



Full wwPDB NMR Structure Validation Report ⓘ

Apr 21, 2024 – 02:39 PM EDT

PDB ID : 2KZT
Title : Structure of the Tandem MA-3 Region of Pdcd4
Authors : Waters, L.C.; Strong, S.L.; Oka, O.; Muskett, F.W.; Veverka, V.; Banerjee, S.; Schmedt, T.; Henry, A.J.; Klempnauer, K.H.; Carr, M.D.
Deposited on : 2010-06-24

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 types of validation reports are described at

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

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

MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
wwPDB-RCI : v_1n_11_5_13_A (Berjanski et al., 2005)
PANAV : Wang et al. (2010)
wwPDB-ShiftChecker : v1.2
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.36.2

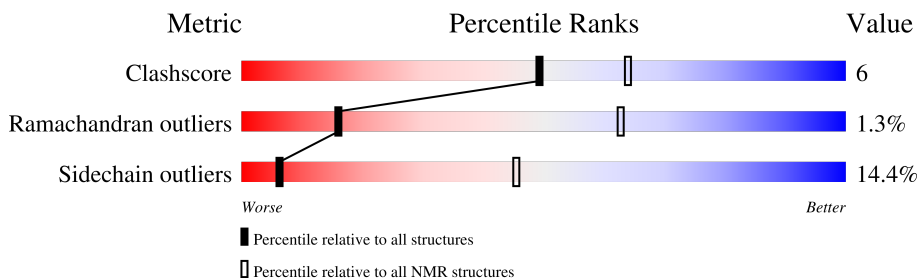
1 Overall quality at a glance

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	A	163	 76% 16% 8%
2	B	131	 76% 15% 8%

2 Ensemble composition and analysis i

This entry contains 73 models. Model 3 is the overall representative, medoid model (most similar to other models). The authors have identified model 1 as representative, based on the following criterion: *lowest haddock score*.

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:156-A:305, B:330-B:449 (270)	0.81	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 4 clusters and 2 single-model clusters were found.

Cluster number	Models
1	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 22, 24, 26, 27, 29, 32, 33, 34, 37, 38, 39, 40, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 57, 60, 61, 62, 63, 64, 65, 67, 68, 70, 71, 73
2	15, 20, 21, 23, 25, 28, 30, 31, 41, 42, 58, 66, 69, 72
3	4, 35
4	56, 59
Single-model clusters	19; 36

3 Entry composition [i](#)

There are 2 unique types of molecules in this entry. The entry contains 2792 atoms, of which 501 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Programmed cell death protein 4.

Mol	Chain	Residues	Atoms					Trace	
			Total	C	H	N	O		S
1	A	163	1511	772	278	208	245	8	0

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	156	GLY	-	expression tag	UNP Q53EL6

- Molecule 2 is a protein called Programmed cell death protein 4.

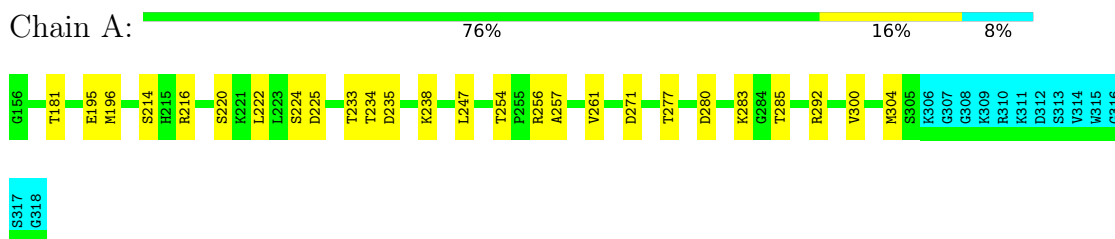
Mol	Chain	Residues	Atoms					Trace	
			Total	C	H	N	O		S
2	B	131	1281	676	223	172	203	7	0

4 Residue-property plots [i](#)

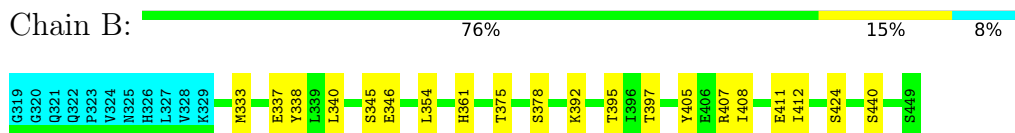
4.1 Average score per residue in the NMR ensemble

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: Programmed cell death protein 4



- Molecule 2: Programmed cell death protein 4

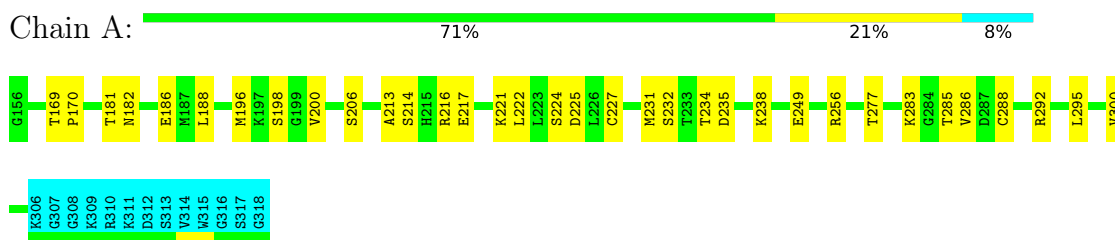


4.2 Scores per residue for each member of the ensemble

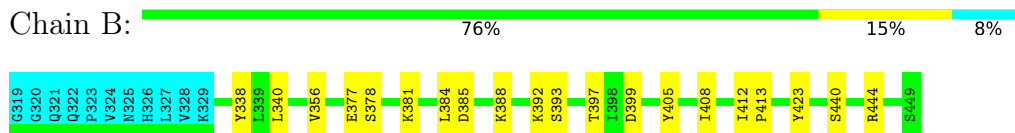
Colouring as in section 4.1 above.

4.2.1 Score per residue for model 1

- Molecule 1: Programmed cell death protein 4

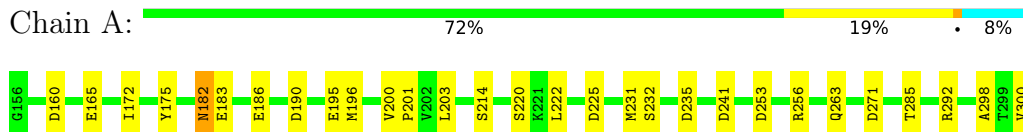


- Molecule 2: Programmed cell death protein 4

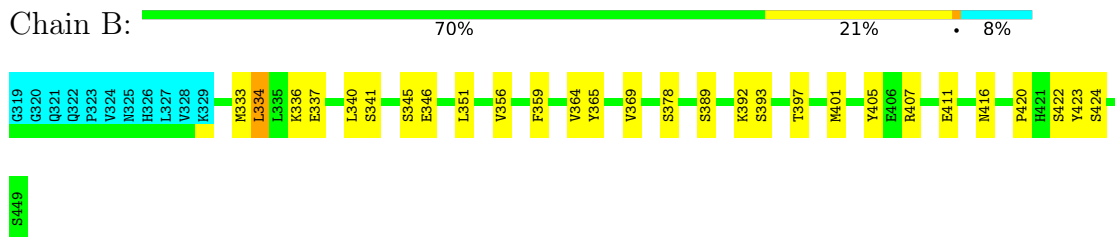


4.2.2 Score per residue for model 2

- Molecule 1: Programmed cell death protein 4

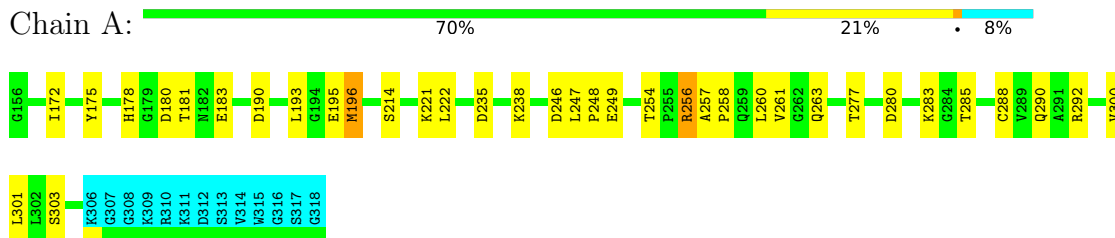


- Molecule 2: Programmed cell death protein 4

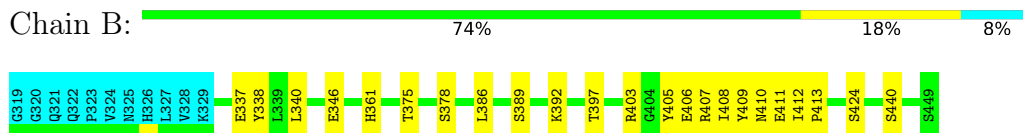


4.2.3 Score per residue for model 3 (medoid)

- Molecule 1: Programmed cell death protein 4

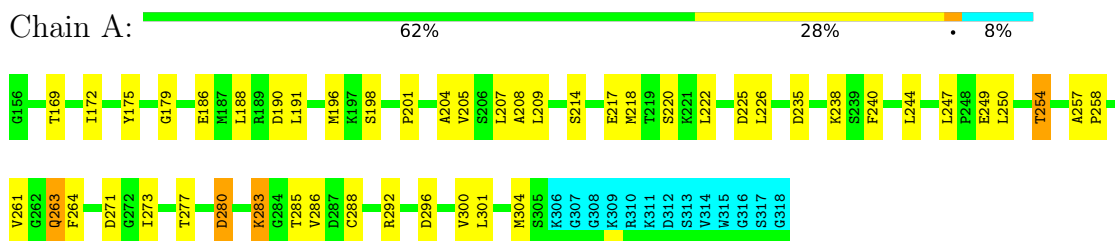


- Molecule 2: Programmed cell death protein 4

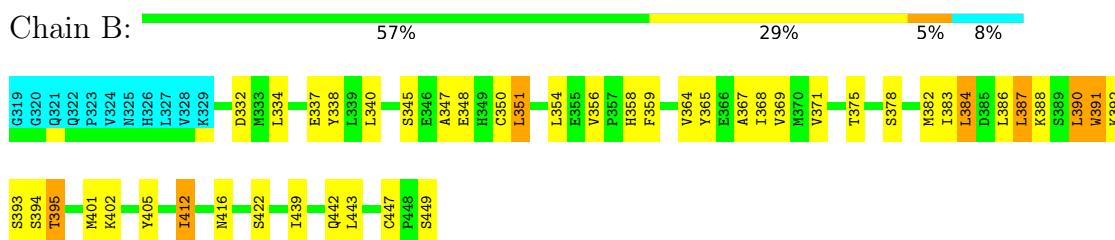


4.2.4 Score per residue for model 4

- Molecule 1: Programmed cell death protein 4

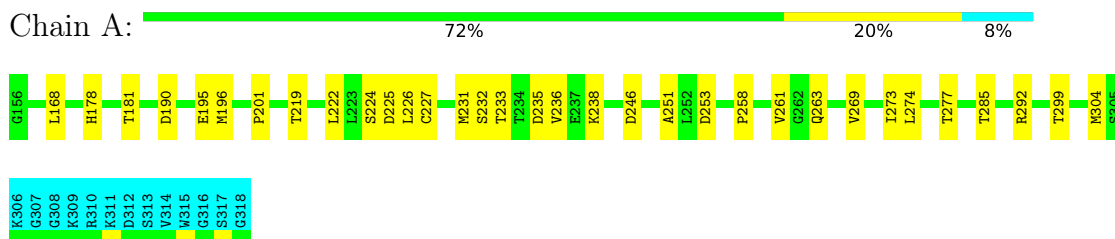


- Molecule 2: Programmed cell death protein 4

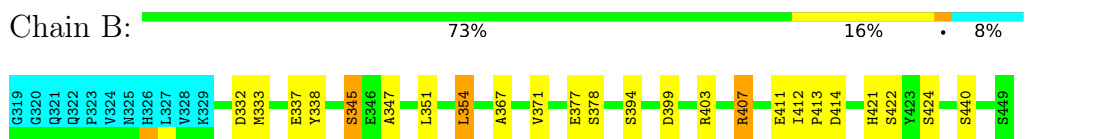


4.2.5 Score per residue for model 5

- Molecule 1: Programmed cell death protein 4



- Molecule 2: Programmed cell death protein 4



4.2.6 Score per residue for model 6

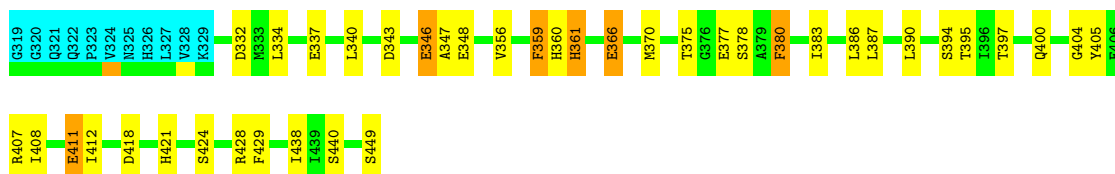
- Molecule 1: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

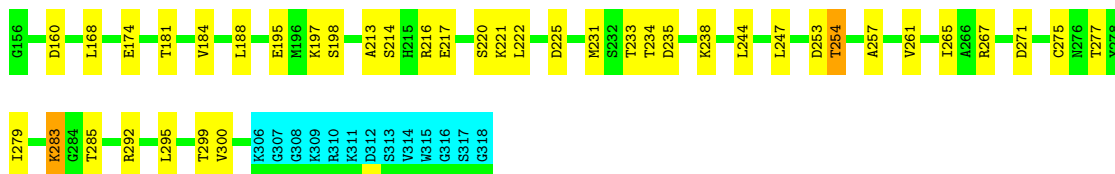
Chain B: 61% 26% 5% 8%



4.2.7 Score per residue for model 7

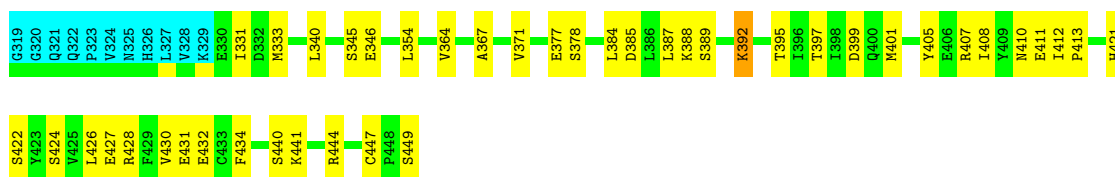
- Molecule 1: Programmed cell death protein 4

Chain A: 67% 23% 8%



- Molecule 2: Programmed cell death protein 4

Chain B: 59% 32% 8%



4.2.8 Score per residue for model 8

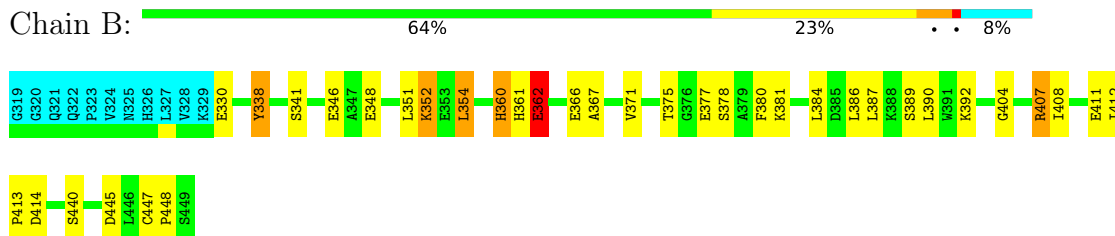
- Molecule 1: Programmed cell death protein 4

Chain A: 61% 29% 8%



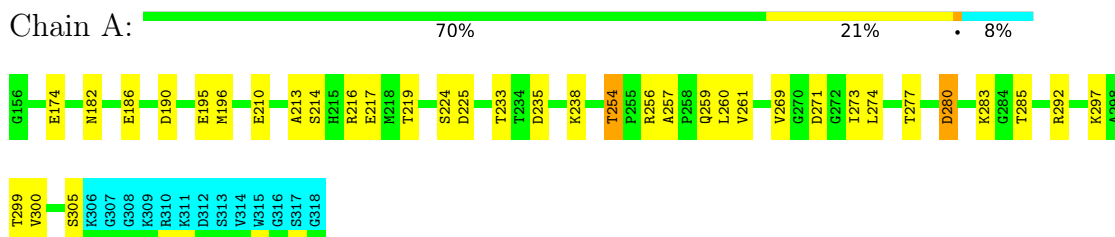


- Molecule 2: Programmed cell death protein 4

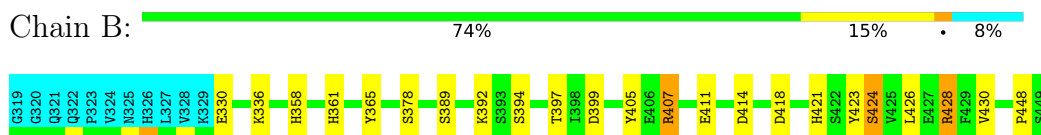


4.2.9 Score per residue for model 9

- Molecule 1: Programmed cell death protein 4

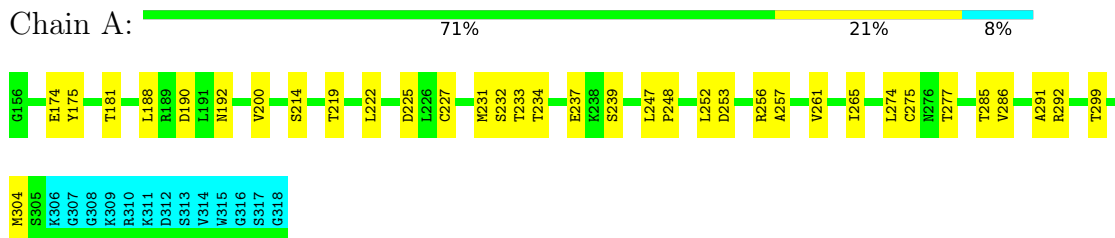


- Molecule 2: Programmed cell death protein 4



4.2.10 Score per residue for model 10

- Molecule 1: Programmed cell death protein 4



- Molecule 2: Programmed cell death protein 4

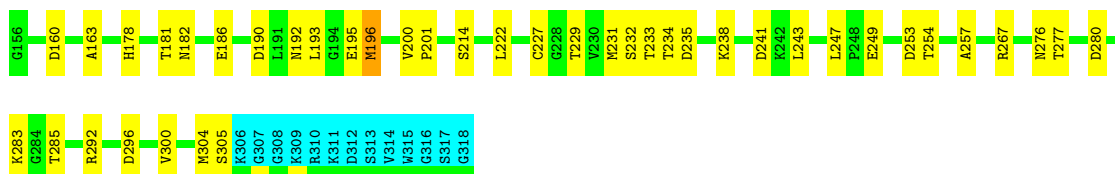




4.2.11 Score per residue for model 11

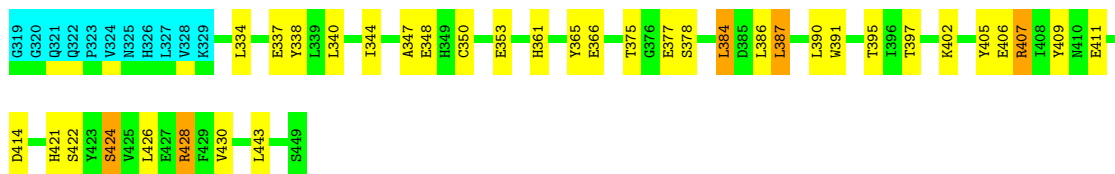
- Molecule 1: Programmed cell death protein 4

Chain A: 67% 25% 8%



- Molecule 2: Programmed cell death protein 4

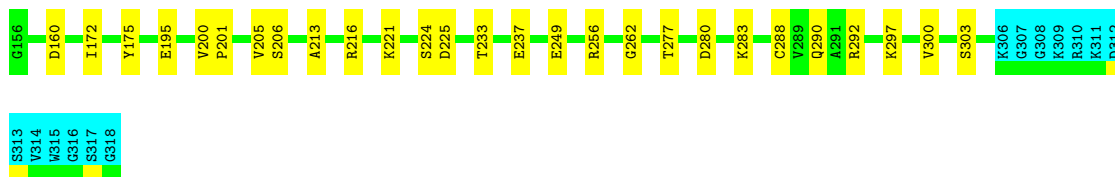
Chain B: 64% 24% 8%



4.2.12 Score per residue for model 12

- Molecule 1: Programmed cell death protein 4

Chain A: 75% 17% 8%



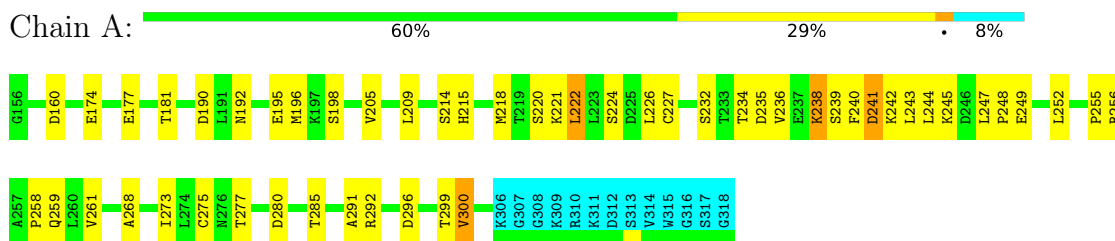
- Molecule 2: Programmed cell death protein 4

Chain B: 73% 18% 8%

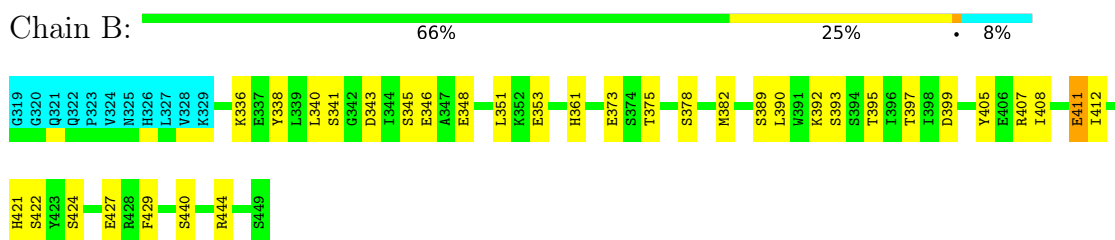


4.2.13 Score per residue for model 13

- Molecule 1: Programmed cell death protein 4

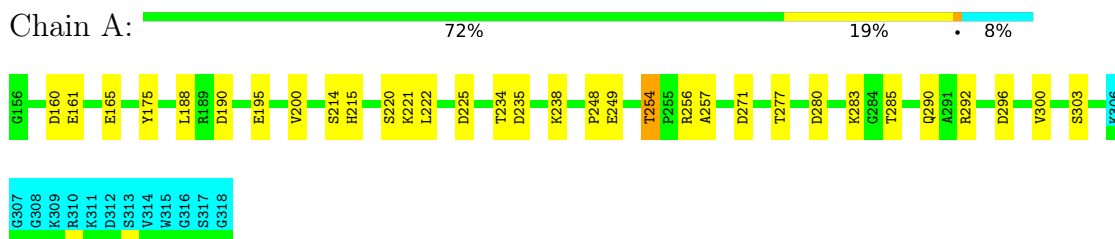


- Molecule 2: Programmed cell death protein 4

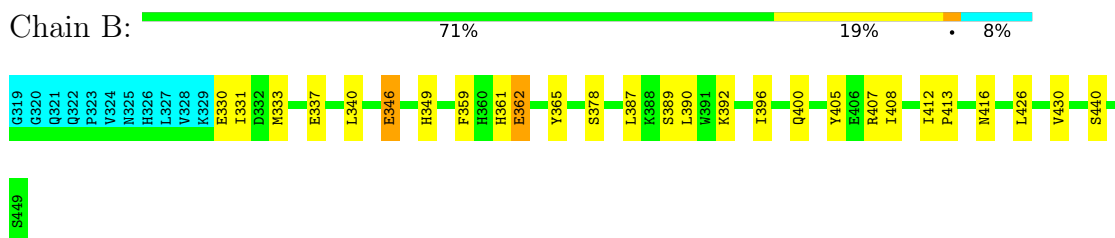


4.2.14 Score per residue for model 14

- Molecule 1: Programmed cell death protein 4

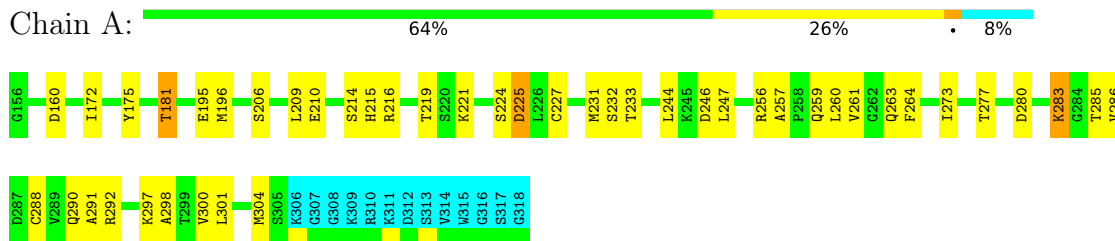


- Molecule 2: Programmed cell death protein 4

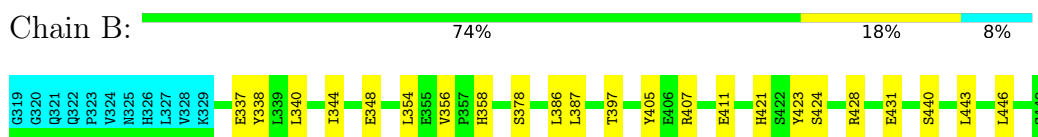


4.2.15 Score per residue for model 15

- Molecule 1: Programmed cell death protein 4

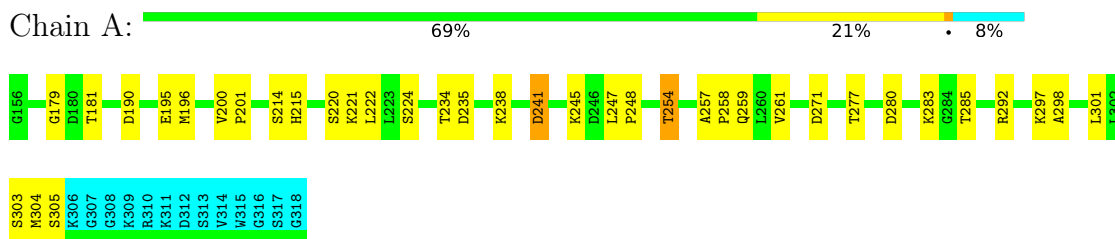


- Molecule 2: Programmed cell death protein 4

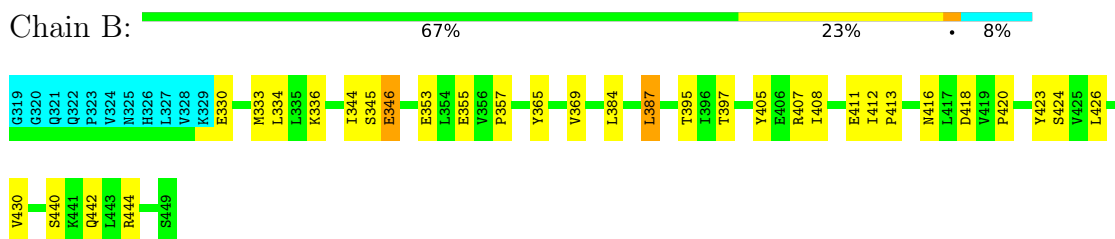


4.2.16 Score per residue for model 16

- Molecule 1: Programmed cell death protein 4

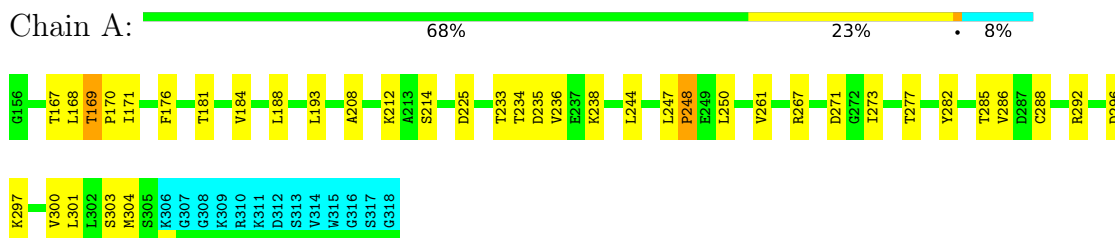


- Molecule 2: Programmed cell death protein 4

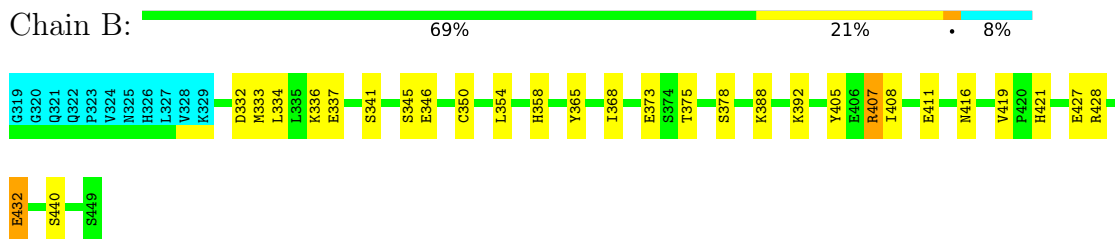


4.2.17 Score per residue for model 17

- Molecule 1: Programmed cell death protein 4

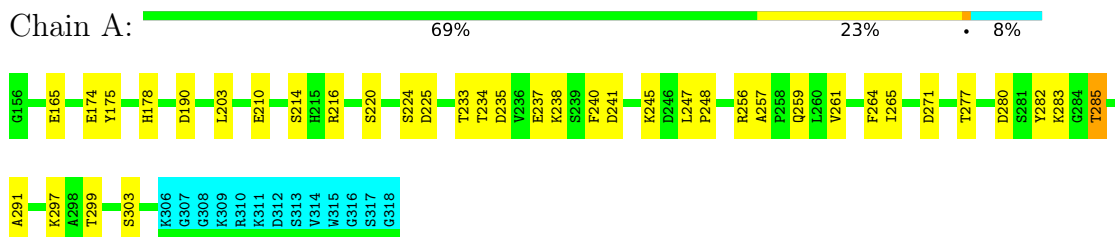


- Molecule 2: Programmed cell death protein 4

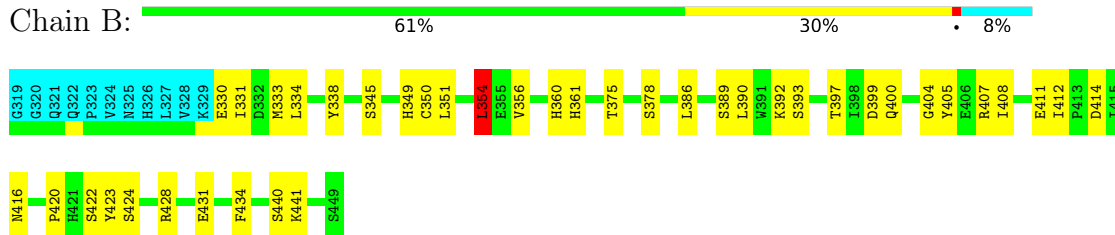


4.2.18 Score per residue for model 18

- Molecule 1: Programmed cell death protein 4

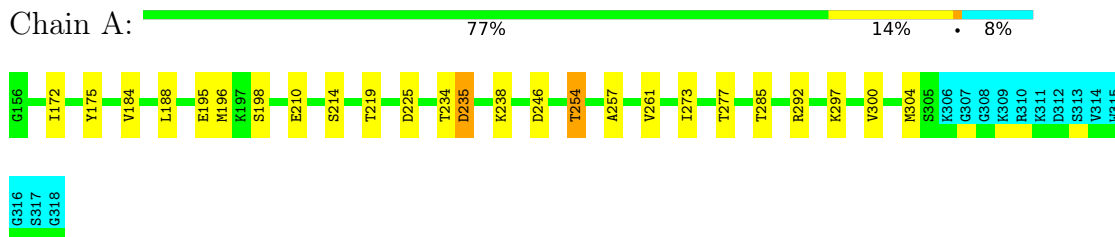


- Molecule 2: Programmed cell death protein 4



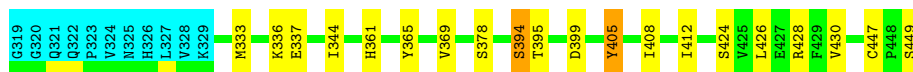
4.2.19 Score per residue for model 19

- Molecule 1: Programmed cell death protein 4



- Molecule 2: Programmed cell death protein 4

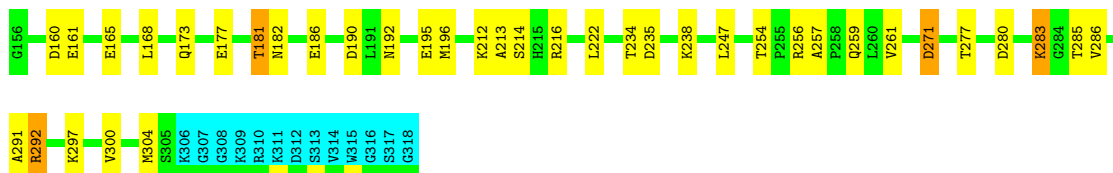




4.2.20 Score per residue for model 20

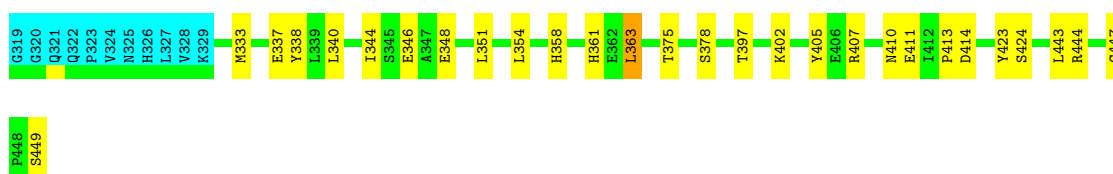
- Molecule 1: Programmed cell death protein 4

Chain A: 69% 21% 8%



- Molecule 2: Programmed cell death protein 4

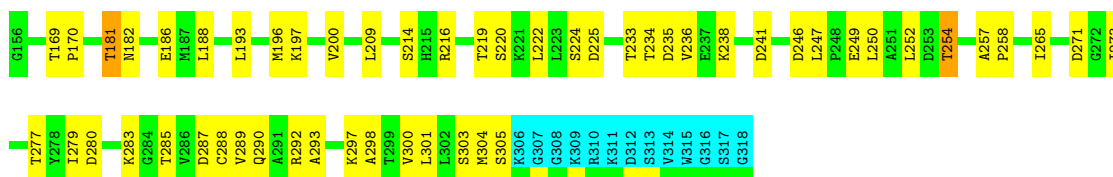
Chain B: 70% 21% 8%



4.2.21 Score per residue for model 21

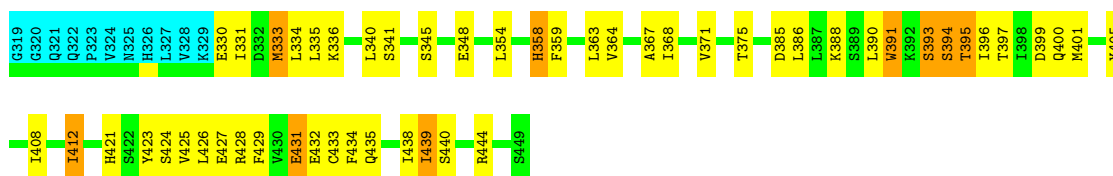
- Molecule 1: Programmed cell death protein 4

Chain A: 60% 31% 8%



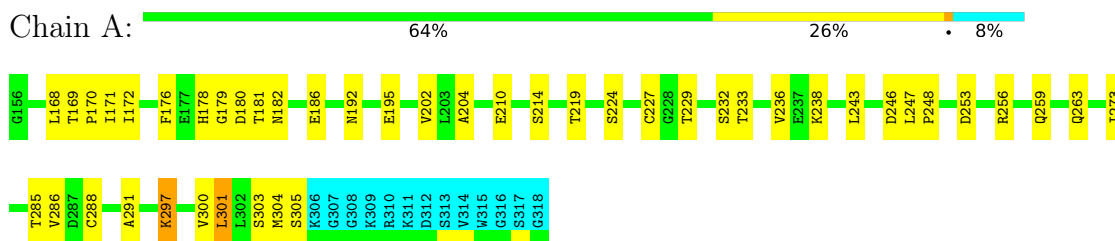
- Molecule 2: Programmed cell death protein 4

Chain B: 52% 33% 7% 8%

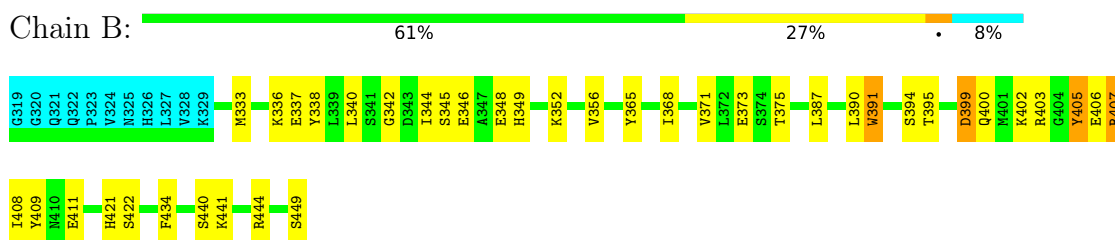


4.2.22 Score per residue for model 22

- Molecule 1: Programmed cell death protein 4

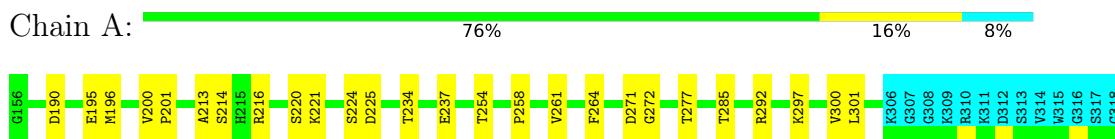


- Molecule 2: Programmed cell death protein 4

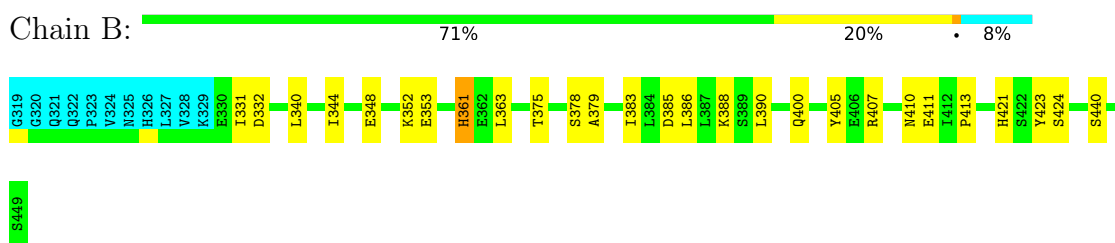


4.2.23 Score per residue for model 23

- Molecule 1: Programmed cell death protein 4



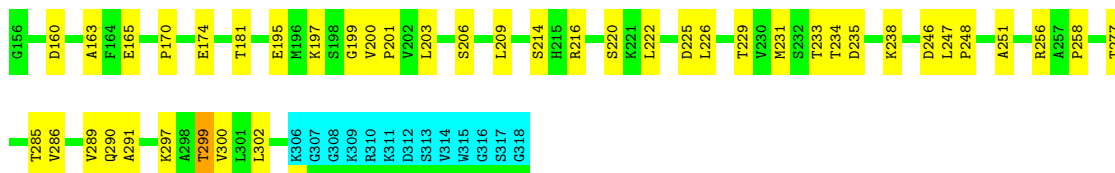
- Molecule 2: Programmed cell death protein 4



4.2.24 Score per residue for model 24

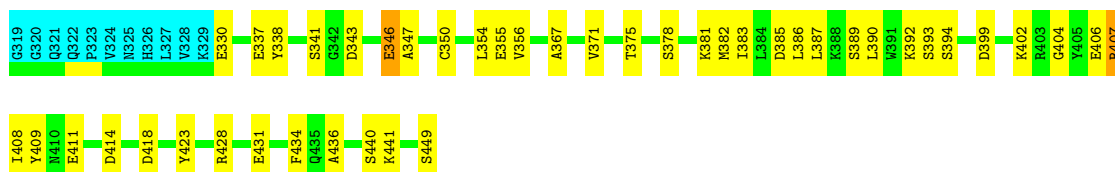
- Molecule 1: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

Chain B: 58% 32% 8%



4.2.25 Score per residue for model 25

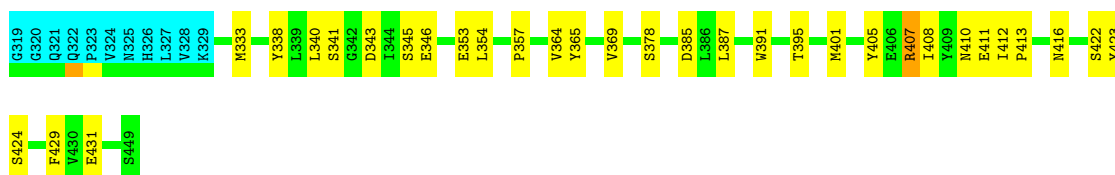
- Molecule 1: Programmed cell death protein 4

Chain A: 61% 29% 8%



- Molecule 2: Programmed cell death protein 4

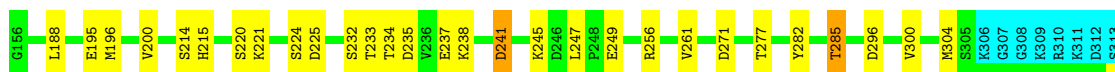
Chain B: 67% 24% 8%



4.2.26 Score per residue for model 26

- Molecule 1: Programmed cell death protein 4

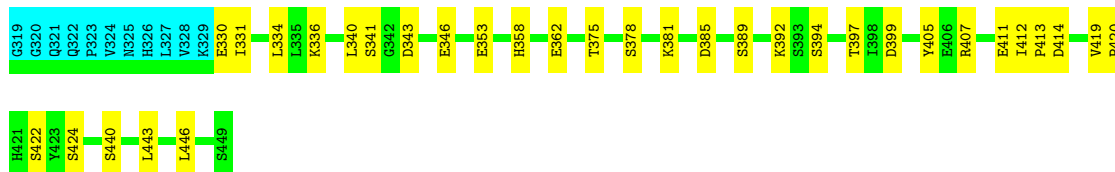
Chain A: 74% 17% 8%



W314
W315
G316
S317
G318

- Molecule 2: Programmed cell death protein 4

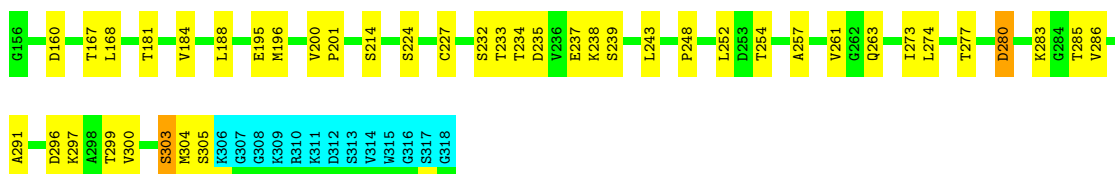
Chain B:



4.2.27 Score per residue for model 27

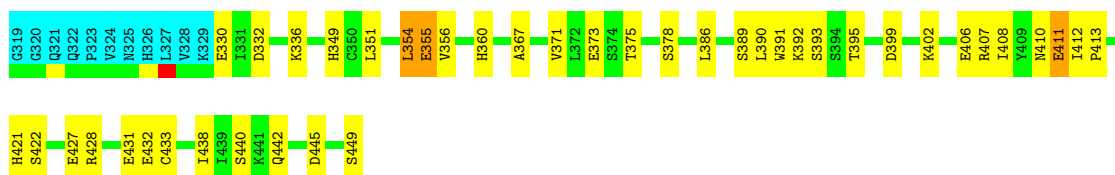
- Molecule 1: Programmed cell death protein 4

Chain A:



- Molecule 2: Programmed cell death protein 4

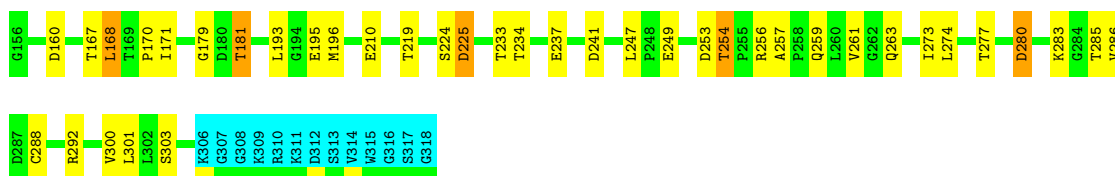
Chain B:



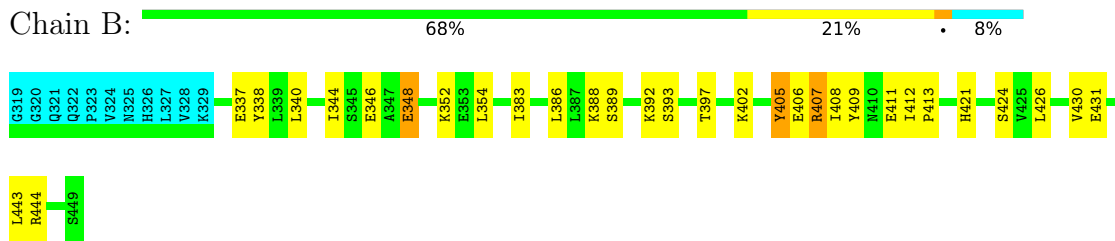
4.2.28 Score per residue for model 28

- Molecule 1: Programmed cell death protein 4

Chain A:

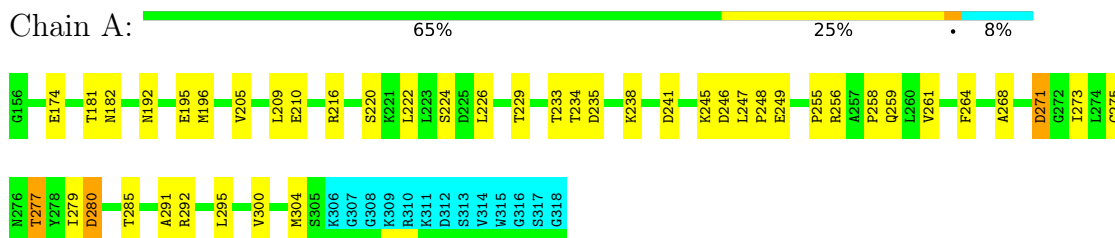


- Molecule 2: Programmed cell death protein 4

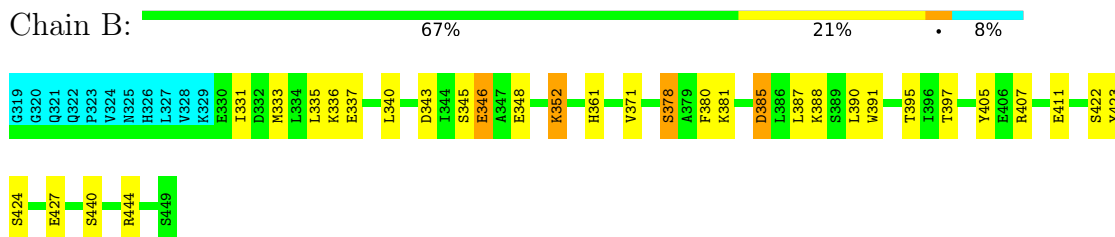


4.2.29 Score per residue for model 29

- Molecule 1: Programmed cell death protein 4

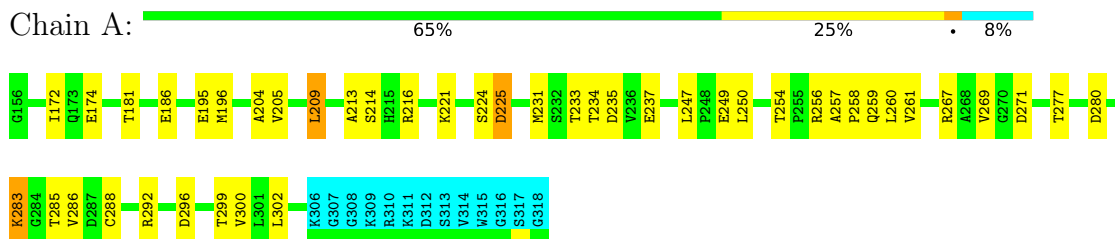


- Molecule 2: Programmed cell death protein 4



4.2.30 Score per residue for model 30

- Molecule 1: Programmed cell death protein 4



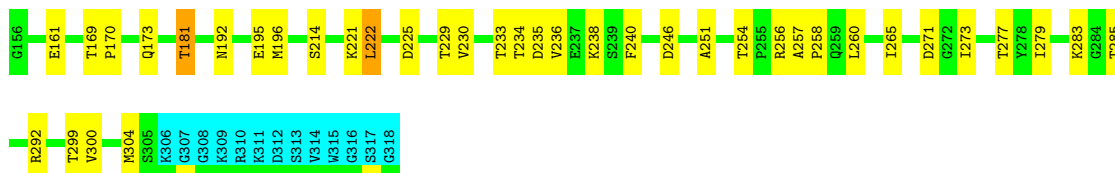
- Molecule 2: Programmed cell death protein 4



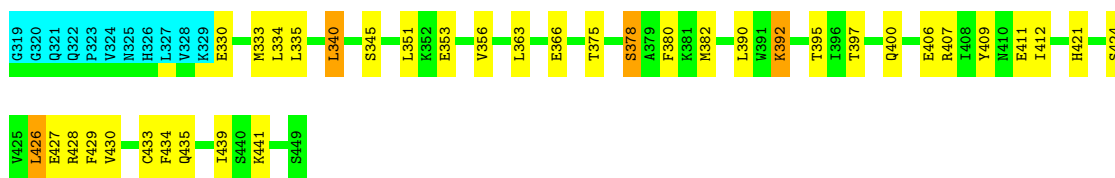


4.2.31 Score per residue for model 31

- Molecule 1: Programmed cell death protein 4

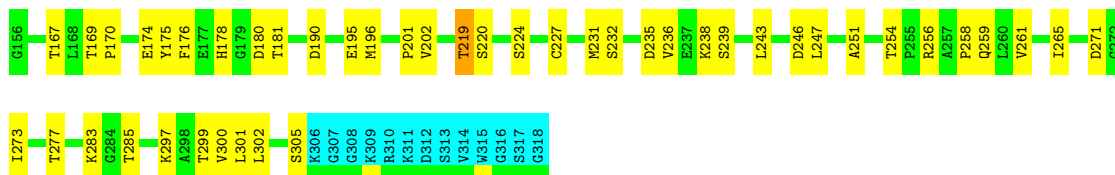


- Molecule 2: Programmed cell death protein 4

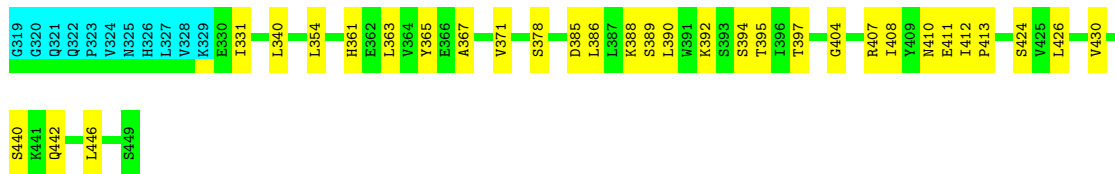


4.2.32 Score per residue for model 32

- Molecule 1: Programmed cell death protein 4

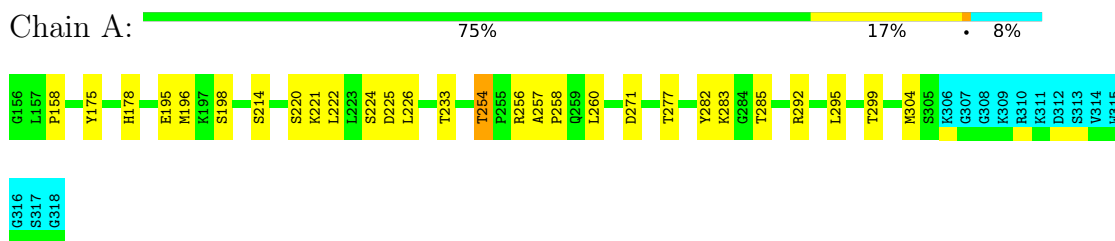


- Molecule 2: Programmed cell death protein 4

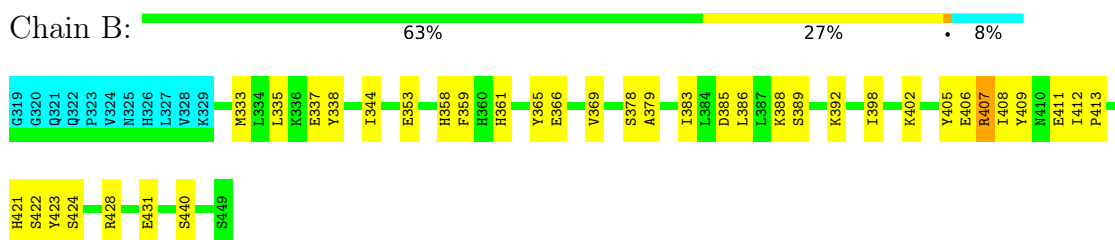


4.2.33 Score per residue for model 33

- Molecule 1: Programmed cell death protein 4

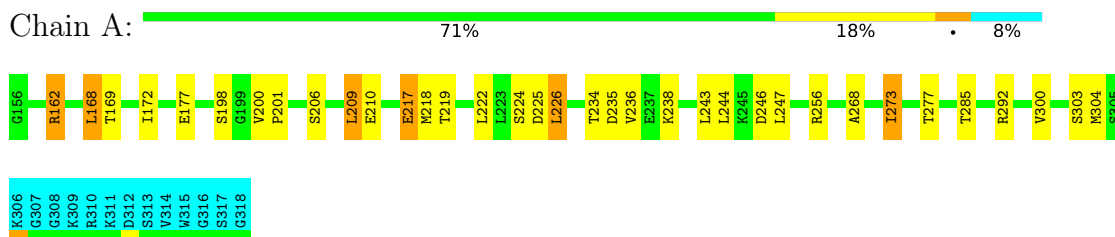


- Molecule 2: Programmed cell death protein 4

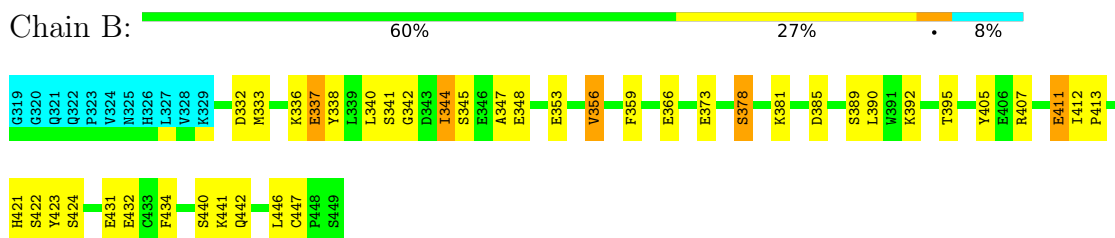


4.2.34 Score per residue for model 34

- Molecule 1: Programmed cell death protein 4

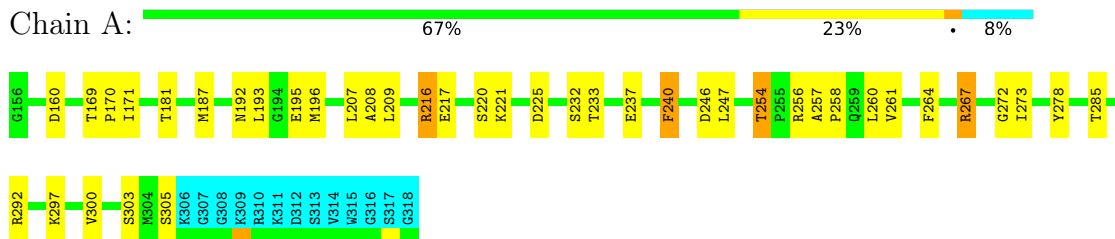


- Molecule 2: Programmed cell death protein 4

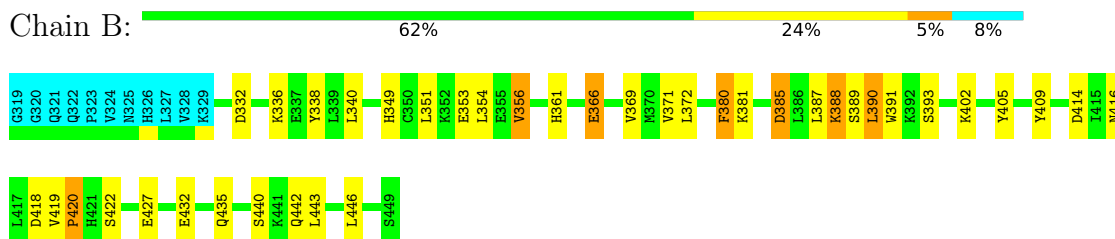


4.2.35 Score per residue for model 35

- Molecule 1: Programmed cell death protein 4

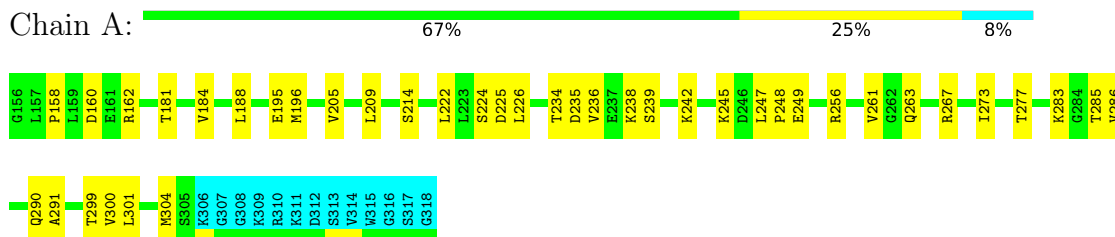


- Molecule 2: Programmed cell death protein 4

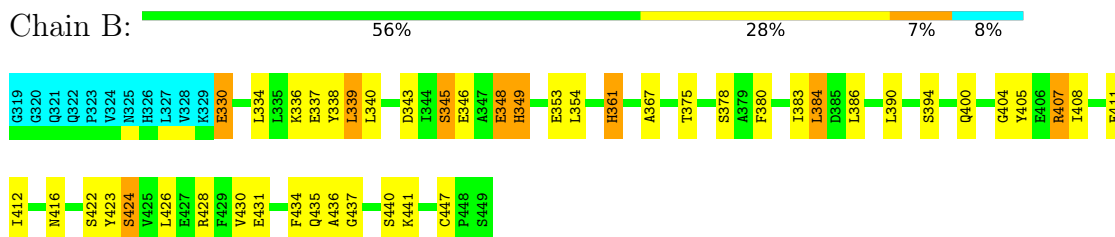


4.2.36 Score per residue for model 36

- Molecule 1: Programmed cell death protein 4

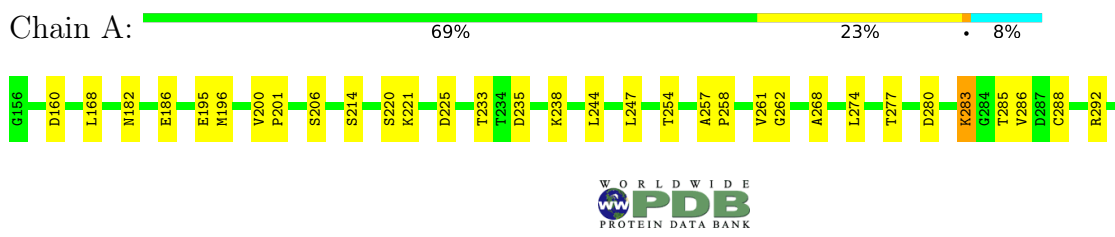


- Molecule 2: Programmed cell death protein 4



4.2.37 Score per residue for model 37

- Molecule 1: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

Chain B: 71% 17% 8%



4.2.38 Score per residue for model 38

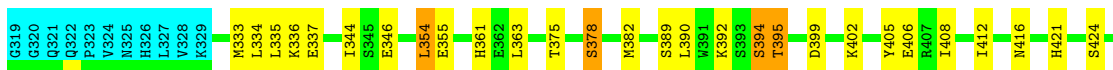
- Molecule 1: Programmed cell death protein 4

Chain A: 65% 25% 8%



- Molecule 2: Programmed cell death protein 4

Chain B: 66% 22% 8%



4.2.39 Score per residue for model 39

- Molecule 1: Programmed cell death protein 4

Chain A: 68% 21% 8%



- Molecule 2: Programmed cell death protein 4

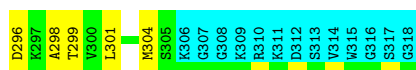
Chain B: 71% 21% 8%



4.2.40 Score per residue for model 40

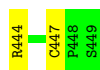
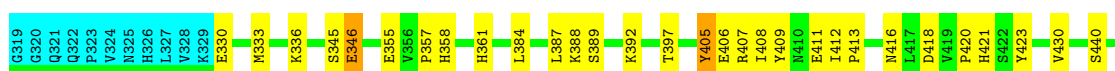
- Molecule 1: Programmed cell death protein 4

Chain A: 67% 24% 8%



- Molecule 2: Programmed cell death protein 4

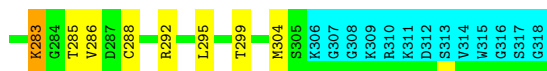
Chain B: 67% 23% 8%



4.2.41 Score per residue for model 41

- Molecule 1: Programmed cell death protein 4

Chain A: 67% 23% 8%



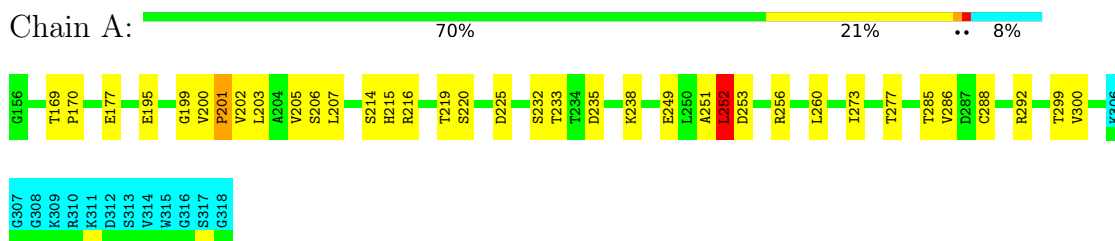
- Molecule 2: Programmed cell death protein 4

Chain B: 64% 26% 8%

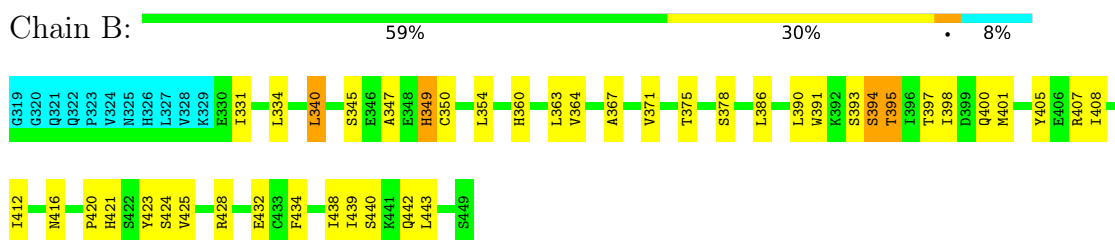


4.2.42 Score per residue for model 42

- Molecule 1: Programmed cell death protein 4

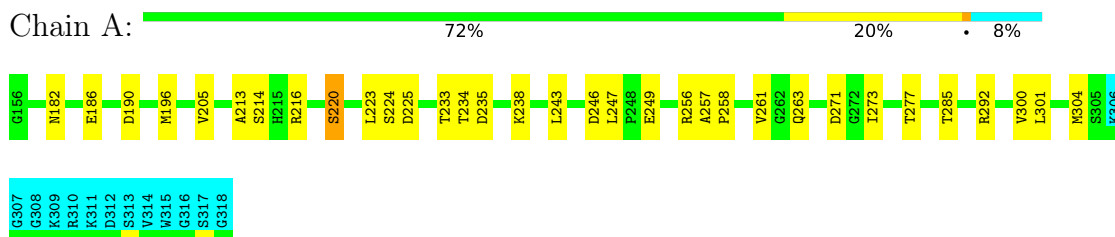


- Molecule 2: Programmed cell death protein 4

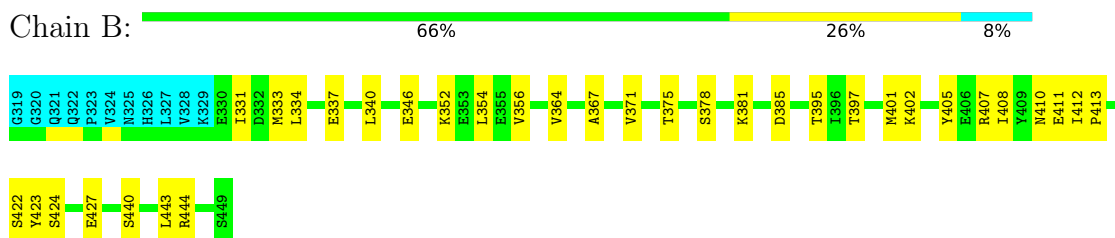


4.2.43 Score per residue for model 43

- Molecule 1: Programmed cell death protein 4

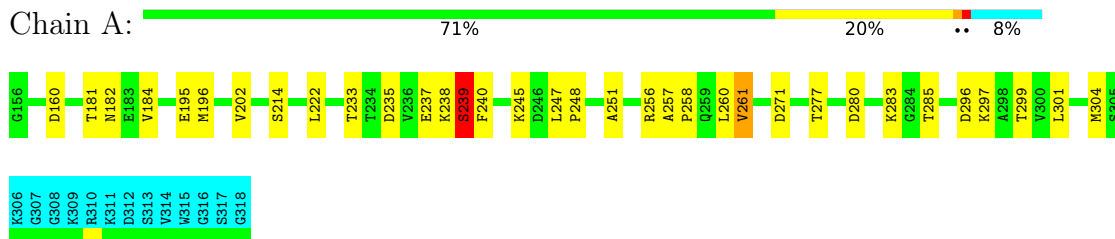


- Molecule 2: Programmed cell death protein 4

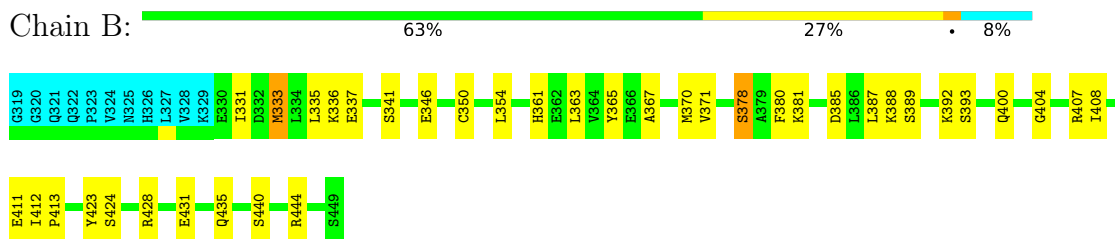


4.2.44 Score per residue for model 44

- Molecule 1: Programmed cell death protein 4

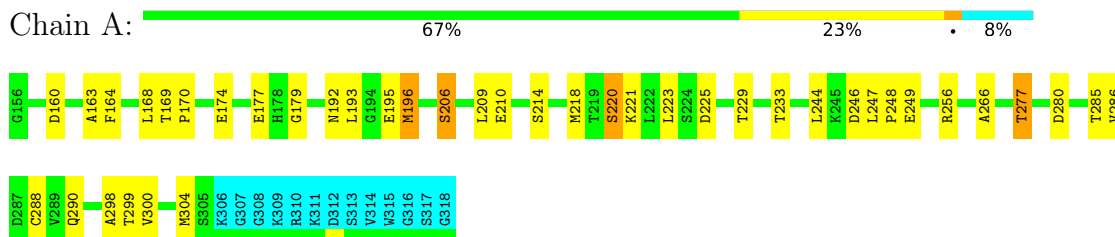


- Molecule 2: Programmed cell death protein 4

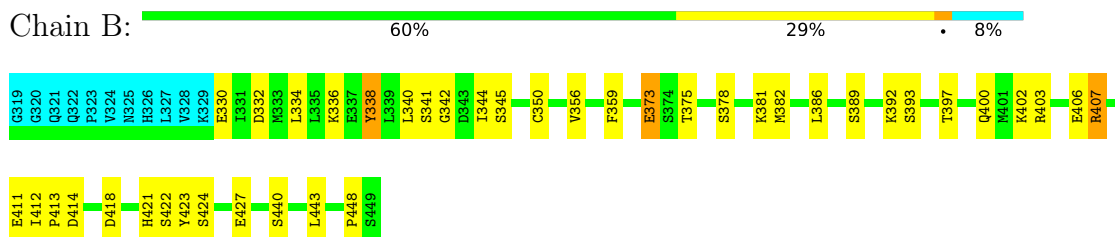


4.2.45 Score per residue for model 45

- Molecule 1: Programmed cell death protein 4

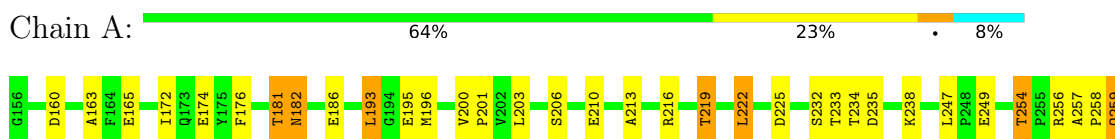


- Molecule 2: Programmed cell death protein 4



4.2.46 Score per residue for model 46

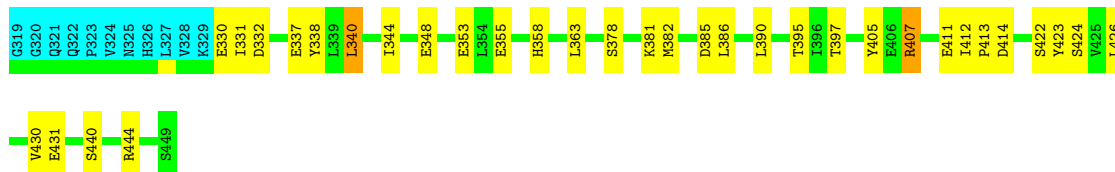
- Molecule 1: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

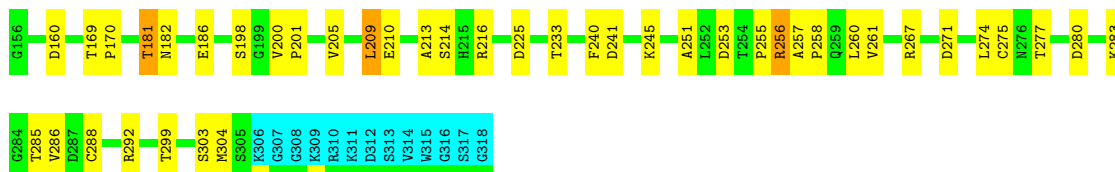
Chain B: 66% 24% 8%



4.2.47 Score per residue for model 47

- Molecule 1: Programmed cell death protein 4

Chain A: 66% 24% 8%



- Molecule 2: Programmed cell death protein 4

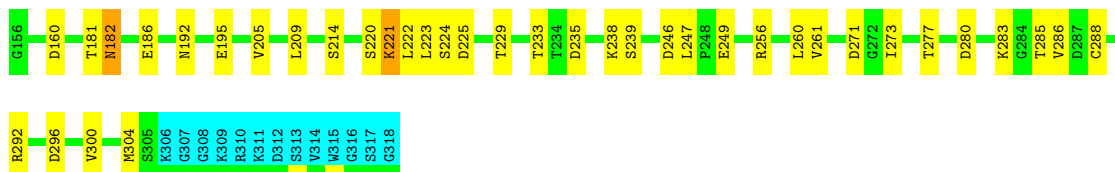
Chain B: 61% 28% 8%



4.2.48 Score per residue for model 48

- Molecule 1: Programmed cell death protein 4

Chain A: 69% 22% 8%



- Molecule 2: Programmed cell death protein 4

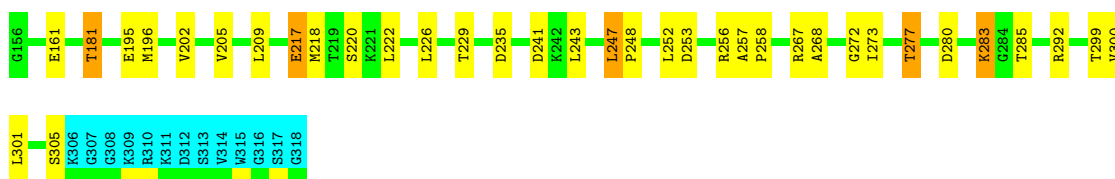
Chain B:  72% 18% 8%



4.2.49 Score per residue for model 49

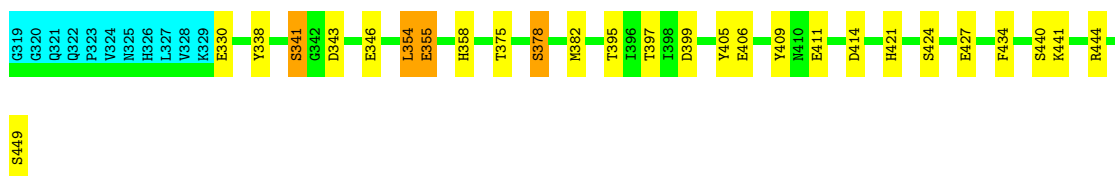
- Molecule 1: Programmed cell death protein 4

Chain A:  70% 19% 8%



- Molecule 2: Programmed cell death protein 4

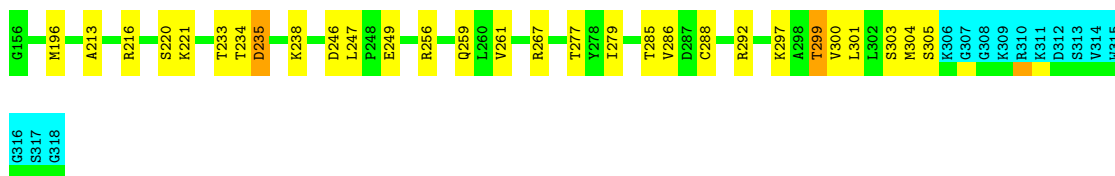
Chain B:  71% 18% 8%



4.2.50 Score per residue for model 50

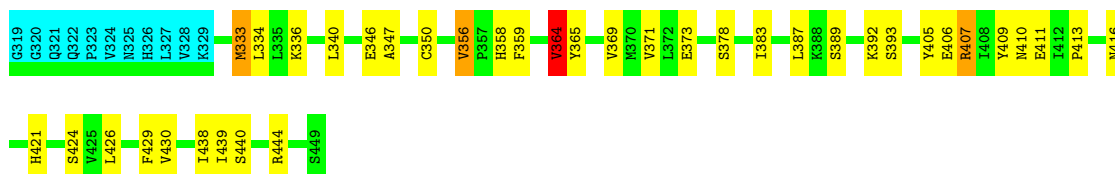
- Molecule 1: Programmed cell death protein 4

Chain A:  74% 17% 8%



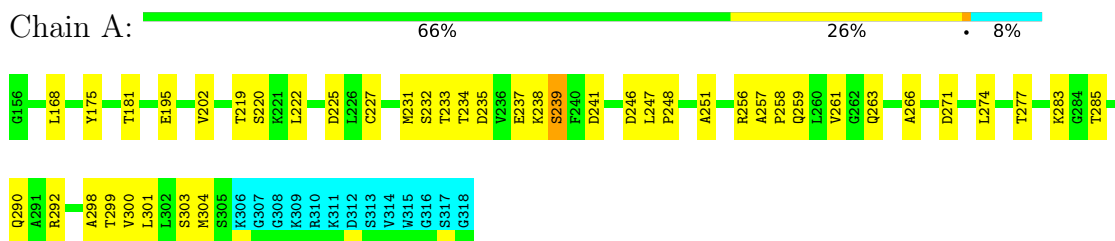
- Molecule 2: Programmed cell death protein 4

Chain B:  63% 26% 8%

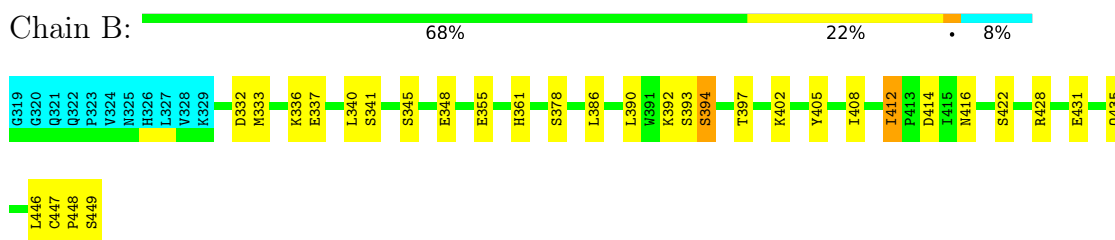


4.2.51 Score per residue for model 51

- Molecule 1: Programmed cell death protein 4

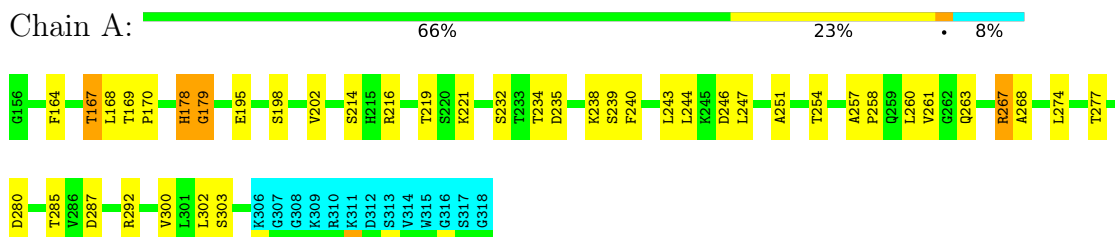


- Molecule 2: Programmed cell death protein 4

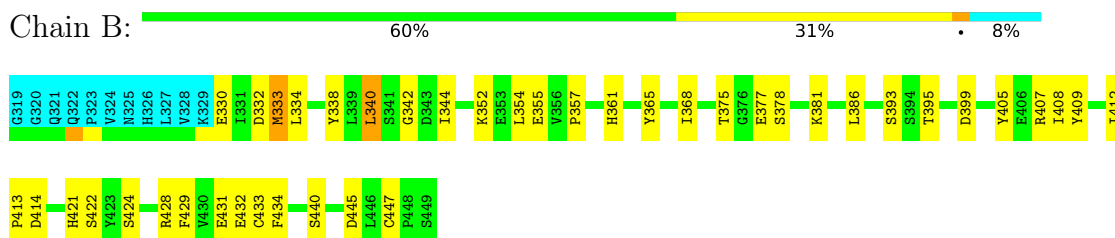


4.2.52 Score per residue for model 52

- Molecule 1: Programmed cell death protein 4

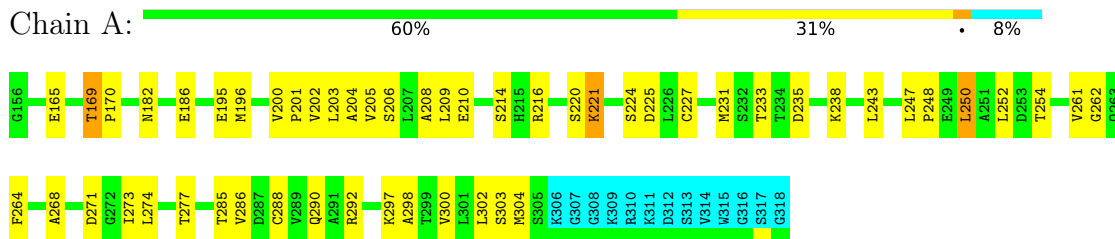


- Molecule 2: Programmed cell death protein 4

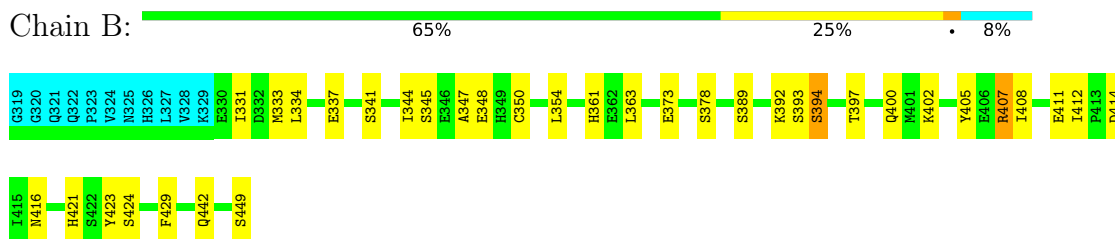


4.2.53 Score per residue for model 53

- Molecule 1: Programmed cell death protein 4

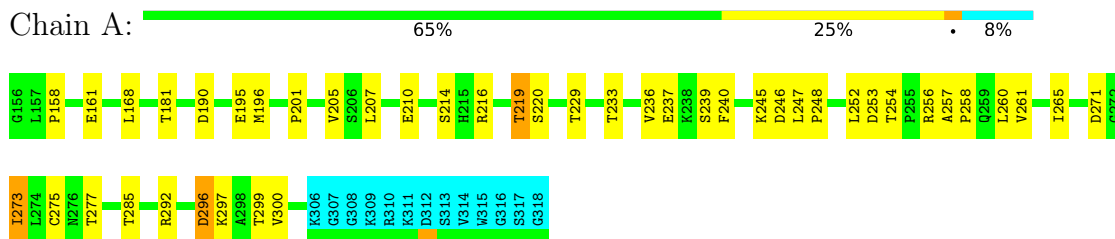


- Molecule 2: Programmed cell death protein 4

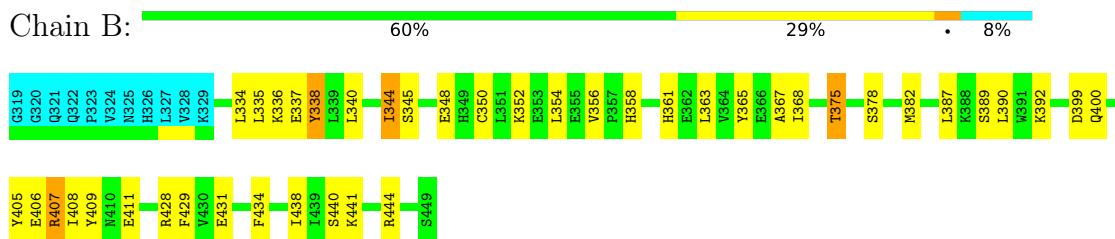


4.2.54 Score per residue for model 54

- Molecule 1: Programmed cell death protein 4

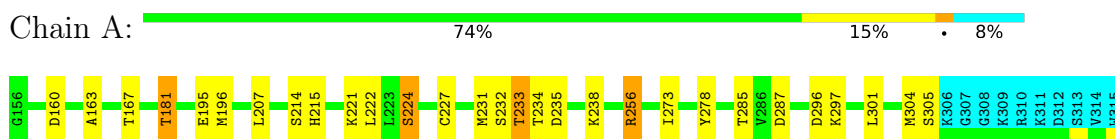


- Molecule 2: Programmed cell death protein 4



4.2.55 Score per residue for model 55

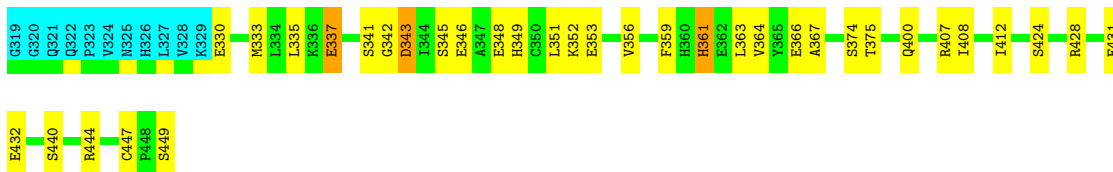
- Molecule 1: Programmed cell death protein 4



G316
S317
G318

- Molecule 2: Programmed cell death protein 4

Chain B: 65% 24% 8%



4.2.56 Score per residue for model 56

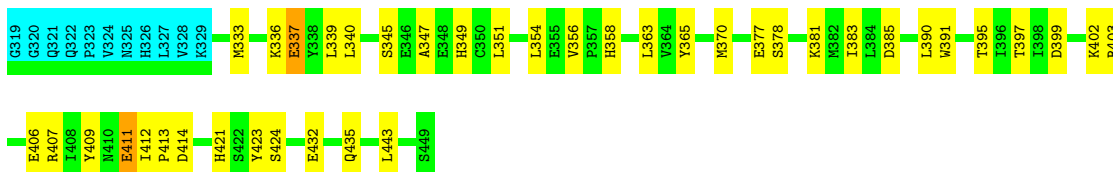
- Molecule 1: Programmed cell death protein 4

Chain A: 63% 28% 8%



- Molecule 2: Programmed cell death protein 4

Chain B: 61% 29% 8%



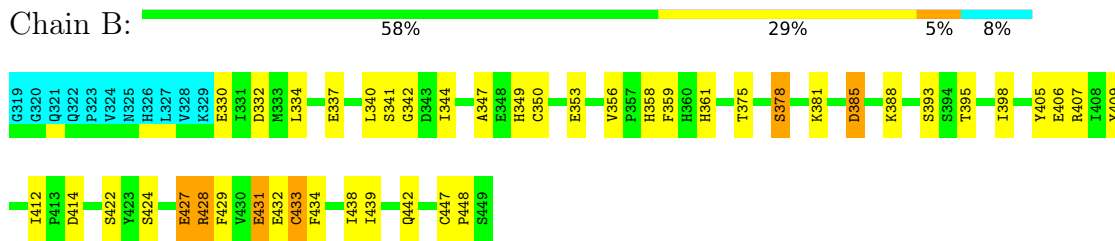
4.2.57 Score per residue for model 57

- Molecule 1: Programmed cell death protein 4

Chain A: 67% 23% 8%

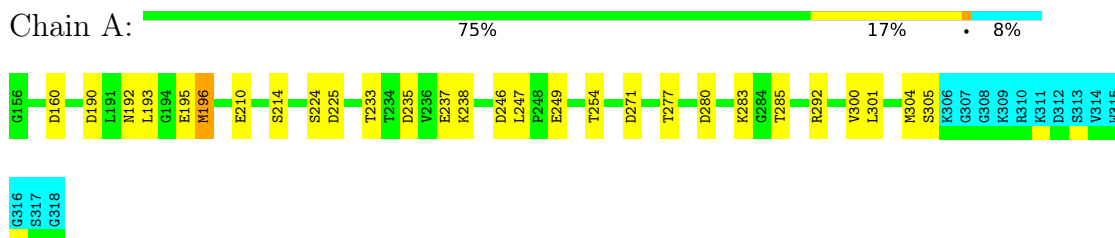


- Molecule 2: Programmed cell death protein 4

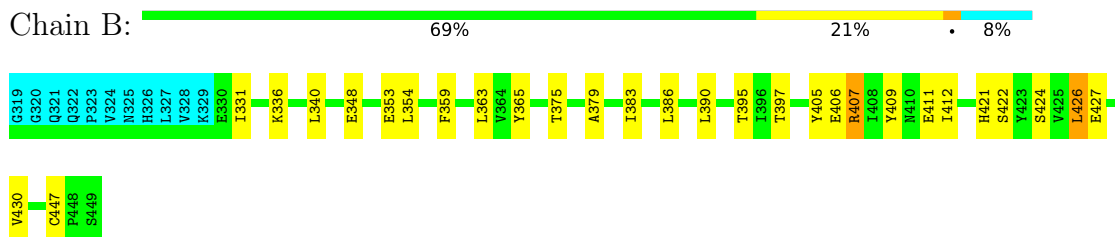


4.2.58 Score per residue for model 58

- Molecule 1: Programmed cell death protein 4

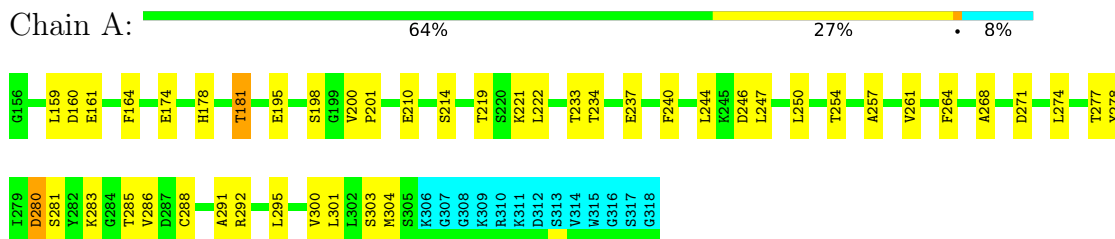


- Molecule 2: Programmed cell death protein 4

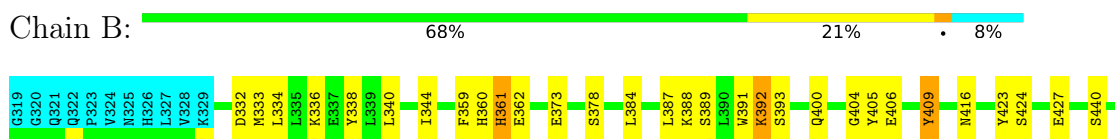


4.2.59 Score per residue for model 59

- Molecule 1: Programmed cell death protein 4



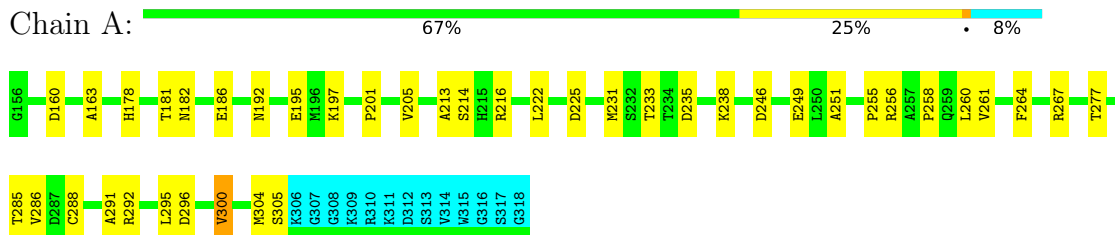
- Molecule 2: Programmed cell death protein 4



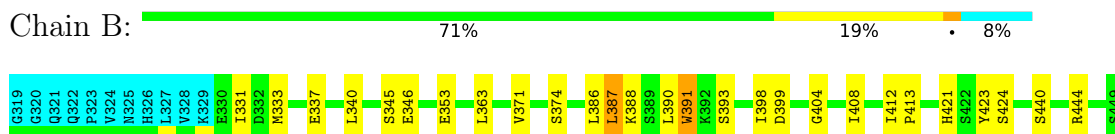
S449

4.2.60 Score per residue for model 60

- Molecule 1: Programmed cell death protein 4

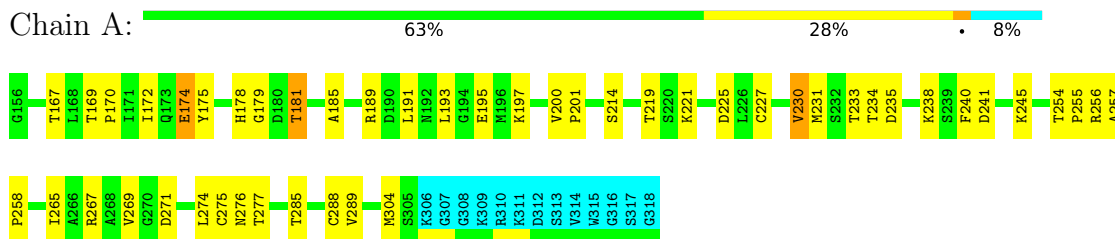


- Molecule 2: Programmed cell death protein 4

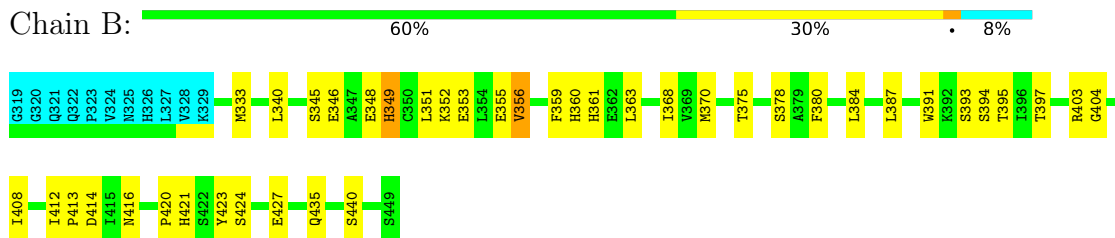


4.2.61 Score per residue for model 61

- Molecule 1: Programmed cell death protein 4

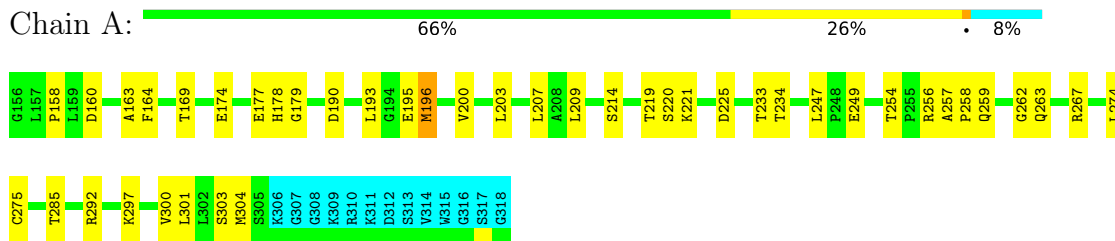


- Molecule 2: Programmed cell death protein 4

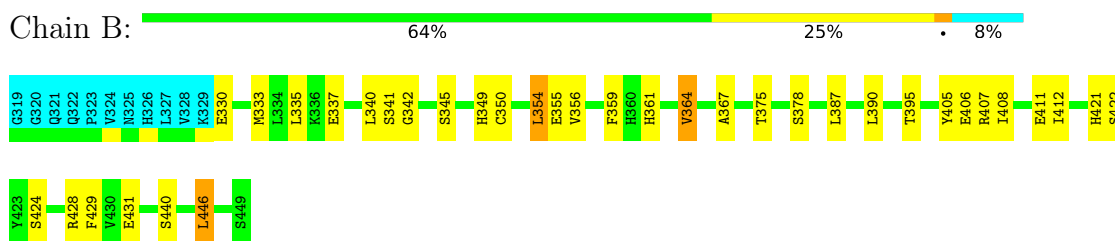


4.2.62 Score per residue for model 62

- Molecule 1: Programmed cell death protein 4

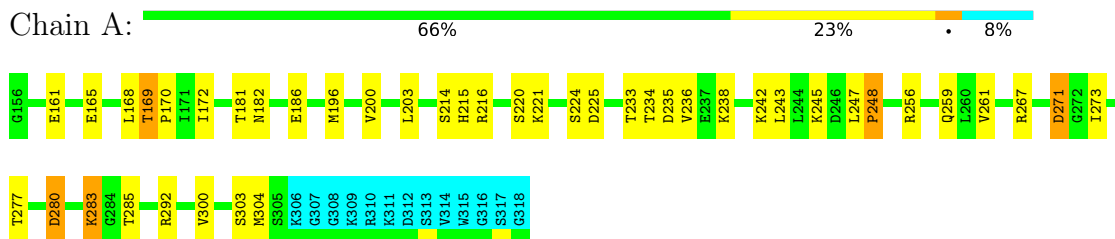


- Molecule 2: Programmed cell death protein 4

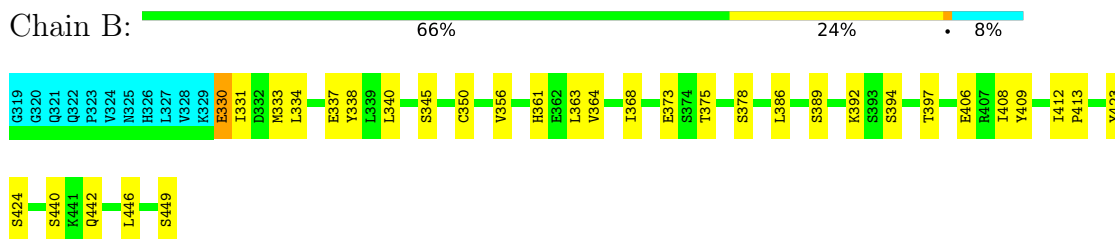


4.2.63 Score per residue for model 63

- Molecule 1: Programmed cell death protein 4

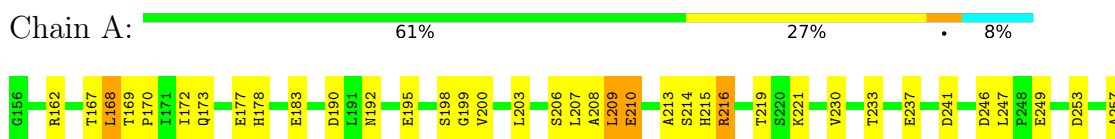


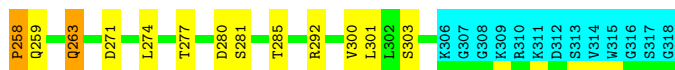
- Molecule 2: Programmed cell death protein 4



4.2.64 Score per residue for model 64

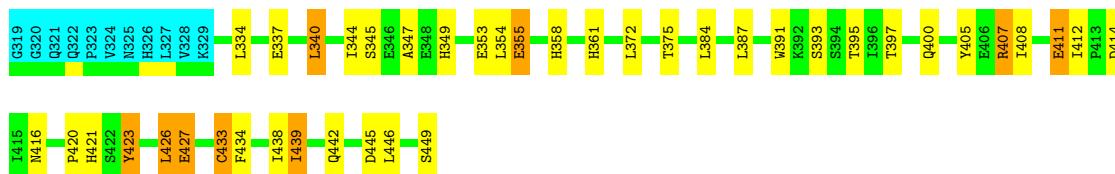
- Molecule 1: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

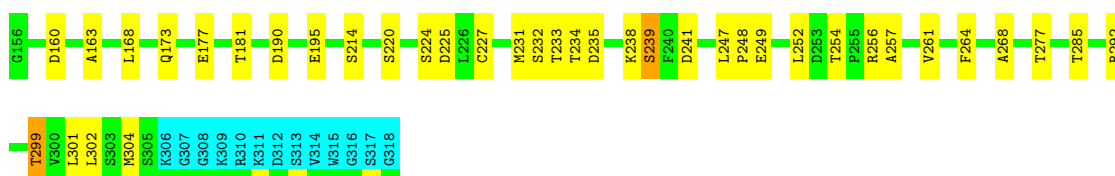
Chain B: 60% 24% 7% 8%



4.2.65 Score per residue for model 65

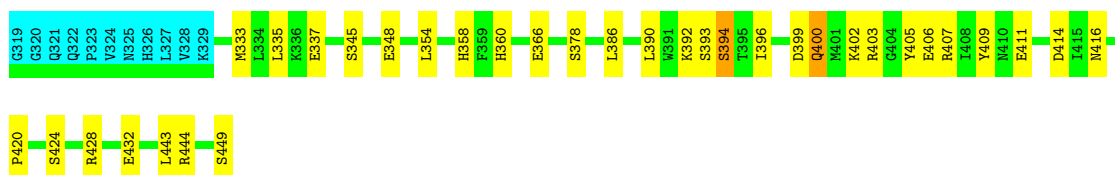
- Molecule 1: Programmed cell death protein 4

Chain A: 69% 22% 8%



- Molecule 2: Programmed cell death protein 4

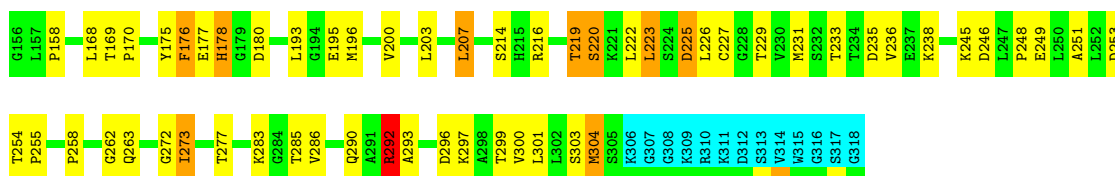
Chain B: 66% 24% 8%



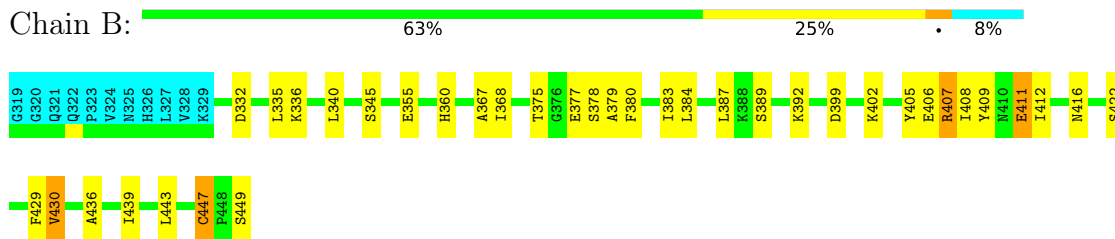
4.2.66 Score per residue for model 66

- Molecule 1: Programmed cell death protein 4

Chain A: 57% 29% 6% 8%

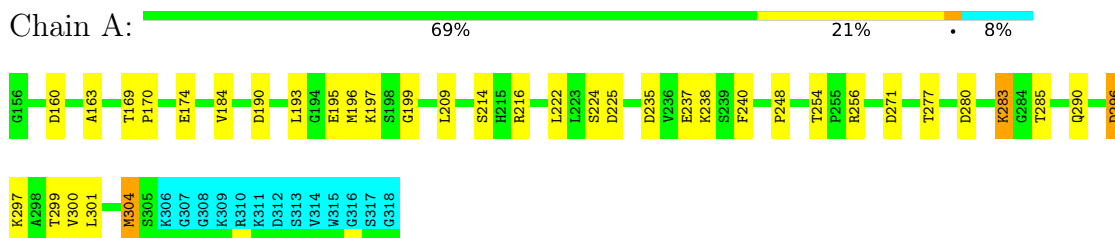


- Molecule 2: Programmed cell death protein 4

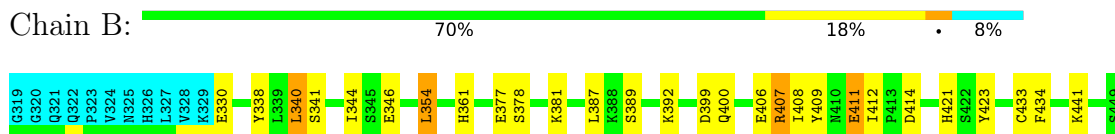


4.2.67 Score per residue for model 67

- Molecule 1: Programmed cell death protein 4



- Molecule 2: Programmed cell death protein 4

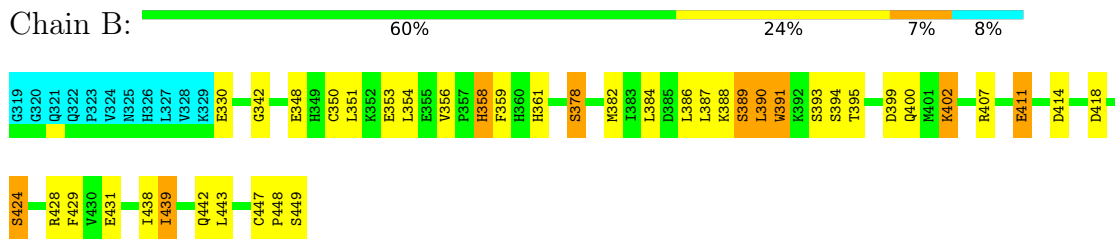


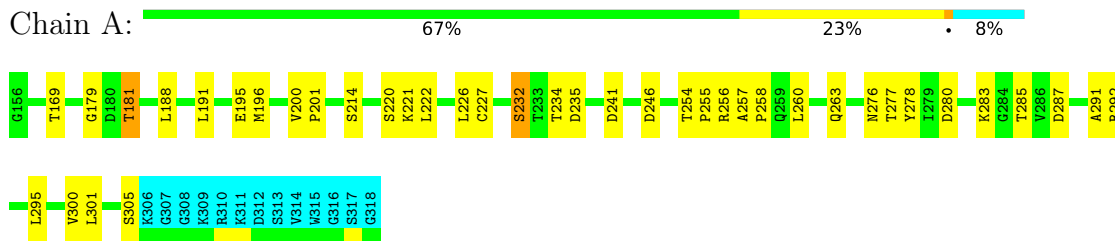
4.2.68 Score per residue for model 68

- Molecule 1: Programmed cell death protein 4

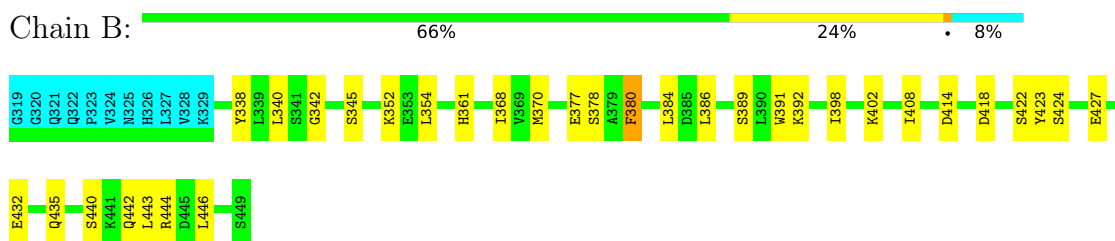


- Molecule 2: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

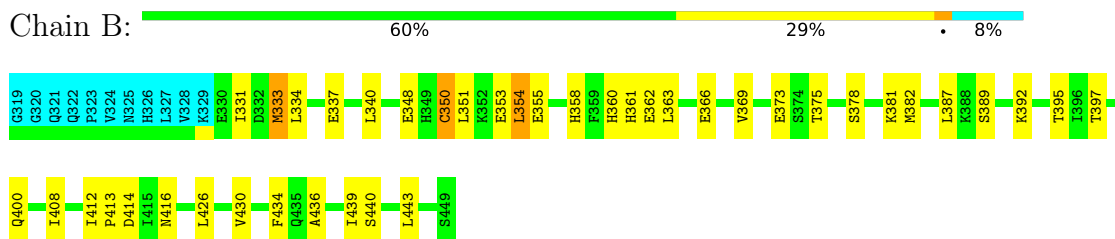


4.2.72 Score per residue for model 72

- Molecule 1: Programmed cell death protein 4

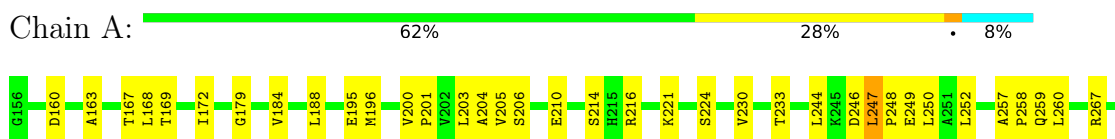


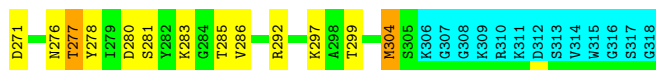
- Molecule 2: Programmed cell death protein 4



4.2.73 Score per residue for model 73

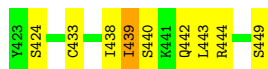
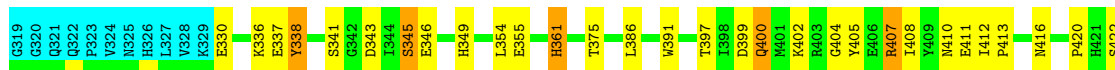
- Molecule 1: Programmed cell death protein 4





- Molecule 2: Programmed cell death protein 4

Chain B: 62% 25% 5% 8%



5 Refinement protocol and experimental data overview

The models were refined using the following method: *HADDOCK*.

Of the 200 calculated structures, 73 were deposited, based on the following criterion: *acceptable RMSD to lowest HADDOCK score structure*.

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

Software name	Classification	Version
HADDOCK	refinement	2.0
X-PLOR NIH	refinement	

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	A	0.31±0.02	0±0/1152 (0.0± 0.0%)	0.49±0.04	0±0/1560 (0.0± 0.0%)
2	B	0.30±0.02	0±0/995 (0.0± 0.0%)	0.48±0.05	0±0/1342 (0.0± 0.0%)
All	All	0.30	0/156731 (0.0%)	0.49	1/211846 (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	Planarity
2	B	0.0±0.1	0.0±0.0
All	All	1	0

There are no bond-length outliers.

All unique angle outliers are listed below.

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)	Models	
								Worst	Total
2	B	385	ASP	N-CA-CB	5.01	119.61	110.60	47	1

All unique chiral outliers are listed below.

Mol	Chain	Res	Type	Atoms	Models (Total)
2	B	371	VAL	CA	1

There are no planarity outliers.

6.2 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 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	A	1137	248	1155	15±4
2	B	976	200	970	13±4
All	All	154249	32704	155125	1872

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 6.

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

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:304:MET:HG2	2:B:333:MET:HA	0.96	1.37	53	1
1:A:160:ASP:HB3	1:A:163:ALA:HB3	0.89	1.45	73	14
1:A:254:THR:HB	1:A:257:ALA:HB2	0.86	1.45	59	26
1:A:304:MET:SD	2:B:333:MET:HA	0.86	2.11	50	20
2:B:389:SER:HA	2:B:392:LYS:HE2	0.83	1.49	53	13
1:A:300:VAL:HG11	2:B:337:GLU:HA	0.82	1.50	63	16
1:A:280:ASP:HA	1:A:283:LYS:HD3	0.82	1.51	16	7
1:A:300:VAL:HB	2:B:336:LYS:HB3	0.82	1.51	35	4
1:A:300:VAL:HG13	2:B:340:LEU:HB2	0.82	1.52	66	14
1:A:300:VAL:HG21	2:B:337:GLU:HA	0.81	1.51	34	1
1:A:236:VAL:HG11	1:A:273:ILE:HB	0.81	1.50	63	6
1:A:247:LEU:HD23	1:A:291:ALA:HA	0.80	1.52	18	1
2:B:389:SER:HA	2:B:392:LYS:HE3	0.80	1.51	7	13
1:A:235:ASP:HA	1:A:238:LYS:HE2	0.80	1.53	34	5
2:B:334:LEU:HD21	2:B:350:CYS:HB2	0.78	1.55	4	11
2:B:402:LYS:HG3	2:B:443:LEU:HD13	0.78	1.55	56	12
1:A:300:VAL:HG22	2:B:340:LEU:HB3	0.78	1.55	36	7
1:A:193:LEU:HB3	1:A:196:MET:HB3	0.77	1.55	67	4
2:B:361:HIS:HB3	2:B:400:GLN:HA	0.76	1.58	64	1
1:A:268:ALA:HB1	1:A:274:LEU:HB3	0.76	1.56	53	3
1:A:235:ASP:HA	1:A:238:LYS:HE3	0.76	1.58	55	43
1:A:247:LEU:HD21	1:A:258:PRO:HA	0.76	1.58	35	5
1:A:300:VAL:HG13	2:B:340:LEU:HD12	0.76	1.57	30	14
2:B:428:ARG:HA	2:B:431:GLU:HG2	0.75	1.58	70	13
1:A:243:LEU:O	1:A:247:LEU:HB2	0.75	1.82	63	2
1:A:256:ARG:HH21	2:B:346:GLU:HA	0.74	1.41	55	3
2:B:434:PHE:HA	2:B:439:ILE:HD11	0.74	1.56	70	9
1:A:304:MET:HB3	2:B:333:MET:HG2	0.73	1.59	53	3
2:B:349:HIS:O	2:B:353:GLU:HG3	0.73	1.84	55	2
2:B:430:VAL:O	2:B:434:PHE:HB2	0.72	1.85	41	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:434:PHE:HA	2:B:439:ILE:HG12	0.72	1.59	72	1
2:B:360:HIS:HB2	2:B:400:GLN:HG3	0.71	1.60	65	1
1:A:188:LEU:HD21	1:A:200:VAL:HG21	0.71	1.61	1	5
2:B:385:ASP:HA	2:B:388:LYS:HE3	0.71	1.61	21	8
1:A:200:VAL:HB	1:A:201:PRO:HD3	0.70	1.62	47	12
1:A:247:LEU:HD11	1:A:261:VAL:HG21	0.70	1.62	26	10
2:B:423:TYR:O	2:B:427:GLU:HB2	0.70	1.86	64	2
1:A:263:GLN:HA	1:A:301:LEU:HD13	0.70	1.63	22	8
1:A:248:PRO:HG3	1:A:290:GLN:HG3	0.70	1.64	67	1
2:B:335:LEU:HD22	2:B:367:ALA:HB2	0.69	1.63	62	5
1:A:221:LYS:HA	1:A:221:LYS:HE2	0.69	1.64	48	3
2:B:427:GLU:O	2:B:431:GLU:HG2	0.69	1.88	57	2
1:A:286:VAL:HG11	1:A:291:ALA:HB3	0.69	1.65	40	10
2:B:399:ASP:O	2:B:403:ARG:HD3	0.69	1.88	65	4
2:B:366:GLU:O	2:B:370:MET:HG2	0.68	1.89	6	1
2:B:384:LEU:HG	2:B:429:PHE:HE1	0.68	1.46	30	1
1:A:172:ILE:HG21	1:A:204:ALA:HA	0.68	1.66	22	3
1:A:203:LEU:HG	1:A:207:LEU:HG	0.67	1.65	66	1
2:B:351:LEU:HD23	2:B:390:LEU:HD11	0.67	1.66	68	1
1:A:266:ALA:HB1	1:A:302:LEU:HG	0.67	1.66	70	1
1:A:247:LEU:HD11	1:A:258:PRO:HA	0.66	1.68	62	4
1:A:236:VAL:HG11	1:A:273:ILE:HG22	0.66	1.68	17	4
2:B:439:ILE:HB	2:B:443:LEU:HD23	0.66	1.66	72	3
2:B:390:LEU:HB3	2:B:395:THR:HB	0.65	1.69	38	8
1:A:169:THR:HB	1:A:170:PRO:HD3	0.65	1.68	52	11
1:A:286:VAL:HG21	1:A:292:ARG:HG3	0.65	1.68	66	1
2:B:366:GLU:HA	2:B:369:VAL:HG22	0.65	1.67	35	1
1:A:222:LEU:HA	1:A:225:ASP:HB2	0.65	1.69	66	1
1:A:203:LEU:O	1:A:207:LEU:HB2	0.65	1.92	57	2
1:A:256:ARG:NH2	2:B:346:GLU:HA	0.64	2.05	55	1
2:B:384:LEU:O	2:B:388:LYS:HG3	0.64	1.93	47	1
1:A:300:VAL:HG11	2:B:337:GLU:HG2	0.64	1.70	34	1
2:B:378:SER:HA	2:B:381:LYS:HE2	0.64	1.70	67	6
2:B:361:HIS:HB3	2:B:400:GLN:HG3	0.64	1.69	18	1
1:A:296:ASP:HB3	2:B:340:LEU:HD21	0.64	1.70	54	1
1:A:304:MET:SD	2:B:336:LYS:HG3	0.63	2.34	73	1
1:A:255:PRO:O	1:A:258:PRO:HD2	0.63	1.94	13	5
1:A:261:VAL:HA	1:A:264:PHE:HD2	0.63	1.52	53	5
2:B:350:CYS:HA	2:B:353:GLU:HB2	0.63	1.70	68	1
1:A:300:VAL:HG22	2:B:340:LEU:HD12	0.63	1.71	4	2
1:A:251:ALA:HB2	1:A:258:PRO:HD3	0.63	1.71	32	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:300:VAL:HG22	2:B:340:LEU:HD23	0.63	1.70	60	1
2:B:361:HIS:HB3	2:B:400:GLN:HB3	0.63	1.70	72	1
1:A:250:LEU:H	1:A:250:LEU:HD23	0.63	1.54	53	2
2:B:391:TRP:HZ2	2:B:398:ILE:HB	0.63	1.53	60	1
1:A:289:VAL:HG13	1:A:290:GLN:H	0.63	1.53	72	1
2:B:337:GLU:O	2:B:341:SER:HB2	0.63	1.94	62	6
1:A:262:GLY:HA3	1:A:297:LYS:HB3	0.63	1.69	66	4
2:B:377:GLU:HA	2:B:380:PHE:CB	0.63	2.24	66	1
2:B:407:ARG:O	2:B:411:GLU:HG2	0.63	1.92	69	51
1:A:231:MET:HG3	1:A:235:ASP:HB3	0.63	1.70	6	2
2:B:334:LEU:HD22	2:B:347:ALA:HA	0.62	1.69	53	8
2:B:405:TYR:HE2	2:B:430:VAL:HG22	0.62	1.53	46	1
1:A:259:GLN:HG2	2:B:346:GLU:HG2	0.62	1.70	40	1
2:B:356:VAL:HB	2:B:359:PHE:HB2	0.62	1.70	34	3
2:B:434:PHE:HE1	2:B:441:LYS:HA	0.61	1.55	36	6
2:B:364:VAL:HG11	2:B:401:MET:HG3	0.61	1.72	21	6
1:A:256:ARG:O	1:A:260:LEU:HG	0.61	1.95	30	12
1:A:205:VAL:HG13	1:A:209:LEU:HD12	0.61	1.72	47	1
1:A:237:GLU:HG3	1:A:274:LEU:HD12	0.61	1.72	10	3
1:A:213:ALA:HA	1:A:216:ARG:HD2	0.61	1.71	9	13
1:A:227:CYS:HA	1:A:231:MET:O	0.61	1.96	55	12
1:A:247:LEU:N	1:A:248:PRO:HD2	0.61	2.11	63	17
1:A:257:ALA:O	1:A:261:VAL:HG23	0.61	1.96	51	13
2:B:333:MET:O	2:B:337:GLU:HB2	0.61	1.96	55	7
2:B:388:LYS:HA	2:B:391:TRP:HB2	0.60	1.71	4	1
1:A:249:GLU:O	1:A:252:LEU:HG	0.60	1.95	21	1
1:A:206:SER:O	1:A:209:LEU:HB3	0.60	1.96	34	1
2:B:432:GLU:HA	2:B:435:GLN:HE21	0.60	1.55	35	3
1:A:259:GLN:NE2	2:B:346:GLU:HA	0.60	2.12	41	2
1:A:282:TYR:HD2	1:A:286:VAL:HG22	0.60	1.56	17	1
1:A:164:PHE:HZ	1:A:200:VAL:HG22	0.60	1.57	40	3
2:B:331:ILE:HG23	2:B:363:LEU:HA	0.60	1.73	21	6
2:B:361:HIS:HB2	2:B:400:GLN:HG3	0.60	1.73	44	5
2:B:365:TYR:HE1	2:B:411:GLU:HG3	0.60	1.56	56	8
1:A:216:ARG:HB3	1:A:264:PHE:HZ	0.60	1.56	18	4
2:B:438:ILE:HG13	2:B:439:ILE:H	0.60	1.56	21	5
2:B:330:GLU:O	2:B:334:LEU:HG	0.60	1.97	45	11
2:B:338:TYR:CE1	2:B:344:ILE:HG12	0.60	2.32	20	3
2:B:338:TYR:HA	2:B:342:GLY:HA2	0.60	1.74	34	2
1:A:300:VAL:CG1	2:B:337:GLU:HA	0.60	2.27	63	4
1:A:235:ASP:HA	1:A:238:LYS:CE	0.59	2.26	18	13

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:331:ILE:HG23	2:B:363:LEU:HG	0.59	1.73	72	1
1:A:245:LYS:O	1:A:248:PRO:HD2	0.59	1.96	54	6
2:B:390:LEU:H	2:B:390:LEU:HD23	0.59	1.57	68	1
1:A:169:THR:HA	1:A:172:ILE:HD12	0.59	1.74	34	1
1:A:205:VAL:HG23	1:A:206:SER:H	0.59	1.57	42	1
1:A:298:ALA:HA	1:A:301:LEU:HD12	0.59	1.74	16	6
2:B:345:SER:HA	2:B:348:GLU:HB3	0.59	1.72	13	3
2:B:337:GLU:HG2	2:B:347:ALA:HB2	0.59	1.74	24	2
1:A:158:PRO:HB3	1:A:196:MET:SD	0.59	2.38	68	3
1:A:240:PHE:HE1	1:A:265:ILE:HG12	0.59	1.58	31	1
2:B:385:ASP:O	2:B:389:SER:HB2	0.59	1.97	48	3
1:A:251:ALA:HB1	1:A:258:PRO:HD3	0.59	1.71	66	1
2:B:343:ASP:HB3	2:B:346:GLU:HB2	0.59	1.74	24	6
1:A:304:MET:SD	2:B:336:LYS:HB2	0.59	2.37	70	7
1:A:172:ILE:O	1:A:175:TYR:HB3	0.59	1.98	61	7
2:B:389:SER:HA	2:B:392:LYS:HD2	0.59	1.75	8	3
1:A:193:LEU:HD13	1:A:196:MET:HB3	0.58	1.75	3	5
2:B:432:GLU:HA	2:B:435:GLN:NE2	0.58	2.13	71	1
1:A:247:LEU:HD12	1:A:250:LEU:HD12	0.58	1.75	73	1
1:A:268:ALA:HA	1:A:273:ILE:HD12	0.58	1.74	72	2
2:B:444:ARG:HD2	2:B:447:CYS:SG	0.58	2.37	20	1
1:A:198:SER:O	1:A:201:PRO:HD2	0.58	1.99	57	4
1:A:304:MET:SD	2:B:337:GLU:HG3	0.58	2.38	15	1
2:B:371:VAL:HG11	2:B:380:PHE:CD1	0.58	2.34	29	1
1:A:304:MET:SD	2:B:336:LYS:HE2	0.58	2.38	44	2
2:B:377:GLU:HA	2:B:380:PHE:HB3	0.58	1.76	66	1
2:B:338:TYR:CE2	2:B:386:LEU:HB2	0.58	2.34	63	8
1:A:251:ALA:HB2	1:A:258:PRO:HG3	0.58	1.76	24	7
1:A:291:ALA:O	1:A:295:LEU:HG	0.58	1.98	59	5
2:B:362:GLU:O	2:B:366:GLU:HB2	0.58	1.99	8	1
1:A:182:ASN:O	1:A:186:GLU:HG2	0.58	1.99	43	21
2:B:386:LEU:O	2:B:390:LEU:HG	0.58	1.99	24	17
2:B:364:VAL:HG11	2:B:401:MET:HA	0.58	1.76	25	2
2:B:338:TYR:HD2	2:B:386:LEU:HB2	0.58	1.58	73	2
1:A:301:LEU:HA	1:A:304:MET:SD	0.58	2.39	69	3
2:B:349:HIS:O	2:B:353:GLU:HG2	0.57	1.99	36	1
1:A:300:VAL:HG21	2:B:337:GLU:HG2	0.57	1.76	6	1
2:B:348:GLU:HA	2:B:390:LEU:HD23	0.57	1.76	4	1
1:A:282:TYR:HB3	1:A:295:LEU:HD13	0.57	1.75	33	1
1:A:188:LEU:HD21	1:A:200:VAL:HG11	0.57	1.75	39	1
1:A:304:MET:HG2	2:B:336:LYS:HE2	0.57	1.77	50	2

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:160:ASP:HB3	1:A:163:ALA:CB	0.57	2.28	73	2
1:A:168:LEU:HB3	1:A:203:LEU:HD23	0.57	1.77	73	1
1:A:247:LEU:HD13	1:A:261:VAL:HG21	0.57	1.77	3	8
2:B:368:ILE:HD12	2:B:408:ILE:HG13	0.57	1.77	61	1
1:A:256:ARG:HD2	2:B:349:HIS:CB	0.57	2.28	36	1
2:B:412:ILE:HB	2:B:413:PRO:HD3	0.56	1.76	5	23
1:A:283:LYS:HB3	1:A:283:LYS:NZ	0.56	2.16	7	4
2:B:368:ILE:O	2:B:371:VAL:HG23	0.56	1.99	22	1
1:A:175:TYR:HE2	1:A:219:THR:HA	0.56	1.61	69	1
2:B:384:LEU:O	2:B:387:LEU:HG	0.56	2.01	11	5
2:B:371:VAL:HG22	2:B:383:ILE:HG13	0.56	1.78	50	2
2:B:412:ILE:HG13	2:B:426:LEU:HD11	0.56	1.78	31	2
1:A:263:GLN:HA	1:A:301:LEU:HD11	0.56	1.77	64	1
2:B:408:ILE:O	2:B:412:ILE:HG12	0.56	2.01	44	31
2:B:425:VAL:O	2:B:429:PHE:HB3	0.56	2.00	21	1
1:A:297:LYS:O	1:A:300:VAL:HB	0.56	2.01	24	3
2:B:388:LYS:O	2:B:391:TRP:HB2	0.56	2.01	68	2
2:B:447:CYS:HB2	2:B:448:PRO:HD2	0.56	1.78	57	2
2:B:345:SER:O	2:B:348:GLU:HB2	0.56	2.01	36	1
2:B:378:SER:O	2:B:382:MET:HB2	0.56	2.00	46	5
2:B:384:LEU:HD21	2:B:432:GLU:HG2	0.56	1.76	7	1
1:A:268:ALA:HB1	1:A:273:ILE:HB	0.56	1.76	13	2
2:B:371:VAL:HG11	2:B:380:PHE:HA	0.56	1.77	44	1
2:B:347:ALA:HA	2:B:350:CYS:SG	0.56	2.41	57	1
1:A:296:ASP:HB3	2:B:340:LEU:CD1	0.56	2.31	67	1
2:B:384:LEU:HG	2:B:429:PHE:CE1	0.56	2.32	30	1
1:A:178:HIS:N	1:A:178:HIS:CD2	0.56	2.74	66	1
1:A:293:ALA:O	1:A:297:LYS:HB2	0.55	2.00	21	1
1:A:205:VAL:HG12	1:A:219:THR:CG2	0.55	2.32	42	1
2:B:378:SER:O	2:B:381:LYS:HG2	0.55	2.01	44	2
2:B:443:LEU:HA	2:B:446:LEU:HD12	0.55	1.79	15	1
1:A:209:LEU:HA	1:A:216:ARG:HD3	0.55	1.77	21	1
2:B:387:LEU:O	2:B:391:TRP:HB2	0.55	2.01	22	3
1:A:168:LEU:HD13	1:A:171:ILE:HD12	0.55	1.79	22	1
1:A:181:THR:HG21	1:A:225:ASP:HB2	0.55	1.78	47	2
2:B:356:VAL:HB	2:B:359:PHE:CB	0.55	2.31	6	1
2:B:361:HIS:H	2:B:400:GLN:HG3	0.55	1.62	36	2
1:A:193:LEU:HB3	1:A:196:MET:HB2	0.55	1.77	66	1
1:A:248:PRO:HA	1:A:290:GLN:HG3	0.55	1.77	3	4
1:A:204:ALA:O	1:A:208:ALA:HB2	0.55	2.02	53	1
1:A:185:ALA:HB2	1:A:226:LEU:HD22	0.55	1.77	56	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:356:VAL:HG23	2:B:359:PHE:HB2	0.55	1.79	62	1
2:B:439:ILE:HG21	2:B:443:LEU:HD22	0.55	1.77	73	1
1:A:263:GLN:HA	1:A:301:LEU:CD1	0.54	2.32	15	4
1:A:297:LYS:O	1:A:301:LEU:HG	0.54	2.02	32	5
2:B:332:ASP:O	2:B:336:LYS:HG2	0.54	2.01	59	4
1:A:236:VAL:HG21	1:A:273:ILE:HB	0.54	1.77	21	1
1:A:297:LYS:NZ	2:B:346:GLU:HG3	0.54	2.18	22	1
1:A:298:ALA:O	1:A:302:LEU:HG	0.54	2.02	53	1
2:B:447:CYS:SG	2:B:448:PRO:HD2	0.54	2.42	68	3
2:B:365:TYR:CE1	2:B:411:GLU:HG3	0.54	2.37	11	5
1:A:286:VAL:HG12	1:A:288:CYS:H	0.54	1.62	30	18
2:B:365:TYR:O	2:B:369:VAL:HG23	0.54	2.01	2	7
1:A:265:ILE:HG21	1:A:279:ILE:HD11	0.54	1.78	31	3
2:B:404:GLY:O	2:B:408:ILE:HG12	0.54	2.03	24	10
1:A:259:GLN:O	1:A:297:LYS:HG2	0.54	2.03	68	5
1:A:263:GLN:O	1:A:267:ARG:HB2	0.54	2.02	62	3
1:A:280:ASP:HA	1:A:283:LYS:HB2	0.54	1.77	48	9
2:B:358:HIS:HA	2:B:400:GLN:NE2	0.54	2.18	68	2
2:B:433:CYS:HB2	2:B:438:ILE:HD11	0.54	1.79	64	3
1:A:197:LYS:HE3	1:A:231:MET:SD	0.54	2.42	61	2
2:B:378:SER:O	2:B:382:MET:HG2	0.54	2.02	38	3
1:A:212:LYS:HG2	1:A:213:ALA:H	0.54	1.63	20	1
1:A:168:LEU:HD22	1:A:171:ILE:HD12	0.54	1.78	39	3
1:A:252:LEU:H	1:A:252:LEU:HD23	0.54	1.62	42	1
2:B:334:LEU:HD11	2:B:347:ALA:HA	0.54	1.80	30	1
2:B:332:ASP:OD2	2:B:336:LYS:HG3	0.54	2.03	51	1
1:A:300:VAL:HA	2:B:340:LEU:HD12	0.54	1.78	34	1
1:A:219:THR:O	1:A:222:LEU:HB3	0.54	2.03	46	1
2:B:331:ILE:HG23	2:B:363:LEU:HD12	0.53	1.80	23	3
1:A:209:LEU:HA	1:A:216:ARG:HG2	0.53	1.79	47	1
2:B:416:ASN:OD1	2:B:420:PRO:HA	0.53	2.02	70	10
2:B:351:LEU:HD13	2:B:390:LEU:HD21	0.53	1.79	4	2
1:A:261:VAL:O	1:A:265:ILE:HG13	0.53	2.03	32	2
1:A:170:PRO:O	1:A:174:GLU:HG3	0.53	2.02	32	2
1:A:256:ARG:HA	1:A:259:GLN:OE1	0.53	2.03	51	3
1:A:300:VAL:HG12	2:B:340:LEU:HB2	0.53	1.80	6	1
2:B:335:LEU:HD13	2:B:366:GLU:HB3	0.53	1.81	31	1
1:A:216:ARG:HA	1:A:219:THR:OG1	0.53	2.02	54	3
2:B:348:GLU:HG3	2:B:352:LYS:HD2	0.53	1.80	55	1
2:B:406:GLU:HA	2:B:409:TYR:CZ	0.53	2.38	57	1
1:A:288:CYS:SG	1:A:290:GLN:HB2	0.53	2.44	15	4

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:226:LEU:HB3	1:A:230:VAL:HB	0.53	1.81	56	1
2:B:402:LYS:HG2	2:B:443:LEU:HD13	0.53	1.81	68	1
1:A:205:VAL:O	1:A:209:LEU:HG	0.53	2.03	13	7
1:A:251:ALA:HA	1:A:257:ALA:HB3	0.53	1.81	31	1
2:B:331:ILE:HA	2:B:334:LEU:HD12	0.53	1.80	43	1
2:B:444:ARG:O	2:B:447:CYS:HB3	0.52	2.04	55	1
1:A:183:GLU:HA	1:A:186:GLU:CG	0.52	2.35	56	1
2:B:388:LYS:O	2:B:392:LYS:HG3	0.52	2.04	28	4
2:B:406:GLU:HA	2:B:409:TYR:CD2	0.52	2.39	11	15
1:A:248:PRO:O	1:A:252:LEU:HG	0.52	2.04	27	6
1:A:292:ARG:NE	1:A:292:ARG:HA	0.52	2.18	23	1
1:A:258:PRO:HA	1:A:261:VAL:HG23	0.52	1.79	5	2
1:A:167:THR:O	1:A:170:PRO:HD2	0.52	2.05	52	6
2:B:389:SER:O	2:B:392:LYS:HB2	0.52	2.05	54	2
2:B:399:ASP:O	2:B:403:ARG:HB2	0.52	2.05	56	1
1:A:300:VAL:CB	2:B:336:LYS:HB3	0.52	2.31	35	1
1:A:279:ILE:HG21	1:A:299:THR:HG23	0.52	1.80	50	1
1:A:164:PHE:O	1:A:168:LEU:HB2	0.52	2.04	52	2
2:B:426:LEU:O	2:B:430:VAL:HG23	0.52	2.04	12	14
1:A:261:VAL:HB	1:A:294:ALA:HB1	0.52	1.80	8	1
1:A:231:MET:HE3	1:A:235:ASP:HB3	0.52	1.81	2	1
1:A:202:VAL:CG2	1:A:239:SER:HB3	0.52	2.35	8	1
1:A:198:SER:HB3	1:A:239:SER:HA	0.52	1.81	13	1
1:A:283:LYS:NZ	1:A:283:LYS:HB3	0.52	2.17	49	2
1:A:209:LEU:HD13	1:A:261:VAL:HG22	0.52	1.80	47	1
2:B:372:LEU:HD21	2:B:426:LEU:HB3	0.52	1.81	64	1
1:A:242:LYS:HD2	1:A:242:LYS:H	0.52	1.64	13	1
2:B:333:MET:O	2:B:337:GLU:HG2	0.52	2.05	51	1
1:A:258:PRO:HA	1:A:261:VAL:CG2	0.52	2.34	5	1
1:A:304:MET:HG3	2:B:332:ASP:OD1	0.52	2.04	6	2
1:A:304:MET:SD	2:B:333:MET:HG2	0.52	2.45	61	3
1:A:209:LEU:HD23	1:A:216:ARG:HG2	0.52	1.82	57	2
2:B:383:ILE:HG23	2:B:386:LEU:HD23	0.52	1.81	4	1
1:A:304:MET:HA	2:B:336:LYS:CE	0.52	2.35	21	1
1:A:202:VAL:HG13	1:A:243:LEU:HD12	0.52	1.80	53	1
1:A:259:GLN:CG	1:A:297:LYS:HE3	0.52	2.35	9	1
2:B:344:ILE:HG22	2:B:348:GLU:HG3	0.52	1.81	34	2
2:B:338:TYR:CD2	2:B:386:LEU:HB2	0.52	2.39	52	3
2:B:392:LYS:C	2:B:394:SER:H	0.52	2.09	51	2
1:A:175:TYR:CZ	1:A:222:LEU:HB2	0.51	2.39	68	5
2:B:338:TYR:HE2	2:B:344:ILE:HA	0.51	1.65	30	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:202:VAL:HG13	1:A:243:LEU:HD13	0.51	1.82	57	4
2:B:389:SER:HA	2:B:392:LYS:CE	0.51	2.33	54	9
1:A:165:GLU:HA	1:A:203:LEU:HD21	0.51	1.82	24	5
1:A:231:MET:HG3	1:A:235:ASP:HB2	0.51	1.82	57	8
1:A:241:ASP:O	1:A:245:LYS:HG2	0.51	2.05	8	6
1:A:172:ILE:HG21	1:A:204:ALA:HB2	0.51	1.83	30	1
1:A:168:LEU:HD21	1:A:200:VAL:HG22	0.51	1.82	34	1
2:B:434:PHE:CZ	2:B:441:LYS:HG2	0.51	2.40	54	3
1:A:223:LEU:HB3	1:A:273:ILE:CD1	0.51	2.36	48	1
1:A:292:ARG:HD2	1:A:295:LEU:HD12	0.51	1.81	1	1
1:A:259:GLN:HG2	1:A:297:LYS:HE3	0.51	1.81	9	1
2:B:355:GLU:O	2:B:357:PRO:HD3	0.51	2.05	40	3
1:A:169:THR:O	1:A:173:GLN:HG3	0.51	2.06	31	2
1:A:205:VAL:HG12	1:A:219:THR:HG21	0.51	1.82	42	1
2:B:410:ASN:O	2:B:413:PRO:HD2	0.51	2.06	27	12
1:A:251:ALA:CB	1:A:258:PRO:HD3	0.51	2.34	32	1
1:A:217:GLU:HG3	1:A:218:MET:N	0.51	2.21	34	1
1:A:242:LYS:O	1:A:245:LYS:HB2	0.51	2.06	36	2
1:A:191:LEU:O	1:A:193:LEU:HG	0.51	2.06	61	1
1:A:264:PHE:O	1:A:268:ALA:HB2	0.51	2.06	65	2
1:A:220:SER:HA	1:A:223:LEU:HG	0.51	1.81	66	2
1:A:175:TYR:HE2	1:A:222:LEU:HD22	0.51	1.66	66	1
2:B:335:LEU:HD13	2:B:366:GLU:HG2	0.51	1.82	33	2
1:A:299:THR:HA	1:A:302:LEU:HD12	0.51	1.83	32	2
1:A:202:VAL:HA	1:A:205:VAL:HG22	0.51	1.83	42	1
2:B:335:LEU:HD21	2:B:363:LEU:HG	0.50	1.83	37	3
2:B:381:LYS:HG3	2:B:382:MET:N	0.50	2.20	72	2
1:A:244:LEU:O	1:A:247:LEU:HB2	0.50	2.06	73	3
2:B:338:TYR:CZ	2:B:386:LEU:HB2	0.50	2.41	3	1
1:A:183:GLU:HA	1:A:186:GLU:HG3	0.50	1.82	56	1
1:A:277:THR:HA	1:A:280:ASP:HB2	0.50	1.82	29	1
1:A:169:THR:HG22	1:A:207:LEU:HD21	0.50	1.83	56	1
2:B:434:PHE:HZ	2:B:441:LYS:HG2	0.50	1.66	49	3
1:A:256:ARG:HD2	2:B:349:HIS:HB2	0.50	1.82	36	1
1:A:200:VAL:N	1:A:201:PRO:HD2	0.50	2.21	61	3
2:B:368:ILE:HG23	2:B:429:PHE:CE2	0.50	2.41	54	2
2:B:430:VAL:HG11	2:B:447:CYS:SG	0.50	2.46	10	1
2:B:428:ARG:O	2:B:432:GLU:HB2	0.50	2.07	17	3
1:A:248:PRO:HB3	1:A:290:GLN:HG3	0.50	1.84	38	4
1:A:300:VAL:HG22	1:A:304:MET:HE1	0.50	1.84	37	1
1:A:261:VAL:HA	1:A:264:PHE:CD2	0.50	2.40	53	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:262:GLY:HA3	1:A:297:LYS:HG2	0.50	1.84	53	1
1:A:199:GLY:O	1:A:203:LEU:HB2	0.50	2.06	42	1
1:A:226:LEU:O	1:A:231:MET:HB3	0.50	2.07	57	1
1:A:222:LEU:O	1:A:226:LEU:HG	0.49	2.06	49	10
1:A:300:VAL:HG13	2:B:340:LEU:HB3	0.49	1.83	15	1
1:A:247:LEU:N	1:A:248:PRO:CD	0.49	2.74	17	3
1:A:220:SER:HA	1:A:223:LEU:HD12	0.49	1.83	45	1
1:A:299:THR:HA	1:A:302:LEU:HB3	0.49	1.83	24	1
1:A:176:PHE:HB3	1:A:215:HIS:CD2	0.49	2.42	56	2
1:A:173:GLN:O	1:A:177:GLU:HG2	0.49	2.07	65	2
1:A:304:MET:HE1	2:B:337:GLU:HB2	0.49	1.84	33	1
1:A:185:ALA:O	1:A:189:ARG:HG3	0.49	2.08	41	2
1:A:178:HIS:CG	1:A:179:GLY:H	0.49	2.26	52	1
2:B:365:TYR:HB2	2:B:408:ILE:HD11	0.49	1.85	54	1
2:B:348:GLU:HG2	2:B:390:LEU:HD22	0.49	1.85	11	1
1:A:221:LYS:O	1:A:225:ASP:HB2	0.49	2.07	15	2
1:A:171:ILE:HG23	1:A:187:MET:SD	0.49	2.47	69	2
2:B:360:HIS:HB2	2:B:400:GLN:CG	0.49	2.36	65	2
1:A:300:VAL:HA	2:B:340:LEU:HD22	0.49	1.83	21	1
1:A:269:VAL:HB	1:A:302:LEU:HD11	0.49	1.85	30	1
2:B:384:LEU:HG	2:B:388:LYS:HE2	0.49	1.84	39	1
1:A:266:ALA:HB2	1:A:298:ALA:HB1	0.49	1.84	51	1
2:B:343:ASP:HB2	2:B:346:GLU:HG2	0.49	1.82	55	1
2:B:346:GLU:HA	2:B:346:GLU:OE1	0.49	2.07	55	3
2:B:377:GLU:HA	2:B:380:PHE:HB2	0.49	1.84	6	2
2:B:423:TYR:HA	2:B:426:LEU:HB3	0.49	1.84	21	1
1:A:178:HIS:CE1	1:A:180:ASP:HB2	0.49	2.43	32	1
2:B:344:ILE:HA	2:B:347:ALA:HB3	0.49	1.84	34	1
1:A:266:ALA:HB2	1:A:298:ALA:HA	0.49	1.83	45	1
2:B:361:HIS:CD2	2:B:403:ARG:HB3	0.49	2.43	61	1
2:B:368:ILE:HG21	2:B:408:ILE:HG13	0.49	1.84	66	4
1:A:172:ILE:HD12	1:A:207:LEU:HD12	0.49	1.85	25	1
1:A:253:ASP:O	1:A:255:PRO:HD3	0.49	2.08	66	1
1:A:184:VAL:O	1:A:188:LEU:HG	0.48	2.08	27	8
1:A:237:GLU:HG2	1:A:274:LEU:HD12	0.48	1.84	27	2
2:B:346:GLU:O	2:B:350:CYS:SG	0.48	2.71	44	1
2:B:360:HIS:HB2	2:B:400:GLN:HG2	0.48	1.85	59	1
1:A:175:TYR:OH	1:A:222:LEU:HB2	0.48	2.08	14	2
1:A:184:VAL:O	1:A:188:LEU:HB2	0.48	2.07	41	1
1:A:240:PHE:O	1:A:244:LEU:HG	0.48	2.08	4	2
1:A:214:SER:O	1:A:218:MET:HG2	0.48	2.09	8	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:240:PHE:HE2	1:A:265:ILE:HA	0.48	1.68	18	1
1:A:240:PHE:HE2	1:A:265:ILE:HG12	0.48	1.68	54	1
2:B:332:ASP:CG	2:B:336:LYS:HZ1	0.48	2.11	17	1
2:B:366:GLU:HA	2:B:369:VAL:CG2	0.48	2.38	35	1
1:A:223:LEU:HB3	1:A:273:ILE:HD13	0.48	1.83	48	1
1:A:286:VAL:HB	1:A:292:ARG:NH1	0.48	2.22	73	1
1:A:201:PRO:O	1:A:205:VAL:HB	0.48	2.08	4	2
2:B:338:TYR:HE1	2:B:344:ILE:HG12	0.48	1.68	12	3
1:A:168:LEU:HD11	1:A:200:VAL:HG13	0.48	1.86	25	2
2:B:334:LEU:HD11	2:B:350:CYS:HB3	0.48	1.84	72	1
2:B:419:VAL:HG12	2:B:421:HIS:CD2	0.48	2.44	17	1
2:B:424:SER:O	2:B:428:ARG:HB2	0.48	2.09	57	4
2:B:377:GLU:O	2:B:381:LYS:HG2	0.48	2.09	8	3
1:A:257:ALA:N	1:A:258:PRO:HD2	0.48	2.23	4	14
2:B:380:PHE:O	2:B:384:LEU:HB2	0.48	2.09	47	3
1:A:244:LEU:O	1:A:248:PRO:HD3	0.48	2.09	17	1
2:B:419:VAL:HG12	2:B:421:HIS:HD2	0.48	1.67	17	1
1:A:304:MET:HG3	2:B:332:ASP:OD2	0.48	2.09	34	1
1:A:220:SER:O	1:A:223:LEU:HB2	0.48	2.09	66	2
1:A:286:VAL:HB	1:A:292:ARG:HG3	0.48	1.86	8	1
1:A:303:SER:HB3	2:B:336:LYS:HD2	0.48	1.86	27	1
1:A:304:MET:CE	2:B:333:MET:HA	0.48	2.39	31	1
2:B:367:ALA:O	2:B:371:VAL:HG23	0.48	2.07	24	10
2:B:368:ILE:HG23	2:B:429:PHE:HE2	0.48	1.69	54	2
1:A:300:VAL:HG13	2:B:340:LEU:CB	0.48	2.39	59	2
2:B:434:PHE:CE1	2:B:441:LYS:HA	0.48	2.43	7	8
1:A:168:LEU:HD12	1:A:171:ILE:HD12	0.48	1.86	17	1
1:A:206:SER:HA	1:A:209:LEU:HD12	0.48	1.86	24	1
2:B:381:LYS:O	2:B:385:ASP:HB2	0.48	2.09	43	3
2:B:442:GLN:O	2:B:446:LEU:HG	0.48	2.08	63	3
2:B:387:LEU:HD11	2:B:433:CYS:SG	0.48	2.49	67	1
1:A:172:ILE:CD1	1:A:207:LEU:HD12	0.47	2.39	25	1
1:A:268:ALA:HB1	1:A:273:ILE:HG13	0.47	1.86	29	1
2:B:343:ASP:HB3	2:B:346:GLU:HG3	0.47	1.84	36	2
2:B:351:LEU:HD23	2:B:390:LEU:HD22	0.47	1.85	35	1
1:A:268:ALA:HB1	1:A:274:LEU:HB2	0.47	1.85	59	2
1:A:181:THR:CG2	1:A:222:LEU:HA	0.47	2.39	60	3
2:B:428:ARG:O	2:B:432:GLU:N	0.47	2.47	27	3
1:A:206:SER:HA	1:A:209:LEU:HG	0.47	1.86	45	1
2:B:350:CYS:HA	2:B:353:GLU:HG3	0.47	1.85	70	1
1:A:205:VAL:O	1:A:219:THR:HB	0.47	2.09	72	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:412:ILE:HG23	2:B:416:ASN:ND2	0.47	2.24	66	2
2:B:393:SER:O	2:B:394:SER:CB	0.47	2.62	21	2
2:B:383:ILE:O	2:B:386:LEU:HB3	0.47	2.09	28	2
1:A:300:VAL:HG21	2:B:341:SER:OG	0.47	2.09	57	3
1:A:197:LYS:C	1:A:199:GLY:H	0.47	2.12	67	2
1:A:301:LEU:HA	1:A:304:MET:HE3	0.47	1.85	55	1
1:A:248:PRO:HG3	1:A:288:CYS:SG	0.47	2.49	3	1
2:B:419:VAL:N	2:B:420:PRO:HD3	0.47	2.25	26	2
1:A:304:MET:HG3	2:B:336:LYS:HE2	0.47	1.86	56	1
1:A:256:ARG:NH1	2:B:349:HIS:HB3	0.47	2.24	61	1
1:A:181:THR:HG21	1:A:225:ASP:CB	0.47	2.39	46	2
2:B:391:TRP:HH2	2:B:398:ILE:HA	0.47	1.70	42	1
1:A:266:ALA:HB3	1:A:301:LEU:HD23	0.47	1.85	6	1
1:A:205:VAL:O	1:A:209:LEU:HB2	0.47	2.09	30	1
2:B:434:PHE:HA	2:B:439:ILE:CD1	0.47	2.33	70	3
1:A:176:PHE:HZ	1:A:219:THR:HG23	0.47	1.70	32	1
2:B:430:VAL:HG21	2:B:447:CYS:SG	0.47	2.50	66	2
1:A:300:VAL:HG21	2:B:341:SER:HA	0.47	1.86	51	1
1:A:158:PRO:HB2	1:A:161:GLU:HG2	0.47	1.86	54	1
2:B:379:ALA:O	2:B:383:ILE:HG13	0.47	2.10	58	1
1:A:277:THR:O	1:A:280:ASP:N	0.47	2.45	68	3
1:A:232:SER:O	1:A:235:ASP:HB2	0.47	2.10	2	1
1:A:259:GLN:HA	1:A:297:LYS:CD	0.47	2.40	9	1
1:A:184:VAL:HG11	1:A:222:LEU:HD11	0.47	1.85	67	2
2:B:409:TYR:HA	2:B:412:ILE:CG1	0.47	2.40	57	1
1:A:304:MET:HG2	2:B:336:LYS:HB3	0.47	1.87	58	1
1:A:283:LYS:HB3	1:A:283:LYS:HZ3	0.47	1.69	7	2
1:A:200:VAL:H	1:A:201:PRO:HD2	0.47	1.70	37	2
2:B:406:GLU:HG2	2:B:446:LEU:HD22	0.47	1.86	62	1
1:A:172:ILE:HD12	1:A:203:LEU:HD23	0.47	1.87	63	1
1:A:164:PHE:CE1	1:A:200:VAL:HG22	0.47	2.45	72	1
1:A:263:GLN:HG3	1:A:301:LEU:HG	0.47	1.84	72	1
1:A:304:MET:HG2	2:B:332:ASP:OD2	0.47	2.10	5	3
2:B:405:TYR:HE1	2:B:430:VAL:HG22	0.47	1.69	28	2
2:B:366:GLU:O	2:B:369:VAL:HB	0.46	2.10	72	1
2:B:402:LYS:HD2	2:B:443:LEU:HD13	0.46	1.88	20	1
1:A:185:ALA:CB	1:A:226:LEU:HD22	0.46	2.40	56	1
2:B:367:ALA:O	2:B:383:ILE:HG21	0.46	2.10	66	1
1:A:207:LEU:C	1:A:209:LEU:H	0.46	2.13	4	2
1:A:263:GLN:HA	1:A:301:LEU:HD22	0.46	1.87	4	1
1:A:269:VAL:HA	1:A:274:LEU:O	0.46	2.10	72	3

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:249:GLU:O	1:A:252:LEU:HB2	0.46	2.11	73	2
1:A:247:LEU:HD11	1:A:261:VAL:HG11	0.46	1.87	20	2
2:B:433:CYS:HB3	2:B:438:ILE:HD11	0.46	1.87	73	4
1:A:217:GLU:HG3	1:A:267:ARG:HH22	0.46	1.71	35	2
2:B:402:LYS:HG2	2:B:406:GLU:OE2	0.46	2.10	45	1
1:A:174:GLU:O	1:A:177:GLU:HB2	0.46	2.11	62	2
1:A:209:LEU:HA	1:A:216:ARG:HE	0.46	1.70	24	2
1:A:300:VAL:HA	2:B:340:LEU:CD1	0.46	2.41	45	1
2:B:345:SER:O	2:B:349:HIS:HB2	0.46	2.10	42	2
1:A:256:ARG:HA	1:A:259:GLN:NE2	0.46	2.25	46	1
1:A:201:PRO:O	1:A:205:VAL:HG23	0.46	2.10	12	7
1:A:161:GLU:O	1:A:165:GLU:HG3	0.46	2.10	14	4
1:A:162:ARG:N	1:A:162:ARG:HD2	0.46	2.25	34	1
1:A:257:ALA:HB3	1:A:258:PRO:HD3	0.46	1.88	54	2
2:B:444:ARG:O	2:B:447:CYS:HB2	0.46	2.11	10	1
1:A:168:LEU:HA	1:A:171:ILE:HD12	0.46	1.88	28	1
1:A:240:PHE:CE1	1:A:265:ILE:HG12	0.46	2.44	31	1
2:B:380:PHE:CE1	2:B:429:PHE:HB3	0.46	2.45	31	1
1:A:222:LEU:O	1:A:226:LEU:HB2	0.46	2.10	34	1
1:A:240:PHE:HE2	1:A:265:ILE:HG23	0.46	1.71	61	1
1:A:203:LEU:O	1:A:207:LEU:N	0.46	2.49	72	2
1:A:236:VAL:HG11	1:A:273:ILE:O	0.46	2.11	13	2
2:B:402:LYS:O	2:B:406:GLU:HG3	0.46	2.10	22	1
2:B:389:SER:HA	2:B:392:LYS:CD	0.46	2.40	8	1
2:B:335:LEU:CD1	2:B:366:GLU:HB3	0.46	2.41	31	2
1:A:263:GLN:HE21	1:A:301:LEU:HD22	0.46	1.70	36	1
2:B:338:TYR:CZ	2:B:344:ILE:HG23	0.46	2.46	54	1
1:A:268:ALA:HA	1:A:271:ASP:OD1	0.46	2.11	29	1
2:B:368:ILE:O	2:B:371:VAL:HG12	0.46	2.11	48	3
1:A:172:ILE:HG13	1:A:173:GLN:N	0.46	2.26	64	1
1:A:240:PHE:O	1:A:243:LEU:HB2	0.45	2.10	13	1
1:A:300:VAL:CG2	2:B:340:LEU:HB3	0.45	2.41	46	2
2:B:398:ILE:O	2:B:402:LYS:HG3	0.45	2.10	33	1
1:A:193:LEU:HD22	1:A:196:MET:HB3	0.45	1.88	58	1
2:B:351:LEU:HD21	2:B:363:LEU:HD13	0.45	1.87	20	1
1:A:209:LEU:HD21	1:A:264:PHE:HE2	0.45	1.72	53	1
2:B:384:LEU:HB2	2:B:429:PHE:CE1	0.45	2.45	66	1
1:A:265:ILE:HD13	1:A:295:LEU:HD23	0.45	1.87	8	1
1:A:304:MET:SD	2:B:333:MET:HG3	0.45	2.51	41	2
1:A:249:GLU:HA	1:A:252:LEU:HG	0.45	1.88	65	1
1:A:282:TYR:HA	1:A:285:THR:OG1	0.45	2.10	57	4

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:333:MET:O	2:B:337:GLU:HG3	0.45	2.11	29	1
2:B:424:SER:O	2:B:428:ARG:HG2	0.45	2.12	36	1
1:A:300:VAL:HG11	2:B:337:GLU:CA	0.45	2.38	48	1
2:B:348:GLU:O	2:B:352:LYS:HD2	0.45	2.12	8	1
1:A:300:VAL:CG1	2:B:340:LEU:HB2	0.45	2.42	23	4
2:B:371:VAL:HG11	2:B:380:PHE:HD1	0.45	1.70	29	1
2:B:434:PHE:HD1	2:B:439:ILE:HD11	0.45	1.71	30	1
2:B:429:PHE:O	2:B:432:GLU:HB3	0.45	2.11	57	1
1:A:225:ASP:C	1:A:227:CYS:H	0.45	2.14	68	1
1:A:249:GLU:O	1:A:251:ALA:N	0.45	2.50	72	1
2:B:334:LEU:HD21	2:B:351:LEU:HB2	0.45	1.88	2	1
2:B:338:TYR:CD2	2:B:386:LEU:HD13	0.45	2.47	4	1
1:A:201:PRO:HG3	1:A:231:MET:SD	0.45	2.52	32	2
1:A:266:ALA:HA	1:A:269:VAL:HG23	0.45	1.87	8	1
1:A:268:ALA:CB	1:A:273:ILE:HB	0.45	2.42	13	1
1:A:169:THR:N	1:A:170:PRO:HD2	0.45	2.27	63	4
2:B:338:TYR:O	2:B:342:GLY:HA2	0.45	2.11	69	2
2:B:382:MET:O	2:B:386:LEU:HB2	0.45	2.11	68	1
1:A:187:MET:O	1:A:191:LEU:HG	0.45	2.12	8	2
1:A:171:ILE:HG12	1:A:187:MET:SD	0.45	2.52	25	1
1:A:240:PHE:HB3	1:A:278:TYR:OH	0.45	2.12	35	1
2:B:368:ILE:CD1	2:B:408:ILE:HG13	0.45	2.40	61	2
1:A:258:PRO:HB2	1:A:293:ALA:HB1	0.45	1.87	66	1
1:A:176:PHE:CZ	1:A:208:ALA:HB2	0.45	2.46	17	2
1:A:296:ASP:O	1:A:300:VAL:HG23	0.45	2.10	70	3
1:A:304:MET:HG2	2:B:336:LYS:HG3	0.45	1.89	22	1
1:A:217:GLU:HA	1:A:267:ARG:NH2	0.45	2.26	49	1
2:B:384:LEU:HB2	2:B:429:PHE:HE1	0.45	1.71	66	1
2:B:334:LEU:CD2	2:B:347:ALA:HA	0.45	2.42	11	2
2:B:405:TYR:CE1	2:B:430:VAL:HG22	0.45	2.47	40	2
1:A:208:ALA:HA	1:A:215:HIS:ND1	0.45	2.27	39	1
2:B:442:GLN:HB3	2:B:446:LEU:HD12	0.45	1.88	64	1
1:A:244:LEU:HA	1:A:247:LEU:HD13	0.45	1.89	59	4
1:A:300:VAL:HB	2:B:340:LEU:CB	0.45	2.41	21	1
2:B:331:ILE:O	2:B:335:LEU:HG	0.45	2.12	29	1
2:B:354:LEU:O	2:B:355:GLU:HB2	0.45	2.11	49	1
2:B:334:LEU:HD21	2:B:350:CYS:CB	0.44	2.42	50	1
1:A:289:VAL:HA	1:A:292:ARG:HB2	0.44	1.89	21	2
2:B:367:ALA:HB1	2:B:383:ILE:HD12	0.44	1.87	36	1
1:A:301:LEU:HD23	1:A:304:MET:HE3	0.44	1.87	37	2
2:B:348:GLU:O	2:B:352:LYS:HG2	0.44	2.12	61	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:398:ILE:O	2:B:402:LYS:HB2	0.44	2.11	71	1
2:B:330:GLU:HG3	2:B:331:ILE:N	0.44	2.27	18	1
1:A:304:MET:HE1	2:B:333:MET:HG3	0.44	1.89	29	2
1:A:205:VAL:HG22	1:A:219:THR:CG2	0.44	2.42	54	1
2:B:338:TYR:CE2	2:B:344:ILE:HA	0.44	2.47	30	1
1:A:267:ARG:O	1:A:271:ASP:HB2	0.44	2.12	73	2
1:A:181:THR:HG22	1:A:222:LEU:HD12	0.44	1.89	71	3
1:A:193:LEU:O	1:A:197:LYS:HB2	0.44	2.12	21	1
1:A:240:PHE:HA	1:A:243:LEU:HB3	0.44	1.88	52	1
2:B:402:LYS:HE3	2:B:442:GLN:OE1	0.44	2.12	53	1
2:B:361:HIS:HB2	2:B:400:GLN:HA	0.44	1.88	73	1
2:B:338:TYR:CD1	2:B:382:MET:HB3	0.44	2.47	45	1
1:A:274:LEU:HG	1:A:275:CYS:N	0.44	2.28	62	2
1:A:169:THR:H	1:A:170:PRO:HD2	0.44	1.73	66	1
2:B:361:HIS:HB3	2:B:400:GLN:CB	0.44	2.41	72	1
1:A:202:VAL:HG23	1:A:239:SER:HB3	0.44	1.90	8	3
1:A:257:ALA:HA	1:A:260:LEU:HD12	0.44	1.90	44	2
2:B:406:GLU:HA	2:B:409:TYR:CE2	0.44	2.48	59	4
2:B:424:SER:O	2:B:428:ARG:HB3	0.44	2.13	9	2
2:B:402:LYS:HG2	2:B:443:LEU:HD22	0.44	1.88	66	1
2:B:331:ILE:HD13	2:B:362:GLU:HB3	0.44	1.89	14	1
1:A:227:CYS:SG	1:A:273:ILE:HG22	0.44	2.53	27	2
2:B:379:ALA:O	2:B:383:ILE:HG12	0.44	2.13	33	3
2:B:352:LYS:HD2	2:B:352:LYS:N	0.44	2.27	29	1
2:B:371:VAL:HB	2:B:383:ILE:HG21	0.44	1.89	69	2
2:B:347:ALA:O	2:B:351:LEU:HB2	0.44	2.13	56	1
2:B:384:LEU:O	2:B:388:LYS:HE3	0.44	2.13	59	1
1:A:168:LEU:HD21	1:A:200:VAL:HG13	0.44	1.88	63	1
2:B:399:ASP:HA	2:B:402:LYS:HG3	0.44	1.90	73	1
1:A:244:LEU:HD11	1:A:295:LEU:HD21	0.43	1.89	41	2
1:A:259:GLN:HB3	2:B:346:GLU:OE1	0.43	2.13	50	1
1:A:247:LEU:HD23	1:A:290:GLN:HB3	0.43	1.88	53	1
1:A:300:VAL:HG22	2:B:340:LEU:HB2	0.43	1.90	1	1
1:A:304:MET:HA	2:B:336:LYS:NZ	0.43	2.28	2	1
2:B:373:GLU:HA	2:B:373:GLU:OE1	0.43	2.13	13	1
2:B:338:TYR:OH	2:B:385:ASP:HB3	0.43	2.14	30	1
1:A:203:LEU:O	1:A:207:LEU:HG	0.43	2.13	41	2
1:A:174:GLU:HA	1:A:177:GLU:HG2	0.43	1.89	45	1
1:A:304:MET:HE3	2:B:337:GLU:HB2	0.43	1.88	53	1
1:A:269:VAL:HG11	1:A:276:ASN:HB3	0.43	1.90	61	1
1:A:216:ARG:NH1	1:A:260:LEU:HD13	0.43	2.28	73	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:297:LYS:HZ3	2:B:346:GLU:CD	0.43	2.17	8	1
2:B:348:GLU:O	2:B:352:LYS:HG3	0.43	2.13	28	1
1:A:256:ARG:HG2	1:A:260:LEU:HG	0.43	1.90	42	1
2:B:391:TRP:CZ2	2:B:398:ILE:HB	0.43	2.42	60	1
1:A:280:ASP:O	1:A:283:LYS:HB2	0.43	2.14	9	2
2:B:391:TRP:HA	2:B:396:ILE:HB	0.43	1.89	21	1
1:A:172:ILE:HG22	1:A:176:PHE:CZ	0.43	2.49	46	2
1:A:224:SER:HA	1:A:273:ILE:HG21	0.43	1.89	22	2
2:B:402:LYS:O	2:B:406:GLU:HB2	0.43	2.12	27	2
1:A:240:PHE:CZ	1:A:274:LEU:HD22	0.43	2.48	47	1
1:A:263:GLN:HB2	1:A:301:LEU:HD13	0.43	1.90	51	1
2:B:334:LEU:HD22	2:B:350:CYS:SG	0.43	2.53	57	1
1:A:178:HIS:O	1:A:180:ASP:N	0.43	2.51	22	1
2:B:405:TYR:O	2:B:408:ILE:HB	0.43	2.12	22	1
2:B:352:LYS:HD2	2:B:352:LYS:H	0.43	1.73	29	1
1:A:158:PRO:HB3	1:A:196:MET:HG2	0.43	1.90	62	1
1:A:300:VAL:HG13	2:B:336:LYS:HB3	0.43	1.89	54	1
2:B:351:LEU:HD23	2:B:395:THR:HG21	0.43	1.91	61	1
1:A:232:SER:H	1:A:235:ASP:HB3	0.43	1.74	71	1
1:A:204:ALA:HA	1:A:207:LEU:HD12	0.43	1.89	4	1
2:B:358:HIS:HA	2:B:400:GLN:HE22	0.43	1.74	21	1
1:A:304:MET:HE2	2:B:333:MET:HG2	0.43	1.91	34	1
2:B:364:VAL:HG23	2:B:365:TYR:H	0.43	1.74	50	1
2:B:412:ILE:N	2:B:413:PRO:HD2	0.43	2.28	72	1
1:A:181:THR:HG22	1:A:222:LEU:HA	0.43	1.89	7	3
1:A:300:VAL:HG11	2:B:337:GLU:HG3	0.43	1.91	4	1
2:B:343:ASP:HB3	2:B:346:GLU:CG	0.43	2.42	13	1
2:B:331:ILE:HD13	2:B:362:GLU:HB2	0.43	1.90	26	1
1:A:200:VAL:HB	1:A:201:PRO:CD	0.43	2.44	34	8
1:A:292:ARG:HD2	1:A:292:ARG:HA	0.43	1.63	20	1
1:A:247:LEU:HA	1:A:250:LEU:HB2	0.43	1.89	21	1
2:B:431:GLU:HG3	2:B:432:GLU:N	0.43	2.29	55	3
2:B:440:SER:OG	2:B:443:LEU:HB2	0.43	2.14	42	1
2:B:331:ILE:CG2	2:B:363:LEU:HA	0.43	2.44	58	1
1:A:277:THR:O	1:A:280:ASP:HB2	0.43	2.14	59	1
2:B:380:PHE:O	2:B:384:LEU:HB3	0.43	2.13	61	1
2:B:360:HIS:CB	2:B:400:GLN:HG3	0.43	2.38	65	1
1:A:197:LYS:O	1:A:200:VAL:HG23	0.43	2.13	38	1
1:A:258:PRO:HG2	1:A:259:GLN:OE1	0.43	2.13	46	1
2:B:371:VAL:O	2:B:374:SER:HB2	0.43	2.14	60	1
2:B:361:HIS:HB2	2:B:400:GLN:O	0.42	2.14	23	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:351:LEU:HD11	2:B:363:LEU:HD11	0.42	1.90	56	1
1:A:195:GLU:HA	1:A:238:LYS:NZ	0.42	2.29	70	1
1:A:251:ALA:CB	1:A:258:PRO:HG3	0.42	2.44	70	2
2:B:364:VAL:O	2:B:368:ILE:HG13	0.42	2.14	63	2
2:B:336:LYS:O	2:B:339:LEU:HB3	0.42	2.14	36	1
1:A:286:VAL:CG1	1:A:291:ALA:HB3	0.42	2.43	38	1
1:A:292:ARG:O	1:A:296:ASP:HB2	0.42	2.15	66	2
1:A:300:VAL:HG21	2:B:341:SER:CA	0.42	2.44	51	1
2:B:348:GLU:HG2	2:B:390:LEU:HD23	0.42	1.90	54	1
2:B:368:ILE:O	2:B:371:VAL:HB	0.42	2.13	4	1
1:A:216:ARG:HB3	1:A:264:PHE:CE1	0.42	2.49	15	1
1:A:181:THR:HG21	1:A:225:ASP:HB3	0.42	1.90	28	1
2:B:380:PHE:HE1	2:B:429:PHE:HB3	0.42	1.74	31	1
2:B:335:LEU:HD11	2:B:366:GLU:HB3	0.42	1.90	65	1
1:A:158:PRO:HA	1:A:196:MET:SD	0.42	2.53	66	1
1:A:283:LYS:O	1:A:283:LYS:HG2	0.42	2.13	7	1
2:B:390:LEU:HD12	2:B:396:ILE:HD11	0.42	1.90	14	1
2:B:416:ASN:HB3	2:B:420:PRO:HB3	0.42	1.91	35	1
1:A:244:LEU:HB3	1:A:291:ALA:CB	0.42	2.45	13	1
2:B:443:LEU:HD12	2:B:446:LEU:HD12	0.42	1.91	26	1
1:A:279:ILE:HG23	1:A:295:LEU:HD22	0.42	1.90	29	1
1:A:300:VAL:HG23	2:B:340:LEU:HD12	0.42	1.89	2	1
2:B:397:THR:OG1	2:B:400:GLN:HG2	0.42	2.14	10	1
2:B:346:GLU:OE1	2:B:346:GLU:HA	0.42	2.15	14	1
1:A:216:ARG:HB3	1:A:264:PHE:CZ	0.42	2.44	18	1
2:B:344:ILE:O	2:B:348:GLU:HB2	0.42	2.15	22	2
1:A:236:VAL:HG21	1:A:273:ILE:HG21	0.42	1.90	66	1
2:B:424:SER:O	2:B:428:ARG:HD3	0.42	2.15	70	1
2:B:348:GLU:O	2:B:352:LYS:HD3	0.42	2.14	23	1
2:B:351:LEU:HD22	2:B:390:LEU:HD13	0.42	1.91	27	1
2:B:354:LEU:HB3	2:B:355:GLU:H	0.42	1.57	64	2
1:A:172:ILE:HD13	1:A:204:ALA:HB2	0.42	1.92	30	1
1:A:251:ALA:O	1:A:253:ASP:N	0.42	2.53	42	1
1:A:300:VAL:HA	2:B:340:LEU:HD13	0.42	1.92	64	2
2:B:348:GLU:HB3	2:B:352:LYS:HE2	0.42	1.90	54	1
1:A:297:LYS:HE3	2:B:346:GLU:OE2	0.42	2.15	55	1
2:B:360:HIS:O	2:B:363:LEU:HB3	0.42	2.15	61	1
1:A:206:SER:O	1:A:209:LEU:HB2	0.42	2.15	15	1
2:B:409:TYR:CZ	2:B:447:CYS:HB3	0.42	2.49	52	1
2:B:338:TYR:CD1	2:B:386:LEU:HD13	0.42	2.50	8	1
1:A:178:HIS:H	1:A:178:HIS:CD2	0.41	2.32	52	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
1:A:212:LYS:O	1:A:216:ARG:HG3	0.41	2.15	70	1
1:A:188:LEU:HA	1:A:191:LEU:HD12	0.41	1.91	71	1
2:B:412:ILE:HD13	2:B:412:ILE:HA	0.41	1.81	21	1
2:B:435:GLN:C	2:B:437:GLY:H	0.41	2.18	36	1
2:B:339:LEU:HB2	2:B:383:ILE:HD11	0.41	1.91	56	1
1:A:208:ALA:C	1:A:210:GLU:H	0.41	2.19	64	1
1:A:180:ASP:HB3	1:A:183:GLU:HB2	0.41	1.91	3	1
1:A:206:SER:HA	1:A:209:LEU:HB2	0.41	1.91	38	1
2:B:388:LYS:HG3	2:B:438:ILE:HD13	0.41	1.91	48	1
1:A:216:ARG:HD3	1:A:260:LEU:HD22	0.41	1.92	56	1
1:A:259:GLN:NE2	2:B:346:GLU:HB3	0.41	2.30	73	1
2:B:412:ILE:O	2:B:416:ASN:HB2	0.41	2.16	25	1
2:B:431:GLU:HA	2:B:434:PHE:HB3	0.41	1.93	52	1
1:A:213:ALA:HA	1:A:216:ARG:CZ	0.41	2.46	64	1
1:A:170:PRO:O	1:A:174:GLU:HG2	0.41	2.14	70	1
2:B:338:TYR:O	2:B:341:SER:O	0.41	2.37	73	1
1:A:254:THR:HG22	1:A:256:ARG:H	0.41	1.76	8	1
1:A:247:LEU:HD21	1:A:258:PRO:CA	0.41	2.42	13	1
2:B:438:ILE:HG13	2:B:439:ILE:N	0.41	2.30	41	1
2:B:351:LEU:HD13	2:B:363:LEU:HD13	0.41	1.93	55	1
1:A:247:LEU:HA	1:A:250:LEU:HD12	0.41	1.91	59	1
2:B:356:VAL:HB	2:B:359:PHE:HB3	0.41	1.90	61	1
1:A:253:ASP:O	1:A:254:THR:CB	0.41	2.68	72	1
1:A:215:HIS:HD2	1:A:218:MET:SD	0.41	2.38	13	1
2:B:351:LEU:HD22	2:B:390:LEU:HD22	0.41	1.93	31	2
1:A:304:MET:HE2	2:B:336:LYS:HB2	0.41	1.91	22	1
1:A:258:PRO:O	1:A:261:VAL:HB	0.41	2.16	23	1
1:A:181:THR:HG21	1:A:222:LEU:HA	0.41	1.93	31	1
1:A:259:GLN:HG2	2:B:346:GLU:CG	0.41	2.44	40	1
2:B:438:ILE:HG13	2:B:439:ILE:HG12	0.41	1.92	50	1
1:A:176:PHE:CE1	1:A:219:THR:HA	0.41	2.50	66	1
2:B:365:TYR:CE1	2:B:407:ARG:HG2	0.41	2.50	17	1
1:A:239:SER:O	1:A:243:LEU:HB2	0.41	2.15	70	2
2:B:367:ALA:HA	2:B:370:MET:HB2	0.41	1.92	44	1
1:A:219:THR:HB	1:A:264:PHE:HE1	0.41	1.74	56	2
1:A:213:ALA:HA	1:A:216:ARG:NH1	0.41	2.30	57	1
2:B:388:LYS:O	2:B:391:TRP:N	0.41	2.37	68	1
1:A:188:LEU:HD23	1:A:191:LEU:HD12	0.41	1.93	4	1
1:A:206:SER:OG	1:A:243:LEU:HD11	0.41	2.15	34	1
2:B:431:GLU:O	2:B:435:GLN:HG3	0.41	2.16	44	1
1:A:297:LYS:NZ	2:B:337:GLU:OE1	0.41	2.52	57	1

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Clash(Å)	Distance(Å)	Models	
				Worst	Total
2:B:409:TYR:CE1	2:B:447:CYS:HB3	0.41	2.51	57	1
1:A:198:SER:C	1:A:200:VAL:H	0.41	2.19	64	1
1:A:168:LEU:HG	1:A:200:VAL:HG22	0.41	1.93	66	1
1:A:175:TYR:O	1:A:177:GLU:N	0.41	2.54	66	1
1:A:170:PRO:O	1:A:174:GLU:HB2	0.41	2.16	67	1
1:A:301:LEU:HA	1:A:304:MET:CE	0.41	2.46	67	1
1:A:161:GLU:O	1:A:165:GLU:HB2	0.41	2.16	68	1
1:A:225:ASP:C	1:A:227:CYS:N	0.41	2.74	68	1
1:A:276:ASN:C	1:A:278:TYR:H	0.41	2.19	73	1
1:A:237:GLU:HG3	1:A:274:LEU:CD1	0.41	2.46	28	1
1:A:300:VAL:HG11	2:B:336:LYS:O	0.41	2.16	35	1
1:A:283:LYS:HZ3	1:A:283:LYS:HB3	0.40	1.76	15	1
2:B:402:LYS:HE3	2:B:443:LEU:HD13	0.40	1.91	37	1
2:B:397:THR:O	2:B:400:GLN:HB2	0.40	2.16	42	1
1:A:248:PRO:O	1:A:252:LEU:HD12	0.40	2.16	53	1
1:A:301:LEU:HD23	1:A:304:MET:CE	0.40	2.47	66	1
2:B:344:ILE:H	2:B:344:ILE:HD12	0.40	1.76	10	1
2:B:434:PHE:CD1	2:B:439:ILE:HD11	0.40	2.51	30	1
1:A:297:LYS:HE3	1:A:301:LEU:HD21	0.40	1.93	44	1
2:B:334:LEU:HD11	2:B:350:CYS:HB2	0.40	1.91	17	1
2:B:354:LEU:HD22	2:B:354:LEU:HA	0.40	1.80	18	1
1:A:169:THR:HB	1:A:170:PRO:CD	0.40	2.46	21	1
1:A:216:ARG:NH1	1:A:260:LEU:HD12	0.40	2.31	52	1
2:B:361:HIS:CE1	2:B:404:GLY:HA2	0.40	2.51	59	1
2:B:396:ILE:HG23	2:B:400:GLN:HB3	0.40	1.94	65	1
1:A:205:VAL:HG11	1:A:243:LEU:HD21	0.40	1.92	43	1
1:A:304:MET:HB3	2:B:333:MET:SD	0.40	2.56	21	1
2:B:367:ALA:HB1	2:B:383:ILE:HG23	0.40	1.93	66	1
1:A:158:PRO:HB2	1:A:196:MET:HE2	0.40	1.94	70	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
1	A	149/163 (91%)	135±5 (91±3%)	12±4 (8±3%)	2±2 (1±1%)	16 63

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	B	119/131 (91%)	105±5 (88±4%)	13±4 (11±3%)	2±2 (1±1%)	16	63
All	All	19564/21462 (91%)	17506 (89%)	1805 (9%)	253 (1%)	16	63

All 79 unique Ramachandran outliers are listed below. They are sorted by the frequency of occurrence in the ensemble.

Mol	Chain	Res	Type	Models (Total)
2	B	354	LEU	22
2	B	394	SER	22
1	A	283	LYS	20
1	A	192	ASN	16
1	A	179	GLY	13
1	A	273	ILE	10
2	B	355	GLU	9
1	A	261	VAL	7
2	B	342	GLY	7
2	B	393	SER	6
2	B	395	THR	5
2	B	439	ILE	5
2	B	436	ALA	4
2	B	392	LYS	4
2	B	361	HIS	4
1	A	289	VAL	3
1	A	168	LEU	3
2	B	373	GLU	3
1	A	272	GLY	3
1	A	239	SER	3
1	A	277	THR	3
1	A	278	TYR	3
1	A	208	ALA	2
2	B	345	SER	2
2	B	438	ILE	2
2	B	448	PRO	2
1	A	245	LYS	2
1	A	248	PRO	2
1	A	202	VAL	2
1	A	238	LYS	2
1	A	230	VAL	2
2	B	353	GLU	2
2	B	356	VAL	2
1	A	201	PRO	2
1	A	305	SER	2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
1	A	209	LEU	2
2	B	364	VAL	2
1	A	254	THR	2
1	A	227	CYS	2
1	A	247	LEU	2
1	A	255	PRO	2
1	A	199	GLY	2
1	A	216	ARG	2
1	A	190	ASP	1
2	B	360	HIS	1
2	B	362	GLU	1
1	A	241	ASP	1
1	A	175	TYR	1
1	A	181	THR	1
1	A	229	THR	1
2	B	357	PRO	1
2	B	380	PHE	1
2	B	420	PRO	1
1	A	219	THR	1
1	A	222	LEU	1
2	B	437	GLY	1
1	A	200	VAL	1
1	A	252	LEU	1
2	B	403	ARG	1
2	B	386	LEU	1
2	B	375	THR	1
1	A	233	THR	1
2	B	374	SER	1
1	A	180	ASP	1
1	A	256	ARG	1
1	A	161	GLU	1
1	A	244	LEU	1
2	B	344	ILE	1
1	A	174	GLU	1
1	A	288	CYS	1
1	A	258	PRO	1
1	A	176	PHE	1
1	A	223	LEU	1
1	A	292	ARG	1
1	A	212	LYS	1
1	A	226	LEU	1
2	B	389	SER	1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
2	B	402	LYS	1
1	A	250	LEU	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	
1	A	127/136 (93%)	109±3 (86±3%)	18±3 (14±3%)	6	45
2	B	112/121 (93%)	96±4 (86±3%)	16±4 (14±3%)	6	46
All	All	17447/18761 (93%)	14942 (86%)	2505 (14%)	6	45

All 190 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)
1	A	285	THR	69
1	A	277	THR	66
1	A	195	GLU	61
1	A	214	SER	60
1	A	233	THR	56
2	B	378	SER	52
1	A	292	ARG	52
2	B	405	TYR	50
2	B	440	SER	46
2	B	424	SER	46
1	A	225	ASP	44
1	A	196	MET	43
1	A	234	THR	42
2	B	375	THR	40
2	B	397	THR	38
1	A	181	THR	38
1	A	271	ASP	37
1	A	224	SER	36
1	A	220	SER	36
2	B	421	HIS	35
2	B	407	ARG	34
2	B	345	SER	32

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
1	A	299	THR	32
1	A	221	LYS	31
2	B	422	SER	31
1	A	246	ASP	30
2	B	423	TYR	29
2	B	361	HIS	29
1	A	256	ARG	28
1	A	249	GLU	27
2	B	414	ASP	27
2	B	387	LEU	25
2	B	395	THR	25
2	B	356	VAL	24
1	A	190	ASP	24
2	B	449	SER	24
1	A	280	ASP	23
2	B	444	ARG	22
1	A	232	SER	21
2	B	399	ASP	21
2	B	346	GLU	21
2	B	358	HIS	21
1	A	219	THR	21
2	B	354	LEU	21
1	A	210	GLU	21
1	A	303	SER	21
1	A	160	ASP	20
1	A	254	THR	20
2	B	393	SER	19
1	A	241	ASP	19
1	A	296	ASP	18
2	B	359	PHE	17
2	B	330	GLU	17
2	B	353	GLU	17
2	B	338	TYR	16
1	A	253	ASP	16
2	B	391	TRP	16
2	B	344	ILE	16
2	B	341	SER	15
1	A	178	HIS	15
1	A	168	LEU	15
2	B	427	GLU	15
2	B	385	ASP	14
2	B	337	GLU	14

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
2	B	442	GLN	14
2	B	418	ASP	14
1	A	305	SER	14
1	A	237	GLU	13
1	A	215	HIS	13
1	A	169	THR	12
2	B	348	GLU	12
1	A	267	ARG	12
2	B	411	GLU	11
1	A	229	THR	11
2	B	349	HIS	11
1	A	198	SER	10
1	A	206	SER	10
1	A	283	LYS	10
2	B	429	PHE	10
1	A	174	GLU	10
2	B	373	GLU	10
2	B	416	ASN	10
2	B	384	LEU	9
2	B	340	LEU	9
1	A	217	GLU	8
1	A	222	LEU	8
1	A	263	GLN	8
2	B	392	LYS	8
2	B	333	MET	8
2	B	377	GLU	8
2	B	360	HIS	8
1	A	275	CYS	8
1	A	239	SER	8
1	A	259	GLN	8
2	B	447	CYS	7
2	B	431	GLU	7
2	B	435	GLN	7
2	B	352	LYS	6
2	B	400	GLN	6
1	A	167	THR	6
2	B	394	SER	6
2	B	363	LEU	6
1	A	216	ARG	6
1	A	182	ASN	5
1	A	273	ILE	5
2	B	351	LEU	5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
2	B	428	ARG	5
2	B	445	ASP	5
1	A	304	MET	5
1	A	193	LEU	5
1	A	297	LYS	5
1	A	209	LEU	5
1	A	161	GLU	5
2	B	433	CYS	5
1	A	247	LEU	5
1	A	207	LEU	5
2	B	390	LEU	4
2	B	412	ILE	4
2	B	366	GLU	4
2	B	380	PHE	4
1	A	240	PHE	4
2	B	362	GLU	4
2	B	365	TYR	4
2	B	336	LYS	4
1	A	250	LEU	4
1	A	235	ASP	4
1	A	287	ASP	4
2	B	409	TYR	4
2	B	350	CYS	4
1	A	226	LEU	4
2	B	388	LYS	4
2	B	446	LEU	4
2	B	355	GLU	4
1	A	183	GLU	3
2	B	334	LEU	3
1	A	264	PHE	3
1	A	192	ASN	3
1	A	301	LEU	3
2	B	402	LYS	3
2	B	426	LEU	3
1	A	162	ARG	3
1	A	177	GLU	3
1	A	252	LEU	3
2	B	364	VAL	3
2	B	370	MET	3
1	A	281	SER	3
1	A	230	VAL	3
1	A	186	GLU	2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Models (Total)
1	A	276	ASN	2
1	A	227	CYS	2
1	A	300	VAL	2
1	A	248	PRO	2
2	B	332	ASP	2
2	B	382	MET	2
1	A	175	TYR	2
2	B	381	LYS	2
1	A	218	MET	2
1	A	165	GLU	2
1	A	203	LEU	2
2	B	343	ASP	2
1	A	159	LEU	2
2	B	403	ARG	1
2	B	383	ILE	1
1	A	197	LYS	1
1	A	238	LYS	1
1	A	212	LYS	1
2	B	432	GLU	1
1	A	243	LEU	1
2	B	371	VAL	1
2	B	372	LEU	1
1	A	158	PRO	1
2	B	339	LEU	1
1	A	289	VAL	1
1	A	191	LEU	1
2	B	425	VAL	1
1	A	164	PHE	1
2	B	331	ILE	1
1	A	278	TYR	1
2	B	398	ILE	1
1	A	274	LEU	1
1	A	242	LYS	1
2	B	408	ILE	1
1	A	180	ASP	1
1	A	290	GLN	1
2	B	335	LEU	1
2	B	430	VAL	1
1	A	188	LEU	1
2	B	389	SER	1
2	B	386	LEU	1
1	A	176	PHE	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