

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

Input file: [100 motifs loaded](#)

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

Multiple Alignment=IR, Tree=UPGMA, Matching against: user-defined

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

[Download results as a PDF](#)

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Multiple Alignment

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

```

0:      -----CCMCACCC-----
1:      -----CCACNCCC-----
2:      -----CACACCCA-----
3:      -----CGCCCCGCCCCG---
4:      -----GGGARGGG-----
5:      -----CCCNCCCA-----
6:      -----ACACMCYCT---
7:      -----CCNCCCCT---
8:      -----RGRGSGNG----
9:      -----CCNCCCTC---
10:     -----GGGGGRGG-----
11:     -----CTCCACCCC-----
12:     -----CNCCGCCCNC---
13:     -----GGNGGAGC-----
14:     -----GGRAGGGG-----
15:     -----GANGGGCG-----
16:     -----CNGCCCAGSC-----
17:     -----GGGNAGGG-----
18:     -----CGCGCGCGC-----
19:     -----GGCCACGC-----
20:     -----CCCAGCCCCAGC---
21:     -----ACCMCGCC-----
22:     -----GCGGAGCC-----

```

Stamp Results

11/22/15

```

23: -----ACACMCMCA---
24: -----GGAGGNGG----
25: -----CCCAGNAG-----
26: -----CMCMCNCY---
27: -----AGGARGAG--
28: -----GCCCASC-----
29: -----AGCAGCAGGA---
30: -----CCCCACCTN-----
31: -----GCCGCCGCC---
32: -----CCCCGCCCYT---
33: -----GGAGGGAG----
34: -----CAGCAGCTGC-
35: -----CNGCAGCCNC----
36: -----GCGSAGGC-----
37: -----CCCNGCCT-----
38: -----AGCCASGC--
39: -----CTGCAGGGNG----
40: -----CCNGCAGG----
41: -----CCNCAGCC-----
42: -----GGRGAGGG-----
43: -----CCCAGGGC-----
44: -----CCAGCWGG----
45: -----TGGRGGAG-----
46: -----CNCAGCAGCC-----
47: -----CTSCAGCC-----
48: -----CAGNNNCTG--
49: -----CCAGGCCWG---
50: -----CCCAGGCT-----
51: -----GGGAGGAGNA-----
52: -----NCGCCCAGC-----
53: -----CCTGSAGC-----
54: -----CCAGCTCCAGCT
55: -----CASCCACA---
56: -----CCAGGNAG----
57: -----CAGGARGG---
58: -----RGAGRGNG----
59: ---CTGNNNNNCAG-----
60: -----CAGCYTCC---
61: -----CYTCCAGGSC-----
62: -----GGAGGAGSC-----
63: -----AGAGAGAG----
64: ---AAAAAAA-----
65: -----GAGGNAG-----

```

Stamp Results

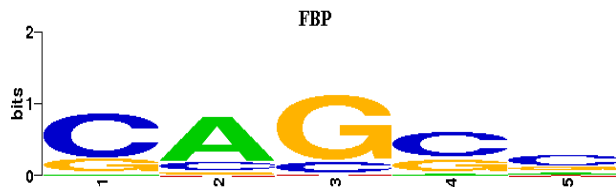
11/22/15

```

66: -----GRGCCAGGSC-----
67: -----AGGGCAGAG-----
68: -----CNGCCCTGCC-
69: ---CCAAGGTCAS-----
70: -----CCCASAGC-----
71: -----ACACRCCC-----
72: -----SCGCCCTC---
73: -----CCGCCCCYT--
74: -----CCCACCCCWG---
75: -----GGAGGNNGGGGC
76: -----SCGCAGCCNC----
77: -----SCSCCCCC---
78: -----CNGCCCAGNG-
79: -----GCAGSCGC----
80: -----CASCCTGC---
81: -----GGAGSAGG----
82: CGCGCNNGCGCA-----
83: -----CAGSAGAG---
84: -----CAGCASAG---
85: -----GSCAGAGCC----
86: -----CACWGCAG-----
87: -----GGSCGCGC-----
88: -----RGAAGGAR-----
89: -----GGNAGAGG-----
90: -----CTCASCTC-----
91: -----GRGRGGGG-----
92: -----GSCCAGGCNC----
93: -----CGCSCGCC-----
94: -----CAGAGNAG----
95: -----GCYCCAGG-----
96: -----CYCCAGCTNC----
97: -----GCAGAGGCAGAG
98: -----NCCAGCCCNG---
99: -----CAGCYCCT---

```

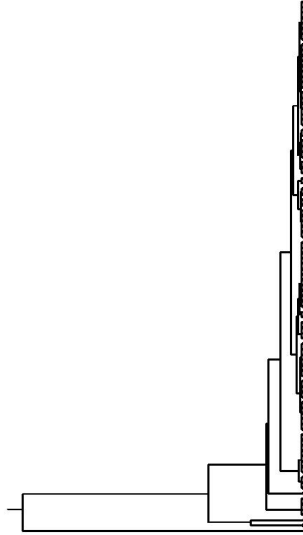
Familial Profile:
(click for matrix)



Motif Tree

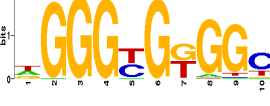
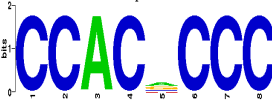
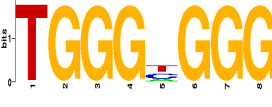
Tree (drawn by **Phylip**)

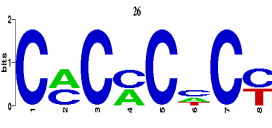
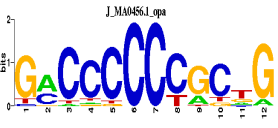
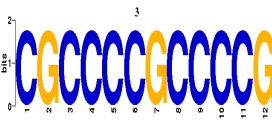
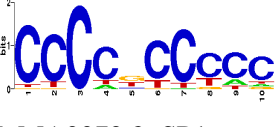
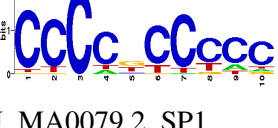
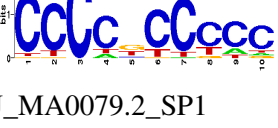
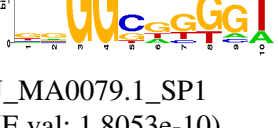
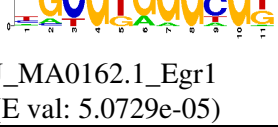
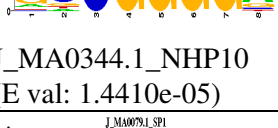
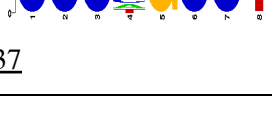
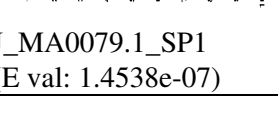
[Click here for Newick-format tree](#) (viewable with **MEGA**)

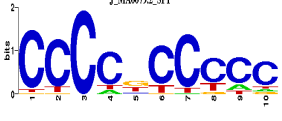
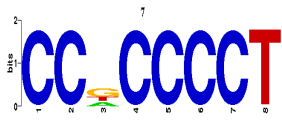
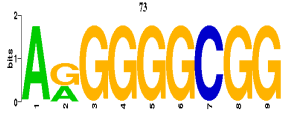
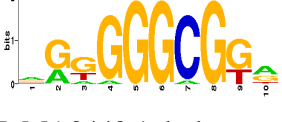
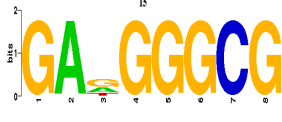


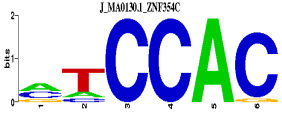
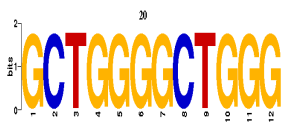
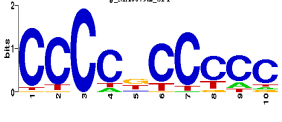
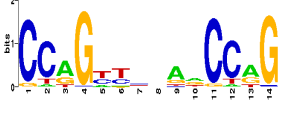
Input Motif

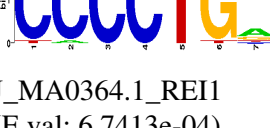
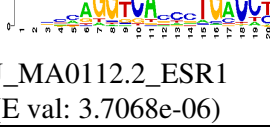
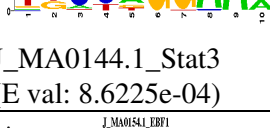
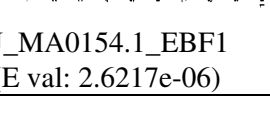
Best match in
user-defined

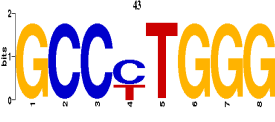
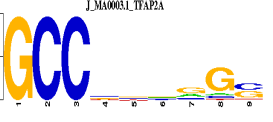
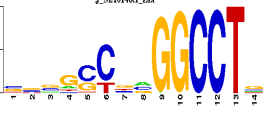
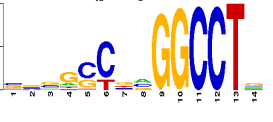
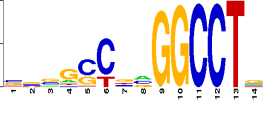
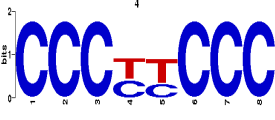
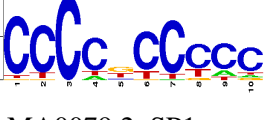
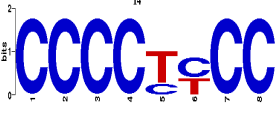
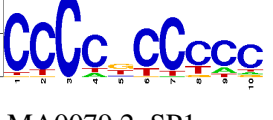
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 1	 J_MA0039.2_Klf4 (E val: 8.0540e-11)
 71	 J_MA0039.2_Klf4 (E val: 3.5620e-07)
 5	 J_MA0039.2_Klf4 (E val: 2.9831e-07)
 2	 J_MA0009.1_T (E val: 6.2316e-07)
 23	 J_MA0073.1_RREB1 (E val: 1.8161e-06)
 6	 J_MA0270.1_AFT2 (E val: 3.8265e-05)

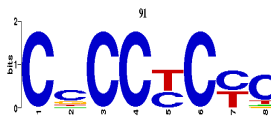
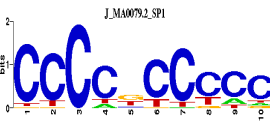
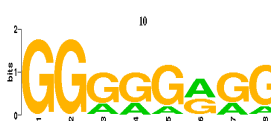
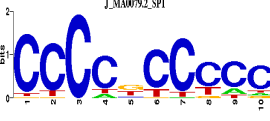
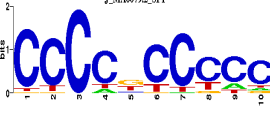
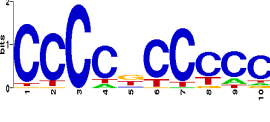
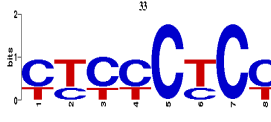
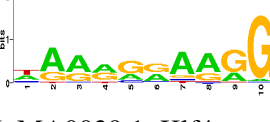
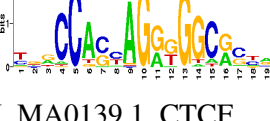
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 3	 J_MA0079.2_SP1 (E val: 5.8252e-11)
 12	 J_MA0079.2_SP1 (E val: 3.5527e-15)
 32	 J_MA0079.2_SP1 (E val: 2.6503e-12)
 21	 J_MA0079.1_SP1 (E val: 1.8053e-10)
 28	 J_MA0162.1_Egr1 (E val: 5.0729e-05)
 41	 J_MA0344.1_NHP10 (E val: 1.4410e-05)
 37	 J_MA0079.1_SP1 (E val: 1.4538e-07)

 74	 J_MA0364.1_REI1 (E val: 5.0505e-05)
 98	 J_MA0079.2_SP1 (E val: 3.5834e-06)
 7	 J_MA0443.1_btd (E val: 4.7757e-08)
 73	 J_MA0443.1_btd (E val: 2.1410e-10)
 15	 J_MA0443.1_btd (E val: 9.3667e-06)
 16	 J_MA0162.1_Egr1 (E val: 2.5569e-07)
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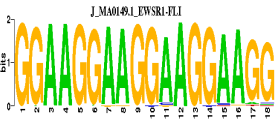
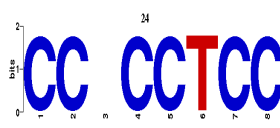
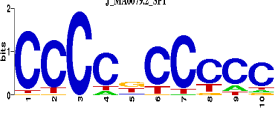
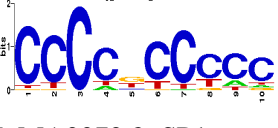
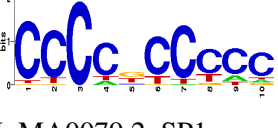
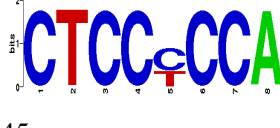
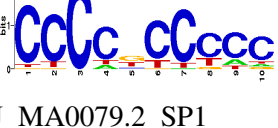
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 <u>11</u>	 J_MA0130.1_ZNF354C (E val: 2.3166e-06)
 <u>47</u>	 J_MA0410.1_UGA3 (E val: 4.9711e-05)
 <u>20</u>	 J_MA0079.2_SP1 (E val: 7.2192e-07)
 <u>54</u>	 J_MA0145.1_Tcfcp2l1 (E val: 1.3232e-06)
 <u>99</u>	 J_MA0366.1_RGM1 (E val: 7.9489e-05)
 <u>55</u>	 J_MA0334.1_MET32 (E val: 3.6228e-06)
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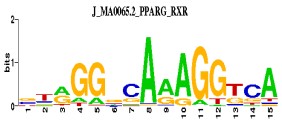
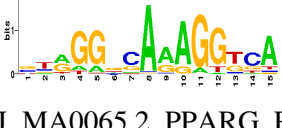
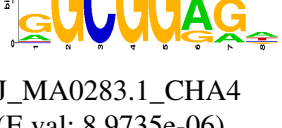
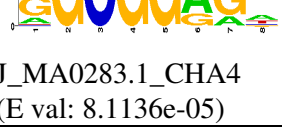
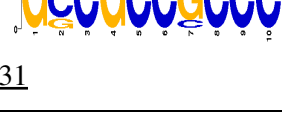
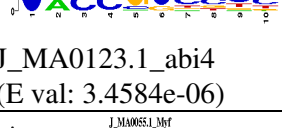
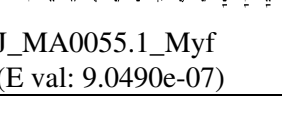
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 <u>90</u>	 J_MA0150.1_NFE2L2 (E val: 4.0116e-04)
 <u>19</u>	 J_MA0097.1_bZIP911 (E val: 9.4222e-07)
 <u>38</u>	 J_MA0039.2_Klf4 (E val: 4.6632e-05)
 <u>39</u>	 J_MA0364.1_REI1 (E val: 6.7413e-04)
 <u>80</u>	 J_MA0112.2_ESR1 (E val: 3.7068e-06)
 <u>53</u>	 J_MA0144.1_Stat3 (E val: 8.6225e-04)
 <u>95</u>	 J_MA0154.1_EBF1 (E val: 2.6217e-06)

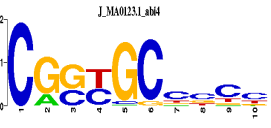
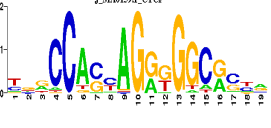
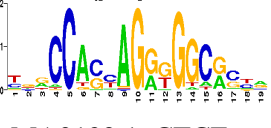
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 61	 J_MA0144.1_Stat3 (E val: 5.8138e-05)
 49	 J_MA0146.1_Zfx (E val: 1.1907e-04)
 66	 J_MA0146.1_Zfx (E val: 1.5300e-03)
 92	 J_MA0146.1_Zfx (E val: 8.6868e-06)
 50	 J_MA0344.1_NHP10 (E val: 1.3504e-05)
 4	 J_MA0079.2_SP1 (E val: 8.7801e-08)
 14	 J_MA0079.2_SP1 (E val: 3.6009e-09)

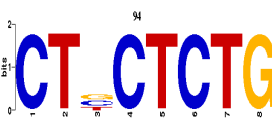
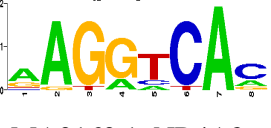
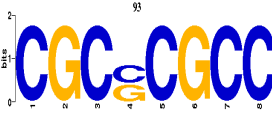
 91	 J_MA0079.2_SP1 (E val: 3.4313e-08)
 10	 J_MA0079.2_SP1 (E val: 1.3341e-08)
 17	 J_MA0079.2_SP1 (E val: 1.8523e-09)
 42	 J_MA0079.2_SP1 (E val: 2.8393e-08)
 33	 J_MA0039.1_Klf4 (E val: 2.0517e-04)
 63	 J_MA0039.1_Klf4 (E val: 4.3368e-04)
 58	 J_MA0366.1_RGM1 (E val: 3.9081e-05)
 8	 J_MA0139.1_CTCF (E val: 3.8120e-05)

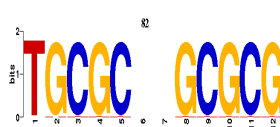
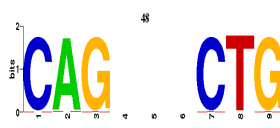
9	J_MA0079.2_SP1 J_MA0079.2_SP1 (E val: 4.3417e-08)
72	J_MA0139.1_CTCF J_MA0139.1_CTCF (E val: 6.3514e-06)
77	J_MA0443.1_btd J_MA0443.1_btd (E val: 2.1466e-08)
60	J_MA0305.1_GCR2 J_MA0305.1_GCR2 (E val: 1.8353e-05)
75	J_MA0079.2_SP1 J_MA0079.2_SP1 (E val: 9.1094e-06)
56	J_MA0144.1_Stat3 J_MA0144.1_Stat3 (E val: 1.6279e-09)
57	J_MA0144.1_Stat3 J_MA0144.1_Stat3 (E val: 1.8740e-06)
65	J_MA0079.2_SP1 J_MA0079.2_SP1 (E val: 1.4773e-05)

 88	 J_MA0149.1_EWSR1-FLI (E val: 2.9531e-09)
 13	 J_MA0283.1_CHA4 (E val: 1.6866e-08)
 24	 J_MA0079.2_SP1 (E val: 9.2243e-07)
 81	 J_MA0079.2_SP1 (E val: 2.5652e-06)
 51	 J_MA0079.2_SP1 (E val: 1.4393e-05)
 62	 J_MA0283.1_CHA4 (E val: 1.0413e-04)
 27	 J_MA0062.1_GABPA (E val: 7.3015e-06)
 45	 J_MA0079.2_SP1 (E val: 1.6848e-06)

 67	 J_MA0065.2_PPARG_RXR (E val: 3.6367e-08)
 85	J_MA0278.1_BAS1 (E val: 9.9624e-05)
 89	 J_MA0065.2_PPARG_RXR (E val: 5.8999e-06)
 97	 J_MA0081.1_SPIB (E val: 5.8925e-04)
 22	 J_MA0283.1_CHA4 (E val: 8.9735e-06)
 36	 J_MA0283.1_CHA4 (E val: 8.1136e-05)
 31	 J_MA0123.1_abi4 (E val: 3.4584e-06)
 35	 J_MA0055.1_Myf (E val: 9.0490e-07)

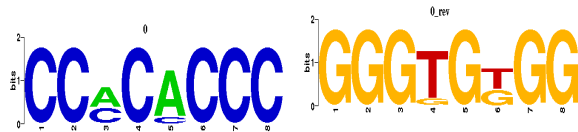
 76	 J_MA0123.1_abi4 (E val: 3.0098e-05)
 79	 J_MA0048.1_NHLH1 (E val: 1.2590e-05)
 25	 J_MA0402.1_SWI5 (E val: 8.4399e-06)
 46	 J_MA0402.1_SWI5 (E val: 7.5868e-05)
 40	 J_MA0139.1_CTCF (E val: 2.2620e-05)
 44	 J_MA0139.1_CTCF (E val: 5.0689e-06)
 29	 J_MA0055.1_Myf (E val: 2.0296e-06)
 34	 J_MA0055.1_Myf (E val: 1.0975e-12)

 83	 J_MA0287.1_CUP2 (E val: 2.8408e-05)
 84	 J_MA0287.1_CUP2 (E val: 1.7431e-05)
 70	 J_MA0332.1_MET28 (E val: 5.5885e-07)
 86	 J_MA0150.1_NFE2L2 (E val: 6.3161e-05)
 94	 J_MA0081.1_SPIB (E val: 3.2106e-04)
 69	 J_MA0160.1_NR4A2 (E val: 2.6934e-10)
 18	 J_MA0375.1_RSC30 (E val: 1.8557e-08)
 93	 J_MA0375.1_RSC30 (E val: 3.5024e-07)

 87	 J_MA0375.1_RSC30 (E val: 2.5317e-06)
 82	 J_MA0374.1_RSC3 (E val: 1.9418e-03)
 48	 J_MA0055.1_Myf (E val: 5.0518e-03)
 59	 J_MA0018.2_CREB1 (E val: 1.0329e-01)
 64	 J_MA0277.1_AZF1 (E val: 6.6380e-08)

Motif Similarity Matches

0

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

J_MA0039.2_Klf4

6.2649e-11

—CCMCACCC—
GCCMCRCN

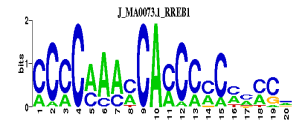


Stamp Results

11/22/15

J_MA0073.1_RREB1 5.4955e-06

---GGGTGKGG-----
NGKKKGKGGGTGKTTTGGGG



J_MA0436.1_YPR022C 1.4077e-05

GGGTGKGG
---NGTG GGG



J_MA0270.1_AFT2 4.3292e-05

---GGGTGKGG
NGGGTGTN---

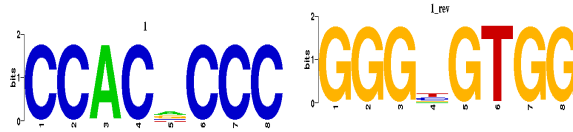


J_MA0268.1_ADR1 5.4990e-05

GGGTGKGG---
---KTGGGGN



1



forward

reverse complement

Name

E value

Alignment

Motif

J_MA0039.2_Klf4 8.0540e-11

---CCACNCCC---
GCCMCRCCCN



J_MA0450.1_hkb 2.6609e-07

CCACNCCC---
TCACGCCCM



J_MA0270.1_AFT2 2.1579e-05

---GGGNGTGG
NGGGTGTN---



J_MA0332.1_MET28 1.6186e-04

CCACNCCC
CCACAG---



J_MA0009.1_T 1.9208e-04

---CCACNCCC---
TTCACACCTAG

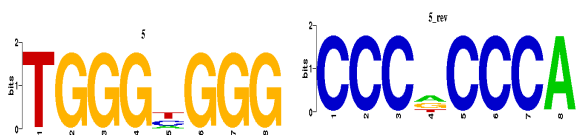


71

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0039.2_Klf4	3.5620e-07	—ACACRCCC— GCCMCRCN	
J_MA0450.1_hkb	6.7958e-07	ACACRCCC— TCACGCCCM	
J_MA0270.1_AFT2	1.1107e-05	—GGGYGTGT NGGGTGTN—	
J_MA0009.1_T	1.0935e-04	—ACACRCCC— TTCACACCTAG	
J_MA0073.1_RREB1	8.1129e-04	-----ACACRCCC----- CCCCAAAMCACCMMCMCN	

5

*forward**reverse compliment*

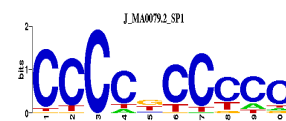
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0039.2_Klf4	2.9831e-07	--CCCNCCCA GCCMCRCN	
J_MA0162.1_Egr1	7.2933e-06	----TGGGNGGG NGCGTGGGCGK—	

Stamp Results

11/22/15

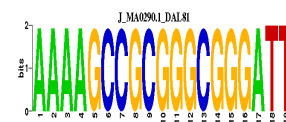
J_MA0079.2_SP1 8.5798e-06

—TGGGNGGG—
GGGGGNGGGG



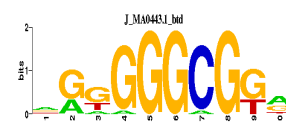
J_MA0290.1_DAL81 1.9181e-05

---CCCNCCCA-----
AATCCCGCCCGCGGCTTTT

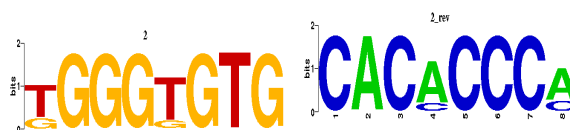


J_MA0443.1_btd 1.1306e-04

--TGGGNGGG
NGKGGGCGGR



2

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

J_MA0009.1_T 6.2316e-07

--CACACCCA--
TTCACACCTAG



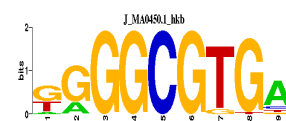
J_MA0270.1_AFT2 2.6502e-06

TGGGTGTG
NGGGTGTN



J_MA0450.1_hkb 2.7612e-06

—CACACCCA
TCACGCCCM



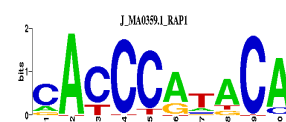
J_MA0039.2_Klf4 7.8321e-06

--CACACCCA
GCCMCRCNN



J_MA0359.1_RAP1 7.7484e-05

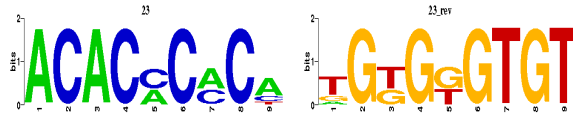
----TGGGTGTG
TGTATGGGTG--



23

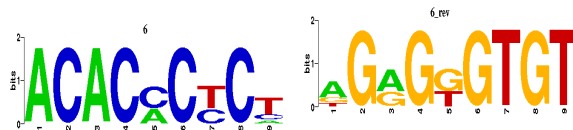
Stamp Results

11/22/15

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0073.1_RREB1	1.8161e-06	-----ACACMCMCA----- CCCCAAAMCACCCMCMCMCN	
J_MA0270.1_AFT2	4.9349e-05	TGKGKGTGT- --NGGGTGTN	
J_MA0162.1_Egr1	1.3974e-04	ACACMCMCA-- MCGCCCACGCN	
J_MA0359.1_RAP1	3.0283e-04	--TGKGKGTGT TGTATGGGTG-	
J_MA0068.1_Pax4	7.2636e-04	-----ACACMCMCA----- RAAWAWWWNNMNNNNNNNNNNNNMNNNNNYMC	

6

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0270.1_AFT2	3.8265e-05	AGRGKGTGT- --NGGGTGTN	
J_MA0007.1_Ar	1.4542e-03	-----ACACMCYCT----- NNNAGNACANNNTGTNCCNNMN	

11/22/15

J_MA0055.1_INSM1

bits

1 2 3 4 5 6 7 8 9 10 11 12

T G C A G G G G G C A A

reverse compliment

[illegible][illegible]

bits

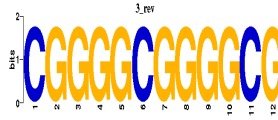
J_MA00731_RREB1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

C C C G A A A C C A C C C C

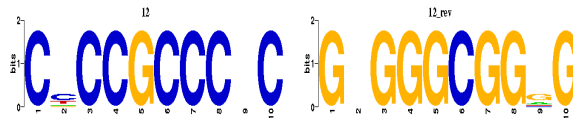
Sequence logo for J_MA00392_K14. The y-axis is labeled 'bits' and ranges from 0 to 2. The x-axis shows positions 1 through 12. The sequence GGGGGGGGGGGG is highlighted in orange, while positions 4, 8, and 12 show other nucleotides (C, T, C) in blue.

Sequence logo for J_MA0450.L_bkb. The y-axis represents 'bits' (0 to 2). The x-axis shows positions 1 to 10. The sequence is GGGCGTGA.

forward*reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	5.8252e-11	CGCCCCGCCCCG --CCCNCCCCC	J_MA0079.2_SP1
J_MA0039.2_Klf4	2.6155e-09	CGCCCCGCCCCG -GCCMCRCN-	J_MA0039.2_Klf4
J_MA0443.1_btd	3.8624e-06	-CGGGGCGGGGCG NGKGGGCGGR---	J_MA0443.1_btd
J_MA0399.1_SUT1	1.3845e-05	CGCCCCGCCCCG --CCCCGCG---	J_MA0399.1_SUT1
J_MA0450.1_hkb	1.4770e-05	CGCCCCGCCCCG --TCACGCCCM-	J_MA0450.1_hkb

12

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	3.5527e-15	GNGGGCGGNG GGGGGNGGGG	J_MA0079.2_SP1
J_MA0443.1_btd	3.1359e-10	CNCCGCCCNC- -YCCGCCCMCN	J_MA0443.1_btd

J_MA0039.2_Klf4 2.9160e-07

—CNCCGCCCNC
GCCMCRCN—



J_MA0283.1_CHA4 1.8621e-06

—CNCCGCCCNC
NCTCCGCC---

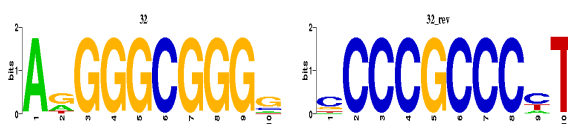


J_MA0399.1_SUT1 3.5991e-06

CNCCGCCCNC
CCCCGCG---

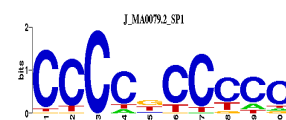


32

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

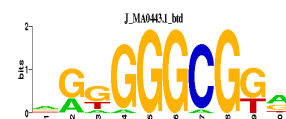
J_MA0079.2_SP1 2.6503e-12

CCCCGCCCYT
CCCNCCCC



J_MA0443.1_btd 1.2303e-07

CCCCGCCCYT—
—YCCGCCCMCN



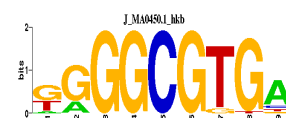
J_MA0039.2_Klf4 2.4380e-07

—CCCCGCCCYT
GCCMCRCN—



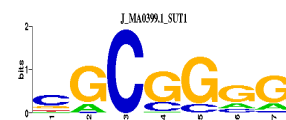
J_MA0450.1_hkb 3.0448e-06

CCCCGCCCYT
TCACGCCCM—

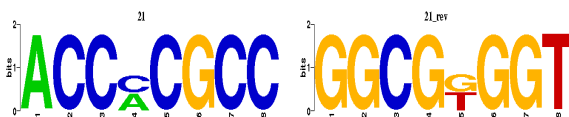


J_MA0399.1_SUT1 4.0766e-06

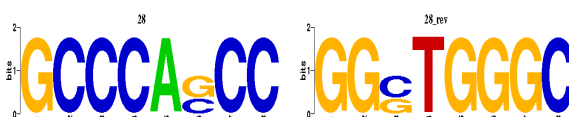
CCCCGCCCYT
CCCCGCG---



21

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.1_SP1	1.8053e-10	--GGCGKGGT NNGGCNGGGT	J_MA0079.1_SP1
J_MA0039.2_Klf4	3.8532e-07	ACCMCGCC-- GCCMCRCN	J_MA0039.2_Klf4
J_MA0079.2_SP1	2.9479e-06	---GGCGKGGT GGGGNGGGG-	J_MA0079.2_SP1
J_MA0338.1_MIG2	1.6799e-05	GGCGKGGT NGYGGGG-	J_MA0338.1_MIG2
J_MA0399.1_SUT1	1.9148e-05	ACCMCGCC -CCCCGCG	J_MA0399.1_SUT1

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0162.1_Egr1	5.0729e-05	--GCCCASCC- MCGCCCACGCN	J_MA0162.1_Egr1
J_MA0079.1_SP1	5.6752e-05	GCCCASCC-- ACCCNGCCNN	J_MA0079.1_SP1

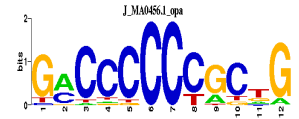
J_MA0039.2_Klf4 9.7485e-05

-GCCCASC-
GCCMCRCN

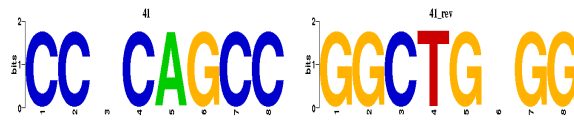
J_MA0267.1_ACE2 7.8923e-04

GGSTGGGC
NGCTGGN-

J_MA0456.1_opa 1.6836e-03

---GGSTGGGC
CNGCGGGGGKC

41

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

J_MA0344.1_NHP10 1.4410e-05

GGCTGNGG-
-NCCGGGGA

J_MA0039.2_Klf4 4.0863e-05

-CCNCAGCC-
GCCMCRCN

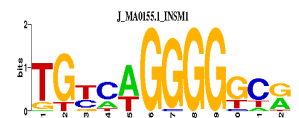
J_MA0079.1_SP1 6.7024e-05

CCNCAGCC--
ACCCNGCCNN

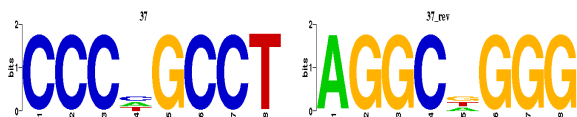
J_MA0267.1_ACE2 1.8123e-04

GGCTGNGG
NGCTGGN-

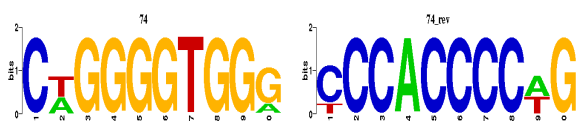
J_MA0155.1_INSM1 2.1613e-04

---CCNCAGCC-
YGCCCCCTGRCA

37

*forward**reverse complement*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.1_SP1	1.4538e-07	—CCCNGCCT— ACCCNGCCNN	J_MA0079.1_SP1
J_MA0079.2_SP1	4.0574e-06	--AGGCNNGG GGGGNNGGG	J_MA0079.2_SP1
J_MA0338.1_MIG2	5.9551e-05	AGGCNNGG —NGYGGG	J_MA0338.1_MIG2
J_MA0283.1_CHA4	6.9374e-05	—CCCNGCCT NCTCCGCC—	J_MA0283.1_CHA4
J_MA0339.1_MIG3	8.1423e-05	CCCNGCCT CCCCRCN—	J_MA0339.1_MIG3

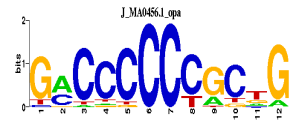


74

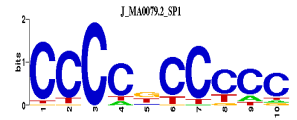
*forward**reverse complement*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0364.1_REI1	5.0505e-05	—CWGGGGTGGG NCAGGGG----	J_MA0364.1_REI1
J_MA0039.2_Klf4	6.1623e-05	CWGGGGTGGG-- --NGGGYGKGGC	J_MA0039.2_Klf4

J_MA0456.1_opa 6.2357e-05

CWGGGGTGGG--
CNGCGGGGGGKC

J_MA0079.2_SP1 9.0991e-05

CWGGGGTGGG--
-GGGGGNGGGG

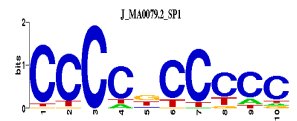
J_MA0443.1_btd 3.1465e-04

CCCACCCCWG
YCCGCCCMCN

98

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

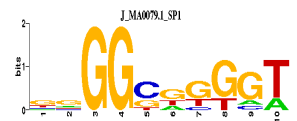
J_MA0079.2_SP1 3.5834e-06

CNGGGCTGGN
GGGGGNGGGG

J_MA0267.1_ACE2 6.9099e-04

NCCAGCCCNG
NCCAGCN---

J_MA0079.1_SP1 8.9290e-04

-NCCAGCCCNG
ACCCNGCCNN-

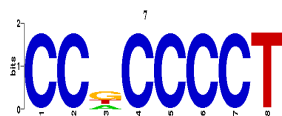
J_MA0039.2_Klf4 1.5120e-03

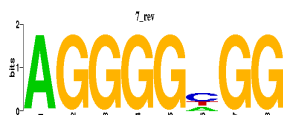
-NCCAGCCCNG
GCCMCRCCCN-

J_MA0443.1_btd 2.1019e-03

-CNGGGCTGGN
NGKGGGCGGR-

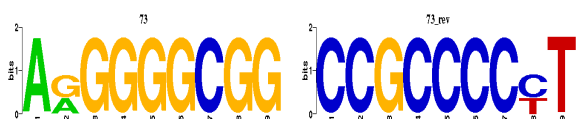
7



forward*reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0443.1_btd	4.7757e-08	—CCNCCCCCT— YCCGCCCMCN	
J_MA0079.2_SP1	2.8085e-07	AGGGGNGG— GGGGGNGGG	
J_MA0366.1_RGM1	1.7889e-06	AGGGGNGG AGGGG---	
J_MA0342.1_MSN4	1.8863e-06	CCNCCCCCT ---CCCCCT	
J_MA0341.1_MSN2	4.9834e-06	CCNCCCCCT ---CCCCCT	

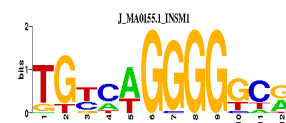
73

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0443.1_btd	2.1410e-10	ARGGGGCGG— NGKGGGCGGR	
J_MA0079.2_SP1	8.5098e-09	ARGGGGCGG— —GGGGGNGGGG	

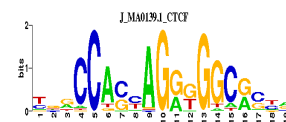
J_MA0155.1_INSM1 1.7930e-07

----ARGGGGCGG
 TGYCAGGGGGCR--



J_MA0139.1_CTCF 9.7845e-07

-----ARGGGGCGG--
 YNNCCASYAGGKGGCRSNN

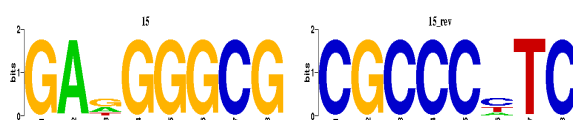


J_MA0373.1_RPN4 4.9127e-06

CCGCCCCYT
 -CGCCACC-

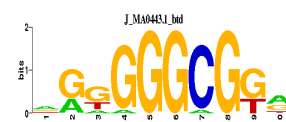


15

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

J_MA0443.1_btd 9.3667e-06

--CGCCCNTC
 YCCGCCCMCN



J_MA0366.1_RGM1 1.1506e-05

CGCCCNTC
 --CCCCT-



J_MA0342.1_MSN4 1.2081e-05

CGCCCNTC
 --CCCCT-



J_MA0450.1_hkb 2.6829e-05

---CGCCCNTC
 TCACGCCCM--

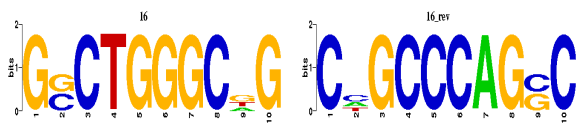


J_MA0341.1_MSN2 2.9492e-05

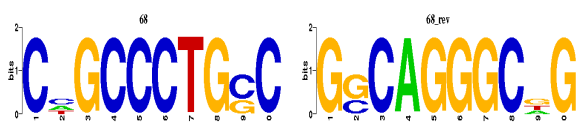
CGCCCNTC
 --CCCCT-



16

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0162.1_Egr1	2.5569e-07	CNGCCCAGSC- MCGCCCACGCN	
J_MA0320.1_IME1	7.1323e-06	CNGCCCAGSC CCGCCGAG--	
J_MA0344.1_NHP10	1.1070e-03	CNGCCCAGSC --TCCCCGCN	
J_MA0443.1_btd	1.3116e-03	GSCTGGGCNG- -NGKGGGCGGR	
J_MA0146.1_Zfx	1.5391e-03	---GSCTGGGCNG- NAGGCCNNGCNNN	



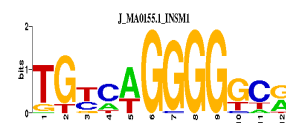
68

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0364.1_REI1	6.7413e-04	GGCAGGGCNG -NCAGGGG--	
J_MA0079.1_SP1	1.3626e-03	CNGCCCTGCC-- --ACCCNGCCNN	

J_MA0155.1_INSM1 1.5080e-03

—GGCAGGGCNG—
TGYCAGGGGGCR



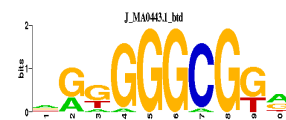
J_MA0039.2_Klf4 1.5131e-03

CNGCCCTGCC—
—GCCMCRCCCN

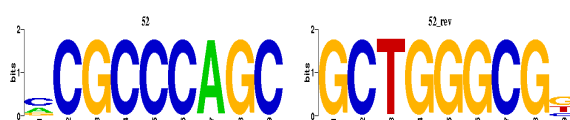


J_MA0443.1_btd 2.2733e-03

—CNGCCCTGCC
YCCGCCCMCN—



52

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

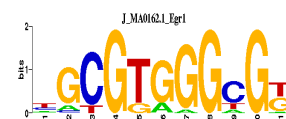
J_MA0320.1_IME1 5.4237e-07

NCGCCCAGC
CCGCCGAG—



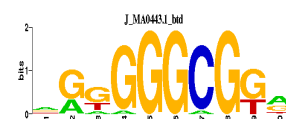
J_MA0162.1_Egr1 2.2006e-06

NCGCCCAGC—
MCGCCCACGCN



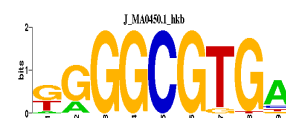
J_MA0443.1_btd 8.5828e-05

—NCGCCCAGC
YCCGCCCMCN



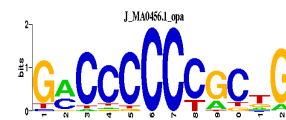
J_MA0450.1_hkb 3.3962e-04

—NCGCCCAGC
TCACGCCCM—



J_MA0456.1_opa 3.4840e-04

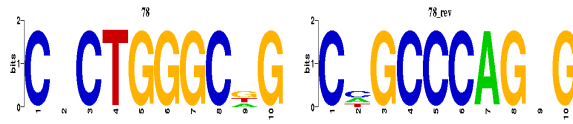
—GCTGGGCGN—
CNGCGGGGGK



78

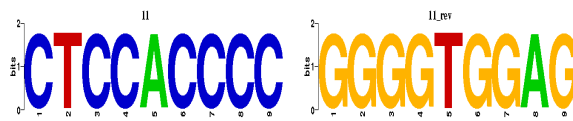
Stamp Results

11/22/15

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0162.1_Egr1	6.4968e-06	CNGCCCAGNG- MCGCCCACGCN	
J_MA0320.1_IME1	7.1323e-06	CNGCCCAGNG CCGCCGAG--	
J_MA0116.1_Zfp423	3.5799e-05	-CNGCCCAGNG---- GSMCCYARGGKKNC	
J_MA0154.1_EBF1	6.8845e-05	-CNC TGGGCNG TCCCTNGG N-	
J_MA0290.1_DAL81	7.3752e-05	----CNGCCCAGNG----- AATCCCGCCCGCGGCTTTT	

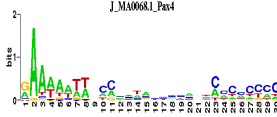
11

*forward**reverse compliment*

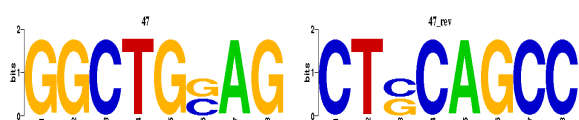
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0130.1_ZNF354C	2.3166e-06	GGGGTGGAG ---GTGGAK	
J_MA0373.1_RPN4	9.8243e-06	CTCCACCCC CGCCACC--	

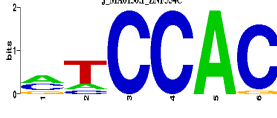
Stamp Results

11/22/15

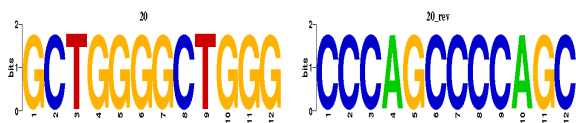
J_MA0443.1_btd	1.9860e-05	--GGGGTGGAG NGKGGGCGGR--	
J_MA0068.1_Pax4	3.0535e-05	-----GGGGTGGAG----- GKRNNNNKNNNNNNNNNNNNKNNWWWTWTTY	
J_MA0039.2_Klf4	8.2930e-05	-CTCCACCCC GCCMCRCCTC	

47

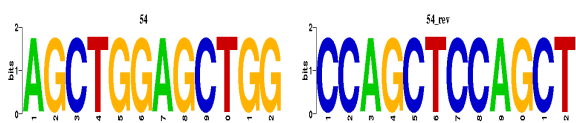
*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0410.1_UGA3	4.9711e-05	CTSCAGCC-- -TCCCGCCN	
J_MA0055.1_Myf	2.1465e-04	CTSCAGCC---- CAGCAGYTGCYK	
J_MA0267.1_ACE2	1.1383e-03	GGCTGSAG NGCTGGN--	
J_MA0402.1_SWI5	3.8891e-03	CTSCAGCC NACCAGCA	
J_MA0130.1_ZNF354C	6.2142e-03	GGCTGSAG --GTGGAK	

20

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	7.2192e-07	GCTGGGGCTGGG --GGGGGNGGGG	J_MA0079.2_SP1
J_MA0145.1_Tcfcp2l1	8.6145e-05	---GCTGGGGCTGGG CYGGNTNNRNCYGG-	J_MA0145.1_Tcfcp2l1
J_MA0344.1_NHP10	3.2079e-04	CCCAGCCCCAGC ----TCCCCGNN	J_MA0344.1_NHP10
J_MA0213.1_brk	5.2600e-04	CCCAGCCCCAGC ---RGCGCCRS-	J_MA0213.1_brk
J_MA0332.1_MET28	1.1280e-03	CCCAGCCCCAGC -----CCACAG-	J_MA0332.1_MET28



54

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0145.1_Tcfcp2l1	1.3232e-06	--AGCTGGAGCTGG CYGGNTNNRNCYGG	J_MA0145.1_Tcfcp2l1
J_MA0055.1_Myf	3.5393e-04	CCAGCTCCAGCT- -CAGCAGYTGCK	J_MA0055.1_Myf

J_MA0213.1_brk 5.2600e-04

CCAGCTCCAGCT
--RGCGCCRS--

J_MA0267.1_ACE2 1.6178e-03

CCAGCTCCAGCT
CCAGCN-----

J_MA0451.1_kni 2.4905e-03

CCAGCTCCAGCT-
-NTGCTCTANTTT

99

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

J_MA0366.1_RGM1 7.9489e-05

CAGCYCCT
---CCCCT

J_MA0342.1_MSN4 8.3066e-05

CAGCYCCT
---CCCCT

J_MA0341.1_MSN2 1.8544e-04

CAGCYCCT
---CCCCT

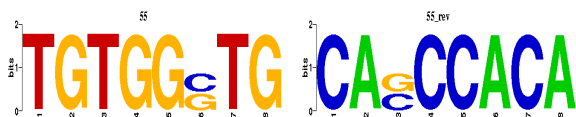
J_MA0055.1_Myf 5.7359e-04

---CAGCYCCT-
CAGCAGYTGCYK

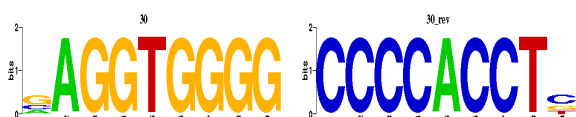
J_MA0048.1_NHLH1 1.3438e-03

-AGGRGCTG---
NCGCAGCTGCGN

55

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0334.1_MET32	3.6228e-06	TGTGGSTG TGTGCCN-	
J_MA0332.1_MET28	1.7502e-05	CASCCACA- ---CCACAG	
J_MA0359.1_RAP1	2.6479e-05	--TGTGGSTG TGTATGGGTG	
J_MA0002.2_RUNX1	2.3032e-04	CASCCACA--- NAACCACARNN	
J_MA0285.1_CRZ1	4.6754e-04	TGTGGSTG-- -GNGGCTNNN	



30

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0436.1_YPR022C	7.3682e-07	NAGGTGGGG --NGTGGGG	
J_MA0268.1_ADR1	2.8834e-06	NAGGTGGGG- ---KTGGGGN	

J_MA0373.1_RPN4 9.8243e-06

CCCCACCTN
CGCCACC--

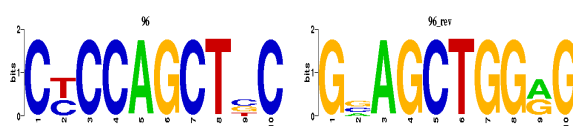
J_MA0039.2_Klf4 1.5442e-05

-CCCCACCTN
GCCMCRCCTN

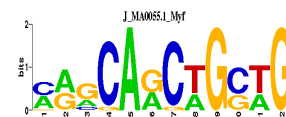
J_MA0086.1_sna 2.2636e-05

CCCCACCTN
---CACCTG

96

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

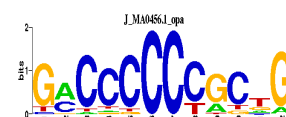
J_MA0055.1_Myf 7.2785e-06

CYCCAGCTNC--
CAGCAGYTGCYK

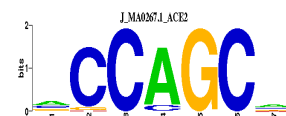
J_MA0048.1_NHLH1 1.5434e-04

CYCCAGCTNC--
NCGCAGCTGCGN

J_MA0456.1_opa 4.5548e-04

GNAGCTGGRG---
-CNGCGGGGGGKC

J_MA0267.1_ACE2 6.9099e-04

GNAGCTGGRG
--NGCTGGN-

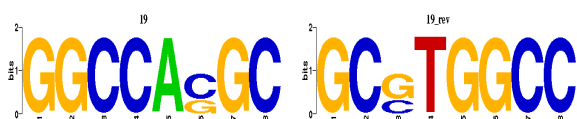
J_MA0344.1_NHP10 1.6590e-03

-CYCCAGCTNC
TCCCCGN---

90

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0150.1_NFE2L2	4.0116e-04	----CTCASCTC RTGACWNAGCA--	
J_MA0048.1_NHLH1	6.2664e-04	---GAGSTGAG-- NCGCAGCTGCGN	
J_MA0103.1_ZEB1	9.0768e-04	GAGSTGAG NAGGTG--	
J_MA0086.1_sna	1.1285e-03	CTCASCTC --CACCTG	
J_MA0117.1_MafB	2.6785e-03	--CTCASCTC NNNTCAGC--	

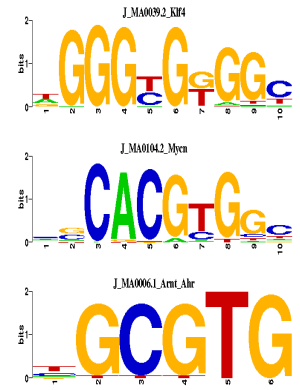


19

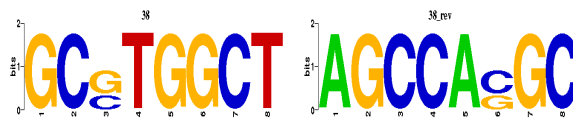
*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0097.1_bZIP911	9.4222e-07	GGCCACGC---- GGCCACGTCAYC	
J_MA0162.1_Egr1	2.1460e-06	--GGCCACGC-- MCGCCACGCN	

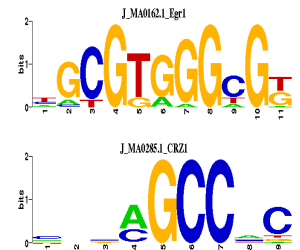
J_MA0039.2_Klf4	3.1697e-05	GGCCACGC--- -GCCMCRCCCN
J_MA0104.2_Mycn	5.2141e-05	GGCCACGC--- -GCCACGTGSN
J_MA0006.1_Arnt_Ahr	5.7849e-05	GGCCACGC- ---CACGCN



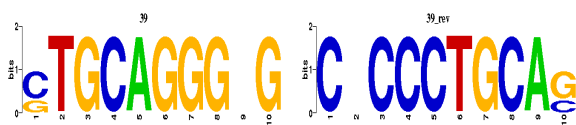
38

*forward**reverse compliment*

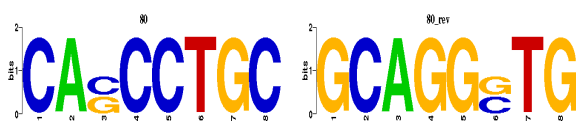
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0039.2_Klf4	4.6632e-05	AGCCASGC--- -GCCMCRCCCN	
J_MA0104.2_Mycn	7.7127e-05	AGCCASGC--- -GCCACGTGSN	
J_MA0006.1_Arnt_Ahr	8.9464e-05	AGCCASGC- ---CACGCN	
J_MA0162.1_Egr1	1.5315e-04	--AGCCASGC- MCGCCACGCN	
J_MA0285.1_CRZ1	2.0840e-04	GCSTGGCT--- --GNGGCTNNN	



39

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0364.1_REI1	6.7413e-04	CTGCAGGGNG --NCAGGGG--	
J_MA0456.1_opa	3.8172e-03	CTGCAGGGNG-- CNGCGGGGGGKC	
J_MA0366.1_RGM1	4.0551e-03	CNCCCTGCAG -CCCCT----	
J_MA0342.1_MSN4	4.4538e-03	CTGCAGGGNG ----AGGGG--	
J_MA0144.1_Stat3	6.7405e-03	CNCCCTGCAG CTTCCNGGAA	



80

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0112.2_ESR1	3.7068e-06	-----CASCCTGC--- NNNNNAGGTCANNNTGACCY	
J_MA0119.1_TLX1_NFIC	7.7600e-05	---GCAGGSTG--- TTGGCNNNSTGCCA	

J_MA0079.1_SP1 3.4676e-04

---GCAGGSTG
NNGGCNNGGT--



J_MA0258.1_ESR2 5.0885e-04

-----CASCCTGC-----
NAGGNCANNNTGACCYNN

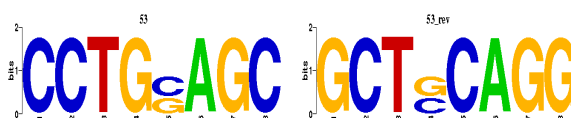


J_MA0364.1_REI1 1.3981e-03

CASCCTGC
-CCCCTGN

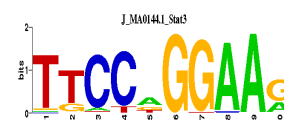


53

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

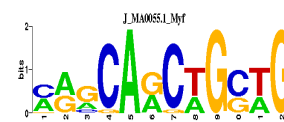
J_MA0144.1_Stat3 8.6225e-04

---CCTGSAGC
CTTCCNGGAA--



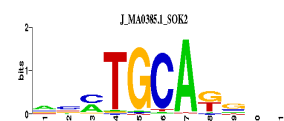
J_MA0055.1_Myf 1.5321e-03

CCTGSAGC-----
-CAGCAGYTGCYK



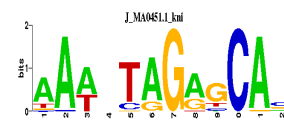
J_MA0385.1_SOK2 3.1853e-03

--CCTGSAGC-
NNNMTGCAKNN



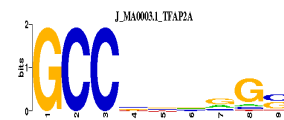
J_MA0451.1_kni 3.4920e-03

--GCTSCAGG--
NTGCTCTANTTT

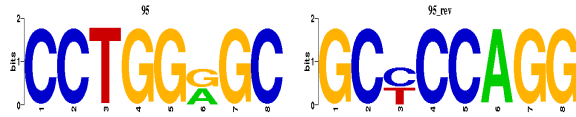


J_MA0003.1_TFAP2A 3.7554e-03

-CCTGSAGC
SCNNNNGGC

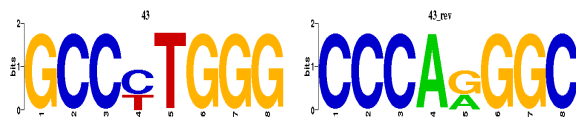


95

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0154.1_EBF1	2.6217e-06	GCYCCAGG-- NCCCNAGGGA	
J_MA0003.1_TFAP2A	4.1969e-06	--CCTGGRGC SCNNNNGGC	
J_MA0163.1_PLAG1	8.5751e-05	---GCYCCAGG--- GGGGCCNAAGGGGG	
J_MA0451.1_kni	3.0551e-04	--GCYCCAGG-- NTGCTCTANTTT	
J_MA0268.1_ADR1	6.3572e-04	CCTGGRGC -KTGGGGN	

43

*forward**reverse compliment*

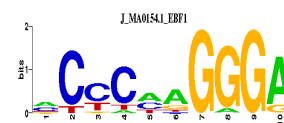
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0003.1_TFAP2A	2.1462e-07	---CCCAGGGC SCNNNNGGC	
J_MA0116.1_Zfp423	4.9112e-06	---GCCCTGGG--- GNMMCCYTRGGKSC	

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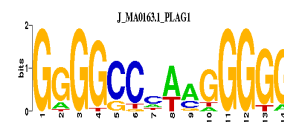
J_MA0154.1_EBF1 8.8591e-06

```
--CCCAGGGC
NCCCNAGGGA
```



J_MA0163.1_PLAG1 1.0268e-04

```
--GCCCTGGG----
CCCCCTTNGGCCCC
```

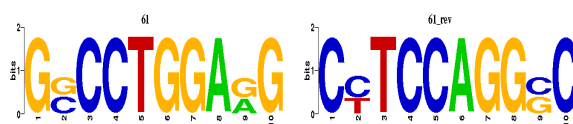


J_MA0364.1_REI1 5.2334e-04

```
CCCAGGGC
-NCAGGGG
```

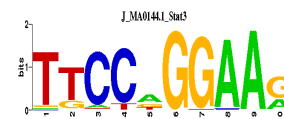


61

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

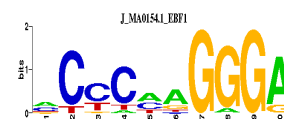
J_MA0144.1_Stat3 5.8138e-05

```
-GSCCTGGARG
CTTCCNGGAA-
```



J_MA0154.1_EBF1 5.8347e-04

```
CYTCCAGGSC
NCCCNAGGGA
```



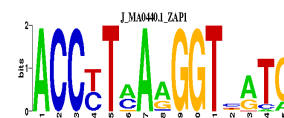
J_MA0304.1_GCR1 8.7134e-04

```
GSCCTGGARG--
----TGGAAGCC
```



J_MA0440.1_ZAP1 1.3730e-03

```
---GSCCTGGARG--
CATNACCTTKARGGT
```

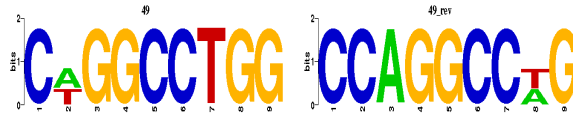


J_MA0026.1_Eip74EF 1.9725e-03

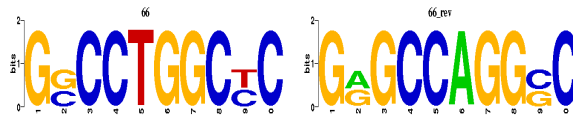
```
CYTCCAGGSC
YTTCCG---
```



49

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0146.1_Zfx	1.1907e-04	-----CCAGGCCWG NNNGCCNNGGCCTN	
J_MA0106.1_TP53	2.1081e-03	-----CCAGGCCWG- NNGGACATGCCCGGGCATGT	
J_MA0344.1_NHP10	7.0944e-03	--CCAGGCCWG TCCCCGN---	
J_MA0119.1_TLX1_NFIC	7.6775e-03	CWGGCCTGG----- TTGGCNNNSTGCCA	
J_MA0145.1_Tcfcp211	8.5967e-03	CWGGCCTGG----- CYGGNTNNRNCYGG	



66

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0146.1_Zfx	1.5300e-03	--GRGCCAGGSC-- NNNGCCNNGGCCTN	
J_MA0344.1_NHP10	2.0113e-03	GRGCCAGGSC --NCCGGGGA	

J_MA0039.2_Klf4 3.3669e-03

GRGCCAGGSC--
--GCCMCRCCTN

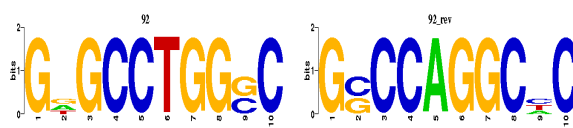
J_MA0368.1_RIM101 3.4116e-03

GSCCTGGCYC
--CTTGCCR--

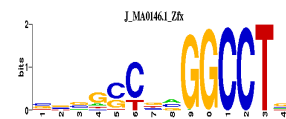
J_MA0381.1_SKN7 4.4959e-03

GSCCTGGCYC
---NYGGCC--

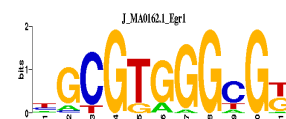
92

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

J_MA0146.1_Zfx 8.6868e-06

---GSCCAGGCNC-
NNNGCCNNGGCCTN

J_MA0162.1_Egr1 1.5351e-04

--GSCCAGGCNC
MCGCCCACGCN-

J_MA0344.1_NHP10 5.2515e-04

GSCCAGGCNC
TCCCCGGN--

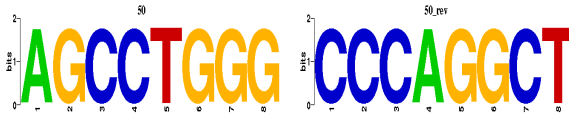
J_MA0039.2_Klf4 1.6726e-03

GSCCAGGCNC-
-GCCMCRCCTN

J_MA0450.1_hkb 4.3205e-03

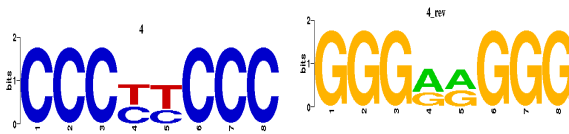
-GNGCCTGGSC
KGGGCGTGA--

50

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0344.1_NHP10	1.3504e-05	-CCCAGGCT TCCCCGGN-	
J_MA0162.1_Egr1	2.7961e-04	---CCCAGGCT MCGCCCACGCN	
J_MA0154.1_EBF1	8.4846e-04	--CCCAGGCT NCCCNAGGGA	
J_MA0146.1_Zfx	1.1397e-03	--AGCCTGGG--- NAGGCCNNGGCNNN	
J_MA0003.1_TFAP2A	1.1649e-03	--CCCAGGCT SCNNNNGGC-	

4

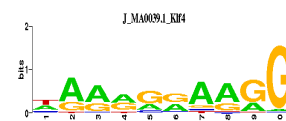
*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	8.7801e-08	--GGGARGGG GGGGGNNGGG	
J_MA0341.1_MSN2	8.0095e-05	CCCYTCCC CCCCT---	

J_MA0039.1_Klf4 1.0086e-04

CCCYTCCC---

-CCTTYYTTN



J_MA0342.1_MSN4 1.3828e-04

CCCYTCCC

CCCCT---



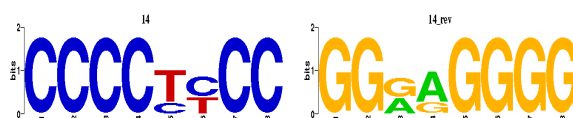
J_MA0366.1_RGM1 2.8144e-04

CCCYTCCC

CCCCT---



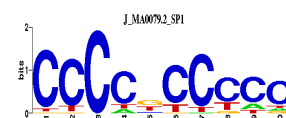
14

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

J_MA0079.2_SP1 3.6009e-09

--GGRAGGGG

GGGGGNNGGG



J_MA0341.1_MSN2 1.8491e-06

CCCCTYCC

CCCCT---



J_MA0342.1_MSN4 1.8579e-06

CCCCTYCC

CCCCT---



J_MA0366.1_RGM1 3.1757e-06

CCCCTYCC

CCCCT---



J_MA0323.1_IXR1 2.5849e-05

--CCCCTYCC-----

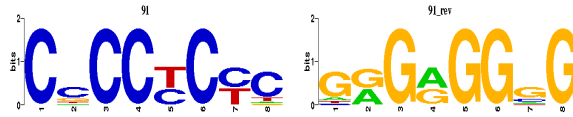
CMCCGCTTCCGYYTT



91

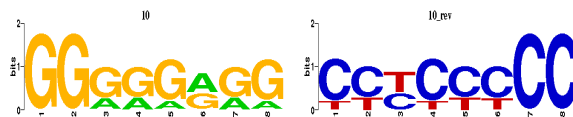
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*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	3.4313e-08	--GRGRGGGG GGGGNGGGG	
J_MA0341.1_MSN2	2.4751e-06	CCCCYCYC CCCCT---	
J_MA0342.1_MSN4	6.9411e-06	CCCCYCYC CCCCT---	
J_MA0366.1_RGM1	1.9288e-05	CCCCYCYC CCCCT---	
J_MA0068.1_Pax4	2.0261e-04	GRGRGGGG----- GKRNNNNKNNNNNNNNNNNNKNNWWWTTTYY	

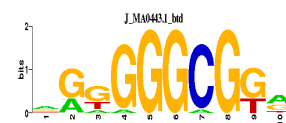
10

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	1.3341e-08	GGGGGRGG-- GGGGNGGGG	
J_MA0068.1_Pax4	1.2200e-05	GGGGGRGG----- GKRNNNNKNNNNNNNNNNNNKNNWWWTTTYY	

J_MA0443.1_btd 4.0727e-05

—CCYCCCC—
YCCGCCCMCN



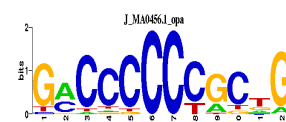
J_MA0283.1_CHA4 1.3281e-04

CCYCCCC
NCTCCGCC

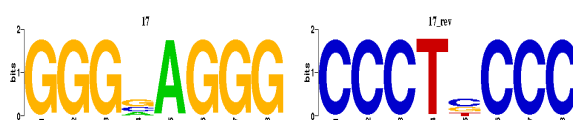


J_MA0456.1_opa 1.6351e-04

--GGGGGRGG--
CNGCGGGGGKGC



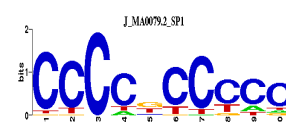
17

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

J_MA0079.2_SP1

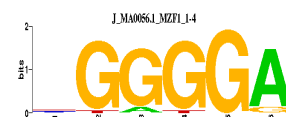
1.8523e-09

—GGGNAGGG—
GGGGGNGGGG



J_MA0056.1_MZF1_1-4 1.0121e-04

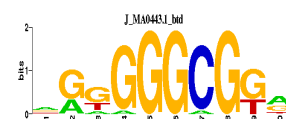
CCCTNCCC—
---TCCCCN



J_MA0443.1_btd

1.9910e-04

CCCTNCCC—
YCCGCCCMCN



J_MA0112.2_ESR1

3.9841e-04

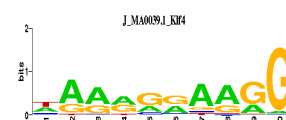
—GGGNAGGG-----
RGGTCANNNTGACCTNNNNN



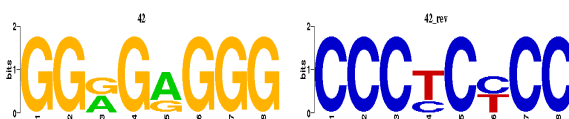
J_MA0039.1_Klf4

1.2065e-03

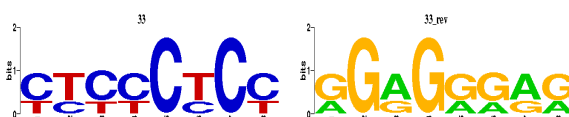
CCCTNCCC—
CCTTYYTTN



42

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SPI1	2.8393e-08	-GGRGAGGG- GGGGNGGGG	
J_MA0159.1_RXR_RAR_D	8.1740e-05	--CCCTCYCC----- TGACCTNYNNNTGAMCY	
J_MA0068.1_Pax4	3.1440e-04	GGRGAGGG----- GKRNNNNKNNNNNNNNNNNNKNNWWWTWTY	
J_MA0056.1_MZF1_1-4	4.2805e-04	CCCTCYCC- ---TCCCN	
J_MA0443.1_btd	1.1564e-03	CCCTCYCC- YCCGCCCMCN	



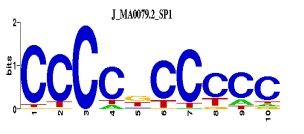
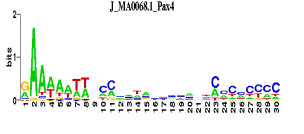
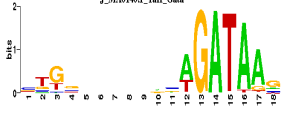
33

*forward**reverse compliment*

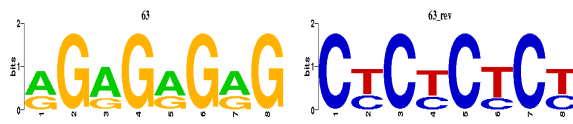
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0039.1_Klf4	2.0517e-04	-GGAGGGAG- NAARRRAAGG	
J_MA0080.2_SPI1	7.0278e-04	-CTCCCTCC ACTTCCT--	

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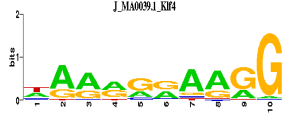
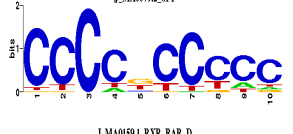
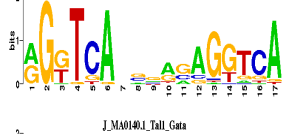
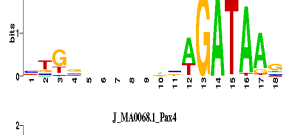
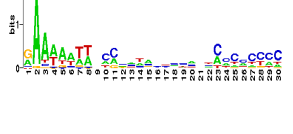
J_MA0079.2_SP1	1.0236e-03	GGAGGGAG---	
		-GGGGGNGGGG	
J_MA0068.1_Pax4	1.2280e-03	-----CTCCCTCC	
		RAAWAWWWNNMNNNNNNNNNNNNMNNNNNYMC	
J_MA0140.1_Tal1_Gata	1.5378e-03	-----CTCCCTCC-----	
		NTTATCTNNNNNNNNNCNN	

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forward

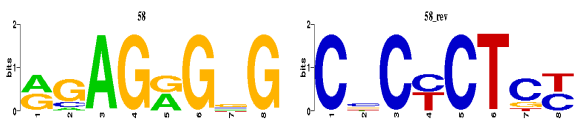
reverse compliment

Name	E value	Alignment	Motif
J_MA0039.1_Klf4	4.3368e-04	-CTCTCTCT- CCTTYYYTTN	
J_MA0079.2_SP1	4.9783e-03	-AGAGAGAG- GGGGGNGGGG	
J_MA0159.1_RXR_RAR_D	6.6934e-03	-----CTCTCTCT----- TGACCTNYNNNTGAMCY	
J_MA0140.1_Tal1_Gata	7.3653e-03	-----CTCTCTCT----- NTTATCTNNNNNNNNNCNN	
J_MA0068.1_Pax4	8.8494e-03	-----CTCTCTCT-- RAAWAWWWNNMNNNNNNNNNNNNMNNNNNYMC	

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Stamp Results

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forward

reverse compliment

Name	E value	Alignment	Motif
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J_MA0366.1_RGM1	3.9081e-05	CNCYCTCY -CCCCT--	
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J_MA0342.1_MSN4	4.9139e-05	CNCYCTCY -CCCCT--	
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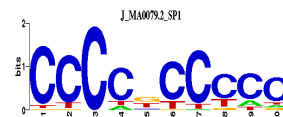
J_MA0057.1_MZF1_5-13	9.7690e-05	--CNCYCTCY NTNCCCCTMN	
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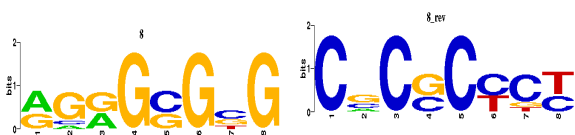
J_MA0341.1_MSN2	1.1138e-04	RGAGRGNG --AGGGG--	
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J_MA0079.2_SP1	1.2692e-04	---RGAGRGNG GGGGGNGGGG--	
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8

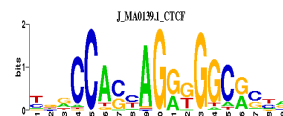


forward

reverse compliment

Name	E value	Alignment	Motif
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J_MA0139.1_CTCF	3.8120e-05	-----RGRGSGNG----- YNNCCASYAGGKGGCRSNN	
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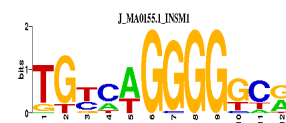


J_MA0443.1_btd	7.7508e-05	--CNCSCYCY YCCGCCCMCN	
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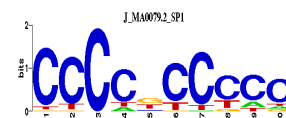
J_MA0155.1_INSM1 9.6219e-05

----RGRGSGNG
 TGYCAGGGGGCR



J_MA0079.2_SP1 9.6967e-05

-RGRGSGNG-
 GGGGGNNGGG

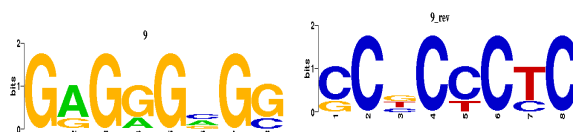


J_MA0450.1_hkb 1.0506e-04

RGRGSGNG-
 KGGGCGTGA

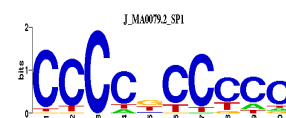


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*forward**reverse compliment**Name**E value**Alignment**Motif*

J_MA0079.2_SP1 4.3417e-08

GAGGGNNG--
 GGGGGNNGGG



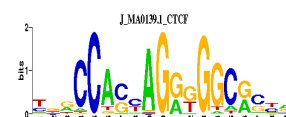
J_MA0443.1_btd 4.6887e-06

-GAGGGNNG-
 NGKGGGCGGR



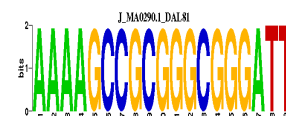
J_MA0139.1_CTCF 1.1500e-04

--CCNCCCTC-----
 NNSYGCCMCCTRSTGGNNR



J_MA0290.1_DAL81 3.0578e-04

----CCNCCCTC-----
 AATCCCGCCCGCGGCTTTT



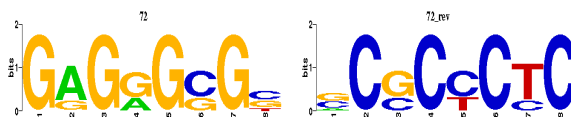
J_MA0366.1_RGM1 1.4909e-03

GAGGGNNG
 -AGGGG--

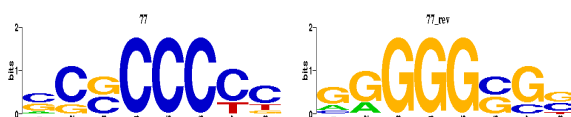


Stamp Results

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*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0139.1_CTCF	6.3514e-06	-----GAGGGCGS-- YNNCCASYAGGKGGRSNN	
J_MA0443.1_btd	4.0029e-05	-SCGCCCTC- YCCGCCCMCN	
J_MA0079.2_SP1	7.6738e-05	GAGGGCGS-- GGGGGNGGGG	
J_MA0123.1_abi4	3.8585e-04	--SCGCCCTC CGSYGCNNCN	
J_MA0057.1_MZF1_5-13	8.2822e-04	-SCGCCCTC- NTNCCCCTMN	



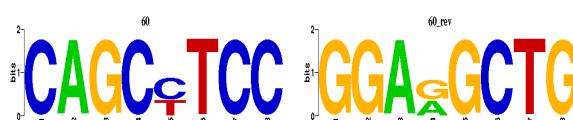
77

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0443.1_btd	2.1466e-08	-SCSCCCCC- YCCGCCCMCN	
J_MA0079.2_SP1	1.1540e-07	GGGGGSGS-- GGGGGNGGGG	

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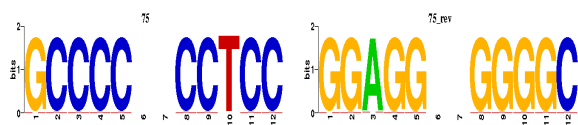
60



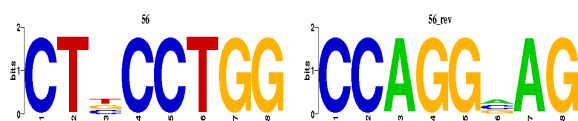
reverse compliment

Motif

75

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	9.1094e-06	GGAGGNNGGGGC GGGGNNGGG--	J_MA0079.2_SP1
J_MA0039.2_Klf4	5.3599e-05	GGAGGNNGGGGC --NNGGYGKGGC	J_MA0039.2_Klf4
J_MA0146.1_Zfx	6.1873e-03	GGAGGNNGGGGC--- -NAGGCCNNGGCNNN	J_MA0146.1_Zfx
J_MA0344.1_NHP10	6.8874e-03	GCCCCNNCCTCC TCCCCGN----	J_MA0344.1_NHP10
J_MA0341.1_MS2	7.1254e-03	GCCCCNNCCTCC -CCCCT-----	J_MA0341.1_MS2



56

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0144.1_Stat3	1.6279e-09	CTNCCTGG-- CTTCNGGAA	J_MA0144.1_Stat3
J_MA0156.1_FEV	4.5346e-06	-CTNCCTGG AYTTCCTG-	J_MA0156.1_FEV

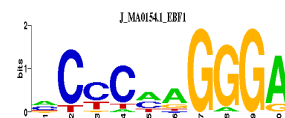
J_MA0026.1_Eip74EF 1.6677e-05

CCAGGNAG
-CCGGAAR

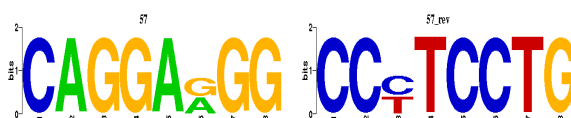
J_MA0080.2_SPI1 1.7870e-05

-CTNCCTGG
ACTTCCT--

J_MA0154.1_EBF1 1.5177e-04

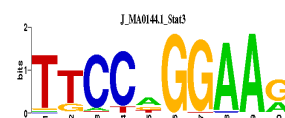
CTNCCTGG---
-TCCCTNGGGN

57

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

J_MA0144.1_Stat3

1.8740e-06

CCYTCCTG---
-CTTCCNGGAA

J_MA0156.1_FEV

2.5033e-06

CCYTCCTG
AYTTCCTG

J_MA0080.2_SPI1

6.9238e-06

CCYTCCTG
ACTTCCT-

J_MA0026.1_Eip74EF

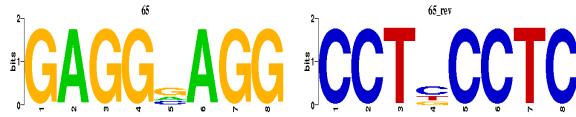
7.4222e-06

CAGGARGG
CCGGAAR-

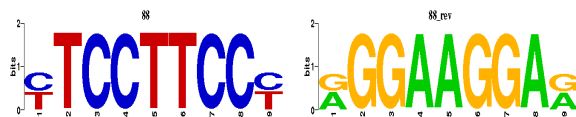
J_MA0149.1_EWSR1-FLI 1.1073e-05

--CAGGARGG-----
GGAAGGAAGGAAGGAAGG

65

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SPI1	1.4773e-05	--CCTNCCTC CCCCNCCCCC	
J_MA0080.2_SPI1	1.6140e-04	CCTNCCTC ACTTCCT-	
J_MA0149.1_EWSR1-FLI	1.8745e-04	-----GAGGNAGG----- GGAAGGAAGGAAGGAAGG	
J_MA0039.1_Klf4	5.9155e-04	CCTNCCTC-- CCTTYYYYTTN	
J_MA0081.1_SPIB	7.7950e-04	CCTNCCTC- --TTCKST	



88

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0149.1_EWSR1-FLI	2.9531e-09	--YTCCTTCCY----- CCTTCCTTCCTTCCTTCC	
J_MA0039.1_Klf4	5.8789e-06	YTCCTTCCY-- --CCTTYYYYTTN	

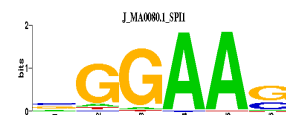
Stamp Results

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J_MA0080.2_SPI1 6.0824e-06

YTCCTTCY
--ACTTCCT

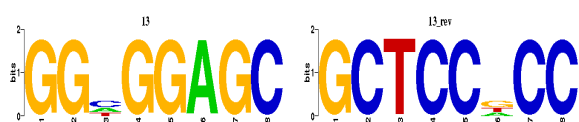
J_MA0080.1_SPI1 9.1317e-05

YTCCTTCY
---STTCN

J_MA0305.1_GCR2 3.8743e-04

RGGGAAGGAR
NGGAAGC--

13

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

J_MA0283.1_CHA4

1.6866e-08

GGNGGAGC
GGCGGAGN

J_MA0039.2_Klf4

1.4481e-05

GCTCCNCC--
GCCMCRCN

J_MA0443.1_btd

4.2336e-04

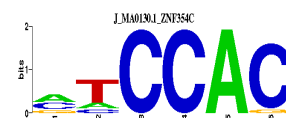
GCTCCNCC----
--YCCGCCMCN

J_MA0079.2_SP1

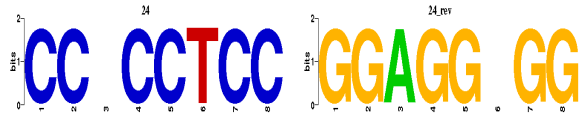
4.5366e-04

---GGNGGAGC
GGGGNGGGG--

J_MA0130.1_ZNF354C 6.0248e-04

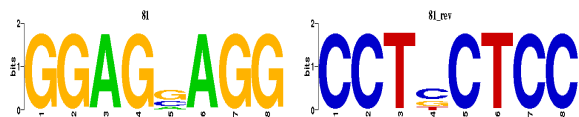
GGNGGAGC
-GTGGAK-

24

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	9.2243e-07	GGAGGNGG-- GGGGGNGGGG	
J_MA0283.1_CHA4	4.1367e-05	CCNCCTCC NCTCCGCC	
J_MA0057.1_MZF1_5-13	9.9552e-05	--CCNCCTCC NTNCCCCTMN	
J_MA0366.1_RGM1	2.6812e-04	CCNCCTCC -CCCCT--	
J_MA0342.1_MS4	2.7927e-04	CCNCCTCC -CCCCT--	

81

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0079.2_SP1	2.5652e-06	GGAGSAGG-- GGGGGNGGGG	
J_MA0283.1_CHA4	7.8124e-05	CCTSCTCC NCTCCGCC	

J_MA0062.1_GABPA 7.6092e-04

CCTSCTCC---
-SNCTTCCGGT

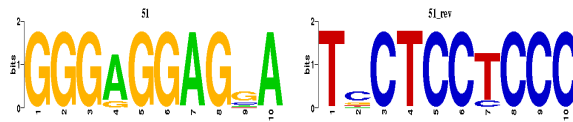
J_MA0081.1_SPIB 1.8209e-03

CCTSCTCC
-TTCKST

J_MA0090.1_TEAD1 2.0723e-03

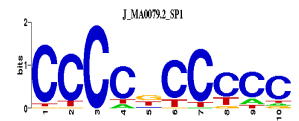
-GGAGSAGG---
CNSWGGAAATGTR

51

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

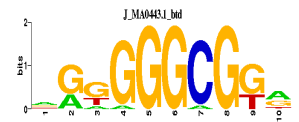
J_MA0079.2_SP1

1.4393e-05

GGGAGGAGNA-
-GGGGGNGGGG

J_MA0443.1_btd

2.3950e-04

TNCTCCTCCC
YCCGCCCMCN

J_MA0283.1_CHA4

3.2441e-04

TNCTCCTCCC
-NCTCCGCC-

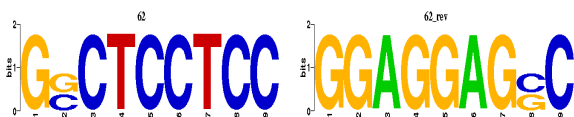
J_MA0057.1_MZF1_5-13 6.4569e-04

GGGAGGAGNA-
-NKAGGGGNAN

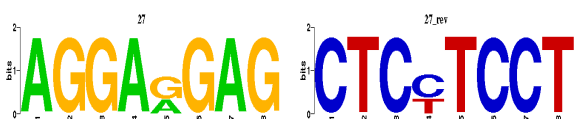
J_MA0149.1_EWSR1-FLI 1.4323e-03

-----TNCTCCTCCC
CCTTCCTTCCTTCCTCC

62

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0283.1_CHA4	1.0413e-04	GSCTCCTCC -NCTCCGCC	
J_MA0079.2_SP1	1.6713e-04	GGAGGAGSC- GGGGGNGGGG	
J_MA0062.1_GABPA	1.3055e-03	GSCTCCTCC-- --SNCTTCCGGT	
J_MA0081.1_SPIB	1.7388e-03	GGAGGAGSC ASMGGAA--	
J_MA0090.1_TEAD1	3.9260e-03	-GGAGGAGSC-- CNSWGAATGTR	



27

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0062.1_GABPA	7.3015e-06	CTCYTCCT-- SNCTTCCGGT	
J_MA0080.2_SPI1	2.1434e-05	CTCYTCCT -ACTTCCT	

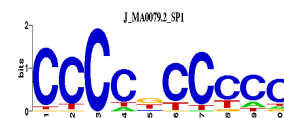
J_MA0283.1_CHA4 1.2571e-04

—CTCYTCCT
NCTCCGCC—



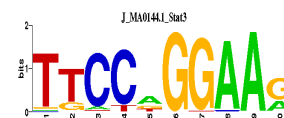
J_MA0079.2_SP1 1.2318e-03

AGGARGAG---
—GGGGGNGGGG

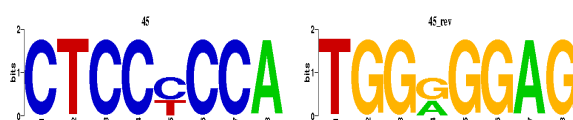


J_MA0144.1_Stat3 1.5704e-03

CTCYTCCT----
--CTTCNGGAA



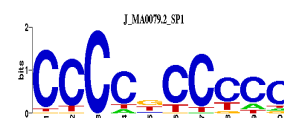
45

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

J_MA0079.2_SP1

1.6848e-06

TGGRGGAG---
—GGGGGNGGGG



J_MA0056.1_MZF1_1-4 6.4101e-05

CTCCYCCA
—TCCCN—



J_MA0283.1_CHA4 1.2966e-04

—CTCCYCCA
NCTCCGCC—



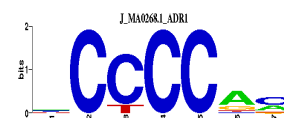
J_MA0057.1_MZF1_5-13 3.7346e-04

CTCCYCCA--
NTNCCCCTMN

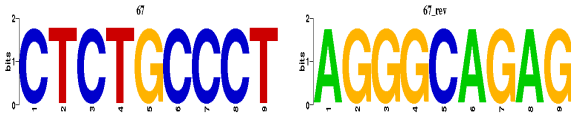


J_MA0268.1_ADR1 4.3322e-04

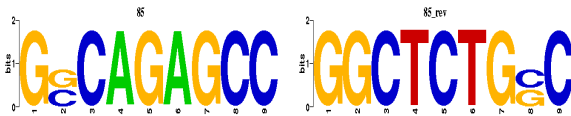
—TGGRGGAG
KTGGGGN--



67

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0065.2_PPARG_RXR	3.6367e-08	----CTCTGCCCT-- TGMCCTTTGNCCYNN	
J_MA0283.1_CHA4	1.0413e-04	-CTCTGCCCT NCTCCGCC--	
J_MA0112.2_ESR1	2.6864e-04	AGGGCAGAG----- RGGTCANNNTGACCTNNNNN	
J_MA0115.1_NR1H2_RXR	3.3776e-04	--AGGGCAGAG----- AAAGGTCAAAGGTCAAS	
J_MA0114.1_HNF4A	4.3843e-04	AGGGCAGAG---- RGNNCAAAGKNCA	



85

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0278.1_BAS1	9.9624e-05	-----GGCTCTGSC----- NNNWNVTGACTCNGGCYNNNN	
J_MA0283.1_CHA4	7.6615e-04	GGCTCTGSC -NCTCCGCC	

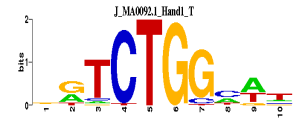
J_MA0384.1_SNT2 1.1840e-03

—GGCTCTGSC—
 NGGCGCTAYCA



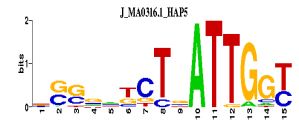
J_MA0092.1_Hand1_T 1.3228e-03

GGCTCTGSC—
 —NRCTGGNWN

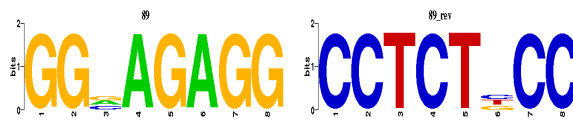


J_MA0316.1_HAP5 2.5247e-03

----GSCAGAGCC--
 ACCAATNAGMNNSSN

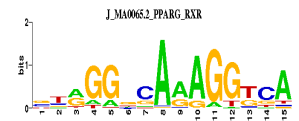


89

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

J_MA0065.2_PPARG_RXR 5.8999e-06

---CCTCTNCC---
 TGMCCTTTGNCCYNN



J_MA0062.1_GABPA 7.0612e-06

CCTCTNCC---
 —SNCTTCCGGT



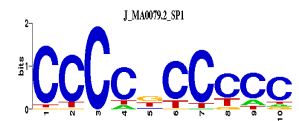
J_MA0323.1_IXR1 8.0302e-05

--CCTCTNCC----
 CMCCGCTTCCGGYTT



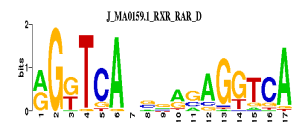
J_MA0079.2_SP1 8.1137e-05

GGNAGAGG--
 GGGGGNGGGG

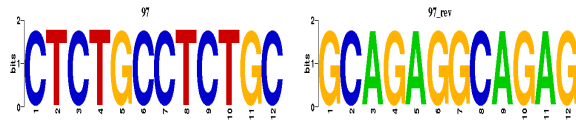


J_MA0159.1_RXR_RAR_D 7.4513e-04

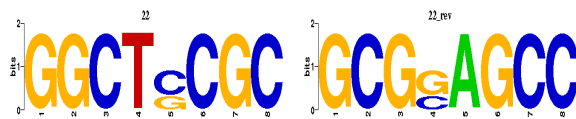
-----GGNAGAGG---
 RGKTCANNRNRNAGGTCA



97

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0081.1_SPIB	5.8925e-04	CTCTGCCTCTGC ---TTCKST--	
J_MA0283.1_CHA4	6.4739e-04	-CTCTGCCTCTGC NCTCCGCC-----	
J_MA0062.1_GABPA	9.4136e-04	GCAGAGGCAGAG --ACCGGAAGNS	
J_MA0150.1_NFE2L2	1.2570e-03	-GCAGAGGCAGAG TGCTNWGTCAY--	
J_MA0340.1_MOT3	1.8159e-03	CTCTGCCTCTGC ---TRCCTN---	



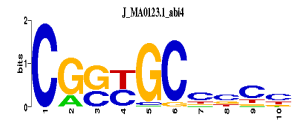
22

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0283.1_CHA4	8.9735e-06	GGCTCCGC- -NCTCCGCC	
J_MA0404.1_TBS1	3.9164e-05	GCGGAGCC- -CGGNTCCG	

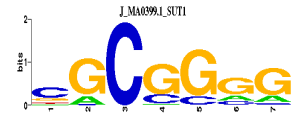
J_MA0123.1_abi4 6.2296e-04

---GGCTCCGC
NGNNGCRSCG-



J_MA0399.1_SUT1 8.0112e-04

-GCGGAGCC
CGCGGGG--

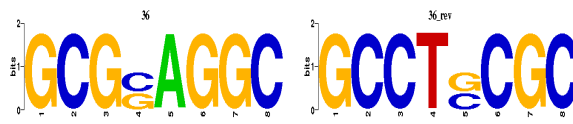


J_MA0213.1_brk 8.5546e-04

GCGGAGCC
SYGGCGCY

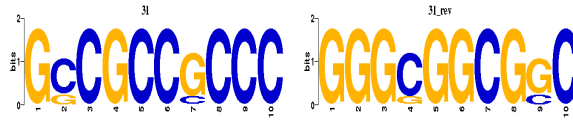


36

*forward**reverse compliment*

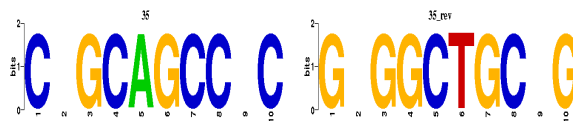
Name	E value	Alignment	Motif
J_MA0283.1_CHA4	8.1136e-05	GCCTSCGC- -NCTCCGCC	
J_MA0146.1_Zfx	7.8691e-04	---GCCTSCGC--- NAGGCCNNGGCNNN	
J_MA0162.1_Egr1	8.2758e-04	--GCCTSCGC- MCGCCCACGCN	
J_MA0090.1_TEAD1	1.1679e-03	GCGSAGGC----- -CNSWGGAATGTR	
J_MA0131.1_MIZF	2.0763e-03	GCGSAGGC-- GCGACGTTN	

31

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0123.1_abi4	3.4584e-06	--GGGCGGCGGC NGNNGCRSCG--	
J_MA0412.1_UME6	1.8704e-05	-----GCCGCCGCC AWWTAGCCGCCSA--	
J_MA0079.2_SP1	2.7293e-05	GGGCGGCGGC-- -GGGGGNGGGG	
J_MA0443.1_btd	3.1677e-05	GCCGCCGCC YCCGCCMCN	
J_MA0320.1_IME1	3.5661e-05	GGGCGGCGGC -CTCGGCGG-	

35

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0055.1_Myf	9.0490e-07	--GNGGCTGCNG MRGCARCTGCTG	
J_MA0048.1_NHLH1	6.3142e-04	--GNGGCTGCNG NCGCAGCTGCGN	

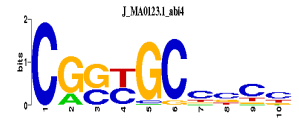
J_MA0412.1_UME6 1.3539e-03

---CNGCAGCCNC
AWWTAGCCGCCSA



J_MA0123.1_abi4 2.9372e-03

-GNGGCTGCNG
NGNNGCRSCG-

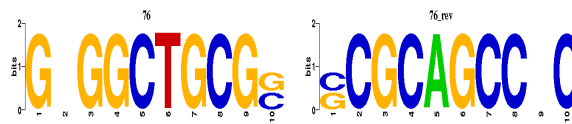


J_MA0454.1_odd 3.8015e-03

GNGGCTGCNG--
-NTGCTACTGTN

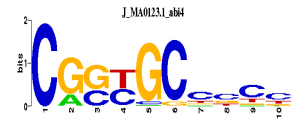


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*forward**reverse compliment**Name**E value**Alignment**Motif*

J_MA0123.1_abi4 3.0098e-05

-GNGGCTGCGS
NGNNGCRSCG-



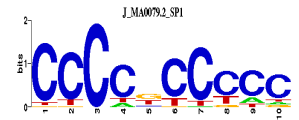
J_MA0048.1_NHLH1 4.3055e-05

--GNGGCTGCGS
NCGCAGCTGCGN



J_MA0079.2_SP1 1.1427e-03

-GNGGCTGCGS
GGGGGNGGGG-



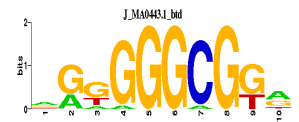
J_MA0332.1_MET28 3.8503e-03

SCGCAGCCNC
CCACAG----



J_MA0443.1_btd 6.1757e-03

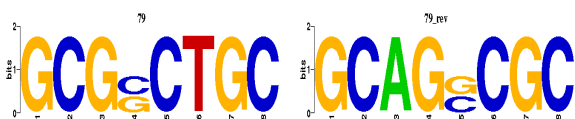
--GNGGCTGCGS
NGKGGGCGGR--



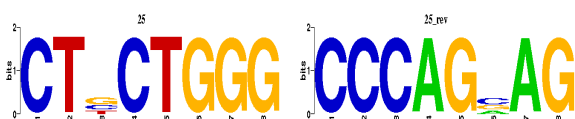
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*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0048.1_NHLH1	1.2590e-05	--GCGSCTGC-- NCGCAGCTGCGN	
J_MA0055.1_Myf	7.7118e-04	--GCGSCTGC-- CAGCAGYTGCYK	
J_MA0412.1_UME6	8.8197e-04	--GCAGSCGC--- AWWTAGCCGCCSA	
J_MA0449.1_h	1.2048e-03	-GCGSCTGC- GNCACGTGNC	
J_MA0394.1_STP1	1.3410e-03	GCAGSCGC- -NMGCCGCR	



25

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0402.1_SWI5	8.4399e-06	-CCCAGNAG NACCAGCA-	
J_MA0088.1_znf143	1.6242e-04	-----CTNCTGGG----- KCNKGMANNMTGGGANNNN	

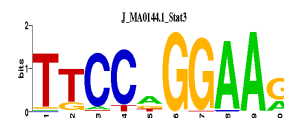
J_MA0267.1_ACE2 8.7035e-04

CTNCTGGG
-NGCTGGN

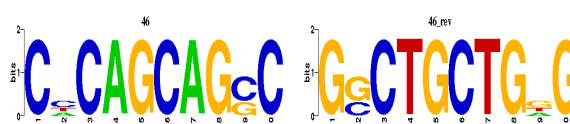
J_MA0287.1_CUP2 2.2448e-03

-----CTNCTGGG
CWTTTGTGCTG--

J_MA0144.1_Stat3 2.3293e-03

-CCCAGNAG-
TTCNGGAAG

46

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

J_MA0402.1_SWI5 7.5868e-05

-CNCAGCAGCC
NACCAGCA---

J_MA0454.1_odd 1.7114e-04

-GGCTGCTGNG
NTGCTACTGTN

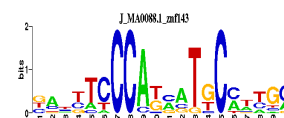
J_MA0150.1_NFE2L2 2.6584e-04

GGCTGCTGNG----
---TGCTNWTGTCAY

J_MA0055.1_Myf 1.0033e-03

-GGCTGCTGNG-
CAGCAGYTGCYK

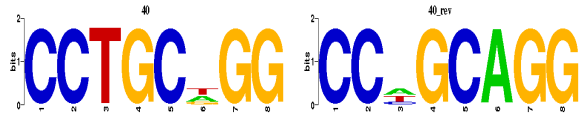
J_MA0088.1_znf143 1.4047e-03

-----GGCTGCTGNG-----
KCNNKGMANNMTGGGANNNN

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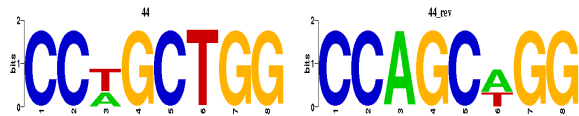


forward

reverse compliment

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0139.1_CTCF	2.2620e-05	-----CCTGCNGG--- NNSYGCCMCCTRSTGGNNR	
J_MA0402.1_SWI5	3.3789e-05	--CCNGCAGG NACCAGCA--	
J_MA0456.1_opa	4.3141e-04	-----CCTGCNGG GMCCCCCGCNG--	
J_MA0055.1_Myf	7.3746e-04	CCNGCAGG----- -CAGCAGYTGCYK	
J_MA0267.1_ACE2	1.9602e-03	CCTGCNGG-- --NGCTGGN	

44



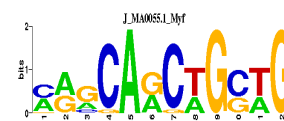
forward

reverse compliment

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0139.1_CTCF	5.0689e-06	-----CCWGCTGG--- NNSYGCCMCCTRSTGGNNR	
J_MA0402.1_SWI5	1.0491e-05	--CCAGCWGG NACCAGCA--	

J_MA0055.1_Myf 1.6226e-04

--CCWGCTGG--
CAGCAGYTGCYK



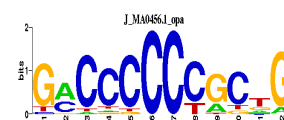
J_MA0267.1_ACE2 1.7345e-04

--CCAGCWGG
NCCAGCN--

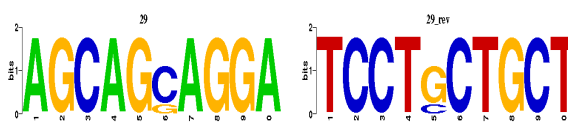


J_MA0456.1_opa 5.3851e-04

-----CCWGCTGG
GMCCCCCGCNG-

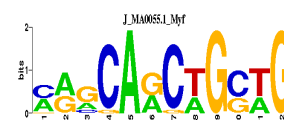


29

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

J_MA0055.1_Myf 2.0296e-06

-TCCTGCTGCT-
CAGCAGYTGCYK



J_MA0402.1_SWI5 2.1103e-04

-AGCAGCAGGA
NACCAGCA---



J_MA0454.1_odd 2.4979e-04

TCCTGCTGCT---
--NTGCTACTGTN



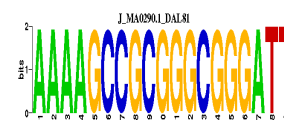
J_MA0287.1_CUP2 6.1671e-04

---TCCTGCTGCT
CWTTTGTGCTG--

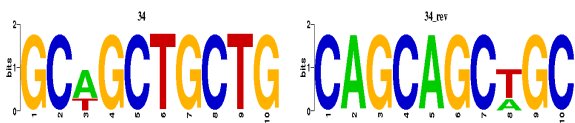


J_MA0290.1_DAL81 1.7498e-03

-----TCCTGCTGCT---
AATCCCGCCCGCGCTTTT



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*forward**reverse compliment*

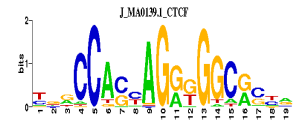
<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0055.1_Myf	1.0975e-12	CAGCAGCTGC-- CAGCAGYTGCYK	
J_MA0048.1_NHLH1	7.7150e-09	CAGCAGCTGC-- NCGCAGCTGCGN	
J_MA0454.1_odd	3.0620e-04	GCAGCTGCTG-- -NTGCTACTGTN	
J_MA0086.1_sna	9.7487e-04	CAGCAGCTGC ---CACCTG-	
J_MA0402.1_SWI5	3.2660e-03	---CAGCAGCTGC NACCAGCA-----	

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0287.1_CUP2	2.8408e-05	---CTCTSCTG CWTTTYTGCTG	
J_MA0320.1_IME1	2.3638e-03	CTCTSCTG CTCGGCGG	

J_MA0139.1_CTCF 2.5256e-03

-----CTCTSCTG-----
 NNSYGCCMCCTRSTGGNNR



J_MA0402.1_SWI5 2.9838e-03

---CAGSAGAG
 NACCAGCA---

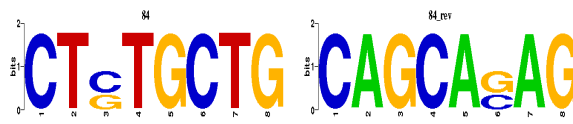


J_MA0055.1_Myf 3.2373e-03

CAGSAGAG-----
 CAGCAGYTGCK

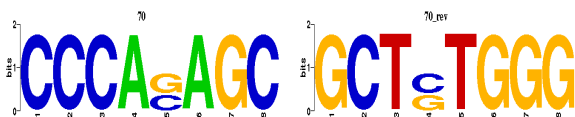


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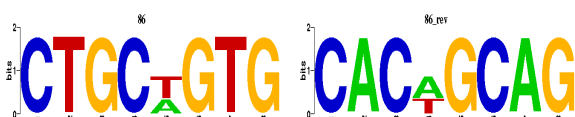
*forward**reverse compliment*

Name	E value	Alignment	Motif
J_MA0287.1_CUP2	1.7431e-05	---CTSTGCTG CWTTYTGCTG	
J_MA0139.1_CTCF	7.0485e-04	-----CTSTGCTG----- NNSYGCCMCCTRSTGGNNR	
J_MA0402.1_SWI5	7.5032e-04	---CAGCASAG NACCAGCA---	
J_MA0332.1_MET28	9.3408e-04	CAGCASAG --CCACAG	
J_MA0320.1_IME1	2.0178e-03	CTSTGCTG CTCGCGG	

70

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0332.1_MET28	5.5885e-07	CCCASAGC -CCACAG-	
J_MA0335.1_MET4	5.9980e-05	CCCASAGC- -CCACAGNT	
J_MA0002.2_RUNX1	1.1079e-03	--CCCASAGC- NAACCACARNN	
J_MA0003.1_TFAP2A	1.1969e-03	-CCCASAGC SCNNNGGC	
J_MA0451.1_kni	1.4686e-03	--GCTSTGGG-- NTGCTCTANTTT	

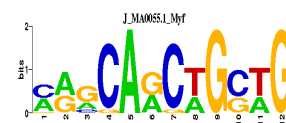


86

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0150.1_NFE2L2	6.3161e-05	CTGCGTG--- -TGCTNWGTCAY	
J_MA0332.1_MET28	7.8092e-05	-CACWGCAG CCACAG---	

J_MA0055.1_Myf 3.5142e-04

-----CTGCWGTG
MRGCARCTGCTG--

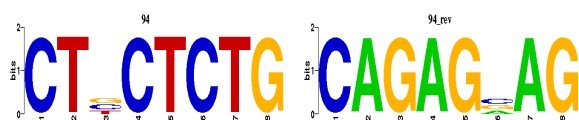
J_MA0454.1_odd 4.3462e-04

---CTGCWGTG
NTGCTACTGTN

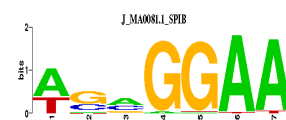
J_MA0335.1_MET4 2.1180e-03

-CACWGCAG
CCACAGNT-

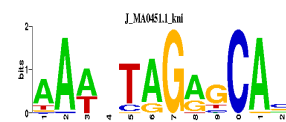
94

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

J_MA0081.1_SPIB 3.2106e-04

CAGAGNAG
-ASMGGAA

J_MA0451.1_kni 1.3082e-03

CTNCTCTG----
NTGCTCTANTTT

J_MA0370.1_RME1 2.7346e-03

CTNCTCTG--
TNCCTTTNNA

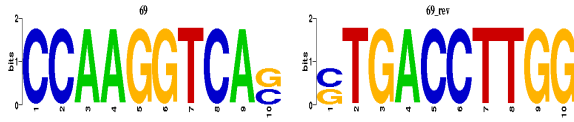
J_MA0326.1_MAC1 7.7534e-03

-CTNCTCTG
TTTGCTCR-

J_MA0090.1_TEAD1 8.8760e-03

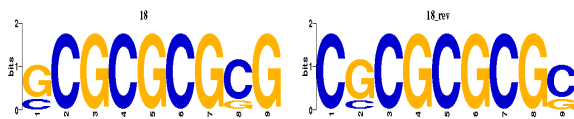
CAGAGNAG----
CNSWGAATGTR

69

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0160.1_NR4A2	2.6934e-10	STGACCTTGG GTGACCTT--	
J_MA0071.1_RORA_1	1.6138e-09	STGACCTTGG- -TGACCTNNWW	
J_MA0141.1_Esrrb	6.1661e-09	STGACCTTGG--- -TGACCTTGRNNN	
J_MA0115.1_NR1H2_RXR	9.6627e-07	-STGACCTTGG----- STTGACCTTTGACCTTT	
J_MA0065.1_PPARG_RXR	2.2759e-06	--STGACCTTGG----- NNNTGACCTTTGACCYCINN	

18

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0375.1_RSC30	1.8557e-08	CGCGCGCGC- --CGCGCGSN	
J_MA0449.1_h	3.7553e-05	-GCGCGCGCG GNCACGTGNC	

J_MA0290.1_DAL81 6.8052e-05

-----GCGCGCGC-----
AATCCCGCCCGCGGCTTTT



J_MA0162.1_Egr1 1.9817e-04

-CGCGCGCGC-
MCGCCCACGCN

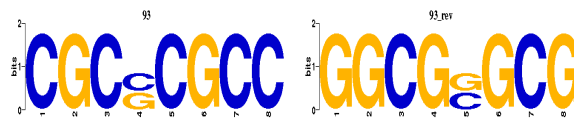


J_MA0399.1_SUT1 4.8588e-04

-CGCGCGCGC
CCCCGCG---

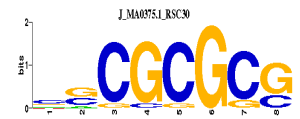


93

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

J_MA0375.1_RSC30 3.5024e-07

CGCSCGCC
CGCGCGSN



J_MA0290.1_DAL81 7.0827e-06

-----CGCSCGCC-----
AATCCCGCCCGCGGCTTTT



J_MA0405.1_TEA1 3.3044e-05

-CGCSCGCC
NWGYSCGC-



J_MA0410.1_UGA3 4.7494e-05

-GGCGSGCG
NGGCGGGA-

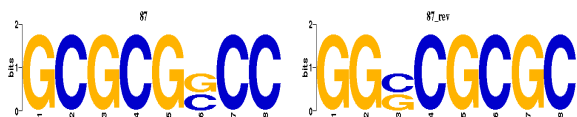


J_MA0449.1_h 8.5901e-05

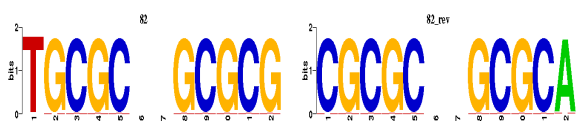
--CGCSCGCC
GNCACGTGNC



87

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0375.1_RSC30	2.5317e-06	-GCGCGSCC CGCGCGSN-	
J_MA0374.1_RSC3	2.1647e-04	--GCGCGSCC NNNCGCG---	
J_MA0394.1_STP1	2.9916e-04	-GGSCGCGC NMGCCGCR-	
J_MA0146.1_Zfx	4.9948e-04	----GCGCGSCC-- NNNGCCNNGGCCTN	
J_MA0361.1_RDS1	5.5897e-04	GCGCGSCC- --NCGGCCG	



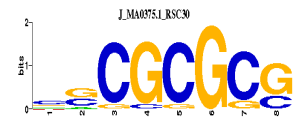
82

*forward**reverse compliment*

<i>Name</i>	<i>E value</i>	<i>Alignment</i>	<i>Motif</i>
J_MA0374.1_RSC3	1.9418e-03	TGCGCNNGCGC -----NNNCGCG	
J_MA0290.1_DAL81	4.2179e-03	----TGCGCNNGCGC--- AAAAGCCGCGGGCGGGATT	

J_MA0375.1_RSC30 7.0563e-03

TGCGCNNGCGCG--
 -----CGCGCGSN



J_MA0162.1_Egr1 1.2642e-02

TGCGCNNGCGCG--
 --NGCGTGGGCGK

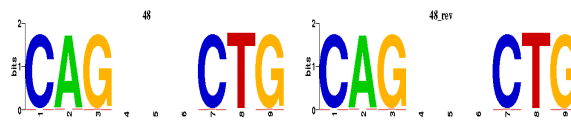


J_MA0213.1_brk 2.0483e-02

TGCGCNNGCGCG
 RCGCCRS-----



48

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

J_MA0055.1_Myf 5.0518e-03

CAGNNNCTG---
 CAGCAGYTGCYK



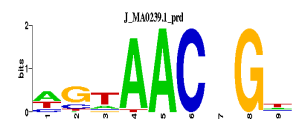
J_MA0126.1_ovo 1.0248e-01

--CAGNNNCTG
 NCNGTTACW--



J_MA0239.1_prd 1.0248e-01

--CAGNNNCTG
 NCNGTTACW--



J_MA0454.1_odd 1.7515e-01

CAGNNNCTG--
 NTGCTACTGTN



J_MA0048.1_NHLH1 2.0546e-01

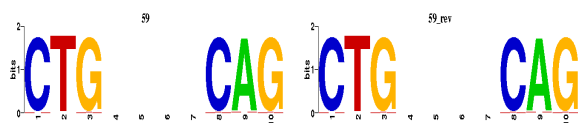
CAGNNNCTG---
 NCGCAGCTGCGN



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Stamp Results

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

J_MA0018.2_CREB1

1.0329e-01

CTGNNNNCAG
-TGACGTCA-

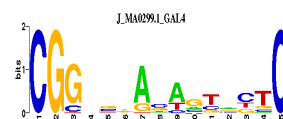
J_MA0157.1_FOXO3

1.5417e-01

CTGNNNNCAG
-TGTTTACA-

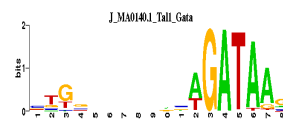
J_MA0299.1_GAL4

2.5596e-01

-----CTGNNNNCAG
GANNRNTNTNNNCCG

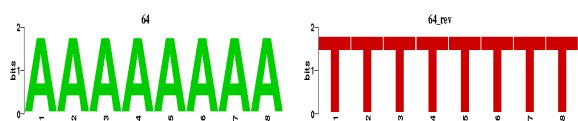
J_MA0140.1_Tal1_Gata

2.7553e-01

-----CTGNNNNCAG---
NTTATCTNNNNNNNNNCNN

J_MA0332.1_MET28

2.9012e-01

CTGNNNNCAG
----CCACAG

64

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

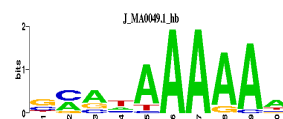
J_MA0277.1_AZF1

6.6380e-08

TTTTTTTT-
TTTCTTTT

J_MA0049.1_hb

2.6211e-06

-TTTTTTTT-
NTTTTNYKS

Stamp Results

11/22/15

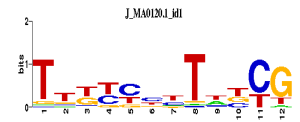
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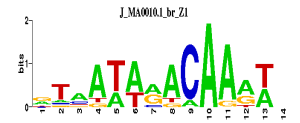
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CGNNANNRRMNA



J_MA0010.1_br_Z1 1.4252e-03

-TTTTTTTTT----
NWYTTGTYTATNAN



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STAMP is written by Shaun Mahony