



MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.1

INPUT

Input Parameters

Number of files:	4
Number of top significant motifs:	10
Number of best matches:	10
Similarity cutoff $\geq$	0.75
Matching motif database:	UniProbe Mus Musculus
Phylogenetic tree:	Yes
Combined similar motifs:	Yes
Output file type:	All
Output file format:	All

Input files and motif counts

File name	Count of motifs	Dataset number
DREME_DM721.txt	16	1
MEME-ChIP_DM721.txt	11	2
PScanChIP_DM721.txt	37	3
RSAT_peak-motifs_DM721.txt	40	4

RESULTS

Best Matches in Database for Each Motif (Highest to Lowest)

Dataset #: 1 **Motif ID: 2** **Motif name: Motif 2**

Original motif

Consensus sequence: CACACACA



Reverse complement motif

Consensus sequence: TGTGTGTG



Best Matches for Motif ID 2 (Highest to Lowest)

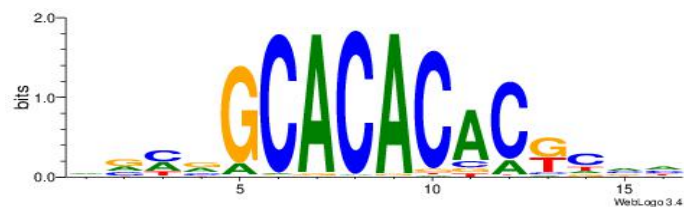
Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

```
HBGYGTGTGTGCVRVD
---TGTGTGTG-----
```

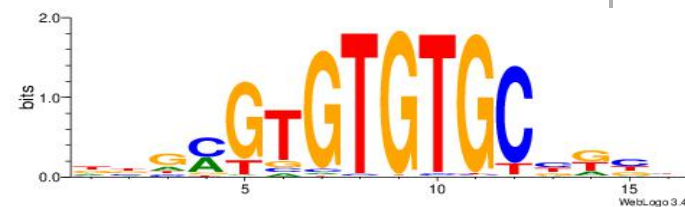
Original motif

Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD



Motif ID:

[UP00026](#)

Motif name:

Zscan4_secondary

Species:

Mus musculus

Matching format of first motif:

Reverse Complement

Matching format of second motif:

Reverse Complement

Direction:

Forward

Position number:

6

Number of overlap:

8

Similarity score:

0.0178637

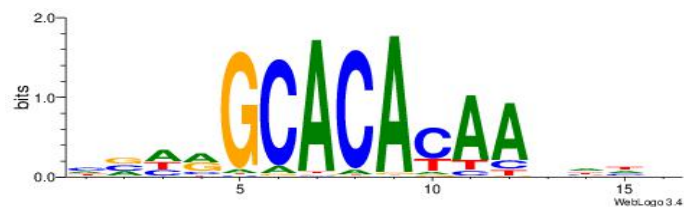
Alignment:

BHHHTTGTGTGCKHVD

-----TGTGTGTG---

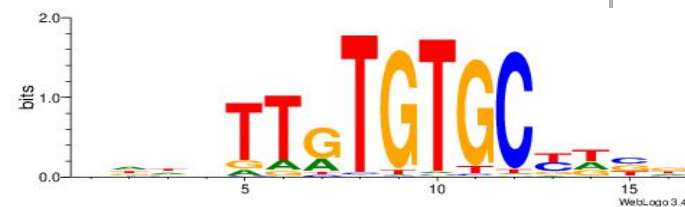
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD



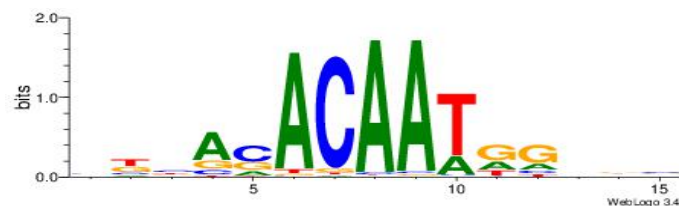
Motif ID: [UP00004](#)
 Motif name: Sox14_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 8
 Number of overlap: 8
 Similarity score: 0.0291592

Alignment:

BKBASACAATRGHBB
 CACACACA-----

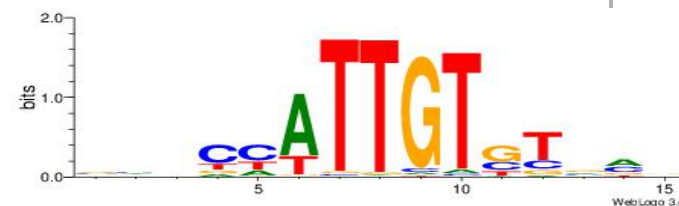
Original motif

Consensus sequence: BKBASACAATRGHBB



Reverse complement motif

Consensus sequence: BBDCMATTGTSTBRB



Motif ID: [UP00042](#)
 Motif name: Gm397_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward

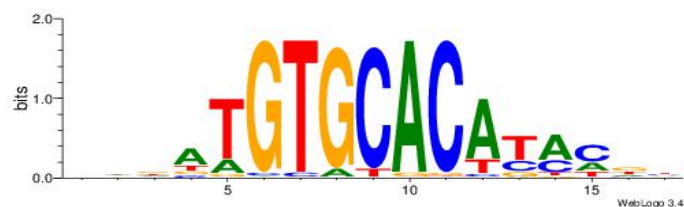
Position number: 9
Number of overlap: 8
Similarity score: 0.0316665

Alignment:

HHRTATGTGCACATHHD
-TGTGTGTG-----

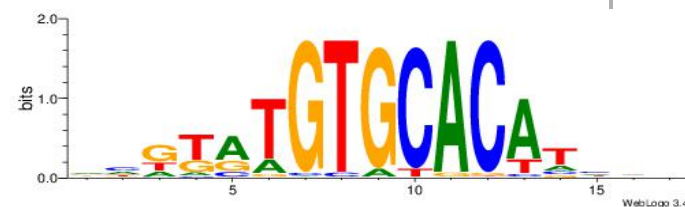
Original motif

Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif

Consensus sequence: HHRTATGTGCACATHHD



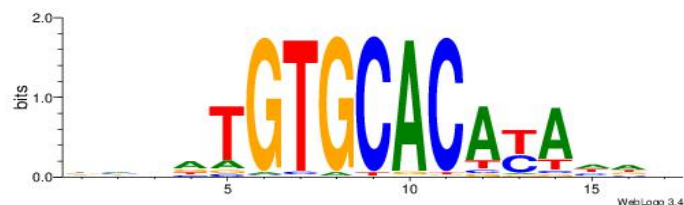
Motif ID: [UP00026](#)
Motif name: Zscan4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.0327662

Alignment:

DHVDTGTGCACAYAHDH
-----CACACACA-

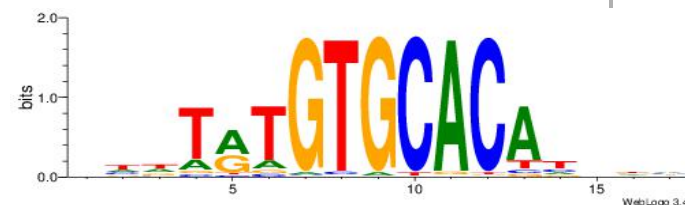
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



Motif ID:

[UP00000](#)

Motif name:

Smad3_primary

Species:

Mus musculus

Matching format of first motif:

Reverse Complement

Matching format of second motif:

Reverse Complement

Direction:

Backward

Position number:

5

Number of overlap:

8

Similarity score:

0.0329902

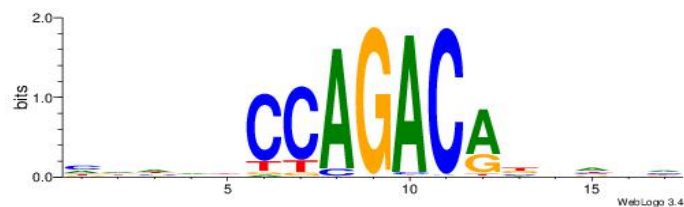
Alignment:

HVHBVTGTCTGGDDHDD

-----TGTGTGTG-----

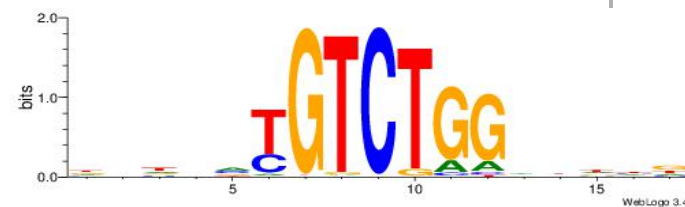
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



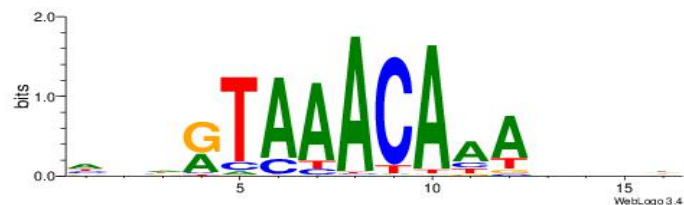
Motif ID: [UP00041](#)
 Motif name: Foxj1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 8
 Similarity score: 0.0361089

Alignment:

HDHRTAAACAAAHDDD
 --CACACACA-----

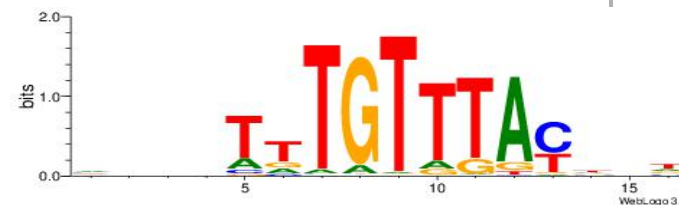
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDDH



Motif ID: [UP00101](#)
 Motif name: Sox12_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward

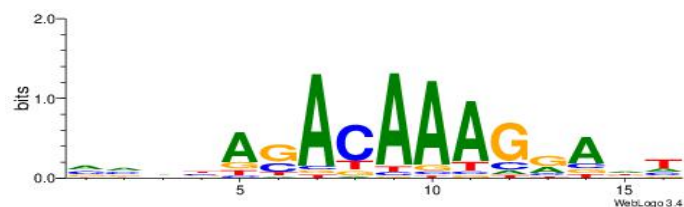
Position number: 6
Number of overlap: 8
Similarity score: 0.039766

Alignment:

HDTMCTTTGTSTVDBB
-----TGTGTGTG---

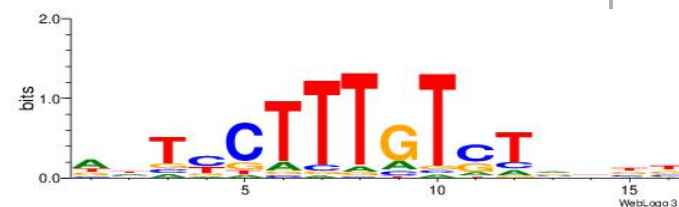
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



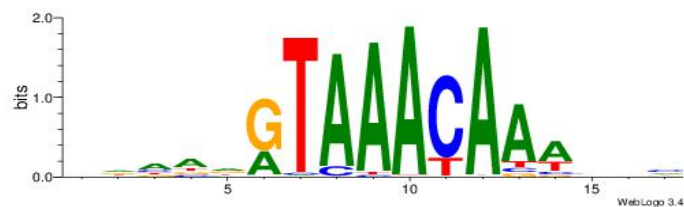
Motif ID: [UP00039](#)
Motif name: Foxj3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0414454

Alignment:

HDHADGTAAACAAAVVH
-----CACACACA-----

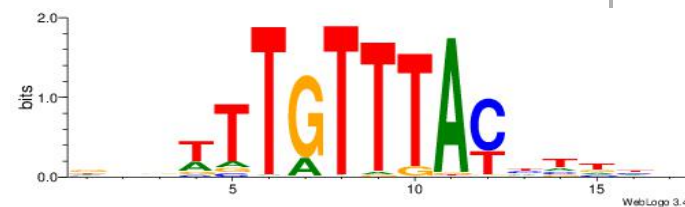
Original motif

Consensus sequence: HDHADGTAAACAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH



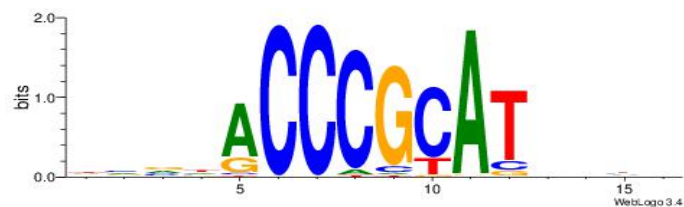
Motif ID:	UP00070
Motif name:	Gcm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0420768

Alignment:

```
HVVHACCCGCATVDHD
---CACACACA-----
```

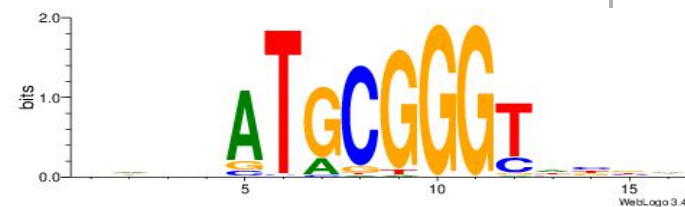
Original motif

Consensus sequence: HVVHACCCGCATVDHD



Reverse complement motif

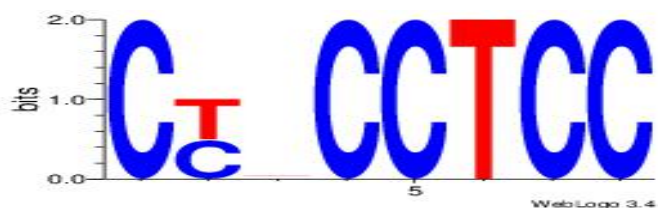
Consensus sequence: DHDVATGCGGGTHVVH



Dataset #: 1 **Motif ID: 4** **Motif name: Motif 4**

Original motif

Consensus sequence: CYBCCTCC



Reverse complement motif

Consensus sequence: GGAGGVMG



Best Matches for Motif ID 4 (Highest to Lowest)

Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0047591

Alignment:

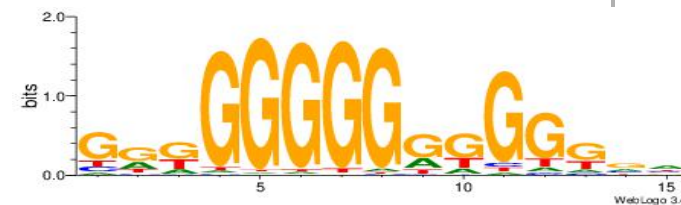
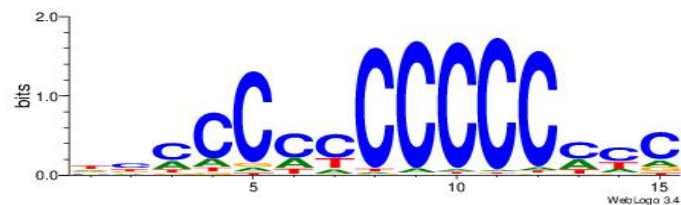
```
DBCCCCCCCCCMYC
----CYBCCTCC---
```

Original motif

Consensus sequence: DBCCCCCCCCCMYC

Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD

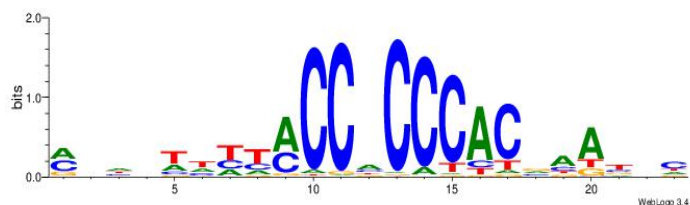


Motif ID: [UP00538](#)
 Motif name: Gli1_v015681_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.0211234

Alignment:
 MHHHWHYTMCCCHCCCACVAABVH
 -----CYBCCTCC-----

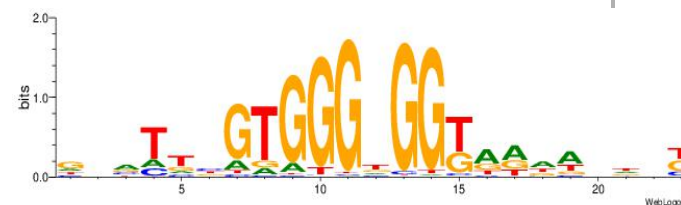
Original motif

Consensus sequence: MHHHWHYTMCCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID: [UP00540](#)

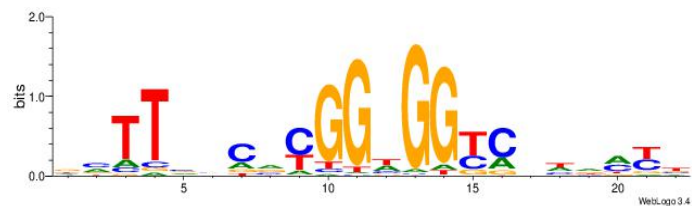
Motif name: Gli3_v015681_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 10
 Number of overlap: 8
 Similarity score: 0.0214303

Alignment:

DVTTVVCVYGGHGGYCHHDMYB
 -----GGAGGVMG-----

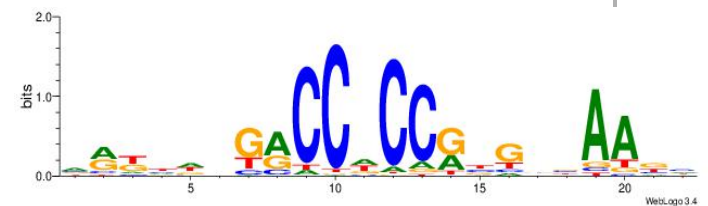
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCCHCKBGVVAHVH



Motif ID: [UP00007](#)
 Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 2
 Number of overlap: 8

Similarity score: 0.0215351

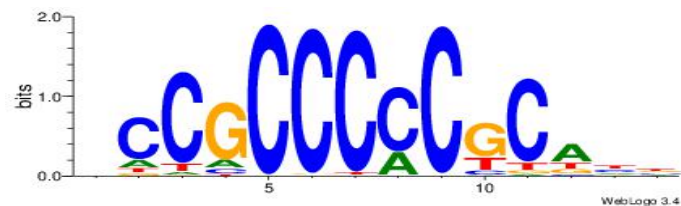
Alignment:

HCCGCCCCCGCAHB

-CYBCCTCC-----

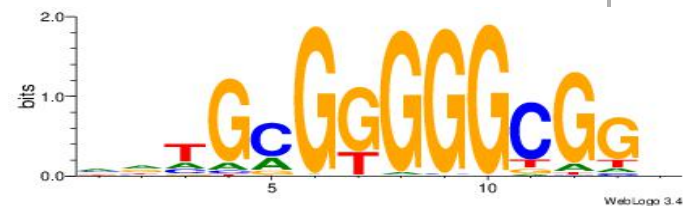
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID: [UP00033](#)
Motif name: Zfp410_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 8
Similarity score: 0.0262858

Alignment:

BDDYYCATCCCATDDBD

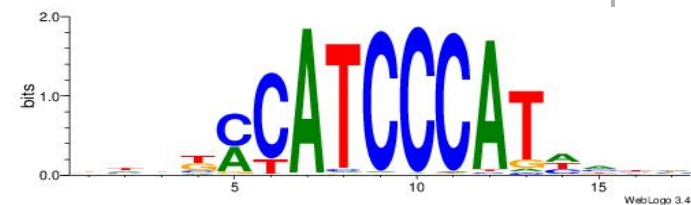
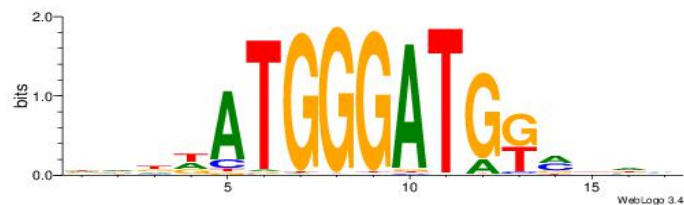
--CYBCCTCC-----

Original motif

Consensus sequence: DVDDATGGGATGKMDDV

Reverse complement motif

Consensus sequence: BDDYYCATCCCATDDBD



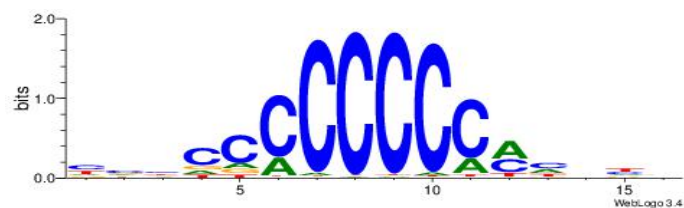
Motif ID: [UP00022](#)
 Motif name: Zfp740_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.0273549

Alignment:

HVBCCCCCCCCMHHHB
 ---CYBCCTCC-----

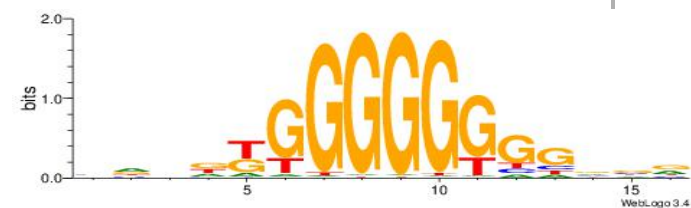
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGGBVD



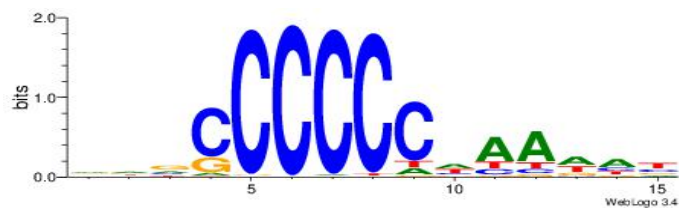
Motif ID: [UP00047](#)
 Motif name: Zbtb7b_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.0294721

Alignment:

VHWTTTHGGGGGGVDD
 -----GGAGGVMG-

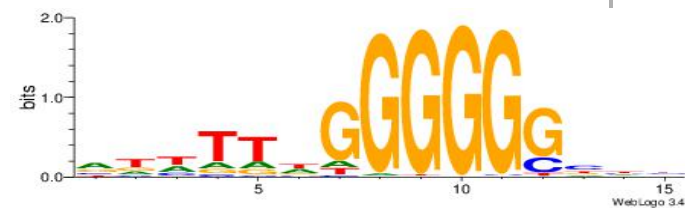
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

Consensus sequence: VHWTTTHGGGGGGVDD

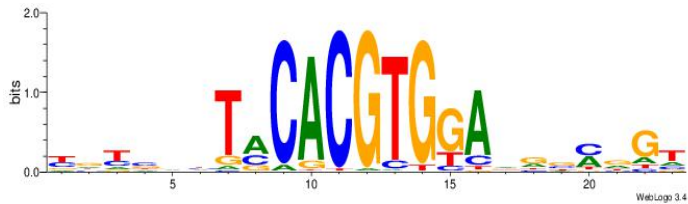


Motif ID: [UP00050](#)
 Motif name: Bhlhb2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3

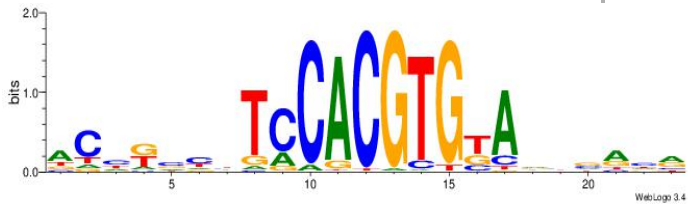
Number of overlap: 8
Similarity score: 0.0296935

Alignment:
YDYBDHTMCACGTGGADDBMDGT
-----GGAGGVMG--

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif
Consensus sequence: ACHRBHTCCACGTGYAHHBMHM



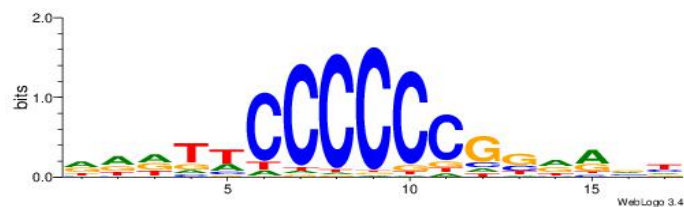
Motif ID: [UP00022](#)
Motif name: Zfp740_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 8
Number of overlap: 8
Similarity score: 0.0314233

Alignment:
HVKDCCGGGGGGWADDD
-----GGAGGVMG--

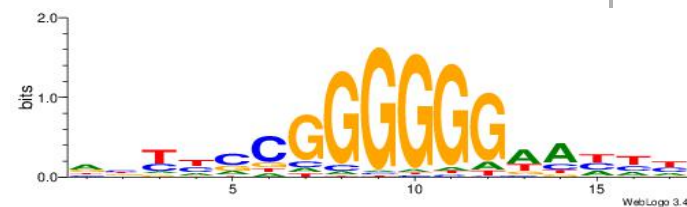
Original motif

Reverse complement motif

Consensus sequence: DDDTWCCCCCGGDRVH



Consensus sequence: HVKDCCGGGGGGWADDD



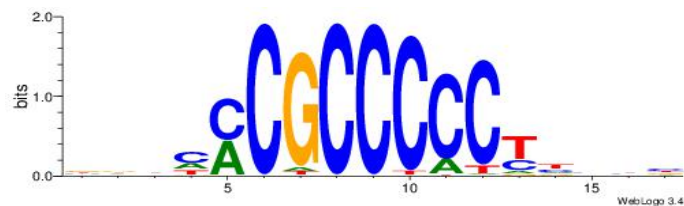
Motif ID: [UP00002](#)
Motif name: Sp4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0324346

Alignment:

BDHHMCGCCCCCTHVBB
-----CYBCCTCC-----

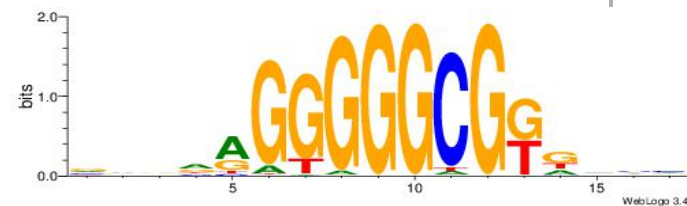
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



Dataset #: 1 **Motif ID: 7** **Motif name: Motif 7**

Original motif

Consensus sequence: ASASAGAA



Reverse complement motif

Consensus sequence: TTCTSTST



Best Matches for Motif ID 7 (Highest to Lowest)

Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

BDHDDADAGATAAGADHBDHVD

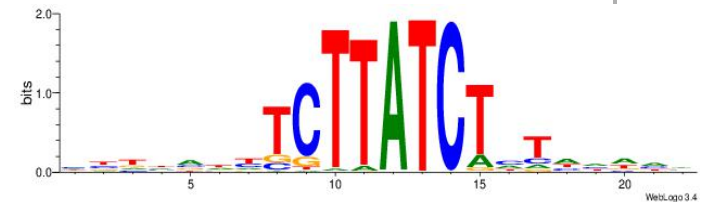
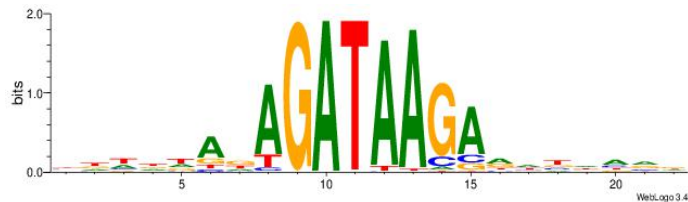
-----ASASAGAA-----

Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD

Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

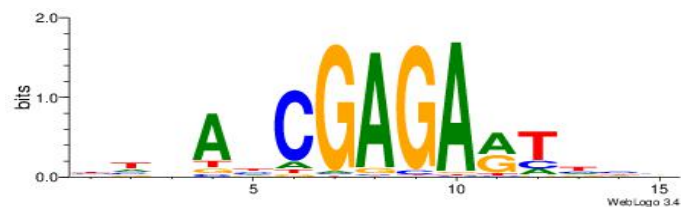


Motif ID: [UP00040](#)
 Motif name: Irf5_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.00562375

Alignment:
 BDAHCGAGARTHBV
 ---ASASAGAA----

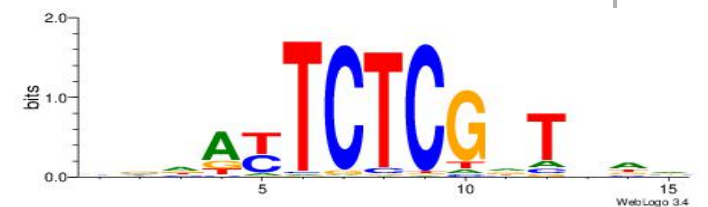
Original motif

Consensus sequence: BDAHCGAGARTHBV



Reverse complement motif

Consensus sequence: VBHAKTCTCGHTHHV



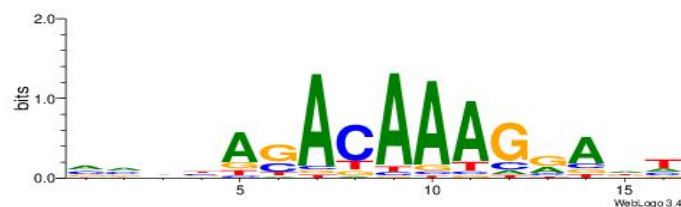
Motif ID: [UP00101](#)

Motif name: Sox12_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 8
 Similarity score: 0.0120605

Alignment:
 VVDBASACAAAGRADH
 --ASASAGAA-----

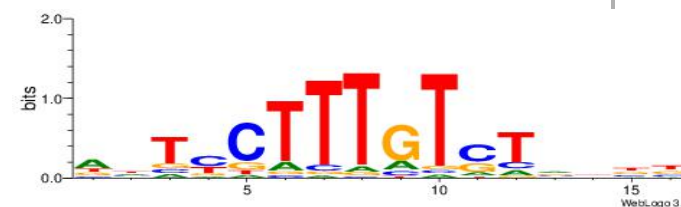
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID: [UP00018](#)
 Motif name: Irf4_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 8

Similarity score: 0.017471

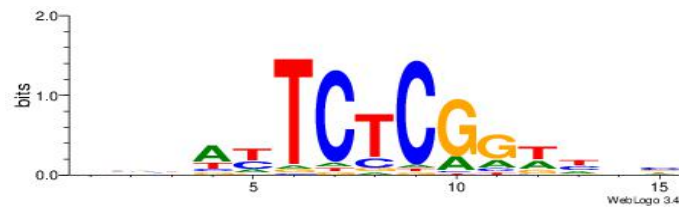
Alignment:

BHHWCCGAGAMTVVB

---ASASAGAA----

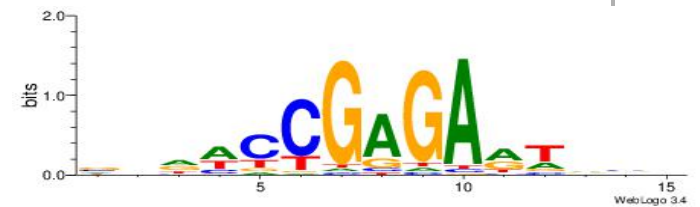
Original motif

Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif

Consensus sequence: BHHWCCGAGAMTVVB



Motif ID: [UP00090](#)

Motif name: Elf3_primary

Species: Mus musculus

Matching format of first motif: Reverse Complement

Matching format of second motif: Reverse Complement

Direction: Forward

Position number: 5

Number of overlap: 8

Similarity score: 0.018291

Alignment:

TDAMTTCCYYDTD

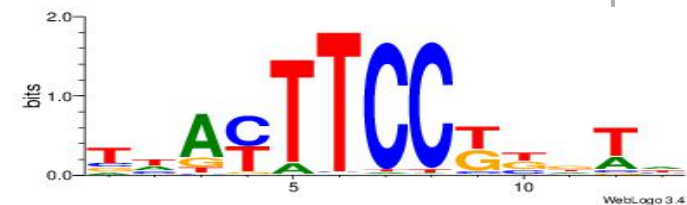
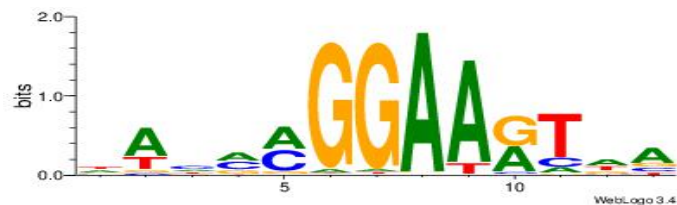
----TTCTSTST-

Original motif

Consensus sequence: DAHMMGGAARTDA

Reverse complement motif

Consensus sequence: TDAMTTCCYYDTD



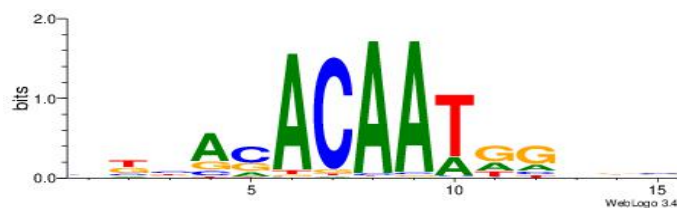
Motif ID: [UP00004](#)
 Motif name: Sox14_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 2
 Number of overlap: 8
 Similarity score: 0.0185351

Alignment:

BBDCMATTGTSTBRB
 -----TTCTSTST-

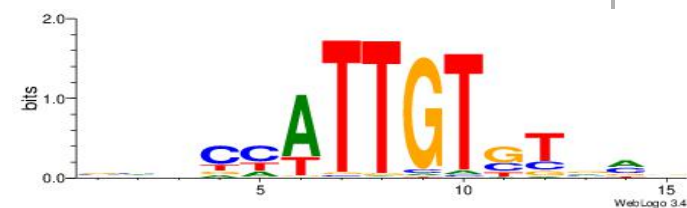
Original motif

Consensus sequence: BKBASACAATRGHBB



Reverse complement motif

Consensus sequence: BBDCMATTGTSTBRB



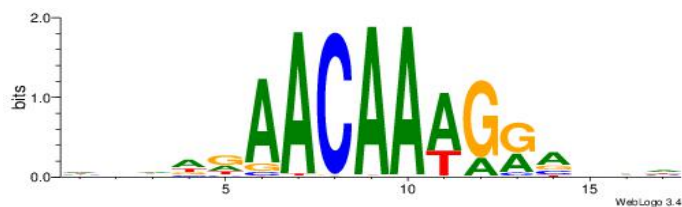
Motif ID: [UP00030](#)
 Motif name: Sox11_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.0187871

Alignment:

HBDDRAACAAAGRABHH
 -----ASASAGAA----

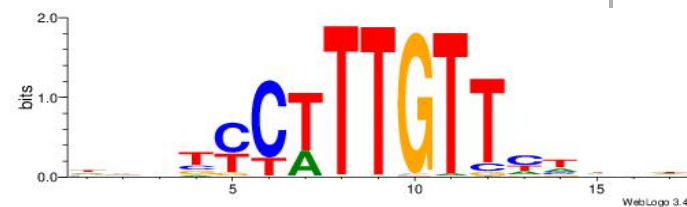
Original motif

Consensus sequence: HBDDRAACAAAGRABHH



Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



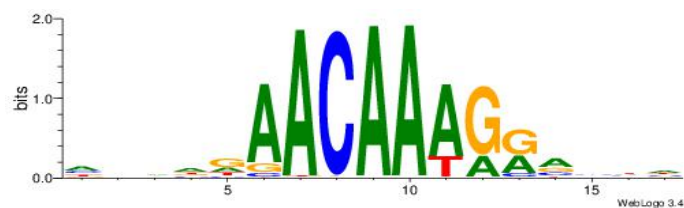
Motif ID: [UP00062](#)
 Motif name: Sox4_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 7

Number of overlap: 8
Similarity score: 0.0188246

Alignment:
HBDDDAACAAAGRVBHH
-----ASASAGAA---

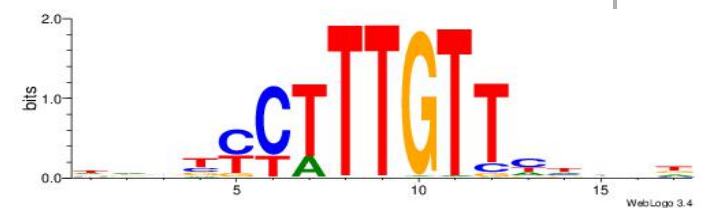
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTTHDDBH



Motif ID: [UP00409](#)
Motif name: Elf5
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 8
Similarity score: 0.0192614

Alignment:
BWAHSMGGAAGTWD
--ASASAGAA----

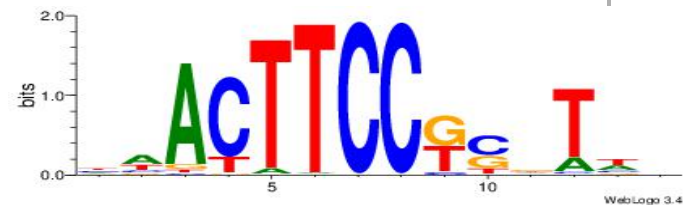
Original motif

Reverse complement motif

Consensus sequence: BWAHSMGGAAGTWD



Consensus sequence: DWACTTCCRSDTWV



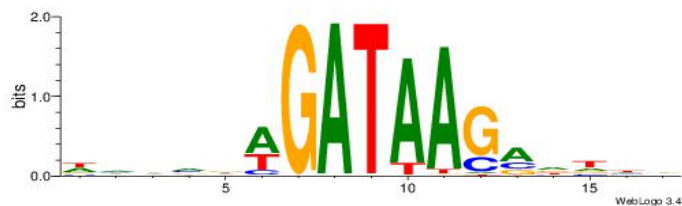
Motif ID: [UP00100](#)
Motif name: Gata6_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 8
Similarity score: 0.0192685

Alignment:

```
VHDDTCTTATCWHBDHD  
-----TTCTSTST---
```

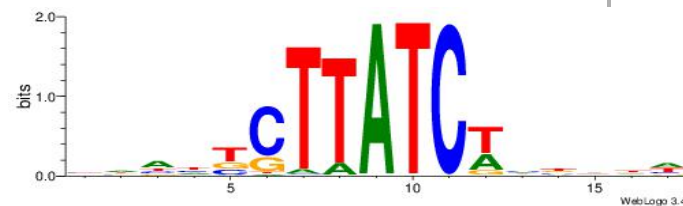
Original motif

Consensus sequence: DHDVDWGATAAGADDHV



Reverse complement motif

Consensus sequence: VHDDTCTTATCWHBDHD



Dataset #: 1 **Motif ID: 13** **Motif name: Motif 13**

Original motif

Consensus sequence: GAGRCAGR



Reverse complement motif

Consensus sequence: MCTGKCTC



Best Matches for Motif ID 13 (Highest to Lowest)

Motif ID:	UP00205
Motif name:	Pknox2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0

Alignment:

HAVSRCTGTCAATHB

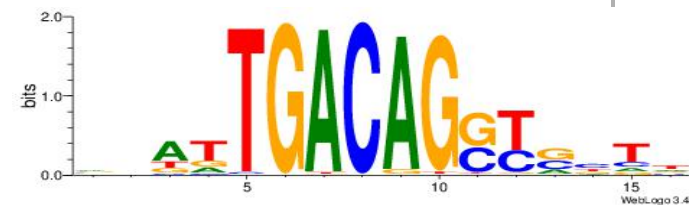
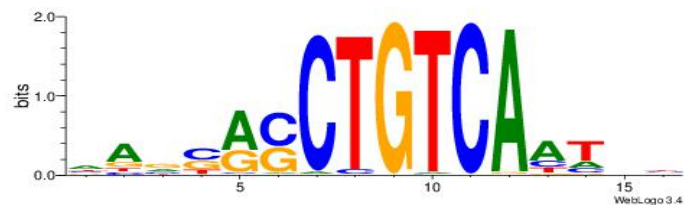
-----MCTGKCTC---

Original motif

Consensus sequence: HAVSRCTGTCAATHB

Reverse complement motif

Consensus sequence: VHATTGACAGSKSVTH

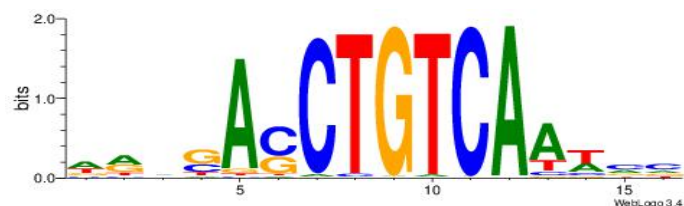


Motif ID: [UP00203](#)
 Motif name: Pknx1
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6
 Number of overlap: 8
 Similarity score: 0.0024357

Alignment:
 DRVSASCTGTCAAWVV
 -----MCTGKCTC---

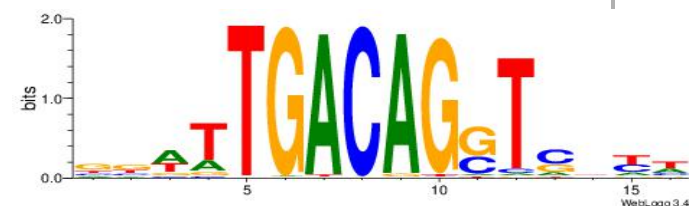
Original motif

Consensus sequence: DRVSASCTGTCAAWVV



Reverse complement motif

Consensus sequence: VVWTTGACAGSTSBKD



Motif ID: [UP00226](#)

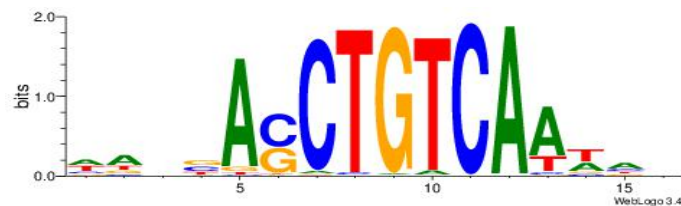
Motif name: Mrg1
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6
 Number of overlap: 8
 Similarity score: 0.00532831

Alignment:

WAVBASCTGTCAAWHB
 -----MCTGKCTC---

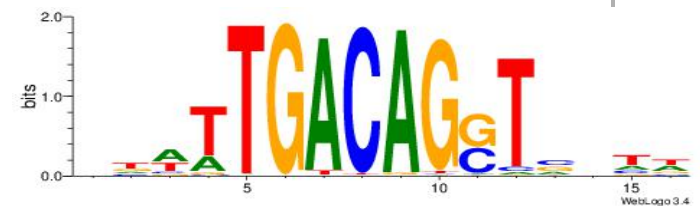
Original motif

Consensus sequence: WAVBASCTGTCAAWHB



Reverse complement motif

Consensus sequence: BHWTTGACAGSTBBTW



Motif ID: [UP00210](#)
 Motif name: Mrg2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6
 Number of overlap: 8

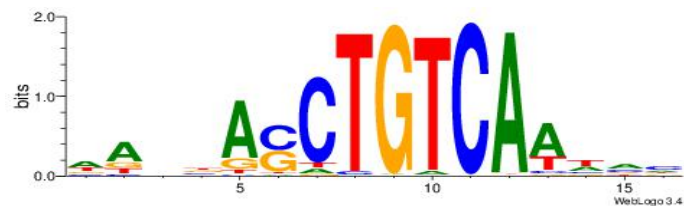
Similarity score: 0.00847279

Alignment:

DADBASCTGTCAAHVH
-----MCTGKCTC---

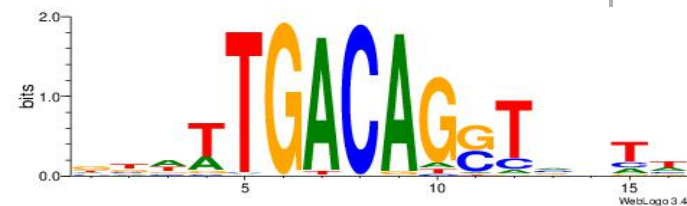
Original motif

Consensus sequence: DADBASCTGTCAAHVH



Reverse complement motif

Consensus sequence: DBHTTGACAGSTVDTD



Motif ID: [UP00186](#)
Motif name: Meis1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.00869293

Alignment:

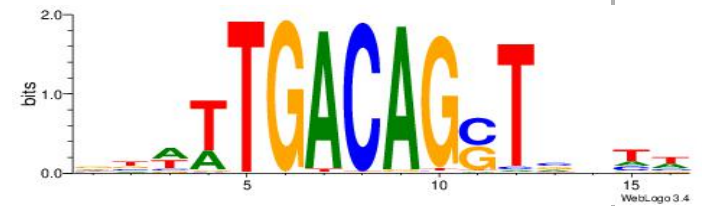
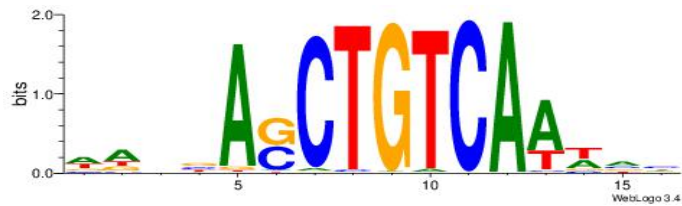
WAVBASCTGTCAAWVH
-----MCTGKCTC---

Original motif

Consensus sequence: WAVBASCTGTCAAWVH

Reverse complement motif

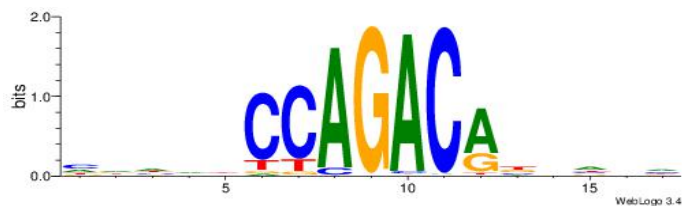
Consensus sequence: DBWTTGACAGSTBVTW



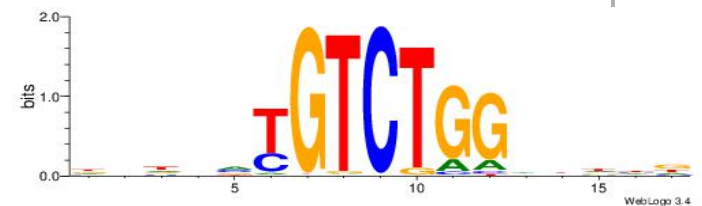
Motif ID: [UP00000](#)
 Motif name: Smad3_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.00919674

Alignment:
 HDHDDCCAGACABBHVH
 -----GAGRCAGR---

Original motif
 Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif
 Consensus sequence: HVHBVTGTCTGGDDHDD



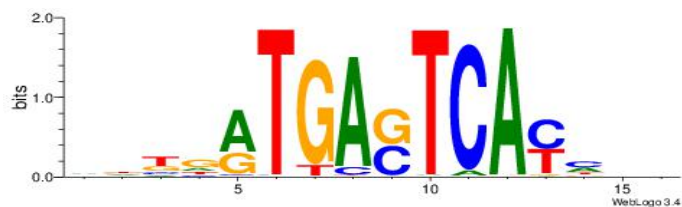
Motif ID: [UP00103](#)
 Motif name: Jundm2_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 6
 Number of overlap: 8
 Similarity score: 0.00968214

Alignment:

HDDKTGASTCAKHRDB
 -----GAGRCAGR---

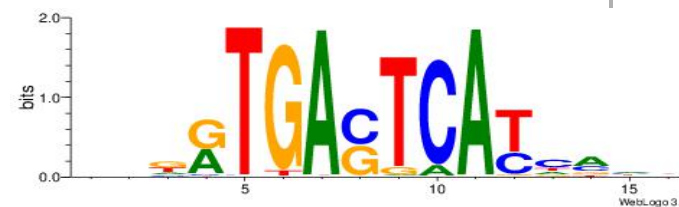
Original motif

Consensus sequence: VDKDRTGASTCAYHDH



Reverse complement motif

Consensus sequence: HDDKTGASTCAKHRDB



Motif ID: [UP00095](#)
 Motif name: Zfp691_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3

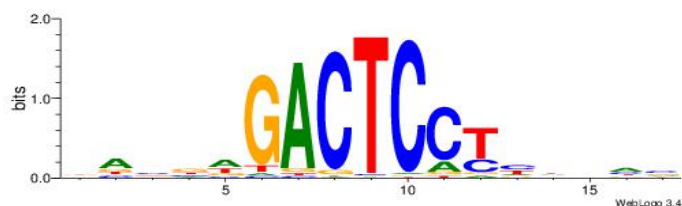
Number of overlap: 8
Similarity score: 0.0110909

Alignment:

DABBWGACTCCTHDVHV
--MCTGKCTC-----

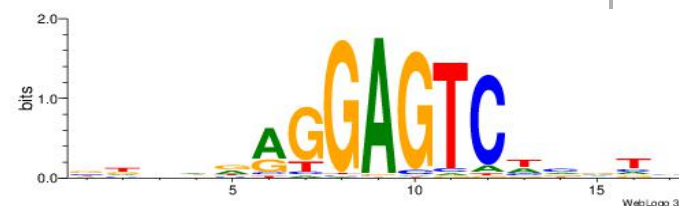
Original motif

Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD



Motif ID: [UP00122](#)
Motif name: Tgif1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 8
Similarity score: 0.0125857

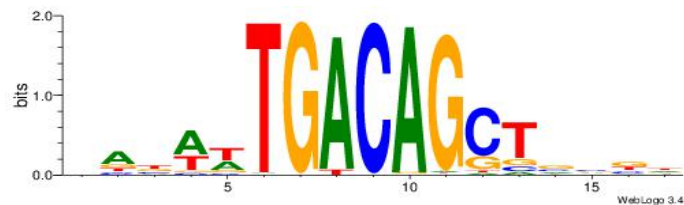
Alignment:

DABWWTGACAGCTVVBD
----GAGRCAGR-----

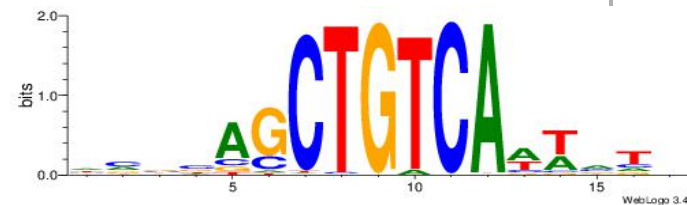
Original motif

Reverse complement motif

Consensus sequence: DABWWTGACAGCTVVBD



Consensus sequence: DBVVAGCTGTCAWWVTH



Motif ID: [UP00258](#)
Motif name: Tgif2
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 8
Similarity score: 0.0145433

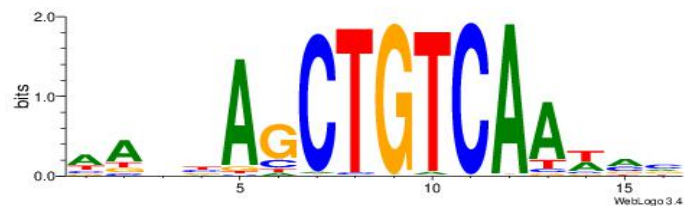
Alignment:

AABBAGCTGTCAAWVV

-----MCTGKCTC---

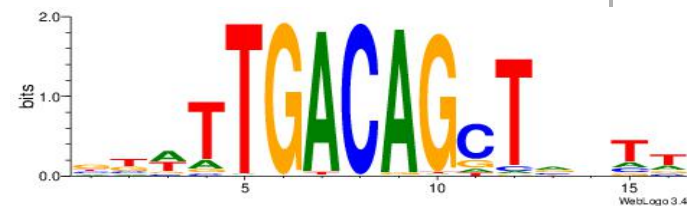
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Dataset #: 1 **Motif ID: 14** **Motif name: Motif 14**

Original motif

Consensus sequence: GCRCACRC



Reverse complement motif

Consensus sequence: GKGTGKGC



Best Matches for Motif ID 14 (Highest to Lowest)

Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0

Alignment:

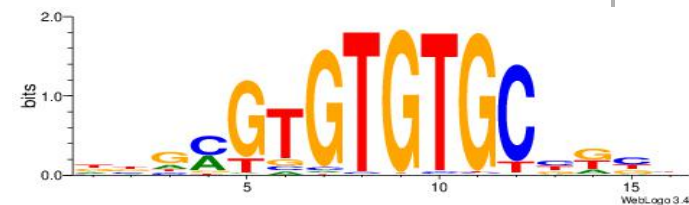
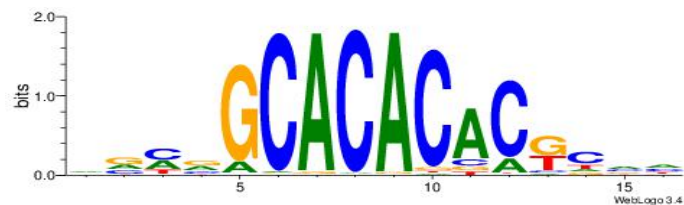
```
DVMVGCACACACKCVH
-----GCRCACRC-----
```

Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD

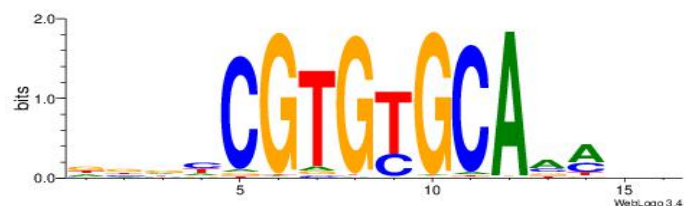


Motif ID: [UP00097](#)
 Motif name: Mtf1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.0261244

Alignment:
 HDYTTGCACACGDHBH
 -----GCRACRC---

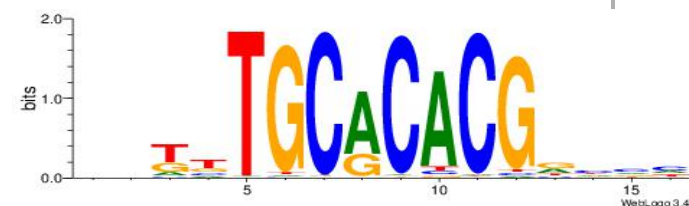
Original motif

Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH



Motif ID: [UP00538](#)

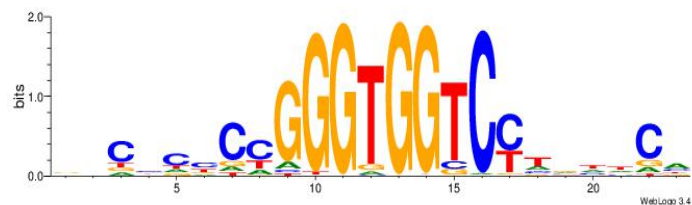
Motif name: Gli1_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 9
 Number of overlap: 8
 Similarity score: 0.0329776

Alignment:

BHCBCBCCGGGTGGTCYHVHDCH
 -----GKGTGKGC-----

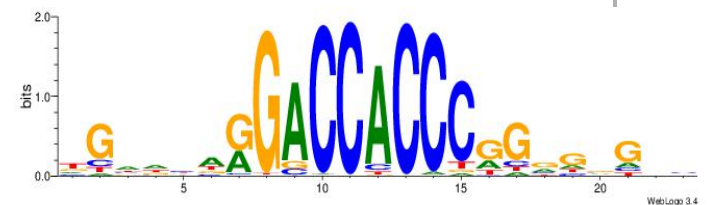
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Motif ID: [UP00540](#)
 Motif name: Gli3_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 9
 Number of overlap: 8

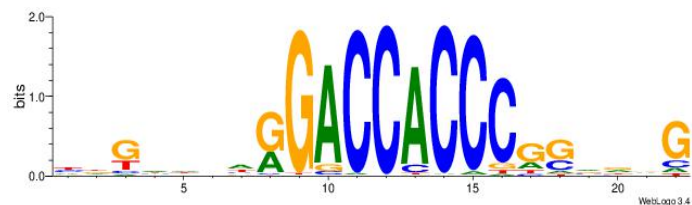
Similarity score: 0.0341116

Alignment:

CVHBSCGGGTGGTCMHVHHCDH
-----GKGTGKGC-----

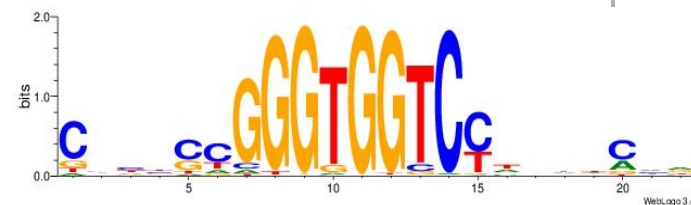
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



Motif ID: [UP00026](#)
Motif name: Zscan4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0351584

Alignment:

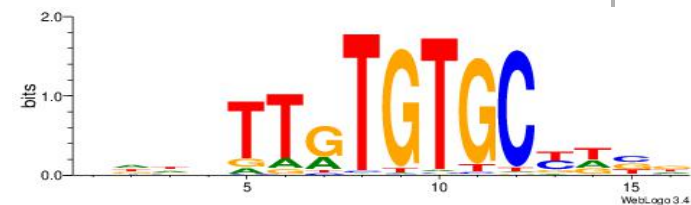
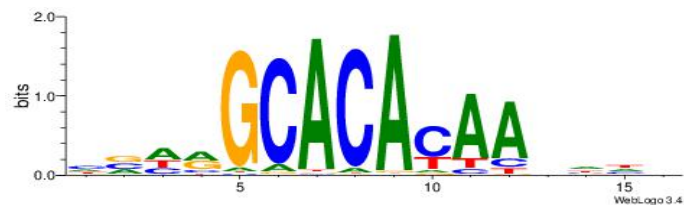
HVHRGCACACAAHHHV
----GCRACACRC----

Original motif

Consensus sequence: HVHRGCACACAAHHHV

Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD



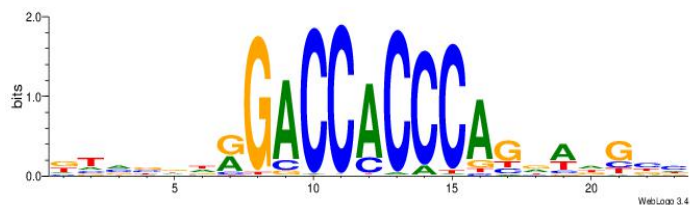
Motif ID: [UP00539](#)
 Motif name: Gli2_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 9
 Number of overlap: 8
 Similarity score: 0.0353979

Alignment:

DBCDWHCTGGGTGGTCMDHBBAH
 -----GKGTGKGC-----

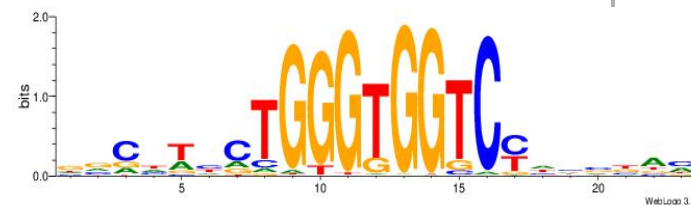
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



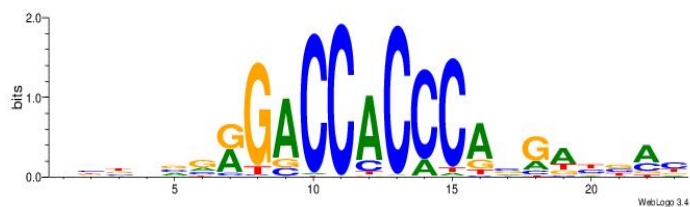
Motif ID: [UP00538](#)
 Motif name: Gli1_v015681_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 8
 Number of overlap: 8
 Similarity score: 0.0359411

Alignment:

BTBVTCTVGGGTGGTCMVVDVBB
 -----GKGTGKGC-----

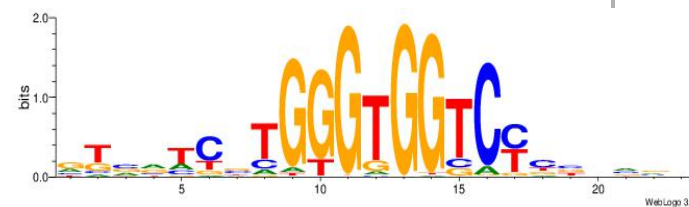
Original motif

Consensus sequence: BBBDVVRGACCACCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCTVGGGTGGTCMVVDVBB

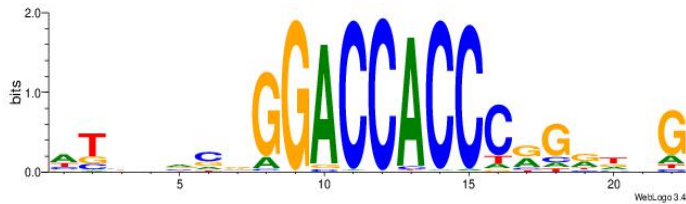


Motif ID: [UP00539](#)
 Motif name: Gli2_v015681_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 9

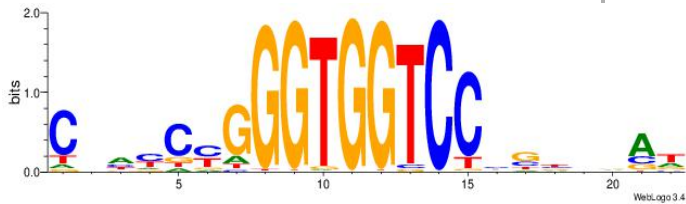
Number of overlap: 8
Similarity score: 0.0360788

Alignment:
CBDMCMGGGTGGTCCHVBVBAH
-----GKGTGKGC-----

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



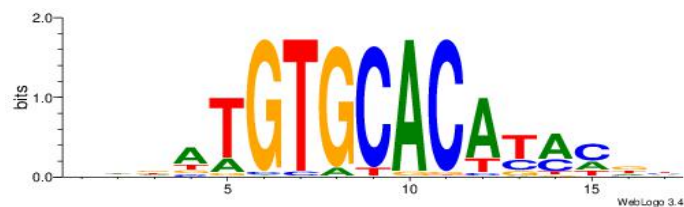
Motif ID: [UP00042](#)
Motif name: Gm397_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 8
Number of overlap: 8
Similarity score: 0.0376684

Alignment:
HHDATGTGCACATAMDH
-----GCRCACRC--

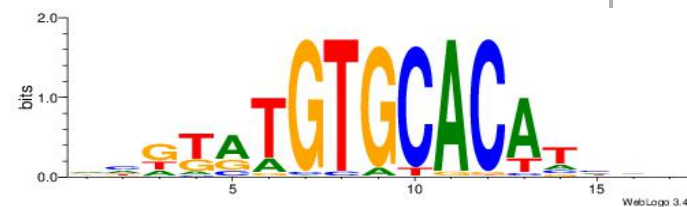
Original motif

Reverse complement motif

Consensus sequence: HHDATGTGCACATAMDH



Consensus sequence: HHRTATGTGCACATHHD



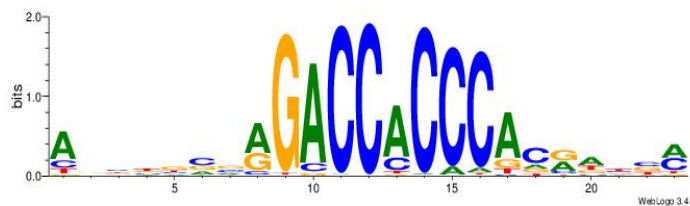
Motif ID: [UP00540](#)
Motif name: Gli3_v015681_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 9
Number of overlap: 8
Similarity score: 0.0381663

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT  
-----GKGTGKGC-----
```

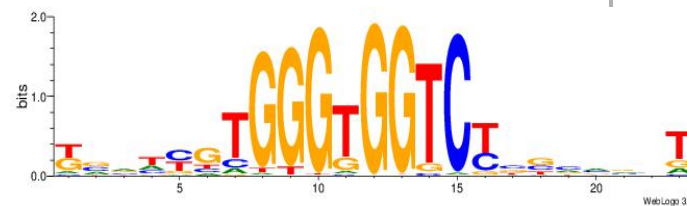
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Dataset #: 2 **Motif ID: 18** **Motif name: Motif 18**

Original motif

Consensus sequence: AMACA



Reverse complement motif

Consensus sequence: TGTGT



Best Matches for Motif ID 18 (Highest to Lowest)

Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	5
Similarity score:	0

Alignment:

DVMVGCACACACKCVH

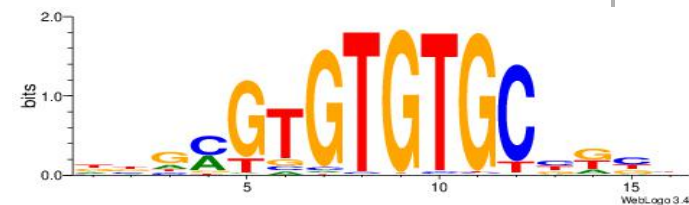
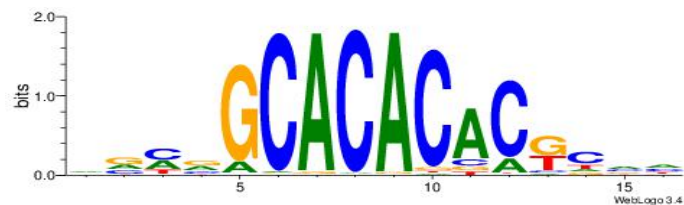
-----AMACA-----

Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD

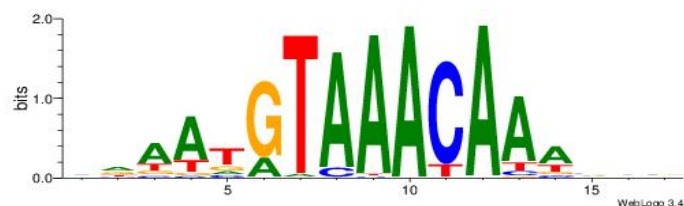


Motif ID: [UP00025](#)
 Motif name: Foxk1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 6
 Number of overlap: 5
 Similarity score: 0.00605402

Alignment:
 DDAATGTAAACAAVVB
 -----AMACA-----

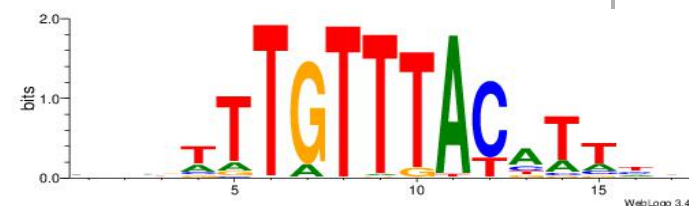
Original motif

Consensus sequence: DDAATGTAAACAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



Motif ID: [UP00041](#)

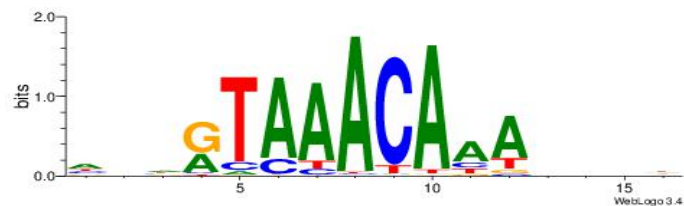
Motif name: Foxj1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6
 Number of overlap: 5
 Similarity score: 0.00753267

Alignment:

HDHRTAAACAAHDDD
 -----AMACA-----

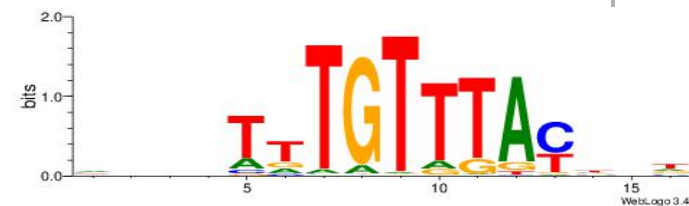
Original motif

Consensus sequence: HDHRTAAACAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDDH



Motif ID: [UP00039](#)
 Motif name: Foxj3_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 8
 Number of overlap: 5

Similarity score: 0.00965634

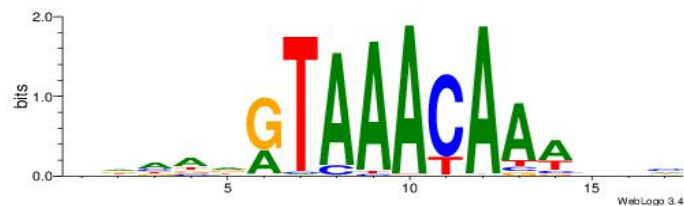
Alignment:

HDHADGTAAACAAVVH

-----AMACA-----

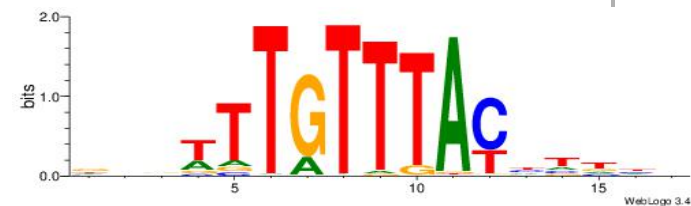
Original motif

Consensus sequence: HDHADGTAAACAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTCACDTHDH



Motif ID: [UP00061](#)
Motif name: Foxl1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 5
Similarity score: 0.00989492

Alignment:

DWAATRTAAACAAWVVB

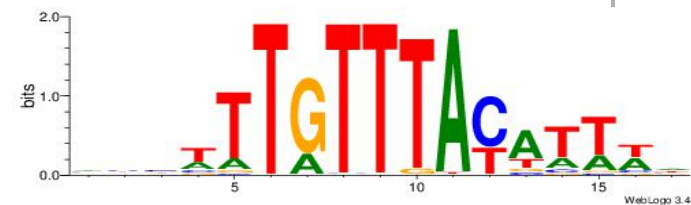
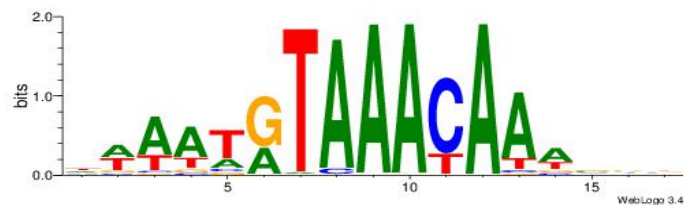
-----AMACA-----

Original motif

Consensus sequence: DWAATRTAAACAAWVVB

Reverse complement motif

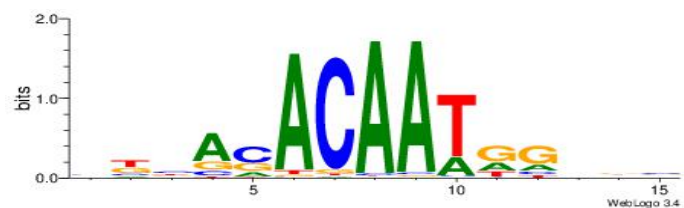
Consensus sequence: VVVWTTGTTTAMATTWD



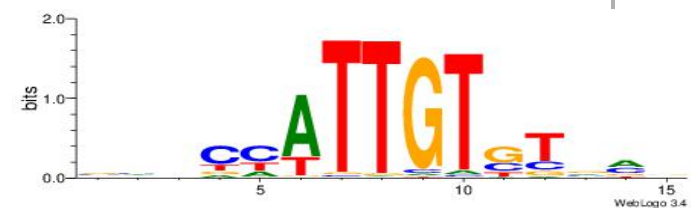
Motif ID: [UP000004](#)
 Motif name: Sox14_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 5
 Similarity score: 0.0116453

Alignment:
 BBDCMATTGTSTBRB
 -----TGTRT---

Original motif
 Consensus sequence: BKBASACAATRGHBB



Reverse complement motif
 Consensus sequence: BBDCMATTGTSTBRB



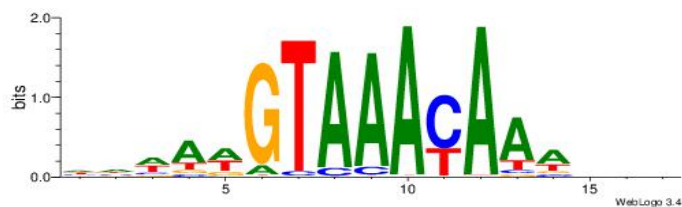
Motif ID: [UP00073](#)
 Motif name: Foxa2_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 6
 Number of overlap: 5
 Similarity score: 0.0143122

Alignment:

HHWAWGTAAAYAAVDB
 -----AMACA-----

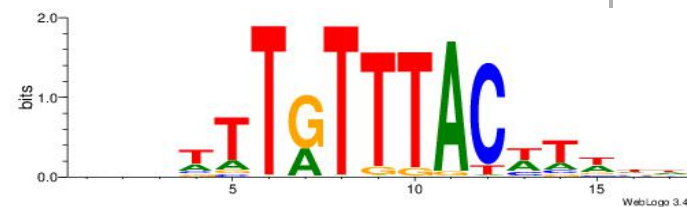
Original motif

Consensus sequence: HHWAWGTAAAYAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: [UP00026](#)
 Motif name: Zscan4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 6

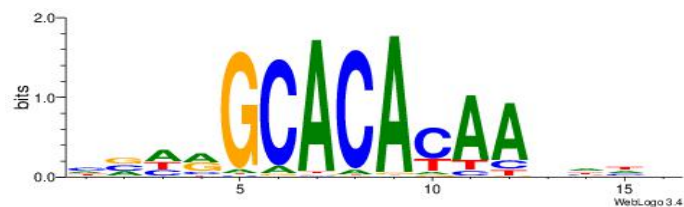
Number of overlap: 5
Similarity score: 0.0153228

Alignment:

BHHHTTGTGTGCKHVD
-----TGTRT-----

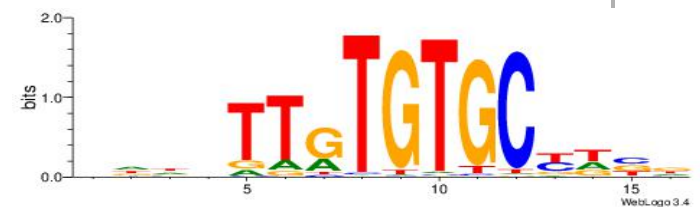
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD



Motif ID: [UP00011](#)
Motif name: Irf6_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 5
Similarity score: 0.024195

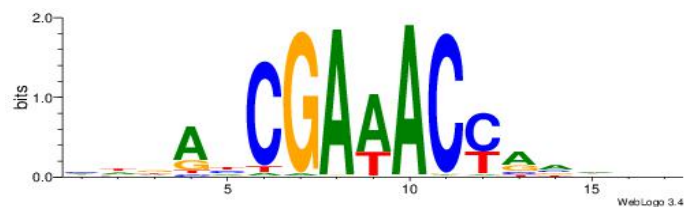
Alignment:

DHDBTKGTTTCGHTHDD
-----TGTRT-----

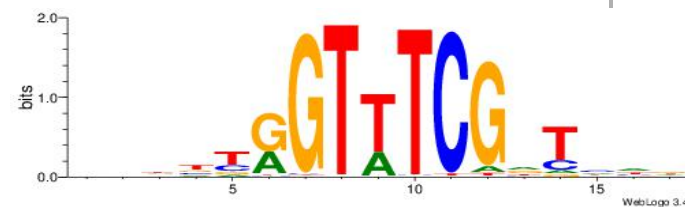
Original motif

Reverse complement motif

Consensus sequence: HDDAHCGAAACYAVDDD



Consensus sequence: DHDBTKGTTTCGHTHDD



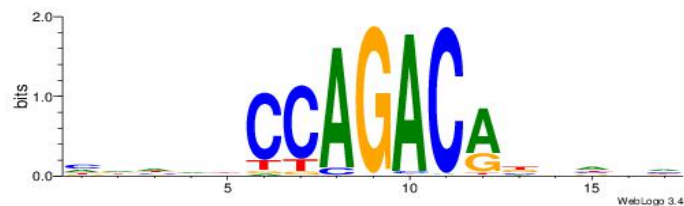
Motif ID: [UP00000](#)
Motif name: Smad3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 5
Similarity score: 0.0255974

Alignment:

HVHBVTGTCTGGDDHDD
-----TGTRT-----

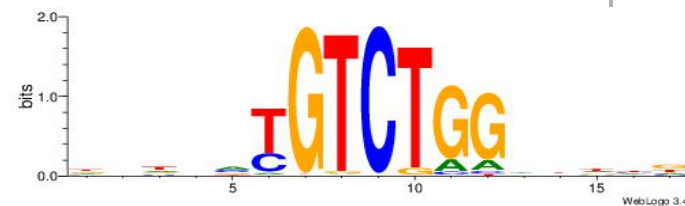
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



Dataset #: 2 **Motif ID: 20** **Motif name: Motif 20**

Original motif

Consensus sequence: CTCTGY



Reverse complement motif

Consensus sequence: KCAGAG



Best Matches for Motif ID 20 (Highest to Lowest)

Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0

Alignment:

BBBAVTGCAGTGBBVDD

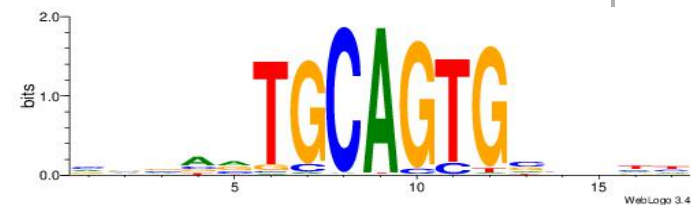
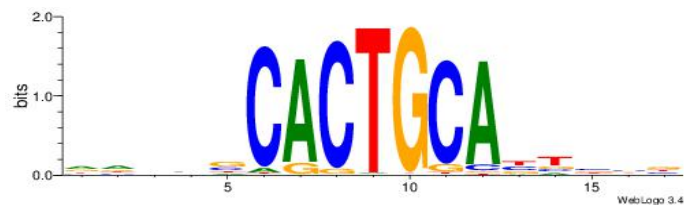
-----KCAGAG-----

Original motif

Consensus sequence: DDBBBCACTGCABTBBB

Reverse complement motif

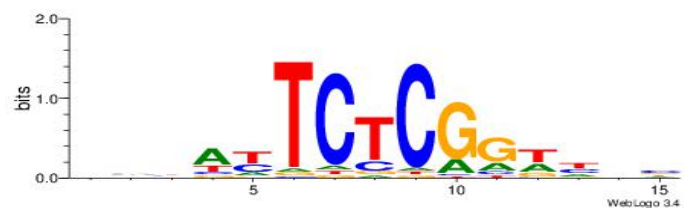
Consensus sequence: BBBAVTGCAGTGBBVDD



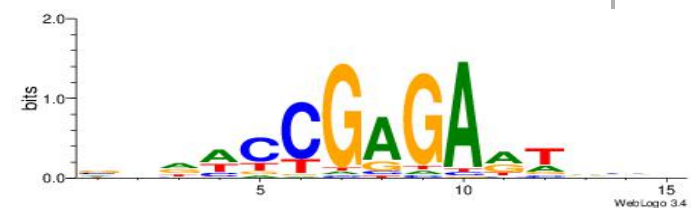
Motif ID: [UP00018](#)
 Motif name: Irf4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 6
 Similarity score: 0.00610915

Alignment:
 BHHWCCGAGAMTVVB
 ---KCAGAG-----

Original motif
 Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif
 Consensus sequence: BHHWCCGAGAMTVVB



Motif ID: [UP00095](#)

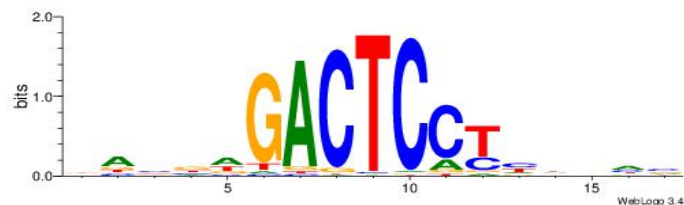
Motif name: Zfp691_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 6
 Similarity score: 0.00648219

Alignment:

VHBDDAGGAGTCWBBTD
 ----KCAGAG-----

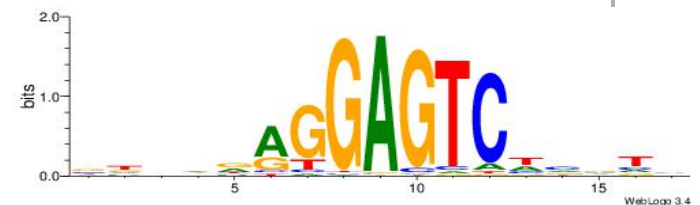
Original motif

Consensus sequence: DABBWGACTCCTHDTVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD



Motif ID: [UP00006](#)
 Motif name: Zic3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 6

Similarity score: 0.00853125

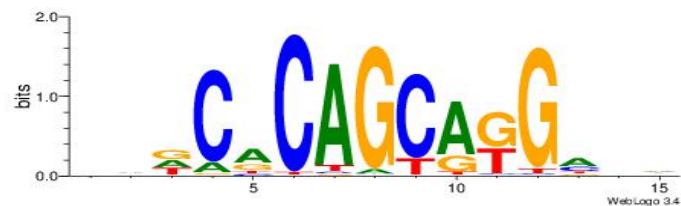
Alignment:

DVHCYTGCTGTGHDH

-----CTCTGY--

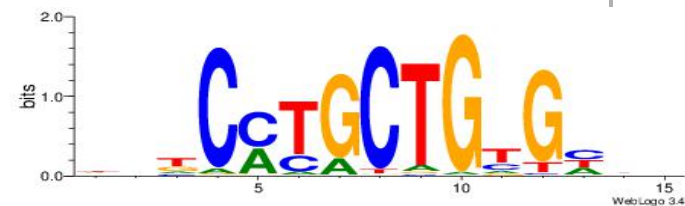
Original motif

Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



Motif ID: [UP00007](#)

Motif name: Egr1_secondary

Species: Mus musculus

Matching format of first motif: Original Motif

Matching format of second motif: Reverse Complement

Direction: Backward

Position number: 2

Number of overlap: 6

Similarity score: 0.00895004

Alignment:

BHHDTCCTCACTCBDBV

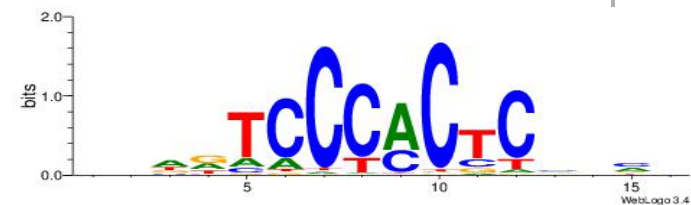
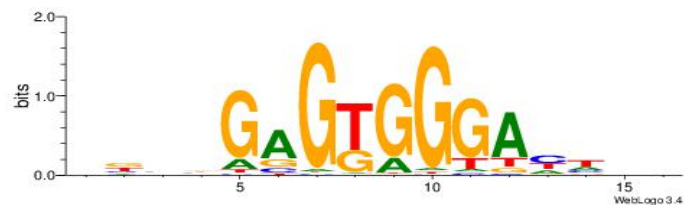
-----CTCTGY--

Original motif

Consensus sequence: BBHBGAGTGGGAHHDB

Reverse complement motif

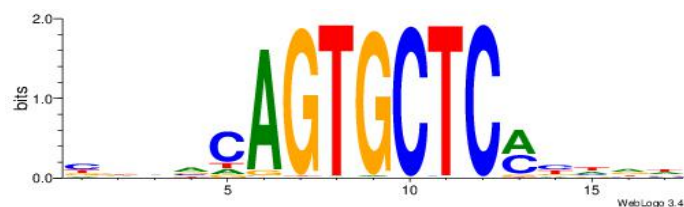
Consensus sequence: BHHDTCCTCACTCBDBV



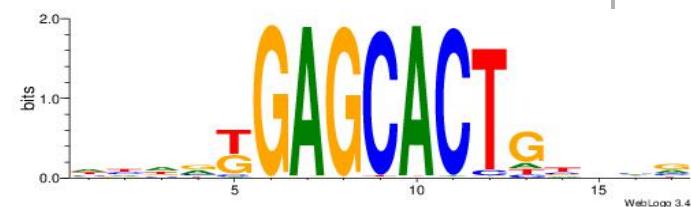
Motif ID: [UP00095](#)
 Motif name: Zfp691_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 9
 Number of overlap: 6
 Similarity score: 0.00955889

Alignment:
 DDHBYGAGCACTGBHBB
 -----CTCTGY---

Original motif
 Consensus sequence: BDHVCAGTGCTCMBHDD



Reverse complement motif
 Consensus sequence: DDHBYGAGCACTGBHBB



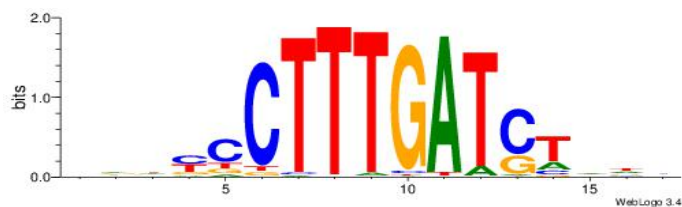
Motif ID: [UP00067](#)
 Motif name: Lef1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 6
 Number of overlap: 6
 Similarity score: 0.0106184

Alignment:

VDDAGATCAAAGGKDDD
 -----KCAGAG-----

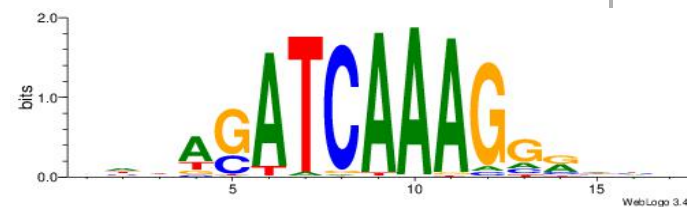
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



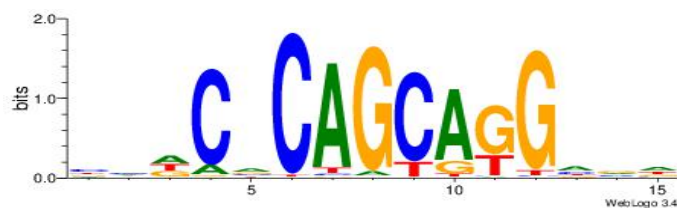
Motif ID: [UP00102](#)
 Motif name: Zic1_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 8

Number of overlap: 6
Similarity score: 0.0122635

Alignment:
BHDCVCAGCAGGHVD
--KCAGAG-----

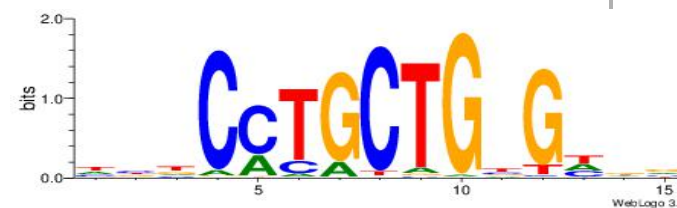
Original motif

Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif

Consensus sequence: DVHCCTGCTGBGDDDB



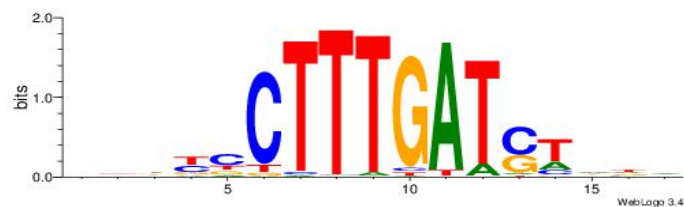
Motif ID: [UP00083](#)
Motif name: Tcf7l2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.0131237

Alignment:
BDDASATCAAAGMDDD
-----KCAGAG-----

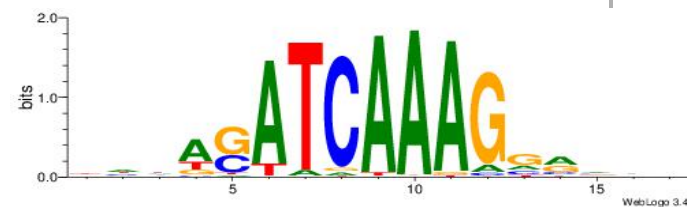
Original motif

Reverse complement motif

Consensus sequence: DDDYCCTTTGATSTDDV



Consensus sequence: BDDASATCAAAGGMDDD

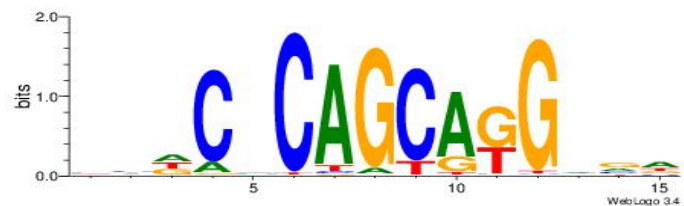


Motif ID: [UP00057](#)
Motif name: Zic2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 6
Similarity score: 0.0136526

Alignment:
HHDCVCAGCAKGVVD
--KCAGAG-----

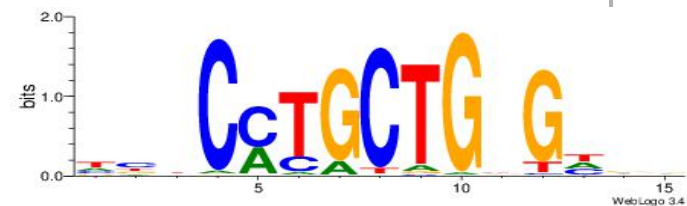
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD



Dataset #: 2 **Motif ID: 21** **Motif name: Motif 21**

Original motif

Consensus sequence: ATKTM



Reverse complement motif

Consensus sequence: RARAT



Best Matches for Motif ID 21 (Highest to Lowest)

Motif ID:	UP00080
Motif name:	Gata5_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	5
Similarity score:	0

Alignment:

VVBHRAGATATCWDHBB

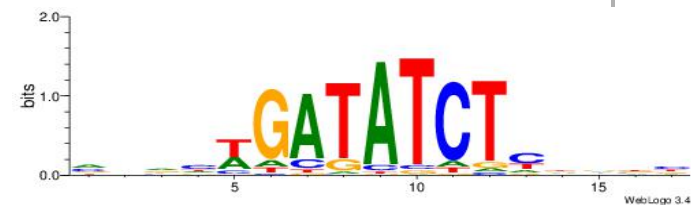
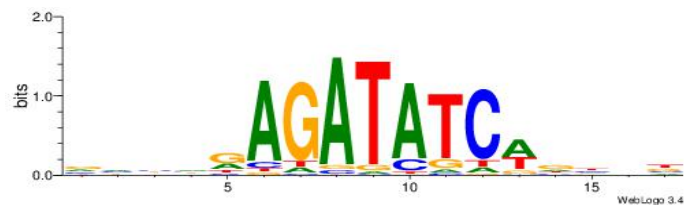
-----RARAT-----

Original motif

Consensus sequence: VVBHRAGATATCWDHBB

Reverse complement motif

Consensus sequence: VVHHWGATATCTMHBBV

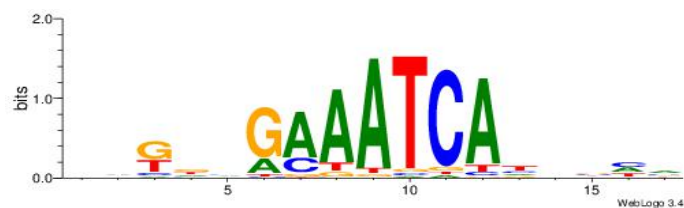


Motif ID: [UP00148](#)
 Motif name: Hdx
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 6
 Number of overlap: 5
 Similarity score: 0.00279496

Alignment:
 BDBDHTGATTTC DHYDD
 -----ATKTM-----

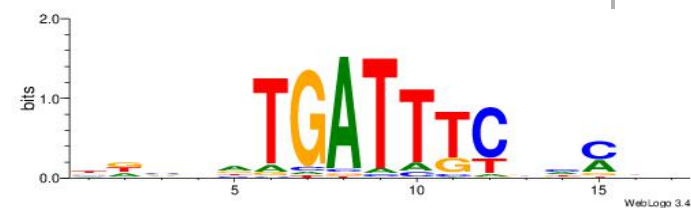
Original motif

Consensus sequence: DDKDHGAAATCAHHBHV



Reverse complement motif

Consensus sequence: BDBDHTGATTTC DHYDD



Motif ID: [UP00032](#)

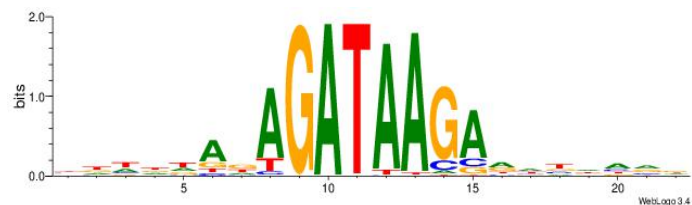
Motif name: Gata3_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 12
 Number of overlap: 5
 Similarity score: 0.00967655

Alignment:

BDHDDADAGATAAGADHBDHVD
 -----RARAT-----

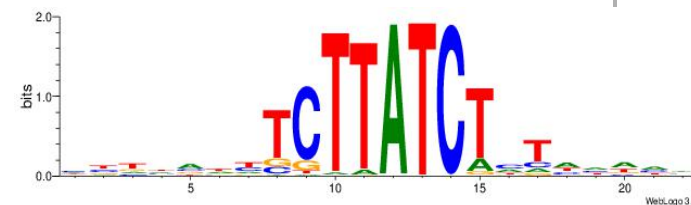
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHVD



Motif ID: [UP00250](#)
 Motif name: Irx5
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 8
 Number of overlap: 5

Similarity score: 0.0116566

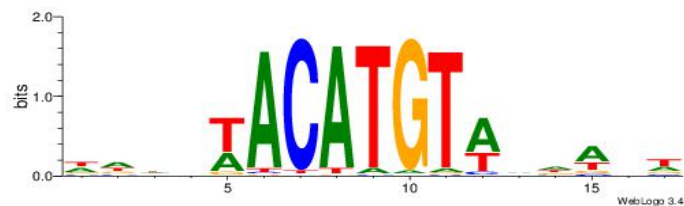
Alignment:

DDDHWACATGTWHDABW

-----ATKTM-----

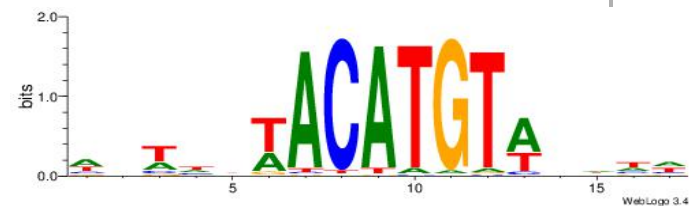
Original motif

Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif

Consensus sequence: WVTDPWACATGTWHD



Motif ID: [UP00236](#)
Motif name: Irx2
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 5
Similarity score: 0.0120196

Alignment:

WDDDTACATGTADDWBW

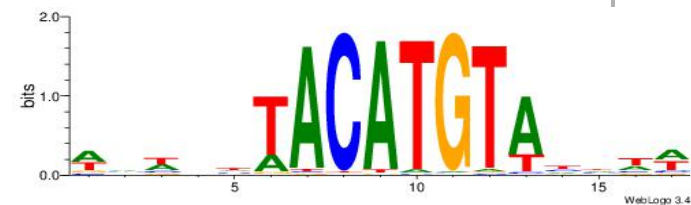
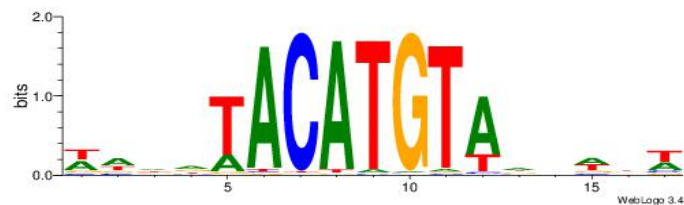
-----ATKTM-----

Original motif

Consensus sequence: WDDDTACATGTADDWBW

Reverse complement motif

Consensus sequence: WVWDDTACATGTADDW

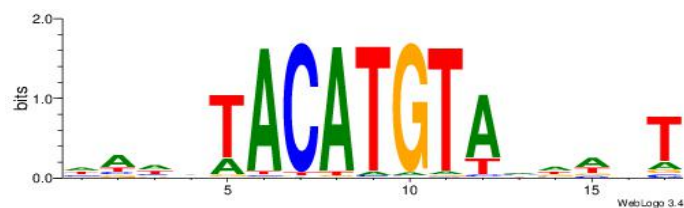


Motif ID: [UP00150](#)
 Motif name: Irx6
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 6
 Number of overlap: 5
 Similarity score: 0.0120601

Alignment:
 HAHDTACATGTAVDWHT
 -----ATKTM-----

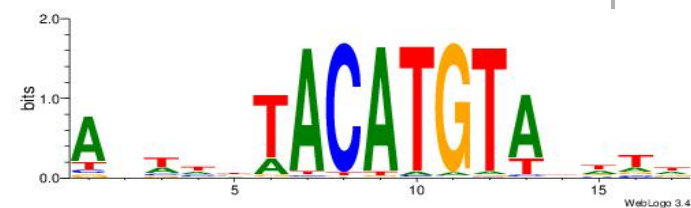
Original motif

Consensus sequence: HAHDTACATGTAVDWHT



Reverse complement motif

Consensus sequence: AHWDBTACATGTADHTH

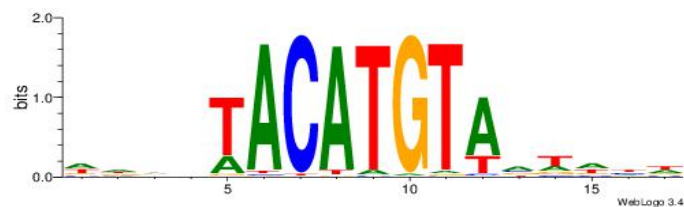


Motif ID: [UP00223](#)
 Motif name: Irx3_2226.1
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 8
 Number of overlap: 5
 Similarity score: 0.0124884

Alignment:
 DDDHTACATGTAVWDHD
 -----ATKTM-----

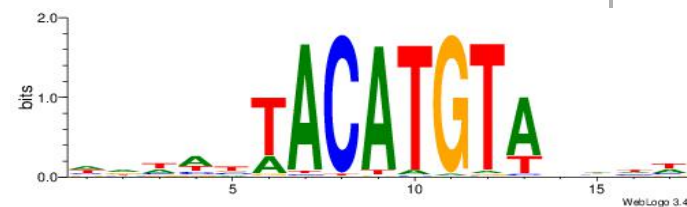
Original motif

Consensus sequence: DDDHTACATGTAVWDHD



Reverse complement motif

Consensus sequence: DHDWBTACATGTAHDDD



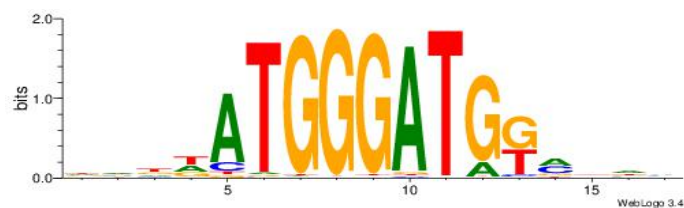
Motif ID: [UP00033](#)
 Motif name: Zfp410_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 10

Number of overlap: 5
Similarity score: 0.0150044

Alignment:
DVDDATGGGATGKMDDV
-----ATKTM---

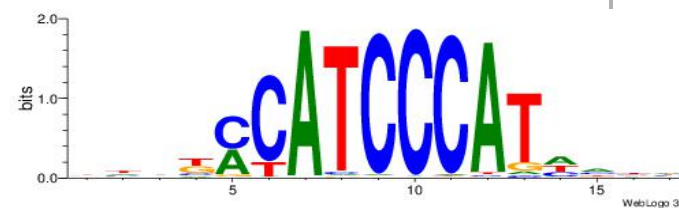
Original motif

Consensus sequence: DVDDATGGGATGKMDDV



Reverse complement motif

Consensus sequence: BDDYYCATCCCATDDBD



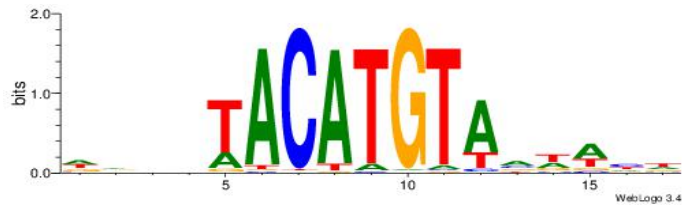
Motif ID: [UP00223](#)
Motif name: Irx3_0920.1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 5
Similarity score: 0.0150192

Alignment:
DDDDTACATGTAVWWHD
-----ATKTM-----

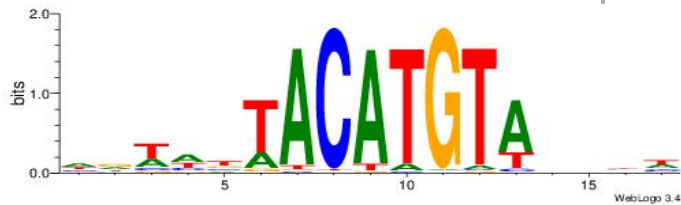
Original motif

Reverse complement motif

Consensus sequence: DDDDTACATGTAVVWHHD



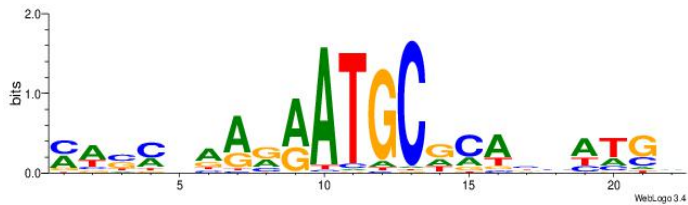
Consensus sequence: DDWWBTACATGTADDDD



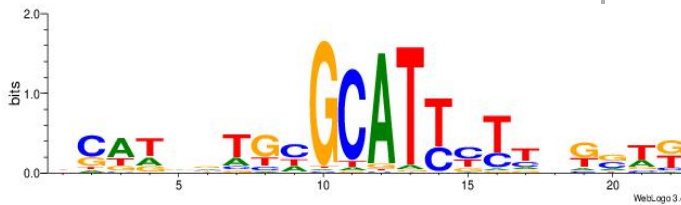
Motif ID: [UP00528](#)
Motif name: Foxm1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 5
Similarity score: 0.0166075

Alignment:
MWSMBAARRATGCD CABHATGD
-----RARAT-----

Original motif
Consensus sequence: MWSMBAARRATGCD CABHATGD



Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Dataset #: 3 **Motif ID: 30** **Motif name: ZEB1**

Original motif

Consensus sequence: CACCTD



Reverse complement motif

Consensus sequence: HAGGTG



Best Matches for Motif ID 30 (Highest to Lowest)

Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0

Alignment:

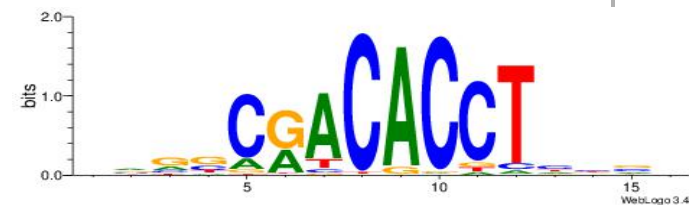
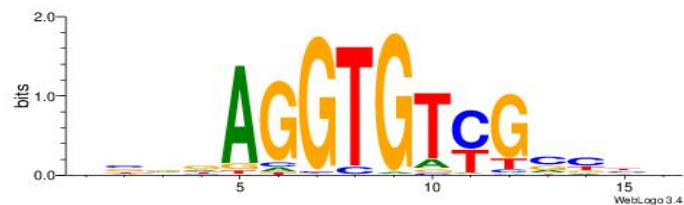
```
VVBVCKACACCTHVBV
-----CACCTD----
```

Original motif

Consensus sequence: VBVDAGGTGTYGVBBV

Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV

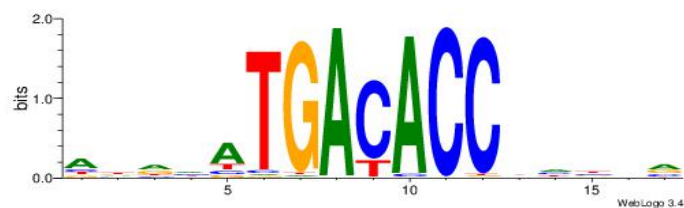


Motif ID: [UP00199](#)
 Motif name: Six4
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 6
 Similarity score: 0.00433068

Alignment:
 BBVHVGGTGTCTHDDT
 ---HAGGTG-----

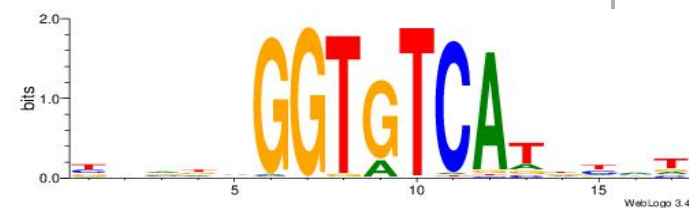
Original motif

Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif

Consensus sequence: BBVHVGGTGTCTHDDT



Motif ID: [UP00068](#)

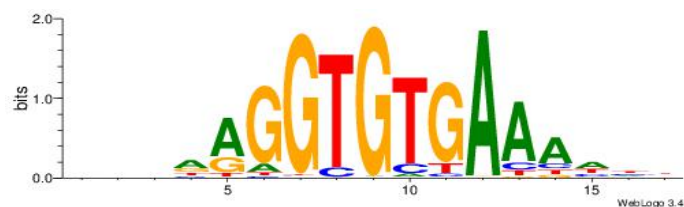
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.00524081

Alignment:

```
HHHTTTCACACCTDHBV
-----CACCTD----
```

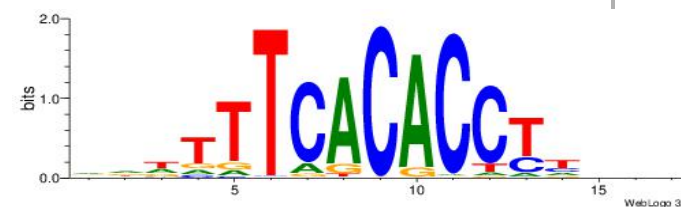
Original motif

Consensus sequence: BVHDAGGTGTGAAHHH



Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV



Motif ID:	UP00046
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	6

Similarity score: 0.00911301

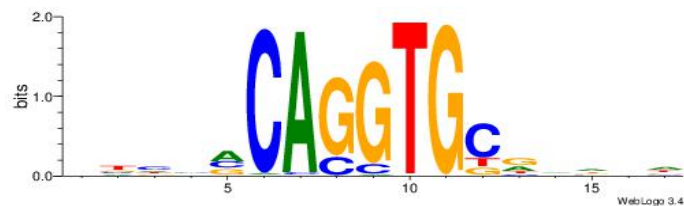
Alignment:

VBHHVCAGGTGCDVDHD

-----HAGGTG-----

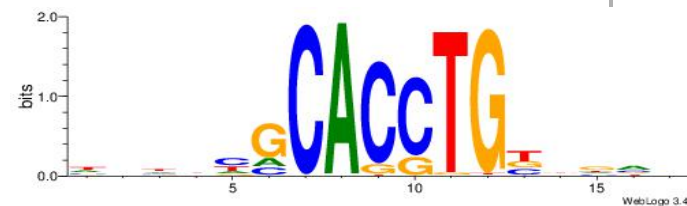
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID: [UP00047](#)
Motif name: Zbtb7b_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 9
Number of overlap: 6
Similarity score: 0.0233556

Alignment:

BDDRVGACCACCHBDVB

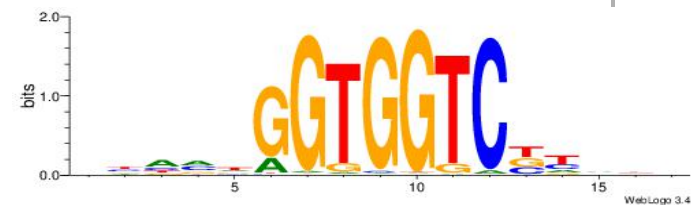
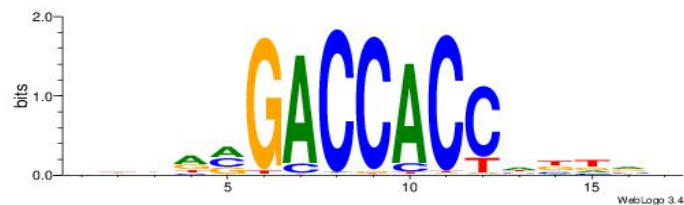
-----CACCTD---

Original motif

Consensus sequence: BDDRVGACCACCHBDVB

Reverse complement motif

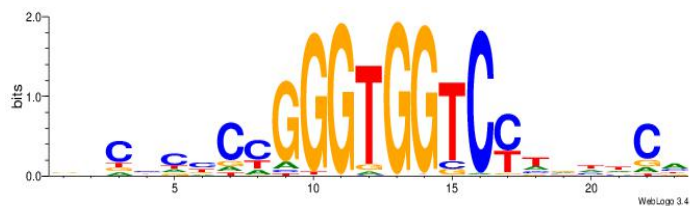
Consensus sequence: BBDVHGGTGGTCBKDDB



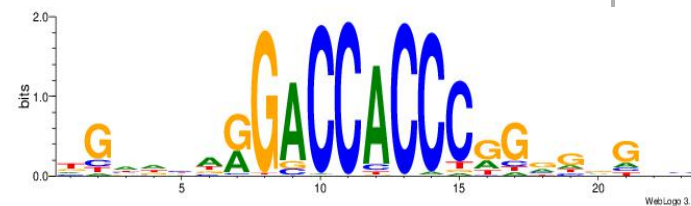
Motif ID: [UP00538](#)
 Motif name: Gli1_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 11
 Number of overlap: 6
 Similarity score: 0.0233928

Alignment:
 BHCBCBCCGGGTGGTCYHVHDCH
 -----HAGGTG-----

Original motif
 Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
 Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



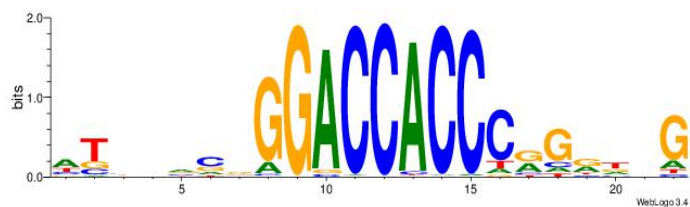
Motif ID: [UP00539](#)
 Motif name: Gli2_v015681_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 6
 Number of overlap: 6
 Similarity score: 0.0254338

Alignment:

HTBVVVDGGACCACCCRGRDBG
 -----CACCTD-----

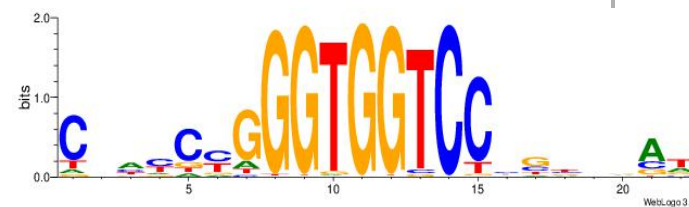
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCCHVBVBAH



Motif ID: [UP00540](#)
 Motif name: Gli3_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 6

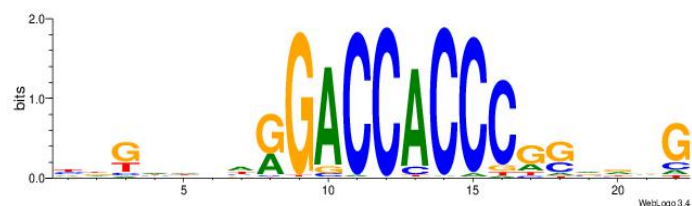
Number of overlap: 6
Similarity score: 0.0290143

Alignment:

HDGHHBHRGACCACCCGSVDVG
-----CACCTD-----

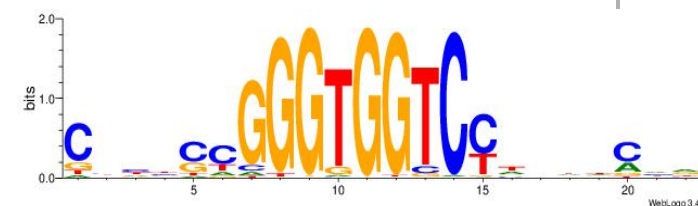
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



Motif ID: [UP00036](#)
Motif name: Myf6_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 6
Similarity score: 0.0309673

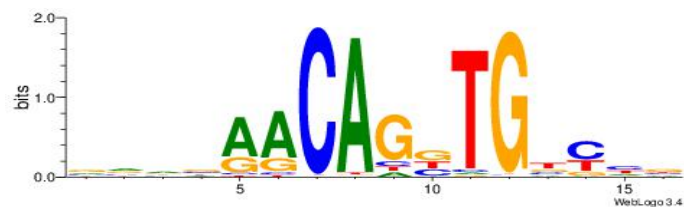
Alignment:

BDKVCABCTGTTBDBV
----CACCTD-----

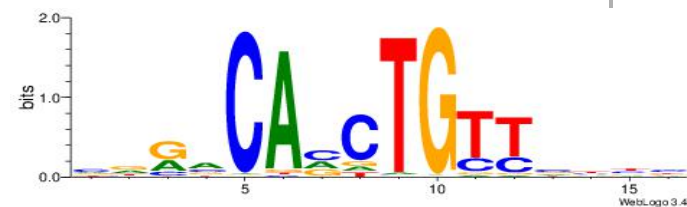
Original motif

Reverse complement motif

Consensus sequence: VVDBAACAGBTGBYHB



Consensus sequence: BDKVCABCTGTTBDBV



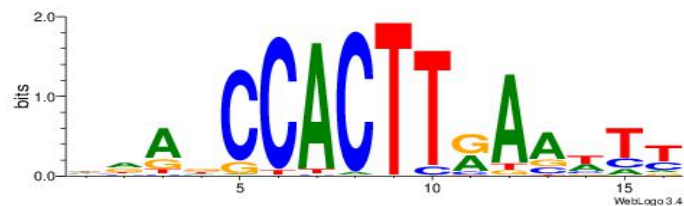
Motif ID: [UP00249](#)
Motif name: Nkx2-5
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.031502

Alignment:

```
HDADCCACTTTRAAWTT  
-----CACCTD-----
```

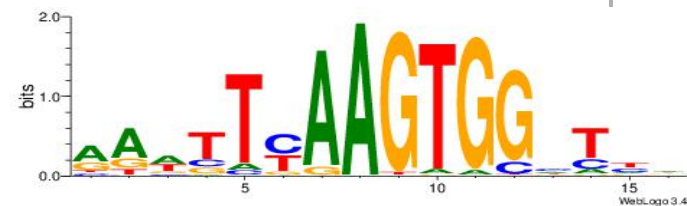
Original motif

Consensus sequence: HDADCCACTTTRAAWTT



Reverse complement motif

Consensus sequence: AAWTTMAAGTGGHTDH



Dataset #: 3 **Motif ID: 42** **Motif name: ArntAhr**

Original motif

Consensus sequence: YGCGTG



Reverse complement motif

Consensus sequence: CACGCM



Best Matches for Motif ID 42 (Highest to Lowest)

Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0

Alignment:

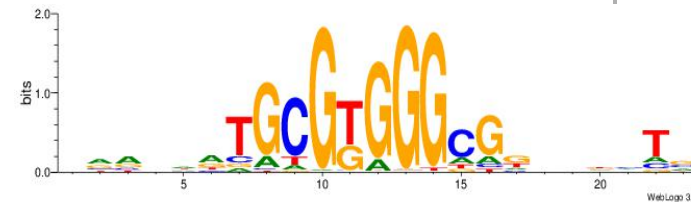
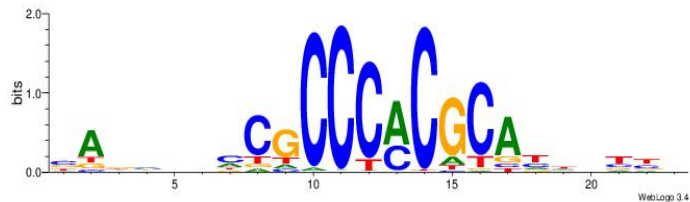
```
VVVDHHTGCGYGGGCGDHVHHTB
-----YGCGTG-----
```

Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV

Reverse complement motif

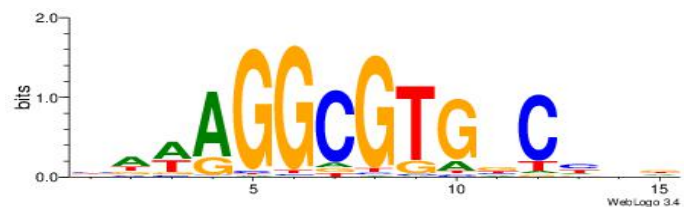
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



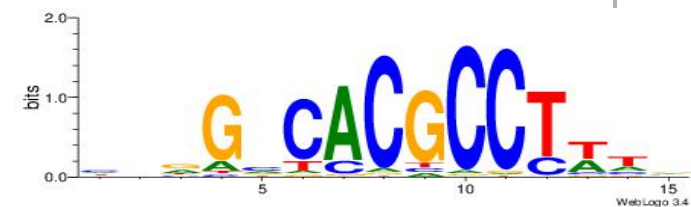
Motif ID: [UP00002](#)
 Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 6
 Number of overlap: 6
 Similarity score: 0.00183587

Alignment:
 HHDGBCACGCCTWDB
 -----CACGCM-----

Original motif
 Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif
 Consensus sequence: HHDGBCACGCCTWDB



Motif ID: [UP00060](#)

Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.00348048

Alignment:

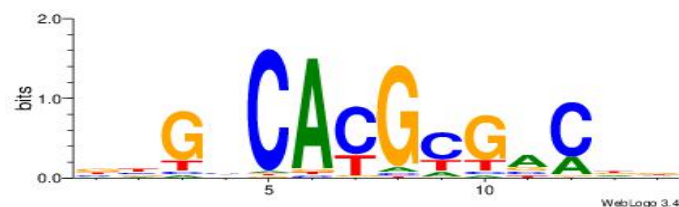
```

HDGTCGCGTGDCVB
----YGCGTG-----

```

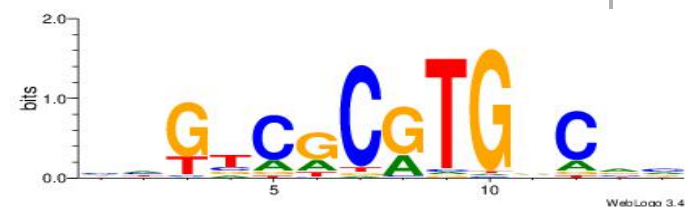
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB

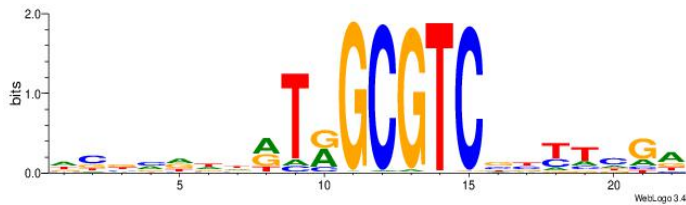


Motif ID:	UP00527
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6

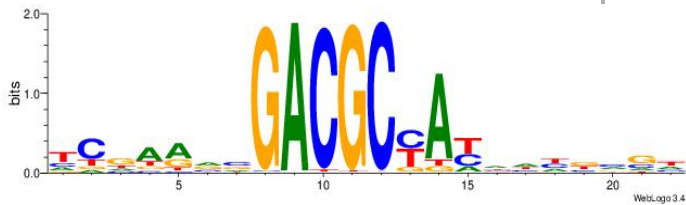
Similarity score: 0.00526158

Alignment:
TCDAMVBGACGCMACDDDVBBB
-----CACGCM-----

Original motif
Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif
Consensus sequence: TCDAMVBGACGCMACDDDVBBB



Motif ID: [UP00042](#)
Motif name: Gm397_second
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 6
Similarity score: 0.00558171

Alignment:
HBGYGTGTGTGCVRVD
---YGCGTG-----

Original motif
Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif
Consensus sequence: HBGYGTGTGTGCVRVD

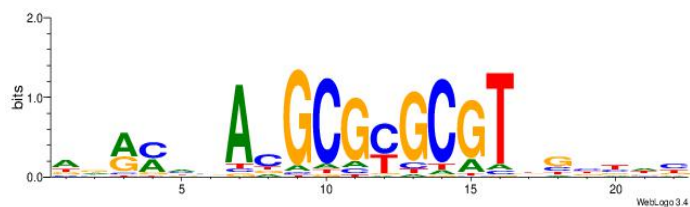
Motif ID: [UP00526](#)
 Motif name: Foxn1_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 8
 Number of overlap: 6
 Similarity score: 0.0123233

Alignment:

DDRMHBACGCGYGCGTDGBBDB
 -----YGCGTG-----

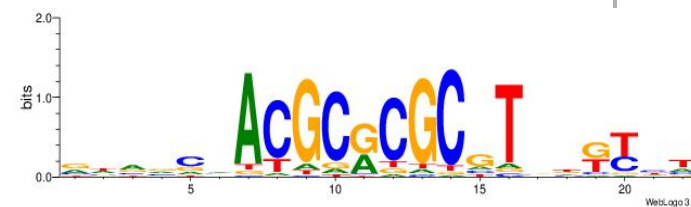
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

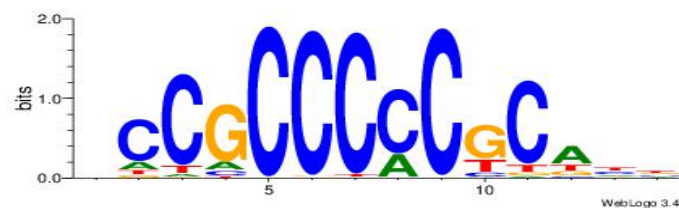


Motif ID: [UP00007](#)
 Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3

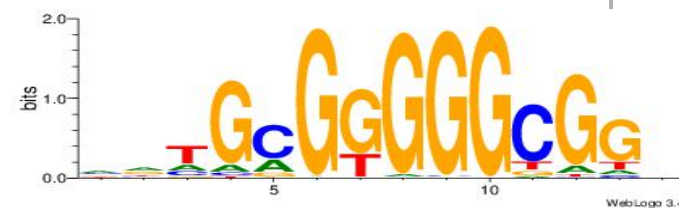
Number of overlap: 6
Similarity score: 0.0141579

Alignment:
HCCGCCCCCGCAHB
-----CACGCM--

Original motif
Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH



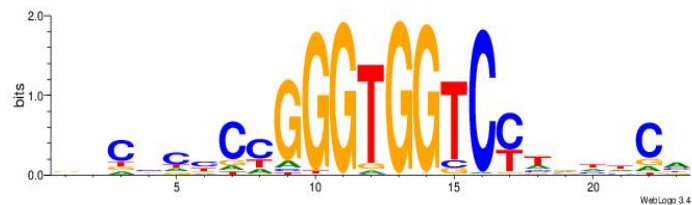
Motif ID: [UP00538](#)
Motif name: Gli1_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 11
Number of overlap: 6
Similarity score: 0.0144485

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
-----YGCGTG-----

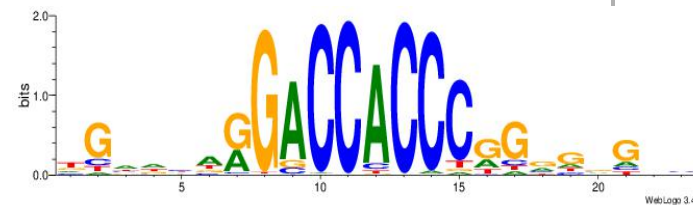
Original motif

Reverse complement motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVDCH



Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



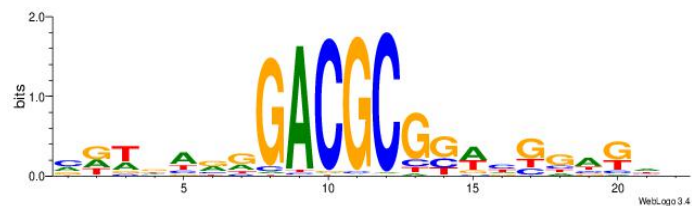
Motif ID: [UP00527](#)
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 10
Number of overlap: 6
Similarity score: 0.0172109

Alignment:

```
VHYTCCDWCCGCGTCMMTHWHV  
-----YGCGTG-----
```

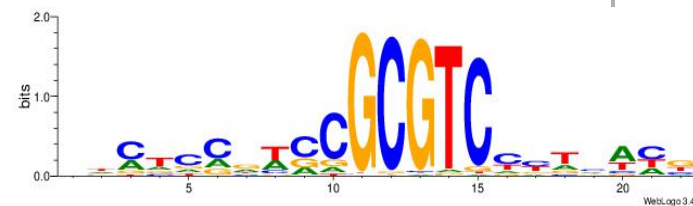
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Results created by MOTIFSIM on 11-20-2016 14:49:39
Runtime: 837.987 seconds

MOTIFSIM is written by Ngoc Tam L. Tran
Motif logo generated by [weblogo](#)