

Jump to: [Multiple Alignment](#) [Motif Tree](#) [Motif Matching](#)

Input file: 72 motifs loaded

Settings: Metric=PCC, Alignment=SWU, Gap-open=1000, Gap-extend=1000, -nooverlapalign

Multiple Alignment=IR, Tree=UPGMA, Matching against: AGRIS

Note: All results files are removed nightly at midnight EST. Please save your results by saving "Webpage, complete".

[Download results as a PDF](#)

[Click here to run STAMP again.](#)

Multiple Alignment

(Consensus sequence representations shown, but multiple alignment was carried out on the matrices)

```
meme_cluster3_1: -----CRCCTCMACA-----
biop_10_cluster1_1: -----CACGTGNC-----
biop_10_cluster1_2: -----CACGTGNC-----
biop_10_cluster1_3: -----CCCYCWCYCC-----
aa_10_cluster3_1: -----WAAAAAAWAA-----
aa_10_cluster3_2: -----AAAAAWAANWWAAWAWAWA
meme_cluster4_1: -----GNCSCCACY-----
meme_cluster4_2: -----RKNMGACGTGKC-----
meme_cluster4_3: -----CCCNACCC-----
meme_cluster4_4: -----GMCACGTGKCNNY-----
meme_cluster4_5: -----MCACGTGKCNCN-----
aa_10_cluster2_1: -----AAAAAAAAA-----
aa_10_cluster2_2: -----TTWWWWWNWAAWWAWT-----
aa_10_cluster2_3: -----AANAWAAAATWAAWWAAAAAWAW--
aa_10_cluster2_4: -----TWWWWAWTTTTAAAW-----
aa_10_cluster2_5: -----MCACGTGK-----
con_10_cluster4_1: -----GSNSCCACG-----
con_10_cluster4_2: -----RKNMGACGTGKC-----
con_10_cluster4_3: -----SGCSACACKNNNC-----
con_10_cluster4_4: -----GSYGCCACGY-----
con_10_cluster4_5: -----TGKCGMCACS-----
meme_cluster1_1: -----YCWCTCNYCC-----
meme_cluster1_2: -----GNCACGTGNC-----
```

Stamp Results

09/28/15

```

meme_cluster1_3: -----TYTYTYTCTC-----
meme_cluster1_4: -----CCNCNCNNYC-----
meme_cluster1_5: -----NNCACGTG-----
aa_10_all_cluster_1: -----AAAAAAAWA-----
aa_10_all_cluster_2: -----AAAAAWNAAW-----
aa_10_all_cluster_3: -----WWWWWWAAWTAATTWWWW-----
aa_10_all_cluster_4: -----AAAAATAAAAATAAW-----
aa_10_all_cluster_5: WWWWTTWWWWWWWWWAAAA-----
con_10_cluster1_1: -----CACGTGNN-----
con_10_cluster1_2: -----NNCACGTGNC-----
con_10_cluster1_3: -----CCCWCMCS-----
con_10_cluster1_4: -----CNCNCYYNCNY-----
con_10_cluster1_5: -----CACGTG-----
biop_10_all_cluster_: -----CCYNNCNNNCNCC-----
biop_10_all_clust_v2: -----CCYYYCNYYCNC-----
biop_10_all_clust_v3: -----CACGTG-----
biop_10_all_clust_v4: -----MCACGTG-----
meme_cluster2_1: -----MCACGTGK-----
meme_cluster2_2: -----GGGNSNSRCC-----
meme_cluster2_3: -----CACSCGCCSM-----
meme_cluster2_4: -----TYNCTCTCTC-----
meme_cluster2_5: -----RMCACGTGK-----
aa_10_cluster4_1: -----AAWWWWWWAAAAANWWA-----
aa_10_cluster4_2: -----ANNWNWAAAAANAWANW-----
aa_10_cluster4_3: -----TWWTAAAAWWWW-----
aa_10_cluster4_4: -----AAWWAWWWWWWWWWAAWAW-----
aa_10_cluster4_5: -----RKNGMCACGTGK-----
meme_all_cluster_1: -----MCACGTG-----
meme_all_cluster_2: -----CNCTYNYCCY-----
meme_all_cluster_3: -----CACGTG-----
meme_all_cluster_4: -----CACGTG-----
meme_all_cluster_5: -----AAAAAAAAA-----
biop_10_cluster2_1: -----CNCWCCMYC-----
biop_10_cluster2_2: -----CWCSYSNCCYC-----
biop_10_cluster2_3: -----RNSMCACS-----
biop_10_cluster2_4: -----CACGTG-----
biop_10_cluster3_1: -----GCAYSGYN SA-----
biop_10_cluster4_1: -----RKNGMCACGTGKC-----
biop_10_cluster4_2: -----RKNGMCACGTGKC-----
biop_10_cluster4_3: -----GSNGMCACGT-----
biop_10_cluster4_4: -----GMCACGTGNCNNY-----
biop_10_cluster4_5: -----NCNMCNCGTSNC-----
con_10_cluster3_1: -----RNGCANGGTGSN-----

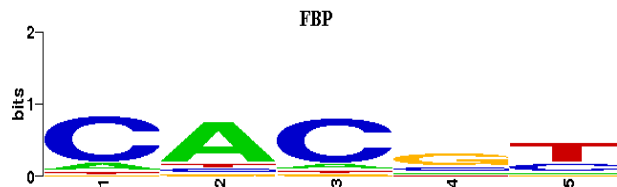
```

```

con_10_cluster3_2: -----NGCACGKTGCG-----
aa_10_cluster1_1: -----AAAAAANAAW-----
aa_10_cluster1_2: ---TTTTTTTTTTTMMWNW-----
aa_10_cluster1_3: -----GNCACGTGNC-----
aa_10_cluster1_4: -----YYCCMNCNCNCNYYC-----
aa_10_cluster1_5: -----TCNCNNNCNCNNCCNNNC-----

```

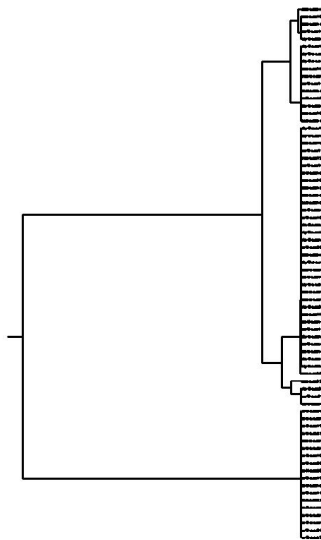
Familial Profile:
[\(click for matrix\)](#)



Motif Tree

Tree (drawn by **Phylip**)

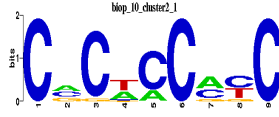

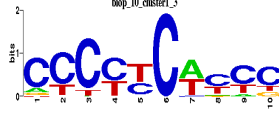

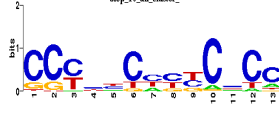





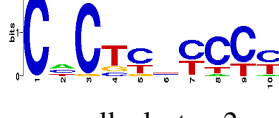

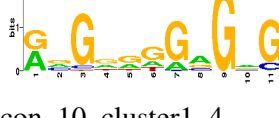
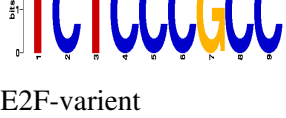
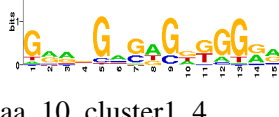

[Click here for Newick-format tree](#) (viewable with [MEGA](#))





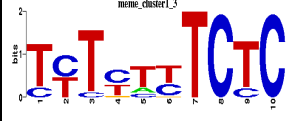

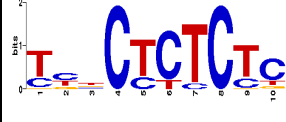



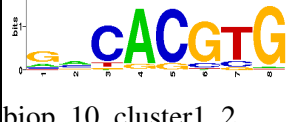

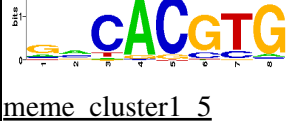

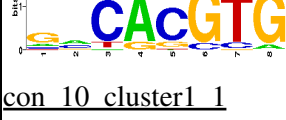



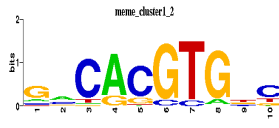

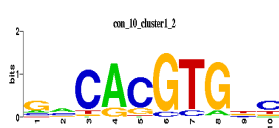



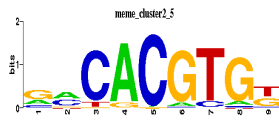

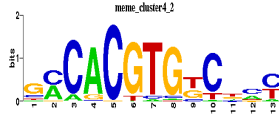

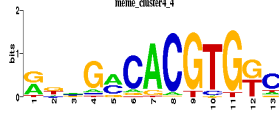





Input Motif

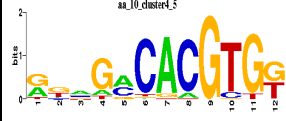

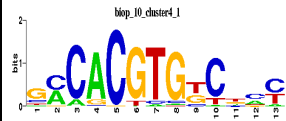







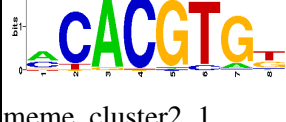

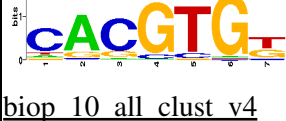



Best match in AGRIS

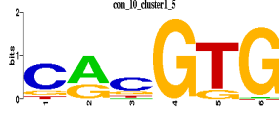











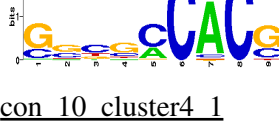

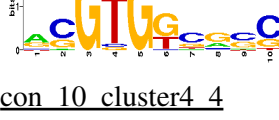

 meme_cluster3_1	 RAV1-A (E val: 4.2977e-04)
 meme_cluster4_3	 MYB1 (E val: 6.5555e-04)
 meme_cluster1_4	 SORLIP5 (E val: 1.8114e-04)
 con_10_cluster1_3	 MYB (E val: 1.1384e-02)

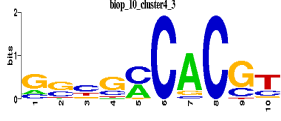












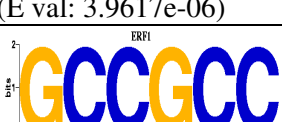


 <p><u>biop_10_cluster2_1</u></p>	 <p>E2F-variant (E val: 1.3407e-02)</p>
 <p><u>biop_10_cluster1_3</u></p>	 <p>SORLIP5 (E val: 3.9003e-04)</p>
 <p><u>biop_10_all_cluster</u></p>	 <p>E2F-variant (E val: 1.0524e-03)</p>
 <p><u>biop_10_all_clust_v2</u></p>	 <p>SORLIP5 (E val: 7.4007e-03)</p>
 <p><u>meme_cluster1_1</u></p>	 <p>SORLIP5 (E val: 2.3050e-04)</p>
 <p><u>meme_all_cluster_2</u></p>	 <p>E2F-variant (E val: 2.3243e-03)</p>
 <p><u>con_10_cluster1_4</u></p>	 <p>E2F-variant (E val: 4.7094e-05)</p>
 <p><u>aa_10_cluster1_4</u></p>	 <p>SORLIP5 (E val: 2.6287e-03)</p>

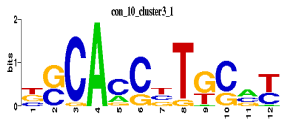
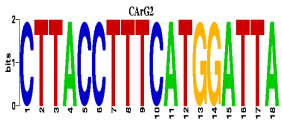



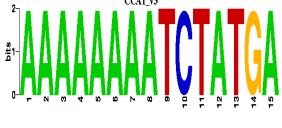


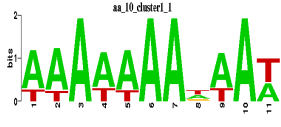
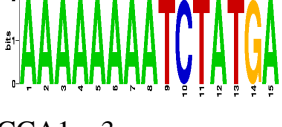

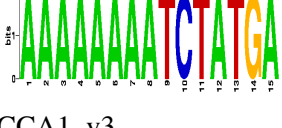


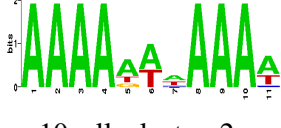
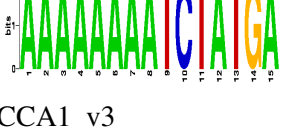
 <p><u>aa_10_cluster1_5</u></p>	 <p>SORLIP5 (E val: 3.9470e-05)</p>
 <p><u>biop_10_cluster2_2</u></p>	 <p>E2F-variant (E val: 1.3850e-03)</p>
 <p><u>meme_cluster1_3</u></p>	 <p>ARF (E val: 1.7015e-03)</p>
 <p><u>meme_cluster2_4</u></p>	 <p>SORLIP5 (E val: 4.8964e-05)</p>
 <p><u>biop_10_cluster1_1</u></p>	 <p>ABFs (E val: 4.9218e-11)</p>
 <p><u>biop_10_cluster1_2</u></p>	 <p>ABFs (E val: 3.2649e-11)</p>
 <p><u>meme_cluster1_5</u></p>	 <p>ABFs (E val: 1.0318e-11)</p>
 <p><u>con_10_cluster1_1</u></p>	 <p>ABFs (E val: 6.1569e-12)</p>

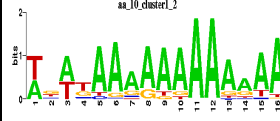

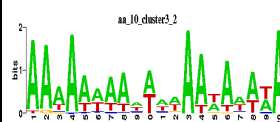
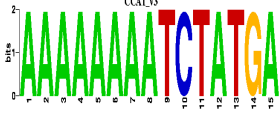
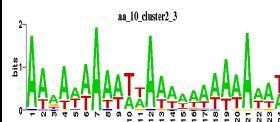

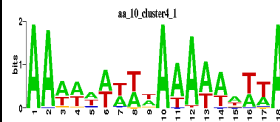

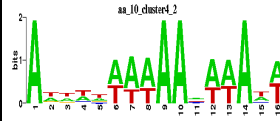

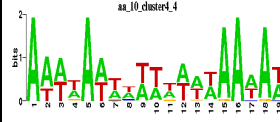
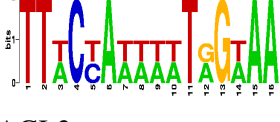
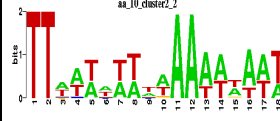
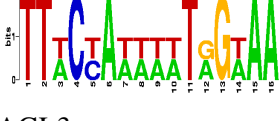
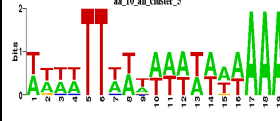
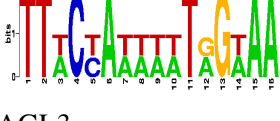
 <p><u>meme_cluster1_2</u></p>	 <p>ABFs (E val: 4.9057e-10)</p>
 <p><u>con_10_cluster1_2</u></p>	 <p>ABFs (E val: 3.5788e-10)</p>
 <p><u>aa_10_cluster1_3</u></p>	 <p>ABFs (E val: 1.2256e-10)</p>
 <p><u>meme_cluster2_5</u></p>	 <p>ABFs (E val: 3.6560e-11)</p>
 <p><u>meme_cluster4_2</u></p>	 <p>ABFs (E val: 4.5627e-10)</p>
 <p><u>meme_cluster4_4</u></p>	 <p>ABFs (E val: 2.9884e-10)</p>
 <p><u>meme_cluster4_5</u></p>	 <p>ABFs (E val: 8.9105e-11)</p>
 <p><u>con_10_cluster4_2</u></p>	 <p>ABFs (E val: 4.5627e-10)</p>

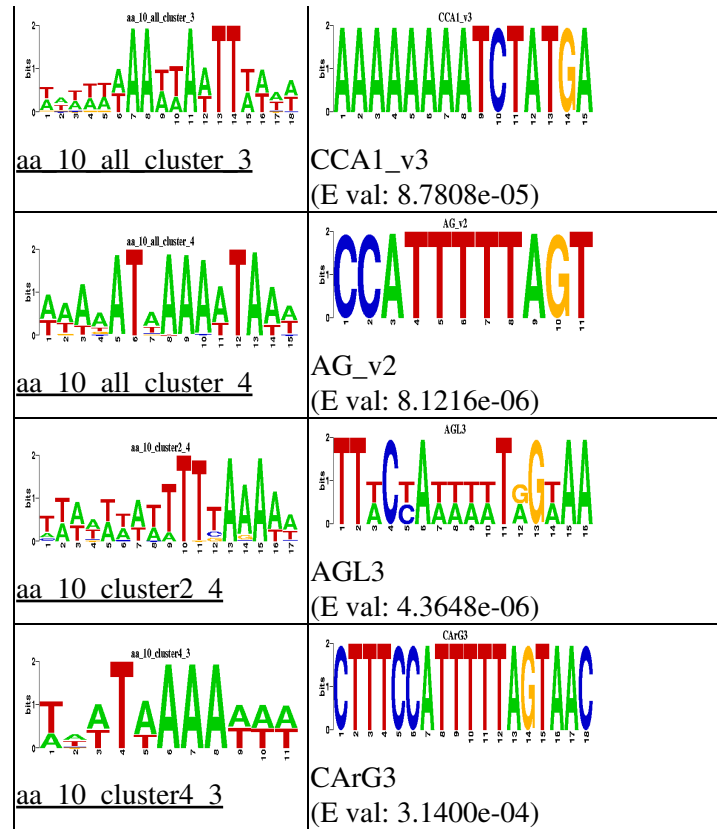
 <p><u>aa_10_cluster4_5</u></p>	 <p>ABFs (E val: 2.7376e-09)</p>
 <p><u>biop_10_cluster4_1</u></p>	 <p>ABFs (E val: 4.5627e-10)</p>
 <p><u>biop_10_cluster4_2</u></p>	 <p>ABFs (E val: 4.5627e-10)</p>
 <p><u>biop_10_cluster4_4</u></p>	 <p>ABFs (E val: 3.9958e-10)</p>
 <p><u>aa_10_cluster2_5</u></p>	 <p>G-box (E val: 4.2821e-09)</p>
 <p><u>meme_cluster2_1</u></p>	 <p>G-box (E val: 4.3084e-09)</p>
 <p><u>biop_10_all_clust_v4</u></p>	 <p>G-box (E val: 1.2324e-09)</p>
 <p><u>meme_all_cluster_1</u></p>	 <p>G-box (E val: 1.1774e-09)</p>

 <p>con_10_cluster1_5</p> <p>con_10_cluster1_5</p>	 <p>G-box</p> <p>G-box (E val: 4.5925e-10)</p>
 <p>biop_10_all_clust_v3</p> <p>biop_10_all_clust_v3</p>	 <p>G-box</p> <p>G-box (E val: 6.2438e-11)</p>
 <p>meme_all_cluster_4</p> <p>meme_all_cluster_4</p>	 <p>G-box</p> <p>G-box (E val: 5.4745e-11)</p>
 <p>meme_all_cluster_3</p> <p>meme_all_cluster_3</p>	 <p>G-box</p> <p>G-box (E val: 5.9453e-11)</p>
 <p>biop_10_cluster2_4</p> <p>biop_10_cluster2_4</p>	 <p>G-box</p> <p>G-box (E val: 6.9934e-11)</p>
 <p>meme_cluster4_1</p> <p>meme_cluster4_1</p>	 <p>ERF1</p> <p>ERF1 (E val: 3.7384e-07)</p>
 <p>con_10_cluster4_1</p> <p>con_10_cluster4_1</p>	 <p>ABFs</p> <p>ABFs (E val: 2.5416e-05)</p>
 <p>con_10_cluster4_4</p> <p>con_10_cluster4_4</p>	 <p>ABFs</p> <p>ABFs (E val: 1.2568e-07)</p>

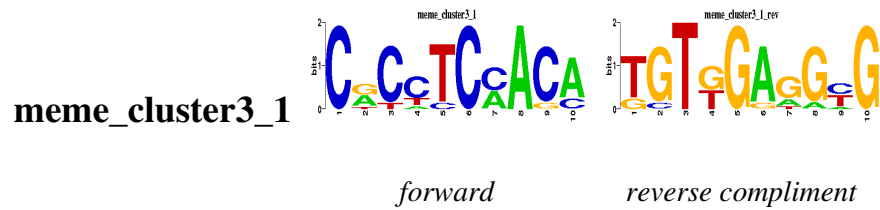
 <p>biop_10_cluster4_3</p>	 <p>ABFs</p>
<p>biop_10_cluster4_3</p>	<p>ABFs (E val: 2.0624e-07)</p>
 <p>con_10_cluster4_5</p>	 <p>ABFs</p>
<p>con_10_cluster4_5</p>	<p>ABFs (E val: 1.3922e-04)</p>
 <p>con_10_cluster4_3</p>	 <p>ACE</p>
<p>con_10_cluster4_3</p>	<p>ACE (E val: 6.2490e-05)</p>
 <p>biop_10_cluster4_5</p>	 <p>ABFs</p>
<p>biop_10_cluster4_5</p>	<p>ABFs (E val: 2.9123e-06)</p>
 <p>biop_10_cluster2_3</p>	 <p>ACE</p>
<p>biop_10_cluster2_3</p>	<p>ACE (E val: 6.1809e-04)</p>
 <p>meme_cluster2_3</p>	 <p>E2F-variant</p>
<p>meme_cluster2_3</p>	<p>E2F-variant (E val: 3.9617e-06)</p>
 <p>meme_cluster2_2</p>	 <p>ERF1</p>
<p>meme_cluster2_2</p>	<p>ERF1 (E val: 1.3269e-04)</p>
 <p>biop_10_cluster3_1</p>	 <p>CBF1</p>
<p>biop_10_cluster3_1</p>	<p>CBF1 (E val: 8.9174e-03)</p>




 <p><u>con_10_cluster3_1</u></p>	 <p>CArG2 (E val: 1.7770e-03)</p>
 <p><u>con_10_cluster3_2</u></p>	 <p>ABFs (E val: 1.3651e-05)</p>
 <p><u>aa_10_cluster3_1</u></p>	 <p>CCA1_v3 (E val: 6.6562e-06)</p>
 <p><u>aa_10_all_cluster_1</u></p>	 <p>CCA1_v3 (E val: 7.1473e-08)</p>
 <p><u>aa_10_cluster1_1</u></p>	 <p>CCA1_v3 (E val: 9.5610e-07)</p>
 <p><u>aa_10_cluster2_1</u></p>	 <p>CCA1_v3 (E val: 2.7265e-07)</p>
 <p><u>meme_all_cluster_5</u></p>	 <p>CCA1_v3 (E val: 1.3989e-07)</p>
 <p><u>aa_10_all_cluster_2</u></p>	 <p>CCA1_v3 (E val: 3.6212e-06)</p>

 <p><u>aa_10_cluster1_2</u></p>	 <p>CCA1_v3 (E val: 1.8433e-04)</p>
 <p><u>aa_10_cluster3_2</u></p>	 <p>CCA1_v3 (E val: 6.8505e-06)</p>
 <p><u>aa_10_cluster2_3</u></p>	 <p>CCA1_v3 (E val: 2.1018e-05)</p>
 <p><u>aa_10_cluster4_1</u></p>	 <p>Bellringer_replumless_pennywise (E val: 9.2666e-04)</p>
 <p><u>aa_10_cluster4_2</u></p>	 <p>CCA1_v3 (E val: 2.3128e-04)</p>
 <p><u>aa_10_cluster4_4</u></p>	 <p>AGL3 (E val: 3.9512e-05)</p>
 <p><u>aa_10_cluster2_2</u></p>	 <p>AGL3 (E val: 2.9105e-06)</p>
 <p><u>aa_10_all_cluster_5</u></p>	 <p>AGL3 (E val: 1.6908e-06)</p>



Motif Similarity Matches



Name	E value	Alignment	Motif
RAV1-A	4.2977e-04	CRCCTMACA -----CAACA	
RAV1-B	1.3312e-03	TGTKGAGGYG ----CAGGTG	
TGA1	2.5764e-02	-CRCCTMACA CCACGTCA---	

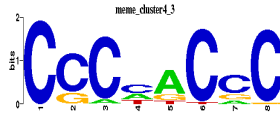
ERF1 2.9515e-02

TGTKGAGGYG
---GGCGGC-

GCC-box 2.9515e-02

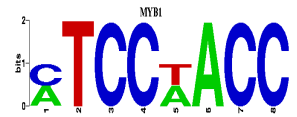
TGTKGAGGYG
---GGCGGC-

meme_cluster4_3

*forward**reverse compliment**Name**E value**Alignment**Motif*

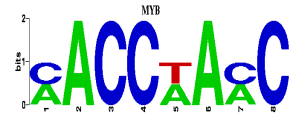
MYB1

6.5555e-04

GGGTNGGG-
-GGTWGGAK

MYB

5.2232e-03

GGGTNGGG-
-GKTWGGTK

E2F-variant

1.1996e-02

GGGTNGGG--
-GGCGGGAGA

MRE

1.3447e-02

GGGTNGGG----
TGGTAGGTTAGA

MYB4

1.8585e-02

CCCNACCC
AMCWAMC-

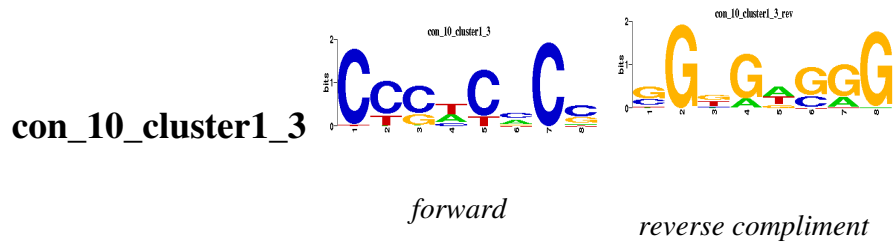
meme_cluster1_4





*forward**reverse compliment**Name**E value**Alignment**Motif*

Stamp Results

09/28/15

SORLIP5	1.8114e-04	GRNNGNGNGG GAGTGAG---	
E2F-varient	3.9895e-02	-GRNNGNGNGG GGCGGGAGA--	
MYB4	6.2511e-02	GRNNGNGNGG --GKTWGKT-	
GT	7.6462e-02	-----CCNCNCNNYC CATATTAACCACACA---	
SORLIP1	9.1186e-02	--CCNCNCNNYC AGCCAC-----	



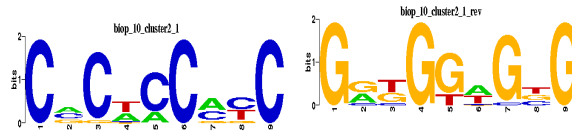
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
MYB	1.1384e-02	SGKGWGGG- -GKTWGGTK	
SORLIP5	1.2978e-02	CCCWCMCS- --CTCACTC	
Hexamer	2.1896e-02	SGKGWGGG --CGACGG	
E2F-varient	2.4054e-02	--SGKGWGGG GGCGGGAGA-	

LTRE

2.8405e-02

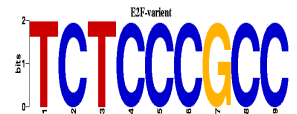
SGKGWGGG--
--TGTCGGT

biop_10_cluster2_1

*forward**reverse compliment**Name**E value**Alignment**Motif*

E2F-variant

1.3407e-02

--GRKGGWNG
GGCGGGAGA--

SORLIP5

1.4550e-02

--CNCWCCMYC
CTCACTC----

RAV1-B

8.3237e-02

--GRKGGWNG
CAGGTG-----

SORLIP4

8.8920e-02

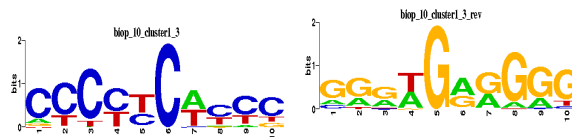
CNCWCCMYC----
----CCATCATA

SORLIP1

9.4131e-02






CNCWCCMYC
--AGCCAC--

biop_10_cluster1_3

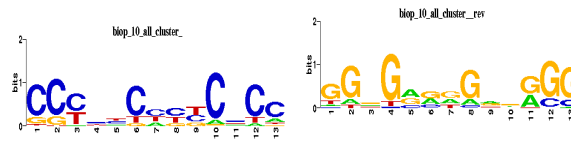
*forward**reverse compliment**Name**E value**Alignment**Motif*





Stamp Results

09/28/15

SORLIP5	3.9003e-04	GGRWGRRGGG GAGTGAG---	
E2F-variant	7.2098e-03	---GGRWGRRGGG GGCGGGAGA----	
MYB1	1.5792e-02	GGRWGRRGGG GGTWGGA--	
SORLIP4	3.4084e-02	CCCYCWYCC -CCATCATAC	
RAV1-B	1.0313e-01	CCCYCWYCC- -----CACCTG	

biop_10_all_cluster_

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
E2F-variant	1.0524e-03	GGNGNNNGNNRGG --GGCGGGAGA--	
SORLIP5	1.9620e-03	CCYNNCNNNCNCC ---CTCACTC---	
TEF-box	6.2993e-02	-GGNGNNNGNNRGG-- AGGGGCATAATGGTAA	
E2F	1.5702e-01	-GGNGNNNGNNRGG GCGGGAAA-----	

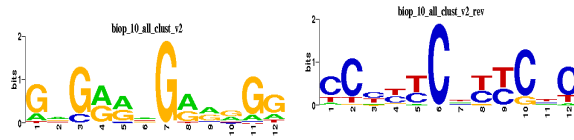
E2F_DP

1.5702e-01

—GGNGNNNGNNRGG
GCGGGAAA-----

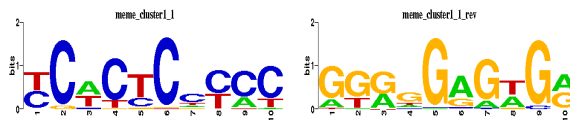


biop_10_all_clust_v2



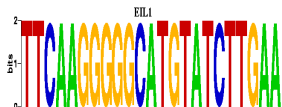
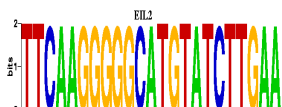

*forward**reverse compliment*

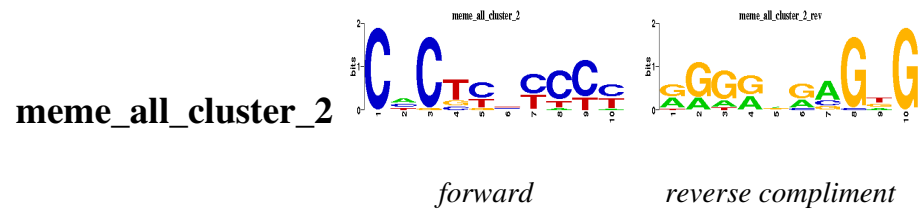
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
SORLIP5	7.4007e-03	CCYYCNYYCNC ---CTCACTC--	
E2F-varient	4.5482e-02	—GNRRNGRRRGG GGCGGGAGA----	
ARF	7.2518e-02	GNRRNGRRRGG GAGACA-----	
ARF1	7.2518e-02	GNRRNGRRRGG GAGACA-----	
CAR2	9.4405e-02	--GNRRNGRRRGG---- TAATCCATGAAAGGTAAG	



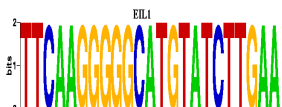
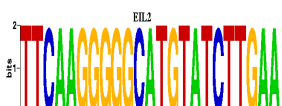

meme_cluster1_1

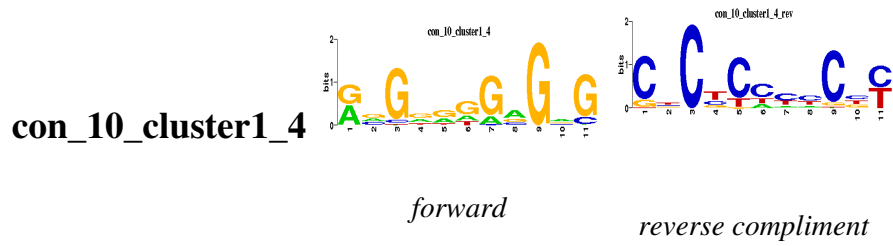
*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
-------------	----------------	------------------	--------------

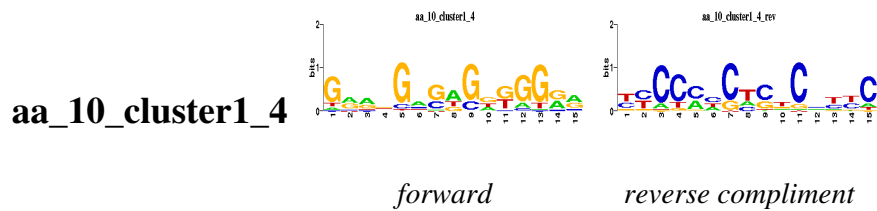
SORLIP5	2.3050e-04	-YCWCTCNYCC CTCACTC----	
E2F-varient	6.8582e-04	YCWCTCNYCC- --TCTCCCGCC	
EIL1	2.1501e-02	-----YCWCTCNYCC----- TTCAAGATACATGCCCCCTTGAA	
EIL2	2.1501e-02	-----YCWCTCNYCC----- TTCAAGATACATGCCCCCTTGAA	
EIL3	2.1501e-02	-----YCWCTCNYCC----- TTCAAGATACATGCCCCCTTGAA	




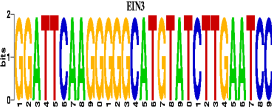


Name	E value	Alignment	Motif
E2F-varient	2.3243e-03	RGGRNRAGNG GGCGGGAGA-	
SORLIP5	5.7760e-03	RGGRNRAGNG-- -----GAGTGAG	
EIL1	2.1809e-02	-----CNCTYNYCCY---- TTCAAGATACATGCCCCCTTGAA	
EIL2	2.1809e-02	-----CNCTYNYCCY---- TTCAAGATACATGCCCCCTTGAA	
EIL3	2.1809e-02	-----CNCTYNYCCY---- TTCAAGATACATGCCCCCTTGAA	

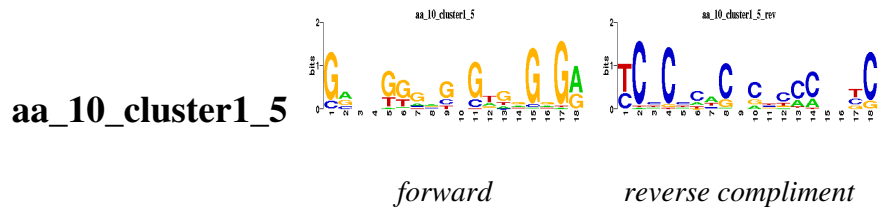





Name	E value	Alignment	Motif
E2F-varient	4.7094e-05	RNGNRRGNGNG -GGCGGGAGA-	
SORLIP5	2.2573e-03	RNGNRRGNGNG --GAGTGAG--	
MYB1	3.1129e-02	RNGNRRGNGNG -GGTWGGAK--	
E2F	3.9542e-02	CNCNCYNCNY -TTTCCCGC--	
E2F_DP	3.9542e-02	CNCNCYNCNY -TTTCCCGC--	



Name	E value	Alignment	Motif
SORLIP5	2.6287e-03	YYCCMNCNCNCNYC -----CTCACTC	

E2F-variant	1.8220e-02	-GRRNGNGNGNKGGRR GGCGGGAGA-----	
EIN3	2.2770e-02	GRRNGNGNGNKGGRR----- GGATTCAAGGGGGCATGTATCTTGAATCC	
ATB2_AtZIP53_AtZIP44_GBF5	5.8095e-02	GRRNGNGNGNKGGRR --ATGAGT-----	
TGA1	6.0368e-02	YYCCMNCNCNCNYC --CCACGTCA-----	



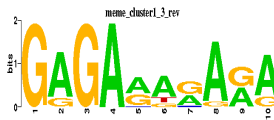
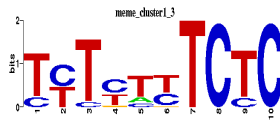
Name	E value	Alignment	Motif
SORLIP5	3.9470e-05	TCNCNNNCNCNNCCNNNC ---CTCACTC-----	
E2F-variant	1.5414e-02	GNNNGGNNGNGNNNGNGA -GGCGGGAGA-----	
TEF-box	2.9816e-02	TCNCNNNCNCNNCCNNNC -TTACCATTATGCCCT--	
ATB2_AtZIP53_AtZIP44_GBF5	1.7322e-01	TCNCNNNCNCNNCCNNNC -----ACTCAT-----	
SORLIP1	1.8318e-01	GNNNGGNNGNGNNNGNGA -----GTGGCT--	

biop_10_cluster2_2

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
E2F-varient	1.3850e-03	GRGGNSRSGWG— ---GGCGGGAGA	
RAV1-B	2.4525e-02	GRGGNSRSGWG -----CAGGTG	
Hexamer	4.9736e-02	GRGGNSRSGWG --CGACGG---	
ABFs	5.0832e-02	GRGGNSRSGWG ---GCCACGTG	
ABRE-like	5.9108e-02	GRGGNSRSGWG ---KMCACGTN	

meme_cluster1_3

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ARF	1.7015e-03	GAGARARARA GAGACA----	
ARF1	1.7015e-03	GAGARARARA GAGACA----	

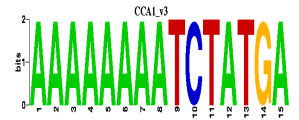
Stamp Results

09/28/15

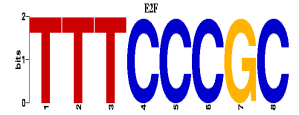
SORLIP5 3.0207e-03

GAGARARARA
GAGTGAG---

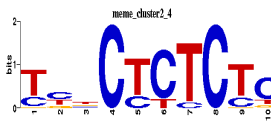
CCA1_v3 1.2274e-02

-----TYTYTYTCTC
TCATAGATTTTTTTT--

E2F 1.4138e-02

--GAGARARARA
GCGGGAAA----

meme_cluster2_4

*forward**reverse complement**Name**E value**Alignment**Motif*

SORLIP5 4.8964e-05

TYNCTCTCTC
---CTCACTC

ARF 1.7638e-03

GAGAGAGNRA
--GAGACA--

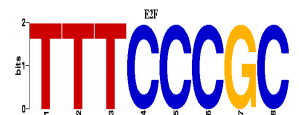
ARF1 1.7638e-03

GAGAGAGNRA
--GAGACA--

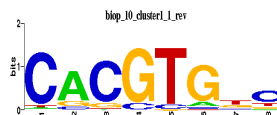
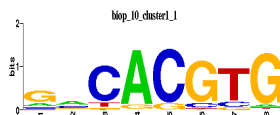
E2F-varient 2.9570e-03






TYNCTCTCTC
TCTCCCGCC-

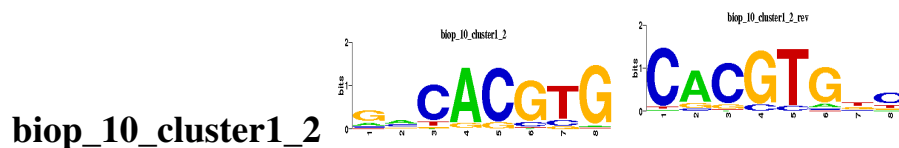
E2F 1.0061e-02




GAGAGAGNRA
--GCGGGAAA

biop_10_cluster1_1



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	4.9218e-11	GNCACGTG GCCACGTG	
ABRE	2.1092e-09	GNCACGTG GCCACGTR	
G-box	5.2985e-09	GNCACGTG --CACGTG	
ABRE-like	8.1440e-09	GNCACGTG KMCACGTN	
ACE	5.2527e-08	GNCACGTG-- GACACGTAGA	



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	3.2649e-11	CACGTGNC CACGTGGC	
ABRE	1.5362e-09	CACGTGNC YACGTGGC	
G-box	5.3569e-09	CACGTGNC CACGTG--	

ABRE-like 7.4835e-09

CACGTGNC
NACGTGKM

ACE 6.8080e-08

--CACGTGNC
TCTACGTGTC

meme_cluster1_5

*forward**reverse compliment**Name**E value**Alignment**Motif*

ABFs

1.0318e-11

NNCACGTG
GCCACGTG

ABRE

4.5077e-10

NNCACGTG
GCCACGTR

ABRE-like

2.6600e-09

NNCACGTG
KMCACGTN

G-box

5.7685e-09

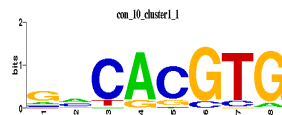
NNCACGTG
--CACGTG

CBF2

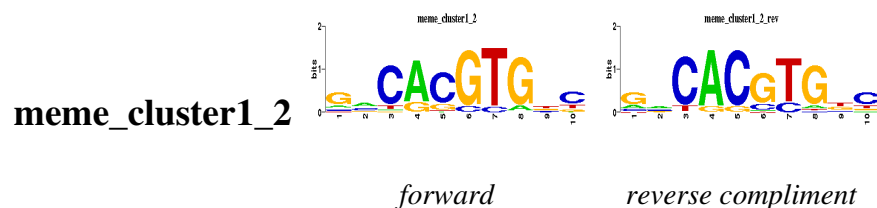
8.4437e-08

NNCACGTG-
-CCACGTGG

con_10_cluster1_1

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	6.1569e-12	NNCACGTG GCCACGTG	
ABRE	1.9523e-10	NNCACGTG GCCACGTR	
ABRE-like	3.2575e-09	NNCACGTG KMCACGTN	
G-box	6.3426e-09	NNCACGTG --CACGTG	
CBF2	5.5909e-08	NNCACGTG- -CCACGTGG	



<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	4.9057e-10	GNCACGTGNC --CACGTGGC	
ABRE	8.6656e-09	GNCACGTGNC --YACGTGGC	
G-box	4.7974e-08	GNCACGTGNC --CACGTG--	
ABRE-like	6.4696e-08	GNCACGTGNC KMCACGTN--	

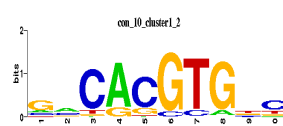
CBF2

7.6291e-08

GNCACGTGNC
-CCACGTGG-



con_10_cluster1_2

*forward**reverse compliment**Name**E value**Alignment**Motif*

ABFs

3.5788e-10

NNCACGTGNC
GCCACGTG--



ABRE

8.4367e-09

NNCACGTGNC
GCCACGTR--



G-box

4.5297e-08

GNCACGTGNN
--CACGTG--



ABRE-like

6.7466e-08

NNCACGTGNC
KMCACGTN--



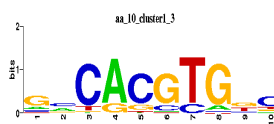
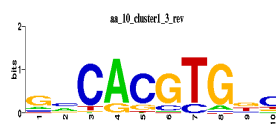
CBF2

1.0407e-07

NNCACGTGNC
-CCACGTGG-








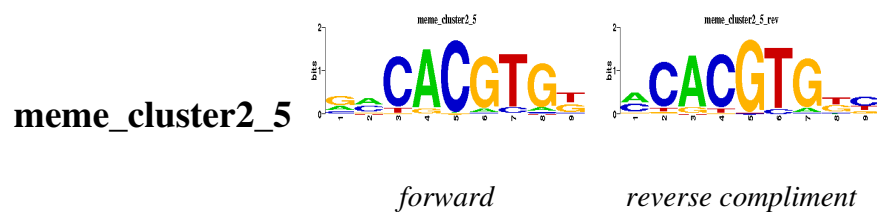
aa_10_cluster1_3






*forward**reverse compliment**Name**E value**Alignment**Motif*

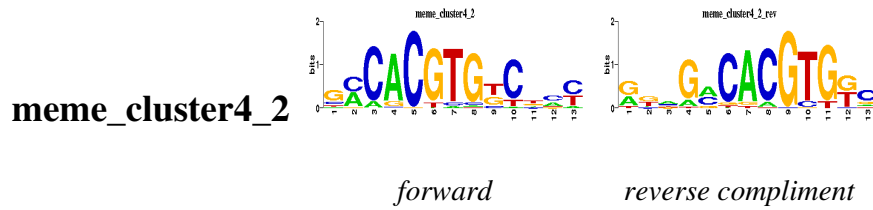
Stamp Results

09/28/15

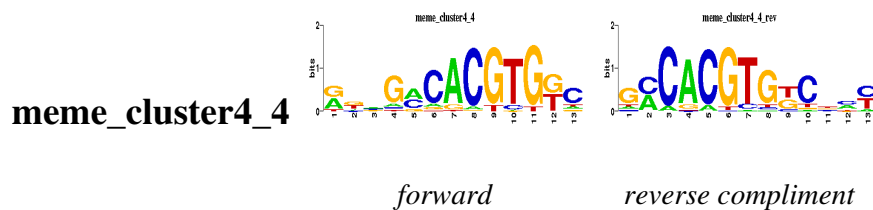
ABFs	1.2256e-10	GNCACGTGNC GCCACGTG--	
ABRE	2.7637e-09	GNCACGTGNC GCCACGTR--	
CBF2	5.6029e-09	GNCACGTGNC -CCACGTGG-	
GBF1_2_3	5.6029e-09	GNCACGTGNC -CCACGTGG-	
G-box	5.3475e-08	GNCACGTGNC --CACGTG--	



<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	3.6560e-11	MCACGTGKY -CACGTGGC	
ABRE	1.2097e-09	RMACGTGK GCCACGTR-	
CBF2	2.4678e-09	MCACGTGKY CCACGTGG-	
GBF1_2_3	2.4678e-09	MCACGTGKY CCACGTGG-	
G-box	1.4540e-08	MCACGTGKY -CACGTG--	



Name	E value	Alignment	Motif
ABFs	4.5627e-10	GMCACGTGKCNMY GCCACGTG-----	
ABRE	1.5589e-08	GMCACGTGKCNMY GCCACGTR-----	
CBF2	6.5834e-08	GMCACGTGKCNMY -CCACGTGG----	
GBF1_2_3	6.5834e-08	GMCACGTGKCNMY -CCACGTGG----	
G-box	1.3804e-07	GMCACGTGKCNMY --CACGTG-----	

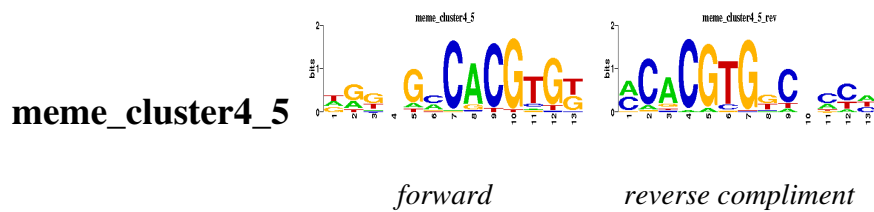







Name	E value	Alignment	Motif
ABFs	2.9884e-10	GMCACGTGKCNMY GCCACGTG-----	
ABRE	1.5176e-08	GMCACGTGKCNMY GCCACGTR-----	

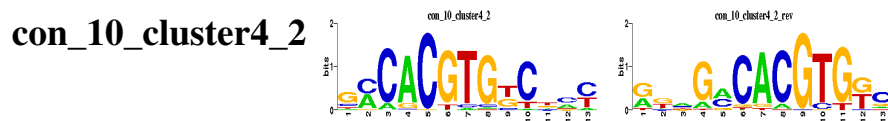
Stamp Results





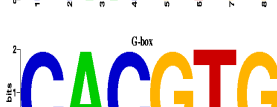
09/28/15

CBF2	2.9740e-08	RNNGMCACGTGKC ----CCACGTGG--	
GBF1_2_3	2.9740e-08	RNNGMCACGTGKC ----CCACGTGG--	
G-box	1.3818e-07	GMCACGTGKCNNY --CACGTG-----	







<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	8.9105e-11	NGKNGMCACGTGK ----GCCACGTG--	
CBF2	4.6778e-09	NGKNGMCACGTGK -----CCACGTGG	
GBF1_2_3	4.6778e-09	NGKNGMCACGTGK -----CCACGTGG	
ABRE	6.8482e-09	NGKNGMCACGTGK ----GCCACGTR--	
G-box	1.3064e-07	MCACGTGKCNMCN -CACGTG-----	



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	4.5627e-10	GMCACGTGKCNMY GCCACGTG-----	
ABRE	1.5589e-08	GMCACGTGKCNMY GCCACGTR-----	
CBF2	6.5834e-08	GMCACGTGKCNMY -CCACGTGG-----	
GBF1_2_3	6.5834e-08	GMCACGTGKCNMY -CCACGTGG-----	
G-box	1.3804e-07	GMCACGTGKCNMY --CACGTG-----	



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	2.7376e-09	RKNGMCACGTGK ---GCCACGTG--	
CBF2	2.6624e-08	MCACGTGKCNMY CCACGTGG-----	
GBF1_2_3	2.6624e-08	MCACGTGKCNMY CCACGTGG-----	
G-box	1.0105e-07	RKNGMCACGTGK -----CACGTG--	

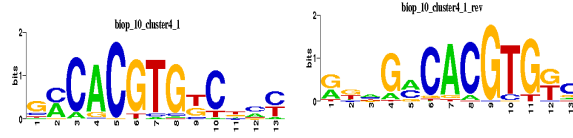
ABRE

1.1506e-07

RKNGMCACGTGK
 ---GCCACGTR--



biop_10_cluster4_1

*forward**reverse compliment**Name**E value**Alignment**Motif*

ABFs

4.5627e-10

GMCACGTGKCNMY
 GCCACGTG-----



ABRE

1.5589e-08

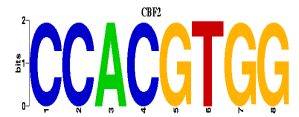
GMCACGTGKCNMY
 GCCACGTR-----



CBF2

6.5834e-08

GMCACGTGKCNMY
 --CCACGTGG----



GBF1_2_3

6.5834e-08

GMCACGTGKCNMY
 --CCACGTGG----



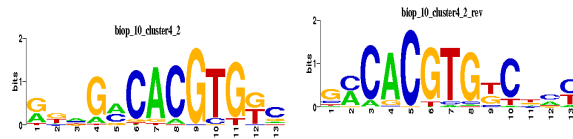
G-box

1.3804e-07

GMCACGTGKCNMY
 --CACGTG-----








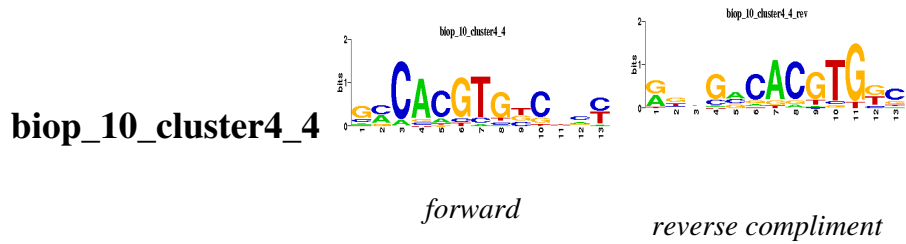
biop_10_cluster4_2





*forward**reverse compliment**Name**E value**Alignment**Motif*

Stamp Results

09/28/15

ABFs	4.5627e-10	GMCACGTGKCNMY GCCACGTG-----	
ABRE	1.5589e-08	GMCACGTGKCNMY GCCACGTR-----	
CBF2	6.5834e-08	RKNGMCACGTGKC ----CCACGTGG--	
GBF1_2_3	6.5834e-08	RKNGMCACGTGKC ----CCACGTGG--	
G-box	1.3804e-07	GMCACGTGKCNMY --CACGTG-----	



<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	3.9958e-10	GMCACGTGNCNNY GCCACGTG-----	
ABRE	2.3938e-08	GMCACGTGNCNNY GCCACGTR-----	
G-box	1.5295e-07	GMCACGTGNCNNY --CACGTG-----	
CBF2	1.6829e-07	GMCACGTGNCNNY --CCACGTGG----	

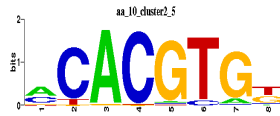
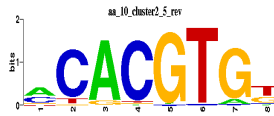
GBF1_2_3

1.6829e-07

GMCACGTGNCNNY
-CCACGTGG----



aa_10_cluster2_5

*forward**reverse complement**Name**E value**Alignment**Motif*

G-box

4.2821e-09

MCACGTGK
-CACGTG-



CBF2

5.1085e-09

MCACGTGK
CCACGTGG



GBF1_2_3

5.1085e-09

MCACGTGK
CCACGTGG



ABFs

5.7683e-08

MCACGTGK-
-CACGTGGC



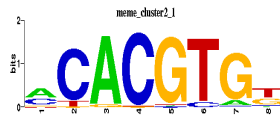
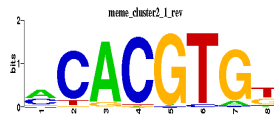
ABRE-like

7.0439e-08

-MCACGTGK
KMCACGTN-



meme_cluster2_1

*forward**reverse complement**Name**E value**Alignment**Motif*

G-box

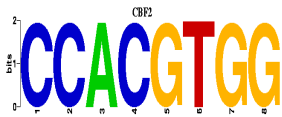



4.3084e-09

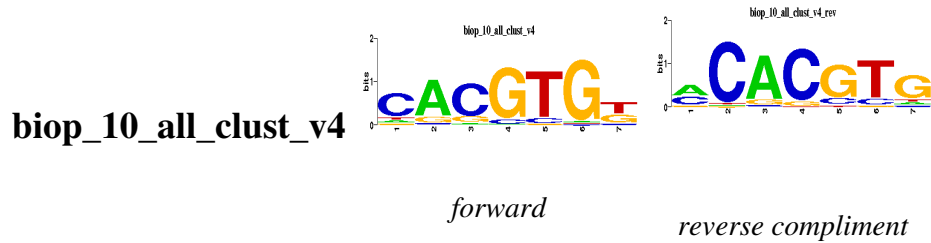
MCACGTGK
-CACGTG-








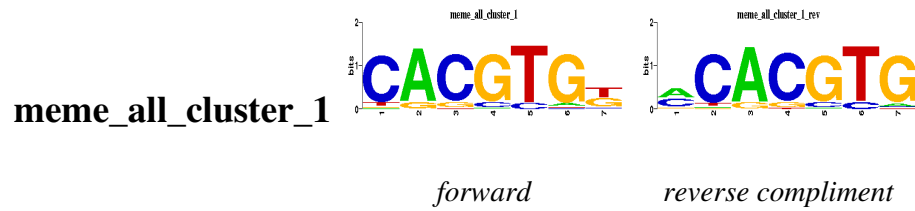
Stamp Results

09/28/15

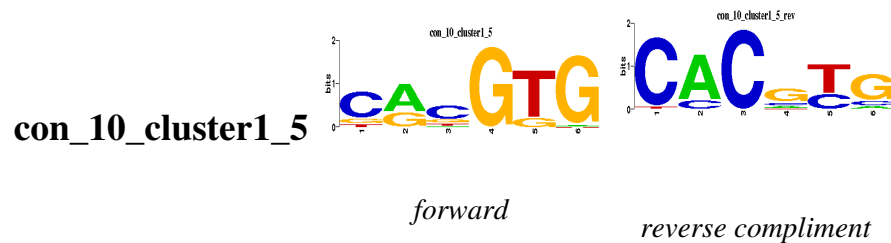
CBF2	8.5899e-09	MCACGTGK CCACGTGG	
GBF1_2_3	8.5899e-09	MCACGTGK CCACGTGG	
ABRE-like	7.9632e-08	-MCACGTGK KMCACGTN-	
Z-box	9.0409e-08	MCACGTGK ACACGTAT	



<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
G-box	1.2324e-09	MCACGTG -CACGTG	
ABFs	6.7752e-09	-MCACGTG GCCACGTG	
CBF2	6.7752e-09	MCACGTG- CCACGTGG	
GBF1_2_3	6.7752e-09	MCACGTG- CCACGTGG	
ABRE-like	1.8273e-08	-MCACGTG KMCACGTN	

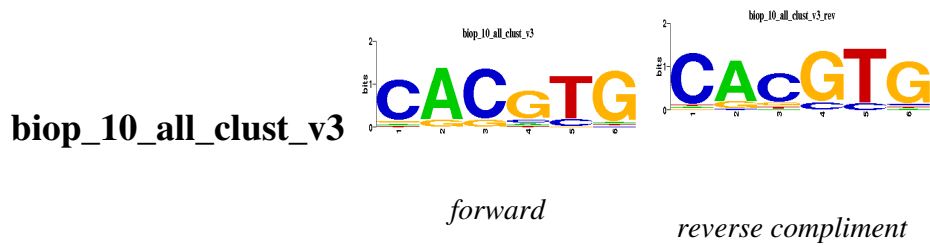







Name	E value	Alignment	Motif
G-box	1.1774e-09	CACGTGK CACGTG-	
ABFs	2.2400e-09	-MCACGTG GCCACGTG	
CBF2	2.2400e-09	MCACGTG- CCACGTGG	
GBF1_2_3	2.2400e-09	MCACGTG- CCACGTGG	
ABRE-like	9.5612e-09	-MCACGTG KMCACGTN	



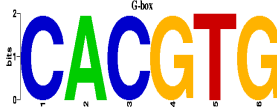




Name	E value	Alignment	Motif
G-box	4.5925e-10	CACGTG CACGTG	
ABFs	2.9924e-08	--CACGTG GCCACGTG	

CBF2	2.9924e-08	-CACGTG- CCACGTGG	
GBF1_2_3	2.9924e-08	-CACGTG- CCACGTGG	
ABRE	9.0519e-07	--CACGTG GCCACGTR	

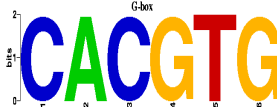





<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
G-box	6.2438e-11	CACGTG CACGTG	
ABFs	5.4690e-09	--CACGTG GCCACGTG	
CBF2	5.4690e-09	-CACGTG- CCACGTGG	
GBF1_2_3	5.4690e-09	-CACGTG- CCACGTGG	
ABRE	2.4512e-07	--CACGTG GCCACGTR	



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
G-box	5.4745e-11	CACGTG CACGTG	
ABFs	4.8887e-09	--CACGTG GCCACGTG	
CBF2	4.8887e-09	-CACGTG- CCACGTGG	
GBF1_2_3	4.8887e-09	-CACGTG- CCACGTGG	
ABRE	1.9855e-07	--CACGTG GCCACGTR	



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
G-box	5.9453e-11	CACGTG CACGTG	
ABFs	5.2451e-09	--CACGTG GCCACGTG	
CBF2	5.2451e-09	-CACGTG- CCACGTGG	
GBF1_2_3	5.2451e-09	-CACGTG- CCACGTGG	

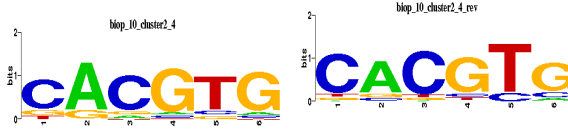
ABRE

3.3526e-07

--CACGTG
GCCACGTR



biop_10_cluster2_4

*forward**reverse compliment**Name**E value**Alignment**Motif*

G-box

6.9934e-11

CACGTG
CACGTG



ABFs

6.0243e-09

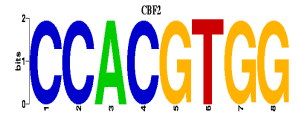
--CACGTG
GCCACGTG



CBF2

6.0243e-09

-CACGTG-
CCACGTGG



GBF1_2_3

6.0243e-09

-CACGTG-
CCACGTGG



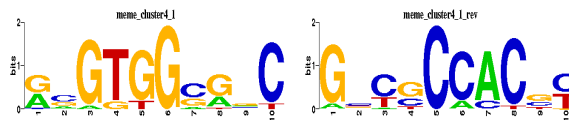
ABRE

2.2064e-07

--CACGTG
GCCACGTR








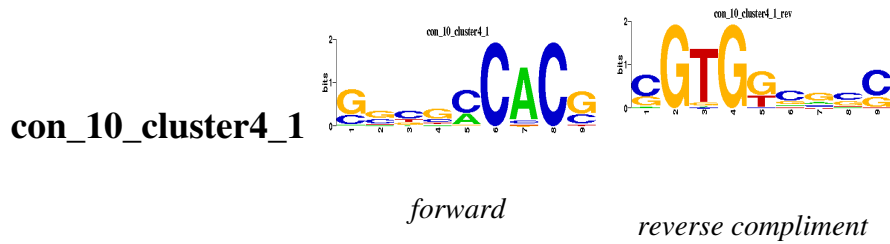
meme_cluster4_1





*forward**reverse compliment**Name**E value**Alignment**Motif*

Stamp Results

09/28/15

ERF1	3.7384e-07	RNGTGGSGNC ----GGCGGC	
GCC-box	3.7384e-07	RNGTGGSGNC ----GGCGGC	
ABFs	7.9180e-06	GNCSCCACNY-- ---GCCACGTG	
ABRE	7.9180e-06	GNCSCCACNY-- ---GCCACGTR	
SORLIP1	1.9452e-04	RNGTGGSGNC --GTGGCT--	



<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	2.5416e-05	GSNSCCACG-- ---GCCACGTG	
ABRE	2.5416e-05	GSNSCCACG-- ---GCCACGTR	
ERF1	5.4767e-05	CGTGGNSNC ---GGCGGC	
GCC-box	5.4767e-05	CGTGGNSNC ---GGCGGC	

SORLIP1

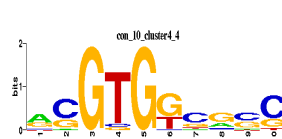
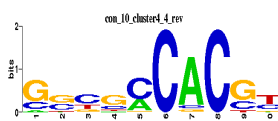
1.0639e-04

CGTGGSNSC

-GTGGCT--



con_10_cluster4_4

*forward**reverse compliment**Name**E value**Alignment**Motif*

ABFs

1.2568e-07

GSYGCCACGY-
---GCCACGTG

ABRE

1.2568e-07

GSYGCCACGY-
---GCCACGTR

ABRE-like

2.9189e-06

GSYGCCACGY-
---KMCACGTN

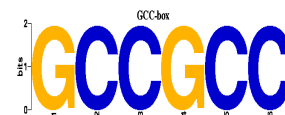
ERF1

5.3387e-05

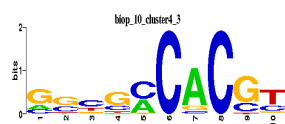
RCGTGGCRSC
----GGCGGC

GCC-box

5.3387e-05

RCGTGGCRSC
----GGCGGC

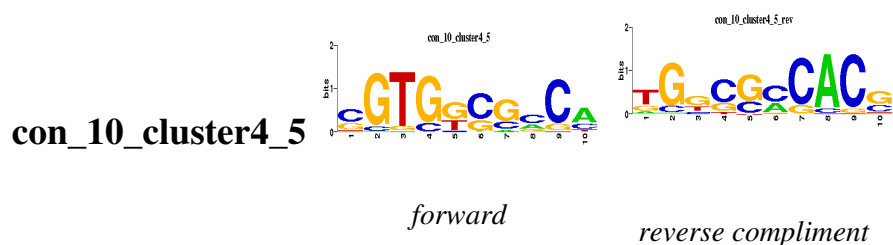
biop_10_cluster4_3





*forward**reverse compliment**Name**E value**Alignment**Motif*

Stamp Results

09/28/15

ABFs	2.0624e-07	GSNGMCACGT-- ---GCCACGTG	
ABRE	2.0624e-07	GSNGMCACGT-- ---GCCACGTR	
ABRE-like	1.2093e-06	GSNGMCACGT-- ---KMCACGTN	
ACE	6.6804e-05	GSNGMCACGT--- ---GACACGTAGA	
CBF2	1.2243e-04	GSNGMCACGT-- ----CCACGTGG	



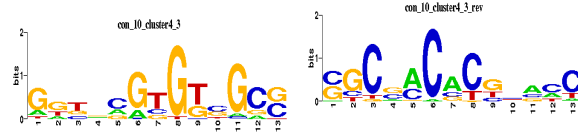
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ABFs	1.3922e-04	TGKCGMCACS-- ----GCCACGTG	
ABRE	1.3922e-04	TGKCGMCACS-- ----GCCACGTR	
SORLIP1	4.0606e-04	SGTGKCGMCA -GTGGCT---	
ABRE-like	1.5073e-03	TGKCGMCACS-- ----KMCACGTN	

ERF1

2.4920e-03

TGKCGMCACS
-GCCGCC---

con_10_cluster4_3

*forward**reverse compliment**Name**E value**Alignment**Motif*

ACE

6.2490e-05

SGCSACACKNNNC
---GACACGTAGA

Z-box

1.1623e-04

SGCSACACKNNNC
----ACACGTAT-

ABRE-like

1.2366e-04

SGCSACACKNNNC
---KMCACGTN--

ABRE

1.7706e-04

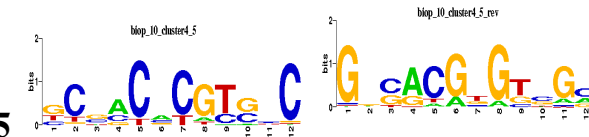
SGCSACACKNNNC
---GCCACGTR--





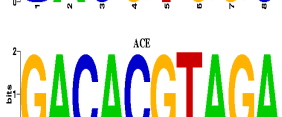
ABFs

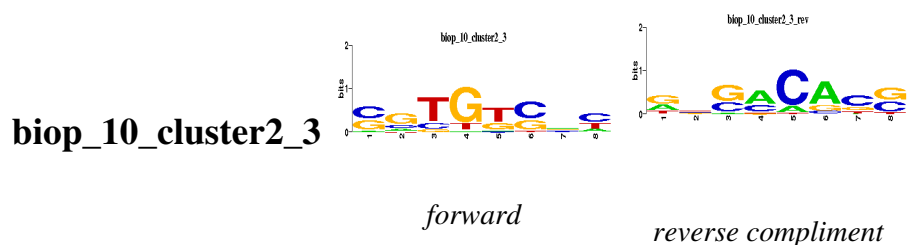
4.4369e-03





SGCSACACKNNNC
---GCCACGTG--

biop_10_cluster4_5

*forward**reverse compliment**Name**E value**Alignment**Motif*

ABFs	2.9123e-06	GNSACGNGKNGN GCCACGTG----	
G-box	3.4761e-06	GNSACGNGKNGN --CACGTG----	
ABRE-like	3.8698e-06	NCNMCNCGT SNC --KMCACGTN--	
ABRE	2.3570e-05	GNSACGNGKNGN GCCACGTR----	
ACE	1.1705e-04	GNSACGNGKNGN TCTACGTGTC--	



<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
ACE	6.1809e-04	-----SGTGKSNY TCTACGTGTC--	
ABRE-like	2.8663e-03	RNSMCACS-- --KMCACGTN	
ABFs	4.1135e-03	RNSMCACS-- --GCCACGTG	
ABRE	4.1135e-03	RNSMCACS-- --GCCACGTR	

Z-box

6.8578e-03

RNSMCACS---

---ACACGTAT



meme_cluster2_3

*forward**reverse complement**Name**E value**Alignment**Motif*

E2F-variant

3.9617e-06

KSGGCGSGTG-

--GGCGGGAGA



ERF1

2.4954e-04

KSGGCGSGTG

--GGCGGC--



GCC-box

2.4954e-04

KSGGCGSGTG

--GGCGGC--



RAV1-B

3.7257e-04

CACSCGCCSM

CACCTG----



Hexamer

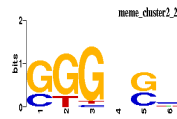
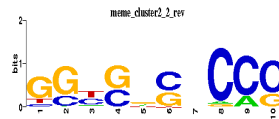
1.0673e-03

CACSCGCCSM

---CCGTG--



meme_cluster2_2

*forward**reverse complement**Name**E value**Alignment**Motif*





ERF1

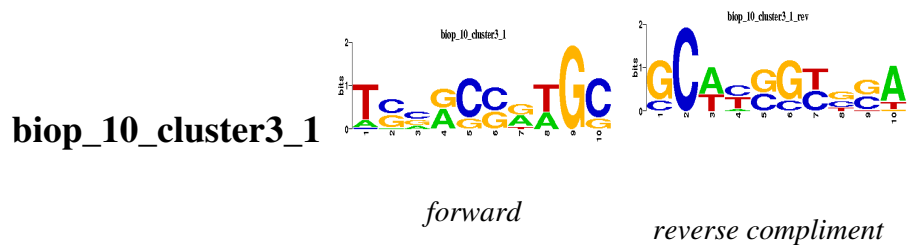
1.3269e-04






GGYSNSNCCC

GGCGGC----

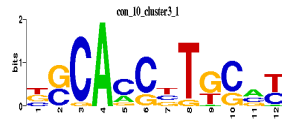
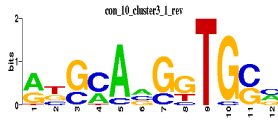


GCC-box	1.3269e-04	GGYSNSNCCC GGCGGC-----	
SORLIP2	1.1345e-03	GGYSNSNCCC ---GGCCC--	
CBF1	1.8444e-03	GGYSNSNCCC -GTCGGCCA-	
ERE	7.7552e-03	GGYSNSNCCC- GGCGGCTCTTA	



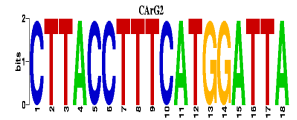
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
CBF1	8.9174e-03	-TSNRCSRTGC GTCGGCCA---	
octamer	3.9962e-02	--TSNRCSRTGC GATCCGCG----	
ERF1	7.1048e-02	GCAYSGYN SA ----GGCGGC	
GCC-box	7.1048e-02	GCAYSGYN SA ----GGCGGC	
RY-repeat	8.6815e-02	---GCAYSGYN SA CATGCATG-----	

con_10_cluster3_1

*forward**reverse compliment*

Name	E value	Alignment	Motif
------	---------	-----------	-------

CAR2	1.7770e-03	NSCACCNTGCNY----- CTTACCTTTTCATGGATTA	
------	------------	--	--



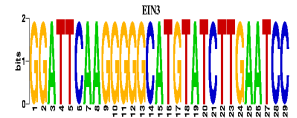
RAV1-B	5.3561e-03	RNGCANGGTGSN ----CAGGTG--	
--------	------------	------------------------------	--



ABFs	6.6080e-03	NSCACCNTGCNY --CACGTGGC--	
------	------------	------------------------------	--



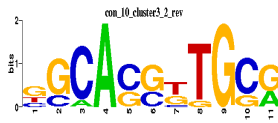
EIN3	7.5321e-03	-----NSCACCNTGCNY-- GGATTCAAGATACATGCCCCCTTGAATCC	
------	------------	--	--



ABRE	3.2934e-02	RNGCANGGTGSN --GCCACGTR--	
------	------------	------------------------------	--



con_10_cluster3_2

*forward**reverse compliment*

Name	E value	Alignment	Motif
------	---------	-----------	-------

ABFs	1.3651e-05	NGCACGKTGCG --CACGTGGC--	
------	------------	-----------------------------	--



ABRE	2.2141e-04	CGCAMCGTGCN -GCCACGTR--	
------	------------	----------------------------	--



Stamp Results

09/28/15

CBF2 2.2302e-03

CGCAMCGTGCN
--CCACGTGG--

GBF1_2_3 2.2302e-03

CGCAMCGTGCN
--CCACGTGG--

G-box 4.1144e-03

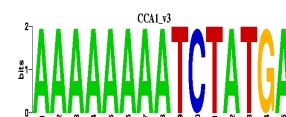
NGCACGKTGCG
--CACGTG---

aa_10_cluster3_1

*forward**reverse complement**Name**E value**Alignment**Motif*

CCA1_v3

6.6562e-06

-----TTWTTTTTTW
TCATAGATTTTTTTT--

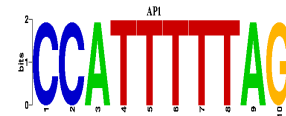
EveningElement

1.8741e-04

TTWTTTTTTW
AGATATTTT--

AP1

1.3961e-03

-WAAAAAAWAA
CTAAAAATGG--

CCA1

2.2145e-03

TTWTTTTTTW
AGATTKTT--

AG_v3

2.4127e-03

WAAAAAAWAA
CCAAAAATGG

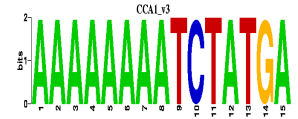
aa_10_all_cluster_1



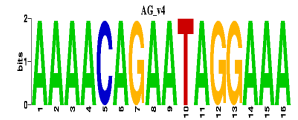
*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
-------------	----------------	------------------	--------------

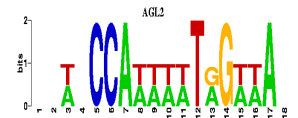
CCA1_v3	7.1473e-08	-----TWTTTTTTTT TCATAGATTTTTTTTT	
---------	------------	-------------------------------------	--



AG_v4	1.1289e-03	-----TWTTTTTTTT- TTTCCTATTCTGTTTT	
-------	------------	--------------------------------------	--



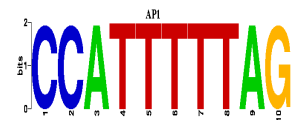
AGL2	2.0531e-03	-TWTTTTTTTT----- NTWWCYAWWWWTGGNWN	
------	------------	---------------------------------------	--



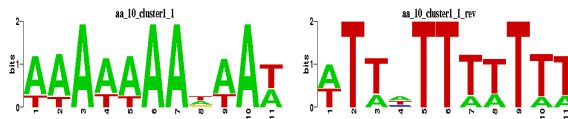
ATHB6	2.6062e-03	AAAAAAAAWA -TAATAATTG	
-------	------------	--------------------------	--



AP1	3.6902e-03	TWTTTTTTTT CCATTTTATG	
-----	------------	--------------------------	--

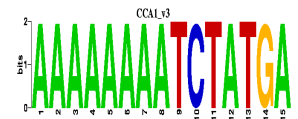


aa_10_cluster1_1

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
-------------	----------------	------------------	--------------

CCA1_v3	9.5610e-07	-----WTTNTTTTTTTT TCATAGATTTTTTTTT--	
---------	------------	---	--



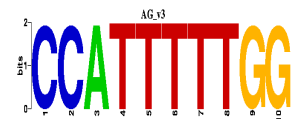
AG_v4	3.8802e-04	-----WTTNTTTTTTTT TTTCCTATTCTGTTTT-	
-------	------------	--	--



EveningElement	1.6909e-03	AAAAAANAAW- ---AAAATATCT	
----------------	------------	-----------------------------	--



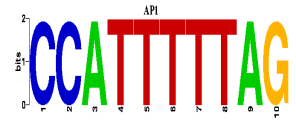
AG_v3	3.1625e-03	AAAAAANAAW CCAAAAATGG-	
-------	------------	---------------------------	--



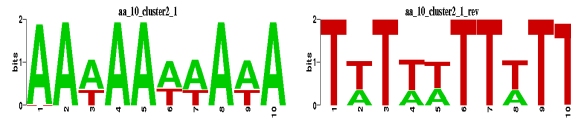
AP1

3.1625e-03

AAAAAANAAW
CTAAAAATGG-



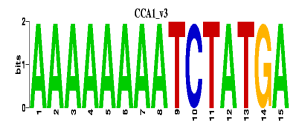
aa_10_cluster2_1

*forward**reverse complement**Name**E value**Alignment**Motif*

CCA1_v3

2.7265e-07

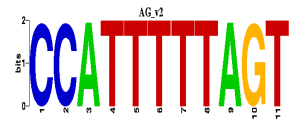
AAAAAAAAA-----
AAAAAAAAATCTATGA



AG_v2

1.4178e-03

AAAAAAAAA--
ACTAAAAATGG



AG_v4

2.6509e-03

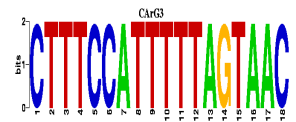
-AAAAAAAAA-----
AAAACAGAATAGGAAA



CArG3

3.1380e-03

-----AAAAAAAAA--
GTTACTAAAAATGGAAAG



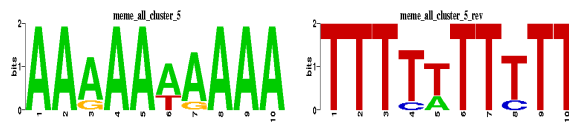
CCA1_v2

3.3213e-03

AAAAAAAAA
AAACAATCTA



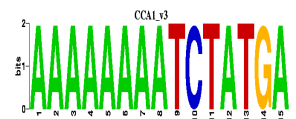
meme_all_cluster_5

*forward**reverse complement**Name**E value**Alignment**Motif*

CCA1_v3

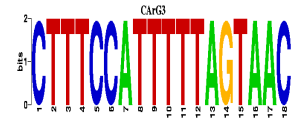
1.3989e-07

-----TTTTTTTTTT
TCATAGATTTTTTTT--



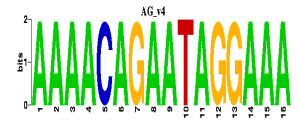
CArG3 4.2201e-04

-----AAAAAAAAAA--
GTTACTAAAAATGGAAAG



AG_v4 7.4634e-04

AAAAAAAAAA-----
AAAACAGAATAGGAAA



SORLREP2 4.6486e-03

---TTTTTTTTTT
ACGTTTTAT----

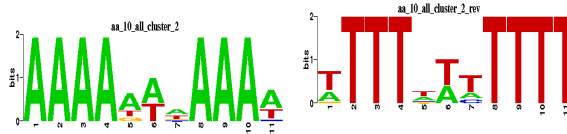


EveningElement 5.2448e-03

TTTTTTTTTT
AGATATTTT-



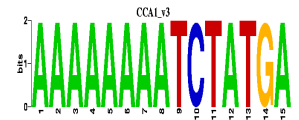
aa_10_all_cluster_2

*forward**reverse complement**Name**E value**Alignment**Motif*

CCA1_v3

3.6212e-06

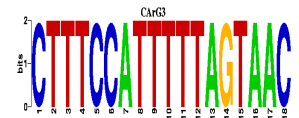
AAAAAWNAAW-----
--AAAAAAAATCTATGA



CArG3

5.6222e-05

-----AAAAAWNAAW-
GTTACTAAAAATGGAAAG



Bellringer_replumless_pennywise 5.2955e-04

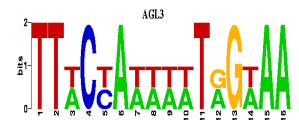
WTTTNWTTTTT
--YTAATTT--



AGL3

3.9670e-03

-----AAAAAWNAAW
TTWCYAWWWTRGWAA

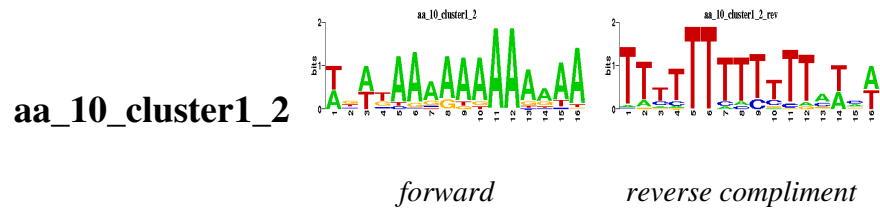


AG_v4

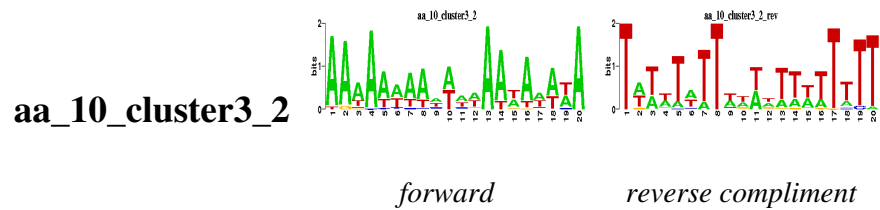
4.7760e-03

AAAAAWNAAW-----
AAAACAGAATAGGAAA






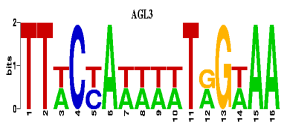
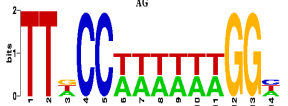
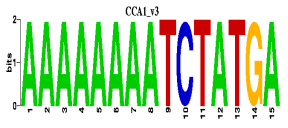

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
CCA1_v3	1.8433e-04	WNWKAIAAAAAAAAAA----- -----AAAAAAAAATCTATGA	
CAR3	3.5288e-04	-WNWKAIAAAAAAAAAA- GTTACTAAAAATGGAAAG	
GATA	4.1154e-04	TTTTTTTTTTTTTMMWNW -----YTATCW	
CAR1	6.6231e-04	TTTTTTTTTTTTTMMWNW-- TTTCCATTTATGTAAAC	
PII	2.0518e-03	-----WNWKAIAAAAAAAAAA TTGGTTTGTATCAAAACCAA---	



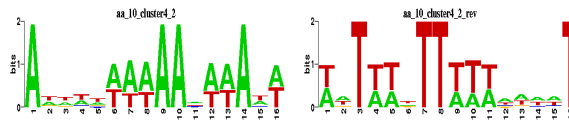
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
CCA1_v3	6.8505e-06	TWTWTWTTWWNTTWTITTT ----TCATAGATTTTTTTT---	
AG_v4	9.2530e-04	AAAAAWAANWWAAWAWAWA AAAACAGAATAGGAAA----	

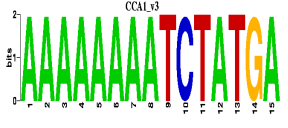
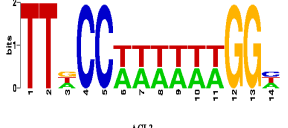
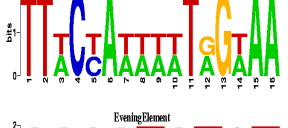

09/28/15



	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
Bellringer_replumless_pennywise	9.2666e-04	-TWWNTTTTTTWWWWWWWT YTAATTT-----	
AGL3	1.0540e-03	---AAWWWWWWAAAAANWWA TTWCYAWWWWTRGWAA-----	
AG	1.4479e-03	-AAWWWWWWAAAAANWWA NCCWWWWWWGGNAA-----	
CCA1_v3	2.0689e-03	---TWWNTTTTTTWWWWWWWT TCATAGATTTTTTT-----	
ATHB6	3.8887e-03	TWWNTTTTTTWWWWWWWT TAATAATTG-----	

aa_10_cluster4_2

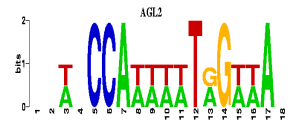


	<i>forward</i>	<i>reverse compliment</i>	
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
CCA1_v3	2.3128e-04	ANNWNWAAAAANAWANW----- -----AAAAAAATCTATGA	
AG	1.5480e-03	-ANNWNWAAAAANAWANW NCCWWWWWWGGNAA---	
AGL3	1.7961e-03	-----ANNWNWAAAAANAWANW TTWCYAWWWWTRGWAA-----	
EveningElement	3.7834e-03	ANNWNWAAAAANAWANW- -----AAAATATCT	

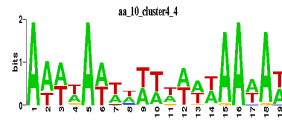
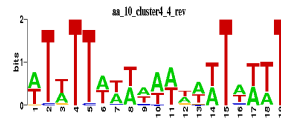
AGL2

7.4264e-03

----ANNWNWAAAAANAWANW
 NNWNCCAWWWWTRGWWAN--



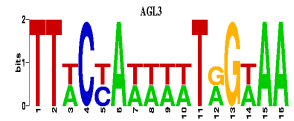
aa_10_cluster4_4

*forward**reverse complement**Name**E value**Alignment**Motif*

AGL3

3.9512e-05

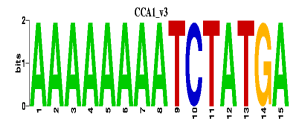
AAWWAWWWWWWWWAAWAW
 ---TTWCYAWWWWTRGWAA



CCA1_v3

7.7605e-04

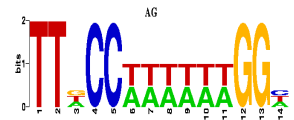
WTWTTWWWWWWWWWTWTT
 ----TCATAGATTTTTTTT



AG

1.3598e-03

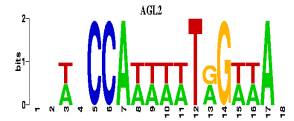
WTWTTWWWWWWWWWTWTT
 TTNCWWWWWWGGN-----



AGL2

1.6321e-03

WTWTTWWWWWWWWWTWTT--
 ---NTWCYAWWWWTGGNWN



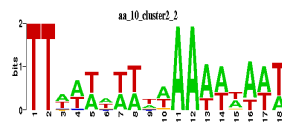
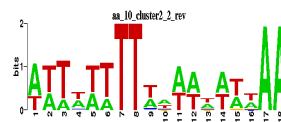
ATHB6

3.0308e-03

WTWTTWWWWWWWWWTWTT--
 -----TAATAATTG



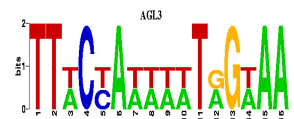
aa_10_cluster2_2

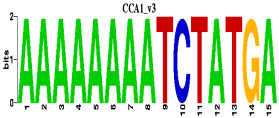
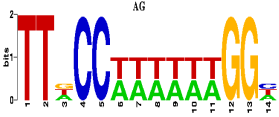


*forward**reverse complement**Name**E value**Alignment**Motif*

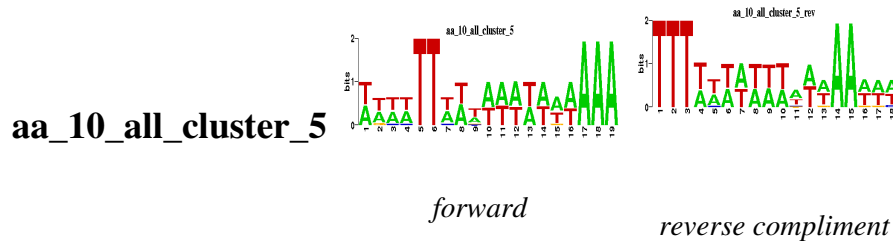
AGL3

2.9105e-06

TTWWWWWWNWAAWWAWT
 TTWCYAWWWWTRGWAA--



CCA1_v3	1.2740e-03	-----AWTWTTTWNWWWWWWAA TCATAGATTTTTTTT-----	
AG	2.9121e-03	-TTWWWWWWNWA AA WWA WT NCCWWWWWWGGNAA-----	
ATHB6	4.2320e-03	AWTWTTTWNWWWWWWAA -----CAATTATTA-	
Bellringer_replumless_pennywise	4.4327e-03	TTWWWWWWNWA AA WWA WT YTAATTT-----	



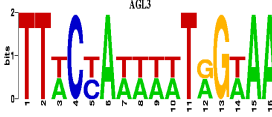
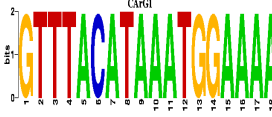
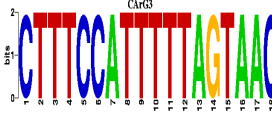

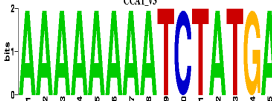
Name	E value	Alignment	Motif
AGL3	1.6908e-06	WWWWTTWWWWWWWWAAAA --TTWCYAWWWWTRGWAA-	
CArg1	4.8204e-04	WWWWTTWWWWWWWWAAAA -GTTTACATAAATGGAAAA	
AG	1.7249e-03	WWWWTTWWWWWWWWAAAA ----NCCWWWWWWGGNAA-	
ATHB6	4.9400e-03	WWWWTTWWWWWWWWAAAA -CAATTATTA-----	
AGL2	7.4895e-03	TTTTWWWWWWWWAA WWWW -NNWNCCA WWWWTRGWAN	



Name	E value	Alignment	Motif
CCA1_v3	8.7808e-05	-WWWWAATTAWTTWWWWWW TCATAGATTTTTTTT----	
ATHB6	4.9783e-04	WWWWWAAWTAATTWWWW -----TAATAATTG---	
Bellringer_replumless_pennywise	6.8918e-04	WWWWAATTAWTTWWWWWW -----YTAATT-----	
EveningElement	1.3726e-03	WWWWAATTAWTTWWWWWW ----AGATATTT-----	
AGL2	1.6064e-03	WWWWAATTAWTTWWWWWW----- -----NTWWCYAWWWWTGGNWN	



Name	E value	Alignment	Motif
AG_v2	8.1216e-06	AAAAAATAAAAAATAAW ---ACTAAAAATGG-	
AP1	5.1977e-05	WTTATTTTTATTTTT -CCATTTTTTAG----	

		aa_10_cluster2_4	aa_10_cluster2_4_rev
		forward	reverse complement
Name	E value	Alignment	Motif
AGL3	4.3648e-06	TWWWWWAWTTTTAAAAW -TTWCYAWWWWTIRGWAA	
CARg1	2.1833e-04	--TWWWWWAWTTTTAAAAW GTTTACATAAATGGAAAA-	
CARg3	2.8140e-04	-WTTTTAAAAWTWWWWWA GTTACTAAAAATGGAAAG	
API	2.9440e-04	TWWWWWAWTTTTAAAAW ---CCATTTTITAG---	
CCA1_v3	8.4278e-04	---TWWWWWAWTTTTAAAAW TCATAGATTTTTTTTT-----	



*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
CArg3	3.1400e-04	--TWWTAAA AWWW----- GTTACTAAAAATGGAAAG	
AP1	4.9701e-04	TWWTAAA AWWW-- --CTAAAAATGG	
AGL2	7.3177e-04	-TWWTAAA AWWW----- NTWWCYA WWWWTTGGNWN	
AG_v2	7.5309e-04	TWWTAAA AWWW-- -ACTAAAAATGG	
SORLREP2	9.0117e-04	WWWT TTTTAWWA ACGTTT TAT--	

Sequence logo generation powered by [weblogo](#)
 STAMP is written by Shaun Mahony