



MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.2

INPUT

Input Parameters

Number of files:	5
Number of top significant motifs:	10
Number of best matches:	10
Similarity cutoff $\geq$	0.75
Matching motif database:	UniProbe Mus Musculus
Motif 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_DM230.txt	1	1
MEME_DM230.txt	20	2
PScanChIP_DM230.txt	14	3
RSAT_peak-motifs_DM230.txt	10	4
PScanChIP_DM230.txt	14	5

RESULTS

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

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

Original motif

Consensus sequence: GGC GGGGC



Reverse complement motif

Consensus sequence: GCCCGGCC



Best Matches for Motif ID 1 (Highest to Lowest)

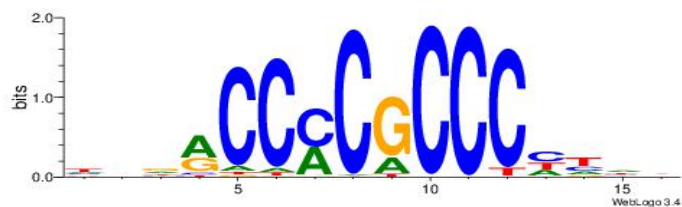
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

```
HBDRCCMCGCCCHHHD
---GCCCGGCC-----
```

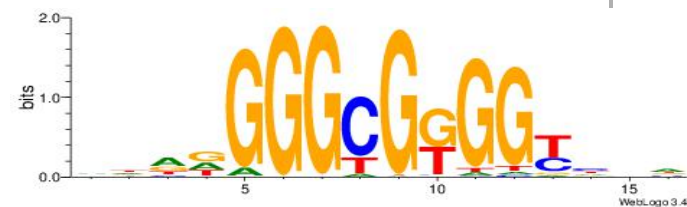
Original motif

Consensus sequence: HBDRCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



Motif ID: [UP00000](#)
Motif name: Smad3_secondary
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: 8
Similarity score: 0.00617043

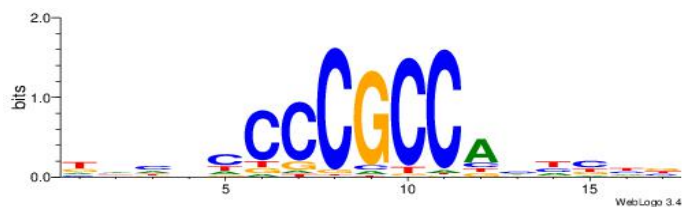
Alignment:

BHBHDTGGCGGGBDHD

-----GGCGGGGC---

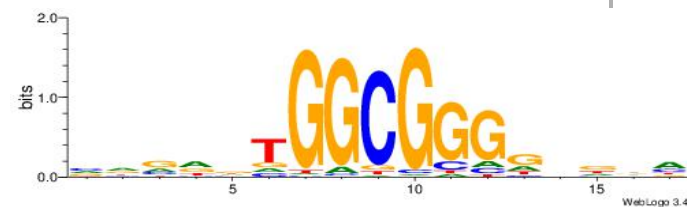
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD



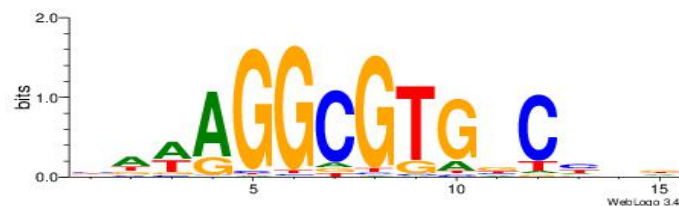
Motif ID: [UP00002](#)
 Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 8
 Similarity score: 0.0145996

Alignment:

BDWAGGCGTGBCHHD
 ----GGCGGGGC---

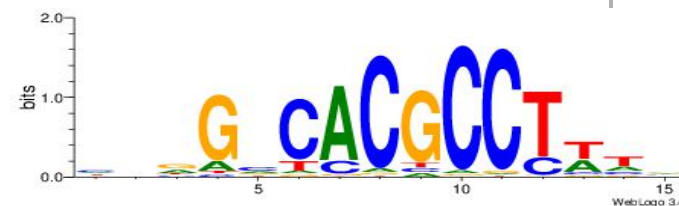
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



Motif ID: [UP00002](#)
 Motif name: Sp4_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward

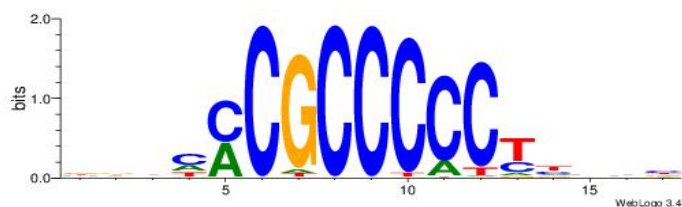
Position number: 2
Number of overlap: 8
Similarity score: 0.0233506

Alignment:

BDHHMCGCCCCCTHVBB
-GCCCCGCC-----

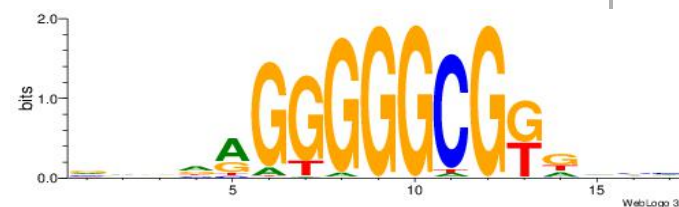
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



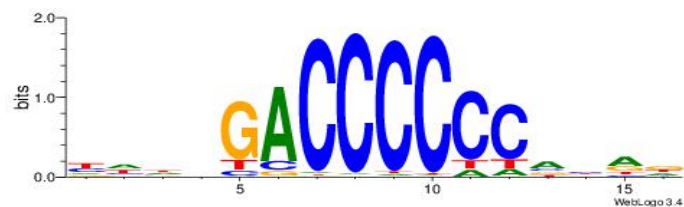
Motif ID: [UP00024](#)
Motif name: Glis2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 8
Similarity score: 0.0291232

Alignment:

HHHVGACCCCCCVBRD
----GCCCCGCC----

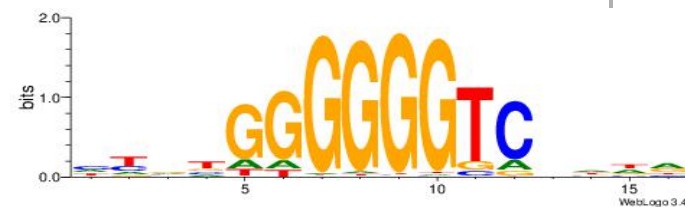
Original motif

Consensus sequence: HHHVGACCCCCCVBRD



Reverse complement motif

Consensus sequence: HKBBGGGGGGTCVHHH



Motif ID:

[UP00022](#)

Motif name:

Zfp740_primary

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:

0.0338469

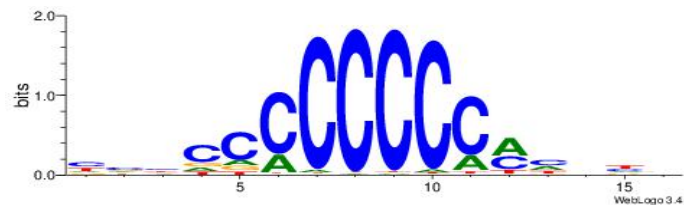
Alignment:

BHHDYGGGGGGGGBVD

-----GCCGGGGC---

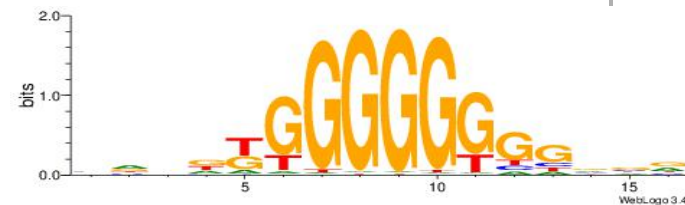
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



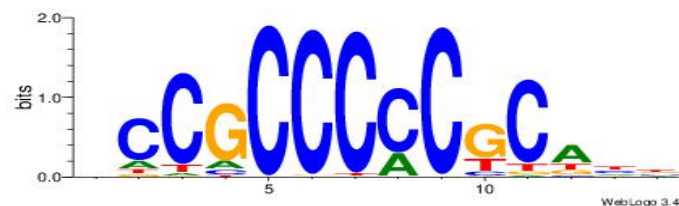
Motif ID: [UP00007](#)
 Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.0361147

Alignment:

VHTGCGGGGGCGGH
 ---GGCGGGGC---

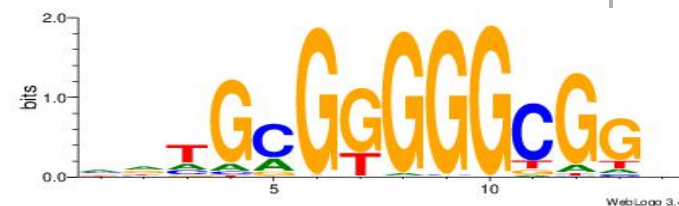
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID: [UP00539](#)
 Motif name: Gli2_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward

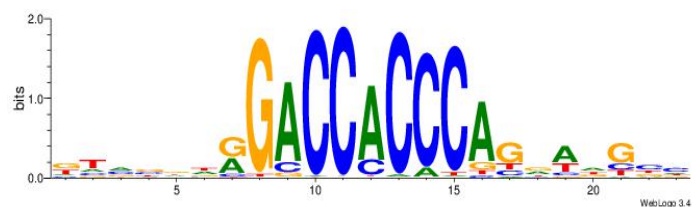
Position number: 8
Number of overlap: 8
Similarity score: 0.0374146

Alignment:

DTVBD DRGACCACCCAGDWDGBH
-----GCCCGCC-----

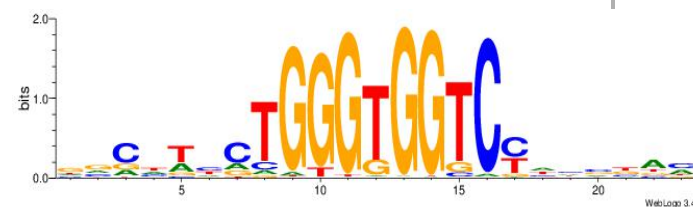
Original motif

Consensus sequence: DTVBD DRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



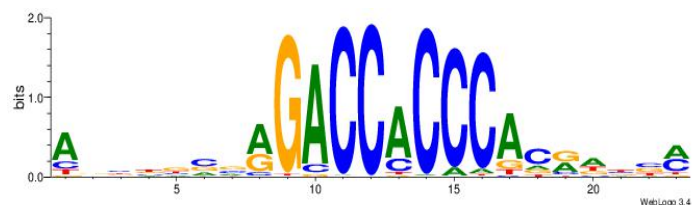
Motif ID: [UP00540](#)
Motif name: Gli3_v015681_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 9
Number of overlap: 8
Similarity score: 0.0376381

Alignment:

ABBBBVVRGACCACCCACRDBBM
-----GCCCGCC-----

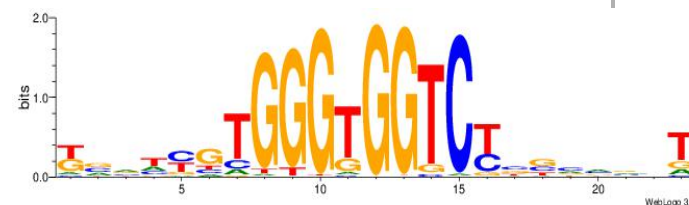
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Motif ID: [UP00021](#)
 Motif name: Zfp281_primary
 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: 0.0392043

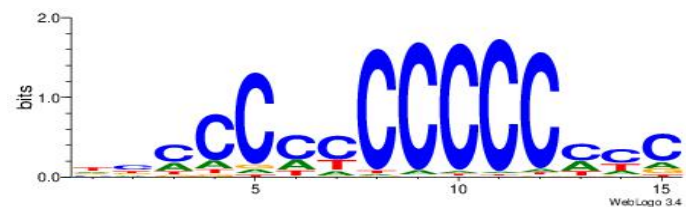
Alignment:

GKRGGGGGGGGGGBD

---GGCGGGGC----

Original motif

Consensus sequence: DBCCCCCCCCCMYC



Reverse complement motif

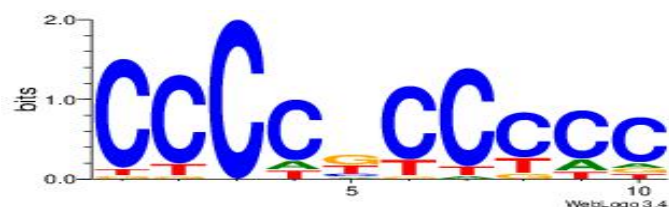
Consensus sequence: GKRGGGGGGGGGGBD



Dataset #: 3 **Motif ID: 24** **Motif name: SP1**

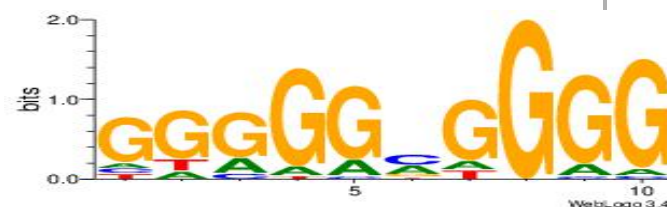
Original motif

Consensus sequence: CCCCKCCCCC



Reverse complement motif

Consensus sequence: GGGGGYGGGG



Best Matches for Motif ID 24 (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: 10
Similarity score: 0.0231018

Alignment:

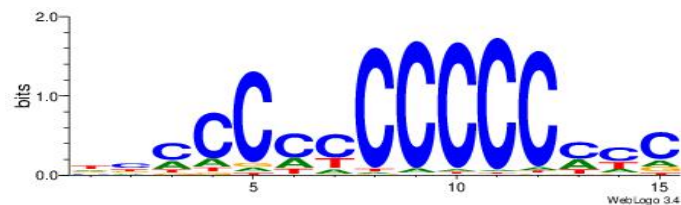
DBCCCCCCCCCMYC
--CCCCKCCCCC---

Original motif

Consensus sequence: DBCCCCCCCCCMYC

Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD

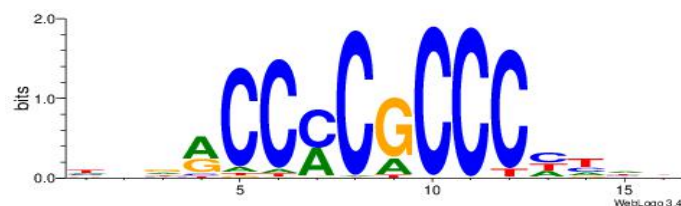


Motif ID: [UP00093](#)
 Motif name: Klf7_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0303207

Alignment:
 HBDRCMCGCCCHHD
 ----CCCCKCCCC--

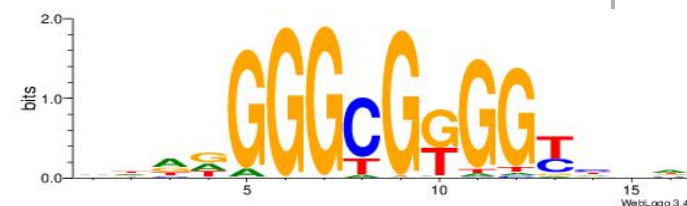
Original motif

Consensus sequence: HBDRCMCGCCCHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



Motif ID: [UP00033](#)

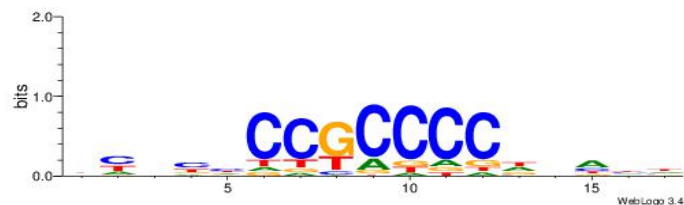
Motif name: Zfp410_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0323007

Alignment:

HHHHDGGGGCGGDBHDV
 ----GGGGYGGG---

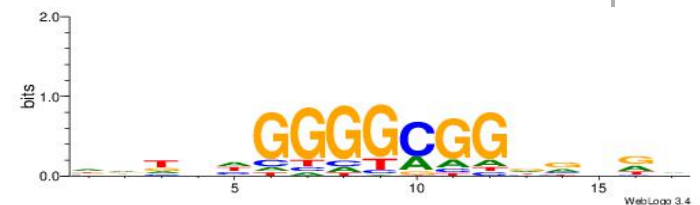
Original motif

Consensus sequence: BHHBHCCGCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID: [UP00099](#)
 Motif name: Ascl2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 10

Similarity score: 0.0340973

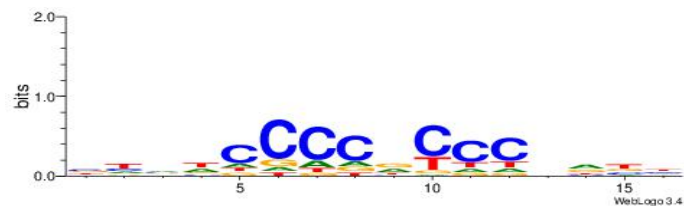
Alignment:

HVDVGGGHGGGGDBHB

--GGGGGYGGGG----

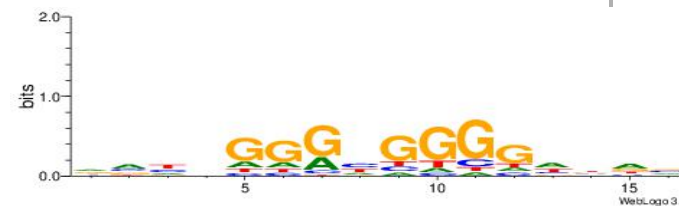
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB



Motif ID: [UP00043](#)
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 10
Similarity score: 0.0351051

Alignment:

BHHHWGGGGCGGBBVH

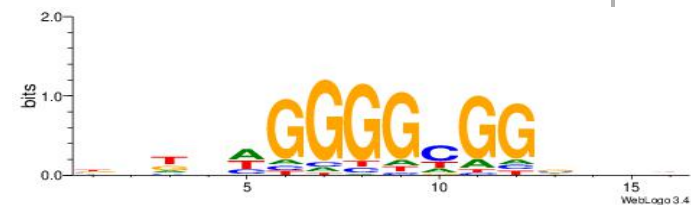
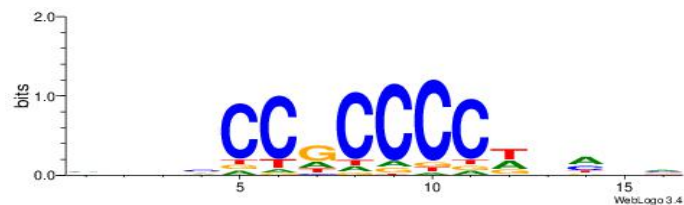
----GGGGGYGGGG--

Original motif

Consensus sequence: HBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



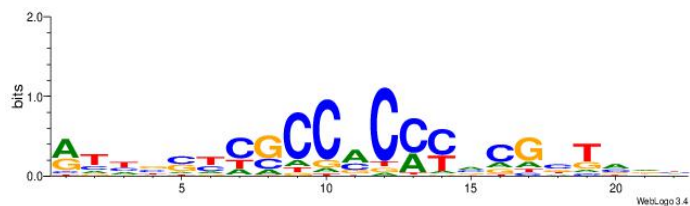
Motif ID: [UP00539](#)
 Motif name: Gli2_v016060_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.0390437

Alignment:

HDBABCGBKRGYGGCGMSBHAK
 -----GGGGGYGGGG-----

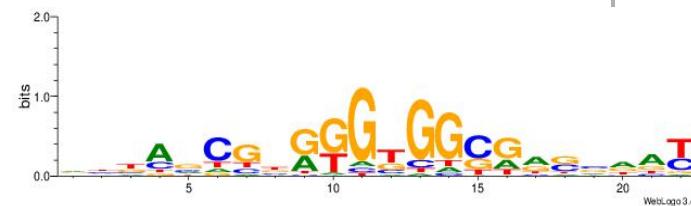
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



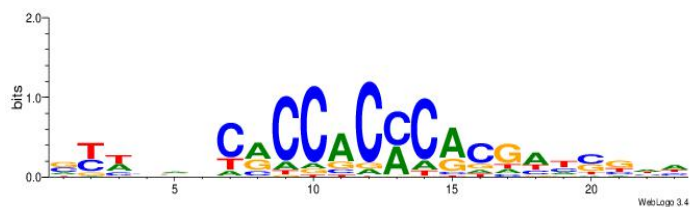
Motif ID: [UP00540](#)
 Motif name: Gli3_v016060_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.0393358

Alignment:

HHBSHTCGTGRGTGGKGDBVWMV
 -----GGGGGYGGGG-----

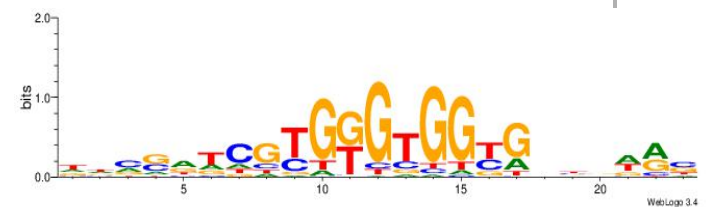
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID: [UP00000](#)
 Motif name: Smad3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4

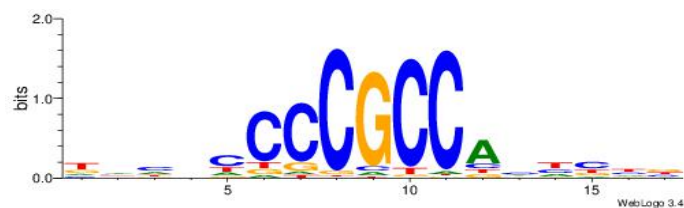
Number of overlap: 10
Similarity score: 0.0413863

Alignment:

DHHBCCCCGCCAHHBHB
----CCCCKCCCC--

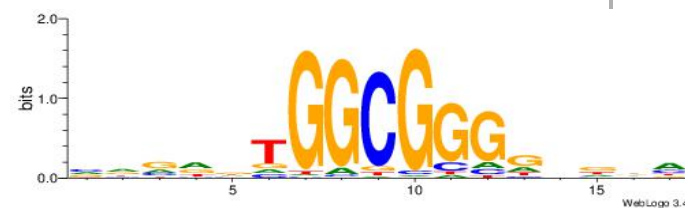
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



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: 10
Similarity score: 0.0418947

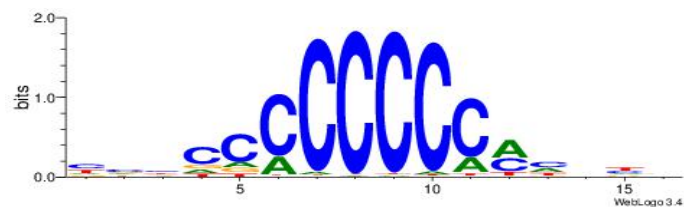
Alignment:

HVBCCCCCCCCMHHHB
---CCCCKCCCC---

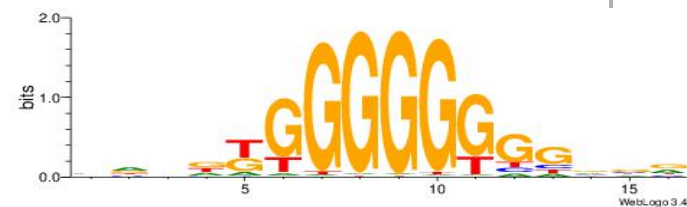
Original motif

Reverse complement motif

Consensus sequence: HVBCCCCCCCCMHHHB



Consensus sequence: BHHDYGGGGGGGGGBVD



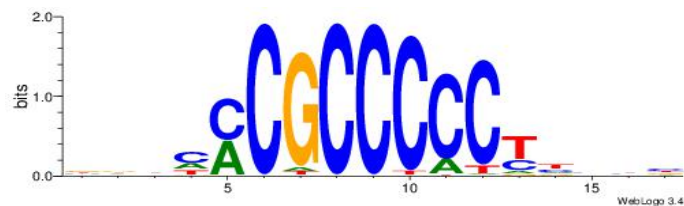
Motif ID: [UP00002](#)
Motif name: Sp4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.0420708

Alignment:

BDHHMCGCCCCCTHVBB
--CCCCKCCCC-----

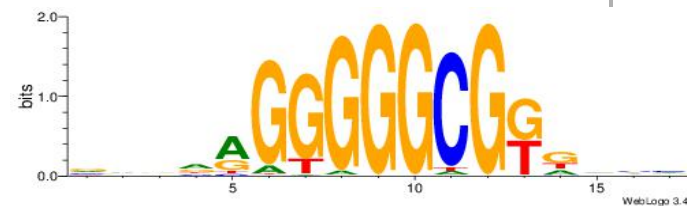
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

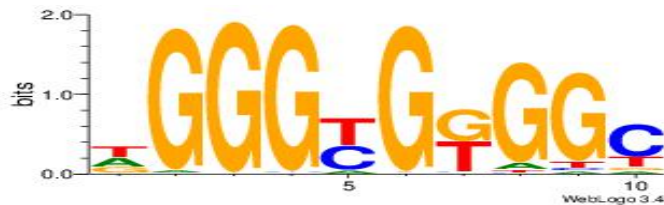
Consensus sequence: BVVHAGGGGGGCGRDHHB



Dataset #: 3 **Motif ID: 27** **Motif name: Klf4**

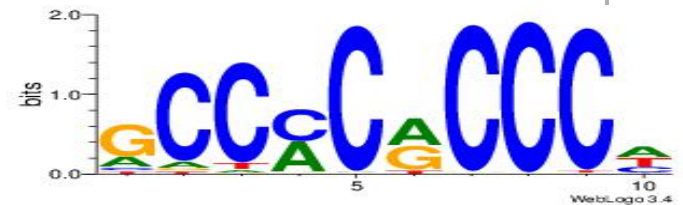
Original motif

Consensus sequence: DGGGYGKGCC



Reverse complement motif

Consensus sequence: GCCYCMCCCD



Best Matches for Motif ID 27 (Highest to Lowest)

Motif ID:	UP00093
Motif name:	Klf7_primary
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:	10
Similarity score:	0

Alignment:

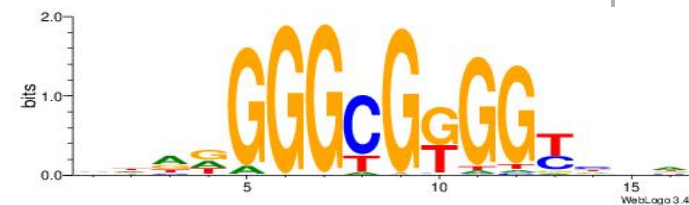
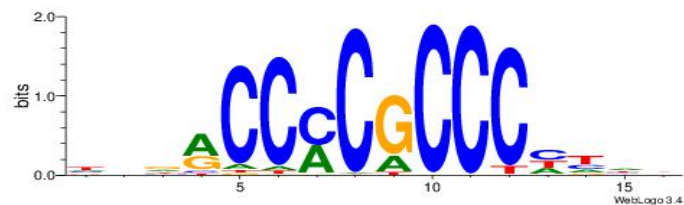
```
DHHDGGGCGRGGKHBH
---DGGGYGKGCC---
```

Original motif

Consensus sequence: HBDRCMCGCCCHHHD

Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH

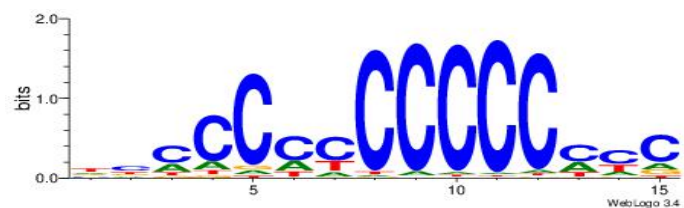


Motif ID: [UP00021](#)
 Motif name: Zfp281_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.0153308

Alignment:
 DBCCCCCCCCCMYC
 ---GCCYCMCCCD--

Original motif

Consensus sequence: DBCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD



Motif ID: [UP00002](#)

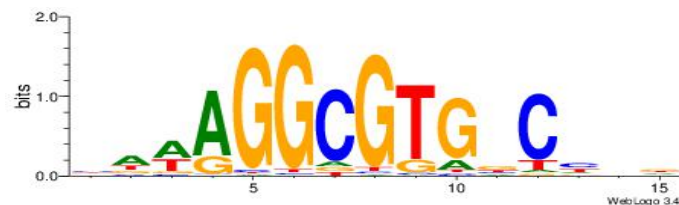
Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0186791

Alignment:

BDWAGGCGTGBCHHD
 --DGGGYGKGGC---

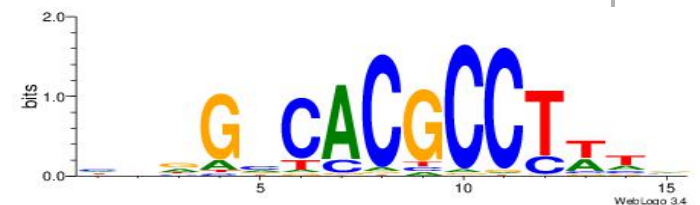
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



Motif ID: [UP00022](#)
 Motif name: Zfp740_primary
 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: 10

Similarity score: 0.0218399

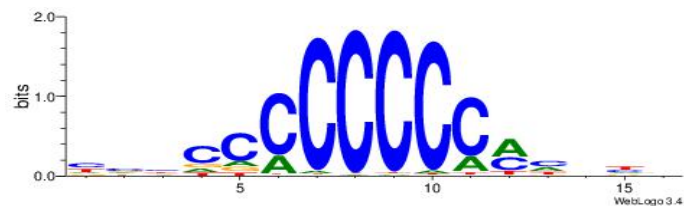
Alignment:

HVBCCCCCCCCMHHHB

--GCCYCMCCCD----

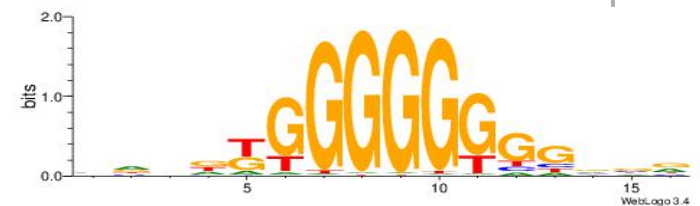
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGGBVD



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:

Forward

Position number:

1

Number of overlap:

10

Similarity score:

0.0249586

Alignment:

VHTGCGGGGGCGGH

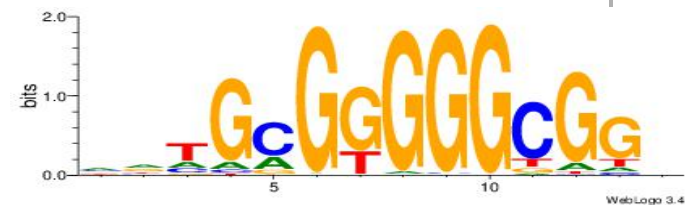
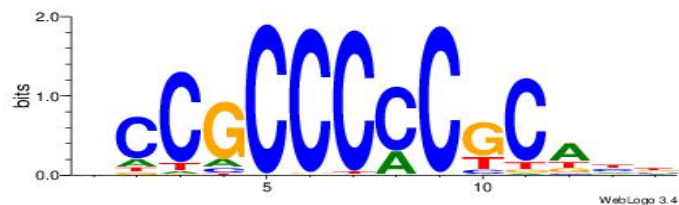
GCCYCMCCCD----

Original motif

Consensus sequence: HCCGCCCCCGCAHB

Reverse complement motif

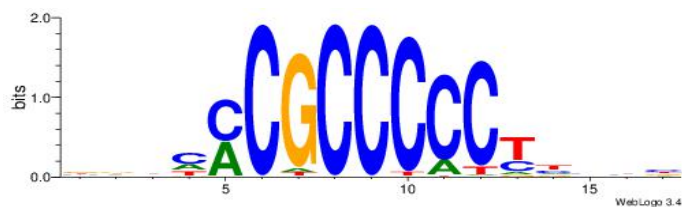
Consensus sequence: VHTGCGGGGGCGGH



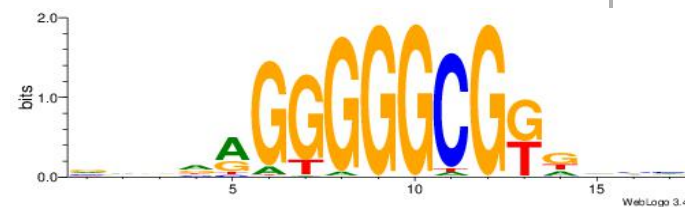
Motif ID: [UP00002](#)
 Motif name: Sp4_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 2
 Number of overlap: 10
 Similarity score: 0.0299159

Alignment:
 BVVHAGGGGGCGRDHBB
 -----DGGGYGKGGC--

Original motif
 Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
 Consensus sequence: BVVHAGGGGGCGRDHBB



Motif ID: [UP00000](#)

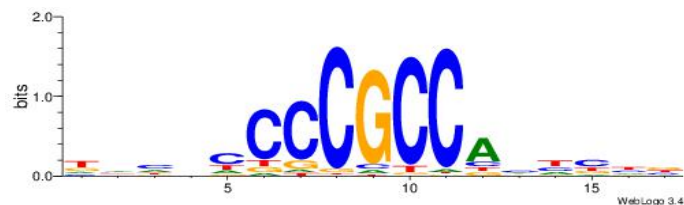
Motif name: Smad3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0308595

Alignment:

BHBHDTGGCGGGBDHD
 ----DGGGYGKGGC---

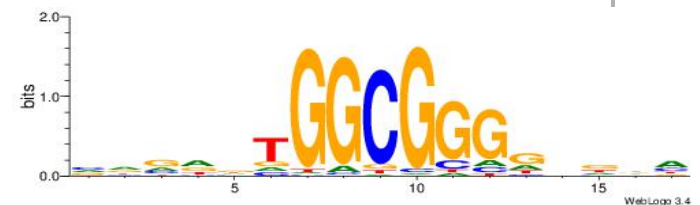
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD



Motif ID: [UP00047](#)
 Motif name: Zbtb7b_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 1
 Number of overlap: 10

Similarity score: 0.0345891

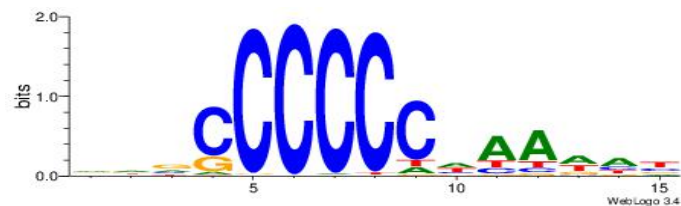
Alignment:

DDVCCCCCCHAAWHB

GCCYCMCCCD-----

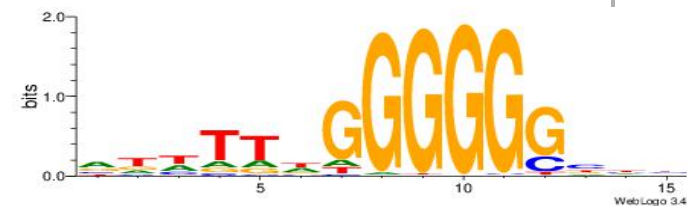
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

Consensus sequence: VHWTTHGGGGGGVDD



Motif ID: [UP00043](#)
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 10
Similarity score: 0.0346735

Alignment:

HBBBCCGCCCCWHHHV

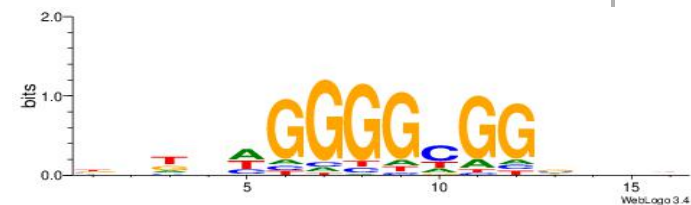
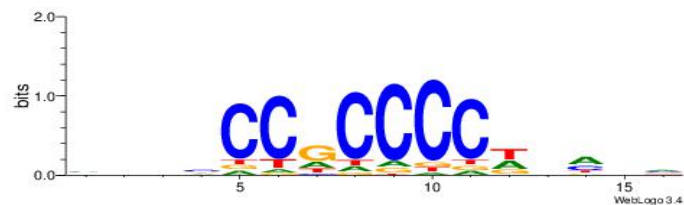
--GCCYCMCCCD-----

Original motif

Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



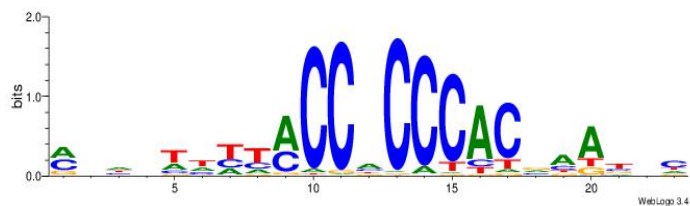
Motif ID: [UP00538](#)
 Motif name: Gli1_v015681_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 8
 Number of overlap: 10
 Similarity score: 0.0351496

Alignment:

MHHHWHYTMCCCHCCCACVAABVH
 -----GCCYCMCCCD-----

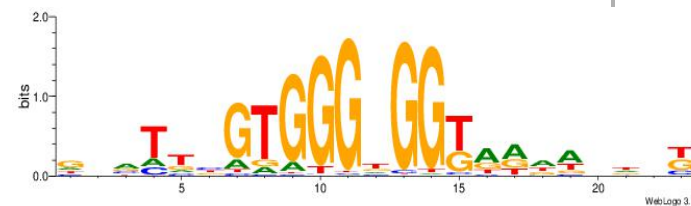
Original motif

Consensus sequence: MHHHWHYTMCCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Dataset #: 3 **Motif ID: 29** **Motif name: HIF1AARNT**

Original motif

Consensus sequence: VBACGTGV



Reverse complement motif

Consensus sequence: VCACGTBV



Best Matches for Motif ID 29 (Highest to Lowest)

Motif ID:	UP00097
Motif name:	Mtf1_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:	8
Similarity score:	0

Alignment:

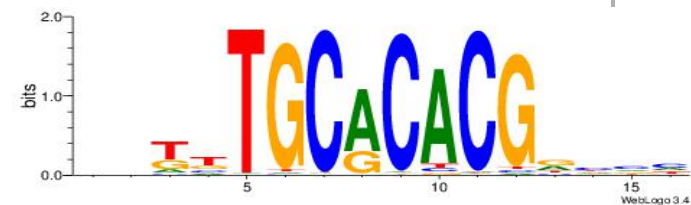
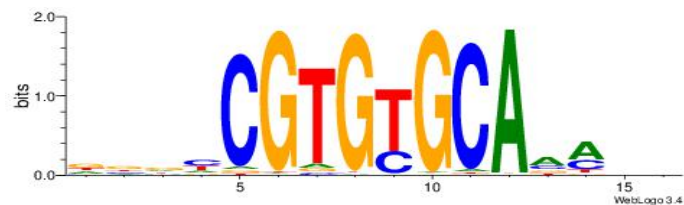
```
HDYTTGCACACGDHBH
-----VCACGTBV--
```

Original motif

Consensus sequence: DBDHC GTGTGCAAMDH

Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH

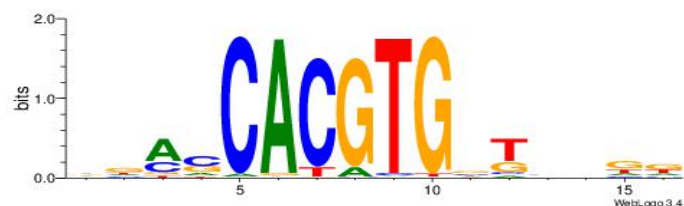


Motif ID: [UP00060](#)
 Motif name: Max_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.000574345

Alignment:
 DDASCACGTGBTBVDD
 ---VBACGTGV-----

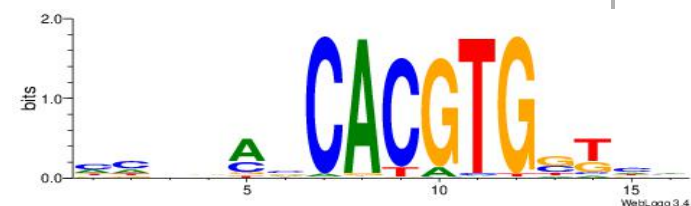
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD



Motif ID: [UP00050](#)

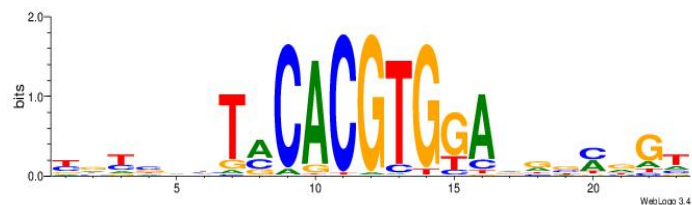
Motif name: Bhlhb2_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 9
 Number of overlap: 8
 Similarity score: 0.00642455

Alignment:

YDYBDHTMCACGTGGADDBMDGT
 -----VBACGTGV-----

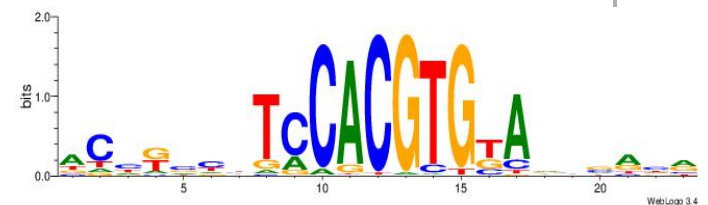
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID: [UP00084](#)
 Motif name: Gmeb1_primary
 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: 8

Similarity score: 0.0131171

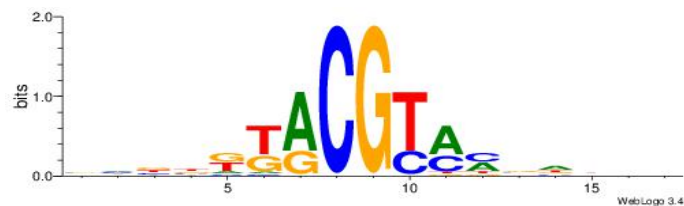
Alignment:

BVVDVRYACGTRYVBHB

-----VBACGTGV-----

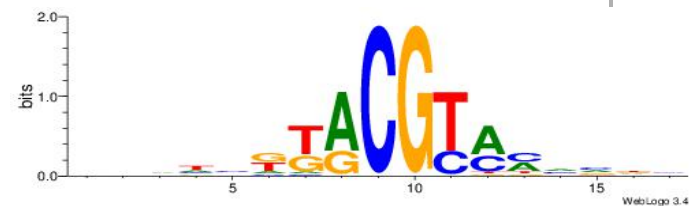
Original motif

Consensus sequence: BHBBKKACGTMMVDBVB



Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB



Motif ID: [UP00050](#)
Motif name: Bhlhb2_primary
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: 8
Similarity score: 0.014006

Alignment:

RDHDBVDTACGTGASBHVHDH

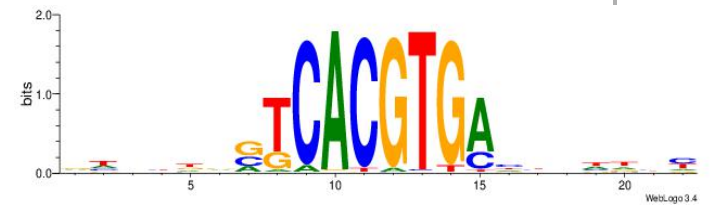
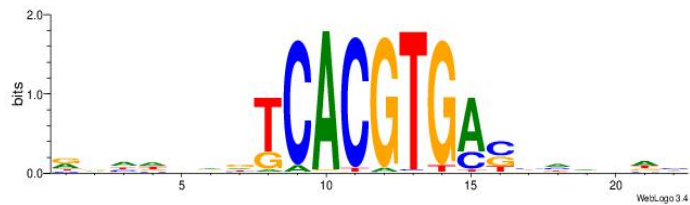
-----VCACGTBV-----

Original motif

Consensus sequence: RDHDBVDTACGTGASBHVHDH

Reverse complement motif

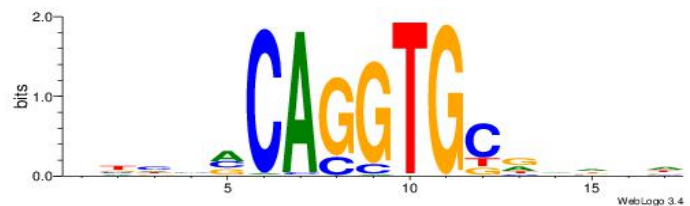
Consensus sequence: DDHBHBSTACGTGAHBBDHMH



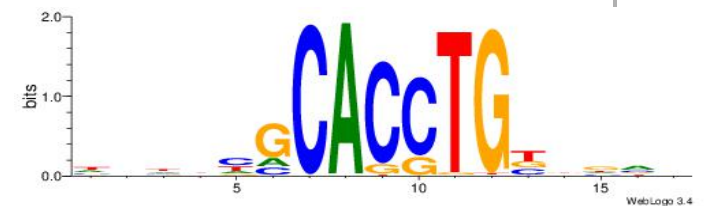
Motif ID: [UP00046](#)
 Motif name: Tcfe2a_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 8
 Similarity score: 0.0184296

Alignment:
 VBHHVCAGGTGCDVDHD
 ----VBACGTGV-----

Original motif
 Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif
 Consensus sequence: DHDBHGCACCTGBDDVB



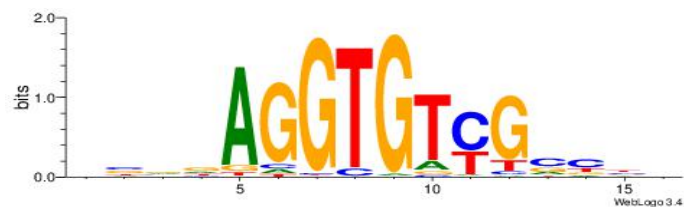
Motif ID: [UP00068](#)
 Motif name: Eomes_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 8
 Similarity score: 0.0188154

Alignment:

VVBVCKACACCTHVBV
 -----VCACGTBV--

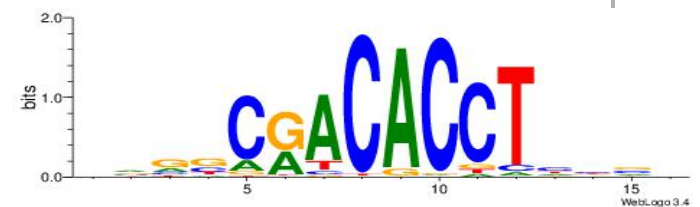
Original motif

Consensus sequence: VBVDAGGTGTGVBVV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV



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: 9

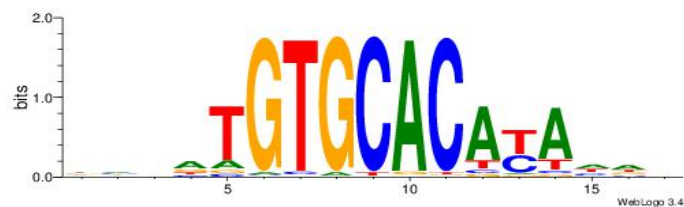
Number of overlap: 8
Similarity score: 0.0189568

Alignment:

DHVDTGTGCACAYAHDH
-VBACGTGV-----

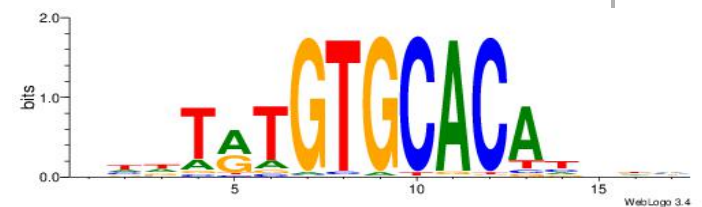
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



Motif ID: [UP00042](#)
Motif name: Gm397_primary
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: 8
Similarity score: 0.0198987

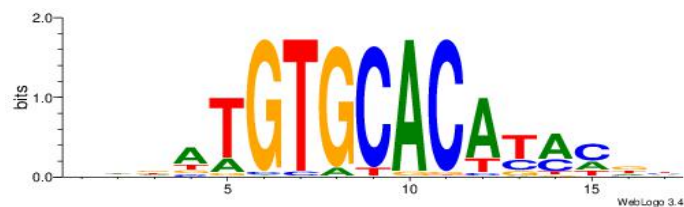
Alignment:

HHRTATGTGCACATHHD
--VBACGTGV-----

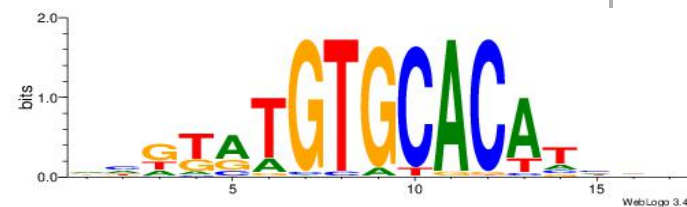
Original motif

Reverse complement motif

Consensus sequence: HHDATGTGCACATAMDH



Consensus sequence: HHRTATGTGCACATHHD



Motif ID: [UP00060](#)
Motif name: Max_secondary
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: 0.021967

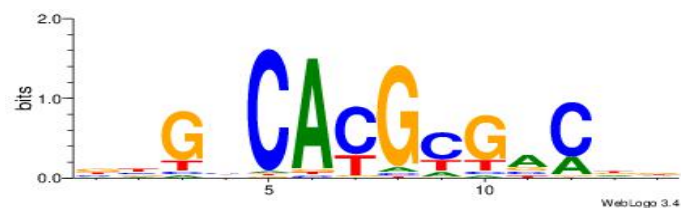
Alignment:

BBGHCACGCGACDD

---VCACGTBV---

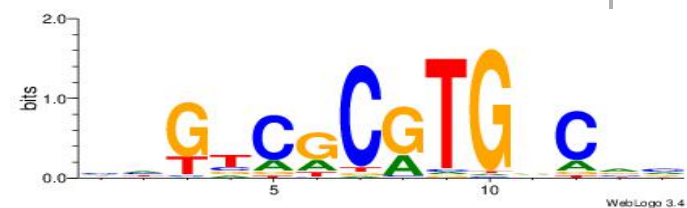
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



Dataset #: 3 **Motif ID: 32** **Motif name: ArntAhr**

Original motif

Consensus sequence: YGCGTG



Reverse complement motif

Consensus sequence: CACGCM



Best Matches for Motif ID 32 (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:

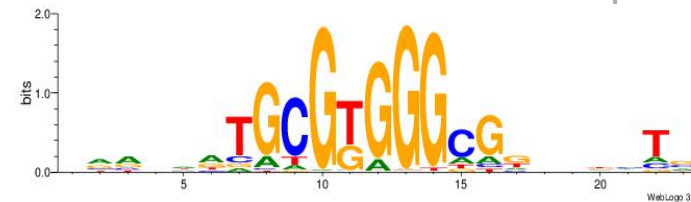
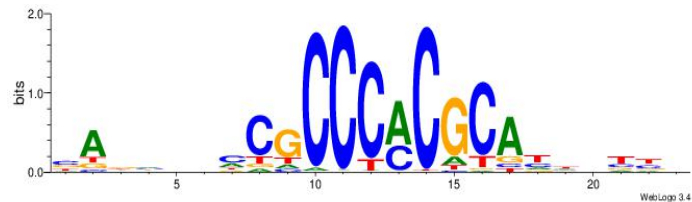
```
VVVDHHTGCGYGGGCGDHSVHHTB
-----YGCGTG-----
```

Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV

Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHSVHHTB

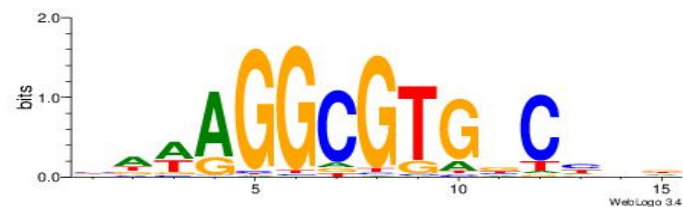


Motif ID: [UP00002](#)
 Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 5
 Number of overlap: 6
 Similarity score: 0.00183587

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

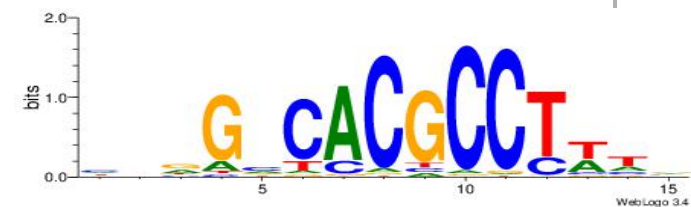
Original motif

Consensus sequence: BDWAGGCGTGBCBHHD



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:

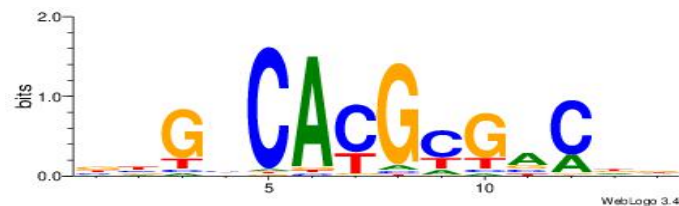
```

HDGTCGCGTGDCVB
----YGCGTG-----

```

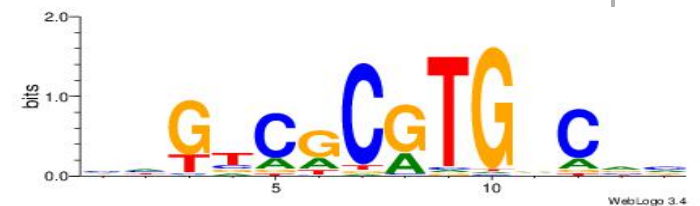
Original motif

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

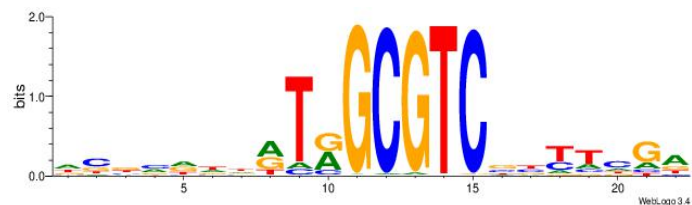
Alignment:

TCDAMVBGACGCMACDDDVBBDD

-----CACGCM-----

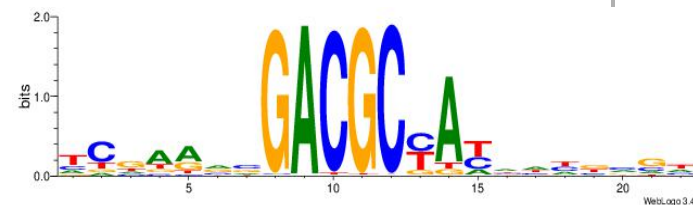
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMACDDDVBBDD



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

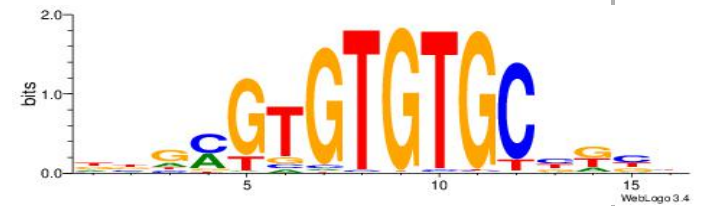
---YGCGTG-----

Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD



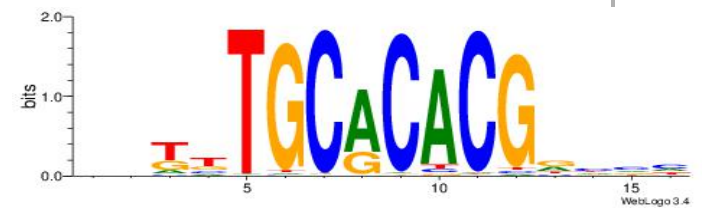
Alignment:

```
HDYTTGCACACGDHBH
-----CACGCM--
```

Consensus sequence: DBDHCGTGTGCAAMDH



Consensus sequence: HDYTTGCACACGDHBH



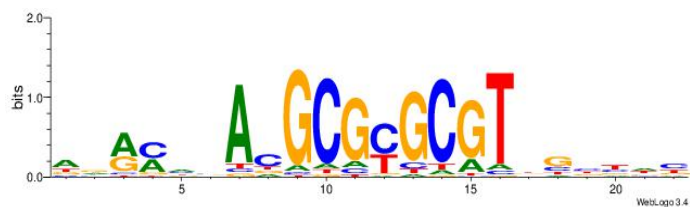
Motif ID: [UP00526](#)
 Motif name: Foxn1_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 8
 Number of overlap: 6
 Similarity score: 0.0123233

Alignment:

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

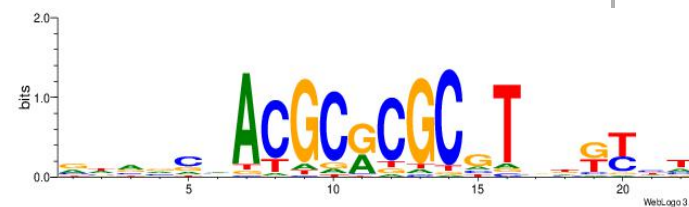
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



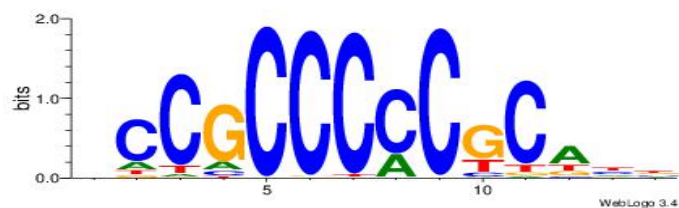
Motif ID: [UP00007](#)
 Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3

Number of overlap: 6
Similarity score: 0.0141579

Alignment:
HCCGCCCCCGCAHB
-----CACGCM--

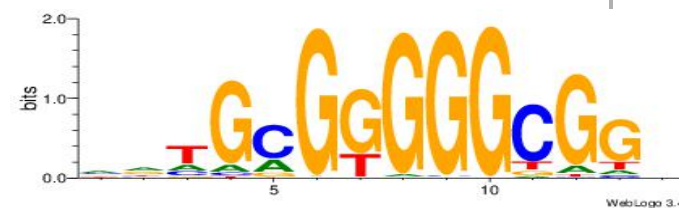
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



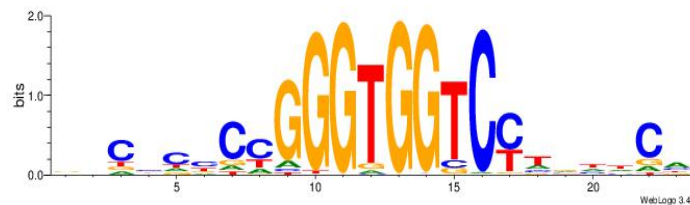
Motif ID: [UP00538](#)
Motif name: Gli1_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 11
Number of overlap: 6
Similarity score: 0.0144485

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

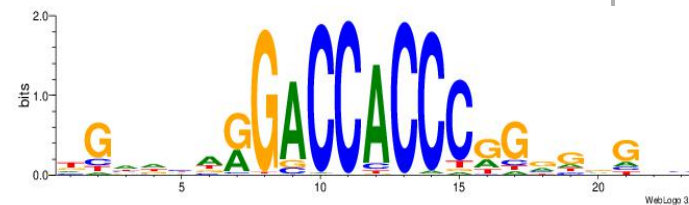
Original motif

Reverse complement motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVDCH



Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



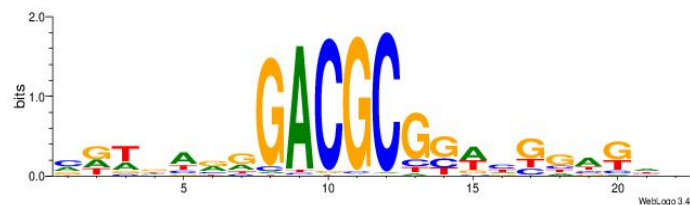
Motif ID: [UP00527](#)
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 6
Similarity score: 0.0172109

Alignment:

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

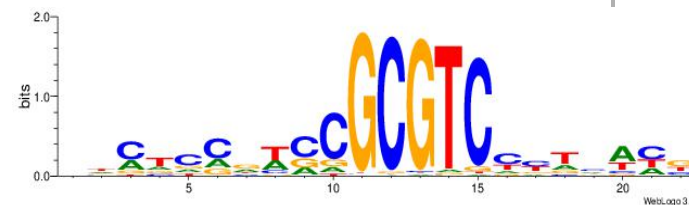
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Dataset #: 4 **Motif ID: 45** **Motif name: wbgTAAATAww**

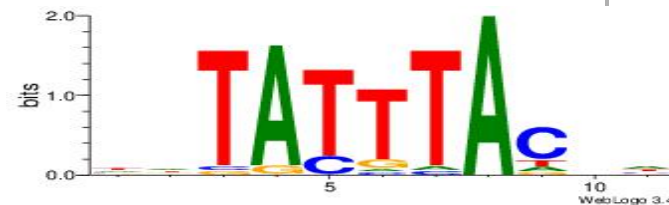
Original motif

Consensus sequence: DBGTAATAHD



Reverse complement motif

Consensus sequence: DHTATTTACBD



Best Matches for Motif ID 45 (Highest to Lowest)

Motif ID:	UP00242
Motif name:	Hoxc8
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0

Alignment:

AHDHTAATTACHHHHV

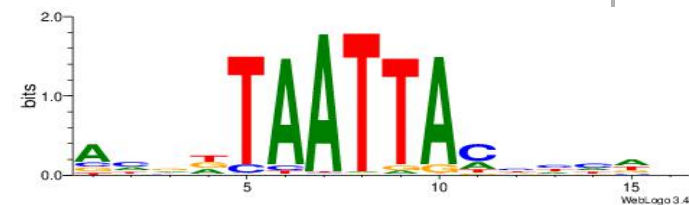
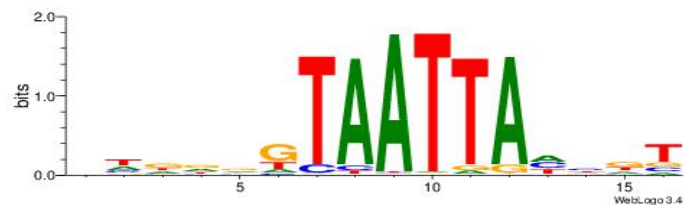
--DHTATTTACBD---

Original motif

Consensus sequence: BHDDDGTAATTAAHHD

Reverse complement motif

Consensus sequence: AHDHTAATTACHHHHV

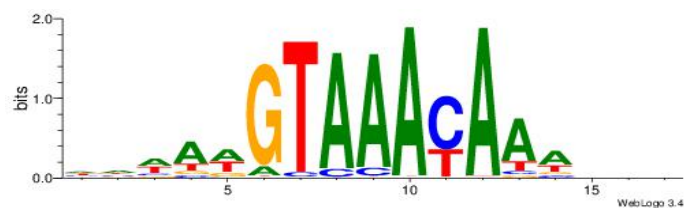


Motif ID: [UP00073](#)
 Motif name: Foxa2_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00453517

Alignment:
 HHWAWGTAAAYAAVDB
 ---DBGTAATAHD---

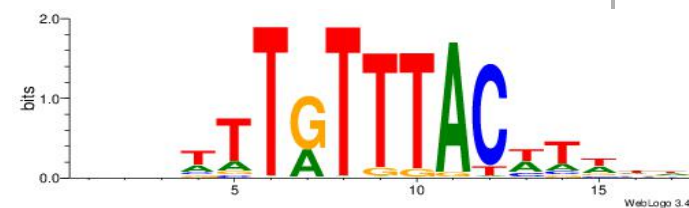
Original motif

Consensus sequence: HHWAWGTAAAYAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: [UP00039](#)

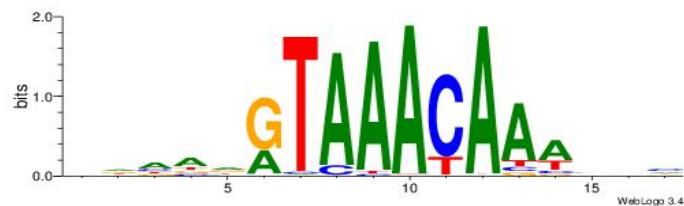
Motif name: Foxj3_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00490457

Alignment:

HDHADGTAAACAAVVH
 ---DBGTAATAHD---

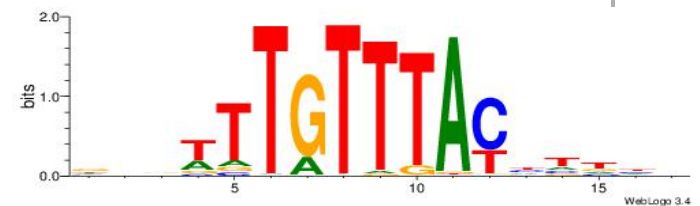
Original motif

Consensus sequence: HDHADGTAAACAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTCACDTHDH



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: Backward
 Position number: 5
 Number of overlap: 11

Similarity score: 0.00656547

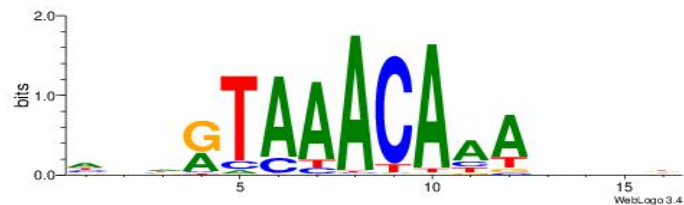
Alignment:

HDHRTAAACAAHDDD

-DBGTAATAHD----

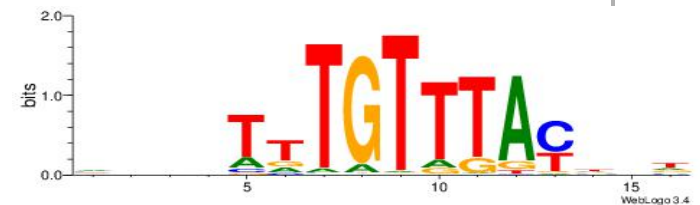
Original motif

Consensus sequence: HDHRTAAACAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDDH



Motif ID: [UP00182](#)

Motif name: Hoxa6

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: 11

Similarity score: 0.0086354

Alignment:

DTHHGGTAATTAYCYT

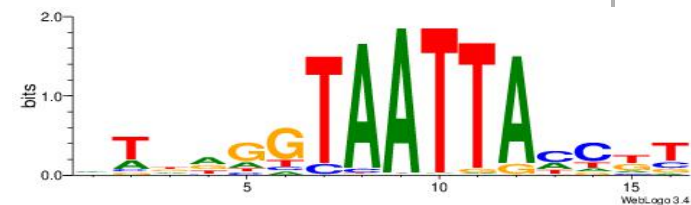
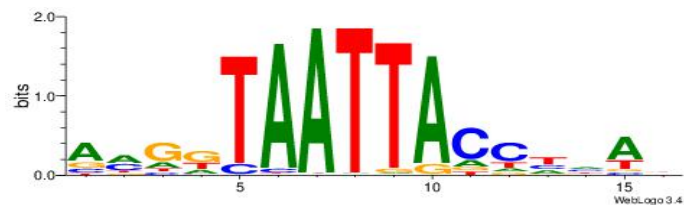
---DBGTAATAHD--

Original motif

Consensus sequence: AMGKTAATTACCHAD

Reverse complement motif

Consensus sequence: DTHHGGTAATTAYCYT



Motif ID: [UP00260](#)
 Motif name: Hoxc6
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.0092156

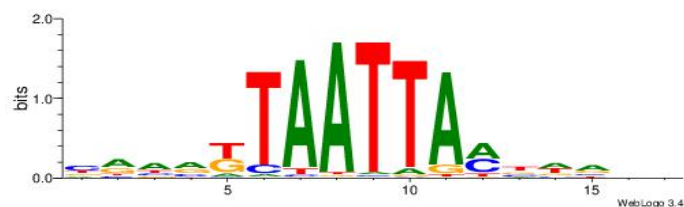
Alignment:

BRHVKTAATTAMBDVVD

---DHTATTTACBD---

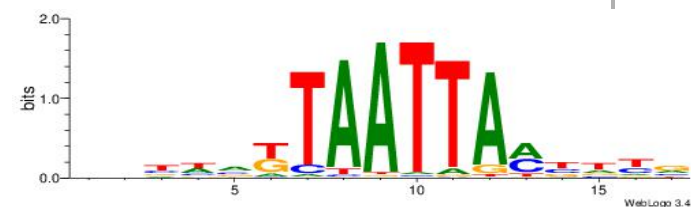
Original motif

Consensus sequence: BRHVKTAATTAMBDVVD



Reverse complement motif

Consensus sequence: DBBDVYTAATTARBHKB



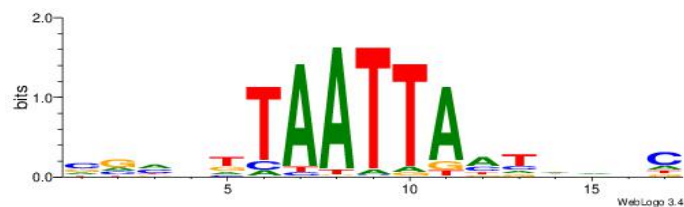
Motif ID: [UP00164](#)
 Motif name: Hoxa7_2668.2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00942246

Alignment:

VVHDDTAATTAHTDDBC
 ---DHTATTTACBD---

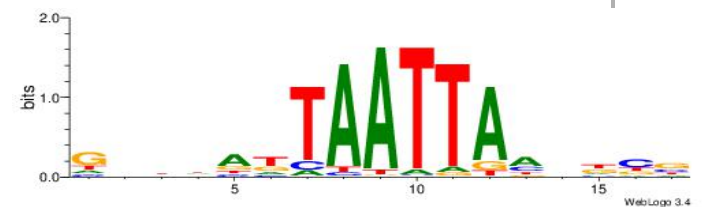
Original motif

Consensus sequence: VVHDDTAATTAHTDDBC



Reverse complement motif

Consensus sequence: GBDDAHTAATTADHHV

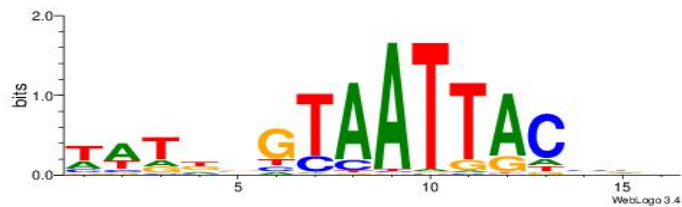


Motif ID: [UP00259](#)
 Motif name: Hoxb6
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 2

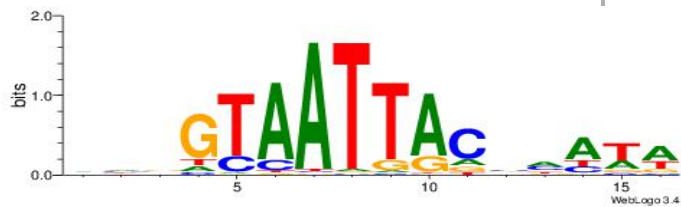
Number of overlap: 11
Similarity score: 0.00949005

Alignment:
VDVGTAATTACBDAWW
-DBGTAATAHD----

Original motif
Consensus sequence: WWTDBGTAATTACVDB



Reverse complement motif
Consensus sequence: VDVGTAATTACBDAWW



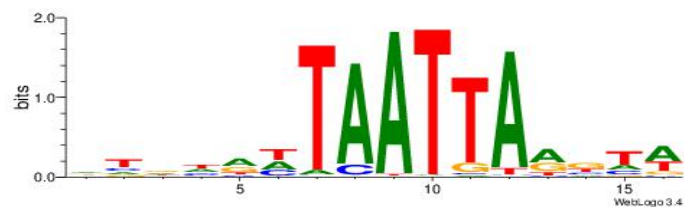
Motif ID: [UP00254](#)
Motif name: Pou2f1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.00998499

Alignment:
WABKTAATTAKHHHD
-DBGTAATAHD----

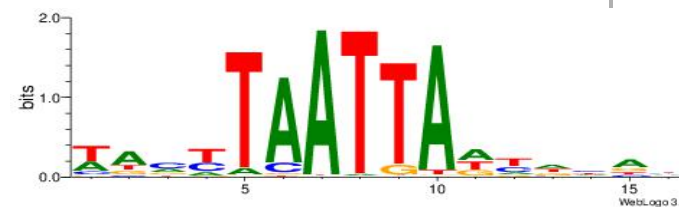
Original motif

Reverse complement motif

Consensus sequence: DHDHRHTAATTARBTW



Consensus sequence: WABKTAATTAHKHHHD



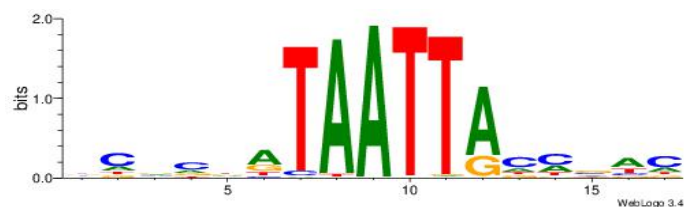
Motif ID: [UP00110](#)
Motif name: Dlx4
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0107458

Alignment:

GHVRGTAATTATDVVG
--DBGTAATAHD----

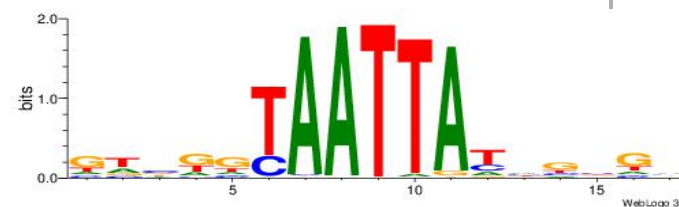
Original motif

Consensus sequence: BCVVDATAATTACMVHC



Reverse complement motif

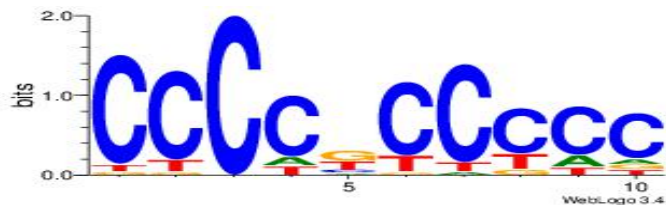
Consensus sequence: GHVRGTAATTATDVVG



Dataset #: 5 **Motif ID: 48** **Motif name: SP1**

Original motif

Consensus sequence: CCCCKCCCCC



Reverse complement motif

Consensus sequence: GGGGGYGGGG



Best Matches for Motif ID 48 (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:	10
Similarity score:	0.0231018

Alignment:

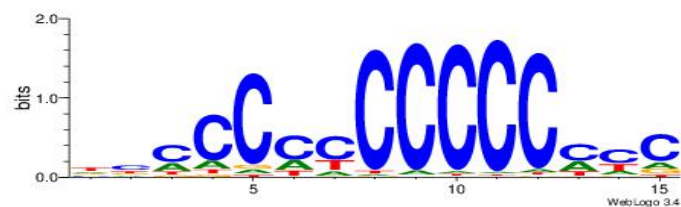
```
DBCCCCCCCCCMYC
--CCCCKCCCCC---
```

Original motif

Consensus sequence: DBCCCCCCCCCMYC

Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD

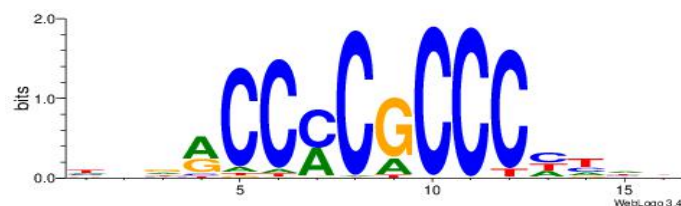


Motif ID: [UP00093](#)
 Motif name: Klf7_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0303207

Alignment:
 HBDRCMCGCCCHHD
 ----CCCCKCCCC--

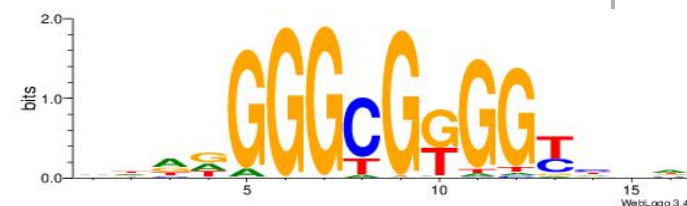
Original motif

Consensus sequence: HBDRCMCGCCCHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



Motif ID: [UP00033](#)

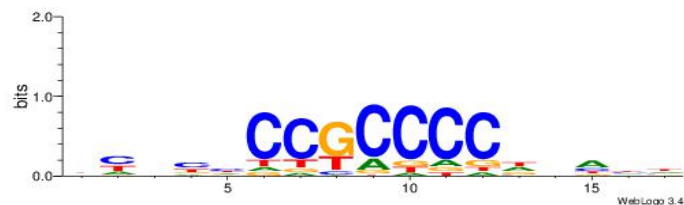
Motif name: Zfp410_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0323007

Alignment:

HHHHDGGGGCGGDBHDV
 ----GGGGYGGG---

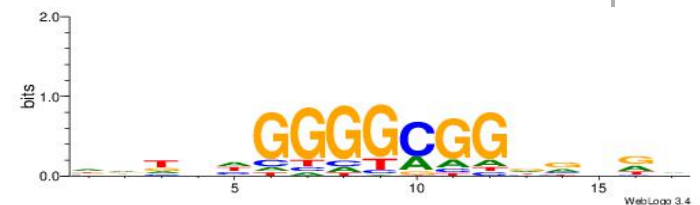
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID: [UP00099](#)
 Motif name: Ascl2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 10

Similarity score: 0.0340973

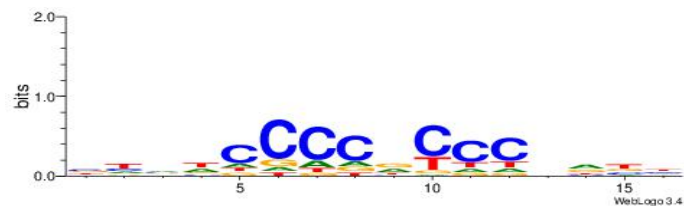
Alignment:

HVDVGGGHGGGGDBHB

--GGGGGYGGGG----

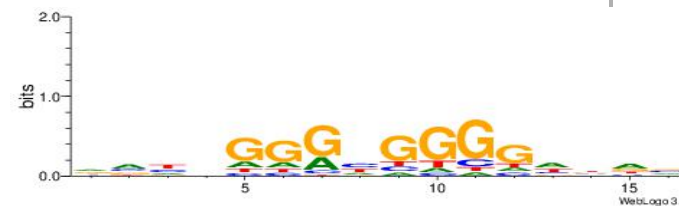
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB



Motif ID: [UP00043](#)
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 10
Similarity score: 0.0351051

Alignment:

BHHHWGGGGCGGBBVH

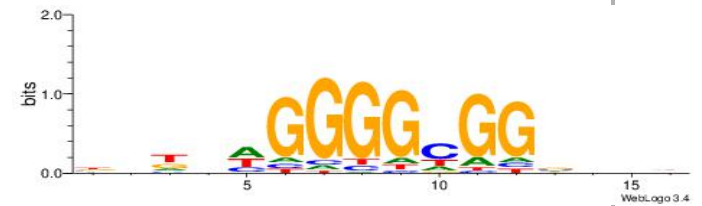
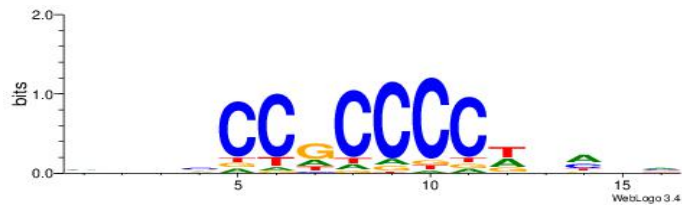
----GGGGGYGGGG--

Original motif

Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH

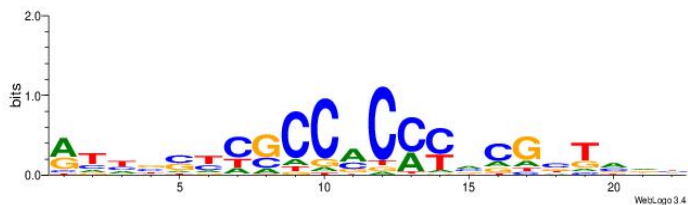


Motif ID: [UP00539](#)
 Motif name: Gli2_v016060_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.0390437

Alignment:
 HDBABCGBKRGYGGCGMSBHAK
 -----GGGGGYGGGG-----

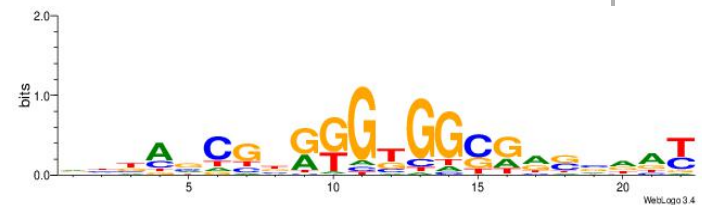
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



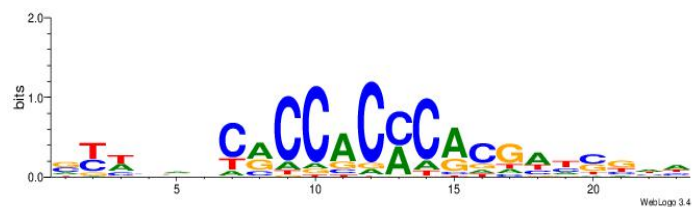
Motif ID: [UP00540](#)
 Motif name: Gli3_v016060_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.0393358

Alignment:

HHBSHTCGTGRGTGGKGDBVWMV
 -----GGGGGYGGGG-----

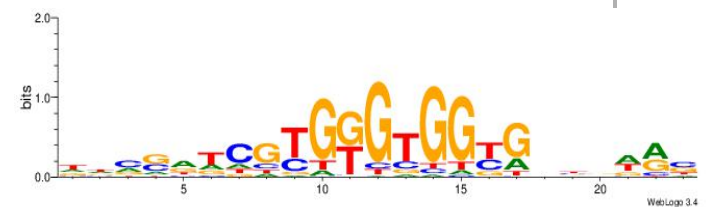
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID: [UP00000](#)
 Motif name: Smad3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4

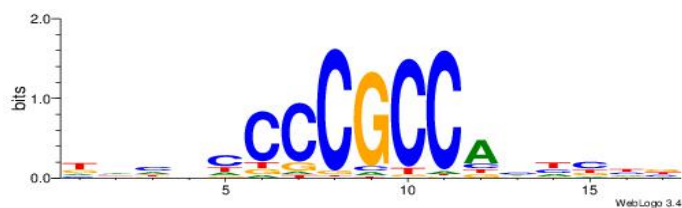
Number of overlap: 10
Similarity score: 0.0413863

Alignment:

DHHBCCCCGCCAHHBHB
----CCCCKCCCC--

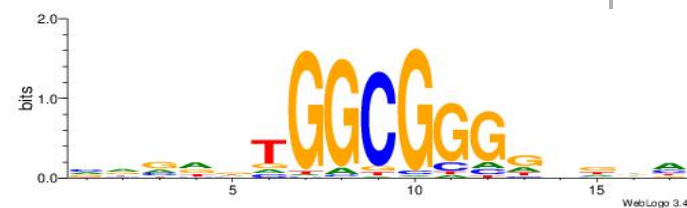
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



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: 10
Similarity score: 0.0418947

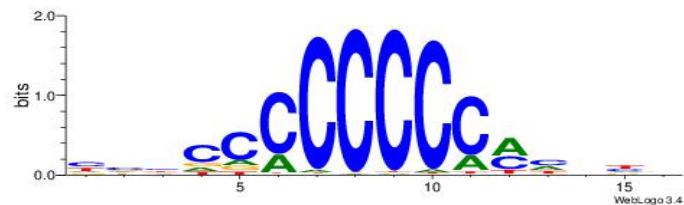
Alignment:

HVBCCCCCCCCMHHHB
---CCCCKCCCC---

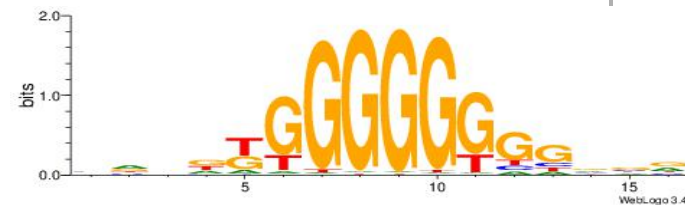
Original motif

Reverse complement motif

Consensus sequence: HVBCCCCCCCCMHHHB



Consensus sequence: BHHDYGGGGGGGGGBVD



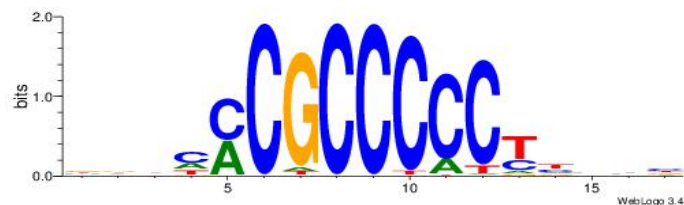
Motif ID: [UP00002](#)
Motif name: Sp4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.0420708

Alignment:

BDHHMCGCCCCCTHVBB
--CCCCKCCCC-----

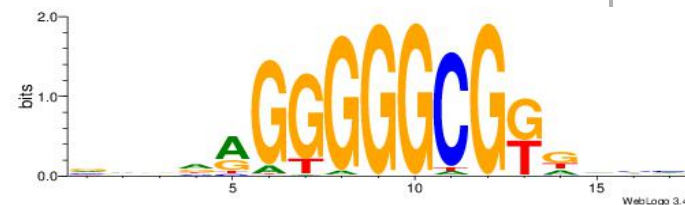
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGGCGRDHHB



Dataset #: 5 **Motif ID: 51** **Motif name: Klf4**

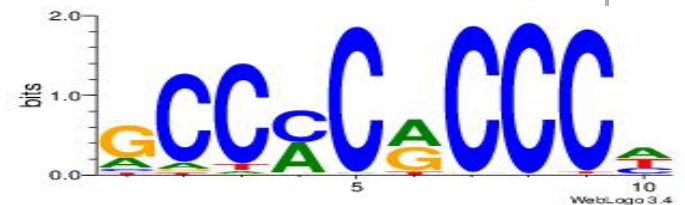
Original motif

Consensus sequence: DGGGYGKGCC



Reverse complement motif

Consensus sequence: GCCYCMCCCD



Best Matches for Motif ID 51 (Highest to Lowest)

Motif ID:	UP00093
Motif name:	Klf7_primary
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:	10
Similarity score:	0

Alignment:

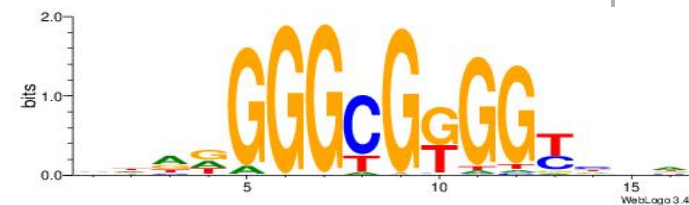
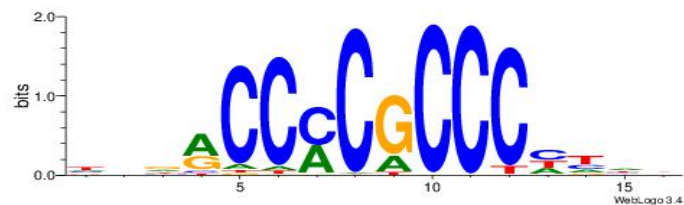
```
DHHDGGGCGRGGKHBH
---DGGGYGKGCC---
```

Original motif

Consensus sequence: HBDRCMCGCCCHHHD

Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH

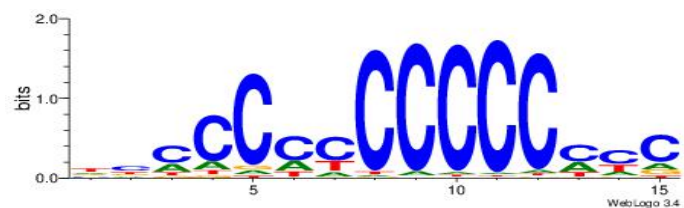


Motif ID: [UP00021](#)
 Motif name: Zfp281_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.0153308

Alignment:
 DBCCCCCCCCCMYC
 ---GCCYCMCCCD--

Original motif

Consensus sequence: DBCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD



Motif ID: [UP00002](#)

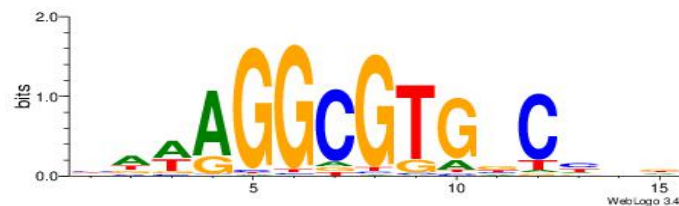
Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0186791

Alignment:

BDWAGGCGTGBCHHD
 --DGGGYGKGGC---

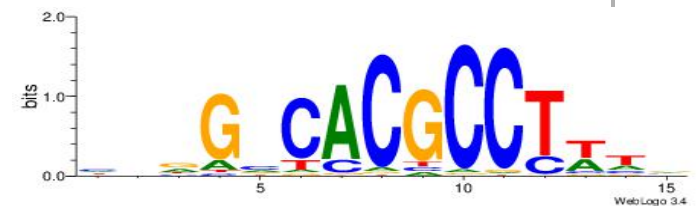
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



Motif ID: [UP00022](#)
 Motif name: Zfp740_primary
 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: 10

Similarity score: 0.0218399

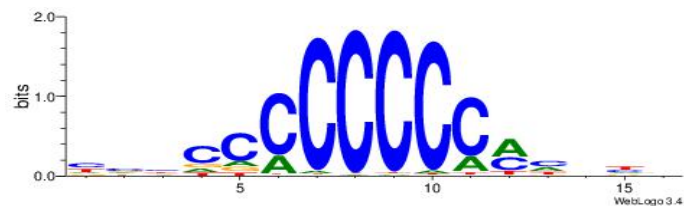
Alignment:

HVBCCCCCCCCMHHHB

--GCCYCMCCCD----

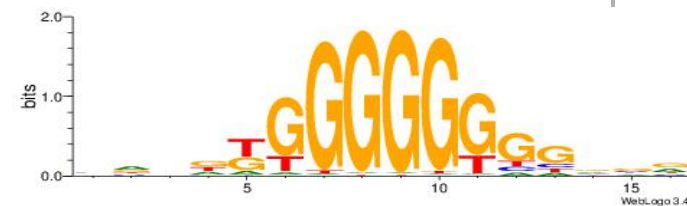
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGGBVD



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:

Forward

Position number:

1

Number of overlap:

10

Similarity score:

0.0249586

Alignment:

VHTGCGGGGGCGGH

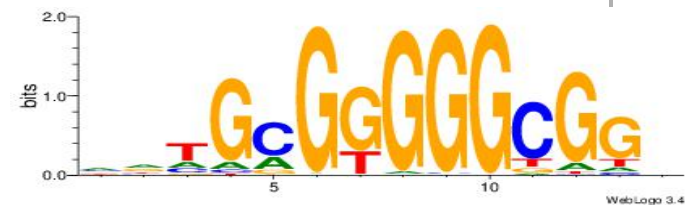
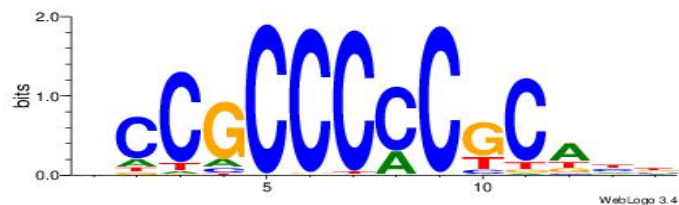
GCCYCMCCCD----

Original motif

Consensus sequence: HCCGCCCCCGCAHB

Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH

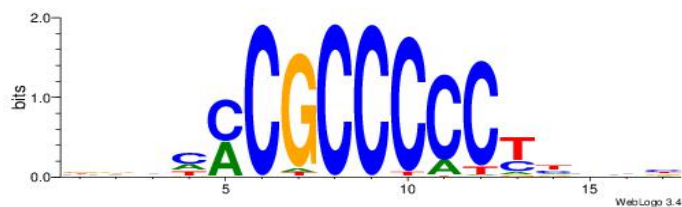


Motif ID: [UP00002](#)
 Motif name: Sp4_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 2
 Number of overlap: 10
 Similarity score: 0.0299159

Alignment:
 BVVHAGGGGGCGRDHBB
 -----DGGGYGKGGC-

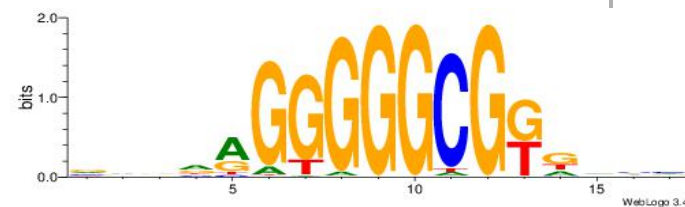
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHBB



Motif ID: [UP00000](#)

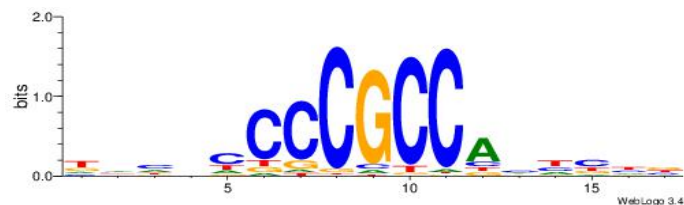
Motif name: Smad3_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0308595

Alignment:

BHBHDTGGCGGGGBDHD
 ----DGGGYGKGGC---

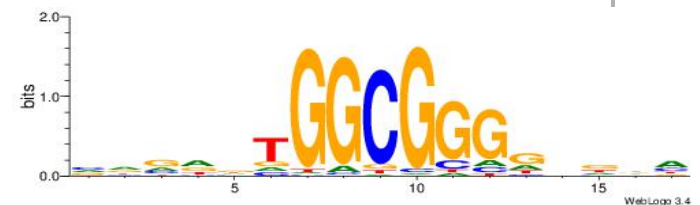
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



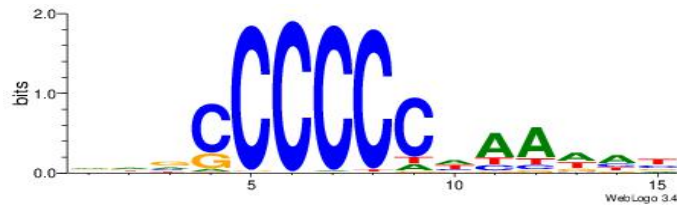
Motif ID: [UP00047](#)
 Motif name: Zbtb7b_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 1
 Number of overlap: 10
 Similarity score: 0.0345891

Alignment:

VHWTTHGGGGGGVDD
GCCYCMCCCD-----

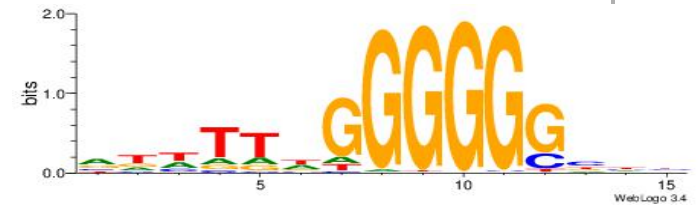
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

Consensus sequence: VHWTTHGGGGGGVDD



Motif ID: [UP00043](#)
Motif name: Bcl6b_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: 10
Similarity score: 0.0346735

Alignment:

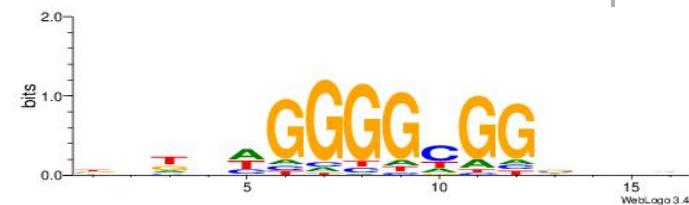
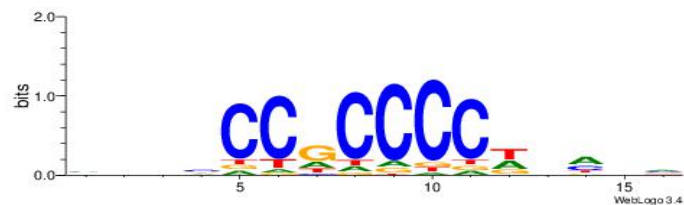
HBBBCCGCCCCWHHHV
--GCCYCMCCCD-----

Original motif

Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



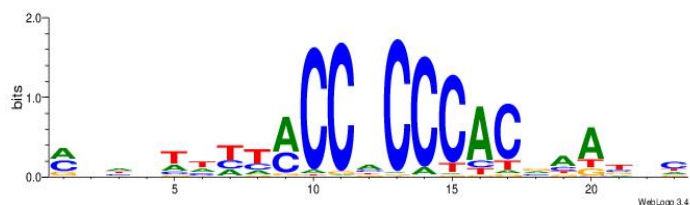
Motif ID: [UP00538](#)
 Motif name: Gli1_v015681_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 8
 Number of overlap: 10
 Similarity score: 0.0351496

Alignment:

MHHHWHYTMCCCHCCCACVAABVH
 -----GCCYCMCCCD-----

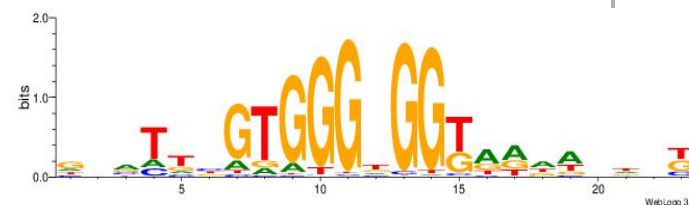
Original motif

Consensus sequence: MHHHWHYTMCCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Dataset #: 5 **Motif ID: 53** **Motif name: HIF1AARNT**

Original motif

Consensus sequence: VBACGTGV



Reverse complement motif

Consensus sequence: VCACGTBV



Best Matches for Motif ID 53 (Highest to Lowest)

Motif ID: [UP00097](#)
Motif name: Mtf1_primary
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

Alignment:

HDYTTGCACACGDHBH

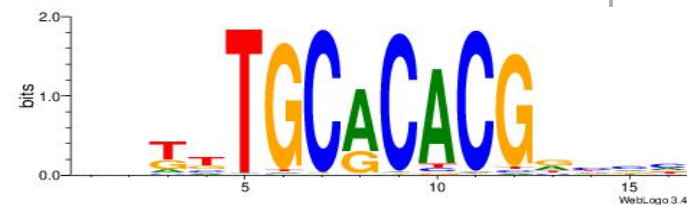
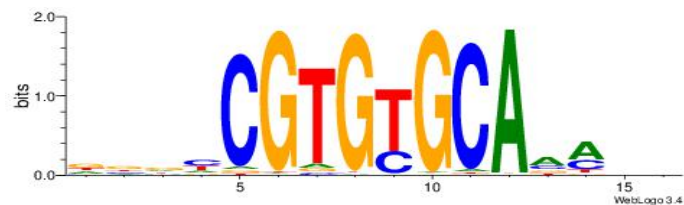
-----VCACGTBV-

Original motif

Consensus sequence: DBDHCGTGTGCAAMDH

Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH

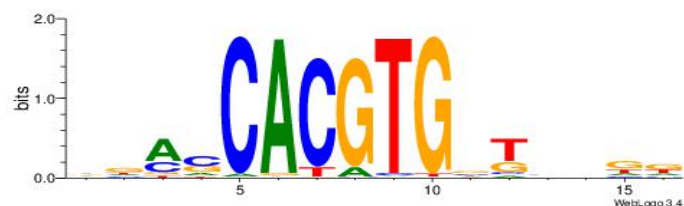


Motif ID: [UP00060](#)
 Motif name: Max_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.000574345

Alignment:
 DDASCACGTGBTBVDD
 ---VBACGTGV-----

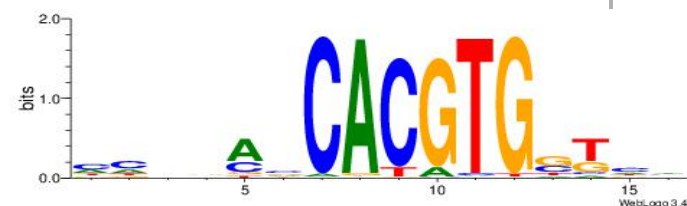
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD



Motif ID: [UP00050](#)

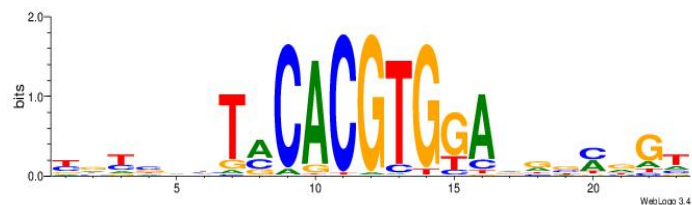
Motif name: Bhlhb2_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 9
 Number of overlap: 8
 Similarity score: 0.00642455

Alignment:

YDYBDHTMCACGTGGADDBMDGT
 -----VBACGTGV-----

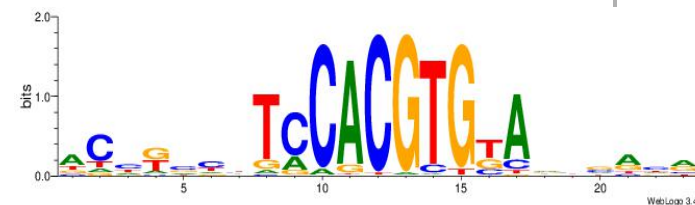
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID: [UP00084](#)
 Motif name: Gmeb1_primary
 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: 8

Similarity score: 0.0131171

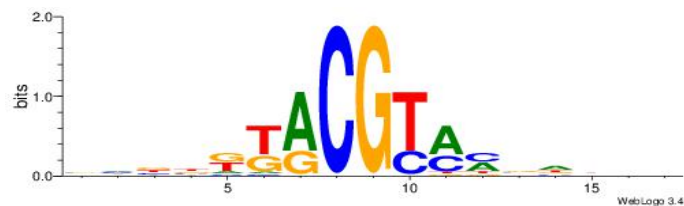
Alignment:

BVVDVRYACGTRYVBHB

-----VBACGTGV-----

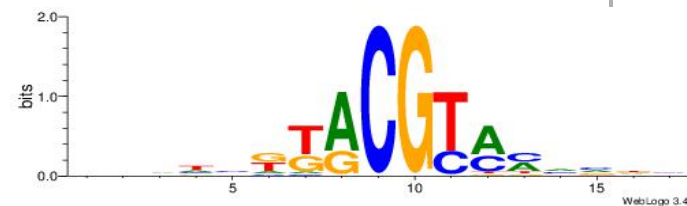
Original motif

Consensus sequence: BHBBKKACGTMMVDBVB



Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB



Motif ID: [UP00050](#)
Motif name: Bhlhb2_primary
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: 8
Similarity score: 0.014006

Alignment:

RDHDBVDTACGTGASBHVHDH

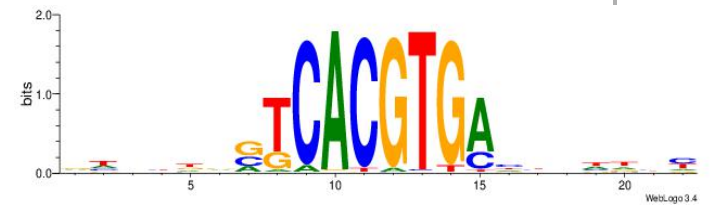
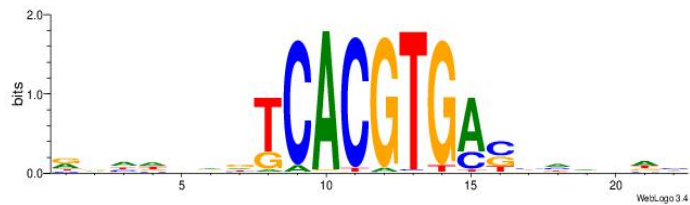
-----VCACGTBV-----

Original motif

Consensus sequence: RDHDBVDTACGTGASBHVHDH

Reverse complement motif

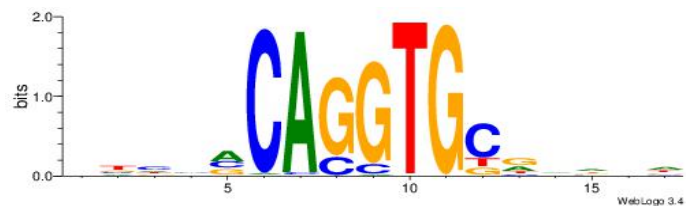
Consensus sequence: DDHBHBSTACGTGAHBBDHMH



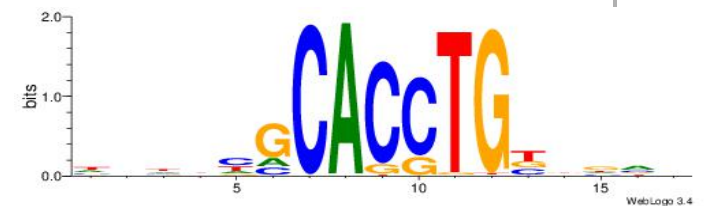
Motif ID: [UP00046](#)
 Motif name: Tcfe2a_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 8
 Similarity score: 0.0184296

Alignment:
 VBHHVCAGGTGCDVDHD
 ----VBACGTGV-----

Original motif
 Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif
 Consensus sequence: DHDBHGCACCTGBDDVB



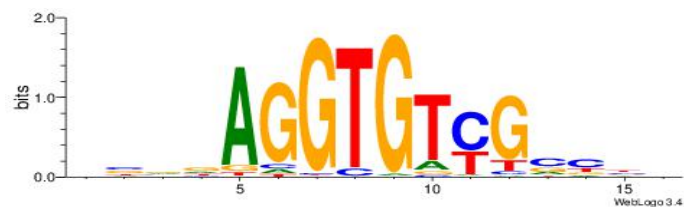
Motif ID: [UP00068](#)
 Motif name: Eomes_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 8
 Similarity score: 0.0188154

Alignment:

VVBVCKACACCTHVBV
 -----VCACGTBV--

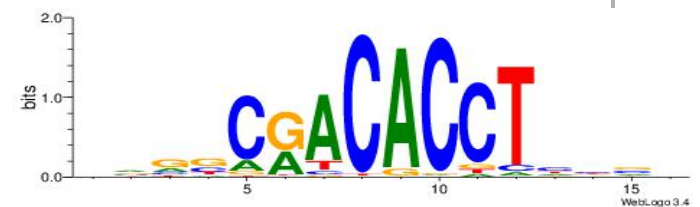
Original motif

Consensus sequence: VBVDAGGTGTGVBVV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV



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: 9

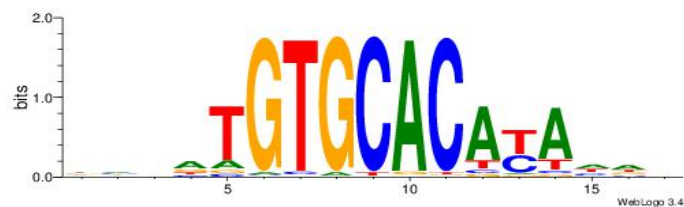
Number of overlap: 8
Similarity score: 0.0189568

Alignment:

DHVDTGTGCACAYAHDH
-VBACGTGV-----

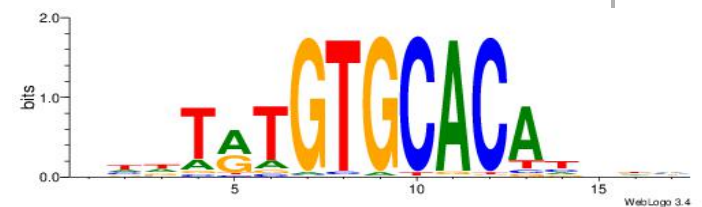
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



Motif ID: [UP00042](#)
Motif name: Gm397_primary
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: 8
Similarity score: 0.0198987

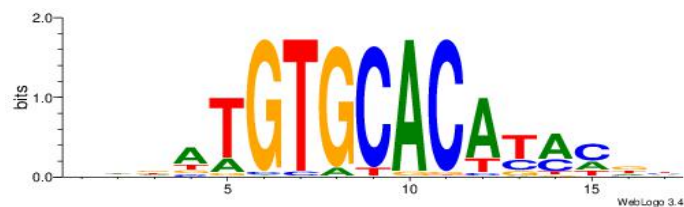
Alignment:

HHRTATGTGCACATHHD
--VBACGTGV-----

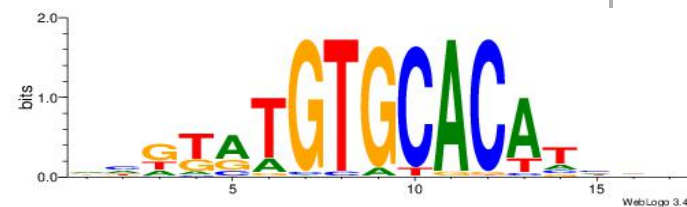
Original motif

Reverse complement motif

Consensus sequence: HHDATGTGCACATAMDH



Consensus sequence: HHRTATGTGCACATHHD



Motif ID: [UP00060](#)
Motif name: Max_secondary
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: 0.021967

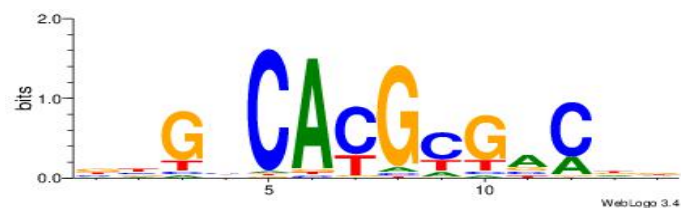
Alignment:

BBGHCACGCGACDD

---VCACGTBV---

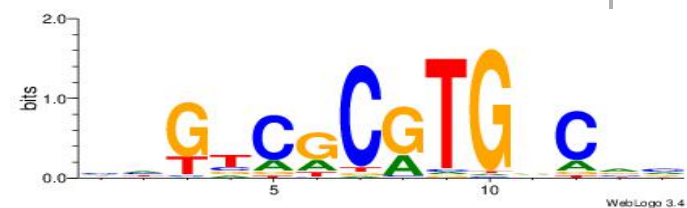
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



Dataset #: 5 **Motif ID: 56** **Motif name: ArntAhr**

Original motif

Consensus sequence: YGCGTG



Reverse complement motif

Consensus sequence: CACGCM



Best Matches for Motif ID 56 (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:

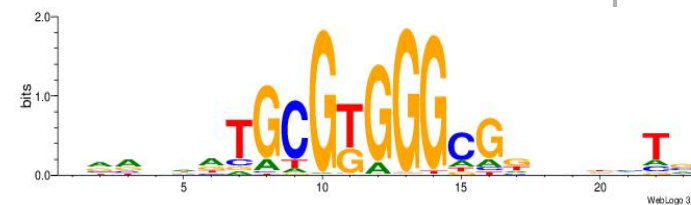
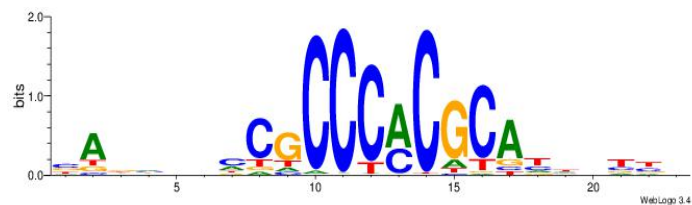
```
VVVDHHTGCGYGGGCGDHVHHTB
-----YGCGTG-----
```

Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV

Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

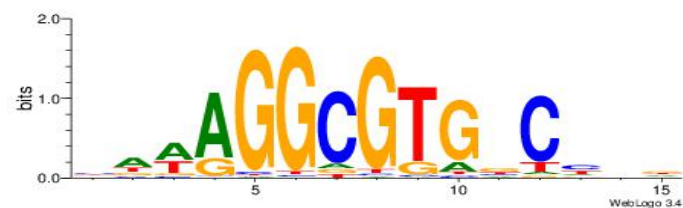


Motif ID: [UP00002](#)
 Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 5
 Number of overlap: 6
 Similarity score: 0.00183587

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

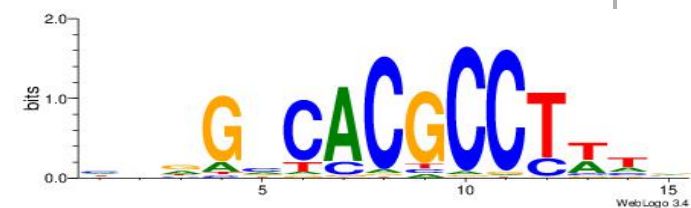
Original motif

Consensus sequence: BDWAGGCGTGBCBHHD



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:

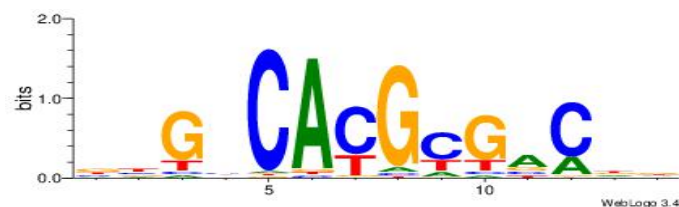
```

HDGTCGCGTGDCVB
----YGCGTG-----

```

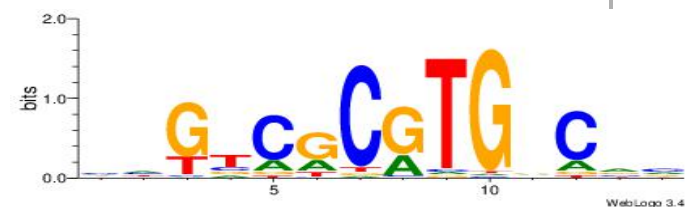
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB

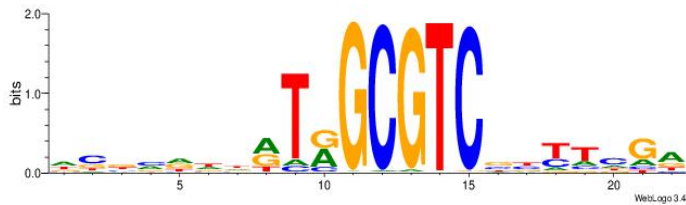


Motif ID:	UP00527
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6

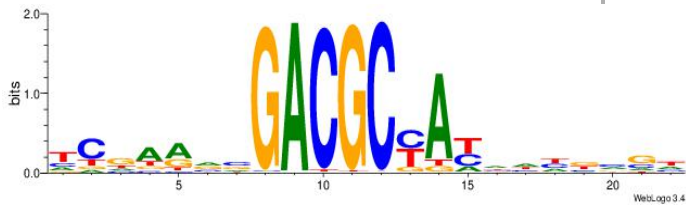
Similarity score: 0.00526158

Alignment:
TCDAMVBGACGCMACDDDVBBDD
-----CACGCM-----

Original motif
Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif
Consensus sequence: TCDAMVBGACGCMACDDDVBBDD

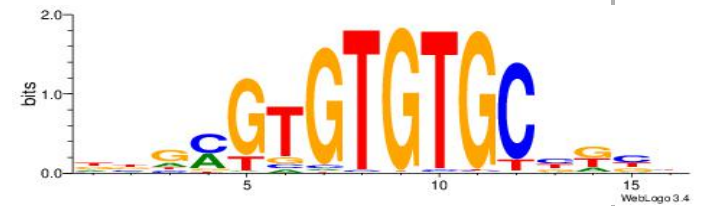


Motif ID: [UP00042](#)
Motif name: Gm397_second
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 6
Similarity score: 0.00558171

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

Original motif
Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif
Consensus sequence: HBGYGTGTGTGCVRVD



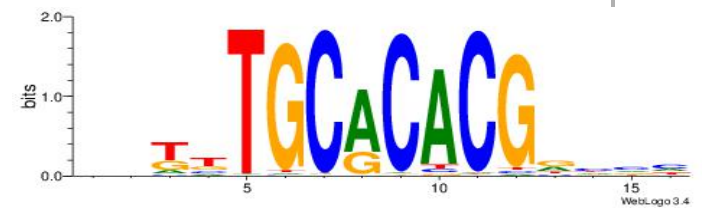
Alignment:

```
HDYTTGCACACGDHBH
-----CACGCM--
```

Consensus sequence: DBDHCGTGTGCAAMDH



Consensus sequence: HDYTTGCACACGDHBH



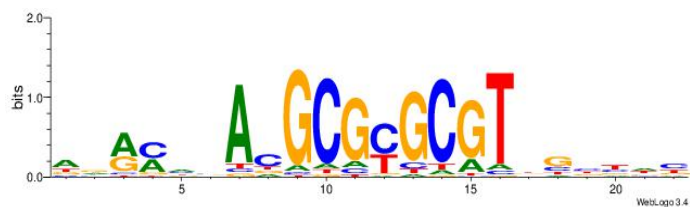
Motif ID: [UP00526](#)
 Motif name: Foxn1_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 8
 Number of overlap: 6
 Similarity score: 0.0123233

Alignment:

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

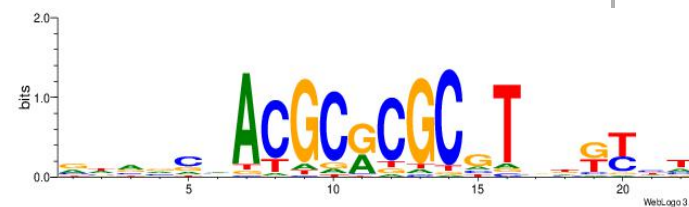
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

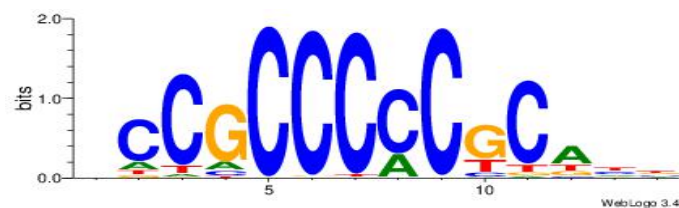


Motif ID: [UP00007](#)
 Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3

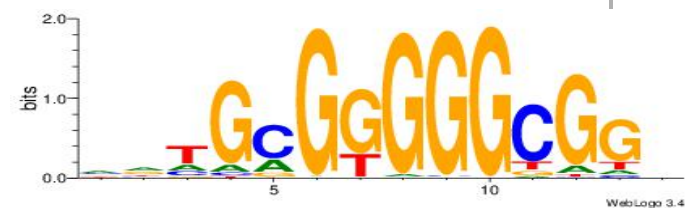
Number of overlap: 6
Similarity score: 0.0141579

Alignment:
HCCGCCCCCGCAHB
-----CACGCM--

Original motif
Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH



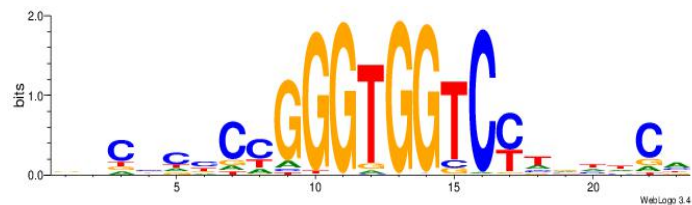
Motif ID: [UP00538](#)
Motif name: Gli1_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 11
Number of overlap: 6
Similarity score: 0.0144485

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

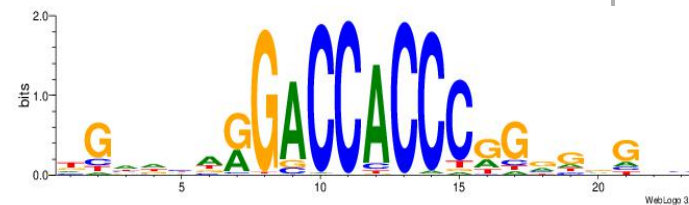
Original motif

Reverse complement motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVDCH



Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



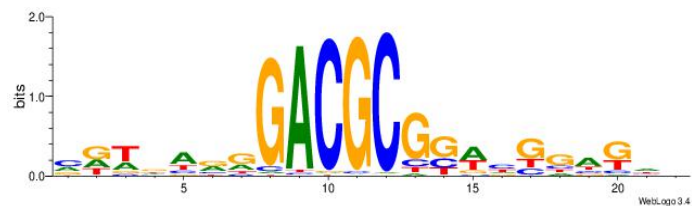
Motif ID: [UP00527](#)
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 6
Similarity score: 0.0172109

Alignment:

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

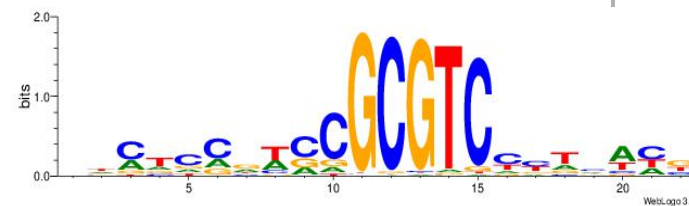
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Results created by MOTIFSIM on 06-18-2018 14:32:36
Runtime: 695.758 seconds

MOTIFSIM is written by Ngoc Tam L. Tran
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