Full wwPDB X-ray Structure Validation Report (i)

Jul 25, 2017 – 04:36 AM EDT

PDB ID	:	5VYC
Title	:	Crystal structure of the human 40S ribosomal subunit in complex with DENR-MCT-1.
Authors	:	Lomakin, I.B.; Stolboushkina, E.A.; Vaidya, A.T.; Garber, M.B.; Dmitriev, S.E.; Steitz, T.A.
Deposited on	:	unknown
Resolution	:	6.00 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
http://wwpdb.org/validation/2016/XrayValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The following versions of software and data (see references (1)) were used in the production of this report:

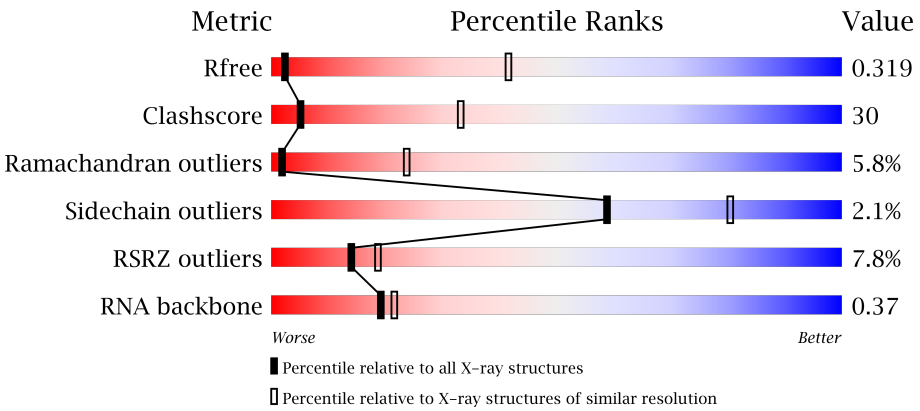
MolProbity	:	4.02b-467
Xtriage (Phenix)	:	1.9-1692
EDS	:	rb-20029824
Percentile statistics	:	20161228.v01 (using entries in the PDB archive December 28th 2016)
Refmac	:	5.8.0135
CCP4	:	6.5.0
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	rb-20029824

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 6.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	100719	1085 (8.30-3.70)
Clashscore	112137	1017 (8.20-3.80)
Ramachandran outliers	110173	1001 (8.20-3.72)
Sidechain outliers	110143	1085 (8.30-3.70)
RSRZ outliers	101464	1094 (8.30-3.70)
RNA backbone	2435	1051 (8.70-2.90)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria. 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 electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	T1	145	3% 68% 27% • •
1	T2	145	.% 67% 28% • •
1	T3	145	.% 65% 31% • •
1	T4	145	6% 66% 30% • •

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Mol	Chain	Length	Quality of chain
1	T5	145	3% 66% 29%
1	T6	145	2% 67% 29%
2	U1	119	42% 42% 13%
2	U2	119	8% 42% 42% 13%
2	U3	119	9% 42% 42% 13%
2	U4	119	24% 42% 42% 13%
2	U5	119	20% 42% 42% 13%
2	U6	119	15% 41% 43% 13%
3	V1	83	8% 64% 35%
3	V2	83	63% 36%
3	V3	83	2% 64% 35%
3	V4	83	5% 63% 36%
3	V5	83	2% 63% 36%
3	V6	83	6% 64% 35%
4	X1	143	20% 53% 41% 5%
4	X2	143	6% 53% 41% 5%
4	X3	143	6% 53% 40% 6%
4	X4	143	7% 52% 41% 6%
4	X5	143	18% 55% 38% 6%
4	X6	143	20% 55% 38% 6%
5	a1	115	9% 79% 12% 7%
5	a2	115	.% 79% 12% 7%
5	a3	115	12% 79% 12% 7%
5	a4	115	7% 79% 11% 7%
5	a5	115	23% 79% 11% 7%

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Mol	Chain	Length	Quality of chain
5	a6	115	23% 79% 12% 7%
6	c1	69	30% 84% 9% 7%
6	c2	69	13% 86% 7% 7%
6	c3	69	9% 86% 7% 7%
6	c4	69	4% 86% 7% 7%
6	c5	69	7% 84% 9% 7%
6	c6	69	3% 86% 7% 7%
7	d1	56	95% 5%
7	d2	56	95% 5%
7	d3	56	20% 95% 5%
7	d4	56	5% 95% 5%
7	d5	56	18% 95% 5%
7	d6	56	11% 95% 5%
8	f1	156	3% 41% 5% 54%
8	f2	156	3% 41% 5% 54%
8	f3	156	6% 40% 5% 54%
8	f4	156	.% 40% 6% 54%
8	f5	156	5% 40% 6% 54%
8	f6	156	4% 40% 6% 54%
9	g1	317	7% 93% 6%
9	g2	317	6% 93% 5%
9	g3	317	7% 94% 5%
9	g4	317	6% 93% 6%
9	g5	317	5% 93% 5%
9	g6	317	5% 93% 6%

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Mol	Chain	Length	Quality of chain
10	C1	293	5% 46% 28% 24%
10	C2	293	3% 47% 27% 24%
10	C3	293	46% 28% 24%
10	C4	293	3% 46% 27% 24%
10	C5	293	11% 47% 27% 24%
10	C6	293	7% 46% 28% 24%
11	G1	249	.% 53% 38% 5%
11	G2	249	2% 53% 37% 5%
11	G3	249	5% 52% 39% 5%
11	G4	249	10% 52% 39% 5%
11	G5	249	8% 52% 38% 5%
11	G6	249	6% 53% 38% 5%
12	J1	194	3% 52% 41% 5%
12	J2	194	6% 52% 42% 5%
12	J3	194	5% 53% 39% 5%
12	J4	194	6% 54% 39% 5%
12	J5	194	10% 52% 41% 5%
12	J6	194	3% 53% 40% 5%
13	M1	132	13% 56% 33% 7%
13	M2	132	2% 57% 33% 7%
13	M3	132	8% 58% 31% 7%
13	M4	132	11% 55% 34% 7%
13	M5	132	6% 55% 34% 7%
13	M6	132	6% 57% 33% 7%
14	N1	151	3% 52% 44%

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Mol	Chain	Length	Quality of chain
14	N2	151	3% 56% 39% 5%
14	N3	151	3% 50% 43% 6%
14	N4	151	2% 52% 44%
14	N5	151	3% 50% 44% 6%
14	N6	151	2% 54% 40% 5%
15	O1	151	14% 46% 42% 5% 7%
15	O2	151	15% 45% 42% 6% 7%
15	O3	151	23% 46% 42% 5% 7%
15	O4	151	18% 48% 40% 5% 7%
15	O5	151	21% 48% 40% 5% 7%
15	O6	151	5% 46% 41% 5% 7%
16	W1	130	3% 55% 42%
16	W2	130	.% 56% 42%
16	W3	130	11% 54% 43%
16	W4	130	26% 54% 44%
16	W5	130	.% 56% 42%
16	W6	130	3% 56% 42%
17	Y1	133	5% 58% 40%
17	Y2	133	8% 58% 41%
17	Y3	133	10% 56% 41%
17	Y4	133	7% 55% 43%
17	Y5	133	8% 55% 43%
17	Y6	133	9% 56% 41%
18	Z1	125	9% 33% 22% 5% 40%
18	Z2	125	11% 33% 22% 5% 40%

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Mol	Chain	Length	Quality of chain
18	Z3	125	5% 31% 24% 5% 40%
18	Z4	125	5% 32% 24% • 40%
18	Z5	125	19% 32% 24% • 40%
18	Z6	125	14% 31% 24% 5% 40%
19	b1	84	13% 86% 12% ••
19	b2	84	94% 5% •
19	b3	84	6% 94% • ••
19	b4	84	11% 87% 11% ••
19	b5	84	5% 92% 7% •
19	b6	84	7% 96% ••
20	e1	133	3% 38% 6% 56%
20	e2	133	7% 37% 5% • 56%
20	e3	133	8% 38% 5% • 56%
20	e4	133	8% 35% 8% • 56%
20	e5	133	5% 35% 8% 56%
20	e6	133	5% 38% 5% • 56%
21	i1	1869	3% 56% 37% 7%
21	i2	1869	2% 56% 37% 7%
21	i3	1869	2% 56% 37% 7%
21	i4	1869	3% 56% 37% 7%
21	i5	1869	2% 56% 37% 7%
21	i6	1869	3% 56% 37% 7%
22	A1	295	7% 39% 35% • 25%
22	A2	295	3% 37% 36% • 25%
22	A3	295	4% 38% 35% • 25%

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Mol	Chain	Length	Quality of chain
22	A4	295	40% 33% • 25%
22	A5	295	10% 39% 34% • 25%
22	A6	295	4% 39% 34% • 25%
23	B1	264	7% 46% 35% 19%
23	B2	264	9% 45% 34% • 19%
23	B3	264	5% 47% 34% • 19%
23	B4	264	7% 46% 34% • 19%
23	B5	264	2% 45% 36% • 19%
23	B6	264	45% 35% • 19%
24	D1	243	5% 53% 38% • 7%
24	D2	243	5% 53% 38% • 7%
24	D3	243	14% 53% 37% • 7%
24	D4	243	27% 53% 37% • 7%
24	D5	243	9% 54% 37% • 7%
24	D6	243	12% 53% 37% • 7%
25	E1	263	15% 56% 40% •
25	E2	263	14% 57% 40% •
25	E3	263	2% 55% 41% •
25	E4	263	7% 56% 40% •
25	E5	263	17% 57% 39% •
25	E6	263	14% 58% 39% •
26	F1	204	16% 39% 50% • 6%
26	F2	204	13% 37% 52% • 6%
26	F3	204	15% 37% 52% • 6%
26	F4	204	14% 38% 51% • 6%

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Mol	Chain	Length	Quality of chain
26	F5	204	29% 39% 50% 6%
26	F6	204	10% 37% 52% 6%
27	H1	194	13% 54% 41%
27	H2	194	3% 53% 42%
27	H3	194	19% 52% 43%
27	H4	194	9% 49% 43% 6%
27	H5	194	12% 51% 44%
27	H6	194	3% 53% 41%
28	I1	208	17% 64% 32%
28	I2	208	9% 68% 29%
28	I3	208	5% 65% 32%
28	I4	208	8% 67% 30%
28	I5	208	27% 70% 28%
28	I6	208	25% 67% 30%
29	K1	165	15% 23% 34% 41%
29	K2	165	5% 22% 35% 41%
29	K3	165	2% 26% 31% 41%
29	K4	165	4% 25% 32% 41%
29	K5	165	.% 24% 33% 41%
29	K6	165	8% 24% 33% 41%
30	L1	158	23% 56% 37%
30	L2	158	18% 56% 36%
30	L3	158	25% 56% 37%
30	L4	158	26% 56% 38%
30	L5	158	18% 58% 35%

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Mol	Chain	Length	Quality of chain
30	L6	158	23% 58% 35%
31	P1	145	3% 43% 34% 8% 14%
31	P2	145	3% 41% 35% 10% 14%
31	P3	145	9% 41% 37% 8% 14%
31	P4	145	.% 41% 35% 10% 14%
31	P5	145	39% 36% 11% 14%
31	P6	145	6% 41% 34% 10% 14%
32	Q1	146	7% 58% 40%
32	Q2	146	12% 56% 42%
32	Q3	146	8% 58% 41%
32	Q4	146	12% 57% 42%
32	Q5	146	6% 56% 42%
32	Q6	146	10% 55% 43%
33	R1	135	4% 43% 47% 7%
33	R2	135	3% 40% 49% 5%
33	R3	135	7% 39% 50% 7%
33	R4	135	4% 47% 44%
33	R5	135	16% 42% 48% 6%
33	R6	135	19% 41% 48% 7%
34	S1	152	14% 52% 41% 6%
34	S2	152	12% 51% 41% 6%
34	S3	152	5% 51% 42% 6%
34	S4	152	21% 51% 42% 6%
34	S5	152	8% 50% 43% 6%
34	S6	152	11% 52% 41% 6%

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Mol	Chain	Length	Quality of chain
35	j1	25	68% 32%
35	j2	25	68% 32%
35	j3	25	68% 32%
35	j4	25	4% 72% 28%
35	j5	25	68% 32%
35	j6	25	68% 32%
36	k1	181	4% 96%
36	k2	181	95%
36	k3	181	97%
36	k4	181	6% 96%
36	k5	181	8% 96%
36	k6	181	4% 97%
37	l1	198	5% 29% 10% 60%
37	l2	198	7% 29% 10% 60%
37	l3	198	10% 29% 10% 60%
37	l4	198	11% 29% 10% 60%
37	l5	198	3% 29% 10% 60%
37	l6	198	4% 29% 10% 60%

2 Entry composition (i)

There are 38 unique types of molecules in this entry. The entry contains 470574 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 40S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	T1	143	1112	697	214	198	3	0	0	0
1	T2	143	1112	697	214	198	3	0	0	0
1	T3	143	1112	697	214	198	3	0	0	0
1	T4	143	1112	697	214	198	3	0	0	0
1	T5	143	1112	697	214	198	3	0	0	0
1	T6	143	1112	697	214	198	3	0	0	0

- Molecule 2 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	U1	104	821	514	155	148	4	0	0	0
2	U2	104	821	514	155	148	4	0	0	0
2	U3	104	821	514	155	148	4	0	0	0
2	U4	104	821	514	155	148	4	0	0	0
2	U5	104	821	514	155	148	4	0	0	0
2	U6	104	821	514	155	148	4	0	0	0

- Molecule 3 is a protein called 40S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	V1	83	636	393	117	121	5	0	0	0
3	V2	83	636	393	117	121	5	0	0	0
3	V3	83	636	393	117	121	5	0	0	0
3	V4	83	636	393	117	121	5	0	0	0
3	V5	83	636	393	117	121	5	0	0	0
3	V6	83	636	393	117	121	5	0	0	0

- Molecule 4 is a protein called 40S ribosomal protein S23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	X1	141	1098	693	219	183	3	0	0	0
4	X2	141	1098	693	219	183	3	0	0	0
4	X3	141	1098	693	219	183	3	0	0	0
4	X4	141	1098	693	219	183	3	0	0	0
4	X5	141	1098	693	219	183	3	0	0	0
4	X6	141	1098	693	219	183	3	0	0	0

- Molecule 5 is a protein called 40S ribosomal protein S26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	a1	107	847	528	176	138	5	0	0	0
5	a2	107	847	528	176	138	5	0	0	0
5	a3	107	847	528	176	138	5	0	0	0
5	a4	107	847	528	176	138	5	0	0	0
5	a5	107	847	528	176	138	5	0	0	0
5	a6	107	847	528	176	138	5	0	0	0

- Molecule 6 is a protein called 40S ribosomal protein S28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	c1	64	506	308	102	94	2	0	0	0
6	c2	64	506	308	102	94	2	0	0	0
6	c3	64	506	308	102	94	2	0	0	0
6	c4	64	506	308	102	94	2	0	0	0
6	c5	64	506	308	102	94	2	0	0	0
6	c6	64	506	308	102	94	2	0	0	0

- Molecule 7 is a protein called 40S ribosomal protein S29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	d1	53	445	278	90	72	5	0	0	0
7	d2	53	445	278	90	72	5	0	0	0
7	d3	53	445	278	90	72	5	0	0	0
7	d4	53	445	278	90	72	5	0	0	0
7	d5	53	445	278	90	72	5	0	0	0
7	d6	53	445	278	90	72	5	0	0	0

- Molecule 8 is a protein called Ribosomal protein S27a.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	f1	72	585	366	114	97	8	0	0	0
8	f2	72	585	366	114	97	8	0	0	0
8	f3	72	585	366	114	97	8	0	0	0
8	f4	72	585	366	114	97	8	0	0	0
8	f5	72	585	366	114	97	8	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	f6	72	585	366	114	97	8	0	0	0

- Molecule 9 is a protein called Receptor of activated protein C kinase 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	g1	313	2436	1535	424	465	12	0	0	0
9	g2	313	2436	1535	424	465	12	0	0	0
9	g3	313	2436	1535	424	465	12	0	0	0
9	g4	313	2436	1535	424	465	12	0	0	0
9	g5	313	2436	1535	424	465	12	0	0	0
9	g6	313	2436	1535	424	465	12	0	0	0

- Molecule 10 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	C1	222	1725	1115	298	302	10	0	0	0
10	C2	222	1725	1115	298	302	10	0	0	0
10	C3	222	1725	1115	298	302	10	0	0	0
10	C4	222	1725	1115	298	302	10	0	0	0
10	C5	222	1725	1115	298	302	10	0	0	0
10	C6	222	1725	1115	298	302	10	0	0	0

- Molecule 11 is a protein called 40S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	G1	237	1923	1200	387	329	7	0	0	0
11	G2	237	1923	1200	387	329	7	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	G3	237	1923	1200	387	329	7	0	0	0
11	G4	237	1923	1200	387	329	7	0	0	0
11	G5	237	1923	1200	387	329	7	0	0	0
11	G6	237	1923	1200	387	329	7	0	0	0

- Molecule 12 is a protein called 40S ribosomal protein S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	J1	185	1525	969	306	248	2	0	0	0
12	J2	185	1525	969	306	248	2	0	0	0
12	J3	185	1525	969	306	248	2	0	0	0
12	J4	185	1525	969	306	248	2	0	0	0
12	J5	185	1525	969	306	248	2	0	0	0
12	J6	185	1525	969	306	248	2	0	0	0

- Molecule 13 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	M1	123	953	598	169	177	9	0	0	0
13	M2	123	953	598	169	177	9	0	0	0
13	M3	123	953	598	169	177	9	0	0	0
13	M4	123	953	598	169	177	9	0	0	0
13	M5	123	953	598	169	177	9	0	0	0
13	M6	123	953	598	169	177	9	0	0	0

- Molecule 14 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	N1	150	1208	773	229	205	1	0	0	0
14	N2	150	1208	773	229	205	1	0	0	0
14	N3	150	1208	773	229	205	1	0	0	0
14	N4	150	1208	773	229	205	1	0	0	0
14	N5	150	1208	773	229	205	1	0	0	0
14	N6	150	1208	773	229	205	1	0	0	0

- Molecule 15 is a protein called 40S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
15	O1	140	1049	642	204	197	6	0	0	0
15	O2	140	1049	642	204	197	6	0	0	0
15	O3	140	1049	642	204	197	6	0	0	0
15	O4	140	1049	642	204	197	6	0	0	0
15	O5	140	1049	642	204	197	6	0	0	0
15	O6	140	1049	642	204	197	6	0	0	0

- Molecule 16 is a protein called 40S ribosomal protein S15a.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	W1	129	1034	659	193	176	6	0	0	0
16	W2	129	1034	659	193	176	6	0	0	0
16	W3	129	1034	659	193	176	6	0	0	0
16	W4	129	1034	659	193	176	6	0	0	0
16	W5	129	1034	659	193	176	6	0	0	0
16	W6	129	1034	659	193	176	6	0	0	0

- Molecule 17 is a protein called 40S ribosomal protein S24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
17	Y1	131	1065	673	209	178	5	0	0	0
17	Y2	131	1065	673	209	178	5	0	0	0
17	Y3	131	1065	673	209	178	5	0	0	0
17	Y4	131	1065	673	209	178	5	0	0	0
17	Y5	131	1065	673	209	178	5	0	0	0
17	Y6	131	1065	673	209	178	5	0	0	0

- Molecule 18 is a protein called 40S ribosomal protein S25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
18	Z1	75	598	382	111	104	1	0	0	0
18	Z2	75	598	382	111	104	1	0	0	0
18	Z3	75	598	382	111	104	1	0	0	0
18	Z4	75	598	382	111	104	1	0	0	0
18	Z5	75	598	382	111	104	1	0	0	0
18	Z6	75	598	382	111	104	1	0	0	0

- Molecule 19 is a protein called 40S ribosomal protein S27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	b1	83	651	408	121	115	7	0	0	0
19	b2	83	651	408	121	115	7	0	0	0
19	b3	83	651	408	121	115	7	0	0	0
19	b4	83	651	408	121	115	7	0	0	0
19	b5	83	651	408	121	115	7	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
19	b6	83	651	408	121	115	7	0	0	0

- Molecule 20 is a protein called 40S ribosomal protein S30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
20	e1	58	459	284	100	74	1	0	0	0
20	e2	58	459	284	100	74	1	0	0	0
20	e3	58	459	284	100	74	1	0	0	0
20	e4	58	459	284	100	74	1	0	0	0
20	e5	58	459	284	100	74	1	0	0	0
20	e6	58	459	284	100	74	1	0	0	0

There are 210 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
e1	-48	ALA	-	insertion	UNP E9PR30
e1	-47	HIS	-	insertion	UNP E9PR30
e1	-46	VAL	-	insertion	UNP E9PR30
e1	-45	ALA	-	insertion	UNP E9PR30
e1	-44	SER	-	insertion	UNP E9PR30
e1	-43	LEU	-	insertion	UNP E9PR30
e1	-42	GLU	-	insertion	UNP E9PR30
e1	-41	GLY	-	insertion	UNP E9PR30
e1	-40	ILE	-	insertion	UNP E9PR30
e1	-39	ALA	-	insertion	UNP E9PR30
e1	-38	PRO	-	insertion	UNP E9PR30
e1	-37	GLU	-	insertion	UNP E9PR30
e1	-36	ASP	-	insertion	UNP E9PR30
e1	-35	GLN	-	insertion	UNP E9PR30
e1	-34	VAL	-	insertion	UNP E9PR30
e1	-33	VAL	-	insertion	UNP E9PR30
e1	-32	LEU	-	insertion	UNP E9PR30
e1	-31	LEU	-	insertion	UNP E9PR30
e1	-30	ALA	-	insertion	UNP E9PR30
e1	-29	GLY	-	insertion	UNP E9PR30

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Chain	Residue	Modelled	Actual	Comment	Reference
e1	-28	ALA	-	insertion	UNP E9PR30
e1	-27	PRO	-	insertion	UNP E9PR30
e1	-26	LEU	-	insertion	UNP E9PR30
e1	-25	GLU	-	insertion	UNP E9PR30
e1	-24	ASP	-	insertion	UNP E9PR30
e1	-23	GLU	-	insertion	UNP E9PR30
e1	-22	ALA	-	insertion	UNP E9PR30
e1	-21	THR	-	insertion	UNP E9PR30
e1	-20	LEU	-	insertion	UNP E9PR30
e1	-19	GLY	-	insertion	UNP E9PR30
e1	-18	GLN	-	insertion	UNP E9PR30
e1	-17	CYS	-	insertion	UNP E9PR30
e1	-16	GLY	-	insertion	UNP E9PR30
e1	-15	VAL	-	insertion	UNP E9PR30
e1	-14	GLU	-	insertion	UNP E9PR30
e2	-48	ALA	-	insertion	UNP E9PR30
e2	-47	HIS	-	insertion	UNP E9PR30
e2	-46	VAL	-	insertion	UNP E9PR30
e2	-45	ALA	-	insertion	UNP E9PR30
e2	-44	SER	-	insertion	UNP E9PR30
e2	-43	LEU	-	insertion	UNP E9PR30
e2	-42	GLU	-	insertion	UNP E9PR30
e2	-41	GLY	-	insertion	UNP E9PR30
e2	-40	ILE	-	insertion	UNP E9PR30
e2	-39	ALA	-	insertion	UNP E9PR30
e2	-38	PRO	-	insertion	UNP E9PR30
e2	-37	GLU	-	insertion	UNP E9PR30
e2	-36	ASP	-	insertion	UNP E9PR30
e2	-35	GLN	-	insertion	UNP E9PR30
e2	-34	VAL	-	insertion	UNP E9PR30
e2	-33	VAL	-	insertion	UNP E9PR30
e2	-32	LEU	-	insertion	UNP E9PR30
e2	-31	LEU	-	insertion	UNP E9PR30
e2	-30	ALA	-	insertion	UNP E9PR30
e2	-29	GLY	-	insertion	UNP E9PR30
e2	-28	ALA	-	insertion	UNP E9PR30
e2	-27	PRO	-	insertion	UNP E9PR30
e2	-26	LEU	-	insertion	UNP E9PR30
e2	-25	GLU	-	insertion	UNP E9PR30
e2	-24	ASP	-	insertion	UNP E9PR30
e2	-23	GLU	-	insertion	UNP E9PR30
e2	-22	ALA	-	insertion	UNP E9PR30

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Chain	Residue	Modelled	Actual	Comment	Reference
e2	-21	THR	-	insertion	UNP E9PR30
e2	-20	LEU	-	insertion	UNP E9PR30
e2	-19	GLY	-	insertion	UNP E9PR30
e2	-18	GLN	-	insertion	UNP E9PR30
e2	-17	CYS	-	insertion	UNP E9PR30
e2	-16	GLY	-	insertion	UNP E9PR30
e2	-15	VAL	-	insertion	UNP E9PR30
e2	-14	GLU	-	insertion	UNP E9PR30
e3	-48	ALA	-	insertion	UNP E9PR30
e3	-47	HIS	-	insertion	UNP E9PR30
e3	-46	VAL	-	insertion	UNP E9PR30
e3	-45	ALA	-	insertion	UNP E9PR30
e3	-44	SER	-	insertion	UNP E9PR30
e3	-43	LEU	-	insertion	UNP E9PR30
e3	-42	GLU	-	insertion	UNP E9PR30
e3	-41	GLY	-	insertion	UNP E9PR30
e3	-40	ILE	-	insertion	UNP E9PR30
e3	-39	ALA	-	insertion	UNP E9PR30
e3	-38	PRO	-	insertion	UNP E9PR30
e3	-37	GLU	-	insertion	UNP E9PR30
e3	-36	ASP	-	insertion	UNP E9PR30
e3	-35	GLN	-	insertion	UNP E9PR30
e3	-34	VAL	-	insertion	UNP E9PR30
e3	-33	VAL	-	insertion	UNP E9PR30
e3	-32	LEU	-	insertion	UNP E9PR30
e3	-31	LEU	-	insertion	UNP E9PR30
e3	-30	ALA	-	insertion	UNP E9PR30
e3	-29	GLY	-	insertion	UNP E9PR30
e3	-28	ALA	-	insertion	UNP E9PR30
e3	-27	PRO	-	insertion	UNP E9PR30
e3	-26	LEU	-	insertion	UNP E9PR30
e3	-25	GLU	-	insertion	UNP E9PR30
e3	-24	ASP	-	insertion	UNP E9PR30
e3	-23	GLU	-	insertion	UNP E9PR30
e3	-22	ALA	-	insertion	UNP E9PR30
e3	-21	THR	-	insertion	UNP E9PR30
e3	-20	LEU	-	insertion	UNP E9PR30
e3	-19	GLY	-	insertion	UNP E9PR30
e3	-18	GLN	-	insertion	UNP E9PR30
e3	-17	CYS	-	insertion	UNP E9PR30
e3	-16	GLY	-	insertion	UNP E9PR30
e3	-15	VAL	-	insertion	UNP E9PR30

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Chain	Residue	Modelled	Actual	Comment	Reference
e3	-14	GLU	-	insertion	UNP E9PR30
e4	-48	ALA	-	insertion	UNP E9PR30
e4	-47	HIS	-	insertion	UNP E9PR30
e4	-46	VAL	-	insertion	UNP E9PR30
e4	-45	ALA	-	insertion	UNP E9PR30
e4	-44	SER	-	insertion	UNP E9PR30
e4	-43	LEU	-	insertion	UNP E9PR30
e4	-42	GLU	-	insertion	UNP E9PR30
e4	-41	GLY	-	insertion	UNP E9PR30
e4	-40	ILE	-	insertion	UNP E9PR30
e4	-39	ALA	-	insertion	UNP E9PR30
e4	-38	PRO	-	insertion	UNP E9PR30
e4	-37	GLU	-	insertion	UNP E9PR30
e4	-36	ASP	-	insertion	UNP E9PR30
e4	-35	GLN	-	insertion	UNP E9PR30
e4	-34	VAL	-	insertion	UNP E9PR30
e4	-33	VAL	-	insertion	UNP E9PR30
e4	-32	LEU	-	insertion	UNP E9PR30
e4	-31	LEU	-	insertion	UNP E9PR30
e4	-30	ALA	-	insertion	UNP E9PR30
e4	-29	GLY	-	insertion	UNP E9PR30
e4	-28	ALA	-	insertion	UNP E9PR30
e4	-27	PRO	-	insertion	UNP E9PR30
e4	-26	LEU	-	insertion	UNP E9PR30
e4	-25	GLU	-	insertion	UNP E9PR30
e4	-24	ASP	-	insertion	UNP E9PR30
e4	-23	GLU	-	insertion	UNP E9PR30
e4	-22	ALA	-	insertion	UNP E9PR30
e4	-21	THR	-	insertion	UNP E9PR30
e4	-20	LEU	-	insertion	UNP E9PR30
e4	-19	GLY	-	insertion	UNP E9PR30
e4	-18	GLN	-	insertion	UNP E9PR30
e4	-17	CYS	-	insertion	UNP E9PR30
e4	-16	GLY	-	insertion	UNP E9PR30
e4	-15	VAL	-	insertion	UNP E9PR30
e4	-14	GLU	-	insertion	UNP E9PR30
e5	-48	ALA	-	insertion	UNP E9PR30
e5	-47	HIS	-	insertion	UNP E9PR30
e5	-46	VAL	-	insertion	UNP E9PR30
e5	-45	ALA	-	insertion	UNP E9PR30
e5	-44	SER	-	insertion	UNP E9PR30
e5	-43	LEU	-	insertion	UNP E9PR30

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Chain	Residue	Modelled	Actual	Comment	Reference
e5	-42	GLU	-	insertion	UNP E9PR30
e5	-41	GLY	-	insertion	UNP E9PR30
e5	-40	ILE	-	insertion	UNP E9PR30
e5	-39	ALA	-	insertion	UNP E9PR30
e5	-38	PRO	-	insertion	UNP E9PR30
e5	-37	GLU	-	insertion	UNP E9PR30
e5	-36	ASP	-	insertion	UNP E9PR30
e5	-35	GLN	-	insertion	UNP E9PR30
e5	-34	VAL	-	insertion	UNP E9PR30
e5	-33	VAL	-	insertion	UNP E9PR30
e5	-32	LEU	-	insertion	UNP E9PR30
e5	-31	LEU	-	insertion	UNP E9PR30
e5	-30	ALA	-	insertion	UNP E9PR30
e5	-29	GLY	-	insertion	UNP E9PR30
e5	-28	ALA	-	insertion	UNP E9PR30
e5	-27	PRO	-	insertion	UNP E9PR30
e5	-26	LEU	-	insertion	UNP E9PR30
e5	-25	GLU	-	insertion	UNP E9PR30
e5	-24	ASP	-	insertion	UNP E9PR30
e5	-23	GLU	-	insertion	UNP E9PR30
e5	-22	ALA	-	insertion	UNP E9PR30
e5	-21	THR	-	insertion	UNP E9PR30
e5	-20	LEU	-	insertion	UNP E9PR30
e5	-19	GLY	-	insertion	UNP E9PR30
e5	-18	GLN	-	insertion	UNP E9PR30
e5	-17	CYS	-	insertion	UNP E9PR30
e5	-16	GLY	-	insertion	UNP E9PR30
e5	-15	VAL	-	insertion	UNP E9PR30
e5	-14	GLU	-	insertion	UNP E9PR30
e6	-48	ALA	-	insertion	UNP E9PR30
e6	-47	HIS	-	insertion	UNP E9PR30
e6	-46	VAL	-	insertion	UNP E9PR30
e6	-45	ALA	-	insertion	UNP E9PR30
e6	-44	SER	-	insertion	UNP E9PR30
e6	-43	LEU	-	insertion	UNP E9PR30
e6	-42	GLU	-	insertion	UNP E9PR30
e6	-41	GLY	-	insertion	UNP E9PR30
e6	-40	ILE	-	insertion	UNP E9PR30
e6	-39	ALA	-	insertion	UNP E9PR30
e6	-38	PRO	-	insertion	UNP E9PR30
e6	-37	GLU	-	insertion	UNP E9PR30
e6	-36	ASP	-	insertion	UNP E9PR30

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Chain	Residue	Modelled	Actual	Comment	Reference
e6	-35	GLN	-	insertion	UNP E9PR30
e6	-34	VAL	-	insertion	UNP E9PR30
e6	-33	VAL	-	insertion	UNP E9PR30
e6	-32	LEU	-	insertion	UNP E9PR30
e6	-31	LEU	-	insertion	UNP E9PR30
e6	-30	ALA	-	insertion	UNP E9PR30
e6	-29	GLY	-	insertion	UNP E9PR30
e6	-28	ALA	-	insertion	UNP E9PR30
e6	-27	PRO	-	insertion	UNP E9PR30
e6	-26	LEU	-	insertion	UNP E9PR30
e6	-25	GLU	-	insertion	UNP E9PR30
e6	-24	ASP	-	insertion	UNP E9PR30
e6	-23	GLU	-	insertion	UNP E9PR30
e6	-22	ALA	-	insertion	UNP E9PR30
e6	-21	THR	-	insertion	UNP E9PR30
e6	-20	LEU	-	insertion	UNP E9PR30
e6	-19	GLY	-	insertion	UNP E9PR30
e6	-18	GLN	-	insertion	UNP E9PR30
e6	-17	CYS	-	insertion	UNP E9PR30
e6	-16	GLY	-	insertion	UNP E9PR30
e6	-15	VAL	-	insertion	UNP E9PR30
e6	-14	GLU	-	insertion	UNP E9PR30

- Molecule 21 is a RNA chain called Human 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
21	i1	1742	36900	16458	6595	12106	1741	0	0	0
21	i2	1742	36900	16458	6595	12106	1741	0	0	0
21	i3	1742	36900	16458	6595	12106	1741	0	0	0
21	i4	1742	36900	16458	6595	12106	1741	0	0	0
21	i5	1742	36900	16458	6595	12106	1741	0	0	0
21	i6	1742	36900	16458	6595	12106	1741	0	0	0

There are 30 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
i1	582	C	U	conflict	GB 36162

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Chain	Residue	Modelled	Actual	Comment	Reference
i1	583	C	A	conflict	GB 36162
i1	584	G	A	conflict	GB 36162
i1	798	A	G	conflict	GB 36162
i1	1095	U	C	conflict	GB 36162
i2	582	C	U	conflict	GB 36162
i2	583	C	A	conflict	GB 36162
i2	584	G	A	conflict	GB 36162
i2	798	A	G	conflict	GB 36162
i2	1095	U	C	conflict	GB 36162
i3	582	C	U	conflict	GB 36162
i3	583	C	A	conflict	GB 36162
i3	584	G	A	conflict	GB 36162
i3	798	A	G	conflict	GB 36162
i3	1095	U	C	conflict	GB 36162
i4	582	C	U	conflict	GB 36162
i4	583	C	A	conflict	GB 36162
i4	584	G	A	conflict	GB 36162
i4	798	A	G	conflict	GB 36162
i4	1095	U	C	conflict	GB 36162
i5	582	C	U	conflict	GB 36162
i5	583	C	A	conflict	GB 36162
i5	584	G	A	conflict	GB 36162
i5	798	A	G	conflict	GB 36162
i5	1095	U	C	conflict	GB 36162
i6	582	C	U	conflict	GB 36162
i6	583	C	A	conflict	GB 36162
i6	584	G	A	conflict	GB 36162
i6	798	A	G	conflict	GB 36162
i6	1095	U	C	conflict	GB 36162

- Molecule 22 is a protein called 40S ribosomal protein SA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
22	A1	222	1747	1109	306	324	8	0	0	0
			Total	C	N	O	S			
22	A2	222	1747	1109	306	324	8	0	0	0
			Total	C	N	O	S			
22	A3	222	1747	1109	306	324	8	0	0	0
			Total	C	N	O	S			
22	A4	222	1747	1109	306	324	8	0	0	0
			Total	C	N	O	S			
22	A5	222	1747	1109	306	324	8	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
22	A6	222	1747	1109	306	324	8	0	0	0

- Molecule 23 is a protein called 40S ribosomal protein S3a.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
23	B1	214	1738	1103	310	311	14	0	0	0
23	B2	214	1738	1103	310	311	14	0	0	0
23	B3	214	1738	1103	310	311	14	0	0	0
23	B4	214	1738	1103	310	311	14	0	0	0
23	B5	214	1738	1103	310	311	14	0	0	0
23	B6	214	1738	1103	310	311	14	0	0	0

- Molecule 24 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
24	D1	227	1765	1125	317	315	8	0	0	0
24	D2	227	1765	1125	317	315	8	0	0	0
24	D3	227	1765	1125	317	315	8	0	0	0
24	D4	227	1765	1125	317	315	8	0	0	0
24	D5	227	1765	1125	317	315	8	0	0	0
24	D6	227	1765	1125	317	315	8	0	0	0

- Molecule 25 is a protein called 40S ribosomal protein S4, X isoform.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
25	E1	262	2076	1324	386	358	8	0	0	0
25	E2	262	2076	1324	386	358	8	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
25	E3	262	2076	1324	386	358	8	0	0	0
25	E4	262	2076	1324	386	358	8	0	0	0
25	E5	262	2076	1324	386	358	8	0	0	0
25	E6	262	2076	1324	386	358	8	0	0	0

- Molecule 26 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
26	F1	191	1509	943	286	273	7	0	0	0
26	F2	191	1509	943	286	273	7	0	0	0
26	F3	191	1509	943	286	273	7	0	0	0
26	F4	191	1509	943	286	273	7	0	0	0
26	F5	191	1509	943	286	273	7	0	0	0
26	F6	191	1509	943	286	273	7	0	0	0

- Molecule 27 is a protein called 40S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
27	H1	189	1521	969	280	271	1	0	0	0
27	H2	189	1521	969	280	271	1	0	0	0
27	H3	189	1521	969	280	271	1	0	0	0
27	H4	189	1521	969	280	271	1	0	0	0
27	H5	189	1521	969	280	271	1	0	0	0
27	H6	189	1521	969	280	271	1	0	0	0

- Molecule 28 is a protein called 40S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
28	I1	206	1686	1058	332	291	5	0	0	0
28	I2	206	1686	1058	332	291	5	0	0	0
28	I3	206	1686	1058	332	291	5	0	0	0
28	I4	206	1686	1058	332	291	5	0	0	0
28	I5	206	1686	1058	332	291	5	0	0	0
28	I6	206	1686	1058	332	291	5	0	0	0

- Molecule 29 is a protein called 40S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
29	K1	98	827	539	148	134	6	0	0	0
29	K2	98	827	539	148	134	6	0	0	0
29	K3	98	827	539	148	134	6	0	0	0
29	K4	98	827	539	148	134	6	0	0	0
29	K5	98	827	539	148	134	6	0	0	0
29	K6	98	827	539	148	134	6	0	0	0

- Molecule 30 is a protein called 40S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
30	L1	153	1247	793	234	214	6	0	0	0
30	L2	153	1247	793	234	214	6	0	0	0
30	L3	153	1247	793	234	214	6	0	0	0
30	L4	153	1247	793	234	214	6	0	0	0
30	L5	153	1247	793	234	214	6	0	0	0
30	L6	153	1247	793	234	214	6	0	0	0

- Molecule 31 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
31	P1	125	1033	656	196	174	7	0	0	0
31	P2	125	1033	656	196	174	7	0	0	0
31	P3	125	1033	656	196	174	7	0	0	0
31	P4	125	1033	656	196	174	7	0	0	0
31	P5	125	1033	656	196	174	7	0	0	0
31	P6	125	1033	656	196	174	7	0	0	0

- Molecule 32 is a protein called 40S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
32	Q1	146	1158	736	218	200	4	0	0	0
32	Q2	146	1158	736	218	200	4	0	0	0
32	Q3	146	1158	736	218	200	4	0	0	0
32	Q4	146	1158	736	218	200	4	0	0	0
32	Q5	146	1158	736	218	200	4	0	0	0
32	Q6	146	1158	736	218	200	4	0	0	0

- Molecule 33 is a protein called 40S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	R1	132	1072	673	199	195	5	0	0	0
33	R2	132	1072	673	199	195	5	0	0	0
33	R3	132	1072	673	199	195	5	0	0	0
33	R4	132	1072	673	199	195	5	0	0	0
33	R5	132	1072	673	199	195	5	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
33	R6	132	1072	673	199	195	5	0	0	0

- Molecule 34 is a protein called 40S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
34	S1	143	1184	743	240	200	1	0	0	0
34	S2	143	1184	743	240	200	1	0	0	0
34	S3	143	1184	743	240	200	1	0	0	0
34	S4	143	1184	743	240	200	1	0	0	0
34	S5	143	1184	743	240	200	1	0	0	0
34	S6	143	1184	743	240	200	1	0	0	0

- Molecule 35 is a protein called 60S ribosomal protein L41.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
35	j1	25	239	145	64	27	3	0	0	0
35	j2	25	239	145	64	27	3	0	0	0
35	j3	25	239	145	64	27	3	0	0	0
35	j4	25	239	145	64	27	3	0	0	0
35	j5	25	239	145	64	27	3	0	0	0
35	j6	25	239	145	64	27	3	0	0	0

- Molecule 36 is a protein called Malignant T-cell-amplified sequence 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
36	k1	181	1421	926	234	250	11	0	0	0
36	k2	181	1421	926	234	250	11	0	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
36	k3	181	1421	926	234	250	11	0	0	0
36	k4	181	1421	926	234	250	11	0	0	0
36	k5	181	1421	926	234	250	11	0	0	0
36	k6	181	1421	926	234	250	11	0	0	0

- Molecule 37 is a protein called Density-regulated protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
37	l1	79	629	400	102	125	2	0	0	0
37	l2	79	629	400	102	125	2	0	0	0
37	l3	79	629	400	102	125	2	0	0	0
37	l4	79	629	400	102	125	2	0	0	0
37	l5	79	629	400	102	125	2	0	0	0
37	l6	79	629	400	102	125	2	0	0	0

- Molecule 38 is ZINC ION (three-letter code: ZN) (formula: Zn).

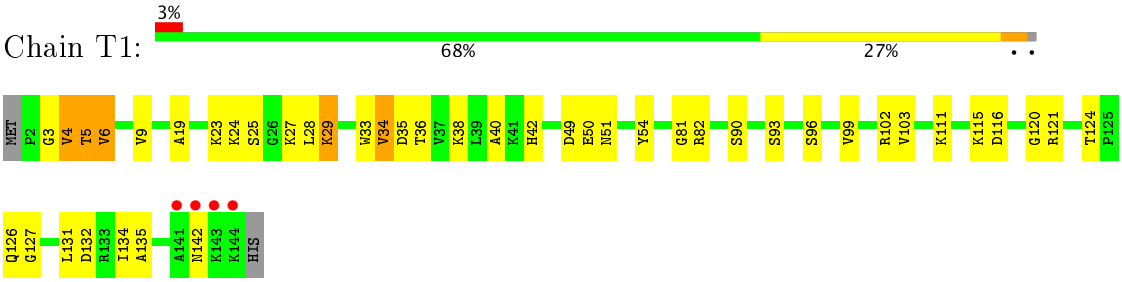
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Zn		
38	f6	1	1	1	0	0
38	f5	1	1	1	0	0
38	f4	1	1	1	0	0
38	f3	1	1	1	0	0
38	f2	1	1	1	0	0
38	f1	1	1	1	0	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA and DNA 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 electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density (RSRZ > 2). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

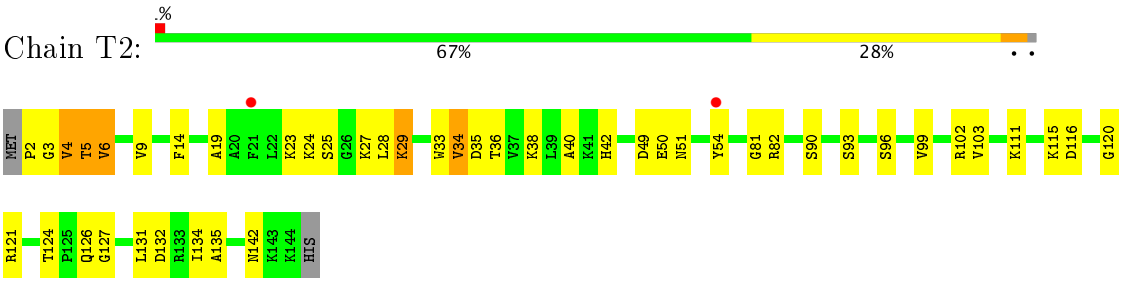
- Molecule 1: 40S ribosomal protein S19

Chain T1:



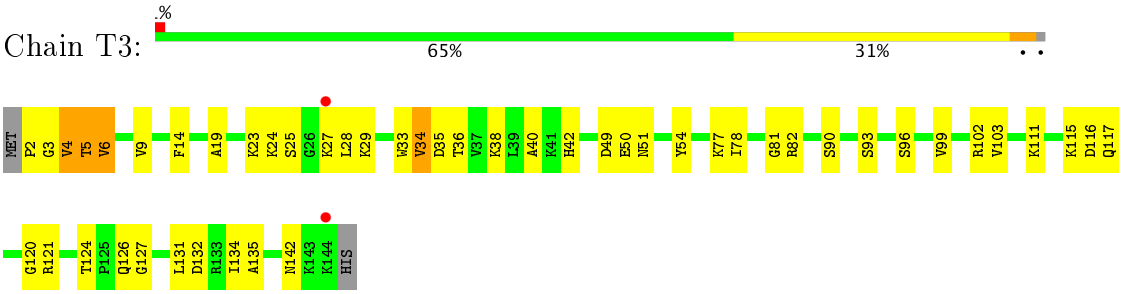
- Molecule 1: 40S ribosomal protein S19

Chain T2:



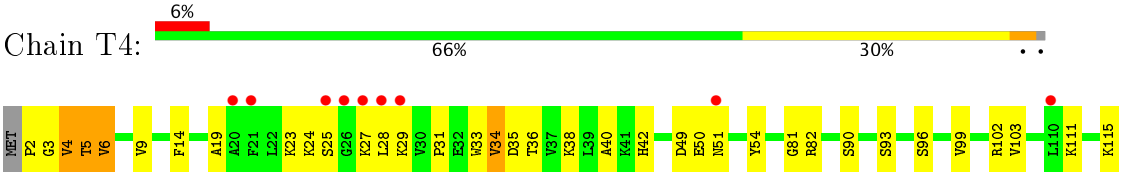
- Molecule 1: 40S ribosomal protein S19

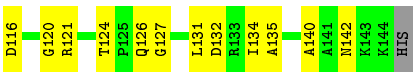
Chain T3:



- Molecule 1: 40S ribosomal protein S19

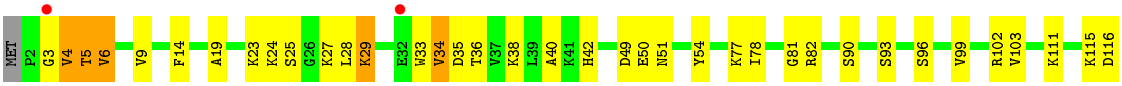
Chain T4:

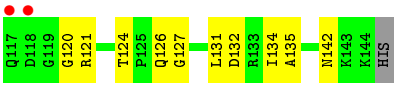




• Molecule 1: 40S ribosomal protein S19

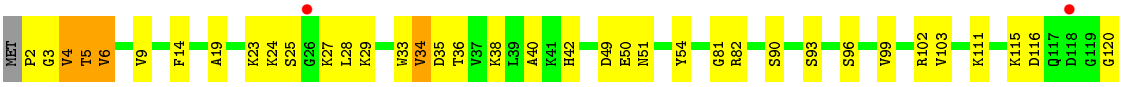
Chain T5:

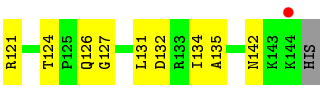




• Molecule 1: 40S ribosomal protein S19

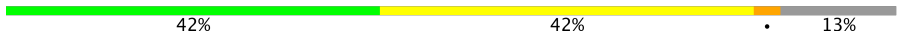
Chain T6:





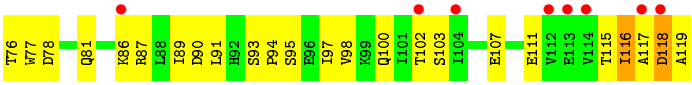
• Molecule 2: 40S ribosomal protein S20

Chain U1:



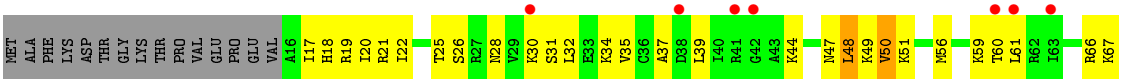
• Molecule 2: 40S ribosomal protein S20

Chain U2:



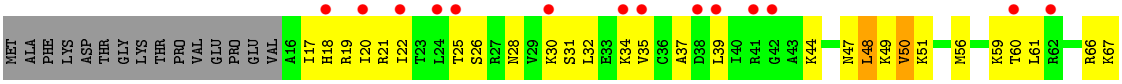
• Molecule 2: 40S ribosomal protein S20

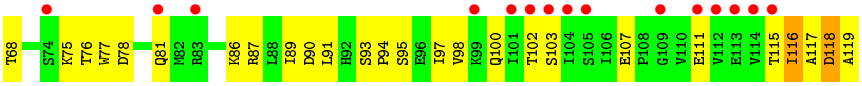
Chain U3:



- Molecule 2: 40S ribosomal protein S20

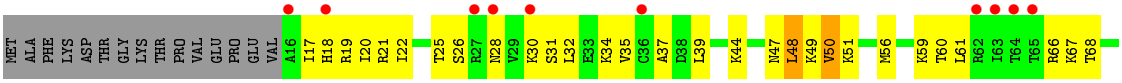
Chain U4:

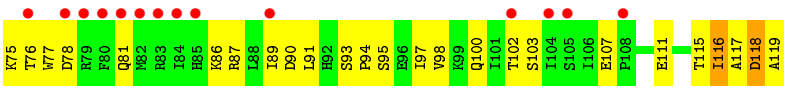




- Molecule 2: 40S ribosomal protein S20

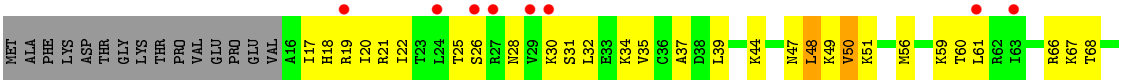
Chain U5:

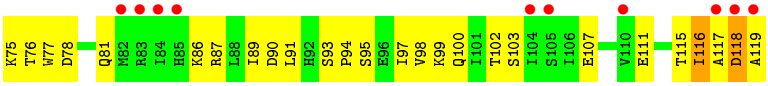




- Molecule 2: 40S ribosomal protein S20

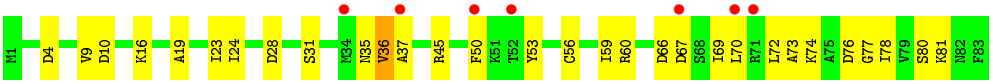
Chain U6:





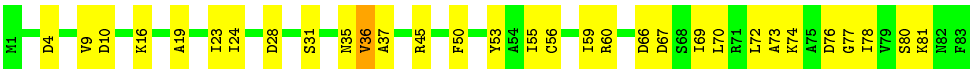
- Molecule 3: 40S ribosomal protein S21

Chain V1:



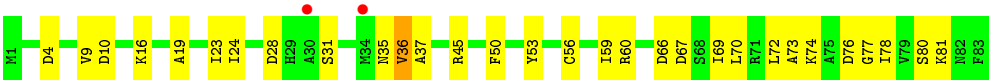
- Molecule 3: 40S ribosomal protein S21

Chain V2:



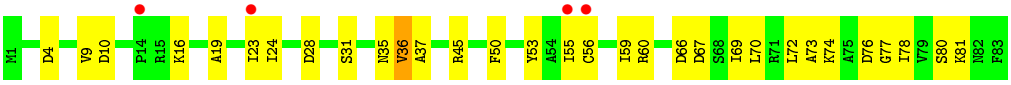
- Molecule 3: 40S ribosomal protein S21

Chain V3:



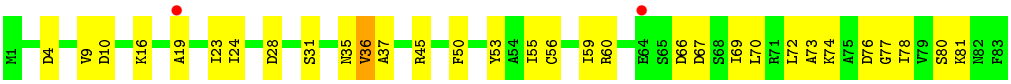
- Molecule 3: 40S ribosomal protein S21

Chain V4:



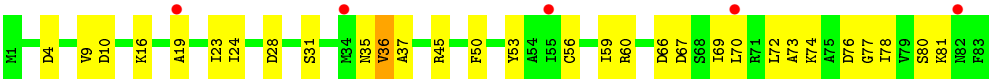
- Molecule 3: 40S ribosomal protein S21

Chain V5:



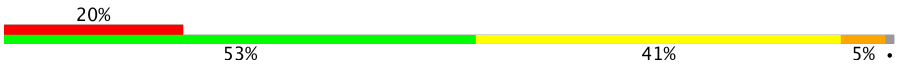
- Molecule 3: 40S ribosomal protein S21

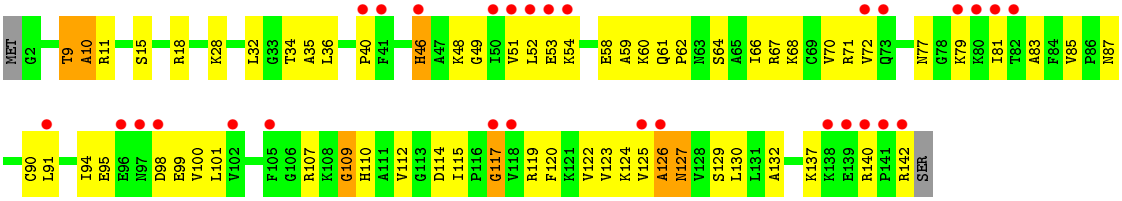
Chain V6:



- Molecule 4: 40S ribosomal protein S23

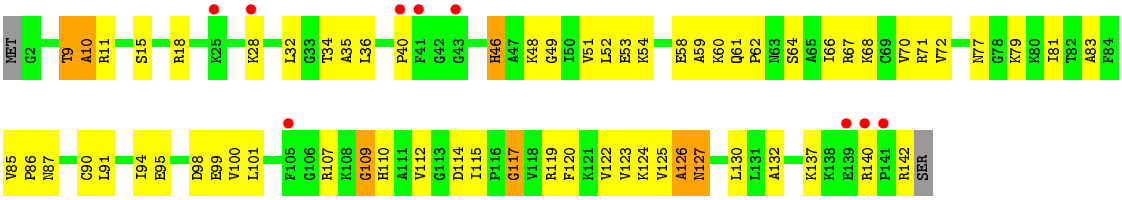
Chain X1:





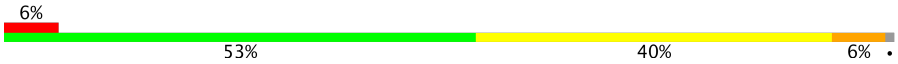
- Molecule 4: 40S ribosomal protein S23

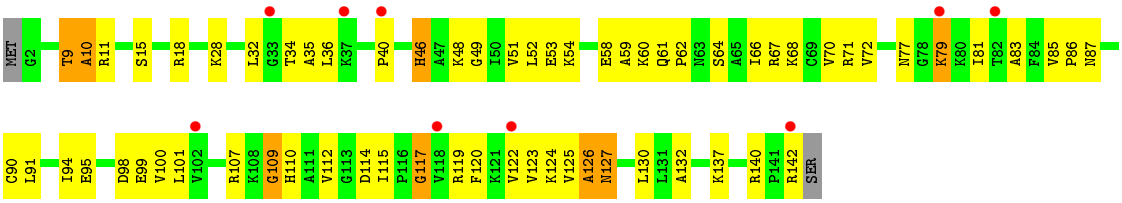
Chain X2:



- Molecule 4: 40S ribosomal protein S23

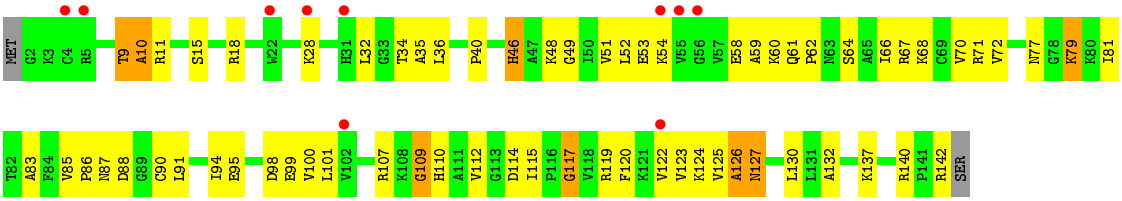
Chain X3:





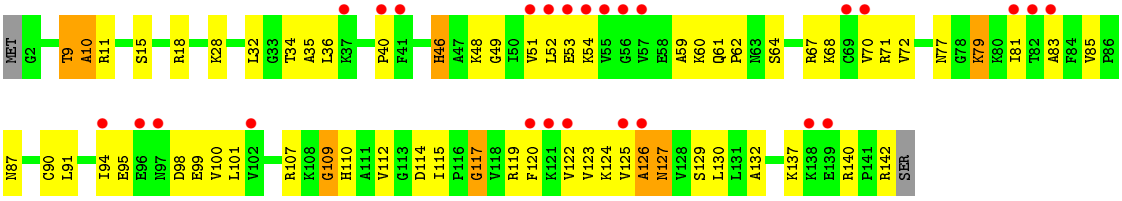
- Molecule 4: 40S ribosomal protein S23

Chain X4:



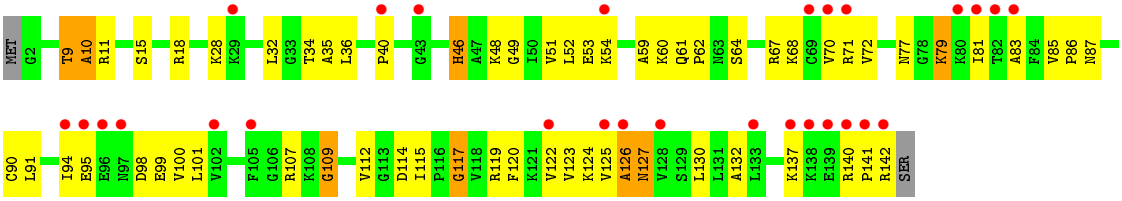
- Molecule 4: 40S ribosomal protein S23

Chain X5:



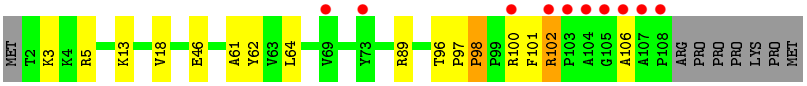
- Molecule 4: 40S ribosomal protein S23

Chain X6:



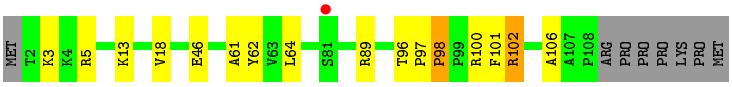
- Molecule 5: 40S ribosomal protein S26

Chain a1:



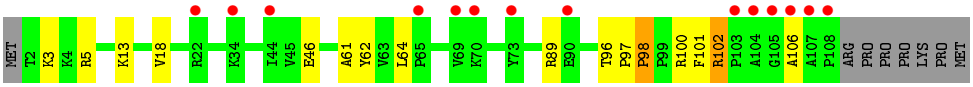
- Molecule 5: 40S ribosomal protein S26

Chain a2:



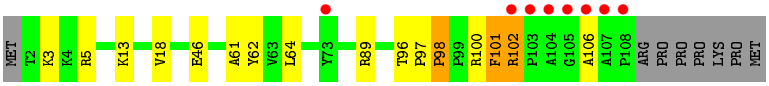
• Molecule 5: 40S ribosomal protein S26

Chain a3:



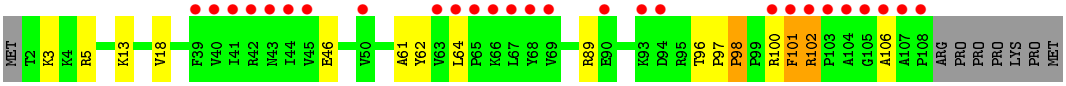
• Molecule 5: 40S ribosomal protein S26

Chain a4:



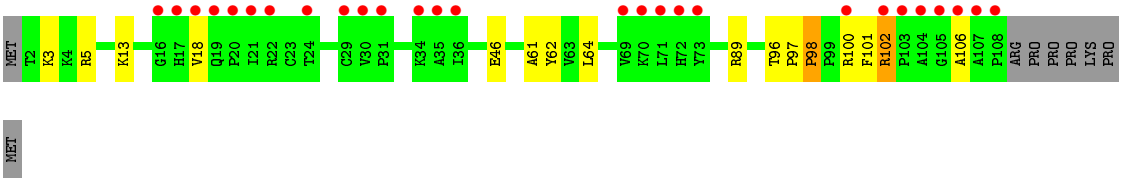
• Molecule 5: 40S ribosomal protein S26

Chain a5:



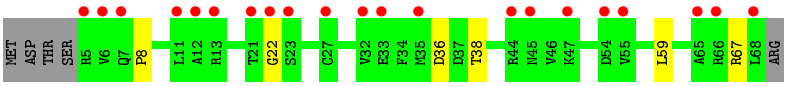
• Molecule 5: 40S ribosomal protein S26

Chain a6:



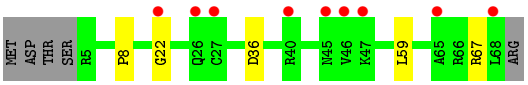
• Molecule 6: 40S ribosomal protein S28

Chain c1:



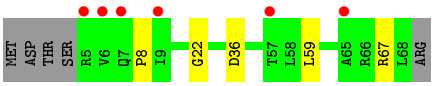
• Molecule 6: 40S ribosomal protein S28

Chain c2:



• Molecule 6: 40S ribosomal protein S28

Chain c3:

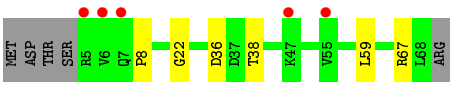


- Molecule 6: 40S ribosomal protein S28

Chain c4:

- Molecule 6: 40S ribosomal protein S28

Chain c5:

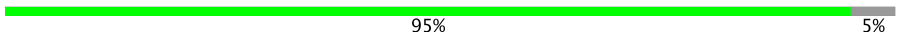


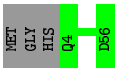
- Molecule 6: 40S ribosomal protein S28

Chain c6:

- Molecule 7: 40S ribosomal protein S29

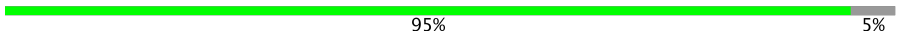
Chain d1:

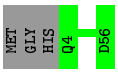




- Molecule 7: 40S ribosomal protein S29

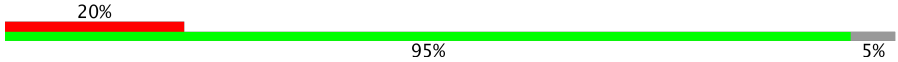
Chain d2:

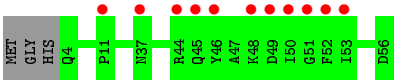




- Molecule 7: 40S ribosomal protein S29

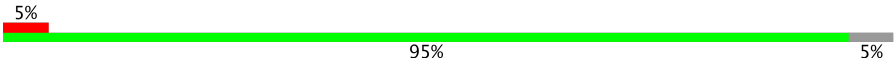
Chain d3:

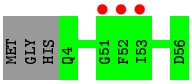




- Molecule 7: 40S ribosomal protein S29

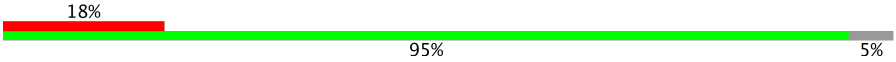
Chain d4:

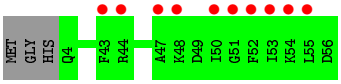




- Molecule 7: 40S ribosomal protein S29

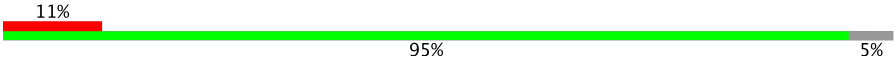
Chain d5:

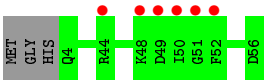




- Molecule 7: 40S ribosomal protein S29

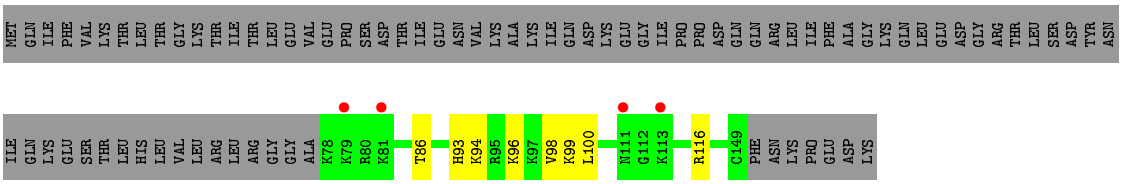
Chain d6:





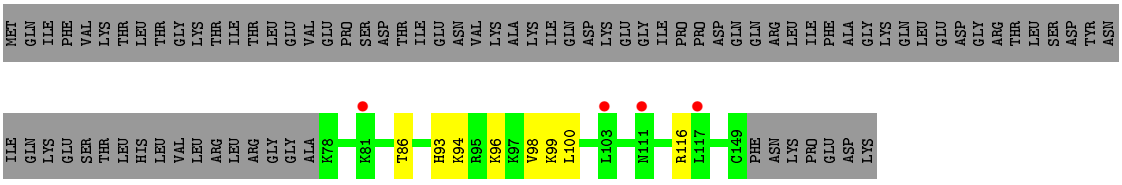
- Molecule 8: Ribosomal protein S27a

Chain f1:



- Molecule 8: Ribosomal protein S27a

Chain f2:



- Molecule 8: Ribosomal protein S27a

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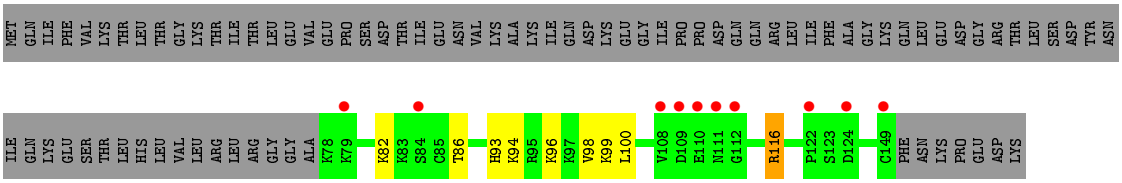
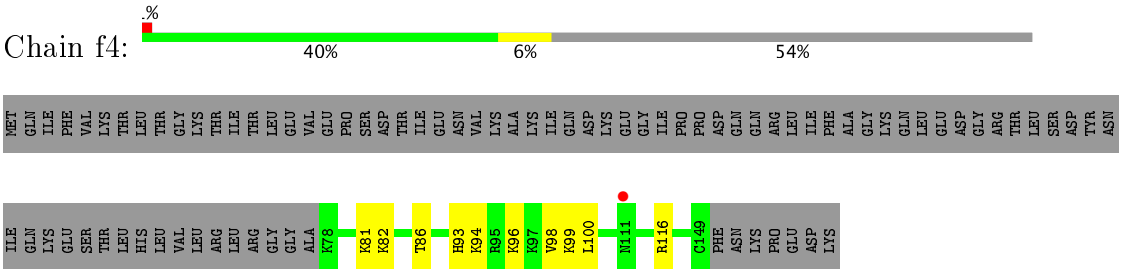


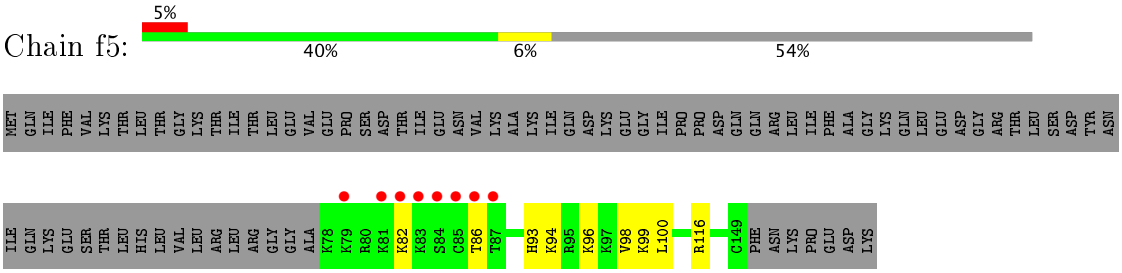
- Molecule 8: Ribosomal protein S27a

Chain f4:



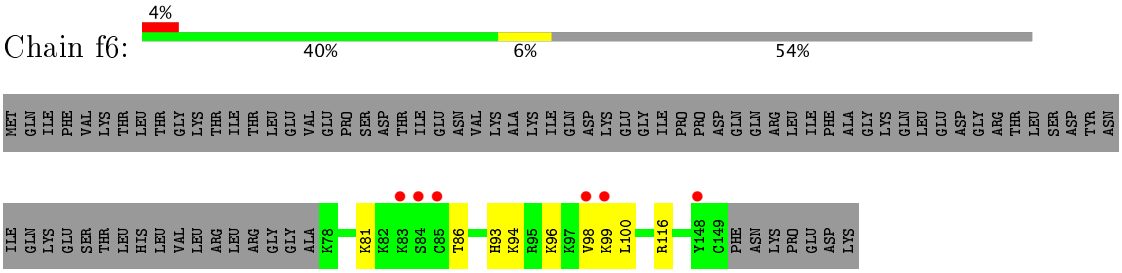
- Molecule 8: Ribosomal protein S27a

Chain f5:



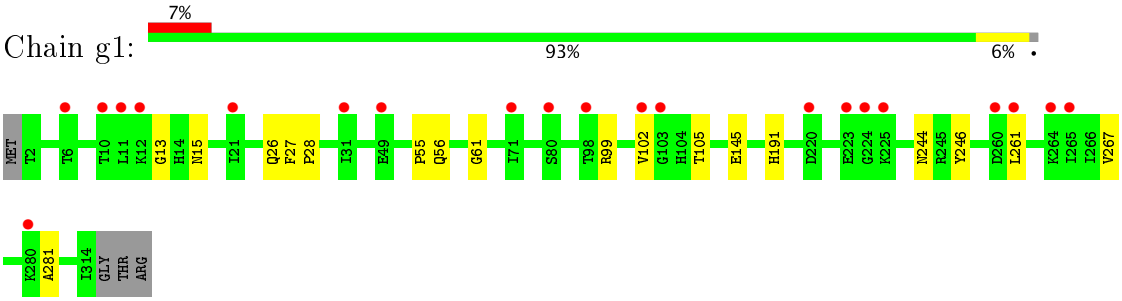
- Molecule 8: Ribosomal protein S27a

Chain f6:



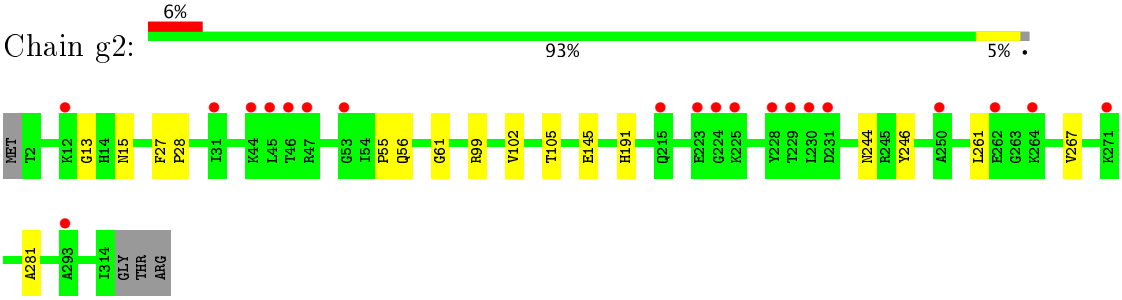
- Molecule 9: Receptor of activated protein C kinase 1

Chain g1:



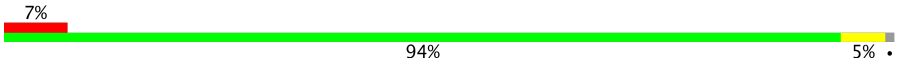
- Molecule 9: Receptor of activated protein C kinase 1

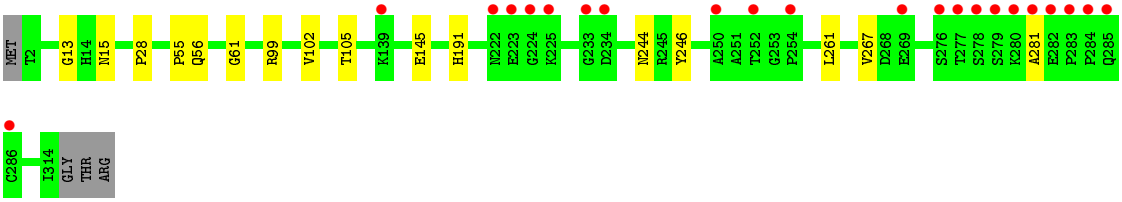
Chain g2:



- Molecule 9: Receptor of activated protein C kinase 1

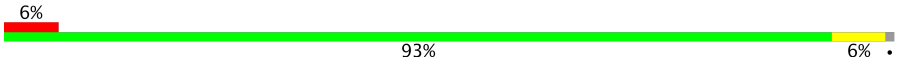
Chain g3:

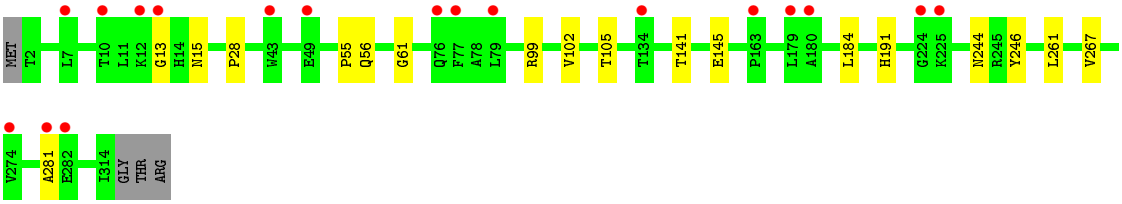




- Molecule 9: Receptor of activated protein C kinase 1

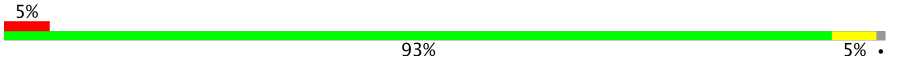
Chain g4:

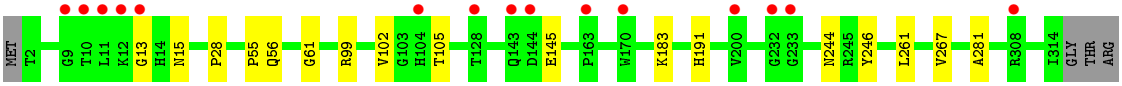




- Molecule 9: Receptor of activated protein C kinase 1

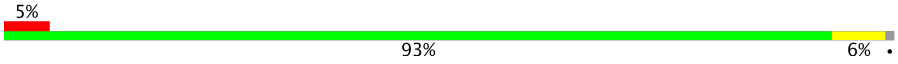
Chain g5:

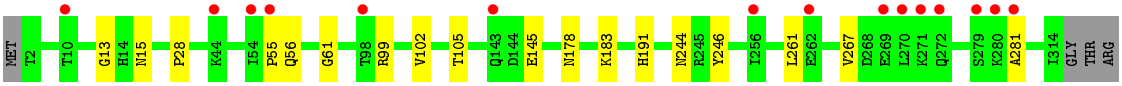




- Molecule 9: Receptor of activated protein C kinase 1

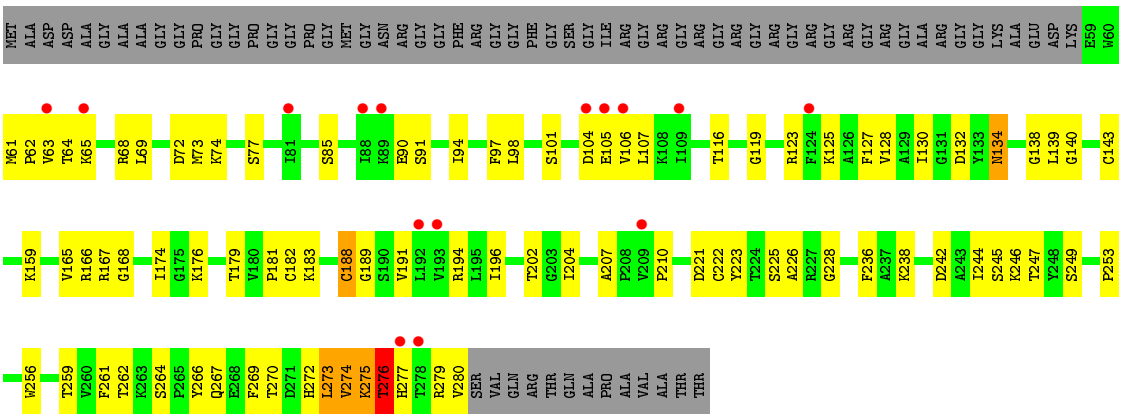
Chain g6:





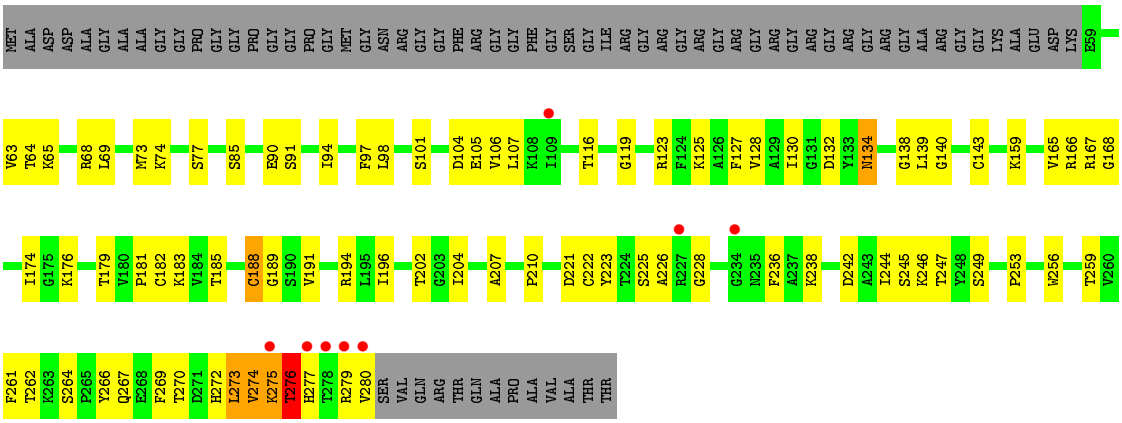
- Molecule 10: 40S ribosomal protein S2

Chain C1:



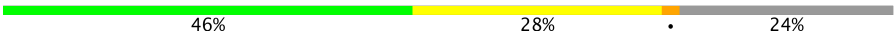
- Molecule 10: 40S ribosomal protein S2

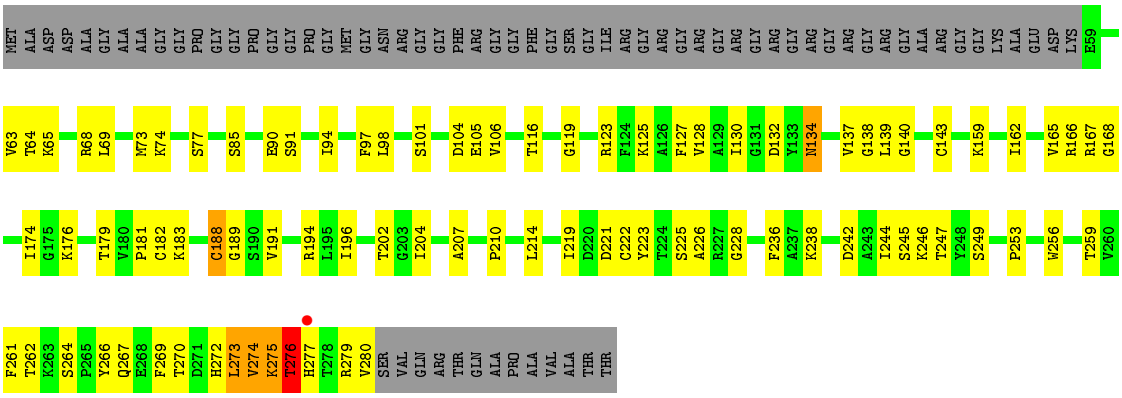
Chain C2:



- Molecule 10: 40S ribosomal protein S2

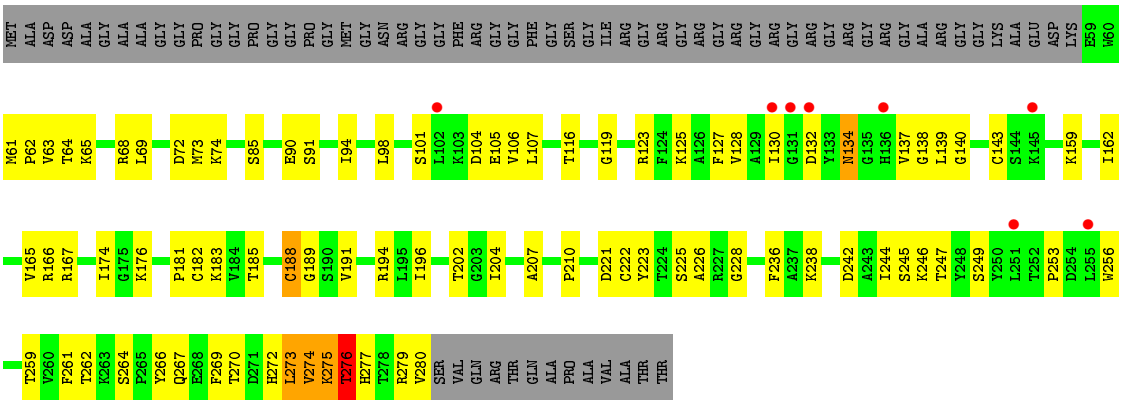
Chain C3:





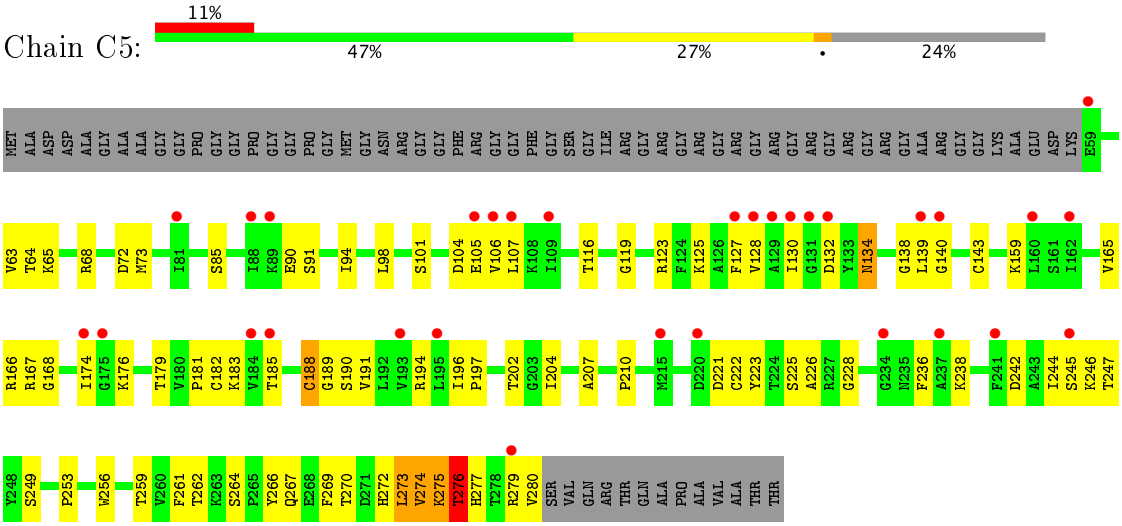
- Molecule 10: 40S ribosomal protein S2

Chain C4:



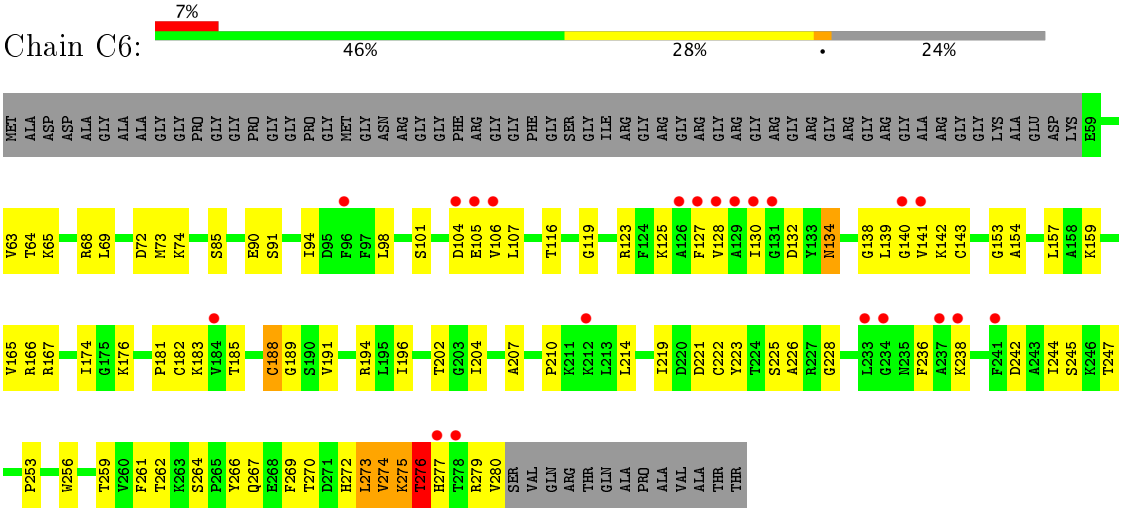
- Molecule 10: 40S ribosomal protein S2

Chain C5:



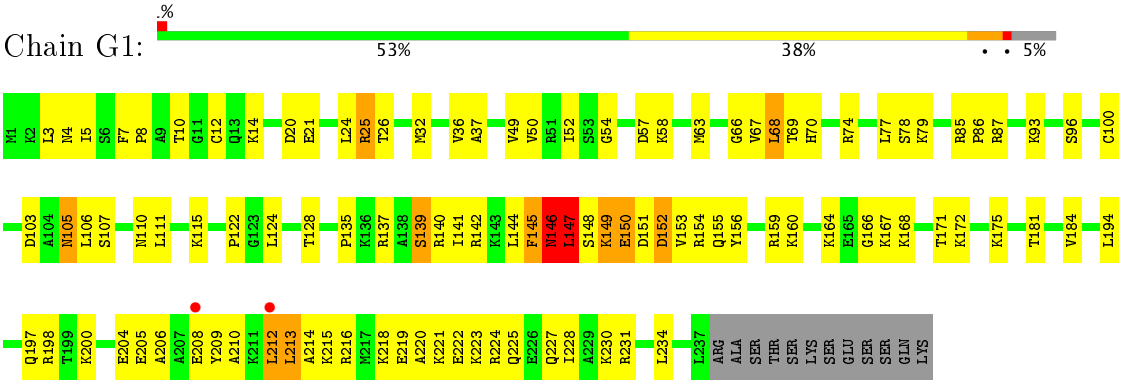
- Molecule 10: 40S ribosomal protein S2

Chain C6:



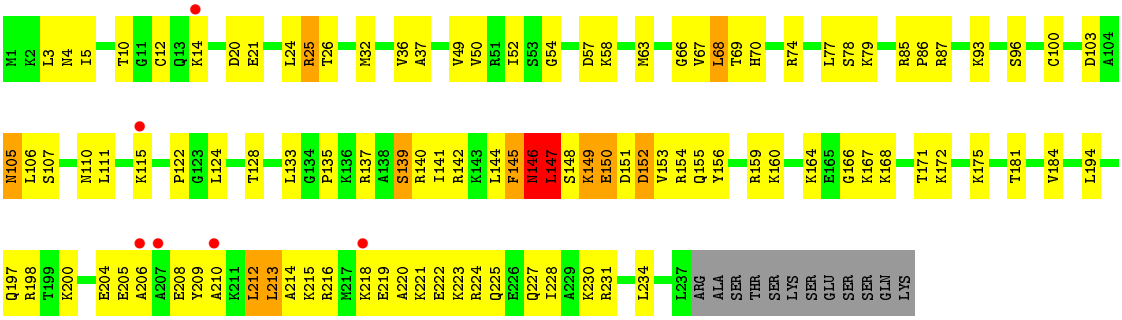
- Molecule 11: 40S ribosomal protein S6

Chain G1:



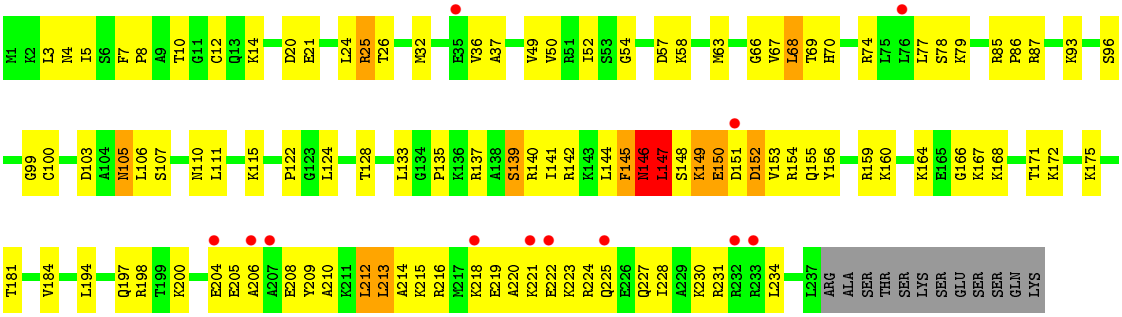
- Molecule 11: 40S ribosomal protein S6

Chain G2:



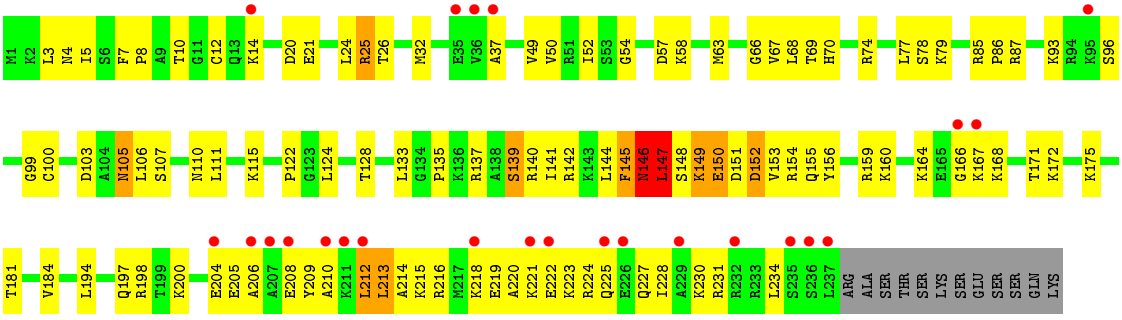
- Molecule 11: 40S ribosomal protein S6

Chain G3:



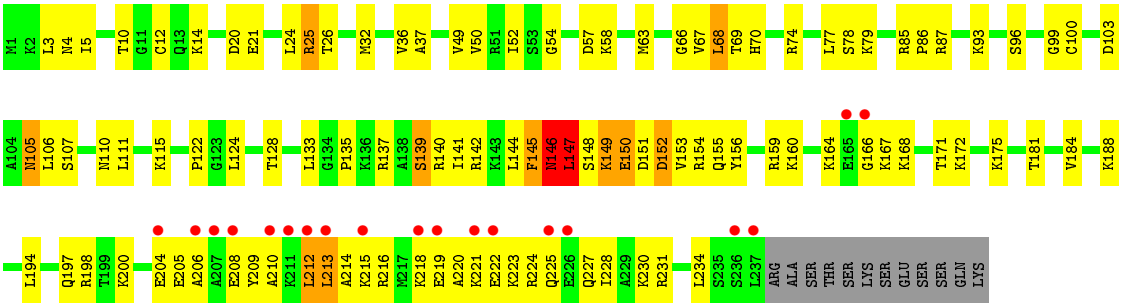
- Molecule 11: 40S ribosomal protein S6

Chain G4:



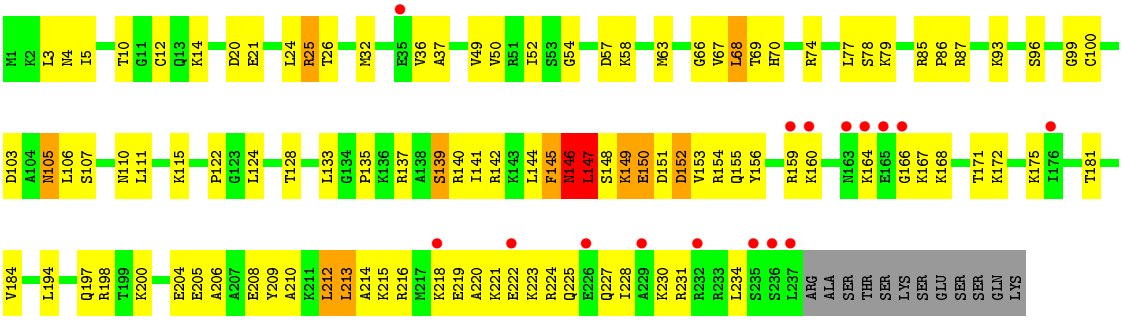
- Molecule 11: 40S ribosomal protein S6

Chain G5:



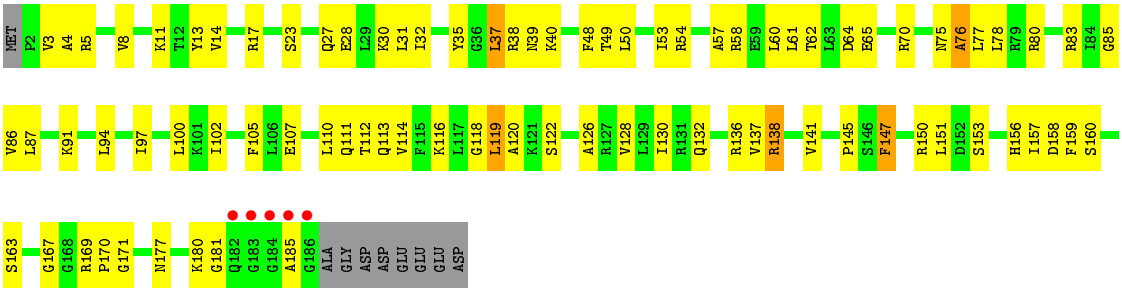
- Molecule 11: 40S ribosomal protein S6

Chain G6:



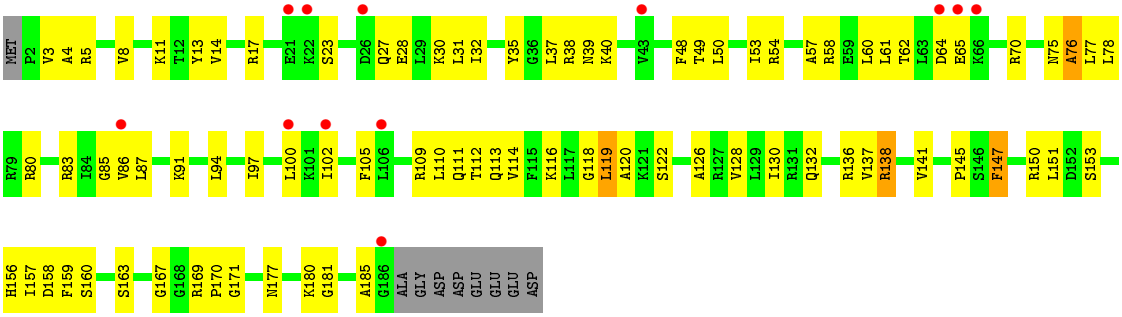
- Molecule 12: 40S ribosomal protein S9

Chain J1:



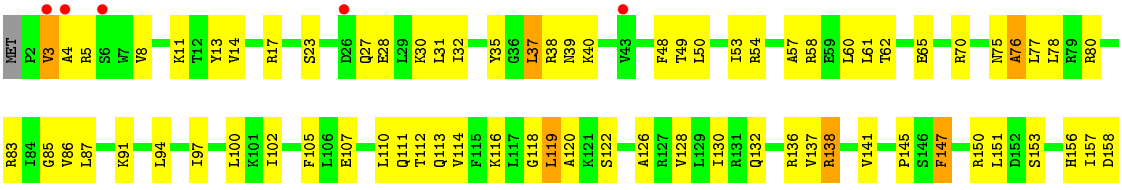
- Molecule 12: 40S ribosomal protein S9

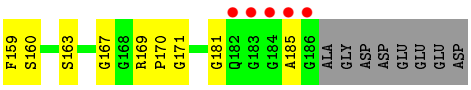
Chain J2:



- Molecule 12: 40S ribosomal protein S9

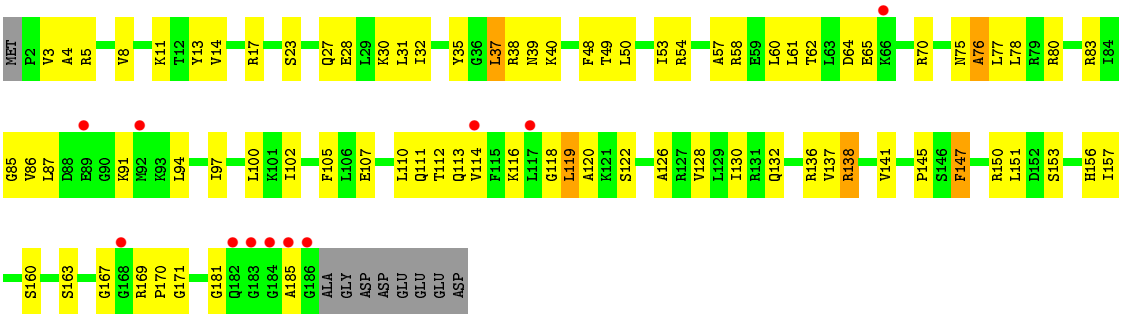
Chain J3:





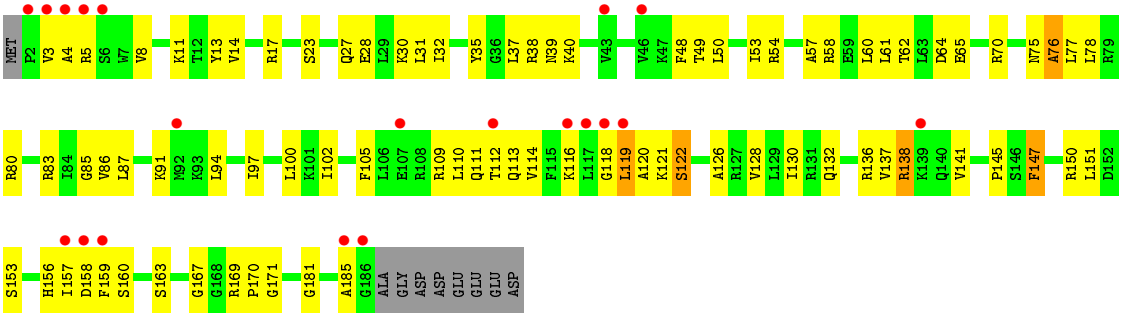
• Molecule 12: 40S ribosomal protein S9

Chain J4:



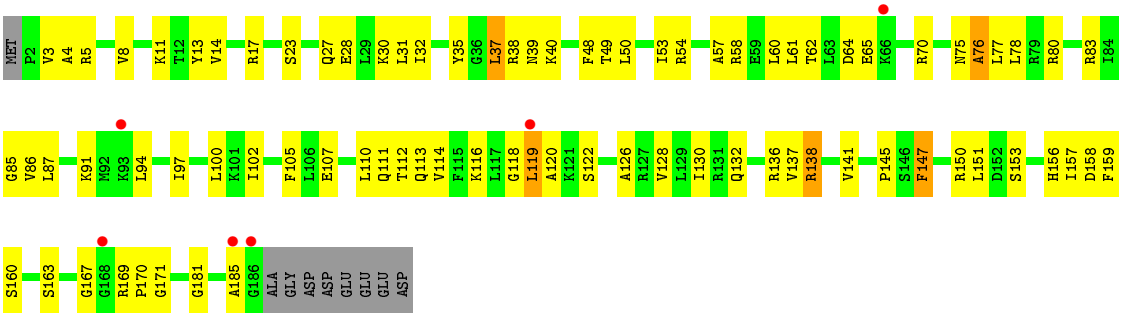
• Molecule 12: 40S ribosomal protein S9

Chain J5:



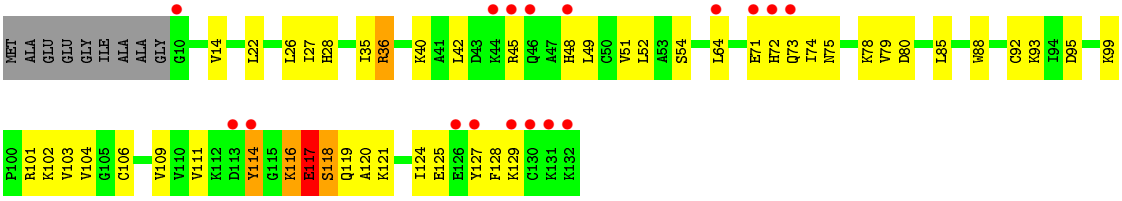
• Molecule 12: 40S ribosomal protein S9

Chain J6:



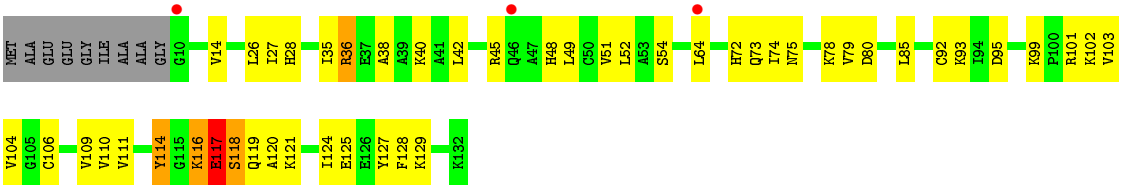
• Molecule 13: 40S ribosomal protein S12

Chain M1:



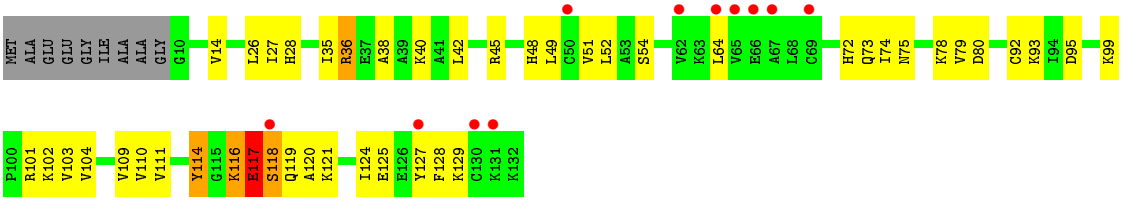
• Molecule 13: 40S ribosomal protein S12

Chain M2:



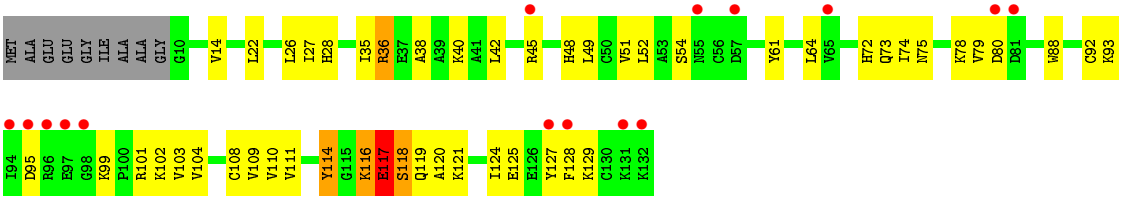
• Molecule 13: 40S ribosomal protein S12

Chain M3:



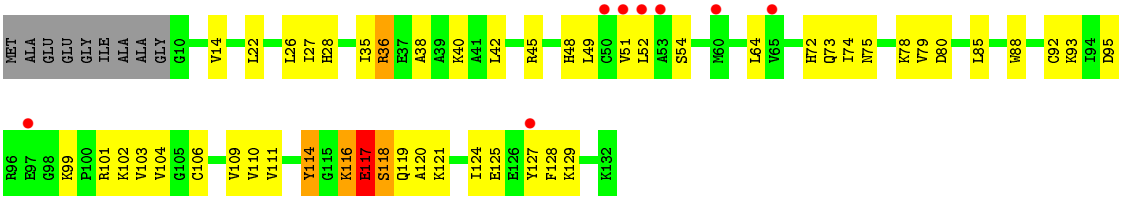
• Molecule 13: 40S ribosomal protein S12

Chain M4:



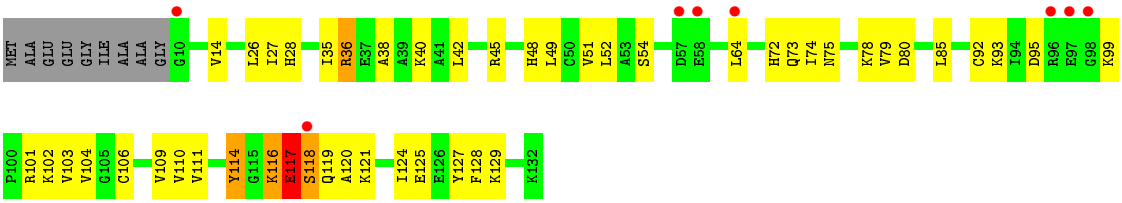
• Molecule 13: 40S ribosomal protein S12

Chain M5:



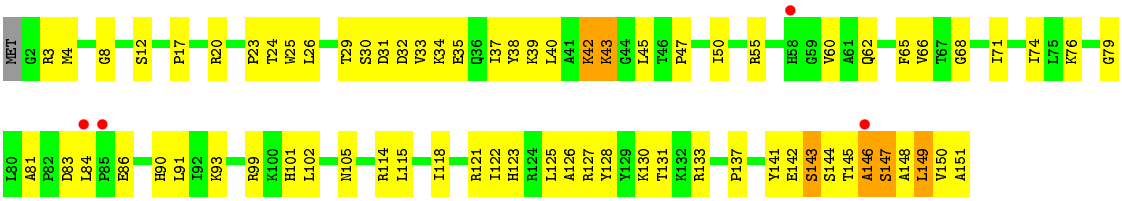
• Molecule 13: 40S ribosomal protein S12

Chain M6:



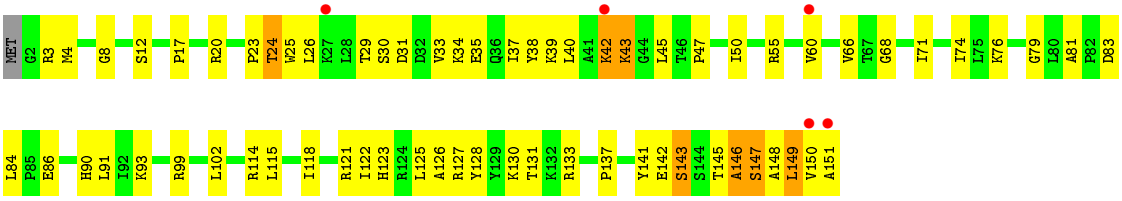
- Molecule 14: 40S ribosomal protein S13

Chain N1:



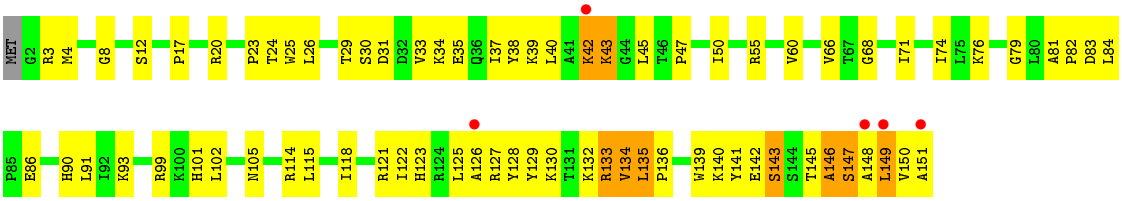
- Molecule 14: 40S ribosomal protein S13

Chain N2:



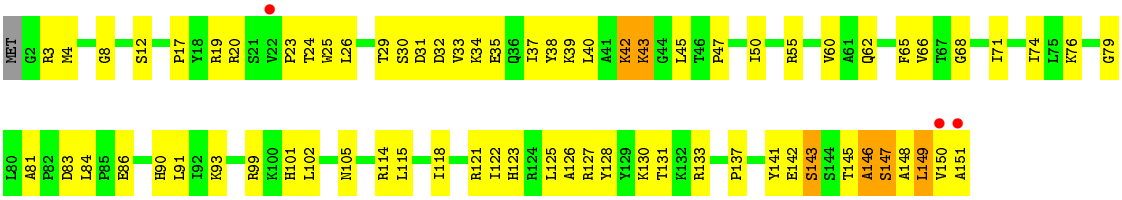
- Molecule 14: 40S ribosomal protein S13

Chain N3:



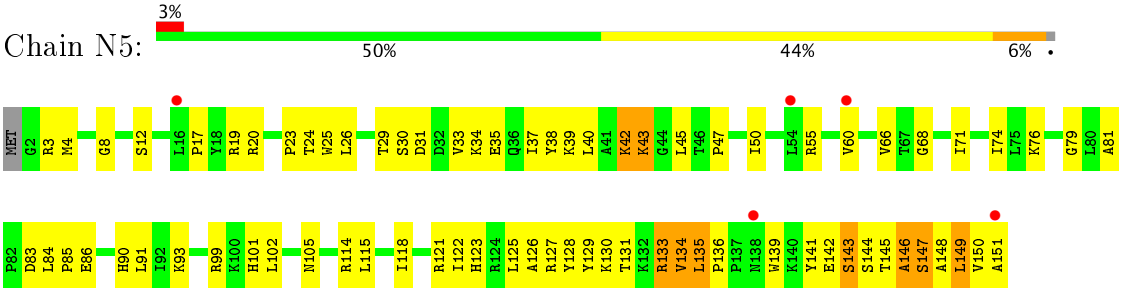
- Molecule 14: 40S ribosomal protein S13

Chain N4:



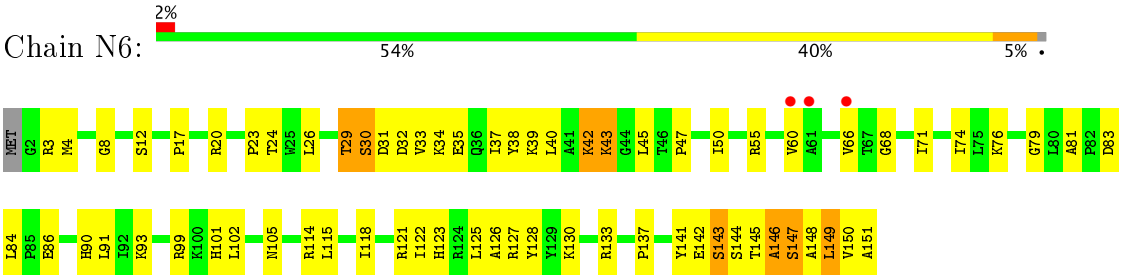
- Molecule 14: 40S ribosomal protein S13

Chain N5:



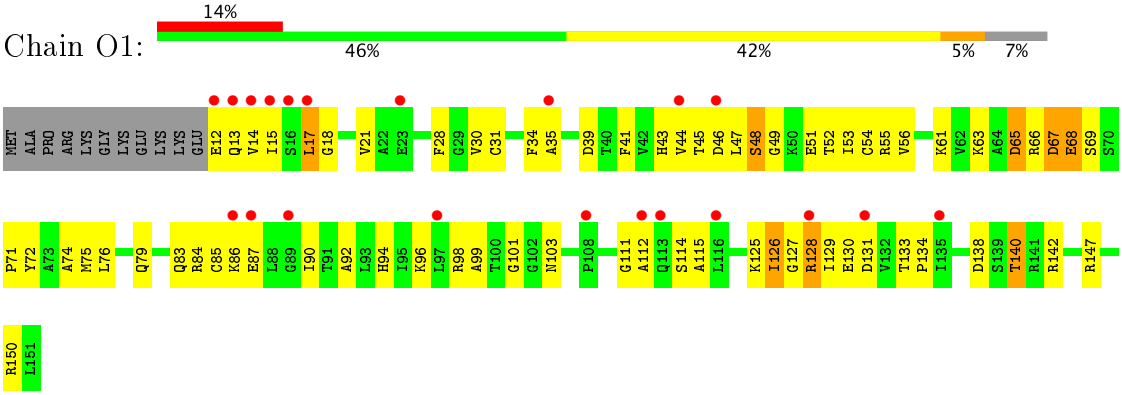
- Molecule 14: 40S ribosomal protein S13

Chain N6:



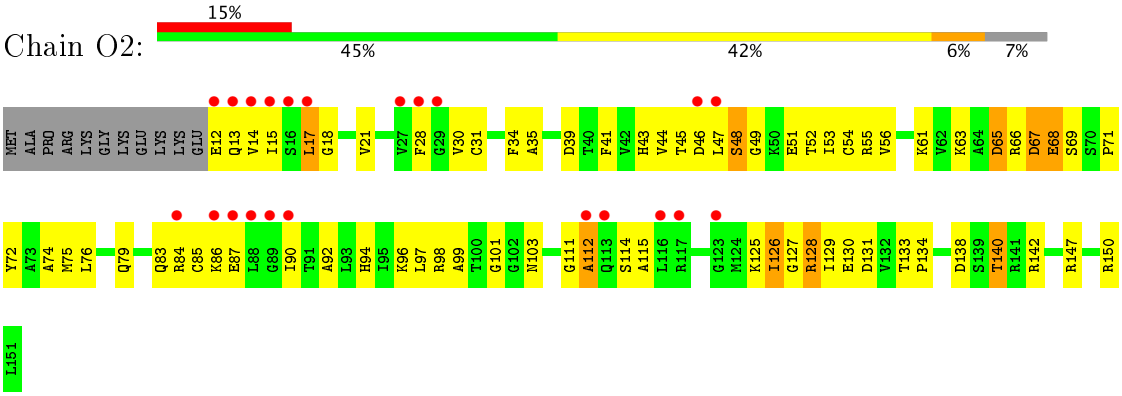
- Molecule 15: 40S ribosomal protein S14

Chain O1:



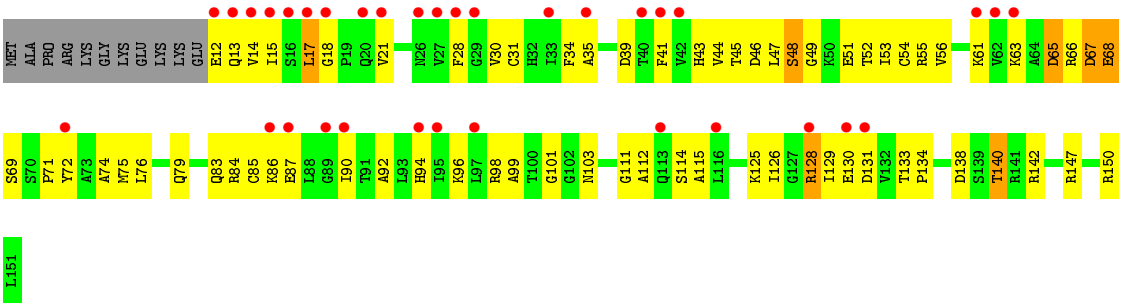
- Molecule 15: 40S ribosomal protein S14

Chain O2:



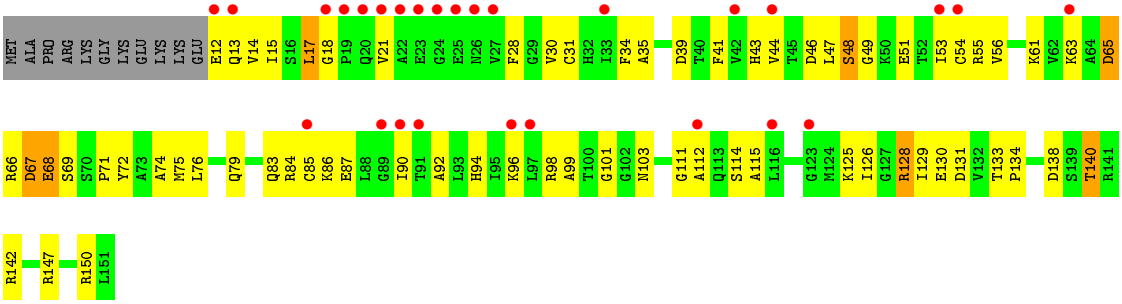
- Molecule 15: 40S ribosomal protein S14

Chain O3:



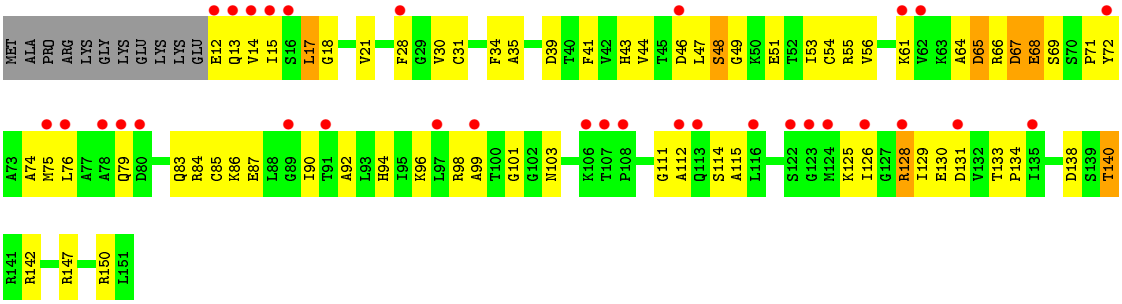
- Molecule 15: 40S ribosomal protein S14

Chain O4:



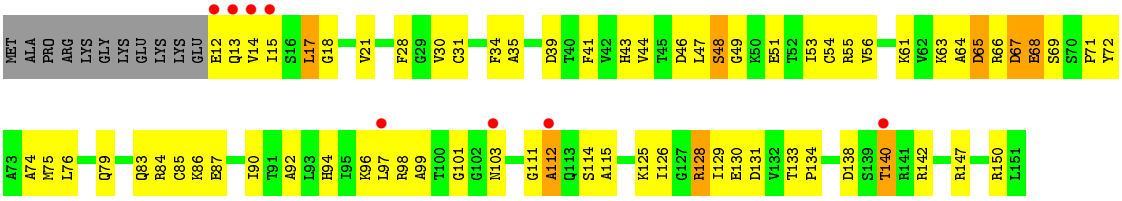
- Molecule 15: 40S ribosomal protein S14

Chain O5:



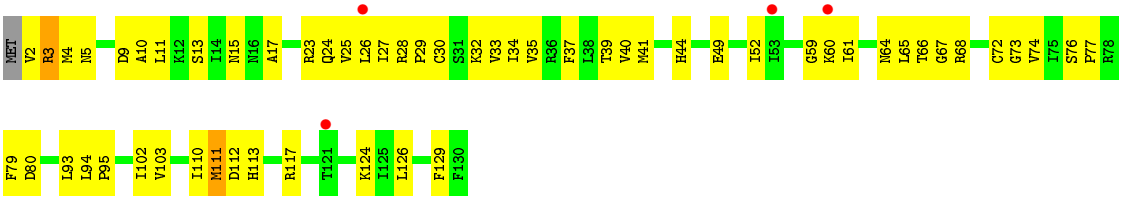
- Molecule 15: 40S ribosomal protein S14

Chain O6:



- Molecule 16: 40S ribosomal protein S15a

Chain W1:

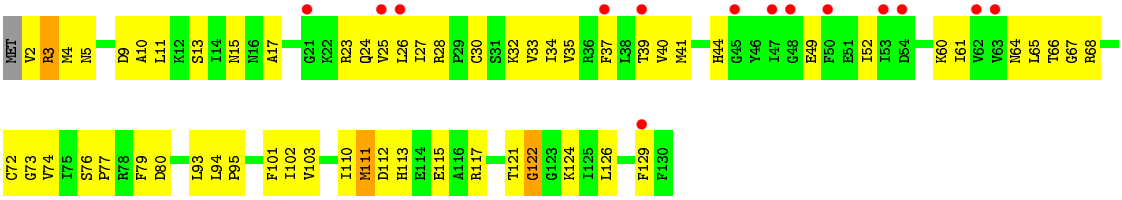


• Molecule 16: 40S ribosomal protein S15a

Chain W2:

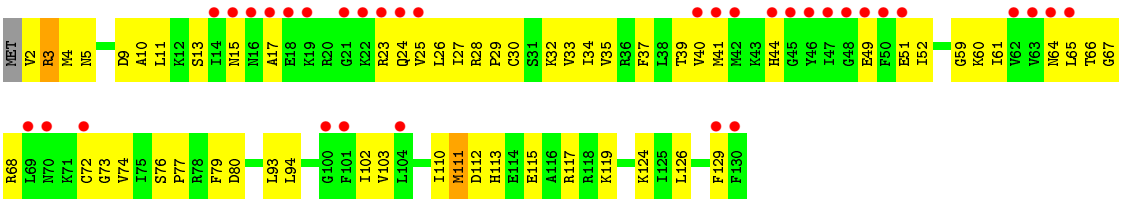
• Molecule 16: 40S ribosomal protein S15a

Chain W3:



• Molecule 16: 40S ribosomal protein S15a

Chain W4:



• Molecule 16: 40S ribosomal protein S15a

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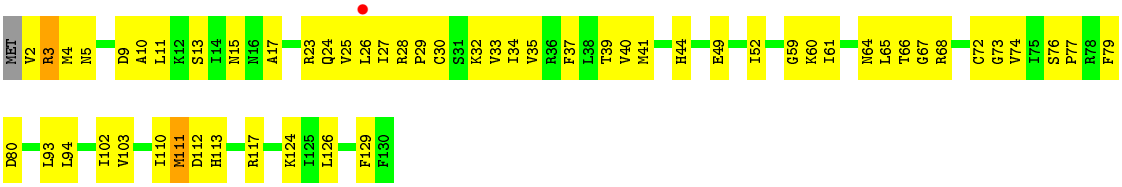
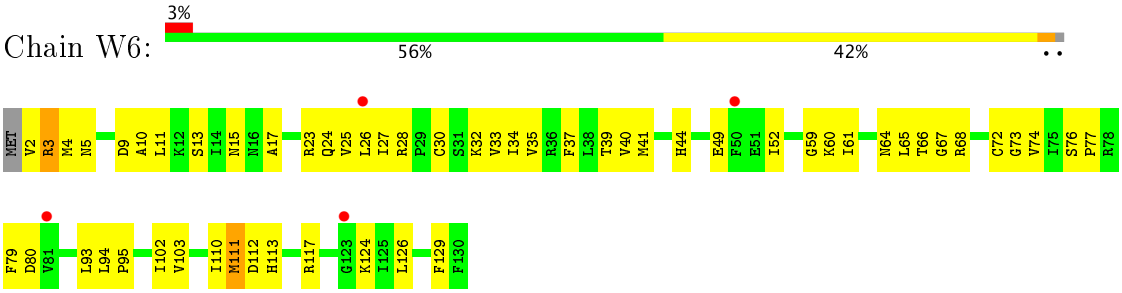


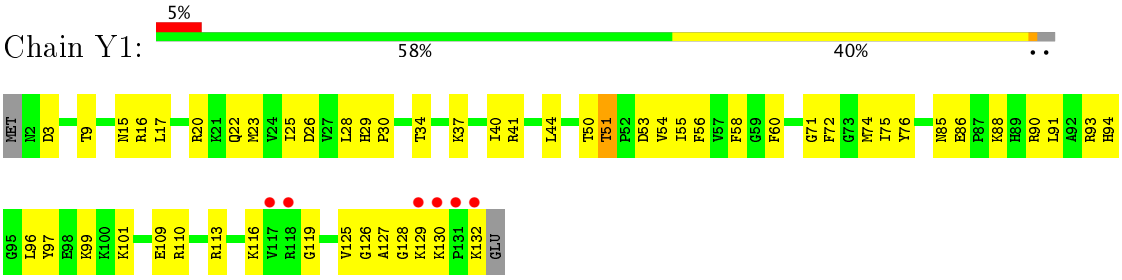
• Molecule 16: 40S ribosomal protein S15a

Chain W6:



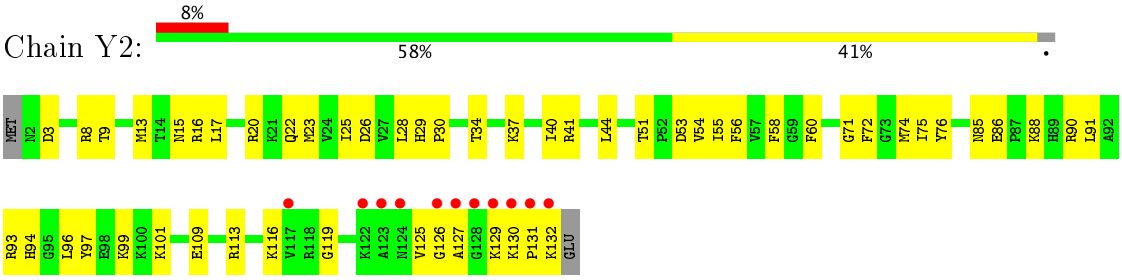
- Molecule 17: 40S ribosomal protein S24

Chain Y1:



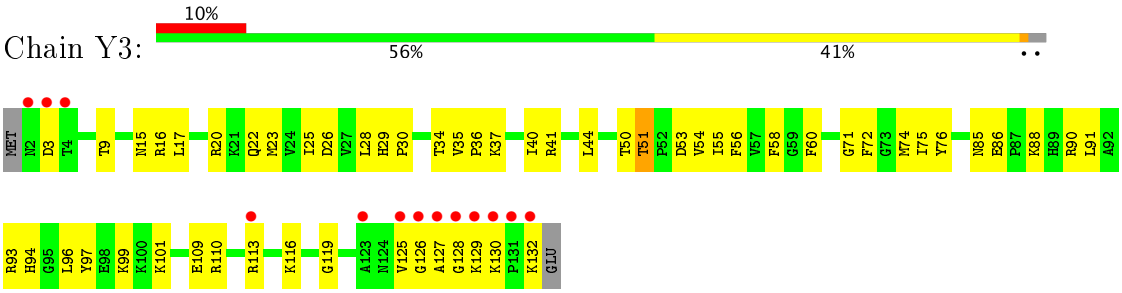
- Molecule 17: 40S ribosomal protein S24

Chain Y2:



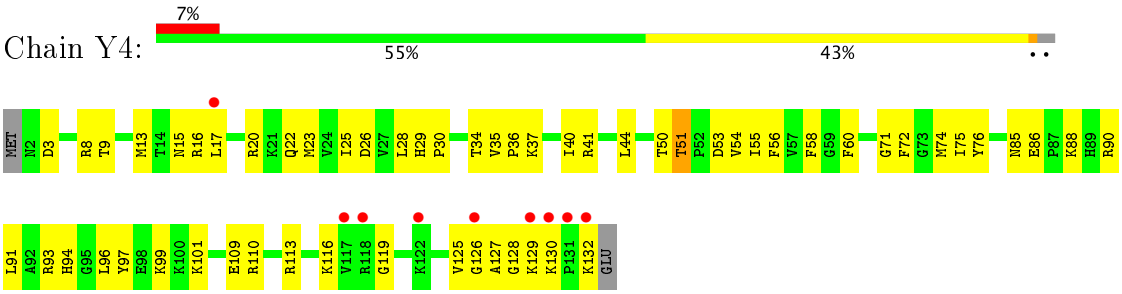
- Molecule 17: 40S ribosomal protein S24

Chain Y3:



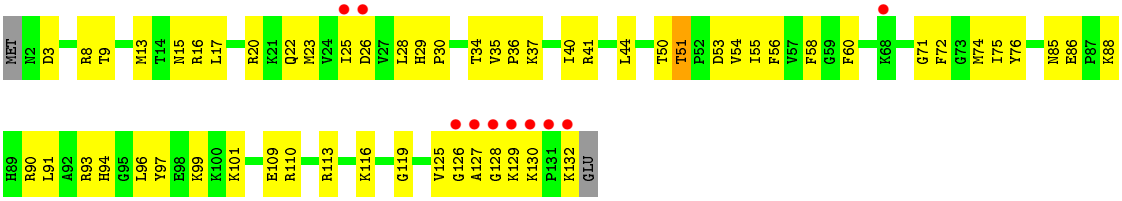
- Molecule 17: 40S ribosomal protein S24

Chain Y4:



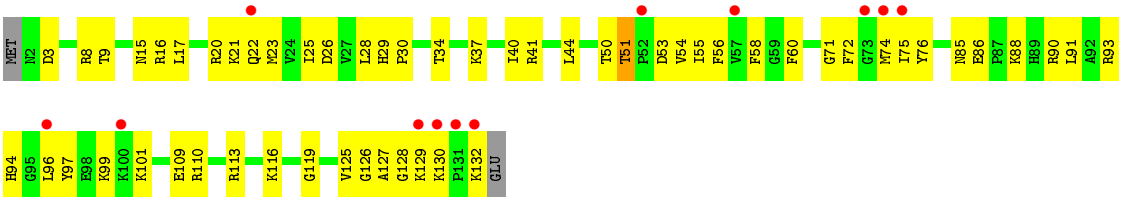
- Molecule 17: 40S ribosomal protein S24

Chain Y5:



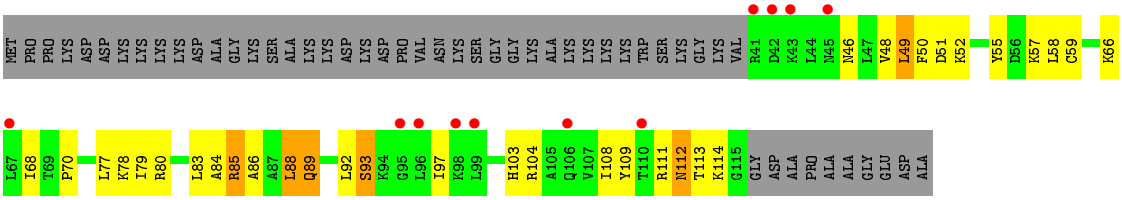
- Molecule 17: 40S ribosomal protein S24

Chain Y6:



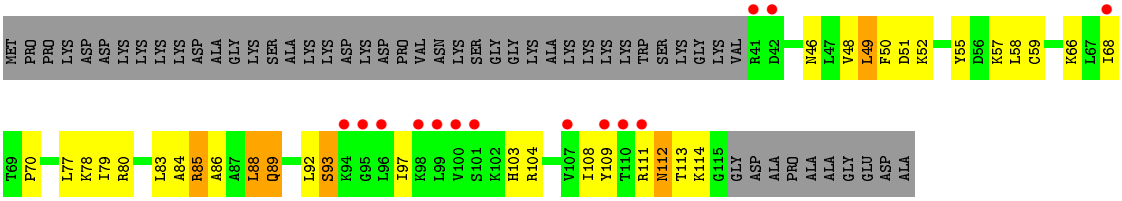
- Molecule 18: 40S ribosomal protein S25

Chain Z1:



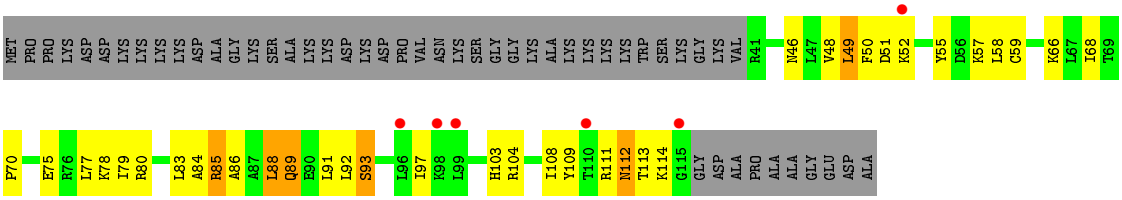
- Molecule 18: 40S ribosomal protein S25

Chain Z2:



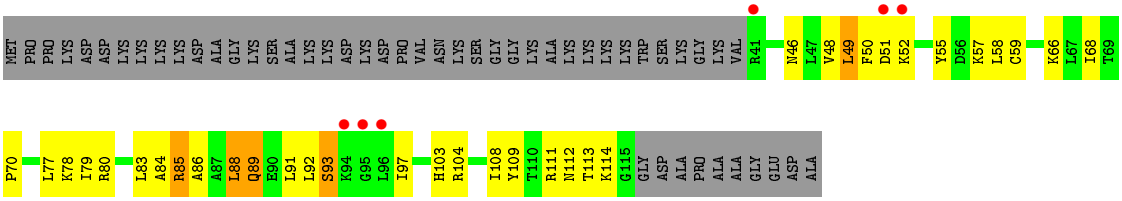
- Molecule 18: 40S ribosomal protein S25

Chain Z3:



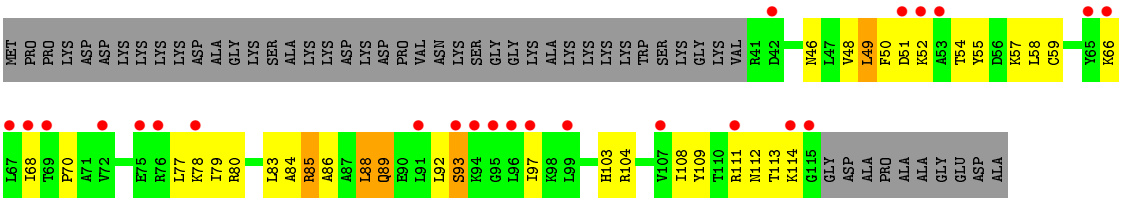
- Molecule 18: 40S ribosomal protein S25

Chain Z4:



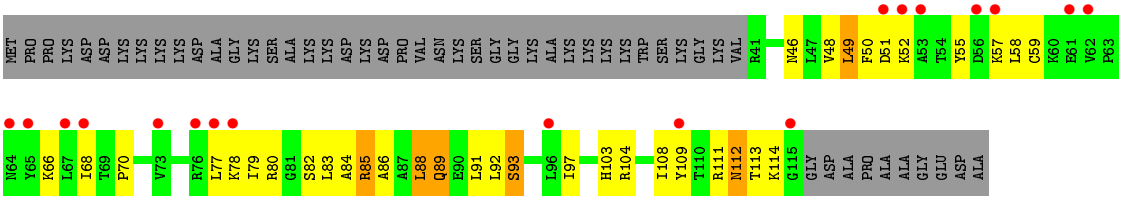
- Molecule 18: 40S ribosomal protein S25

Chain Z5:



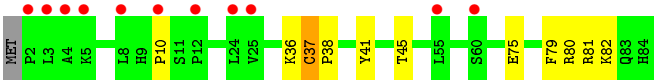
- Molecule 18: 40S ribosomal protein S25

Chain Z6:



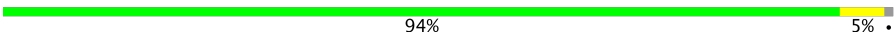
- Molecule 19: 40S ribosomal protein S27

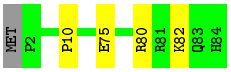
Chain b1:



- Molecule 19: 40S ribosomal protein S27

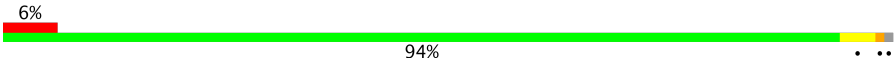
Chain b2:

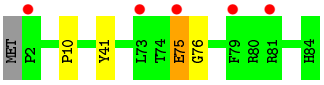




- Molecule 19: 40S ribosomal protein S27

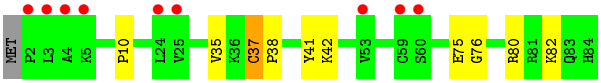
Chain b3:





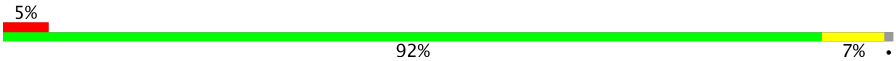
- Molecule 19: 40S ribosomal protein S27

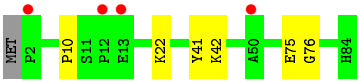
Chain b4:



- Molecule 19: 40S ribosomal protein S27

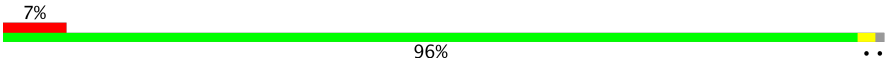
Chain b5:

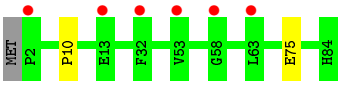




- Molecule 19: 40S ribosomal protein S27

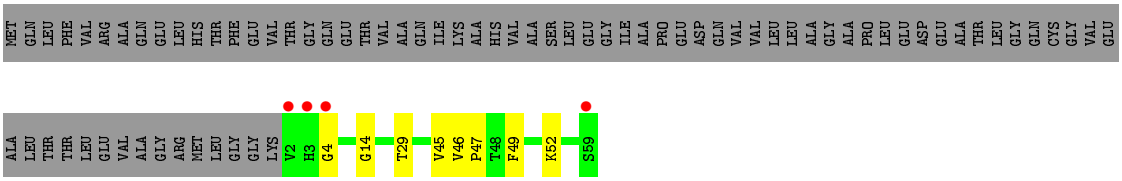
Chain b6:





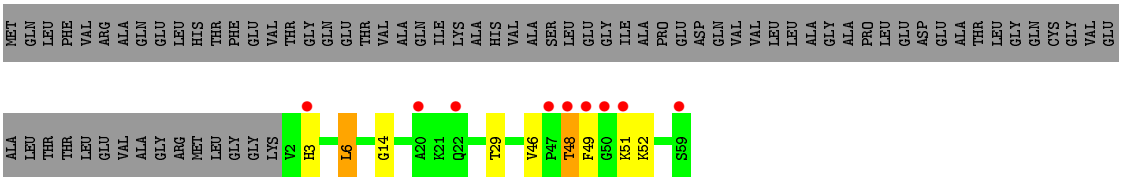
- Molecule 20: 40S ribosomal protein S30

Chain e1:



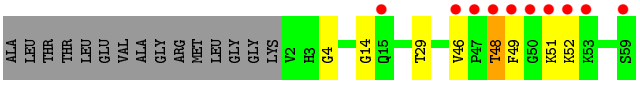
- Molecule 20: 40S ribosomal protein S30

Chain e2:



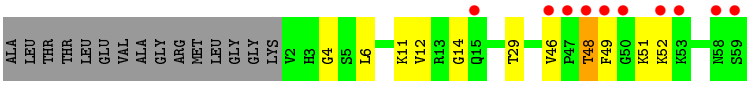
- Molecule 20: 40S ribosomal protein S30

Chain e3:



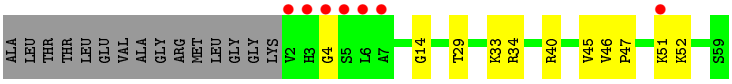
• Molecule 20: 40S ribosomal protein S30

Chain e4:



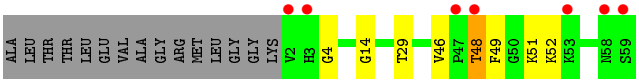
• Molecule 20: 40S ribosomal protein S30

Chain e5:



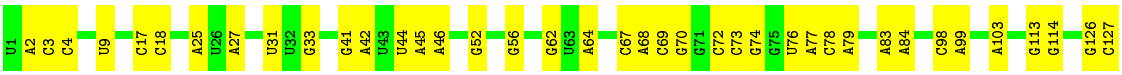
• Molecule 20: 40S ribosomal protein S30

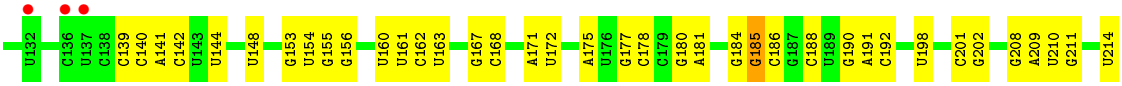
Chain e6:

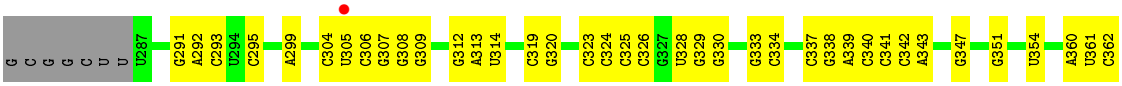


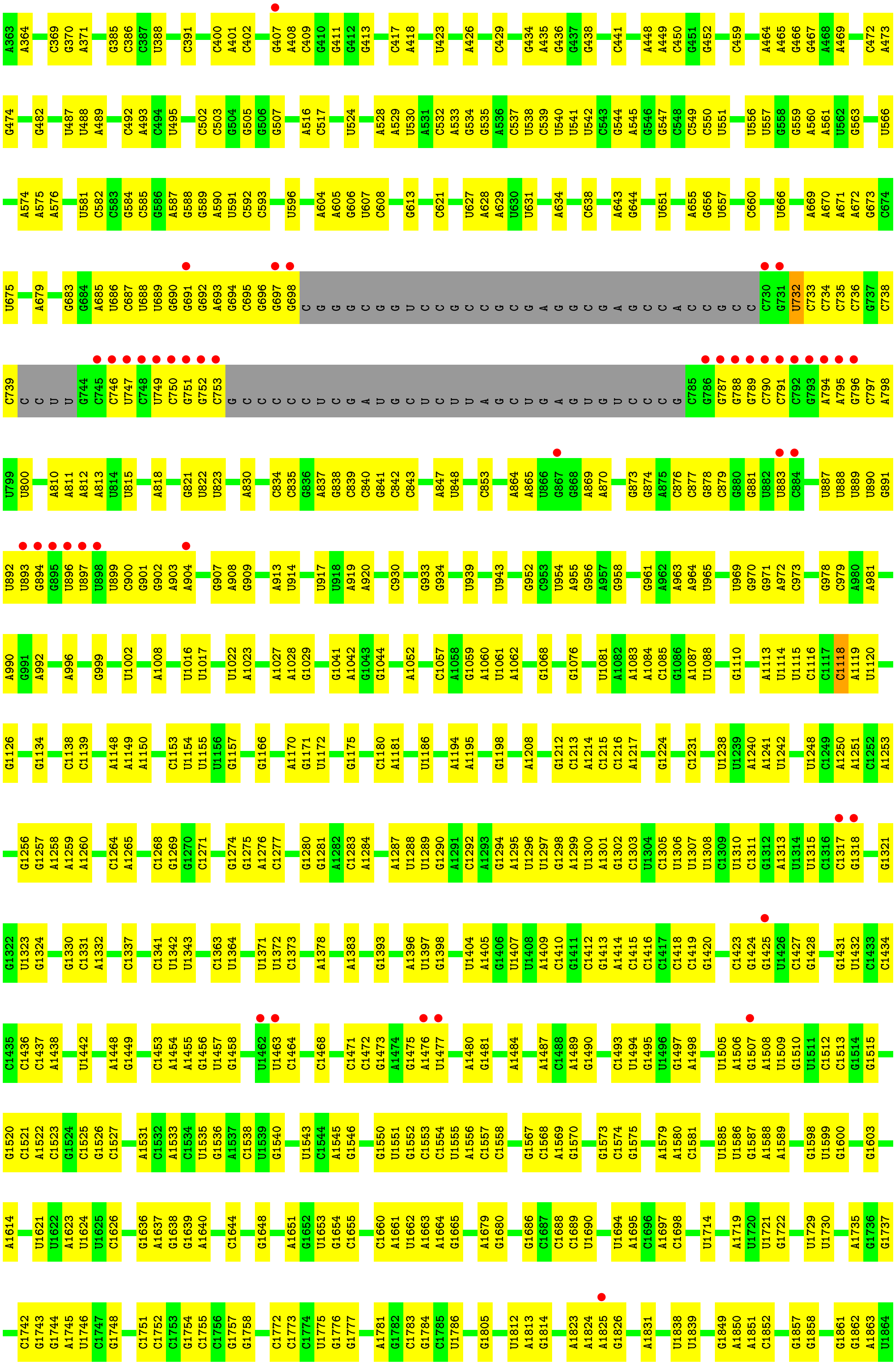
• Molecule 21: Human 18S ribosomal RNA

Chain i1:





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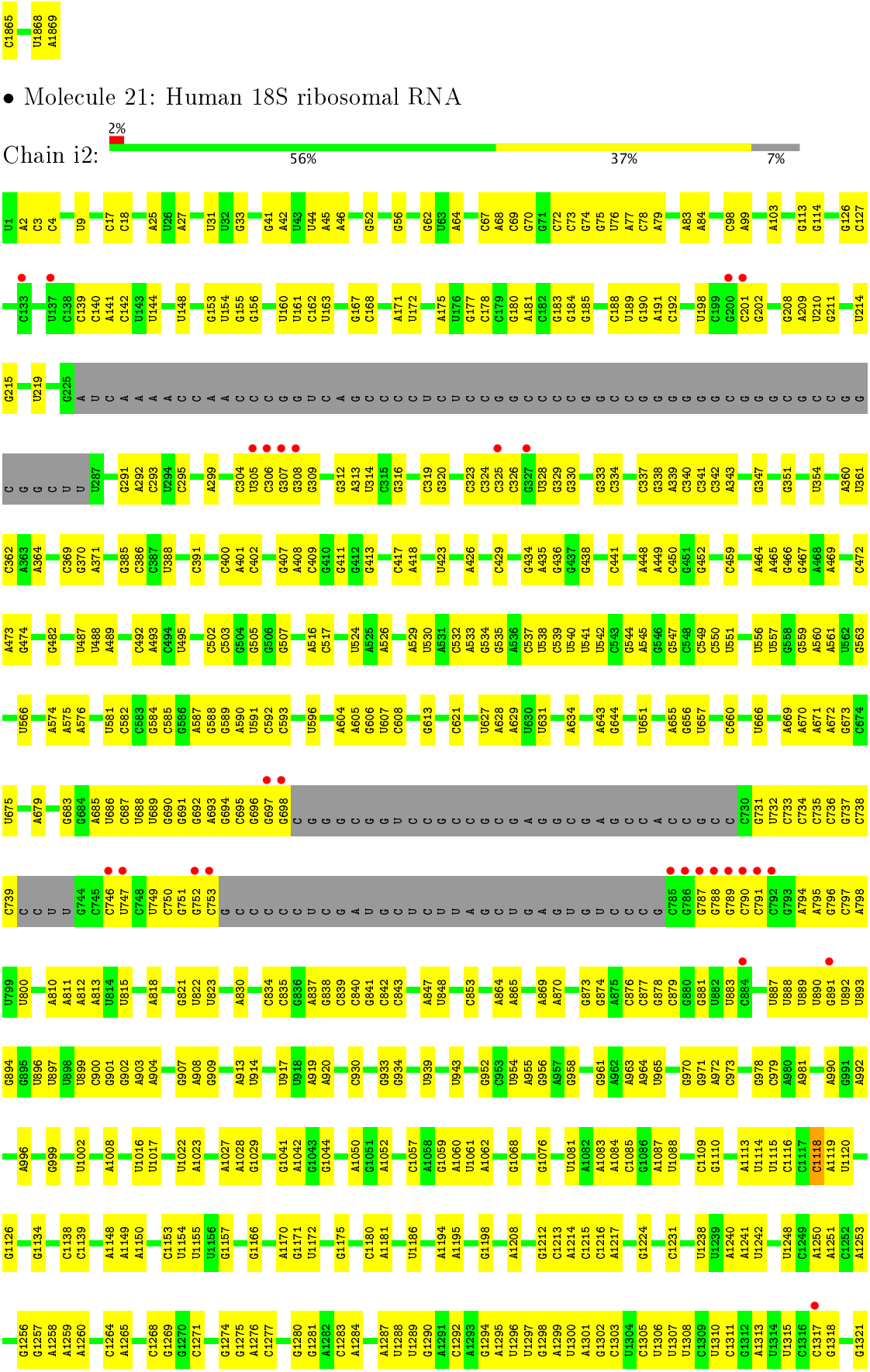
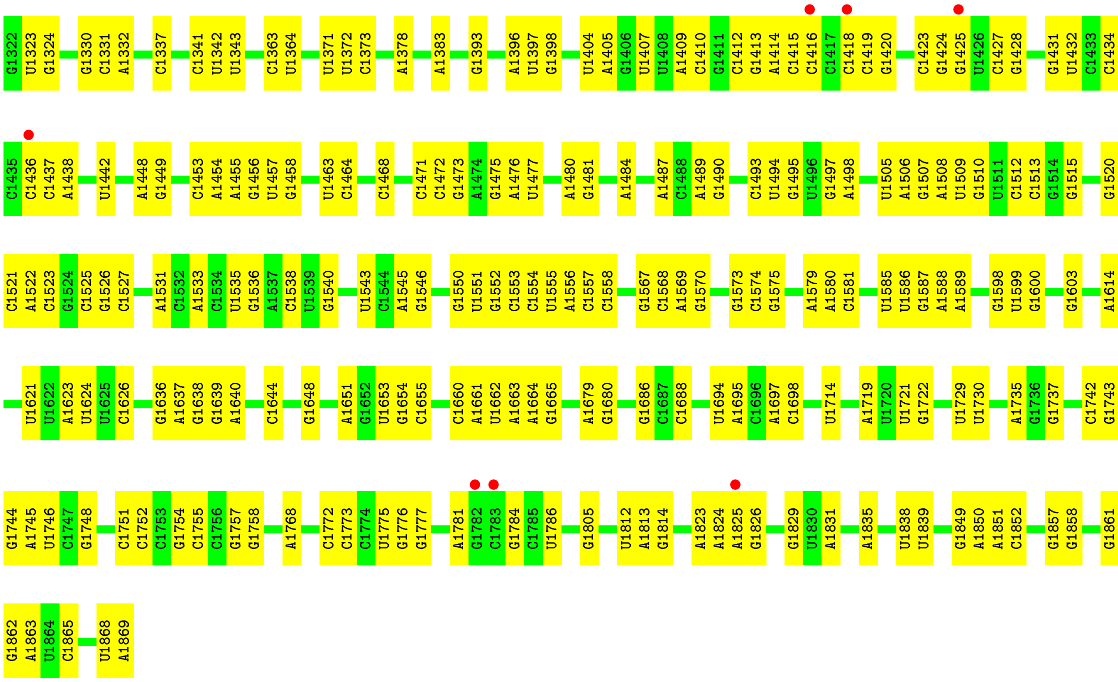
G474 G482 U487 U488 A489 C492 A493 C494 U495 C502 C503 G504 G505 G506 G507 A516 C517 U524 A528 A529 U530 A531 C532 A533 G534 G535 A536 C537 U538 C539 U540 U541 U542 C543 G544 A545 G546 G547 C548 C549 C550 U551 U556 U557 G558 G559 A560 A561 U562 G563 U566
A574 A575 A576 U581 C582 C583 G584 C585 G586 A587 G588 G589 A590 U591 C592 C593 U596 A604 A605 G606 U607 C608 G613 C621 U627 A628 A629 U630 U631 A634 C638 A643 G644 U651 A655 G656 U657 C660 U666 A669 A670 A671 A672 G673 C674
U675 A679 G683 G684 A685 U686 C687 U688 U689 G690 G691 G692 A693 G694 C695 G696 G697 G698 C G G G C G G U C C G C C G C G A G G C G A G C C A C C C C C730 G731 U732 C733 C734 C735 C736 G737 C738
C739 C C U U G744 C745 C746 U747 C748 U749 C750 G751 G752 C753 G C C C C C U C G A U G C U C U U A G C U G A G U G U C C C G C785 G786 G787 G788 G789 C790 C791 C792 G793 A794 A795 G796 C797 A798
U799 U800 A810 A811 A812 A813 U814 U815 A818 G821 U822 U823 A830 C834 C835 G836 A837 G838 C839 C840 G841 C842 C843 A847 U848 C853 A864 A865 U866 G867 G868 A869 A870 G873 G874 A875 C876 C877 G878 C879 G880 G881 U882 U883 C884 U887 U888 U889 U890 G891
U892 U893 G894 G895 U896 U897 U898 U899 C900 G901 G902 A903 A904 G907 A908 G909 A913 U914 U917 U918 A919 A920 C930 G933 G934 U939 U943 G952 C953 U954 A955 G956 A957 G958 G961 A962 A963 A964 U965 U969 G970 G971 A972 C973 G978 C979 A980 A981
A990 G991 A992 A996 G999 U1002 A1008 U1016 U1017 U1022 A1023 A1027 A1028 G1029 G1041 A1042 G1043 G1044 A1052 C1057 A1058 G1059 A1060 U1061 A1062 G1068 G1076 U1081 A1082 A1083 A1084 C1085 G1086 A1087 U1088 G1110 A1113 U1114 U1115 C1116 C1117 C1118 A1119 U1120
G1126 G1134 C1138 C1139 A1148 A1149 A1150 C1153 U1154 U1155 U1156 G1157 G1166 A1170 G1171 U1172 G1175 C1180 A1181 U1186 A1194 A1195 G1198 A1208 G1212 C1213 A1214 C1215 C1216 A1217 G1224 C1231 U1238 U1239 A1240 A1241 U1242 U1248 C1249 A1250 A1251 C1252 A1253
G1256 G1257 A1258 A1259 A1260 C1264 A1265 C1268 G1269 G1270 C1271 G1274 G1275 A1276 C1277 G1280 G1281 A1282 C1283 A1284 A1287 U1288 U1289 G1290 A1291 C1292 A1293 G1294 A1295 U1296 U1297 G1298 A1299 U1300 A1301 G1302 C1303 U1304 C1305 U1306 U1307 U1308 C1309 U1310 C1311 G1312 A1313 U1314 U1315 C1316 C1317 G1318 G1321
G1322 U1323 G1324 G1330 C1331 A1332 C1337 C1341 U1342 U1343 C1363 U1364 U1371 U1372 C1373 A1378 A1383 G1393 A1396 U1397 G1398 U1404 A1405 G1406 U1407 U1408 A1409 C1410 G1411 C1412 G1413 A1414 C1415 C1416 C1417 C1418 C1419 G1420 C1423 G1424 G1425 U1426 C1427 G1428 G1431 U1432 C1433 C1434
C1435 C1436 C1437 A1438 U1442 A1448 G1449 C1453 A1454 A1455 G1456 U1457 G1458 U1462 U1463 C1464 C1468 C1471 C1472 G1473 A1474 G1475 A1476 U1477 A1480 G1481 A1484 A1487 C1488 A1489 G1490 C1493 U1494 G1495 U1496 G1497 A1498 U1505 A1506 G1507 A1508 U1509 G1510 U1511 C1512 C1513 G1514 G1515
G1520 C1521 A1522 C1523 G1524 C1525 G1526 C1527 A1531 C1532 A1533 C1534 U1535 G1536 A1537 C1538 U1539 G1540 U1543 C1544 A1545 G1546 G1550 U1551 G1552 C1553 C1554 U1555 A1556 C1557 C1558 G1567 C1568 A1569 G1570 G1573 C1574 G1575 A1579 A1580 C1581 U1585 U1586 G1587 A1588 A1589 G1598 U1599 G1600 G1603
A1614 U1621 U1622 A1623 U1624 U1625 C1626 G1636 A1637 G1638 G1639 A1640 C1644 G1648 A1651 G1652 U1653 G1654 C1655 C1660 A1661 U1662 A1663 A1664 G1665 A1679 G1680 G1686 C1687 C1688 C1689 U1690 U1694 A1695 C1696 A1697 C1698 U1714 A1719 U1720 U1721 G1722 U1729 U1730 A1735 G1736 G1737
C1742 G1743 G1744 A1745 U1746 C1747 G1748 C1751 C1752 C1753 G1754 C1755 C1756 G1757 G1758 C1772 C1773 C1774 U1775 G1776 G1777 A1781 G1782 C1783 G1784 C1785 U1786 G1805 U1812 A1813 G1814 A1823 A1824 A1825 G1826 A1831 U1838 U1839 G1849 A1850 A1851 C1852 G1857 G1858 G1861 G1862 A1863 U1864

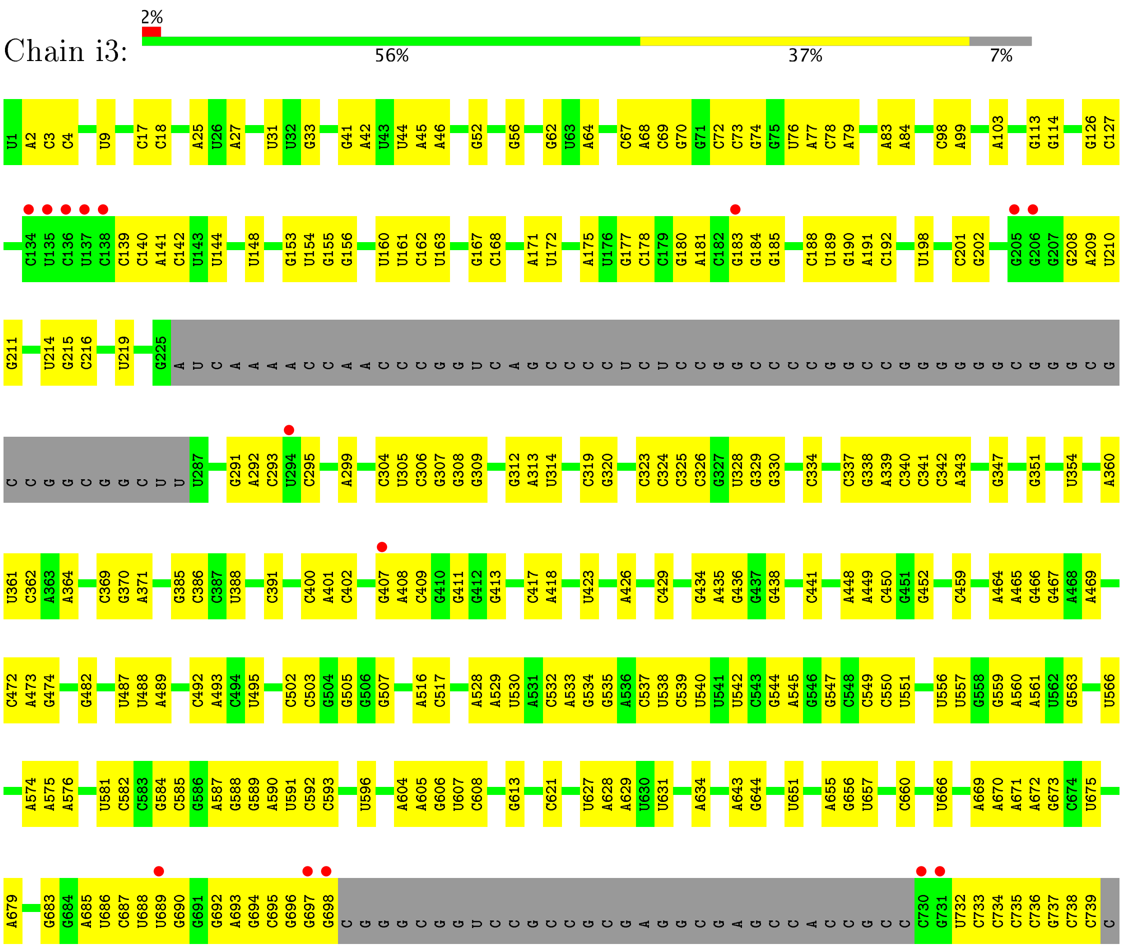


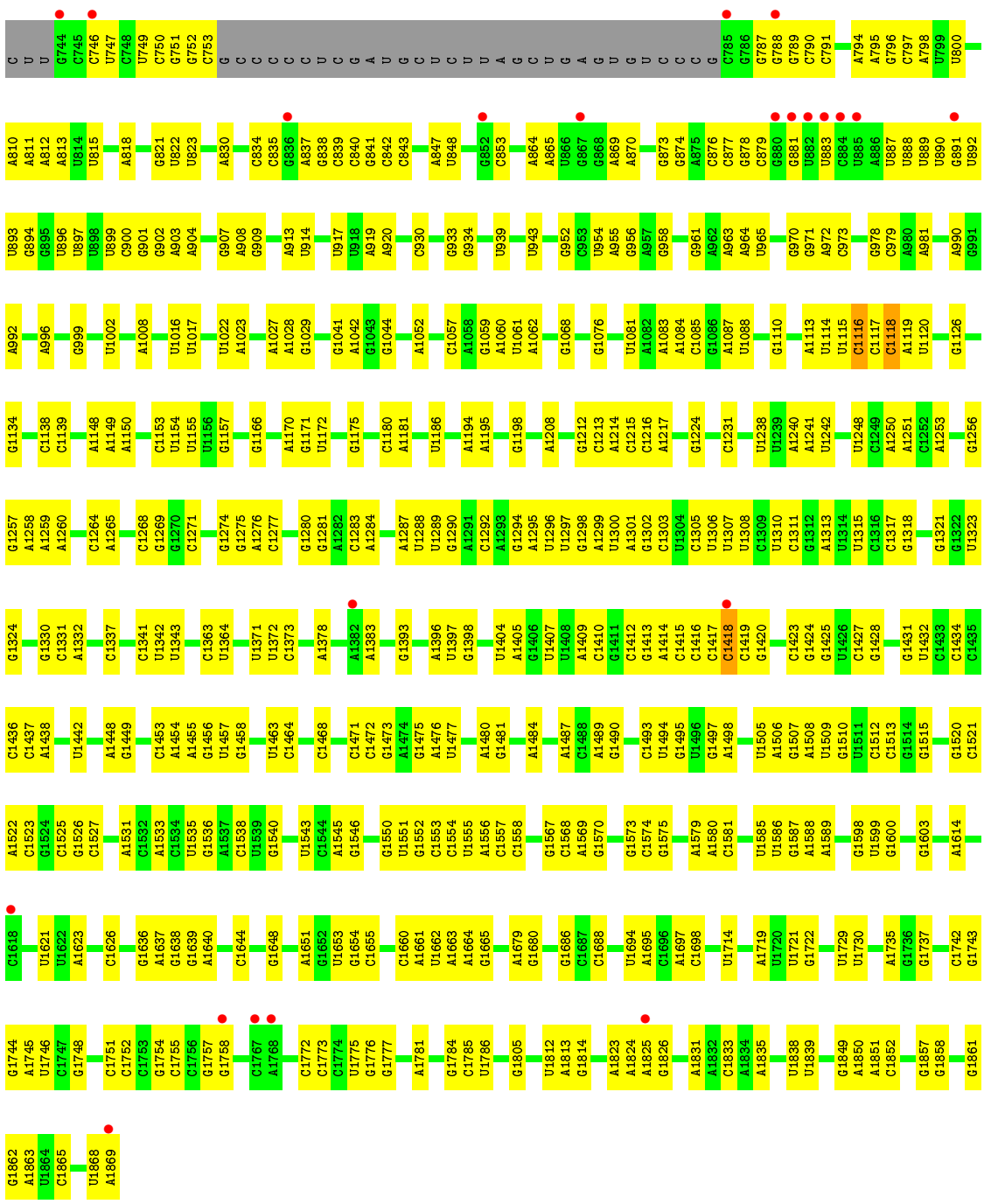
• Molecule 21: Human 18S ribosomal RNA

Chain i2:



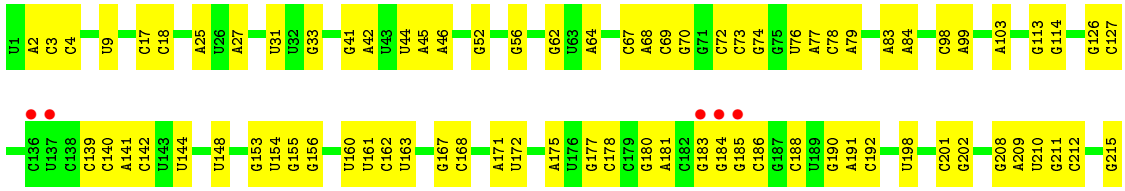
• Molecule 21: Human 18S ribosomal RNA

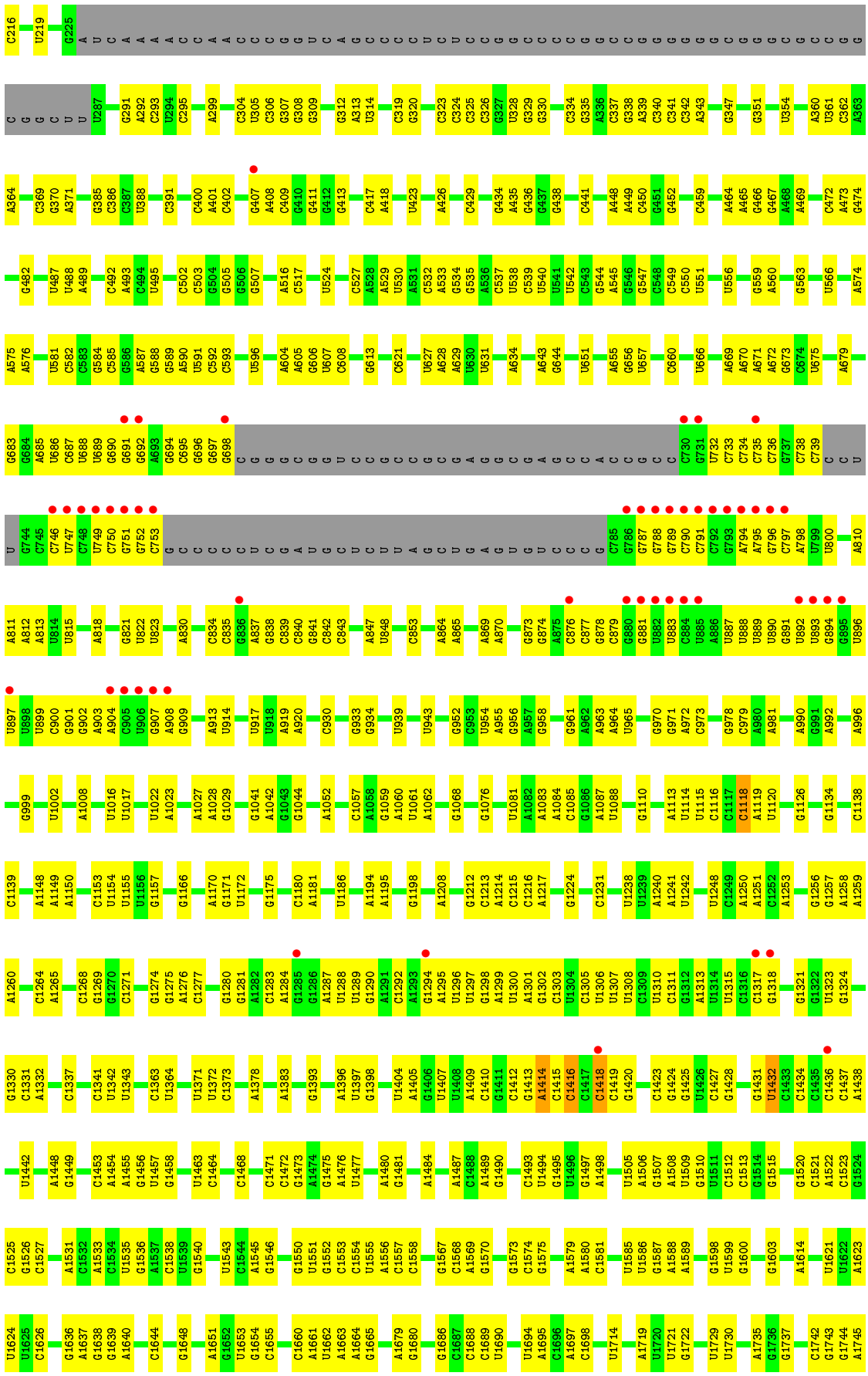


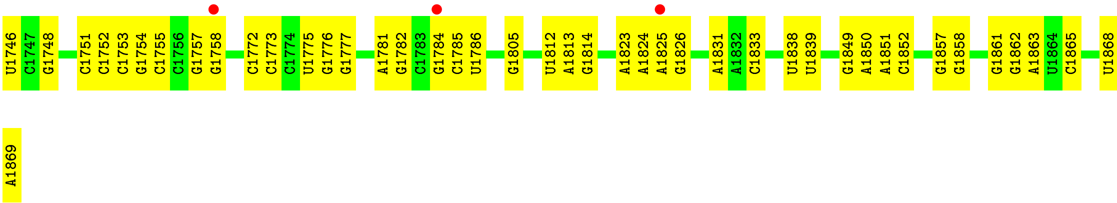


- Molecule 21: Human 18S ribosomal RNA

Chain i4:

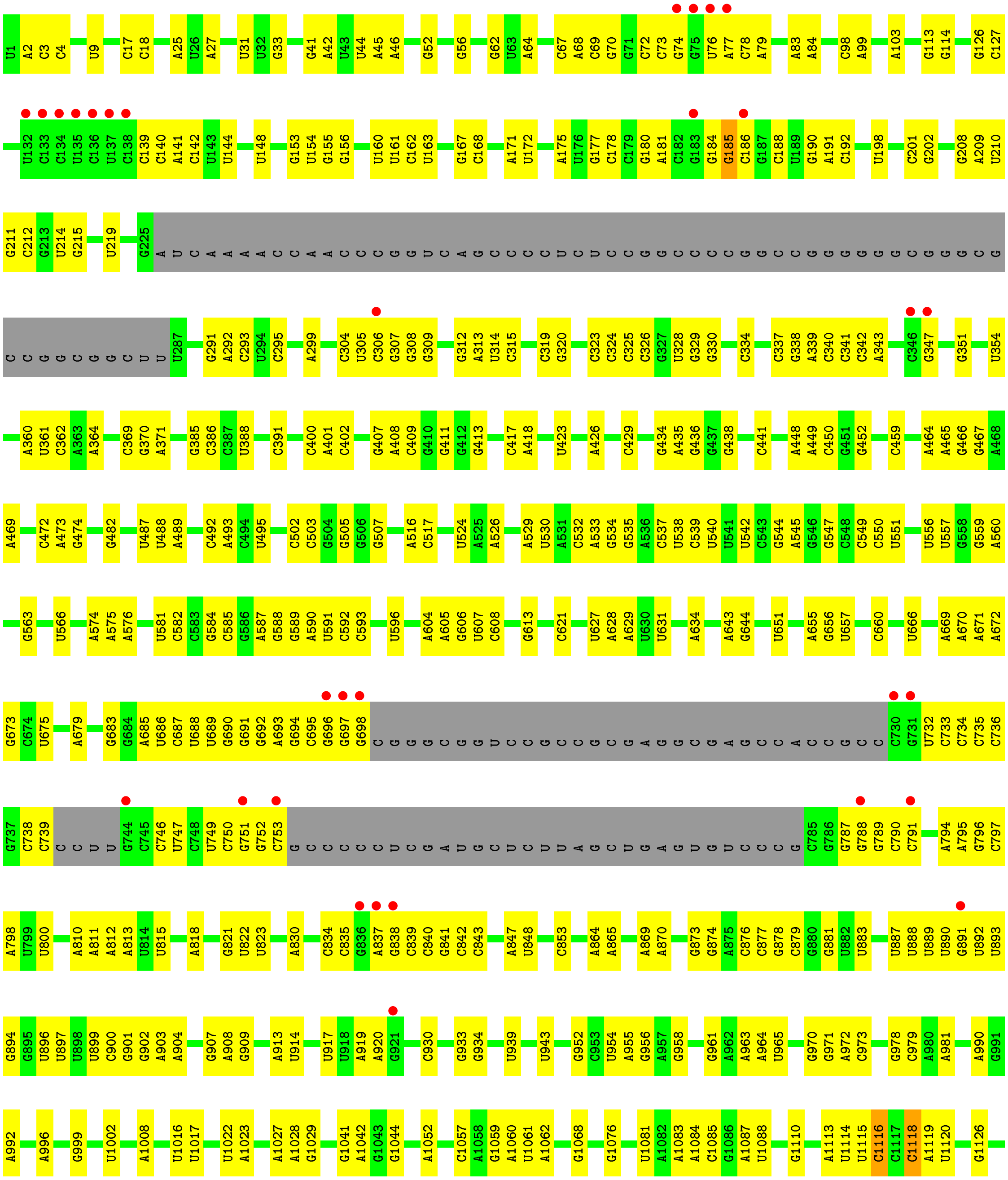


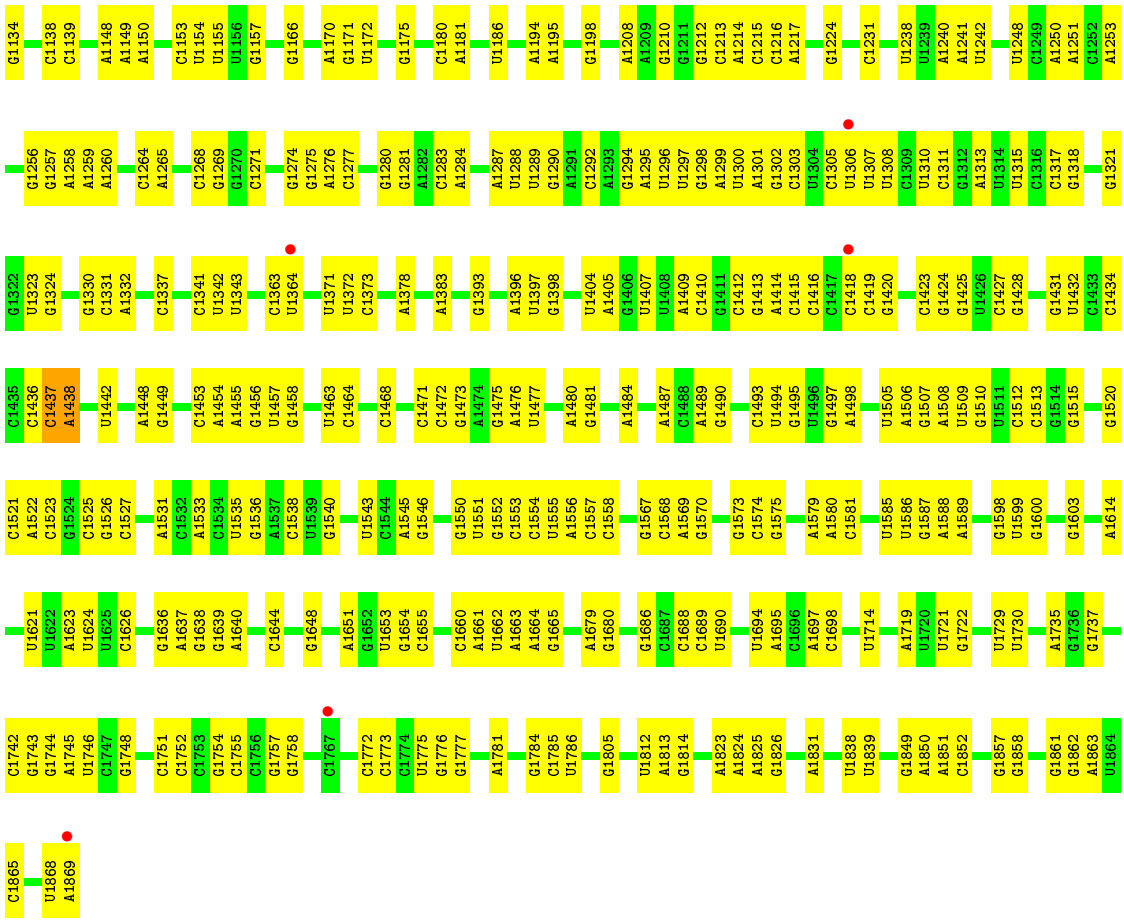




• Molecule 21: Human 18S ribosomal RNA

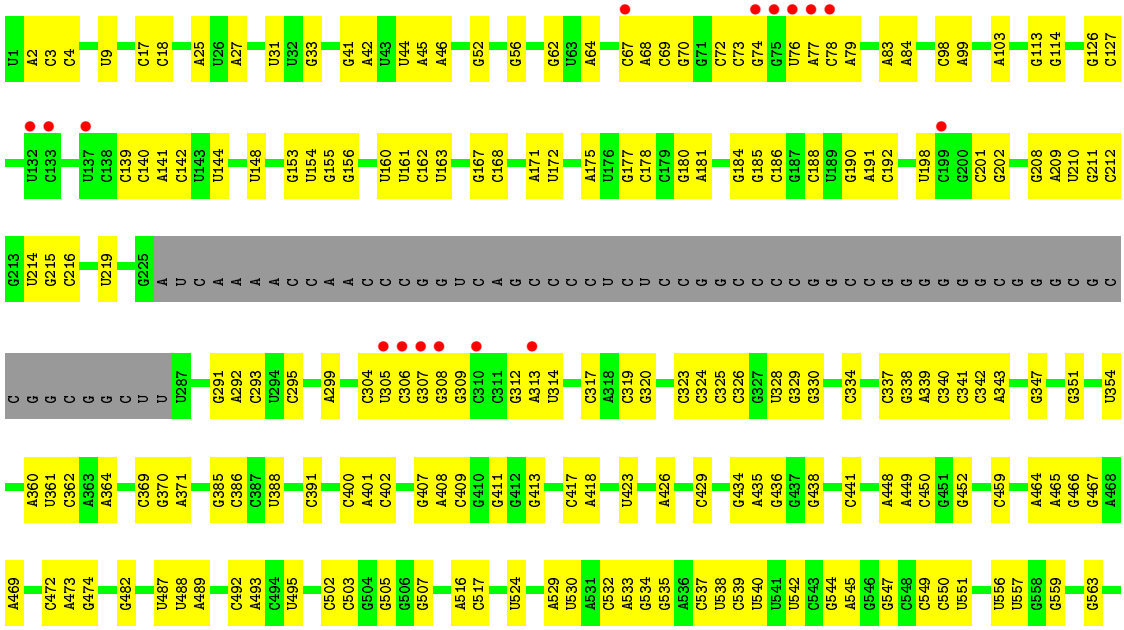
Chain i5:

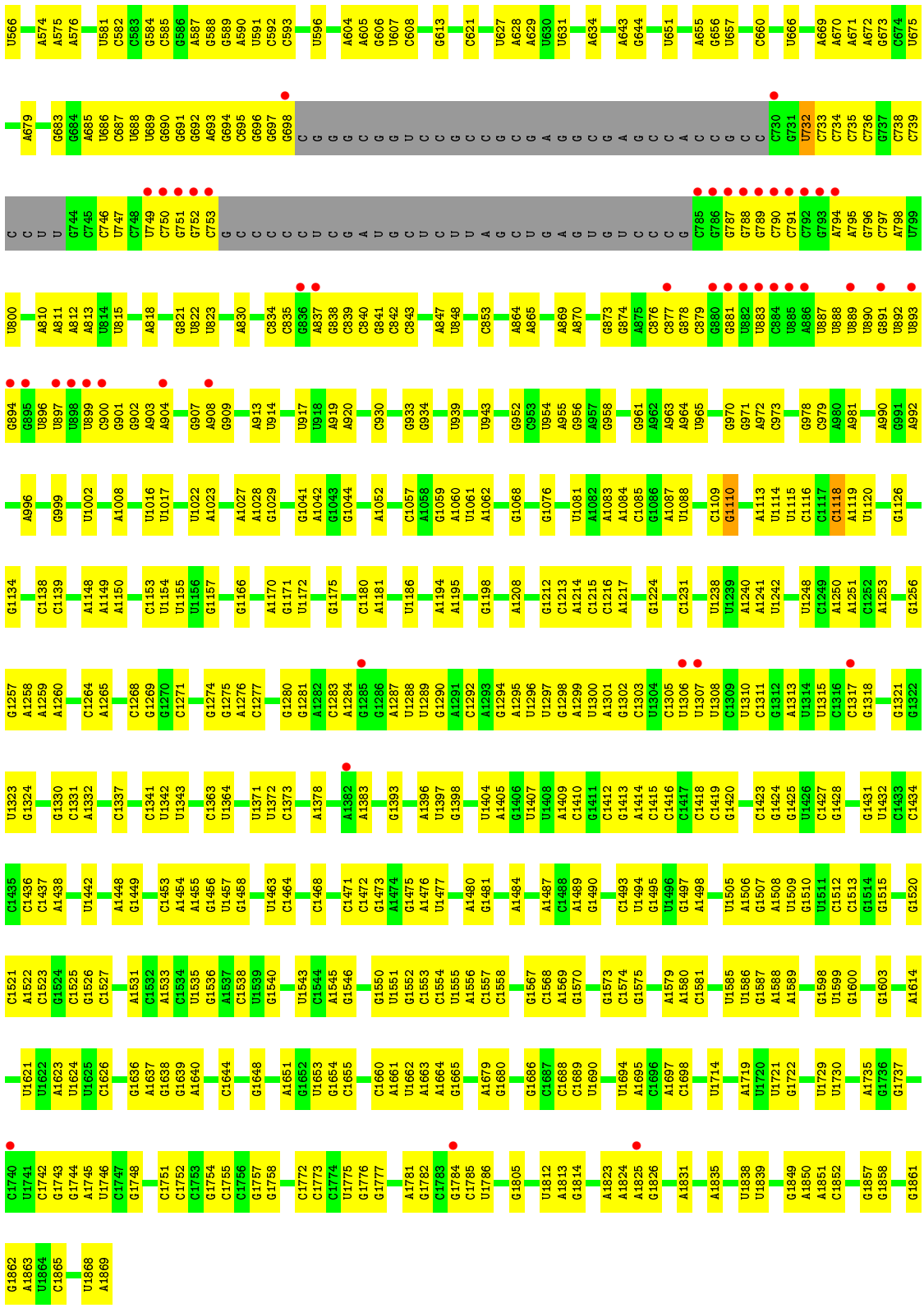




- Molecule 21: Human 18S ribosomal RNA

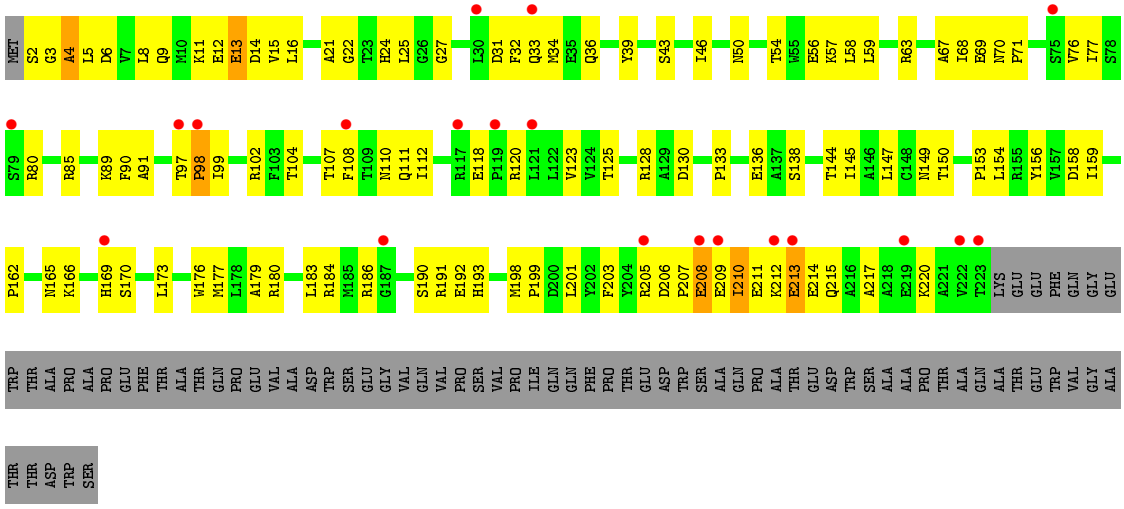
Chain i6:





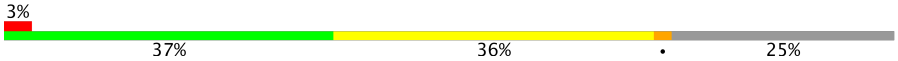
- Molecule 22: 40S ribosomal protein SA

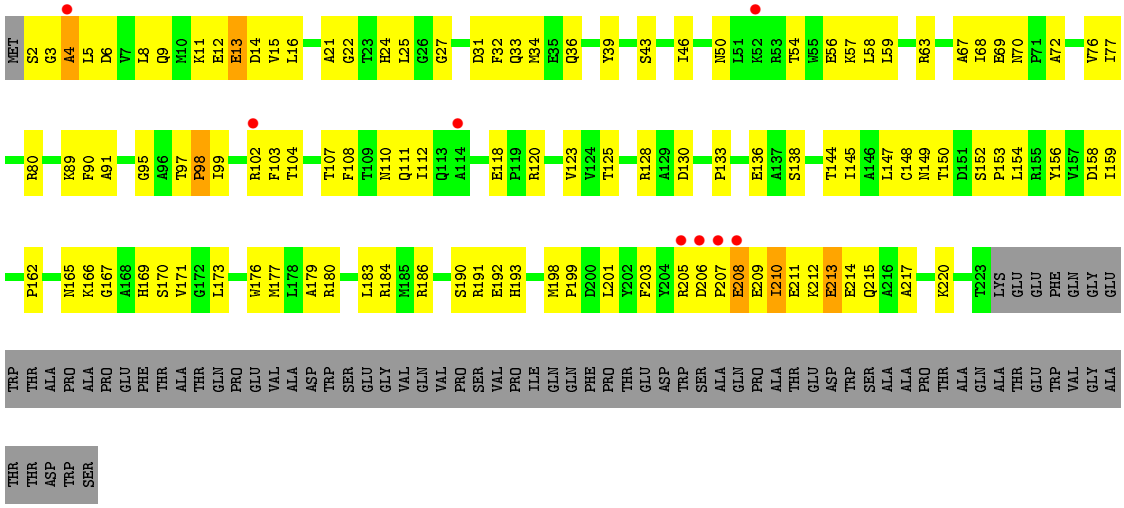
Chain A1:



- Molecule 22: 40S ribosomal protein SA

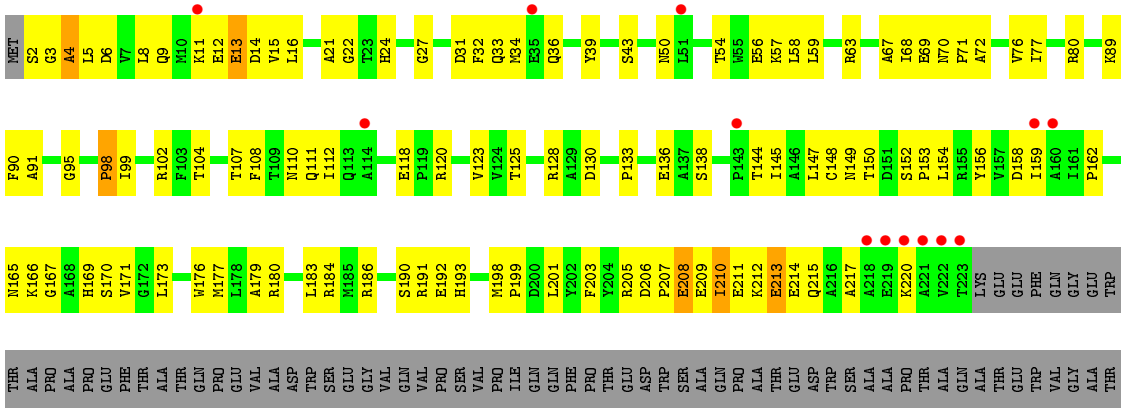
Chain A2:





- Molecule 22: 40S ribosomal protein SA

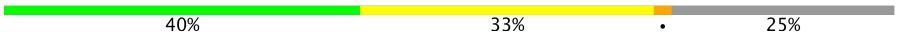
Chain A3:



THR ASP TRP SER

- Molecule 22: 40S ribosomal protein SA

Chain A4:



MET S2 G3 A4 L5 D6 V7 L8 Q9 M10 K11 E12 E13 D14 V15 L16 A21 G22 T23 H24 G27 D31 F32 Q33 M34 E35 Q36 Y39 S43 N50 T54 W55 E56 K57 L58 L59 R63 A67 I68 E69 N70 V76 I77 R80 R85 K89 F90

A91 P98 I99 R102 F103 T104 T107 F108 T109 N110 Q111 I112 E118 P119 R120 V123 V124 T125 R128 E136 A137 S138 T144 I145 A146 L147 C148 N149 T150 P153 L154 R155 Y156 V157 D158 I159 P162 N165 K166 H169 S170 L173 W176 M177 L178 A179

R180 L183 R184 M185 R186 S190 R191 E192 H193 M198 P199 D200 L201 Y202 F203 Y204 R205 D206 P207 E208 E209 I210 E211 K212 E213 E214 Q215 A216 A217 K220 T223 LYS GLU GLU PHE GLN GLY GLU TRP THR ALA PRO ALA PRO GLU PHE THR ALA THR GLN PRO GLU VAL ALA ASP

TRP SER GLU GLY VAL GLN VAL PRO SER VAL PRO ILE GLN GLN PHE PRO THR GLU ASP TRP SER ALA GLN PRO ALA THR GLU ASP TRP SER ALA ALA PRO THR ALA GLN ALA THR GLU TRP VAL GLY ALA THR THR ASP TRP SER

- Molecule 22: 40S ribosomal protein SA

Chain A5:

MET S2 G3 A4 L5 D6 V7 L8 Q9 M10 K11 E12 E13 D14 V15 L16 A21 G22 T23 H24 G27 L30 D31 F32 Q33 M34 E35 Q36 Y39 S43 N50 T54 W55 E56 K57 L58 L59 R63 A64 I65 V66 A67 I68 E69 N70 P71 V76 I77 R80

K89 F90 A91 P98 I99 A100 G101 R102 F103 T104 T107 F108 T109 N110 Q111 I112 E118 P119 R120 L121 L122 V123 V124 T125 R128 A129 D130 P133 E136 A137 S138 Y139 V140 T144 I145 A146 L147 C148 N149 T150 D151 S152 P153 L154 R155 Y156 V157 D158 I159 P162 N165

K166 H169 S170 L173 W176 M177 L178 A179 R180 L183 R184 M185 R186 S190 R191 E192 H193 M198 P199 D200 L201 Y202 F203 Y204 R205 D206 P207 E208 E209 I210 E211 K212 E213 E214 Q215 A216 A217 A218 E219 K220 A221 Y222 T223 LYS GLU GLU PHE GLN GLY GLU TRP THR ALA PRO

ALA PRO GLU PHE THR ALA THR GLN PRO GLU VAL ALA ASP TRP SER GLU GLY VAL GLN VAL PRO SER VAL PRO ILE GLN GLN PHE PRO THR GLU ASP TRP SER ALA GLN PRO ALA THR GLU ASP TRP SER ALA ALA PRO THR ALA GLN ALA THR GLU TRP VAL GLY ALA THR THR ASP TRP

SER

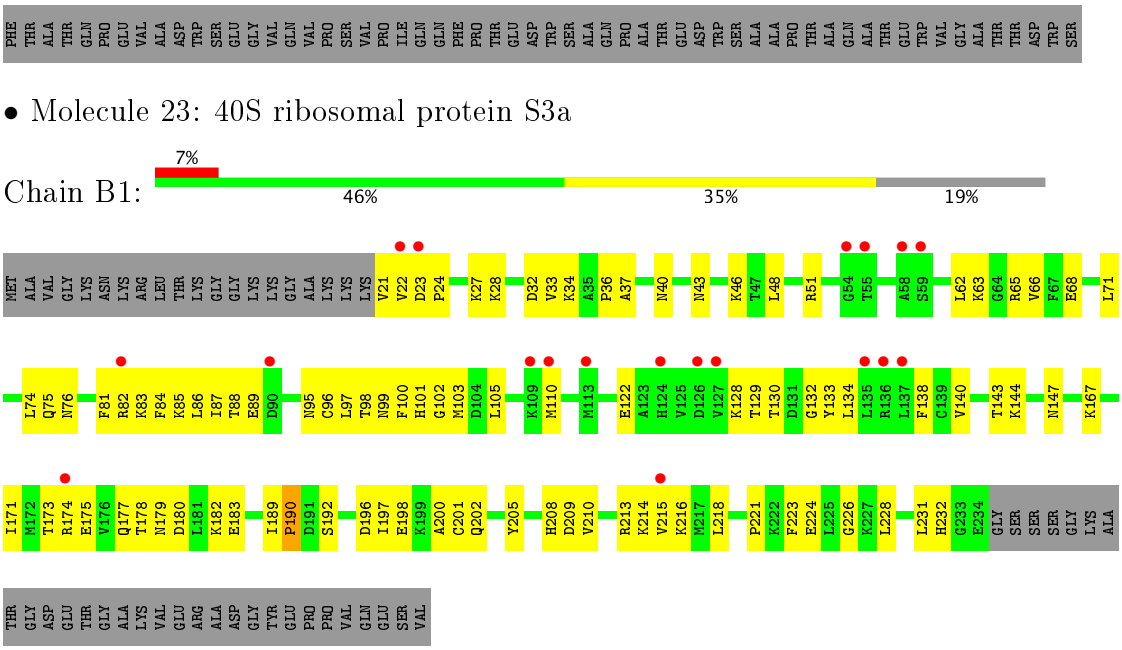
- Molecule 22: 40S ribosomal protein SA

Chain A6:

MET S2 G3 A4 L5 D6 V7 L8 Q9 M10 K11 E12 E13 D14 V15 L16 A21 G22 T23 H24 L25 G26 G27 D31 F32 Q33 M34 E35 Q36 Y37 I38 Y39 S43 I46 N50 L51 T54 W55 E56 K57 L58 L59 L60 R63 A67 I68 E69 N70 V76 I77

R80 K89 F90 A91 P98 I99 R102 F103 T104 T107 F108 T109 N110 Q111 I112 E118 P119 R120 V123 V124 T125 R128 A129 D130 P133 E136 A137 S138 T144 I145 A146 L147 C148 N149 T150 D151 S152 P153 L154 R155 Y156 V157 D158 I159 P162 N165 K166

H169 S170 L173 W176 M177 L178 A179 R180 L183 R184 M185 R186 S190 R191 E192 H193 M198 P199 D200 L201 Y202 F203 Y204 R205 D206 P207 E208 E209 I210 E211 K212 E213 E214 Q215 A216 A217 A218 E219 K220 T223 LYS GLU GLU PHE GLN GLY GLU TRP THR ALA PRO ALA PRO GLU


PHE THR ALA THR GLN PRO GLU VAL ALA ASP TRP SER GLU GLY VAL GLN VAL PRO SER VAL PRO ILE GLN GLN GLN PHE PRO THR GLU ASP TRP SER ALA GLN PRO ALA THR GLU ASP TRP SER ALA ALA PRO THR ALA GLN ALA THR GLU TRP VAL GLY ALA THR THR ASP TRP SER
• Molecule 23: 40S ribosomal protein S3a
Chain B1:
7%
46%
35%
19%
MET ALA VAL GLY LYS ASN LYS ARG LEU THR LYS GLY GLY LYS LYS GLY ALA LYS LYS LYS V21 V22 D23 P24 K27 K28 D32 V33 K34 A35 P36 A37 N40 N43 K46 T47 L48 R51 G54 T55 A58 S59 L62 K63 G64 R65 V66 F67 E68 L71
L74 Q75 N76 F81 R82 K83 F84 K85 L86 I87 T88 E89 D90 N95 C96 L97 T98 N99 F100 H101 G102 M103 D104 L105 K109 M110 M113 E122 A123 H124 V125 D126 V127 K128 T129 T130 D131 G132 Y133 L134 L135 R136 L137 F138 C139 V140 T143 K144 N147 K167
I171 M172 T173 R174 E175 V176 Q177 T178 N179 D180 L181 K182 E183 I189 P190 D191 S192 D196 I197 E198 K199 A200 C201 Q202 Y205 H208 D209 V210 R213 K214 V215 K216 M217 L218 P221 K222 F223 E224 L225 G226 K227 L228 L231 H232 G233 E234 GLY SER SER SER GLY LYS ALA
THR GLY ASP GLU THR GLY ALA LYS VAL GLU ARG ALA ASP GLY TYR GLU PRO PRO VAL GLN GLU SER VAL
• Molecule 23: 40S ribosomal protein S3a
Chain B2:
9%
45%
34%
19%
MET ALA VAL GLY LYS ASN LYS ARG LEU THR LYS GLY GLY LYS LYS GLY ALA LYS LYS LYS V21 V22 D23 P24 F25 S26 K27 K28 D29 W30 Y31 D32 V33 K34 A35 P36 A37 M38 F39 N40 N43 K46 T47 L48 R51 T52 Q53 G54 T55 K56 L62 K63 G64 R65 V66 F67
E68 L71 L74 Q75 N76 F81 R82 K83 F84 K85 L86 I87 T88 E89 K94 N95 C96 L97 T98 N99 F100 H101 G102 M103 D104 L105 M110 I121 E122 D126 V127 K128 T129 T130 D131 G132 Y133 L134 F138 C139 V140 G141 F142 T143 K144 N147 H158 R162
K167 I171 M172 T173 R174 E175 V176 Q177 T178 N179 D180 L181 K182 E183 V184 I189 P190 D191 S192 D196 I197 E198 K199 A200 C201 Q202 Y205 H208 D209 V210 R213 K214 V215 K216 M217 L218 P221 K222 F223 E224 L225 G226 K227 L228 L231 H232 G233 E234 GLY SER SER SER
GLY LYS ALA THR GLY ASP GLU THR GLY ALA LYS VAL GLU ARG ALA ASP GLY TYR GLU PRO PRO VAL GLN GLU SER VAL
• Molecule 23: 40S ribosomal protein S3a
Chain B3:
5%
47%
34%
19%
MET ALA VAL GLY LYS ASN LYS ARG LEU THR LYS GLY GLY LYS LYS GLY ALA LYS LYS LYS V21 V22 D23 S26 K27 K28 D29 W30 Y31 D32 V33 K34 A35 P36 A37 M38 F39 N40 N43 K46 T47 L48 R51 L62 K63 G64 R65 V66 F67 E68 V69 S70 L71 L74
Q75 N76 A80 F81 R82 K83 F84 K85 L86 I87 T88 E89 D90 V91 Q92 G93 K94 N95 C96 L97 T98 N99 F100 H101 G102 M103 D104 L105 M110 E122 K128 T129 T130 D131 G132 Y133 L134 F138 C139 V140 T143 K144 N147 K167 I171 M172 T173 R174 E175 V176 Q177
T178 N179 D180 L181 K182 E183 I189 P190 D191 S192 D196 I197 E198 K199 A200 C201 Q202 Y205 H208 D209 V210 R213 K214 V215 K216 M217 L218 P221 K222 F223 E224 L225 G226 K227 L228 L231 H232 G233 E234 GLY SER SER SER GLY LYS ALA THR GLY ASP GLU THR GLY ALA

LYS VAL GLU ARG ALA ASP GLY TYR GLU PRO PRO VAL GLN GLU SER VAL

- Molecule 23: 40S ribosomal protein S3a

Chain B4:

MET ALA VAL GLY LYS ASN LYS ARG LEU THR LYS GLY GLY LYS LYS GLY ALA LYS LYS LYS V21 V22 K27 K28 D29 W30 Y31 D32 V33 K34 A35 P36 A37 M38 F39 N40 N43 K46 T47 L48 R51 T52 Q53 G54 L62 K63 G64 R65 V66 F67 E68 L71 L74

Q75 N76 F81 R82 K83 F84 K85 L86 I87 T88 E89 D90 N95 C96 L97 T98 N99 F100 H101 G102 M103 D104 L105 M110 E122 D126 V127 K128 T129 T130 D131 G132 Y133 L134 L137 F138 C139 V140 T143 K144 N147 K167 I171 M172 T173 R174 E175 V176 Q177 T178

N179 D180 L181 K182 E183 V184 I189 P190 D191 S192 D196 I197 E198 K199 A200 C201 Q202 Y205 H208 D209 V210 F211 V212 R213 K214 V215 K216 M217 L218 P221 K222 F223 E224 L225 G226 K227 L228 L231 H232 G233 E234 GLY SER SER SER GLY LYS ALA THR GLY ASP GLU THR GLY

ALA LYS VAL GLU ARG ALA ASP GLY TYR GLU PRO PRO VAL GLN GLU SER VAL

- Molecule 23: 40S ribosomal protein S3a

Chain B5:

MET ALA VAL GLY LYS ASN LYS ARG LEU THR LYS GLY GLY LYS LYS GLY ALA LYS LYS LYS V21 V22 F25 S26 K27 K28 D32 V33 K34 A35 P36 A37 M38 F39 N40 N43 K46 T47 L48 R51 L62 K63 G64 R65 V66 F67 E68 L71 L74 Q75 N76

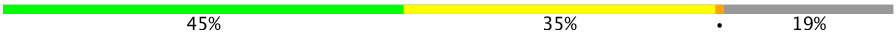
F81 R82 K83 F84 K85 L86 I87 T88 E89 D90 N95 C96 L97 T98 N99 F100 H101 G102 M103 D104 L105 M110 E122 K128 T129 T130 D131 G132 Y133 L134 F138 C139 V140 T143 K144 N147 H158 R162 K167 L171 M172 T173 R174 E175 V176 Q177 T178 N179 D180

L181 K182 E183 I189 P190 D191 S192 D196 I197 E198 K199 A200 C201 Q202 Y205 H208 D209 V210 R213 K214 V215 K216 M217 L218 P221 K222 F223 E224 L225 G226 K227 L228 L231 H232 G233 E234 GLY SER SER SER GLY LYS ALA THR GLY ASP GLU THR GLY ALA LYS VAL GLU

ARG ALA ASP GLY TYR GLU PRO PRO VAL GLN GLU SER VAL

- Molecule 23: 40S ribosomal protein S3a

Chain B6:



MET ALA VAL GLY LYS ASN LYS ARG LEU THR LYS GLY GLY LYS LYS GLY ALA LYS LYS LYS V21 V22 D23 P24 K27 K28 D32 V33 K34 A35 P36 A37 M38 F39 N40 N43 K46 T47 L48 R51 L62 K63 G64 R65 V66 F67 E68 L71 L74 Q75 N76

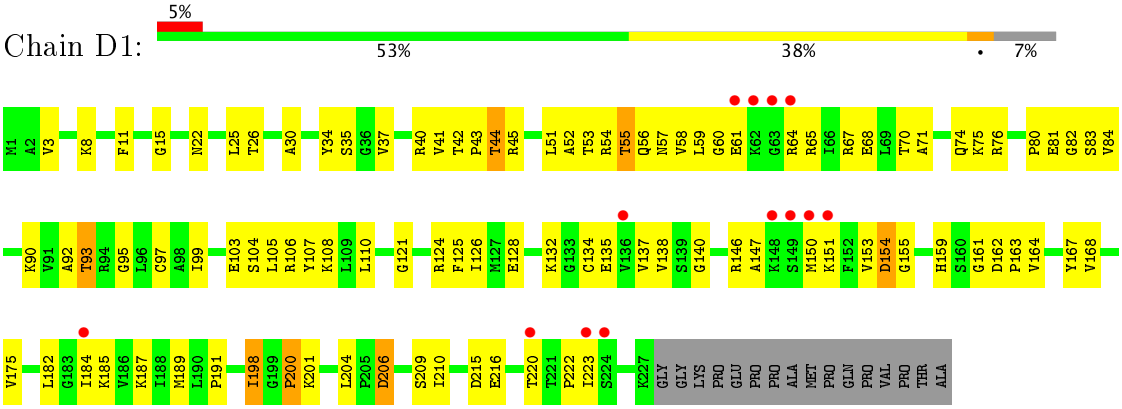
F81 R82 K83 F84 K85 L86 I87 T88 E89 N95 C96 L97 T98 N99 F100 H101 G102 M103 D104 L105 M110 E122 K128 T129 T130 D131 G132 Y133 L134 F138 C139 V140 T143 K144 N147 K167 I171 M172 T173 R174 E175 V176 Q177 T178 N179 D180 L181 K182 E183 V184

I189 P190 D191 S192 D196 I197 E198 K199 A200 C201 Q202 Y205 H208 D209 V210 R213 K214 V215 K216 M217 L218 P221 K222 F223 E224 L225 G226 K227 L228 L231 H232 G233 E234 GLY SER SER SER GLY LYS ALA THR GLY ASP GLU THR GLY ALA LYS VAL GLU ARG ALA ASP GLY

TYR GLU PRO PRO VAL GLN GLU SER VAL

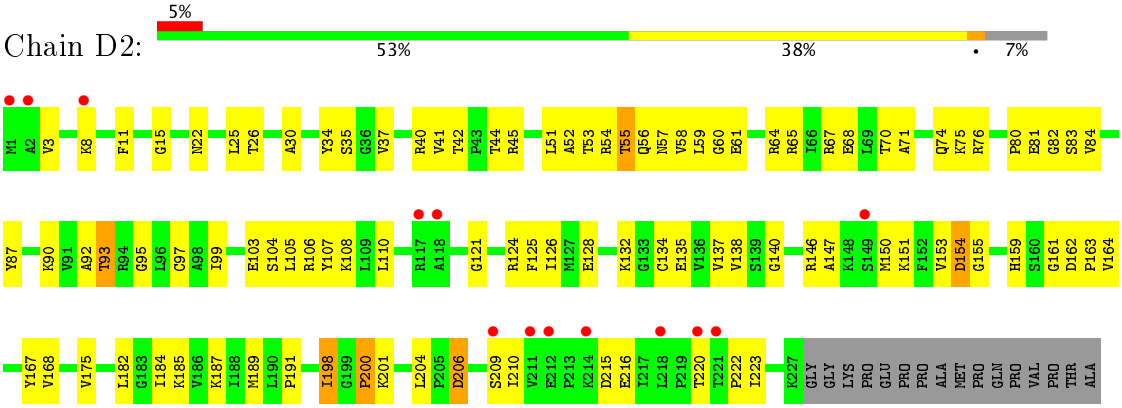
- Molecule 24: 40S ribosomal protein S3

Chain D1:



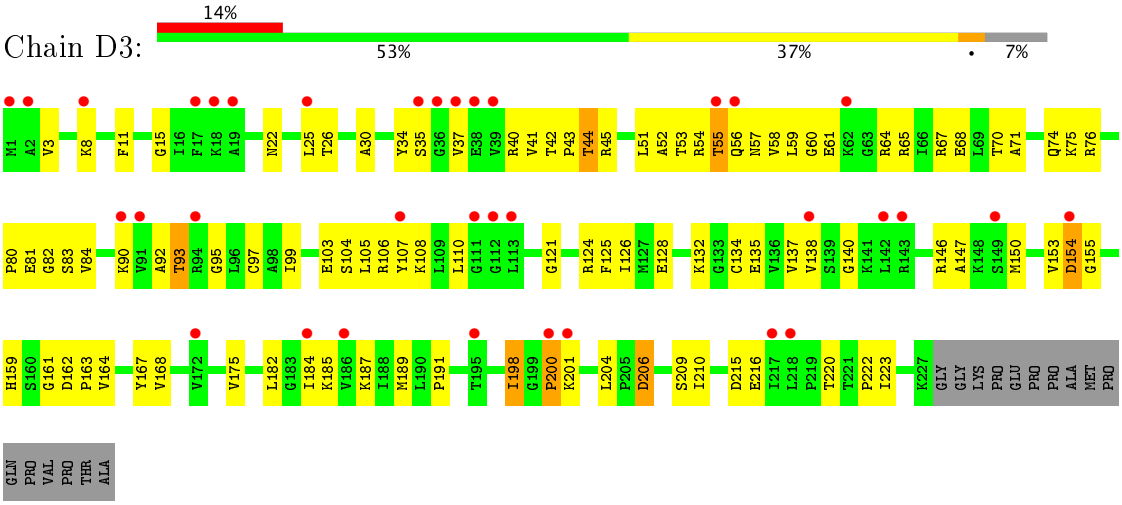
- Molecule 24: 40S ribosomal protein S3

Chain D2:



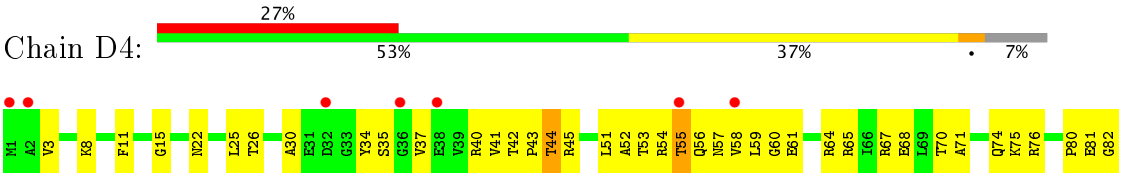
- Molecule 24: 40S ribosomal protein S3

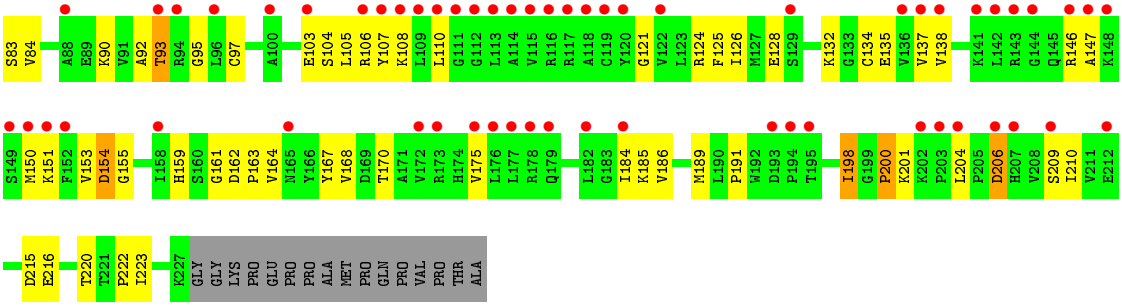
Chain D3:



- Molecule 24: 40S ribosomal protein S3

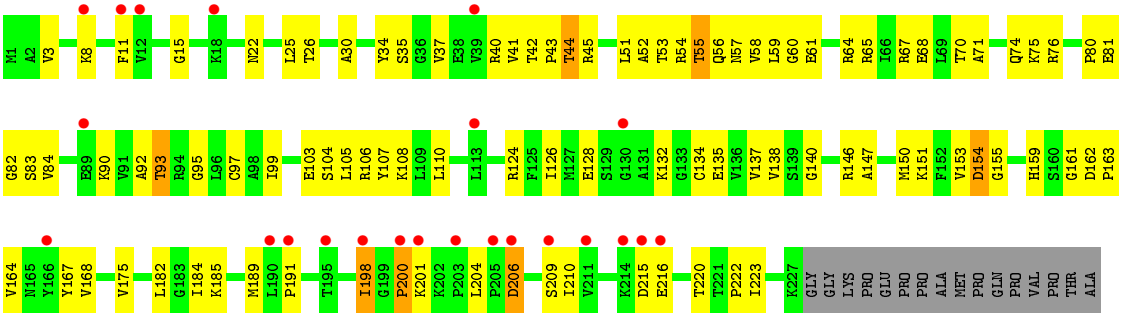
Chain D4:





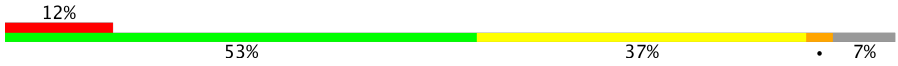
- Molecule 24: 40S ribosomal protein S3

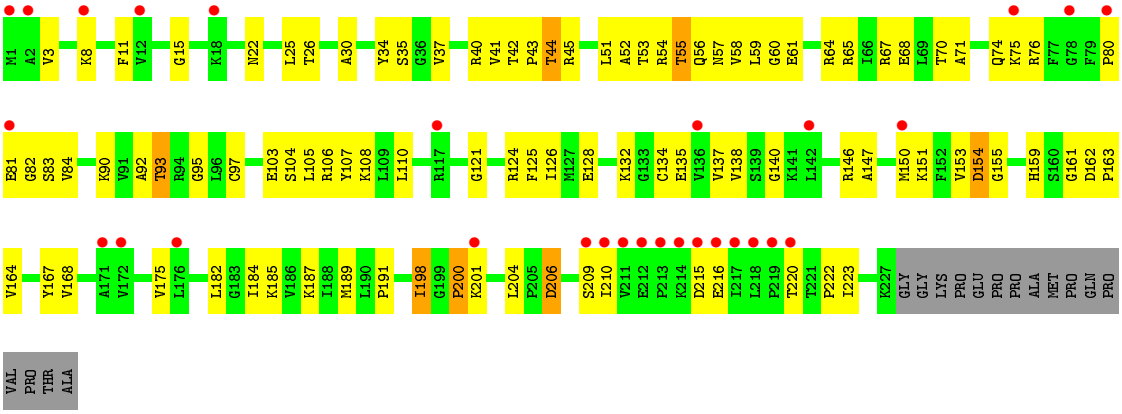
Chain D5:



- Molecule 24: 40S ribosomal protein S3

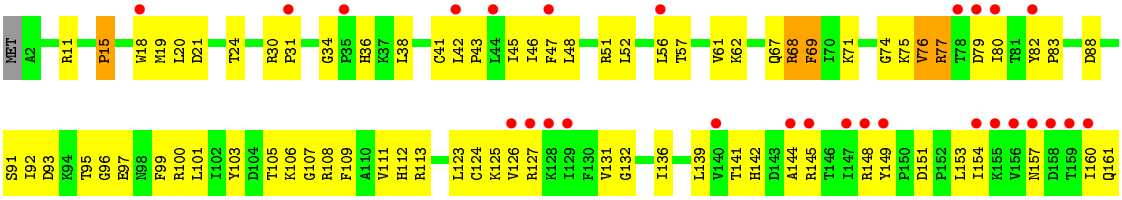
Chain D6:

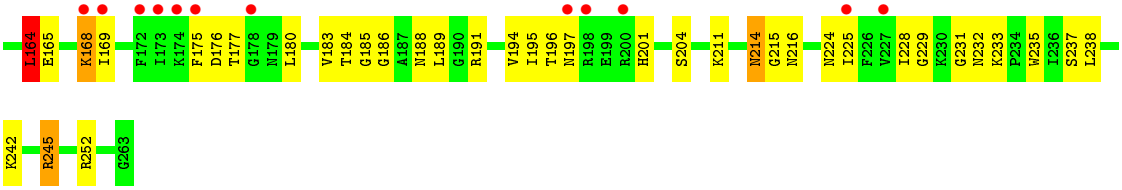




- Molecule 25: 40S ribosomal protein S4, X isoform

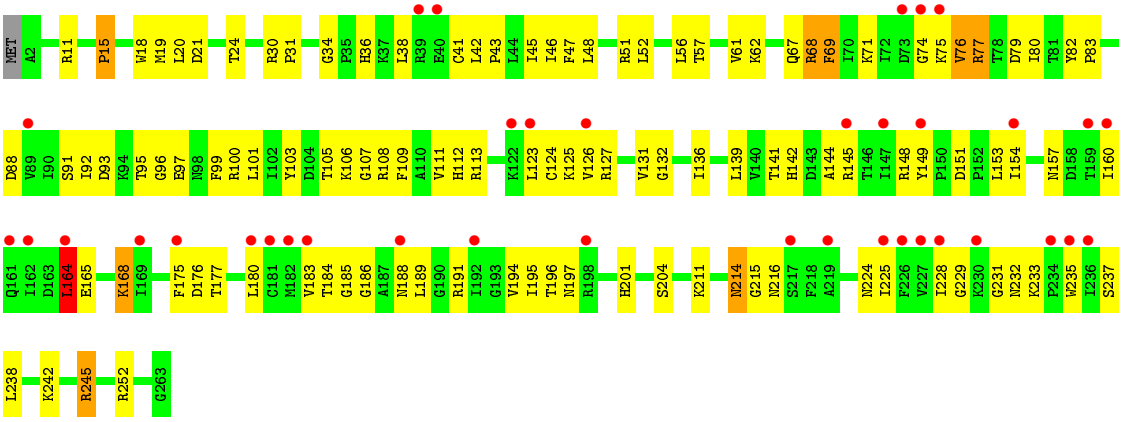
Chain E1:





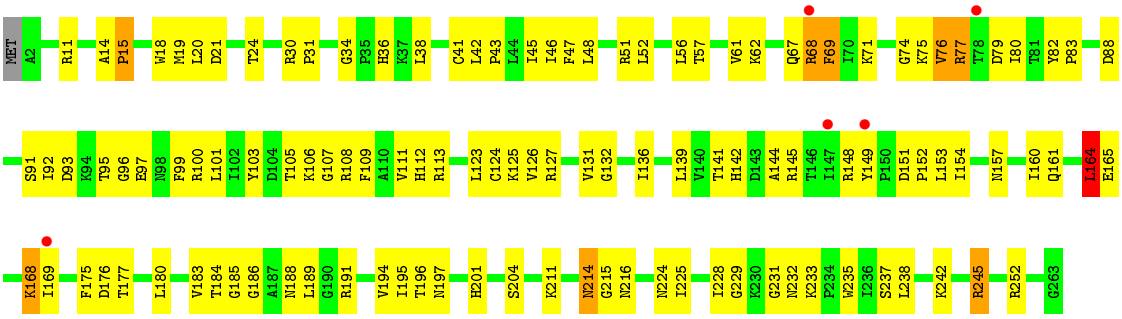
- Molecule 25: 40S ribosomal protein S4, X isoform

Chain E2:



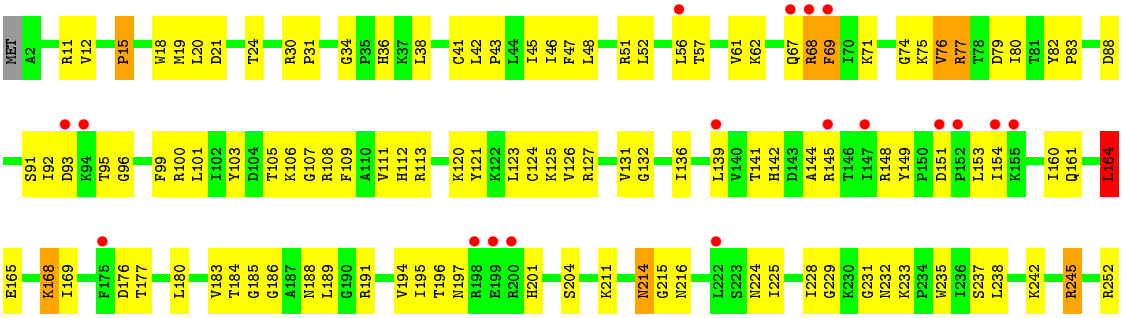
- Molecule 25: 40S ribosomal protein S4, X isoform

Chain E3:



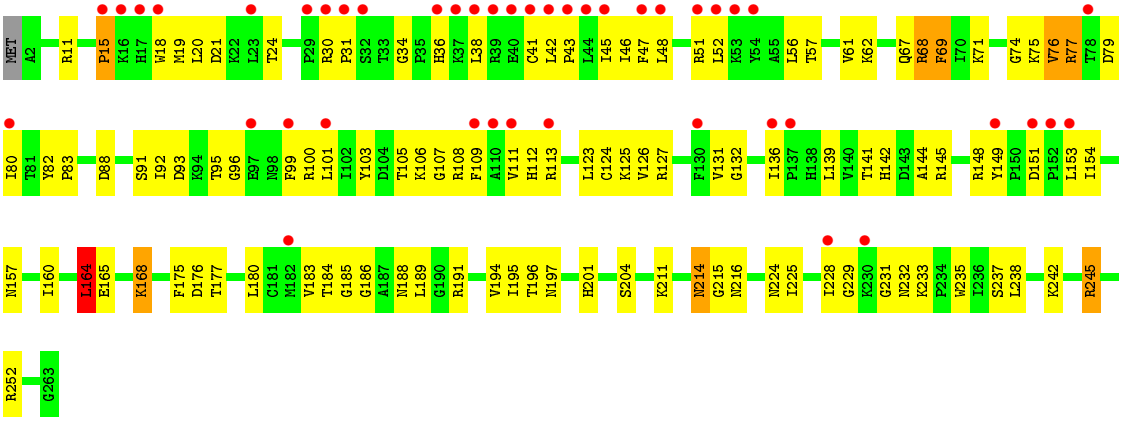
- Molecule 25: 40S ribosomal protein S4, X isoform

Chain E4:



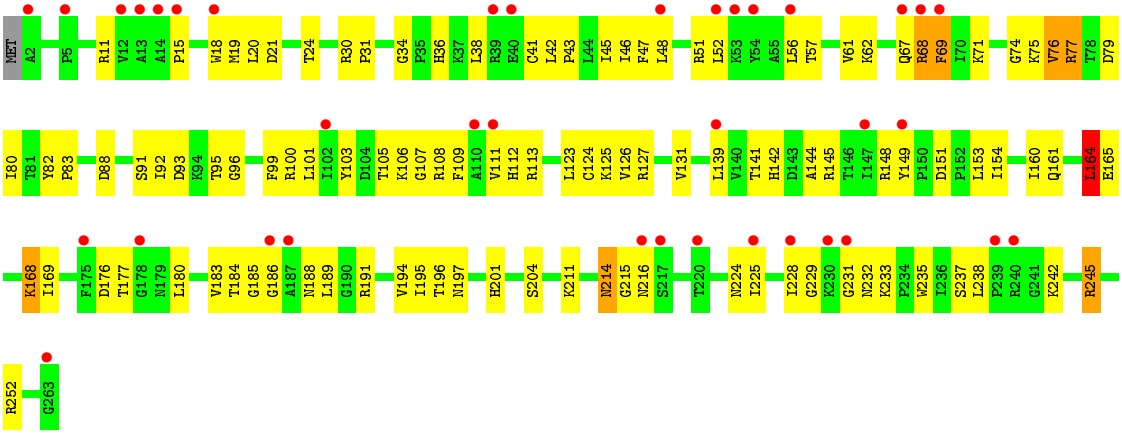
- Molecule 25: 40S ribosomal protein S4, X isoform

Chain E5:



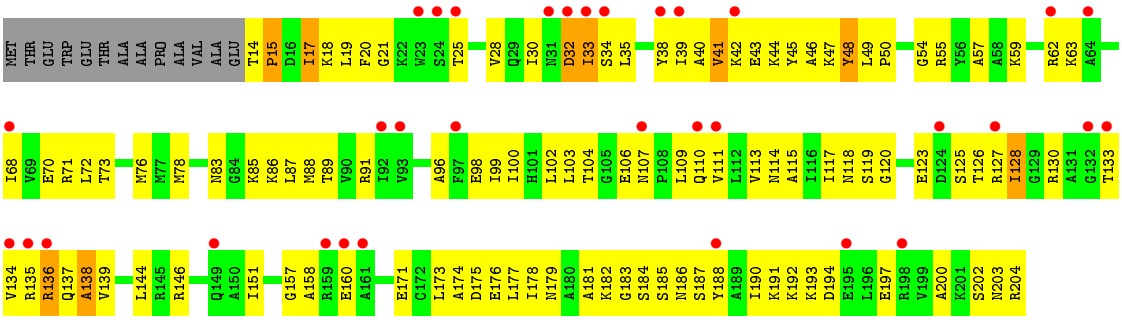
- Molecule 25: 40S ribosomal protein S4, X isoform

Chain E6:



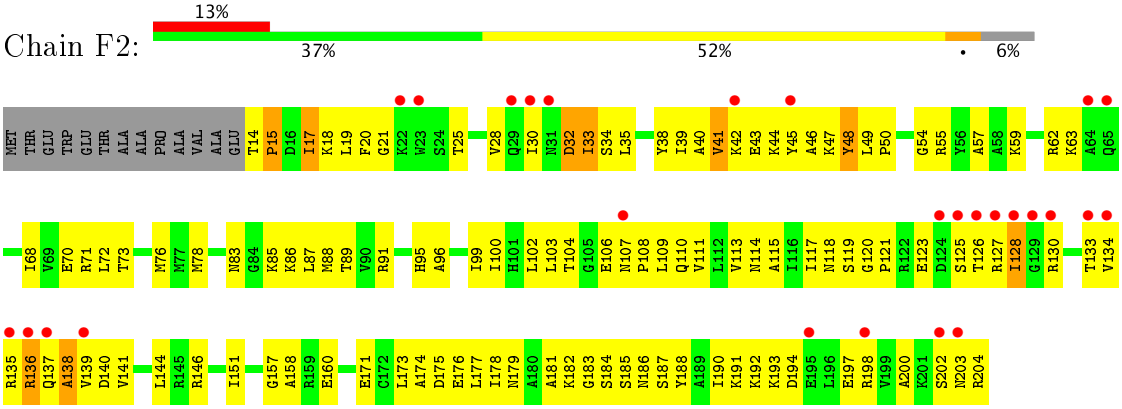
- Molecule 26: 40S ribosomal protein S5

Chain F1:



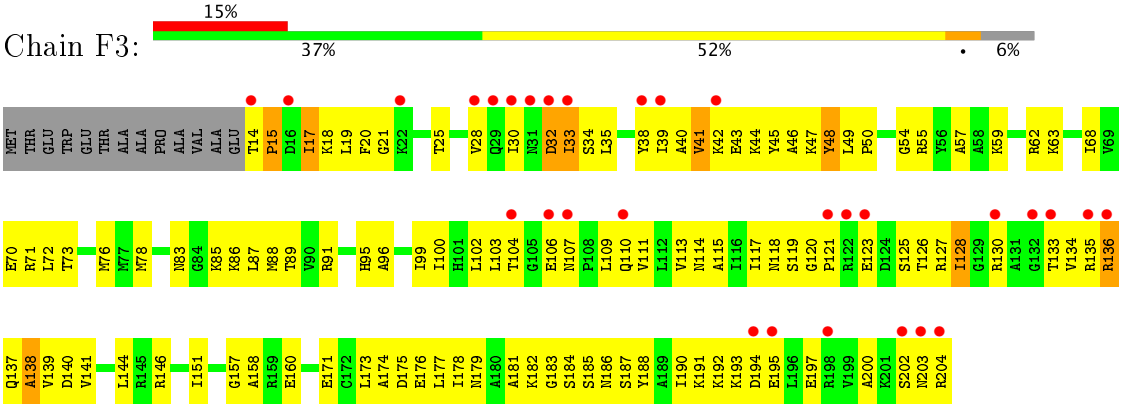
- Molecule 26: 40S ribosomal protein S5

Chain F2:



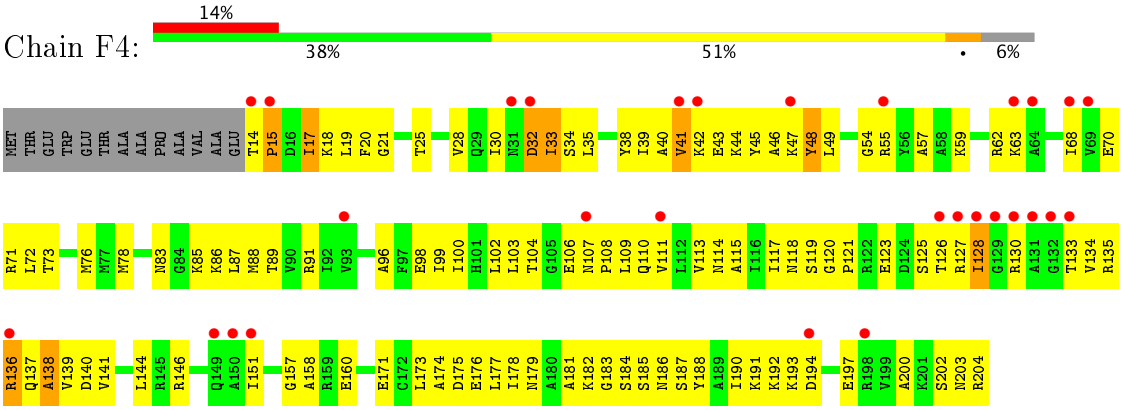
- Molecule 26: 40S ribosomal protein S5

Chain F3:



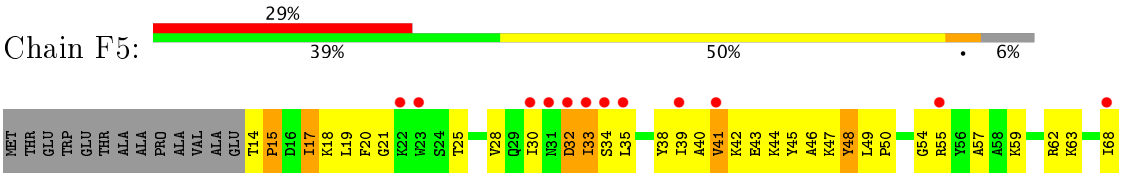
- Molecule 26: 40S ribosomal protein S5

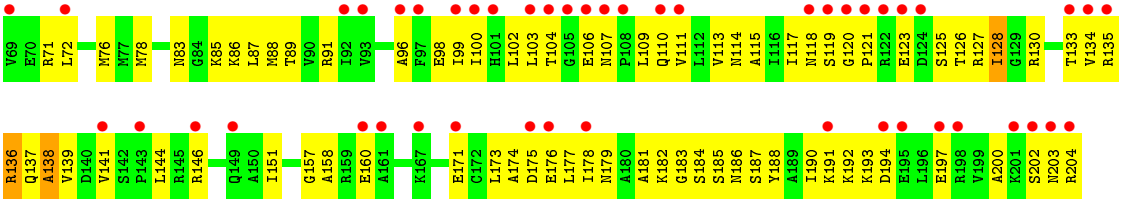
Chain F4:



- Molecule 26: 40S ribosomal protein S5

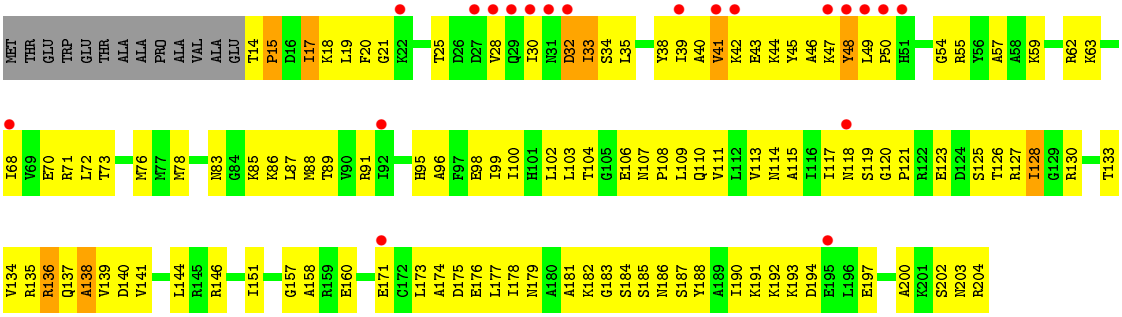
Chain F5:





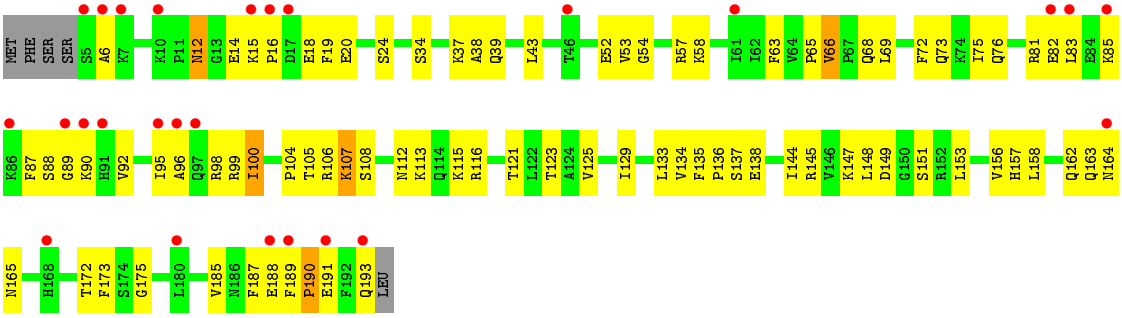
- Molecule 26: 40S ribosomal protein S5

Chain F6:



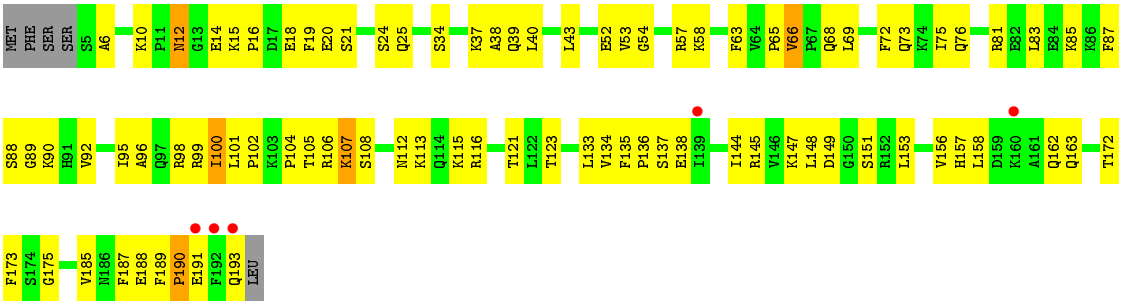
- Molecule 27: 40S ribosomal protein S7

Chain H1:



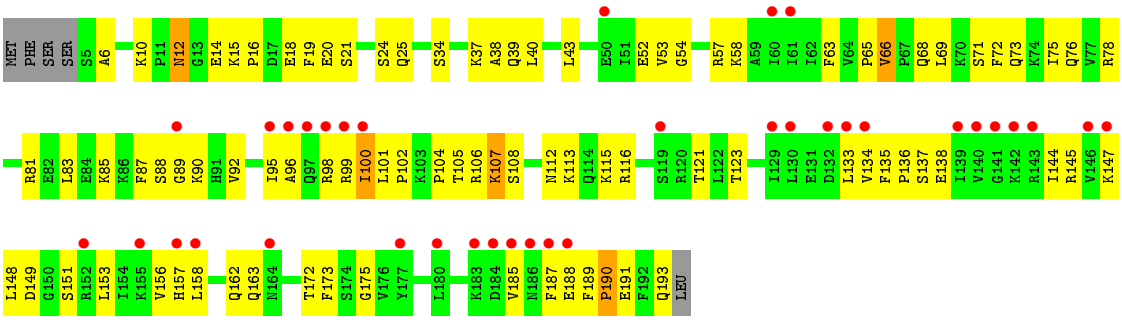
- Molecule 27: 40S ribosomal protein S7

Chain H2:



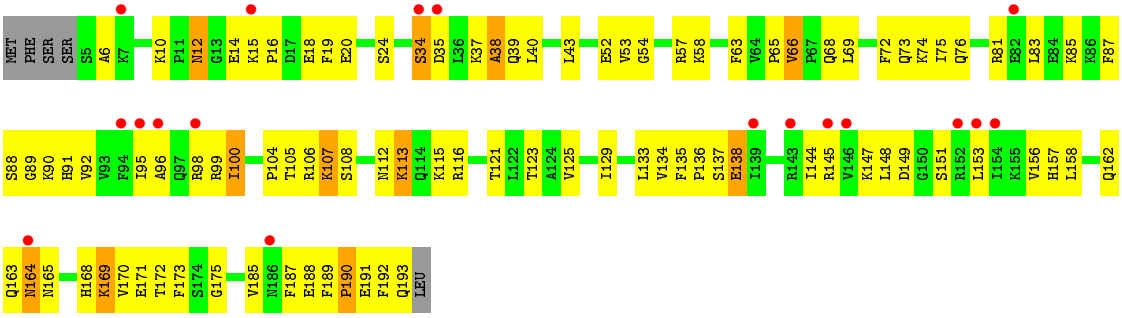
- Molecule 27: 40S ribosomal protein S7

Chain H3:



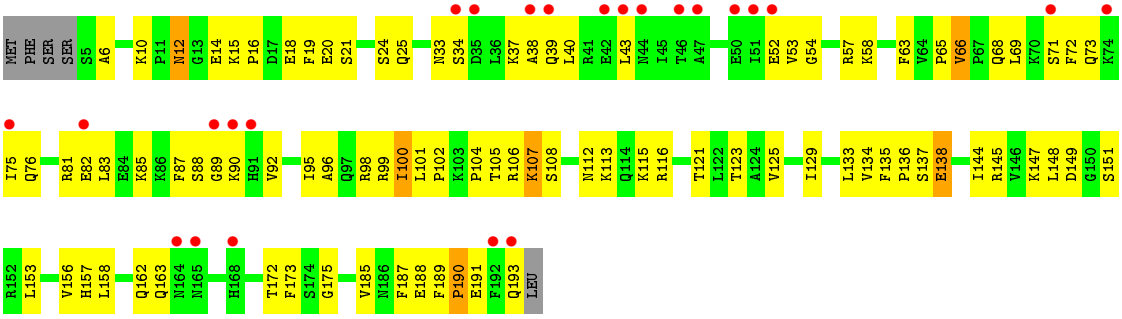
- Molecule 27: 40S ribosomal protein S7

Chain H4:



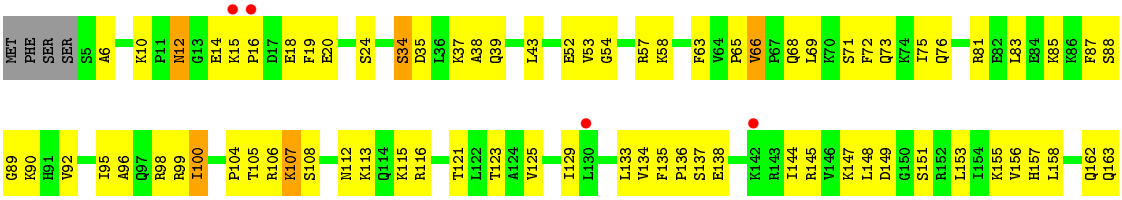
- Molecule 27: 40S ribosomal protein S7

Chain H5:



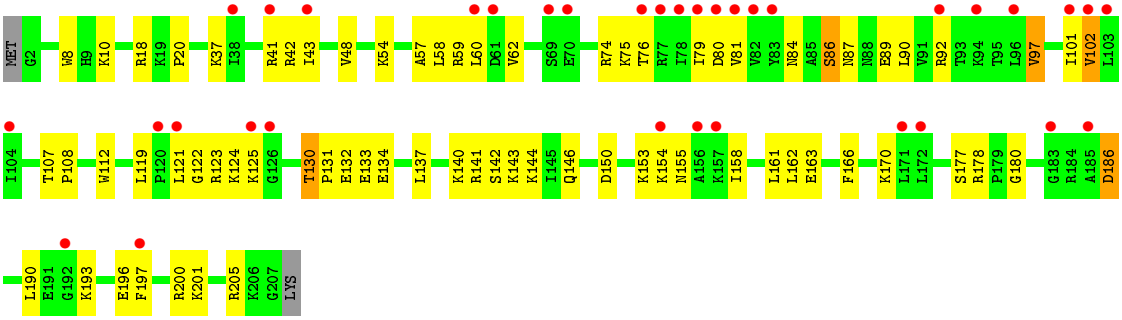
- Molecule 27: 40S ribosomal protein S7

Chain H6:



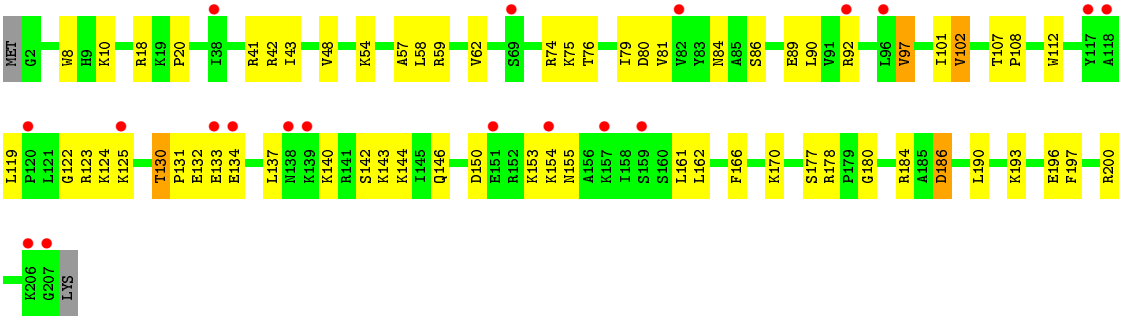
- Molecule 28: 40S ribosomal protein S8

Chain I1:



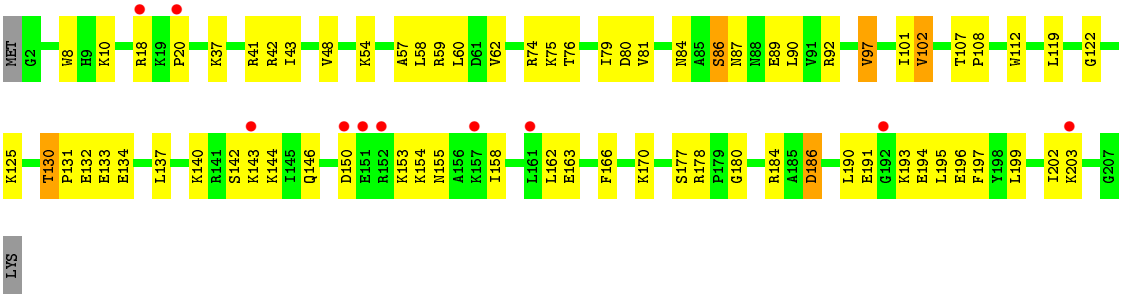
- Molecule 28: 40S ribosomal protein S8

Chain I2:



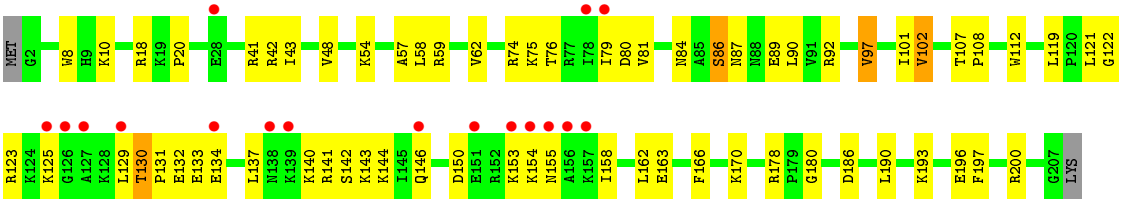
- Molecule 28: 40S ribosomal protein S8

Chain I3:



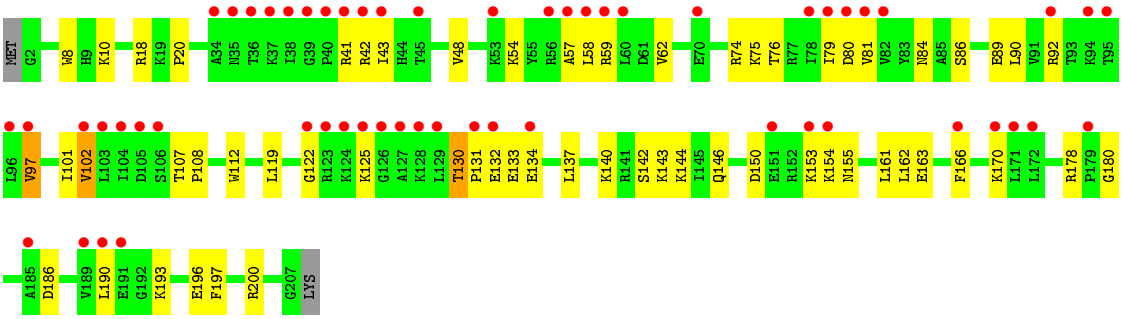
- Molecule 28: 40S ribosomal protein S8

Chain I4:



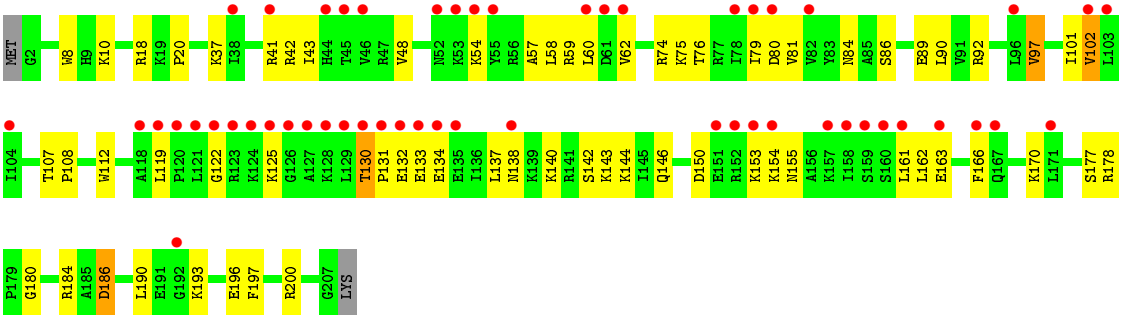
- Molecule 28: 40S ribosomal protein S8

Chain I5:



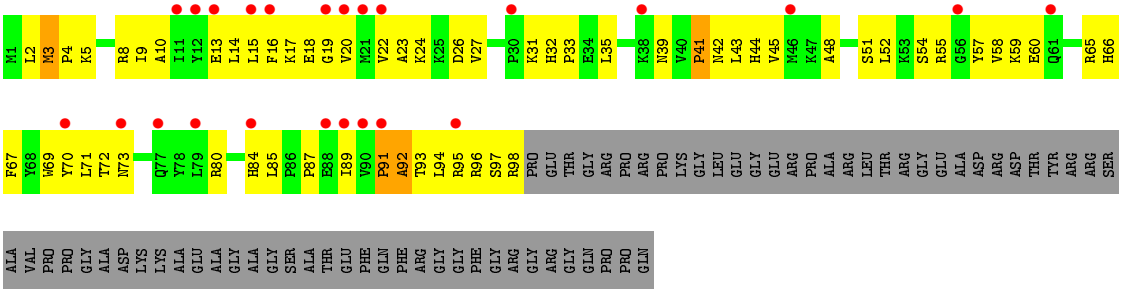
- Molecule 28: 40S ribosomal protein S8

Chain I6:



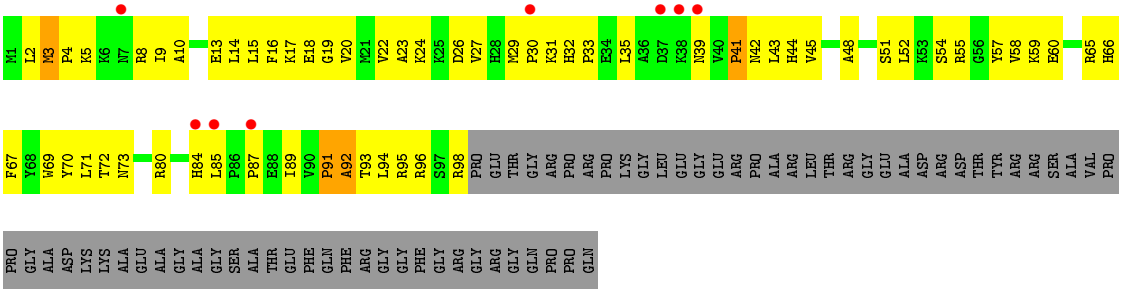
- Molecule 29: 40S ribosomal protein S10

Chain K1:



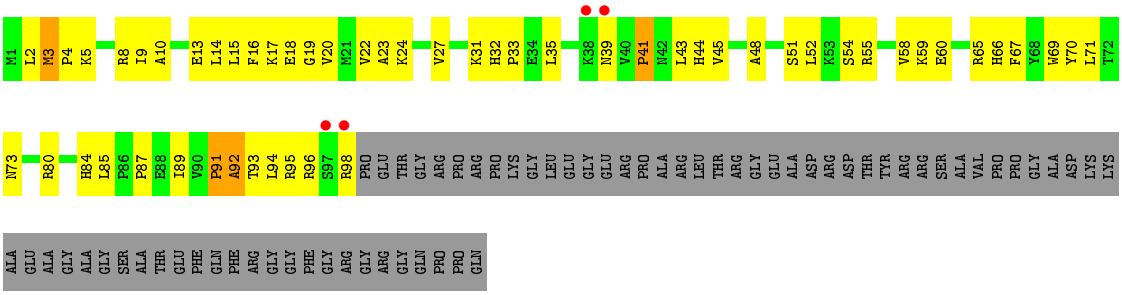
- Molecule 29: 40S ribosomal protein S10

Chain K2:



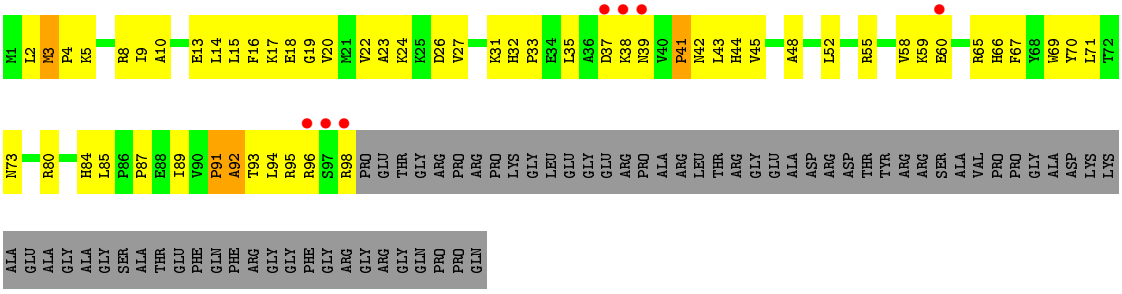
- Molecule 29: 40S ribosomal protein S10

Chain K3:



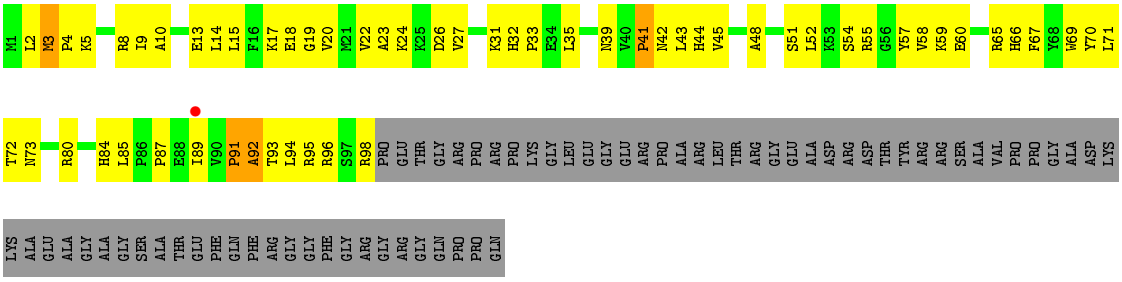
- Molecule 29: 40S ribosomal protein S10

Chain K4:



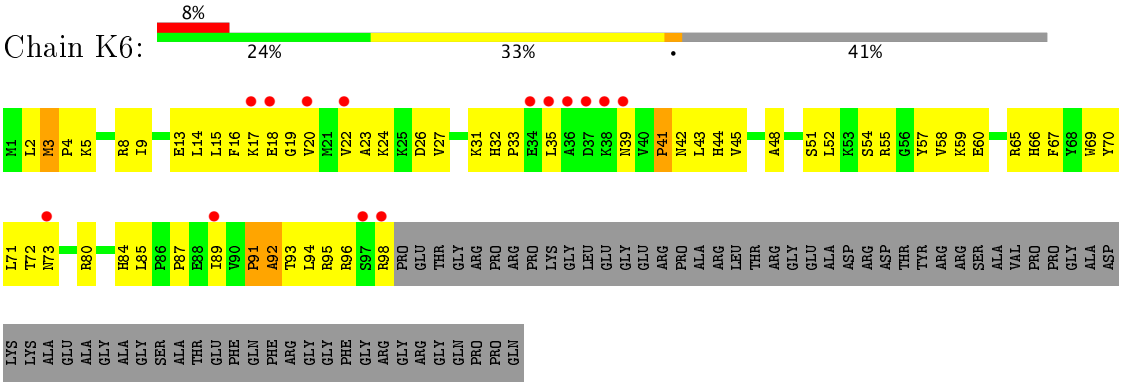
- Molecule 29: 40S ribosomal protein S10

Chain K5:



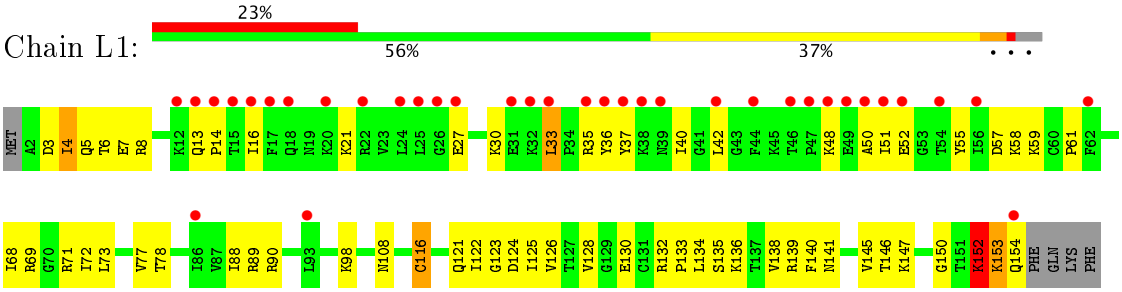
- Molecule 29: 40S ribosomal protein S10

Chain K6:



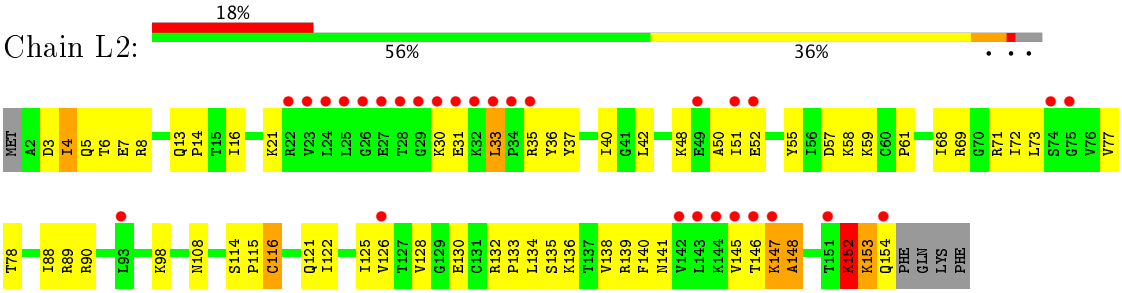
- Molecule 30: 40S ribosomal protein S11

Chain L1:



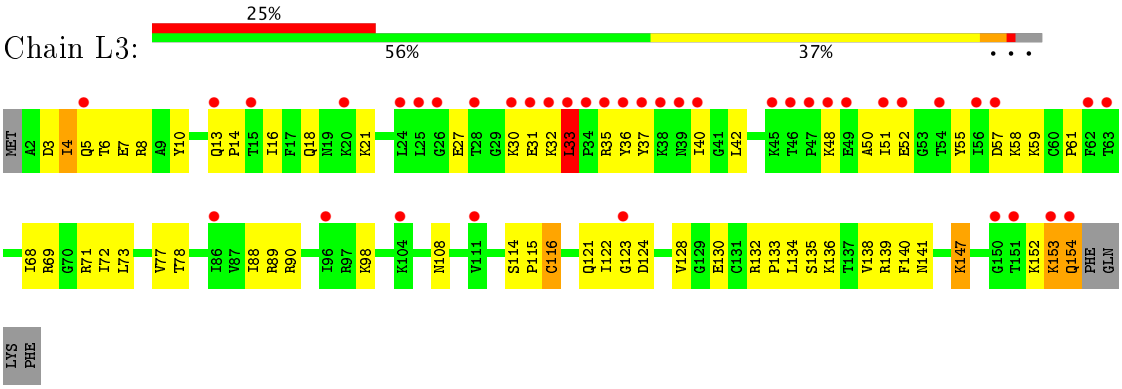
- Molecule 30: 40S ribosomal protein S11

Chain L2:



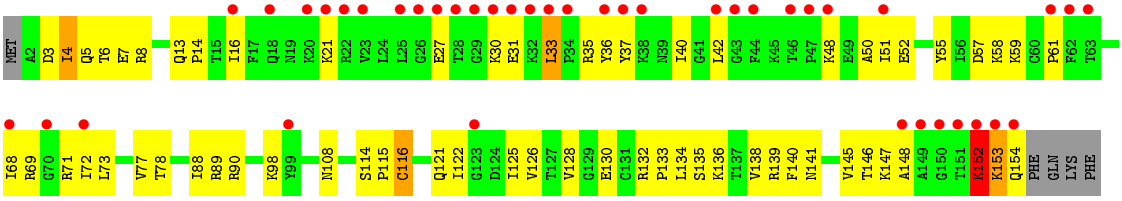
- Molecule 30: 40S ribosomal protein S11

Chain L3:



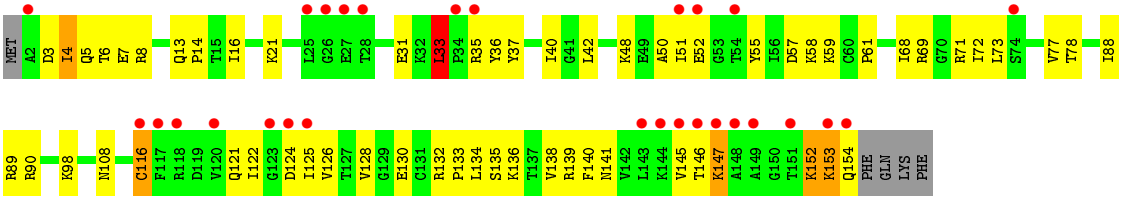
- Molecule 30: 40S ribosomal protein S11

Chain L4:



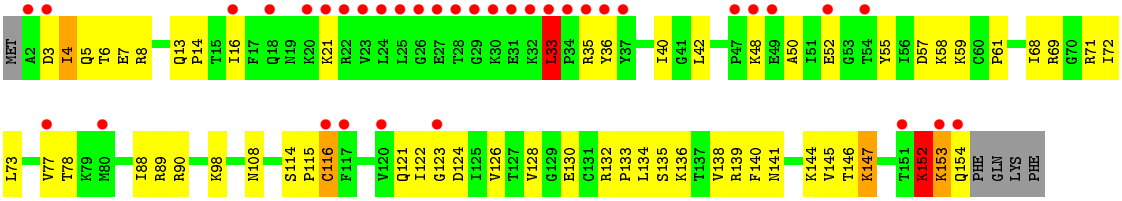
- Molecule 30: 40S ribosomal protein S11

Chain L5:



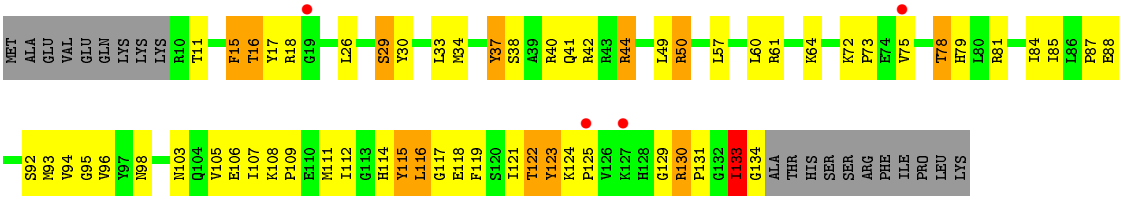
- Molecule 30: 40S ribosomal protein S11

Chain L6:



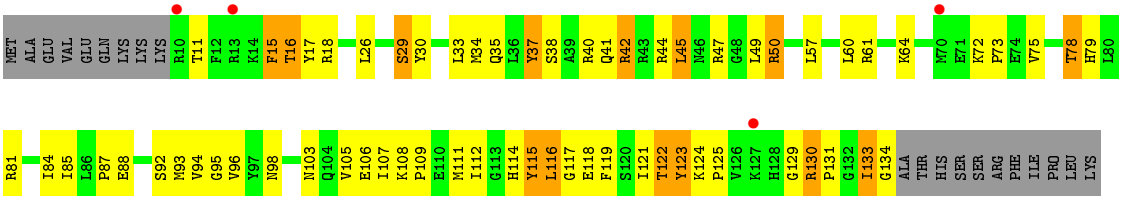
- Molecule 31: 40S ribosomal protein S15

Chain P1:



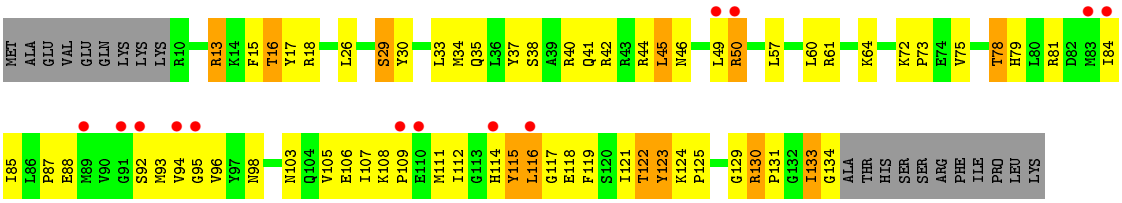
- Molecule 31: 40S ribosomal protein S15

Chain P2:



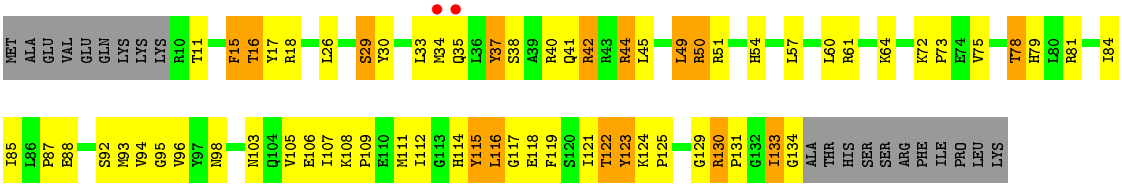
- Molecule 31: 40S ribosomal protein S15

Chain P3:



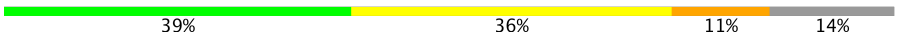
- Molecule 31: 40S ribosomal protein S15

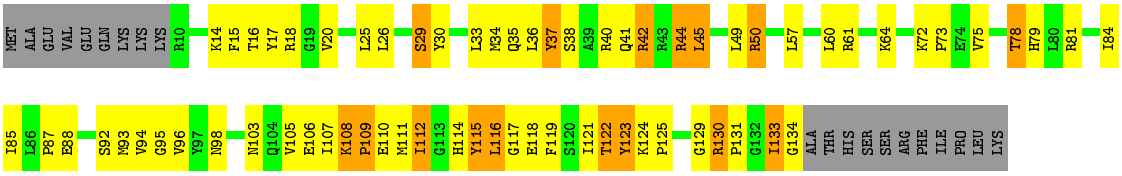
Chain P4:



- Molecule 31: 40S ribosomal protein S15

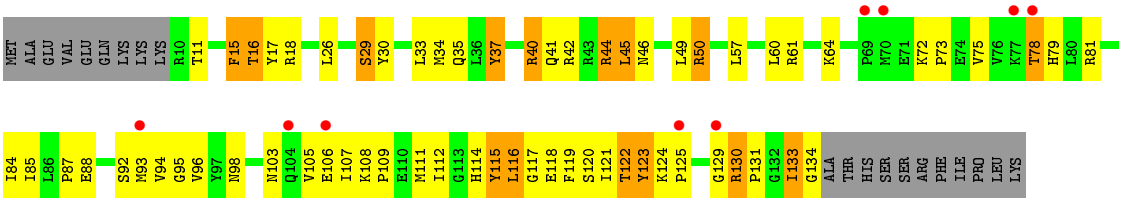
Chain P5:





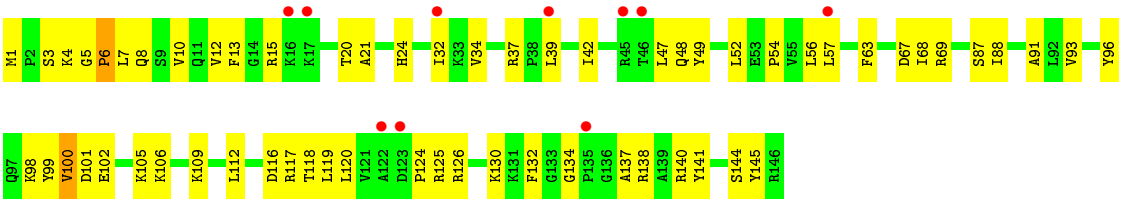
- Molecule 31: 40S ribosomal protein S15

Chain P6:



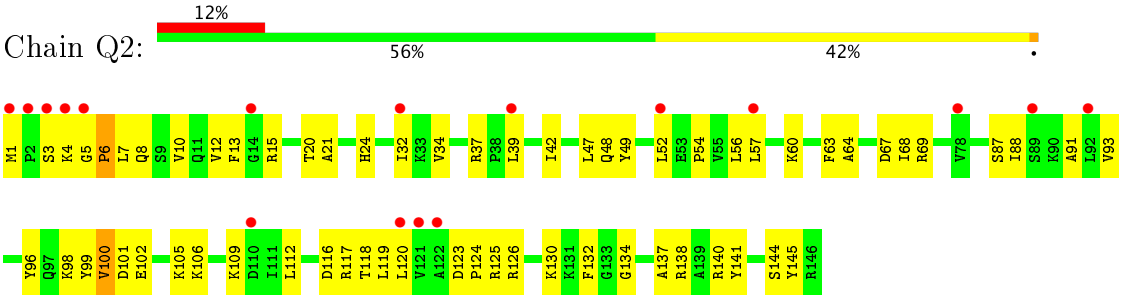
- Molecule 32: 40S ribosomal protein S16

Chain Q1:



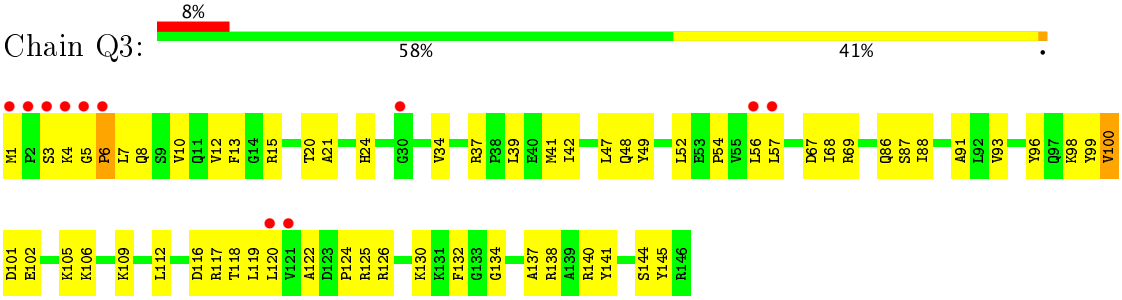
- Molecule 32: 40S ribosomal protein S16

Chain Q2:



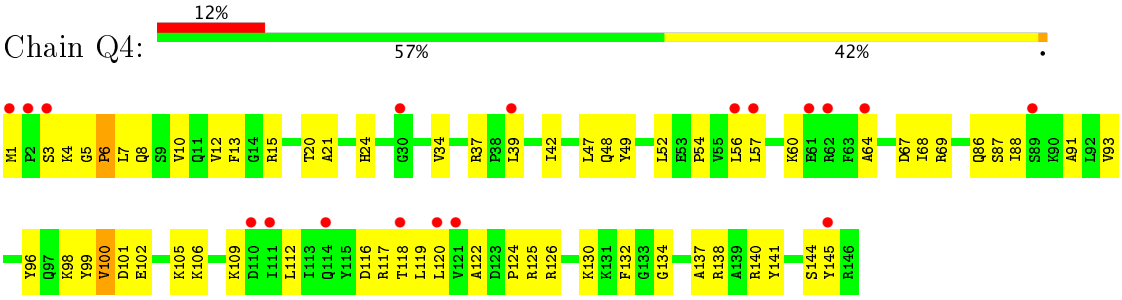
- Molecule 32: 40S ribosomal protein S16

Chain Q3:



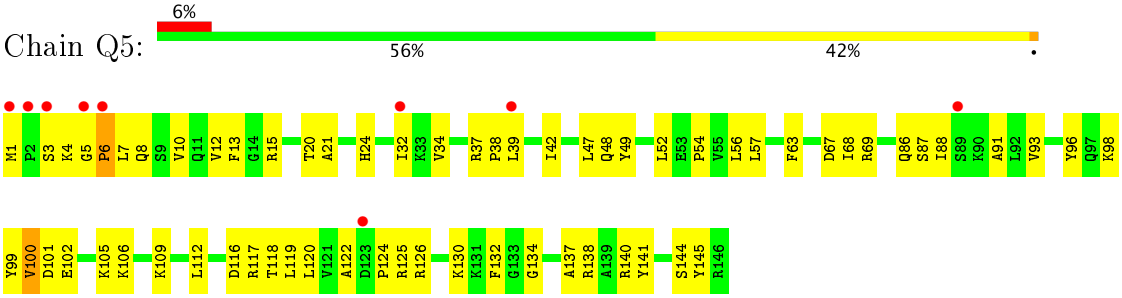
- Molecule 32: 40S ribosomal protein S16

Chain Q4:



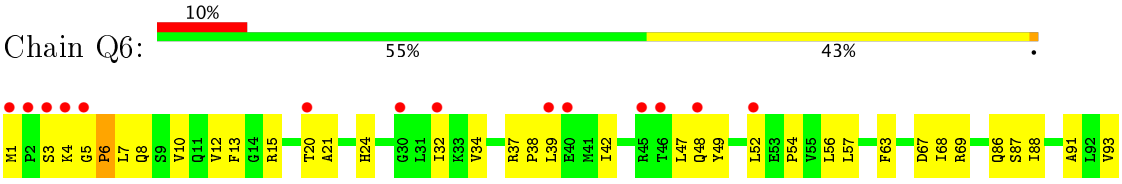
- Molecule 32: 40S ribosomal protein S16

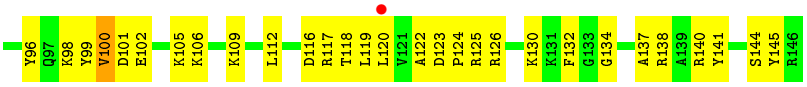
Chain Q5:



- Molecule 32: 40S ribosomal protein S16

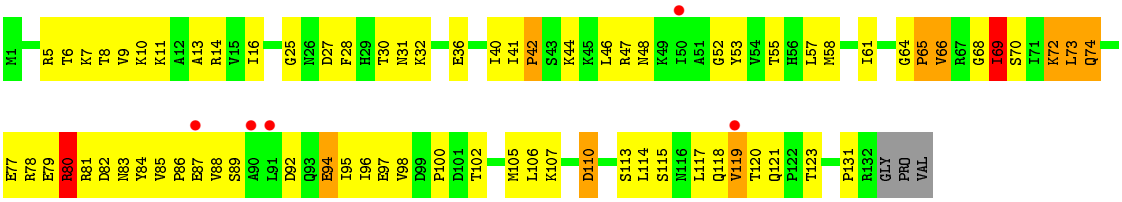
Chain Q6:





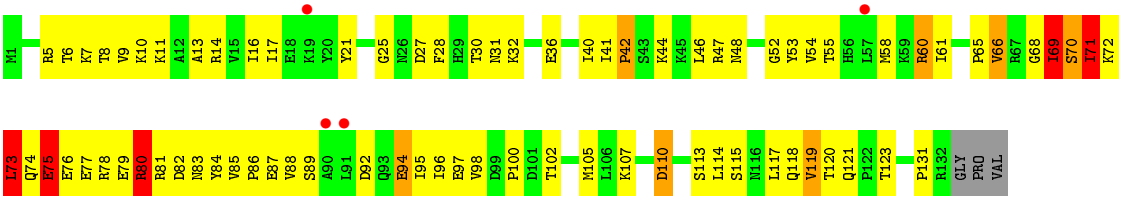
- Molecule 33: 40S ribosomal protein S17

Chain R1:



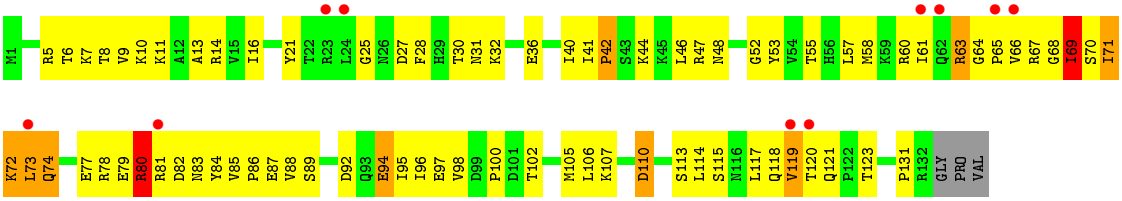
- Molecule 33: 40S ribosomal protein S17

Chain R2:



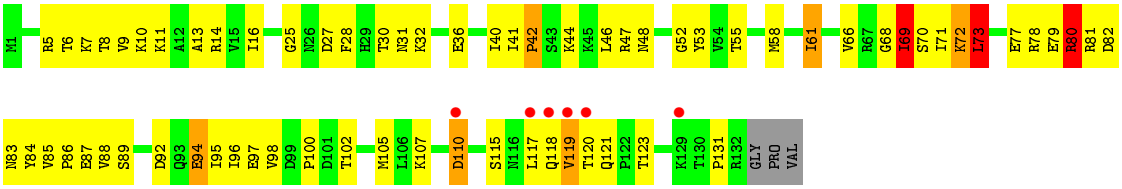
- Molecule 33: 40S ribosomal protein S17

Chain R3:



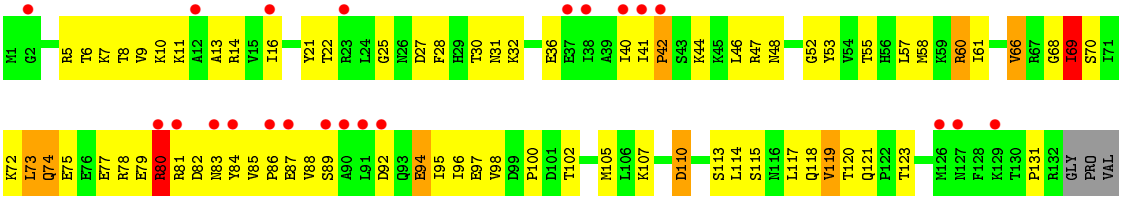
- Molecule 33: 40S ribosomal protein S17

Chain R4:



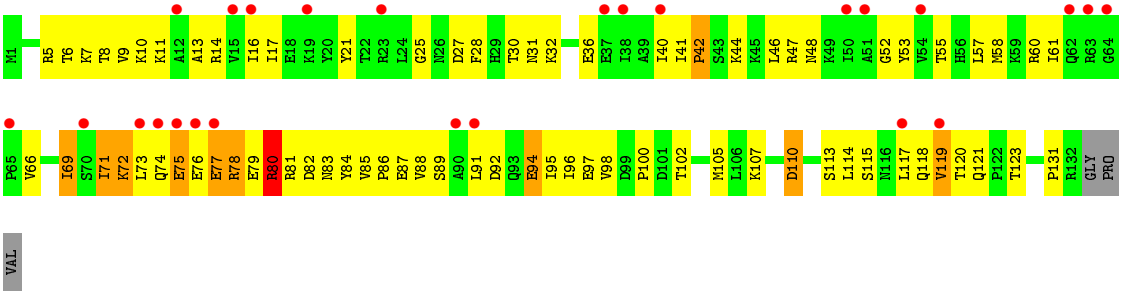
- Molecule 33: 40S ribosomal protein S17

Chain R5:



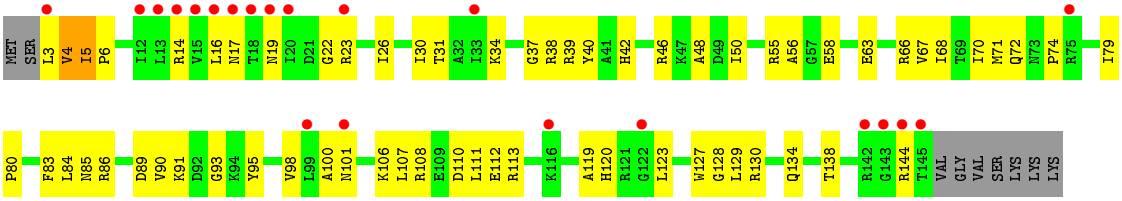
- Molecule 33: 40S ribosomal protein S17

Chain R6:



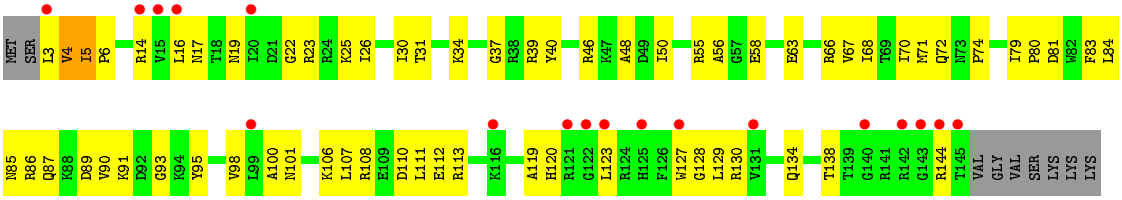
- Molecule 34: 40S ribosomal protein S18

Chain S1:



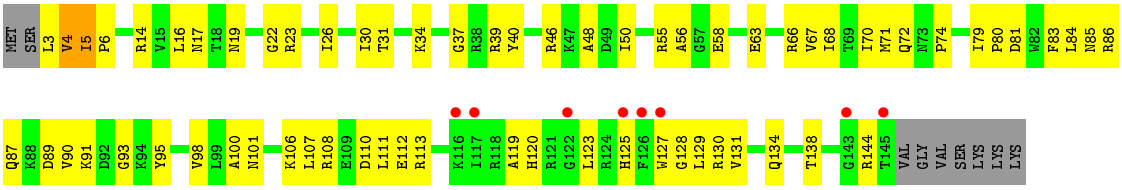
- Molecule 34: 40S ribosomal protein S18

Chain S2:



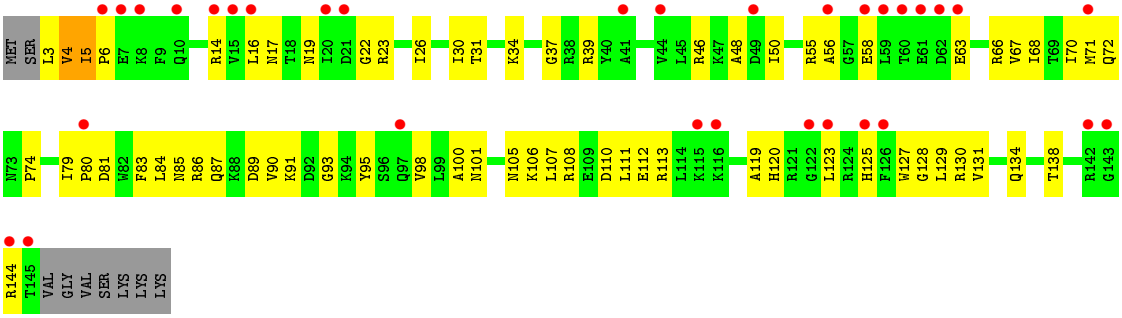
- Molecule 34: 40S ribosomal protein S18

Chain S3:



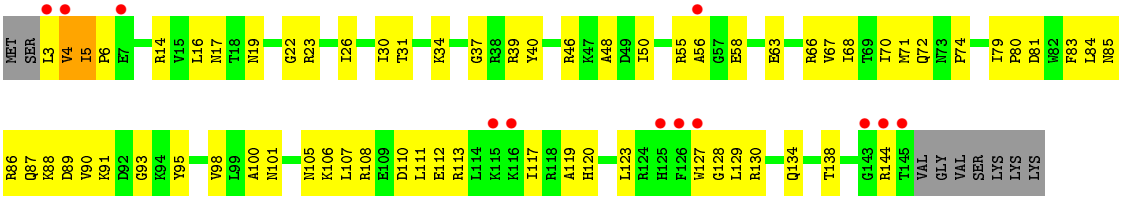
- Molecule 34: 40S ribosomal protein S18

Chain S4:



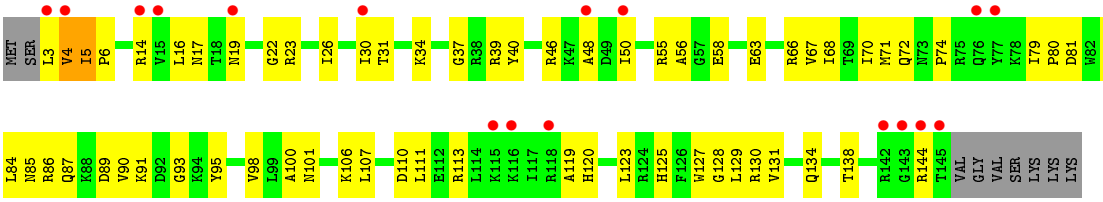
- Molecule 34: 40S ribosomal protein S18

Chain S5:



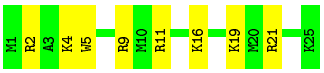
- Molecule 34: 40S ribosomal protein S18

Chain S6:



- Molecule 35: 60S ribosomal protein L41

Chain j1:



- Molecule 35: 60S ribosomal protein L41

Chain j2:

- Molecule 35: 60S ribosomal protein L41

Chain j3: 68% 32%

- Molecule 35: 60S ribosomal protein L41

Chain j4: 4% 72% 28%

- Molecule 35: 60S ribosomal protein L41

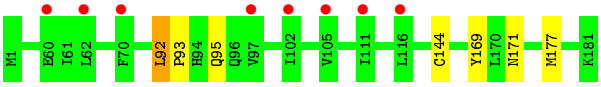
Chain j5: 68% 32%

- Molecule 35: 60S ribosomal protein L41

Chain j6: 68% 32%

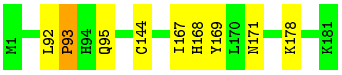
- Molecule 36: Malignant T-cell-amplified sequence 1

Chain k1: 4% 96%



- Molecule 36: Malignant T-cell-amplified sequence 1

Chain k2: 95%

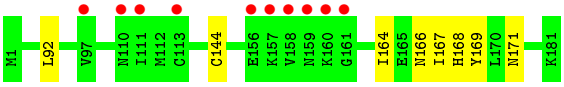


- Molecule 36: Malignant T-cell-amplified sequence 1

Chain k3: 97%

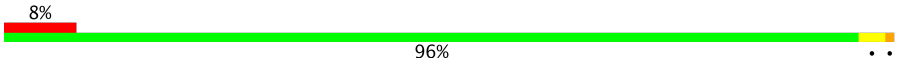
- Molecule 36: Malignant T-cell-amplified sequence 1

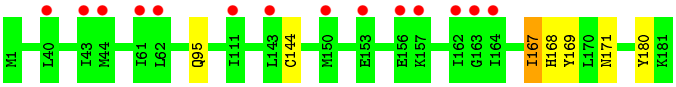
Chain k4: 6% 96%



• Molecule 36: Malignant T-cell-amplified sequence 1

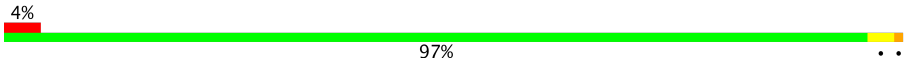
Chain k5:

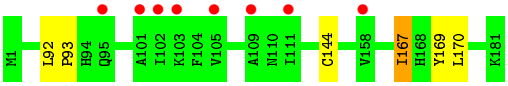




• Molecule 36: Malignant T-cell-amplified sequence 1

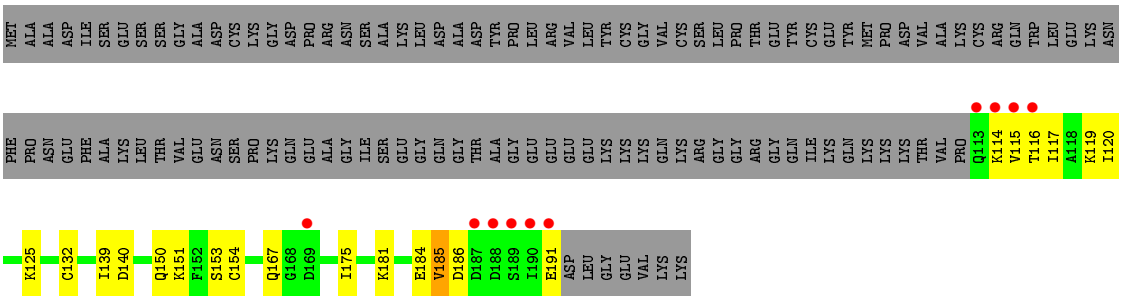
Chain k6:





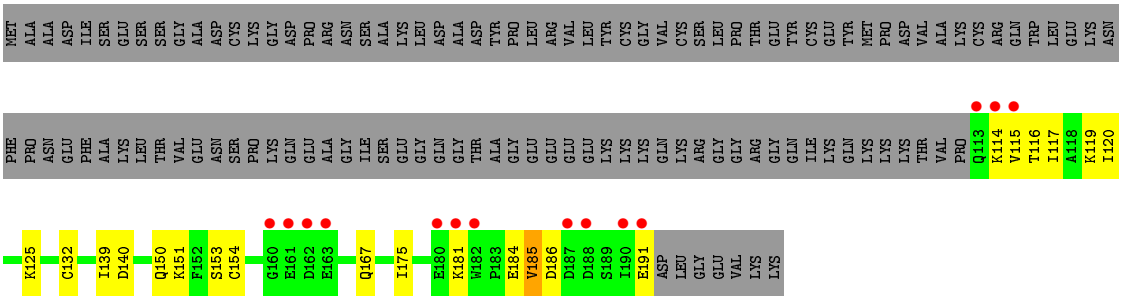
• Molecule 37: Density-regulated protein

Chain l1:



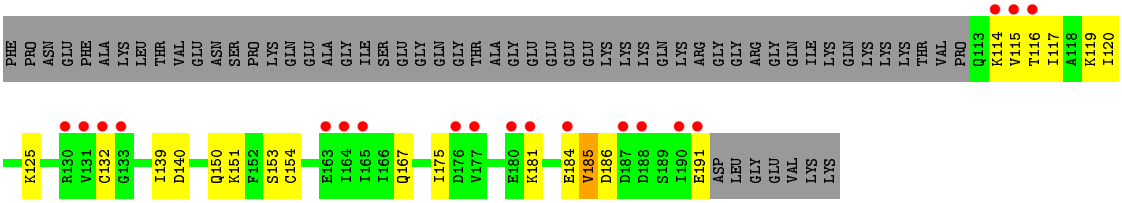
• Molecule 37: Density-regulated protein

Chain l2:



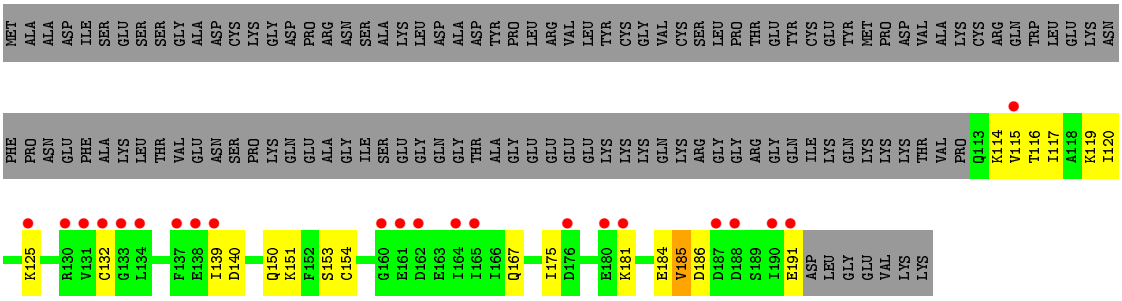
• Molecule 37: Density-regulated protein

Chain l3:



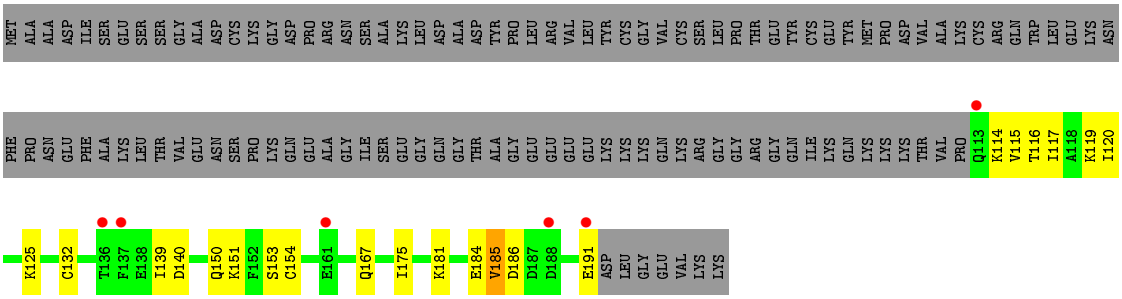
- Molecule 37: Density-regulated protein

Chain l4:



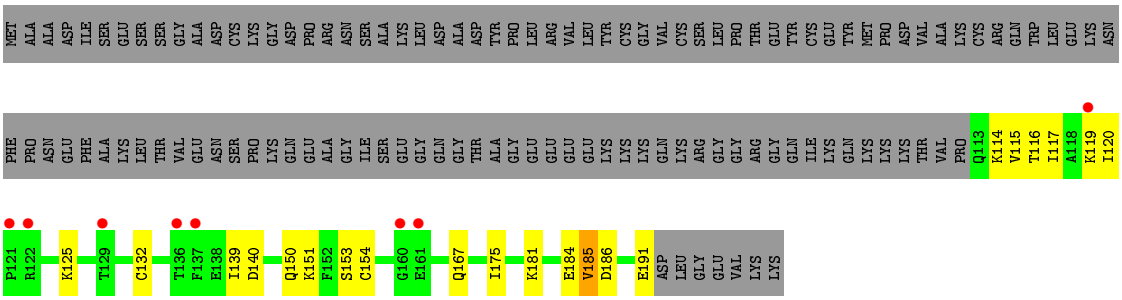
- Molecule 37: Density-regulated protein

Chain l5:



- Molecule 37: Density-regulated protein

Chain l6:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α, β, γ	334.67Å 597.13Å 336.50Å 90.00° 120.29° 90.00°	Depositor
Resolution (Å)	116.93 – 6.00 116.93 – 5.00	Depositor EDS
% Data completeness (in resolution range)	99.3 (116.93-6.00) 80.5 (116.93-5.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.00 (at 5.12Å)	Xtriage
Refinement program	PHENIX 1.8.2_1309	Depositor
R, R_{free}	0.323 , 0.321 0.321 , 0.319	Depositor DCC
R_{free} test set	14420 reflections (5.12%)	DCC
Wilson B-factor (Å^2)	278.9	Xtriage
Anisotropy	0.061	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	(Not available) , (Not available)	EDS
L-test for twinning[2]	$< \|L\| > = 0.33$, $< L^2 > = 0.17$	Xtriage
Estimated twinning fraction	0.094 for -h-l,k,h 0.094 for l,k,-h-l 0.099 for l,-k,h 0.097 for h,-k,-h-l 0.118 for -h-l,-k,l	Xtriage
F_o,F_c correlation	0.92	EDS
Total number of atoms	470574	wwPDB-VP
Average B, all atoms (Å^2)	204.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: ZN

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	T1	0.26	0/1131	0.48	0/1515
1	T2	0.26	0/1131	0.48	0/1515
1	T3	0.26	0/1131	0.48	0/1515
1	T4	0.26	0/1131	0.48	0/1515
1	T5	0.26	0/1131	0.48	0/1515
1	T6	0.26	0/1131	0.48	0/1515
2	U1	0.29	0/831	0.55	0/1115
2	U2	0.29	0/831	0.55	0/1115
2	U3	0.29	0/831	0.56	0/1115
2	U4	0.28	0/831	0.56	0/1115
2	U5	0.29	0/831	0.56	0/1115
2	U6	0.29	0/831	0.56	0/1115
3	V1	0.27	0/643	0.44	0/860
3	V2	0.27	0/643	0.45	0/860
3	V3	0.27	0/643	0.45	0/860
3	V4	0.27	0/643	0.45	0/860
3	V5	0.26	0/643	0.45	0/860
3	V6	0.27	0/643	0.45	0/860
4	X1	0.30	0/1116	0.48	0/1490
4	X2	0.30	0/1116	0.48	0/1490
4	X3	0.30	0/1116	0.47	0/1490
4	X4	0.30	0/1116	0.48	0/1490
4	X5	0.30	0/1116	0.48	0/1490
4	X6	0.30	0/1116	0.48	0/1490
5	a1	0.49	0/863	0.65	3/1159 (0.3%)
5	a2	0.50	0/863	0.65	3/1159 (0.3%)
5	a3	0.49	0/863	0.65	3/1159 (0.3%)
5	a4	0.50	0/863	0.65	3/1159 (0.3%)
5	a5	0.50	0/863	0.65	3/1159 (0.3%)
5	a6	0.49	0/863	0.65	3/1159 (0.3%)
6	c1	0.26	0/508	0.51	0/680
6	c2	0.26	0/508	0.51	0/680

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
6	c3	0.27	0/508	0.51	0/680
6	c4	0.27	0/508	0.51	0/680
6	c5	0.26	0/508	0.51	0/680
6	c6	0.26	0/508	0.51	0/680
7	d1	0.27	0/455	0.42	0/603
7	d2	0.27	0/455	0.42	0/603
7	d3	0.27	0/455	0.42	0/603
7	d4	0.27	0/455	0.42	0/603
7	d5	0.27	0/455	0.42	0/603
7	d6	0.28	0/455	0.42	0/603
8	f1	0.27	0/595	0.43	0/785
8	f2	0.27	0/595	0.43	0/785
8	f3	0.27	0/595	0.43	0/785
8	f4	0.27	0/595	0.43	0/785
8	f5	0.26	0/595	0.43	0/785
8	f6	0.27	0/595	0.43	0/785
9	g1	0.25	0/2493	0.50	0/3394
9	g2	0.25	0/2493	0.50	0/3394
9	g3	0.25	0/2493	0.50	0/3394
9	g4	0.25	0/2493	0.50	0/3394
9	g5	0.25	0/2493	0.50	0/3394
9	g6	0.25	0/2493	0.50	0/3394
10	C1	0.29	0/1762	0.48	0/2381
10	C2	0.29	0/1762	0.48	0/2381
10	C3	0.29	0/1762	0.48	0/2381
10	C4	0.29	0/1762	0.48	0/2381
10	C5	0.29	0/1762	0.48	0/2381
10	C6	0.29	0/1762	0.48	0/2381
11	G1	0.26	0/1946	0.49	0/2590
11	G2	0.26	0/1946	0.49	0/2590
11	G3	0.26	0/1946	0.49	0/2590
11	G4	0.26	0/1946	0.49	0/2590
11	G5	0.26	0/1946	0.49	0/2590
11	G6	0.26	0/1946	0.49	0/2590
12	J1	0.27	0/1550	0.47	0/2069
12	J2	0.27	0/1550	0.47	0/2069
12	J3	0.27	0/1550	0.47	0/2069
12	J4	0.27	0/1550	0.48	0/2069
12	J5	0.27	0/1550	0.48	0/2069
12	J6	0.27	0/1550	0.48	0/2069
13	M1	0.33	0/963	0.49	0/1291
13	M2	0.33	0/963	0.49	0/1291
13	M3	0.33	0/963	0.48	0/1291

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
13	M4	0.33	0/963	0.49	0/1291
13	M5	0.33	0/963	0.49	0/1291
13	M6	0.33	0/963	0.49	0/1291
14	N1	0.30	0/1232	0.47	0/1656
14	N2	0.30	0/1232	0.47	0/1656
14	N3	0.29	0/1232	0.46	0/1656
14	N4	0.30	0/1232	0.47	0/1656
14	N5	0.29	0/1232	0.46	0/1656
14	N6	0.29	0/1232	0.47	0/1656
15	O1	0.30	0/1062	0.58	1/1425 (0.1%)
15	O2	0.30	0/1062	0.58	1/1425 (0.1%)
15	O3	0.30	0/1062	0.58	1/1425 (0.1%)
15	O4	0.30	0/1062	0.58	1/1425 (0.1%)
15	O5	0.30	0/1062	0.58	1/1425 (0.1%)
15	O6	0.30	0/1062	0.58	1/1425 (0.1%)
16	W1	0.30	0/1051	0.52	0/1406
16	W2	0.30	0/1051	0.52	0/1406
16	W3	0.30	0/1051	0.52	0/1406
16	W4	0.30	0/1051	0.52	0/1406
16	W5	0.30	0/1051	0.52	0/1406
16	W6	0.30	0/1051	0.52	0/1406
17	Y1	0.27	0/1083	0.47	0/1438
17	Y2	0.27	0/1083	0.47	0/1438
17	Y3	0.27	0/1083	0.47	0/1438
17	Y4	0.27	0/1083	0.47	0/1438
17	Y5	0.27	0/1083	0.47	0/1438
17	Y6	0.26	0/1083	0.47	0/1438
18	Z1	0.26	0/604	0.55	0/810
18	Z2	0.27	0/604	0.55	0/810
18	Z3	0.26	0/604	0.55	0/810
18	Z4	0.26	0/604	0.55	0/810
18	Z5	0.26	0/604	0.55	0/810
18	Z6	0.27	0/604	0.55	0/810
19	b1	0.27	0/665	0.66	1/891 (0.1%)
19	b2	0.28	0/665	0.51	0/891
19	b3	0.28	0/665	0.51	0/891
19	b4	0.27	0/665	0.71	1/891 (0.1%)
19	b5	0.28	0/665	0.51	0/891
19	b6	0.28	0/665	0.51	0/891
20	e1	0.25	0/465	0.86	1/612 (0.2%)
20	e2	0.33	0/465	0.48	1/612 (0.2%)
20	e3	0.33	0/465	0.50	1/612 (0.2%)
20	e4	0.32	0/465	0.47	1/612 (0.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
20	e5	0.24	0/465	0.40	0/612
20	e6	0.33	0/465	0.50	1/612 (0.2%)
21	i1	0.37	1/41243 (0.0%)	0.78	14/64257 (0.0%)
21	i2	0.37	0/41242	0.77	11/64253 (0.0%)
21	i3	0.38	0/41242	0.77	9/64253 (0.0%)
21	i4	0.39	1/41243 (0.0%)	0.78	14/64257 (0.0%)
21	i5	0.44	1/41243 (0.0%)	0.78	14/64257 (0.0%)
21	i6	0.42	1/41243 (0.0%)	0.78	15/64257 (0.0%)
22	A1	0.26	0/1784	0.49	0/2424
22	A2	0.26	0/1784	0.48	0/2424
22	A3	0.27	0/1784	0.49	0/2424
22	A4	0.26	0/1784	0.49	0/2424
22	A5	0.27	0/1784	0.49	0/2424
22	A6	0.27	0/1784	0.49	0/2424
23	B1	0.29	0/1765	0.52	0/2362
23	B2	0.29	0/1765	0.53	0/2362
23	B3	0.29	0/1765	0.53	0/2362
23	B4	0.29	0/1765	0.53	0/2362
23	B5	0.29	0/1765	0.53	0/2362
23	B6	0.29	0/1765	0.52	0/2362
24	D1	0.27	0/1793	0.49	0/2414
24	D2	0.27	0/1793	0.49	0/2414
24	D3	0.27	0/1793	0.50	0/2414
24	D4	0.27	0/1793	0.50	0/2414
24	D5	0.27	0/1793	0.50	0/2414
24	D6	0.28	0/1793	0.50	0/2414
25	E1	0.27	0/2118	0.53	1/2849 (0.0%)
25	E2	0.27	0/2118	0.53	1/2849 (0.0%)
25	E3	0.27	0/2118	0.53	1/2849 (0.0%)
25	E4	0.27	0/2118	0.53	1/2849 (0.0%)
25	E5	0.27	0/2118	0.53	1/2849 (0.0%)
25	E6	0.27	0/2118	0.53	1/2849 (0.0%)
26	F1	0.28	0/1531	0.50	0/2059
26	F2	0.28	0/1531	0.50	0/2059
26	F3	0.28	0/1531	0.50	0/2059
26	F4	0.28	0/1531	0.50	0/2059
26	F5	0.28	0/1531	0.50	0/2059
26	F6	0.27	0/1531	0.50	0/2059
27	H1	0.27	0/1544	0.50	0/2068
27	H2	0.27	0/1544	0.50	0/2068
27	H3	0.27	0/1544	0.50	0/2068
27	H4	0.27	0/1544	0.50	0/2068
27	H5	0.27	0/1544	0.51	0/2068

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
27	H6	0.26	0/1544	0.50	0/2068
28	I1	0.28	0/1715	0.48	0/2287
28	I2	0.28	0/1715	0.49	0/2287
28	I3	0.28	0/1715	0.48	0/2287
28	I4	0.28	0/1715	0.48	0/2287
28	I5	0.28	0/1715	0.49	0/2287
28	I6	0.28	0/1715	0.48	0/2287
29	K1	0.27	0/851	0.49	0/1147
29	K2	0.28	0/851	0.49	0/1147
29	K3	0.28	0/851	0.49	0/1147
29	K4	0.28	0/851	0.49	0/1147
29	K5	0.28	0/851	0.49	0/1147
29	K6	0.28	0/851	0.49	0/1147
30	L1	0.30	0/1268	0.51	1/1696 (0.1%)
30	L2	0.30	0/1268	0.51	1/1696 (0.1%)
30	L3	0.30	0/1268	0.51	1/1696 (0.1%)
30	L4	0.30	0/1268	0.51	1/1696 (0.1%)
30	L5	0.30	0/1268	0.51	1/1696 (0.1%)
30	L6	0.30	0/1268	0.51	1/1696 (0.1%)
31	P1	0.28	0/1053	0.44	1/1406 (0.1%)
31	P2	0.28	0/1053	0.44	1/1406 (0.1%)
31	P3	0.28	0/1053	0.44	1/1406 (0.1%)
31	P4	0.28	0/1053	0.44	1/1406 (0.1%)
31	P5	0.27	0/1053	0.44	1/1406 (0.1%)
31	P6	0.28	0/1053	0.44	1/1406 (0.1%)
32	Q1	0.33	0/1177	0.50	0/1575
32	Q2	0.33	0/1177	0.50	0/1575
32	Q3	0.33	0/1177	0.51	0/1575
32	Q4	0.33	0/1177	0.51	0/1575
32	Q5	0.33	0/1177	0.50	0/1575
32	Q6	0.33	0/1177	0.51	0/1575
33	R1	0.27	0/1086	0.56	0/1457
33	R2	0.27	0/1086	0.56	0/1457
33	R3	0.27	0/1086	0.56	0/1457
33	R4	0.27	0/1086	0.55	0/1457
33	R5	0.27	0/1086	0.56	0/1457
33	R6	0.27	0/1086	0.56	0/1457
34	S1	0.36	0/1202	0.52	1/1610 (0.1%)
34	S2	0.36	0/1202	0.52	1/1610 (0.1%)
34	S3	0.36	0/1202	0.52	1/1610 (0.1%)
34	S4	0.36	0/1202	0.52	1/1610 (0.1%)
34	S5	0.36	0/1202	0.53	1/1610 (0.1%)
34	S6	0.36	0/1202	0.52	1/1610 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
35	j1	0.19	0/240	0.27	0/305
35	j2	0.19	0/240	0.26	0/305
35	j3	0.20	0/240	0.26	0/305
35	j4	0.19	0/240	0.26	0/305
35	j5	0.20	0/240	0.26	0/305
35	j6	0.20	0/240	0.27	0/305
36	k1	0.57	0/1455	0.60	1/1968 (0.1%)
36	k2	0.67	2/1455 (0.1%)	0.78	6/1968 (0.3%)
36	k3	0.59	0/1455	1.24	3/1968 (0.2%)
36	k4	0.58	0/1455	0.54	0/1968
36	k5	0.60	1/1455 (0.1%)	0.86	3/1968 (0.2%)
36	k6	0.58	0/1455	0.55	0/1968
37	l1	0.40	0/638	0.72	4/859 (0.5%)
37	l2	0.40	0/638	0.72	4/859 (0.5%)
37	l3	0.40	0/638	0.71	4/859 (0.5%)
37	l4	0.40	0/638	0.71	4/859 (0.5%)
37	l5	0.40	0/638	0.72	4/859 (0.5%)
37	l6	0.40	0/638	0.72	4/859 (0.5%)
All	All	0.35	7/500884 (0.0%)	0.67	169/725470 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
33	R1	0	1
33	R2	0	1
33	R3	0	1
33	R4	0	1
33	R5	0	1
36	k2	0	1
36	k3	0	2
36	k5	0	1
All	All	0	9

All (7) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	i5	1689	C	O3'-P	44.78	2.14	1.61
21	i6	1689	C	O3'-P	38.40	2.07	1.61
21	i4	1689	C	O3'-P	25.06	1.91	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	k2	92	LEU	C-N	11.28	1.55	1.34
36	k2	93	PRO	C-N	6.37	1.48	1.34
21	i1	1689	C	O3'-P	5.09	1.67	1.61
36	k5	167	ILE	C-N	5.00	1.45	1.34

All (169) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
36	k3	180	TYR	O-C-N	-37.78	62.25	122.70
21	i1	1689	C	P-O3'-C3'	-30.42	83.20	119.70
36	k5	167	ILE	O-C-N	-26.56	80.21	122.70
36	k3	180	TYR	CA-C-N	25.08	172.38	117.20
21	i4	1689	C	P-O3'-C3'	-25.00	89.69	119.70
21	i5	1689	C	P-O3'-C3'	-21.04	94.45	119.70
36	k3	180	TYR	C-N-CA	19.23	169.78	121.70
20	e1	46	VAL	C-N-CD	-18.73	79.40	120.60
21	i6	1689	C	P-O3'-C3'	-18.53	97.46	119.70
21	i1	1689	C	OP2-P-O3'	16.75	142.05	105.20
21	i1	1689	C	OP1-P-O3'	-15.53	71.03	105.20
21	i4	1689	C	OP2-P-O3'	14.84	137.85	105.20
21	i5	1689	C	OP2-P-O3'	14.82	137.81	105.20
19	b4	37	CYS	C-N-CD	-14.80	88.03	120.60
36	k2	93	PRO	O-C-N	-14.59	99.36	122.70
21	i6	1689	C	OP2-P-O3'	13.71	135.36	105.20
19	b1	37	CYS	C-N-CD	-12.87	92.30	120.60
36	k2	92	LEU	O-C-N	12.26	144.39	121.10
21	i4	1689	C	OP1-P-O3'	-12.25	78.25	105.20
36	k1	92	LEU	C-N-CD	-12.05	94.08	120.60
37	l6	167	GLN	O-C-N	10.85	141.65	123.20
37	l1	167	GLN	O-C-N	10.75	141.47	123.20
37	l2	167	GLN	O-C-N	10.73	141.44	123.20
37	l3	167	GLN	O-C-N	10.73	141.45	123.20
37	l5	167	GLN	O-C-N	10.73	141.44	123.20
21	i6	1689	C	OP1-P-O3'	-10.71	81.64	105.20
37	l4	167	GLN	O-C-N	10.70	141.38	123.20
21	i5	1689	C	OP1-P-O3'	-10.65	81.76	105.20
36	k5	180	TYR	O-C-N	9.57	138.01	122.70
37	l6	167	GLN	CA-C-N	-9.36	97.49	116.20
37	l5	167	GLN	CA-C-N	-9.33	97.55	116.20
37	l2	167	GLN	CA-C-N	-9.30	97.61	116.20
37	l3	167	GLN	CA-C-N	-9.29	97.62	116.20
37	l1	167	GLN	CA-C-N	-9.28	97.64	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	l4	167	GLN	CA-C-N	-9.23	97.73	116.20
36	k2	93	PRO	CA-C-N	8.74	136.43	117.20
37	l6	167	GLN	C-N-CA	-8.41	104.64	122.30
37	l5	167	GLN	C-N-CA	-8.36	104.75	122.30
37	l3	167	GLN	C-N-CA	-8.32	104.82	122.30
37	l1	167	GLN	C-N-CA	-8.32	104.83	122.30
37	l2	167	GLN	C-N-CA	-8.31	104.85	122.30
37	l4	167	GLN	C-N-CA	-8.29	104.88	122.30
36	k2	92	LEU	CA-C-N	-7.99	94.72	117.10
36	k2	92	LEU	C-N-CA	-7.37	91.06	122.00
21	i5	1453	C	C2-N1-C1'	7.30	126.83	118.80
21	i1	1453	C	C2-N1-C1'	7.27	126.80	118.80
21	i4	1453	C	C2-N1-C1'	7.21	126.73	118.80
21	i6	1453	C	C2-N1-C1'	7.21	126.73	118.80
21	i2	1453	C	C2-N1-C1'	7.18	126.70	118.80
21	i3	1453	C	C2-N1-C1'	7.14	126.65	118.80
36	k2	93	PRO	C-N-CA	7.13	139.54	121.70
36	k5	180	TYR	CA-C-N	-7.11	101.56	117.20
21	i5	1016	U	C2-N1-C1'	7.09	126.21	117.70
21	i4	1016	U	C2-N1-C1'	7.08	126.20	117.70
21	i2	1016	U	C2-N1-C1'	7.04	126.15	117.70
21	i3	1016	U	C2-N1-C1'	7.03	126.13	117.70
21	i6	1016	U	C2-N1-C1'	7.01	126.12	117.70
21	i1	1016	U	C2-N1-C1'	6.95	126.04	117.70
21	i2	1453	C	N1-C2-O2	6.93	123.06	118.90
21	i4	1453	C	N1-C2-O2	6.92	123.05	118.90
21	i3	1453	C	N1-C2-O2	6.87	123.02	118.90
21	i1	1453	C	N1-C2-O2	6.83	123.00	118.90
21	i6	1453	C	N1-C2-O2	6.81	122.99	118.90
21	i5	1453	C	N1-C2-O2	6.71	122.93	118.90
21	i5	185	G	C2'-C3'-O3'	6.51	124.11	113.70
21	i1	185	G	C2'-C3'-O3'	6.50	124.10	113.70
21	i1	1016	U	N1-C2-O2	6.32	127.22	122.80
21	i3	1016	U	N1-C2-O2	6.13	127.09	122.80
21	i6	1016	U	N1-C2-O2	6.12	127.09	122.80
21	i4	1016	U	N1-C2-O2	6.06	127.04	122.80
21	i5	1016	U	N1-C2-O2	6.00	127.00	122.80
21	i2	1016	U	N1-C2-O2	5.95	126.97	122.80
31	P6	130	ARG	C-N-CD	-5.88	107.67	120.60
31	P4	130	ARG	C-N-CD	-5.86	107.71	120.60
31	P2	130	ARG	C-N-CD	-5.82	107.79	120.60
31	P5	130	ARG	C-N-CD	-5.81	107.82	120.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	P3	130	ARG	C-N-CD	-5.81	107.83	120.60
31	P1	130	ARG	C-N-CD	-5.80	107.84	120.60
30	L6	33	LEU	CA-CB-CG	5.66	128.31	115.30
30	L5	33	LEU	CA-CB-CG	5.63	128.24	115.30
30	L3	33	LEU	CA-CB-CG	5.61	128.21	115.30
30	L2	33	LEU	CA-CB-CG	5.59	128.16	115.30
30	L1	33	LEU	CA-CB-CG	5.58	128.14	115.30
30	L4	33	LEU	CA-CB-CG	5.55	128.07	115.30
21	i1	1016	U	N3-C2-O2	-5.54	118.32	122.20
15	O4	17	LEU	CA-CB-CG	5.51	127.97	115.30
15	O6	17	LEU	CA-CB-CG	5.51	127.97	115.30
15	O2	17	LEU	CA-CB-CG	5.47	127.89	115.30
15	O5	17	LEU	CA-CB-CG	5.47	127.89	115.30
15	O1	17	LEU	CA-CB-CG	5.46	127.86	115.30
15	O3	17	LEU	CA-CB-CG	5.42	127.78	115.30
21	i6	1016	U	N3-C2-O2	-5.40	118.42	122.20
21	i6	1118	C	C2-N1-C1'	5.39	124.73	118.80
21	i5	1016	U	N3-C2-O2	-5.35	118.46	122.20
21	i4	1016	U	N3-C2-O2	-5.33	118.47	122.20
21	i6	1453	C	C6-N1-C1'	-5.31	114.43	120.80
21	i5	1453	C	C6-N1-C1'	-5.30	114.44	120.80
21	i1	1453	C	C6-N1-C1'	-5.29	114.45	120.80
21	i3	1016	U	N3-C2-O2	-5.27	118.51	122.20
21	i2	1453	C	N3-C2-O2	-5.23	118.24	121.90
21	i3	1057	C	C2-N1-C1'	5.23	124.55	118.80
21	i2	1453	C	C6-N1-C1'	-5.22	114.53	120.80
21	i2	1057	C	N1-C2-O2	5.21	122.03	118.90
5	a6	97	PRO	C-N-CD	5.19	139.29	128.40
21	i4	1118	C	C2-N1-C1'	5.17	124.49	118.80
21	i6	1057	C	N1-C2-O2	5.17	122.00	118.90
21	i3	1118	C	C2-N1-C1'	5.17	124.48	118.80
5	a4	97	PRO	C-N-CD	5.16	139.23	128.40
5	a5	98	PRO	C-N-CD	5.16	139.23	128.40
5	a5	96	THR	C-N-CD	5.15	139.21	128.40
5	a1	97	PRO	C-N-CD	5.15	139.21	128.40
5	a4	96	THR	C-N-CD	5.14	139.20	128.40
21	i4	1453	C	N3-C2-O2	-5.14	118.30	121.90
21	i5	1057	C	C2-N1-C1'	5.14	124.46	118.80
5	a3	98	PRO	C-N-CD	5.14	139.19	128.40
5	a4	98	PRO	C-N-CD	5.13	139.18	128.40
21	i1	1057	C	C2-N1-C1'	5.13	124.44	118.80
20	e6	46	VAL	C-N-CD	5.12	139.16	128.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	a2	98	PRO	C-N-CD	5.12	139.15	128.40
21	i4	1453	C	C6-N1-C1'	-5.12	114.66	120.80
21	i1	1118	C	C2-N1-C1'	5.12	124.43	118.80
20	e3	46	VAL	C-N-CD	5.12	139.14	128.40
34	S3	5	ILE	C-N-CD	5.12	139.14	128.40
20	e2	46	VAL	C-N-CD	5.11	139.14	128.40
5	a3	97	PRO	C-N-CD	5.11	139.14	128.40
21	i3	1453	C	C6-N1-C1'	-5.11	114.67	120.80
34	S5	5	ILE	C-N-CD	5.10	139.12	128.40
5	a2	96	THR	C-N-CD	5.10	139.12	128.40
5	a5	97	PRO	C-N-CD	5.10	139.12	128.40
21	i2	1624	U	C2-N1-C1'	5.09	123.81	117.70
34	S6	5	ILE	C-N-CD	5.09	139.09	128.40
5	a2	97	PRO	C-N-CD	5.09	139.09	128.40
21	i6	1453	C	N3-C2-O2	-5.09	118.34	121.90
21	i2	1118	C	C2-N1-C1'	5.08	124.39	118.80
21	i5	1624	U	C2-N1-C1'	5.08	123.80	117.70
5	a3	96	THR	C-N-CD	5.08	139.07	128.40
20	e4	46	VAL	C-N-CD	5.08	139.07	128.40
21	i5	1453	C	N3-C2-O2	-5.08	118.34	121.90
34	S1	5	ILE	C-N-CD	5.08	139.06	128.40
25	E2	164	LEU	CA-CB-CG	5.08	126.98	115.30
21	i5	1118	C	C2-N1-C1'	5.08	124.38	118.80
25	E3	164	LEU	CA-CB-CG	5.07	126.95	115.30
21	i4	1624	U	C2-N1-C1'	5.07	123.78	117.70
5	a1	98	PRO	C-N-CD	5.06	139.03	128.40
21	i2	1016	U	N3-C2-O2	-5.06	118.66	122.20
25	E1	164	LEU	CA-CB-CG	5.06	126.94	115.30
21	i6	1624	U	C2-N1-C1'	5.06	123.77	117.70
34	S2	5	ILE	C-N-CD	5.06	139.02	128.40
25	E4	164	LEU	CA-CB-CG	5.05	126.93	115.30
5	a6	96	THR	C-N-CD	5.05	139.02	128.40
5	a1	96	THR	C-N-CD	5.04	138.99	128.40
37	l3	120	ILE	C-N-CD	5.04	138.99	128.40
37	l1	120	ILE	C-N-CD	5.04	138.98	128.40
37	l4	120	ILE	C-N-CD	5.04	138.98	128.40
21	i6	1057	C	C2-N1-C1'	5.04	124.34	118.80
34	S4	5	ILE	C-N-CD	5.03	138.97	128.40
21	i4	1057	C	C2-N1-C1'	5.03	124.33	118.80
21	i4	1057	C	N1-C2-O2	5.03	121.92	118.90
21	i2	1057	C	C2-N1-C1'	5.03	124.33	118.80
25	E6	164	LEU	CA-CB-CG	5.02	126.86	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	i1	732	U	C2'-C3'-O3'	5.02	121.73	113.70
37	l2	120	ILE	C-N-CD	5.02	138.94	128.40
5	a6	98	PRO	C-N-CD	5.01	138.93	128.40
21	i6	732	U	C2'-C3'-O3'	5.01	121.71	113.70
37	l5	120	ILE	C-N-CD	5.01	138.92	128.40
25	E5	164	LEU	CA-CB-CG	5.01	126.81	115.30
21	i1	1624	U	C2-N1-C1'	5.00	123.71	117.70
37	l6	120	ILE	C-N-CD	5.00	138.91	128.40
21	i3	1057	C	N1-C2-O2	5.00	121.90	118.90

There are no chirality outliers.

All (9) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
33	R1	69	ILE	Peptide
33	R2	69	ILE	Peptide
33	R3	69	ILE	Peptide
33	R4	69	ILE	Peptide
33	R5	69	ILE	Peptide
36	k2	93	PRO	Mainchain
36	k3	180	TYR	Mainchain,Peptide
36	k5	167	ILE	Mainchain

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	T1	1112	0	1146	28	0
1	T2	1112	0	1146	31	0
1	T3	1112	0	1146	31	2
1	T4	1112	0	1146	31	3
1	T5	1112	0	1146	30	0
1	T6	1112	0	1146	30	0
2	U1	821	0	883	74	0
2	U2	821	0	883	79	0
2	U3	821	0	883	78	0
2	U4	821	0	883	76	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	U5	821	0	883	78	0
2	U6	821	0	883	79	0
3	V1	636	0	637	24	0
3	V2	636	0	637	26	0
3	V3	636	0	637	24	0
3	V4	636	0	637	25	0
3	V5	636	0	637	26	0
3	V6	636	0	637	26	0
4	X1	1098	0	1167	39	0
4	X2	1098	0	1167	39	0
4	X3	1098	0	1167	40	0
4	X4	1098	0	1167	41	0
4	X5	1098	0	1167	39	0
4	X6	1098	0	1167	39	0
5	a1	847	0	899	0	0
5	a2	847	0	899	0	0
5	a3	847	0	899	0	0
5	a4	847	0	899	0	0
5	a5	847	0	899	0	0
5	a6	847	0	899	0	0
6	c1	506	0	536	0	0
6	c2	506	0	536	0	0
6	c3	506	0	536	0	0
6	c4	506	0	536	0	0
6	c5	506	0	536	0	0
6	c6	506	0	536	0	0
7	d1	445	0	442	0	0
7	d2	445	0	442	0	0
7	d3	445	0	442	0	0
7	d4	445	0	442	0	0
7	d5	445	0	442	0	0
7	d6	445	0	442	0	0
8	f1	585	0	617	0	0
8	f2	585	0	617	0	0
8	f3	585	0	618	0	3
8	f4	585	0	616	0	0
8	f5	585	0	617	0	0
8	f6	585	0	618	0	0
9	g1	2436	0	2393	0	3
9	g2	2436	0	2393	0	1
9	g3	2436	0	2393	0	0
9	g4	2436	0	2393	0	2

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
9	g5	2436	0	2393	0	1
9	g6	2436	0	2393	0	3
10	C1	1725	0	1806	146	0
10	C2	1725	0	1810	152	0
10	C3	1725	0	1811	154	0
10	C4	1725	0	1809	144	0
10	C5	1725	0	1809	146	0
10	C6	1725	0	1808	163	0
11	G1	1923	0	2089	119	0
11	G2	1923	0	2089	124	0
11	G3	1923	0	2089	122	0
11	G4	1923	0	2089	126	0
11	G5	1923	0	2086	125	0
11	G6	1923	0	2089	123	0
12	J1	1525	0	1640	58	0
12	J2	1525	0	1640	58	0
12	J3	1525	0	1640	58	0
12	J4	1525	0	1640	57	0
12	J5	1525	0	1640	58	0
12	J6	1525	0	1640	58	0
13	M1	953	0	990	66	0
13	M2	953	0	990	64	0
13	M3	953	0	990	65	1
13	M4	953	0	990	65	0
13	M5	953	0	990	66	0
13	M6	953	0	990	65	0
14	N1	1208	0	1294	101	8
14	N2	1208	0	1294	98	1
14	N3	1208	0	1294	105	0
14	N4	1208	0	1294	89	4
14	N5	1208	0	1294	100	0
14	N6	1208	0	1294	92	4
15	O1	1049	0	1073	74	0
15	O2	1049	0	1071	81	0
15	O3	1049	0	1072	58	0
15	O4	1049	0	1073	65	0
15	O5	1049	0	1071	63	0
15	O6	1049	0	1071	87	0
16	W1	1034	0	1080	44	0
16	W2	1034	0	1080	43	0
16	W3	1034	0	1080	51	0
16	W4	1034	0	1080	61	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
16	W5	1034	0	1080	44	0
16	W6	1034	0	1080	43	0
17	Y1	1065	0	1142	48	0
17	Y2	1065	0	1142	60	0
17	Y3	1065	0	1142	45	0
17	Y4	1065	0	1142	46	0
17	Y5	1065	0	1142	48	0
17	Y6	1065	0	1142	45	0
18	Z1	598	0	655	77	0
18	Z2	598	0	655	79	0
18	Z3	598	0	655	80	0
18	Z4	598	0	655	78	0
18	Z5	598	0	655	77	0
18	Z6	598	0	654	80	0
19	b1	651	0	672	0	16
19	b2	651	0	672	0	2
19	b3	651	0	672	0	8
19	b4	651	0	672	0	11
19	b5	651	0	672	0	6
19	b6	651	0	672	0	0
20	e1	459	0	503	0	0
20	e2	459	0	502	0	0
20	e3	459	0	503	0	0
20	e4	459	0	503	0	0
20	e5	459	0	503	0	0
20	e6	459	0	502	0	0
21	i1	36900	0	18592	0	1
21	i2	36900	0	18590	0	14
21	i3	36900	0	18593	0	8
21	i4	36900	0	18594	0	8
21	i5	36900	0	18589	0	6
21	i6	36900	0	18589	0	6
22	A1	1747	0	1749	136	0
22	A2	1747	0	1751	139	0
22	A3	1747	0	1749	139	0
22	A4	1747	0	1748	132	0
22	A5	1747	0	1748	137	0
22	A6	1747	0	1748	135	0
23	B1	1738	0	1809	72	0
23	B2	1738	0	1809	100	0
23	B3	1738	0	1809	66	0
23	B4	1738	0	1809	94	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
23	B5	1738	0	1809	78	0
23	B6	1738	0	1809	81	0
24	D1	1765	0	1865	88	6
24	D2	1765	0	1865	90	6
24	D3	1765	0	1865	89	0
24	D4	1765	0	1865	89	0
24	D5	1765	0	1865	92	0
24	D6	1765	0	1865	92	0
25	E1	2076	0	2177	86	0
25	E2	2076	0	2177	86	0
25	E3	2076	0	2177	89	0
25	E4	2076	0	2177	85	0
25	E5	2076	0	2177	84	0
25	E6	2076	0	2177	84	0
26	F1	1509	0	1563	122	0
26	F2	1509	0	1561	136	0
26	F3	1509	0	1562	125	0
26	F4	1509	0	1561	122	0
26	F5	1509	0	1562	118	0
26	F6	1509	0	1563	133	0
27	H1	1521	0	1616	54	19
27	H2	1521	0	1616	57	0
27	H3	1521	0	1616	58	2
27	H4	1521	0	1616	75	28
27	H5	1521	0	1616	60	5
27	H6	1521	0	1616	57	0
28	I1	1686	0	1769	92	0
28	I2	1686	0	1769	52	0
28	I3	1686	0	1772	70	0
28	I4	1686	0	1767	79	0
28	I5	1686	0	1772	59	0
28	I6	1686	0	1772	49	0
29	K1	827	0	854	79	1
29	K2	827	0	854	80	2
29	K3	827	0	854	77	0
29	K4	827	0	854	79	0
29	K5	827	0	854	78	0
29	K6	827	0	854	79	0
30	L1	1247	0	1323	110	0
30	L2	1247	0	1323	92	0
30	L3	1247	0	1323	57	0
30	L4	1247	0	1322	112	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	L5	1247	0	1323	88	0
30	L6	1247	0	1323	79	0
31	P1	1033	0	1079	122	0
31	P2	1033	0	1079	114	0
31	P3	1033	0	1079	127	0
31	P4	1033	0	1079	116	0
31	P5	1033	0	1079	142	0
31	P6	1033	0	1078	130	0
32	Q1	1158	0	1232	44	0
32	Q2	1158	0	1232	46	0
32	Q3	1158	0	1232	46	0
32	Q4	1158	0	1232	45	0
32	Q5	1158	0	1232	46	0
32	Q6	1158	0	1232	49	0
33	R1	1072	0	1130	102	0
33	R2	1072	0	1130	112	2
33	R3	1072	0	1128	128	0
33	R4	1072	0	1128	100	0
33	R5	1072	0	1130	111	0
33	R6	1072	0	1130	103	5
34	S1	1184	0	1240	91	0
34	S2	1184	0	1241	92	0
34	S3	1184	0	1241	89	0
34	S4	1184	0	1242	90	0
34	S5	1184	0	1242	97	0
34	S6	1184	0	1242	89	0
35	j1	239	0	287	0	0
35	j2	239	0	288	0	0
35	j3	239	0	286	0	0
35	j4	239	0	288	0	0
35	j5	239	0	289	0	0
35	j6	239	0	287	0	0
36	k1	1421	0	1436	0	0
36	k2	1421	0	1433	0	0
36	k3	1421	0	1436	0	0
36	k4	1421	0	1437	0	0
36	k5	1421	0	1436	0	0
36	k6	1421	0	1436	0	0
37	l1	629	0	626	0	0
37	l2	629	0	626	0	0
37	l3	629	0	626	0	0
37	l4	629	0	626	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
37	l5	629	0	626	0	0
37	l6	629	0	626	0	0
38	f1	1	0	0	0	0
38	f2	1	0	0	0	0
38	f3	1	0	0	0	0
38	f4	1	0	0	0	0
38	f5	1	0	0	0	0
38	f6	1	0	0	0	0
All	All	470574	0	372069	11099	99

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 30.

All (11099) 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)
31:P1:121:ILE:HD11	31:P1:123:TYR:CE2	1.23	1.64
31:P5:121:ILE:HD11	31:P5:123:TYR:CE2	1.23	1.64
31:P4:119:PHE:CE1	34:S4:119:ALA:HB1	1.34	1.63
18:Z6:70:PRO:HG3	18:Z6:88:LEU:CD1	1.17	1.63
31:P6:121:ILE:HD11	31:P6:123:TYR:CE2	1.23	1.63
31:P4:121:ILE:HD11	31:P4:123:TYR:CE2	1.23	1.63
31:P3:121:ILE:HD11	31:P3:123:TYR:CE2	1.23	1.62
14:N3:129:TYR:HB3	14:N3:134:VAL:CG2	1.25	1.61
2:U6:17:ILE:CG2	2:U6:95:SER:H	1.07	1.61
18:Z5:70:PRO:HG3	18:Z5:88:LEU:CD1	1.17	1.61
23:B4:21:VAL:HG22	30:L5:31:GLU:CG	1.28	1.61
2:U1:17:ILE:CG2	2:U1:95:SER:H	1.07	1.60
31:P6:119:PHE:CE1	34:S6:119:ALA:HB1	1.34	1.60
31:P1:119:PHE:CE1	34:S1:119:ALA:HB1	1.34	1.60
2:U5:17:ILE:CG2	2:U5:95:SER:H	1.07	1.60
31:P5:96:VAL:HG21	31:P5:116:LEU:CD1	1.29	1.60
18:Z4:70:PRO:HG3	18:Z4:88:LEU:CD1	1.17	1.60
31:P1:96:VAL:HG21	31:P1:116:LEU:CD1	1.29	1.59
31:P5:119:PHE:CE1	34:S5:119:ALA:HB1	1.34	1.59
31:P2:121:ILE:HD11	31:P2:123:TYR:CE2	1.23	1.59
31:P6:96:VAL:HG21	31:P6:116:LEU:CD1	1.28	1.58
11:G4:141:ILE:HG13	11:G4:144:LEU:CD2	1.30	1.58
2:U2:17:ILE:CG2	2:U2:95:SER:H	1.07	1.58
31:P2:119:PHE:CE1	34:S2:119:ALA:HB1	1.34	1.58
18:Z1:70:PRO:HG3	18:Z1:88:LEU:CD1	1.17	1.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N2:133:ARG:HD3	30:L2:152:LYS:CE	1.31	1.58
31:P2:96:VAL:HG21	31:P2:116:LEU:CD1	1.28	1.58
28:I1:125:LYS:HD2	15:O6:66:ARG:CD	1.19	1.57
31:P3:119:PHE:CE1	34:S3:119:ALA:HB1	1.34	1.57
11:G5:141:ILE:HG13	11:G5:144:LEU:CD2	1.30	1.56
11:G2:141:ILE:HG13	11:G2:144:LEU:CD2	1.30	1.56
11:G1:141:ILE:HG13	11:G1:144:LEU:CD2	1.30	1.55
15:O2:66:ARG:CD	28:I4:125:LYS:HD2	1.34	1.55
11:G3:141:ILE:HG13	11:G3:144:LEU:CD2	1.30	1.55
18:Z6:70:PRO:CG	18:Z6:88:LEU:CD1	1.83	1.55
2:U3:17:ILE:CG2	2:U3:95:SER:H	1.07	1.55
18:Z1:70:PRO:CG	18:Z1:88:LEU:CD1	1.83	1.55
2:U4:17:ILE:CG2	2:U4:95:SER:H	1.07	1.55
18:Z3:70:PRO:HG3	18:Z3:88:LEU:CD1	1.17	1.55
31:P2:121:ILE:CD1	31:P2:123:TYR:CE2	1.91	1.54
31:P4:96:VAL:HG21	31:P4:116:LEU:CD1	1.28	1.54
18:Z4:70:PRO:CG	18:Z4:88:LEU:CD1	1.83	1.54
11:G6:141:ILE:HG13	11:G6:144:LEU:CD2	1.30	1.54
31:P6:121:ILE:CD1	31:P6:123:TYR:CE2	1.91	1.54
31:P3:121:ILE:CD1	31:P3:123:TYR:CE2	1.91	1.54
22:A6:214:GLU:HG3	33:R6:84:TYR:CE1	1.38	1.53
31:P4:96:VAL:CG2	31:P4:116:LEU:CD1	1.86	1.53
18:Z2:70:PRO:HG3	18:Z2:88:LEU:CD1	1.17	1.53
31:P3:96:VAL:CG2	31:P3:116:LEU:CD1	1.86	1.53
31:P3:96:VAL:HG21	31:P3:116:LEU:CD1	1.28	1.53
14:N5:129:TYR:CB	14:N5:134:VAL:HG21	1.35	1.53
31:P2:96:VAL:CG2	31:P2:116:LEU:CD1	1.86	1.52
31:P6:96:VAL:CG2	31:P6:116:LEU:CD1	1.86	1.52
23:B4:21:VAL:CG2	30:L5:31:GLU:HG3	1.36	1.52
31:P1:121:ILE:CD1	31:P1:123:TYR:CE2	1.90	1.52
22:A1:214:GLU:HG3	33:R1:84:TYR:CE1	1.37	1.52
14:N3:129:TYR:CB	14:N3:134:VAL:HG21	1.04	1.52
31:P5:96:VAL:CG2	31:P5:116:LEU:CD1	1.86	1.52
31:P1:96:VAL:CG2	31:P1:116:LEU:CD1	1.86	1.52
31:P4:121:ILE:CD1	31:P4:123:TYR:CE2	1.91	1.51
15:O1:66:ARG:CZ	28:I3:125:LYS:CD	1.81	1.51
18:Z2:70:PRO:CG	18:Z2:88:LEU:CD1	1.83	1.51
18:Z3:70:PRO:CG	18:Z3:88:LEU:CD1	1.83	1.51
18:Z5:70:PRO:CG	18:Z5:88:LEU:CD1	1.83	1.51
18:Z4:70:PRO:CG	18:Z4:88:LEU:HD11	1.41	1.50
10:C6:68:ARG:NH1	10:C6:277:HIS:CB	1.76	1.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C5:68:ARG:NH1	10:C5:277:HIS:CB	1.76	1.48
31:P5:121:ILE:CD1	31:P5:123:TYR:CE2	1.91	1.48
27:H4:163:GLN:HG3	27:H4:189:PHE:CE2	1.45	1.48
10:C4:68:ARG:NH1	10:C4:277:HIS:CB	1.77	1.47
10:C1:68:ARG:NH1	10:C1:277:HIS:CB	1.76	1.47
11:G3:141:ILE:CG1	11:G3:144:LEU:CD2	1.87	1.47
18:Z5:70:PRO:CG	18:Z5:88:LEU:HD11	1.40	1.47
28:I1:125:LYS:CD	15:O6:66:ARG:CD	1.90	1.47
2:U3:19:ARG:HD3	2:U3:119:ALA:CB	1.46	1.47
15:O1:66:ARG:NH2	28:I3:125:LYS:CD	1.73	1.46
28:I1:125:LYS:CD	15:O6:66:ARG:HD3	1.45	1.46
18:Z6:70:PRO:CG	18:Z6:88:LEU:HD11	1.41	1.46
10:C2:68:ARG:NH1	10:C2:277:HIS:CB	1.76	1.46
23:B4:21:VAL:HA	30:L5:31:GLU:CD	1.09	1.45
14:N6:133:ARG:CD	30:L6:152:LYS:HG3	1.46	1.45
10:C3:68:ARG:NH1	10:C3:277:HIS:CB	1.76	1.45
11:G1:141:ILE:CG1	11:G1:144:LEU:CD2	1.87	1.44
15:O1:66:ARG:NH2	28:I3:125:LYS:HD3	1.22	1.44
2:U5:19:ARG:HD3	2:U5:119:ALA:CB	1.45	1.44
2:U1:19:ARG:HD3	2:U1:119:ALA:CB	1.45	1.43
10:C3:266:TYR:O	22:A3:120:ARG:CZ	1.67	1.43
10:C3:74:LYS:HE2	10:C3:272:HIS:CG	1.51	1.43
30:L4:121:GLN:HG3	30:L4:153:LYS:CE	1.48	1.43
10:C2:273:LEU:CD1	10:C2:280:VAL:HG11	1.48	1.43
10:C6:68:ARG:NH1	10:C6:277:HIS:HB3	1.10	1.43
2:U6:19:ARG:HD3	2:U6:119:ALA:CB	1.45	1.43
10:C2:74:LYS:HE2	10:C2:272:HIS:CG	1.51	1.43
2:U2:19:ARG:HD3	2:U2:119:ALA:CB	1.45	1.43
10:C2:266:TYR:O	22:A2:120:ARG:CZ	1.67	1.43
10:C4:273:LEU:CD1	10:C4:280:VAL:HG11	1.48	1.43
10:C1:273:LEU:CD1	10:C1:280:VAL:HG11	1.48	1.43
18:Z3:70:PRO:CG	18:Z3:88:LEU:HD11	1.41	1.43
10:C3:273:LEU:CD1	10:C3:280:VAL:HG11	1.48	1.42
10:C4:266:TYR:O	22:A4:120:ARG:CZ	1.67	1.42
2:U4:19:ARG:HD3	2:U4:119:ALA:CB	1.45	1.42
14:N6:133:ARG:HD3	30:L6:152:LYS:CG	1.47	1.42
10:C6:273:LEU:CD1	10:C6:280:VAL:HG11	1.48	1.42
10:C5:273:LEU:CD1	10:C5:280:VAL:HG11	1.48	1.42
10:C6:266:TYR:O	22:A6:120:ARG:CZ	1.67	1.41
30:L1:121:GLN:CB	30:L1:153:LYS:HD2	1.51	1.41
14:N5:129:TYR:O	14:N5:134:VAL:CG2	1.68	1.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C1:68:ARG:HD2	10:C1:277:HIS:ND1	1.36	1.40
10:C5:68:ARG:HD2	10:C5:277:HIS:ND1	1.36	1.40
18:Z2:70:PRO:CG	18:Z2:88:LEU:HD11	1.40	1.40
2:U4:17:ILE:CG2	2:U4:95:SER:N	1.84	1.40
10:C1:266:TYR:O	22:A1:120:ARG:CZ	1.66	1.40
31:P6:41:GLN:NE2	31:P6:84:ILE:HG23	1.36	1.39
10:C5:266:TYR:O	22:A5:120:ARG:CZ	1.67	1.39
18:Z1:50:PHE:O	34:S1:5:ILE:CG2	1.71	1.39
2:U5:17:ILE:CG2	2:U5:95:SER:N	1.84	1.39
10:C2:68:ARG:NH1	10:C2:277:HIS:HB3	1.10	1.39
10:C5:68:ARG:NH1	10:C5:277:HIS:HB3	1.10	1.38
15:O3:63:LYS:NZ	28:I6:163:GLU:HB3	1.32	1.38
11:G2:141:ILE:CG1	11:G2:144:LEU:HD21	0.90	1.38
14:N5:129:TYR:HB3	14:N5:134:VAL:CG2	1.53	1.38
10:C1:68:ARG:NH1	10:C1:277:HIS:HB3	1.10	1.38
2:U3:17:ILE:CG2	2:U3:95:SER:N	1.84	1.38
10:C4:68:ARG:NH1	10:C4:277:HIS:HB3	1.10	1.38
11:G4:141:ILE:CG1	11:G4:144:LEU:HD21	0.90	1.38
2:U6:17:ILE:CG2	2:U6:95:SER:N	1.84	1.38
10:C4:68:ARG:HD2	10:C4:277:HIS:ND1	1.36	1.38
18:Z6:50:PHE:O	34:S6:5:ILE:CG2	1.71	1.38
10:C3:68:ARG:NH1	10:C3:277:HIS:HB3	1.10	1.38
2:U1:17:ILE:CG2	2:U1:95:SER:N	1.84	1.38
23:B2:21:VAL:CG2	30:L4:31:GLU:C	1.80	1.37
11:G6:141:ILE:CG1	11:G6:144:LEU:HD21	0.90	1.37
28:I1:141:ARG:NH2	26:F6:191:LYS:HE2	1.36	1.37
23:B4:21:VAL:CG2	30:L5:31:GLU:HA	1.52	1.37
11:G5:141:ILE:CG1	11:G5:144:LEU:HD21	0.90	1.37
11:G6:141:ILE:CG1	11:G6:144:LEU:CD2	1.87	1.36
18:Z2:50:PHE:O	34:S2:5:ILE:CG2	1.71	1.36
11:G1:141:ILE:CG1	11:G1:144:LEU:HD21	0.90	1.36
23:B4:21:VAL:HG23	30:L5:31:GLU:CA	1.53	1.36
18:Z3:50:PHE:O	34:S3:5:ILE:CG2	1.71	1.36
18:Z4:50:PHE:O	34:S4:5:ILE:CG2	1.71	1.36
15:O2:65:ASP:CB	28:I4:123:ARG:NH2	1.88	1.36
10:C2:68:ARG:HD2	10:C2:277:HIS:ND1	1.36	1.36
11:G3:141:ILE:CG1	11:G3:144:LEU:HD21	0.90	1.36
10:C6:68:ARG:HD2	10:C6:277:HIS:ND1	1.37	1.36
18:Z5:50:PHE:O	34:S5:5:ILE:CG2	1.71	1.36
18:Z1:70:PRO:CG	18:Z1:88:LEU:HD11	1.41	1.36
27:H4:163:GLN:HG3	27:H4:189:PHE:CZ	1.61	1.35

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C3:68:ARG:HD2	10:C3:277:HIS:ND1	1.37	1.35
14:N2:133:ARG:CG	30:L2:152:LYS:HG3	1.56	1.35
31:P5:15:PHE:CZ	31:P5:112:ILE:HG12	1.61	1.35
2:U3:17:ILE:HG21	2:U3:95:SER:N	1.40	1.35
2:U6:17:ILE:HG21	2:U6:95:SER:N	1.40	1.35
11:G5:141:ILE:CG1	11:G5:144:LEU:CD2	1.87	1.34
23:B4:21:VAL:CA	30:L5:31:GLU:CD	1.93	1.34
26:F2:198:ARG:HH12	28:I4:146:GLN:NE2	1.22	1.34
15:O1:66:ARG:CZ	28:I3:125:LYS:HD3	0.86	1.34
31:P2:96:VAL:CG2	31:P2:116:LEU:HD12	1.52	1.34
33:R1:64:GLY:O	33:R1:73:LEU:HD21	1.22	1.34
2:U2:17:ILE:CG2	2:U2:95:SER:N	1.84	1.34
31:P2:41:GLN:HB3	31:P2:84:ILE:CD1	1.58	1.33
31:P3:121:ILE:CG1	31:P3:123:TYR:CE2	2.12	1.33
14:N6:133:ARG:CD	30:L6:152:LYS:CG	2.03	1.32
10:C1:270:THR:HG21	22:A1:69:GLU:CB	1.59	1.32
28:I1:125:LYS:CG	15:O6:66:ARG:HD2	1.42	1.32
31:P5:121:ILE:CG1	31:P5:123:TYR:CE2	2.12	1.32
10:C2:270:THR:HG21	22:A2:69:GLU:CB	1.59	1.32
10:C3:270:THR:HG21	22:A3:69:GLU:CB	1.59	1.32
2:U4:19:ARG:CD	2:U4:119:ALA:C	1.96	1.32
2:U5:19:ARG:CD	2:U5:119:ALA:C	1.96	1.32
2:U1:17:ILE:HG21	2:U1:95:SER:N	1.40	1.32
10:C5:270:THR:HG21	22:A5:69:GLU:CB	1.59	1.31
31:P2:121:ILE:CG1	31:P2:123:TYR:CE2	2.12	1.31
23:B2:21:VAL:HG21	30:L4:31:GLU:C	0.94	1.31
10:C4:270:THR:HG21	22:A4:69:GLU:CB	1.59	1.31
31:P1:121:ILE:CG1	31:P1:123:TYR:CE2	2.12	1.31
10:C6:270:THR:HG21	22:A6:69:GLU:CB	1.59	1.31
31:P6:96:VAL:CG2	31:P6:116:LEU:HD12	1.51	1.31
11:G2:141:ILE:CG1	11:G2:144:LEU:CD2	1.87	1.31
31:P6:121:ILE:CG1	31:P6:123:TYR:CE2	2.12	1.31
2:U3:19:ARG:CD	2:U3:119:ALA:C	1.96	1.30
2:U5:17:ILE:HG21	2:U5:95:SER:N	1.40	1.30
24:D4:67:ARG:HD2	29:K4:96:ARG:NH2	1.47	1.30
31:P4:121:ILE:CG1	31:P4:123:TYR:CE2	2.12	1.30
2:U2:17:ILE:HG21	2:U2:95:SER:N	1.40	1.30
11:G4:141:ILE:CG1	11:G4:144:LEU:CD2	1.87	1.30
30:L1:121:GLN:HG3	30:L1:153:LYS:CE	1.61	1.30
32:Q5:4:LYS:NZ	32:Q5:99:TYR:HA	1.46	1.30
14:N2:133:ARG:CD	30:L2:152:LYS:HE3	1.58	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:Q2:4:LYS:NZ	32:Q2:99:TYR:HA	1.46	1.30
2:U6:19:ARG:CD	2:U6:119:ALA:C	1.96	1.29
32:Q1:4:LYS:NZ	32:Q1:99:TYR:HA	1.46	1.29
31:P3:96:VAL:CG2	31:P3:116:LEU:HD12	1.52	1.29
23:B2:21:VAL:HG21	30:L4:31:GLU:O	1.29	1.29
22:A2:211:GLU:CG	33:R2:81:ARG:NH2	1.95	1.29
2:U6:17:ILE:HG21	2:U6:94:PRO:CA	1.62	1.29
30:L1:30:LYS:CE	23:B6:21:VAL:O	1.79	1.29
18:Z3:70:PRO:CB	18:Z3:88:LEU:HD11	1.63	1.28
31:P6:98:ASN:O	31:P6:122:THR:HG21	1.26	1.28
2:U1:19:ARG:HD2	2:U1:119:ALA:C	1.52	1.28
22:A6:211:GLU:CG	33:R6:81:ARG:NH2	1.95	1.28
32:Q3:4:LYS:HZ1	32:Q3:99:TYR:CA	1.46	1.28
2:U1:17:ILE:HG21	2:U1:94:PRO:CA	1.63	1.28
18:Z2:70:PRO:CB	18:Z2:88:LEU:HD11	1.63	1.28
22:A4:211:GLU:CG	33:R4:81:ARG:NH2	1.95	1.28
10:C6:279:ARG:O	10:C6:280:VAL:HG12	1.22	1.28
24:D5:67:ARG:HD2	29:K5:96:ARG:NH2	1.47	1.28
10:C3:279:ARG:O	10:C3:280:VAL:HG12	1.22	1.28
31:P1:96:VAL:CG2	31:P1:116:LEU:HD12	1.52	1.28
2:U6:19:ARG:HD2	2:U6:119:ALA:C	1.51	1.28
32:Q6:4:LYS:NZ	32:Q6:99:TYR:HA	1.46	1.28
22:A3:211:GLU:CG	33:R3:81:ARG:NH2	1.95	1.28
28:I4:196:GLU:O	28:I4:200:ARG:HG3	1.27	1.28
31:P2:98:ASN:O	31:P2:122:THR:HG21	1.26	1.27
32:Q4:4:LYS:HZ1	32:Q4:99:TYR:CA	1.46	1.27
2:U3:17:ILE:HG21	2:U3:94:PRO:CA	1.62	1.27
31:P4:98:ASN:O	31:P4:122:THR:HG21	1.26	1.27
22:A5:89:LYS:HZ1	33:R5:82:ASP:CG	1.37	1.27
32:Q3:4:LYS:NZ	32:Q3:99:TYR:HA	1.46	1.27
2:U2:17:ILE:HG21	2:U2:94:PRO:CA	1.62	1.27
18:Z4:70:PRO:CB	18:Z4:88:LEU:HD11	1.63	1.27
18:Z5:70:PRO:CB	18:Z5:88:LEU:HD11	1.63	1.27
22:A5:211:GLU:CG	33:R5:81:ARG:NH2	1.95	1.27
31:P5:41:GLN:HB3	31:P5:84:ILE:CD1	1.64	1.27
13:M6:14:VAL:CG1	13:M6:127:TYR:CE1	2.18	1.27
22:A1:211:GLU:CG	33:R1:81:ARG:NH2	1.95	1.27
13:M5:27:ILE:HG23	29:K5:84:HIS:CE1	1.70	1.27
28:I1:196:GLU:O	28:I1:200:ARG:HG3	1.32	1.27
10:C5:279:ARG:O	10:C5:280:VAL:HG12	1.22	1.26
24:D2:67:ARG:HD2	29:K2:96:ARG:NH2	1.47	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P3:98:ASN:O	31:P3:122:THR:HG21	1.26	1.26
2:U5:17:ILE:HG21	2:U5:94:PRO:CA	1.62	1.26
10:C2:279:ARG:O	10:C2:280:VAL:HG12	1.23	1.26
24:D3:67:ARG:HD2	29:K3:96:ARG:NH2	1.47	1.26
31:P1:98:ASN:O	31:P1:122:THR:HG21	1.26	1.26
18:Z1:70:PRO:CB	18:Z1:88:LEU:HD11	1.63	1.26
18:Z6:70:PRO:CB	18:Z6:88:LEU:HD11	1.63	1.26
32:Q4:4:LYS:NZ	32:Q4:99:TYR:HA	1.46	1.26
24:D1:67:ARG:HD2	29:K1:96:ARG:NH2	1.47	1.26
24:D6:67:ARG:HD2	29:K6:96:ARG:NH2	1.47	1.26
13:M3:27:ILE:HG23	29:K3:84:HIS:CE1	1.70	1.26
23:B2:22:VAL:HG23	30:L4:31:GLU:OE2	1.13	1.26
14:N6:133:ARG:NH1	30:L6:152:LYS:HB3	1.46	1.26
32:Q2:4:LYS:HZ1	32:Q2:99:TYR:CA	1.49	1.26
31:P5:98:ASN:O	31:P5:122:THR:HG21	1.26	1.26
2:U4:17:ILE:HG21	2:U4:94:PRO:CA	1.62	1.26
13:M6:27:ILE:HG23	29:K6:84:HIS:CE1	1.70	1.25
22:A4:89:LYS:NZ	33:R4:82:ASP:CG	1.90	1.25
22:A3:89:LYS:NZ	33:R3:82:ASP:CG	1.90	1.25
14:N6:133:ARG:HH11	30:L6:152:LYS:CB	1.47	1.25
13:M1:14:VAL:CG1	13:M1:127:TYR:CE1	2.18	1.25
13:M1:27:ILE:HG23	29:K1:84:HIS:CE1	1.70	1.25
22:A1:89:LYS:HZ1	33:R1:82:ASP:CG	1.40	1.25
13:M2:27:ILE:HG23	29:K2:84:HIS:CE1	1.70	1.25
31:P5:96:VAL:CG2	31:P5:116:LEU:HD12	1.52	1.25
13:M3:14:VAL:CG1	13:M3:127:TYR:CE1	2.18	1.25
13:M5:14:VAL:CG1	13:M5:127:TYR:CE1	2.18	1.25
22:A1:89:LYS:NZ	33:R1:82:ASP:CG	1.89	1.25
22:A6:89:LYS:NZ	33:R6:82:ASP:CG	1.89	1.25
13:M4:14:VAL:CG1	13:M4:127:TYR:CE1	2.18	1.25
14:N3:129:TYR:O	14:N3:134:VAL:CG2	1.82	1.25
32:Q1:4:LYS:HZ1	32:Q1:99:TYR:CA	1.50	1.25
2:U4:17:ILE:HG21	2:U4:95:SER:N	1.40	1.25
14:N3:129:TYR:O	14:N3:134:VAL:HG22	1.11	1.25
2:U5:19:ARG:HB3	2:U5:118:ASP:O	1.35	1.25
22:A2:89:LYS:NZ	33:R2:82:ASP:CG	1.89	1.25
31:P2:119:PHE:CD1	34:S2:119:ALA:HB1	1.72	1.25
10:C1:279:ARG:O	10:C1:280:VAL:HG12	1.23	1.24
13:M4:27:ILE:HG23	29:K4:84:HIS:CE1	1.70	1.24
32:Q5:4:LYS:HZ1	32:Q5:99:TYR:CA	1.50	1.24
23:B2:22:VAL:CG2	30:L4:31:GLU:OE2	1.84	1.24

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M2:14:VAL:CG1	13:M2:127:TYR:CE1	2.18	1.24
31:P6:119:PHE:CD1	34:S6:119:ALA:HB1	1.72	1.24
14:N3:129:TYR:CD1	14:N3:134:VAL:HG11	1.73	1.24
31:P4:121:ILE:HG12	31:P4:123:TYR:CZ	1.72	1.24
2:U3:19:ARG:HB3	2:U3:118:ASP:O	1.35	1.24
22:A2:205:ARG:HG3	22:A2:210:ILE:CG2	1.67	1.24
23:B4:21:VAL:HA	30:L5:31:GLU:OE2	1.12	1.24
33:R1:61:ILE:O	33:R1:73:LEU:HD22	1.36	1.24
10:C4:279:ARG:O	10:C4:280:VAL:HG12	1.23	1.24
13:M3:14:VAL:HG11	13:M3:127:TYR:CE1	1.73	1.24
22:A1:205:ARG:HG3	22:A1:210:ILE:CG2	1.67	1.24
22:A4:205:ARG:HG3	22:A4:210:ILE:CG2	1.67	1.24
31:P1:121:ILE:HG12	31:P1:123:TYR:CZ	1.73	1.24
31:P5:119:PHE:CD1	34:S5:119:ALA:HB1	1.73	1.24
31:P6:121:ILE:HG12	31:P6:123:TYR:CZ	1.73	1.24
15:O2:66:ARG:HD2	28:I4:125:LYS:CD	1.68	1.24
31:P3:119:PHE:CD1	34:S3:119:ALA:HB1	1.72	1.24
2:U2:19:ARG:CD	2:U2:119:ALA:C	1.96	1.24
31:P5:121:ILE:HG12	31:P5:123:TYR:CZ	1.72	1.23
22:A3:205:ARG:HG3	22:A3:210:ILE:CG2	1.67	1.23
32:Q6:4:LYS:HZ1	32:Q6:99:TYR:CA	1.49	1.23
31:P2:121:ILE:HG12	31:P2:123:TYR:CZ	1.73	1.23
22:A5:205:ARG:HG3	22:A5:210:ILE:CG2	1.67	1.23
31:P1:119:PHE:CD1	34:S1:119:ALA:HB1	1.73	1.23
22:A5:89:LYS:NZ	33:R5:82:ASP:CG	1.90	1.23
31:P2:41:GLN:CB	31:P2:84:ILE:HD13	1.69	1.23
31:P3:121:ILE:HG12	31:P3:123:TYR:CZ	1.73	1.23
22:A2:89:LYS:HZ1	33:R2:82:ASP:CG	1.42	1.23
30:L4:121:GLN:CG	30:L4:153:LYS:HE3	1.67	1.23
15:O2:65:ASP:HB3	28:I4:123:ARG:CZ	1.66	1.23
2:U1:19:ARG:CD	2:U1:119:ALA:C	1.96	1.23
2:U2:19:ARG:HB3	2:U2:118:ASP:O	1.35	1.23
13:M5:14:VAL:HG11	13:M5:127:TYR:CE1	1.73	1.23
14:N5:129:TYR:O	14:N5:134:VAL:HG22	1.24	1.23
31:P3:34:MET:O	31:P3:42:ARG:NE	1.70	1.23
23:B2:21:VAL:CG2	30:L4:31:GLU:O	1.80	1.22
13:M1:14:VAL:HG11	13:M1:127:TYR:CE1	1.72	1.22
10:C1:68:ARG:HD2	10:C1:277:HIS:CG	1.75	1.22
10:C4:68:ARG:HD2	10:C4:277:HIS:CG	1.75	1.22
22:A1:211:GLU:CG	33:R1:81:ARG:HH22	1.52	1.22
22:A6:211:GLU:CG	33:R6:81:ARG:HH22	1.52	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A6:205:ARG:HG3	22:A6:210:ILE:CG2	1.67	1.22
13:M4:14:VAL:HG11	13:M4:127:TYR:CE1	1.72	1.22
16:W4:111:MET:HE1	16:W4:119:LYS:CD	1.68	1.22
33:R3:61:ILE:O	33:R3:73:LEU:HD13	1.38	1.22
31:P4:119:PHE:CD1	34:S4:119:ALA:HB1	1.73	1.22
2:U1:19:ARG:HB3	2:U1:118:ASP:O	1.35	1.22
22:A5:211:GLU:CG	33:R5:81:ARG:HH22	1.52	1.22
10:C6:142:LYS:CG	10:C6:157:LEU:HD13	1.67	1.22
23:B2:21:VAL:C	30:L4:31:GLU:OE1	1.67	1.22
10:C2:68:ARG:HD2	10:C2:277:HIS:CG	1.75	1.22
2:U4:19:ARG:HD2	2:U4:119:ALA:C	1.51	1.21
22:A4:89:LYS:HZ1	33:R4:82:ASP:CG	1.42	1.21
10:C1:64:THR:O	10:C1:277:HIS:HE1	1.22	1.21
13:M6:14:VAL:HG11	13:M6:127:TYR:CE1	1.72	1.21
15:O4:63:LYS:NZ	28:I5:163:GLU:HG3	1.52	1.21
10:C4:266:TYR:O	22:A4:120:ARG:NH1	1.73	1.21
14:N5:129:TYR:CA	14:N5:134:VAL:HG21	1.68	1.21
2:U6:19:ARG:HD2	2:U6:119:ALA:O	1.38	1.21
10:C2:68:ARG:HH22	10:C2:276:THR:CB	1.54	1.21
10:C4:273:LEU:CB	10:C4:280:VAL:CG1	2.19	1.21
31:P4:41:GLN:HB3	31:P4:84:ILE:CD1	1.69	1.21
10:C5:266:TYR:O	22:A5:120:ARG:NH1	1.73	1.21
10:C1:273:LEU:CB	10:C1:280:VAL:CG1	2.19	1.21
31:P6:98:ASN:O	31:P6:122:THR:CG2	1.89	1.21
15:O1:66:ARG:NH2	28:I3:125:LYS:NZ	1.88	1.21
10:C3:68:ARG:HH22	10:C3:276:THR:CB	1.54	1.20
10:C4:68:ARG:HH22	10:C4:276:THR:CB	1.53	1.20
10:C5:68:ARG:HD2	10:C5:277:HIS:CG	1.75	1.20
10:C6:68:ARG:HD2	10:C6:277:HIS:CG	1.75	1.20
14:N6:133:ARG:NH2	30:L6:154:GLN:HB2	1.53	1.20
2:U6:19:ARG:HB3	2:U6:118:ASP:O	1.35	1.20
31:P2:98:ASN:O	31:P2:122:THR:CG2	1.89	1.20
28:I5:196:GLU:O	28:I5:200:ARG:HG3	1.32	1.20
15:O1:66:ARG:NH2	28:I3:125:LYS:HZ2	1.34	1.20
31:P3:98:ASN:O	31:P3:122:THR:CG2	1.89	1.20
10:C4:270:THR:CG2	22:A4:69:GLU:HB2	1.71	1.20
10:C2:68:ARG:HH11	10:C2:277:HIS:CB	1.43	1.20
31:P4:98:ASN:O	31:P4:122:THR:CG2	1.89	1.20
31:P5:98:ASN:O	31:P5:122:THR:CG2	1.89	1.20
33:R2:21:TYR:CG	33:R2:71:ILE:HD11	1.74	1.20
10:C1:68:ARG:HH11	10:C1:277:HIS:CB	1.43	1.20

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C6:68:ARG:HH22	10:C6:276:THR:CB	1.53	1.20
26:F1:126:THR:O	26:F1:127:ARG:HG3	1.38	1.20
10:C3:64:THR:O	10:C3:277:HIS:HE1	1.22	1.20
10:C6:266:TYR:O	22:A6:120:ARG:NH1	1.73	1.20
13:M2:14:VAL:HG11	13:M2:127:TYR:CE1	1.72	1.20
2:U3:19:ARG:HD2	2:U3:119:ALA:O	1.39	1.20
10:C3:68:ARG:HD2	10:C3:277:HIS:CG	1.75	1.20
10:C2:64:THR:O	10:C2:277:HIS:HE1	1.22	1.20
10:C6:273:LEU:CB	10:C6:280:VAL:CG1	2.19	1.20
26:F6:137:GLN:HB3	26:F6:204:ARG:C	1.58	1.20
10:C5:270:THR:CG2	22:A5:69:GLU:HB2	1.71	1.20
10:C6:68:ARG:NH2	10:C6:276:THR:HB	1.57	1.20
13:M1:14:VAL:CG1	13:M1:127:TYR:HE1	1.52	1.19
15:O1:66:ARG:NH2	28:I3:125:LYS:CE	2.04	1.19
22:A4:211:GLU:CG	33:R4:81:ARG:HH22	1.52	1.19
10:C3:270:THR:CG2	22:A3:69:GLU:HB2	1.71	1.19
10:C5:273:LEU:CB	10:C5:280:VAL:CG1	2.19	1.19
10:C5:68:ARG:NH2	10:C5:276:THR:HB	1.58	1.19
26:F6:126:THR:O	26:F6:127:ARG:HG3	1.38	1.19
2:U4:19:ARG:HD2	2:U4:119:ALA:O	1.38	1.19
10:C6:64:THR:O	10:C6:277:HIS:HE1	1.22	1.19
26:F5:137:GLN:HB3	26:F5:204:ARG:C	1.62	1.19
31:P5:41:GLN:CB	31:P5:84:ILE:HD13	1.71	1.19
10:C5:68:ARG:HH22	10:C5:276:THR:CB	1.54	1.19
2:U4:19:ARG:HB3	2:U4:118:ASP:O	1.35	1.19
14:N6:133:ARG:HD2	30:L6:152:LYS:CB	1.71	1.19
31:P1:98:ASN:O	31:P1:122:THR:CG2	1.89	1.19
28:I1:158:ILE:HD11	15:O6:63:LYS:NZ	1.54	1.19
10:C3:273:LEU:CB	10:C3:280:VAL:CG1	2.19	1.19
2:U1:19:ARG:HD2	2:U1:119:ALA:O	1.39	1.19
2:U2:19:ARG:HD2	2:U2:119:ALA:O	1.39	1.19
26:F2:137:GLN:HB3	26:F2:204:ARG:C	1.62	1.19
26:F5:126:THR:O	26:F5:127:ARG:HG3	1.38	1.19
13:M4:14:VAL:CG1	13:M4:127:TYR:HE1	1.52	1.19
16:W4:115:GLU:OE2	16:W4:119:LYS:HE3	1.41	1.19
10:C5:64:THR:O	10:C5:277:HIS:HE1	1.22	1.19
10:C1:270:THR:CG2	22:A1:69:GLU:HB2	1.71	1.18
10:C6:270:THR:CG2	22:A6:69:GLU:HB2	1.71	1.18
10:C1:68:ARG:HH22	10:C1:276:THR:CB	1.54	1.18
10:C1:266:TYR:O	22:A1:120:ARG:NH1	1.73	1.18
10:C2:68:ARG:NH2	10:C2:276:THR:HB	1.57	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C4:64:THR:O	10:C4:277:HIS:HE1	1.22	1.18
26:F3:126:THR:O	26:F3:127:ARG:HG3	1.38	1.18
10:C3:266:TYR:O	22:A3:120:ARG:NH1	1.73	1.18
10:C2:273:LEU:CB	10:C2:280:VAL:CG1	2.19	1.18
26:F4:137:GLN:HB3	26:F4:204:ARG:C	1.62	1.18
30:L1:121:GLN:HB2	30:L1:153:LYS:HD2	1.20	1.18
31:P4:119:PHE:CE1	34:S4:119:ALA:CB	2.27	1.18
10:C1:68:ARG:NH2	10:C1:276:THR:HB	1.57	1.18
31:P4:96:VAL:CG2	31:P4:116:LEU:HD12	1.52	1.18
31:P6:119:PHE:CE1	34:S6:119:ALA:CB	2.27	1.18
10:C2:270:THR:CG2	22:A2:69:GLU:HB2	1.71	1.18
26:F1:137:GLN:HB3	26:F1:204:ARG:C	1.62	1.18
2:U5:19:ARG:HD2	2:U5:119:ALA:C	1.51	1.18
27:H4:163:GLN:CG	27:H4:189:PHE:CE2	2.25	1.18
14:N6:133:ARG:CD	30:L6:152:LYS:CB	2.22	1.18
10:C4:68:ARG:NH2	10:C4:276:THR:HB	1.57	1.18
26:F4:126:THR:O	26:F4:127:ARG:HG3	1.38	1.18
2:U4:17:ILE:HG23	2:U4:95:SER:H	1.08	1.18
13:M2:14:VAL:CG1	13:M2:127:TYR:HE1	1.52	1.18
26:F2:126:THR:O	26:F2:127:ARG:HG3	1.38	1.17
15:O3:63:LYS:NZ	28:I6:163:GLU:CB	1.85	1.17
10:C5:273:LEU:HB2	10:C5:280:VAL:HG13	1.21	1.17
30:L1:121:GLN:CG	30:L1:153:LYS:HE3	1.74	1.17
31:P3:119:PHE:CE1	34:S3:119:ALA:CB	2.27	1.17
18:Z2:70:PRO:CG	18:Z2:88:LEU:HD13	1.58	1.17
10:C3:68:ARG:NH2	10:C3:276:THR:HB	1.57	1.17
10:C6:274:VAL:HG23	10:C6:275:LYS:HD2	1.20	1.17
27:H4:163:GLN:NE2	27:H4:189:PHE:HE2	1.40	1.17
31:P2:41:GLN:NE2	31:P2:84:ILE:HG23	1.60	1.17
2:U5:19:ARG:HD2	2:U5:119:ALA:O	1.38	1.17
18:Z1:46:ASN:HB3	18:Z1:80:ARG:HA	1.23	1.17
10:C3:273:LEU:HB2	10:C3:280:VAL:HG13	1.21	1.17
31:P4:41:GLN:NE2	31:P4:84:ILE:HG23	1.59	1.17
10:C1:64:THR:O	10:C1:277:HIS:CE1	1.98	1.17
10:C2:266:TYR:O	22:A2:120:ARG:NH1	1.73	1.17
26:F3:137:GLN:HB3	26:F3:204:ARG:C	1.62	1.17
10:C3:64:THR:O	10:C3:277:HIS:CE1	1.97	1.17
10:C6:64:THR:O	10:C6:277:HIS:CE1	1.98	1.17
14:N6:148:ALA:H	14:N6:149:LEU:HB3	1.07	1.17
30:L1:30:LYS:HE3	23:B6:21:VAL:O	1.03	1.17
31:P1:119:PHE:CE1	34:S1:119:ALA:CB	2.27	1.17

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C2:64:THR:O	10:C2:277:HIS:CE1	1.98	1.17
11:G2:141:ILE:HG12	11:G2:144:LEU:HD21	1.19	1.17
22:A6:89:LYS:NZ	33:R6:82:ASP:OD1	1.78	1.16
14:N1:148:ALA:H	14:N1:149:LEU:HB3	1.07	1.16
22:A2:211:GLU:CG	33:R2:81:ARG:HH22	1.52	1.16
10:C5:274:VAL:HG23	10:C5:275:LYS:HD2	1.20	1.16
11:G4:141:ILE:HG12	11:G4:144:LEU:HD21	1.19	1.16
10:C1:273:LEU:CB	10:C1:280:VAL:HG13	1.76	1.16
11:G1:141:ILE:CB	11:G1:144:LEU:HD21	1.76	1.16
13:M2:27:ILE:CG2	29:K2:84:HIS:CE1	2.29	1.16
13:M3:27:ILE:CG2	29:K3:84:HIS:CE1	2.29	1.16
13:M3:14:VAL:CG1	13:M3:127:TYR:HE1	1.52	1.16
11:G2:141:ILE:CB	11:G2:144:LEU:HD21	1.76	1.16
13:M6:14:VAL:CG1	13:M6:127:TYR:HE1	1.52	1.16
22:A3:89:LYS:NZ	33:R3:82:ASP:OD1	1.78	1.16
10:C4:273:LEU:CB	10:C4:280:VAL:HG13	1.76	1.16
31:P1:34:MET:O	31:P1:42:ARG:NE	1.79	1.16
22:A2:89:LYS:NZ	33:R2:82:ASP:OD1	1.78	1.16
22:A5:89:LYS:NZ	33:R5:82:ASP:OD1	1.79	1.16
11:G4:141:ILE:CB	11:G4:144:LEU:HD21	1.76	1.16
26:F5:137:GLN:HG2	26:F5:204:ARG:O	1.46	1.16
11:G6:141:ILE:CB	11:G6:144:LEU:HD21	1.76	1.16
22:A1:89:LYS:NZ	33:R1:82:ASP:OD1	1.78	1.16
2:U1:17:ILE:HG21	2:U1:94:PRO:C	1.65	1.16
2:U5:17:ILE:HG21	2:U5:94:PRO:C	1.66	1.16
10:C2:273:LEU:CB	10:C2:280:VAL:HG13	1.76	1.15
26:F2:137:GLN:HG2	26:F2:204:ARG:O	1.46	1.15
13:M4:125:GLU:HB3	13:M4:129:LYS:HE3	1.28	1.15
31:P5:119:PHE:CE1	34:S5:119:ALA:CB	2.27	1.15
18:Z4:46:ASN:HB3	18:Z4:80:ARG:HA	1.23	1.15
10:C4:274:VAL:HG23	10:C4:275:LYS:HD2	1.20	1.15
14:N1:133:ARG:HD2	30:L1:152:LYS:CB	1.76	1.15
13:M4:27:ILE:CG2	29:K4:84:HIS:CE1	2.29	1.15
31:P2:119:PHE:CE1	34:S2:119:ALA:CB	2.27	1.15
22:A5:214:GLU:HG3	33:R5:84:TYR:CE1	1.81	1.15
2:U2:19:ARG:HD3	2:U2:119:ALA:HB1	1.23	1.15
10:C1:273:LEU:HB2	10:C1:280:VAL:HG13	1.21	1.15
10:C4:64:THR:O	10:C4:277:HIS:CE1	1.98	1.15
33:R2:21:TYR:CG	33:R2:71:ILE:CD1	2.29	1.15
10:C6:68:ARG:HH11	10:C6:277:HIS:CB	1.43	1.15
14:N2:137:PRO:CG	30:L2:154:GLN:HB3	1.75	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N4:148:ALA:HB3	14:N4:149:LEU:HA	1.26	1.15
2:U2:17:ILE:HG21	2:U2:94:PRO:C	1.66	1.15
2:U4:17:ILE:HG21	2:U4:94:PRO:C	1.65	1.15
26:F3:137:GLN:HG2	26:F3:204:ARG:O	1.47	1.15
22:A6:89:LYS:HZ1	33:R6:82:ASP:CG	1.43	1.15
18:Z5:50:PHE:O	34:S5:5:ILE:HG21	1.32	1.15
13:M1:27:ILE:CG2	29:K1:84:HIS:CE1	2.29	1.15
14:N4:133:ARG:HD2	30:L4:152:LYS:HB3	1.26	1.15
31:P4:41:GLN:CB	31:P4:84:ILE:HD13	1.75	1.15
22:A5:205:ARG:CG	22:A5:210:ILE:CG2	2.25	1.15
10:C5:64:THR:O	10:C5:277:HIS:CE1	1.97	1.15
13:M5:27:ILE:CG2	29:K5:84:HIS:CE1	2.29	1.15
13:M5:14:VAL:CG1	13:M5:127:TYR:HE1	1.52	1.15
14:N6:148:ALA:HB3	14:N6:149:LEU:HA	1.26	1.15
22:A3:205:ARG:CG	22:A3:210:ILE:CG2	2.26	1.14
10:C3:273:LEU:CB	10:C3:280:VAL:HG13	1.76	1.14
11:G1:141:ILE:HG12	11:G1:144:LEU:HD21	1.18	1.14
11:G5:141:ILE:CB	11:G5:144:LEU:HD21	1.76	1.14
31:P5:15:PHE:CZ	31:P5:112:ILE:CG1	2.31	1.14
18:Z3:50:PHE:O	34:S3:5:ILE:HG21	1.32	1.14
22:A6:205:ARG:CG	22:A6:210:ILE:CG2	2.26	1.14
10:C3:273:LEU:HD13	10:C3:280:VAL:CG1	1.77	1.14
26:F1:137:GLN:HG2	26:F1:204:ARG:O	1.47	1.14
26:F2:198:ARG:NH1	28:I4:146:GLN:HE21	1.43	1.14
13:M3:27:ILE:HG23	29:K3:84:HIS:ND1	1.63	1.14
22:A4:214:GLU:HG3	33:R4:84:TYR:CE1	1.81	1.14
11:G6:139:SER:HA	11:G6:142:ARG:HG3	1.29	1.14
30:L1:124:ASP:HB2	30:L1:147:LYS:CB	1.78	1.14
28:I1:125:LYS:CG	15:O6:66:ARG:CD	2.19	1.14
13:M1:27:ILE:HG23	29:K1:84:HIS:ND1	1.62	1.14
18:Z5:70:PRO:CG	18:Z5:88:LEU:HD13	1.58	1.14
22:A3:214:GLU:HG3	33:R3:84:TYR:CE1	1.81	1.14
10:C2:273:LEU:HB2	10:C2:280:VAL:HG13	1.21	1.14
26:F4:137:GLN:HG2	26:F4:204:ARG:O	1.47	1.14
11:G3:141:ILE:CB	11:G3:144:LEU:HD21	1.76	1.14
14:N2:131:THR:O	30:L2:152:LYS:HG2	1.46	1.14
10:C2:273:LEU:HD13	10:C2:280:VAL:CG1	1.77	1.14
22:A2:214:GLU:HG3	33:R2:84:TYR:CE1	1.80	1.14
2:U3:17:ILE:HG21	2:U3:94:PRO:C	1.65	1.14
2:U6:17:ILE:HG23	2:U6:95:SER:H	1.08	1.14
14:N1:148:ALA:HB3	14:N1:149:LEU:HA	1.26	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N2:133:ARG:CD	30:L2:152:LYS:CE	2.19	1.14
14:N3:129:TYR:C	14:N3:134:VAL:CG2	2.16	1.14
22:A3:211:GLU:CG	33:R3:81:ARG:HH22	1.52	1.14
22:A4:89:LYS:NZ	33:R4:82:ASP:OD1	1.78	1.14
2:U6:17:ILE:HG21	2:U6:94:PRO:C	1.66	1.14
10:C3:274:VAL:HG23	10:C3:275:LYS:HD2	1.20	1.14
10:C4:68:ARG:HH11	10:C4:277:HIS:CB	1.43	1.14
11:G3:139:SER:HA	11:G3:142:ARG:HG3	1.29	1.14
11:G4:141:ILE:HA	11:G4:144:LEU:CD2	1.78	1.14
13:M1:28:HIS:CE1	13:M1:116:LYS:HE3	1.83	1.14
13:M2:125:GLU:HB3	13:M2:129:LYS:HE3	1.28	1.14
13:M3:28:HIS:CE1	13:M3:116:LYS:HE3	1.83	1.14
10:C4:273:LEU:HD13	10:C4:280:VAL:CG1	1.78	1.14
10:C5:273:LEU:CB	10:C5:280:VAL:HG13	1.76	1.14
10:C5:68:ARG:HH11	10:C5:277:HIS:CB	1.43	1.14
18:Z3:70:PRO:CG	18:Z3:88:LEU:HD13	1.58	1.14
22:A1:205:ARG:CG	22:A1:210:ILE:CG2	2.25	1.13
14:N2:133:ARG:HG3	30:L2:152:LYS:CG	1.78	1.13
31:P3:34:MET:HB3	31:P3:42:ARG:HG3	1.23	1.13
15:O1:66:ARG:NH1	28:I3:125:LYS:HD3	1.62	1.13
13:M6:27:ILE:CG2	29:K6:84:HIS:CE1	2.29	1.13
13:M5:27:ILE:HG23	29:K5:84:HIS:ND1	1.62	1.13
18:Z4:88:LEU:HB3	18:Z4:109:TYR:OH	1.49	1.13
2:U6:19:ARG:HD3	2:U6:119:ALA:HB1	1.23	1.13
11:G2:141:ILE:HA	11:G2:144:LEU:CD2	1.78	1.13
26:F2:198:ARG:HH22	28:I4:146:GLN:HG3	1.03	1.13
18:Z2:88:LEU:HB3	18:Z2:109:TYR:OH	1.48	1.13
10:C1:274:VAL:HG23	10:C1:275:LYS:HD2	1.20	1.13
13:M2:28:HIS:CE1	13:M2:116:LYS:HE3	1.83	1.13
13:M3:125:GLU:HB3	13:M3:129:LYS:HE3	1.28	1.13
2:U3:17:ILE:HG23	2:U3:95:SER:H	1.08	1.13
18:Z5:86:ALA:CB	34:S5:3:LEU:HD11	1.79	1.13
22:A1:214:GLU:HG3	33:R1:84:TYR:CD1	1.83	1.13
10:C6:273:LEU:HD13	10:C6:280:VAL:CG1	1.78	1.13
11:G6:141:ILE:HG12	11:G6:144:LEU:HD21	1.19	1.13
30:L1:30:LYS:HZ1	23:B6:21:VAL:N	1.45	1.13
14:N2:148:ALA:H	14:N2:149:LEU:HB3	1.07	1.13
22:A2:205:ARG:CG	22:A2:210:ILE:CG2	2.26	1.13
2:U1:17:ILE:HG21	2:U1:94:PRO:HA	1.30	1.13
18:Z3:88:LEU:HB3	18:Z3:109:TYR:OH	1.49	1.13
11:G3:141:ILE:CA	11:G3:144:LEU:HD23	1.79	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M2:27:ILE:HG23	29:K2:84:HIS:ND1	1.62	1.13
18:Z2:86:ALA:CB	34:S2:3:LEU:HD11	1.79	1.13
18:Z4:70:PRO:CG	18:Z4:88:LEU:HD13	1.58	1.13
22:A4:205:ARG:CG	22:A4:210:ILE:CG2	2.25	1.13
18:Z3:86:ALA:CB	34:S3:3:LEU:HD11	1.78	1.13
18:Z3:46:ASN:HB3	18:Z3:80:ARG:HA	1.24	1.13
18:Z4:50:PHE:O	34:S4:5:ILE:HG21	1.31	1.13
18:Z5:88:LEU:HB3	18:Z5:109:TYR:OH	1.49	1.13
10:C1:273:LEU:HD13	10:C1:280:VAL:CG1	1.77	1.12
13:M6:27:ILE:HG23	29:K6:84:HIS:ND1	1.62	1.12
33:R2:21:TYR:CD1	33:R2:71:ILE:HD11	1.82	1.12
18:Z6:86:ALA:CB	34:S6:3:LEU:HD11	1.79	1.12
18:Z5:46:ASN:HB3	18:Z5:80:ARG:HA	1.23	1.12
31:P5:41:GLN:NE2	31:P5:84:ILE:HG23	1.64	1.12
11:G6:141:ILE:CA	11:G6:144:LEU:HD23	1.78	1.12
24:D4:67:ARG:CD	29:K4:96:ARG:HH21	1.62	1.12
16:W4:111:MET:CE	16:W4:119:LYS:HD2	1.77	1.12
10:C4:273:LEU:HB2	10:C4:280:VAL:HG13	1.21	1.12
10:C6:273:LEU:CB	10:C6:280:VAL:HG13	1.76	1.12
11:G2:141:ILE:CA	11:G2:144:LEU:HD23	1.79	1.12
11:G3:141:ILE:HA	11:G3:144:LEU:CD2	1.78	1.12
13:M4:27:ILE:HG23	29:K4:84:HIS:ND1	1.62	1.12
31:P1:34:MET:O	31:P1:42:ARG:CD	1.96	1.12
2:U2:19:ARG:HD2	2:U2:119:ALA:C	1.52	1.12
18:Z6:88:LEU:HB3	18:Z6:109:TYR:OH	1.49	1.12
24:D3:67:ARG:CD	29:K3:96:ARG:HH21	1.62	1.12
13:M4:28:HIS:CE1	13:M4:116:LYS:HE3	1.83	1.12
2:U6:17:ILE:HG21	2:U6:94:PRO:HA	1.30	1.12
11:G1:141:ILE:CA	11:G1:144:LEU:HD23	1.78	1.12
13:M5:28:HIS:CE1	13:M5:116:LYS:HE3	1.83	1.12
14:N4:133:ARG:HD3	30:L4:152:LYS:HE3	1.15	1.12
2:U5:17:ILE:HG23	2:U5:95:SER:H	1.08	1.12
2:U1:17:ILE:HG23	2:U1:95:SER:H	1.08	1.12
22:A6:214:GLU:HG3	33:R6:84:TYR:CD1	1.84	1.12
13:M5:125:GLU:HB3	13:M5:129:LYS:HE3	1.28	1.12
13:M6:28:HIS:CE1	13:M6:116:LYS:HE3	1.83	1.12
18:Z2:46:ASN:HB3	18:Z2:80:ARG:HA	1.23	1.12
24:D5:67:ARG:CD	29:K5:96:ARG:HH21	1.62	1.12
22:A1:214:GLU:CG	33:R1:84:TYR:CE1	2.32	1.12
2:U3:19:ARG:HD2	2:U3:119:ALA:C	1.52	1.12
14:N4:148:ALA:H	14:N4:149:LEU:HB3	1.07	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G2:139:SER:HA	11:G2:142:ARG:HG3	1.29	1.11
14:N3:148:ALA:H	14:N3:149:LEU:HB3	1.07	1.11
14:N5:129:TYR:C	14:N5:134:VAL:CG2	2.17	1.11
18:Z1:86:ALA:CB	34:S1:3:LEU:HD11	1.79	1.11
24:D2:64:ARG:NE	29:K2:95:ARG:NH2	1.98	1.11
11:G1:141:ILE:HA	11:G1:144:LEU:CD2	1.79	1.11
11:G6:141:ILE:HA	11:G6:144:LEU:CD2	1.78	1.11
24:D1:64:ARG:NE	29:K1:95:ARG:NH2	1.98	1.11
24:D6:64:ARG:NE	29:K6:95:ARG:NH2	1.98	1.11
2:U4:19:ARG:HD3	2:U4:119:ALA:HB1	1.23	1.11
10:C2:74:LYS:HE2	10:C2:272:HIS:CB	1.78	1.11
10:C5:273:LEU:HD13	10:C5:280:VAL:CG1	1.78	1.11
11:G5:141:ILE:HG12	11:G5:144:LEU:HD21	1.19	1.11
11:G5:141:ILE:CA	11:G5:144:LEU:HD23	1.78	1.11
30:L1:124:ASP:CB	30:L1:147:LYS:HB3	1.80	1.11
14:N3:129:TYR:CA	14:N3:134:VAL:HG21	1.79	1.11
26:F6:137:GLN:HG2	26:F6:204:ARG:O	1.45	1.11
11:G4:141:ILE:CA	11:G4:144:LEU:HD23	1.78	1.11
18:Z1:70:PRO:CG	18:Z1:88:LEU:HD13	1.58	1.11
22:A2:211:GLU:HG2	33:R2:81:ARG:NH2	1.59	1.11
24:D2:67:ARG:CD	29:K2:96:ARG:HH21	1.62	1.11
18:Z4:86:ALA:CB	34:S4:3:LEU:HD11	1.79	1.11
10:C3:74:LYS:HE2	10:C3:272:HIS:CB	1.79	1.11
31:P3:15:PHE:CE2	31:P3:17:TYR:HB2	1.84	1.11
31:P3:41:GLN:NE2	31:P3:84:ILE:HG23	1.65	1.11
11:G5:141:ILE:HA	11:G5:144:LEU:CD2	1.78	1.11
24:D5:64:ARG:NE	29:K5:95:ARG:NH2	1.98	1.11
14:N5:133:ARG:HG2	30:L5:154:GLN:HG2	1.30	1.11
24:D1:67:ARG:CD	29:K1:96:ARG:HH21	1.62	1.11
24:D4:64:ARG:NE	29:K4:95:ARG:NH2	1.98	1.11
10:C1:65:LYS:HB3	10:C1:279:ARG:HB3	1.12	1.11
24:D3:64:ARG:NE	29:K3:95:ARG:NH2	1.98	1.10
11:G3:141:ILE:HG12	11:G3:144:LEU:HD21	1.19	1.10
15:O2:63:LYS:HE3	28:I4:163:GLU:HG3	1.24	1.10
2:U1:19:ARG:HD3	2:U1:119:ALA:HB1	1.23	1.10
24:D6:67:ARG:CD	29:K6:96:ARG:HH21	1.63	1.10
10:C6:65:LYS:HB3	10:C6:279:ARG:HB3	1.11	1.10
18:Z1:50:PHE:O	34:S1:5:ILE:HG21	1.31	1.10
22:A6:214:GLU:CG	33:R6:84:TYR:CE1	2.33	1.10
2:U5:17:ILE:HG21	2:U5:94:PRO:HA	1.29	1.10
2:U5:19:ARG:HD3	2:U5:119:ALA:HB1	1.23	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y2:109:GLU:OE2	17:Y2:113:ARG:HD2	1.49	1.10
10:C2:68:ARG:CD	10:C2:277:HIS:ND1	2.15	1.10
11:G5:139:SER:HA	11:G5:142:ARG:HG3	1.29	1.10
15:O2:65:ASP:HB3	28:I4:123:ARG:NH2	1.61	1.10
2:U2:17:ILE:HG23	2:U2:95:SER:H	1.08	1.10
10:C1:68:ARG:CD	10:C1:277:HIS:ND1	2.14	1.10
10:C3:68:ARG:HH11	10:C3:277:HIS:CB	1.43	1.10
31:P5:108:LYS:HB3	31:P5:109:PRO:HD2	1.17	1.10
28:I1:124:LYS:C	15:O6:66:ARG:HH22	1.40	1.10
18:Z5:86:ALA:HB3	34:S5:3:LEU:HD11	1.13	1.10
18:Z1:88:LEU:HB3	18:Z1:109:TYR:OH	1.49	1.10
10:C1:279:ARG:O	10:C1:280:VAL:CG1	2.00	1.10
28:I1:158:ILE:CD1	15:O6:63:LYS:HZ2	1.62	1.10
10:C6:273:LEU:HB2	10:C6:280:VAL:HG13	1.21	1.10
2:U3:19:ARG:HD3	2:U3:119:ALA:HB1	1.23	1.10
11:G1:139:SER:HA	11:G1:142:ARG:HG3	1.29	1.09
22:A3:211:GLU:HG2	33:R3:81:ARG:NH2	1.59	1.09
10:C2:279:ARG:O	10:C2:280:VAL:CG1	2.00	1.09
10:C3:68:ARG:CD	10:C3:277:HIS:ND1	2.15	1.09
30:L4:121:GLN:HG3	30:L4:153:LYS:HE2	1.27	1.09
16:W4:115:GLU:OE2	16:W4:119:LYS:CE	2.00	1.09
18:Z4:86:ALA:HB3	34:S4:3:LEU:HD11	1.13	1.09
18:Z6:46:ASN:HB3	18:Z6:80:ARG:HA	1.23	1.09
10:C5:68:ARG:CD	10:C5:277:HIS:ND1	2.14	1.09
14:N3:148:ALA:HB3	14:N3:149:LEU:HA	1.27	1.09
33:R5:21:TYR:CD2	33:R5:72:LYS:HD2	1.87	1.09
10:C4:279:ARG:O	10:C4:280:VAL:CG1	2.00	1.09
14:N2:133:ARG:HD3	30:L2:152:LYS:HE2	1.33	1.09
10:C4:72:ASP:OD2	10:C4:272:HIS:NE2	1.86	1.09
14:N5:148:ALA:H	14:N5:149:LEU:HB3	1.07	1.09
10:C4:68:ARG:CD	10:C4:277:HIS:ND1	2.14	1.09
32:Q2:4:LYS:HZ1	32:Q2:99:TYR:HA	0.96	1.09
14:N1:133:ARG:HG3	30:L1:152:LYS:HG3	1.30	1.09
10:C5:65:LYS:HB3	10:C5:279:ARG:HB3	1.11	1.09
14:N2:148:ALA:HB3	14:N2:149:LEU:HA	1.26	1.09
2:U4:17:ILE:HG21	2:U4:94:PRO:HA	1.30	1.09
10:C4:65:LYS:HB3	10:C4:279:ARG:HB3	1.11	1.08
18:Z2:50:PHE:O	34:S2:5:ILE:HG21	1.31	1.08
10:C5:72:ASP:OD2	10:C5:272:HIS:NE2	1.86	1.08
14:N6:133:ARG:CD	30:L6:152:LYS:HB3	1.82	1.08
10:C1:72:ASP:OD2	10:C1:272:HIS:NE2	1.86	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C6:279:ARG:O	10:C6:280:VAL:CG1	2.00	1.08
10:C6:72:ASP:OD2	10:C6:272:HIS:NE2	1.86	1.08
14:N1:133:ARG:NH2	30:L1:154:GLN:HA	1.68	1.08
18:Z6:50:PHE:O	34:S6:5:ILE:HG21	1.32	1.08
10:C5:279:ARG:O	10:C5:280:VAL:CG1	2.00	1.08
13:M6:125:GLU:HB3	13:M6:129:LYS:HE3	1.28	1.08
10:C3:65:LYS:HG2	10:C3:279:ARG:HH21	1.15	1.08
14:N1:137:PRO:HG2	30:L1:154:GLN:HB3	1.35	1.08
13:M1:125:GLU:HB3	13:M1:129:LYS:HE3	1.28	1.08
34:S6:6:PRO:HG3	34:S6:58:GLU:HG2	1.32	1.08
10:C6:68:ARG:CD	10:C6:277:HIS:ND1	2.15	1.08
10:C6:65:LYS:HG2	10:C6:279:ARG:HH21	1.15	1.08
14:N1:133:ARG:HD2	30:L1:152:LYS:HB3	1.10	1.08
14:N1:133:ARG:HD3	30:L1:152:LYS:HE3	1.10	1.08
14:N3:129:TYR:C	14:N3:134:VAL:HG22	1.74	1.08
10:C2:74:LYS:CE	10:C2:272:HIS:CG	2.37	1.07
18:Z1:86:ALA:HB3	34:S1:3:LEU:HD11	1.12	1.07
34:S3:6:PRO:HG3	34:S3:58:GLU:HG2	1.31	1.07
14:N5:148:ALA:HB3	14:N5:149:LEU:HA	1.26	1.07
18:Z3:86:ALA:HB3	34:S3:3:LEU:HD11	1.12	1.07
10:C3:74:LYS:CE	10:C3:272:HIS:CG	2.37	1.07
2:U3:17:ILE:HG21	2:U3:94:PRO:HA	1.29	1.07
10:C2:65:LYS:HG2	10:C2:279:ARG:HH21	1.15	1.07
22:A5:211:GLU:HG2	33:R5:81:ARG:NH2	1.59	1.07
10:C3:279:ARG:O	10:C3:280:VAL:CG1	2.00	1.07
14:N3:129:TYR:CB	14:N3:134:VAL:CG2	2.01	1.07
22:A4:211:GLU:HG2	33:R4:81:ARG:NH2	1.59	1.07
10:C1:74:LYS:HE2	10:C1:272:HIS:CB	1.78	1.07
10:C4:65:LYS:HB3	10:C4:279:ARG:CB	1.85	1.07
14:N5:129:TYR:CA	14:N5:134:VAL:CG2	2.33	1.07
10:C2:274:VAL:HG23	10:C2:275:LYS:HD2	1.20	1.07
33:R1:64:GLY:O	33:R1:73:LEU:CD2	2.02	1.07
22:A6:214:GLU:OE1	22:A6:215:GLN:CD	1.94	1.06
10:C5:65:LYS:HB3	10:C5:279:ARG:CB	1.85	1.06
10:C6:65:LYS:HB3	10:C6:279:ARG:CB	1.85	1.06
34:S2:6:PRO:HG3	34:S2:58:GLU:HG2	1.32	1.06
15:O2:66:ARG:CD	28:I4:125:LYS:CD	2.30	1.06
18:Z6:86:ALA:HB3	34:S6:3:LEU:HD11	1.12	1.06
32:Q6:4:LYS:HZ1	32:Q6:99:TYR:HA	0.96	1.06
10:C3:65:LYS:HB3	10:C3:279:ARG:CB	1.85	1.06
18:Z2:86:ALA:HB3	34:S2:3:LEU:HD11	1.13	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A1:211:GLU:HG2	33:R1:81:ARG:NH2	1.59	1.06
10:C3:65:LYS:HB3	10:C3:279:ARG:HB3	1.11	1.06
14:N2:131:THR:O	30:L2:152:LYS:CG	2.03	1.06
10:C1:65:LYS:HB3	10:C1:279:ARG:CB	1.85	1.05
14:N1:133:ARG:HD3	30:L1:152:LYS:CE	1.85	1.05
14:N3:129:TYR:HD1	14:N3:134:VAL:HG11	0.95	1.05
24:D4:64:ARG:HG3	29:K4:95:ARG:NH1	1.72	1.05
33:R2:65:PRO:HB2	33:R2:73:LEU:HD22	1.30	1.05
30:L2:31:GLU:H	23:B5:21:VAL:CG2	1.69	1.05
34:S4:6:PRO:HG3	34:S4:58:GLU:HG2	1.32	1.05
10:C1:65:LYS:HG2	10:C1:279:ARG:HH21	1.15	1.05
11:G4:139:SER:HA	11:G4:142:ARG:HG3	1.30	1.05
24:D5:64:ARG:HG3	29:K5:95:ARG:NH1	1.71	1.05
22:A1:214:GLU:OE1	22:A1:215:GLN:CD	1.93	1.05
22:A3:89:LYS:HZ1	33:R3:82:ASP:CG	1.49	1.05
23:B4:21:VAL:CA	30:L5:31:GLU:OE2	2.00	1.05
31:P5:15:PHE:HZ	31:P5:112:ILE:CG1	1.68	1.05
2:U2:17:ILE:HG21	2:U2:94:PRO:HA	1.30	1.05
31:P5:108:LYS:HB3	31:P5:109:PRO:CD	1.85	1.05
10:C2:65:LYS:HB3	10:C2:279:ARG:CB	1.85	1.05
11:G5:141:ILE:CA	11:G5:144:LEU:CD2	2.35	1.05
24:D2:64:ARG:HG3	29:K2:95:ARG:NH1	1.71	1.04
33:R3:57:LEU:HD11	33:R3:66:VAL:HG11	1.39	1.04
31:P1:41:GLN:NE2	31:P1:84:ILE:HG23	1.71	1.04
18:Z6:70:PRO:CG	18:Z6:88:LEU:HD13	1.58	1.04
31:P1:121:ILE:HG13	31:P1:123:TYR:CD2	1.92	1.04
34:S1:6:PRO:HG3	34:S1:58:GLU:HG2	1.31	1.04
10:C2:65:LYS:HB3	10:C2:279:ARG:HB3	1.11	1.04
31:P4:121:ILE:HG13	31:P4:123:TYR:CD2	1.92	1.04
33:R6:58:MET:O	33:R6:61:ILE:HG12	1.58	1.04
32:Q4:4:LYS:HZ1	32:Q4:99:TYR:HA	0.97	1.04
11:G1:141:ILE:CA	11:G1:144:LEU:CD2	2.35	1.04
11:G4:141:ILE:CA	11:G4:144:LEU:CD2	2.35	1.04
30:L4:121:GLN:HG3	30:L4:153:LYS:HE3	1.20	1.04
31:P1:41:GLN:HB3	31:P1:84:ILE:HD13	1.08	1.04
22:A3:211:GLU:HG2	33:R3:81:ARG:HH22	0.87	1.04
31:P2:96:VAL:HG22	31:P2:116:LEU:HD12	1.04	1.04
31:P6:41:GLN:HB3	31:P6:84:ILE:HD13	1.37	1.04
34:S5:6:PRO:HG3	34:S5:58:GLU:HG2	1.32	1.04
2:U3:17:ILE:CG2	2:U3:94:PRO:HA	1.87	1.04
24:D1:64:ARG:HG3	29:K1:95:ARG:NH1	1.71	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G2:141:ILE:CA	11:G2:144:LEU:CD2	2.35	1.04
11:G6:141:ILE:CA	11:G6:144:LEU:CD2	2.35	1.04
31:P3:121:ILE:CG1	31:P3:123:TYR:CZ	2.38	1.04
2:U1:17:ILE:CG2	2:U1:94:PRO:HA	1.88	1.04
24:D3:64:ARG:HG3	29:K3:95:ARG:NH1	1.71	1.04
2:U2:17:ILE:CG2	2:U2:94:PRO:HA	1.88	1.04
15:O1:66:ARG:HH12	28:I3:125:LYS:HG2	1.19	1.04
31:P3:15:PHE:O	31:P3:16:THR:OG1	1.76	1.04
31:P6:121:ILE:HG13	31:P6:123:TYR:CD2	1.92	1.04
22:A4:211:GLU:HG2	33:R4:81:ARG:HH22	0.88	1.03
10:C4:74:LYS:HE2	10:C4:272:HIS:CB	1.78	1.03
24:D6:64:ARG:HG3	29:K6:95:ARG:NH1	1.72	1.03
15:O2:63:LYS:HE3	28:I4:163:GLU:CG	1.86	1.03
14:N1:137:PRO:CG	30:L1:154:GLN:HB3	1.87	1.03
23:B4:21:VAL:HG22	30:L5:31:GLU:CB	1.88	1.03
10:C4:65:LYS:HG2	10:C4:279:ARG:HH21	1.15	1.03
14:N2:137:PRO:HG2	30:L2:154:GLN:HB3	1.07	1.03
28:I1:125:LYS:HG3	15:O6:66:ARG:HD2	1.35	1.03
31:P5:121:ILE:HG13	31:P5:123:TYR:CD2	1.92	1.03
33:R3:61:ILE:O	33:R3:73:LEU:CD1	2.05	1.03
2:U4:17:ILE:CG2	2:U4:94:PRO:HA	1.88	1.03
22:A1:214:GLU:OE1	22:A1:215:GLN:NE2	1.92	1.03
33:R4:58:MET:HA	33:R4:61:ILE:CD1	1.87	1.03
18:Z4:70:PRO:HB3	18:Z4:88:LEU:HD11	1.39	1.03
11:G3:141:ILE:CA	11:G3:144:LEU:CD2	2.35	1.03
31:P1:41:GLN:HB3	31:P1:84:ILE:CD1	1.87	1.03
32:Q5:4:LYS:HZ1	32:Q5:99:TYR:HA	0.96	1.03
31:P2:121:ILE:HG13	31:P2:123:TYR:CD2	1.92	1.03
32:Q1:4:LYS:HZ1	32:Q1:99:TYR:HA	0.96	1.03
22:A1:211:GLU:HG2	33:R1:81:ARG:HH22	0.88	1.03
10:C5:65:LYS:HG2	10:C5:279:ARG:HH21	1.15	1.02
2:U6:17:ILE:CG2	2:U6:94:PRO:HA	1.88	1.02
22:A4:205:ARG:HG2	22:A4:210:ILE:HG22	1.41	1.02
14:N3:129:TYR:CA	14:N3:134:VAL:CG2	2.36	1.02
31:P1:96:VAL:HG22	31:P1:116:LEU:HD12	1.04	1.02
18:Z6:70:PRO:HB3	18:Z6:88:LEU:HD11	1.39	1.02
13:M3:111:VAL:HG11	13:M3:114:TYR:CE1	1.94	1.02
31:P3:121:ILE:HG13	31:P3:123:TYR:CD2	1.92	1.02
22:A2:211:GLU:HG2	33:R2:81:ARG:HH22	0.88	1.02
13:M2:111:VAL:HG11	13:M2:114:TYR:CE1	1.94	1.02
13:M6:111:VAL:HG11	13:M6:114:TYR:CE1	1.94	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P3:96:VAL:HG22	31:P3:116:LEU:HD12	1.04	1.02
13:M5:14:VAL:HG13	13:M5:127:TYR:CE1	1.92	1.02
23:B4:21:VAL:CG2	30:L5:31:GLU:CA	2.23	1.02
31:P2:121:ILE:CG1	31:P2:123:TYR:CZ	2.38	1.02
10:C4:273:LEU:HB3	10:C4:280:VAL:CG1	1.90	1.02
10:C1:273:LEU:HB3	10:C1:280:VAL:CG1	1.90	1.02
13:M5:111:VAL:HG11	13:M5:114:TYR:CE1	1.94	1.02
10:C4:273:LEU:CG	10:C4:280:VAL:HG11	1.90	1.02
14:N2:137:PRO:CG	30:L2:154:GLN:CB	2.37	1.02
13:M1:111:VAL:HG11	13:M1:114:TYR:CE1	1.94	1.02
2:U5:17:ILE:CG2	2:U5:94:PRO:HA	1.88	1.02
22:A6:214:GLU:OE1	22:A6:215:GLN:NE2	1.93	1.01
31:P5:96:VAL:HG22	31:P5:116:LEU:HD12	1.04	1.01
22:A6:205:ARG:HG3	22:A6:210:ILE:HG21	1.42	1.01
10:C4:65:LYS:HA	10:C4:277:HIS:CE1	1.95	1.01
13:M4:111:VAL:HG11	13:M4:114:TYR:CE1	1.94	1.01
31:P1:41:GLN:CB	31:P1:84:ILE:HD13	1.90	1.01
22:A1:205:ARG:HG2	22:A1:210:ILE:HG22	1.41	1.01
22:A6:211:GLU:HG2	33:R6:81:ARG:NH2	1.59	1.01
10:C1:273:LEU:CG	10:C1:280:VAL:HG11	1.91	1.01
28:I1:158:ILE:CD1	15:O6:63:LYS:NZ	2.22	1.01
30:L4:121:GLN:CG	30:L4:153:LYS:CE	2.27	1.01
31:P3:34:MET:O	31:P3:42:ARG:CD	2.07	1.01
31:P4:119:PHE:HD1	34:S4:120:HIS:N	1.57	1.01
31:P5:121:ILE:CG1	31:P5:123:TYR:CZ	2.38	1.01
2:U2:19:ARG:HD3	2:U2:119:ALA:CA	1.91	1.01
2:U4:19:ARG:HD3	2:U4:119:ALA:CA	1.91	1.01
15:O4:66:ARG:NH1	28:I5:125:LYS:HD3	1.74	1.01
18:Z5:70:PRO:HB3	18:Z5:88:LEU:HD11	1.39	1.01
22:A1:89:LYS:CE	33:R1:82:ASP:OD1	2.09	1.01
22:A6:211:GLU:HG2	33:R6:81:ARG:HH22	0.88	1.01
13:M1:14:VAL:HG13	13:M1:127:TYR:CE1	1.92	1.01
2:U6:19:ARG:HD3	2:U6:119:ALA:CA	1.91	1.01
22:A3:205:ARG:HG2	22:A3:210:ILE:HG22	1.41	1.01
10:C1:65:LYS:HA	10:C1:277:HIS:CE1	1.96	1.01
26:F3:127:ARG:O	26:F3:137:GLN:N	1.94	1.01
26:F5:127:ARG:O	26:F5:137:GLN:N	1.94	1.01
11:G5:139:SER:CA	11:G5:142:ARG:HG3	1.91	1.01
31:P2:119:PHE:HD1	34:S2:120:HIS:N	1.58	1.01
31:P5:119:PHE:HD1	34:S5:120:HIS:N	1.58	1.01
34:S1:4:VAL:CG2	34:S1:58:GLU:OE1	2.09	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U3:19:ARG:HD3	2:U3:119:ALA:CA	1.91	1.01
11:G2:139:SER:CA	11:G2:142:ARG:HG3	1.91	1.01
11:G6:139:SER:CA	11:G6:142:ARG:HG3	1.91	1.01
10:C5:65:LYS:HA	10:C5:277:HIS:CE1	1.95	1.01
10:C6:65:LYS:HA	10:C6:277:HIS:CE1	1.96	1.01
30:L6:121:GLN:HG3	30:L6:153:LYS:HE2	1.38	1.01
33:R1:65:PRO:CB	33:R1:74:GLN:HE22	1.72	1.01
22:A5:89:LYS:CE	33:R5:82:ASP:OD1	2.09	1.01
2:U1:19:ARG:HD3	2:U1:119:ALA:CA	1.90	1.01
23:B1:23:ASP:OD1	23:B1:24:PRO:HD2	1.60	1.00
26:F1:127:ARG:O	26:F1:137:GLN:N	1.94	1.00
26:F2:127:ARG:O	26:F2:137:GLN:N	1.94	1.00
11:G4:139:SER:CA	11:G4:142:ARG:HG3	1.91	1.00
34:S3:4:VAL:CG2	34:S3:58:GLU:OE1	2.09	1.00
10:C5:273:LEU:CG	10:C5:280:VAL:HG11	1.90	1.00
31:P4:96:VAL:HG22	31:P4:116:LEU:HD12	1.04	1.00
22:A6:89:LYS:CE	33:R6:82:ASP:OD1	2.09	1.00
10:C3:273:LEU:HB3	10:C3:280:VAL:CG1	1.90	1.00
10:C6:273:LEU:HB3	10:C6:280:VAL:CG1	1.90	1.00
22:A3:89:LYS:CE	33:R3:82:ASP:OD1	2.09	1.00
2:U5:19:ARG:HD3	2:U5:119:ALA:CA	1.91	1.00
22:A1:205:ARG:HG3	22:A1:210:ILE:HG21	1.42	1.00
10:C6:273:LEU:CG	10:C6:280:VAL:HG11	1.91	1.00
26:F6:127:ARG:O	26:F6:137:GLN:N	1.94	1.00
14:N1:131:THR:O	30:L1:152:LYS:CG	2.08	1.00
31:P6:119:PHE:HD1	34:S6:120:HIS:N	1.58	1.00
22:A2:205:ARG:HG2	22:A2:210:ILE:HG22	1.41	1.00
22:A5:205:ARG:HG2	22:A5:210:ILE:HG22	1.41	1.00
14:N5:129:TYR:O	14:N5:134:VAL:HG23	1.55	1.00
14:N6:133:ARG:HH11	30:L6:152:LYS:HB3	0.88	1.00
15:O4:63:LYS:HZ3	28:I5:163:GLU:HG3	0.98	1.00
11:G1:139:SER:CA	11:G1:142:ARG:HG3	1.91	1.00
22:A2:89:LYS:CE	33:R2:82:ASP:OD1	2.08	1.00
34:S4:4:VAL:CG2	34:S4:58:GLU:OE1	2.09	1.00
18:Z2:70:PRO:HB3	18:Z2:88:LEU:HD11	1.39	1.00
10:C2:273:LEU:CG	10:C2:280:VAL:HG11	1.90	1.00
18:Z3:70:PRO:HB3	18:Z3:88:LEU:HD11	1.39	1.00
18:Z6:83:LEU:HD23	34:S6:55:ARG:HH21	1.27	1.00
22:A4:89:LYS:CE	33:R4:82:ASP:OD1	2.09	1.00
22:A5:205:ARG:HG3	22:A5:210:ILE:HG21	1.41	1.00
11:G4:142:ARG:HD2	11:G4:147:LEU:CD1	1.92	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L5:121:GLN:HG3	30:L5:153:LYS:HE2	1.43	1.00
13:M4:14:VAL:HG13	13:M4:127:TYR:CE1	1.92	1.00
31:P1:119:PHE:HD1	34:S1:120:HIS:N	1.58	1.00
18:Z1:70:PRO:HB3	18:Z1:88:LEU:HD11	1.39	1.00
10:C3:65:LYS:HA	10:C3:277:HIS:CE1	1.96	1.00
10:C3:273:LEU:CG	10:C3:280:VAL:HG11	1.91	1.00
11:G5:142:ARG:HD2	11:G5:147:LEU:CD1	1.92	1.00
11:G6:142:ARG:HD2	11:G6:147:LEU:CD1	1.91	1.00
13:M6:14:VAL:HG13	13:M6:127:TYR:CE1	1.92	1.00
31:P3:119:PHE:HD1	34:S3:120:HIS:N	1.58	1.00
22:A5:211:GLU:HG2	33:R5:81:ARG:HH22	0.87	0.99
10:C5:273:LEU:HB3	10:C5:280:VAL:CG1	1.90	0.99
13:M3:14:VAL:HG13	13:M3:127:TYR:CE1	1.92	0.99
34:S2:4:VAL:CG2	34:S2:58:GLU:OE1	2.09	0.99
11:G3:139:SER:CA	11:G3:142:ARG:HG3	1.91	0.99
15:O2:66:ARG:NE	28:I4:125:LYS:HD2	1.74	0.99
31:P1:121:ILE:CG1	31:P1:123:TYR:CZ	2.38	0.99
34:S6:4:VAL:CG2	34:S6:58:GLU:OE1	2.09	0.99
24:D2:64:ARG:HG3	29:K2:95:ARG:CZ	1.93	0.99
14:N4:133:ARG:CD	30:L4:152:LYS:HE3	1.92	0.99
28:I1:124:LYS:C	15:O6:66:ARG:NH2	2.04	0.99
31:P6:34:MET:HB3	31:P6:42:ARG:HG3	1.44	0.99
34:S5:4:VAL:CG2	34:S5:58:GLU:OE1	2.09	0.99
30:L1:121:GLN:HB3	30:L1:153:LYS:HD2	1.44	0.99
13:M3:14:VAL:HG11	13:M3:127:TYR:HE1	0.83	0.99
13:M6:14:VAL:HG11	13:M6:127:TYR:HE1	0.83	0.99
22:A6:205:ARG:HG2	22:A6:210:ILE:HG22	1.41	0.99
10:C6:68:ARG:CZ	10:C6:277:HIS:CB	2.41	0.99
24:D5:64:ARG:HG3	29:K5:95:ARG:CZ	1.93	0.99
15:O1:66:ARG:NH1	28:I3:125:LYS:CD	2.18	0.99
22:A4:205:ARG:HG3	22:A4:210:ILE:HG21	1.42	0.99
31:P6:96:VAL:HG22	31:P6:116:LEU:HD12	1.03	0.99
10:C2:65:LYS:HA	10:C2:277:HIS:CE1	1.95	0.99
24:D6:64:ARG:HG3	29:K6:95:ARG:CZ	1.93	0.99
11:G1:142:ARG:HD2	11:G1:147:LEU:CD1	1.92	0.99
11:G2:142:ARG:HD2	11:G2:147:LEU:CD1	1.92	0.99
27:H4:163:GLN:NE2	27:H4:189:PHE:CE2	2.21	0.99
10:C6:74:LYS:HE2	10:C6:272:HIS:CB	1.79	0.98
15:O2:65:ASP:HB2	28:I4:123:ARG:NH2	1.74	0.98
13:M2:14:VAL:HG13	13:M2:127:TYR:CE1	1.92	0.98
13:M4:14:VAL:HG11	13:M4:127:TYR:HE1	0.83	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R4:58:MET:HG3	33:R4:61:ILE:HD11	1.43	0.98
30:L5:124:ASP:HB2	30:L5:147:LYS:HG2	1.46	0.98
18:Z1:83:LEU:HD23	34:S1:55:ARG:HH21	1.26	0.98
18:Z4:83:LEU:HD23	34:S4:55:ARG:HH21	1.27	0.98
22:A3:205:ARG:HG3	22:A3:210:ILE:HG21	1.42	0.98
10:C2:65:LYS:HG2	10:C2:279:ARG:NH2	1.78	0.98
10:C3:65:LYS:HG2	10:C3:279:ARG:NH2	1.78	0.98
11:G3:142:ARG:HD2	11:G3:147:LEU:CD1	1.91	0.98
2:U4:19:ARG:CD	2:U4:119:ALA:CB	2.42	0.98
18:Z5:70:PRO:HG2	18:Z5:88:LEU:CD1	1.94	0.98
10:C5:68:ARG:CZ	10:C5:277:HIS:CB	2.41	0.98
26:F6:137:GLN:HA	26:F6:203:ASN:HB2	1.45	0.98
31:P6:34:MET:O	31:P6:42:ARG:NE	1.97	0.98
10:C3:68:ARG:CZ	10:C3:277:HIS:CB	2.41	0.98
26:F4:127:ARG:O	26:F4:137:GLN:N	1.94	0.98
16:W4:111:MET:HE1	16:W4:119:LYS:HD2	1.31	0.98
10:C4:68:ARG:CZ	10:C4:277:HIS:CB	2.41	0.98
32:Q1:4:LYS:NZ	32:Q1:99:TYR:CA	2.16	0.98
33:R3:57:LEU:HD11	33:R3:66:VAL:CG1	1.92	0.98
10:C1:280:VAL:O	22:A1:70:ASN:ND2	1.97	0.98
10:C4:65:LYS:HG2	10:C4:279:ARG:NH2	1.78	0.98
10:C6:280:VAL:O	22:A6:70:ASN:ND2	1.97	0.98
10:C1:68:ARG:NH2	10:C1:276:THR:CB	2.19	0.98
10:C2:68:ARG:CZ	10:C2:277:HIS:CB	2.41	0.98
10:C6:68:ARG:NH2	10:C6:276:THR:CB	2.19	0.98
10:C6:65:LYS:HG2	10:C6:279:ARG:NH2	1.78	0.98
2:U1:19:ARG:CD	2:U1:119:ALA:CB	2.42	0.98
2:U6:19:ARG:CD	2:U6:119:ALA:CB	2.42	0.98
10:C3:280:VAL:O	22:A3:70:ASN:ND2	1.97	0.97
10:C5:280:VAL:O	22:A5:70:ASN:ND2	1.97	0.97
10:C4:280:VAL:O	22:A4:70:ASN:ND2	1.97	0.97
11:G2:141:ILE:HG13	11:G2:144:LEU:HD22	1.45	0.97
24:D1:64:ARG:HG3	29:K1:95:ARG:CZ	1.93	0.97
24:D4:64:ARG:HG3	29:K4:95:ARG:CZ	1.93	0.97
10:C1:273:LEU:CD1	10:C1:280:VAL:CG1	2.40	0.97
11:G5:141:ILE:HG13	11:G5:144:LEU:HD22	1.45	0.97
30:L2:121:GLN:HB2	30:L2:153:LYS:HD2	1.43	0.97
31:P3:34:MET:CB	31:P3:42:ARG:HG3	1.93	0.97
33:R4:58:MET:O	33:R4:61:ILE:CG1	2.11	0.97
22:A2:205:ARG:HG3	22:A2:210:ILE:HG21	1.42	0.97
10:C1:68:ARG:CZ	10:C1:277:HIS:CB	2.41	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N5:133:ARG:HE	30:L5:154:GLN:HB2	1.26	0.97
32:Q3:4:LYS:HZ1	32:Q3:99:TYR:HA	0.97	0.97
33:R5:22:THR:HG22	33:R5:72:LYS:NZ	1.79	0.97
10:C2:280:VAL:O	22:A2:70:ASN:ND2	1.97	0.97
24:D1:67:ARG:HD2	29:K1:96:ARG:HH21	0.81	0.97
11:G3:141:ILE:HG13	11:G3:144:LEU:HD22	1.45	0.97
11:G4:141:ILE:HG13	11:G4:144:LEU:HD22	1.45	0.97
13:M5:14:VAL:HG11	13:M5:127:TYR:HE1	0.83	0.97
33:R1:65:PRO:HB3	33:R1:74:GLN:NE2	1.78	0.97
18:Z3:83:LEU:CD2	34:S3:55:ARG:HH21	1.78	0.97
10:C5:68:ARG:NH2	10:C5:276:THR:CB	2.19	0.97
24:D2:64:ARG:CD	29:K2:95:ARG:NH2	2.28	0.97
24:D3:64:ARG:HG3	29:K3:95:ARG:CZ	1.93	0.97
2:U5:19:ARG:CD	2:U5:119:ALA:CB	2.42	0.97
13:M1:14:VAL:HG11	13:M1:127:TYR:HE1	0.83	0.97
13:M2:14:VAL:HG11	13:M2:127:TYR:HE1	0.83	0.97
31:P6:41:GLN:OE1	31:P6:84:ILE:CD1	2.11	0.97
2:U3:19:ARG:CD	2:U3:119:ALA:CB	2.42	0.97
18:Z5:83:LEU:CD2	34:S5:55:ARG:HH21	1.78	0.97
10:C1:65:LYS:HG2	10:C1:279:ARG:NH2	1.78	0.97
10:C2:273:LEU:HB3	10:C2:280:VAL:CG1	1.90	0.97
18:Z6:83:LEU:CD2	34:S6:55:ARG:HH21	1.78	0.97
2:U2:19:ARG:CD	2:U2:119:ALA:CB	2.42	0.97
24:D4:67:ARG:HD2	29:K4:96:ARG:HH21	0.80	0.97
14:N2:133:ARG:NH2	30:L2:154:GLN:HA	1.78	0.97
18:Z3:70:PRO:HG2	18:Z3:88:LEU:CD1	1.94	0.97
28:I1:196:GLU:CD	28:I1:200:ARG:HH21	1.68	0.97
28:I1:158:ILE:HD11	15:O6:63:LYS:HZ2	1.10	0.97
31:P4:41:GLN:HB3	31:P4:84:ILE:HD13	0.99	0.97
10:C4:68:ARG:NH2	10:C4:276:THR:CB	2.19	0.96
14:N4:133:ARG:HD3	30:L4:152:LYS:CE	1.93	0.96
18:Z2:83:LEU:CD2	34:S2:55:ARG:HH21	1.78	0.96
18:Z4:83:LEU:CD2	34:S4:55:ARG:HH21	1.78	0.96
24:D1:64:ARG:CD	29:K1:95:ARG:NH2	2.28	0.96
18:Z6:70:PRO:HG2	18:Z6:88:LEU:CD1	1.94	0.96
10:C3:270:THR:CG2	22:A3:69:GLU:CB	2.35	0.96
10:C5:65:LYS:HG2	10:C5:279:ARG:NH2	1.78	0.96
24:D6:64:ARG:CD	29:K6:95:ARG:NH2	2.28	0.96
30:L2:31:GLU:H	23:B5:21:VAL:HG23	1.30	0.96
24:D4:64:ARG:CD	29:K4:95:ARG:NH2	2.28	0.96
24:D6:67:ARG:HD2	29:K6:96:ARG:HH21	0.81	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P6:41:GLN:CB	31:P6:84:ILE:HD13	1.94	0.96
10:C6:270:THR:CG2	22:A6:69:GLU:CB	2.35	0.96
14:N5:129:TYR:HD1	14:N5:134:VAL:HG11	1.29	0.96
18:Z2:70:PRO:HG3	18:Z2:88:LEU:HD13	0.96	0.96
18:Z2:70:PRO:HG2	18:Z2:88:LEU:CD1	1.93	0.96
10:C2:68:ARG:NH2	10:C2:276:THR:CB	2.19	0.96
10:C3:273:LEU:CD1	10:C3:280:VAL:CG1	2.40	0.96
11:G6:141:ILE:HA	11:G6:144:LEU:HD23	0.96	0.96
11:G6:141:ILE:HG13	11:G6:144:LEU:HD22	1.45	0.96
17:Y2:109:GLU:OE2	17:Y2:113:ARG:NH1	1.98	0.96
18:Z3:83:LEU:HD23	34:S3:55:ARG:HH21	1.27	0.96
28:I1:141:ARG:NH2	26:F6:191:LYS:CE	2.29	0.96
22:A4:214:GLU:HG3	33:R4:84:TYR:CZ	2.00	0.96
10:C4:273:LEU:HB2	10:C4:280:VAL:CG1	1.90	0.96
10:C5:273:LEU:CD1	10:C5:280:VAL:CG1	2.40	0.96
24:D2:67:ARG:HD2	29:K2:96:ARG:HH21	0.81	0.96
28:I5:196:GLU:CD	28:I5:200:ARG:HH21	1.69	0.96
24:D3:64:ARG:CD	29:K3:95:ARG:NH2	2.28	0.96
24:D3:67:ARG:HD2	29:K3:96:ARG:HH21	0.81	0.96
28:I1:125:LYS:CD	15:O6:66:ARG:HD2	1.71	0.96
22:A2:214:GLU:HG3	33:R2:84:TYR:CZ	1.99	0.96
18:Z5:83:LEU:HD23	34:S5:55:ARG:HH21	1.27	0.96
10:C6:142:LYS:CD	10:C6:157:LEU:HD13	1.96	0.96
18:Z1:83:LEU:CD2	34:S1:55:ARG:HH21	1.78	0.96
24:D5:64:ARG:CD	29:K5:95:ARG:NH2	2.28	0.96
14:N4:133:ARG:HD2	30:L4:152:LYS:CB	1.96	0.96
31:P6:15:PHE:CZ	31:P6:112:ILE:HD11	2.01	0.96
22:A3:214:GLU:HG3	33:R3:84:TYR:CZ	2.00	0.96
10:C1:68:ARG:HD2	10:C1:277:HIS:CB	1.96	0.95
10:C5:68:ARG:HD2	10:C5:277:HIS:CB	1.96	0.95
14:N6:133:ARG:HH22	30:L6:154:GLN:HB2	1.11	0.95
31:P1:15:PHE:CZ	31:P1:112:ILE:HD11	2.01	0.95
18:Z4:49:LEU:CD1	34:S4:5:ILE:HG23	1.96	0.95
22:A5:214:GLU:HG3	33:R5:84:TYR:CZ	2.00	0.95
10:C4:270:THR:CG2	22:A4:69:GLU:CB	2.35	0.95
31:P2:15:PHE:CZ	31:P2:112:ILE:HD11	2.01	0.95
26:F6:137:GLN:HB3	26:F6:204:ARG:CA	1.97	0.95
11:G5:141:ILE:HA	11:G5:144:LEU:HD23	0.96	0.95
31:P6:41:GLN:CD	31:P6:84:ILE:HG23	1.85	0.95
31:P6:37:TYR:OH	31:P6:87:PRO:HD3	1.66	0.95
10:C2:273:LEU:CD1	10:C2:280:VAL:CG1	2.40	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C4:279:ARG:HH22	22:A4:118:GLU:HG3	1.31	0.95
10:C1:279:ARG:HH22	22:A1:118:GLU:HG3	1.31	0.95
26:F3:137:GLN:HA	26:F3:203:ASN:HB2	1.48	0.95
11:G2:141:ILE:HA	11:G2:144:LEU:HD23	0.97	0.95
10:C4:68:ARG:HD2	10:C4:277:HIS:CB	1.96	0.95
11:G3:141:ILE:HA	11:G3:144:LEU:HD23	0.96	0.95
31:P5:15:PHE:CZ	31:P5:112:ILE:CD1	2.50	0.95
33:R1:65:PRO:CB	33:R1:74:GLN:NE2	2.29	0.95
18:Z2:83:LEU:HD23	34:S2:55:ARG:HH21	1.27	0.95
22:A4:205:ARG:CG	22:A4:210:ILE:HG22	1.95	0.95
24:D5:67:ARG:HD2	29:K5:96:ARG:HH21	0.81	0.95
28:I1:163:GLU:CG	15:O6:63:LYS:HE3	1.95	0.95
28:I1:123:ARG:HD2	15:O6:64:ALA:O	1.65	0.95
26:F2:198:ARG:NH2	28:I4:146:GLN:HG3	1.81	0.95
31:P4:121:ILE:CG1	31:P4:123:TYR:CZ	2.38	0.95
11:G5:139:SER:HA	11:G5:142:ARG:CG	1.97	0.95
18:Z3:49:LEU:CD1	34:S3:5:ILE:HG23	1.96	0.95
18:Z4:70:PRO:HG3	18:Z4:88:LEU:HD13	0.96	0.95
10:C3:68:ARG:HD2	10:C3:277:HIS:CB	1.96	0.94
26:F4:137:GLN:HA	26:F4:203:ASN:HB2	1.48	0.94
11:G1:141:ILE:HA	11:G1:144:LEU:HD23	0.96	0.94
11:G4:141:ILE:O	11:G4:144:LEU:HG	1.67	0.94
18:Z1:70:PRO:HG3	18:Z1:88:LEU:HD13	0.96	0.94
18:Z6:49:LEU:CD1	34:S6:5:ILE:HG23	1.96	0.94
22:A1:205:ARG:CG	22:A1:210:ILE:HG22	1.95	0.94
10:C3:279:ARG:HH22	22:A3:118:GLU:HG3	1.31	0.94
10:C5:273:LEU:HB2	10:C5:280:VAL:CG1	1.90	0.94
26:F6:137:GLN:CB	26:F6:204:ARG:C	2.34	0.94
11:G1:139:SER:HA	11:G1:142:ARG:CG	1.97	0.94
11:G6:139:SER:HA	11:G6:142:ARG:CG	1.97	0.94
23:B4:21:VAL:N	30:L5:31:GLU:OE1	2.01	0.94
10:C2:68:ARG:HD2	10:C2:277:HIS:CB	1.96	0.94
26:F1:137:GLN:HA	26:F1:203:ASN:HB2	1.49	0.94
30:L5:55:TYR:HH	30:L5:116:CYS:HG	1.09	0.94
31:P4:15:PHE:CZ	31:P4:112:ILE:HD11	2.02	0.94
32:Q5:4:LYS:NZ	32:Q5:99:TYR:CA	2.16	0.94
18:Z5:49:LEU:CD1	34:S5:5:ILE:HG23	1.97	0.94
10:C3:273:LEU:HB2	10:C3:280:VAL:CG1	1.90	0.94
28:I1:141:ARG:HH22	26:F6:191:LYS:CE	1.80	0.94
11:G5:147:LEU:HD22	11:G5:148:SER:N	1.83	0.94
11:G6:141:ILE:O	11:G6:144:LEU:HG	1.68	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I2:123:ARG:HH22	15:O5:65:ASP:HB3	1.31	0.94
15:O1:66:ARG:HH12	28:I3:125:LYS:CG	1.80	0.94
31:P5:15:PHE:CE2	31:P5:112:ILE:HG12	2.01	0.94
32:Q6:4:LYS:NZ	32:Q6:99:TYR:CA	2.16	0.94
34:S4:6:PRO:CG	34:S4:58:GLU:HG2	1.98	0.94
18:Z1:49:LEU:CD1	34:S1:5:ILE:HG23	1.96	0.94
18:Z1:70:PRO:HG2	18:Z1:88:LEU:CD1	1.94	0.94
26:F2:137:GLN:HA	26:F2:203:ASN:HB2	1.48	0.94
31:P3:96:VAL:HG21	31:P3:116:LEU:HD13	0.94	0.94
31:P5:45:LEU:CD1	31:P5:49:LEU:HD21	1.97	0.94
10:C6:68:ARG:HD2	10:C6:277:HIS:CB	1.96	0.94
30:L1:121:GLN:CB	30:L1:153:LYS:CD	2.45	0.94
14:N1:133:ARG:CD	30:L1:152:LYS:HE3	1.97	0.94
15:O1:66:ARG:NH1	28:I3:125:LYS:CG	2.30	0.94
10:C2:270:THR:CG2	22:A2:69:GLU:CB	2.35	0.94
11:G4:141:ILE:HA	11:G4:144:LEU:HD23	0.96	0.94
31:P6:121:ILE:CG1	31:P6:123:TYR:CZ	2.38	0.94
34:S1:6:PRO:CG	34:S1:58:GLU:HG2	1.97	0.94
10:C5:270:THR:CG2	22:A5:69:GLU:CB	2.35	0.94
18:Z5:70:PRO:HG3	18:Z5:88:LEU:HD13	0.96	0.94
22:A5:205:ARG:CG	22:A5:210:ILE:HG22	1.95	0.94
10:C2:279:ARG:HH22	22:A2:118:GLU:HG3	1.31	0.94
11:G2:141:ILE:O	11:G2:144:LEU:HG	1.68	0.94
26:F5:137:GLN:HA	26:F5:203:ASN:HB2	1.48	0.94
11:G2:147:LEU:HD22	11:G2:148:SER:N	1.83	0.94
11:G3:139:SER:HA	11:G3:142:ARG:CG	1.97	0.94
34:S2:6:PRO:CG	34:S2:58:GLU:HG2	1.98	0.94
34:S5:6:PRO:CG	34:S5:58:GLU:HG2	1.97	0.94
34:S6:6:PRO:CG	34:S6:58:GLU:HG2	1.98	0.94
18:Z4:70:PRO:HG2	18:Z4:88:LEU:CD1	1.94	0.94
23:B2:22:VAL:HG23	30:L4:31:GLU:CD	1.89	0.94
11:G6:147:LEU:HD22	11:G6:148:SER:N	1.83	0.94
14:N1:133:ARG:HH21	30:L1:154:GLN:HG3	1.33	0.94
18:Z2:49:LEU:CD1	34:S2:5:ILE:HG23	1.96	0.94
22:A2:205:ARG:CG	22:A2:210:ILE:HG22	1.95	0.93
10:C2:273:LEU:HB2	10:C2:280:VAL:CG1	1.90	0.93
11:G1:147:LEU:HD22	11:G1:148:SER:N	1.83	0.93
18:Z6:70:PRO:HG3	18:Z6:88:LEU:HD13	0.96	0.93
22:A4:89:LYS:HZ3	33:R4:82:ASP:CG	1.71	0.93
10:C4:274:VAL:CG2	10:C4:275:LYS:HD2	1.99	0.93
11:G4:147:LEU:HD22	11:G4:148:SER:N	1.83	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z3:70:PRO:HG3	18:Z3:88:LEU:HD13	0.96	0.93
10:C2:274:VAL:CG2	10:C2:275:LYS:HD2	1.98	0.93
10:C6:279:ARG:HH22	22:A6:118:GLU:HG3	1.31	0.93
26:F5:126:THR:O	26:F5:127:ARG:CG	2.17	0.93
26:F2:198:ARG:NH1	28:I4:146:GLN:NE2	2.08	0.93
11:G1:141:ILE:HG13	11:G1:144:LEU:HD22	1.45	0.93
11:G3:147:LEU:HD22	11:G3:148:SER:N	1.83	0.93
31:P5:96:VAL:HG21	31:P5:116:LEU:HD13	0.94	0.93
26:F4:126:THR:O	26:F4:127:ARG:CG	2.16	0.93
11:G5:141:ILE:O	11:G5:144:LEU:HG	1.68	0.93
31:P2:96:VAL:HG21	31:P2:116:LEU:HD13	0.94	0.93
31:P4:96:VAL:HG21	31:P4:116:LEU:HD13	0.94	0.93
31:P6:96:VAL:HG21	31:P6:116:LEU:HD13	0.94	0.93
11:G3:141:ILE:O	11:G3:144:LEU:HG	1.68	0.93
15:O1:66:ARG:HH22	28:I3:125:LYS:HZ2	1.05	0.93
26:F2:126:THR:O	26:F2:127:ARG:CG	2.17	0.93
14:N3:129:TYR:HB3	14:N3:134:VAL:CB	1.99	0.93
31:P6:41:GLN:NE2	31:P6:84:ILE:CG2	2.31	0.93
33:R3:65:PRO:CA	33:R3:73:LEU:HD21	1.97	0.93
26:F3:126:THR:O	26:F3:127:ARG:CG	2.16	0.92
18:Z6:86:ALA:HB3	34:S6:3:LEU:CD1	1.99	0.92
11:G4:139:SER:HA	11:G4:142:ARG:CG	1.97	0.92
32:Q2:4:LYS:NZ	32:Q2:99:TYR:CA	2.16	0.92
34:S3:6:PRO:CG	34:S3:58:GLU:HG2	1.98	0.92
22:A6:211:GLU:HG3	33:R6:81:ARG:NH2	1.85	0.92
22:A6:217:ALA:HB1	22:A6:220:LYS:HE3	1.51	0.92
10:C6:142:LYS:HD2	10:C6:157:LEU:CD1	2.00	0.92
15:O4:63:LYS:HZ3	28:I5:163:GLU:CG	1.82	0.92
31:P1:96:VAL:HG21	31:P1:116:LEU:HD13	0.94	0.92
10:C5:274:VAL:CG2	10:C5:275:LYS:HD2	1.99	0.92
10:C6:274:VAL:CG2	10:C6:275:LYS:HD2	1.98	0.92
11:G2:139:SER:HA	11:G2:142:ARG:CG	1.97	0.92
15:O1:66:ARG:HH21	28:I3:125:LYS:NZ	1.59	0.92
22:A3:205:ARG:CG	22:A3:210:ILE:HG22	1.95	0.92
22:A4:205:ARG:CG	22:A4:210:ILE:HG21	1.98	0.92
23:B2:28:LYS:HD3	23:B2:48:LEU:HD21	1.52	0.92
10:C1:68:ARG:CZ	10:C1:277:HIS:HB3	2.00	0.92
26:F2:137:GLN:CB	26:F2:204:ARG:C	2.38	0.92
26:F3:137:GLN:CB	26:F3:204:ARG:C	2.38	0.92
11:G1:141:ILE:O	11:G1:144:LEU:HG	1.68	0.92
14:N3:132:LYS:HA	30:L3:152:LYS:NZ	1.85	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P6:41:GLN:OE1	31:P6:84:ILE:HG12	1.69	0.92
34:S5:4:VAL:HG21	34:S5:58:GLU:OE1	1.69	0.92
10:C3:274:VAL:CG2	10:C3:275:LYS:HD2	1.99	0.92
29:K5:93:THR:OG1	29:K5:95:ARG:NH1	2.03	0.92
34:S2:4:VAL:HG21	34:S2:58:GLU:OE1	1.68	0.92
18:Z5:86:ALA:HB3	34:S5:3:LEU:CD1	2.00	0.92
14:N1:133:ARG:CD	30:L1:152:LYS:HB3	1.99	0.92
15:O4:63:LYS:NZ	28:I5:163:GLU:CG	2.32	0.92
10:C2:68:ARG:CZ	10:C2:277:HIS:HB3	2.00	0.92
10:C4:68:ARG:CZ	10:C4:277:HIS:HB3	2.00	0.92
26:F1:126:THR:O	26:F1:127:ARG:CG	2.17	0.92
22:A2:211:GLU:HG3	33:R2:81:ARG:NH2	1.84	0.92
26:F6:126:THR:O	26:F6:127:ARG:CG	2.17	0.92
15:O1:66:ARG:NE	28:I3:125:LYS:HD3	1.83	0.92
29:K1:93:THR:OG1	29:K1:95:ARG:NH1	2.03	0.92
31:P3:96:VAL:CG2	31:P3:116:LEU:HD11	2.00	0.92
33:R1:61:ILE:O	33:R1:73:LEU:CD2	2.18	0.92
22:A4:217:ALA:HB1	22:A4:220:LYS:HE3	1.51	0.91
10:C3:68:ARG:CZ	10:C3:277:HIS:HB3	2.00	0.91
10:C5:279:ARG:HH22	22:A5:118:GLU:HG3	1.31	0.91
31:P2:96:VAL:CG2	31:P2:116:LEU:HD11	2.00	0.91
34:S1:4:VAL:HG21	34:S1:58:GLU:OE1	1.68	0.91
18:Z4:86:ALA:HB3	34:S4:3:LEU:CD1	2.00	0.91
10:C1:274:VAL:CG2	10:C1:275:LYS:HD2	1.99	0.91
29:K2:93:THR:OG1	29:K2:95:ARG:NH1	2.03	0.91
28:I2:125:LYS:HD3	15:O5:66:ARG:NH1	1.84	0.91
18:Z3:86:ALA:HB3	34:S3:3:LEU:CD1	1.99	0.91
22:A3:89:LYS:HZ3	33:R3:82:ASP:CG	1.64	0.91
10:C3:273:LEU:HD13	10:C3:280:VAL:HG11	0.91	0.91
30:L5:124:ASP:CB	30:L5:147:LYS:HG2	2.01	0.91
31:P2:121:ILE:CD1	31:P2:123:TYR:HE2	1.54	0.91
31:P4:98:ASN:O	31:P4:122:THR:CB	2.18	0.91
31:P6:98:ASN:O	31:P6:122:THR:CB	2.18	0.91
22:A1:217:ALA:HB1	22:A1:220:LYS:HE3	1.51	0.91
23:B5:28:LYS:HD3	23:B5:48:LEU:HD21	1.52	0.91
10:C1:270:THR:CG2	22:A1:69:GLU:CB	2.35	0.91
10:C2:273:LEU:HD13	10:C2:280:VAL:HG11	0.91	0.91
26:F4:137:GLN:CB	26:F4:204:ARG:C	2.38	0.91
32:Q3:4:LYS:NZ	32:Q3:99:TYR:CA	2.16	0.91
10:C3:68:ARG:NH2	10:C3:276:THR:CB	2.19	0.91
10:C3:68:ARG:CZ	10:C3:277:HIS:HB2	2.01	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O1:66:ARG:HH22	28:I3:125:LYS:CD	1.84	0.91
29:K6:93:THR:OG1	29:K6:95:ARG:NH1	2.03	0.91
31:P1:98:ASN:O	31:P1:122:THR:CB	2.18	0.91
26:F1:137:GLN:CB	26:F1:204:ARG:C	2.38	0.91
29:K3:93:THR:OG1	29:K3:95:ARG:NH1	2.03	0.91
33:R1:65:PRO:HB2	33:R1:74:GLN:HE22	1.35	0.91
16:W4:111:MET:SD	16:W4:119:LYS:HD2	2.09	0.91
22:A3:211:GLU:HG3	33:R3:81:ARG:NH2	1.85	0.91
23:B6:28:LYS:HD3	23:B6:48:LEU:HD21	1.52	0.91
28:I1:123:ARG:CD	15:O6:64:ALA:O	2.18	0.91
23:B3:28:LYS:HD3	23:B3:48:LEU:HD21	1.52	0.91
23:B4:28:LYS:HD3	23:B4:48:LEU:HD21	1.52	0.91
14:N1:131:THR:O	30:L1:152:LYS:HG2	1.70	0.91
22:A6:89:LYS:HZ3	33:R6:82:ASP:CG	1.70	0.91
22:A5:217:ALA:HB1	22:A5:220:LYS:HE3	1.51	0.91
10:C4:273:LEU:HD13	10:C4:280:VAL:HG11	0.92	0.91
26:F2:198:ARG:HH22	28:I4:146:GLN:CG	1.84	0.91
28:I1:141:ARG:HH22	26:F6:191:LYS:HE2	1.08	0.91
29:K4:93:THR:OG1	29:K4:95:ARG:NH1	2.03	0.91
31:P2:98:ASN:O	31:P2:122:THR:CB	2.18	0.91
34:S4:4:VAL:HG21	34:S4:58:GLU:OE1	1.69	0.91
10:C6:68:ARG:CZ	10:C6:277:HIS:HB2	2.01	0.91
14:N5:133:ARG:HG2	30:L5:154:GLN:CG	2.01	0.90
14:N2:131:THR:O	30:L2:152:LYS:CD	2.19	0.90
14:N6:133:ARG:HH11	30:L6:152:LYS:CA	1.83	0.90
31:P3:15:PHE:HE2	31:P3:17:TYR:HB2	1.31	0.90
32:Q4:4:LYS:NZ	32:Q4:99:TYR:CA	2.16	0.90
18:Z2:86:ALA:HB3	34:S2:3:LEU:CD1	1.99	0.90
22:A3:217:ALA:HB1	22:A3:220:LYS:HE3	1.51	0.90
10:C5:68:ARG:CZ	10:C5:277:HIS:HB3	2.00	0.90
26:F5:137:GLN:CB	26:F5:204:ARG:C	2.38	0.90
23:B4:21:VAL:CB	30:L5:31:GLU:HG3	2.01	0.90
14:N6:133:ARG:CZ	30:L6:152:LYS:HB3	2.00	0.90
15:O3:63:LYS:HZ2	28:I6:163:GLU:HB3	0.99	0.90
22:A2:89:LYS:HZ3	33:R2:82:ASP:CG	1.71	0.90
10:C1:273:LEU:HD13	10:C1:280:VAL:HG11	0.91	0.90
14:N3:129:TYR:HD1	14:N3:134:VAL:CG1	1.84	0.90
31:P3:41:GLN:HB3	31:P3:84:ILE:HD13	1.54	0.90
31:P5:98:ASN:O	31:P5:122:THR:CB	2.18	0.90
31:P6:96:VAL:CG2	31:P6:116:LEU:HD11	2.00	0.90
34:S3:4:VAL:HG21	34:S3:58:GLU:OE1	1.69	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S6:4:VAL:HG21	34:S6:58:GLU:OE1	1.68	0.90
2:U1:18:HIS:HB2	2:U1:117:ALA:HB1	1.52	0.90
10:C4:68:ARG:CZ	10:C4:277:HIS:HB2	2.01	0.90
15:O1:66:ARG:NH1	28:I3:125:LYS:HG2	1.84	0.90
31:P3:98:ASN:O	31:P3:122:THR:CB	2.18	0.90
33:R2:65:PRO:CB	33:R2:73:LEU:HD22	2.01	0.90
2:U4:19:ARG:HD3	2:U4:119:ALA:HB3	1.53	0.90
22:A5:205:ARG:CG	22:A5:210:ILE:HG21	1.98	0.90
10:C6:68:ARG:CZ	10:C6:277:HIS:HB3	2.00	0.90
2:U5:18:HIS:HB2	2:U5:117:ALA:HB1	1.52	0.90
2:U6:18:HIS:HB2	2:U6:117:ALA:HB1	1.52	0.90
10:C6:273:LEU:HD13	10:C6:280:VAL:HG11	0.92	0.90
14:N2:133:ARG:CD	30:L2:152:LYS:HG3	2.01	0.90
10:C5:273:LEU:HD13	10:C5:280:VAL:HG11	0.92	0.90
22:A2:217:ALA:HB1	22:A2:220:LYS:HE3	1.51	0.90
14:N6:133:ARG:HH22	30:L6:154:GLN:CB	1.85	0.90
10:C1:68:ARG:CZ	10:C1:277:HIS:HB2	2.01	0.90
31:P5:96:VAL:CG2	31:P5:116:LEU:HD11	2.00	0.90
33:R2:21:TYR:CD2	33:R2:71:ILE:HD12	2.07	0.90
2:U3:18:HIS:HB2	2:U3:117:ALA:HB1	1.52	0.90
22:A6:205:ARG:CG	22:A6:210:ILE:HG22	1.95	0.89
18:Z1:86:ALA:HB3	34:S1:3:LEU:CD1	2.00	0.89
10:C2:68:ARG:CZ	10:C2:277:HIS:HB2	2.01	0.89
11:G4:141:ILE:CB	11:G4:144:LEU:CD2	2.44	0.89
22:A5:211:GLU:HG3	33:R5:81:ARG:NH2	1.85	0.89
26:F3:127:ARG:HE	26:F3:128:ILE:HG23	1.38	0.89
2:U6:19:ARG:HD3	2:U6:119:ALA:HB3	1.54	0.89
10:C5:68:ARG:CZ	10:C5:277:HIS:HB2	2.01	0.89
14:N3:150:VAL:HG13	14:N3:151:ALA:H	1.37	0.89
33:R4:58:MET:O	33:R4:61:ILE:HG12	1.69	0.89
2:U2:18:HIS:HB2	2:U2:117:ALA:HB1	1.52	0.89
2:U4:18:HIS:HB2	2:U4:117:ALA:HB1	1.52	0.89
10:C6:273:LEU:HB2	10:C6:280:VAL:CG1	1.90	0.89
14:N2:150:VAL:HG13	14:N2:151:ALA:H	1.37	0.89
31:P5:121:ILE:CG1	31:P5:123:TYR:CD2	2.52	0.89
33:R4:58:MET:CG	33:R4:61:ILE:HD11	2.03	0.89
33:R6:58:MET:HA	33:R6:61:ILE:HD13	1.51	0.89
2:U5:19:ARG:HD3	2:U5:119:ALA:HB3	1.54	0.89
22:A6:205:ARG:CG	22:A6:210:ILE:HG21	1.99	0.89
23:B1:28:LYS:HD3	23:B1:48:LEU:HD21	1.52	0.89
10:C2:65:LYS:CB	10:C2:279:ARG:HB3	2.01	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F6:127:ARG:HE	26:F6:128:ILE:HG23	1.38	0.89
31:P2:41:GLN:HB3	31:P2:84:ILE:HD13	0.90	0.89
10:C3:65:LYS:CB	10:C3:279:ARG:HB3	2.01	0.89
26:F4:127:ARG:HE	26:F4:128:ILE:HG23	1.38	0.89
30:L4:121:GLN:HG2	30:L4:153:LYS:HE3	1.51	0.89
31:P5:15:PHE:HZ	31:P5:112:ILE:CD1	1.85	0.89
10:C4:273:LEU:CD1	10:C4:280:VAL:CG1	2.40	0.88
14:N1:150:VAL:HG13	14:N1:151:ALA:H	1.37	0.88
31:P6:41:GLN:OE1	31:P6:84:ILE:CG1	2.20	0.88
22:A2:214:GLU:CG	33:R2:84:TYR:CE1	2.55	0.88
22:A4:211:GLU:HG3	33:R4:81:ARG:NH2	1.85	0.88
28:I4:197:PHE:HA	28:I4:200:ARG:HD3	1.55	0.88
30:L2:152:LYS:CE	30:L2:152:LYS:HA	2.02	0.88
13:M3:117:GLU:OE1	13:M3:118:SER:N	2.07	0.88
14:N4:150:VAL:HG13	14:N4:151:ALA:H	1.37	0.88
10:C1:273:LEU:HB2	10:C1:280:VAL:CG1	1.90	0.88
11:G3:141:ILE:CB	11:G3:144:LEU:CD2	2.44	0.88
13:M4:117:GLU:OE1	13:M4:118:SER:N	2.07	0.88
14:N6:29:THR:O	14:N6:31:ASP:N	2.06	0.88
13:M5:117:GLU:OE1	13:M5:118:SER:N	2.07	0.88
2:U1:19:ARG:HD3	2:U1:119:ALA:HB3	1.54	0.88
2:U2:19:ARG:HD3	2:U2:119:ALA:HB3	1.54	0.88
31:P2:121:ILE:CG1	31:P2:123:TYR:CD2	2.53	0.88
31:P4:121:ILE:CG1	31:P4:123:TYR:CD2	2.52	0.88
10:C1:74:LYS:HE2	10:C1:272:HIS:HB2	1.54	0.88
10:C4:65:LYS:CB	10:C4:279:ARG:HB3	2.01	0.88
10:C6:142:LYS:HG2	10:C6:157:LEU:HD13	1.56	0.88
15:O2:66:ARG:HD2	28:I4:125:LYS:HD2	0.89	0.88
31:P1:121:ILE:CG1	31:P1:123:TYR:CD2	2.53	0.88
31:P6:121:ILE:CG1	31:P6:123:TYR:CD2	2.53	0.88
22:A4:214:GLU:CG	33:R4:84:TYR:CE1	2.56	0.88
26:F5:137:GLN:HB3	26:F5:204:ARG:CA	2.04	0.88
11:G5:142:ARG:HD2	11:G5:147:LEU:HD12	1.55	0.88
14:N2:131:THR:O	30:L2:152:LYS:HD3	1.71	0.88
15:O4:63:LYS:CE	28:I5:163:GLU:HG3	2.04	0.88
31:P3:121:ILE:CG1	31:P3:123:TYR:CD2	2.53	0.88
22:A3:214:GLU:CG	33:R3:84:TYR:CE1	2.56	0.88
16:W4:115:GLU:OE2	16:W4:119:LYS:NZ	2.07	0.88
18:Z4:85:ARG:HG3	18:Z4:85:ARG:HH21	1.39	0.88
22:A5:214:GLU:CG	33:R5:84:TYR:CE1	2.56	0.87
10:C4:74:LYS:HE2	10:C4:272:HIS:HB2	1.54	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F1:137:GLN:HB3	26:F1:204:ARG:CA	2.04	0.87
26:F5:127:ARG:HE	26:F5:128:ILE:HG23	1.38	0.87
13:M6:117:GLU:OE1	13:M6:118:SER:N	2.07	0.87
14:N5:150:VAL:HG13	14:N5:151:ALA:H	1.37	0.87
31:P4:96:VAL:CG2	31:P4:116:LEU:HD11	2.00	0.87
22:A1:211:GLU:HG3	33:R1:81:ARG:NH2	1.84	0.87
26:F2:137:GLN:HB3	26:F2:204:ARG:CA	2.04	0.87
26:F4:137:GLN:HB3	26:F4:204:ARG:CA	2.04	0.87
11:G2:142:ARG:HD2	11:G2:147:LEU:HD12	1.55	0.87
10:C6:273:LEU:CD1	10:C6:280:VAL:CG1	2.40	0.87
13:M3:64:LEU:HD11	26:F3:103:LEU:HA	126.94	0.87
13:M1:117:GLU:OE1	13:M1:118:SER:N	2.07	0.87
18:Z6:85:ARG:HG3	18:Z6:85:ARG:HH21	1.39	0.87
30:L1:152:LYS:HA	30:L1:152:LYS:HE3	1.56	0.87
13:M2:125:GLU:HB3	13:M2:129:LYS:CE	2.05	0.87
13:M4:64:LEU:HD11	26:F4:103:LEU:HA	126.94	0.87
14:N5:129:TYR:HB3	14:N5:134:VAL:HG21	0.88	0.87
14:N6:150:VAL:HG13	14:N6:151:ALA:H	1.37	0.87
18:Z5:85:ARG:HG3	18:Z5:85:ARG:HH21	1.39	0.87
26:F2:127:ARG:HE	26:F2:128:ILE:HG23	1.38	0.87
14:N4:133:ARG:NH2	30:L4:154:GLN:HA	1.90	0.87
17:Y5:16:ARG:HD2	25:E5:95:THR:HG22	1.57	0.87
26:F3:137:GLN:HB3	26:F3:204:ARG:CA	2.04	0.87
13:M1:125:GLU:HB3	13:M1:129:LYS:CE	2.05	0.87
13:M6:125:GLU:HB3	13:M6:129:LYS:CE	2.05	0.87
11:G3:139:SER:O	11:G3:142:ARG:HG3	1.75	0.87
11:G6:139:SER:O	11:G6:142:ARG:HG3	1.75	0.87
14:N2:133:ARG:HG3	30:L2:152:LYS:HG3	0.89	0.87
2:U3:19:ARG:HD3	2:U3:119:ALA:HB3	1.54	0.87
18:Z4:50:PHE:O	34:S4:5:ILE:HG23	1.75	0.87
22:A3:205:ARG:CG	22:A3:210:ILE:HG21	1.99	0.86
26:F1:127:ARG:HE	26:F1:128:ILE:HG23	1.38	0.86
13:M2:64:LEU:HD11	26:F2:103:LEU:HA	126.94	0.86
13:M2:117:GLU:OE1	13:M2:118:SER:N	2.07	0.86
16:W4:111:MET:CE	16:W4:119:LYS:CD	2.42	0.86
16:W4:52:ILE:HG23	27:H4:144:ILE:HG23	1.57	0.86
17:Y2:109:GLU:CG	17:Y2:113:ARG:CZ	2.53	0.86
18:Z6:50:PHE:O	34:S6:5:ILE:HG23	1.74	0.86
10:C2:270:THR:HG21	22:A2:69:GLU:HB2	0.86	0.86
11:G4:142:ARG:HD2	11:G4:147:LEU:HD12	1.55	0.86
13:M4:125:GLU:HB3	13:M4:129:LYS:CE	2.05	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R6:21:TYR:OH	33:R6:72:LYS:HE3	1.74	0.86
17:Y2:16:ARG:HD2	25:E2:95:THR:HG22	1.57	0.86
11:G6:141:ILE:CB	11:G6:144:LEU:CD2	2.43	0.86
30:L3:121:GLN:HG3	30:L3:153:LYS:NZ	1.90	0.86
31:P1:96:VAL:CG2	31:P1:116:LEU:HD11	2.00	0.86
17:Y1:16:ARG:HD2	25:E1:95:THR:HG22	1.58	0.86
28:I1:196:GLU:OE2	28:I1:200:ARG:NH2	2.08	0.86
13:M6:111:VAL:CG1	13:M6:114:TYR:CE1	2.59	0.86
18:Z2:85:ARG:HG3	18:Z2:85:ARG:HH21	1.39	0.86
22:A1:205:ARG:CG	22:A1:210:ILE:HG21	1.99	0.86
16:W1:52:ILE:HG23	27:H1:144:ILE:HG23	1.57	0.86
33:R5:21:TYR:CD2	33:R5:72:LYS:CD	2.58	0.86
34:S1:50:ILE:HD12	34:S1:67:VAL:CG2	2.06	0.86
18:Z2:50:PHE:O	34:S2:5:ILE:HG23	1.75	0.86
10:C1:65:LYS:CB	10:C1:279:ARG:HB3	2.01	0.86
11:G2:139:SER:O	11:G2:142:ARG:HG3	1.75	0.86
27:H4:163:GLN:CD	27:H4:189:PHE:HE2	1.78	0.86
16:W6:52:ILE:HG23	27:H6:144:ILE:HG23	1.57	0.86
18:Z2:86:ALA:CB	34:S2:3:LEU:CD1	2.53	0.86
10:C6:65:LYS:CB	10:C6:279:ARG:HB3	2.01	0.86
13:M5:64:LEU:HD11	26:F5:103:LEU:HA	126.94	0.86
13:M6:64:LEU:HD11	26:F6:103:LEU:HA	126.94	0.86
13:M3:125:GLU:HB3	13:M3:129:LYS:CE	2.05	0.86
13:M5:111:VAL:CG1	13:M5:114:TYR:CE1	2.59	0.86
13:M5:125:GLU:HB3	13:M5:129:LYS:CE	2.05	0.86
14:N5:148:ALA:N	14:N5:149:LEU:HB3	1.91	0.86
34:S2:50:ILE:HD12	34:S2:67:VAL:CG2	2.06	0.86
18:Z3:50:PHE:O	34:S3:5:ILE:HG23	1.74	0.86
16:W5:52:ILE:HG23	27:H5:144:ILE:HG23	1.57	0.86
10:C3:74:LYS:HE2	10:C3:272:HIS:CD2	2.11	0.86
30:L6:121:GLN:CG	30:L6:153:LYS:CE	2.53	0.86
30:L6:121:GLN:HG2	30:L6:153:LYS:HE3	1.58	0.86
14:N6:148:ALA:N	14:N6:149:LEU:HB3	1.91	0.86
31:P3:15:PHE:CG	31:P3:16:THR:N	2.39	0.86
31:P4:121:ILE:CD1	31:P4:123:TYR:CZ	2.59	0.86
34:S3:50:ILE:HD12	34:S3:67:VAL:CG2	2.06	0.86
23:B2:24:PRO:CD	30:L4:27:GLU:HB3	2.06	0.85
23:B4:21:VAL:HA	30:L5:31:GLU:CG	2.07	0.85
30:L2:152:LYS:HE3	30:L2:152:LYS:HA	1.56	0.85
31:P2:121:ILE:CD1	31:P2:123:TYR:CZ	2.59	0.85
31:P3:121:ILE:CD1	31:P3:123:TYR:CZ	2.59	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A2:214:GLU:OE1	33:R2:84:TYR:CD1	2.29	0.85
23:B4:21:VAL:HG23	30:L5:31:GLU:HA	0.86	0.85
10:C5:65:LYS:CB	10:C5:279:ARG:HB3	2.01	0.85
30:L6:144:LYS:NZ	30:L6:146:THR:HG21	1.91	0.85
18:Z1:86:ALA:CB	34:S1:3:LEU:CD1	2.53	0.85
18:Z3:80:ARG:HH12	34:S3:23:ARG:CD	1.90	0.85
10:C6:74:LYS:HE2	10:C6:272:HIS:HB2	1.54	0.85
11:G6:142:ARG:HD2	11:G6:147:LEU:HD12	1.55	0.85
30:L6:121:GLN:HG3	30:L6:153:LYS:CE	2.04	0.85
28:I2:125:LYS:HD3	15:O5:66:ARG:CZ	2.06	0.85
13:M1:64:LEU:HD11	26:F1:103:LEU:HA	126.94	0.85
11:G3:142:ARG:HD2	11:G3:147:LEU:HD12	1.55	0.85
13:M1:111:VAL:CG1	13:M1:114:TYR:CE1	2.59	0.85
18:Z6:80:ARG:HH12	34:S6:23:ARG:CD	1.90	0.85
11:G5:139:SER:O	11:G5:142:ARG:HG3	1.75	0.85
30:L1:152:LYS:HA	30:L1:152:LYS:CE	2.06	0.85
13:M3:111:VAL:CG1	13:M3:114:TYR:CE1	2.59	0.85
13:M5:14:VAL:HG13	13:M5:127:TYR:CD1	2.11	0.85
31:P5:45:LEU:HD12	31:P5:49:LEU:CD2	2.06	0.85
31:P6:121:ILE:CD1	31:P6:123:TYR:CZ	2.59	0.85
18:Z4:80:ARG:HH12	34:S4:23:ARG:CD	1.89	0.85
10:C4:270:THR:HG21	22:A4:69:GLU:HB2	0.87	0.85
10:C1:270:THR:HG21	22:A1:69:GLU:HB2	0.86	0.85
11:G4:139:SER:O	11:G4:142:ARG:HG3	1.75	0.85
13:M2:111:VAL:CG1	13:M2:114:TYR:CE1	2.59	0.85
31:P1:96:VAL:HG22	31:P1:116:LEU:CD1	1.80	0.85
22:A1:89:LYS:HZ3	33:R1:82:ASP:CG	1.74	0.85
13:M2:14:VAL:HG13	13:M2:127:TYR:CD1	2.11	0.85
18:Z5:86:ALA:CB	34:S5:3:LEU:CD1	2.53	0.85
11:G1:216:ARG:HA	11:G1:219:GLU:HG2	1.59	0.85
11:G6:147:LEU:HD22	11:G6:148:SER:H	1.41	0.85
13:M3:14:VAL:HG13	13:M3:127:TYR:CD1	2.11	0.85
18:Z1:85:ARG:HG3	18:Z1:85:ARG:HH21	1.39	0.85
18:Z3:85:ARG:HH21	18:Z3:85:ARG:HG3	1.39	0.85
18:Z4:86:ALA:CB	34:S4:3:LEU:CD1	2.53	0.85
10:C2:64:THR:C	10:C2:277:HIS:CE1	2.50	0.85
30:L5:153:LYS:NZ	30:L5:153:LYS:O	2.08	0.85
13:M1:14:VAL:HG13	13:M1:127:TYR:CD1	2.12	0.85
31:P4:107:ILE:HA	31:P4:111:MET:SD	2.17	0.85
17:Y2:109:GLU:OE2	17:Y2:113:ARG:CD	2.25	0.85
17:Y4:16:ARG:HD2	25:E4:95:THR:HG22	1.57	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z1:70:PRO:HG3	18:Z1:88:LEU:CG	2.07	0.85
18:Z6:70:PRO:HG3	18:Z6:88:LEU:CG	2.07	0.85
28:I5:196:GLU:OE2	28:I5:200:ARG:NH2	2.09	0.85
30:L3:121:GLN:HG3	30:L3:153:LYS:HZ1	1.42	0.85
23:B2:21:VAL:O	30:L4:30:LYS:HA	1.76	0.85
16:W3:52:ILE:HG23	27:H3:144:ILE:HG23	1.57	0.85
18:Z1:80:ARG:HH12	34:S1:23:ARG:CD	1.89	0.85
11:G1:139:SER:O	11:G1:142:ARG:HG3	1.75	0.84
11:G1:141:ILE:CB	11:G1:144:LEU:CD2	2.44	0.84
31:P6:107:ILE:HA	31:P6:111:MET:SD	2.17	0.84
33:R3:65:PRO:HA	33:R3:73:LEU:HD21	1.57	0.84
18:Z2:80:ARG:HH12	34:S2:23:ARG:CD	1.90	0.84
18:Z5:70:PRO:HG3	18:Z5:88:LEU:CG	2.07	0.84
22:A5:211:GLU:CB	33:R5:81:ARG:NH2	2.40	0.84
30:L5:55:TYR:OH	30:L5:116:CYS:SG	2.35	0.84
14:N1:133:ARG:CG	30:L1:152:LYS:HG3	2.06	0.84
15:O2:65:ASP:CG	28:I4:123:ARG:NH2	2.29	0.84
18:Z3:86:ALA:CB	34:S3:3:LEU:CD1	2.53	0.84
18:Z4:49:LEU:HD11	34:S4:5:ILE:HG23	1.59	0.84
18:Z6:86:ALA:CB	34:S6:3:LEU:CD1	2.53	0.84
17:Y3:16:ARG:HD2	25:E3:95:THR:HG22	1.57	0.84
18:Z3:70:PRO:HG3	18:Z3:88:LEU:CG	2.07	0.84
13:M4:111:VAL:CG1	13:M4:114:TYR:CE1	2.59	0.84
13:M6:14:VAL:HG13	13:M6:127:TYR:CD1	2.11	0.84
14:N3:148:ALA:N	14:N3:149:LEU:HB3	1.91	0.84
28:I1:163:GLU:HG3	15:O6:63:LYS:HE3	1.56	0.84
34:S5:50:ILE:HD12	34:S5:67:VAL:CG2	2.06	0.84
18:Z6:49:LEU:HD11	34:S6:5:ILE:HG23	1.60	0.84
18:Z5:80:ARG:HH12	34:S5:23:ARG:CD	1.90	0.84
22:A4:214:GLU:OE1	33:R4:84:TYR:CD1	2.30	0.84
10:C5:64:THR:C	10:C5:277:HIS:CE1	2.50	0.84
11:G4:216:ARG:HA	11:G4:219:GLU:HG2	1.59	0.84
13:M2:111:VAL:HG11	13:M2:114:TYR:HE1	1.42	0.84
13:M4:14:VAL:HG13	13:M4:127:TYR:CD1	2.11	0.84
13:M5:111:VAL:HG11	13:M5:114:TYR:HE1	1.42	0.84
31:P3:35:GLN:HA	31:P3:42:ARG:NH1	1.93	0.84
31:P5:121:ILE:HD13	34:S5:120:HIS:NE2	1.93	0.84
34:S6:50:ILE:HD12	34:S6:67:VAL:CG2	2.06	0.84
10:C1:266:TYR:O	22:A1:120:ARG:NH2	2.11	0.84
22:A5:214:GLU:OE1	33:R5:84:TYR:CD1	2.30	0.84
10:C3:68:ARG:NH1	10:C3:277:HIS:CA	2.40	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y6:16:ARG:HD2	25:E6:95:THR:HG22	1.58	0.84
11:G3:216:ARG:HA	11:G3:219:GLU:HG2	1.59	0.84
11:G5:147:LEU:HD22	11:G5:148:SER:H	1.41	0.84
15:O2:65:ASP:CG	28:I4:123:ARG:HH22	1.80	0.84
31:P1:34:MET:O	31:P1:42:ARG:CG	2.24	0.84
16:W4:111:MET:HE1	16:W4:119:LYS:NZ	1.91	0.84
22:A1:211:GLU:CB	33:R1:81:ARG:NH2	2.40	0.84
22:A1:211:GLU:CG	33:R1:81:ARG:HH21	1.90	0.84
22:A5:89:LYS:HZ3	33:R5:82:ASP:CG	1.77	0.84
10:C2:74:LYS:HE2	10:C2:272:HIS:CD2	2.10	0.84
23:B4:21:VAL:CG2	30:L5:31:GLU:CB	2.51	0.84
14:N2:148:ALA:N	14:N2:149:LEU:HB3	1.91	0.84
31:P2:107:ILE:HA	31:P2:111:MET:SD	2.17	0.84
31:P3:107:ILE:HA	31:P3:111:MET:SD	2.17	0.84
15:O2:63:LYS:HZ2	28:I4:158:ILE:HD11	1.42	0.84
30:L1:55:TYR:OH	30:L1:116:CYS:SG	2.35	0.84
30:L2:55:TYR:OH	30:L2:116:CYS:SG	2.35	0.84
30:L3:55:TYR:OH	30:L3:116:CYS:SG	2.35	0.84
31:P3:15:PHE:HZ	31:P3:17:TYR:HD2	1.22	0.84
33:R4:58:MET:HA	33:R4:61:ILE:HD11	1.60	0.84
31:P3:121:ILE:HD13	34:S3:120:HIS:NE2	1.93	0.84
18:Z2:70:PRO:HG3	18:Z2:88:LEU:CG	2.07	0.84
24:D3:64:ARG:NE	29:K3:95:ARG:HH21	1.75	0.84
24:D4:64:ARG:NE	29:K4:95:ARG:HH21	1.74	0.84
14:N6:133:ARG:HD2	30:L6:152:LYS:CG	1.89	0.84
14:N2:141:TYR:CE1	14:N2:146:ALA:CB	2.61	0.84
14:N5:141:TYR:CE1	14:N5:146:ALA:CB	2.61	0.84
14:N6:141:TYR:CE1	14:N6:146:ALA:CB	2.61	0.84
18:Z5:50:PHE:O	34:S5:5:ILE:HG23	1.75	0.84
10:C4:64:THR:C	10:C4:277:HIS:CE1	2.50	0.84
14:N3:141:TYR:CE1	14:N3:146:ALA:CB	2.61	0.84
31:P1:119:PHE:CD1	34:S1:119:ALA:CB	2.58	0.84
31:P5:96:VAL:HG22	31:P5:116:LEU:CD1	1.80	0.84
31:P6:121:ILE:HD13	34:S6:120:HIS:NE2	1.93	0.84
10:C1:64:THR:C	10:C1:277:HIS:CE1	2.50	0.84
28:I2:124:LYS:O	28:I2:125:LYS:HG2	1.76	0.84
14:N2:137:PRO:HG3	30:L2:154:GLN:CB	2.08	0.84
22:A3:214:GLU:OE1	33:R3:84:TYR:CD1	2.30	0.84
18:Z1:49:LEU:HD11	34:S1:5:ILE:HG23	1.60	0.84
18:Z4:70:PRO:HG3	18:Z4:88:LEU:CG	2.07	0.84
22:A4:211:GLU:CB	33:R4:81:ARG:NH2	2.40	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C6:64:THR:C	10:C6:277:HIS:CE1	2.50	0.83
26:F6:137:GLN:CG	26:F6:204:ARG:H	1.90	0.83
11:G5:216:ARG:HA	11:G5:219:GLU:HG2	1.59	0.83
16:W2:52:ILE:HG23	27:H2:144:ILE:HG23	1.57	0.83
14:N1:137:PRO:CG	30:L1:154:GLN:CB	2.55	0.83
22:A3:211:GLU:CB	33:R3:81:ARG:NH2	2.40	0.83
2:U5:19:ARG:CD	2:U5:119:ALA:HB1	2.07	0.83
10:C4:270:THR:HG21	22:A4:69:GLU:CG	2.08	0.83
24:D2:64:ARG:NE	29:K2:95:ARG:HH21	1.75	0.83
11:G2:141:ILE:CB	11:G2:144:LEU:CD2	2.44	0.83
11:G2:216:ARG:HA	11:G2:219:GLU:HG2	1.59	0.83
15:O3:63:LYS:HZ3	28:I6:163:GLU:HB3	1.37	0.83
31:P1:107:ILE:HA	31:P1:111:MET:SD	2.16	0.83
31:P4:121:ILE:HD13	34:S4:120:HIS:NE2	1.93	0.83
31:P5:121:ILE:CD1	31:P5:123:TYR:HE2	1.54	0.83
33:R3:57:LEU:CD1	33:R3:66:VAL:HG11	2.08	0.83
33:R5:57:LEU:O	33:R5:61:ILE:HG12	1.78	0.83
26:F6:137:GLN:HA	26:F6:203:ASN:CB	2.08	0.83
31:P5:121:ILE:CD1	31:P5:123:TYR:CZ	2.59	0.83
18:Z2:49:LEU:HD11	34:S2:5:ILE:HG23	1.59	0.83
18:Z3:49:LEU:HD11	34:S3:5:ILE:HG23	1.59	0.83
34:S4:50:ILE:HD12	34:S4:67:VAL:CG2	2.06	0.83
18:Z5:49:LEU:HD11	34:S5:5:ILE:HG23	1.60	0.83
10:C1:68:ARG:NH1	10:C1:277:HIS:HB2	1.94	0.83
10:C2:68:ARG:NH1	10:C2:277:HIS:CA	2.40	0.83
10:C3:64:THR:C	10:C3:277:HIS:CE1	2.50	0.83
10:C4:266:TYR:O	22:A4:120:ARG:NH2	2.11	0.83
10:C2:270:THR:HG21	22:A2:69:GLU:CG	2.08	0.83
10:C3:68:ARG:NH1	10:C3:277:HIS:HB2	1.94	0.83
13:M4:111:VAL:HG11	13:M4:114:TYR:HE1	1.42	0.83
31:P4:119:PHE:CD1	34:S4:119:ALA:CB	2.58	0.83
22:A2:211:GLU:CB	33:R2:81:ARG:NH2	2.40	0.83
10:C5:270:THR:HG21	22:A5:69:GLU:CG	2.08	0.83
10:C5:270:THR:HG21	22:A5:69:GLU:HB2	0.86	0.83
11:G6:216:ARG:HA	11:G6:219:GLU:HG2	1.59	0.83
24:D1:64:ARG:NE	29:K1:95:ARG:HH21	1.75	0.83
31:P5:41:GLN:CD	31:P5:84:ILE:HG23	1.98	0.83
2:U2:17:ILE:CG2	2:U2:94:PRO:CA	2.50	0.83
22:A2:206:ASP:O	22:A2:210:ILE:HG12	1.79	0.83
31:P4:15:PHE:CE2	31:P4:112:ILE:CD1	2.62	0.83
33:R6:57:LEU:O	33:R6:61:ILE:HG23	1.78	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U1:19:ARG:HB3	2:U1:118:ASP:C	1.99	0.83
2:U6:19:ARG:CD	2:U6:119:ALA:HB1	2.07	0.83
10:C3:266:TYR:O	22:A3:120:ARG:NH2	2.11	0.83
10:C2:68:ARG:NH1	10:C2:277:HIS:HB2	1.94	0.83
10:C6:270:THR:HG21	22:A6:69:GLU:HB2	0.86	0.83
11:G4:147:LEU:HD22	11:G4:148:SER:H	1.41	0.83
14:N1:133:ARG:NH1	30:L1:152:LYS:O	2.12	0.83
14:N2:133:ARG:HD2	30:L2:152:LYS:CB	2.08	0.83
14:N3:133:ARG:HD3	30:L3:152:LYS:HB3	1.60	0.83
30:L4:55:TYR:OH	30:L4:116:CYS:SG	2.35	0.83
16:W4:26:LEU:HD11	16:W4:60:LYS:HB3	1.60	0.83
22:A4:206:ASP:O	22:A4:210:ILE:HG12	1.79	0.83
10:C6:266:TYR:O	22:A6:120:ARG:NH2	2.11	0.83
10:C6:68:ARG:NH1	10:C6:277:HIS:CA	2.40	0.83
26:F3:137:GLN:HB3	26:F3:204:ARG:OXT	1.79	0.83
15:O1:66:ARG:NH2	28:I3:125:LYS:CG	2.42	0.83
31:P6:15:PHE:CE2	31:P6:112:ILE:CD1	2.62	0.83
2:U4:19:ARG:HB3	2:U4:118:ASP:C	1.99	0.83
2:U6:19:ARG:HB3	2:U6:118:ASP:C	1.99	0.83
10:C4:68:ARG:NH1	10:C4:277:HIS:HB2	1.94	0.83
11:G1:142:ARG:HD2	11:G1:147:LEU:HD12	1.56	0.83
14:N1:141:TYR:CE1	14:N1:146:ALA:CB	2.61	0.83
14:N4:148:ALA:N	14:N4:149:LEU:HB3	1.91	0.83
31:P6:41:GLN:OE1	31:P6:84:ILE:HD13	1.78	0.83
10:C2:266:TYR:O	22:A2:120:ARG:NH2	2.11	0.82
10:C3:270:THR:HG21	22:A3:69:GLU:CG	2.08	0.82
10:C6:142:LYS:HG3	10:C6:157:LEU:HD13	1.59	0.82
14:N4:141:TYR:CE1	14:N4:146:ALA:CB	2.61	0.82
31:P6:41:GLN:CD	31:P6:84:ILE:CG2	2.47	0.82
31:P1:121:ILE:HD13	34:S1:120:HIS:NE2	1.93	0.82
16:W2:26:LEU:HD11	16:W2:60:LYS:HB3	1.60	0.82
10:C1:270:THR:HG21	22:A1:69:GLU:CG	2.08	0.82
26:F6:137:GLN:HG3	26:F6:204:ARG:H	1.43	0.82
15:O3:30:VAL:HG12	15:O3:94:HIS:HB2	1.60	0.82
22:A6:211:GLU:CB	33:R6:81:ARG:NH2	2.40	0.82
16:W3:26:LEU:HD11	16:W3:60:LYS:HB3	1.60	0.82
22:A3:206:ASP:O	22:A3:210:ILE:HG12	1.79	0.82
22:A5:206:ASP:O	22:A5:210:ILE:HG12	1.79	0.82
26:F2:191:LYS:HE2	28:I4:141:ARG:HD2	1.61	0.82
11:G5:5:ILE:HG12	11:G5:111:LEU:HB3	1.61	0.82
11:G6:149:LYS:HB2	11:G6:149:LYS:NZ	1.94	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L6:55:TYR:OH	30:L6:116:CYS:SG	2.35	0.82
15:O6:17:LEU:HD23	15:O6:18:GLY:H	1.45	0.82
31:P1:15:PHE:CE2	31:P1:112:ILE:CD1	2.62	0.82
31:P1:133:ILE:HG22	31:P1:134:GLY:H	1.44	0.82
31:P2:15:PHE:CE2	31:P2:112:ILE:CD1	2.62	0.82
16:W6:26:LEU:HD11	16:W6:60:LYS:HB3	1.60	0.82
13:M1:111:VAL:HG11	13:M1:114:TYR:HE1	1.42	0.82
13:M4:28:HIS:CE1	13:M4:116:LYS:CE	2.62	0.82
13:M5:28:HIS:CE1	13:M5:116:LYS:CE	2.62	0.82
14:N1:133:ARG:CD	30:L1:152:LYS:CB	2.56	0.82
31:P1:34:MET:O	31:P1:42:ARG:HG3	1.79	0.82
31:P3:41:GLN:OE1	31:P3:84:ILE:HD13	1.79	0.82
2:U3:19:ARG:HB3	2:U3:118:ASP:C	1.99	0.82
10:C5:68:ARG:NH1	10:C5:277:HIS:CA	2.39	0.82
11:G1:147:LEU:HD22	11:G1:148:SER:H	1.41	0.82
28:I1:163:GLU:HG2	15:O6:63:LYS:HE3	1.61	0.82
31:P2:121:ILE:HD13	34:S2:120:HIS:NE2	1.93	0.82
16:W1:26:LEU:HD11	16:W1:60:LYS:HB3	1.60	0.82
10:C1:182:CYS:SG	10:C1:183:LYS:N	2.53	0.82
11:G1:5:ILE:HG12	11:G1:111:LEU:HB3	1.61	0.82
11:G4:5:ILE:HG12	11:G4:111:LEU:HB3	1.61	0.82
13:M3:28:HIS:CE1	13:M3:116:LYS:CE	2.62	0.82
15:O1:30:VAL:HG12	15:O1:94:HIS:HB2	1.60	0.82
31:P3:41:GLN:CB	31:P3:84:ILE:HD13	2.08	0.82
2:U5:19:ARG:HB3	2:U5:118:ASP:C	1.99	0.82
16:W4:111:MET:HE1	16:W4:119:LYS:CE	2.09	0.82
22:A3:211:GLU:CG	33:R3:81:ARG:HH21	1.90	0.82
10:C5:266:TYR:O	22:A5:120:ARG:NH2	2.11	0.82
22:A6:206:ASP:O	22:A6:210:ILE:HG12	1.79	0.82
10:C4:182:CYS:SG	10:C4:183:LYS:N	2.53	0.82
28:I3:130:THR:HA	28:I3:134:GLU:HB2	1.61	0.82
28:I4:130:THR:HA	28:I4:134:GLU:HB2	1.61	0.82
14:N1:148:ALA:N	14:N1:149:LEU:HB3	1.92	0.82
15:O1:17:LEU:HD23	15:O1:18:GLY:H	1.45	0.82
22:A6:209:GLU:O	22:A6:213:GLU:N	2.13	0.82
10:C6:270:THR:HG21	22:A6:69:GLU:CG	2.08	0.82
10:C6:182:CYS:SG	10:C6:183:LYS:N	2.53	0.82
26:F1:127:ARG:HB3	26:F1:128:ILE:HA	1.62	0.82
14:N2:133:ARG:CD	30:L2:152:LYS:CG	2.58	0.82
31:P5:121:ILE:HG12	31:P5:123:TYR:CE1	2.15	0.82
2:U2:19:ARG:HB3	2:U2:118:ASP:C	1.99	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y2:109:GLU:HG2	17:Y2:113:ARG:NE	1.95	0.82
22:A4:209:GLU:O	22:A4:213:GLU:N	2.13	0.82
10:C3:270:THR:HG21	22:A3:69:GLU:HB2	0.86	0.82
2:U6:66:ARG:H	24:D6:40:ARG:HH22	38.15	0.82
14:N2:137:PRO:HG3	30:L2:154:GLN:HB2	1.60	0.82
31:P3:119:PHE:CD1	34:S3:119:ALA:CB	2.58	0.82
33:R1:61:ILE:C	33:R1:73:LEU:HD22	2.00	0.82
33:R5:73:LEU:O	33:R5:75:GLU:N	2.12	0.82
2:U2:19:ARG:CB	2:U2:118:ASP:O	2.26	0.82
22:A1:209:GLU:O	22:A1:213:GLU:N	2.13	0.82
23:B4:21:VAL:N	30:L5:31:GLU:H	1.77	0.82
30:L1:124:ASP:HB2	30:L1:147:LYS:HB3	0.88	0.82
31:P5:45:LEU:HD12	31:P5:49:LEU:HD21	1.59	0.82
33:R6:21:TYR:CE2	33:R6:72:LYS:HE2	2.15	0.82
2:U2:19:ARG:CD	2:U2:119:ALA:HB1	2.08	0.82
22:A1:206:ASP:O	22:A1:210:ILE:HG12	1.79	0.81
22:A2:209:GLU:O	22:A2:213:GLU:N	2.13	0.81
10:C2:182:CYS:SG	10:C2:183:LYS:N	2.53	0.81
11:G5:141:ILE:CB	11:G5:144:LEU:CD2	2.44	0.81
28:I1:124:LYS:CA	15:O6:66:ARG:HH22	1.93	0.81
22:A6:211:GLU:CG	33:R6:81:ARG:HH21	1.90	0.81
14:N2:137:PRO:HG2	30:L2:154:GLN:CB	1.96	0.81
15:O4:17:LEU:HD23	15:O4:18:GLY:H	1.45	0.81
22:A2:211:GLU:CG	33:R2:81:ARG:HH21	1.90	0.81
33:R6:58:MET:HG3	33:R6:61:ILE:HD11	1.59	0.81
34:S2:6:PRO:HG3	34:S2:58:GLU:CG	2.10	0.81
22:A5:211:GLU:CG	33:R5:81:ARG:HH21	1.90	0.81
11:G5:149:LYS:HB2	11:G5:149:LYS:NZ	1.94	0.81
23:B2:21:VAL:N	30:L4:30:LYS:O	1.80	0.81
14:N2:148:ALA:CB	14:N2:149:LEU:HA	2.08	0.81
15:O4:30:VAL:HG12	15:O4:94:HIS:HB2	1.60	0.81
31:P3:108:LYS:HB3	31:P3:109:PRO:HD2	1.62	0.81
2:U3:17:ILE:CG2	2:U3:94:PRO:CA	2.49	0.81
24:D5:64:ARG:NE	29:K5:95:ARG:HH21	1.75	0.81
15:O2:30:VAL:HG12	15:O2:94:HIS:HB2	1.61	0.81
31:P4:121:ILE:HG12	31:P4:123:TYR:CE1	2.15	0.81
34:S5:6:PRO:HG3	34:S5:58:GLU:CG	2.10	0.81
26:F4:127:ARG:HB3	26:F4:128:ILE:HA	1.62	0.81
26:F5:127:ARG:HB3	26:F5:128:ILE:HA	1.62	0.81
26:F5:137:GLN:HB3	26:F5:204:ARG:OXT	1.79	0.81
30:L4:121:GLN:HB2	30:L4:153:LYS:CD	2.10	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M1:28:HIS:CE1	13:M1:116:LYS:CE	2.62	0.81
13:M2:28:HIS:CE1	13:M2:116:LYS:CE	2.62	0.81
13:M6:28:HIS:CE1	13:M6:116:LYS:CE	2.62	0.81
15:O3:17:LEU:HD23	15:O3:18:GLY:H	1.45	0.81
15:O5:17:LEU:HD23	15:O5:18:GLY:H	1.45	0.81
15:O5:30:VAL:HG12	15:O5:94:HIS:HB2	1.60	0.81
31:P4:41:GLN:CD	31:P4:84:ILE:HG23	2.00	0.81
2:U4:19:ARG:CD	2:U4:119:ALA:HB1	2.08	0.81
22:A4:211:GLU:CG	33:R4:81:ARG:HH21	1.90	0.81
26:F3:127:ARG:HB3	26:F3:128:ILE:HA	1.62	0.81
10:C3:182:CYS:SG	10:C3:183:LYS:N	2.53	0.81
10:C5:68:ARG:NH1	10:C5:277:HIS:HB2	1.94	0.81
2:U1:66:ARG:H	24:D1:40:ARG:HH22	38.16	0.81
11:G3:149:LYS:NZ	11:G3:149:LYS:HB2	1.94	0.81
29:K4:32:HIS:H	29:K4:41:PRO:HA	1.46	0.81
15:O6:30:VAL:HG12	15:O6:94:HIS:HB2	1.61	0.81
31:P1:121:ILE:CD1	31:P1:123:TYR:CZ	2.59	0.81
31:P5:15:PHE:CD1	31:P5:109:PRO:O	2.33	0.81
33:R1:64:GLY:C	33:R1:73:LEU:HD21	2.01	0.81
34:S4:6:PRO:HG3	34:S4:58:GLU:CG	2.11	0.81
2:U3:19:ARG:CB	2:U3:118:ASP:O	2.26	0.81
22:A3:209:GLU:O	22:A3:213:GLU:N	2.13	0.81
10:C1:68:ARG:NH1	10:C1:277:HIS:CA	2.39	0.81
24:D6:64:ARG:NE	29:K6:95:ARG:HH21	1.75	0.81
26:F2:137:GLN:HB3	26:F2:204:ARG:OXT	1.79	0.81
11:G6:5:ILE:HG12	11:G6:111:LEU:HB3	1.61	0.81
28:I1:130:THR:HA	28:I1:134:GLU:HB2	1.61	0.81
31:P1:108:LYS:HB3	31:P1:109:PRO:HD2	1.62	0.81
31:P4:108:LYS:HB3	31:P4:109:PRO:HD2	1.62	0.81
34:S1:6:PRO:HG3	34:S1:58:GLU:CG	2.10	0.81
22:A5:209:GLU:O	22:A5:213:GLU:N	2.13	0.81
23:B2:24:PRO:HD2	30:L4:27:GLU:HG3	1.60	0.81
2:U4:66:ARG:H	24:D4:40:ARG:HH22	38.16	0.81
11:G4:149:LYS:HB2	11:G4:149:LYS:NZ	1.94	0.81
18:Z4:49:LEU:HD12	34:S4:5:ILE:HG23	1.63	0.81
24:D1:64:ARG:HG3	29:K1:95:ARG:HH12	1.46	0.81
28:I2:130:THR:HA	28:I2:134:GLU:HB2	1.61	0.81
31:P6:119:PHE:CD1	34:S6:119:ALA:CB	2.58	0.81
2:U4:17:ILE:HG22	2:U4:95:SER:H	1.42	0.81
18:Z1:50:PHE:O	34:S1:5:ILE:HG23	1.75	0.81
11:G1:139:SER:C	11:G1:142:ARG:HG3	2.02	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G3:5:ILE:HG12	11:G3:111:LEU:HB3	1.61	0.81
28:I6:130:THR:HA	28:I6:134:GLU:HB2	1.61	0.81
13:M3:111:VAL:HG11	13:M3:114:TYR:HE1	1.42	0.81
13:M6:111:VAL:HG11	13:M6:114:TYR:CD1	2.16	0.81
15:O2:17:LEU:HD23	15:O2:18:GLY:H	1.44	0.81
15:O2:65:ASP:CB	28:I4:123:ARG:CZ	2.44	0.81
18:Z1:49:LEU:HD12	34:S1:5:ILE:HG23	1.63	0.81
24:D5:64:ARG:HG3	29:K5:95:ARG:HH12	1.46	0.80
11:G2:5:ILE:HG12	11:G2:111:LEU:HB3	1.61	0.80
11:G3:147:LEU:HD22	11:G3:148:SER:H	1.41	0.80
34:S3:6:PRO:HG3	34:S3:58:GLU:CG	2.10	0.80
26:F1:137:GLN:HB3	26:F1:204:ARG:OXT	1.79	0.80
29:K3:32:HIS:H	29:K3:41:PRO:HA	1.46	0.80
30:L4:121:GLN:HB2	30:L4:153:LYS:HD2	1.63	0.80
31:P2:108:LYS:HB3	31:P2:109:PRO:HD2	1.62	0.80
2:U5:17:ILE:CG2	2:U5:94:PRO:CA	2.49	0.80
26:F6:137:GLN:HB3	26:F6:204:ARG:OXT	1.80	0.80
29:K5:32:HIS:H	29:K5:41:PRO:HA	1.46	0.80
30:L1:121:GLN:HB2	30:L1:153:LYS:CD	2.08	0.80
14:N2:133:ARG:HD3	30:L2:152:LYS:HE3	0.82	0.80
30:L4:152:LYS:CE	30:L4:152:LYS:HA	2.11	0.80
31:P2:121:ILE:HG12	31:P2:123:TYR:CE1	2.15	0.80
31:P3:15:PHE:HZ	31:P3:17:TYR:CD2	1.98	0.80
24:D6:64:ARG:HG3	29:K6:95:ARG:HH12	1.47	0.80
26:F6:127:ARG:HB3	26:F6:128:ILE:HA	1.62	0.80
11:G2:149:LYS:NZ	11:G2:149:LYS:HB2	1.94	0.80
11:G4:139:SER:C	11:G4:142:ARG:HG3	2.02	0.80
27:H4:163:GLN:CG	27:H4:189:PHE:HE2	1.79	0.80
28:I1:158:ILE:HD11	15:O6:63:LYS:HZ1	1.45	0.80
29:K2:32:HIS:H	29:K2:41:PRO:HA	1.46	0.80
31:P1:121:ILE:CD1	31:P1:123:TYR:HE2	1.54	0.80
31:P6:108:LYS:HB3	31:P6:109:PRO:HD2	1.62	0.80
31:P6:121:ILE:HG12	31:P6:123:TYR:CE1	2.15	0.80
2:U1:19:ARG:CB	2:U1:118:ASP:O	2.26	0.80
16:W5:26:LEU:HD11	16:W5:60:LYS:HB3	1.60	0.80
22:A2:205:ARG:CG	22:A2:210:ILE:HG21	1.99	0.80
10:C5:182:CYS:SG	10:C5:183:LYS:N	2.53	0.80
2:U2:66:ARG:H	24:D2:40:ARG:HH22	38.15	0.80
26:F4:137:GLN:HB3	26:F4:204:ARG:OXT	1.79	0.80
11:G1:149:LYS:HB2	11:G1:149:LYS:NZ	1.94	0.80
11:G5:139:SER:C	11:G5:142:ARG:HG3	2.02	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M3:125:GLU:CB	13:M3:129:LYS:HE3	2.12	0.80
13:M5:111:VAL:HG11	13:M5:114:TYR:CD1	2.16	0.80
13:M6:111:VAL:HG11	13:M6:114:TYR:HE1	1.42	0.80
14:N2:39:LYS:O	14:N2:42:LYS:HD3	1.81	0.80
14:N3:39:LYS:O	14:N3:42:LYS:HD3	1.81	0.80
31:P1:121:ILE:HG12	31:P1:123:TYR:CE1	2.15	0.80
31:P2:41:GLN:CD	31:P2:84:ILE:HG23	2.01	0.80
23:B4:21:VAL:CG2	30:L5:31:GLU:CG	2.12	0.80
10:C6:142:LYS:HD2	10:C6:157:LEU:HB2	1.62	0.80
13:M4:111:VAL:HG11	13:M4:114:TYR:CD1	2.16	0.80
14:N5:39:LYS:O	14:N5:42:LYS:HD3	1.82	0.80
15:O4:66:ARG:HH22	28:I5:125:LYS:NZ	1.79	0.80
2:U3:66:ARG:H	24:D3:40:ARG:HH22	38.15	0.80
24:D3:64:ARG:HG3	29:K3:95:ARG:HH12	1.46	0.80
11:G2:147:LEU:HD22	11:G2:148:SER:H	1.41	0.80
11:G3:139:SER:C	11:G3:142:ARG:HG3	2.02	0.80
11:G6:139:SER:C	11:G6:142:ARG:HG3	2.02	0.80
28:I4:48:VAL:HG11	28:I4:54:LYS:HD3	1.64	0.80
31:P1:81:ARG:HB3	31:P1:117:GLY:HA2	1.64	0.80
31:P3:121:ILE:HG12	31:P3:123:TYR:CE1	2.15	0.80
31:P3:34:MET:O	31:P3:42:ARG:CG	2.29	0.80
31:P5:15:PHE:CZ	31:P5:112:ILE:HD11	2.17	0.80
33:R3:58:MET:HG3	33:R3:61:ILE:HD11	1.64	0.80
34:S6:6:PRO:HG3	34:S6:58:GLU:CG	2.11	0.80
30:L6:121:GLN:HB2	30:L6:153:LYS:CG	2.12	0.80
22:A6:214:GLU:CG	33:R6:84:TYR:CD1	2.62	0.80
28:I5:48:VAL:HG11	28:I5:54:LYS:HD3	1.64	0.80
31:P3:34:MET:HB3	31:P3:42:ARG:CG	2.08	0.80
31:P5:15:PHE:CE1	31:P5:109:PRO:O	2.35	0.80
31:P6:34:MET:O	31:P6:42:ARG:CD	2.28	0.80
22:A1:214:GLU:CG	33:R1:84:TYR:HE1	1.82	0.80
33:R6:77:GLU:O	33:R6:80:ARG:N	2.15	0.80
18:Z2:49:LEU:HD12	34:S2:5:ILE:HG23	1.63	0.80
28:I5:130:THR:HA	28:I5:134:GLU:HB2	1.61	0.80
13:M4:36:ARG:HE	13:M4:40:LYS:HZ2	1.28	0.80
31:P2:81:ARG:HB3	31:P2:117:GLY:HA2	1.64	0.80
24:D4:64:ARG:HG3	29:K4:95:ARG:HH12	1.47	0.79
26:F2:191:LYS:HE2	28:I4:141:ARG:CD	2.11	0.79
29:K1:32:HIS:H	29:K1:41:PRO:HA	1.46	0.79
13:M2:111:VAL:HG11	13:M2:114:TYR:CD1	2.16	0.79
2:U3:19:ARG:CD	2:U3:119:ALA:HB1	2.08	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M3:111:VAL:HG11	13:M3:114:TYR:CD1	2.16	0.79
14:N4:39:LYS:O	14:N4:42:LYS:HD3	1.81	0.79
31:P5:41:GLN:HB3	31:P5:84:ILE:HD13	0.85	0.79
2:U1:19:ARG:CD	2:U1:119:ALA:HB1	2.08	0.79
11:G2:139:SER:C	11:G2:142:ARG:HG3	2.02	0.79
33:R3:65:PRO:HA	33:R3:73:LEU:CD2	2.11	0.79
31:P2:119:PHE:CD1	34:S2:119:ALA:CB	2.58	0.79
2:U1:19:ARG:HD3	2:U1:119:ALA:C	1.80	0.79
22:A4:4:ALA:H	22:A4:5:LEU:HA	1.47	0.79
33:R4:58:MET:CA	33:R4:61:ILE:HD11	2.12	0.79
34:S3:4:VAL:HG23	34:S3:58:GLU:OE2	1.82	0.79
18:Z3:49:LEU:HD12	34:S3:5:ILE:HG23	1.63	0.79
13:M1:111:VAL:HG11	13:M1:114:TYR:CD1	2.16	0.79
13:M6:28:HIS:HE1	13:M6:116:LYS:HE3	1.47	0.79
14:N1:39:LYS:O	14:N1:42:LYS:HD3	1.82	0.79
33:R5:21:TYR:CE2	33:R5:72:LYS:HD3	2.17	0.79
26:F2:127:ARG:HB3	26:F2:128:ILE:HA	1.62	0.79
13:M6:125:GLU:CB	13:M6:129:LYS:HE3	2.12	0.79
31:P3:98:ASN:O	31:P3:122:THR:OG1	1.99	0.79
34:S2:4:VAL:HG23	34:S2:58:GLU:OE2	1.82	0.79
10:C3:277:HIS:CE1	10:C3:279:ARG:HD3	2.18	0.79
28:I6:74:ARG:HH21	28:I6:112:TRP:HB2	1.47	0.79
30:L2:31:GLU:H	23:B5:21:VAL:HG22	1.46	0.79
33:R5:60:ARG:HG3	33:R5:60:ARG:HH11	1.46	0.79
22:A5:4:ALA:H	22:A5:5:LEU:HA	1.47	0.79
24:D2:64:ARG:HG3	29:K2:95:ARG:HH12	1.46	0.79
24:D4:64:ARG:HG3	29:K4:95:ARG:NH2	1.98	0.79
28:I2:48:VAL:HG11	28:I2:54:LYS:HD3	1.64	0.79
31:P6:121:ILE:CD1	31:P6:123:TYR:HE2	1.55	0.79
10:C1:65:LYS:NZ	10:C1:280:VAL:HB	1.98	0.79
28:I3:48:VAL:HG11	28:I3:54:LYS:HD3	1.64	0.79
24:D2:64:ARG:HG3	29:K2:95:ARG:NH2	1.98	0.79
30:L6:124:ASP:HB2	30:L6:147:LYS:HB3	1.62	0.79
14:N6:39:LYS:O	14:N6:42:LYS:HD3	1.81	0.79
31:P2:98:ASN:O	31:P2:122:THR:OG1	1.99	0.79
31:P5:81:ARG:HB3	31:P5:117:GLY:HA2	1.64	0.79
22:A5:209:GLU:HB2	22:A5:213:GLU:OE2	1.83	0.79
10:C6:65:LYS:NZ	10:C6:280:VAL:HB	1.98	0.79
28:I5:74:ARG:HH21	28:I5:112:TRP:HB2	1.48	0.79
18:Z4:83:LEU:HD23	34:S4:55:ARG:NH2	1.97	0.79
18:Z2:83:LEU:HD23	34:S2:55:ARG:NH2	1.98	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C3:65:LYS:NZ	10:C3:280:VAL:HB	1.98	0.78
2:U5:66:ARG:H	24:D5:40:ARG:HH22	38.15	0.78
28:I3:74:ARG:HH21	28:I3:112:TRP:HB2	1.47	0.78
28:I4:74:ARG:HH21	28:I4:112:TRP:HB2	1.48	0.78
31:P6:45:LEU:CD1	31:P6:49:LEU:HD21	2.13	0.78
33:R2:25:GLY:H	33:R2:31:ASN:HB3	1.48	0.78
18:Z5:83:LEU:HD23	34:S5:55:ARG:NH2	1.97	0.78
18:Z6:83:LEU:HD23	34:S6:55:ARG:NH2	1.97	0.78
10:C6:277:HIS:CE1	10:C6:279:ARG:HD3	2.18	0.78
27:H4:163:GLN:CG	27:H4:189:PHE:CZ	2.57	0.78
28:I1:74:ARG:HH21	28:I1:112:TRP:HB2	1.48	0.78
28:I2:74:ARG:HH21	28:I2:112:TRP:HB2	1.47	0.78
10:C5:277:HIS:CE1	10:C5:279:ARG:HD3	2.18	0.78
13:M1:28:HIS:HE1	13:M1:116:LYS:HE3	1.48	0.78
31:P6:121:ILE:HB	34:S6:120:HIS:CD2	2.19	0.78
32:Q3:4:LYS:HZ1	32:Q3:99:TYR:C	1.86	0.78
33:R2:21:TYR:CG	33:R2:71:ILE:HD12	2.17	0.78
34:S5:4:VAL:HG23	34:S5:58:GLU:OE2	1.82	0.78
34:S6:4:VAL:HG23	34:S6:58:GLU:OE2	1.82	0.78
22:A1:209:GLU:HB2	22:A1:213:GLU:CD	2.04	0.78
22:A6:209:GLU:HB2	22:A6:213:GLU:CD	2.04	0.78
26:F2:137:GLN:HA	26:F2:203:ASN:CB	2.14	0.78
24:D3:64:ARG:HG3	29:K3:95:ARG:NH2	1.98	0.78
31:P3:41:GLN:OE1	31:P3:84:ILE:CD1	2.31	0.78
33:R3:25:GLY:H	33:R3:31:ASN:HB3	1.48	0.78
34:S4:4:VAL:HG23	34:S4:58:GLU:OE2	1.82	0.78
22:A1:102:ARG:HD2	22:A1:102:ARG:N	5.11	0.78
22:A3:209:GLU:HB2	22:A3:213:GLU:OE2	1.84	0.78
10:C2:277:HIS:CE1	10:C2:279:ARG:HD3	2.18	0.78
10:C5:64:THR:C	10:C5:277:HIS:HE1	1.85	0.78
26:F3:127:ARG:HB3	26:F3:128:ILE:CA	2.14	0.78
26:F5:137:GLN:HA	26:F5:203:ASN:CB	2.14	0.78
24:D6:64:ARG:HG3	29:K6:95:ARG:NH2	1.98	0.78
33:R3:70:SER:O	33:R3:71:ILE:HG23	1.84	0.78
33:R6:25:GLY:H	33:R6:31:ASN:HB3	1.48	0.78
18:Z5:49:LEU:HD12	34:S5:5:ILE:HG23	1.63	0.78
22:A2:209:GLU:HB2	22:A2:213:GLU:OE2	1.84	0.78
22:A4:209:GLU:HB2	22:A4:213:GLU:CD	2.04	0.78
10:C6:142:LYS:HD2	10:C6:157:LEU:HD13	1.60	0.78
26:F5:127:ARG:HB3	26:F5:128:ILE:CA	2.14	0.78
24:D5:64:ARG:HG3	29:K5:95:ARG:NH2	1.97	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L2:121:GLN:HG3	30:L2:153:LYS:CE	2.14	0.78
31:P2:15:PHE:CE2	31:P2:112:ILE:HD13	2.19	0.78
31:P6:81:ARG:HB3	31:P6:117:GLY:HA2	1.64	0.78
31:P1:121:ILE:HB	34:S1:120:HIS:CD2	2.19	0.78
34:S3:86:ARG:HD2	34:S3:106:LYS:HD3	1.66	0.78
10:C6:64:THR:C	10:C6:277:HIS:HE1	1.85	0.78
31:P1:15:PHE:CE2	31:P1:112:ILE:HD13	2.19	0.78
31:P4:121:ILE:HB	34:S4:120:HIS:CD2	2.19	0.78
18:Z3:83:LEU:HD23	34:S3:55:ARG:NH2	1.97	0.78
26:F1:137:GLN:HA	26:F1:203:ASN:CB	2.14	0.78
30:L6:121:GLN:HB2	30:L6:153:LYS:HG3	1.66	0.78
31:P3:81:ARG:HB3	31:P3:117:GLY:HA2	1.64	0.78
34:S1:4:VAL:HG23	34:S1:58:GLU:OE2	1.82	0.78
22:A1:4:ALA:H	22:A1:5:LEU:HA	1.48	0.78
22:A3:102:ARG:HD2	22:A3:102:ARG:N	5.11	0.78
22:A3:209:GLU:HB2	22:A3:213:GLU:CD	2.04	0.78
22:A5:209:GLU:HB2	22:A5:213:GLU:CD	2.04	0.78
22:A6:209:GLU:HB2	22:A6:213:GLU:OE2	1.84	0.78
10:C1:64:THR:C	10:C1:277:HIS:HE1	1.85	0.78
10:C3:64:THR:C	10:C3:277:HIS:HE1	1.85	0.78
26:F1:127:ARG:HB3	26:F1:128:ILE:CA	2.14	0.78
28:I1:48:VAL:HG11	28:I1:54:LYS:HD3	1.64	0.78
15:O1:66:ARG:HH22	28:I3:125:LYS:CG	1.96	0.78
24:D1:64:ARG:HG3	29:K1:95:ARG:NH2	1.98	0.78
14:N3:148:ALA:CB	14:N3:149:LEU:HA	2.09	0.78
33:R2:21:TYR:CD2	33:R2:71:ILE:CD1	2.65	0.78
22:A4:102:ARG:N	22:A4:102:ARG:HD2	5.11	0.78
29:K6:32:HIS:H	29:K6:41:PRO:HA	1.46	0.78
13:M4:125:GLU:CB	13:M4:129:LYS:HE3	2.12	0.78
31:P2:121:ILE:HB	34:S2:120:HIS:CD2	2.19	0.78
32:Q4:4:LYS:HZ1	32:Q4:99:TYR:C	1.86	0.78
34:S5:86:ARG:HD2	34:S5:106:LYS:HD3	1.66	0.78
4:X1:51:VAL:HA	4:X1:72:VAL:HG12	1.65	0.78
22:A2:102:ARG:N	22:A2:102:ARG:HD2	5.74	0.77
26:F2:137:GLN:HG2	26:F2:204:ARG:C	2.05	0.77
14:N4:133:ARG:NH2	30:L4:154:GLN:CB	2.47	0.77
33:R5:25:GLY:H	33:R5:31:ASN:HB3	1.48	0.77
31:P5:121:ILE:HB	34:S5:120:HIS:CD2	2.19	0.77
4:X4:51:VAL:HA	4:X4:72:VAL:HG12	1.65	0.77
22:A6:4:ALA:H	22:A6:5:LEU:HA	1.47	0.77
10:C4:65:LYS:NZ	10:C4:280:VAL:HB	1.98	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O2:65:ASP:HB2	28:I4:123:ARG:HH21	1.48	0.77
34:S1:86:ARG:HD2	34:S1:106:LYS:HD3	1.66	0.77
4:X2:51:VAL:HA	4:X2:72:VAL:HG12	1.65	0.77
10:C2:65:LYS:NZ	10:C2:280:VAL:HB	1.98	0.77
26:F2:127:ARG:HB3	26:F2:128:ILE:CG1	2.15	0.77
26:F3:137:GLN:HA	26:F3:203:ASN:CB	2.14	0.77
26:F5:125:SER:HA	26:F5:138:ALA:HA	1.67	0.77
14:N4:148:ALA:H	14:N4:149:LEU:CB	1.94	0.77
31:P3:121:ILE:HB	34:S3:120:HIS:CD2	2.19	0.77
33:R1:72:LYS:O	33:R1:74:GLN:N	2.18	0.77
33:R4:25:GLY:H	33:R4:31:ASN:HB3	1.48	0.77
18:Z1:83:LEU:HD23	34:S1:55:ARG:NH2	1.97	0.77
18:Z6:49:LEU:HD12	34:S6:5:ILE:HG23	1.63	0.77
22:A5:102:ARG:N	22:A5:102:ARG:HD2	5.11	0.77
10:C1:277:HIS:CE1	10:C1:279:ARG:HD3	2.18	0.77
10:C4:277:HIS:CE1	10:C4:279:ARG:HD3	2.18	0.77
26:F4:127:ARG:HB3	26:F4:128:ILE:CG1	2.15	0.77
30:L2:135:SER:O	30:L2:139:ARG:NH1	2.18	0.77
13:M2:125:GLU:CB	13:M2:129:LYS:HE3	2.12	0.77
31:P1:37:TYR:OH	31:P1:87:PRO:HD3	1.83	0.77
26:F5:137:GLN:CG	26:F5:204:ARG:H	1.98	0.77
31:P6:98:ASN:O	31:P6:122:THR:OG1	1.99	0.77
33:R1:57:LEU:HD11	33:R1:66:VAL:HG11	1.66	0.77
4:X6:51:VAL:HA	4:X6:72:VAL:HG12	1.65	0.77
23:B4:34:LYS:HA	23:B4:43:ASN:HA	1.67	0.77
26:F1:125:SER:HA	26:F1:138:ALA:HA	1.67	0.77
26:F3:137:GLN:HG2	26:F3:204:ARG:C	2.05	0.77
26:F4:137:GLN:HA	26:F4:203:ASN:CB	2.14	0.77
26:F6:127:ARG:HB3	26:F6:128:ILE:CG1	2.15	0.77
27:H4:72:PHE:HB3	27:H4:76:GLN:HE21	1.50	0.77
28:I6:48:VAL:HG11	28:I6:54:LYS:HD3	1.64	0.77
31:P6:15:PHE:CE2	31:P6:112:ILE:HD13	2.19	0.77
33:R5:58:MET:HA	33:R5:61:ILE:HG12	1.64	0.77
16:W4:115:GLU:CD	16:W4:119:LYS:HE3	2.05	0.77
23:B2:34:LYS:HA	23:B2:43:ASN:HA	1.67	0.77
23:B5:34:LYS:HA	23:B5:43:ASN:HA	1.67	0.77
10:C5:65:LYS:NZ	10:C5:280:VAL:HB	1.98	0.77
26:F6:127:ARG:HB3	26:F6:128:ILE:CA	2.14	0.77
14:N5:126:ALA:O	14:N5:130:LYS:HG3	1.83	0.77
14:N6:148:ALA:H	14:N6:149:LEU:CB	1.94	0.77
33:R3:72:LYS:O	33:R3:74:GLN:N	2.18	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P5:119:PHE:CD1	34:S5:119:ALA:CB	2.58	0.77
34:S6:86:ARG:HD2	34:S6:106:LYS:HD3	1.66	0.77
23:B3:34:LYS:HA	23:B3:43:ASN:HA	1.67	0.77
26:F3:127:ARG:HB3	26:F3:128:ILE:CG1	2.14	0.77
26:F3:137:GLN:HG3	26:F3:204:ARG:H	1.50	0.77
26:F5:137:GLN:HG3	26:F5:204:ARG:H	1.50	0.77
27:H2:72:PHE:HB3	27:H2:76:GLN:HE21	1.50	0.77
13:M5:125:GLU:CB	13:M5:129:LYS:HE3	2.12	0.77
34:S4:86:ARG:HD2	34:S4:106:LYS:HD3	1.66	0.77
4:X3:51:VAL:HA	4:X3:72:VAL:HG12	1.65	0.77
22:A2:4:ALA:H	22:A2:5:LEU:HA	1.47	0.77
10:C2:64:THR:C	10:C2:277:HIS:HE1	1.85	0.77
26:F2:127:ARG:HB3	26:F2:128:ILE:CA	2.14	0.77
26:F4:127:ARG:HB3	26:F4:128:ILE:CA	2.14	0.77
26:F6:137:GLN:HG2	26:F6:204:ARG:C	2.04	0.77
30:L1:135:SER:O	30:L1:139:ARG:NH1	2.18	0.77
30:L5:135:SER:O	30:L5:139:ARG:NH1	2.18	0.77
14:N4:133:ARG:HH22	30:L4:154:GLN:HA	1.49	0.77
31:P4:15:PHE:CE2	31:P4:112:ILE:HD13	2.19	0.77
31:P4:81:ARG:HB3	31:P4:117:GLY:HA2	1.64	0.77
31:P4:98:ASN:O	31:P4:122:THR:OG1	1.99	0.77
2:U6:19:ARG:CB	2:U6:118:ASP:O	2.26	0.77
17:Y5:91:LEU:HB3	17:Y5:96:LEU:HD11	1.67	0.77
22:A6:102:ARG:N	22:A6:102:ARG:HD2	5.11	0.77
30:L3:135:SER:O	30:L3:139:ARG:NH1	2.18	0.77
33:R1:25:GLY:H	33:R1:31:ASN:HB3	1.48	0.77
2:U6:18:HIS:CB	2:U6:117:ALA:HB1	2.15	0.77
26:F1:127:ARG:HB3	26:F1:128:ILE:CG1	2.15	0.76
26:F3:137:GLN:CG	26:F3:204:ARG:H	1.98	0.76
26:F5:127:ARG:HB3	26:F5:128:ILE:CG1	2.15	0.76
10:C6:202:THR:HG22	12:J6:54:ARG:HD3	1.68	0.76
13:M2:28:HIS:HE1	13:M2:116:LYS:HE3	1.48	0.76
14:N3:148:ALA:H	14:N3:149:LEU:CB	1.94	0.76
22:A4:214:GLU:CD	33:R4:84:TYR:CD1	2.59	0.76
2:U5:19:ARG:CB	2:U5:118:ASP:O	2.26	0.76
26:F3:125:SER:HA	26:F3:138:ALA:HA	1.67	0.76
14:N2:148:ALA:H	14:N2:149:LEU:CB	1.94	0.76
31:P1:15:PHE:HZ	31:P1:112:ILE:HD11	1.47	0.76
22:A2:209:GLU:HB2	22:A2:213:GLU:CD	2.04	0.76
22:A3:4:ALA:H	22:A3:5:LEU:HA	1.47	0.76
22:A6:214:GLU:HG3	33:R6:84:TYR:HE1	0.98	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F1:137:GLN:HG2	26:F1:204:ARG:C	2.05	0.76
26:F2:125:SER:HA	26:F2:138:ALA:HA	1.67	0.76
26:F2:137:GLN:CG	26:F2:204:ARG:H	1.98	0.76
26:F4:137:GLN:HG2	26:F4:204:ARG:C	2.05	0.76
27:H1:72:PHE:HB3	27:H1:76:GLN:HE21	1.50	0.76
10:C1:202:THR:HG22	12:J1:54:ARG:HD3	1.67	0.76
28:I3:194:GLU:HG3	30:L3:10:TYR:CE2	2.20	0.76
30:L4:135:SER:O	30:L4:139:ARG:NH1	2.18	0.76
15:O1:66:ARG:HH22	28:I3:125:LYS:HG3	1.51	0.76
32:Q5:4:LYS:HZ1	32:Q5:99:TYR:C	1.88	0.76
34:S3:34:LYS:HB2	34:S3:100:ALA:HA	1.68	0.76
2:U5:17:ILE:HG22	2:U5:95:SER:H	1.42	0.76
2:U6:17:ILE:HG22	2:U6:95:SER:H	1.42	0.76
18:Z1:83:LEU:CD2	34:S1:55:ARG:NH2	2.49	0.76
22:A3:214:GLU:CD	33:R3:84:TYR:CD1	2.59	0.76
22:A4:209:GLU:HB2	22:A4:213:GLU:OE2	1.84	0.76
26:F2:137:GLN:HG3	26:F2:204:ARG:H	1.50	0.76
26:F4:125:SER:HA	26:F4:138:ALA:HA	1.67	0.76
27:H5:72:PHE:HB3	27:H5:76:GLN:HE21	1.50	0.76
14:N1:148:ALA:H	14:N1:149:LEU:CB	1.94	0.76
33:R6:77:GLU:O	33:R6:79:GLU:N	2.17	0.76
2:U2:18:HIS:CB	2:U2:117:ALA:HB1	2.16	0.76
10:C4:68:ARG:NH1	10:C4:277:HIS:CA	2.39	0.76
26:F1:137:GLN:HG3	26:F1:204:ARG:H	1.50	0.76
15:O1:63:LYS:CE	28:I3:163:GLU:HG3	2.15	0.76
32:Q6:4:LYS:HZ1	32:Q6:99:TYR:C	1.88	0.76
2:U1:17:ILE:HG22	2:U1:95:SER:H	1.42	0.76
10:C1:279:ARG:C	10:C1:280:VAL:HG12	2.06	0.76
10:C5:68:ARG:HH22	10:C5:276:THR:CA	1.99	0.76
34:S2:34:LYS:HB2	34:S2:100:ALA:HA	1.68	0.76
10:C4:68:ARG:HH22	10:C4:276:THR:CA	1.99	0.76
26:F1:137:GLN:CG	26:F1:204:ARG:H	1.98	0.76
26:F4:137:GLN:CG	26:F4:204:ARG:H	1.98	0.76
26:F6:125:SER:HA	26:F6:138:ALA:HA	1.67	0.76
30:L2:55:TYR:HH	30:L2:116:CYS:HG	1.25	0.76
23:B4:21:VAL:HG23	30:L5:31:GLU:N	2.01	0.76
13:M4:28:HIS:HE1	13:M4:116:LYS:HE3	1.47	0.76
31:P1:49:LEU:O	31:P1:50:ARG:NH1	2.18	0.76
32:Q1:4:LYS:HZ1	32:Q1:99:TYR:C	1.88	0.76
22:A2:214:GLU:CD	33:R2:84:TYR:CD1	2.59	0.76
33:R5:58:MET:HA	33:R5:61:ILE:CG1	2.15	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S2:86:ARG:HD2	34:S2:106:LYS:HD3	1.66	0.76
22:A1:209:GLU:HB2	22:A1:213:GLU:OE2	1.84	0.76
10:C1:68:ARG:HH22	10:C1:276:THR:CA	1.99	0.76
10:C3:68:ARG:HH22	10:C3:276:THR:CA	1.99	0.76
10:C4:279:ARG:C	10:C4:280:VAL:HG12	2.06	0.76
30:L2:31:GLU:N	23:B5:21:VAL:CG2	2.48	0.76
30:L6:135:SER:O	30:L6:139:ARG:NH1	2.18	0.76
14:N4:133:ARG:HG3	30:L4:152:LYS:HG3	1.66	0.76
31:P3:41:GLN:CD	31:P3:84:ILE:HG23	2.06	0.76
2:U1:18:HIS:CB	2:U1:117:ALA:HB1	2.16	0.76
2:U5:18:HIS:CB	2:U5:117:ALA:HB1	2.16	0.76
17:Y1:91:LEU:HB3	17:Y1:96:LEU:HD11	1.68	0.76
10:C4:134:ASN:O	10:C4:167:ARG:NH2	2.19	0.76
26:F4:137:GLN:HG3	26:F4:204:ARG:H	1.50	0.76
15:O4:66:ARG:HH22	28:I5:125:LYS:HZ2	1.34	0.76
34:S6:17:ASN:HD22	34:S6:101:ASN:HD21	1.34	0.76
18:Z5:46:ASN:CB	18:Z5:80:ARG:HA	2.13	0.76
28:I2:123:ARG:HH22	15:O5:65:ASP:CB	1.99	0.76
34:S4:34:LYS:HB2	34:S4:100:ALA:HA	1.68	0.76
18:Z5:83:LEU:CD2	34:S5:55:ARG:NH2	2.49	0.76
10:C2:68:ARG:HH22	10:C2:276:THR:CA	1.99	0.75
10:C5:134:ASN:O	10:C5:167:ARG:NH2	2.19	0.75
10:C5:202:THR:HG22	12:J5:54:ARG:HD3	1.68	0.75
14:N3:141:TYR:CE1	14:N3:146:ALA:HB2	2.22	0.75
15:O4:66:ARG:HH12	28:I5:125:LYS:HD3	1.51	0.75
10:C1:134:ASN:O	10:C1:167:ARG:NH2	2.19	0.75
10:C5:279:ARG:C	10:C5:280:VAL:HG12	2.06	0.75
10:C6:279:ARG:C	10:C6:280:VAL:HG12	2.06	0.75
33:R4:58:MET:O	33:R4:61:ILE:HG13	1.86	0.75
16:W3:117:ARG:HH11	16:W3:117:ARG:HG3	1.51	0.75
4:X5:51:VAL:HA	4:X5:72:VAL:HG12	1.65	0.75
17:Y4:91:LEU:HB3	17:Y4:96:LEU:HD11	1.67	0.75
22:A1:210:ILE:HG13	22:A1:211:GLU:H	1.51	0.75
23:B6:34:LYS:HA	23:B6:43:ASN:HA	1.67	0.75
24:D3:64:ARG:HE	29:K3:95:ARG:CZ	2.00	0.75
24:D4:64:ARG:HE	29:K4:95:ARG:CZ	2.00	0.75
26:F5:137:GLN:HG2	26:F5:204:ARG:C	2.05	0.75
31:P1:98:ASN:O	31:P1:122:THR:OG1	1.99	0.75
22:A5:214:GLU:CD	33:R5:84:TYR:CD1	2.59	0.75
14:N3:133:ARG:CD	30:L3:152:LYS:HB3	2.16	0.75
14:N5:148:ALA:CB	14:N5:149:LEU:HA	2.08	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P6:45:LEU:HD12	31:P6:49:LEU:HD21	1.66	0.75
32:Q2:4:LYS:HZ1	32:Q2:99:TYR:C	1.87	0.75
2:U4:18:HIS:CB	2:U4:117:ALA:HB1	2.16	0.75
22:A4:210:ILE:HG13	22:A4:211:GLU:H	1.51	0.75
14:N6:148:ALA:CB	14:N6:149:LEU:HA	2.08	0.75
33:R3:65:PRO:HB3	33:R3:73:LEU:CD2	2.16	0.75
2:U6:19:ARG:HD3	2:U6:119:ALA:C	1.81	0.75
17:Y2:91:LEU:HB3	17:Y2:96:LEU:HD11	1.67	0.75
24:D2:64:ARG:HE	29:K2:95:ARG:CZ	1.99	0.75
30:L4:121:GLN:HB2	30:L4:153:LYS:CG	2.17	0.75
31:P2:81:ARG:O	31:P2:117:GLY:N	2.20	0.75
31:P3:121:ILE:CD1	31:P3:123:TYR:HE2	1.54	0.75
31:P3:15:PHE:CZ	31:P3:17:TYR:HD2	2.04	0.75
31:P5:41:GLN:OE1	31:P5:84:ILE:HG12	1.86	0.75
33:R5:21:TYR:HD2	33:R5:72:LYS:HD2	1.48	0.75
34:S2:17:ASN:HD22	34:S2:101:ASN:HD21	1.34	0.75
22:A4:147:LEU:O	22:A4:165:ASN:ND2	2.20	0.75
10:C6:273:LEU:CB	10:C6:280:VAL:HG11	2.02	0.75
30:L1:121:GLN:CG	30:L1:153:LYS:HD2	2.16	0.75
14:N2:141:TYR:CE1	14:N2:146:ALA:HB2	2.21	0.75
31:P3:96:VAL:HG22	31:P3:116:LEU:CD1	1.80	0.75
2:U4:19:ARG:HD3	2:U4:119:ALA:C	1.81	0.75
18:Z3:83:LEU:CD2	34:S3:55:ARG:NH2	2.48	0.75
22:A2:147:LEU:O	22:A2:165:ASN:ND2	2.20	0.75
22:A6:147:LEU:O	22:A6:165:ASN:ND2	2.20	0.75
10:C2:134:ASN:O	10:C2:167:ARG:NH2	2.19	0.75
25:E5:125:LYS:NZ	25:E5:225:ILE:O	2.18	0.75
30:L3:154:GLN:O	30:L3:154:GLN:NE2	2.20	0.75
14:N4:141:TYR:CE1	14:N4:146:ALA:HB2	2.22	0.75
31:P3:81:ARG:O	31:P3:117:GLY:N	2.20	0.75
31:P6:81:ARG:O	31:P6:117:GLY:N	2.20	0.75
34:S1:34:LYS:HB2	34:S1:100:ALA:HA	1.68	0.75
34:S5:17:ASN:HD22	34:S5:101:ASN:HD21	1.34	0.75
34:S5:4:VAL:HG23	34:S5:58:GLU:CD	2.07	0.75
24:D6:64:ARG:HE	29:K6:95:ARG:CZ	2.00	0.75
10:C4:202:THR:HG22	12:J4:54:ARG:HD3	1.67	0.75
30:L6:144:LYS:HZ3	30:L6:146:THR:HG21	1.52	0.75
34:S1:17:ASN:HD22	34:S1:101:ASN:HD21	1.34	0.75
34:S3:17:ASN:HD22	34:S3:101:ASN:HD21	1.34	0.75
34:S6:34:LYS:HB2	34:S6:100:ALA:HA	1.68	0.75
34:S6:4:VAL:HG23	34:S6:58:GLU:CD	2.07	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B1:34:LYS:HA	23:B1:43:ASN:HA	1.67	0.74
23:B5:122:GLU:OE2	23:B5:213:ARG:NH1	2.20	0.74
10:C6:68:ARG:HH22	10:C6:276:THR:CA	1.99	0.74
14:N1:148:ALA:CB	14:N1:149:LEU:HA	2.08	0.74
31:P1:81:ARG:O	31:P1:117:GLY:N	2.20	0.74
31:P1:15:PHE:CE2	31:P1:112:ILE:HD11	2.22	0.74
18:Z6:83:LEU:CD2	34:S6:55:ARG:NH2	2.49	0.74
2:U2:19:ARG:HD3	2:U2:119:ALA:C	1.81	0.74
2:U3:18:HIS:CB	2:U3:117:ALA:HB1	2.16	0.74
2:U4:19:ARG:CB	2:U4:118:ASP:O	2.26	0.74
4:X3:46:HIS:HB3	4:X3:101:LEU:HD21	1.69	0.74
10:C4:68:ARG:CD	10:C4:277:HIS:CB	2.65	0.74
10:C5:68:ARG:CD	10:C5:277:HIS:CB	2.65	0.74
24:D5:64:ARG:HE	29:K5:95:ARG:CZ	2.00	0.74
14:N5:141:TYR:CE1	14:N5:146:ALA:HB2	2.21	0.74
14:N6:141:TYR:CE1	14:N6:146:ALA:HB2	2.22	0.74
31:P2:96:VAL:HG22	31:P2:116:LEU:CD1	1.81	0.74
34:S3:4:VAL:HG23	34:S3:58:GLU:CD	2.08	0.74
31:P5:16:THR:O	34:S5:91:LYS:O	2.05	0.74
3:V6:4:ASP:HB3	10:C6:174:ILE:HA	1.70	0.74
18:Z6:46:ASN:CB	18:Z6:80:ARG:HA	2.13	0.74
22:A2:210:ILE:HG13	22:A2:211:GLU:H	1.51	0.74
10:C1:68:ARG:CD	10:C1:277:HIS:CB	2.65	0.74
10:C3:68:ARG:CD	10:C3:277:HIS:CB	2.65	0.74
10:C6:68:ARG:CD	10:C6:277:HIS:CB	2.65	0.74
10:C3:202:THR:HG22	12:J3:54:ARG:HD3	1.67	0.74
30:L5:124:ASP:OD2	30:L5:147:LYS:HG3	1.88	0.74
14:N1:150:VAL:HG13	14:N1:151:ALA:N	2.02	0.74
14:N2:150:VAL:HG13	14:N2:151:ALA:N	2.02	0.74
14:N4:148:ALA:CB	14:N4:149:LEU:HA	2.08	0.74
31:P4:81:ARG:O	31:P4:117:GLY:N	2.20	0.74
31:P4:15:PHE:HZ	31:P4:112:ILE:HD11	1.48	0.74
31:P5:81:ARG:O	31:P5:117:GLY:N	2.20	0.74
2:U4:17:ILE:HG22	2:U4:18:HIS:H	1.52	0.74
2:U6:17:ILE:HG22	2:U6:18:HIS:H	1.52	0.74
18:Z2:88:LEU:CB	18:Z2:109:TYR:OH	2.33	0.74
3:V3:4:ASP:HB3	10:C3:174:ILE:HA	1.69	0.74
24:D1:64:ARG:HE	29:K1:95:ARG:CZ	1.99	0.74
27:H3:72:PHE:HB3	27:H3:76:GLN:HE21	1.50	0.74
15:O4:66:ARG:NH2	28:I5:125:LYS:NZ	2.36	0.74
14:N1:131:THR:O	30:L1:152:LYS:HG3	1.85	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U2:17:ILE:HG22	2:U2:18:HIS:H	1.52	0.74
2:U5:17:ILE:HG22	2:U5:18:HIS:H	1.52	0.74
4:X2:46:HIS:HB3	4:X2:101:LEU:HD21	1.69	0.74
22:A3:210:ILE:HG13	22:A3:211:GLU:H	1.51	0.74
22:A4:215:GLN:OE1	22:A4:215:GLN:N	2.21	0.74
27:H6:72:PHE:HB3	27:H6:76:GLN:HE21	1.50	0.74
4:X1:46:HIS:HB3	4:X1:101:LEU:HD21	1.70	0.74
18:Z5:79:ILE:HG13	18:Z5:80:ARG:H	1.53	0.74
10:C3:134:ASN:O	10:C3:167:ARG:NH2	2.19	0.74
24:D1:137:VAL:HB	24:D1:185:LYS:HB3	1.69	0.74
25:E4:125:LYS:NZ	25:E4:225:ILE:O	2.18	0.74
15:O4:63:LYS:HZ1	28:I5:163:GLU:CB	2.00	0.74
30:L1:27:GLU:HB2	30:L1:30:LYS:HD2	1.69	0.74
30:L5:124:ASP:CB	30:L5:147:LYS:CG	2.65	0.74
14:N1:141:TYR:CE1	14:N1:146:ALA:HB2	2.22	0.74
14:N3:150:VAL:HG13	14:N3:151:ALA:N	2.02	0.74
3:V2:4:ASP:HB3	10:C2:174:ILE:HA	1.69	0.74
4:X5:46:HIS:HB3	4:X5:101:LEU:HD21	1.70	0.74
22:A5:210:ILE:HG13	22:A5:211:GLU:H	1.51	0.74
22:A6:210:ILE:HG13	22:A6:211:GLU:H	1.51	0.74
22:A6:215:GLN:OE1	22:A6:215:GLN:N	2.21	0.74
23:B2:24:PRO:CD	30:L4:27:GLU:CB	2.65	0.74
10:C2:68:ARG:CD	10:C2:277:HIS:CB	2.65	0.74
10:C4:64:THR:C	10:C4:277:HIS:HE1	1.85	0.74
10:C6:142:LYS:HD3	10:C6:154:ALA:HA	1.68	0.74
10:C6:134:ASN:O	10:C6:167:ARG:NH2	2.19	0.74
24:D6:137:VAL:HB	24:D6:185:LYS:HB3	1.69	0.74
10:C2:202:THR:HG22	12:J2:54:ARG:HD3	1.68	0.74
23:B2:21:VAL:HG23	30:L4:31:GLU:C	2.04	0.74
28:I1:121:LEU:HD13	15:O6:63:LYS:HZ3	1.52	0.74
31:P5:15:PHE:HB2	31:P5:109:PRO:HB2	1.70	0.74
33:R5:22:THR:HG22	33:R5:72:LYS:HZ2	1.50	0.74
2:U3:17:ILE:HG22	2:U3:18:HIS:H	1.52	0.74
17:Y6:91:LEU:HB3	17:Y6:96:LEU:HD11	1.68	0.74
18:Z3:88:LEU:CB	18:Z3:109:TYR:OH	2.33	0.74
22:A1:147:LEU:O	22:A1:165:ASN:ND2	2.20	0.74
22:A2:215:GLN:N	22:A2:215:GLN:OE1	2.21	0.74
22:A3:205:ARG:HG3	22:A3:210:ILE:HG23	1.70	0.74
30:L3:27:GLU:HB2	30:L3:30:LYS:HD2	1.70	0.74
31:P6:15:PHE:CE2	31:P6:112:ILE:HD11	2.22	0.74
33:R1:65:PRO:HB2	33:R1:74:GLN:NE2	2.01	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R1:69:ILE:HG23	33:R1:70:SER:HA	1.69	0.74
18:Z6:79:ILE:HG13	18:Z6:80:ARG:H	1.53	0.74
22:A5:147:LEU:O	22:A5:165:ASN:ND2	2.20	0.74
23:B5:88:THR:OG1	23:B5:96:CYS:SG	2.46	0.74
30:L4:121:GLN:CB	30:L4:153:LYS:CG	2.66	0.74
31:P4:96:VAL:HG22	31:P4:116:LEU:CD1	1.80	0.74
4:X6:46:HIS:HB3	4:X6:101:LEU:HD21	1.70	0.74
17:Y3:91:LEU:HB3	17:Y3:96:LEU:HD11	1.67	0.74
24:D3:64:ARG:O	29:K3:93:THR:HG21	1.88	0.74
14:N6:150:VAL:HG13	14:N6:151:ALA:N	2.02	0.74
15:O4:63:LYS:HZ1	28:I5:163:GLU:HB2	1.52	0.74
31:P2:15:PHE:HZ	31:P2:112:ILE:HD11	1.48	0.74
31:P4:121:ILE:CD1	31:P4:123:TYR:HE2	1.55	0.74
34:S2:4:VAL:HG23	34:S2:58:GLU:CD	2.08	0.74
18:Z2:83:LEU:CD2	34:S2:55:ARG:NH2	2.49	0.74
18:Z4:88:LEU:CB	18:Z4:109:TYR:OH	2.33	0.74
30:L1:30:LYS:NZ	23:B6:21:VAL:N	2.32	0.73
23:B6:88:THR:OG1	23:B6:96:CYS:SG	2.46	0.73
34:S1:4:VAL:HG23	34:S1:58:GLU:CD	2.08	0.73
2:U5:19:ARG:HD3	2:U5:119:ALA:C	1.81	0.73
3:V1:4:ASP:HB3	10:C1:174:ILE:HA	1.69	0.73
24:D4:64:ARG:O	29:K4:93:THR:HG21	1.88	0.73
26:F1:111:VAL:HG13	26:F1:181:ALA:HB2	1.71	0.73
11:G5:142:ARG:HD2	11:G5:147:LEU:HD11	1.70	0.73
24:D2:64:ARG:O	29:K2:93:THR:HG21	1.88	0.73
30:L6:121:GLN:CG	30:L6:153:LYS:HE3	2.17	0.73
14:N1:35:GLU:O	14:N1:39:LYS:HB2	1.88	0.73
31:P6:16:THR:O	34:S6:91:LYS:HA	1.88	0.73
31:P3:16:THR:O	34:S3:91:LYS:HA	1.88	0.73
2:U1:19:ARG:CD	2:U1:119:ALA:O	2.22	0.73
2:U1:17:ILE:HG22	2:U1:18:HIS:H	1.52	0.73
2:U4:17:ILE:CG2	2:U4:94:PRO:CA	2.50	0.73
22:A2:205:ARG:HG3	22:A2:210:ILE:HG23	1.70	0.73
23:B1:88:THR:OG1	23:B1:96:CYS:SG	2.46	0.73
23:B3:122:GLU:OE2	23:B3:213:ARG:NH1	2.21	0.73
14:N5:150:VAL:HG13	14:N5:151:ALA:N	2.02	0.73
18:Z1:88:LEU:CB	18:Z1:109:TYR:OH	2.33	0.73
18:Z2:79:ILE:HG13	18:Z2:80:ARG:H	1.52	0.73
22:A3:147:LEU:O	22:A3:165:ASN:ND2	2.20	0.73
23:B4:88:THR:OG1	23:B4:96:CYS:SG	2.46	0.73
24:D2:137:VAL:HB	24:D2:185:LYS:HB3	1.70	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L1:125:ILE:HB	30:L1:146:THR:O	1.89	0.73
31:P1:16:THR:O	34:S1:91:LYS:HA	1.88	0.73
31:P2:96:VAL:HG21	31:P2:116:LEU:HD11	1.59	0.73
31:P5:45:LEU:HD11	31:P5:49:LEU:HD21	1.69	0.73
31:P6:41:GLN:CD	31:P6:84:ILE:HD13	2.07	0.73
34:S4:4:VAL:HG23	34:S4:58:GLU:CD	2.08	0.73
18:Z4:83:LEU:CD2	34:S4:55:ARG:NH2	2.49	0.73
22:A4:205:ARG:HG3	22:A4:210:ILE:HG23	1.70	0.73
23:B2:88:THR:OG1	23:B2:96:CYS:SG	2.46	0.73
24:D6:64:ARG:CG	29:K6:95:ARG:NH2	2.52	0.73
24:D6:64:ARG:HE	29:K6:95:ARG:NH2	1.86	0.73
13:M5:28:HIS:HE1	13:M5:116:LYS:HE3	1.48	0.73
31:P6:15:PHE:HZ	31:P6:112:ILE:HD11	1.48	0.73
17:Y1:20:ARG:NH1	17:Y1:74:MET:SD	2.62	0.73
22:A1:205:ARG:HG3	22:A1:210:ILE:HG23	1.70	0.73
23:B1:122:GLU:OE2	23:B1:213:ARG:NH1	2.21	0.73
14:N3:35:GLU:O	14:N3:39:LYS:HB2	1.88	0.73
14:N5:133:ARG:HB2	30:L5:152:LYS:HG3	1.68	0.73
14:N5:35:GLU:O	14:N5:39:LYS:HB2	1.89	0.73
22:A1:214:GLU:CG	33:R1:84:TYR:CD1	2.61	0.73
3:V5:4:ASP:HB3	10:C5:174:ILE:HA	1.69	0.73
4:X4:46:HIS:HB3	4:X4:101:LEU:HD21	1.70	0.73
22:A1:214:GLU:HG3	33:R1:84:TYR:HE1	0.97	0.73
22:A5:205:ARG:HG3	22:A5:210:ILE:HG23	1.70	0.73
23:B2:122:GLU:OE2	23:B2:213:ARG:NH1	2.21	0.73
23:B3:88:THR:OG1	23:B3:96:CYS:SG	2.46	0.73
23:B4:32:ASP:HA	23:B4:46:LYS:HA	1.71	0.73
23:B5:32:ASP:HA	23:B5:46:LYS:HA	1.71	0.73
23:B6:122:GLU:OE2	23:B6:213:ARG:NH1	2.21	0.73
26:F6:111:VAL:HG13	26:F6:181:ALA:HB2	1.71	0.73
11:G1:142:ARG:HD2	11:G1:147:LEU:HD11	1.70	0.73
14:N4:150:VAL:HG13	14:N4:151:ALA:N	2.02	0.73
34:S5:34:LYS:HB2	34:S5:100:ALA:HA	1.68	0.73
2:U1:17:ILE:CG2	2:U1:94:PRO:CA	2.50	0.73
17:Y3:20:ARG:NH1	17:Y3:74:MET:SD	2.62	0.73
17:Y5:20:ARG:NH1	17:Y5:74:MET:SD	2.62	0.73
22:A3:215:GLN:N	22:A3:215:GLN:OE1	2.21	0.73
23:B1:32:ASP:HA	23:B1:46:LYS:HA	1.71	0.73
26:F5:111:VAL:HG13	26:F5:181:ALA:HB2	1.70	0.73
26:F6:137:GLN:CG	26:F6:204:ARG:N	2.51	0.73
24:D2:64:ARG:CG	29:K2:95:ARG:NH2	2.52	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D4:64:ARG:CG	29:K4:95:ARG:NH2	2.52	0.73
28:I1:123:ARG:NH1	15:O6:66:ARG:H	1.87	0.73
31:P2:16:THR:O	34:S2:91:LYS:HA	1.88	0.73
31:P2:45:LEU:CD1	31:P2:49:LEU:HD21	2.17	0.73
18:Z1:79:ILE:HG13	18:Z1:80:ARG:H	1.53	0.73
22:A5:215:GLN:OE1	22:A5:215:GLN:N	2.21	0.73
22:A6:205:ARG:HG3	22:A6:210:ILE:HG23	1.70	0.73
24:D4:137:VAL:HB	24:D4:185:LYS:HB3	1.69	0.73
30:L5:124:ASP:HB2	30:L5:147:LYS:CG	2.18	0.73
14:N5:148:ALA:H	14:N5:149:LEU:CB	1.94	0.73
31:P4:41:GLN:OE1	31:P4:84:ILE:CD1	2.37	0.73
34:S5:4:VAL:HG23	34:S5:58:GLU:OE1	1.88	0.73
2:U3:17:ILE:HG22	2:U3:95:SER:H	1.42	0.73
17:Y4:20:ARG:NH1	17:Y4:74:MET:SD	2.62	0.73
3:V4:4:ASP:HB3	10:C4:174:ILE:HA	1.69	0.73
24:D5:64:ARG:O	29:K5:93:THR:HG21	1.88	0.73
24:D3:64:ARG:CG	29:K3:95:ARG:NH2	2.52	0.73
30:L1:55:TYR:HH	30:L1:116:CYS:HG	1.27	0.73
15:O1:63:LYS:HE3	28:I3:163:GLU:HG3	1.70	0.73
31:P2:41:GLN:OE1	31:P2:84:ILE:HG12	1.89	0.73
34:S3:4:VAL:HG23	34:S3:58:GLU:OE1	1.89	0.73
34:S4:17:ASN:HD22	34:S4:101:ASN:HD21	1.34	0.73
24:D1:64:ARG:O	29:K1:93:THR:HG21	1.88	0.72
26:F4:111:VAL:HG13	26:F4:181:ALA:HB2	1.71	0.72
11:G6:142:ARG:HD2	11:G6:147:LEU:HD11	1.70	0.72
24:D5:64:ARG:HE	29:K5:95:ARG:NH2	1.86	0.72
14:N6:35:GLU:O	14:N6:39:LYS:HB2	1.89	0.72
31:P5:110:GLU:HB3	34:S5:117:ILE:HD11	1.71	0.72
34:S2:4:VAL:HG23	34:S2:58:GLU:OE1	1.89	0.72
18:Z1:46:ASN:CB	18:Z1:80:ARG:HA	2.13	0.72
18:Z6:88:LEU:CB	18:Z6:109:TYR:OH	2.34	0.72
22:A3:177:MET:SD	22:A3:180:ARG:NH2	2.62	0.72
24:D5:137:VAL:HB	24:D5:185:LYS:HB3	1.69	0.72
26:F2:123:GLU:HG3	26:F2:200:ALA:HB2	1.71	0.72
13:M1:125:GLU:CB	13:M1:129:LYS:HE3	2.12	0.72
18:Z4:79:ILE:HG13	18:Z4:80:ARG:H	1.53	0.72
11:G4:142:ARG:HD2	11:G4:147:LEU:HD11	1.70	0.72
24:D1:64:ARG:HE	29:K1:95:ARG:NH2	1.86	0.72
14:N4:133:ARG:NH2	30:L4:154:GLN:CA	2.51	0.72
13:M6:36:ARG:HE	13:M6:40:LYS:HZ2	1.37	0.72
14:N2:137:PRO:HD3	30:L2:154:GLN:CD	2.08	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:W2:37:PHE:HE1	16:W2:103:VAL:HG21	1.55	0.72
18:Z2:46:ASN:CB	18:Z2:80:ARG:HA	2.13	0.72
18:Z3:79:ILE:HG13	18:Z3:80:ARG:H	1.53	0.72
23:B2:32:ASP:HA	23:B2:46:LYS:HA	1.71	0.72
10:C3:279:ARG:C	10:C3:280:VAL:HG12	2.06	0.72
24:D3:137:VAL:HB	24:D3:185:LYS:HB3	1.69	0.72
26:F3:123:GLU:HG3	26:F3:200:ALA:HB2	1.71	0.72
12:J4:35:TYR:O	12:J4:111:GLN:NE2	2.23	0.72
30:L3:77:VAL:HA	30:L3:88:ILE:HG22	1.71	0.72
13:M1:121:LYS:O	13:M1:125:GLU:HB2	1.90	0.72
13:M6:121:LYS:O	13:M6:125:GLU:HB2	1.90	0.72
14:N6:37:ILE:HG23	14:N6:50:ILE:HG21	1.71	0.72
31:P5:15:PHE:HZ	31:P5:112:ILE:HD11	1.51	0.72
34:S6:4:VAL:HG23	34:S6:58:GLU:OE1	1.88	0.72
16:W6:37:PHE:HE1	16:W6:103:VAL:HG21	1.55	0.72
23:B2:22:VAL:N	30:L4:31:GLU:OE1	2.22	0.72
23:B3:32:ASP:HA	23:B3:46:LYS:HA	1.71	0.72
30:L1:30:LYS:HE2	23:B6:21:VAL:O	1.88	0.72
10:C5:273:LEU:CB	10:C5:280:VAL:HG11	2.02	0.72
26:F6:123:GLU:HG3	26:F6:200:ALA:HB2	1.71	0.72
12:J6:35:TYR:O	12:J6:111:GLN:NE2	2.23	0.72
30:L2:77:VAL:HA	30:L2:88:ILE:HG22	1.71	0.72
30:L4:121:GLN:HB2	30:L4:153:LYS:HG3	1.70	0.72
31:P3:119:PHE:CD1	34:S3:120:HIS:N	2.44	0.72
31:P4:15:PHE:CE2	31:P4:112:ILE:HD11	2.22	0.72
31:P4:16:THR:O	34:S4:91:LYS:HA	1.88	0.72
14:N2:35:GLU:O	14:N2:39:LYS:HB2	1.88	0.72
33:R1:57:LEU:HD11	33:R1:66:VAL:CG1	2.20	0.72
33:R5:22:THR:CG2	33:R5:72:LYS:NZ	2.53	0.72
2:U2:17:ILE:HG22	2:U2:95:SER:H	1.42	0.72
22:A1:215:GLN:OE1	22:A1:215:GLN:N	2.21	0.72
26:F1:137:GLN:CG	26:F1:204:ARG:O	2.35	0.72
26:F3:111:VAL:HG13	26:F3:181:ALA:HB2	1.71	0.72
26:F6:15:PRO:HD3	32:Q6:57:LEU:HG	1.72	0.72
11:G2:205:GLU:O	11:G2:209:TYR:N	2.23	0.72
14:N5:37:ILE:HG23	14:N5:50:ILE:HG21	1.71	0.72
23:B4:122:GLU:OE2	23:B4:213:ARG:NH1	2.20	0.72
26:F6:137:GLN:CG	26:F6:204:ARG:C	2.58	0.72
11:G1:205:GLU:O	11:G1:209:TYR:N	2.23	0.72
12:J2:35:TYR:O	12:J2:111:GLN:NE2	2.23	0.72
24:D1:64:ARG:CG	29:K1:95:ARG:NH2	2.52	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M5:27:ILE:CG2	29:K5:84:HIS:ND1	2.46	0.72
14:N4:35:GLU:O	14:N4:39:LYS:HB2	1.89	0.72
31:P6:119:PHE:CD1	34:S6:120:HIS:N	2.43	0.72
17:Y2:20:ARG:NH1	17:Y2:74:MET:SD	2.62	0.72
17:Y6:20:ARG:NH1	17:Y6:74:MET:SD	2.62	0.72
23:B4:21:VAL:CA	30:L5:31:GLU:OE1	2.37	0.72
25:E3:164:LEU:HD12	25:E3:165:GLU:H	1.55	0.72
25:E6:164:LEU:HD12	25:E6:165:GLU:H	1.55	0.72
12:J5:35:TYR:O	12:J5:111:GLN:NE2	2.23	0.72
24:D5:64:ARG:CG	29:K5:95:ARG:NH2	2.52	0.72
16:W5:37:PHE:HE1	16:W5:103:VAL:HG21	1.55	0.72
10:C2:273:LEU:CB	10:C2:280:VAL:HG11	2.02	0.72
25:E1:101:LEU:HG	25:E1:111:VAL:HA	1.72	0.72
25:E5:164:LEU:HD12	25:E5:165:GLU:H	1.55	0.72
11:G4:205:GLU:O	11:G4:209:TYR:N	2.23	0.72
23:B4:21:VAL:N	30:L5:31:GLU:CD	2.38	0.72
14:N2:37:ILE:HG23	14:N2:50:ILE:HG21	1.71	0.72
31:P1:41:GLN:CD	31:P1:84:ILE:HG23	2.10	0.72
18:Z5:80:ARG:NH1	34:S5:23:ARG:NE	2.38	0.72
22:A2:177:MET:SD	22:A2:180:ARG:NH2	2.62	0.71
23:B6:32:ASP:HA	23:B6:46:LYS:HA	1.71	0.71
26:F6:78:MET:O	26:F6:83:ASN:ND2	2.23	0.71
24:D6:64:ARG:O	29:K6:93:THR:HG21	1.88	0.71
30:L1:121:GLN:HG3	30:L1:153:LYS:CD	2.20	0.71
30:L5:77:VAL:HA	30:L5:88:ILE:HG22	1.71	0.71
15:O3:63:LYS:HZ3	28:I6:163:GLU:CB	1.88	0.71
31:P2:15:PHE:CE2	31:P2:112:ILE:HD11	2.23	0.71
10:C2:74:LYS:CE	10:C2:272:HIS:CD2	2.72	0.71
25:E5:101:LEU:HG	25:E5:111:VAL:HA	1.72	0.71
26:F3:78:MET:O	26:F3:83:ASN:ND2	2.23	0.71
24:D3:64:ARG:HE	29:K3:95:ARG:NH2	1.87	0.71
24:D5:64:ARG:CG	29:K5:95:ARG:CZ	2.69	0.71
31:P2:119:PHE:CD1	34:S2:120:HIS:N	2.43	0.71
31:P5:15:PHE:CE2	31:P5:112:ILE:CD1	2.72	0.71
33:R6:95:ILE:H	33:R6:96:ILE:HA	1.55	0.71
23:B1:33:VAL:HG22	23:B1:96:CYS:HB3	1.72	0.71
25:E6:125:LYS:NZ	25:E6:225:ILE:O	2.18	0.71
26:F1:123:GLU:HG3	26:F1:200:ALA:HB2	1.71	0.71
26:F2:111:VAL:HG13	26:F2:181:ALA:HB2	1.71	0.71
12:J2:4:ALA:N	12:J2:5:ARG:HB2	2.06	0.71
24:D3:64:ARG:CG	29:K3:95:ARG:CZ	2.69	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N5:133:ARG:CG	30:L5:154:GLN:HG2	2.14	0.71
30:L6:126:VAL:HG23	30:L6:145:VAL:HA	1.71	0.71
31:P4:15:PHE:HE2	31:P4:112:ILE:HD13	1.55	0.71
33:R5:22:THR:HG22	33:R5:72:LYS:HZ1	1.51	0.71
33:R5:95:ILE:H	33:R5:96:ILE:HA	1.55	0.71
31:P5:119:PHE:CD1	34:S5:120:HIS:N	2.43	0.71
18:Z2:80:ARG:NH1	34:S2:23:ARG:NE	2.38	0.71
18:Z3:80:ARG:NH1	34:S3:23:ARG:NE	2.38	0.71
25:E3:101:LEU:HG	25:E3:111:VAL:HA	1.72	0.71
11:G6:205:GLU:O	11:G6:209:TYR:N	2.23	0.71
12:J3:35:TYR:O	12:J3:111:GLN:NE2	2.23	0.71
24:D2:64:ARG:HE	29:K2:95:ARG:NH2	1.86	0.71
30:L4:126:VAL:HG23	30:L4:145:VAL:HA	1.72	0.71
33:R3:95:ILE:H	33:R3:96:ILE:HA	1.55	0.71
3:V1:16:LYS:HG2	3:V1:23:ILE:HG22	1.73	0.71
23:B2:182:LYS:HG2	23:B2:231:LEU:HD13	1.72	0.71
23:B2:24:PRO:HG3	30:L4:27:GLU:HB3	1.73	0.71
23:B5:182:LYS:HG2	23:B5:231:LEU:HD13	1.72	0.71
26:F4:123:GLU:HG3	26:F4:200:ALA:HB2	1.72	0.71
11:G5:205:GLU:O	11:G5:209:TYR:N	2.23	0.71
12:J1:35:TYR:O	12:J1:111:GLN:NE2	2.23	0.71
30:L1:121:GLN:HG3	30:L1:153:LYS:HE3	0.78	0.71
14:N4:145:THR:O	14:N4:147:SER:N	2.24	0.71
31:P2:45:LEU:HD11	31:P2:49:LEU:HD21	1.72	0.71
31:P2:41:GLN:CG	31:P2:84:ILE:HD13	2.20	0.71
26:F5:15:PRO:HD3	32:Q5:57:LEU:HG	1.72	0.71
33:R5:57:LEU:O	33:R5:61:ILE:HG23	1.90	0.71
34:S1:4:VAL:HG23	34:S1:58:GLU:OE1	1.89	0.71
18:Z4:80:ARG:NH1	34:S4:23:ARG:NE	2.39	0.71
18:Z5:88:LEU:CB	18:Z5:109:TYR:OH	2.33	0.71
23:B2:33:VAL:HG22	23:B2:96:CYS:HB3	1.73	0.71
23:B5:71:LEU:HD13	23:B5:82:ARG:HG3	1.73	0.71
23:B6:33:VAL:HG22	23:B6:96:CYS:HB3	1.73	0.71
10:C1:273:LEU:CB	10:C1:280:VAL:HG11	2.02	0.71
10:C4:202:THR:OG1	10:C4:221:ASP:OD2	2.08	0.71
10:C5:65:LYS:CA	10:C5:277:HIS:CE1	2.73	0.71
24:D4:132:LYS:HE2	24:D4:191:PRO:HA	1.73	0.71
25:E1:164:LEU:HD12	25:E1:165:GLU:H	1.55	0.71
30:L5:126:VAL:HG23	30:L5:145:VAL:HA	1.73	0.71
13:M4:121:LYS:O	13:M4:125:GLU:HB2	1.90	0.71
31:P3:34:MET:O	31:P3:42:ARG:CZ	2.38	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:V2:16:LYS:HG2	3:V2:23:ILE:HG22	1.73	0.71
22:A2:2:SER:HB3	22:A2:56:GLU:HG2	1.72	0.71
23:B1:71:LEU:HD13	23:B1:82:ARG:HG3	1.73	0.71
23:B4:182:LYS:HG2	23:B4:231:LEU:HD13	1.72	0.71
10:C2:116:THR:OG1	10:C2:119:GLY:O	2.08	0.71
10:C6:116:THR:OG1	10:C6:119:GLY:O	2.08	0.71
10:C6:202:THR:OG1	10:C6:221:ASP:OD2	2.08	0.71
25:E2:101:LEU:HG	25:E2:111:VAL:HA	1.72	0.71
26:F1:15:PRO:HD3	32:Q1:57:LEU:HG	1.72	0.71
28:I1:196:GLU:CD	28:I1:200:ARG:NH2	2.42	0.71
12:J3:4:ALA:N	12:J3:5:ARG:HB2	2.06	0.71
24:D4:64:ARG:CG	29:K4:95:ARG:CZ	2.69	0.71
30:L4:77:VAL:HA	30:L4:88:ILE:HG22	1.72	0.71
30:L6:77:VAL:HA	30:L6:88:ILE:HG22	1.71	0.71
15:O1:12:GLU:HA	15:O1:13:GLN:HG3	1.73	0.71
15:O4:12:GLU:HA	15:O4:13:GLN:HG3	1.73	0.71
22:A6:214:GLU:CG	33:R6:84:TYR:HE1	1.83	0.71
34:S4:4:VAL:HG23	34:S4:58:GLU:OE1	1.88	0.71
3:V3:16:LYS:HG2	3:V3:23:ILE:HG22	1.73	0.71
17:Y2:60:PHE:H	17:Y2:71:GLY:HA2	1.56	0.71
17:Y6:60:PHE:H	17:Y6:71:GLY:HA2	1.56	0.71
18:Z4:70:PRO:HG2	18:Z4:88:LEU:HD13	1.60	0.71
18:Z4:89:GLN:O	18:Z4:89:GLN:HG3	1.90	0.71
18:Z6:80:ARG:NH1	34:S6:23:ARG:NE	2.38	0.71
23:B2:71:LEU:HD13	23:B2:82:ARG:HG3	1.73	0.71
23:B4:33:VAL:HG22	23:B4:96:CYS:HB3	1.73	0.71
24:D2:132:LYS:HE2	24:D2:191:PRO:HA	1.72	0.71
12:J1:4:ALA:N	12:J1:5:ARG:HB2	2.05	0.71
24:D2:64:ARG:CG	29:K2:95:ARG:CZ	2.68	0.71
13:M2:121:LYS:O	13:M2:125:GLU:HB2	1.89	0.71
14:N1:37:ILE:HG23	14:N1:50:ILE:HG21	1.71	0.71
14:N6:133:ARG:HD3	30:L6:152:LYS:CB	2.02	0.71
3:V5:16:LYS:HG2	3:V5:23:ILE:HG22	1.73	0.71
18:Z6:80:ARG:NH1	34:S6:23:ARG:CD	2.54	0.71
23:B3:33:VAL:HG22	23:B3:96:CYS:HB3	1.73	0.71
23:B6:182:LYS:HG2	23:B6:231:LEU:HD13	1.72	0.71
24:D3:132:LYS:HE2	24:D3:191:PRO:HA	1.73	0.71
26:F2:78:MET:O	26:F2:83:ASN:ND2	2.24	0.71
14:N1:145:THR:O	14:N1:147:SER:N	2.24	0.71
14:N2:145:THR:O	14:N2:147:SER:N	2.24	0.71
14:N3:145:THR:O	14:N3:147:SER:N	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N4:37:ILE:HG23	14:N4:50:ILE:HG21	1.71	0.71
16:W3:37:PHE:HE1	16:W3:103:VAL:HG21	1.55	0.71
18:Z1:80:ARG:NH1	34:S1:23:ARG:CD	2.54	0.71
10:C4:116:THR:OG1	10:C4:119:GLY:O	2.08	0.71
10:C5:116:THR:OG1	10:C5:119:GLY:O	2.08	0.71
25:E4:164:LEU:HD12	25:E4:165:GLU:H	1.55	0.71
11:G1:153:VAL:O	11:G1:156:TYR:N	2.19	0.71
11:G2:142:ARG:HD2	11:G2:147:LEU:HD11	1.70	0.71
13:M1:36:ARG:HE	13:M1:40:LYS:HZ1	1.39	0.71
14:N3:37:ILE:HG23	14:N3:50:ILE:HG21	1.71	0.71
15:O5:12:GLU:HA	15:O5:13:GLN:HG3	1.73	0.71
31:P2:15:PHE:HE2	31:P2:112:ILE:HD13	1.55	0.71
31:P3:41:GLN:CD	31:P3:84:ILE:HD13	2.10	0.71
18:Z1:80:ARG:NH1	34:S1:23:ARG:NE	2.38	0.71
16:W4:37:PHE:HE1	16:W4:103:VAL:HG21	1.55	0.71
22:A3:2:SER:HB3	22:A3:56:GLU:HG2	1.73	0.70
23:B1:182:LYS:HG2	23:B1:231:LEU:HD13	1.72	0.70
10:C3:116:THR:OG1	10:C3:119:GLY:O	2.08	0.70
26:F2:137:GLN:CG	26:F2:204:ARG:O	2.34	0.70
11:G3:205:GLU:O	11:G3:209:TYR:N	2.23	0.70
24:D6:64:ARG:CG	29:K6:95:ARG:CZ	2.68	0.70
13:M3:28:HIS:HE1	13:M3:116:LYS:HE3	1.48	0.70
13:M5:121:LYS:O	13:M5:125:GLU:HB2	1.90	0.70
31:P5:98:ASN:O	31:P5:122:THR:OG1	1.99	0.70
31:P6:45:LEU:HD12	31:P6:49:LEU:CD2	2.20	0.70
33:R2:95:ILE:H	33:R2:96:ILE:HA	1.55	0.70
33:R4:58:MET:HA	33:R4:61:ILE:HD13	1.70	0.70
16:W1:37:PHE:HE1	16:W1:103:VAL:HG21	1.55	0.70
22:A4:177:MET:SD	22:A4:180:ARG:NH2	2.62	0.70
10:C1:116:THR:OG1	10:C1:119:GLY:O	2.08	0.70
10:C2:202:THR:OG1	10:C2:221:ASP:OD2	2.08	0.70
10:C2:279:ARG:C	10:C2:280:VAL:HG12	2.06	0.70
24:D6:132:LYS:HE2	24:D6:191:PRO:HA	1.73	0.70
26:F4:78:MET:O	26:F4:83:ASN:ND2	2.23	0.70
12:J5:4:ALA:N	12:J5:5:ARG:HB2	2.06	0.70
14:N1:142:GLU:HB2	14:N1:145:THR:OG1	1.92	0.70
14:N6:142:GLU:HB2	14:N6:145:THR:OG1	1.91	0.70
15:O2:65:ASP:CB	28:I4:123:ARG:HH22	1.99	0.70
26:F4:15:PRO:HD3	32:Q4:57:LEU:HG	1.72	0.70
2:U3:19:ARG:CD	2:U3:119:ALA:O	2.23	0.70
18:Z4:80:ARG:NH1	34:S4:23:ARG:CD	2.54	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z6:89:GLN:HG3	18:Z6:89:GLN:O	1.91	0.70
22:A6:2:SER:HB3	22:A6:56:GLU:HG2	1.72	0.70
23:B3:182:LYS:HG2	23:B3:231:LEU:HD13	1.72	0.70
25:E4:101:LEU:HG	25:E4:111:VAL:HA	1.72	0.70
11:G3:142:ARG:HD2	11:G3:147:LEU:HD11	1.70	0.70
24:D1:64:ARG:CG	29:K1:95:ARG:CZ	2.69	0.70
30:L1:30:LYS:HE3	23:B6:21:VAL:C	2.07	0.70
31:P6:34:MET:CB	31:P6:42:ARG:HG3	2.19	0.70
33:R1:95:ILE:H	33:R1:96:ILE:HA	1.55	0.70
33:R4:95:ILE:H	33:R4:96:ILE:HA	1.55	0.70
18:Z3:80:ARG:NH1	34:S3:23:ARG:CD	2.54	0.70
18:Z2:80:ARG:NH1	34:S2:23:ARG:CD	2.54	0.70
22:A1:2:SER:HB3	22:A1:56:GLU:HG2	1.73	0.70
22:A4:2:SER:HB3	22:A4:56:GLU:HG2	1.73	0.70
10:C4:273:LEU:CB	10:C4:280:VAL:HG11	2.02	0.70
11:G5:153:VAL:O	11:G5:156:TYR:N	2.19	0.70
15:O3:12:GLU:HA	15:O3:13:GLN:HG3	1.73	0.70
31:P3:96:VAL:HG21	31:P3:116:LEU:HD11	1.59	0.70
31:P4:96:VAL:HG21	31:P4:116:LEU:HD11	1.59	0.70
31:P6:124:LYS:HG2	31:P6:125:PRO:HD2	1.74	0.70
31:P6:41:GLN:HB3	31:P6:84:ILE:CD1	2.17	0.70
33:R2:21:TYR:CB	33:R2:71:ILE:CD1	2.70	0.70
33:R3:58:MET:HA	33:R3:61:ILE:HG12	1.74	0.70
23:B6:71:LEU:HD13	23:B6:82:ARG:HG3	1.73	0.70
10:C6:65:LYS:CA	10:C6:277:HIS:CE1	2.74	0.70
26:F1:78:MET:O	26:F1:83:ASN:ND2	2.23	0.70
26:F2:15:PRO:HD3	32:Q2:57:LEU:HG	1.72	0.70
26:F2:185:SER:O	28:I4:141:ARG:NH2	2.25	0.70
26:F4:137:GLN:CG	26:F4:204:ARG:C	2.60	0.70
15:O3:66:ARG:NH1	28:I6:125:LYS:NZ	2.39	0.70
31:P1:124:LYS:HG2	31:P1:125:PRO:HD2	1.74	0.70
33:R3:65:PRO:HB2	33:R3:74:GLN:HE22	1.55	0.70
18:Z5:80:ARG:NH1	34:S5:23:ARG:CD	2.54	0.70
22:A5:2:SER:HB3	22:A5:56:GLU:HG2	1.73	0.70
23:B3:71:LEU:HD13	23:B3:82:ARG:HG3	1.73	0.70
23:B5:66:VAL:HG22	23:B5:87:ILE:HG22	1.74	0.70
26:F5:137:GLN:CG	26:F5:204:ARG:C	2.60	0.70
26:F5:123:GLU:HG3	26:F5:200:ALA:HB2	1.72	0.70
26:F5:78:MET:O	26:F5:83:ASN:ND2	2.23	0.70
11:G3:153:VAL:O	11:G3:156:TYR:N	2.19	0.70
14:N2:142:GLU:HB2	14:N2:145:THR:OG1	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O2:84:ARG:NH1	30:L4:27:GLU:OE2	2.22	0.70
33:R6:21:TYR:CE2	33:R6:72:LYS:CE	2.74	0.70
2:U1:25:THR:HG22	2:U1:86:LYS:HA	1.74	0.70
23:B4:66:VAL:HG22	23:B4:87:ILE:HG22	1.74	0.70
10:C6:142:LYS:CD	10:C6:157:LEU:CD1	2.65	0.70
26:F1:137:GLN:CG	26:F1:204:ARG:C	2.60	0.70
28:I5:196:GLU:CD	28:I5:200:ARG:NH2	2.44	0.70
12:J4:4:ALA:N	12:J4:5:ARG:HB2	2.05	0.70
30:L1:77:VAL:HA	30:L1:88:ILE:HG22	1.72	0.70
30:L2:126:VAL:HG23	30:L2:145:VAL:HA	1.72	0.70
14:N5:145:THR:O	14:N5:147:SER:N	2.24	0.70
14:N6:145:THR:O	14:N6:147:SER:N	2.24	0.70
15:O2:12:GLU:HA	15:O2:13:GLN:HG3	1.73	0.70
31:P4:124:LYS:HG2	31:P4:125:PRO:HD2	1.74	0.70
3:V6:16:LYS:HG2	3:V6:23:ILE:HG22	1.72	0.70
18:Z3:70:PRO:HG2	18:Z3:88:LEU:HD13	1.60	0.70
25:E2:164:LEU:HD12	25:E2:165:GLU:H	1.55	0.70
26:F3:137:GLN:CG	26:F3:204:ARG:O	2.35	0.70
26:F5:137:GLN:CG	26:F5:204:ARG:O	2.35	0.70
12:J2:137:VAL:HG22	12:J2:157:ILE:HG22	1.74	0.70
13:M3:121:LYS:O	13:M3:125:GLU:HB2	1.90	0.70
14:N4:142:GLU:HB2	14:N4:145:THR:OG1	1.91	0.70
31:P4:119:PHE:CD1	34:S4:120:HIS:N	2.43	0.70
31:P5:124:LYS:HG2	31:P5:125:PRO:HD2	1.74	0.70
18:Z4:46:ASN:CB	18:Z4:80:ARG:HA	2.13	0.70
22:A1:177:MET:SD	22:A1:180:ARG:NH2	2.62	0.70
23:B4:103:MET:HG2	23:B4:215:VAL:HG12	1.74	0.70
23:B5:33:VAL:HG22	23:B5:96:CYS:HB3	1.73	0.70
25:E4:11:ARG:NH1	25:E4:21:ASP:OD1	2.25	0.70
11:G2:141:ILE:HG13	11:G2:144:LEU:HD21	0.70	0.70
12:J6:4:ALA:N	12:J6:5:ARG:HB2	2.05	0.70
13:M2:48:HIS:HB2	13:M2:114:TYR:OH	1.92	0.70
15:O6:12:GLU:HA	15:O6:13:GLN:HG3	1.73	0.70
18:Z4:80:ARG:HH12	34:S4:23:ARG:NE	1.90	0.70
2:U3:25:THR:HG22	2:U3:86:LYS:HA	1.74	0.70
2:U5:25:THR:HG22	2:U5:86:LYS:HA	1.74	0.70
17:Y4:60:PHE:H	17:Y4:71:GLY:HA2	1.56	0.70
17:Y5:60:PHE:H	17:Y5:71:GLY:HA2	1.56	0.70
10:C3:74:LYS:CE	10:C3:272:HIS:CD2	2.73	0.70
25:E1:125:LYS:NZ	25:E1:225:ILE:O	2.18	0.70
29:K6:14:LEU:HD11	29:K6:35:LEU:HD22	1.74	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M1:48:HIS:HB2	13:M1:114:TYR:OH	1.92	0.70
34:S2:50:ILE:CD1	34:S2:67:VAL:CG2	2.70	0.70
17:Y3:60:PHE:H	17:Y3:71:GLY:HA2	1.55	0.70
10:C4:65:LYS:CA	10:C4:277:HIS:CE1	2.73	0.69
10:C5:202:THR:OG1	10:C5:221:ASP:OD2	2.08	0.69
25:E5:105:THR:HG23	25:E5:106:LYS:HG2	1.74	0.69
26:F6:137:GLN:CG	26:F6:204:ARG:O	2.32	0.69
11:G1:141:ILE:HG13	11:G1:144:LEU:HD21	0.70	0.69
12:J5:137:VAL:HG22	12:J5:157:ILE:HG22	1.74	0.69
14:N3:142:GLU:HB2	14:N3:145:THR:OG1	1.91	0.69
3:V4:16:LYS:HG2	3:V4:23:ILE:HG22	1.73	0.69
18:Z1:70:PRO:HG2	18:Z1:88:LEU:HD13	1.60	0.69
18:Z5:70:PRO:HG2	18:Z5:88:LEU:HD13	1.60	0.69
10:C1:202:THR:OG1	10:C1:221:ASP:OD2	2.08	0.69
24:D5:54:ARG:HE	24:D5:57:ASN:HD22	1.40	0.69
25:E1:105:THR:HG23	25:E1:106:LYS:HG2	1.74	0.69
25:E6:101:LEU:HG	25:E6:111:VAL:HA	1.72	0.69
27:H4:162:GLN:HG3	27:H4:165:ASN:HB3	1.72	0.69
28:I5:8:TRP:HA	28:I5:18:ARG:HH21	1.57	0.69
13:M5:48:HIS:HB2	13:M5:114:TYR:OH	1.92	0.69
32:Q4:4:LYS:NZ	32:Q4:99:TYR:CB	2.55	0.69
33:R5:73:LEU:C	33:R5:75:GLU:H	1.95	0.69
18:Z5:89:GLN:HG3	18:Z5:89:GLN:O	1.90	0.69
18:Z6:85:ARG:HG3	18:Z6:85:ARG:O	1.93	0.69
10:C4:279:ARG:NH2	22:A4:118:GLU:HG3	2.07	0.69
10:C6:279:ARG:NH2	22:A6:118:GLU:HG3	2.07	0.69
25:E1:11:ARG:NH1	25:E1:21:ASP:OD1	2.25	0.69
12:J3:137:VAL:HG22	12:J3:157:ILE:HG22	1.74	0.69
13:M3:48:HIS:HB2	13:M3:114:TYR:OH	1.92	0.69
34:S1:50:ILE:CD1	34:S1:67:VAL:CG2	2.70	0.69
16:W3:111:MET:SD	16:W3:115:GLU:HG2	2.31	0.69
17:Y5:22:GLN:HE22	25:E5:56:LEU:HD12	1.58	0.69
18:Z1:89:GLN:O	18:Z1:89:GLN:HG3	1.90	0.69
22:A2:207:PRO:O	22:A2:208:GLU:HG3	1.93	0.69
22:A6:207:PRO:O	22:A6:208:GLU:HG3	1.93	0.69
24:D5:132:LYS:HE2	24:D5:191:PRO:HA	1.73	0.69
32:Q1:4:LYS:NZ	32:Q1:99:TYR:CB	2.55	0.69
32:Q2:4:LYS:NZ	32:Q2:99:TYR:CB	2.55	0.69
33:R3:65:PRO:CA	33:R3:73:LEU:CD2	2.68	0.69
34:S3:50:ILE:CD1	34:S3:67:VAL:CG2	2.70	0.69
34:S6:50:ILE:CD1	34:S6:67:VAL:CG2	2.70	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U6:25:THR:HG22	2:U6:86:LYS:HA	1.74	0.69
17:Y1:60:PHE:H	17:Y1:71:GLY:HA2	1.55	0.69
18:Z2:89:GLN:HG3	18:Z2:89:GLN:O	1.91	0.69
22:A4:207:PRO:O	22:A4:208:GLU:HG3	1.93	0.69
22:A5:177:MET:SD	22:A5:180:ARG:NH2	2.62	0.69
23:B2:24:PRO:CG	30:L4:27:GLU:HB3	2.22	0.69
25:E3:125:LYS:NZ	25:E3:225:ILE:O	2.18	0.69
25:E6:105:THR:HG23	25:E6:106:LYS:HG2	1.74	0.69
11:G2:153:VAL:O	11:G2:156:TYR:N	2.19	0.69
11:G4:141:ILE:HG13	11:G4:144:LEU:HD21	0.70	0.69
15:O2:63:LYS:NZ	28:I4:158:ILE:HD11	2.06	0.69
15:O3:34:PHE:HB3	15:O3:41:PHE:HB2	1.75	0.69
31:P4:41:GLN:OE1	31:P4:84:ILE:HG12	1.92	0.69
31:P6:15:PHE:HE2	31:P6:112:ILE:HD13	1.55	0.69
32:Q1:4:LYS:HZ2	32:Q1:99:TYR:CB	2.05	0.69
34:S1:50:ILE:CD1	34:S1:67:VAL:HG23	2.23	0.69
18:Z3:89:GLN:O	18:Z3:89:GLN:HG3	1.91	0.69
18:Z6:80:ARG:NH1	34:S6:23:ARG:HD2	2.07	0.69
23:B3:66:VAL:HG22	23:B3:87:ILE:HG22	1.74	0.69
23:B4:71:LEU:HD13	23:B4:82:ARG:HG3	1.73	0.69
26:F2:137:GLN:CG	26:F2:204:ARG:C	2.60	0.69
11:G1:141:ILE:HG12	11:G1:141:ILE:O	1.93	0.69
15:O2:66:ARG:NE	28:I4:125:LYS:CD	2.52	0.69
12:J1:136:ARG:NH1	12:J1:138:ARG:O	2.25	0.69
13:M6:48:HIS:HB2	13:M6:114:TYR:OH	1.92	0.69
14:N6:29:THR:C	14:N6:31:ASP:H	1.95	0.69
26:F3:15:PRO:HD3	32:Q3:57:LEU:HG	1.72	0.69
32:Q5:4:LYS:NZ	32:Q5:99:TYR:CB	2.56	0.69
22:A6:177:MET:SD	22:A6:180:ARG:NH2	2.62	0.69
25:E5:11:ARG:NH1	25:E5:21:ASP:OD1	2.25	0.69
29:K3:14:LEU:HD11	29:K3:35:LEU:HD22	1.74	0.69
31:P2:41:GLN:OE1	31:P2:84:ILE:CD1	2.41	0.69
31:P3:15:PHE:O	31:P3:16:THR:CB	2.39	0.69
32:Q5:4:LYS:HZ2	32:Q5:99:TYR:CB	2.06	0.69
33:R5:21:TYR:CE2	33:R5:72:LYS:CD	2.75	0.69
34:S2:50:ILE:CD1	34:S2:67:VAL:HG23	2.23	0.69
34:S3:50:ILE:CD1	34:S3:67:VAL:HG23	2.23	0.69
2:U2:19:ARG:CD	2:U2:119:ALA:O	2.23	0.69
18:Z1:80:ARG:HH12	34:S1:23:ARG:NE	1.90	0.69
10:C6:270:THR:CG2	22:A6:69:GLU:CG	2.70	0.69
25:E2:105:THR:HG23	25:E2:106:LYS:HG2	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E6:183:VAL:HG23	25:E6:189:LEU:HA	1.75	0.69
11:G5:141:ILE:HG13	11:G5:144:LEU:HD21	0.70	0.69
12:J4:136:ARG:NH1	12:J4:138:ARG:O	2.26	0.69
12:J5:136:ARG:NH1	12:J5:138:ARG:O	2.26	0.69
12:J6:136:ARG:NH1	12:J6:138:ARG:O	2.25	0.69
30:L2:121:GLN:HG3	30:L2:153:LYS:HE3	1.74	0.69
30:L4:121:GLN:CB	30:L4:153:LYS:HG3	2.22	0.69
31:P2:41:GLN:CD	31:P2:84:ILE:HD13	2.13	0.69
3:V2:60:ARG:NH2	22:A2:156:TYR:O	2.26	0.69
3:V4:60:ARG:NH2	22:A4:156:TYR:O	2.26	0.69
17:Y4:22:GLN:HE22	25:E4:56:LEU:HD12	1.58	0.69
18:Z1:85:ARG:HG3	18:Z1:85:ARG:O	1.92	0.69
22:A3:207:PRO:O	22:A3:208:GLU:HG3	1.93	0.69
23:B1:66:VAL:HG22	23:B1:87:ILE:HG22	1.74	0.69
23:B2:66:VAL:HG22	23:B2:87:ILE:HG22	1.74	0.69
10:C2:65:LYS:CA	10:C2:277:HIS:CE1	2.73	0.69
10:C3:202:THR:OG1	10:C3:221:ASP:OD2	2.08	0.69
25:E3:11:ARG:NH1	25:E3:21:ASP:OD1	2.25	0.69
25:E4:75:LYS:O	25:E4:77:ARG:N	2.26	0.69
29:K1:14:LEU:HD11	29:K1:35:LEU:HD22	1.74	0.69
14:N6:76:LYS:HD3	14:N6:81:ALA:HB3	1.74	0.69
31:P1:15:PHE:HE2	31:P1:112:ILE:HD13	1.55	0.69
32:Q3:4:LYS:NZ	32:Q3:99:TYR:CB	2.55	0.69
32:Q6:4:LYS:NZ	32:Q6:99:TYR:CB	2.55	0.69
32:Q6:4:LYS:HZ2	32:Q6:99:TYR:CB	2.06	0.69
33:R3:63:ARG:HG2	33:R3:63:ARG:HH11	1.57	0.69
34:S4:50:ILE:CD1	34:S4:67:VAL:HG23	2.23	0.69
34:S5:50:ILE:CD1	34:S5:67:VAL:CG2	2.70	0.69
2:U2:25:THR:HG22	2:U2:86:LYS:HA	1.74	0.69
3:V3:60:ARG:NH2	22:A3:156:TYR:O	2.26	0.69
18:Z1:80:ARG:NH1	34:S1:23:ARG:HD2	2.07	0.69
18:Z4:80:ARG:NH1	34:S4:23:ARG:HD2	2.07	0.69
18:Z4:85:ARG:O	18:Z4:85:ARG:HG3	1.92	0.69
23:B1:103:MET:HG2	23:B1:215:VAL:HG12	1.74	0.69
24:D1:54:ARG:HE	24:D1:57:ASN:HD22	1.41	0.69
24:D3:54:ARG:HE	24:D3:57:ASN:HD22	1.41	0.69
25:E2:11:ARG:NH1	25:E2:21:ASP:OD1	2.25	0.69
26:F4:137:GLN:CG	26:F4:204:ARG:O	2.35	0.69
29:K3:19:GLY:H	29:K3:92:ALA:HB2	1.58	0.69
14:N5:29:THR:HG22	14:N5:31:ASP:H	1.58	0.69
15:O2:34:PHE:HB3	15:O2:41:PHE:HB2	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A3:211:GLU:CB	33:R3:81:ARG:HH21	2.05	0.69
18:Z2:80:ARG:NH1	34:S2:23:ARG:HD2	2.07	0.69
18:Z3:80:ARG:NH1	34:S3:23:ARG:HD2	2.07	0.69
3:V1:60:ARG:NH2	22:A1:156:TYR:O	2.26	0.69
25:E2:125:LYS:NZ	25:E2:225:ILE:O	2.18	0.69
25:E3:105:THR:HG23	25:E3:106:LYS:HG2	1.74	0.69
17:Y6:22:GLN:HE22	25:E6:56:LEU:HD12	1.58	0.69
26:F3:137:GLN:CG	26:F3:204:ARG:C	2.60	0.69
28:I3:8:TRP:HA	28:I3:18:ARG:HH21	1.57	0.69
24:D4:64:ARG:HE	29:K4:95:ARG:NH2	1.86	0.69
13:M4:48:HIS:HB2	13:M4:114:TYR:OH	1.92	0.69
14:N4:76:LYS:HD3	14:N4:81:ALA:HB3	1.75	0.69
14:N5:84:LEU:HA	14:N5:135:LEU:HD21	1.75	0.69
14:N5:142:GLU:HB2	14:N5:145:THR:OG1	1.92	0.69
31:P1:44:ARG:HH11	31:P1:44:ARG:HG3	1.58	0.69
22:A5:211:GLU:CB	33:R5:81:ARG:HH21	2.05	0.69
34:S4:16:LEU:HD21	34:S4:72:GLN:HE22	1.58	0.69
18:Z3:46:ASN:CB	18:Z3:80:ARG:HA	2.13	0.69
10:C1:270:THR:CG2	22:A1:69:GLU:CG	2.70	0.68
25:E5:183:VAL:HG23	25:E5:189:LEU:HA	1.75	0.68
25:E6:11:ARG:NH1	25:E6:21:ASP:OD1	2.25	0.68
28:I4:8:TRP:HA	28:I4:18:ARG:HH21	1.57	0.68
12:J1:138:ARG:NH2	12:J1:153:SER:OG	2.27	0.68
12:J5:138:ARG:NH2	12:J5:153:SER:OG	2.26	0.68
29:K3:80:ARG:HA	29:K3:85:LEU:HD12	1.75	0.68
14:N1:76:LYS:HD3	14:N1:81:ALA:HB3	1.75	0.68
14:N5:76:LYS:HD3	14:N5:81:ALA:HB3	1.75	0.68
15:O1:34:PHE:HB3	15:O1:41:PHE:HB2	1.75	0.68
15:O5:34:PHE:HB3	15:O5:41:PHE:HB2	1.75	0.68
18:Z2:70:PRO:HG2	18:Z2:88:LEU:HD13	1.60	0.68
10:C1:279:ARG:NH2	22:A1:118:GLU:HG3	2.07	0.68
22:A4:211:GLU:CB	33:R4:81:ARG:HH21	2.05	0.68
10:C5:279:ARG:NH2	22:A5:118:GLU:HG3	2.07	0.68
23:B2:103:MET:HG2	23:B2:215:VAL:HG12	1.75	0.68
24:D1:132:LYS:HE2	24:D1:191:PRO:HA	1.73	0.68
25:E2:75:LYS:O	25:E2:77:ARG:N	2.26	0.68
11:G4:141:ILE:O	11:G4:141:ILE:HG12	1.93	0.68
28:I4:197:PHE:HA	28:I4:200:ARG:CD	2.22	0.68
28:I6:8:TRP:HA	28:I6:18:ARG:HH21	1.58	0.68
12:J2:138:ARG:NH2	12:J2:153:SER:OG	2.26	0.68
12:J3:138:ARG:NH2	12:J3:153:SER:OG	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O4:34:PHE:HB3	15:O4:41:PHE:HB2	1.75	0.68
31:P4:41:GLN:CD	31:P4:84:ILE:HD13	2.12	0.68
31:P5:133:ILE:HG22	31:P5:134:GLY:H	1.56	0.68
32:Q2:4:LYS:HZ2	32:Q2:99:TYR:CB	2.07	0.68
22:A1:211:GLU:CB	33:R1:81:ARG:HH21	2.05	0.68
29:K2:14:LEU:HD11	29:K2:35:LEU:HD22	1.74	0.68
23:B4:21:VAL:CA	30:L5:31:GLU:CG	2.69	0.68
14:N1:29:THR:HG22	14:N1:31:ASP:H	1.58	0.68
18:Z5:80:ARG:HH12	34:S5:23:ARG:NE	1.90	0.68
10:C2:74:LYS:HE2	10:C2:272:HIS:HB3	1.73	0.68
24:D2:54:ARG:HE	24:D2:57:ASN:HD22	1.41	0.68
26:F5:54:GLY:O	32:Q5:125:ARG:NH2	2.27	0.68
11:G5:141:ILE:HG12	11:G5:141:ILE:O	1.93	0.68
12:J2:136:ARG:NH1	12:J2:138:ARG:O	2.26	0.68
31:P5:15:PHE:CE2	31:P5:112:ILE:CG1	2.70	0.68
33:R5:22:THR:CG2	33:R5:72:LYS:HZ2	2.06	0.68
22:A6:211:GLU:CB	33:R6:81:ARG:HH21	2.05	0.68
34:S1:16:LEU:HD21	34:S1:72:GLN:HE22	1.58	0.68
3:V6:60:ARG:NH2	22:A6:156:TYR:O	2.26	0.68
18:Z3:85:ARG:HG3	18:Z3:85:ARG:O	1.92	0.68
3:V5:60:ARG:NH2	22:A5:156:TYR:O	2.26	0.68
22:A5:207:PRO:O	22:A5:208:GLU:HG3	1.93	0.68
23:B6:103:MET:HG2	23:B6:215:VAL:HG12	1.74	0.68
10:C3:74:LYS:HE2	10:C3:272:HIS:HB3	1.73	0.68
25:E1:52:LEU:HD21	25:E1:111:VAL:HG11	1.76	0.68
25:E4:52:LEU:HD21	25:E4:111:VAL:HG11	1.76	0.68
26:F2:54:GLY:O	32:Q2:125:ARG:NH2	2.27	0.68
11:G3:141:ILE:HG13	11:G3:144:LEU:HD21	0.69	0.68
28:I1:124:LYS:O	15:O6:66:ARG:NH2	2.27	0.68
12:J3:136:ARG:NH1	12:J3:138:ARG:O	2.25	0.68
12:J4:138:ARG:NH2	12:J4:153:SER:OG	2.26	0.68
12:J6:138:ARG:NH2	12:J6:153:SER:OG	2.26	0.68
29:K1:80:ARG:HA	29:K1:85:LEU:HD12	1.75	0.68
29:K5:14:LEU:HD11	29:K5:35:LEU:HD22	1.74	0.68
14:N4:29:THR:HG22	14:N4:31:ASP:H	1.58	0.68
31:P2:124:LYS:HG2	31:P2:125:PRO:HD2	1.74	0.68
31:P3:15:PHE:CZ	31:P3:17:TYR:HB2	2.27	0.68
31:P4:41:GLN:CD	31:P4:84:ILE:CG2	2.61	0.68
31:P5:34:MET:HB3	31:P5:42:ARG:HG3	1.74	0.68
18:Z5:85:ARG:O	18:Z5:85:ARG:HG3	1.92	0.68
23:B6:66:VAL:HG22	23:B6:87:ILE:HG22	1.74	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F6:54:GLY:O	32:Q6:125:ARG:NH2	2.27	0.68
28:I2:8:TRP:HA	28:I2:18:ARG:HH21	1.58	0.68
12:J1:137:VAL:HG22	12:J1:157:ILE:HG22	1.74	0.68
29:K5:80:ARG:HA	29:K5:85:LEU:HD12	1.76	0.68
14:N3:132:LYS:HA	30:L3:152:LYS:HZ2	1.57	0.68
31:P5:33:LEU:O	31:P5:37:TYR:HB2	1.93	0.68
34:S5:50:ILE:CD1	34:S5:67:VAL:HG23	2.23	0.68
17:Y2:109:GLU:HG3	17:Y2:113:ARG:CZ	2.22	0.68
18:Z2:85:ARG:HG3	18:Z2:85:ARG:O	1.92	0.68
10:C3:279:ARG:NH2	22:A3:118:GLU:HG3	2.07	0.68
10:C5:101:SER:OG	10:C5:132:ASP:OD1	2.12	0.68
25:E2:183:VAL:HG23	25:E2:189:LEU:HA	1.75	0.68
11:G2:149:LYS:HZ3	11:G2:149:LYS:HB2	1.58	0.68
29:K4:80:ARG:HA	29:K4:85:LEU:HD12	1.76	0.68
30:L1:126:VAL:HG23	30:L1:145:VAL:HA	1.76	0.68
14:N6:133:ARG:HD3	30:L6:152:LYS:HG3	0.71	0.68
14:N5:129:TYR:C	14:N5:134:VAL:HG22	1.99	0.68
14:N6:133:ARG:NH1	30:L6:152:LYS:CA	2.54	0.68
31:P6:41:GLN:HE22	31:P6:115:TYR:HB3	1.58	0.68
18:Z3:80:ARG:HH12	34:S3:23:ARG:NE	1.90	0.68
34:S4:50:ILE:CD1	34:S4:67:VAL:CG2	2.70	0.68
18:Z6:80:ARG:HH12	34:S6:23:ARG:NE	1.90	0.68
18:Z5:80:ARG:NH1	34:S5:23:ARG:HD2	2.07	0.68
22:A1:207:PRO:O	22:A1:208:GLU:HG3	1.93	0.68
10:C4:68:ARG:HH22	10:C4:276:THR:C	1.97	0.68
25:E6:75:LYS:O	25:E6:77:ARG:N	2.26	0.68
11:G6:54:GLY:HA3	11:G6:63:MET:HG2	1.76	0.68
12:J6:137:VAL:HG22	12:J6:157:ILE:HG22	1.74	0.68
29:K2:80:ARG:HA	29:K2:85:LEU:HD12	1.76	0.68
29:K4:19:GLY:H	29:K4:92:ALA:HB2	1.58	0.68
14:N6:133:ARG:CG	30:L6:152:LYS:HG3	2.21	0.68
14:N1:133:ARG:NH2	30:L1:154:GLN:CA	2.53	0.68
31:P2:41:GLN:CD	31:P2:84:ILE:CG2	2.63	0.68
25:E3:183:VAL:HG23	25:E3:189:LEU:HA	1.74	0.68
11:G1:149:LYS:HZ2	11:G1:149:LYS:HB2	1.56	0.68
15:O3:66:ARG:HH12	28:I6:125:LYS:NZ	1.92	0.68
31:P3:124:LYS:HG2	31:P3:125:PRO:HD2	1.74	0.68
31:P5:96:VAL:HG21	31:P5:116:LEU:HD11	1.60	0.68
22:A1:211:GLU:HB2	33:R1:81:ARG:HH21	1.59	0.68
33:R3:58:MET:HA	33:R3:61:ILE:CD1	2.23	0.68
17:Y3:22:GLN:HE22	25:E3:56:LEU:HD12	1.58	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C2:279:ARG:NH2	22:A2:118:GLU:HG3	2.07	0.68
26:F1:54:GLY:O	32:Q1:125:ARG:NH2	2.27	0.68
26:F4:54:GLY:O	32:Q4:125:ARG:NH2	2.27	0.68
23:B2:24:PRO:HD3	30:L4:27:GLU:HB3	1.76	0.68
30:L5:124:ASP:HB3	30:L5:147:LYS:HE3	1.76	0.68
14:N5:133:ARG:CG	30:L5:154:GLN:CG	2.72	0.68
14:N3:130:LYS:HE2	14:N3:139:TRP:O	1.93	0.68
14:N5:129:TYR:CB	14:N5:134:VAL:CG2	2.22	0.68
15:O6:34:PHE:HB3	15:O6:41:PHE:HB2	1.75	0.68
31:P4:41:GLN:CG	31:P4:84:ILE:HD13	2.24	0.68
33:R4:58:MET:CA	33:R4:61:ILE:CD1	2.67	0.68
34:S2:16:LEU:HD21	34:S2:72:GLN:HE22	1.58	0.68
34:S6:16:LEU:HD21	34:S6:72:GLN:HE22	1.58	0.68
2:U4:25:THR:HG22	2:U4:86:LYS:HA	1.74	0.68
18:Z3:49:LEU:HD11	34:S3:5:ILE:CG2	2.24	0.68
22:A6:214:GLU:OE1	22:A6:215:GLN:OE1	2.11	0.67
25:E3:52:LEU:HD21	25:E3:111:VAL:HG11	1.76	0.67
28:I1:8:TRP:HA	28:I1:18:ARG:HH21	1.57	0.67
29:K2:19:GLY:H	29:K2:92:ALA:HB2	1.58	0.67
14:N2:76:LYS:HD3	14:N2:81:ALA:HB3	1.75	0.67
14:N6:30:SER:HB2	14:N6:66:VAL:O	1.94	0.67
31:P2:121:ILE:CD1	31:P2:123:TYR:CD2	2.74	0.67
31:P4:15:PHE:HE2	31:P4:112:ILE:CD1	2.07	0.67
34:S6:50:ILE:CD1	34:S6:67:VAL:HG23	2.23	0.67
17:Y1:22:GLN:HE22	25:E1:56:LEU:HD12	1.58	0.67
18:Z2:80:ARG:HH12	34:S2:23:ARG:NE	1.90	0.67
24:D6:198:ILE:HG23	24:D6:200:PRO:HD3	1.77	0.67
29:K1:19:GLY:H	29:K1:92:ALA:HB2	1.58	0.67
29:K4:14:LEU:HD11	29:K4:35:LEU:HD22	1.74	0.67
14:N3:76:LYS:HD3	14:N3:81:ALA:HB3	1.75	0.67
31:P3:35:GLN:HA	31:P3:42:ARG:CZ	2.24	0.67
33:R3:61:ILE:O	33:R3:73:LEU:HD22	1.94	0.67
22:A4:89:LYS:HE2	33:R4:82:ASP:OD1	1.94	0.67
18:Z2:49:LEU:HD11	34:S2:5:ILE:CG2	2.24	0.67
22:A1:214:GLU:OE1	22:A1:215:GLN:OE1	2.10	0.67
22:A5:211:GLU:HB2	33:R5:81:ARG:HH21	1.59	0.67
23:B3:103:MET:HG2	23:B3:215:VAL:HG12	1.75	0.67
24:D4:64:ARG:NE	29:K4:95:ARG:CZ	2.57	0.67
25:E4:183:VAL:HG23	25:E4:189:LEU:HA	1.75	0.67
25:E5:52:LEU:HD21	25:E5:111:VAL:HG11	1.76	0.67
28:I2:124:LYS:O	28:I2:125:LYS:CG	2.42	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P1:98:ASN:ND2	31:P1:103:ASN:OD1	2.28	0.67
33:R3:107:LYS:HA	33:R3:110:ASP:HB3	1.76	0.67
22:A4:211:GLU:HB2	33:R4:81:ARG:HH21	1.59	0.67
2:U5:19:ARG:CD	2:U5:119:ALA:O	2.23	0.67
11:G6:141:ILE:O	11:G6:141:ILE:HG12	1.92	0.67
12:J4:137:VAL:HG22	12:J4:157:ILE:HG22	1.74	0.67
29:K5:19:GLY:H	29:K5:92:ALA:HB2	1.58	0.67
29:K6:80:ARG:HA	29:K6:85:LEU:HD12	1.76	0.67
18:Z1:49:LEU:HD11	34:S1:5:ILE:CG2	2.24	0.67
17:Y5:127:ALA:HA	17:Y5:130:LYS:HD3	1.77	0.67
17:Y6:127:ALA:HA	17:Y6:130:LYS:HD3	1.77	0.67
18:Z4:49:LEU:HD11	34:S4:5:ILE:CG2	2.24	0.67
24:D6:54:ARG:HE	24:D6:57:ASN:HD22	1.40	0.67
25:E1:183:VAL:HG23	25:E1:189:LEU:HA	1.75	0.67
25:E4:105:THR:HG23	25:E4:106:LYS:HG2	1.74	0.67
11:G1:139:SER:O	11:G1:142:ARG:CG	2.43	0.67
11:G4:147:LEU:HD13	11:G4:147:LEU:C	2.15	0.67
14:N3:29:THR:HG22	14:N3:31:ASP:H	1.58	0.67
14:N6:133:ARG:HD2	30:L6:152:LYS:HB2	1.70	0.67
22:A3:211:GLU:HB2	33:R3:81:ARG:HH21	1.59	0.67
31:P1:119:PHE:CD1	34:S1:120:HIS:N	2.44	0.67
10:C5:270:THR:CG2	22:A5:69:GLU:CG	2.70	0.67
25:E2:52:LEU:HD21	25:E2:111:VAL:HG11	1.76	0.67
11:G5:147:LEU:C	11:G5:147:LEU:HD13	2.15	0.67
23:B4:21:VAL:N	30:L5:31:GLU:N	2.42	0.67
14:N1:30:SER:HB2	14:N1:66:VAL:O	1.94	0.67
31:P6:98:ASN:ND2	31:P6:103:ASN:OD1	2.28	0.67
33:R2:107:LYS:HA	33:R2:110:ASP:HB3	1.77	0.67
16:W5:3:ARG:HH22	16:W5:28:ARG:HD2	1.60	0.67
23:B2:174:ARG:HG3	23:B2:175:GLU:HG2	1.77	0.67
23:B6:174:ARG:HG3	23:B6:175:GLU:HG2	1.77	0.67
24:D3:210:ILE:HD11	33:R3:16:ILE:HD13	1.77	0.67
17:Y2:22:GLN:HE22	25:E2:56:LEU:HD12	1.58	0.67
11:G2:139:SER:O	11:G2:142:ARG:CG	2.43	0.67
11:G3:54:GLY:HA3	11:G3:63:MET:HG2	1.76	0.67
11:G5:212:LEU:O	11:G5:216:ARG:N	2.28	0.67
11:G6:153:VAL:O	11:G6:156:TYR:N	2.19	0.67
28:I3:199:LEU:HA	28:I3:202:ILE:HD12	1.77	0.67
14:N4:30:SER:HB2	14:N4:66:VAL:O	1.94	0.67
26:F3:54:GLY:O	32:Q3:125:ARG:NH2	2.27	0.67
34:S3:16:LEU:HD21	34:S3:72:GLN:HE22	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A2:211:GLU:HB2	33:R2:81:ARG:HH21	1.59	0.67
10:C2:270:THR:CG2	22:A2:69:GLU:CG	2.70	0.67
22:A2:89:LYS:HE2	33:R2:82:ASP:OD1	1.94	0.67
22:A3:210:ILE:CG1	22:A3:211:GLU:H	2.08	0.67
23:B3:174:ARG:HG3	23:B3:175:GLU:HG2	1.77	0.67
23:B4:174:ARG:HG3	23:B4:175:GLU:HG2	1.77	0.67
23:B5:103:MET:HG2	23:B5:215:VAL:HG12	1.74	0.67
10:C6:101:SER:OG	10:C6:132:ASP:OD1	2.12	0.67
26:F6:188:TYR:HA	26:F6:191:LYS:HB2	1.77	0.67
14:N3:30:SER:HB2	14:N3:66:VAL:O	1.94	0.67
33:R4:44:LYS:HG3	33:R4:47:ARG:HH22	1.60	0.67
33:R5:107:LYS:HA	33:R5:110:ASP:HB3	1.77	0.67
34:S5:16:LEU:HD21	34:S5:72:GLN:HE22	1.59	0.67
2:U3:66:ARG:NH1	2:U3:68:THR:OG1	2.28	0.67
10:C1:65:LYS:CA	10:C1:277:HIS:CE1	2.74	0.67
10:C3:65:LYS:CA	10:C3:277:HIS:CE1	2.74	0.67
24:D4:54:ARG:HE	24:D4:57:ASN:HD22	1.41	0.67
24:D6:107:TYR:HA	24:D6:110:LEU:HB2	1.77	0.67
26:F1:188:TYR:HA	26:F1:191:LYS:HB2	1.77	0.67
11:G3:141:ILE:O	11:G3:141:ILE:HG12	1.93	0.67
11:G6:139:SER:O	11:G6:142:ARG:CG	2.43	0.67
11:G6:141:ILE:HG13	11:G6:144:LEU:HD21	0.69	0.67
14:N2:133:ARG:HD2	30:L2:152:LYS:HE3	1.72	0.67
33:R1:107:LYS:HA	33:R1:110:ASP:HB3	1.77	0.67
33:R3:44:LYS:HG3	33:R3:47:ARG:HH22	1.60	0.67
33:R6:107:LYS:HA	33:R6:110:ASP:HB3	1.77	0.67
10:C1:270:THR:CG2	22:A1:69:GLU:HG3	2.25	0.67
10:C1:101:SER:OG	10:C1:132:ASP:OD1	2.12	0.67
10:C5:275:LYS:O	10:C5:276:THR:HG23	1.96	0.67
11:G1:54:GLY:HA3	11:G1:63:MET:HG2	1.75	0.67
14:N2:29:THR:HG22	14:N2:31:ASP:H	1.58	0.67
14:N3:129:TYR:O	14:N3:134:VAL:HG23	1.91	0.67
14:N5:129:TYR:CD1	14:N5:134:VAL:HG11	2.21	0.67
14:N5:129:TYR:HA	14:N5:134:VAL:HG21	1.76	0.67
31:P3:45:LEU:CD1	31:P3:49:LEU:HD21	2.25	0.67
31:P6:121:ILE:CD1	31:P6:123:TYR:CD2	2.74	0.67
17:Y6:113:ARG:HA	17:Y6:116:LYS:HZ1	1.60	0.67
22:A6:54:THR:HG22	22:A6:162:PRO:HG2	1.78	0.66
11:G4:54:GLY:HA3	11:G4:63:MET:HG2	1.76	0.66
11:G5:54:GLY:HA3	11:G5:63:MET:HG2	1.75	0.66
29:K6:19:GLY:H	29:K6:92:ALA:HB2	1.58	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O3:14:VAL:H	15:O3:15:ILE:HA	1.61	0.66
31:P2:15:PHE:CZ	31:P2:112:ILE:CD1	2.78	0.66
33:R4:107:LYS:HA	33:R4:110:ASP:HB3	1.76	0.66
24:D4:210:ILE:HD11	33:R4:16:ILE:HD13	1.77	0.66
33:R5:44:LYS:HG3	33:R5:47:ARG:HH22	1.60	0.66
2:U2:66:ARG:NH1	2:U2:68:THR:OG1	2.28	0.66
2:U4:66:ARG:NH1	2:U4:68:THR:OG1	2.28	0.66
2:U5:66:ARG:NH1	2:U5:68:THR:OG1	2.28	0.66
16:W1:3:ARG:HH22	16:W1:28:ARG:HD2	1.60	0.66
18:Z5:49:LEU:HD11	34:S5:5:ILE:CG2	2.25	0.66
10:C2:101:SER:OG	10:C2:132:ASP:OD1	2.12	0.66
10:C3:101:SER:OG	10:C3:132:ASP:OD1	2.12	0.66
10:C5:270:THR:CG2	22:A5:69:GLU:HG3	2.25	0.66
24:D4:198:ILE:HG23	24:D4:200:PRO:HD3	1.77	0.66
25:E5:75:LYS:O	25:E5:77:ARG:N	2.26	0.66
11:G2:141:ILE:O	11:G2:141:ILE:HG12	1.93	0.66
11:G6:212:LEU:O	11:G6:216:ARG:N	2.28	0.66
24:D5:64:ARG:NE	29:K5:95:ARG:CZ	2.57	0.66
14:N2:30:SER:HB2	14:N2:66:VAL:O	1.94	0.66
14:N3:130:LYS:NZ	14:N3:140:LYS:HD2	2.11	0.66
14:N5:30:SER:HB2	14:N5:66:VAL:O	1.94	0.66
31:P4:98:ASN:ND2	31:P4:103:ASN:OD1	2.28	0.66
31:P4:121:ILE:HD13	34:S4:120:HIS:CE1	2.30	0.66
16:W4:3:ARG:HH22	16:W4:28:ARG:HD2	1.60	0.66
10:C4:101:SER:OG	10:C4:132:ASP:OD1	2.12	0.66
24:D2:210:ILE:HD11	33:R2:16:ILE:HD13	1.77	0.66
26:F3:191:LYS:HA	26:F3:194:ASP:HB2	1.78	0.66
11:G1:147:LEU:HD13	11:G1:147:LEU:C	2.15	0.66
11:G2:147:LEU:C	11:G2:147:LEU:HD13	2.15	0.66
11:G4:153:VAL:O	11:G4:156:TYR:N	2.19	0.66
11:G5:139:SER:O	11:G5:142:ARG:CG	2.43	0.66
33:R5:61:ILE:HG22	33:R5:66:VAL:HG12	1.77	0.66
33:R5:77:GLU:HG2	33:R5:81:ARG:HG3	1.78	0.66
31:P3:119:PHE:HE1	34:S3:119:ALA:HB1	1.46	0.66
2:U5:17:ILE:HG22	2:U5:95:SER:N	2.03	0.66
17:Y5:88:LYS:HE2	17:Y5:99:LYS:HE2	1.78	0.66
18:Z3:79:ILE:HG13	18:Z3:80:ARG:N	2.11	0.66
22:A3:89:LYS:HE2	33:R3:82:ASP:OD1	1.94	0.66
10:C4:275:LYS:O	10:C4:276:THR:HG23	1.96	0.66
24:D3:198:ILE:HG23	24:D3:200:PRO:HD3	1.77	0.66
24:D4:107:TYR:HA	24:D4:110:LEU:HB2	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O2:14:VAL:H	15:O2:15:ILE:HA	1.61	0.66
22:A5:89:LYS:HE2	33:R5:82:ASP:OD1	1.94	0.66
31:P1:121:ILE:HD13	34:S1:120:HIS:CE1	2.30	0.66
18:Z3:86:ALA:HB1	34:S3:3:LEU:CD1	2.26	0.66
22:A1:54:THR:HG22	22:A1:162:PRO:HG2	1.77	0.66
24:D1:210:ILE:HD11	33:R1:16:ILE:HD13	1.77	0.66
26:F4:137:GLN:CG	26:F4:204:ARG:N	2.58	0.66
26:F5:126:THR:C	26:F5:127:ARG:HG3	2.16	0.66
11:G6:147:LEU:HD13	11:G6:147:LEU:C	2.15	0.66
28:I5:76:THR:HG22	28:I5:108:PRO:HG2	1.77	0.66
13:M5:14:VAL:CG1	13:M5:127:TYR:CD1	2.74	0.66
15:O5:14:VAL:H	15:O5:15:ILE:HA	1.61	0.66
4:X5:34:THR:O	4:X5:36:LEU:N	2.29	0.66
18:Z5:79:ILE:HG13	18:Z5:80:ARG:N	2.11	0.66
22:A2:210:ILE:CG1	22:A2:211:GLU:H	2.08	0.66
23:B6:130:THR:OG1	23:B6:178:THR:O	2.14	0.66
30:L1:30:LYS:HE2	23:B6:21:VAL:HB	1.77	0.66
10:C3:270:THR:CG2	22:A3:69:GLU:HG3	2.25	0.66
10:C6:142:LYS:HD2	10:C6:157:LEU:CB	2.25	0.66
25:E6:52:LEU:HD21	25:E6:111:VAL:HG11	1.76	0.66
11:G2:54:GLY:HA3	11:G2:63:MET:HG2	1.76	0.66
27:H2:191:GLU:HG3	27:H2:193:GLN:H	1.61	0.66
28:I1:141:ARG:NH1	26:F6:191:LYS:HD3	2.10	0.66
28:I1:76:THR:HG22	28:I1:108:PRO:HG2	1.77	0.66
13:M2:27:ILE:CG2	29:K2:84:HIS:ND1	2.46	0.66
14:N5:141:TYR:CD1	14:N5:146:ALA:HB2	2.31	0.66
28:I2:123:ARG:NH2	15:O5:65:ASP:HB3	2.09	0.66
31:P1:34:MET:O	31:P1:42:ARG:HD3	1.95	0.66
31:P2:98:ASN:ND2	31:P2:103:ASN:OD1	2.28	0.66
31:P3:98:ASN:ND2	31:P3:103:ASN:OD1	2.28	0.66
31:P6:96:VAL:HG22	31:P6:116:LEU:CD1	1.80	0.66
2:U6:66:ARG:NH1	2:U6:68:THR:OG1	2.28	0.66
4:X4:34:THR:O	4:X4:36:LEU:N	2.29	0.66
22:A6:210:ILE:CG1	22:A6:211:GLU:H	2.08	0.66
10:C4:270:THR:CG2	22:A4:69:GLU:HG3	2.26	0.66
26:F1:137:GLN:O	26:F1:138:ALA:HB2	1.96	0.66
11:G3:147:LEU:C	11:G3:147:LEU:HD13	2.15	0.66
27:H6:191:GLU:HG3	27:H6:193:GLN:H	1.61	0.66
28:I6:76:THR:HG22	28:I6:108:PRO:HG2	1.77	0.66
29:K4:5:LYS:HA	29:K4:8:ARG:HB2	1.78	0.66
14:N6:133:ARG:NE	30:L6:152:LYS:HB3	2.10	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N3:129:TYR:CA	14:N3:134:VAL:HG22	2.17	0.66
14:N5:135:LEU:HB3	14:N5:136:PRO:HD2	1.77	0.66
31:P2:121:ILE:HD13	34:S2:120:HIS:CE1	2.30	0.66
18:Z1:86:ALA:HB1	34:S1:3:LEU:CD1	2.26	0.66
2:U1:66:ARG:NH1	2:U1:68:THR:OG1	2.28	0.66
17:Y1:88:LYS:HE2	17:Y1:99:LYS:HE2	1.77	0.66
23:B5:174:ARG:HG3	23:B5:175:GLU:HG2	1.77	0.66
10:C3:273:LEU:CB	10:C3:280:VAL:HG11	2.02	0.66
24:D2:198:ILE:HG23	24:D2:200:PRO:HD3	1.77	0.66
24:D2:64:ARG:NE	29:K2:95:ARG:CZ	2.57	0.66
26:F2:137:GLN:CG	26:F2:204:ARG:N	2.58	0.66
26:F3:120:GLY:HA3	26:F3:146:ARG:HE	1.61	0.66
11:G3:139:SER:O	11:G3:142:ARG:CG	2.43	0.66
27:H1:191:GLU:HG3	27:H1:193:GLN:H	1.61	0.66
27:H5:191:GLU:HG3	27:H5:193:GLN:H	1.61	0.66
15:O1:14:VAL:H	15:O1:15:ILE:HA	1.60	0.66
31:P5:98:ASN:ND2	31:P5:103:ASN:OD1	2.28	0.66
31:P6:15:PHE:CZ	31:P6:112:ILE:CD1	2.78	0.66
33:R1:44:LYS:HG3	33:R1:47:ARG:HH22	1.60	0.66
16:W6:3:ARG:HH22	16:W6:28:ARG:HD2	1.60	0.66
10:C2:270:THR:CG2	22:A2:69:GLU:HG3	2.25	0.66
24:D1:198:ILE:HG23	24:D1:200:PRO:HD3	1.77	0.66
24:D6:210:ILE:HD11	33:R6:16:ILE:HD13	1.77	0.66
26:F2:120:GLY:HA3	26:F2:146:ARG:HE	1.61	0.66
26:F3:137:GLN:O	26:F3:138:ALA:HB2	1.96	0.66
26:F5:188:TYR:HA	26:F5:191:LYS:HB2	1.77	0.66
11:G1:212:LEU:O	11:G1:216:ARG:N	2.28	0.66
14:N4:141:TYR:CD1	14:N4:146:ALA:HB2	2.31	0.66
15:O6:130:GLU:HG2	15:O6:131:ASP:H	1.60	0.66
31:P3:121:ILE:HD13	34:S3:120:HIS:CE1	2.30	0.66
33:R4:58:MET:C	33:R4:61:ILE:HG12	2.15	0.66
31:P6:121:ILE:HD13	34:S6:120:HIS:CE1	2.30	0.66
2:U4:19:ARG:CD	2:U4:119:ALA:O	2.23	0.66
3:V6:36:VAL:HG12	3:V6:37:ALA:H	1.61	0.66
16:W3:3:ARG:HH22	16:W3:28:ARG:HD2	1.60	0.66
4:X3:101:LEU:HD13	4:X3:124:LYS:HD3	1.78	0.66
18:Z2:79:ILE:HG13	18:Z2:80:ARG:N	2.11	0.66
23:B1:174:ARG:HG3	23:B1:175:GLU:HG2	1.77	0.66
10:C1:188:CYS:SG	10:C1:189:GLY:N	2.69	0.66
24:D3:106:ARG:HG3	24:D3:107:TYR:H	1.61	0.66
26:F1:137:GLN:CG	26:F1:204:ARG:N	2.58	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F4:18:LYS:HE3	26:F4:46:ALA:H	1.61	0.66
26:F6:126:THR:C	26:F6:127:ARG:HG3	2.16	0.66
26:F6:137:GLN:O	26:F6:138:ALA:HB2	1.96	0.66
26:F6:137:GLN:CB	26:F6:204:ARG:CA	2.73	0.66
27:H3:191:GLU:HG3	27:H3:193:GLN:H	1.61	0.66
29:K1:5:LYS:HA	29:K1:8:ARG:HB2	1.78	0.66
14:N2:141:TYR:CD1	14:N2:146:ALA:HB2	2.31	0.66
14:N5:129:TYR:C	14:N5:134:VAL:HG23	2.04	0.66
15:O2:130:GLU:HG2	15:O2:131:ASP:H	1.61	0.66
15:O4:14:VAL:H	15:O4:15:ILE:HA	1.61	0.66
31:P2:15:PHE:HE2	31:P2:112:ILE:CD1	2.07	0.66
22:A1:89:LYS:HE2	33:R1:82:ASP:OD1	1.94	0.66
33:R6:77:GLU:O	33:R6:78:ARG:C	2.35	0.66
18:Z4:86:ALA:HB1	34:S4:3:LEU:CD1	2.26	0.66
18:Z5:86:ALA:HB1	34:S5:3:LEU:CD1	2.26	0.66
2:U6:17:ILE:CG2	2:U6:94:PRO:CA	2.49	0.66
16:W2:3:ARG:HH22	16:W2:28:ARG:HD2	1.60	0.66
4:X6:101:LEU:HD13	4:X6:124:LYS:HD3	1.78	0.66
18:Z6:66:LYS:CB	18:Z6:111:ARG:HD2	2.26	0.66
10:C5:94:ILE:HG21	10:C5:159:LYS:HB3	1.78	0.65
10:C6:188:CYS:SG	10:C6:189:GLY:N	2.69	0.65
24:D5:198:ILE:HG23	24:D5:200:PRO:HD3	1.77	0.65
26:F1:191:LYS:HA	26:F1:194:ASP:HB2	1.78	0.65
26:F6:120:GLY:HA3	26:F6:146:ARG:HE	1.62	0.65
29:K2:5:LYS:HA	29:K2:8:ARG:HB2	1.78	0.65
29:K3:5:LYS:HA	29:K3:8:ARG:HB2	1.78	0.65
15:O1:130:GLU:HG2	15:O1:131:ASP:H	1.61	0.65
15:O6:14:VAL:H	15:O6:15:ILE:HA	1.61	0.65
31:P3:41:GLN:CD	31:P3:84:ILE:CG2	2.64	0.65
31:P5:15:PHE:CG	31:P5:109:PRO:O	2.49	0.65
33:R2:44:LYS:HG3	33:R2:47:ARG:HH22	1.60	0.65
18:Z6:86:ALA:HB1	34:S6:3:LEU:CD1	2.26	0.65
2:U3:17:ILE:HG22	2:U3:95:SER:N	2.03	0.65
17:Y3:88:LYS:HE2	17:Y3:99:LYS:HE2	1.77	0.65
18:Z2:66:LYS:CB	18:Z2:111:ARG:HD2	2.26	0.65
23:B1:130:THR:OG1	23:B1:178:THR:O	2.14	0.65
23:B3:130:THR:OG1	23:B3:178:THR:O	2.14	0.65
10:C3:94:ILE:HG21	10:C3:159:LYS:HB3	1.78	0.65
24:D4:106:ARG:HG3	24:D4:107:TYR:H	1.61	0.65
24:D6:106:ARG:HG3	24:D6:107:TYR:H	1.61	0.65
25:E6:42:LEU:HD21	25:E6:47:PHE:HB2	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F2:198:ARG:HH12	28:I4:146:GLN:HE21	0.68	0.65
26:F3:137:GLN:CG	26:F3:204:ARG:N	2.58	0.65
26:F4:188:TYR:HA	26:F4:191:LYS:HB2	1.77	0.65
29:K6:5:LYS:HA	29:K6:8:ARG:HB2	1.78	0.65
14:N2:133:ARG:NH1	30:L2:152:LYS:O	2.29	0.65
14:N6:141:TYR:CD1	14:N6:146:ALA:HB2	2.31	0.65
15:O3:130:GLU:HG2	15:O3:131:ASP:H	1.61	0.65
33:R1:77:GLU:HG2	33:R1:81:ARG:HG3	1.78	0.65
33:R3:77:GLU:HG2	33:R3:81:ARG:HG3	1.78	0.65
31:P5:121:ILE:HD13	34:S5:120:HIS:CE1	2.30	0.65
4:X1:34:THR:O	4:X1:36:LEU:N	2.29	0.65
22:A4:210:ILE:CG1	22:A4:211:GLU:H	2.08	0.65
22:A5:210:ILE:CG1	22:A5:211:GLU:H	2.08	0.65
23:B4:22:VAL:N	30:L5:31:GLU:OE2	2.30	0.65
10:C1:94:ILE:HG21	10:C1:159:LYS:HB3	1.79	0.65
10:C2:68:ARG:HH22	10:C2:276:THR:C	1.97	0.65
24:D6:54:ARG:NE	24:D6:57:ASN:HD22	1.95	0.65
25:E3:75:LYS:O	25:E3:77:ARG:N	2.26	0.65
26:F5:18:LYS:HE3	26:F5:46:ALA:H	1.61	0.65
11:G3:212:LEU:O	11:G3:216:ARG:N	2.28	0.65
27:H4:191:GLU:HG3	27:H4:193:GLN:H	1.61	0.65
13:M1:49:LEU:HG	13:M1:114:TYR:OH	1.96	0.65
14:N3:141:TYR:CD1	14:N3:146:ALA:HB2	2.31	0.65
15:O4:130:GLU:HG2	15:O4:131:ASP:H	1.61	0.65
33:R2:75:GLU:HA	33:R2:75:GLU:OE1	1.96	0.65
33:R6:44:LYS:HG3	33:R6:47:ARG:HH22	1.60	0.65
3:V4:36:VAL:HG12	3:V4:37:ALA:H	1.61	0.65
17:Y4:127:ALA:HA	17:Y4:130:LYS:HD3	1.77	0.65
22:A3:2:SER:HB2	22:A3:59:LEU:HD21	1.79	0.65
10:C3:270:THR:CG2	22:A3:69:GLU:CG	2.70	0.65
10:C4:188:CYS:SG	10:C4:189:GLY:N	2.69	0.65
24:D5:106:ARG:HG3	24:D5:107:TYR:H	1.61	0.65
31:P1:15:PHE:HE2	31:P1:112:ILE:CD1	2.07	0.65
31:P4:96:VAL:CG2	31:P4:116:LEU:HD13	1.87	0.65
3:V5:36:VAL:HG12	3:V5:37:ALA:H	1.61	0.65
4:X3:34:THR:O	4:X3:36:LEU:N	2.29	0.65
17:Y2:88:LYS:HE2	17:Y2:99:LYS:HE2	1.77	0.65
17:Y3:127:ALA:HA	17:Y3:130:LYS:HD3	1.77	0.65
17:Y4:109:GLU:OE2	17:Y4:113:ARG:NE	2.30	0.65
17:Y4:88:LYS:HE2	17:Y4:99:LYS:HE2	1.78	0.65
18:Z3:66:LYS:CB	18:Z3:111:ARG:HD2	2.26	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z4:51:ASP:OD1	18:Z4:52:LYS:N	2.30	0.65
10:C6:270:THR:CG2	22:A6:69:GLU:HG3	2.25	0.65
10:C2:188:CYS:SG	10:C2:189:GLY:N	2.69	0.65
24:D5:107:TYR:HA	24:D5:110:LEU:HB2	1.78	0.65
25:E5:71:LYS:HG3	25:E5:91:SER:HB2	1.79	0.65
26:F5:137:GLN:CG	26:F5:204:ARG:N	2.58	0.65
26:F6:18:LYS:HE3	26:F6:46:ALA:H	1.61	0.65
11:G2:212:LEU:O	11:G2:216:ARG:N	2.28	0.65
13:M1:27:ILE:CG2	29:K1:84:HIS:ND1	2.46	0.65
30:L2:125:ILE:HG22	30:L2:146:THR:OG1	1.96	0.65
30:L2:73:LEU:O	30:L2:128:VAL:N	2.29	0.65
14:N1:141:TYR:CD1	14:N1:146:ALA:HB2	2.31	0.65
33:R6:69:ILE:O	33:R6:69:ILE:HD13	1.96	0.65
4:X6:34:THR:O	4:X6:36:LEU:N	2.29	0.65
17:Y1:127:ALA:HA	17:Y1:130:LYS:HD3	1.77	0.65
18:Z1:79:ILE:HG13	18:Z1:80:ARG:N	2.11	0.65
18:Z6:70:PRO:HG2	18:Z6:88:LEU:HD13	1.60	0.65
22:A1:210:ILE:CG1	22:A1:211:GLU:H	2.08	0.65
23:B2:130:THR:OG1	23:B2:178:THR:O	2.14	0.65
10:C5:188:CYS:SG	10:C5:189:GLY:N	2.69	0.65
10:C6:94:ILE:HD11	10:C6:98:LEU:HD12	1.79	0.65
10:C6:94:ILE:HG21	10:C6:159:LYS:HB3	1.79	0.65
24:D1:107:TYR:HA	24:D1:110:LEU:HB2	1.77	0.65
24:D3:54:ARG:NE	24:D3:57:ASN:HD22	1.95	0.65
24:D5:210:ILE:HD11	33:R5:16:ILE:HD13	1.77	0.65
26:F1:18:LYS:HE3	26:F1:46:ALA:H	1.61	0.65
26:F2:137:GLN:O	26:F2:138:ALA:HB2	1.96	0.65
26:F5:137:GLN:O	26:F5:138:ALA:HB2	1.96	0.65
11:G4:149:LYS:HB2	11:G4:149:LYS:HZ3	1.59	0.65
15:O2:66:ARG:CZ	28:I4:125:LYS:HD2	2.26	0.65
13:M3:27:ILE:CG2	29:K3:84:HIS:ND1	2.46	0.65
30:L3:73:LEU:O	30:L3:128:VAL:N	2.30	0.65
31:P1:96:VAL:HG21	31:P1:116:LEU:HD11	1.59	0.65
32:Q5:93:VAL:HG13	32:Q5:105:LYS:HG3	1.79	0.65
22:A2:211:GLU:CB	33:R2:81:ARG:HH21	2.05	0.65
3:V1:19:ALA:O	16:W1:23:ARG:NH2	2.30	0.65
18:Z5:66:LYS:CB	18:Z5:111:ARG:HD2	2.26	0.65
18:Z6:49:LEU:HD11	34:S6:5:ILE:CG2	2.24	0.65
22:A6:211:GLU:HB2	33:R6:81:ARG:HH21	1.59	0.65
10:C2:68:ARG:NH2	10:C2:276:THR:C	2.47	0.65
10:C6:275:LYS:O	10:C6:276:THR:HG23	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:54:ARG:NE	24:D2:57:ASN:HD22	1.95	0.65
25:E3:42:LEU:HD21	25:E3:47:PHE:HB2	1.79	0.65
26:F4:191:LYS:HA	26:F4:194:ASP:HB2	1.78	0.65
26:F5:191:LYS:HA	26:F5:194:ASP:HB2	1.77	0.65
11:G4:139:SER:O	11:G4:142:ARG:CG	2.43	0.65
27:H4:91:HIS:CD2	27:H4:169:LYS:HB2	2.32	0.65
27:H5:83:LEU:HD11	27:H5:92:VAL:HG11	1.79	0.65
14:N3:132:LYS:HA	30:L3:152:LYS:HZ1	1.62	0.65
14:N6:133:ARG:NH1	30:L6:152:LYS:C	2.50	0.65
31:P2:45:LEU:HD12	31:P2:49:LEU:CD2	2.27	0.65
31:P3:45:LEU:HD12	31:P3:49:LEU:HD21	1.79	0.65
4:X5:101:LEU:HD13	4:X5:124:LYS:HD3	1.78	0.65
22:A2:104:THR:OG1	22:A2:107:THR:OG1	2.13	0.65
22:A3:54:THR:HG22	22:A3:162:PRO:HG2	1.78	0.65
22:A4:2:SER:HB2	22:A4:59:LEU:HD21	1.79	0.65
23:B5:130:THR:OG1	23:B5:178:THR:O	2.14	0.65
10:C4:270:THR:CG2	22:A4:69:GLU:CG	2.70	0.65
26:F2:191:LYS:HA	26:F2:194:ASP:HB2	1.78	0.65
26:F3:188:TYR:HA	26:F3:191:LYS:HB2	1.77	0.65
30:L5:73:LEU:O	30:L5:128:VAL:N	2.30	0.65
3:V6:19:ALA:O	16:W6:23:ARG:NH2	2.30	0.65
18:Z2:51:ASP:OD1	18:Z2:52:LYS:N	2.30	0.65
18:Z6:79:ILE:HG13	18:Z6:80:ARG:N	2.11	0.65
22:A4:54:THR:HG22	22:A4:162:PRO:HG2	1.77	0.65
10:C5:68:ARG:NH2	10:C5:276:THR:C	2.47	0.65
26:F2:188:TYR:HA	26:F2:191:LYS:HB2	1.77	0.65
11:G5:147:LEU:O	11:G5:148:SER:HB3	1.97	0.65
28:I4:76:THR:HG22	28:I4:108:PRO:HG2	1.78	0.65
30:L1:121:GLN:CG	30:L1:153:LYS:CD	2.74	0.65
13:M5:49:LEU:HG	13:M5:114:TYR:OH	1.96	0.65
32:Q3:93:VAL:HG13	32:Q3:105:LYS:HG3	1.79	0.65
33:R3:61:ILE:O	33:R3:73:LEU:CD2	2.45	0.65
18:Z2:86:ALA:HB1	34:S2:3:LEU:CD1	2.26	0.65
3:V3:19:ALA:O	16:W3:23:ARG:NH2	2.30	0.65
22:A2:54:THR:HG22	22:A2:162:PRO:HG2	1.78	0.65
24:D2:106:ARG:HG3	24:D2:107:TYR:H	1.61	0.65
24:D3:107:TYR:HA	24:D3:110:LEU:HB2	1.78	0.65
26:F5:120:GLY:HA3	26:F5:146:ARG:HE	1.61	0.65
29:K5:5:LYS:HA	29:K5:8:ARG:HB2	1.78	0.65
14:N1:142:GLU:HB2	14:N1:145:THR:HG1	1.61	0.65
31:P6:15:PHE:HE2	31:P6:112:ILE:CD1	2.07	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P6:119:PHE:HE1	34:S6:119:ALA:HB1	1.46	0.65
3:V3:36:VAL:HG12	3:V3:37:ALA:H	1.61	0.65
4:X2:34:THR:O	4:X2:36:LEU:N	2.29	0.65
17:Y2:127:ALA:HA	17:Y2:130:LYS:HD3	1.77	0.65
18:Z3:51:ASP:OD1	18:Z3:52:LYS:N	2.30	0.65
18:Z4:79:ILE:HG13	18:Z4:80:ARG:N	2.11	0.65
10:C1:275:LYS:O	10:C1:276:THR:HG23	1.96	0.64
10:C3:188:CYS:SG	10:C3:189:GLY:N	2.69	0.64
10:C4:68:ARG:NH2	10:C4:276:THR:C	2.47	0.64
24:D1:106:ARG:HG3	24:D1:107:TYR:H	1.61	0.64
25:E4:71:LYS:HG3	25:E4:91:SER:HB2	1.79	0.64
26:F1:120:GLY:HA3	26:F1:146:ARG:HE	1.61	0.64
26:F6:191:LYS:HA	26:F6:194:ASP:HB2	1.78	0.64
11:G4:141:ILE:HG12	11:G4:144:LEU:CG	2.27	0.64
13:M1:71:GLU:HG2	17:Y2:130:LYS:HE3	1.77	0.64
14:N2:133:ARG:CZ	30:L2:154:GLN:HA	2.28	0.64
15:O5:130:GLU:HG2	15:O5:131:ASP:H	1.60	0.64
31:P5:49:LEU:O	31:P5:50:ARG:NH1	2.31	0.64
3:V4:19:ALA:O	16:W4:23:ARG:NH2	2.30	0.64
18:Z1:51:ASP:OD1	18:Z1:52:LYS:N	2.30	0.64
18:Z4:66:LYS:CB	18:Z4:111:ARG:HD2	2.26	0.64
18:Z5:51:ASP:OD1	18:Z5:52:LYS:N	2.30	0.64
10:C2:65:LYS:CE	10:C2:280:VAL:HB	2.28	0.64
10:C2:94:ILE:HD11	10:C2:98:LEU:HD12	1.79	0.64
10:C4:94:ILE:HD11	10:C4:98:LEU:HD12	1.78	0.64
10:C5:94:ILE:HD11	10:C5:98:LEU:HD12	1.79	0.64
10:C6:68:ARG:HH22	10:C6:276:THR:C	1.97	0.64
24:D2:107:TYR:HA	24:D2:110:LEU:HB2	1.77	0.64
24:D3:64:ARG:NE	29:K3:95:ARG:CZ	2.57	0.64
25:E2:42:LEU:HD21	25:E2:47:PHE:HB2	1.79	0.64
26:F6:137:GLN:CB	26:F6:204:ARG:N	2.60	0.64
11:G1:141:ILE:HG12	11:G1:144:LEU:CG	2.27	0.64
27:H2:147:LYS:HB3	27:H2:151:SER:HB3	1.78	0.64
13:M2:14:VAL:CG1	13:M2:127:TYR:CD1	2.74	0.64
31:P2:121:ILE:HG23	31:P2:122:THR:N	2.13	0.64
16:W2:37:PHE:CE1	16:W2:103:VAL:HG21	2.32	0.64
16:W5:37:PHE:CE1	16:W5:103:VAL:HG21	2.32	0.64
4:X2:101:LEU:HD13	4:X2:124:LYS:HD3	1.78	0.64
4:X4:101:LEU:HD13	4:X4:124:LYS:HD3	1.78	0.64
18:Z6:85:ARG:NH2	18:Z6:85:ARG:HG3	2.12	0.64
22:A5:12:GLU:HG3	22:A5:13:GLU:H	1.63	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A5:54:THR:HG22	22:A5:162:PRO:HG2	1.78	0.64
10:C1:94:ILE:HD11	10:C1:98:LEU:HD12	1.79	0.64
10:C3:68:ARG:NH2	10:C3:276:THR:C	2.47	0.64
10:C4:94:ILE:HG21	10:C4:159:LYS:HB3	1.79	0.64
25:E2:71:LYS:HG3	25:E2:91:SER:HB2	1.79	0.64
25:E4:42:LEU:HD21	25:E4:47:PHE:HB2	1.79	0.64
11:G2:141:ILE:HG12	11:G2:144:LEU:CG	2.27	0.64
28:I3:76:THR:HG22	28:I3:108:PRO:HG2	1.77	0.64
28:I3:194:GLU:HB2	30:L3:18:GLN:NE2	2.12	0.64
13:M4:49:LEU:HG	13:M4:114:TYR:OH	1.96	0.64
32:Q6:93:VAL:HG13	32:Q6:105:LYS:HG3	1.79	0.64
26:F3:126:THR:C	26:F3:127:ARG:HG3	2.16	0.64
26:F4:120:GLY:HA3	26:F4:146:ARG:HE	1.62	0.64
11:G6:141:ILE:HG12	11:G6:144:LEU:CG	2.27	0.64
27:H4:83:LEU:HD11	27:H4:92:VAL:HG11	1.79	0.64
14:N1:133:ARG:HH21	30:L1:154:GLN:CG	2.06	0.64
15:O4:63:LYS:NZ	28:I5:163:GLU:CB	2.60	0.64
31:P4:44:ARG:HH11	31:P4:44:ARG:HG3	1.61	0.64
16:W4:49:GLU:OE1	27:H4:145:ARG:NH2	2.31	0.64
22:A2:33:GLN:HB2	22:A2:154:LEU:HD12	1.80	0.64
22:A3:12:GLU:HG3	22:A3:13:GLU:H	1.63	0.64
22:A6:2:SER:HB2	22:A6:59:LEU:HD21	1.78	0.64
10:C1:65:LYS:CE	10:C1:280:VAL:HB	2.28	0.64
10:C2:94:ILE:HG21	10:C2:159:LYS:HB3	1.78	0.64
10:C3:275:LYS:O	10:C3:276:THR:HG23	1.96	0.64
10:C3:68:ARG:HH22	10:C3:276:THR:C	1.97	0.64
10:C4:65:LYS:CE	10:C4:280:VAL:HB	2.28	0.64
26:F3:18:LYS:HE3	26:F3:46:ALA:H	1.61	0.64
11:G4:49:VAL:HG22	11:G4:115:LYS:HB2	1.80	0.64
11:G6:49:VAL:HG22	11:G6:115:LYS:HB2	1.80	0.64
27:H2:83:LEU:HD11	27:H2:92:VAL:HG11	1.79	0.64
14:N1:137:PRO:HG3	30:L1:154:GLN:CB	2.28	0.64
30:L4:78:THR:HG21	30:L4:89:ARG:HG3	1.80	0.64
13:M3:49:LEU:HG	13:M3:114:TYR:OH	1.96	0.64
14:N4:47:PRO:HD2	14:N4:86:GLU:HG3	1.79	0.64
31:P1:121:ILE:HG23	31:P1:122:THR:N	2.13	0.64
31:P3:41:GLN:HB3	31:P3:84:ILE:CD1	2.26	0.64
31:P4:41:GLN:OE1	31:P4:84:ILE:HD13	1.97	0.64
33:R4:81:ARG:HG2	33:R4:81:ARG:HH11	1.63	0.64
1:T4:9:VAL:HG21	1:T4:135:ALA:HB1	1.79	0.64
3:V2:36:VAL:HG12	3:V2:37:ALA:H	1.61	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:W6:37:PHE:CE1	16:W6:103:VAL:HG21	2.33	0.64
18:Z1:66:LYS:CB	18:Z1:111:ARG:HD2	2.26	0.64
18:Z6:51:ASP:OD1	18:Z6:52:LYS:N	2.30	0.64
24:D4:54:ARG:NE	24:D4:57:ASN:HD22	1.95	0.64
26:F6:106:GLU:HG2	26:F6:107:ASN:H	1.63	0.64
11:G3:141:ILE:HG12	11:G3:144:LEU:CG	2.27	0.64
27:H6:83:LEU:HD11	27:H6:92:VAL:HG11	1.79	0.64
13:M2:49:LEU:HG	13:M2:114:TYR:OH	1.96	0.64
13:M3:14:VAL:CG1	13:M3:127:TYR:CD1	2.74	0.64
15:O4:66:ARG:CZ	28:I5:125:LYS:HD3	2.27	0.64
31:P6:121:ILE:HG23	31:P6:122:THR:N	2.13	0.64
3:V1:36:VAL:HG12	3:V1:37:ALA:H	1.61	0.64
3:V5:19:ALA:O	16:W5:23:ARG:NH2	2.30	0.64
18:Z4:46:ASN:HB3	18:Z4:80:ARG:CA	2.16	0.64
30:L2:31:GLU:N	23:B5:21:VAL:HG22	2.11	0.64
10:C2:267:GLN:HA	22:A2:120:ARG:HH12	1.63	0.64
10:C2:275:LYS:O	10:C2:276:THR:HG23	1.96	0.64
10:C3:267:GLN:HA	22:A3:120:ARG:HH12	1.63	0.64
10:C3:94:ILE:HD11	10:C3:98:LEU:HD12	1.78	0.64
24:D5:54:ARG:NE	24:D5:57:ASN:HD22	1.95	0.64
28:I1:197:PHE:HA	28:I1:200:ARG:HD2	1.80	0.64
28:I2:76:THR:HG22	28:I2:108:PRO:HG2	1.77	0.64
30:L4:73:LEU:O	30:L4:128:VAL:N	2.30	0.64
13:M6:49:LEU:HG	13:M6:114:TYR:OH	1.96	0.64
31:P2:49:LEU:O	31:P2:50:ARG:NH1	2.30	0.64
31:P3:121:ILE:HG23	31:P3:122:THR:N	2.13	0.64
31:P5:121:ILE:HG23	31:P5:122:THR:N	2.13	0.64
31:P4:16:THR:HG22	34:S4:91:LYS:O	1.97	0.64
1:T1:9:VAL:HG21	1:T1:135:ALA:HB1	1.80	0.64
2:U1:17:ILE:HG22	2:U1:95:SER:N	2.03	0.64
16:W1:49:GLU:OE1	27:H1:145:ARG:NH2	2.31	0.64
4:X1:101:LEU:HD13	4:X1:124:LYS:HD3	1.78	0.64
17:Y6:88:LYS:HE2	17:Y6:99:LYS:HE2	1.77	0.64
22:A1:2:SER:HB2	22:A1:59:LEU:HD21	1.79	0.64
22:A4:209:GLU:O	22:A4:213:GLU:HB2	1.98	0.64
22:A6:209:GLU:O	22:A6:213:GLU:HB2	1.98	0.64
22:A6:33:GLN:HB2	22:A6:154:LEU:HD12	1.80	0.64
23:B4:130:THR:OG1	23:B4:178:THR:O	2.14	0.64
11:G2:49:VAL:HG22	11:G2:115:LYS:HB2	1.80	0.64
28:I5:41:ARG:HH11	28:I5:62:VAL:HG21	1.63	0.64
14:N3:142:GLU:OE1	14:N3:145:THR:HG21	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N4:142:GLU:HB2	14:N4:145:THR:HG1	1.62	0.64
14:N6:47:PRO:HD2	14:N6:86:GLU:HG3	1.79	0.64
31:P3:49:LEU:O	31:P3:50:ARG:NH1	2.30	0.64
33:R1:61:ILE:O	33:R1:73:LEU:HD13	1.97	0.64
33:R2:54:VAL:O	33:R2:58:MET:CB	2.46	0.64
1:T2:9:VAL:HG21	1:T2:135:ALA:HB1	1.80	0.64
2:U3:25:THR:OG1	2:U3:111:GLU:OE1	2.16	0.64
16:W6:49:GLU:OE1	27:H6:145:ARG:NH2	2.31	0.64
22:A2:12:GLU:HG3	22:A2:13:GLU:H	1.63	0.64
22:A5:2:SER:HB2	22:A5:59:LEU:HD21	1.79	0.64
24:D6:22:ASN:O	24:D6:26:THR:OG1	2.15	0.64
25:E4:189:LEU:H	25:E4:245:ARG:HH22	1.46	0.64
25:E5:42:LEU:HD21	25:E5:47:PHE:HB2	1.78	0.64
26:F2:127:ARG:O	26:F2:137:GLN:HB2	1.98	0.64
26:F4:137:GLN:O	26:F4:138:ALA:HB2	1.96	0.64
26:F5:127:ARG:O	26:F5:137:GLN:HB2	1.98	0.64
28:I4:41:ARG:HH11	28:I4:62:VAL:HG21	1.63	0.64
15:O3:66:ARG:HH12	28:I6:125:LYS:HZ2	1.46	0.64
30:L5:78:THR:HG21	30:L5:89:ARG:HG3	1.80	0.64
32:Q6:130:LYS:HA	32:Q6:137:ALA:HA	1.80	0.64
33:R2:54:VAL:O	33:R2:58:MET:HB3	1.98	0.64
31:P2:16:THR:HG22	34:S2:91:LYS:O	1.97	0.64
1:T3:9:VAL:HG21	1:T3:135:ALA:HB1	1.80	0.64
3:V2:19:ALA:O	16:W2:23:ARG:NH2	2.30	0.64
16:W4:115:GLU:CG	16:W4:119:LYS:HE3	2.27	0.64
16:W5:49:GLU:OE1	27:H5:145:ARG:NH2	2.31	0.64
17:Y3:109:GLU:OE2	17:Y3:113:ARG:NE	2.30	0.64
17:Y5:109:GLU:OE2	17:Y5:113:ARG:NE	2.30	0.64
22:A1:12:GLU:HG3	22:A1:13:GLU:H	1.63	0.64
22:A2:77:ILE:HD11	22:A2:103:PHE:CD1	2.33	0.64
22:A2:209:GLU:O	22:A2:213:GLU:HB2	1.98	0.64
22:A3:214:GLU:CG	33:R3:84:TYR:CD1	2.81	0.64
22:A6:12:GLU:HG3	22:A6:13:GLU:H	1.63	0.64
10:C1:267:GLN:HA	22:A1:120:ARG:HH12	1.63	0.64
10:C1:273:LEU:HB3	10:C1:280:VAL:HG13	1.64	0.64
10:C5:65:LYS:CE	10:C5:280:VAL:HB	2.28	0.64
25:E1:42:LEU:HD21	25:E1:47:PHE:HB2	1.78	0.64
26:F2:106:GLU:HG2	26:F2:107:ASN:H	1.63	0.64
11:G3:49:VAL:HG22	11:G3:115:LYS:HB2	1.80	0.64
27:H1:147:LYS:HB3	27:H1:151:SER:HB3	1.79	0.64
27:H4:169:LYS:HG3	27:H4:169:LYS:O	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I1:196:GLU:O	28:I1:200:ARG:CG	2.27	0.64
12:J2:11:LYS:NZ	12:J2:13:TYR:O	2.30	0.64
13:M1:111:VAL:CG1	13:M1:114:TYR:CD1	2.81	0.64
14:N1:47:PRO:HD2	14:N1:86:GLU:HG3	1.79	0.64
14:N2:142:GLU:OE1	14:N2:145:THR:HG21	1.98	0.64
31:P1:96:VAL:CG2	31:P1:116:LEU:HD13	1.87	0.64
2:U1:17:ILE:CB	2:U1:94:PRO:HA	2.28	0.64
2:U5:25:THR:OG1	2:U5:111:GLU:OE1	2.16	0.64
16:W1:9:ASP:OD1	16:W1:10:ALA:N	2.31	0.64
16:W4:9:ASP:OD1	16:W4:10:ALA:N	2.31	0.64
22:A3:209:GLU:O	22:A3:213:GLU:HB2	1.99	0.63
24:D1:54:ARG:NE	24:D1:57:ASN:HD22	1.95	0.63
24:D2:22:ASN:O	24:D2:26:THR:OG1	2.15	0.63
26:F6:136:ARG:O	26:F6:203:ASN:HB2	1.98	0.63
11:G5:141:ILE:HG12	11:G5:144:LEU:CG	2.27	0.63
28:I5:197:PHE:HA	28:I5:200:ARG:HD2	1.80	0.63
23:B2:22:VAL:HG21	30:L4:31:GLU:OE2	1.91	0.63
13:M6:111:VAL:CG1	13:M6:114:TYR:CD1	2.81	0.63
31:P6:34:MET:O	31:P6:42:ARG:CZ	2.47	0.63
33:R3:81:ARG:HH11	33:R3:81:ARG:HG2	1.63	0.63
22:A6:89:LYS:HE2	33:R6:82:ASP:OD1	1.94	0.63
2:U6:17:ILE:HG22	2:U6:95:SER:N	2.03	0.63
16:W3:37:PHE:CE1	16:W3:103:VAL:HG21	2.33	0.63
16:W4:37:PHE:CE1	16:W4:103:VAL:HG21	2.33	0.63
16:W6:9:ASP:OD1	16:W6:10:ALA:N	2.31	0.63
22:A2:214:GLU:HG3	33:R2:84:TYR:CD1	2.34	0.63
22:A2:2:SER:HB2	22:A2:59:LEU:HD21	1.79	0.63
22:A3:214:GLU:HG3	33:R3:84:TYR:CD1	2.33	0.63
10:C4:267:GLN:HA	22:A4:120:ARG:HH12	1.63	0.63
24:D3:22:ASN:O	24:D3:26:THR:OG1	2.15	0.63
25:E1:71:LYS:HG3	25:E1:91:SER:HB2	1.80	0.63
11:G2:147:LEU:O	11:G2:148:SER:HB3	1.97	0.63
11:G3:147:LEU:O	11:G3:148:SER:HB3	1.97	0.63
27:H3:147:LYS:HB3	27:H3:151:SER:HB3	1.79	0.63
14:N6:142:GLU:OE1	14:N6:145:THR:HG21	1.98	0.63
31:P5:41:GLN:CD	31:P5:84:ILE:CG2	2.65	0.63
32:Q3:4:LYS:HZ3	32:Q3:99:TYR:HA	1.60	0.63
33:R1:57:LEU:CD1	33:R1:66:VAL:HG11	2.29	0.63
17:Y2:126:GLY:O	17:Y2:130:LYS:NZ	2.27	0.63
17:Y3:126:GLY:O	17:Y3:130:LYS:NZ	2.27	0.63
18:Z1:85:ARG:NH2	18:Z1:85:ARG:HG3	2.13	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E1:75:LYS:O	25:E1:77:ARG:N	2.26	0.63
25:E3:71:LYS:HG3	25:E3:91:SER:HB2	1.79	0.63
26:F4:126:THR:C	26:F4:127:ARG:HG3	2.16	0.63
27:H3:83:LEU:HD11	27:H3:92:VAL:HG11	1.79	0.63
27:H6:147:LYS:HB3	27:H6:151:SER:HB3	1.78	0.63
27:H6:163:GLN:HE21	27:H6:189:PHE:HE2	1.46	0.63
30:L6:121:GLN:HB2	30:L6:153:LYS:CD	2.29	0.63
13:M4:111:VAL:CG1	13:M4:114:TYR:CD1	2.81	0.63
13:M5:111:VAL:CG1	13:M5:114:TYR:CD1	2.81	0.63
14:N5:84:LEU:HA	14:N5:135:LEU:CD2	2.28	0.63
32:Q4:93:VAL:HG13	32:Q4:105:LYS:HG3	1.79	0.63
22:A2:214:GLU:CG	33:R2:84:TYR:CD1	2.81	0.63
31:P6:16:THR:HG22	34:S6:91:LYS:O	1.97	0.63
2:U4:25:THR:OG1	2:U4:111:GLU:OE1	2.16	0.63
16:W2:49:GLU:OE1	27:H2:145:ARG:NH2	2.31	0.63
18:Z5:66:LYS:HB3	18:Z5:111:ARG:HD2	1.80	0.63
26:F1:127:ARG:O	26:F1:137:GLN:HB2	1.98	0.63
26:F5:100:ILE:HG12	26:F5:178:ILE:HD11	1.81	0.63
11:G3:221:LYS:O	11:G3:225:GLN:N	2.31	0.63
11:G4:147:LEU:O	11:G4:148:SER:HB3	1.97	0.63
11:G5:49:VAL:HG22	11:G5:115:LYS:HB2	1.80	0.63
27:H1:83:LEU:HD11	27:H1:92:VAL:HG11	1.79	0.63
27:H5:147:LYS:HB3	27:H5:151:SER:HB3	1.79	0.63
30:L1:126:VAL:CG2	30:L1:145:VAL:HG22	2.28	0.63
30:L2:78:THR:HG21	30:L2:89:ARG:HG3	1.80	0.63
14:N4:142:GLU:OE1	14:N4:145:THR:HG21	1.98	0.63
31:P6:49:LEU:O	31:P6:50:ARG:NH1	2.30	0.63
32:Q5:130:LYS:HA	32:Q5:137:ALA:HA	1.80	0.63
33:R5:81:ARG:HG2	33:R5:81:ARG:HH11	1.63	0.63
22:A5:214:GLU:CG	33:R5:84:TYR:CD1	2.81	0.63
2:U6:17:ILE:CB	2:U6:94:PRO:HA	2.28	0.63
4:X6:67:ARG:NH1	4:X6:114:ASP:OD2	2.31	0.63
25:E6:189:LEU:H	25:E6:245:ARG:HH22	1.46	0.63
11:G1:49:VAL:HG22	11:G1:115:LYS:HB2	1.80	0.63
27:H3:53:VAL:HG13	27:H3:175:GLY:HA3	1.81	0.63
14:N2:47:PRO:HD2	14:N2:86:GLU:HG3	1.79	0.63
32:Q1:130:LYS:HA	32:Q1:137:ALA:HA	1.81	0.63
32:Q2:130:LYS:HA	32:Q2:137:ALA:HA	1.81	0.63
32:Q2:93:VAL:HG13	32:Q2:105:LYS:HG3	1.79	0.63
31:P1:16:THR:HG22	34:S1:91:LYS:O	1.97	0.63
1:T5:9:VAL:HG21	1:T5:135:ALA:HB1	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z5:70:PRO:HG3	18:Z5:88:LEU:CD2	2.29	0.63
18:Z6:66:LYS:HB3	18:Z6:111:ARG:HD2	1.80	0.63
10:C5:267:GLN:HA	22:A5:120:ARG:HH12	1.63	0.63
26:F1:33:ILE:HG13	26:F1:34:SER:H	1.63	0.63
26:F4:106:GLU:HG2	26:F4:107:ASN:H	1.63	0.63
26:F6:33:ILE:HG13	26:F6:34:SER:H	1.63	0.63
11:G1:147:LEU:O	11:G1:148:SER:HB3	1.97	0.63
11:G2:221:LYS:O	11:G2:225:GLN:N	2.32	0.63
27:H4:147:LYS:HB3	27:H4:151:SER:HB3	1.78	0.63
27:H5:53:VAL:HG13	27:H5:175:GLY:HA3	1.81	0.63
27:H6:53:VAL:HG13	27:H6:175:GLY:HA3	1.81	0.63
14:N2:133:ARG:HD2	30:L2:152:LYS:CG	2.25	0.63
30:L3:78:THR:HG21	30:L3:89:ARG:HG3	1.80	0.63
14:N3:47:PRO:HD2	14:N3:86:GLU:HG3	1.79	0.63
14:N6:148:ALA:HB3	14:N6:149:LEU:CA	2.18	0.63
15:O3:63:LYS:HZ2	28:I6:163:GLU:CB	1.76	0.63
31:P4:121:ILE:HG23	31:P4:122:THR:N	2.13	0.63
32:Q1:93:VAL:HG13	32:Q1:105:LYS:HG3	1.79	0.63
32:Q3:130:LYS:HA	32:Q3:137:ALA:HA	1.80	0.63
33:R6:81:ARG:HH11	33:R6:81:ARG:HG2	1.63	0.63
2:U3:17:ILE:CB	2:U3:94:PRO:HA	2.28	0.63
23:B2:22:VAL:N	30:L4:30:LYS:HE3	2.14	0.63
26:F2:18:LYS:HE3	26:F2:46:ALA:H	1.61	0.63
26:F4:127:ARG:O	26:F4:137:GLN:HB2	1.98	0.63
28:I3:41:ARG:HH11	28:I3:62:VAL:HG21	1.63	0.63
28:I6:41:ARG:HH11	28:I6:62:VAL:HG21	1.63	0.63
14:N1:133:ARG:HD2	30:L1:152:LYS:CA	2.29	0.63
31:P1:41:GLN:OE1	31:P1:84:ILE:HG12	1.99	0.63
31:P4:44:ARG:HG3	31:P4:44:ARG:NH1	2.14	0.63
22:A4:214:GLU:CG	33:R4:84:TYR:CD1	2.81	0.63
2:U4:17:ILE:CB	2:U4:94:PRO:HA	2.28	0.63
16:W3:9:ASP:OD1	16:W3:10:ALA:N	2.31	0.63
22:A1:209:GLU:O	22:A1:213:GLU:HB2	1.98	0.63
25:E5:214:ASN:ND2	25:E5:216:ASN:OD1	2.32	0.63
26:F2:126:THR:C	26:F2:127:ARG:HG3	2.16	0.63
26:F5:106:GLU:HG2	26:F5:107:ASN:H	1.63	0.63
27:H1:163:GLN:HE21	27:H1:189:PHE:HE2	1.46	0.63
27:H2:53:VAL:HG13	27:H2:175:GLY:HA3	1.80	0.63
30:L5:125:ILE:HG22	30:L5:146:THR:OG1	1.99	0.63
14:N5:142:GLU:OE1	14:N5:145:THR:HG21	1.98	0.63
15:O2:13:GLN:HE21	15:O2:21:VAL:CG1	2.12	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P1:44:ARG:NH1	31:P1:44:ARG:HG3	2.12	0.63
31:P5:15:PHE:CZ	31:P5:109:PRO:O	2.51	0.63
33:R5:69:ILE:HG23	33:R5:70:SER:HA	1.80	0.63
1:T6:9:VAL:HG21	1:T6:135:ALA:HB1	1.79	0.63
2:U1:66:ARG:HE	2:U1:75:LYS:HG2	1.64	0.63
16:W2:9:ASP:OD1	16:W2:10:ALA:N	2.31	0.63
16:W5:11:LEU:HD21	16:W5:37:PHE:HE2	1.64	0.63
4:X5:67:ARG:NH1	4:X5:114:ASP:OD2	2.31	0.63
17:Y1:109:GLU:OE2	17:Y1:113:ARG:NE	2.30	0.63
17:Y6:109:GLU:OE2	17:Y6:113:ARG:NE	2.30	0.63
18:Z1:66:LYS:HB3	18:Z1:111:ARG:HD2	1.80	0.63
22:A5:214:GLU:HG3	33:R5:84:TYR:CD1	2.33	0.63
24:D4:22:ASN:O	24:D4:26:THR:OG1	2.15	0.63
26:F3:106:GLU:HG2	26:F3:107:ASN:H	1.64	0.63
26:F6:127:ARG:O	26:F6:137:GLN:HB2	1.98	0.63
11:G6:147:LEU:O	11:G6:148:SER:HB3	1.97	0.63
27:H2:104:PRO:HA	27:H2:107:LYS:HD2	1.81	0.63
27:H4:104:PRO:HA	27:H4:107:LYS:HD2	1.81	0.63
28:I2:41:ARG:HH11	28:I2:62:VAL:HG21	1.64	0.63
15:O6:13:GLN:HE21	15:O6:21:VAL:CG1	2.12	0.63
31:P6:72:LYS:NZ	31:P6:106:GLU:OE2	2.32	0.63
33:R1:61:ILE:CA	33:R1:73:LEU:HD22	2.28	0.63
16:W6:11:LEU:HD21	16:W6:37:PHE:HE2	1.64	0.63
4:X4:67:ARG:NH1	4:X4:114:ASP:OD2	2.31	0.63
18:Z2:70:PRO:HG3	18:Z2:88:LEU:CD2	2.29	0.63
10:C3:65:LYS:CE	10:C3:280:VAL:HB	2.28	0.62
10:C4:65:LYS:HG2	10:C4:279:ARG:CZ	2.29	0.62
25:E1:214:ASN:ND2	25:E1:216:ASN:OD1	2.32	0.62
26:F1:106:GLU:HG2	26:F1:107:ASN:H	1.63	0.62
26:F6:127:ARG:CB	26:F6:128:ILE:HA	2.24	0.62
11:G1:221:LYS:O	11:G1:225:GLN:N	2.32	0.62
28:I1:41:ARG:HH11	28:I1:62:VAL:HG21	1.63	0.62
14:N6:29:THR:C	14:N6:31:ASP:N	2.50	0.62
15:O5:46:ASP:O	15:O5:48:SER:N	2.32	0.62
31:P6:35:GLN:HA	31:P6:42:ARG:NH1	2.14	0.62
33:R2:81:ARG:HG2	33:R2:81:ARG:HH11	1.62	0.62
2:U5:66:ARG:HE	2:U5:75:LYS:HG2	1.64	0.62
16:W5:9:ASP:OD1	16:W5:10:ALA:N	2.31	0.62
18:Z3:66:LYS:HB3	18:Z3:111:ARG:HD2	1.81	0.62
18:Z3:46:ASN:HB3	18:Z3:80:ARG:CA	2.16	0.62
23:B1:34:LYS:NZ	23:B1:95:ASN:OD1	2.28	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C1:68:ARG:HH22	10:C1:276:THR:C	1.97	0.62
25:E6:214:ASN:ND2	25:E6:216:ASN:OD1	2.33	0.62
26:F3:127:ARG:O	26:F3:137:GLN:HB2	1.98	0.62
26:F6:136:ARG:O	26:F6:203:ASN:ND2	2.32	0.62
11:G4:221:LYS:O	11:G4:225:GLN:N	2.32	0.62
11:G5:221:LYS:O	11:G5:225:GLN:N	2.32	0.62
15:O2:63:LYS:CE	28:I4:163:GLU:CG	2.72	0.62
30:L4:152:LYS:HE3	30:L4:152:LYS:HA	1.80	0.62
13:M2:111:VAL:CG1	13:M2:114:TYR:CD1	2.81	0.62
15:O5:103:ASN:ND2	15:O5:140:THR:O	2.33	0.62
32:Q4:4:LYS:HZ3	32:Q4:99:TYR:HA	1.60	0.62
33:R3:61:ILE:CA	33:R3:73:LEU:HD22	2.29	0.62
33:R4:69:ILE:HG23	33:R4:70:SER:HA	1.80	0.62
33:R6:21:TYR:CZ	33:R6:72:LYS:HE3	2.33	0.62
16:W3:11:LEU:HD21	16:W3:37:PHE:HE2	1.64	0.62
18:Z2:66:LYS:HB3	18:Z2:111:ARG:HD2	1.80	0.62
18:Z4:66:LYS:HB3	18:Z4:111:ARG:HD2	1.80	0.62
26:F4:100:ILE:HG12	26:F4:178:ILE:HD11	1.81	0.62
11:G3:144:LEU:O	11:G3:145:PHE:HB2	2.00	0.62
11:G4:68:LEU:HG	11:G4:69:THR:HG23	1.81	0.62
27:H3:104:PRO:HA	27:H3:107:LYS:HD2	1.81	0.62
30:L6:78:THR:HG21	30:L6:89:ARG:HG3	1.80	0.62
14:N1:142:GLU:OE1	14:N1:145:THR:HG21	1.98	0.62
15:O1:13:GLN:HE21	15:O1:21:VAL:CG1	2.12	0.62
15:O3:46:ASP:O	15:O3:48:SER:N	2.32	0.62
15:O4:103:ASN:ND2	15:O4:140:THR:O	2.33	0.62
33:R6:58:MET:HA	33:R6:61:ILE:CD1	2.29	0.62
1:T3:19:ALA:O	1:T3:23:LYS:N	2.33	0.62
16:W3:49:GLU:OE1	27:H3:145:ARG:NH2	2.31	0.62
23:B2:24:PRO:HD2	30:L4:27:GLU:CG	2.28	0.62
30:L2:31:GLU:N	23:B5:21:VAL:HG23	2.09	0.62
26:F4:33:ILE:HG13	26:F4:34:SER:H	1.63	0.62
27:H5:104:PRO:HA	27:H5:107:LYS:HD2	1.81	0.62
30:L1:78:THR:HG21	30:L1:89:ARG:HG3	1.80	0.62
30:L4:121:GLN:CB	30:L4:153:LYS:CD	2.77	0.62
13:M3:111:VAL:CG1	13:M3:114:TYR:CD1	2.81	0.62
15:O6:46:ASP:O	15:O6:48:SER:N	2.32	0.62
32:Q4:6:PRO:O	32:Q4:7:LEU:HB2	2.00	0.62
2:U2:17:ILE:CB	2:U2:94:PRO:HA	2.28	0.62
2:U5:17:ILE:CB	2:U5:94:PRO:HA	2.28	0.62
18:Z2:85:ARG:HG3	18:Z2:85:ARG:NH2	2.13	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A3:33:GLN:HB2	22:A3:154:LEU:HD12	1.80	0.62
23:B5:128:LYS:HD3	23:B5:134:LEU:HD13	1.81	0.62
10:C4:123:ARG:NH2	10:C4:143:CYS:SG	2.73	0.62
10:C6:65:LYS:CE	10:C6:280:VAL:HB	2.28	0.62
25:E1:189:LEU:H	25:E1:245:ARG:HH22	1.47	0.62
25:E2:214:ASN:ND2	25:E2:216:ASN:OD1	2.33	0.62
25:E6:71:LYS:HG3	25:E6:91:SER:HB2	1.79	0.62
26:F1:100:ILE:HG12	26:F1:178:ILE:HD11	1.82	0.62
26:F1:126:THR:C	26:F1:127:ARG:HG3	2.16	0.62
11:G5:149:LYS:HB2	11:G5:149:LYS:HZ2	1.64	0.62
28:I2:125:LYS:HB3	15:O5:66:ARG:NH1	2.14	0.62
15:O3:103:ASN:ND2	15:O3:140:THR:O	2.33	0.62
15:O4:13:GLN:HE21	15:O4:21:VAL:CG1	2.12	0.62
31:P2:41:GLN:NE2	31:P2:84:ILE:CG2	2.52	0.62
31:P2:72:LYS:NZ	31:P2:106:GLU:OE2	2.32	0.62
1:T1:19:ALA:O	1:T1:23:LYS:N	2.33	0.62
2:U6:25:THR:OG1	2:U6:111:GLU:OE1	2.17	0.62
22:A1:33:GLN:HB2	22:A1:154:LEU:HD12	1.80	0.62
22:A4:33:GLN:HB2	22:A4:154:LEU:HD12	1.80	0.62
10:C2:123:ARG:NH2	10:C2:143:CYS:SG	2.73	0.62
10:C2:65:LYS:HG2	10:C2:279:ARG:CZ	2.29	0.62
10:C3:123:ARG:NH2	10:C3:143:CYS:SG	2.73	0.62
25:E3:189:LEU:H	25:E3:245:ARG:HH22	1.46	0.62
25:E5:189:LEU:H	25:E5:245:ARG:HH22	1.46	0.62
26:F6:100:ILE:HG12	26:F6:178:ILE:HD11	1.81	0.62
11:G2:144:LEU:O	11:G2:145:PHE:HB2	1.99	0.62
27:H1:53:VAL:HG13	27:H1:175:GLY:HA3	1.80	0.62
30:L2:121:GLN:CB	30:L2:153:LYS:HD2	2.26	0.62
14:N1:137:PRO:HG3	30:L1:154:GLN:HB2	1.82	0.62
15:O2:46:ASP:O	15:O2:48:SER:N	2.32	0.62
31:P3:72:LYS:NZ	31:P3:106:GLU:OE2	2.32	0.62
33:R2:60:ARG:HH11	33:R2:60:ARG:HG3	1.62	0.62
18:Z5:49:LEU:H	18:Z5:83:LEU:CD1	2.13	0.62
10:C1:65:LYS:HG2	10:C1:279:ARG:CZ	2.29	0.62
11:G3:68:LEU:HG	11:G3:69:THR:HG23	1.81	0.62
11:G6:221:LYS:O	11:G6:225:GLN:N	2.32	0.62
27:H3:163:GLN:HE21	27:H3:189:PHE:HE2	1.46	0.62
27:H6:66:VAL:HG22	27:H6:96:ALA:HB1	1.81	0.62
14:N3:148:ALA:HB3	14:N3:149:LEU:CA	2.18	0.62
15:O1:46:ASP:O	15:O1:48:SER:N	2.32	0.62
31:P4:15:PHE:CZ	31:P4:112:ILE:CD1	2.78	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:Q6:6:PRO:O	32:Q6:7:LEU:HB2	2.00	0.62
2:U2:25:THR:OG1	2:U2:111:GLU:OE1	2.17	0.62
2:U3:66:ARG:HE	2:U3:75:LYS:HG2	1.64	0.62
16:W4:111:MET:HE1	16:W4:119:LYS:HD3	1.75	0.62
18:Z3:70:PRO:HG3	18:Z3:88:LEU:CD2	2.29	0.62
18:Z4:49:LEU:H	18:Z4:83:LEU:CD1	2.13	0.62
10:C3:267:GLN:HB2	22:A3:120:ARG:HH22	1.65	0.62
10:C4:65:LYS:CB	10:C4:279:ARG:CB	2.72	0.62
10:C6:65:LYS:HG2	10:C6:279:ARG:CZ	2.29	0.62
25:E4:214:ASN:ND2	25:E4:216:ASN:OD1	2.32	0.62
11:G4:141:ILE:HG12	11:G4:144:LEU:CD2	1.94	0.62
11:G6:68:LEU:HG	11:G6:69:THR:HG23	1.81	0.62
27:H1:104:PRO:HA	27:H1:107:LYS:HD2	1.81	0.62
27:H2:163:GLN:HE21	27:H2:189:PHE:HE2	1.46	0.62
14:N5:47:PRO:HD2	14:N5:86:GLU:HG3	1.80	0.62
31:P2:119:PHE:HE1	34:S2:119:ALA:HB1	1.46	0.62
1:T6:19:ALA:O	1:T6:23:LYS:N	2.33	0.62
2:U2:17:ILE:HG22	2:U2:95:SER:N	2.03	0.62
2:U6:66:ARG:HE	2:U6:75:LYS:HG2	1.64	0.62
18:Z1:50:PHE:O	34:S1:5:ILE:HG22	1.92	0.62
18:Z3:85:ARG:NH2	18:Z3:85:ARG:HG3	2.13	0.62
18:Z6:70:PRO:HG3	18:Z6:88:LEU:CD2	2.29	0.62
22:A5:33:GLN:HB2	22:A5:154:LEU:HD12	1.80	0.62
26:F2:33:ILE:HG13	26:F2:34:SER:H	1.63	0.62
11:G1:68:LEU:HG	11:G1:69:THR:HG23	1.80	0.62
11:G5:68:LEU:HG	11:G5:69:THR:HG23	1.81	0.62
29:K2:60:GLU:HB3	29:K2:69:TRP:HA	1.82	0.62
14:N2:133:ARG:HD2	30:L2:152:LYS:HB3	1.80	0.62
14:N1:133:ARG:CD	30:L1:152:LYS:CG	2.78	0.62
15:O5:13:GLN:HE21	15:O5:21:VAL:CG1	2.12	0.62
31:P3:16:THR:HG22	34:S3:91:LYS:O	1.98	0.62
2:U1:25:THR:OG1	2:U1:111:GLU:OE1	2.16	0.62
2:U4:66:ARG:HE	2:U4:75:LYS:HG2	1.64	0.62
16:W1:37:PHE:CE1	16:W1:103:VAL:HG21	2.33	0.62
16:W3:117:ARG:NH1	16:W3:117:ARG:HG3	2.12	0.62
17:Y5:113:ARG:HA	17:Y5:116:LYS:HZ1	1.62	0.62
18:Z1:70:PRO:HG3	18:Z1:88:LEU:CD2	2.29	0.62
18:Z1:80:ARG:HH12	34:S1:23:ARG:HD2	1.65	0.62
18:Z5:50:PHE:O	34:S5:5:ILE:HG22	1.93	0.62
22:A4:12:GLU:HG3	22:A4:13:GLU:H	1.63	0.62
10:C4:65:LYS:HE3	10:C4:280:VAL:HB	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C5:65:LYS:HG2	10:C5:279:ARG:CZ	2.29	0.62
13:M5:27:ILE:HG22	29:K5:84:HIS:CE1	2.31	0.62
14:N2:148:ALA:HB3	14:N2:149:LEU:CA	2.17	0.62
33:R6:21:TYR:CZ	33:R6:72:LYS:CE	2.83	0.62
2:U5:22:ILE:N	2:U5:89:ILE:O	2.32	0.62
18:Z2:49:LEU:H	18:Z2:83:LEU:CD1	2.13	0.62
18:Z5:85:ARG:HG3	18:Z5:85:ARG:NH2	2.13	0.62
10:C4:267:GLN:HB2	22:A4:120:ARG:HH22	1.65	0.61
10:C6:267:GLN:HA	22:A6:120:ARG:HH12	1.63	0.61
23:B4:128:LYS:HD3	23:B4:134:LEU:HD13	1.81	0.61
23:B5:134:LEU:HG	23:B5:218:LEU:HD12	1.82	0.61
23:B6:128:LYS:HD3	23:B6:134:LEU:HD13	1.81	0.61
23:B6:134:LEU:HG	23:B6:218:LEU:HD12	1.82	0.61
25:E2:189:LEU:H	25:E2:245:ARG:HH22	1.46	0.61
25:E3:214:ASN:ND2	25:E3:216:ASN:OD1	2.32	0.61
26:F3:28:VAL:HG23	26:F3:109:LEU:HD22	1.82	0.61
27:H4:53:VAL:HG13	27:H4:175:GLY:HA3	1.81	0.61
27:H5:66:VAL:HG22	27:H5:96:ALA:HB1	1.81	0.61
28:I2:125:LYS:CD	15:O5:66:ARG:NH1	2.60	0.61
30:L1:73:LEU:O	30:L1:128:VAL:N	2.30	0.61
30:L4:125:ILE:HG22	30:L4:146:THR:OG1	2.00	0.61
14:N6:71:ILE:HA	14:N6:74:ILE:HG22	1.82	0.61
33:R2:77:GLU:HG2	33:R2:81:ARG:HG3	1.81	0.61
33:R3:69:ILE:HG23	33:R3:70:SER:HA	1.81	0.61
18:Z3:83:LEU:HD21	34:S3:55:ARG:HH21	1.64	0.61
3:V5:74:LYS:O	3:V5:81:LYS:NZ	2.31	0.61
25:E2:180:LEU:HA	25:E2:194:VAL:HA	1.82	0.61
26:F5:127:ARG:CB	26:F5:128:ILE:HA	2.24	0.61
26:F5:33:ILE:HG13	26:F5:34:SER:H	1.63	0.61
29:K6:52:LEU:HA	29:K6:55:ARG:HG2	1.82	0.61
13:M1:14:VAL:CG1	13:M1:127:TYR:CD1	2.74	0.61
15:O3:13:GLN:HE21	15:O3:21:VAL:CG1	2.12	0.61
31:P2:15:PHE:O	31:P2:16:THR:OG1	2.18	0.61
31:P2:41:GLN:OE1	31:P2:84:ILE:CG1	2.48	0.61
31:P3:45:LEU:HD12	31:P3:49:LEU:CD2	2.31	0.61
32:Q4:4:LYS:HZ2	32:Q4:99:TYR:HD1	1.46	0.61
2:U2:66:ARG:HE	2:U2:75:LYS:HG2	1.64	0.61
18:Z5:111:ARG:O	18:Z5:113:THR:HG23	2.00	0.61
22:A5:209:GLU:O	22:A5:213:GLU:HB2	1.99	0.61
23:B4:134:LEU:HG	23:B4:218:LEU:HD12	1.82	0.61
10:C1:123:ARG:NH2	10:C1:143:CYS:SG	2.73	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C6:123:ARG:NH2	10:C6:143:CYS:SG	2.73	0.61
26:F2:100:ILE:HG12	26:F2:178:ILE:HD11	1.81	0.61
26:F3:33:ILE:HG13	26:F3:34:SER:H	1.63	0.61
29:K4:60:GLU:HB3	29:K4:69:TRP:HA	1.82	0.61
15:O1:103:ASN:ND2	15:O1:140:THR:O	2.33	0.61
15:O6:103:ASN:ND2	15:O6:140:THR:O	2.33	0.61
31:P1:72:LYS:NZ	31:P1:106:GLU:OE2	2.32	0.61
31:P3:122:THR:HG23	31:P3:122:THR:O	2.01	0.61
31:P4:133:ILE:HG22	31:P4:134:GLY:H	1.65	0.61
32:Q4:130:LYS:HA	32:Q4:137:ALA:HA	1.80	0.61
33:R1:81:ARG:HG2	33:R1:81:ARG:HH11	1.63	0.61
1:T1:124:THR:HG23	1:T1:127:GLY:H	1.65	0.61
16:W2:11:LEU:HD21	16:W2:37:PHE:HE2	1.64	0.61
18:Z2:111:ARG:O	18:Z2:113:THR:HG23	2.01	0.61
18:Z3:49:LEU:H	18:Z3:83:LEU:CD1	2.13	0.61
18:Z4:70:PRO:HG3	18:Z4:88:LEU:CD2	2.29	0.61
23:B2:128:LYS:HD3	23:B2:134:LEU:HD13	1.81	0.61
23:B2:22:VAL:N	30:L4:30:LYS:CE	2.64	0.61
10:C6:267:GLN:HB2	22:A6:120:ARG:HH22	1.65	0.61
24:D4:11:PHE:O	24:D4:15:GLY:N	2.31	0.61
26:F1:28:VAL:HG23	26:F1:109:LEU:HD22	1.82	0.61
27:H3:66:VAL:HG22	27:H3:96:ALA:HB1	1.81	0.61
27:H5:163:GLN:HE21	27:H5:189:PHE:HE2	1.46	0.61
28:I4:101:ILE:HD12	28:I4:190:LEU:HD11	1.82	0.61
12:J6:169:ARG:HD2	12:J6:170:PRO:HD2	1.82	0.61
29:K5:52:LEU:HA	29:K5:55:ARG:HG2	1.82	0.61
24:D5:64:ARG:CD	29:K5:95:ARG:HH22	2.14	0.61
31:P4:41:GLN:NE2	31:P4:84:ILE:CG2	2.51	0.61
31:P5:133:ILE:HG22	31:P5:134:GLY:N	2.15	0.61
32:Q4:4:LYS:HD3	32:Q4:8:GLN:HE21	1.65	0.61
33:R1:61:ILE:HA	33:R1:64:GLY:O	2.01	0.61
4:X1:67:ARG:NH1	4:X1:114:ASP:OD2	2.31	0.61
18:Z3:111:ARG:O	18:Z3:113:THR:HG23	2.00	0.61
18:Z6:49:LEU:H	18:Z6:83:LEU:CD1	2.13	0.61
23:B3:128:LYS:HD3	23:B3:134:LEU:HD13	1.81	0.61
24:D4:64:ARG:CD	29:K4:95:ARG:HH22	2.14	0.61
26:F2:28:VAL:HG23	26:F2:109:LEU:HD22	1.83	0.61
13:M4:27:ILE:CG2	29:K4:84:HIS:ND1	2.46	0.61
13:M6:27:ILE:HG22	29:K6:84:HIS:CE1	2.31	0.61
30:L6:73:LEU:O	30:L6:128:VAL:N	2.30	0.61
31:P4:41:GLN:OE1	31:P4:84:ILE:CG1	2.48	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P6:34:MET:O	31:P6:42:ARG:CG	2.48	0.61
32:Q1:4:LYS:HD3	32:Q1:8:GLN:HE21	1.66	0.61
1:T4:124:THR:HG23	1:T4:127:GLY:H	1.65	0.61
3:V3:74:LYS:O	3:V3:81:LYS:NZ	2.31	0.61
16:W4:11:LEU:HD21	16:W4:37:PHE:HE2	1.64	0.61
23:B3:134:LEU:HG	23:B3:218:LEU:HD12	1.82	0.61
10:C1:267:GLN:HB2	22:A1:120:ARG:HH22	1.65	0.61
10:C1:277:HIS:NE2	10:C1:279:ARG:HD3	2.16	0.61
11:G1:144:LEU:O	11:G1:145:PHE:HB2	2.00	0.61
27:H2:66:VAL:HG22	27:H2:96:ALA:HB1	1.81	0.61
28:I1:101:ILE:HD12	28:I1:190:LEU:HD11	1.82	0.61
12:J1:11:LYS:NZ	12:J1:13:TYR:O	2.30	0.61
12:J3:169:ARG:HD2	12:J3:170:PRO:HD2	1.82	0.61
29:K1:52:LEU:HA	29:K1:55:ARG:HG2	1.83	0.61
14:N4:148:ALA:HB3	14:N4:149:LEU:CA	2.18	0.61
32:Q1:6:PRO:O	32:Q1:7:LEU:HB2	2.00	0.61
33:R2:78:ARG:O	33:R2:82:ASP:HB2	1.99	0.61
1:T2:19:ALA:O	1:T2:23:LYS:N	2.32	0.61
2:U4:67:LYS:HB2	2:U4:78:ASP:HB2	1.83	0.61
3:V5:67:ASP:OD1	22:A5:36:GLN:NE2	2.34	0.61
16:W1:11:LEU:HD21	16:W1:37:PHE:HE2	1.64	0.61
18:Z4:80:ARG:HH12	34:S4:23:ARG:HD2	1.65	0.61
22:A4:214:GLU:HG3	33:R4:84:TYR:CD1	2.34	0.61
10:C5:267:GLN:HB2	22:A5:120:ARG:HH22	1.65	0.61
10:C3:65:LYS:HE3	10:C3:280:VAL:HB	1.82	0.61
26:F5:28:VAL:HG23	26:F5:109:LEU:HD22	1.82	0.61
27:H1:66:VAL:HG22	27:H1:96:ALA:HB1	1.81	0.61
27:H6:104:PRO:HA	27:H6:107:LYS:HD2	1.81	0.61
29:K5:60:GLU:HB3	29:K5:69:TRP:HA	1.82	0.61
30:L1:125:ILE:O	30:L1:146:THR:O	2.19	0.61
14:N5:71:ILE:HA	14:N5:74:ILE:HG22	1.82	0.61
15:O2:103:ASN:ND2	15:O2:140:THR:O	2.33	0.61
31:P6:15:PHE:O	31:P6:16:THR:OG1	2.18	0.61
33:R3:65:PRO:CB	33:R3:73:LEU:CD2	2.79	0.61
34:S6:68:ILE:HG23	34:S6:72:GLN:HE21	1.66	0.61
17:Y1:129:LYS:HA	17:Y1:132:LYS:HD2	1.83	0.61
17:Y4:126:GLY:O	17:Y4:130:LYS:NZ	2.27	0.61
22:A3:34:MET:HE2	22:A3:154:LEU:HD21	1.83	0.61
10:C2:267:GLN:HB2	22:A2:120:ARG:HH22	1.66	0.61
10:C5:123:ARG:NH2	10:C5:143:CYS:SG	2.73	0.61
11:G4:141:ILE:O	11:G4:144:LEU:CG	2.47	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G6:141:ILE:HG12	11:G6:144:LEU:CD2	1.94	0.61
30:L6:71:ARG:HB2	30:L6:130:GLU:HB2	1.83	0.61
13:M6:14:VAL:CG1	13:M6:127:TYR:CD1	2.74	0.61
14:N4:133:ARG:CG	30:L4:152:LYS:HG3	2.31	0.61
14:N4:133:ARG:HH21	30:L4:154:GLN:CG	2.13	0.61
34:S3:68:ILE:HG23	34:S3:72:GLN:HE21	1.66	0.61
1:T6:124:THR:HG23	1:T6:127:GLY:H	1.66	0.61
3:V3:67:ASP:OD1	22:A3:36:GLN:NE2	2.34	0.61
17:Y4:129:LYS:HA	17:Y4:132:LYS:HD2	1.82	0.61
22:A6:34:MET:HE2	22:A6:154:LEU:HD21	1.81	0.61
23:B1:23:ASP:OD1	23:B1:24:PRO:CD	2.42	0.61
10:C1:65:LYS:HE3	10:C1:280:VAL:HB	1.82	0.61
10:C2:65:LYS:CB	10:C2:279:ARG:CB	2.72	0.61
10:C5:68:ARG:HH22	10:C5:276:THR:C	1.97	0.61
25:E3:180:LEU:HA	25:E3:194:VAL:HA	1.83	0.61
26:F6:28:VAL:HG23	26:F6:109:LEU:HD22	1.82	0.61
11:G4:144:LEU:O	11:G4:145:PHE:HB2	2.00	0.61
11:G6:144:LEU:O	11:G6:145:PHE:HB2	1.99	0.61
29:K2:52:LEU:HA	29:K2:55:ARG:HG2	1.83	0.61
29:K6:60:GLU:HB3	29:K6:69:TRP:HA	1.82	0.61
13:M5:27:ILE:CG2	29:K5:84:HIS:NE2	2.63	0.61
13:M6:27:ILE:CG2	29:K6:84:HIS:NE2	2.63	0.61
33:R6:71:ILE:HD13	33:R6:71:ILE:C	2.20	0.61
3:V1:67:ASP:OD1	22:A1:36:GLN:NE2	2.34	0.61
16:W4:40:VAL:O	16:W4:44:HIS:ND1	2.30	0.61
4:X4:59:ALA:HB2	4:X4:67:ARG:HG2	1.83	0.61
18:Z1:49:LEU:H	18:Z1:83:LEU:CD1	2.13	0.61
18:Z4:111:ARG:O	18:Z4:113:THR:HG23	2.00	0.61
23:B2:134:LEU:HG	23:B2:218:LEU:HD12	1.82	0.61
10:C2:277:HIS:NE2	10:C2:279:ARG:HD3	2.16	0.61
10:C3:65:LYS:HG2	10:C3:279:ARG:CZ	2.29	0.61
11:G2:225:GLN:HA	11:G2:228:ILE:HG22	1.83	0.61
11:G2:68:LEU:HG	11:G2:69:THR:HG23	1.81	0.61
12:J4:169:ARG:HD2	12:J4:170:PRO:HD2	1.82	0.61
29:K4:52:LEU:HA	29:K4:55:ARG:HG2	1.83	0.61
14:N4:71:ILE:HA	14:N4:74:ILE:HG22	1.82	0.61
14:N6:29:THR:O	14:N6:32:ASP:N	2.33	0.61
15:O4:46:ASP:O	15:O4:48:SER:N	2.32	0.61
31:P6:122:THR:HG23	31:P6:122:THR:O	2.01	0.61
32:Q3:4:LYS:HD3	32:Q3:8:GLN:HE21	1.66	0.61
33:R4:86:PRO:O	33:R4:89:SER:OG	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P3:119:PHE:HA	34:S3:120:HIS:HB2	1.83	0.61
2:U2:67:LYS:HB2	2:U2:78:ASP:HB2	1.83	0.61
16:W3:30:CYS:HA	16:W3:34:ILE:HD11	1.83	0.61
16:W5:40:VAL:O	16:W5:44:HIS:ND1	2.30	0.61
16:W5:72:CYS:SG	16:W5:73:GLY:N	2.72	0.61
4:X2:67:ARG:NH1	4:X2:114:ASP:OD2	2.31	0.61
17:Y5:129:LYS:HA	17:Y5:132:LYS:HD2	1.83	0.61
17:Y6:129:LYS:HA	17:Y6:132:LYS:HD2	1.83	0.61
22:A1:34:MET:HE2	22:A1:154:LEU:HD21	1.82	0.60
22:A5:34:MET:HE2	22:A5:154:LEU:HD21	1.83	0.60
26:F2:193:LYS:O	26:F2:197:GLU:N	2.34	0.60
26:F3:100:ILE:HG12	26:F3:178:ILE:HD11	1.81	0.60
11:G2:137:ARG:HB2	11:G2:140:ARG:HB2	1.83	0.60
11:G6:137:ARG:HB2	11:G6:140:ARG:HB2	1.83	0.60
13:M4:27:ILE:HG22	29:K4:84:HIS:CE1	2.31	0.60
30:L3:71:ARG:HB2	30:L3:130:GLU:HB2	1.83	0.60
30:L5:152:LYS:CE	30:L5:154:GLN:HE21	2.14	0.60
31:P4:15:PHE:O	31:P4:16:THR:OG1	2.18	0.60
32:Q2:4:LYS:HD3	32:Q2:8:GLN:HE21	1.66	0.60
1:T2:124:THR:HG23	1:T2:127:GLY:H	1.65	0.60
3:V2:67:ASP:OD1	22:A2:36:GLN:NE2	2.34	0.60
16:W6:30:CYS:HA	16:W6:34:ILE:HD11	1.83	0.60
4:X6:59:ALA:HB2	4:X6:67:ARG:HG2	1.83	0.60
17:Y1:126:GLY:O	17:Y1:130:LYS:NZ	2.27	0.60
18:Z6:111:ARG:O	18:Z6:113:THR:HG23	2.00	0.60
18:Z6:50:PHE:O	34:S6:5:ILE:HG22	1.92	0.60
23:B5:34:LYS:NZ	23:B5:95:ASN:OD1	2.29	0.60
10:C2:65:LYS:HE3	10:C2:280:VAL:HB	1.82	0.60
25:E1:164:LEU:CD1	25:E1:165:GLU:H	2.15	0.60
26:F1:30:ILE:HG12	26:F1:113:VAL:HG11	1.83	0.60
26:F2:30:ILE:HG12	26:F2:113:VAL:HG11	1.83	0.60
26:F3:30:ILE:HG12	26:F3:113:VAL:HG11	1.84	0.60
11:G2:149:LYS:O	11:G2:150:GLU:HB2	2.01	0.60
11:G4:149:LYS:O	11:G4:150:GLU:HB2	2.01	0.60
14:N1:71:ILE:HA	14:N1:74:ILE:HG22	1.82	0.60
31:P1:15:PHE:O	31:P1:16:THR:OG1	2.18	0.60
32:Q3:6:PRO:O	32:Q3:7:LEU:HB2	2.00	0.60
2:U1:67:LYS:HB2	2:U1:78:ASP:HB2	1.83	0.60
3:V4:67:ASP:OD1	22:A4:36:GLN:NE2	2.34	0.60
18:Z6:80:ARG:HH12	34:S6:23:ARG:HD2	1.65	0.60
22:A6:4:ALA:N	22:A6:5:LEU:HA	2.16	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B1:128:LYS:HD3	23:B1:134:LEU:HD13	1.81	0.60
23:B1:134:LEU:HG	23:B1:218:LEU:HD12	1.82	0.60
10:C6:65:LYS:HE3	10:C6:280:VAL:HB	1.82	0.60
24:D1:64:ARG:CD	29:K1:95:ARG:HH22	2.14	0.60
24:D2:64:ARG:CD	29:K2:95:ARG:HH22	2.14	0.60
25:E1:180:LEU:HA	25:E1:194:VAL:HA	1.82	0.60
11:G5:137:ARG:HB2	11:G5:140:ARG:HB2	1.83	0.60
28:I5:101:ILE:HD12	28:I5:190:LEU:HD11	1.83	0.60
12:J1:77:LEU:HB3	12:J1:80:ARG:HH21	1.67	0.60
30:L2:30:LYS:HA	23:B5:21:VAL:N	2.15	0.60
30:L5:71:ARG:HB2	30:L5:130:GLU:HB2	1.83	0.60
13:M2:27:ILE:CG2	29:K2:84:HIS:NE2	2.64	0.60
15:O3:147:ARG:HD2	15:O3:150:ARG:HE	1.67	0.60
31:P2:119:PHE:HA	34:S2:120:HIS:HB2	1.83	0.60
32:Q3:4:LYS:HZ2	32:Q3:99:TYR:CB	2.14	0.60
32:Q6:4:LYS:HD3	32:Q6:8:GLN:HE21	1.66	0.60
33:R1:58:MET:HA	33:R1:61:ILE:HG12	1.82	0.60
34:S5:22:GLY:HA2	34:S5:56:ALA:HB3	1.83	0.60
16:W2:30:CYS:HA	16:W2:34:ILE:HD11	1.83	0.60
10:C4:277:HIS:NE2	10:C4:279:ARG:HD3	2.16	0.60
26:F4:28:VAL:HG23	26:F4:109:LEU:HD22	1.83	0.60
11:G3:137:ARG:HB2	11:G3:140:ARG:HB2	1.83	0.60
11:G4:74:ARG:HG2	11:G4:96:SER:HA	1.84	0.60
27:H4:66:VAL:HG22	27:H4:96:ALA:HB1	1.81	0.60
28:I6:101:ILE:HD12	28:I6:190:LEU:HD11	1.82	0.60
30:L2:71:ARG:HB2	30:L2:130:GLU:HB2	1.83	0.60
15:O6:147:ARG:HD2	15:O6:150:ARG:HE	1.67	0.60
31:P5:41:GLN:OE1	31:P5:84:ILE:CG1	2.49	0.60
32:Q5:6:PRO:O	32:Q5:7:LEU:HB2	2.00	0.60
34:S5:68:ILE:HG23	34:S5:72:GLN:HE21	1.66	0.60
1:T3:124:THR:HG23	1:T3:127:GLY:H	1.66	0.60
16:W4:30:CYS:HA	16:W4:34:ILE:HD11	1.83	0.60
18:Z1:46:ASN:HB3	18:Z1:80:ARG:CA	2.16	0.60
23:B3:144:LYS:HD2	23:B3:208:HIS:HB3	1.84	0.60
10:C3:277:HIS:NE2	10:C3:279:ARG:HD3	2.16	0.60
25:E1:11:ARG:NH1	25:E1:21:ASP:O	2.35	0.60
25:E5:164:LEU:CD1	25:E5:165:GLU:H	2.14	0.60
26:F6:30:ILE:HG12	26:F6:113:VAL:HG11	1.83	0.60
11:G2:171:THR:HG22	11:G2:172:LYS:H	1.66	0.60
11:G3:225:GLN:HA	11:G3:228:ILE:HG22	1.83	0.60
11:G4:212:LEU:O	11:G4:216:ARG:N	2.28	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J2:169:ARG:HD2	12:J2:170:PRO:HD2	1.82	0.60
12:J4:128:VAL:HG12	12:J4:132:GLN:HE22	1.67	0.60
12:J5:169:ARG:HD2	12:J5:170:PRO:HD2	1.82	0.60
29:K3:52:LEU:HA	29:K3:55:ARG:HG2	1.82	0.60
14:N4:40:LEU:O	14:N4:43:LYS:HG2	2.02	0.60
32:Q5:4:LYS:HD3	32:Q5:8:GLN:HE21	1.66	0.60
34:S4:68:ILE:HG23	34:S4:72:GLN:HE21	1.66	0.60
16:W4:72:CYS:SG	16:W4:73:GLY:N	2.73	0.60
4:X3:67:ARG:NH1	4:X3:114:ASP:OD2	2.31	0.60
4:X3:132:ALA:HB1	4:X3:137:LYS:HD2	1.84	0.60
17:Y2:109:GLU:CD	17:Y2:113:ARG:NH1	2.55	0.60
23:B1:144:LYS:HD2	23:B1:208:HIS:HB3	1.84	0.60
25:E4:180:LEU:HA	25:E4:194:VAL:HA	1.83	0.60
25:E6:180:LEU:HA	25:E6:194:VAL:HA	1.83	0.60
26:F1:193:LYS:O	26:F1:197:GLU:N	2.34	0.60
26:F4:30:ILE:HG12	26:F4:113:VAL:HG11	1.84	0.60
11:G1:225:GLN:HA	11:G1:228:ILE:HG22	1.83	0.60
11:G4:137:ARG:HB2	11:G4:140:ARG:HB2	1.83	0.60
11:G6:225:GLN:HA	11:G6:228:ILE:HG22	1.83	0.60
12:J1:169:ARG:HD2	12:J1:170:PRO:HD2	1.82	0.60
12:J5:128:VAL:HG12	12:J5:132:GLN:HE22	1.67	0.60
29:K3:60:GLU:HB3	29:K3:69:TRP:HA	1.82	0.60
30:L6:121:GLN:CB	30:L6:153:LYS:CG	2.79	0.60
13:M1:27:ILE:CG2	29:K1:84:HIS:NE2	2.63	0.60
14:N3:71:ILE:HA	14:N3:74:ILE:HG22	1.82	0.60
31:P2:41:GLN:CB	31:P2:84:ILE:CD1	2.50	0.60
34:S1:68:ILE:HG23	34:S1:72:GLN:HE21	1.65	0.60
34:S2:22:GLY:HA2	34:S2:56:ALA:HB3	1.83	0.60
22:A4:110:ASN:OD1	22:A4:111:GLN:N	2.35	0.60
11:G3:141:ILE:CG1	11:G3:144:LEU:CG	2.78	0.60
11:G4:225:GLN:HA	11:G4:228:ILE:HG22	1.83	0.60
28:I2:101:ILE:HD12	28:I2:190:LEU:HD11	1.83	0.60
15:O2:66:ARG:CZ	28:I4:125:LYS:CD	2.77	0.60
12:J1:77:LEU:HA	12:J1:80:ARG:HE	1.67	0.60
12:J6:77:LEU:HB3	12:J6:80:ARG:HH21	1.67	0.60
24:D1:71:ALA:HB3	29:K1:20:VAL:HG11	1.84	0.60
24:D4:71:ALA:HB3	29:K4:20:VAL:HG11	1.84	0.60
30:L4:71:ARG:HB2	30:L4:130:GLU:HB2	1.83	0.60
13:M4:27:ILE:CG2	29:K4:84:HIS:NE2	2.63	0.60
14:N2:40:LEU:O	14:N2:43:LYS:HG2	2.02	0.60
31:P5:122:THR:O	31:P5:122:THR:HG23	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R1:78:ARG:O	33:R1:82:ASP:HB2	2.02	0.60
4:X2:132:ALA:HB1	4:X2:137:LYS:HD2	1.84	0.60
17:Y3:129:LYS:HA	17:Y3:132:LYS:HD2	1.83	0.60
18:Z1:111:ARG:O	18:Z1:113:THR:HG23	2.01	0.60
22:A5:110:ASN:OD1	22:A5:111:GLN:N	2.35	0.60
10:C2:130:ILE:O	10:C2:138:GLY:N	2.35	0.60
10:C2:273:LEU:HB3	10:C2:280:VAL:HG13	1.64	0.60
25:E2:164:LEU:CD1	25:E2:165:GLU:H	2.14	0.60
26:F3:193:LYS:O	26:F3:197:GLU:N	2.34	0.60
26:F4:193:LYS:O	26:F4:197:GLU:N	2.34	0.60
11:G1:171:THR:HG22	11:G1:172:LYS:H	1.66	0.60
11:G5:171:THR:HG22	11:G5:172:LYS:H	1.66	0.60
11:G6:171:THR:HG22	11:G6:172:LYS:H	1.66	0.60
12:J5:77:LEU:HA	12:J5:80:ARG:HE	1.67	0.60
30:L1:71:ARG:HB2	30:L1:130:GLU:HB2	1.83	0.60
30:L6:152:LYS:N	30:L6:152:LYS:HD2	2.14	0.60
14:N3:40:LEU:O	14:N3:43:LYS:HG2	2.02	0.60
31:P4:124:LYS:CG	31:P4:125:PRO:HD2	2.31	0.60
18:Z4:83:LEU:HD21	34:S4:55:ARG:HH21	1.65	0.60
1:T5:19:ALA:O	1:T5:23:LYS:N	2.33	0.60
3:V6:67:ASP:OD1	22:A6:36:GLN:NE2	2.34	0.60
16:W3:15:ASN:ND2	16:W3:72:CYS:H	2.00	0.60
16:W5:15:ASN:ND2	16:W5:72:CYS:H	2.00	0.60
22:A1:158:ASP:OD1	22:A1:159:ILE:N	2.35	0.60
22:A5:4:ALA:N	22:A5:5:LEU:HA	2.16	0.60
10:C5:130:ILE:O	10:C5:138:GLY:N	2.35	0.60
26:F1:127:ARG:CB	26:F1:128:ILE:HA	2.24	0.60
11:G3:85:ARG:O	11:G3:87:ARG:NH1	2.35	0.60
11:G5:74:ARG:HG2	11:G5:96:SER:HA	1.84	0.60
12:J4:77:LEU:HA	12:J4:80:ARG:HE	1.67	0.60
14:N3:132:LYS:CA	30:L3:152:LYS:NZ	2.60	0.60
14:N3:135:LEU:CB	14:N3:136:PRO:CD	2.80	0.60
31:P1:119:PHE:HA	34:S1:120:HIS:HB2	1.83	0.60
31:P1:122:THR:O	31:P1:122:THR:HG23	2.01	0.60
31:P2:122:THR:O	31:P2:122:THR:HG23	2.01	0.60
31:P4:72:LYS:NZ	31:P4:106:GLU:OE2	2.32	0.60
31:P5:119:PHE:HA	34:S5:120:HIS:HB2	1.83	0.60
32:Q4:4:LYS:HZ2	32:Q4:99:TYR:CB	2.14	0.60
34:S2:68:ILE:HG23	34:S2:72:GLN:HE21	1.66	0.60
34:S3:22:GLY:HA2	34:S3:56:ALA:HB3	1.82	0.60
1:T5:124:THR:HG23	1:T5:127:GLY:H	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U3:67:LYS:HB2	2:U3:78:ASP:HB2	1.83	0.60
2:U5:20:ILE:N	2:U5:91:LEU:O	2.28	0.60
16:W5:30:CYS:HA	16:W5:34:ILE:HD11	1.83	0.60
23:B4:65:ARG:H	23:B4:88:THR:HG22	1.66	0.60
23:B5:65:ARG:H	23:B5:88:THR:HG22	1.67	0.60
23:B6:34:LYS:NZ	23:B6:95:ASN:OD1	2.29	0.60
10:C4:130:ILE:O	10:C4:138:GLY:N	2.35	0.60
24:D1:11:PHE:O	24:D1:15:GLY:N	2.31	0.60
24:D4:42:THR:OG1	24:D4:45:ARG:O	2.20	0.60
24:D6:42:THR:OG1	24:D6:45:ARG:O	2.20	0.60
25:E3:164:LEU:CD1	25:E3:165:GLU:H	2.15	0.60
25:E3:11:ARG:NH1	25:E3:21:ASP:O	2.35	0.60
11:G1:149:LYS:O	11:G1:150:GLU:HB2	2.01	0.60
11:G1:74:ARG:HG2	11:G1:96:SER:HA	1.84	0.60
11:G2:85:ARG:O	11:G2:87:ARG:NH1	2.35	0.60
11:G3:171:THR:HG22	11:G3:172:LYS:H	1.66	0.60
12:J3:77:LEU:HA	12:J3:80:ARG:HE	1.67	0.60
24:D6:64:ARG:NE	29:K6:95:ARG:CZ	2.57	0.60
13:M5:72:HIS:O	13:M5:73:GLN:HG2	2.02	0.60
31:P2:41:GLN:OE1	31:P2:84:ILE:HD13	2.02	0.60
31:P3:15:PHE:CE2	31:P3:17:TYR:CB	2.75	0.60
33:R5:78:ARG:O	33:R5:82:ASP:HB2	2.02	0.60
1:T4:19:ALA:O	1:T4:23:LYS:N	2.33	0.60
3:V2:80:SER:HB2	22:A2:5:LEU:HD21	1.84	0.60
17:Y5:17:LEU:HD22	25:E5:69:PHE:HE1	1.67	0.60
23:B6:144:LYS:HD2	23:B6:208:HIS:HB3	1.84	0.59
10:C1:130:ILE:O	10:C1:138:GLY:N	2.35	0.59
10:C5:65:LYS:HE3	10:C5:280:VAL:HB	1.82	0.59
10:C6:68:ARG:NH2	10:C6:276:THR:C	2.47	0.59
25:E6:164:LEU:CD1	25:E6:165:GLU:H	2.15	0.59
26:F5:193:LYS:O	26:F5:197:GLU:N	2.34	0.59
11:G3:149:LYS:O	11:G3:150:GLU:HB2	2.01	0.59
27:H2:157:HIS:NE2	27:H2:188:GLU:OE1	2.35	0.59
12:J2:128:VAL:HG12	12:J2:132:GLN:HE22	1.67	0.59
12:J4:11:LYS:NZ	12:J4:13:TYR:O	2.30	0.59
13:M1:27:ILE:HG22	29:K1:84:HIS:CE1	2.31	0.59
13:M6:72:HIS:O	13:M6:73:GLN:HG2	2.02	0.59
14:N1:40:LEU:O	14:N1:43:LYS:HG2	2.02	0.59
14:N4:149:LEU:N	14:N4:149:LEU:HD13	2.17	0.59
14:N6:150:VAL:CG1	14:N6:151:ALA:H	2.14	0.59
15:O3:66:ARG:NH1	28:I6:125:LYS:HZ1	1.98	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O6:67:ASP:O	15:O6:69:SER:N	2.35	0.59
31:P1:49:LEU:O	31:P1:50:ARG:CZ	2.49	0.59
31:P3:124:LYS:CG	31:P3:125:PRO:HD2	2.31	0.59
31:P4:121:ILE:CD1	31:P4:123:TYR:CD2	2.74	0.59
31:P6:124:LYS:CG	31:P6:125:PRO:HD2	2.31	0.59
32:Q2:24:HIS:CE1	32:Q2:69:ARG:HB2	2.37	0.59
32:Q3:24:HIS:CE1	32:Q3:69:ARG:HB2	2.37	0.59
32:Q5:4:LYS:NZ	32:Q5:99:TYR:HD1	2.00	0.59
33:R4:78:ARG:O	33:R4:82:ASP:HB2	2.02	0.59
18:Z1:83:LEU:HD21	34:S1:55:ARG:HH21	1.65	0.59
3:V6:80:SER:HB2	22:A6:5:LEU:HD21	1.84	0.59
16:W6:17:ALA:HB1	16:W6:25:VAL:HG11	1.84	0.59
22:A1:110:ASN:OD1	22:A1:111:GLN:N	2.35	0.59
22:A3:158:ASP:OD1	22:A3:159:ILE:N	2.35	0.59
10:C5:277:HIS:NE2	10:C5:279:ARG:HD3	2.16	0.59
24:D5:42:THR:OG1	24:D5:45:ARG:O	2.20	0.59
24:D6:71:ALA:HB3	29:K6:20:VAL:HG11	1.84	0.59
17:Y2:17:LEU:HD22	25:E2:69:PHE:HE1	1.67	0.59
26:F2:127:ARG:HB3	26:F2:128:ILE:CB	2.32	0.59
11:G5:225:GLN:HA	11:G5:228:ILE:HG22	1.83	0.59
27:H4:157:HIS:NE2	27:H4:188:GLU:OE1	2.35	0.59
12:J1:128:VAL:HG12	12:J1:132:GLN:HE22	1.67	0.59
15:O1:147:ARG:HD2	15:O1:150:ARG:HE	1.67	0.59
15:O5:147:ARG:HD2	15:O5:150:ARG:HE	1.67	0.59
31:P1:124:LYS:CG	31:P1:125:PRO:HD2	2.31	0.59
31:P4:122:THR:HG23	31:P4:122:THR:O	2.01	0.59
32:Q3:4:LYS:NZ	32:Q3:99:TYR:HD1	2.00	0.59
33:R4:42:PRO:HD2	33:R4:46:LEU:HD23	1.85	0.59
34:S6:22:GLY:HA2	34:S6:56:ALA:HB3	1.82	0.59
16:W1:30:CYS:HA	16:W1:34:ILE:HD11	1.83	0.59
4:X5:59:ALA:HB2	4:X5:67:ARG:HG2	1.83	0.59
4:X6:132:ALA:HB1	4:X6:137:LYS:HD2	1.84	0.59
17:Y2:129:LYS:HA	17:Y2:132:LYS:HD2	1.83	0.59
22:A1:4:ALA:N	22:A1:5:LEU:HA	2.16	0.59
22:A2:34:MET:HE2	22:A2:154:LEU:HD21	1.83	0.59
22:A6:110:ASN:OD1	22:A6:111:GLN:N	2.35	0.59
23:B2:21:VAL:O	30:L4:30:LYS:CA	2.48	0.59
23:B6:208:HIS:CE1	23:B6:209:ASP:HB2	2.38	0.59
26:F6:137:GLN:HG3	26:F6:204:ARG:N	2.14	0.59
26:F6:193:LYS:O	26:F6:197:GLU:N	2.34	0.59
11:G3:141:ILE:O	11:G3:144:LEU:CG	2.48	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G5:141:ILE:O	11:G5:144:LEU:CG	2.48	0.59
11:G5:144:LEU:O	11:G5:145:PHE:HB2	1.99	0.59
11:G5:149:LYS:O	11:G5:150:GLU:HB2	2.01	0.59
11:G6:85:ARG:O	11:G6:87:ARG:NH1	2.35	0.59
12:J2:77:LEU:HB3	12:J2:80:ARG:HH21	1.67	0.59
29:K1:60:GLU:HB3	29:K1:69:TRP:HA	1.82	0.59
13:M4:72:HIS:O	13:M4:73:GLN:HG2	2.02	0.59
14:N2:71:ILE:HA	14:N2:74:ILE:HG22	1.82	0.59
14:N5:40:LEU:O	14:N5:43:LYS:HG2	2.02	0.59
15:O4:147:ARG:HD2	15:O4:150:ARG:HE	1.67	0.59
31:P5:124:LYS:CG	31:P5:125:PRO:HD2	2.31	0.59
32:Q2:6:PRO:O	32:Q2:7:LEU:HB2	2.00	0.59
33:R6:75:GLU:HA	33:R6:75:GLU:OE1	2.01	0.59
34:S1:22:GLY:HA2	34:S1:56:ALA:HB3	1.83	0.59
31:P4:119:PHE:HE1	34:S4:119:ALA:HB1	1.46	0.59
16:W4:111:MET:HE1	16:W4:119:LYS:HZ2	1.67	0.59
10:C3:130:ILE:O	10:C3:138:GLY:N	2.35	0.59
25:E1:185:GLY:H	25:E1:189:LEU:HB3	1.67	0.59
25:E5:185:GLY:H	25:E5:189:LEU:HB3	1.68	0.59
26:F1:127:ARG:HB3	26:F1:128:ILE:CB	2.32	0.59
11:G2:141:ILE:O	11:G2:144:LEU:CG	2.48	0.59
11:G6:142:ARG:CD	11:G6:147:LEU:HD12	2.32	0.59
30:L1:125:ILE:HG22	30:L1:146:THR:OG1	2.01	0.59
13:M1:72:HIS:O	13:M1:73:GLN:HG2	2.02	0.59
14:N6:40:LEU:O	14:N6:43:LYS:HG2	2.02	0.59
15:O5:67:ASP:O	15:O5:69:SER:N	2.36	0.59
31:P2:124:LYS:CG	31:P2:125:PRO:HD2	2.31	0.59
31:P3:13:ARG:HG3	31:P3:13:ARG:O	2.03	0.59
31:P5:121:ILE:HG13	31:P5:123:TYR:CG	2.38	0.59
31:P6:119:PHE:HA	34:S6:120:HIS:HB2	1.83	0.59
32:Q2:4:LYS:NZ	32:Q2:99:TYR:HD1	2.01	0.59
32:Q4:24:HIS:CE1	32:Q4:69:ARG:HB2	2.37	0.59
32:Q6:24:HIS:CE1	32:Q6:69:ARG:HB2	2.37	0.59
33:R1:42:PRO:HD2	33:R1:46:LEU:HD23	1.84	0.59
33:R3:42:PRO:HD2	33:R3:46:LEU:HD23	1.84	0.59
33:R4:5:ARG:HB2	33:R4:10:LYS:HZ1	1.67	0.59
18:Z2:83:LEU:HD21	34:S2:55:ARG:HH21	1.65	0.59
2:U3:18:HIS:HB3	2:U3:118:ASP:H	1.68	0.59
2:U3:22:ILE:N	2:U3:89:ILE:O	2.32	0.59
16:W1:72:CYS:SG	16:W1:73:GLY:N	2.73	0.59
16:W2:15:ASN:HD21	16:W2:72:CYS:H	1.50	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:W2:15:ASN:ND2	16:W2:72:CYS:H	2.00	0.59
4:X4:132:ALA:HB1	4:X4:137:LYS:HD2	1.84	0.59
17:Y1:17:LEU:HD22	25:E1:69:PHE:HE1	1.67	0.59
18:Z4:50:PHE:O	34:S4:5:ILE:HG22	1.93	0.59
22:A4:158:ASP:OD1	22:A4:159:ILE:N	2.36	0.59
23:B2:208:HIS:CE1	23:B2:209:ASP:HB2	2.38	0.59
23:B4:208:HIS:CE1	23:B4:209:ASP:HB2	2.38	0.59
11:G1:85:ARG:O	11:G1:87:ARG:NH1	2.35	0.59
11:G4:171:THR:HG22	11:G4:172:LYS:H	1.67	0.59
11:G5:85:ARG:O	11:G5:87:ARG:NH1	2.35	0.59
11:G6:149:LYS:O	11:G6:150:GLU:HB2	2.01	0.59
28:I3:101:ILE:HD12	28:I3:190:LEU:HD11	1.82	0.59
28:I5:89:GLU:OE2	28:I5:92:ARG:NH2	2.36	0.59
12:J2:77:LEU:HA	12:J2:80:ARG:HE	1.67	0.59
12:J5:77:LEU:HB3	12:J5:80:ARG:HH21	1.67	0.59
29:K2:23:ALA:HB3	29:K2:67:PHE:HB2	1.84	0.59
24:D3:71:ALA:HB3	29:K3:20:VAL:HG11	1.84	0.59
29:K5:23:ALA:HB3	29:K5:67:PHE:HB2	1.84	0.59
13:M3:72:HIS:O	13:M3:73:GLN:HG2	2.02	0.59
14:N5:148:ALA:HB3	14:N5:149:LEU:CA	2.17	0.59
31:P1:121:ILE:HG13	31:P1:123:TYR:CG	2.38	0.59
31:P4:119:PHE:HA	34:S4:120:HIS:HB2	1.83	0.59
34:S4:22:GLY:HA2	34:S4:56:ALA:HB3	1.83	0.59
3:V6:74:LYS:O	3:V6:81:LYS:NZ	2.31	0.59
16:W3:17:ALA:HB1	16:W3:25:VAL:HG11	1.84	0.59
23:B3:65:ARG:H	23:B3:88:THR:HG22	1.67	0.59
24:D1:22:ASN:O	24:D1:26:THR:OG1	2.15	0.59
25:E5:180:LEU:HA	25:E5:194:VAL:HA	1.83	0.59
11:G2:142:ARG:CD	11:G2:147:LEU:HD12	2.32	0.59
14:N1:149:LEU:N	14:N1:149:LEU:HD13	2.18	0.59
31:P3:121:ILE:CD1	31:P3:123:TYR:CD2	2.74	0.59
33:R2:5:ARG:HB2	33:R2:10:LYS:NZ	2.18	0.59
33:R5:42:PRO:HD2	33:R5:46:LEU:HD23	1.85	0.59
3:V3:80:SER:HB2	22:A3:5:LEU:HD21	1.84	0.59
16:W1:17:ALA:HB1	16:W1:25:VAL:HG11	1.84	0.59
16:W4:17:ALA:HB1	16:W4:25:VAL:HG11	1.84	0.59
4:X1:109:GLY:O	4:X1:119:ARG:NH1	2.36	0.59
4:X1:28:LYS:HE3	4:X1:32:LEU:HD13	1.85	0.59
4:X3:59:ALA:HB2	4:X3:67:ARG:HG2	1.83	0.59
17:Y4:17:LEU:HD22	25:E4:69:PHE:HE1	1.67	0.59
22:A5:158:ASP:OD1	22:A5:159:ILE:N	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B5:208:HIS:CE1	23:B5:209:ASP:HB2	2.38	0.59
10:C6:130:ILE:O	10:C6:138:GLY:N	2.35	0.59
25:E2:11:ARG:NH1	25:E2:21:ASP:O	2.35	0.59
26:F3:127:ARG:HB3	26:F3:128:ILE:CB	2.32	0.59
26:F5:30:ILE:HG12	26:F5:113:VAL:HG11	1.83	0.59
26:F6:179:ASN:HB3	26:F6:186:ASN:HB3	1.84	0.59
11:G3:141:ILE:C	11:G3:144:LEU:HG	2.23	0.59
11:G4:85:ARG:O	11:G4:87:ARG:NH1	2.35	0.59
27:H1:157:HIS:NE2	27:H1:188:GLU:OE1	2.35	0.59
27:H3:157:HIS:NE2	27:H3:188:GLU:OE1	2.35	0.59
28:I4:89:GLU:OE2	28:I4:92:ARG:NH2	2.36	0.59
14:N2:149:LEU:HD13	14:N2:149:LEU:N	2.17	0.59
32:Q1:24:HIS:CE1	32:Q1:69:ARG:HB2	2.37	0.59
33:R2:60:ARG:CG	33:R2:60:ARG:HH11	2.16	0.59
33:R5:60:ARG:CG	33:R5:60:ARG:HH11	2.16	0.59
33:R6:5:ARG:HE	33:R6:53:TYR:HB2	1.68	0.59
18:Z5:83:LEU:HD21	34:S5:55:ARG:HH21	1.65	0.59
2:U6:67:LYS:HB2	2:U6:78:ASP:HB2	1.83	0.59
16:W4:15:ASN:HD21	16:W4:72:CYS:H	1.50	0.59
4:X5:28:LYS:HE3	4:X5:32:LEU:HD13	1.85	0.59
4:X6:109:GLY:O	4:X6:119:ARG:NH1	2.36	0.59
18:Z3:85:ARG:HH21	18:Z3:85:ARG:CG	2.14	0.59
23:B2:65:ARG:H	23:B2:88:THR:HG22	1.67	0.59
10:C1:68:ARG:NH2	10:C1:276:THR:C	2.47	0.59
10:C6:273:LEU:HB3	10:C6:280:VAL:HG12	1.84	0.59
10:C6:277:HIS:NE2	10:C6:279:ARG:HD3	2.16	0.59
24:D2:42:THR:OG1	24:D2:45:ARG:O	2.20	0.59
24:D3:42:THR:OG1	24:D3:45:ARG:O	2.20	0.59
24:D6:64:ARG:CD	29:K6:95:ARG:HH22	2.14	0.59
25:E4:11:ARG:NH1	25:E4:21:ASP:O	2.35	0.59
25:E5:11:ARG:NH1	25:E5:21:ASP:O	2.35	0.59
17:Y6:17:LEU:HD22	25:E6:69:PHE:HE1	1.67	0.59
11:G6:141:ILE:O	11:G6:144:LEU:CG	2.48	0.59
27:H6:157:HIS:NE2	27:H6:188:GLU:OE1	2.35	0.59
28:I2:89:GLU:OE2	28:I2:92:ARG:NH2	2.36	0.59
29:K5:58:VAL:HA	29:K5:71:LEU:HA	1.85	0.59
13:M2:48:HIS:HB2	13:M2:114:TYR:CZ	2.38	0.59
13:M4:14:VAL:CG1	13:M4:127:TYR:CD1	2.74	0.59
13:M4:48:HIS:HB2	13:M4:114:TYR:CZ	2.38	0.59
14:N3:149:LEU:N	14:N3:149:LEU:HD13	2.17	0.59
14:N4:133:ARG:NH2	30:L4:154:GLN:HB2	2.17	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O2:147:ARG:HD2	15:O2:150:ARG:HE	1.67	0.59
28:I1:121:LEU:HD13	15:O6:63:LYS:NZ	2.17	0.59
31:P5:72:LYS:NZ	31:P5:106:GLU:OE2	2.32	0.59
33:R1:7:LYS:O	33:R1:11:LYS:N	2.35	0.59
33:R3:78:ARG:O	33:R3:82:ASP:HB2	2.02	0.59
33:R4:100:PRO:HA	33:R4:117:LEU:HD12	1.85	0.59
2:U2:22:ILE:N	2:U2:89:ILE:O	2.32	0.59
2:U4:22:ILE:N	2:U4:89:ILE:O	2.32	0.59
2:U4:17:ILE:HG22	2:U4:95:SER:N	2.03	0.59
16:W2:17:ALA:HB1	16:W2:25:VAL:HG11	1.84	0.59
4:X1:132:ALA:HB1	4:X1:137:LYS:HD2	1.84	0.59
4:X1:59:ALA:HB2	4:X1:67:ARG:HG2	1.83	0.59
3:V4:80:SER:HB2	22:A4:5:LEU:HD21	1.84	0.59
23:B1:65:ARG:H	23:B1:88:THR:HG22	1.67	0.59
26:F2:188:TYR:O	26:F2:192:LYS:N	2.36	0.59
26:F4:127:ARG:HB3	26:F4:128:ILE:CB	2.32	0.59
26:F4:179:ASN:HB3	26:F4:186:ASN:HB3	1.85	0.59
11:G6:141:ILE:C	11:G6:144:LEU:HG	2.23	0.59
27:H5:157:HIS:NE2	27:H5:188:GLU:OE1	2.35	0.59
12:J3:77:LEU:HB3	12:J3:80:ARG:HH21	1.66	0.59
12:J5:11:LYS:NZ	12:J5:13:TYR:O	2.30	0.59
29:K1:58:VAL:HA	29:K1:71:LEU:HA	1.85	0.59
29:K3:58:VAL:HA	29:K3:71:LEU:HA	1.85	0.59
29:K4:58:VAL:HA	29:K4:71:LEU:HA	1.85	0.59
14:N4:133:ARG:HD2	30:L4:152:LYS:CG	2.33	0.59
15:O1:67:ASP:O	15:O1:69:SER:N	2.36	0.59
15:O6:31:CYS:HA	15:O6:44:VAL:HA	1.85	0.59
33:R2:100:PRO:HA	33:R2:117:LEU:HD12	1.85	0.59
33:R6:7:LYS:O	33:R6:11:LYS:N	2.35	0.59
2:U3:19:ARG:HD3	2:U3:119:ALA:C	1.81	0.59
2:U5:18:HIS:HB3	2:U5:118:ASP:H	1.68	0.59
2:U6:18:HIS:HB3	2:U6:118:ASP:H	1.68	0.59
16:W3:15:ASN:HD21	16:W3:72:CYS:H	1.50	0.59
4:X5:132:ALA:HB1	4:X5:137:LYS:HD2	1.84	0.59
22:A4:34:MET:HE2	22:A4:154:LEU:HD21	1.85	0.59
23:B1:208:HIS:CE1	23:B1:209:ASP:HB2	2.38	0.59
23:B2:87:ILE:HG23	23:B2:101:HIS:HB2	1.85	0.59
23:B2:144:LYS:HD2	23:B2:208:HIS:HB3	1.84	0.59
24:D5:11:PHE:O	24:D5:15:GLY:N	2.31	0.59
25:E4:185:GLY:H	25:E4:189:LEU:HB3	1.67	0.59
26:F3:179:ASN:HB3	26:F3:186:ASN:HB3	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G2:74:ARG:HG2	11:G2:96:SER:HA	1.84	0.59
27:H4:20:GLU:O	27:H4:24:SER:N	2.35	0.59
28:I5:196:GLU:O	28:I5:200:ARG:CG	2.28	0.59
12:J3:128:VAL:HG12	12:J3:132:GLN:HE22	1.67	0.59
29:K3:23:ALA:HB3	29:K3:67:PHE:HB2	1.85	0.59
29:K4:23:ALA:HB3	29:K4:67:PHE:HB2	1.84	0.59
29:K6:23:ALA:HB3	29:K6:67:PHE:HB2	1.85	0.59
15:O3:67:ASP:O	15:O3:69:SER:N	2.36	0.59
15:O5:31:CYS:HA	15:O5:44:VAL:HA	1.85	0.59
33:R2:42:PRO:HD2	33:R2:46:LEU:HD23	1.85	0.59
33:R2:84:TYR:O	33:R2:87:GLU:HG2	2.03	0.59
33:R3:7:LYS:O	33:R3:11:LYS:N	2.35	0.59
33:R3:84:TYR:O	33:R3:87:GLU:HG2	2.03	0.59
2:U6:49:LYS:O	2:U6:51:LYS:N	2.36	0.59
16:W1:15:ASN:ND2	16:W1:72:CYS:H	2.00	0.59
16:W3:72:CYS:SG	16:W3:73:GLY:N	2.73	0.59
16:W4:15:ASN:ND2	16:W4:72:CYS:H	2.00	0.59
4:X2:59:ALA:HB2	4:X2:67:ARG:HG2	1.83	0.59
17:Y2:109:GLU:OE2	17:Y2:113:ARG:CZ	2.51	0.59
22:A2:158:ASP:OD1	22:A2:159:ILE:N	2.35	0.58
25:E6:11:ARG:NH1	25:E6:21:ASP:O	2.35	0.58
26:F5:136:ARG:O	26:F5:203:ASN:ND2	2.36	0.58
11:G5:141:ILE:C	11:G5:144:LEU:HG	2.23	0.58
11:G6:219:GLU:HB2	11:G6:222:GLU:HB3	1.85	0.58
28:I1:123:ARG:CD	15:O6:64:ALA:C	2.72	0.58
24:D5:71:ALA:HB3	29:K5:20:VAL:HG11	1.84	0.58
13:M3:48:HIS:HB2	13:M3:114:TYR:CZ	2.37	0.58
14:N1:150:VAL:CG1	14:N1:151:ALA:H	2.14	0.58
14:N5:149:LEU:HD13	14:N5:149:LEU:N	2.17	0.58
14:N5:84:LEU:CD2	14:N5:149:LEU:O	2.51	0.58
15:O2:63:LYS:HE3	28:I4:163:GLU:HG2	1.81	0.58
31:P1:15:PHE:CZ	31:P1:112:ILE:CD1	2.78	0.58
31:P4:37:TYR:OH	31:P4:87:PRO:HD3	2.03	0.58
32:Q4:4:LYS:NZ	32:Q4:99:TYR:HD1	2.00	0.58
32:Q5:24:HIS:CE1	32:Q5:69:ARG:HB2	2.37	0.58
16:W6:15:ASN:HD21	16:W6:72:CYS:H	1.50	0.58
10:C1:65:LYS:CB	10:C1:279:ARG:CB	2.72	0.58
24:D2:71:ALA:HB3	29:K2:20:VAL:HG11	1.84	0.58
25:E6:185:GLY:H	25:E6:189:LEU:HB3	1.67	0.58
26:F2:179:ASN:HB3	26:F2:186:ASN:HB3	1.85	0.58
11:G1:230:LYS:O	11:G1:234:LEU:N	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G2:215:LYS:O	11:G2:219:GLU:N	2.36	0.58
11:G3:74:ARG:HG2	11:G3:96:SER:HA	1.84	0.58
11:G6:215:LYS:O	11:G6:219:GLU:N	2.36	0.58
28:I1:89:GLU:OE2	28:I1:92:ARG:NH2	2.36	0.58
28:I6:43:ILE:HG12	28:I6:57:ALA:HA	1.86	0.58
12:J6:77:LEU:HA	12:J6:80:ARG:HE	1.67	0.58
30:L2:121:GLN:HG3	30:L2:153:LYS:HE2	1.86	0.58
30:L6:61:PRO:HD3	30:L6:141:ASN:HD21	1.68	0.58
13:M2:72:HIS:O	13:M2:73:GLN:HG2	2.02	0.58
15:O4:31:CYS:HA	15:O4:44:VAL:HA	1.85	0.58
33:R3:60:ARG:HG2	33:R3:64:GLY:O	2.03	0.58
33:R3:79:GLU:HG2	33:R3:80:ARG:N	2.19	0.58
33:R6:76:GLU:O	33:R6:79:GLU:OE2	2.21	0.58
34:S1:85:ASN:HD22	34:S1:98:VAL:HB	1.68	0.58
18:Z6:83:LEU:HD21	34:S6:55:ARG:HH21	1.65	0.58
2:U5:67:LYS:HB2	2:U5:78:ASP:HB2	1.84	0.58
2:U6:19:ARG:CD	2:U6:119:ALA:O	2.23	0.58
3:V5:80:SER:HB2	22:A5:5:LEU:HD21	1.84	0.58
4:X2:109:GLY:O	4:X2:119:ARG:NH1	2.36	0.58
4:X4:109:GLY:O	4:X4:119:ARG:NH1	2.36	0.58
4:X6:115:ILE:HG22	4:X6:117:GLY:H	1.68	0.58
18:Z4:85:ARG:HG3	18:Z4:85:ARG:NH2	2.13	0.58
22:A5:12:GLU:O	22:A5:14:ASP:N	2.37	0.58
24:D5:76:ARG:NH1	24:D5:76:ARG:O	2.36	0.58
26:F6:136:ARG:C	26:F6:203:ASN:HD22	2.05	0.58
11:G3:215:LYS:O	11:G3:219:GLU:N	2.36	0.58
11:G4:230:LYS:O	11:G4:234:LEU:N	2.37	0.58
11:G6:74:ARG:HG2	11:G6:96:SER:HA	1.84	0.58
28:I4:43:ILE:HG12	28:I4:57:ALA:HA	1.86	0.58
12:J6:128:VAL:HG12	12:J6:132:GLN:HE22	1.67	0.58
13:M5:48:HIS:HB2	13:M5:114:TYR:CZ	2.37	0.58
13:M6:48:HIS:HB2	13:M6:114:TYR:CZ	2.38	0.58
14:N6:149:LEU:N	14:N6:149:LEU:HD13	2.17	0.58
28:I2:123:ARG:NH2	15:O5:65:ASP:CB	2.66	0.58
31:P5:15:PHE:CE1	31:P5:110:GLU:HA	2.37	0.58
31:P5:41:GLN:CG	31:P5:84:ILE:HD13	2.33	0.58
32:Q1:4:LYS:NZ	32:Q1:99:TYR:HD1	2.01	0.58
33:R1:5:ARG:HE	33:R1:53:TYR:HB2	1.69	0.58
33:R6:42:PRO:HD2	33:R6:46:LEU:HD23	1.85	0.58
34:S5:85:ASN:HD22	34:S5:98:VAL:HB	1.68	0.58
16:W5:17:ALA:HB1	16:W5:25:VAL:HG11	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X3:28:LYS:HE3	4:X3:32:LEU:HD13	1.85	0.58
25:E1:229:GLY:H	25:E1:235:TRP:HB2	1.69	0.58
25:E6:229:GLY:H	25:E6:235:TRP:HB2	1.69	0.58
26:F4:188:TYR:O	26:F4:192:LYS:N	2.36	0.58
26:F6:127:ARG:HB3	26:F6:128:ILE:CB	2.32	0.58
28:I6:89:GLU:OE2	28:I6:92:ARG:NH2	2.36	0.58
14:N6:133:ARG:HD2	30:L6:152:LYS:HB3	1.56	0.58
14:N1:84:LEU:CD2	14:N1:149:LEU:O	2.52	0.58
31:P5:121:ILE:CD1	31:P5:123:TYR:CD2	2.74	0.58
31:P5:41:GLN:OE1	31:P5:84:ILE:CD1	2.50	0.58
33:R1:84:TYR:O	33:R1:87:GLU:HG2	2.03	0.58
33:R4:84:TYR:O	33:R4:87:GLU:HG2	2.03	0.58
2:U4:18:HIS:HB3	2:U4:118:ASP:H	1.68	0.58
4:X5:115:ILE:HG22	4:X5:117:GLY:H	1.68	0.58
23:B5:144:LYS:HD2	23:B5:208:HIS:HB3	1.84	0.58
25:E1:18:TRP:HB3	25:E1:20:LEU:HG	1.86	0.58
25:E6:238:LEU:HD11	25:E6:242:LYS:HG2	1.86	0.58
26:F3:17:ILE:HG23	26:F3:18:LYS:H	1.69	0.58
11:G1:215:LYS:O	11:G1:219:GLU:N	2.36	0.58
11:G5:215:LYS:O	11:G5:219:GLU:N	2.36	0.58
11:G6:149:LYS:HZ2	11:G6:149:LYS:HB2	1.66	0.58
28:I1:43:ILE:HG12	28:I1:57:ALA:HA	1.86	0.58
12:J4:77:LEU:HB3	12:J4:80:ARG:HH21	1.67	0.58
29:K2:58:VAL:HA	29:K2:71:LEU:HA	1.85	0.58
13:M1:48:HIS:HB2	13:M1:114:TYR:CZ	2.38	0.58
13:M1:111:VAL:CG1	13:M1:114:TYR:HE1	2.09	0.58
15:O4:67:ASP:O	15:O4:69:SER:N	2.36	0.58
31:P1:121:ILE:CD1	31:P1:123:TYR:CD2	2.74	0.58
33:R1:5:ARG:HB2	33:R1:10:LYS:NZ	2.18	0.58
33:R3:58:MET:O	33:R3:61:ILE:HG12	2.03	0.58
33:R4:58:MET:CB	33:R4:61:ILE:HD11	2.33	0.58
33:R6:5:ARG:HB2	33:R6:10:LYS:NZ	2.18	0.58
33:R6:77:GLU:HA	33:R6:80:ARG:HB2	1.84	0.58
34:S2:85:ASN:HD22	34:S2:98:VAL:HB	1.68	0.58
2:U4:49:LYS:O	2:U4:51:LYS:N	2.36	0.58
16:W6:40:VAL:O	16:W6:44:HIS:ND1	2.30	0.58
16:W6:15:ASN:ND2	16:W6:72:CYS:H	2.00	0.58
4:X2:115:ILE:HG22	4:X2:117:GLY:H	1.68	0.58
22:A3:110:ASN:OD1	22:A3:111:GLN:N	2.35	0.58
22:A3:211:GLU:HG3	33:R3:81:ARG:HH21	1.60	0.58
23:B3:208:HIS:CE1	23:B3:209:ASP:HB2	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B4:144:LYS:HD2	23:B4:208:HIS:HB3	1.84	0.58
24:D1:64:ARG:NE	29:K1:95:ARG:CZ	2.57	0.58
25:E3:18:TRP:HB3	25:E3:20:LEU:HG	1.86	0.58
26:F3:127:ARG:CB	26:F3:128:ILE:HA	2.24	0.58
26:F5:127:ARG:HB3	26:F5:128:ILE:CB	2.32	0.58
11:G1:137:ARG:HB2	11:G1:140:ARG:HB2	1.83	0.58
11:G3:142:ARG:CD	11:G3:147:LEU:HD12	2.32	0.58
11:G3:219:GLU:HB2	11:G3:222:GLU:HB3	1.86	0.58
28:I3:89:GLU:OE2	28:I3:92:ARG:NH2	2.36	0.58
13:M6:27:ILE:CG2	29:K6:84:HIS:ND1	2.46	0.58
30:L6:144:LYS:HZ2	30:L6:146:THR:HG21	1.64	0.58
31:P2:33:LEU:O	31:P2:37:TYR:HB2	2.04	0.58
31:P3:121:ILE:HG13	31:P3:123:TYR:CG	2.38	0.58
31:P3:133:ILE:HG22	31:P3:134:GLY:H	1.69	0.58
33:R2:7:LYS:O	33:R2:11:LYS:N	2.35	0.58
33:R3:100:PRO:HA	33:R3:117:LEU:HD12	1.85	0.58
33:R3:5:ARG:HB2	33:R3:10:LYS:NZ	2.18	0.58
33:R3:5:ARG:HE	33:R3:53:TYR:HB2	1.68	0.58
33:R4:5:ARG:HE	33:R4:53:TYR:HB2	1.68	0.58
33:R5:5:ARG:HB2	33:R5:10:LYS:NZ	2.18	0.58
2:U6:22:ILE:N	2:U6:89:ILE:O	2.32	0.58
4:X1:115:ILE:HG22	4:X1:117:GLY:H	1.68	0.58
4:X2:28:LYS:HE3	4:X2:32:LEU:HD13	1.85	0.58
4:X5:109:GLY:O	4:X5:119:ARG:NH1	2.36	0.58
17:Y2:113:ARG:HH11	17:Y2:131:PRO:HB3	1.68	0.58
22:A4:176:TRP:CD1	22:A4:199:PRO:HA	2.39	0.58
22:A5:176:TRP:CD1	22:A5:199:PRO:HA	2.39	0.58
22:A6:12:GLU:O	22:A6:14:ASP:N	2.37	0.58
23:B3:87:ILE:HG23	23:B3:101:HIS:HB2	1.85	0.58
25:E2:34:GLY:HA3	25:E2:83:PRO:HG3	1.86	0.58
26:F1:179:ASN:HB3	26:F1:186:ASN:HB3	1.85	0.58
26:F5:179:ASN:HB3	26:F5:186:ASN:HB3	1.85	0.58
11:G2:219:GLU:HB2	11:G2:222:GLU:HB3	1.86	0.58
11:G4:215:LYS:O	11:G4:219:GLU:N	2.36	0.58
28:I5:43:ILE:HG12	28:I5:57:ALA:HA	1.86	0.58
12:J2:153:SER:HA	12:J2:156:HIS:HD2	1.69	0.58
12:J3:153:SER:HA	12:J3:156:HIS:HD2	1.69	0.58
29:K1:23:ALA:HB3	29:K1:67:PHE:HB2	1.84	0.58
14:N4:84:LEU:CD2	14:N4:149:LEU:O	2.52	0.58
14:N5:135:LEU:HB3	14:N5:136:PRO:CD	2.33	0.58
15:O1:31:CYS:HA	15:O1:44:VAL:HA	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O3:31:CYS:HA	15:O3:44:VAL:HA	1.85	0.58
15:O5:96:LYS:NZ	15:O5:130:GLU:OE1	2.37	0.58
33:R4:5:ARG:HB2	33:R4:10:LYS:NZ	2.18	0.58
33:R5:84:TYR:O	33:R5:87:GLU:HG2	2.03	0.58
22:A1:176:TRP:CD1	22:A1:199:PRO:HA	2.39	0.58
22:A2:110:ASN:OD1	22:A2:111:GLN:N	2.35	0.58
23:B1:87:ILE:HG23	23:B1:101:HIS:HB2	1.85	0.58
23:B6:87:ILE:HG23	23:B6:101:HIS:HB2	1.86	0.58
10:C6:142:LYS:HD3	10:C6:154:ALA:CA	2.33	0.58
25:E4:164:LEU:CD1	25:E4:165:GLU:H	2.15	0.58
25:E4:18:TRP:HB3	25:E4:20:LEU:HG	1.86	0.58
25:E5:18:TRP:HB3	25:E5:20:LEU:HG	1.86	0.58
26:F3:188:TYR:O	26:F3:192:LYS:N	2.36	0.58
26:F4:72:LEU:HD23	26:F4:151:ILE:HG23	1.86	0.58
27:H3:20:GLU:O	27:H3:24:SER:N	2.36	0.58
15:O4:66:ARG:NH2	28:I5:125:LYS:HZ1	2.01	0.58
12:J5:65:GLU:HA	12:J5:70:ARG:HD3	1.86	0.58
30:L1:61:PRO:HD3	30:L1:141:ASN:HD21	1.69	0.58
28:I6:10:LYS:HE2	30:L6:136:LYS:HE3	1.86	0.58
14:N4:133:ARG:HH21	30:L4:154:GLN:CD	2.06	0.58
32:Q1:12:VAL:HG21	32:Q1:91:ALA:HA	1.86	0.58
32:Q4:12:VAL:HG21	32:Q4:91:ALA:HA	1.86	0.58
32:Q6:4:LYS:NZ	32:Q6:99:TYR:HD1	2.00	0.58
33:R3:58:MET:O	33:R3:61:ILE:CG1	2.51	0.58
33:R5:5:ARG:HE	33:R5:53:TYR:HB2	1.68	0.58
33:R6:84:TYR:O	33:R6:87:GLU:HG2	2.03	0.58
18:Z6:46:ASN:HB3	18:Z6:80:ARG:CA	2.16	0.58
3:V1:80:SER:HB2	22:A1:5:LEU:HD21	1.84	0.58
10:C5:65:LYS:CB	10:C5:279:ARG:CB	2.72	0.58
25:E3:229:GLY:H	25:E3:235:TRP:HB2	1.69	0.58
17:Y3:17:LEU:HD22	25:E3:69:PHE:HE1	1.67	0.58
25:E4:229:GLY:H	25:E4:235:TRP:HB2	1.69	0.58
26:F3:72:LEU:HD23	26:F3:151:ILE:HG23	1.86	0.58
26:F4:17:ILE:HG23	26:F4:18:LYS:H	1.69	0.58
27:H2:20:GLU:O	27:H2:24:SER:N	2.36	0.58
12:J1:65:GLU:HA	12:J1:70:ARG:HD3	1.86	0.58
13:M6:111:VAL:CG1	13:M6:114:TYR:HE1	2.08	0.58
14:N2:142:GLU:H	14:N2:145:THR:HG1	1.52	0.58
14:N5:17:PRO:O	14:N5:20:ARG:NH1	2.30	0.58
15:O2:67:ASP:O	15:O2:69:SER:N	2.36	0.58
31:P4:121:ILE:HG13	31:P4:123:TYR:CG	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:Q6:4:LYS:NZ	32:Q6:99:TYR:CD1	2.72	0.58
34:S4:85:ASN:HD22	34:S4:98:VAL:HB	1.68	0.58
4:X4:28:LYS:HE3	4:X4:32:LEU:HD13	1.85	0.58
22:A4:12:GLU:O	22:A4:14:ASP:N	2.36	0.58
10:C3:65:LYS:CB	10:C3:279:ARG:CB	2.72	0.58
24:D3:76:ARG:O	24:D3:76:ARG:NH1	2.37	0.58
26:F1:72:LEU:HD23	26:F1:151:ILE:HG23	1.86	0.58
26:F4:137:GLN:CB	26:F4:204:ARG:CA	2.80	0.58
26:F6:188:TYR:O	26:F6:192:LYS:N	2.36	0.58
27:H4:163:GLN:CD	27:H4:189:PHE:CE2	2.61	0.58
30:L2:121:GLN:HB2	30:L2:153:LYS:CD	2.26	0.58
32:Q3:4:LYS:HZ2	32:Q3:99:TYR:HD1	1.46	0.58
33:R1:52:GLY:O	33:R1:55:THR:OG1	2.19	0.58
33:R3:58:MET:HA	33:R3:61:ILE:CG1	2.33	0.58
31:P1:119:PHE:HE1	34:S1:119:ALA:HB1	1.46	0.58
16:W1:94:LEU:HD11	16:W1:102:ILE:HG13	1.86	0.58
16:W5:15:ASN:HD21	16:W5:72:CYS:H	1.50	0.58
4:X3:109:GLY:O	4:X3:119:ARG:NH1	2.36	0.58
22:A6:43:SER:HB2	33:R6:123:THR:HG22	1.86	0.57
23:B1:97:LEU:HD22	23:B1:232:HIS:NE2	2.19	0.57
23:B5:122:GLU:HG2	23:B5:140:VAL:HG12	1.86	0.57
24:D2:11:PHE:O	24:D2:15:GLY:N	2.31	0.57
25:E5:11:ARG:NH2	25:E5:24:THR:O	2.37	0.57
26:F1:188:TYR:O	26:F1:192:LYS:N	2.36	0.57
26:F3:136:ARG:O	26:F3:203:ASN:ND2	2.36	0.57
11:G1:141:ILE:C	11:G1:144:LEU:HG	2.23	0.57
28:I3:43:ILE:HG12	28:I3:57:ALA:HA	1.85	0.57
12:J6:153:SER:HA	12:J6:156:HIS:HD2	1.69	0.57
29:K3:80:ARG:HH21	29:K3:87:PRO:HA	1.69	0.57
29:K4:80:ARG:HH21	29:K4:87:PRO:HA	1.69	0.57
30:L2:61:PRO:HD3	30:L2:141:ASN:HD21	1.69	0.57
14:N3:84:LEU:CD2	14:N3:149:LEU:O	2.52	0.57
33:R1:100:PRO:HA	33:R1:117:LEU:HD12	1.85	0.57
33:R2:5:ARG:HE	33:R2:53:TYR:HB2	1.69	0.57
33:R6:79:GLU:HG2	33:R6:80:ARG:N	2.19	0.57
34:S4:80:PRO:HB2	34:S4:83:PHE:HD2	1.69	0.57
16:W2:94:LEU:HD11	16:W2:102:ILE:HG13	1.86	0.57
16:W4:94:LEU:HD11	16:W4:102:ILE:HG13	1.86	0.57
16:W5:94:LEU:HD11	16:W5:102:ILE:HG13	1.86	0.57
4:X3:115:ILE:HG22	4:X3:117:GLY:H	1.69	0.57
22:A6:158:ASP:OD1	22:A6:159:ILE:N	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D1:42:THR:OG1	24:D1:45:ARG:O	2.20	0.57
25:E4:11:ARG:NH2	25:E4:24:THR:O	2.37	0.57
25:E6:189:LEU:O	25:E6:245:ARG:NH2	2.37	0.57
25:E6:34:GLY:HA3	25:E6:83:PRO:HG3	1.86	0.57
26:F2:72:LEU:HD23	26:F2:151:ILE:HG23	1.86	0.57
26:F5:72:LEU:HD23	26:F5:151:ILE:HG23	1.86	0.57
11:G2:141:ILE:C	11:G2:144:LEU:HG	2.23	0.57
11:G2:230:LYS:O	11:G2:234:LEU:N	2.37	0.57
11:G4:219:GLU:HB2	11:G4:222:GLU:HB3	1.86	0.57
12:J1:153:SER:HA	12:J1:156:HIS:HD2	1.69	0.57
30:L3:61:PRO:HD3	30:L3:141:ASN:HD21	1.69	0.57
14:N2:84:LEU:CD2	14:N2:149:LEU:O	2.52	0.57
32:Q2:12:VAL:HG21	32:Q2:91:ALA:HA	1.86	0.57
32:Q5:12:VAL:HG21	32:Q5:91:ALA:HA	1.86	0.57
33:R3:65:PRO:HB2	33:R3:74:GLN:NE2	2.19	0.57
33:R6:100:PRO:HA	33:R6:117:LEU:HD12	1.85	0.57
34:S3:80:PRO:HB2	34:S3:83:PHE:HD2	1.69	0.57
34:S6:85:ASN:HD22	34:S6:98:VAL:HB	1.68	0.57
22:A1:12:GLU:O	22:A1:14:ASP:N	2.37	0.57
22:A6:176:TRP:CD1	22:A6:199:PRO:HA	2.39	0.57
23:B5:87:ILE:HG23	23:B5:101:HIS:HB2	1.85	0.57
23:B6:122:GLU:HG2	23:B6:140:VAL:HG12	1.86	0.57
23:B6:65:ARG:H	23:B6:88:THR:HG22	1.67	0.57
10:C1:270:THR:HG22	22:A1:69:GLU:HG3	1.86	0.57
25:E2:185:GLY:H	25:E2:189:LEU:HB3	1.67	0.57
25:E6:18:TRP:HB3	25:E6:20:LEU:HG	1.86	0.57
26:F3:137:GLN:CB	26:F3:204:ARG:N	2.68	0.57
26:F5:188:TYR:O	26:F5:192:LYS:N	2.36	0.57
26:F6:17:ILE:HG23	26:F6:18:LYS:H	1.69	0.57
11:G1:142:ARG:CD	11:G1:147:LEU:HD12	2.32	0.57
12:J6:65:GLU:HA	12:J6:70:ARG:HD3	1.86	0.57
29:K6:58:VAL:HA	29:K6:71:LEU:HA	1.85	0.57
30:L1:59:LYS:HG2	30:L1:134:LEU:HD11	1.87	0.57
30:L5:124:ASP:HB3	30:L5:147:LYS:HG2	1.83	0.57
30:L5:61:PRO:HD3	30:L5:141:ASN:HD21	1.69	0.57
30:L6:40:ILE:HG12	30:L6:68:ILE:HD13	1.87	0.57
14:N6:84:LEU:CD2	14:N6:149:LEU:O	2.52	0.57
32:Q1:4:LYS:NZ	32:Q1:99:TYR:CD1	2.72	0.57
32:Q2:4:LYS:NZ	32:Q2:99:TYR:CD1	2.72	0.57
32:Q4:4:LYS:NZ	32:Q4:99:TYR:CD1	2.72	0.57
32:Q6:67:ASP:OD1	32:Q6:68:ILE:N	2.37	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R4:7:LYS:O	33:R4:11:LYS:N	2.35	0.57
33:R5:86:PRO:O	33:R5:89:SER:OG	2.16	0.57
17:Y2:109:GLU:HG2	17:Y2:113:ARG:CZ	2.29	0.57
22:A2:12:GLU:O	22:A2:14:ASP:N	2.37	0.57
23:B2:189:ILE:HB	23:B2:190:PRO:HD3	1.87	0.57
23:B2:97:LEU:HD22	23:B2:232:HIS:NE2	2.20	0.57
25:E1:189:LEU:O	25:E1:245:ARG:NH2	2.38	0.57
25:E2:18:TRP:HB3	25:E2:20:LEU:HG	1.86	0.57
25:E3:189:LEU:O	25:E3:245:ARG:NH2	2.37	0.57
25:E4:238:LEU:HD11	25:E4:242:LYS:HG2	1.86	0.57
25:E4:189:LEU:O	25:E4:245:ARG:NH2	2.37	0.57
25:E4:34:GLY:HA3	25:E4:83:PRO:HG3	1.86	0.57
26:F2:136:ARG:O	26:F2:203:ASN:ND2	2.36	0.57
11:G3:231:ARG:HA	11:G3:234:LEU:HB2	1.86	0.57
12:J3:130:ILE:HD13	12:J3:145:PRO:HA	1.87	0.57
12:J4:130:ILE:HD13	12:J4:145:PRO:HA	1.87	0.57
14:N3:133:ARG:CD	30:L3:152:LYS:CB	2.82	0.57
15:O1:66:ARG:HH22	28:I3:125:LYS:NZ	1.75	0.57
15:O4:96:LYS:NZ	15:O4:130:GLU:OE1	2.37	0.57
31:P5:111:MET:HG3	31:P5:111:MET:O	2.03	0.57
31:P5:96:VAL:CG2	31:P5:116:LEU:HD13	1.86	0.57
32:Q2:67:ASP:OD1	32:Q2:68:ILE:N	2.37	0.57
32:Q3:12:VAL:HG21	32:Q3:91:ALA:HA	1.86	0.57
33:R4:79:GLU:HG2	33:R4:80:ARG:N	2.19	0.57
34:S3:85:ASN:HD22	34:S3:98:VAL:HB	1.68	0.57
2:U1:22:ILE:N	2:U1:89:ILE:O	2.33	0.57
2:U2:18:HIS:HB3	2:U2:118:ASP:H	1.68	0.57
16:W2:40:VAL:O	16:W2:44:HIS:ND1	2.30	0.57
16:W4:112:ASP:OD1	16:W4:113:HIS:N	2.38	0.57
16:W6:72:CYS:SG	16:W6:73:GLY:N	2.73	0.57
22:A3:12:GLU:O	22:A3:14:ASP:N	2.37	0.57
22:A4:43:SER:HB2	33:R4:123:THR:HG22	1.87	0.57
23:B4:87:ILE:HG23	23:B4:101:HIS:HB2	1.86	0.57
23:B6:129:THR:HG21	23:B6:133:TYR:HB2	1.87	0.57
23:B6:22:VAL:HG12	23:B6:22:VAL:O	2.05	0.57
24:D3:64:ARG:CD	29:K3:95:ARG:HH22	2.13	0.57
24:D4:76:ARG:NH1	24:D4:76:ARG:O	2.36	0.57
25:E2:231:GLY:O	25:E2:233:LYS:N	2.37	0.57
25:E6:231:GLY:O	25:E6:233:LYS:N	2.37	0.57
25:E6:11:ARG:NH2	25:E6:24:THR:O	2.37	0.57
11:G5:219:GLU:HB2	11:G5:222:GLU:HB3	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J1:130:ILE:HD13	12:J1:145:PRO:HA	1.86	0.57
29:K1:80:ARG:HH21	29:K1:87:PRO:HA	1.69	0.57
30:L1:125:ILE:CG2	30:L1:146:THR:OG1	2.52	0.57
30:L1:30:LYS:CE	23:B6:21:VAL:C	2.68	0.57
30:L2:59:LYS:HG2	30:L2:134:LEU:HD11	1.87	0.57
30:L3:59:LYS:HG2	30:L3:134:LEU:HD11	1.87	0.57
30:L5:59:LYS:HG2	30:L5:134:LEU:HD11	1.86	0.57
13:M3:27:ILE:CG2	29:K3:84:HIS:NE2	2.64	0.57
15:O2:31:CYS:HA	15:O2:44:VAL:HA	1.85	0.57
31:P2:121:ILE:HG13	31:P2:123:TYR:CG	2.38	0.57
31:P4:111:MET:O	31:P4:111:MET:HG3	2.04	0.57
32:Q1:67:ASP:OD1	32:Q1:68:ILE:N	2.38	0.57
33:R5:79:GLU:HG2	33:R5:80:ARG:N	2.19	0.57
33:R5:7:LYS:O	33:R5:11:LYS:N	2.35	0.57
2:U1:49:LYS:O	2:U1:51:LYS:N	2.36	0.57
16:W3:94:LEU:HD11	16:W3:102:ILE:HG13	1.86	0.57
18:Z2:85:ARG:HH21	18:Z2:85:ARG:CG	2.14	0.57
22:A3:43:SER:HB2	33:R3:123:THR:HG22	1.86	0.57
10:C6:270:THR:HG22	22:A6:69:GLU:HG3	1.87	0.57
23:B4:97:LEU:HD22	23:B4:232:HIS:NE2	2.20	0.57
23:B4:34:LYS:NZ	23:B4:95:ASN:OD1	2.28	0.57
25:E3:231:GLY:O	25:E3:233:LYS:N	2.38	0.57
25:E5:34:GLY:HA3	25:E5:83:PRO:HG3	1.86	0.57
26:F1:136:ARG:O	26:F1:203:ASN:HB2	2.04	0.57
26:F2:136:ARG:O	26:F2:203:ASN:HB2	2.05	0.57
26:F2:17:ILE:HG23	26:F2:18:LYS:H	1.69	0.57
26:F6:72:LEU:HD23	26:F6:151:ILE:HG23	1.86	0.57
11:G1:66:GLY:N	11:G1:100:CYS:SG	2.78	0.57
11:G5:66:GLY:N	11:G5:100:CYS:SG	2.78	0.57
27:H1:12:ASN:OD1	27:H1:14:GLU:HG2	2.05	0.57
12:J2:130:ILE:HD13	12:J2:145:PRO:HA	1.87	0.57
14:N4:133:ARG:NH2	30:L4:154:GLN:CG	2.68	0.57
14:N5:150:VAL:CG1	14:N5:151:ALA:H	2.14	0.57
31:P1:111:MET:HG3	31:P1:111:MET:O	2.04	0.57
31:P2:133:ILE:HG22	31:P2:134:GLY:H	1.70	0.57
32:Q3:4:LYS:NZ	32:Q3:99:TYR:CD1	2.72	0.57
33:R3:52:GLY:O	33:R3:55:THR:OG1	2.20	0.57
33:R6:91:LEU:HG	33:R6:91:LEU:O	2.04	0.57
2:U1:18:HIS:HB3	2:U1:118:ASP:H	1.68	0.57
2:U3:18:HIS:CB	2:U3:118:ASP:H	2.18	0.57
2:U3:20:ILE:N	2:U3:91:LEU:O	2.28	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U4:18:HIS:CB	2:U4:118:ASP:H	2.17	0.57
2:U6:18:HIS:CB	2:U6:118:ASP:H	2.18	0.57
16:W1:15:ASN:HD21	16:W1:72:CYS:H	1.51	0.57
4:X4:115:ILE:HG22	4:X4:117:GLY:H	1.69	0.57
4:X6:28:LYS:HE3	4:X6:32:LEU:HD13	1.85	0.57
22:A1:43:SER:HB2	33:R1:123:THR:HG22	1.86	0.57
22:A3:176:TRP:CD1	22:A3:199:PRO:HA	2.39	0.57
25:E2:189:LEU:O	25:E2:245:ARG:NH2	2.38	0.57
25:E5:189:LEU:O	25:E5:245:ARG:NH2	2.38	0.57
11:G1:219:GLU:HB2	11:G1:222:GLU:HB3	1.86	0.57
27:H1:20:GLU:O	27:H1:24:SER:N	2.36	0.57
12:J2:65:GLU:HA	12:J2:70:ARG:HD3	1.86	0.57
14:N2:142:GLU:N	14:N2:145:THR:HG1	2.03	0.57
31:P3:111:MET:O	31:P3:111:MET:HG3	2.04	0.57
31:P6:34:MET:O	31:P6:42:ARG:HG3	2.05	0.57
32:Q3:124:PRO:O	32:Q3:126:ARG:NH2	2.38	0.57
32:Q4:124:PRO:O	32:Q4:126:ARG:NH2	2.38	0.57
33:R2:72:LYS:HB3	33:R2:75:GLU:HB2	1.85	0.57
33:R5:100:PRO:HA	33:R5:117:LEU:HD12	1.85	0.57
2:U6:20:ILE:N	2:U6:91:LEU:O	2.28	0.57
16:W6:94:LEU:HD11	16:W6:102:ILE:HG13	1.86	0.57
22:A2:176:TRP:CD1	22:A2:199:PRO:HA	2.39	0.57
23:B4:189:ILE:HB	23:B4:190:PRO:HD3	1.87	0.57
10:C4:68:ARG:CG	10:C4:277:HIS:ND1	2.68	0.57
10:C6:139:LEU:HD21	10:C6:238:LYS:HG3	1.87	0.57
24:D3:11:PHE:O	24:D3:15:GLY:N	2.31	0.57
25:E1:191:ARG:HE	25:E1:245:ARG:HB3	1.70	0.57
25:E1:34:GLY:HA3	25:E1:83:PRO:HG3	1.86	0.57
25:E2:11:ARG:NH2	25:E2:24:THR:O	2.38	0.57
25:E3:185:GLY:H	25:E3:189:LEU:HB3	1.67	0.57
26:F3:136:ARG:O	26:F3:203:ASN:HB2	2.05	0.57
26:F5:17:ILE:HG23	26:F5:18:LYS:H	1.69	0.57
11:G4:218:LYS:O	11:G4:221:LYS:NZ	2.27	0.57
11:G6:66:GLY:N	11:G6:100:CYS:SG	2.78	0.57
27:H4:169:LYS:O	27:H4:172:THR:HG22	2.04	0.57
28:I2:43:ILE:HG12	28:I2:57:ALA:HA	1.86	0.57
14:N3:130:LYS:HZ3	14:N3:140:LYS:HD2	1.69	0.57
14:N4:150:VAL:CG1	14:N4:151:ALA:H	2.14	0.57
31:P2:114:HIS:HB3	31:P2:119:PHE:HE2	1.70	0.57
34:S2:68:ILE:O	34:S2:72:GLN:HG2	2.05	0.57
34:S5:68:ILE:O	34:S5:72:GLN:HG2	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P5:18:ARG:NH1	34:S5:88:LYS:HB3	2.20	0.57
34:S6:68:ILE:O	34:S6:72:GLN:HG2	2.05	0.57
34:S6:80:PRO:HB2	34:S6:83:PHE:HD2	1.69	0.57
16:W6:112:ASP:OD1	16:W6:113:HIS:N	2.37	0.57
17:Y2:109:GLU:CG	17:Y2:113:ARG:NE	2.64	0.57
23:B1:122:GLU:HG2	23:B1:140:VAL:HG12	1.87	0.57
23:B3:189:ILE:HB	23:B3:190:PRO:HD3	1.87	0.57
25:E1:238:LEU:HD11	25:E1:242:LYS:HG2	1.86	0.57
25:E4:191:ARG:HE	25:E4:245:ARG:HB3	1.70	0.57
25:E4:231:GLY:O	25:E4:233:LYS:N	2.37	0.57
11:G3:149:LYS:HZ3	11:G3:149:LYS:HB2	1.69	0.57
11:G3:230:LYS:O	11:G3:234:LEU:N	2.36	0.57
11:G4:141:ILE:C	11:G4:144:LEU:HG	2.23	0.57
12:J5:130:ILE:HD13	12:J5:145:PRO:HA	1.86	0.57
28:I2:10:LYS:HE2	30:L2:136:LYS:HE3	1.86	0.57
30:L3:40:ILE:HG12	30:L3:68:ILE:HD13	1.86	0.57
30:L5:40:ILE:HG12	30:L5:68:ILE:HD13	1.86	0.57
28:I1:158:ILE:HD13	15:O6:63:LYS:NZ	2.19	0.57
4:X2:140:ARG:HH22	4:X2:142:ARG:HH11	1.53	0.57
18:Z6:85:ARG:CG	18:Z6:85:ARG:HH21	2.14	0.57
22:A1:6:ASP:HB2	22:A1:8:LEU:HG	1.87	0.57
23:B2:24:PRO:HD3	30:L4:27:GLU:CB	2.34	0.57
10:C3:68:ARG:CG	10:C3:277:HIS:ND1	2.68	0.57
3:V5:16:LYS:H	10:C5:259:THR:HG21	1.70	0.57
25:E2:191:ARG:HE	25:E2:245:ARG:HB3	1.70	0.57
25:E3:11:ARG:NH2	25:E3:24:THR:O	2.37	0.57
25:E3:92:ILE:HG23	25:E3:96:GLY:H	1.70	0.57
26:F4:137:GLN:CB	26:F4:204:ARG:N	2.68	0.57
26:F4:63:LYS:HG3	26:F4:71:ARG:HH22	1.70	0.57
26:F5:137:GLN:CB	26:F5:204:ARG:CA	2.80	0.57
11:G1:141:ILE:HG12	11:G1:144:LEU:CD2	1.94	0.57
11:G4:231:ARG:HA	11:G4:234:LEU:HB2	1.87	0.57
11:G5:231:ARG:HA	11:G5:234:LEU:HB2	1.87	0.57
11:G6:231:ARG:HA	11:G6:234:LEU:HB2	1.87	0.57
27:H1:52:GLU:HA	27:H1:58:LYS:HA	1.87	0.57
28:I4:125:LYS:O	28:I4:125:LYS:HG2	2.04	0.57
12:J5:153:SER:HA	12:J5:156:HIS:HD2	1.69	0.57
30:L2:40:ILE:HG12	30:L2:68:ILE:HD13	1.86	0.57
30:L4:59:LYS:HG2	30:L4:134:LEU:HD11	1.87	0.57
31:P2:37:TYR:OH	31:P2:87:PRO:HD3	2.05	0.57
34:S1:80:PRO:HB2	34:S1:83:PHE:HD2	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S3:68:ILE:O	34:S3:72:GLN:HG2	2.05	0.57
22:A3:138:SER:HG	22:A3:156:TYR:HD1	1.52	0.56
10:C5:270:THR:HG22	22:A5:69:GLU:HG3	1.87	0.56
22:A5:6:ASP:HB2	22:A5:8:LEU:HG	1.87	0.56
10:C3:273:LEU:HB3	10:C3:280:VAL:HG12	1.84	0.56
10:C5:68:ARG:CG	10:C5:277:HIS:ND1	2.68	0.56
24:D2:76:ARG:O	24:D2:76:ARG:NH1	2.36	0.56
25:E1:11:ARG:NH2	25:E1:24:THR:O	2.38	0.56
25:E2:229:GLY:H	25:E2:235:TRP:HB2	1.69	0.56
25:E3:112:HIS:NE2	25:E3:237:SER:O	2.38	0.56
26:F1:137:GLN:CB	26:F1:204:ARG:N	2.68	0.56
26:F1:17:ILE:HG23	26:F1:18:LYS:H	1.69	0.56
26:F1:63:LYS:HG3	26:F1:71:ARG:HH22	1.70	0.56
11:G1:231:ARG:HA	11:G1:234:LEU:HB2	1.87	0.56
28:I3:199:LEU:HD12	28:I3:199:LEU:C	2.25	0.56
12:J3:65:GLU:HA	12:J3:70:ARG:HD3	1.86	0.56
30:L5:152:LYS:HE3	30:L5:154:GLN:HE21	1.69	0.56
13:M4:116:LYS:O	13:M4:117:GLU:HB2	2.05	0.56
14:N3:150:VAL:CG1	14:N3:151:ALA:H	2.14	0.56
28:I1:121:LEU:CD1	15:O6:63:LYS:NZ	2.67	0.56
32:Q2:124:PRO:O	32:Q2:126:ARG:NH2	2.38	0.56
32:Q6:124:PRO:O	32:Q6:126:ARG:NH2	2.38	0.56
32:Q6:12:VAL:HG21	32:Q6:91:ALA:HA	1.86	0.56
33:R1:86:PRO:O	33:R1:89:SER:OG	2.15	0.56
16:W1:112:ASP:OD1	16:W1:113:HIS:N	2.38	0.56
16:W1:40:VAL:O	16:W1:44:HIS:ND1	2.30	0.56
16:W3:112:ASP:OD1	16:W3:113:HIS:N	2.35	0.56
22:A2:43:SER:HB2	33:R2:123:THR:HG22	1.86	0.56
22:A3:6:ASP:HB2	22:A3:8:LEU:HG	1.87	0.56
22:A5:43:SER:HB2	33:R5:123:THR:HG22	1.86	0.56
22:A5:68:ILE:HG22	22:A5:70:ASN:H	1.70	0.56
22:A6:68:ILE:HG22	22:A6:70:ASN:H	1.71	0.56
23:B1:132:GLY:HA3	23:B1:221:PRO:HG3	1.87	0.56
23:B5:129:THR:HG21	23:B5:133:TYR:HB2	1.87	0.56
23:B5:189:ILE:HB	23:B5:190:PRO:HD3	1.87	0.56
25:E3:238:LEU:HD11	25:E3:242:LYS:HG2	1.86	0.56
26:F2:137:GLN:CB	26:F2:204:ARG:N	2.68	0.56
26:F5:63:LYS:HG3	26:F5:71:ARG:HH22	1.70	0.56
11:G4:66:GLY:N	11:G4:100:CYS:SG	2.78	0.56
27:H2:12:ASN:OD1	27:H2:14:GLU:HG2	2.05	0.56
27:H4:12:ASN:OD1	27:H4:14:GLU:HG2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I1:125:LYS:HG2	28:I1:125:LYS:O	2.04	0.56
29:K2:80:ARG:HH21	29:K2:87:PRO:HA	1.69	0.56
15:O2:96:LYS:NZ	15:O2:130:GLU:OE1	2.36	0.56
31:P3:114:HIS:HB3	31:P3:119:PHE:HE2	1.70	0.56
31:P3:15:PHE:CZ	31:P3:17:TYR:CB	2.88	0.56
31:P6:111:MET:HG3	31:P6:111:MET:O	2.04	0.56
32:Q3:67:ASP:OD1	32:Q3:68:ILE:N	2.37	0.56
33:R1:32:LYS:HZ1	33:R1:47:ARG:HH21	1.53	0.56
16:W3:40:VAL:O	16:W3:44:HIS:ND1	2.30	0.56
16:W5:112:ASP:OD1	16:W5:113:HIS:N	2.37	0.56
4:X4:140:ARG:HH22	4:X4:142:ARG:HH11	1.53	0.56
17:Y3:113:ARG:HA	17:Y3:116:LYS:HZ1	1.70	0.56
22:A4:6:ASP:HB2	22:A4:8:LEU:HG	1.87	0.56
23:B6:97:LEU:HD22	23:B6:232:HIS:NE2	2.20	0.56
10:C2:68:ARG:CG	10:C2:277:HIS:ND1	2.68	0.56
10:C5:139:LEU:HD21	10:C5:238:LYS:HG3	1.87	0.56
10:C5:273:LEU:HB3	10:C5:280:VAL:HG13	1.64	0.56
25:E5:238:LEU:HD11	25:E5:242:LYS:HG2	1.86	0.56
27:H6:52:GLU:HA	27:H6:58:LYS:HA	1.87	0.56
14:N1:133:ARG:NH2	30:L1:154:GLN:HG3	2.14	0.56
28:I3:10:LYS:HE2	30:L3:136:LYS:HE3	1.86	0.56
28:I5:10:LYS:HE2	30:L5:136:LYS:HE3	1.86	0.56
13:M4:93:LYS:HB2	13:M4:102:LYS:HB3	1.87	0.56
31:P1:115:TYR:HD2	31:P1:115:TYR:H	1.52	0.56
31:P1:114:HIS:HB3	31:P1:119:PHE:HE2	1.70	0.56
31:P5:37:TYR:OH	31:P5:87:PRO:HD3	2.04	0.56
32:Q5:124:PRO:O	32:Q5:126:ARG:NH2	2.38	0.56
33:R1:79:GLU:HG2	33:R1:80:ARG:N	2.19	0.56
34:S2:80:PRO:HB2	34:S2:83:PHE:HD2	1.69	0.56
34:S4:50:ILE:HD12	34:S4:67:VAL:HG21	1.87	0.56
34:S5:84:LEU:HD12	34:S5:95:TYR:HB3	1.87	0.56
2:U1:18:HIS:CB	2:U1:118:ASP:H	2.18	0.56
4:X2:68:LYS:HG2	4:X2:91:LEU:HD22	1.88	0.56
4:X6:68:LYS:HG2	4:X6:91:LEU:HD22	1.88	0.56
22:A6:6:ASP:HB2	22:A6:8:LEU:HG	1.88	0.56
23:B2:129:THR:HG21	23:B2:133:TYR:HB2	1.87	0.56
23:B3:97:LEU:HD22	23:B3:232:HIS:NE2	2.20	0.56
10:C3:139:LEU:HD21	10:C3:238:LYS:HG3	1.87	0.56
24:D2:132:LYS:HG3	24:D2:191:PRO:HB3	1.88	0.56
25:E1:92:ILE:HG23	25:E1:96:GLY:H	1.70	0.56
25:E5:191:ARG:HE	25:E5:245:ARG:HB3	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E5:229:GLY:H	25:E5:235:TRP:HB2	1.69	0.56
25:E5:112:HIS:NE2	25:E5:237:SER:O	2.39	0.56
25:E6:191:ARG:HE	25:E6:245:ARG:HB3	1.70	0.56
26:F5:136:ARG:O	26:F5:203:ASN:HB2	2.05	0.56
27:H2:52:GLU:HA	27:H2:58:LYS:HA	1.87	0.56
27:H6:12:ASN:OD1	27:H6:14:GLU:HG2	2.05	0.56
27:H6:95:ILE:HD11	27:H6:133:LEU:HD21	1.87	0.56
12:J2:118:GLY:O	12:J2:120:ALA:N	2.39	0.56
31:P4:114:HIS:HB3	31:P4:119:PHE:HE2	1.70	0.56
31:P5:115:TYR:HD2	31:P5:115:TYR:H	1.52	0.56
33:R6:81:ARG:NH1	33:R6:81:ARG:HG2	2.20	0.56
34:S4:68:ILE:O	34:S4:72:GLN:HG2	2.05	0.56
34:S5:80:PRO:HB2	34:S5:83:PHE:HD2	1.69	0.56
4:X5:68:LYS:HG2	4:X5:91:LEU:HD22	1.88	0.56
17:Y6:126:GLY:O	17:Y6:130:LYS:NZ	2.27	0.56
22:A2:68:ILE:HG22	22:A2:70:ASN:H	1.70	0.56
23:B1:129:THR:HG21	23:B1:133:TYR:HB2	1.87	0.56
10:C1:68:ARG:CG	10:C1:277:HIS:ND1	2.68	0.56
10:C3:273:LEU:HD13	10:C3:280:VAL:CB	2.35	0.56
10:C4:270:THR:HG22	22:A4:69:GLU:HG3	1.87	0.56
10:C6:68:ARG:CG	10:C6:277:HIS:ND1	2.68	0.56
24:D6:11:PHE:O	24:D6:15:GLY:N	2.31	0.56
25:E2:112:HIS:NE2	25:E2:237:SER:O	2.39	0.56
25:E2:92:ILE:HG23	25:E2:96:GLY:H	1.70	0.56
25:E3:191:ARG:HE	25:E3:245:ARG:HB3	1.70	0.56
26:F6:63:LYS:HG3	26:F6:71:ARG:HH22	1.70	0.56
11:G2:66:GLY:N	11:G2:100:CYS:SG	2.78	0.56
27:H5:52:GLU:HA	27:H5:58:LYS:HA	1.87	0.56
30:L1:40:ILE:HG12	30:L1:68:ILE:HD13	1.86	0.56
30:L4:61:PRO:HD3	30:L4:141:ASN:HD21	1.69	0.56
14:N1:17:PRO:O	14:N1:20:ARG:NH1	2.30	0.56
31:P1:41:GLN:OE1	31:P1:84:ILE:CD1	2.53	0.56
31:P2:111:MET:O	31:P2:111:MET:HG3	2.05	0.56
31:P6:121:ILE:HG13	31:P6:123:TYR:CG	2.38	0.56
31:P6:96:VAL:HG21	31:P6:116:LEU:HD11	1.59	0.56
32:Q3:102:GLU:HG2	32:Q3:106:LYS:HE2	1.88	0.56
32:Q5:67:ASP:OD1	32:Q5:68:ILE:N	2.37	0.56
34:S2:84:LEU:HD12	34:S2:95:TYR:HB3	1.87	0.56
34:S4:74:PRO:HA	34:S4:79:ILE:HD12	1.88	0.56
1:T3:42:HIS:CD2	1:T3:81:GLY:H	2.23	0.56
2:U2:18:HIS:CB	2:U2:118:ASP:H	2.18	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X3:140:ARG:HH22	4:X3:142:ARG:HH11	1.53	0.56
4:X3:68:LYS:HG2	4:X3:91:LEU:HD22	1.88	0.56
22:A4:4:ALA:N	22:A4:5:LEU:HA	2.16	0.56
23:B3:122:GLU:HG2	23:B3:140:VAL:HG12	1.86	0.56
23:B4:122:GLU:HG2	23:B4:140:VAL:HG12	1.87	0.56
10:C2:273:LEU:HB3	10:C2:280:VAL:HG12	1.84	0.56
25:E3:34:GLY:HA3	25:E3:83:PRO:HG3	1.86	0.56
25:E6:92:ILE:HG23	25:E6:96:GLY:H	1.70	0.56
26:F1:127:ARG:HB3	26:F1:128:ILE:HG12	1.87	0.56
26:F3:137:GLN:CB	26:F3:204:ARG:CA	2.80	0.56
26:F4:136:ARG:O	26:F4:203:ASN:HB2	2.05	0.56
11:G1:164:LYS:HG2	11:G1:166:GLY:H	1.71	0.56
27:H3:95:ILE:HD11	27:H3:133:LEU:HD21	1.87	0.56
27:H3:52:GLU:HA	27:H3:58:LYS:HA	1.87	0.56
27:H5:12:ASN:OD1	27:H5:14:GLU:HG2	2.05	0.56
27:H5:95:ILE:HD11	27:H5:133:LEU:HD21	1.88	0.56
28:I4:10:LYS:HE2	30:L4:136:LYS:HE3	1.86	0.56
12:J1:118:GLY:O	12:J1:120:ALA:N	2.39	0.56
12:J6:130:ILE:HD13	12:J6:145:PRO:HA	1.86	0.56
13:M2:27:ILE:HG22	29:K2:84:HIS:CE1	2.31	0.56
13:M1:93:LYS:HB2	13:M1:102:LYS:HB3	1.88	0.56
31:P5:114:HIS:HB3	31:P5:119:PHE:HE2	1.70	0.56
32:Q4:67:ASP:OD1	32:Q4:68:ILE:N	2.37	0.56
34:S1:68:ILE:O	34:S1:72:GLN:HG2	2.05	0.56
1:T2:42:HIS:NE2	1:T2:82:ARG:O	2.39	0.56
22:A2:6:ASP:HB2	22:A2:8:LEU:HG	1.88	0.56
23:B2:22:VAL:H	30:L4:30:LYS:CE	2.18	0.56
23:B5:132:GLY:HA3	23:B5:221:PRO:HG3	1.88	0.56
23:B6:132:GLY:HA3	23:B6:221:PRO:HG3	1.88	0.56
10:C2:139:LEU:HD21	10:C2:238:LYS:HG3	1.87	0.56
10:C3:270:THR:HG22	22:A3:69:GLU:HG3	1.86	0.56
10:C6:65:LYS:CB	10:C6:279:ARG:CB	2.72	0.56
24:D1:132:LYS:HG3	24:D1:191:PRO:HB3	1.88	0.56
25:E5:231:GLY:O	25:E5:233:LYS:N	2.37	0.56
25:E5:92:ILE:HG23	25:E5:96:GLY:H	1.70	0.56
26:F1:88:MET:HB2	26:F1:91:ARG:HH21	1.71	0.56
26:F5:137:GLN:CB	26:F5:204:ARG:N	2.68	0.56
11:G5:164:LYS:HG2	11:G5:166:GLY:H	1.71	0.56
27:H4:116:ARG:NH2	27:H4:121:THR:HA	2.21	0.56
27:H4:95:ILE:HD11	27:H4:133:LEU:HD21	1.87	0.56
12:J3:11:LYS:NZ	12:J3:13:TYR:O	2.30	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J4:153:SER:HA	12:J4:156:HIS:HD2	1.69	0.56
30:L1:4:ILE:HD13	30:L1:55:TYR:HA	1.88	0.56
13:M6:116:LYS:O	13:M6:117:GLU:HB2	2.05	0.56
31:P3:34:MET:O	31:P3:42:ARG:HG3	2.05	0.56
31:P4:33:LEU:O	31:P4:37:TYR:HB2	2.06	0.56
31:P6:45:LEU:HD11	31:P6:49:LEU:HD21	1.88	0.56
32:Q1:102:GLU:HG2	32:Q1:106:LYS:HE2	1.88	0.56
32:Q1:124:PRO:O	32:Q1:126:ARG:NH2	2.38	0.56
32:Q2:102:GLU:HG2	32:Q2:106:LYS:HE2	1.88	0.56
33:R2:79:GLU:HG2	33:R2:80:ARG:N	2.19	0.56
33:R6:52:GLY:O	33:R6:55:THR:OG1	2.20	0.56
34:S1:84:LEU:HD12	34:S1:95:TYR:HB3	1.88	0.56
34:S6:84:LEU:HD12	34:S6:95:TYR:HB3	1.88	0.56
1:T1:42:HIS:NE2	1:T1:82:ARG:O	2.39	0.56
1:T4:42:HIS:CD2	1:T4:81:GLY:H	2.23	0.56
3:V1:74:LYS:O	3:V1:81:LYS:NZ	2.31	0.56
4:X5:70:VAL:O	4:X5:83:ALA:N	2.36	0.56
23:B2:138:PHE:O	23:B2:213:ARG:N	2.39	0.56
23:B3:129:THR:HG21	23:B3:133:TYR:HB2	1.87	0.56
23:B4:132:GLY:HA3	23:B4:221:PRO:HG3	1.88	0.56
10:C6:142:LYS:HG2	10:C6:157:LEU:CD1	2.33	0.56
26:F2:88:MET:HB2	26:F2:91:ARG:HH21	1.71	0.56
11:G3:66:GLY:N	11:G3:100:CYS:SG	2.78	0.56
11:G5:50:VAL:HB	11:G5:111:LEU:HD11	1.88	0.56
11:G6:230:LYS:O	11:G6:234:LEU:N	2.37	0.56
30:L6:59:LYS:HG2	30:L6:134:LEU:HD11	1.86	0.56
13:M5:116:LYS:O	13:M5:117:GLU:HB2	2.05	0.56
14:N1:148:ALA:HB3	14:N1:149:LEU:CA	2.18	0.56
14:N5:129:TYR:HB3	14:N5:134:VAL:CB	2.31	0.56
31:P4:133:ILE:HG22	31:P4:134:GLY:N	2.21	0.56
31:P5:15:PHE:CE2	31:P5:112:ILE:HD13	2.39	0.56
34:S3:84:LEU:HD12	34:S3:95:TYR:HB3	1.87	0.56
1:T1:42:HIS:CD2	1:T1:81:GLY:H	2.23	0.56
1:T3:42:HIS:NE2	1:T3:82:ARG:O	2.39	0.56
1:T5:42:HIS:CD2	1:T5:81:GLY:H	2.23	0.56
1:T6:42:HIS:CD2	1:T6:81:GLY:H	2.24	0.56
2:U5:18:HIS:CB	2:U5:118:ASP:H	2.18	0.56
4:X5:40:PRO:HG2	4:X5:120:PHE:HE2	1.71	0.56
18:Z4:88:LEU:HD22	18:Z4:109:TYR:HE2	1.70	0.56
23:B4:129:THR:HG21	23:B4:133:TYR:HB2	1.87	0.56
10:C4:139:LEU:HD21	10:C4:238:LYS:HG3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C6:273:LEU:HD13	10:C6:280:VAL:CB	2.35	0.56
24:D3:132:LYS:HG3	24:D3:191:PRO:HB3	1.88	0.56
25:E4:112:HIS:NE2	25:E4:237:SER:O	2.39	0.56
26:F1:136:ARG:O	26:F1:203:ASN:ND2	2.36	0.56
26:F2:137:GLN:CB	26:F2:204:ARG:CA	2.80	0.56
26:F3:88:MET:HB2	26:F3:91:ARG:HH21	1.71	0.56
11:G2:231:ARG:HA	11:G2:234:LEU:HB2	1.87	0.56
29:K6:80:ARG:HH21	29:K6:87:PRO:HA	1.69	0.56
30:L4:4:ILE:HD13	30:L4:55:TYR:HA	1.88	0.56
13:M2:93:LYS:HB2	13:M2:102:LYS:HB3	1.88	0.56
14:N3:39:LYS:HA	14:N3:42:LYS:NZ	2.21	0.56
31:P1:34:MET:HB3	31:P1:42:ARG:CG	2.36	0.56
31:P6:133:ILE:HG22	31:P6:134:GLY:H	1.69	0.56
33:R2:75:GLU:OE1	33:R2:78:ARG:NH1	2.38	0.56
34:S2:74:PRO:HA	34:S2:79:ILE:HD12	1.88	0.56
34:S4:84:LEU:HD12	34:S4:95:TYR:HB3	1.88	0.56
4:X1:40:PRO:HG2	4:X1:120:PHE:HE2	1.71	0.56
4:X4:68:LYS:HG2	4:X4:91:LEU:HD22	1.87	0.56
17:Y5:113:ARG:HA	17:Y5:116:LYS:NZ	2.21	0.56
18:Z1:88:LEU:HD22	18:Z1:109:TYR:HE2	1.71	0.56
22:A3:3:GLY:HA3	22:A3:8:LEU:HD11	1.87	0.56
22:A5:180:ARG:O	22:A5:184:ARG:HG2	2.06	0.56
23:B5:97:LEU:HD22	23:B5:232:HIS:NE2	2.20	0.56
23:B6:198:GLU:OE2	23:B6:210:VAL:HB	2.06	0.56
10:C2:273:LEU:HD13	10:C2:280:VAL:CB	2.35	0.56
24:D5:22:ASN:O	24:D5:26:THR:OG1	2.15	0.56
25:E2:238:LEU:HD11	25:E2:242:LYS:HG2	1.86	0.56
11:G4:219:GLU:O	11:G4:223:LYS:N	2.37	0.56
11:G6:164:LYS:HG2	11:G6:166:GLY:H	1.71	0.56
12:J4:65:GLU:HA	12:J4:70:ARG:HD3	1.86	0.56
12:J6:11:LYS:NZ	12:J6:13:TYR:O	2.30	0.56
15:O1:96:LYS:NZ	15:O1:130:GLU:OE1	2.37	0.56
15:O3:96:LYS:NZ	15:O3:130:GLU:OE1	2.37	0.56
31:P3:15:PHE:CD1	31:P3:16:THR:N	2.73	0.56
31:P5:17:TYR:CD2	31:P5:112:ILE:HD11	2.41	0.56
1:T6:24:LYS:HG2	1:T6:25:SER:H	1.71	0.56
3:V2:16:LYS:H	10:C2:259:THR:HG21	1.71	0.56
4:X6:40:PRO:HG2	4:X6:120:PHE:HE2	1.71	0.56
17:Y2:113:ARG:HA	17:Y2:116:LYS:NZ	2.21	0.56
18:Z5:46:ASN:HB3	18:Z5:80:ARG:CA	2.16	0.56
10:C2:270:THR:HG22	22:A2:69:GLU:HG3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A3:68:ILE:HG22	22:A3:70:ASN:H	1.71	0.56
23:B2:122:GLU:HG2	23:B2:140:VAL:HG12	1.87	0.56
23:B3:132:GLY:HA3	23:B3:221:PRO:HG3	1.88	0.56
10:C5:273:LEU:HB3	10:C5:280:VAL:HG12	1.84	0.56
10:C6:221:ASP:OD1	10:C6:222:CYS:N	2.39	0.56
26:F1:137:GLN:CB	26:F1:204:ARG:CA	2.80	0.56
26:F2:127:ARG:NE	26:F2:128:ILE:HG23	2.17	0.56
11:G1:50:VAL:HB	11:G1:111:LEU:HD11	1.88	0.56
11:G4:164:LYS:HG2	11:G4:166:GLY:H	1.71	0.56
11:G5:141:ILE:HG12	11:G5:144:LEU:CD2	1.94	0.56
11:G5:219:GLU:O	11:G5:223:LYS:N	2.37	0.56
27:H1:95:ILE:HD11	27:H1:133:LEU:HD21	1.87	0.56
27:H6:20:GLU:O	27:H6:24:SER:N	2.36	0.56
28:I3:150:ASP:O	28:I3:154:LYS:NZ	2.39	0.56
12:J3:118:GLY:O	12:J3:120:ALA:N	2.39	0.56
12:J4:118:GLY:O	12:J4:120:ALA:N	2.39	0.56
13:M3:27:ILE:HG22	29:K3:84:HIS:CE1	2.31	0.56
29:K5:80:ARG:HH21	29:K5:87:PRO:HA	1.69	0.56
28:I1:10:LYS:HE2	30:L1:136:LYS:HE3	1.86	0.56
30:L1:124:ASP:CB	30:L1:147:LYS:CB	2.58	0.56
30:L3:153:LYS:O	30:L3:153:LYS:HD2	2.05	0.56
13:M1:116:LYS:O	13:M1:117:GLU:HB2	2.05	0.56
15:O1:99:ALA:H	15:O1:133:THR:HB	1.71	0.56
34:S5:74:PRO:HA	34:S5:79:ILE:HD12	1.88	0.56
4:X2:40:PRO:HG2	4:X2:120:PHE:HE2	1.71	0.56
4:X6:140:ARG:HH22	4:X6:142:ARG:HH11	1.53	0.56
18:Z2:46:ASN:HB3	18:Z2:80:ARG:CA	2.16	0.56
18:Z6:88:LEU:HD22	18:Z6:109:TYR:HE2	1.71	0.56
23:B1:198:GLU:OE2	23:B1:210:VAL:HB	2.06	0.55
10:C1:221:ASP:OD1	10:C1:222:CYS:N	2.39	0.55
10:C1:277:HIS:O	10:C1:279:ARG:N	2.36	0.55
27:H2:116:ARG:NH2	27:H2:121:THR:HA	2.21	0.55
28:I5:150:ASP:O	28:I5:154:LYS:NZ	2.39	0.55
30:L4:40:ILE:HG12	30:L4:68:ILE:HD13	1.86	0.55
30:L5:152:LYS:HE3	30:L5:154:GLN:NE2	2.21	0.55
30:L6:4:ILE:HD13	30:L6:55:TYR:HA	1.88	0.55
13:M3:93:LYS:HB2	13:M3:102:LYS:HB3	1.87	0.55
14:N4:39:LYS:HA	14:N4:42:LYS:NZ	2.21	0.55
31:P6:114:HIS:HB3	31:P6:119:PHE:HE2	1.70	0.55
32:Q6:102:GLU:HG2	32:Q6:106:LYS:HE2	1.88	0.55
33:R2:81:ARG:NH1	33:R2:81:ARG:HG2	2.20	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S6:50:ILE:HD12	34:S6:67:VAL:HG21	1.87	0.55
34:S6:74:PRO:HA	34:S6:79:ILE:HD12	1.88	0.55
3:V4:16:LYS:H	10:C4:259:THR:HG21	1.71	0.55
4:X5:140:ARG:HH22	4:X5:142:ARG:HH11	1.53	0.55
18:Z4:88:LEU:HB3	18:Z4:109:TYR:CZ	2.41	0.55
22:A2:180:ARG:O	22:A2:184:ARG:HG2	2.06	0.55
22:A6:180:ARG:O	22:A6:184:ARG:HG2	2.06	0.55
22:A6:89:LYS:HZ1	33:R6:82:ASP:CB	2.19	0.55
22:A6:3:GLY:HA3	22:A6:8:LEU:HD11	1.87	0.55
23:B1:189:ILE:HB	23:B1:190:PRO:HD3	1.87	0.55
10:C1:139:LEU:HD21	10:C1:238:LYS:HG3	1.87	0.55
24:D4:132:LYS:HG3	24:D4:191:PRO:HB3	1.88	0.55
11:G5:218:LYS:O	11:G5:221:LYS:NZ	2.27	0.55
11:G6:149:LYS:HB2	11:G6:149:LYS:HZ3	1.71	0.55
27:H1:116:ARG:NH2	27:H1:121:THR:HA	2.21	0.55
28:I6:150:ASP:O	28:I6:154:LYS:NZ	2.39	0.55
13:M5:93:LYS:HB2	13:M5:102:LYS:HB3	1.87	0.55
13:M5:36:ARG:HE	13:M5:40:LYS:HZ2	1.53	0.55
15:O1:61:LYS:HE3	15:O1:76:LEU:HD13	1.88	0.55
15:O4:61:LYS:HE3	15:O4:76:LEU:HD13	1.88	0.55
33:R2:52:GLY:O	33:R2:55:THR:OG1	2.20	0.55
33:R2:74:GLN:C	33:R2:76:GLU:H	2.09	0.55
33:R3:65:PRO:HB3	33:R3:73:LEU:HD23	1.88	0.55
1:T1:24:LYS:HG2	1:T1:25:SER:H	1.71	0.55
1:T2:24:LYS:HG2	1:T2:25:SER:H	1.72	0.55
3:V6:16:LYS:H	10:C6:259:THR:HG21	1.70	0.55
4:X3:70:VAL:O	4:X3:83:ALA:N	2.36	0.55
17:Y1:113:ARG:HA	17:Y1:116:LYS:NZ	2.22	0.55
22:A3:180:ARG:O	22:A3:184:ARG:HG2	2.06	0.55
10:C1:273:LEU:HB3	10:C1:280:VAL:HG12	1.84	0.55
10:C6:272:HIS:C	10:C6:274:VAL:H	2.10	0.55
26:F4:127:ARG:CB	26:F4:128:ILE:HA	2.24	0.55
27:H5:20:GLU:O	27:H5:24:SER:N	2.36	0.55
30:L2:121:GLN:CG	30:L2:153:LYS:HE3	2.34	0.55
33:R4:52:GLY:O	33:R4:55:THR:OG1	2.20	0.55
34:S1:98:VAL:HG11	34:S1:106:LYS:HD2	1.89	0.55
34:S3:74:PRO:HA	34:S3:79:ILE:HD12	1.88	0.55
1:T2:42:HIS:CD2	1:T2:81:GLY:H	2.23	0.55
4:X1:140:ARG:HH22	4:X1:142:ARG:HH11	1.53	0.55
4:X1:68:LYS:HG2	4:X1:91:LEU:HD22	1.88	0.55
18:Z2:48:VAL:HB	18:Z2:83:LEU:HD11	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z3:48:VAL:HB	18:Z3:83:LEU:HD11	1.89	0.55
22:A2:3:GLY:HA3	22:A2:8:LEU:HD11	1.88	0.55
22:A4:68:ILE:HG22	22:A4:70:ASN:H	1.71	0.55
10:C2:91:SER:O	10:C2:94:ILE:HG22	2.07	0.55
10:C6:141:VAL:O	10:C6:142:LYS:HG3	2.05	0.55
25:E6:11:ARG:HH11	25:E6:20:LEU:HB3	1.72	0.55
26:F2:63:LYS:HG3	26:F2:71:ARG:HH22	1.70	0.55
11:G4:70:HIS:ND1	11:G4:103:ASP:OD1	2.40	0.55
11:G5:70:HIS:ND1	11:G5:103:ASP:OD1	2.40	0.55
11:G6:218:LYS:O	11:G6:221:LYS:NZ	2.27	0.55
27:H3:12:ASN:OD1	27:H3:14:GLU:HG2	2.05	0.55
12:J5:118:GLY:O	12:J5:120:ALA:N	2.39	0.55
30:L5:4:ILE:HD13	30:L5:55:TYR:HA	1.88	0.55
13:M3:116:LYS:O	13:M3:117:GLU:HB2	2.05	0.55
13:M6:93:LYS:HB2	13:M6:102:LYS:HB3	1.88	0.55
14:N4:17:PRO:O	14:N4:20:ARG:NH1	2.30	0.55
15:O3:61:LYS:HE3	15:O3:76:LEU:HD13	1.88	0.55
15:O6:96:LYS:NZ	15:O6:130:GLU:OE1	2.36	0.55
34:S3:50:ILE:HD12	34:S3:67:VAL:HG21	1.88	0.55
34:S3:98:VAL:HG11	34:S3:106:LYS:HD2	1.89	0.55
2:U4:118:ASP:O	2:U4:119:ALA:HB3	2.07	0.55
22:A1:3:GLY:HA3	22:A1:8:LEU:HD11	1.88	0.55
23:B1:22:VAL:HG12	23:B1:22:VAL:O	2.05	0.55
23:B3:138:PHE:O	23:B3:213:ARG:N	2.39	0.55
10:C4:91:SER:O	10:C4:94:ILE:HG22	2.07	0.55
25:E1:231:GLY:O	25:E1:233:LYS:N	2.37	0.55
25:E6:112:HIS:NE2	25:E6:237:SER:O	2.38	0.55
26:F5:179:ASN:HB2	26:F5:187:SER:HB3	1.89	0.55
26:F5:88:MET:HB2	26:F5:91:ARG:HH21	1.71	0.55
11:G5:230:LYS:O	11:G5:234:LEU:N	2.37	0.55
28:I2:150:ASP:O	28:I2:154:LYS:NZ	2.39	0.55
14:N1:133:ARG:CD	30:L1:152:LYS:HG3	2.35	0.55
14:N3:135:LEU:HB3	14:N3:136:PRO:CD	2.36	0.55
15:O2:99:ALA:H	15:O2:133:THR:HB	1.71	0.55
15:O6:99:ALA:H	15:O6:133:THR:HB	1.71	0.55
31:P4:30:TYR:O	31:P4:33:LEU:HB2	2.07	0.55
33:R3:81:ARG:NH1	33:R3:81:ARG:HG2	2.20	0.55
1:T4:116:ASP:HB2	1:T4:120:GLY:HA3	1.89	0.55
2:U5:118:ASP:O	2:U5:119:ALA:HB3	2.07	0.55
3:V2:74:LYS:O	3:V2:81:LYS:NZ	2.31	0.55
17:Y4:113:ARG:HA	17:Y4:116:LYS:NZ	2.21	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y6:113:ARG:HA	17:Y6:116:LYS:NZ	2.22	0.55
22:A4:3:GLY:HA3	22:A4:8:LEU:HD11	1.88	0.55
22:A5:6:ASP:O	22:A5:9:GLN:NE2	2.34	0.55
23:B2:34:LYS:NZ	23:B2:95:ASN:OD1	2.28	0.55
23:B4:198:GLU:OE2	23:B4:210:VAL:HB	2.06	0.55
23:B6:189:ILE:HB	23:B6:190:PRO:HD3	1.87	0.55
10:C5:221:ASP:OD1	10:C5:222:CYS:N	2.40	0.55
24:D2:135:GLU:OE2	24:D2:159:HIS:NE2	2.36	0.55
25:E1:201:HIS:HB3	25:E1:204:SER:HB3	1.88	0.55
25:E4:201:HIS:HB3	25:E4:204:SER:HB3	1.88	0.55
26:F4:88:MET:HB2	26:F4:91:ARG:HH21	1.71	0.55
11:G2:164:LYS:HG2	11:G2:166:GLY:H	1.71	0.55
27:H2:95:ILE:HD11	27:H2:133:LEU:HD21	1.87	0.55
27:H5:116:ARG:NH2	27:H5:121:THR:HA	2.21	0.55
27:H6:116:ARG:NH2	27:H6:121:THR:HA	2.21	0.55
28:I1:125:LYS:CD	15:O6:66:ARG:NE	2.63	0.55
14:N1:39:LYS:HA	14:N1:42:LYS:NZ	2.21	0.55
14:N2:150:VAL:CG1	14:N2:151:ALA:H	2.14	0.55
15:O5:61:LYS:HE3	15:O5:76:LEU:HD13	1.88	0.55
33:R5:81:ARG:NH1	33:R5:81:ARG:HG2	2.21	0.55
34:S2:98:VAL:HG11	34:S2:106:LYS:HD2	1.89	0.55
1:T5:24:LYS:HG2	1:T5:25:SER:H	1.72	0.55
1:T5:42:HIS:NE2	1:T5:82:ARG:O	2.39	0.55
2:U1:118:ASP:O	2:U1:119:ALA:HB3	2.07	0.55
2:U5:49:LYS:O	2:U5:51:LYS:N	2.36	0.55
3:V5:70:LEU:O	3:V5:74:LYS:HG2	2.07	0.55
16:W2:72:CYS:SG	16:W2:73:GLY:N	2.73	0.55
4:X5:53:GLU:HB2	4:X5:71:ARG:HB2	1.88	0.55
22:A4:180:ARG:O	22:A4:184:ARG:HG2	2.06	0.55
22:A5:3:GLY:HA3	22:A5:8:LEU:HD11	1.87	0.55
10:C5:273:LEU:HD13	10:C5:280:VAL:CB	2.35	0.55
24:D6:76:ARG:NH1	24:D6:76:ARG:O	2.37	0.55
25:E5:201:HIS:HB3	25:E5:204:SER:HB3	1.88	0.55
26:F1:137:GLN:HG3	26:F1:204:ARG:N	2.19	0.55
26:F3:195:GLU:OE1	28:I6:138:ASN:ND2	2.40	0.55
26:F4:137:GLN:HG3	26:F4:204:ARG:N	2.20	0.55
27:H4:52:GLU:HA	27:H4:58:LYS:HA	1.87	0.55
28:I4:150:ASP:O	28:I4:154:LYS:NZ	2.39	0.55
15:O4:99:ALA:H	15:O4:133:THR:HB	1.71	0.55
31:P6:30:TYR:O	31:P6:33:LEU:HB2	2.07	0.55
33:R5:58:MET:CA	33:R5:61:ILE:HG12	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R6:60:ARG:HG2	33:R6:60:ARG:O	2.06	0.55
34:S2:50:ILE:HD12	34:S2:67:VAL:HG21	1.87	0.55
3:V4:74:LYS:O	3:V4:81:LYS:NZ	2.31	0.55
4:X2:81:ILE:HG21	4:X2:120:PHE:HD2	1.72	0.55
4:X4:53:GLU:HB2	4:X4:71:ARG:HB2	1.89	0.55
18:Z1:48:VAL:HB	18:Z1:83:LEU:HD11	1.89	0.55
18:Z3:88:LEU:HD22	18:Z3:109:TYR:HE2	1.71	0.55
18:Z5:88:LEU:HD22	18:Z5:109:TYR:HE2	1.71	0.55
23:B2:198:GLU:OE2	23:B2:210:VAL:HB	2.06	0.55
23:B5:138:PHE:O	23:B5:213:ARG:N	2.39	0.55
10:C1:273:LEU:HD13	10:C1:280:VAL:CB	2.35	0.55
10:C2:272:HIS:C	10:C2:274:VAL:H	2.10	0.55
10:C3:91:SER:O	10:C3:94:ILE:HG22	2.07	0.55
24:D5:132:LYS:HG3	24:D5:191:PRO:HB3	1.88	0.55
25:E3:11:ARG:HH11	25:E3:20:LEU:HB3	1.72	0.55
26:F2:175:ASP:OD1	26:F2:176:GLU:N	2.40	0.55
26:F3:175:ASP:OD1	26:F3:176:GLU:N	2.40	0.55
26:F3:63:LYS:HG3	26:F3:71:ARG:HH22	1.70	0.55
26:F4:179:ASN:HB2	26:F4:187:SER:HB3	1.89	0.55
11:G3:149:LYS:HZ2	11:G3:149:LYS:HB2	1.67	0.55
11:G3:70:HIS:ND1	11:G3:103:ASP:OD1	2.40	0.55
11:G4:142:ARG:CD	11:G4:147:LEU:HD12	2.32	0.55
11:G4:216:ARG:HG3	11:G4:223:LYS:HZ2	1.71	0.55
11:G4:50:VAL:HB	11:G4:111:LEU:HD11	1.88	0.55
12:J1:97:ILE:HA	12:J1:100:LEU:HD13	1.89	0.55
12:J6:118:GLY:O	12:J6:120:ALA:N	2.39	0.55
13:M2:116:LYS:O	13:M2:117:GLU:HB2	2.05	0.55
14:N5:39:LYS:HA	14:N5:42:LYS:NZ	2.21	0.55
31:P5:108:LYS:CB	31:P5:109:PRO:CD	2.64	0.55
32:Q4:102:GLU:HG2	32:Q4:106:LYS:HE2	1.88	0.55
34:S1:74:PRO:HA	34:S1:79:ILE:HD12	1.88	0.55
1:T4:42:HIS:NE2	1:T4:82:ARG:O	2.39	0.55
2:U1:20:ILE:N	2:U1:91:LEU:O	2.28	0.55
3:V1:16:LYS:H	10:C1:259:THR:HG21	1.71	0.55
16:W3:65:LEU:O	16:W3:67:GLY:N	2.40	0.55
4:X3:40:PRO:HG2	4:X3:120:PHE:HE2	1.71	0.55
18:Z5:48:VAL:HB	18:Z5:83:LEU:HD11	1.89	0.55
22:A5:211:GLU:HG3	33:R5:81:ARG:HH21	1.60	0.55
22:A6:6:ASP:O	22:A6:9:GLN:NE2	2.34	0.55
23:B2:132:GLY:HA3	23:B2:221:PRO:HG3	1.88	0.55
10:C1:63:VAL:N	10:C1:90:GLU:OE2	2.40	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C2:63:VAL:N	10:C2:90:GLU:OE2	2.40	0.55
10:C6:63:VAL:N	10:C6:90:GLU:OE2	2.40	0.55
24:D1:53:THR:HA	24:D1:90:LYS:HG3	1.89	0.55
24:D5:53:THR:HA	24:D5:90:LYS:HG3	1.89	0.55
24:D6:60:GLY:HA3	24:D6:65:ARG:HB3	1.89	0.55
26:F2:179:ASN:HB2	26:F2:187:SER:HB3	1.89	0.55
26:F6:175:ASP:OD1	26:F6:176:GLU:N	2.40	0.55
30:L3:4:ILE:HD13	30:L3:55:TYR:HA	1.89	0.55
15:O2:61:LYS:HE3	15:O2:76:LEU:HD13	1.88	0.55
15:O3:99:ALA:H	15:O3:133:THR:HB	1.71	0.55
15:O5:99:ALA:H	15:O5:133:THR:HB	1.71	0.55
32:Q5:4:LYS:NZ	32:Q5:99:TYR:CD1	2.72	0.55
33:R4:81:ARG:HG2	33:R4:81:ARG:NH1	2.20	0.55
33:R6:86:PRO:O	33:R6:89:SER:OG	2.15	0.55
3:V3:16:LYS:H	10:C3:259:THR:HG21	1.71	0.55
12:J1:64:ASP:HB3	16:W1:117:ARG:HH21	1.72	0.55
16:W4:65:LEU:O	16:W4:67:GLY:N	2.40	0.55
4:X4:81:ILE:HG21	4:X4:120:PHE:HD2	1.71	0.55
18:Z2:88:LEU:HD22	18:Z2:109:TYR:HE2	1.72	0.55
18:Z4:50:PHE:HB3	18:Z4:58:LEU:HD21	1.89	0.55
22:A5:89:LYS:HZ1	33:R5:82:ASP:CB	2.16	0.55
23:B5:198:GLU:OE2	23:B5:210:VAL:HB	2.06	0.55
10:C3:68:ARG:NH2	10:C3:276:THR:OG1	2.40	0.55
10:C4:221:ASP:OD1	10:C4:222:CYS:N	2.40	0.55
10:C5:272:HIS:C	10:C5:274:VAL:H	2.10	0.55
10:C5:64:THR:OG1	10:C5:279:ARG:CZ	2.55	0.55
10:C6:142:LYS:CG	10:C6:157:LEU:CD1	2.62	0.55
25:E2:11:ARG:HH11	25:E2:20:LEU:HB3	1.72	0.55
25:E4:92:ILE:HG23	25:E4:96:GLY:H	1.70	0.55
26:F1:136:ARG:C	26:F1:203:ASN:HD22	2.11	0.55
26:F2:127:ARG:CB	26:F2:128:ILE:HA	2.24	0.55
26:F2:136:ARG:C	26:F2:203:ASN:HD22	2.11	0.55
12:J4:64:ASP:HB3	16:W4:117:ARG:HH21	1.72	0.55
12:J6:64:ASP:HB3	16:W6:117:ARG:HH21	1.72	0.55
14:N2:133:ARG:HD2	30:L2:152:LYS:CA	2.36	0.55
13:M4:111:VAL:CG1	13:M4:114:TYR:HE1	2.08	0.55
13:M5:111:VAL:CG1	13:M5:114:TYR:HE1	2.08	0.55
14:N6:39:LYS:HA	14:N6:42:LYS:NZ	2.21	0.55
31:P3:30:TYR:O	31:P3:33:LEU:HB2	2.07	0.55
33:R1:100:PRO:HD3	33:R1:118:GLN:HB2	1.89	0.55
4:X2:70:VAL:O	4:X2:83:ALA:N	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X3:81:ILE:HG21	4:X3:120:PHE:HD2	1.72	0.55
4:X4:40:PRO:HG2	4:X4:120:PHE:HE2	1.71	0.55
18:Z2:80:ARG:HH12	34:S2:23:ARG:HD2	1.65	0.55
23:B3:198:GLU:OE2	23:B3:210:VAL:HB	2.06	0.54
10:C3:272:HIS:C	10:C3:274:VAL:H	2.10	0.54
10:C5:91:SER:O	10:C5:94:ILE:HG22	2.07	0.54
10:C6:142:LYS:HD2	10:C6:157:LEU:HD12	1.87	0.54
10:C6:142:LYS:NZ	10:C6:153:GLY:CA	2.70	0.54
24:D3:60:GLY:HA3	24:D3:65:ARG:HB3	1.89	0.54
25:E6:201:HIS:HB3	25:E6:204:SER:HB3	1.88	0.54
25:E6:238:LEU:HD13	25:E6:242:LYS:HA	1.89	0.54
26:F3:136:ARG:C	26:F3:203:ASN:HD22	2.11	0.54
26:F5:127:ARG:HB3	26:F5:128:ILE:HG12	1.87	0.54
26:F5:137:GLN:HG3	26:F5:204:ARG:N	2.19	0.54
11:G1:70:HIS:ND1	11:G1:103:ASP:OD1	2.40	0.54
27:H3:116:ARG:NH2	27:H3:121:THR:HA	2.21	0.54
27:H6:108:SER:HB3	27:H6:113:LYS:HD3	1.90	0.54
12:J6:97:ILE:HA	12:J6:100:LEU:HD13	1.89	0.54
13:M4:27:ILE:HG23	29:K4:84:HIS:CG	2.41	0.54
15:O2:66:ARG:HD2	28:I4:125:LYS:CE	2.34	0.54
31:P1:30:TYR:O	31:P1:33:LEU:HB2	2.07	0.54
31:P3:15:PHE:CZ	31:P3:17:TYR:CD2	2.85	0.54
31:P5:41:GLN:NE2	31:P5:115:TYR:CD2	2.76	0.54
32:Q5:102:GLU:HG2	32:Q5:106:LYS:HE2	1.88	0.54
33:R3:100:PRO:HD3	33:R3:118:GLN:HB2	1.89	0.54
33:R3:65:PRO:CB	33:R3:73:LEU:HD21	2.37	0.54
1:T3:116:ASP:HB2	1:T3:120:GLY:HA3	1.89	0.54
1:T3:24:LYS:HG2	1:T3:25:SER:H	1.71	0.54
2:U1:115:THR:O	2:U1:116:ILE:O	2.25	0.54
3:V4:70:LEU:O	3:V4:74:LYS:HG2	2.07	0.54
12:J2:64:ASP:HB3	16:W2:117:ARG:HH21	1.72	0.54
18:Z6:50:PHE:HB3	18:Z6:58:LEU:HD21	1.89	0.54
22:A1:6:ASP:O	22:A1:9:GLN:NE2	2.34	0.54
22:A6:138:SER:HG	22:A6:156:TYR:HD1	1.54	0.54
10:C1:272:HIS:C	10:C1:274:VAL:H	2.09	0.54
10:C1:91:SER:O	10:C1:94:ILE:HG22	2.07	0.54
10:C6:91:SER:O	10:C6:94:ILE:HG22	2.07	0.54
24:D1:124:ARG:O	24:D1:128:GLU:N	2.40	0.54
24:D2:60:GLY:HA3	24:D2:65:ARG:HB3	1.89	0.54
25:E2:201:HIS:HB3	25:E2:204:SER:HB3	1.88	0.54
25:E3:201:HIS:HB3	25:E3:204:SER:HB3	1.88	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F1:175:ASP:OD1	26:F1:176:GLU:N	2.40	0.54
26:F1:179:ASN:HB2	26:F1:187:SER:HB3	1.89	0.54
11:G2:70:HIS:ND1	11:G2:103:ASP:OD1	2.40	0.54
11:G6:70:HIS:ND1	11:G6:103:ASP:OD1	2.40	0.54
12:J5:97:ILE:HA	12:J5:100:LEU:HD13	1.89	0.54
30:L2:4:ILE:HD13	30:L2:55:TYR:HA	1.88	0.54
14:N2:39:LYS:HA	14:N2:42:LYS:NZ	2.21	0.54
14:N3:17:PRO:O	14:N3:20:ARG:NH1	2.30	0.54
15:O6:61:LYS:HE3	15:O6:76:LEU:HD13	1.88	0.54
33:R6:100:PRO:HD3	33:R6:118:GLN:HB2	1.89	0.54
1:T4:24:LYS:HG2	1:T4:25:SER:H	1.72	0.54
2:U6:115:THR:O	2:U6:116:ILE:O	2.25	0.54
4:X1:53:GLU:HB2	4:X1:71:ARG:HB2	1.89	0.54
18:Z1:50:PHE:HB3	18:Z1:58:LEU:HD21	1.89	0.54
18:Z3:88:LEU:HB3	18:Z3:109:TYR:CZ	2.40	0.54
22:A1:68:ILE:HG22	22:A1:70:ASN:H	1.71	0.54
10:C3:221:ASP:OD1	10:C3:222:CYS:N	2.40	0.54
24:D6:55:THR:HG23	24:D6:56:GLN:H	1.73	0.54
25:E1:112:HIS:NE2	25:E1:237:SER:O	2.39	0.54
25:E4:11:ARG:HH11	25:E4:20:LEU:HB3	1.72	0.54
26:F1:133:THR:HG21	26:F1:135:ARG:HE	1.73	0.54
26:F3:137:GLN:HG3	26:F3:204:ARG:N	2.19	0.54
11:G1:141:ILE:O	11:G1:144:LEU:CG	2.48	0.54
11:G2:209:TYR:CD1	11:G2:213:LEU:HD23	2.43	0.54
11:G2:220:ALA:HA	11:G2:223:LYS:HZ1	1.73	0.54
11:G3:164:LYS:HG2	11:G3:166:GLY:H	1.71	0.54
14:N1:130:LYS:NZ	14:N1:137:PRO:O	2.34	0.54
31:P5:30:TYR:O	31:P5:33:LEU:HB2	2.07	0.54
31:P5:41:GLN:CD	31:P5:84:ILE:HD13	2.28	0.54
31:P6:34:MET:HB3	31:P6:42:ARG:CG	2.29	0.54
2:U4:20:ILE:N	2:U4:91:LEU:O	2.28	0.54
2:U5:115:THR:O	2:U5:116:ILE:O	2.25	0.54
16:W3:103:VAL:HB	16:W3:110:ILE:HD11	1.90	0.54
4:X6:81:ILE:HG21	4:X6:120:PHE:HD2	1.72	0.54
18:Z2:88:LEU:HB3	18:Z2:109:TYR:CZ	2.40	0.54
18:Z4:48:VAL:HB	18:Z4:83:LEU:HD11	1.89	0.54
23:B1:138:PHE:O	23:B1:213:ARG:N	2.39	0.54
26:F3:133:THR:HG21	26:F3:135:ARG:HE	1.73	0.54
26:F3:179:ASN:HB2	26:F3:187:SER:HB3	1.89	0.54
26:F4:133:THR:HG21	26:F4:135:ARG:HE	1.73	0.54
12:J2:97:ILE:HA	12:J2:100:LEU:HD13	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P5:41:GLN:HE22	31:P5:115:TYR:HB3	1.72	0.54
33:R5:27:ASP:O	33:R5:30:THR:OG1	2.24	0.54
34:S4:98:VAL:HG11	34:S4:106:LYS:HD2	1.89	0.54
1:T6:42:HIS:NE2	1:T6:82:ARG:O	2.39	0.54
3:V6:70:LEU:O	3:V6:74:LYS:HG2	2.07	0.54
4:X6:53:GLU:HB2	4:X6:71:ARG:HB2	1.89	0.54
17:Y3:113:ARG:HA	17:Y3:116:LYS:NZ	2.21	0.54
23:B6:23:ASP:OD1	23:B6:24:PRO:HD2	2.08	0.54
10:C1:68:ARG:NH2	10:C1:276:THR:OG1	2.40	0.54
10:C2:221:ASP:OD1	10:C2:222:CYS:N	2.40	0.54
24:D4:53:THR:HA	24:D4:90:LYS:HG3	1.89	0.54
24:D4:55:THR:HG23	24:D4:56:GLN:H	1.72	0.54
24:D6:132:LYS:HG3	24:D6:191:PRO:HB3	1.88	0.54
25:E2:238:LEU:HD13	25:E2:242:LYS:HA	1.89	0.54
26:F3:127:ARG:HB3	26:F3:128:ILE:HG12	1.87	0.54
26:F4:175:ASP:OD1	26:F4:176:GLU:N	2.40	0.54
34:S5:98:VAL:HG11	34:S5:106:LYS:HD2	1.89	0.54
1:T2:116:ASP:HB2	1:T2:120:GLY:HA3	1.89	0.54
1:T6:116:ASP:HB2	1:T6:120:GLY:HA3	1.89	0.54
2:U2:115:THR:O	2:U2:116:ILE:O	2.25	0.54
16:W2:112:ASP:OD1	16:W2:113:HIS:N	2.37	0.54
16:W4:77:PRO:HG2	16:W4:79:PHE:CE2	2.43	0.54
4:X1:81:ILE:HG21	4:X1:120:PHE:HD2	1.72	0.54
4:X2:53:GLU:HB2	4:X2:71:ARG:HB2	1.89	0.54
22:A5:210:ILE:HG13	22:A5:211:GLU:N	2.22	0.54
10:C4:273:LEU:HB3	10:C4:280:VAL:HG12	1.84	0.54
10:C5:68:ARG:CD	10:C5:277:HIS:HB3	2.36	0.54
10:C6:64:THR:OG1	10:C6:279:ARG:CZ	2.56	0.54
24:D2:53:THR:HA	24:D2:90:LYS:HG3	1.89	0.54
24:D6:53:THR:HA	24:D6:90:LYS:HG3	1.89	0.54
25:E2:151:ASP:O	25:E2:154:ILE:HG12	2.08	0.54
25:E5:11:ARG:HH11	25:E5:20:LEU:HB3	1.72	0.54
26:F6:88:MET:HB2	26:F6:91:ARG:HH21	1.71	0.54
11:G3:79:LYS:HB3	11:G3:86:PRO:HG3	1.90	0.54
11:G5:149:LYS:HZ3	11:G5:149:LYS:HB2	1.73	0.54
30:L6:42:LEU:HD21	30:L6:72:ILE:HD11	1.90	0.54
14:N1:142:GLU:N	14:N1:145:THR:HG1	2.05	0.54
14:N1:42:LYS:N	14:N1:42:LYS:HD2	2.23	0.54
14:N3:135:LEU:HB3	14:N3:136:PRO:HD2	1.88	0.54
14:N4:142:GLU:N	14:N4:145:THR:HG1	2.05	0.54
31:P2:30:TYR:O	31:P2:33:LEU:HB2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P5:16:THR:O	31:P5:16:THR:HG22	2.06	0.54
33:R5:32:LYS:HZ1	33:R5:47:ARG:HH21	1.56	0.54
3:V1:70:LEU:O	3:V1:74:LYS:HG2	2.07	0.54
12:J5:64:ASP:HB3	16:W5:117:ARG:HH21	1.72	0.54
4:X5:81:ILE:HG21	4:X5:120:PHE:HD2	1.71	0.54
22:A1:180:ARG:O	22:A1:184:ARG:HG2	2.06	0.54
22:A2:89:LYS:HZ1	33:R2:82:ASP:CB	2.18	0.54
10:C3:64:THR:OG1	10:C3:279:ARG:CZ	2.56	0.54
25:E1:11:ARG:HH11	25:E1:20:LEU:HB3	1.72	0.54
26:F4:127:ARG:HB3	26:F4:128:ILE:HG12	1.87	0.54
11:G1:209:TYR:CD1	11:G1:213:LEU:HD23	2.43	0.54
11:G2:206:ALA:HA	11:G2:209:TYR:CD2	2.43	0.54
11:G3:209:TYR:CD1	11:G3:213:LEU:HD23	2.43	0.54
11:G5:209:TYR:CD1	11:G5:213:LEU:HD23	2.42	0.54
11:G6:50:VAL:HB	11:G6:111:LEU:HD11	1.88	0.54
28:I5:133:GLU:O	28:I5:137:LEU:N	2.41	0.54
12:J3:97:ILE:HA	12:J3:100:LEU:HD13	1.89	0.54
12:J4:4:ALA:HB3	12:J4:5:ARG:HA	1.90	0.54
12:J5:14:VAL:HG23	12:J5:48:PHE:CD1	2.43	0.54
13:M1:27:ILE:CG2	29:K1:84:HIS:CG	2.91	0.54
13:M3:27:ILE:CG2	29:K3:84:HIS:CG	2.91	0.54
13:M4:27:ILE:CG2	29:K4:84:HIS:CG	2.91	0.54
31:P6:96:VAL:CG2	31:P6:116:LEU:HD13	1.86	0.54
18:Z3:83:LEU:HD21	34:S3:55:ARG:NH2	2.21	0.54
18:Z3:50:PHE:HB3	18:Z3:58:LEU:HD21	1.89	0.54
22:A2:4:ALA:N	22:A2:5:LEU:HA	2.16	0.54
22:A3:211:GLU:HB2	33:R3:81:ARG:NH2	2.18	0.54
10:C1:64:THR:OG1	10:C1:279:ARG:CZ	2.56	0.54
10:C2:68:ARG:NE	10:C2:277:HIS:HB2	2.23	0.54
25:E3:125:LYS:H	25:E3:142:HIS:CE1	2.26	0.54
26:F4:136:ARG:O	26:F4:203:ASN:ND2	2.36	0.54
11:G1:216:ARG:HG3	11:G1:223:LYS:HZ2	1.72	0.54
11:G2:141:ILE:CG1	11:G2:144:LEU:CG	2.78	0.54
11:G5:216:ARG:HG3	11:G5:223:LYS:HZ2	1.72	0.54
12:J2:4:ALA:HB3	12:J2:5:ARG:HA	1.90	0.54
12:J2:87:LEU:HG	12:J2:91:LYS:HE3	1.90	0.54
30:L1:42:LEU:HD21	30:L1:72:ILE:HD11	1.90	0.54
14:N3:132:LYS:CA	30:L3:152:LYS:HZ2	2.21	0.54
30:L5:153:LYS:HD2	30:L5:153:LYS:O	2.08	0.54
14:N4:42:LYS:N	14:N4:42:LYS:HD2	2.23	0.54
15:O5:14:VAL:HG21	15:O5:18:GLY:HA3	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P1:41:GLN:CD	31:P1:84:ILE:CG2	2.76	0.54
33:R1:81:ARG:HG2	33:R1:81:ARG:NH1	2.20	0.54
33:R3:21:TYR:HE1	33:R3:61:ILE:HD12	1.72	0.54
33:R5:100:PRO:HD3	33:R5:118:GLN:HB2	1.89	0.54
33:R6:78:ARG:O	33:R6:82:ASP:HB2	2.08	0.54
18:Z5:83:LEU:HD21	34:S5:55:ARG:NH2	2.21	0.54
1:T1:116:ASP:HB2	1:T1:120:GLY:HA3	1.90	0.54
2:U4:115:THR:O	2:U4:116:ILE:O	2.25	0.54
3:V3:70:LEU:O	3:V3:74:LYS:HG2	2.07	0.54
16:W1:77:PRO:HG2	16:W1:79:PHE:CE2	2.43	0.54
16:W3:77:PRO:HG2	16:W3:79:PHE:CE2	2.43	0.54
16:W5:77:PRO:HG2	16:W5:79:PHE:CE2	2.43	0.54
10:C2:64:THR:OG1	10:C2:279:ARG:CZ	2.55	0.54
24:D2:55:THR:HG23	24:D2:56:GLN:H	1.73	0.54
24:D4:204:LEU:O	24:D4:206:ASP:N	2.36	0.54
24:D4:60:GLY:HA3	24:D4:65:ARG:HB3	1.90	0.54
25:E4:151:ASP:O	25:E4:154:ILE:HG12	2.08	0.54
25:E4:238:LEU:HD13	25:E4:242:LYS:HA	1.89	0.54
13:M1:64:LEU:HD12	26:F1:103:LEU:CD2	125.33	0.54
26:F6:128:ILE:HD11	26:F6:204:ARG:OXT	2.08	0.54
11:G2:50:VAL:HB	11:G2:111:LEU:HD11	1.88	0.54
11:G4:79:LYS:HB3	11:G4:86:PRO:HG3	1.90	0.54
12:J1:4:ALA:HB3	12:J1:5:ARG:HA	1.90	0.54
12:J4:14:VAL:HG23	12:J4:48:PHE:CD1	2.43	0.54
12:J5:4:ALA:HB3	12:J5:5:ARG:HA	1.89	0.54
14:N2:131:THR:C	30:L2:152:LYS:HG2	2.25	0.54
14:N3:42:LYS:N	14:N3:42:LYS:HD2	2.23	0.54
14:N4:133:ARG:CD	30:L4:152:LYS:HG3	2.38	0.54
14:N6:17:PRO:O	14:N6:20:ARG:NH1	2.30	0.54
15:O1:14:VAL:HG21	15:O1:18:GLY:HA3	1.90	0.54
22:A1:211:GLU:HG3	33:R1:81:ARG:HH21	1.59	0.54
33:R3:58:MET:CA	33:R3:61:ILE:HG12	2.36	0.54
31:P6:121:ILE:HB	34:S6:120:HIS:NE2	2.23	0.54
2:U2:28:ASN:HD21	2:U2:30:LYS:HB3	1.73	0.54
16:W6:11:LEU:HD21	16:W6:37:PHE:CE2	2.43	0.54
18:Z5:50:PHE:HB3	18:Z5:58:LEU:HD21	1.89	0.54
18:Z5:68:ILE:HG22	18:Z5:109:TYR:HD2	1.73	0.54
23:B3:34:LYS:NZ	23:B3:95:ASN:OD1	2.29	0.54
10:C2:68:ARG:NH2	10:C2:276:THR:OG1	2.40	0.54
10:C4:272:HIS:C	10:C4:274:VAL:H	2.10	0.54
24:D1:55:THR:HG23	24:D1:56:GLN:H	1.72	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D3:53:THR:HA	24:D3:90:LYS:HG3	1.89	0.54
24:D5:55:THR:HG23	24:D5:56:GLN:H	1.72	0.54
25:E3:238:LEU:HD13	25:E3:242:LYS:HA	1.89	0.54
25:E5:125:LYS:H	25:E5:142:HIS:CE1	2.26	0.54
25:E6:125:LYS:H	25:E6:142:HIS:CE1	2.26	0.54
26:F5:136:ARG:C	26:F5:203:ASN:HD22	2.11	0.54
11:G4:209:TYR:CD1	11:G4:213:LEU:HD23	2.43	0.54
11:G6:209:TYR:CD1	11:G6:213:LEU:HD23	2.43	0.54
29:K4:94:LEU:O	29:K4:95:ARG:HB2	2.08	0.54
29:K6:24:LYS:HE2	29:K6:65:ARG:HD3	1.90	0.54
13:M6:27:ILE:CG2	29:K6:84:HIS:CG	2.91	0.54
30:L4:89:ARG:HG2	30:L4:108:ASN:HB3	1.90	0.54
13:M3:64:LEU:HD12	26:F3:103:LEU:CD2	125.33	0.54
13:M6:27:ILE:HG23	29:K6:84:HIS:CG	2.41	0.54
14:N2:130:LYS:NZ	14:N2:137:PRO:O	2.34	0.54
14:N3:135:LEU:CB	14:N3:136:PRO:HD2	2.38	0.54
15:O2:63:LYS:HZ3	28:I4:121:LEU:HD13	1.73	0.54
31:P3:133:ILE:HG22	31:P3:134:GLY:N	2.23	0.54
31:P5:18:ARG:HG2	34:S5:93:GLY:HA2	1.90	0.54
33:R2:77:GLU:CG	33:R2:81:ARG:HG3	2.38	0.54
33:R5:52:GLY:O	33:R5:55:THR:OG1	2.20	0.54
34:S6:98:VAL:HG11	34:S6:106:LYS:HD2	1.89	0.54
2:U1:18:HIS:CG	2:U1:117:ALA:HB1	2.43	0.54
2:U2:118:ASP:O	2:U2:119:ALA:HB3	2.07	0.54
4:X3:53:GLU:HB2	4:X3:71:ARG:HB2	1.88	0.54
17:Y6:9:THR:HG22	17:Y6:25:ILE:HA	1.90	0.54
22:A3:4:ALA:N	22:A3:5:LEU:HA	2.16	0.53
10:C4:64:THR:OG1	10:C4:279:ARG:CZ	2.55	0.53
10:C5:68:ARG:NH2	10:C5:276:THR:OG1	2.40	0.53
10:C6:277:HIS:O	10:C6:279:ARG:N	2.36	0.53
24:D5:204:LEU:O	24:D5:206:ASP:N	2.36	0.53
26:F4:127:ARG:CB	26:F4:128:ILE:CG1	2.86	0.53
26:F5:133:THR:HG21	26:F5:135:ARG:HE	1.73	0.53
26:F6:133:THR:HG21	26:F6:135:ARG:HE	1.73	0.53
11:G1:3:LEU:HD13	11:G1:5:ILE:HG13	1.90	0.53
28:I1:133:GLU:O	28:I1:137:LEU:N	2.41	0.53
28:I2:42:ARG:HG2	28:I2:59:ARG:HB2	1.91	0.53
28:I6:133:GLU:O	28:I6:137:LEU:N	2.41	0.53
12:J6:14:VAL:HG23	12:J6:48:PHE:CD1	2.44	0.53
29:K4:24:LYS:HE2	29:K4:65:ARG:HD3	1.90	0.53
29:K5:24:LYS:HE2	29:K5:65:ARG:HD3	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L4:42:LEU:HD21	30:L4:72:ILE:HD11	1.90	0.53
14:N2:42:LYS:HD2	14:N2:42:LYS:N	2.23	0.53
31:P2:45:LEU:CD1	31:P2:49:LEU:CD2	2.84	0.53
31:P5:121:ILE:HB	34:S5:120:HIS:NE2	2.23	0.53
33:R3:44:LYS:O	33:R3:48:ASN:ND2	2.41	0.53
33:R5:44:LYS:O	33:R5:48:ASN:ND2	2.41	0.53
34:S1:50:ILE:HD12	34:S1:67:VAL:HG21	1.87	0.53
31:P3:121:ILE:HB	34:S3:120:HIS:NE2	2.23	0.53
2:U3:115:THR:O	2:U3:116:ILE:O	2.26	0.53
2:U3:77:TRP:CD1	32:Q3:132:PHE:HB2	2.44	0.53
16:W1:103:VAL:HB	16:W1:110:ILE:HD11	1.90	0.53
16:W2:103:VAL:HB	16:W2:110:ILE:HD11	1.89	0.53
16:W2:26:LEU:HD21	16:W2:60:LYS:HD3	1.90	0.53
16:W2:77:PRO:HG2	16:W2:79:PHE:CE2	2.43	0.53
16:W6:103:VAL:HB	16:W6:110:ILE:HD11	1.89	0.53
22:A1:190:SER:O	22:A1:192:GLU:N	2.40	0.53
23:B4:21:VAL:HG22	30:L5:31:GLU:HG3	0.57	0.53
25:E5:238:LEU:HD13	25:E5:242:LYS:HA	1.89	0.53
26:F2:133:THR:HG21	26:F2:135:ARG:HE	1.73	0.53
11:G1:79:LYS:HB3	11:G1:86:PRO:HG3	1.90	0.53
11:G3:3:LEU:HD13	11:G3:5:ILE:HG13	1.90	0.53
27:H1:108:SER:HB3	27:H1:113:LYS:HD3	1.90	0.53
28:I5:42:ARG:HG2	28:I5:59:ARG:HB2	1.90	0.53
30:L1:30:LYS:HE2	23:B6:21:VAL:CB	2.38	0.53
30:L5:89:ARG:HG2	30:L5:108:ASN:HB3	1.90	0.53
13:M4:64:LEU:HD12	26:F4:103:LEU:CD2	125.33	0.53
14:N1:141:TYR:CE1	14:N1:146:ALA:HB1	2.44	0.53
14:N4:130:LYS:NZ	14:N4:137:PRO:O	2.34	0.53
31:P3:115:TYR:H	31:P3:115:TYR:HD2	1.52	0.53
31:P4:121:ILE:HB	34:S4:120:HIS:NE2	2.23	0.53
31:P6:41:GLN:O	31:P6:45:LEU:HD22	2.07	0.53
2:U4:77:TRP:CD1	32:Q4:132:PHE:HB2	2.44	0.53
34:S5:50:ILE:HD12	34:S5:67:VAL:HG21	1.87	0.53
2:U6:118:ASP:O	2:U6:119:ALA:HB3	2.07	0.53
3:V2:70:LEU:O	3:V2:74:LYS:HG2	2.07	0.53
16:W4:103:VAL:HB	16:W4:110:ILE:HD11	1.90	0.53
16:W4:26:LEU:HD21	16:W4:60:LYS:HD3	1.90	0.53
16:W5:11:LEU:HD21	16:W5:37:PHE:CE2	2.43	0.53
18:Z6:48:VAL:HB	18:Z6:83:LEU:HD11	1.89	0.53
22:A3:89:LYS:HZ1	33:R3:82:ASP:CB	2.21	0.53
23:B2:24:PRO:HD2	30:L4:27:GLU:CB	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C1:68:ARG:NE	10:C1:277:HIS:HB2	2.23	0.53
10:C5:68:ARG:NE	10:C5:277:HIS:HB2	2.23	0.53
10:C6:68:ARG:NE	10:C6:277:HIS:HB2	2.23	0.53
25:E4:125:LYS:H	25:E4:142:HIS:CE1	2.26	0.53
26:F1:128:ILE:N	26:F1:137:GLN:OE1	2.35	0.53
26:F1:18:LYS:HG3	26:F1:46:ALA:HB3	1.90	0.53
13:M5:64:LEU:HD12	26:F5:103:LEU:CD2	125.33	0.53
26:F6:18:LYS:HG3	26:F6:46:ALA:HB3	1.90	0.53
11:G3:50:VAL:HB	11:G3:111:LEU:HD11	1.88	0.53
11:G5:206:ALA:HA	11:G5:209:TYR:CD2	2.43	0.53
11:G5:3:LEU:HD13	11:G5:5:ILE:HG13	1.90	0.53
11:G5:79:LYS:HB3	11:G5:86:PRO:HG3	1.90	0.53
28:I1:150:ASP:O	28:I1:154:LYS:NZ	2.39	0.53
28:I2:133:GLU:O	28:I2:137:LEU:N	2.41	0.53
28:I3:133:GLU:O	28:I3:137:LEU:N	2.41	0.53
28:I3:42:ARG:HG2	28:I3:59:ARG:HB2	1.91	0.53
15:O4:63:LYS:HE2	28:I5:163:GLU:HG3	1.87	0.53
13:M2:27:ILE:CG2	29:K2:84:HIS:CG	2.91	0.53
29:K6:94:LEU:O	29:K6:95:ARG:HB2	2.08	0.53
14:N2:133:ARG:HB2	30:L2:152:LYS:HE2	1.89	0.53
30:L6:145:VAL:HG12	30:L6:145:VAL:O	2.08	0.53
33:R2:44:LYS:O	33:R2:48:ASN:ND2	2.41	0.53
33:R4:44:LYS:O	33:R4:48:ASN:ND2	2.42	0.53
22:A6:211:GLU:HG3	33:R6:81:ARG:HH21	1.60	0.53
2:U3:28:ASN:HD21	2:U3:30:LYS:HB3	1.74	0.53
2:U5:77:TRP:CD1	32:Q5:132:PHE:HB2	2.43	0.53
16:W5:103:VAL:HB	16:W5:110:ILE:HD11	1.90	0.53
17:Y4:9:THR:HG22	17:Y4:25:ILE:HA	1.90	0.53
17:Y6:99:LYS:O	17:Y6:101:LYS:NZ	2.41	0.53
22:A4:205:ARG:CB	22:A4:210:ILE:HG21	2.39	0.53
24:D6:204:LEU:O	24:D6:206:ASP:N	2.36	0.53
25:E1:125:LYS:H	25:E1:142:HIS:CE1	2.26	0.53
13:M2:64:LEU:HD12	26:F2:103:LEU:CD2	125.33	0.53
26:F5:18:LYS:HG3	26:F5:46:ALA:HB3	1.90	0.53
26:F6:179:ASN:HB2	26:F6:187:SER:HB3	1.89	0.53
11:G6:3:LEU:HD13	11:G6:5:ILE:HG13	1.90	0.53
28:I1:42:ARG:HG2	28:I1:59:ARG:HB2	1.90	0.53
28:I4:133:GLU:O	28:I4:137:LEU:N	2.41	0.53
12:J1:14:VAL:HG23	12:J1:48:PHE:CD1	2.43	0.53
12:J2:14:VAL:HG23	12:J2:48:PHE:CD1	2.43	0.53
30:L5:42:LEU:HD21	30:L5:72:ILE:HD11	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L6:153:LYS:NZ	30:L6:153:LYS:O	2.39	0.53
13:M6:64:LEU:HD12	26:F6:103:LEU:CD2	125.33	0.53
14:N1:34:LYS:HG2	14:N1:74:ILE:HD11	1.91	0.53
14:N6:34:LYS:HG2	14:N6:74:ILE:HD11	1.91	0.53
15:O4:14:VAL:HG21	15:O4:18:GLY:HA3	1.90	0.53
33:R1:44:LYS:O	33:R1:48:ASN:ND2	2.42	0.53
33:R4:100:PRO:HD3	33:R4:118:GLN:HB2	1.89	0.53
1:T5:116:ASP:HB2	1:T5:120:GLY:HA3	1.89	0.53
2:U3:118:ASP:O	2:U3:119:ALA:HB3	2.07	0.53
2:U6:77:TRP:CD1	32:Q6:132:PHE:HB2	2.44	0.53
16:W3:26:LEU:HD21	16:W3:60:LYS:HD3	1.90	0.53
16:W6:65:LEU:O	16:W6:67:GLY:N	2.40	0.53
4:X6:70:VAL:O	4:X6:83:ALA:N	2.37	0.53
17:Y1:9:THR:HG22	17:Y1:25:ILE:HA	1.90	0.53
17:Y4:29:HIS:O	17:Y4:29:HIS:ND1	2.42	0.53
17:Y5:29:HIS:ND1	17:Y5:29:HIS:O	2.42	0.53
22:A1:217:ALA:HB1	22:A1:220:LYS:CE	2.34	0.53
22:A6:128:ARG:HD3	22:A6:153:PRO:HD2	1.91	0.53
23:B6:138:PHE:O	23:B6:213:ARG:N	2.39	0.53
10:C3:194:ARG:N	10:C3:225:SER:OG	2.42	0.53
10:C3:63:VAL:N	10:C3:90:GLU:OE2	2.40	0.53
24:D3:135:GLU:OE2	24:D3:159:HIS:NE2	2.36	0.53
25:E1:238:LEU:HD13	25:E1:242:LYS:HA	1.89	0.53
25:E2:177:THR:HA	25:E2:195:ILE:HB	1.91	0.53
26:F5:175:ASP:OD1	26:F5:176:GLU:N	2.40	0.53
11:G1:206:ALA:HA	11:G1:209:TYR:CD2	2.43	0.53
12:J6:87:LEU:HG	12:J6:91:LYS:HE3	1.90	0.53
14:N3:130:LYS:HZ3	14:N3:140:LYS:CD	2.21	0.53
14:N6:84:LEU:HD21	14:N6:149:LEU:O	2.09	0.53
31:P2:121:ILE:HB	34:S2:120:HIS:NE2	2.23	0.53
1:T1:131:LEU:HD12	1:T1:134:ILE:HD11	1.91	0.53
1:T5:131:LEU:HD12	1:T5:134:ILE:HD11	1.91	0.53
16:W3:101:PHE:HA	16:W3:113:HIS:HD2	1.73	0.53
17:Y5:126:GLY:O	17:Y5:130:LYS:NZ	2.27	0.53
17:Y5:76:TYR:OH	17:Y5:86:GLU:OE1	2.21	0.53
22:A1:205:ARG:CB	22:A1:210:ILE:HG21	2.39	0.53
22:A6:210:ILE:HG13	22:A6:211:GLU:N	2.22	0.53
10:C4:273:LEU:HD13	10:C4:280:VAL:CB	2.35	0.53
24:D3:55:THR:HG23	24:D3:56:GLN:H	1.72	0.53
24:D5:124:ARG:O	24:D5:128:GLU:N	2.40	0.53
24:D5:60:GLY:HA3	24:D5:65:ARG:HB3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E1:177:THR:HA	25:E1:195:ILE:HB	1.91	0.53
25:E3:62:LYS:HA	25:E3:80:ILE:HG12	1.91	0.53
25:E6:62:LYS:HA	25:E6:80:ILE:HG12	1.91	0.53
26:F3:128:ILE:N	26:F3:137:GLN:OE1	2.35	0.53
11:G1:24:LEU:O	11:G1:26:THR:N	2.41	0.53
11:G2:153:VAL:O	11:G2:155:GLN:N	2.42	0.53
11:G2:3:LEU:HD13	11:G2:5:ILE:HG13	1.91	0.53
11:G5:153:VAL:O	11:G5:155:GLN:N	2.42	0.53
27:H4:162:GLN:HA	27:H4:162:GLN:OE1	2.08	0.53
12:J4:97:ILE:HA	12:J4:100:LEU:HD13	1.89	0.53
12:J5:14:VAL:HG23	12:J5:48:PHE:HD1	1.74	0.53
29:K2:94:LEU:O	29:K2:95:ARG:HB2	2.08	0.53
30:L2:42:LEU:HD21	30:L2:72:ILE:HD11	1.90	0.53
30:L3:42:LEU:HD21	30:L3:72:ILE:HD11	1.90	0.53
13:M2:36:ARG:HE	13:M2:40:LYS:HZ2	1.56	0.53
14:N5:34:LYS:HG2	14:N5:74:ILE:HD11	1.91	0.53
15:O1:85:CYS:HB2	15:O1:90:ILE:HD11	1.91	0.53
15:O4:63:LYS:NZ	28:I5:163:GLU:HB2	2.21	0.53
2:U1:28:ASN:HD21	2:U1:30:LYS:HB3	1.73	0.53
2:U4:28:ASN:HD21	2:U4:30:LYS:HB3	1.74	0.53
2:U5:18:HIS:CG	2:U5:117:ALA:HB1	2.43	0.53
2:U6:18:HIS:CG	2:U6:117:ALA:HB1	2.43	0.53
17:Y2:9:THR:HG22	17:Y2:25:ILE:HA	1.90	0.53
17:Y3:50:THR:O	17:Y3:51:THR:OG1	2.26	0.53
17:Y4:94:HIS:NE2	17:Y4:96:LEU:HD23	2.24	0.53
18:Z4:68:ILE:HG22	18:Z4:109:TYR:HD2	1.73	0.53
22:A4:128:ARG:HD3	22:A4:153:PRO:HD2	1.91	0.53
10:C3:68:ARG:NE	10:C3:277:HIS:HB2	2.23	0.53
25:E5:151:ASP:O	25:E5:154:ILE:HG12	2.08	0.53
26:F2:137:GLN:HG3	26:F2:204:ARG:N	2.19	0.53
11:G2:219:GLU:O	11:G2:223:LYS:N	2.38	0.53
11:G3:153:VAL:O	11:G3:155:GLN:N	2.42	0.53
11:G3:206:ALA:HA	11:G3:209:TYR:CD2	2.43	0.53
12:J3:4:ALA:HB3	12:J3:5:ARG:HA	1.90	0.53
29:K1:94:LEU:O	29:K1:95:ARG:HB2	2.08	0.53
29:K2:24:LYS:HE2	29:K2:65:ARG:HD3	1.90	0.53
13:M1:28:HIS:NE2	13:M1:116:LYS:HE3	2.22	0.53
14:N1:84:LEU:HD21	14:N1:149:LEU:O	2.09	0.53
15:O2:14:VAL:HG21	15:O2:18:GLY:HA3	1.90	0.53
15:O6:14:VAL:HG21	15:O6:18:GLY:HA3	1.90	0.53
33:R1:5:ARG:HB2	33:R1:10:LYS:HZ1	1.72	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R6:44:LYS:O	33:R6:48:ASN:ND2	2.42	0.53
34:S2:50:ILE:HD11	34:S2:67:VAL:HG23	1.91	0.53
1:T4:131:LEU:HD12	1:T4:134:ILE:HD11	1.91	0.53
1:T6:131:LEU:HD12	1:T6:134:ILE:HD11	1.91	0.53
2:U1:60:THR:HG23	2:U1:81:GLN:HE22	1.74	0.53
16:W2:11:LEU:HD21	16:W2:37:PHE:CE2	2.43	0.53
22:A5:104:THR:HG1	22:A5:107:THR:HG1	1.55	0.53
22:A5:205:ARG:CB	22:A5:210:ILE:HG21	2.39	0.53
10:C6:194:ARG:N	10:C6:225:SER:OG	2.42	0.53
10:C6:68:ARG:NH2	10:C6:276:THR:OG1	2.40	0.53
24:D1:76:ARG:NH1	24:D1:76:ARG:O	2.37	0.53
25:E3:151:ASP:O	25:E3:154:ILE:HG12	2.08	0.53
25:E4:184:THR:O	25:E4:224:ASN:ND2	2.42	0.53
26:F3:18:LYS:HG3	26:F3:46:ALA:HB3	1.90	0.53
26:F4:133:THR:CG2	26:F4:135:ARG:HE	2.22	0.53
26:F4:18:LYS:HG3	26:F4:46:ALA:HB3	1.90	0.53
11:G1:153:VAL:O	11:G1:155:GLN:N	2.42	0.53
11:G2:141:ILE:HG12	11:G2:144:LEU:CD2	1.94	0.53
11:G3:219:GLU:O	11:G3:223:LYS:N	2.38	0.53
27:H2:108:SER:HB3	27:H2:113:LYS:HD3	1.89	0.53
27:H4:108:SER:HB3	27:H4:113:LYS:HD3	1.90	0.53
29:K1:24:LYS:HE2	29:K1:65:ARG:HD3	1.90	0.53
24:D5:67:ARG:CG	29:K5:96:ARG:HH21	2.22	0.53
13:M2:111:VAL:CG1	13:M2:114:TYR:HE1	2.08	0.53
28:I1:123:ARG:NH1	15:O6:66:ARG:N	2.57	0.53
31:P6:41:GLN:CG	31:P6:84:ILE:HD13	2.38	0.53
33:R6:32:LYS:HZ1	33:R6:47:ARG:HH21	1.57	0.53
34:S3:50:ILE:HD11	34:S3:67:VAL:HG23	1.91	0.53
34:S6:50:ILE:HD11	34:S6:67:VAL:HG23	1.91	0.53
2:U3:60:THR:HG23	2:U3:81:GLN:HE22	1.74	0.53
16:W1:65:LEU:O	16:W1:67:GLY:N	2.40	0.53
17:Y3:94:HIS:NE2	17:Y3:96:LEU:HD23	2.24	0.53
17:Y5:9:THR:HG22	17:Y5:25:ILE:HA	1.90	0.53
22:A4:89:LYS:HZ1	33:R4:82:ASP:CB	2.18	0.53
23:B6:130:THR:HB	23:B6:180:ASP:OD1	2.09	0.53
10:C4:63:VAL:N	10:C4:90:GLU:OE2	2.40	0.53
24:D2:124:ARG:O	24:D2:128:GLU:N	2.40	0.53
25:E2:62:LYS:HA	25:E2:80:ILE:HG12	1.91	0.53
25:E5:184:THR:O	25:E5:224:ASN:ND2	2.42	0.53
25:E5:62:LYS:HA	25:E5:80:ILE:HG12	1.91	0.53
25:E6:184:THR:O	25:E6:224:ASN:ND2	2.42	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F2:127:ARG:HB3	26:F2:128:ILE:HG12	1.87	0.53
11:G4:153:VAL:O	11:G4:155:GLN:N	2.42	0.53
11:G4:24:LEU:O	11:G4:26:THR:N	2.41	0.53
11:G5:142:ARG:CD	11:G5:147:LEU:HD12	2.32	0.53
11:G6:206:ALA:HA	11:G6:209:TYR:CD2	2.43	0.53
11:G6:79:LYS:HB3	11:G6:86:PRO:HG3	1.90	0.53
27:H1:134:VAL:HG12	27:H1:137:SER:HB3	1.91	0.53
27:H2:134:VAL:HG12	27:H2:137:SER:HB3	1.91	0.53
28:I6:42:ARG:HG2	28:I6:59:ARG:HB2	1.91	0.53
12:J1:87:LEU:HG	12:J1:91:LYS:HE3	1.90	0.53
29:K3:94:LEU:O	29:K3:95:ARG:HB2	2.08	0.53
13:M5:27:ILE:CG2	29:K5:84:HIS:CG	2.91	0.53
30:L1:126:VAL:HG21	30:L1:145:VAL:HG22	1.91	0.53
30:L6:121:GLN:CB	30:L6:153:LYS:HG3	2.38	0.53
14:N2:34:LYS:HG2	14:N2:74:ILE:HD11	1.91	0.53
14:N3:84:LEU:HA	14:N3:135:LEU:CD2	2.39	0.53
14:N3:34:LYS:HG2	14:N3:74:ILE:HD11	1.91	0.53
31:P3:34:MET:CA	31:P3:42:ARG:HG3	2.38	0.53
33:R2:100:PRO:HD3	33:R2:118:GLN:HB2	1.89	0.53
31:P5:119:PHE:HE1	34:S5:119:ALA:HB1	1.46	0.53
1:T5:111:LYS:HB3	1:T5:126:GLN:NE2	2.24	0.53
2:U1:97:ILE:HG23	2:U1:100:GLN:HB3	1.91	0.53
2:U2:97:ILE:HG23	2:U2:100:GLN:HB3	1.91	0.53
2:U2:49:LYS:O	2:U2:51:LYS:N	2.36	0.53
2:U3:47:ASN:HA	2:U3:48:LEU:HB2	1.91	0.53
2:U5:28:ASN:HD21	2:U5:30:LYS:HB3	1.74	0.53
16:W3:11:LEU:HD21	16:W3:37:PHE:CE2	2.43	0.53
17:Y1:94:HIS:NE2	17:Y1:96:LEU:HD23	2.24	0.53
17:Y3:9:THR:HG22	17:Y3:25:ILE:HA	1.90	0.53
17:Y6:29:HIS:ND1	17:Y6:29:HIS:O	2.42	0.53
22:A2:190:SER:O	22:A2:192:GLU:N	2.40	0.53
22:A3:190:SER:O	22:A3:192:GLU:N	2.40	0.53
22:A4:217:ALA:HB1	22:A4:220:LYS:CE	2.33	0.53
22:A6:205:ARG:CB	22:A6:210:ILE:HG21	2.39	0.53
10:C4:194:ARG:N	10:C4:225:SER:OG	2.42	0.53
10:C6:68:ARG:CD	10:C6:277:HIS:HB3	2.36	0.53
25:E1:124:CYS:O	25:E1:160:ILE:N	2.29	0.53
25:E1:184:THR:O	25:E1:224:ASN:ND2	2.42	0.53
25:E1:62:LYS:HA	25:E1:80:ILE:HG12	1.91	0.53
25:E2:125:LYS:H	25:E2:142:HIS:CE1	2.26	0.53
25:E3:45:ILE:HA	25:E3:61:VAL:HG11	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E6:151:ASP:O	25:E6:154:ILE:HG12	2.08	0.53
26:F1:45:TYR:H	26:F1:46:ALA:HA	1.74	0.53
26:F4:136:ARG:C	26:F4:203:ASN:HD22	2.11	0.53
11:G6:147:LEU:HD13	11:G6:148:SER:HB3	1.91	0.53
11:G6:153:VAL:O	11:G6:155:GLN:N	2.42	0.53
11:G6:24:LEU:O	11:G6:26:THR:N	2.42	0.53
27:H3:108:SER:HB3	27:H3:113:LYS:HD3	1.90	0.53
28:I3:197:PHE:CD2	30:L3:10:TYR:HB2	2.43	0.53
24:D1:67:ARG:CG	29:K1:96:ARG:HH21	2.22	0.53
29:K5:51:SER:O	29:K5:54:SER:OG	2.25	0.53
13:M4:52:LEU:O	13:M4:78:LYS:HA	2.09	0.53
14:N2:141:TYR:CE1	14:N2:146:ALA:HB1	2.44	0.53
14:N2:142:GLU:HB2	14:N2:145:THR:HG1	1.74	0.53
14:N2:17:PRO:O	14:N2:20:ARG:NH1	2.30	0.53
14:N6:42:LYS:N	14:N6:42:LYS:HD2	2.22	0.53
15:O4:63:LYS:CE	28:I5:163:GLU:CG	2.84	0.53
32:Q1:134:GLY:HA3	32:Q1:141:TYR:H	1.74	0.53
34:S2:50:ILE:HD12	34:S2:67:VAL:HG23	1.83	0.53
2:U1:47:ASN:HA	2:U1:48:LEU:HB2	1.91	0.53
2:U5:47:ASN:HA	2:U5:48:LEU:HB2	1.91	0.53
2:U5:60:THR:HG23	2:U5:81:GLN:HE22	1.74	0.53
16:W6:77:PRO:HG2	16:W6:79:PHE:CE2	2.43	0.53
4:X4:48:LYS:HB3	4:X4:99:GLU:OE2	2.09	0.53
22:A1:128:ARG:HD3	22:A1:153:PRO:HD2	1.91	0.52
22:A3:39:TYR:HB2	22:A3:50:ASN:HB3	1.91	0.52
23:B4:130:THR:HB	23:B4:180:ASP:OD1	2.09	0.52
24:D6:103:GLU:O	24:D6:106:ARG:HG2	2.09	0.52
26:F3:127:ARG:CB	26:F3:128:ILE:CG1	2.86	0.52
26:F6:127:ARG:CB	26:F6:128:ILE:CG1	2.86	0.52
11:G2:24:LEU:O	11:G2:26:THR:N	2.42	0.52
11:G3:220:ALA:HA	11:G3:223:LYS:HZ1	1.75	0.52
12:J1:14:VAL:HG23	12:J1:48:PHE:HD1	1.74	0.52
12:J3:14:VAL:HG23	12:J3:48:PHE:CD1	2.43	0.52
29:K2:13:GLU:O	29:K2:17:LYS:N	2.42	0.52
29:K3:24:LYS:HE2	29:K3:65:ARG:HD3	1.90	0.52
24:D4:67:ARG:CG	29:K4:96:ARG:HH21	2.22	0.52
30:L2:89:ARG:HG2	30:L2:108:ASN:HB3	1.90	0.52
15:O2:84:ARG:NH2	30:L4:27:GLU:OE1	2.42	0.52
13:M3:36:ARG:HE	13:M3:40:LYS:HZ2	1.57	0.52
15:O4:85:CYS:HB2	15:O4:90:ILE:HD11	1.91	0.52
15:O6:85:CYS:HB2	15:O6:90:ILE:HD11	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P2:133:ILE:HG22	31:P2:134:GLY:N	2.25	0.52
31:P6:57:LEU:HD23	31:P6:61:ARG:HH21	1.75	0.52
2:U2:77:TRP:CD1	32:Q2:132:PHE:HB2	2.43	0.52
16:W6:26:LEU:HD21	16:W6:60:LYS:HD3	1.90	0.52
18:Z1:68:ILE:HG22	18:Z1:109:TYR:HD2	1.73	0.52
18:Z2:50:PHE:HB3	18:Z2:58:LEU:HD21	1.89	0.52
18:Z6:68:ILE:HG22	18:Z6:109:TYR:HD2	1.73	0.52
22:A2:39:TYR:HB2	22:A2:50:ASN:HB3	1.91	0.52
22:A6:104:THR:OG1	22:A6:107:THR:OG1	2.25	0.52
22:A6:214:GLU:HB3	22:A6:215:GLN:OE1	2.10	0.52
24:D1:60:GLY:HA3	24:D1:65:ARG:HB3	1.90	0.52
24:D5:103:GLU:O	24:D5:106:ARG:HG2	2.09	0.52
25:E1:151:ASP:O	25:E1:154:ILE:HG12	2.08	0.52
25:E4:177:THR:HA	25:E4:195:ILE:HB	1.91	0.52
17:Y6:85:ASN:HD21	25:E6:67:GLN:NE2	2.07	0.52
11:G2:79:LYS:HB3	11:G2:86:PRO:HG3	1.90	0.52
11:G4:206:ALA:HA	11:G4:209:TYR:CD2	2.43	0.52
27:H5:108:SER:HB3	27:H5:113:LYS:HD3	1.90	0.52
12:J1:169:ARG:NH2	12:J1:170:PRO:O	2.43	0.52
12:J3:169:ARG:NH2	12:J3:170:PRO:O	2.43	0.52
12:J3:87:LEU:HG	12:J3:91:LYS:HE3	1.90	0.52
12:J4:113:GLN:HA	12:J4:116:LYS:HG2	1.91	0.52
12:J6:4:ALA:HB3	12:J6:5:ARG:HA	1.90	0.52
29:K3:13:GLU:O	29:K3:17:LYS:N	2.42	0.52
13:M2:52:LEU:O	13:M2:78:LYS:HA	2.10	0.52
15:O3:14:VAL:HG21	15:O3:18:GLY:HA3	1.90	0.52
15:O5:83:GLN:O	15:O5:86:LYS:HG2	2.09	0.52
32:Q6:134:GLY:HA3	32:Q6:141:TYR:H	1.74	0.52
33:R3:65:PRO:N	33:R3:73:LEU:HD21	2.25	0.52
1:T2:111:LYS:HB3	1:T2:126:GLN:NE2	2.24	0.52
2:U3:49:LYS:O	2:U3:51:LYS:N	2.36	0.52
16:W1:26:LEU:HD21	16:W1:60:LYS:HD3	1.90	0.52
16:W2:65:LEU:O	16:W2:67:GLY:N	2.40	0.52
17:Y4:99:LYS:O	17:Y4:101:LYS:NZ	2.41	0.52
18:Z2:68:ILE:HG22	18:Z2:109:TYR:HD2	1.74	0.52
22:A5:128:ARG:HD3	22:A5:153:PRO:HD2	1.91	0.52
23:B3:105:LEU:HD23	23:B3:110:MET:HE2	1.92	0.52
10:C3:277:HIS:O	10:C3:279:ARG:N	2.35	0.52
24:D1:103:GLU:O	24:D1:106:ARG:HG2	2.09	0.52
24:D1:204:LEU:O	24:D1:206:ASP:N	2.36	0.52
25:E1:188:ASN:HA	25:E1:245:ARG:HH12	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y4:85:ASN:HD21	25:E4:67:GLN:NE2	2.08	0.52
26:F3:127:ARG:NE	26:F3:128:ILE:HG23	2.17	0.52
26:F3:133:THR:CG2	26:F3:135:ARG:HE	2.22	0.52
11:G5:147:LEU:HD13	11:G5:148:SER:HB3	1.92	0.52
28:I2:123:ARG:NH1	15:O5:64:ALA:O	2.43	0.52
12:J4:87:LEU:HG	12:J4:91:LYS:HE3	1.90	0.52
30:L6:128:VAL:HG12	30:L6:140:PHE:HB3	1.92	0.52
13:M1:52:LEU:O	13:M1:78:LYS:HA	2.10	0.52
13:M3:52:LEU:O	13:M3:78:LYS:HA	2.10	0.52
14:N2:84:LEU:HD21	14:N2:149:LEU:O	2.09	0.52
14:N5:84:LEU:HD21	14:N5:149:LEU:O	2.09	0.52
31:P5:108:LYS:CB	31:P5:109:PRO:HD2	2.10	0.52
2:U3:18:HIS:CG	2:U3:117:ALA:HB1	2.44	0.52
16:W5:26:LEU:HD21	16:W5:60:LYS:HD3	1.90	0.52
4:X1:48:LYS:HB3	4:X1:99:GLU:OE2	2.09	0.52
4:X6:48:LYS:HB3	4:X6:99:GLU:OE2	2.10	0.52
17:Y2:29:HIS:O	17:Y2:29:HIS:ND1	2.42	0.52
17:Y3:99:LYS:O	17:Y3:101:LYS:NZ	2.41	0.52
17:Y5:94:HIS:NE2	17:Y5:96:LEU:HD23	2.24	0.52
17:Y6:94:HIS:NE2	17:Y6:96:LEU:HD23	2.24	0.52
18:Z2:83:LEU:HD21	34:S2:55:ARG:NH2	2.21	0.52
22:A1:89:LYS:HZ1	33:R1:82:ASP:CB	2.17	0.52
23:B1:130:THR:HB	23:B1:180:ASP:OD1	2.09	0.52
23:B2:130:THR:HB	23:B2:180:ASP:OD1	2.09	0.52
23:B4:27:LYS:HA	23:B4:51:ARG:NH2	2.25	0.52
10:C1:194:ARG:N	10:C1:225:SER:OG	2.42	0.52
10:C4:68:ARG:NE	10:C4:277:HIS:HB2	2.23	0.52
10:C5:194:ARG:N	10:C5:225:SER:OG	2.42	0.52
24:D6:135:GLU:OE2	24:D6:159:HIS:NE2	2.36	0.52
25:E3:124:CYS:O	25:E3:160:ILE:N	2.29	0.52
25:E4:62:LYS:HA	25:E4:80:ILE:HG12	1.91	0.52
25:E5:45:ILE:HA	25:E5:61:VAL:HG11	1.92	0.52
26:F2:128:ILE:N	26:F2:137:GLN:OE1	2.35	0.52
26:F5:43:GLU:HB3	26:F5:44:LYS:HA	1.91	0.52
11:G3:147:LEU:HD13	11:G3:148:SER:HB3	1.92	0.52
11:G5:24:LEU:O	11:G5:26:THR:N	2.42	0.52
11:G6:219:GLU:O	11:G6:223:LYS:N	2.38	0.52
27:H3:134:VAL:HG12	27:H3:137:SER:HB3	1.92	0.52
27:H4:134:VAL:HG12	27:H4:137:SER:HB3	1.92	0.52
28:I4:42:ARG:HG2	28:I4:59:ARG:HB2	1.91	0.52
12:J1:4:ALA:H	12:J1:5:ARG:HB2	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J2:169:ARG:NH2	12:J2:170:PRO:O	2.43	0.52
12:J4:14:VAL:HG23	12:J4:48:PHE:HD1	1.74	0.52
12:J4:4:ALA:H	12:J4:5:ARG:HB2	1.75	0.52
12:J5:113:GLN:HA	12:J5:116:LYS:HG2	1.91	0.52
12:J5:169:ARG:NH2	12:J5:170:PRO:O	2.43	0.52
12:J6:113:GLN:HA	12:J6:116:LYS:HG2	1.91	0.52
30:L1:153:LYS:HE2	30:L1:153:LYS:O	2.09	0.52
30:L3:89:ARG:HG2	30:L3:108:ASN:HB3	1.90	0.52
14:N5:129:TYR:HB3	14:N5:134:VAL:HG23	1.76	0.52
15:O2:83:GLN:O	15:O2:86:LYS:HG2	2.09	0.52
15:O6:83:GLN:O	15:O6:86:LYS:HG2	2.10	0.52
31:P1:121:ILE:HB	34:S1:120:HIS:NE2	2.24	0.52
1:T6:111:LYS:HB3	1:T6:126:GLN:NE2	2.24	0.52
2:U2:18:HIS:CG	2:U2:117:ALA:HB1	2.44	0.52
2:U6:97:ILE:HG23	2:U6:100:GLN:HB3	1.91	0.52
4:X1:140:ARG:NH2	4:X1:142:ARG:HH11	2.08	0.52
17:Y1:50:THR:O	17:Y1:51:THR:OG1	2.26	0.52
18:Z1:88:LEU:HB3	18:Z1:109:TYR:CZ	2.40	0.52
18:Z3:68:ILE:HG22	18:Z3:109:TYR:HD2	1.74	0.52
22:A1:104:THR:HG1	22:A1:107:THR:HG1	1.53	0.52
10:C5:63:VAL:N	10:C5:90:GLU:OE2	2.40	0.52
24:D1:135:GLU:OE2	24:D1:159:HIS:NE2	2.36	0.52
24:D4:103:GLU:O	24:D4:106:ARG:HG2	2.09	0.52
24:D4:124:ARG:O	24:D4:128:GLU:N	2.40	0.52
25:E1:45:ILE:HA	25:E1:61:VAL:HG11	1.92	0.52
25:E2:188:ASN:HA	25:E2:245:ARG:HH12	1.75	0.52
25:E3:177:THR:HA	25:E3:195:ILE:HB	1.91	0.52
25:E5:188:ASN:HA	25:E5:245:ARG:HH12	1.75	0.52
26:F6:127:ARG:HB3	26:F6:128:ILE:HG12	1.87	0.52
11:G2:68:LEU:O	11:G2:69:THR:OG1	2.27	0.52
29:K5:32:HIS:N	29:K5:41:PRO:HA	2.22	0.52
14:N3:130:LYS:CE	14:N3:139:TRP:O	2.58	0.52
14:N5:42:LYS:N	14:N5:42:LYS:HD2	2.23	0.52
15:O3:83:GLN:O	15:O3:86:LYS:HG2	2.09	0.52
31:P1:41:GLN:NE2	31:P1:115:TYR:CD2	2.77	0.52
31:P5:107:ILE:HA	31:P5:111:MET:SD	2.49	0.52
18:Z1:83:LEU:HD21	34:S1:55:ARG:NH2	2.21	0.52
1:T5:35:ASP:CB	34:S5:46:ARG:NE	2.62	0.52
4:X2:48:LYS:HB3	4:X2:99:GLU:OE2	2.10	0.52
4:X5:140:ARG:NH2	4:X5:142:ARG:HH11	2.08	0.52
17:Y3:29:HIS:O	17:Y3:29:HIS:ND1	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A1:104:THR:O	22:A1:107:THR:OG1	2.20	0.52
22:A2:6:ASP:O	22:A2:9:GLN:NE2	2.34	0.52
22:A6:58:LEU:HD21	22:A6:177:MET:HG2	1.92	0.52
23:B6:27:LYS:HA	23:B6:51:ARG:NH2	2.25	0.52
10:C1:253:PRO:HA	10:C1:256:TRP:CD2	2.45	0.52
26:F1:133:THR:CG2	26:F1:135:ARG:HE	2.22	0.52
26:F5:45:TYR:H	26:F5:46:ALA:HA	1.74	0.52
26:F6:45:TYR:H	26:F6:46:ALA:HA	1.75	0.52
27:H5:134:VAL:HG12	27:H5:137:SER:HB3	1.92	0.52
12:J2:4:ALA:H	12:J2:5:ARG:HB2	1.75	0.52
29:K6:13:GLU:O	29:K6:17:LYS:N	2.42	0.52
30:L1:121:GLN:CG	30:L1:153:LYS:CE	2.53	0.52
13:M4:49:LEU:HD13	13:M4:128:PHE:HE2	1.75	0.52
15:O1:46:ASP:O	15:O1:49:GLY:N	2.39	0.52
15:O2:65:ASP:HB3	28:I4:123:ARG:NH1	2.18	0.52
32:Q5:4:LYS:HZ3	32:Q5:99:TYR:HA	1.65	0.52
2:U1:77:TRP:CD1	32:Q1:132:PHE:HB2	2.44	0.52
2:U4:47:ASN:HA	2:U4:48:LEU:HB2	1.92	0.52
2:U4:60:THR:HG23	2:U4:81:GLN:HE22	1.74	0.52
17:Y1:29:HIS:ND1	17:Y1:29:HIS:O	2.42	0.52
17:Y5:99:LYS:O	17:Y5:101:LYS:NZ	2.41	0.52
17:Y6:50:THR:O	17:Y6:51:THR:OG1	2.26	0.52
22:A1:39:TYR:HB2	22:A1:50:ASN:HB3	1.91	0.52
22:A4:190:SER:O	22:A4:192:GLU:N	2.40	0.52
22:A6:39:TYR:HB2	22:A6:50:ASN:HB3	1.91	0.52
10:C2:194:ARG:N	10:C2:225:SER:OG	2.42	0.52
10:C3:253:PRO:HA	10:C3:256:TRP:CD2	2.45	0.52
24:D1:164:VAL:O	24:D1:168:VAL:HG22	2.10	0.52
24:D1:92:ALA:O	24:D1:93:THR:OG1	2.26	0.52
24:D4:164:VAL:O	24:D4:168:VAL:HG22	2.10	0.52
24:D6:168:VAL:HG12	24:D6:189:MET:HA	1.92	0.52
24:D6:80:PRO:O	24:D6:82:GLY:N	2.43	0.52
17:Y1:85:ASN:HD21	25:E1:67:GLN:NE2	2.08	0.52
25:E2:184:THR:O	25:E2:224:ASN:ND2	2.42	0.52
26:F2:18:LYS:HG3	26:F2:46:ALA:HB3	1.90	0.52
26:F5:25:THR:HA	26:F5:107:ASN:HD21	1.75	0.52
11:G4:141:ILE:HG12	11:G4:144:LEU:HD11	1.92	0.52
28:I1:196:GLU:C	28:I1:200:ARG:HG3	2.23	0.52
13:M2:27:ILE:HG21	29:K2:84:HIS:CD2	2.45	0.52
14:N4:84:LEU:HD21	14:N4:149:LEU:O	2.09	0.52
32:Q5:134:GLY:HA3	32:Q5:141:TYR:H	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R5:60:ARG:NH1	33:R5:60:ARG:HG3	2.21	0.52
33:R5:80:ARG:CG	33:R5:80:ARG:HH11	2.23	0.52
1:T2:131:LEU:HD12	1:T2:134:ILE:HD11	1.91	0.52
1:T4:111:LYS:HB3	1:T4:126:GLN:NE2	2.24	0.52
22:A1:138:SER:HG	22:A1:156:TYR:HD1	1.56	0.52
22:A2:210:ILE:HG13	22:A2:211:GLU:N	2.22	0.52
22:A4:210:ILE:HG13	22:A4:211:GLU:N	2.23	0.52
23:B2:27:LYS:HA	23:B2:51:ARG:NH2	2.25	0.52
23:B3:27:LYS:HA	23:B3:51:ARG:NH2	2.25	0.52
23:B5:130:THR:HB	23:B5:180:ASP:OD1	2.09	0.52
10:C5:253:PRO:HA	10:C5:256:TRP:CD2	2.45	0.52
25:E6:188:ASN:HA	25:E6:245:ARG:HH12	1.75	0.52
26:F3:40:ALA:HA	26:F3:44:LYS:HE3	1.92	0.52
26:F5:127:ARG:CB	26:F5:128:ILE:CG1	2.86	0.52
26:F6:157:GLY:HA2	26:F6:160:GLU:HG2	1.92	0.52
27:H1:87:PHE:HE2	27:H1:90:LYS:HD2	1.75	0.52
12:J1:61:LEU:HA	12:J1:70:ARG:HH12	1.75	0.52
12:J5:87:LEU:HG	12:J5:91:LYS:HE3	1.90	0.52
13:M3:27:ILE:HG21	29:K3:84:HIS:CD2	2.45	0.52
30:L1:77:VAL:HG12	30:L1:122:ILE:HG22	1.92	0.52
13:M2:49:LEU:HD13	13:M2:128:PHE:HE2	1.75	0.52
13:M2:125:GLU:O	13:M2:129:LYS:HG3	2.10	0.52
13:M5:27:ILE:HG21	29:K5:84:HIS:CD2	2.45	0.52
13:M5:52:LEU:O	13:M5:78:LYS:HA	2.10	0.52
13:M6:52:LEU:O	13:M6:78:LYS:HA	2.10	0.52
14:N3:84:LEU:HD21	14:N3:149:LEU:O	2.09	0.52
14:N6:133:ARG:NH1	30:L6:152:LYS:CB	2.25	0.52
15:O1:83:GLN:O	15:O1:86:LYS:HG2	2.09	0.52
15:O5:85:CYS:HB2	15:O5:90:ILE:HD11	1.91	0.52
33:R3:80:ARG:CG	33:R3:80:ARG:HH11	2.23	0.52
33:R3:86:PRO:O	33:R3:89:SER:OG	2.16	0.52
33:R6:27:ASP:O	33:R6:30:THR:OG1	2.24	0.52
1:T1:111:LYS:HB3	1:T1:126:GLN:NE2	2.24	0.52
2:U4:18:HIS:CG	2:U4:117:ALA:HB1	2.44	0.52
16:W5:65:LEU:O	16:W5:67:GLY:N	2.40	0.52
4:X3:48:LYS:HB3	4:X3:99:GLU:OE2	2.09	0.52
22:A2:211:GLU:HG3	33:R2:81:ARG:HH21	1.60	0.52
22:A6:89:LYS:NZ	33:R6:82:ASP:OD2	2.23	0.52
23:B5:27:LYS:HA	23:B5:51:ARG:NH2	2.25	0.52
10:C6:253:PRO:HA	10:C6:256:TRP:CD2	2.45	0.52
24:D2:80:PRO:O	24:D2:82:GLY:N	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D4:80:PRO:O	24:D4:82:GLY:N	2.43	0.52
25:E6:45:ILE:HA	25:E6:61:VAL:HG11	1.92	0.52
26:F1:43:GLU:HB3	26:F1:44:LYS:HA	1.91	0.52
26:F2:133:THR:CG2	26:F2:135:ARG:HE	2.22	0.52
13:M3:64:LEU:HD12	26:F3:103:LEU:HD22	124.56	0.52
26:F5:19:LEU:O	26:F5:21:GLY:N	2.43	0.52
26:F6:174:ALA:O	26:F6:178:ILE:HG12	2.10	0.52
27:H3:87:PHE:HE2	27:H3:90:LYS:HD2	1.75	0.52
27:H6:134:VAL:HG12	27:H6:137:SER:HB3	1.92	0.52
28:I3:190:LEU:HB3	28:I3:195:LEU:HB2	1.90	0.52
28:I4:196:GLU:C	28:I4:200:ARG:HG3	2.21	0.52
12:J3:61:LEU:HA	12:J3:70:ARG:HH12	1.75	0.52
13:M1:27:ILE:HG21	29:K1:84:HIS:CD2	2.45	0.52
29:K4:13:GLU:O	29:K4:17:LYS:N	2.42	0.52
13:M1:27:ILE:HG23	29:K1:84:HIS:CG	2.41	0.52
13:M3:111:VAL:CG1	13:M3:114:TYR:HE1	2.09	0.52
13:M6:49:LEU:HD13	13:M6:128:PHE:HE2	1.75	0.52
13:M6:79:VAL:HG12	13:M6:80:ASP:H	1.75	0.52
14:N5:150:VAL:CG1	14:N5:151:ALA:N	2.73	0.52
15:O3:85:CYS:HB2	15:O3:90:ILE:HD11	1.91	0.52
32:Q4:34:VAL:N	32:Q4:37:ARG:O	2.25	0.52
1:T3:111:LYS:HB3	1:T3:126:GLN:NE2	2.24	0.52
2:U3:97:ILE:HG23	2:U3:100:GLN:HB3	1.91	0.52
2:U6:39:LEU:HD22	2:U6:102:THR:HG22	1.92	0.52
4:X3:140:ARG:NH2	4:X3:142:ARG:HH11	2.08	0.52
4:X4:140:ARG:NH2	4:X4:142:ARG:HH11	2.08	0.52
17:Y2:58:PHE:O	17:Y2:72:PHE:N	2.32	0.52
17:Y5:85:ASN:HD21	25:E5:67:GLN:NE2	2.07	0.52
18:Z1:88:LEU:HD22	18:Z1:109:TYR:CE2	2.45	0.52
18:Z4:88:LEU:HD22	18:Z4:109:TYR:CE2	2.45	0.52
22:A1:58:LEU:HD21	22:A1:177:MET:HG2	1.92	0.52
22:A2:198:MET:SD	22:A2:199:PRO:HD2	2.50	0.52
23:B3:130:THR:HB	23:B3:180:ASP:OD1	2.09	0.52
10:C1:65:LYS:HA	10:C1:277:HIS:ND1	2.24	0.52
10:C4:68:ARG:NE	10:C4:277:HIS:CB	2.73	0.52
24:D3:124:ARG:O	24:D3:128:GLU:N	2.40	0.52
24:D5:80:PRO:O	24:D5:82:GLY:N	2.43	0.52
25:E6:177:THR:HA	25:E6:195:ILE:HB	1.91	0.52
26:F3:43:GLU:HB3	26:F3:44:LYS:HA	1.91	0.52
26:F4:157:GLY:HA2	26:F4:160:GLU:HG2	1.92	0.52
11:G2:218:LYS:O	11:G2:221:LYS:NZ	2.26	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:H2:87:PHE:HE2	27:H2:90:LYS:HD2	1.75	0.52
27:H4:87:PHE:HE2	27:H4:90:LYS:HD2	1.75	0.52
12:J1:113:GLN:HA	12:J1:116:LYS:HG2	1.91	0.52
12:J4:27:GLN:O	12:J4:30:LYS:HG2	2.10	0.52
12:J6:14:VAL:HG23	12:J6:48:PHE:HD1	1.74	0.52
13:M4:27:ILE:HG21	29:K4:84:HIS:CD2	2.45	0.52
30:L1:89:ARG:HG2	30:L1:108:ASN:HB3	1.91	0.52
31:P1:121:ILE:CG2	31:P1:122:THR:N	2.73	0.52
31:P3:96:VAL:CG2	31:P3:116:LEU:HD13	1.87	0.52
33:R2:27:ASP:O	33:R2:30:THR:OG1	2.24	0.52
2:U5:97:ILE:HG23	2:U5:100:GLN:HB3	1.91	0.52
2:U6:47:ASN:HA	2:U6:48:LEU:HB2	1.91	0.52
16:W1:11:LEU:HD21	16:W1:37:PHE:CE2	2.43	0.52
4:X4:9:THR:O	4:X4:11:ARG:N	2.43	0.52
17:Y2:94:HIS:NE2	17:Y2:96:LEU:HD23	2.24	0.52
22:A1:89:LYS:NZ	33:R1:82:ASP:OD2	2.23	0.51
22:A3:128:ARG:HD3	22:A3:153:PRO:HD2	1.91	0.51
22:A6:210:ILE:CG1	22:A6:211:GLU:N	2.74	0.51
10:C4:65:LYS:HA	10:C4:277:HIS:ND1	2.24	0.51
24:D3:103:GLU:O	24:D3:106:ARG:HG2	2.09	0.51
24:D5:164:VAL:O	24:D5:168:VAL:HG22	2.10	0.51
24:D6:164:VAL:O	24:D6:168:VAL:HG22	2.10	0.51
26:F1:174:ALA:O	26:F1:178:ILE:HG12	2.10	0.51
26:F1:25:THR:HA	26:F1:107:ASN:HD21	1.75	0.51
26:F1:40:ALA:HA	26:F1:44:LYS:HE3	1.92	0.51
26:F4:40:ALA:HA	26:F4:44:LYS:HE3	1.92	0.51
26:F6:133:THR:CG2	26:F6:135:ARG:HE	2.22	0.51
26:F6:43:GLU:HB3	26:F6:44:LYS:HA	1.91	0.51
30:L4:152:LYS:HD2	30:L4:152:LYS:N	2.23	0.51
30:L6:89:ARG:HG2	30:L6:108:ASN:HB3	1.91	0.51
13:M4:49:LEU:HD22	13:M4:75:ASN:HB2	1.92	0.51
32:Q2:134:GLY:HA3	32:Q2:141:TYR:H	1.74	0.51
32:Q3:134:GLY:HA3	32:Q3:141:TYR:H	1.74	0.51
33:R4:27:ASP:O	33:R4:30:THR:OG1	2.24	0.51
33:R6:80:ARG:CG	33:R6:80:ARG:HH11	2.23	0.51
34:S4:26:ILE:O	34:S4:30:ILE:HG12	2.11	0.51
1:T1:49:ASP:OD1	1:T1:50:GLU:N	2.44	0.51
4:X2:9:THR:O	4:X2:11:ARG:N	2.43	0.51
4:X3:9:THR:O	4:X3:11:ARG:N	2.44	0.51
17:Y2:99:LYS:O	17:Y2:101:LYS:NZ	2.41	0.51
17:Y3:85:ASN:HD21	25:E3:67:GLN:NE2	2.07	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A3:210:ILE:HG13	22:A3:211:GLU:N	2.22	0.51
22:A3:58:LEU:HD21	22:A3:177:MET:HG2	1.92	0.51
22:A5:138:SER:HG	22:A5:156:TYR:HD1	1.57	0.51
23:B2:105:LEU:HD23	23:B2:110:MET:HE2	1.92	0.51
10:C3:210:PRO:HD3	10:C3:236:PHE:HE2	1.75	0.51
10:C4:210:PRO:HD3	10:C4:236:PHE:HE2	1.75	0.51
10:C4:68:ARG:NH2	10:C4:276:THR:OG1	2.40	0.51
24:D2:164:VAL:O	24:D2:168:VAL:HG22	2.09	0.51
25:E4:124:CYS:O	25:E4:160:ILE:N	2.29	0.51
25:E4:45:ILE:HA	25:E4:61:VAL:HG11	1.91	0.51
26:F2:45:TYR:H	26:F2:46:ALA:HA	1.75	0.51
26:F3:45:TYR:H	26:F3:46:ALA:HA	1.74	0.51
11:G4:3:LEU:HD13	11:G4:5:ILE:HG13	1.90	0.51
11:G6:141:ILE:HG12	11:G6:144:LEU:HD11	1.92	0.51
27:H3:53:VAL:HG11	27:H3:172:THR:HA	1.92	0.51
27:H6:87:PHE:HE2	27:H6:90:LYS:HD2	1.75	0.51
12:J2:61:LEU:HA	12:J2:70:ARG:HH12	1.75	0.51
12:J3:113:GLN:HA	12:J3:116:LYS:HG2	1.91	0.51
12:J6:169:ARG:NH2	12:J6:170:PRO:O	2.42	0.51
30:L5:77:VAL:HG12	30:L5:122:ILE:HG22	1.93	0.51
13:M3:125:GLU:O	13:M3:129:LYS:HG3	2.10	0.51
13:M5:28:HIS:NE2	13:M5:116:LYS:HE3	2.22	0.51
13:M5:49:LEU:HD13	13:M5:128:PHE:HE2	1.75	0.51
13:M6:49:LEU:HD22	13:M6:75:ASN:HB2	1.92	0.51
31:P1:41:GLN:CD	31:P1:84:ILE:HD13	2.30	0.51
31:P2:57:LEU:HD23	31:P2:61:ARG:HH21	1.74	0.51
34:S6:26:ILE:O	34:S6:30:ILE:HG12	2.11	0.51
2:U6:60:THR:HG23	2:U6:81:GLN:HE22	1.74	0.51
16:W4:11:LEU:HD21	16:W4:37:PHE:CE2	2.43	0.51
4:X1:70:VAL:O	4:X1:83:ALA:N	2.36	0.51
17:Y1:99:LYS:O	17:Y1:101:LYS:NZ	2.41	0.51
18:Z5:88:LEU:HD22	18:Z5:109:TYR:CE2	2.45	0.51
22:A1:214:GLU:HB3	22:A1:215:GLN:OE1	2.10	0.51
22:A6:198:MET:SD	22:A6:199:PRO:HD2	2.50	0.51
23:B4:105:LEU:HD23	23:B4:110:MET:HE2	1.91	0.51
10:C2:253:PRO:HA	10:C2:256:TRP:CD2	2.45	0.51
10:C4:69:LEU:HD22	10:C4:74:LYS:HD2	1.91	0.51
24:D2:204:LEU:O	24:D2:206:ASP:N	2.36	0.51
25:E2:45:ILE:HA	25:E2:61:VAL:HG11	1.92	0.51
25:E5:177:THR:HA	25:E5:195:ILE:HB	1.91	0.51
26:F3:185:SER:O	26:F3:191:LYS:NZ	2.33	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:H1:53:VAL:HG11	27:H1:172:THR:HA	1.93	0.51
27:H5:87:PHE:HE2	27:H5:90:LYS:HD2	1.75	0.51
12:J1:78:LEU:HD21	12:J1:97:ILE:HD11	1.93	0.51
12:J3:14:VAL:HG23	12:J3:48:PHE:HD1	1.74	0.51
12:J4:169:ARG:NH2	12:J4:170:PRO:O	2.43	0.51
12:J6:27:GLN:O	12:J6:30:LYS:HG2	2.10	0.51
12:J6:61:LEU:HA	12:J6:70:ARG:HH12	1.75	0.51
29:K1:13:GLU:O	29:K1:17:LYS:N	2.42	0.51
29:K5:94:LEU:O	29:K5:95:ARG:HB2	2.08	0.51
13:M6:27:ILE:HG21	29:K6:84:HIS:CD2	2.45	0.51
30:L3:128:VAL:HG12	30:L3:140:PHE:HB3	1.92	0.51
30:L5:128:VAL:HG12	30:L5:140:PHE:HB3	1.92	0.51
13:M2:79:VAL:HG12	13:M2:80:ASP:H	1.75	0.51
15:O2:111:GLY:HA2	15:O2:114:SER:HB3	1.92	0.51
31:P1:57:LEU:HD23	31:P1:61:ARG:HH21	1.75	0.51
33:R1:80:ARG:CG	33:R1:80:ARG:HH11	2.23	0.51
34:S1:26:ILE:O	34:S1:30:ILE:HG12	2.11	0.51
2:U2:60:THR:HG23	2:U2:81:GLN:HE22	1.74	0.51
4:X5:48:LYS:HB3	4:X5:99:GLU:OE2	2.09	0.51
4:X6:140:ARG:NH2	4:X6:142:ARG:HH11	2.08	0.51
18:Z3:111:ARG:HH12	18:Z3:114:LYS:HG2	1.75	0.51
22:A1:198:MET:SD	22:A1:199:PRO:HD2	2.50	0.51
22:A3:205:ARG:CB	22:A3:210:ILE:HG21	2.39	0.51
22:A5:198:MET:SD	22:A5:199:PRO:HD2	2.50	0.51
22:A5:58:LEU:HD21	22:A5:177:MET:HG2	1.92	0.51
10:C1:68:ARG:NE	10:C1:277:HIS:CB	2.73	0.51
10:C5:65:LYS:HA	10:C5:277:HIS:ND1	2.24	0.51
24:D4:168:VAL:HG12	24:D4:189:MET:HA	1.92	0.51
25:E4:188:ASN:HA	25:E4:245:ARG:HH12	1.75	0.51
26:F2:127:ARG:CB	26:F2:128:ILE:CG1	2.86	0.51
26:F3:125:SER:HG	26:F3:137:GLN:C	2.13	0.51
26:F3:15:PRO:HG3	32:Q3:57:LEU:HA	1.93	0.51
26:F4:174:ALA:O	26:F4:178:ILE:HG12	2.10	0.51
26:F4:43:GLU:HB3	26:F4:44:LYS:HA	1.91	0.51
26:F4:45:TYR:H	26:F4:46:ALA:HA	1.75	0.51
26:F5:133:THR:CG2	26:F5:135:ARG:HE	2.22	0.51
28:I1:141:ARG:HH12	26:F6:191:LYS:HD3	1.75	0.51
11:G6:216:ARG:HG3	11:G6:223:LYS:HZ2	1.75	0.51
12:J3:27:GLN:O	12:J3:30:LYS:HG2	2.10	0.51
30:L2:128:VAL:HG12	30:L2:140:PHE:HB3	1.92	0.51
30:L3:77:VAL:HG12	30:L3:122:ILE:HG22	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N4:133:ARG:HH21	30:L4:154:GLN:CB	2.22	0.51
13:M1:125:GLU:O	13:M1:129:LYS:HG3	2.10	0.51
13:M3:49:LEU:HD22	13:M3:75:ASN:HB2	1.92	0.51
13:M3:79:VAL:HG12	13:M3:80:ASP:H	1.75	0.51
15:O4:83:GLN:O	15:O4:86:LYS:HG2	2.09	0.51
31:P5:15:PHE:CD2	31:P5:109:PRO:O	2.63	0.51
1:T2:49:ASP:OD1	1:T2:50:GLU:N	2.44	0.51
1:T3:131:LEU:HD12	1:T3:134:ILE:HD11	1.91	0.51
2:U4:39:LEU:HD22	2:U4:102:THR:HG22	1.92	0.51
16:W1:37:PHE:O	16:W1:40:VAL:HG22	2.11	0.51
16:W6:37:PHE:O	16:W6:40:VAL:HG22	2.11	0.51
4:X1:9:THR:O	4:X1:11:ARG:N	2.43	0.51
17:Y2:85:ASN:HD21	25:E2:67:GLN:NE2	2.07	0.51
17:Y4:113:ARG:HA	17:Y4:116:LYS:HZ1	1.76	0.51
18:Z1:111:ARG:HH12	18:Z1:114:LYS:HG2	1.75	0.51
22:A2:128:ARG:HD3	22:A2:153:PRO:HD2	1.91	0.51
22:A2:205:ARG:CB	22:A2:210:ILE:HG21	2.39	0.51
22:A4:58:LEU:HD21	22:A4:177:MET:HG2	1.92	0.51
23:B1:27:LYS:HA	23:B1:51:ARG:NH2	2.25	0.51
10:C3:65:LYS:HG2	10:C3:279:ARG:NE	2.26	0.51
10:C6:65:LYS:HA	10:C6:277:HIS:ND1	2.24	0.51
24:D2:103:GLU:O	24:D2:106:ARG:HG2	2.09	0.51
24:D3:80:PRO:O	24:D3:82:GLY:N	2.43	0.51
25:E3:184:THR:O	25:E3:224:ASN:ND2	2.42	0.51
26:F1:19:LEU:O	26:F1:21:GLY:N	2.43	0.51
26:F2:185:SER:O	26:F2:191:LYS:NZ	2.32	0.51
26:F4:25:THR:HA	26:F4:107:ASN:HD21	1.75	0.51
26:F4:19:LEU:O	26:F4:21:GLY:N	2.43	0.51
11:G2:147:LEU:HD13	11:G2:148:SER:HB3	1.92	0.51
27:H5:53:VAL:HG11	27:H5:172:THR:HA	1.93	0.51
30:L1:13:GLN:NE2	30:L1:14:PRO:HD2	2.26	0.51
30:L6:77:VAL:HG12	30:L6:122:ILE:HG22	1.93	0.51
13:M1:79:VAL:HG12	13:M1:80:ASP:H	1.75	0.51
13:M5:79:VAL:HG12	13:M5:80:ASP:H	1.75	0.51
14:N4:4:MET:HE1	14:N4:121:ARG:HG2	1.93	0.51
14:N4:122:ILE:O	14:N4:126:ALA:N	2.33	0.51
14:N4:142:GLU:H	14:N4:145:THR:HG1	1.58	0.51
15:O2:12:GLU:N	15:O2:14:VAL:HA	2.26	0.51
15:O5:111:GLY:HA2	15:O5:114:SER:HB3	1.93	0.51
31:P2:121:ILE:CG2	31:P2:122:THR:N	2.73	0.51
31:P3:57:LEU:HD23	31:P3:61:ARG:HH21	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P4:57:LEU:HD23	31:P4:61:ARG:HH21	1.74	0.51
31:P5:121:ILE:CG2	31:P5:122:THR:N	2.73	0.51
33:R2:80:ARG:CG	33:R2:80:ARG:HH11	2.23	0.51
1:T3:81:GLY:O	1:T3:93:SER:N	2.44	0.51
2:U3:39:LEU:HD22	2:U3:102:THR:HG22	1.92	0.51
4:X2:140:ARG:NH2	4:X2:142:ARG:HH11	2.08	0.51
4:X6:9:THR:O	4:X6:11:ARG:N	2.44	0.51
17:Y4:58:PHE:O	17:Y4:72:PHE:N	2.32	0.51
22:A6:211:GLU:HB2	33:R6:81:ARG:NH2	2.19	0.51
23:B6:102:GLY:HA2	23:B6:215:VAL:HG13	1.93	0.51
10:C1:65:LYS:HG2	10:C1:279:ARG:NE	2.26	0.51
10:C1:69:LEU:HD22	10:C1:74:LYS:HD2	1.91	0.51
10:C2:65:LYS:HG2	10:C2:279:ARG:NE	2.25	0.51
10:C4:277:HIS:O	10:C4:279:ARG:N	2.36	0.51
24:D1:80:PRO:O	24:D1:82:GLY:N	2.43	0.51
24:D2:168:VAL:HG12	24:D2:189:MET:HA	1.93	0.51
24:D2:92:ALA:O	24:D2:93:THR:OG1	2.26	0.51
24:D3:168:VAL:HG12	24:D3:189:MET:HA	1.93	0.51
24:D3:164:VAL:O	24:D3:168:VAL:HG22	2.10	0.51
25:E1:211:LYS:HE2	25:E1:215:GLY:HA2	1.93	0.51
26:F2:157:GLY:HA2	26:F2:160:GLU:HG2	1.92	0.51
26:F2:19:LEU:O	26:F2:21:GLY:N	2.43	0.51
26:F4:127:ARG:NE	26:F4:128:ILE:HG23	2.17	0.51
26:F5:157:GLY:HA2	26:F5:160:GLU:HG2	1.93	0.51
26:F6:25:THR:HA	26:F6:107:ASN:HD21	1.75	0.51
26:F6:40:ALA:HA	26:F6:44:LYS:HE3	1.92	0.51
11:G2:141:ILE:HG12	11:G2:144:LEU:HD11	1.92	0.51
11:G2:216:ARG:HG3	11:G2:223:LYS:HZ2	1.76	0.51
11:G5:141:ILE:HG12	11:G5:144:LEU:HD11	1.92	0.51
27:H2:53:VAL:HG11	27:H2:172:THR:HA	1.93	0.51
12:J2:14:VAL:HG23	12:J2:48:PHE:HD1	1.74	0.51
12:J2:78:LEU:HD21	12:J2:97:ILE:HD11	1.93	0.51
30:L5:13:GLN:NE2	30:L5:14:PRO:HD2	2.26	0.51
13:M3:49:LEU:HD13	13:M3:128:PHE:HE2	1.75	0.51
13:M5:64:LEU:HD12	26:F5:103:LEU:HD22	124.56	0.51
14:N2:133:ARG:CD	30:L2:152:LYS:CD	2.88	0.51
15:O1:12:GLU:N	15:O1:14:VAL:HA	2.26	0.51
15:O5:12:GLU:N	15:O5:14:VAL:HA	2.26	0.51
31:P3:121:ILE:CG2	31:P3:122:THR:N	2.74	0.51
31:P6:121:ILE:CG2	31:P6:122:THR:N	2.73	0.51
18:Z4:83:LEU:HD21	34:S4:55:ARG:NH2	2.21	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S5:50:ILE:HD11	34:S5:67:VAL:HG23	1.91	0.51
1:T3:49:ASP:OD1	1:T3:50:GLU:N	2.44	0.51
2:U4:97:ILE:HG23	2:U4:100:GLN:HB3	1.91	0.51
2:U6:28:ASN:HD21	2:U6:30:LYS:HB3	1.73	0.51
22:A2:58:LEU:HD21	22:A2:177:MET:HG2	1.92	0.51
22:A3:198:MET:SD	22:A3:199:PRO:HD2	2.50	0.51
10:C1:64:THR:HA	10:C1:279:ARG:HD2	1.93	0.51
10:C2:69:LEU:HD22	10:C2:74:LYS:HD2	1.91	0.51
10:C4:253:PRO:HA	10:C4:256:TRP:CD2	2.45	0.51
10:C4:64:THR:HA	10:C4:279:ARG:HD2	1.93	0.51
10:C5:64:THR:HA	10:C5:279:ARG:HD2	1.93	0.51
10:C6:65:LYS:CA	10:C6:277:HIS:HE1	2.24	0.51
26:F1:182:LYS:O	26:F1:184:SER:N	2.40	0.51
26:F3:128:ILE:HD11	26:F3:204:ARG:OXT	2.11	0.51
28:I5:196:GLU:C	28:I5:200:ARG:HG3	2.23	0.51
12:J1:27:GLN:O	12:J1:30:LYS:HG2	2.10	0.51
12:J5:27:GLN:O	12:J5:30:LYS:HG2	2.10	0.51
13:M1:49:LEU:HD13	13:M1:128:PHE:HE2	1.75	0.51
13:M4:92:CYS:SG	13:M4:103:VAL:HG22	2.51	0.51
13:M5:49:LEU:HD22	13:M5:75:ASN:HB2	1.92	0.51
13:M6:125:GLU:O	13:M6:129:LYS:HG3	2.10	0.51
14:N4:141:TYR:CE1	14:N4:146:ALA:HB1	2.44	0.51
33:R2:74:GLN:O	33:R2:78:ARG:HB2	2.10	0.51
2:U1:39:LEU:HD22	2:U1:102:THR:HG22	1.92	0.51
2:U2:47:ASN:HA	2:U2:48:LEU:HB2	1.91	0.51
18:Z2:111:ARG:HH12	18:Z2:114:LYS:HG2	1.75	0.51
18:Z6:88:LEU:HB3	18:Z6:109:TYR:CZ	2.41	0.51
22:A1:145:ILE:HG22	22:A1:159:ILE:HB	1.93	0.51
22:A4:39:TYR:HB2	22:A4:50:ASN:HB3	1.91	0.51
22:A6:190:SER:O	22:A6:192:GLU:N	2.40	0.51
10:C2:210:PRO:HD3	10:C2:236:PHE:HE2	1.75	0.51
10:C2:64:THR:HA	10:C2:279:ARG:HD2	1.92	0.51
10:C3:69:LEU:HD22	10:C3:74:LYS:HD2	1.91	0.51
10:C5:68:ARG:NE	10:C5:277:HIS:CB	2.73	0.51
10:C5:65:LYS:HG2	10:C5:279:ARG:NE	2.26	0.51
10:C6:65:LYS:HG2	10:C6:279:ARG:NE	2.26	0.51
10:C6:69:LEU:HD22	10:C6:74:LYS:HD2	1.91	0.51
26:F1:157:GLY:HA2	26:F1:160:GLU:HG2	1.92	0.51
26:F4:123:GLU:OE2	26:F4:197:GLU:HA	2.11	0.51
26:F4:128:ILE:HD11	26:F4:204:ARG:OXT	2.11	0.51
11:G4:147:LEU:HD13	11:G4:148:SER:HB3	1.91	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G6:141:ILE:CG1	11:G6:144:LEU:CG	2.78	0.51
12:J2:113:GLN:HA	12:J2:116:LYS:HG2	1.91	0.51
30:L1:128:VAL:HG12	30:L1:140:PHE:HB3	1.92	0.51
30:L2:77:VAL:HG12	30:L2:122:ILE:HG22	1.93	0.51
13:M2:49:LEU:HD22	13:M2:75:ASN:HB2	1.92	0.51
14:N3:141:TYR:CE1	14:N3:146:ALA:HB1	2.43	0.51
14:N4:99:ARG:HG2	14:N4:115:LEU:HD11	1.93	0.51
14:N4:34:LYS:HG2	14:N4:74:ILE:HD11	1.91	0.51
14:N6:141:TYR:CE1	14:N6:146:ALA:HB1	2.43	0.51
15:O2:63:LYS:CE	28:I4:163:GLU:HG2	2.38	0.51
15:O2:85:CYS:HB2	15:O2:90:ILE:HD11	1.91	0.51
15:O4:111:GLY:HA2	15:O4:114:SER:HB3	1.93	0.51
15:O4:74:ALA:HB1	15:O4:115:ALA:HB2	1.93	0.51
15:O4:17:LEU:CD2	15:O4:18:GLY:H	2.22	0.51
31:P1:133:ILE:HG22	31:P1:134:GLY:N	2.22	0.51
31:P1:41:GLN:OE1	31:P1:84:ILE:CG1	2.59	0.51
34:S4:50:ILE:HD11	34:S4:67:VAL:HG23	1.91	0.51
1:T2:81:GLY:O	1:T2:93:SER:N	2.44	0.51
16:W2:37:PHE:O	16:W2:40:VAL:HG22	2.11	0.51
4:X4:60:LYS:HB3	4:X4:62:PRO:HD2	1.93	0.51
17:Y3:58:PHE:HZ	25:E3:56:LEU:HD11	1.76	0.51
22:A4:210:ILE:CG1	22:A4:211:GLU:N	2.74	0.51
22:A5:104:THR:OG1	22:A5:107:THR:OG1	2.26	0.51
22:A5:39:TYR:HB2	22:A5:50:ASN:HB3	1.91	0.51
23:B1:102:GLY:HA2	23:B1:215:VAL:HG13	1.93	0.51
23:B2:102:GLY:HA2	23:B2:215:VAL:HG13	1.93	0.51
25:E3:188:ASN:HA	25:E3:245:ARG:HH12	1.75	0.51
26:F2:128:ILE:HD11	26:F2:204:ARG:OXT	2.11	0.51
26:F5:174:ALA:O	26:F5:178:ILE:HG12	2.10	0.51
26:F6:19:LEU:O	26:F6:21:GLY:N	2.43	0.51
11:G1:147:LEU:HD13	11:G1:148:SER:HB3	1.92	0.51
11:G3:50:VAL:HG21	11:G3:111:LEU:HD21	1.93	0.51
11:G4:50:VAL:HG21	11:G4:111:LEU:HD21	1.93	0.51
11:G6:220:ALA:HA	11:G6:223:LYS:HZ1	1.75	0.51
27:H4:170:VAL:HG13	27:H4:171:GLU:N	2.26	0.51
12:J5:78:LEU:HD21	12:J5:97:ILE:HD11	1.93	0.51
30:L4:13:GLN:NE2	30:L4:14:PRO:HD2	2.26	0.51
30:L4:152:LYS:HA	30:L4:152:LYS:NZ	2.26	0.51
13:M2:36:ARG:HE	13:M2:40:LYS:NZ	2.08	0.51
13:M2:64:LEU:HD12	26:F2:103:LEU:HD22	124.56	0.51
14:N1:23:PRO:O	14:N1:25:TRP:N	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N3:99:ARG:HG2	14:N3:115:LEU:HD11	1.93	0.51
31:P5:57:LEU:HD23	31:P5:61:ARG:HH21	1.75	0.51
22:A6:39:TYR:CE2	33:R6:105:MET:HB3	2.46	0.51
34:S1:50:ILE:HD11	34:S1:67:VAL:HG23	1.91	0.51
2:U2:20:ILE:N	2:U2:91:LEU:O	2.28	0.51
16:W5:24:GLN:HG3	16:W5:64:ASN:HA	1.93	0.51
4:X1:60:LYS:HB3	4:X1:62:PRO:HD2	1.93	0.51
18:Z4:111:ARG:HH12	18:Z4:114:LYS:HG2	1.75	0.51
22:A3:145:ILE:HG22	22:A3:159:ILE:HB	1.93	0.51
23:B3:102:GLY:HA2	23:B3:215:VAL:HG13	1.93	0.51
10:C2:74:LYS:CE	10:C2:272:HIS:CB	2.70	0.51
10:C2:68:ARG:NE	10:C2:277:HIS:CB	2.73	0.51
10:C3:272:HIS:O	10:C3:274:VAL:N	2.42	0.51
10:C3:68:ARG:NE	10:C3:277:HIS:CB	2.73	0.51
10:C5:210:PRO:HD3	10:C5:236:PHE:HE2	1.75	0.51
10:C6:272:HIS:O	10:C6:274:VAL:N	2.42	0.51
24:D3:92:ALA:O	24:D3:93:THR:OG1	2.27	0.51
24:D4:135:GLU:OE2	24:D4:159:HIS:NE2	2.36	0.51
24:D6:124:ARG:O	24:D6:128:GLU:N	2.40	0.51
25:E6:124:CYS:O	25:E6:160:ILE:N	2.29	0.51
26:F2:174:ALA:O	26:F2:178:ILE:HG12	2.10	0.51
26:F5:123:GLU:OE2	26:F5:197:GLU:HA	2.11	0.51
11:G4:147:LEU:HD13	11:G4:148:SER:CB	2.41	0.51
27:H5:87:PHE:CE2	27:H5:90:LYS:HD2	2.46	0.51
28:I1:123:ARG:NE	15:O6:64:ALA:O	2.44	0.51
12:J4:61:LEU:HA	12:J4:70:ARG:HH12	1.75	0.51
14:N1:133:ARG:CZ	30:L1:154:GLN:HA	2.38	0.51
30:L4:128:VAL:HG12	30:L4:140:PHE:HB3	1.92	0.51
30:L6:13:GLN:NE2	30:L6:14:PRO:HD2	2.26	0.51
30:L6:145:VAL:HG12	30:L6:147:LYS:HG2	1.93	0.51
13:M1:49:LEU:HD22	13:M1:75:ASN:HB2	1.92	0.51
13:M2:92:CYS:SG	13:M2:103:VAL:HG22	2.51	0.51
13:M4:79:VAL:HG12	13:M4:80:ASP:H	1.75	0.51
15:O2:128:ARG:HH12	15:O2:130:GLU:HB2	1.76	0.51
15:O2:17:LEU:CD2	15:O2:18:GLY:H	2.22	0.51
31:P6:133:ILE:HG22	31:P6:134:GLY:N	2.25	0.51
32:Q1:112:LEU:HB3	32:Q1:119:LEU:HD13	1.93	0.51
32:Q4:134:GLY:HA3	32:Q4:141:TYR:H	1.75	0.51
33:R1:61:ILE:O	33:R1:73:LEU:CD1	2.59	0.51
22:A4:39:TYR:CE2	33:R4:105:MET:HB3	2.46	0.51
1:T6:49:ASP:OD1	1:T6:50:GLU:N	2.44	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:W3:37:PHE:O	16:W3:40:VAL:HG22	2.11	0.51
17:Y1:58:PHE:HZ	25:E1:56:LEU:HD11	1.76	0.51
22:A1:39:TYR:CE2	33:R1:105:MET:HB3	2.47	0.50
23:B4:175:GLU:O	23:B4:178:THR:OG1	2.19	0.50
23:B6:27:LYS:HA	23:B6:51:ARG:HH21	1.76	0.50
10:C4:65:LYS:HG2	10:C4:279:ARG:NE	2.26	0.50
25:E6:45:ILE:HG13	25:E6:61:VAL:HG11	1.94	0.50
26:F2:15:PRO:HG3	32:Q2:57:LEU:HA	1.93	0.50
26:F3:19:LEU:O	26:F3:21:GLY:N	2.43	0.50
26:F4:38:TYR:HD1	26:F4:144:LEU:HD13	1.76	0.50
26:F6:123:GLU:OE2	26:F6:197:GLU:HA	2.11	0.50
11:G3:24:LEU:O	11:G3:26:THR:N	2.42	0.50
11:G3:32:MET:HA	11:G3:52:ILE:HG13	1.94	0.50
12:J2:27:GLN:O	12:J2:30:LYS:HG2	2.10	0.50
29:K5:59:LYS:O	29:K5:70:TYR:N	2.37	0.50
24:D5:64:ARG:HD3	29:K5:95:ARG:NH2	2.24	0.50
30:L3:13:GLN:NE2	30:L3:14:PRO:HD2	2.26	0.50
13:M3:48:HIS:CB	13:M3:114:TYR:OH	2.60	0.50
13:M5:117:GLU:OE1	13:M5:119:GLN:N	2.36	0.50
13:M5:125:GLU:O	13:M5:129:LYS:HG3	2.10	0.50
14:N6:4:MET:HE1	14:N6:121:ARG:HG2	1.93	0.50
15:O1:111:GLY:HA2	15:O1:114:SER:HB3	1.93	0.50
15:O5:46:ASP:O	15:O5:49:GLY:N	2.40	0.50
31:P6:115:TYR:H	31:P6:115:TYR:HD2	1.53	0.50
33:R5:10:LYS:HD3	33:R5:14:ARG:HH22	1.76	0.50
34:S1:86:ARG:NH2	34:S1:110:ASP:OD2	2.44	0.50
34:S5:86:ARG:NH2	34:S5:110:ASP:OD2	2.44	0.50
1:T6:81:GLY:O	1:T6:93:SER:N	2.44	0.50
2:U2:39:LEU:HD22	2:U2:102:THR:HG22	1.93	0.50
16:W3:101:PHE:HA	16:W3:113:HIS:CD2	2.46	0.50
16:W5:37:PHE:O	16:W5:40:VAL:HG22	2.11	0.50
4:X5:9:THR:O	4:X5:11:ARG:N	2.43	0.50
17:Y5:58:PHE:HZ	25:E5:56:LEU:HD11	1.76	0.50
22:A3:210:ILE:CG1	22:A3:211:GLU:N	2.74	0.50
23:B2:32:ASP:OD1	23:B2:33:VAL:N	2.44	0.50
23:B4:138:PHE:O	23:B4:213:ARG:N	2.39	0.50
23:B5:32:ASP:OD1	23:B5:33:VAL:N	2.45	0.50
10:C1:166:ARG:O	10:C1:181:PRO:HD3	2.11	0.50
10:C6:64:THR:HA	10:C6:279:ARG:HD2	1.93	0.50
24:D3:161:GLY:O	24:D3:164:VAL:HG12	2.12	0.50
25:E3:211:LYS:HE2	25:E3:215:GLY:HA2	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F2:25:THR:HA	26:F2:107:ASN:HD21	1.75	0.50
26:F2:43:GLU:HB3	26:F2:44:LYS:HA	1.91	0.50
26:F3:174:ALA:O	26:F3:178:ILE:HG12	2.10	0.50
11:G1:141:ILE:HG12	11:G1:144:LEU:HD11	1.92	0.50
11:G2:50:VAL:HG21	11:G2:111:LEU:HD21	1.93	0.50
11:G3:147:LEU:HD13	11:G3:148:SER:CB	2.41	0.50
11:G5:147:LEU:HD13	11:G5:148:SER:CB	2.42	0.50
11:G6:147:LEU:HD13	11:G6:148:SER:CB	2.41	0.50
27:H2:87:PHE:CE2	27:H2:90:LYS:HD2	2.46	0.50
15:O1:66:ARG:HH21	28:I3:125:LYS:CE	2.00	0.50
12:J3:78:LEU:HD21	12:J3:97:ILE:HD11	1.93	0.50
30:L2:152:LYS:CA	30:L2:152:LYS:HE3	2.36	0.50
23:B2:21:VAL:HG23	30:L4:31:GLU:O	1.96	0.50
13:M2:48:HIS:CB	13:M2:114:TYR:OH	2.60	0.50
13:M6:64:LEU:HD12	26:F6:103:LEU:HD22	124.56	0.50
14:N5:133:ARG:HE	30:L5:154:GLN:CB	2.11	0.50
15:O6:12:GLU:N	15:O6:14:VAL:HA	2.26	0.50
31:P4:121:ILE:CG2	31:P4:122:THR:N	2.73	0.50
32:Q4:112:LEU:HB3	32:Q4:119:LEU:HD13	1.92	0.50
32:Q6:112:LEU:HB3	32:Q6:119:LEU:HD13	1.93	0.50
33:R4:36:GLU:N	33:R4:36:GLU:OE1	2.43	0.50
33:R4:28:PHE:HA	33:R4:55:THR:HG21	1.94	0.50
33:R4:58:MET:HA	33:R4:61:ILE:CG1	2.42	0.50
33:R6:74:GLN:HB3	33:R6:77:GLU:HB2	1.93	0.50
34:S2:86:ARG:NH2	34:S2:110:ASP:OD2	2.45	0.50
1:T4:49:ASP:OD1	1:T4:50:GLU:N	2.44	0.50
4:X6:81:ILE:HG21	4:X6:120:PHE:CD2	2.47	0.50
17:Y2:58:PHE:HZ	25:E2:56:LEU:HD11	1.76	0.50
18:Z3:93:SER:N	18:Z3:97:ILE:HG21	2.26	0.50
18:Z4:93:SER:N	18:Z4:97:ILE:HG21	2.27	0.50
18:Z6:88:LEU:HD22	18:Z6:109:TYR:CE2	2.45	0.50
22:A1:102:ARG:CD	22:A1:102:ARG:N	4.99	0.50
22:A2:145:ILE:HG22	22:A2:159:ILE:HB	1.93	0.50
22:A4:138:SER:HG	22:A4:156:TYR:HD1	1.58	0.50
22:A4:198:MET:SD	22:A4:199:PRO:HD2	2.50	0.50
22:A6:145:ILE:HG22	22:A6:159:ILE:HB	1.92	0.50
23:B3:32:ASP:OD1	23:B3:33:VAL:N	2.45	0.50
10:C6:68:ARG:NE	10:C6:277:HIS:CB	2.73	0.50
24:D3:204:LEU:O	24:D3:206:ASP:N	2.36	0.50
24:D4:161:GLY:O	24:D4:164:VAL:HG12	2.12	0.50
25:E1:191:ARG:HE	25:E1:245:ARG:HD2	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E4:176:ASP:OD1	25:E4:177:THR:N	2.41	0.50
25:E5:45:ILE:HG13	25:E5:61:VAL:HG11	1.94	0.50
26:F2:40:ALA:HA	26:F2:44:LYS:HE3	1.92	0.50
11:G3:216:ARG:HG3	11:G3:223:LYS:HZ2	1.76	0.50
27:H4:87:PHE:CE2	27:H4:90:LYS:HD2	2.47	0.50
12:J6:78:LEU:HD21	12:J6:97:ILE:HD11	1.93	0.50
29:K1:4:PRO:HG2	29:K1:8:ARG:HE	1.77	0.50
29:K5:93:THR:CB	29:K5:95:ARG:HH12	2.25	0.50
30:L2:13:GLN:NE2	30:L2:14:PRO:HD2	2.26	0.50
13:M1:64:LEU:HD12	26:F1:103:LEU:HD22	124.56	0.50
14:N2:23:PRO:O	14:N2:25:TRP:N	2.44	0.50
14:N4:23:PRO:O	14:N4:25:TRP:N	2.44	0.50
14:N5:141:TYR:CE1	14:N5:146:ALA:HB1	2.44	0.50
15:O3:111:GLY:HA2	15:O3:114:SER:HB3	1.93	0.50
15:O3:128:ARG:HH12	15:O3:130:GLU:HB2	1.76	0.50
32:Q3:34:VAL:N	32:Q3:37:ARG:O	2.25	0.50
22:A3:39:TYR:CE2	33:R3:105:MET:HB3	2.47	0.50
33:R4:80:ARG:HH11	33:R4:80:ARG:CG	2.23	0.50
34:S3:26:ILE:O	34:S3:30:ILE:HG12	2.10	0.50
34:S4:86:ARG:NH2	34:S4:110:ASP:OD2	2.44	0.50
1:T4:81:GLY:O	1:T4:93:SER:N	2.44	0.50
2:U4:17:ILE:HG21	2:U4:94:PRO:CB	2.38	0.50
2:U5:39:LEU:HD22	2:U5:102:THR:HG22	1.92	0.50
16:W4:37:PHE:O	16:W4:40:VAL:HG22	2.11	0.50
4:X1:81:ILE:HG21	4:X1:120:PHE:CD2	2.47	0.50
17:Y4:50:THR:O	17:Y4:51:THR:OG1	2.26	0.50
18:Z2:93:SER:N	18:Z2:97:ILE:HG21	2.27	0.50
18:Z3:88:LEU:HD22	18:Z3:109:TYR:CE2	2.45	0.50
22:A3:104:THR:OG1	22:A3:107:THR:OG1	2.25	0.50
22:A3:6:ASP:O	22:A3:9:GLN:NE2	2.34	0.50
22:A4:145:ILE:HG22	22:A4:159:ILE:HB	1.93	0.50
23:B1:32:ASP:OD1	23:B1:33:VAL:N	2.45	0.50
23:B2:27:LYS:HA	23:B2:51:ARG:HH21	1.77	0.50
10:C2:277:HIS:O	10:C2:279:ARG:N	2.36	0.50
24:D5:135:GLU:OE2	24:D5:159:HIS:NE2	2.36	0.50
25:E2:211:LYS:HE2	25:E2:215:GLY:HA2	1.93	0.50
25:E2:45:ILE:HG13	25:E2:61:VAL:HG11	1.94	0.50
25:E4:191:ARG:HE	25:E4:245:ARG:HD2	1.77	0.50
26:F6:125:SER:HG	26:F6:137:GLN:C	2.15	0.50
28:I1:141:ARG:CZ	26:F6:191:LYS:HE2	2.29	0.50
11:G3:141:ILE:HG12	11:G3:144:LEU:HD11	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G5:144:LEU:C	11:G5:144:LEU:HD12	2.32	0.50
11:G6:32:MET:HA	11:G6:52:ILE:HG13	1.94	0.50
28:I3:191:GLU:N	28:I3:195:LEU:HB2	2.26	0.50
29:K2:18:GLU:HG3	29:K2:20:VAL:HG22	1.94	0.50
29:K2:57:TYR:O	29:K2:72:THR:OG1	2.19	0.50
13:M3:28:HIS:NE2	13:M3:116:LYS:HE3	2.22	0.50
13:M5:36:ARG:HE	13:M5:40:LYS:NZ	2.08	0.50
14:N4:39:LYS:HA	14:N4:42:LYS:HZ2	1.76	0.50
15:O4:12:GLU:N	15:O4:14:VAL:HA	2.26	0.50
15:O5:74:ALA:HB1	15:O5:115:ALA:HB2	1.93	0.50
15:O5:34:PHE:CD1	15:O5:98:ARG:HD3	2.47	0.50
31:P2:34:MET:HB3	31:P2:42:ARG:HG3	1.93	0.50
31:P5:15:PHE:CE2	31:P5:109:PRO:O	2.65	0.50
32:Q6:54:PRO:HG2	32:Q6:88:ILE:HD11	1.94	0.50
33:R3:10:LYS:HD3	33:R3:14:ARG:HH22	1.76	0.50
33:R3:36:GLU:N	33:R3:36:GLU:OE1	2.43	0.50
33:R6:5:ARG:HB2	33:R6:10:LYS:HZ1	1.76	0.50
1:T1:81:GLY:O	1:T1:93:SER:N	2.44	0.50
1:T5:81:GLY:O	1:T5:93:SER:N	2.44	0.50
2:U2:21:ARG:O	2:U2:115:THR:OG1	2.24	0.50
17:Y5:15:ASN:HD21	17:Y5:20:ARG:HH21	1.60	0.50
18:Z6:111:ARG:HH12	18:Z6:114:LYS:HG2	1.75	0.50
18:Z6:93:SER:N	18:Z6:97:ILE:HG21	2.26	0.50
22:A5:217:ALA:HB1	22:A5:220:LYS:CE	2.34	0.50
22:A6:104:THR:O	22:A6:107:THR:OG1	2.20	0.50
23:B4:102:GLY:HA2	23:B4:215:VAL:HG13	1.93	0.50
10:C1:210:PRO:HD3	10:C1:236:PHE:HE2	1.75	0.50
10:C2:74:LYS:CE	10:C2:272:HIS:HB3	2.41	0.50
24:D5:168:VAL:HG12	24:D5:189:MET:HA	1.92	0.50
25:E1:45:ILE:HG13	25:E1:61:VAL:HG11	1.93	0.50
25:E6:211:LYS:HE2	25:E6:215:GLY:HA2	1.93	0.50
26:F3:115:ALA:O	26:F3:119:SER:OG	2.19	0.50
26:F3:157:GLY:HA2	26:F3:160:GLU:HG2	1.93	0.50
26:F3:25:THR:HA	26:F3:107:ASN:HD21	1.75	0.50
26:F6:15:PRO:HG3	32:Q6:57:LEU:HA	1.93	0.50
11:G1:147:LEU:HD13	11:G1:148:SER:CB	2.41	0.50
27:H3:88:SER:O	27:H3:90:LYS:N	2.42	0.50
27:H3:87:PHE:CE2	27:H3:90:LYS:HD2	2.47	0.50
12:J3:4:ALA:H	12:J3:5:ARG:HB2	1.75	0.50
29:K6:32:HIS:N	29:K6:41:PRO:HA	2.22	0.50
13:M1:92:CYS:SG	13:M1:103:VAL:HG22	2.51	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M4:125:GLU:O	13:M4:129:LYS:HG3	2.10	0.50
14:N2:34:LYS:HB3	14:N2:38:TYR:CE2	2.47	0.50
14:N2:4:MET:HE1	14:N2:121:ARG:HG2	1.93	0.50
14:N3:23:PRO:O	14:N3:25:TRP:N	2.44	0.50
14:N6:29:THR:HG22	14:N6:31:ASP:HB2	1.93	0.50
32:Q2:112:LEU:HB3	32:Q2:119:LEU:HD13	1.92	0.50
34:S5:86:ARG:HB3	34:S5:89:ASP:OD1	2.12	0.50
1:T5:49:ASP:OD1	1:T5:50:GLU:N	2.44	0.50
17:Y3:88:LYS:HZ3	17:Y3:97:TYR:HD2	1.59	0.50
17:Y4:58:PHE:HZ	25:E4:56:LEU:HD11	1.76	0.50
23:B4:179:ASN:HB2	23:B4:183:GLU:HB3	1.94	0.50
10:C3:166:ARG:O	10:C3:181:PRO:HD3	2.11	0.50
10:C4:68:ARG:CD	10:C4:277:HIS:HB3	2.36	0.50
24:D2:161:GLY:O	24:D2:164:VAL:HG12	2.12	0.50
25:E3:45:ILE:HG13	25:E3:61:VAL:HG11	1.93	0.50
26:F1:127:ARG:CB	26:F1:128:ILE:CG1	2.86	0.50
26:F4:35:LEU:HD21	26:F4:146:ARG:HD3	1.94	0.50
26:F5:125:SER:HG	26:F5:137:GLN:C	2.13	0.50
26:F5:40:ALA:HA	26:F5:44:LYS:HE3	1.92	0.50
11:G1:219:GLU:O	11:G1:223:LYS:N	2.37	0.50
11:G5:32:MET:HA	11:G5:52:ILE:HG13	1.94	0.50
11:G6:144:LEU:HD12	11:G6:144:LEU:C	2.32	0.50
27:H1:87:PHE:CE2	27:H1:90:LYS:HD2	2.47	0.50
27:H6:87:PHE:CE2	27:H6:90:LYS:HD2	2.46	0.50
28:I2:42:ARG:HG3	28:I2:58:LEU:HB2	1.94	0.50
28:I3:42:ARG:HG3	28:I3:58:LEU:HB2	1.94	0.50
29:K3:32:HIS:N	29:K3:41:PRO:HA	2.22	0.50
29:K6:93:THR:CB	29:K6:95:ARG:HH12	2.24	0.50
14:N1:137:PRO:CD	30:L1:154:GLN:HB3	2.39	0.50
13:M5:92:CYS:SG	13:M5:103:VAL:HG22	2.51	0.50
13:M6:28:HIS:NE2	13:M6:116:LYS:HE3	2.22	0.50
14:N5:23:PRO:O	14:N5:25:TRP:N	2.44	0.50
15:O6:111:GLY:HA2	15:O6:114:SER:HB3	1.93	0.50
15:O6:128:ARG:HH12	15:O6:130:GLU:HB2	1.77	0.50
32:Q5:54:PRO:HG2	32:Q5:88:ILE:HD11	1.94	0.50
22:A2:39:TYR:CE2	33:R2:105:MET:HB3	2.47	0.50
33:R3:61:ILE:HA	33:R3:73:LEU:HD22	1.93	0.50
33:R6:28:PHE:HA	33:R6:55:THR:HG21	1.94	0.50
34:S3:86:ARG:NH2	34:S3:110:ASP:OD2	2.44	0.50
34:S5:26:ILE:O	34:S5:30:ILE:HG12	2.11	0.50
34:S6:86:ARG:NH2	34:S6:110:ASP:OD2	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U3:21:ARG:O	2:U3:115:THR:OG1	2.24	0.50
3:V2:76:ASP:OD1	3:V2:77:GLY:N	2.45	0.50
3:V3:76:ASP:OD1	3:V3:77:GLY:N	2.45	0.50
16:W1:24:GLN:HG3	16:W1:64:ASN:HA	1.94	0.50
4:X3:60:LYS:HB3	4:X3:62:PRO:HD2	1.93	0.50
4:X6:60:LYS:HB3	4:X6:62:PRO:HD2	1.93	0.50
17:Y3:15:ASN:HD21	17:Y3:20:ARG:HH21	1.59	0.50
18:Z1:93:SER:N	18:Z1:97:ILE:HG21	2.27	0.50
18:Z2:88:LEU:HD22	18:Z2:109:TYR:CE2	2.45	0.50
18:Z5:111:ARG:HH12	18:Z5:114:LYS:HG2	1.75	0.50
23:B1:27:LYS:HA	23:B1:51:ARG:HH21	1.77	0.50
30:L1:27:GLU:HB3	23:B6:24:PRO:CD	2.41	0.50
10:C2:65:LYS:HA	10:C2:277:HIS:ND1	2.24	0.50
24:D1:168:VAL:HG12	24:D1:189:MET:HA	1.92	0.50
25:E4:45:ILE:HG13	25:E4:61:VAL:HG11	1.94	0.50
26:F1:32:ASP:CG	26:F1:33:ILE:H	2.15	0.50
26:F3:123:GLU:OE2	26:F3:197:GLU:HA	2.11	0.50
13:M4:64:LEU:HD12	26:F4:103:LEU:HD22	124.56	0.50
26:F6:136:ARG:O	26:F6:203:ASN:CB	2.60	0.50
11:G1:144:LEU:C	11:G1:144:LEU:HD12	2.32	0.50
11:G2:147:LEU:HD13	11:G2:148:SER:CB	2.41	0.50
11:G2:200:LYS:O	11:G2:204:GLU:N	2.45	0.50
11:G5:50:VAL:HG21	11:G5:111:LEU:HD21	1.93	0.50
28:I1:141:ARG:HH12	26:F6:191:LYS:CD	2.25	0.50
29:K3:18:GLU:HG3	29:K3:20:VAL:HG22	1.94	0.50
30:L4:121:GLN:CG	30:L4:153:LYS:CD	2.87	0.50
13:M3:92:CYS:SG	13:M3:103:VAL:HG22	2.51	0.50
13:M3:36:ARG:HE	13:M3:40:LYS:NZ	2.08	0.50
14:N5:34:LYS:HB3	14:N5:38:TYR:CE2	2.47	0.50
14:N6:34:LYS:HB3	14:N6:38:TYR:CE2	2.47	0.50
31:P3:18:ARG:HA	34:S3:93:GLY:HA3	1.94	0.50
26:F1:15:PRO:HG3	32:Q1:57:LEU:HA	1.93	0.50
33:R2:80:ARG:HH11	33:R2:80:ARG:HG2	1.77	0.50
33:R3:80:ARG:HH11	33:R3:80:ARG:HG2	1.77	0.50
33:R4:10:LYS:HD3	33:R4:14:ARG:HH22	1.76	0.50
17:Y1:15:ASN:HD21	17:Y1:20:ARG:HH21	1.60	0.50
17:Y1:88:LYS:HD2	17:Y1:91:LEU:HB2	1.94	0.50
23:B1:192:SER:O	23:B1:196:ASP:N	2.45	0.50
23:B5:27:LYS:HA	23:B5:51:ARG:HH21	1.77	0.50
23:B6:85:LYS:HB2	23:B6:101:HIS:HB3	1.93	0.50
10:C1:106:VAL:HG22	10:C1:128:VAL:HG22	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C2:272:HIS:O	10:C2:274:VAL:N	2.42	0.50
10:C3:64:THR:HA	10:C3:279:ARG:HD2	1.92	0.50
10:C3:65:LYS:HA	10:C3:277:HIS:ND1	2.24	0.50
10:C6:210:PRO:HD3	10:C6:236:PHE:HE2	1.75	0.50
24:D1:161:GLY:O	24:D1:164:VAL:HG12	2.12	0.50
25:E3:191:ARG:HE	25:E3:245:ARG:HD2	1.76	0.50
25:E5:176:ASP:OD1	25:E5:177:THR:N	2.41	0.50
26:F4:185:SER:O	26:F4:191:LYS:NZ	2.33	0.50
11:G6:50:VAL:HG21	11:G6:111:LEU:HD21	1.93	0.50
27:H3:39:GLN:HB3	27:H3:75:ILE:HD11	1.94	0.50
27:H4:53:VAL:HG11	27:H4:172:THR:HA	1.93	0.50
27:H6:53:VAL:HG11	27:H6:172:THR:HA	1.93	0.50
28:I1:197:PHE:HA	28:I1:200:ARG:CD	2.41	0.50
12:J4:23:SER:O	12:J4:27:GLN:N	2.45	0.50
12:J4:78:LEU:HD21	12:J4:97:ILE:HD11	1.93	0.50
14:N2:133:ARG:CG	30:L2:152:LYS:CE	2.89	0.50
13:M6:117:GLU:OE1	13:M6:119:GLN:N	2.36	0.50
15:O2:74:ALA:HB1	15:O2:115:ALA:HB2	1.93	0.50
15:O3:12:GLU:N	15:O3:14:VAL:HA	2.26	0.50
32:Q2:54:PRO:HG2	32:Q2:88:ILE:HD11	1.94	0.50
33:R1:61:ILE:O	33:R1:73:LEU:CG	2.59	0.50
33:R2:10:LYS:HD3	33:R2:14:ARG:HH22	1.76	0.50
33:R3:69:ILE:H	33:R3:70:SER:HB3	1.76	0.50
22:A5:39:TYR:CE2	33:R5:105:MET:HB3	2.46	0.50
33:R5:28:PHE:HA	33:R5:55:THR:HG21	1.94	0.50
33:R5:60:ARG:CG	33:R5:60:ARG:NH1	2.74	0.50
34:S1:50:ILE:HD12	34:S1:67:VAL:HG23	1.83	0.50
34:S3:6:PRO:CD	34:S3:58:GLU:HG2	2.42	0.50
1:T6:5:THR:OG1	1:T6:6:VAL:N	2.44	0.50
2:U1:17:ILE:HG22	2:U1:18:HIS:N	2.25	0.50
17:Y4:20:ARG:HD2	17:Y4:76:TYR:CE1	2.47	0.50
17:Y5:125:VAL:O	17:Y5:129:LYS:HG3	2.12	0.50
18:Z6:85:ARG:NH2	18:Z6:85:ARG:CG	2.73	0.50
22:A6:111:GLN:HG3	22:A6:112:ILE:HG13	1.94	0.50
23:B1:179:ASN:HB2	23:B1:183:GLU:HB3	1.94	0.50
23:B5:102:GLY:HA2	23:B5:215:VAL:HG13	1.93	0.50
25:E2:124:CYS:O	25:E2:160:ILE:N	2.29	0.50
25:E2:195:ILE:O	25:E2:197:ASN:N	2.45	0.50
25:E4:211:LYS:HE2	25:E4:215:GLY:HA2	1.93	0.50
26:F1:128:ILE:HD11	26:F1:204:ARG:OXT	2.11	0.50
26:F5:15:PRO:HG3	32:Q5:57:LEU:HA	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G4:144:LEU:C	11:G4:144:LEU:HD12	2.32	0.50
11:G5:200:LYS:O	11:G5:204:GLU:N	2.45	0.50
27:H3:156:VAL:HB	27:H3:187:PHE:CD1	2.47	0.50
12:J6:4:ALA:H	12:J6:5:ARG:HB2	1.75	0.50
13:M3:117:GLU:OE1	13:M3:119:GLN:N	2.36	0.50
13:M6:92:CYS:SG	13:M6:103:VAL:HG22	2.51	0.50
14:N1:99:ARG:HG2	14:N1:115:LEU:HD11	1.93	0.50
14:N1:142:GLU:H	14:N1:145:THR:HG1	1.59	0.50
14:N3:34:LYS:HB3	14:N3:38:TYR:CE2	2.47	0.50
31:P3:123:TYR:C	31:P3:123:TYR:CD1	2.86	0.50
31:P4:115:TYR:H	31:P4:115:TYR:HD2	1.52	0.50
31:P5:123:TYR:C	31:P5:123:TYR:CD1	2.85	0.50
31:P6:34:MET:HE3	31:P6:46:ASN:HB2	1.93	0.50
32:Q3:112:LEU:HB3	32:Q3:119:LEU:HD13	1.93	0.50
33:R2:60:ARG:NH1	33:R2:60:ARG:CG	2.74	0.50
34:S2:86:ARG:HB3	34:S2:89:ASP:OD1	2.12	0.50
16:W2:24:GLN:HG3	16:W2:64:ASN:HA	1.94	0.50
17:Y2:113:ARG:NH1	17:Y2:131:PRO:HB3	2.25	0.50
17:Y2:88:LYS:HD2	17:Y2:91:LEU:HB2	1.94	0.50
17:Y4:88:LYS:HD2	17:Y4:91:LEU:HB2	1.94	0.50
22:A1:111:GLN:HG3	22:A1:112:ILE:HG13	1.94	0.49
22:A4:76:VAL:HG13	22:A4:123:VAL:HG23	1.94	0.49
23:B4:198:GLU:O	23:B4:202:GLN:HB2	2.12	0.49
23:B5:32:ASP:HB2	23:B5:46:LYS:HG2	1.94	0.49
10:C1:65:LYS:CG	10:C1:279:ARG:NE	2.75	0.49
10:C3:74:LYS:CE	10:C3:272:HIS:HB3	2.41	0.49
25:E6:191:ARG:HE	25:E6:245:ARG:HD2	1.77	0.49
26:F6:128:ILE:N	26:F6:137:GLN:OE1	2.35	0.49
11:G4:200:LYS:O	11:G4:204:GLU:N	2.45	0.49
11:G6:200:LYS:O	11:G6:204:GLU:N	2.44	0.49
12:J5:23:SER:O	12:J5:27:GLN:N	2.45	0.49
24:D1:64:ARG:CZ	29:K1:95:ARG:HH21	2.25	0.49
29:K2:4:PRO:HG2	29:K2:8:ARG:HE	1.77	0.49
30:L5:152:LYS:CE	30:L5:154:GLN:NE2	2.74	0.49
13:M4:48:HIS:CB	13:M4:114:TYR:OH	2.60	0.49
14:N3:84:LEU:CB	14:N3:135:LEU:CD2	2.90	0.49
14:N5:129:TYR:HA	14:N5:134:VAL:CG2	2.35	0.49
14:N6:99:ARG:HG2	14:N6:115:LEU:HD11	1.93	0.49
14:N6:122:ILE:O	14:N6:126:ALA:N	2.33	0.49
15:O2:63:LYS:NZ	28:I4:121:LEU:CD1	2.76	0.49
15:O3:74:ALA:HB1	15:O3:115:ALA:HB2	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O4:128:ARG:HH12	15:O4:130:GLU:HB2	1.76	0.49
28:I1:158:ILE:CG1	15:O6:63:LYS:HZ2	2.24	0.49
31:P1:18:ARG:HA	34:S1:93:GLY:HA3	1.94	0.49
32:Q3:54:PRO:HG2	32:Q3:88:ILE:HD11	1.94	0.49
33:R1:28:PHE:HA	33:R1:55:THR:HG21	1.94	0.49
33:R3:28:PHE:HA	33:R3:55:THR:HG21	1.94	0.49
33:R5:73:LEU:C	33:R5:75:GLU:N	2.61	0.49
34:S2:26:ILE:O	34:S2:30:ILE:HG12	2.11	0.49
1:T3:35:ASP:CB	34:S3:46:ARG:NE	2.61	0.49
2:U5:17:ILE:HG22	2:U5:18:HIS:N	2.25	0.49
17:Y4:15:ASN:HD21	17:Y4:20:ARG:HH21	1.60	0.49
18:Z5:93:SER:N	18:Z5:97:ILE:HG21	2.26	0.49
18:Z6:83:LEU:HD21	34:S6:55:ARG:NH2	2.21	0.49
22:A5:111:GLN:HG3	22:A5:112:ILE:HG13	1.94	0.49
22:A5:108:PHE:HB2	22:A5:136:GLU:HB3	1.94	0.49
23:B1:22:VAL:HA	23:B1:27:LYS:NZ	2.28	0.49
23:B2:192:SER:O	23:B2:196:ASP:N	2.45	0.49
23:B2:32:ASP:HB2	23:B2:46:LYS:HG2	1.95	0.49
23:B3:179:ASN:HB2	23:B3:183:GLU:HB3	1.94	0.49
23:B4:32:ASP:OD1	23:B4:33:VAL:N	2.45	0.49
10:C4:166:ARG:O	10:C4:181:PRO:HD3	2.11	0.49
24:D6:64:ARG:HG3	29:K6:95:ARG:HH22	1.77	0.49
25:E3:176:ASP:OD1	25:E3:177:THR:N	2.41	0.49
26:F4:182:LYS:O	26:F4:184:SER:N	2.40	0.49
27:H5:156:VAL:HB	27:H5:187:PHE:CD1	2.47	0.49
27:H6:39:GLN:HB3	27:H6:75:ILE:HD11	1.94	0.49
29:K4:4:PRO:HG2	29:K4:8:ARG:HE	1.77	0.49
13:M1:117:GLU:OE1	13:M1:119:GLN:N	2.36	0.49
14:N3:4:MET:HE1	14:N3:121:ARG:HG2	1.93	0.49
15:O1:34:PHE:CD1	15:O1:98:ARG:HD3	2.47	0.49
31:P1:34:MET:HB3	31:P1:42:ARG:HG2	1.92	0.49
33:R2:32:LYS:HZ1	33:R2:47:ARG:HH21	1.60	0.49
16:W6:24:GLN:HG3	16:W6:64:ASN:HA	1.93	0.49
4:X2:81:ILE:HG21	4:X2:120:PHE:CD2	2.47	0.49
4:X3:81:ILE:HG21	4:X3:120:PHE:CD2	2.47	0.49
4:X5:60:LYS:HB3	4:X5:62:PRO:HD2	1.93	0.49
17:Y1:20:ARG:HD2	17:Y1:76:TYR:CE1	2.47	0.49
17:Y2:15:ASN:HD21	17:Y2:20:ARG:HH21	1.60	0.49
17:Y5:50:THR:O	17:Y5:51:THR:OG1	2.26	0.49
17:Y5:20:ARG:HD2	17:Y5:76:TYR:CE1	2.47	0.49
18:Z3:85:ARG:NH2	18:Z3:85:ARG:CG	2.73	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A2:108:PHE:HB2	22:A2:136:GLU:HB3	1.94	0.49
22:A4:102:ARG:N	22:A4:102:ARG:CD	4.99	0.49
22:A4:108:PHE:HB2	22:A4:136:GLU:HB3	1.94	0.49
22:A5:190:SER:O	22:A5:192:GLU:N	2.40	0.49
23:B1:198:GLU:O	23:B1:202:GLN:HB2	2.12	0.49
23:B3:85:LYS:HB2	23:B3:101:HIS:HB3	1.93	0.49
23:B5:192:SER:O	23:B5:196:ASP:N	2.45	0.49
23:B5:198:GLU:O	23:B5:202:GLN:HB2	2.12	0.49
23:B6:179:ASN:HB2	23:B6:183:GLU:HB3	1.94	0.49
23:B6:198:GLU:O	23:B6:202:GLN:HB2	2.12	0.49
10:C2:166:ARG:O	10:C2:181:PRO:HD3	2.11	0.49
10:C4:244:ILE:HA	10:C4:247:THR:HG23	1.95	0.49
10:C5:166:ARG:O	10:C5:181:PRO:HD3	2.11	0.49
25:E3:195:ILE:O	25:E3:197:ASN:N	2.46	0.49
26:F2:38:TYR:HD1	26:F2:144:LEU:HD13	1.77	0.49
26:F4:158:ALA:HB2	26:F4:173:LEU:HB3	1.94	0.49
26:F5:128:ILE:HD11	26:F5:204:ARG:OXT	2.11	0.49
11:G4:32:MET:HA	11:G4:52:ILE:HG13	1.94	0.49
27:H2:156:VAL:HB	27:H2:187:PHE:CD1	2.48	0.49
27:H2:39:GLN:HB3	27:H2:75:ILE:HD11	1.94	0.49
27:H6:156:VAL:HB	27:H6:187:PHE:CD1	2.47	0.49
28:I4:8:TRP:HZ3	28:I4:20:PRO:HB3	1.77	0.49
12:J1:23:SER:O	12:J1:27:GLN:N	2.45	0.49
29:K6:43:LEU:HG	29:K6:44:HIS:ND1	2.28	0.49
14:N4:34:LYS:HB3	14:N4:38:TYR:CE2	2.47	0.49
32:Q4:54:PRO:HG2	32:Q4:88:ILE:HD11	1.94	0.49
26:F4:15:PRO:HG3	32:Q4:57:LEU:HA	1.93	0.49
32:Q5:112:LEU:HB3	32:Q5:119:LEU:HD13	1.93	0.49
33:R2:65:PRO:HB2	33:R2:73:LEU:CD2	2.22	0.49
33:R4:61:ILE:HG22	33:R4:73:LEU:HD21	1.93	0.49
33:R5:77:GLU:CG	33:R5:81:ARG:HG3	2.42	0.49
33:R6:80:ARG:HG2	33:R6:80:ARG:HH11	1.77	0.49
34:S5:128:GLY:O	34:S5:144:ARG:NH2	2.45	0.49
2:U3:117:ALA:O	2:U3:118:ASP:HB2	2.13	0.49
2:U6:17:ILE:HG22	2:U6:18:HIS:N	2.25	0.49
3:V1:76:ASP:OD1	3:V1:77:GLY:N	2.45	0.49
3:V5:76:ASP:OD1	3:V5:77:GLY:N	2.45	0.49
17:Y2:125:VAL:O	17:Y2:129:LYS:HG3	2.12	0.49
17:Y3:88:LYS:HD2	17:Y3:91:LEU:HB2	1.94	0.49
22:A2:111:GLN:HG3	22:A2:112:ILE:HG13	1.94	0.49
22:A2:138:SER:HG	22:A2:156:TYR:HD1	1.59	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A5:76:VAL:HG13	22:A5:123:VAL:HG23	1.94	0.49
22:A6:76:VAL:HG13	22:A6:123:VAL:HG23	1.94	0.49
23:B1:110:MET:HE1	23:B1:213:ARG:HE	1.77	0.49
23:B2:198:GLU:O	23:B2:202:GLN:HB2	2.12	0.49
23:B3:192:SER:O	23:B3:196:ASP:N	2.45	0.49
23:B4:27:LYS:HA	23:B4:51:ARG:HH21	1.77	0.49
23:B5:179:ASN:HB2	23:B5:183:GLU:HB3	1.94	0.49
23:B6:32:ASP:HB2	23:B6:46:LYS:HG2	1.94	0.49
23:B6:32:ASP:OD1	23:B6:33:VAL:N	2.45	0.49
10:C5:106:VAL:HG22	10:C5:128:VAL:HG22	1.94	0.49
25:E5:191:ARG:HE	25:E5:245:ARG:HD2	1.76	0.49
26:F5:38:TYR:HD1	26:F5:144:LEU:HD13	1.77	0.49
26:F5:76:MET:HB2	26:F5:89:THR:HB	1.95	0.49
11:G3:200:LYS:O	11:G3:204:GLU:N	2.45	0.49
27:H4:39:GLN:HB3	27:H4:75:ILE:HD11	1.94	0.49
27:H5:105:THR:OG1	27:H5:106:ARG:N	2.45	0.49
12:J4:181:GLY:O	12:J4:185:ALA:N	2.46	0.49
14:N5:133:ARG:CG	30:L5:154:GLN:HG3	2.42	0.49
15:O3:17:LEU:CD2	15:O3:18:GLY:H	2.22	0.49
31:P4:123:TYR:C	31:P4:123:TYR:CD1	2.86	0.49
31:P5:15:PHE:HE2	31:P5:112:ILE:HD13	1.74	0.49
33:R4:80:ARG:HH11	33:R4:80:ARG:HG2	1.77	0.49
34:S1:128:GLY:O	34:S1:144:ARG:NH2	2.45	0.49
34:S1:6:PRO:CD	34:S1:58:GLU:HG2	2.42	0.49
34:S1:86:ARG:HB3	34:S1:89:ASP:OD1	2.12	0.49
2:U4:17:ILE:HG22	2:U4:18:HIS:N	2.25	0.49
3:V6:76:ASP:OD1	3:V6:77:GLY:N	2.45	0.49
16:W3:80:ASP:OD1	16:W3:124:LYS:HG2	2.13	0.49
4:X2:60:LYS:HB3	4:X2:62:PRO:HD2	1.93	0.49
17:Y1:125:VAL:O	17:Y1:129:LYS:HG3	2.12	0.49
17:Y2:20:ARG:NH1	17:Y2:22:GLN:OE1	2.44	0.49
17:Y6:88:LYS:HD2	17:Y6:91:LEU:HB2	1.94	0.49
22:A4:111:GLN:HG3	22:A4:112:ILE:HG13	1.94	0.49
23:B1:32:ASP:HB2	23:B1:46:LYS:HG2	1.94	0.49
23:B4:192:SER:O	23:B4:196:ASP:N	2.45	0.49
23:B5:85:LYS:HB2	23:B5:101:HIS:HB3	1.93	0.49
24:D4:64:ARG:HG3	29:K4:95:ARG:HH22	1.76	0.49
25:E4:195:ILE:O	25:E4:197:ASN:N	2.46	0.49
26:F1:76:MET:HB2	26:F1:89:THR:HB	1.95	0.49
26:F2:76:MET:HB2	26:F2:89:THR:HB	1.95	0.49
26:F4:32:ASP:CG	26:F4:33:ILE:H	2.16	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F4:76:MET:HB2	26:F4:89:THR:HB	1.95	0.49
26:F6:32:ASP:CG	26:F6:33:ILE:H	2.15	0.49
11:G1:50:VAL:HG21	11:G1:111:LEU:HD21	1.93	0.49
11:G5:37:ALA:HA	11:G5:49:VAL:HA	1.95	0.49
27:H1:39:GLN:HB3	27:H1:75:ILE:HD11	1.94	0.49
28:I5:197:PHE:HA	28:I5:200:ARG:CD	2.41	0.49
12:J6:23:SER:O	12:J6:27:GLN:N	2.45	0.49
13:M3:42:LEU:HG	13:M3:74:ILE:HD13	1.94	0.49
14:N5:99:ARG:HG2	14:N5:115:LEU:HD11	1.93	0.49
31:P2:18:ARG:HA	34:S2:93:GLY:HA3	1.94	0.49
31:P6:18:ARG:HA	34:S6:93:GLY:HA3	1.94	0.49
33:R1:80:ARG:HG2	33:R1:80:ARG:HH11	1.77	0.49
33:R6:10:LYS:HD3	33:R6:14:ARG:HH22	1.76	0.49
34:S3:86:ARG:HB3	34:S3:89:ASP:OD1	2.12	0.49
1:T5:5:THR:OG1	1:T5:6:VAL:N	2.44	0.49
2:U1:117:ALA:O	2:U1:118:ASP:HB2	2.13	0.49
2:U2:44:LYS:HA	2:U2:47:ASN:HB3	1.94	0.49
4:X4:81:ILE:HG21	4:X4:120:PHE:CD2	2.46	0.49
4:X4:70:VAL:O	4:X4:83:ALA:N	2.37	0.49
17:Y3:125:VAL:O	17:Y3:129:LYS:HG3	2.12	0.49
17:Y4:125:VAL:O	17:Y4:129:LYS:HG3	2.12	0.49
17:Y6:20:ARG:HD2	17:Y6:76:TYR:CE1	2.47	0.49
17:Y6:58:PHE:HZ	25:E6:56:LEU:HD11	1.76	0.49
18:Z1:85:ARG:NH2	18:Z1:85:ARG:CG	2.73	0.49
22:A2:210:ILE:CG1	22:A2:211:GLU:N	2.73	0.49
23:B1:85:LYS:HB2	23:B1:101:HIS:HB3	1.94	0.49
10:C3:65:LYS:CG	10:C3:279:ARG:HE	2.11	0.49
10:C5:244:ILE:HA	10:C5:247:THR:HG23	1.94	0.49
25:E2:191:ARG:HE	25:E2:245:ARG:HD2	1.76	0.49
26:F1:35:LEU:HD21	26:F1:146:ARG:HD3	1.94	0.49
26:F5:158:ALA:HB2	26:F5:173:LEU:HB3	1.95	0.49
26:F5:182:LYS:O	26:F5:184:SER:N	2.41	0.49
26:F6:76:MET:HB2	26:F6:89:THR:HB	1.95	0.49
11:G3:144:LEU:C	11:G3:144:LEU:HD12	2.32	0.49
11:G3:37:ALA:HA	11:G3:49:VAL:HA	1.95	0.49
11:G6:37:ALA:HA	11:G6:49:VAL:HA	1.95	0.49
12:J2:23:SER:O	12:J2:27:GLN:N	2.45	0.49
12:J3:23:SER:O	12:J3:27:GLN:N	2.45	0.49
24:D3:64:ARG:HD3	29:K3:95:ARG:NH2	2.24	0.49
29:K4:43:LEU:HG	29:K4:44:HIS:ND1	2.28	0.49
29:K6:15:LEU:HD21	29:K6:71:LEU:HD11	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M6:36:ARG:HE	13:M6:40:LYS:NZ	2.08	0.49
14:N2:99:ARG:HG2	14:N2:115:LEU:HD11	1.93	0.49
15:O1:128:ARG:HH12	15:O1:130:GLU:HB2	1.76	0.49
15:O5:128:ARG:HH12	15:O5:130:GLU:HB2	1.76	0.49
32:Q5:34:VAL:N	32:Q5:37:ARG:O	2.25	0.49
33:R3:77:GLU:CG	33:R3:81:ARG:HG3	2.42	0.49
33:R5:21:TYR:HE2	33:R5:72:LYS:HD3	1.70	0.49
1:T6:36:THR:OG1	34:S6:80:PRO:HG2	2.13	0.49
17:Y3:20:ARG:HD2	17:Y3:76:TYR:CE1	2.47	0.49
22:A1:76:VAL:HG13	22:A1:123:VAL:HG23	1.94	0.49
22:A2:76:VAL:HG13	22:A2:123:VAL:HG23	1.94	0.49
22:A3:111:GLN:HG3	22:A3:112:ILE:HG13	1.94	0.49
22:A5:145:ILE:HG22	22:A5:159:ILE:HB	1.93	0.49
23:B2:85:LYS:HB2	23:B2:101:HIS:HB3	1.94	0.49
23:B6:36:PRO:HD3	23:B6:98:THR:HG23	1.95	0.49
10:C3:196:ILE:HG23	10:C3:223:TYR:HB2	1.95	0.49
25:E1:195:ILE:O	25:E1:197:ASN:N	2.46	0.49
26:F1:123:GLU:OE2	26:F1:197:GLU:HA	2.11	0.49
26:F1:127:ARG:NE	26:F1:128:ILE:HG23	2.17	0.49
26:F2:123:GLU:OE2	26:F2:197:GLU:HA	2.12	0.49
26:F3:76:MET:HB2	26:F3:89:THR:HB	1.95	0.49
26:F6:136:ARG:C	26:F6:203:ASN:ND2	2.66	0.49
11:G2:77:LEU:N	11:G2:93:LYS:O	2.44	0.49
11:G3:68:LEU:O	11:G3:69:THR:OG1	2.27	0.49
27:H1:156:VAL:HB	27:H1:187:PHE:CD1	2.47	0.49
27:H1:18:GLU:HG2	27:H1:19:PHE:H	1.78	0.49
27:H1:88:SER:O	27:H1:90:LYS:N	2.43	0.49
29:K5:18:GLU:HG3	29:K5:20:VAL:HG22	1.94	0.49
30:L1:35:ARG:NE	30:L1:50:ALA:O	2.45	0.49
30:L4:77:VAL:HG12	30:L4:122:ILE:HG22	1.92	0.49
13:M1:42:LEU:HG	13:M1:74:ILE:HD13	1.95	0.49
14:N1:34:LYS:HB3	14:N1:38:TYR:CE2	2.47	0.49
15:O6:74:ALA:HB1	15:O6:115:ALA:HB2	1.93	0.49
15:O6:34:PHE:CD1	15:O6:98:ARG:HD3	2.47	0.49
31:P3:15:PHE:CE2	31:P3:112:ILE:HD11	2.48	0.49
31:P4:34:MET:HB3	31:P4:42:ARG:HG3	1.95	0.49
31:P6:34:MET:CE	31:P6:46:ASN:HB2	2.43	0.49
33:R6:21:TYR:CZ	33:R6:72:LYS:HE2	2.48	0.49
31:P4:18:ARG:HA	34:S4:93:GLY:HA3	1.94	0.49
16:W2:80:ASP:OD1	16:W2:124:LYS:HG2	2.13	0.49
16:W4:80:ASP:OD1	16:W4:124:LYS:HG2	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X5:125:VAL:HG22	4:X5:126:ALA:H	1.78	0.49
17:Y3:20:ARG:NH1	17:Y3:22:GLN:OE1	2.44	0.49
22:A1:108:PHE:HB2	22:A1:136:GLU:HB3	1.94	0.49
22:A2:32:PHE:CE2	22:A2:33:GLN:HG3	2.48	0.49
22:A4:91:ALA:HB3	22:A4:98:PRO:HB3	1.95	0.49
23:B3:40:ASN:N	23:B3:75:GLN:OE1	2.34	0.49
10:C3:244:ILE:HA	10:C3:247:THR:HG23	1.95	0.49
10:C4:106:VAL:HG22	10:C4:128:VAL:HG22	1.94	0.49
2:U3:59:LYS:HG2	24:D3:8:LYS:NZ	2.28	0.49
2:U6:59:LYS:HG2	24:D6:8:LYS:NZ	2.28	0.49
26:F2:120:GLY:O	26:F2:146:ARG:NH2	2.46	0.49
26:F3:38:TYR:HD1	26:F3:144:LEU:HD13	1.77	0.49
26:F4:128:ILE:N	26:F4:137:GLN:OE1	2.35	0.49
26:F5:35:LEU:HD21	26:F5:146:ARG:HD3	1.94	0.49
26:F6:171:GLU:HA	26:F6:174:ALA:HB3	1.95	0.49
11:G1:200:LYS:O	11:G1:204:GLU:N	2.45	0.49
11:G2:144:LEU:HD12	11:G2:144:LEU:C	2.32	0.49
11:G3:141:ILE:HG12	11:G3:144:LEU:CD2	1.94	0.49
27:H5:18:GLU:HG2	27:H5:19:PHE:H	1.78	0.49
28:I1:196:GLU:HG3	28:I1:200:ARG:NE	2.27	0.49
28:I3:8:TRP:HZ3	28:I3:20:PRO:HB3	1.78	0.49
12:J5:61:LEU:HA	12:J5:70:ARG:HH12	1.75	0.49
29:K1:18:GLU:HG3	29:K1:20:VAL:HG22	1.94	0.49
29:K4:18:GLU:HG3	29:K4:20:VAL:HG22	1.94	0.49
29:K5:13:GLU:O	29:K5:17:LYS:N	2.43	0.49
29:K6:27:VAL:HG13	29:K6:43:LEU:HD13	1.95	0.49
30:L4:73:LEU:HD22	30:L4:90:ARG:HH21	1.78	0.49
15:O1:72:TYR:HA	15:O1:75:MET:SD	2.53	0.49
15:O4:72:TYR:HA	15:O4:75:MET:SD	2.53	0.49
15:O6:46:ASP:O	15:O6:49:GLY:N	2.40	0.49
33:R1:10:LYS:HD3	33:R1:14:ARG:HH22	1.77	0.49
34:S4:6:PRO:CD	34:S4:58:GLU:HG2	2.42	0.49
1:T4:36:THR:OG1	34:S4:80:PRO:HG2	2.13	0.49
2:U6:44:LYS:HA	2:U6:47:ASN:HB3	1.94	0.49
16:W4:10:ALA:O	16:W4:13:SER:OG	2.24	0.49
4:X5:81:ILE:HG21	4:X5:120:PHE:CD2	2.47	0.49
17:Y5:88:LYS:HD2	17:Y5:91:LEU:HB2	1.94	0.49
22:A3:32:PHE:CE2	22:A3:33:GLN:HG3	2.48	0.49
22:A6:102:ARG:N	22:A6:102:ARG:CD	4.99	0.49
22:A6:108:PHE:HB2	22:A6:136:GLU:HB3	1.94	0.49
23:B6:63:LYS:HG3	23:B6:89:GLU:O	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C2:244:ILE:HA	10:C2:247:THR:HG23	1.95	0.49
10:C3:74:LYS:CE	10:C3:272:HIS:CB	2.70	0.49
10:C3:65:LYS:CG	10:C3:279:ARG:NE	2.75	0.49
25:E5:211:LYS:HE2	25:E5:215:GLY:HA2	1.93	0.49
25:E6:195:ILE:O	25:E6:197:ASN:N	2.45	0.49
11:G2:209:TYR:O	11:G2:214:ALA:N	2.46	0.49
11:G2:37:ALA:HA	11:G2:49:VAL:HA	1.95	0.49
11:G3:77:LEU:N	11:G3:93:LYS:O	2.44	0.49
27:H3:105:THR:OG1	27:H3:106:ARG:N	2.46	0.49
27:H5:39:GLN:HB3	27:H5:75:ILE:HD11	1.94	0.49
27:H6:18:GLU:HG2	27:H6:19:PHE:H	1.78	0.49
29:K2:43:LEU:HG	29:K2:44:HIS:ND1	2.28	0.49
29:K6:18:GLU:HG3	29:K6:20:VAL:HG22	1.94	0.49
30:L1:73:LEU:HD22	30:L1:90:ARG:HH21	1.78	0.49
30:L2:35:ARG:NE	30:L2:50:ALA:O	2.46	0.49
14:N4:133:ARG:CD	30:L4:152:LYS:CG	2.90	0.49
23:B2:22:VAL:CA	30:L4:30:LYS:HE3	2.43	0.49
30:L6:89:ARG:HA	30:L6:108:ASN:HA	1.95	0.49
13:M2:42:LEU:HG	13:M2:74:ILE:HD13	1.95	0.49
28:I2:125:LYS:CG	15:O5:66:ARG:NH1	2.76	0.49
15:O6:14:VAL:N	15:O6:15:ILE:HA	2.26	0.49
32:Q1:54:PRO:HG2	32:Q1:88:ILE:HD11	1.94	0.49
32:Q2:39:LEU:HD23	32:Q2:52:LEU:HA	1.95	0.49
32:Q6:96:TYR:HA	32:Q6:100:VAL:HG22	1.95	0.49
1:T3:36:THR:OG1	34:S3:80:PRO:HG2	2.13	0.49
1:T4:33:TRP:HH2	1:T4:102:ARG:HH11	1.60	0.49
2:U1:59:LYS:HG2	24:D1:8:LYS:NZ	2.28	0.49
2:U5:44:LYS:HA	2:U5:47:ASN:HB3	1.94	0.49
16:W1:10:ALA:O	16:W1:13:SER:OG	2.24	0.49
16:W2:76:SER:HB2	16:W2:77:PRO:HD3	1.95	0.49
16:W4:24:GLN:HG3	16:W4:64:ASN:HA	1.94	0.49
16:W6:2:VAL:O	16:W6:4:MET:N	2.46	0.49
17:Y1:88:LYS:HZ3	17:Y1:97:TYR:HD2	1.58	0.49
18:Z4:66:LYS:HA	18:Z4:111:ARG:HB3	1.95	0.49
22:A1:32:PHE:CE2	22:A1:33:GLN:HG3	2.48	0.49
22:A1:91:ALA:HB3	22:A1:98:PRO:HB3	1.95	0.49
22:A2:217:ALA:HB1	22:A2:220:LYS:CE	2.34	0.49
22:A3:104:THR:O	22:A3:107:THR:OG1	2.20	0.49
22:A3:76:VAL:HG13	22:A3:123:VAL:HG23	1.94	0.49
23:B1:97:LEU:HD22	23:B1:232:HIS:CD2	2.48	0.49
23:B3:36:PRO:HD3	23:B3:98:THR:HG23	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B5:63:LYS:HG3	23:B5:89:GLU:O	2.13	0.49
10:C2:65:LYS:CG	10:C2:279:ARG:NE	2.74	0.49
2:U2:59:LYS:HG2	24:D2:8:LYS:NZ	2.28	0.49
24:D6:161:GLY:O	24:D6:164:VAL:HG12	2.12	0.49
24:D6:92:ALA:O	24:D6:93:THR:OG1	2.26	0.49
26:F1:120:GLY:O	26:F1:146:ARG:NH2	2.46	0.49
26:F3:120:GLY:O	26:F3:146:ARG:NH2	2.46	0.49
26:F5:106:GLU:HG2	26:F5:107:ASN:N	2.28	0.49
26:F5:120:GLY:O	26:F5:146:ARG:NH2	2.46	0.49
26:F6:106:GLU:HG2	26:F6:107:ASN:N	2.28	0.49
11:G1:37:ALA:HA	11:G1:49:VAL:HA	1.95	0.49
11:G2:32:MET:HA	11:G2:52:ILE:HG13	1.94	0.49
11:G3:135:PRO:HB3	11:G3:140:ARG:HG3	1.95	0.49
11:G3:209:TYR:O	11:G3:214:ALA:N	2.46	0.49
27:H6:73:GLN:HB3	27:H6:135:PHE:CZ	2.48	0.49
29:K1:15:LEU:HD21	29:K1:71:LEU:HD11	1.95	0.49
24:D2:67:ARG:CG	29:K2:96:ARG:HH21	2.22	0.49
29:K4:32:HIS:N	29:K4:41:PRO:HA	2.22	0.49
29:K6:4:PRO:HG2	29:K6:8:ARG:HE	1.77	0.49
13:M6:48:HIS:CB	13:M6:114:TYR:OH	2.60	0.49
14:N1:40:LEU:HD22	14:N1:45:LEU:HD12	1.95	0.49
14:N2:40:LEU:HD22	14:N2:45:LEU:HD12	1.95	0.49
15:O1:74:ALA:HB1	15:O1:115:ALA:HB2	1.93	0.49
15:O2:72:TYR:HA	15:O2:75:MET:SD	2.53	0.49
15:O4:34:PHE:CD1	15:O4:98:ARG:HD3	2.47	0.49
15:O5:72:TYR:HA	15:O5:75:MET:SD	2.53	0.49
33:R2:36:GLU:OE1	33:R2:36:GLU:N	2.43	0.49
33:R5:36:GLU:N	33:R5:36:GLU:OE1	2.43	0.49
1:T3:23:LYS:HE3	1:T3:51:ASN:OD1	2.13	0.49
16:W5:76:SER:HB2	16:W5:77:PRO:HD3	1.95	0.49
16:W6:80:ASP:OD1	16:W6:124:LYS:HG2	2.13	0.49
4:X1:125:VAL:HG22	4:X1:126:ALA:H	1.78	0.49
4:X4:125:VAL:HG22	4:X4:126:ALA:H	1.78	0.49
17:Y2:20:ARG:HD2	17:Y2:76:TYR:CE1	2.47	0.49
22:A5:214:GLU:HB2	22:A5:215:GLN:OE1	2.13	0.48
22:A5:32:PHE:CE2	22:A5:33:GLN:HG3	2.48	0.48
23:B1:63:LYS:HG3	23:B1:89:GLU:O	2.13	0.48
23:B4:36:PRO:HD3	23:B4:98:THR:HG23	1.95	0.48
23:B6:105:LEU:HD23	23:B6:110:MET:HE2	1.95	0.48
10:C1:65:LYS:HG2	10:C1:279:ARG:HE	1.78	0.48
10:C4:196:ILE:HG23	10:C4:223:TYR:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C6:125:LYS:HA	10:C6:143:CYS:HA	1.95	0.48
10:C6:166:ARG:O	10:C6:181:PRO:HD3	2.12	0.48
25:E5:68:ARG:HG3	25:E5:76:VAL:HG21	1.95	0.48
26:F2:35:LEU:HD21	26:F2:146:ARG:HD3	1.94	0.48
26:F6:38:TYR:HD1	26:F6:144:LEU:HD13	1.77	0.48
26:F6:120:GLY:O	26:F6:146:ARG:NH2	2.46	0.48
11:G4:135:PRO:HB3	11:G4:140:ARG:HG3	1.94	0.48
11:G4:77:LEU:N	11:G4:93:LYS:O	2.44	0.48
27:H4:156:VAL:HB	27:H4:187:PHE:CD1	2.47	0.48
27:H5:88:SER:O	27:H5:90:LYS:N	2.42	0.48
26:F3:191:LYS:HE2	28:I6:142:SER:CB	2.42	0.48
29:K1:27:VAL:HG13	29:K1:43:LEU:HD13	1.95	0.48
29:K2:31:LYS:HA	29:K2:41:PRO:HA	1.95	0.48
29:K3:4:PRO:HG2	29:K3:8:ARG:HE	1.77	0.48
29:K4:15:LEU:HD21	29:K4:71:LEU:HD11	1.95	0.48
29:K5:15:LEU:HD21	29:K5:71:LEU:HD11	1.95	0.48
30:L1:69:ARG:HH22	30:L1:132:ARG:HA	1.78	0.48
30:L3:35:ARG:NE	30:L3:50:ALA:O	2.45	0.48
30:L4:69:ARG:HH22	30:L4:132:ARG:HA	1.78	0.48
30:L4:121:GLN:HB3	30:L4:153:LYS:CG	2.43	0.48
30:L5:126:VAL:CG2	30:L5:145:VAL:HG22	2.43	0.48
30:L5:73:LEU:HD22	30:L5:90:ARG:HH21	1.78	0.48
13:M1:48:HIS:CB	13:M1:114:TYR:OH	2.60	0.48
13:M3:27:ILE:HG23	29:K3:84:HIS:CG	2.41	0.48
13:M4:117:GLU:OE1	13:M4:119:GLN:N	2.36	0.48
13:M5:48:HIS:CB	13:M5:114:TYR:OH	2.60	0.48
14:N1:101:HIS:HE2	14:N1:105:ASN:ND2	2.11	0.48
14:N1:4:MET:HE1	14:N1:121:ARG:HG2	1.94	0.48
14:N1:122:ILE:O	14:N1:126:ALA:N	2.33	0.48
15:O3:34:PHE:CD1	15:O3:98:ARG:HD3	2.47	0.48
15:O6:54:CYS:SG	15:O6:84:ARG:HB3	2.53	0.48
32:Q1:96:TYR:HA	32:Q1:100:VAL:HG22	1.95	0.48
32:Q2:34:VAL:N	32:Q2:37:ARG:O	2.26	0.48
33:R2:28:PHE:HA	33:R2:55:THR:HG21	1.94	0.48
33:R5:80:ARG:HG2	33:R5:80:ARG:HH11	1.77	0.48
33:R6:36:GLU:OE1	33:R6:36:GLU:N	2.43	0.48
1:T3:40:ALA:H	1:T3:96:SER:HB2	1.78	0.48
2:U4:44:LYS:HA	2:U4:47:ASN:HB3	1.94	0.48
2:U4:59:LYS:HG2	24:D4:8:LYS:NZ	2.28	0.48
2:U4:86:LYS:O	2:U4:87:ARG:NH2	2.44	0.48
3:V2:56:CYS:HB3	3:V2:59:ILE:HG12	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:W1:76:SER:HB2	16:W1:77:PRO:HD3	1.95	0.48
16:W3:112:ASP:HB3	16:W3:115:GLU:HB3	1.95	0.48
18:Z5:88:LEU:HB3	18:Z5:109:TYR:CZ	2.41	0.48
22:A4:15:VAL:HG23	22:A4:16:LEU:HD12	1.95	0.48
22:A4:32:PHE:CE2	22:A4:33:GLN:HG3	2.48	0.48
23:B3:198:GLU:O	23:B3:202:GLN:HB2	2.12	0.48
23:B3:63:LYS:HG3	23:B3:89:GLU:O	2.13	0.48
23:B4:85:LYS:HB2	23:B4:101:HIS:HB3	1.93	0.48
24:D4:92:ALA:O	24:D4:93:THR:OG1	2.27	0.48
26:F3:182:LYS:O	26:F3:184:SER:N	2.40	0.48
11:G2:135:PRO:HB3	11:G2:140:ARG:HG3	1.95	0.48
11:G6:209:TYR:O	11:G6:214:ALA:N	2.46	0.48
27:H4:73:GLN:HB3	27:H4:135:PHE:CZ	2.48	0.48
27:H4:145:ARG:NH1	27:H4:153:LEU:HD12	2.28	0.48
27:H6:105:THR:OG1	27:H6:106:ARG:N	2.46	0.48
28:I2:8:TRP:HZ3	28:I2:20:PRO:HB3	1.78	0.48
28:I5:196:GLU:HG3	28:I5:200:ARG:NE	2.27	0.48
12:J5:4:ALA:H	12:J5:5:ARG:HB2	1.75	0.48
29:K3:31:LYS:HA	29:K3:41:PRO:HA	1.96	0.48
29:K5:45:VAL:HA	29:K5:48:ALA:HB3	1.95	0.48
29:K5:4:PRO:HG2	29:K5:8:ARG:HE	1.77	0.48
24:D6:67:ARG:CG	29:K6:96:ARG:HH21	2.21	0.48
13:M4:28:HIS:NE2	13:M4:116:LYS:HE3	2.22	0.48
15:O1:54:CYS:SG	15:O1:84:ARG:HB3	2.53	0.48
15:O2:34:PHE:CD1	15:O2:98:ARG:HD3	2.47	0.48
31:P2:29:SER:O	31:P2:33:LEU:HG	2.13	0.48
31:P5:29:SER:O	31:P5:33:LEU:HG	2.13	0.48
31:P6:123:TYR:C	31:P6:123:TYR:CD1	2.86	0.48
33:R2:41:ILE:HD13	33:R2:47:ARG:HB2	1.96	0.48
34:S2:128:GLY:O	34:S2:144:ARG:NH2	2.45	0.48
34:S6:86:ARG:HB3	34:S6:89:ASP:OD1	2.12	0.48
1:T4:23:LYS:HE3	1:T4:51:ASN:OD1	2.13	0.48
1:T6:38:LYS:H	34:S6:39:ARG:HH22	1.61	0.48
2:U3:44:LYS:HA	2:U3:47:ASN:HB3	1.94	0.48
3:V4:76:ASP:OD1	3:V4:77:GLY:N	2.45	0.48
3:V6:16:LYS:HA	3:V6:23:ILE:HA	1.96	0.48
16:W1:80:ASP:OD1	16:W1:124:LYS:HG2	2.13	0.48
16:W3:24:GLN:HG3	16:W3:64:ASN:HA	1.94	0.48
4:X6:125:VAL:HG22	4:X6:126:ALA:H	1.78	0.48
22:A3:15:VAL:HG23	22:A3:16:LEU:HD12	1.95	0.48
23:B2:179:ASN:HB2	23:B2:183:GLU:HB3	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B3:27:LYS:HA	23:B3:51:ARG:HH21	1.77	0.48
23:B4:63:LYS:HG3	23:B4:89:GLU:O	2.13	0.48
10:C1:125:LYS:HA	10:C1:143:CYS:HA	1.95	0.48
10:C3:68:ARG:CD	10:C3:277:HIS:HB3	2.36	0.48
10:C5:65:LYS:HZ2	10:C5:280:VAL:HB	1.76	0.48
10:C6:244:ILE:HA	10:C6:247:THR:HG23	1.95	0.48
26:F2:171:GLU:HA	26:F2:174:ALA:HB3	1.95	0.48
26:F3:171:GLU:HA	26:F3:174:ALA:HB3	1.95	0.48
26:F3:32:ASP:CG	26:F3:33:ILE:H	2.16	0.48
11:G1:139:SER:HA	11:G1:142:ARG:CD	2.43	0.48
11:G1:32:MET:HA	11:G1:52:ILE:HG13	1.94	0.48
11:G6:135:PRO:HB3	11:G6:140:ARG:HG3	1.95	0.48
27:H4:18:GLU:HG2	27:H4:19:PHE:H	1.78	0.48
28:I5:142:SER:O	28:I5:144:LYS:N	2.47	0.48
28:I5:42:ARG:HG3	28:I5:58:LEU:HB2	1.94	0.48
12:J6:181:GLY:O	12:J6:185:ALA:N	2.46	0.48
29:K2:27:VAL:HG13	29:K2:43:LEU:HD13	1.94	0.48
30:L3:73:LEU:HD22	30:L3:90:ARG:HH21	1.78	0.48
30:L5:121:GLN:HG3	30:L5:153:LYS:CE	2.29	0.48
13:M1:36:ARG:HE	13:M1:40:LYS:NZ	2.08	0.48
14:N5:133:ARG:HA	14:N5:133:ARG:HD2	1.59	0.48
14:N5:135:LEU:CB	14:N5:136:PRO:CD	2.91	0.48
15:O3:54:CYS:SG	15:O3:84:ARG:HB3	2.52	0.48
15:O4:54:CYS:SG	15:O4:84:ARG:HB3	2.53	0.48
31:P1:123:TYR:CD1	31:P1:123:TYR:C	2.86	0.48
31:P2:123:TYR:CD1	31:P2:123:TYR:C	2.85	0.48
31:P5:20:VAL:HG12	31:P5:25:LEU:HG	1.94	0.48
32:Q1:39:LEU:HD23	32:Q1:52:LEU:HA	1.95	0.48
32:Q2:96:TYR:HA	32:Q2:100:VAL:HG22	1.94	0.48
33:R2:21:TYR:CE2	33:R2:72:LYS:CE	2.96	0.48
34:S4:86:ARG:HB3	34:S4:89:ASP:OD1	2.12	0.48
34:S5:6:PRO:CD	34:S5:58:GLU:HG2	2.42	0.48
1:T5:23:LYS:HE3	1:T5:51:ASN:OD1	2.13	0.48
1:T6:40:ALA:H	1:T6:96:SER:HB2	1.78	0.48
2:U1:44:LYS:HA	2:U1:47:ASN:HB3	1.94	0.48
2:U2:117:ALA:O	2:U2:118:ASP:HB2	2.13	0.48
2:U4:117:ALA:O	2:U4:118:ASP:HB2	2.13	0.48
2:U5:17:ILE:HG21	2:U5:94:PRO:CB	2.39	0.48
16:W3:2:VAL:O	16:W3:4:MET:N	2.46	0.48
16:W3:76:SER:HB2	16:W3:77:PRO:HD3	1.95	0.48
22:A2:212:LYS:HE3	22:A2:212:LYS:HB3	1.63	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A5:214:GLU:OE1	33:R5:84:TYR:HD1	1.94	0.48
22:A6:32:PHE:CE2	22:A6:33:GLN:HG3	2.48	0.48
23:B1:36:PRO:HD3	23:B1:98:THR:HG23	1.95	0.48
23:B4:32:ASP:HB2	23:B4:46:LYS:HG2	1.94	0.48
23:B5:105:LEU:HD23	23:B5:110:MET:HE2	1.94	0.48
10:C2:106:VAL:HG22	10:C2:128:VAL:HG22	1.94	0.48
10:C6:106:VAL:HG22	10:C6:128:VAL:HG22	1.94	0.48
24:D3:121:GLY:O	24:D3:125:PHE:N	2.41	0.48
24:D5:161:GLY:O	24:D5:164:VAL:HG12	2.12	0.48
26:F1:158:ALA:HB2	26:F1:173:LEU:HB3	1.95	0.48
26:F4:106:GLU:HG2	26:F4:107:ASN:N	2.29	0.48
26:F5:32:ASP:CG	26:F5:33:ILE:H	2.15	0.48
11:G3:139:SER:HA	11:G3:142:ARG:CD	2.43	0.48
11:G6:220:ALA:HA	11:G6:223:LYS:NZ	2.29	0.48
27:H2:105:THR:OG1	27:H2:106:ARG:N	2.45	0.48
27:H3:145:ARG:NH1	27:H3:153:LEU:HD12	2.28	0.48
28:I1:42:ARG:HG3	28:I1:58:LEU:HB2	1.94	0.48
12:J1:61:LEU:HD12	12:J1:70:ARG:HH22	1.79	0.48
12:J5:181:GLY:O	12:J5:185:ALA:N	2.46	0.48
29:K1:43:LEU:HG	29:K1:44:HIS:ND1	2.28	0.48
24:D2:64:ARG:CZ	29:K2:95:ARG:HH21	2.26	0.48
29:K3:27:VAL:HG13	29:K3:43:LEU:HD13	1.94	0.48
29:K3:43:LEU:HG	29:K3:44:HIS:ND1	2.28	0.48
24:D3:67:ARG:CG	29:K3:96:ARG:HH21	2.22	0.48
29:K4:27:VAL:HG13	29:K4:43:LEU:HD13	1.95	0.48
24:D4:64:ARG:CZ	29:K4:95:ARG:HH21	2.25	0.48
29:K5:31:LYS:HA	29:K5:41:PRO:HA	1.95	0.48
14:N1:142:GLU:CB	14:N1:145:THR:HG1	2.26	0.48
14:N6:40:LEU:HD22	14:N6:45:LEU:HD12	1.95	0.48
15:O5:130:GLU:HG2	15:O5:131:ASP:N	2.28	0.48
15:O5:54:CYS:SG	15:O5:84:ARG:HB3	2.52	0.48
31:P1:41:GLN:OE1	31:P1:84:ILE:HD13	2.13	0.48
31:P6:29:SER:O	31:P6:33:LEU:HG	2.13	0.48
32:Q3:96:TYR:HA	32:Q3:100:VAL:HG22	1.95	0.48
33:R3:58:MET:C	33:R3:61:ILE:HG12	2.34	0.48
1:T1:36:THR:OG1	34:S1:80:PRO:HG2	2.13	0.48
1:T2:36:THR:OG1	34:S2:80:PRO:HG2	2.13	0.48
1:T5:33:TRP:HH2	1:T5:102:ARG:HH11	1.60	0.48
3:V1:16:LYS:HA	3:V1:23:ILE:HA	1.95	0.48
16:W4:72:CYS:HA	16:W4:129:PHE:HA	1.95	0.48
17:Y6:125:VAL:O	17:Y6:129:LYS:HG3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z2:50:PHE:O	34:S2:5:ILE:HG22	1.93	0.48
18:Z5:66:LYS:HA	18:Z5:111:ARG:HB3	1.95	0.48
22:A1:210:ILE:HG13	22:A1:211:GLU:N	2.22	0.48
22:A2:214:GLU:HB2	22:A2:215:GLN:OE1	2.13	0.48
22:A3:108:PHE:HB2	22:A3:136:GLU:HB3	1.94	0.48
23:B3:97:LEU:HD22	23:B3:232:HIS:CD2	2.49	0.48
23:B3:32:ASP:HB2	23:B3:46:LYS:HG2	1.94	0.48
10:C2:196:ILE:HG23	10:C2:223:TYR:HB2	1.95	0.48
10:C6:142:LYS:HD3	10:C6:153:GLY:C	2.33	0.48
26:F3:35:LEU:HD21	26:F3:146:ARG:HD3	1.94	0.48
26:F6:158:ALA:HB2	26:F6:173:LEU:HB3	1.95	0.48
11:G6:194:LEU:HA	11:G6:197:GLN:HB3	1.95	0.48
27:H2:73:GLN:HB3	27:H2:135:PHE:CZ	2.48	0.48
28:I1:8:TRP:HZ3	28:I1:20:PRO:HB3	1.78	0.48
28:I4:42:ARG:HG3	28:I4:58:LEU:HB2	1.94	0.48
12:J1:181:GLY:O	12:J1:185:ALA:N	2.46	0.48
12:J4:86:VAL:HG21	12:J4:105:PHE:CE1	2.49	0.48
29:K1:59:LYS:O	29:K1:70:TYR:N	2.37	0.48
29:K2:45:VAL:HA	29:K2:48:ALA:HB3	1.96	0.48
29:K3:15:LEU:HD21	29:K3:71:LEU:HD11	1.95	0.48
30:L2:89:ARG:HA	30:L2:108:ASN:HA	1.95	0.48
30:L4:35:ARG:NE	30:L4:50:ALA:O	2.45	0.48
30:L5:69:ARG:HH22	30:L5:132:ARG:HA	1.78	0.48
30:L5:89:ARG:HA	30:L5:108:ASN:HA	1.95	0.48
13:M4:61:TYR:HH	13:M4:108:CYS:HG	1.50	0.48
13:M5:42:LEU:HG	13:M5:74:ILE:HD13	1.95	0.48
32:Q5:39:LEU:HD23	32:Q5:52:LEU:HA	1.95	0.48
33:R1:44:LYS:HG3	33:R1:47:ARG:NH2	2.28	0.48
33:R5:58:MET:O	33:R5:61:ILE:HG13	2.13	0.48
33:R6:41:ILE:HD13	33:R6:47:ARG:HB2	1.96	0.48
34:S4:128:GLY:O	34:S4:144:ARG:NH2	2.45	0.48
34:S6:128:GLY:O	34:S6:144:ARG:NH2	2.45	0.48
1:T1:23:LYS:HE3	1:T1:51:ASN:OD1	2.13	0.48
1:T2:23:LYS:HE3	1:T2:51:ASN:OD1	2.13	0.48
2:U6:17:ILE:HG21	2:U6:94:PRO:CB	2.38	0.48
3:V6:56:CYS:HB3	3:V6:59:ILE:HG12	1.96	0.48
17:Y6:15:ASN:HD21	17:Y6:20:ARG:HH21	1.60	0.48
23:B2:36:PRO:HD3	23:B2:98:THR:HG23	1.95	0.48
10:C3:106:VAL:HG22	10:C3:128:VAL:HG22	1.94	0.48
25:E2:68:ARG:HG3	25:E2:76:VAL:HG21	1.95	0.48
25:E6:68:ARG:HG3	25:E6:76:VAL:HG21	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G1:135:PRO:HB3	11:G1:140:ARG:HG3	1.95	0.48
11:G1:209:TYR:O	11:G1:214:ALA:N	2.46	0.48
11:G2:139:SER:HA	11:G2:142:ARG:CD	2.43	0.48
11:G4:194:LEU:O	11:G4:198:ARG:N	2.43	0.48
27:H5:145:ARG:NH1	27:H5:153:LEU:HD12	2.28	0.48
29:K3:93:THR:CB	29:K3:95:ARG:HH12	2.25	0.48
29:K4:45:VAL:HA	29:K4:48:ALA:HB3	1.96	0.48
29:K5:27:VAL:HG13	29:K5:43:LEU:HD13	1.94	0.48
30:L1:121:GLN:HB3	30:L1:153:LYS:CD	2.28	0.48
13:M4:42:LEU:HG	13:M4:74:ILE:HD13	1.95	0.48
14:N3:40:LEU:HD22	14:N3:45:LEU:HD12	1.95	0.48
14:N5:4:MET:HE1	14:N5:121:ARG:HG2	1.94	0.48
15:O3:130:GLU:HG2	15:O3:131:ASP:N	2.28	0.48
31:P1:29:SER:O	31:P1:33:LEU:HG	2.14	0.48
31:P2:96:VAL:CG2	31:P2:116:LEU:HD13	1.87	0.48
32:Q4:96:TYR:HA	32:Q4:100:VAL:HG22	1.95	0.48
33:R2:21:TYR:CE2	33:R2:72:LYS:HE2	2.49	0.48
1:T2:5:THR:OG1	1:T2:6:VAL:N	2.44	0.48
1:T4:40:ALA:H	1:T4:96:SER:HB2	1.78	0.48
1:T5:40:ALA:H	1:T5:96:SER:HB2	1.78	0.48
3:V1:56:CYS:HB3	3:V1:59:ILE:HG12	1.96	0.48
18:Z3:75:GLU:HA	18:Z3:75:GLU:OE1	2.13	0.48
23:B6:192:SER:O	23:B6:196:ASP:N	2.45	0.48
24:D6:71:ALA:O	24:D6:75:LYS:N	2.47	0.48
25:E4:68:ARG:HG3	25:E4:76:VAL:HG21	1.96	0.48
25:E5:195:ILE:O	25:E5:197:ASN:N	2.45	0.48
26:F1:38:TYR:HD1	26:F1:144:LEU:HD13	1.77	0.48
26:F1:171:GLU:HA	26:F1:174:ALA:HB3	1.95	0.48
26:F2:32:ASP:CG	26:F2:33:ILE:H	2.16	0.48
26:F4:120:GLY:O	26:F4:146:ARG:NH2	2.47	0.48
27:H2:185:VAL:HB	27:H2:187:PHE:CE1	2.49	0.48
27:H3:18:GLU:HG2	27:H3:19:PHE:H	1.78	0.48
27:H4:185:VAL:HB	27:H4:187:PHE:CE1	2.49	0.48
27:H6:145:ARG:NH1	27:H6:153:LEU:HD12	2.28	0.48
29:K3:45:VAL:HA	29:K3:48:ALA:HB3	1.96	0.48
24:D3:64:ARG:CZ	29:K3:95:ARG:HH21	2.25	0.48
29:K5:43:LEU:HG	29:K5:44:HIS:ND1	2.27	0.48
29:K6:31:LYS:HA	29:K6:41:PRO:HA	1.95	0.48
30:L2:69:ARG:HH22	30:L2:132:ARG:HA	1.78	0.48
14:N2:133:ARG:CD	30:L2:152:LYS:HE2	2.14	0.48
30:L3:89:ARG:HA	30:L3:108:ASN:HA	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M4:54:SER:OG	13:M4:78:LYS:HB3	2.14	0.48
15:O2:54:CYS:SG	15:O2:84:ARG:HB3	2.52	0.48
28:I1:163:GLU:HG2	15:O6:63:LYS:CE	2.36	0.48
31:P2:115:TYR:HD2	31:P2:115:TYR:H	1.52	0.48
31:P3:29:SER:O	31:P3:33:LEU:HG	2.13	0.48
31:P4:41:GLN:CB	31:P4:84:ILE:CD1	2.57	0.48
31:P5:115:TYR:N	31:P5:115:TYR:CD2	2.73	0.48
32:Q4:39:LEU:HD23	32:Q4:52:LEU:HA	1.95	0.48
32:Q6:39:LEU:HD23	32:Q6:52:LEU:HA	1.95	0.48
33:R2:21:TYR:CE2	33:R2:72:LYS:NZ	2.82	0.48
1:T1:35:ASP:CB	34:S1:46:ARG:NE	2.62	0.48
1:T2:33:TRP:HH2	1:T2:102:ARG:HH11	1.60	0.48
1:T4:38:LYS:H	34:S4:39:ARG:HH22	1.62	0.48
2:U6:17:ILE:HG23	2:U6:95:SER:N	1.90	0.48
3:V3:56:CYS:HB3	3:V3:59:ILE:HG12	1.96	0.48
3:V5:56:CYS:HB3	3:V5:59:ILE:HG12	1.96	0.48
16:W5:80:ASP:OD1	16:W5:124:LYS:HG2	2.12	0.48
16:W5:2:VAL:O	16:W5:4:MET:N	2.46	0.48
18:Z2:103:HIS:HE2	26:F2:91:ARG:HD2	1.79	0.48
23:B2:63:LYS:HG3	23:B2:89:GLU:O	2.13	0.48
23:B6:97:LEU:HD22	23:B6:232:HIS:CD2	2.49	0.48
23:B6:228:LEU:HG	23:B6:232:HIS:HB2	1.96	0.48
10:C1:196:ILE:HG23	10:C1:223:TYR:HB2	1.95	0.48
10:C5:65:LYS:HA	10:C5:277:HIS:HE1	1.71	0.48
24:D2:64:ARG:CG	29:K2:95:ARG:HH22	2.27	0.48
25:E3:68:ARG:HG3	25:E3:76:VAL:HG21	1.95	0.48
18:Z1:104:ARG:HH21	26:F1:91:ARG:HH12	1.62	0.48
11:G1:139:SER:O	11:G1:142:ARG:CB	2.62	0.48
11:G6:139:SER:HA	11:G6:142:ARG:CD	2.43	0.48
28:I1:125:LYS:HD2	15:O6:66:ARG:HD3	0.50	0.48
28:I1:79:ILE:HG21	28:I1:170:LYS:HZ2	1.77	0.48
28:I5:130:THR:HB	28:I5:131:PRO:HD3	1.96	0.48
28:I5:8:TRP:HZ3	28:I5:20:PRO:HB3	1.77	0.48
12:J2:109:ARG:O	12:J2:112:THR:OG1	2.32	0.48
12:J2:61:LEU:HD12	12:J2:70:ARG:HH22	1.79	0.48
29:K4:31:LYS:HA	29:K4:41:PRO:HA	1.96	0.48
30:L1:89:ARG:HA	30:L1:108:ASN:HA	1.95	0.48
30:L2:73:LEU:HD22	30:L2:90:ARG:HH21	1.78	0.48
14:N2:148:ALA:CB	14:N2:149:LEU:CA	2.85	0.48
14:N3:136:PRO:HB2	14:N3:139:TRP:HB2	1.96	0.48
15:O4:46:ASP:OD1	15:O4:53:ILE:HD11	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P4:29:SER:O	31:P4:33:LEU:HG	2.14	0.48
31:P5:41:GLN:OE1	31:P5:84:ILE:HD13	2.14	0.48
32:Q1:47:LEU:O	32:Q1:49:TYR:N	2.47	0.48
33:R2:69:ILE:HG23	33:R2:70:SER:HA	1.95	0.48
1:T4:5:THR:OG1	1:T4:6:VAL:N	2.44	0.48
1:T6:23:LYS:HE3	1:T6:51:ASN:OD1	2.13	0.48
2:U1:50:VAL:HG23	2:U1:91:LEU:HD21	1.95	0.48
2:U5:117:ALA:O	2:U5:118:ASP:HB2	2.13	0.48
22:A4:6:ASP:O	22:A4:9:GLN:NE2	2.34	0.48
22:A5:91:ALA:HB3	22:A5:98:PRO:HB3	1.95	0.48
10:C4:273:LEU:HB3	10:C4:280:VAL:HG13	1.64	0.48
10:C4:273:LEU:CD1	10:C4:280:VAL:HG21	2.44	0.48
10:C6:196:ILE:HG23	10:C6:223:TYR:HB2	1.95	0.48
24:D1:121:GLY:O	24:D1:125:PHE:N	2.41	0.48
24:D1:64:ARG:HG3	29:K1:95:ARG:HH22	1.76	0.48
11:G5:135:PRO:HB3	11:G5:140:ARG:HG3	1.95	0.48
11:G5:194:LEU:O	11:G5:198:ARG:N	2.43	0.48
27:H1:73:GLN:HB3	27:H1:135:PHE:CZ	2.48	0.48
27:H2:37:LYS:O	27:H2:39:GLN:N	2.47	0.48
12:J2:181:GLY:O	12:J2:185:ALA:N	2.46	0.48
12:J2:86:VAL:HG21	12:J2:105:PHE:CE1	2.49	0.48
12:J3:61:LEU:HD12	12:J3:70:ARG:HH22	1.79	0.48
12:J6:86:VAL:HG21	12:J6:105:PHE:CE1	2.49	0.48
29:K2:15:LEU:HD21	29:K2:71:LEU:HD11	1.95	0.48
30:L3:124:ASP:HB2	30:L3:147:LYS:HB3	1.96	0.48
30:L4:89:ARG:HA	30:L4:108:ASN:HA	1.95	0.48
15:O2:130:GLU:HG2	15:O2:131:ASP:N	2.29	0.48
15:O6:72:TYR:HA	15:O6:75:MET:SD	2.53	0.48
32:Q6:34:VAL:N	32:Q6:37:ARG:O	2.25	0.48
33:R1:77:GLU:CG	33:R1:81:ARG:HG3	2.42	0.48
33:R5:41:ILE:HD13	33:R5:47:ARG:HB2	1.96	0.48
1:T1:40:ALA:H	1:T1:96:SER:HB2	1.79	0.48
2:U3:19:ARG:NH2	2:U3:90:ASP:OD2	2.47	0.48
2:U4:17:ILE:HG23	2:U4:95:SER:N	1.91	0.48
18:Z1:84:ALA:O	18:Z1:88:LEU:HG	2.13	0.48
18:Z2:66:LYS:HA	18:Z2:111:ARG:HB3	1.95	0.48
18:Z3:50:PHE:O	34:S3:5:ILE:HG22	1.93	0.48
22:A2:15:VAL:HG23	22:A2:16:LEU:HD12	1.95	0.48
10:C3:125:LYS:HA	10:C3:143:CYS:HA	1.95	0.48
10:C4:65:LYS:HZ2	10:C4:280:VAL:HB	1.76	0.48
26:F4:171:GLU:HA	26:F4:174:ALA:HB3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F6:35:LEU:HD21	26:F6:146:ARG:HD3	1.95	0.48
26:F6:185:SER:O	26:F6:191:LYS:NZ	2.33	0.48
11:G4:209:TYR:O	11:G4:214:ALA:N	2.46	0.48
11:G5:209:TYR:O	11:G5:214:ALA:N	2.46	0.48
27:H2:145:ARG:NH1	27:H2:153:LEU:HD12	2.28	0.48
27:H6:185:VAL:HB	27:H6:187:PHE:CE1	2.49	0.48
28:I2:142:SER:O	28:I2:144:LYS:N	2.47	0.48
28:I4:130:THR:HB	28:I4:131:PRO:HD3	1.96	0.48
12:J3:181:GLY:O	12:J3:185:ALA:N	2.46	0.48
29:K1:31:LYS:HA	29:K1:41:PRO:HA	1.96	0.48
29:K2:32:HIS:N	29:K2:41:PRO:HA	2.22	0.48
30:L6:69:ARG:HH22	30:L6:132:ARG:HA	1.78	0.48
30:L6:73:LEU:HD22	30:L6:90:ARG:HH21	1.78	0.48
13:M2:120:ALA:O	13:M2:124:ILE:HG13	2.14	0.48
13:M6:120:ALA:O	13:M6:124:ILE:HG13	2.14	0.48
14:N5:40:LEU:HD22	14:N5:45:LEU:HD12	1.95	0.48
15:O3:72:TYR:HA	15:O3:75:MET:SD	2.53	0.48
15:O6:46:ASP:OD1	15:O6:53:ILE:HD11	2.14	0.48
31:P1:78:THR:HG22	31:P1:95:GLY:O	2.14	0.48
1:T1:38:LYS:H	34:S1:39:ARG:HH22	1.62	0.48
1:T3:38:LYS:H	34:S3:39:ARG:HH22	1.61	0.48
1:T5:36:THR:OG1	34:S5:80:PRO:HG2	2.13	0.48
1:T6:33:TRP:HH2	1:T6:102:ARG:HH11	1.60	0.48
2:U5:59:LYS:HG2	24:D5:8:LYS:NZ	2.28	0.48
2:U6:50:VAL:HG23	2:U6:91:LEU:HD21	1.96	0.48
16:W6:76:SER:HB2	16:W6:77:PRO:HD3	1.95	0.48
17:Y6:15:ASN:HD21	17:Y6:20:ARG:NH2	2.12	0.48
18:Z5:84:ALA:O	18:Z5:88:LEU:HG	2.14	0.48
18:Z6:66:LYS:HA	18:Z6:111:ARG:HB3	1.95	0.48
22:A4:104:THR:OG1	22:A4:107:THR:OG1	2.26	0.47
23:B5:175:GLU:O	23:B5:178:THR:OG1	2.19	0.47
23:B6:40:ASN:N	23:B6:75:GLN:OE1	2.34	0.47
10:C1:244:ILE:HA	10:C1:247:THR:HG23	1.95	0.47
10:C5:125:LYS:HA	10:C5:143:CYS:HA	1.95	0.47
10:C6:142:LYS:HD3	10:C6:154:ALA:N	2.29	0.47
25:E1:68:ARG:HG3	25:E1:76:VAL:HG21	1.95	0.47
26:F4:70:GLU:O	26:F4:73:THR:OG1	2.30	0.47
26:F6:127:ARG:NE	26:F6:128:ILE:HG23	2.17	0.47
11:G2:164:LYS:HD2	11:G2:167:LYS:HB2	1.96	0.47
11:G2:194:LEU:O	11:G2:198:ARG:N	2.43	0.47
11:G3:194:LEU:HA	11:G3:197:GLN:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G4:210:ALA:O	11:G4:215:LYS:HB2	2.14	0.47
11:G5:14:LYS:HG2	11:G5:124:LEU:HD11	1.96	0.47
27:H4:105:THR:OG1	27:H4:106:ARG:N	2.46	0.47
27:H5:185:VAL:HB	27:H5:187:PHE:CE1	2.49	0.47
28:I1:123:ARG:HD3	15:O6:64:ALA:HA	1.95	0.47
28:I6:42:ARG:HG3	28:I6:58:LEU:HB2	1.94	0.47
12:J2:57:ALA:O	12:J2:61:LEU:N	2.47	0.47
29:K1:45:VAL:HA	29:K1:48:ALA:HB3	1.96	0.47
29:K1:93:THR:CB	29:K1:95:ARG:HH12	2.25	0.47
30:L2:16:ILE:HG23	30:L2:36:TYR:HB2	1.96	0.47
30:L6:152:LYS:H	30:L6:152:LYS:HD2	1.78	0.47
13:M2:54:SER:OG	13:M2:78:LYS:HB3	2.14	0.47
13:M6:42:LEU:HG	13:M6:74:ILE:HD13	1.95	0.47
15:O5:46:ASP:OD1	15:O5:53:ILE:HD11	2.14	0.47
31:P4:78:THR:HG22	31:P4:95:GLY:O	2.14	0.47
33:R3:41:ILE:HD13	33:R3:47:ARG:HB2	1.96	0.47
1:T3:33:TRP:HH2	1:T3:102:ARG:HH11	1.60	0.47
2:U2:19:ARG:NH2	2:U2:90:ASP:OD2	2.47	0.47
3:V4:56:CYS:HB3	3:V4:59:ILE:HG12	1.95	0.47
18:Z2:84:ALA:O	18:Z2:88:LEU:HG	2.14	0.47
18:Z3:66:LYS:HA	18:Z3:111:ARG:HB3	1.95	0.47
22:A1:210:ILE:CG1	22:A1:211:GLU:N	2.74	0.47
22:A3:91:ALA:HB3	22:A3:98:PRO:HB3	1.95	0.47
23:B2:40:ASN:N	23:B2:75:GLN:OE1	2.34	0.47
10:C5:65:LYS:CA	10:C5:277:HIS:HE1	2.24	0.47
24:D4:121:GLY:O	24:D4:125:PHE:N	2.41	0.47
25:E1:176:ASP:OD1	25:E1:177:THR:N	2.41	0.47
26:F1:106:GLU:HG2	26:F1:107:ASN:N	2.29	0.47
11:G1:220:ALA:HA	11:G1:223:LYS:NZ	2.29	0.47
11:G4:139:SER:O	11:G4:142:ARG:CB	2.62	0.47
11:G4:164:LYS:HD2	11:G4:167:LYS:HB2	1.96	0.47
11:G5:210:ALA:O	11:G5:215:LYS:HB2	2.14	0.47
11:G5:77:LEU:N	11:G5:93:LYS:O	2.44	0.47
27:H1:145:ARG:NH1	27:H1:153:LEU:HD12	2.28	0.47
27:H3:73:GLN:HB3	27:H3:135:PHE:CZ	2.48	0.47
28:I1:142:SER:O	28:I1:144:LYS:N	2.47	0.47
28:I3:119:LEU:HD12	28:I3:153:LYS:HE3	1.97	0.47
28:I5:79:ILE:HG21	28:I5:170:LYS:HZ2	1.79	0.47
12:J3:57:ALA:O	12:J3:61:LEU:N	2.47	0.47
12:J6:61:LEU:HD12	12:J6:70:ARG:HH22	1.79	0.47
29:K1:51:SER:O	29:K1:54:SER:OG	2.25	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L3:69:ARG:HH22	30:L3:132:ARG:HA	1.78	0.47
30:L4:16:ILE:HG23	30:L4:36:TYR:HB2	1.97	0.47
15:O3:46:ASP:OD1	15:O3:53:ILE:HD11	2.14	0.47
15:O3:66:ARG:NH1	28:I6:125:LYS:HZ2	2.09	0.47
31:P3:78:THR:HG22	31:P3:95:GLY:O	2.14	0.47
33:R1:41:ILE:HD13	33:R1:47:ARG:HB2	1.96	0.47
33:R3:27:ASP:O	33:R3:30:THR:OG1	2.24	0.47
33:R4:32:LYS:HZ1	33:R4:47:ARG:HH21	1.63	0.47
34:S6:6:PRO:CD	34:S6:58:GLU:HG2	2.42	0.47
1:T2:40:ALA:H	1:T2:96:SER:HB2	1.78	0.47
1:T3:5:THR:OG1	1:T3:6:VAL:N	2.44	0.47
16:W2:2:VAL:O	16:W2:4:MET:N	2.46	0.47
16:W3:121:THR:O	16:W3:122:GLY:O	2.32	0.47
22:A3:217:ALA:HB1	22:A3:220:LYS:CE	2.34	0.47
23:B1:228:LEU:HG	23:B1:232:HIS:HB2	1.96	0.47
23:B2:173:THR:HG23	23:B2:177:GLN:OE1	2.14	0.47
23:B2:97:LEU:HD22	23:B2:232:HIS:CD2	2.48	0.47
23:B3:71:LEU:HA	23:B3:74:LEU:HB3	1.97	0.47
23:B4:173:THR:HG23	23:B4:177:GLN:OE1	2.14	0.47
18:Z2:104:ARG:HH21	26:F2:91:ARG:HH12	1.62	0.47
11:G1:210:ALA:O	11:G1:215:LYS:HB2	2.14	0.47
11:G4:37:ALA:HA	11:G4:49:VAL:HA	1.95	0.47
11:G5:164:LYS:HD2	11:G5:167:LYS:HB2	1.97	0.47
27:H1:185:VAL:HB	27:H1:187:PHE:CE1	2.49	0.47
27:H3:185:VAL:HB	27:H3:187:PHE:CE1	2.49	0.47
28:I2:119:LEU:HD12	28:I2:153:LYS:HE3	1.97	0.47
28:I4:142:SER:O	28:I4:144:LYS:N	2.47	0.47
28:I6:142:SER:O	28:I6:144:LYS:N	2.47	0.47
28:I6:79:ILE:HG21	28:I6:170:LYS:HD3	1.96	0.47
29:K2:93:THR:CB	29:K2:95:ARG:HH12	2.25	0.47
30:L6:16:ILE:HG23	30:L6:36:TYR:HB2	1.97	0.47
13:M1:54:SER:OG	13:M1:78:LYS:HB3	2.14	0.47
13:M5:27:ILE:HG23	29:K5:84:HIS:CG	2.41	0.47
14:N4:142:GLU:CB	14:N4:145:THR:HG1	2.27	0.47
28:I1:158:ILE:CD1	15:O6:63:LYS:HZ1	2.11	0.47
31:P5:18:ARG:HA	34:S5:93:GLY:N	2.29	0.47
32:Q4:47:LEU:O	32:Q4:49:TYR:N	2.47	0.47
32:Q5:47:LEU:O	32:Q5:49:TYR:N	2.47	0.47
2:U5:86:LYS:O	2:U5:87:ARG:NH2	2.44	0.47
16:W6:72:CYS:HA	16:W6:129:PHE:HA	1.95	0.47
4:X3:125:VAL:HG22	4:X3:126:ALA:H	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y1:20:ARG:NH1	17:Y1:22:GLN:OE1	2.44	0.47
22:A1:15:VAL:HG23	22:A1:16:LEU:HD12	1.95	0.47
22:A4:214:GLU:HB2	22:A4:215:GLN:OE1	2.14	0.47
23:B1:173:THR:HG23	23:B1:177:GLN:OE1	2.14	0.47
23:B4:97:LEU:HD22	23:B4:232:HIS:CD2	2.48	0.47
10:C1:68:ARG:CD	10:C1:277:HIS:HB3	2.36	0.47
10:C2:125:LYS:HA	10:C2:143:CYS:HA	1.95	0.47
10:C3:273:LEU:CD1	10:C3:280:VAL:HG21	2.44	0.47
10:C5:277:HIS:O	10:C5:279:ARG:N	2.36	0.47
10:C5:273:LEU:CD1	10:C5:280:VAL:HG21	2.44	0.47
10:C6:65:LYS:CG	10:C6:279:ARG:NE	2.74	0.47
11:G4:220:ALA:HA	11:G4:223:LYS:NZ	2.29	0.47
27:H1:105:THR:OG1	27:H1:106:ARG:N	2.45	0.47
27:H2:18:GLU:HG2	27:H2:19:PHE:H	1.78	0.47
28:I5:119:LEU:HD12	28:I5:153:LYS:HE3	1.97	0.47
12:J6:57:ALA:O	12:J6:61:LEU:N	2.47	0.47
24:D4:64:ARG:HD3	29:K4:95:ARG:NH2	2.24	0.47
30:L3:16:ILE:HG23	30:L3:36:TYR:HB2	1.97	0.47
13:M2:28:HIS:NE2	13:M2:116:LYS:HE3	2.22	0.47
13:M3:101:ARG:HG3	13:M3:102:LYS:N	2.30	0.47
15:O1:46:ASP:OD1	15:O1:53:ILE:HD11	2.14	0.47
15:O5:14:VAL:N	15:O5:15:ILE:HA	2.26	0.47
32:Q1:34:VAL:N	32:Q1:37:ARG:O	2.25	0.47
32:Q2:47:LEU:O	32:Q2:49:TYR:N	2.47	0.47
33:R3:63:ARG:NH1	33:R3:63:ARG:HG2	2.27	0.47
33:R4:44:LYS:HG3	33:R4:47:ARG:NH2	2.27	0.47
33:R5:44:LYS:HG3	33:R5:47:ARG:NH2	2.27	0.47
34:S3:50:ILE:HD12	34:S3:67:VAL:HG23	1.83	0.47
1:T1:5:THR:OG1	1:T1:6:VAL:N	2.43	0.47
2:U3:50:VAL:HG23	2:U3:91:LEU:HD21	1.95	0.47
3:V5:16:LYS:HA	3:V5:23:ILE:HA	1.95	0.47
16:W4:76:SER:HB2	16:W4:77:PRO:HD3	1.96	0.47
17:Y5:15:ASN:HD21	17:Y5:20:ARG:NH2	2.12	0.47
17:Y5:17:LEU:HD22	25:E5:69:PHE:CE1	2.50	0.47
18:Z1:66:LYS:HA	18:Z1:111:ARG:HB3	1.95	0.47
18:Z4:85:ARG:CG	18:Z4:85:ARG:NH2	2.73	0.47
18:Z5:103:HIS:HE2	26:F5:91:ARG:HD2	1.79	0.47
18:Z6:84:ALA:O	18:Z6:88:LEU:HG	2.13	0.47
23:B1:71:LEU:HA	23:B1:74:LEU:HB3	1.97	0.47
10:C5:64:THR:OG1	10:C5:279:ARG:NH2	2.48	0.47
24:D3:71:ALA:O	24:D3:75:LYS:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D5:64:ARG:CG	29:K5:95:ARG:HH22	2.27	0.47
26:F3:158:ALA:HB2	26:F3:173:LEU:HB3	1.94	0.47
18:Z4:103:HIS:HE2	26:F4:91:ARG:HD2	1.79	0.47
11:G1:164:LYS:HD2	11:G1:167:LYS:HB2	1.97	0.47
11:G2:194:LEU:HA	11:G2:197:GLN:HB3	1.96	0.47
11:G3:14:LYS:HG2	11:G3:124:LEU:HD11	1.96	0.47
11:G5:139:SER:O	11:G5:142:ARG:CB	2.62	0.47
11:G6:139:SER:O	11:G6:142:ARG:CB	2.62	0.47
27:H1:72:PHE:HB3	27:H1:76:GLN:HG2	1.97	0.47
27:H2:72:PHE:HB3	27:H2:76:GLN:HG2	1.97	0.47
12:J1:86:VAL:HG21	12:J1:105:PHE:CE1	2.49	0.47
12:J5:86:VAL:HG21	12:J5:105:PHE:CE1	2.49	0.47
30:L5:16:ILE:HG23	30:L5:36:TYR:HB2	1.96	0.47
13:M4:101:ARG:HG3	13:M4:102:LYS:N	2.30	0.47
14:N5:84:LEU:HD23	14:N5:149:LEU:O	2.14	0.47
32:Q3:39:LEU:HD23	32:Q3:52:LEU:HA	1.96	0.47
33:R2:54:VAL:O	33:R2:58:MET:HB2	2.13	0.47
34:S3:128:GLY:O	34:S3:144:ARG:NH2	2.45	0.47
34:S5:50:ILE:CD1	34:S5:67:VAL:HG21	2.44	0.47
2:U2:50:VAL:HG23	2:U2:91:LEU:HD21	1.95	0.47
2:U3:49:LYS:C	2:U3:51:LYS:H	2.18	0.47
2:U4:50:VAL:HG23	2:U4:91:LEU:HD21	1.95	0.47
2:U5:19:ARG:NH2	2:U5:90:ASP:OD2	2.47	0.47
3:V5:66:ASP:OD1	3:V5:67:ASP:N	2.48	0.47
18:Z3:84:ALA:O	18:Z3:88:LEU:HG	2.13	0.47
18:Z6:103:HIS:HE2	26:F6:91:ARG:HD2	1.79	0.47
22:A4:212:LYS:HB3	22:A4:212:LYS:HE3	1.63	0.47
23:B3:173:THR:HG23	23:B3:177:GLN:OE1	2.14	0.47
23:B4:228:LEU:HG	23:B4:232:HIS:HB2	1.96	0.47
23:B4:71:LEU:HA	23:B4:74:LEU:HB3	1.97	0.47
23:B5:36:PRO:HD3	23:B5:98:THR:HG23	1.95	0.47
10:C2:273:LEU:CD1	10:C2:280:VAL:HG21	2.45	0.47
10:C4:125:LYS:HA	10:C4:143:CYS:HA	1.95	0.47
10:C4:272:HIS:O	10:C4:274:VAL:N	2.42	0.47
10:C5:196:ILE:HG23	10:C5:223:TYR:HB2	1.95	0.47
10:C6:64:THR:OG1	10:C6:279:ARG:NH2	2.48	0.47
25:E2:42:LEU:HG	25:E2:46:ILE:HD11	1.96	0.47
25:E4:42:LEU:HG	25:E4:46:ILE:HD11	1.96	0.47
26:F3:190:ILE:O	26:F3:194:ASP:N	2.48	0.47
11:G3:139:SER:O	11:G3:142:ARG:CB	2.62	0.47
27:H3:37:LYS:O	27:H3:39:GLN:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:H5:73:GLN:HB3	27:H5:135:PHE:CZ	2.48	0.47
28:I1:119:LEU:HD12	28:I1:153:LYS:HE3	1.97	0.47
12:J4:61:LEU:HD12	12:J4:70:ARG:HH22	1.79	0.47
24:D2:64:ARG:CG	29:K2:95:ARG:NH1	2.62	0.47
30:L6:5:GLN:O	30:L6:7:GLU:N	2.46	0.47
13:M1:101:ARG:HG3	13:M1:102:LYS:N	2.30	0.47
13:M1:71:GLU:HG2	17:Y2:130:LYS:CE	2.42	0.47
13:M5:120:ALA:O	13:M5:124:ILE:HG13	2.14	0.47
14:N6:84:LEU:HD23	14:N6:149:LEU:O	2.15	0.47
15:O5:14:VAL:HG11	15:O5:17:LEU:C	2.35	0.47
31:P1:41:GLN:CG	31:P1:84:ILE:HD13	2.45	0.47
1:T2:38:LYS:H	34:S2:39:ARG:HH22	1.62	0.47
2:U2:17:ILE:HG22	2:U2:18:HIS:N	2.25	0.47
2:U6:117:ALA:O	2:U6:118:ASP:HB2	2.13	0.47
2:U6:19:ARG:NH2	2:U6:90:ASP:OD2	2.47	0.47
3:V2:16:LYS:HA	3:V2:23:ILE:HA	1.95	0.47
3:V4:69:ILE:O	3:V4:73:ALA:N	2.38	0.47
3:V6:69:ILE:O	3:V6:73:ALA:N	2.38	0.47
16:W5:72:CYS:HA	16:W5:129:PHE:HA	1.96	0.47
17:Y3:58:PHE:O	17:Y3:72:PHE:N	2.32	0.47
17:Y4:15:ASN:HD21	17:Y4:20:ARG:NH2	2.12	0.47
22:A6:91:ALA:HB3	22:A6:98:PRO:HB3	1.96	0.47
23:B3:197:ILE:O	23:B3:201:CYS:N	2.35	0.47
10:C6:273:LEU:CD1	10:C6:280:VAL:HG21	2.44	0.47
24:D2:71:ALA:O	24:D2:75:LYS:N	2.47	0.47
24:D4:138:VAL:HB	24:D4:150:MET:HB3	1.97	0.47
24:D4:167:TYR:OH	24:D4:201:LYS:O	2.30	0.47
25:E1:56:LEU:HD23	25:E1:57:THR:HG23	1.97	0.47
25:E5:42:LEU:HG	25:E5:46:ILE:HD11	1.96	0.47
25:E6:42:LEU:HG	25:E6:46:ILE:HD11	1.96	0.47
26:F2:158:ALA:HB2	26:F2:173:LEU:HB3	1.95	0.47
26:F2:190:ILE:O	26:F2:194:ASP:N	2.48	0.47
26:F5:171:GLU:HA	26:F5:174:ALA:HB3	1.95	0.47
11:G3:210:ALA:O	11:G3:215:LYS:HB2	2.14	0.47
11:G3:209:TYR:HD1	11:G3:213:LEU:HD23	1.80	0.47
27:H4:88:SER:O	27:H4:90:LYS:N	2.42	0.47
12:J4:107:GLU:O	12:J4:112:THR:OG1	2.33	0.47
24:D3:64:ARG:CG	29:K3:95:ARG:NH1	2.63	0.47
29:K4:93:THR:CB	29:K4:95:ARG:HH12	2.24	0.47
29:K6:45:VAL:HA	29:K6:48:ALA:HB3	1.96	0.47
13:M1:120:ALA:O	13:M1:124:ILE:HG13	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M3:120:ALA:O	13:M3:124:ILE:HG13	2.14	0.47
14:N4:38:TYR:OH	14:N4:74:ILE:HG12	2.15	0.47
14:N5:85:PRO:HD2	14:N5:135:LEU:HD21	1.96	0.47
31:P3:41:GLN:CG	31:P3:84:ILE:HD13	2.44	0.47
33:R2:74:GLN:C	33:R2:76:GLU:N	2.68	0.47
33:R3:102:THR:O	33:R3:105:MET:HG2	2.15	0.47
31:P5:16:THR:HG22	34:S5:91:LYS:O	2.14	0.47
3:V3:16:LYS:HA	3:V3:23:ILE:HA	1.95	0.47
3:V4:66:ASP:OD1	3:V4:67:ASP:N	2.48	0.47
16:W1:72:CYS:HA	16:W1:129:PHE:HA	1.96	0.47
16:W2:72:CYS:HA	16:W2:129:PHE:HA	1.96	0.47
16:W3:72:CYS:HA	16:W3:129:PHE:HA	1.96	0.47
16:W5:10:ALA:O	16:W5:13:SER:OG	2.24	0.47
17:Y3:15:ASN:HD21	17:Y3:20:ARG:NH2	2.12	0.47
18:Z5:46:ASN:ND2	18:Z5:79:ILE:O	2.48	0.47
18:Z6:46:ASN:ND2	18:Z6:79:ILE:O	2.48	0.47
22:A3:214:GLU:HB2	22:A3:215:GLN:OE1	2.13	0.47
23:B5:228:LEU:HG	23:B5:232:HIS:HB2	1.96	0.47
23:B5:71:LEU:HA	23:B5:74:LEU:HB3	1.97	0.47
23:B6:173:THR:HG23	23:B6:177:GLN:OE1	2.14	0.47
24:D6:138:VAL:HB	24:D6:150:MET:HB3	1.97	0.47
11:G1:14:LYS:HG2	11:G1:124:LEU:HD11	1.96	0.47
11:G2:139:SER:O	11:G2:142:ARG:CB	2.62	0.47
11:G3:164:LYS:HD2	11:G3:167:LYS:HB2	1.97	0.47
11:G4:209:TYR:HD1	11:G4:213:LEU:HD23	1.79	0.47
11:G5:194:LEU:HA	11:G5:197:GLN:HB3	1.96	0.47
27:H1:37:LYS:O	27:H1:39:GLN:N	2.47	0.47
27:H6:37:LYS:O	27:H6:39:GLN:N	2.47	0.47
28:I6:8:TRP:HZ3	28:I6:20:PRO:HB3	1.78	0.47
12:J6:60:LEU:HD11	12:J6:70:ARG:HA	1.97	0.47
24:D5:64:ARG:CZ	29:K5:95:ARG:HH21	2.25	0.47
29:K6:51:SER:O	29:K6:54:SER:OG	2.25	0.47
23:B2:21:VAL:HG22	30:L4:31:GLU:O	1.98	0.47
30:L5:124:ASP:HB3	30:L5:147:LYS:CG	2.42	0.47
13:M6:125:GLU:O	13:M6:129:LYS:CG	2.63	0.47
13:M6:54:SER:OG	13:M6:78:LYS:HB3	2.14	0.47
15:O2:46:ASP:OD1	15:O2:53:ILE:HD11	2.14	0.47
15:O4:130:GLU:HG2	15:O4:131:ASP:N	2.29	0.47
31:P2:78:THR:HG22	31:P2:95:GLY:O	2.14	0.47
31:P6:78:THR:HG22	31:P6:95:GLY:O	2.14	0.47
32:Q6:47:LEU:O	32:Q6:49:TYR:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A2:214:GLU:CB	33:R2:84:TYR:CE1	2.98	0.47
34:S2:90:VAL:HG21	34:S2:113:ARG:NH1	2.30	0.47
2:U6:20:ILE:HD13	2:U6:116:ILE:O	2.15	0.47
3:V3:66:ASP:OD1	3:V3:67:ASP:N	2.48	0.47
3:V6:66:ASP:OD1	3:V6:67:ASP:N	2.48	0.47
4:X2:125:VAL:HG22	4:X2:126:ALA:H	1.78	0.47
18:Z4:84:ALA:O	18:Z4:88:LEU:HG	2.14	0.47
18:Z5:104:ARG:HH21	26:F5:91:ARG:HH12	1.62	0.47
22:A2:91:ALA:HB3	22:A2:98:PRO:HB3	1.95	0.47
3:V3:70:LEU:HD21	22:A3:57:LYS:HD3	1.97	0.47
10:C1:188:CYS:SG	10:C1:191:VAL:HB	2.55	0.47
10:C1:64:THR:OG1	10:C1:279:ARG:NH2	2.48	0.47
10:C4:64:THR:OG1	10:C4:279:ARG:NH2	2.48	0.47
24:D2:138:VAL:HB	24:D2:150:MET:HB3	1.97	0.47
24:D4:95:GLY:O	24:D4:97:CYS:N	2.48	0.47
26:F1:190:ILE:O	26:F1:194:ASP:N	2.48	0.47
18:Z3:103:HIS:HE2	26:F3:91:ARG:HD2	1.79	0.47
11:G4:139:SER:HA	11:G4:142:ARG:CD	2.43	0.47
27:H5:147:LYS:O	27:H5:149:ASP:N	2.48	0.47
28:I4:80:ASP:OD1	28:I4:81:VAL:N	2.48	0.47
12:J1:60:LEU:HD11	12:J1:70:ARG:HA	1.97	0.47
12:J5:61:LEU:HD12	12:J5:70:ARG:HH22	1.79	0.47
29:K2:10:ALA:O	29:K2:14:LEU:N	2.37	0.47
24:D6:64:ARG:CZ	29:K6:95:ARG:HH21	2.26	0.47
30:L1:152:LYS:N	30:L1:152:LYS:HD2	2.29	0.47
13:M4:125:GLU:O	13:M4:129:LYS:CG	2.63	0.47
14:N3:84:LEU:HD23	14:N3:149:LEU:O	2.15	0.47
14:N5:39:LYS:HA	14:N5:42:LYS:HZ2	1.80	0.47
31:P3:115:TYR:N	31:P3:115:TYR:CD2	2.73	0.47
31:P4:57:LEU:HD23	31:P4:61:ARG:NH2	2.30	0.47
31:P6:15:PHE:CE2	31:P6:17:TYR:HB2	2.50	0.47
33:R2:102:THR:O	33:R2:105:MET:HG2	2.15	0.47
33:R6:102:THR:O	33:R6:105:MET:HG2	2.15	0.47
34:S2:6:PRO:CD	34:S2:58:GLU:HG2	2.42	0.47
34:S4:50:ILE:CD1	34:S4:67:VAL:HG21	2.44	0.47
1:T6:35:ASP:CB	34:S6:46:ARG:NE	2.62	0.47
2:U5:20:ILE:HD13	2:U5:116:ILE:O	2.15	0.47
17:Y2:15:ASN:HD21	17:Y2:20:ARG:NH2	2.12	0.47
22:A2:27:GLY:HA3	22:A2:150:THR:OG1	2.15	0.47
22:A5:15:VAL:HG23	22:A5:16:LEU:HD12	1.96	0.47
23:B2:228:LEU:HG	23:B2:232:HIS:HB2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B5:173:THR:HG23	23:B5:177:GLN:OE1	2.14	0.47
10:C2:68:ARG:CD	10:C2:277:HIS:HB3	2.36	0.47
10:C2:64:THR:OG1	10:C2:279:ARG:NH2	2.48	0.47
10:C4:246:LYS:O	10:C4:249:SER:OG	2.31	0.47
24:D3:138:VAL:HB	24:D3:150:MET:HB3	1.97	0.47
24:D4:71:ALA:O	24:D4:75:LYS:N	2.47	0.47
24:D6:95:GLY:O	24:D6:97:CYS:N	2.47	0.47
26:F5:137:GLN:O	26:F5:138:ALA:CB	2.63	0.47
11:G2:210:ALA:O	11:G2:215:LYS:HB2	2.14	0.47
11:G2:220:ALA:HA	11:G2:223:LYS:NZ	2.29	0.47
11:G3:209:TYR:HB3	11:G3:214:ALA:HB2	1.97	0.47
11:G4:181:THR:HG22	11:G4:184:VAL:HG23	1.97	0.47
11:G5:220:ALA:HA	11:G5:223:LYS:NZ	2.29	0.47
27:H3:72:PHE:HB3	27:H3:76:GLN:HG2	1.97	0.47
27:H4:147:LYS:O	27:H4:149:ASP:N	2.48	0.47
27:H5:37:LYS:O	27:H5:39:GLN:N	2.47	0.47
28:I1:130:THR:HB	28:I1:131:PRO:HD3	1.96	0.47
28:I4:79:ILE:HG21	28:I4:170:LYS:HD3	1.96	0.47
12:J1:49:THR:O	12:J1:53:ILE:HG12	2.15	0.47
12:J4:49:THR:O	12:J4:53:ILE:HG12	2.15	0.47
12:J5:109:ARG:O	12:J5:112:THR:OG1	2.32	0.47
13:M1:125:GLU:O	13:M1:129:LYS:CG	2.63	0.47
13:M3:125:GLU:O	13:M3:129:LYS:CG	2.63	0.47
13:M4:120:ALA:O	13:M4:124:ILE:HG13	2.14	0.47
14:N4:40:LEU:HD22	14:N4:45:LEU:HD12	1.95	0.47
14:N5:38:TYR:OH	14:N5:74:ILE:HG12	2.15	0.47
15:O1:14:VAL:HG11	15:O1:17:LEU:C	2.35	0.47
15:O3:99:ALA:O	15:O3:101:GLY:N	2.48	0.47
15:O4:147:ARG:HD2	15:O4:150:ARG:NE	2.30	0.47
15:O4:14:VAL:HG11	15:O4:17:LEU:C	2.35	0.47
31:P1:15:PHE:CE2	31:P1:17:TYR:HB2	2.50	0.47
31:P3:121:ILE:HD11	31:P3:123:TYR:HE2	0.58	0.47
31:P3:57:LEU:HD23	31:P3:61:ARG:NH2	2.30	0.47
31:P5:78:THR:HG22	31:P5:95:GLY:O	2.14	0.47
32:Q1:4:LYS:HZ3	32:Q1:99:TYR:HA	1.65	0.47
33:R1:27:ASP:O	33:R1:30:THR:OG1	2.24	0.47
33:R2:86:PRO:O	33:R2:89:SER:OG	2.16	0.47
33:R4:41:ILE:HD13	33:R4:47:ARG:HB2	1.96	0.47
34:S1:90:VAL:HG21	34:S1:113:ARG:NH1	2.30	0.47
1:T1:33:TRP:HH2	1:T1:102:ARG:HH11	1.61	0.47
2:U1:20:ILE:HD13	2:U1:116:ILE:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U2:20:ILE:HD13	2:U2:116:ILE:O	2.15	0.47
2:U4:20:ILE:HD13	2:U4:116:ILE:O	2.15	0.47
3:V1:66:ASP:OD1	3:V1:67:ASP:N	2.48	0.47
17:Y4:88:LYS:HZ3	17:Y4:97:TYR:HD2	1.61	0.47
18:Z1:66:LYS:HD3	26:F1:102:LEU:O	2.15	0.47
18:Z4:104:ARG:HH21	26:F4:91:ARG:HH12	1.62	0.47
18:Z6:66:LYS:HD3	26:F6:102:LEU:O	2.15	0.47
3:V4:70:LEU:HD21	22:A4:57:LYS:HD3	1.97	0.47
22:A6:15:VAL:HG23	22:A6:16:LEU:HD12	1.95	0.47
22:A6:217:ALA:HB1	22:A6:220:LYS:CE	2.34	0.47
10:C5:188:CYS:SG	10:C5:191:VAL:HB	2.55	0.47
24:D5:71:ALA:HB1	24:D5:75:LYS:HD2	1.97	0.47
25:E5:99:PHE:CD1	25:E5:113:ARG:HG2	2.50	0.47
11:G1:194:LEU:HA	11:G1:197:GLN:HB3	1.96	0.47
11:G4:14:LYS:HG2	11:G4:124:LEU:HD11	1.96	0.47
27:H4:37:LYS:O	27:H4:39:GLN:N	2.47	0.47
28:I4:119:LEU:HD12	28:I4:153:LYS:HE3	1.97	0.47
12:J2:49:THR:O	12:J2:53:ILE:HG12	2.15	0.47
12:J2:60:LEU:HD11	12:J2:70:ARG:HA	1.97	0.47
12:J3:86:VAL:HG21	12:J3:105:PHE:CE1	2.49	0.47
12:J5:136:ARG:HA	12:J5:141:VAL:HA	1.97	0.47
12:J5:60:LEU:HD11	12:J5:70:ARG:HA	1.97	0.47
12:J5:83:ARG:HG3	12:J5:150:ARG:NE	2.30	0.47
29:K1:57:TYR:O	29:K1:72:THR:OG1	2.19	0.47
30:L2:5:GLN:O	30:L2:7:GLU:N	2.46	0.47
30:L4:126:VAL:CG2	30:L4:145:VAL:HG22	2.45	0.47
13:M5:54:SER:OG	13:M5:78:LYS:HB3	2.14	0.47
13:M6:101:ARG:HG3	13:M6:102:LYS:N	2.30	0.47
14:N1:43:LYS:H	14:N1:43:LYS:HG2	1.48	0.47
14:N2:84:LEU:HD23	14:N2:149:LEU:O	2.15	0.47
14:N2:38:TYR:OH	14:N2:74:ILE:HG12	2.15	0.47
31:P5:57:LEU:HD23	31:P5:61:ARG:NH2	2.30	0.47
32:Q3:47:LEU:O	32:Q3:49:TYR:N	2.47	0.47
22:A2:214:GLU:CD	33:R2:84:TYR:CG	2.89	0.47
34:S4:90:VAL:HG21	34:S4:113:ARG:NH1	2.30	0.47
1:T5:38:LYS:H	34:S5:39:ARG:HH22	1.62	0.47
2:U3:17:ILE:HG21	2:U3:94:PRO:CB	2.38	0.47
3:V4:16:LYS:HA	3:V4:23:ILE:HA	1.96	0.47
16:W3:111:MET:HB2	16:W3:115:GLU:CD	2.36	0.47
18:Z3:104:ARG:HH21	26:F3:91:ARG:HH12	1.62	0.47
18:Z3:46:ASN:ND2	18:Z3:79:ILE:O	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z4:66:LYS:HD3	26:F4:102:LEU:O	2.15	0.47
23:B5:97:LEU:HD22	23:B5:232:HIS:CD2	2.49	0.46
10:C5:273:LEU:HD12	10:C5:280:VAL:HG21	1.97	0.46
18:Z6:104:ARG:HH21	26:F6:91:ARG:HH12	1.62	0.46
11:G3:220:ALA:HA	11:G3:223:LYS:NZ	2.29	0.46
11:G5:209:TYR:HB3	11:G5:214:ALA:HB2	1.98	0.46
11:G6:14:LYS:HG2	11:G6:124:LEU:HD11	1.96	0.46
27:H6:147:LYS:O	27:H6:149:ASP:N	2.48	0.46
27:H6:72:PHE:HB3	27:H6:76:GLN:HG2	1.97	0.46
28:I1:80:ASP:OD1	28:I1:81:VAL:N	2.48	0.46
28:I2:130:THR:HB	28:I2:131:PRO:HD3	1.96	0.46
28:I6:119:LEU:HD12	28:I6:153:LYS:HE3	1.97	0.46
12:J2:136:ARG:HA	12:J2:141:VAL:HA	1.97	0.46
30:L1:57:ASP:OD1	30:L1:58:LYS:N	2.49	0.46
23:B4:21:VAL:CB	30:L5:31:GLU:CG	2.75	0.46
13:M2:125:GLU:O	13:M2:129:LYS:CG	2.63	0.46
13:M3:54:SER:OG	13:M3:78:LYS:HB3	2.14	0.46
14:N1:84:LEU:HD23	14:N1:149:LEU:O	2.15	0.46
14:N4:84:LEU:HD23	14:N4:149:LEU:O	2.15	0.46
14:N6:23:PRO:HD2	14:N6:26:LEU:HD23	1.97	0.46
15:O5:99:ALA:O	15:O5:101:GLY:N	2.48	0.46
15:O6:99:ALA:O	15:O6:101:GLY:N	2.48	0.46
31:P3:115:TYR:CZ	31:P3:118:GLU:HB2	2.50	0.46
2:U3:77:TRP:HD1	32:Q3:132:PHE:HB2	1.80	0.46
33:R2:119:VAL:HA	33:R2:120:THR:HA	1.71	0.46
22:A4:214:GLU:CB	33:R4:84:TYR:CE1	2.98	0.46
1:T2:28:LEU:HD13	1:T2:54:TYR:CD2	2.50	0.46
1:T6:28:LEU:HD13	1:T6:54:TYR:CD2	2.50	0.46
2:U3:17:ILE:HG22	2:U3:18:HIS:N	2.25	0.46
2:U3:86:LYS:O	2:U3:87:ARG:NH2	2.44	0.46
2:U4:19:ARG:NH2	2:U4:90:ASP:OD2	2.48	0.46
2:U5:77:TRP:HD1	32:Q5:132:PHE:HB2	1.80	0.46
2:U6:49:LYS:C	2:U6:51:LYS:H	2.18	0.46
22:A4:173:LEU:HB2	22:A4:203:PHE:HE1	1.80	0.46
22:A4:211:GLU:HG3	33:R4:81:ARG:HH21	1.60	0.46
22:A5:9:GLN:O	22:A5:11:LYS:HG2	2.16	0.46
10:C1:273:LEU:CD1	10:C1:280:VAL:HG21	2.44	0.46
10:C3:191:VAL:HA	10:C3:228:GLY:HA3	1.98	0.46
3:V3:50:PHE:HZ	10:C3:267:GLN:HE22	1.60	0.46
10:C4:273:LEU:HD12	10:C4:280:VAL:HG21	1.97	0.46
24:D3:35:SER:HB2	24:D3:51:LEU:O	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D4:106:ARG:O	24:D4:110:LEU:N	2.39	0.46
24:D6:56:GLN:HA	24:D6:59:LEU:HD13	1.98	0.46
25:E2:56:LEU:HD23	25:E2:57:THR:HG23	1.97	0.46
25:E3:42:LEU:HG	25:E3:46:ILE:HD11	1.96	0.46
25:E6:99:PHE:CD1	25:E6:113:ARG:HG2	2.50	0.46
25:E6:125:LYS:HG2	25:E6:126:VAL:O	2.15	0.46
26:F4:190:ILE:O	26:F4:194:ASP:N	2.48	0.46
26:F5:127:ARG:NE	26:F5:128:ILE:HG23	2.17	0.46
11:G2:14:LYS:HG2	11:G2:124:LEU:HD11	1.96	0.46
11:G3:181:THR:HG22	11:G3:184:VAL:HG23	1.97	0.46
27:H5:121:THR:HG22	27:H5:123:THR:H	1.81	0.46
28:I1:79:ILE:HG21	28:I1:170:LYS:HD3	1.96	0.46
28:I3:191:GLU:HA	28:I3:195:LEU:CD2	2.45	0.46
28:I6:130:THR:HB	28:I6:131:PRO:HD3	1.96	0.46
28:I6:80:ASP:OD1	28:I6:81:VAL:N	2.48	0.46
12:J2:83:ARG:HG3	12:J2:150:ARG:NE	2.30	0.46
12:J3:50:LEU:HD13	12:J3:102:ILE:HD13	1.97	0.46
12:J4:83:ARG:HG3	12:J4:150:ARG:NE	2.30	0.46
29:K6:93:THR:CB	29:K6:95:ARG:NH1	2.79	0.46
30:L1:16:ILE:HG23	30:L1:36:TYR:HB2	1.97	0.46
13:M2:27:ILE:HG23	29:K2:84:HIS:CG	2.41	0.46
14:N3:38:TYR:OH	14:N3:74:ILE:HG12	2.15	0.46
15:O6:14:VAL:HG11	15:O6:17:LEU:C	2.35	0.46
31:P1:57:LEU:HD23	31:P1:61:ARG:NH2	2.30	0.46
31:P4:44:ARG:HH11	31:P4:44:ARG:CG	2.28	0.46
33:R1:65:PRO:HB3	33:R1:74:GLN:HE21	1.75	0.46
33:R3:119:VAL:HA	33:R3:120:THR:HA	1.72	0.46
33:R5:77:GLU:HG2	33:R5:81:ARG:CG	2.44	0.46
22:A5:214:GLU:CD	33:R5:84:TYR:CG	2.89	0.46
33:R6:94:GLU:HA	33:R6:96:ILE:HG12	1.98	0.46
34:S1:50:ILE:CD1	34:S1:67:VAL:HG21	2.44	0.46
34:S2:50:ILE:CD1	34:S2:67:VAL:HG21	2.44	0.46
1:T5:28:LEU:HD13	1:T5:54:TYR:CD2	2.50	0.46
2:U1:19:ARG:NH2	2:U1:90:ASP:OD2	2.47	0.46
3:V2:66:ASP:OD1	3:V2:67:ASP:N	2.48	0.46
16:W4:111:MET:CE	16:W4:119:LYS:HZ2	2.28	0.46
17:Y1:9:THR:H	17:Y1:26:ASP:HB3	1.80	0.46
17:Y5:9:THR:H	17:Y5:26:ASP:HB3	1.80	0.46
18:Z1:103:HIS:HE2	26:F1:91:ARG:HD2	1.79	0.46
18:Z5:66:LYS:HD3	26:F5:102:LEU:O	2.15	0.46
22:A4:9:GLN:O	22:A4:11:LYS:HG2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A5:173:LEU:HB2	22:A5:203:PHE:HE1	1.80	0.46
22:A6:173:LEU:HB2	22:A6:203:PHE:HE1	1.80	0.46
23:B3:228:LEU:HG	23:B3:232:HIS:HB2	1.96	0.46
10:C5:191:VAL:HA	10:C5:228:GLY:HA3	1.97	0.46
10:C6:188:CYS:SG	10:C6:191:VAL:HB	2.55	0.46
24:D1:138:VAL:HB	24:D1:150:MET:HB3	1.97	0.46
24:D2:95:GLY:O	24:D2:97:CYS:N	2.48	0.46
25:E1:125:LYS:HG2	25:E1:126:VAL:O	2.15	0.46
25:E1:42:LEU:HG	25:E1:46:ILE:HD11	1.96	0.46
25:E2:71:LYS:HD3	25:E2:74:GLY:HA2	1.98	0.46
25:E3:99:PHE:CD1	25:E3:113:ARG:HG2	2.50	0.46
25:E4:56:LEU:HD23	25:E4:57:THR:HG23	1.97	0.46
25:E5:19:MET:HE1	25:E5:108:ARG:HH11	1.81	0.46
25:E6:141:THR:OG1	25:E6:145:ARG:N	2.49	0.46
26:F1:88:MET:HB2	26:F1:91:ARG:NH2	2.31	0.46
26:F3:137:GLN:O	26:F3:138:ALA:CB	2.62	0.46
11:G1:209:TYR:HD1	11:G1:213:LEU:HD23	1.80	0.46
11:G2:153:VAL:C	11:G2:155:GLN:N	2.69	0.46
11:G4:149:LYS:NZ	11:G4:149:LYS:CB	2.74	0.46
11:G6:148:SER:OG	11:G6:149:LYS:HA	2.16	0.46
11:G6:209:TYR:HB3	11:G6:214:ALA:HB2	1.98	0.46
27:H1:98:ARG:O	27:H1:100:ILE:N	2.48	0.46
27:H2:147:LYS:O	27:H2:149:ASP:N	2.48	0.46
12:J3:83:ARG:HG3	12:J3:150:ARG:NE	2.30	0.46
12:J3:60:LEU:HD11	12:J3:70:ARG:HA	1.97	0.46
12:J4:136:ARG:HA	12:J4:141:VAL:HA	1.97	0.46
12:J6:107:GLU:O	12:J6:112:THR:OG1	2.33	0.46
12:J6:136:ARG:HA	12:J6:141:VAL:HA	1.97	0.46
29:K2:58:VAL:CG2	29:K2:69:TRP:HB3	2.45	0.46
28:I3:193:LYS:HE3	30:L3:32:LYS:NZ	2.30	0.46
30:L4:135:SER:HB3	30:L4:138:VAL:HB	1.97	0.46
14:N4:131:THR:O	30:L4:152:LYS:CG	2.63	0.46
30:L6:152:LYS:N	30:L6:152:LYS:CD	2.77	0.46
13:M5:125:GLU:O	13:M5:129:LYS:N	2.48	0.46
13:M5:125:GLU:O	13:M5:129:LYS:CG	2.63	0.46
15:O1:130:GLU:HG2	15:O1:131:ASP:N	2.29	0.46
15:O6:17:LEU:CD2	15:O6:18:GLY:H	2.22	0.46
31:P1:115:TYR:CZ	31:P1:118:GLU:HB2	2.51	0.46
31:P3:45:LEU:HD11	31:P3:49:LEU:HD21	1.97	0.46
32:Q5:96:TYR:HA	32:Q5:100:VAL:HG22	1.95	0.46
33:R3:58:MET:HA	33:R3:61:ILE:HD11	1.95	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R5:119:VAL:HA	33:R5:120:THR:HA	1.72	0.46
33:R5:94:GLU:HA	33:R5:96:ILE:HG12	1.97	0.46
34:S6:16:LEU:HD21	34:S6:72:GLN:NE2	2.29	0.46
1:T1:28:LEU:HD13	1:T1:54:TYR:CD2	2.50	0.46
1:T4:34:VAL:HG23	1:T4:35:ASP:H	1.80	0.46
2:U4:49:LYS:C	2:U4:51:LYS:H	2.18	0.46
3:V5:70:LEU:HD21	22:A5:57:LYS:HD3	1.97	0.46
16:W1:2:VAL:O	16:W1:4:MET:N	2.46	0.46
4:X4:107:ARG:HD3	4:X4:112:VAL:HB	1.97	0.46
18:Z2:46:ASN:ND2	18:Z2:79:ILE:O	2.48	0.46
22:A4:27:GLY:HA3	22:A4:150:THR:OG1	2.15	0.46
10:C1:273:LEU:HD12	10:C1:280:VAL:HG21	1.97	0.46
10:C5:196:ILE:CG2	10:C5:223:TYR:HB2	2.46	0.46
10:C6:273:LEU:HD12	10:C6:280:VAL:HG21	1.97	0.46
24:D2:64:ARG:HG3	29:K2:95:ARG:HH22	1.76	0.46
24:D4:35:SER:HB2	24:D4:51:LEU:O	2.15	0.46
25:E3:124:CYS:SG	25:E3:141:THR:HB	2.56	0.46
25:E4:99:PHE:CD1	25:E4:113:ARG:HG2	2.51	0.46
25:E5:141:THR:OG1	25:E5:145:ARG:N	2.49	0.46
26:F1:179:ASN:O	26:F1:183:GLY:HA2	2.16	0.46
26:F1:185:SER:O	26:F1:191:LYS:NZ	2.33	0.46
26:F5:128:ILE:N	26:F5:137:GLN:OE1	2.35	0.46
11:G1:181:THR:HG22	11:G1:184:VAL:HG23	1.98	0.46
27:H5:65:PRO:HB2	27:H5:68:GLN:HE22	1.81	0.46
27:H5:72:PHE:HB3	27:H5:76:GLN:HG2	1.97	0.46
12:J2:50:LEU:HD13	12:J2:102:ILE:HD13	1.98	0.46
12:J5:49:THR:O	12:J5:53:ILE:HG12	2.15	0.46
12:J6:83:ARG:HG3	12:J6:150:ARG:NE	2.30	0.46
29:K1:32:HIS:N	29:K1:41:PRO:HA	2.22	0.46
29:K4:93:THR:CB	29:K4:95:ARG:NH1	2.79	0.46
24:D5:76:ARG:HD3	29:K5:22:VAL:HB	1.97	0.46
14:N1:38:TYR:OH	14:N1:74:ILE:HG12	2.15	0.46
14:N1:91:LEU:HD11	14:N1:121:ARG:HD2	1.98	0.46
14:N2:91:LEU:HD11	14:N2:121:ARG:HD2	1.98	0.46
15:O4:43:HIS:HA	15:O4:55:ARG:HA	1.97	0.46
31:P6:41:GLN:CA	31:P6:84:ILE:HD13	2.45	0.46
33:R2:94:GLU:HA	33:R2:96:ILE:HG12	1.98	0.46
34:S3:90:VAL:HG21	34:S3:113:ARG:NH1	2.31	0.46
1:T1:34:VAL:HG23	1:T1:35:ASP:H	1.81	0.46
2:U2:86:LYS:O	2:U2:87:ARG:NH2	2.45	0.46
3:V1:70:LEU:HD21	22:A1:57:LYS:HD3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y1:15:ASN:HD21	17:Y1:20:ARG:NH2	2.12	0.46
18:Z2:66:LYS:HD3	26:F2:102:LEU:O	2.15	0.46
22:A3:27:GLY:HA3	22:A3:150:THR:OG1	2.15	0.46
22:A3:173:LEU:HB2	22:A3:203:PHE:HE1	1.80	0.46
22:A3:214:GLU:CD	33:R3:84:TYR:CG	2.89	0.46
22:A6:27:GLY:HA3	22:A6:150:THR:OG1	2.15	0.46
10:C1:65:LYS:HZ2	10:C1:280:VAL:HB	1.80	0.46
10:C2:191:VAL:HA	10:C2:228:GLY:HA3	1.98	0.46
10:C2:273:LEU:HD12	10:C2:280:VAL:HG21	1.97	0.46
24:D1:71:ALA:HB1	24:D1:75:LYS:HD2	1.98	0.46
24:D3:106:ARG:HG3	24:D3:107:TYR:N	2.30	0.46
24:D3:54:ARG:HB2	24:D3:58:VAL:HG13	1.98	0.46
25:E1:71:LYS:HD3	25:E1:74:GLY:HA2	1.98	0.46
25:E3:71:LYS:HD3	25:E3:74:GLY:HA2	1.98	0.46
26:F2:137:GLN:O	26:F2:138:ALA:CB	2.63	0.46
11:G1:148:SER:OG	11:G1:149:LYS:HA	2.16	0.46
11:G6:210:ALA:O	11:G6:215:LYS:HB2	2.14	0.46
28:I2:79:ILE:HG21	28:I2:170:LYS:HD3	1.97	0.46
28:I3:142:SER:O	28:I3:144:LYS:N	2.47	0.46
28:I3:79:ILE:HG21	28:I3:170:LYS:HD3	1.97	0.46
12:J1:83:ARG:HG3	12:J1:150:ARG:NE	2.30	0.46
12:J4:58:ARG:O	12:J4:62:THR:HG23	2.16	0.46
30:L2:135:SER:HB3	30:L2:138:VAL:HB	1.97	0.46
30:L3:57:ASP:OD1	30:L3:58:LYS:N	2.49	0.46
30:L5:135:SER:HB3	30:L5:138:VAL:HB	1.97	0.46
13:M2:101:ARG:HG3	13:M2:102:LYS:N	2.30	0.46
13:M5:101:ARG:HG3	13:M5:102:LYS:N	2.30	0.46
14:N2:141:TYR:HE1	14:N2:146:ALA:HB1	1.81	0.46
14:N5:136:PRO:HB2	14:N5:139:TRP:HB2	1.97	0.46
15:O1:43:HIS:HA	15:O1:55:ARG:HA	1.97	0.46
15:O2:99:ALA:O	15:O2:101:GLY:N	2.48	0.46
31:P2:115:TYR:CZ	31:P2:118:GLU:HB2	2.50	0.46
31:P2:15:PHE:CE2	31:P2:17:TYR:HB2	2.50	0.46
22:A3:214:GLU:CB	33:R3:84:TYR:CE1	2.99	0.46
33:R3:94:GLU:HA	33:R3:96:ILE:HG12	1.97	0.46
33:R4:68:GLY:HA3	33:R4:69:ILE:HA	1.71	0.46
34:S5:90:VAL:HG21	34:S5:113:ARG:NH1	2.30	0.46
34:S6:90:VAL:HG21	34:S6:113:ARG:NH1	2.30	0.46
1:T5:34:VAL:HG23	1:T5:35:ASP:H	1.81	0.46
2:U5:17:ILE:HG23	2:U5:95:SER:N	1.91	0.46
3:V2:70:LEU:HD21	22:A2:57:LYS:HD3	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:V3:69:ILE:O	3:V3:73:ALA:N	2.38	0.46
16:W6:33:VAL:HG13	16:W6:34:ILE:HG23	1.98	0.46
17:Y3:9:THR:H	17:Y3:26:ASP:HB3	1.81	0.46
17:Y4:9:THR:H	17:Y4:26:ASP:HB3	1.81	0.46
18:Z4:46:ASN:ND2	18:Z4:79:ILE:O	2.48	0.46
10:C3:188:CYS:SG	10:C3:191:VAL:HB	2.55	0.46
10:C4:191:VAL:HA	10:C4:228:GLY:HA3	1.98	0.46
10:C4:275:LYS:CE	10:C4:275:LYS:HA	2.46	0.46
24:D2:56:GLN:HA	24:D2:59:LEU:HD13	1.98	0.46
24:D5:54:ARG:HB2	24:D5:58:VAL:HG13	1.98	0.46
24:D5:76:ARG:HH21	29:K5:66:HIS:CE1	2.34	0.46
25:E3:141:THR:OG1	25:E3:145:ARG:N	2.49	0.46
25:E6:56:LEU:HD23	25:E6:57:THR:HG23	1.97	0.46
26:F2:106:GLU:HG2	26:F2:107:ASN:N	2.28	0.46
26:F6:191:LYS:HA	26:F6:194:ASP:CB	2.46	0.46
11:G1:36:VAL:N	11:G1:50:VAL:O	2.47	0.46
11:G6:194:LEU:O	11:G6:198:ARG:N	2.43	0.46
27:H3:121:THR:HG22	27:H3:123:THR:H	1.81	0.46
27:H3:147:LYS:O	27:H3:149:ASP:N	2.48	0.46
27:H4:72:PHE:HB3	27:H4:76:GLN:HG2	1.97	0.46
28:I3:130:THR:HB	28:I3:131:PRO:HD3	1.96	0.46
12:J3:136:ARG:HA	12:J3:141:VAL:HA	1.97	0.46
12:J6:58:ARG:O	12:J6:62:THR:HG23	2.16	0.46
29:K1:93:THR:CB	29:K1:95:ARG:NH1	2.79	0.46
24:D1:64:ARG:HD3	29:K1:95:ARG:NH2	2.24	0.46
29:K5:58:VAL:CG2	29:K5:69:TRP:HB3	2.46	0.46
30:L4:57:ASP:OD1	30:L4:58:LYS:N	2.49	0.46
14:N1:141:TYR:HE1	14:N1:146:ALA:HB1	1.80	0.46
14:N5:141:TYR:HE1	14:N5:146:ALA:HB1	1.80	0.46
15:O4:99:ALA:O	15:O4:101:GLY:N	2.48	0.46
31:P4:108:LYS:HB3	31:P4:109:PRO:CD	2.40	0.46
31:P5:119:PHE:CD1	34:S5:119:ALA:CA	2.99	0.46
33:R2:44:LYS:HG3	33:R2:47:ARG:NH2	2.28	0.46
33:R4:102:THR:O	33:R4:105:MET:HG2	2.15	0.46
34:S4:16:LEU:HD21	34:S4:72:GLN:NE2	2.29	0.46
2:U5:50:VAL:HG23	2:U5:91:LEU:HD21	1.95	0.46
16:W4:33:VAL:HG13	16:W4:34:ILE:HG23	1.98	0.46
4:X1:90:CYS:HB3	4:X1:130:LEU:HD11	1.98	0.46
22:A1:104:THR:OG1	22:A1:107:THR:OG1	2.25	0.46
22:A1:173:LEU:HB2	22:A1:203:PHE:HE1	1.80	0.46
22:A2:173:LEU:HB2	22:A2:203:PHE:HE1	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A4:104:THR:HG1	22:A4:107:THR:HG1	1.60	0.46
23:B6:71:LEU:HA	23:B6:74:LEU:HB3	1.97	0.46
10:C2:65:LYS:HG2	10:C2:279:ARG:HE	1.77	0.46
10:C4:65:LYS:HG2	10:C4:279:ARG:HE	1.78	0.46
24:D1:54:ARG:HB2	24:D1:58:VAL:HG13	1.98	0.46
24:D4:35:SER:H	24:D4:52:ALA:HA	1.81	0.46
24:D4:54:ARG:HB2	24:D4:58:VAL:HG13	1.98	0.46
24:D5:106:ARG:HB3	24:D5:175:VAL:HG12	1.97	0.46
25:E4:82:TYR:CD1	25:E4:83:PRO:HD2	2.51	0.46
25:E5:82:TYR:CD1	25:E5:83:PRO:HD2	2.51	0.46
26:F3:191:LYS:HA	26:F3:194:ASP:CB	2.46	0.46
26:F4:125:SER:OG	26:F4:137:GLN:O	2.32	0.46
11:G2:148:SER:OG	11:G2:149:LYS:HA	2.16	0.46
11:G2:181:THR:HG22	11:G2:184:VAL:HG23	1.97	0.46
11:G3:152:ASP:OD1	11:G3:155:GLN:HG2	2.16	0.46
11:G5:181:THR:HG22	11:G5:184:VAL:HG23	1.98	0.46
28:I6:81:VAL:HG22	28:I6:102:VAL:HG12	1.98	0.46
12:J3:49:THR:O	12:J3:53:ILE:HG12	2.15	0.46
29:K1:58:VAL:CG2	29:K1:69:TRP:HB3	2.46	0.46
29:K5:93:THR:CB	29:K5:95:ARG:NH1	2.79	0.46
24:D6:76:ARG:HD3	29:K6:22:VAL:HB	1.98	0.46
30:L1:135:SER:HB3	30:L1:138:VAL:HB	1.97	0.46
30:L4:152:LYS:H	30:L4:152:LYS:HD2	1.80	0.46
30:L6:135:SER:HB3	30:L6:138:VAL:HB	1.97	0.46
14:N4:91:LEU:HD11	14:N4:121:ARG:HD2	1.98	0.46
15:O2:14:VAL:HG11	15:O2:17:LEU:C	2.35	0.46
15:O6:130:GLU:HG2	15:O6:131:ASP:N	2.28	0.46
33:R5:102:THR:O	33:R5:105:MET:HG2	2.15	0.46
34:S3:16:LEU:HD21	34:S3:72:GLN:NE2	2.29	0.46
1:T4:28:LEU:HD13	1:T4:54:TYR:CD2	2.50	0.46
2:U1:49:LYS:C	2:U1:51:LYS:H	2.18	0.46
16:W5:27:ILE:HG12	16:W5:61:ILE:HB	1.98	0.46
4:X2:91:LEU:O	4:X2:94:ILE:HG22	2.16	0.46
4:X3:91:LEU:O	4:X3:94:ILE:HG22	2.16	0.46
4:X4:91:LEU:O	4:X4:94:ILE:HG22	2.16	0.46
17:Y2:109:GLU:CD	17:Y2:113:ARG:HD2	2.31	0.46
17:Y2:9:THR:H	17:Y2:26:ASP:HB3	1.80	0.46
22:A1:27:GLY:HA3	22:A1:150:THR:OG1	2.15	0.46
22:A4:149:ASN:HB2	22:A4:165:ASN:OD1	2.16	0.46
22:A5:27:GLY:HA3	22:A5:150:THR:OG1	2.15	0.46
23:B1:197:ILE:O	23:B1:201:CYS:N	2.35	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B1:33:VAL:HG13	23:B1:96:CYS:O	2.16	0.46
23:B2:71:LEU:HA	23:B2:74:LEU:HB3	1.97	0.46
10:C1:272:HIS:O	10:C1:274:VAL:N	2.42	0.46
10:C2:246:LYS:O	10:C2:249:SER:OG	2.31	0.46
10:C3:64:THR:OG1	10:C3:279:ARG:NH2	2.48	0.46
10:C3:65:LYS:HZ2	10:C3:280:VAL:HB	1.78	0.46
10:C6:142:LYS:NZ	10:C6:153:GLY:C	2.69	0.46
24:D1:56:GLN:HA	24:D1:59:LEU:HD13	1.98	0.46
24:D5:35:SER:H	24:D5:52:ALA:HA	1.81	0.46
25:E1:19:MET:HE1	25:E1:108:ARG:HH11	1.80	0.46
25:E1:82:TYR:CD1	25:E1:83:PRO:HD2	2.51	0.46
25:E2:141:THR:OG1	25:E2:145:ARG:N	2.49	0.46
25:E3:125:LYS:HG2	25:E3:126:VAL:O	2.15	0.46
18:Z3:66:LYS:HD3	26:F3:102:LEU:O	2.15	0.46
26:F3:179:ASN:O	26:F3:183:GLY:HA2	2.16	0.46
26:F5:104:THR:OG1	26:F5:178:ILE:HD12	2.16	0.46
26:F5:185:SER:O	26:F5:191:LYS:NZ	2.33	0.46
26:F6:104:THR:OG1	26:F6:178:ILE:HD12	2.16	0.46
11:G1:152:ASP:OD1	11:G1:155:GLN:HG2	2.16	0.46
11:G3:194:LEU:O	11:G3:198:ARG:N	2.43	0.46
11:G3:218:LYS:O	11:G3:221:LYS:NZ	2.27	0.46
11:G4:141:ILE:HG12	11:G4:144:LEU:CD1	2.46	0.46
11:G5:139:SER:HA	11:G5:142:ARG:CD	2.43	0.46
11:G5:149:LYS:CB	11:G5:149:LYS:NZ	2.75	0.46
11:G6:209:TYR:HD1	11:G6:213:LEU:HD23	1.79	0.46
27:H4:98:ARG:O	27:H4:100:ILE:N	2.48	0.46
27:H6:68:GLN:O	27:H6:71:SER:OG	2.25	0.46
28:I3:194:GLU:HB2	30:L3:18:GLN:HE21	1.79	0.46
28:I4:81:VAL:HG22	28:I4:102:VAL:HG12	1.98	0.46
12:J1:107:GLU:O	12:J1:112:THR:OG1	2.33	0.46
12:J4:60:LEU:HD11	12:J4:70:ARG:HA	1.97	0.46
12:J5:163:SER:H	12:J5:167:GLY:HA3	1.81	0.46
30:L2:57:ASP:OD1	30:L2:58:LYS:N	2.49	0.46
30:L3:5:GLN:O	30:L3:7:GLU:N	2.46	0.46
15:O3:14:VAL:HG11	15:O3:17:LEU:C	2.35	0.46
15:O6:43:HIS:HA	15:O6:55:ARG:HA	1.97	0.46
31:P2:57:LEU:HD23	31:P2:61:ARG:NH2	2.30	0.46
31:P4:115:TYR:CZ	31:P4:118:GLU:HB2	2.51	0.46
31:P5:50:ARG:HD3	31:P5:50:ARG:HA	1.73	0.46
33:R4:69:ILE:HG12	33:R4:70:SER:HA	1.97	0.46
22:A4:214:GLU:CD	33:R4:84:TYR:CG	2.89	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R6:71:ILE:O	33:R6:71:ILE:HG12	2.16	0.46
34:S1:16:LEU:HD21	34:S1:72:GLN:NE2	2.29	0.46
18:Z2:86:ALA:HB1	34:S2:3:LEU:HG	1.98	0.46
34:S5:16:LEU:HD21	34:S5:72:GLN:NE2	2.29	0.46
1:T2:34:VAL:HG23	1:T2:35:ASP:H	1.81	0.46
16:W5:33:VAL:HG13	16:W5:34:ILE:HG23	1.98	0.46
4:X5:90:CYS:HB3	4:X5:130:LEU:HD11	1.98	0.46
4:X5:52:LEU:HD22	4:X5:53:GLU:HG2	1.98	0.46
17:Y2:113:ARG:HA	17:Y2:116:LYS:HZ1	1.80	0.46
18:Z1:86:ALA:HB1	34:S1:3:LEU:HG	1.98	0.46
18:Z5:57:LYS:HE2	18:Z5:77:LEU:HD11	1.98	0.46
10:C3:273:LEU:HD12	10:C3:280:VAL:HG21	1.97	0.46
10:C6:196:ILE:CG2	10:C6:223:TYR:HB2	2.46	0.46
24:D3:71:ALA:HB1	24:D3:75:LYS:HD2	1.98	0.46
24:D5:56:GLN:HA	24:D5:59:LEU:HD13	1.98	0.46
24:D6:106:ARG:HB3	24:D6:175:VAL:HG12	1.97	0.46
25:E1:99:PHE:CD1	25:E1:113:ARG:HG2	2.50	0.46
25:E2:99:PHE:CD1	25:E2:113:ARG:HG2	2.50	0.46
25:E6:124:CYS:SG	25:E6:141:THR:HB	2.56	0.46
25:E6:176:ASP:OD1	25:E6:177:THR:N	2.41	0.46
26:F1:104:THR:OG1	26:F1:178:ILE:HD12	2.16	0.46
26:F2:104:THR:OG1	26:F2:178:ILE:HD12	2.16	0.46
11:G3:148:SER:OG	11:G3:149:LYS:HA	2.16	0.46
11:G4:194:LEU:HA	11:G4:197:GLN:HB3	1.96	0.46
27:H2:121:THR:HG22	27:H2:123:THR:H	1.81	0.46
27:H5:58:LYS:O	27:H5:90:LYS:HD3	2.16	0.46
28:I1:141:ARG:NH1	26:F6:191:LYS:CD	2.79	0.46
28:I2:177:SER:OG	28:I2:184:ARG:O	2.30	0.46
12:J1:163:SER:H	12:J1:167:GLY:HA3	1.81	0.46
12:J1:58:ARG:O	12:J1:62:THR:HG23	2.16	0.46
12:J3:107:GLU:O	12:J3:112:THR:OG1	2.33	0.46
12:J4:50:LEU:HD13	12:J4:102:ILE:HD13	1.98	0.46
29:K3:10:ALA:O	29:K3:14:LEU:N	2.37	0.46
14:N6:29:THR:O	14:N6:30:SER:C	2.55	0.46
15:O6:128:ARG:NH1	15:O6:130:GLU:HB2	2.31	0.46
31:P3:34:MET:C	31:P3:42:ARG:HG3	2.37	0.46
31:P4:15:PHE:CE2	31:P4:17:TYR:HB2	2.50	0.46
33:R1:102:THR:O	33:R1:105:MET:HG2	2.15	0.46
33:R4:94:GLU:HA	33:R4:96:ILE:HG12	1.98	0.46
18:Z3:86:ALA:HB1	34:S3:3:LEU:HG	1.98	0.46
2:U2:49:LYS:C	2:U2:51:LYS:H	2.18	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U3:17:ILE:HG23	2:U3:95:SER:N	1.90	0.46
17:Y3:54:VAL:HB	17:Y3:76:TYR:HB2	1.98	0.46
17:Y4:54:VAL:HB	17:Y4:76:TYR:HB2	1.98	0.46
17:Y5:54:VAL:HB	17:Y5:76:TYR:HB2	1.98	0.46
17:Y6:54:VAL:HB	17:Y6:76:TYR:HB2	1.98	0.46
17:Y6:9:THR:H	17:Y6:26:ASP:HB3	1.80	0.46
22:A1:211:GLU:HB2	33:R1:81:ARG:NH2	2.19	0.46
3:V6:60:ARG:HH12	22:A6:158:ASP:HB3	1.81	0.46
23:B5:33:VAL:HG13	23:B5:96:CYS:O	2.16	0.46
10:C3:246:LYS:O	10:C3:249:SER:OG	2.31	0.46
10:C3:275:LYS:CE	10:C3:275:LYS:HA	2.46	0.46
10:C4:188:CYS:SG	10:C4:191:VAL:HB	2.55	0.46
10:C4:196:ILE:CG2	10:C4:223:TYR:HB2	2.46	0.46
24:D1:106:ARG:HB3	24:D1:175:VAL:HG12	1.97	0.46
24:D2:54:ARG:HB2	24:D2:58:VAL:HG13	1.98	0.46
24:D2:71:ALA:HB1	24:D2:75:LYS:HD2	1.97	0.46
2:U3:61:LEU:HD22	24:D3:34:TYR:CZ	27.45	0.46
2:U6:61:LEU:HD22	24:D6:34:TYR:CZ	27.45	0.46
24:D6:35:SER:HB2	24:D6:51:LEU:O	2.15	0.46
25:E2:124:CYS:SG	25:E2:141:THR:HB	2.56	0.46
25:E3:19:MET:HE1	25:E3:108:ARG:HH11	1.80	0.46
25:E3:126:VAL:HG12	25:E3:139:LEU:HD13	1.98	0.46
25:E3:56:LEU:HD23	25:E3:57:THR:HG23	1.98	0.46
25:E4:125:LYS:HG2	25:E4:126:VAL:O	2.15	0.46
25:E4:71:LYS:HD3	25:E4:74:GLY:HA2	1.98	0.46
25:E5:124:CYS:SG	25:E5:141:THR:HB	2.56	0.46
25:E5:56:LEU:HD23	25:E5:57:THR:HG23	1.97	0.46
11:G1:141:ILE:HG12	11:G1:144:LEU:CD1	2.46	0.46
11:G1:218:LYS:O	11:G1:221:LYS:NZ	2.27	0.46
11:G2:152:ASP:OD1	11:G2:155:GLN:HG2	2.16	0.46
11:G3:153:VAL:C	11:G3:155:GLN:N	2.69	0.46
11:G5:36:VAL:N	11:G5:50:VAL:O	2.48	0.46
11:G6:209:TYR:HA	11:G6:213:LEU:HB3	1.98	0.46
27:H2:65:PRO:HB2	27:H2:68:GLN:HE22	1.80	0.46
27:H3:134:VAL:HG22	27:H3:173:PHE:CD2	2.51	0.46
27:H4:96:ALA:HB3	27:H4:98:ARG:NH1	2.31	0.46
27:H6:96:ALA:HB3	27:H6:98:ARG:NH1	2.31	0.46
27:H6:98:ARG:O	27:H6:100:ILE:N	2.48	0.46
28:I2:80:ASP:OD1	28:I2:81:VAL:N	2.48	0.46
28:I5:80:ASP:OD1	28:I5:81:VAL:N	2.49	0.46
12:J6:37:LEU:HB3	12:J6:38:ARG:H	1.45	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:76:ARG:HH21	29:K2:66:HIS:CE1	2.34	0.46
24:D4:76:ARG:HH21	29:K4:66:HIS:CE1	2.34	0.46
30:L1:27:GLU:HG3	23:B6:24:PRO:HD2	1.98	0.46
30:L3:121:GLN:HG3	30:L3:153:LYS:HZ3	1.78	0.46
14:N6:150:VAL:CG1	14:N6:151:ALA:N	2.73	0.46
15:O1:147:ARG:HD2	15:O1:150:ARG:NE	2.30	0.46
15:O2:43:HIS:HA	15:O2:55:ARG:HA	1.97	0.46
15:O3:46:ASP:O	15:O3:49:GLY:N	2.39	0.46
31:P1:50:ARG:HD3	31:P1:50:ARG:HA	1.73	0.46
31:P3:41:GLN:HA	31:P3:41:GLN:OE1	2.16	0.46
31:P5:115:TYR:CZ	31:P5:118:GLU:HB2	2.51	0.46
31:P6:15:PHE:CZ	31:P6:17:TYR:HB2	2.51	0.46
33:R1:36:GLU:N	33:R1:36:GLU:OE1	2.43	0.46
33:R3:44:LYS:HG3	33:R3:47:ARG:NH2	2.28	0.46
22:A5:214:GLU:CB	33:R5:84:TYR:CE1	2.99	0.46
3:V1:69:ILE:O	3:V1:73:ALA:N	2.38	0.46
4:X6:52:LEU:HD22	4:X6:53:GLU:HG2	1.98	0.46
18:Z1:46:ASN:ND2	18:Z1:79:ILE:O	2.48	0.46
18:Z3:57:LYS:HE2	18:Z3:77:LEU:HD11	1.98	0.46
22:A5:210:ILE:CG1	22:A5:211:GLU:N	2.74	0.45
23:B6:110:MET:HE1	23:B6:213:ARG:HE	1.81	0.45
10:C1:196:ILE:CG2	10:C1:223:TYR:HB2	2.46	0.45
2:U2:61:LEU:HD22	24:D2:34:TYR:CZ	27.45	0.45
24:D3:56:GLN:HA	24:D3:59:LEU:HD13	1.98	0.45
24:D4:204:LEU:C	24:D4:206:ASP:H	2.19	0.45
25:E1:126:VAL:HG12	25:E1:139:LEU:HD13	1.98	0.45
25:E1:141:THR:OG1	25:E1:145:ARG:N	2.49	0.45
25:E2:125:LYS:HG2	25:E2:126:VAL:O	2.15	0.45
25:E2:95:THR:OG1	25:E2:97:GLU:OE1	2.25	0.45
25:E4:124:CYS:SG	25:E4:141:THR:HB	2.56	0.45
25:E5:125:LYS:HG2	25:E5:126:VAL:O	2.16	0.45
25:E6:82:TYR:CD1	25:E6:83:PRO:HD2	2.51	0.45
26:F5:88:MET:HB2	26:F5:91:ARG:NH2	2.30	0.45
11:G1:209:TYR:HB3	11:G1:214:ALA:HB2	1.98	0.45
11:G2:209:TYR:HD1	11:G2:213:LEU:HD23	1.79	0.45
11:G5:209:TYR:HD1	11:G5:213:LEU:HD23	1.79	0.45
11:G6:152:ASP:OD1	11:G6:155:GLN:HG2	2.16	0.45
27:H1:121:THR:HG22	27:H1:123:THR:H	1.81	0.45
27:H1:58:LYS:O	27:H1:90:LYS:HD3	2.16	0.45
27:H4:65:PRO:HB2	27:H4:68:GLN:HE22	1.80	0.45
27:H6:65:PRO:HB2	27:H6:68:GLN:HE22	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I2:81:VAL:HG22	28:I2:102:VAL:HG12	1.98	0.45
28:I3:81:VAL:HG22	28:I3:102:VAL:HG12	1.98	0.45
29:K5:96:ARG:O	29:K5:98:ARG:HG2	2.17	0.45
29:K6:96:ARG:O	29:K6:98:ARG:HG2	2.16	0.45
30:L4:5:GLN:O	30:L4:7:GLU:N	2.46	0.45
14:N6:38:TYR:OH	14:N6:74:ILE:HG12	2.15	0.45
33:R6:44:LYS:HG3	33:R6:47:ARG:NH2	2.28	0.45
2:U5:61:LEU:HD22	24:D5:34:TYR:CZ	27.45	0.45
4:X3:107:ARG:HD3	4:X3:112:VAL:HB	1.97	0.45
4:X5:91:LEU:O	4:X5:94:ILE:HG22	2.16	0.45
17:Y2:109:GLU:HG3	17:Y2:113:ARG:NH2	2.31	0.45
18:Z3:49:LEU:H	18:Z3:83:LEU:HD12	1.81	0.45
18:Z6:86:ALA:HB1	34:S6:3:LEU:HG	1.98	0.45
22:A3:9:GLN:O	22:A3:11:LYS:HG2	2.16	0.45
22:A6:9:GLN:O	22:A6:11:LYS:HG2	2.15	0.45
3:V6:70:LEU:HD21	22:A6:57:LYS:HD3	1.97	0.45
23:B2:33:VAL:HG13	23:B2:96:CYS:O	2.16	0.45
23:B4:33:VAL:HG13	23:B4:96:CYS:O	2.16	0.45
3:V4:50:PHE:HZ	10:C4:267:GLN:HE22	1.60	0.45
10:C5:272:HIS:O	10:C5:274:VAL:N	2.42	0.45
10:C6:191:VAL:HA	10:C6:228:GLY:HA3	1.98	0.45
24:D1:35:SER:HB2	24:D1:51:LEU:O	2.16	0.45
24:D5:138:VAL:HB	24:D5:150:MET:HB3	1.97	0.45
24:D6:76:ARG:HH21	29:K6:66:HIS:CE1	2.34	0.45
25:E2:126:VAL:HG12	25:E2:139:LEU:HD13	1.99	0.45
25:E3:82:TYR:CD1	25:E3:83:PRO:HD2	2.51	0.45
25:E4:126:VAL:HG12	25:E4:139:LEU:HD13	1.98	0.45
25:E4:141:THR:OG1	25:E4:145:ARG:N	2.49	0.45
26:F1:115:ALA:O	26:F1:119:SER:OG	2.19	0.45
26:F1:118:ASN:ND2	26:F1:183:GLY:HA3	2.32	0.45
26:F5:118:ASN:ND2	26:F5:183:GLY:HA3	2.32	0.45
26:F6:182:LYS:O	26:F6:184:SER:N	2.40	0.45
11:G2:141:ILE:HG12	11:G2:144:LEU:CD1	2.46	0.45
11:G3:141:ILE:HG12	11:G3:144:LEU:CD1	2.46	0.45
11:G4:167:LYS:HB3	11:G4:168:LYS:H	1.51	0.45
11:G6:164:LYS:HD2	11:G6:167:LYS:HB2	1.97	0.45
27:H1:134:VAL:HG22	27:H1:173:PHE:CD2	2.51	0.45
27:H1:96:ALA:HB3	27:H1:98:ARG:NH1	2.31	0.45
27:H2:58:LYS:O	27:H2:90:LYS:HD3	2.16	0.45
27:H4:135:PHE:HB3	27:H4:136:PRO:HD3	1.98	0.45
27:H5:98:ARG:O	27:H5:100:ILE:N	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I1:8:TRP:CZ3	28:I1:20:PRO:HB3	2.51	0.45
28:I3:80:ASP:OD1	28:I3:81:VAL:N	2.48	0.45
12:J1:50:LEU:HD13	12:J1:102:ILE:HD13	1.98	0.45
30:L6:57:ASP:OD1	30:L6:58:LYS:N	2.48	0.45
13:M5:111:VAL:HG12	13:M5:114:TYR:CE1	2.50	0.45
15:O2:14:VAL:N	15:O2:15:ILE:HA	2.25	0.45
15:O2:63:LYS:NZ	28:I4:121:LEU:HD13	2.31	0.45
15:O4:71:PRO:O	15:O4:75:MET:HG3	2.16	0.45
15:O5:17:LEU:CD2	15:O5:18:GLY:H	2.22	0.45
15:O5:43:HIS:HA	15:O5:55:ARG:HA	1.97	0.45
31:P3:119:PHE:CD1	34:S3:119:ALA:CA	2.99	0.45
31:P6:57:LEU:HD23	31:P6:61:ARG:NH2	2.30	0.45
33:R5:22:THR:CG2	33:R5:72:LYS:HZ1	2.22	0.45
34:S5:50:ILE:HD12	34:S5:67:VAL:HG23	1.83	0.45
1:T3:28:LEU:HD13	1:T3:54:TYR:CD2	2.50	0.45
1:T3:34:VAL:HG23	1:T3:35:ASP:H	1.81	0.45
2:U4:77:TRP:HD1	32:Q4:132:PHE:HB2	1.80	0.45
3:V6:35:ASN:HB3	3:V6:50:PHE:CD1	2.52	0.45
4:X1:52:LEU:HD22	4:X1:53:GLU:HG2	1.98	0.45
17:Y2:54:VAL:HB	17:Y2:76:TYR:HB2	1.98	0.45
3:V1:60:ARG:HH12	22:A1:158:ASP:HB3	1.81	0.45
22:A5:89:LYS:NZ	33:R5:82:ASP:OD2	2.23	0.45
23:B6:33:VAL:HG13	23:B6:96:CYS:O	2.16	0.45
10:C2:188:CYS:SG	10:C2:191:VAL:HB	2.55	0.45
10:C2:65:LYS:HZ2	10:C2:280:VAL:HB	1.80	0.45
24:D1:35:SER:H	24:D1:52:ALA:HA	1.81	0.45
24:D1:76:ARG:HH21	29:K1:66:HIS:CE1	2.34	0.45
24:D2:167:TYR:OH	24:D2:201:LYS:O	2.30	0.45
24:D2:35:SER:HB2	24:D2:51:LEU:O	2.15	0.45
24:D3:76:ARG:HD3	29:K3:22:VAL:HB	1.98	0.45
24:D4:43:PRO:C	24:D4:44:THR:HG1	2.19	0.45
24:D4:53:THR:HG23	24:D4:90:LYS:HE3	1.98	0.45
24:D4:56:GLN:HA	24:D4:59:LEU:HD13	1.98	0.45
24:D5:35:SER:HB2	24:D5:51:LEU:O	2.16	0.45
25:E2:82:TYR:CD1	25:E2:83:PRO:HD2	2.51	0.45
26:F2:186:ASN:HA	28:I4:141:ARG:HH22	1.81	0.45
26:F6:88:MET:HB2	26:F6:91:ARG:NH2	2.30	0.45
27:H6:58:LYS:O	27:H6:90:LYS:HD3	2.16	0.45
28:I2:8:TRP:CZ3	28:I2:20:PRO:HB3	2.51	0.45
28:I3:8:TRP:CZ3	28:I3:20:PRO:HB3	2.51	0.45
12:J5:50:LEU:HD13	12:J5:102:ILE:HD13	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:K3:58:VAL:CG2	29:K3:69:TRP:HB3	2.46	0.45
24:D4:76:ARG:HD3	29:K4:22:VAL:HB	1.98	0.45
30:L2:126:VAL:CG2	30:L2:145:VAL:HG22	2.46	0.45
30:L3:135:SER:HB3	30:L3:138:VAL:HB	1.97	0.45
30:L5:57:ASP:OD1	30:L5:58:LYS:N	2.49	0.45
14:N3:91:LEU:HD11	14:N3:121:ARG:HD2	1.98	0.45
14:N3:132:LYS:C	30:L3:152:LYS:NZ	2.69	0.45
15:O3:128:ARG:NH1	15:O3:130:GLU:HB2	2.31	0.45
15:O3:14:VAL:N	15:O3:15:ILE:HA	2.25	0.45
15:O3:71:PRO:O	15:O3:75:MET:HG3	2.17	0.45
15:O5:128:ARG:NH1	15:O5:130:GLU:HB2	2.31	0.45
31:P1:44:ARG:CG	31:P1:44:ARG:HH11	2.26	0.45
31:P2:108:LYS:HB3	31:P2:109:PRO:CD	2.40	0.45
31:P2:15:PHE:CZ	31:P2:17:TYR:HB2	2.51	0.45
34:S5:17:ASN:HD22	34:S5:101:ASN:ND2	2.10	0.45
34:S6:50:ILE:CD1	34:S6:67:VAL:HG21	2.44	0.45
1:T4:2:PRO:HA	1:T4:3:GLY:HA3	1.70	0.45
2:U2:77:TRP:HD1	32:Q2:132:PHE:HB2	1.80	0.45
16:W4:27:ILE:HG12	16:W4:61:ILE:HB	1.98	0.45
16:W6:10:ALA:O	16:W6:13:SER:OG	2.24	0.45
4:X6:107:ARG:HD3	4:X6:112:VAL:HB	1.97	0.45
4:X6:91:LEU:O	4:X6:94:ILE:HG22	2.16	0.45
18:Z3:92:LEU:HA	18:Z3:97:ILE:HB	1.99	0.45
3:V6:50:PHE:HZ	10:C6:267:GLN:HE22	1.59	0.45
10:C6:65:LYS:HG2	10:C6:279:ARG:HE	1.77	0.45
24:D3:64:ARG:HG3	29:K3:95:ARG:HH22	1.76	0.45
24:D5:43:PRO:O	24:D5:44:THR:OG1	2.32	0.45
24:D6:121:GLY:O	24:D6:125:PHE:N	2.41	0.45
25:E2:132:GLY:N	25:E2:136:ILE:O	2.47	0.45
25:E4:132:GLY:N	25:E4:136:ILE:O	2.47	0.45
26:F4:125:SER:HG	26:F4:137:GLN:C	2.18	0.45
26:F4:104:THR:OG1	26:F4:178:ILE:HD12	2.16	0.45
26:F6:118:ASN:ND2	26:F6:183:GLY:HA3	2.32	0.45
11:G2:149:LYS:HZ3	11:G2:149:LYS:CB	2.28	0.45
11:G2:209:TYR:HB3	11:G2:214:ALA:HB2	1.98	0.45
11:G6:141:ILE:HG12	11:G6:144:LEU:CD1	2.46	0.45
27:H1:135:PHE:HB3	27:H1:136:PRO:HD3	1.99	0.45
27:H4:121:THR:HG22	27:H4:123:THR:H	1.81	0.45
27:H6:121:THR:HG22	27:H6:123:THR:H	1.81	0.45
28:I2:79:ILE:HG21	28:I2:170:LYS:HZ2	1.81	0.45
28:I5:193:LYS:O	28:I5:196:GLU:HG2	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J2:163:SER:H	12:J2:167:GLY:HA3	1.81	0.45
29:K6:58:VAL:CG2	29:K6:69:TRP:HB3	2.45	0.45
14:N5:122:ILE:O	14:N5:126:ALA:N	2.33	0.45
15:O1:99:ALA:O	15:O1:101:GLY:N	2.48	0.45
15:O2:147:ARG:HD2	15:O2:150:ARG:NE	2.30	0.45
15:O5:71:PRO:O	15:O5:75:MET:HG3	2.16	0.45
31:P1:15:PHE:CZ	31:P1:17:TYR:HB2	2.51	0.45
31:P1:49:LEU:HA	31:P1:49:LEU:HD23	1.80	0.45
31:P2:119:PHE:CD1	34:S2:119:ALA:CA	2.99	0.45
31:P4:121:ILE:HD11	31:P4:123:TYR:HE2	0.59	0.45
31:P5:45:LEU:CD1	31:P5:49:LEU:CD2	2.72	0.45
33:R5:57:LEU:O	33:R5:61:ILE:CG1	2.57	0.45
1:T3:27:LYS:HG3	1:T3:29:LYS:HG2	1.99	0.45
2:U5:49:LYS:C	2:U5:51:LYS:H	2.18	0.45
16:W1:33:VAL:HG13	16:W1:34:ILE:HG23	1.98	0.45
16:W1:27:ILE:HG12	16:W1:61:ILE:HB	1.98	0.45
16:W3:27:ILE:HG12	16:W3:61:ILE:HB	1.98	0.45
16:W3:33:VAL:HG13	16:W3:34:ILE:HG23	1.98	0.45
16:W6:27:ILE:HG12	16:W6:61:ILE:HB	1.99	0.45
18:Z2:57:LYS:HE2	18:Z2:77:LEU:HD11	1.98	0.45
18:Z5:85:ARG:CG	18:Z5:85:ARG:NH2	2.73	0.45
18:Z5:86:ALA:HB1	34:S5:3:LEU:HG	1.98	0.45
22:A1:22:GLY:O	22:A1:24:HIS:N	2.46	0.45
22:A2:211:GLU:HB2	33:R2:81:ARG:NH2	2.19	0.45
22:A4:22:GLY:O	22:A4:24:HIS:N	2.46	0.45
23:B3:175:GLU:O	23:B3:178:THR:OG1	2.19	0.45
23:B3:33:VAL:HG13	23:B3:96:CYS:O	2.16	0.45
23:B5:197:ILE:O	23:B5:201:CYS:N	2.35	0.45
10:C1:275:LYS:CE	10:C1:275:LYS:HA	2.46	0.45
10:C4:207:ALA:O	10:C4:210:PRO:HD2	2.17	0.45
10:C5:196:ILE:HA	10:C5:197:PRO:HD3	1.81	0.45
24:D1:95:GLY:O	24:D1:97:CYS:N	2.48	0.45
24:D3:95:GLY:O	24:D3:97:CYS:N	2.48	0.45
24:D4:106:ARG:HG3	24:D4:107:TYR:N	2.31	0.45
24:D5:71:ALA:O	24:D5:75:LYS:N	2.47	0.45
24:D6:204:LEU:C	24:D6:206:ASP:H	2.19	0.45
24:D6:64:ARG:CG	29:K6:95:ARG:HH22	2.27	0.45
26:F1:133:THR:HG21	26:F1:135:ARG:NE	2.32	0.45
26:F1:39:ILE:HG23	26:F1:68:ILE:HG21	1.99	0.45
26:F3:106:GLU:HG2	26:F3:107:ASN:N	2.29	0.45
26:F4:179:ASN:O	26:F4:183:GLY:HA2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F4:118:ASN:ND2	26:F4:183:GLY:HA3	2.32	0.45
26:F5:39:ILE:HG23	26:F5:68:ILE:HG21	1.99	0.45
26:F6:107:ASN:HA	26:F6:108:PRO:HD2	1.71	0.45
11:G4:152:ASP:OD1	11:G4:155:GLN:HG2	2.16	0.45
11:G4:209:TYR:HA	11:G4:213:LEU:HB3	1.99	0.45
11:G6:36:VAL:N	11:G6:50:VAL:O	2.48	0.45
11:G6:68:LEU:O	11:G6:69:THR:OG1	2.28	0.45
27:H1:65:PRO:HB2	27:H1:68:GLN:HE22	1.80	0.45
27:H2:135:PHE:HB3	27:H2:136:PRO:HD3	1.98	0.45
27:H2:6:ALA:O	27:H2:24:SER:OG	2.26	0.45
27:H2:96:ALA:HB3	27:H2:98:ARG:NH1	2.31	0.45
27:H3:6:ALA:O	27:H3:24:SER:OG	2.26	0.45
28:I1:81:VAL:HG22	28:I1:102:VAL:HG12	1.98	0.45
28:I2:125:LYS:HD3	15:O5:66:ARG:HD2	1.99	0.45
28:I6:8:TRP:CZ3	28:I6:20:PRO:HB3	2.52	0.45
12:J3:163:SER:H	12:J3:167:GLY:HA3	1.81	0.45
12:J5:75:ASN:HB3	25:E5:252:ARG:NH2	2.32	0.45
29:K4:96:ARG:O	29:K4:98:ARG:HG2	2.17	0.45
29:K5:10:ALA:O	29:K5:14:LEU:N	2.37	0.45
14:N1:137:PRO:HD3	30:L1:154:GLN:CD	2.37	0.45
14:N3:129:TYR:HB3	14:N3:134:VAL:HG21	0.46	0.45
14:N4:43:LYS:H	14:N4:43:LYS:HG2	1.48	0.45
14:N6:141:TYR:HE1	14:N6:146:ALA:HB1	1.80	0.45
15:O2:71:PRO:O	15:O2:75:MET:HG3	2.17	0.45
15:O5:147:ARG:HD2	15:O5:150:ARG:NE	2.31	0.45
31:P1:75:VAL:HB	31:P1:93:MET:HE2	1.99	0.45
31:P2:75:VAL:HB	31:P2:93:MET:HE2	1.99	0.45
31:P3:41:GLN:NE2	31:P3:84:ILE:CG2	2.56	0.45
31:P6:115:TYR:CZ	31:P6:118:GLU:HB2	2.51	0.45
31:P6:119:PHE:CD1	34:S6:119:ALA:CA	2.99	0.45
33:R1:94:GLU:HA	33:R1:96:ILE:HG12	1.97	0.45
1:T6:34:VAL:HG23	1:T6:35:ASP:H	1.81	0.45
3:V2:35:ASN:HB3	3:V2:50:PHE:CD1	2.52	0.45
16:W2:77:PRO:HG2	16:W2:79:PHE:CZ	2.52	0.45
16:W6:77:PRO:HG2	16:W6:79:PHE:CZ	2.52	0.45
4:X1:107:ARG:HD3	4:X1:112:VAL:HB	1.97	0.45
4:X1:51:VAL:HG21	4:X1:94:ILE:HD11	1.99	0.45
4:X4:52:LEU:HD22	4:X4:53:GLU:HG2	1.98	0.45
4:X4:90:CYS:HB3	4:X4:130:LEU:HD11	1.98	0.45
17:Y2:109:GLU:CD	17:Y2:113:ARG:CZ	2.84	0.45
17:Y6:58:PHE:O	17:Y6:72:PHE:N	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:Z1:57:LYS:HE2	18:Z1:77:LEU:HD11	1.99	0.45
18:Z3:111:ARG:O	18:Z3:113:THR:N	2.50	0.45
22:A1:149:ASN:HB2	22:A1:165:ASN:OD1	2.16	0.45
22:A3:212:LYS:HB3	22:A3:212:LYS:HE3	1.62	0.45
22:A6:212:LYS:HB3	22:A6:212:LYS:HE3	1.62	0.45
10:C1:191:VAL:HA	10:C1:228:GLY:HA3	1.98	0.45
10:C5:275:LYS:HA	10:C5:275:LYS:CE	2.46	0.45
24:D1:167:TYR:OH	24:D1:201:LYS:O	2.30	0.45
24:D2:76:ARG:HD3	29:K2:22:VAL:HB	1.98	0.45
24:D3:106:ARG:HB3	24:D3:175:VAL:HG12	1.98	0.45
25:E1:124:CYS:SG	25:E1:141:THR:HB	2.56	0.45
12:J3:75:ASN:HB3	25:E3:252:ARG:NH2	2.32	0.45
25:E4:19:MET:HE1	25:E4:108:ARG:HH11	1.81	0.45
25:E5:71:LYS:HD3	25:E5:74:GLY:HA2	1.98	0.45
25:E6:71:LYS:HD3	25:E6:74:GLY:HA2	1.98	0.45
26:F2:179:ASN:O	26:F2:183:GLY:HA2	2.16	0.45
26:F3:39:ILE:HG23	26:F3:68:ILE:HG21	1.99	0.45
26:F3:86:LYS:O	26:F3:87:LEU:HD12	2.17	0.45
26:F4:88:MET:HB2	26:F4:91:ARG:NH2	2.30	0.45
26:F6:173:LEU:O	26:F6:177:LEU:HG	2.17	0.45
11:G1:194:LEU:O	11:G1:198:ARG:N	2.43	0.45
11:G2:209:TYR:HA	11:G2:213:LEU:HB3	1.99	0.45
11:G3:209:TYR:HA	11:G3:213:LEU:HB3	1.98	0.45
11:G4:140:ARG:HA	11:G4:140:ARG:HD3	1.70	0.45
11:G4:148:SER:OG	11:G4:149:LYS:HA	2.16	0.45
11:G4:223:LYS:O	11:G4:227:GLN:HG2	2.17	0.45
11:G5:148:SER:OG	11:G5:149:LYS:HA	2.16	0.45
11:G5:152:ASP:OD1	11:G5:155:GLN:HG2	2.16	0.45
11:G5:153:VAL:C	11:G5:155:GLN:N	2.69	0.45
11:G6:149:LYS:CB	11:G6:149:LYS:NZ	2.75	0.45
11:G6:181:THR:HG22	11:G6:184:VAL:HG23	1.98	0.45
11:G6:77:LEU:N	11:G6:93:LYS:O	2.44	0.45
27:H6:134:VAL:HG22	27:H6:173:PHE:CD2	2.52	0.45
28:I2:124:LYS:C	28:I2:125:LYS:HG2	2.36	0.45
28:I3:162:LEU:HG	28:I3:166:PHE:HE2	1.82	0.45
28:I6:193:LYS:O	28:I6:196:GLU:HG2	2.17	0.45
12:J1:75:ASN:HB3	25:E1:252:ARG:NH2	2.32	0.45
12:J6:49:THR:O	12:J6:53:ILE:HG12	2.15	0.45
30:L1:5:GLN:O	30:L1:7:GLU:N	2.46	0.45
30:L3:153:LYS:C	30:L3:153:LYS:HD2	2.36	0.45
23:B4:21:VAL:C	30:L5:31:GLU:OE2	2.55	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I1:124:LYS:HA	15:O6:66:ARG:HH22	1.76	0.45
31:P1:119:PHE:CD1	34:S1:119:ALA:CA	2.99	0.45
31:P5:41:GLN:CB	31:P5:84:ILE:CD1	2.56	0.45
34:S1:17:ASN:HD22	34:S1:101:ASN:ND2	2.10	0.45
1:T6:3:GLY:O	1:T6:4:VAL:HG12	2.17	0.45
2:U3:20:ILE:HD13	2:U3:116:ILE:O	2.15	0.45
3:V2:69:ILE:O	3:V2:73:ALA:N	2.38	0.45
3:V3:35:ASN:HB3	3:V3:50:PHE:CD1	2.52	0.45
16:W3:77:PRO:HG2	16:W3:79:PHE:CZ	2.52	0.45
4:X4:51:VAL:HG21	4:X4:94:ILE:HD11	1.99	0.45
4:X6:51:VAL:HG21	4:X6:94:ILE:HD11	1.99	0.45
18:Z4:111:ARG:O	18:Z4:113:THR:N	2.50	0.45
18:Z6:111:ARG:O	18:Z6:113:THR:N	2.50	0.45
22:A1:80:ARG:HH22	22:A1:166:LYS:HG2	1.82	0.45
22:A2:9:GLN:O	22:A2:11:LYS:HG2	2.15	0.45
22:A2:80:ARG:HH22	22:A2:166:LYS:HG2	1.82	0.45
22:A2:215:GLN:HE21	33:R2:80:ARG:NH1	2.15	0.45
22:A2:77:ILE:HD11	22:A2:103:PHE:HD1	1.77	0.45
22:A3:149:ASN:HB2	22:A3:165:ASN:OD1	2.16	0.45
3:V3:60:ARG:HH12	22:A3:158:ASP:HB3	1.81	0.45
22:A5:211:GLU:HB2	33:R5:81:ARG:NH2	2.19	0.45
22:A6:149:ASN:HB2	22:A6:165:ASN:OD1	2.16	0.45
22:A6:80:ARG:HH22	22:A6:166:LYS:HG2	1.82	0.45
23:B1:34:LYS:HG2	23:B1:43:ASN:HB3	1.99	0.45
23:B2:34:LYS:HG2	23:B2:43:ASN:HB3	1.99	0.45
23:B3:34:LYS:HG2	23:B3:43:ASN:HB3	1.99	0.45
23:B4:34:LYS:HG2	23:B4:43:ASN:HB3	1.99	0.45
23:B5:34:LYS:HG2	23:B5:43:ASN:HB3	1.99	0.45
10:C3:65:LYS:HG2	10:C3:279:ARG:HE	1.78	0.45
24:D2:30:ALA:HB1	24:D2:103:GLU:OE1	2.17	0.45
24:D4:106:ARG:HB3	24:D4:175:VAL:HG12	1.97	0.45
26:F5:179:ASN:O	26:F5:183:GLY:HA2	2.16	0.45
26:F5:190:ILE:O	26:F5:194:ASP:N	2.48	0.45
11:G4:209:TYR:HB3	11:G4:214:ALA:HB2	1.98	0.45
11:G6:57:ASP:HA	11:G6:106:LEU:HB2	1.99	0.45
27:H1:147:LYS:O	27:H1:149:ASP:N	2.48	0.45
28:I4:162:LEU:HG	28:I4:166:PHE:HE2	1.82	0.45
28:I4:79:ILE:HG21	28:I4:170:LYS:HZ2	1.82	0.45
28:I5:79:ILE:HG21	28:I5:170:LYS:HD3	1.97	0.45
12:J6:158:ASP:OD1	12:J6:159:PHE:N	2.45	0.45
12:J6:50:LEU:HD13	12:J6:102:ILE:HD13	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:K4:58:VAL:CG2	29:K4:69:TRP:HB3	2.46	0.45
30:L1:132:ARG:O	30:L1:134:LEU:N	2.50	0.45
23:B1:22:VAL:HB	30:L3:31:GLU:OE2	2.16	0.45
23:B2:21:VAL:O	30:L4:31:GLU:OE1	2.22	0.45
30:L5:132:ARG:O	30:L5:134:LEU:N	2.50	0.45
15:O1:71:PRO:O	15:O1:75:MET:HG3	2.17	0.45
15:O2:128:ARG:NH1	15:O2:130:GLU:HB2	2.31	0.45
15:O3:43:HIS:HA	15:O3:55:ARG:HA	1.97	0.45
31:P2:60:LEU:HD22	31:P2:92:SER:OG	2.17	0.45
31:P3:60:LEU:HD22	31:P3:92:SER:OG	2.17	0.45
31:P4:15:PHE:CZ	31:P4:17:TYR:HB2	2.51	0.45
33:R1:77:GLU:HG2	33:R1:81:ARG:CG	2.45	0.45
33:R3:61:ILE:O	33:R3:73:LEU:CG	2.63	0.45
33:R5:5:ARG:HB2	33:R5:10:LYS:HZ1	1.81	0.45
1:T1:3:GLY:O	1:T1:4:VAL:HG12	2.17	0.45
1:T3:99:VAL:O	1:T3:103:VAL:HG23	2.17	0.45
2:U1:77:TRP:HD1	32:Q1:132:PHE:HB2	1.80	0.45
3:V1:35:ASN:HB3	3:V1:50:PHE:CD1	2.52	0.45
3:V5:69:ILE:O	3:V5:73:ALA:N	2.38	0.45
16:W4:77:PRO:HG2	16:W4:79:PHE:CZ	2.52	0.45
4:X1:91:LEU:O	4:X1:94:ILE:HG22	2.16	0.45
4:X5:107:ARG:HD3	4:X5:112:VAL:HB	1.97	0.45
17:Y4:17:LEU:HD22	25:E4:69:PHE:CE1	2.49	0.45
17:Y6:88:LYS:HZ3	17:Y6:97:TYR:HD2	1.65	0.45
18:Z2:49:LEU:H	18:Z2:83:LEU:HD12	1.81	0.45
18:Z2:85:ARG:NH2	18:Z2:85:ARG:CG	2.73	0.45
18:Z4:92:LEU:HA	18:Z4:97:ILE:HB	1.99	0.45
22:A5:149:ASN:HB2	22:A5:165:ASN:OD1	2.16	0.45
10:C2:196:ILE:CG2	10:C2:223:TYR:HB2	2.46	0.45
10:C2:275:LYS:HA	10:C2:275:LYS:CE	2.46	0.45
10:C5:65:LYS:HG2	10:C5:279:ARG:HE	1.78	0.45
24:D1:30:ALA:HB1	24:D1:103:GLU:OE1	2.17	0.45
24:D2:35:SER:H	24:D2:52:ALA:HA	1.81	0.45
24:D2:53:THR:HG23	24:D2:90:LYS:HE3	1.98	0.45
24:D3:30:ALA:HB1	24:D3:103:GLU:OE1	2.17	0.45
24:D3:35:SER:H	24:D3:52:ALA:HA	1.82	0.45
24:D3:74:GLN:NE2	24:D3:84:VAL:O	2.50	0.45
24:D4:30:ALA:HB1	24:D4:103:GLU:OE1	2.17	0.45
24:D4:104:SER:HB3	24:D4:108:LYS:HE2	1.99	0.45
24:D4:64:ARG:HE	29:K4:95:ARG:NE	2.15	0.45
24:D4:71:ALA:HB1	24:D4:75:LYS:HD2	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D6:167:TYR:OH	24:D6:201:LYS:O	2.30	0.45
25:E2:186:GLY:N	25:E2:189:LEU:HD23	2.32	0.45
25:E3:132:GLY:N	25:E3:136:ILE:O	2.46	0.45
25:E5:186:GLY:N	25:E5:189:LEU:HD23	2.32	0.45
26:F3:104:THR:OG1	26:F3:178:ILE:HD12	2.16	0.45
26:F3:118:ASN:ND2	26:F3:183:GLY:HA3	2.31	0.45
26:F6:179:ASN:O	26:F6:183:GLY:HA2	2.16	0.45
11:G4:159:ARG:HB3	11:G4:172:LYS:HB3	1.99	0.45
11:G5:209:TYR:HA	11:G5:213:LEU:HB3	1.99	0.45
27:H2:98:ARG:O	27:H2:100:ILE:N	2.48	0.45
12:J2:75:ASN:HB3	25:E2:252:ARG:NH2	2.32	0.45
12:J3:114:VAL:HB	12:J3:126:ALA:HB1	1.99	0.45
15:O1:128:ARG:NH1	15:O1:130:GLU:HB2	2.31	0.45
15:O4:128:ARG:NH1	15:O4:130:GLU:HB2	2.31	0.45
32:Q6:123:ASP:HA	32:Q6:124:PRO:HD2	1.74	0.45
33:R2:80:ARG:NH1	33:R2:80:ARG:CG	2.80	0.45
33:R3:32:LYS:HZ1	33:R3:47:ARG:HH21	1.63	0.45
1:T1:27:LYS:HG3	1:T1:29:LYS:HG2	1.99	0.45
1:T4:27:LYS:HG3	1:T4:29:LYS:HG2	1.99	0.45
3:V5:24:ILE:HG23	3:V5:28:ASP:HB3	1.99	0.45
3:V5:35:ASN:HB3	3:V5:50:PHE:CD1	2.52	0.45
3:V5:60:ARG:HH12	22:A5:158:ASP:HB3	1.81	0.45
3:V6:24:ILE:HG23	3:V6:28:ASP:HB3	1.99	0.45
16:W2:33:VAL:HG13	16:W2:34:ILE:HG23	1.98	0.45
17:Y5:20:ARG:NH1	17:Y5:22:GLN:OE1	2.44	0.45
18:Z1:112:ASN:O	18:Z1:113:THR:OG1	2.33	0.45
22:A1:9:GLN:O	22:A1:11:LYS:HG2	2.16	0.45
22:A2:149:ASN:HB2	22:A2:165:ASN:OD1	2.16	0.45
22:A2:22:GLY:O	22:A2:24:HIS:N	2.46	0.45
22:A3:183:LEU:HD23	22:A3:186:ARG:HD2	1.99	0.45
22:A5:215:GLN:HE21	33:R5:80:ARG:NH1	2.15	0.45
10:C2:207:ALA:O	10:C2:210:PRO:HD2	2.17	0.45
24:D5:104:SER:HB3	24:D5:108:LYS:HE2	1.99	0.45
25:E1:186:GLY:N	25:E1:189:LEU:HD23	2.32	0.45
25:E3:186:GLY:N	25:E3:189:LEU:HD23	2.32	0.45
26:F2:173:LEU:O	26:F2:177:LEU:HG	2.17	0.45
26:F2:49:LEU:HA	26:F2:50:PRO:HD3	1.84	0.45
26:F4:86:LYS:O	26:F4:87:LEU:HD12	2.17	0.45
26:F5:173:LEU:O	26:F5:177:LEU:HG	2.17	0.45
26:F6:39:ILE:HG23	26:F6:68:ILE:HG21	1.99	0.45
11:G1:57:ASP:HA	11:G1:106:LEU:HB2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G4:57:ASP:HA	11:G4:106:LEU:HB2	1.99	0.45
11:G4:153:VAL:C	11:G4:155:GLN:N	2.69	0.45
27:H3:58:LYS:O	27:H3:90:LYS:HD3	2.16	0.45
27:H3:65:PRO:HB2	27:H3:68:GLN:HE22	1.80	0.45
27:H3:98:ARG:O	27:H3:100:ILE:N	2.48	0.45
27:H4:58:LYS:O	27:H4:90:LYS:HD3	2.16	0.45
27:H5:134:VAL:HG22	27:H5:173:PHE:CD2	2.51	0.45
27:H5:69:LEU:HA	27:H5:72:PHE:HD2	1.82	0.45
28:I5:81:VAL:HG22	28:I5:102:VAL:HG12	1.98	0.45
26:F3:191:LYS:HE2	28:I6:142:SER:HB3	1.98	0.45
28:I6:162:LEU:HG	28:I6:166:PHE:HE2	1.81	0.45
12:J3:58:ARG:O	12:J3:62:THR:HG23	2.16	0.45
12:J4:163:SER:H	12:J4:167:GLY:HA3	1.81	0.45
29:K3:24:LYS:HA	29:K3:66:HIS:HA	1.99	0.45
30:L5:35:ARG:NE	30:L5:50:ALA:O	2.45	0.45
14:N6:133:ARG:HH21	30:L6:154:GLN:HB2	1.66	0.45
13:M2:111:VAL:HG12	13:M2:114:TYR:CE1	2.50	0.45
14:N5:91:LEU:HD11	14:N5:121:ARG:HD2	1.98	0.45
15:O1:17:LEU:CD2	15:O1:18:GLY:H	2.22	0.45
15:O6:147:ARG:HD2	15:O6:150:ARG:NE	2.30	0.45
2:U6:34:LYS:HA	2:U6:37:ALA:HB3	1.99	0.45
2:U6:77:TRP:HD1	32:Q6:132:PHE:HB2	1.80	0.45
4:X2:107:ARG:HD3	4:X2:112:VAL:HB	1.98	0.45
4:X3:52:LEU:HD22	4:X3:53:GLU:HG2	1.98	0.45
17:Y5:20:ARG:HH11	17:Y5:74:MET:HA	1.82	0.45
22:A6:190:SER:HB2	22:A6:193:HIS:HB3	1.99	0.45
10:C2:168:GLY:N	10:C2:179:THR:O	2.32	0.45
10:C5:207:ALA:O	10:C5:210:PRO:HD2	2.17	0.45
24:D2:74:GLN:NE2	24:D2:84:VAL:O	2.50	0.45
24:D6:35:SER:H	24:D6:52:ALA:HA	1.81	0.45
24:D6:43:PRO:O	24:D6:44:THR:OG1	2.32	0.45
24:D6:54:ARG:HB2	24:D6:58:VAL:HG13	1.98	0.45
24:D6:53:THR:HG23	24:D6:90:LYS:HE3	1.98	0.45
25:E3:38:LEU:HA	25:E3:41:CYS:SG	2.57	0.45
25:E3:95:THR:OG1	25:E3:97:GLU:OE1	2.25	0.45
26:F2:115:ALA:O	26:F2:119:SER:OG	2.19	0.45
26:F2:86:LYS:O	26:F2:87:LEU:HD12	2.17	0.45
26:F2:88:MET:HB2	26:F2:91:ARG:NH2	2.30	0.45
26:F3:88:MET:HB2	26:F3:91:ARG:NH2	2.31	0.45
26:F4:115:ALA:O	26:F4:119:SER:OG	2.19	0.45
26:F5:133:THR:HG21	26:F5:135:ARG:NE	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F5:86:LYS:O	26:F5:87:LEU:HD12	2.17	0.45
26:F6:190:ILE:O	26:F6:194:ASP:N	2.48	0.45
11:G1:223:LYS:O	11:G1:227:GLN:HG2	2.17	0.45
11:G6:167:LYS:HB3	11:G6:168:LYS:H	1.51	0.45
27:H2:158:LEU:O	27:H2:190:PRO:HD2	2.17	0.45
28:I5:8:TRP:CZ3	28:I5:20:PRO:HB3	2.51	0.45
12:J1:57:ALA:O	12:J1:61:LEU:N	2.47	0.45
12:J2:114:VAL:HB	12:J2:126:ALA:HB1	1.99	0.45
12:J5:58:ARG:O	12:J5:62:THR:HG23	2.16	0.45
24:D1:76:ARG:HD3	29:K1:22:VAL:HB	1.98	0.45
29:K6:24:LYS:HA	29:K6:66:HIS:HA	1.99	0.45
30:L1:124:ASP:OD2	30:L1:147:LYS:HD2	2.17	0.45
13:M1:27:ILE:CG2	29:K1:84:HIS:CD2	3.00	0.45
14:N6:91:LEU:HD11	14:N6:121:ARG:HD2	1.98	0.45
31:P4:119:PHE:CD1	34:S4:119:ALA:CA	2.99	0.45
31:P4:60:LEU:HD22	31:P4:92:SER:OG	2.17	0.45
32:Q1:109:LYS:HE2	32:Q1:120:LEU:HD21	1.99	0.45
22:A1:214:GLU:CB	33:R1:84:TYR:CE1	2.98	0.45
33:R2:61:ILE:HG22	33:R2:66:VAL:H	1.82	0.45
1:T2:35:ASP:CB	34:S2:46:ARG:NE	2.62	0.45
1:T2:35:ASP:HB2	34:S2:46:ARG:NE	2.17	0.45
34:S3:50:ILE:CD1	34:S3:67:VAL:HG21	2.44	0.45
1:T4:35:ASP:CB	34:S4:46:ARG:NE	2.62	0.45
34:S6:81:ASP:O	34:S6:87:GLN:NE2	2.49	0.45
16:W2:27:ILE:HG12	16:W2:61:ILE:HB	1.98	0.45
16:W5:77:PRO:HG2	16:W5:79:PHE:CZ	2.52	0.45
4:X3:85:VAL:HA	4:X3:86:PRO:HD2	1.88	0.45
17:Y1:54:VAL:HB	17:Y1:76:TYR:HB2	1.98	0.45
17:Y4:110:ARG:NH1	17:Y4:128:GLY:O	2.44	0.45
17:Y4:8:ARG:O	17:Y4:9:THR:OG1	2.33	0.45
18:Z1:92:LEU:HA	18:Z1:97:ILE:HB	1.99	0.45
10:C1:246:LYS:O	10:C1:249:SER:OG	2.31	0.44
3:V2:50:PHE:HZ	10:C2:267:GLN:HE22	1.60	0.44
10:C3:207:ALA:O	10:C3:210:PRO:HD2	2.17	0.44
10:C6:207:ALA:O	10:C6:210:PRO:HD2	2.17	0.44
10:C6:275:LYS:HA	10:C6:275:LYS:CE	2.46	0.44
24:D5:74:GLN:NE2	24:D5:84:VAL:O	2.50	0.44
24:D6:74:GLN:NE2	24:D6:84:VAL:O	2.50	0.44
25:E5:124:CYS:O	25:E5:160:ILE:N	2.29	0.44
25:E5:126:VAL:HG12	25:E5:139:LEU:HD13	1.98	0.44
25:E5:132:GLY:N	25:E5:136:ILE:O	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E6:38:LEU:HA	25:E6:41:CYS:SG	2.57	0.44
26:F1:49:LEU:HA	26:F1:50:PRO:HD3	1.84	0.44
26:F3:49:LEU:HA	26:F3:50:PRO:HD3	1.84	0.44
11:G2:159:ARG:HB3	11:G2:172:LYS:HB3	1.99	0.44
11:G2:167:LYS:HB3	11:G2:168:LYS:H	1.51	0.44
27:H2:69:LEU:HA	27:H2:72:PHE:HD2	1.83	0.44
27:H4:158:LEU:O	27:H4:190:PRO:HD2	2.18	0.44
27:H5:158:LEU:O	27:H5:190:PRO:HD2	2.18	0.44
28:I4:8:TRP:CZ3	28:I4:20:PRO:HB3	2.51	0.44
12:J1:114:VAL:HB	12:J1:126:ALA:HB1	1.99	0.44
12:J1:136:ARG:HA	12:J1:141:VAL:HA	1.97	0.44
12:J5:114:VAL:HB	12:J5:126:ALA:HB1	1.99	0.44
12:J6:114:VAL:HB	12:J6:126:ALA:HB1	1.99	0.44
29:K1:96:ARG:O	29:K1:98:ARG:HG2	2.16	0.44
29:K2:24:LYS:HA	29:K2:66:HIS:HA	1.99	0.44
29:K2:96:ARG:O	29:K2:98:ARG:HG2	2.17	0.44
29:K3:96:ARG:O	29:K3:98:ARG:HG2	2.16	0.44
29:K5:24:LYS:HA	29:K5:66:HIS:HA	1.99	0.44
30:L1:147:LYS:HE3	30:L1:147:LYS:HB2	1.76	0.44
30:L4:132:ARG:O	30:L4:134:LEU:N	2.50	0.44
30:L5:152:LYS:HE2	30:L5:154:GLN:HE21	1.82	0.44
13:M6:27:ILE:CG2	29:K6:84:HIS:CD2	3.00	0.44
14:N2:30:SER:O	14:N2:33:VAL:HG22	2.17	0.44
14:N3:30:SER:O	14:N3:33:VAL:HG22	2.17	0.44
14:N4:141:TYR:HE1	14:N4:146:ALA:HB1	1.81	0.44
31:P4:15:PHE:HZ	31:P4:17:TYR:HD2	1.65	0.44
32:Q1:87:SER:O	32:Q1:91:ALA:N	2.50	0.44
33:R2:74:GLN:O	33:R2:76:GLU:N	2.50	0.44
33:R3:65:PRO:HB3	33:R3:73:LEU:HG	1.99	0.44
18:Z4:86:ALA:HB1	34:S4:3:LEU:HG	1.98	0.44
34:S4:50:ILE:HD12	34:S4:67:VAL:HG23	1.83	0.44
18:Z6:49:LEU:H	18:Z6:83:LEU:HD12	1.81	0.44
22:A1:183:LEU:HD23	22:A1:186:ARG:HD2	1.99	0.44
22:A1:190:SER:HB2	22:A1:193:HIS:HB3	1.99	0.44
22:A5:190:SER:HB2	22:A5:193:HIS:HB3	1.99	0.44
22:A6:215:GLN:HE21	33:R6:80:ARG:NH1	2.15	0.44
24:D6:71:ALA:HB1	24:D6:75:LYS:HD2	1.98	0.44
25:E2:38:LEU:HA	25:E2:41:CYS:SG	2.57	0.44
26:F2:118:ASN:ND2	26:F2:183:GLY:HA3	2.32	0.44
26:F4:133:THR:HG21	26:F4:135:ARG:NE	2.32	0.44
11:G2:223:LYS:O	11:G2:227:GLN:HG2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G3:146:ASN:HD22	11:G3:146:ASN:HA	1.59	0.44
11:G3:167:LYS:HB3	11:G3:168:LYS:H	1.51	0.44
11:G4:68:LEU:O	11:G4:69:THR:OG1	2.28	0.44
11:G5:57:ASP:HA	11:G5:106:LEU:HB2	1.99	0.44
27:H2:134:VAL:HG22	27:H2:173:PHE:CD2	2.52	0.44
27:H3:158:LEU:O	27:H3:190:PRO:HD2	2.18	0.44
27:H4:163:GLN:HG3	27:H4:189:PHE:HZ	1.58	0.44
27:H5:6:ALA:O	27:H5:24:SER:OG	2.26	0.44
28:I1:162:LEU:HG	28:I1:166:PHE:HE2	1.82	0.44
28:I2:193:LYS:O	28:I2:196:GLU:HG2	2.17	0.44
28:I4:193:LYS:O	28:I4:196:GLU:HG2	2.17	0.44
12:J4:110:LEU:HD22	12:J4:147:PHE:CD2	2.53	0.44
12:J6:75:ASN:HB3	25:E6:252:ARG:NH2	2.32	0.44
29:K4:10:ALA:O	29:K4:14:LEU:N	2.37	0.44
29:K5:57:TYR:O	29:K5:72:THR:OG1	2.19	0.44
30:L6:121:GLN:HB2	30:L6:153:LYS:HD2	1.98	0.44
13:M4:95:ASP:HB2	13:M4:99:LYS:HB2	2.00	0.44
13:M6:125:GLU:O	13:M6:129:LYS:N	2.48	0.44
14:N2:39:LYS:HA	14:N2:42:LYS:HZ3	1.81	0.44
14:N3:130:LYS:HZ1	14:N3:140:LYS:HD2	1.82	0.44
14:N3:84:LEU:CB	14:N3:135:LEU:HD21	2.47	0.44
31:P1:34:MET:HB3	31:P1:42:ARG:HG3	1.99	0.44
31:P2:49:LEU:HD23	31:P2:49:LEU:HA	1.78	0.44
31:P6:60:LEU:HD22	31:P6:92:SER:OG	2.17	0.44
32:Q3:109:LYS:HE2	32:Q3:120:LEU:HD21	1.99	0.44
33:R4:58:MET:HG3	33:R4:61:ILE:CD1	2.29	0.44
33:R5:68:GLY:HA3	33:R5:69:ILE:HA	1.83	0.44
33:R6:80:ARG:CG	33:R6:80:ARG:NH1	2.80	0.44
1:T3:3:GLY:O	1:T3:4:VAL:HG12	2.17	0.44
1:T4:99:VAL:O	1:T4:103:VAL:HG23	2.17	0.44
2:U3:19:ARG:CD	2:U3:119:ALA:HB3	2.32	0.44
2:U6:26:SER:HB2	2:U6:32:LEU:HD22	1.99	0.44
3:V3:24:ILE:HG23	3:V3:28:ASP:HB3	1.99	0.44
4:X5:51:VAL:HG21	4:X5:94:ILE:HD11	1.99	0.44
17:Y4:20:ARG:NH1	17:Y4:22:GLN:OE1	2.44	0.44
17:Y6:20:ARG:HH11	17:Y6:74:MET:HA	1.82	0.44
18:Z1:49:LEU:H	18:Z1:83:LEU:HD12	1.82	0.44
22:A4:90:PHE:CD1	22:A4:179:ALA:HB2	2.53	0.44
22:A4:215:GLN:HE21	33:R4:80:ARG:NH1	2.15	0.44
23:B1:105:LEU:HD23	23:B1:110:MET:HE2	1.98	0.44
23:B6:175:GLU:O	23:B6:178:THR:OG1	2.19	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D1:104:SER:HB3	24:D1:108:LYS:HE2	2.00	0.44
24:D1:71:ALA:O	24:D1:75:LYS:N	2.47	0.44
24:D5:30:ALA:HB1	24:D5:103:GLU:OE1	2.17	0.44
25:E3:127:ARG:NE	25:E3:142:HIS:HA	2.33	0.44
25:E4:61:VAL:HG12	25:E4:80:ILE:HG23	2.00	0.44
26:F3:59:LYS:HB2	26:F3:62:ARG:HD3	2.00	0.44
26:F4:191:LYS:HA	26:F4:194:ASP:CB	2.46	0.44
26:F5:41:VAL:HG11	26:F5:68:ILE:HG12	2.00	0.44
26:F6:125:SER:OG	26:F6:137:GLN:O	2.32	0.44
11:G2:57:ASP:HA	11:G2:106:LEU:HB2	1.99	0.44
11:G6:153:VAL:C	11:G6:155:GLN:N	2.69	0.44
11:G6:159:ARG:HB3	11:G6:172:LYS:HB3	1.99	0.44
27:H3:96:ALA:HB3	27:H3:98:ARG:NH1	2.31	0.44
27:H5:96:ALA:HB3	27:H5:98:ARG:NH1	2.31	0.44
12:J2:158:ASP:OD1	12:J2:159:PHE:N	2.44	0.44
12:J2:58:ARG:O	12:J2:62:THR:HG23	2.16	0.44
14:N1:26:LEU:HG	14:N1:26:LEU:O	2.17	0.44
14:N3:130:LYS:NZ	14:N3:140:LYS:CD	2.78	0.44
14:N3:55:ARG:HA	14:N3:60:VAL:O	2.18	0.44
14:N4:131:THR:O	30:L4:152:LYS:HD3	2.17	0.44
31:P2:26:LEU:CD2	31:P2:88:GLU:HG3	2.48	0.44
31:P4:15:PHE:CG	31:P4:16:THR:N	2.86	0.44
31:P6:41:GLN:HE21	31:P6:84:ILE:HG23	1.62	0.44
32:Q4:109:LYS:HE2	32:Q4:120:LEU:HD21	1.99	0.44
34:S3:63:GLU:HA	34:S3:66:ARG:HG2	2.00	0.44
16:W1:77:PRO:HG2	16:W1:79:PHE:CZ	2.52	0.44
16:W2:74:VAL:HG23	16:W2:126:LEU:O	2.17	0.44
17:Y6:20:ARG:NH1	17:Y6:22:GLN:OE1	2.44	0.44
22:A1:90:PHE:CD1	22:A1:179:ALA:HB2	2.53	0.44
22:A6:22:GLY:O	22:A6:24:HIS:N	2.46	0.44
23:B5:128:LYS:HG3	23:B5:129:THR:O	2.18	0.44
23:B5:40:ASN:N	23:B5:75:GLN:OE1	2.34	0.44
23:B6:214:LYS:HD3	23:B6:216:LYS:HD2	2.00	0.44
3:V5:50:PHE:HZ	10:C5:267:GLN:HE22	1.60	0.44
24:D1:53:THR:HG23	24:D1:90:LYS:HE3	1.98	0.44
24:D2:106:ARG:HB3	24:D2:175:VAL:HG12	1.98	0.44
24:D4:64:ARG:CG	29:K4:95:ARG:HH22	2.27	0.44
24:D5:106:ARG:HG3	24:D5:107:TYR:N	2.31	0.44
25:E2:127:ARG:NE	25:E2:142:HIS:HA	2.33	0.44
25:E2:61:VAL:HG12	25:E2:80:ILE:HG23	2.00	0.44
26:F1:55:ARG:HG2	26:F1:62:ARG:NH1	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F1:86:LYS:O	26:F1:87:LEU:HD12	2.17	0.44
26:F2:70:GLU:O	26:F2:73:THR:OG1	2.30	0.44
26:F6:133:THR:HG21	26:F6:135:ARG:NE	2.32	0.44
11:G5:223:LYS:O	11:G5:227:GLN:HG2	2.17	0.44
28:I2:162:LEU:HG	28:I2:166:PHE:HE2	1.82	0.44
28:I3:79:ILE:HG21	28:I3:170:LYS:HZ2	1.82	0.44
28:I5:162:LEU:HG	28:I5:166:PHE:HE2	1.82	0.44
13:M2:117:GLU:OE1	13:M2:119:GLN:N	2.36	0.44
14:N5:130:LYS:NZ	14:N5:139:TRP:O	2.44	0.44
14:N6:30:SER:O	14:N6:33:VAL:HG22	2.17	0.44
15:O2:46:ASP:O	15:O2:49:GLY:N	2.40	0.44
31:P1:41:GLN:HE22	31:P1:115:TYR:HB3	1.83	0.44
31:P1:15:PHE:CG	31:P1:16:THR:N	2.86	0.44
31:P3:41:GLN:CG	31:P3:84:ILE:HG21	2.47	0.44
33:R4:77:GLU:O	33:R4:78:ARG:C	2.55	0.44
33:R6:58:MET:HG3	33:R6:61:ILE:CD1	2.41	0.44
1:T5:3:GLY:O	1:T5:4:VAL:HG12	2.17	0.44
3:V4:24:ILE:HG23	3:V4:28:ASP:HB3	1.99	0.44
16:W1:74:VAL:HG23	16:W1:126:LEU:O	2.18	0.44
16:W4:2:VAL:O	16:W4:4:MET:N	2.46	0.44
17:Y1:37:LYS:O	17:Y1:41:ARG:HG2	2.18	0.44
17:Y6:37:LYS:O	17:Y6:41:ARG:HG2	2.17	0.44
18:Z1:111:ARG:O	18:Z1:113:THR:N	2.50	0.44
18:Z5:92:LEU:HA	18:Z5:97:ILE:HB	1.99	0.44
3:V2:60:ARG:HH12	22:A2:158:ASP:HB3	1.81	0.44
22:A3:215:GLN:HE21	33:R3:80:ARG:NH1	2.15	0.44
10:C1:207:ALA:O	10:C1:210:PRO:HD2	2.17	0.44
10:C3:196:ILE:CG2	10:C3:223:TYR:HB2	2.46	0.44
10:C3:65:LYS:N	10:C3:277:HIS:CE1	2.86	0.44
24:D2:209:SER:HB2	33:R2:40:ILE:HB	2.00	0.44
24:D3:104:SER:HB3	24:D3:108:LYS:HE2	1.99	0.44
24:D4:74:GLN:NE2	24:D4:84:VAL:O	2.50	0.44
24:D5:53:THR:HG23	24:D5:90:LYS:HE3	1.98	0.44
25:E2:31:PRO:HB3	25:E2:43:PRO:HB3	2.00	0.44
25:E3:31:PRO:HB3	25:E3:43:PRO:HB3	2.00	0.44
25:E4:38:LEU:HA	25:E4:41:CYS:SG	2.58	0.44
25:E6:19:MET:HE1	25:E6:108:ARG:HH11	1.83	0.44
26:F3:173:LEU:O	26:F3:177:LEU:HG	2.17	0.44
26:F4:55:ARG:HG2	26:F4:62:ARG:NH1	2.33	0.44
11:G1:159:ARG:HB3	11:G1:172:LYS:HB3	1.99	0.44
11:G3:223:LYS:O	11:G3:227:GLN:HG2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G5:67:VAL:N	11:G5:100:CYS:SG	2.90	0.44
27:H3:135:PHE:HB3	27:H3:136:PRO:HD3	1.99	0.44
28:I1:193:LYS:O	28:I1:196:GLU:HG2	2.17	0.44
28:I2:123:ARG:NE	15:O5:64:ALA:HA	2.33	0.44
12:J2:110:LEU:HB2	12:J2:147:PHE:O	2.18	0.44
12:J4:114:VAL:HB	12:J4:126:ALA:HB1	1.99	0.44
29:K1:24:LYS:HA	29:K1:66:HIS:HA	1.99	0.44
29:K2:93:THR:CB	29:K2:95:ARG:NH1	2.79	0.44
24:D2:64:ARG:HD3	29:K2:95:ARG:NH2	2.24	0.44
30:L6:132:ARG:O	30:L6:134:LEU:N	2.50	0.44
14:N2:133:ARG:HH21	30:L2:154:GLN:HG3	1.81	0.44
15:O2:84:ARG:HA	15:O2:87:GLU:OE2	2.18	0.44
31:P5:75:VAL:HB	31:P5:93:MET:HE2	2.00	0.44
33:R5:21:TYR:HD2	33:R5:72:LYS:CD	2.18	0.44
34:S3:48:ALA:HB2	34:S3:70:ILE:HD12	2.00	0.44
1:T2:99:VAL:O	1:T2:103:VAL:HG23	2.17	0.44
1:T6:27:LYS:HG3	1:T6:29:LYS:HG2	1.99	0.44
2:U4:26:SER:HB2	2:U4:32:LEU:HD22	1.99	0.44
2:U4:17:ILE:HB	2:U4:94:PRO:HA	1.99	0.44
3:V1:24:ILE:HG23	3:V1:28:ASP:HB3	1.99	0.44
18:Z2:112:ASN:O	18:Z2:113:THR:OG1	2.33	0.44
18:Z2:92:LEU:HA	18:Z2:97:ILE:HB	1.99	0.44
18:Z5:111:ARG:O	18:Z5:113:THR:N	2.50	0.44
22:A2:102:ARG:CD	22:A2:102:ARG:N	4.95	0.44
22:A3:102:ARG:N	22:A3:102:ARG:CD	4.99	0.44
22:A6:183:LEU:HD23	22:A6:186:ARG:HD2	1.99	0.44
22:A6:90:PHE:CD1	22:A6:179:ALA:HB2	2.53	0.44
24:D1:64:ARG:HE	29:K1:95:ARG:NE	2.15	0.44
24:D2:64:ARG:HE	29:K2:95:ARG:NE	2.15	0.44
24:D3:209:SER:HB2	33:R3:40:ILE:HB	2.00	0.44
25:E1:61:VAL:HG12	25:E1:80:ILE:HG23	2.00	0.44
25:E3:61:VAL:HG12	25:E3:80:ILE:HG23	2.00	0.44
12:J4:75:ASN:HB3	25:E4:252:ARG:NH2	2.32	0.44
25:E4:31:PRO:HB3	25:E4:43:PRO:HB3	2.00	0.44
25:E5:38:LEU:HA	25:E5:41:CYS:SG	2.58	0.44
25:E6:186:GLY:N	25:E6:189:LEU:HD23	2.32	0.44
26:F2:125:SER:OG	26:F2:137:GLN:O	2.32	0.44
26:F2:19:LEU:H	26:F2:48:TYR:HE1	1.66	0.44
26:F2:39:ILE:HG23	26:F2:68:ILE:HG21	1.99	0.44
26:F3:70:GLU:O	26:F3:73:THR:OG1	2.30	0.44
26:F4:113:VAL:O	26:F4:117:ILE:HG12	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F5:191:LYS:HA	26:F5:194:ASP:CB	2.46	0.44
11:G2:149:LYS:HB2	11:G2:149:LYS:HZ2	1.79	0.44
27:H6:157:HIS:HB3	27:H6:190:PRO:HG3	2.00	0.44
12:J6:110:LEU:HD22	12:J6:147:PHE:CD2	2.52	0.44
12:J6:85:GLY:HA2	12:J6:151:LEU:HD22	2.00	0.44
30:L4:121:GLN:HB3	30:L4:153:LYS:HG3	1.94	0.44
14:N1:30:SER:O	14:N1:33:VAL:HG22	2.17	0.44
14:N4:55:ARG:HA	14:N4:60:VAL:O	2.18	0.44
15:O5:51:GLU:OE2	23:B5:65:ARG:NH2	2.50	0.44
15:O6:71:PRO:O	15:O6:75:MET:HG3	2.17	0.44
31:P2:121:ILE:HD11	31:P2:123:TYR:HE2	0.58	0.44
33:R3:58:MET:O	33:R3:61:ILE:HG13	2.18	0.44
33:R3:77:GLU:HG2	33:R3:81:ARG:CG	2.44	0.44
2:U1:61:LEU:HD22	24:D1:34:TYR:CZ	27.45	0.44
2:U2:17:ILE:HG23	2:U2:95:SER:N	1.90	0.44
3:V4:60:ARG:HH12	22:A4:158:ASP:HB3	1.81	0.44
16:W6:74:VAL:HG23	16:W6:126:LEU:O	2.18	0.44
4:X2:90:CYS:HB3	4:X2:130:LEU:HD11	1.98	0.44
4:X3:90:CYS:HB3	4:X3:130:LEU:HD11	1.98	0.44
4:X6:90:CYS:HB3	4:X6:130:LEU:HD11	1.99	0.44
17:Y1:17:LEU:HD22	25:E1:69:PHE:CE1	2.49	0.44
17:Y5:37:LYS:O	17:Y5:41:ARG:HG2	2.18	0.44
17:Y6:17:LEU:HD22	25:E6:69:PHE:CE1	2.50	0.44
18:Z6:57:LYS:HE2	18:Z6:77:LEU:HD11	1.98	0.44
22:A5:102:ARG:CD	22:A5:102:ARG:N	4.99	0.44
23:B5:214:LYS:HD3	23:B5:216:LYS:HD2	2.00	0.44
24:D3:70:THR:O	24:D3:74:GLN:HG2	2.18	0.44
24:D3:53:THR:HG23	24:D3:90:LYS:HE3	1.98	0.44
26:F1:19:LEU:H	26:F1:48:TYR:HE1	1.66	0.44
26:F2:14:THR:HA	26:F2:15:PRO:HA	1.72	0.44
26:F4:41:VAL:HG11	26:F4:68:ILE:HG12	2.00	0.44
11:G6:58:LYS:HE3	11:G6:105:ASN:HB2	2.00	0.44
27:H2:88:SER:O	27:H2:90:LYS:N	2.42	0.44
27:H4:134:VAL:HG22	27:H4:173:PHE:CD2	2.51	0.44
27:H4:6:ALA:O	27:H4:24:SER:OG	2.26	0.44
27:H5:135:PHE:HB3	27:H5:136:PRO:HD3	1.99	0.44
27:H6:135:PHE:HB3	27:H6:136:PRO:HD3	1.99	0.44
12:J1:110:LEU:HB2	12:J1:147:PHE:O	2.18	0.44
12:J5:110:LEU:HD22	12:J5:147:PHE:CD2	2.53	0.44
24:D3:76:ARG:HH21	29:K3:66:HIS:CE1	2.34	0.44
14:N1:133:ARG:NH1	30:L1:152:LYS:C	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L3:132:ARG:O	30:L3:134:LEU:N	2.50	0.44
13:M4:125:GLU:O	13:M4:129:LYS:N	2.48	0.44
13:M4:36:ARG:HE	13:M4:40:LYS:NZ	2.08	0.44
14:N2:55:ARG:HA	14:N2:60:VAL:O	2.18	0.44
31:P1:26:LEU:CD2	31:P1:88:GLU:HG3	2.48	0.44
31:P4:114:HIS:HB3	31:P4:119:PHE:CE2	2.52	0.44
31:P6:15:PHE:HZ	31:P6:17:TYR:HD2	1.65	0.44
31:P6:44:ARG:NH1	31:P6:44:ARG:HG3	2.33	0.44
34:S1:63:GLU:HA	34:S1:66:ARG:HG2	2.00	0.44
34:S5:63:GLU:HA	34:S5:66:ARG:HG2	1.99	0.44
1:T2:27:LYS:HG3	1:T2:29:LYS:HG2	1.99	0.44
1:T6:2:PRO:HA	1:T6:3:GLY:HA3	1.71	0.44
2:U3:34:LYS:HA	2:U3:37:ALA:HB3	1.99	0.44
2:U5:19:ARG:CD	2:U5:119:ALA:HB3	2.32	0.44
3:V2:24:ILE:HG23	3:V2:28:ASP:HB3	1.99	0.44
16:W4:74:VAL:HG23	16:W4:126:LEU:O	2.17	0.44
4:X2:101:LEU:O	4:X2:123:VAL:HG22	2.18	0.44
22:A2:190:SER:HB2	22:A2:193:HIS:HB3	1.99	0.44
22:A4:80:ARG:HH22	22:A4:166:LYS:HG2	1.82	0.44
22:A4:190:SER:HB2	22:A4:193:HIS:HB3	1.99	0.44
22:A5:183:LEU:HD23	22:A5:186:ARG:HD2	1.99	0.44
23:B2:128:LYS:HG3	23:B2:129:THR:O	2.18	0.44
23:B6:34:LYS:HG2	23:B6:43:ASN:HB3	1.99	0.44
10:C3:273:LEU:CG	10:C3:280:VAL:CG1	2.65	0.44
10:C4:65:LYS:N	10:C4:277:HIS:CE1	2.86	0.44
24:D1:74:GLN:NE2	24:D1:84:VAL:O	2.50	0.44
24:D6:70:THR:O	24:D6:74:GLN:HG2	2.18	0.44
25:E1:127:ARG:NE	25:E1:142:HIS:HA	2.33	0.44
11:G1:208:GLU:OE2	25:E1:168:LYS:HE2	2.18	0.44
25:E5:148:ARG:HE	25:E5:149:TYR:HE2	1.66	0.44
26:F1:59:LYS:HB2	26:F1:62:ARG:HD3	2.00	0.44
26:F2:182:LYS:O	26:F2:184:SER:N	2.41	0.44
26:F6:110:GLN:O	26:F6:114:ASN:ND2	2.51	0.44
11:G1:209:TYR:HA	11:G1:213:LEU:HB3	1.99	0.44
11:G5:159:ARG:HB3	11:G5:172:LYS:HB3	1.99	0.44
27:H1:72:PHE:O	27:H1:76:GLN:N	2.51	0.44
27:H5:68:GLN:O	27:H5:71:SER:OG	2.26	0.44
12:J3:85:GLY:HA2	12:J3:151:LEU:HD22	1.99	0.44
12:J5:169:ARG:NH2	12:J5:170:PRO:HG2	2.33	0.44
29:K2:59:LYS:O	29:K2:70:TYR:N	2.37	0.44
13:M1:95:ASP:HB2	13:M1:99:LYS:HB2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M6:95:ASP:HB2	13:M6:99:LYS:HB2	2.00	0.44
14:N3:84:LEU:HA	14:N3:135:LEU:HD23	1.99	0.44
14:N6:130:LYS:NZ	14:N6:137:PRO:O	2.34	0.44
31:P1:15:PHE:HZ	31:P1:17:TYR:HD2	1.65	0.44
31:P6:108:LYS:HB3	31:P6:109:PRO:CD	2.40	0.44
32:Q6:4:LYS:HZ3	32:Q6:99:TYR:HA	1.65	0.44
33:R1:88:VAL:O	33:R1:92:ASP:HB2	2.18	0.44
33:R2:68:GLY:HA3	33:R2:69:ILE:HA	1.64	0.44
33:R3:80:ARG:CG	33:R3:80:ARG:NH1	2.80	0.44
33:R5:88:VAL:O	33:R5:92:ASP:HB2	2.18	0.44
34:S1:107:LEU:O	34:S1:111:LEU:HG	2.18	0.44
34:S1:123:LEU:HD22	34:S1:127:TRP:CZ2	2.53	0.44
34:S3:108:ARG:O	34:S3:112:GLU:HG2	2.18	0.44
34:S4:107:LEU:O	34:S4:111:LEU:HG	2.18	0.44
34:S5:123:LEU:HD22	34:S5:127:TRP:CZ2	2.53	0.44
1:T2:3:GLY:O	1:T2:4:VAL:HG12	2.17	0.44
2:U1:17:ILE:HB	2:U1:94:PRO:HA	1.99	0.44
2:U4:34:LYS:HA	2:U4:37:ALA:HB3	1.99	0.44
4:X2:15:SER:O	4:X2:18:ARG:HG2	2.18	0.44
4:X3:51:VAL:HG21	4:X3:94:ILE:HD11	1.99	0.44
4:X6:125:VAL:O	4:X6:127:ASN:N	2.51	0.44
17:Y4:37:LYS:O	17:Y4:41:ARG:HG2	2.18	0.44
17:Y6:28:LEU:HG	17:Y6:30:PRO:HD3	2.00	0.44
18:Z4:57:LYS:HE2	18:Z4:77:LEU:HD11	1.99	0.44
22:A1:70:ASN:HA	22:A1:71:PRO:HD2	1.88	0.44
22:A2:214:GLU:OE1	33:R2:84:TYR:HD1	1.93	0.44
22:A3:90:PHE:CD1	22:A3:179:ALA:HB2	2.52	0.44
22:A3:190:SER:HB2	22:A3:193:HIS:HB3	1.99	0.44
23:B2:214:LYS:HD3	23:B2:216:LYS:HD2	2.00	0.44
24:D2:104:SER:HB3	24:D2:108:LYS:HE2	1.99	0.44
24:D4:70:THR:O	24:D4:74:GLN:HG2	2.18	0.44
24:D5:95:GLY:O	24:D5:97:CYS:N	2.48	0.44
25:E1:38:LEU:HA	25:E1:41:CYS:SG	2.57	0.44
25:E3:36:HIS:ND1	25:E3:41:CYS:HB3	2.33	0.44
11:G4:208:GLU:OE2	25:E4:168:LYS:HE2	2.18	0.44
25:E5:36:HIS:ND1	25:E5:41:CYS:HB3	2.33	0.44
25:E6:36:HIS:ND1	25:E6:41:CYS:HB3	2.33	0.44
26:F2:59:LYS:HB2	26:F2:62:ARG:HD3	2.00	0.44
26:F6:113:VAL:O	26:F6:117:ILE:HG12	2.18	0.44
26:F6:59:LYS:HB2	26:F6:62:ARG:HD3	2.00	0.44
11:G2:140:ARG:HA	11:G2:140:ARG:HD3	1.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G6:223:LYS:O	11:G6:227:GLN:HG2	2.17	0.44
27:H6:69:LEU:HA	27:H6:72:PHE:HD2	1.83	0.44
12:J1:169:ARG:NH2	12:J1:170:PRO:HG2	2.33	0.44
12:J3:110:LEU:HB2	12:J3:147:PHE:O	2.18	0.44
12:J3:110:LEU:HD22	12:J3:147:PHE:CD2	2.53	0.44
12:J4:110:LEU:HB2	12:J4:147:PHE:O	2.18	0.44
12:J5:110:LEU:HB2	12:J5:147:PHE:O	2.18	0.44
12:J6:163:SER:H	12:J6:167:GLY:HA3	1.81	0.44
29:K3:93:THR:CB	29:K3:95:ARG:NH1	2.79	0.44
30:L6:35:ARG:NE	30:L6:50:ALA:O	2.45	0.44
13:M5:51:VAL:HB	13:M5:109:VAL:HB	2.00	0.44
14:N3:141:TYR:HE1	14:N3:146:ALA:HB1	1.80	0.44
14:N6:55:ARG:HA	14:N6:60:VAL:O	2.18	0.44
15:O3:84:ARG:HA	15:O3:87:GLU:OE2	2.18	0.44
15:O4:84:ARG:HA	15:O4:87:GLU:OE2	2.18	0.44
31:P2:15:PHE:CG	31:P2:16:THR:N	2.86	0.44
31:P2:15:PHE:HZ	31:P2:17:TYR:HD2	1.65	0.44
31:P3:108:LYS:HB3	31:P3:109:PRO:CD	2.41	0.44
31:P5:121:ILE:HD11	31:P5:123:TYR:HE2	0.58	0.44
32:Q6:109:LYS:HE2	32:Q6:120:LEU:HD21	1.99	0.44
33:R3:61:ILE:C	33:R3:73:LEU:HD22	2.38	0.44
33:R6:60:ARG:HE	33:R6:66:VAL:HB	1.83	0.44
34:S2:107:LEU:O	34:S2:111:LEU:HG	2.18	0.44
34:S6:107:LEU:O	34:S6:111:LEU:HG	2.18	0.44
1:T5:27:LYS:HG3	1:T5:29:LYS:HG2	1.99	0.44
1:T5:99:VAL:O	1:T5:103:VAL:HG23	2.18	0.44
2:U3:17:ILE:HB	2:U3:94:PRO:HA	1.99	0.44
3:V4:35:ASN:HB3	3:V4:50:PHE:CD1	2.52	0.44
16:W3:74:VAL:HG23	16:W3:126:LEU:O	2.18	0.44
16:W4:65:LEU:C	16:W4:67:GLY:H	2.21	0.44
4:X1:125:VAL:O	4:X1:127:ASN:N	2.51	0.44
4:X3:15:SER:O	4:X3:18:ARG:HG2	2.18	0.44
17:Y3:20:ARG:HH11	17:Y3:74:MET:HA	1.82	0.44
18:Z2:111:ARG:O	18:Z2:113:THR:N	2.50	0.44
22:A1:215:GLN:HE21	33:R1:80:ARG:NH1	2.15	0.43
23:B2:21:VAL:HG22	30:L4:31:GLU:HB2	1.35	0.43
23:B3:128:LYS:HG3	23:B3:129:THR:O	2.18	0.43
23:B5:167:LYS:O	23:B5:171:ILE:HG12	2.18	0.43
3:V1:50:PHE:HZ	10:C1:267:GLN:HE22	1.60	0.43
10:C5:189:GLY:C	10:C5:191:VAL:H	2.22	0.43
10:C5:65:LYS:N	10:C5:277:HIS:CE1	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D3:64:ARG:HE	29:K3:95:ARG:NE	2.15	0.43
2:U4:61:LEU:HD22	24:D4:34:TYR:CZ	27.45	0.43
24:D6:209:SER:HB2	33:R6:40:ILE:HB	2.00	0.43
25:E6:126:VAL:HG12	25:E6:139:LEU:HD13	1.98	0.43
25:E6:127:ARG:NE	25:E6:142:HIS:HA	2.33	0.43
26:F1:110:GLN:O	26:F1:114:ASN:ND2	2.51	0.43
26:F6:19:LEU:H	26:F6:48:TYR:HE1	1.66	0.43
11:G1:58:LYS:HE3	11:G1:105:ASN:HB2	2.00	0.43
11:G1:153:VAL:C	11:G1:155:GLN:N	2.69	0.43
11:G2:58:LYS:HE3	11:G2:105:ASN:HB2	1.99	0.43
11:G5:58:LYS:HE3	11:G5:105:ASN:HB2	2.00	0.43
11:G5:141:ILE:HG12	11:G5:144:LEU:CD1	2.47	0.43
27:H4:163:GLN:NE2	27:H4:189:PHE:CD2	2.75	0.43
27:H4:69:LEU:HA	27:H4:72:PHE:HD2	1.83	0.43
27:H6:88:SER:O	27:H6:90:LYS:N	2.43	0.43
12:J1:37:LEU:HB3	12:J1:38:ARG:H	1.45	0.43
12:J3:4:ALA:H	12:J3:5:ARG:NE	2.16	0.43
13:M4:27:ILE:CG2	29:K4:84:HIS:CD2	3.00	0.43
13:M2:125:GLU:O	13:M2:129:LYS:N	2.48	0.43
14:N2:26:LEU:HG	14:N2:26:LEU:O	2.17	0.43
14:N5:26:LEU:HG	14:N5:26:LEU:O	2.18	0.43
14:N6:39:LYS:HA	14:N6:42:LYS:HZ3	1.81	0.43
15:O3:92:ALA:CB	15:O3:125:LYS:HB2	2.48	0.43
15:O5:92:ALA:CB	15:O5:125:LYS:HB2	2.48	0.43
33:R2:88:VAL:O	33:R2:92:ASP:HB2	2.18	0.43
33:R5:61:ILE:HB	33:R5:73:LEU:CD2	2.48	0.43
33:R6:98:VAL:HB	33:R6:115:SER:HB3	2.00	0.43
1:T6:99:VAL:O	1:T6:103:VAL:HG23	2.17	0.43
16:W3:41:MET:HG2	16:W3:129:PHE:CE2	2.53	0.43
16:W4:41:MET:HG2	16:W4:129:PHE:CE2	2.53	0.43
16:W5:74:VAL:HG23	16:W5:126:LEU:O	2.17	0.43
4:X4:9:THR:OG1	4:X4:10:ALA:N	2.51	0.43
17:Y1:86:GLU:HG3	17:Y1:90:ARG:HB2	2.00	0.43
17:Y5:58:PHE:O	17:Y5:72:PHE:N	2.32	0.43
18:Z6:92:LEU:HA	18:Z6:97:ILE:HB	1.99	0.43
22:A2:152:SER:HA	22:A2:153:PRO:HD2	1.91	0.43
22:A2:183:LEU:HD23	22:A2:186:ARG:HD2	1.99	0.43
24:D5:64:ARG:HE	29:K5:95:ARG:NE	2.15	0.43
24:D6:64:ARG:HE	29:K6:95:ARG:NE	2.15	0.43
25:E4:103:TYR:HB3	25:E4:107:GLY:HA2	2.00	0.43
25:E6:61:VAL:HG12	25:E6:80:ILE:HG23	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F1:125:SER:OG	26:F1:137:GLN:O	2.32	0.43
26:F3:19:LEU:H	26:F3:48:TYR:HE1	1.66	0.43
26:F4:173:LEU:O	26:F4:177:LEU:HG	2.17	0.43
11:G2:208:GLU:OE2	25:E2:168:LYS:HE2	2.18	0.43
27:H1:69:LEU:HA	27:H1:72:PHE:HD2	1.83	0.43
12:J2:110:LEU:HD22	12:J2:147:PHE:CD2	2.53	0.43
12:J4:169:ARG:NH2	12:J4:170:PRO:HG2	2.33	0.43
12:J6:110:LEU:HB2	12:J6:147:PHE:O	2.18	0.43
30:L2:132:ARG:O	30:L2:134:LEU:N	2.50	0.43
13:M1:111:VAL:HG12	13:M1:114:TYR:CE1	2.50	0.43
13:M2:51:VAL:HB	13:M2:109:VAL:HB	2.00	0.43
13:M3:27:ILE:CG2	29:K3:84:HIS:CD2	3.00	0.43
14:N2:137:PRO:HD3	30:L2:154:GLN:NE2	2.33	0.43
14:N2:83:ASP:HB3	14:N2:150:VAL:O	2.18	0.43
14:N6:43:LYS:H	14:N6:43:LYS:HG2	1.48	0.43
15:O2:92:ALA:CB	15:O2:125:LYS:HB2	2.48	0.43
15:O5:84:ARG:HA	15:O5:87:GLU:OE2	2.18	0.43
15:O6:84:ARG:HA	15:O6:87:GLU:OE2	2.18	0.43
31:P4:123:TYR:C	31:P4:123:TYR:HD1	2.22	0.43
31:P5:60:LEU:HD22	31:P5:92:SER:OG	2.17	0.43
26:F3:49:LEU:HD11	32:Q3:49:TYR:HB3	2.00	0.43
24:D1:209:SER:HB2	33:R1:40:ILE:HB	2.00	0.43
33:R1:80:ARG:CG	33:R1:80:ARG:NH1	2.80	0.43
33:R4:98:VAL:HB	33:R4:115:SER:HB3	2.00	0.43
24:D5:209:SER:HB2	33:R5:40:ILE:HB	2.00	0.43
34:S1:48:ALA:HB2	34:S1:70:ILE:HD12	2.00	0.43
34:S5:107:LEU:O	34:S5:111:LEU:HG	2.18	0.43
2:U1:86:LYS:O	2:U1:87:ARG:NH2	2.44	0.43
16:W1:41:MET:HG2	16:W1:129:PHE:CE2	2.53	0.43
16:W1:65:LEU:C	16:W1:67:GLY:H	2.22	0.43
16:W2:41:MET:HG2	16:W2:129:PHE:CE2	2.54	0.43
4:X2:52:LEU:HD22	4:X2:53:GLU:HG2	1.98	0.43
4:X4:15:SER:O	4:X4:18:ARG:HG2	2.18	0.43
4:X6:101:LEU:O	4:X6:123:VAL:HG22	2.18	0.43
17:Y6:21:LYS:HE2	17:Y6:23:MET:HE1	2.00	0.43
18:Z3:112:ASN:O	18:Z3:113:THR:OG1	2.33	0.43
22:A5:90:PHE:CD1	22:A5:179:ALA:HB2	2.52	0.43
10:C2:65:LYS:N	10:C2:277:HIS:CE1	2.86	0.43
10:C5:168:GLY:N	10:C5:179:THR:O	2.32	0.43
25:E1:95:THR:OG1	25:E1:97:GLU:OE1	2.25	0.43
25:E3:79:ASP:CG	25:E3:80:ILE:H	2.22	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E4:127:ARG:NE	25:E4:142:HIS:HA	2.33	0.43
25:E4:88:ASP:O	25:E4:100:ARG:HA	2.19	0.43
25:E6:103:TYR:HB3	25:E6:107:GLY:HA2	2.00	0.43
26:F1:136:ARG:C	26:F1:203:ASN:ND2	2.72	0.43
26:F4:59:LYS:HB2	26:F4:62:ARG:HD3	2.00	0.43
26:F5:136:ARG:C	26:F5:203:ASN:ND2	2.72	0.43
11:G3:67:VAL:N	11:G3:100:CYS:SG	2.90	0.43
11:G4:67:VAL:N	11:G4:100:CYS:SG	2.90	0.43
11:G5:140:ARG:HA	11:G5:140:ARG:HD3	1.70	0.43
11:G5:167:LYS:HB3	11:G5:168:LYS:H	1.51	0.43
27:H2:72:PHE:O	27:H2:76:GLN:N	2.51	0.43
27:H6:158:LEU:O	27:H6:190:PRO:HD2	2.17	0.43
12:J1:110:LEU:HD22	12:J1:147:PHE:CD2	2.53	0.43
12:J2:85:GLY:HA2	12:J2:151:LEU:HD22	1.99	0.43
12:J4:37:LEU:HB3	12:J4:38:ARG:H	1.45	0.43
12:J4:85:GLY:HA2	12:J4:151:LEU:HD22	1.99	0.43
12:J5:57:ALA:O	12:J5:61:LEU:N	2.47	0.43
29:K3:51:SER:O	29:K3:54:SER:OG	2.25	0.43
30:L3:77:VAL:O	30:L3:123:GLY:N	2.46	0.43
30:L6:77:VAL:O	30:L6:123:GLY:N	2.47	0.43
13:M5:95:ASP:HB2	13:M5:99:LYS:HB2	2.00	0.43
15:O1:103:ASN:CG	15:O1:142:ARG:HB2	2.39	0.43
15:O1:84:ARG:HA	15:O1:87:GLU:OE2	2.18	0.43
31:P1:60:LEU:HD22	31:P1:92:SER:OG	2.17	0.43
31:P3:50:ARG:HA	31:P3:50:ARG:HD3	1.73	0.43
31:P6:123:TYR:C	31:P6:123:TYR:HD1	2.22	0.43
31:P6:15:PHE:CG	31:P6:16:THR:N	2.86	0.43
32:Q2:109:LYS:HE2	32:Q2:120:LEU:HD21	1.99	0.43
32:Q2:87:SER:O	32:Q2:91:ALA:N	2.50	0.43
33:R1:106:LEU:O	33:R1:110:ASP:N	2.40	0.43
33:R6:88:VAL:O	33:R6:92:ASP:HB2	2.18	0.43
34:S1:130:ARG:HD2	34:S1:134:GLN:OE1	2.18	0.43
34:S2:48:ALA:HB2	34:S2:70:ILE:HD12	2.00	0.43
34:S4:81:ASP:O	34:S4:87:GLN:NE2	2.49	0.43
34:S5:130:ARG:HD2	34:S5:134:GLN:OE1	2.18	0.43
1:T1:82:ARG:HG3	1:T1:90:SER:HB2	2.01	0.43
1:T4:3:GLY:O	1:T4:4:VAL:HG12	2.17	0.43
2:U2:34:LYS:HA	2:U2:37:ALA:HB3	1.99	0.43
16:W2:65:LEU:C	16:W2:67:GLY:H	2.21	0.43
16:W6:41:MET:HG2	16:W6:129:PHE:CE2	2.53	0.43
4:X1:101:LEU:O	4:X1:123:VAL:HG22	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X5:15:SER:O	4:X5:18:ARG:HG2	2.18	0.43
4:X6:15:SER:O	4:X6:18:ARG:HG2	2.18	0.43
22:A3:80:ARG:HH22	22:A3:166:LYS:HG2	1.82	0.43
22:A4:183:LEU:HD23	22:A4:186:ARG:HD2	1.99	0.43
22:A5:212:LYS:HB3	22:A5:212:LYS:HE3	1.63	0.43
23:B1:214:LYS:HD3	23:B1:216:LYS:HD2	2.00	0.43
23:B4:167:LYS:O	23:B4:171:ILE:HG12	2.18	0.43
23:B6:167:LYS:O	23:B6:171:ILE:HG12	2.19	0.43
24:D2:70:THR:O	24:D2:74:GLN:HG2	2.18	0.43
24:D6:104:SER:HB3	24:D6:108:LYS:HE2	1.99	0.43
24:D6:30:ALA:HB1	24:D6:103:GLU:OE1	2.17	0.43
25:E4:186:GLY:N	25:E4:189:LEU:HD23	2.32	0.43
25:E5:151:ASP:OD2	25:E5:153:LEU:HB2	2.19	0.43
26:F1:49:LEU:HD11	32:Q1:49:TYR:HB3	1.99	0.43
26:F2:55:ARG:HG2	26:F2:62:ARG:NH1	2.33	0.43
26:F5:115:ALA:O	26:F5:119:SER:OG	2.19	0.43
26:F5:19:LEU:H	26:F5:48:TYR:HE1	1.66	0.43
26:F6:86:LYS:O	26:F6:87:LEU:HD12	2.17	0.43
11:G2:221:LYS:HA	11:G2:224:ARG:HB3	2.01	0.43
11:G3:57:ASP:HA	11:G3:106:LEU:HB2	1.99	0.43
11:G3:159:ARG:HB3	11:G3:172:LYS:HB3	1.99	0.43
11:G5:68:LEU:O	11:G5:69:THR:OG1	2.28	0.43
11:G6:221:LYS:HA	11:G6:224:ARG:HB3	2.00	0.43
27:H4:170:VAL:CG1	27:H4:171:GLU:N	2.81	0.43
13:M1:51:VAL:HB	13:M1:109:VAL:HB	2.01	0.43
13:M1:125:GLU:O	13:M1:129:LYS:N	2.48	0.43
13:M5:27:ILE:CG2	29:K5:84:HIS:CD2	3.00	0.43
14:N4:26:LEU:HG	14:N4:26:LEU:O	2.18	0.43
14:N5:30:SER:O	14:N5:33:VAL:HG22	2.18	0.43
15:O3:147:ARG:HD2	15:O3:150:ARG:NE	2.30	0.43
15:O4:103:ASN:CG	15:O4:142:ARG:HB2	2.39	0.43
31:P5:123:TYR:HD1	31:P5:123:TYR:C	2.21	0.43
31:P6:26:LEU:CD2	31:P6:88:GLU:HG3	2.48	0.43
32:Q3:87:SER:O	32:Q3:91:ALA:N	2.50	0.43
33:R2:13:ALA:O	33:R2:16:ILE:HG22	2.18	0.43
33:R3:63:ARG:CG	33:R3:63:ARG:HH11	2.28	0.43
34:S2:130:ARG:HD2	34:S2:134:GLN:OE1	2.18	0.43
34:S4:123:LEU:HD22	34:S4:127:TRP:CZ2	2.53	0.43
34:S4:48:ALA:HB2	34:S4:70:ILE:HD12	2.00	0.43
34:S6:63:GLU:HA	34:S6:66:ARG:HG2	2.00	0.43
1:T4:82:ARG:HG3	1:T4:90:SER:HB2	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U2:61:LEU:H	2:U2:81:GLN:HE22	1.67	0.43
2:U5:17:ILE:HB	2:U5:94:PRO:HA	1.99	0.43
16:W3:10:ALA:O	16:W3:13:SER:OG	2.24	0.43
16:W5:65:LEU:C	16:W5:67:GLY:H	2.21	0.43
4:X2:95:GLU:HB2	4:X2:98:ASP:OD2	2.18	0.43
4:X3:125:VAL:O	4:X3:127:ASN:N	2.51	0.43
4:X5:95:GLU:HB2	4:X5:98:ASP:OD2	2.18	0.43
17:Y2:20:ARG:HH11	17:Y2:74:MET:HA	1.82	0.43
17:Y3:110:ARG:NH1	17:Y3:128:GLY:O	2.44	0.43
22:A1:77:ILE:HA	22:A1:99:ILE:O	2.19	0.43
22:A3:22:GLY:O	22:A3:24:HIS:N	2.46	0.43
22:A4:34:MET:HE1	22:A4:148:CYS:HB2	2.01	0.43
23:B1:167:LYS:O	23:B1:171:ILE:HG12	2.18	0.43
23:B4:100:PHE:HZ	23:B4:215:VAL:HG11	1.84	0.43
23:B4:40:ASN:N	23:B4:75:GLN:OE1	2.34	0.43
24:D4:126:ILE:HG21	24:D4:134:CYS:HB3	2.01	0.43
25:E1:148:ARG:HE	25:E1:149:TYR:HE2	1.66	0.43
25:E5:103:TYR:HB3	25:E5:107:GLY:HA2	2.01	0.43
25:E6:148:ARG:HE	25:E6:149:TYR:HE2	1.66	0.43
25:E6:31:PRO:HB3	25:E6:43:PRO:HB3	2.00	0.43
26:F2:107:ASN:HA	26:F2:108:PRO:HD2	1.71	0.43
26:F3:55:ARG:HG2	26:F3:62:ARG:NH1	2.33	0.43
26:F4:110:GLN:O	26:F4:114:ASN:ND2	2.51	0.43
26:F5:55:ARG:HG2	26:F5:62:ARG:NH1	2.33	0.43
26:F6:70:GLU:O	26:F6:73:THR:OG1	2.30	0.43
11:G1:167:LYS:HB3	11:G1:168:LYS:H	1.51	0.43
11:G1:4:ASN:HB2	11:G1:110:ASN:OD1	2.19	0.43
11:G2:149:LYS:NZ	11:G2:149:LYS:CB	2.75	0.43
11:G5:221:LYS:HA	11:G5:224:ARG:HB3	2.00	0.43
27:H3:157:HIS:HB3	27:H3:190:PRO:HG3	2.00	0.43
27:H4:63:PHE:HA	27:H4:95:ILE:O	2.19	0.43
28:I6:107:THR:OG1	28:I6:108:PRO:HD3	2.19	0.43
12:J2:169:ARG:NH2	12:J2:170:PRO:HG2	2.33	0.43
12:J5:85:GLY:HA2	12:J5:151:LEU:HD22	2.00	0.43
12:J6:4:ALA:H	12:J6:5:ARG:NE	2.16	0.43
30:L3:13:GLN:HG2	30:L3:36:TYR:HB3	2.01	0.43
13:M2:27:ILE:CG2	29:K2:84:HIS:CD2	3.00	0.43
13:M3:111:VAL:HG12	13:M3:114:TYR:CE1	2.50	0.43
13:M3:51:VAL:HB	13:M3:109:VAL:HB	2.01	0.43
13:M4:51:VAL:HB	13:M4:109:VAL:HB	2.01	0.43
14:N1:83:ASP:HB3	14:N1:150:VAL:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N2:122:ILE:O	14:N2:126:ALA:N	2.33	0.43
14:N4:30:SER:O	14:N4:33:VAL:HG22	2.18	0.43
14:N4:83:ASP:HB3	14:N4:150:VAL:O	2.18	0.43
14:N5:55:ARG:HA	14:N5:60:VAL:O	2.18	0.43
14:N5:83:ASP:HB3	14:N5:150:VAL:O	2.18	0.43
15:O2:103:ASN:CG	15:O2:142:ARG:HB2	2.39	0.43
15:O2:35:ALA:HB3	15:O2:98:ARG:O	2.19	0.43
15:O6:92:ALA:CB	15:O6:125:LYS:HB2	2.48	0.43
15:O6:103:ASN:CG	15:O6:142:ARG:HB2	2.39	0.43
31:P6:114:HIS:HB3	31:P6:119:PHE:CE2	2.52	0.43
26:F4:49:LEU:HD11	32:Q4:49:TYR:HB3	2.00	0.43
33:R3:65:PRO:CB	33:R3:74:GLN:NE2	2.81	0.43
33:R3:88:VAL:O	33:R3:92:ASP:HB2	2.18	0.43
33:R6:66:VAL:O	33:R6:66:VAL:HG13	2.18	0.43
34:S3:130:ARG:HD2	34:S3:134:GLN:OE1	2.18	0.43
34:S4:108:ARG:O	34:S4:112:GLU:HG2	2.18	0.43
34:S4:63:GLU:HA	34:S4:66:ARG:HG2	1.99	0.43
31:P5:110:GLU:CD	34:S5:113:ARG:HG3	2.38	0.43
1:T3:2:PRO:HA	1:T3:3:GLY:HA3	1.70	0.43
2:U1:34:LYS:HA	2:U1:37:ALA:HB3	1.99	0.43
2:U5:26:SER:HB2	2:U5:32:LEU:HD22	1.99	0.43
16:W2:10:ALA:O	16:W2:13:SER:OG	2.24	0.43
16:W3:65:LEU:C	16:W3:67:GLY:H	2.22	0.43
16:W4:3:ARG:HD3	16:W4:9:ASP:OD2	2.19	0.43
4:X2:49:GLY:O	4:X2:100:VAL:HG22	2.18	0.43
4:X2:51:VAL:HG21	4:X2:94:ILE:HD11	1.99	0.43
4:X5:101:LEU:O	4:X5:123:VAL:HG22	2.19	0.43
17:Y1:76:TYR:OH	17:Y1:86:GLU:OE1	2.21	0.43
17:Y2:86:GLU:HG3	17:Y2:90:ARG:HB2	2.01	0.43
17:Y3:86:GLU:HG3	17:Y3:90:ARG:HB2	2.01	0.43
17:Y5:86:GLU:HG3	17:Y5:90:ARG:HB2	2.00	0.43
22:A4:214:GLU:OE1	33:R4:84:TYR:HD1	1.94	0.43
23:B3:214:LYS:HD3	23:B3:216:LYS:HD2	2.00	0.43
23:B4:128:LYS:HG3	23:B4:129:THR:O	2.18	0.43
23:B5:100:PHE:HZ	23:B5:215:VAL:HG11	1.84	0.43
10:C3:274:VAL:HA	10:C3:275:LYS:HA	1.79	0.43
10:C4:242:ASP:HA	10:C4:245:SER:OG	2.19	0.43
10:C6:273:LEU:HB3	10:C6:280:VAL:HG13	1.64	0.43
25:E2:176:ASP:OD1	25:E2:177:THR:N	2.41	0.43
25:E2:88:ASP:O	25:E2:100:ARG:HA	2.19	0.43
11:G5:208:GLU:OE2	25:E5:168:LYS:HE2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E5:31:PRO:HB3	25:E5:43:PRO:HB3	2.00	0.43
11:G6:208:GLU:OE2	25:E6:168:LYS:HE2	2.18	0.43
17:Y6:22:GLN:NE2	25:E6:56:LEU:HD12	2.31	0.43
26:F1:113:VAL:O	26:F1:117:ILE:HG12	2.18	0.43
26:F1:125:SER:HG	26:F1:137:GLN:C	2.20	0.43
26:F1:173:LEU:O	26:F1:177:LEU:HG	2.17	0.43
26:F1:41:VAL:HG11	26:F1:68:ILE:HG12	2.00	0.43
26:F5:59:LYS:HB2	26:F5:62:ARG:HD3	2.00	0.43
26:F6:49:LEU:HA	26:F6:50:PRO:HD3	1.84	0.43
26:F6:55:ARG:HG2	26:F6:62:ARG:NH1	2.33	0.43
27:H1:158:LEU:O	27:H1:190:PRO:HD2	2.18	0.43
12:J1:4:ALA:H	12:J1:5:ARG:NE	2.17	0.43
13:M3:95:ASP:HB2	13:M3:99:LYS:HB2	2.00	0.43
14:N1:137:PRO:CG	30:L1:154:GLN:HB2	2.41	0.43
14:N1:55:ARG:HA	14:N1:60:VAL:O	2.18	0.43
14:N3:39:LYS:HA	14:N3:42:LYS:HZ2	1.84	0.43
14:N3:84:LEU:HA	14:N3:135:LEU:HD21	2.00	0.43
14:N6:83:ASP:HB3	14:N6:150:VAL:O	2.18	0.43
15:O3:35:ALA:HB3	15:O3:98:ARG:O	2.19	0.43
15:O6:35:ALA:HB3	15:O6:98:ARG:O	2.19	0.43
31:P4:118:GLU:HG3	31:P4:118:GLU:O	2.19	0.43
31:P5:18:ARG:HG2	34:S5:93:GLY:CA	2.49	0.43
31:P5:26:LEU:CD2	31:P5:88:GLU:HG3	2.49	0.43
32:Q2:13:PHE:HA	32:Q2:21:ALA:O	2.19	0.43
32:Q4:134:GLY:HA3	32:Q4:141:TYR:N	2.33	0.43
33:R6:13:ALA:O	33:R6:16:ILE:HG22	2.19	0.43
31:P5:18:ARG:HA	34:S5:93:GLY:CA	2.49	0.43
1:T6:40:ALA:HB2	1:T6:96:SER:N	2.34	0.43
2:U1:17:ILE:HG21	2:U1:94:PRO:CB	2.39	0.43
4:X1:49:GLY:O	4:X1:100:VAL:HG22	2.18	0.43
4:X2:125:VAL:O	4:X2:127:ASN:N	2.51	0.43
4:X6:95:GLU:HB2	4:X6:98:ASP:OD2	2.18	0.43
24:D3:167:TYR:OH	24:D3:201:LYS:O	2.30	0.43
24:D5:204:LEU:C	24:D5:206:ASP:H	2.19	0.43
25:E2:36:HIS:ND1	25:E2:41:CYS:HB3	2.34	0.43
25:E3:88:ASP:O	25:E3:100:ARG:HA	2.19	0.43
25:E5:61:VAL:HG12	25:E5:80:ILE:HG23	2.00	0.43
26:F1:136:ARG:O	26:F1:203:ASN:CB	2.67	0.43
26:F2:110:GLN:O	26:F2:114:ASN:ND2	2.51	0.43
26:F2:113:VAL:O	26:F2:117:ILE:HG12	2.18	0.43
26:F3:133:THR:HG21	26:F3:135:ARG:NE	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F3:136:ARG:C	26:F3:203:ASN:ND2	2.72	0.43
26:F4:39:ILE:HG23	26:F4:68:ILE:HG21	1.99	0.43
26:F5:110:GLN:O	26:F5:114:ASN:ND2	2.51	0.43
26:F6:41:VAL:HG11	26:F6:68:ILE:HG12	2.00	0.43
11:G2:4:ASN:HB2	11:G2:110:ASN:OD1	2.19	0.43
11:G6:4:ASN:HB2	11:G6:110:ASN:OD1	2.19	0.43
27:H3:69:LEU:HA	27:H3:72:PHE:HD2	1.83	0.43
27:H3:72:PHE:O	27:H3:76:GLN:N	2.51	0.43
27:H4:157:HIS:HB3	27:H4:190:PRO:HG3	2.00	0.43
12:J1:85:GLY:HA2	12:J1:151:LEU:HD22	2.00	0.43
12:J2:4:ALA:H	12:J2:5:ARG:NE	2.17	0.43
12:J5:4:ALA:H	12:J5:5:ARG:NE	2.17	0.43
29:K4:24:LYS:HA	29:K4:66:HIS:HA	1.99	0.43
30:L2:121:GLN:CB	30:L2:153:LYS:CD	2.93	0.43
14:N3:84:LEU:HB3	14:N3:135:LEU:CD2	2.49	0.43
15:O1:51:GLU:OE2	23:B1:65:ARG:NH2	2.50	0.43
15:O4:35:ALA:HB3	15:O4:98:ARG:O	2.19	0.43
15:O5:103:ASN:CG	15:O5:142:ARG:HB2	2.39	0.43
31:P1:108:LYS:HB3	31:P1:109:PRO:CD	2.40	0.43
31:P4:26:LEU:CD2	31:P4:88:GLU:HG3	2.48	0.43
32:Q2:123:ASP:HA	32:Q2:124:PRO:HD2	1.73	0.43
32:Q2:24:HIS:HE1	32:Q2:69:ARG:HB2	1.83	0.43
32:Q3:134:GLY:HA3	32:Q3:141:TYR:N	2.33	0.43
32:Q5:109:LYS:HE2	32:Q5:120:LEU:HD21	1.99	0.43
32:Q5:37:ARG:HA	32:Q5:38:PRO:HD3	1.90	0.43
33:R3:80:ARG:C	33:R3:82:ASP:H	2.22	0.43
33:R4:13:ALA:O	33:R4:16:ILE:HG22	2.18	0.43
24:D4:209:SER:HB2	33:R4:40:ILE:HB	2.00	0.43
34:S2:63:GLU:HA	34:S2:66:ARG:HG2	2.00	0.43
34:S2:81:ASP:O	34:S2:87:GLN:NE2	2.49	0.43
34:S5:48:ALA:HB2	34:S5:70:ILE:HD12	2.00	0.43
1:T2:2:PRO:HA	1:T2:3:GLY:HA3	1.70	0.43
1:T6:82:ARG:HG3	1:T6:90:SER:HB2	2.00	0.43
2:U1:91:LEU:HB3	2:U1:93:SER:HB3	2.01	0.43
2:U2:26:SER:HB2	2:U2:32:LEU:HD22	1.99	0.43
2:U3:26:SER:HB2	2:U3:32:LEU:HD22	1.99	0.43
2:U3:61:LEU:H	2:U3:81:GLN:HE22	1.67	0.43
4:X6:49:GLY:O	4:X6:100:VAL:HG22	2.18	0.43
17:Y2:28:LEU:HG	17:Y2:30:PRO:HD3	2.00	0.43
17:Y4:86:GLU:HG3	17:Y4:90:ARG:HB2	2.01	0.43
17:Y5:28:LEU:HG	17:Y5:30:PRO:HD3	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y6:86:GLU:HG3	17:Y6:90:ARG:HB2	2.01	0.43
17:Y6:8:ARG:O	17:Y6:9:THR:OG1	2.33	0.43
22:A2:90:PHE:CD1	22:A2:179:ALA:HB2	2.53	0.43
22:A4:77:ILE:HA	22:A4:99:ILE:O	2.19	0.43
23:B2:175:GLU:O	23:B2:178:THR:OG1	2.19	0.43
23:B6:128:LYS:HG3	23:B6:129:THR:O	2.18	0.43
24:D3:43:PRO:O	24:D3:44:THR:OG1	2.32	0.43
24:D4:146:ARG:HH11	24:D4:147:ALA:H	1.67	0.43
24:D5:64:ARG:HG3	29:K5:95:ARG:HH22	1.76	0.43
24:D5:70:THR:O	24:D5:74:GLN:HG2	2.18	0.43
24:D5:92:ALA:O	24:D5:93:THR:OG1	2.27	0.43
25:E1:36:HIS:ND1	25:E1:41:CYS:HB3	2.33	0.43
25:E4:151:ASP:OD2	25:E4:153:LEU:HB2	2.19	0.43
26:F6:49:LEU:HD11	32:Q6:49:TYR:HB3	2.00	0.43
27:H1:63:PHE:HA	27:H1:95:ILE:O	2.19	0.43
28:I1:123:ARG:NE	15:O6:64:ALA:C	2.72	0.43
28:I4:107:THR:OG1	28:I4:108:PRO:HD3	2.19	0.43
28:I4:197:PHE:HA	28:I4:200:ARG:CG	2.48	0.43
12:J6:136:ARG:HD3	12:J6:160:SER:HA	2.01	0.43
30:L2:147:LYS:HB2	30:L2:148:ALA:H	1.68	0.43
30:L4:125:ILE:HB	30:L4:146:THR:O	2.19	0.43
30:L5:13:GLN:HG2	30:L5:36:TYR:HB3	2.00	0.43
13:M2:95:ASP:HB2	13:M2:99:LYS:HB2	2.00	0.43
14:N2:90:HIS:HA	14:N2:93:LYS:HE3	2.01	0.43
14:N3:26:LEU:HG	14:N3:26:LEU:O	2.17	0.43
15:O4:51:GLU:OE2	23:B4:65:ARG:NH2	2.50	0.43
15:O5:35:ALA:HB3	15:O5:98:ARG:O	2.19	0.43
31:P3:26:LEU:CD2	31:P3:88:GLU:HG3	2.48	0.43
31:P4:94:VAL:O	31:P4:105:VAL:HB	2.19	0.43
31:P6:41:GLN:CD	31:P6:84:ILE:CG1	2.85	0.43
32:Q2:116:ASP:O	32:Q2:118:THR:N	2.52	0.43
32:Q5:134:GLY:HA3	32:Q5:141:TYR:N	2.34	0.43
32:Q5:13:PHE:HA	32:Q5:21:ALA:O	2.19	0.43
32:Q5:24:HIS:HE1	32:Q5:69:ARG:HB2	1.82	0.43
34:S2:123:LEU:HD22	34:S2:127:TRP:CZ2	2.53	0.43
2:U2:28:ASN:ND2	2:U2:30:LYS:HB3	2.34	0.43
2:U6:59:LYS:HG2	24:D6:8:LYS:HZ2	1.84	0.43
2:U6:17:ILE:HB	2:U6:94:PRO:HA	1.99	0.43
4:X1:95:GLU:HB2	4:X1:98:ASP:OD2	2.18	0.43
4:X3:95:GLU:HB2	4:X3:98:ASP:OD2	2.18	0.43
4:X5:125:VAL:O	4:X5:127:ASN:N	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y1:20:ARG:HH11	17:Y1:74:MET:HA	1.82	0.43
22:A3:152:SER:HA	22:A3:153:PRO:HD2	1.91	0.43
22:A5:80:ARG:HH22	22:A5:166:LYS:HG2	1.82	0.43
23:B2:68:GLU:HA	23:B2:84:PHE:O	2.19	0.43
10:C1:65:LYS:HZ1	10:C1:280:VAL:HB	1.82	0.43
24:D3:126:ILE:HG21	24:D3:134:CYS:HB3	2.01	0.43
24:D3:75:LYS:NZ	29:K3:18:GLU:HG2	2.34	0.43
12:J1:76:ALA:N	25:E1:252:ARG:HH22	2.17	0.43
25:E1:31:PRO:HB3	25:E1:43:PRO:HB3	2.00	0.43
25:E2:19:MET:HE1	25:E2:108:ARG:HH11	1.83	0.43
25:E4:36:HIS:ND1	25:E4:41:CYS:HB3	2.34	0.43
25:E5:127:ARG:NE	25:E5:142:HIS:HA	2.33	0.43
12:J6:76:ALA:N	25:E6:252:ARG:HH22	2.17	0.43
26:F2:136:ARG:C	26:F2:203:ASN:ND2	2.72	0.43
26:F3:113:VAL:O	26:F3:117:ILE:HG12	2.18	0.43
26:F3:110:GLN:O	26:F3:114:ASN:ND2	2.51	0.43
27:H1:157:HIS:HB3	27:H1:190:PRO:HG3	2.00	0.43
12:J3:169:ARG:NH2	12:J3:170:PRO:HG2	2.33	0.43
12:J4:28:GLU:HA	12:J4:31:LEU:HD13	2.01	0.43
12:J4:4:ALA:H	12:J4:5:ARG:NE	2.17	0.43
29:K1:10:ALA:O	29:K1:14:LEU:N	2.37	0.43
30:L4:114:SER:HA	30:L4:115:PRO:HD3	1.91	0.43
30:L5:5:GLN:O	30:L5:7:GLU:N	2.46	0.43
14:N3:83:ASP:HB3	14:N3:150:VAL:O	2.18	0.43
15:O4:92:ALA:CB	15:O4:125:LYS:HB2	2.48	0.43
31:P6:81:ARG:HB3	31:P6:117:GLY:CA	2.44	0.43
32:Q1:134:GLY:HA3	32:Q1:141:TYR:N	2.33	0.43
32:Q2:4:LYS:HZ3	32:Q2:99:TYR:HA	1.64	0.43
32:Q3:116:ASP:O	32:Q3:118:THR:N	2.52	0.43
33:R1:61:ILE:HA	33:R1:73:LEU:HD22	1.99	0.43
33:R5:13:ALA:O	33:R5:16:ILE:HG22	2.19	0.43
34:S2:108:ARG:O	34:S2:112:GLU:HG2	2.19	0.43
34:S3:123:LEU:HD22	34:S3:127:TRP:CZ2	2.53	0.43
1:T3:82:ARG:HG3	1:T3:90:SER:HB2	2.01	0.43
1:T4:40:ALA:HB2	1:T4:96:SER:N	2.34	0.43
1:T5:115:LYS:HA	1:T5:121:ARG:HA	2.01	0.43
1:T6:115:LYS:HA	1:T6:121:ARG:HA	2.01	0.43
2:U2:61:LEU:H	2:U2:81:GLN:NE2	2.17	0.43
2:U5:91:LEU:HB3	2:U5:93:SER:HB3	2.01	0.43
16:W3:3:ARG:HD3	16:W3:9:ASP:OD2	2.19	0.43
4:X1:15:SER:O	4:X1:18:ARG:HG2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:X4:125:VAL:O	4:X4:127:ASN:N	2.51	0.43
4:X4:88:ASP:OD2	25:E4:12:VAL:CG2	59.72	0.43
4:X4:95:GLU:HB2	4:X4:98:ASP:OD2	2.18	0.43
4:X5:61:GLN:N	4:X5:62:PRO:HD2	2.34	0.43
23:B1:100:PHE:HZ	23:B1:215:VAL:HG11	1.84	0.43
23:B2:167:LYS:O	23:B2:171:ILE:HG12	2.18	0.43
23:B3:167:LYS:O	23:B3:171:ILE:HG12	2.18	0.43
23:B5:110:MET:HE1	23:B5:213:ARG:HE	1.83	0.43
10:C6:242:ASP:HA	10:C6:245:SER:OG	2.19	0.43
10:C6:274:VAL:HA	10:C6:275:LYS:HA	1.79	0.43
10:C6:65:LYS:N	10:C6:277:HIS:CE1	2.86	0.43
24:D1:70:THR:O	24:D1:74:GLN:HG2	2.18	0.43
24:D3:106:ARG:O	24:D3:110:LEU:N	2.39	0.43
25:E1:103:TYR:HB3	25:E1:107:GLY:HA2	2.01	0.43
25:E1:132:GLY:N	25:E1:136:ILE:O	2.47	0.43
25:E1:151:ASP:OD2	25:E1:153:LEU:HB2	2.19	0.43
25:E2:79:ASP:CG	25:E2:80:ILE:H	2.22	0.43
11:G3:208:GLU:OE2	25:E3:168:LYS:HE2	2.18	0.43
26:F2:125:SER:HG	26:F2:137:GLN:C	2.21	0.43
26:F5:113:VAL:O	26:F5:117:ILE:HG12	2.18	0.43
11:G1:77:LEU:N	11:G1:93:LYS:O	2.44	0.43
11:G3:58:LYS:HE3	11:G3:105:ASN:HB2	2.00	0.43
11:G3:4:ASN:HB2	11:G3:110:ASN:OD1	2.19	0.43
27:H4:43:LEU:HB2	27:H4:72:PHE:CZ	2.54	0.43
28:I2:107:THR:OG1	28:I2:108:PRO:HD3	2.19	0.43
12:J1:28:GLU:HA	12:J1:31:LEU:HD13	2.01	0.43
12:J6:169:ARG:NH2	12:J6:170:PRO:HG2	2.33	0.43
12:J6:32:ILE:HD11	12:J6:40:LYS:HG2	2.01	0.43
24:D5:64:ARG:CG	29:K5:95:ARG:NH1	2.62	0.43
30:L5:153:LYS:NZ	30:L5:153:LYS:HB3	2.34	0.43
30:L6:114:SER:HA	30:L6:115:PRO:HD3	1.91	0.43
13:M6:51:VAL:HB	13:M6:109:VAL:HB	2.01	0.43
15:O3:103:ASN:CG	15:O3:142:ARG:HB2	2.39	0.43
28:I2:125:LYS:CD	15:O5:66:ARG:CZ	2.87	0.43
31:P1:94:VAL:O	31:P1:105:VAL:HB	2.19	0.43
31:P3:37:TYR:OH	31:P3:87:PRO:HD3	2.19	0.43
31:P5:118:GLU:HG3	31:P5:118:GLU:O	2.19	0.43
26:F5:49:LEU:HD11	32:Q5:49:TYR:HB3	1.99	0.43
2:U6:76:THR:HA	32:Q6:132:PHE:CE2	2.54	0.43
32:Q6:24:HIS:HE1	32:Q6:69:ARG:HB2	1.82	0.43
33:R3:13:ALA:O	33:R3:16:ILE:HG22	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R4:80:ARG:CG	33:R4:80:ARG:NH1	2.80	0.43
34:S1:108:ARG:O	34:S1:112:GLU:HG2	2.18	0.43
34:S3:107:LEU:O	34:S3:111:LEU:HG	2.18	0.43
34:S4:105:ASN:HD22	34:S4:108:ARG:HH21	1.67	0.43
34:S5:108:ARG:O	34:S5:112:GLU:HG2	2.19	0.43
34:S6:48:ALA:HB2	34:S6:70:ILE:HD12	2.00	0.43
1:T5:82:ARG:HG3	1:T5:90:SER:HB2	2.01	0.43
2:U1:26:SER:HB2	2:U1:32:LEU:HD22	1.99	0.43
2:U5:61:LEU:H	2:U5:81:GLN:NE2	2.17	0.43
16:W5:41:MET:HG2	16:W5:129:PHE:CE2	2.53	0.43
4:X3:49:GLY:O	4:X3:100:VAL:HG22	2.18	0.43
4:X4:49:GLY:O	4:X4:100:VAL:HG22	2.18	0.43
4:X6:61:GLN:N	4:X6:62:PRO:HD2	2.34	0.43
17:Y1:56:PHE:HB2	17:Y1:74:MET:HB3	2.01	0.43
17:Y3:56:PHE:HB2	17:Y3:74:MET:HB3	2.01	0.43
17:Y5:88:LYS:HZ3	17:Y5:97:TYR:HD2	1.65	0.43
18:Z2:66:LYS:HB2	18:Z2:111:ARG:HD2	2.01	0.43
18:Z3:91:LEU:HD23	18:Z3:91:LEU:HA	1.78	0.43
18:Z4:86:ALA:HB1	34:S4:3:LEU:CG	2.49	0.43
23:B2:37:ALA:O	23:B2:39:PHE:N	2.47	0.42
23:B4:68:GLU:HA	23:B4:84:PHE:O	2.19	0.42
23:B6:100:PHE:HZ	23:B6:215:VAL:HG11	1.84	0.42
25:E3:123:LEU:HD12	25:E3:160:ILE:O	2.19	0.42
12:J3:76:ALA:N	25:E3:252:ARG:HH22	2.17	0.42
25:E6:79:ASP:CG	25:E6:80:ILE:H	2.22	0.42
26:F1:96:ALA:HA	26:F1:99:ILE:HG22	2.01	0.42
26:F2:133:THR:HG21	26:F2:135:ARG:NE	2.32	0.42
26:F2:140:ASP:OD1	26:F2:141:VAL:N	2.51	0.42
26:F2:41:VAL:HG11	26:F2:68:ILE:HG12	1.99	0.42
26:F4:136:ARG:O	26:F4:203:ASN:CB	2.67	0.42
26:F4:136:ARG:C	26:F4:203:ASN:ND2	2.72	0.42
11:G4:58:LYS:HE3	11:G4:105:ASN:HB2	2.00	0.42
11:G4:7:PHE:HA	11:G4:8:PRO:HD2	1.90	0.42
27:H6:18:GLU:HG2	27:H6:19:PHE:N	2.34	0.42
28:I1:37:LYS:O	28:I1:60:LEU:N	2.39	0.42
12:J1:32:ILE:HD11	12:J1:40:LYS:HG2	2.00	0.42
12:J3:32:ILE:HD11	12:J3:40:LYS:HG2	2.01	0.42
29:K3:89:ILE:O	29:K3:91:PRO:HD3	2.19	0.42
29:K4:89:ILE:O	29:K4:91:PRO:HD3	2.19	0.42
29:K5:2:LEU:HD12	29:K5:3:MET:HB2	2.02	0.42
29:K6:59:LYS:O	29:K6:70:TYR:N	2.37	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O4:46:ASP:O	15:O4:49:GLY:N	2.39	0.42
31:P2:118:GLU:HG3	31:P2:118:GLU:O	2.19	0.42
31:P2:123:TYR:HD1	31:P2:123:TYR:C	2.22	0.42
31:P5:94:VAL:O	31:P5:105:VAL:HB	2.19	0.42
31:P6:94:VAL:O	31:P6:105:VAL:HB	2.19	0.42
32:Q1:24:HIS:HE1	32:Q1:69:ARG:HB2	1.83	0.42
32:Q6:134:GLY:HA3	32:Q6:141:TYR:N	2.33	0.42
33:R4:73:LEU:HA	33:R4:73:LEU:HD23	1.82	0.42
18:Z3:86:ALA:HB1	34:S3:3:LEU:CG	2.49	0.42
34:S6:123:LEU:HD22	34:S6:127:TRP:CZ2	2.53	0.42
2:U1:28:ASN:ND2	2:U1:30:LYS:HB3	2.34	0.42
2:U1:61:LEU:H	2:U1:81:GLN:HE22	1.67	0.42
2:U3:28:ASN:ND2	2:U3:30:LYS:HB3	2.34	0.42
3:V1:36:VAL:HG12	3:V1:37:ALA:N	2.33	0.42
16:W5:3:ARG:HD3	16:W5:9:ASP:OD2	2.19	0.42
4:X4:61:GLN:N	4:X4:62:PRO:HD2	2.34	0.42
18:Z1:55:TYR:HB3	18:Z1:59:CYS:SG	2.59	0.42
18:Z2:86:ALA:HB1	34:S2:3:LEU:CG	2.49	0.42
18:Z3:66:LYS:HB2	18:Z3:111:ARG:HD2	2.01	0.42
22:A3:21:ALA:HB1	22:A3:169:HIS:O	2.20	0.42
23:B1:68:GLU:HA	23:B1:84:PHE:O	2.19	0.42
23:B2:103:MET:HG3	23:B2:103:MET:O	2.19	0.42
23:B4:214:LYS:HD3	23:B4:216:LYS:HD2	2.00	0.42
23:B5:103:MET:HG3	23:B5:103:MET:O	2.19	0.42
23:B6:103:MET:HG3	23:B6:103:MET:O	2.19	0.42
23:B6:87:ILE:N	23:B6:99:ASN:O	2.52	0.42
10:C6:65:LYS:HZ2	10:C6:280:VAL:HB	1.78	0.42
24:D2:146:ARG:HH11	24:D2:147:ALA:H	1.67	0.42
24:D6:106:ARG:O	24:D6:110:LEU:N	2.39	0.42
25:E1:184:THR:HA	25:E1:189:LEU:HB2	2.02	0.42
25:E2:148:ARG:HE	25:E2:149:TYR:HE2	1.66	0.42
25:E3:148:ARG:HE	25:E3:149:TYR:HE2	1.67	0.42
12:J4:76:ALA:N	25:E4:252:ARG:HH22	2.17	0.42
25:E6:123:LEU:HD12	25:E6:160:ILE:O	2.19	0.42
26:F3:140:ASP:OD1	26:F3:141:VAL:N	2.51	0.42
11:G1:221:LYS:HA	11:G1:224:ARG:HB3	2.00	0.42
11:G1:7:PHE:HA	11:G1:8:PRO:HD2	1.90	0.42
11:G4:149:LYS:HZ3	11:G4:149:LYS:CB	2.29	0.42
11:G5:10:THR:OG1	11:G5:128:THR:HG21	2.19	0.42
11:G6:10:THR:OG1	11:G6:128:THR:HG21	2.19	0.42
12:J5:32:ILE:HD11	12:J5:40:LYS:HG2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:K1:19:GLY:N	29:K1:92:ALA:HB2	2.32	0.42
29:K4:37:ASP:HB3	29:K4:38:LYS:H	1.70	0.42
29:K5:5:LYS:O	29:K5:9:ILE:N	2.52	0.42
30:L2:13:GLN:HG2	30:L2:36:TYR:HB3	2.01	0.42
15:O1:35:ALA:HB3	15:O1:98:ARG:O	2.19	0.42
15:O5:34:PHE:HE1	15:O5:98:ARG:CZ	2.32	0.42
31:P2:115:TYR:CD2	31:P2:115:TYR:N	2.73	0.42
31:P2:94:VAL:O	31:P2:105:VAL:HB	2.19	0.42
33:R2:98:VAL:HB	33:R2:115:SER:HB3	2.00	0.42
33:R3:9:VAL:O	33:R3:13:ALA:N	2.53	0.42
1:T1:115:LYS:HA	1:T1:121:ARG:HA	2.01	0.42
1:T5:40:ALA:HB2	1:T5:96:SER:N	2.34	0.42
2:U2:17:ILE:HB	2:U2:94:PRO:HA	1.99	0.42
2:U2:91:LEU:HB3	2:U2:93:SER:HB3	2.01	0.42
2:U3:76:THR:HA	32:Q3:132:PHE:CE2	2.55	0.42
2:U4:91:LEU:HB3	2:U4:93:SER:HB3	2.01	0.42
2:U6:61:LEU:H	2:U6:81:GLN:NE2	2.17	0.42
16:W2:3:ARG:HD3	16:W2:9:ASP:OD2	2.19	0.42
16:W3:121:THR:C	16:W3:122:GLY:O	2.58	0.42
4:X1:60:LYS:HG2	4:X1:114:ASP:O	2.20	0.42
4:X3:101:LEU:O	4:X3:123:VAL:HG22	2.18	0.42
17:Y2:37:LYS:O	17:Y2:41:ARG:HG2	2.18	0.42
17:Y4:20:ARG:HH11	17:Y4:74:MET:HA	1.82	0.42
18:Z4:55:TYR:HB3	18:Z4:59:CYS:SG	2.59	0.42
18:Z5:49:LEU:H	18:Z5:83:LEU:HD12	1.81	0.42
22:A1:144:THR:N	22:A1:158:ASP:OD2	2.53	0.42
22:A3:77:ILE:HA	22:A3:99:ILE:O	2.19	0.42
22:A4:21:ALA:HB1	22:A4:169:HIS:O	2.20	0.42
22:A4:3:GLY:HA2	22:A4:63:ARG:NH2	2.35	0.42
10:C1:189:GLY:C	10:C1:191:VAL:H	2.22	0.42
10:C1:242:ASP:HA	10:C1:245:SER:OG	2.19	0.42
10:C1:65:LYS:N	10:C1:277:HIS:CE1	2.86	0.42
10:C3:165:VAL:HG12	10:C3:244:ILE:HB	2.02	0.42
24:D2:75:LYS:NZ	29:K2:18:GLU:HG2	2.34	0.42
25:E2:123:LEU:HD12	25:E2:160:ILE:O	2.20	0.42
25:E4:148:ARG:HE	25:E4:149:TYR:HE2	1.67	0.42
25:E4:123:LEU:HD12	25:E4:160:ILE:O	2.20	0.42
25:E6:88:ASP:O	25:E6:100:ARG:HA	2.19	0.42
26:F2:49:LEU:HD11	32:Q2:49:TYR:HB3	2.00	0.42
26:F3:14:THR:HA	26:F3:15:PRO:HA	1.72	0.42
26:F6:157:GLY:HA2	26:F6:160:GLU:OE2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:F6:96:ALA:HA	26:F6:99:ILE:HG22	2.01	0.42
11:G3:221:LYS:HA	11:G3:224:ARG:HB3	2.01	0.42
11:G4:216:ARG:O	11:G4:220:ALA:N	2.53	0.42
27:H1:43:LEU:HB2	27:H1:72:PHE:CZ	2.54	0.42
27:H2:101:LEU:HA	27:H2:102:PRO:HD3	1.79	0.42
27:H3:18:GLU:HG2	27:H3:19:PHE:N	2.34	0.42
27:H6:63:PHE:HA	27:H6:95:ILE:O	2.19	0.42
28:I3:107:THR:OG1	28:I3:108:PRO:HD3	2.19	0.42
12:J1:158:ASP:OD1	12:J1:159:PHE:N	2.44	0.42
12:J2:136:ARG:HD3	12:J2:160:SER:HA	2.01	0.42
29:K4:32:HIS:ND1	29:K4:33:PRO:HD2	2.35	0.42
29:K6:89:ILE:O	29:K6:91:PRO:HD3	2.19	0.42
29:K6:5:LYS:O	29:K6:9:ILE:N	2.52	0.42
30:L4:121:GLN:HG3	30:L4:153:LYS:CD	2.37	0.42
14:N3:129:TYR:HB3	14:N3:134:VAL:CG1	2.50	0.42
14:N6:90:HIS:HA	14:N6:93:LYS:HE3	2.01	0.42
15:O1:92:ALA:CB	15:O1:125:LYS:HB2	2.48	0.42
15:O3:51:GLU:OE2	23:B3:65:ARG:NH2	2.49	0.42
15:O4:14:VAL:N	15:O4:15:ILE:HA	2.25	0.42
15:O4:34:PHE:HE1	15:O4:98:ARG:CZ	2.33	0.42
31:P1:123:TYR:HD1	31:P1:123:TYR:C	2.22	0.42
31:P5:116:LEU:HA	31:P5:116:LEU:HD22	1.88	0.42
32:Q4:116:ASP:O	32:Q4:118:THR:N	2.51	0.42
32:Q6:116:ASP:O	32:Q6:118:THR:N	2.52	0.42
33:R1:98:VAL:HB	33:R1:115:SER:HB3	2.00	0.42
33:R1:80:ARG:C	33:R1:82:ASP:H	2.22	0.42
33:R2:9:VAL:O	33:R2:13:ALA:N	2.52	0.42
33:R3:98:VAL:HB	33:R3:115:SER:HB3	2.00	0.42
33:R4:61:ILE:H	33:R4:61:ILE:HG12	1.56	0.42
33:R5:80:ARG:NH1	33:R5:80:ARG:CG	2.80	0.42
34:S4:130:ARG:HD2	34:S4:134:GLN:OE1	2.18	0.42
34:S6:130:ARG:HD2	34:S6:134:GLN:OE1	2.18	0.42
2:U1:61:LEU:H	2:U1:81:GLN:NE2	2.17	0.42
2:U3:56:MET:HB2	2:U3:86:LYS:HB2	2.02	0.42
2:U5:31:SER:O	2:U5:35:VAL:HG23	2.19	0.42
4:X1:61:GLN:N	4:X1:62:PRO:HD2	2.34	0.42
4:X2:60:LYS:HG2	4:X2:114:ASP:O	2.19	0.42
17:Y3:28:LEU:HG	17:Y3:30:PRO:HD3	2.00	0.42
17:Y3:37:LYS:O	17:Y3:41:ARG:HG2	2.18	0.42
17:Y4:56:PHE:HB2	17:Y4:74:MET:HB3	2.01	0.42
18:Z4:49:LEU:H	18:Z4:83:LEU:HD12	1.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A3:70:ASN:HA	22:A3:71:PRO:HD2	1.88	0.42
22:A5:21:ALA:HB1	22:A5:169:HIS:O	2.20	0.42
23:B1:128:LYS:HG3	23:B1:129:THR:O	2.18	0.42
23:B2:197:ILE:HD11	23:B2:210:VAL:HG11	2.02	0.42
23:B6:81:PHE:O	23:B6:105:LEU:HD12	2.20	0.42
10:C1:204:ILE:HA	10:C1:221:ASP:OD1	2.20	0.42
10:C3:242:ASP:HA	10:C3:245:SER:OG	2.19	0.42
10:C4:204:ILE:HA	10:C4:221:ASP:OD1	2.19	0.42
10:C5:73:MET:HG3	10:C5:73:MET:O	2.20	0.42
24:D6:105:LEU:HD23	24:D6:184:ILE:HD12	2.01	0.42
25:E1:123:LEU:HD12	25:E1:160:ILE:O	2.20	0.42
25:E3:103:TYR:HB3	25:E3:107:GLY:HA2	2.00	0.42
17:Y3:17:LEU:HD22	25:E3:69:PHE:CE1	2.50	0.42
26:F3:136:ARG:O	26:F3:203:ASN:CB	2.67	0.42
11:G1:216:ARG:O	11:G1:220:ALA:N	2.53	0.42
11:G3:10:THR:OG1	11:G3:128:THR:HG21	2.19	0.42
11:G3:146:ASN:O	11:G3:147:LEU:HB3	2.19	0.42
11:G4:10:THR:OG1	11:G4:128:THR:HG21	2.20	0.42
11:G4:149:LYS:HB2	11:G4:149:LYS:HZ2	1.77	0.42
11:G5:4:ASN:HB2	11:G5:110:ASN:OD1	2.19	0.42
11:G5:78:SER:OG	11:G5:79:LYS:N	2.53	0.42
27:H2:157:HIS:HB3	27:H2:190:PRO:HG3	2.00	0.42
27:H2:43:LEU:HB2	27:H2:72:PHE:CZ	2.54	0.42
27:H2:63:PHE:HA	27:H2:95:ILE:O	2.19	0.42
27:H3:63:PHE:HA	27:H3:95:ILE:O	2.19	0.42
27:H6:43:LEU:HB2	27:H6:72:PHE:CZ	2.54	0.42
28:I4:142:SER:HA	28:I4:146:GLN:HG2	2.01	0.42
12:J2:32:ILE:HD11	12:J2:40:LYS:HG2	2.01	0.42
12:J3:136:ARG:HD3	12:J3:160:SER:HA	2.02	0.42
29:K2:29:MET:HA	29:K2:30:PRO:HD3	1.84	0.42
29:K3:2:LEU:HD12	29:K3:3:MET:HB2	2.02	0.42
29:K3:5:LYS:O	29:K3:9:ILE:N	2.53	0.42
24:D5:71:ALA:HB1	29:K5:20:VAL:HG21	2.02	0.42
24:D6:64:ARG:CG	29:K6:95:ARG:NH1	2.63	0.42
30:L4:13:GLN:HG2	30:L4:36:TYR:HB3	2.00	0.42
14:N4:133:ARG:HD2	30:L4:152:LYS:HG3	2.01	0.42
14:N4:90:HIS:HA	14:N4:93:LYS:HE3	2.01	0.42
14:N4:99:ARG:NH1	14:N4:143:SER:HA	2.35	0.42
15:O2:51:GLU:OE2	23:B2:65:ARG:NH2	2.49	0.42
15:O2:63:LYS:HZ1	28:I4:121:LEU:CD1	2.32	0.42
31:P1:118:GLU:HG3	31:P1:118:GLU:O	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P5:114:HIS:HB3	31:P5:119:PHE:CE2	2.53	0.42
31:P6:75:VAL:HB	31:P6:93:MET:HE2	2.01	0.42
32:Q1:15:ARG:HG2	32:Q1:20:THR:OG1	2.20	0.42
32:Q3:15:ARG:HG2	32:Q3:20:THR:OG1	2.20	0.42
32:Q6:37:ARG:HA	32:Q6:38:PRO:HD3	1.90	0.42
33:R1:68:GLY:HA3	33:R1:69:ILE:HA	1.91	0.42
33:R2:65:PRO:HG2	33:R2:74:GLN:NE2	2.34	0.42
33:R2:77:GLU:HG2	33:R2:81:ARG:CG	2.49	0.42
33:R2:80:ARG:C	33:R2:82:ASP:H	2.22	0.42
33:R6:80:ARG:C	33:R6:82:ASP:H	2.22	0.42
34:S5:105:ASN:HD22	34:S5:108:ARG:HH21	1.67	0.42
1:T1:40:ALA:HB2	1:T1:96:SER:N	2.34	0.42
1:T2:82:ARG:HG3	1:T2:90:SER:HB2	2.00	0.42
1:T2:40:ALA:HB2	1:T2:96:SER:N	2.34	0.42
2:U3:91:LEU:HB3	2:U3:93:SER:HB3	2.01	0.42
2:U4:61:LEU:H	2:U4:81:GLN:NE2	2.17	0.42
2:U5:34:LYS:HA	2:U5:37:ALA:HB3	1.99	0.42
2:U6:61:LEU:H	2:U6:81:GLN:HE22	1.67	0.42
2:U6:86:LYS:O	2:U6:87:ARG:NH2	2.44	0.42
16:W1:32:LYS:HA	16:W1:35:VAL:HG22	2.01	0.42
16:W4:111:MET:HG3	16:W4:112:ASP:H	1.84	0.42
4:X3:60:LYS:HG2	4:X3:114:ASP:O	2.20	0.42
18:Z1:86:ALA:HB1	34:S1:3:LEU:CG	2.49	0.42
18:Z5:55:TYR:HB3	18:Z5:59:CYS:SG	2.59	0.42
23:B2:197:ILE:HD11	23:B2:210:VAL:HG21	2.02	0.42
23:B3:81:PHE:O	23:B3:105:LEU:HD12	2.20	0.42
23:B3:68:GLU:HA	23:B3:84:PHE:O	2.19	0.42
23:B6:143:THR:HB	23:B6:205:TYR:HE2	1.85	0.42
23:B6:197:ILE:HD11	23:B6:210:VAL:HG11	2.01	0.42
10:C2:165:VAL:HG12	10:C2:244:ILE:HB	2.02	0.42
10:C4:189:GLY:C	10:C4:191:VAL:H	2.22	0.42
24:D5:106:ARG:O	24:D5:110:LEU:N	2.39	0.42
25:E1:88:ASP:O	25:E1:100:ARG:HA	2.19	0.42
12:J2:76:ALA:N	25:E2:252:ARG:HH22	2.17	0.42
25:E6:51:ARG:NH2	25:E6:109:PHE:O	2.53	0.42
26:F4:96:ALA:HA	26:F4:99:ILE:HG22	2.02	0.42
11:G4:78:SER:OG	11:G4:79:LYS:N	2.53	0.42
27:H2:15:LYS:H	27:H2:16:PRO:HD2	1.85	0.42
27:H5:157:HIS:HB3	27:H5:190:PRO:HG3	2.00	0.42
12:J6:38:ARG:HG2	12:J6:39:ASN:H	1.84	0.42
29:K2:5:LYS:O	29:K2:9:ILE:N	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D5:61:GLU:OE2	29:K5:73:ASN:ND2	2.53	0.42
24:D6:75:LYS:NZ	29:K6:18:GLU:HG2	2.35	0.42
30:L1:77:VAL:O	30:L1:123:GLY:N	2.46	0.42
30:L5:124:ASP:CB	30:L5:147:LYS:HG3	2.47	0.42
14:N5:127:ARG:HA	14:N5:130:LYS:HD3	2.02	0.42
14:N6:71:ILE:HD12	14:N6:71:ILE:H	1.85	0.42
15:O3:34:PHE:HE1	15:O3:98:ARG:CZ	2.32	0.42
31:P3:118:GLU:HG3	31:P3:118:GLU:O	2.19	0.42
31:P4:115:TYR:N	31:P4:115:TYR:CD2	2.73	0.42
2:U2:76:THR:HA	32:Q2:132:PHE:CE2	2.55	0.42
32:Q2:138:ARG:O	32:Q2:140:ARG:HG3	2.19	0.42
32:Q3:13:PHE:HA	32:Q3:21:ALA:O	2.19	0.42
32:Q3:24:HIS:HE1	32:Q3:69:ARG:HB2	1.83	0.42
32:Q5:116:ASP:O	32:Q5:118:THR:N	2.52	0.42
33:R4:88:VAL:O	33:R4:92:ASP:HB2	2.18	0.42
1:T1:99:VAL:O	1:T1:103:VAL:HG23	2.17	0.42
16:W1:3:ARG:HD3	16:W1:9:ASP:OD2	2.19	0.42
16:W3:111:MET:HG3	16:W3:112:ASP:H	1.84	0.42
16:W4:30:CYS:HB3	16:W4:59:GLY:H	1.85	0.42
4:X5:49:GLY:O	4:X5:100:VAL:HG22	2.19	0.42
18:Z4:91:LEU:HA	18:Z4:91:LEU:HD23	1.78	0.42
18:Z5:86:ALA:HB1	34:S5:3:LEU:CG	2.49	0.42
22:A3:104:THR:HG1	22:A3:107:THR:HG1	1.64	0.42
22:A3:144:THR:N	22:A3:158:ASP:OD2	2.53	0.42
22:A5:22:GLY:O	22:A5:24:HIS:N	2.46	0.42
22:A6:21:ALA:HB1	22:A6:169:HIS:O	2.20	0.42
23:B1:103:MET:HG3	23:B1:103:MET:O	2.19	0.42
23:B1:143:THR:HB	23:B1:205:TYR:HE2	1.84	0.42
23:B1:87:ILE:N	23:B1:99:ASN:O	2.53	0.42
23:B2:81:PHE:O	23:B2:105:LEU:HD12	2.20	0.42
23:B3:103:MET:O	23:B3:103:MET:HG3	2.19	0.42
23:B3:62:LEU:O	23:B3:88:THR:HG21	2.20	0.42
23:B4:143:THR:HB	23:B4:205:TYR:HE2	1.85	0.42
10:C6:104:ASP:OD1	10:C6:105:GLU:N	2.53	0.42
25:E1:47:PHE:HD2	25:E1:48:LEU:HD12	1.84	0.42
17:Y1:22:GLN:NE2	25:E1:56:LEU:HD12	2.30	0.42
25:E4:47:PHE:HD2	25:E4:48:LEU:HD12	1.85	0.42
25:E4:79:ASP:CG	25:E4:80:ILE:H	2.22	0.42
25:E5:79:ASP:CG	25:E5:80:ILE:H	2.22	0.42
25:E6:151:ASP:OD2	25:E6:153:LEU:HB2	2.19	0.42
26:F5:157:GLY:HA2	26:F5:160:GLU:OE2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G2:21:GLU:O	11:G2:25:ARG:HG2	2.20	0.42
11:G3:140:ARG:HD3	11:G3:140:ARG:HA	1.70	0.42
11:G5:216:ARG:O	11:G5:220:ALA:N	2.52	0.42
27:H4:10:LYS:NZ	27:H4:14:GLU:OE2	2.48	0.42
27:H5:101:LEU:HA	27:H5:102:PRO:HD3	1.79	0.42
27:H5:18:GLU:HG2	27:H5:19:PHE:N	2.34	0.42
27:H5:63:PHE:HA	27:H5:95:ILE:O	2.19	0.42
24:D1:75:LYS:NZ	29:K1:18:GLU:HG2	2.34	0.42
29:K1:89:ILE:O	29:K1:91:PRO:HD3	2.19	0.42
29:K2:2:LEU:HD12	29:K2:3:MET:HB2	2.02	0.42
24:D6:64:ARG:HD3	29:K6:95:ARG:NH2	2.24	0.42
30:L3:114:SER:HA	30:L3:115:PRO:HD3	1.91	0.42
30:L6:13:GLN:HG2	30:L6:36:TYR:HB3	2.01	0.42
14:N1:137:PRO:HG2	30:L1:154:GLN:CB	2.22	0.42
32:Q4:13:PHE:HA	32:Q4:21:ALA:O	2.18	0.42
32:Q4:10:VAL:HG22	32:Q4:98:LYS:HD3	2.02	0.42
32:Q6:13:PHE:HA	32:Q6:21:ALA:O	2.18	0.42
32:Q6:10:VAL:HG22	32:Q6:98:LYS:HD3	2.02	0.42
33:R1:9:VAL:O	33:R1:13:ALA:N	2.52	0.42
33:R3:65:PRO:HB3	33:R3:73:LEU:CG	2.49	0.42
33:R3:71:ILE:HG13	33:R3:72:LYS:H	1.84	0.42
22:A6:214:GLU:CB	33:R6:84:TYR:CE1	2.99	0.42
1:T3:40:ALA:HB2	1:T3:96:SER:N	2.34	0.42
2:U1:61:LEU:HD21	24:D1:8:LYS:HG3	2.02	0.42
2:U2:17:ILE:HG21	2:U2:94:PRO:CB	2.38	0.42
2:U4:76:THR:HA	32:Q4:132:PHE:CE2	2.54	0.42
2:U5:61:LEU:H	2:U5:81:GLN:HE22	1.67	0.42
3:V4:50:PHE:CE2	10:C4:267:GLN:NE2	2.84	0.42
16:W6:30:CYS:HB3	16:W6:59:GLY:H	1.85	0.42
4:X2:61:GLN:N	4:X2:62:PRO:HD2	2.34	0.42
4:X4:101:LEU:O	4:X4:123:VAL:HG22	2.18	0.42
4:X5:60:LYS:HG2	4:X5:114:ASP:O	2.19	0.42
17:Y2:56:PHE:HB2	17:Y2:74:MET:HB3	2.01	0.42
17:Y5:8:ARG:O	17:Y5:9:THR:OG1	2.33	0.42
17:Y6:110:ARG:NH1	17:Y6:128:GLY:O	2.43	0.42
22:A2:144:THR:N	22:A2:158:ASP:OD2	2.53	0.42
10:C5:270:THR:HG23	22:A5:69:GLU:CB	2.43	0.42
22:A6:3:GLY:HA2	22:A6:63:ARG:NH2	2.35	0.42
23:B2:62:LEU:O	23:B2:88:THR:HG21	2.20	0.42
23:B3:100:PHE:HZ	23:B3:215:VAL:HG11	1.84	0.42
23:B3:197:ILE:HD11	23:B3:210:VAL:HG11	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B3:37:ALA:O	23:B3:39:PHE:N	2.46	0.42
23:B6:37:ALA:O	23:B6:39:PHE:N	2.47	0.42
10:C5:104:ASP:OD1	10:C5:105:GLU:N	2.53	0.42
10:C5:242:ASP:HA	10:C5:245:SER:OG	2.19	0.42
10:C6:189:GLY:O	10:C6:191:VAL:N	2.48	0.42
10:C6:165:VAL:HG12	10:C6:244:ILE:HB	2.02	0.42
10:C6:65:LYS:HZ1	10:C6:280:VAL:HB	1.83	0.42
24:D1:146:ARG:HH11	24:D1:147:ALA:H	1.67	0.42
24:D1:43:PRO:O	24:D1:44:THR:OG1	2.32	0.42
24:D4:71:ALA:HB1	29:K4:20:VAL:HG21	2.02	0.42
24:D6:126:ILE:HG21	24:D6:134:CYS:HB3	2.01	0.42
25:E2:238:LEU:CD1	25:E2:242:LYS:HG2	2.50	0.42
25:E3:51:ARG:NH2	25:E3:109:PHE:O	2.53	0.42
25:E3:36:HIS:HD1	25:E3:41:CYS:HB3	1.85	0.42
25:E5:184:THR:HA	25:E5:189:LEU:HB2	2.02	0.42
25:E5:238:LEU:CD1	25:E5:242:LYS:HG2	2.50	0.42
17:Y5:22:GLN:NE2	25:E5:56:LEU:HD12	2.30	0.42
26:F2:191:LYS:HA	26:F2:194:ASP:CB	2.46	0.42
26:F3:41:VAL:HG11	26:F3:68:ILE:HG12	2.00	0.42
11:G3:36:VAL:N	11:G3:50:VAL:O	2.48	0.42
11:G6:216:ARG:O	11:G6:220:ALA:N	2.53	0.42
27:H1:18:GLU:HG2	27:H1:19:PHE:N	2.35	0.42
27:H3:68:GLN:O	27:H3:71:SER:OG	2.26	0.42
28:I1:107:THR:OG1	28:I1:108:PRO:HD3	2.19	0.42
12:J4:57:ALA:O	12:J4:61:LEU:N	2.47	0.42
24:D2:61:GLU:OE2	29:K2:73:ASN:ND2	2.53	0.42
24:D4:75:LYS:NZ	29:K4:18:GLU:HG2	2.34	0.42
29:K4:2:LEU:HD12	29:K4:3:MET:HB2	2.02	0.42
24:D4:61:GLU:OE2	29:K4:73:ASN:ND2	2.53	0.42
30:L2:114:SER:HA	30:L2:115:PRO:HD3	1.90	0.42
30:L6:48:LYS:O	30:L6:52:GLU:HG2	2.20	0.42
28:I1:123:ARG:CZ	15:O6:66:ARG:H	2.31	0.42
31:P2:64:LYS:HA	31:P2:73:PRO:HB3	2.01	0.42
31:P3:64:LYS:HA	31:P3:73:PRO:HB3	2.01	0.42
31:P3:94:VAL:O	31:P3:105:VAL:HB	2.19	0.42
32:Q1:138:ARG:O	32:Q1:140:ARG:HG3	2.19	0.42
32:Q1:10:VAL:HG22	32:Q1:98:LYS:HD3	2.02	0.42
32:Q6:15:ARG:HG2	32:Q6:20:THR:OG1	2.20	0.42
32:Q6:87:SER:O	32:Q6:91:ALA:N	2.50	0.42
33:R1:13:ALA:O	33:R1:16:ILE:HG22	2.19	0.42
33:R2:71:ILE:HG12	33:R2:71:ILE:H	1.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R4:72:LYS:HB2	33:R4:73:LEU:H	1.62	0.42
33:R4:9:VAL:O	33:R4:13:ALA:N	2.53	0.42
2:U1:31:SER:O	2:U1:35:VAL:HG23	2.20	0.42
2:U2:31:SER:O	2:U2:35:VAL:HG23	2.20	0.42
2:U3:61:LEU:H	2:U3:81:GLN:NE2	2.17	0.42
16:W5:35:VAL:O	16:W5:39:THR:HG23	2.20	0.42
17:Y4:35:VAL:HA	17:Y4:36:PRO:HD3	1.89	0.42
17:Y5:56:PHE:HB2	17:Y5:74:MET:HB3	2.01	0.42
18:Z2:55:TYR:HB3	18:Z2:59:CYS:SG	2.59	0.42
22:A2:3:GLY:HA2	22:A2:63:ARG:NH2	2.35	0.42
22:A5:77:ILE:HA	22:A5:99:ILE:O	2.19	0.42
23:B2:143:THR:HB	23:B2:205:TYR:HE2	1.85	0.42
30:L1:27:GLU:HB3	23:B6:24:PRO:HD3	2.00	0.42
23:B6:62:LEU:O	23:B6:88:THR:HG21	2.20	0.42
10:C4:104:ASP:OD1	10:C4:105:GLU:N	2.53	0.42
10:C6:185:THR:HG22	10:C6:194:ARG:HB3	2.02	0.42
2:U4:61:LEU:HD21	24:D4:8:LYS:HG3	2.02	0.42
24:D6:146:ARG:HH11	24:D6:147:ALA:H	1.67	0.42
25:E3:151:ASP:OD2	25:E3:153:LEU:HB2	2.19	0.42
25:E5:123:LEU:HD12	25:E5:160:ILE:O	2.19	0.42
12:J5:76:ALA:N	25:E5:252:ARG:HH22	2.17	0.42
25:E6:201:HIS:O	25:E6:204:SER:N	2.46	0.42
26:F1:14:THR:HA	26:F1:15:PRO:HA	1.72	0.42
26:F2:136:ARG:O	26:F2:203:ASN:CB	2.67	0.42
11:G1:146:ASN:O	11:G1:147:LEU:HB3	2.19	0.42
11:G1:78:SER:OG	11:G1:79:LYS:N	2.53	0.42
11:G3:216:ARG:O	11:G3:220:ALA:N	2.53	0.42
27:H1:163:GLN:HG2	27:H1:189:PHE:CZ	2.55	0.42
28:I5:84:ASN:HD21	28:I5:90:LEU:HD12	1.85	0.42
12:J4:38:ARG:HG2	12:J4:39:ASN:H	1.85	0.42
13:M4:48:HIS:O	13:M4:74:ILE:HG23	2.20	0.42
14:N3:129:TYR:C	14:N3:134:VAL:HG23	2.26	0.42
14:N5:125:LEU:O	14:N5:128:TYR:HB3	2.20	0.42
14:N5:90:HIS:HA	14:N5:93:LYS:HE3	2.01	0.42
15:O1:65:ASP:O	15:O1:68:GLU:HB2	2.20	0.42
15:O6:34:PHE:HE1	15:O6:98:ARG:CZ	2.32	0.42
31:P1:114:HIS:HB3	31:P1:119:PHE:CE2	2.53	0.42
31:P5:124:LYS:HG2	31:P5:125:PRO:CD	2.48	0.42
31:P6:118:GLU:HG3	31:P6:118:GLU:O	2.19	0.42
32:Q1:116:ASP:O	32:Q1:118:THR:N	2.52	0.42
32:Q3:10:VAL:HG22	32:Q3:98:LYS:HD3	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:R2:113:SER:OG	33:R2:114:LEU:N	2.53	0.42
34:S2:31:THR:HG23	34:S2:37:GLY:HA2	2.02	0.42
34:S6:40:TYR:HE1	34:S6:79:ILE:HG21	1.85	0.42
1:T2:40:ALA:N	1:T2:96:SER:HB2	2.35	0.42
1:T4:115:LYS:HA	1:T4:121:ARG:HA	2.01	0.42
2:U1:56:MET:HB2	2:U1:86:LYS:HB2	2.02	0.42
2:U2:61:LEU:HD21	24:D2:8:LYS:HG3	2.02	0.42
2:U3:21:ARG:HB3	2:U3:115:THR:HG21	2.01	0.42
2:U4:31:SER:O	2:U4:35:VAL:HG23	2.20	0.42
3:V2:36:VAL:HG12	3:V2:37:ALA:N	2.32	0.42
16:W6:3:ARG:HD3	16:W6:9:ASP:OD2	2.19	0.42
4:X3:61:GLN:N	4:X3:62:PRO:HD2	2.34	0.42
17:Y2:8:ARG:O	17:Y2:9:THR:OG1	2.33	0.42
17:Y4:20:ARG:HB3	17:Y4:76:TYR:CD1	2.55	0.42
17:Y5:35:VAL:HA	17:Y5:36:PRO:HD3	1.89	0.42
23:B1:175:GLU:O	23:B1:178:THR:OG1	2.19	0.42
23:B4:197:ILE:HD11	23:B4:210:VAL:HG21	2.02	0.42
23:B4:62:LEU:O	23:B4:88:THR:HG21	2.20	0.42
23:B5:68:GLU:HA	23:B5:84:PHE:O	2.20	0.42
10:C1:104:ASP:OD1	10:C1:105:GLU:N	2.53	0.42
10:C3:189:GLY:C	10:C3:191:VAL:H	2.22	0.42
10:C4:61:MET:HA	10:C4:62:PRO:HD2	1.90	0.42
10:C5:189:GLY:O	10:C5:190:SER:OG	2.31	0.42
24:D1:126:ILE:HG21	24:D1:134:CYS:HB3	2.00	0.42
24:D3:146:ARG:HH11	24:D3:147:ALA:H	1.67	0.42
24:D3:135:GLU:HB2	24:D3:187:LYS:HB2	2.02	0.42
24:D5:126:ILE:HG21	24:D5:134:CYS:HB3	2.00	0.42
24:D5:34:TYR:HA	24:D5:52:ALA:HB1	2.02	0.42
25:E1:79:ASP:CG	25:E1:80:ILE:H	2.22	0.42
25:E2:151:ASP:OD2	25:E2:153:LEU:HB2	2.19	0.42
25:E2:47:PHE:HD2	25:E2:48:LEU:HD12	1.84	0.42
25:E5:51:ARG:NH2	25:E5:109:PHE:O	2.53	0.42
11:G2:36:VAL:N	11:G2:50:VAL:O	2.48	0.42
11:G4:4:ASN:HB2	11:G4:110:ASN:OD1	2.19	0.42
11:G5:220:ALA:HA	11:G5:223:LYS:HZ1	1.85	0.42
27:H2:10:LYS:NZ	27:H2:14:GLU:OE2	2.48	0.42
27:H4:145:ARG:HH11	27:H4:153:LEU:HD12	1.85	0.42
27:H5:10:LYS:NZ	27:H5:14:GLU:OE2	2.48	0.42
27:H5:15:LYS:H	27:H5:16:PRO:HD2	1.85	0.42
27:H6:6:ALA:O	27:H6:24:SER:OG	2.26	0.42
27:H6:72:PHE:O	27:H6:76:GLN:N	2.51	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J3:94:LEU:HA	12:J3:97:ILE:HD12	2.02	0.42
29:K1:32:HIS:ND1	29:K1:33:PRO:HD2	2.35	0.42
24:D6:61:GLU:OE2	29:K6:73:ASN:ND2	2.53	0.42
30:L1:13:GLN:HG2	30:L1:36:TYR:HB3	2.00	0.42
30:L1:48:LYS:O	30:L1:52:GLU:HG2	2.20	0.42
30:L4:48:LYS:O	30:L4:52:GLU:HG2	2.20	0.42
14:N2:125:LEU:O	14:N2:128:TYR:HB3	2.20	0.42
14:N2:76:LYS:C	14:N2:79:GLY:H	2.24	0.42
14:N3:99:ARG:NH1	14:N3:143:SER:HA	2.35	0.42
14:N4:125:LEU:O	14:N4:128:TYR:HB3	2.20	0.42
15:O4:39:ASP:N	15:O4:69:SER:HB3	2.35	0.42
31:P4:85:ILE:HD11	31:P4:116:LEU:HD23	2.02	0.42
31:P5:44:ARG:HG3	31:P5:44:ARG:NH1	2.35	0.42
31:P6:64:LYS:HA	31:P6:73:PRO:HB3	2.01	0.42
32:Q4:15:ARG:HG2	32:Q4:20:THR:OG1	2.20	0.42
32:Q5:87:SER:O	32:Q5:91:ALA:N	2.50	0.42
33:R1:113:SER:OG	33:R1:114:LEU:N	2.53	0.42
33:R5:113:SER:OG	33:R5:114:LEU:N	2.53	0.42
33:R5:9:VAL:O	33:R5:13:ALA:N	2.52	0.42
33:R6:113:SER:OG	33:R6:114:LEU:N	2.53	0.42
33:R6:9:VAL:O	33:R6:13:ALA:N	2.53	0.42
1:T5:40:ALA:N	1:T5:96:SER:HB2	2.35	0.42
2:U4:21:ARG:HB3	2:U4:115:THR:HG21	2.02	0.42
17:Y1:28:LEU:HG	17:Y1:30:PRO:HD3	2.00	0.42
17:Y5:110:ARG:NH1	17:Y5:128:GLY:O	2.44	0.42
18:Z6:55:TYR:HB3	18:Z6:59:CYS:SG	2.59	0.42
22:A1:21:ALA:HB1	22:A1:169:HIS:O	2.19	0.42
22:A2:21:ALA:HB1	22:A2:169:HIS:O	2.20	0.42
22:A2:34:MET:HE1	22:A2:148:CYS:HB2	2.02	0.42
22:A3:34:MET:HE1	22:A3:148:CYS:HB2	2.02	0.42
22:A3:3:GLY:HA2	22:A3:63:ARG:NH2	2.35	0.42
22:A4:89:LYS:NZ	33:R4:82:ASP:OD2	2.23	0.42
23:B2:100:PHE:HZ	23:B2:215:VAL:HG11	1.84	0.42
23:B4:87:ILE:N	23:B4:99:ASN:O	2.53	0.42
23:B6:68:GLU:HA	23:B6:84:PHE:O	2.19	0.42
10:C2:273:LEU:CG	10:C2:280:VAL:CG1	2.65	0.42
10:C2:68:ARG:CD	10:C2:277:HIS:HB2	2.49	0.42
10:C4:73:MET:HG3	10:C4:73:MET:O	2.20	0.42
10:C5:204:ILE:HA	10:C5:221:ASP:OD1	2.20	0.42
24:D1:135:GLU:HB2	24:D1:187:LYS:HB2	2.02	0.42
24:D1:64:ARG:CG	29:K1:95:ARG:HH22	2.27	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D2:105:LEU:HD23	24:D2:184:ILE:HD12	2.01	0.42
25:E2:191:ARG:NE	25:E2:245:ARG:HB3	2.35	0.42
25:E3:238:LEU:CD1	25:E3:242:LYS:HG2	2.50	0.42
26:F3:157:GLY:HA2	26:F3:160:GLU:OE2	2.20	0.42
11:G1:220:ALA:HA	11:G1:223:LYS:HZ1	1.85	0.42
11:G2:146:ASN:O	11:G2:147:LEU:HB3	2.20	0.42
11:G4:14:LYS:HG2	11:G4:124:LEU:CD1	2.50	0.42
11:G4:221:LYS:HA	11:G4:224:ARG:HB3	2.00	0.42
11:G5:146:ASN:O	11:G5:147:LEU:HB3	2.19	0.42
27:H1:54:GLY:HA3	27:H1:57:ARG:HH21	1.85	0.42
27:H3:101:LEU:HA	27:H3:102:PRO:HD3	1.79	0.42
27:H3:10:LYS:NZ	27:H3:14:GLU:OE2	2.48	0.42
27:H3:15:LYS:H	27:H3:16:PRO:HD2	1.85	0.42
27:H3:43:LEU:HB2	27:H3:72:PHE:CZ	2.54	0.42
27:H5:43:LEU:HB2	27:H5:72:PHE:CZ	2.54	0.42
28:I1:142:SER:HA	28:I1:146:GLN:HG2	2.02	0.42
12:J4:32:ILE:HD11	12:J4:40:LYS:HG2	2.01	0.42
12:J5:28:GLU:HA	12:J5:31:LEU:HD13	2.01	0.42
29:K2:89:ILE:O	29:K2:91:PRO:HD3	2.19	0.42
30:L1:125:ILE:O	30:L1:146:THR:N	2.51	0.42
13:M1:48:HIS:O	13:M1:74:ILE:HG23	2.20	0.42
13:M3:125:GLU:O	13:M3:129:LYS:N	2.48	0.42
13:M5:48:HIS:O	13:M5:74:ILE:HG23	2.20	0.42
14:N1:71:ILE:HD12	14:N1:71:ILE:H	1.85	0.42
14:N1:90:HIS:HA	14:N1:93:LYS:HE3	2.01	0.42
14:N3:76:LYS:C	14:N3:79:GLY:H	2.24	0.42
14:N5:71:ILE:HD12	14:N5:71:ILE:H	1.85	0.42
15:O6:39:ASP:N	15:O6:69:SER:HB3	2.35	0.42
31:P1:116:LEU:HA	31:P1:116:LEU:HD22	1.88	0.42
31:P4:49:LEU:HD23	31:P4:49:LEU:HA	1.80	0.42
31:P5:49:LEU:HD23	31:P5:49:LEU:HA	1.78	0.42
31:P6:49:LEU:HD23	31:P6:49:LEU:HA	1.78	0.42
32:Q5:10:VAL:HG22	32:Q5:98:LYS:HD3	2.02	0.42
32:Q6:3:SER:O	32:Q6:4:LYS:HB3	2.20	0.42
32:Q6:4:LYS:NZ	32:Q6:99:TYR:HB3	2.34	0.42
33:R3:67:ARG:HB3	33:R3:67:ARG:CZ	2.49	0.42
33:R3:69:ILE:HG12	33:R3:70:SER:HA	2.02	0.42
33:R5:80:ARG:C	33:R5:82:ASP:H	2.22	0.42
34:S2:25:LYS:HD3	34:S2:25:LYS:HA	1.89	0.42
34:S2:40:TYR:HE1	34:S2:79:ILE:HG21	1.85	0.42
34:S5:81:ASP:O	34:S5:87:GLN:NE2	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S6:17:ASN:HD22	34:S6:101:ASN:ND2	2.09	0.42
2:U4:56:MET:HB2	2:U4:86:LYS:HB2	2.02	0.42
2:U6:28:ASN:ND2	2:U6:30:LYS:HB3	2.34	0.42
2:U6:91:LEU:HB3	2:U6:93:SER:HB3	2.02	0.42
17:Y1:40:ILE:O	17:Y1:44:LEU:HD13	2.20	0.42
17:Y4:28:LEU:HG	17:Y4:30:PRO:HD3	2.00	0.42
18:Z3:77:LEU:HD23	18:Z3:78:LYS:H	1.85	0.42
18:Z4:66:LYS:HB2	18:Z4:111:ARG:HD2	2.01	0.42
22:A4:184:ARG:HB3	22:A4:191:ARG:HH21	1.85	0.41
22:A5:144:THR:N	22:A5:158:ASP:OD2	2.53	0.41
22:A5:34:MET:HE1	22:A5:148:CYS:HB2	2.02	0.41
23:B3:143:THR:HB	23:B3:205:TYR:HE2	1.84	0.41
23:B3:87:ILE:N	23:B3:99:ASN:O	2.53	0.41
23:B5:81:PHE:O	23:B5:105:LEU:HD12	2.20	0.41
23:B5:62:LEU:O	23:B5:88:THR:HG21	2.20	0.41
10:C4:185:THR:HG22	10:C4:194:ARG:HB3	2.02	0.41
10:C6:204:ILE:HA	10:C6:221:ASP:OD1	2.19	0.41
24:D1:154:ASP:OD1	24:D1:155:GLY:N	2.53	0.41
24:D2:135:GLU:HB2	24:D2:187:LYS:HB2	2.02	0.41
24:D5:25:LEU:HD23	24:D5:37:VAL:HG11	2.02	0.41
25:E2:51:ARG:NH2	25:E2:109:PHE:O	2.53	0.41
25:E2:36:HIS:HD1	25:E2:41:CYS:HB3	1.85	0.41
25:E4:180:LEU:HD12	25:E4:228:ILE:HG13	2.02	0.41
25:E4:36:HIS:HD1	25:E4:41:CYS:HB3	1.85	0.41
26:F1:191:LYS:HA	26:F1:194:ASP:CB	2.46	0.41
26:F5:14:THR:HA	26:F5:15:PRO:HA	1.72	0.41
11:G1:14:LYS:HG2	11:G1:124:LEU:CD1	2.50	0.41
27:H5:163:GLN:HG2	27:H5:189:PHE:CZ	2.55	0.41
27:H5:72:PHE:O	27:H5:76:GLN:N	2.51	0.41
28:I2:142:SER:HA	28:I2:146:GLN:HG2	2.01	0.41
28:I6:178:ARG:HG3	28:I6:178:ARG:O	2.20	0.41
12:J3:28:GLU:HA	12:J3:31:LEU:HD13	2.01	0.41
12:J3:38:ARG:HG2	12:J3:39:ASN:H	1.85	0.41
12:J4:94:LEU:HA	12:J4:97:ILE:HD12	2.02	0.41
29:K2:51:SER:O	29:K2:54:SER:OG	2.25	0.41
29:K4:5:LYS:O	29:K4:9:ILE:N	2.52	0.41
24:D5:75:LYS:NZ	29:K5:18:GLU:HG2	2.34	0.41
29:K5:32:HIS:ND1	29:K5:33:PRO:HD2	2.35	0.41
30:L5:125:ILE:CG2	30:L5:146:THR:OG1	2.67	0.41
14:N1:125:LEU:O	14:N1:128:TYR:HB3	2.20	0.41
14:N2:150:VAL:CG1	14:N2:151:ALA:N	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N2:71:ILE:H	14:N2:71:ILE:HD12	1.85	0.41
15:O2:34:PHE:HE1	15:O2:98:ARG:CZ	2.33	0.41
15:O2:65:ASP:O	15:O2:68:GLU:HB2	2.20	0.41
15:O4:65:ASP:O	15:O4:68:GLU:HB2	2.20	0.41
15:O6:65:ASP:O	15:O6:68:GLU:HB2	2.20	0.41
31:P1:34:MET:CA	31:P1:42:ARG:HG3	2.50	0.41
31:P3:75:VAL:HB	31:P3:93:MET:HE2	2.02	0.41
31:P5:64:LYS:HA	31:P5:73:PRO:HB3	2.01	0.41
32:Q4:3:SER:O	32:Q4:4:LYS:HB3	2.20	0.41
32:Q5:3:SER:O	32:Q5:4:LYS:HB3	2.20	0.41
33:R2:65:PRO:HG3	33:R2:73:LEU:O	2.20	0.41
33:R5:98:VAL:HB	33:R5:115:SER:HB3	2.00	0.41
33:R5:7:LYS:NZ	33:R5:11:LYS:HD2	2.35	0.41
34:S1:31:THR:HG23	34:S1:37:GLY:HA2	2.02	0.41
34:S3:31:THR:HG23	34:S3:37:GLY:HA2	2.01	0.41
1:T6:40:ALA:N	1:T6:96:SER:HB2	2.35	0.41
2:U2:56:MET:HB2	2:U2:86:LYS:HB2	2.02	0.41
2:U3:31:SER:O	2:U3:35:VAL:HG23	2.20	0.41
2:U4:28:ASN:ND2	2:U4:30:LYS:HB3	2.34	0.41
2:U5:76:THR:HA	32:Q5:132:PHE:CE2	2.55	0.41
16:W1:111:MET:HG3	16:W1:112:ASP:H	1.83	0.41
16:W2:111:MET:HG3	16:W2:112:ASP:H	1.84	0.41
16:W6:65:LEU:C	16:W6:67:GLY:H	2.21	0.41
4:X5:85:VAL:HG12	4:X5:122:VAL:HG11	2.01	0.41
17:Y5:20:ARG:HB3	17:Y5:76:TYR:CD1	2.55	0.41
22:A1:212:LYS:HE3	22:A1:212:LYS:HB3	1.63	0.41
3:V1:36:VAL:O	22:A1:67:ALA:HB2	2.20	0.41
22:A2:184:ARG:HB3	22:A2:191:ARG:HH21	1.85	0.41
22:A5:123:VAL:HG12	22:A5:145:ILE:CG1	2.50	0.41
22:A6:144:THR:N	22:A6:158:ASP:OD2	2.53	0.41
22:A6:77:ILE:HA	22:A6:99:ILE:O	2.19	0.41
23:B1:40:ASN:N	23:B1:75:GLN:OE1	2.34	0.41
23:B1:62:LEU:O	23:B1:88:THR:HG21	2.20	0.41
23:B5:87:ILE:N	23:B5:99:ASN:O	2.53	0.41
10:C2:73:MET:HG3	10:C2:73:MET:O	2.20	0.41
10:C3:204:ILE:HA	10:C3:221:ASP:OD1	2.20	0.41
24:D2:126:ILE:HG21	24:D2:134:CYS:HB3	2.01	0.41
24:D6:135:GLU:HB2	24:D6:187:LYS:HB2	2.02	0.41
25:E3:191:ARG:NE	25:E3:245:ARG:HB3	2.36	0.41
25:E5:88:ASP:O	25:E5:100:ARG:HA	2.19	0.41
26:F4:19:LEU:H	26:F4:48:TYR:HE1	1.66	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G1:139:SER:O	11:G1:142:ARG:HB2	2.20	0.41
11:G1:160:LYS:H	11:G1:172:LYS:HG2	1.85	0.41
11:G2:67:VAL:N	11:G2:100:CYS:SG	2.90	0.41
11:G3:21:GLU:O	11:G3:25:ARG:HG2	2.20	0.41
11:G3:78:SER:OG	11:G3:79:LYS:N	2.53	0.41
11:G6:21:GLU:O	11:G6:25:ARG:HG2	2.20	0.41
27:H2:18:GLU:HG2	27:H2:19:PHE:N	2.35	0.41
27:H4:54:GLY:HA3	27:H4:57:ARG:HH21	1.85	0.41
28:I2:123:ARG:CZ	15:O5:64:ALA:O	2.68	0.41
28:I5:142:SER:HA	28:I5:146:GLN:HG2	2.02	0.41
28:I6:177:SER:OG	28:I6:184:ARG:O	2.30	0.41
28:I6:177:SER:HB2	28:I6:186:ASP:HB2	2.02	0.41
12:J2:28:GLU:HA	12:J2:31:LEU:HD13	2.01	0.41
12:J2:94:LEU:HA	12:J2:97:ILE:HD12	2.02	0.41
12:J3:114:VAL:HG13	12:J3:119:LEU:HD22	2.02	0.41
12:J5:136:ARG:HD3	12:J5:160:SER:HA	2.01	0.41
12:J6:28:GLU:HA	12:J6:31:LEU:HD13	2.01	0.41
29:K1:2:LEU:HD12	29:K1:3:MET:HB2	2.02	0.41
24:D1:61:GLU:OE2	29:K1:73:ASN:ND2	2.53	0.41
29:K1:16:PHE:CE2	29:K1:85:LEU:HD13	2.55	0.41
29:K1:5:LYS:O	29:K1:9:ILE:N	2.53	0.41
29:K4:16:PHE:CE2	29:K4:85:LEU:HD13	2.55	0.41
30:L2:48:LYS:O	30:L2:52:GLU:HG2	2.20	0.41
30:L6:144:LYS:NZ	30:L6:146:THR:CG2	2.72	0.41
14:N1:39:LYS:HA	14:N1:42:LYS:HZ2	1.85	0.41
14:N1:39:LYS:HA	14:N1:42:LYS:HZ3	1.85	0.41
14:N3:122:ILE:O	14:N3:126:ALA:N	2.33	0.41
15:O1:34:PHE:HE1	15:O1:98:ARG:CZ	2.32	0.41
31:P1:85:ILE:HD11	31:P1:116:LEU:HD23	2.02	0.41
31:P2:45:LEU:HD12	31:P2:45:LEU:HA	1.84	0.41
31:P3:41:GLN:OE1	31:P3:84:ILE:CG1	2.68	0.41
31:P5:85:ILE:HD11	31:P5:116:LEU:HD23	2.02	0.41
31:P6:40:ARG:HD2	31:P6:40:ARG:HA	1.74	0.41
32:Q4:87:SER:O	32:Q4:91:ALA:N	2.50	0.41
32:Q6:138:ARG:O	32:Q6:140:ARG:HG3	2.19	0.41
33:R1:119:VAL:HA	33:R1:120:THR:HA	1.71	0.41
33:R3:7:LYS:NZ	33:R3:11:LYS:HD2	2.35	0.41
33:R4:58:MET:C	33:R4:61:ILE:CG1	2.82	0.41
22:A5:201:LEU:N	33:R5:85:VAL:HG11	2.35	0.41
1:T1:23:LYS:HD3	1:T1:54:TYR:CG	2.56	0.41
1:T2:115:LYS:HA	1:T2:121:ARG:HA	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U2:21:ARG:HB3	2:U2:115:THR:HG21	2.02	0.41
2:U5:20:ILE:CD1	2:U5:116:ILE:O	2.68	0.41
2:U6:116:ILE:HB	2:U6:117:ALA:H	1.72	0.41
2:U6:56:MET:HB2	2:U6:86:LYS:HB2	2.02	0.41
3:V6:28:ASP:OD2	3:V6:31:SER:HB3	2.21	0.41
16:W2:32:LYS:HA	16:W2:35:VAL:HG22	2.02	0.41
16:W5:30:CYS:HB3	16:W5:59:GLY:H	1.85	0.41
4:X4:60:LYS:HG2	4:X4:114:ASP:O	2.20	0.41
4:X6:85:VAL:HG12	4:X6:122:VAL:HG11	2.02	0.41
17:Y1:110:ARG:NH1	17:Y1:128:GLY:O	2.43	0.41
17:Y2:13:MET:O	17:Y2:22:GLN:N	2.47	0.41
17:Y5:90:ARG:HA	17:Y5:93:ARG:HG2	2.02	0.41
17:Y6:56:PHE:HB2	17:Y6:74:MET:HB3	2.02	0.41
17:Y6:90:ARG:HA	17:Y6:93:ARG:HG2	2.02	0.41
18:Z2:111:ARG:C	18:Z2:113:THR:N	2.73	0.41
18:Z3:55:TYR:HB3	18:Z3:59:CYS:SG	2.59	0.41
22:A3:201:LEU:N	33:R3:85:VAL:HG11	2.36	0.41
22:A4:144:THR:N	22:A4:158:ASP:OD2	2.53	0.41
23:B1:197:ILE:HD11	23:B1:210:VAL:HG11	2.01	0.41
23:B3:224:GLU:CD	23:B3:226:GLY:H	2.24	0.41
23:B4:103:MET:HG3	23:B4:103:MET:O	2.19	0.41
30:L2:31:GLU:CA	23:B5:21:VAL:HG22	2.49	0.41
23:B5:71:LEU:HB2	23:B5:82:ARG:HB2	2.02	0.41
10:C1:107:LEU:HB2	10:C1:127:PHE:HB2	2.02	0.41
10:C2:189:GLY:C	10:C2:191:VAL:H	2.22	0.41
10:C2:204:ILE:HA	10:C2:221:ASP:OD1	2.20	0.41
10:C3:104:ASP:OD1	10:C3:105:GLU:N	2.53	0.41
10:C3:68:ARG:HD2	10:C3:277:HIS:HB2	1.96	0.41
24:D2:140:GLY:HA3	24:D2:182:LEU:HB2	2.02	0.41
24:D4:105:LEU:HD23	24:D4:184:ILE:HD12	2.01	0.41
24:D4:34:TYR:HA	24:D4:52:ALA:HB1	2.02	0.41
2:U5:59:LYS:HG2	24:D5:8:LYS:HZ1	1.84	0.41
17:Y2:22:GLN:NE2	25:E2:56:LEU:HD12	2.31	0.41
26:F1:157:GLY:HA2	26:F1:160:GLU:OE2	2.20	0.41
26:F2:157:GLY:HA2	26:F2:160:GLU:OE2	2.20	0.41
11:G1:21:GLU:O	11:G1:25:ARG:HG2	2.20	0.41
11:G2:10:THR:OG1	11:G2:128:THR:HG21	2.20	0.41
11:G2:216:ARG:O	11:G2:220:ALA:N	2.53	0.41
11:G3:160:LYS:H	11:G3:172:LYS:HG2	1.84	0.41
11:G4:231:ARG:HA	11:G4:234:LEU:HD12	2.02	0.41
11:G5:14:LYS:HG2	11:G5:124:LEU:CD1	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G6:67:VAL:HG11	11:G6:99:GLY:HA2	2.03	0.41
27:H1:145:ARG:HH11	27:H1:153:LEU:HD12	1.85	0.41
27:H4:72:PHE:O	27:H4:76:GLN:N	2.51	0.41
28:I1:84:ASN:HD21	28:I1:90:LEU:HD12	1.85	0.41
28:I3:142:SER:HA	28:I3:146:GLN:HG2	2.01	0.41
28:I3:90:LEU:HD13	28:I3:97:VAL:HG21	2.02	0.41
28:I4:84:ASN:HD21	28:I4:90:LEU:HD12	1.85	0.41
28:I5:90:LEU:HD13	28:I5:97:VAL:HG21	2.02	0.41
28:I6:37:LYS:O	28:I6:60:LEU:N	2.39	0.41
12:J2:38:ARG:HG2	12:J2:39:ASN:H	1.85	0.41
12:J5:38:ARG:HG2	12:J5:39:ASN:H	1.85	0.41
29:K3:59:LYS:O	29:K3:70:TYR:N	2.37	0.41
24:D3:64:ARG:CG	29:K3:95:ARG:HH22	2.27	0.41
29:K6:16:PHE:CE2	29:K6:85:LEU:HD13	2.55	0.41
14:N1:76:LYS:C	14:N1:79:GLY:H	2.23	0.41
14:N3:90:HIS:HA	14:N3:93:LYS:HE3	2.01	0.41
14:N6:99:ARG:NH1	14:N6:143:SER:HA	2.35	0.41
31:P1:34:MET:C	31:P1:42:ARG:HG3	2.41	0.41
31:P2:85:ILE:HD11	31:P2:116:LEU:HD23	2.02	0.41
32:Q2:15:ARG:HG2	32:Q2:20:THR:OG1	2.20	0.41
32:Q2:10:VAL:HG22	32:Q2:98:LYS:HD3	2.02	0.41
32:Q5:15:ARG:HG2	32:Q5:20:THR:OG1	2.20	0.41
33:R1:7:LYS:NZ	33:R1:11:LYS:HD2	2.36	0.41
34:S6:31:THR:HG23	34:S6:37:GLY:HA2	2.01	0.41
1:T3:40:ALA:N	1:T3:96:SER:HB2	2.35	0.41
2:U6:31:SER:O	2:U6:35:VAL:HG23	2.19	0.41
3:V1:28:ASP:OD2	3:V1:31:SER:HB3	2.21	0.41
3:V2:28:ASP:OD2	3:V2:31:SER:HB3	2.20	0.41
3:V5:28:ASP:OD2	3:V5:31:SER:HB3	2.21	0.41
16:W1:35:VAL:O	16:W1:39:THR:HG23	2.20	0.41
16:W4:111:MET:CE	16:W4:119:LYS:HD3	2.39	0.41
17:Y2:23:MET:HE1	17:Y2:75:ILE:HD12	2.03	0.41
17:Y4:40:ILE:O	17:Y4:44:LEU:HD13	2.21	0.41
18:Z3:111:ARG:C	18:Z3:113:THR:N	2.73	0.41
18:Z5:111:ARG:C	18:Z5:113:THR:N	2.73	0.41
18:Z6:86:ALA:HB1	34:S6:3:LEU:CG	2.49	0.41
22:A1:123:VAL:HG12	22:A1:145:ILE:CG1	2.51	0.41
22:A1:184:ARG:HB3	22:A1:191:ARG:HH21	1.85	0.41
22:A2:201:LEU:N	33:R2:85:VAL:HG11	2.36	0.41
22:A6:152:SER:HA	22:A6:153:PRO:HD2	1.91	0.41
23:B4:138:PHE:CD2	23:B4:214:LYS:HB3	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B4:197:ILE:HD11	23:B4:210:VAL:HG11	2.02	0.41
23:B5:138:PHE:CD2	23:B5:214:LYS:HB3	2.56	0.41
23:B5:197:ILE:HD11	23:B5:210:VAL:HG21	2.02	0.41
23:B5:197:ILE:HD11	23:B5:210:VAL:HG11	2.01	0.41
23:B5:224:GLU:CD	23:B5:226:GLY:H	2.24	0.41
10:C1:267:GLN:C	10:C1:269:PHE:N	2.74	0.41
10:C1:61:MET:HA	10:C1:62:PRO:HD2	1.90	0.41
10:C2:242:ASP:HA	10:C2:245:SER:OG	2.19	0.41
24:D5:140:GLY:HA3	24:D5:182:LEU:HB2	2.02	0.41
24:D6:154:ASP:OD1	24:D6:155:GLY:N	2.53	0.41
25:E1:51:ARG:NH2	25:E1:109:PHE:O	2.53	0.41
25:E1:180:LEU:HD12	25:E1:228:ILE:HG13	2.02	0.41
25:E5:47:PHE:HD2	25:E5:48:LEU:HD12	1.84	0.41
26:F2:45:TYR:H	26:F2:46:ALA:CA	2.34	0.41
26:F3:33:ILE:O	26:F3:35:LEU:N	2.52	0.41
26:F4:45:TYR:H	26:F4:46:ALA:CA	2.34	0.41
26:F5:49:LEU:HA	26:F5:50:PRO:HD3	1.84	0.41
11:G2:145:PHE:CD1	11:G2:145:PHE:O	2.74	0.41
11:G2:14:LYS:HG2	11:G2:124:LEU:CD1	2.50	0.41
11:G3:14:LYS:HG2	11:G3:124:LEU:CD1	2.50	0.41
11:G3:67:VAL:HG11	11:G3:99:GLY:HA2	2.03	0.41
11:G4:37:ALA:HA	11:G4:49:VAL:HG12	2.02	0.41
11:G6:140:ARG:HD3	11:G6:140:ARG:HA	1.69	0.41
11:G6:146:ASN:O	11:G6:147:LEU:HB3	2.20	0.41
27:H2:145:ARG:HH11	27:H2:153:LEU:HD12	1.85	0.41
28:I2:90:LEU:HD13	28:I2:97:VAL:HG21	2.02	0.41
28:I3:84:ASN:HD21	28:I3:90:LEU:HD12	1.85	0.41
12:J2:114:VAL:HG13	12:J2:119:LEU:HD22	2.02	0.41
24:D3:61:GLU:OE2	29:K3:73:ASN:ND2	2.53	0.41
29:K4:59:LYS:O	29:K4:70:TYR:N	2.37	0.41
13:M5:27:ILE:HG21	29:K5:84:HIS:CG	2.55	0.41
29:K6:32:HIS:ND1	29:K6:33:PRO:HD2	2.35	0.41
30:L1:68:ILE:HA	30:L1:130:GLU:O	2.20	0.41
30:L3:48:LYS:O	30:L3:52:GLU:HG2	2.20	0.41
30:L5:48:LYS:O	30:L5:52:GLU:HG2	2.20	0.41
13:M3:42:LEU:HD22	13:M3:110:VAL:HG22	2.03	0.41
14:N1:99:ARG:NH1	14:N1:143:SER:HA	2.35	0.41
14:N5:127:ARG:O	14:N5:131:THR:HG23	2.20	0.41
14:N5:99:ARG:NH1	14:N5:143:SER:HA	2.35	0.41
14:N6:125:LEU:O	14:N6:128:TYR:HB3	2.20	0.41
15:O3:39:ASP:N	15:O3:69:SER:HB3	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:P6:115:TYR:N	31:P6:115:TYR:CD2	2.73	0.41
2:U1:76:THR:HA	32:Q1:132:PHE:CE2	2.55	0.41
32:Q5:138:ARG:O	32:Q5:140:ARG:HG3	2.19	0.41
33:R3:113:SER:OG	33:R3:114:LEU:N	2.53	0.41
33:R4:69:ILE:H	33:R4:70:SER:HB3	1.85	0.41
1:T3:115:LYS:HA	1:T3:121:ARG:HA	2.01	0.41
1:T4:23:LYS:HD3	1:T4:54:TYR:CG	2.56	0.41
2:U6:21:ARG:HB3	2:U6:115:THR:HG21	2.02	0.41
16:W4:35:VAL:O	16:W4:39:THR:HG23	2.20	0.41
16:W5:111:MET:HG3	16:W5:112:ASP:H	1.84	0.41
4:X4:85:VAL:HG12	4:X4:122:VAL:HG11	2.01	0.41
4:X6:9:THR:OG1	4:X6:10:ALA:N	2.51	0.41
17:Y4:55:ILE:HG23	17:Y4:75:ILE:HG12	2.02	0.41
22:A2:77:ILE:HA	22:A2:99:ILE:O	2.19	0.41
22:A3:184:ARG:HB3	22:A3:191:ARG:HH21	1.85	0.41
22:A5:3:GLY:HA2	22:A5:63:ARG:NH2	2.35	0.41
22:A5:70:ASN:HA	22:A5:71:PRO:HD2	1.88	0.41
23:B3:71:LEU:HB2	23:B3:82:ARG:HB2	2.02	0.41
23:B4:224:GLU:CD	23:B4:226:GLY:H	2.24	0.41
23:B4:81:PHE:O	23:B4:105:LEU:HD12	2.20	0.41
10:C5:127:PHE:HA	10:C5:140:GLY:O	2.20	0.41
10:C5:246:LYS:O	10:C5:249:SER:OG	2.31	0.41
10:C6:107:LEU:HB2	10:C6:127:PHE:HB2	2.02	0.41
24:D2:162:ASP:N	24:D2:163:PRO:HD2	2.36	0.41
24:D2:204:LEU:C	24:D2:206:ASP:H	2.19	0.41
24:D4:162:ASP:N	24:D4:163:PRO:HD2	2.36	0.41
24:D6:140:GLY:HA3	24:D6:182:LEU:HB2	2.02	0.41
25:E6:238:LEU:CD1	25:E6:242:LYS:HG2	2.50	0.41
25:E6:36:HIS:HD1	25:E6:41:CYS:HB3	1.85	0.41
26:F1:137:GLN:O	26:F1:138:ALA:CB	2.63	0.41
26:F2:96:ALA:HA	26:F2:99:ILE:HG22	2.01	0.41
26:F4:35:LEU:HD12	26:F4:117:ILE:HD13	2.02	0.41
26:F4:157:GLY:HA2	26:F4:160:GLU:OE2	2.20	0.41
26:F5:96:ALA:O	26:F5:99:ILE:HG22	2.21	0.41
11:G1:145:PHE:O	11:G1:145:PHE:CD1	2.74	0.41
27:H1:15:LYS:H	27:H1:16:PRO:HD2	1.85	0.41
27:H1:68:GLN:N	27:H1:68:GLN:OE1	2.54	0.41
27:H4:18:GLU:HG2	27:H4:19:PHE:N	2.35	0.41
27:H6:163:GLN:HG2	27:H6:189:PHE:CZ	2.55	0.41
28:I2:178:ARG:O	28:I2:178:ARG:HG3	2.21	0.41
28:I6:142:SER:HA	28:I6:146:GLN:HG2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:I6:79:ILE:HG21	28:I6:170:LYS:HZ2	1.86	0.41
12:J1:136:ARG:HD3	12:J1:160:SER:HA	2.01	0.41
12:J5:94:LEU:HA	12:J5:97:ILE:HD12	2.02	0.41
24:D6:71:ALA:HB1	29:K6:20:VAL:HG21	2.02	0.41
14:N2:133:ARG:CG	30:L2:152:LYS:HE2	2.51	0.41
30:L4:68:ILE:HA	30:L4:130:GLU:O	2.20	0.41
14:N1:114:ARG:O	14:N1:118:ILE:HG13	2.21	0.41
14:N1:149:LEU:CD2	14:N1:149:LEU:C	2.89	0.41
14:N3:101:HIS:NE2	14:N3:105:ASN:ND2	2.69	0.41
14:N3:125:LEU:O	14:N3:128:TYR:HB3	2.20	0.41
14:N3:71:ILE:H	14:N3:71:ILE:HD12	1.85	0.41
15:O2:39:ASP:N	15:O2:69:SER:HB3	2.35	0.41
15:O5:39:ASP:N	15:O5:69:SER:HB3	2.35	0.41
15:O5:65:ASP:O	15:O5:68:GLU:HB2	2.20	0.41
31:P3:49:LEU:HA	31:P3:49:LEU:HD23	1.78	0.41
31:P4:64:LYS:HA	31:P4:73:PRO:HB3	2.01	0.41
32:Q3:138:ARG:O	32:Q3:140:ARG:HG3	2.19	0.41
32:Q3:3:SER:O	32:Q3:4:LYS:HB3	2.20	0.41
33:R2:6:THR:HG22	33:R2:8:THR:H	1.86	0.41
33:R3:6:THR:HG22	33:R3:8:THR:H	1.86	0.41
33:R4:119:VAL:HA	33:R4:120:THR:HA	1.72	0.41
34:S1:40:TYR:HE1	34:S1:79:ILE:HG21	1.85	0.41
34:S5:40:TYR:HE1	34:S5:79:ILE:HG21	1.85	0.41
2:U5:28:ASN:ND2	2:U5:30:LYS:HB3	2.34	0.41
3:V4:36:VAL:O	22:A4:67:ALA:HB2	2.20	0.41
3:V4:55:ILE:HD11	3:V4:69:ILE:HD11	2.03	0.41
3:V6:36:VAL:HG12	3:V6:37:ALA:N	2.33	0.41
16:W3:111:MET:HB2	16:W3:115:GLU:CG	2.50	0.41
16:W5:32:LYS:HA	16:W5:35:VAL:HG22	2.02	0.41
4:X1:9:THR:OG1	4:X1:10:ALA:N	2.51	0.41
17:Y1:55:ILE:HG23	17:Y1:75:ILE:HG12	2.02	0.41
17:Y1:20:ARG:HB3	17:Y1:76:TYR:CD1	2.55	0.41
17:Y3:125:VAL:HG12	17:Y3:129:LYS:NZ	2.36	0.41
17:Y6:40:ILE:O	17:Y6:44:LEU:HD13	2.21	0.41
17:Y6:55:ILE:HG23	17:Y6:75:ILE:HG12	2.02	0.41
18:Z4:111:ARG:C	18:Z4:113:THR:N	2.73	0.41
22:A1:130:ASP:O	22:A1:133:PRO:HD2	2.21	0.41
3:V2:36:VAL:O	22:A2:67:ALA:HB2	2.20	0.41
22:A5:152:SER:HA	22:A5:153:PRO:HD2	1.91	0.41
22:A6:123:VAL:HG12	22:A6:145:ILE:CG1	2.51	0.41
23:B1:81:PHE:O	23:B1:105:LEU:HD12	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C3:127:PHE:HA	10:C3:140:GLY:O	2.20	0.41
10:C3:73:MET:HG3	10:C3:73:MET:O	2.20	0.41
10:C4:267:GLN:C	10:C4:269:PHE:H	2.24	0.41
10:C4:65:LYS:CG	10:C4:279:ARG:NE	2.74	0.41
10:C5:107:LEU:HB2	10:C5:127:PHE:HB2	2.02	0.41
10:C6:189:GLY:C	10:C6:191:VAL:H	2.22	0.41
24:D1:137:VAL:HG22	24:D1:151:LYS:HG2	2.02	0.41
24:D1:34:TYR:HA	24:D1:52:ALA:HB1	2.03	0.41
24:D2:154:ASP:OD1	24:D2:155:GLY:N	2.53	0.41
24:D4:25:LEU:HD23	24:D4:37:VAL:HG11	2.02	0.41
24:D5:137:VAL:HG22	24:D5:151:LYS:HG2	2.02	0.41
25:E3:14:ALA:HA	25:E3:15:PRO:HD3	1.87	0.41
25:E6:47:PHE:HD2	25:E6:48:LEU:HD12	1.84	0.41
26:F3:45:TYR:H	26:F3:46:ALA:CA	2.34	0.41
26:F6:115:ALA:O	26:F6:119:SER:OG	2.19	0.41
11:G1:10:THR:OG1	11:G1:128:THR:HG21	2.19	0.41
11:G1:146:ASN:HA	11:G1:146:ASN:HD22	1.59	0.41
11:G1:149:LYS:NZ	11:G1:149:LYS:CB	2.75	0.41
11:G5:139:SER:O	11:G5:142:ARG:HB2	2.21	0.41
11:G5:160:LYS:H	11:G5:172:LYS:HG2	1.85	0.41
11:G6:37:ALA:HA	11:G6:49:VAL:HG12	2.01	0.41
27:H3:163:GLN:HG2	27:H3:189:PHE:CZ	2.55	0.41
27:H4:15:LYS:H	27:H4:16:PRO:HD2	1.85	0.41
28:I2:197:PHE:O	28:I2:200:ARG:HB3	2.21	0.41
28:I2:84:ASN:HD21	28:I2:90:LEU:HD12	1.85	0.41
28:I4:90:LEU:HD13	28:I4:97:VAL:HG21	2.02	0.41
28:I5:107:THR:OG1	28:I5:108:PRO:HD3	2.19	0.41
12:J4:136:ARG:HD3	12:J4:160:SER:HA	2.01	0.41
12:J4:64:ASP:HB3	16:W4:117:ARG:NH2	2.36	0.41
29:K4:19:GLY:N	29:K4:92:ALA:HB2	2.32	0.41
14:N3:81:ALA:HA	14:N3:82:PRO:HD3	1.94	0.41
14:N4:71:ILE:HD12	14:N4:71:ILE:H	1.85	0.41
14:N5:101:HIS:NE2	14:N5:105:ASN:ND2	2.69	0.41
14:N6:143:SER:OG	14:N6:144:SER:N	2.53	0.41
15:O3:65:ASP:O	15:O3:68:GLU:HB2	2.20	0.41
31:P3:45:LEU:HD12	31:P3:45:LEU:HA	1.83	0.41
31:P4:75:VAL:HB	31:P4:93:MET:HE2	2.02	0.41
33:R2:7:LYS:NZ	33:R2:11:LYS:HD2	2.35	0.41
22:A3:201:LEU:HA	33:R3:85:VAL:HG11	2.03	0.41
33:R4:7:LYS:NZ	33:R4:11:LYS:HD2	2.35	0.41
34:S3:40:TYR:HE1	34:S3:79:ILE:HG21	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S4:31:THR:HG23	34:S4:37:GLY:HA2	2.01	0.41
1:T3:23:LYS:HD3	1:T3:54:TYR:CG	2.56	0.41
1:T5:23:LYS:HD3	1:T5:54:TYR:CG	2.56	0.41
2:U3:20:ILE:CD1	2:U3:116:ILE:O	2.69	0.41
2:U4:61:LEU:H	2:U4:81:GLN:HE22	1.67	0.41
2:U6:20:ILE:CD1	2:U6:116:ILE:O	2.68	0.41
2:U6:99:LYS:HZ3	24:D6:43:PRO:HG2	1.86	0.41
16:W1:30:CYS:HB3	16:W1:59:GLY:H	1.85	0.41
10:C2:183:LYS:HE3	16:W2:95:PRO:HA	2.03	0.41
4:X3:85:VAL:HG12	4:X3:122:VAL:HG11	2.01	0.41
4:X4:85:VAL:HA	4:X4:86:PRO:HD2	1.88	0.41
17:Y1:113:ARG:HG3	17:Y1:116:LYS:HZ1	1.86	0.41
17:Y3:40:ILE:O	17:Y3:44:LEU:HD13	2.21	0.41
17:Y4:90:ARG:HA	17:Y4:93:ARG:HG2	2.02	0.41
17:Y5:55:ILE:HG23	17:Y5:75:ILE:HG12	2.02	0.41
22:A6:184:ARG:HB3	22:A6:191:ARG:HH21	1.85	0.41
22:A6:201:LEU:N	33:R6:85:VAL:HG11	2.36	0.41
23:B1:224:GLU:CD	23:B1:226:GLY:H	2.24	0.41
23:B6:167:LYS:NZ	23:B6:200:ALA:O	2.54	0.41
23:B6:71:LEU:HB2	23:B6:82:ARG:HB2	2.03	0.41
10:C1:68:ARG:CD	10:C1:277:HIS:HB2	2.49	0.41
10:C3:189:GLY:O	10:C3:191:VAL:N	2.48	0.41
10:C3:272:HIS:C	10:C3:274:VAL:N	2.74	0.41
10:C5:256:TRP:HB3	16:W5:68:ARG:NH1	2.36	0.41
10:C5:267:GLN:C	10:C5:269:PHE:H	2.24	0.41
24:D2:99:ILE:O	24:D2:103:GLU:HG2	2.21	0.41
24:D3:162:ASP:N	24:D3:163:PRO:HD2	2.36	0.41
25:E1:201:HIS:O	25:E1:204:SER:N	2.46	0.41
25:E2:103:TYR:HB3	25:E2:107:GLY:HA2	2.00	0.41
25:E3:47:PHE:HD2	25:E3:48:LEU:HD12	1.85	0.41
17:Y3:22:GLN:NE2	25:E3:56:LEU:HD12	2.31	0.41
26:F1:35:LEU:HD12	26:F1:117:ILE:HD13	2.02	0.41
26:F2:96:ALA:O	26:F2:99:ILE:HG22	2.21	0.41
26:F4:107:ASN:HA	26:F4:108:PRO:HD2	1.71	0.41
11:G4:145:PHE:CD1	11:G4:145:PHE:O	2.74	0.41
11:G4:67:VAL:HG11	11:G4:99:GLY:HA2	2.02	0.41
11:G5:220:ALA:O	11:G5:224:ARG:N	2.53	0.41
11:G6:145:PHE:CD1	11:G6:145:PHE:O	2.74	0.41
11:G6:146:ASN:HD22	11:G6:146:ASN:HA	1.59	0.41
27:H2:163:GLN:HG2	27:H2:189:PHE:CZ	2.55	0.41
27:H5:145:ARG:HH11	27:H5:153:LEU:HD12	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:H5:68:GLN:N	27:H5:68:GLN:OE1	2.54	0.41
28:I1:90:LEU:HD13	28:I1:97:VAL:HG21	2.02	0.41
28:I2:177:SER:HB2	28:I2:186:ASP:HB2	2.02	0.41
28:I3:178:ARG:O	28:I3:178:ARG:HG3	2.21	0.41
29:K2:16:PHE:CE2	29:K2:85:LEU:HD13	2.55	0.41
29:K3:16:PHE:CE2	29:K3:85:LEU:HD13	2.56	0.41
29:K5:89:ILE:O	29:K5:91:PRO:HD3	2.19	0.41
30:L1:27:GLU:O	30:L1:30:LYS:HG3	2.21	0.41
30:L4:37:TYR:CD2	30:L4:51:ILE:HG12	2.56	0.41
13:M2:42:LEU:HD22	13:M2:110:VAL:HG22	2.03	0.41
13:M3:27:ILE:HG21	29:K3:84:HIS:CG	2.55	0.41
13:M4:38:ALA:HB1	13:M4:110:VAL:HG23	2.03	0.41
14:N4:76:LYS:C	14:N4:79:GLY:H	2.24	0.41
14:N5:149:LEU:CD2	14:N5:149:LEU:C	2.89	0.41
14:N6:149:LEU:C	14:N6:149:LEU:CD2	2.89	0.41
14:N6:76:LYS:C	14:N6:79:GLY:H	2.23	0.41
15:O2:75:MET:O	15:O2:79:GLN:HG2	2.21	0.41
31:P3:34:MET:CE	31:P3:46:ASN:HB2	2.50	0.41
31:P4:121:ILE:CG2	31:P4:122:THR:H	2.34	0.41
31:P5:36:LEU:HD23	31:P5:36:LEU:HA	1.85	0.41
31:P5:85:ILE:O	31:P5:112:ILE:O	2.38	0.41
32:Q1:13:PHE:HA	32:Q1:21:ALA:O	2.19	0.41
32:Q4:138:ARG:O	32:Q4:140:ARG:HG3	2.19	0.41
32:Q6:4:LYS:HZ2	32:Q6:99:TYR:HB3	1.84	0.41
33:R2:21:TYR:HE2	33:R2:72:LYS:NZ	2.18	0.41
33:R5:6:THR:HG22	33:R5:8:THR:H	1.85	0.41
1:T6:23:LYS:HD3	1:T6:54:TYR:CG	2.56	0.41
2:U1:21:ARG:HB3	2:U1:115:THR:HG21	2.02	0.41
2:U2:20:ILE:CD1	2:U2:116:ILE:O	2.68	0.41
2:U2:49:LYS:O	2:U2:50:VAL:HG12	2.21	0.41
2:U3:61:LEU:HD21	24:D3:8:LYS:HG3	2.02	0.41
2:U4:20:ILE:CD1	2:U4:116:ILE:O	2.68	0.41
3:V4:28:ASP:OD2	3:V4:31:SER:HB3	2.20	0.41
16:W6:35:VAL:O	16:W6:39:THR:HG23	2.20	0.41
4:X1:107:ARG:NH1	4:X1:110:HIS:HD2	2.19	0.41
4:X2:85:VAL:HA	4:X2:86:PRO:HD2	1.88	0.41
4:X6:60:LYS:HG2	4:X6:114:ASP:O	2.20	0.41
4:X6:85:VAL:HA	4:X6:86:PRO:HD2	1.88	0.41
17:Y1:58:PHE:O	17:Y1:72:PHE:N	2.32	0.41
22:A2:123:VAL:HG12	22:A2:145:ILE:CG1	2.50	0.41
3:V3:36:VAL:O	22:A3:67:ALA:HB2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A6:25:LEU:HB2	22:A6:46:ILE:HG21	2.03	0.41
23:B2:224:GLU:CD	23:B2:226:GLY:H	2.24	0.41
23:B5:37:ALA:O	23:B5:39:PHE:N	2.47	0.41
23:B6:138:PHE:CD2	23:B6:214:LYS:HB3	2.56	0.41
10:C1:267:GLN:C	10:C1:269:PHE:H	2.24	0.41
10:C1:73:MET:O	10:C1:73:MET:HG3	2.20	0.41
10:C2:272:HIS:C	10:C2:274:VAL:N	2.74	0.41
10:C4:65:LYS:CA	10:C4:277:HIS:HE1	2.24	0.41
10:C5:185:THR:HG22	10:C5:194:ARG:HB3	2.02	0.41
10:C6:73:MET:O	10:C6:73:MET:HG3	2.20	0.41
24:D1:99:ILE:O	24:D1:103:GLU:HG2	2.21	0.41
24:D1:162:ASP:N	24:D1:163:PRO:HD2	2.35	0.41
24:D1:140:GLY:HA3	24:D1:182:LEU:HB2	2.02	0.41
24:D1:105:LEU:HD23	24:D1:184:ILE:HD12	2.01	0.41
24:D1:71:ALA:HB1	29:K1:20:VAL:HG21	2.02	0.41
24:D3:154:ASP:OD1	24:D3:155:GLY:N	2.53	0.41
2:U5:61:LEU:HD21	24:D5:8:LYS:HG3	2.02	0.41
24:D6:137:VAL:HG22	24:D6:151:LYS:HG2	2.02	0.41
26:F3:96:ALA:HA	26:F3:99:ILE:HG22	2.01	0.41
26:F5:96:ALA:HA	26:F5:99:ILE:HG22	2.01	0.41
26:F5:98:GLU:N	26:F5:98:GLU:OE1	2.54	0.41
26:F6:35:LEU:HD12	26:F6:117:ILE:HD13	2.02	0.41
26:F6:98:GLU:N	26:F6:98:GLU:OE1	2.54	0.41
11:G2:231:ARG:HA	11:G2:234:LEU:HD12	2.02	0.41
11:G5:37:ALA:HA	11:G5:49:VAL:HG12	2.02	0.41
11:G5:67:VAL:HG11	11:G5:99:GLY:HA2	2.03	0.41
11:G6:78:SER:OG	11:G6:79:LYS:N	2.53	0.41
27:H6:15:LYS:H	27:H6:16:PRO:HD2	1.85	0.41
28:I3:190:LEU:O	28:I3:195:LEU:HD22	2.21	0.41
28:I6:90:LEU:HD13	28:I6:97:VAL:HG21	2.02	0.41
12:J2:136:ARG:HB3	12:J2:141:VAL:HG12	2.03	0.41
12:J4:114:VAL:HG13	12:J4:119:LEU:HD22	2.03	0.41
12:J5:64:ASP:HB3	16:W5:117:ARG:NH2	2.36	0.41
12:J6:94:LEU:HA	12:J6:97:ILE:HD12	2.02	0.41
29:K2:32:HIS:ND1	29:K2:33:PRO:HD2	2.35	0.41
29:K2:31:LYS:HG2	29:K2:32:HIS:O	2.21	0.41
29:K3:32:HIS:ND1	29:K3:33:PRO:HD2	2.35	0.41
14:N3:133:ARG:NH1	30:L3:153:LYS:HA	2.35	0.41
13:M1:85:LEU:HB3	13:M1:106:CYS:O	2.21	0.41
14:N1:118:ILE:HA	14:N1:121:ARG:NH2	2.36	0.41
14:N1:123:HIS:O	14:N1:127:ARG:NH1	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N2:99:ARG:NH1	14:N2:143:SER:HA	2.35	0.41
14:N3:114:ARG:O	14:N3:118:ILE:HG13	2.21	0.41
14:N3:123:HIS:O	14:N3:127:ARG:NH1	2.54	0.41
14:N4:149:LEU:C	14:N4:149:LEU:CD2	2.89	0.41
14:N5:143:SER:OG	14:N5:144:SER:N	2.53	0.41
14:N6:114:ARG:O	14:N6:118:ILE:HG13	2.21	0.41
15:O1:14:VAL:N	15:O1:15:ILE:HA	2.25	0.41
15:O1:45:THR:HG22	15:O1:52:THR:HG22	2.03	0.41
15:O1:75:MET:O	15:O1:79:GLN:HG2	2.21	0.41
15:O6:28:PHE:HA	15:O6:92:ALA:O	2.21	0.41
31:P5:20:VAL:CG1	31:P5:25:LEU:HG	2.50	0.41
32:Q4:86:GLN:HE22	32:Q4:122:ALA:HB2	1.86	0.41
22:A1:201:LEU:N	33:R1:85:VAL:HG11	2.36	0.41
33:R3:67:ARG:HA	33:R3:68:GLY:HA2	1.63	0.41
33:R4:80:ARG:C	33:R4:82:ASP:H	2.23	0.41
22:A4:211:GLU:HB2	33:R4:81:ARG:NH2	2.19	0.41
33:R6:7:LYS:NZ	33:R6:11:LYS:HD2	2.35	0.41
3:V6:50:PHE:CE2	10:C6:267:GLN:NE2	2.85	0.41
16:W3:35:VAL:O	16:W3:39:THR:HG23	2.20	0.41
10:C3:256:TRP:HB3	16:W3:68:ARG:NH1	2.36	0.41
16:W6:111:MET:HG3	16:W6:112:ASP:H	1.84	0.41
4:X1:85:VAL:HG12	4:X1:122:VAL:HG11	2.02	0.41
17:Y2:17:LEU:HD22	25:E2:69:PHE:CE1	2.50	0.41
17:Y2:55:ILE:HG23	17:Y2:75:ILE:HG12	2.02	0.41
17:Y3:55:ILE:HG23	17:Y3:75:ILE:HG12	2.02	0.41
17:Y4:23:MET:HE1	17:Y4:75:ILE:HD12	2.02	0.41
18:Z5:77:LEU:HD23	18:Z5:78:LYS:H	1.85	0.41
18:Z6:111:ARG:C	18:Z6:113:THR:N	2.73	0.41
22:A3:214:GLU:OE1	33:R3:84:TYR:HD1	1.94	0.41
23:B1:21:VAL:HG23	23:B1:22:VAL:HG23	2.03	0.41
23:B1:71:LEU:HB2	23:B1:82:ARG:HB2	2.02	0.41
23:B2:167:LYS:NZ	23:B2:200:ALA:O	2.54	0.41
23:B2:87:ILE:N	23:B2:99:ASN:O	2.53	0.41
23:B4:167:LYS:NZ	23:B4:200:ALA:O	2.54	0.41
10:C2:127:PHE:HA	10:C2:140:GLY:O	2.20	0.41
10:C4:68:ARG:HH11	10:C4:277:HIS:HB3	0.48	0.41
10:C5:65:LYS:CG	10:C5:279:ARG:NE	2.74	0.41
10:C6:127:PHE:HA	10:C6:140:GLY:O	2.20	0.41
10:C6:267:GLN:C	10:C6:269:PHE:N	2.74	0.41
24:D5:154:ASP:OD1	24:D5:155:GLY:N	2.54	0.41
24:D5:105:LEU:HD23	24:D5:184:ILE:HD12	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D6:162:ASP:N	24:D6:163:PRO:HD2	2.36	0.41
25:E2:180:LEU:HD12	25:E2:228:ILE:HG13	2.02	0.41
25:E2:184:THR:HA	25:E2:189:LEU:HB2	2.02	0.41
25:E3:180:LEU:HD12	25:E3:228:ILE:HG13	2.02	0.41
26:F1:45:TYR:H	26:F1:46:ALA:CA	2.33	0.41
26:F1:96:ALA:O	26:F1:99:ILE:HG22	2.21	0.41
26:F3:35:LEU:HD12	26:F3:117:ILE:HD13	2.02	0.41
26:F5:136:ARG:O	26:F5:203:ASN:CB	2.67	0.41
26:F6:137:GLN:HA	26:F6:203:ASN:CG	2.39	0.41
26:F6:140:ASP:OD1	26:F6:141:VAL:N	2.51	0.41
11:G1:37:ALA:HA	11:G1:49:VAL:HG12	2.01	0.41
11:G2:133:LEU:HG	11:G2:160:LYS:NZ	2.35	0.41
11:G2:220:ALA:O	11:G2:224:ARG:N	2.53	0.41
11:G3:145:PHE:O	11:G3:145:PHE:CD1	2.74	0.41
11:G4:160:LYS:H	11:G4:172:LYS:HG2	1.85	0.41
11:G4:21:GLU:O	11:G4:25:ARG:HG2	2.20	0.41
11:G5:133:LEU:HG	11:G5:160:LYS:NZ	2.36	0.41
28:I1:177:SER:HB2	28:I1:186:ASP:HB2	2.02	0.41
28:I6:84:ASN:HD21	28:I6:90:LEU:HD12	1.85	0.41
12:J1:94:LEU:HA	12:J1:97:ILE:HD12	2.02	0.41
12:J5:114:VAL:HG13	12:J5:119:LEU:HD22	2.02	0.41
12:J5:121:LYS:O	12:J5:122:SER:OG	2.37	0.41
29:K2:26:ASP:H	29:K2:42:ASN:ND2	2.19	0.41
29:K6:57:TYR:O	29:K6:72:THR:OG1	2.20	0.41
13:M3:38:ALA:HB1	13:M3:110:VAL:HG23	2.03	0.41
13:M6:101:ARG:HG3	13:M6:102:LYS:H	1.86	0.41
14:N4:101:HIS:NE2	14:N4:105:ASN:ND2	2.69	0.41
14:N6:123:HIS:O	14:N6:127:ARG:NH1	2.54	0.41
15:O1:39:ASP:N	15:O1:69:SER:HB3	2.35	0.41
15:O3:75:MET:O	15:O3:79:GLN:HG2	2.21	0.41
31:P2:50:ARG:HA	31:P2:50:ARG:HD3	1.72	0.41
31:P5:81:ARG:HB3	31:P5:117:GLY:CA	2.44	0.41
32:Q2:134:GLY:HA3	32:Q2:141:TYR:N	2.33	0.41
33:R3:65:PRO:CB	33:R3:73:LEU:HD23	2.50	0.41
22:A4:201:LEU:N	33:R4:85:VAL:HG11	2.36	0.41
22:A5:201:LEU:HA	33:R5:85:VAL:HG11	2.03	0.41
33:R6:119:VAL:HA	33:R6:120:THR:HA	1.72	0.41
33:R6:14:ARG:HA	33:R6:17:ILE:HB	2.03	0.41
31:P1:119:PHE:CZ	34:S1:119:ALA:CB	2.97	0.41
1:T4:40:ALA:N	1:T4:96:SER:HB2	2.35	0.41
2:U3:49:LYS:O	2:U3:50:VAL:HG12	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:U5:49:LYS:O	2:U5:50:VAL:HG12	2.21	0.41
3:V3:28:ASP:OD2	3:V3:31:SER:HB3	2.21	0.41
10:C1:183:LYS:HE3	16:W1:95:PRO:HA	2.03	0.41
16:W2:35:VAL:O	16:W2:39:THR:HG23	2.20	0.41
4:X1:58:GLU:HG2	4:X1:66:ILE:HG12	2.03	0.41
4:X2:9:THR:OG1	4:X2:10:ALA:N	2.51	0.41
4:X3:9:THR:OG1	4:X3:10:ALA:N	2.51	0.41
4:X4:58:GLU:HG2	4:X4:66:ILE:HG12	2.03	0.41
4:X6:140:ARG:HA	4:X6:141:PRO:HD3	1.97	0.41
17:Y1:113:ARG:HA	17:Y1:116:LYS:HZ1	1.86	0.41
17:Y1:113:ARG:HA	17:Y1:116:LYS:HZ3	1.84	0.41
17:Y2:125:VAL:HG12	17:Y2:129:LYS:NZ	2.36	0.41
22:A1:3:GLY:HA2	22:A1:63:ARG:NH2	2.35	0.41
22:A1:85:ARG:O	22:A1:89:LYS:HG2	2.21	0.41
22:A2:25:LEU:HB2	22:A2:46:ILE:HG21	2.03	0.41
22:A4:123:VAL:HG12	22:A4:145:ILE:CG1	2.51	0.41
3:V5:36:VAL:O	22:A5:67:ALA:HB2	2.20	0.41
10:C1:165:VAL:HG12	10:C1:244:ILE:HB	2.02	0.41
10:C1:168:GLY:N	10:C1:179:THR:O	2.32	0.41
10:C1:189:GLY:O	10:C1:191:VAL:N	2.48	0.41
10:C2:104:ASP:OD1	10:C2:105:GLU:N	2.53	0.41
10:C2:107:LEU:HB2	10:C2:127:PHE:HB2	2.02	0.41
10:C3:267:GLN:C	10:C3:269:PHE:H	2.24	0.41
10:C4:127:PHE:HA	10:C4:140:GLY:O	2.20	0.41
24:D2:137:VAL:HG22	24:D2:151:LYS:HG2	2.02	0.41
24:D3:105:LEU:HD23	24:D3:184:ILE:HD12	2.01	0.41
24:D3:71:ALA:HB1	29:K3:20:VAL:HG21	2.02	0.41
24:D5:99:ILE:O	24:D5:103:GLU:HG2	2.21	0.41
24:D6:34:TYR:HA	24:D6:52:ALA:HB1	2.02	0.41
25:E1:36:HIS:HD1	25:E1:41:CYS:HB3	1.85	0.41
25:E5:36:HIS:HD1	25:E5:41:CYS:HB3	1.85	0.41
26:F1:17:ILE:HG23	26:F1:18:LYS:N	2.36	0.41
26:F1:137:GLN:CB	26:F1:204:ARG:OXT	2.60	0.41
26:F2:35:LEU:HD12	26:F2:117:ILE:HD13	2.02	0.41
26:F4:96:ALA:O	26:F4:99:ILE:HG22	2.21	0.41
26:F4:98:GLU:N	26:F4:98:GLU:OE1	2.54	0.41
11:G1:67:VAL:N	11:G1:100:CYS:SG	2.90	0.41
11:G3:133:LEU:HG	11:G3:160:LYS:NZ	2.36	0.41
11:G3:7:PHE:HA	11:G3:8:PRO:HD2	1.91	0.41
11:G4:142:ARG:CD	11:G4:147:LEU:CD1	2.82	0.41
11:G5:21:GLU:O	11:G5:25:ARG:HG2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:H1:81:ARG:O	27:H1:85:LYS:HD3	2.21	0.41
27:H2:81:ARG:O	27:H2:85:LYS:HD3	2.21	0.41
27:H3:40:LEU:HD23	27:H3:40:LEU:O	2.21	0.41
27:H3:81:ARG:O	27:H3:85:LYS:HD3	2.21	0.41
27:H4:40:LEU:O	27:H4:40:LEU:HD23	2.21	0.41
27:H6:34:SER:OG	27:H6:35:ASP:N	2.54	0.41
28:I1:178:ARG:HG3	28:I1:178:ARG:O	2.21	0.41
28:I1:201:LYS:O	28:I1:205:ARG:HG2	2.21	0.41
28:I3:177:SER:HB2	28:I3:186:ASP:HB2	2.02	0.41
28:I5:144:LYS:HD2	28:I5:144:LYS:HA	1.91	0.41
28:I6:161:LEU:HD23	28:I6:196:GLU:HB3	2.03	0.41
28:I6:197:PHE:O	28:I6:200:ARG:HB3	2.21	0.41
12:J1:136:ARG:HB3	12:J1:141:VAL:HG12	2.03	0.41
29:K1:26:ASP:H	29:K1:42:ASN:ND2	2.19	0.41
29:K6:2:LEU:HD12	29:K6:3:MET:HB2	2.02	0.41
30:L3:37:TYR:CD2	30:L3:51:ILE:HG12	2.56	0.41
13:M2:38:ALA:HB1	13:M2:110:VAL:HG23	2.03	0.41
14:N2:114:ARG:O	14:N2:118:ILE:HG13	2.21	0.41
14:N3:38:TYR:OH	14:N3:74:ILE:CG1	2.69	0.41
14:N6:38:TYR:OH	14:N6:74:ILE:CG1	2.69	0.41
15:O1:28:PHE:HA	15:O1:92:ALA:O	2.21	0.41
15:O4:75:MET:O	15:O4:79:GLN:HG2	2.21	0.41
15:O5:75:MET:O	15:O5:79:GLN:HG2	2.21	0.41
31:P3:85:ILE:HD11	31:P3:116:LEU:HD23	2.03	0.41
31:P4:81:ARG:HB3	31:P4:117:GLY:CA	2.44	0.41
31:P5:18:ARG:HA	34:S5:93:GLY:HA3	2.02	0.41
32:Q3:37:ARG:HB3	32:Q3:41:MET:HG3	2.02	0.41
22:A3:89:LYS:NZ	33:R3:82:ASP:OD2	2.23	0.41
33:R4:95:ILE:N	33:R4:96:ILE:HA	2.27	0.41
1:T1:40:ALA:N	1:T1:96:SER:HB2	2.35	0.41
1:T4:14:PHE:CZ	1:T4:131:LEU:HD11	2.56	0.41
2:U5:56:MET:HB2	2:U5:86:LYS:HB2	2.02	0.41
3:V1:53:TYR:CE1	3:V1:72:LEU:HB3	2.56	0.41
3:V2:66:ASP:OD2	22:A2:154:LEU:HD13	2.21	0.41
16:W3:32:LYS:HA	16:W3:35:VAL:HG22	2.02	0.41
4:X2:85:VAL:HG12	4:X2:122:VAL:HG11	2.02	0.41
17:Y1:60:PHE:N	17:Y1:71:GLY:HA2	2.31	0.41
17:Y2:40:ILE:O	17:Y2:44:LEU:HD13	2.21	0.41
17:Y2:90:ARG:HA	17:Y2:93:ARG:HG2	2.02	0.41
17:Y5:23:MET:HE1	17:Y5:75:ILE:HD12	2.02	0.41
17:Y5:40:ILE:O	17:Y5:44:LEU:HD13	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y6:20:ARG:HB3	17:Y6:76:TYR:CD1	2.55	0.41
18:Z1:77:LEU:HD23	18:Z1:78:LYS:H	1.85	0.41
22:A3:130:ASP:O	22:A3:133:PRO:HD2	2.21	0.41
22:A3:72:ALA:HA	22:A3:95:GLY:O	2.21	0.41
22:A5:130:ASP:O	22:A5:133:PRO:HD2	2.21	0.41
22:A6:130:ASP:O	22:A6:133:PRO:HD2	2.21	0.41
22:A6:38:ILE:HG13	22:A6:39:TYR:N	2.36	0.41
3:V6:36:VAL:O	22:A6:67:ALA:HB2	2.21	0.41
23:B2:138:PHE:CD2	23:B2:214:LYS:HB3	2.56	0.41
23:B2:24:PRO:CD	30:L4:27:GLU:CG	2.95	0.41
23:B4:103:MET:HG2	23:B4:215:VAL:CG1	2.48	0.41
23:B5:131:ASP:O	23:B5:133:TYR:N	2.51	0.41
10:C1:127:PHE:HA	10:C1:140:GLY:O	2.20	0.41
10:C2:185:THR:HG22	10:C2:194:ARG:HB3	2.02	0.41
10:C2:210:PRO:HD3	10:C2:236:PHE:CE2	2.56	0.41
10:C5:279:ARG:HH12	22:A5:118:GLU:HG2	1.86	0.41
24:D2:25:LEU:HD23	24:D2:37:VAL:HG11	2.02	0.41
24:D3:25:LEU:HD23	24:D3:37:VAL:HG11	2.02	0.41
25:E4:184:THR:HA	25:E4:189:LEU:HB2	2.02	0.41
26:F1:98:GLU:OE1	26:F1:98:GLU:N	2.54	0.41
26:F3:91:ARG:O	26:F3:95:HIS:ND1	2.54	0.41
26:F4:140:ASP:OD1	26:F4:141:VAL:N	2.51	0.41
26:F6:14:THR:HA	26:F6:15:PRO:HA	1.72	0.41
11:G2:37:ALA:HA	11:G2:49:VAL:HG12	2.02	0.41
11:G3:139:SER:O	11:G3:142:ARG:HB2	2.21	0.41
11:G4:146:ASN:HD22	11:G4:146:ASN:HA	1.59	0.41
11:G4:133:LEU:HG	11:G4:160:LYS:NZ	2.36	0.41
11:G5:146:ASN:HD22	11:G5:146:ASN:HA	1.59	0.41
11:G5:184:VAL:HG12	11:G5:188:LYS:HG2	2.03	0.41
11:G6:133:LEU:HG	11:G6:160:LYS:NZ	2.36	0.41
27:H2:40:LEU:O	27:H2:40:LEU:HD23	2.21	0.41
27:H5:125:VAL:O	27:H5:129:ILE:HG13	2.21	0.41
27:H5:40:LEU:O	27:H5:40:LEU:HD23	2.21	0.41
27:H6:125:VAL:O	27:H6:129:ILE:HG13	2.21	0.41
27:H6:10:LYS:NZ	27:H6:14:GLU:OE2	2.48	0.41
27:H6:81:ARG:O	27:H6:85:LYS:HD3	2.21	0.41
28:I3:37:LYS:O	28:I3:60:LEU:N	2.39	0.41
28:I4:178:ARG:O	28:I4:178:ARG:HG3	2.21	0.41
12:J3:158:ASP:OD1	12:J3:159:PHE:N	2.44	0.41
29:K1:31:LYS:HG2	29:K1:32:HIS:O	2.21	0.41
29:K3:31:LYS:HG2	29:K3:32:HIS:O	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D4:64:ARG:CG	29:K4:95:ARG:NH1	2.63	0.41
29:K5:31:LYS:HG2	29:K5:32:HIS:O	2.21	0.41
13:M2:101:ARG:HG3	13:M2:102:LYS:H	1.86	0.41
13:M4:22:LEU:HD12	13:M4:88:TRP:HB3	2.03	0.41
13:M6:48:HIS:O	13:M6:74:ILE:HG23	2.20	0.41
14:N1:142:GLU:CB	14:N1:145:THR:OG1	2.67	0.41
14:N2:38:TYR:OH	14:N2:74:ILE:CG1	2.69	0.41
15:O1:28:PHE:HD2	15:O1:94:HIS:NE2	2.19	0.41
15:O5:28:PHE:HD2	15:O5:94:HIS:CE1	2.39	0.41
15:O6:28:PHE:HD2	15:O6:94:HIS:CE1	2.39	0.41
15:O6:75:MET:O	15:O6:79:GLN:HG2	2.21	0.41
15:O6:97:LEU:HD21	15:O6:112:ALA:HB1	2.03	0.41
31:P2:124:LYS:HG2	31:P2:125:PRO:CD	2.48	0.41
31:P3:123:TYR:HD1	31:P3:123:TYR:C	2.22	0.41
31:P3:34:MET:HE3	31:P3:46:ASN:HB2	2.03	0.41
31:P4:51:ARG:O	31:P4:54:HIS:N	2.53	0.41
32:Q2:60:LYS:O	32:Q2:64:ALA:N	2.54	0.41
32:Q6:86:GLN:HE22	32:Q6:122:ALA:HB2	1.86	0.41
33:R1:6:THR:HG22	33:R1:8:THR:H	1.86	0.41
22:A1:201:LEU:HA	33:R1:85:VAL:HG11	2.03	0.41
33:R2:5:ARG:HB2	33:R2:10:LYS:HZ2	1.86	0.41
33:R5:58:MET:HA	33:R5:61:ILE:CD1	2.51	0.41
34:S3:81:ASP:O	34:S3:87:GLN:NE2	2.49	0.41
1:T2:23:LYS:HD3	1:T2:54:TYR:CG	2.56	0.41
2:U1:20:ILE:CD1	2:U1:116:ILE:O	2.69	0.41
2:U6:49:LYS:O	2:U6:50:VAL:HG12	2.21	0.41
3:V6:66:ASP:OD2	22:A6:154:LEU:HD13	2.21	0.41
16:W4:32:LYS:HA	16:W4:35:VAL:HG22	2.01	0.41
16:W6:32:LYS:HA	16:W6:35:VAL:HG22	2.02	0.41
4:X1:124:LYS:HA	4:X1:129:SER:HA	2.04	0.41
17:Y5:125:VAL:HG12	17:Y5:129:LYS:NZ	2.36	0.41
17:Y5:13:MET:O	17:Y5:22:GLN:N	2.47	0.41
18:Z2:77:LEU:HD23	18:Z2:78:LYS:H	1.85	0.41
18:Z4:77:LEU:HD23	18:Z4:78:LYS:H	1.85	0.41
22:A2:72:ALA:HA	22:A2:95:GLY:O	2.21	0.40
23:B2:110:MET:HE1	23:B2:213:ARG:HE	1.86	0.40
23:B2:71:LEU:HB2	23:B2:82:ARG:HB2	2.03	0.40
23:B3:197:ILE:HD11	23:B3:210:VAL:HG21	2.02	0.40
23:B4:71:LEU:HB2	23:B4:82:ARG:HB2	2.02	0.40
10:C1:77:SER:HA	10:C1:97:PHE:CE1	2.56	0.40
10:C2:77:SER:HA	10:C2:97:PHE:CE1	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:C3:183:LYS:HE3	16:W3:95:PRO:HA	2.03	0.40
10:C6:256:TRP:HB3	16:W6:68:ARG:NH1	2.36	0.40
24:D1:204:LEU:C	24:D1:206:ASP:H	2.20	0.40
24:D3:140:GLY:HA3	24:D3:182:LEU:HB2	2.02	0.40
24:D4:137:VAL:HG22	24:D4:151:LYS:HG2	2.02	0.40
25:E2:15:PRO:HD2	25:E2:18:TRP:CE3	2.57	0.40
26:F3:96:ALA:O	26:F3:99:ILE:HG22	2.21	0.40
26:F5:35:LEU:HD12	26:F5:117:ILE:HD13	2.02	0.40
27:H2:68:GLN:N	27:H2:68:GLN:OE1	2.54	0.40
27:H3:145:ARG:HH11	27:H3:153:LEU:HD12	1.86	0.40
27:H5:54:GLY:HA3	27:H5:57:ARG:HH21	1.85	0.40
28:I1:86:SER:OG	28:I1:87:ASN:N	2.53	0.40
28:I2:161:LEU:HD23	28:I2:196:GLU:HB3	2.03	0.40
28:I3:203:LYS:HE2	28:I3:203:LYS:HB2	1.88	0.40
28:I4:86:SER:OG	28:I4:87:ASN:N	2.53	0.40
28:I5:161:LEU:HD23	28:I5:196:GLU:HB3	2.03	0.40
28:I5:178:ARG:O	28:I5:178:ARG:HG3	2.21	0.40
12:J1:177:ASN:O	12:J1:180:LYS:HG2	2.22	0.40
12:J1:38:ARG:HG2	12:J1:39:ASN:H	1.85	0.40
12:J3:136:ARG:HB3	12:J3:141:VAL:HG12	2.03	0.40
12:J5:86:VAL:HG21	12:J5:105:PHE:CD1	2.56	0.40
29:K4:31:LYS:HG2	29:K4:32:HIS:O	2.21	0.40
29:K6:31:LYS:HG2	29:K6:32:HIS:O	2.20	0.40
30:L1:125:ILE:CB	30:L1:146:THR:O	2.64	0.40
30:L2:125:ILE:CG2	30:L2:146:THR:OG1	2.66	0.40
30:L5:68:ILE:HA	30:L5:130:GLU:O	2.21	0.40
30:L6:68:ILE:HA	30:L6:130:GLU:O	2.21	0.40
13:M1:22:LEU:HD12	13:M1:88:TRP:HB3	2.03	0.40
13:M6:42:LEU:HD22	13:M6:110:VAL:HG22	2.03	0.40
14:N1:101:HIS:NE2	14:N1:105:ASN:ND2	2.69	0.40
14:N3:133:ARG:HD2	30:L3:152:LYS:HD3	2.02	0.40
14:N3:149:LEU:C	14:N3:149:LEU:CD2	2.89	0.40
14:N4:19:ARG:HB2	27:H4:138:GLU:OE2	2.22	0.40
14:N5:123:HIS:O	14:N5:127:ARG:NH1	2.54	0.40
14:N6:142:GLU:N	14:N6:145:THR:OG1	2.54	0.40
15:O6:51:GLU:OE2	23:B6:65:ARG:NH2	2.50	0.40
32:Q5:86:GLN:HE22	32:Q5:122:ALA:HB2	1.86	0.40
33:R2:14:ARG:HA	33:R2:17:ILE:HB	2.03	0.40
22:A2:89:LYS:NZ	33:R2:82:ASP:OD2	2.23	0.40
33:R3:106:LEU:O	33:R3:110:ASP:N	2.40	0.40
33:R6:71:ILE:CD1	33:R6:71:ILE:C	2.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:S5:31:THR:HG23	34:S5:37:GLY:HA2	2.02	0.40
1:T2:14:PHE:CZ	1:T2:131:LEU:HD11	2.57	0.40
2:U2:116:ILE:HB	2:U2:117:ALA:H	1.72	0.40
2:U4:19:ARG:CD	2:U4:119:ALA:HB3	2.32	0.40
3:V5:50:PHE:CE2	10:C5:267:GLN:NE2	2.85	0.40
3:V5:55:ILE:HD11	3:V5:69:ILE:HD11	2.03	0.40
10:C2:256:TRP:HB3	16:W2:68:ARG:NH1	2.36	0.40
4:X2:107:ARG:NH1	4:X2:110:HIS:HD2	2.19	0.40
4:X3:107:ARG:NH1	4:X3:110:HIS:HD2	2.19	0.40
4:X5:9:THR:OG1	4:X5:10:ALA:N	2.51	0.40
18:Z6:112:ASN:O	18:Z6:113:THR:OG1	2.33	0.40
22:A2:130:ASP:O	22:A2:133:PRO:HD2	2.21	0.40
22:A3:123:VAL:HG12	22:A3:145:ILE:CG1	2.51	0.40
22:A4:104:THR:O	22:A4:107:THR:OG1	2.20	0.40
23:B5:167:LYS:NZ	23:B5:200:ALA:O	2.54	0.40
23:B5:143:THR:HB	23:B5:205:TYR:HE2	1.84	0.40
23:B6:197:ILE:HD11	23:B6:210:VAL:HG21	2.02	0.40
10:C3:214:LEU:HD22	10:C3:219:ILE:HG13	2.03	0.40
10:C3:267:GLN:C	10:C3:269:PHE:N	2.74	0.40
10:C4:107:LEU:HB2	10:C4:127:PHE:HB2	2.02	0.40
10:C5:165:VAL:HG12	10:C5:244:ILE:HB	2.02	0.40
10:C5:267:GLN:C	10:C5:269:PHE:N	2.74	0.40
10:C6:214:LEU:HD22	10:C6:219:ILE:HG13	2.03	0.40
24:D1:25:LEU:HD23	24:D1:37:VAL:HG11	2.02	0.40
24:D2:106:ARG:HG3	24:D2:107:TYR:N	2.31	0.40
24:D2:34:TYR:HA	24:D2:52:ALA:HB1	2.02	0.40
25:E1:157:ASN:O	25:E1:175:PHE:HB2	2.22	0.40
25:E1:161:GLN:O	25:E1:169:ILE:HA	2.22	0.40
25:E2:157:ASN:O	25:E2:175:PHE:HB2	2.22	0.40
25:E3:157:ASN:O	25:E3:175:PHE:HB2	2.22	0.40
25:E4:51:ARG:NH2	25:E4:109:PHE:O	2.53	0.40
25:E5:15:PRO:HD2	25:E5:18:TRP:CE3	2.57	0.40
26:F3:121:PRO:O	26:F3:141:VAL:HG11	2.21	0.40
26:F4:121:PRO:O	26:F4:141:VAL:HG11	2.21	0.40
26:F4:14:THR:HA	26:F4:15:PRO:HA	1.72	0.40
26:F5:121:PRO:O	26:F5:141:VAL:HG11	2.21	0.40
26:F6:121:PRO:O	26:F6:141:VAL:HG11	2.20	0.40
26:F6:91:ARG:O	26:F6:95:HIS:ND1	2.55	0.40
26:F6:96:ALA:O	26:F6:99:ILE:HG22	2.21	0.40
11:G2:160:LYS:H	11:G2:172:LYS:HG2	1.85	0.40
11:G2:78:SER:OG	11:G2:79:LYS:N	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:G6:67:VAL:N	11:G6:100:CYS:SG	2.90	0.40
27:H1:6:ALA:O	27:H1:24:SER:OG	2.26	0.40
27:H4:125:VAL:O	27:H4:129:ILE:HG13	2.21	0.40
27:H4:68:GLN:OE1	27:H4:68:GLN:N	2.54	0.40
27:H4:91:HIS:CD2	27:H4:169:LYS:CB	3.04	0.40
27:H5:81:ARG:O	27:H5:85:LYS:HD3	2.21	0.40
15:O1:63:LYS:NZ	28:I3:158:ILE:HD11	2.35	0.40
12:J1:114:VAL:HG13	12:J1:119:LEU:HD22	2.02	0.40
12:J4:86:VAL:HG21	12:J4:105:PHE:CD1	2.57	0.40
13:M1:27:ILE:HG21	29:K1:84:HIS:CG	2.56	0.40
29:K2:19:GLY:N	29:K2:92:ALA:HB2	2.32	0.40
13:M6:27:ILE:HG21	29:K6:84:HIS:CG	2.55	0.40
30:L2:37:TYR:CD2	30:L2:51:ILE:HG12	2.56	0.40
30:L3:68:ILE:HA	30:L3:130:GLU:O	2.21	0.40
30:L5:37:TYR:CD2	30:L5:51:ILE:HG12	2.56	0.40
13:M3:101:ARG:HG3	13:M3:102:LYS:H	1.86	0.40
13:M3:48:HIS:O	13:M3:74:ILE:HG23	2.20	0.40
13:M5:22:LEU:HD12	13:M5:88:TRP:HB3	2.03	0.40
13:M5:85:LEU:HB3	13:M5:106:CYS:O	2.21	0.40
14:N1:62:GLN:HB3	14:N1:65:PHE:CD2	2.56	0.40
14:N4:142:GLU:CB	14:N4:145:THR:OG1	2.67	0.40
15:O1:126:ILE:HG22	15:O1:127:GLY:N	2.37	0.40
15:O6:28:PHE:HD2	15:O6:94:HIS:NE2	2.19	0.40
31:P1:64:LYS:HA	31:P1:73:PRO:HB3	2.01	0.40
31:P4:50:ARG:HA	31:P4:50:ARG:HD3	1.76	0.40
31:P6:50:ARG:HA	31:P6:50:ARG:HD3	1.72	0.40
34:S2:16:LEU:HD21	34:S2:72:GLN:NE2	2.29	0.40
34:S4:125:HIS:CE1	34:S4:131:VAL:HG21	2.57	0.40
1:T6:14:PHE:CZ	1:T6:131:LEU:HD11	2.57	0.40
2:U6:61:LEU:HD21	24:D6:8:LYS:HG3	2.02	0.40
4:X3:58:GLU:HG2	4:X3:66:ILE:HG12	2.03	0.40
4:X4:107:ARG:NH1	4:X4:110:HIS:HD2	2.19	0.40
4:X5:107:ARG:NH1	4:X5:110:HIS:HD2	2.19	0.40
17:Y1:23:MET:HE1	17:Y1:75:ILE:HD12	2.03	0.40
17:Y2:20:ARG:HB3	17:Y2:76:TYR:CD1	2.55	0.40
17:Y3:20:ARG:HB3	17:Y3:76:TYR:CD1	2.55	0.40
17:Y3:35:VAL:HA	17:Y3:36:PRO:HD3	1.89	0.40
17:Y4:13:MET:O	17:Y4:22:GLN:N	2.47	0.40
18:Z5:51:ASP:N	18:Z5:54:THR:OG1	2.40	0.40
22:A1:97:THR:HA	22:A1:98:PRO:HD3	1.80	0.40
22:A3:167:GLY:O	22:A3:171:VAL:HG23	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:A5:184:ARG:HB3	22:A5:191:ARG:HH21	1.85	0.40
23:B1:138:PHE:CD2	23:B1:214:LYS:HB3	2.56	0.40
23:B1:167:LYS:NZ	23:B1:200:ALA:O	2.54	0.40
23:B2:158:HIS:O	23:B2:162:ARG:HG3	2.22	0.40
23:B2:180:ASP:O	23:B2:184:VAL:HG23	2.22	0.40
23:B3:138:PHE:CD2	23:B3:214:LYS:HB3	2.56	0.40
23:B4:180:ASP:O	23:B4:184:VAL:HG23	2.22	0.40
23:B4:37:ALA:O	23:B4:39:PHE:N	2.47	0.40
23:B4:34:LYS:O	23:B4:98:THR:HG22	2.22	0.40
23:B6:224:GLU:CD	23:B6:226:GLY:H	2.24	0.40
10:C3:137:VAL:O	10:C3:162:ILE:HA	2.22	0.40
10:C4:137:VAL:O	10:C4:162:ILE:HA	2.21	0.40
24:D2:121:GLY:O	24:D2:125:PHE:N	2.41	0.40
24:D3:58:VAL:HG23	24:D3:59:LEU:HD12	2.04	0.40
24:D5:146:ARG:HH11	24:D5:147:ALA:H	1.67	0.40
24:D5:61:GLU:OE1	24:D5:64:ARG:NH1	2.55	0.40
24:D6:25:LEU:HD23	24:D6:37:VAL:HG11	2.02	0.40
25:E1:15:PRO:HD2	25:E1:18:TRP:CE3	2.56	0.40
25:E3:161:GLN:O	25:E3:169:ILE:HA	2.21	0.40
25:E4:15:PRO:HD2	25:E4:18:TRP:CE3	2.57	0.40
25:E4:120:LYS:HE3	25:E4:164:LEU:HD21	2.04	0.40
25:E5:157:ASN:O	25:E5:175:PHE:HB2	2.22	0.40
25:E6:180:LEU:HD12	25:E6:228:ILE:HG13	2.02	0.40
25:E6:184:THR:HA	25:E6:189:LEU:HB2	2.02	0.40
26:F2:127:ARG:C	26:F2:137:GLN:HB2	2.42	0.40
11:G2:139:SER:O	11:G2:142:ARG:HB2	2.21	0.40
11:G4:139:SER:O	11:G4:142:ARG:HB2	2.21	0.40
11:G4:146:ASN:O	11:G4:147:LEU:HB3	2.19	0.40
11:G4:216:ARG:HD2	11:G4:223:LYS:HD3	2.03	0.40
11:G5:231:ARG:HA	11:G5:234:LEU:HD12	2.02	0.40
27:H2:21:SER:O	27:H2:25:GLN:HG3	2.22	0.40
27:H2:54:GLY:HA3	27:H2:57:ARG:HH21	1.85	0.40
27:H6:54:GLY:HA3	27:H6:57:ARG:HH21	1.85	0.40
28:I2:123:ARG:CZ	15:O5:64:ALA:C	2.90	0.40
28:I3:177:SER:OG	28:I3:184:ARG:O	2.30	0.40
28:I3:86:SER:OG	28:I3:87:ASN:N	2.53	0.40
12:J2:177:ASN:O	12:J2:180:LYS:HG2	2.21	0.40
12:J3:86:VAL:HG21	12:J3:105:PHE:CD1	2.57	0.40
12:J6:86:VAL:HG21	12:J6:105:PHE:CD1	2.56	0.40
12:J6:114:VAL:HG13	12:J6:119:LEU:HD22	2.03	0.40
29:K5:26:ASP:H	29:K5:42:ASN:ND2	2.19	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:L3:33:LEU:HD12	30:L3:33:LEU:O	2.22	0.40
13:M6:85:LEU:HB3	13:M6:106:CYS:O	2.21	0.40
14:N4:123:HIS:O	14:N4:127:ARG:NH1	2.54	0.40
14:N4:62:GLN:HB3	14:N4:65:PHE:CD2	2.57	0.40
14:N4:60:VAL:HG23	14:N4:66:VAL:HG21	2.03	0.40
14:N6:101:HIS:NE2	14:N6:105:ASN:ND2	2.69	0.40
15:O2:28:PHE:HD2	15:O2:94:HIS:NE2	2.19	0.40
15:O5:84:ARG:HE	23:B5:25:PHE:HE2	1.68	0.40
32:Q1:3:SER:O	32:Q1:4:LYS:HB3	2.20	0.40
32:Q1:32:ILE:HD11	32:Q1:63:PHE:CE1	2.56	0.40
33:R4:6:THR:HG22	33:R4:8:THR:H	1.86	0.40
33:R6:6:THR:HG22	33:R6:8:THR:H	1.86	0.40
22:A6:201:LEU:HA	33:R6:85:VAL:HG11	2.03	0.40
1:T3:77:LYS:O	1:T3:78:ILE:HB	2.22	0.40
2:U5:21:ARG:HB3	2:U5:115:THR:HG21	2.02	0.40
3:V3:66:ASP:OD2	22:A3:154:LEU:HD13	2.21	0.40
3:V5:53:TYR:CE1	3:V5:72:LEU:HB3	2.56	0.40
3:V6:53:TYR:CE1	3:V6:72:LEU:HB3	2.56	0.40
16:W4:28:ARG:HB3	16:W4:29:PRO:HD3	2.04	0.40
16:W4:51:GLU:OE1	27:H4:145:ARG:HB3	2.22	0.40
10:C4:256:TRP:HB3	16:W4:68:ARG:NH1	2.36	0.40
16:W5:28:ARG:HB3	16:W5:29:PRO:HD3	2.04	0.40
10:C6:183:LYS:HE3	16:W6:95:PRO:HA	2.03	0.40
4:X2:58:GLU:HG2	4:X2:66:ILE:HG12	2.03	0.40
4:X6:40:PRO:HB3	4:X6:79:LYS:CE	2.52	0.40
17:Y1:125:VAL:HG12	17:Y1:129:LYS:NZ	2.36	0.40
17:Y2:88:LYS:HZ3	17:Y2:97:TYR:HD2	1.67	0.40
18:Z6:77:LEU:HD23	18:Z6:78:LYS:H	1.85	0.40
18:Z6:91:LEU:HD23	18:Z6:91:LEU:HA	1.78	0.40
22:A1:25:LEU:HB2	22:A1:46:ILE:HG21	2.03	0.40
22:A2:103:PHE:CE1	22:A2:108:PHE:CE2	3.09	0.40
22:A4:85:ARG:O	22:A4:89:LYS:HG2	2.22	0.40
23:B3:167:LYS:NZ	23:B3:200:ALA:O	2.54	0.40
23:B6:180:ASP:O	23:B6:184:VAL:HG23	2.21	0.40
10:C1:256:TRP:HB3	16:W1:68:ARG:NH1	2.36	0.40
10:C2:267:GLN:C	10:C2:269:PHE:H	2.25	0.40
10:C2:275:LYS:HB3	10:C2:275:LYS:HE3	1.99	0.40
10:C5:68:ARG:HH11	10:C5:277:HIS:HB3	0.48	0.40
24:D5:162:ASP:N	24:D5:163:PRO:HD2	2.36	0.40
25:E3:151:ASP:HA	25:E3:152:PRO:HD3	1.95	0.40
25:E4:121:TYR:HB2	25:E4:161:GLN:HE21	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:E4:161:GLN:O	25:E4:169:ILE:HA	2.22	0.40
25:E5:180:LEU:HD12	25:E5:228:ILE:HG13	2.02	0.40
25:E6:161:GLN:O	25:E6:169:ILE:HA	2.22	0.40
26:F1:70:GLU:O	26:F1:73:THR:OG1	2.30	0.40
26:F2:33:ILE:O	26:F2:35:LEU:N	2.51	0.40
26:F2:91:ARG:O	26:F2:95:HIS:ND1	2.55	0.40
26:F6:127:ARG:C	26:F6:137:GLN:HB2	2.42	0.40
11:G6:139:SER:O	11:G6:142:ARG:HB2	2.21	0.40
27:H1:125:VAL:O	27:H1:129:ILE:HG13	2.21	0.40
27:H3:21:SER:O	27:H3:25:GLN:HG3	2.21	0.40
14:N5:19:ARG:HB2	27:H5:138:GLU:OE2	2.22	0.40
27:H6:68:GLN:N	27:H6:68:GLN:OE1	2.54	0.40
12:J5:158:ASP:OD1	12:J5:159:PHE:N	2.44	0.40
12:J6:136:ARG:HB3	12:J6:141:VAL:HG12	2.03	0.40
29:K4:26:ASP:H	29:K4:42:ASN:ND2	2.19	0.40
29:K6:26:ASP:H	29:K6:42:ASN:ND2	2.19	0.40
30:L1:37:TYR:CD2	30:L1:51:ILE:HG12	2.56	0.40
30:L2:68:ILE:HA	30:L2:130:GLU:O	2.20	0.40
30:L6:33:LEU:O	30:L6:33:LEU:HD12	2.22	0.40
13:M5:38:ALA:HB1	13:M5:110:VAL:HG23	2.03	0.40
13:M6:38:ALA:HB1	13:M6:110:VAL:HG23	2.03	0.40
14:N1:143:SER:OG	14:N1:144:SER:N	2.53	0.40
14:N4:114:ARG:O	14:N4:118:ILE:HG13	2.21	0.40
14:N4:42:LYS:CD	14:N4:42:LYS:H	2.35	0.40
14:N5:114:ARG:O	14:N5:118:ILE:HG13	2.21	0.40
14:N5:142:GLU:N	14:N5:145:THR:OG1	2.54	0.40
14:N5:76:LYS:C	14:N5:79:GLY:H	2.24	0.40
15:O2:97:LEU:HD21	15:O2:112:ALA:HB1	2.03	0.40
15:O2:45:THR:HG22	15:O2:52:THR:HG22	2.04	0.40
15:O3:28:PHE:HD2	15:O3:94:HIS:NE2	2.19	0.40
15:O4:28:PHE:HD2	15:O4:94:HIS:NE2	2.19	0.40
15:O5:28:PHE:HA	15:O5:92:ALA:O	2.21	0.40
31:P1:81:ARG:HB3	31:P1:117:GLY:CA	2.44	0.40
31:P4:116:LEU:HD22	31:P4:116:LEU:HA	1.88	0.40
31:P4:57:LEU:CD2	31:P4:61:ARG:HH21	2.35	0.40
31:P5:112:ILE:HG13	31:P5:112:ILE:H	1.75	0.40
31:P6:85:ILE:HD11	31:P6:116:LEU:HD23	2.02	0.40
32:Q3:86:GLN:HE22	32:Q3:122:ALA:HB2	1.87	0.40
32:Q4:60:LYS:O	32:Q4:64:ALA:N	2.55	0.40
33:R6:75:GLU:O	33:R6:79:GLU:OE1	2.40	0.40
34:S2:17:ASN:HD22	34:S2:101:ASN:ND2	2.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:T3:14:PHE:CZ	1:T3:131:LEU:HD11	2.57	0.40
1:T5:14:PHE:CZ	1:T5:131:LEU:HD11	2.56	0.40
1:T5:77:LYS:O	1:T5:78:ILE:HB	2.22	0.40
2:U2:19:ARG:CD	2:U2:119:ALA:HB3	2.33	0.40
3:V3:53:TYR:CE1	3:V3:72:LEU:HB3	2.56	0.40
16:W2:30:CYS:HB3	16:W2:59:GLY:H	1.85	0.40
4:X4:40:PRO:HB3	4:X4:79:LYS:CE	2.52	0.40
4:X5:124:LYS:HA	4:X5:129:SER:HA	2.04	0.40
4:X5:40:PRO:HB3	4:X5:79:LYS:CE	2.52	0.40
17:Y1:90:ARG:HA	17:Y1:93:ARG:HG2	2.02	0.40
17:Y3:23:MET:HE1	17:Y3:75:ILE:HD12	2.04	0.40
17:Y3:90:ARG:HA	17:Y3:93:ARG:HG2	2.02	0.40
18:Z1:111:ARG:C	18:Z1:113:THR:N	2.73	0.40
22:A2:167:GLY:O	22:A2:171:VAL:HG23	2.22	0.40
22:A2:97:THR:HA	22:A2:98:PRO:HD3	1.79	0.40
22:A3:210:ILE:C	22:A3:212:LYS:N	2.75	0.40
23:B1:197:ILE:HD11	23:B1:210:VAL:HG21	2.02	0.40
23:B5:158:HIS:O	23:B5:162:ARG:HG3	2.22	0.40
10:C3:168:GLY:N	10:C3:179:THR:O	2.32	0.40
10:C3:210:PRO:HD3	10:C3:236:PHE:CE2	2.56	0.40
10:C3:77:SER:HA	10:C3:97:PHE:CE1	2.57	0.40
10:C4:165:VAL:HG12	10:C4:244:ILE:HB	2.02	0.40
24:D2:58:VAL:HG23	24:D2:59:LEU:HD12	2.04	0.40
24:D2:71:ALA:HB1	29:K2:20:VAL:HG21	2.02	0.40
24:D3:99:ILE:O	24:D3:103:GLU:HG2	2.21	0.40
24:D4:154:ASP:OD1	24:D4:155:GLY:N	2.54	0.40
24:D4:170:THR:HG23	24:D4:186:VAL:O	2.22	0.40
24:D5:167:TYR:OH	24:D5:201:LYS:O	2.30	0.40
24:D5:58:VAL:HG23	24:D5:59:LEU:HD12	2.04	0.40
24:D6:106:ARG:HG3	24:D6:107:TYR:N	2.30	0.40
25:E3:184:THR:HA	25:E3:189:LEU:HB2	2.02	0.40
25:E3:229:GLY:N	25:E3:235:TRP:HB2	2.36	0.40
25:E6:191:ARG:NE	25:E6:245:ARG:HB3	2.35	0.40
26:F2:121:PRO:O	26:F2:141:VAL:HG11	2.21	0.40
26:F4:127:ARG:CB	26:F4:128:ILE:HG12	2.51	0.40
11:G1:231:ARG:HA	11:G1:234:LEU:HD12	2.02	0.40
11:G4:220:ALA:O	11:G4:224:ARG:N	2.53	0.40
11:G5:145:PHE:CD1	11:G5:145:PHE:O	2.74	0.40
11:G6:160:LYS:H	11:G6:172:LYS:HG2	1.85	0.40
11:G6:231:ARG:HA	11:G6:234:LEU:HD12	2.02	0.40
27:H3:54:GLY:HA3	27:H3:57:ARG:HH21	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:H3:68:GLN:OE1	27:H3:68:GLN:N	2.54	0.40
27:H4:81:ARG:O	27:H4:85:LYS:HD3	2.21	0.40
27:H5:21:SER:O	27:H5:25:GLN:HG3	2.21	0.40
27:H6:145:ARG:HD3	27:H6:155:LYS:HE3	2.04	0.40
28:I1:161:LEU:HD23	28:I1:196:GLU:HB3	2.03	0.40
28:I4:129:LEU:O	28:I4:130:THR:OG1	2.34	0.40
12:J2:86:VAL:HG21	12:J2:105:PHE:CD1	2.56	0.40
12:J3:37:LEU:HB3	12:J3:38:ARG:H	1.45	0.40
12:J3:3:VAL:HB	12:J3:5:ARG:CB	2.52	0.40
29:K6:26:ASP:H	29:K6:42:ASN:HD21	1.69	0.40
14:N1:133:ARG:HH11	30:L1:152:LYS:C	2.24	0.40
30:L5:33:LEU:HD12	30:L5:33:LEU:O	2.22	0.40
13:M2:85:LEU:HB3	13:M2:106:CYS:O	2.21	0.40
13:M4:111:VAL:HG12	13:M4:114:TYR:CE1	2.50	0.40
13:M4:27:ILE:HG21	29:K4:84:HIS:CG	2.55	0.40
13:M5:42:LEU:HD22	13:M5:110:VAL:HG22	2.03	0.40
14:N2:123:HIS:O	14:N2:127:ARG:NH1	2.54	0.40
14:N5:38:TYR:OH	14:N5:74:ILE:CG1	2.69	0.40
14:N5:60:VAL:HG23	14:N5:66:VAL:HG21	2.03	0.40
14:N6:42:LYS:CD	14:N6:42:LYS:H	2.35	0.40
15:O2:126:ILE:HG22	15:O2:127:GLY:N	2.37	0.40
15:O3:45:THR:HG22	15:O3:52:THR:HG22	2.04	0.40
15:O4:28:PHE:HD2	15:O4:94:HIS:CE1	2.40	0.40
31:P6:116:LEU:O	31:P6:120:SER:HB2	2.22	0.40
31:P6:121:ILE:CG2	31:P6:122:THR:H	2.34	0.40
32:Q2:3:SER:O	32:Q2:4:LYS:HB3	2.20	0.40
32:Q2:32:ILE:HD11	32:Q2:63:PHE:CE1	2.57	0.40
32:Q5:32:ILE:HD11	32:Q5:63:PHE:CE1	2.57	0.40
32:Q6:32:ILE:HD11	32:Q6:63:PHE:CE1	2.57	0.40
33:R4:41:ILE:CD1	33:R4:47:ARG:HB2	2.52	0.40
33:R6:76:GLU:O	33:R6:80:ARG:HB2	2.21	0.40
34:S1:38:ARG:O	34:S1:42:HIS:ND1	2.51	0.40
34:S3:125:HIS:CE1	34:S3:131:VAL:HG21	2.57	0.40
34:S6:125:HIS:CE1	34:S6:131:VAL:HG21	2.57	0.40
1:T4:31:PRO:HG3	1:T4:102:ARG:HG2	2.04	0.40
3:V2:55:ILE:HD11	3:V2:69:ILE:HD11	2.03	0.40
3:V2:53:TYR:CE1	3:V2:72:LEU:HB3	2.56	0.40
3:V4:53:TYR:CE1	3:V4:72:LEU:HB3	2.56	0.40
3:V5:66:ASP:OD2	22:A5:154:LEU:HD13	2.21	0.40
16:W1:28:ARG:HB3	16:W1:29:PRO:HD3	2.04	0.40
4:X3:40:PRO:HB3	4:X3:79:LYS:CE	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Y4:125:VAL:HG12	17:Y4:129:LYS:NZ	2.36	0.40
17:Y6:125:VAL:HG12	17:Y6:129:LYS:NZ	2.36	0.40
18:Z5:66:LYS:HB2	18:Z5:111:ARG:HD2	2.01	0.40
18:Z6:80:ARG:HG3	18:Z6:82:SER:H	1.87	0.40

All (99) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:b1:81:ARG:CB	27:H4:35:ASP:O[2_545]	0.92	1.28
21:i2:1109:C:OP1	19:b3:41:TYR:CD2[2_555]	1.03	1.17
19:b5:41:TYR:OH	21:i6:1109:C:O4'[2_555]	1.05	1.15
27:H1:165:ASN:OD1	27:H4:164:ASN:N[2_545]	1.07	1.13
19:b5:41:TYR:OH	21:i6:1109:C:C4'[2_555]	1.09	1.11
19:b1:81:ARG:NH1	27:H4:34:SER:O[2_545]	1.10	1.10
21:i2:541:U:O4	1:T4:140:ALA:O[1_455]	1.20	1.00
21:i2:1109:C:P	19:b3:41:TYR:CE2[2_555]	1.51	0.69
27:H1:165:ASN:N	27:H4:164:ASN:O[2_545]	1.53	0.67
19:b5:42:LYS:CE	21:i6:1110:G:OP1[2_555]	1.55	0.65
27:H1:164:ASN:OD1	27:H4:168:HIS:NE2[2_545]	1.62	0.58
9:g4:184:LEU:CD2	21:i5:1438:A:O2'[1_656]	1.63	0.57
27:H1:82:GLU:OE2	27:H4:192:PHE:CD1[2_545]	1.66	0.54
33:R2:95:ILE:O	27:H3:78:ARG:NE[2_555]	1.67	0.53
21:i5:1116:C:OP1	14:N6:24:THR:O[2_555]	1.67	0.53
14:N1:32:ASP:CA	19:b4:41:TYR:CD1[2_545]	1.67	0.53
19:b1:41:TYR:CE1	14:N4:32:ASP:CA[2_545]	1.70	0.50
29:K1:97:SER:CB	1:T3:117:GLN:NE2[1_454]	1.71	0.49
14:N1:32:ASP:OD1	19:b4:42:LYS:CD[2_545]	1.72	0.48
14:N2:24:THR:CG2	21:i3:1116:C:O2'[2_555]	1.74	0.46
19:b1:41:TYR:CB	14:N4:29:THR:CG2[2_545]	1.75	0.45
21:i2:1768:A:OP1	13:M3:129:LYS:O[1_454]	1.75	0.45
19:b1:82:LYS:CE	27:H4:75:ILE:CG1[2_545]	1.75	0.45
27:H1:164:ASN:C	27:H4:164:ASN:O[2_545]	1.75	0.45
21:i2:1109:C:O5'	19:b3:41:TYR:CZ[2_555]	1.76	0.44
29:K2:98:ARG:NH2	21:i4:1432:U:C2'[1_455]	1.77	0.43
27:H1:165:ASN:OD1	27:H4:164:ASN:CB[2_545]	1.78	0.42
21:i5:1116:C:C4'	14:N6:24:THR:CG2[2_555]	1.80	0.40
21:i2:541:U:C4	1:T4:140:ALA:O[1_455]	1.81	0.39
27:H1:165:ASN:CA	27:H4:164:ASN:CB[2_545]	1.81	0.39
19:b1:79:PHE:O	27:H4:38:ALA:CB[2_545]	1.82	0.38

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:D1:56:GLN:NE2	21:i3:1417:C:O2'[1_454]	1.83	0.37
19:b1:81:ARG:CD	27:H4:35:ASP:CA[2_545]	1.85	0.35
19:b1:81:ARG:CB	27:H4:35:ASP:C[2_545]	1.85	0.35
19:b1:36:LYS:NZ	27:H4:74:LYS:NZ[2_545]	1.86	0.34
27:H5:82:GLU:OE2	33:R6:91:LEU:CA[2_555]	1.87	0.33
14:N1:32:ASP:N	19:b4:41:TYR:CD1[2_545]	1.89	0.31
27:H1:165:ASN:CG	27:H4:164:ASN:CA[2_545]	1.90	0.30
27:H1:165:ASN:CG	27:H4:164:ASN:C[2_545]	1.90	0.30
21:i1:541:U:N3	1:T3:2:PRO:CD[1_454]	1.90	0.30
24:D2:56:GLN:NE2	21:i4:1418:C:OP2[1_455]	1.91	0.29
27:H1:165:ASN:CB	27:H4:164:ASN:CB[2_545]	1.91	0.29
21:i2:541:U:O4	1:T4:140:ALA:C[1_455]	1.91	0.29
27:H1:39:GLN:NE2	19:b4:80:ARG:CA[2_545]	1.92	0.28
19:b1:81:ARG:NH1	27:H4:34:SER:C[2_545]	1.93	0.27
9:g4:141:THR:O	21:i5:1437:C:O2[1_656]	1.94	0.26
19:b5:41:TYR:CZ	21:i6:1109:C:C4'[2_555]	1.95	0.25
21:i2:1109:C:OP2	19:b3:41:TYR:CE2[2_555]	1.96	0.24
27:H1:165:ASN:CG	27:H4:164:ASN:CB[2_545]	1.96	0.24
24:D1:56:GLN:CD	21:i3:1417:C:O3'[1_454]	1.96	0.24
19:b5:42:LYS:NZ	21:i6:1110:G:OP1[2_555]	1.96	0.24
33:R2:95:ILE:O	27:H3:78:ARG:CD[2_555]	1.97	0.23
19:b1:41:TYR:CE1	14:N4:32:ASP:N[2_545]	1.97	0.23
27:H1:165:ASN:ND2	27:H4:164:ASN:C[2_545]	1.97	0.23
27:H5:33:ASN:OD1	33:R6:91:LEU:CD2[2_555]	2.00	0.20
21:i2:75:G:OP2	8:f3:116:ARG:NE[1_454]	2.00	0.20
21:i5:1116:C:OP1	14:N6:24:THR:C[2_555]	2.00	0.20
9:g1:27:PHE:CE1	9:g6:183:LYS:CE[1_554]	2.00	0.20
9:g1:26:GLN:NE2	9:g6:178:ASN:OD1[1_554]	2.01	0.19
19:b5:41:TYR:OH	21:i6:1109:C:C5'[2_555]	2.01	0.19
24:D1:55:THR:OG1	21:i3:1418:C:OP1[1_454]	2.02	0.18
19:b1:81:ARG:CA	27:H4:35:ASP:O[2_545]	2.02	0.18
24:D1:56:GLN:NE2	21:i3:1417:C:O3'[1_454]	2.03	0.17
14:N1:35:GLU:CB	19:b4:41:TYR:OH[2_545]	2.04	0.16
27:H1:165:ASN:ND2	27:H4:165:ASN:N[2_545]	2.04	0.16
19:b1:81:ARG:CZ	27:H4:34:SER:O[2_545]	2.04	0.16
27:H5:82:GLU:CG	33:R6:91:LEU:CD1[2_555]	2.05	0.15
21:i2:1109:C:O5'	19:b3:41:TYR:OH[2_555]	2.05	0.15
21:i5:1116:C:C5'	14:N6:24:THR:CG2[2_555]	2.06	0.14
19:b1:41:TYR:CZ	14:N4:32:ASP:CA[2_545]	2.06	0.14
29:K2:98:ARG:NH2	21:i4:1432:U:O2[1_455]	2.06	0.14
9:g2:27:PHE:CE1	9:g5:183:LYS:CE[1_556]	2.06	0.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:b2:80:ARG:NH2	21:i3:1117:C:N4[2_555]	2.07	0.13
19:b1:80:ARG:CG	27:H4:39:GLN:NE2[2_545]	2.07	0.13
27:H5:82:GLU:OE1	33:R6:91:LEU:CB[2_555]	2.07	0.13
21:i2:75:G:O5'	8:f3:116:ARG:NH2[1_454]	2.07	0.13
27:H1:39:GLN:CG	19:b4:82:LYS:CG[2_545]	2.08	0.12
14:N1:32:ASP:CA	19:b4:41:TYR:CE1[2_545]	2.08	0.12
24:D2:56:GLN:NE2	21:i4:1418:C:O5'[1_455]	2.09	0.11
24:D2:87:TYR:OH	21:i4:1414:A:OP2[1_455]	2.10	0.10
27:H5:33:ASN:CG	33:R6:91:LEU:CD2[2_555]	2.10	0.10
14:N1:35:GLU:CG	19:b4:41:TYR:CZ[2_545]	2.10	0.10
19:b1:80:ARG:CG	27:H4:39:GLN:CD[2_545]	2.10	0.10
24:D2:87:TYR:CZ	21:i4:1414:A:OP1[1_455]	2.11	0.09
24:D2:55:THR:C	21:i4:1416:C:N4[1_455]	2.11	0.09
9:g1:27:PHE:CG	9:g6:183:LYS:CE[1_554]	2.11	0.09
19:b2:82:LYS:CE	19:b3:75:GLU:CG[2_555]	2.12	0.08
27:H1:82:GLU:OE2	27:H4:192:PHE:CG[2_545]	2.12	0.08
21:i2:75:G:OP2	8:f3:116:ARG:CZ[1_454]	2.12	0.08
24:D1:56:GLN:NE2	21:i3:1417:C:C4'[1_454]	2.13	0.07
24:D1:56:GLN:NE2	21:i3:1417:C:C3'[1_454]	2.14	0.06
24:D2:56:GLN:CB	21:i4:1416:C:N4[1_455]	2.14	0.06
21:i2:1109:C:OP1	19:b3:41:TYR:CG[2_555]	2.15	0.05
27:H1:164:ASN:CG	27:H4:168:HIS:CD2[2_545]	2.15	0.05
21:i2:1109:C:P	19:b3:41:TYR:CZ[2_555]	2.16	0.04
27:H1:39:GLN:OE1	19:b4:82:LYS:CE[2_545]	2.16	0.04
14:N1:31:ASP:CB	19:b4:41:TYR:CB[2_545]	2.18	0.02
14:N1:35:GLU:CA	19:b4:41:TYR:OH[2_545]	2.18	0.02
27:H1:165:ASN:CG	27:H4:164:ASN:N[2_545]	2.19	0.01

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 X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	T1	141/145 (97%)	119 (84%)	15 (11%)	7 (5%)	2 27

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	T2	141/145 (97%)	119 (84%)	15 (11%)	7 (5%)	2	27
1	T3	141/145 (97%)	119 (84%)	16 (11%)	6 (4%)	3	29
1	T4	141/145 (97%)	119 (84%)	16 (11%)	6 (4%)	3	29
1	T5	141/145 (97%)	119 (84%)	15 (11%)	7 (5%)	2	27
1	T6	141/145 (97%)	119 (84%)	16 (11%)	6 (4%)	3	29
2	U1	102/119 (86%)	84 (82%)	12 (12%)	6 (6%)	2	23
2	U2	102/119 (86%)	84 (82%)	12 (12%)	6 (6%)	2	23
2	U3	102/119 (86%)	84 (82%)	12 (12%)	6 (6%)	2	23
2	U4	102/119 (86%)	84 (82%)	12 (12%)	6 (6%)	2	23
2	U5	102/119 (86%)	84 (82%)	12 (12%)	6 (6%)	2	23
2	U6	102/119 (86%)	84 (82%)	12 (12%)	6 (6%)	2	23
3	V1	81/83 (98%)	65 (80%)	11 (14%)	5 (6%)	2	22
3	V2	81/83 (98%)	66 (82%)	10 (12%)	5 (6%)	2	22
3	V3	81/83 (98%)	65 (80%)	11 (14%)	5 (6%)	2	22
3	V4	81/83 (98%)	65 (80%)	11 (14%)	5 (6%)	2	22
3	V5	81/83 (98%)	65 (80%)	11 (14%)	5 (6%)	2	22
3	V6	81/83 (98%)	65 (80%)	11 (14%)	5 (6%)	2	22
4	X1	139/143 (97%)	114 (82%)	12 (9%)	13 (9%)	1	14
4	X2	139/143 (97%)	114 (82%)	12 (9%)	13 (9%)	1	14
4	X3	139/143 (97%)	114 (82%)	12 (9%)	13 (9%)	1	14
4	X4	139/143 (97%)	114 (82%)	12 (9%)	13 (9%)	1	14
4	X5	139/143 (97%)	114 (82%)	12 (9%)	13 (9%)	1	14
4	X6	139/143 (97%)	114 (82%)	12 (9%)	13 (9%)	1	14
5	a1	105/115 (91%)	73 (70%)	19 (18%)	13 (12%)	0	7
5	a2	105/115 (91%)	73 (70%)	19 (18%)	13 (12%)	0	7
5	a3	105/115 (91%)	73 (70%)	19 (18%)	13 (12%)	0	7
5	a4	105/115 (91%)	73 (70%)	19 (18%)	13 (12%)	0	7
5	a5	105/115 (91%)	73 (70%)	19 (18%)	13 (12%)	0	7
5	a6	105/115 (91%)	73 (70%)	19 (18%)	13 (12%)	0	7
6	c1	62/69 (90%)	47 (76%)	9 (14%)	6 (10%)	1	13
6	c2	62/69 (90%)	47 (76%)	10 (16%)	5 (8%)	1	16

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	c3	62/69 (90%)	47 (76%)	10 (16%)	5 (8%)	1	16
6	c4	62/69 (90%)	47 (76%)	10 (16%)	5 (8%)	1	16
6	c5	62/69 (90%)	47 (76%)	9 (14%)	6 (10%)	1	13
6	c6	62/69 (90%)	47 (76%)	10 (16%)	5 (8%)	1	16
7	d1	51/56 (91%)	44 (86%)	7 (14%)	0	100	100
7	d2	51/56 (91%)	44 (86%)	7 (14%)	0	100	100
7	d3	51/56 (91%)	44 (86%)	7 (14%)	0	100	100
7	d4	51/56 (91%)	44 (86%)	7 (14%)	0	100	100
7	d5	51/56 (91%)	44 (86%)	7 (14%)	0	100	100
7	d6	51/56 (91%)	44 (86%)	7 (14%)	0	100	100
8	f1	70/156 (45%)	56 (80%)	10 (14%)	4 (6%)	2	24
8	f2	70/156 (45%)	56 (80%)	10 (14%)	4 (6%)	2	24
8	f3	70/156 (45%)	56 (80%)	10 (14%)	4 (6%)	2	24
8	f4	70/156 (45%)	57 (81%)	9 (13%)	4 (6%)	2	24
8	f5	70/156 (45%)	56 (80%)	10 (14%)	4 (6%)	2	24
8	f6	70/156 (45%)	55 (79%)	11 (16%)	4 (6%)	2	24
9	g1	311/317 (98%)	237 (76%)	58 (19%)	16 (5%)	2	26
9	g2	311/317 (98%)	236 (76%)	59 (19%)	16 (5%)	2	26
9	g3	311/317 (98%)	236 (76%)	59 (19%)	16 (5%)	2	26
9	g4	311/317 (98%)	237 (76%)	58 (19%)	16 (5%)	2	26
9	g5	311/317 (98%)	237 (76%)	58 (19%)	16 (5%)	2	26
9	g6	311/317 (98%)	236 (76%)	59 (19%)	16 (5%)	2	26
10	C1	220/293 (75%)	182 (83%)	27 (12%)	11 (5%)	2	27
10	C2	220/293 (75%)	181 (82%)	28 (13%)	11 (5%)	2	27
10	C3	220/293 (75%)	182 (83%)	27 (12%)	11 (5%)	2	27
10	C4	220/293 (75%)	182 (83%)	27 (12%)	11 (5%)	2	27
10	C5	220/293 (75%)	182 (83%)	27 (12%)	11 (5%)	2	27
10	C6	220/293 (75%)	182 (83%)	27 (12%)	11 (5%)	2	27
11	G1	235/249 (94%)	194 (83%)	25 (11%)	16 (7%)	1	20
11	G2	235/249 (94%)	195 (83%)	24 (10%)	16 (7%)	1	20
11	G3	235/249 (94%)	194 (83%)	25 (11%)	16 (7%)	1	20

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
11	G4	235/249 (94%)	194 (83%)	26 (11%)	15 (6%)	1	22
11	G5	235/249 (94%)	194 (83%)	25 (11%)	16 (7%)	1	20
11	G6	235/249 (94%)	194 (83%)	25 (11%)	16 (7%)	1	20
12	J1	183/194 (94%)	157 (86%)	16 (9%)	10 (6%)	2	25
12	J2	183/194 (94%)	157 (86%)	16 (9%)	10 (6%)	2	25
12	J3	183/194 (94%)	157 (86%)	16 (9%)	10 (6%)	2	25
12	J4	183/194 (94%)	157 (86%)	16 (9%)	10 (6%)	2	25
12	J5	183/194 (94%)	157 (86%)	16 (9%)	10 (6%)	2	25
12	J6	183/194 (94%)	157 (86%)	16 (9%)	10 (6%)	2	25
13	M1	121/132 (92%)	111 (92%)	8 (7%)	2 (2%)	11	50
13	M2	121/132 (92%)	111 (92%)	8 (7%)	2 (2%)	11	50
13	M3	121/132 (92%)	111 (92%)	8 (7%)	2 (2%)	11	50
13	M4	121/132 (92%)	111 (92%)	8 (7%)	2 (2%)	11	50
13	M5	121/132 (92%)	111 (92%)	8 (7%)	2 (2%)	11	50
13	M6	121/132 (92%)	111 (92%)	8 (7%)	2 (2%)	11	50
14	N1	148/151 (98%)	125 (84%)	14 (10%)	9 (6%)	2	22
14	N2	148/151 (98%)	125 (84%)	14 (10%)	9 (6%)	2	22
14	N3	148/151 (98%)	124 (84%)	15 (10%)	9 (6%)	2	22
14	N4	148/151 (98%)	125 (84%)	14 (10%)	9 (6%)	2	22
14	N5	148/151 (98%)	124 (84%)	15 (10%)	9 (6%)	2	22
14	N6	148/151 (98%)	125 (84%)	13 (9%)	10 (7%)	1	20
15	O1	138/151 (91%)	101 (73%)	24 (17%)	13 (9%)	1	14
15	O2	138/151 (91%)	101 (73%)	24 (17%)	13 (9%)	1	14
15	O3	138/151 (91%)	101 (73%)	24 (17%)	13 (9%)	1	14
15	O4	138/151 (91%)	101 (73%)	24 (17%)	13 (9%)	1	14
15	O5	138/151 (91%)	101 (73%)	24 (17%)	13 (9%)	1	14
15	O6	138/151 (91%)	101 (73%)	24 (17%)	13 (9%)	1	14
16	W1	127/130 (98%)	109 (86%)	13 (10%)	5 (4%)	3	31
16	W2	127/130 (98%)	109 (86%)	13 (10%)	5 (4%)	3	31
16	W3	127/130 (98%)	108 (85%)	13 (10%)	6 (5%)	3	28
16	W4	127/130 (98%)	109 (86%)	13 (10%)	5 (4%)	3	31

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	W5	127/130 (98%)	109 (86%)	13 (10%)	5 (4%)	3	31
16	W6	127/130 (98%)	109 (86%)	13 (10%)	5 (4%)	3	31
17	Y1	129/133 (97%)	108 (84%)	16 (12%)	5 (4%)	3	31
17	Y2	129/133 (97%)	109 (84%)	15 (12%)	5 (4%)	3	31
17	Y3	129/133 (97%)	109 (84%)	15 (12%)	5 (4%)	3	31
17	Y4	129/133 (97%)	109 (84%)	15 (12%)	5 (4%)	3	31
17	Y5	129/133 (97%)	109 (84%)	15 (12%)	5 (4%)	3	31
17	Y6	129/133 (97%)	108 (84%)	16 (12%)	5 (4%)	3	31
18	Z1	73/125 (58%)	54 (74%)	15 (20%)	4 (6%)	2	25
18	Z2	73/125 (58%)	54 (74%)	15 (20%)	4 (6%)	2	25
18	Z3	73/125 (58%)	54 (74%)	15 (20%)	4 (6%)	2	25
18	Z4	73/125 (58%)	54 (74%)	15 (20%)	4 (6%)	2	25
18	Z5	73/125 (58%)	54 (74%)	15 (20%)	4 (6%)	2	25
18	Z6	73/125 (58%)	54 (74%)	15 (20%)	4 (6%)	2	25
19	b1	81/84 (96%)	64 (79%)	12 (15%)	5 (6%)	2	22
19	b2	81/84 (96%)	67 (83%)	12 (15%)	2 (2%)	6	40
19	b3	81/84 (96%)	67 (83%)	11 (14%)	3 (4%)	4	33
19	b4	81/84 (96%)	65 (80%)	11 (14%)	5 (6%)	2	22
19	b5	81/84 (96%)	67 (83%)	10 (12%)	4 (5%)	2	27
19	b6	81/84 (96%)	67 (83%)	12 (15%)	2 (2%)	6	40
20	e1	56/133 (42%)	41 (73%)	11 (20%)	4 (7%)	1	19
20	e2	56/133 (42%)	37 (66%)	12 (21%)	7 (12%)	0	7
20	e3	56/133 (42%)	38 (68%)	12 (21%)	6 (11%)	0	10
20	e4	56/133 (42%)	35 (62%)	15 (27%)	6 (11%)	0	10
20	e5	56/133 (42%)	38 (68%)	11 (20%)	7 (12%)	0	7
20	e6	56/133 (42%)	38 (68%)	12 (21%)	6 (11%)	0	10
22	A1	220/295 (75%)	181 (82%)	31 (14%)	8 (4%)	4	33
22	A2	220/295 (75%)	180 (82%)	32 (14%)	8 (4%)	4	33
22	A3	220/295 (75%)	181 (82%)	31 (14%)	8 (4%)	4	33
22	A4	220/295 (75%)	181 (82%)	31 (14%)	8 (4%)	4	33
22	A5	220/295 (75%)	181 (82%)	31 (14%)	8 (4%)	4	33

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
22	A6	220/295 (75%)	181 (82%)	31 (14%)	8 (4%)	4	33
23	B1	212/264 (80%)	174 (82%)	31 (15%)	7 (3%)	4	35
23	B2	212/264 (80%)	174 (82%)	29 (14%)	9 (4%)	3	29
23	B3	212/264 (80%)	174 (82%)	30 (14%)	8 (4%)	4	32
23	B4	212/264 (80%)	174 (82%)	30 (14%)	8 (4%)	4	32
23	B5	212/264 (80%)	174 (82%)	30 (14%)	8 (4%)	4	32
23	B6	212/264 (80%)	174 (82%)	31 (15%)	7 (3%)	4	35
24	D1	225/243 (93%)	183 (81%)	24 (11%)	18 (8%)	1	17
24	D2	225/243 (93%)	183 (81%)	24 (11%)	18 (8%)	1	17
24	D3	225/243 (93%)	183 (81%)	24 (11%)	18 (8%)	1	17
24	D4	225/243 (93%)	183 (81%)	24 (11%)	18 (8%)	1	17
24	D5	225/243 (93%)	183 (81%)	24 (11%)	18 (8%)	1	17
24	D6	225/243 (93%)	183 (81%)	24 (11%)	18 (8%)	1	17
25	E1	260/263 (99%)	215 (83%)	30 (12%)	15 (6%)	2	24
25	E2	260/263 (99%)	215 (83%)	30 (12%)	15 (6%)	2	24
25	E3	260/263 (99%)	215 (83%)	30 (12%)	15 (6%)	2	24
25	E4	260/263 (99%)	215 (83%)	30 (12%)	15 (6%)	2	24
25	E5	260/263 (99%)	215 (83%)	30 (12%)	15 (6%)	2	24
25	E6	260/263 (99%)	215 (83%)	30 (12%)	15 (6%)	2	24
26	F1	189/204 (93%)	144 (76%)	30 (16%)	15 (8%)	1	17
26	F2	189/204 (93%)	144 (76%)	30 (16%)	15 (8%)	1	17
26	F3	189/204 (93%)	144 (76%)	30 (16%)	15 (8%)	1	17
26	F4	189/204 (93%)	144 (76%)	30 (16%)	15 (8%)	1	17
26	F5	189/204 (93%)	144 (76%)	30 (16%)	15 (8%)	1	17
26	F6	189/204 (93%)	144 (76%)	30 (16%)	15 (8%)	1	17
27	H1	187/194 (96%)	145 (78%)	28 (15%)	14 (8%)	1	18
27	H2	187/194 (96%)	145 (78%)	28 (15%)	14 (8%)	1	18
27	H3	187/194 (96%)	145 (78%)	28 (15%)	14 (8%)	1	18
27	H4	187/194 (96%)	146 (78%)	27 (14%)	14 (8%)	1	18
27	H5	187/194 (96%)	146 (78%)	27 (14%)	14 (8%)	1	18
27	H6	187/194 (96%)	146 (78%)	27 (14%)	14 (8%)	1	18

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
28	I1	204/208 (98%)	168 (82%)	24 (12%)	12 (6%)	2	23
28	I2	204/208 (98%)	168 (82%)	24 (12%)	12 (6%)	2	23
28	I3	204/208 (98%)	168 (82%)	24 (12%)	12 (6%)	2	23
28	I4	204/208 (98%)	168 (82%)	24 (12%)	12 (6%)	2	23
28	I5	204/208 (98%)	168 (82%)	24 (12%)	12 (6%)	2	23
28	I6	204/208 (98%)	168 (82%)	24 (12%)	12 (6%)	2	23
29	K1	96/165 (58%)	76 (79%)	15 (16%)	5 (5%)	2	25
29	K2	96/165 (58%)	76 (79%)	15 (16%)	5 (5%)	2	25
29	K3	96/165 (58%)	76 (79%)	15 (16%)	5 (5%)	2	25
29	K4	96/165 (58%)	76 (79%)	15 (16%)	5 (5%)	2	25
29	K5	96/165 (58%)	76 (79%)	15 (16%)	5 (5%)	2	25
29	K6	96/165 (58%)	76 (79%)	15 (16%)	5 (5%)	2	25
30	L1	151/158 (96%)	129 (85%)	11 (7%)	11 (7%)	1	19
30	L2	151/158 (96%)	125 (83%)	15 (10%)	11 (7%)	1	19
30	L3	151/158 (96%)	128 (85%)	14 (9%)	9 (6%)	2	22
30	L4	151/158 (96%)	127 (84%)	13 (9%)	11 (7%)	1	19
30	L5	151/158 (96%)	128 (85%)	14 (9%)	9 (6%)	2	22
30	L6	151/158 (96%)	126 (83%)	15 (10%)	10 (7%)	1	21
31	P1	123/145 (85%)	111 (90%)	6 (5%)	6 (5%)	2	27
31	P2	123/145 (85%)	111 (90%)	6 (5%)	6 (5%)	2	27
31	P3	123/145 (85%)	108 (88%)	11 (9%)	4 (3%)	4	35
31	P4	123/145 (85%)	111 (90%)	6 (5%)	6 (5%)	2	27
31	P5	123/145 (85%)	112 (91%)	6 (5%)	5 (4%)	3	30
31	P6	123/145 (85%)	111 (90%)	6 (5%)	6 (5%)	2	27
32	Q1	144/146 (99%)	112 (78%)	22 (15%)	10 (7%)	1	20
32	Q2	144/146 (99%)	112 (78%)	22 (15%)	10 (7%)	1	20
32	Q3	144/146 (99%)	112 (78%)	22 (15%)	10 (7%)	1	20
32	Q4	144/146 (99%)	112 (78%)	22 (15%)	10 (7%)	1	20
32	Q5	144/146 (99%)	112 (78%)	22 (15%)	10 (7%)	1	20
32	Q6	144/146 (99%)	112 (78%)	22 (15%)	10 (7%)	1	20
33	R1	130/135 (96%)	94 (72%)	25 (19%)	11 (8%)	1	15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
33	R2	130/135 (96%)	95 (73%)	22 (17%)	13 (10%)	1	12
33	R3	130/135 (96%)	95 (73%)	24 (18%)	11 (8%)	1	15
33	R4	130/135 (96%)	97 (75%)	23 (18%)	10 (8%)	1	17
33	R5	130/135 (96%)	93 (72%)	26 (20%)	11 (8%)	1	15
33	R6	130/135 (96%)	93 (72%)	27 (21%)	10 (8%)	1	17
34	S1	141/152 (93%)	135 (96%)	6 (4%)	0	100	100
34	S2	141/152 (93%)	135 (96%)	6 (4%)	0	100	100
34	S3	141/152 (93%)	135 (96%)	6 (4%)	0	100	100
34	S4	141/152 (93%)	135 (96%)	6 (4%)	0	100	100
34	S5	141/152 (93%)	135 (96%)	6 (4%)	0	100	100
34	S6	141/152 (93%)	135 (96%)	6 (4%)	0	100	100
35	j1	23/25 (92%)	23 (100%)	0	0	100	100
35	j2	23/25 (92%)	23 (100%)	0	0	100	100
35	j3	23/25 (92%)	23 (100%)	0	0	100	100
35	j4	23/25 (92%)	23 (100%)	0	0	100	100
35	j5	23/25 (92%)	23 (100%)	0	0	100	100
35	j6	23/25 (92%)	23 (100%)	0	0	100	100
36	k1	179/181 (99%)	162 (90%)	13 (7%)	4 (2%)	8	44
36	k2	179/181 (99%)	161 (90%)	16 (9%)	2 (1%)	17	59
36	k3	179/181 (99%)	164 (92%)	14 (8%)	1 (1%)	28	71
36	k4	179/181 (99%)	160 (89%)	17 (10%)	2 (1%)	17	59
36	k5	179/181 (99%)	164 (92%)	13 (7%)	2 (1%)	17	59
36	k6	179/181 (99%)	164 (92%)	13 (7%)	2 (1%)	17	59
37	l1	77/198 (39%)	44 (57%)	24 (31%)	9 (12%)	0	8
37	l2	77/198 (39%)	44 (57%)	24 (31%)	9 (12%)	0	8
37	l3	77/198 (39%)	44 (57%)	24 (31%)	9 (12%)	0	8
37	l4	77/198 (39%)	44 (57%)	24 (31%)	9 (12%)	0	8
37	l5	77/198 (39%)	44 (57%)	24 (31%)	9 (12%)	0	8
37	l6	77/198 (39%)	44 (57%)	24 (31%)	9 (12%)	0	8
All	All	30804/35724 (86%)	25074 (81%)	3953 (13%)	1777 (6%)	2	24

All (1777) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	T1	4	VAL
2	U1	50	VAL
2	U1	103	SER
2	U1	107	GLU
2	U1	116	ILE
4	X1	35	ALA
5	a1	3	LYS
5	a1	101	PHE
5	a1	106	ALA
6	c1	67	ARG
8	f1	99	LYS
9	g1	55	PRO
9	g1	99	ARG
9	g1	102	VAL
9	g1	281	ALA
10	C1	262	THR
11	G1	107	SER
11	G1	122	PRO
11	G1	145	PHE
11	G1	150	GLU
12	J1	3	VAL
12	J1	8	VAL
12	J1	17	ARG
14	N1	24	THR
14	N1	146	ALA
16	W1	66	THR
19	b1	37	CYS
19	b1	38	PRO
20	e1	47	PRO
22	A1	125	THR
22	A1	208	GLU
23	B1	147	ASN
24	D1	3	VAL
24	D1	55	THR
24	D1	81	GLU
25	E1	76	VAL
25	E1	164	LEU
26	F1	15	PRO
26	F1	33	ILE
27	H1	66	VAL
27	H1	107	LYS
28	I1	130	THR
29	K1	3	MET

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Mol	Chain	Res	Type
30	L1	8	ARG
30	L1	116	CYS
31	P1	131	PRO
32	Q1	42	ILE
32	Q1	117	ARG
33	R1	42	PRO
33	R1	94	GLU
33	R1	131	PRO
1	T2	4	VAL
2	U2	50	VAL
2	U2	103	SER
2	U2	107	GLU
2	U2	116	ILE
4	X2	35	ALA
5	a2	3	LYS
5	a2	18	VAL
5	a2	101	PHE
5	a2	106	ALA
6	c2	67	ARG
8	f2	99	LYS
9	g2	55	PRO
9	g2	99	ARG
9	g2	102	VAL
9	g2	281	ALA
10	C2	262	THR
11	G2	107	SER
11	G2	122	PRO
11	G2	145	PHE
11	G2	150	GLU
12	J2	3	VAL
12	J2	8	VAL
12	J2	17	ARG
14	N2	24	THR
14	N2	146	ALA
16	W2	66	THR
22	A2	125	THR
22	A2	208	GLU
23	B2	147	ASN
24	D2	3	VAL
24	D2	55	THR
24	D2	81	GLU
25	E2	76	VAL

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Mol	Chain	Res	Type
25	E2	164	LEU
26	F2	15	PRO
26	F2	33	ILE
27	H2	66	VAL
27	H2	107	LYS
28	I2	130	THR
29	K2	3	MET
30	L2	8	ARG
30	L2	116	CYS
31	P2	131	PRO
31	P2	133	ILE
32	Q2	42	ILE
32	Q2	117	ARG
33	R2	42	PRO
33	R2	70	SER
33	R2	94	GLU
33	R2	131	PRO
1	T3	4	VAL
2	U3	50	VAL
2	U3	103	SER
2	U3	107	GLU
2	U3	116	ILE
4	X3	35	ALA
5	a3	3	LYS
5	a3	18	VAL
5	a3	101	PHE
5	a3	106	ALA
6	c3	67	ARG
8	f3	99	LYS
9	g3	55	PRO
9	g3	99	ARG
9	g3	102	VAL
9	g3	281	ALA
10	C3	262	THR
11	G3	107	SER
11	G3	122	PRO
11	G3	145	PHE
11	G3	150	GLU
12	J3	3	VAL
12	J3	8	VAL
12	J3	17	ARG
14	N3	24	THR

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Mol	Chain	Res	Type
14	N3	146	ALA
16	W3	66	THR
22	A3	125	THR
22	A3	208	GLU
23	B3	147	ASN
24	D3	3	VAL
24	D3	55	THR
24	D3	81	GLU
25	E3	76	VAL
25	E3	164	LEU
26	F3	15	PRO
26	F3	33	ILE
27	H3	66	VAL
27	H3	107	LYS
28	I3	130	THR
29	K3	3	MET
30	L3	8	ARG
30	L3	116	CYS
31	P3	16	THR
31	P3	131	PRO
31	P3	133	ILE
32	Q3	42	ILE
32	Q3	117	ARG
33	R3	42	PRO
33	R3	71	ILE
33	R3	94	GLU
33	R3	131	PRO
1	T4	4	VAL
2	U4	50	VAL
2	U4	103	SER
2	U4	107	GLU
2	U4	116	ILE
4	X4	35	ALA
5	a4	3	LYS
5	a4	18	VAL
5	a4	101	PHE
5	a4	106	ALA
6	c4	67	ARG
8	f4	99	LYS
9	g4	55	PRO
9	g4	99	ARG
9	g4	102	VAL

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Mol	Chain	Res	Type
9	g4	281	ALA
10	C4	262	THR
11	G4	107	SER
11	G4	122	PRO
11	G4	145	PHE
11	G4	150	GLU
12	J4	3	VAL
12	J4	8	VAL
12	J4	17	ARG
14	N4	24	THR
14	N4	146	ALA
16	W4	66	THR
19	b4	37	CYS
19	b4	38	PRO
22	A4	125	THR
22	A4	208	GLU
23	B4	147	ASN
24	D4	3	VAL
24	D4	55	THR
24	D4	81	GLU
25	E4	76	VAL
25	E4	164	LEU
26	F4	15	PRO
26	F4	33	ILE
27	H4	66	VAL
27	H4	107	LYS
28	I4	130	THR
29	K4	3	MET
30	L4	8	ARG
30	L4	116	CYS
31	P4	131	PRO
31	P4	133	ILE
32	Q4	42	ILE
32	Q4	117	ARG
33	R4	42	PRO
33	R4	94	GLU
33	R4	131	PRO
1	T5	4	VAL
2	U5	50	VAL
2	U5	103	SER
2	U5	107	GLU
2	U5	116	ILE

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Mol	Chain	Res	Type
4	X5	35	ALA
5	a5	3	LYS
5	a5	101	PHE
5	a5	106	ALA
6	c5	67	ARG
8	f5	99	LYS
9	g5	55	PRO
9	g5	99	ARG
9	g5	102	VAL
9	g5	281	ALA
10	C5	262	THR
11	G5	107	SER
11	G5	122	PRO
11	G5	145	PHE
11	G5	150	GLU
12	J5	3	VAL
12	J5	8	VAL
12	J5	17	ARG
14	N5	24	THR
14	N5	146	ALA
16	W5	66	THR
20	e5	47	PRO
20	e5	51	LYS
22	A5	125	THR
22	A5	208	GLU
23	B5	147	ASN
24	D5	3	VAL
24	D5	55	THR
24	D5	81	GLU
25	E5	76	VAL
25	E5	164	LEU
26	F5	15	PRO
26	F5	33	ILE
27	H5	66	VAL
27	H5	107	LYS
28	I5	130	THR
29	K5	3	MET
30	L5	8	ARG
30	L5	116	CYS
31	P5	131	PRO
31	P5	133	ILE
32	Q5	42	ILE

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Mol	Chain	Res	Type
32	Q5	117	ARG
33	R5	42	PRO
33	R5	74	GLN
33	R5	94	GLU
33	R5	131	PRO
1	T6	4	VAL
2	U6	50	VAL
2	U6	103	SER
2	U6	107	GLU
2	U6	116	ILE
4	X6	35	ALA
5	a6	3	LYS
5	a6	101	PHE
5	a6	106	ALA
6	c6	67	ARG
8	f6	99	LYS
9	g6	55	PRO
9	g6	99	ARG
9	g6	102	VAL
9	g6	281	ALA
10	C6	262	THR
11	G6	107	SER
11	G6	122	PRO
11	G6	145	PHE
11	G6	150	GLU
12	J6	3	VAL
12	J6	8	VAL
12	J6	17	ARG
14	N6	30	SER
14	N6	146	ALA
16	W6	66	THR
22	A6	125	THR
22	A6	208	GLU
23	B6	147	ASN
24	D6	3	VAL
24	D6	55	THR
24	D6	81	GLU
25	E6	76	VAL
25	E6	164	LEU
26	F6	15	PRO
26	F6	33	ILE
27	H6	66	VAL

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Mol	Chain	Res	Type
27	H6	107	LYS
28	I6	130	THR
29	K6	3	MET
30	L6	8	ARG
30	L6	116	CYS
31	P6	131	PRO
31	P6	133	ILE
32	Q6	42	ILE
32	Q6	117	ARG
33	R6	42	PRO
33	R6	78	ARG
33	R6	94	GLU
33	R6	131	PRO
36	k2	171	ASN
36	k5	168	HIS
37	l1	125	LYS
37	l1	151	LYS
37	l1	184	GLU
37	l1	185	VAL
37	l2	125	LYS
37	l2	151	LYS
37	l2	184	GLU
37	l2	185	VAL
37	l3	125	LYS
37	l3	151	LYS
37	l3	184	GLU
37	l3	185	VAL
37	l4	125	LYS
37	l4	151	LYS
37	l4	184	GLU
37	l4	185	VAL
37	l5	125	LYS
37	l5	151	LYS
37	l5	184	GLU
37	l5	185	VAL
37	l6	125	LYS
37	l6	151	LYS
37	l6	184	GLU
37	l6	185	VAL
1	T1	5	THR
1	T1	132	ASP
3	V1	9	VAL

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Mol	Chain	Res	Type
3	V1	10	ASP
3	V1	78	ILE
4	X1	10	ALA
5	a1	13	LYS
5	a1	18	VAL
5	a1	46	GLU
5	a1	89	ARG
6	c1	59	LEU
9	g1	15	ASN
9	g1	28	PRO
9	g1	56	GLN
9	g1	145	GLU
9	g1	261	LEU
10	C1	261	PHE
11	G1	12	CYS
11	G1	20	ASP
11	G1	25	ARG
11	G1	154	ARG
12	J1	37	LEU
12	J1	147	PHE
14	N1	3	ARG
14	N1	102	LEU
14	N1	147	SER
15	O1	48	SER
15	O1	126	ILE
15	O1	128	ARG
16	W1	5	ASN
17	Y1	34	THR
17	Y1	119	GLY
18	Z1	93	SER
19	b1	10	PRO
19	b1	45	THR
19	b1	75	GLU
20	e1	29	THR
22	A1	13	GLU
22	A1	31	ASP
22	A1	170	SER
22	A1	210	ILE
23	B1	37	ALA
23	B1	83	LYS
23	B1	190	PRO
24	D1	93	THR

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Mol	Chain	Res	Type
24	D1	198	ILE
25	E1	144	ALA
25	E1	214	ASN
26	F1	17	ILE
26	F1	48	TYR
26	F1	57	ALA
26	F1	202	SER
27	H1	34	SER
27	H1	115	LYS
28	I1	75	LYS
28	I1	122	GLY
28	I1	140	LYS
28	I1	143	LYS
28	I1	155	ASN
28	I1	186	ASP
31	P1	133	ILE
32	Q1	5	GLY
32	Q1	100	VAL
33	R1	73	LEU
33	R1	83	ASN
33	R1	119	VAL
1	T2	5	THR
1	T2	132	ASP
3	V2	9	VAL
3	V2	10	ASP
3	V2	78	ILE
4	X2	10	ALA
5	a2	13	LYS
5	a2	46	GLU
5	a2	89	ARG
6	c2	59	LEU
9	g2	15	ASN
9	g2	28	PRO
9	g2	56	GLN
9	g2	145	GLU
9	g2	261	LEU
10	C2	261	PHE
11	G2	12	CYS
11	G2	20	ASP
11	G2	25	ARG
11	G2	154	ARG
12	J2	37	LEU

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Mol	Chain	Res	Type
12	J2	147	PHE
14	N2	3	ARG
14	N2	102	LEU
14	N2	147	SER
15	O2	48	SER
15	O2	126	ILE
15	O2	128	ARG
16	W2	5	ASN
17	Y2	34	THR
17	Y2	119	GLY
18	Z2	93	SER
19	b2	10	PRO
19	b2	75	GLU
20	e2	3	HIS
20	e2	29	THR
20	e2	49	PHE
22	A2	13	GLU
22	A2	31	ASP
22	A2	170	SER
22	A2	210	ILE
23	B2	22	VAL
23	B2	37	ALA
23	B2	83	LYS
23	B2	190	PRO
24	D2	93	THR
24	D2	198	ILE
25	E2	144	ALA
25	E2	214	ASN
26	F2	17	ILE
26	F2	48	TYR
26	F2	57	ALA
26	F2	202	SER
27	H2	34	SER
27	H2	112	ASN
27	H2	115	LYS
28	I2	75	LYS
28	I2	122	GLY
28	I2	140	LYS
28	I2	143	LYS
28	I2	155	ASN
28	I2	186	ASP
32	Q2	5	GLY

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Mol	Chain	Res	Type
32	Q2	100	VAL
33	R2	71	ILE
33	R2	83	ASN
33	R2	119	VAL
1	T3	5	THR
1	T3	132	ASP
3	V3	9	VAL
3	V3	10	ASP
3	V3	78	ILE
4	X3	10	ALA
5	a3	13	LYS
5	a3	46	GLU
5	a3	89	ARG
6	c3	59	LEU
9	g3	15	ASN
9	g3	28	PRO
9	g3	56	GLN
9	g3	145	GLU
9	g3	261	LEU
10	C3	261	PHE
11	G3	12	CYS
11	G3	20	ASP
11	G3	25	ARG
11	G3	154	ARG
12	J3	37	LEU
12	J3	147	PHE
14	N3	3	ARG
14	N3	102	LEU
14	N3	147	SER
15	O3	48	SER
15	O3	126	ILE
15	O3	128	ARG
16	W3	5	ASN
17	Y3	34	THR
17	Y3	119	GLY
18	Z3	93	SER
19	b3	10	PRO
19	b3	75	GLU
20	e3	29	THR
20	e3	49	PHE
22	A3	13	GLU
22	A3	31	ASP

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Mol	Chain	Res	Type
22	A3	170	SER
22	A3	210	ILE
23	B3	22	VAL
23	B3	37	ALA
23	B3	83	LYS
23	B3	190	PRO
24	D3	93	THR
24	D3	198	ILE
25	E3	144	ALA
25	E3	214	ASN
26	F3	17	ILE
26	F3	48	TYR
26	F3	57	ALA
26	F3	202	SER
27	H3	34	SER
27	H3	115	LYS
28	I3	75	LYS
28	I3	122	GLY
28	I3	140	LYS
28	I3	143	LYS
28	I3	155	ASN
28	I3	186	ASP
32	Q3	5	GLY
32	Q3	100	VAL
33	R3	73	LEU
33	R3	83	ASN
33	R3	119	VAL
1	T4	5	THR
1	T4	132	ASP
3	V4	9	VAL
3	V4	10	ASP
3	V4	78	ILE
4	X4	10	ALA
5	a4	13	LYS
5	a4	46	GLU
5	a4	89	ARG
6	c4	59	LEU
9	g4	15	ASN
9	g4	28	PRO
9	g4	56	GLN
9	g4	145	GLU
9	g4	261	LEU

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Mol	Chain	Res	Type
10	C4	261	PHE
11	G4	12	CYS
11	G4	20	ASP
11	G4	25	ARG
11	G4	154	ARG
12	J4	37	LEU
12	J4	147	PHE
14	N4	3	ARG
14	N4	102	LEU
14	N4	147	SER
15	O4	48	SER
15	O4	126	ILE
15	O4	128	ARG
16	W4	5	ASN
17	Y4	34	THR
17	Y4	119	GLY
18	Z4	93	SER
19	b4	10	PRO
19	b4	75	GLU
20	e4	14	GLY
20	e4	29	THR
20	e4	49	PHE
22	A4	13	GLU
22	A4	31	ASP
22	A4	170	SER
22	A4	210	ILE
23	B4	22	VAL
23	B4	37	ALA
23	B4	83	LYS
23	B4	190	PRO
24	D4	93	THR
24	D4	198	ILE
25	E4	144	ALA
25	E4	214	ASN
26	F4	17	ILE
26	F4	48	TYR
26	F4	57	ALA
26	F4	202	SER
27	H4	34	SER
27	H4	112	ASN
27	H4	115	LYS
28	I4	75	LYS

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Mol	Chain	Res	Type
28	I4	122	GLY
28	I4	140	LYS
28	I4	143	LYS
28	I4	155	ASN
28	I4	186	ASP
32	Q4	5	GLY
32	Q4	100	VAL
33	R4	83	ASN
33	R4	119	VAL
1	T5	5	THR
1	T5	132	ASP
3	V5	9	VAL
3	V5	10	ASP
3	V5	78	ILE
4	X5	10	ALA
5	a5	13	LYS
5	a5	18	VAL
5	a5	46	GLU
5	a5	89	ARG
6	c5	59	LEU
9	g5	15	ASN
9	g5	28	PRO
9	g5	56	GLN
9	g5	145	GLU
9	g5	261	LEU
10	C5	261	PHE
11	G5	12	CYS
11	G5	20	ASP
11	G5	25	ARG
11	G5	154	ARG
12	J5	37	LEU
12	J5	147	PHE
14	N5	3	ARG
14	N5	102	LEU
14	N5	147	SER
15	O5	48	SER
15	O5	126	ILE
15	O5	128	ARG
16	W5	5	ASN
17	Y5	34	THR
17	Y5	119	GLY
18	Z5	93	SER

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Mol	Chain	Res	Type
19	b5	10	PRO
19	b5	75	GLU
20	e5	29	THR
20	e5	45	VAL
20	e5	46	VAL
22	A5	13	GLU
22	A5	31	ASP
22	A5	170	SER
22	A5	210	ILE
23	B5	22	VAL
23	B5	37	ALA
23	B5	83	LYS
23	B5	190	PRO
24	D5	93	THR
24	D5	198	ILE
25	E5	144	ALA
25	E5	214	ASN
26	F5	17	ILE
26	F5	48	TYR
26	F5	57	ALA
26	F5	202	SER
27	H5	34	SER
27	H5	115	LYS
28	I5	75	LYS
28	I5	122	GLY
28	I5	140	LYS
28	I5	143	LYS
28	I5	155	ASN
28	I5	186	ASP
31	P5	108	LYS
32	Q5	5	GLY
32	Q5	100	VAL
33	R5	83	ASN
33	R5	119	VAL
1	T6	5	THR
1	T6	132	ASP
3	V6	9	VAL
3	V6	10	ASP
3	V6	78	ILE
4	X6	10	ALA
5	a6	13	LYS
5	a6	18	VAL

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Mol	Chain	Res	Type
5	a6	46	GLU
5	a6	89	ARG
6	c6	59	LEU
9	g6	15	ASN
9	g6	28	PRO
9	g6	56	GLN
9	g6	145	GLU
9	g6	261	LEU
10	C6	261	PHE
11	G6	12	CYS
11	G6	20	ASP
11	G6	25	ARG
11	G6	154	ARG
12	J6	37	LEU
12	J6	147	PHE
14	N6	3	ARG
14	N6	29	THR
14	N6	102	LEU
14	N6	147	SER
15	O6	48	SER
15	O6	126	ILE
15	O6	128	ARG
16	W6	5	ASN
17	Y6	34	THR
17	Y6	119	GLY
18	Z6	93	SER
19	b6	10	PRO
19	b6	75	GLU
20	e6	29	THR
20	e6	49	PHE
22	A6	13	GLU
22	A6	31	ASP
22	A6	170	SER
22	A6	210	ILE
23	B6	37	ALA
23	B6	83	LYS
23	B6	190	PRO
24	D6	93	THR
24	D6	198	ILE
25	E6	144	ALA
25	E6	214	ASN
26	F6	17	ILE

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Mol	Chain	Res	Type
26	F6	48	TYR
26	F6	57	ALA
26	F6	139	VAL
26	F6	202	SER
27	H6	34	SER
27	H6	115	LYS
28	I6	75	LYS
28	I6	122	GLY
28	I6	140	LYS
28	I6	143	LYS
28	I6	155	ASN
28	I6	186	ASP
32	Q6	5	GLY
32	Q6	100	VAL
33	R6	83	ASN
33	R6	119	VAL
36	k1	93	PRO
36	k1	171	ASN
36	k3	171	ASN
36	k4	171	ASN
36	k5	171	ASN
1	T1	34	VAL
3	V1	36	VAL
4	X1	46	HIS
4	X1	64	SER
4	X1	77	ASN
4	X1	79	LYS
4	X1	109	GLY
4	X1	126	ALA
5	a1	5	ARG
5	a1	61	ALA
5	a1	102	ARG
6	c1	36	ASP
8	f1	100	LEU
9	g1	105	THR
9	g1	244	ASN
9	g1	246	TYR
10	C1	188	CYS
10	C1	226	ALA
10	C1	273	LEU
11	G1	175	LYS
11	G1	212	LEU

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Mol	Chain	Res	Type
11	G1	213	LEU
12	J1	119	LEU
12	J1	122	SER
13	M1	114	TYR
14	N1	12	SER
15	O1	65	ASP
15	O1	67	ASP
15	O1	68	GLU
15	O1	138	ASP
15	O1	140	THR
16	W1	93	LEU
17	Y1	3	ASP
18	Z1	112	ASN
22	A1	98	PRO
23	B1	76	ASN
24	D1	44	THR
24	D1	215	ASP
24	D1	216	GLU
25	E1	77	ARG
25	E1	93	ASP
25	E1	196	THR
25	E1	232	ASN
26	F1	42	LYS
26	F1	47	LYS
26	F1	85	LYS
26	F1	139	VAL
27	H1	112	ASN
27	H1	148	LEU
28	I1	86	SER
28	I1	132	GLU
28	I1	180	GLY
30	L1	3	ASP
30	L1	21	LYS
30	L1	33	LEU
30	L1	133	PRO
30	L1	152	LYS
31	P1	11	THR
32	Q1	6	PRO
32	Q1	48	GLN
32	Q1	56	LEU
32	Q1	101	ASP
32	Q1	145	TYR

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Mol	Chain	Res	Type
1	T2	34	VAL
3	V2	36	VAL
4	X2	46	HIS
4	X2	64	SER
4	X2	77	ASN
4	X2	79	LYS
4	X2	109	GLY
4	X2	126	ALA
5	a2	61	ALA
5	a2	102	ARG
6	c2	36	ASP
8	f2	100	LEU
9	g2	105	THR
9	g2	244	ASN
9	g2	246	TYR
10	C2	188	CYS
10	C2	226	ALA
10	C2	273	LEU
11	G2	175	LYS
11	G2	212	LEU
11	G2	213	LEU
12	J2	119	LEU
12	J2	122	SER
13	M2	114	TYR
14	N2	12	SER
15	O2	65	ASP
15	O2	67	ASP
15	O2	68	GLU
15	O2	138	ASP
15	O2	140	THR
16	W2	93	LEU
17	Y2	3	ASP
18	Z2	112	ASN
20	e2	6	LEU
20	e2	51	LYS
22	A2	98	PRO
23	B2	76	ASN
24	D2	44	THR
24	D2	215	ASP
24	D2	216	GLU
25	E2	77	ARG
25	E2	93	ASP

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Mol	Chain	Res	Type
25	E2	196	THR
25	E2	232	ASN
26	F2	42	LYS
26	F2	47	LYS
26	F2	85	LYS
26	F2	139	VAL
27	H2	148	LEU
28	I2	86	SER
28	I2	132	GLU
28	I2	180	GLY
30	L2	3	ASP
30	L2	21	LYS
30	L2	33	LEU
30	L2	133	PRO
30	L2	152	LYS
31	P2	11	THR
32	Q2	6	PRO
32	Q2	48	GLN
32	Q2	56	LEU
32	Q2	101	ASP
32	Q2	145	TYR
33	R2	73	LEU
33	R2	75	GLU
1	T3	34	VAL
3	V3	36	VAL
4	X3	46	HIS
4	X3	64	SER
4	X3	77	ASN
4	X3	79	LYS
4	X3	109	GLY
4	X3	126	ALA
5	a3	61	ALA
5	a3	102	ARG
6	c3	36	ASP
8	f3	100	LEU
9	g3	105	THR
9	g3	244	ASN
9	g3	246	TYR
10	C3	188	CYS
10	C3	226	ALA
10	C3	273	LEU
11	G3	175	LYS

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Mol	Chain	Res	Type
11	G3	212	LEU
11	G3	213	LEU
12	J3	119	LEU
12	J3	122	SER
13	M3	114	TYR
14	N3	12	SER
15	O3	65	ASP
15	O3	67	ASP
15	O3	68	GLU
15	O3	138	ASP
15	O3	140	THR
16	W3	93	LEU
16	W3	122	GLY
17	Y3	3	ASP
18	Z3	112	ASN
20	e3	51	LYS
22	A3	98	PRO
23	B3	76	ASN
24	D3	44	THR
24	D3	215	ASP
24	D3	216	GLU
25	E3	77	ARG
25	E3	93	ASP
25	E3	196	THR
25	E3	232	ASN
26	F3	42	LYS
26	F3	47	LYS
26	F3	85	LYS
26	F3	139	VAL
27	H3	112	ASN
27	H3	148	LEU
28	I3	86	SER
28	I3	132	GLU
28	I3	180	GLY
30	L3	3	ASP
30	L3	21	LYS
30	L3	33	LEU
30	L3	133	PRO
32	Q3	6	PRO
32	Q3	48	GLN
32	Q3	56	LEU
32	Q3	101	ASP

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Mol	Chain	Res	Type
32	Q3	145	TYR
1	T4	34	VAL
3	V4	36	VAL
4	X4	46	HIS
4	X4	64	SER
4	X4	77	ASN
4	X4	79	LYS
4	X4	109	GLY
4	X4	126	ALA
5	a4	61	ALA
5	a4	102	ARG
6	c4	36	ASP
8	f4	100	LEU
9	g4	105	THR
9	g4	244	ASN
9	g4	246	TYR
10	C4	188	CYS
10	C4	226	ALA
10	C4	273	LEU
11	G4	175	LYS
11	G4	212	LEU
11	G4	213	LEU
12	J4	119	LEU
12	J4	122	SER
13	M4	114	TYR
14	N4	12	SER
15	O4	65	ASP
15	O4	67	ASP
15	O4	68	GLU
15	O4	138	ASP
15	O4	140	THR
16	W4	93	LEU
17	Y4	3	ASP
18	Z4	112	ASN
20	e4	4	GLY
20	e4	51	LYS
22	A4	98	PRO
24	D4	44	THR
24	D4	215	ASP
24	D4	216	GLU
25	E4	77	ARG
25	E4	93	ASP

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Mol	Chain	Res	Type
25	E4	196	THR
25	E4	232	ASN
26	F4	42	LYS
26	F4	47	LYS
26	F4	85	LYS
26	F4	139	VAL
27	H4	148	LEU
28	I4	86	SER
28	I4	132	GLU
28	I4	180	GLY
30	L4	3	ASP
30	L4	21	LYS
30	L4	33	LEU
30	L4	133	PRO
30	L4	152	LYS
31	P4	11	THR
32	Q4	6	PRO
32	Q4	48	GLN
32	Q4	56	LEU
32	Q4	101	ASP
32	Q4	145	TYR
33	R4	73	LEU
1	T5	34	VAL
3	V5	36	VAL
4	X5	46	HIS
4	X5	64	SER
4	X5	77	ASN
4	X5	79	LYS
4	X5	109	GLY
4	X5	126	ALA
5	a5	61	ALA
5	a5	102	ARG
6	c5	36	ASP
8	f5	100	LEU
9	g5	105	THR
9	g5	244	ASN
9	g5	246	TYR
10	C5	188	CYS
10	C5	226	ALA
10	C5	273	LEU
11	G5	175	LYS
11	G5	212	LEU

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Mol	Chain	Res	Type
11	G5	213	LEU
12	J5	119	LEU
12	J5	122	SER
13	M5	114	TYR
14	N5	12	SER
15	O5	65	ASP
15	O5	68	GLU
15	O5	138	ASP
15	O5	140	THR
16	W5	93	LEU
17	Y5	3	ASP
18	Z5	112	ASN
22	A5	98	PRO
24	D5	44	THR
24	D5	215	ASP
24	D5	216	GLU
25	E5	77	ARG
25	E5	93	ASP
25	E5	196	THR
25	E5	232	ASN
26	F5	42	LYS
26	F5	47	LYS
26	F5	85	LYS
26	F5	139	VAL
27	H5	112	ASN
27	H5	148	LEU
28	I5	86	SER
28	I5	132	GLU
28	I5	180	GLY
30	L5	3	ASP
30	L5	21	LYS
30	L5	33	LEU
30	L5	133	PRO
32	Q5	6	PRO
32	Q5	48	GLN
32	Q5	56	LEU
32	Q5	101	ASP
32	Q5	145	TYR
33	R5	73	LEU
1	T6	34	VAL
3	V6	36	VAL
4	X6	46	HIS

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Mol	Chain	Res	Type
4	X6	64	SER
4	X6	77	ASN
4	X6	79	LYS
4	X6	109	GLY
4	X6	126	ALA
5	a6	61	ALA
5	a6	102	ARG
6	c6	36	ASP
8	f6	100	LEU
9	g6	105	THR
9	g6	244	ASN
9	g6	246	TYR
10	C6	188	CYS
10	C6	226	ALA
10	C6	273	LEU
11	G6	175	LYS
11	G6	212	LEU
11	G6	213	LEU
12	J6	119	LEU
12	J6	122	SER
13	M6	114	TYR
14	N6	12	SER
15	O6	65	ASP
15	O6	67	ASP
15	O6	68	GLU
15	O6	138	ASP
15	O6	140	THR
16	W6	93	LEU
17	Y6	3	ASP
18	Z6	112	ASN
20	e6	51	LYS
22	A6	98	PRO
23	B6	76	ASN
24	D6	44	THR
24	D6	215	ASP
24	D6	216	GLU
25	E6	77	ARG
25	E6	93	ASP
25	E6	196	THR
25	E6	232	ASN
26	F6	42	LYS
26	F6	47	LYS

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Mol	Chain	Res	Type
26	F6	85	LYS
27	H6	112	ASN
27	H6	148	LEU
28	I6	86	SER
28	I6	132	GLU
28	I6	180	GLY
30	L6	3	ASP
30	L6	21	LYS
30	L6	33	LEU
30	L6	133	PRO
30	L6	152	LYS
31	P6	11	THR
32	Q6	6	PRO
32	Q6	48	GLN
32	Q6	56	LEU
32	Q6	101	ASP
32	Q6	145	TYR
37	l1	116	THR
37	l1	117	ILE
37	l2	116	THR
37	l2	117	ILE
37	l3	116	THR
37	l3	117	ILE
37	l4	116	THR
37	l4	117	ILE
37	l5	116	THR
37	l5	117	ILE
37	l6	116	THR
37	l6	117	ILE
1	T1	6	VAL
2	U1	48	LEU
4	X1	9	THR
4	X1	87	ASN
4	X1	117	GLY
5	a1	62	TYR
5	a1	64	LEU
8	f1	96	LYS
9	g1	191	HIS
10	C1	85	SER
10	C1	134	ASN
10	C1	264	SER
10	C1	276	THR

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Mol	Chain	Res	Type
11	G1	146	ASN
11	G1	147	LEU
11	G1	152	ASP
12	J1	138	ARG
13	M1	117	GLU
14	N1	143	SER
15	O1	47	LEU
15	O1	129	ILE
16	W1	111	MET
17	Y1	51	THR
17	Y1	53	ASP
18	Z1	49	LEU
22	A1	4	ALA
23	B1	86	LEU
23	B1	223	PHE
24	D1	83	SER
24	D1	153	VAL
24	D1	206	ASP
24	D1	222	PRO
24	D1	223	ILE
25	E1	131	VAL
25	E1	168	LYS
26	F1	138	ALA
27	H1	12	ASN
27	H1	38	ALA
27	H1	138	GLU
27	H1	162	GLN
29	K1	39	ASN
29	K1	41	PRO
29	K1	91	PRO
30	L1	4	ILE
30	L1	6	THR
30	L1	150	GLY
31	P1	16	THR
32	Q1	144	SER
33	R1	80	ARG
1	T2	6	VAL
2	U2	48	LEU
4	X2	9	THR
4	X2	87	ASN
4	X2	117	GLY
5	a2	5	ARG

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Mol	Chain	Res	Type
5	a2	62	TYR
5	a2	64	LEU
8	f2	96	LYS
9	g2	191	HIS
10	C2	85	SER
10	C2	134	ASN
10	C2	264	SER
10	C2	276	THR
11	G2	146	ASN
11	G2	147	LEU
11	G2	152	ASP
12	J2	138	ARG
13	M2	117	GLU
14	N2	143	SER
15	O2	47	LEU
15	O2	129	ILE
16	W2	111	MET
17	Y2	51	THR
17	Y2	53	ASP
18	Z2	49	LEU
22	A2	4	ALA
23	B2	86	LEU
23	B2	223	PHE
24	D2	153	VAL
24	D2	206	ASP
24	D2	222	PRO
24	D2	223	ILE
25	E2	131	VAL
25	E2	168	LYS
26	F2	138	ALA
27	H2	12	ASN
27	H2	38	ALA
27	H2	138	GLU
27	H2	162	GLN
29	K2	39	ASN
29	K2	41	PRO
29	K2	91	PRO
30	L2	4	ILE
30	L2	6	THR
30	L2	148	ALA
31	P2	16	THR
32	Q2	144	SER

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Mol	Chain	Res	Type
33	R2	80	ARG
1	T3	6	VAL
2	U3	48	LEU
4	X3	9	THR
4	X3	87	ASN
4	X3	117	GLY
5	a3	5	ARG
5	a3	62	TYR
5	a3	64	LEU
8	f3	96	LYS
9	g3	191	HIS
10	C3	85	SER
10	C3	134	ASN
10	C3	264	SER
10	C3	276	THR
11	G3	146	ASN
11	G3	147	LEU
11	G3	152	ASP
12	J3	138	ARG
13	M3	117	GLU
14	N3	143	SER
15	O3	47	LEU
15	O3	129	ILE
16	W3	3	ARG
16	W3	111	MET
17	Y3	51	THR
17	Y3	53	ASP
18	Z3	49	LEU
22	A3	4	ALA
23	B3	86	LEU
23	B3	223	PHE
24	D3	153	VAL
24	D3	206	ASP
24	D3	222	PRO
24	D3	223	ILE
25	E3	68	ARG
25	E3	131	VAL
26	F3	138	ALA
27	H3	12	ASN
27	H3	38	ALA
27	H3	138	GLU
27	H3	162	GLN

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Mol	Chain	Res	Type
29	K3	39	ASN
29	K3	41	PRO
29	K3	91	PRO
30	L3	4	ILE
30	L3	6	THR
32	Q3	144	SER
33	R3	80	ARG
1	T4	6	VAL
2	U4	48	LEU
4	X4	9	THR
4	X4	87	ASN
4	X4	117	GLY
5	a4	5	ARG
5	a4	62	TYR
5	a4	64	LEU
8	f4	96	LYS
9	g4	191	HIS
10	C4	85	SER
10	C4	134	ASN
10	C4	264	SER
10	C4	276	THR
11	G4	146	ASN
11	G4	147	LEU
11	G4	152	ASP
12	J4	138	ARG
13	M4	117	GLU
14	N4	143	SER
15	O4	47	LEU
15	O4	129	ILE
16	W4	3	ARG
16	W4	111	MET
17	Y4	51	THR
17	Y4	53	ASP
18	Z4	49	LEU
22	A4	4	ALA
23	B4	76	ASN
23	B4	86	LEU
23	B4	223	PHE
24	D4	83	SER
24	D4	153	VAL
24	D4	206	ASP
24	D4	222	PRO

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Mol	Chain	Res	Type
24	D4	223	ILE
25	E4	131	VAL
26	F4	138	ALA
27	H4	12	ASN
27	H4	38	ALA
27	H4	138	GLU
29	K4	39	ASN
29	K4	41	PRO
29	K4	91	PRO
30	L4	4	ILE
30	L4	6	THR
31	P4	16	THR
32	Q4	144	SER
33	R4	80	ARG
33	R4	110	ASP
1	T5	6	VAL
2	U5	48	LEU
4	X5	9	THR
4	X5	87	ASN
4	X5	117	GLY
5	a5	5	ARG
5	a5	62	TYR
5	a5	64	LEU
8	f5	96	LYS
9	g5	191	HIS
10	C5	85	SER
10	C5	134	ASN
10	C5	264	SER
10	C5	276	THR
11	G5	146	ASN
11	G5	147	LEU
11	G5	152	ASP
12	J5	138	ARG
13	M5	117	GLU
14	N5	143	SER
15	O5	47	LEU
15	O5	67	ASP
15	O5	129	ILE
16	W5	111	MET
17	Y5	51	THR
17	Y5	53	ASP
18	Z5	49	LEU

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Mol	Chain	Res	Type
22	A5	4	ALA
23	B5	76	ASN
23	B5	86	LEU
23	B5	223	PHE
24	D5	153	VAL
24	D5	206	ASP
24	D5	222	PRO
24	D5	223	ILE
25	E5	68	ARG
25	E5	131	VAL
26	F5	138	ALA
27	H5	12	ASN
27	H5	38	ALA
27	H5	138	GLU
27	H5	162	GLN
29	K5	39	ASN
29	K5	41	PRO
29	K5	91	PRO
30	L5	4	ILE
30	L5	6	THR
32	Q5	144	SER
33	R5	80	ARG
33	R5	110	ASP
1	T6	6	VAL
2	U6	48	LEU
4	X6	9	THR
4	X6	87	ASN
4	X6	117	GLY
5	a6	5	ARG
5	a6	62	TYR
5	a6	64	LEU
8	f6	96	LYS
9	g6	191	HIS
10	C6	85	SER
10	C6	134	ASN
10	C6	264	SER
10	C6	276	THR
11	G6	146	ASN
11	G6	147	LEU
11	G6	152	ASP
12	J6	138	ARG
13	M6	117	GLU

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Mol	Chain	Res	Type
14	N6	143	SER
15	O6	47	LEU
15	O6	129	ILE
16	W6	3	ARG
16	W6	111	MET
17	Y6	51	THR
17	Y6	53	ASP
18	Z6	49	LEU
22	A6	4	ALA
23	B6	86	LEU
23	B6	223	PHE
24	D6	153	VAL
24	D6	206	ASP
24	D6	222	PRO
24	D6	223	ILE
25	E6	68	ARG
25	E6	131	VAL
25	E6	168	LYS
26	F6	138	ALA
27	H6	12	ASN
27	H6	38	ALA
27	H6	138	GLU
27	H6	162	GLN
29	K6	39	ASN
29	K6	41	PRO
29	K6	91	PRO
30	L6	4	ILE
30	L6	6	THR
31	P6	16	THR
32	Q6	144	SER
33	R6	80	ARG
33	R6	110	ASP
36	k6	93	PRO
2	U1	98	VAL
3	V1	45	ARG
4	X1	54	LYS
4	X1	127	ASN
8	f1	93	HIS
10	C1	176	LYS
11	G1	105	ASN
12	J1	76	ALA
14	N1	8	GLY

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Mol	Chain	Res	Type
15	O1	56	VAL
15	O1	112	ALA
15	O1	134	PRO
16	W1	3	ARG
18	Z1	108	ILE
20	e1	4	GLY
20	e1	14	GLY
24	D1	68	GLU
24	D1	220	THR
25	E1	30	ARG
25	E1	68	ARG
25	E1	69	PHE
25	E1	245	ARG
26	F1	20	PHE
26	F1	32	ASP
27	H1	89	GLY
27	H1	99	ARG
27	H1	100	ILE
29	K1	92	ALA
31	P1	15	PHE
33	R1	65	PRO
33	R1	110	ASP
2	U2	98	VAL
3	V2	45	ARG
4	X2	54	LYS
4	X2	127	ASN
8	f2	93	HIS
10	C2	176	LYS
11	G2	105	ASN
14	N2	8	GLY
15	O2	56	VAL
15	O2	112	ALA
15	O2	134	PRO
16	W2	3	ARG
18	Z2	108	ILE
20	e2	14	GLY
20	e2	48	THR
24	D2	68	GLU
24	D2	83	SER
24	D2	220	THR
25	E2	30	ARG
25	E2	68	ARG

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Mol	Chain	Res	Type
25	E2	69	PHE
25	E2	245	ARG
26	F2	20	PHE
26	F2	32	ASP
27	H2	89	GLY
27	H2	99	ARG
27	H2	100	ILE
29	K2	92	ALA
31	P2	15	PHE
33	R2	110	ASP
2	U3	98	VAL
3	V3	45	ARG
4	X3	54	LYS
4	X3	127	ASN
8	f3	93	HIS
10	C3	176	LYS
11	G3	105	ASN
12	J3	76	ALA
14	N3	8	GLY
15	O3	56	VAL
15	O3	112	ALA
15	O3	134	PRO
18	Z3	108	ILE
20	e3	4	GLY
20	e3	14	GLY
20	e3	48	THR
24	D3	68	GLU
24	D3	83	SER
24	D3	220	THR
25	E3	30	ARG
25	E3	69	PHE
25	E3	168	LYS
25	E3	245	ARG
26	F3	20	PHE
26	F3	32	ASP
27	H3	89	GLY
27	H3	100	ILE
33	R3	110	ASP
2	U4	98	VAL
3	V4	45	ARG
4	X4	54	LYS
4	X4	127	ASN

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Mol	Chain	Res	Type
8	f4	93	HIS
10	C4	176	LYS
11	G4	105	ASN
12	J4	76	ALA
14	N4	8	GLY
15	O4	56	VAL
15	O4	134	PRO
18	Z4	108	ILE
20	e4	48	THR
24	D4	68	GLU
24	D4	220	THR
25	E4	30	ARG
25	E4	68	ARG
25	E4	69	PHE
25	E4	168	LYS
25	E4	245	ARG
26	F4	20	PHE
26	F4	32	ASP
27	H4	89	GLY
27	H4	99	ARG
27	H4	100	ILE
29	K4	92	ALA
30	L4	148	ALA
31	P4	15	PHE
2	U5	98	VAL
3	V5	45	ARG
4	X5	54	LYS
4	X5	127	ASN
8	f5	93	HIS
10	C5	176	LYS
11	G5	105	ASN
12	J5	76	ALA
14	N5	8	GLY
15	O5	56	VAL
15	O5	112	ALA
15	O5	134	PRO
16	W5	3	ARG
18	Z5	108	ILE
20	e5	4	GLY
20	e5	14	GLY
24	D5	68	GLU
24	D5	83	SER

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Mol	Chain	Res	Type
24	D5	220	THR
25	E5	30	ARG
25	E5	69	PHE
25	E5	168	LYS
25	E5	245	ARG
26	F5	20	PHE
26	F5	32	ASP
27	H5	89	GLY
27	H5	99	ARG
27	H5	100	ILE
2	U6	98	VAL
3	V6	45	ARG
4	X6	54	LYS
4	X6	127	ASN
8	f6	93	HIS
10	C6	176	LYS
11	G6	105	ASN
14	N6	8	GLY
15	O6	56	VAL
15	O6	112	ALA
15	O6	134	PRO
18	Z6	108	ILE
20	e6	4	GLY
20	e6	14	GLY
20	e6	48	THR
24	D6	68	GLU
24	D6	83	SER
24	D6	220	THR
25	E6	30	ARG
25	E6	69	PHE
25	E6	245	ARG
26	F6	20	PHE
26	F6	32	ASP
27	H6	89	GLY
27	H6	99	ARG
27	H6	100	ILE
29	K6	92	ALA
31	P6	15	PHE
36	k1	92	LEU
37	l3	139	ILE
37	l4	139	ILE
1	T1	29	LYS

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Mol	Chain	Res	Type
1	T1	142	ASN
5	a1	98	PRO
6	c1	38	THR
11	G1	68	LEU
24	D1	154	ASP
26	F1	41	VAL
27	H1	190	PRO
28	I1	97	VAL
30	L1	98	LYS
33	R1	97	GLU
1	T2	29	LYS
1	T2	142	ASN
5	a2	98	PRO
11	G2	68	LEU
12	J2	76	ALA
24	D2	154	ASP
26	F2	41	VAL
28	I2	97	VAL
30	L2	98	LYS
33	R2	97	GLU
1	T3	142	ASN
5	a3	98	PRO
10	C3	274	VAL
11	G3	68	LEU
24	D3	154	ASP
26	F3	41	VAL
27	H3	99	ARG
28	I3	97	VAL
29	K3	92	ALA
30	L3	98	LYS
33	R3	97	GLU
1	T4	142	ASN
5	a4	98	PRO
15	O4	112	ALA
24	D4	154	ASP
26	F4	41	VAL
27	H4	113	LYS
28	I4	97	VAL
30	L4	98	LYS
33	R4	97	GLU
1	T5	29	LYS
1	T5	142	ASN

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Mol	Chain	Res	Type
5	a5	98	PRO
6	c5	38	THR
10	C5	274	VAL
11	G5	68	LEU
14	N5	68	GLY
19	b5	22	LYS
24	D5	154	ASP
26	F5	41	VAL
27	H5	190	PRO
28	I5	97	VAL
29	K5	92	ALA
30	L5	98	LYS
33	R5	97	GLU
1	T6	142	ASN
5	a6	98	PRO
11	G6	68	LEU
12	J6	76	ALA
24	D6	154	ASP
26	F6	41	VAL
27	H6	190	PRO
28	I6	97	VAL
30	L6	98	LYS
33	R6	97	GLU
36	k1	177	MET
36	k2	167	ILE
37	l1	139	ILE
37	l1	175	ILE
37	l2	139	ILE
37	l2	175	ILE
37	l3	175	ILE
37	l4	175	ILE
37	l5	139	ILE
37	l5	175	ILE
37	l6	139	ILE
37	l6	175	ILE
6	c1	8	PRO
9	g1	13	GLY
10	C1	274	VAL
12	J1	171	GLY
14	N1	68	GLY
6	c2	8	PRO
9	g2	13	GLY

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Mol	Chain	Res	Type
10	C2	274	VAL
12	J2	171	GLY
14	N2	68	GLY
27	H2	190	PRO
6	c3	8	PRO
9	g3	13	GLY
12	J3	171	GLY
14	N3	68	GLY
27	H3	190	PRO
6	c4	8	PRO
9	g4	13	GLY
10	C4	274	VAL
12	J4	171	GLY
14	N4	68	GLY
27	H4	190	PRO
6	c5	8	PRO
9	g5	13	GLY
12	J5	171	GLY
31	P5	109	PRO
9	g6	13	GLY
10	C6	274	VAL
12	J6	171	GLY
14	N6	68	GLY
24	D1	41	VAL
24	D1	200	PRO
25	E1	15	PRO
24	D2	200	PRO
25	E2	15	PRO
24	D3	41	VAL
25	E3	15	PRO
25	E4	15	PRO
25	E5	15	PRO
6	c6	8	PRO
24	D6	41	VAL
24	D6	200	PRO
25	E6	15	PRO
36	k6	167	ILE
9	g1	61	GLY
9	g1	267	VAL
28	I1	102	VAL
31	P1	129	GLY
33	R1	121	GLN

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Mol	Chain	Res	Type
9	g2	61	GLY
9	g2	267	VAL
24	D2	41	VAL
28	I2	102	VAL
33	R2	121	GLN
9	g3	61	GLY
9	g3	267	VAL
24	D3	200	PRO
28	I3	102	VAL
33	R3	121	GLN
9	g4	61	GLY
9	g4	267	VAL
24	D4	41	VAL
24	D4	200	PRO
31	P4	129	GLY
33	R4	121	GLN
9	g5	61	GLY
9	g5	267	VAL
24	D5	41	VAL
24	D5	200	PRO
28	I5	102	VAL
33	R5	121	GLN
9	g6	61	GLY
9	g6	267	VAL
28	I6	102	VAL
33	R6	121	GLN
36	k4	167	ILE
26	F1	128	ILE
26	F2	128	ILE
31	P2	129	GLY
26	F3	128	ILE
31	P3	129	GLY
26	F4	128	ILE
28	I4	102	VAL
26	F5	128	ILE
31	P5	129	GLY
26	F6	128	ILE
31	P6	129	GLY
37	l1	115	VAL
37	l2	115	VAL
37	l3	115	VAL
37	l4	115	VAL

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Mol	Chain	Res	Type
37	l5	115	VAL
37	l6	115	VAL
6	c1	22	GLY
6	c2	22	GLY
23	B2	132	GLY
6	c3	22	GLY
19	b3	76	GLY
6	c4	22	GLY
19	b4	76	GLY
6	c5	22	GLY
19	b5	76	GLY
6	c6	22	GLY

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 X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	T1	113/115 (98%)	113 (100%)	0	100	100
1	T2	113/115 (98%)	113 (100%)	0	100	100
1	T3	113/115 (98%)	113 (100%)	0	100	100
1	T4	113/115 (98%)	113 (100%)	0	100	100
1	T5	113/115 (98%)	113 (100%)	0	100	100
1	T6	113/115 (98%)	113 (100%)	0	100	100
2	U1	94/107 (88%)	93 (99%)	1 (1%)	78	89
2	U2	94/107 (88%)	93 (99%)	1 (1%)	78	89
2	U3	94/107 (88%)	93 (99%)	1 (1%)	78	89
2	U4	94/107 (88%)	93 (99%)	1 (1%)	78	89
2	U5	94/107 (88%)	93 (99%)	1 (1%)	78	89
2	U6	94/107 (88%)	93 (99%)	1 (1%)	78	89
3	V1	67/67 (100%)	67 (100%)	0	100	100
3	V2	67/67 (100%)	67 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	V3	67/67 (100%)	67 (100%)	0	100	100
3	V4	67/67 (100%)	67 (100%)	0	100	100
3	V5	67/67 (100%)	67 (100%)	0	100	100
3	V6	67/67 (100%)	67 (100%)	0	100	100
4	X1	113/115 (98%)	113 (100%)	0	100	100
4	X2	113/115 (98%)	113 (100%)	0	100	100
4	X3	113/115 (98%)	113 (100%)	0	100	100
4	X4	113/115 (98%)	113 (100%)	0	100	100
4	X5	113/115 (98%)	113 (100%)	0	100	100
4	X6	113/115 (98%)	113 (100%)	0	100	100
5	a1	90/98 (92%)	88 (98%)	2 (2%)	57	79
5	a2	90/98 (92%)	88 (98%)	2 (2%)	57	79
5	a3	90/98 (92%)	88 (98%)	2 (2%)	57	79
5	a4	90/98 (92%)	87 (97%)	3 (3%)	43	70
5	a5	90/98 (92%)	87 (97%)	3 (3%)	43	70
5	a6	90/98 (92%)	88 (98%)	2 (2%)	57	79
6	c1	57/62 (92%)	57 (100%)	0	100	100
6	c2	57/62 (92%)	57 (100%)	0	100	100
6	c3	57/62 (92%)	57 (100%)	0	100	100
6	c4	57/62 (92%)	57 (100%)	0	100	100
6	c5	57/62 (92%)	57 (100%)	0	100	100
6	c6	57/62 (92%)	57 (100%)	0	100	100
7	d1	47/49 (96%)	47 (100%)	0	100	100
7	d2	47/49 (96%)	47 (100%)	0	100	100
7	d3	47/49 (96%)	47 (100%)	0	100	100
7	d4	47/49 (96%)	47 (100%)	0	100	100
7	d5	47/49 (96%)	47 (100%)	0	100	100
7	d6	47/49 (96%)	47 (100%)	0	100	100
8	f1	65/140 (46%)	61 (94%)	4 (6%)	21	54
8	f2	65/140 (46%)	61 (94%)	4 (6%)	21	54
8	f3	65/140 (46%)	60 (92%)	5 (8%)	15	47

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
8	f4	65/140 (46%)	59 (91%)	6 (9%)	11	38
8	f5	65/140 (46%)	60 (92%)	5 (8%)	15	47
8	f6	65/140 (46%)	60 (92%)	5 (8%)	15	47
9	g1	272/275 (99%)	272 (100%)	0	100	100
9	g2	272/275 (99%)	272 (100%)	0	100	100
9	g3	272/275 (99%)	272 (100%)	0	100	100
9	g4	272/275 (99%)	272 (100%)	0	100	100
9	g5	272/275 (99%)	272 (100%)	0	100	100
9	g6	272/275 (99%)	272 (100%)	0	100	100
10	C1	188/225 (84%)	186 (99%)	2 (1%)	78	89
10	C2	188/225 (84%)	186 (99%)	2 (1%)	78	89
10	C3	188/225 (84%)	186 (99%)	2 (1%)	78	89
10	C4	188/225 (84%)	186 (99%)	2 (1%)	78	89
10	C5	188/225 (84%)	186 (99%)	2 (1%)	78	89
10	C6	188/225 (84%)	186 (99%)	2 (1%)	78	89
11	G1	207/218 (95%)	202 (98%)	5 (2%)	54	77
11	G2	207/218 (95%)	202 (98%)	5 (2%)	54	77
11	G3	207/218 (95%)	202 (98%)	5 (2%)	54	77
11	G4	207/218 (95%)	202 (98%)	5 (2%)	54	77
11	G5	207/218 (95%)	202 (98%)	5 (2%)	54	77
11	G6	207/218 (95%)	202 (98%)	5 (2%)	54	77
12	J1	161/168 (96%)	161 (100%)	0	100	100
12	J2	161/168 (96%)	161 (100%)	0	100	100
12	J3	161/168 (96%)	161 (100%)	0	100	100
12	J4	161/168 (96%)	161 (100%)	0	100	100
12	J5	161/168 (96%)	161 (100%)	0	100	100
12	J6	161/168 (96%)	161 (100%)	0	100	100
13	M1	104/108 (96%)	96 (92%)	8 (8%)	15	47
13	M2	104/108 (96%)	96 (92%)	8 (8%)	15	47
13	M3	104/108 (96%)	96 (92%)	8 (8%)	15	47
13	M4	104/108 (96%)	96 (92%)	8 (8%)	15	47

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	M5	104/108 (96%)	96 (92%)	8 (8%)	15	47
13	M6	104/108 (96%)	96 (92%)	8 (8%)	15	47
14	N1	130/131 (99%)	127 (98%)	3 (2%)	56	78
14	N2	130/131 (99%)	127 (98%)	3 (2%)	56	78
14	N3	130/131 (99%)	124 (95%)	6 (5%)	31	62
14	N4	130/131 (99%)	127 (98%)	3 (2%)	56	78
14	N5	130/131 (99%)	124 (95%)	6 (5%)	31	62
14	N6	130/131 (99%)	127 (98%)	3 (2%)	56	78
15	O1	110/119 (92%)	110 (100%)	0	100	100
15	O2	110/119 (92%)	110 (100%)	0	100	100
15	O3	110/119 (92%)	110 (100%)	0	100	100
15	O4	110/119 (92%)	110 (100%)	0	100	100
15	O5	110/119 (92%)	110 (100%)	0	100	100
15	O6	110/119 (92%)	110 (100%)	0	100	100
16	W1	112/113 (99%)	112 (100%)	0	100	100
16	W2	112/113 (99%)	112 (100%)	0	100	100
16	W3	112/113 (99%)	112 (100%)	0	100	100
16	W4	112/113 (99%)	112 (100%)	0	100	100
16	W5	112/113 (99%)	112 (100%)	0	100	100
16	W6	112/113 (99%)	112 (100%)	0	100	100
17	Y1	113/115 (98%)	113 (100%)	0	100	100
17	Y2	113/115 (98%)	113 (100%)	0	100	100
17	Y3	113/115 (98%)	113 (100%)	0	100	100
17	Y4	113/115 (98%)	113 (100%)	0	100	100
17	Y5	113/115 (98%)	113 (100%)	0	100	100
17	Y6	113/115 (98%)	113 (100%)	0	100	100
18	Z1	66/103 (64%)	63 (96%)	3 (4%)	32	63
18	Z2	66/103 (64%)	63 (96%)	3 (4%)	32	63
18	Z3	66/103 (64%)	63 (96%)	3 (4%)	32	63
18	Z4	66/103 (64%)	63 (96%)	3 (4%)	32	63
18	Z5	66/103 (64%)	63 (96%)	3 (4%)	32	63

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	Z6	66/103 (64%)	63 (96%)	3 (4%)	32	63
19	b1	75/76 (99%)	75 (100%)	0	100	100
19	b2	75/76 (99%)	75 (100%)	0	100	100
19	b3	75/76 (99%)	75 (100%)	0	100	100
19	b4	75/76 (99%)	74 (99%)	1 (1%)	73	87
19	b5	75/76 (99%)	75 (100%)	0	100	100
19	b6	75/76 (99%)	75 (100%)	0	100	100
20	e1	47/104 (45%)	44 (94%)	3 (6%)	20	53
20	e2	47/104 (45%)	44 (94%)	3 (6%)	20	53
20	e3	47/104 (45%)	45 (96%)	2 (4%)	33	64
20	e4	47/104 (45%)	42 (89%)	5 (11%)	8	31
20	e5	47/104 (45%)	43 (92%)	4 (8%)	12	43
20	e6	47/104 (45%)	45 (96%)	2 (4%)	33	64
22	A1	184/243 (76%)	183 (100%)	1 (0%)	91	95
22	A2	184/243 (76%)	183 (100%)	1 (0%)	91	95
22	A3	184/243 (76%)	183 (100%)	1 (0%)	91	95
22	A4	184/243 (76%)	183 (100%)	1 (0%)	91	95
22	A5	184/243 (76%)	183 (100%)	1 (0%)	91	95
22	A6	184/243 (76%)	183 (100%)	1 (0%)	91	95
23	B1	195/231 (84%)	195 (100%)	0	100	100
23	B2	195/231 (84%)	195 (100%)	0	100	100
23	B3	195/231 (84%)	195 (100%)	0	100	100
23	B4	195/231 (84%)	195 (100%)	0	100	100
23	B5	195/231 (84%)	195 (100%)	0	100	100
23	B6	195/231 (84%)	195 (100%)	0	100	100
24	D1	190/202 (94%)	190 (100%)	0	100	100
24	D2	190/202 (94%)	190 (100%)	0	100	100
24	D3	190/202 (94%)	190 (100%)	0	100	100
24	D4	190/202 (94%)	190 (100%)	0	100	100
24	D5	190/202 (94%)	190 (100%)	0	100	100
24	D6	190/202 (94%)	190 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
25	E1	224/225 (100%)	224 (100%)	0	100	100
25	E2	224/225 (100%)	224 (100%)	0	100	100
25	E3	224/225 (100%)	224 (100%)	0	100	100
25	E4	224/225 (100%)	224 (100%)	0	100	100
25	E5	224/225 (100%)	224 (100%)	0	100	100
25	E6	224/225 (100%)	224 (100%)	0	100	100
26	F1	161/170 (95%)	158 (98%)	3 (2%)	62	82
26	F2	161/170 (95%)	158 (98%)	3 (2%)	62	82
26	F3	161/170 (95%)	158 (98%)	3 (2%)	62	82
26	F4	161/170 (95%)	158 (98%)	3 (2%)	62	82
26	F5	161/170 (95%)	158 (98%)	3 (2%)	62	82
26	F6	161/170 (95%)	158 (98%)	3 (2%)	62	82
27	H1	169/174 (97%)	169 (100%)	0	100	100
27	H2	169/174 (97%)	169 (100%)	0	100	100
27	H3	169/174 (97%)	169 (100%)	0	100	100
27	H4	169/174 (97%)	167 (99%)	2 (1%)	75	88
27	H5	169/174 (97%)	169 (100%)	0	100	100
27	H6	169/174 (97%)	169 (100%)	0	100	100
28	I1	178/180 (99%)	178 (100%)	0	100	100
28	I2	178/180 (99%)	178 (100%)	0	100	100
28	I3	178/180 (99%)	177 (99%)	1 (1%)	89	94
28	I4	178/180 (99%)	178 (100%)	0	100	100
28	I5	178/180 (99%)	178 (100%)	0	100	100
28	I6	178/180 (99%)	178 (100%)	0	100	100
29	K1	89/136 (65%)	89 (100%)	0	100	100
29	K2	89/136 (65%)	89 (100%)	0	100	100
29	K3	89/136 (65%)	89 (100%)	0	100	100
29	K4	89/136 (65%)	89 (100%)	0	100	100
29	K5	89/136 (65%)	89 (100%)	0	100	100
29	K6	89/136 (65%)	89 (100%)	0	100	100
30	L1	137/142 (96%)	135 (98%)	2 (2%)	70	85

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
30	L2	137/142 (96%)	134 (98%)	3 (2%)	57	79
30	L3	137/142 (96%)	134 (98%)	3 (2%)	57	79
30	L4	137/142 (96%)	134 (98%)	3 (2%)	57	79
30	L5	137/142 (96%)	134 (98%)	3 (2%)	57	79
30	L6	137/142 (96%)	134 (98%)	3 (2%)	57	79
31	P1	112/130 (86%)	98 (88%)	14 (12%)	5	26
31	P2	112/130 (86%)	95 (85%)	17 (15%)	3	19
31	P3	112/130 (86%)	98 (88%)	14 (12%)	5	26
31	P4	112/130 (86%)	95 (85%)	17 (15%)	3	19
31	P5	112/130 (86%)	94 (84%)	18 (16%)	3	17
31	P6	112/130 (86%)	99 (88%)	13 (12%)	6	28
32	Q1	121/121 (100%)	120 (99%)	1 (1%)	85	92
32	Q2	121/121 (100%)	120 (99%)	1 (1%)	85	92
32	Q3	121/121 (100%)	120 (99%)	1 (1%)	85	92
32	Q4	121/121 (100%)	120 (99%)	1 (1%)	85	92
32	Q5	121/121 (100%)	120 (99%)	1 (1%)	85	92
32	Q6	121/121 (100%)	120 (99%)	1 (1%)	85	92
33	R1	120/122 (98%)	115 (96%)	5 (4%)	34	64
33	R2	120/122 (98%)	113 (94%)	7 (6%)	23	56
33	R3	120/122 (98%)	115 (96%)	5 (4%)	34	64
33	R4	120/122 (98%)	113 (94%)	7 (6%)	23	56
33	R5	120/122 (98%)	115 (96%)	5 (4%)	34	64
33	R6	120/122 (98%)	113 (94%)	7 (6%)	23	56
34	S1	124/132 (94%)	118 (95%)	6 (5%)	30	61
34	S2	124/132 (94%)	118 (95%)	6 (5%)	30	61
34	S3	124/132 (94%)	118 (95%)	6 (5%)	30	61
34	S4	124/132 (94%)	118 (95%)	6 (5%)	30	61
34	S5	124/132 (94%)	118 (95%)	6 (5%)	30	61
34	S6	124/132 (94%)	118 (95%)	6 (5%)	30	61
35	j1	24/24 (100%)	16 (67%)	8 (33%)	0	2
35	j2	24/24 (100%)	16 (67%)	8 (33%)	0	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	j3	24/24 (100%)	16 (67%)	8 (33%)	0	2
35	j4	24/24 (100%)	17 (71%)	7 (29%)	0	3
35	j5	24/24 (100%)	16 (67%)	8 (33%)	0	2
35	j6	24/24 (100%)	16 (67%)	8 (33%)	0	2
36	k1	152/159 (96%)	149 (98%)	3 (2%)	60	81
36	k2	152/159 (96%)	147 (97%)	5 (3%)	43	70
36	k3	152/159 (96%)	148 (97%)	4 (3%)	51	75
36	k4	152/159 (96%)	146 (96%)	6 (4%)	37	66
36	k5	152/159 (96%)	149 (98%)	3 (2%)	60	81
36	k6	152/159 (96%)	147 (97%)	5 (3%)	43	70
37	l1	69/168 (41%)	58 (84%)	11 (16%)	3	18
37	l2	69/168 (41%)	58 (84%)	11 (16%)	3	18
37	l3	69/168 (41%)	58 (84%)	11 (16%)	3	18
37	l4	69/168 (41%)	58 (84%)	11 (16%)	3	18
37	l5	69/168 (41%)	58 (84%)	11 (16%)	3	18
37	l6	69/168 (41%)	58 (84%)	11 (16%)	3	18
All	All	26880/30402 (88%)	26325 (98%)	555 (2%)	59	80

All (555) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	U1	118	ASP
5	a1	100	ARG
5	a1	102	ARG
8	f1	86	THR
8	f1	94	LYS
8	f1	98	VAL
8	f1	116	ARG
10	C1	275	LYS
10	C1	276	THR
11	G1	139	SER
11	G1	146	ASN
11	G1	147	LEU
11	G1	149	LYS
11	G1	151	ASP
13	M1	26	LEU

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Mol	Chain	Res	Type
13	M1	35	ILE
13	M1	36	ARG
13	M1	45	ARG
13	M1	104	VAL
13	M1	116	LYS
13	M1	117	GLU
13	M1	118	SER
14	N1	42	LYS
14	N1	43	LYS
14	N1	149	LEU
18	Z1	85	ARG
18	Z1	88	LEU
18	Z1	89	GLN
20	e1	45	VAL
20	e1	49	PHE
20	e1	52	LYS
22	A1	213	GLU
26	F1	130	ARG
26	F1	134	VAL
26	F1	136	ARG
30	L1	152	LYS
30	L1	153	LYS
31	P1	29	SER
31	P1	37	TYR
31	P1	38	SER
31	P1	40	ARG
31	P1	44	ARG
31	P1	50	ARG
31	P1	78	THR
31	P1	79	HIS
31	P1	115	TYR
31	P1	116	LEU
31	P1	122	THR
31	P1	123	TYR
31	P1	130	ARG
31	P1	133	ILE
32	Q1	1	MET
33	R1	66	VAL
33	R1	69	ILE
33	R1	72	LYS
33	R1	74	GLN
33	R1	80	ARG

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Mol	Chain	Res	Type
34	S1	4	VAL
34	S1	14	ARG
34	S1	19	ASN
34	S1	71	MET
34	S1	129	LEU
34	S1	138	THR
35	j1	2	ARG
35	j1	4	LYS
35	j1	5	TRP
35	j1	9	ARG
35	j1	11	ARG
35	j1	16	LYS
35	j1	19	LYS
35	j1	21	ARG
2	U2	118	ASP
5	a2	100	ARG
5	a2	102	ARG
8	f2	86	THR
8	f2	94	LYS
8	f2	98	VAL
8	f2	116	ARG
10	C2	275	LYS
10	C2	276	THR
11	G2	139	SER
11	G2	146	ASN
11	G2	147	LEU
11	G2	149	LYS
11	G2	151	ASP
13	M2	26	LEU
13	M2	35	ILE
13	M2	36	ARG
13	M2	45	ARG
13	M2	104	VAL
13	M2	116	LYS
13	M2	117	GLU
13	M2	118	SER
14	N2	42	LYS
14	N2	43	LYS
14	N2	149	LEU
18	Z2	85	ARG
18	Z2	88	LEU
18	Z2	89	GLN

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Mol	Chain	Res	Type
20	e2	6	LEU
20	e2	48	THR
20	e2	52	LYS
22	A2	213	GLU
26	F2	130	ARG
26	F2	134	VAL
26	F2	136	ARG
30	L2	147	LYS
30	L2	152	LYS
30	L2	153	LYS
31	P2	29	SER
31	P2	35	GLN
31	P2	37	TYR
31	P2	38	SER
31	P2	40	ARG
31	P2	42	ARG
31	P2	44	ARG
31	P2	45	LEU
31	P2	47	ARG
31	P2	50	ARG
31	P2	78	THR
31	P2	79	HIS
31	P2	115	TYR
31	P2	116	LEU
31	P2	122	THR
31	P2	123	TYR
31	P2	130	ARG
32	Q2	1	MET
33	R2	60	ARG
33	R2	66	VAL
33	R2	69	ILE
33	R2	71	ILE
33	R2	73	LEU
33	R2	75	GLU
33	R2	80	ARG
34	S2	4	VAL
34	S2	14	ARG
34	S2	19	ASN
34	S2	71	MET
34	S2	129	LEU
34	S2	138	THR
35	j2	2	ARG

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Mol	Chain	Res	Type
35	j2	4	LYS
35	j2	5	TRP
35	j2	9	ARG
35	j2	11	ARG
35	j2	16	LYS
35	j2	19	LYS
35	j2	21	ARG
2	U3	118	ASP
5	a3	100	ARG
5	a3	102	ARG
8	f3	82	LYS
8	f3	86	THR
8	f3	94	LYS
8	f3	98	VAL
8	f3	116	ARG
10	C3	275	LYS
10	C3	276	THR
11	G3	139	SER
11	G3	146	ASN
11	G3	147	LEU
11	G3	149	LYS
11	G3	151	ASP
13	M3	26	LEU
13	M3	35	ILE
13	M3	36	ARG
13	M3	45	ARG
13	M3	104	VAL
13	M3	116	LYS
13	M3	117	GLU
13	M3	118	SER
14	N3	42	LYS
14	N3	43	LYS
14	N3	133	ARG
14	N3	134	VAL
14	N3	135	LEU
14	N3	149	LEU
18	Z3	85	ARG
18	Z3	88	LEU
18	Z3	89	GLN
20	e3	48	THR
20	e3	52	LYS
22	A3	213	GLU

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Mol	Chain	Res	Type
26	F3	130	ARG
26	F3	134	VAL
26	F3	136	ARG
28	I3	196	GLU
30	L3	147	LYS
30	L3	153	LYS
30	L3	154	GLN
31	P3	13	ARG
31	P3	29	SER
31	P3	38	SER
31	P3	40	ARG
31	P3	44	ARG
31	P3	45	LEU
31	P3	50	ARG
31	P3	78	THR
31	P3	79	HIS
31	P3	115	TYR
31	P3	116	LEU
31	P3	122	THR
31	P3	123	TYR
31	P3	130	ARG
32	Q3	1	MET
33	R3	63	ARG
33	R3	69	ILE
33	R3	72	LYS
33	R3	74	GLN
33	R3	80	ARG
34	S3	4	VAL
34	S3	14	ARG
34	S3	19	ASN
34	S3	71	MET
34	S3	129	LEU
34	S3	138	THR
35	j3	2	ARG
35	j3	4	LYS
35	j3	5	TRP
35	j3	9	ARG
35	j3	11	ARG
35	j3	16	LYS
35	j3	19	LYS
35	j3	21	ARG
2	U4	118	ASP

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Mol	Chain	Res	Type
5	a4	100	ARG
5	a4	101	PHE
5	a4	102	ARG
8	f4	81	LYS
8	f4	82	LYS
8	f4	86	THR
8	f4	94	LYS
8	f4	98	VAL
8	f4	116	ARG
10	C4	275	LYS
10	C4	276	THR
11	G4	139	SER
11	G4	146	ASN
11	G4	147	LEU
11	G4	149	LYS
11	G4	151	ASP
13	M4	26	LEU
13	M4	35	ILE
13	M4	36	ARG
13	M4	45	ARG
13	M4	104	VAL
13	M4	116	LYS
13	M4	117	GLU
13	M4	118	SER
14	N4	42	LYS
14	N4	43	LYS
14	N4	149	LEU
18	Z4	85	ARG
18	Z4	88	LEU
18	Z4	89	GLN
19	b4	35	VAL
20	e4	6	LEU
20	e4	11	LYS
20	e4	12	VAL
20	e4	48	THR
20	e4	52	LYS
22	A4	213	GLU
26	F4	130	ARG
26	F4	134	VAL
26	F4	136	ARG
27	H4	164	ASN
27	H4	169	LYS

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Mol	Chain	Res	Type
30	L4	147	LYS
30	L4	152	LYS
30	L4	153	LYS
31	P4	29	SER
31	P4	35	GLN
31	P4	37	TYR
31	P4	38	SER
31	P4	40	ARG
31	P4	42	ARG
31	P4	44	ARG
31	P4	45	LEU
31	P4	49	LEU
31	P4	50	ARG
31	P4	78	THR
31	P4	79	HIS
31	P4	115	TYR
31	P4	116	LEU
31	P4	122	THR
31	P4	123	TYR
31	P4	130	ARG
32	Q4	1	MET
33	R4	61	ILE
33	R4	66	VAL
33	R4	69	ILE
33	R4	71	ILE
33	R4	72	LYS
33	R4	73	LEU
33	R4	80	ARG
34	S4	4	VAL
34	S4	14	ARG
34	S4	19	ASN
34	S4	71	MET
34	S4	129	LEU
34	S4	138	THR
35	j4	4	LYS
35	j4	5	TRP
35	j4	9	ARG
35	j4	11	ARG
35	j4	16	LYS
35	j4	19	LYS
35	j4	21	ARG
2	U5	118	ASP

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Mol	Chain	Res	Type
5	a5	100	ARG
5	a5	101	PHE
5	a5	102	ARG
8	f5	82	LYS
8	f5	86	THR
8	f5	94	LYS
8	f5	98	VAL
8	f5	116	ARG
10	C5	275	LYS
10	C5	276	THR
11	G5	139	SER
11	G5	146	ASN
11	G5	147	LEU
11	G5	149	LYS
11	G5	151	ASP
13	M5	26	LEU
13	M5	35	ILE
13	M5	36	ARG
13	M5	45	ARG
13	M5	104	VAL
13	M5	116	LYS
13	M5	117	GLU
13	M5	118	SER
14	N5	42	LYS
14	N5	43	LYS
14	N5	133	ARG
14	N5	134	VAL
14	N5	135	LEU
14	N5	149	LEU
18	Z5	85	ARG
18	Z5	88	LEU
18	Z5	89	GLN
20	e5	33	LYS
20	e5	34	ARG
20	e5	40	ARG
20	e5	52	LYS
22	A5	213	GLU
26	F5	130	ARG
26	F5	134	VAL
26	F5	136	ARG
30	L5	147	LYS
30	L5	152	LYS

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Mol	Chain	Res	Type
30	L5	153	LYS
31	P5	14	LYS
31	P5	29	SER
31	P5	35	GLN
31	P5	37	TYR
31	P5	38	SER
31	P5	40	ARG
31	P5	42	ARG
31	P5	44	ARG
31	P5	45	LEU
31	P5	50	ARG
31	P5	78	THR
31	P5	79	HIS
31	P5	112	ILE
31	P5	115	TYR
31	P5	116	LEU
31	P5	122	THR
31	P5	123	TYR
31	P5	130	ARG
32	Q5	1	MET
33	R5	60	ARG
33	R5	66	VAL
33	R5	69	ILE
33	R5	74	GLN
33	R5	80	ARG
34	S5	4	VAL
34	S5	14	ARG
34	S5	19	ASN
34	S5	71	MET
34	S5	129	LEU
34	S5	138	THR
35	j5	2	ARG
35	j5	4	LYS
35	j5	5	TRP
35	j5	9	ARG
35	j5	11	ARG
35	j5	16	LYS
35	j5	19	LYS
35	j5	21	ARG
2	U6	118	ASP
5	a6	100	ARG
5	a6	102	ARG

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Mol	Chain	Res	Type
8	f6	81	LYS
8	f6	86	THR
8	f6	94	LYS
8	f6	98	VAL
8	f6	116	ARG
10	C6	275	LYS
10	C6	276	THR
11	G6	139	SER
11	G6	146	ASN
11	G6	147	LEU
11	G6	149	LYS
11	G6	151	ASP
13	M6	26	LEU
13	M6	35	ILE
13	M6	36	ARG
13	M6	45	ARG
13	M6	104	VAL
13	M6	116	LYS
13	M6	117	GLU
13	M6	118	SER
14	N6	42	LYS
14	N6	43	LYS
14	N6	149	LEU
18	Z6	85	ARG
18	Z6	88	LEU
18	Z6	89	GLN
20	e6	48	THR
20	e6	52	LYS
22	A6	213	GLU
26	F6	130	ARG
26	F6	134	VAL
26	F6	136	ARG
30	L6	147	LYS
30	L6	152	LYS
30	L6	153	LYS
31	P6	29	SER
31	P6	37	TYR
31	P6	40	ARG
31	P6	44	ARG
31	P6	45	LEU
31	P6	50	ARG
31	P6	78	THR

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Mol	Chain	Res	Type
31	P6	79	HIS
31	P6	115	TYR
31	P6	116	LEU
31	P6	122	THR
31	P6	123	TYR
31	P6	130	ARG
32	Q6	1	MET
33	R6	69	ILE
33	R6	71	ILE
33	R6	72	LYS
33	R6	73	LEU
33	R6	75	GLU
33	R6	77	GLU
33	R6	80	ARG
34	S6	4	VAL
34	S6	14	ARG
34	S6	19	ASN
34	S6	71	MET
34	S6	129	LEU
34	S6	138	THR
35	j6	2	ARG
35	j6	4	LYS
35	j6	5	TRP
35	j6	9	ARG
35	j6	11	ARG
35	j6	16	LYS
35	j6	19	LYS
35	j6	21	ARG
36	k1	95	GLN
36	k1	144	CYS
36	k1	169	TYR
36	k2	95	GLN
36	k2	144	CYS
36	k2	168	HIS
36	k2	169	TYR
36	k2	178	LYS
36	k3	95	GLN
36	k3	144	CYS
36	k3	168	HIS
36	k3	169	TYR
36	k4	92	LEU
36	k4	144	CYS

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Mol	Chain	Res	Type
36	k4	164	ILE
36	k4	166	ASN
36	k4	168	HIS
36	k4	169	TYR
36	k5	95	GLN
36	k5	144	CYS
36	k5	169	TYR
36	k6	92	LEU
36	k6	144	CYS
36	k6	167	ILE
36	k6	169	TYR
36	k6	170	LEU
37	l1	114	LYS
37	l1	119	LYS
37	l1	132	CYS
37	l1	140	ASP
37	l1	150	GLN
37	l1	153	SER
37	l1	154	CYS
37	l1	181	LYS
37	l1	185	VAL
37	l1	186	ASP
37	l1	191	GLU
37	l2	114	LYS
37	l2	119	LYS
37	l2	132	CYS
37	l2	140	ASP
37	l2	150	GLN
37	l2	153	SER
37	l2	154	CYS
37	l2	181	LYS
37	l2	185	VAL
37	l2	186	ASP
37	l2	191	GLU
37	l3	114	LYS
37	l3	119	LYS
37	l3	132	CYS
37	l3	140	ASP
37	l3	150	GLN
37	l3	153	SER
37	l3	154	CYS
37	l3	181	LYS

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Mol	Chain	Res	Type
37	l3	185	VAL
37	l3	186	ASP
37	l3	191	GLU
37	l4	114	LYS
37	l4	119	LYS
37	l4	132	CYS
37	l4	140	ASP
37	l4	150	GLN
37	l4	153	SER
37	l4	154	CYS
37	l4	181	LYS
37	l4	185	VAL
37	l4	186	ASP
37	l4	191	GLU
37	l5	114	LYS
37	l5	119	LYS
37	l5	132	CYS
37	l5	140	ASP
37	l5	150	GLN
37	l5	153	SER
37	l5	154	CYS
37	l5	181	LYS
37	l5	185	VAL
37	l5	186	ASP
37	l5	191	GLU
37	l6	114	LYS
37	l6	119	LYS
37	l6	132	CYS
37	l6	140	ASP
37	l6	150	GLN
37	l6	153	SER
37	l6	154	CYS
37	l6	181	LYS
37	l6	185	VAL
37	l6	186	ASP
37	l6	191	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (297) such sidechains are listed below:

Mol	Chain	Res	Type
1	T1	126	GLN
2	U1	81	GLN

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Mol	Chain	Res	Type
4	X1	63	ASN
4	X1	110	HIS
8	f1	111	ASN
9	g1	62	HIS
9	g1	187	ASN
9	g1	188	HIS
9	g1	285	GLN
10	C1	115	GLN
10	C1	277	HIS
11	G1	4	ASN
11	G1	65	GLN
11	G1	146	ASN
12	J1	156	HIS
13	M1	28	HIS
14	N1	58	HIS
14	N1	105	ASN
15	O1	13	GLN
15	O1	26	ASN
15	O1	103	ASN
16	W1	15	ASN
20	e1	44	ASN
23	B1	202	GLN
24	D1	57	ASN
24	D1	226	GLN
25	E1	67	GLN
26	F1	83	ASN
26	F1	118	ASN
27	H1	33	ASN
27	H1	76	GLN
27	H1	163	GLN
29	K1	50	GLN
29	K1	73	ASN
30	L1	13	GLN
30	L1	141	ASN
31	P1	79	HIS
32	Q1	35	ASN
33	R1	74	GLN
34	S1	72	GLN
34	S1	85	ASN
34	S1	101	ASN
34	S1	105	ASN
34	S1	134	GLN

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Mol	Chain	Res	Type
2	U2	18	HIS
2	U2	81	GLN
4	X2	63	ASN
4	X2	110	HIS
9	g2	62	HIS
9	g2	187	ASN
9	g2	188	HIS
9	g2	285	GLN
10	C2	115	GLN
10	C2	272	HIS
10	C2	277	HIS
11	G2	4	ASN
11	G2	65	GLN
11	G2	146	ASN
11	G2	187	HIS
12	J2	125	HIS
12	J2	156	HIS
13	M2	28	HIS
14	N2	58	HIS
14	N2	105	ASN
15	O2	13	GLN
15	O2	26	ASN
15	O2	103	ASN
16	W2	15	ASN
22	A2	36	GLN
23	B2	202	GLN
24	D2	57	ASN
24	D2	226	GLN
25	E2	67	GLN
26	F2	83	ASN
26	F2	118	ASN
27	H2	33	ASN
27	H2	76	GLN
27	H2	163	GLN
29	K2	50	GLN
29	K2	73	ASN
30	L2	13	GLN
30	L2	141	ASN
31	P2	79	HIS
32	Q2	35	ASN
33	R2	74	GLN
34	S2	72	GLN

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Mol	Chain	Res	Type
34	S2	85	ASN
34	S2	101	ASN
34	S2	134	GLN
1	T3	126	GLN
2	U3	18	HIS
2	U3	81	GLN
4	X3	63	ASN
4	X3	110	HIS
8	f3	111	ASN
9	g3	62	HIS
9	g3	187	ASN
9	g3	188	HIS
9	g3	285	GLN
10	C3	115	GLN
10	C3	272	HIS
10	C3	277	HIS
11	G3	4	ASN
11	G3	65	GLN
11	G3	146	ASN
11	G3	186	GLN
12	J3	156	HIS
13	M3	28	HIS
14	N3	58	HIS
14	N3	105	ASN
15	O3	13	GLN
15	O3	26	ASN
15	O3	103	ASN
16	W3	15	ASN
16	W3	113	HIS
23	B3	202	GLN
24	D3	57	ASN
24	D3	226	GLN
25	E3	67	GLN
26	F3	83	ASN
26	F3	118	ASN
27	H3	33	ASN
27	H3	76	GLN
27	H3	163	GLN
29	K3	50	GLN
29	K3	73	ASN
30	L3	13	GLN
30	L3	141	ASN

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Mol	Chain	Res	Type
30	L3	154	GLN
31	P3	79	HIS
32	Q3	35	ASN
33	R3	74	GLN
34	S3	72	GLN
34	S3	85	ASN
34	S3	101	ASN
34	S3	134	GLN
1	T4	126	GLN
2	U4	81	GLN
4	X4	63	ASN
4	X4	92	ASN
4	X4	110	HIS
8	f4	111	ASN
9	g4	62	HIS
9	g4	187	ASN
9	g4	188	HIS
9	g4	285	GLN
10	C4	115	GLN
10	C4	277	HIS
11	G4	4	ASN
11	G4	65	GLN
11	G4	146	ASN
12	J4	125	HIS
12	J4	156	HIS
13	M4	28	HIS
14	N4	58	HIS
14	N4	105	ASN
15	O4	13	GLN
15	O4	26	ASN
15	O4	103	ASN
16	W4	15	ASN
23	B4	202	GLN
24	D4	57	ASN
24	D4	226	GLN
25	E4	67	GLN
26	F4	83	ASN
26	F4	118	ASN
27	H4	33	ASN
27	H4	76	GLN
27	H4	91	HIS
27	H4	164	ASN

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Mol	Chain	Res	Type
28	I4	146	GLN
29	K4	50	GLN
29	K4	73	ASN
29	K4	84	HIS
30	L4	13	GLN
30	L4	141	ASN
31	P4	79	HIS
32	Q4	35	ASN
34	S4	72	GLN
34	S4	85	ASN
34	S4	101	ASN
34	S4	105	ASN
34	S4	134	GLN
1	T5	126	GLN
2	U5	81	GLN
4	X5	63	ASN
4	X5	110	HIS
8	f5	111	ASN
9	g5	62	HIS
9	g5	187	ASN
9	g5	188	HIS
9	g5	285	GLN
10	C5	115	GLN
10	C5	277	HIS
11	G5	4	ASN
11	G5	65	GLN
11	G5	146	ASN
11	G5	187	HIS
12	J5	156	HIS
13	M5	28	HIS
14	N5	58	HIS
14	N5	105	ASN
15	O5	13	GLN
15	O5	26	ASN
15	O5	103	ASN
16	W5	15	ASN
20	e5	37	GLN
22	A5	36	GLN
23	B5	202	GLN
24	D5	57	ASN
24	D5	226	GLN
25	E5	67	GLN

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Mol	Chain	Res	Type
26	F5	83	ASN
26	F5	118	ASN
27	H5	33	ASN
27	H5	76	GLN
27	H5	163	GLN
29	K5	50	GLN
29	K5	73	ASN
30	L5	13	GLN
30	L5	141	ASN
30	L5	154	GLN
31	P5	79	HIS
32	Q5	35	ASN
34	S5	72	GLN
34	S5	85	ASN
34	S5	101	ASN
34	S5	105	ASN
34	S5	134	GLN
2	U6	18	HIS
2	U6	81	GLN
4	X6	63	ASN
4	X6	110	HIS
8	f6	111	ASN
9	g6	62	HIS
9	g6	187	ASN
9	g6	188	HIS
9	g6	285	GLN
10	C6	115	GLN
10	C6	277	HIS
11	G6	4	ASN
11	G6	65	GLN
11	G6	146	ASN
12	J6	156	HIS
13	M6	28	HIS
14	N6	58	HIS
14	N6	105	ASN
15	O6	13	GLN
15	O6	26	ASN
15	O6	103	ASN
16	W6	15	ASN
19	b6	84	HIS
22	A6	132	GLN
23	B6	202	GLN

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Mol	Chain	Res	Type
24	D6	57	ASN
24	D6	226	GLN
25	E6	67	GLN
26	F6	83	ASN
26	F6	118	ASN
27	H6	33	ASN
27	H6	76	GLN
27	H6	163	GLN
28	I6	138	ASN
29	K6	50	GLN
29	K6	73	ASN
29	K6	84	HIS
30	L6	13	GLN
30	L6	141	ASN
31	P6	79	HIS
32	Q6	35	ASN
34	S6	72	GLN
34	S6	85	ASN
34	S6	101	ASN
34	S6	134	GLN
36	k1	10	ASN
36	k1	16	GLN
36	k1	56	HIS
36	k1	96	GLN
36	k1	141	HIS
36	k2	16	GLN
36	k2	96	GLN
36	k2	141	HIS
36	k2	166	ASN
36	k3	16	GLN
36	k3	96	GLN
36	k3	141	HIS
36	k4	16	GLN
36	k4	96	GLN
36	k4	141	HIS
36	k4	168	HIS
36	k5	96	GLN
36	k5	141	HIS
36	k6	16	GLN
36	k6	56	HIS
36	k6	96	GLN
36	k6	141	HIS

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Mol	Chain	Res	Type
36	k6	166	ASN

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
21	i1	1716/1869 (91%)	685 (39%)	0
21	i2	1715/1869 (91%)	687 (40%)	0
21	i3	1715/1869 (91%)	683 (39%)	0
21	i4	1716/1869 (91%)	684 (39%)	0
21	i5	1716/1869 (91%)	683 (39%)	0
21	i6	1716/1869 (91%)	683 (39%)	0
All	All	10294/11214 (91%)	4105 (39%)	0

All (4105) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
21	i1	2	A
21	i1	3	C
21	i1	4	C
21	i1	9	U
21	i1	17	C
21	i1	18	C
21	i1	25	A
21	i1	27	A
21	i1	31	U
21	i1	33	G
21	i1	41	G
21	i1	42	A
21	i1	44	U
21	i1	45	A
21	i1	46	A
21	i1	52	G
21	i1	56	G
21	i1	62	G
21	i1	64	A
21	i1	67	C
21	i1	68	A
21	i1	69	C
21	i1	70	G
21	i1	72	C
21	i1	73	C

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Mol	Chain	Res	Type
21	i1	74	G
21	i1	76	U
21	i1	77	A
21	i1	78	C
21	i1	79	A
21	i1	83	A
21	i1	84	A
21	i1	98	C
21	i1	99	A
21	i1	103	A
21	i1	113	G
21	i1	114	G
21	i1	126	G
21	i1	127	C
21	i1	139	C
21	i1	140	C
21	i1	141	A
21	i1	142	C
21	i1	144	U
21	i1	148	U
21	i1	153	G
21	i1	154	U
21	i1	155	G
21	i1	156	G
21	i1	160	U
21	i1	161	U
21	i1	162	C
21	i1	163	U
21	i1	167	G
21	i1	168	C
21	i1	171	A
21	i1	172	U
21	i1	175	A
21	i1	177	G
21	i1	178	C
21	i1	180	G
21	i1	181	A
21	i1	184	G
21	i1	185	G
21	i1	186	C
21	i1	188	C
21	i1	190	G

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Mol	Chain	Res	Type
21	i1	191	A
21	i1	192	C
21	i1	198	U
21	i1	201	C
21	i1	202	G
21	i1	208	G
21	i1	209	A
21	i1	210	U
21	i1	211	G
21	i1	214	U
21	i1	215	G
21	i1	216	C
21	i1	219	U
21	i1	291	G
21	i1	292	A
21	i1	293	C
21	i1	295	C
21	i1	299	A
21	i1	304	C
21	i1	305	U
21	i1	306	C
21	i1	307	G
21	i1	308	G
21	i1	309	G
21	i1	312	G
21	i1	313	A
21	i1	314	U
21	i1	319	C
21	i1	320	G
21	i1	323	C
21	i1	324	C
21	i1	325	C
21	i1	326	C
21	i1	328	U
21	i1	329	G
21	i1	330	G
21	i1	333	G
21	i1	334	C
21	i1	337	C
21	i1	338	G
21	i1	339	A
21	i1	340	C

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Mol	Chain	Res	Type
21	i1	341	C
21	i1	342	C
21	i1	343	A
21	i1	347	G
21	i1	351	G
21	i1	354	U
21	i1	360	A
21	i1	361	U
21	i1	362	C
21	i1	364	A
21	i1	369	C
21	i1	370	G
21	i1	371	A
21	i1	385	G
21	i1	386	C
21	i1	388	U
21	i1	391	C
21	i1	400	C
21	i1	401	A
21	i1	402	C
21	i1	407	G
21	i1	408	A
21	i1	409	C
21	i1	411	G
21	i1	413	G
21	i1	417	C
21	i1	418	A
21	i1	423	U
21	i1	426	A
21	i1	429	C
21	i1	434	G
21	i1	435	A
21	i1	436	G
21	i1	438	G
21	i1	441	C
21	i1	448	A
21	i1	449	A
21	i1	450	C
21	i1	452	G
21	i1	459	C
21	i1	464	A
21	i1	465	A

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Mol	Chain	Res	Type
21	i1	466	G
21	i1	467	G
21	i1	469	A
21	i1	472	C
21	i1	473	A
21	i1	474	G
21	i1	482	G
21	i1	487	U
21	i1	488	U
21	i1	489	A
21	i1	492	C
21	i1	493	A
21	i1	495	U
21	i1	502	C
21	i1	503	C
21	i1	505	G
21	i1	507	G
21	i1	516	A
21	i1	517	C
21	i1	524	U
21	i1	528	A
21	i1	529	A
21	i1	530	U
21	i1	532	C
21	i1	533	A
21	i1	534	G
21	i1	535	G
21	i1	537	C
21	i1	538	U
21	i1	539	C
21	i1	540	U
21	i1	542	U
21	i1	544	G
21	i1	545	A
21	i1	547	G
21	i1	549	C
21	i1	550	C
21	i1	551	U
21	i1	556	U
21	i1	557	U
21	i1	559	G
21	i1	560	A

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Mol	Chain	Res	Type
21	i1	561	A
21	i1	563	G
21	i1	566	U
21	i1	574	A
21	i1	575	A
21	i1	576	A
21	i1	581	U
21	i1	582	C
21	i1	584	G
21	i1	585	C
21	i1	587	A
21	i1	588	G
21	i1	589	G
21	i1	590	A
21	i1	591	U
21	i1	592	C
21	i1	593	C
21	i1	596	U
21	i1	604	A
21	i1	605	A
21	i1	606	G
21	i1	607	U
21	i1	608	C
21	i1	613	G
21	i1	621	C
21	i1	627	U
21	i1	628	A
21	i1	629	A
21	i1	631	U
21	i1	634	A
21	i1	638	C
21	i1	643	A
21	i1	644	G
21	i1	651	U
21	i1	655	A
21	i1	656	G
21	i1	657	U
21	i1	660	C
21	i1	666	U
21	i1	669	A
21	i1	670	A
21	i1	671	A

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Mol	Chain	Res	Type
21	i1	672	A
21	i1	673	G
21	i1	675	U
21	i1	679	A
21	i1	683	G
21	i1	685	A
21	i1	686	U
21	i1	687	C
21	i1	688	U
21	i1	689	U
21	i1	690	G
21	i1	691	G
21	i1	692	G
21	i1	693	A
21	i1	694	G
21	i1	695	C
21	i1	696	G
21	i1	697	G
21	i1	698	G
21	i1	732	U
21	i1	733	C
21	i1	734	C
21	i1	735	C
21	i1	736	C
21	i1	738	C
21	i1	739	C
21	i1	746	C
21	i1	747	U
21	i1	749	U
21	i1	750	C
21	i1	751	G
21	i1	752	G
21	i1	753	C
21	i1	787	G
21	i1	788	G
21	i1	789	G
21	i1	790	C
21	i1	791	C
21	i1	794	A
21	i1	795	A
21	i1	796	G
21	i1	797	C

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Mol	Chain	Res	Type
21	i1	798	A
21	i1	800	U
21	i1	810	A
21	i1	811	A
21	i1	812	A
21	i1	813	A
21	i1	815	U
21	i1	818	A
21	i1	821	G
21	i1	822	U
21	i1	823	U
21	i1	830	A
21	i1	834	C
21	i1	835	C
21	i1	837	A
21	i1	838	G
21	i1	839	C
21	i1	840	C
21	i1	841	G
21	i1	842	C
21	i1	843	C
21	i1	847	A
21	i1	848	U
21	i1	853	C
21	i1	864	A
21	i1	865	A
21	i1	869	A
21	i1	870	A
21	i1	873	G
21	i1	874	G
21	i1	876	C
21	i1	877	C
21	i1	878	G
21	i1	879	C
21	i1	881	G
21	i1	883	U
21	i1	887	U
21	i1	888	U
21	i1	889	U
21	i1	890	U
21	i1	891	G
21	i1	892	U

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Mol	Chain	Res	Type
21	i1	893	U
21	i1	894	G
21	i1	896	U
21	i1	897	U
21	i1	899	U
21	i1	900	C
21	i1	901	G
21	i1	902	G
21	i1	903	A
21	i1	904	A
21	i1	907	G
21	i1	908	A
21	i1	909	G
21	i1	913	A
21	i1	914	U
21	i1	917	U
21	i1	919	A
21	i1	920	A
21	i1	930	C
21	i1	933	G
21	i1	934	G
21	i1	939	U
21	i1	943	U
21	i1	952	G
21	i1	954	U
21	i1	955	A
21	i1	956	G
21	i1	958	G
21	i1	961	G
21	i1	963	A
21	i1	964	A
21	i1	965	U
21	i1	969	U
21	i1	970	G
21	i1	971	G
21	i1	972	A
21	i1	973	C
21	i1	978	G
21	i1	979	C
21	i1	981	A
21	i1	990	A
21	i1	992	A

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Mol	Chain	Res	Type
21	i1	996	A
21	i1	999	G
21	i1	1002	U
21	i1	1008	A
21	i1	1017	U
21	i1	1022	U
21	i1	1023	A
21	i1	1027	A
21	i1	1028	A
21	i1	1029	G
21	i1	1041	G
21	i1	1042	A
21	i1	1044	G
21	i1	1052	A
21	i1	1059	G
21	i1	1060	A
21	i1	1061	U
21	i1	1062	A
21	i1	1068	G
21	i1	1076	G
21	i1	1081	U
21	i1	1083	A
21	i1	1084	A
21	i1	1085	C
21	i1	1087	A
21	i1	1088	U
21	i1	1110	G
21	i1	1113	A
21	i1	1114	U
21	i1	1115	U
21	i1	1116	C
21	i1	1118	C
21	i1	1119	A
21	i1	1120	U
21	i1	1126	G
21	i1	1134	G
21	i1	1138	C
21	i1	1139	C
21	i1	1148	A
21	i1	1149	A
21	i1	1150	A
21	i1	1153	C

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Mol	Chain	Res	Type
21	i1	1154	U
21	i1	1155	U
21	i1	1157	G
21	i1	1166	G
21	i1	1170	A
21	i1	1171	G
21	i1	1172	U
21	i1	1175	G
21	i1	1180	C
21	i1	1181	A
21	i1	1186	U
21	i1	1194	A
21	i1	1195	A
21	i1	1198	G
21	i1	1208	A
21	i1	1212	G
21	i1	1213	C
21	i1	1214	A
21	i1	1215	C
21	i1	1216	C
21	i1	1217	A
21	i1	1224	G
21	i1	1231	C
21	i1	1238	U
21	i1	1240	A
21	i1	1241	A
21	i1	1242	U
21	i1	1248	U
21	i1	1250	A
21	i1	1251	A
21	i1	1253	A
21	i1	1256	G
21	i1	1257	G
21	i1	1258	A
21	i1	1259	A
21	i1	1260	A
21	i1	1264	C
21	i1	1265	A
21	i1	1268	C
21	i1	1269	G
21	i1	1271	C
21	i1	1274	G

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Mol	Chain	Res	Type
21	i1	1275	G
21	i1	1276	A
21	i1	1277	C
21	i1	1280	G
21	i1	1281	G
21	i1	1283	C
21	i1	1284	A
21	i1	1287	A
21	i1	1288	U
21	i1	1289	U
21	i1	1290	G
21	i1	1292	C
21	i1	1294	G
21	i1	1295	A
21	i1	1296	U
21	i1	1297	U
21	i1	1298	G
21	i1	1299	A
21	i1	1300	U
21	i1	1301	A
21	i1	1302	G
21	i1	1303	C
21	i1	1305	C
21	i1	1306	U
21	i1	1307	U
21	i1	1308	U
21	i1	1310	U
21	i1	1311	C
21	i1	1313	A
21	i1	1315	U
21	i1	1317	C
21	i1	1318	G
21	i1	1321	G
21	i1	1323	U
21	i1	1324	G
21	i1	1330	G
21	i1	1331	C
21	i1	1332	A
21	i1	1337	C
21	i1	1341	C
21	i1	1342	U
21	i1	1343	U

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Mol	Chain	Res	Type
21	i1	1363	C
21	i1	1364	U
21	i1	1371	U
21	i1	1372	U
21	i1	1373	C
21	i1	1378	A
21	i1	1383	A
21	i1	1393	G
21	i1	1396	A
21	i1	1397	U
21	i1	1398	G
21	i1	1404	U
21	i1	1405	A
21	i1	1407	U
21	i1	1409	A
21	i1	1410	C
21	i1	1412	C
21	i1	1413	G
21	i1	1414	A
21	i1	1415	C
21	i1	1416	C
21	i1	1418	C
21	i1	1419	C
21	i1	1420	G
21	i1	1423	C
21	i1	1424	G
21	i1	1425	G
21	i1	1427	C
21	i1	1428	G
21	i1	1431	G
21	i1	1432	U
21	i1	1434	C
21	i1	1436	C
21	i1	1437	C
21	i1	1438	A
21	i1	1442	U
21	i1	1448	A
21	i1	1449	G
21	i1	1454	A
21	i1	1455	A
21	i1	1456	G
21	i1	1457	U

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Mol	Chain	Res	Type
21	i1	1458	G
21	i1	1463	U
21	i1	1464	C
21	i1	1468	C
21	i1	1471	C
21	i1	1472	C
21	i1	1473	G
21	i1	1475	G
21	i1	1476	A
21	i1	1477	U
21	i1	1480	A
21	i1	1481	G
21	i1	1484	A
21	i1	1487	A
21	i1	1489	A
21	i1	1490	G
21	i1	1493	C
21	i1	1494	U
21	i1	1495	G
21	i1	1497	G
21	i1	1498	A
21	i1	1505	U
21	i1	1506	A
21	i1	1507	G
21	i1	1508	A
21	i1	1509	U
21	i1	1510	G
21	i1	1512	C
21	i1	1513	C
21	i1	1515	G
21	i1	1520	G
21	i1	1521	C
21	i1	1522	A
21	i1	1523	C
21	i1	1525	C
21	i1	1526	G
21	i1	1527	C
21	i1	1531	A
21	i1	1533	A
21	i1	1535	U
21	i1	1536	G
21	i1	1538	C

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Mol	Chain	Res	Type
21	i1	1540	G
21	i1	1543	U
21	i1	1545	A
21	i1	1546	G
21	i1	1550	G
21	i1	1551	U
21	i1	1552	G
21	i1	1553	C
21	i1	1554	C
21	i1	1555	U
21	i1	1556	A
21	i1	1557	C
21	i1	1558	C
21	i1	1567	G
21	i1	1568	C
21	i1	1569	A
21	i1	1570	G
21	i1	1573	G
21	i1	1574	C
21	i1	1575	G
21	i1	1579	A
21	i1	1580	A
21	i1	1581	C
21	i1	1585	U
21	i1	1586	U
21	i1	1587	G
21	i1	1588	A
21	i1	1589	A
21	i1	1598	G
21	i1	1599	U
21	i1	1600	G
21	i1	1603	G
21	i1	1614	A
21	i1	1621	U
21	i1	1623	A
21	i1	1626	C
21	i1	1636	G
21	i1	1637	A
21	i1	1638	G
21	i1	1639	G
21	i1	1640	A
21	i1	1644	C

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Mol	Chain	Res	Type
21	i1	1648	G
21	i1	1651	A
21	i1	1653	U
21	i1	1654	G
21	i1	1655	C
21	i1	1660	C
21	i1	1661	A
21	i1	1662	U
21	i1	1663	A
21	i1	1664	A
21	i1	1665	G
21	i1	1679	A
21	i1	1680	G
21	i1	1686	G
21	i1	1688	C
21	i1	1690	U
21	i1	1694	U
21	i1	1695	A
21	i1	1697	A
21	i1	1698	C
21	i1	1714	U
21	i1	1719	A
21	i1	1721	U
21	i1	1722	G
21	i1	1729	U
21	i1	1730	U
21	i1	1735	A
21	i1	1737	G
21	i1	1742	C
21	i1	1743	G
21	i1	1744	G
21	i1	1745	A
21	i1	1746	U
21	i1	1748	G
21	i1	1751	C
21	i1	1752	C
21	i1	1754	G
21	i1	1755	C
21	i1	1757	G
21	i1	1758	G
21	i1	1772	C
21	i1	1773	C

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Mol	Chain	Res	Type
21	i1	1775	U
21	i1	1776	G
21	i1	1777	G
21	i1	1781	A
21	i1	1783	C
21	i1	1784	G
21	i1	1786	U
21	i1	1805	G
21	i1	1812	U
21	i1	1813	A
21	i1	1814	G
21	i1	1823	A
21	i1	1824	A
21	i1	1825	A
21	i1	1826	G
21	i1	1831	A
21	i1	1838	U
21	i1	1839	U
21	i1	1849	G
21	i1	1850	A
21	i1	1851	A
21	i1	1852	C
21	i1	1857	G
21	i1	1858	G
21	i1	1861	G
21	i1	1862	G
21	i1	1863	A
21	i1	1865	C
21	i1	1868	U
21	i1	1869	A
21	i2	2	A
21	i2	3	C
21	i2	4	C
21	i2	9	U
21	i2	17	C
21	i2	18	C
21	i2	25	A
21	i2	27	A
21	i2	31	U
21	i2	33	G
21	i2	41	G
21	i2	42	A

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Mol	Chain	Res	Type
21	i2	44	U
21	i2	45	A
21	i2	46	A
21	i2	52	G
21	i2	56	G
21	i2	62	G
21	i2	64	A
21	i2	67	C
21	i2	68	A
21	i2	69	C
21	i2	70	G
21	i2	72	C
21	i2	73	C
21	i2	74	G
21	i2	76	U
21	i2	77	A
21	i2	78	C
21	i2	79	A
21	i2	83	A
21	i2	84	A
21	i2	98	C
21	i2	99	A
21	i2	103	A
21	i2	113	G
21	i2	114	G
21	i2	126	G
21	i2	127	C
21	i2	139	C
21	i2	140	C
21	i2	141	A
21	i2	142	C
21	i2	144	U
21	i2	148	U
21	i2	153	G
21	i2	154	U
21	i2	155	G
21	i2	156	G
21	i2	160	U
21	i2	161	U
21	i2	162	C
21	i2	163	U
21	i2	167	G

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Mol	Chain	Res	Type
21	i2	168	C
21	i2	171	A
21	i2	172	U
21	i2	175	A
21	i2	177	G
21	i2	178	C
21	i2	180	G
21	i2	181	A
21	i2	183	G
21	i2	184	G
21	i2	185	G
21	i2	188	C
21	i2	189	U
21	i2	190	G
21	i2	191	A
21	i2	192	C
21	i2	198	U
21	i2	201	C
21	i2	202	G
21	i2	208	G
21	i2	209	A
21	i2	210	U
21	i2	211	G
21	i2	214	U
21	i2	215	G
21	i2	219	U
21	i2	291	G
21	i2	292	A
21	i2	293	C
21	i2	295	C
21	i2	299	A
21	i2	304	C
21	i2	305	U
21	i2	306	C
21	i2	307	G
21	i2	308	G
21	i2	309	G
21	i2	312	G
21	i2	313	A
21	i2	314	U
21	i2	316	G
21	i2	319	C

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Mol	Chain	Res	Type
21	i2	320	G
21	i2	323	C
21	i2	324	C
21	i2	325	C
21	i2	326	C
21	i2	328	U
21	i2	329	G
21	i2	330	G
21	i2	333	G
21	i2	334	C
21	i2	337	C
21	i2	338	G
21	i2	339	A
21	i2	340	C
21	i2	341	C
21	i2	342	C
21	i2	343	A
21	i2	347	G
21	i2	351	G
21	i2	354	U
21	i2	360	A
21	i2	361	U
21	i2	362	C
21	i2	364	A
21	i2	369	C
21	i2	370	G
21	i2	371	A
21	i2	385	G
21	i2	386	C
21	i2	388	U
21	i2	391	C
21	i2	400	C
21	i2	401	A
21	i2	402	C
21	i2	407	G
21	i2	408	A
21	i2	409	C
21	i2	411	G
21	i2	413	G
21	i2	417	C
21	i2	418	A
21	i2	423	U

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Mol	Chain	Res	Type
21	i2	426	A
21	i2	429	C
21	i2	434	G
21	i2	435	A
21	i2	436	G
21	i2	438	G
21	i2	441	C
21	i2	448	A
21	i2	449	A
21	i2	450	C
21	i2	452	G
21	i2	459	C
21	i2	464	A
21	i2	465	A
21	i2	466	G
21	i2	467	G
21	i2	469	A
21	i2	472	C
21	i2	473	A
21	i2	474	G
21	i2	482	G
21	i2	487	U
21	i2	488	U
21	i2	489	A
21	i2	492	C
21	i2	493	A
21	i2	495	U
21	i2	502	C
21	i2	503	C
21	i2	505	G
21	i2	507	G
21	i2	516	A
21	i2	517	C
21	i2	524	U
21	i2	526	A
21	i2	529	A
21	i2	530	U
21	i2	532	C
21	i2	533	A
21	i2	534	G
21	i2	535	G
21	i2	537	C

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Mol	Chain	Res	Type
21	i2	538	U
21	i2	539	C
21	i2	540	U
21	i2	542	U
21	i2	544	G
21	i2	545	A
21	i2	547	G
21	i2	549	C
21	i2	550	C
21	i2	551	U
21	i2	556	U
21	i2	557	U
21	i2	559	G
21	i2	560	A
21	i2	561	A
21	i2	563	G
21	i2	566	U
21	i2	574	A
21	i2	575	A
21	i2	576	A
21	i2	581	U
21	i2	582	C
21	i2	584	G
21	i2	585	C
21	i2	587	A
21	i2	588	G
21	i2	589	G
21	i2	590	A
21	i2	591	U
21	i2	592	C
21	i2	593	C
21	i2	596	U
21	i2	604	A
21	i2	605	A
21	i2	606	G
21	i2	607	U
21	i2	608	C
21	i2	613	G
21	i2	621	C
21	i2	627	U
21	i2	628	A
21	i2	629	A

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Mol	Chain	Res	Type
21	i2	631	U
21	i2	634	A
21	i2	643	A
21	i2	644	G
21	i2	651	U
21	i2	655	A
21	i2	656	G
21	i2	657	U
21	i2	660	C
21	i2	666	U
21	i2	669	A
21	i2	670	A
21	i2	671	A
21	i2	672	A
21	i2	673	G
21	i2	675	U
21	i2	679	A
21	i2	683	G
21	i2	685	A
21	i2	686	U
21	i2	687	C
21	i2	688	U
21	i2	689	U
21	i2	690	G
21	i2	691	G
21	i2	692	G
21	i2	693	A
21	i2	694	G
21	i2	695	C
21	i2	696	G
21	i2	697	G
21	i2	698	G
21	i2	731	G
21	i2	732	U
21	i2	733	C
21	i2	734	C
21	i2	735	C
21	i2	736	C
21	i2	737	G
21	i2	738	C
21	i2	739	C
21	i2	746	C

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Mol	Chain	Res	Type
21	i2	747	U
21	i2	749	U
21	i2	750	C
21	i2	751	G
21	i2	752	G
21	i2	753	C
21	i2	787	G
21	i2	788	G
21	i2	789	G
21	i2	790	C
21	i2	791	C
21	i2	794	A
21	i2	795	A
21	i2	796	G
21	i2	797	C
21	i2	798	A
21	i2	800	U
21	i2	810	A
21	i2	811	A
21	i2	812	A
21	i2	813	A
21	i2	815	U
21	i2	818	A
21	i2	821	G
21	i2	822	U
21	i2	823	U
21	i2	830	A
21	i2	834	C
21	i2	835	C
21	i2	837	A
21	i2	838	G
21	i2	839	C
21	i2	840	C
21	i2	841	G
21	i2	842	C
21	i2	843	C
21	i2	847	A
21	i2	848	U
21	i2	853	C
21	i2	864	A
21	i2	865	A
21	i2	869	A

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Mol	Chain	Res	Type
21	i2	870	A
21	i2	873	G
21	i2	874	G
21	i2	876	C
21	i2	877	C
21	i2	878	G
21	i2	879	C
21	i2	881	G
21	i2	883	U
21	i2	887	U
21	i2	888	U
21	i2	889	U
21	i2	890	U
21	i2	891	G
21	i2	892	U
21	i2	893	U
21	i2	894	G
21	i2	896	U
21	i2	897	U
21	i2	899	U
21	i2	900	C
21	i2	901	G
21	i2	902	G
21	i2	903	A
21	i2	904	A
21	i2	907	G
21	i2	908	A
21	i2	909	G
21	i2	913	A
21	i2	914	U
21	i2	917	U
21	i2	919	A
21	i2	920	A
21	i2	930	C
21	i2	933	G
21	i2	934	G
21	i2	939	U
21	i2	943	U
21	i2	952	G
21	i2	954	U
21	i2	955	A
21	i2	956	G

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Mol	Chain	Res	Type
21	i2	958	G
21	i2	961	G
21	i2	963	A
21	i2	964	A
21	i2	965	U
21	i2	970	G
21	i2	971	G
21	i2	972	A
21	i2	973	C
21	i2	978	G
21	i2	979	C
21	i2	981	A
21	i2	990	A
21	i2	992	A
21	i2	996	A
21	i2	999	G
21	i2	1002	U
21	i2	1008	A
21	i2	1017	U
21	i2	1022	U
21	i2	1023	A
21	i2	1027	A
21	i2	1028	A
21	i2	1029	G
21	i2	1041	G
21	i2	1042	A
21	i2	1044	G
21	i2	1050	A
21	i2	1052	A
21	i2	1059	G
21	i2	1060	A
21	i2	1061	U
21	i2	1062	A
21	i2	1068	G
21	i2	1076	G
21	i2	1081	U
21	i2	1083	A
21	i2	1084	A
21	i2	1085	C
21	i2	1087	A
21	i2	1088	U
21	i2	1110	G

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Mol	Chain	Res	Type
21	i2	1113	A
21	i2	1114	U
21	i2	1115	U
21	i2	1116	C
21	i2	1118	C
21	i2	1119	A
21	i2	1120	U
21	i2	1126	G
21	i2	1134	G
21	i2	1138	C
21	i2	1139	C
21	i2	1148	A
21	i2	1149	A
21	i2	1150	A
21	i2	1153	C
21	i2	1154	U
21	i2	1155	U
21	i2	1157	G
21	i2	1166	G
21	i2	1170	A
21	i2	1171	G
21	i2	1172	U
21	i2	1175	G
21	i2	1180	C
21	i2	1181	A
21	i2	1186	U
21	i2	1194	A
21	i2	1195	A
21	i2	1198	G
21	i2	1208	A
21	i2	1212	G
21	i2	1213	C
21	i2	1214	A
21	i2	1215	C
21	i2	1216	C
21	i2	1217	A
21	i2	1224	G
21	i2	1231	C
21	i2	1238	U
21	i2	1240	A
21	i2	1241	A
21	i2	1242	U

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Mol	Chain	Res	Type
21	i2	1248	U
21	i2	1250	A
21	i2	1251	A
21	i2	1253	A
21	i2	1256	G
21	i2	1257	G
21	i2	1258	A
21	i2	1259	A
21	i2	1260	A
21	i2	1264	C
21	i2	1265	A
21	i2	1268	C
21	i2	1269	G
21	i2	1271	C
21	i2	1274	G
21	i2	1275	G
21	i2	1276	A
21	i2	1277	C
21	i2	1280	G
21	i2	1281	G
21	i2	1283	C
21	i2	1284	A
21	i2	1287	A
21	i2	1288	U
21	i2	1289	U
21	i2	1290	G
21	i2	1292	C
21	i2	1294	G
21	i2	1295	A
21	i2	1296	U
21	i2	1297	U
21	i2	1298	G
21	i2	1299	A
21	i2	1300	U
21	i2	1301	A
21	i2	1302	G
21	i2	1303	C
21	i2	1305	C
21	i2	1306	U
21	i2	1307	U
21	i2	1308	U
21	i2	1310	U

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Mol	Chain	Res	Type
21	i2	1311	C
21	i2	1313	A
21	i2	1315	U
21	i2	1317	C
21	i2	1318	G
21	i2	1321	G
21	i2	1323	U
21	i2	1324	G
21	i2	1330	G
21	i2	1331	C
21	i2	1332	A
21	i2	1337	C
21	i2	1341	C
21	i2	1342	U
21	i2	1343	U
21	i2	1363	C
21	i2	1364	U
21	i2	1371	U
21	i2	1372	U
21	i2	1373	C
21	i2	1378	A
21	i2	1383	A
21	i2	1393	G
21	i2	1396	A
21	i2	1397	U
21	i2	1398	G
21	i2	1404	U
21	i2	1405	A
21	i2	1407	U
21	i2	1409	A
21	i2	1410	C
21	i2	1412	C
21	i2	1413	G
21	i2	1414	A
21	i2	1415	C
21	i2	1416	C
21	i2	1418	C
21	i2	1419	C
21	i2	1420	G
21	i2	1423	C
21	i2	1424	G
21	i2	1425	G

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Mol	Chain	Res	Type
21	i2	1427	C
21	i2	1428	G
21	i2	1431	G
21	i2	1432	U
21	i2	1434	C
21	i2	1436	C
21	i2	1437	C
21	i2	1438	A
21	i2	1442	U
21	i2	1448	A
21	i2	1449	G
21	i2	1454	A
21	i2	1455	A
21	i2	1456	G
21	i2	1457	U
21	i2	1458	G
21	i2	1463	U
21	i2	1464	C
21	i2	1468	C
21	i2	1471	C
21	i2	1472	C
21	i2	1473	G
21	i2	1475	G
21	i2	1476	A
21	i2	1477	U
21	i2	1480	A
21	i2	1481	G
21	i2	1484	A
21	i2	1487	A
21	i2	1489	A
21	i2	1490	G
21	i2	1493	C
21	i2	1494	U
21	i2	1495	G
21	i2	1497	G
21	i2	1498	A
21	i2	1505	U
21	i2	1506	A
21	i2	1507	G
21	i2	1508	A
21	i2	1509	U
21	i2	1510	G

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Mol	Chain	Res	Type
21	i2	1512	C
21	i2	1513	C
21	i2	1515	G
21	i2	1520	G
21	i2	1521	C
21	i2	1522	A
21	i2	1523	C
21	i2	1525	C
21	i2	1526	G
21	i2	1527	C
21	i2	1531	A
21	i2	1533	A
21	i2	1535	U
21	i2	1536	G
21	i2	1538	C
21	i2	1540	G
21	i2	1543	U
21	i2	1545	A
21	i2	1546	G
21	i2	1550	G
21	i2	1551	U
21	i2	1552	G
21	i2	1553	C
21	i2	1554	C
21	i2	1555	U
21	i2	1556	A
21	i2	1557	C
21	i2	1558	C
21	i2	1567	G
21	i2	1568	C
21	i2	1569	A
21	i2	1570	G
21	i2	1573	G
21	i2	1574	C
21	i2	1575	G
21	i2	1579	A
21	i2	1580	A
21	i2	1581	C
21	i2	1585	U
21	i2	1586	U
21	i2	1587	G
21	i2	1588	A

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Mol	Chain	Res	Type
21	i2	1589	A
21	i2	1598	G
21	i2	1599	U
21	i2	1600	G
21	i2	1603	G
21	i2	1614	A
21	i2	1621	U
21	i2	1623	A
21	i2	1626	C
21	i2	1636	G
21	i2	1637	A
21	i2	1638	G
21	i2	1639	G
21	i2	1640	A
21	i2	1644	C
21	i2	1648	G
21	i2	1651	A
21	i2	1653	U
21	i2	1654	G
21	i2	1655	C
21	i2	1660	C
21	i2	1661	A
21	i2	1662	U
21	i2	1663	A
21	i2	1664	A
21	i2	1665	G
21	i2	1679	A
21	i2	1680	G
21	i2	1686	G
21	i2	1688	C
21	i2	1694	U
21	i2	1695	A
21	i2	1697	A
21	i2	1698	C
21	i2	1714	U
21	i2	1719	A
21	i2	1721	U
21	i2	1722	G
21	i2	1729	U
21	i2	1730	U
21	i2	1735	A
21	i2	1737	G

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Mol	Chain	Res	Type
21	i2	1742	C
21	i2	1743	G
21	i2	1744	G
21	i2	1745	A
21	i2	1746	U
21	i2	1748	G
21	i2	1751	C
21	i2	1752	C
21	i2	1754	G
21	i2	1755	C
21	i2	1757	G
21	i2	1758	G
21	i2	1772	C
21	i2	1773	C
21	i2	1775	U
21	i2	1776	G
21	i2	1777	G
21	i2	1781	A
21	i2	1784	G
21	i2	1786	U
21	i2	1805	G
21	i2	1812	U
21	i2	1813	A
21	i2	1814	G
21	i2	1823	A
21	i2	1824	A
21	i2	1825	A
21	i2	1826	G
21	i2	1829	G
21	i2	1831	A
21	i2	1835	A
21	i2	1838	U
21	i2	1839	U
21	i2	1849	G
21	i2	1850	A
21	i2	1851	A
21	i2	1852	C
21	i2	1857	G
21	i2	1858	G
21	i2	1861	G
21	i2	1862	G
21	i2	1863	A

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Mol	Chain	Res	Type
21	i2	1865	C
21	i2	1868	U
21	i2	1869	A
21	i3	2	A
21	i3	3	C
21	i3	4	C
21	i3	9	U
21	i3	17	C
21	i3	18	C
21	i3	25	A
21	i3	27	A
21	i3	31	U
21	i3	33	G
21	i3	41	G
21	i3	42	A
21	i3	44	U
21	i3	45	A
21	i3	46	A
21	i3	52	G
21	i3	56	G
21	i3	62	G
21	i3	64	A
21	i3	67	C
21	i3	68	A
21	i3	69	C
21	i3	70	G
21	i3	72	C
21	i3	73	C
21	i3	74	G
21	i3	76	U
21	i3	77	A
21	i3	78	C
21	i3	79	A
21	i3	83	A
21	i3	84	A
21	i3	98	C
21	i3	99	A
21	i3	103	A
21	i3	113	G
21	i3	114	G
21	i3	126	G
21	i3	127	C

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Mol	Chain	Res	Type
21	i3	139	C
21	i3	140	C
21	i3	141	A
21	i3	142	C
21	i3	144	U
21	i3	148	U
21	i3	153	G
21	i3	154	U
21	i3	155	G
21	i3	156	G
21	i3	160	U
21	i3	161	U
21	i3	162	C
21	i3	163	U
21	i3	167	G
21	i3	168	C
21	i3	171	A
21	i3	172	U
21	i3	175	A
21	i3	177	G
21	i3	178	C
21	i3	180	G
21	i3	181	A
21	i3	183	G
21	i3	184	G
21	i3	185	G
21	i3	188	C
21	i3	189	U
21	i3	190	G
21	i3	191	A
21	i3	192	C
21	i3	198	U
21	i3	201	C
21	i3	202	G
21	i3	208	G
21	i3	209	A
21	i3	210	U
21	i3	211	G
21	i3	214	U
21	i3	215	G
21	i3	216	C
21	i3	219	U

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Mol	Chain	Res	Type
21	i3	291	G
21	i3	292	A
21	i3	293	C
21	i3	295	C
21	i3	299	A
21	i3	304	C
21	i3	305	U
21	i3	306	C
21	i3	307	G
21	i3	308	G
21	i3	309	G
21	i3	312	G
21	i3	313	A
21	i3	314	U
21	i3	319	C
21	i3	320	G
21	i3	323	C
21	i3	324	C
21	i3	325	C
21	i3	326	C
21	i3	328	U
21	i3	329	G
21	i3	330	G
21	i3	334	C
21	i3	337	C
21	i3	338	G
21	i3	339	A
21	i3	340	C
21	i3	341	C
21	i3	342	C
21	i3	343	A
21	i3	347	G
21	i3	351	G
21	i3	354	U
21	i3	360	A
21	i3	361	U
21	i3	362	C
21	i3	364	A
21	i3	369	C
21	i3	370	G
21	i3	371	A
21	i3	385	G

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Mol	Chain	Res	Type
21	i3	386	C
21	i3	388	U
21	i3	391	C
21	i3	400	C
21	i3	401	A
21	i3	402	C
21	i3	407	G
21	i3	408	A
21	i3	409	C
21	i3	411	G
21	i3	413	G
21	i3	417	C
21	i3	418	A
21	i3	423	U
21	i3	426	A
21	i3	429	C
21	i3	434	G
21	i3	435	A
21	i3	436	G
21	i3	438	G
21	i3	441	C
21	i3	448	A
21	i3	449	A
21	i3	450	C
21	i3	452	G
21	i3	459	C
21	i3	464	A
21	i3	465	A
21	i3	466	G
21	i3	467	G
21	i3	469	A
21	i3	472	C
21	i3	473	A
21	i3	474	G
21	i3	482	G
21	i3	487	U
21	i3	488	U
21	i3	489	A
21	i3	492	C
21	i3	493	A
21	i3	495	U
21	i3	502	C

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Mol	Chain	Res	Type
21	i3	503	C
21	i3	505	G
21	i3	507	G
21	i3	516	A
21	i3	517	C
21	i3	528	A
21	i3	529	A
21	i3	530	U
21	i3	532	C
21	i3	533	A
21	i3	534	G
21	i3	535	G
21	i3	537	C
21	i3	538	U
21	i3	539	C
21	i3	540	U
21	i3	542	U
21	i3	544	G
21	i3	545	A
21	i3	547	G
21	i3	549	C
21	i3	550	C
21	i3	551	U
21	i3	556	U
21	i3	557	U
21	i3	559	G
21	i3	560	A
21	i3	561	A
21	i3	563	G
21	i3	566	U
21	i3	574	A
21	i3	575	A
21	i3	576	A
21	i3	581	U
21	i3	582	C
21	i3	584	G
21	i3	585	C
21	i3	587	A
21	i3	588	G
21	i3	589	G
21	i3	590	A
21	i3	591	U

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Mol	Chain	Res	Type
21	i3	592	C
21	i3	593	C
21	i3	596	U
21	i3	604	A
21	i3	605	A
21	i3	606	G
21	i3	607	U
21	i3	608	C
21	i3	613	G
21	i3	621	C
21	i3	627	U
21	i3	628	A
21	i3	629	A
21	i3	631	U
21	i3	634	A
21	i3	643	A
21	i3	644	G
21	i3	651	U
21	i3	655	A
21	i3	656	G
21	i3	657	U
21	i3	660	C
21	i3	666	U
21	i3	669	A
21	i3	670	A
21	i3	671	A
21	i3	672	A
21	i3	673	G
21	i3	675	U
21	i3	679	A
21	i3	683	G
21	i3	685	A
21	i3	686	U
21	i3	687	C
21	i3	688	U
21	i3	689	U
21	i3	690	G
21	i3	692	G
21	i3	693	A
21	i3	694	G
21	i3	695	C
21	i3	696	G

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Mol	Chain	Res	Type
21	i3	697	G
21	i3	698	G
21	i3	732	U
21	i3	733	C
21	i3	734	C
21	i3	735	C
21	i3	736	C
21	i3	737	G
21	i3	738	C
21	i3	739	C
21	i3	746	C
21	i3	747	U
21	i3	749	U
21	i3	750	C
21	i3	751	G
21	i3	752	G
21	i3	753	C
21	i3	787	G
21	i3	788	G
21	i3	789	G
21	i3	790	C
21	i3	791	C
21	i3	794	A
21	i3	795	A
21	i3	796	G
21	i3	797	C
21	i3	798	A
21	i3	800	U
21	i3	810	A
21	i3	811	A
21	i3	812	A
21	i3	813	A
21	i3	815	U
21	i3	818	A
21	i3	821	G
21	i3	822	U
21	i3	823	U
21	i3	830	A
21	i3	834	C
21	i3	835	C
21	i3	837	A
21	i3	838	G

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Mol	Chain	Res	Type
21	i3	839	C
21	i3	840	C
21	i3	841	G
21	i3	842	C
21	i3	843	C
21	i3	847	A
21	i3	848	U
21	i3	853	C
21	i3	864	A
21	i3	865	A
21	i3	869	A
21	i3	870	A
21	i3	873	G
21	i3	874	G
21	i3	876	C
21	i3	877	C
21	i3	878	G
21	i3	879	C
21	i3	881	G
21	i3	883	U
21	i3	887	U
21	i3	888	U
21	i3	889	U
21	i3	890	U
21	i3	891	G
21	i3	892	U
21	i3	893	U
21	i3	894	G
21	i3	896	U
21	i3	897	U
21	i3	899	U
21	i3	900	C
21	i3	901	G
21	i3	902	G
21	i3	903	A
21	i3	904	A
21	i3	907	G
21	i3	908	A
21	i3	909	G
21	i3	913	A
21	i3	914	U
21	i3	917	U

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Mol	Chain	Res	Type
21	i3	919	A
21	i3	920	A
21	i3	930	C
21	i3	933	G
21	i3	934	G
21	i3	939	U
21	i3	943	U
21	i3	952	G
21	i3	954	U
21	i3	955	A
21	i3	956	G
21	i3	958	G
21	i3	961	G
21	i3	963	A
21	i3	964	A
21	i3	965	U
21	i3	970	G
21	i3	971	G
21	i3	972	A
21	i3	973	C
21	i3	978	G
21	i3	979	C
21	i3	981	A
21	i3	990	A
21	i3	992	A
21	i3	996	A
21	i3	999	G
21	i3	1002	U
21	i3	1008	A
21	i3	1017	U
21	i3	1022	U
21	i3	1023	A
21	i3	1027	A
21	i3	1028	A
21	i3	1029	G
21	i3	1041	G
21	i3	1042	A
21	i3	1044	G
21	i3	1052	A
21	i3	1059	G
21	i3	1060	A
21	i3	1061	U

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Mol	Chain	Res	Type
21	i3	1062	A
21	i3	1068	G
21	i3	1076	G
21	i3	1081	U
21	i3	1083	A
21	i3	1084	A
21	i3	1085	C
21	i3	1087	A
21	i3	1088	U
21	i3	1110	G
21	i3	1113	A
21	i3	1114	U
21	i3	1115	U
21	i3	1116	C
21	i3	1118	C
21	i3	1119	A
21	i3	1120	U
21	i3	1126	G
21	i3	1134	G
21	i3	1138	C
21	i3	1139	C
21	i3	1148	A
21	i3	1149	A
21	i3	1150	A
21	i3	1153	C
21	i3	1154	U
21	i3	1155	U
21	i3	1157	G
21	i3	1166	G
21	i3	1170	A
21	i3	1171	G
21	i3	1172	U
21	i3	1175	G
21	i3	1180	C
21	i3	1181	A
21	i3	1186	U
21	i3	1194	A
21	i3	1195	A
21	i3	1198	G
21	i3	1208	A
21	i3	1212	G
21	i3	1213	C

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Mol	Chain	Res	Type
21	i3	1214	A
21	i3	1215	C
21	i3	1216	C
21	i3	1217	A
21	i3	1224	G
21	i3	1231	C
21	i3	1238	U
21	i3	1240	A
21	i3	1241	A
21	i3	1242	U
21	i3	1248	U
21	i3	1250	A
21	i3	1251	A
21	i3	1253	A
21	i3	1256	G
21	i3	1257	G
21	i3	1258	A
21	i3	1259	A
21	i3	1260	A
21	i3	1264	C
21	i3	1265	A
21	i3	1268	C
21	i3	1269	G
21	i3	1271	C
21	i3	1274	G
21	i3	1275	G
21	i3	1276	A
21	i3	1277	C
21	i3	1280	G
21	i3	1281	G
21	i3	1283	C
21	i3	1284	A
21	i3	1287	A
21	i3	1288	U
21	i3	1289	U
21	i3	1290	G
21	i3	1292	C
21	i3	1294	G
21	i3	1295	A
21	i3	1296	U
21	i3	1297	U
21	i3	1298	G

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Mol	Chain	Res	Type
21	i3	1299	A
21	i3	1300	U
21	i3	1301	A
21	i3	1302	G
21	i3	1303	C
21	i3	1305	C
21	i3	1306	U
21	i3	1307	U
21	i3	1308	U
21	i3	1310	U
21	i3	1311	C
21	i3	1313	A
21	i3	1315	U
21	i3	1317	C
21	i3	1318	G
21	i3	1321	G
21	i3	1323	U
21	i3	1324	G
21	i3	1330	G
21	i3	1331	C
21	i3	1332	A
21	i3	1337	C
21	i3	1341	C
21	i3	1342	U
21	i3	1343	U
21	i3	1363	C
21	i3	1364	U
21	i3	1371	U
21	i3	1372	U
21	i3	1373	C
21	i3	1378	A
21	i3	1383	A
21	i3	1393	G
21	i3	1396	A
21	i3	1397	U
21	i3	1398	G
21	i3	1404	U
21	i3	1405	A
21	i3	1407	U
21	i3	1409	A
21	i3	1410	C
21	i3	1412	C

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Mol	Chain	Res	Type
21	i3	1413	G
21	i3	1414	A
21	i3	1415	C
21	i3	1416	C
21	i3	1418	C
21	i3	1419	C
21	i3	1420	G
21	i3	1423	C
21	i3	1424	G
21	i3	1425	G
21	i3	1427	C
21	i3	1428	G
21	i3	1431	G
21	i3	1432	U
21	i3	1434	C
21	i3	1436	C
21	i3	1437	C
21	i3	1438	A
21	i3	1442	U
21	i3	1448	A
21	i3	1449	G
21	i3	1454	A
21	i3	1455	A
21	i3	1456	G
21	i3	1457	U
21	i3	1458	G
21	i3	1463	U
21	i3	1464	C
21	i3	1468	C
21	i3	1471	C
21	i3	1472	C
21	i3	1473	G
21	i3	1475	G
21	i3	1476	A
21	i3	1477	U
21	i3	1480	A
21	i3	1481	G
21	i3	1484	A
21	i3	1487	A
21	i3	1489	A
21	i3	1490	G
21	i3	1493	C

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Mol	Chain	Res	Type
21	i3	1494	U
21	i3	1495	G
21	i3	1497	G
21	i3	1498	A
21	i3	1505	U
21	i3	1506	A
21	i3	1507	G
21	i3	1508	A
21	i3	1509	U
21	i3	1510	G
21	i3	1512	C
21	i3	1513	C
21	i3	1515	G
21	i3	1520	G
21	i3	1521	C
21	i3	1522	A
21	i3	1523	C
21	i3	1525	C
21	i3	1526	G
21	i3	1527	C
21	i3	1531	A
21	i3	1533	A
21	i3	1535	U
21	i3	1536	G
21	i3	1538	C
21	i3	1540	G
21	i3	1543	U
21	i3	1545	A
21	i3	1546	G
21	i3	1550	G
21	i3	1551	U
21	i3	1552	G
21	i3	1553	C
21	i3	1554	C
21	i3	1555	U
21	i3	1556	A
21	i3	1557	C
21	i3	1558	C
21	i3	1567	G
21	i3	1568	C
21	i3	1569	A
21	i3	1570	G

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Mol	Chain	Res	Type
21	i3	1573	G
21	i3	1574	C
21	i3	1575	G
21	i3	1579	A
21	i3	1580	A
21	i3	1581	C
21	i3	1585	U
21	i3	1586	U
21	i3	1587	G
21	i3	1588	A
21	i3	1589	A
21	i3	1598	G
21	i3	1599	U
21	i3	1600	G
21	i3	1603	G
21	i3	1614	A
21	i3	1621	U
21	i3	1623	A
21	i3	1626	C
21	i3	1636	G
21	i3	1637	A
21	i3	1638	G
21	i3	1639	G
21	i3	1640	A
21	i3	1644	C
21	i3	1648	G
21	i3	1651	A
21	i3	1653	U
21	i3	1654	G
21	i3	1655	C
21	i3	1660	C
21	i3	1661	A
21	i3	1662	U
21	i3	1663	A
21	i3	1664	A
21	i3	1665	G
21	i3	1679	A
21	i3	1680	G
21	i3	1686	G
21	i3	1688	C
21	i3	1694	U
21	i3	1695	A

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Mol	Chain	Res	Type
21	i3	1697	A
21	i3	1698	C
21	i3	1714	U
21	i3	1719	A
21	i3	1721	U
21	i3	1722	G
21	i3	1729	U
21	i3	1730	U
21	i3	1735	A
21	i3	1737	G
21	i3	1742	C
21	i3	1743	G
21	i3	1744	G
21	i3	1745	A
21	i3	1746	U
21	i3	1748	G
21	i3	1751	C
21	i3	1752	C
21	i3	1754	G
21	i3	1755	C
21	i3	1757	G
21	i3	1758	G
21	i3	1772	C
21	i3	1773	C
21	i3	1775	U
21	i3	1776	G
21	i3	1777	G
21	i3	1781	A
21	i3	1784	G
21	i3	1785	C
21	i3	1786	U
21	i3	1805	G
21	i3	1812	U
21	i3	1813	A
21	i3	1814	G
21	i3	1823	A
21	i3	1824	A
21	i3	1825	A
21	i3	1826	G
21	i3	1831	A
21	i3	1833	C
21	i3	1835	A

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Mol	Chain	Res	Type
21	i3	1838	U
21	i3	1839	U
21	i3	1849	G
21	i3	1850	A
21	i3	1851	A
21	i3	1852	C
21	i3	1857	G
21	i3	1858	G
21	i3	1861	G
21	i3	1862	G
21	i3	1863	A
21	i3	1865	C
21	i3	1868	U
21	i3	1869	A
21	i4	2	A
21	i4	3	C
21	i4	4	C
21	i4	9	U
21	i4	17	C
21	i4	18	C
21	i4	25	A
21	i4	27	A
21	i4	31	U
21	i4	33	G
21	i4	41	G
21	i4	42	A
21	i4	44	U
21	i4	45	A
21	i4	46	A
21	i4	52	G
21	i4	56	G
21	i4	62	G
21	i4	64	A
21	i4	67	C
21	i4	68	A
21	i4	69	C
21	i4	70	G
21	i4	72	C
21	i4	73	C
21	i4	74	G
21	i4	76	U
21	i4	77	A

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Mol	Chain	Res	Type
21	i4	78	C
21	i4	79	A
21	i4	83	A
21	i4	84	A
21	i4	98	C
21	i4	99	A
21	i4	103	A
21	i4	113	G
21	i4	114	G
21	i4	126	G
21	i4	127	C
21	i4	139	C
21	i4	140	C
21	i4	141	A
21	i4	142	C
21	i4	144	U
21	i4	148	U
21	i4	153	G
21	i4	154	U
21	i4	155	G
21	i4	156	G
21	i4	160	U
21	i4	161	U
21	i4	162	C
21	i4	163	U
21	i4	167	G
21	i4	168	C
21	i4	171	A
21	i4	172	U
21	i4	175	A
21	i4	177	G
21	i4	178	C
21	i4	180	G
21	i4	181	A
21	i4	183	G
21	i4	184	G
21	i4	185	G
21	i4	186	C
21	i4	188	C
21	i4	190	G
21	i4	191	A
21	i4	192	C

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Mol	Chain	Res	Type
21	i4	198	U
21	i4	201	C
21	i4	202	G
21	i4	208	G
21	i4	209	A
21	i4	210	U
21	i4	211	G
21	i4	212	C
21	i4	215	G
21	i4	216	C
21	i4	219	U
21	i4	291	G
21	i4	292	A
21	i4	293	C
21	i4	295	C
21	i4	299	A
21	i4	304	C
21	i4	305	U
21	i4	306	C
21	i4	307	G
21	i4	308	G
21	i4	309	G
21	i4	312	G
21	i4	313	A
21	i4	314	U
21	i4	319	C
21	i4	320	G
21	i4	323	C
21	i4	324	C
21	i4	325	C
21	i4	326	C
21	i4	328	U
21	i4	329	G
21	i4	330	G
21	i4	334	C
21	i4	335	G
21	i4	337	C
21	i4	338	G
21	i4	339	A
21	i4	340	C
21	i4	341	C
21	i4	342	C

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Mol	Chain	Res	Type
21	i4	343	A
21	i4	347	G
21	i4	351	G
21	i4	354	U
21	i4	360	A
21	i4	361	U
21	i4	362	C
21	i4	364	A
21	i4	369	C
21	i4	370	G
21	i4	371	A
21	i4	385	G
21	i4	386	C
21	i4	388	U
21	i4	391	C
21	i4	400	C
21	i4	401	A
21	i4	402	C
21	i4	407	G
21	i4	408	A
21	i4	409	C
21	i4	411	G
21	i4	413	G
21	i4	417	C
21	i4	418	A
21	i4	423	U
21	i4	426	A
21	i4	429	C
21	i4	434	G
21	i4	435	A
21	i4	436	G
21	i4	438	G
21	i4	441	C
21	i4	448	A
21	i4	449	A
21	i4	450	C
21	i4	452	G
21	i4	459	C
21	i4	464	A
21	i4	465	A
21	i4	466	G
21	i4	467	G

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Mol	Chain	Res	Type
21	i4	469	A
21	i4	472	C
21	i4	473	A
21	i4	474	G
21	i4	482	G
21	i4	487	U
21	i4	488	U
21	i4	489	A
21	i4	492	C
21	i4	493	A
21	i4	495	U
21	i4	502	C
21	i4	503	C
21	i4	505	G
21	i4	507	G
21	i4	516	A
21	i4	517	C
21	i4	524	U
21	i4	527	C
21	i4	529	A
21	i4	530	U
21	i4	532	C
21	i4	533	A
21	i4	534	G
21	i4	535	G
21	i4	537	C
21	i4	538	U
21	i4	539	C
21	i4	540	U
21	i4	542	U
21	i4	544	G
21	i4	545	A
21	i4	547	G
21	i4	549	C
21	i4	550	C
21	i4	551	U
21	i4	556	U
21	i4	559	G
21	i4	560	A
21	i4	563	G
21	i4	566	U
21	i4	574	A

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Mol	Chain	Res	Type
21	i4	575	A
21	i4	576	A
21	i4	581	U
21	i4	582	C
21	i4	584	G
21	i4	585	C
21	i4	587	A
21	i4	588	G
21	i4	589	G
21	i4	590	A
21	i4	591	U
21	i4	592	C
21	i4	593	C
21	i4	596	U
21	i4	604	A
21	i4	605	A
21	i4	606	G
21	i4	607	U
21	i4	608	C
21	i4	613	G
21	i4	621	C
21	i4	627	U
21	i4	628	A
21	i4	629	A
21	i4	631	U
21	i4	634	A
21	i4	643	A
21	i4	644	G
21	i4	651	U
21	i4	655	A
21	i4	656	G
21	i4	657	U
21	i4	660	C
21	i4	666	U
21	i4	669	A
21	i4	670	A
21	i4	671	A
21	i4	672	A
21	i4	673	G
21	i4	675	U
21	i4	679	A
21	i4	683	G

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Mol	Chain	Res	Type
21	i4	685	A
21	i4	686	U
21	i4	687	C
21	i4	688	U
21	i4	689	U
21	i4	690	G
21	i4	691	G
21	i4	692	G
21	i4	694	G
21	i4	695	C
21	i4	696	G
21	i4	697	G
21	i4	698	G
21	i4	732	U
21	i4	733	C
21	i4	734	C
21	i4	735	C
21	i4	736	C
21	i4	738	C
21	i4	739	C
21	i4	746	C
21	i4	747	U
21	i4	749	U
21	i4	750	C
21	i4	751	G
21	i4	752	G
21	i4	753	C
21	i4	787	G
21	i4	788	G
21	i4	789	G
21	i4	790	C
21	i4	791	C
21	i4	794	A
21	i4	795	A
21	i4	796	G
21	i4	797	C
21	i4	798	A
21	i4	800	U
21	i4	810	A
21	i4	811	A
21	i4	812	A
21	i4	813	A

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Mol	Chain	Res	Type
21	i4	815	U
21	i4	818	A
21	i4	821	G
21	i4	822	U
21	i4	823	U
21	i4	830	A
21	i4	834	C
21	i4	835	C
21	i4	837	A
21	i4	838	G
21	i4	839	C
21	i4	840	C
21	i4	841	G
21	i4	842	C
21	i4	843	C
21	i4	847	A
21	i4	848	U
21	i4	853	C
21	i4	864	A
21	i4	865	A
21	i4	869	A
21	i4	870	A
21	i4	873	G
21	i4	874	G
21	i4	876	C
21	i4	877	C
21	i4	878	G
21	i4	879	C
21	i4	881	G
21	i4	883	U
21	i4	887	U
21	i4	888	U
21	i4	889	U
21	i4	890	U
21	i4	891	G
21	i4	892	U
21	i4	893	U
21	i4	894	G
21	i4	896	U
21	i4	897	U
21	i4	899	U
21	i4	900	C

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Mol	Chain	Res	Type
21	i4	901	G
21	i4	902	G
21	i4	903	A
21	i4	904	A
21	i4	907	G
21	i4	908	A
21	i4	909	G
21	i4	913	A
21	i4	914	U
21	i4	917	U
21	i4	919	A
21	i4	920	A
21	i4	930	C
21	i4	933	G
21	i4	934	G
21	i4	939	U
21	i4	943	U
21	i4	952	G
21	i4	954	U
21	i4	955	A
21	i4	956	G
21	i4	958	G
21	i4	961	G
21	i4	963	A
21	i4	964	A
21	i4	965	U
21	i4	970	G
21	i4	971	G
21	i4	972	A
21	i4	973	C
21	i4	978	G
21	i4	979	C
21	i4	981	A
21	i4	990	A
21	i4	992	A
21	i4	996	A
21	i4	999	G
21	i4	1002	U
21	i4	1008	A
21	i4	1017	U
21	i4	1022	U
21	i4	1023	A

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Mol	Chain	Res	Type
21	i4	1027	A
21	i4	1028	A
21	i4	1029	G
21	i4	1041	G
21	i4	1042	A
21	i4	1044	G
21	i4	1052	A
21	i4	1059	G
21	i4	1060	A
21	i4	1061	U
21	i4	1062	A
21	i4	1068	G
21	i4	1076	G
21	i4	1081	U
21	i4	1083	A
21	i4	1084	A
21	i4	1085	C
21	i4	1087	A
21	i4	1088	U
21	i4	1110	G
21	i4	1113	A
21	i4	1114	U
21	i4	1115	U
21	i4	1116	C
21	i4	1118	C
21	i4	1119	A
21	i4	1120	U
21	i4	1126	G
21	i4	1134	G
21	i4	1138	C
21	i4	1139	C
21	i4	1148	A
21	i4	1149	A
21	i4	1150	A
21	i4	1153	C
21	i4	1154	U
21	i4	1155	U
21	i4	1157	G
21	i4	1166	G
21	i4	1170	A
21	i4	1171	G
21	i4	1172	U

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Mol	Chain	Res	Type
21	i4	1175	G
21	i4	1180	C
21	i4	1181	A
21	i4	1186	U
21	i4	1194	A
21	i4	1195	A
21	i4	1198	G
21	i4	1208	A
21	i4	1212	G
21	i4	1213	C
21	i4	1214	A
21	i4	1215	C
21	i4	1216	C
21	i4	1217	A
21	i4	1224	G
21	i4	1231	C
21	i4	1238	U
21	i4	1240	A
21	i4	1241	A
21	i4	1242	U
21	i4	1248	U
21	i4	1250	A
21	i4	1251	A
21	i4	1253	A
21	i4	1256	G
21	i4	1257	G
21	i4	1258	A
21	i4	1259	A
21	i4	1260	A
21	i4	1264	C
21	i4	1265	A
21	i4	1268	C
21	i4	1269	G
21	i4	1271	C
21	i4	1274	G
21	i4	1275	G
21	i4	1276	A
21	i4	1277	C
21	i4	1280	G
21	i4	1281	G
21	i4	1283	C
21	i4	1284	A

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Mol	Chain	Res	Type
21	i4	1287	A
21	i4	1288	U
21	i4	1289	U
21	i4	1290	G
21	i4	1292	C
21	i4	1294	G
21	i4	1295	A
21	i4	1296	U
21	i4	1297	U
21	i4	1298	G
21	i4	1299	A
21	i4	1300	U
21	i4	1301	A
21	i4	1302	G
21	i4	1303	C
21	i4	1305	C
21	i4	1306	U
21	i4	1307	U
21	i4	1308	U
21	i4	1310	U
21	i4	1311	C
21	i4	1313	A
21	i4	1315	U
21	i4	1317	C
21	i4	1318	G
21	i4	1321	G
21	i4	1323	U
21	i4	1324	G
21	i4	1330	G
21	i4	1331	C
21	i4	1332	A
21	i4	1337	C
21	i4	1341	C
21	i4	1342	U
21	i4	1343	U
21	i4	1363	C
21	i4	1364	U
21	i4	1371	U
21	i4	1372	U
21	i4	1373	C
21	i4	1378	A
21	i4	1383	A

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Mol	Chain	Res	Type
21	i4	1393	G
21	i4	1396	A
21	i4	1397	U
21	i4	1398	G
21	i4	1404	U
21	i4	1405	A
21	i4	1407	U
21	i4	1409	A
21	i4	1410	C
21	i4	1412	C
21	i4	1413	G
21	i4	1414	A
21	i4	1415	C
21	i4	1416	C
21	i4	1418	C
21	i4	1419	C
21	i4	1420	G
21	i4	1423	C
21	i4	1424	G
21	i4	1425	G
21	i4	1427	C
21	i4	1428	G
21	i4	1431	G
21	i4	1432	U
21	i4	1434	C
21	i4	1436	C
21	i4	1437	C
21	i4	1438	A
21	i4	1442	U
21	i4	1448	A
21	i4	1449	G
21	i4	1454	A
21	i4	1455	A
21	i4	1456	G
21	i4	1457	U
21	i4	1458	G
21	i4	1463	U
21	i4	1464	C
21	i4	1468	C
21	i4	1471	C
21	i4	1472	C
21	i4	1473	G

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Mol	Chain	Res	Type
21	i4	1475	G
21	i4	1476	A
21	i4	1477	U
21	i4	1480	A
21	i4	1481	G
21	i4	1484	A
21	i4	1487	A
21	i4	1489	A
21	i4	1490	G
21	i4	1493	C
21	i4	1494	U
21	i4	1495	G
21	i4	1497	G
21	i4	1498	A
21	i4	1505	U
21	i4	1506	A
21	i4	1507	G
21	i4	1508	A
21	i4	1509	U
21	i4	1510	G
21	i4	1512	C
21	i4	1513	C
21	i4	1515	G
21	i4	1520	G
21	i4	1521	C
21	i4	1522	A
21	i4	1523	C
21	i4	1525	C
21	i4	1526	G
21	i4	1527	C
21	i4	1531	A
21	i4	1533	A
21	i4	1535	U
21	i4	1536	G
21	i4	1538	C
21	i4	1540	G
21	i4	1543	U
21	i4	1545	A
21	i4	1546	G
21	i4	1550	G
21	i4	1551	U
21	i4	1552	G

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Mol	Chain	Res	Type
21	i4	1553	C
21	i4	1554	C
21	i4	1555	U
21	i4	1556	A
21	i4	1557	C
21	i4	1558	C
21	i4	1567	G
21	i4	1568	C
21	i4	1569	A
21	i4	1570	G
21	i4	1573	G
21	i4	1574	C
21	i4	1575	G
21	i4	1579	A
21	i4	1580	A
21	i4	1581	C
21	i4	1585	U
21	i4	1586	U
21	i4	1587	G
21	i4	1588	A
21	i4	1589	A
21	i4	1598	G
21	i4	1599	U
21	i4	1600	G
21	i4	1603	G
21	i4	1614	A
21	i4	1621	U
21	i4	1623	A
21	i4	1626	C
21	i4	1636	G
21	i4	1637	A
21	i4	1638	G
21	i4	1639	G
21	i4	1640	A
21	i4	1644	C
21	i4	1648	G
21	i4	1651	A
21	i4	1653	U
21	i4	1654	G
21	i4	1655	C
21	i4	1660	C
21	i4	1661	A

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Mol	Chain	Res	Type
21	i4	1662	U
21	i4	1663	A
21	i4	1664	A
21	i4	1665	G
21	i4	1679	A
21	i4	1680	G
21	i4	1686	G
21	i4	1688	C
21	i4	1690	U
21	i4	1694	U
21	i4	1695	A
21	i4	1697	A
21	i4	1698	C
21	i4	1714	U
21	i4	1719	A
21	i4	1721	U
21	i4	1722	G
21	i4	1729	U
21	i4	1730	U
21	i4	1735	A
21	i4	1737	G
21	i4	1742	C
21	i4	1743	G
21	i4	1744	G
21	i4	1745	A
21	i4	1746	U
21	i4	1748	G
21	i4	1751	C
21	i4	1752	C
21	i4	1753	C
21	i4	1754	G
21	i4	1755	C
21	i4	1757	G
21	i4	1758	G
21	i4	1772	C
21	i4	1773	C
21	i4	1775	U
21	i4	1776	G
21	i4	1777	G
21	i4	1781	A
21	i4	1782	G
21	i4	1784	G

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Mol	Chain	Res	Type
21	i4	1785	C
21	i4	1786	U
21	i4	1805	G
21	i4	1812	U
21	i4	1813	A
21	i4	1814	G
21	i4	1823	A
21	i4	1824	A
21	i4	1825	A
21	i4	1826	G
21	i4	1831	A
21	i4	1833	C
21	i4	1838	U
21	i4	1839	U
21	i4	1849	G
21	i4	1850	A
21	i4	1851	A
21	i4	1852	C
21	i4	1857	G
21	i4	1858	G
21	i4	1861	G
21	i4	1862	G
21	i4	1863	A
21	i4	1865	C
21	i4	1868	U
21	i4	1869	A
21	i5	2	A
21	i5	3	C
21	i5	4	C
21	i5	9	U
21	i5	17	C
21	i5	18	C
21	i5	25	A
21	i5	27	A
21	i5	31	U
21	i5	33	G
21	i5	41	G
21	i5	42	A
21	i5	44	U
21	i5	45	A
21	i5	46	A
21	i5	52	G

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Mol	Chain	Res	Type
21	i5	56	G
21	i5	62	G
21	i5	64	A
21	i5	67	C
21	i5	68	A
21	i5	69	C
21	i5	70	G
21	i5	72	C
21	i5	73	C
21	i5	74	G
21	i5	76	U
21	i5	77	A
21	i5	78	C
21	i5	79	A
21	i5	83	A
21	i5	84	A
21	i5	98	C
21	i5	99	A
21	i5	103	A
21	i5	113	G
21	i5	114	G
21	i5	126	G
21	i5	127	C
21	i5	139	C
21	i5	140	C
21	i5	141	A
21	i5	142	C
21	i5	144	U
21	i5	148	U
21	i5	153	G
21	i5	154	U
21	i5	155	G
21	i5	156	G
21	i5	160	U
21	i5	161	U
21	i5	162	C
21	i5	163	U
21	i5	167	G
21	i5	168	C
21	i5	171	A
21	i5	172	U
21	i5	175	A

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Mol	Chain	Res	Type
21	i5	177	G
21	i5	178	C
21	i5	180	G
21	i5	181	A
21	i5	184	G
21	i5	185	G
21	i5	186	C
21	i5	188	C
21	i5	190	G
21	i5	191	A
21	i5	192	C
21	i5	198	U
21	i5	201	C
21	i5	202	G
21	i5	208	G
21	i5	209	A
21	i5	210	U
21	i5	211	G
21	i5	212	C
21	i5	214	U
21	i5	215	G
21	i5	219	U
21	i5	291	G
21	i5	292	A
21	i5	293	C
21	i5	295	C
21	i5	299	A
21	i5	304	C
21	i5	305	U
21	i5	306	C
21	i5	307	G
21	i5	308	G
21	i5	309	G
21	i5	312	G
21	i5	313	A
21	i5	314	U
21	i5	315	C
21	i5	319	C
21	i5	320	G
21	i5	323	C
21	i5	324	C
21	i5	325	C

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Mol	Chain	Res	Type
21	i5	326	C
21	i5	328	U
21	i5	329	G
21	i5	330	G
21	i5	334	C
21	i5	337	C
21	i5	338	G
21	i5	339	A
21	i5	340	C
21	i5	341	C
21	i5	342	C
21	i5	343	A
21	i5	347	G
21	i5	351	G
21	i5	354	U
21	i5	360	A
21	i5	361	U
21	i5	362	C
21	i5	364	A
21	i5	369	C
21	i5	370	G
21	i5	371	A
21	i5	385	G
21	i5	386	C
21	i5	388	U
21	i5	391	C
21	i5	400	C
21	i5	401	A
21	i5	402	C
21	i5	407	G
21	i5	408	A
21	i5	409	C
21	i5	411	G
21	i5	413	G
21	i5	417	C
21	i5	418	A
21	i5	423	U
21	i5	426	A
21	i5	429	C
21	i5	434	G
21	i5	435	A
21	i5	436	G

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Mol	Chain	Res	Type
21	i5	438	G
21	i5	441	C
21	i5	448	A
21	i5	449	A
21	i5	450	C
21	i5	452	G
21	i5	459	C
21	i5	464	A
21	i5	465	A
21	i5	466	G
21	i5	467	G
21	i5	469	A
21	i5	472	C
21	i5	473	A
21	i5	474	G
21	i5	482	G
21	i5	487	U
21	i5	488	U
21	i5	489	A
21	i5	492	C
21	i5	493	A
21	i5	495	U
21	i5	502	C
21	i5	503	C
21	i5	505	G
21	i5	507	G
21	i5	516	A
21	i5	517	C
21	i5	524	U
21	i5	526	A
21	i5	529	A
21	i5	530	U
21	i5	532	C
21	i5	533	A
21	i5	534	G
21	i5	535	G
21	i5	537	C
21	i5	538	U
21	i5	539	C
21	i5	540	U
21	i5	542	U
21	i5	544	G

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Mol	Chain	Res	Type
21	i5	545	A
21	i5	547	G
21	i5	549	C
21	i5	550	C
21	i5	551	U
21	i5	556	U
21	i5	557	U
21	i5	559	G
21	i5	560	A
21	i5	563	G
21	i5	566	U
21	i5	574	A
21	i5	575	A
21	i5	576	A
21	i5	581	U
21	i5	582	C
21	i5	584	G
21	i5	585	C
21	i5	587	A
21	i5	588	G
21	i5	589	G
21	i5	590	A
21	i5	591	U
21	i5	592	C
21	i5	593	C
21	i5	596	U
21	i5	604	A
21	i5	605	A
21	i5	606	G
21	i5	607	U
21	i5	608	C
21	i5	613	G
21	i5	621	C
21	i5	627	U
21	i5	628	A
21	i5	629	A
21	i5	631	U
21	i5	634	A
21	i5	643	A
21	i5	644	G
21	i5	651	U
21	i5	655	A

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Mol	Chain	Res	Type
21	i5	656	G
21	i5	657	U
21	i5	660	C
21	i5	666	U
21	i5	669	A
21	i5	670	A
21	i5	671	A
21	i5	672	A
21	i5	673	G
21	i5	675	U
21	i5	679	A
21	i5	683	G
21	i5	685	A
21	i5	686	U
21	i5	687	C
21	i5	688	U
21	i5	689	U
21	i5	690	G
21	i5	691	G
21	i5	692	G
21	i5	693	A
21	i5	694	G
21	i5	695	C
21	i5	696	G
21	i5	697	G
21	i5	698	G
21	i5	732	U
21	i5	733	C
21	i5	734	C
21	i5	735	C
21	i5	736	C
21	i5	738	C
21	i5	739	C
21	i5	746	C
21	i5	747	U
21	i5	749	U
21	i5	750	C
21	i5	751	G
21	i5	752	G
21	i5	753	C
21	i5	787	G
21	i5	788	G

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Mol	Chain	Res	Type
21	i5	789	G
21	i5	790	C
21	i5	791	C
21	i5	794	A
21	i5	795	A
21	i5	796	G
21	i5	797	C
21	i5	798	A
21	i5	800	U
21	i5	810	A
21	i5	811	A
21	i5	812	A
21	i5	813	A
21	i5	815	U
21	i5	818	A
21	i5	821	G
21	i5	822	U
21	i5	823	U
21	i5	830	A
21	i5	834	C
21	i5	835	C
21	i5	837	A
21	i5	838	G
21	i5	839	C
21	i5	840	C
21	i5	841	G
21	i5	842	C
21	i5	843	C
21	i5	847	A
21	i5	848	U
21	i5	853	C
21	i5	864	A
21	i5	865	A
21	i5	869	A
21	i5	870	A
21	i5	873	G
21	i5	874	G
21	i5	876	C
21	i5	877	C
21	i5	878	G
21	i5	879	C
21	i5	881	G

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Mol	Chain	Res	Type
21	i5	883	U
21	i5	887	U
21	i5	888	U
21	i5	889	U
21	i5	890	U
21	i5	891	G
21	i5	892	U
21	i5	893	U
21	i5	894	G
21	i5	896	U
21	i5	897	U
21	i5	899	U
21	i5	900	C
21	i5	901	G
21	i5	902	G
21	i5	903	A
21	i5	904	A
21	i5	907	G
21	i5	908	A
21	i5	909	G
21	i5	913	A
21	i5	914	U
21	i5	917	U
21	i5	919	A
21	i5	920	A
21	i5	930	C
21	i5	933	G
21	i5	934	G
21	i5	939	U
21	i5	943	U
21	i5	952	G
21	i5	954	U
21	i5	955	A
21	i5	956	G
21	i5	958	G
21	i5	961	G
21	i5	963	A
21	i5	964	A
21	i5	965	U
21	i5	970	G
21	i5	971	G
21	i5	972	A

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Mol	Chain	Res	Type
21	i5	973	C
21	i5	978	G
21	i5	979	C
21	i5	981	A
21	i5	990	A
21	i5	992	A
21	i5	996	A
21	i5	999	G
21	i5	1002	U
21	i5	1008	A
21	i5	1017	U
21	i5	1022	U
21	i5	1023	A
21	i5	1027	A
21	i5	1028	A
21	i5	1029	G
21	i5	1041	G
21	i5	1042	A
21	i5	1044	G
21	i5	1052	A
21	i5	1059	G
21	i5	1060	A
21	i5	1061	U
21	i5	1062	A
21	i5	1068	G
21	i5	1076	G
21	i5	1081	U
21	i5	1083	A
21	i5	1084	A
21	i5	1085	C
21	i5	1087	A
21	i5	1088	U
21	i5	1110	G
21	i5	1113	A
21	i5	1114	U
21	i5	1115	U
21	i5	1116	C
21	i5	1118	C
21	i5	1119	A
21	i5	1120	U
21	i5	1126	G
21	i5	1134	G

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Mol	Chain	Res	Type
21	i5	1138	C
21	i5	1139	C
21	i5	1148	A
21	i5	1149	A
21	i5	1150	A
21	i5	1153	C
21	i5	1154	U
21	i5	1155	U
21	i5	1157	G
21	i5	1166	G
21	i5	1170	A
21	i5	1171	G
21	i5	1172	U
21	i5	1175	G
21	i5	1180	C
21	i5	1181	A
21	i5	1186	U
21	i5	1194	A
21	i5	1195	A
21	i5	1198	G
21	i5	1208	A
21	i5	1210	G
21	i5	1212	G
21	i5	1213	C
21	i5	1214	A
21	i5	1215	C
21	i5	1216	C
21	i5	1217	A
21	i5	1224	G
21	i5	1231	C
21	i5	1238	U
21	i5	1240	A
21	i5	1241	A
21	i5	1242	U
21	i5	1248	U
21	i5	1250	A
21	i5	1251	A
21	i5	1253	A
21	i5	1256	G
21	i5	1257	G
21	i5	1258	A
21	i5	1259	A

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Mol	Chain	Res	Type
21	i5	1260	A
21	i5	1264	C
21	i5	1265	A
21	i5	1268	C
21	i5	1269	G
21	i5	1271	C
21	i5	1274	G
21	i5	1275	G
21	i5	1276	A
21	i5	1277	C
21	i5	1280	G
21	i5	1281	G
21	i5	1283	C
21	i5	1284	A
21	i5	1287	A
21	i5	1288	U
21	i5	1289	U
21	i5	1290	G
21	i5	1292	C
21	i5	1294	G
21	i5	1295	A
21	i5	1296	U
21	i5	1297	U
21	i5	1298	G
21	i5	1299	A
21	i5	1300	U
21	i5	1301	A
21	i5	1302	G
21	i5	1303	C
21	i5	1305	C
21	i5	1306	U
21	i5	1307	U
21	i5	1308	U
21	i5	1310	U
21	i5	1311	C
21	i5	1313	A
21	i5	1315	U
21	i5	1317	C
21	i5	1318	G
21	i5	1321	G
21	i5	1323	U
21	i5	1324	G

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Mol	Chain	Res	Type
21	i5	1330	G
21	i5	1331	C
21	i5	1332	A
21	i5	1337	C
21	i5	1341	C
21	i5	1342	U
21	i5	1343	U
21	i5	1363	C
21	i5	1364	U
21	i5	1371	U
21	i5	1372	U
21	i5	1373	C
21	i5	1378	A
21	i5	1383	A
21	i5	1393	G
21	i5	1396	A
21	i5	1397	U
21	i5	1398	G
21	i5	1404	U
21	i5	1405	A
21	i5	1407	U
21	i5	1409	A
21	i5	1410	C
21	i5	1412	C
21	i5	1413	G
21	i5	1414	A
21	i5	1415	C
21	i5	1416	C
21	i5	1418	C
21	i5	1419	C
21	i5	1420	G
21	i5	1423	C
21	i5	1424	G
21	i5	1425	G
21	i5	1427	C
21	i5	1428	G
21	i5	1431	G
21	i5	1432	U
21	i5	1434	C
21	i5	1436	C
21	i5	1437	C
21	i5	1438	A

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Mol	Chain	Res	Type
21	i5	1442	U
21	i5	1448	A
21	i5	1449	G
21	i5	1454	A
21	i5	1455	A
21	i5	1456	G
21	i5	1457	U
21	i5	1458	G
21	i5	1463	U
21	i5	1464	C
21	i5	1468	C
21	i5	1471	C
21	i5	1472	C
21	i5	1473	G
21	i5	1475	G
21	i5	1476	A
21	i5	1477	U
21	i5	1480	A
21	i5	1481	G
21	i5	1484	A
21	i5	1487	A
21	i5	1489	A
21	i5	1490	G
21	i5	1493	C
21	i5	1494	U
21	i5	1495	G
21	i5	1497	G
21	i5	1498	A
21	i5	1505	U
21	i5	1506	A
21	i5	1507	G
21	i5	1508	A
21	i5	1509	U
21	i5	1510	G
21	i5	1512	C
21	i5	1513	C
21	i5	1515	G
21	i5	1520	G
21	i5	1521	C
21	i5	1522	A
21	i5	1523	C
21	i5	1525	C

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Mol	Chain	Res	Type
21	i5	1526	G
21	i5	1527	C
21	i5	1531	A
21	i5	1533	A
21	i5	1535	U
21	i5	1536	G
21	i5	1538	C
21	i5	1540	G
21	i5	1543	U
21	i5	1545	A
21	i5	1546	G
21	i5	1550	G
21	i5	1551	U
21	i5	1552	G
21	i5	1553	C
21	i5	1554	C
21	i5	1555	U
21	i5	1556	A
21	i5	1557	C
21	i5	1558	C
21	i5	1567	G
21	i5	1568	C
21	i5	1569	A
21	i5	1570	G
21	i5	1573	G
21	i5	1574	C
21	i5	1575	G
21	i5	1579	A
21	i5	1580	A
21	i5	1581	C
21	i5	1585	U
21	i5	1586	U
21	i5	1587	G
21	i5	1588	A
21	i5	1589	A
21	i5	1598	G
21	i5	1599	U
21	i5	1600	G
21	i5	1603	G
21	i5	1614	A
21	i5	1621	U
21	i5	1623	A

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Mol	Chain	Res	Type
21	i5	1626	C
21	i5	1636	G
21	i5	1637	A
21	i5	1638	G
21	i5	1639	G
21	i5	1640	A
21	i5	1644	C
21	i5	1648	G
21	i5	1651	A
21	i5	1653	U
21	i5	1654	G
21	i5	1655	C
21	i5	1660	C
21	i5	1661	A
21	i5	1662	U
21	i5	1663	A
21	i5	1664	A
21	i5	1665	G
21	i5	1679	A
21	i5	1680	G
21	i5	1686	G
21	i5	1688	C
21	i5	1690	U
21	i5	1694	U
21	i5	1695	A
21	i5	1697	A
21	i5	1698	C
21	i5	1714	U
21	i5	1719	A
21	i5	1721	U
21	i5	1722	G
21	i5	1729	U
21	i5	1730	U
21	i5	1735	A
21	i5	1737	G
21	i5	1742	C
21	i5	1743	G
21	i5	1744	G
21	i5	1745	A
21	i5	1746	U
21	i5	1748	G
21	i5	1751	C

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Mol	Chain	Res	Type
21	i5	1752	C
21	i5	1754	G
21	i5	1755	C
21	i5	1757	G
21	i5	1758	G
21	i5	1772	C
21	i5	1773	C
21	i5	1775	U
21	i5	1776	G
21	i5	1777	G
21	i5	1781	A
21	i5	1784	G
21	i5	1785	C
21	i5	1786	U
21	i5	1805	G
21	i5	1812	U
21	i5	1813	A
21	i5	1814	G
21	i5	1823	A
21	i5	1824	A
21	i5	1825	A
21	i5	1826	G
21	i5	1831	A
21	i5	1838	U
21	i5	1839	U
21	i5	1849	G
21	i5	1850	A
21	i5	1851	A
21	i5	1852	C
21	i5	1857	G
21	i5	1858	G
21	i5	1861	G
21	i5	1862	G
21	i5	1863	A
21	i5	1865	C
21	i5	1868	U
21	i5	1869	A
21	i6	2	A
21	i6	3	C
21	i6	4	C
21	i6	9	U
21	i6	17	C

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Mol	Chain	Res	Type
21	i6	18	C
21	i6	25	A
21	i6	27	A
21	i6	31	U
21	i6	33	G
21	i6	41	G
21	i6	42	A
21	i6	44	U
21	i6	45	A
21	i6	46	A
21	i6	52	G
21	i6	56	G
21	i6	62	G
21	i6	64	A
21	i6	67	C
21	i6	68	A
21	i6	69	C
21	i6	70	G
21	i6	72	C
21	i6	73	C
21	i6	74	G
21	i6	76	U
21	i6	77	A
21	i6	78	C
21	i6	79	A
21	i6	83	A
21	i6	84	A
21	i6	98	C
21	i6	99	A
21	i6	103	A
21	i6	113	G
21	i6	114	G
21	i6	126	G
21	i6	127	C
21	i6	139	C
21	i6	140	C
21	i6	141	A
21	i6	142	C
21	i6	144	U
21	i6	148	U
21	i6	153	G
21	i6	154	U

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Mol	Chain	Res	Type
21	i6	155	G
21	i6	156	G
21	i6	160	U
21	i6	161	U
21	i6	162	C
21	i6	163	U
21	i6	167	G
21	i6	168	C
21	i6	171	A
21	i6	172	U
21	i6	175	A
21	i6	177	G
21	i6	178	C
21	i6	180	G
21	i6	181	A
21	i6	184	G
21	i6	185	G
21	i6	186	C
21	i6	188	C
21	i6	190	G
21	i6	191	A
21	i6	192	C
21	i6	198	U
21	i6	201	C
21	i6	202	G
21	i6	208	G
21	i6	209	A
21	i6	210	U
21	i6	211	G
21	i6	212	C
21	i6	214	U
21	i6	215	G
21	i6	216	C
21	i6	219	U
21	i6	291	G
21	i6	292	A
21	i6	293	C
21	i6	295	C
21	i6	299	A
21	i6	304	C
21	i6	305	U
21	i6	306	C

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Mol	Chain	Res	Type
21	i6	307	G
21	i6	308	G
21	i6	309	G
21	i6	312	G
21	i6	313	A
21	i6	314	U
21	i6	317	C
21	i6	319	C
21	i6	320	G
21	i6	323	C
21	i6	324	C
21	i6	325	C
21	i6	326	C
21	i6	328	U
21	i6	329	G
21	i6	330	G
21	i6	334	C
21	i6	337	C
21	i6	338	G
21	i6	339	A
21	i6	340	C
21	i6	341	C
21	i6	342	C
21	i6	343	A
21	i6	347	G
21	i6	351	G
21	i6	354	U
21	i6	360	A
21	i6	361	U
21	i6	362	C
21	i6	364	A
21	i6	369	C
21	i6	370	G
21	i6	371	A
21	i6	385	G
21	i6	386	C
21	i6	388	U
21	i6	391	C
21	i6	400	C
21	i6	401	A
21	i6	402	C
21	i6	407	G

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Mol	Chain	Res	Type
21	i6	408	A
21	i6	409	C
21	i6	411	G
21	i6	413	G
21	i6	417	C
21	i6	418	A
21	i6	423	U
21	i6	426	A
21	i6	429	C
21	i6	434	G
21	i6	435	A
21	i6	436	G
21	i6	438	G
21	i6	441	C
21	i6	448	A
21	i6	449	A
21	i6	450	C
21	i6	452	G
21	i6	459	C
21	i6	464	A
21	i6	465	A
21	i6	466	G
21	i6	467	G
21	i6	469	A
21	i6	472	C
21	i6	473	A
21	i6	474	G
21	i6	482	G
21	i6	487	U
21	i6	488	U
21	i6	489	A
21	i6	492	C
21	i6	493	A
21	i6	495	U
21	i6	502	C
21	i6	503	C
21	i6	505	G
21	i6	507	G
21	i6	516	A
21	i6	517	C
21	i6	524	U
21	i6	529	A

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Mol	Chain	Res	Type
21	i6	530	U
21	i6	532	C
21	i6	533	A
21	i6	534	G
21	i6	535	G
21	i6	537	C
21	i6	538	U
21	i6	539	C
21	i6	540	U
21	i6	542	U
21	i6	544	G
21	i6	545	A
21	i6	547	G
21	i6	549	C
21	i6	550	C
21	i6	551	U
21	i6	556	U
21	i6	557	U
21	i6	559	G
21	i6	563	G
21	i6	566	U
21	i6	574	A
21	i6	575	A
21	i6	576	A
21	i6	581	U
21	i6	582	C
21	i6	584	G
21	i6	585	C
21	i6	587	A
21	i6	588	G
21	i6	589	G
21	i6	590	A
21	i6	591	U
21	i6	592	C
21	i6	593	C
21	i6	596	U
21	i6	604	A
21	i6	605	A
21	i6	606	G
21	i6	607	U
21	i6	608	C
21	i6	613	G

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Mol	Chain	Res	Type
21	i6	621	C
21	i6	627	U
21	i6	628	A
21	i6	629	A
21	i6	631	U
21	i6	634	A
21	i6	643	A
21	i6	644	G
21	i6	651	U
21	i6	655	A
21	i6	656	G
21	i6	657	U
21	i6	660	C
21	i6	666	U
21	i6	669	A
21	i6	670	A
21	i6	671	A
21	i6	672	A
21	i6	673	G
21	i6	675	U
21	i6	679	A
21	i6	683	G
21	i6	685	A
21	i6	686	U
21	i6	687	C
21	i6	688	U
21	i6	689	U
21	i6	690	G
21	i6	691	G
21	i6	692	G
21	i6	693	A
21	i6	694	G
21	i6	695	C
21	i6	696	G
21	i6	697	G
21	i6	698	G
21	i6	732	U
21	i6	733	C
21	i6	734	C
21	i6	735	C
21	i6	736	C
21	i6	738	C

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Mol	Chain	Res	Type
21	i6	739	C
21	i6	746	C
21	i6	747	U
21	i6	749	U
21	i6	750	C
21	i6	751	G
21	i6	752	G
21	i6	753	C
21	i6	787	G
21	i6	788	G
21	i6	789	G
21	i6	790	C
21	i6	791	C
21	i6	794	A
21	i6	795	A
21	i6	796	G
21	i6	797	C
21	i6	798	A
21	i6	800	U
21	i6	810	A
21	i6	811	A
21	i6	812	A
21	i6	813	A
21	i6	815	U
21	i6	818	A
21	i6	821	G
21	i6	822	U
21	i6	823	U
21	i6	830	A
21	i6	834	C
21	i6	835	C
21	i6	837	A
21	i6	838	G
21	i6	839	C
21	i6	840	C
21	i6	841	G
21	i6	842	C
21	i6	843	C
21	i6	847	A
21	i6	848	U
21	i6	853	C
21	i6	864	A

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Mol	Chain	Res	Type
21	i6	865	A
21	i6	869	A
21	i6	870	A
21	i6	873	G
21	i6	874	G
21	i6	876	C
21	i6	877	C
21	i6	878	G
21	i6	879	C
21	i6	881	G
21	i6	883	U
21	i6	887	U
21	i6	888	U
21	i6	889	U
21	i6	890	U
21	i6	891	G
21	i6	892	U
21	i6	893	U
21	i6	894	G
21	i6	896	U
21	i6	897	U
21	i6	899	U
21	i6	900	C
21	i6	901	G
21	i6	902	G
21	i6	903	A
21	i6	904	A
21	i6	907	G
21	i6	908	A
21	i6	909	G
21	i6	913	A
21	i6	914	U
21	i6	917	U
21	i6	919	A
21	i6	920	A
21	i6	930	C
21	i6	933	G
21	i6	934	G
21	i6	939	U
21	i6	943	U
21	i6	952	G
21	i6	954	U

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Mol	Chain	Res	Type
21	i6	955	A
21	i6	956	G
21	i6	958	G
21	i6	961	G
21	i6	963	A
21	i6	964	A
21	i6	965	U
21	i6	970	G
21	i6	971	G
21	i6	972	A
21	i6	973	C
21	i6	978	G
21	i6	979	C
21	i6	981	A
21	i6	990	A
21	i6	992	A
21	i6	996	A
21	i6	999	G
21	i6	1002	U
21	i6	1008	A
21	i6	1017	U
21	i6	1022	U
21	i6	1023	A
21	i6	1027	A
21	i6	1028	A
21	i6	1029	G
21	i6	1041	G
21	i6	1042	A
21	i6	1044	G
21	i6	1052	A
21	i6	1059	G
21	i6	1060	A
21	i6	1061	U
21	i6	1062	A
21	i6	1068	G
21	i6	1076	G
21	i6	1081	U
21	i6	1083	A
21	i6	1084	A
21	i6	1085	C
21	i6	1087	A
21	i6	1088	U

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Mol	Chain	Res	Type
21	i6	1110	G
21	i6	1113	A
21	i6	1114	U
21	i6	1115	U
21	i6	1116	C
21	i6	1118	C
21	i6	1119	A
21	i6	1120	U
21	i6	1126	G
21	i6	1134	G
21	i6	1138	C
21	i6	1139	C
21	i6	1148	A
21	i6	1149	A
21	i6	1150	A
21	i6	1153	C
21	i6	1154	U
21	i6	1155	U
21	i6	1157	G
21	i6	1166	G
21	i6	1170	A
21	i6	1171	G
21	i6	1172	U
21	i6	1175	G
21	i6	1180	C
21	i6	1181	A
21	i6	1186	U
21	i6	1194	A
21	i6	1195	A
21	i6	1198	G
21	i6	1208	A
21	i6	1212	G
21	i6	1213	C
21	i6	1214	A
21	i6	1215	C
21	i6	1216	C
21	i6	1217	A
21	i6	1224	G
21	i6	1231	C
21	i6	1238	U
21	i6	1240	A
21	i6	1241	A

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Mol	Chain	Res	Type
21	i6	1242	U
21	i6	1248	U
21	i6	1250	A
21	i6	1251	A
21	i6	1253	A
21	i6	1256	G
21	i6	1257	G
21	i6	1258	A
21	i6	1259	A
21	i6	1260	A
21	i6	1264	C
21	i6	1265	A
21	i6	1268	C
21	i6	1269	G
21	i6	1271	C
21	i6	1274	G
21	i6	1275	G
21	i6	1276	A
21	i6	1277	C
21	i6	1280	G
21	i6	1281	G
21	i6	1283	C
21	i6	1284	A
21	i6	1287	A
21	i6	1288	U
21	i6	1289	U
21	i6	1290	G
21	i6	1292	C
21	i6	1294	G
21	i6	1295	A
21	i6	1296	U
21	i6	1297	U
21	i6	1298	G
21	i6	1299	A
21	i6	1300	U
21	i6	1301	A
21	i6	1302	G
21	i6	1303	C
21	i6	1305	C
21	i6	1306	U
21	i6	1307	U
21	i6	1308	U

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Mol	Chain	Res	Type
21	i6	1310	U
21	i6	1311	C
21	i6	1313	A
21	i6	1315	U
21	i6	1317	C
21	i6	1318	G
21	i6	1321	G
21	i6	1323	U
21	i6	1324	G
21	i6	1330	G
21	i6	1331	C
21	i6	1332	A
21	i6	1337	C
21	i6	1341	C
21	i6	1342	U
21	i6	1343	U
21	i6	1363	C
21	i6	1364	U
21	i6	1371	U
21	i6	1372	U
21	i6	1373	C
21	i6	1378	A
21	i6	1383	A
21	i6	1393	G
21	i6	1396	A
21	i6	1397	U
21	i6	1398	G
21	i6	1404	U
21	i6	1405	A
21	i6	1407	U
21	i6	1409	A
21	i6	1410	C
21	i6	1412	C
21	i6	1413	G
21	i6	1414	A
21	i6	1415	C
21	i6	1416	C
21	i6	1418	C
21	i6	1419	C
21	i6	1420	G
21	i6	1423	C
21	i6	1424	G

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Mol	Chain	Res	Type
21	i6	1425	G
21	i6	1427	C
21	i6	1428	G
21	i6	1431	G
21	i6	1432	U
21	i6	1434	C
21	i6	1436	C
21	i6	1437	C
21	i6	1438	A
21	i6	1442	U
21	i6	1448	A
21	i6	1449	G
21	i6	1454	A
21	i6	1455	A
21	i6	1456	G
21	i6	1457	U
21	i6	1458	G
21	i6	1463	U
21	i6	1464	C
21	i6	1468	C
21	i6	1471	C
21	i6	1472	C
21	i6	1473	G
21	i6	1475	G
21	i6	1476	A
21	i6	1477	U
21	i6	1480	A
21	i6	1481	G
21	i6	1484	A
21	i6	1487	A
21	i6	1489	A
21	i6	1490	G
21	i6	1493	C
21	i6	1494	U
21	i6	1495	G
21	i6	1497	G
21	i6	1498	A
21	i6	1505	U
21	i6	1506	A
21	i6	1507	G
21	i6	1508	A
21	i6	1509	U

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Mol	Chain	Res	Type
21	i6	1510	G
21	i6	1512	C
21	i6	1513	C
21	i6	1515	G
21	i6	1520	G
21	i6	1521	C
21	i6	1522	A
21	i6	1523	C
21	i6	1525	C
21	i6	1526	G
21	i6	1527	C
21	i6	1531	A
21	i6	1533	A
21	i6	1535	U
21	i6	1536	G
21	i6	1538	C
21	i6	1540	G
21	i6	1543	U
21	i6	1545	A
21	i6	1546	G
21	i6	1550	G
21	i6	1551	U
21	i6	1552	G
21	i6	1553	C
21	i6	1554	C
21	i6	1555	U
21	i6	1556	A
21	i6	1557	C
21	i6	1558	C
21	i6	1567	G
21	i6	1568	C
21	i6	1569	A
21	i6	1570	G
21	i6	1573	G
21	i6	1574	C
21	i6	1575	G
21	i6	1579	A
21	i6	1580	A
21	i6	1581	C
21	i6	1585	U
21	i6	1586	U
21	i6	1587	G

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Mol	Chain	Res	Type
21	i6	1588	A
21	i6	1589	A
21	i6	1598	G
21	i6	1599	U
21	i6	1600	G
21	i6	1603	G
21	i6	1614	A
21	i6	1621	U
21	i6	1623	A
21	i6	1626	C
21	i6	1636	G
21	i6	1637	A
21	i6	1638	G
21	i6	1639	G
21	i6	1640	A
21	i6	1644	C
21	i6	1648	G
21	i6	1651	A
21	i6	1653	U
21	i6	1654	G
21	i6	1655	C
21	i6	1660	C
21	i6	1661	A
21	i6	1662	U
21	i6	1663	A
21	i6	1664	A
21	i6	1665	G
21	i6	1679	A
21	i6	1680	G
21	i6	1686	G
21	i6	1688	C
21	i6	1690	U
21	i6	1694	U
21	i6	1695	A
21	i6	1697	A
21	i6	1698	C
21	i6	1714	U
21	i6	1719	A
21	i6	1721	U
21	i6	1722	G
21	i6	1729	U
21	i6	1730	U

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Mol	Chain	Res	Type
21	i6	1735	A
21	i6	1737	G
21	i6	1742	C
21	i6	1743	G
21	i6	1744	G
21	i6	1745	A
21	i6	1746	U
21	i6	1748	G
21	i6	1751	C
21	i6	1752	C
21	i6	1754	G
21	i6	1755	C
21	i6	1757	G
21	i6	1758	G
21	i6	1772	C
21	i6	1773	C
21	i6	1775	U
21	i6	1776	G
21	i6	1777	G
21	i6	1781	A
21	i6	1782	G
21	i6	1784	G
21	i6	1785	C
21	i6	1786	U
21	i6	1805	G
21	i6	1812	U
21	i6	1813	A
21	i6	1814	G
21	i6	1823	A
21	i6	1824	A
21	i6	1825	A
21	i6	1826	G
21	i6	1831	A
21	i6	1835	A
21	i6	1838	U
21	i6	1839	U
21	i6	1849	G
21	i6	1850	A
21	i6	1851	A
21	i6	1852	C
21	i6	1857	G
21	i6	1858	G

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Mol	Chain	Res	Type
21	i6	1861	G
21	i6	1862	G
21	i6	1863	A
21	i6	1865	C
21	i6	1868	U
21	i6	1869	A

There are no RNA pucker outliers to report.

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

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

5.5 Carbohydrates (i)

There are no carbohydrates in this entry.

5.6 Ligand geometry (i)

Of 6 ligands modelled in this entry, 6 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
21	i2	1
21	i4	1
21	i3	1
21	i6	1
21	i5	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	i2	1689:C	O3'	1690:U	P	2.39
1	i3	1689:C	O3'	1690:U	P	2.27
1	i5	1689:C	O3'	1690:U	P	2.14
1	i6	1689:C	O3'	1690:U	P	2.07
1	i4	1689:C	O3'	1690:U	P	1.91

6 Fit of model and data (i)

6.1 Protein, DNA and RNA chains (i)

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
1	T1	143/145 (98%)	-0.54	4 (2%)	53	50	166, 196, 227, 240	0
1	T2	143/145 (98%)	-0.44	2 (1%)	75	70	164, 191, 211, 219	0
1	T3	143/145 (98%)	-0.22	2 (1%)	75	70	235, 251, 270, 279	0
1	T4	143/145 (98%)	-0.20	9 (6%)	21	23	302, 349, 376, 382	0
1	T5	143/145 (98%)	-0.19	4 (2%)	53	50	182, 217, 239, 247	0
1	T6	143/145 (98%)	-0.43	3 (2%)	64	60	177, 203, 220, 229	0
2	U1	104/119 (87%)	-0.38	0	100	100	155, 178, 205, 213	0
2	U2	104/119 (87%)	0.28	10 (9%)	9	14	153, 168, 189, 197	0
2	U3	104/119 (87%)	0.18	11 (10%)	7	12	222, 235, 250, 257	0
2	U4	104/119 (87%)	0.98	29 (27%)	1	6	241, 266, 296, 311	0
2	U5	104/119 (87%)	1.25	24 (23%)	1	6	173, 200, 224, 233	0
2	U6	104/119 (87%)	0.51	18 (17%)	2	8	168, 180, 196, 203	0
3	V1	83/83 (100%)	0.37	7 (8%)	12	17	134, 163, 202, 215	0
3	V2	83/83 (100%)	-0.28	0	100	100	128, 151, 181, 191	0
3	V3	83/83 (100%)	-0.04	2 (2%)	59	56	169, 194, 239, 250	0
3	V4	83/83 (100%)	-0.14	4 (4%)	31	33	161, 194, 236, 248	0
3	V5	83/83 (100%)	-0.11	2 (2%)	59	56	162, 193, 232, 245	0
3	V6	83/83 (100%)	0.12	5 (6%)	23	25	153, 179, 211, 222	0
4	X1	141/143 (98%)	0.74	29 (20%)	1	6	112, 126, 143, 151	0
4	X2	141/143 (98%)	0.11	9 (6%)	20	23	116, 130, 146, 153	0
4	X3	141/143 (98%)	0.15	9 (6%)	20	23	131, 151, 176, 187	0
4	X4	141/143 (98%)	0.27	10 (7%)	17	20	129, 166, 204, 218	0
4	X5	141/143 (98%)	0.76	26 (18%)	1	7	137, 151, 168, 180	0
4	X6	141/143 (98%)	0.64	28 (19%)	1	7	138, 152, 169, 180	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
5	a1	107/115 (93%)	0.18	10 (9%) 9 15	111, 122, 148, 157	0
5	a2	107/115 (93%)	-0.34	1 (0%) 84 80	113, 123, 149, 155	0
5	a3	107/115 (93%)	0.57	14 (13%) 4 10	144, 161, 211, 220	0
5	a4	107/115 (93%)	0.24	8 (7%) 15 19	136, 154, 197, 204	0
5	a5	107/115 (93%)	1.32	27 (25%) 1 6	135, 144, 180, 188	0
5	a6	107/115 (93%)	1.02	27 (25%) 1 6	133, 141, 171, 176	0
6	c1	64/69 (92%)	1.22	21 (32%) 0 5	182, 206, 232, 243	0
6	c2	64/69 (92%)	0.66	9 (14%) 3 9	191, 213, 235, 252	0
6	c3	64/69 (92%)	0.58	6 (9%) 9 15	209, 217, 229, 241	0
6	c4	64/69 (92%)	-0.03	3 (4%) 32 33	237, 252, 280, 296	0
6	c5	64/69 (92%)	0.53	5 (7%) 14 19	187, 203, 217, 222	0
6	c6	64/69 (92%)	-0.31	2 (3%) 49 46	196, 216, 234, 238	0
7	d1	53/56 (94%)	-0.35	0 100 100	156, 160, 181, 189	0
7	d2	53/56 (94%)	-0.31	0 100 100	154, 156, 172, 179	0
7	d3	53/56 (94%)	0.93	11 (20%) 1 6	217, 249, 308, 321	0
7	d4	53/56 (94%)	-0.19	3 (5%) 24 27	244, 285, 361, 375	0
7	d5	53/56 (94%)	0.37	10 (18%) 1 7	175, 179, 191, 197	0
7	d6	53/56 (94%)	-0.02	6 (11%) 6 12	169, 171, 191, 199	0
8	f1	72/156 (46%)	0.04	4 (5%) 25 27	179, 218, 268, 285	0
8	f2	72/156 (46%)	-0.05	4 (5%) 25 27	174, 207, 248, 257	0
8	f3	72/156 (46%)	0.20	10 (13%) 3 9	282, 365, 385, 393	0
8	f4	72/156 (46%)	-0.48	1 (1%) 75 70	317, 397, 425, 435	0
8	f5	72/156 (46%)	0.09	8 (11%) 6 12	182, 223, 255, 263	0
8	f6	72/156 (46%)	0.21	6 (8%) 12 17	185, 229, 268, 282	0
9	g1	313/317 (98%)	0.06	21 (6%) 19 22	191, 230, 269, 290	0
9	g2	313/317 (98%)	-0.04	20 (6%) 20 23	175, 207, 237, 248	0
9	g3	313/317 (98%)	0.02	22 (7%) 17 21	208, 228, 248, 255	0
9	g4	313/317 (98%)	-0.11	18 (5%) 24 26	223, 250, 276, 286	0
9	g5	313/317 (98%)	0.07	15 (4%) 31 33	204, 232, 260, 267	0
9	g6	313/317 (98%)	-0.15	15 (4%) 31 33	191, 224, 256, 271	0
10	C1	222/293 (75%)	0.16	15 (6%) 18 22	117, 147, 182, 192	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
10	C2	222/293 (75%)	-0.08	8 (3%) 43 41	118, 140, 168, 176	0
10	C3	222/293 (75%)	-0.44	1 (0%) 90 88	145, 179, 221, 235	0
10	C4	222/293 (75%)	-0.19	8 (3%) 43 41	145, 186, 226, 241	0
10	C5	222/293 (75%)	0.31	31 (13%) 3 9	144, 176, 211, 221	0
10	C6	222/293 (75%)	0.25	21 (9%) 9 14	141, 166, 194, 203	0
11	G1	237/249 (95%)	-0.43	2 (0%) 86 82	160, 218, 269, 295	0
11	G2	237/249 (95%)	-0.30	6 (2%) 58 54	168, 228, 256, 271	0
11	G3	237/249 (95%)	-0.20	12 (5%) 29 31	166, 225, 250, 256	0
11	G4	237/249 (95%)	0.07	24 (10%) 8 13	174, 239, 267, 288	0
11	G5	237/249 (95%)	-0.19	19 (8%) 13 18	209, 290, 320, 341	0
11	G6	237/249 (95%)	-0.05	16 (6%) 18 22	212, 290, 318, 339	0
12	J1	185/194 (95%)	-0.30	5 (2%) 55 51	129, 171, 222, 262	0
12	J2	185/194 (95%)	-0.05	12 (6%) 20 23	128, 162, 204, 236	0
12	J3	185/194 (95%)	-0.20	10 (5%) 26 29	157, 197, 258, 306	0
12	J4	185/194 (95%)	-0.06	11 (5%) 23 25	164, 213, 300, 317	0
12	J5	185/194 (95%)	0.17	20 (10%) 6 12	158, 209, 259, 296	0
12	J6	185/194 (95%)	-0.35	6 (3%) 48 45	154, 195, 238, 271	0
13	M1	123/132 (93%)	0.42	17 (13%) 3 10	215, 248, 278, 291	0
13	M2	123/132 (93%)	-0.23	3 (2%) 59 56	201, 226, 255, 268	0
13	M3	123/132 (93%)	0.13	11 (8%) 10 16	339, 364, 377, 381	0
13	M4	123/132 (93%)	0.34	15 (12%) 5 11	369, 398, 417, 422	0
13	M5	123/132 (93%)	-0.06	8 (6%) 20 23	217, 237, 257, 269	0
13	M6	123/132 (93%)	-0.04	8 (6%) 20 23	212, 236, 257, 268	0
14	N1	150/151 (99%)	-0.08	4 (2%) 55 51	130, 172, 211, 221	0
14	N2	150/151 (99%)	-0.13	5 (3%) 47 44	124, 158, 185, 191	0
14	N3	150/151 (99%)	-0.17	5 (3%) 47 44	144, 166, 206, 219	0
14	N4	150/151 (99%)	-0.24	3 (2%) 65 62	138, 166, 208, 222	0
14	N5	150/151 (99%)	-0.32	5 (3%) 47 44	148, 182, 217, 230	0
14	N6	150/151 (99%)	-0.39	3 (2%) 65 62	144, 178, 207, 216	0
15	O1	140/151 (92%)	0.73	21 (15%) 3 9	121, 151, 185, 197	0
15	O2	140/151 (92%)	0.60	22 (15%) 2 8	124, 154, 181, 195	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
15	O3	140/151 (92%)	1.16	34 (24%)	1	6	150, 202, 247, 260	0
15	O4	140/151 (92%)	0.73	27 (19%)	1	7	147, 199, 237, 259	0
15	O5	140/151 (92%)	0.76	32 (22%)	1	6	139, 177, 213, 227	0
15	O6	140/151 (92%)	-0.11	8 (5%)	24	27	138, 169, 197, 211	0
16	W1	129/130 (99%)	0.02	4 (3%)	49	46	132, 149, 167, 175	0
16	W2	129/130 (99%)	0.07	1 (0%)	86	82	127, 141, 155, 162	0
16	W3	129/130 (99%)	0.70	14 (10%)	6	12	146, 165, 180, 186	0
16	W4	129/130 (99%)	1.11	34 (26%)	1	6	140, 162, 178, 187	0
16	W5	129/130 (99%)	-0.25	1 (0%)	86	82	156, 178, 195, 207	0
16	W6	129/130 (99%)	0.05	4 (3%)	49	46	152, 169, 184, 194	0
17	Y1	131/133 (98%)	-0.35	6 (4%)	33	34	159, 196, 223, 237	0
17	Y2	131/133 (98%)	-0.22	11 (8%)	12	17	164, 191, 214, 225	0
17	Y3	131/133 (98%)	0.05	13 (9%)	8	14	180, 221, 252, 267	0
17	Y4	131/133 (98%)	-0.11	9 (6%)	18	21	191, 239, 278, 300	0
17	Y5	131/133 (98%)	0.16	10 (7%)	15	19	210, 252, 285, 302	0
17	Y6	131/133 (98%)	0.16	12 (9%)	10	15	208, 239, 266, 280	0
18	Z1	75/125 (60%)	0.61	11 (14%)	3	9	196, 226, 255, 258	0
18	Z2	75/125 (60%)	0.71	14 (18%)	1	7	191, 228, 254, 264	0
18	Z3	75/125 (60%)	-0.07	6 (8%)	13	18	241, 264, 288, 300	0
18	Z4	75/125 (60%)	-0.10	6 (8%)	13	18	325, 359, 372, 379	0
18	Z5	75/125 (60%)	1.62	24 (32%)	0	5	205, 223, 244, 248	0
18	Z6	75/125 (60%)	1.13	18 (24%)	1	6	195, 217, 236, 244	0
19	b1	83/84 (98%)	0.62	11 (13%)	4	10	146, 177, 216, 229	0
19	b2	83/84 (98%)	-0.34	0	100	100	136, 156, 185, 194	0
19	b3	83/84 (98%)	0.03	5 (6%)	23	25	166, 192, 221, 235	0
19	b4	83/84 (98%)	0.02	9 (10%)	6	12	157, 182, 219, 236	0
19	b5	83/84 (98%)	0.20	4 (4%)	31	33	169, 191, 221, 235	0
19	b6	83/84 (98%)	0.41	6 (7%)	16	20	160, 179, 207, 219	0
20	e1	58/133 (43%)	0.10	4 (6%)	18	21	134, 160, 176, 179	0
20	e2	58/133 (43%)	0.33	9 (15%)	2	8	143, 155, 166, 168	0
20	e3	58/133 (43%)	0.48	10 (17%)	2	8	163, 198, 215, 218	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
20	e4	58/133 (43%)	0.41	10 (17%)	2	8	199, 226, 246, 253	0
20	e5	58/133 (43%)	0.14	7 (12%)	5	11	154, 186, 202, 204	0
20	e6	58/133 (43%)	0.01	7 (12%)	5	11	158, 181, 191, 194	0
21	i1	1742/1869 (93%)	0.10	49 (2%)	53	50	110, 170, 323, 428	0
21	i2	1742/1869 (93%)	0.01	34 (1%)	65	62	113, 169, 301, 421	0
21	i3	1742/1869 (93%)	-0.04	37 (2%)	64	60	130, 200, 353, 478	0
21	i4	1742/1869 (93%)	0.07	59 (3%)	46	44	128, 212, 362, 457	0
21	i5	1742/1869 (93%)	-0.00	36 (2%)	64	60	133, 191, 362, 430	0
21	i6	1742/1869 (93%)	0.09	62 (3%)	43	41	132, 188, 335, 417	0
22	A1	222/295 (75%)	0.28	20 (9%)	10	15	134, 159, 193, 212	0
22	A2	222/295 (75%)	-0.11	8 (3%)	43	41	128, 149, 178, 190	0
22	A3	222/295 (75%)	-0.04	13 (5%)	23	25	172, 206, 247, 272	0
22	A4	222/295 (75%)	-0.52	0	100	100	161, 197, 237, 252	0
22	A5	222/295 (75%)	0.26	29 (13%)	4	10	162, 191, 229, 245	0
22	A6	222/295 (75%)	0.02	11 (4%)	30	31	154, 177, 211, 222	0
23	B1	214/264 (81%)	0.24	19 (8%)	10	16	127, 168, 205, 214	0
23	B2	214/264 (81%)	0.18	23 (10%)	7	12	124, 157, 193, 204	0
23	B3	214/264 (81%)	-0.02	13 (6%)	22	24	166, 208, 248, 254	0
23	B4	214/264 (81%)	0.33	19 (8%)	10	16	151, 197, 248, 262	0
23	B5	214/264 (81%)	-0.35	5 (2%)	61	58	150, 186, 220, 228	0
23	B6	214/264 (81%)	-0.42	1 (0%)	90	88	144, 172, 204, 210	0
24	D1	227/243 (93%)	0.20	13 (5%)	24	27	159, 173, 203, 250	0
24	D2	227/243 (93%)	-0.07	13 (5%)	24	27	156, 173, 205, 233	0
24	D3	227/243 (93%)	0.72	35 (15%)	2	8	211, 244, 269, 286	0
24	D4	227/243 (93%)	1.26	65 (28%)	1	5	217, 260, 298, 310	0
24	D5	227/243 (93%)	0.27	23 (10%)	8	13	180, 191, 221, 254	0
24	D6	227/243 (93%)	0.42	29 (12%)	4	10	171, 184, 221, 250	0
25	E1	262/263 (99%)	0.72	40 (15%)	2	8	149, 195, 227, 237	0
25	E2	262/263 (99%)	0.59	37 (14%)	3	9	151, 188, 219, 227	0
25	E3	262/263 (99%)	-0.23	5 (1%)	67	63	154, 197, 221, 238	0
25	E4	262/263 (99%)	0.10	18 (6%)	18	21	158, 209, 239, 261	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å^2)	Q<0.9
25	E5	262/263 (99%)	0.72	44 (16%)	2	8	190, 242, 280, 296	0
25	E6	262/263 (99%)	0.59	37 (14%)	3	9	189, 232, 270, 280	0
26	F1	191/204 (93%)	0.81	33 (17%)	2	8	175, 204, 228, 236	0
26	F2	191/204 (93%)	0.71	27 (14%)	3	9	172, 203, 224, 232	0
26	F3	191/204 (93%)	0.51	30 (15%)	2	8	209, 229, 245, 255	0
26	F4	191/204 (93%)	0.28	29 (15%)	2	8	242, 289, 324, 338	0
26	F5	191/204 (93%)	1.38	59 (30%)	0	5	185, 201, 218, 223	0
26	F6	191/204 (93%)	0.30	20 (10%)	7	13	180, 203, 216, 221	0
27	H1	189/194 (97%)	0.40	26 (13%)	3	10	173, 225, 287, 300	0
27	H2	189/194 (97%)	-0.16	5 (2%)	56	53	156, 196, 245, 258	0
27	H3	189/194 (97%)	0.58	36 (19%)	1	7	172, 222, 267, 278	0
27	H4	189/194 (97%)	0.23	18 (9%)	9	14	176, 228, 290, 303	0
27	H5	189/194 (97%)	0.35	24 (12%)	4	11	196, 242, 297, 312	0
27	H6	189/194 (97%)	-0.31	5 (2%)	56	53	183, 227, 279, 291	0
28	I1	206/208 (99%)	0.71	35 (16%)	2	8	135, 223, 315, 326	0
28	I2	206/208 (99%)	0.18	19 (9%)	10	15	139, 220, 301, 318	0
28	I3	206/208 (99%)	-0.09	10 (4%)	30	32	136, 188, 250, 272	0
28	I4	206/208 (99%)	0.07	17 (8%)	12	17	139, 204, 286, 313	0
28	I5	206/208 (99%)	1.03	56 (27%)	1	6	163, 250, 344, 364	0
28	I6	206/208 (99%)	1.06	53 (25%)	1	6	166, 255, 345, 361	0
29	K1	98/165 (59%)	1.14	24 (24%)	1	6	164, 190, 213, 221	0
29	K2	98/165 (59%)	0.19	8 (8%)	12	18	159, 181, 202, 210	0
29	K3	98/165 (59%)	-0.00	4 (4%)	38	37	255, 297, 324, 332	0
29	K4	98/165 (59%)	-0.10	7 (7%)	17	20	283, 331, 365, 374	0
29	K5	98/165 (59%)	-0.23	1 (1%)	82	77	182, 201, 219, 224	0
29	K6	98/165 (59%)	0.27	14 (14%)	3	9	174, 192, 204, 210	0
30	L1	153/158 (96%)	0.92	36 (23%)	1	6	124, 177, 257, 284	0
30	L2	153/158 (96%)	1.04	29 (18%)	1	7	124, 169, 239, 265	0
30	L3	153/158 (96%)	1.27	40 (26%)	1	6	138, 161, 209, 227	0
30	L4	153/158 (96%)	1.20	41 (26%)	1	6	136, 167, 234, 258	0
30	L5	153/158 (96%)	0.70	28 (18%)	1	7	152, 202, 272, 302	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
30	L6	153/158 (96%)	1.24	36 (23%) 1 6	150, 200, 273, 303	0
31	P1	125/145 (86%)	-0.26	4 (3%) 48 45	174, 193, 217, 230	0
31	P2	125/145 (86%)	-0.33	4 (3%) 48 45	174, 193, 222, 231	0
31	P3	125/145 (86%)	0.03	13 (10%) 7 13	265, 327, 365, 374	0
31	P4	125/145 (86%)	-0.33	2 (1%) 72 67	306, 383, 399, 409	0
31	P5	125/145 (86%)	-0.31	0 100 100	182, 204, 223, 228	0
31	P6	125/145 (86%)	-0.07	9 (7%) 16 20	187, 212, 240, 251	0
32	Q1	146/146 (100%)	0.01	10 (6%) 18 22	156, 200, 232, 265	0
32	Q2	146/146 (100%)	0.56	17 (11%) 5 12	156, 182, 200, 218	0
32	Q3	146/146 (100%)	-0.04	11 (7%) 15 19	212, 223, 233, 243	0
32	Q4	146/146 (100%)	0.31	18 (12%) 5 11	249, 279, 311, 317	0
32	Q5	146/146 (100%)	0.01	9 (6%) 21 24	174, 209, 233, 258	0
32	Q6	146/146 (100%)	0.45	15 (10%) 7 13	170, 194, 210, 229	0
33	R1	132/135 (97%)	-0.13	5 (3%) 41 40	127, 177, 194, 201	0
33	R2	132/135 (97%)	-0.26	4 (3%) 51 47	124, 171, 196, 202	0
33	R3	132/135 (97%)	0.06	10 (7%) 15 19	171, 211, 240, 249	0
33	R4	132/135 (97%)	-0.03	6 (4%) 34 34	154, 216, 227, 235	0
33	R5	132/135 (97%)	0.56	22 (16%) 2 8	153, 202, 220, 228	0
33	R6	132/135 (97%)	0.62	25 (18%) 1 7	146, 196, 217, 224	0
34	S1	143/152 (94%)	0.54	21 (14%) 3 9	171, 201, 229, 247	0
34	S2	143/152 (94%)	0.25	18 (12%) 4 11	172, 210, 240, 258	0
34	S3	143/152 (94%)	-0.31	8 (5%) 25 27	268, 296, 323, 339	0
34	S4	143/152 (94%)	0.92	32 (22%) 1 6	321, 375, 385, 388	0
34	S5	143/152 (94%)	-0.12	12 (8%) 12 17	181, 213, 234, 246	0
34	S6	143/152 (94%)	0.28	17 (11%) 5 12	183, 215, 233, 243	0
35	j1	25/25 (100%)	0.21	0 100 100	113, 121, 137, 140	0
35	j2	25/25 (100%)	-0.13	0 100 100	119, 127, 143, 146	0
35	j3	25/25 (100%)	-0.56	0 100 100	137, 141, 145, 149	0
35	j4	25/25 (100%)	-0.26	1 (4%) 39 37	139, 147, 157, 163	0
35	j5	25/25 (100%)	-0.89	0 100 100	133, 138, 152, 153	0
35	j6	25/25 (100%)	-0.11	0 100 100	134, 141, 155, 157	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
36	k1	181/181 (100%)	-0.04	8 (4%) 35 35	146, 198, 267, 284	0
36	k2	181/181 (100%)	-0.41	0 100 100	147, 195, 253, 268	0
36	k3	181/181 (100%)	-0.54	0 100 100	158, 205, 256, 270	0
36	k4	181/181 (100%)	-0.11	10 (5%) 26 28	168, 233, 302, 315	0
36	k5	181/181 (100%)	0.27	14 (7%) 14 19	157, 199, 256, 270	0
36	k6	181/181 (100%)	-0.06	8 (4%) 35 35	155, 193, 242, 252	0
37	l1	79/198 (39%)	0.63	10 (12%) 4 11	174, 212, 268, 279	0
37	l2	79/198 (39%)	0.74	14 (17%) 2 8	185, 206, 233, 240	0
37	l3	79/198 (39%)	0.70	19 (24%) 1 6	237, 298, 351, 357	0
37	l4	79/198 (39%)	1.21	22 (27%) 1 6	237, 274, 309, 327	0
37	l5	79/198 (39%)	0.13	6 (7%) 15 19	199, 234, 288, 302	0
37	l6	79/198 (39%)	0.36	8 (10%) 8 13	185, 220, 273, 287	0
All	All	41688/46938 (88%)	0.15	3271 (7%) 14 19	110, 198, 315, 478	0

All (3271) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
30	L6	28	THR	21.0
32	Q5	2	PRO	19.7
21	i6	788	G	18.7
5	a4	105	GLY	18.4
15	O1	12	GLU	18.0
32	Q4	3	SER	17.0
5	a5	105	GLY	16.0
21	i4	788	G	15.9
21	i1	789	G	15.4
32	Q3	3	SER	14.5
21	i6	883	U	14.3
30	L6	29	GLY	13.9
21	i5	75	G	13.6
15	O3	12	GLU	13.3
32	Q6	2	PRO	13.2
15	O1	13	GLN	13.2
28	I6	126	GLY	12.9
15	O2	12	GLU	12.8
21	i5	698	G	12.5
30	L2	29	GLY	12.2
15	O3	14	VAL	12.1

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Mol	Chain	Res	Type	RSRZ
21	i1	793	G	12.0
21	i4	906	U	12.0
9	g1	224	GLY	11.7
30	L6	26	GLY	11.4
5	a4	107	ALA	11.3
21	i4	789	G	11.2
15	O3	13	GLN	11.2
21	i6	884	C	11.1
21	i6	75	G	11.0
21	i4	883	U	11.0
26	F2	126	THR	10.8
30	L6	31	GLU	10.8
30	L6	32	LYS	10.8
21	i1	788	G	10.8
21	i5	836	G	10.7
22	A3	221	ALA	10.7
21	i4	792	C	10.5
15	O1	14	VAL	10.5
5	a3	105	GLY	10.5
21	i4	905	C	10.5
34	S6	3	LEU	10.5
15	O2	13	GLN	10.4
5	a5	104	ALA	10.2
32	Q6	3	SER	10.1
21	i6	787	G	10.1
21	i4	752	G	10.0
21	i4	787	G	9.8
21	i6	789	G	9.8
23	B5	21	VAL	9.8
28	I5	38	ILE	9.8
22	A3	223	THR	9.7
21	i6	786	G	9.7
21	i1	794	A	9.7
21	i1	790	C	9.5
21	i6	785	C	9.5
21	i4	793	G	9.5
32	Q4	2	PRO	9.5
21	i6	894	G	9.5
30	L6	33	LEU	9.5
30	L2	30	LYS	9.3
2	U4	105	SER	9.2
2	U4	104	ILE	9.1

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Mol	Chain	Res	Type	RSRZ
28	I5	96	LEU	9.0
21	i4	1825	A	8.9
7	d3	49	ASP	8.8
22	A3	219	GLU	8.7
21	i1	753	C	8.6
28	I1	80	ASP	8.6
30	L6	34	PRO	8.6
30	L6	30	LYS	8.6
21	i1	752	G	8.5
21	i6	77	A	8.5
21	i6	882	U	8.5
32	Q3	2	PRO	8.5
7	d3	50	ILE	8.5
15	O4	13	GLN	8.4
29	K4	39	ASN	8.4
37	l4	191	GLU	8.4
30	L4	27	GLU	8.4
30	L6	27	GLU	8.3
21	i1	748	C	8.2
26	F2	31	ASN	8.2
28	I6	123	ARG	8.2
12	J4	184	GLY	8.1
21	i4	751	G	8.1
21	i1	791	C	8.1
24	D4	113	LEU	8.1
5	a5	103	PRO	8.1
12	J4	185	ALA	8.1
5	a4	104	ALA	8.0
32	Q6	5	GLY	8.0
26	F2	129	GLY	8.0
21	i5	697	G	8.0
15	O2	16	SER	7.9
8	f3	111	ASN	7.9
21	i4	884	C	7.9
22	A3	220	LYS	7.8
32	Q5	3	SER	7.8
21	i1	792	C	7.8
18	Z5	67	LEU	7.8
30	L2	28	THR	7.8
5	a3	104	ALA	7.8
17	Y1	130	LYS	7.8
9	g3	279	SER	7.8

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Mol	Chain	Res	Type	RSRZ
18	Z5	51	ASP	7.7
21	i6	74	G	7.7
21	i2	698	G	7.7
15	O3	16	SER	7.6
21	i6	885	U	7.6
30	L4	21	LYS	7.6
5	a4	106	ALA	7.6
21	i4	791	C	7.6
15	O3	17	LEU	7.6
17	Y3	127	ALA	7.6
27	H1	5	SER	7.6
32	Q6	1	MET	7.5
27	H2	193	GLN	7.5
28	I5	126	GLY	7.5
21	i4	882	U	7.5
2	U5	82	MET	7.4
21	i4	137	U	7.4
26	F3	31	ASN	7.4
21	i3	136	C	7.4
26	F5	121	PRO	7.4
15	O4	24	GLY	7.4
20	e1	3	HIS	7.3
26	F1	32	ASP	7.3
26	F2	30	ILE	7.3
30	L2	24	LEU	7.3
15	O2	14	VAL	7.3
7	d3	51	GLY	7.2
9	g5	13	GLY	7.2
30	L4	34	PRO	7.2
25	E5	39	ARG	7.2
30	L2	31	GLU	7.2
23	B2	22	VAL	7.2
21	i5	76	U	7.2
24	D4	111	GLY	7.1
17	Y3	130	LYS	7.1
21	i1	1317	C	7.1
23	B2	23	ASP	7.1
17	Y2	132	LYS	7.1
28	I4	126	GLY	7.1
5	a3	106	ALA	7.0
34	S5	145	THR	7.0
5	a5	107	ALA	7.0

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Mol	Chain	Res	Type	RSRZ
28	I1	78	ILE	7.0
24	D4	142	LEU	7.0
30	L4	154	GLN	7.0
26	F3	29	GLN	7.0
30	L4	33	LEU	7.0
30	L2	27	GLU	7.0
30	L4	29	GLY	6.9
28	I1	79	ILE	6.9
32	Q3	57	LEU	6.9
25	E6	239	PRO	6.9
32	Q5	1	MET	6.9
25	E6	40	GLU	6.9
25	E6	39	ARG	6.9
21	i1	751	G	6.9
8	f3	112	GLY	6.9
15	O4	12	GLU	6.9
24	D3	1	MET	6.9
26	F6	31	ASN	6.8
15	O2	15	ILE	6.8
37	l4	190	ILE	6.8
9	g3	277	THR	6.8
28	I6	45	THR	6.8
11	G6	236	SER	6.8
2	U5	105	SER	6.7
33	R6	62	GLN	6.7
34	S1	16	LEU	6.7
26	F2	127	ARG	6.7
34	S1	144	ARG	6.7
25	E1	173	ILE	6.7
28	I6	125	LYS	6.7
30	L6	24	LEU	6.7
28	I6	53	LYS	6.6
2	U5	83	ARG	6.6
28	I5	79	ILE	6.6
10	C6	130	ILE	6.6
21	i4	698	G	6.6
28	I6	127	ALA	6.6
15	O5	13	GLN	6.6
9	g4	13	GLY	6.6
21	i4	753	C	6.6
30	L4	151	THR	6.6
12	J3	185	ALA	6.6

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Mol	Chain	Res	Type	RSRZ
28	I6	122	GLY	6.5
23	B3	22	VAL	6.5
9	g3	278	SER	6.5
5	a5	41	ILE	6.5
26	F4	14	THR	6.5
34	S4	7	GLU	6.5
27	H5	89	GLY	6.5
21	i5	136	C	6.4
30	L1	37	TYR	6.4
21	i4	907	G	6.4
33	R5	90	ALA	6.4
27	H5	43	LEU	6.4
30	L4	26	GLY	6.4
24	D4	114	ALA	6.4
34	S1	15	VAL	6.4
13	M3	127	TYR	6.4
30	L1	36	TYR	6.4
21	i5	77	A	6.4
5	a5	66	LYS	6.3
25	E5	38	LEU	6.3
21	i6	751	G	6.3
15	O3	15	ILE	6.3
30	L1	13	GLN	6.3
24	D4	112	GLY	6.3
28	I5	41	ARG	6.3
25	E1	198	ARG	6.3
25	E5	54	TYR	6.2
26	F5	32	ASP	6.2
30	L4	32	LYS	6.2
8	f6	84	SER	6.2
11	G5	212	LEU	6.2
33	R6	63	ARG	6.2
5	a4	103	PRO	6.2
26	F2	195	GLU	6.2
30	L2	26	GLY	6.2
30	L2	23	VAL	6.2
9	g6	280	LYS	6.2
30	L5	34	PRO	6.2
34	S1	14	ARG	6.2
15	O5	12	GLU	6.2
15	O1	89	GLY	6.1
13	M4	97	GLU	6.1

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Mol	Chain	Res	Type	RSRZ
21	i1	747	U	6.1
21	i3	137	U	6.1
15	O2	89	GLY	6.1
29	K1	90	VAL	6.1
28	I5	80	ASP	6.1
30	L4	28	THR	6.1
17	Y2	131	PRO	6.1
34	S4	143	GLY	6.1
21	i5	74	G	6.1
26	F5	106	GLU	6.1
9	g5	12	LYS	6.1
5	a4	108	PRO	6.0
2	U3	82	MET	6.0
11	G4	236	SER	6.0
28	I1	82	VAL	6.0
6	c5	7	GLN	6.0
18	Z5	76	ARG	6.0
21	i6	1825	A	6.0
6	c2	45	ASN	6.0
30	L3	34	PRO	6.0
28	I6	124	LYS	6.0
21	i5	137	U	6.0
23	B3	21	VAL	6.0
33	R5	91	LEU	6.0
9	g3	280	LYS	6.0
26	F2	135	ARG	6.0
25	E5	111	VAL	6.0
25	E5	40	GLU	6.0
21	i6	1784	G	5.9
21	i4	750	C	5.9
20	e5	6	LEU	5.9
28	I6	121	LEU	5.9
5	a3	103	PRO	5.9
13	M1	130	CYS	5.9
34	S1	17	ASN	5.9
27	H1	7	LYS	5.9
30	L3	36	TYR	5.9
18	Z5	96	LEU	5.9
21	i6	836	G	5.9
26	F5	105	GLY	5.9
2	U4	114	VAL	5.9
21	i1	750	C	5.9

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Mol	Chain	Res	Type	RSRZ
37	l3	191	GLU	5.9
26	F6	29	GLN	5.9
20	e5	2	VAL	5.9
28	I5	125	LYS	5.9
30	L3	47	PRO	5.9
12	J4	186	GLY	5.9
4	X1	141	PRO	5.9
30	L4	18	GLN	5.9
6	c4	6	VAL	5.9
29	K1	89	ILE	5.8
2	U5	80	PHE	5.8
18	Z5	52	LYS	5.8
15	O4	21	VAL	5.8
26	F2	29	GLN	5.8
29	K4	38	LYS	5.8
21	i1	897	U	5.8
17	Y3	131	PRO	5.8
20	e6	59	SER	5.8
29	K1	21	MET	5.8
37	l1	188	ASP	5.8
5	a6	72	HIS	5.8
21	i5	135	U	5.8
29	K6	35	LEU	5.8
32	Q2	120	LEU	5.8
34	S1	19	ASN	5.7
18	Z5	93	SER	5.7
21	i4	794	A	5.7
32	Q5	32	ILE	5.7
34	S2	144	ARG	5.7
25	E6	54	TYR	5.7
30	L2	145	VAL	5.7
25	E1	157	ASN	5.7
25	E5	31	PRO	5.7
17	Y4	130	LYS	5.7
28	I5	129	LEU	5.7
25	E5	137	PRO	5.7
37	l1	189	SER	5.7
13	M4	131	LYS	5.7
7	d5	52	PHE	5.7
28	I1	101	ILE	5.7
21	i4	904	A	5.6
18	Z5	68	ILE	5.6

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Mol	Chain	Res	Type	RSRZ
9	g5	10	THR	5.6
26	F2	125	SER	5.6
30	L6	153	LYS	5.6
26	F5	104	THR	5.6
25	E1	174	LYS	5.6
37	l5	191	GLU	5.6
27	H5	164	ASN	5.6
15	O4	53	ILE	5.6
9	g1	225	LYS	5.6
21	i2	1418	C	5.6
23	B2	54	GLY	5.6
30	L6	154	GLN	5.6
25	E2	73	ASP	5.6
28	I5	127	ALA	5.6
37	l4	187	ASP	5.6
2	U5	81	GLN	5.6
21	i3	746	C	5.6
13	M1	131	LYS	5.5
21	i6	78	C	5.5
28	I1	81	VAL	5.5
10	C2	280	VAL	5.5
21	i3	1618	C	5.5
11	G6	165	GLU	5.5
20	e6	48	THR	5.5
4	X5	82	THR	5.5
17	Y6	130	LYS	5.5
20	e3	59	SER	5.5
24	D4	203	PRO	5.5
25	E6	56	LEU	5.5
26	F5	110	GLN	5.5
30	L2	143	LEU	5.5
34	S4	6	PRO	5.5
26	F2	198	ARG	5.5
25	E1	149	TYR	5.5
30	L4	31	GLU	5.5
21	i4	786	G	5.5
4	X6	138	LYS	5.5
26	F5	31	ASN	5.5
34	S1	145	THR	5.5
34	S2	145	THR	5.4
16	W4	49	GLU	5.4
21	i2	1425	G	5.4

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Mol	Chain	Res	Type	RSRZ
5	a5	65	PRO	5.4
25	E2	39	ARG	5.4
20	e4	58	ASN	5.4
26	F3	110	GLN	5.4
34	S6	4	VAL	5.4
20	e3	48	THR	5.4
17	Y3	129	LYS	5.4
18	Z6	67	LEU	5.4
22	A1	209	GLU	5.4
13	M3	131	LYS	5.4
7	d5	53	ILE	5.4
24	D6	215	ASP	5.4
5	a5	93	LYS	5.4
26	F3	32	ASP	5.4
29	K6	73	ASN	5.4
33	R3	62	GLN	5.4
26	F5	122	ARG	5.3
17	Y5	131	PRO	5.3
37	l1	191	GLU	5.3
18	Z1	41	ARG	5.3
5	a5	106	ALA	5.3
26	F5	111	VAL	5.3
21	i4	797	C	5.3
26	F2	64	ALA	5.3
27	H1	89	GLY	5.3
11	G6	166	GLY	5.3
20	e3	47	PRO	5.3
21	i6	753	C	5.3
9	g3	223	GLU	5.3
19	b4	2	PRO	5.3
2	U5	79	ARG	5.3
29	K4	97	SER	5.3
21	i6	881	G	5.3
4	X5	54	LYS	5.3
27	H3	89	GLY	5.3
24	D4	143	ARG	5.3
26	F2	136	ARG	5.2
30	L6	21	LYS	5.2
30	L3	46	THR	5.2
24	D4	107	TYR	5.2
37	l4	161	GLU	5.2
26	F3	204	ARG	5.2

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Mol	Chain	Res	Type	RSRZ
14	N2	151	ALA	5.2
24	D4	148	LYS	5.2
25	E2	160	ILE	5.2
21	i4	136	C	5.2
30	L3	48	LYS	5.2
26	F3	104	THR	5.2
26	F5	202	SER	5.2
26	F5	171	GLU	5.2
22	A5	223	THR	5.2
24	D6	2	ALA	5.2
34	S6	50	ILE	5.2
24	D4	58	VAL	5.2
37	l3	176	ASP	5.2
26	F1	160	GLU	5.2
1	T1	144	LYS	5.2
17	Y3	128	GLY	5.2
26	F2	139	VAL	5.2
30	L3	32	LYS	5.2
2	U5	104	ILE	5.2
8	f6	85	CYS	5.1
5	a6	18	VAL	5.1
17	Y5	130	LYS	5.1
37	l1	115	VAL	5.1
9	g3	224	GLY	5.1
27	H3	98	ARG	5.1
2	U6	105	SER	5.1
32	Q5	5	GLY	5.1
21	i6	886	A	5.1
25	E2	147	ILE	5.1
28	I6	46	VAL	5.1
16	W4	48	GLY	5.1
37	l3	115	VAL	5.1
28	I1	83	TYR	5.1
9	g6	281	ALA	5.1
15	O3	63	LYS	5.1
22	A3	222	VAL	5.1
11	G4	207	ALA	5.1
27	H4	95	ILE	5.1
4	X1	140	ARG	5.1
28	I6	38	ILE	5.1
17	Y6	131	PRO	5.1
26	F5	194	ASP	5.1

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Mol	Chain	Res	Type	RSRZ
30	L3	35	ARG	5.1
12	J4	183	GLY	5.1
15	O4	26	ASN	5.1
15	O1	15	ILE	5.1
15	O1	16	SER	5.1
25	E5	110	ALA	5.1
30	L1	51	ILE	5.1
28	I6	129	LEU	5.0
24	D6	1	MET	5.0
30	L3	38	LYS	5.0
23	B3	23	ASP	5.0
5	a6	103	PRO	5.0
15	O1	131	ASP	5.0
26	F2	128	ILE	5.0
2	U3	83	ARG	5.0
9	g6	269	GLU	5.0
6	c3	7	GLN	5.0
28	I6	120	PRO	5.0
30	L5	26	GLY	5.0
34	S6	145	THR	5.0
21	i6	67	C	5.0
30	L1	18	GLN	5.0
33	R6	90	ALA	5.0
33	R6	74	GLN	5.0
21	i6	792	C	5.0
21	i6	897	U	5.0
26	F5	161	ALA	5.0
4	X6	139	GLU	5.0
20	e4	59	SER	5.0
11	G4	229	ALA	5.0
16	W4	47	ILE	5.0
4	X1	40	PRO	4.9
17	Y3	3	ASP	4.9
18	Z2	110	THR	4.9
17	Y3	132	LYS	4.9
5	a6	73	TYR	4.9
4	X3	33	GLY	4.9
17	Y3	126	GLY	4.9
21	i3	138	C	4.9
21	i6	791	C	4.9
29	K3	98	ARG	4.9
34	S4	62	ASP	4.9

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Mol	Chain	Res	Type	RSRZ
2	U5	78	ASP	4.9
21	i4	894	G	4.9
37	l1	113	GLN	4.9
25	E1	175	PHE	4.9
26	F6	50	PRO	4.9
26	F2	130	ARG	4.9
15	O2	17	LEU	4.9
21	i6	1307	U	4.9
32	Q4	1	MET	4.9
9	g1	223	GLU	4.9
12	J3	184	GLY	4.9
37	l2	188	ASP	4.9
30	L3	33	LEU	4.9
28	I6	60	LEU	4.9
26	F3	30	ILE	4.9
4	X1	139	GLU	4.9
32	Q2	121	VAL	4.9
32	Q2	4	LYS	4.9
4	X6	125	VAL	4.9
32	Q6	39	LEU	4.9
12	J1	185	ALA	4.9
28	I6	128	LYS	4.9
12	J3	186	GLY	4.9
24	D1	61	GLU	4.8
21	i6	76	U	4.8
30	L3	31	GLU	4.8
37	l1	114	LYS	4.8
18	Z6	51	ASP	4.8
5	a3	107	ALA	4.8
25	E6	147	ILE	4.8
15	O3	131	ASP	4.8
1	T4	21	PHE	4.8
25	E4	145	ARG	4.8
30	L2	32	LYS	4.8
32	Q2	122	ALA	4.8
34	S4	59	LEU	4.8
4	X6	141	PRO	4.8
11	G5	211	LYS	4.8
37	l4	133	GLY	4.8
24	D5	8	LYS	4.8
15	O5	107	THR	4.8
26	F4	149	GLN	4.8

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Mol	Chain	Res	Type	RSRZ
30	L1	38	LYS	4.8
26	F1	161	ALA	4.8
37	l2	113	GLN	4.8
12	J5	119	LEU	4.8
25	E4	154	ILE	4.8
11	G5	218	LYS	4.8
24	D6	219	PRO	4.8
30	L6	3	ASP	4.8
26	F5	107	ASN	4.8
24	D4	184	ILE	4.8
33	R5	87	GLU	4.8
24	D3	218	LEU	4.7
21	i6	308	G	4.7
10	C2	234	GLY	4.7
20	e4	50	GLY	4.7
12	J2	64	ASP	4.7
30	L4	44	PHE	4.7
15	O1	97	LEU	4.7
15	O5	123	GLY	4.7
18	Z2	41	ARG	4.7
37	l2	187	ASP	4.7
18	Z2	96	LEU	4.7
23	B4	22	VAL	4.7
24	D4	94	ARG	4.7
28	I5	128	LYS	4.7
13	M3	64	LEU	4.7
15	O4	20	GLN	4.7
37	l6	122	ARG	4.7
16	W3	26	LEU	4.7
20	e3	50	GLY	4.7
30	L4	20	LYS	4.7
18	Z1	99	LEU	4.7
5	a5	108	PRO	4.7
8	f5	82	LYS	4.7
27	H3	96	ALA	4.7
18	Z5	65	TYR	4.6
18	Z2	95	GLY	4.6
30	L1	12	LYS	4.6
24	D4	176	LEU	4.6
25	E4	67	GLN	4.6
18	Z6	76	ARG	4.6
15	O4	19	PRO	4.6

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Mol	Chain	Res	Type	RSRZ
28	I5	94	LYS	4.6
18	Z1	42	ASP	4.6
1	T5	3	GLY	4.6
24	D4	118	ALA	4.6
24	D2	212	GLU	4.6
17	Y5	128	GLY	4.6
33	R3	120	THR	4.6
6	c1	68	LEU	4.6
25	E6	240	ARG	4.6
26	F6	51	HIS	4.6
15	O3	62	VAL	4.6
27	H4	94	PHE	4.6
28	I6	118	ALA	4.6
4	X1	142	ARG	4.6
21	i1	749	U	4.6
28	I6	80	ASP	4.6
4	X1	54	LYS	4.6
25	E5	99	PHE	4.6
30	L3	37	TYR	4.6
33	R3	65	PRO	4.6
21	i4	407	G	4.6
5	a1	107	ALA	4.6
8	f5	87	THR	4.6
12	J3	182	GLN	4.6
28	I1	92	ARG	4.6
9	g1	21	ILE	4.6
24	D3	112	GLY	4.6
29	K2	38	LYS	4.6
20	e1	59	SER	4.5
30	L2	34	PRO	4.5
32	Q1	32	ILE	4.5
24	D4	110	LEU	4.5
10	C2	278	THR	4.5
20	e4	48	THR	4.5
13	M6	97	GLU	4.5
28	I4	155	ASN	4.5
20	e2	48	THR	4.5
19	b4	4	ALA	4.5
28	I5	57	ALA	4.5
28	I4	154	LYS	4.5
6	c4	7	GLN	4.5
28	I6	167	GLN	4.5

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Mol	Chain	Res	Type	RSRZ
27	H2	191	GLU	4.5
22	A5	219	GLU	4.5
4	X1	97	ASN	4.5
28	I6	79	ILE	4.5
8	f5	84	SER	4.5
15	O6	13	GLN	4.5
18	Z6	52	LYS	4.5
32	Q2	2	PRO	4.5
16	W4	24	GLN	4.5
11	G6	163	ASN	4.5
22	A5	214	GLU	4.5
18	Z5	72	VAL	4.5
24	D6	172	VAL	4.5
24	D4	151	LYS	4.5
28	I5	39	GLY	4.5
2	U3	81	GLN	4.5
4	X1	126	ALA	4.5
5	a5	69	VAL	4.5
6	c5	5	ARG	4.5
21	i1	883	U	4.5
8	f3	149	CYS	4.5
28	I5	105	ASP	4.5
26	F5	143	PRO	4.5
25	E5	113	ARG	4.5
17	Y2	130	LYS	4.5
15	O3	27	VAL	4.5
10	C6	234	GLY	4.5
4	X5	41	PHE	4.4
21	i4	895	G	4.4
6	c1	5	ARG	4.4
33	R6	19	LYS	4.4
16	W4	72	CYS	4.4
24	D4	195	THR	4.4
29	K6	98	ARG	4.4
11	G5	207	ALA	4.4
27	H2	192	PHE	4.4
28	I5	36	THR	4.4
20	e4	49	PHE	4.4
30	L5	117	PHE	4.4
24	D6	220	THR	4.4
28	I6	151	GLU	4.4
21	i3	698	G	4.4

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Mol	Chain	Res	Type	RSRZ
30	L5	148	ALA	4.4
15	O3	28	PHE	4.4
28	I1	77	ARG	4.4
5	a5	68	TYR	4.4
27	H5	44	ASN	4.4
9	g1	280	LYS	4.4
28	I2	154	LYS	4.4
23	B1	127	VAL	4.4
24	D6	212	GLU	4.4
21	i2	787	G	4.4
21	i3	836	G	4.4
21	i4	731	G	4.4
21	i4	893	U	4.4
21	i6	1306	U	4.4
24	D6	214	LYS	4.4
21	i3	135	U	4.4
2	U4	101	ILE	4.4
22	A1	30	LEU	4.4
24	D4	204	LEU	4.4
32	Q3	5	GLY	4.4
12	J6	185	ALA	4.4
5	a6	71	LEU	4.4
33	R3	61	ILE	4.4
28	I5	171	LEU	4.4
23	B2	26	SER	4.4
7	d4	53	ILE	4.4
12	J2	26	ASP	4.4
25	E4	200	ARG	4.4
25	E5	53	LYS	4.4
17	Y3	4	THR	4.4
12	J1	186	GLY	4.4
24	D4	144	GLY	4.4
24	D4	172	VAL	4.3
4	X6	140	ARG	4.3
33	R5	81	ARG	4.3
7	d5	54	LYS	4.3
11	G4	210	ALA	4.3
21	i1	787	G	4.3
26	F1	42	LYS	4.3
7	d5	51	GLY	4.3
25	E6	230	LYS	4.3
2	U4	113	GLU	4.3

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Mol	Chain	Res	Type	RSRZ
17	Y5	132	LYS	4.3
6	c5	6	VAL	4.3
9	g3	225	LYS	4.3
12	J1	184	GLY	4.3
21	i3	883	U	4.3
21	i4	795	A	4.3
16	W4	50	PHE	4.3
24	D3	38	GLU	4.3
21	i5	183	G	4.3
26	F3	28	VAL	4.3
21	i1	795	A	4.3
11	G4	225	GLN	4.3
16	W4	25	VAL	4.3
26	F5	123	GLU	4.3
28	I5	37	LYS	4.3
30	L5	153	LYS	4.3
32	Q4	145	TYR	4.3
34	S1	20	ILE	4.3
23	B2	55	THR	4.3
24	D4	149	SER	4.3
5	a5	39	PHE	4.3
32	Q3	1	MET	4.3
20	e1	2	VAL	4.2
13	M6	10	GLY	4.2
2	U4	102	THR	4.2
12	J1	183	GLY	4.2
24	D6	209	SER	4.2
25	E1	172	PHE	4.2
28	I6	119	LEU	4.2
21	i6	793	G	4.2
9	g3	281	ALA	4.2
20	e3	51	LYS	4.2
23	B2	53	GLN	4.2
34	S1	12	ILE	4.2
16	W3	25	VAL	4.2
18	Z6	65	TYR	4.2
15	O5	61	LYS	4.2
17	Y6	73	GLY	4.2
1	T5	118	ASP	4.2
28	I5	78	ILE	4.2
17	Y6	57	VAL	4.2
5	a3	44	ILE	4.2

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Mol	Chain	Res	Type	RSRZ
11	G5	166	GLY	4.2
26	F5	167	LYS	4.2
30	L5	25	LEU	4.2
24	D1	224	SER	4.2
24	D6	216	GLU	4.2
26	F3	122	ARG	4.2
28	I1	103	LEU	4.2
30	L2	25	LEU	4.2
33	R4	119	VAL	4.2
21	i6	750	C	4.2
29	K3	97	SER	4.2
7	d3	44	ARG	4.2
5	a1	108	PRO	4.2
12	J5	117	LEU	4.2
15	O1	112	ALA	4.2
23	B3	90	ASP	4.2
27	H5	91	HIS	4.1
25	E4	198	ARG	4.1
34	S3	145	THR	4.1
17	Y5	127	ALA	4.1
27	H1	82	GLU	4.1
28	I5	104	ILE	4.1
18	Z2	109	TYR	4.1
6	c4	5	ARG	4.1
19	b1	25	VAL	4.1
30	L4	62	PHE	4.1
34	S6	143	GLY	4.1
24	D6	81	GLU	4.1
24	D3	113	LEU	4.1
21	i2	791	C	4.1
17	Y4	131	PRO	4.1
25	E5	149	TYR	4.1
25	E5	17	HIS	4.1
2	U4	41	ARG	4.1
26	F6	42	LYS	4.1
4	X5	83	ALA	4.1
12	J6	186	GLY	4.1
22	A5	215	GLN	4.1
30	L6	123	GLY	4.1
9	g5	9	GLY	4.1
11	G3	232	ARG	4.1
5	a5	42	ARG	4.1

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Mol	Chain	Res	Type	RSRZ
5	a5	102	ARG	4.1
8	f5	79	LYS	4.1
30	L4	30	LYS	4.1
10	C6	141	VAL	4.1
25	E1	128	LYS	4.1
20	e2	49	PHE	4.1
24	D4	109	LEU	4.1
29	K6	37	ASP	4.1
16	W5	26	LEU	4.1
23	B1	135	LEU	4.1
26	F1	111	VAL	4.1
25	E2	145	ARG	4.1
11	G5	210	ALA	4.1
10	C5	105	GLU	4.0
15	O4	23	GLU	4.0
5	a6	22	ARG	4.0
30	L1	154	GLN	4.0
19	b3	79	PHE	4.0
29	K3	38	LYS	4.0
32	Q6	4	LYS	4.0
17	Y5	25	ILE	4.0
18	Z5	97	ILE	4.0
15	O5	97	LEU	4.0
28	I5	154	LYS	4.0
5	a4	102	ARG	4.0
5	a5	43	ASN	4.0
9	g3	282	GLU	4.0
30	L1	35	ARG	4.0
31	P6	104	GLN	4.0
21	i4	185	G	4.0
6	c6	5	ARG	4.0
37	l1	187	ASP	4.0
21	i1	884	C	4.0
17	Y1	131	PRO	4.0
21	i6	895	G	4.0
34	S4	122	GLY	4.0
13	M3	65	VAL	4.0
30	L6	54	THR	4.0
31	P3	109	PRO	4.0
1	T5	117	GLN	4.0
11	G3	206	ALA	4.0
5	a5	40	VAL	4.0

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Mol	Chain	Res	Type	RSRZ
10	C1	89	LYS	4.0
24	D2	1	MET	4.0
26	F1	110	GLN	4.0
30	L4	22	ARG	4.0
25	E5	42	LEU	4.0
28	I5	35	ASN	4.0
32	Q1	46	THR	4.0
23	B1	126	ASP	4.0
30	L5	154	GLN	4.0
1	T4	26	GLY	4.0
2	U2	118	ASP	4.0
2	U5	28	ASN	4.0
15	O4	96	LYS	4.0
24	D1	62	LYS	4.0
18	Z5	66	LYS	4.0
4	X5	56	GLY	4.0
28	I5	166	PHE	4.0
20	e5	3	HIS	4.0
22	A5	218	ALA	4.0
28	I5	40	PRO	4.0
23	B4	90	ASP	4.0
30	L5	145	VAL	4.0
22	A1	98	PRO	3.9
33	R4	118	GLN	3.9
15	O4	25	GLU	3.9
24	D3	2	ALA	3.9
32	Q6	32	ILE	3.9
34	S1	143	GLY	3.9
30	L4	152	LYS	3.9
28	I6	138	ASN	3.9
36	k4	160	LYS	3.9
1	T4	25	SER	3.9
30	L3	153	LYS	3.9
9	g2	45	LEU	3.9
21	i3	183	G	3.9
24	D3	35	SER	3.9
19	b1	24	LEU	3.9
25	E1	155	LYS	3.9
25	E6	53	LYS	3.9
29	K1	12	TYR	3.9
21	i6	900	C	3.9
26	F5	39	ILE	3.9

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Mol	Chain	Res	Type	RSRZ
30	L5	151	THR	3.9
9	g1	264	LYS	3.9
8	f3	110	GLU	3.9
32	Q4	39	LEU	3.9
13	M4	98	GLY	3.9
4	X5	40	PRO	3.9
9	g1	31	ILE	3.9
5	a6	104	ALA	3.9
24	D3	39	VAL	3.9
26	F1	31	ASN	3.9
7	d3	45	GLN	3.9
18	Z2	99	LEU	3.9
21	i4	747	U	3.9
36	k6	105	VAL	3.9
15	O3	97	LEU	3.9
20	e3	52	LYS	3.9
11	G2	207	ALA	3.9
28	I6	160	SER	3.9
4	X5	69	CYS	3.9
9	g1	103	GLY	3.9
28	I6	171	LEU	3.9
22	A5	217	ALA	3.9
13	M1	127	TYR	3.9
21	i6	1285	G	3.9
17	Y4	132	LYS	3.9
26	F3	133	THR	3.9
30	L5	28	THR	3.9
22	A5	222	VAL	3.9
24	D3	111	GLY	3.9
23	B2	25	PHE	3.9
30	L1	16	ILE	3.9
37	l3	190	ILE	3.9
24	D2	8	LYS	3.9
28	I4	153	LYS	3.9
5	a5	94	ASP	3.9
16	W4	129	PHE	3.9
10	C4	102	LEU	3.9
26	F2	42	LYS	3.9
34	S5	3	LEU	3.9
30	L5	149	ALA	3.8
28	I1	70	GLU	3.8
37	l4	162	ASP	3.8

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Mol	Chain	Res	Type	RSRZ
9	g5	11	LEU	3.8
19	b4	24	LEU	3.8
37	l4	181	LYS	3.8
25	E6	67	GLN	3.8
12	J5	5	ARG	3.8
21	i5	138	C	3.8
25	E4	151	ASP	3.8
27	H1	6	ALA	3.8
33	R6	12	ALA	3.8
32	Q4	62	ARG	3.8
34	S2	3	LEU	3.8
29	K3	39	ASN	3.8
30	L4	150	GLY	3.8
25	E5	43	PRO	3.8
4	X4	54	LYS	3.8
34	S3	143	GLY	3.8
30	L6	151	THR	3.8
2	U5	63	ILE	3.8
21	i2	306	C	3.8
28	I1	38	ILE	3.8
32	Q6	40	GLU	3.8
2	U6	85	HIS	3.8
4	X5	55	VAL	3.8
6	c6	7	GLN	3.8
32	Q6	120	LEU	3.8
11	G6	235	SER	3.8
3	V1	34	MET	3.8
15	O4	90	ILE	3.8
26	F1	136	ARG	3.8
26	F3	39	ILE	3.8
16	W4	18	GLU	3.8
26	F1	34	SER	3.8
24	D5	166	TYR	3.8
21	i4	184	G	3.8
24	D1	149	SER	3.8
30	L1	52	GLU	3.8
9	g4	76	GLN	3.8
28	I4	127	ALA	3.8
8	f1	81	LYS	3.8
6	c3	5	ARG	3.8
30	L1	62	PHE	3.8
32	Q4	114	GLN	3.8

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Mol	Chain	Res	Type	RSRZ
4	X5	81	ILE	3.8
37	l1	190	ILE	3.8
30	L3	52	GLU	3.8
36	k4	161	GLY	3.8
17	Y6	132	LYS	3.8
21	i4	790	C	3.8
23	B1	55	THR	3.8
13	M3	66	GLU	3.8
34	S4	123	LEU	3.8
21	i2	753	C	3.8
21	i2	792	C	3.8
26	F5	23	TRP	3.8
26	F6	32	ASP	3.8
30	L3	154	GLN	3.8
9	g1	10	THR	3.8
20	e3	53	LYS	3.8
23	B2	21	VAL	3.8
24	D4	207	HIS	3.8
28	I2	134	GLU	3.8
24	D5	215	ASP	3.8
25	E6	139	LEU	3.8
28	I5	106	SER	3.8
36	k5	44	MET	3.8
24	D4	115	VAL	3.7
34	S4	126	PHE	3.8
15	O4	97	LEU	3.7
15	O6	12	GLU	3.7
27	H1	16	PRO	3.7
11	G6	237	LEU	3.7
6	c1	12	ALA	3.7
12	J3	183	GLY	3.7
21	i4	881	G	3.7
32	Q4	111	ILE	3.7
36	k1	102	ILE	3.7
21	i5	1869	A	3.7
30	L3	51	ILE	3.7
17	Y2	123	ALA	3.7
26	F3	195	GLU	3.7
30	L3	49	GLU	3.7
17	Y4	118	ARG	3.7
34	S1	13	LEU	3.7
7	d6	52	PHE	3.7

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Mol	Chain	Res	Type	RSRZ
21	i6	790	C	3.7
26	F5	160	GLU	3.7
34	S6	19	ASN	3.7
11	G5	165	GLU	3.7
29	K4	98	ARG	3.7
5	a6	34	LYS	3.7
25	E5	101	LEU	3.7
24	D2	220	THR	3.7
12	J3	4	ALA	3.7
25	E5	109	PHE	3.7
10	C5	106	VAL	3.7
16	W4	70	ASN	3.7
15	O4	89	GLY	3.7
19	b1	5	LYS	3.7
21	i2	788	G	3.7
21	i6	893	U	3.7
26	F5	22	LYS	3.7
28	I5	81	VAL	3.7
34	S4	80	PRO	3.7
11	G5	222	GLU	3.7
26	F5	92	ILE	3.7
17	Y4	129	LYS	3.7
18	Z1	67	LEU	3.7
21	i6	889	U	3.7
28	I5	60	LEU	3.7
2	U5	27	ARG	3.7
5	a6	100	ARG	3.7
21	i2	789	G	3.7
23	B4	215	VAL	3.7
31	P6	125	PRO	3.7
15	O2	27	VAL	3.7
34	S2	16	LEU	3.7
16	W4	45	GLY	3.7
28	I5	185	ALA	3.7
29	K6	20	VAL	3.7
22	A1	213	GLU	3.7
27	H3	188	GLU	3.7
36	k5	111	ILE	3.7
37	l6	160	GLY	3.7
12	J1	182	GLN	3.7
28	I6	54	LYS	3.7
28	I1	96	LEU	3.6

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Mol	Chain	Res	Type	RSRZ
5	a1	103	PRO	3.6
16	W2	117	ARG	3.6
21	i3	407	G	3.6
5	a1	104	ALA	3.6
8	f3	84	SER	3.6
15	O5	91	THR	3.6
24	D3	36	GLY	3.6
28	I1	102	VAL	3.6
25	E1	148	ARG	3.6
25	E1	200	ARG	3.6
14	N5	151	ALA	3.6
24	D4	136	VAL	3.6
36	k5	157	LYS	3.6
15	O5	79	GLN	3.6
25	E2	126	VAL	3.6
1	T4	27	LYS	3.6
8	f5	81	LYS	3.6
27	H3	184	ASP	3.6
17	Y2	127	ALA	3.6
22	A1	223	THR	3.6
10	C6	128	VAL	3.6
16	W4	15	ASN	3.6
27	H5	38	ALA	3.6
37	l4	188	ASP	3.6
24	D3	217	ILE	3.6
30	L3	63	THR	3.6
30	L5	143	LEU	3.6
4	X5	70	VAL	3.6
28	I2	157	LYS	3.6
33	R5	84	TYR	3.6
24	D4	193	ASP	3.6
25	E2	228	ILE	3.6
25	E5	151	ASP	3.6
30	L4	46	THR	3.6
33	R6	65	PRO	3.6
19	b1	2	PRO	3.6
29	K6	34	GLU	3.6
2	U2	112	VAL	3.6
6	c1	55	VAL	3.6
12	J5	6	SER	3.6
34	S4	145	THR	3.6
11	G6	159	ARG	3.6

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Mol	Chain	Res	Type	RSRZ
15	O4	112	ALA	3.6
5	a6	70	LYS	3.6
10	C2	275	LYS	3.6
27	H3	183	LYS	3.6
30	L1	46	THR	3.6
21	i1	730	C	3.6
28	I6	131	PRO	3.6
8	f5	86	THR	3.6
21	i1	895	G	3.6
24	D2	211	VAL	3.6
17	Y2	122	LYS	3.6
26	F2	124	ASP	3.6
2	U6	82	MET	3.6
21	i6	880	G	3.6
30	L3	39	ASN	3.6
33	R6	91	LEU	3.6
11	G4	208	GLU	3.6
18	Z3	96	LEU	3.6
28	I5	172	LEU	3.6
18	Z5	94	LYS	3.6
3	V1	71	ARG	3.6
11	G5	221	LYS	3.6
24	D5	200	PRO	3.6
13	M3	69	CYS	3.6
20	e5	7	ALA	3.6
34	S1	18	THR	3.6
17	Y2	129	LYS	3.6
21	i3	881	G	3.6
28	I4	134	GLU	3.6
22	A6	51	LEU	3.6
4	X6	95	GLU	3.5
30	L2	144	LYS	3.5
4	X6	142	ARG	3.5
21	i1	136	C	3.5
18	Z2	94	LYS	3.5
34	S2	125	HIS	3.5
26	F5	119	SER	3.5
5	a6	36	ILE	3.5
21	i3	882	U	3.5
13	M2	10	GLY	3.5
37	l4	131	VAL	3.5
25	E5	152	PRO	3.5

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Mol	Chain	Res	Type	RSRZ
28	I1	171	LEU	3.5
27	H1	193	GLN	3.5
17	Y4	122	LYS	3.5
26	F5	124	ASP	3.5
9	g6	271	LYS	3.5
12	J5	139	LYS	3.5
15	O4	91	THR	3.5
28	I6	154	LYS	3.5
29	K6	38	LYS	3.5
32	Q2	5	GLY	3.5
7	d3	52	PHE	3.5
8	f3	109	ASP	3.5
15	O2	117	ARG	3.5
27	H1	15	LYS	3.5
34	S4	60	THR	3.5
15	O5	131	ASP	3.5
25	E3	78	THR	3.5
37	l3	114	LYS	3.5
28	I2	207	GLY	3.5
8	f5	85	CYS	3.5
28	I6	134	GLU	3.5
22	A5	220	LYS	3.5
32	Q2	3	SER	3.5
20	e2	50	GLY	3.5
25	E4	175	PHE	3.5
34	S4	56	ALA	3.5
19	b4	25	VAL	3.5
30	L6	25	LEU	3.5
34	S4	15	VAL	3.5
24	D6	78	GLY	3.5
26	F1	39	ILE	3.5
32	Q3	4	LYS	3.5
33	R6	119	VAL	3.5
37	l2	161	GLU	3.5
11	G4	36	VAL	3.5
11	G4	204	GLU	3.5
15	O2	88	LEU	3.5
19	b5	13	GLU	3.5
28	I5	123	ARG	3.5
15	O5	108	PRO	3.5
23	B2	24	PRO	3.5
26	F1	135	ARG	3.5

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Mol	Chain	Res	Type	RSRZ
21	i5	134	C	3.5
21	i2	891	G	3.5
22	A3	218	ALA	3.5
37	l3	188	ASP	3.5
30	L6	20	LYS	3.5
24	D4	152	PHE	3.5
30	L3	104	LYS	3.4
5	a5	44	ILE	3.4
28	I5	103	LEU	3.4
36	k5	163	GLY	3.4
17	Y5	129	LYS	3.4
15	O5	15	ILE	3.4
21	i6	752	G	3.4
18	Z4	52	LYS	3.4
26	F5	93	VAL	3.4
27	H3	186	ASN	3.4
30	L4	148	ALA	3.4
32	Q4	57	LEU	3.4
30	L1	15	THR	3.4
5	a6	35	ALA	3.4
11	G3	218	LYS	3.4
10	C5	184	VAL	3.4
11	G5	208	GLU	3.4
32	Q4	61	GLU	3.4
36	k1	111	ILE	3.4
2	U5	102	THR	3.4
18	Z5	114	LYS	3.4
21	i4	1317	C	3.4
5	a6	24	THR	3.4
21	i6	899	U	3.4
9	g6	262	GLU	3.4
24	D4	138	VAL	3.4
6	c1	47	LYS	3.4
9	g2	264	LYS	3.4
16	W3	50	PHE	3.4
37	l2	182	TRP	3.4
25	E5	44	LEU	3.4
27	H3	61	ILE	3.4
28	I1	61	ASP	3.4
4	X6	83	ALA	3.4
15	O5	14	VAL	3.4
30	L4	153	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
37	l5	113	GLN	3.4
21	i3	697	G	3.4
2	U5	64	THR	3.4
32	Q2	89	SER	3.4
11	G2	218	LYS	3.4
28	I1	104	ILE	3.4
26	F6	171	GLU	3.4
34	S4	61	GLU	3.4
30	L6	23	VAL	3.4
22	A1	117	ARG	3.4
9	g4	77	PHE	3.4
26	F6	30	ILE	3.4
9	g2	224	GLY	3.4
16	W4	19	LYS	3.4
26	F4	127	ARG	3.4
9	g3	286	CYS	3.4
28	I5	82	VAL	3.4
21	i3	1767	C	3.4
9	g4	10	THR	3.4
21	i3	891	G	3.4
23	B3	48	LEU	3.4
24	D4	175	VAL	3.4
13	M4	57	ASP	3.4
18	Z2	68	ILE	3.4
12	J2	100	LEU	3.4
34	S2	121	ARG	3.4
24	D4	119	CYS	3.4
24	D6	171	ALA	3.4
24	D3	8	LYS	3.4
34	S1	101	ASN	3.4
32	Q2	39	LEU	3.4
13	M5	50	CYS	3.4
18	Z5	53	ALA	3.4
26	F5	101	HIS	3.4
5	a6	30	VAL	3.4
18	Z4	95	GLY	3.4
34	S6	14	ARG	3.4
15	O3	72	TYR	3.4
22	A5	221	ALA	3.4
26	F4	133	THR	3.4
12	J3	26	ASP	3.4
24	D5	214	LYS	3.4

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Mol	Chain	Res	Type	RSRZ
30	L4	68	ILE	3.4
27	H3	140	VAL	3.3
9	g3	234	ASP	3.3
24	D5	18	LYS	3.3
28	I1	126	GLY	3.3
33	R5	37	GLU	3.3
34	S2	122	GLY	3.3
36	k1	105	VAL	3.3
15	O6	15	ILE	3.3
16	W4	16	ASN	3.3
28	I6	161	LEU	3.3
10	C6	238	LYS	3.3
15	O3	87	GLU	3.3
28	I4	125	LYS	3.3
30	L5	35	ARG	3.3
24	D4	93	THR	3.3
4	X2	25	LYS	3.3
4	X6	94	ILE	3.3
15	O1	113	GLN	3.3
33	R6	75	GLU	3.3
16	W4	23	ARG	3.3
22	A3	143	PRO	3.3
26	F2	137	GLN	3.3
13	M4	65	VAL	3.3
21	i1	746	C	3.3
26	F2	134	VAL	3.3
25	E2	182	MET	3.3
28	I6	103	LEU	3.3
33	R2	91	LEU	3.3
37	l6	121	PRO	3.3
10	C5	131	GLY	3.3
30	L3	62	PHE	3.3
16	W4	51	GLU	3.3
36	k4	159	ASN	3.3
21	i3	884	C	3.3
26	F5	204	ARG	3.3
24	D1	184	ILE	3.3
26	F6	27	ASP	3.3
10	C6	237	ALA	3.3
5	a5	67	LEU	3.3
10	C5	130	ILE	3.3
18	Z5	99	LEU	3.3

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Mol	Chain	Res	Type	RSRZ
25	E2	225	ILE	3.3
25	E6	225	ILE	3.3
32	Q4	30	GLY	3.3
33	R3	24	LEU	3.3
11	G4	211	LYS	3.3
24	D3	201	LYS	3.3
2	U2	113	GLU	3.3
12	J5	3	VAL	3.3
21	i4	908	A	3.3
25	E4	68	ARG	3.3
2	U6	30	LYS	3.3
30	L4	38	LYS	3.3
24	D1	64	ARG	3.3
24	D4	103	GLU	3.3
25	E5	51	ARG	3.3
27	H1	96	ALA	3.3
27	H5	34	SER	3.3
28	I5	170	LYS	3.3
2	U4	20	ILE	3.3
21	i5	133	C	3.3
26	F4	130	ARG	3.3
13	M6	118	SER	3.3
16	W4	21	GLY	3.3
16	W3	129	PHE	3.3
24	D3	55	THR	3.3
13	M6	96	ARG	3.3
1	T3	144	LYS	3.3
9	g2	250	ALA	3.3
18	Z6	53	ALA	3.3
23	B1	215	VAL	3.3
33	R4	117	LEU	3.3
18	Z5	69	THR	3.3
15	O3	89	GLY	3.3
21	i2	1825	A	3.3
24	D2	2	ALA	3.3
27	H4	186	ASN	3.3
24	D4	96	LEU	3.3
37	l4	130	ARG	3.3
3	V6	34	MET	3.3
17	Y6	96	LEU	3.3
29	K1	15	LEU	3.3
33	R3	66	VAL	3.3

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Mol	Chain	Res	Type	RSRZ
7	d6	51	GLY	3.3
9	g2	262	GLU	3.3
10	C2	279	ARG	3.3
13	M4	80	ASP	3.3
21	i6	698	G	3.3
2	U5	16	ALA	3.3
26	F5	178	ILE	3.3
7	d5	55	LEU	3.3
4	X5	122	VAL	3.3
5	a3	69	VAL	3.3
26	F1	92	ILE	3.3
32	Q1	45	ARG	3.3
1	T6	118	ASP	3.3
37	l3	133	GLY	3.3
2	U3	63	ILE	3.2
2	U5	84	ILE	3.2
27	H1	46	THR	3.2
26	F3	121	PRO	3.2
25	E1	227	VAL	3.2
10	C6	129	ALA	3.2
37	l1	116	THR	3.2
4	X5	51	VAL	3.2
5	a6	29	CYS	3.2
10	C6	127	PHE	3.2
13	M6	98	GLY	3.2
2	U4	112	VAL	3.2
10	C1	106	VAL	3.2
15	O4	27	VAL	3.2
4	X1	98	ASP	3.2
32	Q5	39	LEU	3.2
21	i2	1317	C	3.2
36	k4	158	VAL	3.2
36	k6	158	VAL	3.2
25	E1	129	ILE	3.2
11	G2	210	ALA	3.2
7	d3	46	TYR	3.2
21	i1	893	U	3.2
30	L1	31	GLU	3.2
15	O5	113	GLN	3.2
25	E2	235	TRP	3.2
24	D4	129	SER	3.2
37	l3	184	GLU	3.2

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Mol	Chain	Res	Type	RSRZ
16	W4	17	ALA	3.2
4	X1	125	VAL	3.2
4	X6	128	VAL	3.2
11	G5	236	SER	3.2
25	E1	156	VAL	3.2
26	F6	118	ASN	3.2
32	Q3	30	GLY	3.2
28	I5	151	GLU	3.2
21	i1	894	G	3.2
26	F5	100	ILE	3.2
24	D3	149	SER	3.2
29	K1	95	ARG	3.2
32	Q4	120	LEU	3.2
33	R5	89	SER	3.2
34	S4	115	LYS	3.2
34	S4	116	LYS	3.2
21	i4	746	C	3.2
23	B3	93	GLY	3.2
34	S2	143	GLY	3.2
36	k5	164	ILE	3.2
4	X6	40	PRO	3.2
18	Z2	101	SER	3.2
29	K1	73	ASN	3.2
10	C1	63	VAL	3.2
19	b1	55	LEU	3.2
23	B4	54	GLY	3.2
6	c1	13	ARG	3.2
26	F3	136	ARG	3.2
18	Z2	98	LYS	3.2
20	e4	47	PRO	3.2
24	D4	38	GLU	3.2
21	i5	891	G	3.2
21	i6	891	G	3.2
7	d3	11	PRO	3.2
19	b1	3	LEU	3.2
19	b4	5	LYS	3.2
25	E5	52	LEU	3.2
28	I1	157	LYS	3.2
9	g2	293	ALA	3.2
28	I1	76	THR	3.2
30	L2	126	VAL	3.2
6	c1	66	ARG	3.2

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Mol	Chain	Res	Type	RSRZ
24	D2	117	ARG	3.2
13	M1	114	TYR	3.2
12	J2	65	GLU	3.2
21	i2	747	U	3.2
2	U4	103	SER	3.2
8	f6	99	LYS	3.2
11	G6	232	ARG	3.2
17	Y1	129	LYS	3.2
17	Y6	22	GLN	3.2
32	Q4	121	VAL	3.2
9	g2	231	ASP	3.2
26	F4	126	THR	3.2
31	P3	110	GLU	3.2
21	i1	1463	U	3.2
22	A5	154	LEU	3.2
21	i5	730	C	3.2
22	A1	108	PHE	3.2
9	g3	269	GLU	3.2
10	C5	128	VAL	3.2
30	L3	45	LYS	3.2
5	a6	19	GLN	3.2
15	O3	40	THR	3.2
15	O6	103	ASN	3.2
23	B1	174	ARG	3.2
26	F6	49	LEU	3.1
27	H5	165	ASN	3.1
18	Z5	91	LEU	3.1
24	D4	150	MET	3.1
25	E2	217	SER	3.1
24	D2	218	LEU	3.1
24	D3	142	LEU	3.1
28	I6	153	LYS	3.1
5	a1	105	GLY	3.1
5	a6	21	ILE	3.1
10	C4	130	ILE	3.1
10	C4	131	GLY	3.1
10	C6	131	GLY	3.1
32	Q5	89	SER	3.1
4	X1	96	GLU	3.1
15	O3	42	VAL	3.1
11	G3	207	ALA	3.1
18	Z1	43	LYS	3.1

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Mol	Chain	Res	Type	RSRZ
5	a6	16	GLY	3.1
8	f2	117	LEU	3.1
23	B4	174	ARG	3.1
28	I1	154	LYS	3.1
34	S6	115	LYS	3.1
21	i6	305	U	3.1
10	C2	227	ARG	3.1
30	L2	146	THR	3.1
19	b6	58	GLY	3.1
21	i5	837	A	3.1
26	F5	34	SER	3.1
36	k6	95	GLN	3.1
2	U5	62	ARG	3.1
21	i4	892	U	3.1
30	L1	26	GLY	3.1
18	Z6	68	ILE	3.1
21	i2	200	G	3.1
22	A1	208	GLU	3.1
11	G5	237	LEU	3.1
16	W3	63	VAL	3.1
27	H3	100	ILE	3.1
30	L3	13	GLN	3.1
4	X1	53	GLU	3.1
27	H5	42	GLU	3.1
37	l4	165	ILE	3.1
32	Q6	46	THR	3.1
3	V3	34	MET	3.1
21	i5	921	G	3.1
26	F5	30	ILE	3.1
33	R5	16	ILE	3.1
23	B5	22	VAL	3.1
30	L6	35	ARG	3.1
11	G4	37	ALA	3.1
26	F3	202	SER	3.1
36	k5	43	ILE	3.1
4	X5	37	LYS	3.1
22	A2	206	ASP	3.1
27	H3	134	VAL	3.1
37	l4	134	LEU	3.1
4	X5	102	VAL	3.1
11	G5	225	GLN	3.1
21	i2	1416	C	3.1

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Mol	Chain	Res	Type	RSRZ
25	E5	16	LYS	3.1
26	F5	69	VAL	3.1
15	O2	123	GLY	3.1
15	O5	126	ILE	3.1
25	E6	5	PRO	3.1
31	P3	91	GLY	3.1
14	N2	150	VAL	3.1
26	F5	201	LYS	3.1
30	L1	22	ARG	3.1
37	l6	161	GLU	3.1
9	g2	46	THR	3.1
7	d3	48	LYS	3.1
4	X6	96	GLU	3.1
9	g4	282	GLU	3.1
25	E5	15	PRO	3.1
11	G2	14	LYS	3.1
3	V1	67	ASP	3.1
12	J5	4	ALA	3.1
18	Z6	96	LEU	3.1
25	E4	199	GLU	3.1
15	O3	61	LYS	3.1
21	i6	837	A	3.1
2	U4	24	LEU	3.1
12	J4	92	MET	3.1
15	O5	128	ARG	3.1
25	E1	56	LEU	3.1
17	Y6	52	PRO	3.1
17	Y6	75	ILE	3.1
26	F3	132	GLY	3.1
15	O4	42	VAL	3.1
20	e6	2	VAL	3.1
15	O5	106	LYS	3.1
18	Z6	109	TYR	3.1
21	i1	698	G	3.1
21	i2	327	G	3.1
10	C5	175	GLY	3.1
5	a6	108	PRO	3.1
27	H5	39	GLN	3.1
30	L6	2	ALA	3.1
30	L5	146	THR	3.1
36	k6	111	ILE	3.1
29	K4	96	ARG	3.1

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Mol	Chain	Res	Type	RSRZ
7	d5	50	ILE	3.1
37	l3	187	ASP	3.1
29	K1	20	VAL	3.1
16	W1	53	ILE	3.0
26	F4	151	ILE	3.0
32	Q1	16	LYS	3.0
37	l4	132	CYS	3.0
15	O2	87	GLU	3.0
18	Z1	96	LEU	3.0
27	H3	152	ARG	3.0
1	T6	144	LYS	3.0
11	G4	14	LYS	3.0
28	I6	130	THR	3.0
24	D3	19	ALA	3.0
31	P3	83	MET	3.0
13	M1	71	GLU	3.0
24	D3	143	ARG	3.0
28	I2	125	LYS	3.0
25	E6	178	GLY	3.0
28	I6	61	ASP	3.0
8	f4	111	ASN	3.0
9	g6	272	GLN	3.0
28	I2	151	GLU	3.0
6	c1	22	GLY	3.0
24	D3	107	TYR	3.0
25	E1	160	ILE	3.0
32	Q1	39	LEU	3.0
30	L5	74	SER	3.0
26	F4	15	PRO	3.0
28	I6	132	GLU	3.0
4	X6	80	LYS	3.0
34	S5	115	LYS	3.0
2	U3	80	PHE	3.0
25	E1	158	ASP	3.0
29	K2	39	ASN	3.0
30	L1	49	GLU	3.0
8	f6	83	LYS	3.0
9	g1	71	ILE	3.0
22	A2	52	LYS	3.0
18	Z5	107	VAL	3.0
3	V1	50	PHE	3.0
15	O3	29	GLY	3.0

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Mol	Chain	Res	Type	RSRZ
21	i1	1476	A	3.0
9	g4	43	TRP	3.0
11	G2	206	ALA	3.0
21	i3	206	G	3.0
23	B3	92	GLN	3.0
27	H2	160	LYS	3.0
27	H3	95	ILE	3.0
12	J5	118	GLY	3.0
27	H3	97	GLN	3.0
33	R2	90	ALA	3.0
19	b3	73	LEU	3.0
3	V4	23	ILE	3.0
24	D5	201	LYS	3.0
9	g2	229	THR	3.0
26	F4	132	GLY	3.0
14	N6	66	VAL	3.0
21	i6	133	C	3.0
32	Q3	120	LEU	3.0
25	E1	147	ILE	3.0
28	I5	43	ILE	3.0
32	Q2	1	MET	3.0
17	Y5	26	ASP	3.0
23	B2	27	LYS	3.0
29	K1	16	PHE	3.0
33	R6	37	GLU	3.0
28	I1	60	LEU	3.0
32	Q2	78	VAL	3.0
26	F5	108	PRO	3.0
14	N5	16	LEU	3.0
15	O3	41	PHE	3.0
25	E1	145	ARG	3.0
34	S1	142	ARG	3.0
34	S5	144	ARG	3.0
3	V3	30	ALA	3.0
4	X2	28	LYS	3.0
28	I1	94	LYS	3.0
30	L5	124	ASP	3.0
37	l5	188	ASP	3.0
26	F4	150	ALA	3.0
28	I5	42	ARG	3.0
19	b5	12	PRO	3.0
9	g5	143	GLN	3.0

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Mol	Chain	Res	Type	RSRZ
18	Z6	73	VAL	3.0
26	F2	133	THR	3.0
8	f1	111	ASN	3.0
27	H4	145	ARG	3.0
33	R5	80	ARG	3.0
28	I3	157	LYS	3.0
5	a5	45	VAL	3.0
15	O1	46	ASP	3.0
15	O4	116	LEU	3.0
21	i2	201	C	3.0
11	G6	222	GLU	3.0
24	D5	209	SER	3.0
26	F5	195	GLU	3.0
33	R6	70	SER	3.0
16	W4	22	LYS	3.0
25	E4	94	LYS	3.0
26	F3	198	ARG	3.0
26	F5	120	GLY	3.0
29	K6	97	SER	3.0
37	l2	115	VAL	3.0
37	l5	161	GLU	3.0
11	G4	218	LYS	3.0
24	D4	106	ARG	3.0
25	E1	79	ASP	3.0
23	B4	234	GLU	3.0
24	D6	8	LYS	3.0
25	E5	18	TRP	3.0
28	I2	118	ALA	3.0
4	X5	97	ASN	3.0
9	g4	7	LEU	3.0
25	E4	152	PRO	3.0
11	G5	226	GLU	3.0
2	U2	117	ALA	3.0
24	D1	220	THR	3.0
37	l3	132	CYS	3.0
19	b6	2	PRO	3.0
24	D4	1	MET	3.0
26	F3	194	ASP	3.0
11	G3	222	GLU	3.0
27	H5	82	GLU	3.0
29	K4	60	GLU	3.0
21	i5	838	G	2.9

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Mol	Chain	Res	Type	RSRZ
23	B1	136	ARG	2.9
12	J2	21	GLU	2.9
24	D2	214	LYS	2.9
27	H3	155	LYS	2.9
1	T2	54	TYR	2.9
10	C5	132	ASP	2.9
27	H1	95	ILE	2.9
30	L2	33	LEU	2.9
18	Z6	115	GLY	2.9
20	e2	47	PRO	2.9
14	N6	60	VAL	2.9
24	D4	147	ALA	2.9
24	D6	142	LEU	2.9
30	L4	149	ALA	2.9
37	l3	165	ILE	2.9
29	K1	56	GLY	2.9
19	b1	10	PRO	2.9
13	M5	53	ALA	2.9
18	Z6	56	ASP	2.9
25	E1	154	ILE	2.9
11	G3	225	GLN	2.9
15	O5	124	MET	2.9
21	i1	407	G	2.9
21	i3	788	G	2.9
2	U6	29	VAL	2.9
15	O4	33	ILE	2.9
27	H5	193	GLN	2.9
4	X5	126	ALA	2.9
18	Z6	77	LEU	2.9
2	U3	41	ARG	2.9
2	U5	18	HIS	2.9
15	O6	14	VAL	2.9
16	W4	64	ASN	2.9
22	A5	216	ALA	2.9
22	A6	223	THR	2.9
24	D5	206	ASP	2.9
16	W4	14	ILE	2.9
27	H3	187	PHE	2.9
27	H4	98	ARG	2.9
28	I5	53	LYS	2.9
26	F4	131	ALA	2.9
28	I5	131	PRO	2.9

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Mol	Chain	Res	Type	RSRZ
28	I3	203	LYS	2.9
25	E1	31	PRO	2.9
28	I5	95	THR	2.9
16	W4	46	TYR	2.9
20	e4	46	VAL	2.9
21	i1	796	G	2.9
26	F5	191	LYS	2.9
15	O3	20	GLN	2.9
31	P4	34	MET	2.9
32	Q4	56	LEU	2.9
24	D4	173	ARG	2.9
24	D6	211	VAL	2.9
26	F1	134	VAL	2.9
30	L5	147	LYS	2.9
15	O4	54	CYS	2.9
25	E2	226	PHE	2.9
27	H1	189	PHE	2.9
10	C1	105	GLU	2.9
28	I2	206	LYS	2.9
34	S2	15	VAL	2.9
9	g4	12	LYS	2.9
12	J4	89	GLU	2.9
27	H4	96	ALA	2.9
28	I6	166	PHE	2.9
21	i2	308	G	2.9
29	K6	36	ALA	2.9
37	l4	176	ASP	2.9
22	A3	160	ALA	2.9
25	E5	136	ILE	2.9
27	H5	192	PHE	2.9
28	I6	78	ILE	2.9
4	X1	82	THR	2.9
28	I5	189	VAL	2.9
26	F6	195	GLU	2.9
28	I3	151	GLU	2.9
34	S4	44	VAL	2.9
5	a6	105	GLY	2.9
7	d5	48	LYS	2.9
30	L4	25	LEU	2.9
28	I6	52	ASN	2.9
10	C1	88	ILE	2.9
15	O2	112	ALA	2.9

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Mol	Chain	Res	Type	RSRZ
25	E2	40	GLU	2.9
28	I5	34	ALA	2.9
32	Q1	122	ALA	2.9
34	S4	58	GLU	2.9
25	E2	227	VAL	2.9
33	R6	73	LEU	2.9
21	i6	898	U	2.9
23	B4	46	LYS	2.9
24	D6	18	LYS	2.9
25	E6	110	ALA	2.9
9	g5	200	VAL	2.9
25	E1	126	VAL	2.9
5	a1	106	ALA	2.9
21	i5	753	C	2.9
26	F2	23	TRP	2.9
25	E4	93	ASP	2.9
26	F3	123	GLU	2.9
26	F4	198	ARG	2.9
33	R6	77	GLU	2.9
25	E1	225	ILE	2.9
30	L5	144	LYS	2.8
11	G6	35	GLU	2.8
14	N5	60	VAL	2.8
25	E2	164	LEU	2.8
28	I5	132	GLU	2.8
9	g6	10	THR	2.8
17	Y1	132	LYS	2.8
21	i2	1782	G	2.8
24	D3	56	GLN	2.8
27	H3	164	ASN	2.8
13	M4	81	ASP	2.8
32	Q1	57	LEU	2.8
18	Z5	75	GLU	2.8
21	i3	1768	A	2.8
2	U5	30	LYS	2.8
10	C6	126	ALA	2.8
12	J2	22	LYS	2.8
25	E1	144	ALA	2.8
25	E6	48	LEU	2.8
27	H5	90	LYS	2.8
4	X2	139	GLU	2.8
36	k1	60	GLU	2.8

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Mol	Chain	Res	Type	RSRZ
36	k5	162	ILE	2.8
9	g3	283	PRO	2.8
25	E3	149	TYR	2.8
27	H3	158	LEU	2.8
30	L4	43	GLY	2.8
11	G4	226	GLU	2.8
34	S5	7	GLU	2.8
5	a3	70	LYS	2.8
16	W4	63	VAL	2.8
17	Y2	128	GLY	2.8
19	b1	8	LEU	2.8
20	e3	46	VAL	2.8
33	R1	91	LEU	2.8
36	k6	103	LYS	2.8
10	C5	88	ILE	2.8
21	i2	790	C	2.8
21	i1	137	U	2.8
21	i1	305	U	2.8
2	U5	85	HIS	2.8
4	X4	31	HIS	2.8
13	M1	72	HIS	2.8
24	D4	55	THR	2.8
27	H3	139	ILE	2.8
22	A5	122	LEU	2.8
23	B2	234	GLU	2.8
28	I1	121	LEU	2.8
28	I6	41	ARG	2.8
13	M1	10	GLY	2.8
23	B1	22	VAL	2.8
37	l3	131	VAL	2.8
26	F5	149	GLN	2.8
6	c2	22	GLY	2.8
7	d4	51	GLY	2.8
16	W4	44	HIS	2.8
24	D1	223	ILE	2.8
24	D5	205	PRO	2.8
34	S2	131	VAL	2.8
30	L2	51	ILE	2.8
24	D2	221	THR	2.8
31	P3	50	ARG	2.8
34	S1	3	LEU	2.8
3	V1	37	ALA	2.8

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Mol	Chain	Res	Type	RSRZ
4	X6	70	VAL	2.8
8	f3	108	VAL	2.8
9	g2	223	GLU	2.8
10	C6	241	PHE	2.8
21	i3	1418	C	2.8
21	i6	132	U	2.8
25	E2	219	ALA	2.8
30	L3	26	GLY	2.8
12	J5	116	LYS	2.8
26	F1	68	ILE	2.8
10	C5	193	VAL	2.8
29	K1	88	GLU	2.8
31	P6	93	MET	2.8
36	k6	101	ALA	2.8
2	U4	22	ILE	2.8
11	G3	221	LYS	2.8
27	H3	147	LYS	2.8
27	H6	142	LYS	2.8
31	P6	77	LYS	2.8
21	i4	749	U	2.8
9	g2	47	ARG	2.8
15	O1	135	ILE	2.8
36	k4	157	LYS	2.8
16	W6	81	VAL	2.8
7	d6	50	ILE	2.8
23	B1	137	LEU	2.8
23	B4	53	GLN	2.8
26	F1	133	THR	2.8
30	L5	51	ILE	2.8
34	S5	143	GLY	2.8
30	L6	47	PRO	2.8
4	X4	55	VAL	2.8
11	G4	206	ALA	2.8
15	O4	22	ALA	2.8
25	E5	47	PHE	2.8
24	D4	117	ARG	2.8
25	E6	14	ALA	2.8
20	e5	5	SER	2.8
28	I5	134	GLU	2.8
27	H3	177	TYR	2.8
19	b4	3	LEU	2.8
20	e5	4	GLY	2.8

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Mol	Chain	Res	Type	RSRZ
2	U4	81	GLN	2.8
21	i6	199	C	2.8
28	I4	28	GLU	2.8
29	K1	13	GLU	2.8
34	S6	116	LYS	2.8
17	Y3	2	ASN	2.8
36	k5	150	MET	2.8
37	l2	190	ILE	2.8
28	I5	92	ARG	2.8
37	l2	162	ASP	2.8
20	e1	4	GLY	2.8
5	a6	20	PRO	2.8
9	g1	102	VAL	2.8
22	A1	222	VAL	2.8
25	E6	217	SER	2.8
34	S4	16	LEU	2.8
9	g2	228	TYR	2.8
5	a3	108	PRO	2.8
8	f1	79	LYS	2.8
21	i3	1869	A	2.8
2	U4	111	GLU	2.8
11	G1	212	LEU	2.8
14	N2	42	LYS	2.8
27	H5	35	ASP	2.8
27	H5	74	LYS	2.8
30	L1	20	LYS	2.8
1	T2	21	PHE	2.8
10	C1	193	VAL	2.8
11	G6	164	LYS	2.8
30	L2	142	VAL	2.8
5	a6	31	PRO	2.8
1	T1	143	LYS	2.8
21	i5	1364	U	2.8
10	C4	132	ASP	2.7
6	c2	46	VAL	2.7
6	c3	9	ILE	2.7
9	g6	270	LEU	2.7
25	E5	41	CYS	2.7
22	A2	205	ARG	2.7
26	F1	124	ASP	2.7
28	I1	69	SER	2.7
26	F3	135	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
30	L3	40	ILE	2.7
14	N1	146	ALA	2.7
4	X1	51	VAL	2.7
2	U2	46	LYS	2.7
4	X5	53	GLU	2.7
6	c1	33	GLU	2.7
9	g4	79	LEU	2.7
14	N3	151	ALA	2.7
26	F4	42	LYS	2.7
25	E2	234	PRO	2.7
30	L5	27	GLU	2.7
28	I4	156	ALA	2.7
3	V6	70	LEU	2.7
4	X3	142	ARG	2.7
23	B1	23	ASP	2.7
3	V4	55	ILE	2.7
9	g3	284	PRO	2.7
18	Z3	115	GLY	2.7
22	A5	213	GLU	2.7
30	L2	74	SER	2.7
34	S2	20	ILE	2.7
2	U6	19	ARG	2.7
14	N1	84	LEU	2.7
17	Y6	129	LYS	2.7
25	E4	69	PHE	2.7
12	J5	186	GLY	2.7
18	Z1	95	GLY	2.7
21	i4	885	U	2.7
23	B2	30	TRP	2.7
22	A6	150	THR	2.7
11	G4	237	LEU	2.7
27	H3	130	LEU	2.7
36	k1	116	LEU	2.7
10	C5	237	ALA	2.7
30	L5	2	ALA	2.7
27	H3	129	ILE	2.7
9	g2	53	GLY	2.7
25	E1	42	LEU	2.7
30	L6	49	GLU	2.7
34	S3	125	HIS	2.7
34	S3	126	PHE	2.7
4	X3	102	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
10	C1	104	ASP	2.7
21	i1	1477	U	2.7
34	S4	144	ARG	2.7
4	X5	139	GLU	2.7
12	J4	117	LEU	2.7
25	E2	175	PHE	2.7
25	E1	82	TYR	2.7
27	H3	132	ASP	2.7
30	L4	36	TYR	2.7
5	a5	64	LEU	2.7
7	d4	52	PHE	2.7
24	D4	209	SER	2.7
27	H4	82	GLU	2.7
27	H5	52	GLU	2.7
9	g6	54	ILE	2.7
19	b1	4	ALA	2.7
23	B3	46	LYS	2.7
27	H1	97	GLN	2.7
28	I6	152	ARG	2.7
10	C6	104	ASP	2.7
20	e6	58	ASN	2.7
4	X3	118	VAL	2.7
25	E3	147	ILE	2.7
28	I5	45	THR	2.7
9	g6	143	GLN	2.7
10	C1	65	LYS	2.7
11	G5	215	LYS	2.7
28	I5	97	VAL	2.7
24	D6	80	PRO	2.7
2	U5	65	THR	2.7
8	f6	98	VAL	2.7
14	N4	151	ALA	2.7
24	D4	2	ALA	2.7
23	B2	56	LYS	2.7
10	C5	185	THR	2.7
30	L2	151	THR	2.7
34	S5	127	TRP	2.7
9	g5	144	ASP	2.7
12	J5	185	ALA	2.7
21	i6	1317	C	2.7
27	H1	17	ASP	2.7
25	E2	154	ILE	2.7

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Mol	Chain	Res	Type	RSRZ
15	O5	116	LEU	2.7
24	D3	154	ASP	2.7
26	F5	175	ASP	2.7
30	L6	36	TYR	2.7
2	U2	102	THR	2.7
27	H3	157	HIS	2.7
4	X3	122	VAL	2.7
28	I4	78	ILE	2.7
33	R5	2	GLY	2.7
2	U6	63	ILE	2.7
4	X4	102	VAL	2.7
9	g2	230	LEU	2.7
14	N3	149	LEU	2.7
16	W4	104	LEU	2.7
24	D3	200	PRO	2.7
4	X6	137	LYS	2.7
18	Z5	78	LYS	2.7
21	i5	791	C	2.7
22	A2	208	GLU	2.7
8	f2	111	ASN	2.7
17	Y3	125	VAL	2.7
24	D5	130	GLY	2.7
26	F4	69	VAL	2.7
6	c3	65	ALA	2.7
21	i1	1462	U	2.7
29	K1	91	PRO	2.7
8	f3	79	LYS	2.7
9	g6	98	THR	2.7
21	i3	1825	A	2.7
25	E1	169	ILE	2.7
26	F5	135	ARG	2.7
27	H6	15	LYS	2.7
30	L6	22	ARG	2.7
32	Q1	17	LYS	2.7
33	R3	73	LEU	2.7
4	X4	22	TRP	2.7
6	c5	55	VAL	2.7
9	g6	279	SER	2.7
13	M4	55	ASN	2.6
13	M4	128	PHE	2.6
20	e3	49	PHE	2.6
22	A1	205	ARG	2.7

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Mol	Chain	Res	Type	RSRZ
31	P3	92	SER	2.7
18	Z5	95	GLY	2.6
24	D5	113	LEU	2.6
25	E5	45	ILE	2.6
12	J5	46	VAL	2.6
14	N2	60	VAL	2.6
5	a6	106	ALA	2.6
6	c1	65	ALA	2.6
18	Z2	42	ASP	2.6
26	F5	96	ALA	2.6
21	i2	746	C	2.6
4	X6	54	LYS	2.6
25	E4	155	LYS	2.6
28	I5	179	PRO	2.6
36	k4	97	VAL	2.6
4	X4	4	CYS	2.6
20	e6	3	HIS	2.6
30	L2	75	GLY	2.6
32	Q6	48	GLN	2.6
10	C1	278	THR	2.6
30	L1	50	ALA	2.6
33	R6	38	ILE	2.6
26	F5	203	ASN	2.6
26	F6	28	VAL	2.6
28	I3	143	LYS	2.6
28	I4	138	ASN	2.6
24	D6	217	ILE	2.6
17	Y1	117	VAL	2.6
18	Z6	57	LYS	2.6
24	D4	206	ASP	2.6
24	D6	75	LYS	2.6
27	H3	185	VAL	2.6
21	i6	137	U	2.6
25	E4	139	LEU	2.6
4	X1	118	VAL	2.6
26	F1	25	THR	2.6
1	T4	20	ALA	2.6
12	J2	106	LEU	2.6
29	K6	89	ILE	2.6
33	R5	83	ASN	2.6
19	b4	53	VAL	2.6
24	D3	91	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
13	M1	73	GLN	2.6
26	F5	35	LEU	2.6
28	I5	190	LEU	2.6
30	L1	32	LYS	2.6
5	a6	17	HIS	2.6
21	i5	347	G	2.6
27	H1	91	HIS	2.6
33	R6	76	GLU	2.6
30	L3	54	THR	2.6
9	g2	44	LYS	2.6
30	L3	25	LEU	2.6
9	g5	308	ARG	2.6
32	Q6	45	ARG	2.6
9	g1	80	SER	2.6
20	e4	52	LYS	2.6
11	G4	35	GLU	2.6
15	O3	128	ARG	2.6
16	W1	121	THR	2.6
2	U3	42	GLY	2.6
11	G4	166	GLY	2.6
22	A2	114	ALA	2.6
24	D3	18	LYS	2.6
26	F4	64	ALA	2.6
12	J5	107	GLU	2.6
32	Q4	110	ASP	2.6
26	F1	107	ASN	2.6
24	D4	202	LYS	2.6
24	D3	172	VAL	2.6
32	Q5	123	ASP	2.6
25	E1	78	THR	2.6
33	R6	50	ILE	2.6
14	N2	27	LYS	2.6
30	L6	120	VAL	2.6
28	I4	151	GLU	2.6
27	H4	146	VAL	2.6
37	l3	116	THR	2.6
21	i4	836	G	2.6
30	L2	35	ARG	2.6
4	X5	57	VAL	2.6
4	X6	102	VAL	2.6
5	a3	34	LYS	2.6
8	f3	122	PRO	2.6

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Mol	Chain	Res	Type	RSRZ
27	H6	16	PRO	2.6
30	L1	42	LEU	2.6
26	F6	39	ILE	2.6
29	K1	11	ILE	2.6
10	C5	127	PHE	2.6
13	M3	50	CYS	2.6
34	S5	125	HIS	2.6
20	e2	51	LYS	2.6
21	i4	1294	G	2.6
26	F3	203	ASN	2.6
29	K2	7	ASN	2.6
25	E2	89	VAL	2.6
5	a3	65	PRO	2.6
15	O5	75	MET	2.6
33	R5	92	ASP	2.6
6	c3	6	VAL	2.6
19	b5	2	PRO	2.6
21	i4	183	G	2.6
6	c1	7	GLN	2.6
21	i6	1740	C	2.6
24	D6	218	LEU	2.6
28	I1	41	ARG	2.6
28	I2	138	ASN	2.6
28	I4	129	LEU	2.6
28	I6	62	VAL	2.6
30	L4	42	LEU	2.6
11	G6	218	LYS	2.6
15	O3	130	GLU	2.6
24	D2	209	SER	2.6
25	E5	230	LYS	2.6
16	W4	100	GLY	2.6
30	L4	47	PRO	2.6
2	U6	83	ARG	2.6
26	F1	149	GLN	2.6
26	F6	41	VAL	2.6
8	f5	83	LYS	2.6
21	i2	752	G	2.5
21	i5	1418	C	2.6
4	X5	96	GLU	2.5
20	e4	15	GLN	2.5
25	E5	37	LYS	2.5
37	l2	114	LYS	2.5

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Mol	Chain	Res	Type	RSRZ
10	C5	234	GLY	2.5
23	B2	141	GLY	2.5
13	M5	51	VAL	2.5
29	K4	37	ASP	2.5
4	X6	126	ALA	2.5
22	A5	100	ALA	2.5
26	F1	64	ALA	2.5
16	W4	101	PHE	2.5
24	D4	165	ASN	2.5
27	H5	51	ILE	2.5
21	i2	133	C	2.5
17	Y2	117	VAL	2.5
30	L3	56	ILE	2.5
33	R5	38	ILE	2.5
37	l4	139	ILE	2.5
13	M3	130	CYS	2.5
27	H3	142	LYS	2.5
32	Q2	14	GLY	2.5
4	X6	133	LEU	2.5
5	a1	102	ARG	2.5
10	C1	109	ILE	2.5
15	O2	86	LYS	2.5
15	O3	94	HIS	2.5
21	i1	132	U	2.5
25	E2	149	TYR	2.5
30	L4	99	TYR	2.5
24	D1	63	GLY	2.5
34	S1	116	LYS	2.5
15	O5	16	SER	2.5
21	i6	1382	A	2.5
11	G4	232	ARG	2.5
17	Y3	113	ARG	2.5
25	E4	56	LEU	2.5
30	L5	54	THR	2.5
37	l6	129	THR	2.5
9	g5	104	HIS	2.5
17	Y5	126	GLY	2.5
27	H3	141	GLY	2.5
28	I4	139	LYS	2.5
25	E1	18	TRP	2.5
33	R6	64	GLY	2.5
23	B3	26	SER	2.5

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Mol	Chain	Res	Type	RSRZ
21	i3	785	C	2.5
25	E1	44	LEU	2.5
30	L1	24	LEU	2.5
30	L2	22	ARG	2.5
36	k1	62	LEU	2.5
13	M4	132	LYS	2.5
24	D3	62	LYS	2.5
24	D4	108	LYS	2.5
27	H1	90	LYS	2.5
25	E2	161	GLN	2.5
26	F6	92	ILE	2.5
30	L1	44	PHE	2.5
30	L6	117	PHE	2.5
27	H3	143	ARG	2.5
30	L3	20	LYS	2.5
10	C6	277	HIS	2.5
24	D4	212	GLU	2.5
27	H3	180	LEU	2.5
18	Z1	45	ASN	2.5
25	E1	197	ASN	2.5
16	W4	62	VAL	2.5
10	C2	277	HIS	2.5
15	O1	23	GLU	2.5
24	D5	198	ILE	2.5
25	E5	23	LEU	2.5
28	I1	172	LEU	2.5
30	L1	93	LEU	2.5
16	W4	41	MET	2.5
37	l3	180	GLU	2.5
2	U5	76	THR	2.5
16	W1	60	LYS	2.5
17	Y1	118	ARG	2.5
1	T6	26	GLY	2.5
18	Z3	52	LYS	2.5
33	R3	23	ARG	2.5
26	F5	68	ILE	2.5
34	S4	8	LYS	2.5
26	F1	38	TYR	2.5
21	i1	1825	A	2.5
23	B2	95	ASN	2.5
26	F5	198	ARG	2.5
28	I5	59	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
22	A1	169	HIS	2.5
29	K6	18	GLU	2.5
30	L5	52	GLU	2.5
18	Z1	98	LYS	2.5
26	F5	133	THR	2.5
27	H4	154	ILE	2.5
30	L4	70	GLY	2.5
33	R4	120	THR	2.5
11	G5	206	ALA	2.5
24	D4	120	TYR	2.5
27	H1	188	GLU	2.5
9	g1	11	LEU	2.5
13	M3	118	SER	2.5
2	U4	99	LYS	2.5
4	X1	105	PHE	2.5
6	c1	11	LEU	2.5
24	D1	151	LYS	2.5
26	F1	33	ILE	2.5
28	I1	43	ILE	2.5
5	a5	50	VAL	2.5
11	G5	204	GLU	2.5
28	I6	82	VAL	2.5
10	C6	212	LYS	2.5
12	J2	66	LYS	2.5
22	A5	102	ARG	2.5
26	F1	159	ARG	2.5
26	F6	47	LYS	2.5
34	S6	142	ARG	2.5
25	E5	48	LEU	2.5
28	I6	44	HIS	2.5
11	G6	176	ILE	2.5
18	Z1	106	GLN	2.5
30	L5	116	CYS	2.5
33	R6	15	VAL	2.5
28	I3	152	ARG	2.5
34	S3	127	TRP	2.5
15	O6	140	THR	2.5
20	e6	47	PRO	2.5
21	i1	1425	G	2.5
21	i2	884	C	2.5
21	i4	730	C	2.5
29	K6	22	VAL	2.5

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Mol	Chain	Res	Type	RSRZ
15	O4	63	LYS	2.5
16	W3	45	GLY	2.5
18	Z4	51	ASP	2.5
25	E3	68	ARG	2.5
2	U6	117	ALA	2.5
16	W6	26	LEU	2.5
7	d5	43	PHE	2.5
4	X2	141	PRO	2.5
26	F2	203	ASN	2.5
9	g5	232	GLY	2.5
13	M1	132	LYS	2.5
19	b1	60	SER	2.5
26	F4	136	ARG	2.5
34	S4	14	ARG	2.5
34	S6	76	GLN	2.5
37	l4	164	ILE	2.5
1	T5	32	GLU	2.5
21	i3	852	G	2.5
5	a6	102	ARG	2.5
10	C5	129	ALA	2.5
11	G6	160	LYS	2.5
15	O3	113	GLN	2.5
26	F5	55	ARG	2.5
28	I3	161	LEU	2.5
23	B4	100	PHE	2.5
36	k1	97	VAL	2.5
4	X1	73	GLN	2.5
10	C5	89	LYS	2.5
18	Z3	99	LEU	2.5
22	A5	139	TYR	2.5
33	R5	127	ASN	2.5
15	O5	80	ASP	2.5
21	i2	325	C	2.5
23	B1	90	ASP	2.5
24	D5	11	PHE	2.5
26	F5	141	VAL	2.5
27	H1	61	ILE	2.5
28	I2	38	ILE	2.5
36	k6	102	ILE	2.5
37	l1	169	ASP	2.5
11	G3	35	GLU	2.5
11	G4	212	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
6	c1	45	ASN	2.5
6	c2	47	LYS	2.5
30	L6	16	ILE	2.5
34	S2	14	ARG	2.5
37	l4	137	PHE	2.5
23	B5	90	ASP	2.5
31	P6	78	THR	2.5
7	d6	48	LYS	2.4
27	H1	86	LYS	2.4
28	I6	104	ILE	2.4
34	S6	15	VAL	2.4
36	k6	109	ALA	2.4
15	O5	46	ASP	2.4
26	F2	45	TYR	2.4
34	S1	99	LEU	2.4
4	X1	102	VAL	2.4
18	Z6	78	LYS	2.4
24	D6	117	ARG	2.4
27	H1	10	LYS	2.4
28	I2	133	GLU	2.4
32	Q4	64	ALA	2.4
33	R1	90	ALA	2.4
34	S1	33	ILE	2.4
34	S6	144	ARG	2.4
25	E6	18	TRP	2.4
13	M5	127	TYR	2.4
31	P3	89	MET	2.4
32	Q2	110	ASP	2.4
3	V4	14	PRO	2.4
34	S3	117	ILE	2.4
24	D3	94	ARG	2.4
25	E5	153	LEU	2.4
26	F5	103	LEU	2.4
32	Q2	57	LEU	2.4
2	U3	60	THR	2.4
21	i4	880	G	2.4
25	E6	220	THR	2.4
9	g1	12	LYS	2.4
9	g3	233	GLY	2.4
24	D6	136	VAL	2.4
26	F3	22	LYS	2.4
33	R4	110	ASP	2.4

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Mol	Chain	Res	Type	RSRZ
16	W4	69	LEU	2.4
31	P6	106	GLU	2.4
20	e2	59	SER	2.4
22	A6	34	MET	2.4
23	B3	69	VAL	2.4
37	l6	136	THR	2.4
5	a1	100	ARG	2.4
12	J5	2	PRO	2.4
25	E2	198	ARG	2.4
27	H1	191	GLU	2.4
27	H3	133	LEU	2.4
33	R5	23	ARG	2.4
2	U4	115	THR	2.4
3	V6	82	ASN	2.4
6	c1	6	VAL	2.4
6	c1	21	THR	2.4
4	X5	121	LYS	2.4
11	G3	76	LEU	2.4
11	G3	204	GLU	2.4
13	M4	95	ASP	2.4
17	Y4	126	GLY	2.4
21	i6	749	U	2.4
24	D3	90	LYS	2.4
29	K2	30	PRO	2.4
30	L1	33	LEU	2.4
27	H5	50	GLU	2.4
37	l2	191	GLU	2.4
24	D4	137	VAL	2.4
27	H5	75	ILE	2.4
4	X6	29	LYS	2.4
9	g6	44	LYS	2.4
26	F2	107	ASN	2.4
28	I3	192	GLY	2.4
9	g1	265	ILE	2.4
27	H4	34	SER	2.4
30	L4	51	ILE	2.4
2	U3	61	LEU	2.4
18	Z4	96	LEU	2.4
21	i6	877	C	2.4
25	E1	168	LYS	2.4
29	K6	39	ASN	2.4
30	L3	30	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
34	S2	116	LYS	2.4
36	k4	110	ASN	2.4
24	D5	89	GLU	2.4
26	F5	33	ILE	2.4
28	I5	191	GLU	2.4
2	U4	39	LEU	2.4
15	O2	113	GLN	2.4
33	R5	126	MET	2.4
1	T4	110	LEU	2.4
7	d5	44	ARG	2.4
10	C6	105	GLU	2.4
10	C6	106	VAL	2.4
11	G6	226	GLU	2.4
13	M2	64	LEU	2.4
18	Z6	61	GLU	2.4
22	A2	102	ARG	2.4
22	A5	30	LEU	2.4
23	B4	126	ASP	2.4
5	a6	107	ALA	2.4
12	J4	66	LYS	2.4
16	W3	37	PHE	2.4
30	L1	17	PHE	2.4
11	G5	213	LEU	2.4
13	M6	58	GLU	2.4
22	A1	33	GLN	2.4
23	B2	52	THR	2.4
26	F5	99	ILE	2.4
37	l6	119	LYS	2.4
1	T4	51	ASN	2.4
17	Y6	74	MET	2.4
24	D4	146	ARG	2.4
26	F1	198	ARG	2.4
30	L5	120	VAL	2.4
15	O5	112	ALA	2.4
21	i1	731	G	2.4
21	i5	306	C	2.4
4	X1	117	GLY	2.4
28	I6	159	SER	2.4
5	a3	73	TYR	2.4
29	K1	19	GLY	2.4
33	R5	40	ILE	2.4
21	i3	294	U	2.4

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Mol	Chain	Res	Type	RSRZ
30	L2	52	GLU	2.4
37	l3	130	ARG	2.4
9	g4	281	ALA	2.4
4	X1	50	ILE	2.4
16	W3	47	ILE	2.4
5	a5	63	VAL	2.4
28	I4	157	LYS	2.4
28	I5	124	LYS	2.4
4	X4	5	ARG	2.4
30	L4	63	THR	2.4
5	a5	90	GLU	2.4
22	A5	211	GLU	2.4
24	D5	216	GLU	2.4
25	E5	97	GLU	2.4
30	L5	118	ARG	2.4
4	X5	94	ILE	2.4
23	B3	43	ASN	2.4
25	E6	2	ALA	2.4
15	O2	116	LEU	2.4
22	A1	75	SER	2.4
32	Q3	56	LEU	2.4
5	a5	101	PHE	2.4
26	F5	197	GLU	2.4
6	c2	26	GLN	2.4
26	F2	22	LYS	2.4
26	F3	42	LYS	2.4
27	H3	146	VAL	2.4
37	l2	181	LYS	2.4
4	X1	41	PHE	2.4
9	g5	163	PRO	2.4
10	C5	107	LEU	2.4
25	E3	169	ILE	2.4
30	L5	125	ILE	2.4
12	J2	43	VAL	2.4
15	O1	44	VAL	2.4
15	O2	29	GLY	2.4
16	W6	123	GLY	2.4
23	B1	54	GLY	2.4
13	M1	46	GLN	2.4
28	I5	153	LYS	2.4
15	O4	85	CYS	2.4
19	b1	12	PRO	2.4

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Mol	Chain	Res	Type	RSRZ
23	B1	58	ALA	2.4
27	H4	153	LEU	2.4
30	L3	28	THR	2.4
31	P3	114	HIS	2.4
28	I5	122	GLY	2.4
9	g4	225	LYS	2.4
4	X1	91	LEU	2.4
18	Z6	64	ASN	2.4
20	e3	15	GLN	2.4
4	X3	40	PRO	2.4
6	c3	57	THR	2.4
34	S6	48	ALA	2.4
21	i2	307	G	2.4
25	E6	186	GLY	2.4
10	C5	160	LEU	2.4
18	Z3	110	THR	2.4
26	F4	41	VAL	2.4
33	R3	119	VAL	2.4
15	O3	86	LYS	2.4
4	X1	81	ILE	2.4
15	O3	90	ILE	2.4
30	L4	16	ILE	2.4
9	g4	134	THR	2.4
15	O2	46	ASP	2.4
15	O3	26	ASN	2.4
25	E6	216	ASN	2.4
27	H1	168	HIS	2.4
27	H5	168	HIS	2.4
22	A3	159	ILE	2.3
22	A6	60	LEU	2.3
25	E2	123	LEU	2.3
29	K6	17	LYS	2.3
9	g4	180	ALA	2.3
4	X6	97	ASN	2.3
7	d6	44	ARG	2.3
30	L4	61	PRO	2.3
2	U4	109	GLY	2.3
6	c5	47	LYS	2.3
10	C1	124	PHE	2.3
16	W3	54	ASP	2.3
24	D4	182	LEU	2.3
25	E2	122	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
27	H3	50	GLU	2.3
28	I1	197	PHE	2.3
13	M1	45	ARG	2.3
13	M4	96	ARG	2.3
30	L3	111	VAL	2.3
28	I1	192	GLY	2.3
22	A1	119	PRO	2.3
2	U2	104	ILE	2.3
25	E2	75	LYS	2.3
12	J4	114	VAL	2.3
2	U6	24	LEU	2.3
15	O5	122	SER	2.3
30	L6	37	TYR	2.3
34	S5	4	VAL	2.3
25	E6	15	PRO	2.3
10	C5	162	ILE	2.3
25	E2	181	CYS	2.3
25	E6	102	ILE	2.3
26	F3	130	ARG	2.3
24	D5	211	VAL	2.3
33	R6	51	ALA	2.3
2	U4	83	ARG	2.3
25	E1	47	PHE	2.3
26	F1	132	GLY	2.3
31	P3	95	GLY	2.3
34	S4	97	GLN	2.3
34	S4	142	ARG	2.3
36	k4	111	ILE	2.3
22	A5	124	VAL	2.3
24	D4	32	ASP	2.3
37	l5	137	PHE	2.3
28	I1	183	GLY	2.3
30	L1	86	ILE	2.3
12	J5	112	THR	2.3
1	T1	141	ALA	2.3
13	M1	126	GLU	2.3
22	A5	156	TYR	2.3
23	B4	127	VAL	2.3
22	A6	149	ASN	2.3
23	B6	40	ASN	2.3
30	L6	52	GLU	2.3
2	U4	74	SER	2.3

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Mol	Chain	Res	Type	RSRZ
26	F1	127	ARG	2.3
27	H2	139	ILE	2.3
33	R5	42	PRO	2.3
6	c1	32	VAL	2.3
11	G4	221	LYS	2.3
13	M1	48	HIS	2.3
24	D4	141	LYS	2.3
25	E5	36	HIS	2.3
26	F3	14	THR	2.3
21	i4	1418	C	2.3
21	i5	1767	C	2.3
24	D6	210	ILE	2.3
34	S6	30	ILE	2.3
14	N3	148	ALA	2.3
18	Z1	110	THR	2.3
21	i3	867	G	2.3
25	E6	263	GLY	2.3
22	A1	212	LYS	2.3
23	B2	94	LYS	2.3
30	L1	25	LEU	2.3
10	C2	109	ILE	2.3
23	B1	110	MET	2.3
3	V1	70	LEU	2.3
9	g1	261	LEU	2.3
18	Z5	111	ARG	2.3
15	O5	28	PHE	2.3
16	W3	62	VAL	2.3
25	E1	127	ARG	2.3
27	H6	130	LEU	2.3
30	L3	123	GLY	2.3
28	I6	157	LYS	2.3
29	K1	77	GLN	2.3
30	L4	23	VAL	2.3
15	O5	135	ILE	2.3
22	A1	97	THR	2.3
22	A3	114	ALA	2.3
21	i1	745	C	2.3
23	B2	121	ILE	2.3
26	F4	128	ILE	2.3
4	X1	72	VAL	2.3
5	a6	69	VAL	2.3
13	M3	62	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
15	O1	116	LEU	2.3
4	X1	138	LYS	2.3
15	O2	28	PHE	2.3
24	D3	138	VAL	2.3
24	D4	116	ARG	2.3
28	I5	58	LEU	2.3
30	L1	47	PRO	2.3
32	Q1	135	PRO	2.3
34	S2	99	LEU	2.3
21	i2	786	G	2.3
34	S5	126	PHE	2.3
35	j4	23	ARG	2.3
21	i6	908	A	2.3
7	d3	53	ILE	2.3
19	b6	53	VAL	2.3
26	F1	24	SER	2.3
33	R1	119	VAL	2.3
11	G4	167	LYS	2.3
25	E2	162	ILE	2.3
28	I6	158	ILE	2.3
15	O5	76	LEU	2.3
4	X2	41	PHE	2.3
5	a3	22	ARG	2.3
12	J3	43	VAL	2.3
26	F4	55	ARG	2.3
34	S2	142	ARG	2.3
34	S4	71	MET	2.3
12	J6	168	GLY	2.3
3	V4	56	CYS	2.3
9	g1	260	ASP	2.3
12	J5	92	MET	2.3
13	M3	67	ALA	2.3
28	I2	69	SER	2.3
33	R6	16	ILE	2.3
9	g1	6	THR	2.3
23	B5	97	LEU	2.3
21	i6	794	A	2.3
21	i3	731	G	2.3
21	i5	731	G	2.3
23	B2	51	ARG	2.3
27	H1	85	LYS	2.3
4	X2	43	GLY	2.3

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Mol	Chain	Res	Type	RSRZ
12	J2	102	ILE	2.3
21	i5	346	C	2.3
36	k5	61	ILE	2.3
20	e2	22	GLN	2.3
23	B1	124	HIS	2.3
26	F4	31	ASN	2.3
29	K1	61	GLN	2.3
34	S4	49	ASP	2.3
10	C5	279	ARG	2.3
15	O1	17	LEU	2.3
33	R5	41	ILE	2.3
30	L6	48	LYS	2.3
31	P2	10	ARG	2.3
15	O4	44	VAL	2.3
22	A5	108	PHE	2.3
2	U3	38	ASP	2.3
26	F2	65	GLN	2.3
28	I3	150	ASP	2.3
12	J4	168	GLY	2.3
21	i1	896	U	2.3
30	L3	15	THR	2.3
10	C5	245	SER	2.3
13	M1	129	LYS	2.3
15	O1	108	PRO	2.3
24	D6	213	PRO	2.3
26	F5	146	ARG	2.3
32	Q3	6	PRO	2.3
10	C1	277	HIS	2.3
22	A5	123	VAL	2.3
9	g1	98	THR	2.3
9	g1	220	ASP	2.3
13	M6	64	LEU	2.3
23	B4	89	GLU	2.3
26	F3	106	GLU	2.3
32	Q6	30	GLY	2.3
34	S3	122	GLY	2.3
37	l3	163	GLU	2.3
21	i6	307	G	2.3
24	D1	148	LYS	2.3
32	Q5	6	PRO	2.3
12	J6	119	LEU	2.3
21	i4	897	U	2.3

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Mol	Chain	Res	Type	RSRZ
30	L4	37	TYR	2.3
2	U4	25	THR	2.3
22	A6	36	GLN	2.3
2	U4	34	LYS	2.3
5	a1	69	VAL	2.3
5	a2	81	SER	2.2
24	D2	149	SER	2.2
25	E5	80	ILE	2.2
25	E6	52	LEU	2.2
28	I2	159	SER	2.2
28	I6	55	TYR	2.2
37	l3	177	VAL	2.3
21	i1	904	A	2.2
30	L3	96	ILE	2.2
2	U4	38	ASP	2.2
14	N1	85	PRO	2.2
15	O3	95	ILE	2.2
21	i5	788	G	2.2
29	K1	22	VAL	2.2
10	C1	192	LEU	2.2
23	B4	30	TRP	2.2
11	G1	208	GLU	2.2
19	b6	13	GLU	2.2
24	D1	136	VAL	2.2
25	E5	78	THR	2.2
25	E5	182	MET	2.2
2	U5	89	ILE	2.2
15	O5	72	TYR	2.2
22	A3	51	LEU	2.2
28	I2	120	PRO	2.2
32	Q6	52	LEU	2.2
18	Z5	115	GLY	2.2
23	B4	67	PHE	2.2
1	T4	29	LYS	2.2
4	X4	28	LYS	2.2
13	M6	57	ASP	2.2
16	W1	26	LEU	2.2
31	P2	13	ARG	2.2
10	C6	96	PHE	2.2
12	J3	6	SER	2.2
4	X5	125	VAL	2.2
4	X6	43	GLY	2.2

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Mol	Chain	Res	Type	RSRZ
15	O3	33	ILE	2.2
24	D3	195	THR	2.2
24	D4	177	LEU	2.2
25	E6	12	VAL	2.2
29	K5	89	ILE	2.2
30	L1	56	ILE	2.2
15	O3	18	GLY	2.2
15	O5	99	ALA	2.2
37	l2	160	GLY	2.2
18	Z3	98	LYS	2.2
28	I6	163	GLU	2.2
9	g3	222	ASN	2.2
17	Y2	124	ASN	2.2
19	b4	59	CYS	2.2
24	D4	100	ALA	2.2
25	E1	178	GLY	2.2
25	E6	231	GLY	2.2
29	K2	85	LEU	2.2
34	S2	140	GLY	2.2
16	W4	130	PHE	2.2
6	c1	27	CYS	2.2
9	g4	224	GLY	2.2
11	G6	229	ALA	2.2
12	J5	43	VAL	2.2
24	D4	36	GLY	2.2
26	F3	38	TYR	2.2
2	U4	30	LYS	2.2
2	U4	62	ARG	2.2
2	U6	27	ARG	2.2
4	X1	79	LYS	2.2
16	W3	39	THR	2.2
21	i1	1318	G	2.2
10	C5	220	ASP	2.2
13	M5	52	LEU	2.2
24	D4	122	VAL	2.2
26	F3	16	ASP	2.2
27	H1	83	LEU	2.2
28	I1	185	ALA	2.2
33	R6	54	VAL	2.2
36	k5	40	LEU	2.2
28	I2	117	TYR	2.2
2	U6	61	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
9	g3	252	THR	2.2
10	C6	233	LEU	2.2
11	G2	115	LYS	2.2
18	Z4	41	ARG	2.2
28	I3	18	ARG	2.2
34	S2	127	TRP	2.2
22	A1	121	LEU	2.2
2	U5	36	CYS	2.2
11	G3	151	ASP	2.2
13	M4	127	TYR	2.2
15	O4	123	GLY	2.2
25	E6	228	ILE	2.2
26	F4	32	ASP	2.2
29	K1	70	TYR	2.2
2	U2	24	LEU	2.2
6	c1	44	ARG	2.2
8	f1	113	LYS	2.2
16	W4	65	LEU	2.2
21	i1	691	G	2.2
21	i1	898	U	2.2
25	E2	188	ASN	2.2
29	K1	38	LYS	2.2
15	O1	35	ALA	2.2
25	E6	187	ALA	2.2
26	F3	33	ILE	2.2
2	U6	26	SER	2.2
21	i2	1436	C	2.2
2	U4	60	THR	2.2
2	U6	104	ILE	2.2
4	X6	81	ILE	2.2
19	b3	75	GLU	2.2
25	E1	35	PRO	2.2
25	E6	13	ALA	2.2
30	L3	5	GLN	2.2
32	Q6	20	THR	2.2
34	S5	56	ALA	2.2
21	i5	1306	U	2.2
26	F1	97	PHE	2.2
26	F4	194	ASP	2.2
26	F5	97	PHE	2.2
2	U2	114	VAL	2.2
16	W3	53	ILE	2.2

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Mol	Chain	Res	Type	RSRZ
19	b3	81	ARG	2.2
21	i4	691	G	2.2
24	D5	203	PRO	2.2
37	l3	164	ILE	2.2
4	X1	52	LEU	2.2
21	i4	748	C	2.2
12	J4	182	GLN	2.2
19	b6	32	PHE	2.2
28	I1	120	PRO	2.2
31	P6	69	PRO	2.2
12	J6	93	LYS	2.2
4	X3	82	THR	2.2
9	g3	254	PRO	2.2
9	g4	49	GLU	2.2
13	M1	64	LEU	2.2
21	i2	785	C	2.2
21	i4	876	C	2.2
25	E6	175	PHE	2.2
28	I6	96	LEU	2.2
28	I6	135	GLU	2.2
33	R5	12	ALA	2.2
4	X6	122	VAL	2.2
17	Y4	117	VAL	2.2
24	D1	150	MET	2.2
25	E2	183	VAL	2.2
29	K2	84	HIS	2.2
31	P3	94	VAL	2.2
5	a4	73	TYR	2.2
5	a5	100	ARG	2.2
10	C4	251	LEU	2.2
10	C5	59	GLU	2.2
15	O1	128	ARG	2.2
18	Z2	111	ARG	2.2
25	E5	30	ARG	2.2
27	H4	143	ARG	2.2
28	I2	92	ARG	2.2
24	D4	179	GLN	2.2
27	H4	164	ASN	2.2
12	J2	86	VAL	2.2
12	J5	157	ILE	2.2
1	T3	27	LYS	2.2
15	O1	86	LYS	2.2

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Mol	Chain	Res	Type	RSRZ
8	f2	103	LEU	2.2
21	i1	697	G	2.2
30	L4	48	LYS	2.2
26	F1	195	GLU	2.2
36	k4	156	GLU	2.2
10	C5	241	PHE	2.2
22	A5	129	ALA	2.2
23	B1	59	SER	2.2
24	D4	88	ALA	2.2
27	H5	47	ALA	2.2
28	I5	56	ARG	2.2
30	L5	123	GLY	2.2
3	V1	52	THR	2.2
25	E4	147	ILE	2.2
26	F5	134	VAL	2.2
4	X3	37	LYS	2.2
4	X6	105	PHE	2.2
10	C4	136	HIS	2.2
21	i2	1783	C	2.2
21	i3	134	C	2.2
21	i3	730	C	2.2
23	B4	97	LEU	2.2
32	Q2	52	LEU	2.2
30	L4	123	GLY	2.2
14	N4	22	VAL	2.2
26	F4	93	VAL	2.2
30	L6	77	VAL	2.2
11	G4	95	LYS	2.2
15	O2	47	LEU	2.2
24	D6	201	LYS	2.2
26	F1	188	TYR	2.2
27	H4	15	LYS	2.2
30	L3	24	LEU	2.2
31	P3	116	LEU	2.2
19	b4	60	SER	2.2
16	W6	50	PHE	2.2
21	i3	885	U	2.2
21	i4	735	C	2.2
30	L3	57	ASP	2.2
31	P3	49	LEU	2.2
34	S4	21	ASP	2.2
1	T1	142	ASN	2.2

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Mol	Chain	Res	Type	RSRZ
27	H1	164	ASN	2.2
2	U6	84	ILE	2.2
25	E2	169	ILE	2.2
32	Q4	89	SER	2.2
4	X5	52	LEU	2.1
15	O6	97	LEU	2.1
23	B2	47	THR	2.1
24	D6	150	MET	2.1
4	X1	80	LYS	2.1
25	E6	68	ARG	2.1
26	F1	62	ARG	2.1
28	I2	82	VAL	2.1
30	L1	39	ASN	2.1
22	A5	209	GLU	2.1
9	g5	128	THR	2.1
15	O3	35	ALA	2.1
22	A5	144	THR	2.1
25	E2	159	THR	2.1
29	K2	37	ASP	2.1
14	N1	58	HIS	2.1
21	i1	786	G	2.1
21	i4	692	G	2.1
21	i5	751	G	2.1
30	L2	147	LYS	2.1
29	K1	84	HIS	2.1
30	L3	86	ILE	2.1
33	R2	19	LYS	2.1
12	J2	186	GLY	2.1
23	B1	82	ARG	2.1
25	E2	74	GLY	2.1
24	D4	194	PRO	2.1
28	I5	70	GLU	2.1
31	P1	125	PRO	2.1
6	c1	54	ASP	2.1
19	b5	50	ALA	2.1
4	X1	46	HIS	2.1
4	X4	122	VAL	2.1
22	A3	11	LYS	2.1
22	A5	33	GLN	2.1
26	F4	129	GLY	2.1
28	I2	96	LEU	2.1
31	P6	129	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
37	l6	137	PHE	2.1
10	C5	215	MET	2.1
2	U6	119	ALA	2.1
15	O1	87	GLU	2.1
30	L1	27	GLU	2.1
33	R1	87	GLU	2.1
3	V6	55	ILE	2.1
4	X3	79	LYS	2.1
23	B1	109	LYS	2.1
24	D6	12	VAL	2.1
30	L2	93	LEU	2.1
21	i3	689	U	2.1
28	I6	192	GLY	2.1
10	C5	174	ILE	2.1
13	M4	94	ILE	2.1
14	N3	126	ALA	2.1
23	B3	30	TRP	2.1
24	D5	190	LEU	2.1
30	L6	18	GLN	2.1
31	P4	35	GLN	2.1
36	k5	62	LEU	2.1
2	U4	18	HIS	2.1
8	f3	124	ASP	2.1
37	l4	115	VAL	2.1
22	A1	79	SER	2.1
36	k4	113	CYS	2.1
30	L2	49	GLU	2.1
33	R5	86	PRO	2.1
18	Z2	100	VAL	2.1
21	i2	137	U	2.1
21	i3	205	G	2.1
26	F1	23	TRP	2.1
27	H6	192	PHE	2.1
28	I1	125	LYS	2.1
6	c1	35	MET	2.1
9	g3	276	SER	2.1
9	g6	55	PRO	2.1
23	B3	80	ALA	2.1
24	D3	184	ILE	2.1
34	S1	75	ARG	2.1
17	Y6	100	LYS	2.1
20	e6	53	LYS	2.1

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Mol	Chain	Res	Type	RSRZ
37	l3	181	LYS	2.1
10	C5	140	GLY	2.1
24	D3	25	LEU	2.1
25	E1	80	ILE	2.1
25	E5	29	PRO	2.1
27	H3	60	ILE	2.1
30	L6	116	CYS	2.1
3	V5	64	GLU	2.1
8	f2	81	LYS	2.1
25	E6	111	VAL	2.1
26	F4	111	VAL	2.1
28	I6	133	GLU	2.1
21	i1	867	G	2.1
21	i3	744	G	2.1
22	A1	187	GLY	2.1
10	C1	81	ILE	2.1
11	G3	233	ARG	2.1
2	U4	35	VAL	2.1
4	X2	105	PHE	2.1
7	d6	49	ASP	2.1
21	i6	730	C	2.1
24	D4	178	ARG	2.1
26	F2	202	SER	2.1
34	S4	125	HIS	2.1
14	N4	150	VAL	2.1
22	A2	207	PRO	2.1
11	G5	219	GLU	2.1
20	e4	53	LYS	2.1
22	A3	35	GLU	2.1
14	N5	138	ASN	2.1
15	O4	18	GLY	2.1
21	i6	904	A	2.1
25	E2	230	LYS	2.1
26	F6	22	LYS	2.1
25	E2	192	ILE	2.1
26	F4	68	ILE	2.1
31	P2	70	MET	2.1
37	l4	160	GLY	2.1
6	c2	40	ARG	2.1
9	g4	274	VAL	2.1
27	H5	71	SER	2.1
10	C6	140	GLY	2.1

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Mol	Chain	Res	Type	RSRZ
15	O3	116	LEU	2.1
25	E1	159	THR	2.1
27	H5	46	THR	2.1
4	X6	71	ARG	2.1
17	Y3	123	ALA	2.1
22	A6	157	VAL	2.1
2	U2	86	LYS	2.1
21	i2	305	U	2.1
25	E2	236	ILE	2.1
26	F5	72	LEU	2.1
34	S3	116	LYS	2.1
22	A5	65	ILE	2.1
37	l4	180	GLU	2.1
14	N6	61	ALA	2.1
15	O5	62	VAL	2.1
26	F4	107	ASN	2.1
30	L2	154	GLN	2.1
9	g2	271	LYS	2.1
10	C4	145	LYS	2.1
18	Z5	42	ASP	2.1
2	U4	42	GLY	2.1
21	i2	697	G	2.1
21	i4	1436	C	2.1
23	B2	126	ASP	2.1
30	L6	80	MET	2.1
34	S6	77	TYR	2.1
24	D3	37	VAL	2.1
2	U5	108	PRO	2.1
33	R2	57	LEU	2.1
24	D5	39	VAL	2.1
13	M2	46	GLN	2.1
4	X5	138	LYS	2.1
9	g2	225	LYS	2.1
21	i6	310	C	2.1
25	E5	32	SER	2.1
21	i3	1758	G	2.1
21	i4	796	G	2.1
25	E6	69	PHE	2.1
15	O5	78	ALA	2.1
32	Q3	121	VAL	2.1
9	g3	285	GLN	2.1
9	g4	163	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
26	F4	63	LYS	2.1
26	F6	48	TYR	2.1
26	F6	68	ILE	2.1
30	L4	72	ILE	2.1
34	S5	116	LYS	2.1
12	J3	3	VAL	2.1
13	M1	113	ASP	2.1
15	O6	112	ALA	2.1
23	B4	21	VAL	2.1
24	D2	118	ALA	2.1
24	D5	12	VAL	2.1
4	X6	82	THR	2.1
8	f6	148	TYR	2.1
21	i6	306	C	2.1
36	k5	143	LEU	2.1
11	G4	235	SER	2.1
25	E5	130	PHE	2.1
28	I4	146	GLN	2.1
31	P6	70	MET	2.1
32	Q2	32	ILE	2.1
3	V6	19	ALA	2.1
12	J5	158	ASP	2.1
12	J5	159	PHE	2.1
25	E6	149	TYR	2.1
18	Z2	107	VAL	2.1
29	K1	30	PRO	2.1
29	K2	87	PRO	2.1
30	L1	14	PRO	2.1
33	R5	129	LYS	2.1
23	B4	217	MET	2.1
29	K1	46	MET	2.1
9	g2	215	GLN	2.1
9	g3	139	LYS	2.1
13	M5	65	VAL	2.1
24	D3	186	VAL	2.1
30	L1	48	LYS	2.1
33	R6	117	LEU	2.1
34	S1	122	GLY	2.1
34	S4	10	GLN	2.1
5	a3	90	GLU	2.1
21	i3	880	G	2.1
21	i4	1784	G	2.1

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Mol	Chain	Res	Type	RSRZ
18	Z4	94	LYS	2.1
19	b3	2	PRO	2.1
25	E1	140	VAL	2.1
28	I3	20	PRO	2.1
32	Q2	92	LEU	2.1
9	g6	256	ILE	2.1
22	A2	4	ALA	2.1
26	F3	107	ASN	2.1
36	k5	156	GLU	2.1
2	U6	118	ASP	2.0
9	g5	233	GLY	2.0
17	Y5	68	LYS	2.0
23	B2	48	LEU	2.0
26	F4	47	LYS	2.0
21	i5	744	G	2.0
24	D4	158	ILE	2.0
28	I4	79	ILE	2.0
30	L3	150	GLY	2.0
31	P3	84	ILE	2.0
10	C4	255	LEU	2.0
4	X6	69	CYS	2.0
21	i5	186	C	2.0
23	B4	212	VAL	2.0
28	I6	102	VAL	2.0
29	K1	79	LEU	2.0
7	d5	47	ALA	2.0
20	e2	20	ALA	2.0
22	A6	26	GLY	2.0
6	c2	68	LEU	2.0
9	g1	49	GLU	2.0
11	G4	222	GLU	2.0
17	Y4	17	LEU	2.0
23	B4	137	LEU	2.0
4	X2	140	ARG	2.0
3	V5	19	ALA	2.0
4	X4	56	GLY	2.0
4	X5	120	PHE	2.0
21	i3	1382	A	2.0
22	A6	27	GLY	2.0
23	B2	46	LYS	2.0
24	D5	195	THR	2.0
28	I1	156	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
31	P1	19	GLY	2.0
31	P1	127	LYS	2.0
1	T4	28	LEU	2.0
19	b6	63	LEU	2.0
22	A5	140	VAL	2.0
23	B1	113	MET	2.0
27	H1	180	LEU	2.0
9	g2	31	ILE	2.0
9	g3	250	ALA	2.0
10	C6	278	THR	2.0
23	B5	100	PHE	2.0
24	D5	191	PRO	2.0
27	H4	7	LYS	2.0
27	H4	35	ASP	2.0
31	P2	127	LYS	2.0
32	Q4	118	THR	2.0
33	R1	50	ILE	2.0
33	R4	129	LYS	2.0
2	U6	110	VAL	2.0
36	k5	153	GLU	2.0
9	g2	12	LYS	2.0
13	M4	45	ARG	2.0
9	g4	179	LEU	2.0
10	C3	277	HIS	2.0
16	W3	21	GLY	2.0
33	R6	23	ARG	2.0
37	l4	125	LYS	2.0
16	W4	42	MET	2.0
21	i4	1758	G	2.0
21	i5	696	G	2.0
25	E2	180	LEU	2.0
25	E4	222	LEU	2.0
32	Q1	123	ASP	2.0
26	F5	41	VAL	2.0
13	M5	97	GLU	2.0
7	d3	37	ASN	2.0
10	C5	195	LEU	2.0
13	M1	44	LYS	2.0
14	N3	42	LYS	2.0
15	O5	89	GLY	2.0
26	F5	118	ASN	2.0
28	I2	139	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
30	L1	54	THR	2.0
34	S4	41	ALA	2.0
28	I5	102	VAL	2.0
15	O2	90	ILE	2.0
24	D3	17	PHE	2.0
34	S1	23	ARG	2.0
34	S6	118	ARG	2.0
37	l2	180	GLU	2.0
6	c2	27	CYS	2.0
6	c2	65	ALA	2.0
10	C1	209	VAL	2.0
10	C6	184	VAL	2.0
15	O3	21	VAL	2.0
16	W4	40	VAL	2.0
20	e2	3	HIS	2.0
21	i1	1507	G	2.0
21	i4	1318	G	2.0
30	L3	151	THR	2.0
9	g5	170	TRP	2.0
14	N5	54	LEU	2.0
22	A1	219	GLU	2.0
22	A6	219	GLU	2.0
26	F5	176	GLU	2.0
27	H3	99	ARG	2.0
34	S4	63	GLU	2.0
12	J6	66	LYS	2.0
22	A5	133	PRO	2.0
31	P1	75	VAL	2.0
37	l5	136	THR	2.0
6	c1	23	SER	2.0
27	H4	139	ILE	2.0
33	R6	40	ILE	2.0
34	S4	20	ILE	2.0
10	C5	139	LEU	2.0
15	O2	84	ARG	2.0
21	i6	313	A	2.0
24	D6	176	LEU	2.0
33	R3	81	ARG	2.0
34	S2	123	LEU	2.0
2	U3	30	LYS	2.0
4	X2	40	PRO	2.0
13	M5	60	MET	2.0

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Mol	Chain	Res	Type	RSRZ
16	W3	48	GLY	2.0
17	Y2	126	GLY	2.0
37	l4	138	GLU	2.0
10	C5	81	ILE	2.0
10	C5	109	ILE	2.0
21	i4	1285	G	2.0
26	F1	93	VAL	2.0
21	i5	132	U	2.0
25	E5	228	ILE	2.0
27	H3	119	SER	2.0
36	k1	70	PHE	2.0
5	a1	73	TYR	2.0
18	Z6	62	VAL	2.0
20	e5	51	LYS	2.0
27	H4	152	ARG	2.0
37	l2	163	GLU	2.0

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

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

6.3 Carbohydrates (i)

There are no carbohydrates in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å^2)	Q<0.9
38	ZN	f3	500	1/1	0.91	0.12	-0.78	80,80,80,80	0
38	ZN	f1	500	1/1	0.98	0.13	-1.17	80,80,80,80	0
38	ZN	f2	500	1/1	0.84	0.12	-1.54	80,80,80,80	0
38	ZN	f4	500	1/1	0.59	0.10	-1.62	80,80,80,80	0
38	ZN	f6	500	1/1	0.72	0.07	-1.74	80,80,80,80	0
38	ZN	f5	500	1/1	0.33	0.07	-1.92	80,80,80,80	0

6.5 Other polymers (i)

There are no such residues in this entry.