



# Full wwPDB NMR Structure Validation Report ⓘ

Aug 10, 2023 – 07:40 PM EDT

PDB ID : 7U8K  
BMRB ID : 30877  
Title : Magic Angle Spinning NMR Structure of Human Cofilin-2 Assembled on Actin Filaments  
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We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

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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>.

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

Cyrange : **FAILED**  
NmrClust : **FAILED**  
MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
wwPDB-RCI : **FAILED**  
PANAV : **FAILED**  
wwPDB-ShiftChecker : **FAILED**  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.35

# 1 Overall quality at a glance

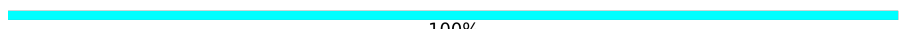
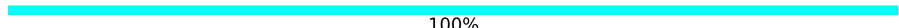
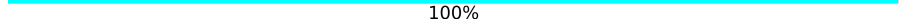

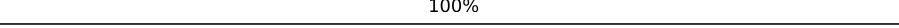
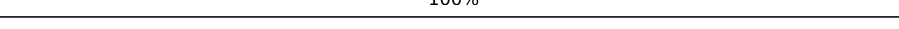
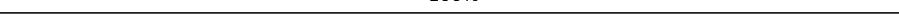
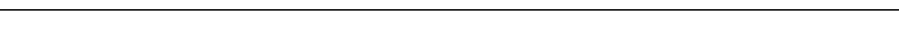



The following experimental techniques were used to determine the structure:

*SOLID-STATE NMR*

The overall completeness of chemical shifts assignment was not calculated.


There are no overall percentile quality scores available for this entry.

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  $\geq 3$ , 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	377	 100%
1	B	377	 100%
1	C	377	 100%
1	D	377	 100%
1	E	377	 100%
1	F	377	 100%
1	G	377	 100%
1	H	377	 100%
1	I	377	 100%
1	J	377	 100%
2	K	168	 100%
2	L	168	 100%
2	M	168	 100%
2	N	168	 100%
2	O	168	 100%
2	P	168	 100%
2	Q	168	 100%

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Mol	Chain	Length	Quality of chain
2	R	168	 100%

## 2 Ensemble composition and analysis

This entry contains 4 models. The atoms present in the NMR models are not consistent. Some calculations may have failed as a result. All residues are included in the validation scores.

Cyrange was unable to find well-defined residues.

Error message: Cyrange did not run

NmrClust was unable to cluster the ensemble.

Error message: NmrClust did not run

### 3 Entry composition i

There are 2 unique types of molecules in this entry. The entry contains 79778 atoms, of which 39858 are hydrogens and 0 are deuteriums.

- Molecule 1 is a protein called Actin, alpha skeletal muscle.

Mol	Chain	Residues	Atoms						Trace
			Total	C	H	N	O	S	
1	A	377	5833	1856	2897	494	565	21	1
1	B	377	5833	1856	2897	494	565	21	1
1	C	377	5833	1856	2897	494	565	21	1
1	D	377	5833	1856	2897	494	565	21	1
1	E	377	5833	1856	2897	494	565	21	1
1	F	377	5833	1856	2897	494	565	21	1
1	G	377	5833	1856	2897	494	565	21	1
1	H	377	5833	1856	2897	494	565	21	1
1	I	377	5833	1856	2897	494	565	21	1
1	J	377	5833	1856	2897	494	565	21	1

There are 20 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	0	ACE	-	acetylation	UNP P68135
A	376	NH2	-	amidation	UNP P68135
B	0	ACE	-	acetylation	UNP P68135
B	376	NH2	-	amidation	UNP P68135
C	0	ACE	-	acetylation	UNP P68135
C	376	NH2	-	amidation	UNP P68135
D	0	ACE	-	acetylation	UNP P68135
D	376	NH2	-	amidation	UNP P68135
E	0	ACE	-	acetylation	UNP P68135
E	376	NH2	-	amidation	UNP P68135
F	0	ACE	-	acetylation	UNP P68135
F	376	NH2	-	amidation	UNP P68135
G	0	ACE	-	acetylation	UNP P68135

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Chain	Residue	Modelled	Actual	Comment	Reference
G	376	NH2	-	amidation	UNP P68135
H	0	ACE	-	acetylation	UNP P68135
H	376	NH2	-	amidation	UNP P68135
I	0	ACE	-	acetylation	UNP P68135
I	376	NH2	-	amidation	UNP P68135
J	0	ACE	-	acetylation	UNP P68135
J	376	NH2	-	amidation	UNP P68135

- Molecule 2 is a protein called Cofilin-2.

Mol	Chain	Residues	Atoms					Trace	
			Total	C	H	N	O		S
2	K	168	2681	842	1361	218	255	5	1
2	L	168	2681	842	1361	218	255	5	1
2	M	168	2681	842	1361	218	255	5	1
2	N	168	2681	842	1361	218	255	5	1
2	O	168	2681	842	1361	218	255	5	1
2	P	168	2681	842	1361	218	255	5	1
2	Q	168	2681	842	1361	218	255	5	1
2	R	168	2681	842	1361	218	255	5	1

There are 16 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	0	ACE	-	acetylation	UNP Q9Y281
K	167	NH2	-	amidation	UNP Q9Y281
L	0	ACE	-	acetylation	UNP Q9Y281
L	167	NH2	-	amidation	UNP Q9Y281
M	0	ACE	-	acetylation	UNP Q9Y281
M	167	NH2	-	amidation	UNP Q9Y281
N	0	ACE	-	acetylation	UNP Q9Y281
N	167	NH2	-	amidation	UNP Q9Y281
O	0	ACE	-	acetylation	UNP Q9Y281
O	167	NH2	-	amidation	UNP Q9Y281
P	0	ACE	-	acetylation	UNP Q9Y281

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Chain	Residue	Modelled	Actual	Comment	Reference
P	167	NH2	-	amidation	UNP Q9Y281
Q	0	ACE	-	acetylation	UNP Q9Y281
Q	167	NH2	-	amidation	UNP Q9Y281
R	0	ACE	-	acetylation	UNP Q9Y281
R	167	NH2	-	amidation	UNP Q9Y281

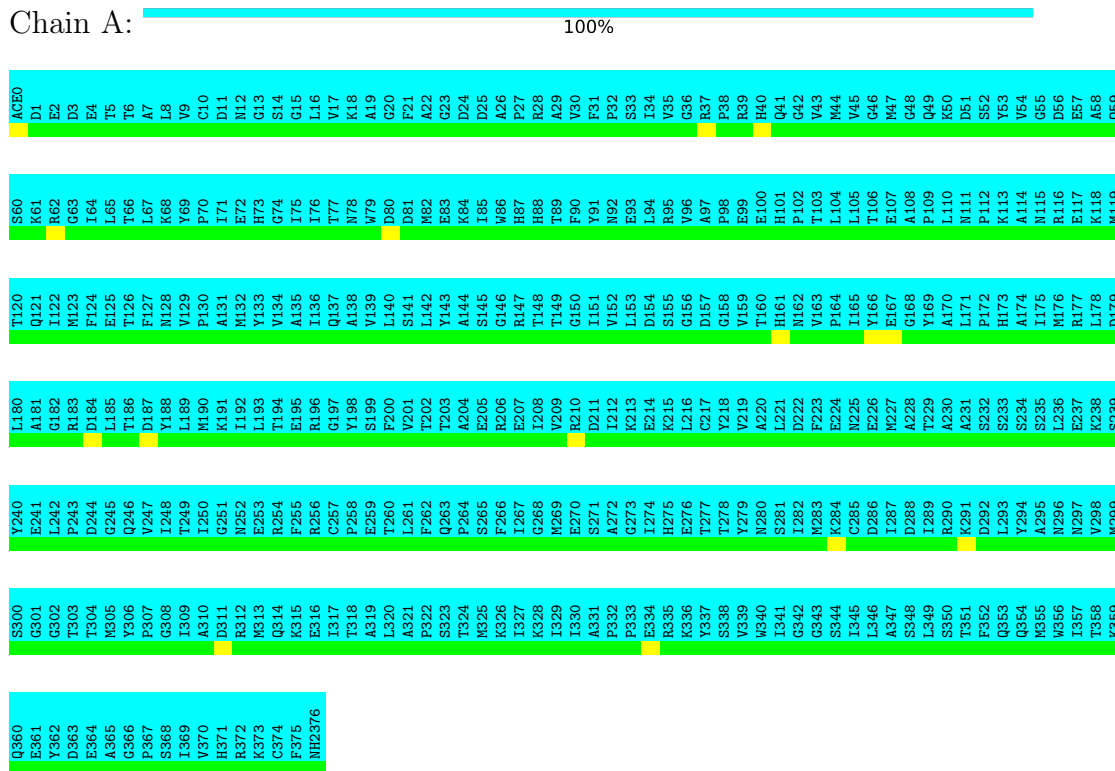
## 4 Residue-property plots [i](#)

### 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.

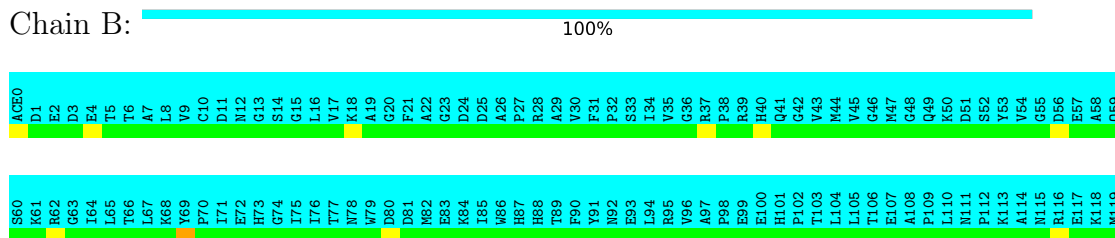
- Molecule 1: Actin, alpha skeletal muscle

Chain A:



- Molecule 1: Actin, alpha skeletal muscle

Chain B:







T120	L180	Y240	S300	Q360
Q121	A181	E241	G301	E361
I122	G182	L242	G302	Y362
M123	R183	P243	G303	D363
F124	R184	D244	T304	E364
E125	L185	G245	M305	A365
T126	L186	Q246	Y306	G366
F127	D187	V247	P307	P367
M128	Y188	L248	G308	S368
L129	L189	T249	I309	I369
P130	M190	L250	A310	V370
A131	K191	G251	D311	H371
M132	K192	N252	R312	R372
Y133	L193	E253	M313	K373
L134	T194	R254	Q314	C374
A135	E195	F255	K315	F375
R196	R196	R256	E316	NH2376
G197	G197	C257	I317	
Q137	Y198	P258	T318	
A138	S199	E259	A319	
Y139	F200	L260	L320	
L140	V201	L261	A321	
L141	T202	F262	P322	
L142	T202	L142	M82	
L143	T203	Q263	S323	
A144	A204	P264	T324	
S145	E205	S265	M325	
S146	R206	F266	K326	
R147	E207	L267	I327	
L148	I208	G268	K328	
T149	V209	M269	I329	
R210	R210	E270	I330	
D211	D211	S271	A331	
L152	L212	A272	P332	
L153	K213	G273	P333	
L154	E214	L274	E334	
S155	K215	H275	R335	
G156	L216	E276	K336	
D157	C217	T277	Y337	
G158	Y218	T278	S338	
L159	V219	Y279	V339	
T160	A220	N280	W340	
H161	L221	S281	I341	
M162	D222	I282	P102	
V163	F223	M283	G42	
P164	E224	K284	T103	
L165	N225	C285	L104	
Y166	E226	D286	M44	
E167	M227	L287	V45	
G168	A228	D288	T106	
Y169	T229	I289	G46	
A170	A230	K290	M47	
L171	A231	R291	A108	
P172	D232	D292	P109	
H173	S233	L293	L110	
S234	Y294	Y294	M11	
A174	G354	A295	P112	
L175	M355	G296	K113	
M176	W356	N296	V54	
R177	E357	N297	A114	
L178	K358	V298	M115	
S239	M359	M299	G55	
			D56	
			E57	
			K118	
			A58	
			M119	

- Molecule 1: Actin, alpha skeletal muscle

## Chain E:

100%

ACE0	S60	T120	L180	Y240	S300	Q360
D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	F243	T303	D363
E4	I64	F124	L184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	L186	Q246	Y306	G366
A7	L67	F127	D187	V247	P307	P367
L8	K68	M128	Y188	L248	G308	S368
V9	Y69	I129	L189	T249	I309	I369
C10	P70	P130	M190	L250	A310	V370
D11	I71	A131	K191	G251	D311	H371
M12	I72	M132	K192	N252	R312	R372
G13	H73	Y133	L193	E253	M313	K373
S14	G74	V134	T194	R254	Q314	C374
G15	I75	A135	E195	F255	K315	F375
L16	I76	L136	R196	R256	E316	NH2376
V17	T77	Q137	G197	C257	I317	
K18	N78	M138	T318	P258	T318	
A19	W79	A139	A319	E259	A319	
G20	D80	L140	L320	L260	L320	
D81	F21	S141	A321	L261	A321	
A22	M82	L142	M82	F262	P322	
Q23	E83	Y143	T203	Q263	S323	
D24	K84	D24	K84	P264	T324	
D25	I85	D25	I85	S265	M325	
A26	W86	A26	W86	F266	K326	
P27	H87	P27	H87	L267	I327	
R28	H88	R28	H88	G268	K328	
A29	V89	A29	V89	M269	I329	
V30	F90	V30	F90	E270	I330	
F31	Y91	F31	Y91	S271	A331	
N92	M92	N92	M92	A272	P332	
S93	E93	S93	E93	G273	P333	
L94	L94	L94	L94	L274	E334	
V95	R95	V95	R95	H275	R335	
G96	V96	G96	V96	E276	K336	
R97	A97	R97	A97	T277	Y337	
F98	P98	F98	P98	T278	S338	
R99	E99	R99	E99	Y279	V339	
H40	E100	H40	E100	N280	W340	
Q41	H101	Q41	H101	S281	I341	
G42	P102	G42	P102	I282	P102	
V43	T103	V43	T103	M283	G42	
M44	L104	M44	L104	K284	T103	
V45	L105	V45	L105	N225	L104	
G46	T106	G46	T106	C285	M44	
M47	E107	M47	E107	D286	V45	
G48	M47	G48	E107	L287	A347	
Q49	A108	Q49	A108	D288	P109	
K50	P109	K50	P109	I289	L349	
D51	L110	D51	L110	K290	S350	
S52	M11	S52	M11	R291	T351	
Y53	P112	Y53	P112	D292	F352	
V54	K113	V54	K113	L293	Q353	
G55	A114	G55	A114	Y294	Q354	
D56	M115	D56	M115	A295	M355	
E57	R116	E57	R116	N296	W356	
K118	E117	K118	E117	N297	W357	
A58	K118	A58	K118	V298	T358	
M119	M119	M119	M119	M299	K359	

- Molecule 1: Actin, alpha skeletal muscle

## Chain F:

100%

ACE0	S60	T120	L180	Y240	S300	Q360
D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	F243	T303	D363
E4	I64	F124	L184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	L186	Q246	Y306	G366
A7	L67	F127	D187	V247	P307	P367
L8	K68	M128	Y188	L248	G308	S368
V9	Y69	I129	L189	T249	I309	I369
C10	P70	P130	M190	L250	A310	V370
D11	I71	A131	K191	G251	D311	H371
M12	I72	M132	K192	N252	R312	R372
G13	H73	Y133	L193	E253	M313	K373
S14	G74	V134	T194	R254	Q314	C374
G15	I75	A135	E195	F255	K315	F375
L16	I76	L136	R196	R256	E316	NH2376
V17	T77	Q137	G197	C257	I317	
K18	N78	M138	T318	P258	T318	
A19	W79	A139	A319	E259	A319	
G20	D80	L140	L320	L260	L320	
D81	F21	S141	A321	L261	A321	
A22	M82	L142	M82	F262	P322	
Q23	E83	Y143	T203	Q263	S323	
D24	K84	D24	K84	P264	T324	
D25	I85	D25	I85	S265	M325	
A26	W86	A26	W86	F266	K326	
P27	H87	P27	H87	L267	I327	
R28	H88	R28	H88	G268	K328	
A29	V89	A29	V89	M269	I329	
V30	F90	V30	F90	E270	I330	
F31	Y91	F31	Y91	S271	A331	
N92	M92	N92	M92	A272	P332	
S93	E93	S93	E93	G273	P333	
L94	L94	L94	L94	L274	E334	
V95	R95	V95	R95	H275	R335	
G96	V96	G96	V96	E276	K336	
R97	A97	R97	A97	T277	Y337	
F98	P98	F98	P98	T278	S338	
R99	E99	R99	E99	Y279	V339	
H40	E100	H40	E100	N280	W340	
Q41	H101	Q41	H101	S281	I341	
G42	P102	G42	P102	I282	P102	
V43	T103	V43	T103	M283	G42	
M44	L104	M44	L104	K284	T103	
V45	L105	V45	L105	N225	L104	
G46	T106	G46	T106	C285	M44	
M47	E107	M47	E107	D286	V45	
G48	M47	G48	E107	L287	A347	
Q49	A108	Q49	A108	D288	P109	
K50	P109	K50	P109	I289	L349	
D51	L110	D51	L110	K290	S350	
S52	M11	S52	M11	R291	T351	
Y53	P112	Y53	P112	D292	F352	
V54	K113	V54	K113	L293	Q353	
G55	A114	G55	A114	Y294	Q354	
D56	M115	D56	M115	A295	M355	
E57	R116	E57	R116	N296	W356	
K118	E117	K118	E117	N297	W357	
A58	K118	A58	K118	V298	T358	
M119	M119	M119	M119	M299	K359	

T120	L180	Y240	S300	Q360	T120	L180	Y240	S300	Q360
Q121	A181	E241	G301	E361	Q121	A181	E241	G301	E361
I122	G182	L242	G302	Y362	I122	G182	L242	G302	Y362
M123	R183	P243	T303	D363	M123	R183	P243	T303	D363
F124	R184	D244	T304	E364	F124	R184	D244	T304	E364
E125	L185	G245	M305	A365	E125	L185	G245	M305	A365
T126	L186	Q246	Y306	G366	T126	L186	Q246	Y306	G366
F127	D187	V247	P307	P367	F127	D187	V247	P307	P367
M128	Y188	L248	G308	S368	M128	Y188	L248	G308	S368
V129	L189	T249	I309	I369	V129	L189	T249	I309	I369
M130	M190	A130	P70	V370	M130	M190	A130	P70	V370
A131	K191	G251	D311	H371	A131	K191	G251	D311	H371
M132	K192	W252	R312	R372	M132	K192	W252	R312	R372
Y133	L193	E253	M313	K373	Y133	L193	E253	M313	K373
V134	T194	R254	Q314	C374	V134	T194	R254	Q314	C374
A136	E195	F255	K315	F375	A136	E195	F255	K315	F375
R196	R196	R256	E316	NH2376	R196	R196	R256	E316	NH2376
G197	G197	C257	I317		G197	G197	C257	I317	
Q137	Y198	P258	T318		Q137	Y198	P258	T318	
Y138	S199	E259	A319		Y138	S199	E259	A319	
F140	F200	T260	L320		F140	F200	T260	L320	
L141	V201	L261	A321		L141	V201	L261	A321	
L142	T202	F262	P322		L142	T202	F262	P322	
Y143	T203	Q263	S323		Y143	T203	Q263	S323	
A144	A204	P264	T324		A144	A204	P264	T324	
S145	E205	S265	M325		S145	E205	S265	M325	
R146	R206	F266	K326		R146	R206	F266	K326	
R147	E207	L267	I327		R147	E207	L267	I327	
L148	I208	G268	K328		L148	I208	G268	K328	
T149	V209	M269	I329		T149	V209	M269	I329	
G150	R210	E270	I330		G150	R210	E270	I330	
I151	D211	S271	A331		I151	D211	S271	A331	
I152	L212	A272	P332		I152	L212	A272	P332	
L153	K213	G273	S333		L153	K213	G273	S333	
D154	E214	L274	E334		D154	E214	L274	E334	
S155	K215	H275	R335		S155	K215	H275	R335	
G156	L216	E276	K336		G156	L216	E276	K336	
D157	C217	T277	Y337		D157	C217	T277	Y337	
G158	Y218	T278	S338		G158	Y218	T278	S338	
V159	V219	Y279	V339		V159	V219	Y279	V339	
H160	A220	N280	W340		H160	A220	N280	W340	
L161	L221	S281	I341		L161	L221	S281	I341	
M162	D222	L282	P102		M162	D222	L282	P102	
F163	F223	M283	G43		F163	F223	M283	G43	
P164	E224	K284	L104		P164	E224	K284	L104	
I165	N225	C285	L105		I165	N225	C285	L105	
Y166	E226	D286	T106		Y166	E226	D286	T106	
E167	M227	L287	E107		E167	M227	L287	E107	
G168	A228	D288	A108		G168	A228	D288	A108	
Y169	T229	I289	P109		Y169	T229	I289	P109	
A170	A230	K290	L110		A170	A230	K290	L110	
L171	A231	M291	M111		L171	A231	M291	M111	
P172	S232	D292	P112		P172	S232	D292	P112	
H173	S233	L293	K113		H173	S233	L293	K113	
A174	S234	Y294	A114		A174	S234	Y294	A114	
I175	S235	A295	M115		I175	S235	A295	M115	
M176	L236	N296	R116		M176	L236	N296	R116	
R177	E237	N297	E117		R177	E237	N297	E117	
L178	K238	V298	K118		L178	K238	V298	K118	
D179	S239	M299	M119		D179	S239	M299	M119	

● Molecule 1: Actin, alpha skeletal muscle

Chain G:

100%

ACE0	S60	T120	L180	Y240	S300	Q360	ACE0	S60	T120	L180	Y240	S300	Q360
D1	K61	Q121	A181	E241	G301	E361	D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362	E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	P243	T303	D363	D3	G63	M123	R183	P243	T303	D363
E4	I64	F124	E184	D244	T304	E364	E4	I64	F124	E184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365	T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	L186	Q246	Y306	G366	T6	T66	T126	L186	Q246	Y306	G366
A7	L67	F127	D187	V247	P307	P367	A7	L67	F127	D187	V247	P307	P367
L8	K68	M128	Y188	L248	G308	S368	L8	K68	M128	Y188	L248	G308	S368
V9	Y69	I129	L189	T249	I309	I369	V9	Y69	I129	L189	T249	I309	I369
C10	P70	M130	M190	A130	P70	V370	C10	P70	M130	M190	A130	P70	V370
D11	I71	D11	K191	G251	D311	H371	D11	I71	D11	K191	G251	D311	H371
M12	I72	M12	K192	W252	R312	R372	M12	I72	M12	K192	W252	R312	R372
G13	H73	G13	H73	E253	M313	K373	G13	H73	G13	H73	E253	M313	K373
S14	G74	S14	T194	R254	Q314	C374	S14	G74	S14	T194	R254	Q314	C374
I15	I75	I15	I75	F255	K315	F375	I15	I75	I15	I75	F255	K315	F375
L16	I76	L16	I76	R256	E316	NH2376	L16	I76	L16	I76	R256	E316	NH2376
V17	T77	V17	T77	C257	I317		V17	T77	V17	T77	C257	I317	
K18	N78	K18	N78	P258	T318		K18	N78	K18	N78	P258	T318	
A19	W79	A19	W79	E259	A319		A19	W79	A19	W79	E259	A319	
G20	D80	G20	D80	T260	L320		G20	D80	G20	D80	T260	L320	
D81	F21	D81	F21	L261	A321		D81	F21	D81	F21	L261	A321	
A22	M82	A22	M82	F262	P322		A22	M82	A22	M82	F262	P322	
G23	E83	G23	E83	Q263	S323		G23	E83	G23	E83	Q263	S323	
D24	K84	D24	K84	P264	T324		D24	K84	D24	K84	P264	T324	
D25	I85	D25	I85	S265	M325		D25	I85	D25	I85	S265	M325	
A26	W86	A26	W86	F266	K326		A26	W86	A26	W86	F266	K326	
P27	H87	P27	H87	L267	I327		P27	H87	P27	H87	L267	I327	
R28	H88	R28	H88	G268	K328		R28	H88	R28	H88	G268	K328	
A29	I89	A29	I89	M269	I329		A29	I89	A29	I89	M269	I329	
V30	F90	V30	F90	E270	I330		V30	F90	V30	F90	E270	I330	
F31	Y91	F31	Y91	S271	A331		F31	Y91	F31	Y91	S271	A331	
N92	N92	N92	N92	A272	P332		N92	N92	N92	N92	A272	P332	
S93	S93	S93	S93	G273	S333		S93	S93	S93	S93	G273	S333	
L94	L94	L94	L94	I274	E334		L94	L94	L94	L94	I274	E334	
V95	R95	V95	R95	H275	R335		V95	R95	V95	R95	H275	R335	
G96	V96	G96	V96	E276	K336		G96	V96	G96	V96	E276	K336	
R97	A97	R97	A97	T277	Y337		R97	A97	R97	A97	T277	Y337	
F98	P98	F98	P98	T278	S338		F98	P98	F98	P98	T278	S338	
R99	E99	R99	E99	Y279	V339		R99	E99	R99	E99	Y279	V339	
H40	E100	H40	E100	N280	W340		H40	E100	H40	E100	N280	W340	
Q41	H101	Q41	H101	S281	I341		Q41	H101	Q41	H101	S281	I341	
G42	P102	G42	P102	L282	P102		G42	P102	G42	P102	L282	P102	
V43	M103	V43	M103	M283	G43		V43	M103	V43	M103	M283	G43	
M44	L104	M44	L104	K284	L104		M44	L104	M44	L104	K284	L104	
V45	L105	V45	L105	N225	L105		V45	L105	V45	L105	N225	L105	
G46	T106	G46	T106	D286	T106		G46	T106	G46	T106	D286	T106	
M47	E107	M47	E107	L287	E107		M47	E107	M47	E107	L287	E107	
G48	A108	G48	A108	D288	A108		G48	A108	G48	A108	D288	A108	
O49	P109	O49	P109	I289	P109		O49	P109	O49	P109	I289	P109	
K50	L110	K50	L110	K290	L110		K50	L110	K50	L110	K290	L110	
D51	M111	D51	M111	M291	M111		D51	M111	D51	M111	M291	M111	
S52	P112	S52	P112	D292	P112		S52	P112	S52	P112	D292	P112	
Y53	K113	Y53	K113	L293	K113		Y53	K113	Y53	K113	L293	K113	
V54	A114	V54	A114	Y294	A114		V54	A114	V54	A114	Y294	A114	
G55	M115	G55	M115	A295	M115		G55	M115	G55	M115	A295	M115	
D56	R116	D56	R116	N296	R116		D56	R116	D56	R116	N296	R116	
E57	L357	E57	L357	N297	E117		E57	L357	E57	L357	N297	E117	
A58	K118	A58	K118	V298	K118		A58	K118	A58	K118	V298	K118	
O59	M119	O59	M119	M299	M119		O59	M119	O59	M119	M299	M119	

● Molecule 1: Actin, alpha skeletal muscle

Chain H:

100%

ACE0	S60	T120	L180	Y240	S300	Q360	ACE0	S60	T120	L180	Y240	S300	Q360
D1	K61	Q121	A181	E241	G301	E361	D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362	E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	P243	T303	D363	D3	G63	M123	R183	P243	T303	D363
E4	I64	F124	E184	D244	T304	E364	E4	I64	F124	E184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365	T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	L186	Q246	Y306	G366	T6	T66	T126	L186	Q246	Y306	G366
A7	L67	F127	D187	V247	P307	P367	A7	L67	F127	D187	V247	P307	P367

T120	Q121	Q122	M123	F124	E125	T126	F127	M128	L129	M130	A131	K132	L133	V134	L135	A136	R137	Q138	L139	A140	V141	T142	T202	L143	T203	Y144	A204	S145	R206	F146	L147	L148	T149	V209	T149	G150	L151	L152	L153	L154	S155	K215	L216	C217	D157	G158	V219	A220	H161	L221	D222	F223	E224	M225	E226	M227	A228	G168	T229	A230	L171	P172	S232	K173	S233	A174	S234	M115	S235	L236	E237	L177	K238	S239																															
Q360	E361	Y362	D363	E364	A365	G366	P367	G368	I369	V370	H371	R372	K373	C374	F375	NH2376	S300	G301	G302	T303	T304	M305	Y306	P307	G308	I309	T249	A310	L250	D311	K312	M313	Q314	R254	E316	E317	C257	P258	A319	A319	L320	L260	L261	A321	F262	F262	Q263	S323	T324	M325	K326	F266	L267	I327	K328	R269	I329	A29	F30	A331	P332	G273	E333	E334	L34	V35	H275	G356	K337	T277	R37	F38	E39	H40	I341	H101	Q41	P102	G42	G43	S344	L345	G46	L346	A347	M47	D288	G48	L349	S350	T351	D292	Q353	L293	Y294	V54	M115	G55	A295	W356	L357	M297	K358	V298	M299

• Molecule 1: Actin, alpha skeletal muscle

Chain I:

100%

ACE0	D1	E2	D3	E4	T5	T6	A7	L8	V9	C10	D11	M12	G13	S14	I15	I16	V17	K18	A19	D20	F21	A22	M82	E83	D24	D25	A26	H87	R88	T89	F30	Y91	N92	E93	L94	V95	G96	A87	P98	E99	H100	H101	Q41	P102	G42	T103	L104	M44	V45	T106	G46	E107	M47	A108	P109	L110	M111	P112	S52	K113	A114	V54	M115	A116	E117	K118	A58	M119																																					
S80	K61	R62	G63	I64	L65	T66	L67	K68	Y69	P70	I71	E72	H73	G74	I75	I76	T77	N78	W79	D80	F201	M82	E83	K84	I85	W86	H87	R88	T89	F30	Y91	N92	E93	L94	V95	G96	A87	P98	E99	H100	H101	Q41	P102	G42	T103	L104	M44	V45	T106	G46	E107	M47	A108	P109	L110	M111	P112	S52	K113	A114	V54	M115	A116	E117	K118	A58	M119																																						
T120	Q121	M123	F124	E125	T126	F127	M128	L129	M130	A131	K132	L133	V134	L135	A136	R137	Q138	L139	A140	V141	T142	T202	L143	T203	Y144	A204	S145	R206	F146	L147	L148	T149	G150	L151	L152	L153	L154	S155	K215	L216	C217	D157	G158	V219	A220	H161	L221	D222	F223	E224	M225	E226	M227	A228	G168	T229	A230	L171	P172	S232	K173	S233	A174	S234	M115	S235	L236	E237	L177	K238	S239																																		
L180	A181	G182	R183	D184	L185	T186	D187	Y188	L189	M190	K191	L192	L193	T194	E195	R196	G197	Y198	S199	F200	L260	L261	T202	T203	A204	S205	R206	F266	L267	I267	G268	M269	T149	G150	L151	L152	L153	L154	S155	K215	L216	C217	D157	G158	V219	A220	H161	L221	D222	F223	E224	M225	E226	M227	A228	G168	T229	A230	L171	P172	S232	K173	S233	A174	S234	M115	S235	L236	E237	L177	K238	S239																																	
Y240	E241	L242	P243	D244	G245	Q246	V247	I248	V129	A310	L250	D251	E252	E253	R254	R256	C257	P258	E259	L260	L261	F262	Q263	P264	S265	F266	L267	I267	G268	M269	T149	G150	L151	L152	L153	L154	S155	K215	L216	C217	D157	G158	V219	A220	H161	L221	D222	F223	E224	M225	E226	M227	A228	G168	T229	A230	L171	P172	S232	K173	S233	A174	S234	M115	S235	L236	E237	L177	K238	S239																																			
G300	G301	G302	T303	T304	M305	Y306	P307	G308	I309	T249	A310	L250	D311	K312	M313	Q314	R254	E316	E317	C257	P258	A319	A319	L320	L260	L261	A321	F262	F262	Q263	S323	T324	M325	K326	F266	L267	I327	K328	R269	I329	A29	F30	A331	P332	G273	E333	E334	L34	V35	H275	G356	K337	T277	R37	F38	E39	H40	I341	H101	Q41	P102	G42	G43	S344	L345	G46	L346	A347	M47	D288	G48	L349	S350	T351	D292	Q353	L293	Y294	V54	M115	G55	A295	W356	L357	M297	K358	V298	M299																	
Q360	E361	Y362	D363	E364	A365	G366	P367	G368	I369	V370	H371	R372	K373	C374	F375	NH2376	S300	G301	G302	T303	T304	M305	Y306	P307	G308	I309	T249	A310	L250	D311	K312	M313	Q314	R254	E316	E317	C257	P258	A319	A319	L320	L260	L261	A321	F262	F262	Q263	S323	T324	M325	K326	F266	L267	I327	K328	R269	I329	A29	F30	A331	P332	G273	E333	E334	L34	V35	H275	G356	K337	T277	R37	F38	E39	H40	I341	H101	Q41	P102	G42	G43	S344	L345	G46	L346	A347	M47	D288	G48	L349	S350	T351	D292	Q353	L293	Y294	V54	M115	G55	A295	W356	L357	M297	K358	V298	M299

• Molecule 1: Actin, alpha skeletal muscle

Chain J:

100%

ACE0	D1	E2	D3	E4	T5	T6	A7	L8	V9	C10	D11	M12	G13	S14	I15	I16	V17	K18	A19	D20	F21	A22	M82	E83	D24	D25	A26	H87	R88	T89	F30	Y91	N92	E93	L94	V95	G96	A87	P98	E99	H100	H101	Q41	P102	G42	T103	L104	M44	V45	T106	G46	E107	M47	A108	P109	L110	M111	P112	S52	K113	A114	V54	M115	A116	E117	K118	A58	M119
S80	K61	R62	G63	I64	L65	T66	L67	K68	Y69	P70	I71	E72	H73	G74	I75	I76	T77	N78	W79	D80	F201	M82	E83	K84	I85	W86	H87	R88	T89	F30	Y91	N92	E93	L94	V95	G96	A87	P98	E99	H100	H101	Q41	P102	G42	T103	L104	M44	V45	T106	G46	E107	M47	A108	P109	L110	M111	P112	S52	K113	A114	V54	M115	A116	E117	K118	A58	M119	

T120	L180	Y240	S300	Q360
Q121	A181	E241	G301	E361
I122	G182	L242	G302	Y362
M123	R183	P243	T303	D363
F124	D184	D244	T304	E364
E125	L185	G245	M305	A365
T126	T186	Q246	Y306	G366
F127	D187	V247	P307	P367
L128	Y188	I248	G308	S368
M129	L189	T249	I309	I369
P130	M190	L250	A310	V370
A131	K191	G251	D311	H371
I132	L192	N252	R312	H372
Y133	L193	E253	M313	K373
V134	T194	R254	Q314	Q374
A135	E195	F255	K315	F375
I136	R196	R256	E316	NH2376
Q137	G197	C257	I317	
A138	Y198	P258	T318	
V139	S199	E259	A319	
F200	F200	T260	L320	
S141	V201	L261	R21	
L142	T202	F262	P322	
Y143	T203	Q263	S323	
A144	A204	P264	A324	
S145	E205	S265	M325	
G146	R206	F266	K326	
R147	E207	L267	I327	
I148	I208	G268	K328	
T149	V209	N269	I29	
G150	R210	E270	I330	
I151	D211	S271	A331	
I152	L212	A272	P332	
L153	K213	G273	E333	
E154	E214	L274	S334	
S155	K215	H275	R335	
G156	L216	E276	K336	
D157	C217	T277	Y337	
G158	Y218	T278	S338	
V159	V219	Y279	V339	
T160	A220	N280	W340	
H161	L221	S281	I341	
D222	L222	L282	G342	
V163	F223	M283	G343	
P164	E224	K284	S344	
I165	N225	C285	L345	
Y166	E226	D286	L346	
E167	M227	L287	A347	
G168	A228	D288	S348	
Y169	T229	L289	L349	
A170	A230	K290	S350	
L171	A231	R291	T351	
P172	S232	D292	F352	
H173	S233	L293	Q353	
A174	S234	Y294	Q354	
I175	S235	A295	M355	
M176	L236	N296	W356	
R177	E237	N297	I357	
L178	K238	V298	T358	
D179	S239	M299	K359	

● Molecule 2: Cofilin-2

Chain K:  100%

ACE0	T60	S120
M1	G61	K121
A2	D62	D122
S3	T63	A123
G4	V64	I124
V5	E65	K125
T6	D66	K126
V7	P67	K127
N8	F68	F128
D9	T69	T129
E10	S70	G130
V11	F71	I131
I12	W72	K132
K13	K73	H133
V14	L74	E134
F15	L75	W135
M16	P76	Q136
D17	L77	V137
M18	N78	M138
K19	D79	G139
V20	C80	L140
R21	R81	D141
K22	Y82	D142
S23	A83	I143
S24	L84	K144
T25	Y85	D145
Q26	D86	R146
E27	A87	S147
E28	T88	T148
I29	Y89	L149
K30	E90	G150
K31	T91	E151
R32	K92	K152
K33	E93	L153
K34	S94	G154
A35	K95	G155
V36	K96	N156
L37	E97	V157
F38	D98	V158
C39	L99	V159
L40	M100	S160
S41	F101	L161
D42	I102	E162
D43	F103	G163
K44	W104	K164
R45	P105	P165
Q46	P106	L166
I47	E107	E107
I48	S108	I48
V49	A109	V49
E50	F110	F110
E51	L111	L111
A52	K112	K112
K53	S113	S113
Q54	K114	K114
I55	M115	M115
L56	I116	I116
V57	Y117	Y117
G58	A118	A118
D59	S119	S119

● Molecule 2: Cofilin-2

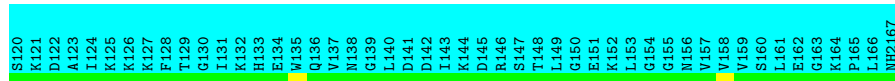
Chain L:  100%

ACE0	T60	S120
M1	G61	K121
A2	D62	D122
S3	T63	A123
G4	V64	I124
V5	E65	K125
T6	D66	K126
V7	P67	K127
N8	F68	F128
D9	T69	T129
E10	S70	G130
V11	F71	I131
I12	W72	K132
K13	K73	H133
V14	L74	E134
F15	L75	W135
M16	P76	Q136
D17	L77	V137
M18	N78	M138
K19	D79	G139
V20	C80	L140
R21	R81	D141
K22	Y82	D142
S23	A83	I143
S24	L84	K144
T25	Y85	D145
Q26	D86	R146
E27	A87	S147
E28	T88	T148
I29	Y89	L149
K30	E90	G150
K31	T91	E151
R32	K92	K152
K33	E93	L153
K34	S94	G154
A35	K95	G155
V36	K96	N156
L37	E97	V157
F38	D98	V158
C39	L99	V159
L40	M100	S160
S41	F101	L161
D42	I102	E162
D43	F103	G163
K44	W104	K164
R45	P105	P165
Q46	P106	L166
I47	E107	E107
I48	S108	I48
V49	A109	V49
E50	F110	F110
E51	L111	L111
A52	K112	K112
K53	S113	S113
Q54	K114	K114
I55	M115	M115
L56	I116	I116
V57	Y117	Y117
G58	A118	A118
D59	S119	S119

● Molecule 2: Cofilin-2

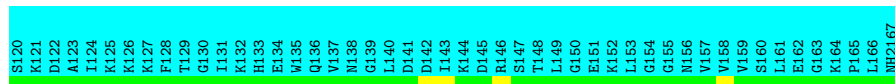
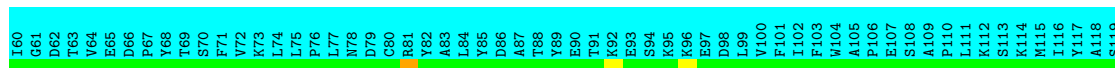
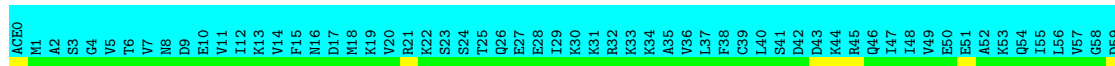
Chain M:  100%

ACE0	I60	S120
M1	G61	K121
A2	D62	D122
S3	T63	A123
G4	V64	I124
V5	E65	K125
T6	D66	K126
V7	P67	K127
N8	F68	F128
D9	T69	T129
E10	S70	G130
V11	F71	I131
I12	W72	K132
K13	K73	H133
V14	L74	E134
F15	L75	W135
M16	P76	Q136
D17	L77	V137
M18	N78	M138
K19	D79	G139
V20	C80	L140
R21	R81	D141
K22	Y82	D142
S23	A83	I143
S24	L84	K144
T25	Y85	D145
Q26	D86	R146
E27	A87	S147
E28	T88	T148
I29	Y89	L149
K30	E90	G150
K31	T91	E151
R32	K92	K152
K33	E93	L153
K34	S94	G154
A35	K95	G155
V36	K96	N156
L37	E97	V157
F38	D98	V158
C39	L99	V159
L40	M100	S160
S41	F101	L161
D42	I102	E162
D43	F103	G163
K44	W104	K164
R45	P105	P165
Q46	P106	L166
I47	E107	E107
I48	S108	I48
V49	A109	V49
E50	F110	F110
E51	L111	L111
A52	K112	K112
K53	S113	S113
Q54	K114	K114
I55	M115	M115
L56	I116	I116
V57	Y117	Y117
G58	A118	A118
D59	S119	S119



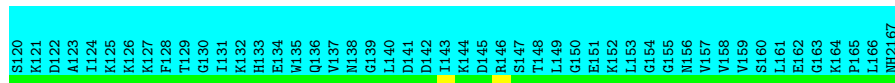
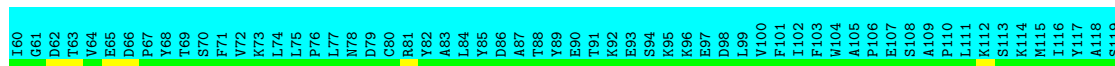
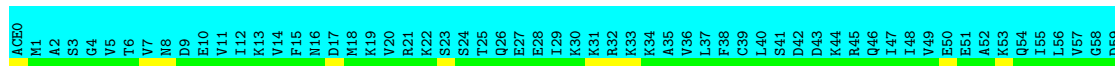
• Molecule 2: Cofilin-2

Chain N: 100%



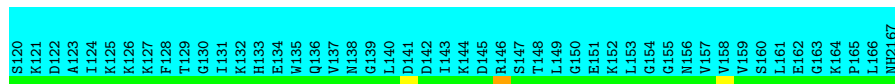
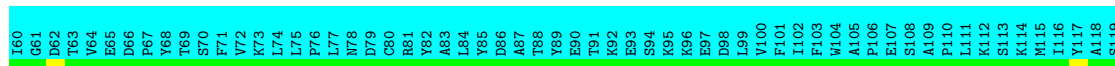
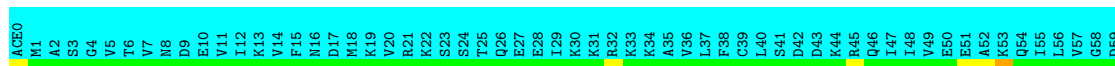
• Molecule 2: Cofilin-2

Chain O: 100%



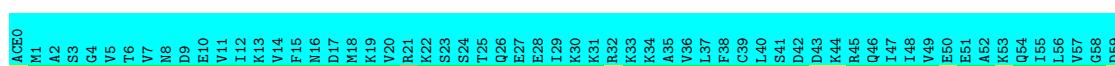
• Molecule 2: Cofilin-2

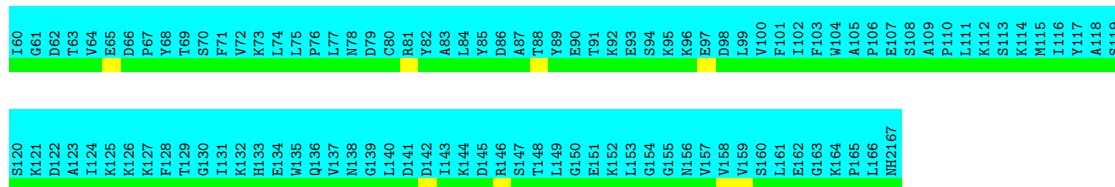
Chain P: 100%



• Molecule 2: Cofilin-2

Chain Q: 100%

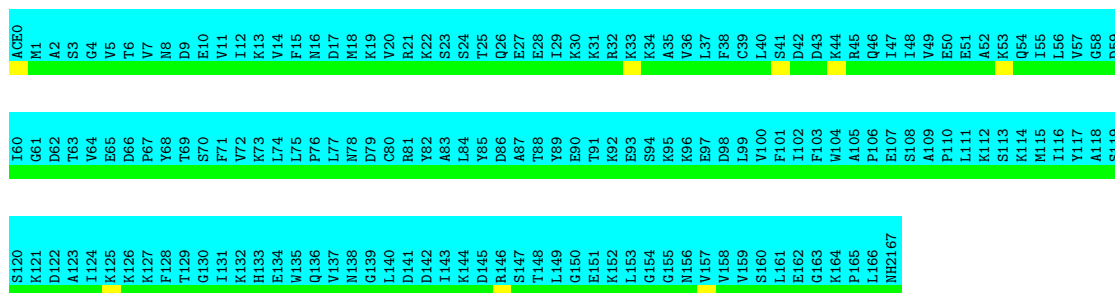




- Molecule 2: Cofilin-2

Chain R:

100%



## 4.2 Scores per residue for each member of the ensemble

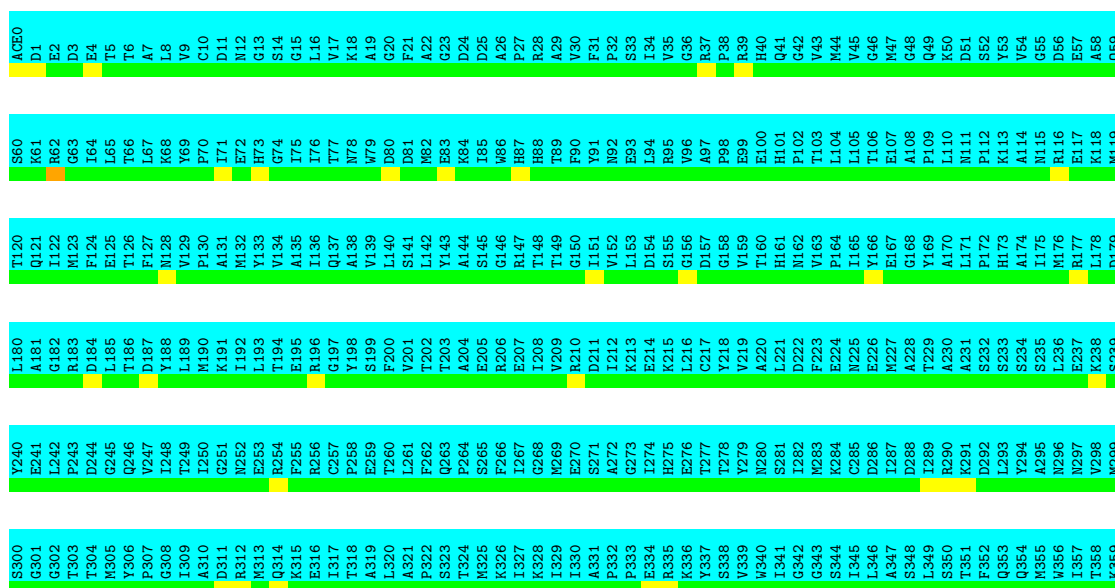
Colouring as in section 4.1 above.

### 4.2.1 Score per residue for model 1

- Molecule 1: Actin, alpha skeletal muscle

Chain A:

100%

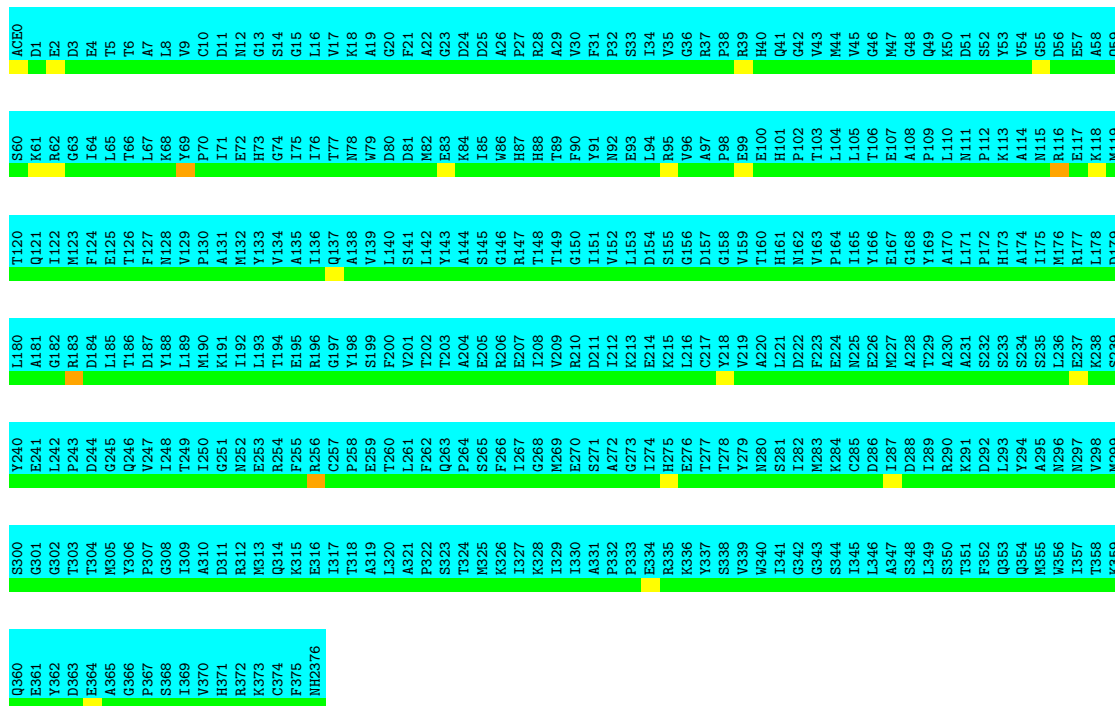


Q360  
E361  
Y362  
D363  
E364  
A365  
G366  
F367  
S368  
L368  
V370  
H371  
H372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain B:

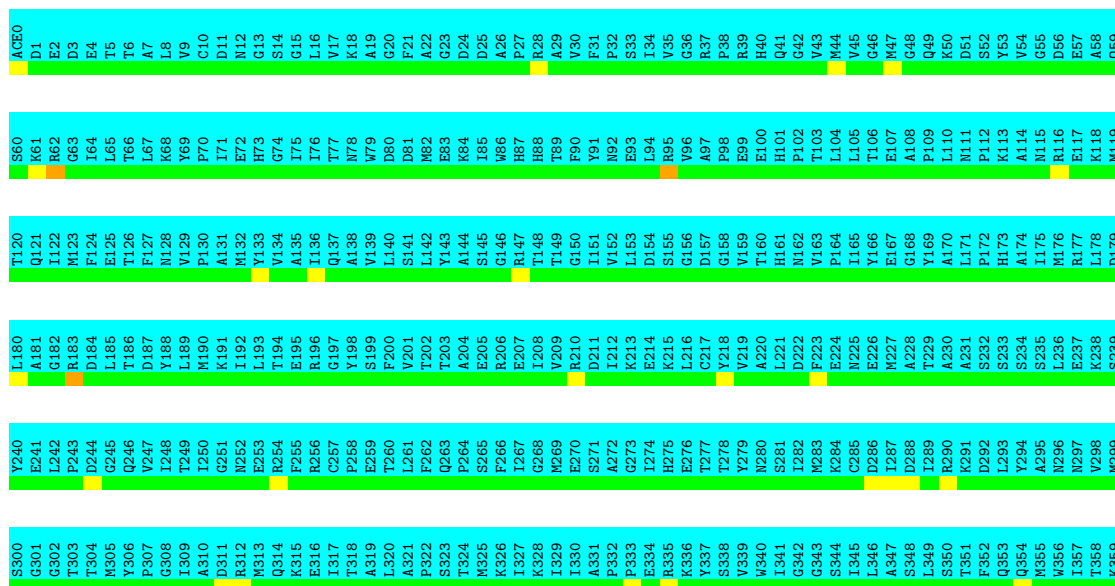
100%



• Molecule 1: Actin, alpha skeletal muscle

Chain C:

100%



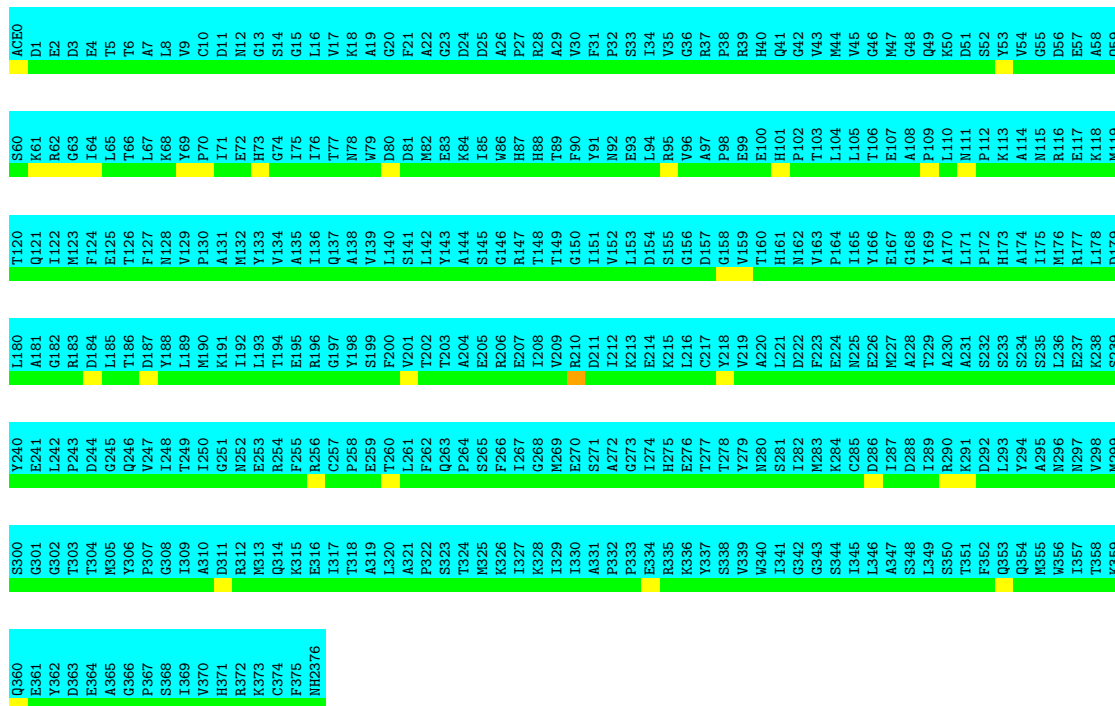


Q360  
E361  
Y362  
D363  
E364  
A365  
G366  
F367  
S368  
L369  
V370  
H371  
H372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain D:

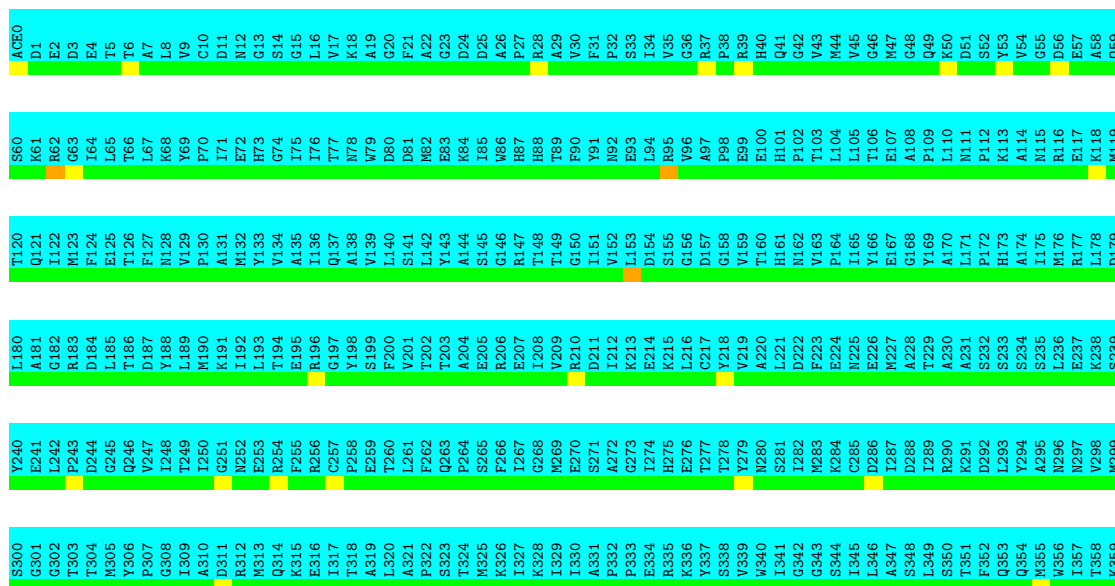
100%



• Molecule 1: Actin, alpha skeletal muscle

Chain E:

100%

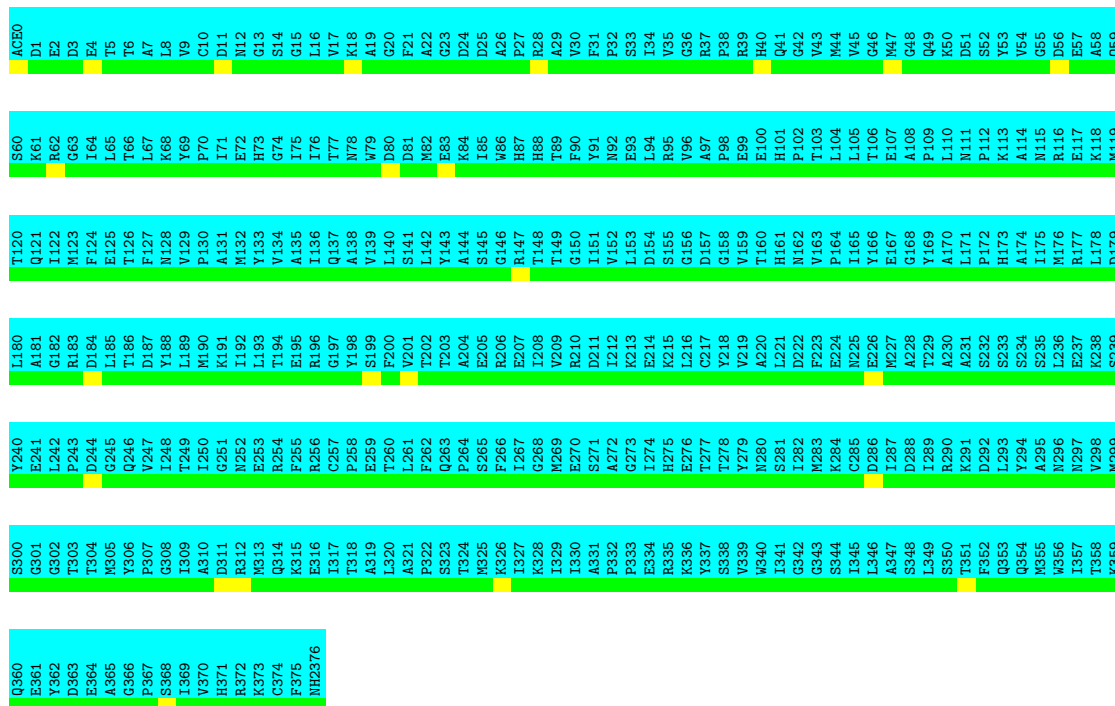


Q360  
E361  
Y362  
D363  
E364  
A365  
G366  
F367  
S368  
L369  
V370  
H371  
H372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain F:

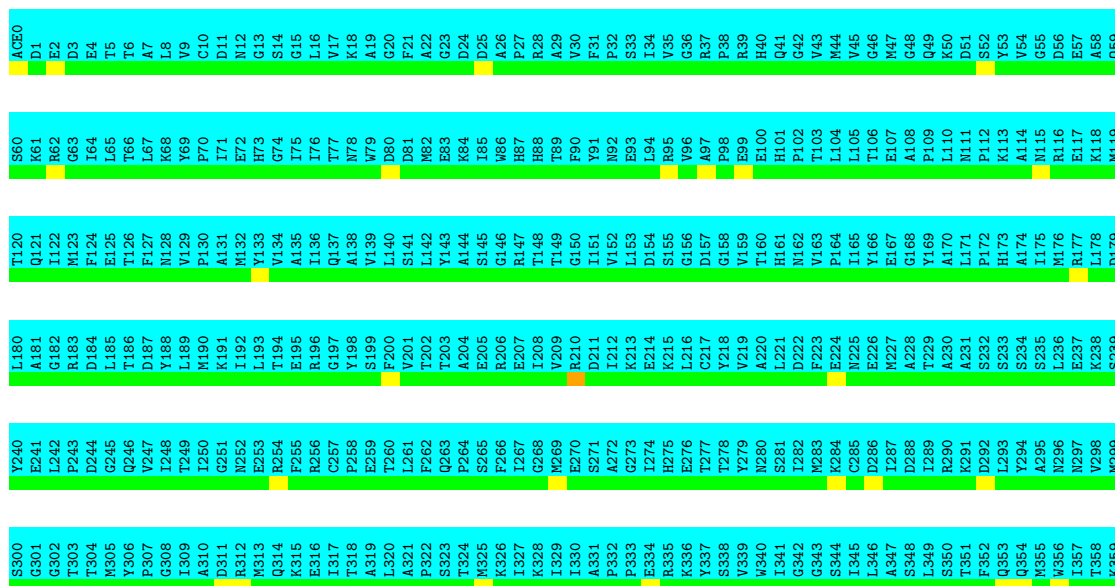
100%



• Molecule 1: Actin, alpha skeletal muscle

Chain G:

100%

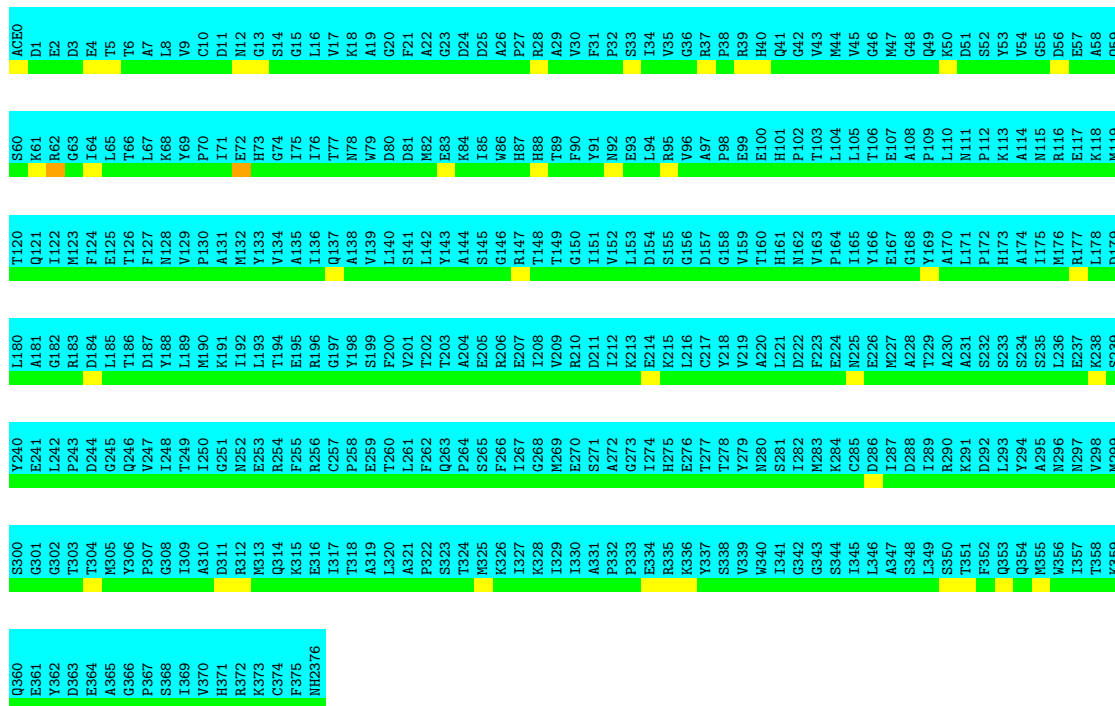


Q360  
E361  
Y362  
D363  
E364  
A365  
G366  
F367  
S368  
L368  
V370  
W370  
H371  
H372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain H:

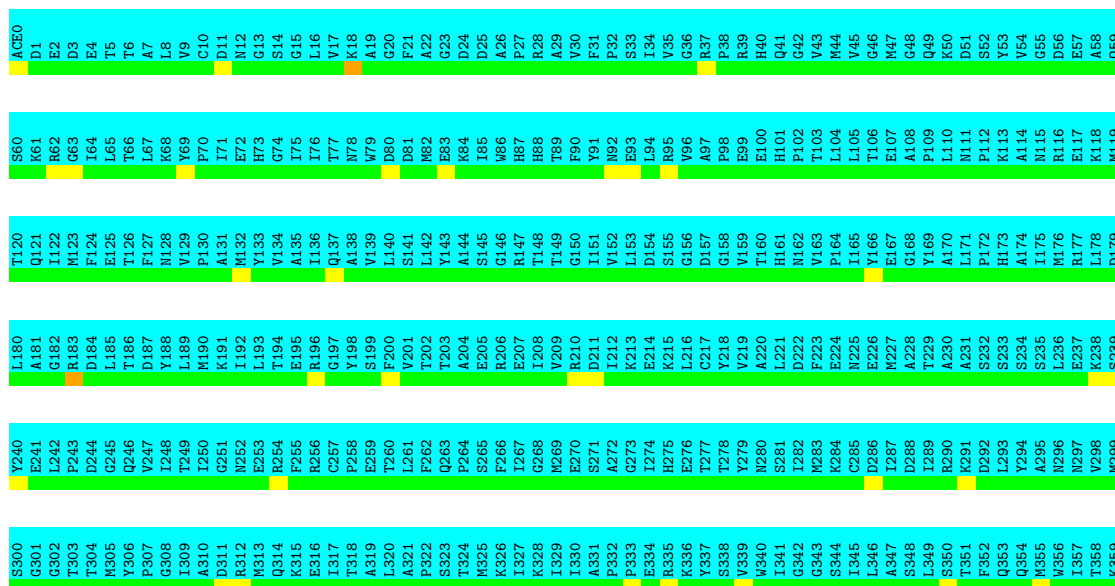
100%



• Molecule 1: Actin, alpha skeletal muscle

Chain I:

100%

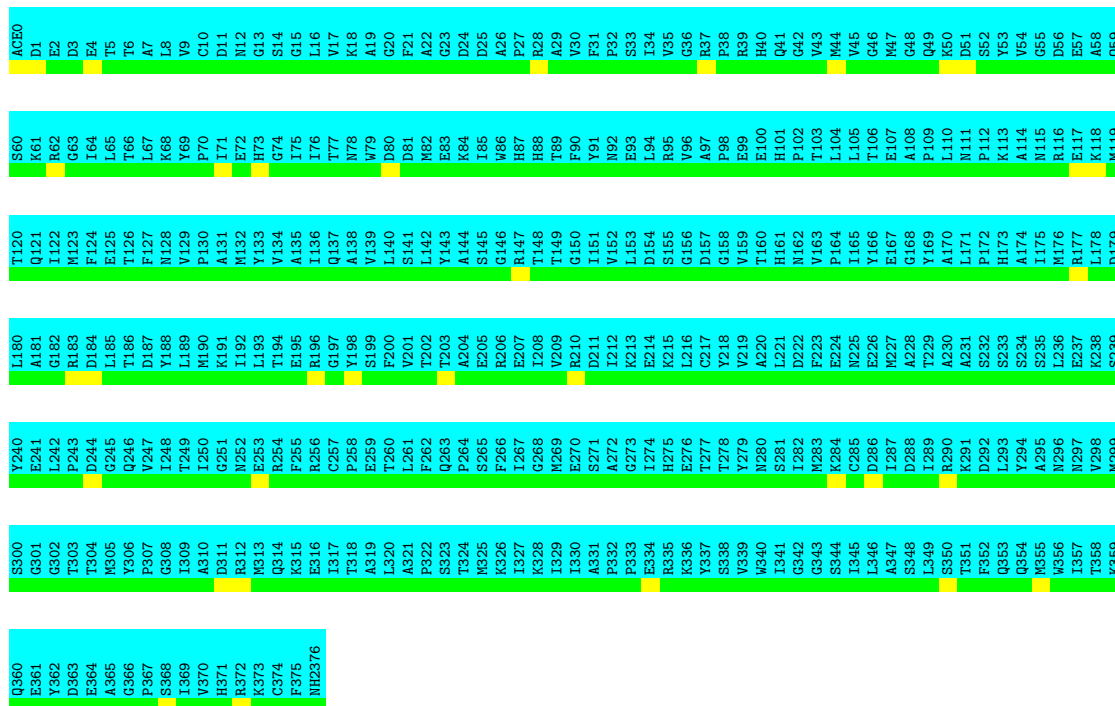


Q360  
E361  
Y362  
D363  
E364  
A365  
G366  
F367  
S368  
V370  
H371  
R372  
K373  
C374  
F375  
NH2376

● Molecule 1: Actin, alpha skeletal muscle

Chain J:

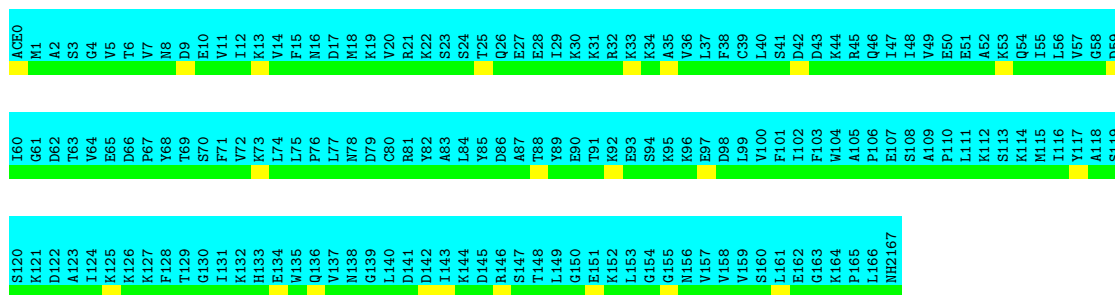
100%



● Molecule 2: Cofilin-2

Chain K:

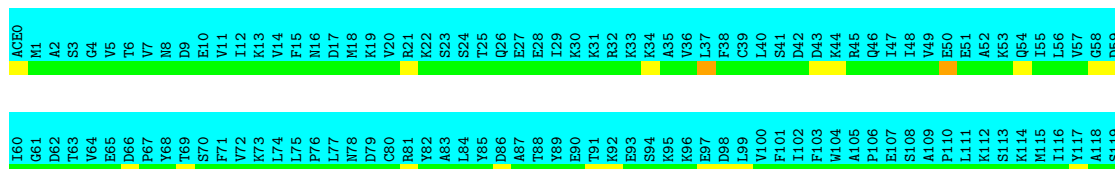
100%

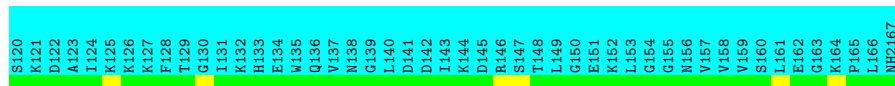


● Molecule 2: Cofilin-2

Chain L:

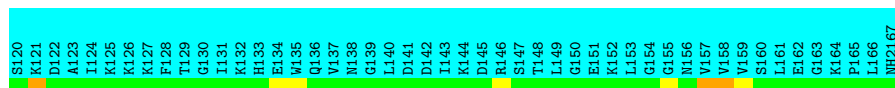
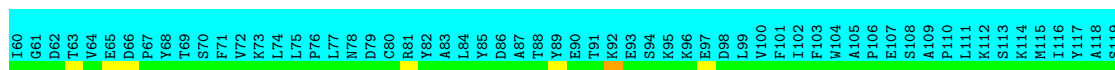
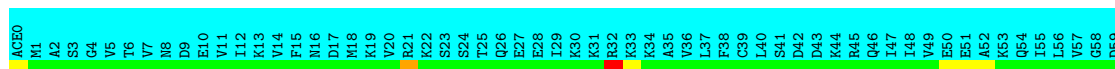
100%





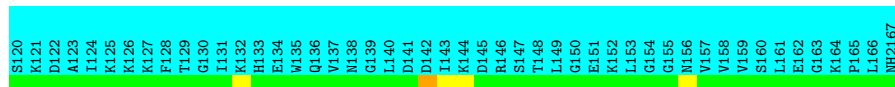
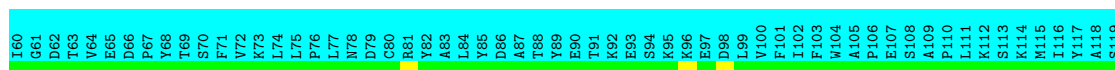
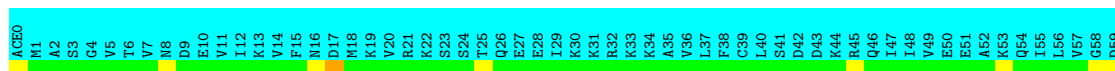
• Molecule 2: Cofilin-2

Chain M: 100%



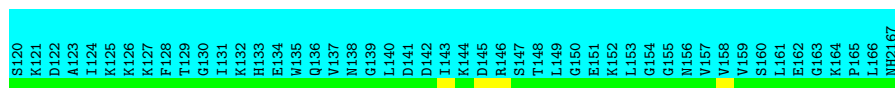
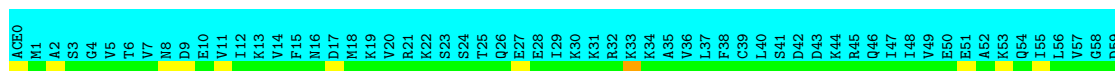
• Molecule 2: Cofilin-2

Chain N: 100%



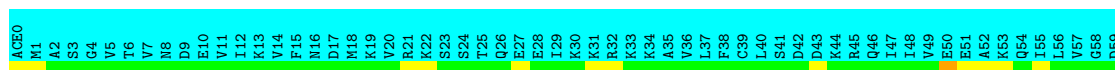
• Molecule 2: Cofilin-2

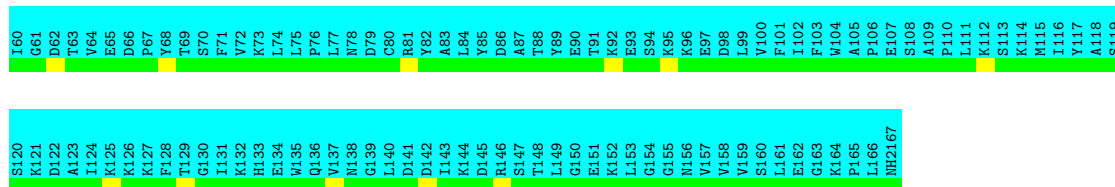
Chain O: 100%



• Molecule 2: Cofilin-2

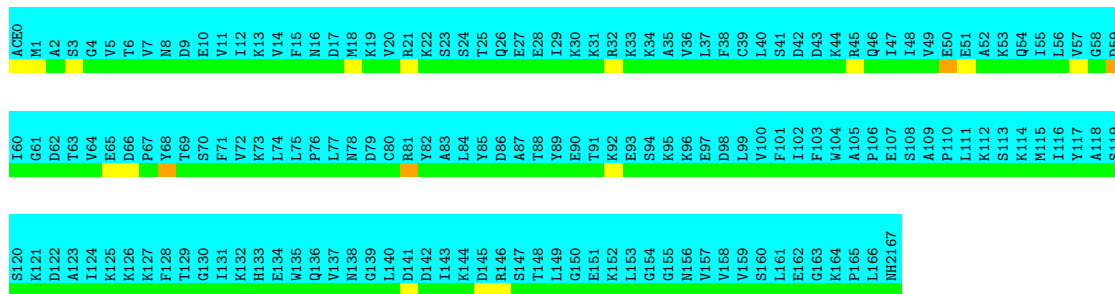
Chain P: 100%





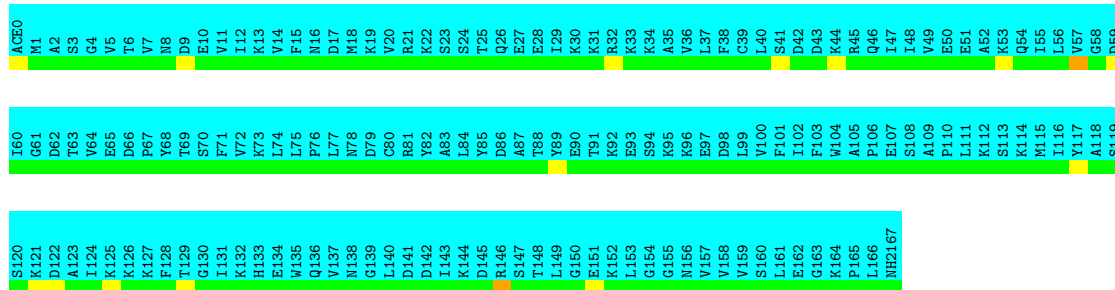
- Molecule 2: Cofilin-2

Chain Q: 100%



- Molecule 2: Cofilin-2

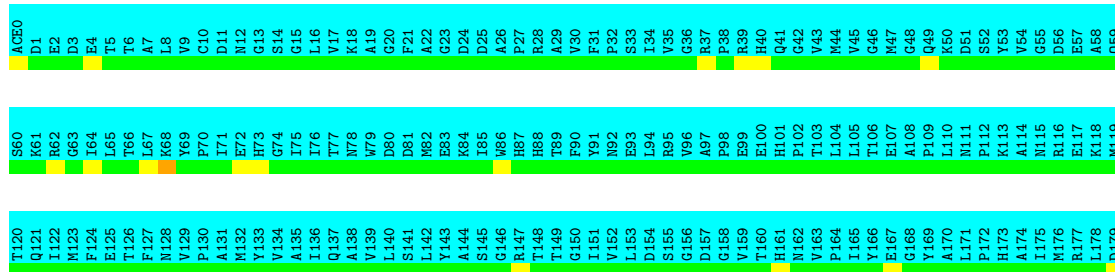
Chain R: 100%

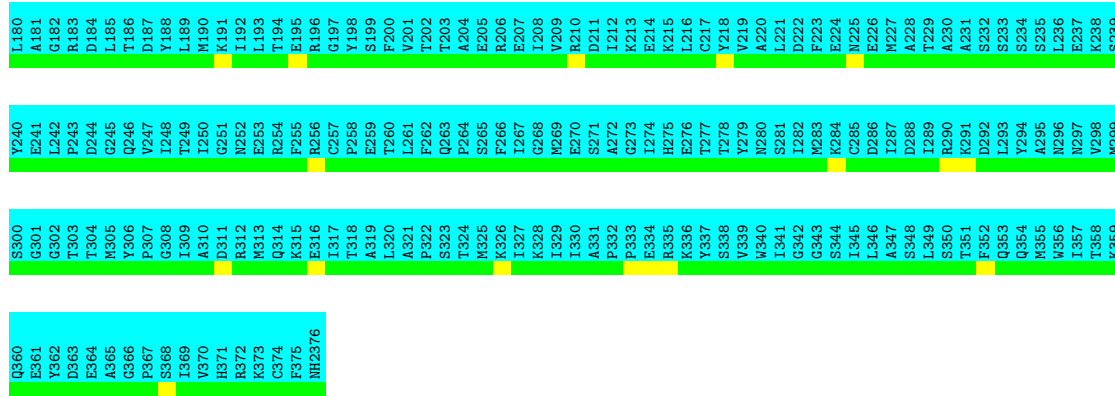


## 4.2.2 Score per residue for model 2

- Molecule 1: Actin, alpha skeletal muscle

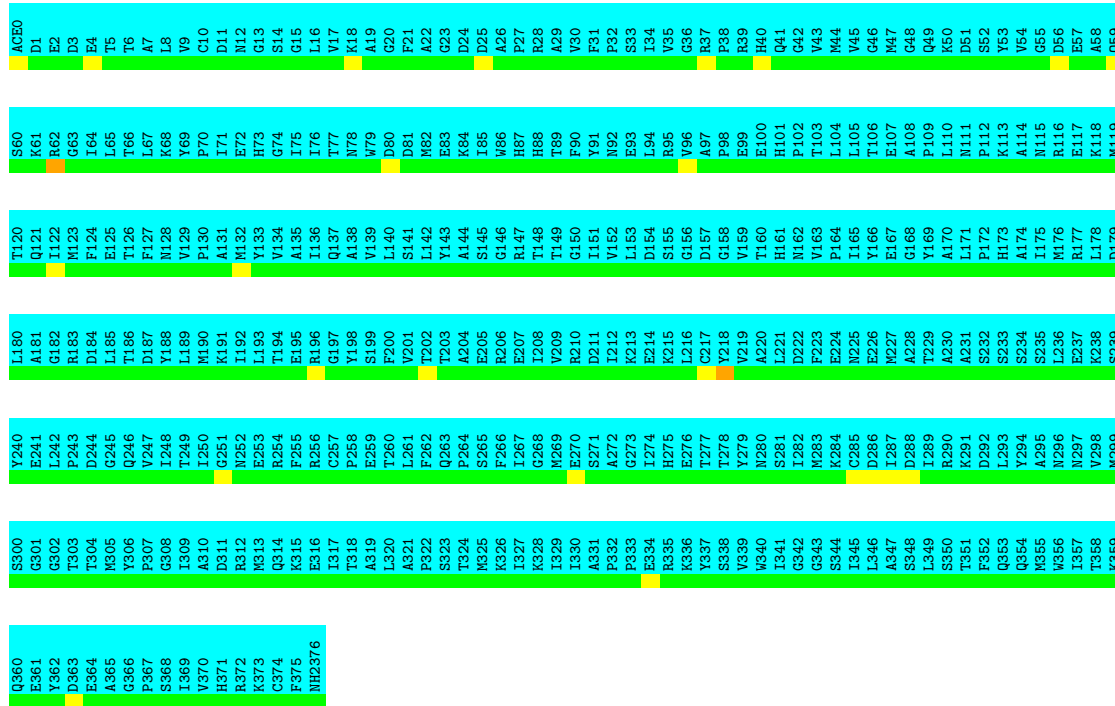
Chain A: 100%





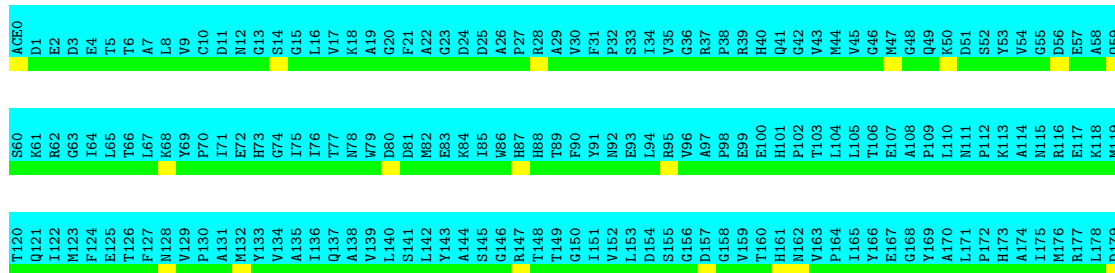
• Molecule 1: Actin, alpha skeletal muscle

Chain B:  100%



• Molecule 1: Actin, alpha skeletal muscle

Chain C:  100%



L180	Y240	S800	Q860
A181	E241	G301	E361
G182	L242	G302	Y362
R183	P243	T303	D363
D184	D244	T304	E364
L185	G245	M305	A365
T186	Q246	Y306	G366
D187	V247	P307	P367
L188	L248	G308	S368
L189	T249	I309	I369
M190	I250	A310	V370
K191	G251	D311	H371
L192	N252	R312	R372
L193	E253	H313	K373
L194	R254	Q314	C374
		F375	NH2376
		E316	
		R256	
		G197	
		C257	
		T318	
		A319	
		L320	
		F261	
		L261	
		A321	
		P322	
		G23	
		S323	
		T203	
		Q263	
		D24	
		K84	
		S265	
		H325	
		R206	
		F266	
		K326	
		P27	
		L327	
		R28	
		K328	
		I208	
		M269	
		V30	
		L330	
		R210	
		A331	
		S271	
		E272	
		G273	
		P333	
		E334	
		L274	
		E214	
		R215	
		H275	
		K335	
		G336	
		V337	
		R37	
		S338	
		Y279	
		T278	
		I218	
		V219	
		N280	
		H40	
		E100	
		T281	
		L221	
		D222	
		I282	
		M283	
		F223	
		K284	
		C285	
		I286	
		D286	
		E226	
		I287	
		A347	
		D288	
		G48	
		S348	
		I289	
		R290	
		K291	
		A231	
		D51	
		S52	
		F352	
		D292	
		K293	
		L293	
		Q353	
		K113	
		V53	
		H173	
		K113	
		V54	
		A114	
		I175	
		G55	
		M115	
		R116	
		M176	
		R177	
		E57	
		L118	
		A58	
		K359	
		M119	

- Molecule 1: Actin, alpha skeletal muscle

Chain D:  100%

ACE0	S60	T120	L180	Y240	S800	Q860
D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	P243	T303	D363
E4	F64	F124	D184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	T186	Q246	Y306	G366
A7	L67	F127	D187	V247	P307	P367
V9	K68	M128	L188	L248	G308	S368
C10	V69	I129	L189	T249	I309	I369
D11	P70	P130	M190	I250	A310	V370
D11	I71	A131	K191	G251	D311	H371
N12	E72	M132	L192	N252	R312	R372
G13	H73	Y133	L193	E253	H313	K373
S14	G74	V134	L194	R254	Q314	C374
L16	I75	I136	E195	F255	F375	NH2376
L16	T76	I136	E196	R256	E316	
V17	T77	Q137	G197	G197	R256	
K18	N78	A138	Y198	P258	G197	
A19	W79	V139	S199	E259	T318	
G20	D80	L140	G200	T260	A319	
F21	D81	S141	F201	L261	L320	
A22	M82	L142	P202	F262	A321	
G23	E83	Y143	G23	Q263	P322	
D24	K84	A144	T203	D264	G23	
D25	L85	S145	T203	S265	T203	
A26	H86	G146	E206	S265	D24	
R28	H87	R147	R206	F266	K84	
A29	T89	T148	E207	R266	R206	
V30	F90	I149	L208	L267	F266	
F31	Y91	G150	H88	E270	K326	
P32	N92	V152	T89	S271	P27	
S33	E93	L153	V209	E272	L327	
L34	L94	D154	I208	A272	L320	
V35	R95	S155	M269	I274	A321	
G36	V96	G156	V30	H275	P322	
R37	A97	D157	L330	E276	G23	
P38	F98	G158	S30	T277	D204	
R39	E99	V159	I329	T278	A204	
H40	E100	H160	R28	Y279	K84	
Q41	H101	H161	I208	T279	S265	
G42	S102	N162	V209	E279	E206	
V43	T103	P163	I149	S271	R206	
M44	L104	P164	F31	S271	F266	
V45	L105	I165	N92	E272	L267	
G46	T106	Y166	M92	A272	E207	
M47	E107	E167	E93	I274	L261	
G48	A108	G168	L94	H275	V201	
O49	P109	Y169	R95	E276	G23	
K50	L110	A170	V96	T277	A204	
D51	M111	L171	A97	T277	D204	
S52	F112	P172	R37	T277	A204	
V53	K113	H173	P38	T278	A204	
V54	A114	A174	R39	T278	A204	
G55	M115	I175	E99	T279	A204	
D56	R116	M176	E100	T279	A204	
E57	L117	R177	H101	T290	A204	
A58	K118	L178	H101	R290	A204	
M119	M119	D179	E99	K290	A204	

- Molecule 1: Actin, alpha skeletal muscle

Chain E:  100%

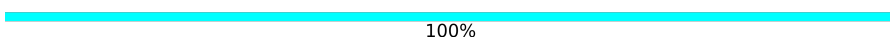
ACE0	S60	T120	L180	Y240	S800	Q860
D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	P243	T303	D363
E4	F64	F124	D184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	T186	Q246	Y306	G366
A7	L67	F127	D187	V247	P307	P367
V9	K68	M128	L188	L248	G308	S368
C10	V69	I129	L189	T249	I309	I369
D11	P70	P130	M190	I250	A310	V370
D11	I71	A131	K191	G251	D311	H371
N12	E72	M132	L192	N252	R312	R372
G13	H73	Y133	L193	E253	H313	K373
S14	G74	V134	L194	R254	Q314	C374
L16	I75	I136	E195	F255	F375	NH2376
L16	T76	I136	E196	R256	E316	
V17	T77	Q137	G197	G197	R256	
K18	N78	A138	Y198	P258	G197	
A19	W79	V139	S199	E259	T318	
G20	D80	L140	G200	T260	A319	
F21	D81	S141	F201	L261	L320	
A22	M82	L142	P202	F262	A321	
G23	E83	Y143	G23	Q263	P322	
D24	K84	A144	T203	D264	G23	
D25	L85	S145	T203	S265	T203	
A26	H86	G146	E206	S265	D24	
R28	H87	R147	R206	F266	K84	
A29	T89	T148	E207	R266	R206	
V30	F90	I149	L208	L267	F266	
F31	Y91	G150	H88	E270	K326	
P32	N92	V152	T89	S271	P27	
S33	E93	L153	V209	E272	L327	
L34	L94	D154	I208	A272	L320	
V35	R95	S155	M269	I274	A321	
G36	V96	G156	V30	H275	P322	
R37	A97	D157	L330	E276	G23	
P38	F98	G158	S30	T277	D204	
R39	E99	V159	I329	T278	A204	
H40	E100	H160	R28	Y279	K84	
Q41	H101	H161	I208	T279	S265	
G42	S102	N162	V209	E279	E206	
V43	T103	P163	I149	S271	R206	
M44	L104	P164	F31	S271	F266	
V45	L105	I165	N92	E272	L267	
G46	T106	Y166	M92	A272	E207	
M47	E107	E167	E93	I274	L261	
G48	A108	G168	L94	H275	V201	
O49	P109	Y169	R95	E276	G23	
K50	L110	A170	V96	T277	A204	
D51	M111	L171	A97	T277	A204	
S52	F112	P172	R37	T277	A204	
V53	K113	H173	P38	T278	A204	
V54	A114	A174	R39	T278	A204	
G55	M115	I175	E99	T279	A204	
D56	R116	M176	E100	T279	A204	
E57	L117	R177	H101	T290	A204	
A58	K118	L178	H101	R290	A204	
M119	M119	D179	E99	K290	A204	



L180	Y240	S800	Q860
A181	E241	G301	E361
G182	L242	G302	Y362
R183	P243	T303	D363
D184	D244	T304	E364
L185	G245	M305	A365
T186	Q246	Y306	G366
D187	V247	P307	P367
L188	L248	G308	S368
L189	T249	I309	I369
M190	I250	A310	V370
K191	G251	D311	H371
L192	N252	R312	R372
L193	E253	M313	K373
L194	R254	Q314	C374
E195	F255	S315	F375
R196	R256	E316	L196
G197	C257	I317	G197
Y198	P258	T318	K198
S199	E259	A319	A199
F200	T260	L320	G200
L201	L261	A321	D81
T202	F262	P322	M82
T203	Q263	G23	E83
A204	P264	T324	K84
E205	S265	M325	L85
R206	F266	K326	M86
E207	L267	P327	H87
L208	G268	R328	L148
M209	M269	I329	T89
R210	E270	V330	F90
D211	S271	A331	Y91
L212	A272	P332	N92
K213	G273	S333	E93
E214	I274	E334	L94
R215	H275	R335	V95
L216	E276	K336	M96
G217	T277	V337	A97
Y218	T278	S338	F98
Y219	Y279	V339	E99
A220	N280	H40	E100
L221	S281	I341	H101
D222	I282	G342	P102
F223	M283	G343	T103
E224	K284	S344	L104
M225	C285	L345	I105
D226	D286	L346	Y166
M227	I287	A347	E107
A228	D288	S348	G48
T229	I289	L349	O49
A230	R290	S350	K50
A231	K291	T351	M111
S232	D292	F352	P112
S233	L293	Q353	K113
S234	Y294	Q354	A114
S235	A295	M355	M115
L236	M296	M356	R116
E237	I297	R177	E57
K238	L298	K118	A58
S239	M299	K359	M119

• Molecule 1: Actin, alpha skeletal muscle

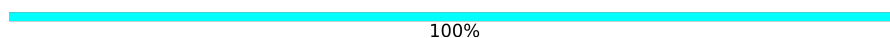
Chain F:



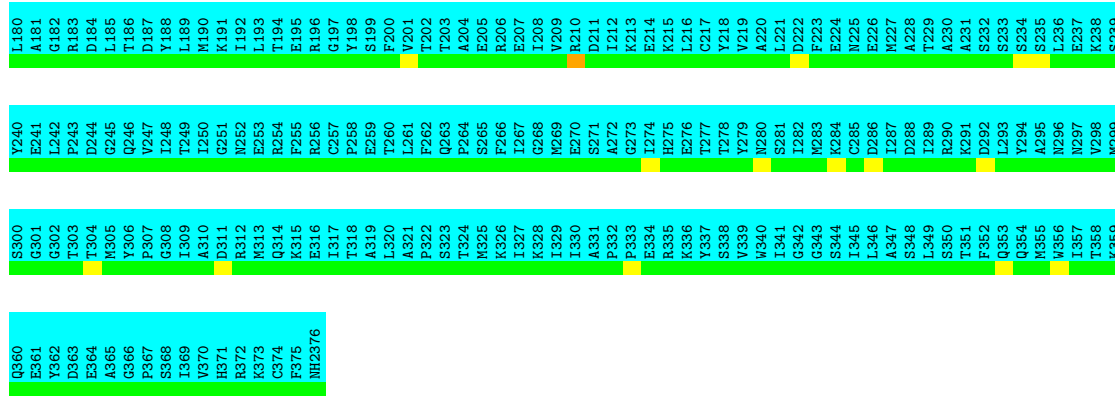
ACE0	S60	T120	L180	Y240	S800	Q860
D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	P243	T303	D363
E4	I64	F124	D184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	T186	Q246	Y306	G366
A7	L67	I127	D187	V247	P307	P367
L8	K68	M128	L188	L248	G308	S368
V9	V69	L129	L189	T249	I309	I369
C10	P70	P130	M190	I250	A310	V370
D11	I71	A131	K191	G251	D311	H371
N12	E72	M132	L192	N252	R312	R372
G13	H73	Y133	L193	E253	M313	K373
S14	G74	V134	L194	R254	Q314	C374
G15	I75	I136	E195	F255	S315	F375
L16	T76	L137	R196	R256	E316	L196
V17	T77	Q137	G197	C257	I317	G197
K18	M78	A138	Y198	P258	T318	K198
A19	W79	V139	S199	E259	A319	A199
G20	D80	L140	F200	T260	L320	G200
F21	D81	S141	V201	L261	A321	D81
A22	M82	L142	M202	F262	P322	M82
G23	E83	Y143	T203	Q263	G23	E83
D24	K84	A144	A204	P264	T324	K84
D25	L85	S145	E205	S265	M325	L85
A26	M86	G146	R206	F266	K326	M86
P27	H87	R147	E207	L267	P327	H87
R28	L88	T148	L208	G268	R328	L148
A29	T89	T149	M209	M269	I329	T89
V30	F90	G150	R210	E270	V330	F90
F31	Y91	I151	D211	S271	A331	Y91
P32	N92	V152	L212	A272	P332	N92
S33	E93	L153	K213	G273	S333	E93
L34	L94	D154	E214	I274	E334	L94
V35	R95	S155	R215	H275	R335	V95
G36	M96	G156	L216	E276	K336	M96
R37	A97	D157	G217	T277	V337	A97
P38	F98	G158	C217	T277	V337	F98
R39	E99	V159	Y218	T278	S338	E99
H40	E100	T160	Y219	Y279	V339	E100
Q41	H101	H161	A220	N280	H40	H101
G42	P102	N162	L221	S281	I341	P102
M43	T103	M163	D222	I282	G342	T103
M44	L104	P164	F223	M283	G343	L104
V45	I105	I165	E224	K284	S344	I105
G46	Y166	Y166	M225	C285	L345	Y166
M47	E107	E107	D226	D286	L346	E107
A48	G48	G48	M227	I287	A347	G48
O49	P109	Y169	A228	D288	S348	P109
K50	L110	A170	T229	I289	L349	K50
D51	M111	L171	A230	R290	S350	M111
S52	P112	P112	A231	K291	T351	P112
Y53	K113	H173	D292	D292	F352	K113
V54	A114	A114	S233	L293	Q353	A114
G55	M115	I175	S234	Y294	Q354	M115
D56	R116	M176	S235	A295	M355	R116
E57	L117	R177	S236	M296	M356	L117
A58	K118	L178	E237	I297	R177	K118
Q59	M119	D179	S239	M299	K359	M119

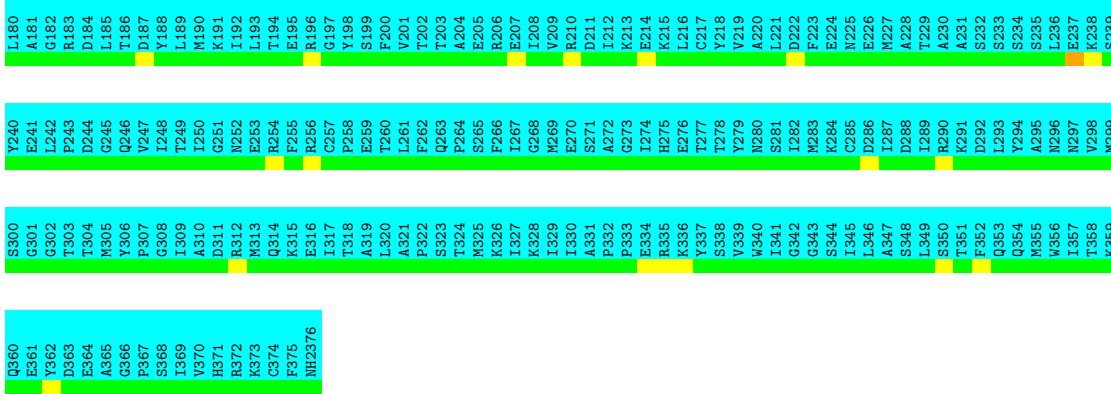
• Molecule 1: Actin, alpha skeletal muscle

Chain G:



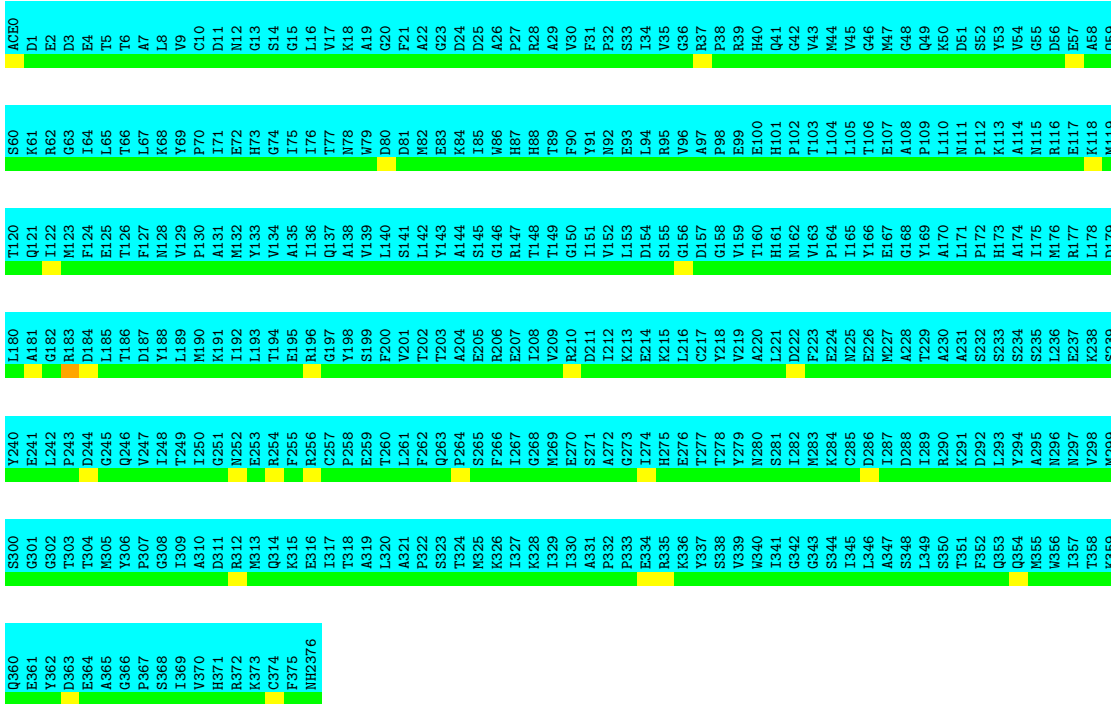
ACE0	S60	T120	L180	Y240	S800	Q860
D1	K61	Q121	A181	E241	G301	E361
E2	R62	I122	G182	L242	G302	Y362
D3	G63	M123	R183	P243	T303	D363
E4	I64	F124	D184	D244	T304	E364
T5	L65	E125	L185	G245	M305	A365
T6	T66	T126	T186	Q246	Y306	G366
A7	L67	I127	D187	V247	P307	P367
L8	K68	M128	L188	L248	G308	S368
V9	V69	L129	L189	T249	I309	I369
C10	P70	P130	M190	I250	A310	V370
D11	I71	A131	K191	G251	D311	H371
N12	E72	M132	L192	N252	R312	R372
G13	H73	Y133	L193	E253	M313	K373
S14	G74	V134	L194	R254	Q314	C374
G15	I75	I136	E195	F255	S315	F375
L16	T76	L137	R196	R256	E316	L196
V17	T77	Q137	G197	C257	I317	G197
K18	M78	A138	Y198	P258	T318	K198
A19	W79	V139	S199	E259	A319	A199
G20	D80	L140	F200	T260	L320	G200
F21	D81	S141	V201	L261	A321	D81
A22	M82	L142	M202	F262	P322	M82
G23	E83	Y143	T203	Q263	G23	E83
D24	K84	A144	A204	P264	T324	K84
D25	L85	S145	E205	S265	M325	L85
A26	M86	G146	R206	F266	K326	M86
P27	H87	R147	E207	L267	P327	H87
R28	L88	T148	L208	G268	R328	L148
A29	T89	T149	M209	M269	I329	T89
V30	F90	G150	R210	E270	V330	F90
F31	Y91	I151	D211	S271	A331	Y91
P32	N92	V152	L212	A272	P332	N92
S33	E93	L153	K213	G273	S333	E93
L34	L94	D154	E214	I274	E334	L94
V35	R95	S155	R215	H275	R335	V95
G36	M96	G156	L216	E276	K336	M96
R37	A97	D157	G217	T277	V337	A97
P38	F98	G158	C217	T277	V337	F98
R39	E99	V159	Y218	T278	S338	E99
H40	E100	T160	Y219	Y279	V339	E100
Q41	H101	H161	A220	N280	H40	H101
G42	P102	N162	L221	S281	I341	P102
M43	T103	M163	D222	I282	G342	T103
M44	L104	P164	F223	M283	G343	L104
V45	I105	I165	E224	K284	S344	I105
G46	Y166	Y166	M225	C285	L345	Y166
M47	E107	E107	D226	D286	L346	E107
A48	G48	G48	M227	I287	A347	G48
O49	P109	Y169	A228	D288	S348	P109
K50	L110	A170	T229	I289	L349	K50
D51	M111	L171	A230	R290	S350	M111
S52	P112	P112	A231	K291	T351	P112
Y53	K113	H173	D292	D292	F352	K113
V54	A114	A114	S233	L293	Q353	A114
G55	M115	I175	S234	Y294	Q354	M115
D56	R116	M176	S235	A295	M355	R116
E57	L117	R177	S236	M296	M356	L117
A58	K118	L178	E237	I297	R177	K118
Q59	M119	D179	S239	M299	K359	M119





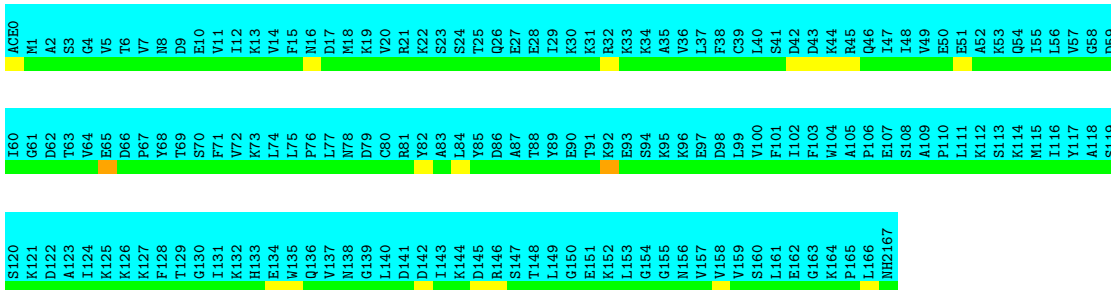
• Molecule 1: Actin, alpha skeletal muscle

Chain J: 100%



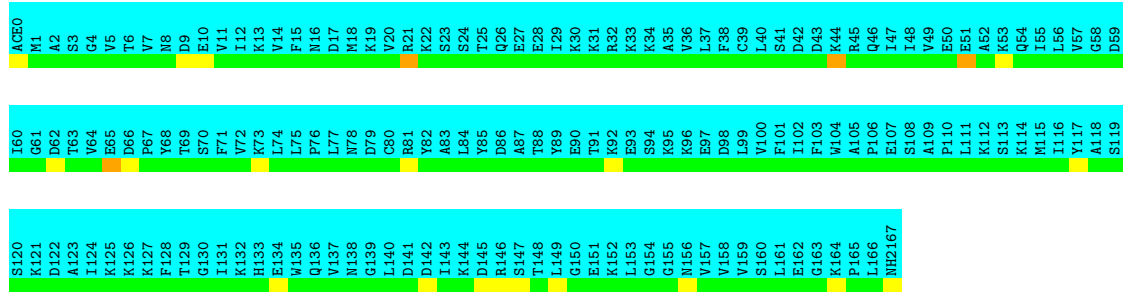
• Molecule 2: Cofilin-2

Chain K: 100%



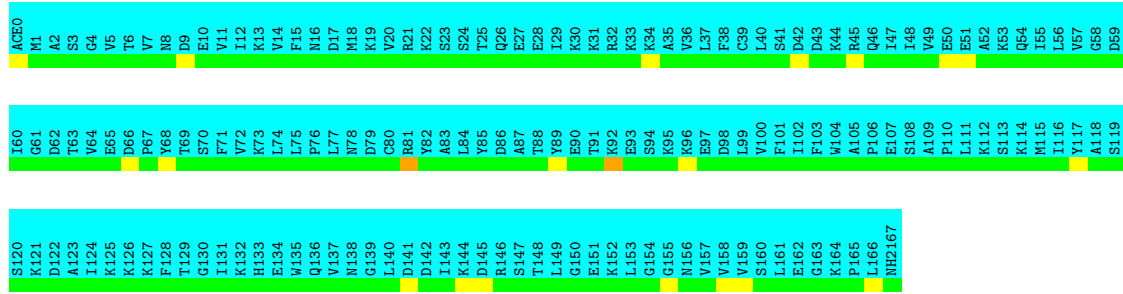
• Molecule 2: Cofilin-2

Chain L:  100%



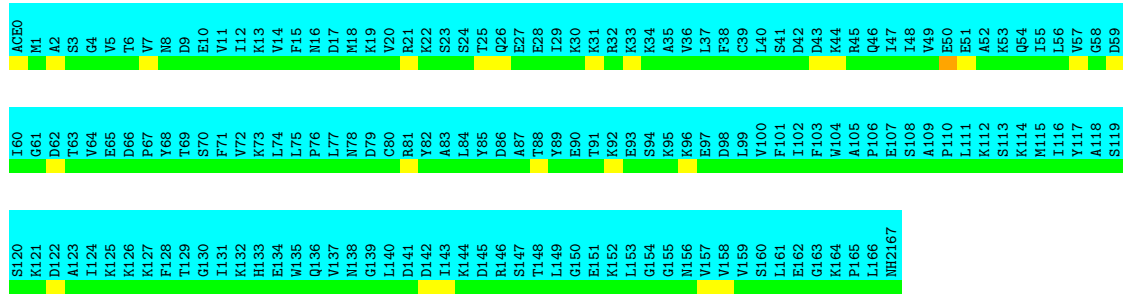
• Molecule 2: Cofilin-2

Chain M:  100%



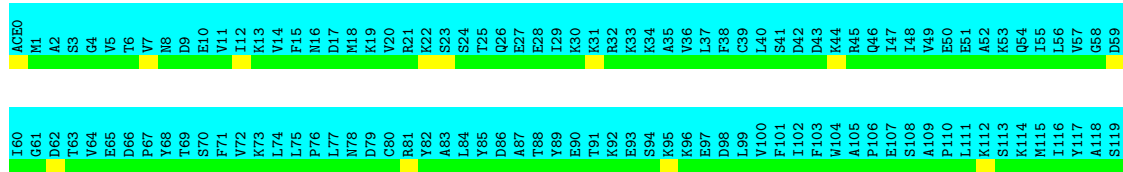
• Molecule 2: Cofilin-2

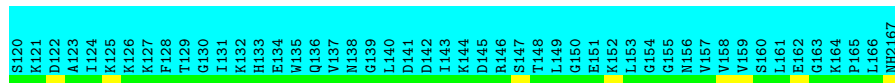
Chain N:  100%



• Molecule 2: Cofilin-2

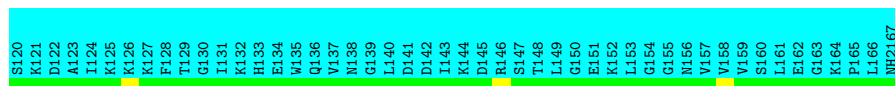
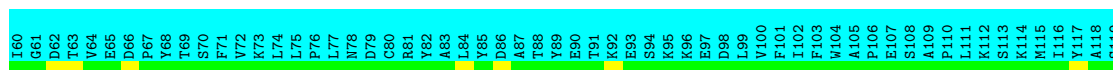
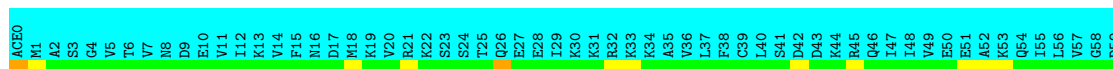
Chain O:  100%





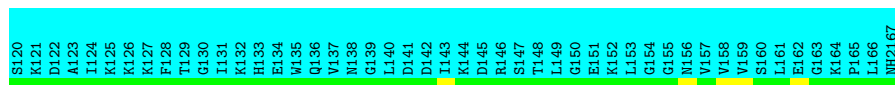
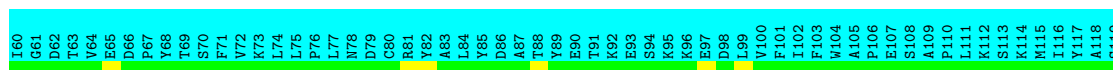
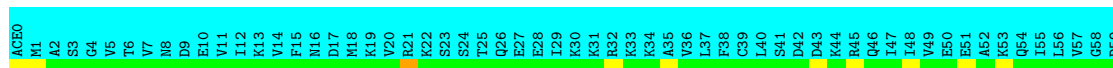
- Molecule 2: Cofilin-2

Chain P: 100%



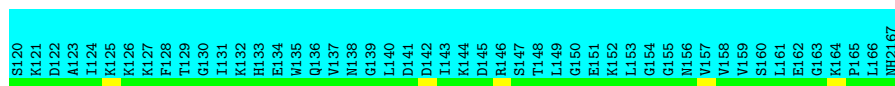
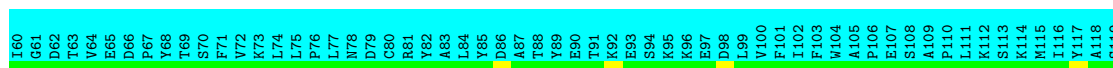
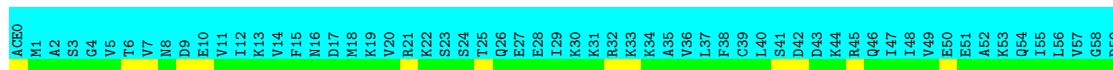
- Molecule 2: Cofilin-2

Chain Q: 100%



- Molecule 2: Cofilin-2

Chain R: 100%



#### 4.2.3 Score per residue for model 3

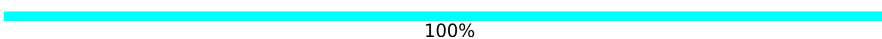
- Molecule 1: Actin, alpha skeletal muscle

Chain A: 100%

ACE0	D1	K61	R62	G63	I64	L65	T66	A7	K68	P70	I71	D11	C10	F10	E11	G13	S14	I15	I16	I17	I18	A19	G20	D81	F21	M82	G23	K84	I85	M86	H87	R88	T89	F90	F91	F31	F32	S33	L34	V35	V36	V96	A97	P98	E99	E100	H101	Q41	P102	V43	M44	V45	T106	E107	M47	A108	P109	K50	L110	M111	S52	K113	V53	A114	M115	R116	E117	K118	M119
L180	A181	G182	R183	D184	L185	T186	D187	Y188	L189	M190	K191	D311	C10	I250	G251	M312	E253	R254	I255	R196	G197	Y198	S199	F200	L140	V201	M202	T203	Q263	A204	E205	R206	E207	I208	V209	R210	D211	L212	K213	E214	L215	H216	G217	Y218	V219	A220	L221	D222	F223	E224	M225	D226	M227	A228	T229	A230	L231	D292	S232	K233	L293	Y294	A295	M296	N297	K298	M299		
Y240	E241	L242	P243	D244	G245	O246	Y247	L248	T249	I250	G251	D311	C10	I250	G251	M312	E253	R254	I255	R196	G197	Y198	S199	F200	L260	L261	F262	Q263	P264	S265	F266	E267	G268	I269	E270	S271	M272	G273	L274	H275	E276	T277	Y278	Y279	N280	S281	L282	M283	K284	C285	D286	L287	D288	T289	R290	M291	D292	L293	Y294	A295	M296	N297	K298	M299					
S300	G301	G302	T303	T304	M305	Y306	P307	G308	I309	A310	D311	H371	C310	V370	H371	R372	K373	C374	F375	NH2376	I317	T318	A319	L320	L321	A321	P322	S323	T324	M325	K326	L327	K328	I329	I330	A331	P332	G333	E334	R335	K336	Y337	S338	V339	W340	I341	D342	G343	S344	L345	L346	A347	S348	L349	S350	T351	F352	Q353	K354	M355	W356	L357	T358	K359					
Q360	E361	Y362	D363	E364	A365	G366	P367	S368	L369	V370	H371	R372	K373	C374	F375	NH2376	I317	T318	A319	L320	L321	A321	P322	S323	T324	M325	K326	L327	K328	I329	I330	A331	P332	G333	E334	R335	K336	Y337	S338	V339	W340	I341	D342	G343	S344	L345	L346	A347	S348	L349	S350	T351	F352	Q353	K354	M355	W356	L357	T358	K359									

• Molecule 1: Actin, alpha skeletal muscle

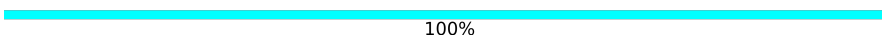
Chain B:



ACE0	D1	K61	R62	G63	I64	L65	T66	A7	K68	P70	I71	D11	C10	F10	E11	G13	S14	I15	I16	I17	I18	A19	G20	D81	F21	M82	G23	K84	I85	M86	H87	R88	T89	F90	F91	F31	F32	S33	L34	V35	V36	V96	A97	P98	E99	E100	H101	Q41	P102	V43	M44	V45	T106	E107	M47	A108	P109	K50	L110	M111	S52	K113	V53	A114	M115	R116	E117	K118	M119
L180	A181	G182	R183	D184	L185	T186	D187	Y188	L189	M190	K191	D311	C10	I250	G251	M312	E253	R254	I255	R196	G197	Y198	S199	F200	L140	V201	M202	T203	Q263	A204	E205	R206	E207	I208	V209	R210	D211	L212	K213	E214	L215	H216	G217	Y218	V219	A220	L221	D222	F223	E224	M225	D226	M227	A228	T229	A230	L231	D292	S232	K233	L293	Y294	A295	M296	N297	K298	M299		
Y240	E241	L242	P243	D244	G245	O246	Y247	L248	T249	I250	G251	D311	C10	I250	G251	M312	E253	R254	I255	R196	G197	Y198	S199	F200	L260	L261	F262	Q263	P264	S265	F266	E267	G268	I269	E270	S271	M272	G273	L274	H275	E276	T277	Y278	Y279	N280	S281	L282	M283	K284	C285	D286	L287	D288	T289	R290	M291	D292	L293	Y294	A295	M296	N297	K298	M299					
S300	G301	G302	T303	T304	M305	Y306	P307	G308	I309	A310	D311	H371	C310	V370	H371	R372	K373	C374	F375	NH2376	I317	T318	A319	L320	L321	A321	P322	S323	T324	M325	K326	L327	K328	I329	I330	A331	P332	G333	E334	R335	K336	Y337	S338	V339	W340	I341	D342	G343	S344	L345	L346	A347	S348	L349	S350	T351	F352	Q353	K354	M355	W356	L357	T358	K359					
Q360	E361	Y362	D363	E364	A365	G366	P367	S368	L369	V370	H371	R372	K373	C374	F375	NH2376	I317	T318	A319	L320	L321	A321	P322	S323	T324	M325	K326	L327	K328	I329	I330	A331	P332	G333	E334	R335	K336	Y337	S338	V339	W340	I341	D342	G343	S344	L345	L346	A347	S348	L349	S350	T351	F352	Q353	K354	M355	W356	L357	T358	K359									

• Molecule 1: Actin, alpha skeletal muscle

Chain C:



ACE0
D1
E2
D3
E4
T5
T6
A7
L8
V9
C10
D11
E12
G13
S14
G15
I16
T17
K18
A19
G20
D81
M82
G83
D84
D25
A26
P27
R28
A29
V30
F31
P32
N92
S93
L94
V35
V96
A97
P98
E99
E100
H101
Q41
P102
T103
L104
V45
T106
M107
A108
Q49
P109
L110
M111
P112
K113
H114
A115
M116
E117
K118
M119
Q121
I122
M123
F124
E125
T126
F127
M128
V129
P130
A131
M132
Y133
V134
G135
G136
E137
I138
A139
F200
L140
V201
M202
G203
A204
E205
R206
E207
I208
V209
R210
D211
L212
K213
E214
K215
G216
L217
G158
Y159
A220
H161
D222
V163
P164
N225
E226
M227
A228
T229
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K113
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A174
S235
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K238
S239
E241
L242
P243
D244
G245
O246
V247
I248
T249
M190
D251
E252
R254
F255
R256
P258
E259
T260
L261
F262
Q263
P264
S265
F266
I267
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E270
S271
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G273
L274
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E276
T277
T278
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M305
Y306
P307
G308
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R335
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S350
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W356
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D363
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NH2376

- Molecule 1: Actin, alpha skeletal muscle

Chain D:

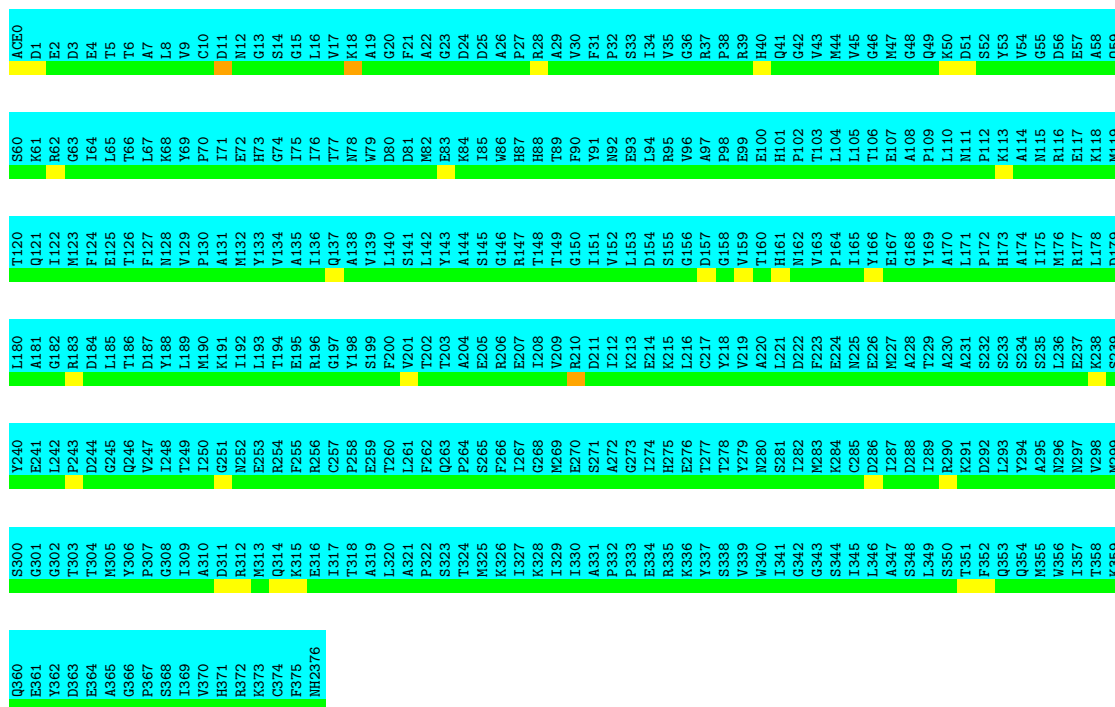
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T17
K18
A19
G20
D81
M82
G83
D84
D25
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P27
R28
A29
V30
F31
P32
N92
S93
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E100
H101
Q41
P102
T103
L104
V45
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Q49
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P112
K113
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M116
E117
K118
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Q121
I122
M123
F124
E125
T126
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V129
P130
A131
M132
Y133
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G135
G136
E137
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V201
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G203
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R206
E207
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E214
K215
G216
L217
G158
Y159
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H161
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N225
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K113
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L344
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A347
S348
L349
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Y362
D363
E364
A365
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C374
F375
NH2376

- Molecule 1: Actin, alpha skeletal muscle

Chain E:

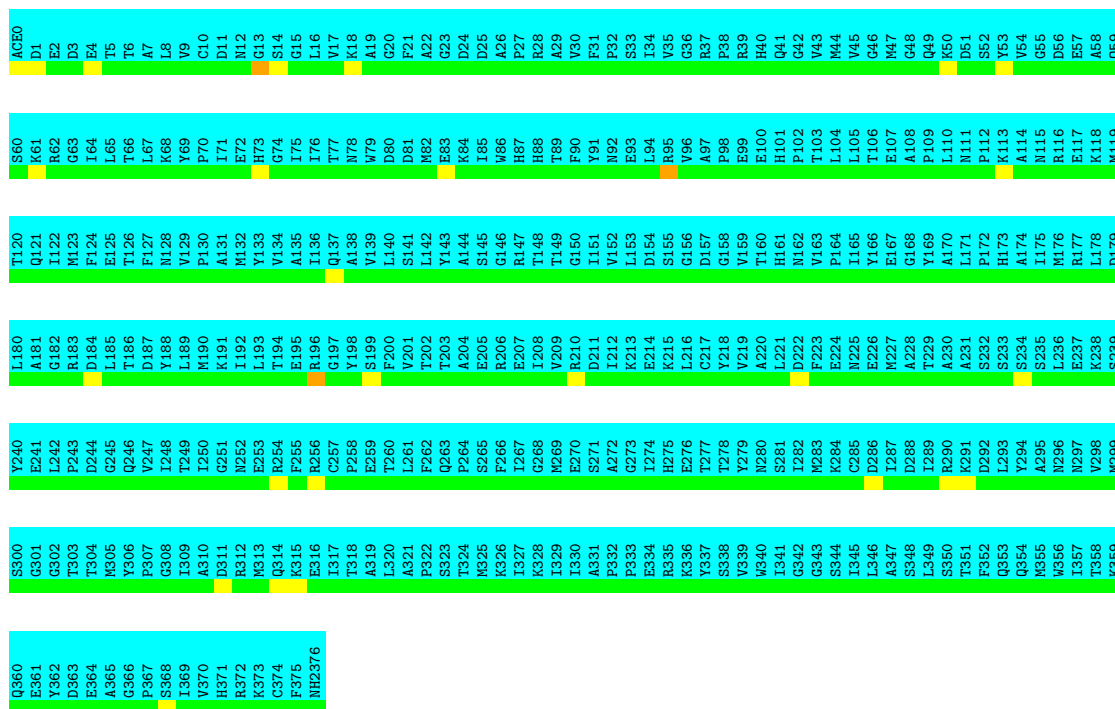
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- Molecule 1: Actin, alpha skeletal muscle

Chain F:

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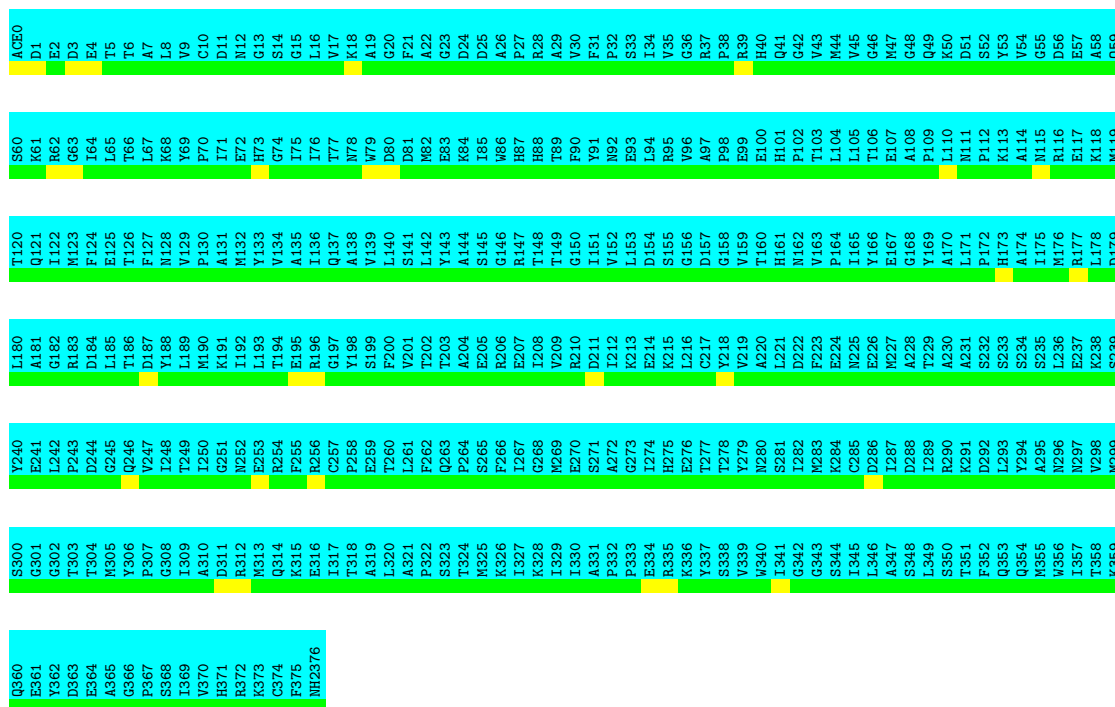


- Molecule 1: Actin, alpha skeletal muscle

Chain G:

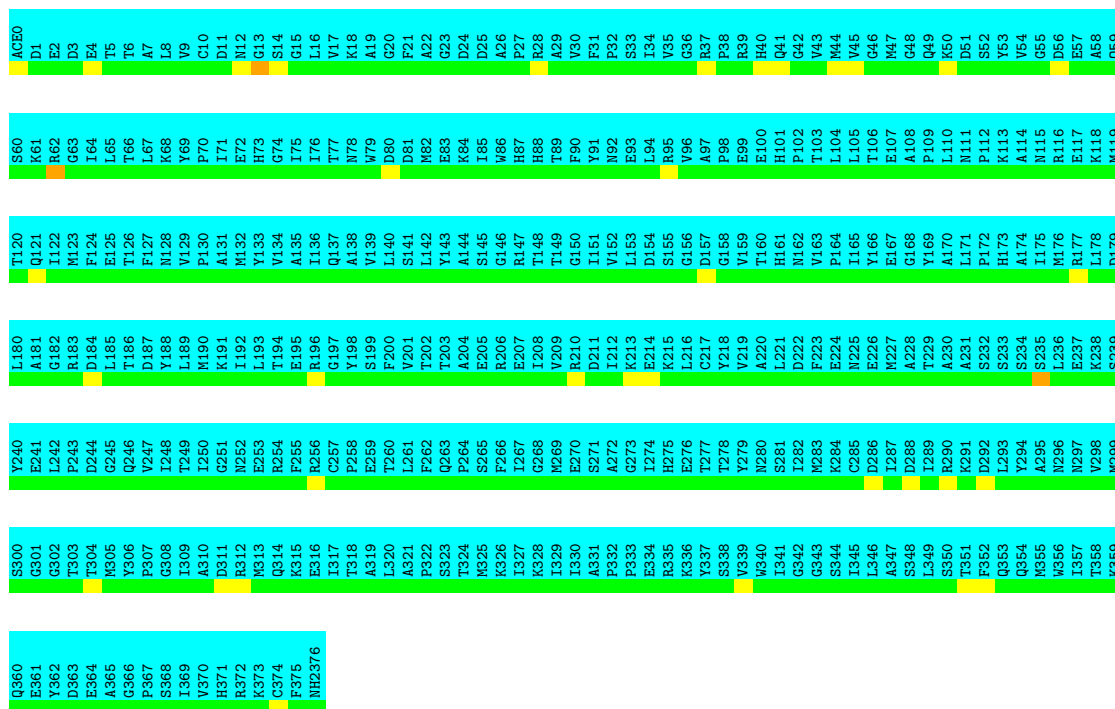
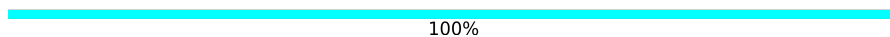
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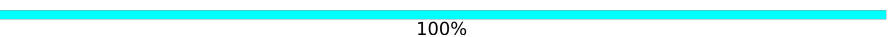
● Molecule 1: Actin, alpha skeletal muscle

Chain H:

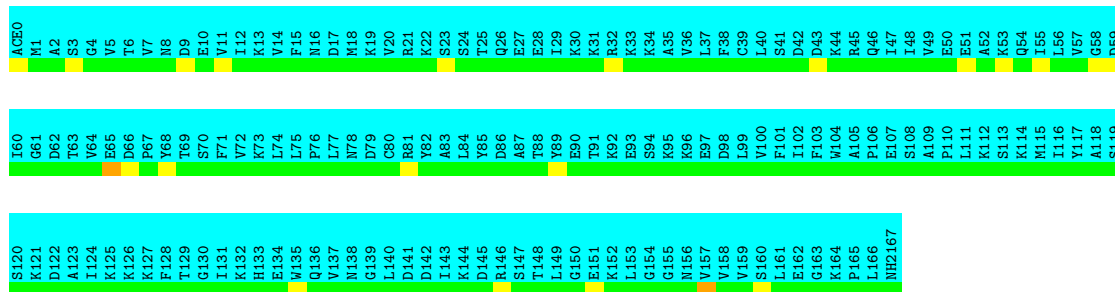


● Molecule 1: Actin, alpha skeletal muscle

Chain I:

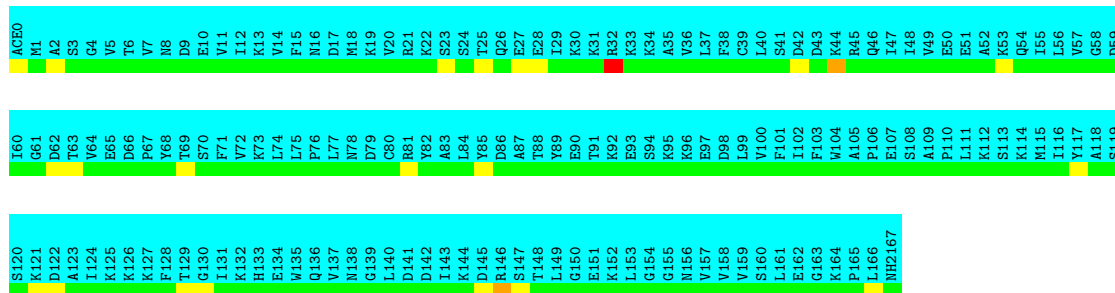






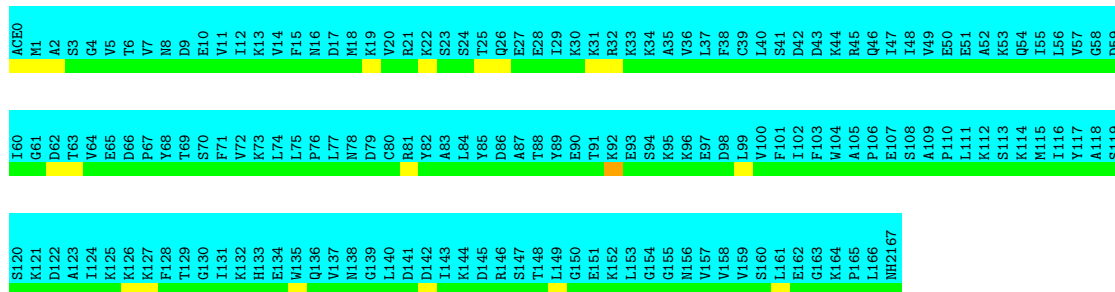
• Molecule 2: Cofilin-2

Chain L:  100%



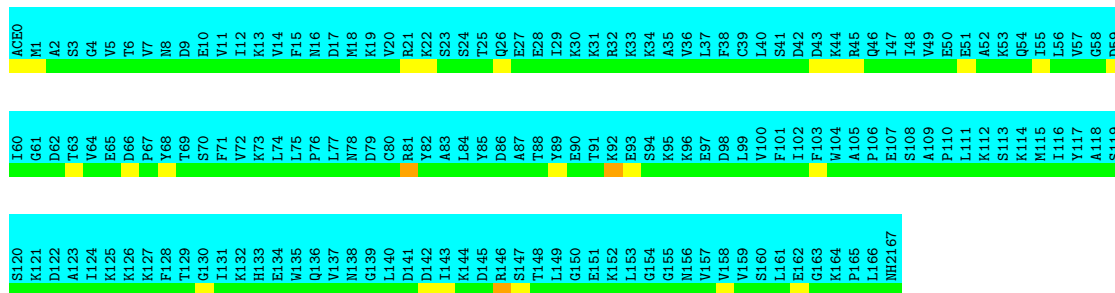
• Molecule 2: Cofilin-2

Chain M:  100%



• Molecule 2: Cofilin-2

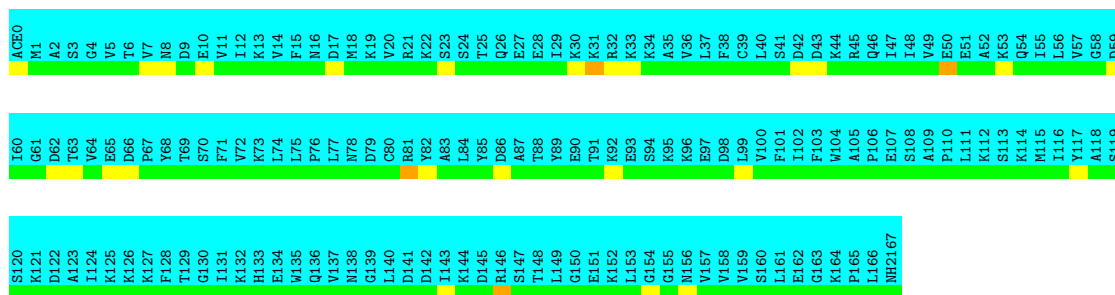
Chain N:  100%



• Molecule 2: Cofilin-2

Chain O:

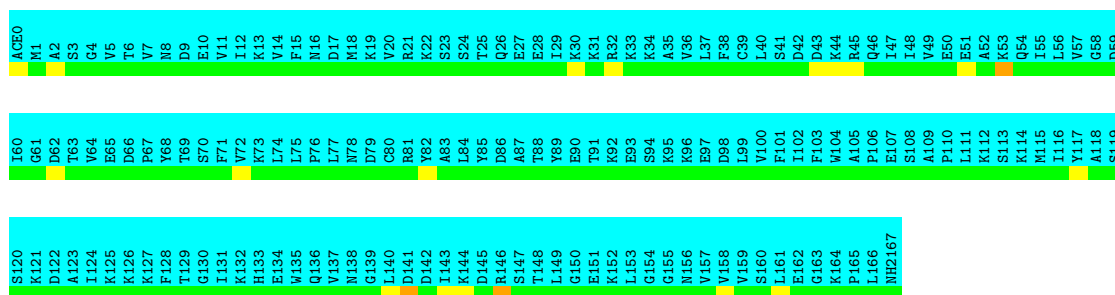
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• Molecule 2: Cofilin-2

Chain P:

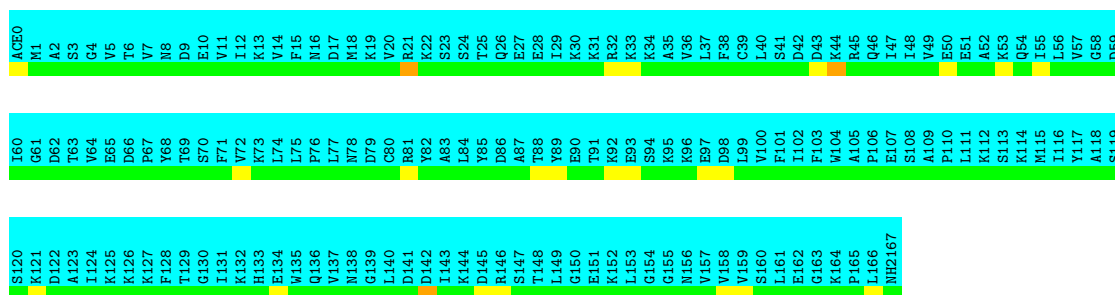
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• Molecule 2: Cofilin-2

Chain Q:

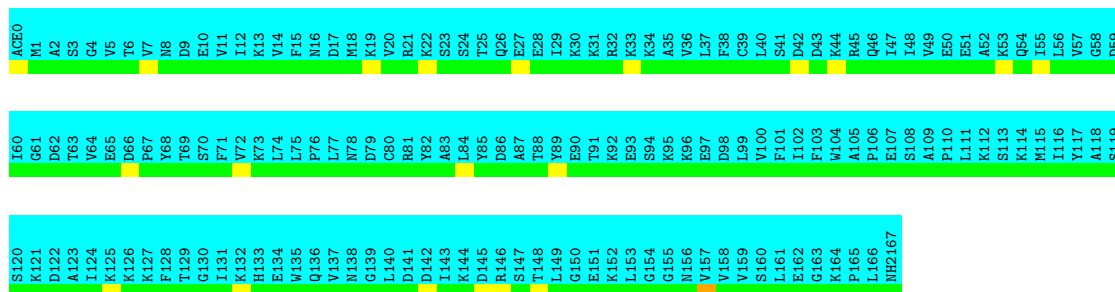
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• Molecule 2: Cofilin-2

Chain R:

100%





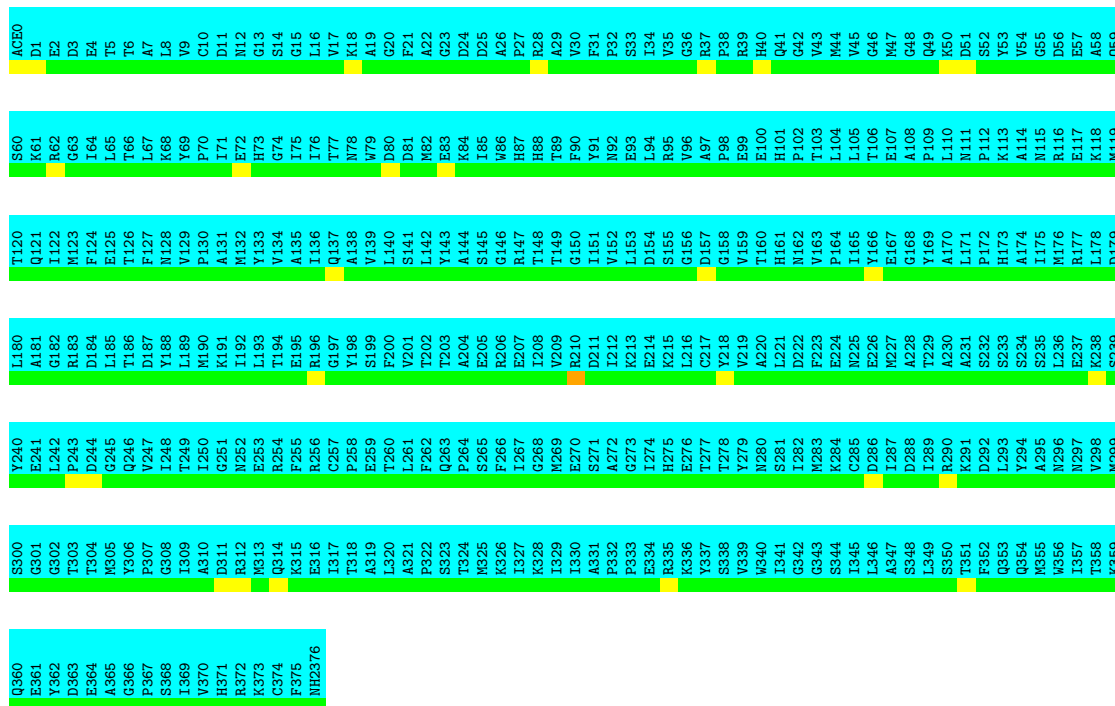


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Y362  
D363  
E364  
A365  
G366  
F367  
S368  
L368  
V370  
H371  
H372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain E:

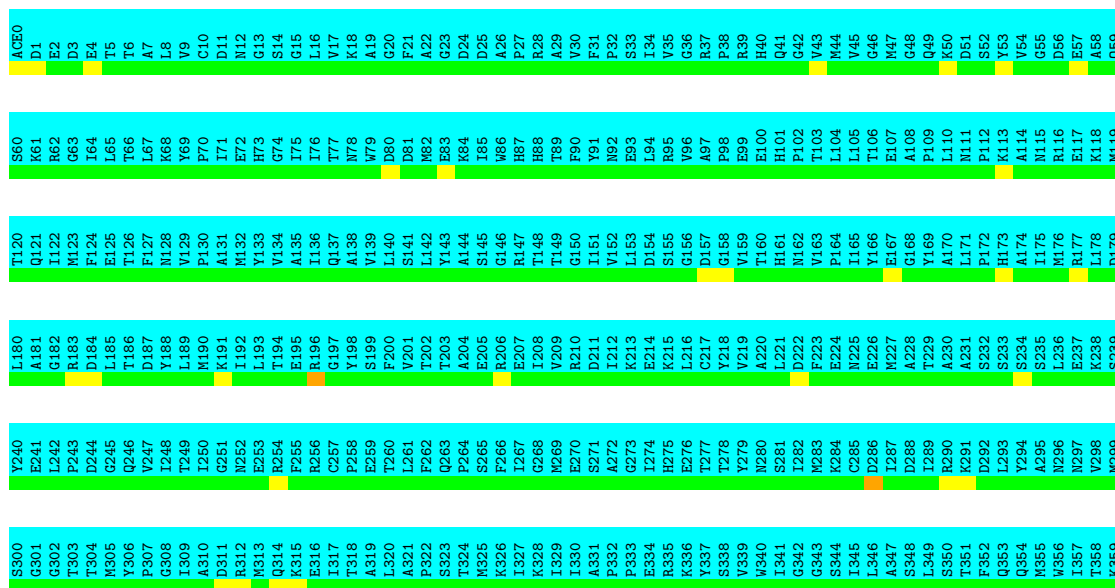
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• Molecule 1: Actin, alpha skeletal muscle

Chain F:

100%

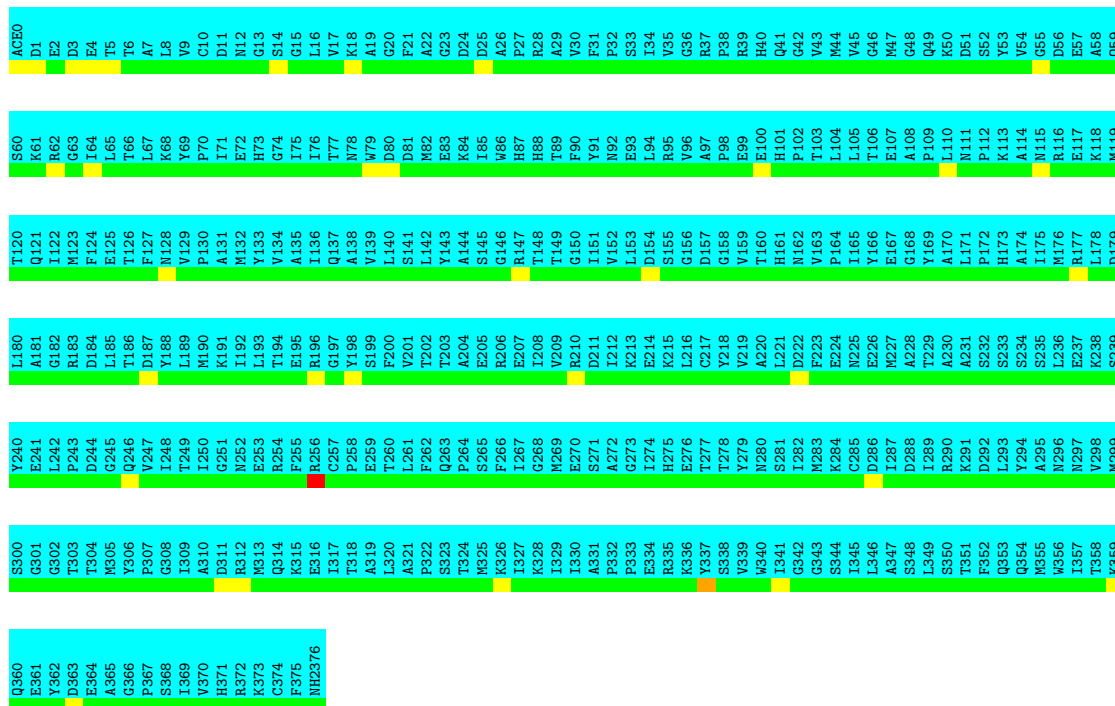


Q360  
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Y362  
D363  
E364  
A365  
G366  
F367  
S368  
V370  
H371  
R372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain G:

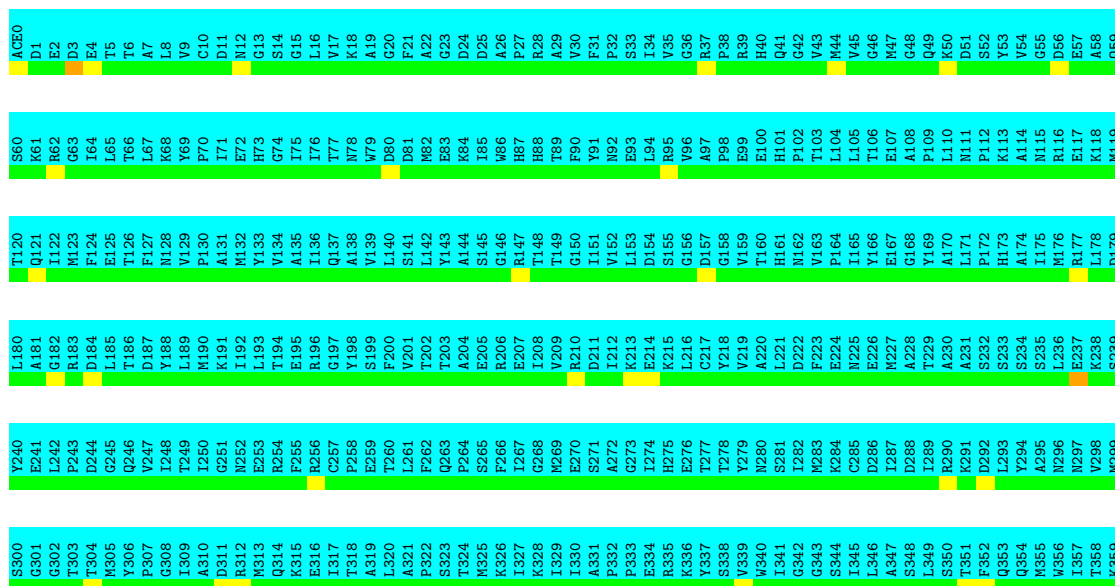
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• Molecule 1: Actin, alpha skeletal muscle

Chain H:

100%



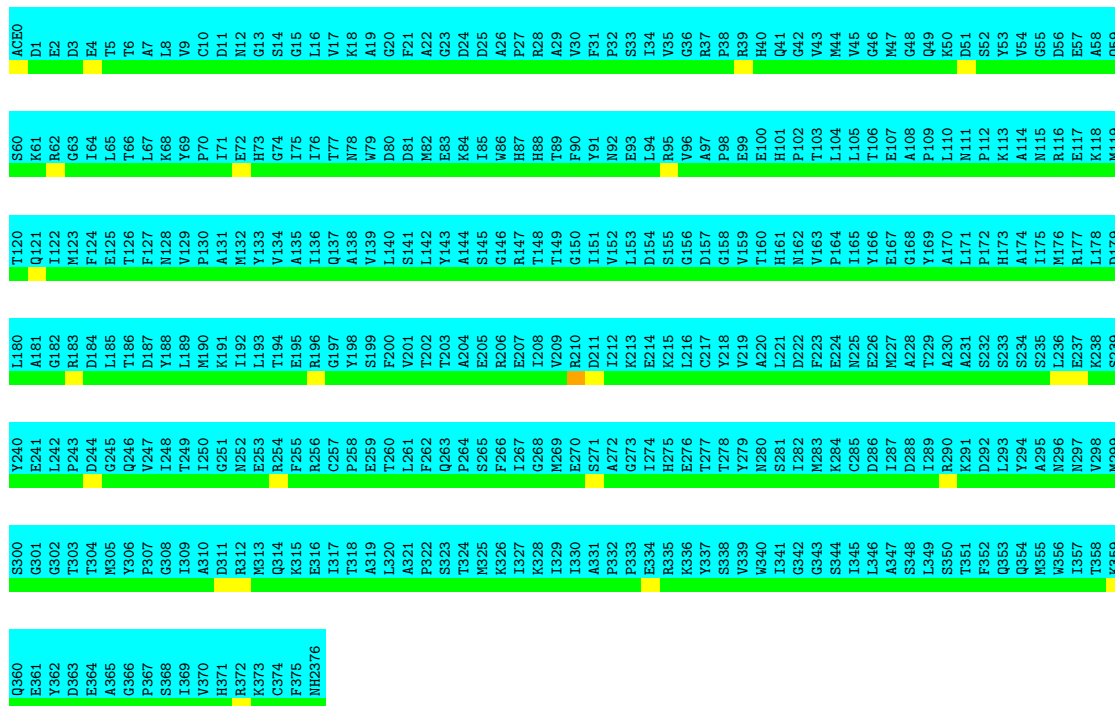


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Y362  
D363  
E364  
A365  
G366  
F367  
S368  
R369  
V370  
H371  
H372  
K373  
C374  
F375  
NH2376

• Molecule 1: Actin, alpha skeletal muscle

Chain I:

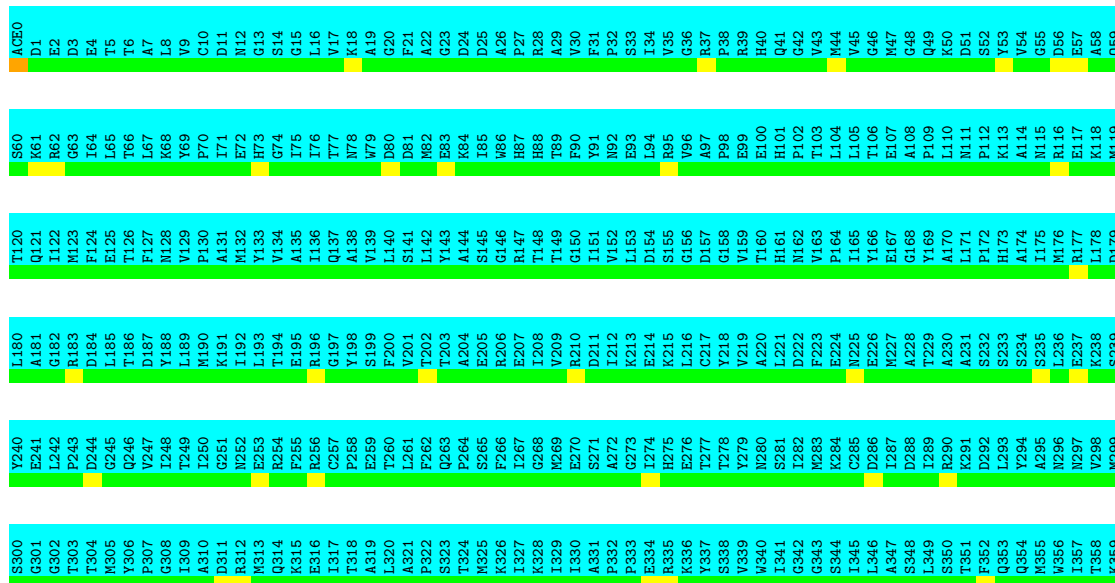
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• Molecule 1: Actin, alpha skeletal muscle

Chain J:

100%



Q360  
E361  
Y362  
D363  
E364  
A365  
G366  
F367  
S368  
I369  
V370  
H371  
H372  
K373  
C374  
F375  
NH2376

- Molecule 2: Cofilin-2

Chain K:  100%

ACE0  
M1  
D62  
S3  
G4  
V5  
T6  
V7  
N8  
D9  
E10  
F11  
V12  
K13  
L14  
W15  
P16  
M17  
D18  
M18  
K19  
V20  
R21  
K22  
S23  
A24  
L25  
T26  
Q27  
E28  
E29  
K30  
K31  
R32  
K33  
K34  
A35  
G36  
V37  
L38  
F39  
C39  
L40  
S41  
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S108  
V49  
E50  
L111  
A52  
K112  
S113  
Q54  
M114  
I55  
L56  
V57  
G58  
D59

T60  
G61  
D62  
T63  
V64  
E65  
D66  
P67  
F68  
N68  
T69  
G130  
S70  
F71  
V72  
K73  
L74  
W75  
P76  
M77  
D78  
M78  
K79  
V80  
R81  
K82  
Y82  
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S24  
L84  
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E27  
T88  
I29  
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K90  
F90  
T91  
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E93  
S94  
A95  
G95  
K96  
V96  
L97  
F98  
D98  
L99  
V100  
S100  
L40  
S41  
D42  
D43  
F103  
W104  
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Q106  
E107  
I47  
S108  
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K112  
S113  
Q54  
M114  
I55  
L56  
V57  
G58  
D59

S120  
K121  
D122  
A123  
I124  
K125  
K126  
K127  
F128  
N128  
T129  
G130  
E10  
I131  
V11  
K132  
H133  
E134  
W135  
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V137  
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M138  
G139  
V20  
L140  
R21  
D141  
K22  
D142  
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I143  
K144  
D145  
R146  
S147  
T148  
E28  
I149  
Y89  
K90  
G150  
E151  
K92  
L152  
L153  
G154  
A35  
G155  
M156  
V157  
V158  
V159  
S160  
L161  
E162  
G163  
K164  
P165  
L166  
NH2167

- Molecule 2: Cofilin-2

Chain L:  100%

ACE0  
M1  
D62  
S3  
G4  
V5  
T6  
V7  
N8  
D9  
E10  
F11  
V12  
K13  
L14  
W15  
P16  
M17  
D18  
M18  
K19  
V20  
R21  
K22  
S23  
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L25  
T26  
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E27  
T88  
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Y89  
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K31  
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V36  
L37  
F38  
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L99  
V100  
S100  
L40  
S41  
D42  
D43  
K44  
R45  
P106  
Q106  
E107  
I47  
S108  
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V49  
E50  
L111  
A52  
K112  
S113  
K53  
Q54  
M114  
I55  
L56  
V57  
G58  
D59

T60  
G61  
D62  
T63  
V64  
E65  
D66  
P67  
F68  
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T69  
G130  
S70  
F71  
V72  
K73  
L74  
W75  
P76  
M77  
D78  
M78  
K79  
V80  
R81  
K82  
Y82  
A83  
I143  
K144  
D145  
R146  
S147  
T148  
E28  
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Y89  
K90  
G150  
E151  
K92  
L152  
L153  
G154  
A35  
G155  
M156  
V157  
V158  
V159  
S160  
L161  
E162  
G163  
K164  
P165  
L166  
NH2167

S120  
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K125  
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K127  
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W135  
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G139  
V20  
L140  
R21  
D141  
K22  
D142  
A83  
I143  
K144  
D145  
R146  
S147  
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G150  
E151  
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M156  
V157  
V158  
V159  
S160  
L161  
E162  
G163  
K164  
P165  
L166  
NH2167

- Molecule 2: Cofilin-2

Chain M:  100%

ACE0  
M1  
D62  
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G4  
V5  
T6  
V7  
N8  
D9  
E10  
F11  
V12  
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L14  
W15  
P16  
M17  
D18  
M18  
K19  
V20  
R21  
K22  
S23  
A24  
L25  
T26  
Q27  
E27  
T88  
I29  
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R32  
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F38  
D98  
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S100  
L40  
S41  
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V57  
G58  
D59

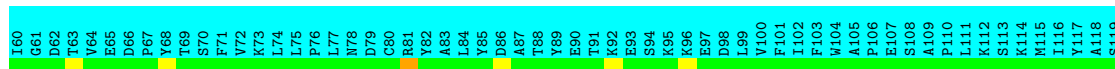
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V72  
K73  
L74  
W75  
P76  
M77  
D78  
M78  
K79  
V80  
R81  
K82  
Y82  
A83  
I143  
K144  
D145  
R146  
S147  
T148  
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I149  
Y89  
K90  
G150  
E151  
K92  
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L153  
G154  
A35  
G155  
M156  
V157  
V158  
V159  
S160  
L161  
E162  
G163  
K164  
P165  
L166  
NH2167

S120  
K121  
D122  
A123  
I124  
K125  
K126  
K127  
F128  
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G130  
E10  
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H133  
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M138  
G139  
V20  
L140  
R21  
D141  
K22  
D142  
A83  
I143  
K144  
D145  
R146  
S147  
T148  
E28  
I149  
Y89  
K90  
G150  
E151  
K92  
L152  
L153  
G154  
A35  
G155  
M156  
V157  
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G163  
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NH2167

- Molecule 2: Cofilin-2

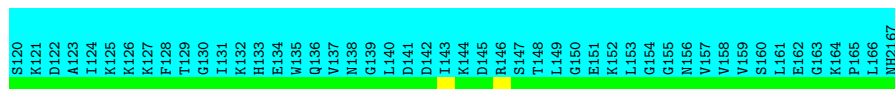
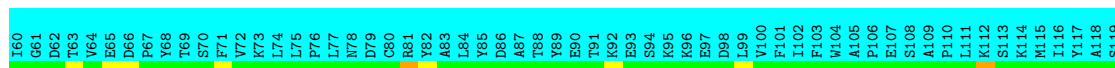
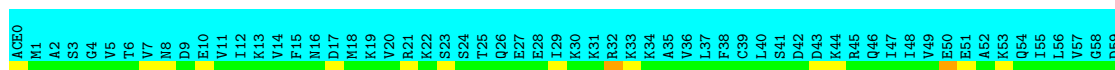
Chain N:  100%

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V5  
T6  
V7  
N8  
D9  
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F11  
V12  
K13  
L14  
W15  
P16  
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D18  
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V20  
R21  
K22  
S23  
A24  
L25  
T26  
Q27  
E27  
T88  
I29  
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F38  
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I48  
V49  
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D59



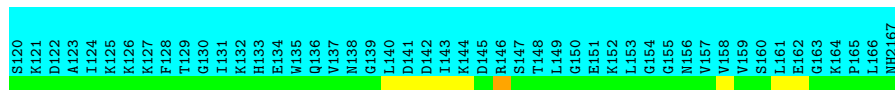
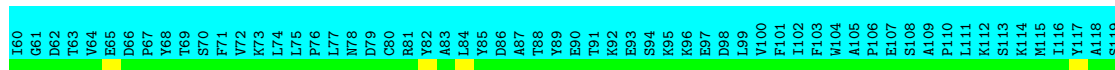
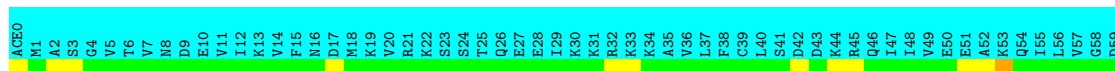
• Molecule 2: Cofilin-2

Chain O: 100%



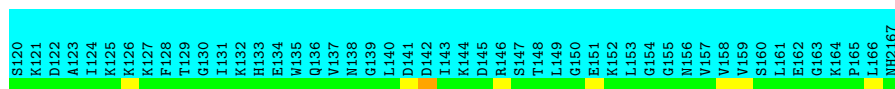
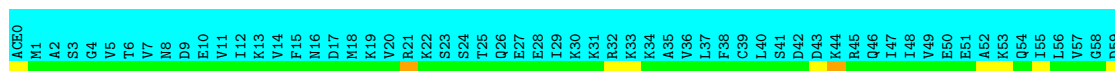
• Molecule 2: Cofilin-2

Chain P: 100%



• Molecule 2: Cofilin-2

Chain Q: 100%



• Molecule 2: Cofilin-2

Chain R: 100%

ACEO	T60
M1	G61
A2	D62
S3	T63
G4	V64
V5	E65
T6	D66
V7	P67
M8	Y68
D9	T69
E10	S70
V11	F71
I12	V72
K13	K73
V14	L74
F15	L75
M16	P76
D17	L77
M18	W78
K19	D79
V20	C80
R21	R81
K22	Y82
S23	A83
S24	L84
T25	Y85
Q26	D86
E27	A87
E28	T88
I29	Y89
K30	G90
K31	T91
R32	K92
K33	E93
K34	S94
A35	G95
V36	K96
L37	E97
F38	D98
C39	L99
L40	V100
S41	F101
D42	I102
D43	F103
K44	W104
R45	A105
Q46	P106
I47	E107
I48	S108
W49	A109
E50	P110
E51	L111
A52	K112
K53	S113
O54	K114
I55	M115
I56	I116
V57	Y117
G58	A118
D59	S119
S120	
K121	
D122	
A123	
I124	
K125	
K126	
K127	
F128	
T129	
G130	
I131	
K132	
H133	
E134	
M135	
Q136	
V137	
M138	
G139	
L140	
D141	
D142	
I143	
K144	
D145	
R146	
S147	
T148	
L149	
G150	
E151	
K152	
L153	
G154	
G155	
N156	
V157	
V158	
V159	
S160	
L161	
E162	
G163	
K164	
P165	
L166	
NH2167	

## 5 Refinement protocol and experimental data overview

The models were refined using the following method: *molecular dynamics*.

Of the 4 calculated structures, 4 were deposited, based on the following criterion: *all calculated structures submitted*.

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

Software name	Classification	Version
TALOS-N	structure calculation	
X-PLOR NIH	structure calculation	
X-PLOR NIH	refinement	
NAMD	refinement	

No chemical shift data was provided. Note: This is a solid-state NMR structure, where hydrogen atoms are typically not assigned a chemical shift value, which may lead to lower completeness of assignment measure.

## 6 Model quality [i](#)

### 6.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: NH2, ACE

There are no covalent bond-length or bond-angle outliers.

There are no bond-length outliers.

There are no bond-angle outliers.

There are no chirality outliers.

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	C	0	0	0	0±0
1	G	0	0	0	0±0
1	H	0	0	0	0±0
1	I	0	0	0	0±0
1	J	0	0	0	0±0
1	A	0	0	0	0±0
1	D	0	0	0	0±0
1	E	0	0	0	0±0
1	F	0	0	0	0±0
1	B	0	0	0	0±0
2	K	0	0	0	0±0
2	M	0	0	0	0±0
2	O	0	0	0	0±0
2	P	0	0	0	0±0
2	Q	0	0	0	0±0
2	L	0	0	0	0±0
2	N	0	0	0	0±0
2	R	0	0	0	0±0
All	All	0	0	0	-

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including

hydrogen atoms). The all-atom clashscore for this structure is -.

There are no clashes.

## 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	0	-	-	-	-
1	B	0	-	-	-	-
1	C	0	-	-	-	-
1	D	0	-	-	-	-
1	E	0	-	-	-	-
1	F	0	-	-	-	-
1	G	0	-	-	-	-
1	H	0	-	-	-	-
1	I	0	-	-	-	-
1	J	0	-	-	-	-
2	K	0	-	-	-	-
2	L	0	-	-	-	-
2	M	0	-	-	-	-
2	N	0	-	-	-	-
2	O	0	-	-	-	-
2	P	0	-	-	-	-
2	Q	0	-	-	-	-
2	R	0	-	-	-	-
All	All	0	-	-	-	-

There are no Ramachandran outliers.

### 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	0	-	-	-
1	B	0	-	-	-
1	C	0	-	-	-
1	D	0	-	-	-
1	E	0	-	-	-
1	F	0	-	-	-
1	G	0	-	-	-
1	H	0	-	-	-
1	I	0	-	-	-
1	J	0	-	-	-
2	K	0	-	-	-
2	L	0	-	-	-
2	M	0	-	-	-
2	N	0	-	-	-
2	O	0	-	-	-
2	P	0	-	-	-
2	Q	0	-	-	-
2	R	0	-	-	-
All	All	0	-	-	-

There are no protein residues with a non-rotameric sidechain to report.

### 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.