015	CLA	O2A-CGA-O1A	-2.09	117.73	123.43
27	k	6052	BCR	C4-C5-C6	-2.09	120.06	122.84
27	k	6052	BCR	C37-C22-C21	-2.09	119.95	122.92
27	h	6049	BCR	C27-C26-C25	-2.09	120.06	122.84
23	B	1015	CLA	O2A-CGA-O1A	-2.09	117.74	123.43
27	b	6048	BCR	C1-C6-C5	-2.08	119.58	122.60
23	B	1019	CLA	C3A-C4A-NA	2.08	113.48	110.95
24	A	1038	PHO	C2C-C1C-NC	2.08	112.78	109.72
27	b	6048	BCR	C37-C22-C21	-2.08	119.96	122.92
27	t	1046	BCR	C4-C5-C6	-2.08	120.07	122.84
27	d	6050	BCR	C24-C25-C26	-2.08	116.59	121.57
23	c	6029	CLA	C4C-C3C-C2C	-2.08	103.55	106.93
23	c	6034	CLA	O2A-CGA-O1A	-2.08	117.75	123.43
27	Z	1053	BCR	C34-C9-C10	-2.08	119.97	122.92
23	B	1022	CLA	CHB-C1B-NB	-2.08	121.11	124.58
27	b	6045	BCR	C36-C18-C17	-2.08	119.97	122.92
23	A	1007	CLA	C2B-C1B-CHB	-2.08	122.06	126.00
23	C	1029	CLA	C4C-C3C-C2C	-2.08	103.56	106.93
27	H	1049	BCR	C27-C26-C25	-2.08	120.07	122.84
24	d	6038	PHO	C2C-C1C-NC	2.08	112.77	109.72
27	b	6045	BCR	C35-C13-C14	-2.08	119.97	122.92
27	Z	1053	BCR	C37-C22-C21	-2.07	119.97	122.92
23	b	6022	CLA	CHB-C1B-NB	-2.07	121.12	124.58
27	h	6049	BCR	C36-C18-C17	-2.07	119.98	122.92
25	E	1040	HEM	C3A-C4A-NA	-2.07	107.85	109.41
27	k	6052	BCR	C34-C9-C10	-2.07	119.98	122.92
26	a	6043	PQ9	C35-C33-C32	2.07	125.06	121.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	D	1050	BCR	C24-C25-C26	-2.07	116.62	121.57
27	K	1052	BCR	C34-C9-C10	-2.07	119.98	122.92
23	a	6007	CLA	C2B-C1B-CHB	-2.07	122.08	126.00
27	B	1045	BCR	C35-C13-C14	-2.07	119.98	122.92
23	C	1029	CLA	C4D-ND-C1D	-2.07	104.07	106.57
25	V	1041	HEM	C3A-C4A-NA	-2.07	107.85	109.41
27	B	1045	BCR	C36-C18-C17	-2.06	119.99	122.92
27	H	1049	BCR	C36-C18-C17	-2.06	119.99	122.92
26	a	6043	PQ9	C41-C40-C38	-2.06	105.92	112.74
27	b	6045	BCR	C34-C9-C10	-2.06	120.00	122.92
27	k	6052	BCR	C35-C13-C14	-2.06	120.00	122.92
26	D	1042	PQ9	C25-C23-C22	2.06	125.04	121.08
27	t	1046	BCR	C24-C25-C26	2.06	126.48	121.57
27	z	6053	BCR	C34-C9-C10	-2.05	120.00	122.92
27	c	6054	BCR	C34-C9-C10	-2.05	120.00	122.92
27	H	1049	BCR	C37-C22-C21	-2.05	120.00	122.92
26	A	1043	PQ9	C25-C23-C22	2.05	125.03	121.08
27	b	6048	BCR	C35-C13-C14	-2.05	120.01	122.92
27	t	1046	BCR	C34-C9-C10	-2.05	120.01	122.92
23	c	6029	CLA	CHB-C1B-NB	-2.05	121.15	124.58
27	b	6048	BCR	C4-C5-C6	-2.05	120.11	122.84
27	z	6053	BCR	C35-C13-C14	-2.04	120.02	122.92
24	A	1038	PHO	CHC-C1C-C2C	-2.05	121.20	125.82
27	z	6053	BCR	C37-C22-C21	-2.04	120.02	122.92
27	C	1054	BCR	C34-C9-C10	-2.04	120.02	122.92
27	T	6046	BCR	C35-C13-C14	-2.04	120.02	122.92
24	d	6038	PHO	CHC-C1C-C2C	-2.04	121.20	125.82
23	c	6036	CLA	C2B-C1B-CHB	-2.04	122.13	126.00
27	k	6052	BCR	C36-C18-C17	-2.04	120.02	122.92
27	B	1048	BCR	C4-C5-C6	-2.04	120.12	122.84
27	t	1046	BCR	C35-C13-C14	-2.04	120.02	122.92
27	K	1052	BCR	C36-C18-C17	-2.04	120.02	122.92
27	Z	1053	BCR	C35-C13-C14	-2.04	120.02	122.92
27	h	6049	BCR	C37-C22-C21	-2.04	120.02	122.92
27	z	6053	BCR	C36-C18-C17	-2.04	120.02	122.92
27	T	6046	BCR	C24-C23-C22	2.04	129.27	126.22
26	D	1042	PQ9	C24-C23-C22	-2.04	119.48	123.52
27	h	6049	BCR	C34-C9-C10	-2.04	120.02	122.92
27	B	1045	BCR	C34-C9-C10	-2.04	120.02	122.92
27	K	1052	BCR	C35-C13-C14	-2.04	120.02	122.92
27	k	6051	BCR	C24-C25-C26	-2.04	116.70	121.57
27	H	1049	BCR	C34-C9-C10	-2.04	120.03	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	Z	1053	BCR	C36-C18-C17	-2.03	120.03	122.92
27	H	1049	BCR	C35-C13-C14	-2.03	120.03	122.92
23	b	6015	CLA	C11-C10-C8	-2.03	109.29	115.14
23	C	1026	CLA	CAC-C3C-C4C	2.03	127.89	124.85
23	B	1015	CLA	C11-C10-C8	-2.03	109.29	115.14
23	C	1036	CLA	C2B-C1B-CHB	-2.03	122.15	126.00
27	h	6049	BCR	C35-C13-C14	-2.03	120.04	122.92
23	b	6019	CLA	O1A-CGA-CBA	-2.03	115.41	123.78
23	c	6034	CLA	C4-C3-C2	-2.03	119.50	123.52
27	t	1046	BCR	C36-C18-C17	-2.03	120.04	122.92
23	c	6026	CLA	CAC-C3C-C4C	2.03	127.89	124.85
23	b	6018	CLA	C2B-C1B-CHB	-2.03	122.16	126.00
27	B	1048	BCR	C1-C6-C7	2.03	121.31	115.69
27	B	1048	BCR	C35-C13-C14	-2.03	120.04	122.92
27	K	1052	BCR	C37-C22-C21	-2.02	120.04	122.92
23	B	1011	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	b	6023	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	b	6011	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
27	K	1051	BCR	C24-C25-C26	-2.02	116.73	121.57
23	C	1029	CLA	CHB-C1B-NB	-2.02	121.20	124.58
23	B	1023	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	B	1014	CLA	CMD-C2D-C3D	-2.02	121.78	124.97
23	c	6029	CLA	C4D-ND-C1D	-2.02	104.13	106.57
23	b	6017	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	c	6030	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	c	6028	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	b	6013	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	B	1019	CLA	O1A-CGA-CBA	-2.02	115.45	123.78
23	c	6027	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	c	6031	CLA	C2B-C1B-CHB	-2.02	122.18	126.00
23	B	1012	CLA	C2B-C1B-CHB	-2.02	122.17	126.00
23	B	1021	CLA	C2B-C1B-CHB	-2.02	122.18	126.00
23	C	1031	CLA	C2B-C1B-CHB	-2.02	122.18	126.00
27	b	6048	BCR	C1-C6-C7	2.01	121.27	115.69
23	H	1017	CLA	C2B-C1B-CHB	-2.02	122.18	126.00
23	C	1035	CLA	C2B-C1B-CHB	-2.02	122.18	126.00
23	b	6019	CLA	C4-C3-C2	-2.02	119.53	123.52
23	b	6016	CLA	C2B-C1B-CHB	-2.02	122.18	126.00
23	D	1005	CLA	C2B-C1B-CHB	-2.01	122.18	126.00
23	d	6008	CLA	C2B-C1B-CHB	-2.01	122.19	126.00
27	T	6046	BCR	C36-C18-C17	-2.01	120.06	122.92
23	B	1014	CLA	CMB-C2B-C1B	2.01	131.72	128.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	6037	CLA	C2B-C1B-CHB	-2.01	122.19	126.00
23	B	1013	CLA	C2B-C1B-CHB	-2.01	122.19	126.00
23	b	6014	CLA	CMB-C2B-C1B	2.01	131.71	128.62
23	C	1037	CLA	C2B-C1B-CHB	-2.01	122.20	126.00
23	A	1006	CLA	C2B-C1B-CHB	-2.01	122.20	126.00
23	b	6012	CLA	C2B-C1B-CHB	-2.00	122.20	126.00
23	D	1004	CLA	C2B-C1B-CHB	-2.01	122.20	126.00
23	D	1008	CLA	C2B-C1B-CHB	-2.00	122.20	126.00
25	v	6041	HEM	C3A-C4A-NA	-2.00	107.90	109.41
23	A	1003	CLA	C2B-C1B-CHB	-2.00	122.20	126.00
23	B	1018	CLA	C2B-C1B-CHB	-2.00	122.20	126.00
23	b	6014	CLA	CMD-C2D-C3D	-2.00	121.81	124.97
23	C	1034	CLA	C2B-C1B-CHB	-2.00	122.20	126.00
23	C	1032	CLA	C2B-C1B-CHB	-2.00	122.20	126.00
23	d	6005	CLA	C2B-C1B-CHB	-2.00	122.21	126.00
23	C	1033	CLA	C2B-C1B-CHB	-2.00	122.21	126.00
23	b	6024	CLA	CGD-CBD-CAD	-2.00	104.16	110.96

All (86) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	b	6014	CLA	C3A
23	C	1028	CLA	C8
23	C	1028	CLA	C13
23	C	1028	CLA	C3A
23	c	6029	CLA	C8
23	c	6029	CLA	C3A
23	C	1037	CLA	CBD
23	C	1037	CLA	C13
23	B	1020	CLA	C3A
24	a	6039	PHO	C2A
24	a	6039	PHO	C8
23	b	6017	CLA	C13
23	b	6022	CLA	CBD
23	b	6022	CLA	C8
23	B	1021	CLA	C8
23	B	1021	CLA	C13
23	B	1014	CLA	C3A
24	A	1038	PHO	C2A
23	d	6005	CLA	C8
24	A	1039	PHO	C2A
24	A	1039	PHO	C8

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Mol	Chain	Res	Type	Atom
24	d	6038	PHO	C2A
23	c	6028	CLA	C8
23	c	6028	CLA	C13
23	c	6028	CLA	C3A
23	B	1024	CLA	C13
23	c	6027	CLA	C8
23	c	6027	CLA	C13
23	c	6027	CLA	C3A
23	C	1033	CLA	C8
23	C	1033	CLA	C3A
23	b	6020	CLA	C3A
23	b	6024	CLA	C13
23	b	6021	CLA	C8
23	b	6021	CLA	C13
23	c	6031	CLA	CBD
23	c	6031	CLA	C8
23	c	6031	CLA	C13
23	c	6034	CLA	CBD
23	c	6034	CLA	C2A
23	c	6034	CLA	C8
23	c	6034	CLA	C3A
23	B	1022	CLA	CBD
23	B	1022	CLA	C8
23	b	6023	CLA	CBD
23	b	6023	CLA	C13
23	c	6025	CLA	CBD
23	B	1009	CLA	CBD
23	B	1009	CLA	C8
23	B	1009	CLA	C13
23	c	6037	CLA	CBD
23	c	6037	CLA	C13
23	C	1031	CLA	CBD
23	C	1031	CLA	C8
23	C	1031	CLA	C13
23	C	1034	CLA	CBD
23	C	1034	CLA	C2A
23	C	1034	CLA	C8
23	C	1034	CLA	C3A
23	C	1026	CLA	C8
23	C	1029	CLA	C8
23	C	1029	CLA	C3A
23	c	6036	CLA	C8

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Mol	Chain	Res	Type	Atom
23	c	6036	CLA	C13
23	A	1007	CLA	C13
23	H	1017	CLA	C13
23	a	6007	CLA	C13
23	c	6033	CLA	C8
23	c	6033	CLA	C3A
23	C	1036	CLA	C8
23	C	1036	CLA	C13
23	c	6026	CLA	C8
23	D	1005	CLA	C8
23	b	6019	CLA	C8
23	b	6019	CLA	C13
23	b	6009	CLA	CBD
23	b	6009	CLA	C8
23	b	6009	CLA	C13
23	C	1025	CLA	CBD
23	B	1023	CLA	CBD
23	B	1023	CLA	C13
23	C	1027	CLA	C8
23	C	1027	CLA	C13
23	C	1027	CLA	C3A
23	B	1019	CLA	C8
23	B	1019	CLA	C13

All (26) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	1038	PHO	CED-O2D-CGD-CBD
24	d	6038	PHO	CED-O2D-CGD-CBD
23	c	6031	CLA	CED-O2D-CGD-CBD
23	C	1031	CLA	CED-O2D-CGD-CBD
23	A	1007	CLA	CED-O2D-CGD-CBD
23	a	6007	CLA	CED-O2D-CGD-CBD
23	b	6009	CLA	CED-O2D-CGD-CBD
23	B	1009	CLA	CED-O2D-CGD-CBD
23	B	1022	CLA	CED-O2D-CGD-CBD
23	b	6022	CLA	CED-O2D-CGD-CBD
23	b	6012	CLA	CED-O2D-CGD-CBD
23	B	1012	CLA	CED-O2D-CGD-CBD
27	A	1044	BCR	C10-C11-C12-C13
27	a	6044	BCR	C10-C11-C12-C13
27	b	6047	BCR	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
27	B	1047	BCR	C10-C11-C12-C13
27	Z	1053	BCR	C21-C20-C19-C18
27	z	6053	BCR	C21-C20-C19-C18
29	B	1060	MGE	C3G-O3G-C1D-O6D
29	b	6060	MGE	C3G-O3G-C1D-O6D
27	A	1044	BCR	C21-C20-C19-C18
27	a	6044	BCR	C21-C20-C19-C18
27	b	6048	BCR	C17-C16-C15-C14
27	B	1048	BCR	C17-C16-C15-C14
27	B	1047	BCR	C17-C16-C15-C14
27	b	6047	BCR	C17-C16-C15-C14

All (2) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
28	H	1058	DGD	C1E-C2E-C3E-C4E-C5E-O6E
28	h	6058	DGD	C1E-C2E-C3E-C4E-C5E-O6E

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	335/344 (97%)	-0.10	2 (0%) 86 69	97, 127, 162, 173	0
1	a	335/344 (97%)	-0.05	1 (0%) 91 83	101, 131, 166, 178	0
2	B	485/488 (99%)	-0.05	4 (0%) 83 63	94, 130, 157, 181	0
2	b	485/488 (99%)	-0.00	4 (0%) 83 63	102, 129, 161, 183	0
3	C	447/447 (100%)	0.09	3 (0%) 84 66	100, 143, 170, 185	0
3	c	447/447 (100%)	0.18	10 (2%) 59 37	102, 150, 173, 187	0
4	D	340/340 (100%)	0.06	7 (2%) 60 38	94, 127, 165, 187	0
4	d	340/340 (100%)	0.03	4 (1%) 75 52	92, 133, 172, 191	0
5	E	82/83 (98%)	0.08	1 (1%) 75 52	117, 156, 184, 186	0
5	e	82/83 (98%)	0.47	4 (4%) 28 18	126, 160, 181, 186	0
6	F	35/44 (79%)	0.16	4 (11%) 6 6	139, 147, 160, 163	0
6	f	35/44 (79%)	0.07	2 (5%) 23 15	143, 152, 160, 163	0
7	H	64/64 (100%)	0.34	4 (6%) 19 13	119, 143, 165, 170	0
7	h	64/64 (100%)	0.12	3 (4%) 30 20	120, 143, 164, 169	0
8	I	35/35 (100%)	0.01	2 (5%) 23 15	127, 137, 166, 173	0
8	i	35/35 (100%)	0.17	3 (8%) 11 9	124, 141, 175, 176	0
9	J	34/40 (85%)	-0.13	1 (2%) 49 31	127, 142, 165, 175	0
9	j	34/40 (85%)	0.24	4 (11%) 5 6	131, 146, 172, 174	0
10	K	36/36 (100%)	-0.06	0 100 100	132, 145, 153, 155	0
10	k	36/36 (100%)	0.29	3 (8%) 11 9	140, 151, 162, 164	0
11	L	37/37 (100%)	-0.15	1 (2%) 52 32	102, 123, 178, 184	0
11	l	37/37 (100%)	-0.01	1 (2%) 52 32	110, 130, 181, 188	0
12	M	36/36 (100%)	0.23	4 (11%) 6 6	101, 119, 171, 174	0
12	m	36/36 (100%)	-0.15	0 100 100	100, 121, 171, 179	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	242/242 (100%)	0.14	5 (2%) 60 38	108, 133, 165, 186	0
13	o	242/242 (100%)	0.19	6 (2%) 54 34	114, 139, 164, 186	0
14	T	30/30 (100%)	0.02	2 (6%) 17 13	105, 124, 173, 178	0
14	t	30/30 (100%)	-0.10	0 100 100	101, 115, 173, 181	0
15	U	98/98 (100%)	0.06	1 (1%) 79 57	108, 123, 143, 158	0
15	u	98/98 (100%)	-0.13	0 100 100	112, 128, 143, 167	0
16	V	137/137 (100%)	-0.15	2 (1%) 70 46	104, 131, 160, 170	0
16	v	137/137 (100%)	0.10	2 (1%) 70 46	114, 145, 165, 176	0
17	X	34/34 (100%)	-0.35	0 100 100	148, 155, 164, 170	0
17	x	34/34 (100%)	-0.12	0 100 100	151, 159, 169, 175	0
18	Y	28/28 (100%)	-0.14	0 100 100	164, 178, 189, 192	0
18	y	28/28 (100%)	-0.04	1 (3%) 41 26	170, 181, 191, 196	0
19	N	0/24	-	-	-	-
19	n	0/24	-	-	-	-
20	Z	62/62 (100%)	0.05	1 (1%) 68 45	138, 161, 180, 186	0
20	z	62/62 (100%)	0.14	3 (4%) 29 19	144, 164, 184, 187	0
All	All	5194/5298 (98%)	0.04	95 (1%) 65 43	92, 136, 172, 196	0

All (95) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
3	c	5142	GLU	5.5
8	i	5035	LYS	5.2
20	z	5001	MET	4.6
5	e	5018	ARG	4.3
4	d	5228	GLY	4.3
3	C	97	TRP	3.6
3	c	5027	ASP	3.3
9	j	5007	ARG	3.2
4	D	227	GLU	3.2
20	Z	1	MET	3.2
3	c	5034	ALA	3.1
12	M	5	GLN	3.1
2	b	5121	ARG	3.0
18	y	5028	LEU	3.0
10	k	5011	LEU	3.0
15	U	92	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
9	j	5008	ILE	2.8
6	F	39	ALA	2.8
7	H	4	ARG	2.8
16	v	5111	GLU	2.8
16	V	27	ALA	2.7
13	O	142	ILE	2.7
5	e	5017	VAL	2.7
5	E	18	ARG	2.7
4	d	5229	ALA	2.7
4	d	5233	ARG	2.7
9	j	5009	PRO	2.6
13	o	5049	ASP	2.6
13	O	136	MET	2.6
7	H	64	ALA	2.6
14	T	28	ARG	2.6
14	T	30	THR	2.6
2	B	187	PRO	2.6
3	c	5249	ILE	2.5
4	D	139	ARG	2.5
12	M	34	LYS	2.5
13	O	162	ILE	2.5
6	F	40	MET	2.5
7	h	5055	LEU	2.5
2	B	86	ILE	2.5
8	i	5033	LYS	2.5
3	C	365	TRP	2.4
4	D	95	PRO	2.4
3	C	135	ARG	2.4
8	i	5034	ARG	2.4
7	h	5056	ASP	2.4
7	H	63	LYS	2.4
2	b	5181	GLU	2.4
6	f	5015	ILE	2.4
1	A	310	LYS	2.4
13	o	5051	THR	2.4
4	D	233	ARG	2.4
2	B	379	ALA	2.4
10	k	5012	PRO	2.4
3	c	5035	TRP	2.4
11	l	5010	VAL	2.3
10	k	5010	LYS	2.3
4	D	226	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
4	D	228	GLY	2.3
9	j	5010	LEU	2.3
12	M	2	GLU	2.3
9	J	7	ARG	2.3
13	o	5112	LYS	2.3
2	b	5184	PRO	2.3
3	c	5453	ALA	2.3
13	o	5111	LEU	2.2
13	o	5230	VAL	2.2
13	O	62	GLN	2.2
3	c	5143	TYR	2.2
11	L	1	MET	2.2
20	z	5004	LEU	2.2
4	d	5059	TYR	2.2
12	M	36	SER	2.2
1	a	5310	LYS	2.2
3	c	5198	VAL	2.2
7	H	65	LEU	2.2
8	I	35	LYS	2.2
6	F	42	PHE	2.1
20	z	5061	VAL	2.1
3	c	5148	GLY	2.1
4	D	71	CYS	2.1
13	O	58	ILE	2.1
3	c	5184	GLY	2.1
16	v	5029	LEU	2.1
6	f	5013	TYR	2.1
16	V	37	PRO	2.1
8	I	1	MET	2.1
6	F	14	PRO	2.1
2	b	5351	LEU	2.1
5	e	5073	LYS	2.1
7	h	5022	ALA	2.0
5	e	5021	VAL	2.0
13	o	5088	GLU	2.0
1	A	14	TRP	2.0
2	B	354	LEU	2.0

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

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

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
27	BCR	b	6045	40/40	0.56	8.24	145,156,167,168	0
27	BCR	a	6044	40/40	0.77	6.44	154,160,163,166	0
27	BCR	T	6046	40/40	0.51	6.12	140,149,154,157	0
27	BCR	A	1044	40/40	0.61	6.02	147,156,158,159	0
27	BCR	b	6048	40/40	0.71	5.93	141,147,158,159	0
28	DGD	C	1056	66/66	0.51	5.82	155,171,183,188	0
27	BCR	H	1049	40/40	0.59	5.15	155,162,188,188	0
27	BCR	b	6047	40/40	0.46	5.07	114,127,145,147	0
27	BCR	B	1045	40/40	0.46	4.54	146,156,169,170	0
23	CLA	a	6007	65/65	0.58	4.47	143,149,179,183	0
27	BCR	B	1047	40/40	0.36	4.46	101,136,157,157	0
23	CLA	d	6008	65/65	0.44	4.05	172,175,185,200	0
27	BCR	z	6053	40/40	0.85	4.05	159,176,186,187	0
30	LHG	A	1063	49/49	0.56	3.90	181,187,194,195	0
23	CLA	b	6023	65/65	0.51	3.81	149,183,189,190	0
29	MGE	b	6060	48/48	0.40	3.78	158,178,191,192	0
27	BCR	K	1051	40/40	0.47	3.73	175,179,182,183	0
28	DGD	c	6057	66/66	0.63	3.70	128,149,183,184	0
27	BCR	d	6050	40/40	0.49	3.65	149,160,166,167	0
27	BCR	B	1048	40/40	0.58	3.64	148,155,163,163	0
23	CLA	C	1025	65/65	0.44	3.35	131,170,180,200	0
28	DGD	c	6056	66/66	0.54	3.34	170,175,181,183	0
28	DGD	C	1057	66/66	0.46	3.18	125,140,187,193	0
27	BCR	c	6054	40/40	0.58	3.07	174,177,183,183	0
23	CLA	C	1028	65/65	0.39	3.02	141,154,159,168	0
29	MGE	d	6059	48/48	0.52	3.01	164,168,198,200	0
30	LHG	a	6063	49/49	0.82	2.90	186,196,200,200	0
23	CLA	B	1021	65/65	0.27	2.84	104,129,142,146	0
23	CLA	b	6013	65/65	0.33	2.82	139,154,161,172	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
24	PHO	d	6038	64/64	0.48	2.79	136,147,150,150	0
27	BCR	D	1050	40/40	0.32	2.63	149,153,161,162	0
23	CLA	A	1006	65/65	0.32	2.62	119,124,190,192	0
27	BCR	t	1046	40/40	0.33	2.61	144,156,163,163	0
28	DGD	H	1058	66/66	0.41	2.47	131,150,165,166	0
23	CLA	D	1004	65/65	0.31	2.36	101,131,139,142	0
23	CLA	B	1012	65/65	0.33	2.28	148,152,159,176	0
29	MGE	d	6062	48/48	0.32	2.23	130,155,167,168	0
28	DGD	h	6058	66/66	0.35	2.23	140,153,163,170	0
24	PHO	A	1039	64/64	0.30	2.19	149,151,160,161	0
23	CLA	c	6027	65/65	0.63	2.18	178,195,198,200	0
23	CLA	C	1032	65/65	0.47	2.03	153,166,174,176	0
23	CLA	A	1003	65/65	0.32	2.00	122,129,147,149	0
27	BCR	h	6049	40/40	0.44	1.98	156,175,191,192	0
29	MGE	d	6061	48/48	0.45	1.98	141,152,165,169	0
23	CLA	c	6032	65/65	0.43	1.97	144,175,181,182	0
23	CLA	b	6012	65/65	0.37	1.95	146,153,159,198	0
23	CLA	b	6017	65/65	0.31	1.86	118,165,168,200	0
23	CLA	b	6011	65/65	0.35	1.85	156,159,165,170	0
23	CLA	b	6016	65/65	0.36	1.85	76,148,153,155	0
23	CLA	c	6031	65/65	0.40	1.76	173,182,185,186	0
23	CLA	a	6006	65/65	0.31	1.71	140,145,197,200	0
27	BCR	C	1054	40/40	0.44	1.71	158,165,169,170	0
23	CLA	A	1007	65/65	0.44	1.71	137,141,171,183	0
29	MGE	L	1061	48/48	0.39	1.71	141,144,154,155	0
25	HEM	V	1041	43/43	0.28	1.71	81,131,132,133	0
23	CLA	D	1008	65/65	0.29	1.66	159,167,182,200	0
29	MGE	D	1062	48/48	0.34	1.64	129,148,165,165	0
23	CLA	c	6037	65/65	0.54	1.63	184,188,191,200	0
23	CLA	b	6021	65/65	0.32	1.62	125,132,157,160	0
23	CLA	d	6004	65/65	0.28	1.62	111,128,134,134	0
23	CLA	d	6005	65/65	0.29	1.58	90,100,117,118	0
23	CLA	c	6028	65/65	0.39	1.57	147,157,160,162	0
23	CLA	b	6015	65/65	0.27	1.54	137,149,155,164	0
26	PQ9	A	1043	45/45	0.31	1.52	138,151,171,171	30
28	DGD	c	6055	66/66	0.35	1.48	147,153,165,166	0
23	CLA	B	1013	65/65	0.29	1.46	131,157,165,168	0
23	CLA	C	1034	65/65	0.40	1.44	134,147,172,174	0
27	BCR	K	1052	40/40	0.40	1.34	153,171,178,179	0
26	PQ9	d	6042	45/45	0.28	1.32	137,146,167,168	0
23	CLA	c	6034	65/65	0.52	1.27	87,162,181,181	0
24	PHO	a	6039	64/64	0.31	1.27	151,165,169,170	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å ²)	Q<0.9
26	PQ9	a	6043	45/45	0.34	1.24	135,149,185,185	30
28	DGD	C	1055	66/66	0.37	1.18	131,140,147,152	0
27	BCR	Z	1053	40/40	0.42	1.18	141,166,178,178	0
23	CLA	c	6025	65/65	0.40	1.17	145,170,178,200	0
23	CLA	b	6024	65/65	0.42	1.13	172,183,186,187	0
23	CLA	c	6036	65/65	0.47	1.08	177,180,184,200	0
23	CLA	C	1037	65/65	0.49	1.08	180,185,188,200	0
23	CLA	a	6003	65/65	0.31	1.07	121,130,145,193	0
23	CLA	B	1024	65/65	0.40	1.07	105,177,179,180	0
23	CLA	C	1027	65/65	0.47	1.02	167,183,190,200	0
23	CLA	B	1023	65/65	0.41	0.99	155,179,185,200	0
23	CLA	B	1018	65/65	0.33	0.98	111,158,165,168	0
23	CLA	B	1019	65/65	0.25	0.97	121,156,158,200	0
23	CLA	B	1015	65/65	0.30	0.88	133,146,153,175	0
23	CLA	B	1016	65/65	0.30	0.86	87,143,150,150	0
23	CLA	D	1005	65/65	0.29	0.84	101,108,116,157	0
23	CLA	b	6018	65/65	0.33	0.82	142,154,162,165	0
23	CLA	C	1031	65/65	0.40	0.80	164,170,179,200	0
23	CLA	C	1036	65/65	0.37	0.80	162,166,179,200	0
25	HEM	E	1040	43/43	0.40	0.74	141,181,194,198	0
29	MGE	B	1060	48/48	0.36	0.72	151,170,182,184	0
27	BCR	k	6051	40/40	0.31	0.71	187,193,197,197	0
23	CLA	b	6010	65/65	0.29	0.70	93,165,169,170	0
26	PQ9	D	1042	45/45	0.28	0.68	131,145,154,155	0
23	CLA	B	1022	65/65	0.29	0.67	135,155,159,161	0
23	CLA	B	1010	65/65	0.28	0.67	115,164,166,169	0
23	CLA	B	1011	65/65	0.28	0.66	144,159,161,166	0
23	CLA	c	6030	65/65	0.29	0.59	100,154,174,175	0
25	HEM	e	6040	43/43	0.38	0.55	171,184,185,185	0
24	PHO	A	1038	64/64	0.30	0.54	122,144,147,148	0
23	CLA	H	1017	65/65	0.27	0.53	116,169,174,200	0
29	MGE	J	1059	48/48	0.34	0.52	152,158,185,186	0
23	CLA	c	6026	65/65	0.35	0.45	140,144,157,170	0
23	CLA	b	6020	65/65	0.32	0.44	75,148,170,173	0
27	BCR	k	6052	40/40	0.36	0.41	158,179,200,200	0
23	CLA	B	1014	65/65	0.27	0.40	123,169,174,176	0
23	CLA	b	6009	65/65	0.43	0.33	160,177,200,200	0
23	CLA	C	1026	65/65	0.27	0.32	128,133,146,149	0
25	HEM	v	6041	43/43	0.27	0.31	99,135,139,140	0
23	CLA	c	6029	65/65	0.28	0.30	151,170,173,200	0
23	CLA	b	6019	65/65	0.28	0.29	124,150,155,193	0
23	CLA	B	1009	65/65	0.38	0.27	119,178,184,185	0

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Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(\AA^2)	Q<0.9
23	CLA	C	1030	65/65	0.31	0.22	92,145,175,176	0
23	CLA	B	1020	65/65	0.26	0.21	113,151,177,179	0
23	CLA	c	6033	65/65	0.27	0.10	84,142,180,180	0
23	CLA	b	6014	65/65	0.24	0.10	163,171,179,200	0
21	OEC	a	6001	5/9	0.26	0.08	87,94,106,107	0
21	OEC	A	1001	5/9	0.24	0.05	79,94,115,119	0
23	CLA	c	6035	65/65	0.31	0.01	170,173,177,200	0
23	CLA	C	1029	65/65	0.29	0.00	146,156,159,200	0
23	CLA	C	1035	65/65	0.27	0.00	155,167,173,200	0
23	CLA	C	1033	65/65	0.27	-0.03	117,131,162,164	0
31	BR	a	6065	1/1	0.18	-0.22	164,164,164,164	0
22	FE2	a	6002	1/1	0.26	-0.32	149,149,149,149	0
23	CLA	b	6022	65/65	0.25	-0.36	133,148,156,157	0
31	BR	A	1065	1/1	0.26	-0.43	158,158,158,158	0
22	FE2	A	1002	1/1	0.20	-0.54	125,125,125,125	0
31	BR	A	1064	1/1	0.16	-1.04	113,113,113,113	0
31	BR	d	6064	1/1	0.14	-2.14	130,130,130,130	0

6.5 Other polymers ⓘ

There are no such residues in this entry.