Full wwPDB EM Validation Report ⓘ

Dec 21, 2024 – 07:30 am GMT

PDB ID	:	9G6K
EMDB ID	:	EMD-51104
Title	:	LSU structure derived from the LSU sample of the mitoribosome from T. gondii.
Authors	:	Rocha, R.E.O.; Barua, S.; Boissier, F.; Nguyen, T.T.; Hashem, Y.
Deposited on	:	2024-07-18
Resolution	:	2.89 Å(reported)
Based on initial model	:	.

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

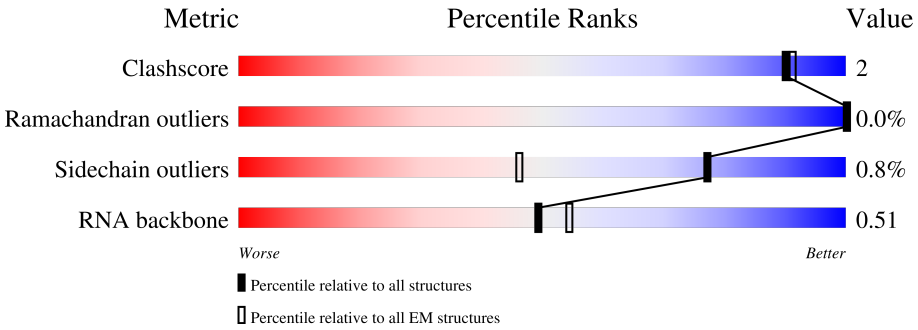
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.40

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 2.89 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415
RNA backbone	6643	2191

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

Mol	Chain	Length	Quality of chain
1	L0	405	5% 67% 19% • 13%
2	L1	92	11% 72% 27% •
3	L2	270	9% 86% 13% •
4	L3	331	• 66% 15% • 18%
5	L4	430	• 87% 11% •
6	L5	30	17% 57% 43%
7	L6	57	21% 93% 7%

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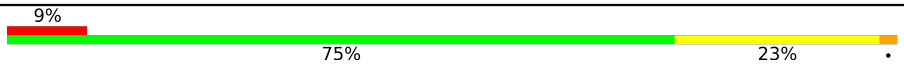
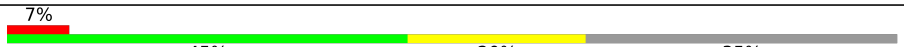
Mol	Chain	Length	Quality of chain
8	L7	114	
9	L8	246	
10	L9	475	
11	LA	217	
12	LB	121	
13	LC	527	
14	LD	282	
15	LE	338	
16	LF	88	
17	LG	148	
18	LH	87	
19	LI	79	
20	LJ	443	
21	LK	219	
22	LL	855	
23	LM	177	
24	LN	113	
25	LO	344	
26	LP	230	
27	LQ	70	
28	LR	132	
29	LS	228	
30	LT	117	
31	LU	79	
32	LV	880	

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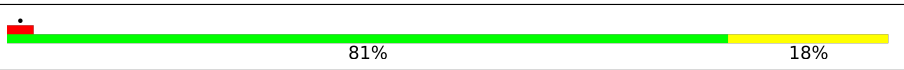
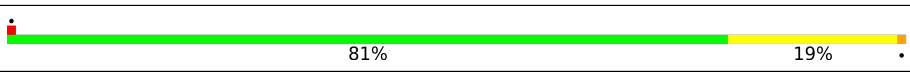
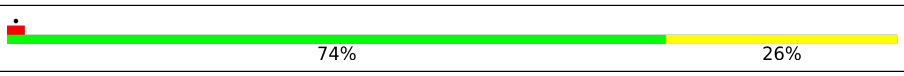
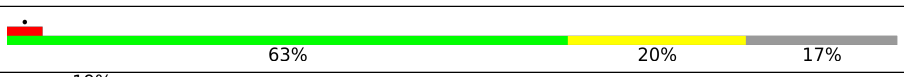
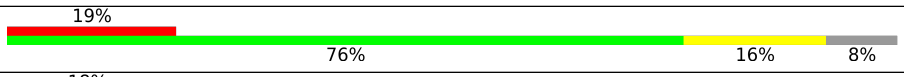
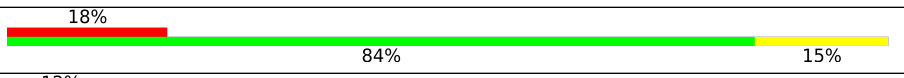
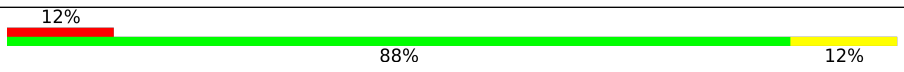
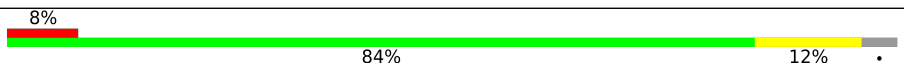
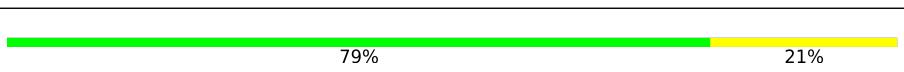
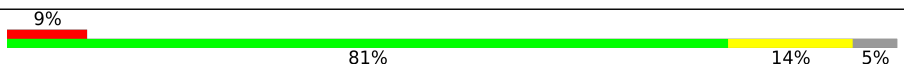
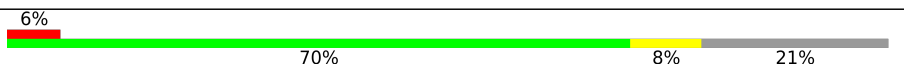
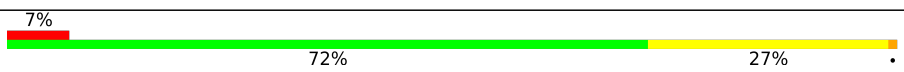
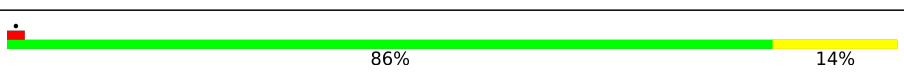
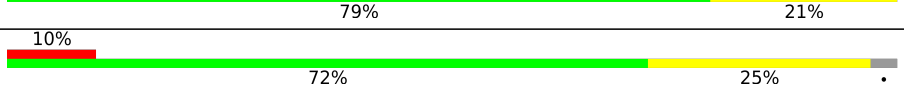
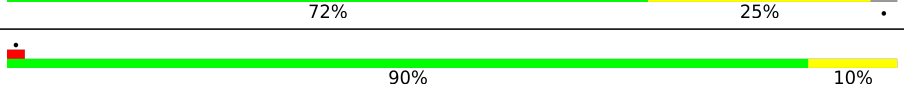
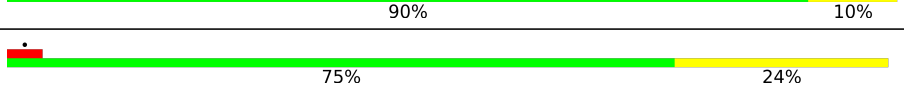
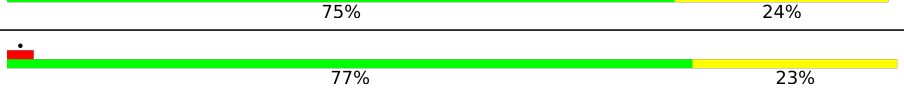
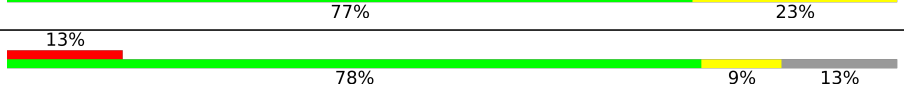
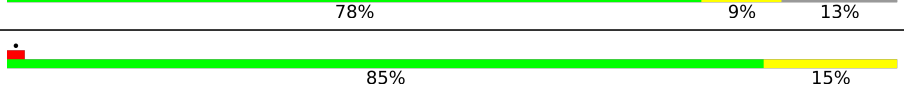
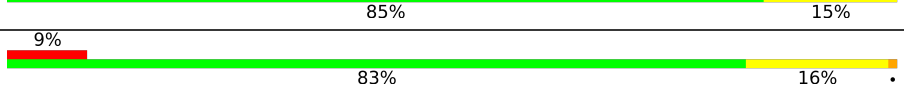
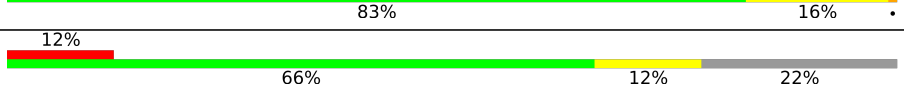
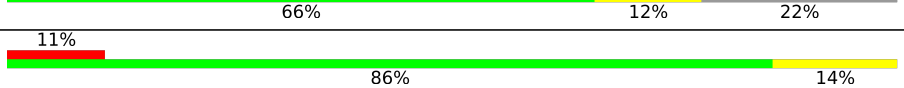
Mol	Chain	Length	Quality of chain
33	LW	306	
34	LX	92	
35	LY	346	
36	LZ	197	
37	La	214	
38	Lb	733	
39	Lc	512	
40	Ld	437	
41	Le	376	
42	Lf	226	
43	Lg	214	
44	Lh	464	
45	Li	602	
46	Lj	122	
47	Lk	184	
48	Ll	190	
49	Lm	189	
50	Ln	60	
51	Lo	283	
52	Lp	368	
53	Lq	787	
54	Lr	281	
55	Ls	311	
56	Lt	240	
57	Lu	232	

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Mol	Chain	Length	Quality of chain
58	Lv	112	11% 80% 20%
59	Lw	179	5% 84% 16%
60	Lx	98	8% 82% 18%
61	Ly	404	63% 21% 16%
62	Lz	120	82% 18%
63	UA	85	7% 80% 20%
64	UB	174	78% 22%
65	UC	105	6% 86% 13%
66	UD	35	66% 34%
67	UE	113	81% 19%
68	UF	78	67% 33%
69	UG	158	6% 85% 15%
70	UH	47	70% 30%
71	UI	35	29% 86% 14%
72	l0	44	9% 52% 43% 5%
73	l1	50	44% 42% 14%
74	l2	31	16% 35% 55% 10%
75	l3	59	10% 36% 54% 10%
76	l4	94	30% 54% 16%
77	l5	36	22% 47% 39% 14%
78	l6	50	46% 44% 10%
79	l7	69	6% 39% 51% 10%
80	l8	33	12% 58% 36% 6%
81	l9	91	33% 55% 12%
82	lA	65	5% 48% 43% 8%

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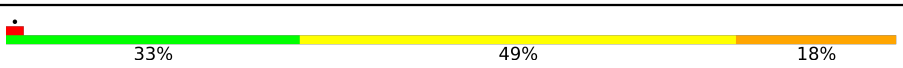
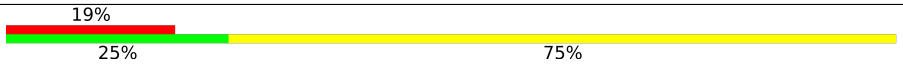
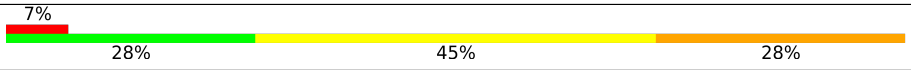
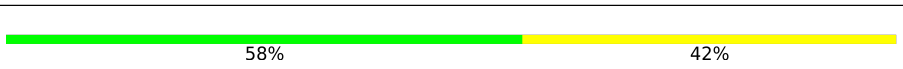
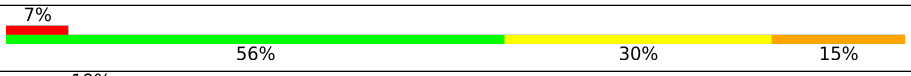
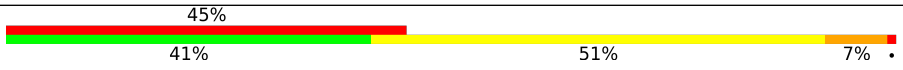
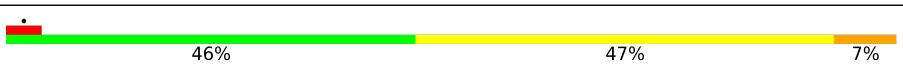
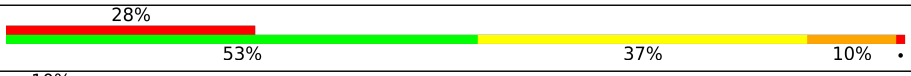
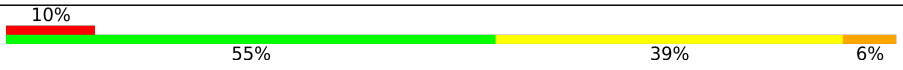
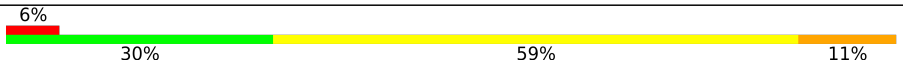
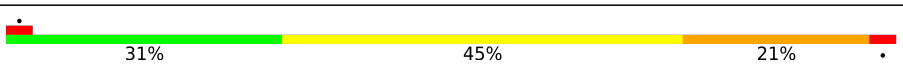
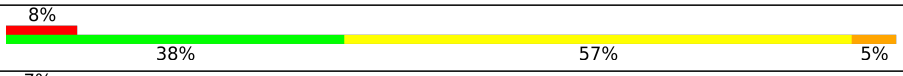
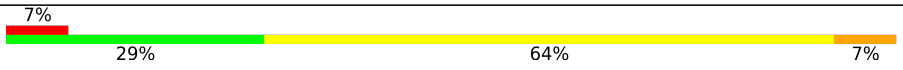
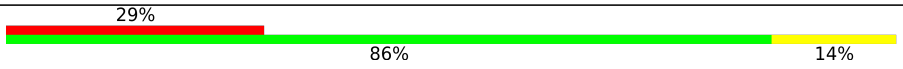
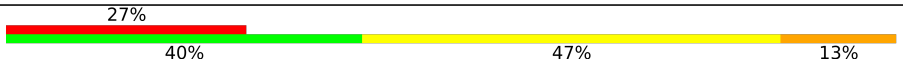
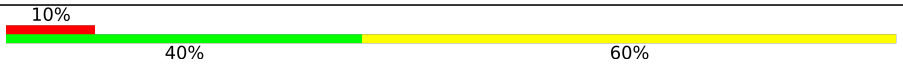
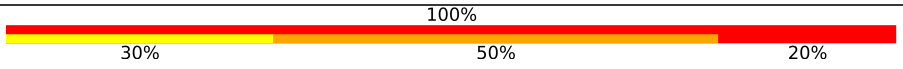
Mol	Chain	Length	Quality of chain
83	lB	45	
84	lC	27	
85	lD	16	
86	lE	29	
87	lF	88	
88	lG	26	
89	lH	27	
90	lI	48	
91	lJ	279	
92	lK	38	
93	lL	91	
94	lM	194	
95	lN	62	
96	lO	180	
97	lP	29	
98	lQ	37	
99	lR	28	
100	lS	7	
101	lT	14	
101	lW	14	
102	lU	15	
103	lV	10	
103	lY	10	
104	lX	58	

2 Entry composition

There are 104 unique types of molecules in this entry. The entry contains 175729 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called RRM domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	L0	353	2984	1911	557	503	13	0	0

- Molecule 2 is a protein called Large ribosomal subunit protein mL54.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	L1	92	768	502	130	134	2	0	0

- Molecule 3 is a protein called mL162.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	L2	270	2111	1329	384	392	6	0	0

- Molecule 4 is a protein called Ribosomal l25 family protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	L3	272	2196	1411	389	383	13	0	0

- Molecule 5 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	L4	424	3430	2184	620	609	17	0	0

- Molecule 6 is a protein called mL183.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	L5	30	264	164	62	36	2	0	0

- Molecule 7 is a protein called uL1m.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	L6	57	Total	C	N	O	S	0	0
			476	312	92	71	1		

- Molecule 8 is a protein called uL14m.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	L7	114	Total	C	N	O	S	0	0
			906	571	181	149	5		

- Molecule 9 is a protein called Putative 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	L8	239	Total	C	N	O	S	0	0
			2008	1276	384	341	7		

- Molecule 10 is a protein called DUF6832 domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	L9	475	Total	C	N	O	S	0	0
			3888	2511	683	679	15		

- Molecule 11 is a protein called Putative 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	LA	217	Total	C	N	O	S	0	0
			1708	1094	322	284	8		

- Molecule 12 is a protein called Putative ribosomal protein L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	LB	121	Total	C	N	O	S	0	0
			1033	663	200	165	5		

- Molecule 13 is a protein called Macro domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	LC	380	Total	C	N	O	S	0	0
			2909	1822	549	528	10		

- Molecule 14 is a protein called Ribosomal protein L46.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	LD	225	Total	C	N	O	S	0	0
			1847	1197	319	328	3		

- Molecule 15 is a protein called FAS1 domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	LE	267	Total	C	N	O	S	0	0
			2118	1345	398	367	8		

- Molecule 16 is a protein called bL36m.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	LF	88	Total	C	N	O	S	0	0
			731	466	152	109	4		

- Molecule 17 is a protein called Ribosomal protein RPL22.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	LG	148	Total	C	N	O	S	0	0
			1253	804	235	211	3		

- Molecule 18 is a protein called Ribosomal protein L9, N-terminal domain-containing protein.

Mol	Chain	Residues	Atoms				AltConf	Trace
18	LH	87	Total	C	N	O	0	0
			693	442	135	116		

- Molecule 19 is a protein called Putative 60S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	LI	79	Total	C	N	O	S	0	0
			613	402	109	98	4		

- Molecule 20 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	LJ	443	Total	C	N	O	S	0	0
			3640	2316	690	616	18		

- Molecule 21 is a protein called BIR protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	LK	219	Total	C	N	O	S	0	0
			1905	1211	364	324	6		

- Molecule 22 is a protein called AMP-dependent synthetase/ligase domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	LL	633	Total	C	N	O	S	0	0
			4847	3061	882	883	21		

- Molecule 23 is a protein called Large ribosomal subunit protein uL11m.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	LM	177	Total	C	N	O	S	0	0
			1376	867	258	240	11		

- Molecule 24 is a protein called bL35m.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	LN	113	Total	C	N	O	S	0	0
			986	626	205	153	2		

- Molecule 25 is a protein called LSU ribosomal protein L2P, putative.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	LO	344	Total	C	N	O	S	0	0
			2647	1662	530	448	7		

- Molecule 26 is a protein called Peptidyl-prolyl cis-trans isomerase.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	LP	202	Total	C	N	O	S	0	0
			1636	1041	297	288	10		

- Molecule 27 is a protein called mL175.

Mol	Chain	Residues	Atoms				AltConf	Trace
27	LQ	70	Total	C	N	O	0	0
			600	383	120	97		

- Molecule 28 is a protein called mL172.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	LR	86	Total	C	N	O	S	0	0
			738	461	146	127	4		

- Molecule 29 is a protein called Large ribosomal subunit protein uL24c.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	LS	228	Total	C	N	O	S	0	0
			1812	1154	333	314	11		

- Molecule 30 is a protein called Putative 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	LT	113	Total	C	N	O	S	0	0
			965	622	184	156	3		

- Molecule 31 is a protein called Large ribosomal subunit protein mL49.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	LU	79	Total	C	N	O	S	0	0
			623	398	118	105	2		

- Molecule 32 is a protein called mL148.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	LV	662	Total	C	N	O	S	0	0
			5149	3256	961	913	19		

- Molecule 33 is a protein called Putative 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	LW	306	Total	C	N	O	S	0	0
			2433	1553	441	425	14		

- Molecule 34 is a protein called mL176.

Mol	Chain	Residues	Atoms					AltConf	Trace
34	LX	92	Total	C	N	O	S	0	0
			779	496	132	146	5		

- Molecule 35 is a protein called Ribosomal L22p/L17e protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	LY	346	Total	C	N	O	S	0	0
			2909	1858	561	483	7		

- Molecule 36 is a protein called mL174.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	LZ	197	Total	C	N	O	S	0	0
			1591	1012	304	267	8		

- Molecule 37 is a protein called Large ribosomal subunit protein uL23m.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	La	214	Total	C	N	O	S	0	0
			1769	1146	320	297	6		

- Molecule 38 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	Lb	609	Total	C	N	O	S	0	0
			4929	3140	925	849	15		

- Molecule 39 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	Lc	473	Total	C	N	O	S	0	0
			3797	2416	681	686	14		

- Molecule 40 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	Ld	437	Total	C	N	O	S	0	0
			3507	2233	626	633	15		

- Molecule 41 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	Le	376	Total	C	N	O	S	0	0
			3057	1925	573	549	10		

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
Le	?	-	LEU	deletion	UNP S8GIP4

- Molecule 42 is a protein called HECT-domain (Ubiquitin-transferase) domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	Lf	216	Total	C	N	O	S	0	0
			1709	1093	315	294	7		

- Molecule 43 is a protein called Large ribosomal subunit protein uL29m.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Lg	214	Total	C	N	O	S	0	0
			1824	1156	345	314	9		

- Molecule 44 is a protein called Large ribosomal subunit protein uL4m.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	Lh	443	Total	C	N	O	S	0	0
			3675	2351	682	628	14		

- Molecule 45 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	Li	473	Total	C	N	O	S	0	0
			3833	2459	702	656	16		

- Molecule 46 is a protein called mL177.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	Lj	122	Total	C	N	O	S	0	0
			977	610	200	164	3		

- Molecule 47 is a protein called AP2 domain transcription factor AP2VIIb-2.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	Lk	184	Total	C	N	O	S	0	0
			1502	969	267	260	6		

- Molecule 48 is a protein called Large ribosomal subunit protein mL43.

Mol	Chain	Residues	Atoms					AltConf	Trace
48	Ll	190	Total	C	N	O	S	0	0
			1573	996	307	267	3		

- Molecule 49 is a protein called Large ribosomal subunit protein uL24c.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	Lm	184	Total	C	N	O	S	0	0
			1501	944	285	265	7		

- Molecule 50 is a protein called mL185.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	Ln	60	Total	C	N	O	S	0	0
			442	280	80	79	3		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
Ln	?	-	SER	deletion	UNP S8G210
Ln	?	-	ALA	deletion	UNP S8G210

- Molecule 51 is a protein called Transmembrane protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	Lo	283	Total	C	N	O	S	0	0
			2219	1405	421	384	9		

- Molecule 52 is a protein called bL19m.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	Lp	368	Total	C	N	O	S	0	0
			3074	1954	595	514	11		

- Molecule 53 is a protein called RAP domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	Lq	687	Total	C	N	O	S	0	0
			5268	3323	958	966	21		

- Molecule 54 is a protein called Putative ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
54	Lr	281	Total	C	N	O	S	0	0
			2342	1475	461	398	8		

- Molecule 55 is a protein called Ribosomal protein L15, putative.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	Ls	311	Total	C	N	O	S	0	0
			2565	1615	507	438	5		

- Molecule 56 is a protein called mL40.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	Lt	188	Total	C	N	O	S	0	0
			1556	999	276	274	7		

- Molecule 57 is a protein called mL164.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	Lu	232	Total	C	N	O	S	0	0
			1834	1158	328	339	9		

- Molecule 58 is a protein called mL180.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	Lv	112	Total	C	N	O	S	0	0
			928	599	165	159	5		

- Molecule 59 is a protein called Putative 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
59	Lw	179	Total	C	N	O	S	0	0
			1440	916	282	240	2		

- Molecule 60 is a protein called mL173.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	Lx	98	Total	C	N	O	S	0	0
			796	504	149	138	5		

- Molecule 61 is a protein called Large ribosomal subunit protein bL21m.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	Ly	340	Total	C	N	O	S	0	0
			2821	1777	551	482	11		

- Molecule 62 is a protein called mL182.

Mol	Chain	Residues	Atoms					AltConf	Trace
62	Lz	120	Total	C	N	O	S	0	0
			994	620	188	184	2		

- Molecule 63 is a protein called mL178.

Mol	Chain	Residues	Atoms					AltConf	Trace
63	UA	85	Total	C	N	O	S	0	0
			709	464	133	111	1		

- Molecule 64 is a protein called bL27m.

Mol	Chain	Residues	Atoms					AltConf	Trace
64	UB	174	Total	C	N	O	S	0	0
			1451	921	281	245	4		

- Molecule 65 is a protein called mL179.

Mol	Chain	Residues	Atoms					AltConf	Trace
65	UC	105	Total	C	N	O	S	0	0
			864	567	150	141	6		

- Molecule 66 is a protein called Transmembrane protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
66	UD	35	Total	C	N	O	S	0	0
			308	192	72	43	1		

- Molecule 67 is a protein called mL53.

Mol	Chain	Residues	Atoms					AltConf	Trace
67	UE	113	Total	C	N	O	S	0	0
			935	598	165	166	6		

- Molecule 68 is a protein called bL32m.

Mol	Chain	Residues	Atoms					AltConf	Trace
68	UF	78	Total	C	N	O	S	0	0
			672	443	122	105	2		

- Molecule 69 is a protein called AP2 domain transcription factor AP2IV-1.

Mol	Chain	Residues	Atoms					AltConf	Trace
69	UG	158	Total	C	N	O	S	0	0
			1343	846	266	227	4		

- Molecule 70 is a protein called mL181.

Mol	Chain	Residues	Atoms					AltConf	Trace
70	UH	47	Total	C	N	O	S	0	0
			401	254	80	64	3		

- Molecule 71 is a protein called mL184.

Mol	Chain	Residues	Atoms					AltConf	Trace
71	UI	35	Total	C	N	O	S	0	0
			293	178	71	41	3		

- Molecule 72 is a RNA chain called RNA23t.

Mol	Chain	Residues	Atoms					AltConf	Trace
72	l0	44	Total	C	N	O	P	0	0
			936	419	170	303	44		

- Molecule 73 is a RNA chain called RNA29.

Mol	Chain	Residues	Atoms					AltConf	Trace
73	l1	50	Total	C	N	O	P	0	0
			1070	480	197	343	50		

- Molecule 74 is a RNA chain called LSUB.

Mol	Chain	Residues	Atoms					AltConf	Trace
74	l2	31	Total	C	N	O	P	0	0
			660	296	116	217	31		

- Molecule 75 is a RNA chain called RNA6.

Mol	Chain	Residues	Atoms					AltConf	Trace
75	l3	59	Total	C	N	O	P	0	0
			1254	563	227	405	59		

- Molecule 76 is a RNA chain called RNA1.

Mol	Chain	Residues	Atoms					AltConf	Trace
76	l4	94	Total	C	N	O	P	0	0
			1991	893	346	658	94		

- Molecule 77 is a RNA chain called RNA31.

Mol	Chain	Residues	Atoms					AltConf	Trace
77	l5	36	Total	C	N	O	P	0	0
			761	341	129	255	36		

- Molecule 78 is a RNA chain called RNA14.

Mol	Chain	Residues	Atoms					AltConf	Trace
78	l6	50	Total	C	N	O	P	0	0
			1072	483	209	330	50		

- Molecule 79 is a RNA chain called RNA11.

Mol	Chain	Residues	Atoms					AltConf	Trace
79	l7	69	Total	C	N	O	P	0	0
			1481	666	279	467	69		

- Molecule 80 is a RNA chain called RNA36.

Mol	Chain	Residues	Atoms					AltConf	Trace
80	l8	33	Total	C	N	O	P	0	0
			707	318	136	220	33		

- Molecule 81 is a RNA chain called RNA3.

Mol	Chain	Residues	Atoms					AltConf	Trace
81	l9	91	Total	C	N	O	P	0	0
			1926	864	336	635	91		

- Molecule 82 is a RNA chain called RNA2.

Mol	Chain	Residues	Atoms					AltConf	Trace
82	lA	65	Total 1387	C 622	N 253	O 447	P 65	0	0

- Molecule 83 is a RNA chain called RNA38.

Mol	Chain	Residues	Atoms					AltConf	Trace
83	lB	45	Total 985	C 439	N 197	O 304	P 45	0	0

- Molecule 84 is a RNA chain called RNA35.

Mol	Chain	Residues	Atoms					AltConf	Trace
84	lC	27	Total 583	C 261	N 112	O 183	P 27	0	0

- Molecule 85 is a RNA chain called RNA32.

Mol	Chain	Residues	Atoms					AltConf	Trace
85	lD	16	Total 338	C 153	N 62	O 107	P 16	0	0

- Molecule 86 is a RNA chain called RNA15.

Mol	Chain	Residues	Atoms					AltConf	Trace
86	lE	29	Total 630	C 282	N 124	O 195	P 29	0	0

- Molecule 87 is a RNA chain called RNA10.

Mol	Chain	Residues	Atoms					AltConf	Trace
87	lF	88	Total 1880	C 842	N 339	O 611	P 88	0	0

- Molecule 88 is a RNA chain called LSUC.

Mol	Chain	Residues	Atoms					AltConf	Trace
88	lG	26	Total 561	C 252	N 110	O 173	P 26	0	0

- Molecule 89 is a RNA chain called RNA16.

Mol	Chain	Residues	Atoms					AltConf	Trace
89	lH	27	Total	C	N	O	P	0	0
			572	256	96	193	27		

- Molecule 90 is a RNA chain called RNA13.

Mol	Chain	Residues	Atoms					AltConf	Trace
90	lI	48	Total	C	N	O	P	0	0
			1039	467	206	318	48		

- Molecule 91 is a RNA chain called LSUD/E.

Mol	Chain	Residues	Atoms					AltConf	Trace
91	lJ	279	Total	C	N	O	P	0	0
			5929	2654	1045	1951	279		

- Molecule 92 is a RNA chain called SSUF.

Mol	Chain	Residues	Atoms					AltConf	Trace
92	lK	38	Total	C	N	O	P	0	0
			821	367	157	259	38		

- Molecule 93 is a RNA chain called RNA7.

Mol	Chain	Residues	Atoms					AltConf	Trace
93	lL	91	Total	C	N	O	P	0	0
			1948	875	361	621	91		

- Molecule 94 is a RNA chain called LSUF/G.

Mol	Chain	Residues	Atoms					AltConf	Trace
94	lM	194	Total	C	N	O	P	0	0
			4121	1843	719	1365	194		

- Molecule 95 is a RNA chain called RNA37.

Mol	Chain	Residues	Atoms					AltConf	Trace
95	lN	62	Total	C	N	O	P	0	0
			1316	592	234	428	62		

- Molecule 96 is a RNA chain called LSUA.

Mol	Chain	Residues	Atoms					AltConf	Trace
96	lO	180	Total	C	N	O	P	0	0
			3841	1722	691	1248	180		

- Molecule 97 is a RNA chain called ulr1.

Mol	Chain	Residues	Atoms					AltConf	Trace
97	lP	29	Total	C	N	O	P	0	0
			580	261	58	232	29		

- Molecule 98 is a RNA chain called ulr2.

Mol	Chain	Residues	Atoms					AltConf	Trace
98	lQ	37	Total	C	N	O	P	0	0
			740	333	74	296	37		

- Molecule 99 is a RNA chain called ulr3.

Mol	Chain	Residues	Atoms					AltConf	Trace
99	lR	28	Total	C	N	O	P	0	0
			560	252	56	224	28		

- Molecule 100 is a RNA chain called ulr4.

Mol	Chain	Residues	Atoms					AltConf	Trace
100	lS	7	Total	C	N	O	P	0	0
			140	63	14	56	7		

- Molecule 101 is a RNA chain called ulr5.

Mol	Chain	Residues	Atoms					AltConf	Trace
101	lT	14	Total	C	N	O	P	0	0
			280	126	28	112	14		
101	lW	14	Total	C	N	O	P	0	0
			280	126	28	112	14		

- Molecule 102 is a RNA chain called ulr6.

Mol	Chain	Residues	Atoms					AltConf	Trace
102	lU	15	Total	C	N	O	P	0	0
			300	135	30	120	15		

- Molecule 103 is a RNA chain called ulr7,ulr8.

Mol	Chain	Residues	Atoms					AltConf	Trace
103	lV	10	Total 200	C 90	N 20	O 80	P 10	0	0
103	lY	10	Total 200	C 90	N 20	O 80	P 10	0	0

- Molecule 104 is a RNA chain called ulr9.

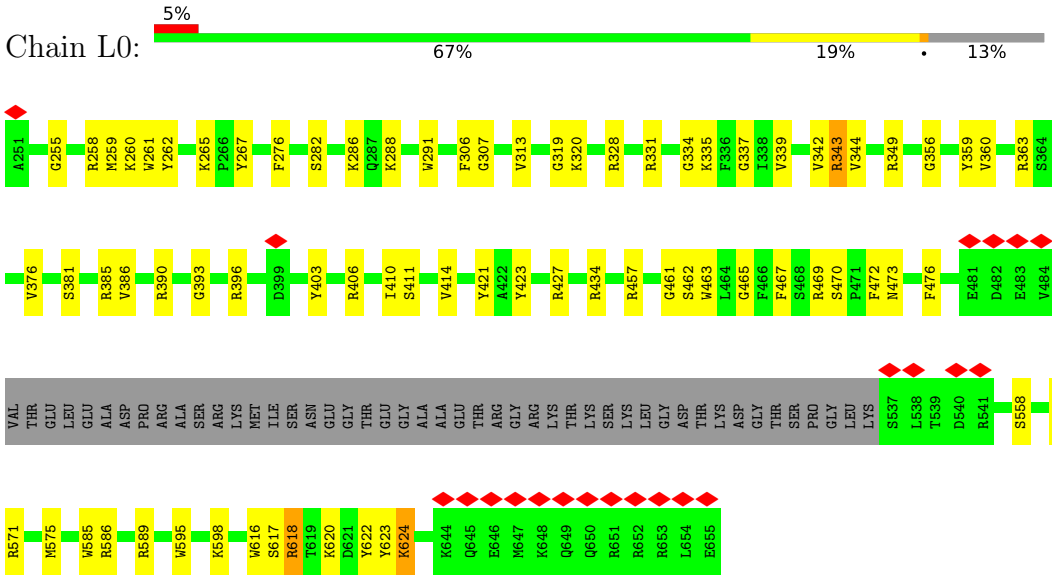
Mol	Chain	Residues	Atoms					AltConf	Trace
104	lX	58	Total 1160	C 522	N 116	O 464	P 58	0	0

3 Residue-property plots (i)

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

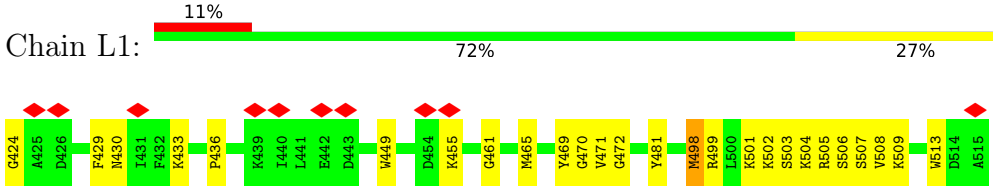
• Molecule 1: RRM domain-containing protein

Chain L0:



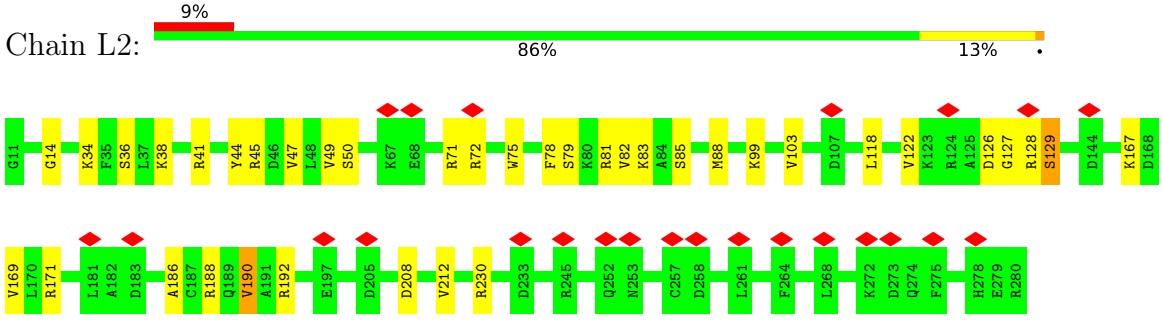
• Molecule 2: Large ribosomal subunit protein mL54

Chain L1:



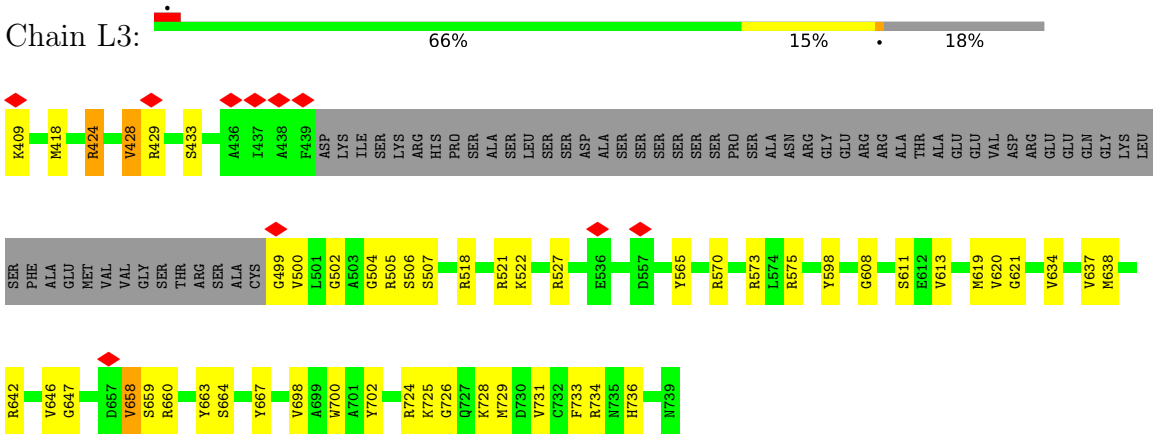
• Molecule 3: mL162

Chain L2:



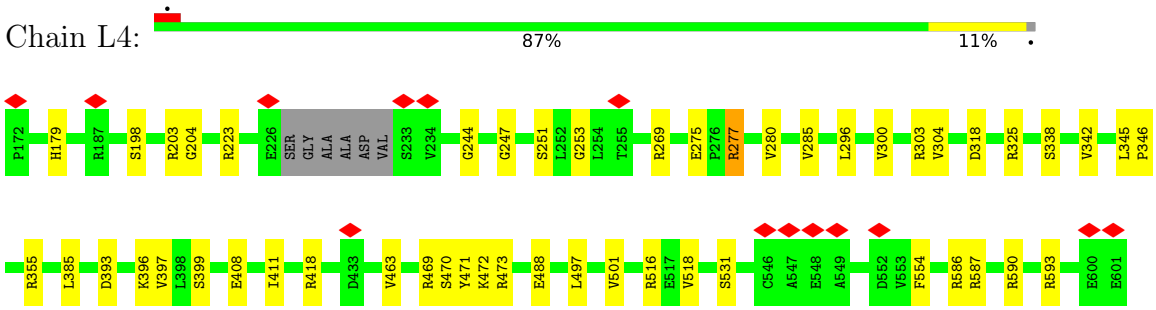
• Molecule 4: Ribosomal l25 family protein

Chain L3:



• Molecule 5: RAP domain-containing protein

Chain L4:

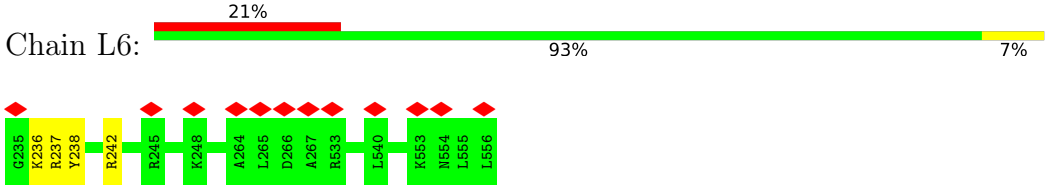


• Molecule 6: mL183

Chain L5:

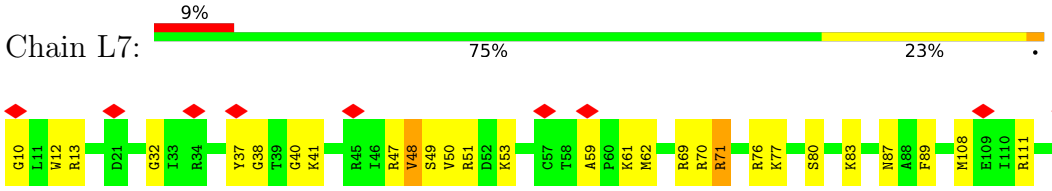
• Molecule 7: uL1m

Chain L6:



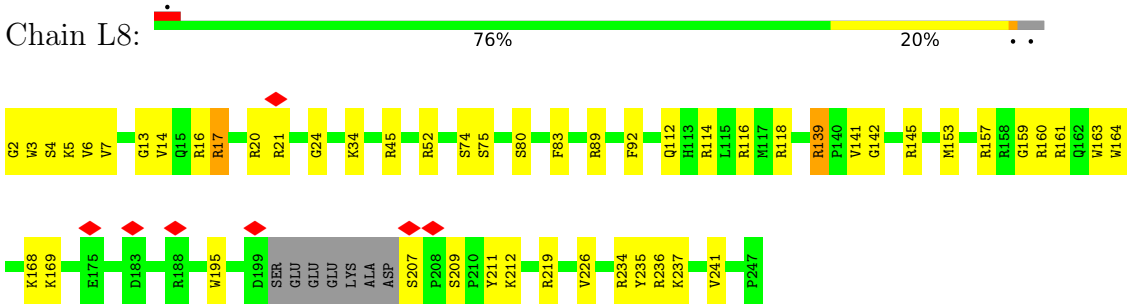
• Molecule 8: uL14m

Chain L7:



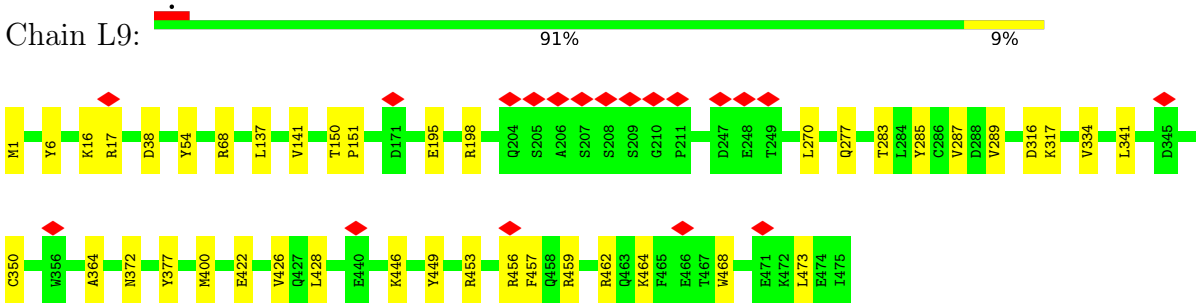
• Molecule 9: Putative 50S ribosomal protein L17

Chain L8:



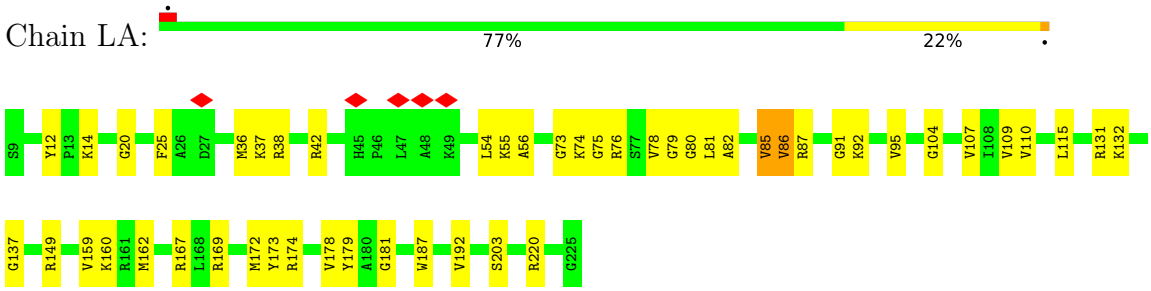
• Molecule 10: DUF6832 domain-containing protein

Chain L9:



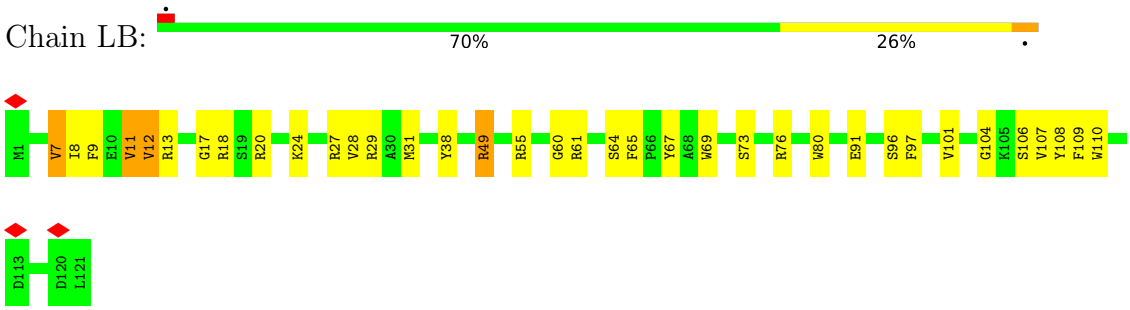
• Molecule 11: Putative 50S ribosomal protein L13

Chain LA:



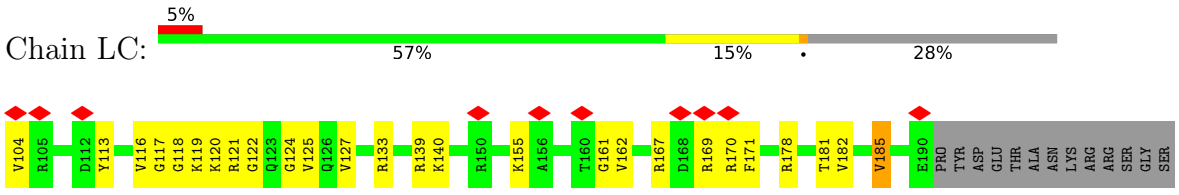
• Molecule 12: Putative ribosomal protein L20

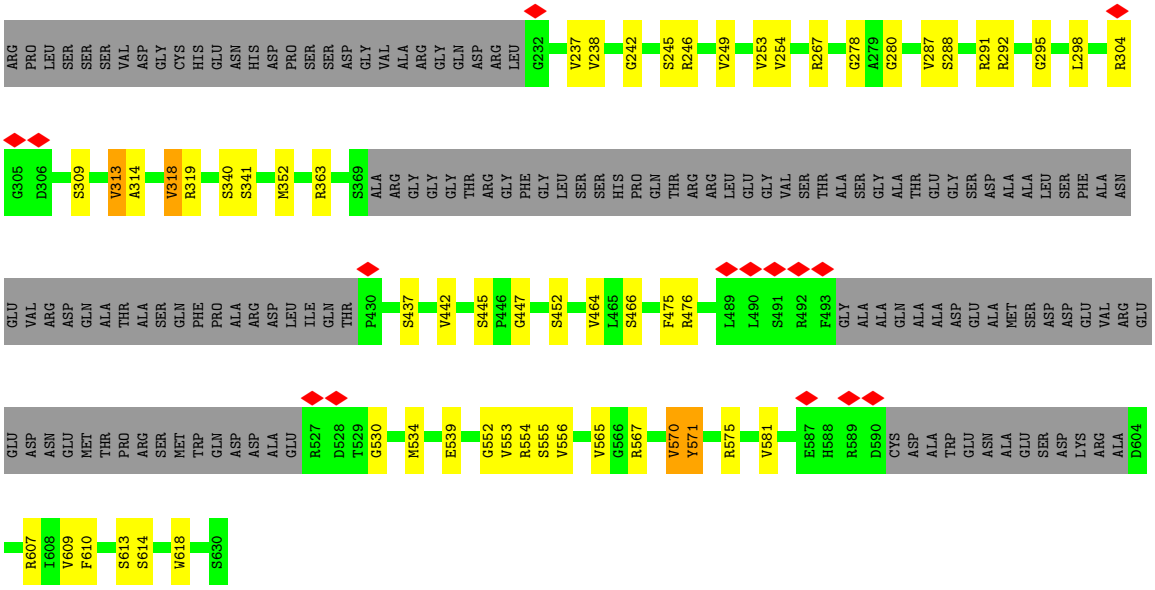
Chain LB:



• Molecule 13: Macro domain-containing protein

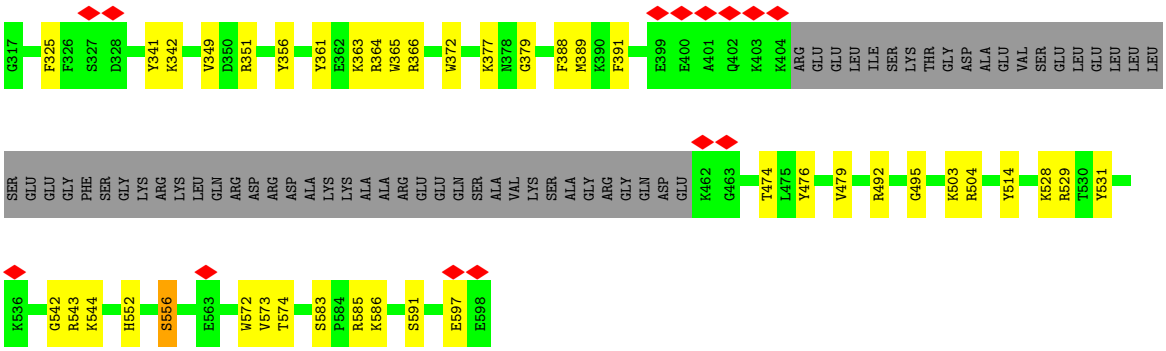
Chain LC:





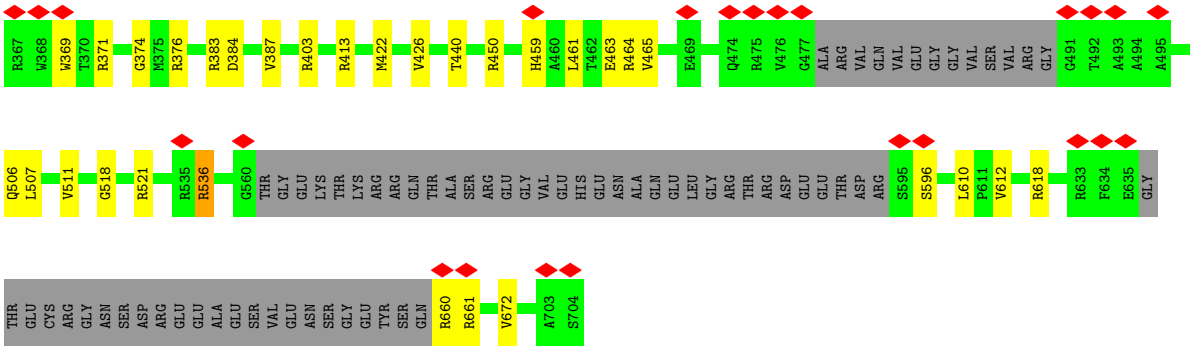
• Molecule 14: Ribosomal protein L46

Chain LD:



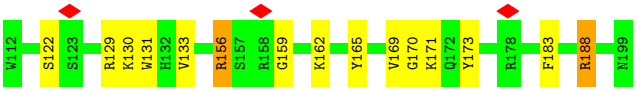
• Molecule 15: FAS1 domain-containing protein

Chain LE:

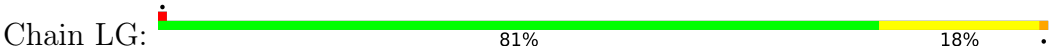


• Molecule 16: bL36m

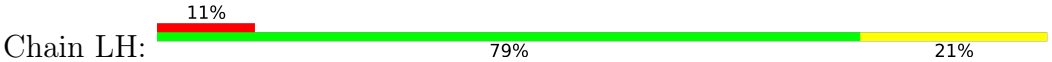
Chain LF:



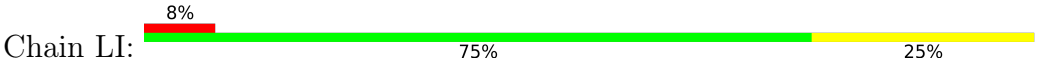
• Molecule 17: Ribosomal protein RPL22

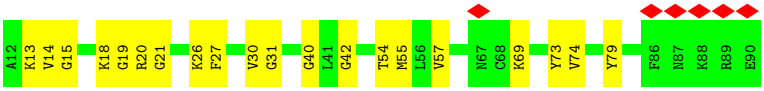


• Molecule 18: Ribosomal protein L9, N-terminal domain-containing protein

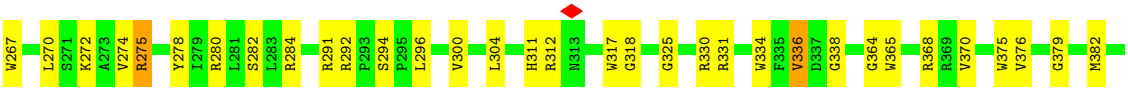


• Molecule 19: Putative 60S ribosomal protein L27

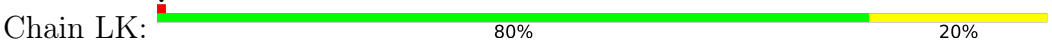


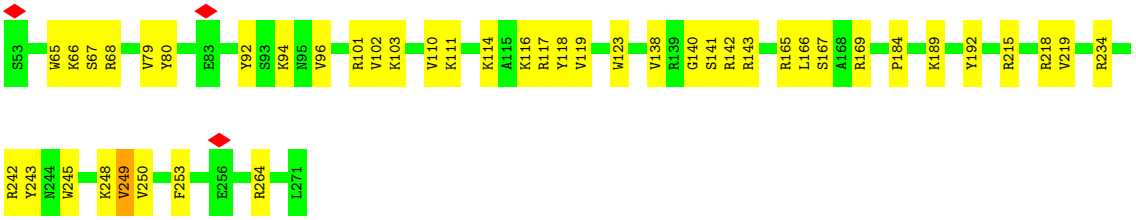


• Molecule 20: RAP domain-containing protein



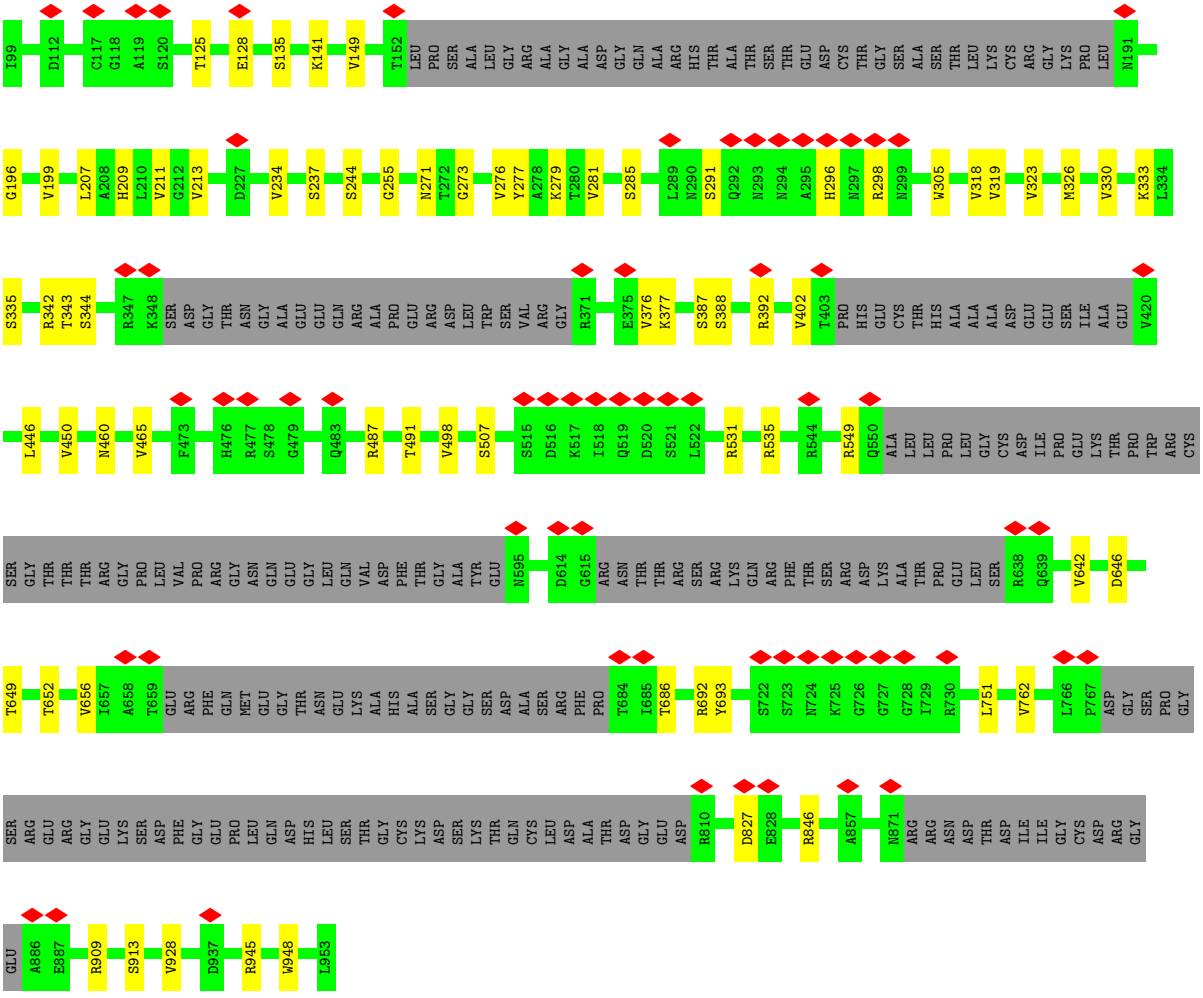
• Molecule 21: BIR protein





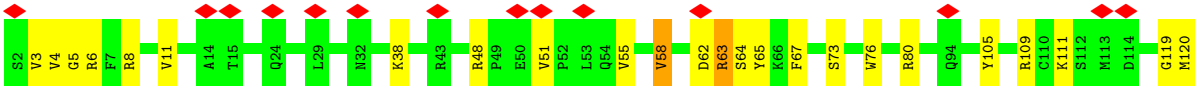
• Molecule 22: AMP-dependent synthetase/ligase domain-containing protein

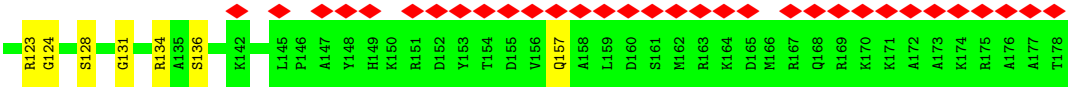
Chain LL:



• Molecule 23: Large ribosomal subunit protein uL11m

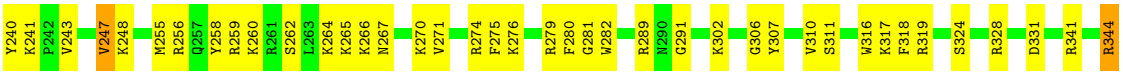
Chain LM:

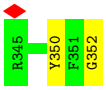




• Molecule 24: bL35m

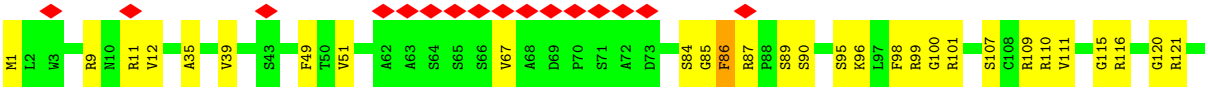
Chain LN:

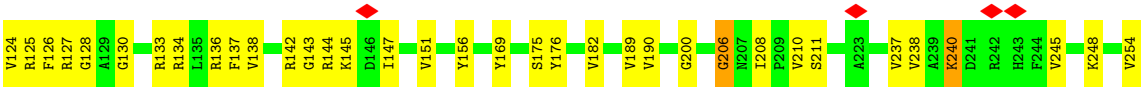


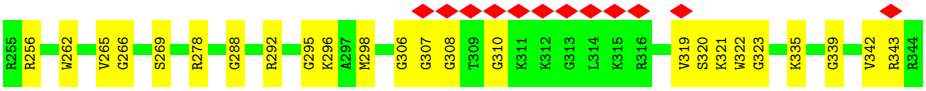


• Molecule 25: LSU ribosomal protein L2P, putative

Chain LO:

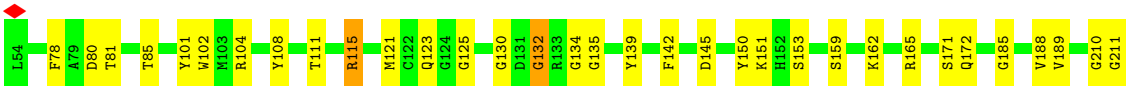


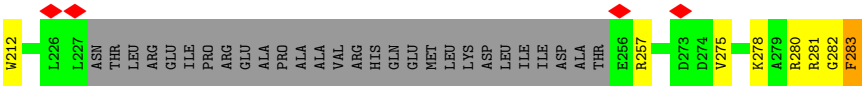




• Molecule 26: Peptidyl-prolyl cis-trans isomerase

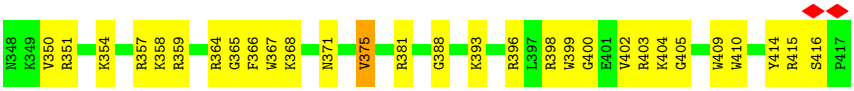
Chain LP:





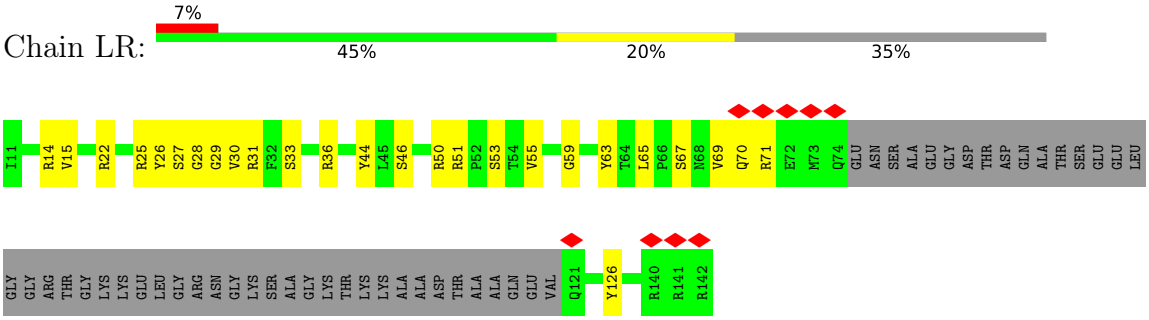
• Molecule 27: mL175

Chain LQ:



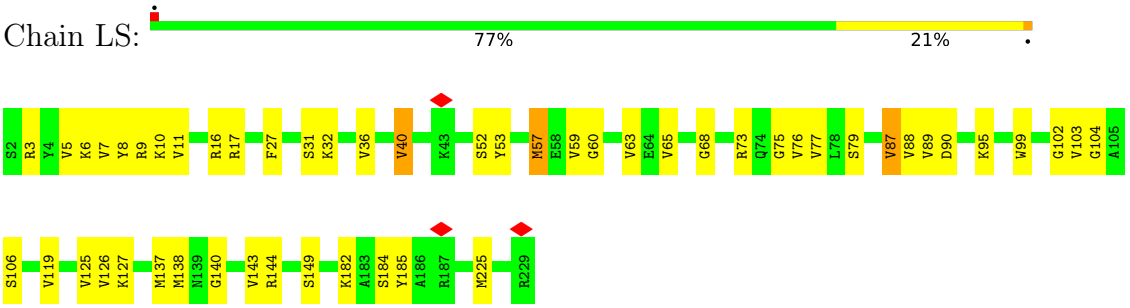
• Molecule 28: mL172

Chain LR:



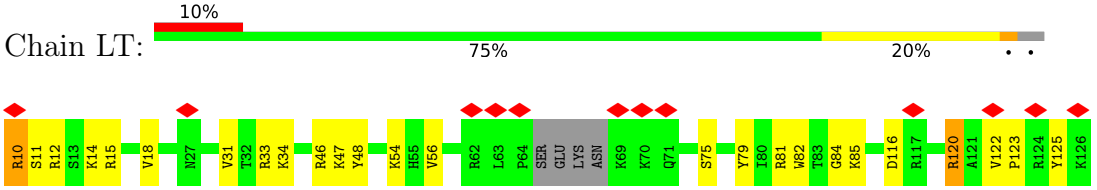
• Molecule 29: Large ribosomal subunit protein uL24c

Chain LS:



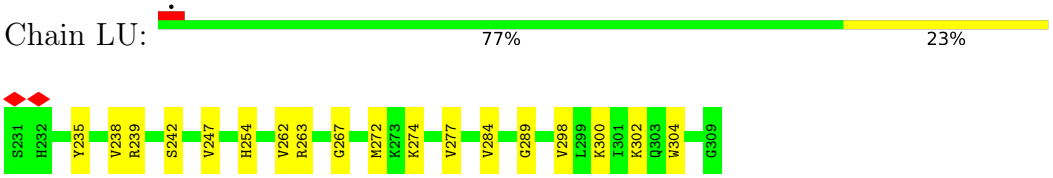
• Molecule 30: Putative 50S ribosomal protein L33

Chain LT:



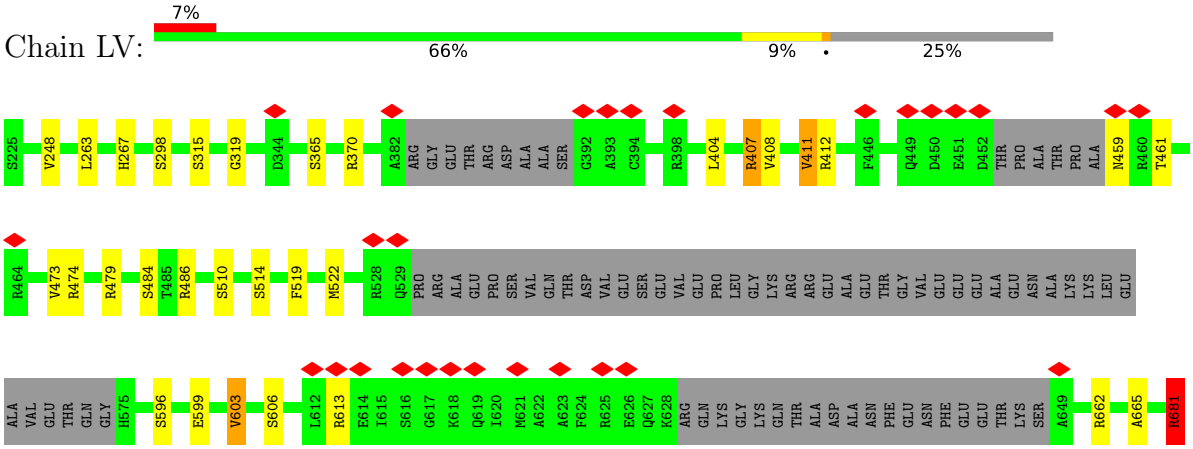
• Molecule 31: Large ribosomal subunit protein mL49

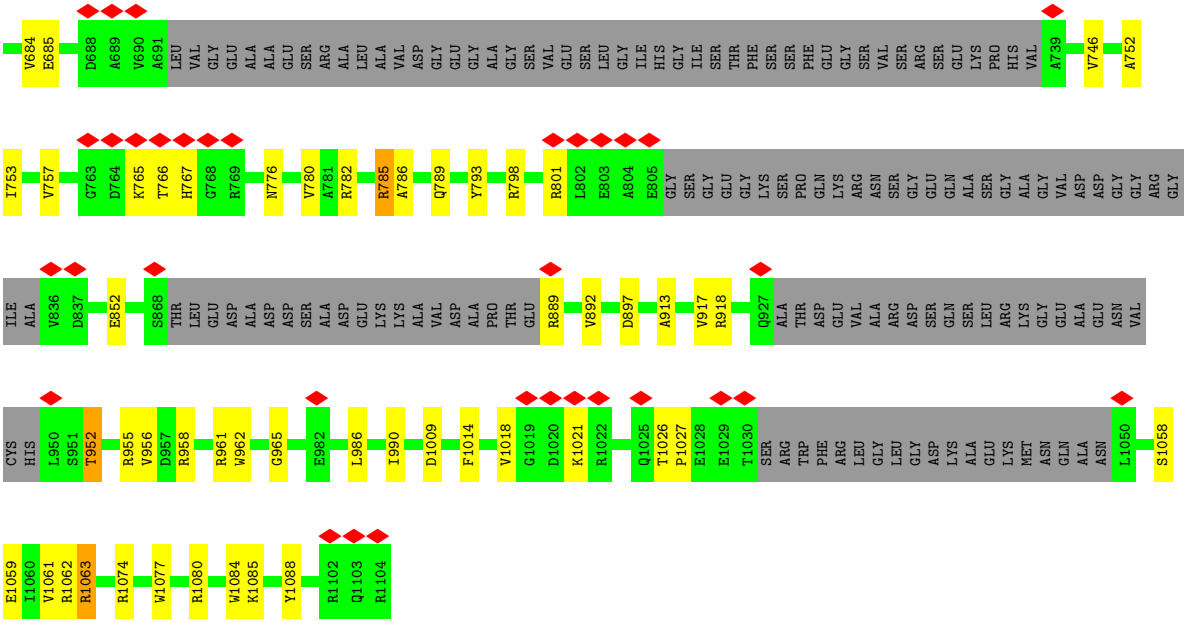
Chain LU:



• Molecule 32: mL148

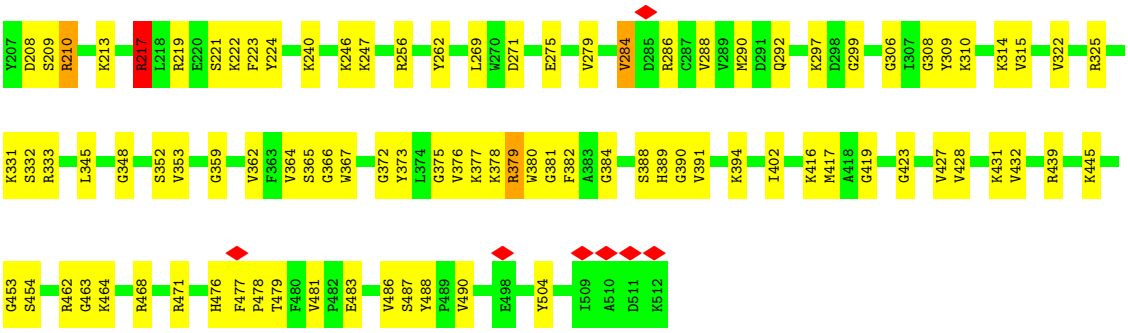
Chain LV:





• Molecule 33: Putative 50S ribosomal protein L3

Chain LW:

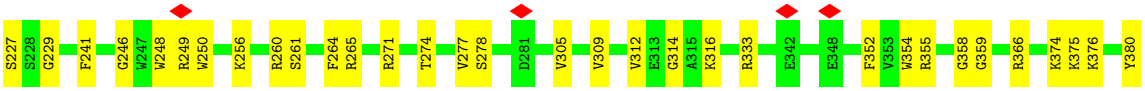


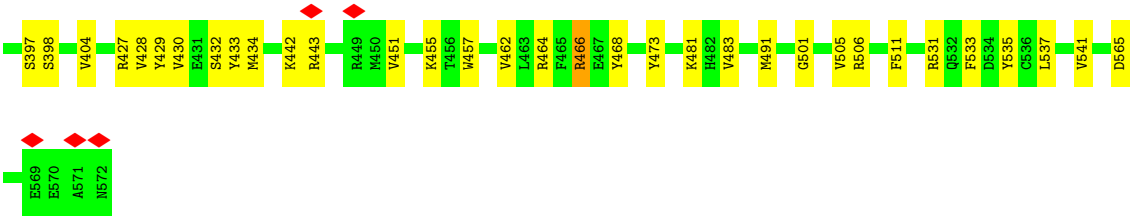
• Molecule 34: mL176

Chain LX:

• Molecule 35: Ribosomal L22p/L17e protein

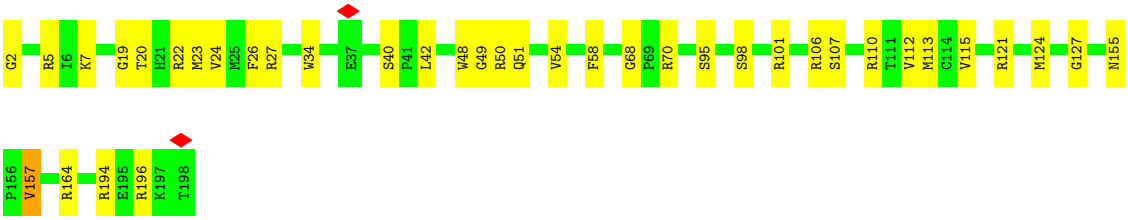
Chain LY:





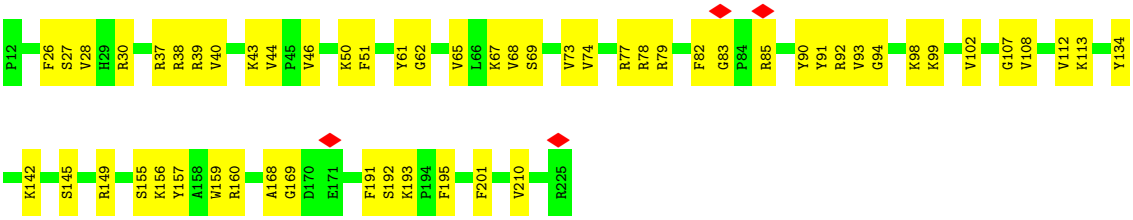
• Molecule 36: mL174

Chain LZ:



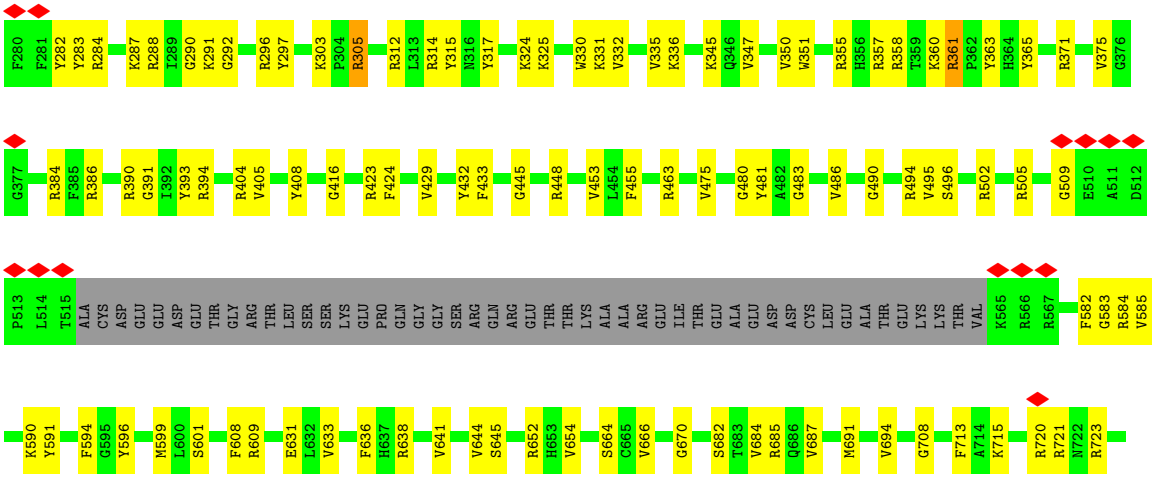
• Molecule 37: Large ribosomal subunit protein uL23m

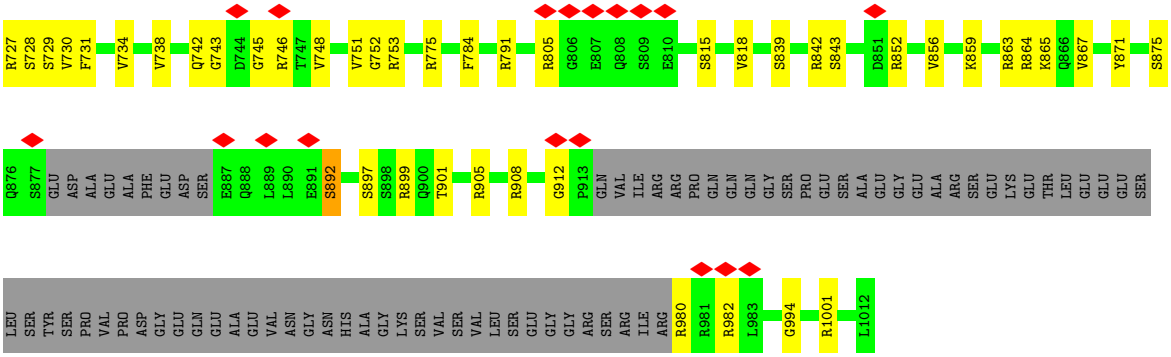
Chain La:



• Molecule 38: RAP domain-containing protein

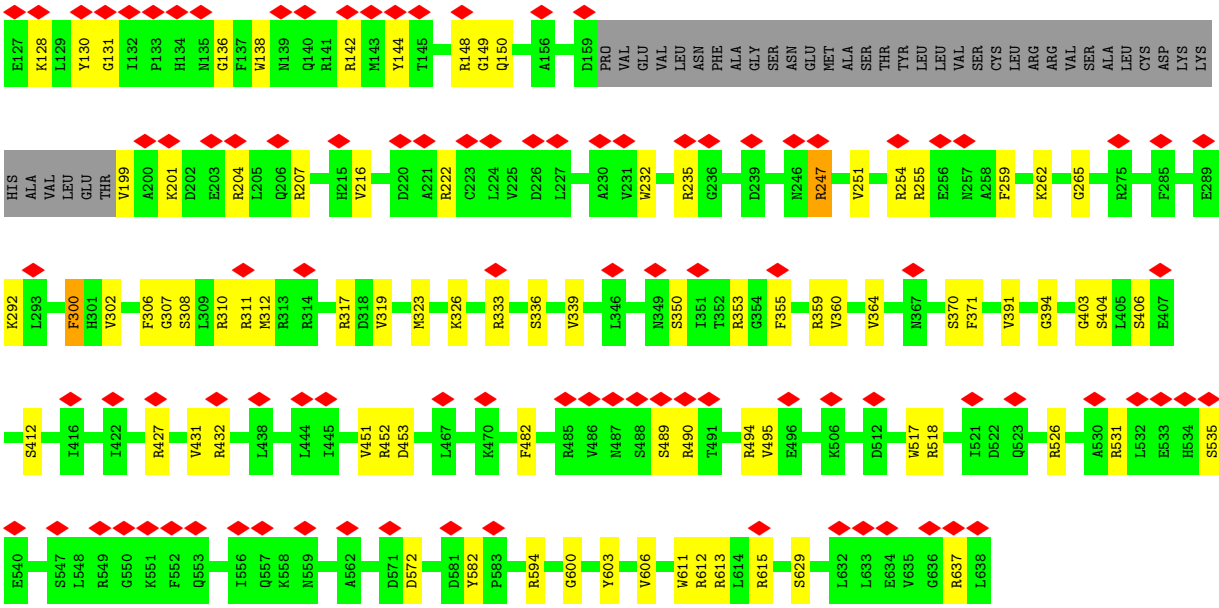
Chain Lb:





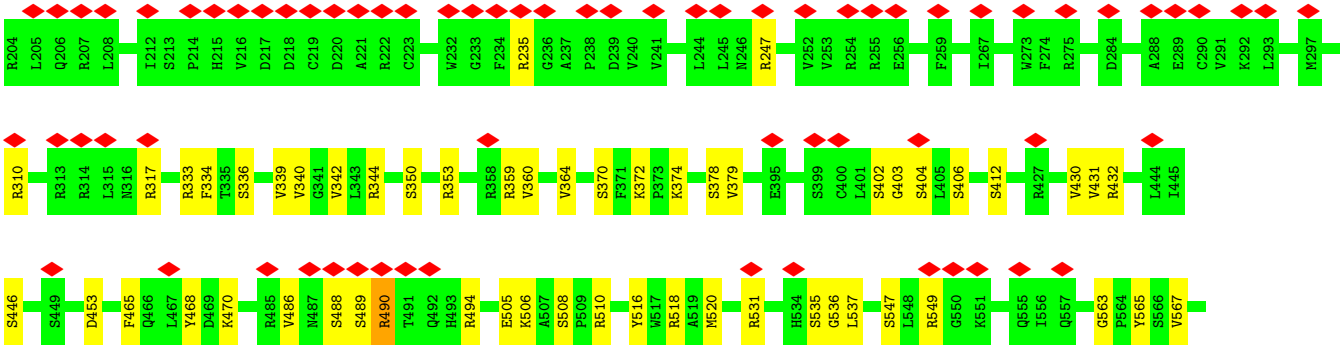
• Molecule 39: RAP domain-containing protein

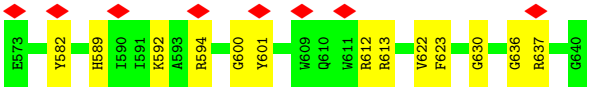
Chain Lc:



• Molecule 40: RAP domain-containing protein

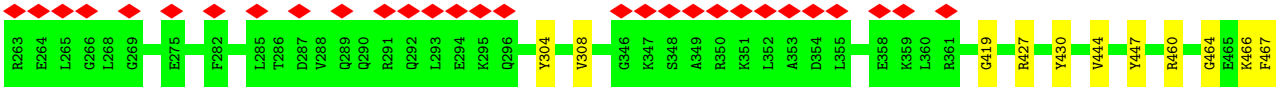
Chain Ld:

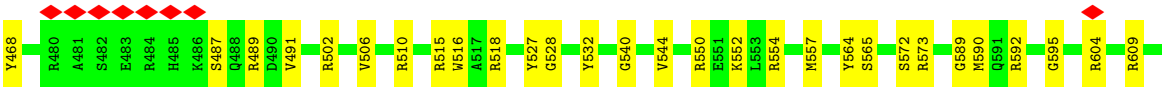


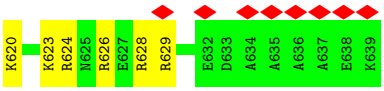


• Molecule 41: RAP domain-containing protein

Chain Le:

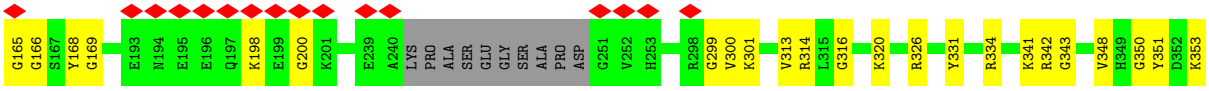


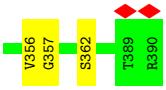




• Molecule 42: HECT-domain (Ubiquitin-transferase) domain-containing protein

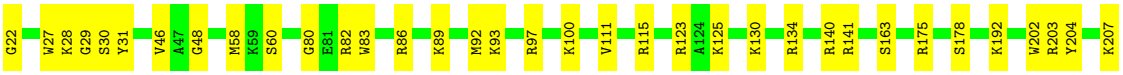
Chain Lf:

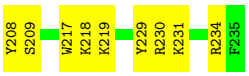




• Molecule 43: Large ribosomal subunit protein uL29m

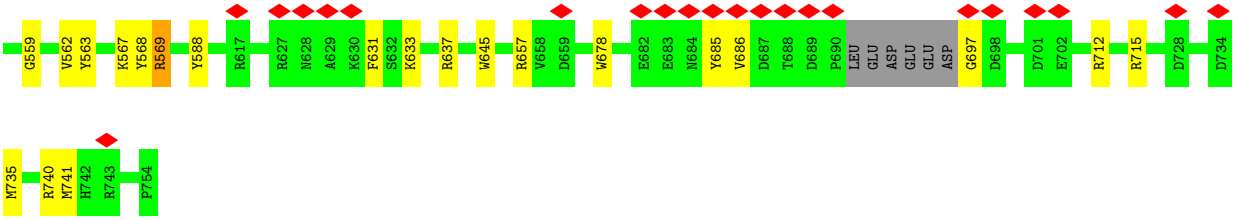
Chain Lg:





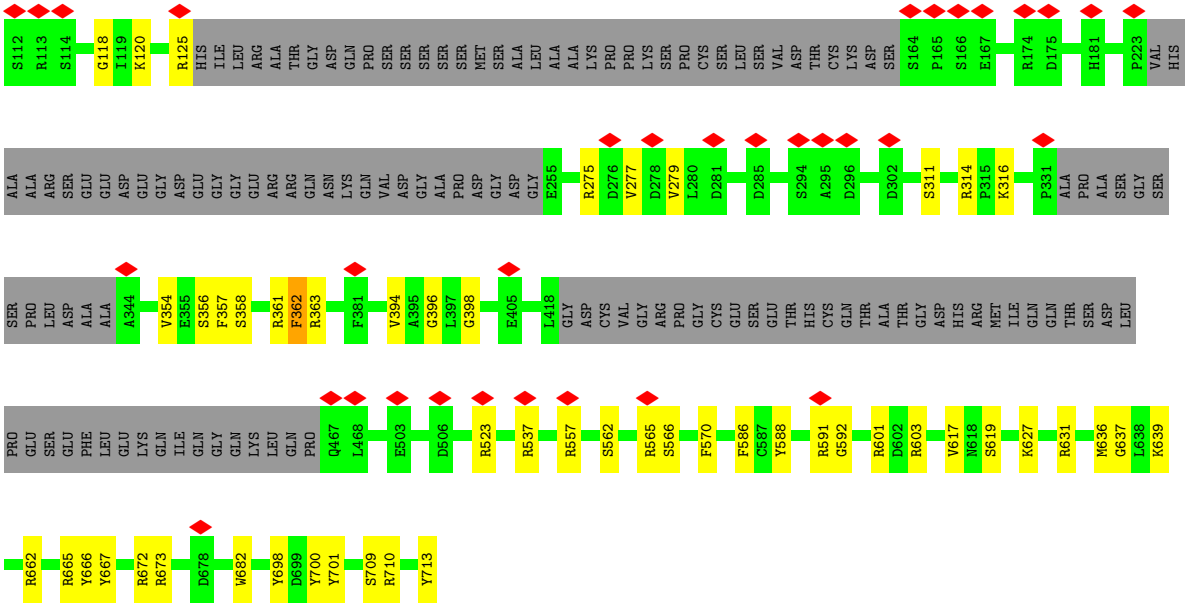
• Molecule 44: Large ribosomal subunit protein uL4m

Chain Lh:



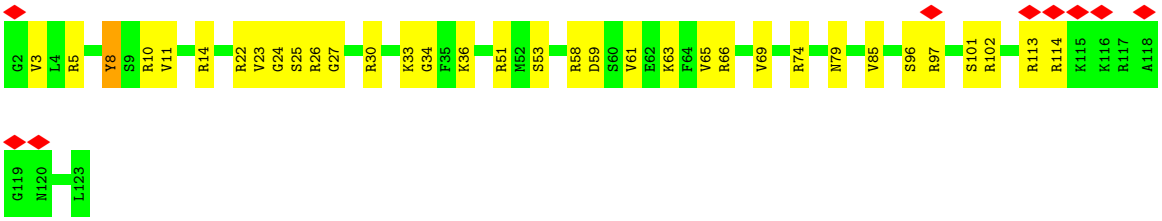
• Molecule 45: RAP domain-containing protein

Chain Li:



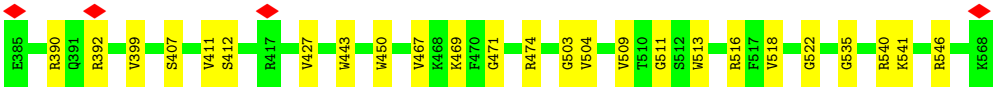
• Molecule 46: mL177

Chain Lj:



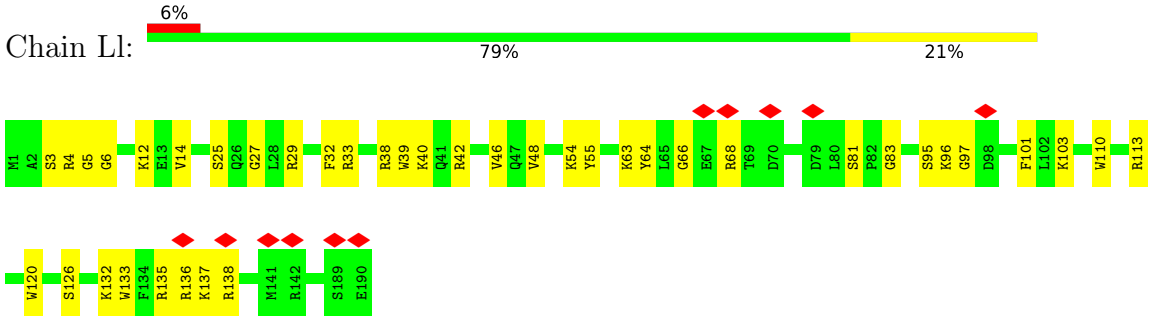
• Molecule 47: AP2 domain transcription factor AP2VIIb-2

Chain Lk:



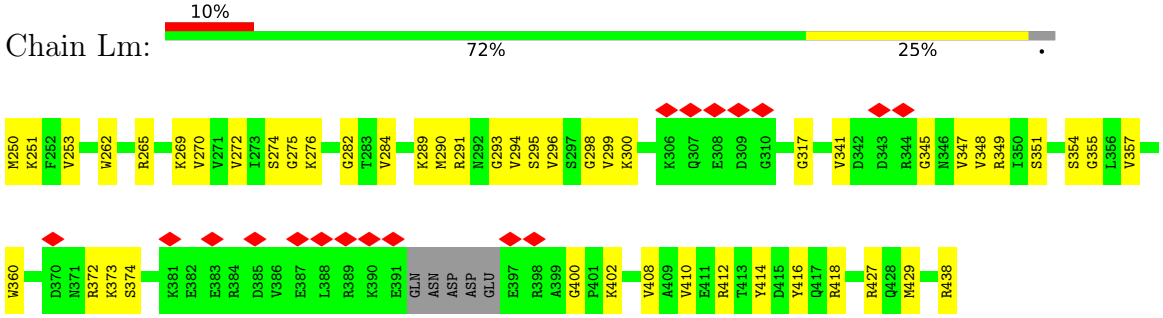
• Molecule 48: Large ribosomal subunit protein mL43

Chain Ll:



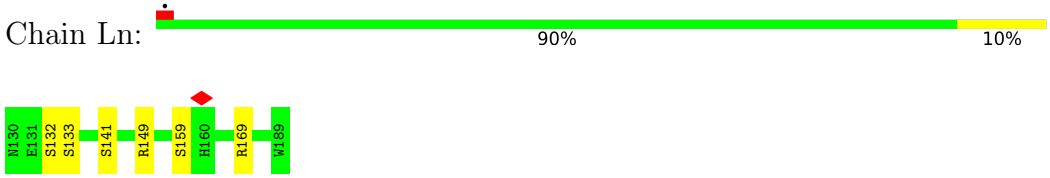
• Molecule 49: Large ribosomal subunit protein uL24c

Chain Lm:



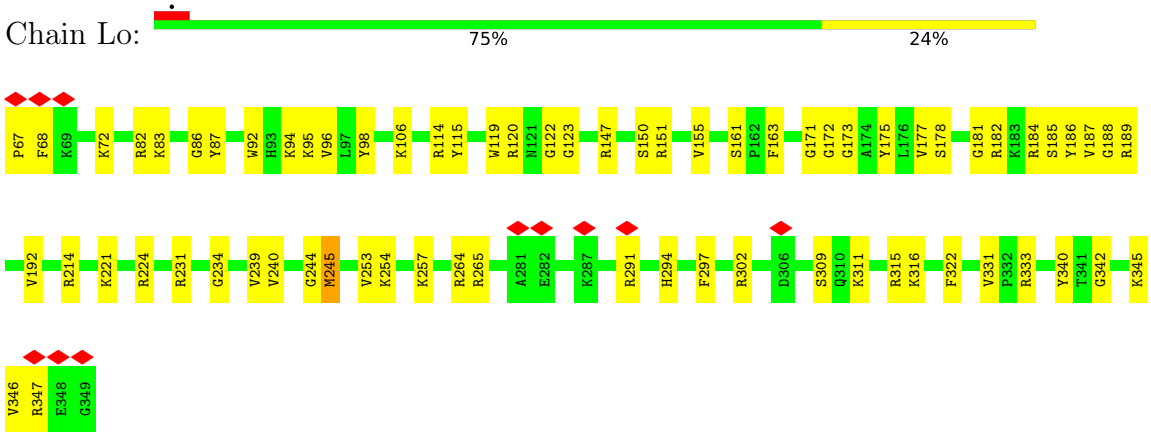
• Molecule 50: mL185

Chain Ln:



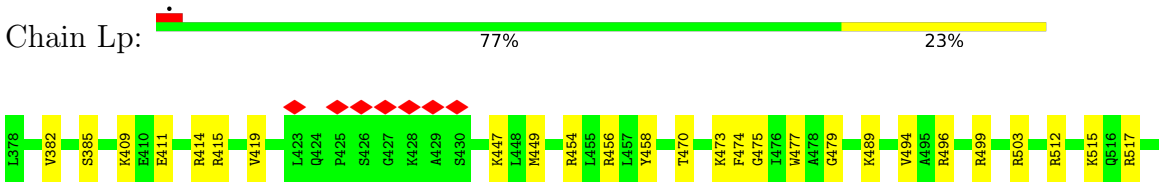
• Molecule 51: Transmembrane protein

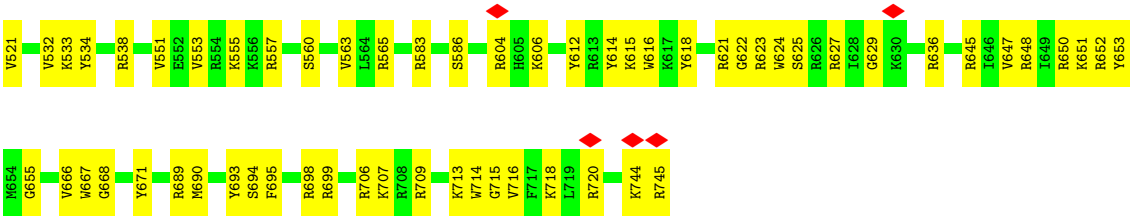
Chain Lo:



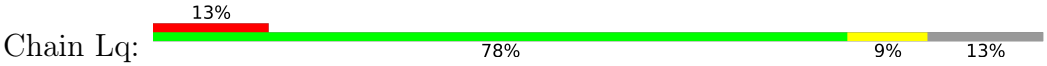
• Molecule 52: bL19m

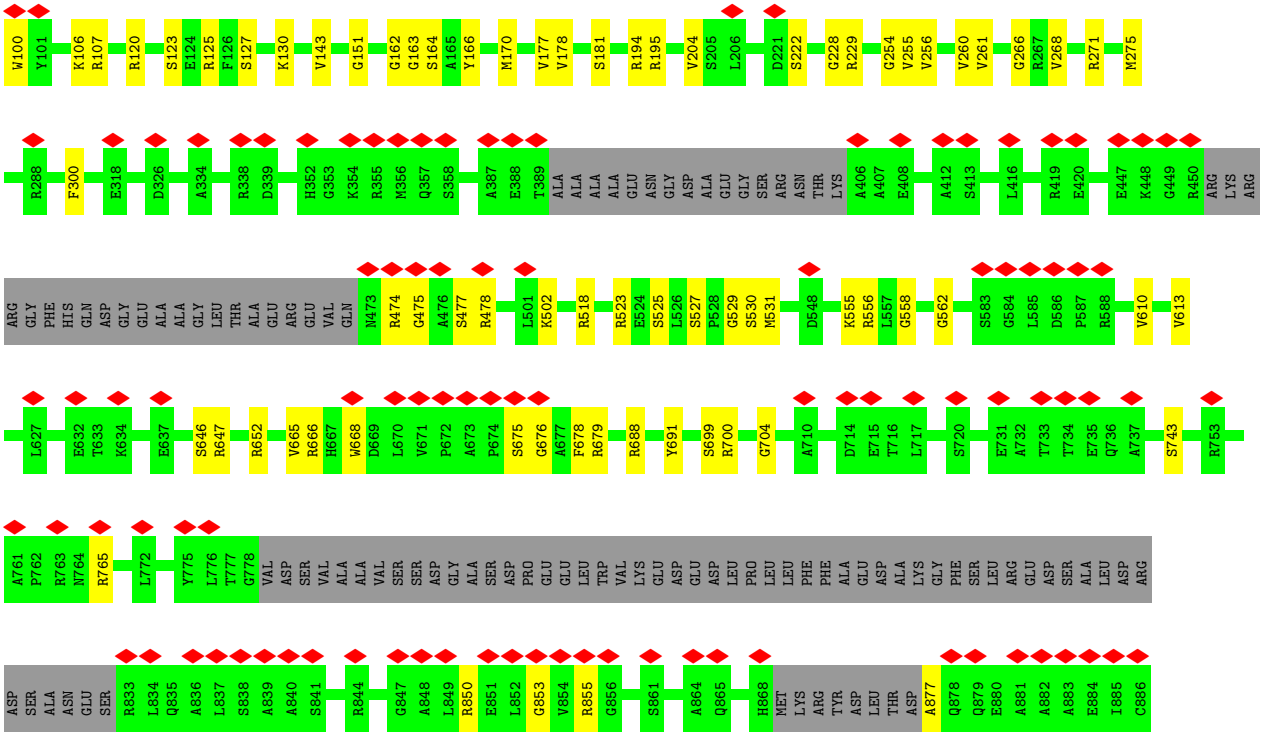
Chain Lp:



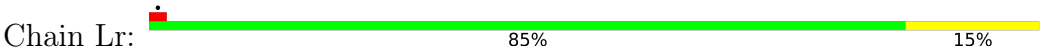


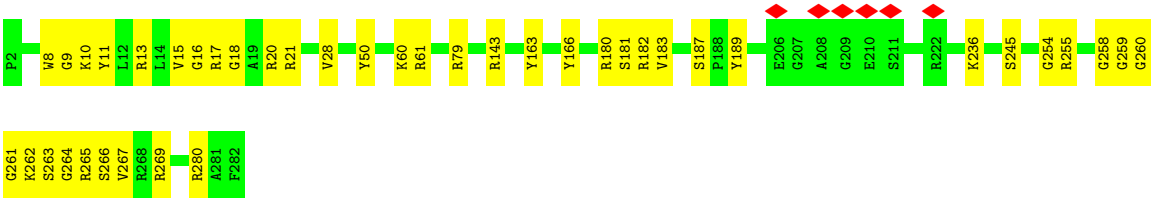
• Molecule 53: RAP domain-containing protein



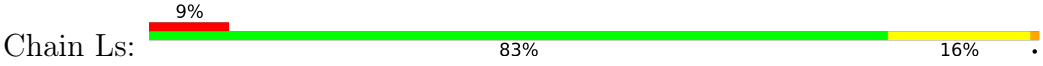


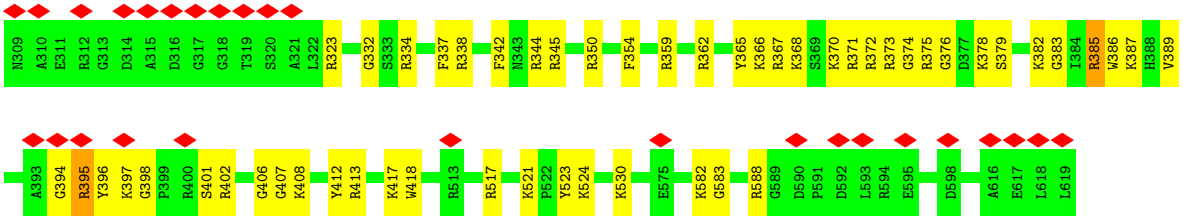
• Molecule 54: Putative ribosomal protein L28



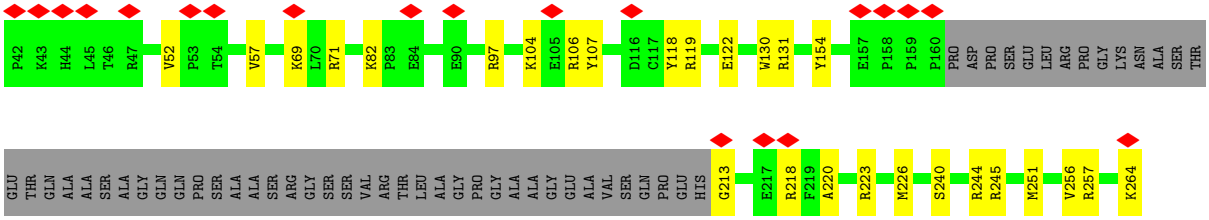


• Molecule 55: Ribosomal protein L15, putative

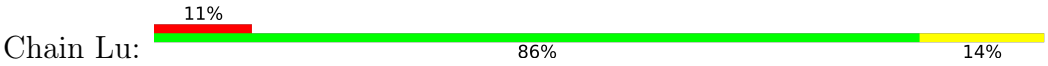


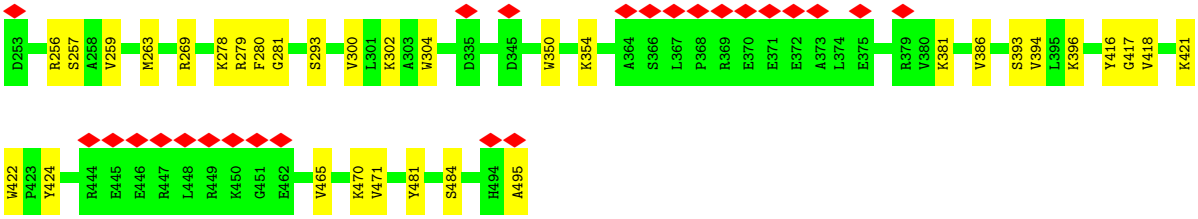


• Molecule 56: mL40

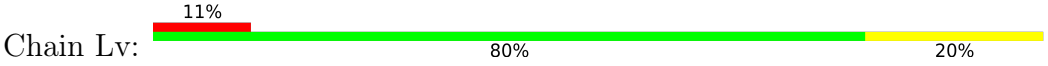


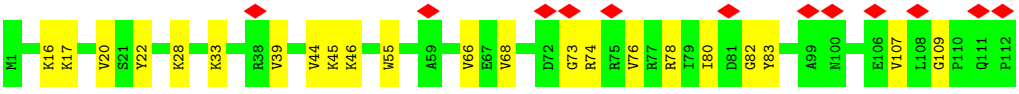
• Molecule 57: mL164



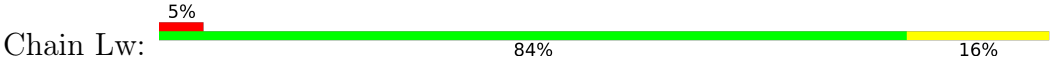


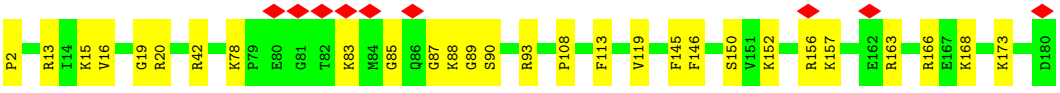
• Molecule 58: mL180





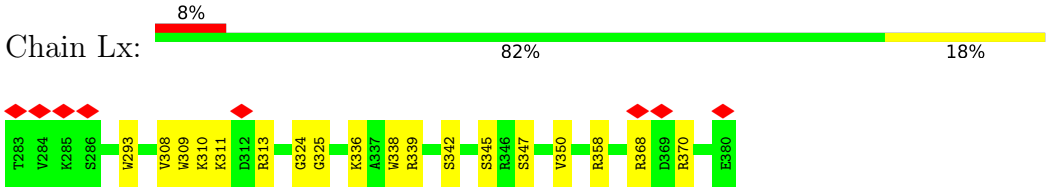
• Molecule 59: Putative 50S ribosomal protein L16





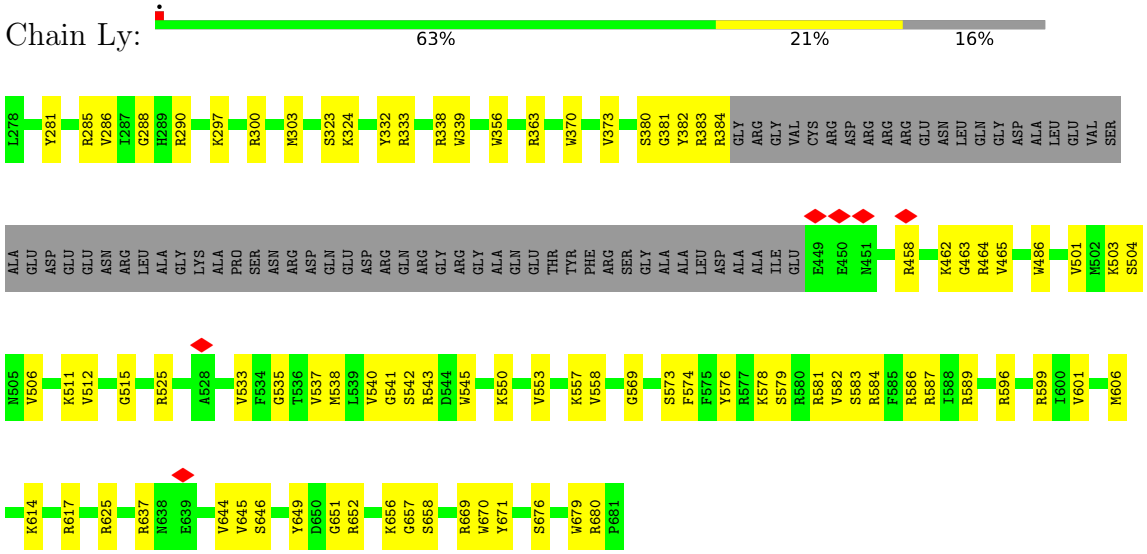
• Molecule 60: mL173

Chain Lx:



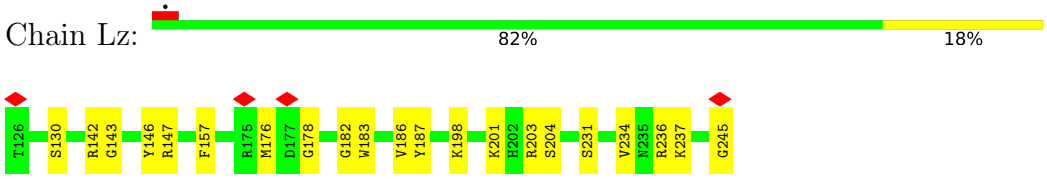
• Molecule 61: Large ribosomal subunit protein bL21m

Chain Ly:



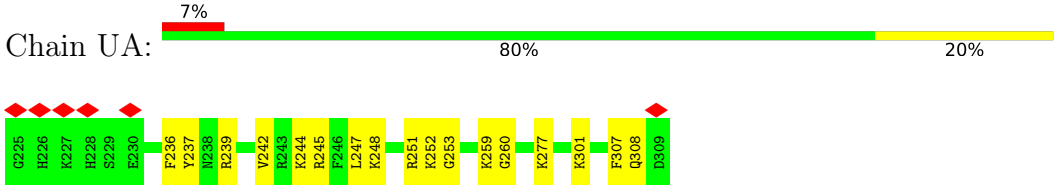
• Molecule 62: mL182

Chain Lz:



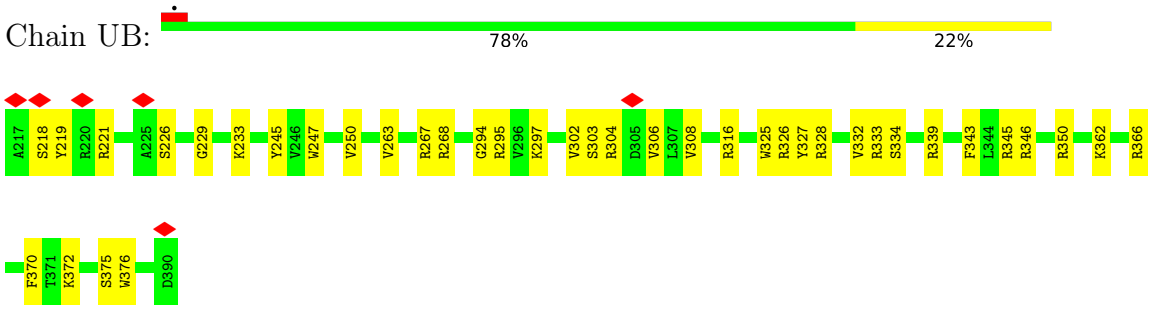
• Molecule 63: mL178

Chain UA:



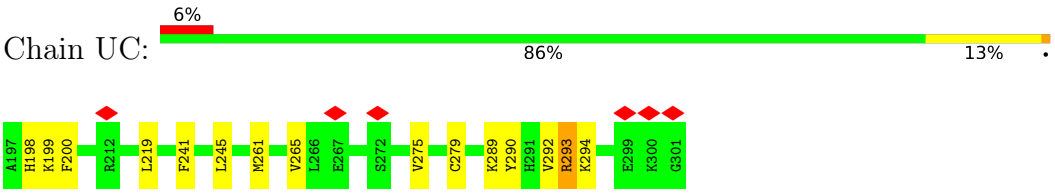
• Molecule 64: bL27m

Chain UB:



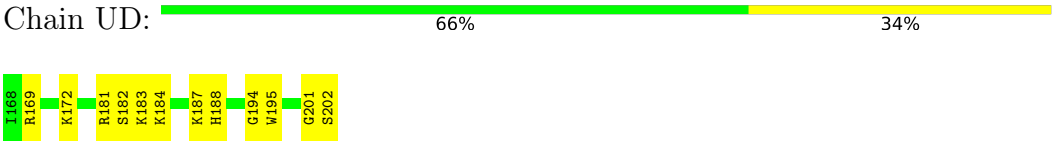
• Molecule 65: mL179

Chain UC:



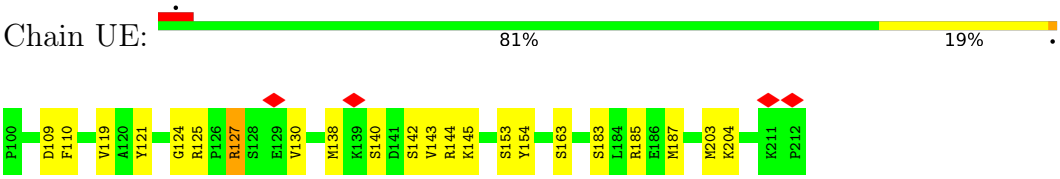
• Molecule 66: Transmembrane protein

Chain UD:



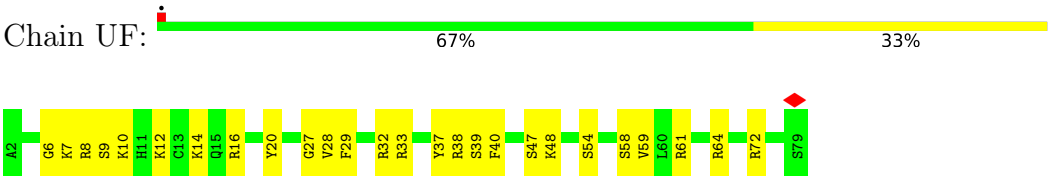
• Molecule 67: mL53

Chain UE:



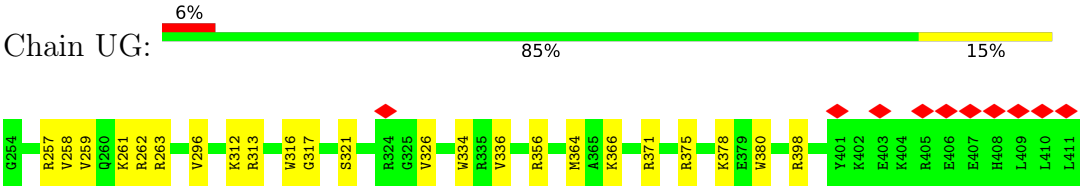
• Molecule 68: bL32m

Chain UF:



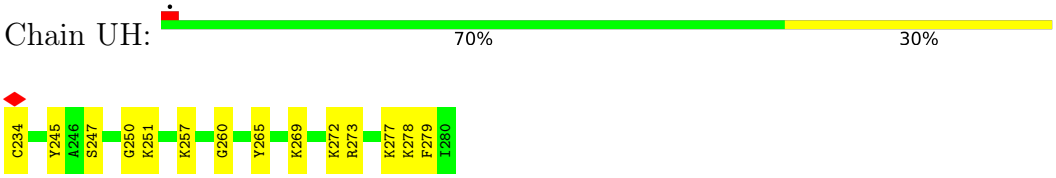
• Molecule 69: AP2 domain transcription factor AP2IV-1

Chain UG:



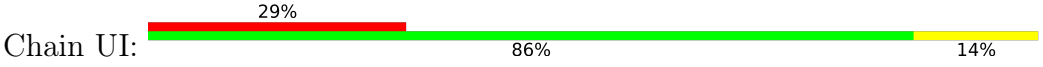
• Molecule 70: mL181

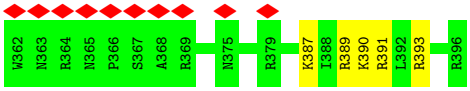
Chain UH:



• Molecule 71: mL184

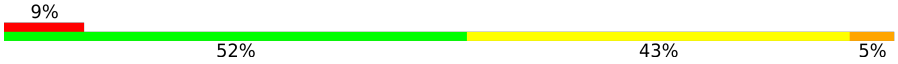
Chain UI:

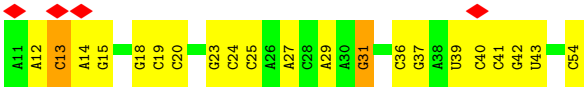




• Molecule 72: RNA23t

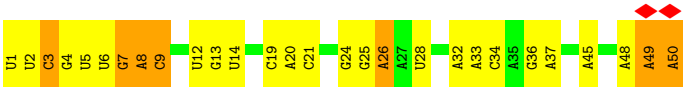
Chain l0:





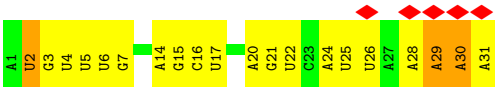
• Molecule 73: RNA29

Chain l1:



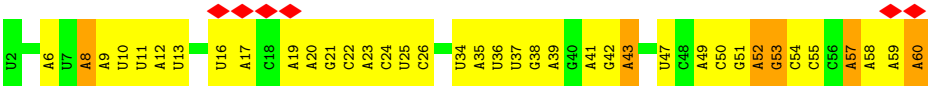
• Molecule 74: LSUB

Chain l2:



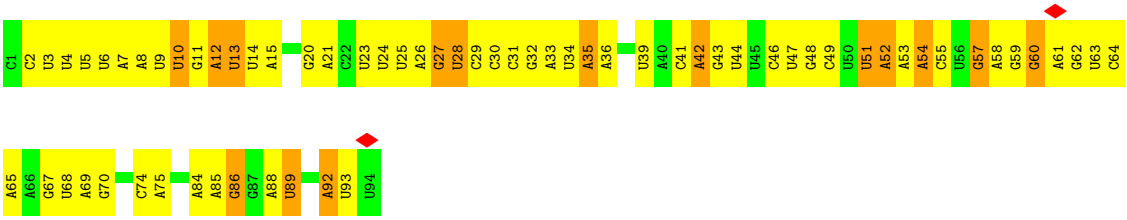
• Molecule 75: RNA6

Chain l3:



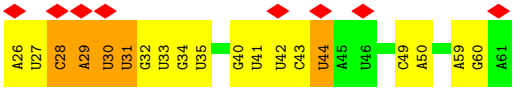
• Molecule 76: RNA1

Chain l4:



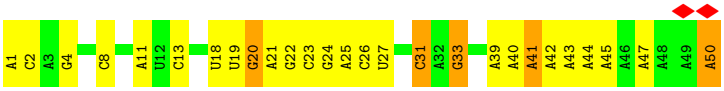
• Molecule 77: RNA31

Chain l5:



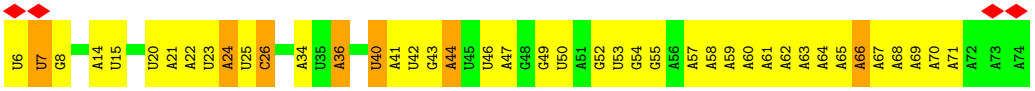
• Molecule 78: RNA14

Chain l6:



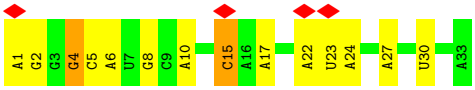
• Molecule 79: RNA11

Chain l7:



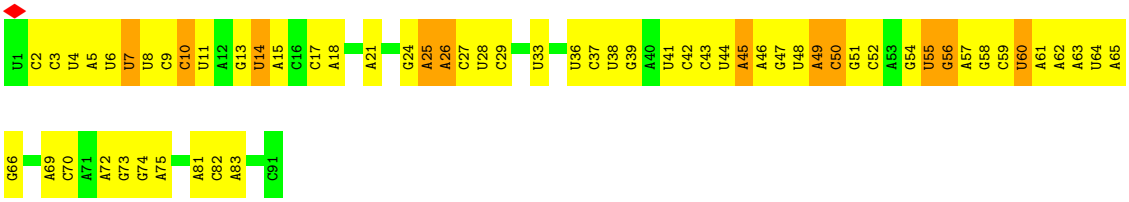
• Molecule 80: RNA36

Chain l8:



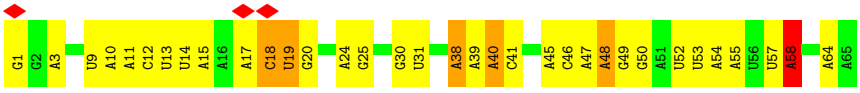
• Molecule 81: RNA3

Chain l9:



• Molecule 82: RNA2

Chain lA:

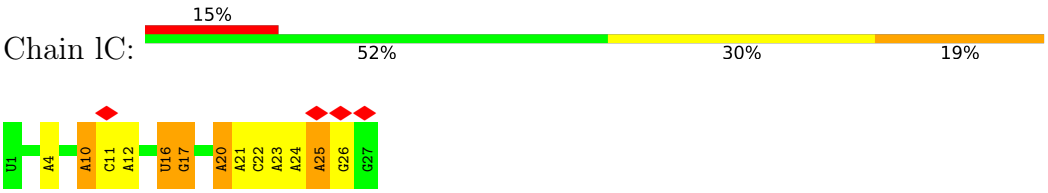


• Molecule 83: RNA38

Chain lB:

• Molecule 84: RNA35

Chain lC:

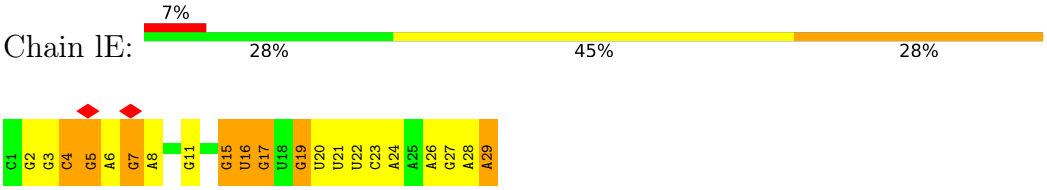


• Molecule 85: RNA32

Chain lD:

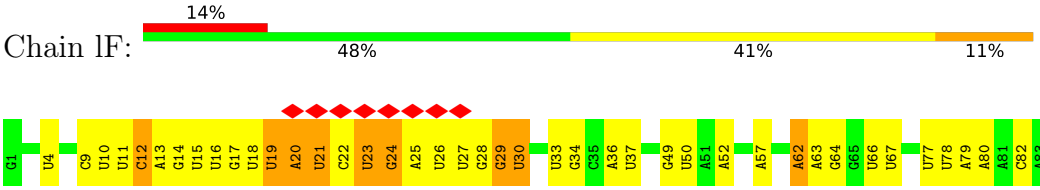
• Molecule 86: RNA15

Chain lE:



• Molecule 87: RNA10

Chain lF:



• Molecule 88: LSUC

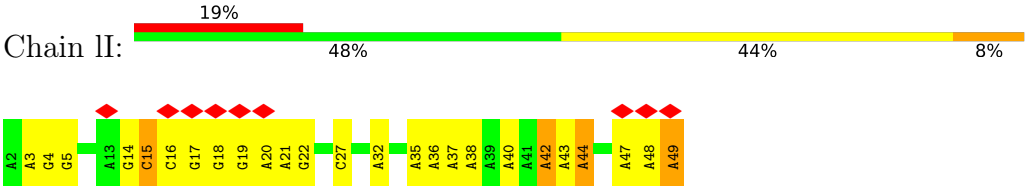
Chain lG:

• Molecule 89: RNA16

Chain lH:

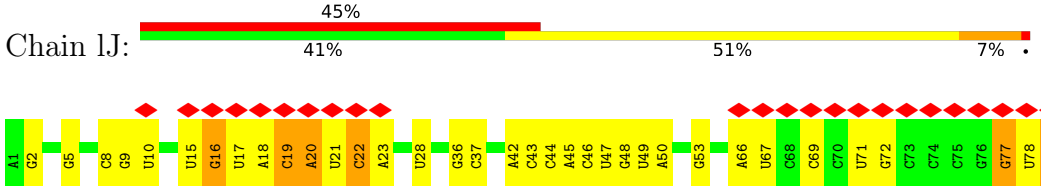
• Molecule 90: RNA13

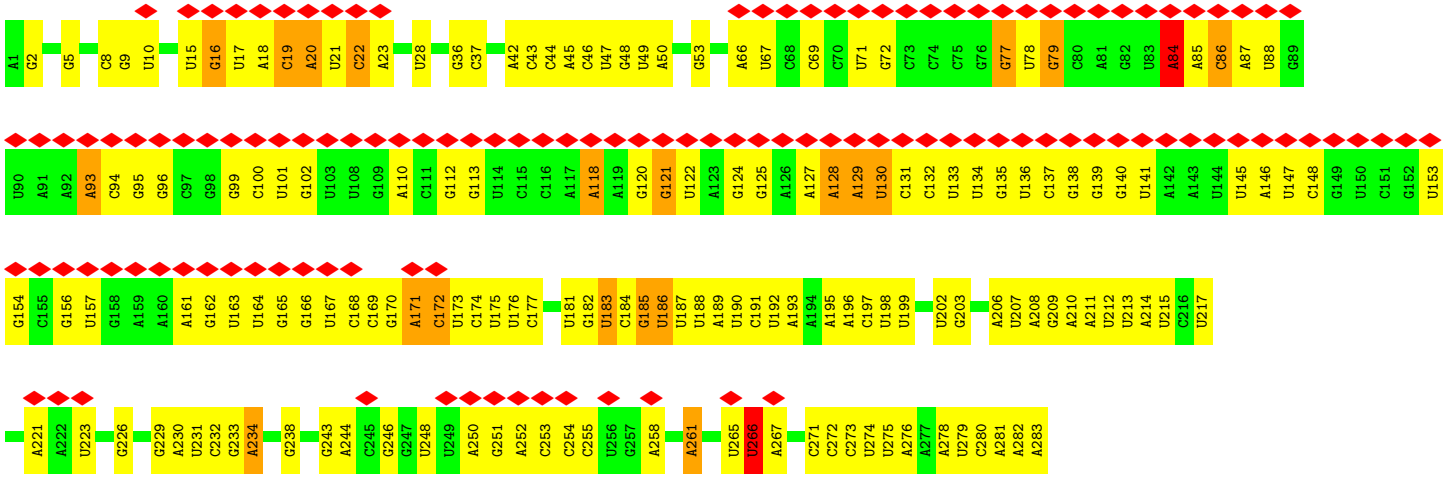
Chain lI:



• Molecule 91: LSUD/E

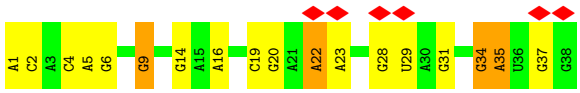
Chain lJ:





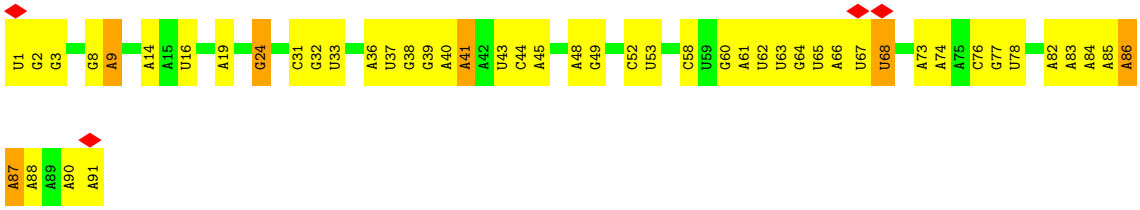
• Molecule 92: SSUF

Chain lK:



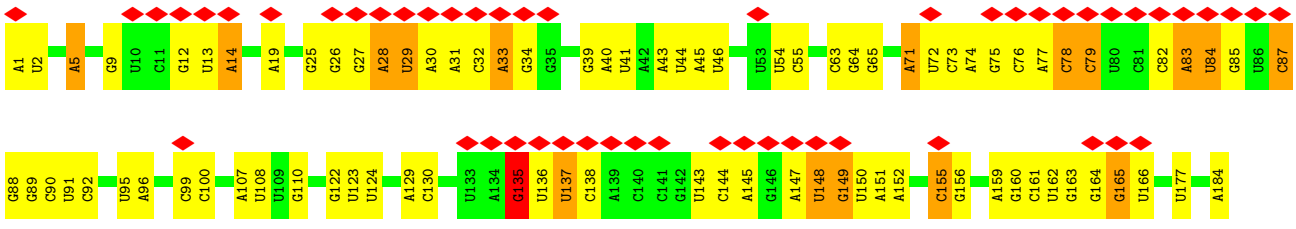
• Molecule 93: RNA7

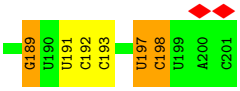
Chain lL:



• Molecule 94: LSUF/G

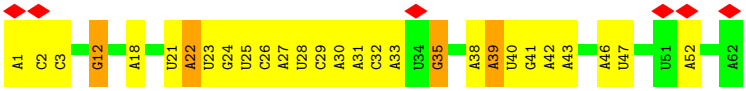
Chain lM:





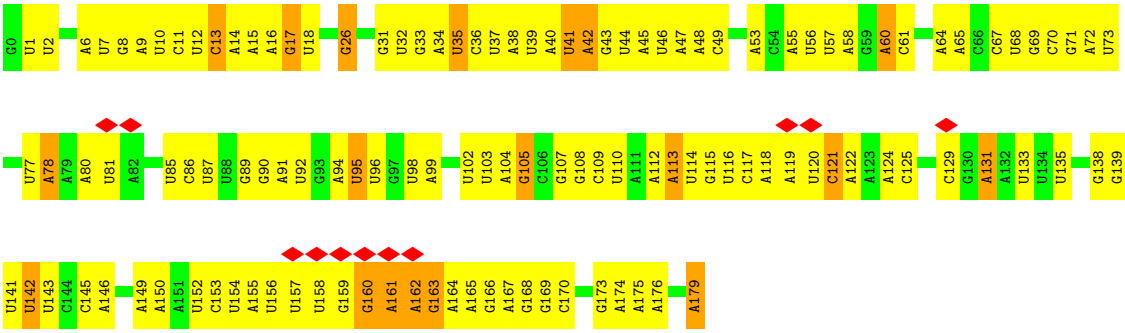
• Molecule 95: RNA37

Chain lN:



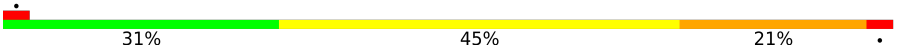
• Molecule 96: LSUA

Chain lO:



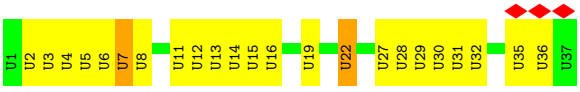
• Molecule 97: ulr1

Chain lP:



• Molecule 98: ulr2

Chain lQ:



• Molecule 99: ulr3

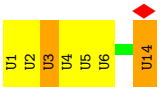
Chain lR:

• Molecule 100: ulr4

Chain lS:

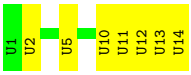
• Molecule 101: ulr5

Chain lT:



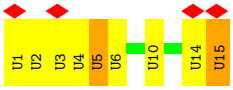
• Molecule 101: ulr5

Chain lW:



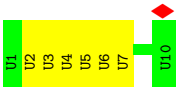
• Molecule 102: ulr6

Chain lU:



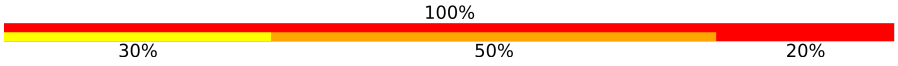
• Molecule 103: ulr7,ulr8

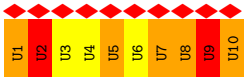
Chain lV:



• Molecule 103: ulr7,ulr8

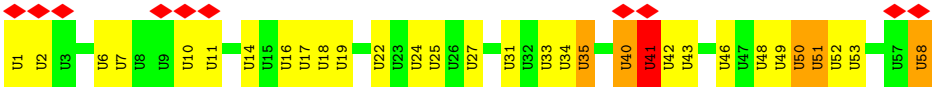
Chain lY:





• Molecule 104: ulr9

Chain lX:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	22169	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TALOS ARCTICA	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	59000	Depositor
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	2.021	Depositor
Minimum map value	-0.059	Depositor
Average map value	0.003	Depositor
Map value standard deviation	0.032	Depositor
Recommended contour level	0.15	Depositor
Map size (Å)	520.785, 520.785, 520.785	wwPDB
Map dimensions	450, 450, 450	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.1573, 1.1573, 1.1573	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	L0	2.08	101/3065 (3.3%)	1.70	27/4138 (0.7%)
2	L1	1.86	25/789 (3.2%)	1.54	5/1064 (0.5%)
3	L2	1.59	42/2147 (2.0%)	1.34	13/2899 (0.4%)
4	L3	1.88	62/2259 (2.7%)	1.55	21/3068 (0.7%)
5	L4	1.26	42/3505 (1.2%)	1.04	14/4737 (0.3%)
6	L5	2.80	20/270 (7.4%)	2.23	5/355 (1.4%)
7	L6	1.47	7/491 (1.4%)	1.20	2/664 (0.3%)
8	L7	1.87	32/920 (3.5%)	1.49	5/1230 (0.4%)
9	L8	1.95	64/2066 (3.1%)	1.55	17/2794 (0.6%)
10	L9	0.92	18/3996 (0.5%)	0.85	10/5422 (0.2%)
11	LA	1.91	59/1758 (3.4%)	1.53	12/2387 (0.5%)
12	LB	2.10	41/1059 (3.9%)	1.68	11/1427 (0.8%)
13	LC	1.82	98/2963 (3.3%)	1.43	24/4015 (0.6%)
14	LD	1.92	49/1900 (2.6%)	1.63	13/2566 (0.5%)
15	LE	1.38	12/2172 (0.6%)	1.18	11/2948 (0.4%)
16	LF	1.69	21/757 (2.8%)	1.37	2/1025 (0.2%)
17	LG	1.47	26/1295 (2.0%)	1.26	9/1758 (0.5%)
18	LH	1.84	25/707 (3.5%)	1.47	4/953 (0.4%)
19	LI	1.74	22/628 (3.5%)	1.43	4/840 (0.5%)
20	LJ	2.10	142/3731 (3.8%)	1.68	52/5048 (1.0%)
21	LK	1.85	60/1961 (3.1%)	1.53	11/2643 (0.4%)
22	LL	1.26	62/4945 (1.3%)	1.07	14/6705 (0.2%)
23	LM	1.81	39/1403 (2.8%)	1.45	7/1893 (0.4%)
24	LN	2.39	52/1009 (5.2%)	1.99	15/1346 (1.1%)
25	LO	2.01	109/2708 (4.0%)	1.61	31/3659 (0.8%)
26	LP	1.74	41/1683 (2.4%)	1.43	13/2272 (0.6%)
27	LQ	2.56	40/614 (6.5%)	2.03	11/822 (1.3%)
28	LR	2.28	40/757 (5.3%)	1.80	12/1018 (1.2%)
29	LS	1.83	71/1858 (3.8%)	1.46	14/2522 (0.6%)
30	LT	1.82	30/986 (3.0%)	1.51	10/1317 (0.8%)
31	LU	2.00	24/635 (3.8%)	1.61	2/858 (0.2%)
32	LV	1.58	73/5258 (1.4%)	1.31	24/7127 (0.3%)
33	LW	2.00	101/2500 (4.0%)	1.64	16/3377 (0.5%)
34	LX	2.15	30/797 (3.8%)	1.76	8/1071 (0.7%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
35	LY	1.81	78/2977 (2.6%)	1.51	23/3997 (0.6%)
36	LZ	1.94	43/1638 (2.6%)	1.55	19/2217 (0.9%)
37	La	2.07	76/1823 (4.2%)	1.66	22/2471 (0.9%)
38	Lb	2.21	207/5031 (4.1%)	1.79	66/6788 (1.0%)
39	Lc	1.98	114/3872 (2.9%)	1.62	32/5251 (0.6%)
40	Ld	1.70	83/3576 (2.3%)	1.39	27/4852 (0.6%)
41	Le	1.67	65/3118 (2.1%)	1.40	21/4192 (0.5%)
42	Lf	1.56	37/1751 (2.1%)	1.34	6/2364 (0.3%)
43	Lg	2.02	58/1862 (3.1%)	1.71	19/2499 (0.8%)
44	Lh	1.82	103/3781 (2.7%)	1.49	24/5115 (0.5%)
45	Li	1.54	72/3927 (1.8%)	1.29	23/5332 (0.4%)
46	Lj	2.31	49/994 (4.9%)	1.77	17/1333 (1.3%)
47	Lk	1.76	34/1544 (2.2%)	1.43	6/2074 (0.3%)
48	Ll	1.94	53/1618 (3.3%)	1.59	13/2181 (0.6%)
49	Lm	1.99	67/1525 (4.4%)	1.61	9/2043 (0.4%)
50	Ln	1.53	6/457 (1.3%)	1.42	1/624 (0.2%)
51	Lo	2.17	97/2288 (4.2%)	1.70	28/3100 (0.9%)
52	Lp	2.11	126/3153 (4.0%)	1.71	36/4245 (0.8%)
53	Lq	1.50	94/5374 (1.7%)	1.22	19/7299 (0.3%)
54	Lr	1.57	55/2409 (2.3%)	1.32	18/3241 (0.6%)
55	Ls	1.80	71/2617 (2.7%)	1.48	26/3512 (0.7%)
56	Lt	2.04	42/1604 (2.6%)	1.64	14/2174 (0.6%)
57	Lu	1.74	42/1873 (2.2%)	1.45	7/2532 (0.3%)
58	Lv	1.75	31/952 (3.3%)	1.43	3/1286 (0.2%)
59	Lw	1.63	31/1477 (2.1%)	1.36	12/1994 (0.6%)
60	Lx	1.91	25/812 (3.1%)	1.54	6/1093 (0.5%)
61	Ly	2.12	120/2895 (4.1%)	1.71	30/3911 (0.8%)
62	Lz	1.81	27/1021 (2.6%)	1.48	6/1377 (0.4%)
63	UA	1.66	16/728 (2.2%)	1.39	4/976 (0.4%)
64	UB	1.99	55/1489 (3.7%)	1.58	14/2016 (0.7%)
65	UC	0.96	8/890 (0.9%)	0.85	1/1201 (0.1%)
66	UD	1.93	13/316 (4.1%)	1.61	3/416 (0.7%)
67	UE	1.67	24/960 (2.5%)	1.39	11/1289 (0.9%)
68	UF	2.23	32/698 (4.6%)	1.82	14/935 (1.5%)
69	UG	1.89	34/1377 (2.5%)	1.53	8/1856 (0.4%)
70	UH	2.00	15/408 (3.7%)	1.77	5/537 (0.9%)
71	UI	1.56	6/298 (2.0%)	1.36	1/393 (0.3%)
72	l0	1.78	26/1046 (2.5%)	1.78	37/1627 (2.3%)
73	l1	2.52	73/1199 (6.1%)	2.41	104/1866 (5.6%)
74	l2	2.57	50/738 (6.8%)	2.52	73/1147 (6.4%)
75	l3	2.64	94/1403 (6.7%)	2.49	132/2182 (6.0%)
76	l4	2.72	165/2225 (7.4%)	2.62	241/3461 (7.0%)
77	l5	2.30	43/849 (5.1%)	2.29	69/1319 (5.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
78	l6	2.39	61/1204 (5.1%)	2.41	98/1873 (5.2%)
79	l7	2.48	94/1663 (5.7%)	2.53	155/2589 (6.0%)
80	l8	1.19	1/793 (0.1%)	1.60	11/1233 (0.9%)
81	l9	2.82	177/2152 (8.2%)	2.60	242/3347 (7.2%)
82	lA	2.02	53/1553 (3.4%)	2.08	89/2417 (3.7%)
83	lB	2.72	85/1108 (7.7%)	2.56	115/1730 (6.6%)
84	lC	1.80	15/653 (2.3%)	1.97	33/1014 (3.3%)
85	lD	3.16	38/378 (10.1%)	2.87	54/585 (9.2%)
86	lE	2.60	49/708 (6.9%)	2.52	79/1103 (7.2%)
87	lF	2.27	104/2105 (4.9%)	2.28	150/3278 (4.6%)
88	lG	1.84	20/630 (3.2%)	1.83	30/980 (3.1%)
89	lH	1.67	16/638 (2.5%)	1.80	26/991 (2.6%)
90	lI	2.51	72/1169 (6.2%)	2.44	107/1821 (5.9%)
91	lJ	2.36	361/6628 (5.4%)	2.29	518/10319 (5.0%)
92	lK	1.96	29/921 (3.1%)	1.99	46/1435 (3.2%)
93	lL	2.58	142/2185 (6.5%)	2.50	213/3402 (6.3%)
94	lM	2.03	177/4604 (3.8%)	2.01	268/7167 (3.7%)
95	lN	2.28	78/1473 (5.3%)	2.19	106/2290 (4.6%)
96	lO	2.65	298/4302 (6.9%)	2.58	457/6700 (6.8%)
97	lP	2.36	30/637 (4.7%)	2.64	54/982 (5.5%)
98	lQ	2.17	32/813 (3.9%)	2.38	53/1254 (4.2%)
99	lR	2.66	38/615 (6.2%)	2.87	63/948 (6.6%)
100	lS	0.08	0/153	0.69	0/234
101	lT	2.09	12/307 (3.9%)	2.26	18/472 (3.8%)
101	lW	2.04	9/307 (2.9%)	2.29	16/472 (3.4%)
102	lU	2.28	14/329 (4.3%)	2.48	23/506 (4.5%)
103	lV	2.46	12/219 (5.5%)	2.64	18/336 (5.4%)
103	lY	1.35	0/219	2.32	12/336 (3.6%)
104	lX	1.69	26/1275 (2.0%)	1.96	47/1968 (2.4%)
All	All	1.97	6283/183926 (3.4%)	1.77	4800/258068 (1.9%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	L1	0	1
22	LL	0	1
37	La	0	1
40	Ld	0	1
53	Lq	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
61	Ly	0	1
72	l0	0	1
78	l6	0	1
79	l7	0	1
80	l8	0	1
82	lA	0	2
84	lC	0	3
91	lJ	0	5
92	lK	0	2
94	lM	0	3
95	lN	0	1
96	lO	0	1
97	lP	0	1
101	lW	0	1
103	lY	0	6
104	lX	0	1
All	All	0	36

All (6283) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
96	lO	99	A	C6-N6	-13.05	1.23	1.33
96	lO	48	A	C6-N6	-12.96	1.23	1.33
83	lB	19	A	C6-N6	-12.90	1.23	1.33
93	lL	74	A	C6-N6	-12.82	1.23	1.33
85	lD	10	A	C6-N6	-12.80	1.23	1.33
95	lN	33	A	C6-N6	-12.79	1.23	1.33
96	lO	38	A	C6-N6	-12.78	1.23	1.33
79	l7	64	A	C6-N6	-12.76	1.23	1.33
79	l7	62	A	C6-N6	-12.76	1.23	1.33
91	lJ	42	A	C6-N6	-12.76	1.23	1.33
78	l6	21	A	C6-N6	-12.74	1.23	1.33
93	lL	85	A	C6-N6	-12.73	1.23	1.33
96	lO	72	A	C6-N6	-12.73	1.23	1.33
93	lL	14	A	C6-N6	-12.72	1.23	1.33
94	lM	151	A	C6-N6	-12.71	1.23	1.33
79	l7	63	A	C6-N6	-12.71	1.23	1.33
96	lO	113	A	C6-N6	-12.70	1.23	1.33
93	lL	41	A	C6-N6	-12.70	1.23	1.33
83	lB	21	A	C6-N6	-12.69	1.23	1.33
78	l6	45	A	C6-N6	-12.69	1.23	1.33
90	lI	37	A	C6-N6	-12.69	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	l9	62	A	C6-N6	-12.68	1.23	1.33
79	l7	70	A	C6-N6	-12.68	1.23	1.33
76	l4	26	A	C6-N6	-12.67	1.23	1.33
93	lL	84	A	C6-N6	-12.67	1.23	1.33
94	lM	184	A	C6-N6	-12.66	1.23	1.33
94	lM	152	A	C6-N6	-12.66	1.23	1.33
74	l2	28	A	C6-N6	-12.65	1.23	1.33
86	lE	28	A	C6-N6	-12.65	1.23	1.33
73	l1	33	A	C6-N6	-12.65	1.23	1.33
91	lJ	193	A	C6-N6	-12.64	1.23	1.33
95	lN	1	A	C6-N6	-12.64	1.23	1.33
81	l9	26	A	C6-N6	-12.64	1.23	1.33
79	l7	71	A	C6-N6	-12.63	1.23	1.33
82	lA	47	A	C6-N6	-12.63	1.23	1.33
78	l6	25	A	C6-N6	-12.63	1.23	1.33
93	lL	48	A	C6-N6	-12.63	1.23	1.33
81	l9	15	A	C6-N6	-12.63	1.23	1.33
93	lL	36	A	C6-N6	-12.63	1.23	1.33
96	lO	164	A	C6-N6	-12.63	1.23	1.33
78	l6	41	A	C6-N6	-12.62	1.23	1.33
81	l9	57	A	C6-N6	-12.63	1.23	1.33
87	lF	86	A	C6-N6	-12.63	1.23	1.33
79	l7	60	A	C6-N6	-12.62	1.23	1.33
87	lF	20	A	C6-N6	-12.62	1.23	1.33
94	lM	30	A	C6-N6	-12.62	1.23	1.33
77	l5	29	A	C6-N6	-12.62	1.23	1.33
94	lM	33	A	C6-N6	-12.62	1.23	1.33
96	lO	64	A	C6-N6	-12.62	1.23	1.33
88	lG	17	A	C6-N6	-12.62	1.23	1.33
91	lJ	50	A	C6-N6	-12.62	1.23	1.33
91	lJ	230	A	C6-N6	-12.62	1.23	1.33
91	lJ	128	A	C6-N6	-12.61	1.23	1.33
74	l2	30	A	C6-N6	-12.61	1.23	1.33
91	lJ	208	A	C6-N6	-12.61	1.23	1.33
81	l9	18	A	C6-N6	-12.60	1.23	1.33
93	lL	61	A	C6-N6	-12.60	1.23	1.33
81	l9	45	A	C6-N6	-12.60	1.23	1.33
87	lF	62	A	C6-N6	-12.60	1.23	1.33
95	lN	42	A	C6-N6	-12.60	1.23	1.33
91	lJ	214	A	C6-N6	-12.60	1.23	1.33
87	lF	13	A	C6-N6	-12.60	1.23	1.33
83	lB	9	A	C6-N6	-12.59	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
75	l3	9	A	C6-N6	-12.59	1.23	1.33
82	lA	48	A	C6-N6	-12.59	1.23	1.33
84	lC	10	A	C6-N6	-12.59	1.23	1.33
91	lJ	196	A	C6-N6	-12.59	1.23	1.33
94	lM	1	A	C6-N6	-12.59	1.23	1.33
82	lA	11	A	C6-N6	-12.59	1.23	1.33
92	lK	22	A	C6-N6	-12.59	1.23	1.33
94	lM	71	A	C6-N6	-12.59	1.23	1.33
93	lL	83	A	C6-N6	-12.58	1.23	1.33
81	l9	25	A	C6-N6	-12.58	1.23	1.33
76	l4	61	A	C6-N6	-12.58	1.23	1.33
86	lE	26	A	C6-N6	-12.58	1.23	1.33
90	lI	21	A	C6-N6	-12.58	1.23	1.33
90	lI	32	A	C6-N6	-12.58	1.23	1.33
91	lJ	171	A	C6-N6	-12.58	1.23	1.33
96	lO	60	A	C6-N6	-12.58	1.23	1.33
93	lL	87	A	C6-N6	-12.57	1.23	1.33
93	lL	91	A	C6-N6	-12.57	1.23	1.33
81	l9	72	A	C6-N6	-12.57	1.23	1.33
96	lO	47	A	C6-N6	-12.57	1.23	1.33
96	lO	53	A	C6-N6	-12.57	1.23	1.33
78	l6	39	A	C6-N6	-12.57	1.23	1.33
76	l4	36	A	C6-N6	-12.56	1.23	1.33
76	l4	58	A	C6-N6	-12.56	1.23	1.33
79	l7	58	A	C6-N6	-12.56	1.23	1.33
79	l7	67	A	C6-N6	-12.56	1.24	1.33
73	l1	37	A	C6-N6	-12.56	1.24	1.33
79	l7	66	A	C6-N6	-12.56	1.24	1.33
78	l6	43	A	C6-N6	-12.56	1.24	1.33
75	l3	35	A	C6-N6	-12.56	1.24	1.33
75	l3	52	A	C6-N6	-12.56	1.24	1.33
79	l7	61	A	C6-N6	-12.56	1.24	1.33
95	lN	38	A	C6-N6	-12.56	1.24	1.33
81	l9	75	A	C6-N6	-12.55	1.24	1.33
83	lB	32	A	C6-N6	-12.56	1.24	1.33
93	lL	88	A	C6-N6	-12.55	1.24	1.33
96	lO	9	A	C6-N6	-12.55	1.24	1.33
96	lO	55	A	C6-N6	-12.55	1.24	1.33
96	lO	91	A	C6-N6	-12.55	1.24	1.33
92	lK	23	A	C6-N6	-12.55	1.24	1.33
96	lO	155	A	C6-N6	-12.55	1.24	1.33
76	l4	21	A	C6-N6	-12.55	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
93	lL	66	A	C6-N6	-12.55	1.24	1.33
94	lM	28	A	C6-N6	-12.55	1.24	1.33
79	l7	65	A	C6-N6	-12.55	1.24	1.33
90	lI	3	A	C6-N6	-12.55	1.24	1.33
96	lO	161	A	C6-N6	-12.55	1.24	1.33
96	lO	34	A	C6-N6	-12.55	1.24	1.33
79	l7	57	A	C6-N6	-12.54	1.24	1.33
84	lC	25	A	C6-N6	-12.54	1.24	1.33
91	lJ	189	A	C6-N6	-12.54	1.24	1.33
96	lO	15	A	C6-N6	-12.54	1.24	1.33
93	lL	86	A	C6-N6	-12.54	1.24	1.33
81	l9	63	A	C6-N6	-12.53	1.24	1.33
87	lF	63	A	C6-N6	-12.54	1.24	1.33
95	lN	39	A	C6-N6	-12.54	1.24	1.33
96	lO	167	A	C6-N6	-12.53	1.24	1.33
76	l4	54	A	C6-N6	-12.53	1.24	1.33
90	lI	20	A	C6-N6	-12.53	1.24	1.33
81	l9	46	A	C6-N6	-12.53	1.24	1.33
96	lO	146	A	C6-N6	-12.53	1.24	1.33
75	l3	59	A	C6-N6	-12.53	1.24	1.33
91	lJ	234	A	C6-N6	-12.53	1.24	1.33
73	l1	8	A	C6-N6	-12.52	1.24	1.33
90	lI	40	A	C6-N6	-12.52	1.24	1.33
90	lI	44	A	C6-N6	-12.52	1.24	1.33
93	lL	90	A	C6-N6	-12.52	1.24	1.33
96	lO	14	A	C6-N6	-12.52	1.24	1.33
73	l1	50	A	C6-N6	-12.52	1.24	1.33
76	l4	33	A	C6-N6	-12.52	1.24	1.33
79	l7	47	A	C6-N6	-12.52	1.24	1.33
79	l7	69	A	C6-N6	-12.52	1.24	1.33
81	l9	81	A	C6-N6	-12.52	1.24	1.33
75	l3	60	A	C6-N6	-12.52	1.24	1.33
85	lD	4	A	C6-N6	-12.52	1.24	1.33
91	lJ	127	A	C6-N6	-12.52	1.24	1.33
86	lE	24	A	C6-N6	-12.51	1.24	1.33
91	lJ	129	A	C6-N6	-12.51	1.24	1.33
93	lL	82	A	C6-N6	-12.51	1.24	1.33
96	lO	40	A	C6-N6	-12.51	1.24	1.33
95	lN	30	A	C6-N6	-12.51	1.24	1.33
73	l1	48	A	C6-N6	-12.51	1.24	1.33
81	l9	65	A	C6-N6	-12.51	1.24	1.33
78	l6	40	A	C6-N6	-12.50	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
79	l7	59	A	C6-N6	-12.50	1.24	1.33
76	l4	92	A	C6-N6	-12.50	1.24	1.33
93	lL	19	A	C6-N6	-12.50	1.24	1.33
82	lA	64	A	C6-N6	-12.50	1.24	1.33
91	lJ	195	A	C6-N6	-12.50	1.24	1.33
76	l4	53	A	C6-N6	-12.50	1.24	1.33
78	l6	44	A	C6-N6	-12.50	1.24	1.33
79	l7	21	A	C6-N6	-12.50	1.24	1.33
90	lI	43	A	C6-N6	-12.50	1.24	1.33
85	lD	1	A	C6-N6	-12.50	1.24	1.33
86	lE	29	A	C6-N6	-12.50	1.24	1.33
96	lO	165	A	C6-N6	-12.50	1.24	1.33
91	lJ	210	A	C6-N6	-12.49	1.24	1.33
76	l4	85	A	C6-N6	-12.49	1.24	1.33
83	lB	45	A	C6-N6	-12.49	1.24	1.33
91	lJ	276	A	C6-N6	-12.49	1.24	1.33
73	l1	49	A	C6-N6	-12.49	1.24	1.33
81	l9	83	A	C6-N6	-12.49	1.24	1.33
83	lB	7	A	C6-N6	-12.49	1.24	1.33
87	lF	84	A	C6-N6	-12.49	1.24	1.33
96	lO	162	A	C6-N6	-12.48	1.24	1.33
91	lJ	18	A	C6-N6	-12.48	1.24	1.33
91	lJ	211	A	C6-N6	-12.48	1.24	1.33
94	lM	19	A	C6-N6	-12.48	1.24	1.33
75	l3	12	A	C6-N6	-12.48	1.24	1.33
75	l3	58	A	C6-N6	-12.48	1.24	1.33
83	lB	25	A	C6-N6	-12.48	1.24	1.33
75	l3	39	A	C6-N6	-12.48	1.24	1.33
87	lF	85	A	C6-N6	-12.48	1.24	1.33
77	l5	59	A	C6-N6	-12.47	1.24	1.33
78	l6	42	A	C6-N6	-12.47	1.24	1.33
79	l7	22	A	C6-N6	-12.47	1.24	1.33
82	lA	45	A	C6-N6	-12.47	1.24	1.33
95	lN	27	A	C6-N6	-12.47	1.24	1.33
75	l3	49	A	C6-N6	-12.47	1.24	1.33
85	lD	13	A	C6-N6	-12.47	1.24	1.33
95	lN	31	A	C6-N6	-12.47	1.24	1.33
83	lB	33	A	C6-N6	-12.46	1.24	1.33
74	l2	29	A	C6-N6	-12.46	1.24	1.33
74	l2	20	A	C6-N6	-12.46	1.24	1.33
75	l3	57	A	C6-N6	-12.46	1.24	1.33
93	lL	40	A	C6-N6	-12.46	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
96	lO	124	A	C6-N6	-12.46	1.24	1.33
78	l6	1	A	C6-N6	-12.46	1.24	1.33
91	lJ	23	A	C6-N6	-12.46	1.24	1.33
76	l4	84	A	C6-N6	-12.45	1.24	1.33
85	lD	5	A	C6-N6	-12.45	1.24	1.33
95	lN	43	A	C6-N6	-12.45	1.24	1.33
96	lO	16	A	C6-N6	-12.45	1.24	1.33
74	l2	14	A	C6-N6	-12.45	1.24	1.33
83	lB	23	A	C6-N6	-12.45	1.24	1.33
75	l3	23	A	C6-N6	-12.45	1.24	1.33
82	lA	10	A	C6-N6	-12.44	1.24	1.33
76	l4	65	A	C6-N6	-12.44	1.24	1.33
85	lD	9	A	C6-N6	-12.44	1.24	1.33
86	lE	6	A	C6-N6	-12.44	1.24	1.33
90	lI	35	A	C6-N6	-12.44	1.24	1.33
73	l1	45	A	C6-N6	-12.44	1.24	1.33
76	l4	52	A	C6-N6	-12.44	1.24	1.33
81	l9	61	A	C6-N6	-12.44	1.24	1.33
90	lI	42	A	C6-N6	-12.44	1.24	1.33
94	lM	129	A	C6-N6	-12.44	1.24	1.33
95	lN	22	A	C6-N6	-12.44	1.24	1.33
87	lF	79	A	C6-N6	-12.43	1.24	1.33
76	l4	42	A	C6-N6	-12.43	1.24	1.33
94	lM	31	A	C6-N6	-12.43	1.24	1.33
96	lO	6	A	C6-N6	-12.43	1.24	1.33
79	l7	68	A	C6-N6	-12.42	1.24	1.33
76	l4	35	A	C6-N6	-12.42	1.24	1.33
96	lO	45	A	C6-N6	-12.42	1.24	1.33
91	lJ	20	A	C6-N6	-12.41	1.24	1.33
94	lM	96	A	C6-N6	-12.41	1.24	1.33
96	lO	65	A	C6-N6	-12.41	1.24	1.33
96	lO	104	A	C6-N6	-12.41	1.24	1.33
87	lF	88	A	C6-N6	-12.40	1.24	1.33
91	lJ	281	A	C6-N6	-12.40	1.24	1.33
94	lM	77	A	C6-N6	-12.40	1.24	1.33
73	l1	20	A	C6-N6	-12.40	1.24	1.33
93	lL	45	A	C6-N6	-12.39	1.24	1.33
96	lO	118	A	C6-N6	-12.39	1.24	1.33
87	lF	80	A	C6-N6	-12.38	1.24	1.33
96	lO	42	A	C6-N6	-12.38	1.24	1.33
75	l3	8	A	C6-N6	-12.37	1.24	1.33
81	l9	69	A	C6-N6	-12.37	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	lB	13	A	C6-N6	-12.37	1.24	1.33
92	lK	16	A	C6-N6	-12.36	1.24	1.33
93	lL	73	A	C6-N6	-12.36	1.24	1.33
94	lM	83	A	C6-N6	-12.35	1.24	1.33
90	lI	36	A	C6-N6	-12.35	1.24	1.33
86	lE	8	A	C6-N6	-12.33	1.24	1.33
76	l4	15	A	C6-N6	-12.31	1.24	1.33
91	lJ	282	A	C6-N6	-12.31	1.24	1.33
91	lJ	252	A	C6-N6	-12.26	1.24	1.33
95	lN	18	A	C6-N6	-12.26	1.24	1.33
87	lF	57	A	C6-N6	-12.19	1.24	1.33
74	l2	31	A	C6-N6	-12.19	1.24	1.33
91	lJ	278	A	C6-N6	-12.08	1.24	1.33
94	lM	87	C	C4-N4	-11.39	1.23	1.33
91	lJ	177	C	C4-N4	-11.36	1.23	1.33
91	lJ	272	C	C4-N4	-11.35	1.23	1.33
86	lE	23	C	C4-N4	-11.28	1.23	1.33
91	lJ	174	C	C4-N4	-11.28	1.23	1.33
91	lJ	184	C	C4-N4	-11.27	1.23	1.33
91	lJ	271	C	C4-N4	-11.27	1.23	1.33
96	lO	145	C	C4-N4	-11.27	1.23	1.33
81	l9	10	C	C4-N4	-11.26	1.23	1.33
95	lN	2	C	C4-N4	-11.26	1.23	1.33
84	lC	11	C	C4-N4	-11.26	1.23	1.33
78	l6	26	C	C4-N4	-11.25	1.23	1.33
76	l4	49	C	C4-N4	-11.25	1.23	1.33
76	l4	64	C	C4-N4	-11.24	1.23	1.33
81	l9	9	C	C4-N4	-11.24	1.23	1.33
81	l9	70	C	C4-N4	-11.24	1.23	1.33
94	lM	76	C	C4-N4	-11.24	1.23	1.33
91	lJ	197	C	C4-N4	-11.23	1.23	1.33
72	l0	40	C	C4-N4	-11.23	1.23	1.33
72	l0	36	C	C4-N4	-11.22	1.23	1.33
92	lK	19	C	C4-N4	-11.22	1.23	1.33
90	lI	15	C	C4-N4	-11.22	1.23	1.33
94	lM	79	C	C4-N4	-11.22	1.23	1.33
91	lJ	273	C	C4-N4	-11.22	1.23	1.33
94	lM	73	C	C4-N4	-11.22	1.23	1.33
81	l9	27	C	C4-N4	-11.21	1.23	1.33
72	l0	41	C	C4-N4	-11.20	1.23	1.33
96	lO	11	C	C4-N4	-11.20	1.23	1.33
87	lF	12	C	C4-N4	-11.20	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	l9	82	C	C4-N4	-11.20	1.23	1.33
91	lJ	43	C	C4-N4	-11.19	1.23	1.33
82	lA	12	C	C4-N4	-11.19	1.23	1.33
87	lF	9	C	C4-N4	-11.18	1.23	1.33
87	lF	22	C	C4-N4	-11.18	1.23	1.33
94	lM	32	C	C4-N4	-11.17	1.23	1.33
77	l5	28	C	C4-N4	-11.17	1.23	1.33
76	l4	30	C	C4-N4	-11.16	1.24	1.33
81	l9	17	C	C4-N4	-11.16	1.24	1.33
88	lG	19	C	C4-N4	-11.16	1.24	1.33
81	l9	52	C	C4-N4	-11.16	1.24	1.33
91	lJ	172	C	C4-N4	-11.16	1.24	1.33
94	lM	78	C	C4-N4	-11.15	1.24	1.33
96	lO	70	C	C4-N4	-11.15	1.24	1.33
96	lO	109	C	C4-N4	-11.15	1.24	1.33
83	lB	30	C	C4-N4	-11.15	1.24	1.33
75	l3	50	C	C4-N4	-11.15	1.24	1.33
91	lJ	22	C	C4-N4	-11.15	1.24	1.33
78	l6	23	C	C4-N4	-11.15	1.24	1.33
85	lD	14	C	C4-N4	-11.15	1.24	1.33
76	l4	2	C	C4-N4	-11.14	1.24	1.33
93	lL	52	C	C4-N4	-11.14	1.24	1.33
96	lO	49	C	C4-N4	-11.14	1.24	1.33
96	lO	36	C	C4-N4	-11.13	1.24	1.33
91	lJ	19	C	C4-N4	-11.13	1.24	1.33
85	lD	11	C	C4-N4	-11.13	1.24	1.33
94	lM	130	C	C4-N4	-11.13	1.24	1.33
96	lO	121	C	C4-N4	-11.12	1.24	1.33
81	l9	42	C	C4-N4	-11.12	1.24	1.33
93	lL	44	C	C4-N4	-11.12	1.24	1.33
74	l2	16	C	C4-N4	-11.12	1.24	1.33
82	lA	18	C	C4-N4	-11.11	1.24	1.33
91	lJ	44	C	C4-N4	-11.11	1.24	1.33
94	lM	90	C	C4-N4	-11.11	1.24	1.33
96	lO	153	C	C4-N4	-11.11	1.24	1.33
94	lM	155	C	C4-N4	-11.11	1.24	1.33
91	lJ	8	C	C4-N4	-11.11	1.24	1.33
96	lO	67	C	C4-N4	-11.11	1.24	1.33
81	l9	37	C	C4-N4	-11.10	1.24	1.33
91	lJ	137	C	C4-N4	-11.10	1.24	1.33
73	l1	3	C	C4-N4	-11.09	1.24	1.33
86	lE	4	C	C4-N4	-11.09	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	l5	43	C	C4-N4	-11.09	1.24	1.33
92	lK	4	C	C4-N4	-11.09	1.24	1.33
83	lB	20	C	C4-N4	-11.09	1.24	1.33
81	l9	29	C	C4-N4	-11.08	1.24	1.33
83	lB	26	C	C4-N4	-11.08	1.24	1.33
93	lL	58	C	C4-N4	-11.08	1.24	1.33
95	lN	29	C	C4-N4	-11.07	1.24	1.33
75	l3	55	C	C4-N4	-11.07	1.24	1.33
93	lL	31	C	C4-N4	-11.07	1.24	1.33
91	lJ	191	C	C4-N4	-11.07	1.24	1.33
95	lN	26	C	C4-N4	-11.07	1.24	1.33
96	lO	13	C	C4-N4	-11.06	1.24	1.33
81	l9	50	C	C4-N4	-11.06	1.24	1.33
85	lD	6	C	C4-N4	-11.06	1.24	1.33
88	lG	11	C	C4-N4	-11.06	1.24	1.33
76	l4	55	C	C4-N4	-11.05	1.24	1.33
76	l4	29	C	C4-N4	-11.05	1.24	1.33
91	lJ	131	C	C4-N4	-11.05	1.24	1.33
96	lO	86	C	C4-N4	-11.05	1.24	1.33
93	lL	76	C	C4-N4	-11.05	1.24	1.33
91	lJ	100	C	C4-N4	-11.05	1.24	1.33
91	lJ	280	C	C4-N4	-11.05	1.24	1.33
94	lM	144	C	C4-N4	-11.05	1.24	1.33
91	lJ	232	C	C4-N4	-11.04	1.24	1.33
96	lO	125	C	C4-N4	-11.04	1.24	1.33
73	l1	19	C	C4-N4	-11.04	1.24	1.33
94	lM	161	C	C4-N4	-11.04	1.24	1.33
92	lK	2	C	C4-N4	-11.03	1.24	1.33
91	lJ	132	C	C4-N4	-11.03	1.24	1.33
73	l1	34	C	C4-N4	-11.02	1.24	1.33
91	lJ	148	C	C4-N4	-11.02	1.24	1.33
75	l3	54	C	C4-N4	-11.01	1.24	1.33
76	l4	31	C	C4-N4	-11.01	1.24	1.33
73	l1	21	C	C4-N4	-11.01	1.24	1.33
91	lJ	253	C	C4-N4	-11.00	1.24	1.33
75	l3	26	C	C4-N4	-11.00	1.24	1.33
94	lM	198	C	C4-N4	-10.99	1.24	1.33
90	lI	16	C	C4-N4	-10.99	1.24	1.33
76	l4	46	C	C4-N4	-10.99	1.24	1.33
91	lJ	255	C	C4-N4	-10.99	1.24	1.33
95	lN	32	C	C4-N4	-10.98	1.24	1.33
81	l9	43	C	C4-N4	-10.98	1.24	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	168	C	C4-N4	-10.98	1.24	1.33
94	lM	92	C	C4-N4	-10.97	1.24	1.33
96	lO	61	C	C4-N4	-10.97	1.24	1.33
91	lJ	169	C	C4-N4	-10.96	1.24	1.33
73	l1	9	C	C4-N4	-10.94	1.24	1.33
81	l9	59	C	C4-N4	-10.94	1.24	1.33
75	l3	22	C	C4-N4	-10.92	1.24	1.33
96	lO	117	C	C4-N4	-10.85	1.24	1.33
91	lJ	254	C	C4-N4	-10.81	1.24	1.33
90	lI	17	G	C2-N2	-10.21	1.24	1.34
94	lM	149	G	C2-N2	-10.21	1.24	1.34
77	l5	40	G	C2-N2	-10.20	1.24	1.34
96	lO	105	G	C2-N2	-10.19	1.24	1.34
96	lO	163	G	C2-N2	-10.19	1.24	1.34
93	lL	64	G	C2-N2	-10.18	1.24	1.34
96	lO	43	G	C2-N2	-10.17	1.24	1.34
91	lJ	9	G	C2-N2	-10.16	1.24	1.34
79	l7	49	G	C2-N2	-10.15	1.24	1.34
83	lB	8	G	C2-N2	-10.15	1.24	1.34
87	lF	24	G	C2-N2	-10.14	1.24	1.34
91	lJ	5	G	C2-N2	-10.14	1.24	1.34
91	lJ	102	G	C2-N2	-10.13	1.24	1.34
74	l2	3	G	C2-N2	-10.13	1.24	1.34
93	lL	38	G	C2-N2	-10.12	1.24	1.34
91	lJ	165	G	C2-N2	-10.12	1.24	1.34
94	lM	165	G	C2-N2	-10.11	1.24	1.34
91	lJ	139	G	C2-N2	-10.11	1.24	1.34
74	l2	7	G	C2-N2	-10.11	1.24	1.34
91	lJ	125	G	C2-N2	-10.11	1.24	1.34
76	l4	67	G	C2-N2	-10.11	1.24	1.34
83	lB	22	G	C2-N2	-10.10	1.24	1.34
93	lL	39	G	C2-N2	-10.10	1.24	1.34
94	lM	89	G	C2-N2	-10.10	1.24	1.34
83	lB	31	G	C2-N2	-10.10	1.24	1.34
91	lJ	182	G	C2-N2	-10.10	1.24	1.34
82	lA	20	G	C2-N2	-10.09	1.24	1.34
91	lJ	135	G	C2-N2	-10.09	1.24	1.34
72	l0	18	G	C2-N2	-10.09	1.24	1.34
91	lJ	156	G	C2-N2	-10.08	1.24	1.34
93	lL	32	G	C2-N2	-10.08	1.24	1.34
82	lA	1	G	C2-N2	-10.08	1.24	1.34
76	l4	86	G	C2-N2	-10.08	1.24	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	l5	60	G	C2-N2	-10.08	1.24	1.34
91	lJ	185	G	C2-N2	-10.08	1.24	1.34
91	lJ	229	G	C2-N2	-10.08	1.24	1.34
76	l4	27	G	C2-N2	-10.07	1.24	1.34
93	lL	2	G	C2-N2	-10.07	1.24	1.34
96	lO	33	G	C2-N2	-10.07	1.24	1.34
96	lO	107	G	C2-N2	-10.07	1.24	1.34
75	l3	51	G	C2-N2	-10.07	1.24	1.34
76	l4	32	G	C2-N2	-10.06	1.24	1.34
78	l6	22	G	C2-N2	-10.06	1.24	1.34
81	l9	24	G	C2-N2	-10.06	1.24	1.34
95	lN	35	G	C2-N2	-10.06	1.24	1.34
73	l1	13	G	C2-N2	-10.05	1.24	1.34
88	lG	10	G	C2-N2	-10.06	1.24	1.34
94	lM	27	G	C2-N2	-10.06	1.24	1.34
76	l4	60	G	C2-N2	-10.05	1.24	1.34
91	lJ	112	G	C2-N2	-10.05	1.24	1.34
96	lO	115	G	C2-N2	-10.05	1.24	1.34
82	lA	49	G	C2-N2	-10.05	1.24	1.34
91	lJ	166	G	C2-N2	-10.05	1.24	1.34
76	l4	59	G	C2-N2	-10.05	1.24	1.34
76	l4	62	G	C2-N2	-10.05	1.24	1.34
81	l9	39	G	C2-N2	-10.05	1.24	1.34
92	lK	14	G	C2-N2	-10.05	1.24	1.34
87	lF	29	G	C2-N2	-10.04	1.24	1.34
87	lF	64	G	C2-N2	-10.04	1.24	1.34
91	lJ	16	G	C2-N2	-10.04	1.24	1.34
91	lJ	203	G	C2-N2	-10.04	1.24	1.34
96	lO	71	G	C2-N2	-10.04	1.24	1.34
77	l5	32	G	C2-N2	-10.04	1.24	1.34
72	l0	37	G	C2-N2	-10.03	1.24	1.34
91	lJ	124	G	C2-N2	-10.03	1.24	1.34
91	lJ	238	G	C2-N2	-10.03	1.24	1.34
96	lO	17	G	C2-N2	-10.03	1.24	1.34
72	l0	42	G	C2-N2	-10.03	1.24	1.34
91	lJ	170	G	C2-N2	-10.03	1.24	1.34
91	lJ	226	G	C2-N2	-10.02	1.24	1.34
74	l2	15	G	C2-N2	-10.02	1.24	1.34
91	lJ	209	G	C2-N2	-10.02	1.24	1.34
93	lL	60	G	C2-N2	-10.02	1.24	1.34
75	l3	53	G	C2-N2	-10.02	1.24	1.34
95	lN	41	G	C2-N2	-10.02	1.24	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
94	lM	156	G	C2-N2	-10.02	1.24	1.34
78	l6	24	G	C2-N2	-10.02	1.24	1.34
90	lI	19	G	C2-N2	-10.02	1.24	1.34
91	lJ	140	G	C2-N2	-10.02	1.24	1.34
81	l9	74	G	C2-N2	-10.01	1.24	1.34
83	lB	44	G	C2-N2	-10.01	1.24	1.34
81	l9	73	G	C2-N2	-10.01	1.24	1.34
95	lN	24	G	C2-N2	-10.01	1.24	1.34
90	lI	5	G	C2-N2	-10.01	1.24	1.34
79	l7	52	G	C2-N2	-10.01	1.24	1.34
76	l4	48	G	C2-N2	-10.00	1.24	1.34
87	lF	14	G	C2-N2	-10.00	1.24	1.34
90	lI	22	G	C2-N2	-10.00	1.24	1.34
86	lE	27	G	C2-N2	-10.00	1.24	1.34
91	lJ	233	G	C2-N2	-10.00	1.24	1.34
73	l1	36	G	C2-N2	-10.00	1.24	1.34
96	lO	89	G	C2-N2	-10.00	1.24	1.34
86	lE	3	G	C2-N2	-9.99	1.24	1.34
93	lL	49	G	C2-N2	-9.99	1.24	1.34
86	lE	7	G	C2-N2	-9.99	1.24	1.34
89	lH	14	G	C2-N2	-9.99	1.24	1.34
82	lA	50	G	C2-N2	-9.99	1.24	1.34
83	lB	40	G	C2-N2	-9.99	1.24	1.34
94	lM	40	A	C6-N6	-9.99	1.25	1.33
96	lO	108	G	C2-N2	-9.99	1.24	1.34
94	lM	34	G	C2-N2	-9.98	1.24	1.34
96	lO	8	G	C2-N2	-9.98	1.24	1.34
96	lO	69	G	C2-N2	-9.98	1.24	1.34
81	l9	54	G	C2-N2	-9.98	1.24	1.34
96	lO	160	G	C2-N2	-9.98	1.24	1.34
73	l1	7	G	C2-N2	-9.97	1.24	1.34
83	lB	42	G	C2-N2	-9.97	1.24	1.34
74	l2	21	G	C2-N2	-9.97	1.24	1.34
90	lI	18	G	C2-N2	-9.97	1.24	1.34
91	lJ	255	C	C5-C6	-9.97	1.26	1.34
81	l9	47	G	C2-N2	-9.97	1.24	1.34
77	l5	34	G	C2-N2	-9.96	1.24	1.34
81	l9	66	G	C2-N2	-9.96	1.24	1.34
91	lJ	113	G	C2-N2	-9.96	1.24	1.34
73	l1	4	G	C2-N2	-9.96	1.24	1.34
79	l7	55	G	C2-N2	-9.96	1.24	1.34
84	lC	26	G	C2-N2	-9.96	1.24	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	138	G	C2-N2	-9.96	1.24	1.34
93	lL	77	G	C2-N2	-9.96	1.24	1.34
87	lF	34	G	C2-N2	-9.96	1.24	1.34
89	lH	6	G	C2-N2	-9.96	1.24	1.34
75	l3	38	G	C2-N2	-9.95	1.24	1.34
79	l7	54	G	C2-N2	-9.95	1.24	1.34
76	l4	57	G	C2-N2	-9.95	1.24	1.34
89	lH	17	G	C2-N2	-9.95	1.24	1.34
75	l3	21	G	C2-N2	-9.95	1.24	1.34
91	lJ	251	G	C2-N2	-9.95	1.24	1.34
96	lO	166	G	C2-N2	-9.94	1.24	1.34
86	lE	5	G	C2-N2	-9.94	1.24	1.34
78	l6	20	G	C2-N2	-9.94	1.24	1.34
94	lM	122	G	C2-N2	-9.94	1.24	1.34
83	lB	43	G	C2-N2	-9.94	1.24	1.34
88	lG	18	G	C2-N2	-9.94	1.24	1.34
76	l4	20	G	C2-N2	-9.93	1.24	1.34
76	l4	43	G	C2-N2	-9.93	1.24	1.34
81	l9	56	G	C2-N2	-9.93	1.24	1.34
83	lB	4	G	C2-N2	-9.92	1.24	1.34
91	lJ	177	C	C5-C6	-9.92	1.26	1.34
96	lO	31	G	C2-N2	-9.92	1.24	1.34
94	lM	163	G	C2-N2	-9.90	1.24	1.34
90	lI	4	G	C2-N2	-9.90	1.24	1.34
81	l9	58	G	C2-N2	-9.89	1.24	1.34
94	lM	26	G	C2-N2	-9.89	1.24	1.34
94	lM	25	G	C2-N2	-9.89	1.24	1.34
91	lJ	271	C	C5-C6	-9.88	1.26	1.34
81	l9	51	G	C2-N2	-9.88	1.24	1.34
93	lL	3	G	C2-N2	-9.88	1.24	1.34
75	l3	24	C	C5-C6	-9.87	1.26	1.34
91	lJ	272	C	C5-C6	-9.83	1.26	1.34
96	lO	138	G	C2-N2	-9.82	1.24	1.34
87	lF	17	G	C2-N2	-9.82	1.24	1.34
85	lD	11	C	C5-C6	-9.79	1.26	1.34
88	lG	11	C	C5-C6	-9.79	1.26	1.34
96	lO	90	G	C2-N2	-9.79	1.24	1.34
96	lO	139	G	C2-N2	-9.79	1.24	1.34
78	l6	4	G	C2-N2	-9.77	1.24	1.34
91	lJ	168	C	C5-C6	-9.77	1.26	1.34
91	lJ	148	C	C5-C6	-9.75	1.26	1.34
81	l9	37	C	C5-C6	-9.74	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
94	lM	32	C	C5-C6	-9.69	1.26	1.34
75	l3	26	C	C5-C6	-9.68	1.26	1.34
76	l4	2	C	C5-C6	-9.68	1.26	1.34
91	lJ	137	C	C5-C6	-9.67	1.26	1.34
94	lM	74	A	C6-N6	-9.67	1.26	1.33
96	lO	67	C	C5-C6	-9.66	1.26	1.34
94	lM	144	C	C5-C6	-9.65	1.26	1.34
72	l0	36	C	C5-C6	-9.64	1.26	1.34
77	l5	43	C	C5-C6	-9.64	1.26	1.34
75	l3	55	C	C5-C6	-9.62	1.26	1.34
93	lL	58	C	C5-C6	-9.62	1.26	1.34
75	l3	50	C	C5-C6	-9.62	1.26	1.34
81	l9	70	C	C5-C6	-9.62	1.26	1.34
92	lK	19	C	C5-C6	-9.62	1.26	1.34
82	lA	12	C	C5-C6	-9.61	1.26	1.34
96	lO	61	C	C5-C6	-9.61	1.26	1.34
91	lJ	254	C	C5-C6	-9.61	1.26	1.34
81	l9	59	C	C5-C6	-9.60	1.26	1.34
81	l9	52	C	C5-C6	-9.59	1.26	1.34
75	l3	24	C	C4-N4	-9.59	1.25	1.33
83	lB	26	C	C5-C6	-9.58	1.26	1.34
76	l4	46	C	C5-C6	-9.58	1.26	1.34
77	l5	28	C	C5-C6	-9.58	1.26	1.34
92	lK	4	C	C5-C6	-9.58	1.26	1.34
94	lM	73	C	C5-C6	-9.58	1.26	1.34
73	l1	21	C	C5-C6	-9.57	1.26	1.34
75	l3	22	C	C5-C6	-9.57	1.26	1.34
96	lO	13	C	C5-C6	-9.57	1.26	1.34
91	lJ	8	C	C5-C6	-9.56	1.26	1.34
95	lN	2	C	C5-C6	-9.56	1.26	1.34
87	lF	22	C	C5-C6	-9.55	1.26	1.34
96	lO	36	C	C5-C6	-9.55	1.26	1.34
83	lB	30	C	C5-C6	-9.55	1.26	1.34
93	lL	52	C	C5-C6	-9.54	1.26	1.34
93	lL	31	C	C5-C6	-9.54	1.26	1.34
74	l2	16	C	C5-C6	-9.54	1.26	1.34
94	lM	92	C	C5-C6	-9.53	1.26	1.34
96	lO	125	C	C5-C6	-9.53	1.26	1.34
76	l4	30	C	C5-C6	-9.52	1.26	1.34
85	lD	6	C	C5-C6	-9.52	1.26	1.34
91	lJ	184	C	C5-C6	-9.52	1.26	1.34
96	lO	70	C	C5-C6	-9.52	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
73	l1	34	C	C5-C6	-9.52	1.26	1.34
94	lM	130	C	C5-C6	-9.52	1.26	1.34
90	lI	16	C	C5-C6	-9.52	1.26	1.34
90	lI	15	C	C5-C6	-9.51	1.26	1.34
96	lO	117	C	C5-C6	-9.51	1.26	1.34
81	l9	29	C	C5-C6	-9.51	1.26	1.34
81	l9	43	C	C5-C6	-9.51	1.26	1.34
96	lO	109	C	C5-C6	-9.51	1.26	1.34
81	l9	50	C	C5-C6	-9.50	1.26	1.34
91	lJ	280	C	C5-C6	-9.50	1.26	1.34
73	l1	9	C	C5-C6	-9.50	1.26	1.34
96	lO	153	C	C5-C6	-9.50	1.26	1.34
83	lB	20	C	C5-C6	-9.49	1.26	1.34
96	lO	11	C	C5-C6	-9.49	1.26	1.34
94	lM	161	C	C5-C6	-9.49	1.26	1.34
72	l0	41	C	C5-C6	-9.49	1.26	1.34
73	l1	3	C	C5-C6	-9.48	1.26	1.34
94	lM	87	C	C5-C6	-9.48	1.26	1.34
95	lN	26	C	C5-C6	-9.48	1.26	1.34
87	lF	9	C	C5-C6	-9.48	1.26	1.34
87	lF	12	C	C5-C6	-9.48	1.26	1.34
76	l4	64	C	C5-C6	-9.47	1.26	1.34
88	lG	19	C	C5-C6	-9.47	1.26	1.34
81	l9	82	C	C5-C6	-9.47	1.26	1.34
91	lJ	44	C	C5-C6	-9.46	1.26	1.34
86	lE	4	C	C5-C6	-9.46	1.26	1.34
91	lJ	232	C	C5-C6	-9.46	1.26	1.34
92	lK	2	C	C5-C6	-9.46	1.26	1.34
96	lO	49	C	C5-C6	-9.46	1.26	1.34
94	lM	155	C	C5-C6	-9.46	1.26	1.34
94	lM	76	C	C5-C6	-9.45	1.26	1.34
91	lJ	172	C	C5-C6	-9.45	1.26	1.34
75	l3	54	C	C5-C6	-9.44	1.26	1.34
76	l4	29	C	C5-C6	-9.44	1.26	1.34
91	lJ	197	C	C5-C6	-9.44	1.26	1.34
86	lE	23	C	C5-C6	-9.44	1.26	1.34
93	lL	76	C	C5-C6	-9.44	1.26	1.34
76	l4	31	C	C5-C6	-9.43	1.26	1.34
81	l9	9	C	C5-C6	-9.42	1.26	1.34
73	l1	19	C	C5-C6	-9.42	1.26	1.34
91	lJ	100	C	C5-C6	-9.42	1.26	1.34
94	lM	78	C	C5-C6	-9.42	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	273	C	C5-C6	-9.42	1.26	1.34
84	lC	11	C	C5-C6	-9.42	1.26	1.34
94	lM	79	C	C5-C6	-9.42	1.26	1.34
91	lJ	19	C	C5-C6	-9.41	1.26	1.34
91	lJ	132	C	C5-C6	-9.41	1.26	1.34
96	lO	121	C	C5-C6	-9.41	1.26	1.34
96	lO	86	C	C5-C6	-9.41	1.26	1.34
72	l0	40	C	C5-C6	-9.40	1.26	1.34
81	l9	17	C	C5-C6	-9.40	1.26	1.34
93	lL	44	C	C5-C6	-9.40	1.26	1.34
95	lN	29	C	C5-C6	-9.40	1.26	1.34
85	lD	14	C	C5-C6	-9.39	1.26	1.34
78	l6	26	C	C5-C6	-9.38	1.26	1.34
81	l9	42	C	C5-C6	-9.38	1.26	1.34
76	l4	49	C	C5-C6	-9.37	1.26	1.34
91	lJ	22	C	C5-C6	-9.37	1.26	1.34
95	lN	32	C	C5-C6	-9.36	1.26	1.34
78	l6	23	C	C5-C6	-9.36	1.26	1.34
91	lJ	174	C	C5-C6	-9.34	1.26	1.34
91	lJ	191	C	C5-C6	-9.32	1.26	1.34
94	lM	90	C	C5-C6	-9.31	1.26	1.34
91	lJ	131	C	C5-C6	-9.31	1.26	1.34
76	l4	55	C	C5-C6	-9.29	1.26	1.34
81	l9	10	C	C5-C6	-9.29	1.26	1.34
94	lM	198	C	C5-C6	-9.29	1.26	1.34
82	lA	18	C	C5-C6	-9.27	1.26	1.34
96	lO	145	C	C5-C6	-9.25	1.26	1.34
81	l9	27	C	C5-C6	-9.24	1.26	1.34
91	lJ	169	C	C5-C6	-9.21	1.26	1.34
91	lJ	253	C	C5-C6	-9.17	1.27	1.34
91	lJ	43	C	C5-C6	-8.99	1.27	1.34
76	l4	4	U	C5-C6	-8.71	1.26	1.34
77	l5	35	U	C5-C6	-8.65	1.26	1.34
96	lO	103	U	C5-C6	-8.58	1.26	1.34
96	lO	95	U	C5-C6	-8.54	1.26	1.34
76	l4	5	U	C5-C6	-8.52	1.26	1.34
91	lJ	49	U	C5-C6	-8.51	1.26	1.34
76	l4	3	U	C5-C6	-8.48	1.26	1.34
96	lO	44	U	C5-C6	-8.47	1.26	1.34
95	lN	21	U	C5-C6	-8.42	1.26	1.34
94	lM	95	U	C5-C6	-8.36	1.26	1.34
75	l3	34	U	C5-C6	-8.35	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
98	lQ	6	U	C5-C6	-8.34	1.26	1.34
101	lT	1	U	C5-C6	-8.33	1.26	1.34
94	lM	29	U	C5-C6	-8.32	1.26	1.34
96	lO	1	U	C5-C6	-8.32	1.26	1.34
99	lR	28	U	C5-C6	-8.32	1.26	1.34
76	l4	51	U	C5-C6	-8.32	1.26	1.34
83	lB	24	U	C5-C6	-8.30	1.26	1.34
93	lL	68	U	C5-C6	-8.31	1.26	1.34
91	lJ	275	U	C5-C6	-8.30	1.26	1.34
91	lJ	248	U	C5-C6	-8.30	1.26	1.34
77	l5	41	U	C5-C6	-8.30	1.26	1.34
97	lP	23	U	C5-C6	-8.30	1.26	1.34
77	l5	33	U	C5-C6	-8.28	1.26	1.34
97	lP	7	U	C5-C6	-8.28	1.26	1.34
99	lR	20	U	C5-C6	-8.28	1.26	1.34
75	l3	25	U	C5-C6	-8.27	1.26	1.34
93	lL	65	U	C5-C6	-8.27	1.26	1.34
91	lJ	192	U	C5-C6	-8.27	1.26	1.34
96	lO	96	U	C5-C6	-8.27	1.26	1.34
101	lT	4	U	C5-C6	-8.27	1.26	1.34
93	lL	33	U	C5-C6	-8.27	1.26	1.34
96	lO	85	U	C5-C6	-8.27	1.26	1.34
73	l1	6	U	C5-C6	-8.26	1.26	1.34
91	lJ	279	U	C5-C6	-8.26	1.26	1.34
91	lJ	17	U	C5-C6	-8.26	1.26	1.34
96	lO	37	U	C5-C6	-8.26	1.26	1.34
99	lR	17	U	C5-C6	-8.26	1.26	1.34
104	lX	6	U	C5-C6	-8.26	1.26	1.34
102	lU	15	U	C5-C6	-8.26	1.26	1.34
83	lB	18	U	C5-C6	-8.25	1.26	1.34
102	lU	1	U	C5-C6	-8.25	1.26	1.34
98	lQ	13	U	C5-C6	-8.25	1.26	1.34
81	l9	60	U	C5-C6	-8.25	1.26	1.34
96	lO	102	U	C5-C6	-8.25	1.26	1.34
87	lF	77	U	C5-C6	-8.25	1.26	1.34
73	l1	2	U	C5-C6	-8.24	1.26	1.34
96	lO	98	U	C5-C6	-8.24	1.26	1.34
96	lO	154	U	C5-C6	-8.24	1.26	1.34
77	l5	30	U	C5-C6	-8.24	1.26	1.34
96	lO	152	U	C5-C6	-8.24	1.26	1.34
104	lX	7	U	C5-C6	-8.24	1.26	1.34
79	l7	53	U	C5-C6	-8.24	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
96	lO	41	U	C5-C6	-8.24	1.26	1.34
81	l9	36	U	C5-C6	-8.23	1.26	1.34
91	lJ	274	U	C5-C6	-8.23	1.26	1.34
98	lQ	11	U	C5-C6	-8.23	1.26	1.34
103	lV	3	U	C5-C6	-8.23	1.26	1.34
98	lQ	7	U	C5-C6	-8.23	1.26	1.34
91	lJ	207	U	C5-C6	-8.23	1.26	1.34
73	l1	5	U	C5-C6	-8.22	1.26	1.34
73	l1	14	U	C5-C6	-8.22	1.26	1.34
91	lJ	186	U	C5-C6	-8.22	1.26	1.34
98	lQ	31	U	C5-C6	-8.22	1.26	1.34
91	lJ	147	U	C5-C6	-8.22	1.26	1.34
104	lX	14	U	C5-C6	-8.22	1.26	1.34
87	lF	30	U	C5-C6	-8.21	1.26	1.34
94	lM	91	U	C5-C6	-8.22	1.26	1.34
99	lR	13	U	C5-C6	-8.21	1.26	1.34
87	lF	66	U	C5-C6	-8.21	1.26	1.34
93	lL	67	U	C5-C6	-8.21	1.26	1.34
79	l7	40	U	C5-C6	-8.21	1.26	1.34
87	lF	33	U	C5-C6	-8.21	1.26	1.34
91	lJ	101	U	C5-C6	-8.21	1.26	1.34
91	lJ	181	U	C5-C6	-8.21	1.26	1.34
96	lO	57	U	C5-C6	-8.21	1.26	1.34
91	lJ	21	U	C5-C6	-8.21	1.26	1.34
91	lJ	190	U	C5-C6	-8.21	1.26	1.34
95	lN	28	U	C5-C6	-8.21	1.26	1.34
96	lO	2	U	C5-C6	-8.21	1.26	1.34
81	l9	38	U	C5-C6	-8.21	1.26	1.34
99	lR	14	U	C5-C6	-8.21	1.26	1.34
101	lT	5	U	C5-C6	-8.20	1.26	1.34
79	l7	7	U	C5-C6	-8.20	1.26	1.34
72	l0	39	U	C5-C6	-8.20	1.26	1.34
87	lF	15	U	C5-C6	-8.20	1.26	1.34
91	lJ	167	U	C5-C6	-8.20	1.26	1.34
99	lR	21	U	C5-C6	-8.20	1.26	1.34
91	lJ	213	U	C5-C6	-8.20	1.26	1.34
104	lX	53	U	C5-C6	-8.20	1.26	1.34
76	l4	34	U	C5-C6	-8.20	1.26	1.34
76	l4	44	U	C5-C6	-8.20	1.26	1.34
91	lJ	130	U	C5-C6	-8.20	1.26	1.34
98	lQ	15	U	C5-C6	-8.20	1.26	1.34
93	lL	62	U	C5-C6	-8.20	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
74	l2	22	U	C5-C6	-8.20	1.26	1.34
103	lV	5	U	C5-C6	-8.20	1.26	1.34
96	lO	12	U	C5-C6	-8.19	1.26	1.34
99	lR	15	U	C5-C6	-8.19	1.26	1.34
76	l4	47	U	C5-C6	-8.19	1.26	1.34
76	l4	89	U	C5-C6	-8.19	1.26	1.34
86	lE	22	U	C5-C6	-8.19	1.26	1.34
94	lM	197	U	C5-C6	-8.19	1.26	1.34
76	l4	23	U	C5-C6	-8.18	1.26	1.34
85	lD	2	U	C5-C6	-8.18	1.26	1.34
97	lP	28	U	C5-C6	-8.18	1.26	1.34
98	lQ	16	U	C5-C6	-8.18	1.26	1.34
98	lQ	3	U	C5-C6	-8.18	1.26	1.34
93	lL	37	U	C5-C6	-8.18	1.26	1.34
99	lR	19	U	C5-C6	-8.18	1.26	1.34
76	l4	28	U	C5-C6	-8.17	1.26	1.34
93	lL	53	U	C5-C6	-8.17	1.26	1.34
102	lU	2	U	C5-C6	-8.17	1.26	1.34
85	lD	3	U	C5-C6	-8.17	1.26	1.34
93	lL	1	U	C5-C6	-8.17	1.26	1.34
98	lQ	30	U	C5-C6	-8.17	1.26	1.34
92	lK	29	U	C5-C6	-8.17	1.26	1.34
81	l9	64	U	C5-C6	-8.16	1.26	1.34
87	lF	19	U	C5-C6	-8.16	1.26	1.34
99	lR	11	U	C5-C6	-8.16	1.26	1.34
78	l6	18	U	C5-C6	-8.16	1.26	1.34
83	lB	16	U	C5-C6	-8.16	1.26	1.34
94	lM	124	U	C5-C6	-8.16	1.26	1.34
101	lW	14	U	C5-C6	-8.16	1.26	1.34
76	l4	10	U	C5-C6	-8.16	1.26	1.34
91	lJ	164	U	C5-C6	-8.16	1.26	1.34
96	lO	156	U	C5-C6	-8.16	1.26	1.34
97	lP	26	U	C5-C6	-8.16	1.26	1.34
97	lP	29	U	C5-C6	-8.16	1.26	1.34
97	lP	1	U	C5-C6	-8.16	1.26	1.34
89	lH	18	U	C5-C6	-8.15	1.26	1.34
97	lP	21	U	C5-C6	-8.15	1.26	1.34
91	lJ	141	U	C5-C6	-8.15	1.26	1.34
91	lJ	202	U	C5-C6	-8.15	1.26	1.34
94	lM	84	U	C5-C6	-8.15	1.26	1.34
97	lP	24	U	C5-C6	-8.15	1.26	1.34
73	l1	12	U	C5-C6	-8.15	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
75	l3	11	U	C5-C6	-8.15	1.26	1.34
79	l7	15	U	C5-C6	-8.15	1.26	1.34
81	l9	11	U	C5-C6	-8.15	1.26	1.34
94	lM	148	U	C5-C6	-8.15	1.26	1.34
103	lV	7	U	C5-C6	-8.15	1.26	1.34
74	l2	25	U	C5-C6	-8.14	1.26	1.34
76	l4	93	U	C5-C6	-8.14	1.26	1.34
103	lV	4	U	C5-C6	-8.14	1.26	1.34
104	lX	52	U	C5-C6	-8.14	1.26	1.34
91	lJ	212	U	C5-C6	-8.14	1.26	1.34
78	l6	27	U	C5-C6	-8.14	1.26	1.34
81	l9	33	U	C5-C6	-8.14	1.26	1.34
101	lW	10	U	C5-C6	-8.14	1.26	1.34
76	l4	25	U	C5-C6	-8.14	1.26	1.34
86	lE	21	U	C5-C6	-8.14	1.26	1.34
98	lQ	5	U	C5-C6	-8.14	1.26	1.34
102	lU	10	U	C5-C6	-8.14	1.26	1.34
104	lX	35	U	C5-C6	-8.14	1.26	1.34
95	lN	25	U	C5-C6	-8.13	1.26	1.34
96	lO	73	U	C5-C6	-8.14	1.26	1.34
102	lU	3	U	C5-C6	-8.13	1.26	1.34
76	l4	13	U	C5-C6	-8.13	1.26	1.34
104	lX	1	U	C5-C6	-8.13	1.26	1.34
75	l3	13	U	C5-C6	-8.13	1.26	1.34
79	l7	42	U	C5-C6	-8.13	1.26	1.34
81	l9	55	U	C5-C6	-8.13	1.26	1.34
87	lF	10	U	C5-C6	-8.13	1.26	1.34
96	lO	35	U	C5-C6	-8.13	1.26	1.34
101	lT	14	U	C5-C6	-8.13	1.26	1.34
76	l4	14	U	C5-C6	-8.13	1.26	1.34
81	l9	48	U	C5-C6	-8.13	1.26	1.34
91	lJ	231	U	C5-C6	-8.13	1.26	1.34
99	lR	10	U	C5-C6	-8.13	1.26	1.34
104	lX	50	U	C5-C6	-8.13	1.26	1.34
97	lP	22	U	C5-C6	-8.13	1.26	1.34
82	lA	9	U	C5-C6	-8.12	1.26	1.34
98	lQ	12	U	C5-C6	-8.12	1.26	1.34
96	lO	68	U	C5-C6	-8.12	1.26	1.34
73	l1	1	U	C5-C6	-8.12	1.26	1.34
91	lJ	183	U	C5-C6	-8.12	1.26	1.34
87	lF	18	U	C5-C6	-8.12	1.26	1.34
91	lJ	187	U	C5-C6	-8.12	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	199	U	C5-C6	-8.12	1.26	1.34
96	lO	7	U	C5-C6	-8.12	1.26	1.34
99	lR	12	U	C5-C6	-8.12	1.26	1.34
81	l9	28	U	C5-C6	-8.12	1.26	1.34
91	lJ	198	U	C5-C6	-8.11	1.26	1.34
93	lL	43	U	C5-C6	-8.11	1.26	1.34
79	l7	20	U	C5-C6	-8.11	1.26	1.34
87	lF	21	U	C5-C6	-8.11	1.26	1.34
87	lF	23	U	C5-C6	-8.11	1.26	1.34
102	lU	4	U	C5-C6	-8.11	1.26	1.34
96	lO	46	U	C5-C6	-8.11	1.26	1.34
96	lO	32	U	C5-C6	-8.11	1.26	1.34
98	lQ	29	U	C5-C6	-8.11	1.26	1.34
99	lR	2	U	C5-C6	-8.11	1.26	1.34
99	lR	23	U	C5-C6	-8.11	1.26	1.34
101	lW	12	U	C5-C6	-8.11	1.26	1.34
97	lP	9	U	C5-C6	-8.11	1.26	1.34
101	lW	11	U	C5-C6	-8.11	1.26	1.34
94	lM	2	U	C5-C6	-8.10	1.26	1.34
103	lV	6	U	C5-C6	-8.10	1.26	1.34
76	l4	63	U	C5-C6	-8.10	1.26	1.34
91	lJ	15	U	C5-C6	-8.10	1.26	1.34
95	lN	40	U	C5-C6	-8.10	1.26	1.34
75	l3	47	U	C5-C6	-8.10	1.26	1.34
87	lF	11	U	C5-C6	-8.10	1.26	1.34
96	lO	140	U	C5-C6	-8.10	1.26	1.34
53	Lq	478	ARG	CZ-NH2	-8.09	1.22	1.33
96	lO	56	U	C5-C6	-8.09	1.26	1.34
96	lO	141	U	C5-C6	-8.09	1.26	1.34
104	lX	34	U	C5-C6	-8.09	1.26	1.34
74	l2	6	U	C5-C6	-8.09	1.26	1.34
97	lP	27	U	C5-C6	-8.09	1.26	1.34
91	lJ	175	U	C5-C6	-8.09	1.26	1.34
96	lO	10	U	C5-C6	-8.09	1.26	1.34
97	lP	25	U	C5-C6	-8.09	1.26	1.34
99	lR	25	U	C5-C6	-8.09	1.26	1.34
101	lW	13	U	C5-C6	-8.09	1.26	1.34
82	lA	19	U	C5-C6	-8.08	1.26	1.34
96	lO	142	U	C5-C6	-8.08	1.26	1.34
91	lJ	173	U	C5-C6	-8.08	1.26	1.34
97	lP	8	U	C5-C6	-8.08	1.26	1.34
79	l7	6	U	C5-C6	-8.08	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	188	U	C5-C6	-8.08	1.26	1.34
77	l5	31	U	C5-C6	-8.07	1.26	1.34
85	lD	8	U	C5-C6	-8.07	1.26	1.34
97	lP	3	U	C5-C6	-8.07	1.26	1.34
98	lQ	14	U	C5-C6	-8.07	1.26	1.34
102	lU	5	U	C5-C6	-8.07	1.26	1.34
104	lX	2	U	C5-C6	-8.07	1.26	1.34
56	Lt	119	ARG	CZ-NH2	-8.07	1.22	1.33
76	l4	6	U	C5-C6	-8.07	1.26	1.34
87	lF	78	U	C5-C6	-8.07	1.26	1.34
96	lO	110	U	C5-C6	-8.07	1.26	1.34
104	lX	51	U	C5-C6	-8.07	1.26	1.34
77	l5	44	U	C5-C6	-8.06	1.26	1.34
53	Lq	474	ARG	CZ-NH2	-8.06	1.22	1.33
75	l3	10	U	C5-C6	-8.06	1.26	1.34
81	l9	14	U	C5-C6	-8.06	1.26	1.34
99	lR	24	U	C5-C6	-8.06	1.26	1.34
91	lJ	136	U	C5-C6	-8.06	1.26	1.34
99	lR	22	U	C5-C6	-8.06	1.26	1.34
75	l3	37	U	C5-C6	-8.05	1.26	1.34
101	lT	3	U	C5-C6	-8.06	1.26	1.34
55	Ls	338	ARG	CZ-NH2	-8.05	1.22	1.33
74	l2	4	U	C5-C6	-8.05	1.26	1.34
81	l9	8	U	C5-C6	-8.05	1.26	1.34
79	l7	50	U	C5-C6	-8.05	1.26	1.34
101	lT	2	U	C5-C6	-8.05	1.26	1.34
68	UF	64	ARG	CZ-NH2	-8.05	1.22	1.33
94	lM	162	U	C5-C6	-8.05	1.26	1.34
96	lO	143	U	C5-C6	-8.05	1.26	1.34
34	LX	109	ARG	CZ-NH2	-8.05	1.22	1.33
59	Lw	20	ARG	CZ-NH2	-8.04	1.22	1.33
98	lQ	4	U	C5-C6	-8.04	1.26	1.34
49	Lm	349	ARG	CZ-NH2	-8.04	1.22	1.33
78	l6	19	U	C5-C6	-8.04	1.26	1.34
74	l2	5	U	C5-C6	-8.04	1.26	1.34
38	Lb	361	ARG	CZ-NH2	-8.04	1.22	1.33
51	Lo	265	ARG	CZ-NH2	-8.04	1.22	1.33
52	Lp	709	ARG	CZ-NH2	-8.04	1.22	1.33
94	lM	143	U	C5-C6	-8.03	1.26	1.34
104	lX	33	U	C5-C6	-8.03	1.26	1.34
4	L3	424	ARG	CZ-NH2	-8.03	1.22	1.33
37	La	85	ARG	CZ-NH2	-8.03	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
79	l7	23	U	C5-C6	-8.03	1.26	1.34
42	Lf	334	ARG	CZ-NH2	-8.03	1.22	1.33
91	lJ	163	U	C5-C6	-8.03	1.26	1.34
93	lL	63	U	C5-C6	-8.03	1.26	1.34
23	LM	48	ARG	CZ-NH2	-8.03	1.22	1.33
52	Lp	627	ARG	CZ-NH2	-8.03	1.22	1.33
94	lM	72	U	C5-C6	-8.03	1.26	1.34
35	LY	249	ARG	CZ-NH2	-8.02	1.22	1.33
87	lF	4	U	C5-C6	-8.02	1.26	1.34
95	lN	23	U	C5-C6	-8.02	1.26	1.34
96	lO	116	U	C5-C6	-8.02	1.26	1.34
61	Ly	587	ARG	CZ-NH2	-8.02	1.22	1.33
91	lJ	157	U	C5-C6	-8.02	1.26	1.34
91	lJ	217	U	C5-C6	-8.02	1.26	1.34
1	L0	343	ARG	CZ-NH2	-8.02	1.22	1.33
36	LZ	101	ARG	CZ-NH2	-8.02	1.22	1.33
37	La	30	ARG	CZ-NH2	-8.01	1.22	1.33
4	L3	505	ARG	CZ-NH2	-8.01	1.22	1.33
29	LS	73	ARG	CZ-NH2	-8.01	1.22	1.33
93	lL	78	U	C5-C6	-8.01	1.26	1.34
103	lV	2	U	C5-C6	-8.01	1.26	1.34
3	L2	71	ARG	CZ-NH2	-8.01	1.22	1.33
46	Lj	97	ARG	CZ-NH2	-8.01	1.22	1.33
76	l4	24	U	C5-C6	-8.01	1.26	1.34
104	lX	58	U	C5-C6	-8.01	1.26	1.34
55	Ls	359	ARG	CZ-NH2	-8.00	1.22	1.33
98	lQ	28	U	C5-C6	-8.00	1.26	1.34
3	L2	45	ARG	CZ-NH2	-8.00	1.22	1.33
20	LJ	260	ARG	CZ-NH2	-8.00	1.22	1.33
30	LT	10	ARG	CZ-NH2	-8.00	1.22	1.33
35	LY	355	ARG	CZ-NH2	-8.00	1.22	1.33
44	Lh	358	ARG	CZ-NH2	-8.00	1.22	1.33
60	Lx	370	ARG	CZ-NH2	-8.00	1.22	1.33
94	lM	123	U	C5-C6	-8.00	1.26	1.34
20	LJ	245	ARG	CZ-NH2	-8.00	1.22	1.33
51	Lo	264	ARG	CZ-NH2	-8.00	1.22	1.33
59	Lw	163	ARG	CZ-NH2	-8.00	1.22	1.33
87	lF	67	U	C5-C6	-8.00	1.26	1.34
14	LD	529	ARG	CZ-NH2	-8.00	1.22	1.33
35	LY	265	ARG	CZ-NH2	-8.00	1.22	1.33
96	lO	39	U	C5-C6	-8.00	1.26	1.34
2	L1	505	ARG	CZ-NH2	-8.00	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L0	349	ARG	CZ-NH2	-7.99	1.22	1.33
21	LK	143	ARG	CZ-NH2	-7.99	1.22	1.33
24	LN	279	ARG	CZ-NH2	-7.99	1.22	1.33
26	LP	115	ARG	CZ-NH2	-7.99	1.22	1.33
26	LP	257	ARG	CZ-NH2	-7.99	1.22	1.33
38	Lb	852	ARG	CZ-NH2	-7.99	1.22	1.33
99	lR	27	U	C5-C6	-7.99	1.26	1.34
23	LM	63	ARG	CZ-NH2	-7.99	1.22	1.33
12	LB	13	ARG	CZ-NH2	-7.99	1.22	1.33
25	LO	9	ARG	CZ-NH2	-7.99	1.22	1.33
34	LX	162	ARG	CZ-NH2	-7.99	1.22	1.33
44	Lh	657	ARG	CZ-NH2	-7.99	1.22	1.33
61	Ly	680	ARG	CZ-NH2	-7.99	1.22	1.33
1	L0	434	ARG	CZ-NH2	-7.99	1.22	1.33
3	L2	188	ARG	CZ-NH2	-7.99	1.22	1.33
51	Lo	82	ARG	CZ-NH2	-7.99	1.22	1.33
53	Lq	107	ARG	CZ-NH2	-7.99	1.22	1.33
29	LS	9	ARG	CZ-NH2	-7.99	1.22	1.33
36	LZ	194	ARG	CZ-NH2	-7.99	1.22	1.33
39	Lc	207	ARG	CZ-NH2	-7.99	1.22	1.33
43	Lg	115	ARG	CZ-NH2	-7.99	1.22	1.33
55	Ls	375	ARG	CZ-NH2	-7.99	1.22	1.33
13	LC	133	ARG	CZ-NH2	-7.99	1.22	1.33
27	LQ	359	ARG	CZ-NH2	-7.99	1.22	1.33
35	LY	271	ARG	CZ-NH2	-7.99	1.22	1.33
39	Lc	612	ARG	CZ-NH2	-7.99	1.22	1.33
48	Ll	68	ARG	CZ-NH2	-7.99	1.22	1.33
7	L6	242	ARG	CZ-NH2	-7.98	1.22	1.33
8	L7	71	ARG	CZ-NH2	-7.98	1.22	1.33
25	LO	256	ARG	CZ-NH2	-7.98	1.22	1.33
37	La	77	ARG	CZ-NH2	-7.98	1.22	1.33
62	Lz	236	ARG	CZ-NH2	-7.98	1.22	1.33
67	UE	185	ARG	CZ-NH2	-7.98	1.22	1.33
5	L4	590	ARG	CZ-NH2	-7.98	1.22	1.33
30	LT	46	ARG	CZ-NH2	-7.98	1.22	1.33
91	lJ	176	U	C5-C6	-7.98	1.26	1.34
1	L0	385	ARG	CZ-NH2	-7.98	1.22	1.33
24	LN	328	ARG	CZ-NH2	-7.98	1.22	1.33
42	Lf	342	ARG	CZ-NH2	-7.98	1.22	1.33
38	Lb	384	ARG	CZ-NH2	-7.98	1.22	1.33
39	Lc	615	ARG	CZ-NH2	-7.98	1.22	1.33
12	LB	27	ARG	CZ-NH2	-7.98	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	LE	371	ARG	CZ-NH2	-7.98	1.22	1.33
40	Ld	317	ARG	CZ-NH2	-7.98	1.22	1.33
41	Le	518	ARG	CZ-NH2	-7.98	1.22	1.33
61	Ly	458	ARG	CZ-NH2	-7.98	1.22	1.33
55	Ls	345	ARG	CZ-NH2	-7.98	1.22	1.33
81	l9	41	U	C5-C6	-7.98	1.26	1.34
41	Le	624	ARG	CZ-NH2	-7.97	1.22	1.33
17	LG	214	ARG	CZ-NH2	-7.97	1.22	1.33
38	Lb	305	ARG	CZ-NH2	-7.97	1.22	1.33
48	Ll	4	ARG	CZ-NH2	-7.97	1.22	1.33
51	Lo	224	ARG	CZ-NH2	-7.97	1.22	1.33
53	Lq	120	ARG	CZ-NH2	-7.97	1.22	1.33
40	Ld	353	ARG	CZ-NH2	-7.97	1.22	1.33
63	UA	239	ARG	CZ-NH2	-7.97	1.22	1.33
24	LN	259	ARG	CZ-NH2	-7.97	1.22	1.33
32	LV	479	ARG	CZ-NH2	-7.97	1.22	1.33
36	LZ	50	ARG	CZ-NH2	-7.97	1.22	1.33
41	Le	489	ARG	CZ-NH2	-7.97	1.22	1.33
52	Lp	720	ARG	CZ-NH2	-7.97	1.22	1.33
54	Lr	17	ARG	CZ-NH2	-7.97	1.22	1.33
87	lF	16	U	C5-C6	-7.97	1.26	1.34
3	L2	81	ARG	CZ-NH2	-7.97	1.22	1.33
6	L5	469	ARG	CZ-NH2	-7.97	1.22	1.33
24	LN	256	ARG	CZ-NH2	-7.97	1.22	1.33
25	LO	144	ARG	CZ-NH2	-7.97	1.22	1.33
36	LZ	27	ARG	CZ-NH2	-7.97	1.22	1.33
38	Lb	404	ARG	CZ-NH2	-7.97	1.22	1.33
51	Lo	302	ARG	CZ-NH2	-7.97	1.22	1.33
54	Lr	182	ARG	CZ-NH2	-7.97	1.22	1.33
3	L2	41	ARG	CZ-NH2	-7.96	1.22	1.33
8	L7	111	ARG	CZ-NH2	-7.96	1.22	1.33
36	LZ	196	ARG	CZ-NH2	-7.96	1.22	1.33
41	Le	502	ARG	CZ-NH2	-7.96	1.22	1.33
44	Lh	478	ARG	CZ-NH2	-7.96	1.22	1.33
45	Li	125	ARG	CZ-NH2	-7.96	1.22	1.33
54	Lr	143	ARG	CZ-NH2	-7.96	1.22	1.33
54	Lr	180	ARG	CZ-NH2	-7.96	1.22	1.33
69	UG	262	ARG	CZ-NH2	-7.96	1.22	1.33
12	LB	20	ARG	CZ-NH2	-7.96	1.22	1.33
22	LL	535	ARG	CZ-NH2	-7.96	1.22	1.33
5	L4	269	ARG	CZ-NH2	-7.96	1.22	1.33
10	L9	456	ARG	CZ-NH2	-7.96	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	LX	176	ARG	CZ-NH2	-7.96	1.22	1.33
38	Lb	863	ARG	CZ-NH2	-7.96	1.22	1.33
45	Li	601	ARG	CZ-NH2	-7.96	1.22	1.33
45	Li	631	ARG	CZ-NH2	-7.96	1.22	1.33
51	Lo	184	ARG	CZ-NH2	-7.96	1.22	1.33
66	UD	181	ARG	CZ-NH2	-7.96	1.22	1.33
52	Lp	636	ARG	CZ-NH2	-7.96	1.22	1.33
26	LP	165	ARG	CZ-NH2	-7.96	1.22	1.33
43	Lg	97	ARG	CZ-NH2	-7.96	1.22	1.33
43	Lg	123	ARG	CZ-NH2	-7.96	1.22	1.33
64	UB	346	ARG	CZ-NH2	-7.96	1.22	1.33
8	L7	76	ARG	CZ-NH2	-7.96	1.22	1.33
13	LC	319	ARG	CZ-NH2	-7.96	1.22	1.33
33	LW	217	ARG	CZ-NH2	-7.96	1.22	1.33
35	LY	427	ARG	CZ-NH2	-7.96	1.22	1.33
39	Lc	222	ARG	CZ-NH2	-7.96	1.22	1.33
40	Ld	518	ARG	CZ-NH2	-7.96	1.22	1.33
41	Le	510	ARG	CZ-NH2	-7.96	1.22	1.33
44	Lh	523	ARG	CZ-NH2	-7.96	1.22	1.33
45	Li	603	ARG	CZ-NH2	-7.96	1.22	1.33
46	Lj	51	ARG	CZ-NH2	-7.96	1.22	1.33
55	Ls	344	ARG	CZ-NH2	-7.96	1.22	1.33
55	Ls	350	ARG	CZ-NH2	-7.96	1.22	1.33
61	Ly	581	ARG	CZ-NH2	-7.96	1.22	1.33
27	LQ	357	ARG	CZ-NH2	-7.96	1.22	1.33
27	LQ	398	ARG	CZ-NH2	-7.96	1.22	1.33
46	Lj	26	ARG	CZ-NH2	-7.96	1.22	1.33
46	Lj	74	ARG	CZ-NH2	-7.96	1.22	1.33
25	LO	142	ARG	CZ-NH2	-7.95	1.22	1.33
32	LV	486	ARG	CZ-NH2	-7.95	1.22	1.33
39	Lc	204	ARG	CZ-NH2	-7.95	1.22	1.33
39	Lc	452	ARG	CZ-NH2	-7.95	1.22	1.33
46	Lj	58	ARG	CZ-NH2	-7.95	1.22	1.33
51	Lo	347	ARG	CZ-NH2	-7.95	1.22	1.33
28	LR	50	ARG	CZ-NH2	-7.95	1.22	1.33
32	LV	1063	ARG	CZ-NH2	-7.95	1.22	1.33
36	LZ	110	ARG	CZ-NH2	-7.95	1.22	1.33
52	Lp	689	ARG	CZ-NH2	-7.95	1.22	1.33
99	lR	18	U	C5-C6	-7.95	1.26	1.34
25	LO	101	ARG	CZ-NH2	-7.95	1.22	1.33
26	LP	280	ARG	CZ-NH2	-7.95	1.22	1.33
38	Lb	746	ARG	CZ-NH2	-7.95	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	Lj	113	ARG	CZ-NH2	-7.95	1.22	1.33
56	Lt	244	ARG	CZ-NH2	-7.95	1.22	1.33
20	LJ	395	ARG	CZ-NH2	-7.95	1.22	1.33
24	LN	289	ARG	CZ-NH2	-7.95	1.22	1.33
35	LY	464	ARG	CZ-NH2	-7.95	1.22	1.33
41	Le	427	ARG	CZ-NH2	-7.95	1.22	1.33
51	Lo	151	ARG	CZ-NH2	-7.95	1.22	1.33
51	Lo	214	ARG	CZ-NH2	-7.95	1.22	1.33
55	Ls	362	ARG	CZ-NH2	-7.95	1.22	1.33
56	Lt	131	ARG	CZ-NH2	-7.95	1.22	1.33
61	Ly	584	ARG	CZ-NH2	-7.95	1.22	1.33
70	UH	273	ARG	CZ-NH2	-7.95	1.22	1.33
1	L0	363	ARG	CZ-NH2	-7.95	1.22	1.33
7	L6	237	ARG	CZ-NH2	-7.95	1.22	1.33
13	LC	121	ARG	CZ-NH2	-7.95	1.22	1.33
14	LD	364	ARG	CZ-NH2	-7.95	1.22	1.33
17	LG	237	ARG	CZ-NH2	-7.95	1.22	1.33
38	Lb	312	ARG	CZ-NH2	-7.95	1.22	1.33
53	Lq	523	ARG	CZ-NH2	-7.95	1.22	1.33
60	Lx	358	ARG	CZ-NH2	-7.95	1.22	1.33
6	L5	450	ARG	CZ-NH2	-7.95	1.22	1.33
11	LA	131	ARG	CZ-NH2	-7.95	1.22	1.33
25	LO	125	ARG	CZ-NH2	-7.95	1.22	1.33
31	LU	263	ARG	CZ-NH2	-7.95	1.22	1.33
33	LW	219	ARG	CZ-NH2	-7.95	1.22	1.33
38	Lb	864	ARG	CZ-NH2	-7.95	1.22	1.33
61	Ly	652	ARG	CZ-NH2	-7.95	1.22	1.33
8	L7	13	ARG	CZ-NH2	-7.94	1.22	1.33
11	LA	174	ARG	CZ-NH2	-7.94	1.22	1.33
16	LF	156	ARG	CZ-NH2	-7.94	1.22	1.33
41	Le	573	ARG	CZ-NH2	-7.94	1.22	1.33
56	Lt	218	ARG	CZ-NH2	-7.94	1.22	1.33
98	lQ	27	U	C5-C6	-7.94	1.26	1.34
1	L0	568	ARG	CZ-NH2	-7.94	1.22	1.33
6	L5	468	ARG	CZ-NH2	-7.94	1.22	1.33
41	Le	629	ARG	CZ-NH2	-7.94	1.22	1.33
57	Lu	256	ARG	CZ-NH2	-7.94	1.22	1.33
59	Lw	13	ARG	CZ-NH2	-7.94	1.22	1.33
4	L3	734	ARG	CZ-NH2	-7.94	1.22	1.33
11	LA	167	ARG	CZ-NH2	-7.94	1.22	1.33
14	LD	543	ARG	CZ-NH2	-7.94	1.22	1.33
20	LJ	291	ARG	CZ-NH2	-7.94	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	LL	298	ARG	CZ-NH2	-7.94	1.22	1.33
22	LL	531	ARG	CZ-NH2	-7.94	1.22	1.33
26	LP	104	ARG	CZ-NH2	-7.94	1.22	1.33
45	Li	557	ARG	CZ-NH2	-7.94	1.22	1.33
48	Ll	42	ARG	CZ-NH2	-7.94	1.22	1.33
49	Lm	412	ARG	CZ-NH2	-7.94	1.22	1.33
55	Ls	395	ARG	CZ-NH2	-7.94	1.22	1.33
20	LJ	280	ARG	CZ-NH2	-7.94	1.22	1.33
44	Lh	715	ARG	CZ-NH2	-7.94	1.22	1.33
62	Lz	147	ARG	CZ-NH2	-7.94	1.22	1.33
13	LC	169	ARG	CZ-NH2	-7.94	1.22	1.33
21	LK	234	ARG	CZ-NH2	-7.94	1.22	1.33
23	LM	134	ARG	CZ-NH2	-7.94	1.22	1.33
37	La	38	ARG	CZ-NH2	-7.94	1.22	1.33
37	La	39	ARG	CZ-NH2	-7.94	1.22	1.33
38	Lb	727	ARG	CZ-NH2	-7.94	1.22	1.33
43	Lg	175	ARG	CZ-NH2	-7.94	1.22	1.33
52	Lp	454	ARG	CZ-NH2	-7.94	1.22	1.33
52	Lp	517	ARG	CZ-NH2	-7.94	1.22	1.33
5	L4	593	ARG	CZ-NH2	-7.94	1.22	1.33
11	LA	38	ARG	CZ-NH2	-7.94	1.22	1.33
21	LK	68	ARG	CZ-NH2	-7.94	1.22	1.33
28	LR	71	ARG	CZ-NH2	-7.94	1.22	1.33
55	Ls	402	ARG	CZ-NH2	-7.94	1.22	1.33
64	UB	295	ARG	CZ-NH2	-7.94	1.22	1.33
20	LJ	31	ARG	CZ-NH2	-7.93	1.22	1.33
38	Lb	905	ARG	CZ-NH2	-7.93	1.22	1.33
41	Le	550	ARG	CZ-NH2	-7.93	1.22	1.33
49	Lm	291	ARG	CZ-NH2	-7.93	1.22	1.33
49	Lm	438	ARG	CZ-NH1	-7.93	1.22	1.33
61	Ly	285	ARG	CZ-NH2	-7.93	1.22	1.33
61	Ly	586	ARG	CZ-NH2	-7.93	1.22	1.33
61	Ly	596	ARG	CZ-NH2	-7.93	1.22	1.33
3	L2	72	ARG	CZ-NH2	-7.93	1.22	1.33
6	L5	475	ARG	CZ-NH2	-7.93	1.22	1.33
9	L8	145	ARG	CZ-NH2	-7.93	1.22	1.33
39	Lc	142	ARG	CZ-NH2	-7.93	1.22	1.33
44	Lh	332	ARG	CZ-NH2	-7.93	1.22	1.33
49	Lm	265	ARG	CZ-NH2	-7.93	1.22	1.33
53	Lq	688	ARG	CZ-NH2	-7.93	1.22	1.33
59	Lw	156	ARG	CZ-NH2	-7.93	1.22	1.33
61	Ly	589	ARG	CZ-NH2	-7.93	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
64	UB	267	ARG	CZ-NH2	-7.93	1.22	1.33
39	Lc	310	ARG	CZ-NH2	-7.93	1.22	1.33
22	LL	342	ARG	CZ-NH2	-7.93	1.22	1.33
30	LT	120	ARG	CZ-NH2	-7.93	1.22	1.33
32	LV	1062	ARG	CZ-NH2	-7.93	1.22	1.33
40	Ld	432	ARG	CZ-NH2	-7.93	1.22	1.33
44	Lh	637	ARG	CZ-NH2	-7.93	1.22	1.33
47	Lk	474	ARG	CZ-NH2	-7.93	1.22	1.33
53	Lq	652	ARG	CZ-NH2	-7.93	1.22	1.33
54	Lr	20	ARG	CZ-NH2	-7.93	1.22	1.33
67	UE	125	ARG	CZ-NH2	-7.93	1.22	1.33
99	lR	1	U	C5-C6	-7.93	1.27	1.34
8	L7	51	ARG	CZ-NH2	-7.93	1.22	1.33
24	LN	341	ARG	CZ-NH2	-7.93	1.22	1.33
30	LT	12	ARG	CZ-NH2	-7.93	1.22	1.33
37	La	78	ARG	CZ-NH2	-7.93	1.22	1.33
48	Ll	135	ARG	CZ-NH2	-7.93	1.22	1.33
9	L8	21	ARG	CZ-NH2	-7.93	1.22	1.33
22	LL	549	ARG	CZ-NH2	-7.93	1.22	1.33
32	LV	407	ARG	CZ-NH2	-7.93	1.22	1.33
35	LY	260	ARG	CZ-NH2	-7.93	1.22	1.33
40	Ld	594	ARG	CZ-NH2	-7.93	1.22	1.33
52	Lp	623	ARG	CZ-NH2	-7.93	1.22	1.33
57	Lu	269	ARG	CZ-NH2	-7.93	1.22	1.33
64	UB	316	ARG	CZ-NH2	-7.93	1.22	1.33
13	LC	291	ARG	CZ-NH2	-7.92	1.22	1.33
30	LT	15	ARG	CZ-NH2	-7.92	1.22	1.33
35	LY	333	ARG	CZ-NH2	-7.92	1.22	1.33
37	La	92	ARG	CZ-NH2	-7.92	1.22	1.33
38	Lb	899	ARG	CZ-NH2	-7.92	1.22	1.33
48	Ll	136	ARG	CZ-NH2	-7.92	1.22	1.33
56	Lt	97	ARG	CZ-NH2	-7.92	1.22	1.33
58	Lv	74	ARG	CZ-NH2	-7.92	1.22	1.33
68	UF	33	ARG	CZ-NH2	-7.92	1.22	1.33
69	UG	263	ARG	CZ-NH2	-7.92	1.22	1.33
40	Ld	310	ARG	CZ-NH2	-7.92	1.22	1.33
45	Li	363	ARG	CZ-NH2	-7.92	1.22	1.33
46	Lj	114	ARG	CZ-NH2	-7.92	1.22	1.33
47	Lk	540	ARG	CZ-NH2	-7.92	1.22	1.33
52	Lp	621	ARG	CZ-NH2	-7.92	1.22	1.33
60	Lx	313	ARG	CZ-NH2	-7.92	1.22	1.33
1	L0	586	ARG	CZ-NH2	-7.92	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	L4	516	ARG	CZ-NH2	-7.92	1.22	1.33
8	L7	70	ARG	CZ-NH2	-7.92	1.22	1.33
9	L8	89	ARG	CZ-NH2	-7.92	1.22	1.33
10	L9	17	ARG	CZ-NH2	-7.92	1.22	1.33
15	LE	376	ARG	CZ-NH2	-7.92	1.22	1.33
15	LE	383	ARG	CZ-NH2	-7.92	1.22	1.33
33	LW	325	ARG	CZ-NH2	-7.92	1.22	1.33
33	LW	379	ARG	CZ-NH2	-7.92	1.22	1.33
38	Lb	284	ARG	CZ-NH2	-7.92	1.22	1.33
38	Lb	721	ARG	CZ-NH2	-7.92	1.22	1.33
39	Lc	148	ARG	CZ-NH2	-7.92	1.22	1.33
39	Lc	317	ARG	CZ-NH2	-7.92	1.22	1.33
52	Lp	604	ARG	CZ-NH2	-7.92	1.22	1.33
71	UI	391	ARG	CZ-NH2	-7.92	1.22	1.33
25	LO	121	ARG	CZ-NH2	-7.92	1.22	1.33
29	LS	17	ARG	CZ-NH2	-7.92	1.22	1.33
41	Le	604	ARG	CZ-NH2	-7.92	1.22	1.33
45	Li	523	ARG	CZ-NH2	-7.92	1.22	1.33
51	Lo	291	ARG	CZ-NH2	-7.92	1.22	1.33
61	Ly	464	ARG	CZ-NH2	-7.92	1.22	1.33
1	L0	328	ARG	CZ-NH2	-7.92	1.22	1.33
1	L0	390	ARG	CZ-NH2	-7.92	1.22	1.33
3	L2	192	ARG	CZ-NH2	-7.92	1.22	1.33
5	L4	355	ARG	CZ-NH2	-7.92	1.22	1.33
20	LJ	312	ARG	CZ-NH2	-7.92	1.22	1.33
20	LJ	418	ARG	CZ-NH2	-7.92	1.22	1.33
21	LK	117	ARG	CZ-NH2	-7.92	1.22	1.33
25	LO	109	ARG	CZ-NH2	-7.92	1.22	1.33
25	LO	116	ARG	CZ-NH2	-7.92	1.22	1.33
27	LQ	403	ARG	CZ-NH2	-7.92	1.22	1.33
39	Lc	247	ARG	CZ-NH2	-7.92	1.22	1.33
39	Lc	311	ARG	CZ-NH2	-7.92	1.22	1.33
44	Lh	569	ARG	CZ-NH2	-7.92	1.22	1.33
49	Lm	372	ARG	CZ-NH2	-7.92	1.22	1.33
52	Lp	583	ARG	CZ-NH2	-7.92	1.22	1.33
52	Lp	706	ARG	CZ-NH2	-7.92	1.22	1.33
61	Ly	383	ARG	CZ-NH2	-7.92	1.22	1.33
63	UA	251	ARG	CZ-NH2	-7.92	1.22	1.33
8	L7	47	ARG	CZ-NH2	-7.92	1.22	1.33
10	L9	453	ARG	CZ-NH2	-7.92	1.22	1.33
14	LD	351	ARG	CZ-NH2	-7.92	1.22	1.33
21	LK	142	ARG	CZ-NH2	-7.92	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	LM	6	ARG	CZ-NH2	-7.92	1.22	1.33
25	LO	99	ARG	CZ-NH2	-7.92	1.22	1.33
33	LW	462	ARG	CZ-NH2	-7.92	1.22	1.33
38	Lb	584	ARG	CZ-NH2	-7.92	1.22	1.33
41	Le	628	ARG	CZ-NH2	-7.92	1.22	1.33
55	Ls	385	ARG	CZ-NH2	-7.92	1.22	1.33
69	UG	356	ARG	CZ-NH2	-7.92	1.22	1.33
18	LH	232	ARG	CZ-NH2	-7.92	1.22	1.33
45	Li	665	ARG	CZ-NH2	-7.92	1.22	1.33
51	Lo	315	ARG	CZ-NH2	-7.92	1.22	1.33
54	Lr	13	ARG	CZ-NH2	-7.92	1.22	1.33
1	L0	258	ARG	CZ-NH2	-7.91	1.22	1.33
11	LA	76	ARG	CZ-NH2	-7.91	1.22	1.33
24	LN	319	ARG	CZ-NH2	-7.91	1.22	1.33
35	LY	506	ARG	CZ-NH2	-7.91	1.22	1.33
36	LZ	22	ARG	CZ-NH2	-7.91	1.22	1.33
42	Lf	326	ARG	CZ-NH2	-7.91	1.22	1.33
50	Ln	149	ARG	CZ-NH2	-7.91	1.22	1.33
52	Lp	650	ARG	CZ-NH2	-7.91	1.22	1.33
53	Lq	229	ARG	CZ-NH2	-7.91	1.22	1.33
60	Lx	368	ARG	CZ-NH2	-7.91	1.22	1.33
18	LH	236	ARG	CZ-NH2	-7.91	1.22	1.33
20	LJ	113	ARG	CZ-NH2	-7.91	1.22	1.33
20	LJ	213	ARG	CZ-NH2	-7.91	1.22	1.33
25	LO	133	ARG	CZ-NH2	-7.91	1.22	1.33
33	LW	286	ARG	CZ-NH2	-7.91	1.22	1.33
52	Lp	499	ARG	CZ-NH2	-7.91	1.22	1.33
4	L3	660	ARG	CZ-NH2	-7.91	1.22	1.33
5	L4	223	ARG	CZ-NH2	-7.91	1.22	1.33
20	LJ	275	ARG	CZ-NH2	-7.91	1.22	1.33
21	LK	264	ARG	CZ-NH2	-7.91	1.22	1.33
30	LT	81	ARG	CZ-NH2	-7.91	1.22	1.33
36	LZ	121	ARG	CZ-NH2	-7.91	1.22	1.33
41	Le	515	ARG	CZ-NH2	-7.91	1.22	1.33
43	Lg	82	ARG	CZ-NH2	-7.91	1.22	1.33
44	Lh	740	ARG	CZ-NH2	-7.91	1.22	1.33
57	Lu	279	ARG	CZ-NH2	-7.91	1.22	1.33
68	UF	32	ARG	CZ-NH2	-7.91	1.22	1.33
17	LG	206	ARG	CZ-NH2	-7.91	1.22	1.33
25	LO	343	ARG	CZ-NH2	-7.91	1.22	1.33
37	La	37	ARG	CZ-NH2	-7.91	1.22	1.33
38	Lb	355	ARG	CZ-NH2	-7.91	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
40	Ld	490	ARG	CZ-NH2	-7.91	1.22	1.33
43	Lg	230	ARG	CZ-NH2	-7.91	1.22	1.33
49	Lm	427	ARG	CZ-NH2	-7.91	1.22	1.33
51	Lo	120	ARG	CZ-NH2	-7.91	1.22	1.33
55	Ls	517	ARG	CZ-NH2	-7.91	1.22	1.33
69	UG	313	ARG	CZ-NH2	-7.91	1.22	1.33
69	UG	371	ARG	CZ-NH2	-7.91	1.22	1.33
8	L7	69	ARG	CZ-NH2	-7.91	1.22	1.33
13	LC	554	ARG	CZ-NH2	-7.91	1.22	1.33
51	Lo	114	ARG	CZ-NH2	-7.91	1.22	1.33
51	Lo	182	ARG	CZ-NH2	-7.91	1.22	1.33
1	L0	396	ARG	CZ-NH2	-7.91	1.22	1.33
5	L4	586	ARG	CZ-NH2	-7.91	1.22	1.33
13	LC	575	ARG	CZ-NH2	-7.91	1.22	1.33
17	LG	236	ARG	CZ-NH2	-7.91	1.22	1.33
19	LI	20	ARG	CZ-NH2	-7.91	1.22	1.33
24	LN	274	ARG	CZ-NH2	-7.91	1.22	1.33
38	Lb	314	ARG	CZ-NH2	-7.91	1.22	1.33
38	Lb	394	ARG	CZ-NH2	-7.91	1.22	1.33
38	Lb	638	ARG	CZ-NH2	-7.91	1.22	1.33
39	Lc	333	ARG	CZ-NH2	-7.91	1.22	1.33
52	Lp	557	ARG	CZ-NH2	-7.91	1.22	1.33
12	LB	18	ARG	CZ-NH2	-7.90	1.22	1.33
12	LB	29	ARG	CZ-NH2	-7.90	1.22	1.33
24	LN	344	ARG	CZ-NH2	-7.90	1.22	1.33
29	LS	16	ARG	CZ-NH2	-7.90	1.22	1.33
52	Lp	538	ARG	CZ-NH2	-7.90	1.22	1.33
54	Lr	61	ARG	CZ-NH2	-7.90	1.22	1.33
1	L0	618	ARG	CZ-NH2	-7.90	1.22	1.33
20	LJ	9	ARG	CZ-NH2	-7.90	1.22	1.33
27	LQ	415	ARG	CZ-NH2	-7.90	1.22	1.33
31	LU	239	ARG	CZ-NH2	-7.90	1.22	1.33
36	LZ	5	ARG	CZ-NH2	-7.90	1.22	1.33
36	LZ	70	ARG	CZ-NH2	-7.90	1.22	1.33
38	Lb	358	ARG	CZ-NH2	-7.90	1.22	1.33
38	Lb	723	ARG	CZ-NH2	-7.90	1.22	1.33
47	Lk	546	ARG	CZ-NH2	-7.90	1.22	1.33
53	Lq	125	ARG	CZ-NH2	-7.90	1.22	1.33
53	Lq	271	ARG	CZ-NH2	-7.90	1.22	1.33
54	Lr	265	ARG	CZ-NH2	-7.90	1.22	1.33
56	Lt	265	ARG	CZ-NH2	-7.90	1.22	1.33
66	UD	169	ARG	CZ-NH2	-7.90	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
11	LA	87	ARG	CZ-NH2	-7.90	1.22	1.33
13	LC	607	ARG	CZ-NH2	-7.90	1.22	1.33
23	LM	8	ARG	CZ-NH2	-7.90	1.22	1.33
23	LM	109	ARG	CZ-NH2	-7.90	1.22	1.33
28	LR	22	ARG	CZ-NH2	-7.90	1.22	1.33
35	LY	466	ARG	CZ-NH2	-7.90	1.22	1.33
35	LY	531	ARG	CZ-NH2	-7.90	1.22	1.33
38	Lb	842	ARG	CZ-NH2	-7.90	1.22	1.33
42	Lf	314	ARG	CZ-NH2	-7.90	1.22	1.33
45	Li	565	ARG	CZ-NH2	-7.90	1.22	1.33
46	Lj	14	ARG	CZ-NH2	-7.90	1.22	1.33
46	Lj	30	ARG	CZ-NH2	-7.90	1.22	1.33
52	Lp	698	ARG	CZ-NH2	-7.90	1.22	1.33
59	Lw	166	ARG	CZ-NH2	-7.90	1.22	1.33
35	LY	443	ARG	CZ-NH2	-7.90	1.22	1.33
38	Lb	390	ARG	CZ-NH2	-7.90	1.22	1.33
40	Ld	333	ARG	CZ-NH2	-7.90	1.22	1.33
53	Lq	700	ARG	CZ-NH2	-7.90	1.22	1.33
64	UB	326	ARG	CZ-NH2	-7.90	1.22	1.33
68	UF	16	ARG	CZ-NH2	-7.90	1.22	1.33
5	L4	277	ARG	CZ-NH2	-7.90	1.22	1.33
16	LF	129	ARG	CZ-NH2	-7.90	1.22	1.33
20	LJ	292	ARG	CZ-NH2	-7.90	1.22	1.33
28	LR	14	ARG	CZ-NH2	-7.90	1.22	1.33
30	LT	33	ARG	CZ-NH2	-7.90	1.22	1.33
37	La	149	ARG	CZ-NH2	-7.90	1.22	1.33
52	Lp	648	ARG	CZ-NH2	-7.90	1.22	1.33
29	LS	144	ARG	CZ-NH2	-7.90	1.22	1.33
53	Lq	647	ARG	CZ-NH2	-7.90	1.22	1.33
5	L4	203	ARG	CZ-NH2	-7.89	1.22	1.33
9	L8	161	ARG	CZ-NH2	-7.89	1.22	1.33
16	LF	188	ARG	CZ-NH2	-7.89	1.22	1.33
41	Le	554	ARG	CZ-NH2	-7.89	1.22	1.33
55	Ls	334	ARG	CZ-NH2	-7.89	1.22	1.33
55	Ls	373	ARG	CZ-NH2	-7.89	1.22	1.33
67	UE	127	ARG	CZ-NH2	-7.89	1.22	1.33
1	L0	427	ARG	CZ-NH2	-7.89	1.22	1.33
12	LB	61	ARG	CZ-NH2	-7.89	1.22	1.33
17	LG	235	ARG	CZ-NH2	-7.89	1.22	1.33
38	Lb	652	ARG	CZ-NH2	-7.89	1.22	1.33
48	Ll	29	ARG	CZ-NH2	-7.89	1.22	1.33
48	Ll	113	ARG	CZ-NH2	-7.89	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	Ls	367	ARG	CZ-NH2	-7.89	1.22	1.33
61	Ly	290	ARG	CZ-NH2	-7.89	1.22	1.33
69	UG	375	ARG	CZ-NH2	-7.89	1.22	1.33
13	LC	476	ARG	CZ-NH2	-7.89	1.22	1.33
14	LD	492	ARG	CZ-NH2	-7.89	1.22	1.33
34	LX	111	ARG	CZ-NH2	-7.89	1.22	1.33
55	Ls	413	ARG	CZ-NH2	-7.89	1.22	1.33
67	UE	144	ARG	CZ-NH2	-7.89	1.22	1.33
9	L8	20	ARG	CZ-NH2	-7.89	1.22	1.33
9	L8	118	ARG	CZ-NH2	-7.89	1.22	1.33
38	Lb	720	ARG	CZ-NH2	-7.89	1.22	1.33
56	Lt	223	ARG	CZ-NH2	-7.89	1.22	1.33
69	UG	398	ARG	CZ-NH2	-7.89	1.22	1.33
6	L5	458	ARG	CZ-NH2	-7.89	1.22	1.33
38	Lb	288	ARG	CZ-NH2	-7.89	1.22	1.33
52	Lp	745	ARG	CZ-NH1	-7.89	1.22	1.33
55	Ls	588	ARG	CZ-NH2	-7.89	1.22	1.33
56	Lt	106	ARG	CZ-NH2	-7.89	1.22	1.33
56	Lt	245	ARG	CZ-NH2	-7.89	1.22	1.33
13	LC	178	ARG	CZ-NH2	-7.89	1.22	1.33
22	LL	909	ARG	CZ-NH2	-7.89	1.22	1.33
43	Lg	203	ARG	CZ-NH2	-7.89	1.22	1.33
45	Li	314	ARG	CZ-NH2	-7.89	1.22	1.33
51	Lo	333	ARG	CZ-NH2	-7.89	1.22	1.33
52	Lp	414	ARG	CZ-NH2	-7.89	1.22	1.33
54	Lr	255	ARG	CZ-NH2	-7.89	1.22	1.33
25	LO	87	ARG	CZ-NH2	-7.88	1.22	1.33
38	Lb	357	ARG	CZ-NH2	-7.88	1.22	1.33
56	Lt	71	ARG	CZ-NH2	-7.88	1.22	1.33
61	Ly	384	ARG	CZ-NH2	-7.88	1.22	1.33
64	UB	366	ARG	CZ-NH2	-7.88	1.22	1.33
81	l9	3	C	C5-C6	-7.88	1.28	1.34
28	LR	31	ARG	CZ-NH2	-7.88	1.22	1.33
40	Ld	612	ARG	CZ-NH2	-7.88	1.22	1.33
9	L8	157	ARG	CZ-NH2	-7.88	1.22	1.33
20	LJ	170	ARG	CZ-NH2	-7.88	1.22	1.33
20	LJ	330	ARG	CZ-NH2	-7.88	1.22	1.33
27	LQ	351	ARG	CZ-NH2	-7.88	1.22	1.33
40	Ld	494	ARG	CZ-NH2	-7.88	1.22	1.33
43	Lg	234	ARG	CZ-NH2	-7.88	1.22	1.33
44	Lh	408	ARG	CZ-NH2	-7.88	1.22	1.33
45	Li	591	ARG	CZ-NH2	-7.88	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
65	UC	293	ARG	CZ-NH2	-7.88	1.22	1.33
64	UB	339	ARG	CZ-NH2	-7.88	1.22	1.33
1	L0	589	ARG	CZ-NH2	-7.88	1.22	1.33
3	L2	128	ARG	CZ-NH2	-7.88	1.22	1.33
25	LO	136	ARG	CZ-NH2	-7.88	1.22	1.33
26	LP	281	ARG	CZ-NH2	-7.88	1.22	1.33
27	LQ	364	ARG	CZ-NH2	-7.88	1.22	1.33
33	LW	210	ARG	CZ-NH2	-7.88	1.22	1.33
39	Lc	255	ARG	CZ-NH2	-7.88	1.22	1.33
39	Lc	432	ARG	CZ-NH2	-7.88	1.22	1.33
45	Li	662	ARG	CZ-NH2	-7.88	1.22	1.33
47	Lk	516	ARG	CZ-NH2	-7.88	1.22	1.33
52	Lp	456	ARG	CZ-NH2	-7.88	1.22	1.33
60	Lx	339	ARG	CZ-NH2	-7.88	1.22	1.33
9	L8	234	ARG	CZ-NH2	-7.88	1.22	1.33
32	LV	370	ARG	CZ-NH2	-7.88	1.22	1.33
51	Lo	231	ARG	CZ-NH2	-7.88	1.22	1.33
53	Lq	850	ARG	CZ-NH2	-7.88	1.22	1.33
62	Lz	142	ARG	CZ-NH2	-7.88	1.22	1.33
68	UF	61	ARG	CZ-NH2	-7.88	1.22	1.33
1	L0	373	ARG	CZ-NH2	-7.88	1.22	1.33
10	L9	459	ARG	CZ-NH2	-7.88	1.22	1.33
13	LC	246	ARG	CZ-NH2	-7.87	1.22	1.33
21	LK	242	ARG	CZ-NH2	-7.87	1.22	1.33
33	LW	439	ARG	CZ-NH2	-7.87	1.22	1.33
37	La	79	ARG	CZ-NH2	-7.87	1.22	1.33
40	Ld	510	ARG	CZ-NH2	-7.87	1.22	1.33
61	Ly	333	ARG	CZ-NH2	-7.87	1.22	1.33
1	L0	406	ARG	CZ-NH2	-7.87	1.22	1.33
6	L5	476	ARG	CZ-NH2	-7.87	1.22	1.33
20	LJ	421	ARG	CZ-NH2	-7.87	1.22	1.33
21	LK	101	ARG	CZ-NH2	-7.87	1.22	1.33
44	Lh	402	ARG	CZ-NH2	-7.87	1.22	1.33
44	Lh	515	ARG	CZ-NH2	-7.87	1.22	1.33
61	Ly	637	ARG	CZ-NH2	-7.87	1.22	1.33
68	UF	8	ARG	CZ-NH2	-7.87	1.22	1.33
20	LJ	5	ARG	CZ-NH2	-7.87	1.22	1.33
20	LJ	284	ARG	CZ-NH2	-7.87	1.22	1.33
33	LW	333	ARG	CZ-NH2	-7.87	1.22	1.33
3	L2	171	ARG	CZ-NH2	-7.87	1.22	1.33
13	LC	292	ARG	CZ-NH2	-7.87	1.22	1.33
21	LK	165	ARG	CZ-NH2	-7.87	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	Lb	609	ARG	CZ-NH2	-7.87	1.22	1.33
39	Lc	353	ARG	CZ-NH2	-7.87	1.22	1.33
54	Lr	79	ARG	CZ-NH2	-7.87	1.22	1.33
61	Ly	543	ARG	CZ-NH2	-7.87	1.22	1.33
61	Ly	669	ARG	CZ-NH2	-7.87	1.22	1.33
63	UA	245	ARG	CZ-NH2	-7.87	1.22	1.33
28	LR	25	ARG	CZ-NH2	-7.87	1.22	1.33
39	Lc	427	ARG	CZ-NH2	-7.87	1.22	1.33
53	Lq	556	ARG	CZ-NH2	-7.87	1.22	1.33
11	LA	149	ARG	CZ-NH2	-7.87	1.22	1.33
14	LD	366	ARG	CZ-NH2	-7.87	1.22	1.33
52	Lp	415	ARG	CZ-NH2	-7.87	1.22	1.33
52	Lp	496	ARG	CZ-NH2	-7.87	1.22	1.33
52	Lp	503	ARG	CZ-NH2	-7.87	1.22	1.33
61	Ly	300	ARG	CZ-NH2	-7.87	1.22	1.33
5	L4	587	ARG	CZ-NH2	-7.86	1.22	1.33
12	LB	76	ARG	CZ-NH2	-7.86	1.22	1.33
49	Lm	418	ARG	CZ-NH2	-7.86	1.22	1.33
51	Lo	147	ARG	CZ-NH2	-7.86	1.22	1.33
9	L8	160	ARG	CZ-NH2	-7.86	1.22	1.33
32	LV	1080	ARG	CZ-NH2	-7.86	1.22	1.33
40	Ld	613	ARG	CZ-NH2	-7.86	1.22	1.33
28	LR	51	ARG	CZ-NH2	-7.86	1.22	1.33
32	LV	1074	ARG	CZ-NH2	-7.86	1.22	1.33
37	La	160	ARG	CZ-NH2	-7.86	1.22	1.33
64	UB	350	ARG	CZ-NH2	-7.86	1.22	1.33
1	L0	331	ARG	CZ-NH2	-7.86	1.22	1.33
13	LC	363	ARG	CZ-NH2	-7.86	1.22	1.33
36	LZ	106	ARG	CZ-NH2	-7.86	1.22	1.33
4	L3	642	ARG	CZ-NH2	-7.86	1.22	1.33
4	L3	724	ARG	CZ-NH2	-7.86	1.22	1.33
13	LC	167	ARG	CZ-NH2	-7.86	1.22	1.33
38	Lb	502	ARG	CZ-NH2	-7.86	1.22	1.33
43	Lg	86	ARG	CZ-NH2	-7.86	1.22	1.33
48	Ll	33	ARG	CZ-NH2	-7.86	1.22	1.33
61	Ly	338	ARG	CZ-NH2	-7.86	1.22	1.33
5	L4	325	ARG	CZ-NH2	-7.85	1.22	1.33
20	LJ	22	ARG	CZ-NH2	-7.85	1.22	1.33
38	Lb	505	ARG	CZ-NH2	-7.85	1.22	1.33
43	Lg	134	ARG	CZ-NH2	-7.85	1.22	1.33
45	Li	710	ARG	CZ-NH2	-7.85	1.22	1.33
28	LR	36	ARG	CZ-NH2	-7.85	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	Lb	775	ARG	CZ-NH2	-7.85	1.22	1.33
53	Lq	855	ARG	CZ-NH2	-7.85	1.22	1.33
71	UI	393	ARG	CZ-NH2	-7.85	1.22	1.33
9	L8	17	ARG	CZ-NH2	-7.85	1.22	1.33
43	Lg	140	ARG	CZ-NH2	-7.85	1.22	1.33
20	LJ	410	ARG	CZ-NH2	-7.85	1.22	1.33
40	Ld	531	ARG	CZ-NH2	-7.85	1.22	1.33
9	L8	236	ARG	CZ-NH2	-7.85	1.22	1.33
13	LC	139	ARG	CZ-NH2	-7.85	1.22	1.33
33	LW	471	ARG	CZ-NH2	-7.85	1.22	1.33
38	Lb	494	ARG	CZ-NH2	-7.85	1.22	1.33
64	UB	268	ARG	CZ-NH2	-7.85	1.22	1.33
14	LD	585	ARG	CZ-NH2	-7.84	1.22	1.33
44	Lh	414	ARG	CZ-NH2	-7.84	1.22	1.33
48	Ll	138	ARG	CZ-NH2	-7.84	1.22	1.33
53	Lq	679	ARG	CZ-NH2	-7.84	1.22	1.33
55	Ls	372	ARG	CZ-NH2	-7.84	1.22	1.33
2	L1	499	ARG	CZ-NH2	-7.84	1.22	1.33
20	LJ	24	ARG	CZ-NH2	-7.84	1.22	1.33
46	Lj	102	ARG	CZ-NH2	-7.84	1.22	1.33
55	Ls	371	ARG	CZ-NH2	-7.84	1.22	1.33
20	LJ	119	ARG	CZ-NH2	-7.84	1.22	1.33
20	LJ	368	ARG	CZ-NH2	-7.84	1.22	1.33
32	LV	613	ARG	CZ-NH2	-7.84	1.22	1.33
1	L0	365	ARG	CZ-NH2	-7.84	1.22	1.33
25	LO	110	ARG	CZ-NH2	-7.84	1.22	1.33
36	LZ	164	ARG	CZ-NH2	-7.84	1.22	1.33
41	Le	626	ARG	CZ-NH2	-7.84	1.22	1.33
44	Lh	436	ARG	CZ-NH2	-7.84	1.22	1.33
61	Ly	363	ARG	CZ-NH2	-7.84	1.22	1.33
20	LJ	331	ARG	CZ-NH2	-7.84	1.22	1.33
25	LO	127	ARG	CZ-NH2	-7.84	1.22	1.33
29	LS	3	ARG	CZ-NH2	-7.84	1.22	1.33
40	Ld	344	ARG	CZ-NH2	-7.84	1.22	1.33
45	Li	672	ARG	CZ-NH2	-7.84	1.22	1.33
62	Lz	203	ARG	CZ-NH2	-7.84	1.22	1.33
20	LJ	7	ARG	CZ-NH2	-7.84	1.22	1.33
38	Lb	791	ARG	CZ-NH2	-7.83	1.22	1.33
1	L0	457	ARG	CZ-NH2	-7.83	1.22	1.33
4	L3	570	ARG	CZ-NH2	-7.83	1.22	1.33
51	Lo	189	ARG	CZ-NH2	-7.83	1.22	1.33
52	Lp	699	ARG	CZ-NH2	-7.83	1.22	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
69	UG	257	ARG	CZ-NH2	-7.83	1.22	1.33
32	LV	474	ARG	CZ-NH2	-7.83	1.22	1.33
38	Lb	371	ARG	CZ-NH2	-7.83	1.22	1.33
41	Le	609	ARG	CZ-NH2	-7.83	1.22	1.33
22	LL	945	ARG	CZ-NH2	-7.83	1.22	1.33
1	L0	469	ARG	CZ-NH2	-7.83	1.22	1.33
11	LA	169	ARG	CZ-NH2	-7.83	1.22	1.33
20	LJ	230	ARG	CZ-NH2	-7.83	1.22	1.33
23	LM	123	ARG	CZ-NH2	-7.83	1.22	1.33
32	LV	889	ARG	CZ-NH2	-7.83	1.22	1.33
38	Lb	685	ARG	CZ-NH2	-7.83	1.22	1.33
39	Lc	254	ARG	CZ-NH2	-7.83	1.22	1.33
40	Ld	549	ARG	CZ-NH2	-7.83	1.22	1.33
46	Lj	66	ARG	CZ-NH2	-7.83	1.22	1.33
9	L8	116	ARG	CZ-NH2	-7.82	1.22	1.33
38	Lb	296	ARG	CZ-NH2	-7.82	1.22	1.33
38	Lb	753	ARG	CZ-NH2	-7.82	1.22	1.33
39	Lc	613	ARG	CZ-NH2	-7.82	1.22	1.33
48	Ll	38	ARG	CZ-NH2	-7.82	1.22	1.33
64	UB	333	ARG	CZ-NH2	-7.82	1.22	1.33
27	LQ	396	ARG	CZ-NH2	-7.82	1.22	1.33
4	L3	429	ARG	CZ-NH2	-7.82	1.22	1.33
52	Lp	565	ARG	CZ-NH2	-7.82	1.22	1.33
9	L8	139	ARG	CZ-NH2	-7.82	1.22	1.33
39	Lc	359	ARG	CZ-NH2	-7.82	1.22	1.33
96	lO	92	U	C5-C6	-7.81	1.27	1.34
17	LG	232	ARG	CZ-NH2	-7.81	1.22	1.33
27	LQ	381	ARG	CZ-NH2	-7.81	1.22	1.33
45	Li	673	ARG	CZ-NH2	-7.81	1.22	1.33
13	LC	170	ARG	CZ-NH2	-7.81	1.22	1.33
38	Lb	386	ARG	CZ-NH2	-7.81	1.22	1.33
38	Lb	423	ARG	CZ-NH2	-7.81	1.22	1.33
39	Lc	494	ARG	CZ-NH2	-7.81	1.22	1.33
40	Ld	359	ARG	CZ-NH2	-7.81	1.22	1.33
54	Lr	269	ARG	CZ-NH2	-7.81	1.22	1.33
25	LO	134	ARG	CZ-NH2	-7.81	1.22	1.33
97	lP	4	U	C5-C6	-7.81	1.27	1.34
13	LC	567	ARG	CZ-NH2	-7.81	1.23	1.33
45	Li	275	ARG	CZ-NH2	-7.81	1.22	1.33
46	Lj	5	ARG	CZ-NH2	-7.81	1.23	1.33
9	L8	16	ARG	CZ-NH2	-7.80	1.23	1.33
52	Lp	512	ARG	CZ-NH2	-7.80	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	Lq	666	ARG	CZ-NH2	-7.80	1.23	1.33
5	L4	469	ARG	CZ-NH2	-7.80	1.23	1.33
18	LH	204	ARG	CZ-NH2	-7.80	1.23	1.33
32	LV	961	ARG	CZ-NH2	-7.80	1.23	1.33
52	Lp	652	ARG	CZ-NH2	-7.79	1.23	1.33
9	L8	52	ARG	CZ-NH2	-7.79	1.23	1.33
14	LD	504	ARG	CZ-NH2	-7.79	1.23	1.33
32	LV	412	ARG	CZ-NH2	-7.79	1.23	1.33
25	LO	11	ARG	CZ-NH2	-7.79	1.23	1.33
64	UB	304	ARG	CZ-NH2	-7.79	1.23	1.33
61	Ly	599	ARG	CZ-NH2	-7.79	1.23	1.33
64	UB	345	ARG	CZ-NH2	-7.79	1.23	1.33
34	LX	125	ARG	CZ-NH2	-7.78	1.23	1.33
44	Lh	712	ARG	CZ-NH2	-7.78	1.23	1.33
33	LW	468	ARG	CZ-NH2	-7.78	1.23	1.33
38	Lb	463	ARG	CZ-NH2	-7.78	1.23	1.33
21	LK	169	ARG	CZ-NH2	-7.78	1.23	1.33
52	Lp	645	ARG	CZ-NH2	-7.78	1.23	1.33
94	lM	75	G	C2-N2	-7.78	1.26	1.34
64	UB	328	ARG	CZ-NH2	-7.77	1.23	1.33
46	Lj	10	ARG	CZ-NH2	-7.77	1.23	1.33
10	L9	462	ARG	CZ-NH2	-7.76	1.23	1.33
38	Lb	448	ARG	CZ-NH2	-7.75	1.23	1.33
81	l9	2	C	C5-C6	-7.74	1.28	1.34
81	l9	5	A	C6-N6	-7.74	1.27	1.33
58	Lv	78	ARG	CZ-NH2	-7.72	1.23	1.33
94	lM	39	G	C2-N2	-7.58	1.26	1.34
90	lI	49	A	C6-N6	-7.58	1.27	1.33
71	UI	393	ARG	CZ-NH1	-7.57	1.23	1.33
13	LC	133	ARG	CZ-NH1	-7.54	1.23	1.33
60	Lx	370	ARG	CZ-NH1	-7.54	1.23	1.33
9	L8	160	ARG	CZ-NH1	-7.53	1.23	1.33
39	Lc	310	ARG	CZ-NH1	-7.53	1.23	1.33
1	L0	331	ARG	CZ-NH1	-7.53	1.23	1.33
44	Lh	332	ARG	CZ-NH1	-7.52	1.23	1.33
55	Ls	413	ARG	CZ-NH1	-7.52	1.23	1.33
69	UG	398	ARG	CZ-NH1	-7.52	1.23	1.33
38	Lb	386	ARG	CZ-NH1	-7.51	1.23	1.33
1	L0	390	ARG	CZ-NH1	-7.51	1.23	1.33
55	Ls	334	ARG	CZ-NH1	-7.51	1.23	1.33
27	LQ	357	ARG	CZ-NH1	-7.51	1.23	1.33
14	LD	492	ARG	CZ-NH1	-7.51	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	L8	157	ARG	CZ-NH1	-7.50	1.23	1.33
55	Ls	345	ARG	CZ-NH1	-7.50	1.23	1.33
21	LK	101	ARG	CZ-NH1	-7.50	1.23	1.33
24	LN	344	ARG	CZ-NH1	-7.50	1.23	1.33
54	Lr	61	ARG	CZ-NH1	-7.50	1.23	1.33
12	LB	20	ARG	CZ-NH1	-7.50	1.23	1.33
53	Lq	125	ARG	CZ-NH1	-7.50	1.23	1.33
29	LS	16	ARG	CZ-NH1	-7.50	1.23	1.33
53	Lq	855	ARG	CZ-NH1	-7.50	1.23	1.33
53	Lq	474	ARG	CZ-NH1	-7.49	1.23	1.33
20	LJ	24	ARG	CZ-NH1	-7.49	1.23	1.33
35	LY	355	ARG	CZ-NH1	-7.49	1.23	1.33
20	LJ	230	ARG	CZ-NH1	-7.49	1.23	1.33
26	LP	280	ARG	CZ-NH1	-7.49	1.23	1.33
28	LR	71	ARG	CZ-NH1	-7.48	1.23	1.33
40	Ld	531	ARG	CZ-NH1	-7.48	1.23	1.33
40	Ld	510	ARG	CZ-NH1	-7.48	1.23	1.33
25	LO	134	ARG	CZ-NH1	-7.48	1.23	1.33
51	Lo	291	ARG	CZ-NH1	-7.48	1.23	1.33
54	Lr	20	ARG	CZ-NH1	-7.48	1.23	1.33
55	Ls	395	ARG	CZ-NH1	-7.47	1.23	1.33
20	LJ	7	ARG	CZ-NH1	-7.47	1.23	1.33
21	LK	234	ARG	CZ-NH1	-7.47	1.23	1.33
39	Lc	317	ARG	CZ-NH1	-7.47	1.23	1.33
1	L0	427	ARG	CZ-NH1	-7.47	1.23	1.33
20	LJ	31	ARG	CZ-NH1	-7.47	1.23	1.33
41	Le	624	ARG	CZ-NH1	-7.47	1.23	1.33
71	UI	391	ARG	CZ-NH1	-7.47	1.23	1.33
6	L5	450	ARG	CZ-NH1	-7.47	1.23	1.33
28	LR	31	ARG	CZ-NH1	-7.47	1.23	1.33
64	UB	350	ARG	CZ-NH1	-7.47	1.23	1.33
68	UF	16	ARG	CZ-NH1	-7.47	1.23	1.33
12	LB	61	ARG	CZ-NH1	-7.47	1.23	1.33
9	L8	16	ARG	CZ-NH1	-7.47	1.23	1.33
13	LC	121	ARG	CZ-NH1	-7.47	1.23	1.33
20	LJ	410	ARG	CZ-NH1	-7.47	1.23	1.33
24	LN	274	ARG	CZ-NH1	-7.47	1.23	1.33
26	LP	104	ARG	CZ-NH1	-7.47	1.23	1.33
30	LT	12	ARG	CZ-NH1	-7.47	1.23	1.33
41	Le	518	ARG	CZ-NH1	-7.47	1.23	1.33
25	LO	256	ARG	CZ-NH1	-7.46	1.23	1.33
49	Lm	349	ARG	CZ-NH1	-7.46	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	Lq	271	ARG	CZ-NH1	-7.46	1.23	1.33
55	Ls	362	ARG	CZ-NH1	-7.46	1.23	1.33
3	L2	188	ARG	CZ-NH1	-7.46	1.23	1.33
10	L9	453	ARG	CZ-NH1	-7.46	1.23	1.33
35	LY	506	ARG	CZ-NH1	-7.46	1.23	1.33
49	Lm	418	ARG	CZ-NH1	-7.46	1.23	1.33
1	L0	457	ARG	CZ-NH1	-7.46	1.23	1.33
52	Lp	621	ARG	CZ-NH1	-7.46	1.23	1.33
61	Ly	637	ARG	CZ-NH1	-7.46	1.23	1.33
1	L0	469	ARG	CZ-NH1	-7.46	1.23	1.33
12	LB	76	ARG	CZ-NH1	-7.46	1.23	1.33
67	UE	125	ARG	CZ-NH1	-7.46	1.23	1.33
25	LO	109	ARG	CZ-NH1	-7.46	1.23	1.33
32	LV	370	ARG	CZ-NH1	-7.46	1.23	1.33
32	LV	1080	ARG	CZ-NH1	-7.46	1.23	1.33
53	Lq	666	ARG	CZ-NH1	-7.46	1.23	1.33
63	UA	239	ARG	CZ-NH1	-7.46	1.23	1.33
20	LJ	292	ARG	CZ-NH1	-7.46	1.23	1.33
28	LR	51	ARG	CZ-NH1	-7.46	1.23	1.33
48	Ll	138	ARG	CZ-NH1	-7.46	1.23	1.33
54	Lr	265	ARG	CZ-NH1	-7.46	1.23	1.33
13	LC	476	ARG	CZ-NH1	-7.45	1.23	1.33
39	Lc	612	ARG	CZ-NH1	-7.45	1.23	1.33
45	Li	591	ARG	CZ-NH1	-7.45	1.23	1.33
58	Lv	78	ARG	CZ-NH1	-7.45	1.23	1.33
1	L0	328	ARG	CZ-NH1	-7.45	1.23	1.33
20	LJ	22	ARG	CZ-NH1	-7.45	1.23	1.33
38	Lb	723	ARG	CZ-NH1	-7.45	1.23	1.33
37	La	149	ARG	CZ-NH1	-7.45	1.23	1.33
48	Ll	136	ARG	CZ-NH1	-7.45	1.23	1.33
53	Lq	679	ARG	CZ-NH1	-7.45	1.23	1.33
64	UB	339	ARG	CZ-NH1	-7.45	1.23	1.33
68	UF	8	ARG	CZ-NH1	-7.45	1.23	1.33
3	L2	192	ARG	CZ-NH1	-7.45	1.23	1.33
22	LL	945	ARG	CZ-NH1	-7.45	1.23	1.33
39	Lc	353	ARG	CZ-NH1	-7.45	1.23	1.33
90	lI	47	A	C6-N6	-7.45	1.27	1.33
14	LD	585	ARG	CZ-NH1	-7.45	1.23	1.33
39	Lc	204	ARG	CZ-NH1	-7.45	1.23	1.33
40	Ld	353	ARG	CZ-NH1	-7.45	1.23	1.33
7	L6	242	ARG	CZ-NH1	-7.45	1.23	1.33
10	L9	17	ARG	CZ-NH1	-7.45	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	LY	333	ARG	CZ-NH1	-7.45	1.23	1.33
38	Lb	357	ARG	CZ-NH1	-7.45	1.23	1.33
38	Lb	502	ARG	CZ-NH1	-7.45	1.23	1.33
53	Lq	652	ARG	CZ-NH1	-7.45	1.23	1.33
55	Ls	350	ARG	CZ-NH1	-7.45	1.23	1.33
4	L3	660	ARG	CZ-NH1	-7.44	1.23	1.33
13	LC	363	ARG	CZ-NH1	-7.44	1.23	1.33
14	LD	543	ARG	CZ-NH1	-7.44	1.23	1.33
35	LY	271	ARG	CZ-NH1	-7.44	1.23	1.33
47	Lk	474	ARG	CZ-NH1	-7.44	1.23	1.33
38	Lb	463	ARG	CZ-NH1	-7.44	1.23	1.33
41	Le	554	ARG	CZ-NH1	-7.44	1.23	1.33
44	Lh	408	ARG	CZ-NH1	-7.44	1.23	1.33
45	Li	665	ARG	CZ-NH1	-7.44	1.23	1.33
46	Lj	66	ARG	CZ-NH1	-7.44	1.23	1.33
1	L0	343	ARG	CZ-NH1	-7.44	1.23	1.33
3	L2	171	ARG	CZ-NH1	-7.44	1.23	1.33
5	L4	277	ARG	CZ-NH1	-7.44	1.23	1.33
7	L6	237	ARG	CZ-NH1	-7.44	1.23	1.33
20	LJ	291	ARG	CZ-NH1	-7.44	1.23	1.33
36	LZ	50	ARG	CZ-NH1	-7.44	1.23	1.33
41	Le	502	ARG	CZ-NH1	-7.44	1.23	1.33
48	Ll	4	ARG	CZ-NH1	-7.44	1.23	1.33
52	Lp	512	ARG	CZ-NH1	-7.44	1.23	1.33
52	Lp	636	ARG	CZ-NH1	-7.44	1.23	1.33
53	Lq	556	ARG	CZ-NH1	-7.44	1.23	1.33
68	UF	33	ARG	CZ-NH1	-7.44	1.23	1.33
8	L7	69	ARG	CZ-NH1	-7.44	1.23	1.33
13	LC	292	ARG	CZ-NH1	-7.44	1.23	1.33
17	LG	206	ARG	CZ-NH1	-7.44	1.23	1.33
43	Lg	123	ARG	CZ-NH1	-7.44	1.23	1.33
46	Lj	58	ARG	CZ-NH1	-7.44	1.23	1.33
69	UG	371	ARG	CZ-NH1	-7.44	1.23	1.33
5	L4	325	ARG	CZ-NH1	-7.44	1.23	1.33
23	LM	8	ARG	CZ-NH1	-7.44	1.23	1.33
36	LZ	194	ARG	CZ-NH1	-7.44	1.23	1.33
40	Ld	432	ARG	CZ-NH1	-7.44	1.23	1.33
44	Lh	712	ARG	CZ-NH1	-7.44	1.23	1.33
54	Lr	143	ARG	CZ-NH1	-7.44	1.23	1.33
29	LS	17	ARG	CZ-NH1	-7.44	1.23	1.33
41	Le	510	ARG	CZ-NH1	-7.44	1.23	1.33
51	Lo	120	ARG	CZ-NH1	-7.44	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	L7	51	ARG	CZ-NH1	-7.43	1.23	1.33
38	Lb	905	ARG	CZ-NH1	-7.43	1.23	1.33
39	Lc	359	ARG	CZ-NH1	-7.43	1.23	1.33
48	Ll	135	ARG	CZ-NH1	-7.43	1.23	1.33
52	Lp	503	ARG	CZ-NH1	-7.43	1.23	1.33
53	Lq	478	ARG	CZ-NH1	-7.43	1.23	1.33
1	L0	589	ARG	CZ-NH1	-7.43	1.23	1.33
4	L3	429	ARG	CZ-NH1	-7.43	1.23	1.33
37	La	39	ARG	CZ-NH1	-7.43	1.23	1.33
40	Ld	359	ARG	CZ-NH1	-7.43	1.23	1.33
44	Lh	523	ARG	CZ-NH1	-7.43	1.23	1.33
68	UF	64	ARG	CZ-NH1	-7.43	1.23	1.33
28	LR	14	ARG	CZ-NH1	-7.43	1.23	1.33
38	Lb	358	ARG	CZ-NH1	-7.43	1.23	1.33
39	Lc	142	ARG	CZ-NH1	-7.43	1.23	1.33
48	Ll	29	ARG	CZ-NH1	-7.43	1.23	1.33
48	Ll	68	ARG	CZ-NH1	-7.43	1.23	1.33
52	Lp	557	ARG	CZ-NH1	-7.43	1.23	1.33
24	LN	289	ARG	CZ-NH1	-7.43	1.23	1.33
46	Lj	14	ARG	CZ-NH1	-7.43	1.23	1.33
56	Lt	244	ARG	CZ-NH1	-7.43	1.23	1.33
61	Ly	384	ARG	CZ-NH1	-7.43	1.23	1.33
1	L0	349	ARG	CZ-NH1	-7.43	1.23	1.33
16	LF	188	ARG	CZ-NH1	-7.43	1.23	1.33
17	LG	237	ARG	CZ-NH1	-7.43	1.23	1.33
20	LJ	331	ARG	CZ-NH1	-7.43	1.23	1.33
21	LK	169	ARG	CZ-NH1	-7.43	1.23	1.33
26	LP	281	ARG	CZ-NH1	-7.43	1.23	1.33
38	Lb	284	ARG	CZ-NH1	-7.43	1.23	1.33
44	Lh	414	ARG	CZ-NH1	-7.43	1.23	1.33
46	Lj	51	ARG	CZ-NH1	-7.43	1.23	1.33
46	Lj	114	ARG	CZ-NH1	-7.43	1.23	1.33
5	L4	593	ARG	CZ-NH1	-7.42	1.23	1.33
11	LA	76	ARG	CZ-NH1	-7.42	1.23	1.33
13	LC	167	ARG	CZ-NH1	-7.42	1.23	1.33
13	LC	170	ARG	CZ-NH1	-7.42	1.23	1.33
20	LJ	260	ARG	CZ-NH1	-7.42	1.23	1.33
35	LY	466	ARG	CZ-NH1	-7.42	1.23	1.33
40	Ld	612	ARG	CZ-NH1	-7.42	1.23	1.33
44	Lh	569	ARG	CZ-NH1	-7.42	1.23	1.33
45	Li	314	ARG	CZ-NH1	-7.42	1.23	1.33
45	Li	631	ARG	CZ-NH1	-7.42	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	Lp	583	ARG	CZ-NH1	-7.42	1.23	1.33
69	UG	375	ARG	CZ-NH1	-7.42	1.23	1.33
8	L7	47	ARG	CZ-NH1	-7.42	1.23	1.33
14	LD	504	ARG	CZ-NH1	-7.42	1.23	1.33
3	L2	41	ARG	CZ-NH1	-7.42	1.23	1.33
30	LT	10	ARG	CZ-NH1	-7.42	1.23	1.33
39	Lc	615	ARG	CZ-NH1	-7.42	1.23	1.33
60	Lx	339	ARG	CZ-NH1	-7.42	1.23	1.33
1	L0	406	ARG	CZ-NH1	-7.42	1.23	1.33
17	LG	214	ARG	CZ-NH1	-7.42	1.23	1.33
27	LQ	364	ARG	CZ-NH1	-7.42	1.23	1.33
31	LU	263	ARG	CZ-NH1	-7.42	1.23	1.33
3	L2	128	ARG	CZ-NH1	-7.42	1.23	1.33
8	L7	71	ARG	CZ-NH1	-7.42	1.23	1.33
16	LF	129	ARG	CZ-NH1	-7.42	1.23	1.33
20	LJ	5	ARG	CZ-NH1	-7.42	1.23	1.33
21	LK	264	ARG	CZ-NH1	-7.42	1.23	1.33
35	LY	464	ARG	CZ-NH1	-7.42	1.23	1.33
45	Li	662	ARG	CZ-NH1	-7.42	1.23	1.33
52	Lp	565	ARG	CZ-NH1	-7.42	1.23	1.33
5	L4	223	ARG	CZ-NH1	-7.42	1.23	1.33
17	LG	235	ARG	CZ-NH1	-7.42	1.23	1.33
20	LJ	280	ARG	CZ-NH1	-7.42	1.23	1.33
36	LZ	106	ARG	CZ-NH1	-7.42	1.23	1.33
36	LZ	110	ARG	CZ-NH1	-7.42	1.23	1.33
45	Li	125	ARG	CZ-NH1	-7.42	1.23	1.33
48	Ll	38	ARG	CZ-NH1	-7.42	1.23	1.33
12	LB	13	ARG	CZ-NH1	-7.42	1.23	1.33
43	Lg	140	ARG	CZ-NH1	-7.42	1.23	1.33
1	L0	568	ARG	CZ-NH1	-7.41	1.23	1.33
3	L2	45	ARG	CZ-NH1	-7.41	1.23	1.33
21	LK	242	ARG	CZ-NH1	-7.41	1.23	1.33
45	Li	673	ARG	CZ-NH1	-7.41	1.23	1.33
49	Lm	412	ARG	CZ-NH1	-7.41	1.23	1.33
60	Lx	313	ARG	CZ-NH1	-7.41	1.23	1.33
20	LJ	330	ARG	CZ-NH1	-7.41	1.23	1.33
26	LP	165	ARG	CZ-NH1	-7.41	1.23	1.33
48	Ll	113	ARG	CZ-NH1	-7.41	1.23	1.33
55	Ls	371	ARG	CZ-NH1	-7.41	1.23	1.33
68	UF	32	ARG	CZ-NH1	-7.41	1.23	1.33
22	LL	342	ARG	CZ-NH1	-7.41	1.23	1.33
24	LN	328	ARG	CZ-NH1	-7.41	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	LV	486	ARG	CZ-NH1	-7.41	1.23	1.33
40	Ld	333	ARG	CZ-NH1	-7.41	1.23	1.33
49	Lm	265	ARG	CZ-NH1	-7.41	1.23	1.33
51	Lo	182	ARG	CZ-NH1	-7.41	1.23	1.33
55	Ls	375	ARG	CZ-NH1	-7.41	1.23	1.33
64	UB	267	ARG	CZ-NH1	-7.41	1.23	1.33
69	UG	313	ARG	CZ-NH1	-7.41	1.23	1.33
1	L0	385	ARG	CZ-NH1	-7.41	1.23	1.33
3	L2	81	ARG	CZ-NH1	-7.41	1.23	1.33
6	L5	475	ARG	CZ-NH1	-7.41	1.23	1.33
15	LE	371	ARG	CZ-NH1	-7.41	1.23	1.33
26	LP	257	ARG	CZ-NH1	-7.41	1.23	1.33
30	LT	15	ARG	CZ-NH1	-7.41	1.23	1.33
36	LZ	196	ARG	CZ-NH1	-7.41	1.23	1.33
38	Lb	371	ARG	CZ-NH1	-7.41	1.23	1.33
38	Lb	775	ARG	CZ-NH1	-7.41	1.23	1.33
25	LO	127	ARG	CZ-NH1	-7.41	1.23	1.33
40	Ld	310	ARG	CZ-NH1	-7.41	1.23	1.33
46	Lj	97	ARG	CZ-NH1	-7.41	1.23	1.33
1	L0	618	ARG	CZ-NH1	-7.41	1.23	1.33
11	LA	167	ARG	CZ-NH1	-7.41	1.23	1.33
23	LM	134	ARG	CZ-NH1	-7.41	1.23	1.33
25	LO	144	ARG	CZ-NH1	-7.41	1.23	1.33
27	LQ	398	ARG	CZ-NH1	-7.41	1.23	1.33
37	La	77	ARG	CZ-NH1	-7.41	1.23	1.33
37	La	160	ARG	CZ-NH1	-7.41	1.23	1.33
43	Lg	175	ARG	CZ-NH1	-7.41	1.23	1.33
53	Lq	700	ARG	CZ-NH1	-7.41	1.23	1.33
55	Ls	338	ARG	CZ-NH1	-7.41	1.23	1.33
59	Lw	163	ARG	CZ-NH1	-7.41	1.23	1.33
5	L4	586	ARG	CZ-NH1	-7.40	1.23	1.33
40	Ld	317	ARG	CZ-NH1	-7.40	1.23	1.33
2	L1	499	ARG	CZ-NH1	-7.40	1.23	1.33
9	L8	17	ARG	CZ-NH1	-7.40	1.23	1.33
13	LC	246	ARG	CZ-NH1	-7.40	1.23	1.33
23	LM	63	ARG	CZ-NH1	-7.40	1.23	1.33
28	LR	22	ARG	CZ-NH1	-7.40	1.23	1.33
32	LV	961	ARG	CZ-NH1	-7.40	1.23	1.33
34	LX	111	ARG	CZ-NH1	-7.40	1.23	1.33
35	LY	260	ARG	CZ-NH1	-7.40	1.23	1.33
35	LY	443	ARG	CZ-NH1	-7.40	1.23	1.33
38	Lb	288	ARG	CZ-NH1	-7.40	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	Lb	390	ARG	CZ-NH1	-7.40	1.23	1.33
39	Lc	427	ARG	CZ-NH1	-7.40	1.23	1.33
45	Li	603	ARG	CZ-NH1	-7.40	1.23	1.33
52	Lp	499	ARG	CZ-NH1	-7.40	1.23	1.33
61	Ly	586	ARG	CZ-NH1	-7.40	1.23	1.33
67	UE	185	ARG	CZ-NH1	-7.40	1.23	1.33
4	L3	505	ARG	CZ-NH1	-7.40	1.23	1.33
11	LA	169	ARG	CZ-NH1	-7.40	1.23	1.33
27	LQ	359	ARG	CZ-NH1	-7.40	1.23	1.33
30	LT	81	ARG	CZ-NH1	-7.40	1.23	1.33
38	Lb	609	ARG	CZ-NH1	-7.40	1.23	1.33
38	Lb	685	ARG	CZ-NH1	-7.40	1.23	1.33
43	Lg	230	ARG	CZ-NH1	-7.40	1.23	1.33
53	Lq	523	ARG	CZ-NH1	-7.40	1.23	1.33
56	Lt	265	ARG	CZ-NH1	-7.40	1.23	1.33
57	Lu	256	ARG	CZ-NH1	-7.40	1.23	1.33
59	Lw	20	ARG	CZ-NH1	-7.40	1.23	1.33
4	L3	570	ARG	CZ-NH1	-7.40	1.23	1.33
21	LK	143	ARG	CZ-NH1	-7.40	1.23	1.33
38	Lb	314	ARG	CZ-NH1	-7.40	1.23	1.33
41	Le	609	ARG	CZ-NH1	-7.40	1.23	1.33
46	Lj	102	ARG	CZ-NH1	-7.40	1.23	1.33
57	Lu	279	ARG	CZ-NH1	-7.40	1.23	1.33
8	L7	13	ARG	CZ-NH1	-7.40	1.23	1.33
10	L9	456	ARG	CZ-NH1	-7.40	1.23	1.33
11	LA	149	ARG	CZ-NH1	-7.40	1.23	1.33
32	LV	407	ARG	CZ-NH1	-7.40	1.23	1.33
32	LV	889	ARG	CZ-NH1	-7.40	1.23	1.33
37	La	79	ARG	CZ-NH1	-7.40	1.23	1.33
38	Lb	899	ARG	CZ-NH1	-7.40	1.23	1.33
41	Le	573	ARG	CZ-NH1	-7.40	1.23	1.33
51	Lo	184	ARG	CZ-NH1	-7.40	1.23	1.33
52	Lp	623	ARG	CZ-NH1	-7.40	1.23	1.33
53	Lq	688	ARG	CZ-NH1	-7.40	1.23	1.33
61	Ly	458	ARG	CZ-NH1	-7.40	1.23	1.33
69	UG	263	ARG	CZ-NH1	-7.40	1.23	1.33
22	LL	549	ARG	CZ-NH1	-7.40	1.23	1.33
23	LM	109	ARG	CZ-NH1	-7.40	1.23	1.33
25	LO	125	ARG	CZ-NH1	-7.40	1.23	1.33
43	Lg	82	ARG	CZ-NH1	-7.40	1.23	1.33
1	L0	373	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	421	ARG	CZ-NH1	-7.39	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	La	92	ARG	CZ-NH1	-7.39	1.23	1.33
38	Lb	404	ARG	CZ-NH1	-7.39	1.23	1.33
51	Lo	315	ARG	CZ-NH1	-7.39	1.23	1.33
61	Ly	285	ARG	CZ-NH1	-7.39	1.23	1.33
63	UA	251	ARG	CZ-NH1	-7.39	1.23	1.33
70	UH	273	ARG	CZ-NH1	-7.39	1.23	1.33
1	L0	258	ARG	CZ-NH1	-7.39	1.23	1.33
12	LB	29	ARG	CZ-NH1	-7.39	1.23	1.33
13	LC	139	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	170	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	213	ARG	CZ-NH1	-7.39	1.23	1.33
27	LQ	415	ARG	CZ-NH1	-7.39	1.23	1.33
33	LW	286	ARG	CZ-NH1	-7.39	1.23	1.33
33	LW	325	ARG	CZ-NH1	-7.39	1.23	1.33
33	LW	462	ARG	CZ-NH1	-7.39	1.23	1.33
47	Lk	540	ARG	CZ-NH1	-7.39	1.23	1.33
51	Lo	214	ARG	CZ-NH1	-7.39	1.23	1.33
53	Lq	107	ARG	CZ-NH1	-7.39	1.23	1.33
55	Ls	367	ARG	CZ-NH1	-7.39	1.23	1.33
55	Ls	373	ARG	CZ-NH1	-7.39	1.23	1.33
61	Ly	383	ARG	CZ-NH1	-7.39	1.23	1.33
61	Ly	589	ARG	CZ-NH1	-7.39	1.23	1.33
65	UC	293	ARG	CZ-NH1	-7.39	1.23	1.33
1	L0	365	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	284	ARG	CZ-NH1	-7.39	1.23	1.33
38	Lb	384	ARG	CZ-NH1	-7.39	1.23	1.33
43	Lg	115	ARG	CZ-NH1	-7.39	1.23	1.33
52	Lp	698	ARG	CZ-NH1	-7.39	1.23	1.33
52	Lp	720	ARG	CZ-NH1	-7.39	1.23	1.33
54	Lr	13	ARG	CZ-NH1	-7.39	1.23	1.33
55	Ls	344	ARG	CZ-NH1	-7.39	1.23	1.33
6	L5	476	ARG	CZ-NH1	-7.39	1.23	1.33
14	LD	529	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	113	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	395	ARG	CZ-NH1	-7.39	1.23	1.33
25	LO	99	ARG	CZ-NH1	-7.39	1.23	1.33
40	Ld	613	ARG	CZ-NH1	-7.39	1.23	1.33
41	Le	489	ARG	CZ-NH1	-7.39	1.23	1.33
52	Lp	414	ARG	CZ-NH1	-7.39	1.23	1.33
52	Lp	517	ARG	CZ-NH1	-7.39	1.23	1.33
52	Lp	689	ARG	CZ-NH1	-7.39	1.23	1.33
54	Lr	255	ARG	CZ-NH1	-7.39	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
62	Lz	236	ARG	CZ-NH1	-7.39	1.23	1.33
67	UE	127	ARG	CZ-NH1	-7.39	1.23	1.33
53	Lq	120	ARG	CZ-NH1	-7.39	1.23	1.33
20	LJ	9	ARG	CZ-NH1	-7.39	1.23	1.33
24	LN	319	ARG	CZ-NH1	-7.39	1.23	1.33
33	LW	217	ARG	CZ-NH1	-7.39	1.23	1.33
38	Lb	423	ARG	CZ-NH1	-7.39	1.23	1.33
54	Lr	17	ARG	CZ-NH1	-7.39	1.23	1.33
54	Lr	269	ARG	CZ-NH1	-7.39	1.23	1.33
59	Lw	13	ARG	CZ-NH1	-7.39	1.23	1.33
3	L2	71	ARG	CZ-NH1	-7.38	1.23	1.33
9	L8	161	ARG	CZ-NH1	-7.38	1.23	1.33
11	LA	87	ARG	CZ-NH1	-7.38	1.23	1.33
25	LO	9	ARG	CZ-NH1	-7.38	1.23	1.33
35	LY	249	ARG	CZ-NH1	-7.38	1.23	1.33
36	LZ	101	ARG	CZ-NH1	-7.38	1.23	1.33
41	Le	629	ARG	CZ-NH1	-7.38	1.23	1.33
42	Lf	342	ARG	CZ-NH1	-7.38	1.23	1.33
45	Li	601	ARG	CZ-NH1	-7.38	1.23	1.33
48	Ll	42	ARG	CZ-NH1	-7.38	1.23	1.33
51	Lo	333	ARG	CZ-NH1	-7.38	1.23	1.33
61	Ly	596	ARG	CZ-NH1	-7.38	1.23	1.33
61	Ly	669	ARG	CZ-NH1	-7.38	1.23	1.33
1	L0	586	ARG	CZ-NH1	-7.38	1.23	1.33
6	L5	458	ARG	CZ-NH1	-7.38	1.23	1.33
15	LE	376	ARG	CZ-NH1	-7.38	1.23	1.33
38	Lb	361	ARG	CZ-NH1	-7.38	1.23	1.33
64	UB	366	ARG	CZ-NH1	-7.38	1.23	1.33
18	LH	204	ARG	CZ-NH1	-7.38	1.23	1.33
20	LJ	368	ARG	CZ-NH1	-7.38	1.23	1.33
29	LS	3	ARG	CZ-NH1	-7.38	1.23	1.33
32	LV	1074	ARG	CZ-NH1	-7.38	1.23	1.33
38	Lb	394	ARG	CZ-NH1	-7.38	1.23	1.33
41	Le	550	ARG	CZ-NH1	-7.38	1.23	1.33
44	Lh	740	ARG	CZ-NH1	-7.38	1.23	1.33
61	Ly	300	ARG	CZ-NH1	-7.38	1.23	1.33
64	UB	304	ARG	CZ-NH1	-7.38	1.23	1.33
69	UG	262	ARG	CZ-NH1	-7.38	1.23	1.33
4	L3	642	ARG	CZ-NH1	-7.38	1.23	1.33
36	LZ	70	ARG	CZ-NH1	-7.38	1.23	1.33
44	Lh	715	ARG	CZ-NH1	-7.38	1.23	1.33
52	Lp	456	ARG	CZ-NH1	-7.38	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	Lp	496	ARG	CZ-NH1	-7.38	1.23	1.33
5	L4	269	ARG	CZ-NH1	-7.38	1.23	1.33
25	LO	116	ARG	CZ-NH1	-7.38	1.23	1.33
30	LT	33	ARG	CZ-NH1	-7.38	1.23	1.33
36	LZ	5	ARG	CZ-NH1	-7.38	1.23	1.33
38	Lb	842	ARG	CZ-NH1	-7.38	1.23	1.33
39	Lc	254	ARG	CZ-NH1	-7.38	1.23	1.33
43	Lg	234	ARG	CZ-NH1	-7.38	1.23	1.33
45	Li	672	ARG	CZ-NH1	-7.38	1.23	1.33
55	Ls	372	ARG	CZ-NH1	-7.38	1.23	1.33
55	Ls	402	ARG	CZ-NH1	-7.38	1.23	1.33
4	L3	734	ARG	CZ-NH1	-7.38	1.23	1.33
5	L4	355	ARG	CZ-NH1	-7.38	1.23	1.33
15	LE	383	ARG	CZ-NH1	-7.38	1.23	1.33
17	LG	232	ARG	CZ-NH1	-7.38	1.23	1.33
34	LX	176	ARG	CZ-NH1	-7.38	1.23	1.33
46	Lj	30	ARG	CZ-NH1	-7.38	1.23	1.33
52	Lp	604	ARG	CZ-NH1	-7.38	1.23	1.33
56	Lt	97	ARG	CZ-NH1	-7.38	1.23	1.33
9	L8	21	ARG	CZ-NH1	-7.38	1.23	1.33
27	LQ	381	ARG	CZ-NH1	-7.38	1.23	1.33
32	LV	479	ARG	CZ-NH1	-7.38	1.23	1.33
35	LY	427	ARG	CZ-NH1	-7.38	1.23	1.33
37	La	85	ARG	CZ-NH1	-7.38	1.23	1.33
51	Lo	347	ARG	CZ-NH1	-7.38	1.23	1.33
9	L8	145	ARG	CZ-NH1	-7.37	1.23	1.33
22	LL	909	ARG	CZ-NH1	-7.37	1.23	1.33
33	LW	379	ARG	CZ-NH1	-7.37	1.23	1.33
39	Lc	432	ARG	CZ-NH1	-7.37	1.23	1.33
39	Lc	452	ARG	CZ-NH1	-7.37	1.23	1.33
44	Lh	657	ARG	CZ-NH1	-7.37	1.23	1.33
59	Lw	156	ARG	CZ-NH1	-7.37	1.23	1.33
60	Lx	368	ARG	CZ-NH1	-7.37	1.23	1.33
61	Ly	599	ARG	CZ-NH1	-7.37	1.23	1.33
10	L9	459	ARG	CZ-NH1	-7.37	1.23	1.33
40	Ld	494	ARG	CZ-NH1	-7.37	1.23	1.33
45	Li	523	ARG	CZ-NH1	-7.37	1.23	1.33
49	Lm	372	ARG	CZ-NH1	-7.37	1.23	1.33
52	Lp	745	ARG	CZ-NH2	-7.37	1.23	1.33
55	Ls	588	ARG	CZ-NH1	-7.37	1.23	1.33
58	Lv	74	ARG	CZ-NH1	-7.37	1.23	1.33
66	UD	169	ARG	CZ-NH1	-7.37	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LQ	351	ARG	CZ-NH1	-7.37	1.23	1.33
33	LW	210	ARG	CZ-NH1	-7.37	1.23	1.33
38	Lb	746	ARG	CZ-NH1	-7.37	1.23	1.33
51	Lo	231	ARG	CZ-NH1	-7.37	1.23	1.33
5	L4	469	ARG	CZ-NH1	-7.37	1.23	1.33
8	L7	70	ARG	CZ-NH1	-7.37	1.23	1.33
16	LF	156	ARG	CZ-NH1	-7.37	1.23	1.33
38	Lb	652	ARG	CZ-NH1	-7.37	1.23	1.33
49	Lm	291	ARG	CZ-NH1	-7.37	1.23	1.33
53	Lq	850	ARG	CZ-NH1	-7.37	1.23	1.33
13	LC	554	ARG	CZ-NH1	-7.37	1.23	1.33
40	Ld	518	ARG	CZ-NH1	-7.37	1.23	1.33
51	Lo	147	ARG	CZ-NH1	-7.37	1.23	1.33
6	L5	469	ARG	CZ-NH1	-7.37	1.23	1.33
12	LB	18	ARG	CZ-NH1	-7.37	1.23	1.33
13	LC	319	ARG	CZ-NH1	-7.37	1.23	1.33
17	LG	236	ARG	CZ-NH1	-7.37	1.23	1.33
21	LK	165	ARG	CZ-NH1	-7.37	1.23	1.33
33	LW	468	ARG	CZ-NH1	-7.37	1.23	1.33
38	Lb	494	ARG	CZ-NH1	-7.37	1.23	1.33
40	Ld	490	ARG	CZ-NH1	-7.37	1.23	1.33
43	Lg	203	ARG	CZ-NH1	-7.37	1.23	1.33
50	Ln	149	ARG	CZ-NH1	-7.37	1.23	1.33
64	UB	295	ARG	CZ-NH1	-7.37	1.23	1.33
11	LA	131	ARG	CZ-NH1	-7.36	1.23	1.33
25	LO	11	ARG	CZ-NH1	-7.36	1.23	1.33
25	LO	87	ARG	CZ-NH1	-7.36	1.23	1.33
30	LT	46	ARG	CZ-NH1	-7.36	1.23	1.33
38	Lb	720	ARG	CZ-NH1	-7.36	1.23	1.33
42	Lf	314	ARG	CZ-NH1	-7.36	1.23	1.33
44	Lh	637	ARG	CZ-NH1	-7.36	1.23	1.33
46	Lj	74	ARG	CZ-NH1	-7.36	1.23	1.33
62	Lz	203	ARG	CZ-NH1	-7.36	1.23	1.33
63	UA	245	ARG	CZ-NH1	-7.36	1.23	1.33
44	Lh	515	ARG	CZ-NH1	-7.36	1.23	1.33
1	L0	434	ARG	CZ-NH1	-7.36	1.23	1.33
14	LD	351	ARG	CZ-NH1	-7.36	1.23	1.33
18	LH	232	ARG	CZ-NH1	-7.36	1.23	1.33
32	LV	474	ARG	CZ-NH1	-7.36	1.23	1.33
37	La	30	ARG	CZ-NH1	-7.36	1.23	1.33
38	Lb	721	ARG	CZ-NH1	-7.36	1.23	1.33
40	Ld	344	ARG	CZ-NH1	-7.36	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
41	Le	515	ARG	CZ-NH1	-7.36	1.23	1.33
43	Lg	134	ARG	CZ-NH1	-7.36	1.23	1.33
51	Lo	151	ARG	CZ-NH1	-7.36	1.23	1.33
52	Lp	650	ARG	CZ-NH1	-7.36	1.23	1.33
56	Lt	106	ARG	CZ-NH1	-7.36	1.23	1.33
67	UE	144	ARG	CZ-NH1	-7.36	1.23	1.33
20	LJ	119	ARG	CZ-NH1	-7.36	1.23	1.33
29	LS	144	ARG	CZ-NH1	-7.36	1.23	1.33
68	UF	61	ARG	CZ-NH1	-7.36	1.23	1.33
12	LB	27	ARG	CZ-NH1	-7.36	1.23	1.33
13	LC	169	ARG	CZ-NH1	-7.36	1.23	1.33
24	LN	259	ARG	CZ-NH1	-7.36	1.23	1.33
25	LO	110	ARG	CZ-NH1	-7.36	1.23	1.33
31	LU	239	ARG	CZ-NH1	-7.36	1.23	1.33
42	Lf	326	ARG	CZ-NH1	-7.36	1.23	1.33
46	Lj	113	ARG	CZ-NH1	-7.36	1.23	1.33
51	Lo	114	ARG	CZ-NH1	-7.36	1.23	1.33
56	Lt	71	ARG	CZ-NH1	-7.36	1.23	1.33
6	L5	468	ARG	CZ-NH1	-7.36	1.23	1.33
9	L8	118	ARG	CZ-NH1	-7.36	1.23	1.33
22	LL	298	ARG	CZ-NH1	-7.36	1.23	1.33
25	LO	101	ARG	CZ-NH1	-7.36	1.23	1.33
25	LO	121	ARG	CZ-NH1	-7.36	1.23	1.33
51	Lo	189	ARG	CZ-NH1	-7.36	1.23	1.33
51	Lo	265	ARG	CZ-NH1	-7.36	1.23	1.33
52	Lp	645	ARG	CZ-NH1	-7.36	1.23	1.33
52	Lp	648	ARG	CZ-NH1	-7.36	1.23	1.33
54	Lr	79	ARG	CZ-NH1	-7.36	1.23	1.33
55	Ls	385	ARG	CZ-NH1	-7.36	1.23	1.33
32	LV	412	ARG	CZ-NH1	-7.35	1.23	1.33
5	L4	203	ARG	CZ-NH1	-7.35	1.23	1.33
9	L8	116	ARG	CZ-NH1	-7.35	1.23	1.33
13	LC	291	ARG	CZ-NH1	-7.35	1.23	1.33
39	Lc	222	ARG	CZ-NH1	-7.35	1.23	1.33
39	Lc	613	ARG	CZ-NH1	-7.35	1.23	1.33
45	Li	565	ARG	CZ-NH1	-7.35	1.23	1.33
52	Lp	627	ARG	CZ-NH1	-7.35	1.23	1.33
56	Lt	223	ARG	CZ-NH1	-7.35	1.23	1.33
24	LN	341	ARG	CZ-NH1	-7.35	1.23	1.33
33	LW	471	ARG	CZ-NH1	-7.35	1.23	1.33
39	Lc	637	ARG	CZ-NH2	-7.35	1.23	1.33
41	Le	628	ARG	CZ-NH1	-7.35	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	Lk	516	ARG	CZ-NH1	-7.35	1.23	1.33
61	Ly	333	ARG	CZ-NH1	-7.35	1.23	1.33
61	Ly	543	ARG	CZ-NH1	-7.35	1.23	1.33
61	Ly	587	ARG	CZ-NH1	-7.35	1.23	1.33
8	L7	111	ARG	CZ-NH1	-7.35	1.23	1.33
21	LK	68	ARG	CZ-NH1	-7.35	1.23	1.33
29	LS	9	ARG	CZ-NH1	-7.35	1.23	1.33
37	La	78	ARG	CZ-NH1	-7.35	1.23	1.33
52	Lp	699	ARG	CZ-NH1	-7.35	1.23	1.33
3	L2	72	ARG	CZ-NH1	-7.35	1.23	1.33
23	LM	48	ARG	CZ-NH1	-7.35	1.23	1.33
23	LM	123	ARG	CZ-NH1	-7.35	1.23	1.33
35	LY	265	ARG	CZ-NH1	-7.35	1.23	1.33
36	LZ	22	ARG	CZ-NH1	-7.35	1.23	1.33
36	LZ	121	ARG	CZ-NH1	-7.35	1.23	1.33
51	Lo	82	ARG	CZ-NH1	-7.35	1.23	1.33
64	UB	333	ARG	CZ-NH1	-7.35	1.23	1.33
34	LX	109	ARG	CZ-NH1	-7.35	1.23	1.33
37	La	38	ARG	CZ-NH1	-7.35	1.23	1.33
41	Le	626	ARG	CZ-NH1	-7.35	1.23	1.33
43	Lg	86	ARG	CZ-NH1	-7.35	1.23	1.33
56	Lt	218	ARG	CZ-NH1	-7.35	1.23	1.33
60	Lx	358	ARG	CZ-NH1	-7.35	1.23	1.33
5	L4	516	ARG	CZ-NH1	-7.34	1.23	1.33
20	LJ	275	ARG	CZ-NH1	-7.34	1.23	1.33
38	Lb	584	ARG	CZ-NH1	-7.34	1.23	1.33
45	Li	710	ARG	CZ-NH1	-7.34	1.23	1.33
52	Lp	709	ARG	CZ-NH1	-7.34	1.23	1.33
61	Ly	581	ARG	CZ-NH1	-7.34	1.23	1.33
25	LO	142	ARG	CZ-NH1	-7.34	1.23	1.33
33	LW	219	ARG	CZ-NH1	-7.34	1.23	1.33
45	Li	557	ARG	CZ-NH1	-7.34	1.23	1.33
46	Lj	26	ARG	CZ-NH1	-7.34	1.23	1.33
52	Lp	538	ARG	CZ-NH1	-7.34	1.23	1.33
53	Lq	647	ARG	CZ-NH1	-7.34	1.23	1.33
2	L1	505	ARG	CZ-NH1	-7.34	1.23	1.33
13	LC	567	ARG	CZ-NH1	-7.34	1.23	1.33
13	LC	575	ARG	CZ-NH1	-7.34	1.23	1.33
20	LJ	312	ARG	CZ-NH1	-7.34	1.23	1.33
20	LJ	418	ARG	CZ-NH1	-7.34	1.23	1.33
33	LW	333	ARG	CZ-NH1	-7.34	1.23	1.33
36	LZ	164	ARG	CZ-NH1	-7.34	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
45	Li	275	ARG	CZ-NH1	-7.34	1.23	1.33
54	Lr	182	ARG	CZ-NH1	-7.34	1.23	1.33
62	Lz	142	ARG	CZ-NH1	-7.34	1.23	1.33
64	UB	328	ARG	CZ-NH1	-7.34	1.23	1.33
38	Lb	355	ARG	CZ-NH1	-7.34	1.23	1.33
44	Lh	402	ARG	CZ-NH1	-7.34	1.23	1.33
51	Lo	302	ARG	CZ-NH1	-7.34	1.23	1.33
69	UG	257	ARG	CZ-NH1	-7.34	1.23	1.33
25	LO	136	ARG	CZ-NH1	-7.34	1.23	1.33
38	Lb	305	ARG	CZ-NH1	-7.34	1.23	1.33
52	Lp	706	ARG	CZ-NH1	-7.34	1.23	1.33
1	L0	363	ARG	CZ-NH1	-7.34	1.23	1.33
28	LR	25	ARG	CZ-NH1	-7.34	1.23	1.33
28	LR	50	ARG	CZ-NH1	-7.34	1.23	1.33
37	La	37	ARG	CZ-NH1	-7.34	1.23	1.33
38	Lb	753	ARG	CZ-NH1	-7.33	1.23	1.33
38	Lb	864	ARG	CZ-NH1	-7.33	1.23	1.33
64	UB	316	ARG	CZ-NH1	-7.33	1.23	1.33
4	L3	424	ARG	CZ-NH1	-7.33	1.23	1.33
14	LD	366	ARG	CZ-NH1	-7.33	1.23	1.33
32	LV	1062	ARG	CZ-NH1	-7.33	1.23	1.33
38	Lb	791	ARG	CZ-NH1	-7.33	1.23	1.33
38	Lb	863	ARG	CZ-NH1	-7.33	1.23	1.33
39	Lc	255	ARG	CZ-NH1	-7.33	1.23	1.33
55	Ls	517	ARG	CZ-NH1	-7.33	1.23	1.33
11	LA	174	ARG	CZ-NH1	-7.33	1.23	1.33
27	LQ	396	ARG	CZ-NH1	-7.33	1.23	1.33
38	Lb	448	ARG	CZ-NH1	-7.33	1.23	1.33
66	UD	181	ARG	CZ-NH1	-7.33	1.23	1.33
61	Ly	652	ARG	CZ-NH1	-7.33	1.23	1.33
24	LN	279	ARG	CZ-NH1	-7.33	1.23	1.33
41	Le	427	ARG	CZ-NH1	-7.33	1.23	1.33
44	Lh	478	ARG	CZ-NH1	-7.33	1.23	1.33
23	LM	6	ARG	CZ-NH1	-7.33	1.23	1.33
38	Lb	505	ARG	CZ-NH1	-7.33	1.23	1.33
46	Lj	5	ARG	CZ-NH1	-7.33	1.23	1.33
9	L8	236	ARG	CZ-NH1	-7.33	1.23	1.33
27	LQ	403	ARG	CZ-NH1	-7.33	1.23	1.33
51	Lo	264	ARG	CZ-NH1	-7.33	1.23	1.33
56	Lt	245	ARG	CZ-NH1	-7.33	1.23	1.33
69	UG	356	ARG	CZ-NH1	-7.33	1.23	1.33
39	Lc	333	ARG	CZ-NH1	-7.32	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	Lq	229	ARG	CZ-NH1	-7.32	1.23	1.33
59	Lw	166	ARG	CZ-NH1	-7.32	1.23	1.33
24	LN	256	ARG	CZ-NH1	-7.32	1.23	1.33
44	Lh	358	ARG	CZ-NH1	-7.32	1.23	1.33
49	Lm	427	ARG	CZ-NH1	-7.32	1.23	1.33
32	LV	1063	ARG	CZ-NH1	-7.32	1.23	1.33
33	LW	439	ARG	CZ-NH1	-7.32	1.23	1.33
34	LX	125	ARG	CZ-NH1	-7.32	1.23	1.33
36	LZ	27	ARG	CZ-NH1	-7.32	1.23	1.33
39	Lc	247	ARG	CZ-NH1	-7.32	1.23	1.33
48	Ll	33	ARG	CZ-NH1	-7.32	1.23	1.33
57	Lu	269	ARG	CZ-NH1	-7.32	1.23	1.33
30	LT	120	ARG	CZ-NH1	-7.32	1.23	1.33
52	Lp	415	ARG	CZ-NH1	-7.32	1.23	1.33
55	Ls	359	ARG	CZ-NH1	-7.32	1.23	1.33
21	LK	117	ARG	CZ-NH1	-7.32	1.23	1.33
22	LL	535	ARG	CZ-NH1	-7.32	1.23	1.33
25	LO	133	ARG	CZ-NH1	-7.32	1.23	1.33
54	Lr	180	ARG	CZ-NH1	-7.32	1.23	1.33
38	Lb	638	ARG	CZ-NH1	-7.32	1.23	1.33
52	Lp	454	ARG	CZ-NH1	-7.32	1.23	1.33
61	Ly	363	ARG	CZ-NH1	-7.32	1.23	1.33
35	LY	531	ARG	CZ-NH1	-7.31	1.23	1.33
40	Ld	549	ARG	CZ-NH1	-7.31	1.23	1.33
4	L3	724	ARG	CZ-NH1	-7.31	1.23	1.33
29	LS	73	ARG	CZ-NH1	-7.31	1.23	1.33
51	Lo	224	ARG	CZ-NH1	-7.31	1.23	1.33
43	Lg	97	ARG	CZ-NH1	-7.31	1.23	1.33
56	Lt	131	ARG	CZ-NH1	-7.31	1.23	1.33
61	Ly	464	ARG	CZ-NH1	-7.31	1.23	1.33
19	LI	20	ARG	CZ-NH1	-7.31	1.23	1.33
38	Lb	727	ARG	CZ-NH1	-7.31	1.23	1.33
42	Lf	334	ARG	CZ-NH1	-7.31	1.23	1.33
52	Lp	652	ARG	CZ-NH1	-7.31	1.23	1.33
64	UB	346	ARG	CZ-NH1	-7.31	1.23	1.33
20	LJ	245	ARG	CZ-NH1	-7.31	1.23	1.33
28	LR	36	ARG	CZ-NH1	-7.31	1.23	1.33
32	LV	613	ARG	CZ-NH1	-7.31	1.23	1.33
64	UB	326	ARG	CZ-NH1	-7.31	1.23	1.33
18	LH	236	ARG	CZ-NH1	-7.31	1.23	1.33
38	Lb	852	ARG	CZ-NH1	-7.31	1.23	1.33
39	Lc	207	ARG	CZ-NH1	-7.30	1.23	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	Lc	311	ARG	CZ-NH1	-7.30	1.23	1.33
41	Le	604	ARG	CZ-NH1	-7.30	1.23	1.33
64	UB	268	ARG	CZ-NH1	-7.30	1.23	1.33
1	L0	396	ARG	CZ-NH1	-7.30	1.23	1.33
8	L7	76	ARG	CZ-NH1	-7.30	1.23	1.33
21	LK	142	ARG	CZ-NH1	-7.30	1.23	1.33
34	LX	162	ARG	CZ-NH1	-7.30	1.23	1.33
13	LC	178	ARG	CZ-NH1	-7.30	1.23	1.33
26	LP	115	ARG	CZ-NH1	-7.30	1.23	1.33
62	Lz	147	ARG	CZ-NH1	-7.30	1.23	1.33
61	Ly	584	ARG	CZ-NH1	-7.30	1.23	1.33
38	Lb	312	ARG	CZ-NH1	-7.29	1.23	1.33
45	Li	363	ARG	CZ-NH1	-7.29	1.23	1.33
9	L8	20	ARG	CZ-NH1	-7.29	1.23	1.33
39	Lc	148	ARG	CZ-NH1	-7.29	1.23	1.33
61	Ly	680	ARG	CZ-NH1	-7.29	1.23	1.33
9	L8	89	ARG	CZ-NH1	-7.29	1.23	1.33
64	UB	345	ARG	CZ-NH1	-7.29	1.23	1.33
40	Ld	594	ARG	CZ-NH1	-7.29	1.23	1.33
5	L4	590	ARG	CZ-NH1	-7.29	1.23	1.33
9	L8	52	ARG	CZ-NH1	-7.29	1.23	1.33
77	l5	34	G	C8-N7	-7.29	1.26	1.30
49	Lm	438	ARG	CZ-NH2	-7.29	1.23	1.33
9	L8	139	ARG	CZ-NH1	-7.29	1.23	1.33
11	LA	38	ARG	CZ-NH1	-7.28	1.23	1.33
47	Lk	546	ARG	CZ-NH1	-7.28	1.23	1.33
39	Lc	494	ARG	CZ-NH1	-7.28	1.23	1.33
5	L4	587	ARG	CZ-NH1	-7.28	1.23	1.33
13	LC	607	ARG	CZ-NH1	-7.28	1.23	1.33
14	LD	364	ARG	CZ-NH1	-7.28	1.23	1.33
25	LO	343	ARG	CZ-NH1	-7.28	1.23	1.33
61	Ly	290	ARG	CZ-NH1	-7.28	1.23	1.33
61	Ly	338	ARG	CZ-NH1	-7.28	1.23	1.33
22	LL	531	ARG	CZ-NH1	-7.27	1.23	1.33
38	Lb	296	ARG	CZ-NH1	-7.26	1.23	1.33
56	Lt	119	ARG	CZ-NH1	-7.26	1.23	1.33
10	L9	462	ARG	CZ-NH1	-7.25	1.23	1.33
9	L8	234	ARG	CZ-NH1	-7.25	1.23	1.33
44	Lh	436	ARG	CZ-NH1	-7.24	1.23	1.33
46	Lj	10	ARG	CZ-NH1	-7.24	1.23	1.33
82	lA	14	U	C5-C6	-7.24	1.27	1.34
78	l6	31	C	C4-N4	-7.21	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
90	lI	36	A	C2'-C1'	-7.20	1.45	1.53
91	lJ	138	G	C8-N7	-7.17	1.26	1.30
76	l4	11	G	C2'-O2'	-7.16	1.32	1.41
82	lA	13	U	C5-C6	-7.16	1.27	1.34
90	lI	48	A	C6-N6	-7.13	1.28	1.33
79	l7	55	G	C8-N7	-7.10	1.26	1.30
91	lJ	5	G	C8-N7	-7.09	1.26	1.30
90	lI	5	G	C8-N7	-7.06	1.26	1.30
81	l9	2	C	C4-N4	-7.06	1.27	1.33
93	lL	3	G	C8-N7	-7.01	1.26	1.30
96	lO	31	G	C8-N7	-7.00	1.26	1.30
96	lO	138	G	C8-N7	-6.99	1.26	1.30
81	l9	3	C	C4-N4	-6.98	1.27	1.33
75	l3	21	G	C8-N7	-6.97	1.26	1.30
93	lL	2	G	C8-N7	-6.96	1.26	1.30
43	Lg	22	GLY	N-CA	-6.95	1.35	1.46
91	lJ	16	G	C8-N7	-6.95	1.26	1.30
76	l4	20	G	C8-N7	-6.94	1.26	1.30
96	lO	139	G	C8-N7	-6.94	1.26	1.30
93	lL	64	G	C8-N7	-6.92	1.26	1.30
96	lO	89	G	C8-N7	-6.92	1.26	1.30
36	LZ	2	GLY	N-CA	-6.92	1.35	1.46
76	l4	32	G	C8-N7	-6.89	1.26	1.30
72	l0	18	G	C8-N7	-6.89	1.26	1.30
92	lK	14	G	C8-N7	-6.87	1.26	1.30
82	lA	1	G	C8-N7	-6.87	1.26	1.30
96	lO	8	G	C8-N7	-6.86	1.26	1.30
91	lJ	140	G	C8-N7	-6.86	1.26	1.30
42	Lf	165	GLY	N-CA	-6.85	1.35	1.46
95	lN	18	A	C2'-C1'	-6.84	1.45	1.53
90	lI	17	G	C8-N7	-6.84	1.26	1.30
39	Lc	637	ARG	CZ-NH1	-6.81	1.24	1.33
91	lJ	229	G	C8-N7	-6.81	1.26	1.30
8	L7	10	GLY	N-CA	-6.81	1.35	1.46
20	LJ	2	GLY	N-CA	-6.80	1.35	1.46
76	l4	48	G	C8-N7	-6.80	1.26	1.30
90	lI	22	G	C8-N7	-6.79	1.26	1.30
96	lO	69	G	C8-N7	-6.79	1.26	1.30
81	l9	66	G	C8-N7	-6.78	1.26	1.30
94	lM	149	G	C8-N7	-6.78	1.26	1.30
87	lF	14	G	C8-N7	-6.77	1.26	1.30
96	lO	90	G	C8-N7	-6.77	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	L1	424	GLY	N-CA	-6.77	1.35	1.46
79	l7	52	G	C8-N7	-6.77	1.26	1.30
73	l1	13	G	C8-N7	-6.77	1.26	1.30
88	lG	18	G	C8-N7	-6.76	1.26	1.30
89	lH	14	G	C8-N7	-6.76	1.26	1.30
93	lL	38	G	C8-N7	-6.76	1.26	1.30
83	lB	31	G	C8-N7	-6.76	1.26	1.30
90	lI	4	G	C8-N7	-6.76	1.26	1.30
78	l6	22	G	C8-N7	-6.75	1.26	1.30
81	l9	7	U	C5-C6	-6.75	1.28	1.34
87	lF	17	G	C8-N7	-6.75	1.26	1.30
96	lO	115	G	C8-N7	-6.75	1.26	1.30
75	l3	51	G	C8-N7	-6.74	1.26	1.30
87	lF	34	G	C8-N7	-6.73	1.26	1.30
74	l2	3	G	C8-N7	-6.73	1.26	1.30
94	lM	25	G	C8-N7	-6.73	1.26	1.30
96	lO	166	G	C8-N7	-6.73	1.26	1.30
91	lJ	102	G	C8-N7	-6.72	1.26	1.30
9	L8	2	GLY	N-CA	-6.72	1.35	1.46
95	lN	41	G	C8-N7	-6.72	1.26	1.30
91	lJ	124	G	C8-N7	-6.71	1.26	1.30
96	lO	160	G	C8-N7	-6.71	1.26	1.30
81	l9	24	G	C8-N7	-6.71	1.26	1.30
78	l6	20	G	C8-N7	-6.70	1.26	1.30
81	l9	6	U	C5-C6	-6.70	1.28	1.34
89	lH	17	G	C8-N7	-6.70	1.26	1.30
93	lL	49	G	C8-N7	-6.70	1.26	1.30
83	lB	42	G	C8-N7	-6.69	1.26	1.30
93	lL	39	G	C8-N7	-6.69	1.26	1.30
91	lJ	203	G	C8-N7	-6.68	1.26	1.30
75	l3	38	G	C8-N7	-6.68	1.26	1.30
91	lJ	185	G	C8-N7	-6.68	1.26	1.30
96	lO	107	G	C8-N7	-6.68	1.26	1.30
76	l4	60	G	C8-N7	-6.68	1.26	1.30
86	lE	5	G	C8-N7	-6.68	1.26	1.30
91	lJ	135	G	C8-N7	-6.68	1.26	1.30
81	l9	51	G	C8-N7	-6.68	1.26	1.30
77	l5	32	G	C8-N7	-6.67	1.26	1.30
91	lJ	156	G	C8-N7	-6.67	1.26	1.30
91	lJ	139	G	C8-N7	-6.66	1.26	1.30
72	l0	37	G	C8-N7	-6.66	1.26	1.30
77	l5	60	G	C8-N7	-6.66	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
76	l4	27	G	C8-N7	-6.66	1.26	1.30
83	lB	22	G	C8-N7	-6.65	1.26	1.30
86	lE	27	G	C8-N7	-6.65	1.26	1.30
94	lM	34	G	C8-N7	-6.65	1.26	1.30
94	lM	156	G	C8-N7	-6.65	1.26	1.30
96	lO	163	G	C8-N7	-6.64	1.26	1.30
89	lH	6	G	C8-N7	-6.64	1.26	1.30
96	lO	71	G	C8-N7	-6.64	1.26	1.30
81	l9	74	G	C8-N7	-6.63	1.26	1.30
84	lC	26	G	C8-N7	-6.63	1.26	1.30
75	l3	53	G	C8-N7	-6.63	1.26	1.30
91	lJ	113	G	C8-N7	-6.63	1.26	1.30
83	lB	43	G	C8-N7	-6.63	1.26	1.30
74	l2	21	G	C8-N7	-6.63	1.26	1.30
91	lJ	251	G	C8-N7	-6.62	1.26	1.30
91	lJ	226	G	C8-N7	-6.62	1.26	1.30
95	lN	35	G	C8-N7	-6.62	1.26	1.30
76	l4	86	G	C8-N7	-6.62	1.26	1.30
87	lF	64	G	C8-N7	-6.62	1.26	1.30
74	l2	15	G	C8-N7	-6.61	1.26	1.30
87	lF	24	G	C8-N7	-6.61	1.26	1.30
88	lG	10	G	C8-N7	-6.61	1.26	1.30
82	lA	50	G	C8-N7	-6.61	1.26	1.30
94	lM	26	G	C8-N7	-6.61	1.26	1.30
83	lB	40	G	C8-N7	-6.60	1.26	1.30
90	lI	19	G	C8-N7	-6.60	1.26	1.30
73	l1	7	G	C8-N7	-6.59	1.26	1.30
96	lO	17	G	C8-N7	-6.59	1.26	1.30
86	lE	3	G	C8-N7	-6.59	1.26	1.30
91	lJ	238	G	C8-N7	-6.59	1.26	1.30
78	l6	24	G	C8-N7	-6.59	1.26	1.30
96	lO	33	G	C8-N7	-6.59	1.26	1.30
74	l2	7	G	C8-N7	-6.59	1.26	1.30
94	lM	27	G	C8-N7	-6.58	1.27	1.30
96	lO	43	G	C8-N7	-6.58	1.27	1.30
81	l9	58	G	C8-N7	-6.58	1.27	1.30
96	lO	61	C	N1-C6	-6.58	1.33	1.37
73	l1	4	G	C8-N7	-6.57	1.27	1.30
76	l4	57	G	C8-N7	-6.57	1.27	1.30
81	l9	47	G	C8-N7	-6.57	1.27	1.30
76	l4	67	G	C8-N7	-6.57	1.27	1.30
91	lJ	166	G	C8-N7	-6.56	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	l5	40	G	C8-N7	-6.56	1.27	1.30
91	lJ	182	G	C8-N7	-6.56	1.27	1.30
81	l9	73	G	C8-N7	-6.56	1.27	1.30
91	lJ	170	G	C8-N7	-6.56	1.27	1.30
95	lN	24	G	C8-N7	-6.56	1.27	1.30
87	lF	29	G	C8-N7	-6.55	1.27	1.30
90	lI	18	G	C8-N7	-6.55	1.27	1.30
82	lA	20	G	C8-N7	-6.55	1.27	1.30
91	lJ	233	G	C8-N7	-6.55	1.27	1.30
72	l0	42	G	C8-N7	-6.55	1.27	1.30
96	lO	108	G	C8-N7	-6.54	1.27	1.30
91	lJ	177	C	N1-C6	-6.54	1.33	1.37
94	lM	89	G	C8-N7	-6.53	1.27	1.30
13	LC	280	GLY	N-CA	-6.53	1.36	1.46
93	lL	60	G	C8-N7	-6.52	1.27	1.30
81	l9	54	G	C8-N7	-6.52	1.27	1.30
94	lM	163	G	C8-N7	-6.51	1.27	1.30
79	l7	49	G	C8-N7	-6.51	1.27	1.30
81	l9	39	G	C8-N7	-6.50	1.27	1.30
76	l4	43	G	C8-N7	-6.50	1.27	1.30
93	lL	32	G	C8-N7	-6.49	1.27	1.30
93	lL	77	G	C8-N7	-6.49	1.27	1.30
76	l4	59	G	C8-N7	-6.48	1.27	1.30
91	lJ	209	G	C8-N7	-6.48	1.27	1.30
94	lM	122	G	C8-N7	-6.48	1.27	1.30
83	lB	4	G	C8-N7	-6.48	1.27	1.30
91	lJ	165	G	C8-N7	-6.47	1.27	1.30
86	lE	8	A	C2'-C1'	-6.47	1.46	1.53
91	lJ	255	C	N1-C6	-6.47	1.33	1.37
83	lB	8	G	C8-N7	-6.46	1.27	1.30
86	lE	7	G	C8-N7	-6.46	1.27	1.30
82	lA	49	G	C8-N7	-6.46	1.27	1.30
94	lM	165	G	C8-N7	-6.46	1.27	1.30
91	lJ	112	G	C8-N7	-6.46	1.27	1.30
39	Lc	531	ARG	CZ-NH2	-6.46	1.24	1.33
81	l9	56	G	C8-N7	-6.45	1.27	1.30
91	lJ	125	G	C8-N7	-6.45	1.27	1.30
76	l4	62	G	C8-N7	-6.44	1.27	1.30
95	lN	18	A	C3'-C2'	-6.44	1.45	1.52
39	Lc	490	ARG	CZ-NH2	-6.43	1.24	1.33
39	Lc	594	ARG	CZ-NH2	-6.42	1.24	1.33
73	l1	36	G	C8-N7	-6.42	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	148	C	N1-C6	-6.41	1.33	1.37
39	Lc	518	ARG	CZ-NH2	-6.39	1.24	1.33
91	lJ	137	C	N1-C6	-6.38	1.33	1.37
21	LK	218	ARG	CZ-NH2	-6.38	1.24	1.33
91	lJ	9	G	C8-N7	-6.38	1.27	1.30
39	Lc	526	ARG	CZ-NH2	-6.34	1.24	1.33
91	lJ	254	C	N1-C6	-6.33	1.33	1.37
94	lM	184	A	C8-N7	-6.28	1.27	1.31
83	lB	44	G	C8-N7	-6.28	1.27	1.30
91	lJ	169	C	N1-C6	-6.26	1.33	1.37
79	l7	62	A	C8-N7	-6.26	1.27	1.31
90	lI	15	C	N1-C6	-6.26	1.33	1.37
91	lJ	272	C	N1-C6	-6.25	1.33	1.37
78	l6	4	G	C8-N7	-6.25	1.27	1.30
94	lM	73	C	N1-C6	-6.25	1.33	1.37
90	lI	16	C	N1-C6	-6.22	1.33	1.37
88	lG	19	C	N1-C6	-6.22	1.33	1.37
91	lJ	280	C	N1-C6	-6.21	1.33	1.37
79	l7	54	G	C8-N7	-6.20	1.27	1.30
79	l7	63	A	C8-N7	-6.20	1.27	1.31
94	lM	75	G	C8-N7	-6.20	1.27	1.30
91	lJ	197	C	N1-C6	-6.20	1.33	1.37
90	lI	36	A	C3'-C2'	-6.19	1.46	1.52
91	lJ	253	C	N1-C6	-6.19	1.33	1.37
94	lM	43	A	C6-N6	-6.16	1.29	1.33
59	Lw	42	ARG	CZ-NH2	-6.16	1.25	1.33
85	lD	11	C	N1-C6	-6.14	1.33	1.37
85	lD	10	A	C8-N7	-6.14	1.27	1.31
96	lO	125	C	N1-C6	-6.13	1.33	1.37
91	lJ	174	C	N1-C6	-6.12	1.33	1.37
96	lO	105	G	C8-N7	-6.12	1.27	1.30
91	lJ	191	C	N1-C6	-6.12	1.33	1.37
40	Ld	637	ARG	CZ-NH2	-6.11	1.25	1.33
91	lJ	138	G	N9-C8	-6.11	1.33	1.37
76	l4	46	C	N1-C6	-6.10	1.33	1.37
75	l3	26	C	N1-C6	-6.09	1.33	1.37
91	lJ	271	C	N1-C6	-6.09	1.33	1.37
93	lL	76	C	N1-C6	-6.08	1.33	1.37
75	l3	24	C	N1-C6	-6.08	1.33	1.37
80	l8	4	G	C2-N2	-6.08	1.28	1.34
94	lM	39	G	C8-N7	-6.08	1.27	1.30
17	LG	165	TYR	CD1-CE1	-6.08	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
72	l0	41	C	N1-C6	-6.07	1.33	1.37
81	l9	10	C	N1-C6	-6.07	1.33	1.37
75	l3	50	C	N1-C6	-6.07	1.33	1.37
17	LG	165	TYR	CD2-CE2	-6.06	1.30	1.39
91	lJ	50	A	C8-N7	-6.06	1.27	1.31
94	lM	90	C	N1-C6	-6.06	1.33	1.37
81	l9	37	C	N1-C6	-6.05	1.33	1.37
72	l0	36	C	N1-C6	-6.04	1.33	1.37
76	l4	29	C	N1-C6	-6.04	1.33	1.37
94	lM	161	C	N1-C6	-6.04	1.33	1.37
96	lO	86	C	N1-C6	-6.04	1.33	1.37
93	lL	44	C	N1-C6	-6.04	1.33	1.37
94	lM	63	C	C5-C6	-6.03	1.29	1.34
22	LL	692	ARG	CZ-NH2	-6.02	1.25	1.33
78	l6	26	C	N1-C6	-6.02	1.33	1.37
91	lJ	5	G	N9-C8	-6.02	1.33	1.37
96	lO	60	A	C8-N7	-6.02	1.27	1.31
91	lJ	273	C	N1-C6	-6.02	1.33	1.37
96	lO	117	C	N1-C6	-6.02	1.33	1.37
94	lM	45	A	C6-N6	-6.00	1.29	1.33
76	l4	48	G	N9-C8	-5.99	1.33	1.37
77	l5	34	G	N9-C8	-5.99	1.33	1.37
86	lE	4	C	N1-C6	-5.99	1.33	1.37
91	lJ	22	C	N1-C6	-5.99	1.33	1.37
81	l9	59	C	N1-C6	-5.99	1.33	1.37
91	lJ	238	G	N9-C8	-5.98	1.33	1.37
84	lC	11	C	N1-C6	-5.98	1.33	1.37
83	lB	20	C	N1-C6	-5.97	1.33	1.37
96	lO	121	C	N1-C6	-5.97	1.33	1.37
32	LV	785	ARG	CZ-NH2	-5.97	1.25	1.33
75	l3	22	C	N1-C6	-5.97	1.33	1.37
91	lJ	44	C	N1-C6	-5.97	1.33	1.37
96	lO	72	A	C8-N7	-5.97	1.27	1.31
92	lK	2	C	N1-C6	-5.96	1.33	1.37
94	lM	151	A	C8-N7	-5.96	1.27	1.31
81	l9	29	C	N1-C6	-5.96	1.33	1.37
96	lO	89	G	N9-C8	-5.96	1.33	1.37
81	l9	69	A	C8-N7	-5.95	1.27	1.31
96	lO	31	G	N9-C8	-5.95	1.33	1.37
96	lO	48	A	C8-N7	-5.95	1.27	1.31
83	lB	26	C	N1-C6	-5.95	1.33	1.37
96	lO	49	C	N1-C6	-5.95	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	LV	955	ARG	CZ-NH2	-5.94	1.25	1.33
85	lD	14	C	N1-C6	-5.94	1.33	1.37
96	lO	124	A	C8-N7	-5.94	1.27	1.31
39	Lc	526	ARG	CZ-NH1	-5.93	1.25	1.33
82	lA	12	C	N1-C6	-5.93	1.33	1.37
96	lO	67	C	N1-C6	-5.93	1.33	1.37
89	lH	17	G	N9-C8	-5.93	1.33	1.37
39	Lc	518	ARG	CZ-NH1	-5.93	1.25	1.33
81	l9	50	C	N1-C6	-5.92	1.33	1.37
93	lL	31	C	N1-C6	-5.92	1.33	1.37
94	lM	28	A	C8-N7	-5.92	1.27	1.31
49	Lm	400	GLY	N-CA	-5.92	1.37	1.46
39	Lc	594	ARG	CZ-NH1	-5.92	1.25	1.33
96	lO	108	G	N9-C8	-5.92	1.33	1.37
37	La	83	GLY	N-CA	-5.91	1.37	1.46
75	l3	55	C	N1-C6	-5.91	1.33	1.37
96	lO	145	C	N1-C6	-5.91	1.33	1.37
91	lJ	232	C	N1-C6	-5.91	1.33	1.37
32	LV	918	ARG	CZ-NH2	-5.90	1.25	1.33
91	lJ	100	C	N1-C6	-5.90	1.33	1.37
77	l5	59	A	C8-N7	-5.90	1.27	1.31
81	l9	17	C	N1-C6	-5.90	1.33	1.37
87	lF	12	C	N1-C6	-5.90	1.33	1.37
93	lL	58	C	N1-C6	-5.90	1.33	1.37
74	l2	16	C	N1-C6	-5.90	1.33	1.37
39	Lc	490	ARG	CZ-NH1	-5.90	1.25	1.33
77	l5	28	C	N1-C6	-5.90	1.33	1.37
75	l3	49	A	C8-N7	-5.90	1.27	1.31
93	lL	52	C	N1-C6	-5.90	1.33	1.37
86	lE	23	C	N1-C6	-5.89	1.33	1.37
32	LV	782	ARG	CZ-NH2	-5.89	1.25	1.33
93	lL	45	A	C8-N7	-5.89	1.27	1.31
29	LS	68	GLY	N-CA	-5.89	1.37	1.46
78	l6	1	A	C8-N7	-5.89	1.27	1.31
82	lA	10	A	C8-N7	-5.89	1.27	1.31
83	lB	45	A	C8-N7	-5.88	1.27	1.31
82	lA	11	A	C8-N7	-5.88	1.27	1.31
96	lO	153	C	N1-C6	-5.88	1.33	1.37
32	LV	801	ARG	CZ-NH2	-5.88	1.25	1.33
39	Lc	531	ARG	CZ-NH1	-5.88	1.25	1.33
91	lJ	19	C	N1-C6	-5.88	1.33	1.37
93	lL	3	G	N9-C8	-5.88	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
94	lM	25	G	N9-C8	-5.88	1.33	1.37
91	lJ	172	C	N1-C6	-5.87	1.33	1.37
32	LV	958	ARG	CZ-NH2	-5.87	1.25	1.33
75	l3	38	G	N9-C8	-5.87	1.33	1.37
94	lM	89	G	N9-C8	-5.87	1.33	1.37
75	l3	21	G	N9-C8	-5.86	1.33	1.37
21	LK	218	ARG	CZ-NH1	-5.86	1.25	1.33
94	lM	82	C	C4-N4	-5.86	1.28	1.33
32	LV	662	ARG	CZ-NH2	-5.86	1.25	1.33
94	lM	87	C	N1-C6	-5.86	1.33	1.37
77	l5	60	G	N9-C8	-5.86	1.33	1.37
91	lJ	113	G	N9-C8	-5.86	1.33	1.37
94	lM	144	C	N1-C6	-5.85	1.33	1.37
79	l7	47	A	C8-N7	-5.85	1.27	1.31
83	lB	20	C	C5'-C4'	-5.85	1.44	1.51
91	lJ	9	G	N9-C8	-5.85	1.33	1.37
81	l9	52	C	N1-C6	-5.85	1.33	1.37
89	lH	25	A	C6-N6	-5.85	1.29	1.33
87	lF	57	A	C8-N7	-5.85	1.27	1.31
58	Lv	109	GLY	N-CA	-5.84	1.37	1.46
90	lI	5	G	N9-C8	-5.84	1.33	1.37
77	l5	29	A	C8-N7	-5.84	1.27	1.31
87	lF	63	A	C8-N7	-5.84	1.27	1.31
77	l5	43	C	N1-C6	-5.84	1.33	1.37
87	lF	29	G	N9-C8	-5.84	1.33	1.37
91	lJ	210	A	C8-N7	-5.84	1.27	1.31
81	l9	9	C	N1-C6	-5.83	1.33	1.37
94	lM	122	G	N9-C8	-5.83	1.33	1.37
72	l0	40	C	N1-C6	-5.83	1.33	1.37
73	l1	4	G	N9-C8	-5.83	1.33	1.37
76	l4	31	C	N1-C6	-5.83	1.33	1.37
79	l7	21	A	C8-N7	-5.83	1.27	1.31
82	lA	18	C	N1-C6	-5.83	1.33	1.37
95	lN	43	A	C8-N7	-5.83	1.27	1.31
76	l4	2	C	N1-C6	-5.83	1.33	1.37
94	lM	19	A	C8-N7	-5.83	1.27	1.31
73	l1	3	C	N1-C6	-5.83	1.33	1.37
96	lO	8	G	N9-C8	-5.83	1.33	1.37
73	l1	21	C	N1-C6	-5.83	1.33	1.37
96	lO	109	C	N1-C6	-5.83	1.33	1.37
91	lJ	184	C	N1-C6	-5.82	1.33	1.37
91	lJ	276	A	C8-N7	-5.82	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
92	lK	19	C	N1-C6	-5.82	1.33	1.37
96	lO	146	A	C8-N7	-5.82	1.27	1.31
81	l9	73	G	N9-C8	-5.82	1.33	1.37
83	lB	8	G	N9-C8	-5.82	1.33	1.37
32	LV	798	ARG	CZ-NH2	-5.82	1.25	1.33
74	l2	7	G	N9-C8	-5.82	1.33	1.37
76	l4	21	A	C8-N7	-5.82	1.27	1.31
96	lO	118	A	C8-N7	-5.82	1.27	1.31
85	lD	6	C	N1-C6	-5.81	1.33	1.37
96	lO	16	A	C5'-C4'	-5.81	1.44	1.51
73	l1	9	C	N1-C6	-5.81	1.33	1.37
96	lO	53	A	C8-N7	-5.81	1.27	1.31
93	lL	73	A	C8-N7	-5.81	1.27	1.31
94	lM	130	C	N1-C6	-5.81	1.33	1.37
32	LV	681	ARG	CZ-NH2	-5.81	1.25	1.33
73	l1	19	C	N1-C6	-5.81	1.33	1.37
87	lF	14	G	N9-C8	-5.80	1.33	1.37
19	LI	21	GLY	N-CA	-5.80	1.37	1.46
76	l4	26	A	C8-N7	-5.80	1.27	1.31
82	lA	12	C	C5'-C4'	-5.80	1.44	1.51
83	lB	30	C	N1-C6	-5.80	1.33	1.37
94	lM	77	A	C8-N7	-5.80	1.27	1.31
41	Le	527	TYR	CD2-CE2	-5.79	1.30	1.39
76	l4	64	C	N1-C6	-5.79	1.33	1.37
96	lO	11	C	N1-C6	-5.79	1.33	1.37
73	l1	45	A	C8-N7	-5.79	1.27	1.31
82	lA	64	A	C8-N7	-5.79	1.27	1.31
85	lD	13	A	C8-N7	-5.79	1.27	1.31
76	l4	30	C	N1-C6	-5.79	1.33	1.37
81	l9	65	A	C8-N7	-5.79	1.27	1.31
96	lO	14	A	C8-N7	-5.79	1.27	1.31
11	LA	137	GLY	N-CA	-5.78	1.37	1.46
73	l1	34	C	N1-C6	-5.78	1.33	1.37
93	lL	87	A	C8-N7	-5.78	1.27	1.31
93	lL	38	G	C5'-C4'	-5.78	1.44	1.51
93	lL	49	G	N9-C8	-5.78	1.33	1.37
94	lM	1	A	C8-N7	-5.78	1.27	1.31
96	lO	33	G	N9-C8	-5.78	1.33	1.37
94	lM	79	C	N1-C6	-5.78	1.33	1.37
94	lM	33	A	C8-N7	-5.78	1.27	1.31
96	lO	91	A	C8-N7	-5.78	1.27	1.31
83	lB	22	G	C5'-C4'	-5.78	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	112	G	N9-C8	-5.78	1.33	1.37
94	lM	26	G	N9-C8	-5.77	1.33	1.37
38	Lb	495	VAL	CB-CG1	-5.77	1.40	1.52
74	l2	21	G	N9-C8	-5.77	1.33	1.37
76	l4	92	A	C8-N7	-5.77	1.27	1.31
78	l6	23	C	N1-C6	-5.77	1.33	1.37
81	l9	66	G	N9-C8	-5.77	1.33	1.37
89	lH	26	A	C6-N6	-5.77	1.29	1.33
91	lJ	192	U	C5'-C4'	-5.77	1.44	1.51
91	lJ	229	G	N9-C8	-5.77	1.33	1.37
91	lJ	251	G	N9-C8	-5.77	1.33	1.37
93	lL	77	G	N9-C8	-5.77	1.33	1.37
73	l1	36	G	N9-C8	-5.77	1.33	1.37
91	lJ	280	C	C5'-C4'	-5.77	1.44	1.51
36	LZ	49	GLY	N-CA	-5.77	1.37	1.46
74	l2	20	A	C5'-C4'	-5.77	1.44	1.51
75	l3	34	U	C5'-C4'	-5.77	1.44	1.51
91	lJ	42	A	C8-N7	-5.77	1.27	1.31
91	lJ	165	G	N9-C8	-5.77	1.33	1.37
90	lI	22	G	N9-C8	-5.77	1.33	1.37
90	lI	42	A	C8-N7	-5.77	1.27	1.31
91	lJ	132	C	N1-C6	-5.77	1.33	1.37
92	lK	4	C	N1-C6	-5.77	1.33	1.37
94	lM	198	C	N1-C6	-5.77	1.33	1.37
95	lN	22	A	C8-N7	-5.77	1.27	1.31
4	L3	502	GLY	N-CA	-5.76	1.37	1.46
76	l4	54	A	C8-N7	-5.76	1.27	1.31
95	lN	28	U	C5'-C4'	-5.76	1.44	1.51
81	l9	82	C	N1-C6	-5.76	1.33	1.37
95	lN	27	A	C5'-C4'	-5.76	1.44	1.51
95	lN	38	A	C8-N7	-5.76	1.27	1.31
77	l5	40	G	N9-C8	-5.76	1.33	1.37
93	lL	83	A	C8-N7	-5.76	1.27	1.31
31	LU	267	GLY	N-CA	-5.76	1.37	1.46
73	l1	20	A	C8-N7	-5.76	1.27	1.31
83	lB	33	A	C8-N7	-5.76	1.27	1.31
91	lJ	8	C	N1-C6	-5.76	1.33	1.37
76	l4	49	C	N1-C6	-5.75	1.33	1.37
87	lF	9	C	N1-C6	-5.75	1.33	1.37
96	lO	138	G	N9-C8	-5.75	1.33	1.37
82	lA	48	A	C8-N7	-5.75	1.27	1.31
76	l4	55	C	N1-C6	-5.75	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
79	l7	47	A	C5'-C4'	-5.75	1.44	1.51
79	l7	54	G	N9-C8	-5.75	1.33	1.37
75	l3	59	A	C8-N7	-5.75	1.27	1.31
91	lJ	157	U	C5'-C4'	-5.75	1.44	1.51
94	lM	165	G	N9-C8	-5.75	1.33	1.37
96	lO	165	A	C8-N7	-5.75	1.27	1.31
73	l1	37	A	C5'-C4'	-5.75	1.44	1.51
82	lA	50	G	N9-C8	-5.75	1.33	1.37
91	lJ	209	G	N9-C8	-5.75	1.33	1.37
94	lM	76	C	N1-C6	-5.75	1.33	1.37
94	lM	162	U	C5'-C4'	-5.75	1.44	1.51
94	lM	155	C	N1-C6	-5.75	1.33	1.37
59	Lw	87	GLY	N-CA	-5.74	1.37	1.46
81	l9	54	G	N9-C8	-5.74	1.33	1.37
83	lB	7	A	C8-N7	-5.74	1.27	1.31
76	l4	42	A	C8-N7	-5.74	1.27	1.31
78	l6	25	A	C5'-C4'	-5.74	1.44	1.51
87	lF	79	A	C8-N7	-5.74	1.27	1.31
94	lM	63	C	C4-N4	-5.74	1.28	1.33
96	lO	6	A	C8-N7	-5.74	1.27	1.31
96	lO	12	U	C5'-C4'	-5.74	1.44	1.51
102	lU	2	U	C5'-C4'	-5.74	1.44	1.51
76	l4	20	G	N9-C8	-5.74	1.33	1.37
97	lP	1	U	C5'-C4'	-5.74	1.44	1.51
74	l2	31	A	N9-C8	-5.74	1.33	1.37
45	Li	118	GLY	N-CA	-5.74	1.37	1.46
59	Lw	89	GLY	N-CA	-5.74	1.37	1.46
86	lE	24	A	C8-N7	-5.74	1.27	1.31
96	lO	155	A	C8-N7	-5.74	1.27	1.31
51	Lo	87	TYR	CD1-CE1	-5.73	1.30	1.39
87	lF	10	U	C5'-C4'	-5.73	1.44	1.51
75	l3	51	G	N9-C8	-5.73	1.33	1.37
78	l6	24	G	N9-C8	-5.73	1.33	1.37
91	lJ	281	A	C8-N7	-5.73	1.27	1.31
96	lO	90	G	N9-C8	-5.73	1.33	1.37
78	l6	44	A	C8-N7	-5.73	1.27	1.31
83	lB	19	A	C5'-C4'	-5.73	1.44	1.51
91	lJ	156	G	N9-C8	-5.73	1.33	1.37
91	lJ	278	A	C5'-C4'	-5.73	1.44	1.51
93	lL	91	A	C8-N7	-5.73	1.27	1.31
96	lO	32	U	C5'-C4'	-5.73	1.44	1.51
81	l9	24	G	N9-C8	-5.73	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
93	lL	32	G	N9-C8	-5.73	1.33	1.37
98	lQ	6	U	C5'-C4'	-5.73	1.44	1.51
103	lV	5	U	C5'-C4'	-5.73	1.44	1.51
1	L0	307	GLY	N-CA	-5.73	1.37	1.46
98	lQ	16	U	C5'-C4'	-5.73	1.44	1.51
81	l9	39	G	N9-C8	-5.73	1.33	1.37
81	l9	42	C	N1-C6	-5.73	1.33	1.37
83	lB	25	A	C5'-C4'	-5.73	1.44	1.51
79	l7	58	A	C8-N7	-5.72	1.27	1.31
81	l9	70	C	N1-C6	-5.72	1.33	1.37
45	Li	592	GLY	N-CA	-5.72	1.37	1.46
57	Lu	416	TYR	CD1-CE1	-5.72	1.30	1.39
14	LD	495	GLY	N-CA	-5.72	1.37	1.46
79	l7	52	G	N9-C8	-5.72	1.33	1.37
81	l9	26	A	C8-N7	-5.72	1.27	1.31
82	lA	47	A	C8-N7	-5.72	1.27	1.31
91	lJ	168	C	N1-C6	-5.72	1.33	1.37
91	lJ	191	C	C5'-C4'	-5.72	1.44	1.51
94	lM	92	C	N1-C6	-5.72	1.33	1.37
95	lN	32	C	N1-C6	-5.72	1.33	1.37
93	lL	65	U	C5'-C4'	-5.72	1.44	1.51
61	Ly	569	GLY	N-CA	-5.72	1.37	1.46
81	l9	42	C	C5'-C4'	-5.72	1.44	1.51
91	lJ	195	A	C8-N7	-5.72	1.27	1.31
92	lK	23	A	C8-N7	-5.72	1.27	1.31
95	lN	30	A	C8-N7	-5.72	1.27	1.31
96	lO	105	G	N9-C8	-5.72	1.33	1.37
24	LN	291	GLY	N-CA	-5.71	1.37	1.46
76	l4	15	A	C8-N7	-5.71	1.27	1.31
81	l9	56	G	N9-C8	-5.71	1.33	1.37
79	l7	64	A	C8-N7	-5.71	1.27	1.31
83	lB	22	G	N9-C8	-5.71	1.33	1.37
75	l3	57	A	C8-N7	-5.71	1.27	1.31
79	l7	64	A	C5'-C4'	-5.71	1.44	1.51
90	lI	43	A	C8-N7	-5.71	1.27	1.31
91	lJ	125	G	N9-C8	-5.71	1.33	1.37
91	lJ	189	A	C8-N7	-5.71	1.27	1.31
76	l4	6	U	C5'-C4'	-5.71	1.44	1.51
93	lL	90	A	C5'-C4'	-5.71	1.44	1.51
73	l1	33	A	C8-N7	-5.71	1.27	1.31
76	l4	62	G	N9-C8	-5.71	1.33	1.37
81	l9	83	A	C8-N7	-5.71	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
82	lA	20	G	N9-C8	-5.71	1.33	1.37
87	lF	9	C	C5'-C4'	-5.71	1.44	1.51
94	lM	27	G	N9-C8	-5.71	1.33	1.37
96	lO	160	G	N9-C8	-5.71	1.33	1.37
33	LW	306	GLY	N-CA	-5.71	1.37	1.46
38	Lb	290	GLY	N-CA	-5.71	1.37	1.46
76	l4	60	G	N9-C8	-5.71	1.33	1.37
77	l5	32	G	N9-C8	-5.71	1.33	1.37
79	l7	55	G	N9-C8	-5.71	1.33	1.37
87	lF	80	A	C8-N7	-5.71	1.27	1.31
96	lO	104	A	C8-N7	-5.71	1.27	1.31
77	l5	28	C	C5'-C4'	-5.70	1.44	1.51
79	l7	70	A	C8-N7	-5.70	1.27	1.31
89	lH	6	G	C5'-C4'	-5.70	1.44	1.51
91	lJ	217	U	C5'-C4'	-5.70	1.44	1.51
94	lM	96	A	C5'-C4'	-5.70	1.44	1.51
94	lM	156	G	C5'-C4'	-5.70	1.44	1.51
96	lO	17	G	N9-C8	-5.70	1.33	1.37
96	lO	38	A	C8-N7	-5.70	1.27	1.31
81	l9	17	C	C5'-C4'	-5.70	1.44	1.51
91	lJ	234	A	C8-N7	-5.70	1.27	1.31
96	lO	166	G	N9-C8	-5.70	1.33	1.37
27	LQ	405	GLY	N-CA	-5.70	1.37	1.46
42	Lf	169	GLY	N-CA	-5.70	1.37	1.46
43	Lg	29	GLY	N-CA	-5.70	1.37	1.46
76	l4	53	A	C8-N7	-5.70	1.27	1.31
83	lB	31	G	C5'-C4'	-5.70	1.44	1.51
91	lJ	185	G	N9-C8	-5.70	1.33	1.37
74	l2	30	A	C8-N7	-5.70	1.27	1.31
77	l5	41	U	C5'-C4'	-5.70	1.44	1.51
86	lE	5	G	N9-C8	-5.70	1.33	1.37
94	lM	96	A	C8-N7	-5.70	1.27	1.31
98	lQ	28	U	C5'-C4'	-5.70	1.44	1.51
75	l3	23	A	C8-N7	-5.70	1.27	1.31
79	l7	66	A	C8-N7	-5.70	1.27	1.31
75	l3	8	A	C8-N7	-5.70	1.27	1.31
75	l3	13	U	C5'-C4'	-5.70	1.44	1.51
93	lL	39	G	N9-C8	-5.70	1.33	1.37
96	lO	70	C	N1-C6	-5.70	1.33	1.37
23	LM	119	GLY	N-CA	-5.69	1.37	1.46
44	Lh	456	GLY	N-CA	-5.69	1.37	1.46
47	Lk	503	GLY	N-CA	-5.69	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	Lr	258	GLY	N-CA	-5.69	1.37	1.46
73	l1	50	A	C8-N7	-5.69	1.27	1.31
79	l7	22	A	C5'-C4'	-5.69	1.44	1.51
94	lM	34	G	N9-C8	-5.69	1.33	1.37
96	lO	139	G	N9-C8	-5.69	1.33	1.37
75	l3	12	A	C8-N7	-5.69	1.27	1.31
75	l3	39	A	C8-N7	-5.69	1.27	1.31
81	l9	75	A	C8-N7	-5.69	1.27	1.31
83	lB	13	A	C8-N7	-5.69	1.27	1.31
93	lL	39	G	C5'-C4'	-5.69	1.44	1.51
76	l4	61	A	C8-N7	-5.69	1.27	1.31
78	l6	25	A	C8-N7	-5.69	1.27	1.31
79	l7	69	A	C8-N7	-5.69	1.27	1.31
85	lD	6	C	C5'-C4'	-5.69	1.44	1.51
93	lL	48	A	C8-N7	-5.69	1.27	1.31
95	lN	33	A	C8-N7	-5.69	1.27	1.31
96	lO	15	A	C8-N7	-5.69	1.27	1.31
96	lO	33	G	C5'-C4'	-5.69	1.44	1.51
96	lO	55	A	C5'-C4'	-5.69	1.44	1.51
96	lO	69	G	N9-C8	-5.69	1.33	1.37
78	l6	22	G	N9-C8	-5.69	1.33	1.37
81	l9	73	G	C5'-C4'	-5.69	1.44	1.51
91	lJ	211	A	C8-N7	-5.69	1.27	1.31
94	lM	152	A	C5'-C4'	-5.69	1.44	1.51
33	LW	375	GLY	N-CA	-5.69	1.37	1.46
76	l4	67	G	N9-C8	-5.69	1.33	1.37
96	lO	65	A	C8-N7	-5.69	1.27	1.31
96	lO	71	G	N9-C8	-5.69	1.33	1.37
79	l7	68	A	C8-N7	-5.69	1.27	1.31
90	lI	32	A	C8-N7	-5.69	1.27	1.31
14	LD	379	GLY	N-CA	-5.68	1.37	1.46
74	l2	3	G	N9-C8	-5.68	1.33	1.37
79	l7	21	A	C5'-C4'	-5.68	1.44	1.51
79	l7	67	A	C8-N7	-5.68	1.27	1.31
81	l9	46	A	C8-N7	-5.68	1.27	1.31
81	l9	72	A	C8-N7	-5.68	1.27	1.31
87	lF	13	A	C8-N7	-5.68	1.27	1.31
87	lF	57	A	C5'-C4'	-5.68	1.44	1.51
91	lJ	168	C	C5'-C4'	-5.68	1.44	1.51
91	lJ	281	A	C5'-C4'	-5.68	1.44	1.51
19	LI	40	GLY	N-CA	-5.68	1.37	1.46
20	LJ	388	TYR	CD2-CE2	-5.68	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
76	l4	25	U	C5'-C4'	-5.68	1.44	1.51
83	lB	42	G	N9-C8	-5.68	1.33	1.37
84	lC	25	A	C8-N7	-5.68	1.27	1.31
91	lJ	253	C	C5'-C4'	-5.68	1.44	1.51
93	lL	82	A	C5'-C4'	-5.68	1.44	1.51
96	lO	39	U	C5'-C4'	-5.68	1.44	1.51
83	lB	4	G	N9-C8	-5.68	1.33	1.37
86	lE	6	A	C8-N7	-5.68	1.27	1.31
88	lG	10	G	C5'-C4'	-5.68	1.44	1.51
91	lJ	231	U	C5'-C4'	-5.68	1.44	1.51
82	lA	49	G	C5'-C4'	-5.68	1.44	1.51
82	lA	49	G	N9-C8	-5.68	1.33	1.37
85	lD	1	A	C8-N7	-5.68	1.27	1.31
85	lD	5	A	C8-N7	-5.68	1.27	1.31
90	lI	21	A	C8-N7	-5.68	1.27	1.31
91	lJ	167	U	C5'-C4'	-5.68	1.44	1.51
92	lK	22	A	C8-N7	-5.68	1.27	1.31
93	lL	36	A	C8-N7	-5.68	1.27	1.31
94	lM	71	A	C8-N7	-5.68	1.27	1.31
95	lN	39	A	C8-N7	-5.68	1.27	1.31
53	Lq	151	GLY	N-CA	-5.67	1.37	1.46
79	l7	23	U	C5'-C4'	-5.67	1.44	1.51
87	lF	64	G	N9-C8	-5.67	1.33	1.37
90	lI	43	A	C5'-C4'	-5.67	1.44	1.51
91	lJ	20	A	C8-N7	-5.67	1.27	1.31
91	lJ	139	G	C5'-C4'	-5.67	1.44	1.51
91	lJ	140	G	N9-C8	-5.67	1.33	1.37
95	lN	1	A	C8-N7	-5.67	1.27	1.31
96	lO	34	A	C8-N7	-5.67	1.27	1.31
96	lO	113	A	C5'-C4'	-5.67	1.44	1.51
79	l7	6	U	C5'-C4'	-5.67	1.44	1.51
95	lN	41	G	N9-C8	-5.67	1.33	1.37
95	lN	43	A	C5'-C4'	-5.67	1.44	1.51
96	lO	55	A	C8-N7	-5.67	1.27	1.31
75	l3	54	C	C5'-C4'	-5.67	1.44	1.51
76	l4	84	A	C8-N7	-5.67	1.27	1.31
78	l6	39	A	C8-N7	-5.67	1.27	1.31
79	l7	49	G	N9-C8	-5.67	1.33	1.37
83	lB	23	A	C5'-C4'	-5.67	1.44	1.51
83	lB	41	C	C4-N4	-5.67	1.28	1.33
91	lJ	129	A	C8-N7	-5.67	1.27	1.31
94	lM	156	G	N9-C8	-5.67	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	lB	18	U	C5'-C4'	-5.67	1.44	1.51
99	lR	19	U	C5'-C4'	-5.67	1.44	1.51
78	l6	21	A	C8-N7	-5.67	1.27	1.31
87	lF	80	A	C5'-C4'	-5.67	1.44	1.51
88	lG	17	A	C8-N7	-5.67	1.27	1.31
91	lJ	44	C	C5'-C4'	-5.67	1.44	1.51
94	lM	163	G	N9-C8	-5.67	1.33	1.37
95	lN	26	C	N1-C6	-5.67	1.33	1.37
1	L0	255	GLY	N-CA	-5.67	1.37	1.46
73	l1	37	A	C8-N7	-5.67	1.27	1.31
75	l3	35	A	C8-N7	-5.67	1.27	1.31
79	l7	71	A	C8-N7	-5.67	1.27	1.31
91	lJ	124	G	N9-C8	-5.67	1.33	1.37
91	lJ	182	G	N9-C8	-5.67	1.33	1.37
44	Lh	407	TYR	CD2-CE2	-5.67	1.30	1.39
73	l1	5	U	C5'-C4'	-5.67	1.44	1.51
95	lN	42	A	C8-N7	-5.67	1.27	1.31
81	l9	51	G	N9-C8	-5.66	1.33	1.37
83	lB	31	G	N9-C8	-5.66	1.33	1.37
87	lF	13	A	C5'-C4'	-5.66	1.44	1.51
87	lF	14	G	C5'-C4'	-5.66	1.44	1.51
90	lI	18	G	N9-C8	-5.66	1.33	1.37
93	lL	37	U	C5'-C4'	-5.66	1.44	1.51
94	lM	78	C	N1-C6	-5.66	1.33	1.37
95	lN	24	G	N9-C8	-5.66	1.33	1.37
96	lO	13	C	N1-C6	-5.66	1.33	1.37
96	lO	36	C	N1-C6	-5.66	1.33	1.37
96	lO	71	G	C5'-C4'	-5.66	1.44	1.51
101	lW	10	U	C5'-C4'	-5.66	1.44	1.51
93	lL	36	A	C5'-C4'	-5.66	1.44	1.51
99	lR	11	U	C5'-C4'	-5.66	1.44	1.51
11	LA	181	GLY	N-CA	-5.66	1.37	1.46
36	LZ	68	GLY	N-CA	-5.66	1.37	1.46
74	l2	14	A	C5'-C4'	-5.66	1.44	1.51
76	l4	65	A	C8-N7	-5.66	1.27	1.31
87	lF	84	A	C8-N7	-5.66	1.27	1.31
88	lG	11	C	N1-C6	-5.66	1.33	1.37
91	lJ	5	G	C5'-C4'	-5.66	1.44	1.51
96	lO	107	G	C5'-C4'	-5.66	1.44	1.51
74	l2	31	A	C2'-C1'	-5.66	1.47	1.53
91	lJ	43	C	N1-C6	-5.66	1.33	1.37
91	lJ	203	G	N9-C8	-5.66	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	LL	273	GLY	N-CA	-5.66	1.37	1.46
76	l4	57	G	N9-C8	-5.66	1.33	1.37
89	lH	6	G	N9-C8	-5.66	1.33	1.37
79	l7	60	A	C8-N7	-5.66	1.27	1.31
83	lB	25	A	C8-N7	-5.66	1.27	1.31
87	lF	78	U	C5'-C4'	-5.66	1.44	1.51
91	lJ	131	C	C5'-C4'	-5.66	1.44	1.51
91	lJ	141	U	C5'-C4'	-5.66	1.44	1.51
74	l2	15	G	C5'-C4'	-5.65	1.44	1.51
75	l3	23	A	C5'-C4'	-5.65	1.44	1.51
93	lL	73	A	C5'-C4'	-5.65	1.44	1.51
97	lP	8	U	C5'-C4'	-5.65	1.44	1.51
22	LL	318	VAL	CB-CG1	-5.65	1.41	1.52
73	l1	48	A	C8-N7	-5.65	1.27	1.31
76	l4	46	C	C5'-C4'	-5.65	1.44	1.51
87	lF	79	A	C5'-C4'	-5.65	1.44	1.51
91	lJ	232	C	C5'-C4'	-5.65	1.44	1.51
93	lL	61	A	C8-N7	-5.65	1.27	1.31
75	l3	54	C	N1-C6	-5.65	1.33	1.37
76	l4	21	A	C5'-C4'	-5.65	1.44	1.51
78	l6	40	A	C5'-C4'	-5.65	1.44	1.51
78	l6	45	A	C5'-C4'	-5.65	1.44	1.51
83	lB	7	A	C5'-C4'	-5.65	1.44	1.51
84	lC	10	A	C5'-C4'	-5.65	1.44	1.51
91	lJ	169	C	C5'-C4'	-5.65	1.44	1.51
91	lJ	176	U	C5'-C4'	-5.65	1.44	1.51
95	lN	29	C	N1-C6	-5.65	1.33	1.37
38	Lb	912	GLY	N-CA	-5.65	1.37	1.46
86	lE	27	G	C5'-C4'	-5.65	1.44	1.51
99	lR	13	U	C5'-C4'	-5.65	1.44	1.51
101	lW	13	U	C5'-C4'	-5.65	1.44	1.51
76	l4	58	A	C8-N7	-5.65	1.27	1.31
76	l4	59	G	N9-C8	-5.65	1.33	1.37
81	l9	43	C	N1-C6	-5.65	1.33	1.37
90	lI	4	G	N9-C8	-5.65	1.33	1.37
91	lJ	196	A	C5'-C4'	-5.65	1.44	1.51
87	lF	4	U	C5'-C4'	-5.65	1.44	1.51
87	lF	86	A	C8-N7	-5.65	1.27	1.31
91	lJ	23	A	C8-N7	-5.65	1.27	1.31
95	lN	22	A	C5'-C4'	-5.65	1.44	1.51
52	Lp	622	GLY	N-CA	-5.64	1.37	1.46
74	l2	15	G	N9-C8	-5.64	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
76	l4	43	G	N9-C8	-5.64	1.33	1.37
78	l6	18	U	C5'-C4'	-5.64	1.44	1.51
93	lL	14	A	C5'-C4'	-5.64	1.44	1.51
95	lN	31	A	C8-N7	-5.64	1.27	1.31
96	lO	89	G	C5'-C4'	-5.64	1.44	1.51
96	lO	99	A	C5'-C4'	-5.64	1.44	1.51
96	lO	110	U	C5'-C4'	-5.64	1.44	1.51
77	l5	60	G	C5'-C4'	-5.64	1.44	1.51
81	l9	18	A	C8-N7	-5.64	1.27	1.31
91	lJ	147	U	C5'-C4'	-5.64	1.44	1.51
95	lN	29	C	C5'-C4'	-5.64	1.44	1.51
96	lO	163	G	N9-C8	-5.64	1.33	1.37
97	lP	9	U	C5'-C4'	-5.64	1.44	1.51
91	lJ	165	G	C5'-C4'	-5.64	1.44	1.51
96	lO	161	A	C8-N7	-5.64	1.27	1.31
98	lQ	14	U	C5'-C4'	-5.64	1.44	1.51
4	L3	608	GLY	N-CA	-5.64	1.37	1.46
76	l4	24	U	C5'-C4'	-5.64	1.44	1.51
82	lA	20	G	C5'-C4'	-5.64	1.44	1.51
83	lB	43	G	N9-C8	-5.64	1.33	1.37
90	lI	17	G	N9-C8	-5.64	1.33	1.37
91	lJ	233	G	C5'-C4'	-5.64	1.44	1.51
94	lM	76	C	C5'-C4'	-5.64	1.44	1.51
94	lM	152	A	C8-N7	-5.64	1.27	1.31
73	l1	12	U	C5'-C4'	-5.64	1.44	1.51
94	lM	83	A	C8-N7	-5.64	1.27	1.31
96	lO	86	C	C5'-C4'	-5.64	1.44	1.51
91	lJ	42	A	C5'-C4'	-5.64	1.44	1.51
94	lM	19	A	C5'-C4'	-5.64	1.44	1.51
94	lM	92	C	C5'-C4'	-5.64	1.44	1.51
94	lM	163	G	C5'-C4'	-5.64	1.44	1.51
96	lO	164	A	C5'-C4'	-5.64	1.44	1.51
25	LO	128	GLY	N-CA	-5.63	1.37	1.46
76	l4	10	U	C5'-C4'	-5.63	1.44	1.51
76	l4	43	G	C5'-C4'	-5.63	1.44	1.51
79	l7	57	A	C8-N7	-5.63	1.27	1.31
86	lE	29	A	C8-N7	-5.63	1.27	1.31
87	lF	66	U	C5'-C4'	-5.63	1.44	1.51
52	Lp	458	TYR	CD2-CE2	-5.63	1.30	1.39
72	l0	36	C	C5'-C4'	-5.63	1.44	1.51
78	l6	27	U	C5'-C4'	-5.63	1.44	1.51
82	lA	9	U	C5'-C4'	-5.63	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	lB	26	C	C5'-C4'	-5.63	1.44	1.51
94	lM	149	G	N9-C8	-5.63	1.33	1.37
76	l4	51	U	C5'-C4'	-5.63	1.44	1.51
78	l6	42	A	C5'-C4'	-5.63	1.44	1.51
88	lG	10	G	N9-C8	-5.63	1.33	1.37
93	lL	41	A	C8-N7	-5.63	1.27	1.31
93	lL	82	A	C8-N7	-5.63	1.27	1.31
93	lL	91	A	C5'-C4'	-5.63	1.44	1.51
96	lO	91	A	C5'-C4'	-5.63	1.44	1.51
77	l5	59	A	C5'-C4'	-5.63	1.44	1.51
83	lB	40	G	C5'-C4'	-5.63	1.44	1.51
95	lN	23	U	C5'-C4'	-5.63	1.44	1.51
86	lE	26	A	C8-N7	-5.63	1.27	1.31
91	lJ	113	G	C5'-C4'	-5.63	1.44	1.51
91	lJ	166	G	N9-C8	-5.63	1.33	1.37
91	lJ	193	A	C5'-C4'	-5.63	1.44	1.51
91	lJ	208	A	C5'-C4'	-5.63	1.44	1.51
11	LA	173	TYR	CD2-CE2	-5.63	1.30	1.39
25	LO	120	GLY	N-CA	-5.63	1.37	1.46
76	l4	52	A	C5'-C4'	-5.63	1.44	1.51
78	l6	4	G	N9-C8	-5.63	1.33	1.37
78	l6	44	A	C5'-C4'	-5.63	1.44	1.51
81	l9	72	A	C5'-C4'	-5.63	1.44	1.51
91	lJ	272	C	C5'-C4'	-5.63	1.44	1.51
96	lO	145	C	C5'-C4'	-5.63	1.44	1.51
73	l1	7	G	N9-C8	-5.62	1.33	1.37
81	l9	74	G	N9-C8	-5.62	1.33	1.37
82	lA	19	U	C5'-C4'	-5.62	1.44	1.51
82	lA	47	A	C5'-C4'	-5.62	1.44	1.51
85	lD	5	A	C5'-C4'	-5.62	1.44	1.51
87	lF	17	G	N9-C8	-5.62	1.33	1.37
95	lN	25	U	C5'-C4'	-5.62	1.44	1.51
95	lN	33	A	C5'-C4'	-5.62	1.44	1.51
91	lJ	214	A	C8-N7	-5.62	1.27	1.31
91	lJ	248	U	C5'-C4'	-5.62	1.44	1.51
96	lO	43	G	N9-C8	-5.62	1.33	1.37
96	lO	109	C	C5'-C4'	-5.62	1.44	1.51
75	l3	51	G	C5'-C4'	-5.62	1.44	1.51
81	l9	81	A	C8-N7	-5.62	1.27	1.31
85	lD	8	U	C5'-C4'	-5.62	1.44	1.51
85	lD	13	A	C5'-C4'	-5.62	1.44	1.51
86	lE	8	A	N9-C8	-5.62	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	282	A	C8-N7	-5.62	1.27	1.31
96	lO	6	A	C5'-C4'	-5.62	1.44	1.51
96	lO	13	C	C5'-C4'	-5.62	1.44	1.51
96	lO	42	A	C8-N7	-5.62	1.27	1.31
96	lO	68	U	C5'-C4'	-5.62	1.44	1.51
98	lQ	5	U	C5'-C4'	-5.62	1.44	1.51
55	Ls	383	GLY	N-CA	-5.62	1.37	1.46
93	lL	38	G	N9-C8	-5.62	1.33	1.37
19	LI	15	GLY	N-CA	-5.62	1.37	1.46
22	LL	693	TYR	CD2-CE2	-5.62	1.30	1.39
35	LY	535	TYR	CD2-CE2	-5.62	1.30	1.39
78	l6	22	G	C5'-C4'	-5.62	1.44	1.51
78	l6	42	A	C8-N7	-5.62	1.27	1.31
79	l7	59	A	C5'-C4'	-5.62	1.44	1.51
81	l9	29	C	C5'-C4'	-5.62	1.44	1.51
87	lF	18	U	C5'-C4'	-5.62	1.44	1.51
87	lF	77	U	C5'-C4'	-5.62	1.44	1.51
91	lJ	170	G	C5'-C4'	-5.62	1.44	1.51
96	lO	11	C	C5'-C4'	-5.62	1.44	1.51
96	lO	140	U	C5'-C4'	-5.62	1.44	1.51
98	lQ	27	U	C5'-C4'	-5.62	1.44	1.51
76	l4	52	A	C8-N7	-5.62	1.27	1.31
51	Lo	87	TYR	CD2-CE2	-5.62	1.30	1.39
62	Lz	182	GLY	N-CA	-5.62	1.37	1.46
87	lF	85	A	C8-N7	-5.62	1.27	1.31
91	lJ	102	G	N9-C8	-5.62	1.33	1.37
91	lJ	170	G	N9-C8	-5.62	1.33	1.37
96	lO	37	U	C5'-C4'	-5.62	1.44	1.51
96	lO	99	A	C8-N7	-5.62	1.27	1.31
44	Lh	522	GLY	N-CA	-5.61	1.37	1.46
79	l7	63	A	C5'-C4'	-5.61	1.44	1.51
85	lD	4	A	C8-N7	-5.61	1.27	1.31
87	lF	20	A	C8-N7	-5.61	1.27	1.31
91	lJ	8	C	C5'-C4'	-5.61	1.44	1.51
96	lO	73	U	C5'-C4'	-5.61	1.44	1.51
96	lO	98	U	C5'-C4'	-5.61	1.44	1.51
91	lJ	124	G	C5'-C4'	-5.61	1.44	1.51
91	lJ	136	U	C5'-C4'	-5.61	1.44	1.51
96	lO	107	G	N9-C8	-5.61	1.33	1.37
44	Lh	588	TYR	CD2-CE2	-5.61	1.30	1.39
74	l2	6	U	C5'-C4'	-5.61	1.44	1.51
76	l4	48	G	C5'-C4'	-5.61	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	lE	28	A	C8-N7	-5.61	1.27	1.31
90	lI	36	A	N9-C8	-5.61	1.33	1.37
91	lJ	121	G	C2-N2	-5.61	1.28	1.34
91	lJ	125	G	C5'-C4'	-5.61	1.44	1.51
91	lJ	171	A	C8-N7	-5.61	1.27	1.31
91	lJ	278	A	C8-N7	-5.61	1.27	1.31
94	lM	122	G	C5'-C4'	-5.61	1.44	1.51
94	lM	161	C	C5'-C4'	-5.61	1.44	1.51
95	lN	27	A	C8-N7	-5.61	1.27	1.31
96	lO	162	A	C8-N7	-5.61	1.27	1.31
91	lJ	131	C	N1-C6	-5.61	1.33	1.37
96	lO	45	A	C8-N7	-5.61	1.27	1.31
20	LJ	338	GLY	N-CA	-5.61	1.37	1.46
74	l2	5	U	C5'-C4'	-5.61	1.44	1.51
75	l3	52	A	C8-N7	-5.61	1.27	1.31
77	l5	40	G	C5'-C4'	-5.61	1.44	1.51
81	l9	45	A	C8-N7	-5.61	1.27	1.31
87	lF	22	C	N1-C6	-5.61	1.33	1.37
91	lJ	140	G	C5'-C4'	-5.61	1.44	1.51
95	lN	30	A	C5'-C4'	-5.61	1.44	1.51
1	L0	403	TYR	CD1-CE1	-5.61	1.30	1.39
59	Lw	42	ARG	CZ-NH1	-5.61	1.25	1.33
72	l0	42	G	N9-C8	-5.61	1.33	1.37
76	l4	86	G	N9-C8	-5.61	1.33	1.37
81	l9	15	A	C8-N7	-5.61	1.27	1.31
81	l9	83	A	C5'-C4'	-5.61	1.44	1.51
93	lL	33	U	C5'-C4'	-5.61	1.44	1.51
96	lO	36	C	C5'-C4'	-5.61	1.44	1.51
96	lO	102	U	C5'-C4'	-5.61	1.44	1.51
14	LD	531	TYR	CD1-CE1	-5.60	1.30	1.39
82	lA	64	A	C5'-C4'	-5.60	1.44	1.51
85	lD	9	A	C5'-C4'	-5.60	1.44	1.51
91	lJ	15	U	C5'-C4'	-5.60	1.44	1.51
73	l1	21	C	C5'-C4'	-5.60	1.44	1.51
76	l4	35	A	C8-N7	-5.60	1.27	1.31
78	l6	4	G	C5'-C4'	-5.60	1.44	1.51
78	l6	24	G	C5'-C4'	-5.60	1.44	1.51
83	lB	30	C	C5'-C4'	-5.60	1.44	1.51
85	lD	9	A	C8-N7	-5.60	1.27	1.31
96	lO	40	A	C8-N7	-5.60	1.27	1.31
96	lO	72	A	C5'-C4'	-5.60	1.44	1.51
96	lO	156	U	C5'-C4'	-5.60	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LP	185	GLY	N-CA	-5.60	1.37	1.46
93	lL	84	A	C8-N7	-5.60	1.27	1.31
93	lL	86	A	C5'-C4'	-5.60	1.44	1.51
98	lQ	13	U	C5'-C4'	-5.60	1.44	1.51
41	Le	540	GLY	N-CA	-5.60	1.37	1.46
74	l2	20	A	C8-N7	-5.60	1.27	1.31
75	l3	58	A	C5'-C4'	-5.60	1.44	1.51
81	l9	47	G	N9-C8	-5.60	1.33	1.37
95	lN	24	G	C5'-C4'	-5.60	1.44	1.51
30	LT	79	TYR	CD2-CE2	-5.60	1.30	1.39
65	UC	290	TYR	CD1-CE1	-5.60	1.30	1.39
72	l0	18	G	N9-C8	-5.60	1.33	1.37
83	lB	8	G	C5'-C4'	-5.60	1.44	1.51
87	lF	88	A	C8-N7	-5.60	1.27	1.31
90	lI	40	A	C8-N7	-5.60	1.27	1.31
91	lJ	127	A	C8-N7	-5.60	1.27	1.31
91	lJ	163	U	C5'-C4'	-5.60	1.44	1.51
82	lA	11	A	C5'-C4'	-5.60	1.44	1.51
91	lJ	183	U	C5'-C4'	-5.60	1.44	1.51
15	LE	374	GLY	N-CA	-5.59	1.37	1.46
28	LR	29	GLY	N-CA	-5.59	1.37	1.46
35	LY	501	GLY	N-CA	-5.59	1.37	1.46
76	l4	49	C	C5'-C4'	-5.59	1.44	1.51
81	l9	25	A	C8-N7	-5.59	1.27	1.31
93	lL	60	G	N9-C8	-5.59	1.33	1.37
95	lN	18	A	N9-C8	-5.59	1.33	1.37
96	lO	38	A	C5'-C4'	-5.59	1.44	1.51
75	l3	60	A	C8-N7	-5.59	1.27	1.31
76	l4	32	G	N9-C8	-5.59	1.33	1.37
77	l5	35	U	C5'-C4'	-5.59	1.44	1.51
93	lL	2	G	N9-C8	-5.59	1.33	1.37
99	lR	23	U	C5'-C4'	-5.59	1.44	1.51
13	LC	287	VAL	CB-CG1	-5.59	1.41	1.52
25	LO	266	GLY	N-CA	-5.59	1.37	1.46
79	l7	69	A	C5'-C4'	-5.59	1.44	1.51
83	lB	32	A	C5'-C4'	-5.59	1.44	1.51
86	lE	27	G	N9-C8	-5.59	1.33	1.37
91	lJ	185	G	C5'-C4'	-5.59	1.44	1.51
93	lL	85	A	C8-N7	-5.59	1.27	1.31
95	lN	40	U	C5'-C4'	-5.59	1.44	1.51
35	LY	473	TYR	CD2-CE2	-5.59	1.30	1.39
78	l6	41	A	C8-N7	-5.59	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
79	l7	61	A	C8-N7	-5.59	1.27	1.31
91	lJ	173	U	C5'-C4'	-5.59	1.44	1.51
91	lJ	276	A	C5'-C4'	-5.59	1.44	1.51
94	lM	32	C	C5'-C4'	-5.59	1.44	1.51
96	lO	154	U	C5'-C4'	-5.59	1.44	1.51
81	l9	36	U	C5'-C4'	-5.59	1.44	1.51
91	lJ	230	A	C8-N7	-5.59	1.27	1.31
93	lL	64	G	C5'-C4'	-5.59	1.44	1.51
96	lO	48	A	C5'-C4'	-5.59	1.44	1.51
96	lO	49	C	C5'-C4'	-5.59	1.44	1.51
104	lX	34	U	C5'-C4'	-5.59	1.44	1.51
14	LD	476	TYR	CD1-CE1	-5.59	1.30	1.39
44	Lh	410	TYR	CD2-CE2	-5.59	1.30	1.39
55	Ls	398	GLY	N-CA	-5.59	1.37	1.46
73	l1	33	A	C5'-C4'	-5.59	1.44	1.51
75	l3	58	A	C8-N7	-5.59	1.27	1.31
81	l9	61	A	C5'-C4'	-5.59	1.44	1.51
83	lB	9	A	C8-N7	-5.59	1.27	1.31
85	lD	2	U	C5'-C4'	-5.59	1.44	1.51
87	lF	24	G	N9-C8	-5.59	1.33	1.37
90	lI	37	A	C8-N7	-5.59	1.27	1.31
91	lJ	9	G	C5'-C4'	-5.59	1.44	1.51
91	lJ	207	U	C5'-C4'	-5.59	1.44	1.51
91	lJ	214	A	C5'-C4'	-5.59	1.44	1.51
95	lN	42	A	C5'-C4'	-5.59	1.44	1.51
1	L0	403	TYR	CD2-CE2	-5.58	1.30	1.39
75	l3	26	C	C5'-C4'	-5.58	1.44	1.51
81	l9	46	A	C5'-C4'	-5.58	1.44	1.51
82	lA	50	G	C5'-C4'	-5.58	1.44	1.51
91	lJ	16	G	N9-C8	-5.58	1.33	1.37
91	lJ	189	A	C5'-C4'	-5.58	1.44	1.51
96	lO	64	A	C5'-C4'	-5.58	1.44	1.51
83	lB	21	A	C5'-C4'	-5.58	1.44	1.51
91	lJ	174	C	C5'-C4'	-5.58	1.44	1.51
91	lJ	252	A	C5'-C4'	-5.58	1.44	1.51
94	lM	77	A	C5'-C4'	-5.58	1.44	1.51
95	lN	18	A	C8-N7	-5.58	1.27	1.31
96	lO	34	A	C5'-C4'	-5.58	1.44	1.51
101	lT	2	U	C5'-C4'	-5.58	1.44	1.51
18	LH	257	TYR	CD2-CE2	-5.58	1.30	1.39
72	l0	41	C	C5'-C4'	-5.58	1.44	1.51
75	l3	53	G	N9-C8	-5.58	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
76	l4	32	G	C5'-C4'	-5.58	1.44	1.51
77	l5	43	C	C5'-C4'	-5.58	1.44	1.51
79	l7	59	A	C8-N7	-5.58	1.27	1.31
90	lI	19	G	C5'-C4'	-5.58	1.44	1.51
91	lJ	139	G	N9-C8	-5.58	1.33	1.37
94	lM	91	U	C5'-C4'	-5.58	1.44	1.51
11	LA	104	GLY	N-CA	-5.58	1.37	1.46
76	l4	55	C	C5'-C4'	-5.58	1.44	1.51
77	l5	32	G	C5'-C4'	-5.58	1.44	1.51
90	lI	44	A	C8-N7	-5.58	1.27	1.31
93	lL	19	A	C8-N7	-5.58	1.27	1.31
94	lM	79	C	C5'-C4'	-5.58	1.44	1.51
96	lO	9	A	C8-N7	-5.58	1.27	1.31
73	l1	8	A	C8-N7	-5.58	1.27	1.31
75	l3	47	U	C5'-C4'	-5.58	1.44	1.51
78	l6	45	A	C8-N7	-5.58	1.27	1.31
83	lB	33	A	C5'-C4'	-5.58	1.44	1.51
87	lF	85	A	C5'-C4'	-5.58	1.44	1.51
90	lI	20	A	C5'-C4'	-5.58	1.44	1.51
90	lI	20	A	C8-N7	-5.58	1.27	1.31
93	lL	40	A	C8-N7	-5.58	1.27	1.31
96	lO	103	U	C5'-C4'	-5.58	1.44	1.51
90	lI	22	G	C5'-C4'	-5.58	1.44	1.51
17	LG	161	SER	CB-OG	-5.58	1.35	1.42
60	Lx	325	GLY	N-CA	-5.58	1.37	1.46
74	l2	7	G	C5'-C4'	-5.58	1.44	1.51
90	lI	18	G	C5'-C4'	-5.58	1.44	1.51
91	lJ	135	G	N9-C8	-5.58	1.33	1.37
91	lJ	193	A	C8-N7	-5.58	1.27	1.31
93	lL	86	A	C8-N7	-5.58	1.27	1.31
96	lO	64	A	C8-N7	-5.58	1.27	1.31
99	lR	10	U	C5'-C4'	-5.58	1.44	1.51
73	l1	45	A	C5'-C4'	-5.57	1.44	1.51
81	l9	63	A	C5'-C4'	-5.57	1.44	1.51
83	lB	44	G	N9-C8	-5.57	1.33	1.37
91	lJ	49	U	C5'-C4'	-5.57	1.44	1.51
91	lJ	233	G	N9-C8	-5.57	1.33	1.37
33	LW	372	GLY	N-CA	-5.57	1.37	1.46
74	l2	16	C	C5'-C4'	-5.57	1.44	1.51
74	l2	28	A	C8-N7	-5.57	1.27	1.31
74	l2	29	A	C8-N7	-5.57	1.27	1.31
76	l4	54	A	C5'-C4'	-5.57	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
79	l7	50	U	C5'-C4'	-5.57	1.44	1.51
93	lL	62	U	C5'-C4'	-5.57	1.44	1.51
104	lX	6	U	C5'-C4'	-5.57	1.44	1.51
12	LB	38	TYR	CD2-CE2	-5.57	1.30	1.39
24	LN	306	GLY	N-CA	-5.57	1.37	1.46
32	LV	965	GLY	N-CA	-5.57	1.37	1.46
35	LY	359	GLY	N-CA	-5.57	1.37	1.46
41	Le	527	TYR	CD1-CE1	-5.57	1.30	1.39
52	Lp	419	VAL	CB-CG2	-5.57	1.41	1.52
73	l1	4	G	C5'-C4'	-5.57	1.44	1.51
79	l7	65	A	C8-N7	-5.57	1.27	1.31
85	lD	10	A	C5'-C4'	-5.57	1.44	1.51
87	lF	15	U	C5'-C4'	-5.57	1.44	1.51
87	lF	22	C	C5'-C4'	-5.57	1.44	1.51
91	lJ	164	U	C5'-C4'	-5.57	1.44	1.51
93	lL	14	A	C8-N7	-5.57	1.27	1.31
94	lM	25	G	C5'-C4'	-5.57	1.44	1.51
25	LO	100	GLY	N-CA	-5.57	1.37	1.46
82	lA	45	A	C8-N7	-5.57	1.27	1.31
83	lB	23	A	C8-N7	-5.57	1.27	1.31
90	lI	35	A	C8-N7	-5.57	1.27	1.31
91	lJ	197	C	C5'-C4'	-5.57	1.44	1.51
96	lO	10	U	C5'-C4'	-5.57	1.44	1.51
98	lQ	30	U	C5'-C4'	-5.57	1.44	1.51
13	LC	117	GLY	N-CA	-5.57	1.37	1.46
25	LO	200	GLY	N-CA	-5.57	1.37	1.46
75	l3	49	A	C5'-C4'	-5.57	1.44	1.51
76	l4	33	A	C5'-C4'	-5.57	1.44	1.51
90	lI	44	A	C5'-C4'	-5.57	1.44	1.51
91	lJ	137	C	C5'-C4'	-5.57	1.44	1.51
94	lM	129	A	C8-N7	-5.57	1.27	1.31
99	lR	14	U	C5'-C4'	-5.57	1.44	1.51
73	l1	34	C	C5'-C4'	-5.57	1.44	1.51
77	l5	44	U	C5'-C4'	-5.57	1.44	1.51
82	lA	10	A	C5'-C4'	-5.57	1.44	1.51
87	lF	62	A	C8-N7	-5.57	1.27	1.31
96	lO	155	A	C5'-C4'	-5.57	1.44	1.51
101	lW	11	U	C5'-C4'	-5.57	1.44	1.51
47	Lk	511	GLY	N-CA	-5.56	1.37	1.46
83	lB	19	A	C8-N7	-5.56	1.27	1.31
94	lM	32	C	N1-C6	-5.56	1.33	1.37
96	lO	113	A	C8-N7	-5.56	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
103	lV	4	U	C5'-C4'	-5.56	1.44	1.51
91	lJ	18	A	C8-N7	-5.56	1.27	1.31
91	lJ	132	C	C5'-C4'	-5.56	1.44	1.51
96	lO	117	C	C5'-C4'	-5.56	1.44	1.51
36	LZ	127	GLY	N-CA	-5.56	1.37	1.46
83	lB	40	G	N9-C8	-5.56	1.33	1.37
85	lD	1	A	C5'-C4'	-5.56	1.44	1.51
86	lE	23	C	C5'-C4'	-5.56	1.44	1.51
91	lJ	128	A	C8-N7	-5.56	1.27	1.31
95	lN	41	G	C5'-C4'	-5.56	1.44	1.51
74	l2	14	A	C8-N7	-5.56	1.27	1.31
76	l4	15	A	C5'-C4'	-5.56	1.44	1.51
82	lA	1	G	N9-C8	-5.56	1.33	1.37
83	lB	4	G	C5'-C4'	-5.56	1.44	1.51
87	lF	64	G	C5'-C4'	-5.56	1.44	1.51
91	lJ	190	U	C5'-C4'	-5.56	1.44	1.51
91	lJ	209	G	C5'-C4'	-5.56	1.44	1.51
91	lJ	210	A	C5'-C4'	-5.56	1.44	1.51
94	lM	123	U	C5'-C4'	-5.56	1.44	1.51
94	lM	143	U	C5'-C4'	-5.56	1.44	1.51
95	lN	31	A	C5'-C4'	-5.56	1.44	1.51
102	lU	3	U	C5'-C4'	-5.56	1.44	1.51
21	LK	118	TYR	CD2-CE2	-5.56	1.31	1.39
55	Ls	374	GLY	N-CA	-5.56	1.37	1.46
73	l1	20	A	C5'-C4'	-5.56	1.44	1.51
75	l3	53	G	C5'-C4'	-5.56	1.44	1.51
81	l9	27	C	C5'-C4'	-5.56	1.44	1.51
87	lF	67	U	C5'-C4'	-5.56	1.44	1.51
98	lQ	29	U	C5'-C4'	-5.56	1.44	1.51
44	Lh	563	TYR	CD2-CE2	-5.56	1.31	1.39
61	Ly	515	GLY	N-CA	-5.56	1.37	1.46
63	UA	237	TYR	CD2-CE2	-5.56	1.31	1.39
91	lJ	230	A	C5'-C4'	-5.56	1.44	1.51
102	lU	4	U	C5'-C4'	-5.56	1.44	1.51
3	L2	44	TYR	CD1-CE1	-5.55	1.31	1.39
31	LU	277	VAL	CB-CG1	-5.55	1.41	1.52
39	Lc	603	TYR	CD1-CE1	-5.55	1.31	1.39
70	UH	245	TYR	CD2-CE2	-5.55	1.31	1.39
76	l4	33	A	C8-N7	-5.55	1.27	1.31
79	l7	57	A	C5'-C4'	-5.55	1.44	1.51
79	l7	62	A	C5'-C4'	-5.55	1.44	1.51
81	l9	54	G	C5'-C4'	-5.55	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
93	lL	49	G	C5'-C4'	-5.55	1.44	1.51
93	lL	66	A	C8-N7	-5.55	1.27	1.31
94	lM	90	C	C5'-C4'	-5.55	1.44	1.51
96	lO	115	G	C5'-C4'	-5.55	1.44	1.51
96	lO	167	A	C5'-C4'	-5.55	1.44	1.51
75	l3	9	A	C5'-C4'	-5.55	1.44	1.51
75	l3	11	U	C5'-C4'	-5.55	1.44	1.51
93	lL	66	A	C5'-C4'	-5.55	1.44	1.51
96	lO	46	U	C5'-C4'	-5.55	1.44	1.51
96	lO	146	A	C5'-C4'	-5.55	1.44	1.51
101	lT	4	U	C5'-C4'	-5.55	1.44	1.51
22	LL	692	ARG	CZ-NH1	-5.55	1.25	1.33
39	Lc	603	TYR	CD2-CE2	-5.55	1.31	1.39
52	Lp	479	GLY	N-CA	-5.55	1.37	1.46
61	Ly	645	VAL	CB-CG1	-5.55	1.41	1.52
75	l3	37	U	C5'-C4'	-5.55	1.44	1.51
76	l4	28	U	C5'-C4'	-5.55	1.44	1.51
78	l6	26	C	C5'-C4'	-5.55	1.44	1.51
81	l9	64	U	C5'-C4'	-5.55	1.44	1.51
93	lL	43	U	C5'-C4'	-5.55	1.44	1.51
96	lO	15	A	C5'-C4'	-5.55	1.44	1.51
96	lO	17	G	C5'-C4'	-5.55	1.44	1.51
96	lO	53	A	C5'-C4'	-5.55	1.44	1.51
79	l7	15	U	C5'-C4'	-5.55	1.44	1.51
81	l9	39	G	C5'-C4'	-5.55	1.44	1.51
83	lB	13	A	C5'-C4'	-5.55	1.44	1.51
83	lB	32	A	C8-N7	-5.55	1.27	1.31
91	lJ	50	A	C5'-C4'	-5.55	1.44	1.51
91	lJ	195	A	C5'-C4'	-5.55	1.44	1.51
95	lN	35	G	N9-C8	-5.55	1.33	1.37
96	lO	96	U	C5'-C4'	-5.55	1.44	1.51
99	lR	27	U	C5'-C4'	-5.55	1.44	1.51
45	Li	667	TYR	CD1-CE1	-5.55	1.31	1.39
79	l7	61	A	C5'-C4'	-5.55	1.44	1.51
72	l0	18	G	C5'-C4'	-5.55	1.44	1.51
73	l1	49	A	C8-N7	-5.55	1.27	1.31
74	l2	22	U	C5'-C4'	-5.55	1.44	1.51
85	lD	3	U	C5'-C4'	-5.55	1.44	1.51
86	lE	24	A	C5'-C4'	-5.55	1.44	1.51
87	lF	29	G	C5'-C4'	-5.55	1.44	1.51
101	lW	12	U	C5'-C4'	-5.55	1.44	1.51
76	l4	31	C	C5'-C4'	-5.54	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
86	lE	21	U	C5'-C4'	-5.54	1.44	1.51
91	lJ	202	U	C5'-C4'	-5.54	1.44	1.51
94	lM	95	U	C5'-C4'	-5.54	1.44	1.51
64	UB	219	TYR	CD1-CE1	-5.54	1.31	1.39
77	l5	33	U	C5'-C4'	-5.54	1.44	1.51
96	lO	85	U	C5'-C4'	-5.54	1.44	1.51
96	lO	104	A	C5'-C4'	-5.54	1.44	1.51
103	lV	3	U	C5'-C4'	-5.54	1.44	1.51
24	LN	350	TYR	CD2-CE2	-5.54	1.31	1.39
33	LW	308	GLY	N-CA	-5.54	1.37	1.46
52	Lp	475	GLY	N-CA	-5.54	1.37	1.46
55	Ls	332	GLY	N-CA	-5.54	1.37	1.46
73	l1	13	G	C5'-C4'	-5.54	1.44	1.51
75	l3	12	A	C5'-C4'	-5.54	1.44	1.51
78	l6	19	U	C5'-C4'	-5.54	1.44	1.51
87	lF	88	A	C5'-C4'	-5.54	1.44	1.51
91	lJ	252	A	C8-N7	-5.54	1.27	1.31
92	lK	2	C	C5'-C4'	-5.54	1.44	1.51
74	l2	31	A	C8-N7	-5.54	1.27	1.31
96	lO	16	A	C8-N7	-5.54	1.27	1.31
96	lO	69	G	C5'-C4'	-5.54	1.44	1.51
56	Lt	107	TYR	CD2-CE2	-5.54	1.31	1.39
60	Lx	324	GLY	N-CA	-5.54	1.37	1.46
67	UE	124	GLY	N-CA	-5.54	1.37	1.46
75	l3	22	C	C5'-C4'	-5.54	1.44	1.51
76	l4	3	U	C5'-C4'	-5.54	1.44	1.51
79	l7	22	A	C8-N7	-5.54	1.27	1.31
85	lD	4	A	C5'-C4'	-5.54	1.44	1.51
91	lJ	102	G	C5'-C4'	-5.54	1.44	1.51
13	LC	113	TYR	CD1-CE1	-5.54	1.31	1.39
24	LN	350	TYR	CD1-CE1	-5.54	1.31	1.39
81	l9	74	G	C5'-C4'	-5.54	1.44	1.51
87	lF	84	A	C5'-C4'	-5.54	1.44	1.51
104	lX	33	U	C5'-C4'	-5.54	1.44	1.51
47	Lk	518	VAL	CB-CG1	-5.54	1.41	1.52
78	l6	43	A	C5'-C4'	-5.54	1.44	1.51
81	l9	57	A	C5'-C4'	-5.54	1.44	1.51
91	lJ	226	G	N9-C8	-5.54	1.33	1.37
93	lL	45	A	C5'-C4'	-5.54	1.44	1.51
93	lL	52	C	C5'-C4'	-5.54	1.44	1.51
93	lL	58	C	C5'-C4'	-5.54	1.44	1.51
93	lL	67	U	C5'-C4'	-5.54	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
95	lN	26	C	C5'-C4'	-5.54	1.44	1.51
96	lO	1	U	C5'-C4'	-5.54	1.44	1.51
96	lO	47	A	C8-N7	-5.54	1.27	1.31
97	lP	7	U	C5'-C4'	-5.54	1.44	1.51
25	LO	306	GLY	N-CA	-5.53	1.37	1.46
38	Lb	734	VAL	CB-CG2	-5.53	1.41	1.52
79	l7	7	U	C5'-C4'	-5.53	1.44	1.51
91	lJ	101	U	C5'-C4'	-5.53	1.44	1.51
96	lO	57	U	C5'-C4'	-5.53	1.44	1.51
99	lR	18	U	C5'-C4'	-5.53	1.44	1.51
38	Lb	363	TYR	CD2-CE2	-5.53	1.31	1.39
41	Le	447	TYR	CD2-CE2	-5.53	1.31	1.39
73	l1	8	A	C5'-C4'	-5.53	1.44	1.51
98	lQ	12	U	C5'-C4'	-5.53	1.44	1.51
3	L2	14	GLY	N-CA	-5.53	1.37	1.46
78	l6	20	G	N9-C8	-5.53	1.33	1.37
81	l9	58	G	N9-C8	-5.53	1.33	1.37
81	l9	75	A	C5'-C4'	-5.53	1.44	1.51
90	lI	3	A	C5'-C4'	-5.53	1.44	1.51
74	l2	28	A	C5'-C4'	-5.53	1.44	1.51
75	l3	39	A	C5'-C4'	-5.53	1.44	1.51
83	lB	16	U	C5'-C4'	-5.53	1.44	1.51
84	lC	11	C	C5'-C4'	-5.53	1.44	1.51
91	lJ	279	U	C5'-C4'	-5.53	1.44	1.51
102	lU	1	U	C5'-C4'	-5.53	1.44	1.51
14	LD	531	TYR	CD2-CE2	-5.53	1.31	1.39
20	LJ	379	GLY	N-CA	-5.53	1.37	1.46
37	La	90	TYR	CD1-CE1	-5.53	1.31	1.39
40	Ld	379	VAL	CB-CG1	-5.53	1.41	1.52
44	Lh	568	TYR	CD1-CE1	-5.53	1.31	1.39
61	Ly	649	TYR	CD2-CE2	-5.53	1.31	1.39
76	l4	53	A	C5'-C4'	-5.53	1.44	1.51
89	lH	14	G	C5'-C4'	-5.53	1.44	1.51
21	LK	92	TYR	CD2-CE2	-5.53	1.31	1.39
22	LL	196	GLY	N-CA	-5.53	1.37	1.46
40	Ld	565	TYR	CD2-CE2	-5.53	1.31	1.39
42	Lf	316	GLY	N-CA	-5.53	1.37	1.46
57	Lu	281	GLY	N-CA	-5.53	1.37	1.46
75	l3	9	A	C8-N7	-5.53	1.27	1.31
79	l7	68	A	C5'-C4'	-5.53	1.44	1.51
81	l9	33	U	C5'-C4'	-5.53	1.44	1.51
88	lG	18	G	N9-C8	-5.53	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
96	lO	167	A	C8-N7	-5.53	1.27	1.31
6	L5	477	GLY	N-CA	-5.52	1.37	1.46
12	LB	104	GLY	N-CA	-5.52	1.37	1.46
21	LK	243	TYR	CD1-CE1	-5.52	1.31	1.39
76	l4	13	U	C5'-C4'	-5.52	1.44	1.51
76	l4	67	G	C5'-C4'	-5.52	1.44	1.51
81	l9	81	A	C5'-C4'	-5.52	1.44	1.51
9	L8	211	TYR	CD1-CE1	-5.52	1.31	1.39
28	LR	28	GLY	N-CA	-5.52	1.37	1.46
41	Le	430	TYR	CD1-CE1	-5.52	1.31	1.39
52	Lp	647	VAL	CB-CG2	-5.52	1.41	1.52
54	Lr	16	GLY	N-CA	-5.52	1.37	1.46
76	l4	30	C	C5'-C4'	-5.52	1.44	1.51
76	l4	93	U	C5'-C4'	-5.52	1.44	1.51
82	lA	45	A	C5'-C4'	-5.52	1.44	1.51
83	lB	21	A	C8-N7	-5.52	1.27	1.31
88	lG	18	G	C5'-C4'	-5.52	1.44	1.51
91	lJ	148	C	C5'-C4'	-5.52	1.44	1.51
91	lJ	196	A	C8-N7	-5.52	1.27	1.31
91	lJ	211	A	C5'-C4'	-5.52	1.44	1.51
91	lJ	229	G	C5'-C4'	-5.52	1.44	1.51
93	lL	90	A	C8-N7	-5.52	1.27	1.31
99	lR	25	U	C5'-C4'	-5.52	1.44	1.51
38	Lb	315	TYR	CD2-CE2	-5.52	1.31	1.39
41	Le	468	TYR	CD2-CE2	-5.52	1.31	1.39
76	l4	42	A	C5'-C4'	-5.52	1.44	1.51
81	l9	8	U	C5'-C4'	-5.52	1.44	1.51
91	lJ	186	U	C5'-C4'	-5.52	1.44	1.51
13	LC	113	TYR	CD2-CE2	-5.52	1.31	1.39
26	LP	282	GLY	N-CA	-5.52	1.37	1.46
37	La	90	TYR	CD2-CE2	-5.52	1.31	1.39
38	Lb	283	TYR	CD2-CE2	-5.52	1.31	1.39
90	lI	3	A	C8-N7	-5.52	1.27	1.31
13	LC	295	GLY	N-CA	-5.52	1.37	1.46
68	UF	37	TYR	CD1-CE1	-5.52	1.31	1.39
79	l7	54	G	C5'-C4'	-5.52	1.44	1.51
91	lJ	43	C	C5'-C4'	-5.52	1.44	1.51
94	lM	184	A	C5'-C4'	-5.52	1.44	1.51
96	lO	164	A	C8-N7	-5.52	1.27	1.31
52	Lp	618	TYR	CD1-CE1	-5.52	1.31	1.39
61	Ly	649	TYR	CD1-CE1	-5.52	1.31	1.39
75	l3	10	U	C5'-C4'	-5.52	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	l9	24	G	C5'-C4'	-5.52	1.44	1.51
81	l9	63	A	C8-N7	-5.52	1.27	1.31
91	lJ	181	U	C5'-C4'	-5.52	1.44	1.51
3	L2	127	GLY	N-CA	-5.51	1.37	1.46
11	LA	75	GLY	N-CA	-5.51	1.37	1.46
33	LW	348	GLY	N-CA	-5.51	1.37	1.46
81	l9	18	A	C5'-C4'	-5.51	1.44	1.51
86	lE	22	U	C5'-C4'	-5.51	1.44	1.51
87	lF	34	G	N9-C8	-5.51	1.33	1.37
91	lJ	100	C	C5'-C4'	-5.51	1.44	1.51
101	lT	1	U	C5'-C4'	-5.51	1.44	1.51
101	lT	5	U	C5'-C4'	-5.51	1.44	1.51
8	L7	37	TYR	CD1-CE1	-5.51	1.31	1.39
29	LS	60	GLY	N-CA	-5.51	1.37	1.46
38	Lb	283	TYR	CD1-CE1	-5.51	1.31	1.39
78	l6	43	A	C8-N7	-5.51	1.27	1.31
104	lX	53	U	C5'-C4'	-5.51	1.44	1.51
4	L3	565	TYR	CD2-CE2	-5.51	1.31	1.39
20	LJ	25	GLY	N-CA	-5.51	1.37	1.46
37	La	107	GLY	N-CA	-5.51	1.37	1.46
52	Lp	618	TYR	CD2-CE2	-5.51	1.31	1.39
76	l4	63	U	C5'-C4'	-5.51	1.44	1.51
91	lJ	274	U	C5'-C4'	-5.51	1.44	1.51
92	lK	14	G	C5'-C4'	-5.51	1.44	1.51
96	lO	8	G	C5'-C4'	-5.51	1.44	1.51
96	lO	116	U	C5'-C4'	-5.51	1.44	1.51
26	LP	101	TYR	CD1-CE1	-5.51	1.31	1.39
29	LS	8	TYR	CD2-CE2	-5.51	1.31	1.39
29	LS	53	TYR	CD1-CE1	-5.51	1.31	1.39
34	LX	166	TYR	CD1-CE1	-5.51	1.31	1.39
39	Lc	582	TYR	CD1-CE1	-5.51	1.31	1.39
45	Li	698	TYR	CD2-CE2	-5.51	1.31	1.39
51	Lo	186	TYR	CD1-CE1	-5.51	1.31	1.39
56	Lt	154	TYR	CD1-CE1	-5.51	1.31	1.39
72	l0	42	G	C5'-C4'	-5.51	1.44	1.51
92	lK	4	C	C5'-C4'	-5.51	1.44	1.51
98	lQ	7	U	C5'-C4'	-5.51	1.44	1.51
102	lU	5	U	C5'-C4'	-5.51	1.44	1.51
20	LJ	278	TYR	CD1-CE1	-5.51	1.31	1.39
61	Ly	463	GLY	N-CA	-5.51	1.37	1.46
104	lX	52	U	C5'-C4'	-5.51	1.44	1.51
21	LK	192	TYR	CD1-CE1	-5.51	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	LK	192	TYR	CD2-CE2	-5.51	1.31	1.39
93	lL	19	A	C5'-C4'	-5.51	1.44	1.51
3	L2	44	TYR	CD2-CE2	-5.50	1.31	1.39
35	LY	229	GLY	N-CA	-5.50	1.37	1.46
56	Lt	154	TYR	CD2-CE2	-5.50	1.31	1.39
81	l9	38	U	C5'-C4'	-5.50	1.44	1.51
90	lI	40	A	C5'-C4'	-5.50	1.44	1.51
97	lP	21	U	C5'-C4'	-5.50	1.44	1.51
52	Lp	671	TYR	CD1-CE1	-5.50	1.31	1.39
81	l9	9	C	C5'-C4'	-5.50	1.44	1.51
25	LO	176	TYR	CD2-CE2	-5.50	1.31	1.39
40	Ld	563	GLY	N-CA	-5.50	1.37	1.46
76	l4	86	G	C5'-C4'	-5.50	1.44	1.51
81	l9	11	U	C5'-C4'	-5.50	1.44	1.51
81	l9	52	C	C5'-C4'	-5.50	1.44	1.51
81	l9	62	A	C5'-C4'	-5.50	1.44	1.51
90	lI	4	G	C5'-C4'	-5.50	1.44	1.51
91	lJ	175	U	C5'-C4'	-5.50	1.44	1.51
91	lJ	203	G	C5'-C4'	-5.50	1.44	1.51
92	lK	22	A	C5'-C4'	-5.50	1.44	1.51
95	lN	2	C	N1-C6	-5.50	1.33	1.37
96	lO	108	G	C5'-C4'	-5.50	1.44	1.51
20	LJ	249	TYR	CD2-CE2	-5.50	1.31	1.39
23	LM	105	TYR	CD2-CE2	-5.50	1.31	1.39
54	Lr	11	TYR	CD1-CE1	-5.50	1.31	1.39
75	l3	50	C	C5'-C4'	-5.50	1.44	1.51
96	lO	67	C	C5'-C4'	-5.50	1.44	1.51
26	LP	139	TYR	CD1-CE1	-5.50	1.31	1.39
38	Lb	432	TYR	CD1-CE1	-5.50	1.31	1.39
73	l1	48	A	C5'-C4'	-5.50	1.44	1.51
79	l7	67	A	C5'-C4'	-5.50	1.44	1.51
90	lI	36	A	C8-N7	-5.50	1.27	1.31
96	lO	165	A	C5'-C4'	-5.50	1.44	1.51
97	lP	22	U	C5'-C4'	-5.50	1.44	1.51
13	LC	571	TYR	CD2-CE2	-5.50	1.31	1.39
14	LD	361	TYR	CD2-CE2	-5.50	1.31	1.39
43	Lg	204	TYR	CD1-CE1	-5.50	1.31	1.39
48	Ll	64	TYR	CD2-CE2	-5.50	1.31	1.39
53	Lq	162	GLY	N-CA	-5.50	1.37	1.46
57	Lu	416	TYR	CD2-CE2	-5.50	1.31	1.39
58	Lv	22	TYR	CD2-CE2	-5.50	1.31	1.39
73	l1	1	U	C5'-C4'	-5.50	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	l6	40	A	C8-N7	-5.50	1.27	1.31
91	lJ	172	C	C5'-C4'	-5.50	1.44	1.51
94	lM	72	U	C5'-C4'	-5.50	1.44	1.51
96	lO	139	G	C5'-C4'	-5.50	1.44	1.51
96	lO	166	G	C5'-C4'	-5.50	1.44	1.51
38	Lb	591	TYR	CD1-CE1	-5.50	1.31	1.39
42	Lf	299	GLY	N-CA	-5.50	1.37	1.46
55	Ls	412	TYR	CD1-CE1	-5.50	1.31	1.39
79	l7	42	U	C5'-C4'	-5.50	1.44	1.51
86	lE	3	G	N9-C8	-5.50	1.34	1.37
1	L0	461	GLY	N-CA	-5.49	1.37	1.46
12	LB	108	TYR	CD1-CE1	-5.49	1.31	1.39
17	LG	239	TYR	CD2-CE2	-5.49	1.31	1.39
20	LJ	102	TYR	CD2-CE2	-5.49	1.31	1.39
21	LK	80	TYR	CD1-CE1	-5.49	1.31	1.39
29	LS	8	TYR	CD1-CE1	-5.49	1.31	1.39
43	Lg	31	TYR	CD2-CE2	-5.49	1.31	1.39
43	Lg	229	TYR	CD1-CE1	-5.49	1.31	1.39
67	UE	121	TYR	CD2-CE2	-5.49	1.31	1.39
74	l2	21	G	C5'-C4'	-5.49	1.44	1.51
79	l7	52	G	C5'-C4'	-5.49	1.44	1.51
79	l7	71	A	C5'-C4'	-5.49	1.44	1.51
81	l9	15	A	C5'-C4'	-5.49	1.44	1.51
90	lI	37	A	C5'-C4'	-5.49	1.44	1.51
96	lO	161	A	C5'-C4'	-5.49	1.44	1.51
1	L0	423	TYR	CD1-CE1	-5.49	1.31	1.39
51	Lo	181	GLY	N-CA	-5.49	1.37	1.46
53	Lq	163	GLY	N-CA	-5.49	1.37	1.46
54	Lr	163	TYR	CD1-CE1	-5.49	1.31	1.39
14	LD	514	TYR	CD2-CE2	-5.49	1.31	1.39
93	lL	88	A	C8-N7	-5.49	1.27	1.31
8	L7	40	GLY	N-CA	-5.49	1.37	1.46
16	LF	165	TYR	CD1-CE1	-5.49	1.31	1.39
30	LT	48	TYR	CD2-CE2	-5.49	1.31	1.39
35	LY	468	TYR	CD2-CE2	-5.49	1.31	1.39
41	Le	564	TYR	CD2-CE2	-5.49	1.31	1.39
52	Lp	612	TYR	CD1-CE1	-5.49	1.31	1.39
64	UB	245	TYR	CD2-CE2	-5.49	1.31	1.39
76	l4	57	G	C5'-C4'	-5.49	1.44	1.51
99	lR	24	U	C5'-C4'	-5.49	1.44	1.51
104	lX	7	U	C5'-C4'	-5.49	1.44	1.51
1	L0	421	TYR	CD2-CE2	-5.49	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LP	150	TYR	CD2-CE2	-5.49	1.31	1.39
56	Lt	52	VAL	CB-CG2	-5.49	1.41	1.52
76	l4	47	U	C5'-C4'	-5.49	1.44	1.51
76	l4	85	A	C8-N7	-5.49	1.27	1.31
81	l9	55	U	C5'-C4'	-5.49	1.44	1.51
10	L9	6	TYR	CD1-CE1	-5.49	1.31	1.39
11	LA	179	TYR	CD1-CE1	-5.49	1.31	1.39
25	LO	308	GLY	N-CA	-5.49	1.37	1.46
33	LW	359	GLY	N-CA	-5.49	1.37	1.46
40	Ld	565	TYR	CD1-CE1	-5.49	1.31	1.39
41	Le	564	TYR	CD1-CE1	-5.49	1.31	1.39
57	Lu	481	TYR	CD2-CE2	-5.49	1.31	1.39
61	Ly	332	TYR	CD1-CE1	-5.49	1.31	1.39
86	lE	7	G	N9-C8	-5.49	1.34	1.37
86	lE	28	A	C5'-C4'	-5.49	1.44	1.51
87	lF	33	U	C5'-C4'	-5.49	1.44	1.51
91	lJ	213	U	C5'-C4'	-5.49	1.44	1.51
94	lM	144	C	C5'-C4'	-5.49	1.44	1.51
96	lO	56	U	C5'-C4'	-5.49	1.44	1.51
96	lO	115	G	N9-C8	-5.49	1.34	1.37
1	L0	267	TYR	CD1-CE1	-5.48	1.31	1.39
79	l7	49	G	C5'-C4'	-5.48	1.44	1.51
94	lM	31	A	C8-N7	-5.48	1.27	1.31
1	L0	267	TYR	CD2-CE2	-5.48	1.31	1.39
4	L3	726	GLY	N-CA	-5.48	1.37	1.46
14	LD	341	TYR	CD2-CE2	-5.48	1.31	1.39
28	LR	44	TYR	CD1-CE1	-5.48	1.31	1.39
33	LW	488	TYR	CD1-CE1	-5.48	1.31	1.39
33	LW	488	TYR	CD2-CE2	-5.48	1.31	1.39
38	Lb	297	TYR	CD1-CE1	-5.48	1.31	1.39
38	Lb	393	TYR	CD2-CE2	-5.48	1.31	1.39
39	Lc	130	TYR	CD1-CE1	-5.48	1.31	1.39
44	Lh	685	TYR	CD1-CE1	-5.48	1.31	1.39
74	l2	3	G	C5'-C4'	-5.48	1.44	1.51
75	l3	25	U	C5'-C4'	-5.48	1.44	1.51
76	l4	5	U	C5'-C4'	-5.48	1.44	1.51
83	lB	42	G	C5'-C4'	-5.48	1.44	1.51
91	lJ	112	G	C5'-C4'	-5.48	1.44	1.51
99	lR	17	U	C5'-C4'	-5.48	1.44	1.51
1	L0	622	TYR	CD2-CE2	-5.48	1.31	1.39
17	LG	231	TYR	CD2-CE2	-5.48	1.31	1.39
72	l0	37	G	C5'-C4'	-5.48	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
74	l2	4	U	C5'-C4'	-5.48	1.44	1.51
78	l6	39	A	C5'-C4'	-5.48	1.44	1.51
87	lF	21	U	C5'-C4'	-5.48	1.44	1.51
93	lL	44	C	C5'-C4'	-5.48	1.44	1.51
98	lQ	31	U	C5'-C4'	-5.48	1.44	1.51
39	Lc	606	VAL	CB-CG1	-5.48	1.41	1.52
45	Li	700	TYR	CD2-CE2	-5.48	1.31	1.39
78	l6	23	C	C5'-C4'	-5.48	1.44	1.51
81	l9	51	G	C5'-C4'	-5.48	1.44	1.51
94	lM	84	U	C5'-C4'	-5.48	1.44	1.51
96	lO	153	C	C5'-C4'	-5.48	1.44	1.51
17	LG	231	TYR	CD1-CE1	-5.48	1.31	1.39
19	LI	79	TYR	CD2-CE2	-5.48	1.31	1.39
37	La	62	GLY	N-CA	-5.48	1.37	1.46
83	lB	45	A	C5'-C4'	-5.48	1.44	1.51
84	lC	26	G	C5'-C4'	-5.48	1.44	1.51
87	lF	11	U	C5'-C4'	-5.48	1.44	1.51
92	lK	16	A	C8-N7	-5.48	1.27	1.31
94	lM	31	A	C5'-C4'	-5.48	1.44	1.51
94	lM	78	C	C5'-C4'	-5.48	1.44	1.51
97	lP	24	U	C5'-C4'	-5.48	1.44	1.51
22	LL	693	TYR	CD1-CE1	-5.48	1.31	1.39
23	LM	51	VAL	CB-CG2	-5.48	1.41	1.52
64	UB	294	GLY	N-CA	-5.48	1.37	1.46
73	l1	6	U	C5'-C4'	-5.48	1.44	1.51
104	lX	51	U	C5'-C4'	-5.48	1.44	1.51
11	LA	12	TYR	CD2-CE2	-5.47	1.31	1.39
21	LK	118	TYR	CD1-CE1	-5.47	1.31	1.39
32	LV	1088	TYR	CD2-CE2	-5.47	1.31	1.39
33	LW	373	TYR	CD2-CE2	-5.47	1.31	1.39
40	Ld	468	TYR	CD2-CE2	-5.47	1.31	1.39
51	Lo	340	TYR	CD2-CE2	-5.47	1.31	1.39
51	Lo	342	GLY	N-CA	-5.47	1.37	1.46
53	Lq	177	VAL	CB-CG1	-5.47	1.41	1.52
61	Ly	382	TYR	CD1-CE1	-5.47	1.31	1.39
67	UE	154	TYR	CD1-CE1	-5.47	1.31	1.39
68	UF	20	TYR	CD2-CE2	-5.47	1.31	1.39
72	l0	37	G	N9-C8	-5.47	1.34	1.37
75	l3	60	A	C5'-C4'	-5.47	1.44	1.51
76	l4	64	C	C5'-C4'	-5.47	1.44	1.51
77	l5	34	G	C5'-C4'	-5.47	1.44	1.51
96	lO	47	A	C5'-C4'	-5.47	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
98	lQ	3	U	C5'-C4'	-5.47	1.44	1.51
8	L7	37	TYR	CD2-CE2	-5.47	1.31	1.39
9	L8	159	GLY	N-CA	-5.47	1.37	1.46
20	LJ	107	TYR	CD1-CE1	-5.47	1.31	1.39
22	LL	277	TYR	CD1-CE1	-5.47	1.31	1.39
28	LR	26	TYR	CD1-CE1	-5.47	1.31	1.39
35	LY	314	GLY	N-CA	-5.47	1.37	1.46
40	Ld	516	TYR	CD1-CE1	-5.47	1.31	1.39
43	Lg	204	TYR	CD2-CE2	-5.47	1.31	1.39
52	Lp	614	TYR	CD2-CE2	-5.47	1.31	1.39
52	Lp	715	GLY	N-CA	-5.47	1.37	1.46
81	l9	62	A	C8-N7	-5.47	1.27	1.31
91	lJ	127	A	C5'-C4'	-5.47	1.44	1.51
93	lL	32	G	C5'-C4'	-5.47	1.44	1.51
96	lO	42	A	C5'-C4'	-5.47	1.44	1.51
73	l1	14	U	C5'-C4'	-5.47	1.44	1.51
38	Lb	317	TYR	CD2-CE2	-5.47	1.31	1.39
40	Ld	637	ARG	CZ-NH1	-5.47	1.25	1.33
44	Lh	458	TYR	CD1-CE1	-5.47	1.31	1.39
61	Ly	576	TYR	CD1-CE1	-5.47	1.31	1.39
75	l3	57	A	C5'-C4'	-5.47	1.44	1.51
76	l4	59	G	C5'-C4'	-5.47	1.44	1.51
85	lD	11	C	C5'-C4'	-5.47	1.44	1.51
86	lE	8	A	C8-N7	-5.47	1.27	1.31
99	lR	2	U	C5'-C4'	-5.47	1.44	1.51
44	Lh	495	GLY	N-CA	-5.47	1.37	1.46
78	l6	21	A	C5'-C4'	-5.47	1.44	1.51
81	l9	65	A	C5'-C4'	-5.47	1.44	1.51
93	lL	3	G	C5'-C4'	-5.47	1.44	1.51
64	UB	327	TYR	CD2-CE2	-5.47	1.31	1.39
90	lI	19	G	N9-C8	-5.47	1.34	1.37
91	lJ	208	A	C8-N7	-5.47	1.27	1.31
9	L8	235	TYR	CD1-CE1	-5.46	1.31	1.39
12	LB	108	TYR	CD2-CE2	-5.46	1.31	1.39
14	LD	476	TYR	CD2-CE2	-5.46	1.31	1.39
17	LG	239	TYR	CD1-CE1	-5.46	1.31	1.39
35	LY	429	TYR	CD1-CE1	-5.46	1.31	1.39
45	Li	666	TYR	CD1-CE1	-5.46	1.31	1.39
46	Lj	8	TYR	CD2-CE2	-5.46	1.31	1.39
93	lL	84	A	C5'-C4'	-5.46	1.44	1.51
95	lN	21	U	C5'-C4'	-5.46	1.44	1.51
103	lV	2	U	C5'-C4'	-5.46	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	LB	17	GLY	N-CA	-5.46	1.37	1.46
28	LR	44	TYR	CD2-CE2	-5.46	1.31	1.39
35	LY	433	TYR	CD1-CE1	-5.46	1.31	1.39
38	Lb	596	TYR	CD2-CE2	-5.46	1.31	1.39
45	Li	698	TYR	CD1-CE1	-5.46	1.31	1.39
49	Lm	414	TYR	CD2-CE2	-5.46	1.31	1.39
61	Ly	281	TYR	CD1-CE1	-5.46	1.31	1.39
81	l9	61	A	C8-N7	-5.46	1.27	1.31
90	lI	32	A	C5'-C4'	-5.46	1.44	1.51
92	lK	14	G	N9-C8	-5.46	1.34	1.37
103	lV	6	U	C5'-C4'	-5.46	1.44	1.51
38	Lb	317	TYR	CD1-CE1	-5.46	1.31	1.39
51	Lo	123	GLY	N-CA	-5.46	1.37	1.46
59	Lw	19	GLY	N-CA	-5.46	1.37	1.46
62	Lz	187	TYR	CD2-CE2	-5.46	1.31	1.39
75	l3	55	C	C5'-C4'	-5.46	1.44	1.51
76	l4	65	A	C5'-C4'	-5.46	1.44	1.51
86	lE	3	G	C5'-C4'	-5.46	1.44	1.51
89	lH	17	G	C5'-C4'	-5.46	1.44	1.51
91	lJ	166	G	C5'-C4'	-5.46	1.44	1.51
23	LM	65	TYR	CD2-CE2	-5.46	1.31	1.39
39	Lc	339	VAL	CB-CG1	-5.46	1.41	1.52
61	Ly	381	GLY	N-CA	-5.46	1.37	1.46
94	lM	73	C	C5'-C4'	-5.46	1.44	1.51
4	L3	702	TYR	CD1-CE1	-5.46	1.31	1.39
10	L9	449	TYR	CD1-CE1	-5.46	1.31	1.39
25	LO	130	GLY	N-CA	-5.46	1.37	1.46
35	LY	433	TYR	CD2-CE2	-5.46	1.31	1.39
61	Ly	332	TYR	CD2-CE2	-5.46	1.31	1.39
66	UD	201	GLY	N-CA	-5.46	1.37	1.46
75	l3	38	G	C5'-C4'	-5.46	1.44	1.51
78	l6	20	G	C5'-C4'	-5.46	1.44	1.51
79	l7	60	A	C5'-C4'	-5.46	1.44	1.51
96	lO	60	A	C5'-C4'	-5.46	1.44	1.51
104	lX	1	U	C5'-C4'	-5.46	1.44	1.51
12	LB	67	TYR	CD2-CE2	-5.46	1.31	1.39
42	Lf	343	GLY	N-CA	-5.46	1.37	1.46
87	lF	16	U	C5'-C4'	-5.46	1.44	1.51
94	lM	30	A	C8-N7	-5.46	1.27	1.31
4	L3	621	GLY	N-CA	-5.46	1.37	1.46
46	Lj	34	GLY	N-CA	-5.46	1.37	1.46
55	Ls	396	TYR	CD2-CE2	-5.46	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	LR	63	TYR	CD2-CE2	-5.45	1.31	1.39
31	LU	289	GLY	N-CA	-5.45	1.37	1.46
38	Lb	481	TYR	CD1-CE1	-5.45	1.31	1.39
52	Lp	693	TYR	CD2-CE2	-5.45	1.31	1.39
54	Lr	189	TYR	CD2-CE2	-5.45	1.31	1.39
55	Ls	412	TYR	CD2-CE2	-5.45	1.31	1.39
64	UB	219	TYR	CD2-CE2	-5.45	1.31	1.39
85	lD	14	C	C5'-C4'	-5.45	1.44	1.51
89	lH	18	U	C5'-C4'	-5.45	1.44	1.51
25	LO	323	GLY	N-CA	-5.45	1.37	1.46
33	LW	224	TYR	CD2-CE2	-5.45	1.31	1.39
38	Lb	481	TYR	CD2-CE2	-5.45	1.31	1.39
45	Li	701	TYR	CD2-CE2	-5.45	1.31	1.39
54	Lr	260	GLY	N-CA	-5.45	1.37	1.46
58	Lv	82	GLY	N-CA	-5.45	1.37	1.46
74	l2	31	A	C3'-C2'	-5.45	1.46	1.52
76	l4	14	U	C5'-C4'	-5.45	1.44	1.51
28	LR	26	TYR	CD2-CE2	-5.45	1.31	1.39
37	La	91	TYR	CD1-CE1	-5.45	1.31	1.39
38	Lb	365	TYR	CD1-CE1	-5.45	1.31	1.39
40	Ld	536	GLY	N-CA	-5.45	1.37	1.46
44	Lh	458	TYR	CD2-CE2	-5.45	1.31	1.39
51	Lo	175	TYR	CD2-CE2	-5.45	1.31	1.39
51	Lo	340	TYR	CD1-CE1	-5.45	1.31	1.39
52	Lp	458	TYR	CD1-CE1	-5.45	1.31	1.39
61	Ly	382	TYR	CD2-CE2	-5.45	1.31	1.39
93	lL	78	U	C5'-C4'	-5.45	1.44	1.51
12	LB	67	TYR	CD1-CE1	-5.45	1.31	1.39
30	LT	79	TYR	CD1-CE1	-5.45	1.31	1.39
33	LW	423	GLY	N-CA	-5.45	1.37	1.46
35	LY	473	TYR	CD1-CE1	-5.45	1.31	1.39
44	Lh	407	TYR	CD1-CE1	-5.45	1.31	1.39
49	Lm	416	TYR	CD2-CE2	-5.45	1.31	1.39
54	Lr	166	TYR	CD2-CE2	-5.45	1.31	1.39
79	l7	55	G	C5'-C4'	-5.45	1.44	1.51
90	lI	5	G	C5'-C4'	-5.45	1.44	1.51
91	lJ	212	U	C5'-C4'	-5.45	1.44	1.51
91	lJ	238	G	C5'-C4'	-5.45	1.44	1.51
25	LO	206	GLY	N-CA	-5.45	1.37	1.46
37	La	157	TYR	CD1-CE1	-5.45	1.31	1.39
38	Lb	490	GLY	N-CA	-5.45	1.37	1.46
91	lJ	255	C	C4-C5	-5.45	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	LW	224	TYR	CD1-CE1	-5.45	1.31	1.39
38	Lb	332	VAL	CB-CG1	-5.45	1.41	1.52
42	Lf	331	TYR	CD1-CE1	-5.45	1.31	1.39
45	Li	713	TYR	CD2-CE2	-5.45	1.31	1.39
49	Lm	414	TYR	CD1-CE1	-5.45	1.31	1.39
94	lM	129	A	C5'-C4'	-5.45	1.44	1.51
20	LJ	107	TYR	CD2-CE2	-5.44	1.31	1.39
42	Lf	168	TYR	CD1-CE1	-5.44	1.31	1.39
45	Li	667	TYR	CD2-CE2	-5.44	1.31	1.39
54	Lr	259	GLY	N-CA	-5.44	1.37	1.46
81	l9	59	C	C5'-C4'	-5.44	1.44	1.51
4	L3	598	TYR	CD1-CE1	-5.44	1.31	1.39
4	L3	663	TYR	CD2-CE2	-5.44	1.31	1.39
7	L6	238	TYR	CD1-CE1	-5.44	1.31	1.39
13	LC	530	GLY	N-CA	-5.44	1.37	1.46
18	LH	257	TYR	CD1-CE1	-5.44	1.31	1.39
23	LM	105	TYR	CD1-CE1	-5.44	1.31	1.39
35	LY	246	GLY	N-CA	-5.44	1.37	1.46
35	LY	468	TYR	CD1-CE1	-5.44	1.31	1.39
37	La	61	TYR	CD2-CE2	-5.44	1.31	1.39
41	Le	304	TYR	CD1-CE1	-5.44	1.31	1.39
43	Lg	31	TYR	CD1-CE1	-5.44	1.31	1.39
44	Lh	357	TYR	CD1-CE1	-5.44	1.31	1.39
46	Lj	24	GLY	N-CA	-5.44	1.37	1.46
48	Ll	64	TYR	CD1-CE1	-5.44	1.31	1.39
51	Lo	98	TYR	CD2-CE2	-5.44	1.31	1.39
52	Lp	614	TYR	CD1-CE1	-5.44	1.31	1.39
55	Ls	523	TYR	CD2-CE2	-5.44	1.31	1.39
61	Ly	281	TYR	CD2-CE2	-5.44	1.31	1.39
73	l1	19	C	C5'-C4'	-5.44	1.44	1.51
96	lO	143	U	C5'-C4'	-5.44	1.44	1.51
99	lR	22	U	C5'-C4'	-5.44	1.44	1.51
26	LP	150	TYR	CD1-CE1	-5.44	1.31	1.39
43	Lg	208	TYR	CD2-CE2	-5.44	1.31	1.39
44	Lh	568	TYR	CD2-CE2	-5.44	1.31	1.39
54	Lr	166	TYR	CD1-CE1	-5.44	1.31	1.39
57	Lu	424	TYR	CD1-CE1	-5.44	1.31	1.39
58	Lv	83	TYR	CD1-CE1	-5.44	1.31	1.39
79	l7	70	A	C5'-C4'	-5.44	1.44	1.51
92	lK	19	C	C5'-C4'	-5.44	1.44	1.51
96	lO	125	C	C5'-C4'	-5.44	1.44	1.51
20	LJ	388	TYR	CD1-CE1	-5.44	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	Lm	275	GLY	N-CA	-5.44	1.37	1.46
58	Lv	22	TYR	CD1-CE1	-5.44	1.31	1.39
72	l0	39	U	C5'-C4'	-5.44	1.44	1.51
81	l9	41	U	C5'-C4'	-5.44	1.44	1.51
6	L5	455	TYR	CD1-CE1	-5.44	1.31	1.39
14	LD	356	TYR	CD2-CE2	-5.44	1.31	1.39
21	LK	140	GLY	N-CA	-5.44	1.37	1.46
26	LP	130	GLY	N-CA	-5.44	1.37	1.46
40	Ld	468	TYR	CD1-CE1	-5.44	1.31	1.39
44	Lh	588	TYR	CD1-CE1	-5.44	1.31	1.39
96	lO	90	G	C5'-C4'	-5.44	1.44	1.51
99	lR	20	U	C5'-C4'	-5.44	1.44	1.51
19	LI	73	TYR	CD1-CE1	-5.44	1.31	1.39
20	LJ	278	TYR	CD2-CE2	-5.44	1.31	1.39
56	Lt	118	TYR	CD2-CE2	-5.44	1.31	1.39
93	lL	2	G	C5'-C4'	-5.44	1.44	1.51
24	LN	258	TYR	CD1-CE1	-5.43	1.31	1.39
25	LO	115	GLY	N-CA	-5.43	1.37	1.46
33	LW	262	TYR	CD2-CE2	-5.43	1.31	1.39
33	LW	504	TYR	CD2-CE2	-5.43	1.31	1.39
37	La	44	VAL	CB-CG2	-5.43	1.41	1.52
40	Ld	630	GLY	N-CA	-5.43	1.37	1.46
42	Lf	168	TYR	CD2-CE2	-5.43	1.31	1.39
45	Li	666	TYR	CD2-CE2	-5.43	1.31	1.39
45	Li	713	TYR	CD1-CE1	-5.43	1.31	1.39
48	Ll	83	GLY	N-CA	-5.43	1.37	1.46
49	Lm	374	SER	CB-OG	-5.43	1.35	1.42
52	Lp	668	GLY	N-CA	-5.43	1.37	1.46
53	Lq	691	TYR	CD1-CE1	-5.43	1.31	1.39
61	Ly	671	TYR	CD1-CE1	-5.43	1.31	1.39
76	l4	85	A	C5'-C4'	-5.43	1.44	1.51
96	lO	70	C	C5'-C4'	-5.43	1.44	1.51
104	lX	14	U	C5'-C4'	-5.43	1.44	1.51
76	l4	84	A	C5'-C4'	-5.43	1.44	1.51
79	l7	53	U	C5'-C4'	-5.43	1.44	1.51
91	lJ	20	A	C5'-C4'	-5.43	1.44	1.51
91	lJ	234	A	C5'-C4'	-5.43	1.44	1.51
94	lM	197	U	C5'-C4'	-5.43	1.44	1.51
20	LJ	155	VAL	CB-CG1	-5.43	1.41	1.52
38	Lb	670	GLY	N-CA	-5.43	1.38	1.46
91	lJ	138	G	C5'-C4'	-5.43	1.44	1.51
1	L0	623	TYR	CD1-CE1	-5.43	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	LP	101	TYR	CD2-CE2	-5.43	1.31	1.39
35	LY	429	TYR	CD2-CE2	-5.43	1.31	1.39
43	Lg	208	TYR	CD1-CE1	-5.43	1.31	1.39
61	Ly	537	VAL	CB-CG2	-5.43	1.41	1.52
1	L0	622	TYR	CD1-CE1	-5.43	1.31	1.39
29	LS	53	TYR	CD2-CE2	-5.43	1.31	1.39
67	UE	154	TYR	CD2-CE2	-5.43	1.31	1.39
91	lJ	135	G	C5'-C4'	-5.43	1.44	1.51
14	LD	341	TYR	CD1-CE1	-5.43	1.31	1.39
16	LF	170	GLY	N-CA	-5.43	1.38	1.46
38	Lb	315	TYR	CD1-CE1	-5.43	1.31	1.39
44	Lh	559	GLY	N-CA	-5.43	1.38	1.46
52	Lp	534	TYR	CD2-CE2	-5.43	1.31	1.39
53	Lq	166	TYR	CD2-CE2	-5.43	1.31	1.39
54	Lr	163	TYR	CD2-CE2	-5.43	1.31	1.39
94	lM	124	U	C5'-C4'	-5.43	1.44	1.51
38	Lb	596	TYR	CD1-CE1	-5.42	1.31	1.39
62	Lz	187	TYR	CD1-CE1	-5.42	1.31	1.39
67	UE	121	TYR	CD1-CE1	-5.42	1.31	1.39
76	l4	61	A	C5'-C4'	-5.42	1.44	1.51
86	lE	26	A	C5'-C4'	-5.42	1.44	1.51
88	lG	19	C	C5'-C4'	-5.42	1.44	1.51
93	lL	31	C	C5'-C4'	-5.42	1.44	1.51
96	lO	44	U	C5'-C4'	-5.42	1.44	1.51
5	L4	471	TYR	CD2-CE2	-5.42	1.31	1.39
29	LS	185	TYR	CD2-CE2	-5.42	1.31	1.39
51	Lo	98	TYR	CD1-CE1	-5.42	1.31	1.39
52	Lp	653	TYR	CD1-CE1	-5.42	1.31	1.39
55	Ls	376	GLY	N-CA	-5.42	1.38	1.46
76	l4	2	C	C5'-C4'	-5.42	1.44	1.51
4	L3	663	TYR	CD1-CE1	-5.42	1.31	1.39
40	Ld	622	VAL	CB-CG2	-5.42	1.41	1.52
57	Lu	381	LYS	CE-NZ	-5.42	1.35	1.49
70	UH	265	TYR	CD2-CE2	-5.42	1.31	1.39
89	lH	14	G	N9-C8	-5.42	1.34	1.37
91	lJ	184	C	C5'-C4'	-5.42	1.44	1.51
96	lO	138	G	C5'-C4'	-5.42	1.44	1.51
1	L0	359	TYR	CD1-CE1	-5.42	1.31	1.39
5	L4	253	GLY	N-CA	-5.42	1.38	1.46
16	LF	173	TYR	CD2-CE2	-5.42	1.31	1.39
37	La	61	TYR	CD1-CE1	-5.42	1.31	1.39
41	Le	304	TYR	CD2-CE2	-5.42	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
76	l4	4	U	C5'-C4'	-5.42	1.44	1.51
91	lJ	226	G	C5'-C4'	-5.42	1.44	1.51
1	L0	359	TYR	CD2-CE2	-5.42	1.31	1.39
2	L1	469	TYR	CD2-CE2	-5.42	1.31	1.39
10	L9	449	TYR	CD2-CE2	-5.42	1.31	1.39
11	LA	80	GLY	N-CA	-5.42	1.38	1.46
14	LD	356	TYR	CD1-CE1	-5.42	1.31	1.39
20	LJ	106	GLY	N-CA	-5.42	1.38	1.46
27	LQ	414	TYR	CD2-CE2	-5.42	1.31	1.39
33	LW	262	TYR	CD1-CE1	-5.42	1.31	1.39
33	LW	381	GLY	N-CA	-5.42	1.38	1.46
41	Le	468	TYR	CD1-CE1	-5.42	1.31	1.39
61	Ly	657	GLY	N-CA	-5.42	1.38	1.46
75	l3	24	C	C5'-C4'	-5.42	1.44	1.51
76	l4	58	A	C5'-C4'	-5.42	1.44	1.51
81	l9	69	A	C5'-C4'	-5.42	1.44	1.51
93	lL	64	G	N9-C8	-5.42	1.34	1.37
25	LO	339	GLY	N-CA	-5.42	1.38	1.46
28	LR	59	GLY	N-CA	-5.42	1.38	1.46
48	Ll	27	GLY	N-CA	-5.42	1.38	1.46
76	l4	29	C	C5'-C4'	-5.42	1.44	1.51
81	l9	58	G	C5'-C4'	-5.42	1.44	1.51
86	lE	29	A	C5'-C4'	-5.42	1.44	1.51
93	lL	88	A	C5'-C4'	-5.42	1.44	1.51
24	LN	240	TYR	CD2-CE2	-5.42	1.31	1.39
33	LW	390	GLY	N-CA	-5.42	1.38	1.46
44	Lh	357	TYR	CD2-CE2	-5.42	1.31	1.39
46	Lj	8	TYR	CD1-CE1	-5.42	1.31	1.39
62	Lz	178	GLY	N-CA	-5.42	1.38	1.46
76	l4	26	A	C5'-C4'	-5.42	1.44	1.51
1	L0	319	GLY	N-CA	-5.41	1.38	1.46
5	L4	471	TYR	CD1-CE1	-5.41	1.31	1.39
11	LA	73	GLY	N-CA	-5.41	1.38	1.46
32	LV	1061	VAL	CB-CG1	-5.41	1.41	1.52
49	Lm	345	GLY	N-CA	-5.41	1.38	1.46
57	Lu	481	TYR	CD1-CE1	-5.41	1.31	1.39
76	l4	27	G	N9-C8	-5.41	1.34	1.37
96	lO	141	U	C5'-C4'	-5.41	1.44	1.51
2	L1	470	GLY	N-CA	-5.41	1.38	1.46
20	LJ	318	GLY	N-CA	-5.41	1.38	1.46
49	Lm	355	GLY	N-CA	-5.41	1.38	1.46
53	Lq	558	GLY	N-CA	-5.41	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
90	lI	35	A	C5'-C4'	-5.41	1.44	1.51
11	LA	91	GLY	N-CA	-5.41	1.38	1.46
22	LL	277	TYR	CD2-CE2	-5.41	1.31	1.39
28	LR	63	TYR	CD1-CE1	-5.41	1.31	1.39
38	Lb	391	GLY	N-CA	-5.41	1.38	1.46
51	Lo	186	TYR	CD2-CE2	-5.41	1.31	1.39
54	Lr	189	TYR	CD1-CE1	-5.41	1.31	1.39
55	Ls	365	TYR	CD1-CE1	-5.41	1.31	1.39
76	l4	36	A	C8-N7	-5.41	1.27	1.31
81	l9	37	C	C5'-C4'	-5.41	1.44	1.51
84	lC	25	A	C5'-C4'	-5.41	1.44	1.51
88	lG	17	A	C5'-C4'	-5.41	1.44	1.51
90	lI	21	A	C5'-C4'	-5.41	1.44	1.51
38	Lb	282	TYR	CD2-CE2	-5.41	1.31	1.39
40	Ld	516	TYR	CD2-CE2	-5.41	1.31	1.39
42	Lf	351	TYR	CD2-CE2	-5.41	1.31	1.39
45	Li	396	GLY	N-CA	-5.41	1.38	1.46
48	Ll	95	SER	CB-OG	-5.41	1.35	1.42
52	Lp	655	GLY	N-CA	-5.41	1.38	1.46
56	Lt	278	VAL	CB-CG2	-5.41	1.41	1.52
93	lL	77	G	C5'-C4'	-5.41	1.44	1.51
101	lT	14	U	C5'-C4'	-5.41	1.44	1.51
16	LF	173	TYR	CD1-CE1	-5.41	1.31	1.39
4	L3	702	TYR	CD2-CE2	-5.41	1.31	1.39
13	LC	122	GLY	N-CA	-5.41	1.38	1.46
16	LF	159	GLY	N-CA	-5.41	1.38	1.46
24	LN	240	TYR	CD1-CE1	-5.41	1.31	1.39
25	LO	156	TYR	CD2-CE2	-5.41	1.31	1.39
26	LP	211	GLY	N-CA	-5.41	1.38	1.46
29	LS	140	GLY	N-CA	-5.41	1.38	1.46
34	LX	115	GLY	N-CA	-5.41	1.38	1.46
35	LY	535	TYR	CD1-CE1	-5.41	1.31	1.39
44	Lh	410	TYR	CD1-CE1	-5.41	1.31	1.39
45	Li	316	LYS	CE-NZ	-5.41	1.35	1.49
57	Lu	424	TYR	CD2-CE2	-5.41	1.31	1.39
76	l4	92	A	C5'-C4'	-5.41	1.44	1.51
81	l9	57	A	C8-N7	-5.41	1.27	1.31
93	lL	60	G	C5'-C4'	-5.41	1.44	1.51
94	lM	34	G	C5'-C4'	-5.41	1.44	1.51
96	lO	65	A	C5'-C4'	-5.41	1.44	1.51
96	lO	92	U	C5'-C4'	-5.41	1.44	1.51
41	Le	532	TYR	CD2-CE2	-5.40	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	L0	262	TYR	CD1-CE1	-5.40	1.31	1.39
4	L3	565	TYR	CD1-CE1	-5.40	1.31	1.39
32	LV	681	ARG	CZ-NH1	-5.40	1.26	1.33
35	LY	380	TYR	CD1-CE1	-5.40	1.31	1.39
38	Lb	393	TYR	CD1-CE1	-5.40	1.31	1.39
39	Lc	130	TYR	CD2-CE2	-5.40	1.31	1.39
45	Li	588	TYR	CD1-CE1	-5.40	1.31	1.39
93	lL	74	A	C5'-C4'	-5.40	1.44	1.51
9	L8	235	TYR	CD2-CE2	-5.40	1.31	1.39
20	LJ	118	TYR	CD1-CE1	-5.40	1.31	1.39
21	LK	80	TYR	CD2-CE2	-5.40	1.31	1.39
21	LK	92	TYR	CD1-CE1	-5.40	1.31	1.39
32	LV	798	ARG	CZ-NH1	-5.40	1.26	1.33
34	LX	98	TYR	CD2-CE2	-5.40	1.31	1.39
38	Lb	591	TYR	CD2-CE2	-5.40	1.31	1.39
51	Lo	115	TYR	CD2-CE2	-5.40	1.31	1.39
53	Lq	529	GLY	N-CA	-5.40	1.38	1.46
61	Ly	541	GLY	N-CA	-5.40	1.38	1.46
81	l9	26	A	C5'-C4'	-5.40	1.44	1.51
86	lE	7	G	C5'-C4'	-5.40	1.44	1.51
90	lI	17	G	C5'-C4'	-5.40	1.44	1.51
104	lX	50	U	C5'-C4'	-5.40	1.44	1.51
5	L4	247	GLY	N-CA	-5.40	1.38	1.46
10	L9	6	TYR	CD2-CE2	-5.40	1.31	1.39
38	Lb	365	TYR	CD2-CE2	-5.40	1.31	1.39
39	Lc	336	SER	CB-OG	-5.40	1.35	1.42
87	lF	19	U	C5'-C4'	-5.40	1.44	1.51
97	lP	29	U	C5'-C4'	-5.40	1.44	1.51
5	L4	204	GLY	N-CA	-5.40	1.38	1.46
24	LN	307	TYR	CD2-CE2	-5.40	1.31	1.39
25	LO	176	TYR	CD1-CE1	-5.40	1.31	1.39
26	LP	159	SER	CB-OG	-5.40	1.35	1.42
32	LV	319	GLY	N-CA	-5.40	1.38	1.46
34	LX	129	GLY	N-CA	-5.40	1.38	1.46
42	Lf	331	TYR	CD2-CE2	-5.40	1.31	1.39
53	Lq	166	TYR	CD1-CE1	-5.40	1.31	1.39
63	UA	237	TYR	CD1-CE1	-5.40	1.31	1.39
76	l4	36	A	C5'-C4'	-5.40	1.44	1.51
93	lL	63	U	C5'-C4'	-5.40	1.44	1.51
96	lO	40	A	C5'-C4'	-5.40	1.44	1.51
1	L0	623	TYR	CD2-CE2	-5.40	1.31	1.39
20	LJ	249	TYR	CD1-CE1	-5.40	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	LK	243	TYR	CD2-CE2	-5.40	1.31	1.39
52	Lp	629	GLY	N-CA	-5.40	1.38	1.46
62	Lz	146	TYR	CD1-CE1	-5.40	1.31	1.39
65	UC	290	TYR	CD2-CE2	-5.40	1.31	1.39
11	LA	173	TYR	CD1-CE1	-5.39	1.31	1.39
25	LO	307	GLY	N-CA	-5.39	1.38	1.46
49	Lm	293	GLY	N-CA	-5.39	1.38	1.46
61	Ly	576	TYR	CD2-CE2	-5.39	1.31	1.39
83	lB	44	G	C5'-C4'	-5.39	1.44	1.51
87	lF	34	G	C5'-C4'	-5.39	1.44	1.51
87	lF	86	A	C5'-C4'	-5.39	1.44	1.51
24	LN	258	TYR	CD2-CE2	-5.39	1.31	1.39
26	LP	210	GLY	N-CA	-5.39	1.38	1.46
38	Lb	282	TYR	CD1-CE1	-5.39	1.31	1.39
68	UF	20	TYR	CD1-CE1	-5.39	1.31	1.39
91	lJ	198	U	C5'-C4'	-5.39	1.44	1.51
94	lM	89	G	C5'-C4'	-5.39	1.44	1.51
102	lU	10	U	C5'-C4'	-5.39	1.44	1.51
28	LR	126	TYR	CD1-CE1	-5.39	1.31	1.39
54	Lr	261	GLY	N-CA	-5.39	1.38	1.46
73	l1	7	G	C5'-C4'	-5.39	1.44	1.51
77	l5	30	U	C5'-C4'	-5.39	1.44	1.51
103	lV	7	U	C5'-C4'	-5.39	1.44	1.51
1	L0	262	TYR	CD2-CE2	-5.39	1.31	1.39
13	LC	571	TYR	CD1-CE1	-5.39	1.31	1.39
22	LL	948	TRP	CD1-NE1	-5.39	1.28	1.38
26	LP	139	TYR	CD2-CE2	-5.39	1.31	1.39
26	LP	162	LYS	CE-NZ	-5.39	1.35	1.49
40	Ld	470	LYS	CE-NZ	-5.39	1.35	1.49
41	Le	419	GLY	N-CA	-5.39	1.38	1.46
64	UB	245	TYR	CD1-CE1	-5.39	1.31	1.39
11	LA	12	TYR	CD1-CE1	-5.39	1.31	1.39
13	LC	161	GLY	N-CA	-5.39	1.38	1.46
55	Ls	523	TYR	CD1-CE1	-5.39	1.31	1.39
58	Lv	83	TYR	CD2-CE2	-5.39	1.31	1.39
3	L2	50	SER	CB-OG	-5.39	1.35	1.42
7	L6	238	TYR	CD2-CE2	-5.39	1.31	1.39
13	LC	118	GLY	N-CA	-5.39	1.38	1.46
20	LJ	101	GLY	N-CA	-5.39	1.38	1.46
29	LS	185	TYR	CD1-CE1	-5.39	1.31	1.39
30	LT	84	GLY	N-CA	-5.39	1.38	1.46
39	Lc	517	TRP	CD1-NE1	-5.39	1.28	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	Lq	562	GLY	N-CA	-5.39	1.38	1.46
64	UB	229	GLY	N-CA	-5.39	1.38	1.46
95	lN	32	C	C5'-C4'	-5.39	1.44	1.51
16	LF	165	TYR	CD2-CE2	-5.38	1.31	1.39
20	LJ	225	TYR	CD2-CE2	-5.38	1.31	1.39
32	LV	662	ARG	CZ-NH1	-5.38	1.26	1.33
34	LX	166	TYR	CD2-CE2	-5.38	1.31	1.39
38	Lb	375	VAL	CB-CG2	-5.38	1.41	1.52
52	Lp	612	TYR	CD2-CE2	-5.38	1.31	1.39
54	Lr	264	GLY	N-CA	-5.38	1.38	1.46
70	UH	245	TYR	CD1-CE1	-5.38	1.31	1.39
87	lF	63	A	C5'-C4'	-5.38	1.44	1.51
95	lN	38	A	C5'-C4'	-5.38	1.44	1.51
38	Lb	297	TYR	CD2-CE2	-5.38	1.31	1.39
47	Lk	522	GLY	N-CA	-5.38	1.38	1.46
11	LA	74	LYS	CE-NZ	-5.38	1.35	1.49
19	LI	73	TYR	CD2-CE2	-5.38	1.31	1.39
25	LO	156	TYR	CD1-CE1	-5.38	1.31	1.39
43	Lg	229	TYR	CD2-CE2	-5.38	1.31	1.39
48	Ll	6	GLY	N-CA	-5.38	1.38	1.46
54	Lr	18	GLY	N-CA	-5.38	1.38	1.46
72	l0	40	C	C5'-C4'	-5.38	1.44	1.51
81	l9	45	A	C5'-C4'	-5.38	1.44	1.51
81	l9	70	C	C5'-C4'	-5.38	1.44	1.51
96	lO	160	G	C5'-C4'	-5.38	1.44	1.51
96	lO	162	A	C5'-C4'	-5.38	1.44	1.51
2	L1	469	TYR	CD1-CE1	-5.38	1.31	1.39
9	L8	212	LYS	CE-NZ	-5.38	1.35	1.49
25	LO	240	LYS	CE-NZ	-5.38	1.35	1.49
38	Lb	363	TYR	CD1-CE1	-5.38	1.31	1.39
64	UB	327	TYR	CD1-CE1	-5.38	1.31	1.39
73	l1	13	G	N9-C8	-5.38	1.34	1.37
74	l2	25	U	C5'-C4'	-5.38	1.44	1.51
93	lL	74	A	C8-N7	-5.38	1.27	1.31
96	lO	60	A	N9-C8	-5.38	1.33	1.37
98	lQ	4	U	C5'-C4'	-5.38	1.44	1.51
9	L8	211	TYR	CD2-CE2	-5.38	1.31	1.39
13	LC	242	GLY	N-CA	-5.38	1.38	1.46
32	LV	958	ARG	CZ-NH1	-5.38	1.26	1.33
37	La	157	TYR	CD2-CE2	-5.38	1.31	1.39
45	Li	394	VAL	CB-CG1	-5.38	1.41	1.52
64	UB	226	SER	CB-OG	-5.38	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
93	lL	76	C	C5'-C4'	-5.38	1.44	1.51
102	lU	15	U	C5'-C4'	-5.38	1.44	1.51
1	L0	393	GLY	N-CA	-5.38	1.38	1.46
4	L3	667	TYR	CD2-CE2	-5.38	1.31	1.39
22	LL	913	SER	CB-OG	-5.38	1.35	1.42
27	LQ	414	TYR	CD1-CE1	-5.38	1.31	1.39
44	Lh	563	TYR	CD1-CE1	-5.38	1.31	1.39
51	Lo	171	GLY	N-CA	-5.38	1.38	1.46
61	Ly	535	GLY	N-CA	-5.38	1.38	1.46
73	l1	2	U	C5'-C4'	-5.38	1.44	1.51
73	l1	50	A	C5'-C4'	-5.38	1.44	1.51
98	lQ	11	U	C5'-C4'	-5.38	1.44	1.51
1	L0	423	TYR	CD2-CE2	-5.38	1.31	1.39
4	L3	598	TYR	CD2-CE2	-5.38	1.31	1.39
32	LV	782	ARG	CZ-NH1	-5.38	1.26	1.33
1	L0	421	TYR	CD1-CE1	-5.37	1.31	1.39
20	LJ	239	LYS	CE-NZ	-5.37	1.35	1.49
22	LL	319	VAL	CB-CG1	-5.37	1.41	1.52
51	Lo	175	TYR	CD1-CE1	-5.37	1.31	1.39
51	Lo	311	LYS	CE-NZ	-5.37	1.35	1.49
59	Lw	15	LYS	CE-NZ	-5.37	1.35	1.49
65	UC	294	LYS	CE-NZ	-5.37	1.35	1.49
81	l9	47	G	C5'-C4'	-5.37	1.45	1.51
26	LP	153	SER	CB-OG	-5.37	1.35	1.42
33	LW	504	TYR	CD1-CE1	-5.37	1.31	1.39
34	LX	98	TYR	CD1-CE1	-5.37	1.31	1.39
34	LX	117	LYS	CE-NZ	-5.37	1.35	1.49
52	Lp	744	LYS	CE-NZ	-5.37	1.35	1.49
54	Lr	11	TYR	CD2-CE2	-5.37	1.31	1.39
92	lK	16	A	C5'-C4'	-5.37	1.45	1.51
4	L3	647	GLY	N-CA	-5.37	1.38	1.46
32	LV	1088	TYR	CD1-CE1	-5.37	1.31	1.39
52	Lp	671	TYR	CD2-CE2	-5.37	1.31	1.39
13	LC	278	GLY	N-CA	-5.37	1.38	1.46
14	LD	514	TYR	CD1-CE1	-5.37	1.31	1.39
20	LJ	118	TYR	CD2-CE2	-5.37	1.31	1.39
20	LJ	376	VAL	CB-CG1	-5.37	1.41	1.52
37	La	94	GLY	N-CA	-5.37	1.38	1.46
41	Le	528	GLY	N-CA	-5.37	1.38	1.46
45	Li	701	TYR	CD1-CE1	-5.37	1.31	1.39
47	Lk	535	GLY	N-CA	-5.37	1.38	1.46
48	Ll	55	TYR	CD1-CE1	-5.37	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	Lq	502	LYS	CE-NZ	-5.37	1.35	1.49
58	Lv	66	VAL	CB-CG2	-5.37	1.41	1.52
61	Ly	288	GLY	N-CA	-5.37	1.38	1.46
62	Lz	146	TYR	CD2-CE2	-5.37	1.31	1.39
68	UF	6	GLY	N-CA	-5.37	1.38	1.46
38	Lb	871	TYR	CD2-CE2	-5.37	1.31	1.39
41	Le	430	TYR	CD2-CE2	-5.37	1.31	1.39
44	Lh	413	TYR	CD1-CE1	-5.37	1.31	1.39
46	Lj	33	LYS	CE-NZ	-5.37	1.35	1.49
49	Lm	269	LYS	CE-NZ	-5.37	1.35	1.49
55	Ls	396	TYR	CD1-CE1	-5.37	1.31	1.39
86	lE	6	A	C5'-C4'	-5.37	1.45	1.51
94	lM	149	G	C5'-C4'	-5.37	1.45	1.51
6	L5	455	TYR	CD2-CE2	-5.37	1.31	1.39
13	LC	447	GLY	N-CA	-5.37	1.38	1.46
14	LD	573	VAL	CB-CG1	-5.37	1.41	1.52
20	LJ	17	LYS	CE-NZ	-5.37	1.35	1.49
20	LJ	266	VAL	CB-CG1	-5.37	1.41	1.52
38	Lb	875	SER	CB-OG	-5.37	1.35	1.42
44	Lh	685	TYR	CD2-CE2	-5.37	1.31	1.39
45	Li	700	TYR	CD1-CE1	-5.37	1.31	1.39
55	Ls	397	LYS	CE-NZ	-5.37	1.35	1.49
12	LB	60	GLY	N-CA	-5.36	1.38	1.46
13	LC	452	SER	CB-OG	-5.36	1.35	1.42
37	La	155	SER	CB-OG	-5.36	1.35	1.42
38	Lb	331	LYS	CE-NZ	-5.36	1.35	1.49
38	Lb	408	TYR	CD1-CE1	-5.36	1.31	1.39
44	Lh	336	VAL	CB-CG1	-5.36	1.41	1.52
48	Ll	55	TYR	CD2-CE2	-5.36	1.31	1.39
49	Lm	317	GLY	N-CA	-5.36	1.38	1.46
52	Lp	707	LYS	CE-NZ	-5.36	1.35	1.49
98	lQ	15	U	C5'-C4'	-5.36	1.45	1.51
31	LU	235	TYR	CD2-CE2	-5.36	1.31	1.39
41	Le	308	VAL	CB-CG1	-5.36	1.41	1.52
42	Lf	351	TYR	CD1-CE1	-5.36	1.31	1.39
68	UF	10	LYS	CE-NZ	-5.36	1.35	1.49
2	L1	461	GLY	N-CA	-5.36	1.38	1.46
3	L2	38	LYS	CE-NZ	-5.36	1.35	1.49
11	LA	179	TYR	CD2-CE2	-5.36	1.31	1.39
25	LO	169	TYR	CD2-CE2	-5.36	1.31	1.39
36	LZ	40	SER	CB-OG	-5.36	1.35	1.42
40	Ld	431	VAL	CB-CG1	-5.36	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	Ly	671	TYR	CD2-CE2	-5.36	1.31	1.39
67	UE	183	SER	CB-OG	-5.36	1.35	1.42
99	lR	21	U	C5'-C4'	-5.36	1.45	1.51
20	LJ	251	LYS	CE-NZ	-5.36	1.35	1.49
25	LO	143	GLY	N-CA	-5.36	1.38	1.46
41	Le	595	GLY	N-CA	-5.36	1.38	1.46
45	Li	627	LYS	CE-NZ	-5.36	1.35	1.49
69	UG	317	GLY	N-CA	-5.36	1.38	1.46
7	L6	236	LYS	CE-NZ	-5.36	1.35	1.49
8	L7	38	GLY	N-CA	-5.36	1.38	1.46
8	L7	77	LYS	CE-NZ	-5.36	1.35	1.49
21	LK	248	LYS	CE-NZ	-5.36	1.35	1.49
25	LO	335	LYS	CE-NZ	-5.36	1.35	1.49
35	LY	316	LYS	CE-NZ	-5.36	1.35	1.49
35	LY	380	TYR	CD2-CE2	-5.36	1.31	1.39
44	Lh	511	LYS	CE-NZ	-5.36	1.35	1.49
63	UA	260	GLY	N-CA	-5.36	1.38	1.46
91	lJ	251	G	C5'-C4'	-5.36	1.45	1.51
1	L0	561	LYS	CE-NZ	-5.36	1.35	1.49
24	LN	266	LYS	CE-NZ	-5.36	1.35	1.49
30	LT	54	LYS	CE-NZ	-5.36	1.35	1.49
38	Lb	601	SER	CB-OG	-5.36	1.35	1.42
43	Lg	80	GLY	N-CA	-5.36	1.38	1.46
43	Lg	130	LYS	CE-NZ	-5.36	1.35	1.49
48	Ll	54	LYS	CE-NZ	-5.36	1.35	1.49
51	Lo	188	GLY	N-CA	-5.36	1.38	1.46
53	Lq	477	SER	CB-OG	-5.36	1.35	1.42
55	Ls	365	TYR	CD2-CE2	-5.36	1.31	1.39
58	Lv	45	LYS	CE-NZ	-5.36	1.35	1.49
65	UC	289	LYS	CE-NZ	-5.36	1.35	1.49
71	UI	390	LYS	CE-NZ	-5.36	1.35	1.49
91	lJ	271	C	C5'-C4'	-5.36	1.45	1.51
23	LM	38	LYS	CE-NZ	-5.35	1.35	1.49
25	LO	288	GLY	N-CA	-5.35	1.38	1.46
38	Lb	509	GLY	N-CA	-5.35	1.38	1.46
39	Lc	136	GLY	N-CA	-5.35	1.38	1.46
14	LD	361	TYR	CD1-CE1	-5.35	1.31	1.39
31	LU	242	SER	CB-OG	-5.35	1.35	1.42
37	La	142	LYS	CE-NZ	-5.35	1.35	1.49
39	Lc	326	LYS	CE-NZ	-5.35	1.35	1.49
55	Ls	370	LYS	CE-NZ	-5.35	1.35	1.49
60	Lx	311	LYS	CE-NZ	-5.35	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	Ly	503	LYS	CE-NZ	-5.35	1.35	1.49
73	l1	49	A	C5'-C4'	-5.35	1.45	1.51
4	L3	499	GLY	N-CA	-5.35	1.38	1.46
14	LD	528	LYS	CE-NZ	-5.35	1.35	1.49
33	LW	384	GLY	N-CA	-5.35	1.38	1.46
37	La	50	LYS	CE-NZ	-5.35	1.35	1.49
41	Le	552	LYS	CE-NZ	-5.35	1.35	1.49
43	Lg	30	SER	CB-OG	-5.35	1.35	1.42
51	Lo	83	LYS	CE-NZ	-5.35	1.35	1.49
68	UF	58	SER	CB-OG	-5.35	1.35	1.42
90	lI	48	A	C2'-C1'	-5.35	1.47	1.53
33	LW	419	GLY	N-CA	-5.35	1.38	1.46
35	LY	278	SER	CB-OG	-5.35	1.35	1.42
41	Le	532	TYR	CD1-CE1	-5.35	1.31	1.39
42	Lf	362	SER	CB-OG	-5.35	1.35	1.42
44	Lh	433	GLY	N-CA	-5.35	1.38	1.46
54	Lr	60	LYS	CE-NZ	-5.35	1.35	1.49
66	UD	184	LYS	CE-NZ	-5.35	1.35	1.49
96	lO	9	A	C5'-C4'	-5.35	1.45	1.51
97	lP	3	U	C5'-C4'	-5.35	1.45	1.51
1	L0	286	LYS	CE-NZ	-5.35	1.35	1.49
12	LB	38	TYR	CD1-CE1	-5.35	1.31	1.39
13	LC	120	LYS	CE-NZ	-5.35	1.35	1.49
33	LW	416	LYS	CE-NZ	-5.35	1.35	1.49
38	Lb	336	LYS	CE-NZ	-5.35	1.35	1.49
53	Lq	130	LYS	CE-NZ	-5.35	1.35	1.49
64	UB	332	VAL	CB-CG1	-5.35	1.41	1.52
75	l3	21	G	C5'-C4'	-5.35	1.45	1.51
91	lJ	156	G	C5'-C4'	-5.35	1.45	1.51
94	lM	26	G	C5'-C4'	-5.35	1.45	1.51
19	LI	79	TYR	CD1-CE1	-5.35	1.31	1.39
32	LV	785	ARG	CZ-NH1	-5.35	1.26	1.33
38	Lb	360	LYS	CE-NZ	-5.35	1.35	1.49
48	Ll	5	GLY	N-CA	-5.35	1.38	1.46
81	l9	28	U	C5'-C4'	-5.35	1.45	1.51
94	lM	155	C	C5'-C4'	-5.35	1.45	1.51
5	L4	198	SER	CB-OG	-5.34	1.35	1.42
23	LM	65	TYR	CD1-CE1	-5.34	1.31	1.39
32	LV	365	SER	CB-OG	-5.34	1.35	1.42
37	La	91	TYR	CD2-CE2	-5.34	1.31	1.39
38	Lb	291	LYS	CE-NZ	-5.34	1.35	1.49
39	Lc	582	TYR	CD2-CE2	-5.34	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
44	Lh	633	LYS	CE-NZ	-5.34	1.35	1.49
51	Lo	115	TYR	CD1-CE1	-5.34	1.31	1.39
57	Lu	354	LYS	CE-NZ	-5.34	1.35	1.49
81	l9	82	C	C5'-C4'	-5.34	1.45	1.51
91	lJ	177	C	C5'-C4'	-5.34	1.45	1.51
94	lM	2	U	C5'-C4'	-5.34	1.45	1.51
20	LJ	225	TYR	CD1-CE1	-5.34	1.31	1.39
27	LQ	354	LYS	CE-NZ	-5.34	1.35	1.49
29	LS	79	SER	CB-OG	-5.34	1.35	1.42
32	LV	801	ARG	CZ-NH1	-5.34	1.26	1.33
33	LW	454	SER	CB-OG	-5.34	1.35	1.42
53	Lq	691	TYR	CD2-CE2	-5.34	1.31	1.39
57	Lu	278	LYS	CE-NZ	-5.34	1.35	1.49
61	Ly	511	LYS	CE-NZ	-5.34	1.35	1.49
67	UE	142	SER	CB-OG	-5.34	1.35	1.42
97	lP	28	U	C5'-C4'	-5.34	1.45	1.51
1	L0	598	LYS	CE-NZ	-5.34	1.35	1.49
20	LJ	62	TYR	CD2-CE2	-5.34	1.31	1.39
24	LN	270	LYS	CE-NZ	-5.34	1.35	1.49
31	LU	235	TYR	CD1-CE1	-5.34	1.31	1.39
33	LW	331	LYS	CE-NZ	-5.34	1.35	1.49
38	Lb	432	TYR	CD2-CE2	-5.34	1.31	1.39
38	Lb	664	SER	CB-OG	-5.34	1.35	1.42
38	Lb	871	TYR	CD1-CE1	-5.34	1.31	1.39
40	Ld	360	VAL	CB-CG1	-5.34	1.41	1.52
41	Le	544	VAL	CB-CG1	-5.34	1.41	1.52
42	Lf	353	LYS	CE-NZ	-5.34	1.35	1.49
55	Ls	407	GLY	N-CA	-5.34	1.38	1.46
55	Ls	582	LYS	CE-NZ	-5.34	1.35	1.49
62	Lz	245	GLY	N-CA	-5.34	1.38	1.46
13	LC	253	VAL	CB-CG2	-5.34	1.41	1.52
24	LN	307	TYR	CD1-CE1	-5.34	1.31	1.39
26	LP	278	LYS	CE-NZ	-5.34	1.35	1.49
35	LY	455	LYS	CE-NZ	-5.34	1.35	1.49
36	LZ	19	GLY	N-CA	-5.34	1.38	1.46
40	Ld	379	VAL	CB-CG2	-5.34	1.41	1.52
44	Lh	477	LYS	CE-NZ	-5.34	1.35	1.49
52	Lp	606	LYS	CE-NZ	-5.34	1.35	1.49
52	Lp	653	TYR	CD2-CE2	-5.34	1.31	1.39
53	Lq	254	GLY	N-CA	-5.34	1.38	1.46
18	LH	197	SER	CB-OG	-5.34	1.35	1.42
44	Lh	524	LYS	CE-NZ	-5.34	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	Lw	168	LYS	CE-NZ	-5.34	1.35	1.49
66	UD	202	SER	CB-OG	-5.34	1.35	1.42
91	lJ	254	C	C5'-C4'	-5.34	1.45	1.51
1	L0	570	GLY	N-CA	-5.34	1.38	1.46
11	LA	37	LYS	CE-NZ	-5.34	1.35	1.49
17	LG	230	LYS	CE-NZ	-5.34	1.35	1.49
19	LI	18	LYS	CE-NZ	-5.34	1.35	1.49
19	LI	19	GLY	N-CA	-5.34	1.38	1.46
28	LR	126	TYR	CD2-CE2	-5.34	1.31	1.39
32	LV	298	SER	CB-OG	-5.34	1.35	1.42
33	LW	431	LYS	CE-NZ	-5.34	1.35	1.49
38	Lb	303	LYS	CE-NZ	-5.34	1.35	1.49
38	Lb	480	GLY	N-CA	-5.34	1.38	1.46
39	Lc	262	LYS	CE-NZ	-5.34	1.35	1.49
60	Lx	310	LYS	CE-NZ	-5.34	1.35	1.49
62	Lz	143	GLY	N-CA	-5.34	1.38	1.46
84	lC	26	G	N9-C8	-5.34	1.34	1.37
91	lJ	128	A	C5'-C4'	-5.34	1.45	1.51
94	lM	151	A	C5'-C4'	-5.34	1.45	1.51
96	lO	105	G	C5'-C4'	-5.34	1.45	1.51
3	L2	83	LYS	CE-NZ	-5.33	1.35	1.49
5	L4	396	LYS	CE-NZ	-5.33	1.35	1.49
13	LC	556	VAL	CB-CG2	-5.33	1.41	1.52
38	Lb	752	GLY	N-CA	-5.33	1.38	1.46
39	Lc	302	VAL	CB-CG2	-5.33	1.41	1.52
57	Lu	396	LYS	CE-NZ	-5.33	1.35	1.49
61	Ly	658	SER	CB-OG	-5.33	1.35	1.42
70	UH	250	GLY	N-CA	-5.33	1.38	1.46
1	L0	260	LYS	CE-NZ	-5.33	1.35	1.49
18	LH	249	SER	CB-OG	-5.33	1.35	1.42
37	La	99	LYS	CE-NZ	-5.33	1.35	1.49
45	Li	120	LYS	CE-NZ	-5.33	1.35	1.49
46	Lj	36	LYS	CE-NZ	-5.33	1.35	1.49
52	Lp	382	VAL	CB-CG1	-5.33	1.41	1.52
52	Lp	651	LYS	CE-NZ	-5.33	1.35	1.49
53	Lq	525	SER	CB-OG	-5.33	1.35	1.42
55	Ls	382	LYS	CE-NZ	-5.33	1.35	1.49
76	l4	23	U	C5'-C4'	-5.33	1.45	1.51
76	l4	44	U	C5'-C4'	-5.33	1.45	1.51
76	l4	62	G	C5'-C4'	-5.33	1.45	1.51
99	lR	15	U	C5'-C4'	-5.33	1.45	1.51
4	L3	522	LYS	CE-NZ	-5.33	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
10	L9	16	LYS	CE-NZ	-5.33	1.35	1.49
20	LJ	221	VAL	CB-CG1	-5.33	1.41	1.52
25	LO	169	TYR	CD1-CE1	-5.33	1.31	1.39
25	LO	296	LYS	CE-NZ	-5.33	1.35	1.49
27	LQ	368	LYS	CE-NZ	-5.33	1.35	1.49
30	LT	48	TYR	CD1-CE1	-5.33	1.31	1.39
33	LW	365	SER	CB-OG	-5.33	1.35	1.42
52	Lp	693	TYR	CD1-CE1	-5.33	1.31	1.39
56	Lt	107	TYR	CD1-CE1	-5.33	1.31	1.39
59	Lw	88	LYS	CE-NZ	-5.33	1.35	1.49
59	Lw	90	SER	CB-OG	-5.33	1.35	1.42
61	Ly	462	LYS	CE-NZ	-5.33	1.35	1.49
64	UB	303	SER	CB-OG	-5.33	1.35	1.42
74	l2	29	A	C5'-C4'	-5.33	1.45	1.51
84	lC	10	A	C8-N7	-5.33	1.27	1.31
91	lJ	199	U	C5'-C4'	-5.33	1.45	1.51
96	lO	7	U	C5'-C4'	-5.33	1.45	1.51
4	L3	504	GLY	N-CA	-5.33	1.38	1.46
14	LD	556	SER	CB-OG	-5.33	1.35	1.42
22	LL	377	LYS	CE-NZ	-5.33	1.35	1.49
30	LT	47	LYS	CE-NZ	-5.33	1.35	1.49
37	La	43	LYS	CE-NZ	-5.33	1.35	1.49
51	Lo	345	LYS	CE-NZ	-5.33	1.35	1.49
70	UH	269	LYS	CE-NZ	-5.33	1.35	1.49
91	lJ	16	G	C5'-C4'	-5.33	1.45	1.51
31	LU	274	LYS	CE-NZ	-5.33	1.35	1.49
33	LW	309	TYR	CD1-CE1	-5.33	1.31	1.39
38	Lb	408	TYR	CD2-CE2	-5.33	1.31	1.39
40	Ld	372	LYS	CE-NZ	-5.33	1.35	1.49
49	Lm	298	GLY	N-CA	-5.33	1.38	1.46
61	Ly	578	LYS	CE-NZ	-5.33	1.35	1.49
69	UG	378	LYS	CE-NZ	-5.33	1.35	1.49
70	UH	247	SER	CB-OG	-5.33	1.35	1.42
40	Ld	488	SER	CB-OG	-5.33	1.35	1.42
55	Ls	406	GLY	N-CA	-5.33	1.38	1.46
62	Lz	231	SER	CB-OG	-5.33	1.35	1.42
66	UD	183	LYS	CE-NZ	-5.33	1.35	1.49
5	L4	244	GLY	N-CA	-5.33	1.38	1.46
18	LH	190	SER	CB-OG	-5.33	1.35	1.42
33	LW	377	LYS	CE-NZ	-5.33	1.35	1.49
41	Le	466	LYS	CE-NZ	-5.33	1.35	1.49
44	Lh	514	VAL	CB-CG1	-5.33	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	Lj	3	VAL	CB-CG2	-5.33	1.41	1.52
49	Lm	416	TYR	CD1-CE1	-5.33	1.31	1.39
52	Lp	534	TYR	CD1-CE1	-5.33	1.31	1.39
91	lJ	23	A	C5'-C4'	-5.33	1.45	1.51
11	LA	55	LYS	CE-NZ	-5.32	1.35	1.49
16	LF	122	SER	CB-OG	-5.32	1.35	1.42
22	LL	135	SER	CB-OG	-5.32	1.35	1.42
25	LO	248	LYS	CE-NZ	-5.32	1.35	1.49
27	LQ	400	GLY	N-CA	-5.32	1.38	1.46
31	LU	300	LYS	CE-NZ	-5.32	1.35	1.49
33	LW	373	TYR	CD1-CE1	-5.32	1.31	1.39
36	LZ	95	SER	CB-OG	-5.32	1.35	1.42
36	LZ	107	SER	CB-OG	-5.32	1.35	1.42
48	Ll	137	LYS	CE-NZ	-5.32	1.35	1.49
50	Ln	159	SER	CB-OG	-5.32	1.35	1.42
54	Lr	262	LYS	CE-NZ	-5.32	1.35	1.49
55	Ls	583	GLY	N-CA	-5.32	1.38	1.46
70	UH	277	LYS	CE-NZ	-5.32	1.35	1.49
82	lA	48	A	C5'-C4'	-5.32	1.45	1.51
1	L0	288	LYS	CE-NZ	-5.32	1.35	1.49
8	L7	41	LYS	CE-NZ	-5.32	1.35	1.49
28	LR	53	SER	CB-OG	-5.32	1.35	1.42
35	LY	375	LYS	CE-NZ	-5.32	1.35	1.49
37	La	169	GLY	N-CA	-5.32	1.38	1.46
53	Lq	106	LYS	CE-NZ	-5.32	1.35	1.49
69	UG	312	LYS	CE-NZ	-5.32	1.35	1.49
13	LC	125	VAL	CB-CG2	-5.32	1.41	1.52
19	LI	26	LYS	CE-NZ	-5.32	1.35	1.49
28	LR	55	VAL	CB-CG1	-5.32	1.41	1.52
44	Lh	361	VAL	CB-CG2	-5.32	1.41	1.52
52	Lp	515	LYS	CE-NZ	-5.32	1.35	1.49
70	UH	265	TYR	CD1-CE1	-5.32	1.31	1.39
81	l9	48	U	C5'-C4'	-5.32	1.45	1.51
93	lL	1	U	C5'-C4'	-5.32	1.45	1.51
3	L2	167	LYS	CE-NZ	-5.32	1.35	1.49
21	LK	116	LYS	CE-NZ	-5.32	1.35	1.49
58	Lv	20	VAL	CB-CG1	-5.32	1.41	1.52
61	Ly	557	LYS	CE-NZ	-5.32	1.35	1.49
63	UA	277	LYS	CE-NZ	-5.32	1.35	1.49
67	UE	143	VAL	CB-CG2	-5.32	1.41	1.52
2	L1	504	LYS	CE-NZ	-5.32	1.35	1.49
22	LL	244	SER	CB-OG	-5.32	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LQ	404	LYS	CE-NZ	-5.32	1.35	1.49
33	LW	481	VAL	CB-CG1	-5.32	1.41	1.52
39	Lc	131	GLY	N-CA	-5.32	1.38	1.46
43	Lg	219	LYS	CE-NZ	-5.32	1.35	1.49
43	Lg	231	LYS	CE-NZ	-5.32	1.35	1.49
50	Ln	132	SER	CB-OG	-5.32	1.35	1.42
55	Ls	408	LYS	CE-NZ	-5.32	1.35	1.49
62	Lz	201	LYS	CE-NZ	-5.32	1.35	1.49
79	l7	20	U	C5'-C4'	-5.32	1.45	1.51
93	lL	68	U	C5'-C4'	-5.32	1.45	1.51
11	LA	160	LYS	CE-NZ	-5.32	1.35	1.49
13	LC	119	LYS	CE-NZ	-5.32	1.35	1.49
21	LK	66	LYS	CE-NZ	-5.32	1.35	1.49
25	LO	145	LYS	CE-NZ	-5.32	1.35	1.49
26	LP	171	SER	CB-OG	-5.32	1.35	1.42
32	LV	484	SER	CB-OG	-5.32	1.35	1.42
32	LV	955	ARG	CZ-NH1	-5.32	1.26	1.33
33	LW	297	LYS	CE-NZ	-5.32	1.35	1.49
38	Lb	815	SER	CB-OG	-5.32	1.35	1.42
49	Lm	276	LYS	CE-NZ	-5.32	1.35	1.49
51	Lo	72	LYS	CE-NZ	-5.32	1.35	1.49
51	Lo	187	VAL	CB-CG1	-5.32	1.41	1.52
52	Lp	473	LYS	CE-NZ	-5.32	1.35	1.49
52	Lp	713	LYS	CE-NZ	-5.32	1.35	1.49
60	Lx	342	SER	CB-OG	-5.32	1.35	1.42
63	UA	259	LYS	CE-NZ	-5.32	1.35	1.49
66	UD	172	LYS	CE-NZ	-5.32	1.35	1.49
68	UF	12	LYS	CE-NZ	-5.32	1.35	1.49
96	lO	2	U	C5'-C4'	-5.32	1.45	1.51
96	lO	124	A	C5'-C4'	-5.32	1.45	1.51
12	LB	24	LYS	CE-NZ	-5.31	1.35	1.49
20	LJ	62	TYR	CD1-CE1	-5.31	1.31	1.39
29	LS	32	LYS	CE-NZ	-5.31	1.35	1.49
33	LW	353	VAL	CB-CG1	-5.31	1.41	1.52
48	Ll	132	LYS	CE-NZ	-5.31	1.35	1.49
55	Ls	378	LYS	CE-NZ	-5.31	1.35	1.49
73	l1	9	C	C5'-C4'	-5.31	1.45	1.51
2	L1	506	SER	CB-OG	-5.31	1.35	1.42
4	L3	613	VAL	CB-CG1	-5.31	1.41	1.52
9	L8	168	LYS	CE-NZ	-5.31	1.35	1.49
20	LJ	294	SER	CB-OG	-5.31	1.35	1.42
24	LN	265	LYS	CE-NZ	-5.31	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LQ	358	LYS	CE-NZ	-5.31	1.35	1.49
33	LW	362	VAL	CB-CG1	-5.31	1.41	1.52
35	LY	505	VAL	CB-CG1	-5.31	1.41	1.52
38	Lb	287	LYS	CE-NZ	-5.31	1.35	1.49
40	Ld	370	SER	CB-OG	-5.31	1.35	1.42
54	Lr	266	SER	CB-OG	-5.31	1.35	1.42
58	Lv	46	LYS	CE-NZ	-5.31	1.35	1.49
64	UB	372	LYS	CE-NZ	-5.31	1.35	1.49
25	LO	269	SER	CB-OG	-5.31	1.35	1.42
41	Le	620	LYS	CE-NZ	-5.31	1.35	1.49
42	Lf	350	GLY	N-CA	-5.31	1.38	1.46
44	Lh	485	LYS	CE-NZ	-5.31	1.35	1.49
44	Lh	697	GLY	N-CA	-5.31	1.38	1.46
48	Ll	103	LYS	CE-NZ	-5.31	1.35	1.49
53	Lq	475	GLY	N-CA	-5.31	1.38	1.46
54	Lr	9	GLY	N-CA	-5.31	1.38	1.46
2	L1	501	LYS	CE-NZ	-5.31	1.35	1.49
5	L4	399	SER	CB-OG	-5.31	1.35	1.42
8	L7	83	LYS	CE-NZ	-5.31	1.35	1.49
12	LB	107	VAL	CB-CG2	-5.31	1.41	1.52
20	LJ	154	VAL	CB-CG1	-5.31	1.41	1.52
23	LM	124	GLY	N-CA	-5.31	1.38	1.46
37	La	98	LYS	CE-NZ	-5.31	1.35	1.49
37	La	193	LYS	CE-NZ	-5.31	1.35	1.49
38	Lb	590	LYS	CE-NZ	-5.31	1.35	1.49
40	Ld	402	SER	CB-OG	-5.31	1.35	1.42
42	Lf	198	LYS	CE-NZ	-5.31	1.35	1.49
44	Lh	474	LYS	CE-NZ	-5.31	1.35	1.49
46	Lj	53	SER	CB-OG	-5.31	1.35	1.42
52	Lp	385	SER	CB-OG	-5.31	1.35	1.42
53	Lq	704	GLY	N-CA	-5.31	1.38	1.46
57	Lu	484	SER	CB-OG	-5.31	1.35	1.42
58	Lv	16	LYS	CE-NZ	-5.31	1.35	1.49
1	L0	381	SER	CB-OG	-5.31	1.35	1.42
14	LD	503	LYS	CE-NZ	-5.31	1.35	1.49
20	LJ	16	LYS	CE-NZ	-5.31	1.35	1.49
20	LJ	60	GLY	N-CA	-5.31	1.38	1.46
26	LP	189	VAL	CB-CG2	-5.31	1.41	1.52
33	LW	391	VAL	CB-CG1	-5.31	1.41	1.52
38	Lb	416	GLY	N-CA	-5.31	1.38	1.46
44	Lh	413	TYR	CD2-CE2	-5.31	1.31	1.39
46	Lj	27	GLY	N-CA	-5.31	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
48	Ll	63	LYS	CE-NZ	-5.31	1.35	1.49
53	Lq	665	VAL	CB-CG1	-5.31	1.41	1.52
3	L2	34	LYS	CE-NZ	-5.31	1.35	1.49
4	L3	667	TYR	CD1-CE1	-5.31	1.31	1.39
14	LD	544	LYS	CE-NZ	-5.31	1.35	1.49
17	LG	202	LYS	CE-NZ	-5.31	1.35	1.49
24	LN	260	LYS	CE-NZ	-5.31	1.35	1.49
34	LX	134	VAL	CB-CG1	-5.31	1.41	1.52
38	Lb	332	VAL	CB-CG2	-5.31	1.41	1.52
44	Lh	361	VAL	CB-CG1	-5.31	1.41	1.52
51	Lo	244	GLY	N-CA	-5.31	1.38	1.46
52	Lp	533	LYS	CE-NZ	-5.31	1.35	1.49
96	lO	43	G	C5'-C4'	-5.31	1.45	1.51
1	L0	313	VAL	CB-CG1	-5.30	1.41	1.52
4	L3	506	SER	CB-OG	-5.30	1.35	1.42
14	LD	586	LYS	CE-NZ	-5.30	1.35	1.49
20	LJ	272	LYS	CE-NZ	-5.30	1.35	1.49
21	LK	189	LYS	CE-NZ	-5.30	1.35	1.49
30	LT	56	VAL	CB-CG1	-5.30	1.41	1.52
31	LU	302	LYS	CE-NZ	-5.30	1.35	1.49
33	LW	309	TYR	CD2-CE2	-5.30	1.31	1.39
39	Lc	201	LYS	CE-NZ	-5.30	1.35	1.49
41	Le	464	GLY	N-CA	-5.30	1.38	1.46
70	UH	278	LYS	CE-NZ	-5.30	1.35	1.49
1	L0	465	GLY	N-CA	-5.30	1.38	1.46
4	L3	620	VAL	CB-CG2	-5.30	1.41	1.52
34	LX	116	LYS	CE-NZ	-5.30	1.35	1.49
38	Lb	645	SER	CB-OG	-5.30	1.35	1.42
47	Lk	541	LYS	CE-NZ	-5.30	1.35	1.49
56	Lt	264	LYS	CE-NZ	-5.30	1.35	1.49
59	Lw	173	LYS	CE-NZ	-5.30	1.35	1.49
3	L2	85	SER	CB-OG	-5.30	1.35	1.42
9	L8	4	SER	CB-OG	-5.30	1.35	1.42
14	LD	583	SER	CB-OG	-5.30	1.35	1.42
25	LO	84	SER	CB-OG	-5.30	1.35	1.42
28	LR	30	VAL	CB-CG1	-5.30	1.41	1.52
28	LR	46	SER	CB-OG	-5.30	1.35	1.42
33	LW	246	LYS	CE-NZ	-5.30	1.35	1.49
38	Lb	743	GLY	N-CA	-5.30	1.38	1.46
39	Lc	489	SER	CB-OG	-5.30	1.35	1.42
45	Li	566	SER	CB-OG	-5.30	1.35	1.42
48	Ll	25	SER	CB-OG	-5.30	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	Lt	69	LYS	CE-NZ	-5.30	1.35	1.49
57	Lu	300	VAL	CB-CG1	-5.30	1.41	1.52
59	Lw	78	LYS	CE-NZ	-5.30	1.35	1.49
61	Ly	512	VAL	CB-CG2	-5.30	1.41	1.52
63	UA	248	LYS	CE-NZ	-5.30	1.35	1.49
87	lF	20	A	C5'-C4'	-5.30	1.45	1.51
93	lL	85	A	C5'-C4'	-5.30	1.45	1.51
94	lM	148	U	C5'-C4'	-5.30	1.45	1.51
8	L7	61	LYS	CE-NZ	-5.30	1.35	1.49
26	LP	151	LYS	CE-NZ	-5.30	1.35	1.49
41	Le	447	TYR	CD1-CE1	-5.30	1.31	1.39
43	Lg	125	LYS	CE-NZ	-5.30	1.35	1.49
44	Lh	306	LYS	CE-NZ	-5.30	1.35	1.49
44	Lh	567	LYS	CE-NZ	-5.30	1.35	1.49
52	Lp	586	SER	CB-OG	-5.30	1.35	1.42
57	Lu	302	LYS	CE-NZ	-5.30	1.35	1.49
66	UD	187	LYS	CE-NZ	-5.30	1.35	1.49
67	UE	204	LYS	CE-NZ	-5.30	1.35	1.49
70	UH	257	LYS	CE-NZ	-5.30	1.35	1.49
71	UI	387	LYS	CE-NZ	-5.30	1.35	1.49
76	l4	34	U	C5'-C4'	-5.30	1.45	1.51
79	l7	58	A	C5'-C4'	-5.30	1.45	1.51
96	lO	118	A	C5'-C4'	-5.30	1.45	1.51
20	LJ	102	TYR	CD1-CE1	-5.30	1.31	1.39
29	LS	119	VAL	CB-CG1	-5.30	1.41	1.52
42	Lf	320	LYS	CE-NZ	-5.30	1.35	1.49
51	Lo	254	LYS	CE-NZ	-5.30	1.35	1.49
55	Ls	366	LYS	CE-NZ	-5.30	1.35	1.49
99	lR	28	U	C5'-C4'	-5.30	1.45	1.51
10	L9	446	LYS	CE-NZ	-5.30	1.35	1.49
13	LC	155	LYS	CE-NZ	-5.30	1.35	1.49
29	LS	106	SER	CB-OG	-5.30	1.35	1.42
33	LW	322	VAL	CB-CG1	-5.30	1.41	1.52
39	Lc	403	GLY	N-CA	-5.30	1.38	1.46
41	Le	623	LYS	CE-NZ	-5.30	1.35	1.49
45	Li	277	VAL	CB-CG2	-5.30	1.41	1.52
56	Lt	240	SER	CB-OG	-5.30	1.35	1.42
81	l9	66	G	C5'-C4'	-5.30	1.45	1.51
94	lM	184	A	N9-C8	-5.30	1.33	1.37
13	LC	125	VAL	CB-CG1	-5.29	1.41	1.52
37	La	67	LYS	CE-NZ	-5.29	1.35	1.49
45	Li	358	SER	CB-OG	-5.29	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	Lj	63	LYS	CE-NZ	-5.29	1.35	1.49
62	Lz	198	LYS	CE-NZ	-5.29	1.35	1.49
76	l4	20	G	C5'-C4'	-5.29	1.45	1.51
93	lL	83	A	C5'-C4'	-5.29	1.45	1.51
1	L0	344	VAL	CB-CG2	-5.29	1.41	1.52
6	L5	453	LYS	CE-NZ	-5.29	1.35	1.49
13	LC	318	VAL	CB-CG1	-5.29	1.41	1.52
22	LL	333	LYS	CE-NZ	-5.29	1.35	1.49
24	LN	241	LYS	CE-NZ	-5.29	1.35	1.49
38	Lb	859	LYS	CE-NZ	-5.29	1.35	1.49
49	Lm	351	SER	CB-OG	-5.29	1.35	1.42
52	Lp	489	LYS	CE-NZ	-5.29	1.35	1.49
55	Ls	394	GLY	N-CA	-5.29	1.38	1.46
55	Ls	417	LYS	CE-NZ	-5.29	1.35	1.49
58	Lv	33	LYS	CE-NZ	-5.29	1.35	1.49
59	Lw	152	LYS	CE-NZ	-5.29	1.35	1.49
61	Ly	297	LYS	CE-NZ	-5.29	1.35	1.49
61	Ly	651	GLY	N-CA	-5.29	1.38	1.46
70	UH	272	LYS	CE-NZ	-5.29	1.35	1.49
91	lJ	18	A	C5'-C4'	-5.29	1.45	1.51
2	L1	507	SER	CB-OG	-5.29	1.35	1.42
11	LA	92	LYS	CE-NZ	-5.29	1.35	1.49
25	LO	320	SER	CB-OG	-5.29	1.35	1.42
35	LY	374	LYS	CE-NZ	-5.29	1.35	1.49
37	La	113	LYS	CE-NZ	-5.29	1.35	1.49
39	Lc	265	GLY	N-CA	-5.29	1.38	1.46
39	Lc	404	SER	CB-OG	-5.29	1.35	1.42
43	Lg	48	GLY	N-CA	-5.29	1.38	1.46
44	Lh	509	LYS	CE-NZ	-5.29	1.35	1.49
50	Ln	141	SER	CB-OG	-5.29	1.35	1.42
52	Lp	532	VAL	CB-CG2	-5.29	1.41	1.52
70	UH	251	LYS	CE-NZ	-5.29	1.35	1.49
81	l9	25	A	C5'-C4'	-5.29	1.45	1.51
91	lJ	273	C	C5'-C4'	-5.29	1.45	1.51
95	lN	35	G	C5'-C4'	-5.29	1.45	1.51
2	L1	472	GLY	N-CA	-5.29	1.38	1.46
16	LF	130	LYS	CE-NZ	-5.29	1.35	1.49
24	LN	302	LYS	CE-NZ	-5.29	1.35	1.49
25	LO	321	LYS	CE-NZ	-5.29	1.35	1.49
29	LS	182	LYS	CE-NZ	-5.29	1.35	1.49
38	Lb	325	LYS	CE-NZ	-5.29	1.35	1.49
53	Lq	177	VAL	CB-CG2	-5.29	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	Ly	614	LYS	CE-NZ	-5.29	1.35	1.49
93	lL	53	U	C5'-C4'	-5.29	1.45	1.51
9	L8	226	VAL	CB-CG2	-5.29	1.41	1.52
13	LC	140	LYS	CE-NZ	-5.29	1.35	1.49
13	LC	341	SER	CB-OG	-5.29	1.35	1.42
20	LJ	61	SER	CB-OG	-5.29	1.35	1.42
23	LM	111	LYS	CE-NZ	-5.29	1.35	1.49
25	LO	107	SER	CB-OG	-5.29	1.35	1.42
29	LS	31	SER	CB-OG	-5.29	1.35	1.42
30	LT	85	LYS	CE-NZ	-5.29	1.35	1.49
33	LW	314	LYS	CE-NZ	-5.29	1.35	1.49
38	Lb	345	LYS	CE-NZ	-5.29	1.35	1.49
38	Lb	897	SER	CB-OG	-5.29	1.35	1.42
51	Lo	106	LYS	CE-NZ	-5.29	1.35	1.49
51	Lo	309	SER	CB-OG	-5.29	1.35	1.42
53	Lq	143	VAL	CB-CG2	-5.29	1.41	1.52
59	Lw	83	LYS	CE-NZ	-5.29	1.35	1.49
61	Ly	537	VAL	CB-CG1	-5.29	1.41	1.52
63	UA	301	LYS	CE-NZ	-5.29	1.35	1.49
64	UB	233	LYS	CE-NZ	-5.29	1.35	1.49
67	UE	153	SER	CB-OG	-5.29	1.35	1.42
68	UF	14	LYS	CE-NZ	-5.29	1.35	1.49
73	l1	36	G	C5'-C4'	-5.29	1.45	1.51
91	lJ	187	U	C5'-C4'	-5.29	1.45	1.51
19	LI	13	LYS	CE-NZ	-5.29	1.35	1.49
35	LY	376	LYS	CE-NZ	-5.29	1.35	1.49
35	LY	481	LYS	CE-NZ	-5.29	1.35	1.49
36	LZ	112	VAL	CB-CG2	-5.29	1.41	1.52
49	Lm	354	SER	CB-OG	-5.29	1.35	1.42
51	Lo	94	LYS	CE-NZ	-5.29	1.35	1.49
67	UE	145	LYS	CE-NZ	-5.29	1.35	1.49
1	L0	335	LYS	CE-NZ	-5.29	1.35	1.49
1	L0	624	LYS	CE-NZ	-5.29	1.35	1.49
2	L1	455	LYS	CE-NZ	-5.29	1.35	1.49
9	L8	5	LYS	CE-NZ	-5.29	1.35	1.49
14	LD	363	LYS	CE-NZ	-5.29	1.35	1.49
21	LK	141	SER	CB-OG	-5.29	1.35	1.42
22	LL	141	LYS	CE-NZ	-5.29	1.35	1.49
24	LN	262	SER	CB-OG	-5.29	1.35	1.42
24	LN	276	LYS	CE-NZ	-5.29	1.35	1.49
25	LO	245	VAL	CB-CG2	-5.29	1.41	1.52
29	LS	95	LYS	CE-NZ	-5.29	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	LW	378	LYS	CE-NZ	-5.29	1.35	1.49
35	LY	432	SER	CB-OG	-5.29	1.35	1.42
38	Lb	839	SER	CB-OG	-5.29	1.35	1.42
46	Lj	65	VAL	CB-CG2	-5.29	1.41	1.52
48	Ll	12	LYS	CE-NZ	-5.29	1.35	1.49
49	Lm	373	LYS	CE-NZ	-5.29	1.35	1.49
52	Lp	553	VAL	CB-CG2	-5.29	1.41	1.52
52	Lp	615	LYS	CE-NZ	-5.29	1.35	1.49
57	Lu	257	SER	CB-OG	-5.29	1.35	1.42
68	UF	48	LYS	CE-NZ	-5.29	1.35	1.49
69	UG	261	LYS	CE-NZ	-5.29	1.35	1.49
94	lM	198	C	C5'-C4'	-5.29	1.45	1.51
1	L0	558	SER	CB-OG	-5.28	1.35	1.42
4	L3	664	SER	CB-OG	-5.28	1.35	1.42
4	L3	728	LYS	CE-NZ	-5.28	1.35	1.49
5	L4	531	SER	CB-OG	-5.28	1.35	1.42
9	L8	169	LYS	CE-NZ	-5.28	1.35	1.49
13	LC	466	SER	CB-OG	-5.28	1.35	1.42
20	LJ	110	SER	CB-OG	-5.28	1.35	1.42
22	LL	285	SER	CB-OG	-5.28	1.35	1.42
30	LT	14	LYS	CE-NZ	-5.28	1.35	1.49
32	LV	1085	LYS	CE-NZ	-5.28	1.35	1.49
42	Lf	301	LYS	CE-NZ	-5.28	1.35	1.49
52	Lp	718	LYS	CE-NZ	-5.28	1.35	1.49
63	UA	244	LYS	CE-NZ	-5.28	1.35	1.49
68	UF	54	SER	CB-OG	-5.28	1.35	1.42
91	lJ	171	A	C5'-C4'	-5.28	1.45	1.51
5	L4	472	LYS	CE-NZ	-5.28	1.35	1.49
9	L8	24	GLY	N-CA	-5.28	1.38	1.46
13	LC	313	VAL	CB-CG1	-5.28	1.41	1.52
18	LH	198	LYS	CE-NZ	-5.28	1.35	1.49
25	LO	12	VAL	CB-CG1	-5.28	1.41	1.52
32	LV	918	ARG	CZ-NH1	-5.28	1.26	1.33
59	Lw	157	LYS	CE-NZ	-5.28	1.35	1.49
1	L0	320	LYS	CE-NZ	-5.28	1.35	1.49
2	L1	433	LYS	CE-NZ	-5.28	1.35	1.49
14	LD	342	LYS	CE-NZ	-5.28	1.35	1.49
34	LX	124	LYS	CE-NZ	-5.28	1.35	1.49
34	LX	173	LYS	CE-NZ	-5.28	1.35	1.49
39	Lc	350	SER	CB-OG	-5.28	1.35	1.42
43	Lg	28	LYS	CE-NZ	-5.28	1.35	1.49
43	Lg	207	LYS	CE-NZ	-5.28	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
47	Lk	399	VAL	CB-CG2	-5.28	1.41	1.52
47	Lk	412	SER	CB-OG	-5.28	1.35	1.42
51	Lo	95	LYS	CE-NZ	-5.28	1.35	1.49
51	Lo	221	LYS	CE-NZ	-5.28	1.35	1.49
52	Lp	560	SER	CB-OG	-5.28	1.35	1.42
53	Lq	127	SER	CB-OG	-5.28	1.35	1.42
53	Lq	266	GLY	N-CA	-5.28	1.38	1.46
57	Lu	470	LYS	CE-NZ	-5.28	1.35	1.49
62	Lz	130	SER	CB-OG	-5.28	1.35	1.42
69	UG	380	TRP	CD1-NE1	-5.28	1.28	1.38
94	lM	71	A	C5'-C4'	-5.28	1.45	1.51
6	L5	457	LYS	CE-NZ	-5.28	1.35	1.49
11	LA	110	VAL	CB-CG1	-5.28	1.41	1.52
12	LB	7	VAL	CB-CG2	-5.28	1.41	1.52
20	LJ	108	GLY	N-CA	-5.28	1.38	1.46
40	Ld	340	VAL	CB-CG2	-5.28	1.41	1.52
43	Lg	192	LYS	CE-NZ	-5.28	1.35	1.49
48	Ll	97	GLY	N-CA	-5.28	1.38	1.46
4	L3	433	SER	CB-OG	-5.28	1.35	1.42
11	LA	79	GLY	N-CA	-5.28	1.38	1.46
18	LH	200	LYS	CE-NZ	-5.28	1.35	1.49
21	LK	103	LYS	CE-NZ	-5.28	1.35	1.49
24	LN	248	LYS	CE-NZ	-5.28	1.35	1.49
29	LS	10	LYS	CE-NZ	-5.28	1.35	1.49
35	LY	442	LYS	CE-NZ	-5.28	1.35	1.49
38	Lb	324	LYS	CE-NZ	-5.28	1.35	1.49
45	Li	639	LYS	CE-NZ	-5.28	1.35	1.49
49	Lm	251	LYS	CE-NZ	-5.28	1.35	1.49
53	Lq	178	VAL	CB-CG2	-5.28	1.41	1.52
57	Lu	386	VAL	CB-CG1	-5.28	1.41	1.52
93	lL	48	A	C5'-C4'	-5.28	1.45	1.51
96	lO	163	G	C5'-C4'	-5.28	1.45	1.51
13	LC	445	SER	CB-OG	-5.28	1.35	1.42
16	LF	162	LYS	CE-NZ	-5.28	1.35	1.49
22	LL	279	LYS	CE-NZ	-5.28	1.35	1.49
24	LN	317	LYS	CE-NZ	-5.28	1.35	1.49
29	LS	63	VAL	CB-CG2	-5.28	1.41	1.52
30	LT	31	VAL	CB-CG1	-5.28	1.41	1.52
33	LW	209	SER	CB-OG	-5.28	1.35	1.42
33	LW	222	LYS	CE-NZ	-5.28	1.35	1.49
36	LZ	7	LYS	CE-NZ	-5.28	1.35	1.49
42	Lf	166	GLY	N-CA	-5.28	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
43	Lg	218	LYS	CE-NZ	-5.28	1.35	1.49
44	Lh	299	SER	CB-OG	-5.28	1.35	1.42
47	Lk	469	LYS	CE-NZ	-5.28	1.35	1.49
48	Ll	66	GLY	N-CA	-5.28	1.38	1.46
54	Lr	236	LYS	CE-NZ	-5.28	1.35	1.49
55	Ls	387	LYS	CE-NZ	-5.28	1.35	1.49
58	Lv	39	VAL	CB-CG1	-5.28	1.41	1.52
77	l5	29	A	C5'-C4'	-5.28	1.45	1.51
87	lF	62	A	N9-C8	-5.28	1.33	1.37
30	LT	75	SER	CB-OG	-5.27	1.35	1.42
33	LW	487	SER	CB-OG	-5.27	1.35	1.42
44	Lh	491	LYS	CE-NZ	-5.27	1.35	1.49
61	Ly	550	LYS	CE-NZ	-5.27	1.35	1.49
61	Ly	583	SER	CB-OG	-5.27	1.35	1.42
21	LK	249	VAL	CB-CG1	-5.27	1.41	1.52
24	LN	247	VAL	CB-CG1	-5.27	1.41	1.52
24	LN	324	SER	CB-OG	-5.27	1.35	1.42
32	LV	510	SER	CB-OG	-5.27	1.35	1.42
34	LX	138	VAL	CB-CG2	-5.27	1.41	1.52
35	LY	261	SER	CB-OG	-5.27	1.35	1.42
38	Lb	445	GLY	N-CA	-5.27	1.38	1.46
38	Lb	583	GLY	N-CA	-5.27	1.38	1.46
48	Ll	3	SER	CB-OG	-5.27	1.35	1.42
49	Lm	410	VAL	CB-CG1	-5.27	1.41	1.52
52	Lp	409	LYS	CE-NZ	-5.27	1.35	1.49
55	Ls	368	LYS	CE-NZ	-5.27	1.35	1.49
62	Lz	237	LYS	CE-NZ	-5.27	1.35	1.49
79	l7	66	A	C5'-C4'	-5.27	1.45	1.51
25	LO	295	GLY	N-CA	-5.27	1.38	1.46
34	LX	158	LYS	CE-NZ	-5.27	1.35	1.49
35	LY	483	VAL	CB-CG2	-5.27	1.41	1.52
39	Lc	128	LYS	CE-NZ	-5.27	1.35	1.49
61	Ly	323	SER	CB-OG	-5.27	1.35	1.42
4	L3	409	LYS	CE-NZ	-5.27	1.35	1.49
9	L8	207	SER	CB-OG	-5.27	1.35	1.42
13	LC	442	VAL	CB-CG1	-5.27	1.41	1.52
29	LS	63	VAL	CB-CG1	-5.27	1.41	1.52
36	LZ	98	SER	CB-OG	-5.27	1.35	1.42
37	La	156	LYS	CE-NZ	-5.27	1.35	1.49
38	Lb	708	GLY	N-CA	-5.27	1.38	1.46
45	Li	637	GLY	N-CA	-5.27	1.38	1.46
49	Lm	274	SER	CB-OG	-5.27	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
51	Lo	172	GLY	N-CA	-5.27	1.38	1.46
54	Lr	181	SER	CB-OG	-5.27	1.35	1.42
58	Lv	17	LYS	CE-NZ	-5.27	1.35	1.49
75	l3	59	A	C5'-C4'	-5.27	1.45	1.51
94	lM	28	A	C5'-C4'	-5.27	1.45	1.51
95	lN	1	A	C5'-C4'	-5.27	1.45	1.51
96	lO	31	G	C5'-C4'	-5.27	1.45	1.51
11	LA	95	VAL	CB-CG2	-5.27	1.41	1.52
13	LC	552	GLY	N-CA	-5.27	1.38	1.46
17	LG	238	LYS	CE-NZ	-5.27	1.35	1.49
22	LL	344	SER	CB-OG	-5.27	1.35	1.42
24	LN	264	LYS	CE-NZ	-5.27	1.35	1.49
28	LR	27	SER	CB-OG	-5.27	1.35	1.42
29	LS	127	LYS	CE-NZ	-5.27	1.35	1.49
38	Lb	684	VAL	CB-CG2	-5.27	1.41	1.52
38	Lb	729	SER	CB-OG	-5.27	1.35	1.42
40	Ld	364	VAL	CB-CG1	-5.27	1.41	1.52
56	Lt	104	LYS	CE-NZ	-5.27	1.35	1.49
57	Lu	421	LYS	CE-NZ	-5.27	1.35	1.49
61	Ly	644	VAL	CB-CG2	-5.27	1.41	1.52
63	UA	252	LYS	CE-NZ	-5.27	1.35	1.49
9	L8	74	SER	CB-OG	-5.27	1.35	1.42
13	LC	249	VAL	CB-CG1	-5.27	1.41	1.52
30	LT	11	SER	CB-OG	-5.27	1.35	1.42
40	Ld	506	LYS	CE-NZ	-5.27	1.35	1.49
66	UD	182	SER	CB-OG	-5.27	1.35	1.42
18	LH	199	GLY	N-CA	-5.26	1.38	1.46
21	LK	114	LYS	CE-NZ	-5.26	1.35	1.49
29	LS	11	VAL	CB-CG2	-5.26	1.41	1.52
43	Lg	60	SER	CB-OG	-5.26	1.35	1.42
53	Lq	555	LYS	CE-NZ	-5.26	1.35	1.49
64	UB	362	LYS	CE-NZ	-5.26	1.35	1.49
86	lE	4	C	C5'-C4'	-5.26	1.45	1.51
1	L0	344	VAL	CB-CG1	-5.26	1.41	1.52
9	L8	226	VAL	CB-CG1	-5.26	1.41	1.52
20	LJ	274	VAL	CB-CG2	-5.26	1.41	1.52
20	LJ	336	VAL	CB-CG1	-5.26	1.41	1.52
31	LU	238	VAL	CB-CG2	-5.26	1.41	1.52
47	Lk	407	SER	CB-OG	-5.26	1.35	1.42
54	Lr	10	LYS	CE-NZ	-5.26	1.35	1.49
57	Lu	293	SER	CB-OG	-5.26	1.35	1.42
1	L0	360	VAL	CB-CG1	-5.26	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	L1	502	LYS	CE-NZ	-5.26	1.35	1.49
5	L4	251	SER	CB-OG	-5.26	1.35	1.42
9	L8	34	LYS	CE-NZ	-5.26	1.35	1.49
11	LA	132	LYS	CE-NZ	-5.26	1.35	1.49
31	LU	247	VAL	CB-CG2	-5.26	1.41	1.52
33	LW	221	SER	CB-OG	-5.26	1.35	1.42
33	LW	310	LYS	CE-NZ	-5.26	1.35	1.49
33	LW	332	SER	CB-OG	-5.26	1.35	1.42
33	LW	394	LYS	CE-NZ	-5.26	1.35	1.49
35	LY	397	SER	CB-OG	-5.26	1.35	1.42
38	Lb	715	LYS	CE-NZ	-5.26	1.35	1.49
39	Lc	431	VAL	CB-CG2	-5.26	1.41	1.52
43	Lg	89	LYS	CE-NZ	-5.26	1.35	1.49
48	Ll	46	VAL	CB-CG2	-5.26	1.41	1.52
49	Lm	289	LYS	CE-NZ	-5.26	1.35	1.49
61	Ly	656	LYS	CE-NZ	-5.26	1.35	1.49
81	l9	56	G	C5'-C4'	-5.26	1.45	1.51
94	lM	1	A	C5'-C4'	-5.26	1.45	1.51
104	lX	2	U	C5'-C4'	-5.26	1.45	1.51
12	LB	11	VAL	CB-CG2	-5.26	1.41	1.52
20	LJ	202	VAL	CB-CG2	-5.26	1.41	1.52
23	LM	136	SER	CB-OG	-5.26	1.35	1.42
39	Lc	370	SER	CB-OG	-5.26	1.35	1.42
44	Lh	330	VAL	CB-CG2	-5.26	1.41	1.52
48	Ll	96	LYS	CE-NZ	-5.26	1.35	1.49
49	Lm	294	VAL	CB-CG1	-5.26	1.41	1.52
53	Lq	699	SER	CB-OG	-5.26	1.35	1.42
55	Ls	521	LYS	CE-NZ	-5.26	1.35	1.49
58	Lv	28	LYS	CE-NZ	-5.26	1.35	1.49
68	UF	7	LYS	CE-NZ	-5.26	1.35	1.49
69	UG	366	LYS	CE-NZ	-5.26	1.35	1.49
96	lO	95	U	C5'-C4'	-5.26	1.45	1.51
6	L5	456	LYS	CE-NZ	-5.26	1.35	1.49
22	LL	330	VAL	CB-CG1	-5.26	1.41	1.52
44	Lh	514	VAL	CB-CG2	-5.26	1.41	1.52
46	Lj	25	SER	CB-OG	-5.26	1.35	1.42
4	L3	725	LYS	CE-NZ	-5.26	1.35	1.49
5	L4	285	VAL	CB-CG1	-5.26	1.41	1.52
10	L9	464	LYS	CE-NZ	-5.26	1.35	1.49
14	LD	377	LYS	CE-NZ	-5.26	1.35	1.49
14	LD	573	VAL	CB-CG2	-5.26	1.41	1.52
21	LK	111	LYS	CE-NZ	-5.26	1.35	1.49

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LQ	393	LYS	CE-NZ	-5.26	1.35	1.49
28	LR	67	SER	CB-OG	-5.26	1.35	1.42
32	LV	1061	VAL	CB-CG2	-5.26	1.41	1.52
33	LW	247	LYS	CE-NZ	-5.26	1.35	1.49
37	La	112	VAL	CB-CG2	-5.26	1.41	1.52
39	Lc	495	VAL	CB-CG1	-5.26	1.41	1.52
45	Li	398	GLY	N-CA	-5.26	1.38	1.46
45	Li	588	TYR	CD2-CE2	-5.26	1.31	1.39
49	Lm	295	SER	CB-OG	-5.26	1.35	1.42
51	Lo	150	SER	CB-OG	-5.26	1.35	1.42
52	Lp	555	LYS	CE-NZ	-5.26	1.35	1.49
54	Lr	245	SER	CB-OG	-5.26	1.35	1.42
56	Lt	213	GLY	N-CA	-5.26	1.38	1.46
57	Lu	393	SER	CB-OG	-5.26	1.35	1.42
58	Lv	76	VAL	CB-CG2	-5.26	1.41	1.52
60	Lx	336	LYS	CE-NZ	-5.26	1.35	1.49
61	Ly	380	SER	CB-OG	-5.26	1.35	1.42
64	UB	218	SER	CB-OG	-5.26	1.35	1.42
68	UF	9	SER	CB-OG	-5.26	1.35	1.42
99	lR	12	U	C5'-C4'	-5.26	1.45	1.51
4	L3	637	VAL	CB-CG2	-5.25	1.41	1.52
51	Lo	178	SER	CB-OG	-5.25	1.35	1.42
61	Ly	542	SER	CB-OG	-5.25	1.35	1.42
64	UB	297	LYS	CE-NZ	-5.25	1.35	1.49
4	L3	646	VAL	CB-CG2	-5.25	1.41	1.52
13	LC	127	VAL	CB-CG1	-5.25	1.41	1.52
20	LJ	419	SER	CB-OG	-5.25	1.35	1.42
25	LO	319	VAL	CB-CG1	-5.25	1.41	1.52
29	LS	125	VAL	CB-CG1	-5.25	1.41	1.52
32	LV	603	VAL	CB-CG2	-5.25	1.41	1.52
38	Lb	644	VAL	CB-CG2	-5.25	1.41	1.52
39	Lc	199	VAL	CB-CG2	-5.25	1.41	1.52
40	Ld	374	LYS	CE-NZ	-5.25	1.35	1.49
44	Lh	686	VAL	CB-CG2	-5.25	1.41	1.52
49	Lm	300	LYS	CE-NZ	-5.25	1.35	1.49
55	Ls	524	LYS	CE-NZ	-5.25	1.35	1.49
81	l9	27	C	N1-C6	-5.25	1.33	1.37
1	L0	334	GLY	N-CA	-5.25	1.38	1.46
11	LA	14	LYS	CE-NZ	-5.25	1.35	1.49
20	LJ	147	VAL	CB-CG2	-5.25	1.41	1.52
25	LO	96	LYS	CE-NZ	-5.25	1.35	1.49
25	LO	189	VAL	CB-CG2	-5.25	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	LY	256	LYS	CE-NZ	-5.25	1.35	1.49
38	Lb	633	VAL	CB-CG1	-5.25	1.41	1.52
38	Lb	682	SER	CB-OG	-5.25	1.35	1.42
51	Lo	185	SER	CB-OG	-5.25	1.35	1.42
51	Lo	257	LYS	CE-NZ	-5.25	1.35	1.49
57	Lu	386	VAL	CB-CG2	-5.25	1.41	1.52
68	UF	37	TYR	CD2-CE2	-5.25	1.31	1.39
86	lE	5	G	C5'-C4'	-5.25	1.45	1.51
26	LP	125	GLY	N-CA	-5.25	1.38	1.46
33	LW	464	LYS	CE-NZ	-5.25	1.35	1.49
55	Ls	530	LYS	CE-NZ	-5.25	1.35	1.49
57	Lu	417	GLY	N-CA	-5.25	1.38	1.46
91	lJ	148	C	C4-C5	-5.25	1.38	1.43
3	L2	190	VAL	CB-CG1	-5.25	1.41	1.52
4	L3	507	SER	CB-OG	-5.25	1.35	1.42
8	L7	49	SER	CB-OG	-5.25	1.35	1.42
9	L8	75	SER	CB-OG	-5.25	1.35	1.42
12	LB	64	SER	CB-OG	-5.25	1.35	1.42
25	LO	95	SER	CB-OG	-5.25	1.35	1.42
40	Ld	350	SER	CB-OG	-5.25	1.35	1.42
41	Le	487	SER	CB-OG	-5.25	1.35	1.42
49	Lm	284	VAL	CB-CG2	-5.25	1.41	1.52
49	Lm	402	LYS	CE-NZ	-5.25	1.35	1.49
51	Lo	346	VAL	CB-CG2	-5.25	1.41	1.52
53	Lq	222	SER	CB-OG	-5.25	1.35	1.42
55	Ls	401	SER	CB-OG	-5.25	1.35	1.42
16	LF	171	LYS	CE-NZ	-5.25	1.35	1.49
21	LK	119	VAL	CB-CG2	-5.25	1.41	1.52
32	LV	514	SER	CB-OG	-5.25	1.35	1.42
34	LX	114	SER	CB-OG	-5.25	1.35	1.42
38	Lb	818	VAL	CB-CG1	-5.25	1.41	1.52
39	Lc	149	GLY	N-CA	-5.25	1.38	1.46
39	Lc	307	GLY	N-CA	-5.25	1.38	1.46
43	Lg	100	LYS	CE-NZ	-5.25	1.35	1.49
53	Lq	527	SER	CB-OG	-5.25	1.35	1.42
58	Lv	76	VAL	CB-CG1	-5.25	1.41	1.52
67	UE	140	SER	CB-OG	-5.25	1.35	1.42
75	l3	35	A	C5'-C4'	-5.25	1.45	1.51
35	LY	398	SER	CB-OG	-5.25	1.35	1.42
79	l7	65	A	C5'-C4'	-5.25	1.45	1.51
22	LL	199	VAL	CB-CG2	-5.24	1.41	1.52
29	LS	104	GLY	N-CA	-5.24	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	La	159	TRP	CD1-NE1	-5.24	1.29	1.38
39	Lc	292	LYS	CE-NZ	-5.24	1.35	1.49
53	Lq	853	GLY	N-CA	-5.24	1.38	1.46
54	Lr	183	VAL	CB-CG2	-5.24	1.41	1.52
11	LA	85	VAL	CB-CG1	-5.24	1.41	1.52
13	LC	245	SER	CB-OG	-5.24	1.35	1.42
23	LM	5	GLY	N-CA	-5.24	1.38	1.46
60	Lx	293	TRP	CD1-NE1	-5.24	1.29	1.38
61	Ly	644	VAL	CB-CG1	-5.24	1.41	1.52
91	lJ	282	A	C5'-C4'	-5.24	1.45	1.51
20	LJ	202	VAL	CB-CG1	-5.24	1.41	1.52
20	LJ	274	VAL	CB-CG1	-5.24	1.41	1.52
33	LW	352	SER	CB-OG	-5.24	1.35	1.42
35	LY	505	VAL	CB-CG2	-5.24	1.41	1.52
38	Lb	892	SER	CB-OG	-5.24	1.35	1.42
42	Lf	357	GLY	N-CA	-5.24	1.38	1.46
53	Lq	228	GLY	N-CA	-5.24	1.38	1.46
54	Lr	28	VAL	CB-CG2	-5.24	1.41	1.52
56	Lt	82	LYS	CE-NZ	-5.24	1.35	1.49
81	l9	10	C	C5'-C4'	-5.24	1.45	1.51
17	LG	162	ALA	CA-CB	-5.24	1.41	1.52
19	LI	14	VAL	CB-CG2	-5.24	1.41	1.52
25	LO	175	SER	CB-OG	-5.24	1.35	1.42
33	LW	240	LYS	CE-NZ	-5.24	1.35	1.49
33	LW	388	SER	CB-OG	-5.24	1.35	1.42
44	Lh	527	SER	CB-OG	-5.24	1.35	1.42
46	Lj	23	VAL	CB-CG1	-5.24	1.41	1.52
52	Lp	477	TRP	CD1-NE1	-5.24	1.29	1.38
54	Lr	8	TRP	CD1-NE1	-5.24	1.29	1.38
54	Lr	254	GLY	N-CA	-5.24	1.38	1.46
57	Lu	471	VAL	CB-CG2	-5.24	1.41	1.52
61	Ly	645	VAL	CB-CG2	-5.24	1.41	1.52
69	UG	336	VAL	CB-CG2	-5.24	1.41	1.52
87	lF	62	A	C5'-C4'	-5.24	1.45	1.51
94	lM	130	C	C5'-C4'	-5.24	1.45	1.51
95	lN	39	A	C5'-C4'	-5.24	1.45	1.51
1	L0	342	VAL	CB-CG1	-5.24	1.41	1.52
11	LA	159	VAL	CB-CG1	-5.24	1.41	1.52
27	LQ	367	TRP	CD1-NE1	-5.24	1.29	1.38
29	LS	7	VAL	CB-CG2	-5.24	1.41	1.52
32	LV	606	SER	CB-OG	-5.24	1.35	1.42
37	La	73	VAL	CB-CG2	-5.24	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
39	Lc	308	SER	CB-OG	-5.24	1.35	1.42
56	Lt	256	VAL	CB-CG2	-5.24	1.41	1.52
61	Ly	486	TRP	CD1-NE1	-5.24	1.29	1.38
62	Lz	204	SER	CB-OG	-5.24	1.35	1.42
64	UB	302	VAL	CB-CG2	-5.24	1.41	1.52
65	UC	199	LYS	CE-NZ	-5.24	1.35	1.49
65	UC	292	VAL	CB-CG2	-5.24	1.41	1.52
82	lA	18	C	C5'-C4'	-5.24	1.45	1.51
83	lB	9	A	C5'-C4'	-5.24	1.45	1.51
4	L3	659	SER	CB-OG	-5.24	1.35	1.42
17	LG	210	VAL	CB-CG2	-5.24	1.41	1.52
27	LQ	416	SER	CB-OG	-5.24	1.35	1.42
29	LS	6	LYS	CE-NZ	-5.24	1.35	1.49
32	LV	411	VAL	CB-CG1	-5.24	1.41	1.52
38	Lb	730	VAL	CB-CG1	-5.24	1.41	1.52
51	Lo	96	VAL	CB-CG2	-5.24	1.41	1.52
1	L0	342	VAL	CB-CG2	-5.23	1.41	1.52
19	LI	30	VAL	CB-CG2	-5.23	1.41	1.52
20	LJ	214	GLY	N-CA	-5.23	1.38	1.46
41	Le	572	SER	CB-OG	-5.23	1.35	1.42
44	Lh	499	VAL	CB-CG2	-5.23	1.41	1.52
46	Lj	101	SER	CB-OG	-5.23	1.35	1.42
51	Lo	86	GLY	N-CA	-5.23	1.38	1.46
52	Lp	625	SER	CB-OG	-5.23	1.35	1.42
1	L0	282	SER	CB-OG	-5.23	1.35	1.42
2	L1	503	SER	CB-OG	-5.23	1.35	1.42
21	LK	102	VAL	CB-CG1	-5.23	1.41	1.52
37	La	108	VAL	CB-CG2	-5.23	1.41	1.52
38	Lb	738	VAL	CB-CG2	-5.23	1.41	1.52
40	Ld	378	SER	CB-OG	-5.23	1.35	1.42
42	Lf	356	VAL	CB-CG1	-5.23	1.41	1.52
43	Lg	209	SER	CB-OG	-5.23	1.35	1.42
45	Li	311	SER	CB-OG	-5.23	1.35	1.42
47	Lk	471	GLY	N-CA	-5.23	1.38	1.46
87	lF	23	U	C5'-C4'	-5.23	1.45	1.51
91	lJ	177	C	C4-C5	-5.23	1.38	1.43
91	lJ	189	A	N9-C8	-5.23	1.33	1.37
9	L8	237	LYS	CE-NZ	-5.23	1.35	1.49
10	L9	468	TRP	CD1-NE1	-5.23	1.29	1.38
13	LC	570	VAL	CB-CG2	-5.23	1.41	1.52
23	LM	73	SER	CB-OG	-5.23	1.35	1.42
47	Lk	509	VAL	CB-CG1	-5.23	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	Lq	268	VAL	CB-CG2	-5.23	1.41	1.52
79	l7	40	U	C5'-C4'	-5.23	1.45	1.51
92	lK	23	A	C5'-C4'	-5.23	1.45	1.51
93	lL	87	A	C5'-C4'	-5.23	1.45	1.51
13	LC	555	SER	CB-OG	-5.23	1.35	1.42
23	LM	64	SER	CB-OG	-5.23	1.35	1.42
37	La	69	SER	CB-OG	-5.23	1.35	1.42
45	Li	394	VAL	CB-CG2	-5.23	1.41	1.52
52	Lp	447	LYS	CE-NZ	-5.23	1.35	1.49
53	Lq	743	SER	CB-OG	-5.23	1.35	1.42
62	Lz	186	VAL	CB-CG2	-5.23	1.41	1.52
18	LH	212	VAL	CB-CG2	-5.23	1.41	1.52
19	LI	42	GLY	N-CA	-5.23	1.38	1.46
32	LV	411	VAL	CB-CG2	-5.23	1.41	1.52
35	LY	358	GLY	N-CA	-5.23	1.38	1.46
37	La	74	VAL	CB-CG1	-5.23	1.41	1.52
39	Lc	364	VAL	CB-CG2	-5.23	1.41	1.52
39	Lc	394	GLY	N-CA	-5.23	1.38	1.46
40	Ld	404	SER	CB-OG	-5.23	1.35	1.42
42	Lf	313	VAL	CB-CG1	-5.23	1.41	1.52
43	Lg	93	LYS	CE-NZ	-5.23	1.35	1.49
44	Lh	481	TRP	CD1-NE1	-5.23	1.29	1.38
48	Ll	40	LYS	CE-NZ	-5.23	1.35	1.49
51	Lo	316	LYS	CE-NZ	-5.23	1.35	1.49
61	Ly	540	VAL	CB-CG1	-5.23	1.41	1.52
61	Ly	646	SER	CB-OG	-5.23	1.35	1.42
91	lJ	19	C	C5'-C4'	-5.23	1.45	1.51
91	lJ	22	C	C5'-C4'	-5.23	1.45	1.51
37	La	108	VAL	CB-CG1	-5.23	1.41	1.52
9	L8	142	GLY	N-CA	-5.22	1.38	1.46
30	LT	56	VAL	CB-CG2	-5.22	1.41	1.52
31	LU	262	VAL	CB-CG1	-5.22	1.41	1.52
35	LY	404	VAL	CB-CG1	-5.22	1.41	1.52
44	Lh	341	TRP	CD1-NE1	-5.22	1.29	1.38
11	LA	95	VAL	CB-CG1	-5.22	1.41	1.52
13	LC	127	VAL	CB-CG2	-5.22	1.41	1.52
13	LC	614	SER	CB-OG	-5.22	1.35	1.42
14	LD	591	SER	CB-OG	-5.22	1.35	1.42
25	LO	111	VAL	CB-CG2	-5.22	1.41	1.52
29	LS	89	VAL	CB-CG2	-5.22	1.41	1.52
33	LW	213	LYS	CE-NZ	-5.22	1.35	1.49
40	Ld	336	SER	CB-OG	-5.22	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
44	Lh	328	GLY	N-CA	-5.22	1.38	1.46
49	Lm	262	TRP	CD1-NE1	-5.22	1.29	1.38
68	UF	27	GLY	N-CA	-5.22	1.38	1.46
76	l4	27	G	C5'-C4'	-5.22	1.45	1.51
91	lJ	130	U	C5'-C4'	-5.22	1.45	1.51
96	lO	61	C	C5'-C4'	-5.22	1.45	1.51
9	L8	80	SER	CB-OG	-5.22	1.35	1.42
9	L8	141	VAL	CB-CG1	-5.22	1.41	1.52
33	LW	376	VAL	CB-CG2	-5.22	1.41	1.52
39	Lc	291	VAL	CB-CG1	-5.22	1.41	1.52
43	Lg	46	VAL	CB-CG1	-5.22	1.41	1.52
44	Lh	435	LYS	CE-NZ	-5.22	1.35	1.49
51	Lo	253	VAL	CB-CG1	-5.22	1.41	1.52
4	L3	428	VAL	CB-CG1	-5.22	1.41	1.52
4	L3	620	VAL	CB-CG1	-5.22	1.41	1.52
19	LI	69	LYS	CE-NZ	-5.22	1.36	1.49
26	LP	189	VAL	CB-CG1	-5.22	1.41	1.52
37	La	27	SER	CB-OG	-5.22	1.35	1.42
38	Lb	429	VAL	CB-CG1	-5.22	1.41	1.52
38	Lb	483	GLY	N-CA	-5.22	1.38	1.46
38	Lb	694	VAL	CB-CG1	-5.22	1.41	1.52
45	Li	619	SER	CB-OG	-5.22	1.35	1.42
55	Ls	379	SER	CB-OG	-5.22	1.35	1.42
31	LU	262	VAL	CB-CG2	-5.22	1.41	1.52
39	Lc	339	VAL	CB-CG2	-5.22	1.41	1.52
53	Lq	204	VAL	CB-CG1	-5.22	1.41	1.52
69	UG	259	VAL	CB-CG1	-5.22	1.41	1.52
96	lO	121	C	C5'-C4'	-5.22	1.45	1.51
13	LC	185	VAL	CB-CG2	-5.22	1.41	1.52
20	LJ	364	GLY	N-CA	-5.22	1.38	1.46
21	LK	94	LYS	CE-NZ	-5.22	1.36	1.49
38	Lb	292	GLY	N-CA	-5.22	1.38	1.46
38	Lb	865	LYS	CE-NZ	-5.22	1.36	1.49
40	Ld	403	GLY	N-CA	-5.22	1.38	1.46
47	Lk	518	VAL	CB-CG2	-5.22	1.41	1.52
51	Lo	155	VAL	CB-CG1	-5.22	1.41	1.52
62	Lz	234	VAL	CB-CG2	-5.22	1.41	1.52
91	lJ	275	U	C5'-C4'	-5.22	1.45	1.51
11	LA	187	TRP	CD1-NE1	-5.21	1.29	1.38
12	LB	96	SER	CB-OG	-5.21	1.35	1.42
18	LH	212	VAL	CB-CG1	-5.21	1.42	1.52
20	LJ	51	VAL	CB-CG1	-5.21	1.41	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	LZ	157	VAL	CB-CG2	-5.21	1.41	1.52
37	La	102	VAL	CB-CG1	-5.21	1.41	1.52
44	Lh	342	SER	CB-OG	-5.21	1.35	1.42
45	Li	709	SER	CB-OG	-5.21	1.35	1.42
53	Lq	675	SER	CB-OG	-5.21	1.35	1.42
57	Lu	394	VAL	CB-CG1	-5.21	1.41	1.52
74	l2	30	A	C5'-C4'	-5.21	1.45	1.51
82	lA	1	G	C5'-C4'	-5.21	1.45	1.51
3	L2	82	VAL	CB-CG1	-5.21	1.42	1.52
43	Lg	178	SER	CB-OG	-5.21	1.35	1.42
2	L1	509	LYS	CE-NZ	-5.21	1.36	1.49
29	LS	126	VAL	CB-CG1	-5.21	1.42	1.52
38	Lb	694	VAL	CB-CG2	-5.21	1.42	1.52
42	Lf	200	GLY	N-CA	-5.21	1.38	1.46
42	Lf	356	VAL	CB-CG2	-5.21	1.42	1.52
46	Lj	85	VAL	CB-CG1	-5.21	1.42	1.52
50	Ln	133	SER	CB-OG	-5.21	1.35	1.42
51	Lo	331	VAL	CB-CG1	-5.21	1.42	1.52
61	Ly	679	TRP	CD1-NE1	-5.21	1.29	1.38
79	l7	26	C	C4-N4	-5.21	1.29	1.33
97	lP	26	U	C5'-C4'	-5.21	1.45	1.51
9	L8	163	TRP	CD1-NE1	-5.21	1.29	1.38
13	LC	288	SER	CB-OG	-5.21	1.35	1.42
20	LJ	365	TRP	CD1-NE1	-5.21	1.29	1.38
22	LL	234	VAL	CB-CG1	-5.21	1.42	1.52
22	LL	376	VAL	CB-CG2	-5.21	1.42	1.52
59	Lw	150	SER	CB-OG	-5.21	1.35	1.42
60	Lx	347	SER	CB-OG	-5.21	1.35	1.42
1	L0	462	SER	CB-OG	-5.21	1.35	1.42
4	L3	613	VAL	CB-CG2	-5.21	1.42	1.52
9	L8	164	TRP	CD1-NE1	-5.21	1.29	1.38
13	LC	340	SER	CB-OG	-5.21	1.35	1.42
19	LI	74	VAL	CB-CG2	-5.21	1.42	1.52
21	LK	110	VAL	CB-CG2	-5.21	1.42	1.52
22	LL	335	SER	CB-OG	-5.21	1.35	1.42
23	LM	55	VAL	CB-CG1	-5.21	1.42	1.52
29	LS	126	VAL	CB-CG2	-5.21	1.42	1.52
37	La	145	SER	CB-OG	-5.21	1.35	1.42
40	Ld	535	SER	CB-OG	-5.21	1.35	1.42
42	Lf	341	LYS	CE-NZ	-5.21	1.36	1.49
44	Lh	330	VAL	CB-CG1	-5.21	1.42	1.52
44	Lh	500	VAL	CB-CG1	-5.21	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
48	Ll	46	VAL	CB-CG1	-5.21	1.42	1.52
75	l3	8	A	C5'-C4'	-5.21	1.45	1.51
4	L3	634	VAL	CB-CG2	-5.21	1.42	1.52
16	LF	131	TRP	CD1-NE1	-5.21	1.29	1.38
20	LJ	257	VAL	CB-CG2	-5.21	1.42	1.52
27	LQ	375	VAL	CB-CG2	-5.21	1.42	1.52
27	LQ	399	TRP	CD1-NE1	-5.21	1.29	1.38
37	La	40	VAL	CB-CG2	-5.21	1.42	1.52
38	Lb	843	SER	CB-OG	-5.21	1.35	1.42
39	Lc	216	VAL	CB-CG2	-5.21	1.42	1.52
41	Le	565	SER	CB-OG	-5.21	1.35	1.42
45	Li	356	SER	CB-OG	-5.21	1.35	1.42
46	Lj	61	VAL	CB-CG1	-5.21	1.42	1.52
49	Lm	296	VAL	CB-CG2	-5.21	1.42	1.52
51	Lo	177	VAL	CB-CG1	-5.21	1.42	1.52
61	Ly	324	LYS	CE-NZ	-5.21	1.36	1.49
61	Ly	545	TRP	CD1-NE1	-5.21	1.29	1.38
64	UB	334	SER	CB-OG	-5.21	1.35	1.42
1	L0	595	TRP	CD1-NE1	-5.21	1.29	1.38
4	L3	500	VAL	CB-CG2	-5.21	1.42	1.52
5	L4	518	VAL	CB-CG2	-5.21	1.42	1.52
21	LK	123	TRP	CD1-NE1	-5.21	1.29	1.38
29	LS	184	SER	CB-OG	-5.21	1.35	1.42
36	LZ	112	VAL	CB-CG1	-5.21	1.42	1.52
40	Ld	508	SER	CB-OG	-5.21	1.35	1.42
51	Lo	173	GLY	N-CA	-5.21	1.38	1.46
22	LL	237	SER	CB-OG	-5.20	1.35	1.42
22	LL	323	VAL	CB-CG1	-5.20	1.42	1.52
26	LP	134	GLY	N-CA	-5.20	1.38	1.46
27	LQ	388	GLY	N-CA	-5.20	1.38	1.46
29	LS	119	VAL	CB-CG2	-5.20	1.42	1.52
37	La	112	VAL	CB-CG1	-5.20	1.42	1.52
38	Lb	751	VAL	CB-CG2	-5.20	1.42	1.52
57	Lu	394	VAL	CB-CG2	-5.20	1.42	1.52
94	lM	30	A	C5'-C4'	-5.20	1.45	1.51
22	LL	388	SER	CB-OG	-5.20	1.35	1.42
35	LY	428	VAL	CB-CG2	-5.20	1.42	1.52
35	LY	457	TRP	CD1-NE1	-5.20	1.29	1.38
41	Le	308	VAL	CB-CG2	-5.20	1.42	1.52
48	Ll	126	SER	CB-OG	-5.20	1.35	1.42
49	Lm	348	VAL	CB-CG2	-5.20	1.42	1.52
64	UB	263	VAL	CB-CG2	-5.20	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
69	UG	258	VAL	CB-CG2	-5.20	1.42	1.52
3	L2	36	SER	CB-OG	-5.20	1.35	1.42
11	LA	110	VAL	CB-CG2	-5.20	1.42	1.52
20	LJ	376	VAL	CB-CG2	-5.20	1.42	1.52
20	LJ	398	TRP	CD1-NE1	-5.20	1.29	1.38
26	LP	132	GLY	N-CA	-5.20	1.38	1.46
29	LS	7	VAL	CB-CG1	-5.20	1.42	1.52
33	LW	362	VAL	CB-CG2	-5.20	1.42	1.52
33	LW	367	TRP	CD1-NE1	-5.20	1.29	1.38
39	Lc	391	VAL	CB-CG2	-5.20	1.42	1.52
57	Lu	304	TRP	CD1-NE1	-5.20	1.29	1.38
61	Ly	558	VAL	CB-CG1	-5.20	1.42	1.52
62	Lz	183	TRP	CD1-NE1	-5.20	1.29	1.38
1	L0	372	VAL	CB-CG2	-5.20	1.42	1.52
4	L3	634	VAL	CB-CG1	-5.20	1.42	1.52
5	L4	518	VAL	CB-CG1	-5.20	1.42	1.52
11	LA	178	VAL	CB-CG2	-5.20	1.42	1.52
20	LJ	51	VAL	CB-CG2	-5.20	1.42	1.52
20	LJ	370	VAL	CB-CG2	-5.20	1.42	1.52
29	LS	149	SER	CB-OG	-5.20	1.35	1.42
38	Lb	496	SER	CB-OG	-5.20	1.35	1.42
38	Lb	748	VAL	CB-CG1	-5.20	1.42	1.52
40	Ld	592	LYS	CE-NZ	-5.20	1.36	1.49
49	Lm	294	VAL	CB-CG2	-5.20	1.42	1.52
52	Lp	694	SER	CB-OG	-5.20	1.35	1.42
81	l9	50	C	C5'-C4'	-5.20	1.45	1.51
22	LL	276	VAL	CB-CG2	-5.20	1.42	1.52
22	LL	928	VAL	CB-CG2	-5.20	1.42	1.52
25	LO	90	SER	CB-OG	-5.20	1.35	1.42
33	LW	299	GLY	N-CA	-5.20	1.38	1.46
35	LY	312	VAL	CB-CG1	-5.20	1.42	1.52
38	Lb	730	VAL	CB-CG2	-5.20	1.42	1.52
69	UG	258	VAL	CB-CG1	-5.20	1.42	1.52
91	lJ	21	U	C5'-C4'	-5.20	1.45	1.51
14	LD	479	VAL	CB-CG1	-5.20	1.42	1.52
22	LL	928	VAL	CB-CG1	-5.20	1.42	1.52
27	LQ	402	VAL	CB-CG1	-5.20	1.42	1.52
34	LX	165	SER	CB-OG	-5.20	1.35	1.42
47	Lk	427	VAL	CB-CG2	-5.20	1.42	1.52
53	Lq	178	VAL	CB-CG1	-5.20	1.42	1.52
53	Lq	181	SER	CB-OG	-5.20	1.35	1.42
59	Lw	85	GLY	N-CA	-5.20	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	Ly	573	SER	CB-OG	-5.20	1.35	1.42
20	LJ	181	VAL	CB-CG2	-5.19	1.42	1.52
20	LJ	226	SER	CB-OG	-5.19	1.35	1.42
21	LK	102	VAL	CB-CG2	-5.19	1.42	1.52
48	Ll	14	VAL	CB-CG1	-5.19	1.42	1.52
88	lG	11	C	C5'-C4'	-5.19	1.45	1.51
20	LJ	216	VAL	CB-CG2	-5.19	1.42	1.52
20	LJ	221	VAL	CB-CG2	-5.19	1.42	1.52
20	LJ	325	GLY	N-CA	-5.19	1.38	1.46
22	LL	402	VAL	CB-CG2	-5.19	1.42	1.52
28	LR	55	VAL	CB-CG2	-5.19	1.42	1.52
29	LS	103	VAL	CB-CG2	-5.19	1.42	1.52
33	LW	380	TRP	CD1-NE1	-5.19	1.29	1.38
38	Lb	738	VAL	CB-CG1	-5.19	1.42	1.52
46	Lj	85	VAL	CB-CG2	-5.19	1.42	1.52
46	Lj	96	SER	CB-OG	-5.19	1.35	1.42
48	Ll	81	SER	CB-OG	-5.19	1.35	1.42
49	Lm	408	VAL	CB-CG2	-5.19	1.42	1.52
53	Lq	676	GLY	N-CA	-5.19	1.38	1.46
1	L0	313	VAL	CB-CG2	-5.19	1.42	1.52
3	L2	79	SER	CB-OG	-5.19	1.35	1.42
33	LW	376	VAL	CB-CG1	-5.19	1.42	1.52
33	LW	445	LYS	CE-NZ	-5.19	1.36	1.49
44	Lh	343	VAL	CB-CG1	-5.19	1.42	1.52
54	Lr	267	VAL	CB-CG2	-5.19	1.42	1.52
57	Lu	465	VAL	CB-CG1	-5.19	1.42	1.52
68	UF	47	SER	CB-OG	-5.19	1.35	1.42
69	UG	296	VAL	CB-CG2	-5.19	1.42	1.52
20	LJ	261	VAL	CB-CG2	-5.19	1.42	1.52
25	LO	254	VAL	CB-CG1	-5.19	1.42	1.52
34	LX	99	TRP	CD1-NE1	-5.19	1.29	1.38
37	La	192	SER	CB-OG	-5.19	1.35	1.42
52	Lp	494	VAL	CB-CG1	-5.19	1.42	1.52
1	L0	463	TRP	CD1-NE1	-5.19	1.29	1.38
4	L3	637	VAL	CB-CG1	-5.19	1.42	1.52
8	L7	50	VAL	CB-CG2	-5.19	1.42	1.52
16	LF	169	VAL	CB-CG2	-5.19	1.42	1.52
20	LJ	375	TRP	CD1-NE1	-5.19	1.29	1.38
22	LL	234	VAL	CB-CG2	-5.19	1.42	1.52
25	LO	151	VAL	CB-CG2	-5.19	1.42	1.52
25	LO	310	GLY	N-CA	-5.19	1.38	1.46
91	lJ	50	A	N9-C8	-5.19	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
91	lJ	255	C	C5'-C4'	-5.19	1.45	1.51
94	lM	165	G	C5'-C4'	-5.19	1.45	1.51
94	lM	189	G	C2-N2	-5.19	1.29	1.34
25	LO	12	VAL	CB-CG2	-5.19	1.42	1.52
28	LR	33	SER	CB-OG	-5.19	1.35	1.42
38	Lb	350	VAL	CB-CG2	-5.19	1.42	1.52
67	UE	130	VAL	CB-CG2	-5.19	1.42	1.52
94	lM	87	C	C5'-C4'	-5.19	1.45	1.51
21	LK	96	VAL	CB-CG2	-5.18	1.42	1.52
31	LU	277	VAL	CB-CG2	-5.18	1.42	1.52
32	LV	1058	SER	CB-OG	-5.18	1.35	1.42
33	LW	366	GLY	N-CA	-5.18	1.38	1.46
39	Lc	319	VAL	CB-CG1	-5.18	1.42	1.52
42	Lf	313	VAL	CB-CG2	-5.18	1.42	1.52
47	Lk	467	VAL	CB-CG2	-5.18	1.42	1.52
55	Ls	386	TRP	CD1-NE1	-5.18	1.29	1.38
60	Lx	338	TRP	CD1-NE1	-5.18	1.29	1.38
69	UG	296	VAL	CB-CG1	-5.18	1.42	1.52
76	l4	35	A	C5'-C4'	-5.18	1.45	1.51
76	l4	89	U	C5'-C4'	-5.18	1.45	1.51
13	LC	253	VAL	CB-CG1	-5.18	1.42	1.52
13	LC	618	TRP	CD1-NE1	-5.18	1.29	1.38
18	LH	246	VAL	CB-CG2	-5.18	1.42	1.52
23	LM	131	GLY	N-CA	-5.18	1.38	1.46
38	Lb	867	VAL	CB-CG2	-5.18	1.42	1.52
39	Lc	391	VAL	CB-CG1	-5.18	1.42	1.52
39	Lc	536	GLY	N-CA	-5.18	1.38	1.46
58	Lv	68	VAL	CB-CG2	-5.18	1.42	1.52
60	Lx	350	VAL	CB-CG2	-5.18	1.42	1.52
20	LJ	81	TRP	CD1-NE1	-5.18	1.29	1.38
22	LL	281	VAL	CB-CG2	-5.18	1.42	1.52
38	Lb	335	VAL	CB-CG1	-5.18	1.42	1.52
53	Lq	123	SER	CB-OG	-5.18	1.35	1.42
53	Lq	261	VAL	CB-CG2	-5.18	1.42	1.52
57	Lu	422	TRP	CD1-NE1	-5.18	1.29	1.38
101	lT	3	U	C5'-C4'	-5.18	1.45	1.51
1	L0	411	SER	CB-OG	-5.18	1.35	1.42
9	L8	13	GLY	N-CA	-5.18	1.38	1.46
19	LI	30	VAL	CB-CG1	-5.18	1.42	1.52
20	LJ	181	VAL	CB-CG1	-5.18	1.42	1.52
20	LJ	267	TRP	CD1-NE1	-5.18	1.29	1.38
20	LJ	282	SER	CB-OG	-5.18	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	LS	36	VAL	CB-CG1	-5.18	1.42	1.52
31	LU	247	VAL	CB-CG1	-5.18	1.42	1.52
35	LY	248	TRP	CD1-NE1	-5.18	1.29	1.38
44	Lh	390	VAL	CB-CG1	-5.18	1.42	1.52
49	Lm	272	VAL	CB-CG1	-5.18	1.42	1.52
51	Lo	161	SER	CB-OG	-5.18	1.35	1.42
51	Lo	177	VAL	CB-CG2	-5.18	1.42	1.52
61	Ly	579	SER	CB-OG	-5.18	1.35	1.42
66	UD	195	TRP	CD1-NE1	-5.18	1.29	1.38
69	UG	316	TRP	CD1-NE1	-5.18	1.29	1.38
87	lF	12	C	C5'-C4'	-5.18	1.45	1.51
1	L0	360	VAL	CB-CG2	-5.18	1.42	1.52
21	LK	249	VAL	CB-CG2	-5.18	1.42	1.52
40	Ld	364	VAL	CB-CG2	-5.18	1.42	1.52
56	Lt	52	VAL	CB-CG1	-5.18	1.42	1.52
8	L7	32	GLY	N-CA	-5.18	1.38	1.46
23	LM	128	SER	CB-OG	-5.18	1.35	1.42
25	LO	262	TRP	CD1-NE1	-5.18	1.29	1.38
34	LX	134	VAL	CB-CG2	-5.18	1.42	1.52
35	LY	227	SER	CB-OG	-5.18	1.35	1.42
39	Lc	360	VAL	CB-CG2	-5.18	1.42	1.52
39	Lc	412	SER	CB-OG	-5.18	1.35	1.42
39	Lc	600	GLY	N-CA	-5.18	1.38	1.46
45	Li	562	SER	CB-OG	-5.18	1.35	1.42
5	L4	280	VAL	CB-CG1	-5.17	1.42	1.52
12	LB	110	TRP	CD1-NE1	-5.17	1.29	1.38
20	LJ	414	VAL	CB-CG2	-5.17	1.42	1.52
23	LM	11	VAL	CB-CG2	-5.17	1.42	1.52
25	LO	211	SER	CB-OG	-5.17	1.35	1.42
29	LS	65	VAL	CB-CG1	-5.17	1.42	1.52
32	LV	596	SER	CB-OG	-5.17	1.35	1.42
38	Lb	728	SER	CB-OG	-5.17	1.35	1.42
41	Le	444	VAL	CB-CG1	-5.17	1.42	1.52
53	Lq	164	SER	CB-OG	-5.17	1.35	1.42
60	Lx	345	SER	CB-OG	-5.17	1.35	1.42
79	l7	63	A	N9-C8	-5.17	1.33	1.37
90	lI	42	A	C5'-C4'	-5.17	1.45	1.51
91	lJ	188	U	C5'-C4'	-5.17	1.45	1.51
13	LC	442	VAL	CB-CG2	-5.17	1.42	1.52
33	LW	353	VAL	CB-CG2	-5.17	1.42	1.52
33	LW	432	VAL	CB-CG2	-5.17	1.42	1.52
36	LZ	54	VAL	CB-CG2	-5.17	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	La	73	VAL	CB-CG1	-5.17	1.42	1.52
38	Lb	405	VAL	CB-CG1	-5.17	1.42	1.52
38	Lb	687	VAL	CB-CG1	-5.17	1.42	1.52
38	Lb	856	VAL	CB-CG1	-5.17	1.42	1.52
54	Lr	15	VAL	CB-CG1	-5.17	1.42	1.52
55	Ls	389	VAL	CB-CG1	-5.17	1.42	1.52
13	LC	104	VAL	CB-CG1	-5.17	1.42	1.52
27	LQ	375	VAL	CB-CG1	-5.17	1.42	1.52
29	LS	59	VAL	CB-CG2	-5.17	1.42	1.52
36	LZ	34	TRP	CD1-NE1	-5.17	1.29	1.38
40	Ld	340	VAL	CB-CG1	-5.17	1.42	1.52
40	Ld	412	SER	CB-OG	-5.17	1.35	1.42
49	Lm	299	VAL	CB-CG2	-5.17	1.42	1.52
51	Lo	122	GLY	N-CA	-5.17	1.38	1.46
61	Ly	553	VAL	CB-CG1	-5.17	1.42	1.52
61	Ly	601	VAL	CB-CG2	-5.17	1.42	1.52
87	lF	13	A	N9-C8	-5.17	1.33	1.37
94	lM	75	G	N9-C8	-5.17	1.34	1.37
3	L2	169	VAL	CB-CG1	-5.17	1.42	1.52
6	L5	449	TRP	CD1-NE1	-5.17	1.29	1.38
8	L7	80	SER	CB-OG	-5.17	1.35	1.42
24	LN	282	TRP	CD1-NE1	-5.17	1.29	1.38
32	LV	962	TRP	CD1-NE1	-5.17	1.29	1.38
33	LW	427	VAL	CB-CG1	-5.17	1.42	1.52
39	Lc	302	VAL	CB-CG1	-5.17	1.42	1.52
64	UB	325	TRP	CD1-NE1	-5.17	1.29	1.38
3	L2	82	VAL	CB-CG2	-5.17	1.42	1.52
9	L8	14	VAL	CB-CG2	-5.17	1.42	1.52
11	LA	107	VAL	CB-CG1	-5.17	1.42	1.52
11	LA	203	SER	CB-OG	-5.17	1.35	1.42
25	LO	237	VAL	CB-CG1	-5.17	1.42	1.52
29	LS	103	VAL	CB-CG1	-5.17	1.42	1.52
33	LW	288	VAL	CB-CG2	-5.17	1.42	1.52
33	LW	364	VAL	CB-CG1	-5.17	1.42	1.52
40	Ld	342	VAL	CB-CG1	-5.17	1.42	1.52
42	Lf	348	VAL	CB-CG2	-5.17	1.42	1.52
44	Lh	390	VAL	CB-CG2	-5.17	1.42	1.52
44	Lh	645	TRP	CD1-NE1	-5.17	1.29	1.38
47	Lk	504	VAL	CB-CG2	-5.17	1.42	1.52
49	Lm	296	VAL	CB-CG1	-5.17	1.42	1.52
59	Lw	119	VAL	CB-CG2	-5.17	1.42	1.52
61	Ly	373	VAL	CB-CG1	-5.17	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
83	lB	24	U	C5'-C4'	-5.17	1.45	1.51
90	lI	16	C	C5'-C4'	-5.17	1.45	1.51
96	lO	41	U	C5'-C4'	-5.17	1.45	1.51
4	L3	428	VAL	CB-CG2	-5.17	1.42	1.52
9	L8	141	VAL	CB-CG2	-5.17	1.42	1.52
11	LA	192	VAL	CB-CG2	-5.17	1.42	1.52
13	LC	318	VAL	CB-CG2	-5.17	1.42	1.52
13	LC	553	VAL	CB-CG1	-5.17	1.42	1.52
14	LD	542	GLY	N-CA	-5.17	1.38	1.46
21	LK	65	TRP	CD1-NE1	-5.17	1.29	1.38
38	Lb	585	VAL	CB-CG1	-5.17	1.42	1.52
39	Lc	495	VAL	CB-CG2	-5.17	1.42	1.52
41	Le	589	GLY	N-CA	-5.17	1.38	1.46
45	Li	682	TRP	CD1-NE1	-5.17	1.29	1.38
47	Lk	411	VAL	CB-CG2	-5.17	1.42	1.52
48	Ll	48	VAL	CB-CG1	-5.17	1.42	1.52
49	Lm	408	VAL	CB-CG1	-5.17	1.42	1.52
59	Lw	119	VAL	CB-CG1	-5.17	1.42	1.52
61	Ly	582	VAL	CB-CG2	-5.17	1.42	1.52
96	lO	64	A	N9-C8	-5.17	1.33	1.37
3	L2	49	VAL	CB-CG2	-5.17	1.42	1.52
14	LD	349	VAL	CB-CG1	-5.17	1.42	1.52
53	Lq	646	SER	CB-OG	-5.17	1.35	1.42
63	UA	253	GLY	N-CA	-5.17	1.38	1.46
96	lO	152	U	C5'-C4'	-5.17	1.45	1.51
1	L0	291	TRP	CD1-NE1	-5.16	1.29	1.38
11	LA	178	VAL	CB-CG1	-5.16	1.42	1.52
13	LC	124	GLY	N-CA	-5.16	1.38	1.46
15	LE	369	TRP	CD1-NE1	-5.16	1.29	1.38
20	LJ	53	SER	CB-OG	-5.16	1.35	1.42
20	LJ	414	VAL	CB-CG1	-5.16	1.42	1.52
25	LO	189	VAL	CB-CG1	-5.16	1.42	1.52
36	LZ	48	TRP	CD1-NE1	-5.16	1.29	1.38
48	Ll	14	VAL	CB-CG2	-5.16	1.42	1.52
49	Lm	347	VAL	CB-CG1	-5.16	1.42	1.52
55	Ls	418	TRP	CD1-NE1	-5.16	1.29	1.38
87	lF	17	G	C5'-C4'	-5.16	1.45	1.51
11	LA	86	VAL	CB-CG1	-5.16	1.42	1.52
24	LN	271	VAL	CB-CG1	-5.16	1.42	1.52
29	LS	143	VAL	CB-CG2	-5.16	1.42	1.52
2	L1	471	VAL	CB-CG2	-5.16	1.42	1.52
4	L3	611	SER	CB-OG	-5.16	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	L4	285	VAL	CB-CG2	-5.16	1.42	1.52
12	LB	11	VAL	CB-CG1	-5.16	1.42	1.52
12	LB	106	SER	CB-OG	-5.16	1.35	1.42
34	LX	147	TRP	CD1-NE1	-5.16	1.29	1.38
37	La	46	VAL	CB-CG2	-5.16	1.42	1.52
38	Lb	347	VAL	CB-CG2	-5.16	1.42	1.52
40	Ld	339	VAL	CB-CG1	-5.16	1.42	1.52
49	Lm	282	GLY	N-CA	-5.16	1.38	1.46
52	Lp	521	VAL	CB-CG2	-5.16	1.42	1.52
52	Lp	616	TRP	CD1-NE1	-5.16	1.29	1.38
81	l9	69	A	N9-C8	-5.16	1.33	1.37
96	lO	142	U	C5'-C4'	-5.16	1.45	1.51
9	L8	6	VAL	CB-CG1	-5.16	1.42	1.52
12	LB	69	TRP	CD1-NE1	-5.16	1.29	1.38
14	LD	479	VAL	CB-CG2	-5.16	1.42	1.52
24	LN	271	VAL	CB-CG2	-5.16	1.42	1.52
29	LS	65	VAL	CB-CG2	-5.16	1.42	1.52
31	LU	304	TRP	CD1-NE1	-5.16	1.29	1.38
38	Lb	856	VAL	CB-CG2	-5.16	1.42	1.52
38	Lb	994	GLY	N-CA	-5.16	1.38	1.46
44	Lh	562	VAL	CB-CG2	-5.16	1.42	1.52
46	Lj	23	VAL	CB-CG2	-5.16	1.42	1.52
51	Lo	253	VAL	CB-CG2	-5.16	1.42	1.52
58	Lv	66	VAL	CB-CG1	-5.16	1.42	1.52
64	UB	375	SER	CB-OG	-5.16	1.35	1.42
13	LC	464	VAL	CB-CG2	-5.16	1.42	1.52
14	LD	572	TRP	CD1-NE1	-5.16	1.29	1.38
23	LM	3	VAL	CB-CG1	-5.16	1.42	1.52
38	Lb	347	VAL	CB-CG1	-5.16	1.42	1.52
48	Ll	133	TRP	CD1-NE1	-5.16	1.29	1.38
68	UF	39	SER	CB-OG	-5.16	1.35	1.42
4	L3	500	VAL	CB-CG1	-5.16	1.42	1.52
13	LC	162	VAL	CB-CG2	-5.16	1.42	1.52
20	LJ	216	VAL	CB-CG1	-5.16	1.42	1.52
20	LJ	300	VAL	CB-CG1	-5.16	1.42	1.52
22	LL	291	SER	CB-OG	-5.16	1.35	1.42
25	LO	322	TRP	CD1-NE1	-5.16	1.29	1.38
39	Lc	360	VAL	CB-CG1	-5.16	1.42	1.52
43	Lg	46	VAL	CB-CG2	-5.16	1.42	1.52
49	Lm	410	VAL	CB-CG2	-5.16	1.42	1.52
52	Lp	624	TRP	CD1-NE1	-5.16	1.29	1.38
52	Lp	666	VAL	CB-CG1	-5.16	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	Lt	278	VAL	CB-CG1	-5.16	1.42	1.52
61	Ly	582	VAL	CB-CG1	-5.16	1.42	1.52
64	UB	263	VAL	CB-CG1	-5.16	1.42	1.52
66	UD	194	GLY	N-CA	-5.16	1.38	1.46
75	l3	52	A	C5'-C4'	-5.16	1.45	1.51
99	lR	1	U	C5'-C4'	-5.16	1.45	1.51
22	LL	199	VAL	CB-CG1	-5.15	1.42	1.52
28	LR	69	VAL	CB-CG1	-5.15	1.42	1.52
33	LW	432	VAL	CB-CG1	-5.15	1.42	1.52
34	LX	170	TRP	CD1-NE1	-5.15	1.29	1.38
18	LH	205	VAL	CB-CG1	-5.15	1.42	1.52
20	LJ	266	VAL	CB-CG2	-5.15	1.42	1.52
25	LO	254	VAL	CB-CG2	-5.15	1.42	1.52
33	LW	453	GLY	N-CA	-5.15	1.38	1.46
35	LY	312	VAL	CB-CG2	-5.15	1.42	1.52
38	Lb	475	VAL	CB-CG1	-5.15	1.42	1.52
38	Lb	633	VAL	CB-CG2	-5.15	1.42	1.52
44	Lh	336	VAL	CB-CG2	-5.15	1.42	1.52
45	Li	279	VAL	CB-CG1	-5.15	1.42	1.52
53	Lq	256	VAL	CB-CG1	-5.15	1.42	1.52
53	Lq	260	VAL	CB-CG2	-5.15	1.42	1.52
53	Lq	261	VAL	CB-CG1	-5.15	1.42	1.52
57	Lu	471	VAL	CB-CG1	-5.15	1.42	1.52
61	Ly	356	TRP	CD1-NE1	-5.15	1.29	1.38
64	UB	306	VAL	CB-CG2	-5.15	1.42	1.52
9	L8	3	TRP	CD1-NE1	-5.15	1.29	1.38
12	LB	7	VAL	CB-CG1	-5.15	1.42	1.52
20	LJ	370	VAL	CB-CG1	-5.15	1.42	1.52
25	LO	111	VAL	CB-CG1	-5.15	1.42	1.52
25	LO	245	VAL	CB-CG1	-5.15	1.42	1.52
37	La	93	VAL	CB-CG2	-5.15	1.42	1.52
43	Lg	111	VAL	CB-CG1	-5.15	1.42	1.52
47	Lk	399	VAL	CB-CG1	-5.15	1.42	1.52
52	Lp	532	VAL	CB-CG1	-5.15	1.42	1.52
52	Lp	667	TRP	CD1-NE1	-5.15	1.29	1.38
61	Ly	506	VAL	CB-CG1	-5.15	1.42	1.52
68	UF	28	VAL	CB-CG1	-5.15	1.42	1.52
69	UG	334	TRP	CD1-NE1	-5.15	1.29	1.38
76	l4	36	A	N9-C8	-5.15	1.33	1.37
81	l9	43	C	C5'-C4'	-5.15	1.45	1.51
20	LJ	178	VAL	CB-CG2	-5.15	1.42	1.52
29	LS	52	SER	CB-OG	-5.15	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
49	Lm	341	VAL	CB-CG1	-5.15	1.42	1.52
52	Lp	716	VAL	CB-CG1	-5.15	1.42	1.52
57	Lu	418	VAL	CB-CG2	-5.15	1.42	1.52
3	L2	169	VAL	CB-CG2	-5.15	1.42	1.52
9	L8	7	VAL	CB-CG2	-5.15	1.42	1.52
13	LC	249	VAL	CB-CG2	-5.15	1.42	1.52
27	LQ	350	VAL	CB-CG1	-5.15	1.42	1.52
29	LS	36	VAL	CB-CG2	-5.15	1.42	1.52
44	Lh	340	TRP	CD1-NE1	-5.15	1.29	1.38
47	Lk	509	VAL	CB-CG2	-5.15	1.42	1.52
48	Ll	110	TRP	CD1-NE1	-5.15	1.29	1.38
51	Lo	155	VAL	CB-CG2	-5.15	1.42	1.52
52	Lp	716	VAL	CB-CG2	-5.15	1.42	1.52
53	Lq	268	VAL	CB-CG1	-5.15	1.42	1.52
53	Lq	668	TRP	CD1-NE1	-5.15	1.29	1.38
87	lF	30	U	C5'-C4'	-5.15	1.45	1.51
20	LJ	67	VAL	CB-CG1	-5.15	1.42	1.52
54	Lr	183	VAL	CB-CG1	-5.15	1.42	1.52
83	lB	19	A	N9-C8	-5.15	1.33	1.37
96	lO	35	U	C5'-C4'	-5.15	1.45	1.51
3	L2	49	VAL	CB-CG1	-5.14	1.42	1.52
20	LJ	140	VAL	CB-CG1	-5.14	1.42	1.52
20	LJ	261	VAL	CB-CG1	-5.14	1.42	1.52
20	LJ	300	VAL	CB-CG2	-5.14	1.42	1.52
25	LO	238	VAL	CB-CG2	-5.14	1.42	1.52
37	La	210	VAL	CB-CG2	-5.14	1.42	1.52
39	Lc	611	TRP	CD1-NE1	-5.14	1.29	1.38
58	Lv	107	VAL	CB-CG2	-5.14	1.42	1.52
61	Ly	339	TRP	CD1-NE1	-5.14	1.29	1.38
67	UE	130	VAL	CB-CG1	-5.14	1.42	1.52
8	L7	50	VAL	CB-CG1	-5.14	1.42	1.52
13	LC	162	VAL	CB-CG1	-5.14	1.42	1.52
18	LH	250	TRP	CD1-NE1	-5.14	1.29	1.38
24	LN	311	SER	CB-OG	-5.14	1.35	1.42
37	La	40	VAL	CB-CG1	-5.14	1.42	1.52
38	Lb	751	VAL	CB-CG1	-5.14	1.42	1.52
40	Ld	406	SER	CB-OG	-5.14	1.35	1.42
60	Lx	308	VAL	CB-CG2	-5.14	1.42	1.52
2	L1	449	TRP	CD1-NE1	-5.14	1.29	1.38
16	LF	169	VAL	CB-CG1	-5.14	1.42	1.52
21	LK	250	VAL	CB-CG2	-5.14	1.42	1.52
22	LL	330	VAL	CB-CG2	-5.14	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LO	342	VAL	CB-CG1	-5.14	1.42	1.52
29	LS	89	VAL	CB-CG1	-5.14	1.42	1.52
30	LT	82	TRP	CD1-NE1	-5.14	1.29	1.38
31	LU	284	VAL	CB-CG2	-5.14	1.42	1.52
32	LV	1084	TRP	CD1-NE1	-5.14	1.29	1.38
40	Ld	342	VAL	CB-CG2	-5.14	1.42	1.52
51	Lo	239	VAL	CB-CG2	-5.14	1.42	1.52
97	lP	23	U	C5'-C4'	-5.14	1.45	1.51
26	LP	275	VAL	CB-CG2	-5.14	1.42	1.52
29	LS	99	TRP	CD1-NE1	-5.14	1.29	1.38
38	Lb	654	VAL	CB-CG2	-5.14	1.42	1.52
44	Lh	499	VAL	CB-CG1	-5.14	1.42	1.52
49	Lm	272	VAL	CB-CG2	-5.14	1.42	1.52
1	L0	339	VAL	CB-CG2	-5.14	1.42	1.52
9	L8	241	VAL	CB-CG2	-5.14	1.42	1.52
13	LC	313	VAL	CB-CG2	-5.14	1.42	1.52
20	LJ	125	VAL	CB-CG1	-5.14	1.42	1.52
20	LJ	178	VAL	CB-CG1	-5.14	1.42	1.52
21	LK	96	VAL	CB-CG1	-5.14	1.42	1.52
26	LP	135	GLY	N-CA	-5.14	1.38	1.46
27	LQ	350	VAL	CB-CG2	-5.14	1.42	1.52
33	LW	481	VAL	CB-CG2	-5.14	1.42	1.52
35	LY	305	VAL	CB-CG2	-5.14	1.42	1.52
36	LZ	157	VAL	CB-CG1	-5.14	1.42	1.52
43	Lg	83	TRP	CD1-NE1	-5.14	1.29	1.38
51	Lo	92	TRP	CD1-NE1	-5.14	1.29	1.38
52	Lp	551	VAL	CB-CG1	-5.14	1.42	1.52
61	Ly	558	VAL	CB-CG2	-5.14	1.42	1.52
1	L0	585	TRP	CD1-NE1	-5.13	1.29	1.38
13	LC	185	VAL	CB-CG1	-5.13	1.42	1.52
17	LG	234	TRP	CD1-NE1	-5.13	1.29	1.38
18	LH	246	VAL	CB-CG1	-5.13	1.42	1.52
25	LO	51	VAL	CB-CG2	-5.13	1.42	1.52
33	LW	364	VAL	CB-CG2	-5.13	1.42	1.52
35	LY	309	VAL	CB-CG2	-5.13	1.42	1.52
37	La	68	VAL	CB-CG1	-5.13	1.42	1.52
41	Le	506	VAL	CB-CG2	-5.13	1.42	1.52
44	Lh	678	TRP	CD1-NE1	-5.13	1.29	1.38
47	Lk	450	TRP	CD1-NE1	-5.13	1.29	1.38
56	Lt	220	ALA	CA-CB	-5.13	1.41	1.52
58	Lv	44	VAL	CB-CG1	-5.13	1.42	1.52
61	Ly	670	TRP	CD1-NE1	-5.13	1.29	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
94	lM	33	A	C5'-C4'	-5.13	1.45	1.51
14	LD	372	TRP	CD1-NE1	-5.13	1.29	1.38
22	LL	149	VAL	CB-CG1	-5.13	1.42	1.52
26	LP	275	VAL	CB-CG1	-5.13	1.42	1.52
37	La	28	VAL	CB-CG2	-5.13	1.42	1.52
67	UE	143	VAL	CB-CG1	-5.13	1.42	1.52
13	LC	556	VAL	CB-CG1	-5.13	1.42	1.52
28	LR	69	VAL	CB-CG2	-5.13	1.42	1.52
44	Lh	354	VAL	CB-CG2	-5.13	1.42	1.52
56	Lt	130	TRP	CD1-NE1	-5.13	1.29	1.38
62	Lz	186	VAL	CB-CG1	-5.13	1.42	1.52
93	lL	40	A	C5'-C4'	-5.13	1.45	1.51
94	lM	27	G	C5'-C4'	-5.13	1.45	1.51
104	lX	58	U	C5'-C4'	-5.13	1.45	1.51
1	L0	337	GLY	N-CA	-5.13	1.38	1.46
13	LC	104	VAL	CB-CG2	-5.13	1.42	1.52
25	LO	51	VAL	CB-CG1	-5.13	1.42	1.52
33	LW	322	VAL	CB-CG2	-5.13	1.42	1.52
38	Lb	734	VAL	CB-CG1	-5.13	1.42	1.52
56	Lt	272	TRP	CD1-NE1	-5.13	1.29	1.38
61	Ly	512	VAL	CB-CG1	-5.13	1.42	1.52
78	l6	1	A	C5'-C4'	-5.13	1.45	1.51
93	lL	61	A	C5'-C4'	-5.13	1.45	1.51
96	lO	14	A	C5'-C4'	-5.13	1.45	1.51
4	L3	731	VAL	CB-CG2	-5.13	1.42	1.52
13	LC	613	SER	CB-OG	-5.13	1.35	1.42
26	LP	212	TRP	CD1-NE1	-5.13	1.29	1.38
38	Lb	351	TRP	CD1-NE1	-5.13	1.29	1.38
44	Lh	686	VAL	CB-CG1	-5.13	1.42	1.52
45	Li	277	VAL	CB-CG1	-5.13	1.42	1.52
47	Lk	443	TRP	CD1-NE1	-5.13	1.29	1.38
86	lE	8	A	C3'-C2'	-5.13	1.47	1.52
95	lN	2	C	C5'-C4'	-5.13	1.45	1.51
2	L1	471	VAL	CB-CG1	-5.13	1.42	1.52
3	L2	75	TRP	CD1-NE1	-5.13	1.29	1.38
20	LJ	317	TRP	CD1-NE1	-5.13	1.29	1.38
21	LK	119	VAL	CB-CG1	-5.13	1.42	1.52
26	LP	102	TRP	CD1-NE1	-5.13	1.29	1.38
32	LV	892	VAL	CB-CG2	-5.13	1.42	1.52
33	LW	428	VAL	CB-CG1	-5.13	1.42	1.52
35	LY	250	TRP	CD1-NE1	-5.13	1.29	1.38
44	Lh	562	VAL	CB-CG1	-5.13	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	Lp	714	TRP	CD1-NE1	-5.13	1.29	1.38
64	UB	376	TRP	CD1-NE1	-5.13	1.29	1.38
68	UF	28	VAL	CB-CG2	-5.13	1.42	1.52
2	L1	508	VAL	CB-CG1	-5.12	1.42	1.52
18	LH	205	VAL	CB-CG2	-5.12	1.42	1.52
32	LV	1077	TRP	CD1-NE1	-5.12	1.29	1.38
38	Lb	475	VAL	CB-CG2	-5.12	1.42	1.52
40	Ld	430	VAL	CB-CG2	-5.12	1.42	1.52
47	Lk	504	VAL	CB-CG1	-5.12	1.42	1.52
52	Lp	563	VAL	CB-CG1	-5.12	1.42	1.52
79	l7	57	A	N9-C8	-5.12	1.33	1.37
94	lM	39	G	N9-C8	-5.12	1.34	1.37
2	L1	513	TRP	CD1-NE1	-5.12	1.29	1.38
11	LA	20	GLY	N-CA	-5.12	1.38	1.46
27	LQ	402	VAL	CB-CG2	-5.12	1.42	1.52
46	Lj	61	VAL	CB-CG2	-5.12	1.42	1.52
48	Ll	39	TRP	CD1-NE1	-5.12	1.29	1.38
60	Lx	350	VAL	CB-CG1	-5.12	1.42	1.52
61	Ly	533	VAL	CB-CG1	-5.12	1.42	1.52
4	L3	700	TRP	CD1-NE1	-5.12	1.29	1.38
13	LC	553	VAL	CB-CG2	-5.12	1.42	1.52
24	LN	243	VAL	CB-CG1	-5.12	1.42	1.52
27	LQ	409	TRP	CD1-NE1	-5.12	1.29	1.38
39	Lc	319	VAL	CB-CG2	-5.12	1.42	1.52
39	Lc	451	VAL	CB-CG2	-5.12	1.42	1.52
43	Lg	217	TRP	CD1-NE1	-5.12	1.29	1.38
49	Lm	270	VAL	CB-CG1	-5.12	1.42	1.52
52	Lp	494	VAL	CB-CG2	-5.12	1.42	1.52
53	Lq	877	ALA	CA-CB	-5.12	1.41	1.52
60	Lx	309	TRP	CD1-NE1	-5.12	1.29	1.38
73	l1	3	C	C5'-C4'	-5.12	1.45	1.51
92	lK	29	U	C5'-C4'	-5.12	1.45	1.51
6	L5	471	TRP	CD1-NE1	-5.12	1.29	1.38
39	Lc	451	VAL	CB-CG1	-5.12	1.42	1.52
43	Lg	27	TRP	CD1-NE1	-5.12	1.29	1.38
52	Lp	419	VAL	CB-CG1	-5.12	1.42	1.52
58	Lv	20	VAL	CB-CG2	-5.12	1.42	1.52
69	UG	321	SER	CB-OG	-5.12	1.35	1.42
18	LH	188	ALA	CA-CB	-5.12	1.41	1.52
19	LI	74	VAL	CB-CG1	-5.12	1.42	1.52
44	Lh	346	VAL	CB-CG2	-5.12	1.42	1.52
49	Lm	347	VAL	CB-CG2	-5.12	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	Lu	465	VAL	CB-CG2	-5.12	1.42	1.52
81	l9	83	A	N9-C8	-5.12	1.33	1.37
90	lI	15	C	C5'-C4'	-5.12	1.45	1.51
29	LS	143	VAL	CB-CG1	-5.12	1.42	1.52
39	Lc	216	VAL	CB-CG1	-5.12	1.42	1.52
47	Lk	513	TRP	CD1-NE1	-5.12	1.29	1.38
57	Lu	259	VAL	CB-CG1	-5.12	1.42	1.52
96	lO	124	A	N9-C8	-5.12	1.33	1.37
1	L0	261	TRP	CD1-NE1	-5.12	1.29	1.38
1	L0	617	SER	CB-OG	-5.12	1.35	1.42
11	LA	192	VAL	CB-CG1	-5.12	1.42	1.52
21	LK	67	SER	CB-OG	-5.12	1.35	1.42
21	LK	110	VAL	CB-CG1	-5.12	1.42	1.52
21	LK	250	VAL	CB-CG1	-5.12	1.42	1.52
22	LL	323	VAL	CB-CG2	-5.12	1.42	1.52
32	LV	248	VAL	CB-CG1	-5.12	1.42	1.52
33	LW	284	VAL	CB-CG2	-5.12	1.42	1.52
38	Lb	641	VAL	CB-CG2	-5.12	1.42	1.52
40	Ld	360	VAL	CB-CG2	-5.12	1.42	1.52
44	Lh	343	VAL	CB-CG2	-5.12	1.42	1.52
9	L8	6	VAL	CB-CG2	-5.11	1.42	1.52
20	LJ	155	VAL	CB-CG2	-5.11	1.42	1.52
20	LJ	334	TRP	CD1-NE1	-5.11	1.29	1.38
22	LL	319	VAL	CB-CG2	-5.11	1.42	1.52
23	LM	58	VAL	CB-CG1	-5.11	1.42	1.52
26	LP	188	VAL	CB-CG2	-5.11	1.42	1.52
39	Lc	364	VAL	CB-CG1	-5.11	1.42	1.52
43	Lg	202	TRP	CD1-NE1	-5.11	1.29	1.38
53	Lq	665	VAL	CB-CG2	-5.11	1.42	1.52
59	Lw	16	VAL	CB-CG2	-5.11	1.42	1.52
61	Ly	373	VAL	CB-CG2	-5.11	1.42	1.52
78	l6	41	A	C5'-C4'	-5.11	1.45	1.51
97	lP	27	U	C5'-C4'	-5.11	1.45	1.51
11	LA	86	VAL	CB-CG2	-5.11	1.42	1.52
17	LG	210	VAL	CB-CG1	-5.11	1.42	1.52
24	LN	316	TRP	CD1-NE1	-5.11	1.29	1.38
40	Ld	547	SER	CB-OG	-5.11	1.35	1.42
57	Lu	495	ALA	CA-CB	-5.11	1.41	1.52
91	lJ	129	A	C5'-C4'	-5.11	1.45	1.51
12	LB	28	VAL	CB-CG1	-5.11	1.42	1.52
19	LI	31	GLY	N-CA	-5.11	1.38	1.46
24	LN	281	GLY	N-CA	-5.11	1.38	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	LR	15	VAL	CB-CG1	-5.11	1.42	1.52
29	LS	40	VAL	CB-CG1	-5.11	1.42	1.52
29	LS	40	VAL	CB-CG2	-5.11	1.42	1.52
29	LS	75	GLY	N-CA	-5.11	1.38	1.46
42	Lf	300	VAL	CB-CG2	-5.11	1.42	1.52
44	Lh	411	TRP	CD1-NE1	-5.11	1.29	1.38
52	Lp	551	VAL	CB-CG2	-5.11	1.42	1.52
54	Lr	15	VAL	CB-CG2	-5.11	1.42	1.52
58	Lv	55	TRP	CD1-NE1	-5.11	1.29	1.38
83	lB	45	A	N9-C8	-5.11	1.33	1.37
20	LJ	149	VAL	CB-CG2	-5.11	1.42	1.52
40	Ld	430	VAL	CB-CG1	-5.11	1.42	1.52
53	Lq	204	VAL	CB-CG2	-5.11	1.42	1.52
82	lA	47	A	N9-C8	-5.11	1.33	1.37
4	L3	658	VAL	CB-CG2	-5.11	1.42	1.52
4	L3	731	VAL	CB-CG1	-5.11	1.42	1.52
13	LC	116	VAL	CB-CG2	-5.11	1.42	1.52
22	LL	281	VAL	CB-CG1	-5.11	1.42	1.52
22	LL	402	VAL	CB-CG1	-5.11	1.42	1.52
25	LO	342	VAL	CB-CG2	-5.11	1.42	1.52
31	LU	284	VAL	CB-CG1	-5.11	1.42	1.52
33	LW	315	VAL	CB-CG2	-5.11	1.42	1.52
36	LZ	115	VAL	CB-CG1	-5.11	1.42	1.52
38	Lb	745	GLY	N-CA	-5.11	1.38	1.46
47	Lk	411	VAL	CB-CG1	-5.11	1.42	1.52
47	Lk	427	VAL	CB-CG1	-5.11	1.42	1.52
48	Ll	120	TRP	CD1-NE1	-5.11	1.29	1.38
94	lM	74	A	C8-N7	-5.11	1.27	1.31
11	LA	109	VAL	CB-CG1	-5.11	1.42	1.52
12	LB	80	TRP	CD1-NE1	-5.11	1.29	1.38
14	LD	365	TRP	CD1-NE1	-5.11	1.29	1.38
24	LN	247	VAL	CB-CG2	-5.11	1.42	1.52
87	lF	24	G	C5'-C4'	-5.11	1.45	1.51
87	lF	85	A	N9-C8	-5.11	1.33	1.37
88	lG	17	A	N9-C8	-5.11	1.33	1.37
91	lJ	182	G	C5'-C4'	-5.11	1.45	1.51
94	lM	83	A	C5'-C4'	-5.11	1.45	1.51
28	LR	30	VAL	CB-CG2	-5.10	1.42	1.52
33	LW	288	VAL	CB-CG1	-5.10	1.42	1.52
38	Lb	330	TRP	CD1-NE1	-5.10	1.29	1.38
60	Lx	308	VAL	CB-CG1	-5.10	1.42	1.52
21	LK	79	VAL	CB-CG2	-5.10	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	LO	124	VAL	CB-CG2	-5.10	1.42	1.52
27	LQ	365	GLY	N-CA	-5.10	1.38	1.46
29	LS	87	VAL	CB-CG1	-5.10	1.42	1.52
35	LY	428	VAL	CB-CG1	-5.10	1.42	1.52
35	LY	483	VAL	CB-CG1	-5.10	1.42	1.52
39	Lc	199	VAL	CB-CG1	-5.10	1.42	1.52
40	Ld	567	VAL	CB-CG2	-5.10	1.42	1.52
53	Lq	143	VAL	CB-CG1	-5.10	1.42	1.52
61	Ly	540	VAL	CB-CG2	-5.10	1.42	1.52
70	UH	260	GLY	N-CA	-5.10	1.38	1.46
96	lO	45	A	C5'-C4'	-5.10	1.45	1.51
96	lO	125	C	C4-C5	-5.10	1.38	1.43
1	L0	356	GLY	N-CA	-5.10	1.38	1.46
33	LW	315	VAL	CB-CG1	-5.10	1.42	1.52
37	La	74	VAL	CB-CG2	-5.10	1.42	1.52
51	Lo	119	TRP	CD1-NE1	-5.10	1.29	1.38
1	L0	386	VAL	CB-CG1	-5.10	1.42	1.52
8	L7	12	TRP	CD1-NE1	-5.10	1.29	1.38
24	LN	310	VAL	CB-CG2	-5.10	1.42	1.52
25	LO	151	VAL	CB-CG1	-5.10	1.42	1.52
29	LS	5	VAL	CB-CG1	-5.10	1.42	1.52
29	LS	102	GLY	N-CA	-5.10	1.38	1.46
41	Le	516	TRP	CD1-NE1	-5.10	1.29	1.38
41	Le	544	VAL	CB-CG2	-5.10	1.42	1.52
46	Lj	11	VAL	CB-CG1	-5.10	1.42	1.52
56	Lt	256	VAL	CB-CG1	-5.10	1.42	1.52
58	Lv	73	GLY	N-CA	-5.10	1.38	1.46
67	UE	119	VAL	CB-CG2	-5.10	1.42	1.52
76	l4	65	A	N9-C8	-5.10	1.33	1.37
83	lB	35	G	C2-N2	-5.10	1.29	1.34
85	lD	10	A	N9-C8	-5.10	1.33	1.37
22	LL	255	GLY	N-CA	-5.10	1.38	1.46
23	LM	11	VAL	CB-CG1	-5.10	1.42	1.52
25	LO	238	VAL	CB-CG1	-5.10	1.42	1.52
38	Lb	335	VAL	CB-CG2	-5.10	1.42	1.52
38	Lb	350	VAL	CB-CG1	-5.10	1.42	1.52
39	Lc	629	SER	CB-OG	-5.10	1.35	1.42
61	Ly	506	VAL	CB-CG2	-5.10	1.42	1.52
75	l3	49	A	N9-C8	-5.10	1.33	1.37
12	LB	28	VAL	CB-CG2	-5.09	1.42	1.52
22	LL	276	VAL	CB-CG1	-5.09	1.42	1.52
25	LO	138	VAL	CB-CG2	-5.09	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	LQ	410	TRP	CD1-NE1	-5.09	1.29	1.38
33	LW	463	GLY	N-CA	-5.09	1.38	1.46
39	Lc	431	VAL	CB-CG1	-5.09	1.42	1.52
40	Ld	486	VAL	CB-CG1	-5.09	1.42	1.52
45	Li	617	VAL	CB-CG2	-5.09	1.42	1.52
94	lM	152	A	N9-C8	-5.09	1.33	1.37
20	LJ	257	VAL	CB-CG1	-5.09	1.42	1.52
58	Lv	44	VAL	CB-CG2	-5.09	1.42	1.52
1	L0	376	VAL	CB-CG2	-5.09	1.42	1.52
11	LA	109	VAL	CB-CG2	-5.09	1.42	1.52
11	LA	159	VAL	CB-CG2	-5.09	1.42	1.52
20	LJ	154	VAL	CB-CG2	-5.09	1.42	1.52
23	LM	58	VAL	CB-CG2	-5.09	1.42	1.52
26	LP	188	VAL	CB-CG1	-5.09	1.42	1.52
29	LS	76	VAL	CB-CG2	-5.09	1.42	1.52
36	LZ	115	VAL	CB-CG2	-5.09	1.42	1.52
38	Lb	495	VAL	CB-CG2	-5.09	1.42	1.52
3	L2	47	VAL	CB-CG1	-5.09	1.42	1.52
4	L3	646	VAL	CB-CG1	-5.09	1.42	1.52
25	LO	182	VAL	CB-CG2	-5.09	1.42	1.52
32	LV	473	VAL	CB-CG2	-5.09	1.42	1.52
35	LY	354	TRP	CD1-NE1	-5.09	1.29	1.38
51	Lo	239	VAL	CB-CG1	-5.09	1.42	1.52
51	Lo	346	VAL	CB-CG1	-5.09	1.42	1.52
81	l9	14	U	C5'-C4'	-5.09	1.45	1.51
22	LL	318	VAL	CB-CG2	-5.09	1.42	1.52
23	LM	76	TRP	CD1-NE1	-5.09	1.29	1.38
40	Ld	339	VAL	CB-CG2	-5.09	1.42	1.52
64	UB	306	VAL	CB-CG1	-5.09	1.42	1.52
95	lN	22	A	N9-C8	-5.09	1.33	1.37
4	L3	658	VAL	CB-CG1	-5.09	1.42	1.52
25	LO	182	VAL	CB-CG1	-5.09	1.42	1.52
39	Lc	535	SER	CB-OG	-5.09	1.35	1.42
53	Lq	610	VAL	CB-CG1	-5.09	1.42	1.52
59	Lw	16	VAL	CB-CG1	-5.09	1.42	1.52
69	UG	259	VAL	CB-CG2	-5.09	1.42	1.52
82	lA	41	C	C4-N4	-5.09	1.29	1.33
94	lM	46	U	C5-C6	-5.09	1.29	1.34
29	LS	11	VAL	CB-CG1	-5.08	1.42	1.52
38	Lb	644	VAL	CB-CG1	-5.08	1.42	1.52
41	Le	491	VAL	CB-CG2	-5.08	1.42	1.52
53	Lq	530	SER	CB-OG	-5.08	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
95	lN	1	A	N9-C8	-5.08	1.33	1.37
96	lO	170	C	C4-N4	-5.08	1.29	1.33
38	Lb	666	VAL	CB-CG2	-5.08	1.42	1.52
38	Lb	684	VAL	CB-CG1	-5.08	1.42	1.52
49	Lm	284	VAL	CB-CG1	-5.08	1.42	1.52
58	Lv	68	VAL	CB-CG1	-5.08	1.42	1.52
61	Ly	501	VAL	CB-CG1	-5.08	1.42	1.52
61	Ly	501	VAL	CB-CG2	-5.08	1.42	1.52
69	UG	326	VAL	CB-CG2	-5.08	1.42	1.52
87	lF	20	A	N9-C8	-5.08	1.33	1.37
18	LH	247	VAL	CB-CG2	-5.08	1.42	1.52
29	LS	77	VAL	CB-CG2	-5.08	1.42	1.52
35	LY	430	VAL	CB-CG1	-5.08	1.42	1.52
46	Lj	3	VAL	CB-CG1	-5.08	1.42	1.52
91	lJ	196	A	N9-C8	-5.08	1.33	1.37
11	LA	107	VAL	CB-CG2	-5.08	1.42	1.52
20	LJ	196	SER	CB-OG	-5.08	1.35	1.42
49	Lm	270	VAL	CB-CG2	-5.08	1.42	1.52
51	Lo	67	PRO	N-CD	-5.08	1.40	1.47
83	lB	33	A	N9-C8	-5.08	1.33	1.37
1	L0	386	VAL	CB-CG2	-5.08	1.42	1.52
13	LC	464	VAL	CB-CG1	-5.08	1.42	1.52
25	LO	89	SER	CB-OG	-5.08	1.35	1.42
33	LW	490	VAL	CB-CG1	-5.08	1.42	1.52
38	Lb	486	VAL	CB-CG2	-5.08	1.42	1.52
39	Lc	251	VAL	CB-CG2	-5.08	1.42	1.52
42	Lf	348	VAL	CB-CG1	-5.08	1.42	1.52
11	LA	85	VAL	CB-CG2	-5.08	1.42	1.52
44	Lh	331	VAL	CB-CG1	-5.08	1.42	1.52
45	Li	617	VAL	CB-CG1	-5.08	1.42	1.52
49	Lm	348	VAL	CB-CG1	-5.08	1.42	1.52
51	Lo	96	VAL	CB-CG1	-5.08	1.42	1.52
53	Lq	613	VAL	CB-CG1	-5.08	1.42	1.52
58	Lv	39	VAL	CB-CG2	-5.08	1.42	1.52
16	LF	133	VAL	CB-CG1	-5.08	1.42	1.52
56	Lt	57	VAL	CB-CG2	-5.08	1.42	1.52
64	UB	308	VAL	CB-CG1	-5.08	1.42	1.52
81	l9	60	U	C5'-C4'	-5.08	1.45	1.51
96	lO	164	A	N9-C8	-5.08	1.33	1.37
37	La	28	VAL	CB-CG1	-5.07	1.42	1.52
40	Ld	567	VAL	CB-CG1	-5.07	1.42	1.52
52	Lp	666	VAL	CB-CG2	-5.07	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
104	lX	35	U	C5'-C4'	-5.07	1.45	1.51
37	La	68	VAL	CB-CG2	-5.07	1.42	1.52
86	lE	16	U	C5-C6	-5.07	1.29	1.34
20	LJ	125	VAL	CB-CG2	-5.07	1.42	1.52
23	LM	4	VAL	CB-CG1	-5.07	1.42	1.52
25	LO	265	VAL	CB-CG2	-5.07	1.42	1.52
77	l5	59	A	N9-C8	-5.07	1.33	1.37
79	l7	59	A	N9-C8	-5.07	1.33	1.37
93	lL	19	A	N9-C8	-5.07	1.33	1.37
33	LW	490	VAL	CB-CG2	-5.07	1.42	1.52
9	L8	195	TRP	CD1-NE1	-5.07	1.29	1.38
29	LS	125	VAL	CB-CG2	-5.07	1.42	1.52
37	La	46	VAL	CB-CG1	-5.07	1.42	1.52
38	Lb	375	VAL	CB-CG1	-5.07	1.42	1.52
49	Lm	360	TRP	CD1-NE1	-5.07	1.29	1.38
51	Lo	192	VAL	CB-CG1	-5.07	1.42	1.52
56	Lt	57	VAL	CB-CG1	-5.07	1.42	1.52
57	Lu	300	VAL	CB-CG2	-5.07	1.42	1.52
61	Ly	533	VAL	CB-CG2	-5.07	1.42	1.52
68	UF	59	VAL	CB-CG1	-5.07	1.42	1.52
93	lL	61	A	N9-C8	-5.07	1.33	1.37
96	lO	61	C	C4-C5	-5.07	1.38	1.43
13	LC	254	VAL	CB-CG1	-5.07	1.42	1.52
29	LS	88	VAL	CB-CG2	-5.07	1.42	1.52
37	La	93	VAL	CB-CG1	-5.07	1.42	1.52
38	Lb	748	VAL	CB-CG2	-5.07	1.42	1.52
47	Lk	467	VAL	CB-CG1	-5.07	1.42	1.52
1	L0	616	TRP	CD1-NE1	-5.06	1.29	1.38
25	LO	210	VAL	CB-CG1	-5.06	1.42	1.52
39	Lc	291	VAL	CB-CG2	-5.06	1.42	1.52
49	Lm	357	VAL	CB-CG2	-5.06	1.42	1.52
57	Lu	350	TRP	CD1-NE1	-5.06	1.29	1.38
77	l5	31	U	C5'-C4'	-5.06	1.45	1.51
13	LC	287	VAL	CB-CG2	-5.06	1.42	1.52
35	LY	277	VAL	CB-CG1	-5.06	1.42	1.52
44	Lh	459	VAL	CB-CG1	-5.06	1.42	1.52
68	UF	59	VAL	CB-CG2	-5.06	1.42	1.52
81	l9	65	A	N9-C8	-5.06	1.33	1.37
96	lO	16	A	N9-C8	-5.06	1.33	1.37
12	LB	73	SER	CB-OG	-5.06	1.35	1.42
33	LW	427	VAL	CB-CG2	-5.06	1.42	1.52
52	Lp	382	VAL	CB-CG2	-5.06	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
64	UB	332	VAL	CB-CG2	-5.06	1.42	1.52
5	L4	470	SER	CB-OG	-5.06	1.35	1.42
34	LX	138	VAL	CB-CG1	-5.06	1.42	1.52
37	La	44	VAL	CB-CG1	-5.06	1.42	1.52
45	Li	354	VAL	CB-CG2	-5.06	1.42	1.52
59	Lw	2	PRO	N-CD	-5.06	1.40	1.47
61	Ly	465	VAL	CB-CG1	-5.06	1.42	1.52
91	lJ	211	A	N9-C8	-5.06	1.33	1.37
1	L0	339	VAL	CB-CG1	-5.06	1.42	1.52
12	LB	107	VAL	CB-CG1	-5.06	1.42	1.52
44	Lh	459	VAL	CB-CG2	-5.06	1.42	1.52
49	Lm	299	VAL	CB-CG1	-5.06	1.42	1.52
53	Lq	255	VAL	CB-CG1	-5.06	1.42	1.52
81	l9	25	A	N9-C8	-5.06	1.33	1.37
22	LL	305	TRP	CD1-NE1	-5.06	1.29	1.38
29	LS	76	VAL	CB-CG1	-5.06	1.42	1.52
35	LY	277	VAL	CB-CG2	-5.06	1.42	1.52
57	Lu	418	VAL	CB-CG1	-5.06	1.42	1.52
61	Ly	286	VAL	CB-CG1	-5.06	1.42	1.52
82	lA	45	A	N9-C8	-5.06	1.33	1.37
9	L8	241	VAL	CB-CG1	-5.05	1.42	1.52
23	LM	3	VAL	CB-CG2	-5.05	1.42	1.52
29	LS	87	VAL	CB-CG2	-5.05	1.42	1.52
45	Li	279	VAL	CB-CG2	-5.05	1.42	1.52
52	Lp	563	VAL	CB-CG2	-5.05	1.42	1.52
53	Lq	610	VAL	CB-CG2	-5.05	1.42	1.52
76	l4	60	G	C5'-C4'	-5.05	1.45	1.51
44	Lh	346	VAL	CB-CG1	-5.05	1.42	1.52
53	Lq	255	VAL	CB-CG2	-5.05	1.42	1.52
22	LL	376	VAL	CB-CG1	-5.05	1.42	1.52
35	LY	404	VAL	CB-CG2	-5.05	1.42	1.52
35	LY	451	VAL	CB-CG1	-5.05	1.42	1.52
37	La	65	VAL	CB-CG2	-5.05	1.42	1.52
38	Lb	908	ARG	CZ-NH2	-5.05	1.26	1.33
49	Lm	253	VAL	CB-CG1	-5.05	1.42	1.52
52	Lp	553	VAL	CB-CG1	-5.05	1.42	1.52
76	l4	35	A	N9-C8	-5.05	1.33	1.37
13	LC	116	VAL	CB-CG1	-5.05	1.42	1.52
25	LO	85	GLY	N-CA	-5.05	1.38	1.46
35	LY	451	VAL	CB-CG2	-5.05	1.42	1.52
96	lO	38	A	N9-C8	-5.05	1.33	1.37
3	L2	190	VAL	CB-CG2	-5.05	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
81	l9	27	C	C4-C5	-5.05	1.39	1.43
3	L2	47	VAL	CB-CG2	-5.05	1.42	1.52
19	LI	14	VAL	CB-CG1	-5.05	1.42	1.52
24	LN	352	GLY	N-CA	-5.05	1.38	1.46
25	LO	138	VAL	CB-CG1	-5.05	1.42	1.52
44	Lh	354	VAL	CB-CG1	-5.05	1.42	1.52
61	Ly	601	VAL	CB-CG1	-5.05	1.42	1.52
93	lL	41	A	C5'-C4'	-5.05	1.45	1.51
97	lP	25	U	C5'-C4'	-5.05	1.45	1.51
22	LL	149	VAL	CB-CG2	-5.04	1.42	1.52
29	LS	77	VAL	CB-CG1	-5.04	1.42	1.52
38	Lb	687	VAL	CB-CG2	-5.04	1.42	1.52
43	Lg	163	SER	CB-OG	-5.04	1.35	1.42
51	Lo	240	VAL	CB-CG2	-5.04	1.42	1.52
61	Ly	676	SER	CB-OG	-5.04	1.35	1.42
20	LJ	140	VAL	CB-CG2	-5.04	1.42	1.52
24	LN	310	VAL	CB-CG1	-5.04	1.42	1.52
37	La	210	VAL	CB-CG1	-5.04	1.42	1.52
39	Lc	606	VAL	CB-CG2	-5.04	1.42	1.52
40	Ld	600	GLY	N-CA	-5.04	1.38	1.46
51	Lo	240	VAL	CB-CG1	-5.04	1.42	1.52
61	Ly	465	VAL	CB-CG2	-5.04	1.42	1.52
84	lC	17	G	C2-N2	-5.04	1.29	1.34
64	UB	308	VAL	CB-CG2	-5.04	1.42	1.52
82	lA	10	A	N9-C8	-5.04	1.33	1.37
29	LS	59	VAL	CB-CG1	-5.04	1.42	1.52
32	LV	473	VAL	CB-CG1	-5.04	1.42	1.52
48	Ll	48	VAL	CB-CG2	-5.04	1.42	1.52
15	LE	661	ARG	CZ-NH2	-5.04	1.26	1.33
38	Lb	585	VAL	CB-CG2	-5.04	1.42	1.52
44	Lh	308	VAL	CB-CG1	-5.04	1.42	1.52
49	Lm	357	VAL	CB-CG1	-5.04	1.42	1.52
91	lJ	17	U	C5'-C4'	-5.04	1.45	1.51
92	lK	16	A	N9-C8	-5.04	1.33	1.37
96	lO	67	C	C4-C5	-5.04	1.39	1.43
15	LE	660	ARG	CZ-NH2	-5.04	1.26	1.33
20	LJ	336	VAL	CB-CG2	-5.04	1.42	1.52
21	LK	79	VAL	CB-CG1	-5.04	1.42	1.52
25	LO	124	VAL	CB-CG1	-5.04	1.42	1.52
91	lJ	271	C	C4-C5	-5.04	1.39	1.43
25	LO	210	VAL	CB-CG2	-5.04	1.42	1.52
31	LU	298	VAL	CB-CG2	-5.04	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	Ly	286	VAL	CB-CG2	-5.04	1.42	1.52
91	lJ	94	C	C4-N4	-5.04	1.29	1.33
96	lO	65	A	N9-C8	-5.04	1.33	1.37
1	L0	372	VAL	CB-CG1	-5.03	1.42	1.52
12	LB	12	VAL	CB-CG1	-5.03	1.42	1.52
25	LO	319	VAL	CB-CG2	-5.03	1.42	1.52
33	LW	391	VAL	CB-CG2	-5.03	1.42	1.52
42	Lf	300	VAL	CB-CG1	-5.03	1.42	1.52
18	LH	248	ALA	CA-CB	-5.03	1.41	1.52
54	Lr	263	SER	CB-OG	-5.03	1.35	1.42
3	L2	129	SER	CB-OG	-5.03	1.35	1.42
37	La	102	VAL	CB-CG2	-5.03	1.42	1.52
37	La	168	ALA	CA-CB	-5.03	1.41	1.52
46	Lj	69	VAL	CB-CG1	-5.03	1.42	1.52
62	Lz	234	VAL	CB-CG1	-5.03	1.42	1.52
69	UG	336	VAL	CB-CG1	-5.03	1.42	1.52
73	l1	20	A	N9-C8	-5.03	1.33	1.37
32	LV	603	VAL	CB-CG1	-5.03	1.42	1.52
40	Ld	486	VAL	CB-CG2	-5.03	1.42	1.52
23	LM	51	VAL	CB-CG1	-5.03	1.42	1.52
35	LY	305	VAL	CB-CG1	-5.03	1.42	1.52
44	Lh	308	VAL	CB-CG2	-5.03	1.42	1.52
91	lJ	137	C	C4-C5	-5.03	1.39	1.43
79	l7	71	A	N9-C8	-5.03	1.33	1.37
92	lK	23	A	N9-C8	-5.03	1.33	1.37
94	lM	151	A	N9-C8	-5.03	1.33	1.37
49	Lm	253	VAL	CB-CG2	-5.02	1.42	1.52
21	LK	167	SER	CB-OG	-5.02	1.35	1.42
32	LV	315	SER	CB-OG	-5.02	1.35	1.42
39	Lc	138	TRP	CD1-NE1	-5.02	1.29	1.38
90	lI	3	A	N9-C8	-5.02	1.33	1.37
96	lO	45	A	N9-C8	-5.02	1.33	1.37
96	lO	55	A	N9-C8	-5.02	1.33	1.37
43	Lg	111	VAL	CB-CG2	-5.02	1.42	1.52
53	Lq	260	VAL	CB-CG1	-5.02	1.42	1.52
39	Lc	406	SER	CB-OG	-5.02	1.35	1.42
40	Ld	636	GLY	N-CA	-5.02	1.38	1.46
52	Lp	521	VAL	CB-CG1	-5.02	1.42	1.52
91	lJ	208	A	N9-C8	-5.02	1.33	1.37
64	UB	302	VAL	CB-CG1	-5.02	1.42	1.52
95	lN	43	A	N9-C8	-5.02	1.33	1.37
8	L7	48	VAL	CB-CG2	-5.01	1.42	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
51	Lo	234	GLY	N-CA	-5.01	1.38	1.46
54	Lr	267	VAL	CB-CG1	-5.01	1.42	1.52
76	l4	26	A	N9-C8	-5.01	1.33	1.37
91	lJ	278	A	N9-C8	-5.01	1.33	1.37
53	Lq	256	VAL	CB-CG2	-5.01	1.42	1.52
75	l3	39	A	N9-C8	-5.01	1.33	1.37
87	lF	79	A	N9-C8	-5.01	1.33	1.37
11	LA	42	ARG	CZ-NH2	-5.01	1.26	1.33
25	LO	265	VAL	CB-CG1	-5.01	1.42	1.52
38	Lb	654	VAL	CB-CG1	-5.01	1.42	1.52
53	Lq	613	VAL	CB-CG2	-5.01	1.42	1.52
79	l7	62	A	N9-C8	-5.01	1.33	1.37
82	lA	48	A	N9-C8	-5.01	1.33	1.37
12	LB	12	VAL	CB-CG2	-5.01	1.42	1.52
13	LC	254	VAL	CB-CG2	-5.01	1.42	1.52
51	Lo	187	VAL	CB-CG2	-5.01	1.42	1.52
61	Ly	504	SER	CB-OG	-5.01	1.35	1.42
18	LH	195	SER	CB-OG	-5.01	1.35	1.42
75	l3	60	A	N9-C8	-5.01	1.33	1.37
91	lJ	252	A	N9-C8	-5.01	1.33	1.37
2	L1	508	VAL	CB-CG2	-5.01	1.42	1.52
15	LE	403	ARG	CZ-NH2	-5.01	1.26	1.33
20	LJ	149	VAL	CB-CG1	-5.01	1.42	1.52
38	Lb	405	VAL	CB-CG2	-5.01	1.42	1.52
38	Lb	453	VAL	CB-CG1	-5.01	1.42	1.52
83	lB	25	A	N9-C8	-5.01	1.33	1.37
91	lJ	254	C	C4-C5	-5.01	1.39	1.43
93	lL	40	A	N9-C8	-5.01	1.33	1.37
94	lM	41	U	C5-C6	-5.01	1.29	1.34
95	lN	33	A	N9-C8	-5.01	1.33	1.37
32	LV	892	VAL	CB-CG1	-5.00	1.42	1.52
38	Lb	818	VAL	CB-CG2	-5.00	1.42	1.52
75	l3	23	A	N9-C8	-5.00	1.33	1.37
85	lD	1	A	N9-C8	-5.00	1.33	1.37
15	LE	413	ARG	CZ-NH2	-5.00	1.26	1.33
16	LF	133	VAL	CB-CG2	-5.00	1.42	1.52
30	LT	31	VAL	CB-CG2	-5.00	1.42	1.52
31	LU	238	VAL	CB-CG1	-5.00	1.42	1.52
38	Lb	486	VAL	CB-CG1	-5.00	1.42	1.52
51	Lo	331	VAL	CB-CG2	-5.00	1.42	1.52
93	lL	66	A	N9-C8	-5.00	1.33	1.37
95	lN	31	A	N9-C8	-5.00	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
28	LR	15	VAL	CB-CG2	-5.00	1.42	1.52
32	LV	248	VAL	CB-CG2	-5.00	1.42	1.52
81	l9	63	A	N9-C8	-5.00	1.33	1.37
97	lP	3	U	C2-N3	-5.00	1.34	1.37

All (4800) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	60	A	N1-C2-N3	13.24	135.92	129.30
78	l6	25	A	N1-C2-N3	13.01	135.80	129.30
91	lJ	278	A	N7-C8-N9	12.66	120.13	113.80
94	lM	184	A	N7-C8-N9	12.57	120.09	113.80
96	lO	60	A	N7-C8-N9	12.53	120.06	113.80
82	lA	64	A	N1-C2-N3	12.52	135.56	129.30
94	lM	1	A	N1-C2-N3	12.48	135.54	129.30
96	lO	124	A	N7-C8-N9	12.46	120.03	113.80
91	lJ	50	A	N7-C8-N9	12.44	120.02	113.80
96	lO	160	G	N7-C8-N9	12.44	119.32	113.10
77	l5	34	G	N7-C8-N9	12.40	119.30	113.10
82	lA	1	G	N7-C8-N9	12.38	119.29	113.10
78	l6	1	A	N7-C8-N9	12.30	119.95	113.80
79	l7	63	A	N7-C8-N9	12.27	119.93	113.80
96	lO	72	A	N1-C2-N3	12.21	135.40	129.30
96	lO	48	A	N1-C2-N3	12.20	135.40	129.30
91	lJ	50	A	N1-C2-N3	12.20	135.40	129.30
93	lL	45	A	N1-C2-N3	12.14	135.37	129.30
91	lJ	138	G	N7-C8-N9	12.14	119.17	113.10
91	lJ	278	A	N1-C2-N3	12.12	135.36	129.30
96	lO	16	A	N1-C2-N3	12.06	135.33	129.30
75	l3	58	A	N1-C2-N3	12.06	135.33	129.30
85	lD	5	A	N1-C2-N3	12.05	135.32	129.30
91	lJ	42	A	N1-C2-N3	12.03	135.32	129.30
79	l7	62	A	N7-C8-N9	12.00	119.80	113.80
96	lO	31	G	N7-C8-N9	11.99	119.10	113.10
79	l7	64	A	N1-C2-N3	11.98	135.29	129.30
82	lA	47	A	N1-C2-N3	11.97	135.28	129.30
83	lB	33	A	N1-C2-N3	11.97	135.28	129.30
96	lO	155	A	N1-C2-N3	11.97	135.28	129.30
87	lF	17	G	N7-C8-N9	11.96	119.08	113.10
91	lJ	189	A	N1-C2-N3	11.95	135.28	129.30
91	lJ	208	A	N1-C2-N3	11.94	135.27	129.30
81	l9	75	A	N1-C2-N3	11.94	135.27	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
95	lN	27	A	N1-C2-N3	11.94	135.27	129.30
94	lM	184	A	N1-C2-N3	11.94	135.27	129.30
79	l7	47	A	N1-C2-N3	11.93	135.27	129.30
91	lJ	281	A	N1-C2-N3	11.93	135.26	129.30
93	lL	2	G	N7-C8-N9	11.93	119.06	113.10
94	lM	96	A	N1-C2-N3	11.92	135.26	129.30
95	lN	39	A	N1-C2-N3	11.92	135.26	129.30
77	l5	29	A	N1-C2-N3	11.91	135.26	129.30
93	lL	40	A	N1-C2-N3	11.90	135.25	129.30
76	l4	42	A	N1-C2-N3	11.90	135.25	129.30
81	l9	81	A	N1-C2-N3	11.89	135.25	129.30
74	l2	29	A	N1-C2-N3	11.89	135.25	129.30
96	lO	78	A	O4'-C1'-N9	11.89	117.71	108.20
96	lO	113	A	N1-C2-N3	11.89	135.24	129.30
81	l9	83	A	N1-C2-N3	11.88	135.24	129.30
79	l7	63	A	N1-C2-N3	11.88	135.24	129.30
93	lL	36	A	N1-C2-N3	11.88	135.24	129.30
84	lC	10	A	N1-C2-N3	11.87	135.23	129.30
82	lA	48	A	N1-C2-N3	11.87	135.23	129.30
91	lJ	230	A	N1-C2-N3	11.86	135.23	129.30
91	lJ	276	A	N1-C2-N3	11.86	135.23	129.30
93	lL	83	A	N1-C2-N3	11.86	135.23	129.30
96	lO	9	A	N1-C2-N3	11.86	135.23	129.30
95	lN	42	A	N1-C2-N3	11.86	135.23	129.30
96	lO	45	A	N1-C2-N3	11.86	135.23	129.30
73	l1	50	A	N1-C2-N3	11.86	135.23	129.30
85	lD	10	A	N7-C8-N9	11.86	119.73	113.80
82	lA	11	A	N1-C2-N3	11.85	135.23	129.30
90	lI	20	A	N1-C2-N3	11.85	135.22	129.30
91	lJ	5	G	N7-C8-N9	11.85	119.02	113.10
75	l3	59	A	N1-C2-N3	11.85	135.22	129.30
76	l4	84	A	N1-C2-N3	11.84	135.22	129.30
95	lN	1	A	N1-C2-N3	11.84	135.22	129.30
78	l6	44	A	N1-C2-N3	11.84	135.22	129.30
83	lB	9	A	N1-C2-N3	11.84	135.22	129.30
76	l4	32	G	N7-C8-N9	11.83	119.02	113.10
81	l9	69	A	N1-C2-N3	11.83	135.22	129.30
86	lE	28	A	N1-C2-N3	11.83	135.21	129.30
73	l1	37	A	N1-C2-N3	11.83	135.21	129.30
77	l5	59	A	N1-C2-N3	11.83	135.21	129.30
96	lO	53	A	N1-C2-N3	11.83	135.21	129.30
82	lA	64	A	N7-C8-N9	11.82	119.71	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	85	A	N1-C2-N3	11.82	135.21	129.30
77	l5	59	A	N7-C8-N9	11.82	119.71	113.80
81	l9	72	A	N1-C2-N3	11.82	135.21	129.30
96	lO	124	A	N1-C2-N3	11.82	135.21	129.30
79	l7	21	A	N1-C2-N3	11.81	135.21	129.30
79	l7	57	A	N1-C2-N3	11.81	135.21	129.30
78	l6	24	G	N7-C8-N9	11.81	119.00	113.10
94	lM	152	A	N1-C2-N3	11.81	135.21	129.30
75	l3	8	A	N1-C2-N3	11.81	135.20	129.30
75	l3	49	A	N1-C2-N3	11.80	135.20	129.30
76	l4	15	A	N1-C2-N3	11.80	135.20	129.30
91	lJ	214	A	N1-C2-N3	11.81	135.20	129.30
93	lL	85	A	N1-C2-N3	11.81	135.20	129.30
91	lJ	234	A	N1-C2-N3	11.80	135.20	129.30
81	l9	69	A	N7-C8-N9	11.80	119.70	113.80
79	l7	67	A	N1-C2-N3	11.80	135.20	129.30
93	lL	73	A	N1-C2-N3	11.80	135.20	129.30
90	lI	44	A	N1-C2-N3	11.79	135.20	129.30
96	lO	38	A	N1-C2-N3	11.79	135.20	129.30
96	lO	55	A	N1-C2-N3	11.79	135.20	129.30
78	l6	42	A	N1-C2-N3	11.79	135.19	129.30
81	l9	57	A	N1-C2-N3	11.79	135.19	129.30
96	lO	104	A	N1-C2-N3	11.79	135.19	129.30
82	lA	10	A	N1-C2-N3	11.79	135.19	129.30
95	lN	33	A	N1-C2-N3	11.79	135.19	129.30
75	l3	12	A	N1-C2-N3	11.79	135.19	129.30
79	l7	62	A	N1-C2-N3	11.78	135.19	129.30
93	lL	91	A	N1-C2-N3	11.78	135.19	129.30
96	lO	164	A	N1-C2-N3	11.78	135.19	129.30
76	l4	65	A	N1-C2-N3	11.78	135.19	129.30
96	lO	40	A	N1-C2-N3	11.78	135.19	129.30
90	lI	37	A	N1-C2-N3	11.77	135.19	129.30
81	l9	45	A	N1-C2-N3	11.77	135.18	129.30
90	lI	32	A	N1-C2-N3	11.77	135.18	129.30
95	lN	39	A	N7-C8-N9	11.77	119.68	113.80
78	l6	21	A	N1-C2-N3	11.76	135.18	129.30
81	l9	18	A	N1-C2-N3	11.76	135.18	129.30
90	lI	5	G	N7-C8-N9	11.76	118.98	113.10
93	lL	82	A	N1-C2-N3	11.76	135.18	129.30
95	lN	31	A	N1-C2-N3	11.76	135.18	129.30
78	l6	40	A	N1-C2-N3	11.76	135.18	129.30
79	l7	55	G	N7-C8-N9	11.76	118.98	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	lE	24	A	N1-C2-N3	11.76	135.18	129.30
87	lF	80	A	N1-C2-N3	11.76	135.18	129.30
95	lN	22	A	N1-C2-N3	11.76	135.18	129.30
78	l6	39	A	N1-C2-N3	11.76	135.18	129.30
79	l7	66	A	N1-C2-N3	11.76	135.18	129.30
93	lL	90	A	N1-C2-N3	11.76	135.18	129.30
79	l7	65	A	N1-C2-N3	11.76	135.18	129.30
90	lI	42	A	N1-C2-N3	11.76	135.18	129.30
93	lL	61	A	N1-C2-N3	11.76	135.18	129.30
93	lL	19	A	N1-C2-N3	11.75	135.18	129.30
78	l6	43	A	N1-C2-N3	11.75	135.18	129.30
75	l3	23	A	N1-C2-N3	11.75	135.17	129.30
83	lB	13	A	N1-C2-N3	11.74	135.17	129.30
96	lO	47	A	N1-C2-N3	11.74	135.17	129.30
87	lF	88	A	N1-C2-N3	11.74	135.17	129.30
74	l2	28	A	N1-C2-N3	11.74	135.17	129.30
79	l7	68	A	N1-C2-N3	11.74	135.17	129.30
93	lL	48	A	N1-C2-N3	11.74	135.17	129.30
96	lO	146	A	N1-C2-N3	11.74	135.17	129.30
87	lF	57	A	N1-C2-N3	11.73	135.17	129.30
73	l1	45	A	N1-C2-N3	11.73	135.17	129.30
92	lK	22	A	N1-C2-N3	11.73	135.17	129.30
93	lL	14	A	N1-C2-N3	11.73	135.17	129.30
73	l1	20	A	N1-C2-N3	11.73	135.17	129.30
76	l4	61	A	N1-C2-N3	11.73	135.16	129.30
81	l9	66	G	N7-C8-N9	11.73	118.96	113.10
79	l7	59	A	N1-C2-N3	11.72	135.16	129.30
94	lM	129	A	N1-C2-N3	11.72	135.16	129.30
96	lO	89	G	N7-C8-N9	11.72	118.96	113.10
94	lM	77	A	N1-C2-N3	11.72	135.16	129.30
91	lJ	193	A	N1-C2-N3	11.72	135.16	129.30
90	lI	43	A	N1-C2-N3	11.71	135.16	129.30
92	lK	16	A	N1-C2-N3	11.71	135.16	129.30
94	lM	83	A	N1-C2-N3	11.71	135.16	129.30
79	l7	60	A	N1-C2-N3	11.71	135.15	129.30
91	lJ	18	A	N1-C2-N3	11.71	135.15	129.30
95	lN	38	A	N1-C2-N3	11.71	135.15	129.30
96	lO	6	A	N1-C2-N3	11.71	135.15	129.30
76	l4	53	A	N1-C2-N3	11.70	135.15	129.30
87	lF	84	A	N1-C2-N3	11.70	135.15	129.30
91	lJ	211	A	N1-C2-N3	11.70	135.15	129.30
73	l1	33	A	N1-C2-N3	11.70	135.15	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
75	l3	60	A	N1-C2-N3	11.70	135.15	129.30
76	l4	33	A	N1-C2-N3	11.70	135.15	129.30
81	l9	26	A	N1-C2-N3	11.70	135.15	129.30
96	lO	161	A	N1-C2-N3	11.70	135.15	129.30
91	lJ	226	G	N7-C8-N9	11.69	118.95	113.10
91	lJ	252	A	N1-C2-N3	11.69	135.15	129.30
86	lE	26	A	N1-C2-N3	11.69	135.15	129.30
73	l1	49	A	N1-C2-N3	11.69	135.14	129.30
79	l7	70	A	N1-C2-N3	11.69	135.14	129.30
81	l9	62	A	N1-C2-N3	11.68	135.14	129.30
85	lD	4	A	N1-C2-N3	11.68	135.14	129.30
87	lF	62	A	N1-C2-N3	11.68	135.14	129.30
75	l3	39	A	N1-C2-N3	11.68	135.14	129.30
83	lB	45	A	N1-C2-N3	11.68	135.14	129.30
87	lF	20	A	N1-C2-N3	11.68	135.14	129.30
74	l2	30	A	N1-C2-N3	11.68	135.14	129.30
79	l7	69	A	N1-C2-N3	11.68	135.14	129.30
96	lO	162	A	N1-C2-N3	11.68	135.14	129.30
93	lL	41	A	N1-C2-N3	11.68	135.14	129.30
93	lL	45	A	N7-C8-N9	11.68	119.64	113.80
93	lL	84	A	N1-C2-N3	11.68	135.14	129.30
95	lN	43	A	N1-C2-N3	11.68	135.14	129.30
83	lB	23	A	N1-C2-N3	11.67	135.14	129.30
91	lJ	124	G	N7-C8-N9	11.67	118.94	113.10
93	lL	87	A	N1-C2-N3	11.67	135.14	129.30
96	lO	14	A	N1-C2-N3	11.67	135.14	129.30
75	l3	49	A	N7-C8-N9	11.67	119.64	113.80
90	lI	35	A	N1-C2-N3	11.67	135.13	129.30
81	l9	61	A	N1-C2-N3	11.67	135.13	129.30
93	lL	86	A	N1-C2-N3	11.67	135.13	129.30
74	l2	3	G	N7-C8-N9	11.66	118.93	113.10
94	lM	33	A	N1-C2-N3	11.66	135.13	129.30
75	l3	57	A	N1-C2-N3	11.66	135.13	129.30
81	l9	46	A	N1-C2-N3	11.66	135.13	129.30
85	lD	13	A	N1-C2-N3	11.66	135.13	129.30
96	lO	91	A	N1-C2-N3	11.66	135.13	129.30
79	l7	58	A	N1-C2-N3	11.66	135.13	129.30
94	lM	30	A	N1-C2-N3	11.66	135.13	129.30
78	l6	45	A	N1-C2-N3	11.65	135.13	129.30
83	lB	32	A	N1-C2-N3	11.65	135.12	129.30
90	lI	40	A	N1-C2-N3	11.65	135.13	129.30
73	l1	48	A	N1-C2-N3	11.65	135.12	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	58	A	N1-C2-N3	11.65	135.12	129.30
83	lB	21	A	N1-C2-N3	11.65	135.12	129.30
85	lD	1	A	N1-C2-N3	11.65	135.12	129.30
75	l3	35	A	N1-C2-N3	11.64	135.12	129.30
95	lN	30	A	N1-C2-N3	11.64	135.12	129.30
75	l3	9	A	N1-C2-N3	11.64	135.12	129.30
83	lB	19	A	N1-C2-N3	11.64	135.12	129.30
91	lJ	282	A	N1-C2-N3	11.64	135.12	129.30
75	l3	52	A	N1-C2-N3	11.63	135.12	129.30
78	l6	1	A	N1-C2-N3	11.63	135.12	129.30
83	lB	7	A	N1-C2-N3	11.64	135.12	129.30
87	lF	85	A	N1-C2-N3	11.63	135.12	129.30
94	lM	71	A	N1-C2-N3	11.63	135.12	129.30
96	lO	167	A	N1-C2-N3	11.63	135.12	129.30
96	lO	71	G	N7-C8-N9	11.63	118.92	113.10
96	lO	15	A	N1-C2-N3	11.63	135.11	129.30
78	l6	41	A	N1-C2-N3	11.62	135.11	129.30
76	l4	54	A	N1-C2-N3	11.62	135.11	129.30
73	l1	8	A	N1-C2-N3	11.62	135.11	129.30
76	l4	92	A	N1-C2-N3	11.62	135.11	129.30
91	lJ	195	A	N1-C2-N3	11.62	135.11	129.30
81	l9	15	A	N1-C2-N3	11.62	135.11	129.30
76	l4	35	A	N1-C2-N3	11.61	135.11	129.30
85	lD	10	A	N1-C2-N3	11.61	135.11	129.30
79	l7	71	A	N1-C2-N3	11.61	135.10	129.30
91	lJ	23	A	N1-C2-N3	11.61	135.10	129.30
91	lJ	166	G	N7-C8-N9	11.61	118.90	113.10
75	l3	21	G	N7-C8-N9	11.60	118.90	113.10
76	l4	48	G	N7-C8-N9	11.60	118.90	113.10
91	lJ	171	A	N1-C2-N3	11.60	135.10	129.30
87	lF	86	A	N1-C2-N3	11.60	135.10	129.30
92	lK	23	A	N1-C2-N3	11.60	135.10	129.30
86	lE	29	A	N1-C2-N3	11.59	135.10	129.30
81	l9	65	A	N1-C2-N3	11.59	135.09	129.30
90	lI	3	A	N1-C2-N3	11.59	135.09	129.30
76	l4	36	A	N1-C2-N3	11.59	135.09	129.30
79	l7	22	A	N1-C2-N3	11.59	135.09	129.30
91	lJ	210	A	N1-C2-N3	11.58	135.09	129.30
93	lL	88	A	N1-C2-N3	11.58	135.09	129.30
76	l4	21	A	N1-C2-N3	11.58	135.09	129.30
74	l2	20	A	N1-C2-N3	11.58	135.09	129.30
87	lF	13	A	N1-C2-N3	11.58	135.09	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	l9	63	A	N1-C2-N3	11.58	135.09	129.30
85	lD	9	A	N1-C2-N3	11.58	135.09	129.30
86	lE	6	A	N1-C2-N3	11.58	135.09	129.30
96	lO	42	A	N1-C2-N3	11.58	135.09	129.30
76	l4	52	A	N1-C2-N3	11.57	135.09	129.30
83	lB	25	A	N1-C2-N3	11.57	135.08	129.30
87	lF	57	A	N7-C8-N9	11.56	119.58	113.80
87	lF	63	A	N1-C2-N3	11.56	135.08	129.30
91	lJ	128	A	N1-C2-N3	11.56	135.08	129.30
93	lL	3	G	N7-C8-N9	11.56	118.88	113.10
88	lG	17	A	N1-C2-N3	11.56	135.08	129.30
90	lI	21	A	N1-C2-N3	11.55	135.08	129.30
83	lB	22	G	N7-C8-N9	11.55	118.87	113.10
79	l7	61	A	N1-C2-N3	11.54	135.07	129.30
91	lJ	182	G	N7-C8-N9	11.54	118.87	113.10
91	lJ	129	A	N1-C2-N3	11.54	135.07	129.30
96	lO	118	A	N1-C2-N3	11.54	135.07	129.30
81	l9	25	A	N1-C2-N3	11.53	135.07	129.30
95	lN	35	G	N7-C8-N9	11.53	118.86	113.10
84	lC	25	A	N1-C2-N3	11.53	135.06	129.30
86	lE	5	G	N7-C8-N9	11.53	118.86	113.10
94	lM	31	A	N1-C2-N3	11.53	135.06	129.30
94	lM	19	A	N1-C2-N3	11.53	135.06	129.30
96	lO	69	G	N7-C8-N9	11.53	118.86	113.10
74	l2	14	A	N1-C2-N3	11.52	135.06	129.30
94	lM	71	A	N7-C8-N9	11.52	119.56	113.80
96	lO	165	A	N1-C2-N3	11.52	135.06	129.30
96	lO	64	A	N1-C2-N3	11.51	135.06	129.30
93	lL	66	A	N1-C2-N3	11.51	135.05	129.30
90	lI	4	G	N7-C8-N9	11.50	118.85	113.10
79	l7	21	A	N7-C8-N9	11.50	119.55	113.80
82	lA	10	A	N7-C8-N9	11.50	119.55	113.80
91	lJ	127	A	N1-C2-N3	11.49	135.05	129.30
91	lJ	20	A	N1-C2-N3	11.49	135.04	129.30
82	lA	50	G	N7-C8-N9	11.49	118.84	113.10
91	lJ	189	A	N7-C8-N9	11.48	119.54	113.80
94	lM	96	A	N7-C8-N9	11.48	119.54	113.80
76	l4	27	G	N7-C8-N9	11.47	118.84	113.10
83	lB	40	G	N7-C8-N9	11.47	118.84	113.10
91	lJ	238	G	N7-C8-N9	11.47	118.84	113.10
96	lO	65	A	N1-C2-N3	11.47	135.04	129.30
96	lO	8	G	N7-C8-N9	11.47	118.83	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	115	G	N7-C8-N9	11.47	118.83	113.10
96	lO	163	G	N7-C8-N9	11.46	118.83	113.10
87	lF	79	A	N1-C2-N3	11.46	135.03	129.30
77	l5	60	G	N7-C8-N9	11.46	118.83	113.10
91	lJ	156	G	N7-C8-N9	11.46	118.83	113.10
76	l4	26	A	N1-C2-N3	11.45	135.02	129.30
78	l6	20	G	N7-C8-N9	11.45	118.82	113.10
87	lF	64	G	N7-C8-N9	11.44	118.82	113.10
94	lM	151	A	N1-C2-N3	11.45	135.02	129.30
76	l4	60	G	N7-C8-N9	11.44	118.82	113.10
93	lL	19	A	N7-C8-N9	11.44	119.52	113.80
81	l9	47	G	N7-C8-N9	11.44	118.82	113.10
82	lA	45	A	N1-C2-N3	11.44	135.02	129.30
91	lJ	113	G	N7-C8-N9	11.44	118.82	113.10
91	lJ	196	A	N1-C2-N3	11.44	135.02	129.30
96	lO	146	A	N7-C8-N9	11.44	119.52	113.80
91	lJ	16	G	N7-C8-N9	11.43	118.82	113.10
94	lM	151	A	N7-C8-N9	11.43	119.52	113.80
96	lO	34	A	N1-C2-N3	11.43	135.01	129.30
81	l9	24	G	N7-C8-N9	11.42	118.81	113.10
96	lO	43	G	N7-C8-N9	11.42	118.81	113.10
91	lJ	23	A	N7-C8-N9	11.42	119.51	113.80
93	lL	64	G	N7-C8-N9	11.42	118.81	113.10
81	l9	83	A	N7-C8-N9	11.42	119.51	113.80
95	lN	41	G	N7-C8-N9	11.42	118.81	113.10
81	l9	74	G	N7-C8-N9	11.41	118.81	113.10
76	l4	42	A	N7-C8-N9	11.41	119.51	113.80
79	l7	47	A	N7-C8-N9	11.41	119.51	113.80
81	l9	51	G	N7-C8-N9	11.41	118.81	113.10
96	lO	33	G	N7-C8-N9	11.41	118.81	113.10
91	lJ	140	G	N7-C8-N9	11.41	118.80	113.10
94	lM	152	A	N7-C8-N9	11.41	119.50	113.80
96	lO	72	A	N7-C8-N9	11.41	119.50	113.80
88	lG	18	G	N7-C8-N9	11.40	118.80	113.10
94	lM	89	G	N7-C8-N9	11.40	118.80	113.10
91	lJ	233	G	N7-C8-N9	11.40	118.80	113.10
93	lL	74	A	N1-C2-N3	11.40	135.00	129.30
79	l7	71	A	N7-C8-N9	11.39	119.50	113.80
84	lC	26	G	N7-C8-N9	11.39	118.80	113.10
94	lM	27	G	N7-C8-N9	11.39	118.80	113.10
75	l3	51	G	N7-C8-N9	11.39	118.79	113.10
91	lJ	171	A	N7-C8-N9	11.38	119.49	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
72	l0	18	G	N7-C8-N9	11.38	118.79	113.10
90	lI	17	G	N7-C8-N9	11.38	118.79	113.10
90	lI	22	G	N7-C8-N9	11.38	118.79	113.10
94	lM	149	G	N7-C8-N9	11.38	118.79	113.10
75	l3	12	A	N7-C8-N9	11.38	119.49	113.80
76	l4	21	A	N7-C8-N9	11.37	119.48	113.80
74	l2	15	G	N7-C8-N9	11.36	118.78	113.10
93	lL	38	G	N7-C8-N9	11.36	118.78	113.10
94	lM	25	G	N7-C8-N9	11.36	118.78	113.10
78	l6	44	A	N7-C8-N9	11.36	119.48	113.80
83	lB	42	G	N7-C8-N9	11.36	118.78	113.10
74	l2	31	A	N1-C2-N3	11.35	134.97	129.30
77	l5	32	G	N7-C8-N9	11.35	118.78	113.10
75	l3	57	A	N7-C8-N9	11.34	119.47	113.80
82	lA	20	G	N7-C8-N9	11.34	118.77	113.10
73	l1	7	G	N7-C8-N9	11.34	118.77	113.10
96	lO	138	G	N7-C8-N9	11.34	118.77	113.10
87	lF	88	A	N7-C8-N9	11.34	119.47	113.80
86	lE	24	A	N7-C8-N9	11.33	119.47	113.80
92	lK	14	G	N7-C8-N9	11.33	118.77	113.10
87	lF	29	G	N7-C8-N9	11.33	118.77	113.10
90	lI	36	A	N1-C2-N3	11.33	134.97	129.30
79	l7	61	A	N7-C8-N9	11.32	119.46	113.80
95	lN	22	A	N7-C8-N9	11.32	119.46	113.80
94	lM	28	A	N1-C2-N3	11.32	134.96	129.30
86	lE	6	A	N7-C8-N9	11.31	119.46	113.80
93	lL	39	G	N7-C8-N9	11.31	118.76	113.10
75	l3	23	A	N7-C8-N9	11.31	119.45	113.80
87	lF	14	G	N7-C8-N9	11.31	118.75	113.10
73	l1	36	G	N7-C8-N9	11.31	118.75	113.10
92	lK	23	A	N7-C8-N9	11.31	119.45	113.80
85	lD	13	A	N7-C8-N9	11.31	119.45	113.80
94	lM	165	G	N7-C8-N9	11.30	118.75	113.10
93	lL	32	G	N7-C8-N9	11.30	118.75	113.10
89	lH	17	G	N7-C8-N9	11.29	118.75	113.10
74	l2	21	G	N7-C8-N9	11.29	118.75	113.10
81	l9	72	A	N7-C8-N9	11.29	119.44	113.80
91	lJ	276	A	N7-C8-N9	11.29	119.45	113.80
87	lF	62	A	N7-C8-N9	11.29	119.44	113.80
79	l7	57	A	N7-C8-N9	11.29	119.44	113.80
81	l9	65	A	N7-C8-N9	11.29	119.44	113.80
90	lI	32	A	N7-C8-N9	11.29	119.44	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	229	G	N7-C8-N9	11.29	118.74	113.10
75	l3	38	G	N7-C8-N9	11.28	118.74	113.10
83	lB	25	A	N7-C8-N9	11.28	119.44	113.80
94	lM	26	G	N7-C8-N9	11.28	118.74	113.10
76	l4	65	A	N7-C8-N9	11.28	119.44	113.80
81	l9	54	G	N7-C8-N9	11.28	118.74	113.10
96	lO	34	A	N7-C8-N9	11.28	119.44	113.80
83	lB	4	G	N7-C8-N9	11.28	118.74	113.10
88	lG	10	G	N7-C8-N9	11.28	118.74	113.10
93	lL	36	A	N7-C8-N9	11.28	119.44	113.80
96	lO	104	A	N7-C8-N9	11.28	119.44	113.80
81	l9	26	A	N7-C8-N9	11.27	119.44	113.80
89	lH	6	G	N7-C8-N9	11.27	118.74	113.10
81	l9	15	A	N7-C8-N9	11.27	119.44	113.80
91	lJ	203	G	N7-C8-N9	11.27	118.74	113.10
91	lJ	251	G	N7-C8-N9	11.27	118.74	113.10
96	lO	139	G	N7-C8-N9	11.27	118.73	113.10
72	l0	37	G	N7-C8-N9	11.27	118.73	113.10
79	l7	52	G	N7-C8-N9	11.27	118.73	113.10
90	lI	20	A	N7-C8-N9	11.27	119.44	113.80
74	l2	7	G	N7-C8-N9	11.27	118.73	113.10
86	lE	7	G	N7-C8-N9	11.27	118.73	113.10
84	lC	10	A	N7-C8-N9	11.26	119.43	113.80
87	lF	79	A	N7-C8-N9	11.26	119.43	113.80
91	lJ	281	A	N7-C8-N9	11.26	119.43	113.80
73	l1	33	A	N7-C8-N9	11.25	119.43	113.80
73	l1	13	G	N7-C8-N9	11.25	118.72	113.10
91	lJ	102	G	N7-C8-N9	11.25	118.72	113.10
94	lM	34	G	N7-C8-N9	11.24	118.72	113.10
95	lN	43	A	N7-C8-N9	11.24	119.42	113.80
76	l4	20	G	N7-C8-N9	11.24	118.72	113.10
96	lO	99	A	N7-C8-N9	11.24	119.42	113.80
78	l6	22	G	N7-C8-N9	11.24	118.72	113.10
82	lA	45	A	N7-C8-N9	11.24	119.42	113.80
87	lF	84	A	N7-C8-N9	11.24	119.42	113.80
94	lM	122	G	N7-C8-N9	11.24	118.72	113.10
82	lA	49	G	N7-C8-N9	11.24	118.72	113.10
86	lE	8	A	N1-C2-N3	11.24	134.92	129.30
93	lL	90	A	N7-C8-N9	11.24	119.42	113.80
95	lN	18	A	N1-C2-N3	11.24	134.92	129.30
81	l9	73	G	N7-C8-N9	11.23	118.72	113.10
91	lJ	209	G	N7-C8-N9	11.23	118.72	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
90	lI	18	G	N7-C8-N9	11.23	118.72	113.10
82	lA	11	A	N7-C8-N9	11.23	119.42	113.80
77	l5	29	A	N7-C8-N9	11.23	119.42	113.80
85	lD	9	A	N7-C8-N9	11.23	119.42	113.80
86	lE	28	A	N7-C8-N9	11.23	119.42	113.80
84	lC	21	A	N1-C6-N6	-11.23	111.86	118.60
96	lO	38	A	N7-C8-N9	11.23	119.41	113.80
96	lO	155	A	N7-C8-N9	11.23	119.42	113.80
75	l3	53	G	N7-C8-N9	11.23	118.71	113.10
90	lI	42	A	N7-C8-N9	11.23	119.41	113.80
95	lN	18	A	N7-C8-N9	11.22	119.41	113.80
94	lM	19	A	N7-C8-N9	11.22	119.41	113.80
91	lJ	214	A	N7-C8-N9	11.21	119.41	113.80
91	lJ	139	G	N7-C8-N9	11.21	118.70	113.10
76	l4	57	G	N7-C8-N9	11.21	118.70	113.10
87	lF	80	A	N7-C8-N9	11.21	119.40	113.80
96	lO	64	A	N7-C8-N9	11.21	119.40	113.80
91	lJ	135	G	N7-C8-N9	11.21	118.70	113.10
73	l1	45	A	N7-C8-N9	11.21	119.40	113.80
91	lJ	170	G	N7-C8-N9	11.20	118.70	113.10
95	lN	38	A	N7-C8-N9	11.21	119.40	113.80
96	lO	9	A	N7-C8-N9	11.21	119.40	113.80
90	lI	43	A	N7-C8-N9	11.20	119.40	113.80
96	lO	6	A	N7-C8-N9	11.20	119.40	113.80
91	lJ	129	A	N7-C8-N9	11.20	119.40	113.80
73	l1	37	A	N7-C8-N9	11.20	119.40	113.80
74	l2	28	A	N7-C8-N9	11.20	119.40	113.80
87	lF	34	G	N7-C8-N9	11.20	118.70	113.10
76	l4	67	G	N7-C8-N9	11.20	118.70	113.10
93	lL	74	A	N7-C8-N9	11.20	119.40	113.80
96	lO	90	G	N7-C8-N9	11.20	118.70	113.10
82	lA	47	A	N7-C8-N9	11.19	119.40	113.80
91	lJ	42	A	N7-C8-N9	11.20	119.40	113.80
73	l1	50	A	N7-C8-N9	11.19	119.39	113.80
75	l3	9	A	N7-C8-N9	11.19	119.39	113.80
81	l9	75	A	N7-C8-N9	11.19	119.39	113.80
78	l6	45	A	N7-C8-N9	11.18	119.39	113.80
79	l7	70	A	N7-C8-N9	11.18	119.39	113.80
83	lB	9	A	N7-C8-N9	11.18	119.39	113.80
85	lD	5	A	N7-C8-N9	11.18	119.39	113.80
91	lJ	112	G	N7-C8-N9	11.18	118.69	113.10
94	lM	156	G	N7-C8-N9	11.18	118.69	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	65	A	N7-C8-N9	11.18	119.39	113.80
83	lB	23	A	N7-C8-N9	11.18	119.39	113.80
76	l4	59	G	N7-C8-N9	11.17	118.69	113.10
87	lF	63	A	N7-C8-N9	11.17	119.39	113.80
85	lD	1	A	N7-C8-N9	11.17	119.39	113.80
94	lM	33	A	N7-C8-N9	11.17	119.39	113.80
104	lX	41	U	O4'-C1'-N1	11.17	117.14	108.20
75	l3	58	A	N7-C8-N9	11.16	119.38	113.80
83	lB	45	A	N7-C8-N9	11.16	119.38	113.80
90	lI	37	A	N7-C8-N9	11.16	119.38	113.80
78	l6	25	A	N7-C8-N9	11.16	119.38	113.80
91	lJ	185	G	N7-C8-N9	11.16	118.68	113.10
96	lO	48	A	N7-C8-N9	11.16	119.38	113.80
73	l1	48	A	N7-C8-N9	11.15	119.38	113.80
78	l6	21	A	N7-C8-N9	11.15	119.37	113.80
96	lO	14	A	N7-C8-N9	11.15	119.37	113.80
93	lL	83	A	N7-C8-N9	11.14	119.37	113.80
90	lI	44	A	N7-C8-N9	11.14	119.37	113.80
76	l4	84	A	N7-C8-N9	11.14	119.37	113.80
83	lB	43	G	N7-C8-N9	11.14	118.67	113.10
72	l0	42	G	N7-C8-N9	11.14	118.67	113.10
91	lJ	20	A	N7-C8-N9	11.14	119.37	113.80
90	lI	36	A	N7-C8-N9	11.14	119.37	113.80
91	lJ	211	A	N7-C8-N9	11.14	119.37	113.80
75	l3	59	A	N7-C8-N9	11.14	119.37	113.80
96	lO	118	A	N7-C8-N9	11.14	119.37	113.80
87	lF	86	A	N7-C8-N9	11.13	119.37	113.80
93	lL	40	A	N7-C8-N9	11.13	119.37	113.80
93	lL	87	A	N7-C8-N9	11.14	119.37	113.80
96	lO	53	A	N7-C8-N9	11.13	119.37	113.80
91	lJ	165	G	N7-C8-N9	11.13	118.67	113.10
93	lL	48	A	N7-C8-N9	11.13	119.37	113.80
77	l5	40	G	N7-C8-N9	11.13	118.67	113.10
78	l6	43	A	N7-C8-N9	11.13	119.37	113.80
91	lJ	18	A	N7-C8-N9	11.13	119.37	113.80
96	lO	99	A	N1-C2-N3	11.13	134.87	129.30
96	lO	113	A	N7-C8-N9	11.13	119.36	113.80
76	l4	92	A	N7-C8-N9	11.13	119.36	113.80
79	l7	67	A	N7-C8-N9	11.13	119.36	113.80
83	lB	8	G	N7-C8-N9	11.13	118.66	113.10
93	lL	88	A	N7-C8-N9	11.12	119.36	113.80
74	l2	31	A	N7-C8-N9	11.12	119.36	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	43	G	N7-C8-N9	11.12	118.66	113.10
85	lD	4	A	N7-C8-N9	11.12	119.36	113.80
95	lN	42	A	N7-C8-N9	11.12	119.36	113.80
96	lO	17	G	N7-C8-N9	11.12	118.66	113.10
79	l7	54	G	N7-C8-N9	11.12	118.66	113.10
79	l7	69	A	N7-C8-N9	11.11	119.36	113.80
90	lI	40	A	N7-C8-N9	11.11	119.36	113.80
91	lJ	234	A	N7-C8-N9	11.12	119.36	113.80
86	lE	26	A	N7-C8-N9	11.11	119.36	113.80
91	lJ	252	A	N7-C8-N9	11.11	119.36	113.80
95	lN	27	A	N7-C8-N9	11.11	119.36	113.80
87	lF	24	G	N7-C8-N9	11.11	118.65	113.10
91	lJ	9	G	N7-C8-N9	11.11	118.65	113.10
93	lL	61	A	N7-C8-N9	11.11	119.35	113.80
96	lO	15	A	N7-C8-N9	11.11	119.35	113.80
96	lO	161	A	N7-C8-N9	11.11	119.35	113.80
73	l1	20	A	N7-C8-N9	11.11	119.35	113.80
79	l7	64	A	N7-C8-N9	11.10	119.35	113.80
86	lE	27	G	N7-C8-N9	11.10	118.65	113.10
96	lO	16	A	N7-C8-N9	11.10	119.35	113.80
90	lI	19	G	N7-C8-N9	11.10	118.65	113.10
95	lN	24	G	N7-C8-N9	11.10	118.65	113.10
75	l3	39	A	N7-C8-N9	11.10	119.35	113.80
76	l4	86	G	N7-C8-N9	11.10	118.65	113.10
96	lO	165	A	N7-C8-N9	11.09	119.35	113.80
92	lK	16	A	N7-C8-N9	11.09	119.34	113.80
79	l7	68	A	N7-C8-N9	11.08	119.34	113.80
83	lB	13	A	N7-C8-N9	11.08	119.34	113.80
96	lO	164	A	N7-C8-N9	11.08	119.34	113.80
96	lO	166	G	N7-C8-N9	11.08	118.64	113.10
90	lI	35	A	N7-C8-N9	11.08	119.34	113.80
74	l2	30	A	N7-C8-N9	11.07	119.34	113.80
86	lE	8	A	N7-C8-N9	11.07	119.34	113.80
78	l6	39	A	N7-C8-N9	11.07	119.33	113.80
81	l9	25	A	N7-C8-N9	11.07	119.33	113.80
91	lJ	127	A	N7-C8-N9	11.07	119.34	113.80
81	l9	56	G	N7-C8-N9	11.07	118.63	113.10
93	lL	66	A	N7-C8-N9	11.07	119.33	113.80
86	lE	3	G	N7-C8-N9	11.06	118.63	113.10
87	lF	20	A	N7-C8-N9	11.06	119.33	113.80
74	l2	20	A	N7-C8-N9	11.06	119.33	113.80
75	l3	35	A	N7-C8-N9	11.06	119.33	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
93	lL	49	G	N7-C8-N9	11.06	118.63	113.10
95	lN	31	A	N7-C8-N9	11.06	119.33	113.80
87	lF	85	A	N7-C8-N9	11.06	119.33	113.80
81	l9	81	A	N7-C8-N9	11.06	119.33	113.80
93	lL	60	G	N7-C8-N9	11.05	118.63	113.10
94	lM	77	A	N7-C8-N9	11.05	119.33	113.80
76	l4	54	A	N7-C8-N9	11.05	119.32	113.80
84	lC	25	A	N7-C8-N9	11.04	119.32	113.80
93	lL	82	A	N7-C8-N9	11.04	119.32	113.80
96	lO	42	A	N7-C8-N9	11.05	119.32	113.80
75	l3	8	A	N7-C8-N9	11.04	119.32	113.80
79	l7	49	G	N7-C8-N9	11.04	118.62	113.10
75	l3	60	A	N7-C8-N9	11.04	119.32	113.80
76	l4	85	A	N7-C8-N9	11.04	119.32	113.80
87	lF	13	A	N7-C8-N9	11.04	119.32	113.80
93	lL	86	A	N7-C8-N9	11.04	119.32	113.80
79	l7	58	A	N7-C8-N9	11.04	119.32	113.80
79	l7	60	A	N7-C8-N9	11.04	119.32	113.80
91	lJ	128	A	N7-C8-N9	11.03	119.32	113.80
93	lL	84	A	N7-C8-N9	11.03	119.31	113.80
89	lH	14	G	N7-C8-N9	11.03	118.61	113.10
93	lL	91	A	N7-C8-N9	11.03	119.31	113.80
94	lM	163	G	N7-C8-N9	11.03	118.61	113.10
95	lN	30	A	N7-C8-N9	11.03	119.31	113.80
94	lM	1	A	N7-C8-N9	11.03	119.31	113.80
94	lM	28	A	N7-C8-N9	11.03	119.31	113.80
96	lO	91	A	N7-C8-N9	11.03	119.31	113.80
91	lJ	193	A	N7-C8-N9	11.02	119.31	113.80
83	lB	31	G	N7-C8-N9	11.02	118.61	113.10
81	l9	18	A	N7-C8-N9	11.02	119.31	113.80
86	lE	29	A	N7-C8-N9	11.02	119.31	113.80
96	lO	45	A	N7-C8-N9	11.02	119.31	113.80
95	lN	33	A	N7-C8-N9	11.02	119.31	113.80
79	l7	22	A	N7-C8-N9	11.01	119.31	113.80
93	lL	41	A	N7-C8-N9	11.01	119.31	113.80
96	lO	108	G	N7-C8-N9	11.01	118.61	113.10
73	l1	4	G	N7-C8-N9	11.01	118.61	113.10
79	l7	59	A	N7-C8-N9	11.01	119.31	113.80
93	lL	73	A	N7-C8-N9	11.01	119.31	113.80
90	lI	21	A	N7-C8-N9	11.01	119.30	113.80
96	lO	40	A	N7-C8-N9	11.01	119.30	113.80
78	l6	41	A	N7-C8-N9	11.01	119.30	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
94	lM	31	A	N7-C8-N9	11.01	119.30	113.80
76	l4	58	A	N7-C8-N9	11.00	119.30	113.80
83	lB	32	A	N7-C8-N9	11.00	119.30	113.80
96	lO	162	A	N7-C8-N9	11.00	119.30	113.80
76	l4	52	A	N7-C8-N9	10.99	119.30	113.80
94	lM	83	A	N7-C8-N9	10.99	119.30	113.80
78	l6	42	A	N7-C8-N9	10.98	119.29	113.80
76	l4	53	A	N7-C8-N9	10.98	119.29	113.80
81	l9	46	A	N7-C8-N9	10.98	119.29	113.80
96	lO	55	A	N7-C8-N9	10.98	119.29	113.80
74	l2	29	A	N7-C8-N9	10.97	119.29	113.80
91	lJ	210	A	N7-C8-N9	10.97	119.29	113.80
94	lM	30	A	N7-C8-N9	10.97	119.29	113.80
78	l6	4	G	N7-C8-N9	10.97	118.59	113.10
92	lK	22	A	N7-C8-N9	10.97	119.29	113.80
91	lJ	125	G	N7-C8-N9	10.97	118.58	113.10
76	l4	33	A	N7-C8-N9	10.96	119.28	113.80
79	l7	66	A	N7-C8-N9	10.96	119.28	113.80
81	l9	45	A	N7-C8-N9	10.96	119.28	113.80
95	lN	1	A	N7-C8-N9	10.96	119.28	113.80
78	l6	40	A	N7-C8-N9	10.95	119.28	113.80
73	l1	8	A	N7-C8-N9	10.94	119.27	113.80
75	l3	52	A	N7-C8-N9	10.94	119.27	113.80
91	lJ	195	A	N7-C8-N9	10.94	119.27	113.80
76	l4	62	G	N7-C8-N9	10.93	118.57	113.10
96	lO	107	G	N7-C8-N9	10.92	118.56	113.10
74	l2	14	A	N7-C8-N9	10.92	119.26	113.80
76	l4	61	A	N7-C8-N9	10.92	119.26	113.80
91	lJ	196	A	N7-C8-N9	10.92	119.26	113.80
81	l9	58	G	N7-C8-N9	10.91	118.56	113.10
81	l9	63	A	N7-C8-N9	10.90	119.25	113.80
83	lB	33	A	N7-C8-N9	10.90	119.25	113.80
91	lJ	208	A	N7-C8-N9	10.89	119.25	113.80
90	lI	3	A	N7-C8-N9	10.89	119.25	113.80
93	lL	14	A	N7-C8-N9	10.89	119.25	113.80
96	lO	167	A	N7-C8-N9	10.89	119.25	113.80
76	l4	15	A	N7-C8-N9	10.89	119.24	113.80
91	lJ	230	A	N7-C8-N9	10.89	119.24	113.80
93	lL	77	G	N7-C8-N9	10.88	118.54	113.10
82	lA	48	A	N7-C8-N9	10.88	119.24	113.80
76	l4	26	A	N7-C8-N9	10.88	119.24	113.80
83	lB	44	G	N7-C8-N9	10.87	118.54	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	l9	39	G	N7-C8-N9	10.87	118.53	113.10
73	l1	49	A	N7-C8-N9	10.86	119.23	113.80
93	lL	85	A	N7-C8-N9	10.85	119.23	113.80
91	lJ	282	A	N7-C8-N9	10.85	119.22	113.80
81	l9	61	A	N7-C8-N9	10.83	119.21	113.80
83	lB	19	A	N7-C8-N9	10.81	119.21	113.80
96	lO	65	A	N7-C8-N9	10.80	119.20	113.80
96	lO	47	A	N7-C8-N9	10.79	119.20	113.80
83	lB	7	A	N7-C8-N9	10.78	119.19	113.80
76	l4	36	A	N7-C8-N9	10.76	119.18	113.80
83	lB	21	A	N7-C8-N9	10.76	119.18	113.80
94	lM	129	A	N7-C8-N9	10.76	119.18	113.80
81	l9	57	A	N7-C8-N9	10.73	119.16	113.80
96	lO	105	G	N7-C8-N9	10.72	118.46	113.10
88	lG	17	A	N7-C8-N9	10.71	119.15	113.80
94	lM	40	A	N1-C2-N3	10.70	134.65	129.30
76	l4	35	A	N7-C8-N9	10.67	119.14	113.80
81	l9	62	A	N7-C8-N9	10.54	119.07	113.80
91	lJ	146	A	N1-C6-N6	-10.54	112.28	118.60
94	lM	74	A	N1-C2-N3	10.43	134.51	129.30
94	lM	189	G	N3-C2-N2	-10.43	112.60	119.90
97	lP	4	U	C2-N3-C4	10.38	133.23	127.00
94	lM	74	A	N7-C8-N9	10.37	118.99	113.80
92	lK	35	A	N1-C6-N6	-10.34	112.40	118.60
94	lM	75	G	N7-C8-N9	10.32	118.26	113.10
95	lN	24	G	C6-N1-C2	10.27	131.26	125.10
97	lP	4	U	N3-C4-C5	-10.18	108.50	114.60
91	lJ	238	G	C6-N1-C2	10.17	131.21	125.10
91	lJ	188	U	C2-N3-C4	10.08	133.05	127.00
91	lJ	279	U	C2-N3-C4	10.06	133.04	127.00
79	l7	50	U	C2-N3-C4	10.04	133.02	127.00
81	l9	36	U	C2-N3-C4	10.03	133.02	127.00
76	l4	28	U	C2-N3-C4	10.02	133.01	127.00
78	l6	19	U	C2-N3-C4	10.01	133.01	127.00
96	lO	89	G	C6-N1-C2	9.98	131.09	125.10
96	lO	92	U	C2-N3-C4	9.98	132.99	127.00
91	lJ	274	U	C2-N3-C4	9.97	132.98	127.00
78	l6	18	U	C2-N3-C4	9.95	132.97	127.00
75	l3	10	U	C2-N3-C4	9.94	132.96	127.00
73	l1	6	U	C2-N3-C4	9.90	132.94	127.00
99	lR	20	U	C2-N3-C4	9.89	132.94	127.00
102	lU	4	U	C2-N3-C4	9.89	132.94	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
83	lB	16	U	C2-N3-C4	9.88	132.93	127.00
96	lO	152	U	C2-N3-C4	9.87	132.92	127.00
103	lV	6	U	C2-N3-C4	9.87	132.92	127.00
73	l1	26	A	O4'-C1'-N9	9.84	116.07	108.20
94	lM	39	G	N7-C8-N9	9.84	118.02	113.10
96	lO	32	U	C2-N3-C4	9.84	132.90	127.00
91	lJ	21	U	C2-N3-C4	9.84	132.90	127.00
81	l9	27	C	C6-N1-C2	-9.84	116.37	120.30
76	l4	44	U	C2-N3-C4	9.83	132.90	127.00
81	l9	60	U	C2-N3-C4	9.83	132.90	127.00
91	lJ	213	U	C2-N3-C4	9.83	132.90	127.00
99	lR	25	U	C2-N3-C4	9.82	132.89	127.00
97	lP	26	U	C2-N3-C4	9.82	132.89	127.00
97	lP	8	U	C2-N3-C4	9.82	132.89	127.00
96	lO	2	U	C2-N3-C4	9.81	132.88	127.00
91	lJ	248	U	C2-N3-C4	9.80	132.88	127.00
99	lR	22	U	C2-N3-C4	9.80	132.88	127.00
87	lF	18	U	C2-N3-C4	9.80	132.88	127.00
79	l7	23	U	C2-N3-C4	9.79	132.88	127.00
97	lP	9	U	C2-N3-C4	9.79	132.88	127.00
92	lK	29	U	C2-N3-C4	9.79	132.87	127.00
87	lF	30	U	C2-N3-C4	9.79	132.87	127.00
104	lX	35	U	C2-N3-C4	9.79	132.87	127.00
96	lO	12	U	C2-N3-C4	9.78	132.87	127.00
74	l2	4	U	C2-N3-C4	9.78	132.87	127.00
72	l0	39	U	C2-N3-C4	9.78	132.87	127.00
96	lO	102	U	C2-N3-C4	9.77	132.87	127.00
86	lE	22	U	C2-N3-C4	9.77	132.86	127.00
98	lQ	31	U	C2-N3-C4	9.77	132.86	127.00
96	lO	7	U	C2-N3-C4	9.77	132.86	127.00
81	l9	48	U	C2-N3-C4	9.76	132.86	127.00
73	l1	2	U	C2-N3-C4	9.76	132.86	127.00
76	l4	24	U	C2-N3-C4	9.76	132.86	127.00
94	lM	84	U	C2-N3-C4	9.76	132.86	127.00
101	lW	13	U	C2-N3-C4	9.76	132.86	127.00
76	l4	6	U	C2-N3-C4	9.75	132.85	127.00
79	l7	20	U	C2-N3-C4	9.75	132.85	127.00
91	lJ	167	U	C2-N3-C4	9.75	132.85	127.00
93	lL	3	G	C6-N1-C2	9.75	130.95	125.10
74	l2	5	U	C2-N3-C4	9.75	132.85	127.00
81	l9	14	U	C2-N3-C4	9.75	132.85	127.00
94	lM	124	U	C2-N3-C4	9.75	132.85	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
97	lP	29	U	C2-N3-C4	9.75	132.85	127.00
91	lJ	187	U	C2-N3-C4	9.74	132.85	127.00
96	lO	1	U	C2-N3-C4	9.74	132.84	127.00
97	lP	21	U	C2-N3-C4	9.74	132.85	127.00
98	lQ	14	U	C2-N3-C4	9.74	132.85	127.00
87	lF	11	U	C2-N3-C4	9.74	132.84	127.00
91	lJ	212	U	C2-N3-C4	9.74	132.84	127.00
76	l4	34	U	C2-N3-C4	9.74	132.84	127.00
91	lJ	17	U	C2-N3-C4	9.74	132.84	127.00
91	lJ	186	U	C2-N3-C4	9.74	132.84	127.00
76	l4	89	U	C2-N3-C4	9.73	132.84	127.00
91	lJ	183	U	C2-N3-C4	9.73	132.84	127.00
96	lO	35	U	C2-N3-C4	9.73	132.84	127.00
96	lO	37	U	C2-N3-C4	9.73	132.84	127.00
104	lX	51	U	C2-N3-C4	9.73	132.84	127.00
97	lP	22	U	C2-N3-C4	9.73	132.84	127.00
81	l9	41	U	C2-N3-C4	9.72	132.83	127.00
97	lP	28	U	C2-N3-C4	9.72	132.83	127.00
104	lX	52	U	C2-N3-C4	9.72	132.83	127.00
91	lJ	175	U	C2-N3-C4	9.72	132.83	127.00
99	lR	13	U	C2-N3-C4	9.72	132.83	127.00
91	lJ	192	U	C2-N3-C4	9.72	132.83	127.00
81	l9	11	U	C2-N3-C4	9.71	132.83	127.00
91	lJ	130	U	C2-N3-C4	9.72	132.83	127.00
99	lR	11	U	C2-N3-C4	9.72	132.83	127.00
87	lF	19	U	C2-N3-C4	9.71	132.83	127.00
95	lN	21	U	C2-N3-C4	9.71	132.83	127.00
91	lJ	229	G	C6-N1-C2	9.71	130.93	125.10
101	lW	14	U	C2-N3-C4	9.70	132.82	127.00
104	lX	50	U	C2-N3-C4	9.70	132.82	127.00
104	lX	58	U	C2-N3-C4	9.71	132.82	127.00
81	l9	28	U	C2-N3-C4	9.70	132.82	127.00
99	lR	10	U	C2-N3-C4	9.70	132.82	127.00
99	lR	15	U	C2-N3-C4	9.70	132.82	127.00
98	lQ	3	U	C2-N3-C4	9.70	132.82	127.00
87	lF	33	U	C2-N3-C4	9.70	132.82	127.00
93	lL	53	U	C2-N3-C4	9.70	132.82	127.00
99	lR	24	U	C2-N3-C4	9.70	132.82	127.00
98	lQ	7	U	C2-N3-C4	9.70	132.82	127.00
96	lO	56	U	C2-N3-C4	9.70	132.82	127.00
103	lV	3	U	C2-N3-C4	9.70	132.82	127.00
101	lW	12	U	C2-N3-C4	9.69	132.82	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
95	lN	28	U	C2-N3-C4	9.69	132.81	127.00
96	lO	57	U	C2-N3-C4	9.69	132.81	127.00
98	lQ	6	U	C2-N3-C4	9.69	132.82	127.00
98	lQ	13	U	C2-N3-C4	9.69	132.82	127.00
98	lQ	27	U	C2-N3-C4	9.69	132.82	127.00
76	l4	25	U	C2-N3-C4	9.69	132.81	127.00
76	l4	14	U	C2-N3-C4	9.68	132.81	127.00
104	lX	14	U	C2-N3-C4	9.68	132.81	127.00
99	lR	23	U	C2-N3-C4	9.68	132.81	127.00
99	lR	27	U	C2-N3-C4	9.68	132.81	127.00
101	lT	2	U	C2-N3-C4	9.68	132.81	127.00
97	lP	23	U	C2-N3-C4	9.67	132.80	127.00
98	lQ	12	U	C2-N3-C4	9.67	132.80	127.00
102	lU	5	U	C2-N3-C4	9.67	132.80	127.00
87	lF	77	U	C2-N3-C4	9.67	132.80	127.00
93	lL	37	U	C2-N3-C4	9.67	132.80	127.00
94	lM	91	U	C2-N3-C4	9.67	132.80	127.00
99	lR	2	U	C2-N3-C4	9.67	132.80	127.00
101	lW	11	U	C2-N3-C4	9.67	132.80	127.00
104	lX	1	U	C2-N3-C4	9.67	132.80	127.00
77	l5	33	U	C2-N3-C4	9.67	132.80	127.00
91	lJ	49	U	C2-N3-C4	9.67	132.80	127.00
97	lP	3	U	C2-N3-C4	9.67	132.80	127.00
97	lP	24	U	C2-N3-C4	9.67	132.80	127.00
97	lP	27	U	C2-N3-C4	9.67	132.80	127.00
99	lR	14	U	C2-N3-C4	9.67	132.80	127.00
99	lR	18	U	C2-N3-C4	9.67	132.80	127.00
104	lX	6	U	C2-N3-C4	9.67	132.80	127.00
76	l4	23	U	C2-N3-C4	9.66	132.80	127.00
96	lO	141	U	C2-N3-C4	9.66	132.80	127.00
97	lP	25	U	C2-N3-C4	9.66	132.80	127.00
81	l9	33	U	C2-N3-C4	9.66	132.80	127.00
104	lX	33	U	C2-N3-C4	9.66	132.80	127.00
87	lF	10	U	C2-N3-C4	9.65	132.79	127.00
102	lU	10	U	C2-N3-C4	9.65	132.79	127.00
91	lJ	181	U	C2-N3-C4	9.65	132.79	127.00
76	l4	48	G	C6-N1-C2	9.65	130.89	125.10
91	lJ	15	U	C2-N3-C4	9.65	132.79	127.00
91	lJ	138	G	C6-N1-C2	9.65	130.89	125.10
96	lO	10	U	C2-N3-C4	9.65	132.79	127.00
98	lQ	15	U	C2-N3-C4	9.65	132.79	127.00
75	l3	34	U	C2-N3-C4	9.64	132.78	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	10	U	C2-N3-C4	9.64	132.78	127.00
104	lX	2	U	C2-N3-C4	9.64	132.78	127.00
75	l3	11	U	C2-N3-C4	9.64	132.78	127.00
79	l7	40	U	C2-N3-C4	9.64	132.78	127.00
98	lQ	5	U	C2-N3-C4	9.64	132.78	127.00
87	lF	66	U	C2-N3-C4	9.64	132.78	127.00
91	lJ	136	U	C2-N3-C4	9.64	132.78	127.00
91	lJ	202	U	C2-N3-C4	9.63	132.78	127.00
73	l1	14	U	C2-N3-C4	9.63	132.78	127.00
76	l4	51	U	C2-N3-C4	9.63	132.78	127.00
76	l4	4	U	C2-N3-C4	9.63	132.78	127.00
91	lJ	16	G	C6-N1-C2	9.63	130.88	125.10
96	lO	39	U	C2-N3-C4	9.63	132.78	127.00
99	lR	1	U	C2-N3-C4	9.63	132.78	127.00
93	lL	33	U	C2-N3-C4	9.63	132.78	127.00
83	lB	24	U	C2-N3-C4	9.62	132.78	127.00
94	lM	29	U	C2-N3-C4	9.63	132.78	127.00
73	l1	1	U	C2-N3-C4	9.62	132.77	127.00
83	lB	18	U	C2-N3-C4	9.62	132.77	127.00
96	lO	41	U	C2-N3-C4	9.62	132.77	127.00
96	lO	78	A	N1-C6-N6	-9.62	112.83	118.60
101	lT	14	U	C2-N3-C4	9.62	132.77	127.00
102	lU	1	U	C2-N3-C4	9.62	132.77	127.00
93	lL	43	U	C2-N3-C4	9.62	132.77	127.00
99	lR	28	U	C2-N3-C4	9.62	132.77	127.00
94	lM	2	U	C2-N3-C4	9.62	132.77	127.00
96	lO	140	U	C2-N3-C4	9.62	132.77	127.00
99	lR	19	U	C2-N3-C4	9.62	132.77	127.00
94	lM	197	U	C2-N3-C4	9.62	132.77	127.00
102	lU	2	U	C2-N3-C4	9.61	132.77	127.00
74	l2	25	U	C2-N3-C4	9.61	132.77	127.00
86	lE	21	U	C2-N3-C4	9.61	132.77	127.00
87	lF	21	U	C2-N3-C4	9.61	132.77	127.00
104	lX	53	U	C2-N3-C4	9.61	132.77	127.00
91	lJ	157	U	C2-N3-C4	9.61	132.77	127.00
99	lR	21	U	C2-N3-C4	9.61	132.77	127.00
95	lN	25	U	C2-N3-C4	9.61	132.76	127.00
96	lO	68	U	C2-N3-C4	9.60	132.76	127.00
103	lV	5	U	C2-N3-C4	9.60	132.76	127.00
87	lF	67	U	C2-N3-C4	9.60	132.76	127.00
98	lQ	28	U	C2-N3-C4	9.60	132.76	127.00
103	lV	7	U	C2-N3-C4	9.60	132.76	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	113	G	C6-N1-C2	9.60	130.86	125.10
91	lJ	207	U	C2-N3-C4	9.60	132.76	127.00
103	lV	4	U	C2-N3-C4	9.60	132.76	127.00
99	lR	17	U	C2-N3-C4	9.59	132.76	127.00
96	lO	154	U	C2-N3-C4	9.59	132.75	127.00
99	lR	12	U	C2-N3-C4	9.59	132.75	127.00
101	lW	10	U	C2-N3-C4	9.59	132.75	127.00
81	l9	64	U	C2-N3-C4	9.58	132.75	127.00
91	lJ	101	U	C2-N3-C4	9.58	132.75	127.00
104	lX	7	U	C2-N3-C4	9.58	132.75	127.00
87	lF	23	U	C2-N3-C4	9.58	132.75	127.00
91	lJ	141	U	C2-N3-C4	9.58	132.75	127.00
93	lL	49	G	C6-N1-C2	9.58	130.85	125.10
93	lL	68	U	C2-N3-C4	9.58	132.75	127.00
96	lO	116	U	C2-N3-C4	9.58	132.75	127.00
101	lT	4	U	C2-N3-C4	9.58	132.75	127.00
96	lO	142	U	C2-N3-C4	9.57	132.75	127.00
102	lU	15	U	C2-N3-C4	9.57	132.74	127.00
79	l7	6	U	C2-N3-C4	9.57	132.74	127.00
97	lP	7	U	C2-N3-C4	9.57	132.74	127.00
98	lQ	11	U	C2-N3-C4	9.57	132.74	127.00
101	lT	3	U	C2-N3-C4	9.57	132.74	127.00
85	lD	8	U	C2-N3-C4	9.56	132.74	127.00
76	l4	47	U	C2-N3-C4	9.56	132.74	127.00
77	l5	34	G	C6-N1-C2	9.56	130.84	125.10
77	l5	44	U	C2-N3-C4	9.56	132.74	127.00
91	lJ	147	U	C2-N3-C4	9.56	132.74	127.00
96	lO	107	G	C6-N1-C2	9.56	130.84	125.10
79	l7	7	U	C2-N3-C4	9.56	132.73	127.00
101	lT	1	U	C2-N3-C4	9.55	132.73	127.00
74	l2	6	U	C2-N3-C4	9.55	132.73	127.00
81	l9	55	U	C2-N3-C4	9.55	132.73	127.00
91	lJ	164	U	C2-N3-C4	9.55	132.73	127.00
94	lM	123	U	C2-N3-C4	9.55	132.73	127.00
96	lO	46	U	C2-N3-C4	9.55	132.73	127.00
91	lJ	199	U	C2-N3-C4	9.55	132.73	127.00
98	lQ	16	U	C2-N3-C4	9.55	132.73	127.00
85	lD	2	U	C2-N3-C4	9.55	132.73	127.00
90	lI	22	G	C6-N1-C2	9.55	130.83	125.10
82	lA	19	U	C2-N3-C4	9.54	132.72	127.00
91	lJ	198	U	C2-N3-C4	9.54	132.72	127.00
93	lL	1	U	C2-N3-C4	9.54	132.72	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	143	U	C2-N3-C4	9.54	132.72	127.00
91	lJ	176	U	C2-N3-C4	9.54	132.72	127.00
76	l4	20	G	C6-N1-C2	9.54	130.82	125.10
82	lA	9	U	C2-N3-C4	9.54	132.72	127.00
97	lP	1	U	C2-N3-C4	9.54	132.72	127.00
77	l5	41	U	C2-N3-C4	9.53	132.72	127.00
78	l6	50	A	N1-C6-N6	-9.53	112.88	118.60
81	l9	5	A	N1-C2-N3	9.53	134.06	129.30
87	lF	15	U	C2-N3-C4	9.53	132.72	127.00
91	lJ	163	U	C2-N3-C4	9.53	132.72	127.00
91	lJ	231	U	C2-N3-C4	9.53	132.72	127.00
96	lO	98	U	C2-N3-C4	9.52	132.71	127.00
75	l3	53	G	C6-N1-C2	9.52	130.81	125.10
77	l5	31	U	C2-N3-C4	9.52	132.71	127.00
91	lJ	182	G	C6-N1-C2	9.52	130.81	125.10
79	l7	53	U	C2-N3-C4	9.52	132.71	127.00
96	lO	110	U	C2-N3-C4	9.52	132.71	127.00
76	l4	62	G	C6-N1-C2	9.52	130.81	125.10
94	lM	148	U	C2-N3-C4	9.52	132.71	127.00
72	l0	37	G	C6-N1-C2	9.52	130.81	125.10
87	lF	16	U	C2-N3-C4	9.52	132.71	127.00
77	l5	30	U	C2-N3-C4	9.51	132.71	127.00
78	l6	27	U	C2-N3-C4	9.51	132.71	127.00
90	lI	5	G	C6-N1-C2	9.51	130.81	125.10
103	lV	2	U	C2-N3-C4	9.51	132.71	127.00
98	lQ	29	U	C2-N3-C4	9.51	132.70	127.00
104	lX	34	U	C2-N3-C4	9.51	132.70	127.00
81	l9	24	G	C6-N1-C2	9.50	130.80	125.10
96	lO	156	U	C2-N3-C4	9.50	132.70	127.00
74	l2	22	U	C2-N3-C4	9.50	132.70	127.00
98	lQ	4	U	C2-N3-C4	9.50	132.70	127.00
78	l6	22	G	C6-N1-C2	9.50	130.80	125.10
91	lJ	125	G	C6-N1-C2	9.50	130.80	125.10
83	lB	22	G	C6-N1-C2	9.50	130.80	125.10
87	lF	24	G	C6-N1-C2	9.50	130.80	125.10
98	lQ	30	U	C2-N3-C4	9.50	132.70	127.00
93	lL	62	U	C2-N3-C4	9.49	132.70	127.00
76	l4	13	U	C2-N3-C4	9.49	132.69	127.00
89	lH	6	G	C6-N1-C2	9.49	130.80	125.10
74	l2	7	G	C6-N1-C2	9.49	130.79	125.10
79	l7	15	U	C2-N3-C4	9.49	132.69	127.00
81	l9	38	U	C2-N3-C4	9.49	132.69	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
102	lU	3	U	C2-N3-C4	9.49	132.69	127.00
81	l9	73	G	C6-N1-C2	9.48	130.79	125.10
93	lL	77	G	C6-N1-C2	9.48	130.79	125.10
76	l4	93	U	C2-N3-C4	9.48	132.69	127.00
94	lM	143	U	C2-N3-C4	9.48	132.69	127.00
93	lL	39	G	C6-N1-C2	9.48	130.78	125.10
95	lN	41	G	C6-N1-C2	9.48	130.79	125.10
75	l3	47	U	C2-N3-C4	9.47	132.69	127.00
73	l1	5	U	C2-N3-C4	9.47	132.68	127.00
87	lF	78	U	C2-N3-C4	9.47	132.68	127.00
87	lF	29	G	C6-N1-C2	9.47	130.78	125.10
95	lN	23	U	C2-N3-C4	9.46	132.68	127.00
75	l3	51	G	C6-N1-C2	9.46	130.78	125.10
91	lJ	135	G	C6-N1-C2	9.46	130.78	125.10
73	l1	4	G	C6-N1-C2	9.46	130.78	125.10
94	lM	26	G	C6-N1-C2	9.46	130.77	125.10
94	lM	165	G	C6-N1-C2	9.46	130.77	125.10
96	lO	8	G	C6-N1-C2	9.46	130.78	125.10
83	lB	31	G	C6-N1-C2	9.45	130.77	125.10
79	l7	42	U	C2-N3-C4	9.45	132.67	127.00
91	lJ	217	U	C2-N3-C4	9.45	132.67	127.00
75	l3	13	U	C2-N3-C4	9.45	132.67	127.00
76	l4	3	U	C2-N3-C4	9.45	132.67	127.00
83	lB	8	G	C6-N1-C2	9.45	130.77	125.10
81	l9	8	U	C2-N3-C4	9.44	132.67	127.00
91	lJ	112	G	C6-N1-C2	9.45	130.77	125.10
72	l0	18	G	C6-N1-C2	9.44	130.77	125.10
81	l9	51	G	C6-N1-C2	9.44	130.76	125.10
94	lM	27	G	C6-N1-C2	9.44	130.76	125.10
75	l3	38	G	C6-N1-C2	9.44	130.76	125.10
81	l9	56	G	C6-N1-C2	9.44	130.76	125.10
92	lK	14	G	C6-N1-C2	9.43	130.76	125.10
93	lL	63	U	C2-N3-C4	9.43	132.66	127.00
101	lT	5	U	C2-N3-C4	9.43	132.66	127.00
91	lJ	173	U	C2-N3-C4	9.43	132.66	127.00
95	lN	40	U	C2-N3-C4	9.43	132.66	127.00
96	lO	33	G	C6-N1-C2	9.43	130.76	125.10
73	l1	13	G	C6-N1-C2	9.43	130.75	125.10
75	l3	37	U	C2-N3-C4	9.42	132.65	127.00
88	lG	18	G	C6-N1-C2	9.42	130.75	125.10
93	lL	65	U	C2-N3-C4	9.42	132.65	127.00
79	l7	52	G	C6-N1-C2	9.42	130.75	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	lE	7	G	C6-N1-C2	9.42	130.75	125.10
93	lL	60	G	C6-N1-C2	9.42	130.75	125.10
85	lD	3	U	C2-N3-C4	9.41	132.65	127.00
86	lE	3	G	C6-N1-C2	9.41	130.75	125.10
91	lJ	165	G	C6-N1-C2	9.41	130.75	125.10
73	l1	12	U	C2-N3-C4	9.41	132.65	127.00
76	l4	63	U	C2-N3-C4	9.41	132.65	127.00
79	l7	49	G	C6-N1-C2	9.41	130.75	125.10
96	lO	17	G	C6-N1-C2	9.41	130.75	125.10
90	lI	17	G	C6-N1-C2	9.41	130.74	125.10
91	lJ	5	G	C6-N1-C2	9.41	130.74	125.10
76	l4	59	G	C6-N1-C2	9.40	130.74	125.10
84	lC	26	G	C6-N1-C2	9.40	130.74	125.10
72	l0	42	G	C6-N1-C2	9.40	130.74	125.10
81	l9	39	G	C6-N1-C2	9.40	130.74	125.10
91	lJ	251	G	C6-N1-C2	9.40	130.74	125.10
89	lH	17	G	C6-N1-C2	9.40	130.74	125.10
96	lO	90	G	C6-N1-C2	9.40	130.74	125.10
76	l4	60	G	C6-N1-C2	9.39	130.74	125.10
93	lL	67	U	C2-N3-C4	9.39	132.64	127.00
91	lJ	203	G	C6-N1-C2	9.39	130.74	125.10
78	l6	20	G	C6-N1-C2	9.39	130.73	125.10
95	lN	35	G	C6-N1-C2	9.39	130.73	125.10
91	lJ	279	U	N3-C4-C5	-9.39	108.97	114.60
83	lB	4	G	C6-N1-C2	9.38	130.73	125.10
91	lJ	139	G	C6-N1-C2	9.38	130.73	125.10
93	lL	38	G	C6-N1-C2	9.38	130.73	125.10
96	lO	43	G	C6-N1-C2	9.38	130.73	125.10
76	l4	86	G	C6-N1-C2	9.38	130.73	125.10
94	lM	163	G	C6-N1-C2	9.38	130.73	125.10
76	l4	57	G	C6-N1-C2	9.38	130.73	125.10
96	lO	96	U	C2-N3-C4	9.38	132.63	127.00
59	Lw	108	PRO	CA-N-CD	-9.38	98.37	111.50
91	lJ	233	G	C6-N1-C2	9.38	130.73	125.10
96	lO	139	G	C6-N1-C2	9.38	130.72	125.10
90	lI	18	G	C6-N1-C2	9.37	130.72	125.10
91	lJ	188	U	N3-C4-C5	-9.37	108.98	114.60
87	lF	14	G	C6-N1-C2	9.37	130.72	125.10
74	l2	3	G	C6-N1-C2	9.37	130.72	125.10
76	l4	43	G	C6-N1-C2	9.37	130.72	125.10
82	lA	20	G	C6-N1-C2	9.37	130.72	125.10
91	lJ	140	G	C6-N1-C2	9.37	130.72	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
94	lM	89	G	C6-N1-C2	9.36	130.72	125.10
82	lA	50	G	C6-N1-C2	9.36	130.72	125.10
88	lG	10	G	C6-N1-C2	9.36	130.72	125.10
87	lF	34	G	C6-N1-C2	9.36	130.72	125.10
73	l1	7	G	C6-N1-C2	9.36	130.72	125.10
81	l9	74	G	C6-N1-C2	9.36	130.72	125.10
96	lO	163	G	C6-N1-C2	9.36	130.72	125.10
76	l4	67	G	C6-N1-C2	9.36	130.71	125.10
96	lO	44	U	C2-N3-C4	9.36	132.61	127.00
77	l5	35	U	C2-N3-C4	9.35	132.61	127.00
90	lI	19	G	C6-N1-C2	9.35	130.71	125.10
91	lJ	170	G	C6-N1-C2	9.35	130.71	125.10
96	lO	71	G	C6-N1-C2	9.35	130.71	125.10
81	l9	54	G	C6-N1-C2	9.35	130.71	125.10
83	lB	42	G	C6-N1-C2	9.35	130.71	125.10
89	lH	14	G	C6-N1-C2	9.35	130.71	125.10
94	lM	122	G	C6-N1-C2	9.35	130.71	125.10
77	l5	32	G	C6-N1-C2	9.35	130.71	125.10
77	l5	40	G	C6-N1-C2	9.34	130.71	125.10
94	lM	34	G	C6-N1-C2	9.34	130.71	125.10
91	lJ	198	U	N3-C4-C5	-9.34	109.00	114.60
91	lJ	102	G	C6-N1-C2	9.34	130.70	125.10
94	lM	25	G	C6-N1-C2	9.34	130.70	125.10
96	lO	108	G	C6-N1-C2	9.33	130.70	125.10
83	lB	40	G	C6-N1-C2	9.33	130.70	125.10
91	lJ	226	G	C6-N1-C2	9.33	130.70	125.10
93	lL	32	G	C6-N1-C2	9.33	130.70	125.10
96	lO	138	G	C6-N1-C2	9.33	130.70	125.10
96	lO	166	G	C6-N1-C2	9.33	130.70	125.10
74	l2	15	G	C6-N1-C2	9.33	130.70	125.10
79	l7	55	G	C6-N1-C2	9.33	130.70	125.10
81	l9	47	G	C6-N1-C2	9.32	130.69	125.10
86	lE	27	G	C6-N1-C2	9.32	130.69	125.10
93	lL	64	G	C6-N1-C2	9.32	130.69	125.10
86	lE	5	G	C6-N1-C2	9.31	130.69	125.10
91	lJ	124	G	C6-N1-C2	9.31	130.69	125.10
91	lJ	190	U	C2-N3-C4	9.31	132.59	127.00
87	lF	64	G	C6-N1-C2	9.31	130.68	125.10
91	lJ	118	A	N1-C6-N6	-9.30	113.02	118.60
91	lJ	156	G	C6-N1-C2	9.30	130.68	125.10
91	lJ	209	G	C6-N1-C2	9.30	130.68	125.10
91	lJ	185	G	C6-N1-C2	9.30	130.68	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	69	G	C6-N1-C2	9.29	130.68	125.10
83	lB	43	G	C6-N1-C2	9.29	130.68	125.10
91	lJ	261	A	N1-C6-N6	-9.29	113.03	118.60
94	lM	156	G	C6-N1-C2	9.28	130.67	125.10
94	lM	149	G	C6-N1-C2	9.28	130.67	125.10
76	l4	32	G	C6-N1-C2	9.27	130.66	125.10
82	lA	49	G	C6-N1-C2	9.27	130.66	125.10
91	lJ	166	G	C6-N1-C2	9.27	130.66	125.10
74	l2	21	G	C6-N1-C2	9.27	130.66	125.10
94	lM	40	A	N7-C8-N9	9.27	118.43	113.80
96	lO	103	U	C2-N3-C4	9.26	132.56	127.00
83	lB	44	G	C6-N1-C2	9.26	130.66	125.10
96	lO	31	G	C6-N1-C2	9.26	130.65	125.10
78	l6	24	G	C6-N1-C2	9.25	130.65	125.10
76	l4	27	G	C6-N1-C2	9.24	130.65	125.10
91	lJ	49	U	N3-C4-C5	-9.24	109.06	114.60
87	lF	17	G	C6-N1-C2	9.23	130.64	125.10
81	l9	28	U	N3-C4-C5	-9.22	109.07	114.60
91	lJ	274	U	N3-C4-C5	-9.22	109.07	114.60
96	lO	152	U	N3-C4-C5	-9.22	109.07	114.60
90	lI	47	A	N1-C2-N3	9.21	133.91	129.30
96	lO	115	G	C6-N1-C2	9.21	130.63	125.10
90	lI	4	G	C6-N1-C2	9.21	130.62	125.10
99	lR	2	U	N3-C4-C5	-9.19	109.08	114.60
93	lL	62	U	N3-C4-C5	-9.19	109.09	114.60
102	lU	10	U	N3-C4-C5	-9.19	109.09	114.60
96	lO	92	U	N3-C4-C5	-9.18	109.09	114.60
78	l6	19	U	N3-C4-C5	-9.18	109.09	114.60
91	lJ	275	U	C2-N3-C4	9.18	132.50	127.00
91	lJ	253	C	C6-N1-C2	-9.17	116.63	120.30
94	lM	72	U	C2-N3-C4	9.17	132.50	127.00
79	l7	20	U	N3-C4-C5	-9.17	109.10	114.60
73	l1	36	G	C6-N1-C2	9.15	130.59	125.10
91	lJ	176	U	N3-C4-C5	-9.15	109.11	114.60
84	lC	20	A	N1-C6-N6	-9.15	113.11	118.60
76	l4	28	U	N3-C4-C5	-9.15	109.11	114.60
91	lJ	199	U	N3-C4-C5	-9.15	109.11	114.60
78	l6	18	U	N3-C4-C5	-9.14	109.11	114.60
94	lM	95	U	C2-N3-C4	9.14	132.49	127.00
81	l9	36	U	N3-C4-C5	-9.14	109.12	114.60
75	l3	25	U	C2-N3-C4	9.13	132.48	127.00
74	l2	25	U	N3-C4-C5	-9.13	109.12	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	34	A	N1-C6-N6	-9.13	113.12	118.60
91	lJ	175	U	N3-C4-C5	-9.13	109.12	114.60
82	lA	1	G	C6-N1-C2	9.13	130.58	125.10
94	lM	162	U	C2-N3-C4	9.12	132.47	127.00
93	lL	2	G	C6-N1-C2	9.11	130.56	125.10
81	l9	5	A	N7-C8-N9	9.11	118.35	113.80
96	lO	32	U	N3-C4-C5	-9.11	109.14	114.60
81	l9	64	U	N3-C4-C5	-9.09	109.15	114.60
90	lI	49	A	N1-C2-N3	9.09	133.84	129.30
96	lO	105	G	C6-N1-C2	9.09	130.55	125.10
76	l4	5	U	C2-N3-C4	9.09	132.45	127.00
79	l7	50	U	N3-C4-C5	-9.08	109.15	114.60
96	lO	85	U	C2-N3-C4	9.07	132.44	127.00
96	lO	154	U	N3-C4-C5	-9.06	109.16	114.60
97	lP	9	U	N3-C4-C5	-9.05	109.17	114.60
78	l6	4	G	C6-N1-C2	9.05	130.53	125.10
76	l4	23	U	N3-C4-C5	-9.05	109.17	114.60
98	lQ	7	U	N3-C4-C5	-9.05	109.17	114.60
91	lJ	43	C	C6-N1-C2	-9.05	116.68	120.30
81	l9	58	G	C6-N1-C2	9.04	130.53	125.10
99	lR	10	U	N3-C4-C5	-9.04	109.18	114.60
93	lL	53	U	N3-C4-C5	-9.03	109.18	114.60
83	lB	16	U	N3-C4-C5	-9.02	109.19	114.60
99	lR	1	U	N3-C4-C5	-9.02	109.19	114.60
86	lE	22	U	N3-C4-C5	-9.02	109.19	114.60
102	lU	1	U	N3-C4-C5	-9.02	109.19	114.60
91	lJ	21	U	N3-C4-C5	-9.02	109.19	114.60
96	lO	160	G	C6-N1-C2	9.01	130.51	125.10
77	l5	33	U	N3-C4-C5	-9.01	109.19	114.60
96	lO	7	U	N3-C4-C5	-9.00	109.20	114.60
98	lQ	11	U	N3-C4-C5	-9.00	109.20	114.60
94	lM	14	A	N1-C6-N6	-9.00	113.20	118.60
101	lW	12	U	N3-C4-C5	-9.00	109.20	114.60
86	lE	21	U	N3-C4-C5	-8.99	109.20	114.60
77	l5	60	G	C6-N1-C2	8.99	130.49	125.10
98	lQ	13	U	N3-C4-C5	-8.99	109.21	114.60
101	lW	11	U	N3-C4-C5	-8.99	109.21	114.60
96	lO	96	U	N3-C4-C5	-8.98	109.21	114.60
93	lL	1	U	N3-C4-C5	-8.98	109.21	114.60
102	lU	4	U	N3-C4-C5	-8.98	109.21	114.60
81	l9	60	U	N3-C4-C5	-8.98	109.22	114.60
73	l1	6	U	N3-C4-C5	-8.97	109.22	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	54	G	C6-N1-C2	8.97	130.48	125.10
91	lJ	147	U	N3-C4-C5	-8.97	109.22	114.60
104	lX	6	U	N3-C4-C5	-8.97	109.22	114.60
97	lP	8	U	N3-C4-C5	-8.97	109.22	114.60
101	lT	1	U	N3-C4-C5	-8.97	109.22	114.60
91	lJ	167	U	N3-C4-C5	-8.96	109.22	114.60
96	lO	57	U	N3-C4-C5	-8.96	109.22	114.60
97	lP	26	U	N3-C4-C5	-8.96	109.22	114.60
76	l4	89	U	N3-C4-C5	-8.96	109.22	114.60
95	lN	28	U	N3-C4-C5	-8.96	109.22	114.60
81	l9	66	G	C6-N1-C2	8.96	130.47	125.10
91	lJ	157	U	N3-C4-C5	-8.96	109.22	114.60
95	lN	21	U	N3-C4-C5	-8.96	109.22	114.60
91	lJ	84	A	N1-C6-N6	-8.96	113.23	118.60
93	lL	65	U	N3-C4-C5	-8.96	109.23	114.60
74	l2	4	U	N3-C4-C5	-8.95	109.23	114.60
94	lM	29	U	N3-C4-C5	-8.95	109.23	114.60
99	lR	20	U	N3-C4-C5	-8.95	109.23	114.60
76	l4	34	U	N3-C4-C5	-8.95	109.23	114.60
96	lO	102	U	N3-C4-C5	-8.94	109.23	114.60
103	lV	6	U	N3-C4-C5	-8.94	109.23	114.60
91	lJ	254	C	C6-N1-C2	-8.94	116.72	120.30
96	lO	2	U	N3-C4-C5	-8.94	109.23	114.60
104	lX	7	U	N3-C4-C5	-8.94	109.24	114.60
91	lJ	213	U	N3-C4-C5	-8.94	109.24	114.60
101	lT	4	U	N3-C4-C5	-8.94	109.24	114.60
102	lU	5	U	N3-C4-C5	-8.94	109.24	114.60
72	l0	39	U	N3-C4-C5	-8.94	109.24	114.60
87	lF	77	U	N3-C4-C5	-8.94	109.24	114.60
91	lJ	248	U	N3-C4-C5	-8.93	109.24	114.60
104	lX	33	U	N3-C4-C5	-8.93	109.24	114.60
81	l9	14	U	N3-C4-C5	-8.93	109.24	114.60
99	lR	28	U	N3-C4-C5	-8.93	109.24	114.60
96	lO	1	U	N3-C4-C5	-8.93	109.25	114.60
91	lJ	136	U	N3-C4-C5	-8.92	109.25	114.60
91	lJ	164	U	N3-C4-C5	-8.92	109.25	114.60
76	l4	47	U	N3-C4-C5	-8.92	109.25	114.60
81	l9	11	U	N3-C4-C5	-8.92	109.25	114.60
97	lP	23	U	N3-C4-C5	-8.92	109.25	114.60
104	lX	52	U	N3-C4-C5	-8.92	109.25	114.60
91	lJ	183	U	N3-C4-C5	-8.92	109.25	114.60
93	lL	37	U	N3-C4-C5	-8.92	109.25	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
98	lQ	4	U	N3-C4-C5	-8.92	109.25	114.60
75	l3	11	U	N3-C4-C5	-8.91	109.25	114.60
87	lF	67	U	N3-C4-C5	-8.91	109.25	114.60
94	lM	91	U	N3-C4-C5	-8.91	109.25	114.60
91	lJ	17	U	N3-C4-C5	-8.91	109.25	114.60
81	l9	48	U	N3-C4-C5	-8.91	109.25	114.60
87	lF	18	U	N3-C4-C5	-8.91	109.25	114.60
97	lP	28	U	N3-C4-C5	-8.91	109.25	114.60
82	lA	9	U	N3-C4-C5	-8.91	109.25	114.60
87	lF	30	U	N3-C4-C5	-8.91	109.26	114.60
91	lJ	15	U	N3-C4-C5	-8.91	109.26	114.60
79	l7	23	U	N3-C4-C5	-8.90	109.26	114.60
79	l7	40	U	N3-C4-C5	-8.90	109.26	114.60
91	lJ	163	U	N3-C4-C5	-8.90	109.26	114.60
73	l1	2	U	N3-C4-C5	-8.90	109.26	114.60
87	lF	10	U	N3-C4-C5	-8.90	109.26	114.60
96	lO	141	U	N3-C4-C5	-8.89	109.26	114.60
98	lQ	31	U	N3-C4-C5	-8.89	109.26	114.60
104	lX	58	U	N3-C4-C5	-8.89	109.26	114.60
76	l4	44	U	N3-C4-C5	-8.89	109.27	114.60
87	lF	66	U	N3-C4-C5	-8.89	109.27	114.60
91	lJ	141	U	N3-C4-C5	-8.89	109.27	114.60
96	lO	68	U	N3-C4-C5	-8.89	109.27	114.60
76	l4	24	U	N3-C4-C5	-8.89	109.27	114.60
91	lJ	101	U	N3-C4-C5	-8.89	109.27	114.60
99	lR	12	U	N3-C4-C5	-8.89	109.27	114.60
92	lK	29	U	N3-C4-C5	-8.89	109.27	114.60
104	lX	35	U	N3-C4-C5	-8.89	109.27	114.60
91	lJ	130	U	N3-C4-C5	-8.88	109.27	114.60
91	lJ	231	U	N3-C4-C5	-8.88	109.27	114.60
104	lX	50	U	N3-C4-C5	-8.89	109.27	114.60
76	l4	93	U	N3-C4-C5	-8.88	109.27	114.60
91	lJ	202	U	N3-C4-C5	-8.88	109.27	114.60
94	lM	124	U	N3-C4-C5	-8.88	109.27	114.60
101	lT	14	U	N3-C4-C5	-8.88	109.27	114.60
98	lQ	6	U	N3-C4-C5	-8.88	109.27	114.60
99	lR	19	U	N3-C4-C5	-8.88	109.27	114.60
76	l4	25	U	N3-C4-C5	-8.88	109.28	114.60
91	lJ	275	U	N3-C4-C5	-8.88	109.28	114.60
97	lP	24	U	N3-C4-C5	-8.88	109.28	114.60
99	lR	13	U	N3-C4-C5	-8.87	109.28	114.60
101	lW	14	U	N3-C4-C5	-8.87	109.28	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	186	U	N3-C4-C5	-8.87	109.28	114.60
78	l6	27	U	N3-C4-C5	-8.87	109.28	114.60
91	lJ	181	U	N3-C4-C5	-8.87	109.28	114.60
98	lQ	12	U	N3-C4-C5	-8.87	109.28	114.60
91	lJ	192	U	N3-C4-C5	-8.87	109.28	114.60
96	lO	37	U	N3-C4-C5	-8.87	109.28	114.60
98	lQ	14	U	N3-C4-C5	-8.87	109.28	114.60
75	l3	10	U	N3-C4-C5	-8.86	109.28	114.60
87	lF	21	U	N3-C4-C5	-8.87	109.28	114.60
104	lX	1	U	N3-C4-C5	-8.87	109.28	114.60
103	lV	3	U	N3-C4-C5	-8.86	109.28	114.60
101	lW	13	U	N3-C4-C5	-8.86	109.28	114.60
93	lL	33	U	N3-C4-C5	-8.86	109.28	114.60
96	lO	179	A	N1-C6-N6	-8.86	113.28	118.60
101	lT	2	U	N3-C4-C5	-8.86	109.28	114.60
81	l9	41	U	N3-C4-C5	-8.86	109.28	114.60
75	l3	21	G	C6-N1-C2	8.86	130.41	125.10
96	lO	116	U	N3-C4-C5	-8.86	109.29	114.60
97	lP	21	U	N3-C4-C5	-8.86	109.29	114.60
90	lI	48	A	N7-C8-N9	8.85	118.23	113.80
91	lJ	212	U	N3-C4-C5	-8.85	109.29	114.60
94	lM	72	U	N3-C4-C5	-8.85	109.29	114.60
104	lX	51	U	N3-C4-C5	-8.85	109.29	114.60
75	l3	34	U	N3-C4-C5	-8.85	109.29	114.60
81	l9	33	U	N3-C4-C5	-8.85	109.29	114.60
91	lJ	207	U	N3-C4-C5	-8.85	109.29	114.60
79	l7	53	U	N3-C4-C5	-8.85	109.29	114.60
97	lP	22	U	N3-C4-C5	-8.85	109.29	114.60
98	lQ	5	U	N3-C4-C5	-8.85	109.29	114.60
99	lR	17	U	N3-C4-C5	-8.85	109.29	114.60
94	lM	84	U	N3-C4-C5	-8.84	109.29	114.60
96	lO	46	U	N3-C4-C5	-8.84	109.30	114.60
93	lL	63	U	N3-C4-C5	-8.84	109.30	114.60
99	lR	11	U	N3-C4-C5	-8.84	109.30	114.60
99	lR	14	U	N3-C4-C5	-8.84	109.30	114.60
99	lR	25	U	N3-C4-C5	-8.84	109.30	114.60
104	lX	2	U	N3-C4-C5	-8.84	109.30	114.60
87	lF	33	U	N3-C4-C5	-8.84	109.30	114.60
93	lL	43	U	N3-C4-C5	-8.84	109.30	114.60
96	lO	35	U	N3-C4-C5	-8.84	109.30	114.60
101	lW	10	U	N3-C4-C5	-8.84	109.30	114.60
99	lR	23	U	N3-C4-C5	-8.83	109.30	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
95	lN	40	U	N3-C4-C5	-8.83	109.30	114.60
81	l9	38	U	N3-C4-C5	-8.83	109.30	114.60
73	l1	1	U	N3-C4-C5	-8.83	109.30	114.60
94	lM	123	U	N3-C4-C5	-8.83	109.30	114.60
94	lM	197	U	N3-C4-C5	-8.83	109.30	114.60
99	lR	24	U	N3-C4-C5	-8.83	109.30	114.60
79	l7	7	U	N3-C4-C5	-8.82	109.31	114.60
99	lR	21	U	N3-C4-C5	-8.82	109.31	114.60
76	l4	10	U	N3-C4-C5	-8.82	109.31	114.60
97	lP	25	U	N3-C4-C5	-8.82	109.31	114.60
96	lO	41	U	N3-C4-C5	-8.82	109.31	114.60
104	lX	14	U	N3-C4-C5	-8.82	109.31	114.60
76	l4	3	U	N3-C4-C5	-8.82	109.31	114.60
73	l1	5	U	N3-C4-C5	-8.81	109.31	114.60
76	l4	63	U	N3-C4-C5	-8.81	109.31	114.60
95	lN	25	U	N3-C4-C5	-8.81	109.31	114.60
96	lO	10	U	N3-C4-C5	-8.81	109.31	114.60
101	lT	3	U	N3-C4-C5	-8.81	109.31	114.60
81	l9	55	U	N3-C4-C5	-8.81	109.31	114.60
87	lF	15	U	N3-C4-C5	-8.81	109.31	114.60
82	lA	19	U	N3-C4-C5	-8.81	109.32	114.60
98	lQ	30	U	N3-C4-C5	-8.81	109.32	114.60
96	lO	12	U	N3-C4-C5	-8.80	109.32	114.60
96	lO	143	U	N3-C4-C5	-8.80	109.32	114.60
74	l2	5	U	N3-C4-C5	-8.80	109.32	114.60
77	l5	41	U	N3-C4-C5	-8.80	109.32	114.60
93	lL	78	U	C2-N3-C4	8.80	132.28	127.00
98	lQ	28	U	N3-C4-C5	-8.80	109.32	114.60
94	lM	148	U	N3-C4-C5	-8.80	109.32	114.60
101	lT	5	U	N3-C4-C5	-8.80	109.32	114.60
73	l1	14	U	N3-C4-C5	-8.79	109.32	114.60
97	lP	29	U	N3-C4-C5	-8.79	109.32	114.60
83	lB	18	U	N3-C4-C5	-8.79	109.33	114.60
87	lF	23	U	N3-C4-C5	-8.79	109.33	114.60
96	lO	73	U	C2-N3-C4	8.79	132.28	127.00
98	lQ	16	U	N3-C4-C5	-8.79	109.33	114.60
104	lX	53	U	N3-C4-C5	-8.79	109.32	114.60
87	lF	16	U	N3-C4-C5	-8.79	109.33	114.60
76	l4	51	U	N3-C4-C5	-8.79	109.33	114.60
97	lP	27	U	N3-C4-C5	-8.79	109.33	114.60
103	lV	5	U	N3-C4-C5	-8.79	109.33	114.60
76	l4	6	U	N3-C4-C5	-8.78	109.33	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	278	A	C8-N9-C4	-8.78	102.29	105.80
98	lQ	27	U	N3-C4-C5	-8.78	109.33	114.60
103	lV	7	U	N3-C4-C5	-8.79	109.33	114.60
102	lU	15	U	N3-C4-C5	-8.78	109.33	114.60
103	lV	2	U	N3-C4-C5	-8.78	109.33	114.60
76	l4	14	U	N3-C4-C5	-8.78	109.33	114.60
85	lD	3	U	N3-C4-C5	-8.78	109.33	114.60
85	lD	8	U	N3-C4-C5	-8.78	109.33	114.60
91	lJ	217	U	N3-C4-C5	-8.78	109.33	114.60
94	lM	2	U	N3-C4-C5	-8.78	109.33	114.60
85	lD	2	U	N3-C4-C5	-8.78	109.33	114.60
96	lO	56	U	N3-C4-C5	-8.78	109.33	114.60
94	lM	143	U	N3-C4-C5	-8.77	109.34	114.60
97	lP	3	U	N3-C4-C5	-8.77	109.34	114.60
99	lR	18	U	N3-C4-C5	-8.77	109.33	114.60
87	lF	11	U	N3-C4-C5	-8.77	109.34	114.60
96	lO	39	U	N3-C4-C5	-8.77	109.34	114.60
98	lQ	3	U	N3-C4-C5	-8.77	109.34	114.60
75	l3	47	U	N3-C4-C5	-8.77	109.34	114.60
74	l2	6	U	N3-C4-C5	-8.77	109.34	114.60
96	lO	110	U	N3-C4-C5	-8.77	109.34	114.60
75	l3	37	U	N3-C4-C5	-8.76	109.34	114.60
96	lO	44	U	N3-C4-C5	-8.76	109.34	114.60
96	lO	140	U	N3-C4-C5	-8.76	109.34	114.60
98	lQ	15	U	N3-C4-C5	-8.76	109.34	114.60
91	lJ	173	U	N3-C4-C5	-8.76	109.34	114.60
93	lL	68	U	N3-C4-C5	-8.76	109.34	114.60
103	lV	4	U	N3-C4-C5	-8.76	109.34	114.60
79	l7	36	A	N1-C6-N6	-8.76	113.34	118.60
82	lA	13	U	C2-N3-C4	8.76	132.25	127.00
83	lB	24	U	N3-C4-C5	-8.75	109.35	114.60
99	lR	15	U	N3-C4-C5	-8.75	109.35	114.60
79	l7	42	U	N3-C4-C5	-8.75	109.35	114.60
76	l4	4	U	N3-C4-C5	-8.75	109.35	114.60
77	l5	35	U	N3-C4-C5	-8.75	109.35	114.60
81	l9	8	U	N3-C4-C5	-8.75	109.35	114.60
87	lF	4	U	C2-N3-C4	8.75	132.25	127.00
99	lR	27	U	N3-C4-C5	-8.75	109.35	114.60
79	l7	15	U	N3-C4-C5	-8.75	109.35	114.60
98	lQ	29	U	N3-C4-C5	-8.75	109.35	114.60
96	lO	142	U	N3-C4-C5	-8.73	109.36	114.60
75	l3	13	U	N3-C4-C5	-8.73	109.36	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
94	lM	162	U	N3-C4-C5	-8.73	109.36	114.60
102	lU	2	U	N3-C4-C5	-8.72	109.36	114.60
95	lN	23	U	N3-C4-C5	-8.72	109.37	114.60
77	l5	31	U	N3-C4-C5	-8.72	109.37	114.60
91	lJ	9	G	C6-N1-C2	8.71	130.33	125.10
79	l7	6	U	N3-C4-C5	-8.71	109.38	114.60
91	lJ	187	U	N3-C4-C5	-8.70	109.38	114.60
96	lO	156	U	N3-C4-C5	-8.70	109.38	114.60
97	lP	1	U	N3-C4-C5	-8.70	109.38	114.60
99	lR	22	U	N3-C4-C5	-8.70	109.38	114.60
73	l1	12	U	N3-C4-C5	-8.69	109.38	114.60
94	lM	95	U	N3-C4-C5	-8.69	109.38	114.60
87	lF	19	U	N3-C4-C5	-8.69	109.39	114.60
76	l4	13	U	N3-C4-C5	-8.69	109.39	114.60
102	lU	3	U	N3-C4-C5	-8.69	109.39	114.60
90	lI	47	A	N7-C8-N9	8.68	118.14	113.80
87	lF	78	U	N3-C4-C5	-8.68	109.39	114.60
90	lI	48	A	N1-C2-N3	8.68	133.64	129.30
90	lI	49	A	N7-C8-N9	8.68	118.14	113.80
91	lJ	190	U	N3-C4-C5	-8.68	109.39	114.60
93	lL	78	U	N3-C4-C5	-8.67	109.40	114.60
104	lX	34	U	N3-C4-C5	-8.66	109.40	114.60
74	l2	22	U	N3-C4-C5	-8.66	109.41	114.60
77	l5	30	U	N3-C4-C5	-8.65	109.41	114.60
77	l5	44	U	N3-C4-C5	-8.65	109.41	114.60
97	lP	7	U	N3-C4-C5	-8.65	109.41	114.60
96	lO	85	U	N3-C4-C5	-8.61	109.43	114.60
94	lM	191	U	N3-C2-O2	-8.61	116.17	122.20
76	l4	5	U	N3-C4-C5	-8.60	109.44	114.60
82	lA	14	U	C2-N3-C4	8.60	132.16	127.00
75	l3	25	U	N3-C4-C5	-8.53	109.48	114.60
96	lO	103	U	N3-C4-C5	-8.52	109.49	114.60
80	l8	27	A	N1-C6-N6	-8.52	113.49	118.60
9	L8	45	ARG	NE-CZ-NH2	8.52	124.56	120.30
33	LW	224	TYR	CB-CG-CD2	8.52	126.11	121.00
96	lO	98	U	N3-C4-C5	-8.48	109.51	114.60
20	LJ	225	TYR	CB-CG-CD2	8.48	126.09	121.00
34	LX	166	TYR	CB-CG-CD2	8.44	126.06	121.00
46	Lj	8	TYR	CB-CG-CD2	8.44	126.06	121.00
91	lJ	49	U	C5-C6-N1	8.43	126.92	122.70
73	l1	26	A	N1-C6-N6	-8.42	113.55	118.60
91	lJ	273	C	C6-N1-C2	-8.42	116.93	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
89	lH	18	U	C2-N3-C4	8.42	132.05	127.00
93	lL	67	U	N3-C4-C5	-8.41	109.55	114.60
86	lE	8	A	C3'-C2'-C1'	8.40	108.22	101.50
96	lO	153	C	C6-N1-C2	-8.38	116.95	120.30
89	lH	18	U	N3-C4-C5	-8.38	109.57	114.60
94	lM	75	G	C6-N1-C2	8.38	130.13	125.10
94	lM	39	G	C6-N1-C2	8.37	130.12	125.10
96	lO	73	U	N3-C4-C5	-8.37	109.58	114.60
41	Le	430	TYR	CB-CG-CD2	8.37	126.02	121.00
87	lF	4	U	N3-C4-C5	-8.37	109.58	114.60
91	lJ	279	U	C5-C6-N1	8.36	126.88	122.70
88	lG	24	A	N1-C6-N6	-8.35	113.59	118.60
95	lN	2	C	C6-N1-C2	-8.31	116.97	120.30
39	Lc	130	TYR	CB-CG-CD2	8.31	125.98	121.00
82	lA	1	G	C8-N9-C4	-8.30	103.08	106.40
80	l8	4	G	N3-C2-N2	-8.30	114.09	119.90
96	lO	95	U	C2-N3-C4	8.24	131.95	127.00
28	LR	63	TYR	CB-CG-CD2	8.24	125.94	121.00
91	lJ	177	C	C6-N1-C2	-8.23	117.01	120.30
96	lO	160	G	C8-N9-C4	-8.23	103.11	106.40
75	l3	24	C	C6-N1-C2	-8.22	117.01	120.30
88	lG	3	A	N1-C6-N6	-8.22	113.67	118.60
96	lO	125	C	C6-N1-C2	-8.21	117.02	120.30
96	lO	61	C	C6-N1-C2	-8.18	117.03	120.30
35	LY	468	TYR	CB-CG-CD2	8.16	125.89	121.00
91	lJ	272	C	C6-N1-C2	-8.15	117.04	120.30
96	lO	61	C	N3-C4-C5	-8.15	118.64	121.90
85	lD	6	C	C6-N1-C2	-8.13	117.05	120.30
12	LB	49	ARG	NE-CZ-NH2	8.13	124.37	120.30
74	l2	31	A	C3'-C2'-C1'	8.13	108.00	101.50
29	LS	185	TYR	CB-CG-CD2	8.10	125.86	121.00
76	l4	2	C	C6-N1-C2	-8.10	117.06	120.30
78	l6	1	A	C8-N9-C4	-8.10	102.56	105.80
54	Lr	50	TYR	CB-CG-CD2	-8.09	116.15	121.00
94	lM	73	C	C6-N1-C2	-8.09	117.07	120.30
96	lO	95	U	N3-C4-C5	-8.06	109.76	114.60
91	lJ	271	C	C6-N1-C2	-8.06	117.08	120.30
96	lO	124	A	C8-N9-C4	-8.04	102.58	105.80
94	lM	87	C	C6-N1-C2	-8.04	117.09	120.30
91	lJ	191	C	C6-N1-C2	-8.01	117.10	120.30
94	lM	135	G	C5-C6-N1	8.01	115.50	111.50
86	lE	23	C	C6-N1-C2	-7.95	117.12	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	67	C	C6-N1-C2	-7.95	117.12	120.30
93	lL	44	C	C6-N1-C2	-7.92	117.13	120.30
81	l9	7	U	C2-N3-C4	7.91	131.75	127.00
76	l4	4	U	C5-C6-N1	7.91	126.66	122.70
82	lA	13	U	N3-C4-C5	-7.91	109.85	114.60
96	lO	70	C	C6-N1-C2	-7.90	117.14	120.30
82	lA	40	A	N1-C6-N6	-7.89	113.87	118.60
81	l9	52	C	C6-N1-C2	-7.88	117.15	120.30
95	lN	39	A	C8-N9-C4	-7.88	102.65	105.80
81	l9	43	C	C6-N1-C2	-7.87	117.15	120.30
96	lO	11	C	C6-N1-C2	-7.85	117.16	120.30
75	l3	54	C	C6-N1-C2	-7.82	117.17	120.30
81	l9	6	U	C2-N3-C4	7.82	131.69	127.00
91	lJ	8	C	C6-N1-C2	-7.80	117.18	120.30
38	Lb	432	TYR	CB-CG-CD2	7.80	125.68	121.00
82	lA	14	U	N3-C4-C5	-7.79	109.93	114.60
96	lO	78	A	C5-C6-N1	7.79	121.59	117.70
72	l0	31	G	O4'-C1'-N9	7.77	114.42	108.20
91	lJ	50	A	C8-N9-C4	-7.77	102.69	105.80
93	lL	2	G	C8-N9-C4	-7.77	103.29	106.40
94	lM	78	C	C6-N1-C2	-7.74	117.20	120.30
90	lI	16	C	C6-N1-C2	-7.73	117.21	120.30
87	lF	22	C	C6-N1-C2	-7.73	117.21	120.30
91	lJ	197	C	C6-N1-C2	-7.71	117.22	120.30
87	lF	17	G	C8-N9-C4	-7.71	103.32	106.40
94	lM	184	A	C8-N9-C4	-7.69	102.73	105.80
88	lG	24	A	C5-C6-N1	7.68	121.54	117.70
80	l8	27	A	C5-C6-N1	7.67	121.54	117.70
103	lY	1	U	O4'-C1'-N1	7.66	114.33	108.20
90	lI	15	C	C6-N1-C2	-7.65	117.24	120.30
85	lD	14	C	C6-N1-C2	-7.63	117.25	120.30
35	LY	380	TYR	CB-CG-CD2	7.63	125.58	121.00
96	lO	13	C	C6-N1-C2	-7.63	117.25	120.30
81	l9	27	C	N3-C4-C5	-7.63	118.85	121.90
95	lN	29	C	C6-N1-C2	-7.63	117.25	120.30
75	l3	55	C	C6-N1-C2	-7.62	117.25	120.30
96	lO	60	A	C8-N9-C4	-7.61	102.75	105.80
97	lP	4	U	C5-C6-N1	7.60	126.50	122.70
78	l6	50	A	C5-C6-N1	7.60	121.50	117.70
76	l4	27	G	C8-N9-C4	-7.60	103.36	106.40
91	lJ	169	C	C6-N1-C2	-7.59	117.26	120.30
77	l5	34	G	C8-N9-C4	-7.59	103.37	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	l6	23	C	C6-N1-C2	-7.58	117.27	120.30
22	LL	693	TYR	CB-CG-CD2	7.57	125.54	121.00
76	l4	29	C	C6-N1-C2	-7.57	117.27	120.30
91	lJ	226	G	C8-N9-C4	-7.56	103.38	106.40
91	lJ	188	U	C5-C6-N1	7.55	126.47	122.70
91	lJ	280	C	C6-N1-C2	-7.55	117.28	120.30
76	l4	32	G	C8-N9-C4	-7.54	103.38	106.40
91	lJ	137	C	C6-N1-C2	-7.54	117.28	120.30
91	lJ	254	C	N3-C4-C5	-7.54	118.89	121.90
72	l0	40	C	C6-N1-C2	-7.53	117.29	120.30
76	l4	55	C	C6-N1-C2	-7.53	117.29	120.30
22	LL	277	TYR	CB-CG-CD2	7.53	125.52	121.00
52	Lp	693	TYR	CB-CG-CD2	7.53	125.52	121.00
94	lM	189	G	N9-C4-C5	7.50	108.40	105.40
95	lN	26	C	C6-N1-C2	-7.50	117.30	120.30
54	Lr	189	TYR	CB-CG-CD2	7.50	125.50	121.00
91	lJ	168	C	C6-N1-C2	-7.50	117.30	120.30
96	lO	36	C	C6-N1-C2	-7.50	117.30	120.30
81	l9	66	G	C8-N9-C4	-7.50	103.40	106.40
91	lJ	182	G	C8-N9-C4	-7.49	103.40	106.40
103	lY	5	U	O4'-C1'-N1	7.49	114.19	108.20
95	lN	32	C	C6-N1-C2	-7.48	117.31	120.30
90	lI	16	C	N3-C4-C5	-7.48	118.91	121.90
78	l6	24	G	C8-N9-C4	-7.48	103.41	106.40
79	l7	36	A	C5-C6-N1	7.47	121.44	117.70
82	lA	58	A	N1-C6-N6	-7.47	114.11	118.60
85	lD	11	C	C6-N1-C2	-7.46	117.31	120.30
81	l9	37	C	C6-N1-C2	-7.46	117.32	120.30
94	lM	14	A	C5-C6-N1	7.46	121.43	117.70
94	lM	198	C	C6-N1-C2	-7.45	117.32	120.30
77	l5	35	U	C5-C6-N1	7.45	126.42	122.70
96	lO	71	G	C8-N9-C4	-7.44	103.42	106.40
73	l1	3	C	C6-N1-C2	-7.44	117.33	120.30
76	l4	46	C	C6-N1-C2	-7.44	117.33	120.30
82	lA	64	A	C8-N9-C4	-7.43	102.83	105.80
93	lL	58	C	C6-N1-C2	-7.43	117.33	120.30
81	l9	29	C	C6-N1-C2	-7.43	117.33	120.30
84	lC	20	A	C4-C5-C6	-7.42	113.29	117.00
104	lX	40	U	N3-C2-O2	-7.42	117.00	122.20
63	UA	237	TYR	CB-CG-CD2	7.42	125.45	121.00
76	l4	31	C	C6-N1-C2	-7.42	117.33	120.30
81	l9	9	C	C6-N1-C2	-7.42	117.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	l9	47	G	C8-N9-C4	-7.42	103.43	106.40
92	lK	19	C	C6-N1-C2	-7.41	117.33	120.30
95	lN	35	G	C8-N9-C4	-7.41	103.44	106.40
78	l6	20	G	C8-N9-C4	-7.41	103.44	106.40
96	lO	86	C	C6-N1-C2	-7.41	117.34	120.30
75	l3	26	C	C6-N1-C2	-7.41	117.34	120.30
84	lC	26	G	C8-N9-C4	-7.41	103.44	106.40
91	lJ	174	C	C6-N1-C2	-7.40	117.34	120.30
38	Lb	591	TYR	CB-CG-CD2	7.40	125.44	121.00
78	l6	19	U	C5-C6-N1	7.38	126.39	122.70
21	LK	92	TYR	CB-CG-CD2	7.38	125.43	121.00
81	l9	70	C	C6-N1-C2	-7.37	117.35	120.30
94	lM	65	G	N7-C8-N9	7.37	116.79	113.10
91	lJ	44	C	C6-N1-C2	-7.37	117.35	120.30
73	l1	34	C	C6-N1-C2	-7.37	117.35	120.30
91	lJ	79	G	N3-C2-N2	-7.37	114.74	119.90
21	LK	243	TYR	CB-CG-CD2	7.36	125.42	121.00
91	lJ	166	G	C8-N9-C4	-7.36	103.46	106.40
94	lM	43	A	N7-C8-N9	7.36	117.48	113.80
94	lM	64	G	N7-C8-N9	7.36	116.78	113.10
91	lJ	131	C	C6-N1-C2	-7.35	117.36	120.30
84	lC	20	A	C5-C6-N1	7.34	121.37	117.70
92	lK	4	C	C6-N1-C2	-7.34	117.36	120.30
95	lN	29	C	N3-C4-C5	-7.34	118.96	121.90
87	lF	64	G	C8-N9-C4	-7.34	103.47	106.40
91	lJ	148	C	C6-N1-C2	-7.34	117.36	120.30
93	lL	45	A	C8-N9-C4	-7.34	102.86	105.80
81	l9	52	C	N3-C4-C5	-7.33	118.97	121.90
81	l9	49	A	C5-C6-N1	7.33	121.37	117.70
75	l3	21	G	C8-N9-C4	-7.33	103.47	106.40
75	l3	24	C	N3-C4-C5	-7.33	118.97	121.90
94	lM	71	A	C8-N9-C4	-7.33	102.87	105.80
80	l8	15	C	O4'-C1'-N1	7.32	114.06	108.20
86	lE	19	G	N7-C8-N9	7.32	116.76	113.10
73	l1	21	C	C6-N1-C2	-7.31	117.37	120.30
81	l9	17	C	C6-N1-C2	-7.30	117.38	120.30
91	lJ	253	C	N3-C4-C5	-7.30	118.98	121.90
94	lM	161	C	C6-N1-C2	-7.30	117.38	120.30
48	Ll	55	TYR	CB-CG-CD2	7.30	125.38	121.00
73	l1	9	C	C6-N1-C2	-7.29	117.38	120.30
76	l4	3	U	C5-C6-N1	7.29	126.34	122.70
91	lJ	19	C	C6-N1-C2	-7.29	117.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	184	C	C6-N1-C2	-7.29	117.39	120.30
45	Li	701	TYR	CB-CG-CD2	7.28	125.37	121.00
73	l1	19	C	C6-N1-C2	-7.28	117.39	120.30
75	l3	49	A	C8-N9-C4	-7.28	102.89	105.80
79	l7	55	G	C8-N9-C4	-7.28	103.49	106.40
77	l5	59	A	C8-N9-C4	-7.28	102.89	105.80
96	lO	152	U	C5-C6-N1	7.28	126.34	122.70
45	Li	667	TYR	CB-CG-CD2	7.28	125.37	121.00
81	l9	69	A	C8-N9-C4	-7.28	102.89	105.80
91	lJ	275	U	C5-C6-N1	7.27	126.34	122.70
96	lO	115	G	C8-N9-C4	-7.27	103.49	106.40
94	lM	90	C	C6-N1-C2	-7.27	117.39	120.30
78	l6	26	C	C6-N1-C2	-7.27	117.39	120.30
79	l7	34	A	C5-C6-N1	7.27	121.33	117.70
70	UH	265	TYR	CB-CG-CD2	7.27	125.36	121.00
94	lM	192	C	N3-C2-O2	-7.26	116.82	121.90
103	lY	3	U	O4'-C1'-N1	7.26	114.01	108.20
74	l2	3	G	C8-N9-C4	-7.26	103.50	106.40
84	lC	11	C	C6-N1-C2	-7.26	117.40	120.30
81	l9	7	U	N3-C4-C5	-7.25	110.25	114.60
91	lJ	5	G	C8-N9-C4	-7.25	103.50	106.40
73	l1	13	G	C8-N9-C4	-7.25	103.50	106.40
96	lO	179	A	C5-C6-N1	7.25	121.33	117.70
93	lL	64	G	C8-N9-C4	-7.25	103.50	106.40
91	lJ	175	U	C5-C6-N1	7.25	126.32	122.70
83	lB	26	C	C6-N1-C2	-7.24	117.40	120.30
94	lM	144	C	C6-N1-C2	-7.24	117.40	120.30
96	lO	153	C	N3-C4-C5	-7.24	119.00	121.90
91	lJ	84	A	C5-C6-N1	7.24	121.32	117.70
91	lJ	233	G	C8-N9-C4	-7.24	103.50	106.40
82	lA	12	C	C6-N1-C2	-7.24	117.41	120.30
91	lJ	171	A	C8-N9-C4	-7.23	102.91	105.80
96	lO	145	C	C6-N1-C2	-7.23	117.41	120.30
84	lC	10	A	C8-N9-C4	-7.22	102.91	105.80
94	lM	79	C	C6-N1-C2	-7.22	117.41	120.30
96	lO	146	A	C8-N9-C4	-7.22	102.91	105.80
94	lM	130	C	C6-N1-C2	-7.22	117.41	120.30
91	lJ	9	G	C8-N9-C4	-7.21	103.51	106.40
92	lK	14	G	C8-N9-C4	-7.21	103.51	106.40
81	l9	42	C	C6-N1-C2	-7.21	117.42	120.30
86	lE	7	G	C8-N9-C4	-7.21	103.52	106.40
86	lE	15	G	N7-C8-N9	7.21	116.70	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	100	C	C6-N1-C2	-7.21	117.42	120.30
91	lJ	132	C	C6-N1-C2	-7.21	117.42	120.30
91	lJ	124	G	C8-N9-C4	-7.21	103.52	106.40
94	lM	76	C	C6-N1-C2	-7.21	117.42	120.30
78	l6	31	C	N3-C4-C5	7.21	124.78	121.90
93	lL	31	C	C6-N1-C2	-7.20	117.42	120.30
53	Lq	194	ARG	NE-CZ-NH2	7.20	123.90	120.30
76	l4	30	C	C6-N1-C2	-7.20	117.42	120.30
79	l7	63	A	C8-N9-C4	-7.20	102.92	105.80
81	l9	82	C	C6-N1-C2	-7.19	117.42	120.30
91	lJ	272	C	C5-C6-N1	7.19	124.60	121.00
74	l2	28	A	C8-N9-C4	-7.19	102.92	105.80
93	lL	52	C	C6-N1-C2	-7.19	117.42	120.30
83	lB	30	C	C6-N1-C2	-7.19	117.42	120.30
86	lE	28	A	C8-N9-C4	-7.19	102.92	105.80
96	lO	34	A	C8-N9-C4	-7.19	102.92	105.80
96	lO	49	C	C6-N1-C2	-7.19	117.42	120.30
77	l5	28	C	C6-N1-C2	-7.18	117.43	120.30
87	lF	9	C	C6-N1-C2	-7.18	117.43	120.30
76	l4	2	C	N3-C4-C5	-7.18	119.03	121.90
97	lP	7	U	C5-C6-N1	7.18	126.29	122.70
76	l4	60	G	C8-N9-C4	-7.18	103.53	106.40
79	l7	54	G	C8-N9-C4	-7.18	103.53	106.40
90	lI	32	A	C8-N9-C4	-7.18	102.93	105.80
72	l0	31	G	O5'-C5'-C4'	7.17	125.33	111.70
77	l5	43	C	C6-N1-C2	-7.17	117.43	120.30
75	l3	50	C	C6-N1-C2	-7.17	117.43	120.30
81	l9	59	C	C6-N1-C2	-7.17	117.43	120.30
72	l0	36	C	C6-N1-C2	-7.17	117.43	120.30
92	lK	2	C	C6-N1-C2	-7.17	117.43	120.30
91	lJ	16	G	C8-N9-C4	-7.17	103.53	106.40
94	lM	96	A	C8-N9-C4	-7.17	102.93	105.80
75	l3	57	A	C8-N9-C4	-7.16	102.94	105.80
79	l7	21	A	C8-N9-C4	-7.16	102.93	105.80
91	lJ	232	C	C6-N1-C2	-7.16	117.44	120.30
73	l1	7	G	C8-N9-C4	-7.16	103.54	106.40
96	lO	69	G	C8-N9-C4	-7.16	103.53	106.40
83	lB	22	G	C8-N9-C4	-7.16	103.54	106.40
91	lJ	238	G	C8-N9-C4	-7.16	103.54	106.40
75	l3	12	A	C8-N9-C4	-7.16	102.94	105.80
76	l4	42	A	C8-N9-C4	-7.16	102.94	105.80
91	lJ	138	G	C8-N9-C4	-7.16	103.54	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	254	C	C5-C6-N1	7.16	124.58	121.00
82	lA	18	C	C6-N1-C2	-7.15	117.44	120.30
81	l9	50	C	C6-N1-C2	-7.15	117.44	120.30
96	lO	31	G	C8-N9-C4	-7.15	103.54	106.40
91	lJ	140	G	C8-N9-C4	-7.15	103.54	106.40
87	lF	88	A	C8-N9-C4	-7.15	102.94	105.80
96	lO	43	G	C8-N9-C4	-7.14	103.54	106.40
82	lA	38	A	N1-C6-N6	-7.14	114.32	118.60
91	lJ	43	C	N3-C4-C5	-7.14	119.05	121.90
91	lJ	93	A	O4'-C1'-N9	-7.14	102.49	108.20
87	lF	57	A	C8-N9-C4	-7.13	102.95	105.80
91	lJ	255	C	C6-N1-C2	-7.13	117.45	120.30
91	lJ	156	G	C8-N9-C4	-7.12	103.55	106.40
81	l9	74	G	C8-N9-C4	-7.12	103.55	106.40
91	lJ	253	C	C5-C6-N1	7.12	124.56	121.00
72	l0	41	C	C6-N1-C2	-7.12	117.45	120.30
76	l4	64	C	C6-N1-C2	-7.12	117.45	120.30
83	lB	40	G	C8-N9-C4	-7.12	103.55	106.40
94	lM	89	G	C8-N9-C4	-7.12	103.55	106.40
14	LD	531	TYR	CB-CG-CD2	7.11	125.27	121.00
82	lA	50	G	C8-N9-C4	-7.11	103.56	106.40
91	lJ	135	G	C8-N9-C4	-7.11	103.56	106.40
96	lO	104	A	C8-N9-C4	-7.11	102.95	105.80
90	lI	20	A	C8-N9-C4	-7.11	102.96	105.80
91	lJ	148	C	N3-C4-C5	-7.11	119.06	121.90
92	lK	34	G	P-O3'-C3'	7.11	128.23	119.70
93	lL	76	C	C6-N1-C2	-7.11	117.46	120.30
95	lN	41	G	C8-N9-C4	-7.11	103.56	106.40
89	lH	26	A	N1-C2-N3	7.11	132.85	129.30
96	lO	117	C	C6-N1-C2	-7.10	117.46	120.30
93	lL	62	U	C5-C6-N1	7.10	126.25	122.70
79	l7	71	A	C8-N9-C4	-7.10	102.96	105.80
93	lL	74	A	C8-N9-C4	-7.10	102.96	105.80
87	lF	12	C	C6-N1-C2	-7.10	117.46	120.30
96	lO	80	A	N1-C6-N6	-7.09	114.34	118.60
90	lI	4	G	C8-N9-C4	-7.09	103.56	106.40
72	l0	18	G	C8-N9-C4	-7.09	103.56	106.40
79	l7	70	A	C8-N9-C4	-7.09	102.97	105.80
96	lO	163	G	C8-N9-C4	-7.08	103.57	106.40
73	l1	36	G	C8-N9-C4	-7.08	103.57	106.40
87	lF	34	G	C8-N9-C4	-7.08	103.57	106.40
94	lM	19	A	C8-N9-C4	-7.08	102.97	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
77	l5	32	G	C8-N9-C4	-7.08	103.57	106.40
75	l3	22	C	C6-N1-C2	-7.08	117.47	120.30
86	lE	17	G	N7-C8-N9	7.08	116.64	113.10
79	l7	20	U	C5-C6-N1	7.08	126.24	122.70
79	l7	61	A	C8-N9-C4	-7.08	102.97	105.80
81	l9	6	U	N3-C4-C5	-7.08	110.35	114.60
74	l2	15	G	C8-N9-C4	-7.07	103.57	106.40
32	LV	519	PHE	CB-CG-CD2	7.07	125.75	120.80
85	lD	6	C	N3-C4-C5	-7.07	119.07	121.90
94	lM	27	G	C8-N9-C4	-7.07	103.57	106.40
78	l6	25	A	C8-N9-C4	-7.07	102.97	105.80
91	lJ	271	C	C5-C6-N1	7.07	124.53	121.00
94	lM	165	G	C8-N9-C4	-7.07	103.57	106.40
83	lB	23	A	C8-N9-C4	-7.06	102.97	105.80
93	lL	88	A	C8-N9-C4	-7.06	102.97	105.80
76	l4	49	C	C6-N1-C2	-7.06	117.48	120.30
86	lE	22	U	C5-C6-N1	7.06	126.23	122.70
96	lO	109	C	C6-N1-C2	-7.06	117.48	120.30
86	lE	5	G	C8-N9-C4	-7.06	103.58	106.40
94	lM	32	C	C6-N1-C2	-7.06	117.48	120.30
83	lB	42	G	C8-N9-C4	-7.05	103.58	106.40
91	lJ	177	C	N3-C4-C5	-7.05	119.08	121.90
91	lJ	102	G	C8-N9-C4	-7.05	103.58	106.40
86	lE	23	C	N3-C4-C5	-7.04	119.08	121.90
96	lO	11	C	N3-C4-C5	-7.04	119.08	121.90
83	lB	20	C	C6-N1-C2	-7.04	117.48	120.30
88	lG	18	G	C8-N9-C4	-7.04	103.58	106.40
76	l4	5	U	C5-C6-N1	7.04	126.22	122.70
79	l7	62	A	C8-N9-C4	-7.04	102.99	105.80
91	lJ	137	C	N3-C4-C5	-7.04	119.09	121.90
74	l2	21	G	C8-N9-C4	-7.03	103.59	106.40
76	l4	23	U	C5-C6-N1	7.03	126.22	122.70
81	l9	58	G	C8-N9-C4	-7.03	103.59	106.40
79	l7	67	A	C8-N9-C4	-7.03	102.99	105.80
74	l2	16	C	C6-N1-C2	-7.03	117.49	120.30
81	l9	51	G	C8-N9-C4	-7.03	103.59	106.40
82	lA	20	G	C8-N9-C4	-7.03	103.59	106.40
91	lJ	214	A	C8-N9-C4	-7.03	102.99	105.80
93	lL	19	A	C8-N9-C4	-7.03	102.99	105.80
72	l0	37	G	C8-N9-C4	-7.02	103.59	106.40
81	l9	10	C	C6-N1-C2	-7.02	117.49	120.30
91	lJ	255	C	N3-C4-C5	-7.02	119.09	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
98	lQ	12	U	C5-C6-N1	7.02	126.21	122.70
93	lL	31	C	N3-C4-C5	-7.02	119.09	121.90
96	lO	9	A	C8-N9-C4	-7.02	102.99	105.80
82	lA	10	A	C8-N9-C4	-7.02	102.99	105.80
42	Lf	168	TYR	CB-CG-CD2	7.01	125.21	121.00
95	lN	38	A	C8-N9-C4	-7.01	103.00	105.80
76	l4	46	C	N3-C4-C5	-7.01	119.10	121.90
90	lI	37	A	C8-N9-C4	-7.01	103.00	105.80
78	l6	4	G	C8-N9-C4	-7.00	103.60	106.40
78	l6	18	U	C5-C6-N1	7.00	126.20	122.70
79	l7	50	U	C5-C6-N1	7.00	126.20	122.70
76	l4	57	G	C8-N9-C4	-7.00	103.60	106.40
76	l4	28	U	C5-C6-N1	7.00	126.20	122.70
86	lE	21	U	C5-C6-N1	7.00	126.20	122.70
86	lE	16	U	C2-N3-C4	7.00	131.20	127.00
96	lO	155	A	C8-N9-C4	-7.00	103.00	105.80
86	lE	26	A	C8-N9-C4	-6.99	103.00	105.80
59	Lw	108	PRO	N-CD-CG	-6.99	92.72	103.20
90	lI	17	G	C8-N9-C4	-6.99	103.60	106.40
36	LZ	26	PHE	CB-CG-CD2	6.99	125.69	120.80
88	lG	3	A	C5-C6-N1	6.99	121.19	117.70
98	lQ	13	U	C5-C6-N1	6.98	126.19	122.70
18	LH	204	ARG	CD-NE-CZ	6.98	133.37	123.60
76	l4	21	A	C8-N9-C4	-6.98	103.01	105.80
90	lI	43	A	C8-N9-C4	-6.98	103.01	105.80
91	lJ	281	A	C8-N9-C4	-6.98	103.01	105.80
91	lJ	118	A	C5-C6-N1	6.97	121.19	117.70
78	l6	44	A	C8-N9-C4	-6.97	103.01	105.80
90	lI	19	G	C8-N9-C4	-6.97	103.61	106.40
90	lI	35	A	C8-N9-C4	-6.97	103.01	105.80
87	lF	84	A	C8-N9-C4	-6.97	103.01	105.80
81	l9	15	A	C8-N9-C4	-6.96	103.01	105.80
92	lK	23	A	C8-N9-C4	-6.96	103.02	105.80
94	lM	33	A	C8-N9-C4	-6.96	103.02	105.80
93	lL	38	G	C8-N9-C4	-6.96	103.62	106.40
90	lI	40	A	C8-N9-C4	-6.96	103.02	105.80
93	lL	39	G	C8-N9-C4	-6.96	103.62	106.40
95	lN	2	C	N3-C4-C5	-6.96	119.12	121.90
96	lO	33	G	C8-N9-C4	-6.96	103.62	106.40
79	l7	65	A	C8-N9-C4	-6.96	103.02	105.80
96	lO	105	G	C8-N9-C4	-6.96	103.62	106.40
81	l9	36	U	C5-C6-N1	6.95	126.18	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	Ld	334	PHE	CB-CG-CD2	6.95	125.67	120.80
81	l9	26	A	C8-N9-C4	-6.95	103.02	105.80
94	lM	87	C	N3-C4-C5	-6.95	119.12	121.90
73	l1	50	A	C8-N9-C4	-6.95	103.02	105.80
96	lO	36	C	N3-C4-C5	-6.94	119.12	121.90
38	Lb	731	PHE	CB-CG-CD2	6.94	125.66	120.80
94	lM	155	C	C6-N1-C2	-6.94	117.52	120.30
94	lM	34	G	C8-N9-C4	-6.94	103.62	106.40
95	lN	26	C	N3-C4-C5	-6.94	119.12	121.90
75	l3	55	C	N3-C4-C5	-6.94	119.13	121.90
96	lO	139	G	C8-N9-C4	-6.94	103.62	106.40
86	lE	4	C	C6-N1-C2	-6.93	117.53	120.30
73	l1	37	A	C8-N9-C4	-6.93	103.03	105.80
81	l9	24	G	C8-N9-C4	-6.93	103.63	106.40
76	l4	53	A	C8-N9-C4	-6.93	103.03	105.80
96	lO	125	C	N3-C4-C5	-6.93	119.13	121.90
83	lB	4	G	C8-N9-C4	-6.93	103.63	106.40
91	lJ	248	U	C5-C6-N1	6.93	126.16	122.70
75	l3	51	G	C8-N9-C4	-6.93	103.63	106.40
85	lD	10	A	C8-N9-C4	-6.93	103.03	105.80
85	lD	9	A	C8-N9-C4	-6.92	103.03	105.80
91	lJ	112	G	C8-N9-C4	-6.92	103.63	106.40
74	l2	7	G	C8-N9-C4	-6.92	103.63	106.40
93	lL	41	A	C8-N9-C4	-6.92	103.03	105.80
94	lM	92	C	C6-N1-C2	-6.92	117.53	120.30
89	lH	6	G	C8-N9-C4	-6.92	103.63	106.40
91	lJ	274	U	C5-C6-N1	6.92	126.16	122.70
93	lL	32	G	C8-N9-C4	-6.92	103.63	106.40
73	l1	48	A	C8-N9-C4	-6.92	103.03	105.80
82	lA	11	A	C8-N9-C4	-6.92	103.03	105.80
94	lM	25	G	C8-N9-C4	-6.91	103.64	106.40
76	l4	67	G	C8-N9-C4	-6.91	103.64	106.40
75	l3	54	C	N3-C4-C5	-6.91	119.14	121.90
90	lI	44	A	C8-N9-C4	-6.91	103.04	105.80
91	lJ	172	C	C6-N1-C2	-6.91	117.54	120.30
76	l4	86	G	C8-N9-C4	-6.91	103.64	106.40
81	l9	56	G	C8-N9-C4	-6.91	103.64	106.40
85	lD	5	A	C8-N9-C4	-6.91	103.04	105.80
94	lM	152	A	C8-N9-C4	-6.91	103.04	105.80
75	l3	53	G	C8-N9-C4	-6.90	103.64	106.40
76	l4	55	C	N3-C4-C5	-6.90	119.14	121.90
91	lJ	139	G	C8-N9-C4	-6.90	103.64	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
101	lW	11	U	C5-C6-N1	6.90	126.15	122.70
93	lL	65	U	C5-C6-N1	6.90	126.15	122.70
38	Lb	408	TYR	CB-CG-CD2	6.90	125.14	121.00
81	l9	73	G	C8-N9-C4	-6.90	103.64	106.40
85	lD	4	A	C8-N9-C4	-6.90	103.04	105.80
81	l9	28	U	C5-C6-N1	6.89	126.15	122.70
85	lD	13	A	C8-N9-C4	-6.89	103.04	105.80
59	Lw	145	PHE	CB-CG-CD2	6.89	125.62	120.80
77	l5	29	A	C8-N9-C4	-6.89	103.04	105.80
81	l9	50	C	N3-C4-C5	-6.89	119.14	121.90
86	lE	24	A	C8-N9-C4	-6.89	103.04	105.80
90	lI	15	C	N3-C4-C5	-6.89	119.14	121.90
96	lO	89	G	C8-N9-C4	-6.89	103.64	106.40
79	l7	47	A	C8-N9-C4	-6.89	103.05	105.80
81	l9	72	A	C8-N9-C4	-6.89	103.05	105.80
1	L0	622	TYR	CB-CG-CD2	6.89	125.13	121.00
77	l5	60	G	C8-N9-C4	-6.89	103.64	106.40
81	l9	54	G	C8-N9-C4	-6.89	103.64	106.40
83	lB	43	G	C8-N9-C4	-6.89	103.64	106.40
89	lH	25	A	N1-C2-N3	6.89	132.74	129.30
87	lF	14	G	C8-N9-C4	-6.88	103.65	106.40
90	lI	21	A	C8-N9-C4	-6.88	103.05	105.80
90	lI	18	G	C8-N9-C4	-6.88	103.65	106.40
76	l4	59	G	C8-N9-C4	-6.88	103.65	106.40
78	l6	22	G	C8-N9-C4	-6.88	103.65	106.40
91	lJ	23	A	C8-N9-C4	-6.88	103.05	105.80
91	lJ	168	C	N3-C4-C5	-6.88	119.15	121.90
86	lE	6	A	C8-N9-C4	-6.88	103.05	105.80
96	lO	12	U	C5-C6-N1	6.88	126.14	122.70
94	lM	78	C	N3-C4-C5	-6.87	119.15	121.90
94	lM	122	G	C8-N9-C4	-6.87	103.65	106.40
96	lO	67	C	N3-C4-C5	-6.87	119.15	121.90
78	l6	23	C	N3-C4-C5	-6.87	119.15	121.90
89	lH	14	G	C8-N9-C4	-6.87	103.65	106.40
91	lJ	197	C	N3-C4-C5	-6.87	119.15	121.90
96	lO	103	U	C5-C6-N1	6.87	126.14	122.70
81	l9	81	A	C8-N9-C4	-6.87	103.05	105.80
91	lJ	170	G	C8-N9-C4	-6.87	103.65	106.40
91	lJ	251	G	C8-N9-C4	-6.87	103.65	106.40
94	lM	149	G	C8-N9-C4	-6.87	103.65	106.40
76	l4	49	C	N3-C4-C5	-6.87	119.15	121.90
81	l9	27	C	C5-C6-N1	6.87	124.43	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	l9	29	C	N3-C4-C5	-6.87	119.15	121.90
87	lF	29	G	C8-N9-C4	-6.87	103.65	106.40
96	lO	14	A	C8-N9-C4	-6.87	103.05	105.80
89	lH	17	G	C8-N9-C4	-6.86	103.65	106.40
91	lJ	8	C	N3-C4-C5	-6.86	119.15	121.90
91	lJ	113	G	C8-N9-C4	-6.86	103.66	106.40
83	lB	25	A	C8-N9-C4	-6.86	103.06	105.80
73	l1	2	U	C5-C6-N1	6.86	126.13	122.70
81	l9	75	A	C8-N9-C4	-6.86	103.06	105.80
79	l7	52	G	C8-N9-C4	-6.86	103.66	106.40
90	lI	5	G	C8-N9-C4	-6.86	103.66	106.40
82	lA	45	A	C8-N9-C4	-6.86	103.06	105.80
94	lM	83	A	C8-N9-C4	-6.86	103.06	105.80
33	LW	382	PHE	CB-CG-CD2	6.86	125.60	120.80
75	l3	38	G	C8-N9-C4	-6.86	103.66	106.40
94	lM	31	A	C8-N9-C4	-6.86	103.06	105.80
87	lF	79	A	C8-N9-C4	-6.85	103.06	105.80
76	l4	84	A	C8-N9-C4	-6.85	103.06	105.80
76	l4	92	A	C8-N9-C4	-6.85	103.06	105.80
96	lO	7	U	C5-C6-N1	6.85	126.13	122.70
93	lL	36	A	C8-N9-C4	-6.85	103.06	105.80
93	lL	86	A	C8-N9-C4	-6.85	103.06	105.80
91	lJ	203	G	C8-N9-C4	-6.85	103.66	106.40
91	lJ	209	G	C8-N9-C4	-6.85	103.66	106.40
72	l0	41	C	N3-C4-C5	-6.85	119.16	121.90
87	lF	24	G	C8-N9-C4	-6.85	103.66	106.40
90	lI	22	G	C8-N9-C4	-6.85	103.66	106.40
91	lJ	42	A	C8-N9-C4	-6.85	103.06	105.80
87	lF	63	A	C8-N9-C4	-6.85	103.06	105.80
43	Lg	134	ARG	CD-NE-CZ	6.84	133.18	123.60
86	lE	3	G	C8-N9-C4	-6.84	103.66	106.40
87	lF	22	C	N3-C4-C5	-6.84	119.16	121.90
87	lF	62	A	C8-N9-C4	-6.84	103.06	105.80
91	lJ	185	G	C8-N9-C4	-6.84	103.66	106.40
76	l4	34	U	C5-C6-N1	6.84	126.12	122.70
91	lJ	252	A	C8-N9-C4	-6.84	103.06	105.80
82	lA	49	G	C8-N9-C4	-6.84	103.66	106.40
86	lE	29	A	C8-N9-C4	-6.84	103.06	105.80
91	lJ	20	A	C8-N9-C4	-6.84	103.06	105.80
76	l4	48	G	C8-N9-C4	-6.84	103.67	106.40
96	lO	118	A	C8-N9-C4	-6.84	103.06	105.80
75	l3	25	U	C5-C6-N1	6.84	126.12	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	lA	41	C	N3-C2-O2	-6.84	117.11	121.90
85	lD	1	A	C8-N9-C4	-6.84	103.06	105.80
88	lG	10	G	C8-N9-C4	-6.84	103.67	106.40
91	lJ	128	A	C8-N9-C4	-6.84	103.06	105.80
91	lJ	193	A	C8-N9-C4	-6.84	103.06	105.80
92	lK	4	C	N3-C4-C5	-6.84	119.17	121.90
77	l5	33	U	C5-C6-N1	6.83	126.12	122.70
96	lO	42	A	C8-N9-C4	-6.83	103.07	105.80
96	lO	143	U	C5-C6-N1	6.83	126.12	122.70
75	l3	58	A	C8-N9-C4	-6.83	103.07	105.80
96	lO	13	C	N3-C4-C5	-6.83	119.17	121.90
96	lO	61	C	C4-C5-C6	6.83	120.82	117.40
96	lO	96	U	C5-C6-N1	6.83	126.12	122.70
96	lO	64	A	C8-N9-C4	-6.83	103.07	105.80
96	lO	85	U	C5-C6-N1	6.83	126.11	122.70
83	lB	9	A	C8-N9-C4	-6.83	103.07	105.80
91	lJ	22	C	C6-N1-C2	-6.83	117.57	120.30
91	lJ	177	C	C5-C6-N1	6.83	124.41	121.00
94	lM	192	C	O4'-C1'-N1	6.83	113.66	108.20
37	La	26	PHE	CB-CG-CD2	6.83	125.58	120.80
86	lE	27	G	C8-N9-C4	-6.83	103.67	106.40
88	lG	11	C	C6-N1-C2	-6.83	117.57	120.30
96	lO	53	A	C8-N9-C4	-6.83	103.07	105.80
104	lX	6	U	C5-C6-N1	6.83	126.11	122.70
91	lJ	18	A	C8-N9-C4	-6.83	103.07	105.80
93	lL	84	A	C8-N9-C4	-6.83	103.07	105.80
73	l1	8	A	C8-N9-C4	-6.82	103.07	105.80
82	lA	58	A	C5-C6-N1	6.82	121.11	117.70
83	lB	44	G	C8-N9-C4	-6.82	103.67	106.40
52	Lp	538	ARG	CD-NE-CZ	6.82	133.15	123.60
96	lO	6	A	C8-N9-C4	-6.82	103.07	105.80
67	UE	144	ARG	CD-NE-CZ	6.82	133.15	123.60
25	LO	87	ARG	CD-NE-CZ	6.82	133.15	123.60
75	l3	52	A	C8-N9-C4	-6.82	103.07	105.80
93	lL	58	C	N3-C4-C5	-6.82	119.17	121.90
73	l1	33	A	C8-N9-C4	-6.82	103.07	105.80
75	l3	23	A	C8-N9-C4	-6.82	103.07	105.80
91	lJ	276	A	C8-N9-C4	-6.82	103.07	105.80
91	lJ	273	C	N3-C4-C5	-6.81	119.17	121.90
1	L0	363	ARG	CD-NE-CZ	6.81	133.14	123.60
52	Lp	745	ARG	CD-NE-CZ	6.81	133.14	123.60
96	lO	72	A	C8-N9-C4	-6.81	103.08	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
99	lR	1	U	C5-C6-N1	6.81	126.11	122.70
98	lQ	11	U	C5-C6-N1	6.81	126.11	122.70
11	LA	149	ARG	CD-NE-CZ	6.81	133.13	123.60
20	LJ	418	ARG	CD-NE-CZ	6.81	133.13	123.60
52	Lp	653	TYR	CB-CG-CD2	6.81	125.09	121.00
83	lB	45	A	C8-N9-C4	-6.81	103.08	105.80
87	lF	9	C	N3-C4-C5	-6.81	119.18	121.90
78	l6	39	A	C8-N9-C4	-6.81	103.08	105.80
80	l8	6	A	N1-C6-N6	-6.81	114.52	118.60
82	lA	55	A	N1-C6-N6	-6.81	114.52	118.60
86	lE	4	C	N3-C4-C5	-6.81	119.18	121.90
91	lJ	261	A	C5-C6-N1	6.81	121.10	117.70
98	lQ	14	U	C5-C6-N1	6.81	126.10	122.70
44	Lh	637	ARG	CD-NE-CZ	6.81	133.13	123.60
94	lM	156	G	C8-N9-C4	-6.81	103.68	106.40
13	LC	170	ARG	CD-NE-CZ	6.80	133.12	123.60
61	Ly	587	ARG	CD-NE-CZ	6.80	133.12	123.60
87	lF	12	C	N3-C4-C5	-6.80	119.18	121.90
67	UE	127	ARG	CD-NE-CZ	6.80	133.12	123.60
81	l9	65	A	C8-N9-C4	-6.80	103.08	105.80
83	lB	8	G	C8-N9-C4	-6.80	103.68	106.40
57	Lu	279	ARG	CD-NE-CZ	6.80	133.12	123.60
81	l9	17	C	N3-C4-C5	-6.80	119.18	121.90
91	lJ	127	A	C8-N9-C4	-6.80	103.08	105.80
93	lL	61	A	C8-N9-C4	-6.80	103.08	105.80
81	l9	82	C	N3-C4-C5	-6.79	119.18	121.90
43	Lg	115	ARG	CD-NE-CZ	6.79	133.11	123.60
45	Li	314	ARG	CD-NE-CZ	6.79	133.11	123.60
78	l6	43	A	C8-N9-C4	-6.79	103.08	105.80
87	lF	80	A	C8-N9-C4	-6.79	103.08	105.80
90	lI	42	A	C8-N9-C4	-6.79	103.08	105.80
72	l0	40	C	N3-C4-C5	-6.79	119.18	121.90
72	l0	42	G	C8-N9-C4	-6.79	103.68	106.40
76	l4	54	A	C8-N9-C4	-6.79	103.08	105.80
83	lB	30	C	N3-C4-C5	-6.79	119.18	121.90
91	lJ	184	C	N3-C4-C5	-6.79	119.18	121.90
26	LP	78	PHE	CB-CG-CD2	6.79	125.55	120.80
35	LY	506	ARG	CD-NE-CZ	6.79	133.10	123.60
91	lJ	272	C	N3-C4-C5	-6.79	119.19	121.90
93	lL	44	C	N3-C4-C5	-6.79	119.18	121.90
96	lO	17	G	C8-N9-C4	-6.79	103.68	106.40
75	l3	35	A	C8-N9-C4	-6.79	103.08	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	113	A	C8-N9-C4	-6.79	103.08	105.80
28	LR	71	ARG	CD-NE-CZ	6.79	133.10	123.60
35	LY	531	ARG	CD-NE-CZ	6.79	133.10	123.60
76	l4	65	A	C8-N9-C4	-6.79	103.09	105.80
17	LG	164	PRO	CA-N-CD	-6.78	102.00	111.50
61	Ly	300	ARG	CD-NE-CZ	6.78	133.10	123.60
91	lJ	125	G	C8-N9-C4	-6.78	103.69	106.40
44	Lh	332	ARG	CD-NE-CZ	6.78	133.09	123.60
91	lJ	21	U	C5-C6-N1	6.78	126.09	122.70
77	l5	40	G	C8-N9-C4	-6.78	103.69	106.40
79	l7	49	G	C8-N9-C4	-6.78	103.69	106.40
91	lJ	129	A	C8-N9-C4	-6.78	103.09	105.80
94	lM	1	A	C8-N9-C4	-6.78	103.09	105.80
40	Ld	310	ARG	CD-NE-CZ	6.78	133.09	123.60
91	lJ	167	U	C5-C6-N1	6.78	126.09	122.70
91	lJ	232	C	N3-C4-C5	-6.78	119.19	121.90
96	lO	49	C	N3-C4-C5	-6.78	119.19	121.90
93	lL	90	A	C8-N9-C4	-6.78	103.09	105.80
23	LM	109	ARG	CD-NE-CZ	6.77	133.08	123.60
91	lJ	44	C	N3-C4-C5	-6.77	119.19	121.90
55	Ls	345	ARG	CD-NE-CZ	6.77	133.08	123.60
68	UF	32	ARG	CD-NE-CZ	6.77	133.08	123.60
79	l7	58	A	C8-N9-C4	-6.77	103.09	105.80
92	lK	2	C	N3-C4-C5	-6.77	119.19	121.90
52	Lp	512	ARG	CD-NE-CZ	6.77	133.08	123.60
53	Lq	478	ARG	CD-NE-CZ	6.77	133.08	123.60
33	LW	462	ARG	CD-NE-CZ	6.77	133.08	123.60
78	l6	45	A	C8-N9-C4	-6.77	103.09	105.80
94	lM	43	A	N1-C2-N3	6.77	132.68	129.30
96	lO	161	A	C8-N9-C4	-6.77	103.09	105.80
11	LA	167	ARG	CD-NE-CZ	6.77	133.07	123.60
96	lO	26	G	N3-C2-N2	-6.77	115.16	119.90
79	l7	64	A	C8-N9-C4	-6.77	103.09	105.80
87	lF	86	A	C8-N9-C4	-6.77	103.09	105.80
38	Lb	685	ARG	CD-NE-CZ	6.76	133.07	123.60
41	Le	604	ARG	CD-NE-CZ	6.76	133.07	123.60
87	lF	66	U	C5-C6-N1	6.76	126.08	122.70
91	lJ	280	C	N3-C4-C5	-6.76	119.19	121.90
95	lN	18	A	C8-N9-C4	-6.76	103.09	105.80
96	lO	8	G	C8-N9-C4	-6.76	103.69	106.40
5	L4	593	ARG	CD-NE-CZ	6.76	133.07	123.60
46	Lj	102	ARG	CD-NE-CZ	6.76	133.07	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	Lr	17	ARG	CD-NE-CZ	6.76	133.07	123.60
78	l6	42	A	C8-N9-C4	-6.76	103.09	105.80
92	lK	16	A	C8-N9-C4	-6.76	103.09	105.80
96	lO	91	A	C8-N9-C4	-6.76	103.10	105.80
99	lR	10	U	C5-C6-N1	6.76	126.08	122.70
20	LJ	119	ARG	CD-NE-CZ	6.76	133.06	123.60
44	Lh	408	ARG	CD-NE-CZ	6.76	133.06	123.60
55	Ls	344	ARG	CD-NE-CZ	6.76	133.06	123.60
61	Ly	384	ARG	CD-NE-CZ	6.76	133.06	123.60
78	l6	21	A	C8-N9-C4	-6.76	103.10	105.80
95	lN	22	A	C8-N9-C4	-6.76	103.10	105.80
69	UG	262	ARG	CD-NE-CZ	6.76	133.06	123.60
79	l7	69	A	C8-N9-C4	-6.76	103.10	105.80
1	L0	331	ARG	CD-NE-CZ	6.76	133.06	123.60
40	Ld	510	ARG	CD-NE-CZ	6.76	133.06	123.60
43	Lg	141	ARG	NE-CZ-NH2	6.76	123.68	120.30
96	lO	108	G	C8-N9-C4	-6.76	103.70	106.40
5	L4	203	ARG	CD-NE-CZ	6.75	133.06	123.60
25	LO	121	ARG	CD-NE-CZ	6.75	133.05	123.60
39	Lc	204	ARG	CD-NE-CZ	6.75	133.05	123.60
73	l1	6	U	C5-C6-N1	6.75	126.08	122.70
75	l3	50	C	N3-C4-C5	-6.75	119.20	121.90
93	lL	53	U	C5-C6-N1	6.75	126.08	122.70
96	lO	57	U	C5-C6-N1	6.75	126.08	122.70
37	La	37	ARG	CD-NE-CZ	6.75	133.05	123.60
37	La	92	ARG	CD-NE-CZ	6.75	133.05	123.60
54	Lr	61	ARG	CD-NE-CZ	6.75	133.05	123.60
52	Lp	604	ARG	CD-NE-CZ	6.75	133.05	123.60
69	UG	263	ARG	CD-NE-CZ	6.75	133.05	123.60
81	l9	83	A	C8-N9-C4	-6.75	103.10	105.80
23	LM	63	ARG	CD-NE-CZ	6.75	133.05	123.60
35	LY	443	ARG	CD-NE-CZ	6.75	133.05	123.60
49	Lm	349	ARG	CD-NE-CZ	6.75	133.05	123.60
79	l7	63	A	C5-N7-C8	-6.75	100.53	103.90
22	LL	531	ARG	CD-NE-CZ	6.75	133.04	123.60
38	Lb	502	ARG	CD-NE-CZ	6.75	133.04	123.60
45	Li	125	ARG	CD-NE-CZ	6.75	133.04	123.60
55	Ls	350	ARG	CD-NE-CZ	6.75	133.05	123.60
88	lG	24	A	C4-C5-C6	-6.75	113.63	117.00
91	lJ	255	C	C5-C6-N1	6.75	124.37	121.00
76	l4	85	A	C8-N9-C4	-6.75	103.10	105.80
91	lJ	100	C	N3-C4-C5	-6.75	119.20	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
94	lM	77	A	C8-N9-C4	-6.75	103.10	105.80
27	LQ	403	ARG	CD-NE-CZ	6.74	133.04	123.60
48	Ll	4	ARG	CD-NE-CZ	6.74	133.04	123.60
79	l7	57	A	C8-N9-C4	-6.74	103.10	105.80
91	lJ	19	C	N3-C4-C5	-6.74	119.20	121.90
45	Li	710	ARG	CD-NE-CZ	6.74	133.04	123.60
91	lJ	211	A	C8-N9-C4	-6.74	103.10	105.80
104	lX	7	U	C5-C6-N1	6.74	126.07	122.70
5	L4	469	ARG	CD-NE-CZ	6.74	133.04	123.60
41	Le	489	ARG	CD-NE-CZ	6.74	133.03	123.60
44	Lh	358	ARG	CD-NE-CZ	6.74	133.04	123.60
52	Lp	720	ARG	CD-NE-CZ	6.74	133.04	123.60
91	lJ	174	C	N3-C4-C5	-6.74	119.20	121.90
30	LT	12	ARG	CD-NE-CZ	6.74	133.03	123.60
37	La	79	ARG	CD-NE-CZ	6.74	133.03	123.60
38	Lb	357	ARG	CD-NE-CZ	6.74	133.03	123.60
48	Ll	138	ARG	CD-NE-CZ	6.74	133.03	123.60
55	Ls	338	ARG	CD-NE-CZ	6.74	133.03	123.60
81	l9	37	C	N3-C4-C5	-6.74	119.20	121.90
93	lL	60	G	C8-N9-C4	-6.74	103.70	106.40
96	lO	95	U	C5-C6-N1	6.74	126.07	122.70
20	LJ	280	ARG	CD-NE-CZ	6.74	133.03	123.60
26	LP	280	ARG	CD-NE-CZ	6.74	133.03	123.60
41	Le	515	ARG	CD-NE-CZ	6.74	133.03	123.60
45	Li	523	ARG	CD-NE-CZ	6.74	133.03	123.60
51	Lo	114	ARG	CD-NE-CZ	6.74	133.03	123.60
91	lJ	230	A	C8-N9-C4	-6.74	103.11	105.80
38	Lb	284	ARG	CD-NE-CZ	6.74	133.03	123.60
51	Lo	265	ARG	CD-NE-CZ	6.74	133.03	123.60
64	UB	304	ARG	CD-NE-CZ	6.74	133.03	123.60
73	l1	45	A	C8-N9-C4	-6.74	103.11	105.80
75	l3	8	A	C8-N9-C4	-6.74	103.11	105.80
76	l4	43	G	C8-N9-C4	-6.74	103.71	106.40
94	lM	26	G	C8-N9-C4	-6.74	103.71	106.40
38	Lb	584	ARG	CD-NE-CZ	6.73	133.03	123.60
41	Le	629	ARG	CD-NE-CZ	6.73	133.03	123.60
94	lM	151	A	C8-N9-C4	-6.73	103.11	105.80
96	lO	32	U	C5-C6-N1	6.73	126.07	122.70
9	L8	52	ARG	CD-NE-CZ	6.73	133.03	123.60
92	lK	22	A	C8-N9-C4	-6.73	103.11	105.80
94	lM	90	C	N3-C4-C5	-6.73	119.21	121.90
9	L8	161	ARG	CD-NE-CZ	6.73	133.02	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	LS	9	ARG	CD-NE-CZ	6.73	133.02	123.60
33	LW	210	ARG	CD-NE-CZ	6.73	133.02	123.60
79	l7	60	A	C8-N9-C4	-6.73	103.11	105.80
88	lG	19	C	C6-N1-C2	-6.73	117.61	120.30
95	lN	24	G	C8-N9-C4	-6.73	103.71	106.40
35	LY	249	ARG	CD-NE-CZ	6.73	133.02	123.60
38	Lb	384	ARG	CD-NE-CZ	6.73	133.02	123.60
48	Ll	38	ARG	CD-NE-CZ	6.73	133.02	123.60
61	Ly	596	ARG	CD-NE-CZ	6.73	133.02	123.60
69	UG	364	MET	CA-CB-CG	6.73	124.74	113.30
81	l9	45	A	C8-N9-C4	-6.73	103.11	105.80
25	LO	136	ARG	CD-NE-CZ	6.73	133.02	123.60
49	Lm	418	ARG	CD-NE-CZ	6.73	133.02	123.60
54	Lr	265	ARG	CD-NE-CZ	6.73	133.02	123.60
93	lL	66	A	C8-N9-C4	-6.73	103.11	105.80
28	LR	51	ARG	CD-NE-CZ	6.73	133.02	123.60
20	LJ	213	ARG	CD-NE-CZ	6.72	133.02	123.60
38	Lb	312	ARG	CD-NE-CZ	6.72	133.01	123.60
53	Lq	229	ARG	CD-NE-CZ	6.72	133.01	123.60
93	lL	40	A	C8-N9-C4	-6.72	103.11	105.80
96	lO	154	U	C5-C6-N1	6.72	126.06	122.70
2	L1	469	TYR	CB-CG-CD2	6.72	125.03	121.00
3	L2	41	ARG	CD-NE-CZ	6.72	133.01	123.60
30	LT	120	ARG	CD-NE-CZ	6.72	133.01	123.60
39	Lc	317	ARG	CD-NE-CZ	6.72	133.01	123.60
39	Lc	427	ARG	CD-NE-CZ	6.72	133.01	123.60
40	Ld	494	ARG	CD-NE-CZ	6.72	133.01	123.60
40	Ld	613	ARG	CD-NE-CZ	6.72	133.01	123.60
51	Lo	347	ARG	CD-NE-CZ	6.72	133.01	123.60
74	l2	20	A	C8-N9-C4	-6.72	103.11	105.80
76	l4	64	C	N3-C4-C5	-6.72	119.21	121.90
85	lD	11	C	N3-C4-C5	-6.72	119.21	121.90
91	lJ	147	U	C5-C6-N1	6.72	126.06	122.70
97	lP	3	U	C5-C6-N1	6.72	126.06	122.70
36	LZ	110	ARG	CD-NE-CZ	6.72	133.01	123.60
39	Lc	333	ARG	CD-NE-CZ	6.72	133.01	123.60
91	lJ	189	A	C8-N9-C4	-6.72	103.11	105.80
93	lL	87	A	C8-N9-C4	-6.72	103.11	105.80
17	LG	206	ARG	CD-NE-CZ	6.72	133.01	123.60
32	LV	486	ARG	CD-NE-CZ	6.72	133.01	123.60
38	Lb	358	ARG	CD-NE-CZ	6.72	133.01	123.60
44	Lh	740	ARG	CD-NE-CZ	6.72	133.01	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	l6	41	A	C8-N9-C4	-6.72	103.11	105.80
81	l9	70	C	N3-C4-C5	-6.72	119.21	121.90
91	lJ	165	G	C8-N9-C4	-6.72	103.71	106.40
24	LN	318	PHE	CB-CG-CD2	6.72	125.50	120.80
27	LQ	357	ARG	CD-NE-CZ	6.72	133.00	123.60
38	Lb	386	ARG	CD-NE-CZ	6.72	133.00	123.60
43	Lg	175	ARG	CD-NE-CZ	6.72	133.00	123.60
92	lK	19	C	N3-C4-C5	-6.72	119.21	121.90
36	LZ	5	ARG	CD-NE-CZ	6.72	133.00	123.60
37	La	30	ARG	CD-NE-CZ	6.72	133.00	123.60
48	Ll	113	ARG	CD-NE-CZ	6.72	133.00	123.60
81	l9	25	A	C8-N9-C4	-6.72	103.11	105.80
91	lJ	229	G	C8-N9-C4	-6.72	103.71	106.40
1	L0	469	ARG	CD-NE-CZ	6.71	133.00	123.60
1	L0	586	ARG	CD-NE-CZ	6.71	133.00	123.60
20	LJ	84	PHE	CB-CG-CD2	6.71	125.50	120.80
20	LJ	245	ARG	CD-NE-CZ	6.71	133.00	123.60
37	La	191	PHE	CB-CG-CD2	6.71	125.50	120.80
53	Lq	271	ARG	CD-NE-CZ	6.71	133.00	123.60
68	UF	64	ARG	CD-NE-CZ	6.71	133.00	123.60
76	l4	58	A	C8-N9-C4	-6.71	103.11	105.80
81	l9	10	C	N3-C4-C5	-6.71	119.21	121.90
96	lO	15	A	C8-N9-C4	-6.71	103.11	105.80
96	lO	70	C	N3-C4-C5	-6.71	119.21	121.90
25	LO	137	PHE	CB-CG-CD2	6.71	125.50	120.80
39	Lc	494	ARG	CD-NE-CZ	6.71	133.00	123.60
5	L4	223	ARG	CD-NE-CZ	6.71	133.00	123.60
13	LC	246	ARG	CD-NE-CZ	6.71	133.00	123.60
96	lO	40	A	C8-N9-C4	-6.71	103.12	105.80
20	LJ	260	ARG	CD-NE-CZ	6.71	132.99	123.60
51	Lo	333	ARG	CD-NE-CZ	6.71	132.99	123.60
61	Ly	290	ARG	CD-NE-CZ	6.71	132.99	123.60
21	LK	142	ARG	CD-NE-CZ	6.71	132.99	123.60
29	LS	3	ARG	CD-NE-CZ	6.71	132.99	123.60
38	Lb	371	ARG	CD-NE-CZ	6.71	132.99	123.60
48	Ll	68	ARG	CD-NE-CZ	6.71	132.99	123.60
54	Lr	255	ARG	CD-NE-CZ	6.71	132.99	123.60
76	l4	62	G	C8-N9-C4	-6.71	103.72	106.40
87	lF	77	U	C5-C6-N1	6.71	126.05	122.70
90	lI	16	C	C4-C5-C6	6.71	120.75	117.40
94	lM	163	G	C8-N9-C4	-6.71	103.72	106.40
95	lN	27	A	C8-N9-C4	-6.71	103.12	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	LC	476	ARG	CD-NE-CZ	6.71	132.99	123.60
32	LV	1063	ARG	CD-NE-CZ	6.71	132.99	123.60
38	Lb	899	ARG	CD-NE-CZ	6.71	132.99	123.60
46	Lj	97	ARG	CD-NE-CZ	6.71	132.99	123.60
64	UB	328	ARG	CD-NE-CZ	6.71	132.99	123.60
68	UF	33	ARG	CD-NE-CZ	6.71	132.99	123.60
85	lD	11	C	C5-C6-N1	6.71	124.35	121.00
10	L9	459	ARG	CD-NE-CZ	6.71	132.99	123.60
21	LK	68	ARG	CD-NE-CZ	6.71	132.99	123.60
21	LK	234	ARG	CD-NE-CZ	6.71	132.99	123.60
25	LO	11	ARG	CD-NE-CZ	6.71	132.99	123.60
42	Lf	342	ARG	CD-NE-CZ	6.70	132.99	123.60
46	Lj	26	ARG	CD-NE-CZ	6.70	132.99	123.60
48	Ll	33	ARG	CD-NE-CZ	6.70	132.99	123.60
55	Ls	413	ARG	CD-NE-CZ	6.70	132.99	123.60
56	Lt	107	TYR	CB-CG-CD2	6.70	125.02	121.00
48	Ll	136	ARG	CD-NE-CZ	6.70	132.98	123.60
51	Lo	82	ARG	CD-NE-CZ	6.70	132.98	123.60
1	L0	568	ARG	CD-NE-CZ	6.70	132.98	123.60
13	LC	139	ARG	CD-NE-CZ	6.70	132.98	123.60
24	LN	274	ARG	CD-NE-CZ	6.70	132.98	123.60
47	Lk	540	ARG	CD-NE-CZ	6.70	132.98	123.60
55	Ls	371	ARG	CD-NE-CZ	6.70	132.98	123.60
1	L0	385	ARG	CD-NE-CZ	6.70	132.98	123.60
29	LS	144	ARG	CD-NE-CZ	6.70	132.98	123.60
52	Lp	517	ARG	CD-NE-CZ	6.70	132.98	123.60
54	Lr	269	ARG	CD-NE-CZ	6.70	132.98	123.60
58	Lv	74	ARG	CD-NE-CZ	6.70	132.98	123.60
64	UB	366	ARG	CD-NE-CZ	6.70	132.98	123.60
76	l4	2	C	C5-C6-N1	6.70	124.35	121.00
79	l7	66	A	C8-N9-C4	-6.70	103.12	105.80
81	l9	18	A	C8-N9-C4	-6.70	103.12	105.80
93	lL	48	A	C8-N9-C4	-6.70	103.12	105.80
96	lO	67	C	C5-C6-N1	6.70	124.35	121.00
96	lO	121	C	C6-N1-C2	-6.70	117.62	120.30
37	La	38	ARG	CD-NE-CZ	6.70	132.98	123.60
39	Lc	612	ARG	CD-NE-CZ	6.70	132.97	123.60
45	Li	672	ARG	CD-NE-CZ	6.70	132.98	123.60
59	Lw	13	ARG	CD-NE-CZ	6.70	132.98	123.60
70	UH	273	ARG	CD-NE-CZ	6.70	132.98	123.60
76	l4	29	C	N3-C4-C5	-6.70	119.22	121.90
94	lM	73	C	N3-C4-C5	-6.70	119.22	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
94	lM	130	C	N3-C4-C5	-6.70	119.22	121.90
9	L8	16	ARG	CD-NE-CZ	6.70	132.97	123.60
9	L8	160	ARG	CD-NE-CZ	6.70	132.97	123.60
11	LA	169	ARG	CD-NE-CZ	6.70	132.97	123.60
25	LO	109	ARG	CD-NE-CZ	6.70	132.97	123.60
30	LT	10	ARG	CD-NE-CZ	6.70	132.97	123.60
32	LV	1074	ARG	CD-NE-CZ	6.70	132.97	123.60
38	Lb	423	ARG	CD-NE-CZ	6.70	132.97	123.60
39	Lc	207	ARG	CD-NE-CZ	6.70	132.97	123.60
66	UD	181	ARG	CD-NE-CZ	6.70	132.97	123.60
99	lR	12	U	C5-C6-N1	6.70	126.05	122.70
30	LT	46	ARG	CD-NE-CZ	6.69	132.97	123.60
94	lM	30	A	C8-N9-C4	-6.69	103.12	105.80
3	L2	192	ARG	CD-NE-CZ	6.69	132.97	123.60
25	LO	256	ARG	CD-NE-CZ	6.69	132.97	123.60
35	LY	355	ARG	CD-NE-CZ	6.69	132.97	123.60
38	Lb	775	ARG	CD-NE-CZ	6.69	132.97	123.60
51	Lo	182	ARG	CD-NE-CZ	6.69	132.97	123.60
51	Lo	184	ARG	CD-NE-CZ	6.69	132.97	123.60
64	UB	343	PHE	CB-CG-CD2	6.69	125.48	120.80
82	lA	18	C	N3-C4-C5	-6.69	119.22	121.90
6	L5	450	ARG	CD-NE-CZ	6.69	132.97	123.60
10	L9	456	ARG	CD-NE-CZ	6.69	132.97	123.60
32	LV	1080	ARG	CD-NE-CZ	6.69	132.97	123.60
36	LZ	22	ARG	CD-NE-CZ	6.69	132.97	123.60
54	Lr	20	ARG	CD-NE-CZ	6.69	132.97	123.60
55	Ls	402	ARG	CD-NE-CZ	6.69	132.97	123.60
68	UF	29	PHE	CB-CG-CD2	6.69	125.48	120.80
75	l3	9	A	C8-N9-C4	-6.69	103.12	105.80
82	lA	12	C	N3-C4-C5	-6.69	119.22	121.90
93	lL	82	A	C8-N9-C4	-6.69	103.12	105.80
104	lX	53	U	C5-C6-N1	6.69	126.05	122.70
1	L0	373	ARG	CD-NE-CZ	6.69	132.96	123.60
15	LE	376	ARG	CD-NE-CZ	6.69	132.96	123.60
26	LP	281	ARG	CD-NE-CZ	6.69	132.97	123.60
36	LZ	50	ARG	CD-NE-CZ	6.69	132.96	123.60
10	L9	17	ARG	CD-NE-CZ	6.69	132.96	123.60
22	LL	342	ARG	CD-NE-CZ	6.69	132.96	123.60
23	LM	134	ARG	CD-NE-CZ	6.69	132.96	123.60
34	LX	125	ARG	CD-NE-CZ	6.69	132.96	123.60
36	LZ	106	ARG	CD-NE-CZ	6.69	132.96	123.60
52	Lp	503	ARG	CD-NE-CZ	6.69	132.96	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	Lp	689	ARG	CD-NE-CZ	6.69	132.96	123.60
52	Lp	699	ARG	CD-NE-CZ	6.69	132.96	123.60
73	l1	20	A	C8-N9-C4	-6.69	103.12	105.80
33	LW	379	ARG	CD-NE-CZ	6.69	132.96	123.60
38	Lb	746	ARG	CD-NE-CZ	6.69	132.96	123.60
67	UE	185	ARG	CD-NE-CZ	6.69	132.96	123.60
94	lM	155	C	N3-C4-C5	-6.69	119.23	121.90
14	LD	543	ARG	CD-NE-CZ	6.68	132.96	123.60
25	LO	127	ARG	CD-NE-CZ	6.68	132.96	123.60
25	LO	144	ARG	CD-NE-CZ	6.68	132.96	123.60
26	LP	139	TYR	CB-CG-CD2	6.68	125.01	121.00
34	LX	176	ARG	CD-NE-CZ	6.68	132.96	123.60
36	LZ	196	ARG	CD-NE-CZ	6.68	132.96	123.60
38	Lb	842	ARG	CD-NE-CZ	6.68	132.96	123.60
43	Lg	97	ARG	CD-NE-CZ	6.68	132.96	123.60
45	Li	601	ARG	CD-NE-CZ	6.68	132.96	123.60
60	Lx	370	ARG	CD-NE-CZ	6.68	132.96	123.60
73	l1	4	G	C8-N9-C4	-6.68	103.73	106.40
77	l5	28	C	N3-C4-C5	-6.68	119.23	121.90
94	lM	198	C	N3-C4-C5	-6.68	119.23	121.90
95	lN	32	C	N3-C4-C5	-6.68	119.23	121.90
97	lP	27	U	C5-C6-N1	6.68	126.04	122.70
14	LD	364	ARG	CD-NE-CZ	6.68	132.96	123.60
24	LN	328	ARG	CD-NE-CZ	6.68	132.96	123.60
25	LO	9	ARG	CD-NE-CZ	6.68	132.96	123.60
25	LO	125	ARG	CD-NE-CZ	6.68	132.96	123.60
27	LQ	351	ARG	CD-NE-CZ	6.68	132.95	123.60
43	Lg	230	ARG	CD-NE-CZ	6.68	132.96	123.60
44	Lh	436	ARG	CD-NE-CZ	6.68	132.96	123.60
64	UB	268	ARG	CD-NE-CZ	6.68	132.96	123.60
4	L3	505	ARG	CD-NE-CZ	6.68	132.95	123.60
24	LN	341	ARG	CD-NE-CZ	6.68	132.95	123.60
27	LQ	396	ARG	CD-NE-CZ	6.68	132.95	123.60
46	Lj	5	ARG	CD-NE-CZ	6.68	132.95	123.60
62	Lz	142	ARG	CD-NE-CZ	6.68	132.95	123.60
76	l4	33	A	C8-N9-C4	-6.68	103.13	105.80
52	Lp	623	ARG	CD-NE-CZ	6.68	132.95	123.60
52	Lp	627	ARG	CD-NE-CZ	6.68	132.95	123.60
56	Lt	244	ARG	CD-NE-CZ	6.68	132.95	123.60
61	Ly	383	ARG	CD-NE-CZ	6.68	132.95	123.60
73	l1	26	A	C5-C6-N1	6.68	121.04	117.70
87	lF	19	U	C5-C6-N1	6.68	126.04	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	166	G	C8-N9-C4	-6.68	103.73	106.40
40	Ld	490	ARG	CD-NE-CZ	6.68	132.95	123.60
40	Ld	612	ARG	CD-NE-CZ	6.68	132.95	123.60
91	lJ	195	A	C8-N9-C4	-6.68	103.13	105.80
4	L3	734	ARG	CD-NE-CZ	6.68	132.95	123.60
13	LC	319	ARG	CD-NE-CZ	6.68	132.95	123.60
15	LE	371	ARG	CD-NE-CZ	6.68	132.95	123.60
20	LJ	291	ARG	CD-NE-CZ	6.68	132.95	123.60
28	LR	36	ARG	CD-NE-CZ	6.68	132.95	123.60
36	LZ	27	ARG	CD-NE-CZ	6.68	132.95	123.60
38	Lb	404	ARG	CD-NE-CZ	6.68	132.95	123.60
43	Lg	123	ARG	CD-NE-CZ	6.68	132.95	123.60
52	Lp	706	ARG	CD-NE-CZ	6.68	132.95	123.60
52	Lp	709	ARG	CD-NE-CZ	6.68	132.95	123.60
96	lO	48	A	C8-N9-C4	-6.68	103.13	105.80
4	L3	424	ARG	CD-NE-CZ	6.67	132.94	123.60
26	LP	257	ARG	CD-NE-CZ	6.67	132.94	123.60
40	Ld	594	ARG	CD-NE-CZ	6.67	132.94	123.60
51	Lo	302	ARG	CD-NE-CZ	6.67	132.94	123.60
52	Lp	583	ARG	CD-NE-CZ	6.67	132.94	123.60
93	lL	44	C	C5-C6-N1	6.67	124.34	121.00
95	lN	43	A	C8-N9-C4	-6.67	103.13	105.80
51	Lo	147	ARG	CD-NE-CZ	6.67	132.94	123.60
61	Ly	363	ARG	CD-NE-CZ	6.67	132.94	123.60
68	UF	8	ARG	CD-NE-CZ	6.67	132.94	123.60
32	LV	407	ARG	CD-NE-CZ	6.67	132.94	123.60
37	La	39	ARG	CD-NE-CZ	6.67	132.94	123.60
56	Lt	265	ARG	CD-NE-CZ	6.67	132.94	123.60
61	Ly	586	ARG	CD-NE-CZ	6.67	132.94	123.60
75	l3	22	C	N3-C4-C5	-6.67	119.23	121.90
81	l9	42	C	N3-C4-C5	-6.67	119.23	121.90
83	lB	13	A	C8-N9-C4	-6.67	103.13	105.80
94	lM	45	A	N1-C2-N3	6.67	132.64	129.30
3	L2	45	ARG	CD-NE-CZ	6.67	132.94	123.60
41	Le	427	ARG	CD-NE-CZ	6.67	132.94	123.60
33	LW	471	ARG	CD-NE-CZ	6.67	132.94	123.60
43	Lg	234	ARG	CD-NE-CZ	6.67	132.94	123.60
51	Lo	224	ARG	CD-NE-CZ	6.67	132.94	123.60
57	Lu	269	ARG	CD-NE-CZ	6.67	132.94	123.60
67	UE	203	MET	CA-CB-CG	6.67	124.64	113.30
96	lO	165	A	C8-N9-C4	-6.67	103.13	105.80
96	lO	167	A	C8-N9-C4	-6.67	103.13	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	L4	586	ARG	CD-NE-CZ	6.67	132.93	123.60
20	LJ	113	ARG	CD-NE-CZ	6.67	132.93	123.60
20	LJ	410	ARG	CD-NE-CZ	6.67	132.93	123.60
35	LY	333	ARG	CD-NE-CZ	6.67	132.93	123.60
37	La	201	PHE	CB-CG-CD2	6.67	125.47	120.80
38	Lb	791	ARG	CD-NE-CZ	6.67	132.93	123.60
52	Lp	621	ARG	CD-NE-CZ	6.67	132.93	123.60
79	l7	68	A	C8-N9-C4	-6.67	103.13	105.80
84	lC	21	A	C5-C6-N1	6.67	121.03	117.70
95	lN	30	A	C8-N9-C4	-6.67	103.13	105.80
95	lN	42	A	C8-N9-C4	-6.67	103.13	105.80
99	lR	2	U	C5-C6-N1	6.67	126.03	122.70
20	LJ	312	ARG	CD-NE-CZ	6.67	132.93	123.60
32	LV	889	ARG	CD-NE-CZ	6.67	132.93	123.60
43	Lg	86	ARG	CD-NE-CZ	6.67	132.93	123.60
1	L0	427	ARG	CD-NE-CZ	6.66	132.93	123.60
55	Ls	385	ARG	CD-NE-CZ	6.66	132.93	123.60
76	l4	20	G	C8-N9-C4	-6.66	103.73	106.40
93	lL	14	A	C8-N9-C4	-6.66	103.14	105.80
20	LJ	170	ARG	CD-NE-CZ	6.66	132.93	123.60
46	Lj	114	ARG	CD-NE-CZ	6.66	132.93	123.60
93	lL	83	A	C8-N9-C4	-6.66	103.14	105.80
20	LJ	292	ARG	CD-NE-CZ	6.66	132.92	123.60
20	LJ	331	ARG	CD-NE-CZ	6.66	132.93	123.60
28	LR	25	ARG	CD-NE-CZ	6.66	132.93	123.60
33	LW	439	ARG	CD-NE-CZ	6.66	132.92	123.60
39	Lc	526	ARG	CD-NE-CZ	6.66	132.93	123.60
55	Ls	367	ARG	CD-NE-CZ	6.66	132.93	123.60
62	Lz	147	ARG	CD-NE-CZ	6.66	132.92	123.60
91	lJ	146	A	C5-C6-N1	6.66	121.03	117.70
99	lR	20	U	C5-C6-N1	6.66	126.03	122.70
11	LA	131	ARG	CD-NE-CZ	6.66	132.92	123.60
15	LE	383	ARG	CD-NE-CZ	6.66	132.92	123.60
27	LQ	381	ARG	CD-NE-CZ	6.66	132.92	123.60
32	LV	613	ARG	CD-NE-CZ	6.66	132.92	123.60
38	Lb	314	ARG	CD-NE-CZ	6.66	132.92	123.60
38	Lb	355	ARG	CD-NE-CZ	6.66	132.92	123.60
46	Lj	113	ARG	CD-NE-CZ	6.66	132.92	123.60
55	Ls	359	ARG	CD-NE-CZ	6.66	132.92	123.60
81	l9	52	C	C5-C6-N1	6.66	124.33	121.00
91	lJ	131	C	N3-C4-C5	-6.66	119.24	121.90
93	lL	76	C	N3-C4-C5	-6.66	119.24	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	Lf	314	ARG	CD-NE-CZ	6.66	132.92	123.60
97	lP	8	U	C5-C6-N1	6.66	126.03	122.70
8	L7	70	ARG	CD-NE-CZ	6.66	132.92	123.60
35	LY	260	ARG	CD-NE-CZ	6.66	132.92	123.60
40	Ld	359	ARG	CD-NE-CZ	6.66	132.92	123.60
49	Lm	291	ARG	CD-NE-CZ	6.66	132.92	123.60
52	Lp	652	ARG	CD-NE-CZ	6.66	132.92	123.60
59	Lw	113	PHE	CB-CG-CD2	6.66	125.46	120.80
75	l3	60	A	C8-N9-C4	-6.66	103.14	105.80
77	l5	43	C	N3-C4-C5	-6.66	119.24	121.90
80	l8	1	A	C5-C6-N1	6.66	121.03	117.70
81	l9	43	C	N3-C4-C5	-6.66	119.24	121.90
81	l9	46	A	C8-N9-C4	-6.66	103.14	105.80
85	lD	14	C	N3-C4-C5	-6.66	119.24	121.90
94	lM	184	A	C5-N7-C8	-6.66	100.57	103.90
47	Lk	474	ARG	CD-NE-CZ	6.65	132.91	123.60
4	L3	570	ARG	CD-NE-CZ	6.65	132.91	123.60
16	LF	188	ARG	CD-NE-CZ	6.65	132.91	123.60
34	LX	109	ARG	CD-NE-CZ	6.65	132.91	123.60
38	Lb	720	ARG	CD-NE-CZ	6.65	132.91	123.60
44	Lh	414	ARG	CD-NE-CZ	6.65	132.91	123.60
61	Ly	680	ARG	CD-NE-CZ	6.65	132.91	123.60
69	UG	375	ARG	CD-NE-CZ	6.65	132.91	123.60
98	lQ	6	U	C5-C6-N1	6.65	126.03	122.70
103	lY	2	U	C3'-C2'-C1'	6.65	106.82	101.50
6	L5	468	ARG	CD-NE-CZ	6.65	132.91	123.60
8	L7	13	ARG	CD-NE-CZ	6.65	132.91	123.60
32	LV	370	ARG	CD-NE-CZ	6.65	132.91	123.60
38	Lb	494	ARG	CD-NE-CZ	6.65	132.91	123.60
46	Lj	10	ARG	CD-NE-CZ	6.65	132.91	123.60
52	Lp	456	ARG	CD-NE-CZ	6.65	132.91	123.60
55	Ls	372	ARG	CD-NE-CZ	6.65	132.91	123.60
61	Ly	333	ARG	CD-NE-CZ	6.65	132.91	123.60
39	Lc	594	ARG	CD-NE-CZ	6.65	132.91	123.60
68	UF	61	ARG	CD-NE-CZ	6.65	132.91	123.60
79	l7	36	A	C4-C5-C6	-6.65	113.67	117.00
93	lL	52	C	N3-C4-C5	-6.65	119.24	121.90
1	L0	396	ARG	CD-NE-CZ	6.65	132.91	123.60
22	LL	535	ARG	CD-NE-CZ	6.65	132.91	123.60
23	LM	6	ARG	CD-NE-CZ	6.65	132.91	123.60
49	Lm	372	ARG	CD-NE-CZ	6.65	132.91	123.60
59	Lw	166	ARG	CD-NE-CZ	6.65	132.91	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
74	l2	30	A	C8-N9-C4	-6.65	103.14	105.80
94	lM	161	C	N3-C4-C5	-6.65	119.24	121.90
20	LJ	31	ARG	CD-NE-CZ	6.65	132.90	123.60
45	Li	363	ARG	CD-NE-CZ	6.65	132.91	123.60
4	L3	724	ARG	CD-NE-CZ	6.64	132.90	123.60
18	LH	236	ARG	CD-NE-CZ	6.64	132.90	123.60
39	Lc	142	ARG	CD-NE-CZ	6.64	132.90	123.60
60	Lx	339	ARG	CD-NE-CZ	6.64	132.90	123.60
64	UB	339	ARG	CD-NE-CZ	6.64	132.90	123.60
75	l3	59	A	C8-N9-C4	-6.64	103.14	105.80
83	lB	20	C	N3-C4-C5	-6.64	119.24	121.90
83	lB	32	A	C8-N9-C4	-6.64	103.14	105.80
96	lO	86	C	N3-C4-C5	-6.64	119.24	121.90
3	L2	81	ARG	CD-NE-CZ	6.64	132.89	123.60
26	LP	115	ARG	CD-NE-CZ	6.64	132.89	123.60
40	Ld	531	ARG	CD-NE-CZ	6.64	132.90	123.60
41	Le	573	ARG	CD-NE-CZ	6.64	132.90	123.60
95	lN	31	A	C8-N9-C4	-6.64	103.14	105.80
13	LC	363	ARG	CD-NE-CZ	6.64	132.89	123.60
30	LT	15	ARG	CD-NE-CZ	6.64	132.89	123.60
40	Ld	344	ARG	CD-NE-CZ	6.64	132.89	123.60
3	L2	171	ARG	CD-NE-CZ	6.64	132.89	123.60
20	LJ	5	ARG	CD-NE-CZ	6.64	132.89	123.60
20	LJ	230	ARG	CD-NE-CZ	6.64	132.89	123.60
27	LQ	359	ARG	CD-NE-CZ	6.64	132.89	123.60
38	Lb	753	ARG	CD-NE-CZ	6.64	132.89	123.60
53	Lq	125	ARG	CD-NE-CZ	6.64	132.89	123.60
75	l3	26	C	N3-C4-C5	-6.64	119.25	121.90
83	lB	31	G	C8-N9-C4	-6.64	103.75	106.40
96	lO	162	A	C8-N9-C4	-6.63	103.15	105.80
25	LO	343	ARG	CD-NE-CZ	6.63	132.89	123.60
39	Lc	371	PHE	CB-CG-CD2	6.63	125.44	120.80
53	Lq	647	ARG	CD-NE-CZ	6.63	132.89	123.60
94	lM	76	C	N3-C4-C5	-6.63	119.25	121.90
94	lM	84	U	C5-C6-N1	6.63	126.02	122.70
20	LJ	22	ARG	CD-NE-CZ	6.63	132.88	123.60
25	LO	116	ARG	CD-NE-CZ	6.63	132.88	123.60
29	LS	73	ARG	CD-NE-CZ	6.63	132.88	123.60
72	l0	36	C	N3-C4-C5	-6.63	119.25	121.90
90	lI	36	A	C8-N9-C4	-6.63	103.15	105.80
14	LD	514	TYR	CB-CG-CD2	6.63	124.98	121.00
94	lM	32	C	N3-C4-C5	-6.63	119.25	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
101	lW	12	U	C5-C6-N1	6.63	126.02	122.70
1	L0	618	ARG	CD-NE-CZ	6.63	132.88	123.60
7	L6	238	TYR	CB-CG-CD2	6.63	124.98	121.00
46	Lj	74	ARG	CD-NE-CZ	6.63	132.88	123.60
93	lL	77	G	C8-N9-C4	-6.63	103.75	106.40
37	La	78	ARG	CD-NE-CZ	6.63	132.88	123.60
74	l2	29	A	C8-N9-C4	-6.63	103.15	105.80
91	lJ	183	U	C5-C6-N1	6.63	126.01	122.70
96	lO	90	G	C8-N9-C4	-6.63	103.75	106.40
2	L1	499	ARG	CD-NE-CZ	6.62	132.88	123.60
22	LL	909	ARG	CD-NE-CZ	6.62	132.88	123.60
48	Ll	32	PHE	CB-CG-CD2	6.62	125.44	120.80
61	Ly	543	ARG	CD-NE-CZ	6.62	132.88	123.60
60	Lx	313	ARG	CD-NE-CZ	6.62	132.87	123.60
96	lO	1	U	C5-C6-N1	6.62	126.01	122.70
13	LC	567	ARG	CD-NE-CZ	6.62	132.87	123.60
22	LL	298	ARG	CD-NE-CZ	6.62	132.87	123.60
35	LY	464	ARG	CD-NE-CZ	6.62	132.87	123.60
36	LZ	70	ARG	CD-NE-CZ	6.62	132.87	123.60
38	Lb	721	ARG	CD-NE-CZ	6.62	132.87	123.60
39	Lc	482	PHE	CB-CG-CD2	6.62	125.44	120.80
45	Li	673	ARG	CD-NE-CZ	6.62	132.87	123.60
87	lF	13	A	C8-N9-C4	-6.62	103.15	105.80
20	LJ	284	ARG	CD-NE-CZ	6.62	132.87	123.60
94	lM	95	U	C5-C6-N1	6.62	126.01	122.70
55	Ls	373	ARG	CD-NE-CZ	6.62	132.87	123.60
84	lC	25	A	C8-N9-C4	-6.62	103.15	105.80
96	lO	38	A	C8-N9-C4	-6.62	103.15	105.80
97	lP	4	U	C6-N1-C2	-6.62	117.03	121.00
25	LO	134	ARG	CD-NE-CZ	6.62	132.86	123.60
99	lR	15	U	C5-C6-N1	6.62	126.01	122.70
74	l2	5	U	C5-C6-N1	6.62	126.01	122.70
74	l2	16	C	N3-C4-C5	-6.62	119.25	121.90
96	lO	109	C	N3-C4-C5	-6.62	119.25	121.90
13	LC	291	ARG	CD-NE-CZ	6.61	132.86	123.60
24	LN	256	ARG	CD-NE-CZ	6.61	132.86	123.60
24	LN	258	TYR	CB-CG-CD2	6.61	124.97	121.00
5	L4	355	ARG	CD-NE-CZ	6.61	132.86	123.60
75	l3	39	A	C8-N9-C4	-6.61	103.16	105.80
94	lM	144	C	N3-C4-C5	-6.61	119.25	121.90
13	LC	178	ARG	CD-NE-CZ	6.61	132.85	123.60
28	LR	22	ARG	CD-NE-CZ	6.61	132.86	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	Lo	120	ARG	CD-NE-CZ	6.61	132.85	123.60
75	l3	11	U	C5-C6-N1	6.61	126.00	122.70
82	lA	25	G	N3-C4-C5	-6.61	125.30	128.60
95	lN	2	C	C5-C6-N1	6.61	124.31	121.00
42	Lf	334	ARG	CD-NE-CZ	6.61	132.85	123.60
86	lE	16	U	C5-C6-N1	6.61	126.00	122.70
17	LG	214	ARG	CD-NE-CZ	6.61	132.85	123.60
37	La	85	ARG	CD-NE-CZ	6.61	132.85	123.60
38	Lb	296	ARG	CD-NE-CZ	6.61	132.85	123.60
91	lJ	234	A	C8-N9-C4	-6.61	103.16	105.80
99	lR	25	U	C5-C6-N1	6.61	126.00	122.70
76	l4	31	C	N3-C4-C5	-6.60	119.26	121.90
76	l4	52	A	C8-N9-C4	-6.60	103.16	105.80
1	L0	258	ARG	CD-NE-CZ	6.60	132.84	123.60
61	Ly	338	ARG	CD-NE-CZ	6.60	132.84	123.60
96	lO	107	G	C8-N9-C4	-6.60	103.76	106.40
103	lY	9	U	O4'-C1'-N1	6.60	113.48	108.20
7	L6	242	ARG	CD-NE-CZ	6.60	132.84	123.60
91	lJ	181	U	C5-C6-N1	6.60	126.00	122.70
9	L8	116	ARG	CD-NE-CZ	6.60	132.84	123.60
61	Ly	652	ARG	CD-NE-CZ	6.60	132.84	123.60
6	L5	476	ARG	CD-NE-CZ	6.60	132.84	123.60
38	Lb	727	ARG	CD-NE-CZ	6.60	132.84	123.60
54	Lr	79	ARG	CD-NE-CZ	6.60	132.84	123.60
82	lA	47	A	C8-N9-C4	-6.60	103.16	105.80
91	lJ	199	U	C5-C6-N1	6.60	126.00	122.70
32	LV	474	ARG	CD-NE-CZ	6.60	132.83	123.60
5	L4	587	ARG	CD-NE-CZ	6.59	132.83	123.60
20	LJ	421	ARG	CD-NE-CZ	6.59	132.83	123.60
25	LO	133	ARG	CD-NE-CZ	6.59	132.83	123.60
38	Lb	505	ARG	CD-NE-CZ	6.59	132.83	123.60
51	Lo	297	PHE	CB-CG-CD2	6.59	125.42	120.80
53	Lq	120	ARG	CD-NE-CZ	6.59	132.83	123.60
75	l3	24	C	C5-C6-N1	6.59	124.30	121.00
81	l9	63	A	C8-N9-C4	-6.59	103.16	105.80
91	lJ	50	A	C5-N7-C8	-6.59	100.60	103.90
9	L8	234	ARG	CD-NE-CZ	6.59	132.83	123.60
20	LJ	395	ARG	CD-NE-CZ	6.59	132.83	123.60
22	LL	945	ARG	CD-NE-CZ	6.59	132.83	123.60
60	Lx	358	ARG	CD-NE-CZ	6.59	132.83	123.60
68	UF	40	PHE	CB-CG-CD2	6.59	125.42	120.80
13	LC	575	ARG	CD-NE-CZ	6.59	132.82	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	Li	700	TYR	CB-CG-CD2	6.59	124.95	121.00
56	Lt	131	ARG	CD-NE-CZ	6.59	132.82	123.60
104	lX	52	U	C5-C6-N1	6.59	126.00	122.70
93	lL	37	U	C5-C6-N1	6.59	125.99	122.70
39	Lc	148	ARG	CD-NE-CZ	6.58	132.82	123.60
56	Lt	122	GLU	CA-CB-CG	6.58	127.88	113.40
74	l2	31	A	C8-N9-C4	-6.58	103.17	105.80
78	l6	40	A	C8-N9-C4	-6.58	103.17	105.80
91	lJ	212	U	C5-C6-N1	6.58	125.99	122.70
91	lJ	217	U	C5-C6-N1	6.58	125.99	122.70
94	lM	79	C	N3-C4-C5	-6.58	119.27	121.90
72	l0	39	U	C5-C6-N1	6.58	125.99	122.70
102	lU	2	U	C5-C6-N1	6.58	125.99	122.70
38	Lb	784	PHE	CB-CG-CD2	6.58	125.41	120.80
17	LG	235	ARG	CD-NE-CZ	6.58	132.81	123.60
74	l2	14	A	C8-N9-C4	-6.58	103.17	105.80
98	lQ	31	U	C5-C6-N1	6.58	125.99	122.70
43	Lg	140	ARG	CD-NE-CZ	6.57	132.80	123.60
73	l1	49	A	C8-N9-C4	-6.57	103.17	105.80
87	lF	20	A	C8-N9-C4	-6.57	103.17	105.80
91	lJ	271	C	N3-C4-C5	-6.57	119.27	121.90
97	lP	29	U	C5-C6-N1	6.57	125.99	122.70
1	L0	267	TYR	CB-CG-CD2	6.57	124.94	121.00
79	l7	22	A	C8-N9-C4	-6.57	103.17	105.80
103	lV	3	U	C5-C6-N1	6.57	125.99	122.70
91	lJ	148	C	C5-C6-N1	6.57	124.28	121.00
69	UG	313	ARG	CD-NE-CZ	6.57	132.79	123.60
93	lL	91	A	C8-N9-C4	-6.57	103.17	105.80
91	lJ	210	A	C8-N9-C4	-6.57	103.17	105.80
76	l4	47	U	C5-C6-N1	6.56	125.98	122.70
88	lG	11	C	N3-C4-C5	-6.56	119.27	121.90
20	LJ	7	ARG	CD-NE-CZ	6.56	132.79	123.60
20	LJ	253	PHE	CB-CG-CD2	6.56	125.39	120.80
94	lM	45	A	N7-C8-N9	6.56	117.08	113.80
13	LC	113	TYR	CB-CG-CD2	6.56	124.93	121.00
13	LC	607	ARG	CD-NE-CZ	6.56	132.78	123.60
73	l1	34	C	N3-C4-C5	-6.56	119.28	121.90
91	lJ	132	C	N3-C4-C5	-6.56	119.28	121.90
94	lM	184	A	C2-N3-C4	-6.56	107.32	110.60
83	lB	16	U	C5-C6-N1	6.55	125.98	122.70
91	lJ	266	U	C5-C6-N1	-6.55	119.42	122.70
52	Lp	414	ARG	CD-NE-CZ	6.55	132.77	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
93	lL	73	A	C8-N9-C4	-6.55	103.18	105.80
96	lO	16	A	C8-N9-C4	-6.55	103.18	105.80
81	l9	57	A	C8-N9-C4	-6.55	103.18	105.80
44	Lh	478	ARG	CD-NE-CZ	6.55	132.77	123.60
93	lL	49	G	C8-N9-C4	-6.55	103.78	106.40
76	l4	30	C	N3-C4-C5	-6.55	119.28	121.90
96	lO	117	C	N3-C4-C5	-6.55	119.28	121.90
104	lX	1	U	C5-C6-N1	6.55	125.97	122.70
41	Le	550	ARG	CD-NE-CZ	6.54	132.76	123.60
99	lR	27	U	C5-C6-N1	6.54	125.97	122.70
81	l9	9	C	N3-C4-C5	-6.54	119.28	121.90
52	Lp	618	TYR	CB-CG-CD2	6.54	124.92	121.00
73	l1	3	C	N3-C4-C5	-6.54	119.28	121.90
89	lH	26	A	N7-C8-N9	6.54	117.07	113.80
94	lM	124	U	C5-C6-N1	6.54	125.97	122.70
96	lO	10	U	C5-C6-N1	6.54	125.97	122.70
24	LN	279	ARG	CD-NE-CZ	6.54	132.75	123.60
39	Lc	247	ARG	CD-NE-CZ	6.54	132.75	123.60
44	Lh	357	TYR	CB-CG-CD2	6.54	124.92	121.00
81	l9	11	U	C5-C6-N1	6.54	125.97	122.70
83	lB	21	A	C8-N9-C4	-6.54	103.19	105.80
92	lK	29	U	C5-C6-N1	6.54	125.97	122.70
94	lM	87	C	C5-C6-N1	6.54	124.27	121.00
96	lO	60	A	C5-N7-C8	-6.54	100.63	103.90
73	l1	14	U	C5-C6-N1	6.53	125.97	122.70
89	lH	25	A	N7-C8-N9	6.53	117.07	113.80
11	LA	173	TYR	CB-CG-CD2	6.53	124.92	121.00
81	l9	61	A	C8-N9-C4	-6.53	103.19	105.80
45	Li	713	TYR	CB-CG-CD2	6.53	124.92	121.00
73	l1	19	C	N3-C4-C5	-6.53	119.29	121.90
96	lO	92	U	C5-C6-N1	6.53	125.96	122.70
75	l3	10	U	C5-C6-N1	6.52	125.96	122.70
83	lB	26	C	N3-C4-C5	-6.52	119.29	121.90
91	lJ	261	A	C4-C5-C6	-6.52	113.74	117.00
96	lO	164	A	C8-N9-C4	-6.52	103.19	105.80
54	Lr	163	TYR	CB-CG-CD2	6.52	124.91	121.00
96	lO	45	A	C8-N9-C4	-6.52	103.19	105.80
74	l2	4	U	C5-C6-N1	6.51	125.96	122.70
81	l9	14	U	C5-C6-N1	6.51	125.96	122.70
81	l9	49	A	N1-C6-N6	-6.51	114.69	118.60
77	l5	44	U	C5-C6-N1	6.51	125.96	122.70
91	lJ	207	U	C5-C6-N1	6.51	125.95	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	lF	85	A	C8-N9-C4	-6.51	103.20	105.80
90	lI	27	C	N3-C2-O2	-6.51	117.34	121.90
96	lO	56	U	C5-C6-N1	6.51	125.95	122.70
75	l3	55	C	C5-C6-N1	6.51	124.25	121.00
84	lC	11	C	N3-C4-C5	-6.51	119.30	121.90
104	lX	14	U	C5-C6-N1	6.51	125.95	122.70
94	lM	5	A	N1-C6-N6	-6.50	114.70	118.60
98	lQ	28	U	C5-C6-N1	6.50	125.95	122.70
75	l3	26	C	C5-C6-N1	6.50	124.25	121.00
94	lM	191	U	N1-C2-N3	6.50	118.80	114.90
90	lI	3	A	C8-N9-C4	-6.50	103.20	105.80
92	lK	34	G	N3-C4-C5	-6.50	125.35	128.60
86	lE	8	A	C8-N9-C4	-6.50	103.20	105.80
94	lM	129	A	C8-N9-C4	-6.50	103.20	105.80
96	lO	35	U	C5-C6-N1	6.50	125.95	122.70
88	lG	17	A	C8-N9-C4	-6.50	103.20	105.80
96	lO	2	U	C5-C6-N1	6.50	125.95	122.70
87	lF	18	U	C5-C6-N1	6.50	125.95	122.70
81	l9	59	C	N3-C4-C5	-6.49	119.30	121.90
91	lJ	86	C	N3-C2-O2	-6.49	117.35	121.90
76	l4	15	A	C8-N9-C4	-6.49	103.20	105.80
81	l9	60	U	C5-C6-N1	6.49	125.95	122.70
12	LB	18	ARG	CD-NE-CZ	6.49	132.68	123.60
76	l4	61	A	C8-N9-C4	-6.49	103.20	105.80
94	lM	74	A	C8-N9-C4	-6.49	103.20	105.80
91	lJ	280	C	C5-C6-N1	6.49	124.24	121.00
101	lW	13	U	C5-C6-N1	6.49	125.94	122.70
85	lD	8	U	C5-C6-N1	6.49	125.94	122.70
93	lL	68	U	C5-C6-N1	6.49	125.94	122.70
95	lN	21	U	C5-C6-N1	6.49	125.94	122.70
96	lO	68	U	C5-C6-N1	6.49	125.94	122.70
83	lB	7	A	C8-N9-C4	-6.48	103.21	105.80
91	lJ	198	U	C5-C6-N1	6.48	125.94	122.70
61	Ly	606	MET	CA-CB-CG	6.48	124.32	113.30
91	lJ	22	C	N3-C4-C5	-6.48	119.31	121.90
99	lR	13	U	C5-C6-N1	6.48	125.94	122.70
17	LG	236	ARG	CD-NE-CZ	6.48	132.67	123.60
40	Ld	637	ARG	CD-NE-CZ	6.48	132.67	123.60
91	lJ	136	U	C5-C6-N1	6.48	125.94	122.70
103	lV	7	U	C5-C6-N1	6.48	125.94	122.70
101	lW	14	U	C5-C6-N1	6.48	125.94	122.70
79	l7	53	U	C5-C6-N1	6.48	125.94	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	lA	48	A	C8-N9-C4	-6.48	103.21	105.80
91	lJ	223	U	N3-C2-O2	-6.48	117.67	122.20
104	lX	51	U	C5-C6-N1	6.48	125.94	122.70
91	lJ	93	A	N1-C6-N6	-6.47	114.72	118.60
91	lJ	192	U	C5-C6-N1	6.47	125.94	122.70
97	lP	23	U	C5-C6-N1	6.47	125.94	122.70
99	lR	22	U	C5-C6-N1	6.47	125.94	122.70
79	l7	24	A	C5-C6-N1	6.47	120.94	117.70
96	lO	141	U	C5-C6-N1	6.47	125.94	122.70
38	Lb	982	ARG	NE-CZ-NH2	6.47	123.53	120.30
83	lB	33	A	C8-N9-C4	-6.47	103.21	105.80
87	lF	15	U	C5-C6-N1	6.47	125.94	122.70
91	lJ	191	C	N3-C4-C5	-6.47	119.31	121.90
24	LN	255	MET	CA-CB-CG	6.47	124.30	113.30
56	Lt	251	MET	CA-CB-CG	6.47	124.30	113.30
87	lF	30	U	C5-C6-N1	6.47	125.93	122.70
91	lJ	196	A	C8-N9-C4	-6.47	103.21	105.80
81	l9	39	G	C8-N9-C4	-6.47	103.81	106.40
87	lF	67	U	C5-C6-N1	6.47	125.93	122.70
40	Ld	520	MET	CA-CB-CG	6.46	124.29	113.30
79	l7	59	A	C8-N9-C4	-6.46	103.21	105.80
88	lG	19	C	N3-C4-C5	-6.46	119.31	121.90
93	lL	85	A	C8-N9-C4	-6.46	103.21	105.80
20	LJ	27	ARG	NE-CZ-NH1	-6.46	117.07	120.30
91	lJ	157	U	C5-C6-N1	6.46	125.93	122.70
91	lJ	208	A	C8-N9-C4	-6.46	103.22	105.80
96	lO	11	C	C5-C6-N1	6.46	124.23	121.00
96	lO	121	C	N3-C4-C5	-6.46	119.31	121.90
70	UH	245	TYR	CB-CG-CD2	6.46	124.88	121.00
84	lC	24	A	C5-C6-N1	6.46	120.93	117.70
96	lO	124	A	C5-N7-C8	-6.46	100.67	103.90
96	lO	48	A	C6-N1-C2	-6.46	114.72	118.60
96	lO	55	A	C8-N9-C4	-6.46	103.22	105.80
103	lV	6	U	C5-C6-N1	6.46	125.93	122.70
17	LG	199	PHE	CB-CG-CD2	6.46	125.32	120.80
38	Lb	283	TYR	CB-CG-CD2	6.46	124.87	121.00
96	lO	41	U	C5-C6-N1	6.46	125.93	122.70
61	Ly	671	TYR	CB-CG-CD2	6.45	124.87	121.00
73	l1	21	C	N3-C4-C5	-6.45	119.32	121.90
97	lP	21	U	C5-C6-N1	6.45	125.93	122.70
91	lJ	282	A	C8-N9-C4	-6.45	103.22	105.80
102	lU	10	U	C5-C6-N1	6.45	125.92	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	14	U	C5-C6-N1	6.45	125.92	122.70
55	Ls	588	ARG	CD-NE-CZ	6.44	132.62	123.60
81	l9	43	C	C5-C6-N1	6.44	124.22	121.00
99	lR	21	U	C5-C6-N1	6.44	125.92	122.70
99	lR	24	U	C5-C6-N1	6.44	125.92	122.70
51	Lo	151	ARG	CD-NE-CZ	6.44	132.62	123.60
76	l4	6	U	C5-C6-N1	6.44	125.92	122.70
77	l5	34	G	C5-N7-C8	-6.44	101.08	104.30
76	l4	44	U	C5-C6-N1	6.44	125.92	122.70
81	l9	48	U	C5-C6-N1	6.44	125.92	122.70
95	lN	33	A	C8-N9-C4	-6.44	103.22	105.80
51	Lo	87	TYR	CB-CG-CD2	6.44	124.86	121.00
92	lK	35	A	C5-C6-N1	6.44	120.92	117.70
94	lM	91	U	C5-C6-N1	6.44	125.92	122.70
76	l4	25	U	C5-C6-N1	6.43	125.92	122.70
103	lV	2	U	C5-C6-N1	6.43	125.92	122.70
39	Lc	259	PHE	CB-CG-CD2	6.43	125.30	120.80
76	l4	36	A	C8-N9-C4	-6.43	103.23	105.80
87	lF	4	U	C5-C6-N1	6.43	125.92	122.70
94	lM	123	U	C5-C6-N1	6.43	125.91	122.70
96	lO	102	U	C5-C6-N1	6.43	125.92	122.70
98	lQ	29	U	C5-C6-N1	6.43	125.92	122.70
104	lX	58	U	C5-C6-N1	6.43	125.92	122.70
85	lD	10	A	C5-N7-C8	-6.43	100.69	103.90
91	lJ	43	C	C5-C6-N1	6.43	124.21	121.00
99	lR	17	U	C5-C6-N1	6.42	125.91	122.70
94	lM	5	A	C5-C6-N1	6.42	120.91	117.70
95	lN	28	U	C5-C6-N1	6.42	125.91	122.70
75	l3	43	A	C5-C6-N1	6.42	120.91	117.70
102	lU	4	U	C5-C6-N1	6.42	125.91	122.70
79	l7	23	U	C5-C6-N1	6.42	125.91	122.70
81	l9	33	U	C5-C6-N1	6.42	125.91	122.70
76	l4	24	U	C5-C6-N1	6.41	125.91	122.70
87	lF	78	U	C5-C6-N1	6.41	125.91	122.70
97	lP	24	U	C5-C6-N1	6.41	125.91	122.70
97	lP	22	U	C5-C6-N1	6.41	125.91	122.70
83	lB	18	U	C5-C6-N1	6.41	125.91	122.70
87	lF	11	U	C5-C6-N1	6.41	125.91	122.70
91	lJ	137	C	C5-C6-N1	6.41	124.20	121.00
91	lJ	176	U	C5-C6-N1	6.41	125.91	122.70
99	lR	11	U	C5-C6-N1	6.41	125.90	122.70
99	lR	14	U	C5-C6-N1	6.41	125.90	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	99	A	C8-N9-C4	-6.41	103.24	105.80
91	lJ	188	U	C6-N1-C2	-6.41	117.16	121.00
75	l3	47	U	C5-C6-N1	6.40	125.90	122.70
76	l4	13	U	C5-C6-N1	6.40	125.90	122.70
76	l4	46	C	C5-C6-N1	6.40	124.20	121.00
74	l2	25	U	C5-C6-N1	6.40	125.90	122.70
85	lD	2	U	C5-C6-N1	6.40	125.90	122.70
93	lL	3	G	C8-N9-C4	-6.40	103.84	106.40
96	lO	37	U	C5-C6-N1	6.40	125.90	122.70
96	lO	145	C	N3-C4-C5	-6.40	119.34	121.90
97	lP	1	U	C5-C6-N1	6.40	125.90	122.70
97	lP	9	U	C5-C6-N1	6.40	125.90	122.70
97	lP	28	U	C5-C6-N1	6.40	125.90	122.70
81	l9	62	A	C8-N9-C4	-6.39	103.24	105.80
96	lO	125	C	C5-C6-N1	6.39	124.20	121.00
104	lX	35	U	C5-C6-N1	6.39	125.90	122.70
79	l7	44	A	N1-C6-N6	-6.39	114.77	118.60
96	lO	39	U	C5-C6-N1	6.39	125.90	122.70
76	l4	51	U	C5-C6-N1	6.39	125.89	122.70
78	l6	25	A	C6-N1-C2	-6.39	114.77	118.60
87	lF	22	C	C5-C6-N1	6.39	124.19	121.00
96	lO	70	C	C5-C6-N1	6.39	124.19	121.00
73	l1	9	C	N3-C4-C5	-6.38	119.35	121.90
75	l3	34	U	C5-C6-N1	6.38	125.89	122.70
81	l9	64	U	C5-C6-N1	6.38	125.89	122.70
91	lJ	15	U	C5-C6-N1	6.38	125.89	122.70
101	lT	4	U	C5-C6-N1	6.38	125.89	122.70
96	lO	47	A	C8-N9-C4	-6.38	103.25	105.80
102	lU	5	U	C5-C6-N1	6.38	125.89	122.70
22	LL	692	ARG	CD-NE-CZ	6.38	132.53	123.60
91	lJ	138	G	C5-N7-C8	-6.38	101.11	104.30
93	lL	43	U	C5-C6-N1	6.38	125.89	122.70
87	lF	33	U	C5-C6-N1	6.37	125.89	122.70
91	lJ	163	U	C5-C6-N1	6.37	125.89	122.70
94	lM	92	C	N3-C4-C5	-6.37	119.35	121.90
96	lO	142	U	C5-C6-N1	6.37	125.89	122.70
104	lX	50	U	C5-C6-N1	6.37	125.89	122.70
73	l1	5	U	C5-C6-N1	6.37	125.89	122.70
94	lM	197	U	C5-C6-N1	6.37	125.89	122.70
97	lP	26	U	C5-C6-N1	6.37	125.88	122.70
103	lV	5	U	C5-C6-N1	6.37	125.88	122.70
78	l6	26	C	N3-C4-C5	-6.37	119.35	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	118	A	C4-C5-C6	-6.37	113.82	117.00
76	l4	89	U	C5-C6-N1	6.37	125.88	122.70
77	l5	31	U	C5-C6-N1	6.36	125.88	122.70
83	lB	41	C	N3-C4-C5	6.36	124.44	121.90
91	lJ	273	C	C5-C6-N1	6.36	124.18	121.00
94	lM	73	C	C5-C6-N1	6.36	124.18	121.00
103	lY	8	U	O4'-C1'-N1	6.36	113.29	108.20
101	lT	2	U	C5-C6-N1	6.36	125.88	122.70
104	lX	33	U	C5-C6-N1	6.36	125.88	122.70
91	lJ	130	U	C5-C6-N1	6.36	125.88	122.70
95	lN	25	U	C5-C6-N1	6.36	125.88	122.70
98	lQ	15	U	C5-C6-N1	6.36	125.88	122.70
104	lX	2	U	C5-C6-N1	6.36	125.88	122.70
38	Lb	691	MET	CA-CB-CG	6.36	124.11	113.30
98	lQ	5	U	C5-C6-N1	6.36	125.88	122.70
101	lW	10	U	C5-C6-N1	6.35	125.88	122.70
81	l9	41	U	C5-C6-N1	6.35	125.88	122.70
99	lR	23	U	C5-C6-N1	6.35	125.88	122.70
91	lJ	173	U	C5-C6-N1	6.35	125.87	122.70
102	lU	15	U	C5-C6-N1	6.35	125.88	122.70
91	lJ	17	U	C5-C6-N1	6.35	125.87	122.70
91	lJ	213	U	C5-C6-N1	6.35	125.87	122.70
96	lO	99	A	C5-N7-C8	-6.35	100.73	103.90
4	L3	598	TYR	CB-CG-CD2	6.34	124.81	121.00
81	l9	55	U	C5-C6-N1	6.34	125.87	122.70
96	lO	80	A	C5-C6-N1	6.34	120.87	117.70
79	l7	40	U	C5-C6-N1	6.34	125.87	122.70
98	lQ	22	U	O4'-C1'-N1	6.34	113.27	108.20
1	L0	575	MET	CA-CB-CG	6.34	124.07	113.30
61	Ly	538	MET	CA-CB-CG	6.34	124.08	113.30
94	lM	148	U	C5-C6-N1	6.34	125.87	122.70
96	lO	46	U	C5-C6-N1	6.34	125.87	122.70
76	l4	26	A	C8-N9-C4	-6.33	103.27	105.80
79	l7	6	U	C5-C6-N1	6.33	125.86	122.70
94	lM	75	G	C8-N9-C4	-6.33	103.87	106.40
98	lQ	16	U	C5-C6-N1	6.33	125.86	122.70
91	lJ	266	U	N3-C2-O2	-6.33	117.77	122.20
95	lN	40	U	C5-C6-N1	6.33	125.86	122.70
33	LW	262	TYR	CB-CG-CD2	6.33	124.80	121.00
74	l2	6	U	C5-C6-N1	6.33	125.86	122.70
91	lJ	101	U	C5-C6-N1	6.33	125.86	122.70
95	lN	1	A	C8-N9-C4	-6.32	103.27	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
102	lU	1	U	C5-C6-N1	6.32	125.86	122.70
96	lO	116	U	C5-C6-N1	6.32	125.86	122.70
91	lJ	202	U	C5-C6-N1	6.32	125.86	122.70
102	lU	3	U	C5-C6-N1	6.32	125.86	122.70
85	lD	6	C	C5-C6-N1	6.32	124.16	121.00
93	lL	8	G	N7-C8-N9	6.32	116.26	113.10
98	lQ	3	U	C5-C6-N1	6.32	125.86	122.70
87	lF	10	U	C5-C6-N1	6.32	125.86	122.70
32	LV	1088	TYR	CB-CG-CD2	6.31	124.79	121.00
96	lO	138	G	C8-N9-C4	-6.31	103.88	106.40
77	l5	41	U	C5-C6-N1	6.31	125.86	122.70
91	lJ	186	U	C5-C6-N1	6.31	125.86	122.70
79	l7	24	A	N1-C6-N6	-6.31	114.81	118.60
91	lJ	190	U	C5-C6-N1	6.31	125.86	122.70
94	lM	29	U	C5-C6-N1	6.31	125.86	122.70
98	lQ	27	U	C5-C6-N1	6.31	125.86	122.70
14	LD	391	PHE	CB-CG-CD2	6.31	125.22	120.80
79	l7	7	U	C5-C6-N1	6.31	125.85	122.70
91	lJ	172	C	N3-C4-C5	-6.30	119.38	121.90
96	lO	65	A	C8-N9-C4	-6.30	103.28	105.80
76	l4	35	A	C8-N9-C4	-6.30	103.28	105.80
56	Lt	118	TYR	CB-CG-CD2	6.30	124.78	121.00
98	lQ	7	U	C5-C6-N1	6.30	125.85	122.70
75	l3	37	U	C5-C6-N1	6.29	125.85	122.70
103	lV	4	U	C5-C6-N1	6.29	125.85	122.70
88	lG	3	A	C8-N9-C4	-6.29	103.28	105.80
98	lQ	4	U	C5-C6-N1	6.29	125.84	122.70
103	lY	5	U	N3-C2-O2	-6.29	117.80	122.20
96	lO	98	U	C5-C6-N1	6.29	125.84	122.70
96	lO	156	U	C5-C6-N1	6.29	125.84	122.70
104	lX	34	U	C5-C6-N1	6.29	125.84	122.70
36	LZ	124	MET	CA-CB-CG	6.28	123.98	113.30
73	l1	12	U	C5-C6-N1	6.28	125.84	122.70
96	lO	110	U	C5-C6-N1	6.28	125.84	122.70
96	lO	140	U	C5-C6-N1	6.28	125.84	122.70
92	lK	19	C	C5-C6-N1	6.28	124.14	121.00
11	LA	162	MET	CA-CB-CG	6.28	123.98	113.30
91	lJ	231	U	C5-C6-N1	6.28	125.84	122.70
97	lP	15	U	N3-C2-O2	-6.28	117.80	122.20
97	lP	25	U	C5-C6-N1	6.28	125.84	122.70
64	UB	219	TYR	CB-CG-CD2	6.28	124.77	121.00
93	lL	63	U	C5-C6-N1	6.28	125.84	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	LJ	102	TYR	CB-CG-CD2	6.28	124.77	121.00
76	l4	63	U	C5-C6-N1	6.27	125.84	122.70
1	L0	423	TYR	CB-CG-CD2	6.27	124.76	121.00
39	Lc	323	MET	CA-CB-CG	6.27	123.96	113.30
86	lE	23	C	C5-C6-N1	6.27	124.13	121.00
91	lJ	8	C	C5-C6-N1	6.27	124.13	121.00
91	lJ	84	A	C4-C5-C6	-6.27	113.87	117.00
103	lY	9	U	N3-C2-O2	-6.27	117.81	122.20
99	lR	28	U	C5-C6-N1	6.26	125.83	122.70
94	lM	28	A	C8-N9-C4	-6.26	103.30	105.80
85	lD	14	C	C5-C6-N1	6.26	124.13	121.00
91	lJ	168	C	C5-C6-N1	6.26	124.13	121.00
94	lM	46	U	C2-N3-C4	6.26	130.76	127.00
79	l7	62	A	C5-N7-C8	-6.26	100.77	103.90
75	l3	13	U	C5-C6-N1	6.26	125.83	122.70
87	lF	16	U	C5-C6-N1	6.26	125.83	122.70
95	lN	18	A	C3'-C2'-C1'	6.26	106.50	101.50
99	lR	18	U	C5-C6-N1	6.26	125.83	122.70
13	LC	475	PHE	CB-CG-CD2	6.25	125.18	120.80
51	Lo	163	PHE	CB-CG-CD2	6.25	125.18	120.80
87	lF	21	U	C5-C6-N1	6.25	125.83	122.70
9	L8	235	TYR	CB-CG-CD2	6.25	124.75	121.00
93	lL	8	G	C5-N7-C8	-6.25	101.17	104.30
67	UE	187	MET	CA-CB-CG	6.25	123.92	113.30
51	Lo	340	TYR	CB-CG-CD2	6.25	124.75	121.00
93	lL	9	A	C2-N3-C4	6.25	113.72	110.60
96	lO	13	C	C5-C6-N1	6.25	124.12	121.00
91	lJ	164	U	C5-C6-N1	6.25	125.82	122.70
37	La	51	PHE	CB-CG-CD2	6.24	125.17	120.80
91	lJ	169	C	N3-C4-C5	-6.24	119.41	121.90
76	l4	10	U	C5-C6-N1	6.24	125.82	122.70
96	lO	86	C	C5-C6-N1	6.24	124.12	121.00
98	lQ	30	U	C5-C6-N1	6.24	125.82	122.70
9	L8	153	MET	CA-CB-CG	6.23	123.90	113.30
73	l1	1	U	C5-C6-N1	6.23	125.81	122.70
87	lF	23	U	C5-C6-N1	6.23	125.81	122.70
96	lO	153	C	C5-C6-N1	6.23	124.11	121.00
75	l3	54	C	C5-C6-N1	6.23	124.11	121.00
38	Lb	871	TYR	CB-CG-CD2	6.22	124.73	121.00
76	l4	93	U	C5-C6-N1	6.22	125.81	122.70
79	l7	15	U	C5-C6-N1	6.22	125.81	122.70
95	lN	23	U	C5-C6-N1	6.22	125.81	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	141	U	C5-C6-N1	6.22	125.81	122.70
93	lL	9	A	N1-C6-N6	-6.22	114.87	118.60
94	lM	2	U	C5-C6-N1	6.22	125.81	122.70
94	lM	72	U	C5-C6-N1	6.22	125.81	122.70
96	lO	60	A	C2-N3-C4	-6.22	107.49	110.60
67	UE	138	MET	CA-CB-CG	6.22	123.87	113.30
80	l8	5	C	N3-C2-O2	-6.22	117.55	121.90
93	lL	58	C	C5-C6-N1	6.22	124.11	121.00
93	lL	33	U	C5-C6-N1	6.22	125.81	122.70
20	LJ	169	MET	CA-CB-CG	6.22	123.87	113.30
38	Lb	713	PHE	CB-CG-CD2	6.22	125.15	120.80
81	l9	37	C	C5-C6-N1	6.22	124.11	121.00
82	lA	25	G	N1-C6-O6	-6.22	116.17	119.90
19	LI	27	PHE	CB-CG-CD2	6.21	125.15	120.80
64	UB	316	ARG	CD-NE-CZ	6.21	132.30	123.60
49	Lm	414	TYR	CB-CG-CD2	6.21	124.73	121.00
56	Lt	226	MET	CA-CB-CG	6.21	123.86	113.30
82	lA	19	U	C5-C6-N1	6.21	125.81	122.70
95	lN	29	C	C5-C6-N1	6.21	124.11	121.00
101	lT	1	U	C5-C6-N1	6.21	125.80	122.70
4	L3	729	MET	CA-CB-CG	6.21	123.85	113.30
20	LJ	413	MET	CA-CB-CG	6.21	123.85	113.30
91	lJ	49	U	C6-N1-C2	-6.21	117.28	121.00
81	l9	2	C	C6-N1-C2	-6.20	117.82	120.30
81	l9	29	C	C5-C6-N1	6.20	124.10	121.00
32	LV	958	ARG	CD-NE-CZ	6.20	132.28	123.60
74	l2	22	U	C5-C6-N1	6.20	125.80	122.70
82	lA	64	A	C5-N7-C8	-6.20	100.80	103.90
85	lD	3	U	C5-C6-N1	6.20	125.80	122.70
96	lO	89	G	C5-N7-C8	-6.20	101.20	104.30
36	LZ	23	MET	CA-CB-CG	6.19	123.83	113.30
68	UF	72	ARG	NE-CZ-NH2	6.19	123.40	120.30
83	lB	24	U	C5-C6-N1	6.19	125.80	122.70
99	lR	19	U	C5-C6-N1	6.19	125.79	122.70
53	Lq	531	MET	CA-CB-CG	6.19	123.82	113.30
8	L7	62	MET	CA-CB-CG	6.19	123.82	113.30
57	Lu	263	MET	CA-CB-CG	6.19	123.82	113.30
25	LO	176	TYR	CB-CG-CD2	6.18	124.71	121.00
52	Lp	449	MET	CA-CB-CG	6.18	123.81	113.30
32	LV	681	ARG	CD-NE-CZ	6.18	132.25	123.60
44	Lh	741	MET	CA-CB-CG	6.18	123.80	113.30
36	LZ	113	MET	CA-CB-CG	6.17	123.80	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
73	l1	3	C	C5-C6-N1	6.17	124.09	121.00
76	l4	31	C	C5-C6-N1	6.17	124.09	121.00
79	l7	42	U	C5-C6-N1	6.17	125.79	122.70
81	l9	38	U	C5-C6-N1	6.17	125.79	122.70
94	lM	161	C	C5-C6-N1	6.17	124.09	121.00
81	l9	57	A	C2-N3-C4	-6.17	107.51	110.60
32	LV	785	ARG	CD-NE-CZ	6.17	132.24	123.60
91	lJ	44	C	C5-C6-N1	6.17	124.08	121.00
80	l8	15	C	N3-C2-O2	-6.17	117.58	121.90
81	l9	9	C	C5-C6-N1	6.16	124.08	121.00
96	lO	72	A	C5-N7-C8	-6.16	100.82	103.90
90	lI	5	G	C5-N7-C8	-6.16	101.22	104.30
1	L0	276	PHE	CB-CG-CD2	6.16	125.11	120.80
79	l7	44	A	C5-C6-N1	6.16	120.78	117.70
4	L3	619	MET	CA-CB-CG	6.16	123.76	113.30
45	Li	362	PHE	CB-CG-CD2	6.16	125.11	120.80
78	l6	23	C	C5-C6-N1	6.15	124.08	121.00
19	LI	55	MET	CA-CB-CG	6.15	123.75	113.30
45	Li	636	MET	CA-CB-CG	6.15	123.76	113.30
96	lO	44	U	C5-C6-N1	6.15	125.78	122.70
61	Ly	649	TYR	CB-CG-CD2	6.15	124.69	121.00
40	Ld	468	TYR	CB-CG-CD2	6.15	124.69	121.00
32	LV	798	ARG	CD-NE-CZ	6.15	132.21	123.60
35	LY	491	MET	CA-CB-CG	6.15	123.75	113.30
35	LY	434	MET	CA-CB-CG	6.14	123.75	113.30
91	lJ	187	U	C5-C6-N1	6.14	125.77	122.70
91	lJ	189	A	C5-N7-C8	-6.14	100.83	103.90
101	lT	5	U	C5-C6-N1	6.14	125.77	122.70
20	LJ	28	MET	CA-CB-CG	6.14	123.74	113.30
23	LM	120	MET	CA-CB-CG	6.14	123.74	113.30
81	l9	70	C	C5-C6-N1	6.14	124.07	121.00
91	lJ	100	C	C5-C6-N1	6.14	124.07	121.00
49	Lm	250	MET	CA-CB-CG	6.14	123.73	113.30
72	l0	36	C	C5-C6-N1	6.14	124.07	121.00
93	lL	1	U	C5-C6-N1	6.14	125.77	122.70
90	lI	36	A	C3'-C2'-C1'	6.13	106.41	101.50
96	lO	164	A	C2-N3-C4	-6.13	107.53	110.60
29	LS	138	MET	CA-CB-CG	6.12	123.71	113.30
77	l5	30	U	C5-C6-N1	6.12	125.76	122.70
81	l9	69	A	C5-N7-C8	-6.12	100.84	103.90
93	lL	3	G	C5-N7-C8	-6.12	101.24	104.30
55	Ls	396	TYR	CB-CG-CD2	6.12	124.67	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	l6	27	U	C5-C6-N1	6.12	125.76	122.70
81	l9	8	U	C5-C6-N1	6.12	125.76	122.70
96	lO	53	A	C2-N3-C4	-6.12	107.54	110.60
49	Lm	290	MET	CA-CB-CG	6.12	123.70	113.30
77	l5	59	A	C5-N7-C8	-6.12	100.84	103.90
68	UF	37	TYR	CB-CG-CD2	6.11	124.67	121.00
101	lT	14	U	C5-C6-N1	6.11	125.76	122.70
8	L7	108	MET	CA-CB-CG	6.11	123.69	113.30
93	lL	67	U	C5-C6-N1	6.11	125.76	122.70
82	lA	55	A	C5-C6-N1	6.11	120.76	117.70
26	LP	150	TYR	CB-CG-CD2	6.11	124.67	121.00
93	lL	19	A	C2-N3-C4	-6.11	107.55	110.60
44	Lh	735	MET	CA-CB-CG	6.11	123.68	113.30
82	lA	9	U	C5-C6-N1	6.10	125.75	122.70
72	l0	40	C	C5-C6-N1	6.10	124.05	121.00
93	lL	62	U	C6-N1-C2	-6.10	117.34	121.00
20	LJ	278	TYR	CB-CG-CD2	6.10	124.66	121.00
77	l5	49	C	N3-C2-O2	-6.10	117.63	121.90
94	lM	78	C	C5-C6-N1	6.10	124.05	121.00
91	lJ	132	C	C5-C6-N1	6.10	124.05	121.00
94	lM	28	A	C2-N3-C4	-6.10	107.55	110.60
82	lA	12	C	C5-C6-N1	6.09	124.05	121.00
78	l6	1	A	C5-N7-C8	-6.09	100.85	103.90
11	LA	36	MET	CA-CB-CG	6.09	123.66	113.30
53	Lq	678	PHE	CB-CG-CD2	6.09	125.06	120.80
91	lJ	19	C	C5-C6-N1	6.09	124.05	121.00
75	l3	22	C	C5-C6-N1	6.09	124.04	121.00
101	lT	3	U	C5-C6-N1	6.08	125.74	122.70
54	Lr	11	TYR	CB-CG-CD2	6.08	124.65	121.00
84	lC	11	C	C5-C6-N1	6.08	124.04	121.00
94	lM	144	C	C5-C6-N1	6.08	124.04	121.00
8	L7	37	TYR	CB-CG-CD2	6.08	124.65	121.00
83	lB	9	A	C2-N3-C4	-6.08	107.56	110.60
96	lO	36	C	C5-C6-N1	6.08	124.04	121.00
14	LD	325	PHE	CB-CG-CD2	6.07	125.05	120.80
4	L3	418	MET	CA-CB-CG	6.07	123.62	113.30
73	l1	19	C	C5-C6-N1	6.07	124.04	121.00
73	l1	21	C	C5-C6-N1	6.07	124.03	121.00
87	lF	52	A	C8-N9-C4	-6.07	103.37	105.80
94	lM	1	A	C2-N3-C4	-6.07	107.57	110.60
94	lM	198	C	C5-C6-N1	6.07	124.03	121.00
83	lB	19	A	C8-N9-C4	-6.07	103.37	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	197	C	C5-C6-N1	6.07	124.03	121.00
83	lB	26	C	C5-C6-N1	6.06	124.03	121.00
20	LJ	132	PHE	CB-CG-CD2	6.06	125.04	120.80
80	l8	27	A	C4-C5-C6	-6.06	113.97	117.00
96	lO	117	C	C5-C6-N1	6.06	124.03	121.00
96	lO	31	G	C5-N7-C8	-6.06	101.27	104.30
96	lO	160	G	C5-N7-C8	-6.06	101.27	104.30
29	LS	57	MET	CA-CB-CG	6.06	123.60	113.30
20	LJ	58	MET	CA-CB-CG	6.05	123.59	113.30
91	lJ	23	A	C5-N7-C8	-6.05	100.88	103.90
94	lM	152	A	C5-N7-C8	-6.05	100.88	103.90
96	lO	38	A	C5-N7-C8	-6.05	100.88	103.90
29	LS	225	MET	CA-CB-CG	6.05	123.58	113.30
32	LV	801	ARG	CD-NE-CZ	6.05	132.06	123.60
38	Lb	608	PHE	CB-CG-CD2	6.05	125.03	120.80
81	l9	59	C	C5-C6-N1	6.05	124.02	121.00
84	lC	24	A	N1-C6-N6	-6.05	114.97	118.60
95	lN	12	G	C5-C6-N1	6.05	114.52	111.50
2	L1	465	MET	CA-CB-CG	6.04	123.58	113.30
39	Lc	306	PHE	CB-CG-CD2	6.04	125.03	120.80
85	lD	5	A	C2-N3-C4	-6.04	107.58	110.60
83	lB	20	C	C5-C6-N1	6.04	124.02	121.00
51	Lo	115	TYR	CB-CG-CD2	6.04	124.62	121.00
78	l6	19	U	C6-N1-C2	-6.04	117.38	121.00
91	lJ	278	A	C5-N7-C8	-6.04	100.88	103.90
78	l6	50	A	C4-C5-C6	-6.04	113.98	117.00
83	lB	33	A	C2-N3-C4	-6.04	107.58	110.60
93	lL	45	A	C5-N7-C8	-6.04	100.88	103.90
94	lM	152	A	C2-N3-C4	-6.04	107.58	110.60
2	L1	429	PHE	CB-CG-CD2	6.03	125.02	120.80
75	l3	9	A	C5-N7-C8	-6.03	100.88	103.90
81	l9	3	C	C6-N1-C2	-6.03	117.89	120.30
76	l4	30	C	C5-C6-N1	6.03	124.02	121.00
90	lI	15	C	C4-C5-C6	6.03	120.41	117.40
94	lM	143	U	C5-C6-N1	6.03	125.71	122.70
96	lO	179	A	C4-C5-C6	-6.03	113.99	117.00
76	l4	3	U	N3-C4-O4	6.02	123.62	119.40
89	lH	18	U	C5-C6-N1	6.02	125.71	122.70
75	l3	50	C	C5-C6-N1	6.02	124.01	121.00
87	lF	57	A	C5-N7-C8	-6.02	100.89	103.90
94	lM	162	U	C5-C6-N1	6.02	125.71	122.70
33	LW	290	MET	CA-CB-CG	6.02	123.53	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
93	lL	19	A	C5-N7-C8	-6.02	100.89	103.90
14	LD	341	TYR	CB-CG-CD2	6.02	124.61	121.00
94	lM	76	C	C5-C6-N1	6.02	124.01	121.00
96	lO	73	U	C5-C6-N1	6.02	125.71	122.70
93	lL	31	C	C5-C6-N1	6.01	124.01	121.00
28	LR	26	TYR	CB-CG-CD2	6.01	124.61	121.00
95	lN	32	C	C5-C6-N1	6.01	124.01	121.00
68	UF	20	TYR	CB-CG-CD2	6.01	124.61	121.00
92	lK	35	A	C4-C5-C6	-6.01	114.00	117.00
20	LJ	100	MET	CA-CB-CG	6.01	123.51	113.30
74	l2	16	C	C5-C6-N1	6.01	124.00	121.00
83	lB	19	A	C5-N7-C8	-6.01	100.90	103.90
74	l2	2	U	C1'-O4'-C4'	6.00	114.70	109.90
78	l6	40	A	C2-N3-C4	-6.00	107.60	110.60
53	Lq	170	MET	CA-CB-CG	6.00	123.51	113.30
76	l4	55	C	C5-C6-N1	6.00	124.00	121.00
93	lL	78	U	C5-C6-N1	6.00	125.70	122.70
91	lJ	279	U	C6-N1-C2	-6.00	117.40	121.00
96	lO	16	A	C2-N3-C4	-6.00	107.60	110.60
75	l3	49	A	C5-N7-C8	-6.00	100.90	103.90
93	lL	41	A	C2-N3-C4	-6.00	107.60	110.60
77	l5	50	A	N1-C6-N6	-6.00	115.00	118.60
96	lO	89	G	C5-C6-N1	-6.00	108.50	111.50
40	Ld	516	TYR	CB-CG-CD2	5.99	124.60	121.00
96	lO	138	G	C5-N7-C8	-5.99	101.30	104.30
76	l4	48	G	C5-N7-C8	-5.99	101.30	104.30
91	lJ	174	C	C5-C6-N1	5.99	124.00	121.00
81	l9	83	A	C5-N7-C8	-5.99	100.91	103.90
94	lM	96	A	C5-N7-C8	-5.99	100.91	103.90
55	Ls	337	PHE	CB-CG-CD2	5.99	124.99	120.80
57	Lu	481	TYR	CB-CG-CD2	5.99	124.59	121.00
91	lJ	238	G	C5-N7-C8	-5.99	101.31	104.30
96	lO	8	G	C5-N7-C8	-5.99	101.31	104.30
72	l0	41	C	C5-C6-N1	5.98	123.99	121.00
83	lB	22	G	C5-N7-C8	-5.98	101.31	104.30
74	l2	3	G	C5-N7-C8	-5.98	101.31	104.30
78	l6	13	C	N3-C2-O2	-5.98	117.71	121.90
79	l7	58	A	C2-N3-C4	-5.98	107.61	110.60
77	l5	35	U	N3-C4-O4	5.98	123.59	119.40
81	l9	17	C	C5-C6-N1	5.98	123.99	121.00
3	L2	78	PHE	CB-CG-CD2	5.98	124.99	120.80
75	l3	23	A	C5-N7-C8	-5.98	100.91	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
64	UB	370	PHE	CB-CG-CD2	5.98	124.98	120.80
95	lN	26	C	C5-C6-N1	5.98	123.99	121.00
73	l1	34	C	C5-C6-N1	5.98	123.99	121.00
82	lA	47	A	C2-N3-C4	-5.98	107.61	110.60
94	lM	14	A	C4-C5-C6	-5.97	114.01	117.00
53	Lq	275	MET	CA-CB-CG	5.97	123.45	113.30
77	l5	43	C	C5-C6-N1	5.97	123.99	121.00
78	l6	26	C	C5-C6-N1	5.97	123.99	121.00
94	lM	151	A	C5-N7-C8	-5.97	100.91	103.90
40	Ld	565	TYR	CB-CG-CD2	5.97	124.58	121.00
49	Lm	429	MET	CA-CB-CG	5.97	123.45	113.30
81	l9	65	A	C5-N7-C8	-5.97	100.92	103.90
91	lJ	124	G	C5-N7-C8	-5.97	101.31	104.30
87	lF	79	A	C2-N3-C4	-5.97	107.62	110.60
96	lO	164	A	C5-N7-C8	-5.97	100.92	103.90
82	lA	1	G	C5-N7-C8	-5.97	101.32	104.30
94	lM	28	A	C5-N7-C8	-5.97	100.92	103.90
96	lO	155	A	C2-N3-C4	-5.97	107.62	110.60
38	Lb	599	MET	CA-CB-CG	5.96	123.44	113.30
96	lO	49	C	C5-C6-N1	5.96	123.98	121.00
73	l1	50	A	C2-N3-C4	-5.96	107.62	110.60
84	lC	10	A	C5-N7-C8	-5.96	100.92	103.90
79	l7	47	A	C5-N7-C8	-5.96	100.92	103.90
83	lB	9	A	C5-N7-C8	-5.96	100.92	103.90
35	LY	473	TYR	CB-CG-CD2	5.95	124.57	121.00
76	l4	29	C	C5-C6-N1	5.95	123.98	121.00
76	l4	35	A	C2-N3-C4	-5.95	107.62	110.60
43	Lg	58	MET	CA-CB-CG	5.95	123.42	113.30
35	LY	241	PHE	CB-CG-CD2	5.95	124.96	120.80
86	lE	16	U	N3-C4-C5	-5.95	111.03	114.60
93	lL	9	A	C5-C6-N1	5.95	120.67	117.70
94	lM	90	C	C5-C6-N1	5.95	123.97	121.00
91	lJ	50	A	C2-N3-C4	-5.94	107.63	110.60
87	lF	9	C	C5-C6-N1	5.94	123.97	121.00
95	lN	39	A	C5-N7-C8	-5.94	100.93	103.90
13	LC	534	MET	CA-CB-CG	5.94	123.40	113.30
87	lF	17	G	C5-N7-C8	-5.94	101.33	104.30
96	lO	55	A	C2-N3-C4	-5.94	107.63	110.60
92	lK	4	C	C5-C6-N1	5.94	123.97	121.00
75	l3	23	A	C2-N3-C4	-5.94	107.63	110.60
93	lL	45	A	C2-N3-C4	-5.94	107.63	110.60
75	l3	12	A	C5-N7-C8	-5.94	100.93	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	Lw	42	ARG	CD-NE-CZ	5.93	131.91	123.60
81	l9	62	A	C2-N3-C4	-5.93	107.63	110.60
94	lM	44	U	C2-N3-C4	5.93	130.56	127.00
91	lJ	276	A	C5-N7-C8	-5.93	100.93	103.90
63	UA	307	PHE	CB-CG-CD2	5.93	124.95	120.80
73	l1	37	A	C2-N3-C4	-5.93	107.64	110.60
91	lJ	49	U	N3-C4-O4	5.93	123.55	119.40
91	lJ	28	U	N1-C1'-C2'	5.93	121.71	114.00
94	lM	96	A	C2-N3-C4	-5.93	107.64	110.60
83	lB	19	A	C2-N3-C4	-5.93	107.64	110.60
76	l4	42	A	C5-N7-C8	-5.92	100.94	103.90
79	l7	20	U	C6-N1-C2	-5.92	117.44	121.00
96	lO	91	A	C2-N3-C4	-5.92	107.64	110.60
77	l5	60	G	C5-N7-C8	-5.92	101.34	104.30
82	lA	13	U	C5-C6-N1	5.92	125.66	122.70
11	LA	172	MET	CA-CB-CG	5.92	123.37	113.30
91	lJ	171	A	C5-N7-C8	-5.92	100.94	103.90
3	L2	88	MET	CA-CB-CG	5.92	123.36	113.30
12	LB	31	MET	CA-CB-CG	5.92	123.36	113.30
13	LC	352	MET	CA-CB-CG	5.92	123.36	113.30
96	lO	113	A	C2-N3-C4	-5.92	107.64	110.60
44	Lh	588	TYR	CB-CG-CD2	5.92	124.55	121.00
76	l4	21	A	C5-N7-C8	-5.91	100.94	103.90
78	l6	24	G	C5-N7-C8	-5.91	101.34	104.30
78	l6	39	A	C2-N3-C4	-5.91	107.64	110.60
90	lI	22	G	C5-N7-C8	-5.91	101.34	104.30
93	lL	52	C	C5-C6-N1	5.91	123.96	121.00
93	lL	85	A	C2-N3-C4	-5.91	107.64	110.60
96	lO	161	A	C2-N3-C4	-5.91	107.64	110.60
81	l9	81	A	C2-N3-C4	-5.91	107.65	110.60
21	LK	218	ARG	CD-NE-CZ	5.91	131.87	123.60
79	l7	47	A	C2-N3-C4	-5.91	107.65	110.60
82	lA	10	A	C5-N7-C8	-5.91	100.95	103.90
91	lJ	5	G	C5-N7-C8	-5.91	101.35	104.30
95	lN	27	A	C2-N3-C4	-5.90	107.65	110.60
81	l9	72	A	C5-N7-C8	-5.90	100.95	103.90
96	lO	113	A	C5-N7-C8	-5.90	100.95	103.90
76	l4	65	A	C5-N7-C8	-5.90	100.95	103.90
76	l4	84	A	C2-N3-C4	-5.90	107.65	110.60
82	lA	47	A	C5-N7-C8	-5.90	100.95	103.90
91	lJ	281	A	C2-N3-C4	-5.90	107.65	110.60
96	lO	121	C	C4-C5-C6	5.90	120.35	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	191	C	C5-C6-N1	5.90	123.95	121.00
91	lJ	234	A	C2-N3-C4	-5.90	107.65	110.60
78	l6	43	A	C5-N7-C8	-5.90	100.95	103.90
81	l9	50	C	C5-C6-N1	5.90	123.95	121.00
84	lC	25	A	C2-N3-C4	-5.90	107.65	110.60
91	lJ	42	A	C5-N7-C8	-5.90	100.95	103.90
29	LS	137	MET	CA-CB-CG	5.90	123.32	113.30
75	l3	58	A	C2-N3-C4	-5.90	107.65	110.60
1	L0	259	MET	CA-CB-CG	5.89	123.32	113.30
41	Le	557	MET	CA-CB-CG	5.89	123.32	113.30
78	l6	43	A	C2-N3-C4	-5.89	107.65	110.60
78	l6	45	A	C5-N7-C8	-5.89	100.95	103.90
93	lL	74	A	C5-N7-C8	-5.89	100.95	103.90
96	lO	55	A	C5-N7-C8	-5.89	100.95	103.90
79	l7	21	A	C5-N7-C8	-5.89	100.95	103.90
87	lF	88	A	C5-N7-C8	-5.89	100.95	103.90
77	l5	28	C	C5-C6-N1	5.89	123.94	121.00
86	lE	24	A	C5-N7-C8	-5.89	100.95	103.90
87	lF	84	A	C5-N7-C8	-5.89	100.96	103.90
82	lA	64	A	C2-N3-C4	-5.89	107.66	110.60
91	lJ	22	C	C5-C6-N1	5.89	123.94	121.00
96	lO	64	A	C5-N7-C8	-5.89	100.96	103.90
78	l6	42	A	C2-N3-C4	-5.89	107.66	110.60
93	lL	41	A	C5-N7-C8	-5.89	100.96	103.90
95	lN	30	A	C2-N3-C4	-5.88	107.66	110.60
96	lO	109	C	C5-C6-N1	5.88	123.94	121.00
79	l7	70	A	C2-N3-C4	-5.88	107.66	110.60
96	lO	72	A	C2-N3-C4	-5.88	107.66	110.60
67	UE	121	TYR	CB-CG-CD2	5.88	124.53	121.00
75	l3	12	A	C2-N3-C4	-5.88	107.66	110.60
81	l9	75	A	C2-N3-C4	-5.88	107.66	110.60
82	lA	40	A	C5-C6-N1	5.88	120.64	117.70
93	lL	40	A	C2-N3-C4	-5.88	107.66	110.60
93	lL	87	A	C5-N7-C8	-5.88	100.96	103.90
28	LR	126	TYR	CB-CG-CD2	5.88	124.53	121.00
45	Li	666	TYR	CB-CG-CD2	5.88	124.53	121.00
75	l3	8	A	C2-N3-C4	-5.88	107.66	110.60
87	lF	79	A	C5-N7-C8	-5.88	100.96	103.90
95	lN	24	G	C5-C6-N1	-5.88	108.56	111.50
76	l4	53	A	C2-N3-C4	-5.88	107.66	110.60
79	l7	57	A	C5-N7-C8	-5.88	100.96	103.90
87	lF	20	A	C2-N3-C4	-5.88	107.66	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
90	lI	42	A	C5-N7-C8	-5.88	100.96	103.90
73	l1	37	A	C5-N7-C8	-5.87	100.96	103.90
75	l3	59	A	C2-N3-C4	-5.87	107.66	110.60
82	lA	48	A	C2-N3-C4	-5.87	107.66	110.60
93	lL	90	A	C5-N7-C8	-5.87	100.96	103.90
73	l1	26	A	C4-C5-C6	-5.87	114.06	117.00
94	lM	129	A	C2-N3-C4	-5.87	107.66	110.60
96	lO	104	A	C5-N7-C8	-5.87	100.96	103.90
79	l7	71	A	C5-N7-C8	-5.87	100.97	103.90
87	lF	12	C	C5-C6-N1	5.87	123.94	121.00
52	Lp	695	PHE	CB-CG-CD2	5.87	124.91	120.80
79	l7	64	A	C5-N7-C8	-5.87	100.97	103.90
91	lJ	281	A	C5-N7-C8	-5.87	100.97	103.90
82	lA	45	A	C5-N7-C8	-5.87	100.97	103.90
96	lO	153	C	C4-C5-C6	5.87	120.33	117.40
81	l9	61	A	C2-N3-C4	-5.86	107.67	110.60
90	lI	4	G	C5-N7-C8	-5.86	101.37	104.30
93	lL	36	A	C2-N3-C4	-5.86	107.67	110.60
90	lI	32	A	C5-N7-C8	-5.86	100.97	103.90
92	lK	2	C	C5-C6-N1	5.86	123.93	121.00
95	lN	42	A	C2-N3-C4	-5.86	107.67	110.60
82	lA	25	G	C8-N9-C4	-5.86	104.06	106.40
91	lJ	234	A	C5-N7-C8	-5.86	100.97	103.90
93	lL	48	A	C5-N7-C8	-5.86	100.97	103.90
96	lO	175	A	C5-C6-N1	5.86	120.63	117.70
73	l1	33	A	C5-N7-C8	-5.86	100.97	103.90
82	lA	11	A	C2-N3-C4	-5.86	107.67	110.60
83	lB	7	A	C2-N3-C4	-5.86	107.67	110.60
83	lB	40	G	C5-N7-C8	-5.86	101.37	104.30
93	lL	73	A	C2-N3-C4	-5.86	107.67	110.60
96	lO	162	A	C2-N3-C4	-5.86	107.67	110.60
96	lO	145	C	C4-C5-C6	5.86	120.33	117.40
9	L8	219	ARG	NE-CZ-NH2	5.85	123.23	120.30
59	Lw	146	PHE	CB-CG-CD2	5.85	124.90	120.80
22	LL	326	MET	CA-CB-CG	5.85	123.25	113.30
77	l5	26	A	C5-C6-N1	5.85	120.63	117.70
79	l7	55	G	C5-N7-C8	-5.85	101.37	104.30
79	l7	65	A	C2-N3-C4	-5.85	107.67	110.60
79	l7	65	A	C5-N7-C8	-5.85	100.97	103.90
96	lO	40	A	C2-N3-C4	-5.85	107.67	110.60
82	lA	40	A	C4-C5-C6	-5.85	114.08	117.00
93	lL	36	A	C5-N7-C8	-5.85	100.98	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
93	lL	91	A	C2-N3-C4	-5.85	107.67	110.60
9	L8	145	ARG	CD-NE-CZ	5.85	131.79	123.60
81	l9	69	A	C2-N3-C4	-5.85	107.68	110.60
84	lC	10	A	C2-N3-C4	-5.85	107.68	110.60
76	l4	32	G	C5-N7-C8	-5.85	101.38	104.30
95	lN	42	A	C5-N7-C8	-5.85	100.98	103.90
81	l9	10	C	C5-C6-N1	5.84	123.92	121.00
73	l1	33	A	C2-N3-C4	-5.84	107.68	110.60
81	l9	18	A	C2-N3-C4	-5.84	107.68	110.60
91	lJ	131	C	C5-C6-N1	5.84	123.92	121.00
88	lG	18	G	C5-N7-C8	-5.84	101.38	104.30
92	lK	23	A	C5-N7-C8	-5.84	100.98	103.90
14	LD	389	MET	CA-CB-CG	5.84	123.23	113.30
81	l9	75	A	C5-N7-C8	-5.84	100.98	103.90
81	l9	82	C	C5-C6-N1	5.84	123.92	121.00
86	lE	6	A	C5-N7-C8	-5.84	100.98	103.90
92	lK	34	G	N1-C6-O6	-5.84	116.40	119.90
96	lO	16	A	C5-N7-C8	-5.84	100.98	103.90
91	lJ	229	G	C5-N7-C8	-5.84	101.38	104.30
94	lM	71	A	C5-N7-C8	-5.84	100.98	103.90
87	lF	84	A	C2-N3-C4	-5.83	107.68	110.60
91	lJ	211	A	C2-N3-C4	-5.83	107.68	110.60
96	lO	33	G	C5-N7-C8	-5.83	101.38	104.30
5	L4	471	TYR	CB-CG-CD2	5.83	124.50	121.00
75	l3	59	A	C5-N7-C8	-5.83	100.98	103.90
93	lL	48	A	C2-N3-C4	-5.83	107.68	110.60
82	lA	18	C	C5-C6-N1	5.83	123.92	121.00
91	lJ	226	G	C5-N7-C8	-5.83	101.38	104.30
10	L9	1	MET	CA-CB-CG	5.83	123.21	113.30
52	Lp	690	MET	CA-CB-CG	5.83	123.21	113.30
74	l2	28	A	C2-N3-C4	-5.83	107.69	110.60
75	l3	9	A	C2-N3-C4	-5.83	107.69	110.60
91	lJ	275	U	C6-N1-C2	-5.83	117.50	121.00
87	lF	85	A	C5-N7-C8	-5.83	100.99	103.90
78	l6	45	A	C2-N3-C4	-5.83	107.69	110.60
85	lD	1	A	C2-N3-C4	-5.83	107.69	110.60
91	lJ	171	A	C2-N3-C4	-5.83	107.69	110.60
96	lO	69	G	C5-N7-C8	-5.83	101.39	104.30
86	lE	28	A	C2-N3-C4	-5.83	107.69	110.60
90	lI	43	A	C2-N3-C4	-5.83	107.69	110.60
91	lJ	93	A	C5-C6-N1	5.83	120.61	117.70
94	lM	79	C	C5-C6-N1	5.83	123.91	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
61	Ly	332	TYR	CB-CG-CD2	5.82	124.49	121.00
73	l1	50	A	C5-N7-C8	-5.82	100.99	103.90
78	l6	44	A	C5-N7-C8	-5.82	100.99	103.90
79	l7	21	A	C2-N3-C4	-5.82	107.69	110.60
94	lM	92	C	C5-C6-N1	5.82	123.91	121.00
95	lN	1	A	C5-N7-C8	-5.82	100.99	103.90
87	lF	80	A	C5-N7-C8	-5.82	100.99	103.90
91	lJ	232	C	C5-C6-N1	5.82	123.91	121.00
96	lO	150	A	C5-C6-N1	5.82	120.61	117.70
82	lA	11	A	C5-N7-C8	-5.82	100.99	103.90
83	lB	21	A	C2-N3-C4	-5.82	107.69	110.60
87	lF	86	A	C5-N7-C8	-5.82	100.99	103.90
88	lG	17	A	C2-N3-C4	-5.82	107.69	110.60
93	lL	83	A	C2-N3-C4	-5.82	107.69	110.60
93	lL	87	A	C2-N3-C4	-5.82	107.69	110.60
81	l9	65	A	C2-N3-C4	-5.82	107.69	110.60
72	l0	13	C	N3-C2-O2	-5.82	117.83	121.90
79	l7	59	A	C5-N7-C8	-5.82	100.99	103.90
93	lL	14	A	C2-N3-C4	-5.82	107.69	110.60
94	lM	32	C	C5-C6-N1	5.82	123.91	121.00
94	lM	41	U	C2-N3-C4	5.82	130.49	127.00
73	l1	45	A	C2-N3-C4	-5.82	107.69	110.60
73	l1	49	A	C2-N3-C4	-5.82	107.69	110.60
75	l3	52	A	C2-N3-C4	-5.82	107.69	110.60
93	lL	61	A	C2-N3-C4	-5.82	107.69	110.60
95	lN	43	A	C5-N7-C8	-5.82	100.99	103.90
73	l1	9	C	C5-C6-N1	5.81	123.91	121.00
78	l6	21	A	C2-N3-C4	-5.81	107.69	110.60
87	lF	20	A	C5-N7-C8	-5.81	100.99	103.90
91	lJ	166	G	C5-N7-C8	-5.81	101.39	104.30
91	lJ	184	C	C5-C6-N1	5.81	123.91	121.00
94	lM	165	G	C5-N7-C8	-5.81	101.39	104.30
30	LT	79	TYR	CB-CG-CD2	5.81	124.49	121.00
39	Lc	312	MET	CA-CB-CG	5.81	123.18	113.30
56	Lt	154	TYR	CB-CG-CD2	5.81	124.49	121.00
73	l1	20	A	C2-N3-C4	-5.81	107.69	110.60
77	l5	29	A	C5-N7-C8	-5.81	100.99	103.90
81	l9	72	A	C2-N3-C4	-5.81	107.69	110.60
93	lL	40	A	C5-N7-C8	-5.81	100.99	103.90
61	Ly	303	MET	CA-CB-CG	5.81	123.18	113.30
75	l3	57	A	C5-N7-C8	-5.81	100.99	103.90
75	l3	39	A	C5-N7-C8	-5.81	101.00	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
85	lD	5	A	C5-N7-C8	-5.81	101.00	103.90
89	lH	24	U	C2-N3-C4	5.81	130.49	127.00
91	lJ	113	G	C5-N7-C8	-5.81	101.39	104.30
95	lN	22	A	C5-N7-C8	-5.81	101.00	103.90
95	lN	39	A	C2-N3-C4	-5.81	107.69	110.60
38	Lb	805	ARG	NE-CZ-NH2	5.81	123.20	120.30
81	l9	54	G	C5-N7-C8	-5.81	101.40	104.30
82	lA	49	G	C5-N7-C8	-5.81	101.40	104.30
86	lE	24	A	C2-N3-C4	-5.81	107.70	110.60
88	lG	11	C	C5-C6-N1	5.81	123.90	121.00
79	l7	60	A	C2-N3-C4	-5.81	107.70	110.60
94	lM	77	A	C2-N3-C4	-5.81	107.70	110.60
94	lM	130	C	C5-C6-N1	5.80	123.90	121.00
96	lO	146	A	C5-N7-C8	-5.80	101.00	103.90
73	l1	45	A	C5-N7-C8	-5.80	101.00	103.90
45	Li	588	TYR	CB-CG-CD2	5.80	124.48	121.00
90	lI	36	A	C5-N7-C8	-5.80	101.00	103.90
93	lL	38	G	C5-N7-C8	-5.80	101.40	104.30
96	lO	34	A	C5-N7-C8	-5.80	101.00	103.90
75	l3	35	A	C2-N3-C4	-5.80	107.70	110.60
79	l7	69	A	C2-N3-C4	-5.80	107.70	110.60
95	lN	30	A	C5-N7-C8	-5.80	101.00	103.90
96	lO	65	A	C5-N7-C8	-5.80	101.00	103.90
76	l4	26	A	C5-N7-C8	-5.80	101.00	103.90
76	l4	33	A	C2-N3-C4	-5.80	107.70	110.60
79	l7	66	A	C2-N3-C4	-5.80	107.70	110.60
96	lO	15	A	C5-N7-C8	-5.79	101.00	103.90
96	lO	152	U	C6-N1-C2	-5.79	117.52	121.00
89	lH	6	G	C5-N7-C8	-5.79	101.40	104.30
91	lJ	211	A	C5-N7-C8	-5.79	101.00	103.90
94	lM	26	G	C5-N7-C8	-5.79	101.40	104.30
95	lN	38	A	C2-N3-C4	-5.79	107.70	110.60
96	lO	161	A	C5-N7-C8	-5.79	101.00	103.90
37	La	82	PHE	CB-CG-CD2	5.79	124.85	120.80
76	l4	61	A	C2-N3-C4	-5.79	107.70	110.60
91	lJ	276	A	C2-N3-C4	-5.79	107.70	110.60
78	l6	44	A	C2-N3-C4	-5.79	107.70	110.60
87	lF	85	A	C2-N3-C4	-5.79	107.70	110.60
83	lB	25	A	C5-N7-C8	-5.79	101.00	103.90
94	lM	149	G	C5-N7-C8	-5.79	101.41	104.30
12	LB	109	PHE	CB-CG-CD2	5.79	124.85	120.80
96	lO	104	A	C2-N3-C4	-5.79	107.71	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
73	l1	48	A	C2-N3-C4	-5.79	107.71	110.60
88	lG	19	C	C5-C6-N1	5.79	123.89	121.00
79	l7	68	A	C2-N3-C4	-5.78	107.71	110.60
81	l9	42	C	C5-C6-N1	5.78	123.89	121.00
81	l9	45	A	C2-N3-C4	-5.78	107.71	110.60
83	lB	13	A	C2-N3-C4	-5.78	107.71	110.60
90	lI	37	A	C5-N7-C8	-5.78	101.01	103.90
95	lN	31	A	C2-N3-C4	-5.78	107.71	110.60
96	lO	43	G	C5-N7-C8	-5.78	101.41	104.30
20	LJ	249	TYR	CB-CG-CD2	5.78	124.47	121.00
75	l3	8	A	C5-N7-C8	-5.78	101.01	103.90
81	l9	24	G	C5-N7-C8	-5.78	101.41	104.30
81	l9	63	A	C2-N3-C4	-5.78	107.71	110.60
81	l9	83	A	C2-N3-C4	-5.78	107.71	110.60
96	lO	155	A	C5-N7-C8	-5.78	101.01	103.90
83	lB	30	C	C5-C6-N1	5.78	123.89	121.00
83	lB	32	A	C5-N7-C8	-5.78	101.01	103.90
91	lJ	214	A	C2-N3-C4	-5.78	107.71	110.60
41	Le	564	TYR	CB-CG-CD2	5.78	124.47	121.00
81	l9	25	A	C5-N7-C8	-5.78	101.01	103.90
88	lG	10	G	C5-N7-C8	-5.78	101.41	104.30
91	lJ	189	A	C2-N3-C4	-5.78	107.71	110.60
96	lO	71	G	C5-N7-C8	-5.78	101.41	104.30
96	lO	165	A	C5-N7-C8	-5.78	101.01	103.90
87	lF	29	G	C5-N7-C8	-5.78	101.41	104.30
25	LO	126	PHE	CB-CG-CD2	5.77	124.84	120.80
93	lL	88	A	C5-N7-C8	-5.77	101.01	103.90
76	l4	23	U	C6-N1-C2	-5.77	117.54	121.00
79	l7	22	A	C5-N7-C8	-5.77	101.01	103.90
81	l9	46	A	C2-N3-C4	-5.77	107.71	110.60
92	lK	23	A	C2-N3-C4	-5.77	107.71	110.60
93	lL	83	A	C5-N7-C8	-5.77	101.01	103.90
94	lM	135	G	N3-C2-N2	-5.77	115.86	119.90
79	l7	59	A	C2-N3-C4	-5.77	107.71	110.60
87	lF	80	A	C2-N3-C4	-5.77	107.72	110.60
91	lJ	20	A	C5-N7-C8	-5.77	101.02	103.90
91	lJ	182	G	C5-N7-C8	-5.77	101.42	104.30
95	lN	24	G	C5-N7-C8	-5.77	101.42	104.30
95	lN	35	G	C5-N7-C8	-5.77	101.42	104.30
25	LO	298	MET	CA-CB-CG	5.77	123.10	113.30
91	lJ	129	A	C5-N7-C8	-5.77	101.02	103.90
94	lM	19	A	C5-N7-C8	-5.77	101.02	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	33	A	C5-N7-C8	-5.76	101.02	103.90
79	l7	67	A	C2-N3-C4	-5.76	107.72	110.60
90	lI	17	G	C5-N7-C8	-5.76	101.42	104.30
96	lO	163	G	C5-N7-C8	-5.76	101.42	104.30
75	l3	49	A	C2-N3-C4	-5.76	107.72	110.60
76	l4	60	G	C5-N7-C8	-5.76	101.42	104.30
90	lI	44	A	C5-N7-C8	-5.76	101.02	103.90
93	lL	66	A	C5-N7-C8	-5.76	101.02	103.90
96	lO	118	A	C2-N3-C4	-5.76	107.72	110.60
41	Le	590	MET	CA-CB-CG	5.76	123.09	113.30
63	UA	236	PHE	CB-CG-CD2	5.76	124.83	120.80
85	lD	13	A	C5-N7-C8	-5.76	101.02	103.90
91	lJ	238	G	C5-C6-N1	-5.76	108.62	111.50
94	lM	30	A	C2-N3-C4	-5.76	107.72	110.60
94	lM	122	G	C5-N7-C8	-5.76	101.42	104.30
76	l4	85	A	C5-N7-C8	-5.76	101.02	103.90
81	l9	15	A	C5-N7-C8	-5.76	101.02	103.90
84	lC	26	G	C5-N7-C8	-5.76	101.42	104.30
91	lJ	196	A	C5-N7-C8	-5.76	101.02	103.90
91	lJ	214	A	C5-N7-C8	-5.76	101.02	103.90
91	lJ	233	G	C5-N7-C8	-5.76	101.42	104.30
93	lL	82	A	C2-N3-C4	-5.76	107.72	110.60
51	Lo	245	MET	CA-CB-CG	5.76	123.09	113.30
79	l7	62	A	C6-N1-C2	-5.76	115.14	118.60
82	lA	50	G	C5-N7-C8	-5.76	101.42	104.30
90	lI	37	A	C2-N3-C4	-5.76	107.72	110.60
93	lL	32	G	C5-N7-C8	-5.76	101.42	104.30
94	lM	33	A	C5-N7-C8	-5.76	101.02	103.90
85	lD	9	A	C5-N7-C8	-5.76	101.02	103.90
89	lH	17	G	C5-N7-C8	-5.76	101.42	104.30
91	lJ	208	A	C2-N3-C4	-5.76	107.72	110.60
93	lL	86	A	C2-N3-C4	-5.76	107.72	110.60
81	l9	26	A	C5-N7-C8	-5.75	101.02	103.90
81	l9	74	G	C5-N7-C8	-5.75	101.42	104.30
91	lJ	172	C	C5-C6-N1	5.75	123.88	121.00
95	lN	27	A	C5-N7-C8	-5.75	101.02	103.90
96	lO	40	A	C5-N7-C8	-5.75	101.02	103.90
74	l2	29	A	C2-N3-C4	-5.75	107.72	110.60
78	l6	21	A	C5-N7-C8	-5.75	101.02	103.90
79	l7	64	A	C6-N1-C2	-5.75	115.15	118.60
90	lI	40	A	C5-N7-C8	-5.75	101.02	103.90
94	lM	1	A	C6-N1-C2	-5.75	115.15	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
75	l3	39	A	C2-N3-C4	-5.75	107.72	110.60
79	l7	57	A	C2-N3-C4	-5.75	107.72	110.60
86	lE	5	G	C5-N7-C8	-5.75	101.42	104.30
92	lK	16	A	C5-N7-C8	-5.75	101.02	103.90
93	lL	2	G	C5-N7-C8	-5.75	101.42	104.30
96	lO	118	A	C5-N7-C8	-5.75	101.02	103.90
75	l3	60	A	C5-N7-C8	-5.75	101.03	103.90
87	lF	62	A	C5-N7-C8	-5.75	101.03	103.90
74	l2	20	A	C5-N7-C8	-5.75	101.03	103.90
82	lA	10	A	C2-N3-C4	-5.75	107.72	110.60
91	lJ	209	G	C5-N7-C8	-5.75	101.43	104.30
96	lO	6	A	C2-N3-C4	-5.75	107.73	110.60
38	Lb	282	TYR	CB-CG-CD2	5.75	124.45	121.00
74	l2	20	A	C2-N3-C4	-5.75	107.73	110.60
75	l3	57	A	C2-N3-C4	-5.75	107.73	110.60
76	l4	85	A	C2-N3-C4	-5.75	107.73	110.60
75	l3	58	A	C5-N7-C8	-5.75	101.03	103.90
94	lM	65	G	C6-N1-C2	5.75	128.55	125.10
76	l4	54	A	C2-N3-C4	-5.74	107.73	110.60
85	lD	1	A	C5-N7-C8	-5.74	101.03	103.90
91	lJ	18	A	C5-N7-C8	-5.74	101.03	103.90
93	lL	39	G	C5-N7-C8	-5.74	101.43	104.30
96	lO	14	A	C5-N7-C8	-5.74	101.03	103.90
75	l3	60	A	C2-N3-C4	-5.74	107.73	110.60
96	lO	115	G	C5-N7-C8	-5.74	101.43	104.30
96	lO	162	A	C5-N7-C8	-5.74	101.03	103.90
74	l2	28	A	C5-N7-C8	-5.74	101.03	103.90
77	l5	29	A	C2-N3-C4	-5.74	107.73	110.60
83	lB	13	A	C5-N7-C8	-5.74	101.03	103.90
86	lE	28	A	C5-N7-C8	-5.74	101.03	103.90
94	lM	1	A	C5-N7-C8	-5.74	101.03	103.90
94	lM	27	G	C5-N7-C8	-5.74	101.43	104.30
64	UB	327	TYR	CB-CG-CD2	5.74	124.44	121.00
81	l9	27	C	C4-C5-C6	5.74	120.27	117.40
87	lF	52	A	C5-C6-N1	5.74	120.57	117.70
91	lJ	42	A	C6-N1-C2	-5.74	115.16	118.60
91	lJ	252	A	C5-N7-C8	-5.74	101.03	103.90
93	lL	91	A	C5-N7-C8	-5.74	101.03	103.90
31	LU	272	MET	CA-CB-CG	5.74	123.05	113.30
10	L9	6	TYR	CB-CG-CD2	5.74	124.44	121.00
25	LO	86	PHE	CB-CG-CD2	5.74	124.81	120.80
76	l4	20	G	C5-N7-C8	-5.74	101.43	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	61	A	C5-N7-C8	-5.74	101.03	103.90
83	lB	4	G	C5-N7-C8	-5.74	101.43	104.30
90	lI	20	A	C5-N7-C8	-5.74	101.03	103.90
91	lJ	170	G	C5-N7-C8	-5.74	101.43	104.30
91	lJ	208	A	C5-N7-C8	-5.74	101.03	103.90
93	lL	61	A	C5-N7-C8	-5.74	101.03	103.90
93	lL	82	A	C5-N7-C8	-5.74	101.03	103.90
93	lL	85	A	C5-N7-C8	-5.74	101.03	103.90
73	l1	20	A	C5-N7-C8	-5.73	101.03	103.90
78	l6	39	A	C5-N7-C8	-5.73	101.03	103.90
79	l7	22	A	C2-N3-C4	-5.73	107.73	110.60
76	l4	36	A	C2-N3-C4	-5.73	107.73	110.60
78	l6	40	A	C5-N7-C8	-5.73	101.03	103.90
83	lB	32	A	C2-N3-C4	-5.73	107.73	110.60
91	lJ	282	A	C2-N3-C4	-5.73	107.73	110.60
95	lN	18	A	C5-N7-C8	-5.73	101.03	103.90
96	lO	53	A	C5-N7-C8	-5.73	101.03	103.90
72	l0	37	G	C5-N7-C8	-5.73	101.44	104.30
90	lI	32	A	C2-N3-C4	-5.73	107.73	110.60
93	lL	86	A	C5-N7-C8	-5.73	101.03	103.90
96	lO	65	A	C2-N3-C4	-5.73	107.73	110.60
76	l4	65	A	C2-N3-C4	-5.73	107.73	110.60
85	lD	4	A	C5-N7-C8	-5.73	101.03	103.90
91	lJ	128	A	C5-N7-C8	-5.73	101.04	103.90
92	lK	16	A	C2-N3-C4	-5.73	107.73	110.60
94	lM	83	A	C2-N3-C4	-5.73	107.74	110.60
73	l1	48	A	C5-N7-C8	-5.73	101.04	103.90
79	l7	58	A	C5-N7-C8	-5.73	101.04	103.90
87	lF	13	A	C2-N3-C4	-5.73	107.74	110.60
95	lN	38	A	C5-N7-C8	-5.73	101.04	103.90
96	lO	146	A	C2-N3-C4	-5.73	107.74	110.60
73	l1	36	G	C5-N7-C8	-5.73	101.44	104.30
75	l3	35	A	C5-N7-C8	-5.72	101.04	103.90
91	lJ	5	G	C5-C6-N1	-5.72	108.64	111.50
92	lK	22	A	C2-N3-C4	-5.72	107.74	110.60
74	l2	30	A	C2-N3-C4	-5.72	107.74	110.60
74	l2	30	A	C5-N7-C8	-5.72	101.04	103.90
81	l9	81	A	C5-N7-C8	-5.72	101.04	103.90
86	lE	7	G	C5-N7-C8	-5.72	101.44	104.30
90	lI	42	A	C2-N3-C4	-5.72	107.74	110.60
93	lL	49	G	C5-N7-C8	-5.72	101.44	104.30
95	lN	31	A	C5-N7-C8	-5.72	101.04	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	l9	47	G	C5-N7-C8	-5.72	101.44	104.30
85	lD	4	A	C2-N3-C4	-5.72	107.74	110.60
91	lJ	156	G	C5-N7-C8	-5.72	101.44	104.30
95	lN	33	A	C5-N7-C8	-5.72	101.04	103.90
77	l5	59	A	C2-N3-C4	-5.72	107.74	110.60
91	lJ	169	C	C4-C5-C6	5.72	120.26	117.40
93	lL	76	C	C5-C6-N1	5.72	123.86	121.00
93	lL	88	A	C2-N3-C4	-5.72	107.74	110.60
94	lM	19	A	C2-N3-C4	-5.72	107.74	110.60
96	lO	6	A	C5-N7-C8	-5.72	101.04	103.90
96	lO	47	A	C2-N3-C4	-5.72	107.74	110.60
84	lC	25	A	C5-N7-C8	-5.72	101.04	103.90
90	lI	20	A	C2-N3-C4	-5.72	107.74	110.60
93	lL	90	A	C2-N3-C4	-5.72	107.74	110.60
76	l4	15	A	C2-N3-C4	-5.72	107.74	110.60
81	l9	45	A	C5-N7-C8	-5.72	101.04	103.90
82	lA	20	G	C5-N7-C8	-5.72	101.44	104.30
91	lJ	77	G	N3-C2-N2	-5.72	115.90	119.90
74	l2	29	A	C5-N7-C8	-5.71	101.04	103.90
79	l7	34	A	C4-C5-C6	-5.71	114.14	117.00
87	lF	63	A	C5-N7-C8	-5.71	101.04	103.90
94	lM	30	A	C5-N7-C8	-5.71	101.04	103.90
96	lO	14	A	C2-N3-C4	-5.71	107.74	110.60
4	L3	565	TYR	CB-CG-CD2	5.71	124.43	121.00
91	lJ	16	G	C5-C6-N1	-5.71	108.64	111.50
52	Lp	648	ARG	CD-NE-CZ	5.71	131.59	123.60
78	l6	42	A	C5-N7-C8	-5.71	101.05	103.90
79	l7	70	A	C5-N7-C8	-5.71	101.05	103.90
83	lB	42	G	C5-N7-C8	-5.71	101.45	104.30
90	lI	3	A	C2-N3-C4	-5.71	107.75	110.60
96	lO	48	A	C5-N7-C8	-5.71	101.05	103.90
90	lI	17	G	C5-C6-N1	-5.71	108.65	111.50
86	lE	29	A	C5-N7-C8	-5.71	101.05	103.90
91	lJ	177	C	C4-C5-C6	5.71	120.25	117.40
94	lM	39	G	C8-N9-C4	-5.71	104.12	106.40
78	l6	41	A	C5-N7-C8	-5.70	101.05	103.90
87	lF	14	G	C5-N7-C8	-5.70	101.45	104.30
94	lM	83	A	C5-N7-C8	-5.70	101.05	103.90
95	lN	22	A	C2-N3-C4	-5.70	107.75	110.60
96	lO	45	A	C2-N3-C4	-5.70	107.75	110.60
75	l3	51	G	C5-N7-C8	-5.70	101.45	104.30
76	l4	84	A	C5-N7-C8	-5.70	101.05	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
78	l6	33	G	N3-C4-C5	-5.70	125.75	128.60
81	l9	18	A	C5-N7-C8	-5.70	101.05	103.90
91	lJ	18	A	C2-N3-C4	-5.70	107.75	110.60
93	lL	66	A	C2-N3-C4	-5.70	107.75	110.60
76	l4	43	G	C5-N7-C8	-5.70	101.45	104.30
76	l4	92	A	C2-N3-C4	-5.70	107.75	110.60
83	lB	23	A	C2-N3-C4	-5.70	107.75	110.60
91	lJ	251	G	C5-N7-C8	-5.70	101.45	104.30
96	lO	9	A	C5-N7-C8	-5.70	101.05	103.90
87	lF	13	A	C5-N7-C8	-5.70	101.05	103.90
96	lO	64	A	C2-N3-C4	-5.70	107.75	110.60
87	lF	86	A	C2-N3-C4	-5.70	107.75	110.60
90	lI	44	A	C2-N3-C4	-5.70	107.75	110.60
96	lO	107	G	C5-N7-C8	-5.70	101.45	104.30
78	l6	25	A	C2-N3-C4	-5.69	107.75	110.60
81	l9	51	G	C5-N7-C8	-5.69	101.45	104.30
94	lM	34	G	C5-N7-C8	-5.69	101.45	104.30
76	l4	4	U	N3-C4-O4	5.69	123.38	119.40
76	l4	64	C	C5-C6-N1	5.69	123.85	121.00
79	l7	69	A	C5-N7-C8	-5.69	101.05	103.90
86	lE	26	A	C5-N7-C8	-5.69	101.05	103.90
90	lI	36	A	C2-N3-C4	-5.69	107.75	110.60
94	lM	31	A	C5-N7-C8	-5.69	101.05	103.90
95	lN	41	G	C5-N7-C8	-5.69	101.45	104.30
76	l4	26	A	C2-N3-C4	-5.69	107.75	110.60
76	l4	52	A	C5-N7-C8	-5.69	101.06	103.90
87	lF	88	A	C2-N3-C4	-5.69	107.75	110.60
91	lJ	127	A	C5-N7-C8	-5.69	101.05	103.90
91	lJ	203	G	C5-N7-C8	-5.69	101.45	104.30
72	l0	13	C	N1-C2-O2	5.69	122.31	118.90
93	lL	84	A	C5-N7-C8	-5.69	101.06	103.90
94	lM	163	G	C5-N7-C8	-5.69	101.46	104.30
96	lO	9	A	C2-N3-C4	-5.69	107.76	110.60
74	l2	15	G	C5-N7-C8	-5.69	101.46	104.30
79	l7	68	A	C5-N7-C8	-5.68	101.06	103.90
81	l9	61	A	C5-N7-C8	-5.68	101.06	103.90
85	lD	9	A	C2-N3-C4	-5.68	107.76	110.60
90	lI	3	A	C5-N7-C8	-5.68	101.06	103.90
90	lI	18	G	C5-N7-C8	-5.68	101.46	104.30
96	lO	90	G	C5-N7-C8	-5.68	101.46	104.30
55	Ls	323	ARG	NE-CZ-NH2	5.68	123.14	120.30
79	l7	66	A	C5-N7-C8	-5.68	101.06	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	67	A	C5-N7-C8	-5.68	101.06	103.90
86	lE	4	C	C5-C6-N1	5.68	123.84	121.00
96	lO	124	A	C2-N3-C4	-5.68	107.76	110.60
76	l4	52	A	C2-N3-C4	-5.68	107.76	110.60
91	lJ	193	A	C5-N7-C8	-5.68	101.06	103.90
76	l4	92	A	C5-N7-C8	-5.68	101.06	103.90
96	lO	15	A	C2-N3-C4	-5.68	107.76	110.60
52	Lp	614	TYR	CB-CG-CD2	5.68	124.41	121.00
92	lK	34	G	C5-C6-N1	5.68	114.34	111.50
94	lM	189	G	C6-C5-N7	5.68	133.81	130.40
74	l2	14	A	C5-N7-C8	-5.67	101.06	103.90
94	lM	40	A	C8-N9-C4	-5.67	103.53	105.80
96	lO	17	G	C5-N7-C8	-5.67	101.46	104.30
95	lN	33	A	C2-N3-C4	-5.67	107.76	110.60
96	lO	91	A	C5-N7-C8	-5.67	101.06	103.90
84	lC	21	A	C4-C5-C6	-5.67	114.16	117.00
86	lE	26	A	C2-N3-C4	-5.67	107.76	110.60
90	lI	35	A	C2-N3-C4	-5.67	107.76	110.60
93	lL	84	A	C2-N3-C4	-5.67	107.76	110.60
96	lO	47	A	C5-N7-C8	-5.67	101.06	103.90
73	l1	49	A	C5-N7-C8	-5.67	101.06	103.90
75	l3	24	C	C4-C5-C6	5.67	120.23	117.40
57	Lu	280	PHE	CB-CG-CD2	5.67	124.77	120.80
74	l2	7	G	C5-N7-C8	-5.67	101.47	104.30
79	l7	60	A	C5-N7-C8	-5.67	101.06	103.90
82	lA	45	A	C2-N3-C4	-5.67	107.77	110.60
86	lE	29	A	C2-N3-C4	-5.67	107.77	110.60
90	lI	40	A	C2-N3-C4	-5.67	107.77	110.60
90	lI	43	A	C5-N7-C8	-5.67	101.06	103.90
94	lM	25	G	C5-N7-C8	-5.67	101.47	104.30
95	lN	43	A	C2-N3-C4	-5.67	107.77	110.60
91	lJ	118	A	C6-C5-N7	5.67	136.27	132.30
91	lJ	139	G	C5-N7-C8	-5.67	101.47	104.30
76	l4	42	A	C2-N3-C4	-5.66	107.77	110.60
79	l7	52	G	C5-N7-C8	-5.66	101.47	104.30
83	lB	8	G	C5-N7-C8	-5.66	101.47	104.30
96	lO	45	A	C5-N7-C8	-5.66	101.07	103.90
25	LO	278	ARG	NE-CZ-NH2	5.66	123.13	120.30
81	l9	24	G	C5-C6-N1	-5.66	108.67	111.50
91	lJ	210	A	C5-N7-C8	-5.66	101.07	103.90
96	lO	173	G	N7-C8-N9	5.66	115.93	113.10
81	l9	63	A	C5-N7-C8	-5.66	101.07	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
86	lE	8	A	C5-N7-C8	-5.66	101.07	103.90
91	lJ	140	G	C5-N7-C8	-5.66	101.47	104.30
61	Ly	382	TYR	CB-CG-CD2	5.66	124.39	121.00
76	l4	49	C	C5-C6-N1	5.66	123.83	121.00
91	lJ	20	A	C2-N3-C4	-5.66	107.77	110.60
92	lK	14	G	C5-N7-C8	-5.66	101.47	104.30
93	lL	73	A	C5-N7-C8	-5.66	101.07	103.90
75	l3	38	G	C5-N7-C8	-5.66	101.47	104.30
94	lM	89	G	C5-N7-C8	-5.66	101.47	104.30
94	lM	155	C	C5-C6-N1	5.66	123.83	121.00
78	l6	25	A	C5-N7-C8	-5.65	101.07	103.90
91	lJ	112	G	C5-N7-C8	-5.65	101.47	104.30
91	lJ	165	G	C5-N7-C8	-5.65	101.47	104.30
61	Ly	281	TYR	CB-CG-CD2	5.65	124.39	121.00
76	l4	28	U	C6-N1-C2	-5.65	117.61	121.00
78	l6	41	A	C2-N3-C4	-5.65	107.78	110.60
96	lO	72	A	C6-N1-C2	-5.65	115.21	118.60
48	Ll	101	PHE	CB-CG-CD2	5.65	124.75	120.80
76	l4	58	A	C5-N7-C8	-5.65	101.08	103.90
83	lB	23	A	C5-N7-C8	-5.65	101.08	103.90
75	l3	25	U	N3-C4-O4	5.64	123.35	119.40
76	l4	61	A	C5-N7-C8	-5.64	101.08	103.90
76	l4	67	G	C5-N7-C8	-5.64	101.48	104.30
81	l9	73	G	C5-N7-C8	-5.64	101.48	104.30
83	lB	45	A	C5-N7-C8	-5.64	101.08	103.90
96	lO	95	U	N3-C4-O4	5.64	123.35	119.40
96	lO	176	A	C5-C6-N1	5.64	120.52	117.70
76	l4	59	G	C5-N7-C8	-5.64	101.48	104.30
87	lF	57	A	C2-N3-C4	-5.64	107.78	110.60
1	L0	359	TYR	CB-CG-CD2	5.64	124.38	121.00
73	l1	7	G	C5-N7-C8	-5.64	101.48	104.30
72	l0	18	G	C5-N7-C8	-5.64	101.48	104.30
75	l3	53	G	C5-N7-C8	-5.64	101.48	104.30
89	lH	6	G	C5-C6-N1	-5.64	108.68	111.50
83	lB	33	A	C5-N7-C8	-5.64	101.08	103.90
74	l2	14	A	C2-N3-C4	-5.64	107.78	110.60
76	l4	54	A	C5-N7-C8	-5.64	101.08	103.90
76	l4	57	G	C5-N7-C8	-5.64	101.48	104.30
78	l6	22	G	C5-N7-C8	-5.64	101.48	104.30
81	l9	73	G	C5-C6-N1	-5.64	108.68	111.50
86	lE	17	G	C6-N1-C2	5.64	128.48	125.10
91	lJ	282	A	C5-N7-C8	-5.64	101.08	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	LG	239	TYR	CB-CG-CD2	5.63	124.38	121.00
53	Lq	300	PHE	CB-CG-CD2	5.63	124.74	120.80
85	lD	6	C	C4-C5-C6	5.63	120.22	117.40
94	lM	77	A	C5-N7-C8	-5.63	101.08	103.90
91	lJ	16	G	C5-N7-C8	-5.63	101.48	104.30
91	lJ	125	G	C5-C6-N1	-5.63	108.68	111.50
28	LR	44	TYR	CB-CG-CD2	5.63	124.38	121.00
41	Le	460	ARG	NE-CZ-NH2	5.63	123.12	120.30
96	lO	26	G	O4'-C1'-N9	5.63	112.71	108.20
96	lO	60	A	C6-N1-C2	-5.63	115.22	118.60
73	l1	8	A	C2-N3-C4	-5.63	107.78	110.60
81	l9	2	C	N3-C4-C5	-5.63	119.65	121.90
96	lO	42	A	C5-N7-C8	-5.63	101.08	103.90
72	l0	42	G	C5-N7-C8	-5.63	101.49	104.30
76	l4	58	A	C2-N3-C4	-5.63	107.78	110.60
77	l5	32	G	C5-N7-C8	-5.63	101.49	104.30
78	l6	20	G	C5-N7-C8	-5.63	101.49	104.30
83	lB	21	A	C5-N7-C8	-5.63	101.09	103.90
83	lB	45	A	C2-N3-C4	-5.63	107.79	110.60
84	lC	23	A	C5-C6-N1	5.63	120.51	117.70
91	lJ	129	A	C2-N3-C4	-5.63	107.79	110.60
96	lO	139	G	C5-N7-C8	-5.63	101.49	104.30
91	lJ	127	A	C2-N3-C4	-5.63	107.79	110.60
43	Lg	92	MET	CA-CB-CG	5.62	122.86	113.30
81	l9	66	G	C5-N7-C8	-5.62	101.49	104.30
12	LB	108	TYR	CB-CG-CD2	5.62	124.37	121.00
103	lY	10	U	N3-C2-O2	-5.62	118.26	122.20
74	l2	31	A	C5-N7-C8	-5.62	101.09	103.90
82	lA	14	U	C5-C6-N1	5.62	125.51	122.70
90	lI	19	G	C5-N7-C8	-5.62	101.49	104.30
91	lJ	184	C	C4-C5-C6	5.62	120.21	117.40
91	lJ	252	A	C2-N3-C4	-5.62	107.79	110.60
74	l2	21	G	C5-N7-C8	-5.62	101.49	104.30
81	l9	46	A	C5-N7-C8	-5.62	101.09	103.90
81	l9	57	A	C5-N7-C8	-5.62	101.09	103.90
95	lN	1	A	C2-N3-C4	-5.62	107.79	110.60
76	l4	49	C	C4-C5-C6	5.62	120.21	117.40
81	l9	26	A	C2-N3-C4	-5.62	107.79	110.60
93	lL	60	G	C5-N7-C8	-5.62	101.49	104.30
76	l4	27	G	C5-N7-C8	-5.61	101.49	104.30
91	lJ	195	A	C2-N3-C4	-5.61	107.79	110.60
91	lJ	125	G	C5-N7-C8	-5.61	101.49	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	lF	64	G	C5-N7-C8	-5.61	101.50	104.30
91	lJ	191	C	C4-C5-C6	5.61	120.21	117.40
94	lM	156	G	C5-N7-C8	-5.61	101.50	104.30
91	lJ	102	G	C5-N7-C8	-5.61	101.50	104.30
91	lJ	128	A	C2-N3-C4	-5.61	107.80	110.60
96	lO	42	A	C2-N3-C4	-5.61	107.80	110.60
73	l1	13	G	C5-N7-C8	-5.61	101.50	104.30
77	l5	40	G	C5-N7-C8	-5.61	101.50	104.30
81	l9	3	C	N3-C4-C5	-5.61	119.66	121.90
91	lJ	102	G	C5-C6-N1	-5.61	108.70	111.50
75	l3	21	G	C5-N7-C8	-5.61	101.50	104.30
87	lF	24	G	C5-N7-C8	-5.61	101.50	104.30
93	lL	39	G	C5-C6-N1	-5.61	108.70	111.50
96	lO	99	A	C2-N3-C4	-5.61	107.80	110.60
91	lJ	210	A	C2-N3-C4	-5.60	107.80	110.60
86	lE	16	U	C6-N1-C2	-5.60	117.64	121.00
91	lJ	185	G	C5-N7-C8	-5.60	101.50	104.30
96	lO	165	A	C2-N3-C4	-5.60	107.80	110.60
90	lI	35	A	C5-N7-C8	-5.60	101.10	103.90
96	lO	125	C	C4-C5-C6	5.60	120.20	117.40
4	L3	667	TYR	CB-CG-CD2	5.60	124.36	121.00
82	lA	48	A	C5-N7-C8	-5.60	101.10	103.90
86	lE	4	C	C4-C5-C6	5.60	120.20	117.40
91	lJ	121	G	P-O3'-C3'	5.60	126.42	119.70
83	lB	43	G	C5-N7-C8	-5.60	101.50	104.30
96	lO	166	G	C5-N7-C8	-5.60	101.50	104.30
44	Lh	685	TYR	CB-CG-CD2	5.59	124.36	121.00
81	l9	36	U	C6-N1-C2	-5.59	117.64	121.00
86	lE	15	G	C6-N1-C2	5.59	128.46	125.10
79	l7	63	A	C2-N3-C4	-5.59	107.80	110.60
93	lL	64	G	C5-N7-C8	-5.59	101.51	104.30
90	lI	21	A	C5-N7-C8	-5.59	101.11	103.90
91	lJ	139	G	C5-C6-N1	-5.59	108.71	111.50
95	lN	41	G	C5-C6-N1	-5.59	108.71	111.50
70	UH	279	PHE	CB-CG-CD2	5.59	124.71	120.80
96	lO	38	A	C2-N3-C4	-5.59	107.81	110.60
96	lO	167	A	C2-N3-C4	-5.59	107.81	110.60
3	L2	44	TYR	CB-CG-CD2	5.58	124.35	121.00
85	lD	10	A	C6-N1-C2	-5.58	115.25	118.60
91	lJ	193	A	C2-N3-C4	-5.58	107.81	110.60
50	Ln	169	ARG	NE-CZ-NH2	5.58	123.09	120.30
96	lO	71	G	C5-C6-N1	-5.58	108.71	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
76	l4	59	G	C5-C6-N1	-5.58	108.71	111.50
80	l8	1	A	N1-C6-N6	-5.58	115.25	118.60
93	lL	64	G	C5-C6-N1	-5.58	108.71	111.50
79	l7	49	G	C5-N7-C8	-5.58	101.51	104.30
83	lB	25	A	C2-N3-C4	-5.58	107.81	110.60
83	lB	30	C	C4-C5-C6	5.58	120.19	117.40
86	lE	27	G	C5-N7-C8	-5.58	101.51	104.30
91	lJ	137	C	C4-C5-C6	5.58	120.19	117.40
91	lJ	251	G	C5-C6-N1	-5.58	108.71	111.50
92	lK	9	G	N3-C2-N2	-5.58	116.00	119.90
94	lM	31	A	C2-N3-C4	-5.58	107.81	110.60
96	lO	61	C	C5-C6-N1	5.58	123.79	121.00
26	LP	283	PHE	CB-CG-CD2	5.57	124.70	120.80
86	lE	3	G	C5-N7-C8	-5.57	101.51	104.30
38	Lb	721	ARG	CG-CD-NE	5.57	123.50	111.80
75	l3	52	A	C5-N7-C8	-5.57	101.11	103.90
77	l5	34	G	N1-C6-O6	5.57	123.24	119.90
76	l4	53	A	C5-N7-C8	-5.57	101.11	103.90
73	l1	4	G	C5-N7-C8	-5.57	101.52	104.30
81	l9	28	U	C6-N1-C2	-5.57	117.66	121.00
88	lG	18	G	C5-C6-N1	-5.57	108.72	111.50
91	lJ	138	G	C5-C6-N1	-5.57	108.72	111.50
44	Lh	631	PHE	CB-CG-CD2	5.57	124.70	120.80
76	l4	86	G	C5-N7-C8	-5.57	101.52	104.30
86	lE	19	G	C6-N1-C2	5.57	128.44	125.10
90	lI	22	G	C5-C6-N1	-5.57	108.72	111.50
93	lL	49	G	C5-C6-N1	-5.57	108.72	111.50
30	LT	48	TYR	CB-CG-CD2	5.56	124.34	121.00
91	lJ	182	G	C5-C6-N1	-5.56	108.72	111.50
91	lJ	197	C	C4-C5-C6	5.56	120.18	117.40
92	lK	22	A	C5-N7-C8	-5.56	101.12	103.90
96	lO	34	A	C2-N3-C4	-5.56	107.82	110.60
87	lF	29	G	C5-C6-N1	-5.56	108.72	111.50
93	lL	31	C	C4-C5-C6	5.56	120.18	117.40
95	lN	18	A	C2-N3-C4	-5.56	107.82	110.60
73	l1	9	C	C4-C5-C6	5.56	120.18	117.40
96	lO	8	G	C5-C6-N1	-5.56	108.72	111.50
78	l6	22	G	C5-C6-N1	-5.56	108.72	111.50
94	lM	25	G	C5-C6-N1	-5.56	108.72	111.50
77	l5	32	G	C5-C6-N1	-5.56	108.72	111.50
91	lJ	195	A	C5-N7-C8	-5.56	101.12	103.90
51	Lo	68	PHE	CB-CG-CD2	5.55	124.69	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	LB	65	PHE	CB-CG-CD2	5.55	124.69	120.80
39	Lc	427	ARG	CG-CD-NE	5.55	123.46	111.80
76	l4	64	C	C4-C5-C6	5.55	120.18	117.40
10	L9	457	PHE	CB-CG-CD2	5.55	124.69	120.80
74	l2	7	G	C5-C6-N1	-5.55	108.72	111.50
93	lL	38	G	C5-C6-N1	-5.55	108.72	111.50
87	lF	52	A	N7-C8-N9	5.55	116.58	113.80
91	lJ	226	G	C5-C6-N1	-5.55	108.72	111.50
76	l4	35	A	C5-N7-C8	-5.55	101.13	103.90
81	l9	54	G	C5-C6-N1	-5.55	108.73	111.50
87	lF	34	G	C5-N7-C8	-5.55	101.53	104.30
94	lM	122	G	C5-C6-N1	-5.55	108.73	111.50
96	lO	69	G	C5-C6-N1	-5.55	108.73	111.50
94	lM	165	G	C5-C6-N1	-5.54	108.73	111.50
96	lO	17	G	C5-C6-N1	-5.54	108.73	111.50
1	L0	427	ARG	CG-CD-NE	5.54	123.44	111.80
75	l3	51	G	C5-C6-N1	-5.54	108.73	111.50
44	Lh	478	ARG	CG-CD-NE	5.54	123.44	111.80
73	l1	8	A	C5-N7-C8	-5.54	101.13	103.90
78	l6	47	A	N1-C6-N6	-5.54	115.28	118.60
91	lJ	230	A	C5-N7-C8	-5.54	101.13	103.90
92	lK	14	G	C5-C6-N1	-5.54	108.73	111.50
22	LL	945	ARG	CG-CD-NE	5.54	123.43	111.80
84	lC	26	G	C5-C6-N1	-5.54	108.73	111.50
90	lI	21	A	C2-N3-C4	-5.54	107.83	110.60
91	lJ	230	A	C6-N1-C2	-5.54	115.28	118.60
94	lM	27	G	C5-C6-N1	-5.54	108.73	111.50
96	lO	167	A	C5-N7-C8	-5.54	101.13	103.90
72	l0	37	G	C5-C6-N1	-5.54	108.73	111.50
83	lB	40	G	C5-C6-N1	-5.54	108.73	111.50
37	La	77	ARG	CD-NE-CZ	5.53	131.35	123.60
81	l9	74	G	C5-C6-N1	-5.53	108.73	111.50
76	l4	62	G	C5-N7-C8	-5.53	101.53	104.30
23	LM	134	ARG	CG-CD-NE	5.53	123.42	111.80
79	l7	54	G	C5-N7-C8	-5.53	101.53	104.30
91	lJ	42	A	C2-N3-C4	-5.53	107.83	110.60
93	lL	14	A	C5-N7-C8	-5.53	101.14	103.90
94	lM	26	G	C5-C6-N1	-5.53	108.73	111.50
96	lO	33	G	C5-C6-N1	-5.53	108.73	111.50
96	lO	163	G	C5-C6-N1	-5.53	108.73	111.50
76	l4	21	A	C6-N1-C2	-5.53	115.28	118.60
76	l4	36	A	C5-N7-C8	-5.53	101.14	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
77	l5	34	G	C5-C6-N1	-5.53	108.74	111.50
93	lL	76	C	C4-C5-C6	5.53	120.17	117.40
96	lO	7	U	C6-N1-C2	-5.53	117.68	121.00
38	Lb	594	PHE	CB-CG-CD2	5.53	124.67	120.80
75	l3	53	G	C5-C6-N1	-5.53	108.74	111.50
76	l4	15	A	C5-N7-C8	-5.53	101.14	103.90
75	l3	43	A	N1-C6-N6	-5.53	115.28	118.60
93	lL	32	G	C5-C6-N1	-5.53	108.74	111.50
94	lM	78	C	C4-C5-C6	5.53	120.16	117.40
74	l2	3	G	C5-C6-N1	-5.52	108.74	111.50
79	l7	50	U	C6-N1-C2	-5.52	117.69	121.00
78	l6	1	A	C6-N1-C2	-5.52	115.29	118.60
92	lK	4	C	C4-C5-C6	5.52	120.16	117.40
72	l0	42	G	C5-C6-N1	-5.52	108.74	111.50
86	lE	8	A	C2-N3-C4	-5.52	107.84	110.60
34	LX	98	TYR	CB-CG-CD2	5.52	124.31	121.00
91	lJ	156	G	C5-C6-N1	-5.52	108.74	111.50
91	lJ	233	G	C5-C6-N1	-5.52	108.74	111.50
94	lM	129	A	C5-N7-C8	-5.52	101.14	103.90
45	Li	586	PHE	CB-CG-CD2	5.52	124.66	120.80
96	lO	108	G	C5-N7-C8	-5.52	101.54	104.30
6	L5	476	ARG	CG-CD-NE	5.51	123.38	111.80
55	Ls	359	ARG	CG-CD-NE	5.51	123.38	111.80
81	l9	25	A	C2-N3-C4	-5.51	107.84	110.60
81	l9	39	G	C5-N7-C8	-5.51	101.55	104.30
82	lA	41	C	N1-C2-O2	5.51	122.21	118.90
89	lH	14	G	C5-N7-C8	-5.51	101.54	104.30
91	lJ	124	G	C5-C6-N1	-5.51	108.75	111.50
91	lJ	273	C	C4-C5-C6	5.51	120.16	117.40
93	lL	60	G	C5-C6-N1	-5.51	108.74	111.50
83	lB	31	G	C5-C6-N1	-5.51	108.75	111.50
94	lM	149	G	C5-C6-N1	-5.51	108.75	111.50
52	Lp	604	ARG	CG-CD-NE	5.51	123.37	111.80
83	lB	4	G	C5-C6-N1	-5.51	108.75	111.50
91	lJ	196	A	C2-N3-C4	-5.51	107.85	110.60
1	L0	467	PHE	CB-CG-CD2	5.50	124.65	120.80
94	lM	135	G	N3-C4-N9	5.50	129.30	126.00
51	Lo	98	TYR	CB-CG-CD2	5.50	124.30	121.00
81	l9	5	A	C8-N9-C4	-5.50	103.60	105.80
91	lJ	113	G	C5-C6-N1	-5.50	108.75	111.50
81	l9	15	A	C2-N3-C4	-5.50	107.85	110.60
87	lF	24	G	C5-C6-N1	-5.50	108.75	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
90	lI	14	G	N3-C2-N2	-5.50	116.05	119.90
91	lJ	175	U	C6-N1-C2	-5.50	117.70	121.00
96	lO	43	G	C5-C6-N1	-5.50	108.75	111.50
79	l7	49	G	C5-C6-N1	-5.50	108.75	111.50
86	lE	5	G	C5-C6-N1	-5.50	108.75	111.50
95	lN	35	G	C5-C6-N1	-5.50	108.75	111.50
79	l7	71	A	C2-N3-C4	-5.50	107.85	110.60
94	lM	155	C	C4-C5-C6	5.50	120.15	117.40
88	lG	10	G	C5-C6-N1	-5.50	108.75	111.50
76	l4	29	C	C4-C5-C6	5.49	120.15	117.40
81	l9	62	A	C5-N7-C8	-5.49	101.15	103.90
94	lM	90	C	C4-C5-C6	5.49	120.15	117.40
75	l3	50	C	C4-C5-C6	5.49	120.14	117.40
76	l4	4	U	N1-C2-N3	-5.49	111.61	114.90
88	lG	11	C	C4-C5-C6	5.49	120.15	117.40
94	lM	163	G	C5-C6-N1	-5.49	108.75	111.50
96	lO	90	G	N1-C6-O6	5.49	123.19	119.90
74	l2	31	A	C2-N3-C4	-5.49	107.86	110.60
77	l5	40	G	C5-C6-N1	-5.49	108.76	111.50
20	LJ	260	ARG	CG-CD-NE	5.49	123.32	111.80
22	LL	342	ARG	CG-CD-NE	5.49	123.32	111.80
76	l4	62	G	C5-C6-N1	-5.49	108.76	111.50
79	l7	52	G	C5-C6-N1	-5.49	108.76	111.50
82	lA	38	A	C5-C6-N1	5.49	120.44	117.70
83	lB	31	G	C5-N7-C8	-5.49	101.56	104.30
81	l9	56	G	C5-N7-C8	-5.48	101.56	104.30
3	L2	81	ARG	CG-CD-NE	5.48	123.31	111.80
86	lE	6	A	C2-N3-C4	-5.48	107.86	110.60
25	LO	133	ARG	CG-CD-NE	5.48	123.31	111.80
37	La	79	ARG	CG-CD-NE	5.48	123.31	111.80
61	Ly	384	ARG	CG-CD-NE	5.48	123.31	111.80
76	l4	48	G	C5-C6-N1	-5.48	108.76	111.50
81	l9	50	C	C4-C5-C6	5.48	120.14	117.40
81	l9	56	G	C5-C6-N1	-5.48	108.76	111.50
82	lA	49	G	C5-C6-N1	-5.48	108.76	111.50
18	LH	257	TYR	CB-CG-CD2	5.48	124.29	121.00
19	LI	73	TYR	CB-CG-CD2	5.48	124.29	121.00
78	l6	24	G	C5-C6-N1	-5.48	108.76	111.50
81	l9	37	C	C4-C5-C6	5.48	120.14	117.40
81	l9	42	C	C4-C5-C6	5.48	120.14	117.40
83	lB	22	G	C5-C6-N1	-5.48	108.76	111.50
90	lI	18	G	C5-C6-N1	-5.48	108.76	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	169	C	C5-C6-N1	5.48	123.74	121.00
83	lB	7	A	C5-N7-C8	-5.48	101.16	103.90
14	LD	356	TYR	CB-CG-CD2	5.47	124.28	121.00
73	l1	13	G	C5-C6-N1	-5.47	108.76	111.50
95	lN	26	C	C4-C5-C6	5.47	120.14	117.40
96	lO	107	G	C5-C6-N1	-5.47	108.76	111.50
94	lM	130	C	C4-C5-C6	5.47	120.14	117.40
4	L3	663	TYR	CB-CG-CD2	5.47	124.28	121.00
96	lO	38	A	C6-N1-C2	-5.47	115.32	118.60
76	l4	43	G	C5-C6-N1	-5.47	108.77	111.50
91	lJ	112	G	C5-C6-N1	-5.47	108.77	111.50
91	lJ	203	G	C5-C6-N1	-5.47	108.77	111.50
96	lO	36	C	C4-C5-C6	5.47	120.14	117.40
38	Lb	753	ARG	CG-CD-NE	5.47	123.28	111.80
83	lB	42	G	C5-C6-N1	-5.47	108.77	111.50
32	LV	1063	ARG	CG-CD-NE	5.47	123.28	111.80
32	LV	1080	ARG	CG-CD-NE	5.47	123.28	111.80
38	Lb	455	PHE	CB-CG-CD2	5.47	124.63	120.80
38	Lb	582	PHE	CB-CG-CD2	5.47	124.63	120.80
53	Lq	647	ARG	CG-CD-NE	5.47	123.28	111.80
76	l4	55	C	C4-C5-C6	5.47	120.13	117.40
90	lI	19	G	C5-C6-N1	-5.47	108.77	111.50
91	lJ	131	C	C4-C5-C6	5.47	120.13	117.40
38	Lb	297	TYR	CB-CG-CD2	5.46	124.28	121.00
55	Ls	373	ARG	CG-CD-NE	5.46	123.28	111.80
78	l6	20	G	C5-C6-N1	-5.46	108.77	111.50
86	lE	22	U	C6-N1-C2	-5.46	117.72	121.00
87	lF	14	G	C5-C6-N1	-5.46	108.77	111.50
1	L0	472	PHE	CB-CG-CD2	5.46	124.62	120.80
29	LS	8	TYR	CB-CG-CD2	5.46	124.28	121.00
75	l3	42	G	N3-C4-C5	-5.46	125.87	128.60
91	lJ	165	G	C5-C6-N1	-5.46	108.77	111.50
34	LX	156	PHE	CB-CG-CD2	5.46	124.62	120.80
39	Lc	452	ARG	CD-NE-CZ	5.46	131.24	123.60
76	l4	57	G	C5-C6-N1	-5.46	108.77	111.50
87	lF	63	A	C2-N3-C4	-5.46	107.87	110.60
91	lJ	230	A	C2-N3-C4	-5.46	107.87	110.60
91	lJ	254	C	C4-C5-C6	5.46	120.13	117.40
94	lM	32	C	C4-C5-C6	5.46	120.13	117.40
13	LC	171	PHE	CB-CG-CD2	5.45	124.62	120.80
38	Lb	424	PHE	CB-CG-CD2	5.45	124.62	120.80
86	lE	23	C	C4-C5-C6	5.45	120.13	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	lF	34	G	C5-C6-N1	-5.45	108.77	111.50
51	Lo	265	ARG	CG-CD-NE	5.45	123.25	111.80
91	lJ	209	G	C5-C6-N1	-5.45	108.77	111.50
94	lM	73	C	C4-C5-C6	5.45	120.13	117.40
20	LJ	230	ARG	CG-CD-NE	5.45	123.25	111.80
90	lI	5	G	C5-C6-N1	-5.45	108.77	111.50
33	LW	488	TYR	CB-CG-CD2	5.45	124.27	121.00
38	Lb	775	ARG	CG-CD-NE	5.45	123.24	111.80
46	Lj	5	ARG	CG-CD-NE	5.45	123.24	111.80
72	l0	31	G	N1-C6-O6	-5.45	116.63	119.90
73	l1	4	G	C5-C6-N1	-5.45	108.78	111.50
73	l1	7	G	C5-C6-N1	-5.45	108.78	111.50
81	l9	47	G	C5-C6-N1	-5.45	108.78	111.50
6	L5	450	ARG	CG-CD-NE	5.45	123.24	111.80
77	l5	28	C	C4-C5-C6	5.45	120.12	117.40
13	LC	139	ARG	CG-CD-NE	5.45	123.23	111.80
55	Ls	342	PHE	CB-CG-CD2	5.45	124.61	120.80
67	UE	185	ARG	CG-CD-NE	5.45	123.23	111.80
28	LR	22	ARG	CG-CD-NE	5.44	123.23	111.80
94	lM	156	G	C5-C6-N1	-5.44	108.78	111.50
96	lO	176	A	N1-C6-N6	-5.44	115.33	118.60
87	lF	64	G	C5-C6-N1	-5.44	108.78	111.50
91	lJ	232	C	C4-C5-C6	5.44	120.12	117.40
93	lL	74	A	C2-N3-C4	-5.44	107.88	110.60
94	lM	79	C	C4-C5-C6	5.44	120.12	117.40
96	lO	31	G	N1-C6-O6	5.44	123.17	119.90
25	LO	98	PHE	CB-CG-CD2	5.44	124.61	120.80
81	l9	52	C	C4-C5-C6	5.44	120.12	117.40
81	l9	82	C	C4-C5-C6	5.44	120.12	117.40
89	lH	14	G	C5-C6-N1	-5.44	108.78	111.50
2	L1	498	MET	CA-CB-CG	5.44	122.55	113.30
76	l4	20	G	N1-C6-O6	5.44	123.16	119.90
70	UH	273	ARG	CG-CD-NE	5.44	123.22	111.80
68	UF	33	ARG	CG-CD-NE	5.44	123.22	111.80
86	lE	7	G	C5-C6-N1	-5.44	108.78	111.50
24	LN	280	PHE	CB-CG-CD2	5.43	124.60	120.80
72	l0	18	G	C5-C6-N1	-5.43	108.78	111.50
91	lJ	278	A	C2-N3-C4	-5.43	107.88	110.60
20	LJ	119	ARG	CG-CD-NE	5.43	123.20	111.80
41	Le	515	ARG	CG-CD-NE	5.43	123.21	111.80
54	Lr	269	ARG	CG-CD-NE	5.43	123.20	111.80
75	l3	38	G	C5-C6-N1	-5.43	108.78	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
95	lN	32	C	C4-C5-C6	5.43	120.12	117.40
54	Lr	50	TYR	CA-CB-CG	5.43	123.72	113.40
60	Lx	313	ARG	CG-CD-NE	5.43	123.20	111.80
72	l0	40	C	C4-C5-C6	5.43	120.11	117.40
93	lL	77	G	C5-N7-C8	-5.43	101.58	104.30
44	Lh	413	TYR	CB-CG-CD2	5.43	124.26	121.00
54	Lr	50	TYR	CB-CG-CD1	5.43	124.26	121.00
92	lK	2	C	C4-C5-C6	5.43	120.11	117.40
26	LP	280	ARG	CG-CD-NE	5.42	123.19	111.80
40	Ld	531	ARG	CG-CD-NE	5.42	123.19	111.80
69	UG	375	ARG	CG-CD-NE	5.42	123.19	111.80
74	l2	15	G	C5-C6-N1	-5.42	108.79	111.50
94	lM	33	A	C2-N3-C4	-5.42	107.89	110.60
91	lJ	135	G	C5-N7-C8	-5.42	101.59	104.30
17	LG	206	ARG	CG-CD-NE	5.42	123.19	111.80
20	LJ	245	ARG	CG-CD-NE	5.42	123.18	111.80
32	LV	889	ARG	CG-CD-NE	5.42	123.19	111.80
45	Li	125	ARG	CG-CD-NE	5.42	123.19	111.80
69	UG	366	LYS	CA-CB-CG	5.42	125.33	113.40
79	l7	63	A	C6-N1-C2	-5.42	115.35	118.60
46	Lj	26	ARG	CG-CD-NE	5.42	123.18	111.80
47	Lk	474	ARG	CG-CD-NE	5.42	123.18	111.80
75	l3	54	C	C4-C5-C6	5.42	120.11	117.40
52	Lp	720	ARG	CG-CD-NE	5.42	123.18	111.80
87	lF	12	C	C4-C5-C6	5.42	120.11	117.40
94	lM	40	A	C2-N3-C4	-5.42	107.89	110.60
33	LW	210	ARG	CG-CD-NE	5.42	123.18	111.80
85	lD	13	A	C2-N3-C4	-5.42	107.89	110.60
87	lF	9	C	C4-C5-C6	5.42	120.11	117.40
90	lI	15	C	C5-C6-N1	5.42	123.71	121.00
41	Le	489	ARG	CG-CD-NE	5.42	123.17	111.80
49	Lm	418	ARG	CG-CD-NE	5.42	123.17	111.80
94	lM	41	U	N3-C4-C5	-5.42	111.35	114.60
1	L0	306	PHE	CB-CG-CD2	5.41	124.59	120.80
48	Ll	4	ARG	CG-CD-NE	5.41	123.17	111.80
48	Ll	136	ARG	CG-CD-NE	5.41	123.17	111.80
69	UG	262	ARG	CG-CD-NE	5.41	123.17	111.80
91	lJ	84	A	O4'-C1'-N9	5.41	112.53	108.20
94	lM	64	G	C6-N1-C2	5.41	128.35	125.10
67	UE	127	ARG	CG-CD-NE	5.41	123.17	111.80
82	lA	50	G	C5-C6-N1	-5.41	108.79	111.50
91	lJ	86	C	N1-C2-O2	5.41	122.15	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	LJ	62	TYR	CB-CG-CD2	5.41	124.25	121.00
91	lJ	229	G	C5-C6-N1	-5.41	108.80	111.50
104	lX	46	U	N1-C2-N3	5.41	118.15	114.90
5	L4	593	ARG	CG-CD-NE	5.41	123.16	111.80
27	LQ	357	ARG	CG-CD-NE	5.41	123.16	111.80
39	Lc	518	ARG	CD-NE-CZ	5.41	131.17	123.60
91	lJ	185	G	C5-C6-N1	-5.41	108.80	111.50
15	LE	371	ARG	CG-CD-NE	5.41	123.15	111.80
104	lX	40	U	N1-C2-O2	5.41	126.58	122.80
44	Lh	358	ARG	CG-CD-NE	5.41	123.15	111.80
46	Lj	102	ARG	CG-CD-NE	5.41	123.15	111.80
54	Lr	255	ARG	CG-CD-NE	5.41	123.15	111.80
91	lJ	43	C	C4-C5-C6	5.41	120.10	117.40
91	lJ	135	G	C5-C6-N1	-5.41	108.80	111.50
99	lR	1	U	C6-N1-C2	-5.41	117.76	121.00
39	Lc	317	ARG	CG-CD-NE	5.40	123.15	111.80
81	l9	17	C	C4-C5-C6	5.40	120.10	117.40
89	lH	17	G	C5-C6-N1	-5.40	108.80	111.50
94	lM	89	G	C5-C6-N1	-5.40	108.80	111.50
35	LY	429	TYR	CB-CG-CD2	5.40	124.24	121.00
78	l6	4	G	C5-N7-C8	-5.40	101.60	104.30
84	lC	21	A	C6-C5-N7	5.40	136.08	132.30
91	lJ	140	G	C5-C6-N1	-5.40	108.80	111.50
91	lJ	174	C	C4-C5-C6	5.40	120.10	117.40
96	lO	49	C	C4-C5-C6	5.40	120.10	117.40
1	L0	331	ARG	CG-CD-NE	5.40	123.14	111.80
33	LW	471	ARG	CG-CD-NE	5.40	123.14	111.80
87	lF	17	G	C5-C6-N1	-5.40	108.80	111.50
87	lF	62	A	C6-N1-C2	-5.40	115.36	118.60
51	Lo	82	ARG	CG-CD-NE	5.40	123.14	111.80
29	LS	3	ARG	CG-CD-NE	5.40	123.14	111.80
76	l4	32	G	C5-C6-N1	-5.40	108.80	111.50
95	lN	2	C	C4-C5-C6	5.40	120.10	117.40
34	LX	125	ARG	CG-CD-NE	5.39	123.13	111.80
44	Lh	436	ARG	CG-CD-NE	5.39	123.13	111.80
61	Ly	290	ARG	CG-CD-NE	5.39	123.13	111.80
76	l4	60	G	C5-C6-N1	-5.39	108.80	111.50
91	lJ	148	C	C4-C5-C6	5.39	120.10	117.40
91	lJ	168	C	C4-C5-C6	5.39	120.10	117.40
36	LZ	5	ARG	CG-CD-NE	5.39	123.13	111.80
37	La	78	ARG	CG-CD-NE	5.39	123.12	111.80
76	l4	27	G	C5-C6-N1	-5.39	108.80	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	64	A	C2-N3-C4	-5.39	107.90	110.60
91	lJ	23	A	C2-N3-C4	-5.39	107.90	110.60
97	lP	15	U	O4'-C1'-N1	5.39	112.52	108.20
32	LV	370	ARG	CG-CD-NE	5.39	123.12	111.80
51	Lo	347	ARG	CG-CD-NE	5.39	123.12	111.80
79	l7	61	A	C2-N3-C4	-5.39	107.90	110.60
82	lA	64	A	C6-N1-C2	-5.39	115.36	118.60
91	lJ	255	C	C4-C5-C6	5.39	120.09	117.40
93	lL	3	G	C5-C6-N1	-5.39	108.81	111.50
36	LZ	110	ARG	CG-CD-NE	5.39	123.12	111.80
86	lE	27	G	C5-C6-N1	-5.39	108.81	111.50
21	LK	192	TYR	CB-CG-CD2	5.39	124.23	121.00
20	LJ	213	ARG	CG-CD-NE	5.39	123.11	111.80
41	Le	573	ARG	CG-CD-NE	5.39	123.11	111.80
83	lB	8	G	C5-C6-N1	-5.39	108.81	111.50
86	lE	3	G	C5-C6-N1	-5.39	108.81	111.50
27	LQ	403	ARG	CG-CD-NE	5.38	123.11	111.80
91	lJ	50	A	C6-N1-C2	-5.38	115.37	118.60
15	LE	376	ARG	CG-CD-NE	5.38	123.10	111.80
36	LZ	50	ARG	CG-CD-NE	5.38	123.11	111.80
48	Ll	33	ARG	CG-CD-NE	5.38	123.11	111.80
81	l9	10	C	C4-C5-C6	5.38	120.09	117.40
88	lG	17	A	C5-N7-C8	-5.38	101.21	103.90
83	lB	43	G	C5-C6-N1	-5.38	108.81	111.50
24	LN	256	ARG	CG-CD-NE	5.38	123.09	111.80
38	Lb	746	ARG	CG-CD-NE	5.38	123.10	111.80
91	lJ	9	G	C5-N7-C8	-5.38	101.61	104.30
94	lM	34	G	C5-C6-N1	-5.38	108.81	111.50
21	LK	142	ARG	CG-CD-NE	5.38	123.09	111.80
32	LV	407	ARG	CG-CD-NE	5.38	123.09	111.80
58	Lv	83	TYR	CB-CG-CD2	5.38	124.23	121.00
74	l2	21	G	C5-C6-N1	-5.38	108.81	111.50
76	l4	67	G	C5-C6-N1	-5.37	108.81	111.50
81	l9	29	C	C4-C5-C6	5.37	120.09	117.40
91	lJ	86	C	O4'-C1'-N1	5.37	112.50	108.20
95	lN	1	A	C6-N1-C2	-5.37	115.38	118.60
25	LO	121	ARG	CG-CD-NE	5.37	123.08	111.80
82	lA	20	G	C5-C6-N1	-5.37	108.81	111.50
76	l4	12	A	C5-C6-N1	5.37	120.39	117.70
78	l6	23	C	C4-C5-C6	5.37	120.08	117.40
81	l9	39	G	C5-C6-N1	-5.37	108.81	111.50
51	Lo	114	ARG	CG-CD-NE	5.37	123.07	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
96	lO	175	A	N1-C6-N6	-5.37	115.38	118.60
36	LZ	106	ARG	CG-CD-NE	5.37	123.07	111.80
83	lB	44	G	C5-N7-C8	-5.37	101.62	104.30
20	LJ	418	ARG	CG-CD-NE	5.36	123.06	111.80
26	LP	281	ARG	CG-CD-NE	5.36	123.06	111.80
38	Lb	363	TYR	CB-CG-CD2	5.36	124.22	121.00
39	Lc	204	ARG	CG-CD-NE	5.36	123.06	111.80
94	lM	74	A	C5-N7-C8	-5.36	101.22	103.90
20	LJ	291	ARG	CG-CD-NE	5.36	123.06	111.80
72	l0	36	C	C4-C5-C6	5.36	120.08	117.40
91	lJ	170	G	C5-C6-N1	-5.36	108.82	111.50
93	lL	58	C	C4-C5-C6	5.36	120.08	117.40
4	L3	505	ARG	CG-CD-NE	5.36	123.06	111.80
36	LZ	121	ARG	CD-NE-CZ	5.36	131.10	123.60
38	Lb	365	TYR	CB-CG-CD2	5.36	124.22	121.00
52	Lp	517	ARG	CG-CD-NE	5.36	123.05	111.80
72	l0	41	C	C4-C5-C6	5.36	120.08	117.40
76	l4	2	C	C4-C5-C6	5.36	120.08	117.40
84	lC	23	A	N1-C6-N6	-5.36	115.39	118.60
96	lO	13	C	C4-C5-C6	5.36	120.08	117.40
3	L2	41	ARG	CG-CD-NE	5.36	123.05	111.80
91	lJ	8	C	C4-C5-C6	5.36	120.08	117.40
91	lJ	19	C	C4-C5-C6	5.36	120.08	117.40
20	LJ	107	TYR	CB-CG-CD2	5.36	124.21	121.00
28	LR	25	ARG	CG-CD-NE	5.36	123.05	111.80
77	l5	43	C	C4-C5-C6	5.36	120.08	117.40
93	lL	77	G	C5-C6-N1	-5.35	108.82	111.50
25	LO	11	ARG	CG-CD-NE	5.35	123.03	111.80
43	Lg	230	ARG	CG-CD-NE	5.35	123.03	111.80
59	Lw	13	ARG	CG-CD-NE	5.35	123.03	111.80
91	lJ	199	U	C6-N1-C2	-5.35	117.79	121.00
42	Lf	351	TYR	CB-CG-CD2	5.34	124.21	121.00
61	Ly	550	LYS	CA-CB-CG	5.34	125.16	113.40
81	l9	70	C	C4-C5-C6	5.34	120.07	117.40
74	l2	25	U	C6-N1-C2	-5.34	117.80	121.00
84	lC	4	A	C5-C6-N1	5.34	120.37	117.70
14	LD	364	ARG	CG-CD-NE	5.34	123.01	111.80
68	UF	64	ARG	CG-CD-NE	5.34	123.01	111.80
90	lI	16	C	C5-C6-N1	5.34	123.67	121.00
96	lO	149	A	C5-C6-N1	5.34	120.37	117.70
104	lX	40	U	C2-N1-C1'	5.34	124.10	117.70
13	LC	246	ARG	CG-CD-NE	5.33	123.00	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	LC	607	ARG	CG-CD-NE	5.33	123.00	111.80
72	l0	29	A	C5-C6-N1	5.33	120.37	117.70
38	Lb	355	ARG	CG-CD-NE	5.33	123.00	111.80
62	Lz	147	ARG	CG-CD-NE	5.33	123.00	111.80
73	l1	34	C	C4-C5-C6	5.33	120.07	117.40
81	l9	51	G	C5-C6-N1	-5.33	108.83	111.50
93	lL	52	C	C4-C5-C6	5.33	120.07	117.40
36	LZ	70	ARG	CG-CD-NE	5.33	122.99	111.80
51	Lo	333	ARG	CG-CD-NE	5.33	122.99	111.80
90	lI	4	G	C5-C6-N1	-5.33	108.84	111.50
91	lJ	138	G	N1-C6-O6	5.33	123.10	119.90
96	lO	115	G	C5-C6-N1	-5.33	108.83	111.50
43	Lg	86	ARG	CG-CD-NE	5.33	122.99	111.80
91	lJ	206	A	C5-C6-N1	5.33	120.36	117.70
15	LE	536	ARG	CD-NE-CZ	5.33	131.06	123.60
29	LS	27	PHE	CB-CG-CD2	5.33	124.53	120.80
38	Lb	358	ARG	CG-CD-NE	5.33	122.98	111.80
62	Lz	142	ARG	CG-CD-NE	5.33	122.98	111.80
78	l6	33	G	O4'-C1'-N9	5.33	112.46	108.20
83	lB	44	G	C5-C6-N1	-5.33	108.84	111.50
98	lQ	13	U	C6-N1-C2	-5.33	117.81	121.00
35	LY	333	ARG	CG-CD-NE	5.32	122.98	111.80
52	Lp	636	ARG	CD-NE-CZ	5.32	131.05	123.60
75	l3	22	C	C4-C5-C6	5.32	120.06	117.40
91	lJ	44	C	C4-C5-C6	5.32	120.06	117.40
96	lO	160	G	C5-C6-N1	-5.32	108.84	111.50
24	LN	274	ARG	CG-CD-NE	5.32	122.98	111.80
41	Le	629	ARG	CG-CD-NE	5.32	122.98	111.80
61	Ly	574	PHE	CB-CG-CD2	5.32	124.53	120.80
71	UI	391	ARG	CD-NE-CZ	5.32	131.05	123.60
90	lI	49	A	C8-N9-C4	-5.32	103.67	105.80
15	LE	521	ARG	CD-NE-CZ	5.32	131.05	123.60
39	Lc	247	ARG	CG-CD-NE	5.32	122.97	111.80
61	Ly	596	ARG	CG-CD-NE	5.32	122.97	111.80
26	LP	101	TYR	CB-CG-CD2	5.32	124.19	121.00
38	Lb	502	ARG	CG-CD-NE	5.32	122.97	111.80
55	Ls	517	ARG	CD-NE-CZ	5.32	131.04	123.60
65	UC	290	TYR	CB-CG-CD2	5.32	124.19	121.00
76	l4	86	G	C5-C6-N1	-5.32	108.84	111.50
82	lA	12	C	C4-C5-C6	5.32	120.06	117.40
94	lM	151	A	C6-N1-C2	-5.32	115.41	118.60
96	lO	109	C	C4-C5-C6	5.32	120.06	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	L3	734	ARG	CG-CD-NE	5.32	122.97	111.80
9	L8	234	ARG	CG-CD-NE	5.31	122.96	111.80
95	lN	29	C	C4-C5-C6	5.31	120.06	117.40
66	UD	181	ARG	CG-CD-NE	5.31	122.96	111.80
68	UF	61	ARG	CG-CD-NE	5.31	122.95	111.80
86	lE	16	U	C2-N1-C1'	5.31	124.07	117.70
96	lO	105	G	C5-N7-C8	-5.31	101.64	104.30
102	lU	10	U	C6-N1-C2	-5.31	117.81	121.00
28	LR	71	ARG	CG-CD-NE	5.31	122.95	111.80
10	L9	17	ARG	CG-CD-NE	5.31	122.95	111.80
20	LJ	112	PHE	CB-CG-CD2	5.31	124.52	120.80
91	lJ	166	G	C5-C6-N1	-5.31	108.85	111.50
96	lO	138	G	N1-C6-O6	5.31	123.09	119.90
3	L2	45	ARG	CG-CD-NE	5.31	122.95	111.80
9	L8	92	PHE	CB-CG-CD2	5.31	124.52	120.80
30	LT	81	ARG	CD-NE-CZ	5.31	131.03	123.60
38	Lb	980	ARG	NE-CZ-NH2	5.31	122.95	120.30
52	Lp	623	ARG	CG-CD-NE	5.31	122.95	111.80
73	l1	19	C	C4-C5-C6	5.31	120.05	117.40
94	lM	46	U	N3-C4-C5	-5.31	111.42	114.60
24	LN	341	ARG	CG-CD-NE	5.31	122.94	111.80
38	Lb	404	ARG	CG-CD-NE	5.31	122.94	111.80
94	lM	87	C	C4-C5-C6	5.31	120.05	117.40
59	Lw	163	ARG	CD-NE-CZ	5.30	131.03	123.60
13	LC	291	ARG	CG-CD-NE	5.30	122.94	111.80
96	lO	139	G	C5-C6-N1	-5.30	108.85	111.50
37	La	37	ARG	CG-CD-NE	5.30	122.93	111.80
38	Lb	481	TYR	CB-CG-CD2	5.30	124.18	121.00
40	Ld	613	ARG	CG-CD-NE	5.30	122.93	111.80
45	Li	363	ARG	CG-CD-NE	5.30	122.93	111.80
73	l1	21	C	C4-C5-C6	5.30	120.05	117.40
91	lJ	93	A	C4-C5-C6	-5.30	114.35	117.00
94	lM	95	U	N3-C4-O4	5.30	123.11	119.40
25	LO	9	ARG	CG-CD-NE	5.30	122.93	111.80
43	Lg	115	ARG	CG-CD-NE	5.30	122.93	111.80
43	Lg	234	ARG	CG-CD-NE	5.30	122.93	111.80
96	lO	108	G	C5-C6-N1	-5.30	108.85	111.50
76	l4	5	U	N3-C4-O4	5.30	123.11	119.40
91	lJ	100	C	C4-C5-C6	5.30	120.05	117.40
5	L4	223	ARG	CG-CD-NE	5.30	122.92	111.80
15	LE	618	ARG	CD-NE-CZ	5.30	131.01	123.60
45	Li	673	ARG	CG-CD-NE	5.30	122.92	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
82	lA	1	G	C5-C6-N1	-5.30	108.85	111.50
96	lO	11	C	C4-C5-C6	5.30	120.05	117.40
94	lM	151	A	C2-N3-C4	-5.29	107.95	110.60
24	LN	275	PHE	CB-CG-CD2	5.29	124.51	120.80
39	Lc	333	ARG	CG-CD-NE	5.29	122.92	111.80
40	Ld	594	ARG	CG-CD-NE	5.29	122.92	111.80
91	lJ	198	U	C6-N1-C2	-5.29	117.82	121.00
94	lM	92	C	C4-C5-C6	5.29	120.05	117.40
5	L4	586	ARG	CG-CD-NE	5.29	122.91	111.80
38	Lb	296	ARG	CG-CD-NE	5.29	122.91	111.80
22	LL	531	ARG	CG-CD-NE	5.29	122.91	111.80
33	LW	462	ARG	CG-CD-NE	5.29	122.91	111.80
85	lD	10	A	C2-N3-C4	-5.29	107.95	110.60
37	La	91	TYR	CB-CG-CD2	5.29	124.17	121.00
76	l4	20	G	C5-C6-N1	-5.29	108.86	111.50
26	LP	142	PHE	CB-CG-CD2	5.29	124.50	120.80
33	LW	223	PHE	CB-CG-CD2	5.29	124.50	120.80
53	Lq	195	ARG	NE-CZ-NH2	5.29	122.94	120.30
93	lL	53	U	C6-N1-C2	-5.29	117.83	121.00
27	LQ	351	ARG	CG-CD-NE	5.28	122.89	111.80
78	l6	26	C	C4-C5-C6	5.28	120.04	117.40
1	L0	396	ARG	CG-CD-NE	5.28	122.89	111.80
10	L9	449	TYR	CB-CG-CD2	5.28	124.17	121.00
52	Lp	458	TYR	CB-CG-CD2	5.28	124.17	121.00
5	L4	469	ARG	CG-CD-NE	5.28	122.89	111.80
20	LJ	312	ARG	CG-CD-NE	5.28	122.89	111.80
41	Le	604	ARG	CG-CD-NE	5.28	122.89	111.80
88	lG	19	C	C4-C5-C6	5.28	120.04	117.40
92	lK	19	C	C4-C5-C6	5.28	120.04	117.40
94	lM	44	U	N3-C4-C5	-5.28	111.43	114.60
1	L0	476	PHE	CB-CG-CD2	5.28	124.49	120.80
81	l9	59	C	C4-C5-C6	5.28	120.04	117.40
82	lA	18	C	C4-C5-C6	5.28	120.04	117.40
83	lB	26	C	C4-C5-C6	5.28	120.04	117.40
96	lO	70	C	C4-C5-C6	5.28	120.04	117.40
12	LB	9	PHE	CB-CG-CD2	5.28	124.49	120.80
32	LV	522	MET	CA-CB-CG	5.28	122.27	113.30
46	Lj	114	ARG	CG-CD-NE	5.28	122.88	111.80
64	UB	268	ARG	CG-CD-NE	5.28	122.88	111.80
15	LE	661	ARG	CD-NE-CZ	5.27	130.98	123.60
40	Ld	623	PHE	CB-CG-CD2	5.27	124.49	120.80
52	Lp	512	ARG	CG-CD-NE	5.27	122.87	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
81	l9	9	C	C4-C5-C6	5.27	120.04	117.40
91	lJ	238	G	N1-C2-N3	-5.27	120.74	123.90
99	lR	2	U	C6-N1-C2	-5.27	117.84	121.00
94	lM	189	G	C8-N9-C1'	5.27	133.85	127.00
96	lO	89	G	N1-C6-O6	5.27	123.06	119.90
15	LE	450	ARG	CD-NE-CZ	5.27	130.97	123.60
20	LJ	435	ARG	CD-NE-CZ	5.27	130.97	123.60
25	LO	109	ARG	CG-CD-NE	5.27	122.86	111.80
42	Lf	353	LYS	CA-CB-CG	5.27	124.99	113.40
56	Lt	131	ARG	CG-CD-NE	5.27	122.86	111.80
73	l1	3	C	C4-C5-C6	5.27	120.03	117.40
32	LV	486	ARG	CG-CD-NE	5.26	122.85	111.80
59	Lw	156	ARG	CD-NE-CZ	5.26	130.97	123.60
76	l4	46	C	C4-C5-C6	5.26	120.03	117.40
35	LY	531	ARG	CG-CD-NE	5.26	122.85	111.80
37	La	30	ARG	CG-CD-NE	5.26	122.85	111.80
44	Lh	569	ARG	CD-NE-CZ	5.26	130.97	123.60
67	UE	154	TYR	CB-CG-CD2	5.26	124.16	121.00
81	l9	43	C	C4-C5-C6	5.26	120.03	117.40
85	lD	14	C	C4-C5-C6	5.26	120.03	117.40
91	lJ	176	U	C6-N1-C2	-5.26	117.84	121.00
97	lP	3	U	C6-N1-C2	-5.26	117.84	121.00
29	LS	9	ARG	CG-CD-NE	5.26	122.84	111.80
38	Lb	720	ARG	CG-CD-NE	5.26	122.84	111.80
94	lM	161	C	C4-C5-C6	5.26	120.03	117.40
26	LP	257	ARG	CG-CD-NE	5.25	122.83	111.80
90	lI	47	A	C8-N9-C4	-5.25	103.70	105.80
13	LC	170	ARG	CG-CD-NE	5.25	122.83	111.80
87	lF	49	G	N3-C2-N2	-5.25	116.22	119.90
90	lI	48	A	C8-N9-C4	-5.25	103.70	105.80
11	LA	167	ARG	CG-CD-NE	5.25	122.83	111.80
77	l5	33	U	C6-N1-C2	-5.25	117.85	121.00
91	lJ	243	G	N3-C2-N2	-5.25	116.22	119.90
15	LE	660	ARG	CD-NE-CZ	5.25	130.95	123.60
94	lM	76	C	C4-C5-C6	5.25	120.03	117.40
35	LY	506	ARG	CG-CD-NE	5.25	122.82	111.80
76	l4	30	C	C4-C5-C6	5.25	120.02	117.40
61	Ly	617	ARG	NE-CZ-NH2	5.25	122.92	120.30
74	l2	16	C	C4-C5-C6	5.25	120.02	117.40
94	lM	198	C	C4-C5-C6	5.25	120.02	117.40
54	Lr	166	TYR	CB-CG-CD2	5.25	124.15	121.00
84	lC	11	C	C4-C5-C6	5.25	120.02	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
87	lF	4	U	C6-N1-C2	-5.25	117.85	121.00
96	lO	145	C	C5-C6-N1	5.25	123.62	121.00
55	Ls	362	ARG	CD-NE-CZ	5.24	130.94	123.60
91	lJ	147	U	C6-N1-C2	-5.24	117.85	121.00
39	Lc	300	PHE	CB-CG-CD2	5.24	124.47	120.80
80	l8	6	A	C5-C6-N1	5.24	120.32	117.70
38	Lb	596	TYR	CB-CG-CD2	5.24	124.14	121.00
61	Ly	586	ARG	CG-CD-NE	5.24	122.81	111.80
88	lG	18	G	N1-C6-O6	5.24	123.05	119.90
36	LZ	58	PHE	CB-CG-CD2	5.24	124.47	120.80
81	l9	6	U	C5-C6-N1	5.24	125.32	122.70
95	lN	24	G	N1-C2-N3	-5.24	120.76	123.90
44	Lh	637	ARG	CG-CD-NE	5.24	122.79	111.80
89	lH	24	U	N3-C4-C5	-5.23	111.46	114.60
32	LV	613	ARG	CG-CD-NE	5.23	122.79	111.80
62	Lz	157	PHE	CB-CG-CD2	5.23	124.46	120.80
30	LT	12	ARG	CG-CD-NE	5.23	122.78	111.80
33	LW	309	TYR	CB-CG-CD2	5.23	124.14	121.00
43	Lg	204	TYR	CB-CG-CD2	5.23	124.14	121.00
91	lJ	275	U	N3-C4-O4	5.23	123.06	119.40
91	lJ	280	C	C4-C5-C6	5.23	120.02	117.40
1	L0	363	ARG	CG-CD-NE	5.23	122.78	111.80
14	LD	476	TYR	CB-CG-CD2	5.23	124.14	121.00
38	Lb	423	ARG	CG-CD-NE	5.23	122.78	111.80
67	UE	144	ARG	CG-CD-NE	5.23	122.78	111.80
51	Lo	224	ARG	CG-CD-NE	5.23	122.77	111.80
91	lJ	274	U	C6-N1-C2	-5.23	117.86	121.00
13	LC	575	ARG	CG-CD-NE	5.22	122.77	111.80
20	LJ	118	TYR	CB-CG-CD2	5.22	124.14	121.00
91	lJ	187	U	N1-C2-N3	-5.22	111.77	114.90
91	lJ	244	A	N1-C6-N6	-5.22	115.47	118.60
93	lL	2	G	C5-C6-N1	-5.22	108.89	111.50
12	LB	67	TYR	CB-CG-CD2	5.22	124.13	121.00
61	Ly	300	ARG	CG-CD-NE	5.22	122.77	111.80
83	lB	20	C	C4-C5-C6	5.22	120.01	117.40
18	LH	204	ARG	CG-CD-NE	5.22	122.76	111.80
21	LK	234	ARG	CG-CD-NE	5.22	122.76	111.80
40	Ld	510	ARG	CG-CD-NE	5.22	122.76	111.80
61	Ly	576	TYR	CB-CG-CD2	5.22	124.13	121.00
77	l5	60	G	C5-C6-N1	-5.22	108.89	111.50
84	lC	16	U	N1-C2-N3	5.22	118.03	114.90
51	Lo	120	ARG	CG-CD-NE	5.22	122.76	111.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
56	Lt	104	LYS	CA-CB-CG	5.22	124.88	113.40
58	Lv	22	TYR	CB-CG-CD2	5.22	124.13	121.00
94	lM	82	C	N3-C4-C5	5.22	123.99	121.90
96	lO	117	C	C4-C5-C6	5.21	120.01	117.40
3	L2	192	ARG	CG-CD-NE	5.21	122.75	111.80
24	LN	279	ARG	CG-CD-NE	5.21	122.74	111.80
81	l9	7	U	C5-C6-N1	5.21	125.31	122.70
86	lE	21	U	C6-N1-C2	-5.21	117.87	121.00
96	lO	85	U	N3-C4-O4	5.21	123.05	119.40
94	lM	144	C	C4-C5-C6	5.21	120.00	117.40
96	lO	57	U	C6-N1-C2	-5.21	117.87	121.00
96	lO	90	G	N1-C2-N3	-5.21	120.77	123.90
1	L0	258	ARG	CG-CD-NE	5.21	122.74	111.80
76	l4	3	U	C6-N1-C2	-5.21	117.88	121.00
51	Lo	186	TYR	CB-CG-CD2	5.21	124.12	121.00
76	l4	31	C	C4-C5-C6	5.21	120.00	117.40
90	lI	5	G	N1-C6-O6	5.21	123.02	119.90
24	LN	240	TYR	CB-CG-CD2	5.20	124.12	121.00
40	Ld	549	ARG	CA-CB-CG	5.20	124.85	113.40
73	l1	2	U	C6-N1-C2	-5.20	117.88	121.00
4	L3	724	ARG	CG-CD-NE	5.20	122.72	111.80
38	Lb	393	TYR	CB-CG-CD2	5.20	124.12	121.00
79	l7	55	G	N1-C6-O6	5.20	123.02	119.90
87	lF	22	C	C4-C5-C6	5.20	120.00	117.40
87	lF	62	A	C2-N3-C4	-5.20	108.00	110.60
96	lO	31	G	C5-C6-N1	-5.20	108.90	111.50
103	lY	7	U	N3-C2-O2	-5.20	118.56	122.20
14	LD	388	PHE	CB-CG-CD2	5.20	124.44	120.80
75	l3	21	G	C5-C6-N1	-5.20	108.90	111.50
75	l3	26	C	C4-C5-C6	5.20	120.00	117.40
91	lJ	22	C	C4-C5-C6	5.20	120.00	117.40
96	lO	139	G	N1-C6-O6	5.20	123.02	119.90
30	LT	46	ARG	CG-CD-NE	5.20	122.71	111.80
76	l4	20	G	N1-C2-N3	-5.20	120.78	123.90
23	LM	65	TYR	CB-CG-CD2	5.19	124.12	121.00
37	La	157	TYR	CB-CG-CD2	5.19	124.12	121.00
73	l1	36	G	C5-C6-N1	-5.19	108.90	111.50
55	Ls	371	ARG	CG-CD-NE	5.19	122.71	111.80
25	LO	136	ARG	CG-CD-NE	5.19	122.70	111.80
35	LY	464	ARG	CG-CD-NE	5.19	122.70	111.80
98	lQ	12	U	C6-N1-C2	-5.19	117.89	121.00
53	Lq	523	ARG	CD-NE-CZ	5.19	130.86	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	172	C	C4-C5-C6	5.19	119.99	117.40
55	Ls	385	ARG	CG-CD-NE	5.18	122.68	111.80
75	l3	55	C	C4-C5-C6	5.18	119.99	117.40
41	Le	427	ARG	CA-CB-CG	5.18	124.80	113.40
104	lX	6	U	C6-N1-C2	-5.18	117.89	121.00
37	La	195	PHE	CB-CG-CD2	5.18	124.42	120.80
44	Lh	478	ARG	CA-CB-CG	5.18	124.79	113.40
96	lO	96	U	C6-N1-C2	-5.17	117.90	121.00
9	L8	161	ARG	CG-CD-NE	5.17	122.66	111.80
38	Lb	908	ARG	CD-NE-CZ	5.17	130.84	123.60
81	l9	58	G	C5-N7-C8	-5.17	101.72	104.30
91	lJ	183	U	C6-N1-C2	-5.17	117.90	121.00
27	LQ	359	ARG	CG-CD-NE	5.16	122.64	111.80
96	lO	166	G	C5-C6-N1	-5.16	108.92	111.50
81	l9	2	C	C5-C6-N1	5.16	123.58	121.00
94	lM	71	A	C6-N1-C2	-5.16	115.50	118.60
4	L3	575	ARG	CD-NE-CZ	5.16	130.83	123.60
56	Lt	97	ARG	CD-NE-CZ	5.16	130.82	123.60
47	Lk	392	ARG	CD-NE-CZ	5.16	130.82	123.60
53	Lq	478	ARG	CA-CB-CG	5.16	124.75	113.40
60	Lx	368	ARG	CD-NE-CZ	5.16	130.82	123.60
94	lM	39	G	C5-N7-C8	-5.16	101.72	104.30
96	lO	154	U	C6-N1-C2	-5.16	117.91	121.00
35	LY	264	PHE	CB-CG-CD2	5.16	124.41	120.80
43	Lg	229	TYR	CB-CG-CD2	5.16	124.09	121.00
79	l7	55	G	C5-C6-N1	-5.16	108.92	111.50
85	lD	11	C	C4-C5-C6	5.15	119.98	117.40
94	lM	75	G	C5-N7-C8	-5.15	101.72	104.30
96	lO	90	G	C5-C6-N1	-5.15	108.92	111.50
96	lO	168	G	N7-C8-N9	5.15	115.67	113.10
68	UF	32	ARG	CG-CD-NE	5.15	122.61	111.80
81	l9	66	G	C5-C6-N1	-5.15	108.93	111.50
75	l3	6	A	C5-C6-N1	5.15	120.27	117.70
4	L3	521	ARG	CD-NE-CZ	5.14	130.80	123.60
10	L9	473	LEU	CA-CB-CG	5.14	127.13	115.30
45	Li	357	PHE	CB-CG-CD2	5.14	124.40	120.80
87	lF	77	U	C6-N1-C2	-5.14	117.92	121.00
10	L9	459	ARG	CG-CD-NE	5.14	122.60	111.80
54	Lr	187	SER	N-CA-CB	5.14	118.21	110.50
96	lO	8	G	N1-C6-O6	5.14	122.98	119.90
97	lP	7	U	C6-N1-C2	-5.14	117.92	121.00
55	Ls	412	TYR	CB-CG-CD2	5.14	124.08	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	LJ	284	ARG	CG-CD-NE	5.14	122.59	111.80
35	LY	260	ARG	CG-CD-NE	5.14	122.59	111.80
47	Lk	390	ARG	CD-NE-CZ	5.14	130.79	123.60
47	Lk	540	ARG	CA-CB-CG	5.14	124.70	113.40
75	l3	10	U	N1-C2-N3	-5.14	111.82	114.90
101	lW	11	U	C6-N1-C2	-5.14	117.92	121.00
76	l4	4	U	C6-N1-C2	-5.14	117.92	121.00
77	l5	35	U	C6-N1-C2	-5.14	117.92	121.00
93	lL	45	A	C6-N1-C2	-5.14	115.52	118.60
11	LA	25	PHE	CB-CG-CD2	5.13	124.39	120.80
31	LU	263	ARG	CA-CB-CG	5.13	124.70	113.40
38	Lb	314	ARG	CG-CD-NE	5.13	122.58	111.80
62	Lz	203	ARG	CD-NE-CZ	5.13	130.79	123.60
64	UB	328	ARG	CG-CD-NE	5.13	122.58	111.80
91	lJ	28	U	C5-C6-N1	-5.13	120.13	122.70
3	L2	171	ARG	CG-CD-NE	5.13	122.58	111.80
5	L4	554	PHE	CB-CG-CD2	5.13	124.39	120.80
91	lJ	9	G	C5-C6-N1	-5.13	108.93	111.50
11	LA	149	ARG	CG-CD-NE	5.13	122.58	111.80
34	LX	121	PHE	CB-CG-CD2	5.13	124.39	120.80
56	Lt	245	ARG	CA-CB-CG	5.13	124.69	113.40
96	lO	86	C	C4-C5-C6	5.13	119.97	117.40
82	lA	55	A	C4-C5-C6	-5.13	114.44	117.00
82	lA	64	A	O4'-C1'-N9	5.13	112.30	108.20
96	lO	92	U	C6-N1-C2	-5.13	117.92	121.00
96	lO	96	U	N3-C4-O4	5.13	122.99	119.40
12	LB	29	ARG	CD-NE-CZ	5.13	130.78	123.60
93	lL	65	U	C6-N1-C2	-5.12	117.93	121.00
53	Lq	229	ARG	CG-CD-NE	5.12	122.55	111.80
96	lO	67	C	C4-C5-C6	5.12	119.96	117.40
13	LC	571	TYR	CB-CG-CD2	5.12	124.07	121.00
91	lJ	208	A	C6-N1-C2	-5.12	115.53	118.60
96	lO	138	G	C5-C6-N1	-5.12	108.94	111.50
103	lY	9	U	P-O3'-C3'	5.12	125.84	119.70
96	lO	12	U	C6-N1-C2	-5.12	117.93	121.00
96	lO	98	U	N1-C2-N3	-5.12	111.83	114.90
96	lO	107	G	N1-C2-N3	-5.12	120.83	123.90
9	L8	83	PHE	CB-CG-CD2	5.12	124.38	120.80
39	Lc	207	ARG	CG-CD-NE	5.12	122.55	111.80
25	LO	116	ARG	CG-CD-NE	5.11	122.54	111.80
79	l7	54	G	C5-C6-N1	-5.11	108.94	111.50
97	lP	8	U	C6-N1-C2	-5.11	117.93	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	Lh	410	TYR	CB-CG-CD2	5.11	124.07	121.00
22	LL	298	ARG	CG-CD-NE	5.11	122.53	111.80
93	lL	68	U	N1-C2-N3	-5.11	111.83	114.90
92	lK	1	A	C5-C6-N1	5.11	120.25	117.70
16	LF	188	ARG	CG-CD-NE	5.11	122.53	111.80
44	Lh	563	TYR	CB-CG-CD2	5.11	124.06	121.00
53	Lq	523	ARG	CA-CB-CG	5.11	124.64	113.40
96	lO	105	G	C5-C6-N1	-5.11	108.95	111.50
77	l5	35	U	N1-C2-N3	-5.11	111.84	114.90
85	lD	5	A	C6-N1-C2	-5.11	115.54	118.60
94	lM	33	A	C6-N1-C2	-5.11	115.54	118.60
20	LJ	230	ARG	CA-CB-CG	5.10	124.63	113.40
39	Lc	582	TYR	CB-CG-CD2	5.10	124.06	121.00
91	lJ	229	G	N1-C2-N3	-5.10	120.84	123.90
4	L3	573	ARG	CD-NE-CZ	5.10	130.74	123.60
20	LJ	31	ARG	CG-CD-NE	5.10	122.52	111.80
55	Ls	345	ARG	CG-CD-NE	5.10	122.52	111.80
55	Ls	367	ARG	CG-CD-NE	5.10	122.52	111.80
87	lF	66	U	C6-N1-C2	-5.10	117.94	121.00
73	l1	6	U	N1-C2-N3	-5.10	111.84	114.90
21	LK	253	PHE	CB-CG-CD2	5.10	124.37	120.80
40	Ld	353	ARG	CD-NE-CZ	5.10	130.74	123.60
52	Lp	709	ARG	CG-CD-NE	5.10	122.51	111.80
76	l4	21	A	C2-N3-C4	-5.10	108.05	110.60
81	l9	75	A	C6-N1-C2	-5.10	115.54	118.60
94	lM	14	A	O4'-C1'-N9	5.10	112.28	108.20
97	lP	15	U	N1-C2-N3	5.10	117.96	114.90
38	Lb	433	PHE	CB-CG-CD2	5.10	124.37	120.80
52	Lp	411	GLU	CA-CB-CG	5.10	124.61	113.40
40	Ld	612	ARG	CG-CD-NE	5.09	122.50	111.80
54	Lr	20	ARG	CG-CD-NE	5.09	122.49	111.80
59	Lw	152	LYS	CA-CB-CG	5.09	124.60	113.40
91	lJ	132	C	C4-C5-C6	5.09	119.94	117.40
4	L3	527	ARG	CD-NE-CZ	5.09	130.72	123.60
25	LO	292	ARG	NE-CZ-NH2	5.09	122.84	120.30
46	Lj	66	ARG	CD-NE-CZ	5.09	130.72	123.60
94	lM	72	U	C6-N1-C2	-5.09	117.95	121.00
94	lM	135	G	C6-N1-C2	-5.09	122.05	125.10
96	lO	173	G	C8-N9-C4	-5.09	104.37	106.40
4	L3	518	ARG	CD-NE-CZ	5.08	130.72	123.60
11	LA	12	TYR	CB-CG-CD2	5.08	124.05	121.00
91	lJ	21	U	C6-N1-C2	-5.08	117.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
91	lJ	167	U	C6-N1-C2	-5.08	117.95	121.00
96	lO	31	G	N1-C2-N3	-5.08	120.85	123.90
104	lX	50	U	C6-N1-C2	-5.08	117.95	121.00
75	l3	58	A	C6-N1-C2	-5.08	115.55	118.60
41	Le	468	TYR	CB-CG-CD2	5.08	124.05	121.00
96	lO	105	G	N1-C2-N2	5.08	120.77	116.20
14	LD	366	ARG	CD-NE-CZ	5.08	130.71	123.60
38	Lb	636	PHE	CB-CG-CD2	5.08	124.35	120.80
91	lJ	138	G	N1-C2-N3	-5.08	120.85	123.90
82	lA	25	G	N7-C8-N9	5.07	115.64	113.10
96	lO	143	U	C6-N1-C2	-5.07	117.96	121.00
91	lJ	217	U	C6-N1-C2	-5.07	117.96	121.00
96	lO	105	G	N1-C2-N3	-5.07	120.86	123.90
27	LQ	366	PHE	CB-CG-CD2	5.07	124.35	120.80
29	LS	53	TYR	CB-CG-CD2	5.07	124.04	121.00
82	lA	52	U	N3-C2-O2	-5.07	118.65	122.20
93	lL	24	G	C5-C6-N1	5.07	114.03	111.50
20	LJ	410	ARG	CG-CD-NE	5.07	122.44	111.80
72	l0	39	U	C6-N1-C2	-5.07	117.96	121.00
83	lB	45	A	C6-N1-C2	-5.07	115.56	118.60
46	Lj	74	ARG	CA-CB-CG	5.07	124.55	113.40
94	lM	193	C	N3-C2-O2	-5.07	118.35	121.90
77	l5	30	U	N1-C2-N3	-5.06	111.86	114.90
79	l7	43	G	C5-C6-N1	5.06	114.03	111.50
93	lL	67	U	N1-C2-N3	-5.06	111.86	114.90
13	LC	292	ARG	CD-NE-CZ	5.06	130.69	123.60
21	LK	68	ARG	CG-CD-NE	5.06	122.43	111.80
39	Lc	254	ARG	CD-NE-CZ	5.06	130.69	123.60
40	Ld	465	PHE	CB-CG-CD2	5.06	124.34	120.80
77	l5	29	A	C6-N1-C2	-5.06	115.56	118.60
81	l9	58	G	C5-C6-N1	-5.06	108.97	111.50
66	UD	169	ARG	CD-NE-CZ	5.06	130.69	123.60
78	l6	18	U	C6-N1-C2	-5.06	117.96	121.00
91	lJ	253	C	C4-C5-C6	5.06	119.93	117.40
96	lO	103	U	N3-C4-O4	5.06	122.94	119.40
56	Lt	118	TYR	CD1-CG-CD2	-5.06	112.34	117.90
76	l4	34	U	C6-N1-C2	-5.06	117.97	121.00
91	lJ	276	A	C6-N1-C2	-5.06	115.56	118.60
93	lL	44	C	C4-C5-C6	5.06	119.93	117.40
96	lO	16	A	C6-N1-C2	-5.06	115.57	118.60
92	lK	9	G	N1-C6-O6	-5.05	116.87	119.90
96	lO	104	A	C6-N1-C2	-5.05	115.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
39	Lc	603	TYR	CB-CG-CD2	5.05	124.03	121.00
78	l6	4	G	N1-C2-N3	-5.05	120.87	123.90
40	Ld	310	ARG	CG-CD-NE	5.05	122.41	111.80
57	Lu	279	ARG	CG-CD-NE	5.05	122.41	111.80
64	UB	226	SER	N-CA-CB	5.05	118.08	110.50
81	l9	3	C	C5-C6-N1	5.05	123.53	121.00
81	l9	83	A	C6-N1-C2	-5.05	115.57	118.60
83	lB	19	A	C6-N1-C2	-5.05	115.57	118.60
98	lQ	11	U	C6-N1-C2	-5.05	117.97	121.00
12	LB	24	LYS	CA-CB-CG	5.05	124.50	113.40
17	LG	165	TYR	CB-CG-CD2	5.05	124.03	121.00
35	LY	249	ARG	CA-CB-CG	5.05	124.50	113.40
46	Lj	8	TYR	CD1-CG-CD2	-5.05	112.35	117.90
91	lJ	248	U	C6-N1-C2	-5.05	117.97	121.00
76	l4	15	A	C6-N1-C2	-5.04	115.57	118.60
44	Lh	524	LYS	CA-CB-CG	5.04	124.50	113.40
89	lH	2	U	N3-C2-O2	-5.04	118.67	122.20
91	lJ	243	G	O4'-C1'-N9	-5.04	104.17	108.20
19	LI	79	TYR	CB-CG-CD2	5.04	124.03	121.00
91	lJ	193	A	C6-N1-C2	-5.04	115.58	118.60
91	lJ	278	A	C6-N1-C2	-5.04	115.58	118.60
94	lM	96	A	C6-N1-C2	-5.04	115.58	118.60
96	lO	45	A	C6-N1-C2	-5.04	115.58	118.60
25	LO	87	ARG	CA-CB-CG	5.04	124.49	113.40
46	Lj	22	ARG	NE-CZ-NH2	5.04	122.82	120.30
77	l5	50	A	C5-C6-N1	5.04	120.22	117.70
9	L8	34	LYS	CA-CB-CG	5.04	124.49	113.40
41	Le	628	ARG	CD-NE-CZ	5.04	130.66	123.60
89	lH	18	U	C6-N1-C2	-5.04	117.98	121.00
90	lI	22	G	N1-C6-O6	5.04	122.92	119.90
91	lJ	282	A	C6-N1-C2	-5.04	115.58	118.60
96	lO	169	G	N7-C8-N9	5.04	115.62	113.10
76	l4	3	U	N1-C2-N3	-5.04	111.88	114.90
81	l9	64	U	C6-N1-C2	-5.04	117.98	121.00
37	La	92	ARG	CG-CD-NE	5.04	122.37	111.80
98	lQ	14	U	C6-N1-C2	-5.04	117.98	121.00
35	LY	533	PHE	CB-CG-CD2	5.03	124.32	120.80
39	Lc	531	ARG	CD-NE-CZ	5.03	130.65	123.60
25	LO	49	PHE	CB-CG-CD2	5.03	124.32	120.80
91	lJ	17	U	N1-C2-N3	-5.03	111.88	114.90
93	lL	85	A	C6-N1-C2	-5.03	115.58	118.60
96	lO	47	A	C6-N1-C2	-5.03	115.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
79	l7	53	U	C6-N1-C2	-5.03	117.98	121.00
92	lK	22	A	C6-N1-C2	-5.03	115.58	118.60
94	lM	95	U	C6-N1-C2	-5.03	117.98	121.00
96	lO	9	A	C6-N1-C2	-5.03	115.58	118.60
104	lX	7	U	C6-N1-C2	-5.03	117.98	121.00
33	LW	373	TYR	CB-CG-CD2	5.03	124.02	121.00
57	Lu	293	SER	N-CA-CB	5.03	118.04	110.50
74	l2	29	A	C6-N1-C2	-5.03	115.58	118.60
95	lN	27	A	C6-N1-C2	-5.03	115.58	118.60
96	lO	113	A	C6-N1-C2	-5.03	115.58	118.60
97	lP	22	U	C6-N1-C2	-5.03	117.98	121.00
85	lD	13	A	C6-N1-C2	-5.02	115.59	118.60
77	l5	34	G	N1-C2-N3	-5.02	120.89	123.90
94	lM	83	A	C6-N1-C2	-5.02	115.59	118.60
96	lO	44	U	N3-C4-O4	5.02	122.92	119.40
103	lY	5	U	N1-C2-N3	5.02	117.91	114.90
76	l4	48	G	N1-C2-N3	-5.02	120.89	123.90
94	lM	74	A	C2-N3-C4	-5.02	108.09	110.60
91	lJ	189	A	C6-N1-C2	-5.02	115.59	118.60
93	lL	43	U	C6-N1-C2	-5.02	117.99	121.00
96	lO	166	G	N1-C2-N3	-5.02	120.89	123.90
99	lR	12	U	C6-N1-C2	-5.02	117.99	121.00
4	L3	733	PHE	CB-CG-CD2	5.02	124.31	120.80
20	LJ	148	ARG	NE-CZ-NH2	5.02	122.81	120.30
40	Ld	344	ARG	CA-CB-CG	5.02	124.44	113.40
91	lJ	238	G	N1-C6-O6	5.02	122.91	119.90
96	lO	103	U	N1-C2-N3	-5.02	111.89	114.90
96	lO	141	U	C6-N1-C2	-5.02	117.99	121.00
63	UA	245	ARG	CD-NE-CZ	5.02	130.62	123.60
43	Lg	208	TYR	CB-CG-CD2	5.01	124.01	121.00
76	l4	5	U	C6-N1-C2	-5.01	117.99	121.00
45	Li	523	ARG	CA-CB-CG	5.01	124.43	113.40
86	lE	28	A	C6-N1-C2	-5.01	115.59	118.60
96	lO	131	A	C5-C6-N1	5.01	120.21	117.70
99	lR	10	U	C6-N1-C2	-5.01	117.99	121.00
41	Le	467	PHE	CB-CG-CD2	5.01	124.31	120.80
52	Lp	474	PHE	CB-CG-CD2	5.01	124.31	120.80
91	lJ	136	U	C6-N1-C2	-5.01	117.99	121.00
102	lU	4	U	N1-C2-N3	-5.01	111.89	114.90
45	Li	662	ARG	CD-NE-CZ	5.01	130.61	123.60
76	l4	84	A	C6-N1-C2	-5.01	115.59	118.60
81	l9	81	A	C6-N1-C2	-5.01	115.59	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
84	lC	17	G	C8-N9-C4	-5.01	104.40	106.40
93	lL	40	A	C6-N1-C2	-5.01	115.59	118.60
94	lM	84	U	C6-N1-C2	-5.01	117.99	121.00
96	lO	155	A	C6-N1-C2	-5.01	115.59	118.60
99	lR	20	U	N1-C2-N3	-5.01	111.89	114.90
53	Lq	666	ARG	CD-NE-CZ	5.01	130.61	123.60
64	UB	333	ARG	CD-NE-CZ	5.01	130.61	123.60
79	l7	66	A	C6-N1-C2	-5.01	115.60	118.60
96	lO	32	U	C6-N1-C2	-5.01	118.00	121.00
81	l9	45	A	C6-N1-C2	-5.00	115.60	118.60
76	l4	44	U	N1-C2-N3	-5.00	111.90	114.90
76	l4	85	A	C6-N1-C2	-5.00	115.60	118.60
83	lB	33	A	C6-N1-C2	-5.00	115.60	118.60
96	lO	10	U	C6-N1-C2	-5.00	118.00	121.00
99	lR	22	U	N1-C2-N3	-5.00	111.90	114.90
5	L4	325	ARG	CA-CB-CG	5.00	124.40	113.40
9	L8	209	SER	N-CA-CB	5.00	118.00	110.50
12	LB	27	ARG	CA-CB-CG	5.00	124.41	113.40
77	l5	60	G	N1-C6-O6	5.00	122.90	119.90
97	lP	27	U	C6-N1-C2	-5.00	118.00	121.00

There are no chirality outliers.

All (36) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	L1	481	TYR	Sidechain
22	LL	296	HIS	Mainchain
37	La	134	TYR	Sidechain
40	Ld	489	SER	Mainchain
53	Lq	765	ARG	Sidechain
61	Ly	525	ARG	Sidechain
72	l0	23	G	Sidechain
78	l6	33	G	Sidechain
79	l7	36	A	Sidechain
80	l8	8	G	Sidechain
82	lA	40	A	Sidechain
82	lA	58	A	Sidechain
84	lC	16	U	Sidechain
84	lC	17	G	Sidechain
84	lC	20	A	Sidechain
91	lJ	118	A	Sidechain
91	lJ	266	U	Sidechain

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Mol	Chain	Res	Type	Group
91	lJ	36	G	Sidechain
91	lJ	79	G	Sidechain
91	lJ	84	A	Sidechain
92	lK	34	G	Sidechain
92	lK	9	G	Sidechain
94	lM	135	G	Sidechain
94	lM	137	U	Sidechain
94	lM	189	G	Sidechain
95	lN	12	G	Sidechain
96	lO	26	G	Sidechain
97	lP	15	U	Sidechain
101	lW	5	U	Sidechain
104	lX	41	U	Sidechain
103	lY	1	U	Sidechain
103	lY	2	U	Sidechain
103	lY	4	U	Sidechain
103	lY	5	U	Sidechain
103	lY	7	U	Sidechain
103	lY	9	U	Sidechain

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	L0	2984	0	2988	5	0
2	L1	768	0	774	1	0
3	L2	2111	0	2147	5	0
4	L3	2196	0	2156	3	0
5	L4	3430	0	3454	12	0
6	L5	264	0	288	0	0
7	L6	476	0	503	0	0
8	L7	906	0	973	3	0
9	L8	2008	0	1998	2	0
10	L9	3888	0	3896	15	0
11	LA	1708	0	1745	5	0
12	LB	1033	0	1052	4	0
13	LC	2909	0	2949	11	0
14	LD	1847	0	1840	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	LE	2118	0	2118	10	0
16	LF	731	0	744	2	0
17	LG	1253	0	1225	7	0
18	LH	693	0	729	0	0
19	LI	613	0	652	1	0
20	LJ	3640	0	3677	19	0
21	LK	1905	0	1879	3	0
22	LL	4847	0	4916	14	0
23	LM	1376	0	1435	4	0
24	LN	986	0	1036	2	0
25	LO	2647	0	2725	5	0
26	LP	1636	0	1577	4	0
27	LQ	600	0	618	1	0
28	LR	738	0	728	1	0
29	LS	1812	0	1884	3	0
30	LT	965	0	1013	3	0
31	LU	623	0	665	1	0
32	LV	5149	0	5211	21	0
33	LW	2433	0	2442	12	0
34	LX	779	0	762	1	0
35	LY	2909	0	2976	3	0
36	LZ	1591	0	1608	4	0
37	La	1769	0	1799	0	0
38	Lb	4929	0	5042	0	0
39	Lc	3797	0	3835	0	0
40	Ld	3507	0	3563	0	0
41	Le	3057	0	3083	0	0
42	Lf	1709	0	1711	0	0
43	Lg	1824	0	1879	0	0
44	Lh	3675	0	3687	0	0
45	Li	3833	0	3922	0	0
46	Lj	977	0	1019	0	0
47	Lk	1502	0	1491	0	0
48	Ll	1573	0	1585	0	0
49	Lm	1501	0	1559	0	0
50	Ln	442	0	417	0	0
51	Lo	2219	0	2223	0	0
52	Lp	3074	0	3164	0	0
53	Lq	5268	0	5324	0	0
54	Lr	2342	0	2310	0	0
55	Ls	2565	0	2644	0	0
56	Lt	1556	0	1518	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	Lu	1834	0	1841	0	0
58	Lv	928	0	960	0	0
59	Lw	1440	0	1483	0	0
60	Lx	796	0	824	0	0
61	Ly	2821	0	2849	0	0
62	Lz	994	0	944	0	0
63	UA	709	0	752	2	0
64	UB	1451	0	1477	1	0
65	UC	864	0	888	4	0
66	UD	308	0	321	0	0
67	UE	935	0	927	2	0
68	UF	672	0	664	0	0
69	UG	1343	0	1341	0	0
70	UH	401	0	427	0	0
71	UI	293	0	320	0	0
72	l0	936	0	461	0	0
73	l1	1070	0	494	0	0
74	l2	660	0	300	0	0
75	l3	1254	0	581	0	0
76	l4	1991	0	906	0	0
77	l5	761	0	358	0	0
78	l6	1072	0	503	0	0
79	l7	1481	0	683	0	0
80	l8	707	0	357	0	0
81	l9	1926	0	867	0	0
82	lA	1387	0	666	0	0
83	lB	985	0	433	0	0
84	lC	583	0	283	0	0
85	lD	338	0	152	0	0
86	lE	630	0	285	0	0
87	lF	1880	0	883	0	0
88	lG	561	0	271	0	0
89	lH	572	0	273	0	0
90	lI	1039	0	471	0	0
91	lJ	5929	0	2780	0	0
92	lK	821	0	396	0	0
93	lL	1948	0	890	0	0
94	lM	4121	0	1965	0	0
95	lN	1316	0	619	0	0
96	lO	3841	0	1750	0	0
97	lP	580	0	276	0	0
98	lQ	740	0	355	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
99	lR	560	0	262	0	0
100	lS	140	0	71	0	0
101	lT	280	0	135	0	0
101	lW	280	0	136	0	0
102	lU	300	0	144	0	0
103	lV	200	0	95	0	0
103	lY	200	0	101	0	0
104	lX	1160	0	568	0	0
All	All	175729	0	154946	188	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 2.

All (188) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:L0:470:SER:O	1:L0:473:ASN:ND2	2.20	0.75
36:LZ:42:LEU:HD23	36:LZ:51:GLN:OE1	1.87	0.74
3:L2:118:LEU:O	3:L2:122:VAL:HG23	1.90	0.72
15:LE:464:ARG:NH2	15:LE:506:GLN:OE1	2.23	0.72
32:LV:407:ARG:O	32:LV:411:VAL:HG22	1.90	0.70
10:L9:372:ASN:OD1	11:LA:220:ARG:NH2	2.25	0.69
10:L9:195:GLU:OE1	10:L9:198:ARG:NH1	2.24	0.69
32:LV:1014:PHE:O	32:LV:1018:VAL:HG23	1.92	0.68
20:LJ:143:ALA:O	20:LJ:147:VAL:HG22	1.94	0.67
15:LE:461:LEU:O	15:LE:465:VAL:HG23	1.96	0.65
36:LZ:42:LEU:CD2	36:LZ:51:GLN:OE1	2.44	0.65
33:LW:483:GLU:O	33:LW:486:VAL:HG12	1.97	0.64
10:L9:285:TYR:O	10:L9:289:VAL:HG23	1.98	0.62
25:LO:147:ILE:O	25:LO:190:VAL:HG23	2.00	0.61
1:L0:618:ARG:NH2	1:L0:624:LYS:O	2.34	0.60
22:LL:465:VAL:HG11	22:LL:498:VAL:HG12	1.83	0.60
36:LZ:20:THR:O	36:LZ:24:VAL:HG23	2.01	0.60
5:L4:393:ASP:O	5:L4:397:VAL:HG23	2.01	0.59
32:LV:404:LEU:O	32:LV:408:VAL:HG23	2.03	0.59
15:LE:536:ARG:NH1	15:LE:596:SER:OG	2.35	0.58
17:LG:264:VAL:HG21	17:LG:279:TRP:CZ2	2.38	0.58
22:LL:125:THR:OG1	22:LL:128:GLU:OE1	2.20	0.58
32:LV:746:VAL:HG21	32:LV:793:TYR:CE2	2.39	0.58
20:LJ:270:LEU:O	20:LJ:275:ARG:NH2	2.36	0.58
9:L8:17:ARG:O	33:LW:210:ARG:NH2	2.36	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:LL:209:HIS:O	22:LL:213:VAL:HG23	2.03	0.57
5:L4:300:VAL:O	5:L4:304:VAL:HG23	2.04	0.57
33:LW:478:PRO:O	33:LW:479:THR:HG23	2.05	0.57
21:LK:215:ARG:O	21:LK:219:VAL:HG23	2.04	0.57
20:LJ:4:LEU:O	20:LJ:9:ARG:NH2	2.38	0.56
20:LJ:198:GLU:O	20:LJ:202:VAL:HG23	2.05	0.56
21:LK:138:VAL:HG11	21:LK:166:LEU:HD22	1.87	0.56
13:LC:581:VAL:HG21	13:LC:610:PHE:HZ	1.70	0.56
20:LJ:217:ASP:O	20:LJ:221:VAL:HG23	2.06	0.56
30:LT:116:ASP:OD1	30:LT:120:ARG:N	2.39	0.56
32:LV:765:LYS:O	32:LV:766:THR:OG1	2.22	0.56
12:LB:7:VAL:O	12:LB:11:VAL:HG23	2.07	0.55
32:LV:1059:GLU:OE2	32:LV:1063:ARG:NE	2.40	0.55
13:LC:181:THR:O	13:LC:185:VAL:HG23	2.06	0.55
11:LA:82:ALA:O	11:LA:86:VAL:HG23	2.06	0.55
13:LC:309:SER:O	13:LC:313:VAL:HG23	2.07	0.55
15:LE:422:MET:O	15:LE:426:VAL:HG12	2.05	0.55
26:LP:115:ARG:NH1	26:LP:123:GLN:OE1	2.42	0.53
10:L9:341:LEU:HD12	10:L9:428:LEU:HD23	1.91	0.53
35:LY:274:THR:OG1	35:LY:352:PHE:O	2.20	0.53
20:LJ:382:MET:O	20:LJ:386:VAL:HG23	2.09	0.53
13:LC:304:ARG:NE	13:LC:539:GLU:OE2	2.36	0.53
20:LJ:253:PHE:O	20:LJ:257:VAL:HG23	2.09	0.52
8:L7:53:LYS:NZ	8:L7:59:ALA:O	2.37	0.52
10:L9:270:LEU:O	10:L9:277:GLN:NE2	2.38	0.52
17:LG:215:ASP:OD1	17:LG:216:GLY:N	2.42	0.52
17:LG:264:VAL:HG12	17:LG:281:ARG:HA	1.91	0.52
34:LX:123:ALA:HB3	34:LX:134:VAL:HG21	1.92	0.52
35:LY:366:ARG:HG3	35:LY:462:VAL:HG22	1.92	0.52
23:LM:58:VAL:HG22	23:LM:67:PHE:CB	2.40	0.51
25:LO:206:GLY:O	25:LO:240:LYS:NZ	2.34	0.51
25:LO:67:VAL:HG13	25:LO:67:VAL:O	2.11	0.51
33:LW:284:VAL:HG13	33:LW:284:VAL:O	2.10	0.51
36:LZ:155:ASN:OD1	36:LZ:157:VAL:HG23	2.09	0.51
20:LJ:7:ARG:NH1	20:LJ:8:GLU:OE2	2.39	0.50
23:LM:58:VAL:HG22	23:LM:67:PHE:HB3	1.93	0.50
63:UA:242:VAL:HG23	63:UA:247:LEU:HG	1.93	0.50
33:LW:379:ARG:NH1	33:LW:417:MET:O	2.44	0.49
5:L4:275:GLU:OE1	5:L4:277:ARG:NE	2.45	0.49
33:LW:292:GLN:NE2	33:LW:345:LEU:O	2.44	0.49
32:LV:952:THR:O	32:LV:956:VAL:HG23	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:L2:208:ASP:O	3:L2:212:VAL:HG23	2.11	0.49
22:LL:446:LEU:O	22:LL:450:VAL:HG13	2.13	0.49
23:LM:80:ARG:O	23:LM:157:GLN:NE2	2.46	0.49
28:LR:65:LEU:O	28:LR:70:GLN:NE2	2.46	0.49
32:LV:776:ASN:O	32:LV:780:VAL:HG23	2.11	0.49
33:LW:217:ARG:O	33:LW:217:ARG:NE	2.45	0.49
22:LL:652:THR:O	22:LL:656:VAL:HG23	2.12	0.49
30:LT:18:VAL:HG11	30:LT:34:LYS:HD3	1.95	0.48
32:LV:785:ARG:NH2	32:LV:789:GLN:OE1	2.47	0.48
13:LC:314:ALA:O	13:LC:318:VAL:HG23	2.13	0.48
17:LG:264:VAL:HG21	17:LG:279:TRP:CE2	2.48	0.48
11:LA:81:LEU:O	11:LA:85:VAL:HG23	2.13	0.48
33:LW:271:ASP:OD1	33:LW:275:GLU:N	2.47	0.48
3:L2:126:ASP:OD1	3:L2:129:SER:OG	2.25	0.48
32:LV:681:ARG:NH2	32:LV:685:GLU:OE2	2.47	0.47
30:LT:122:VAL:N	30:LT:123:PRO:CD	2.77	0.47
17:LG:307:ASP:OD1	17:LG:307:ASP:N	2.48	0.47
15:LE:459:HIS:NE2	15:LE:463:GLU:OE2	2.48	0.47
4:L3:638:MET:HB2	4:L3:698:VAL:HG23	1.96	0.47
22:LL:207:LEU:O	22:LL:211:VAL:HG23	2.15	0.47
14:LD:474:THR:OG1	14:LD:597:GLU:OE1	2.25	0.47
32:LV:461:THR:OG1	32:LV:897:ASP:OD2	2.29	0.47
32:LV:913:ALA:O	32:LV:917:VAL:HG23	2.14	0.47
65:UC:198:HIS:ND1	65:UC:200:PHE:O	2.46	0.47
10:L9:38:ASP:OD1	10:L9:68:ARG:NH1	2.48	0.47
15:LE:507:LEU:O	15:LE:511:VAL:HG23	2.15	0.47
25:LO:35:ALA:O	25:LO:39:VAL:HG23	2.16	0.46
2:L1:430:ASN:ND2	2:L1:436:PRO:O	2.48	0.46
10:L9:316:ASP:OD2	67:UE:127:ARG:NH1	2.46	0.46
26:LP:80:ASP:OD1	26:LP:81:THR:N	2.49	0.46
33:LW:402:ILE:HD11	33:LW:417:MET:HE3	1.98	0.46
9:L8:112:GLN:OE1	9:L8:114:ARG:NE	2.49	0.45
20:LJ:410:ARG:O	20:LJ:414:VAL:HG23	2.15	0.45
33:LW:402:ILE:HD11	33:LW:417:MET:CE	2.46	0.45
64:UB:247:TRP:O	64:UB:250:VAL:HG22	2.16	0.45
5:L4:385:LEU:O	5:L4:418:ARG:NH2	2.49	0.45
22:LL:460:ASN:O	22:LL:507:SER:OG	2.30	0.45
13:LC:267:ARG:O	13:LC:565:VAL:HG13	2.16	0.45
20:LJ:149:VAL:O	20:LJ:149:VAL:HG13	2.17	0.45
5:L4:497:LEU:O	5:L4:501:VAL:HG23	2.17	0.45
20:LJ:296:LEU:HD23	20:LJ:336:VAL:HG12	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:LE:440:THR:OG1	15:LE:518:GLY:O	2.25	0.44
20:LJ:136:ALA:O	20:LJ:140:VAL:HG23	2.17	0.44
20:LJ:174:PHE:O	20:LJ:178:VAL:HG23	2.17	0.44
10:L9:334:VAL:HG21	10:L9:377:TYR:CE1	2.52	0.44
10:L9:350:CYS:O	10:L9:364:ALA:N	2.50	0.44
21:LK:245:TRP:O	21:LK:249:VAL:HG23	2.17	0.44
24:LN:247:VAL:HG13	29:LS:40:VAL:HG11	1.99	0.44
65:UC:241:PHE:HB2	65:UC:275:VAL:HG22	1.99	0.44
12:LB:8:ILE:O	12:LB:12:VAL:HG22	2.17	0.44
1:L0:265:LYS:NZ	29:LS:90:ASP:OD1	2.44	0.44
15:LE:610:LEU:HD21	15:LE:672:VAL:HG12	2.00	0.44
13:LC:298:LEU:O	13:LC:437:SER:OG	2.31	0.43
13:LC:581:VAL:HG21	13:LC:610:PHE:CZ	2.52	0.43
4:L3:658:VAL:HG22	4:L3:658:VAL:O	2.17	0.43
10:L9:422:GLU:O	10:L9:426:VAL:HG23	2.17	0.43
12:LB:55:ARG:NH2	12:LB:91:GLU:OE1	2.51	0.43
5:L4:463:VAL:O	5:L4:473:ARG:NH2	2.51	0.43
1:L0:410:ILE:O	1:L0:414:VAL:HG23	2.18	0.43
11:LA:78:VAL:HG22	11:LA:115:LEU:HD13	1.99	0.43
24:LN:331:ASP:OD2	31:LU:254:HIS:ND1	2.51	0.43
33:LW:256:ARG:NH1	33:LW:476:HIS:O	2.52	0.43
3:L2:186:ALA:O	3:L2:190:VAL:HG23	2.18	0.43
23:LM:62:ASP:OD1	23:LM:63:ARG:N	2.51	0.43
67:UE:109:ASP:OD1	67:UE:110:PHE:N	2.50	0.43
8:L7:71:ARG:N	8:L7:87:ASN:OD1	2.48	0.43
10:L9:137:LEU:O	10:L9:141:VAL:HG23	2.18	0.43
26:LP:108:TYR:O	26:LP:111:THR:HG22	2.19	0.43
4:L3:424:ARG:O	4:L3:428:VAL:HG23	2.19	0.43
5:L4:296:LEU:O	5:L4:300:VAL:HG23	2.18	0.43
8:L7:48:VAL:HG21	8:L7:89:PHE:CZ	2.53	0.43
15:LE:384:ASP:HB3	15:LE:387:VAL:HG12	2.01	0.43
32:LV:753:ILE:O	32:LV:757:VAL:HG23	2.18	0.43
5:L4:488:GLU:OE2	22:LL:846:ARG:HA	2.19	0.43
20:LJ:177:ILE:O	20:LJ:181:VAL:HG23	2.19	0.43
11:LA:54:LEU:O	11:LA:56:ALA:N	2.52	0.42
65:UC:219:LEU:HD13	65:UC:245:LEU:HD21	2.01	0.42
13:LC:182:VAL:HG23	13:LC:237:VAL:O	2.20	0.42
22:LL:465:VAL:HG13	22:LL:642:VAL:HG13	2.01	0.42
16:LF:156:ARG:NH1	63:UA:308:GLN:O	2.51	0.42
35:LY:537:LEU:O	35:LY:541:VAL:HG23	2.18	0.42
15:LE:612:VAL:HG22	15:LE:672:VAL:HG13	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:LJ:147:VAL:HG23	20:LJ:149:VAL:HG12	2.02	0.42
32:LV:986:LEU:O	32:LV:990:ILE:HD12	2.20	0.42
17:LG:262:LEU:HD13	17:LG:279:TRP:HH2	1.84	0.42
32:LV:599:GLU:O	32:LV:603:VAL:HG23	2.19	0.42
32:LV:684:VAL:HG21	32:LV:786:ALA:HB1	2.00	0.42
5:L4:408:GLU:O	5:L4:411:ILE:HG22	2.19	0.42
32:LV:746:VAL:HG21	32:LV:793:TYR:CD2	2.53	0.42
1:L0:571:ARG:NH2	22:LL:271:ASN:O	2.53	0.42
33:LW:269:LEU:HD12	33:LW:279:VAL:HG21	2.02	0.42
22:LL:751:LEU:HD12	22:LL:762:VAL:HG23	2.01	0.41
32:LV:665:ALA:HA	32:LV:752:ALA:HB2	2.01	0.41
5:L4:318:ASP:OD1	22:LL:387:SER:OG	2.34	0.41
32:LV:459:ASN:ND2	32:LV:461:THR:OG1	2.52	0.41
22:LL:646:ASP:OD1	22:LL:649:THR:N	2.51	0.41
27:LQ:371:ASN:O	27:LQ:375:VAL:HG23	2.20	0.41
20:LJ:63:ILE:O	20:LJ:67:VAL:HG23	2.20	0.41
25:LO:208:ILE:O	25:LO:240:LYS:NZ	2.32	0.41
14:LD:552:HIS:NE2	14:LD:556:SER:OG	2.54	0.41
20:LJ:125:VAL:HG13	20:LJ:132:PHE:CZ	2.55	0.41
3:L2:99:LYS:O	3:L2:103:VAL:HG23	2.21	0.41
10:L9:283:THR:O	10:L9:287:VAL:HG23	2.21	0.41
13:LC:570:VAL:HG13	13:LC:571:TYR:N	2.36	0.41
22:LL:487:ARG:O	22:LL:491:THR:OG1	2.24	0.41
32:LV:1026:THR:HB	32:LV:1027:PRO:HD3	2.02	0.41
5:L4:345:LEU:N	5:L4:346:PRO:CD	2.85	0.41
17:LG:251:SER:OG	17:LG:294:GLU:OE2	2.28	0.41
10:L9:150:THR:N	10:L9:151:PRO:CD	2.84	0.40
13:LC:238:VAL:HB	13:LC:609:VAL:HG22	2.03	0.40
5:L4:338:SER:O	5:L4:342:VAL:HG23	2.22	0.40
10:L9:316:ASP:OD1	10:L9:317:LYS:N	2.48	0.40
16:LF:183:PHE:O	16:LF:188:ARG:NH2	2.51	0.40
26:LP:132:GLY:O	26:LP:172:GLN:NE2	2.48	0.40
29:LS:57:MET:CE	29:LS:87:VAL:HG11	2.51	0.40
10:L9:150:THR:OG1	10:L9:151:PRO:HD3	2.22	0.40
20:LJ:257:VAL:O	20:LJ:261:VAL:HG23	2.22	0.40
20:LJ:304:LEU:HD23	20:LJ:311:HIS:CD2	2.57	0.40
32:LV:263:LEU:HD11	32:LV:267:HIS:NE2	2.36	0.40
12:LB:97:PHE:O	12:LB:101:VAL:HG23	2.21	0.40
19:LI:54:THR:O	19:LI:57:VAL:HG12	2.22	0.40
65:UC:261:MET:O	65:UC:265:VAL:HG23	2.21	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	L0	349/405 (86%)	335 (96%)	14 (4%)	0	100	100
2	L1	90/92 (98%)	89 (99%)	1 (1%)	0	100	100
3	L2	268/270 (99%)	263 (98%)	5 (2%)	0	100	100
4	L3	268/331 (81%)	258 (96%)	10 (4%)	0	100	100
5	L4	420/430 (98%)	413 (98%)	7 (2%)	0	100	100
6	L5	28/30 (93%)	26 (93%)	2 (7%)	0	100	100
7	L6	53/57 (93%)	53 (100%)	0	0	100	100
8	L7	112/114 (98%)	110 (98%)	2 (2%)	0	100	100
9	L8	235/246 (96%)	226 (96%)	9 (4%)	0	100	100
10	L9	473/475 (100%)	461 (98%)	12 (2%)	0	100	100
11	LA	215/217 (99%)	206 (96%)	9 (4%)	0	100	100
12	LB	119/121 (98%)	115 (97%)	4 (3%)	0	100	100
13	LC	370/527 (70%)	359 (97%)	11 (3%)	0	100	100
14	LD	221/282 (78%)	213 (96%)	8 (4%)	0	100	100
15	LE	259/338 (77%)	255 (98%)	4 (2%)	0	100	100
16	LF	86/88 (98%)	84 (98%)	2 (2%)	0	100	100
17	LG	146/148 (99%)	139 (95%)	7 (5%)	0	100	100
18	LH	85/87 (98%)	83 (98%)	2 (2%)	0	100	100
19	LI	77/79 (98%)	75 (97%)	2 (3%)	0	100	100
20	LJ	441/443 (100%)	423 (96%)	18 (4%)	0	100	100
21	LK	217/219 (99%)	210 (97%)	6 (3%)	1 (0%)	25	56
22	LL	615/855 (72%)	598 (97%)	17 (3%)	0	100	100
23	LM	175/177 (99%)	167 (95%)	8 (5%)	0	100	100
24	LN	111/113 (98%)	109 (98%)	2 (2%)	0	100	100
25	LO	342/344 (99%)	318 (93%)	24 (7%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
26	LP	198/230 (86%)	191 (96%)	7 (4%)	0	100	100
27	LQ	68/70 (97%)	63 (93%)	5 (7%)	0	100	100
28	LR	82/132 (62%)	81 (99%)	1 (1%)	0	100	100
29	LS	226/228 (99%)	219 (97%)	7 (3%)	0	100	100
30	LT	109/117 (93%)	108 (99%)	1 (1%)	0	100	100
31	LU	77/79 (98%)	73 (95%)	4 (5%)	0	100	100
32	LV	642/880 (73%)	629 (98%)	13 (2%)	0	100	100
33	LW	304/306 (99%)	287 (94%)	17 (6%)	0	100	100
34	LX	90/92 (98%)	87 (97%)	3 (3%)	0	100	100
35	LY	344/346 (99%)	337 (98%)	7 (2%)	0	100	100
36	LZ	195/197 (99%)	189 (97%)	6 (3%)	0	100	100
37	La	212/214 (99%)	203 (96%)	9 (4%)	0	100	100
38	Lb	601/733 (82%)	584 (97%)	17 (3%)	0	100	100
39	Lc	469/512 (92%)	442 (94%)	27 (6%)	0	100	100
40	Ld	435/437 (100%)	419 (96%)	16 (4%)	0	100	100
41	Le	374/376 (100%)	366 (98%)	8 (2%)	0	100	100
42	Lf	212/226 (94%)	204 (96%)	8 (4%)	0	100	100
43	Lg	212/214 (99%)	209 (99%)	3 (1%)	0	100	100
44	Lh	437/464 (94%)	428 (98%)	9 (2%)	0	100	100
45	Li	463/602 (77%)	450 (97%)	13 (3%)	0	100	100
46	Lj	120/122 (98%)	118 (98%)	2 (2%)	0	100	100
47	Lk	182/184 (99%)	172 (94%)	10 (6%)	0	100	100
48	Ll	188/190 (99%)	179 (95%)	9 (5%)	0	100	100
49	Lm	180/189 (95%)	176 (98%)	4 (2%)	0	100	100
50	Ln	58/60 (97%)	51 (88%)	7 (12%)	0	100	100
51	Lo	281/283 (99%)	268 (95%)	13 (5%)	0	100	100
52	Lp	366/368 (100%)	353 (96%)	13 (4%)	0	100	100
53	Lq	677/787 (86%)	649 (96%)	28 (4%)	0	100	100
54	Lr	279/281 (99%)	272 (98%)	7 (2%)	0	100	100
55	Ls	309/311 (99%)	294 (95%)	15 (5%)	0	100	100
56	Lt	184/240 (77%)	180 (98%)	4 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
57	Lu	228/232 (98%)	218 (96%)	10 (4%)	0	100	100
58	Lv	110/112 (98%)	108 (98%)	2 (2%)	0	100	100
59	Lw	177/179 (99%)	168 (95%)	9 (5%)	0	100	100
60	Lx	96/98 (98%)	92 (96%)	4 (4%)	0	100	100
61	Ly	336/404 (83%)	325 (97%)	11 (3%)	0	100	100
62	Lz	118/120 (98%)	118 (100%)	0	0	100	100
63	UA	83/85 (98%)	83 (100%)	0	0	100	100
64	UB	172/174 (99%)	169 (98%)	3 (2%)	0	100	100
65	UC	103/105 (98%)	100 (97%)	3 (3%)	0	100	100
66	UD	33/35 (94%)	32 (97%)	1 (3%)	0	100	100
67	UE	111/113 (98%)	109 (98%)	2 (2%)	0	100	100
68	UF	76/78 (97%)	74 (97%)	2 (3%)	0	100	100
69	UG	156/158 (99%)	156 (100%)	0	0	100	100
70	UH	45/47 (96%)	44 (98%)	1 (2%)	0	100	100
71	UI	33/35 (94%)	29 (88%)	4 (12%)	0	100	100
All	All	16226/17933 (90%)	15694 (97%)	531 (3%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
21	LK	184	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	L0	317/359 (88%)	315 (99%)	2 (1%)	84	95
2	L1	83/83 (100%)	82 (99%)	1 (1%)	67	89
3	L2	227/227 (100%)	226 (100%)	1 (0%)	89	97

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	L3	232/281 (83%)	231 (100%)	1 (0%)	89 97
5	L4	371/375 (99%)	369 (100%)	2 (0%)	86 96
6	L5	26/26 (100%)	26 (100%)	0	100 100
7	L6	51/51 (100%)	51 (100%)	0	100 100
8	L7	95/96 (99%)	95 (100%)	0	100 100
9	L8	212/218 (97%)	211 (100%)	1 (0%)	86 96
10	L9	418/418 (100%)	416 (100%)	2 (0%)	86 96
11	LA	180/180 (100%)	180 (100%)	0	100 100
12	LB	105/105 (100%)	104 (99%)	1 (1%)	73 91
13	LC	309/423 (73%)	309 (100%)	0	100 100
14	LD	194/241 (80%)	193 (100%)	1 (0%)	86 96
15	LE	222/281 (79%)	222 (100%)	0	100 100
16	LF	78/78 (100%)	78 (100%)	0	100 100
17	LG	131/131 (100%)	129 (98%)	2 (2%)	60 85
18	LH	71/71 (100%)	71 (100%)	0	100 100
19	LI	65/65 (100%)	65 (100%)	0	100 100
20	LJ	381/382 (100%)	377 (99%)	4 (1%)	73 91
21	LK	199/199 (100%)	199 (100%)	0	100 100
22	LL	523/701 (75%)	519 (99%)	4 (1%)	79 93
23	LM	149/149 (100%)	149 (100%)	0	100 100
24	LN	106/106 (100%)	104 (98%)	2 (2%)	52 81
25	LO	271/272 (100%)	269 (99%)	2 (1%)	81 94
26	LP	171/195 (88%)	167 (98%)	4 (2%)	45 77
27	LQ	62/62 (100%)	62 (100%)	0	100 100
28	LR	82/114 (72%)	82 (100%)	0	100 100
29	LS	205/205 (100%)	205 (100%)	0	100 100
30	LT	102/106 (96%)	100 (98%)	2 (2%)	50 79
31	LU	69/69 (100%)	69 (100%)	0	100 100
32	LV	538/705 (76%)	532 (99%)	6 (1%)	70 90
33	LW	262/263 (100%)	258 (98%)	4 (2%)	60 85
34	LX	85/85 (100%)	81 (95%)	4 (5%)	22 55

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
35	LY	300/302 (99%)	297 (99%)	3 (1%)	73 91
36	LZ	166/166 (100%)	166 (100%)	0	100 100
37	La	193/193 (100%)	193 (100%)	0	100 100
38	Lb	520/626 (83%)	513 (99%)	7 (1%)	65 88
39	Lc	412/450 (92%)	403 (98%)	9 (2%)	47 78
40	Ld	387/388 (100%)	377 (97%)	10 (3%)	41 74
41	Le	311/311 (100%)	310 (100%)	1 (0%)	91 97
42	Lf	174/181 (96%)	174 (100%)	0	100 100
43	Lg	192/192 (100%)	192 (100%)	0	100 100
44	Lh	391/406 (96%)	389 (100%)	2 (0%)	86 96
45	Li	421/526 (80%)	417 (99%)	4 (1%)	73 91
46	Lj	105/105 (100%)	102 (97%)	3 (3%)	37 72
47	Lk	156/156 (100%)	156 (100%)	0	100 100
48	Ll	169/169 (100%)	169 (100%)	0	100 100
49	Lm	165/170 (97%)	165 (100%)	0	100 100
50	Ln	44/44 (100%)	44 (100%)	0	100 100
51	Lo	235/236 (100%)	232 (99%)	3 (1%)	65 88
52	Lp	329/330 (100%)	328 (100%)	1 (0%)	91 97
53	Lq	557/637 (87%)	555 (100%)	2 (0%)	89 97
54	Lr	241/242 (100%)	239 (99%)	2 (1%)	79 93
55	Ls	268/268 (100%)	265 (99%)	3 (1%)	70 90
56	Lt	165/201 (82%)	164 (99%)	1 (1%)	84 95
57	Lu	196/197 (100%)	196 (100%)	0	100 100
58	Lv	101/101 (100%)	100 (99%)	1 (1%)	73 91
59	Lw	152/152 (100%)	151 (99%)	1 (1%)	81 94
60	Lx	86/86 (100%)	86 (100%)	0	100 100
61	Ly	303/351 (86%)	301 (99%)	2 (1%)	81 94
62	Lz	103/103 (100%)	102 (99%)	1 (1%)	73 91
63	UA	76/76 (100%)	76 (100%)	0	100 100
64	UB	159/159 (100%)	158 (99%)	1 (1%)	84 95
65	UC	95/95 (100%)	93 (98%)	2 (2%)	48 78

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
66	UD	30/30 (100%)	29 (97%)	1 (3%)	33 68
67	UE	103/103 (100%)	102 (99%)	1 (1%)	73 91
68	UF	71/71 (100%)	70 (99%)	1 (1%)	62 86
69	UG	139/139 (100%)	139 (100%)	0	100 100
70	UH	43/43 (100%)	42 (98%)	1 (2%)	45 77
71	UI	30/30 (100%)	29 (97%)	1 (3%)	33 68
All	All	14180/15357 (92%)	14070 (99%)	110 (1%)	77 93

All (110) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	L0	343	ARG
1	L0	620	LYS
2	L1	498	MET
3	L2	230	ARG
4	L3	736	HIS
5	L4	179	HIS
5	L4	303	ARG
9	L8	139	ARG
10	L9	54	TYR
10	L9	400	MET
12	LB	49	ARG
14	LD	574	THR
17	LG	208	MET
17	LG	307	ASP
20	LJ	7	ARG
20	LJ	68	GLN
20	LJ	74	ARG
20	LJ	260	ARG
22	LL	343	THR
22	LL	392	ARG
22	LL	686	THR
22	LL	827	ASP
24	LN	267	ASN
24	LN	344	ARG
25	LO	1	MET
25	LO	86	PHE
26	LP	85	THR
26	LP	121	MET
26	LP	145	ASP

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Mol	Chain	Res	Type
26	LP	283	PHE
30	LT	10	ARG
30	LT	125	TYR
32	LV	681	ARG
32	LV	767	HIS
32	LV	852	GLU
32	LV	952	THR
32	LV	1009	ASP
32	LV	1021	LYS
33	LW	208	ASP
33	LW	217	ARG
33	LW	389	HIS
33	LW	477	PHE
34	LX	98	TYR
34	LX	117	LYS
34	LX	121	PHE
34	LX	162	ARG
35	LY	466	ARG
35	LY	511	PHE
35	LY	565	ASP
38	Lb	305	ARG
38	Lb	361	ARG
38	Lb	631	GLU
38	Lb	742	GLN
38	Lb	892	SER
38	Lb	901	THR
38	Lb	1001	ARG
39	Lc	144	TYR
39	Lc	150	GLN
39	Lc	232	TRP
39	Lc	235	ARG
39	Lc	247	ARG
39	Lc	300	PHE
39	Lc	355	PHE
39	Lc	453	ASP
39	Lc	572	ASP
40	Ld	235	ARG
40	Ld	247	ARG
40	Ld	446	SER
40	Ld	453	ASP
40	Ld	490	ARG
40	Ld	505	GLU

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Mol	Chain	Res	Type
40	Ld	537	LEU
40	Ld	582	TYR
40	Ld	589	HIS
40	Ld	601	TYR
41	Le	592	ARG
44	Lh	402	ARG
44	Lh	569	ARG
45	Li	361	ARG
45	Li	362	PHE
45	Li	537	ARG
45	Li	570	PHE
46	Lj	8	TYR
46	Lj	59	ASP
46	Lj	79	ASN
51	Lo	245	MET
51	Lo	294	HIS
51	Lo	322	PHE
52	Lp	470	THR
53	Lq	100	TRP
53	Lq	518	ARG
54	Lr	21	ARG
54	Lr	280	ARG
55	Ls	354	PHE
55	Ls	385	ARG
55	Ls	395	ARG
56	Lt	257	ARG
58	Lv	80	ILE
59	Lw	93	ARG
61	Ly	370	TRP
61	Ly	625	ARG
62	Lz	176	MET
64	UB	221	ARG
65	UC	279	CYS
65	UC	293	ARG
66	UD	188	HIS
67	UE	163	SER
68	UF	38	ARG
70	UH	234	CYS
71	UI	389	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (13) such sidechains are listed below:

Mol	Chain	Res	Type
1	L0	473	ASN
13	LC	627	GLN
20	LJ	311	HIS
20	LJ	438	HIS
22	LL	426	HIS
22	LL	750	HIS
24	LN	268	HIS
29	LS	110	GLN
45	Li	191	HIS
49	Lm	424	GLN
53	Lq	522	HIS
59	Lw	106	HIS
67	UE	118	HIS

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
100	lS	6/7 (85%)	1 (16%)	0
101	lT	13/14 (92%)	3 (23%)	0
101	lW	13/14 (92%)	1 (7%)	0
102	lU	14/15 (93%)	4 (28%)	0
103	lV	9/10 (90%)	0	0
103	lY	9/10 (90%)	5 (55%)	0
104	lX	57/58 (98%)	21 (36%)	0
72	l0	43/44 (97%)	12 (27%)	0
73	l1	49/50 (98%)	11 (22%)	0
74	l2	29/31 (93%)	6 (20%)	0
75	l3	58/59 (98%)	12 (20%)	0
76	l4	93/94 (98%)	26 (27%)	0
77	l5	35/36 (97%)	7 (20%)	0
78	l6	47/50 (94%)	7 (14%)	0
79	l7	67/69 (97%)	11 (16%)	0
80	l8	31/33 (93%)	9 (29%)	0
81	l9	90/91 (98%)	15 (16%)	0
82	lA	64/65 (98%)	16 (25%)	0
83	lB	43/45 (95%)	12 (27%)	0
84	lC	25/27 (92%)	4 (16%)	0
85	lD	15/16 (93%)	0	0
86	lE	25/29 (86%)	11 (44%)	0
87	lF	87/88 (98%)	19 (21%)	0
88	lG	25/26 (96%)	4 (16%)	0
89	lH	26/27 (96%)	8 (30%)	0

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
90	lI	45/48 (93%)	5 (11%)	0
91	lJ	277/279 (99%)	58 (20%)	0
92	lK	36/38 (94%)	8 (22%)	0
93	lL	89/91 (97%)	7 (7%)	0
94	lM	192/194 (98%)	41 (21%)	0
95	lN	58/62 (93%)	7 (12%)	0
96	lO	179/180 (99%)	36 (20%)	0
97	lP	28/29 (96%)	11 (39%)	0
98	lQ	36/37 (97%)	8 (22%)	0
99	lR	27/28 (96%)	3 (11%)	0
All	All	1940/1994 (97%)	409 (21%)	0

All (409) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
72	l0	12	A
72	l0	13	C
72	l0	14	A
72	l0	15	G
72	l0	19	C
72	l0	20	C
72	l0	24	C
72	l0	25	C
72	l0	27	A
72	l0	31	G
72	l0	43	U
72	l0	54	C
73	l1	3	C
73	l1	7	G
73	l1	8	A
73	l1	9	C
73	l1	24	G
73	l1	25	G
73	l1	26	A
73	l1	28	U
73	l1	32	A
73	l1	49	A
73	l1	50	A
74	l2	2	U
74	l2	17	U
74	l2	24	A
74	l2	26	U

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Mol	Chain	Res	Type
74	l2	29	A
74	l2	30	A
75	l3	8	A
75	l3	16	U
75	l3	17	A
75	l3	19	A
75	l3	20	A
75	l3	36	U
75	l3	41	A
75	l3	43	A
75	l3	52	A
75	l3	53	G
75	l3	57	A
75	l3	60	A
76	l4	7	A
76	l4	8	A
76	l4	9	U
76	l4	10	U
76	l4	12	A
76	l4	13	U
76	l4	27	G
76	l4	28	U
76	l4	35	A
76	l4	39	U
76	l4	41	C
76	l4	42	A
76	l4	51	U
76	l4	52	A
76	l4	54	A
76	l4	57	G
76	l4	60	G
76	l4	68	U
76	l4	69	A
76	l4	70	G
76	l4	74	C
76	l4	75	A
76	l4	86	G
76	l4	88	A
76	l4	89	U
76	l4	92	A
77	l5	27	U
77	l5	28	C

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Mol	Chain	Res	Type
77	l5	29	A
77	l5	30	U
77	l5	31	U
77	l5	42	U
77	l5	44	U
78	l6	2	C
78	l6	8	C
78	l6	11	A
78	l6	20	G
78	l6	31	C
78	l6	41	A
78	l6	50	A
79	l7	7	U
79	l7	8	G
79	l7	14	A
79	l7	24	A
79	l7	25	U
79	l7	26	C
79	l7	40	U
79	l7	41	A
79	l7	44	A
79	l7	46	U
79	l7	66	A
80	l8	2	G
80	l8	4	G
80	l8	10	A
80	l8	15	C
80	l8	17	A
80	l8	22	A
80	l8	23	U
80	l8	24	A
80	l8	30	U
81	l9	4	U
81	l9	7	U
81	l9	10	C
81	l9	13	G
81	l9	14	U
81	l9	21	A
81	l9	25	A
81	l9	26	A
81	l9	44	U
81	l9	45	A

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Mol	Chain	Res	Type
81	l9	49	A
81	l9	50	C
81	l9	55	U
81	l9	56	G
81	l9	60	U
82	lA	3	A
82	lA	15	A
82	lA	17	A
82	lA	18	C
82	lA	19	U
82	lA	24	A
82	lA	30	G
82	lA	31	U
82	lA	38	A
82	lA	39	A
82	lA	46	C
82	lA	48	A
82	lA	53	U
82	lA	54	A
82	lA	57	U
82	lA	58	A
83	lB	3	U
83	lB	9	A
83	lB	10	A
83	lB	13	A
83	lB	14	G
83	lB	17	A
83	lB	18	U
83	lB	22	G
83	lB	24	U
83	lB	41	C
83	lB	43	G
83	lB	45	A
84	lC	10	A
84	lC	12	A
84	lC	22	C
84	lC	25	A
86	lE	2	G
86	lE	4	C
86	lE	5	G
86	lE	7	G
86	lE	11	G

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Mol	Chain	Res	Type
86	lE	15	G
86	lE	16	U
86	lE	17	G
86	lE	19	G
86	lE	20	U
86	lE	29	A
87	lF	12	C
87	lF	19	U
87	lF	20	A
87	lF	21	U
87	lF	23	U
87	lF	24	G
87	lF	25	A
87	lF	26	U
87	lF	27	U
87	lF	28	G
87	lF	29	G
87	lF	30	U
87	lF	36	A
87	lF	37	U
87	lF	50	U
87	lF	62	A
87	lF	82	C
87	lF	87	A
87	lF	88	A
88	lG	7	A
88	lG	8	U
88	lG	15	A
88	lG	16	A
89	lH	2	U
89	lH	3	C
89	lH	7	G
89	lH	8	C
89	lH	13	C
89	lH	14	G
89	lH	25	A
89	lH	26	A
90	lI	15	C
90	lI	38	A
90	lI	42	A
90	lI	44	A
90	lI	49	A

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Mol	Chain	Res	Type
91	lJ	2	G
91	lJ	10	U
91	lJ	16	G
91	lJ	19	C
91	lJ	20	A
91	lJ	22	C
91	lJ	37	C
91	lJ	45	A
91	lJ	46	C
91	lJ	47	U
91	lJ	48	G
91	lJ	53	G
91	lJ	66	A
91	lJ	67	U
91	lJ	69	C
91	lJ	71	U
91	lJ	72	G
91	lJ	77	G
91	lJ	78	U
91	lJ	84	A
91	lJ	85	A
91	lJ	86	C
91	lJ	87	A
91	lJ	88	U
91	lJ	93	A
91	lJ	95	G
91	lJ	96	G
91	lJ	99	G
91	lJ	110	A
91	lJ	120	G
91	lJ	121	G
91	lJ	122	U
91	lJ	128	A
91	lJ	129	A
91	lJ	130	U
91	lJ	133	U
91	lJ	134	U
91	lJ	145	U
91	lJ	153	U
91	lJ	154	G
91	lJ	161	A
91	lJ	162	G

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Mol	Chain	Res	Type
91	lJ	171	A
91	lJ	172	C
91	lJ	183	U
91	lJ	185	G
91	lJ	186	U
91	lJ	215	U
91	lJ	221	A
91	lJ	234	A
91	lJ	246	G
91	lJ	250	A
91	lJ	258	A
91	lJ	261	A
91	lJ	265	U
91	lJ	266	U
91	lJ	267	A
91	lJ	283	A
92	lK	5	A
92	lK	6	G
92	lK	20	G
92	lK	22	A
92	lK	28	G
92	lK	31	G
92	lK	35	A
92	lK	37	G
93	lL	9	A
93	lL	16	U
93	lL	24	G
93	lL	41	A
93	lL	68	U
93	lL	86	A
93	lL	87	A
94	lM	5	A
94	lM	9	G
94	lM	12	G
94	lM	13	U
94	lM	14	A
94	lM	28	A
94	lM	29	U
94	lM	33	A
94	lM	54	U
94	lM	55	C
94	lM	71	A

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Mol	Chain	Res	Type
94	lM	78	C
94	lM	79	C
94	lM	83	A
94	lM	84	U
94	lM	85	G
94	lM	87	C
94	lM	88	G
94	lM	99	C
94	lM	100	C
94	lM	107	A
94	lM	108	U
94	lM	110	G
94	lM	135	G
94	lM	136	U
94	lM	137	U
94	lM	138	C
94	lM	145	A
94	lM	147	A
94	lM	148	U
94	lM	149	G
94	lM	150	U
94	lM	155	C
94	lM	159	A
94	lM	160	G
94	lM	164	G
94	lM	165	G
94	lM	166	U
94	lM	177	U
94	lM	197	U
94	lM	198	C
95	lN	3	C
95	lN	22	A
95	lN	35	G
95	lN	39	A
95	lN	46	A
95	lN	47	U
95	lN	52	A
96	lO	13	C
96	lO	17	G
96	lO	18	U
96	lO	35	U
96	lO	41	U

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Mol	Chain	Res	Type
96	lO	42	A
96	lO	58	A
96	lO	60	A
96	lO	77	U
96	lO	78	A
96	lO	81	U
96	lO	87	U
96	lO	94	A
96	lO	95	U
96	lO	105	G
96	lO	112	A
96	lO	113	A
96	lO	114	U
96	lO	119	A
96	lO	120	U
96	lO	121	C
96	lO	122	A
96	lO	129	C
96	lO	131	A
96	lO	133	U
96	lO	135	U
96	lO	142	U
96	lO	157	U
96	lO	158	U
96	lO	159	G
96	lO	160	G
96	lO	161	A
96	lO	162	A
96	lO	163	G
96	lO	174	A
96	lO	179	A
97	lP	10	U
97	lP	12	U
97	lP	13	U
97	lP	14	U
97	lP	15	U
97	lP	22	U
97	lP	23	U
97	lP	24	U
97	lP	26	U
97	lP	27	U
97	lP	28	U

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Mol	Chain	Res	Type
98	lQ	2	U
98	lQ	7	U
98	lQ	8	U
98	lQ	19	U
98	lQ	22	U
98	lQ	32	U
98	lQ	35	U
98	lQ	36	U
99	lR	6	U
99	lR	23	U
99	lR	28	U
100	lS	2	U
101	lT	3	U
101	lT	6	U
101	lT	14	U
102	lU	5	U
102	lU	6	U
102	lU	14	U
102	lU	15	U
101	lW	2	U
104	lX	10	U
104	lX	11	U
104	lX	16	U
104	lX	17	U
104	lX	18	U
104	lX	19	U
104	lX	22	U
104	lX	24	U
104	lX	25	U
104	lX	27	U
104	lX	31	U
104	lX	35	U
104	lX	40	U
104	lX	41	U
104	lX	42	U
104	lX	43	U
104	lX	48	U
104	lX	49	U
104	lX	50	U
104	lX	51	U
104	lX	58	U
103	lY	2	U

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Mol	Chain	Res	Type
103	lY	6	U
103	lY	8	U
103	lY	9	U
103	lY	10	U

There are no RNA pucker outliers to report.

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

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

5.5 Carbohydrates

There are no oligosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

The following chains have linkage breaks:

Mol	Chain	Number of breaks
7	L6	1
57	Lu	1
94	lM	1
91	lJ	1
84	lC	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	L6	267:ALA	C	533:ARG	N	44.09

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	Lu	451:GLY	C	462:GLU	N	29.06
1	lM	166:U	O3'	174:G	P	22.23
1	lJ	103:U	O3'	108:U	P	11.87
1	lC	26:G	O3'	27:G	P	3.50

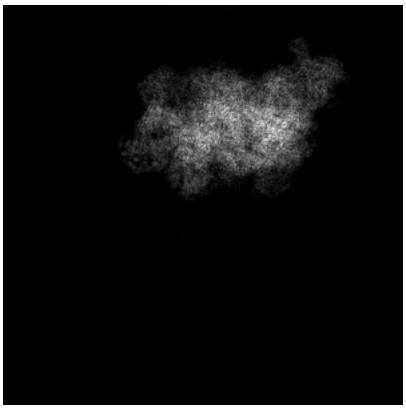
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-51104. These allow visual inspection of the internal detail of the map and identification of artifacts.

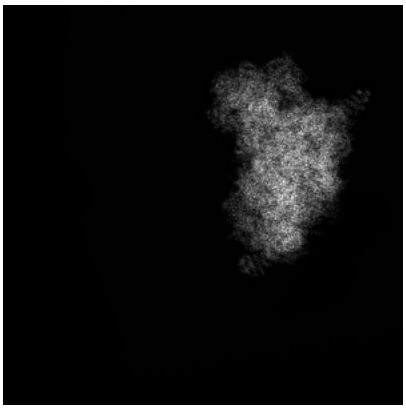
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

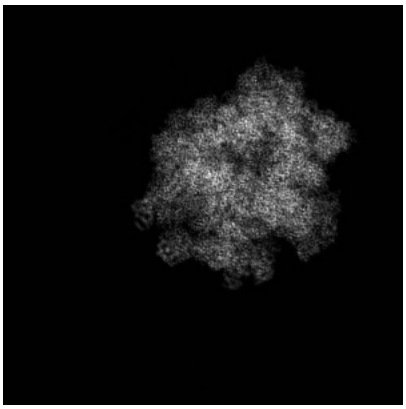
6.1.1 Primary map



X

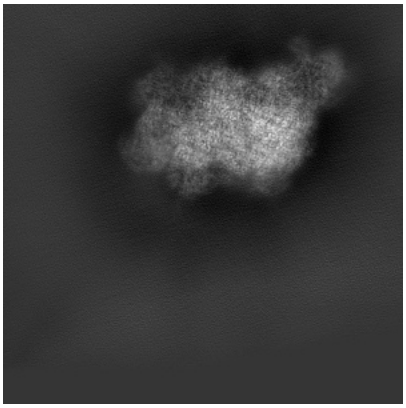


Y

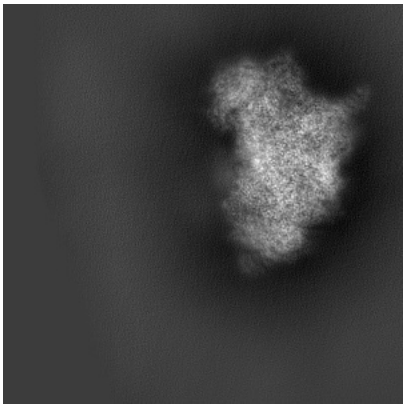


Z

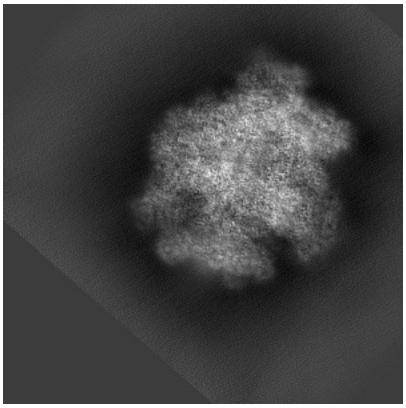
6.1.2 Raw map



X



Y



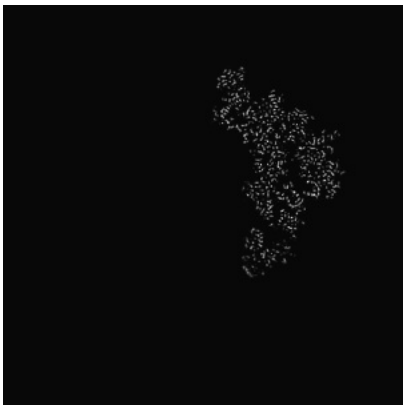
Z

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

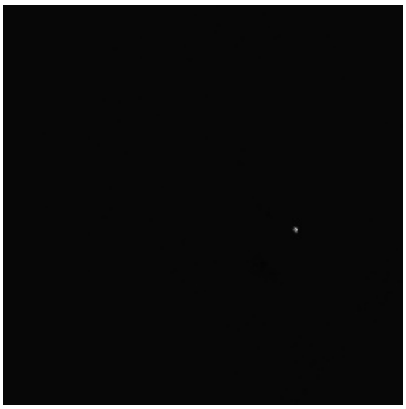
6.2 Central slices (i)

6.2.1 Primary map

X Index: 225

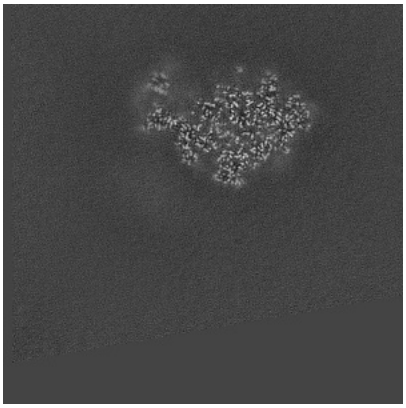


Y Index: 225

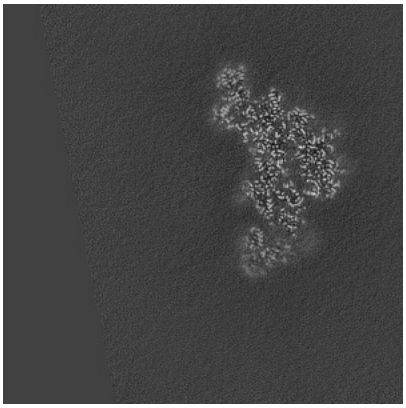


Z Index: 225

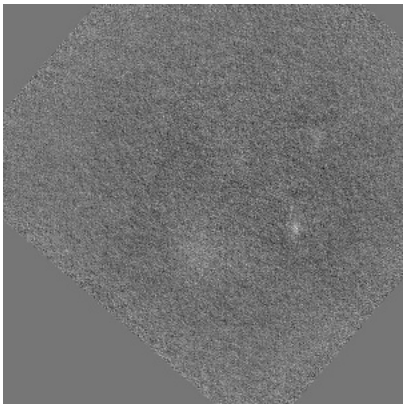
6.2.2 Raw map



X Index: 225



Y Index: 225

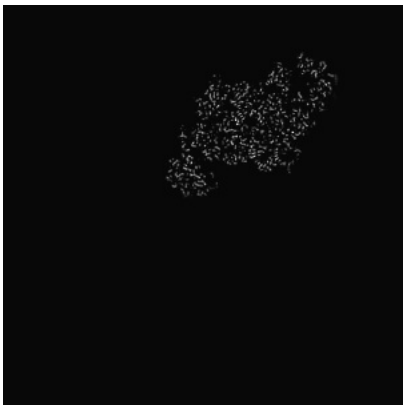


Z Index: 225

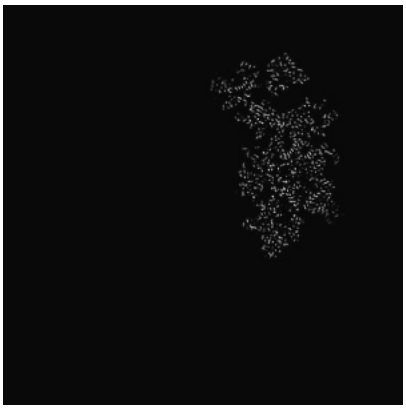
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map



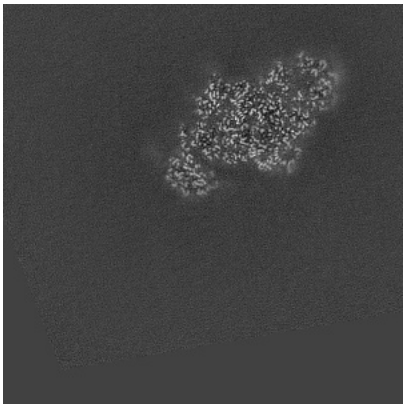
X Index: 320



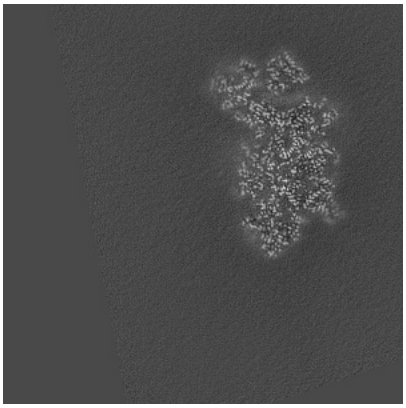
Y Index: 300

Z Index: 317

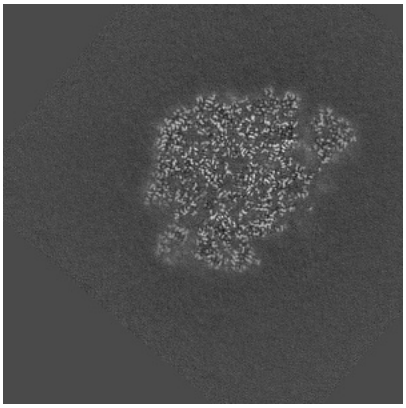
6.3.2 Raw map



X Index: 320



Y Index: 300

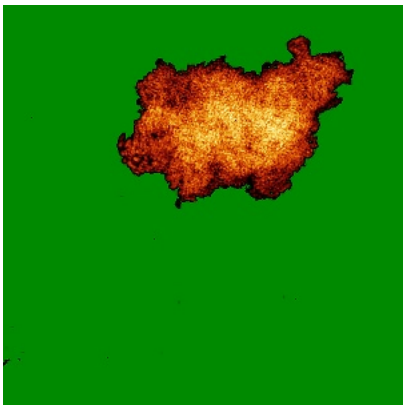


Z Index: 317

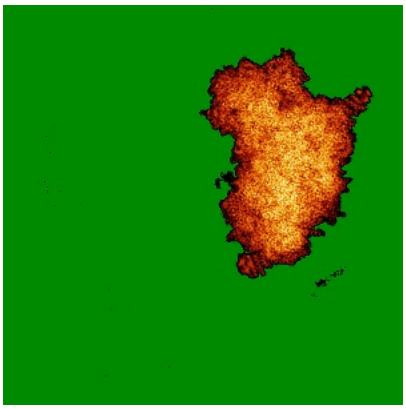
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

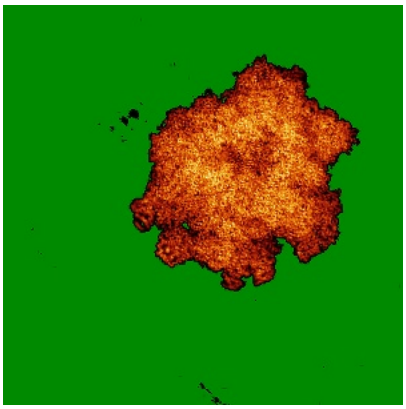
6.4.1 Primary map



X

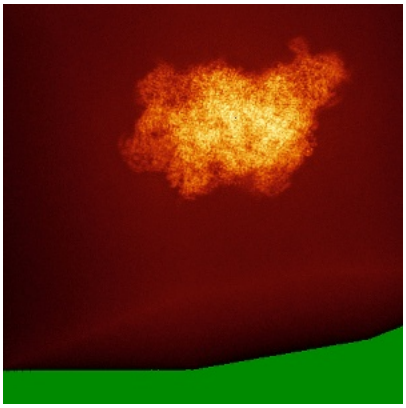


Y

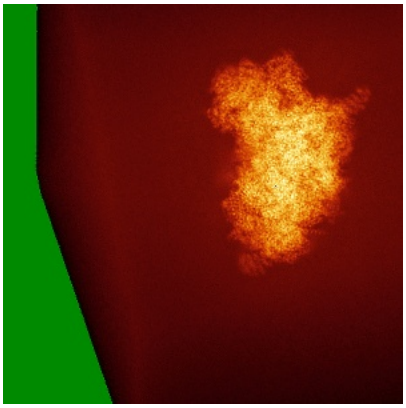


Z

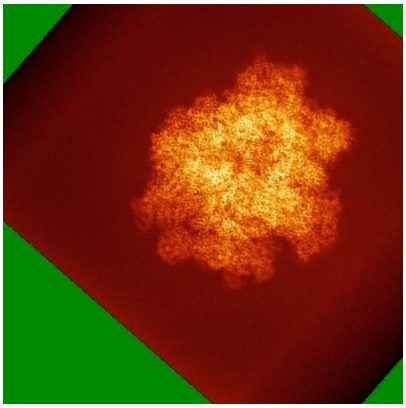
6.4.2 Raw map



X



Y

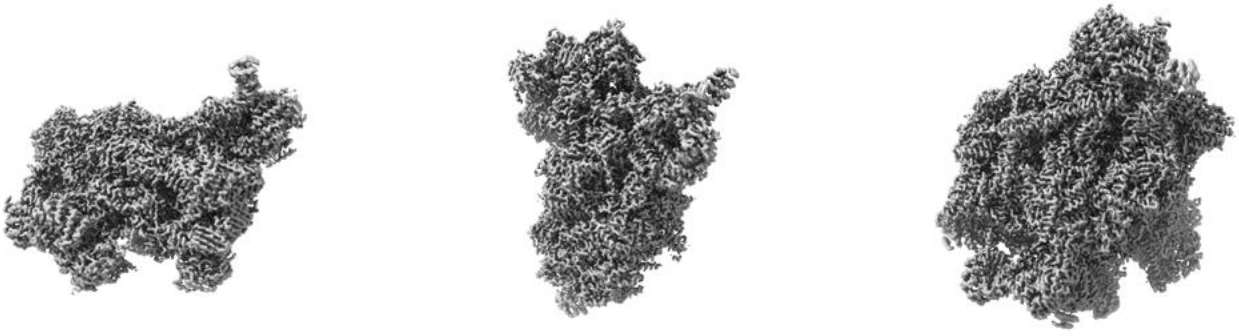


Z

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

6.5 Orthogonal surface views (i)

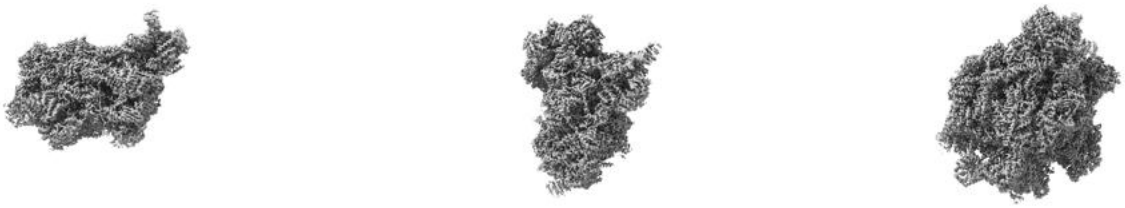
6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.15. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

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

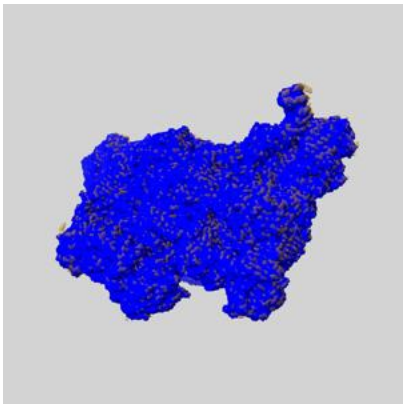
6.6 Mask visualisation

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

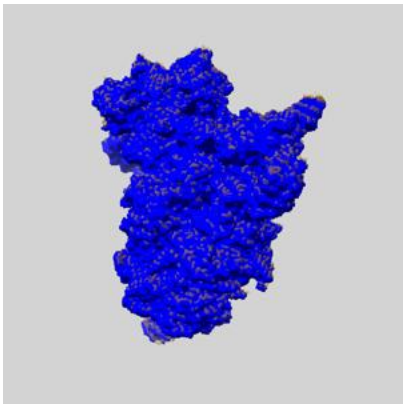
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

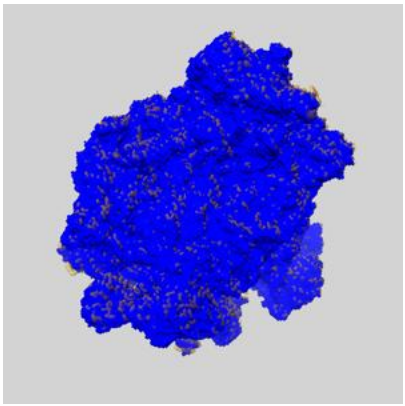
6.6.1 emd_51104_msk_1.map



X



Y

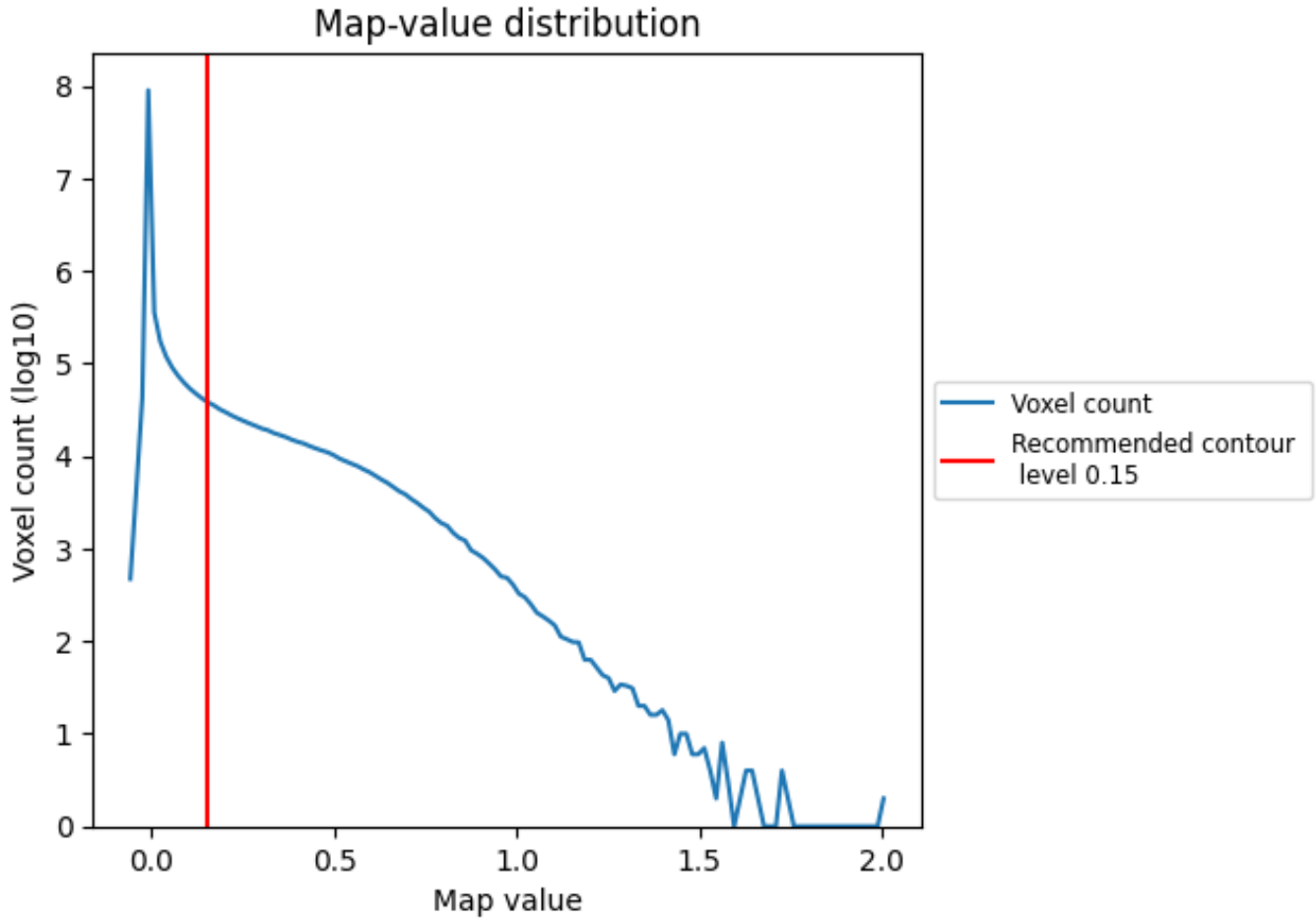


Z

7 Map analysis

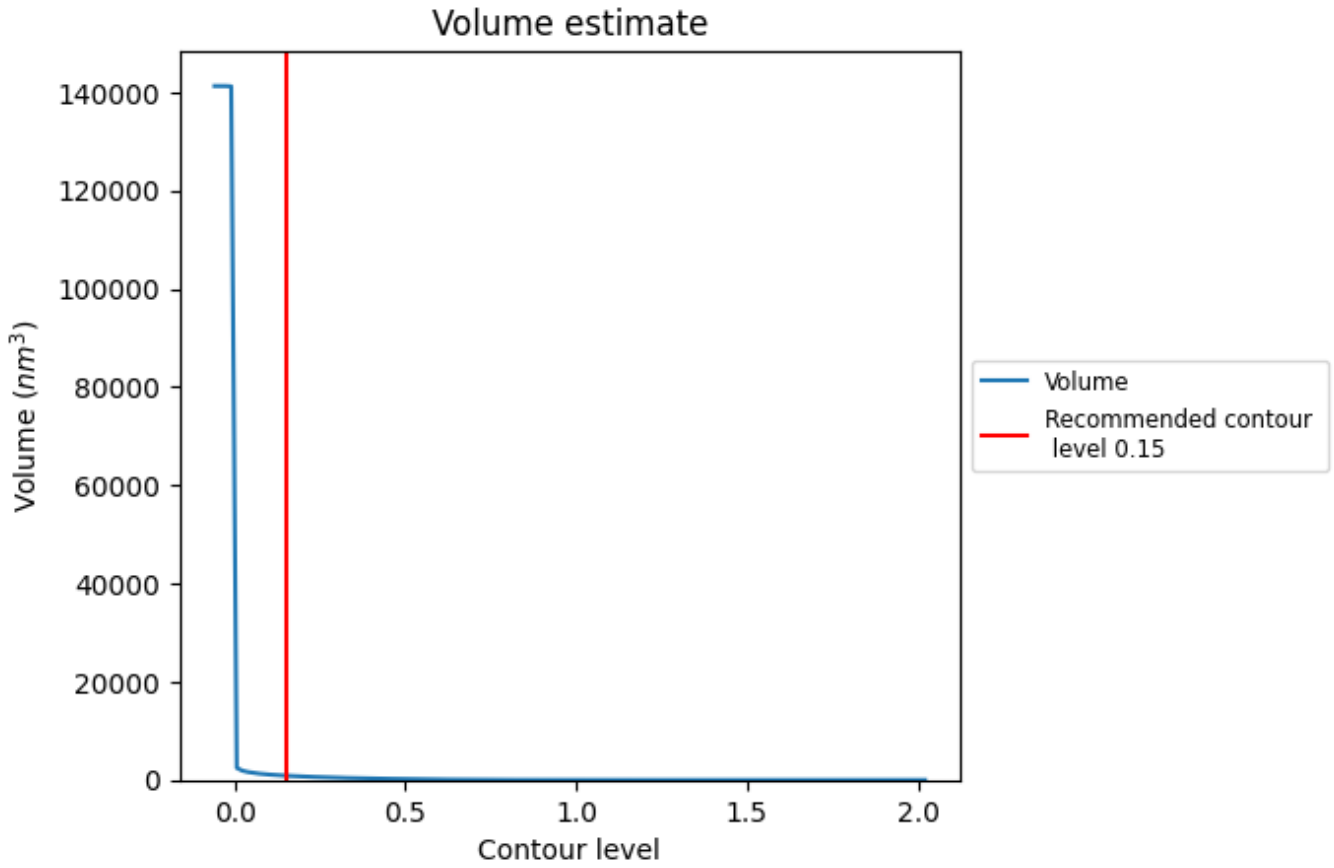
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

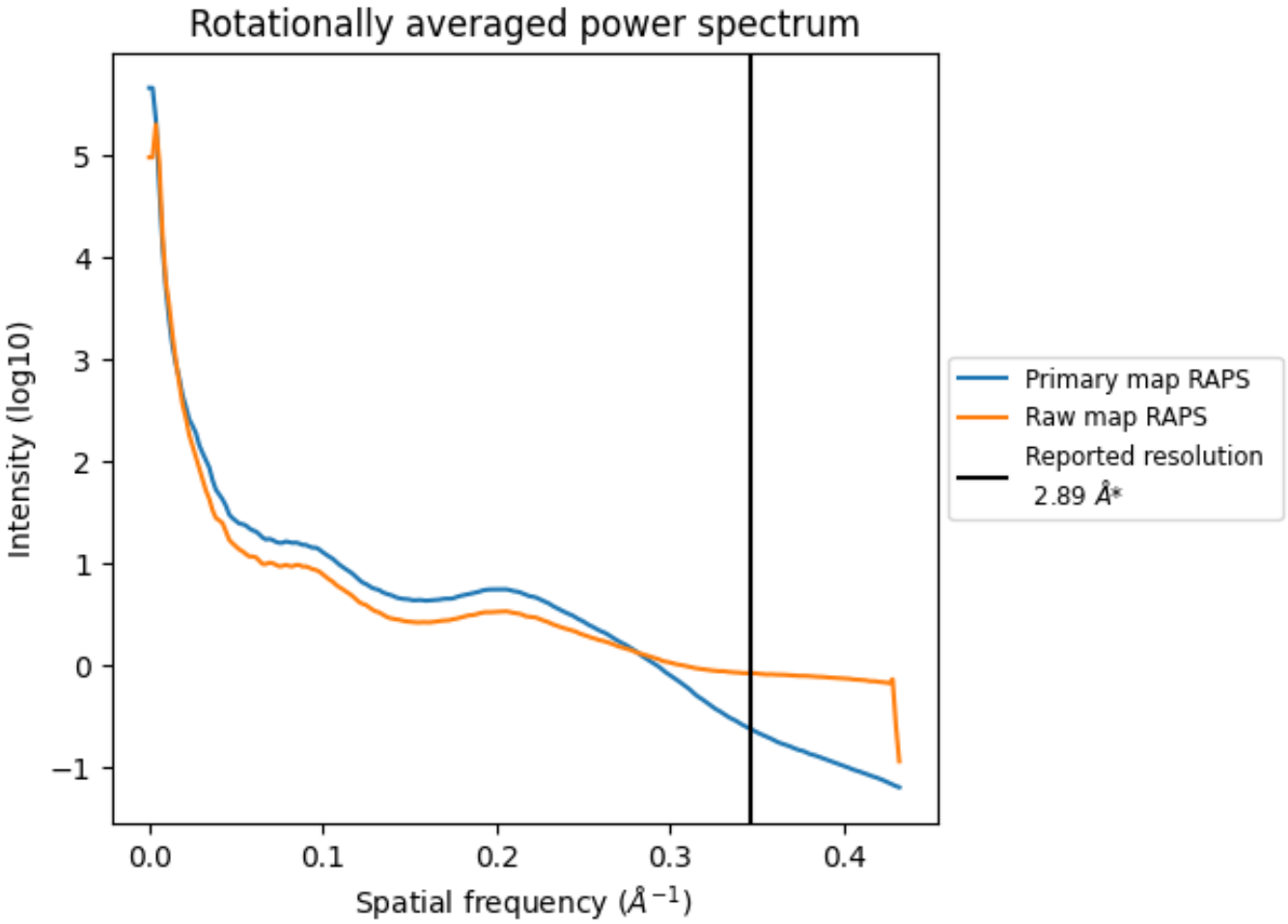
7.2 Volume estimate



The volume at the recommended contour level is 871 nm^3; this corresponds to an approximate mass of 787 kDa.

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

7.3 Rotationally averaged power spectrum (i)

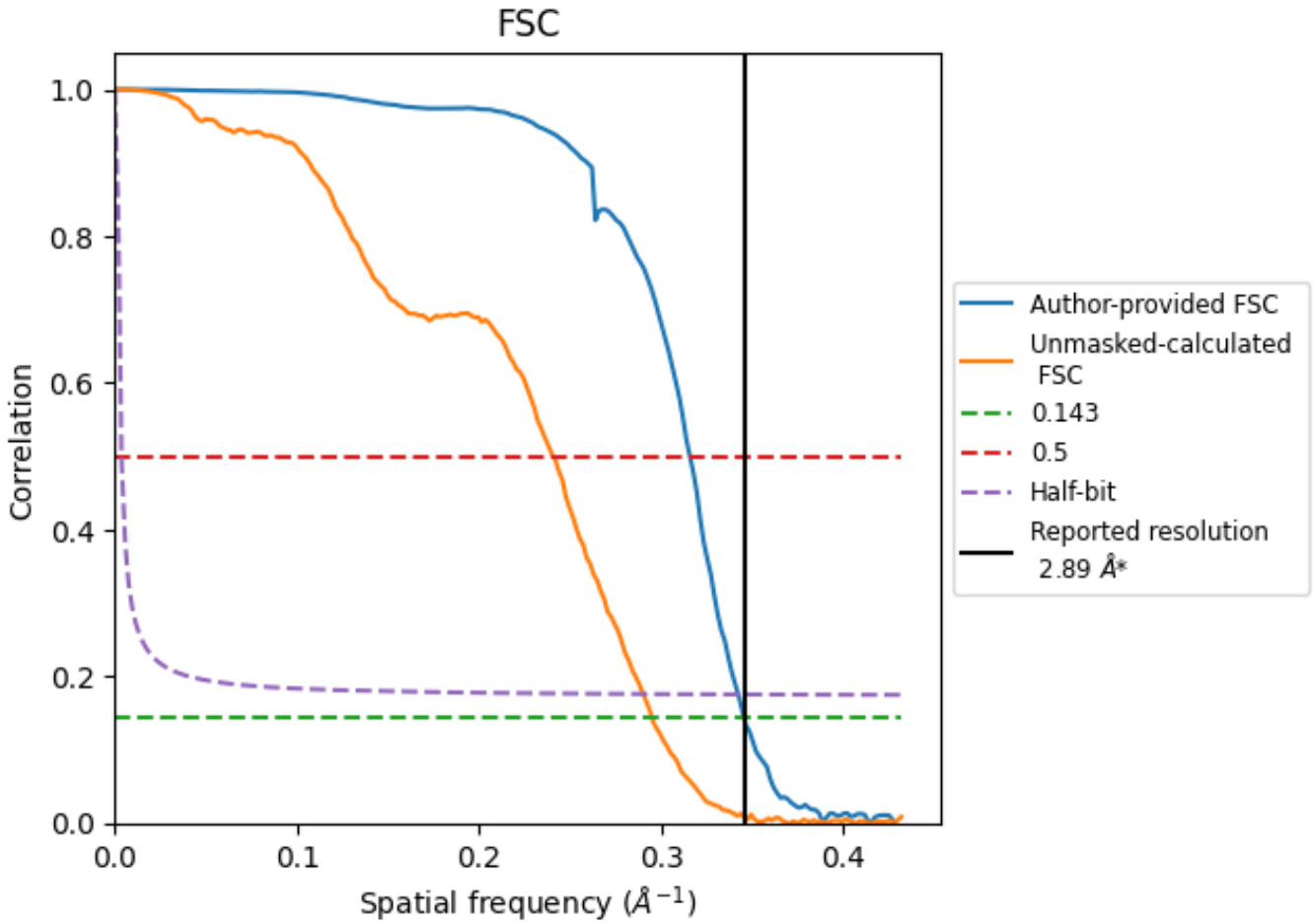


*Reported resolution corresponds to spatial frequency of 0.346 $Å^{-1}$

8 Fourier-Shell correlation

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

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.346 Å^{-1}

8.2 Resolution estimates (i)

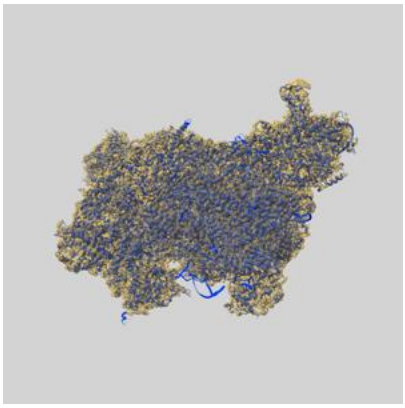
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.89	-	-
Author-provided FSC curve	2.89	3.17	2.92
Unmasked-calculated*	3.39	4.15	3.44

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.39 differs from the reported value 2.89 by more than 10 %

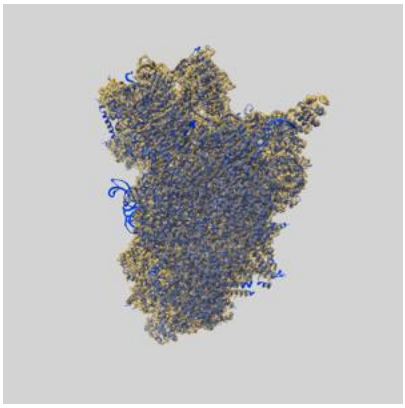
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-51104 and PDB model 9G6K. Per-residue inclusion information can be found in section 3 on page 23.

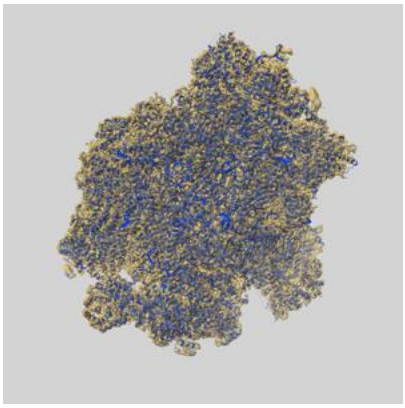
9.1 Map-model overlay



X



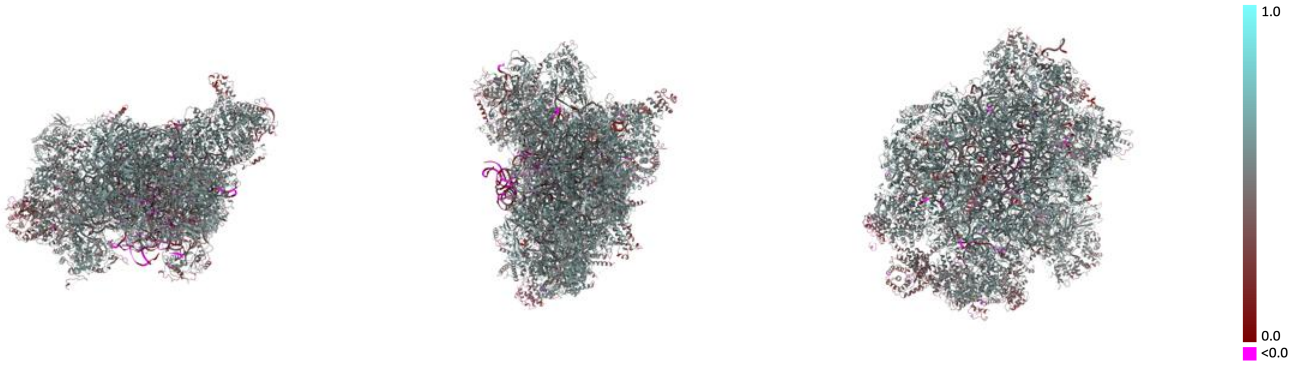
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.15 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

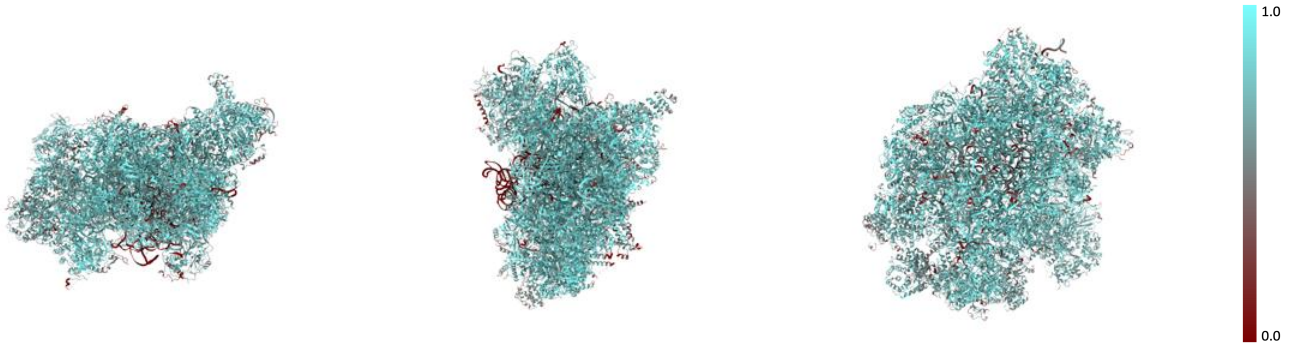
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

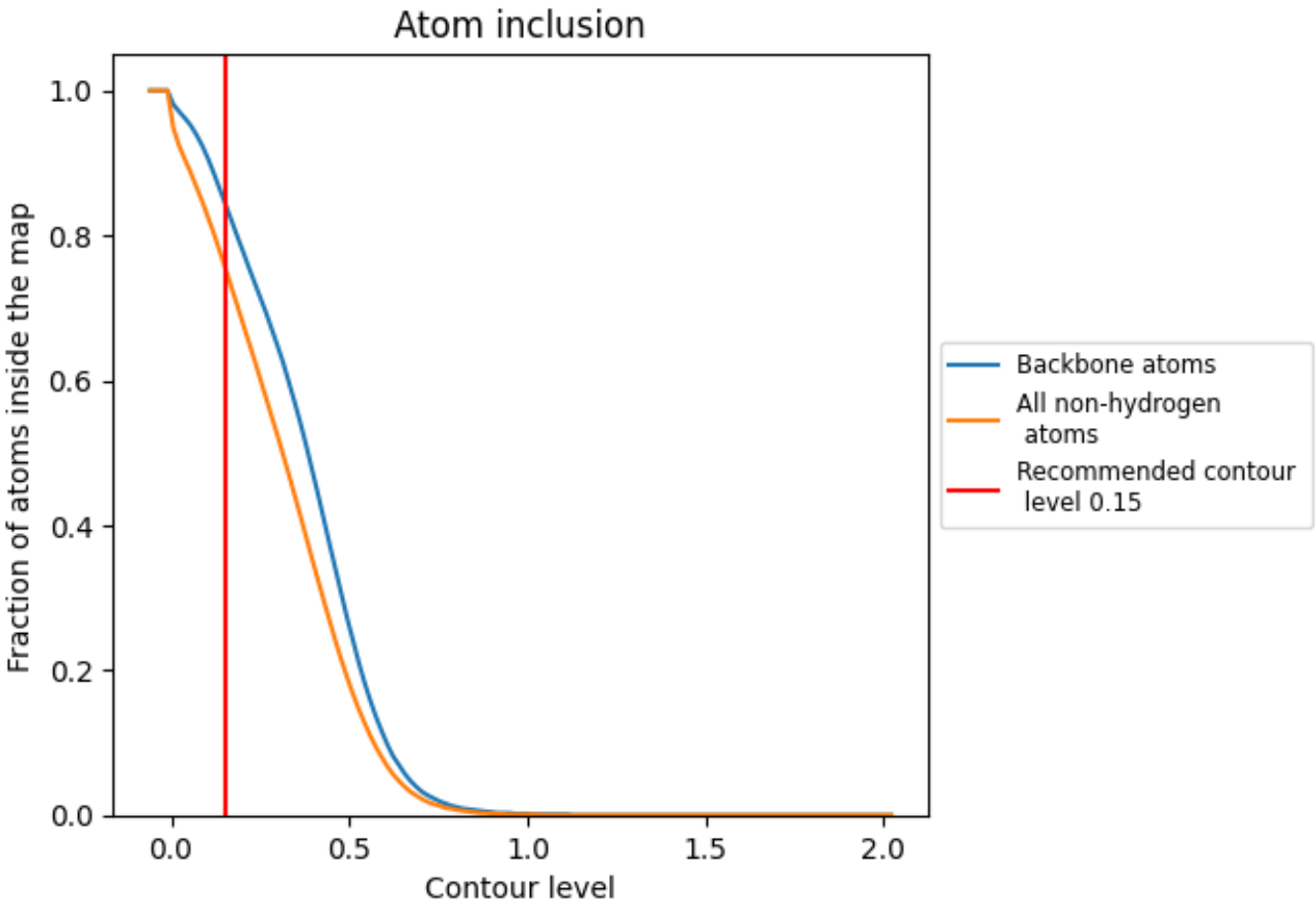
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.15).

9.4 Atom inclusion (i)



At the recommended contour level, 85% of all backbone atoms, 76% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.15) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7590	0.4820
L0	0.7970	0.5210
L1	0.7040	0.4720
L2	0.7320	0.4540
L3	0.8040	0.5190
L4	0.7980	0.5150
L5	0.7310	0.4910
L6	0.6090	0.4260
L7	0.6780	0.4810
L8	0.8520	0.5520
L9	0.7770	0.4980
LA	0.8410	0.5520
LB	0.8640	0.5600
LC	0.7640	0.4930
LD	0.7240	0.4780
LE	0.7590	0.5080
LF	0.8790	0.5590
LG	0.8490	0.5420
LH	0.7190	0.4940
LI	0.7910	0.5350
LJ	0.8660	0.5550
LK	0.8180	0.5250
LL	0.7160	0.4680
LM	0.5640	0.3890
LN	0.8640	0.5720
LO	0.7640	0.5090
LP	0.8430	0.5430
LQ	0.8480	0.5480
LR	0.7570	0.5260
LS	0.8330	0.5430
LT	0.7210	0.4830
LU	0.8450	0.5600
LV	0.7500	0.4880
LW	0.8170	0.5450
LX	0.7530	0.4910

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Chain	Atom inclusion	Q-score
LY	0.8260	0.5450
LZ	0.8150	0.5380
La	0.8570	0.5640
Lb	0.8030	0.5230
Lc	0.5540	0.2980
Ld	0.5930	0.3190
Le	0.7060	0.4890
Lf	0.7690	0.5000
Lg	0.8590	0.5490
Lh	0.7570	0.5050
Li	0.7330	0.4750
Lj	0.7980	0.5370
Lk	0.8050	0.5160
Ll	0.8040	0.5280
Lm	0.7480	0.5230
Ln	0.8120	0.5000
Lo	0.7970	0.5100
Lp	0.8030	0.5270
Lq	0.6820	0.4190
Lr	0.8440	0.5550
Ls	0.7690	0.5080
Lt	0.6980	0.4670
Lu	0.7490	0.4960
Lv	0.6490	0.4380
Lw	0.7810	0.4930
Lx	0.7390	0.4940
Ly	0.8140	0.5370
Lz	0.7920	0.5240
UA	0.8060	0.5490
UB	0.8540	0.5470
UC	0.7060	0.4980
UD	0.8720	0.5650
UE	0.7600	0.5040
UF	0.8520	0.5550
UG	0.7970	0.5340
UH	0.8300	0.5540
UI	0.5490	0.2930
l0	0.8140	0.4580
l1	0.8700	0.5130
l2	0.6390	0.3320
l3	0.8200	0.4840
l4	0.8620	0.5000

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Chain	Atom inclusion	Q-score
l5	0.6660	0.4220
l6	0.8520	0.4920
l7	0.8570	0.5200
l8	0.7570	0.4220
l9	0.8690	0.5050
lA	0.8420	0.4720
lB	0.8270	0.4510
lC	0.7670	0.4090
lD	0.7100	0.4240
lE	0.7630	0.4360
lF	0.7700	0.4700
lG	0.8130	0.4690
lH	0.7590	0.4380
lI	0.7060	0.4610
lJ	0.4820	0.2990
lK	0.7530	0.4470
lL	0.8490	0.5110
lM	0.5990	0.3750
lN	0.7970	0.4960
lO	0.8230	0.4950
lP	0.8170	0.4200
lQ	0.7840	0.4170
lR	0.8230	0.4590
lS	0.6000	0.4180
lT	0.8070	0.4370
lU	0.5800	0.3320
lV	0.8550	0.4880
lW	0.8500	0.4700
lX	0.7100	0.3880
lY	0.1550	0.0000