



Full wwPDB NMR Structure Validation Report ⓘ

Oct 23, 2021 – 05:05 PM EDT

PDB ID : 1A66
Title : SOLUTION NMR STRUCTURE OF THE CORE NFATC1/DNA COMPLEX, 18 STRUCTURES
Authors : Zhou, P.; Sun, L.J.; Doetsch, V.; Wagner, G.; Verdine, G.L.
Deposited on : 1998-03-06

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
RCI : v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV : Wang et al. (2010)
ShiftChecker : 2.23.2
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.23.2

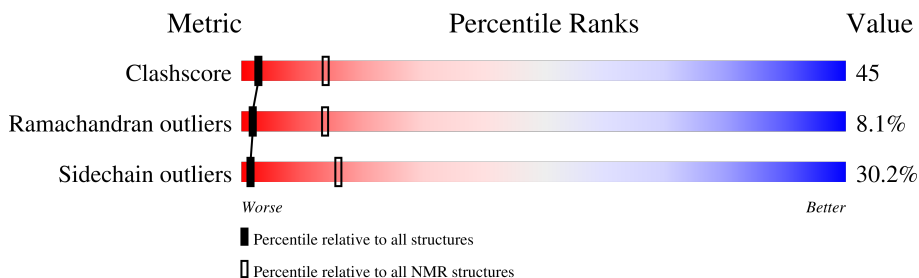
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

SOLUTION NMR

The overall completeness of chemical shifts assignment was not calculated.

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)	NMR archive (#Entries)
Clashscore	158937	12864
Ramachandran outliers	154571	11451
Sidechain outliers	154315	11428

The table below summarises the geometric issues observed across the polymeric chains and their fit to the experimental data. The red, orange, yellow and green segments indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A cyan segment indicates the fraction of residues that are not part of the well-defined cores, and a grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$

Mol	Chain	Length	Quality of chain
1	B	12	8% 92%
2	C	12	33% 67%
3	A	178	26% 57% 9% 8%

2 Ensemble composition and analysis

This entry contains 18 models. Model 3 is the overall representative, medoid model (most similar to other models).

The following residues are included in the computation of the global validation metrics.

Well-defined (core) protein residues			
Well-defined core	Residue range (total)	Backbone RMSD (Å)	Medoid model
1	A:10-A:40, A:45-A:177 (164)	0.77	3

Ill-defined regions of proteins are excluded from the global statistics.

Ligands and non-protein polymers are included in the analysis.

The models can be grouped into 2 clusters and 3 single-model clusters were found.

Cluster number	Models
1	1, 2, 3, 5, 6, 8, 9, 11, 12, 13, 15, 17, 18
2	4, 16
Single-model clusters	7; 10; 14

3 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 3595 atoms, of which 1704 are hydrogens and 0 are deuteriums.

- Molecule 1 is a DNA chain called DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3').

Mol	Chain	Residues	Atoms						Trace
			Total	C	H	N	O	P	
1	B	12	385	119	136	52	67	11	0

- Molecule 2 is a DNA chain called DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3').

Mol	Chain	Residues	Atoms						Trace
			Total	C	H	N	O	P	
2	C	12	376	116	139	37	73	11	0

- Molecule 3 is a protein called CORE NFATC1.

Mol	Chain	Residues	Atoms						Trace
			Total	C	H	N	O	S	
3	A	178	2834	875	1429	267	258	5	0

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	1	MET	ALA	engineered mutation	UNP O95644
A	2	LYS	LEU	engineered mutation	UNP O95644
A	28	ARG	HIS	engineered mutation	UNP O95644

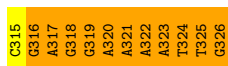
4 Residue-property plots [\(i\)](#)

4.1 Average score per residue in the NMR ensemble

These plots are provided for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic is the same as shown in the summary in section 1 of this report. The second graphic shows the sequence where residues are colour-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. Stretches of 2 or more consecutive residues without any outliers are shown as green connectors. Residues which are classified as ill-defined in the NMR ensemble, are shown in cyan with an underline colour-coded according to the previous scheme. Residues which were present in the experimental sample, but not modelled in the final structure are shown in grey.

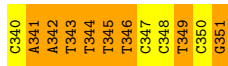
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')

Chain B:  8% 92%



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

Chain C:  33% 67%

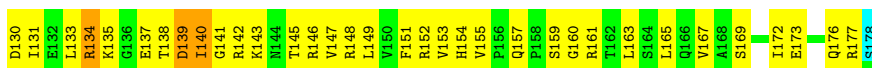


- Molecule 3: CORE NFATC1

Chain A:  26% 57% 9% 8%







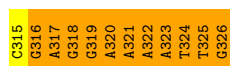
4.2 Scores per residue for each member of the ensemble

Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')

Chain B:  8% 92%



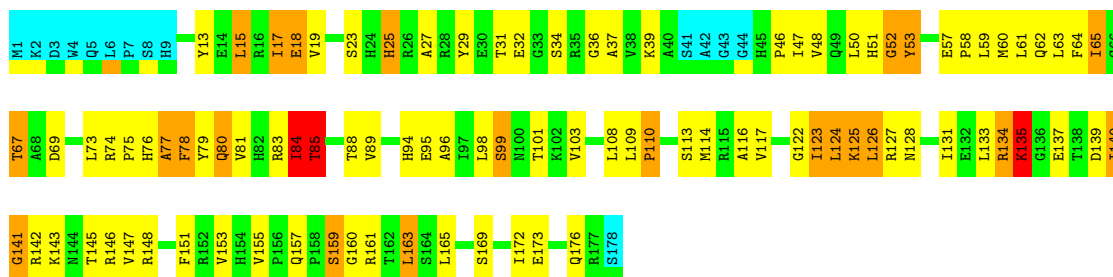
- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

Chain C:  8% 33% 58%



- Molecule 3: CORE NFATC1

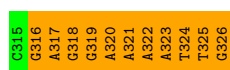
Chain A:  39% 39% 12% 8%



4.2.2 Score per residue for model 2

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')

Chain B:  8% 92%

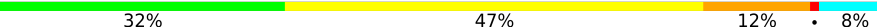


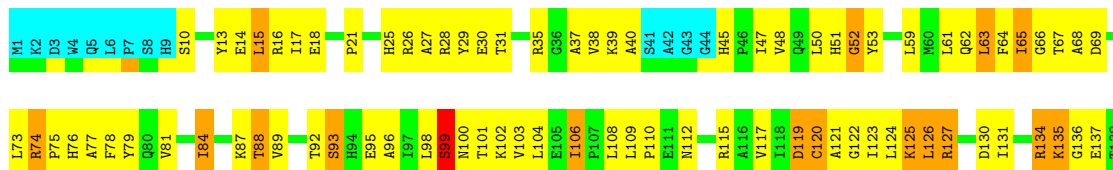
- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

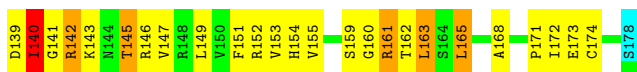
Chain C:  33% 67%



- Molecule 3: CORE NFATC1

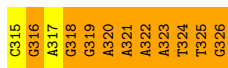
Chain A:  32% 47% 12% 8%





4.2.3 Score per residue for model 3 (medoid)

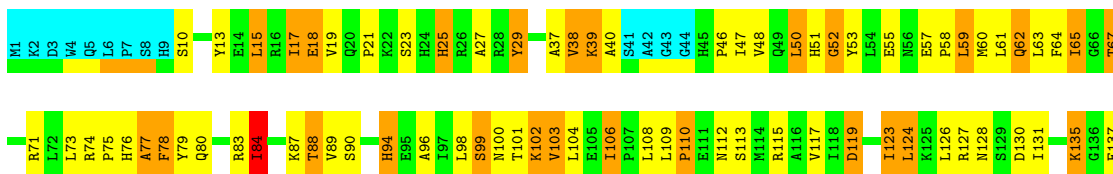
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

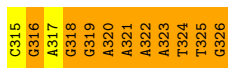


- Molecule 3: CORE NFATC1

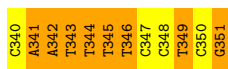


4.2.4 Score per residue for model 4

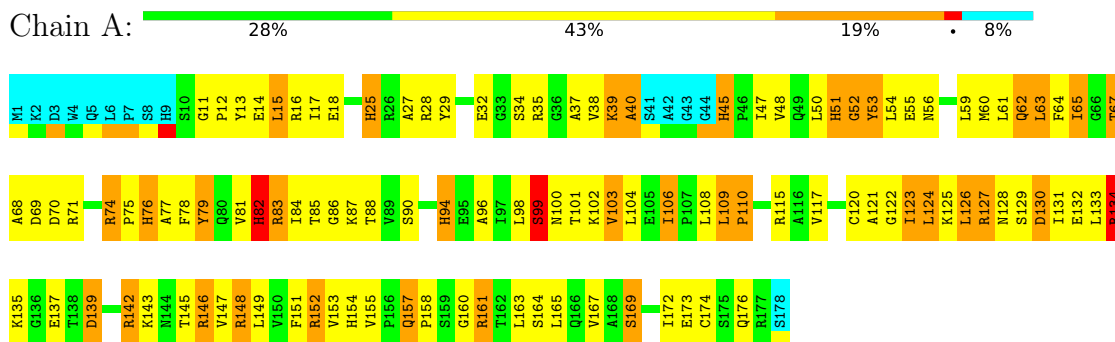
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



- Molecule 3: CORE NFATC1



4.2.5 Score per residue for model 5

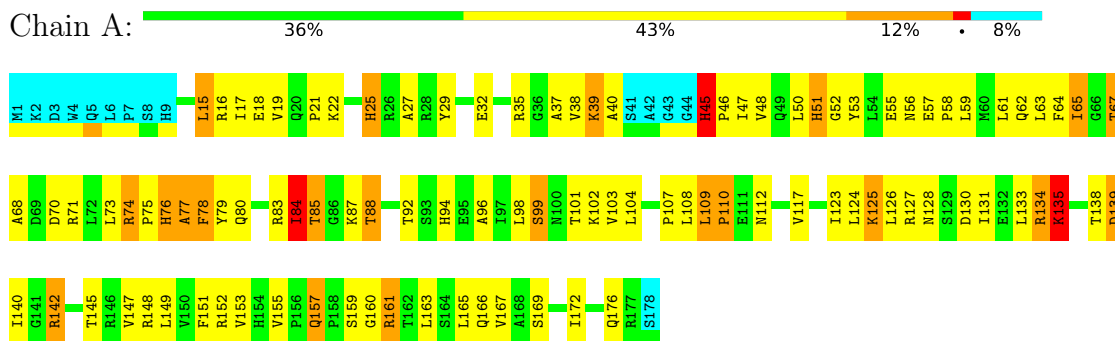
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



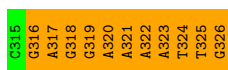
- Molecule 3: CORE NFATC1



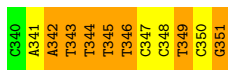
4.2.6 Score per residue for model 6

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')

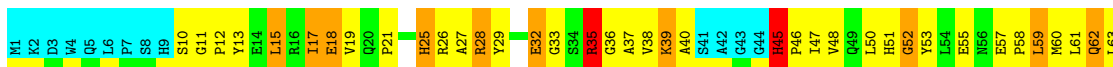
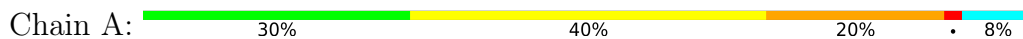




- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

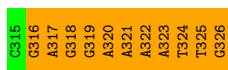


- Molecule 3: CORE NFATC1



4.2.7 Score per residue for model 7

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



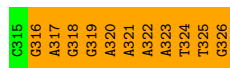
- Molecule 3: CORE NFATC1





4.2.8 Score per residue for model 8

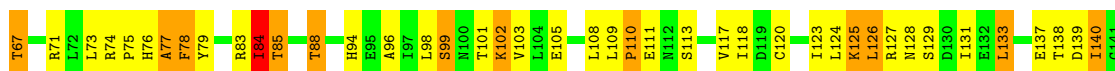
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

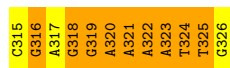


- Molecule 3: CORE NFATC1



4.2.9 Score per residue for model 9

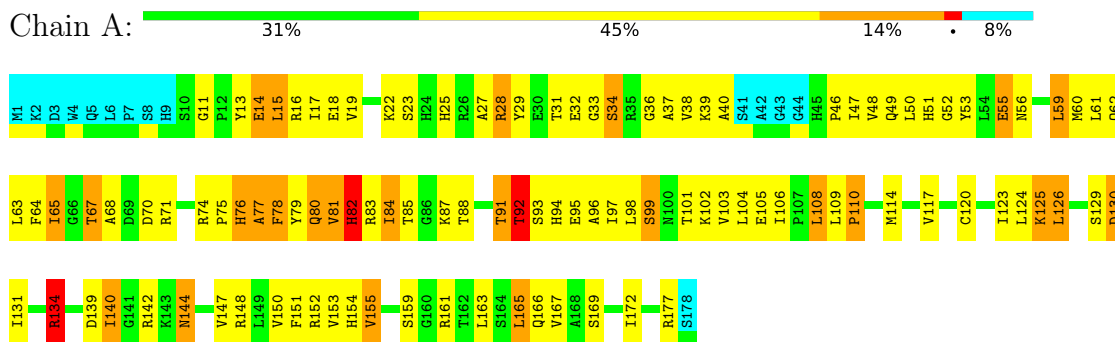
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



- Molecule 3: CORE NFATC1



4.2.10 Score per residue for model 10

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



- Molecule 3: CORE NFATC1



4.2.11 Score per residue for model 11

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



G316
G317
G318
G319
A320
A321
A322
A323
T324
T325
G326

- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

Chain C: 33% 67%

G340
A341
A342
T343
T344
T345
T346
C347
C348
C349
C350
G351

- Molecule 3: CORE NFATC1

Chain A: 30% 46% 16% 8%

M1 K2 D3 W4 Q5 L6 P7 S8 H9 S10 Y13 E14 L15 R16 E18 V19 Q20 P21 H25 R26 A27 R28 Y29 E30 S31 T31 E32 L33 A37 V38 K39 R40 S41 A42 G43 G44 H45 P46 V47 V48 M112 L50 H51 G52 Y53 E55 N56 E57 P58 M60 L61 Q62 L63 F64 I65 T67

A68 D69 R74 P75 H76 A77 F78 Y79 Q80 W81 R82 R83 I84 T85 G86 K87 R88 T88 V89 S90 P91 T92 S93 H94 A96 R97 L98 S99 N100 T101 V102 V103 L104 E105 I106 G107 L108 L109 P110 E111 M112 V117 I118 D119 C120 A121 I123 L124 K125 L126 R127 M128 I131 R134 K135

G136 E137 T138 I140 G141 R142 K143 M144 R146 V147 L148 L149 V150 F151 R152 V153 H154 V155 P156 Q157 P158 S159 G160 R161 T162 L163 S164 L165 Q166 V167 A168 S169 M170 P171 E173 C174 S175 Q176 R177 S178

4.2.12 Score per residue for model 12

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')

Chain B: 8% 92%

G316
G317
G318
G319
A320
A321
A322
A323
T324
T325
G326

- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

Chain C: 8% 17% 75%

G340
A341
A342
T343
T344
T345
T346
C347
C348
C349
C350
G351

- Molecule 3: CORE NFATC1

Chain A: 34% 47% 11% 8%

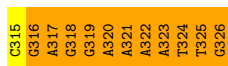
M1 K2 D3 W4 Q5 L6 P7 S8 H9 S10 Y13 E14 L15 R16 E18 V19 Q20 P21 H25 R26 A27 R28 Y29 E30 S31 T31 E32 L33 A37 V38 K39 R40 S41 A42 G43 G44 H45 P46 V47 V48 M112 L50 H51 G52 Y53 E55 N56 L59 M60 L61 Q62 L63 F64 I65 T67

A68 D69 R74 P75 H76 A77 F78 Y79 Q80 W81 R82 R83 I84 T85 T88 R89 S93 H94 A96 R97 L98 S99 N100 T101 V102 V103 L104 E105 I106 P107 L108 L109 P110 M114 R115 A116 V117 F118 D119 C120 A121 I123 L124 K125 L126 R127 M128 S129 D130 I131



4.2.13 Score per residue for model 13

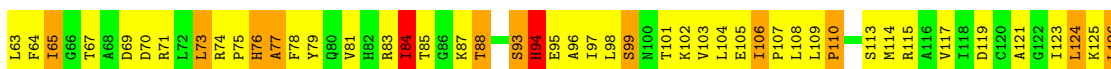
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

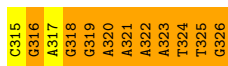


- Molecule 3: CORE NFATC1

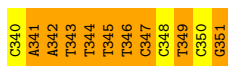


4.2.14 Score per residue for model 14

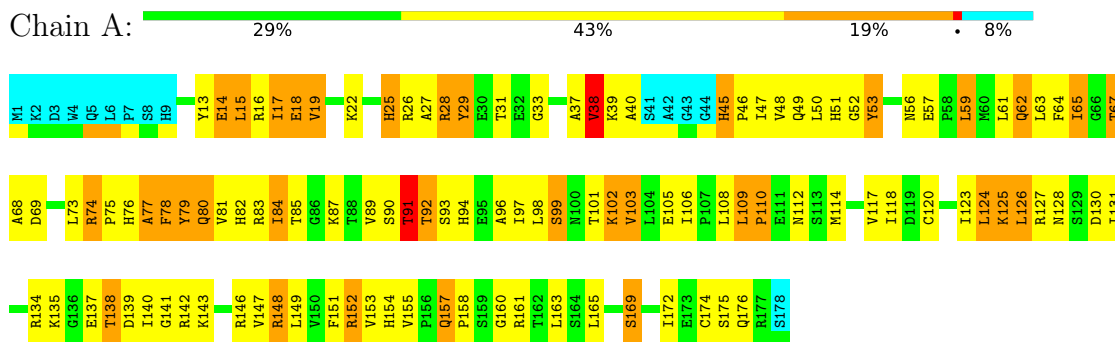
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



- Molecule 3: CORE NFATC1



4.2.15 Score per residue for model 15

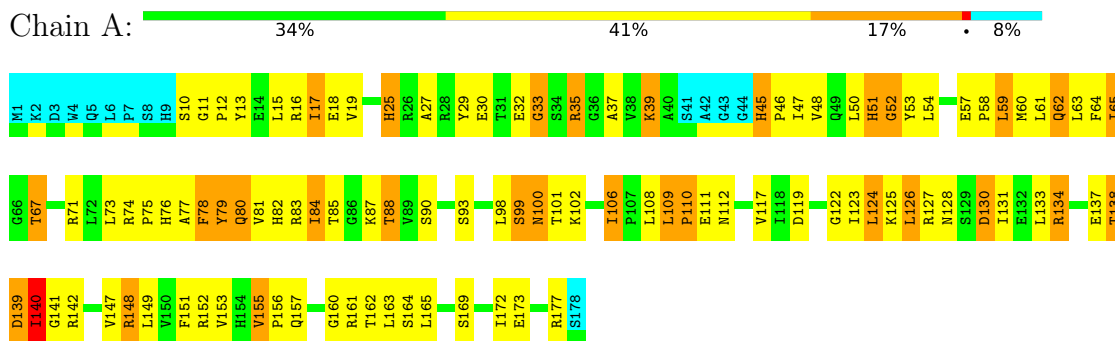
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



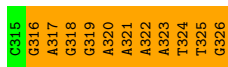
- Molecule 3: CORE NFATC1



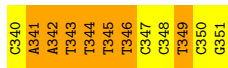
4.2.16 Score per residue for model 16

- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')

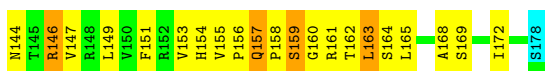
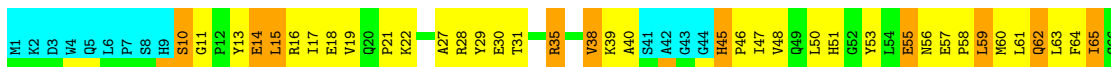




- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')

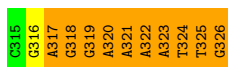


- Molecule 3: CORE NFATC1



4.2.17 Score per residue for model 17

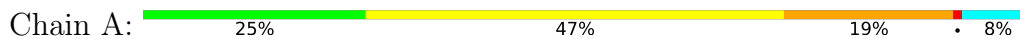
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



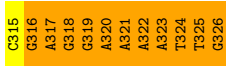
- Molecule 3: CORE NFATC1





4.2.18 Score per residue for model 18

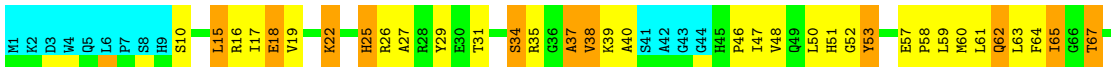
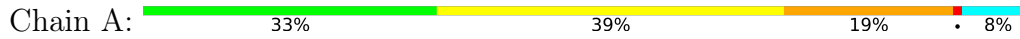
- Molecule 1: DNA (5'-D(*CP*GP*AP*GP*GP*AP*AP*AP*AP*TP*TP*G)-3')



- Molecule 2: DNA (5'-D(*CP*AP*AP*TP*TP*TP*TP*CP*CP*TP*CP*G)-3')



- Molecule 3: CORE NFATC1



5 Refinement protocol and experimental data overview

The models were refined using the following method: *TORSION ANGLE DYNAMICS AND SIMULATED ANNEALING*.

Of the 18 calculated structures, 18 were deposited, based on the following criterion: *NOE VIOLATION <= 0.4 ANGSTROM, DIHEDRAL ANGLE VIOLATION <= 5 DEGREE*.

The following table shows the software used for structure solution, optimisation and refinement.

Software name	Classification	Version
X-PLOR	refinement	3.1
DYANA-1.4	structure solution	
X-PLOR	structure solution	3.1

No chemical shift data was provided.

6 Model quality i

6.1 Standard geometry i

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the (average) 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	B	1.28±0.02	2±0/281 (0.7± 0.1%)	2.45±0.01	25±1/433 (5.8± 0.3%)
2	C	1.23±0.01	1±0/263 (0.3± 0.2%)	2.26±0.01	17±1/403 (4.3± 0.3%)
3	A	1.02±0.01	0±0/1325 (0.0± 0.0%)	0.80±0.01	0±0/1794 (0.0± 0.0%)
All	All	1.10	51/33642 (0.2%)	1.49	765/47340 (1.6%)

All unique bond outliers are listed below. They are sorted according to the Z-score of the worst occurrence in the ensemble.

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)	Models	
								Worst	Total
1	B	325	DT	C5-C7	5.54	1.53	1.50	12	17
2	C	345	DT	C5-C7	5.49	1.53	1.50	1	15
1	B	324	DT	C5-C7	5.48	1.53	1.50	3	18
2	C	343	DT	C5-C7	5.11	1.53	1.50	13	1

All unique angle outliers are listed below. They are sorted according to the Z-score of the worst occurrence in the ensemble.

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)	Models	
								Worst	Total
1	B	326	DG	N7-C8-N9	9.71	117.95	113.10	8	18
1	B	316	DG	N7-C8-N9	9.38	117.79	113.10	16	18
2	C	351	DG	N7-C8-N9	9.23	117.71	113.10	5	18
1	B	319	DG	N7-C8-N9	9.15	117.68	113.10	17	18
1	B	318	DG	N7-C8-N9	8.94	117.57	113.10	11	18
2	C	341	DA	N7-C8-N9	8.31	117.95	113.80	5	18
2	C	342	DA	N7-C8-N9	7.79	117.69	113.80	2	18
1	B	317	DA	N7-C8-N9	7.65	117.62	113.80	4	18
1	B	323	DA	N7-C8-N9	7.64	117.62	113.80	15	18
1	B	321	DA	N7-C8-N9	7.63	117.61	113.80	5	18
1	B	320	DA	N7-C8-N9	7.45	117.53	113.80	13	18
1	B	322	DA	N7-C8-N9	7.44	117.52	113.80	7	18
2	C	343	DT	C6-C5-C7	-7.08	118.65	122.90	15	18

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)	Models	
								Worst	Total
2	C	351	DG	C8-N9-C4	-6.95	103.62	106.40	5	18
1	B	326	DG	C8-N9-C4	-6.89	103.64	106.40	16	18
1	B	319	DG	C8-N9-C4	-6.87	103.65	106.40	9	18
1	B	318	DG	C8-N9-C4	-6.83	103.67	106.40	5	18
1	B	316	DG	C8-N9-C4	-6.72	103.71	106.40	18	18
2	C	344	DT	C6-C5-C7	-6.66	118.91	122.90	7	18
2	C	346	DT	C6-C5-C7	-6.30	119.12	122.90	16	16
2	C	345	DT	C6-C5-C7	-6.20	119.18	122.90	14	18
2	C	343	DT	O4'-C1'-N1	6.17	112.32	108.00	9	17
2	C	349	DT	C6-C5-C7	-6.10	119.24	122.90	14	18
1	B	317	DA	C8-N9-C4	-6.07	103.37	105.80	4	18
1	B	324	DT	C6-C5-C7	-6.05	119.27	122.90	14	18
2	C	342	DA	C8-N9-C4	-6.02	103.39	105.80	17	18
1	B	321	DA	C8-N9-C4	-5.89	103.44	105.80	14	18
2	C	345	DT	O4'-C1'-N1	5.84	112.09	108.00	1	6
1	B	325	DT	C6-C5-C7	-5.84	119.40	122.90	6	18
1	B	322	DA	C8-N9-C4	-5.83	103.47	105.80	16	18
1	B	319	DG	C5-N7-C8	-5.81	101.39	104.30	17	18
2	C	346	DT	C4-C5-C6	5.80	121.48	118.00	12	18
1	B	320	DA	C8-N9-C4	-5.63	103.55	105.80	15	18
1	B	323	DA	C8-N9-C4	-5.59	103.56	105.80	4	17
1	B	322	DA	O4'-C1'-N9	5.59	111.91	108.00	14	1
2	C	341	DA	O4'-C1'-N9	5.57	111.90	108.00	7	9
1	B	318	DG	C5-N7-C8	-5.52	101.54	104.30	2	18
1	B	324	DT	O4'-C1'-N1	5.52	111.86	108.00	17	4
1	B	319	DG	O4'-C1'-N9	5.45	111.81	108.00	11	3
1	B	326	DG	C5-N7-C8	-5.44	101.58	104.30	8	18
1	B	316	DG	O4'-C1'-N9	5.42	111.80	108.00	16	2
2	C	346	DT	C5-C6-N1	-5.40	120.46	123.70	7	2
2	C	347	DC	O4'-C1'-N1	5.36	111.75	108.00	12	2
1	B	316	DG	C5-N7-C8	-5.35	101.63	104.30	16	13
2	C	341	DA	C8-N9-C4	-5.35	103.66	105.80	5	7
2	C	344	DT	C4-C5-C6	5.31	121.19	118.00	11	15
2	C	343	DT	C4-C5-C6	5.29	121.18	118.00	17	12
1	B	317	DA	O4'-C1'-N9	5.29	111.70	108.00	6	5
1	B	323	DA	N1-C2-N3	-5.29	126.66	129.30	9	1
2	C	351	DG	C5-N7-C8	-5.22	101.69	104.30	5	14
2	C	349	DT	C4-C5-C6	5.19	121.11	118.00	14	18
2	C	341	DA	C5-N7-C8	-5.17	101.31	103.90	13	11
1	B	325	DT	O4'-C1'-N1	5.11	111.58	108.00	4	2
1	B	324	DT	C4-C5-C6	5.10	121.06	118.00	11	6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)	Models	
								Worst	Total
3	A	29	TYR	CB-CG-CD1	-5.08	117.95	121.00	7	1
1	B	320	DA	C5-N7-C8	-5.08	101.36	103.90	4	1
1	B	325	DT	C4-C5-C6	5.05	121.03	118.00	15	1
2	C	349	DT	O4'-C1'-N1	5.04	111.53	108.00	14	1
2	C	345	DT	C4-C5-C6	5.03	121.02	118.00	10	2

There are no chirality outliers.

There are no planarity outliers.

6.2 Too-close contacts

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in each 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 averaged over the ensemble.

Mol	Chain	Non-H	H(model)	H(added)	Clashes
1	B	249	136	136	15±3
2	C	237	139	139	21±3
3	A	1300	1332	1332	127±13
All	All	32148	28926	28926	2773

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 45.

All unique clashes are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:61:LEU:HD13	3:A:153:VAL:HG22	1.11	1.11	14	18
3:A:15:LEU:HD13	3:A:153:VAL:HG21	1.09	1.23	10	18
3:A:37:ALA:HB2	3:A:123:ILE:HG22	1.05	1.17	14	6
3:A:79:TYR:CE2	3:A:126:LEU:HD21	1.04	1.87	13	7
3:A:47:ILE:HD12	3:A:117:VAL:HG13	1.00	1.34	17	12
3:A:59:LEU:HD21	3:A:153:VAL:HG11	0.99	1.26	11	10
3:A:47:ILE:HG23	3:A:117:VAL:HG22	0.98	1.29	8	15
3:A:96:ALA:HB3	3:A:103:VAL:HG23	0.97	1.37	18	15
2:C:344:DT:H2''	2:C:345:DT:O5'	0.96	1.60	17	18
3:A:79:TYR:CE1	3:A:126:LEU:HD22	0.95	1.97	10	2
3:A:59:LEU:HD21	3:A:153:VAL:HG13	0.94	1.40	7	8
3:A:25:HIS:CE1	3:A:172:ILE:HG23	0.94	1.97	7	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:37:ALA:CB	3:A:123:ILE:HG22	0.93	1.92	14	3
3:A:89:VAL:HG13	3:A:92:THR:HB	0.91	1.42	7	1
3:A:155:VAL:HG13	3:A:163:LEU:HB3	0.91	1.42	14	18
2:C:344:DT:H5"	3:A:142:ARG:O	0.90	1.66	14	11
3:A:15:LEU:HD13	3:A:153:VAL:CG2	0.88	1.98	15	14
3:A:59:LEU:HD21	3:A:153:VAL:CG1	0.88	1.98	15	13
3:A:147:VAL:HG23	3:A:172:ILE:HD12	0.87	1.44	8	13
3:A:15:LEU:HB3	3:A:165:LEU:HD22	0.86	1.44	2	8
3:A:147:VAL:CG2	3:A:172:ILE:HD12	0.86	2.01	10	13
3:A:93:SER:CB	3:A:106:ILE:HG22	0.85	2.01	14	3
3:A:94:HIS:HB3	3:A:106:ILE:HG23	0.85	1.45	4	2
3:A:79:TYR:CE2	3:A:147:VAL:HG11	0.85	2.07	7	1
3:A:78:PHE:CE2	3:A:131:ILE:HG23	0.85	2.07	16	2
3:A:59:LEU:HD11	3:A:153:VAL:HG12	0.84	1.47	11	9
3:A:15:LEU:CD1	3:A:153:VAL:HG21	0.83	2.03	2	11
3:A:48:VAL:HG21	3:A:151:PHE:CE2	0.83	2.09	9	2
3:A:15:LEU:CB	3:A:165:LEU:HD13	0.83	2.04	5	8
3:A:131:ILE:HG21	3:A:140:ILE:CG2	0.83	2.02	8	3
3:A:125:LYS:HE3	3:A:145:THR:HG22	0.83	1.49	8	1
3:A:27:ALA:HB2	3:A:123:ILE:CG1	0.82	2.04	6	7
3:A:27:ALA:HB2	3:A:123:ILE:HG23	0.82	1.52	16	1
3:A:157:GLN:HG2	3:A:163:LEU:HD23	0.82	1.50	17	1
3:A:27:ALA:HB2	3:A:123:ILE:HD12	0.81	1.51	4	2
3:A:17:ILE:HG23	3:A:47:ILE:O	0.80	1.77	4	18
3:A:61:LEU:HD13	3:A:153:VAL:CG2	0.80	2.01	14	3
3:A:59:LEU:HD13	3:A:155:VAL:HB	0.80	1.53	11	4
3:A:50:LEU:HD23	3:A:51:HIS:N	0.79	1.92	15	15
3:A:63:LEU:HD12	3:A:104:LEU:HD12	0.79	1.53	7	3
3:A:63:LEU:HD13	3:A:64:PHE:N	0.79	1.92	10	16
3:A:78:PHE:CE1	3:A:131:ILE:HD12	0.79	2.12	11	9
3:A:79:TYR:CD2	3:A:126:LEU:HD21	0.79	2.12	15	8
3:A:17:ILE:HG13	3:A:48:VAL:HG22	0.79	1.55	11	13
2:C:346:DT:H71	3:A:29:TYR:CE2	0.79	2.12	7	2
3:A:15:LEU:HB2	3:A:165:LEU:HD13	0.79	1.55	5	8
3:A:25:HIS:CD2	3:A:123:ILE:HG21	0.79	2.13	18	2
3:A:77:ALA:HB2	3:A:140:ILE:HD13	0.78	1.54	13	4
3:A:84:ILE:HG21	3:A:121:ALA:N	0.78	1.92	4	1
3:A:79:TYR:CE1	3:A:126:LEU:HD21	0.78	2.13	8	2
3:A:89:VAL:HG21	3:A:119:ASP:HB3	0.78	1.54	2	2
3:A:25:HIS:NE2	3:A:123:ILE:HG21	0.78	1.92	3	1
3:A:84:ILE:HG21	3:A:120:CYS:HA	0.78	1.53	9	4

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:127:ARG:O	3:A:131:ILE:HD12	0.78	1.77	5	2
3:A:47:ILE:HD12	3:A:117:VAL:HG22	0.77	1.55	16	12
3:A:78:PHE:CE2	3:A:131:ILE:HD12	0.77	2.14	16	3
3:A:37:ALA:HB2	3:A:123:ILE:CG2	0.77	2.10	13	4
2:C:346:DT:H71	3:A:29:TYR:HE2	0.76	1.38	7	2
3:A:38:VAL:HG13	3:A:45:HIS:HA	0.76	1.56	4	2
2:C:345:DT:H2''	2:C:346:DT:O5'	0.76	1.81	7	9
3:A:157:GLN:HG3	3:A:158:PRO:HD2	0.76	1.55	17	5
3:A:47:ILE:CD1	3:A:117:VAL:HG13	0.76	2.11	11	15
3:A:93:SER:C	3:A:106:ILE:HG21	0.76	2.01	13	1
3:A:126:LEU:N	3:A:126:LEU:HD13	0.76	1.96	6	11
3:A:15:LEU:HD23	3:A:167:VAL:CG2	0.75	2.10	9	8
3:A:15:LEU:HD12	3:A:50:LEU:HB2	0.75	1.55	12	7
3:A:47:ILE:HD13	3:A:117:VAL:HG22	0.75	1.57	4	2
3:A:27:ALA:HA	3:A:123:ILE:HG23	0.75	1.57	13	11
3:A:17:ILE:CG1	3:A:48:VAL:HG22	0.75	2.12	11	5
3:A:79:TYR:CD1	3:A:126:LEU:HD21	0.74	2.17	18	2
3:A:80:GLN:HB2	3:A:97:ILE:HD12	0.74	1.58	6	2
3:A:123:ILE:HD11	3:A:172:ILE:HG21	0.74	1.58	9	4
3:A:79:TYR:HA	3:A:126:LEU:HD21	0.74	1.56	3	2
3:A:126:LEU:HB2	3:A:145:THR:HG22	0.74	1.58	7	1
3:A:59:LEU:HD22	3:A:108:LEU:HD13	0.73	1.59	7	1
3:A:126:LEU:CB	3:A:145:THR:HG22	0.73	2.14	7	1
3:A:67:THR:HG22	3:A:147:VAL:HG12	0.73	1.58	13	1
3:A:124:LEU:HD23	3:A:125:LYS:N	0.73	1.97	9	2
3:A:25:HIS:CD2	3:A:172:ILE:HG23	0.72	2.19	14	2
3:A:59:LEU:HD23	3:A:108:LEU:CG	0.72	2.13	4	2
3:A:17:ILE:HG12	3:A:48:VAL:HG22	0.72	1.60	13	3
3:A:61:LEU:CD1	3:A:153:VAL:HG22	0.72	2.10	11	12
2:C:346:DT:H71	3:A:29:TYR:CE1	0.72	2.19	3	11
1:B:323:DA:H2''	1:B:324:DT:O5'	0.72	1.84	9	18
3:A:79:TYR:CD1	3:A:126:LEU:HD23	0.72	2.20	5	1
3:A:74:ARG:HD2	3:A:138:THR:HG21	0.72	1.59	8	1
3:A:131:ILE:HG21	3:A:140:ILE:HG21	0.71	1.62	9	1
3:A:157:GLN:HG3	3:A:158:PRO:CD	0.71	2.15	17	1
3:A:131:ILE:HG21	3:A:140:ILE:HG23	0.71	1.59	8	1
3:A:47:ILE:HG12	3:A:117:VAL:HG13	0.71	1.60	4	3
3:A:79:TYR:CD2	3:A:126:LEU:HD23	0.71	2.20	3	2
3:A:53:TYR:CE1	3:A:155:VAL:CG2	0.71	2.74	17	9
3:A:38:VAL:HG12	3:A:38:VAL:O	0.71	1.86	9	4
3:A:81:VAL:HG21	3:A:124:LEU:HB2	0.71	1.62	10	7

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:84:ILE:HD12	3:A:85:THR:N	0.71	2.00	1	1
3:A:94:HIS:CB	3:A:106:ILE:HG23	0.71	2.15	4	1
3:A:30:GLU:HB2	3:A:124:LEU:HD13	0.70	1.60	7	1
3:A:98:LEU:HD23	3:A:99:SER:N	0.70	2.02	11	17
3:A:140:ILE:HG23	3:A:141:GLY:N	0.70	2.02	15	4
3:A:63:LEU:HD21	3:A:151:PHE:CD1	0.70	2.22	2	1
3:A:59:LEU:HD23	3:A:108:LEU:HD12	0.69	1.64	11	1
3:A:108:LEU:N	3:A:108:LEU:HD23	0.69	2.02	11	4
3:A:157:GLN:CG	3:A:158:PRO:CD	0.69	2.69	10	2
3:A:34:SER:CB	3:A:81:VAL:HG21	0.69	2.17	9	1
3:A:80:GLN:O	3:A:81:VAL:HG23	0.69	1.88	15	7
3:A:27:ALA:HB2	3:A:123:ILE:HG13	0.69	1.64	9	5
3:A:53:TYR:CE1	3:A:155:VAL:HG21	0.69	2.23	17	10
3:A:63:LEU:HD23	3:A:151:PHE:CD2	0.69	2.23	13	14
3:A:78:PHE:CZ	3:A:131:ILE:HD12	0.69	2.23	15	9
3:A:79:TYR:CE1	3:A:126:LEU:HD13	0.68	2.23	7	2
3:A:27:ALA:HB2	3:A:123:ILE:HG12	0.68	1.65	6	7
3:A:94:HIS:HB2	3:A:104:LEU:HD22	0.68	1.65	7	1
3:A:131:ILE:HA	3:A:134:ARG:HG2	0.68	1.64	2	2
3:A:64:PHE:HA	3:A:103:VAL:HG12	0.68	1.65	18	7
3:A:169:SER:C	3:A:171:PRO:HD3	0.68	2.08	7	1
1:B:316:DG:H2''	1:B:317:DA:O5'	0.68	1.88	8	11
3:A:25:HIS:HB3	3:A:172:ILE:HG23	0.67	1.63	12	5
3:A:38:VAL:HG11	3:A:85:THR:OG1	0.67	1.88	18	1
3:A:123:ILE:HD11	3:A:172:ILE:CG2	0.67	2.20	13	2
3:A:63:LEU:HD22	3:A:64:PHE:H	0.67	1.50	13	1
3:A:27:ALA:HB1	3:A:124:LEU:C	0.67	2.10	6	5
3:A:84:ILE:HG21	3:A:120:CYS:C	0.67	2.10	4	2
3:A:59:LEU:HD12	3:A:155:VAL:HB	0.67	1.68	9	2
3:A:57:GLU:HG2	3:A:58:PRO:HD2	0.66	1.66	10	5
3:A:59:LEU:HD11	3:A:153:VAL:CG1	0.66	2.21	5	11
3:A:63:LEU:C	3:A:63:LEU:HD13	0.66	2.10	13	1
3:A:46:PRO:O	3:A:47:ILE:HD13	0.66	1.90	17	12
3:A:59:LEU:HD23	3:A:108:LEU:HG	0.66	1.68	4	7
3:A:126:LEU:HB2	3:A:140:ILE:HG21	0.66	1.68	1	1
3:A:59:LEU:HD23	3:A:108:LEU:CD1	0.66	2.21	11	2
3:A:27:ALA:CB	3:A:123:ILE:HG23	0.66	2.20	16	6
3:A:65:ILE:CG2	3:A:76:HIS:CD2	0.66	2.79	4	9
3:A:81:VAL:HG23	3:A:124:LEU:HB2	0.66	1.66	9	2
3:A:63:LEU:HD22	3:A:64:PHE:N	0.66	2.05	13	1
3:A:125:LYS:C	3:A:126:LEU:HD22	0.66	2.10	7	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:B:325:DT:H2''	1:B:326:DG:O5'	0.66	1.89	14	16
3:A:37:ALA:HB1	3:A:123:ILE:N	0.66	2.05	6	2
3:A:15:LEU:CD1	3:A:50:LEU:HD12	0.65	2.21	11	7
3:A:164:SER:O	3:A:165:LEU:HD22	0.65	1.91	4	2
3:A:124:LEU:HD23	3:A:125:LYS:O	0.65	1.91	12	2
3:A:53:TYR:CD1	3:A:155:VAL:HG21	0.65	2.25	17	1
3:A:38:VAL:O	3:A:38:VAL:HG13	0.65	1.90	14	5
3:A:155:VAL:HG23	3:A:156:PRO:HD2	0.65	1.67	17	2
3:A:63:LEU:HD12	3:A:64:PHE:N	0.65	2.07	4	1
3:A:109:LEU:HD12	3:A:110:PRO:HD2	0.65	1.67	13	2
3:A:25:HIS:NE2	3:A:37:ALA:HB1	0.65	2.06	7	1
2:C:344:DT:O3'	3:A:128:ASN:HB2	0.64	1.91	1	3
3:A:84:ILE:HD13	3:A:85:THR:N	0.64	2.08	12	8
3:A:25:HIS:CD2	3:A:37:ALA:HB1	0.64	2.27	7	2
3:A:96:ALA:HB3	3:A:103:VAL:CG2	0.64	2.22	8	1
3:A:17:ILE:HD11	3:A:151:PHE:CE1	0.64	2.27	9	1
3:A:78:PHE:HE2	3:A:131:ILE:HD12	0.64	1.52	16	2
3:A:15:LEU:HD12	3:A:50:LEU:HD12	0.64	1.69	11	4
3:A:89:VAL:O	3:A:92:THR:HG22	0.64	1.93	2	1
3:A:63:LEU:HD12	3:A:104:LEU:CD1	0.64	2.22	5	3
3:A:29:TYR:CE2	3:A:127:ARG:HB3	0.64	2.27	13	1
3:A:123:ILE:HD12	3:A:172:ILE:HD13	0.64	1.70	6	1
3:A:65:ILE:HD13	3:A:148:ARG:O	0.64	1.92	8	10
3:A:76:HIS:NE2	3:A:79:TYR:HB2	0.64	2.08	6	13
3:A:155:VAL:CG1	3:A:163:LEU:HB3	0.64	2.22	2	14
3:A:96:ALA:CB	3:A:103:VAL:HG23	0.64	2.18	4	2
3:A:126:LEU:HG	3:A:145:THR:HA	0.63	1.69	7	1
3:A:130:ASP:O	3:A:134:ARG:HG3	0.63	1.93	4	1
3:A:50:LEU:HD22	3:A:51:HIS:N	0.63	2.09	12	2
3:A:17:ILE:CD1	3:A:167:VAL:HG11	0.63	2.24	17	1
3:A:32:GLU:O	3:A:32:GLU:HG2	0.63	1.93	6	2
1:B:320:DA:H2''	1:B:321:DA:O5'	0.63	1.93	12	17
3:A:157:GLN:CG	3:A:163:LEU:HD23	0.63	2.24	17	1
3:A:59:LEU:HG	3:A:108:LEU:HD13	0.63	1.70	1	2
3:A:157:GLN:CG	3:A:158:PRO:HD2	0.63	2.24	10	2
3:A:131:ILE:N	3:A:131:ILE:HD13	0.62	2.09	17	6
3:A:63:LEU:HD13	3:A:64:PHE:H	0.62	1.52	2	1
3:A:59:LEU:HB3	3:A:108:LEU:HB2	0.62	1.69	7	10
3:A:88:THR:O	3:A:88:THR:HG22	0.62	1.93	4	2
3:A:170:ASN:N	3:A:171:PRO:HD3	0.62	2.08	7	1
3:A:79:TYR:CE1	3:A:126:LEU:CD2	0.62	2.83	12	4

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:109:LEU:CD1	3:A:110:PRO:HD2	0.62	2.23	10	4
3:A:63:LEU:HD12	3:A:104:LEU:HG	0.62	1.71	13	1
3:A:137:GLU:HG2	3:A:138:THR:N	0.62	2.08	11	1
3:A:74:ARG:HB2	3:A:75:PRO:HD2	0.62	1.72	13	2
3:A:92:THR:HG22	3:A:106:ILE:HG22	0.62	1.70	11	1
3:A:84:ILE:HG21	3:A:120:CYS:CA	0.62	2.25	12	3
3:A:50:LEU:HD12	3:A:153:VAL:HG21	0.62	1.70	15	3
3:A:61:LEU:CG	3:A:106:ILE:HD11	0.62	2.25	2	1
3:A:123:ILE:HD11	3:A:172:ILE:HD13	0.62	1.70	2	3
3:A:47:ILE:CG2	3:A:117:VAL:HG22	0.62	2.21	14	6
3:A:128:ASN:HA	3:A:140:ILE:HG21	0.62	1.71	6	1
3:A:127:ARG:CD	3:A:130:ASP:HB2	0.62	2.25	13	1
2:C:348:DC:H2''	2:C:349:DT:O5'	0.62	1.94	14	18
3:A:59:LEU:HD22	3:A:108:LEU:CD1	0.62	2.25	3	4
2:C:344:DT:H2'	2:C:345:DT:H71	0.61	1.70	11	10
3:A:37:ALA:HB3	3:A:123:ILE:HG22	0.61	1.71	18	1
1:B:318:DG:H2''	1:B:319:DG:O5'	0.61	1.94	14	12
3:A:15:LEU:HD23	3:A:167:VAL:HG23	0.61	1.71	13	5
3:A:109:LEU:HD13	3:A:110:PRO:HD2	0.61	1.71	5	2
3:A:37:ALA:HB3	3:A:123:ILE:CG2	0.61	2.25	18	1
3:A:74:ARG:HB3	3:A:75:PRO:HD2	0.61	1.73	8	13
3:A:65:ILE:HG21	3:A:76:HIS:CG	0.61	2.31	2	6
3:A:65:ILE:CG1	3:A:149:LEU:HD23	0.61	2.26	13	2
2:C:343:DT:H2''	2:C:344:DT:O5'	0.60	1.95	9	5
2:C:346:DT:OP2	3:A:29:TYR:CE2	0.60	2.54	3	3
3:A:76:HIS:NE2	3:A:79:TYR:N	0.60	2.47	12	2
2:C:345:DT:OP1	3:A:128:ASN:N	0.60	2.35	12	15
3:A:27:ALA:CA	3:A:123:ILE:HG23	0.60	2.26	13	7
3:A:98:LEU:HD22	3:A:101:THR:HB	0.60	1.71	7	10
3:A:78:PHE:CE1	3:A:131:ILE:HG23	0.60	2.31	11	3
3:A:106:ILE:HD13	3:A:106:ILE:N	0.60	2.11	13	1
3:A:78:PHE:CD2	3:A:126:LEU:HG	0.60	2.31	9	2
2:C:342:DA:H2''	2:C:343:DT:O5'	0.60	1.96	9	16
3:A:63:LEU:HD21	3:A:151:PHE:CE1	0.60	2.32	2	2
3:A:65:ILE:CG2	3:A:76:HIS:CG	0.60	2.84	17	11
1:B:317:DA:H2''	1:B:318:DG:O5'	0.60	1.93	17	5
3:A:98:LEU:HB3	3:A:101:THR:HB	0.60	1.73	2	13
3:A:126:LEU:HD23	3:A:140:ILE:CD1	0.60	2.27	10	1
3:A:126:LEU:CB	3:A:140:ILE:HD13	0.60	2.27	10	1
3:A:17:ILE:HG21	3:A:20:GLN:HB3	0.59	1.74	11	1
3:A:59:LEU:CG	3:A:108:LEU:HD13	0.59	2.27	17	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:C:343:DT:H1'	2:C:344:DT:O4'	0.59	1.97	9	1
3:A:25:HIS:HB2	3:A:172:ILE:HG23	0.59	1.72	1	2
3:A:88:THR:HG23	3:A:88:THR:O	0.59	1.96	1	10
2:C:346:DT:H72	3:A:29:TYR:CE1	0.59	2.32	4	5
3:A:78:PHE:CZ	3:A:131:ILE:HG23	0.59	2.31	6	7
3:A:59:LEU:HD12	3:A:60:MET:H	0.59	1.56	11	1
2:C:346:DT:H1'	2:C:347:DC:C6	0.59	2.33	7	4
3:A:137:GLU:O	3:A:138:THR:HG22	0.59	1.97	11	1
3:A:79:TYR:CE2	3:A:126:LEU:CD2	0.59	2.85	17	7
3:A:25:HIS:ND1	3:A:172:ILE:HG23	0.59	2.13	7	1
3:A:17:ILE:HD11	3:A:151:PHE:CD2	0.59	2.33	17	1
1:B:323:DA:C2	1:B:324:DT:C2	0.58	2.91	7	15
3:A:109:LEU:HD13	3:A:110:PRO:CD	0.58	2.28	14	2
3:A:123:ILE:HD13	3:A:124:LEU:N	0.58	2.13	16	1
3:A:73:LEU:HD12	3:A:74:ARG:O	0.58	1.97	10	2
3:A:157:GLN:HG3	3:A:158:PRO:HD3	0.58	1.73	10	1
2:C:346:DT:C7	3:A:29:TYR:CE1	0.58	2.87	2	14
3:A:63:LEU:HD22	3:A:151:PHE:CD2	0.58	2.33	4	1
3:A:53:TYR:CE2	3:A:155:VAL:CG2	0.58	2.86	2	1
3:A:65:ILE:HD11	3:A:149:LEU:HD23	0.58	1.75	17	3
3:A:85:THR:O	3:A:85:THR:HG23	0.58	1.98	9	7
3:A:78:PHE:CE1	3:A:131:ILE:HG21	0.58	2.34	7	3
3:A:37:ALA:CB	3:A:123:ILE:HB	0.58	2.29	4	3
1:B:321:DA:H2''	1:B:322:DA:O5'	0.58	1.99	2	16
3:A:164:SER:C	3:A:165:LEU:HD12	0.58	2.19	6	1
3:A:17:ILE:HD11	3:A:151:PHE:CE2	0.58	2.33	10	1
3:A:89:VAL:HG11	3:A:120:CYS:HB2	0.58	1.74	10	1
3:A:157:GLN:CB	3:A:158:PRO:CD	0.58	2.81	10	2
3:A:94:HIS:HB2	3:A:104:LEU:HD13	0.58	1.76	13	1
3:A:15:LEU:HD11	3:A:61:LEU:HD22	0.58	1.75	14	1
3:A:73:LEU:C	3:A:73:LEU:HD12	0.58	2.19	3	9
3:A:134:ARG:O	3:A:135:LYS:HG3	0.58	1.99	1	1
3:A:89:VAL:HG21	3:A:119:ASP:CB	0.58	2.27	12	2
3:A:149:LEU:HD12	3:A:169:SER:CB	0.58	2.29	5	5
3:A:25:HIS:CB	3:A:172:ILE:HG23	0.58	2.28	8	3
2:C:341:DA:H2''	2:C:342:DA:O5'	0.58	1.99	13	15
3:A:21:PRO:HA	3:A:40:ALA:HB2	0.58	1.75	3	2
3:A:81:VAL:HG13	3:A:122:GLY:N	0.58	2.14	4	1
3:A:94:HIS:CG	3:A:106:ILE:HG23	0.58	2.34	4	1
3:A:164:SER:C	3:A:165:LEU:HD22	0.58	2.19	4	3
3:A:17:ILE:HG21	3:A:20:GLN:HG3	0.58	1.76	17	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:25:HIS:CE1	3:A:172:ILE:CG2	0.57	2.86	3	2
3:A:29:TYR:CE1	3:A:127:ARG:HD2	0.57	2.35	7	1
3:A:29:TYR:HB2	3:A:32:GLU:HG2	0.57	1.77	15	5
3:A:126:LEU:CB	3:A:140:ILE:HG21	0.57	2.29	1	1
3:A:84:ILE:HG23	3:A:84:ILE:O	0.57	1.99	18	4
3:A:18:GLU:HB2	3:A:47:ILE:HB	0.57	1.75	13	3
3:A:92:THR:HG23	3:A:93:SER:N	0.57	2.14	9	1
3:A:79:TYR:CD1	3:A:124:LEU:O	0.57	2.58	17	6
3:A:84:ILE:C	3:A:84:ILE:HD13	0.57	2.20	3	4
3:A:147:VAL:CG2	3:A:172:ILE:HB	0.57	2.30	14	6
3:A:126:LEU:H	3:A:126:LEU:HD22	0.57	1.59	13	10
3:A:125:LYS:HG3	3:A:174:CYS:SG	0.57	2.40	2	2
3:A:149:LEU:HD12	3:A:169:SER:HB3	0.57	1.76	4	3
3:A:51:HIS:CG	3:A:51:HIS:O	0.57	2.57	7	1
3:A:50:LEU:HD22	3:A:50:LEU:C	0.57	2.20	12	2
3:A:53:TYR:CE1	3:A:155:VAL:HG22	0.56	2.35	16	5
3:A:13:TYR:CD1	3:A:52:GLY:HA2	0.56	2.35	13	3
3:A:147:VAL:HG22	3:A:172:ILE:HB	0.56	1.78	7	6
3:A:57:GLU:HG3	3:A:58:PRO:HD2	0.56	1.77	7	2
3:A:50:LEU:HD23	3:A:50:LEU:C	0.56	2.20	17	12
3:A:127:ARG:HG2	3:A:130:ASP:HB2	0.56	1.77	18	2
3:A:65:ILE:HG21	3:A:76:HIS:CD2	0.56	2.36	11	7
2:C:345:DT:H5''	3:A:129:SER:OG	0.56	2.01	4	1
3:A:59:LEU:HD23	3:A:108:LEU:HD11	0.56	1.78	4	1
3:A:79:TYR:HA	3:A:124:LEU:HB3	0.56	1.77	7	1
3:A:103:VAL:C	3:A:104:LEU:HD12	0.56	2.20	11	2
3:A:17:ILE:HD11	3:A:151:PHE:HD2	0.56	1.61	17	1
3:A:61:LEU:HG	3:A:106:ILE:HD11	0.56	1.76	2	1
3:A:149:LEU:HB2	3:A:169:SER:CB	0.56	2.30	14	4
3:A:17:ILE:HD12	3:A:167:VAL:HG11	0.56	1.76	11	2
3:A:94:HIS:HA	3:A:106:ILE:HD12	0.56	1.77	13	1
3:A:140:ILE:HG23	3:A:141:GLY:H	0.56	1.61	17	4
3:A:126:LEU:N	3:A:126:LEU:HD22	0.56	2.16	5	3
3:A:17:ILE:HD11	3:A:151:PHE:CD1	0.56	2.36	13	1
3:A:15:LEU:HD22	3:A:153:VAL:HG23	0.56	1.78	4	6
3:A:157:GLN:CB	3:A:158:PRO:HD2	0.56	2.31	10	1
3:A:63:LEU:CD2	3:A:151:PHE:CD1	0.55	2.89	2	2
3:A:74:ARG:CB	3:A:75:PRO:HD2	0.55	2.31	13	12
3:A:67:THR:HG23	3:A:76:HIS:HA	0.55	1.78	5	3
2:C:344:DT:H4'	3:A:142:ARG:HD2	0.55	1.77	9	1
3:A:109:LEU:HD12	3:A:110:PRO:CD	0.55	2.30	13	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:46:PRO:HD2	3:A:118:ILE:HB	0.55	1.76	14	1
3:A:78:PHE:N	3:A:78:PHE:CD1	0.55	2.75	15	10
3:A:37:ALA:C	3:A:123:ILE:HG22	0.55	2.22	6	1
3:A:37:ALA:HB1	3:A:122:GLY:CA	0.55	2.31	6	1
3:A:147:VAL:HG22	3:A:172:ILE:CB	0.55	2.31	7	1
3:A:23:SER:HA	3:A:170:ASN:HB2	0.55	1.78	17	1
3:A:153:VAL:O	3:A:164:SER:HA	0.55	2.02	17	1
1:B:319:DG:H2''	1:B:320:DA:O5'	0.55	2.01	17	18
3:A:21:PRO:HD3	3:A:46:PRO:HB3	0.55	1.78	11	3
3:A:148:ARG:HB2	3:A:170:ASN:HB3	0.55	1.79	7	1
3:A:124:LEU:HG	3:A:125:LYS:N	0.55	2.17	7	3
3:A:28:ARG:HG3	3:A:35:ARG:HB3	0.55	1.77	7	1
3:A:94:HIS:HB2	3:A:104:LEU:CD2	0.55	2.31	7	1
3:A:109:LEU:CD1	3:A:110:PRO:CD	0.55	2.85	16	3
1:B:315:DC:H2''	1:B:316:DG:O5'	0.55	2.01	18	10
3:A:61:LEU:HD12	3:A:62:GLN:H	0.55	1.61	7	11
3:A:170:ASN:N	3:A:171:PRO:CD	0.55	2.70	7	1
3:A:47:ILE:HG23	3:A:117:VAL:HA	0.55	1.77	10	2
3:A:94:HIS:O	3:A:104:LEU:HD23	0.55	2.01	10	2
3:A:13:TYR:CD2	3:A:163:LEU:HD23	0.55	2.37	15	2
3:A:78:PHE:CD1	3:A:131:ILE:HD13	0.54	2.38	2	1
3:A:59:LEU:CB	3:A:108:LEU:HD12	0.54	2.32	6	2
3:A:37:ALA:CB	3:A:123:ILE:CG2	0.54	2.85	7	3
3:A:174:CYS:O	3:A:175:SER:C	0.54	2.45	17	1
3:A:131:ILE:CA	3:A:134:ARG:HG2	0.54	2.32	2	1
3:A:108:LEU:HD22	3:A:108:LEU:N	0.54	2.16	13	1
3:A:15:LEU:HD12	3:A:50:LEU:HG	0.54	1.78	3	1
3:A:61:LEU:HD12	3:A:152:ARG:O	0.54	2.02	2	6
3:A:81:VAL:HG21	3:A:124:LEU:CB	0.54	2.31	10	1
1:B:324:DT:H2'	1:B:325:DT:H72	0.54	1.79	13	8
3:A:59:LEU:HG	3:A:60:MET:N	0.54	2.18	4	5
3:A:76:HIS:CE1	3:A:79:TYR:HB2	0.54	2.38	1	4
3:A:107:PRO:C	3:A:108:LEU:HD22	0.54	2.23	5	3
3:A:108:LEU:CD2	3:A:108:LEU:N	0.54	2.71	15	4
3:A:63:LEU:HD11	3:A:149:LEU:HD23	0.54	1.79	16	1
3:A:37:ALA:CB	3:A:123:ILE:N	0.54	2.70	14	1
3:A:45:HIS:CE1	3:A:121:ALA:HB3	0.54	2.37	6	1
3:A:93:SER:HB2	3:A:106:ILE:HG22	0.54	1.76	14	4
1:B:322:DA:H2''	1:B:323:DA:O5'	0.54	2.03	14	9
3:A:81:VAL:HG22	3:A:122:GLY:O	0.54	2.03	2	2
3:A:27:ALA:HB1	3:A:125:LYS:N	0.54	2.18	1	3

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:63:LEU:CB	3:A:104:LEU:HB2	0.54	2.33	10	5
2:C:344:DT:C5'	3:A:142:ARG:O	0.54	2.52	14	2
2:C:347:DC:H2''	2:C:348:DC:O5'	0.53	2.01	14	17
3:A:39:LYS:O	3:A:40:ALA:HB2	0.53	2.04	10	3
3:A:79:TYR:CE1	3:A:124:LEU:O	0.53	2.61	12	7
3:A:125:LYS:C	3:A:126:LEU:HD13	0.53	2.24	2	2
3:A:77:ALA:HB2	3:A:140:ILE:CD1	0.53	2.33	5	4
3:A:47:ILE:HD13	3:A:117:VAL:HG13	0.53	1.81	11	3
3:A:146:ARG:HG2	3:A:173:GLU:HG2	0.53	1.81	8	1
3:A:131:ILE:HG23	3:A:138:THR:HG22	0.53	1.79	14	1
3:A:63:LEU:HD12	3:A:104:LEU:HD23	0.53	1.80	3	1
3:A:81:VAL:HG22	3:A:124:LEU:HD12	0.53	1.80	9	1
3:A:155:VAL:O	3:A:163:LEU:N	0.53	2.41	17	1
3:A:37:ALA:HA	3:A:122:GLY:HA2	0.53	1.79	1	2
3:A:27:ALA:CB	3:A:123:ILE:HD12	0.53	2.28	4	1
3:A:163:LEU:C	3:A:163:LEU:HD13	0.53	2.24	11	8
3:A:63:LEU:CB	3:A:104:LEU:HD12	0.53	2.33	10	1
3:A:135:LYS:N	3:A:135:LYS:HD3	0.53	2.18	10	2
3:A:27:ALA:HA	3:A:123:ILE:CG2	0.53	2.34	12	4
3:A:50:LEU:HD12	3:A:153:VAL:HG11	0.53	1.79	4	1
3:A:79:TYR:CD2	3:A:126:LEU:CD2	0.53	2.91	9	3
3:A:19:VAL:HB	3:A:47:ILE:HG12	0.53	1.80	15	12
3:A:59:LEU:HD11	3:A:153:VAL:HG11	0.53	1.79	10	1
3:A:78:PHE:CE1	3:A:131:ILE:CG2	0.53	2.92	10	7
3:A:61:LEU:HD12	3:A:62:GLN:N	0.53	2.18	9	13
3:A:124:LEU:HD23	3:A:124:LEU:C	0.53	2.23	9	1
3:A:37:ALA:HA	3:A:122:GLY:CA	0.53	2.34	1	1
3:A:21:PRO:HA	3:A:40:ALA:CB	0.53	2.34	5	4
3:A:96:ALA:O	3:A:103:VAL:CG2	0.53	2.57	7	2
3:A:65:ILE:HD13	3:A:76:HIS:CD2	0.53	2.39	16	1
3:A:134:ARG:NH1	3:A:136:GLY:HA3	0.53	2.19	16	1
3:A:15:LEU:HD13	3:A:50:LEU:HD12	0.52	1.80	7	3
3:A:157:GLN:CG	3:A:158:PRO:HD3	0.52	2.34	10	1
2:C:350:DC:H2''	2:C:351:DG:O5'	0.52	2.04	11	14
3:A:149:LEU:O	3:A:168:ALA:HA	0.52	2.04	7	6
3:A:15:LEU:CB	3:A:165:LEU:HD22	0.52	2.33	6	1
3:A:169:SER:C	3:A:171:PRO:CD	0.52	2.77	7	1
3:A:131:ILE:HA	3:A:134:ARG:CG	0.52	2.35	9	1
3:A:109:LEU:HD13	3:A:110:PRO:HD3	0.52	1.80	14	1
3:A:137:GLU:O	3:A:138:THR:HG23	0.52	2.03	15	1
3:A:126:LEU:N	3:A:126:LEU:CD1	0.52	2.70	6	3

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:11:GLY:N	3:A:12:PRO:CD	0.52	2.73	7	6
3:A:79:TYR:CD2	3:A:123:ILE:HD11	0.52	2.39	18	1
3:A:61:LEU:CB	3:A:108:LEU:HD11	0.52	2.35	17	2
3:A:65:ILE:HG21	3:A:76:HIS:CE1	0.52	2.40	17	3
3:A:61:LEU:CD2	3:A:106:ILE:HD11	0.52	2.33	2	2
3:A:18:GLU:HB3	3:A:47:ILE:HB	0.52	1.82	10	3
3:A:67:THR:CG2	3:A:76:HIS:HA	0.52	2.34	9	1
3:A:105:GLU:C	3:A:106:ILE:HD13	0.52	2.25	13	1
3:A:25:HIS:CE1	3:A:27:ALA:HB2	0.52	2.40	7	1
3:A:84:ILE:HD12	3:A:84:ILE:C	0.52	2.25	1	1
3:A:38:VAL:O	3:A:38:VAL:CG1	0.52	2.58	14	4
2:C:341:DA:C6	2:C:342:DA:C6	0.52	2.98	16	3
3:A:77:ALA:HB3	3:A:79:TYR:CZ	0.52	2.40	7	1
3:A:78:PHE:CE1	3:A:131:ILE:HG13	0.52	2.39	7	2
3:A:15:LEU:HD23	3:A:167:VAL:HG21	0.52	1.79	9	1
2:C:345:DT:C5	2:C:346:DT:H73	0.52	2.39	14	1
3:A:53:TYR:CZ	3:A:155:VAL:CG2	0.52	2.93	18	3
3:A:125:LYS:O	3:A:126:LEU:HD22	0.52	2.04	7	1
2:C:346:DT:OP2	3:A:29:TYR:CD2	0.52	2.63	6	9
3:A:87:LYS:O	3:A:88:THR:HB	0.52	2.05	3	7
3:A:47:ILE:HG23	3:A:117:VAL:CG2	0.52	2.23	14	3
3:A:27:ALA:CB	3:A:123:ILE:CG1	0.52	2.88	12	2
3:A:134:ARG:CZ	3:A:136:GLY:HA3	0.52	2.35	16	1
3:A:104:LEU:HD22	3:A:104:LEU:N	0.51	2.20	3	1
3:A:151:PHE:N	3:A:151:PHE:CD1	0.51	2.78	10	1
3:A:57:GLU:CG	3:A:58:PRO:HD2	0.51	2.34	5	9
3:A:124:LEU:HD21	3:A:126:LEU:HD13	0.51	1.83	3	2
3:A:79:TYR:CD2	3:A:147:VAL:CG2	0.51	2.93	4	2
3:A:93:SER:OG	3:A:106:ILE:HG22	0.51	2.05	9	1
3:A:37:ALA:HB1	3:A:123:ILE:H	0.51	1.62	6	1
3:A:163:LEU:CD1	3:A:165:LEU:CD1	0.51	2.88	6	1
3:A:78:PHE:CZ	3:A:131:ILE:CG2	0.51	2.94	7	2
3:A:84:ILE:HD13	3:A:84:ILE:C	0.51	2.26	13	4
2:C:346:DT:O2	2:C:347:DC:C2	0.51	2.63	4	2
3:A:29:TYR:CE1	3:A:127:ARG:CD	0.51	2.93	7	1
3:A:64:PHE:C	3:A:64:PHE:CD1	0.51	2.83	10	1
3:A:65:ILE:HG23	3:A:66:GLY:N	0.51	2.20	2	1
3:A:124:LEU:C	3:A:124:LEU:HD23	0.51	2.25	15	4
3:A:76:HIS:CE1	3:A:102:LYS:HB2	0.51	2.41	7	3
3:A:15:LEU:N	3:A:165:LEU:HD22	0.51	2.20	11	1
3:A:53:TYR:CE2	3:A:55:GLU:HB3	0.51	2.41	13	7

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:89:VAL:HG21	3:A:119:ASP:OD2	0.51	2.06	11	1
3:A:108:LEU:N	3:A:108:LEU:CD2	0.51	2.73	13	2
3:A:139:ASP:O	3:A:141:GLY:N	0.51	2.44	1	2
3:A:11:GLY:N	3:A:12:PRO:HD2	0.51	2.21	7	6
2:C:346:DT:H2''	2:C:347:DC:OP2	0.51	2.05	6	1
3:A:28:ARG:CG	3:A:35:ARG:HB2	0.51	2.36	16	2
2:C:344:DT:C2'	2:C:345:DT:O5'	0.51	2.48	17	1
2:C:344:DT:H2'	2:C:345:DT:C7	0.51	2.36	11	7
3:A:77:ALA:C	3:A:78:PHE:CD1	0.51	2.84	4	5
3:A:93:SER:HB3	3:A:106:ILE:HG22	0.51	1.81	2	2
3:A:92:THR:HG21	3:A:107:PRO:O	0.51	2.05	5	1
3:A:29:TYR:CE2	3:A:125:LYS:HD3	0.51	2.41	7	1
3:A:81:VAL:HG12	3:A:82:HIS:N	0.51	2.21	9	1
3:A:149:LEU:HB2	3:A:169:SER:HB3	0.51	1.82	16	5
3:A:65:ILE:HG22	3:A:76:HIS:CG	0.50	2.42	5	6
3:A:149:LEU:HD12	3:A:169:SER:HB2	0.50	1.82	12	3
1:B:319:DG:C2	1:B:320:DA:C4	0.50	2.99	11	5
3:A:79:TYR:CG	3:A:147:VAL:HG21	0.50	2.42	5	1
3:A:81:VAL:CG2	3:A:124:LEU:HB2	0.50	2.36	9	3
3:A:15:LEU:CD2	3:A:167:VAL:CG2	0.50	2.89	11	2
3:A:92:THR:HG21	3:A:120:CYS:CB	0.50	2.36	2	2
3:A:37:ALA:HB1	3:A:123:ILE:HB	0.50	1.82	12	2
3:A:94:HIS:CA	3:A:104:LEU:HB3	0.50	2.36	7	1
3:A:163:LEU:CD1	3:A:165:LEU:HD23	0.50	2.35	16	1
1:B:323:DA:C2	2:C:344:DT:O2	0.50	2.64	10	14
3:A:15:LEU:HB3	3:A:165:LEU:HD13	0.50	1.78	5	2
3:A:81:VAL:HG21	3:A:123:ILE:CA	0.50	2.36	13	1
3:A:133:LEU:O	3:A:134:ARG:C	0.50	2.48	5	2
3:A:163:LEU:CD1	3:A:163:LEU:C	0.50	2.79	17	1
3:A:78:PHE:O	3:A:124:LEU:HD22	0.50	2.07	4	2
3:A:82:HIS:CG	3:A:82:HIS:O	0.50	2.64	4	1
3:A:82:HIS:O	3:A:83:ARG:CB	0.50	2.59	4	1
3:A:146:ARG:HA	3:A:172:ILE:O	0.50	2.07	7	6
3:A:93:SER:OG	3:A:106:ILE:HG21	0.50	2.07	10	1
3:A:155:VAL:HG13	3:A:163:LEU:O	0.50	2.06	17	1
3:A:63:LEU:HD23	3:A:151:PHE:CE2	0.50	2.42	9	1
3:A:39:LYS:HA	3:A:45:HIS:CE1	0.50	2.42	14	1
2:C:349:DT:H2''	2:C:350:DC:O5'	0.50	2.06	12	12
1:B:320:DA:C2	1:B:321:DA:C4	0.50	3.00	13	4
3:A:131:ILE:HG21	3:A:140:ILE:HG22	0.50	1.84	11	1
3:A:78:PHE:CE1	3:A:131:ILE:CD1	0.50	2.93	14	7

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:109:LEU:CB	3:A:110:PRO:HD2	0.50	2.37	9	9
3:A:74:ARG:CB	3:A:75:PRO:CD	0.50	2.89	13	11
3:A:135:LYS:CD	3:A:135:LYS:C	0.50	2.80	6	1
2:C:344:DT:H4'	3:A:142:ARG:HG2	0.50	1.83	7	3
3:A:32:GLU:O	3:A:33:GLY:C	0.50	2.51	15	2
3:A:62:GLN:HG2	3:A:63:LEU:N	0.49	2.21	4	1
3:A:79:TYR:CE1	3:A:123:ILE:HD11	0.49	2.42	4	1
3:A:34:SER:OG	3:A:81:VAL:HG21	0.49	2.07	9	1
3:A:45:HIS:O	3:A:45:HIS:CG	0.49	2.65	14	2
3:A:15:LEU:H	3:A:165:LEU:HD22	0.49	1.66	7	2
2:C:347:DC:OP2	3:A:32:GLU:HB3	0.49	2.07	9	1
3:A:109:LEU:HD23	3:A:110:PRO:HD2	0.49	1.84	11	2
3:A:79:TYR:CE2	3:A:126:LEU:HD23	0.49	2.42	16	1
2:C:346:DT:H71	3:A:29:TYR:CZ	0.49	2.43	10	6
3:A:63:LEU:HD13	3:A:63:LEU:C	0.49	2.28	10	6
3:A:29:TYR:HE1	3:A:127:ARG:CD	0.49	2.21	7	1
3:A:48:VAL:HG21	3:A:151:PHE:CZ	0.49	2.42	9	1
3:A:140:ILE:CG2	3:A:141:GLY:N	0.49	2.73	15	3
3:A:63:LEU:HB3	3:A:104:LEU:HB2	0.49	1.82	3	2
3:A:45:HIS:CB	3:A:46:PRO:HD2	0.49	2.38	6	1
3:A:36:GLY:CA	3:A:122:GLY:HA2	0.49	2.36	7	1
3:A:163:LEU:C	3:A:163:LEU:HD12	0.49	2.28	7	1
3:A:15:LEU:HB2	3:A:50:LEU:HD23	0.49	1.83	8	2
3:A:74:ARG:HD2	3:A:75:PRO:HD2	0.49	1.83	9	1
3:A:47:ILE:HG22	3:A:48:VAL:N	0.49	2.23	4	2
3:A:37:ALA:HB2	3:A:123:ILE:N	0.49	2.22	4	2
3:A:81:VAL:CG1	3:A:82:HIS:N	0.49	2.75	11	6
3:A:85:THR:HG23	3:A:120:CYS:HA	0.49	1.85	18	1
3:A:123:ILE:CD1	3:A:172:ILE:HG21	0.49	2.38	6	3
3:A:147:VAL:HG23	3:A:172:ILE:HB	0.49	1.84	5	1
3:A:93:SER:O	3:A:106:ILE:CG2	0.49	2.61	7	1
1:B:324:DT:H2''	1:B:325:DT:O5'	0.49	2.08	16	17
2:C:346:DT:H2''	2:C:347:DC:O5'	0.49	2.08	2	6
1:B:326:DG:C2	2:C:341:DA:C2	0.49	3.01	16	6
3:A:157:GLN:HB2	3:A:162:THR:HA	0.49	1.85	15	1
3:A:140:ILE:O	3:A:140:ILE:HG23	0.49	2.07	1	1
3:A:77:ALA:CB	3:A:140:ILE:HD13	0.49	2.37	3	3
3:A:79:TYR:CD1	3:A:147:VAL:HG11	0.49	2.43	5	2
3:A:39:LYS:HD3	3:A:40:ALA:N	0.49	2.23	16	1
3:A:13:TYR:CD1	3:A:13:TYR:N	0.49	2.80	4	4
3:A:163:LEU:CD1	3:A:165:LEU:HD11	0.49	2.38	6	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:39:LYS:C	3:A:39:LYS:CD	0.49	2.81	16	1
2:C:348:DC:H2'	2:C:349:DT:H72	0.49	1.85	17	1
2:C:342:DA:C5	2:C:343:DT:C4	0.48	3.01	1	6
3:A:134:ARG:HG3	3:A:134:ARG:O	0.48	2.07	2	1
3:A:134:ARG:O	3:A:135:LYS:C	0.48	2.52	5	1
3:A:127:ARG:HD2	3:A:130:ASP:HB2	0.48	1.85	15	3
3:A:140:ILE:HG23	3:A:140:ILE:O	0.48	2.08	8	1
1:B:318:DG:N2	2:C:349:DT:C2	0.48	2.80	6	5
3:A:123:ILE:CD1	3:A:172:ILE:HD13	0.48	2.38	5	1
3:A:137:GLU:O	3:A:138:THR:CB	0.48	2.60	11	1
3:A:53:TYR:CE2	3:A:155:VAL:HG22	0.48	2.42	2	1
3:A:109:LEU:HD23	3:A:112:ASN:ND2	0.48	2.23	2	2
3:A:124:LEU:HD21	3:A:126:LEU:CD1	0.48	2.39	3	2
1:B:322:DA:C2	2:C:345:DT:O2	0.48	2.67	4	3
3:A:84:ILE:CG2	3:A:120:CYS:C	0.48	2.82	4	1
3:A:65:ILE:HG12	3:A:149:LEU:HD23	0.48	1.84	6	3
3:A:15:LEU:HD12	3:A:50:LEU:CB	0.48	2.39	13	4
3:A:127:ARG:HD3	3:A:130:ASP:HB2	0.48	1.84	13	1
1:B:319:DG:C2	1:B:320:DA:N3	0.48	2.82	8	10
3:A:50:LEU:CD1	3:A:153:VAL:HG11	0.48	2.39	9	2
3:A:131:ILE:O	3:A:134:ARG:HG3	0.48	2.09	5	1
3:A:59:LEU:HD12	3:A:60:MET:N	0.48	2.23	11	1
3:A:126:LEU:HD21	3:A:147:VAL:HG13	0.48	1.86	12	1
3:A:37:ALA:CB	3:A:122:GLY:HA2	0.48	2.38	15	1
3:A:68:ALA:HB3	3:A:146:ARG:HG3	0.48	1.85	17	2
3:A:77:ALA:C	3:A:78:PHE:CG	0.48	2.86	10	12
3:A:38:VAL:HG13	3:A:45:HIS:CA	0.48	2.34	4	2
3:A:124:LEU:CD2	3:A:126:LEU:CD1	0.48	2.91	17	2
3:A:28:ARG:HG3	3:A:35:ARG:CB	0.48	2.37	7	1
3:A:96:ALA:O	3:A:103:VAL:HG23	0.48	2.07	7	1
3:A:47:ILE:HG22	3:A:48:VAL:H	0.48	1.69	10	1
3:A:84:ILE:HD12	3:A:120:CYS:HA	0.48	1.86	12	1
3:A:63:LEU:HB2	3:A:104:LEU:HB2	0.48	1.86	17	1
3:A:48:VAL:O	3:A:116:ALA:HB3	0.48	2.08	1	2
3:A:140:ILE:O	3:A:144:ASN:HB3	0.48	2.09	16	3
3:A:29:TYR:HB2	3:A:32:GLU:CB	0.48	2.38	5	1
3:A:30:GLU:CB	3:A:124:LEU:HD13	0.48	2.35	7	1
3:A:151:PHE:CD1	3:A:151:PHE:N	0.48	2.80	2	1
3:A:149:LEU:HB2	3:A:169:SER:HB2	0.48	1.84	3	3
3:A:84:ILE:HG21	3:A:121:ALA:CA	0.48	2.38	4	1
3:A:13:TYR:HD2	3:A:163:LEU:HD23	0.48	1.68	15	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:79:TYR:HD1	3:A:126:LEU:HD21	0.48	1.65	18	1
3:A:45:HIS:CB	3:A:46:PRO:CD	0.48	2.92	6	1
3:A:65:ILE:CG2	3:A:76:HIS:HB3	0.48	2.38	9	1
3:A:89:VAL:HG11	3:A:119:ASP:CB	0.48	2.38	18	1
3:A:126:LEU:HD22	3:A:126:LEU:N	0.48	2.24	15	4
3:A:94:HIS:HB2	3:A:104:LEU:HB3	0.48	1.86	3	2
3:A:138:THR:O	3:A:139:ASP:HB2	0.48	2.09	18	2
3:A:50:LEU:C	3:A:50:LEU:HD23	0.48	2.30	10	1
3:A:10:SER:HB3	3:A:163:LEU:HD21	0.48	1.85	18	1
3:A:13:TYR:HA	3:A:52:GLY:CA	0.47	2.39	8	4
3:A:154:HIS:CE1	3:A:162:THR:HG21	0.47	2.44	18	2
3:A:155:VAL:HG12	3:A:163:LEU:O	0.47	2.08	4	1
3:A:155:VAL:CG1	3:A:163:LEU:HG	0.47	2.39	7	1
3:A:29:TYR:CE1	3:A:125:LYS:HD2	0.47	2.44	11	1
3:A:109:LEU:CB	3:A:110:PRO:CD	0.47	2.92	4	9
3:A:64:PHE:CD1	3:A:150:VAL:HB	0.47	2.44	10	1
3:A:27:ALA:HB3	3:A:174:CYS:SG	0.47	2.49	11	1
3:A:155:VAL:HG23	3:A:156:PRO:CD	0.47	2.38	17	1
3:A:95:GLU:HA	3:A:104:LEU:HG	0.47	1.86	2	1
2:C:344:DT:H2'	2:C:345:DT:H72	0.47	1.86	15	4
1:B:318:DG:P	3:A:39:LYS:HE2	0.47	2.49	11	1
3:A:68:ALA:HB1	3:A:171:PRO:HB3	0.47	1.86	12	1
3:A:94:HIS:O	3:A:104:LEU:HD22	0.47	2.10	13	1
3:A:59:LEU:HD23	3:A:108:LEU:HD22	0.47	1.85	17	1
3:A:19:VAL:HB	3:A:47:ILE:CG1	0.47	2.39	14	3
2:C:344:DT:C5'	3:A:142:ARG:HG3	0.47	2.39	2	1
3:A:63:LEU:C	3:A:63:LEU:CD1	0.47	2.83	13	1
3:A:25:HIS:ND1	3:A:25:HIS:N	0.47	2.63	14	1
3:A:89:VAL:HG12	3:A:92:THR:HB	0.47	1.86	14	1
3:A:53:TYR:CE2	3:A:155:VAL:HG21	0.47	2.44	2	1
3:A:59:LEU:CD2	3:A:153:VAL:HG13	0.47	2.40	4	1
2:C:343:DT:H2''	2:C:344:DT:C6	0.47	2.44	10	9
3:A:109:LEU:HD12	3:A:112:ASN:ND2	0.47	2.25	5	1
3:A:98:LEU:HD23	3:A:98:LEU:C	0.47	2.29	15	1
3:A:147:VAL:O	3:A:171:PRO:HA	0.47	2.10	10	3
2:C:344:DT:OP1	3:A:145:THR:HG23	0.47	2.08	5	1
3:A:93:SER:HB3	3:A:105:GLU:O	0.47	2.10	12	1
3:A:13:TYR:HB3	3:A:52:GLY:HA3	0.47	1.86	2	4
3:A:28:ARG:HG3	3:A:35:ARG:HB2	0.47	1.87	2	2
3:A:65:ILE:HG13	3:A:149:LEU:HD23	0.47	1.86	2	1
2:C:346:DT:H71	3:A:29:TYR:HE1	0.47	1.65	3	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:78:PHE:CZ	3:A:131:ILE:HG21	0.47	2.45	7	2
3:A:80:GLN:HE21	3:A:97:ILE:HG21	0.47	1.69	9	1
3:A:27:ALA:HB1	3:A:124:LEU:CA	0.47	2.39	15	3
3:A:127:ARG:O	3:A:127:ARG:HG3	0.47	2.10	10	1
3:A:137:GLU:O	3:A:138:THR:CG2	0.47	2.62	11	1
3:A:80:GLN:NE2	3:A:97:ILE:HG12	0.47	2.24	14	1
1:B:317:DA:H5''	3:A:39:LYS:CD	0.47	2.40	15	1
3:A:10:SER:HB2	3:A:13:TYR:HB2	0.47	1.85	16	1
3:A:81:VAL:CG2	3:A:124:LEU:HD13	0.47	2.40	6	1
1:B:319:DG:C6	1:B:320:DA:C6	0.47	3.02	11	1
3:A:76:HIS:HB3	3:A:101:THR:HA	0.47	1.87	1	1
3:A:77:ALA:HB1	3:A:140:ILE:HG22	0.47	1.87	1	1
3:A:84:ILE:HG21	3:A:122:GLY:N	0.47	2.24	2	1
2:C:342:DA:C2'	2:C:343:DT:C6	0.47	2.98	11	4
3:A:142:ARG:HB2	3:A:142:ARG:NH1	0.47	2.25	2	1
3:A:138:THR:HG22	3:A:139:ASP:OD1	0.47	2.10	6	1
3:A:125:LYS:HE3	3:A:145:THR:HG21	0.47	1.86	11	1
3:A:61:LEU:HD23	3:A:106:ILE:HD11	0.46	1.86	2	1
3:A:161:ARG:O	3:A:161:ARG:HD2	0.46	2.10	4	1
3:A:94:HIS:CB	3:A:104:LEU:HB3	0.46	2.40	7	1
3:A:130:ASP:O	3:A:134:ARG:HG2	0.46	2.09	9	2
3:A:109:LEU:HB3	3:A:112:ASN:HB2	0.46	1.87	10	1
3:A:77:ALA:HB3	3:A:126:LEU:CD1	0.46	2.39	12	1
3:A:26:ARG:O	3:A:37:ALA:HB2	0.46	2.10	18	1
3:A:59:LEU:CD1	3:A:155:VAL:HB	0.46	2.38	1	1
3:A:59:LEU:CD2	3:A:108:LEU:HD13	0.46	2.40	1	3
3:A:66:GLY:HA3	3:A:73:LEU:HD22	0.46	1.87	2	1
3:A:78:PHE:CE1	3:A:131:ILE:HG12	0.46	2.46	4	1
3:A:79:TYR:CE2	3:A:147:VAL:CG1	0.46	2.93	7	1
3:A:65:ILE:HG23	3:A:76:HIS:HB3	0.46	1.85	9	2
3:A:22:LYS:CG	3:A:40:ALA:HA	0.46	2.40	13	1
3:A:78:PHE:CD2	3:A:131:ILE:HD12	0.46	2.45	16	1
3:A:15:LEU:CB	3:A:165:LEU:HG	0.46	2.41	4	3
3:A:65:ILE:HG22	3:A:76:HIS:HB2	0.46	1.87	7	3
3:A:68:ALA:HA	3:A:148:ARG:HB2	0.46	1.87	9	1
3:A:15:LEU:CD1	3:A:153:VAL:CG2	0.46	2.86	15	4
2:C:347:DC:N4	3:A:26:ARG:NH2	0.46	2.64	6	2
3:A:45:HIS:CG	3:A:46:PRO:HD2	0.46	2.45	6	1
3:A:139:ASP:O	3:A:140:ILE:C	0.46	2.54	7	1
3:A:148:ARG:HA	3:A:170:ASN:HA	0.46	1.88	7	1
3:A:79:TYR:CZ	3:A:124:LEU:O	0.46	2.68	12	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:25:HIS:HD2	3:A:172:ILE:HG23	0.46	1.66	14	1
3:A:68:ALA:HB2	3:A:147:VAL:C	0.46	2.31	4	1
3:A:124:LEU:HD23	3:A:126:LEU:CD1	0.46	2.40	6	1
3:A:27:ALA:CB	3:A:123:ILE:HG13	0.46	2.41	12	2
3:A:79:TYR:CG	3:A:126:LEU:HD11	0.46	2.44	13	1
3:A:108:LEU:N	3:A:108:LEU:HD22	0.46	2.23	15	1
3:A:78:PHE:CZ	3:A:134:ARG:NH1	0.46	2.83	16	1
3:A:65:ILE:HD11	3:A:149:LEU:CD2	0.46	2.39	17	1
1:B:318:DG:N2	2:C:349:DT:O2	0.46	2.49	7	13
2:C:341:DA:H2''	2:C:342:DA:C8	0.46	2.46	2	1
3:A:64:PHE:O	3:A:150:VAL:HB	0.46	2.11	9	5
3:A:93:SER:HB2	3:A:106:ILE:HG12	0.46	1.88	10	1
3:A:22:LYS:N	3:A:22:LYS:HD2	0.46	2.26	12	1
3:A:77:ALA:HB3	3:A:126:LEU:HD12	0.46	1.88	12	1
3:A:115:ARG:NE	3:A:117:VAL:HG23	0.46	2.25	13	1
3:A:134:ARG:O	3:A:135:LYS:CG	0.46	2.64	1	1
3:A:73:LEU:HD12	3:A:73:LEU:O	0.46	2.11	7	2
3:A:45:HIS:N	3:A:45:HIS:CD2	0.46	2.84	5	2
3:A:28:ARG:HG3	3:A:35:ARG:N	0.46	2.26	17	1
3:A:37:ALA:HA	3:A:123:ILE:HG23	0.46	1.87	6	1
3:A:91:THR:O	3:A:92:THR:HG22	0.46	2.11	9	2
3:A:63:LEU:HB3	3:A:104:LEU:HD12	0.46	1.87	10	1
3:A:81:VAL:CG2	3:A:124:LEU:CB	0.46	2.94	10	1
3:A:157:GLN:HB3	3:A:158:PRO:HD2	0.46	1.87	10	1
3:A:78:PHE:C	3:A:126:LEU:HD11	0.46	2.31	17	2
3:A:79:TYR:CD2	3:A:147:VAL:HG21	0.46	2.46	13	3
3:A:124:LEU:HD23	3:A:124:LEU:O	0.46	2.10	15	3
3:A:47:ILE:HD12	3:A:117:VAL:CG2	0.46	2.38	7	2
3:A:78:PHE:HZ	3:A:131:ILE:HG23	0.46	1.71	8	1
3:A:36:GLY:HA2	3:A:84:ILE:HA	0.46	1.87	9	1
3:A:131:ILE:CG2	3:A:140:ILE:CG2	0.46	2.94	9	1
3:A:21:PRO:CB	3:A:40:ALA:HB2	0.46	2.41	10	1
3:A:81:VAL:CG2	3:A:124:LEU:HD12	0.46	2.40	16	1
3:A:129:SER:HB3	3:A:142:ARG:NH1	0.45	2.27	9	1
3:A:106:ILE:HD12	3:A:106:ILE:O	0.45	2.10	15	2
3:A:93:SER:O	3:A:94:HIS:CB	0.45	2.65	7	1
3:A:13:TYR:HA	3:A:52:GLY:HA2	0.45	1.89	8	2
3:A:22:LYS:CD	3:A:40:ALA:HB1	0.45	2.41	18	1
3:A:76:HIS:CD2	3:A:77:ALA:N	0.45	2.84	18	1
2:C:345:DT:H3'	3:A:29:TYR:OH	0.45	2.11	14	3
3:A:25:HIS:NE2	3:A:123:ILE:HD13	0.45	2.25	3	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:77:ALA:O	3:A:78:PHE:CD1	0.45	2.69	9	1
3:A:105:GLU:O	3:A:106:ILE:HG23	0.45	2.12	10	2
3:A:131:ILE:CG2	3:A:138:THR:HG22	0.45	2.41	14	1
2:C:345:DT:OP1	3:A:127:ARG:HG2	0.45	2.11	3	2
3:A:59:LEU:CD2	3:A:108:LEU:HD11	0.45	2.40	4	1
3:A:132:GLU:CG	3:A:139:ASP:HB2	0.45	2.42	4	1
3:A:37:ALA:O	3:A:123:ILE:HG22	0.45	2.11	6	1
3:A:65:ILE:HG21	3:A:76:HIS:NE2	0.45	2.26	8	2
3:A:125:LYS:CE	3:A:145:THR:HG22	0.45	2.30	8	1
3:A:65:ILE:CD1	3:A:149:LEU:HD23	0.45	2.41	3	2
3:A:131:ILE:O	3:A:131:ILE:CG2	0.45	2.64	4	1
3:A:126:LEU:HD12	3:A:140:ILE:HG13	0.45	1.88	7	1
3:A:37:ALA:HB3	3:A:121:ALA:O	0.45	2.11	10	2
3:A:84:ILE:HG12	3:A:119:ASP:O	0.45	2.12	10	1
3:A:78:PHE:CD2	3:A:126:LEU:CD1	0.45	2.99	16	1
3:A:25:HIS:HD2	3:A:123:ILE:HG21	0.45	1.67	18	1
3:A:78:PHE:CD1	3:A:78:PHE:N	0.45	2.85	2	4
3:A:92:THR:HG21	3:A:120:CYS:HB2	0.45	1.88	2	1
3:A:53:TYR:CE1	3:A:55:GLU:CB	0.45	2.99	4	1
1:B:319:DG:N2	2:C:348:DC:C2	0.45	2.84	16	2
3:A:47:ILE:HG23	3:A:117:VAL:CA	0.45	2.42	10	1
3:A:84:ILE:HG13	3:A:120:CYS:HA	0.45	1.88	11	1
3:A:134:ARG:NH2	3:A:136:GLY:HA3	0.45	2.26	13	1
3:A:108:LEU:HD12	3:A:108:LEU:N	0.45	2.27	17	1
3:A:68:ALA:CB	3:A:146:ARG:HD2	0.45	2.41	2	1
3:A:53:TYR:CZ	3:A:155:VAL:HG21	0.45	2.47	18	3
3:A:53:TYR:CE1	3:A:157:GLN:NE2	0.45	2.84	5	3
3:A:106:ILE:O	3:A:106:ILE:HG13	0.45	2.12	9	2
3:A:61:LEU:HB3	3:A:108:LEU:HD21	0.45	1.88	13	1
3:A:102:LYS:N	3:A:102:LYS:HD3	0.45	2.26	14	1
3:A:29:TYR:HB2	3:A:32:GLU:HB3	0.45	1.89	5	1
3:A:74:ARG:CD	3:A:138:THR:HG21	0.45	2.37	8	1
3:A:79:TYR:CE2	3:A:124:LEU:O	0.45	2.70	8	1
3:A:125:LYS:CE	3:A:145:THR:HG21	0.45	2.42	11	1
3:A:14:GLU:HG3	3:A:51:HIS:O	0.45	2.11	14	1
3:A:127:ARG:O	3:A:131:ILE:HB	0.45	2.12	2	1
3:A:104:LEU:HD12	3:A:104:LEU:N	0.45	2.27	4	1
3:A:83:ARG:HA	3:A:122:GLY:HA3	0.45	1.89	7	1
3:A:94:HIS:NE2	3:A:121:ALA:HB2	0.45	2.27	13	1
3:A:128:ASN:O	3:A:129:SER:C	0.45	2.55	13	1
3:A:14:GLU:HB3	3:A:51:HIS:CE1	0.45	2.47	16	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:21:PRO:HG3	3:A:46:PRO:HB3	0.45	1.89	17	1
2:C:340:DC:H2''	2:C:341:DA:O5'	0.44	2.11	14	9
3:A:39:LYS:CD	3:A:40:ALA:N	0.44	2.81	13	2
3:A:79:TYR:CA	3:A:126:LEU:HD21	0.44	2.42	5	2
2:C:344:DT:H5'	3:A:142:ARG:HD3	0.44	1.87	10	3
3:A:15:LEU:HD22	3:A:153:VAL:CG2	0.44	2.42	4	2
3:A:15:LEU:HB3	3:A:165:LEU:CD2	0.44	2.37	6	1
3:A:27:ALA:CB	3:A:123:ILE:HG12	0.44	2.40	6	1
3:A:93:SER:C	3:A:94:HIS:CG	0.44	2.90	7	1
3:A:46:PRO:HG2	3:A:118:ILE:O	0.44	2.12	11	1
3:A:53:TYR:O	3:A:54:LEU:HD23	0.44	2.12	17	1
3:A:13:TYR:CB	3:A:52:GLY:HA3	0.44	2.42	2	1
3:A:106:ILE:H	3:A:106:ILE:HD13	0.44	1.72	2	1
3:A:138:THR:O	3:A:139:ASP:CB	0.44	2.64	13	3
3:A:109:LEU:HB3	3:A:110:PRO:HD2	0.44	1.89	9	2
3:A:45:HIS:CB	3:A:118:ILE:O	0.44	2.65	6	1
3:A:147:VAL:HG22	3:A:172:ILE:CG2	0.44	2.42	7	1
3:A:59:LEU:CD2	3:A:153:VAL:HG11	0.44	2.19	11	1
2:C:340:DC:H2''	2:C:341:DA:C8	0.44	2.47	13	1
3:A:23:SER:HA	3:A:170:ASN:HB3	0.44	1.88	13	1
3:A:81:VAL:HG12	3:A:122:GLY:HA3	0.44	1.88	17	1
3:A:78:PHE:O	3:A:126:LEU:HD11	0.44	2.13	3	1
3:A:84:ILE:O	3:A:84:ILE:CG2	0.44	2.65	3	2
3:A:98:LEU:CD2	3:A:99:SER:N	0.44	2.79	13	3
3:A:15:LEU:CD1	3:A:50:LEU:HB2	0.44	2.37	8	1
3:A:46:PRO:C	3:A:47:ILE:HD13	0.44	2.33	17	2
3:A:125:LYS:CE	3:A:174:CYS:HB3	0.44	2.41	10	1
3:A:79:TYR:HE1	3:A:126:LEU:HD22	0.44	1.67	12	1
3:A:128:ASN:O	3:A:131:ILE:N	0.44	2.50	13	1
3:A:25:HIS:CD2	3:A:40:ALA:HB1	0.44	2.48	14	1
3:A:131:ILE:N	3:A:131:ILE:CD1	0.44	2.79	17	1
3:A:78:PHE:CE1	3:A:131:ILE:HD13	0.44	2.48	2	1
3:A:61:LEU:HA	3:A:153:VAL:HG13	0.44	1.90	11	1
1:B:319:DG:N2	2:C:348:DC:O2	0.44	2.51	7	12
3:A:67:THR:CG2	3:A:74:ARG:HB2	0.44	2.42	1	1
3:A:79:TYR:CD2	3:A:147:VAL:HG11	0.44	2.48	3	1
3:A:98:LEU:O	3:A:100:ASN:N	0.44	2.51	15	3
3:A:161:ARG:O	3:A:161:ARG:CD	0.44	2.65	4	1
3:A:29:TYR:HE1	3:A:127:ARG:HD2	0.44	1.70	7	1
3:A:28:ARG:HB2	3:A:34:SER:HA	0.44	1.88	9	1
3:A:151:PHE:O	3:A:167:VAL:HG23	0.44	2.11	11	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:53:TYR:CE1	3:A:57:GLU:HB3	0.44	2.48	14	1
3:A:15:LEU:CD1	3:A:50:LEU:HG	0.44	2.43	3	1
3:A:61:LEU:HD23	3:A:106:ILE:HD12	0.44	1.88	3	1
3:A:89:VAL:HG11	3:A:119:ASP:HB2	0.44	1.88	3	2
3:A:68:ALA:N	3:A:147:VAL:HA	0.44	2.27	4	1
3:A:130:ASP:O	3:A:134:ARG:CG	0.44	2.64	4	1
3:A:89:VAL:HG11	3:A:119:ASP:OD2	0.44	2.12	17	1
3:A:134:ARG:HB3	3:A:137:GLU:HB2	0.44	1.89	18	1
3:A:37:ALA:CA	3:A:122:GLY:HA2	0.44	2.42	1	2
3:A:34:SER:CB	3:A:83:ARG:HG2	0.44	2.42	4	1
3:A:63:LEU:HD12	3:A:63:LEU:C	0.44	2.33	4	1
3:A:94:HIS:N	3:A:94:HIS:CD2	0.44	2.85	4	1
3:A:81:VAL:HB	3:A:122:GLY:HA3	0.44	1.89	12	1
3:A:135:LYS:O	3:A:135:LYS:HG3	0.44	2.12	16	1
3:A:155:VAL:HG13	3:A:163:LEU:HG	0.44	1.90	7	1
1:B:315:DC:H2'	1:B:316:DG:C8	0.44	2.48	11	1
3:A:125:LYS:HG3	3:A:126:LEU:N	0.44	2.28	12	1
3:A:10:SER:CB	3:A:13:TYR:HB2	0.44	2.42	16	2
3:A:61:LEU:HG	3:A:106:ILE:HG13	0.44	1.89	14	1
3:A:123:ILE:HG23	3:A:123:ILE:O	0.44	2.12	14	1
3:A:80:GLN:HA	3:A:102:LYS:HG3	0.44	1.89	3	1
3:A:82:HIS:O	3:A:83:ARG:HB2	0.44	2.13	4	1
3:A:132:GLU:CG	3:A:139:ASP:CB	0.44	2.95	4	1
3:A:19:VAL:HB	3:A:47:ILE:HG13	0.44	1.89	10	1
3:A:59:LEU:O	3:A:108:LEU:N	0.44	2.50	10	1
3:A:25:HIS:CG	3:A:40:ALA:HB2	0.44	2.48	14	1
3:A:15:LEU:HB3	3:A:165:LEU:HG	0.43	1.89	4	2
3:A:98:LEU:CD2	3:A:101:THR:HB	0.43	2.42	4	3
3:A:15:LEU:CA	3:A:50:LEU:HD23	0.43	2.43	12	2
3:A:38:VAL:HG13	3:A:45:HIS:HB3	0.43	1.88	10	1
3:A:79:TYR:CD1	3:A:126:LEU:HD22	0.43	2.46	10	1
1:B:315:DC:C2'	1:B:316:DG:C8	0.43	3.01	11	1
1:B:318:DG:C2	1:B:319:DG:C4	0.43	3.06	13	2
2:C:349:DT:C2	2:C:350:DC:C4	0.43	3.06	17	1
3:A:147:VAL:O	3:A:172:ILE:N	0.43	2.51	16	3
3:A:128:ASN:OD1	3:A:140:ILE:HG23	0.43	2.13	10	1
3:A:67:THR:HA	3:A:147:VAL:HA	0.43	1.89	13	2
3:A:25:HIS:HA	3:A:39:LYS:CB	0.43	2.43	6	1
3:A:26:ARG:HD2	3:A:27:ALA:N	0.43	2.27	6	1
3:A:19:VAL:O	3:A:46:PRO:HA	0.43	2.14	7	4
3:A:79:TYR:CD2	3:A:123:ILE:HG13	0.43	2.49	8	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:157:GLN:HG2	3:A:158:PRO:HD2	0.43	1.90	10	1
3:A:13:TYR:CD2	3:A:163:LEU:CD2	0.43	3.02	11	1
3:A:97:ILE:HD12	3:A:97:ILE:N	0.43	2.29	14	3
3:A:15:LEU:HB2	3:A:50:LEU:HG	0.43	1.90	3	4
3:A:21:PRO:CD	3:A:46:PRO:HB3	0.43	2.43	6	1
3:A:126:LEU:N	3:A:126:LEU:CD2	0.43	2.81	7	1
3:A:129:SER:O	3:A:133:LEU:HD12	0.43	2.13	8	1
3:A:59:LEU:CD2	3:A:108:LEU:HG	0.43	2.43	9	1
3:A:28:ARG:HB2	3:A:33:GLY:O	0.43	2.14	14	1
3:A:106:ILE:HG12	3:A:106:ILE:O	0.43	2.14	2	1
3:A:128:ASN:ND2	3:A:145:THR:HG23	0.43	2.28	3	1
2:C:347:DC:OP2	3:A:32:GLU:CB	0.43	2.65	6	1
3:A:84:ILE:CG2	3:A:120:CYS:HA	0.43	2.41	12	3
2:C:340:DC:C2'	2:C:341:DA:C8	0.43	3.01	16	1
3:A:157:GLN:NE2	3:A:157:GLN:HA	0.43	2.27	17	1
3:A:25:HIS:CE1	3:A:39:LYS:HD3	0.43	2.48	4	1
3:A:88:THR:O	3:A:88:THR:HG23	0.43	2.12	6	1
3:A:79:TYR:CD2	3:A:126:LEU:HD11	0.43	2.49	13	1
1:B:317:DA:O3'	3:A:39:LYS:HE3	0.43	2.13	16	1
3:A:113:SER:O	3:A:114:MET:HG2	0.43	2.13	18	1
3:A:151:PHE:HB2	3:A:167:VAL:HB	0.43	1.91	8	1
3:A:96:ALA:N	3:A:103:VAL:O	0.43	2.51	10	1
3:A:84:ILE:HD13	3:A:84:ILE:O	0.43	2.14	11	1
3:A:76:HIS:CE1	3:A:79:TYR:H	0.43	2.31	13	1
3:A:39:LYS:O	3:A:40:ALA:CB	0.43	2.67	4	2
3:A:125:LYS:HD2	3:A:174:CYS:SG	0.43	2.54	18	2
3:A:149:LEU:CD1	3:A:169:SER:HB3	0.43	2.43	4	1
3:A:39:LYS:HE2	3:A:40:ALA:N	0.43	2.28	6	1
3:A:77:ALA:HB1	3:A:78:PHE:CE1	0.43	2.49	7	1
3:A:148:ARG:HG2	3:A:149:LEU:N	0.43	2.29	7	1
2:C:344:DT:C5'	3:A:142:ARG:HG2	0.43	2.44	15	2
3:A:22:LYS:HD2	3:A:40:ALA:HB1	0.43	1.88	18	1
3:A:135:LYS:N	3:A:135:LYS:HE3	0.43	2.28	18	1
3:A:80:GLN:HB3	3:A:102:LYS:HG3	0.43	1.89	5	1
3:A:21:PRO:HB3	3:A:40:ALA:CB	0.43	2.43	6	1
3:A:22:LYS:O	3:A:171:PRO:HB2	0.43	2.14	7	1
3:A:64:PHE:CD1	3:A:64:PHE:C	0.43	2.92	15	3
1:B:316:DG:H5''	3:A:85:THR:HB	0.43	1.90	9	1
3:A:81:VAL:HG23	3:A:124:LEU:HD12	0.43	1.91	16	1
3:A:148:ARG:HG2	3:A:171:PRO:HB3	0.43	1.90	17	1
3:A:77:ALA:CB	3:A:140:ILE:HG22	0.43	2.44	1	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:133:LEU:HD22	3:A:133:LEU:N	0.43	2.29	5	2
3:A:89:VAL:HB	3:A:119:ASP:HB3	0.43	1.91	6	1
3:A:32:GLU:O	3:A:32:GLU:HG3	0.43	2.14	7	1
2:C:341:DA:C5	2:C:342:DA:C6	0.43	3.07	16	2
2:C:344:DT:C2'	2:C:345:DT:C6	0.42	3.02	15	5
3:A:93:SER:HB2	3:A:106:ILE:CG2	0.42	2.44	2	1
3:A:47:ILE:CG2	3:A:48:VAL:N	0.42	2.82	4	1
3:A:17:ILE:CG2	3:A:20:GLN:HB3	0.42	2.43	11	1
3:A:78:PHE:HE1	3:A:131:ILE:HG23	0.42	1.72	11	1
3:A:84:ILE:HG13	3:A:119:ASP:O	0.42	2.13	11	1
3:A:61:LEU:HG	3:A:106:ILE:CG1	0.42	2.44	14	1
3:A:109:LEU:CB	3:A:112:ASN:HB2	0.42	2.44	14	1
3:A:93:SER:N	3:A:106:ILE:HG22	0.42	2.29	15	1
3:A:126:LEU:HD22	3:A:126:LEU:H	0.42	1.74	18	1
3:A:65:ILE:CG2	3:A:102:LYS:HB3	0.42	2.44	9	1
3:A:149:LEU:HD21	3:A:172:ILE:HD11	0.42	1.90	12	1
1:B:317:DA:C2	1:B:318:DG:C2	0.42	3.07	17	1
3:A:124:LEU:CD2	3:A:126:LEU:HD13	0.42	2.44	17	1
1:B:317:DA:C2	2:C:350:DC:O2	0.42	2.73	1	1
1:B:316:DG:N2	2:C:351:DG:C2	0.42	2.87	12	2
3:A:74:ARG:HD2	3:A:75:PRO:CD	0.42	2.44	9	1
3:A:85:THR:O	3:A:88:THR:HG22	0.42	2.14	1	1
1:B:320:DA:C6	1:B:321:DA:C6	0.42	3.08	4	2
3:A:68:ALA:HA	3:A:148:ARG:HG3	0.42	1.91	5	1
3:A:74:ARG:CG	3:A:75:PRO:HD2	0.42	2.44	5	1
3:A:45:HIS:HB2	3:A:118:ILE:O	0.42	2.14	8	1
3:A:13:TYR:HA	3:A:51:HIS:O	0.42	2.14	13	1
3:A:52:GLY:O	3:A:54:LEU:HG	0.42	2.15	15	1
3:A:128:ASN:HD21	3:A:145:THR:HG22	0.42	1.74	17	1
3:A:157:GLN:CB	3:A:161:ARG:O	0.42	2.68	5	1
3:A:123:ILE:CD1	3:A:172:ILE:CG2	0.42	2.97	6	1
3:A:79:TYR:CD2	3:A:124:LEU:O	0.42	2.72	8	1
3:A:15:LEU:HD12	3:A:50:LEU:CG	0.42	2.45	9	1
3:A:109:LEU:CD1	3:A:110:PRO:HD3	0.42	2.44	16	2
3:A:146:ARG:CG	3:A:173:GLU:HG2	0.42	2.44	13	1
3:A:125:LYS:HD3	3:A:174:CYS:SG	0.42	2.54	14	1
2:C:349:DT:H2''	2:C:350:DC:C6	0.42	2.49	17	2
1:B:326:DG:N1	2:C:341:DA:C2	0.42	2.88	10	1
3:A:77:ALA:HB3	3:A:126:LEU:HD21	0.42	1.92	10	1
3:A:53:TYR:CE1	3:A:155:VAL:HG23	0.42	2.49	17	1
3:A:13:TYR:HA	3:A:52:GLY:HA3	0.42	1.90	9	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:C:344:DT:H2''	2:C:345:DT:C6	0.42	2.50	3	1
3:A:74:ARG:HG2	3:A:75:PRO:HD2	0.42	1.91	4	1
3:A:79:TYR:CZ	3:A:126:LEU:CD1	0.42	3.03	7	1
2:C:344:DT:H5'	3:A:142:ARG:HG3	0.42	1.92	2	1
3:A:99:SER:O	3:A:100:ASN:HB2	0.42	2.15	4	1
3:A:32:GLU:O	3:A:32:GLU:CG	0.42	2.66	6	1
3:A:63:LEU:HG	3:A:104:LEU:HD12	0.42	1.92	6	1
1:B:319:DG:C2	1:B:320:DA:C2	0.42	3.08	17	4
3:A:61:LEU:CD2	3:A:106:ILE:CD1	0.42	2.98	9	1
3:A:45:HIS:CD2	3:A:119:ASP:HB3	0.42	2.50	11	1
3:A:126:LEU:O	3:A:128:ASN:N	0.42	2.53	14	2
3:A:94:HIS:CD2	3:A:121:ALA:HB2	0.42	2.50	13	1
3:A:45:HIS:N	3:A:46:PRO:HD3	0.42	2.30	14	1
3:A:79:TYR:CE2	3:A:123:ILE:CG1	0.42	3.02	18	1
3:A:124:LEU:CG	3:A:125:LYS:N	0.42	2.83	7	1
3:A:140:ILE:HD12	3:A:144:ASN:O	0.42	2.15	9	1
3:A:29:TYR:HB2	3:A:32:GLU:CG	0.42	2.43	15	1
3:A:131:ILE:HG13	3:A:140:ILE:HG23	0.41	1.92	1	1
1:B:319:DG:N2	1:B:320:DA:N3	0.41	2.68	4	2
3:A:18:GLU:CB	3:A:47:ILE:HB	0.41	2.45	5	2
3:A:28:ARG:HG2	3:A:35:ARG:HB2	0.41	1.91	10	1
3:A:25:HIS:NE2	3:A:37:ALA:HA	0.41	2.30	13	1
2:C:345:DT:OP2	3:A:127:ARG:HA	0.41	2.15	17	1
1:B:318:DG:OP2	3:A:26:ARG:CB	0.41	2.68	2	1
3:A:163:LEU:HD13	3:A:163:LEU:C	0.41	2.36	4	1
1:B:316:DG:N7	3:A:35:ARG:CZ	0.41	2.83	6	1
3:A:154:HIS:CD2	3:A:154:HIS:C	0.41	2.92	10	2
3:A:127:ARG:HD2	3:A:130:ASP:CG	0.41	2.36	17	1
3:A:131:ILE:HG21	3:A:140:ILE:CD1	0.41	2.44	17	1
3:A:127:ARG:C	3:A:131:ILE:HD12	0.41	2.35	4	1
3:A:89:VAL:HG21	3:A:119:ASP:O	0.41	2.15	10	1
3:A:29:TYR:CE2	3:A:125:LYS:HG2	0.41	2.50	12	1
3:A:81:VAL:HG21	3:A:123:ILE:N	0.41	2.30	12	1
3:A:123:ILE:HD11	3:A:172:ILE:HG23	0.41	1.90	13	1
3:A:131:ILE:HG21	3:A:140:ILE:HB	0.41	1.92	14	1
3:A:134:ARG:HG2	3:A:135:LYS:N	0.41	2.30	17	1
3:A:79:TYR:CD1	3:A:126:LEU:CD2	0.41	2.97	18	1
3:A:25:HIS:NE2	3:A:123:ILE:CG2	0.41	2.77	3	1
3:A:155:VAL:CG1	3:A:163:LEU:O	0.41	2.68	4	1
1:B:317:DA:OP1	3:A:38:VAL:HG12	0.41	2.15	6	1
3:A:138:THR:O	3:A:139:ASP:HB3	0.41	2.15	6	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:74:ARG:HB3	3:A:75:PRO:CD	0.41	2.44	8	1
1:B:323:DA:N6	2:C:342:DA:N6	0.41	2.68	16	1
3:A:124:LEU:O	3:A:124:LEU:HD23	0.41	2.15	17	1
3:A:127:ARG:HD2	3:A:130:ASP:CB	0.41	2.45	17	1
3:A:80:GLN:CB	3:A:102:LYS:HG3	0.41	2.45	5	1
3:A:107:PRO:O	3:A:108:LEU:HD22	0.41	2.15	5	1
3:A:101:THR:HG22	3:A:102:LYS:N	0.41	2.31	8	1
3:A:79:TYR:CD1	3:A:126:LEU:HD13	0.41	2.50	12	1
3:A:68:ALA:HB2	3:A:147:VAL:O	0.41	2.16	14	1
3:A:78:PHE:H	3:A:126:LEU:HD11	0.41	1.76	16	1
3:A:38:VAL:HG22	3:A:38:VAL:O	0.41	2.15	18	1
3:A:61:LEU:O	3:A:106:ILE:HD13	0.41	2.15	2	1
3:A:75:PRO:O	3:A:76:HIS:C	0.41	2.59	3	2
3:A:39:LYS:C	3:A:39:LYS:HD2	0.41	2.36	5	1
2:C:342:DA:H2''	2:C:343:DT:C6	0.41	2.50	10	1
3:A:53:TYR:HB3	3:A:114:MET:CE	0.41	2.45	12	1
3:A:65:ILE:HG12	3:A:149:LEU:HA	0.41	1.92	13	1
1:B:317:DA:H5''	3:A:39:LYS:HD3	0.41	1.93	15	1
3:A:21:PRO:HA	3:A:40:ALA:HB1	0.41	1.93	16	1
3:A:109:LEU:HD22	3:A:112:ASN:CG	0.41	2.36	11	1
3:A:75:PRO:HG2	3:A:139:ASP:HB3	0.41	1.92	15	1
3:A:27:ALA:HA	3:A:123:ILE:O	0.41	2.15	1	1
3:A:103:VAL:C	3:A:104:LEU:HD22	0.41	2.36	3	1
3:A:63:LEU:CD1	3:A:104:LEU:HD12	0.41	2.38	7	1
3:A:84:ILE:C	3:A:84:ILE:CD1	0.41	2.87	11	1
3:A:74:ARG:HD3	3:A:75:PRO:HD3	0.41	1.93	1	1
3:A:37:ALA:HB2	3:A:123:ILE:HB	0.41	1.92	2	1
3:A:84:ILE:HG21	3:A:121:ALA:C	0.41	2.37	2	1
3:A:131:ILE:CG2	3:A:131:ILE:O	0.41	2.69	2	1
3:A:163:LEU:HD22	3:A:163:LEU:HA	0.41	1.79	3	1
3:A:25:HIS:HB3	3:A:123:ILE:HD13	0.41	1.92	6	1
3:A:77:ALA:HB1	3:A:78:PHE:CD1	0.41	2.51	6	1
3:A:100:ASN:ND2	3:A:137:GLU:HG2	0.41	2.31	6	1
2:C:345:DT:H2'	3:A:29:TYR:CE2	0.41	2.51	7	1
3:A:172:ILE:O	3:A:172:ILE:HG22	0.41	2.15	7	1
3:A:14:GLU:HG2	3:A:51:HIS:O	0.41	2.15	9	1
3:A:59:LEU:HB3	3:A:108:LEU:HG	0.41	1.91	9	1
3:A:124:LEU:CD2	3:A:125:LYS:O	0.41	2.68	9	1
3:A:25:HIS:HB3	3:A:123:ILE:CD1	0.41	2.46	10	1
2:C:348:DC:H2''	2:C:349:DT:C5'	0.41	2.46	13	1
3:A:59:LEU:O	3:A:107:PRO:HA	0.41	2.16	13	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
3:A:106:ILE:N	3:A:106:ILE:CD1	0.41	2.80	13	1
3:A:25:HIS:CG	3:A:40:ALA:CB	0.41	3.03	14	1
1:B:317:DA:H4'	3:A:39:LYS:HE3	0.41	1.93	16	1
3:A:127:ARG:O	3:A:131:ILE:HG12	0.41	2.15	16	2
3:A:156:PRO:HB3	3:A:161:ARG:HG2	0.41	1.91	17	1
3:A:94:HIS:HB2	3:A:105:GLU:O	0.41	2.14	18	1
1:B:320:DA:C2	1:B:321:DA:C5	0.41	3.09	13	1
3:A:109:LEU:CG	3:A:110:PRO:HD2	0.41	2.45	15	1
3:A:125:LYS:HE2	3:A:145:THR:HG22	0.40	1.92	2	1
3:A:160:GLY:C	3:A:161:ARG:HG3	0.40	2.36	4	1
3:A:169:SER:CB	3:A:171:PRO:HD3	0.40	2.47	7	1
3:A:79:TYR:CE2	3:A:123:ILE:HG13	0.40	2.50	8	1
3:A:85:THR:HG23	3:A:85:THR:O	0.40	2.17	14	1
3:A:125:LYS:HG2	3:A:174:CYS:SG	0.40	2.55	14	1
3:A:134:ARG:CZ	3:A:135:LYS:HB2	0.40	2.46	17	1
3:A:35:ARG:C	3:A:84:ILE:HG21	0.40	2.37	18	1
2:C:347:DC:H2''	2:C:348:DC:C6	0.40	2.52	1	1
3:A:74:ARG:CD	3:A:75:PRO:HD2	0.40	2.47	1	2
2:C:340:DC:C4	2:C:341:DA:N6	0.40	2.89	16	1
1:B:318:DG:OP1	3:A:39:LYS:HE2	0.40	2.16	17	1
3:A:163:LEU:C	3:A:163:LEU:CD1	0.40	2.90	18	1
2:C:348:DC:H2'	2:C:349:DT:H71	0.40	1.93	4	2
3:A:80:GLN:HB2	3:A:102:LYS:HE3	0.40	1.93	5	1
3:A:131:ILE:O	3:A:134:ARG:CG	0.40	2.69	5	1
1:B:316:DG:C8	3:A:35:ARG:HD3	0.40	2.51	6	1
3:A:72:LEU:HD23	3:A:72:LEU:HA	0.40	1.68	7	1
3:A:59:LEU:HD22	3:A:108:LEU:HD11	0.40	1.93	9	1
3:A:140:ILE:O	3:A:140:ILE:CG1	0.40	2.69	10	1
3:A:93:SER:HB2	3:A:107:PRO:HD2	0.40	1.93	12	1
3:A:93:SER:CA	3:A:106:ILE:HG21	0.40	2.45	13	1
2:C:345:DT:H3'	3:A:29:TYR:CZ	0.40	2.51	14	1
3:A:51:HIS:CD2	3:A:51:HIS:C	0.40	2.95	14	1
3:A:84:ILE:O	3:A:84:ILE:HG23	0.40	2.16	5	1
3:A:28:ARG:HG2	3:A:32:GLU:CD	0.40	2.37	6	1
3:A:61:LEU:CB	3:A:108:LEU:HD12	0.40	2.47	7	1
3:A:113:SER:O	3:A:114:MET:C	0.40	2.59	7	1
3:A:156:PRO:HA	3:A:162:THR:HG23	0.40	1.93	16	1
1:B:316:DG:OP1	3:A:84:ILE:HD11	0.40	2.15	3	1
3:A:125:LYS:C	3:A:126:LEU:CD2	0.40	2.88	7	1
3:A:65:ILE:CG2	3:A:76:HIS:HB2	0.40	2.47	10	1
3:A:23:SER:HA	3:A:170:ASN:CB	0.40	2.46	17	1

6.3 Torsion angles [i](#)

6.3.1 Protein backbone [i](#)

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	A	164/178 (92%)	114±5 (70±3%)	37±5 (22±3%)	13±3 (8±2%)	2	14
All	All	2952/3204 (92%)	2054 (70%)	659 (22%)	239 (8%)	2	14

All 49 unique Ramachandran outliers are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
3	A	99	SER	18
3	A	110	PRO	18
3	A	77	ALA	16
3	A	18	GLU	15
3	A	52	GLY	14
3	A	160	GLY	12
3	A	67	THR	10
3	A	88	THR	10
3	A	84	ILE	8
3	A	140	ILE	8
3	A	159	SER	8
3	A	139	ASP	8
3	A	127	ARG	7
3	A	141	GLY	7
3	A	134	ARG	6
3	A	33	GLY	6
3	A	135	LYS	4
3	A	38	VAL	4
3	A	45	HIS	4
3	A	34	SER	3
3	A	53	TYR	3
3	A	85	THR	3
3	A	136	GLY	3
3	A	161	ARG	3
3	A	76	HIS	3
3	A	82	HIS	3
3	A	86	GLY	3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
3	A	81	VAL	3
3	A	36	GLY	2
3	A	40	ALA	2
3	A	35	ARG	2
3	A	138	THR	2
3	A	94	HIS	2
3	A	11	GLY	2
3	A	91	THR	2
3	A	92	THR	2
3	A	89	VAL	1
3	A	21	PRO	1
3	A	83	ARG	1
3	A	142	ARG	1
3	A	95	GLU	1
3	A	71	ARG	1
3	A	14	GLU	1
3	A	157	GLN	1
3	A	19	VAL	1
3	A	26	ARG	1
3	A	172	ILE	1
3	A	175	SER	1
3	A	37	ALA	1

6.3.2 Protein sidechains [i](#)

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	A	145/156 (93%)	101±7 (70±5%)	44±7 (30±5%)	1 16
All	All	2610/2808 (93%)	1822 (70%)	788 (30%)	1 16

All 113 unique residues with a non-rotameric sidechain are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
3	A	65	ILE	18
3	A	15	LEU	16
3	A	161	ARG	16

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
3	A	62	GLN	15
3	A	83	ARG	15
3	A	67	THR	15
3	A	78	PHE	14
3	A	84	ILE	14
3	A	135	LYS	14
3	A	157	GLN	14
3	A	39	LYS	13
3	A	124	LEU	13
3	A	126	LEU	13
3	A	137	GLU	13
3	A	16	ARG	13
3	A	102	LYS	13
3	A	25	HIS	12
3	A	130	ASP	12
3	A	31	THR	11
3	A	94	HIS	11
3	A	125	LYS	11
3	A	134	ARG	11
3	A	142	ARG	11
3	A	143	LYS	11
3	A	56	ASN	11
3	A	80	GLN	10
3	A	139	ASP	10
3	A	71	ARG	10
3	A	109	LEU	10
3	A	145	THR	9
3	A	159	SER	9
3	A	176	GLN	9
3	A	10	SER	9
3	A	74	ARG	9
3	A	60	MET	9
3	A	152	ARG	9
3	A	177	ARG	9
3	A	45	HIS	9
3	A	17	ILE	8
3	A	69	ASP	8
3	A	163	LEU	8
3	A	169	SER	8
3	A	173	GLU	8
3	A	138	THR	8
3	A	14	GLU	8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
3	A	85	THR	7
3	A	114	MET	7
3	A	146	ARG	7
3	A	93	SER	7
3	A	106	ILE	7
3	A	119	ASP	7
3	A	154	HIS	7
3	A	165	LEU	7
3	A	59	LEU	7
3	A	90	SER	7
3	A	148	ARG	7
3	A	35	ARG	7
3	A	70	ASP	7
3	A	82	HIS	7
3	A	87	LYS	7
3	A	22	LYS	7
3	A	155	VAL	7
3	A	95	GLU	6
3	A	133	LEU	6
3	A	120	CYS	6
3	A	140	ILE	6
3	A	79	TYR	6
3	A	111	GLU	6
3	A	105	GLU	6
3	A	123	ILE	5
3	A	51	HIS	5
3	A	166	GLN	5
3	A	175	SER	5
3	A	23	SER	4
3	A	113	SER	4
3	A	115	ARG	4
3	A	127	ARG	4
3	A	29	TYR	4
3	A	103	VAL	4
3	A	28	ARG	4
3	A	76	HIS	4
3	A	73	LEU	4
3	A	49	GLN	4
3	A	55	GLU	4
3	A	30	GLU	3
3	A	63	LEU	3
3	A	99	SER	3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
3	A	100	ASN	3
3	A	162	THR	3
3	A	50	LEU	3
3	A	53	TYR	3
3	A	18	GLU	3
3	A	108	LEU	3
3	A	34	SER	3
3	A	20	GLN	3
3	A	54	LEU	2
3	A	104	LEU	2
3	A	91	THR	2
3	A	170	ASN	2
3	A	174	CYS	2
3	A	32	GLU	1
3	A	64	PHE	1
3	A	147	VAL	1
3	A	149	LEU	1
3	A	13	TYR	1
3	A	164	SER	1
3	A	92	THR	1
3	A	144	ASN	1
3	A	57	GLU	1
3	A	38	VAL	1
3	A	112	ASN	1
3	A	26	ARG	1
3	A	129	SER	1

6.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

6.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.6 Ligand geometry [i](#)

There are no ligands in this entry.

6.7 Other polymers [i](#)

There are no such molecules in this entry.

6.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

7 Chemical shift validation

No chemical shift data were provided