



MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.1

INPUT

Input Parameters

Number of files:	2
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
PScanChIP_DM05.txt	16	1
RSAT_peak-motifs_DM05.txt	17	2

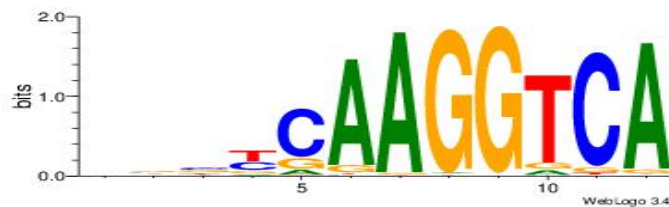
RESULTS

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

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

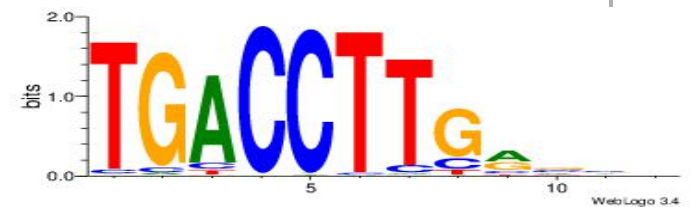
Original motif

Consensus sequence: VBBYCAAGGTCA



Reverse complement motif

Consensus sequence: TGACCTGMBBB



Best Matches for Motif ID 4 (Highest to Lowest)

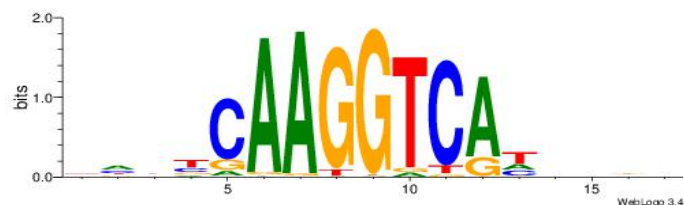
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0

Alignment:

```
HHBVHTGACCTTGVDHD
-----TGACCTTGMBBB
```

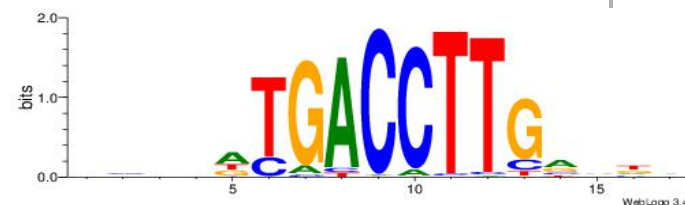
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



Motif ID: [UP00009](#)
Motif name: Nr2f2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.0205471

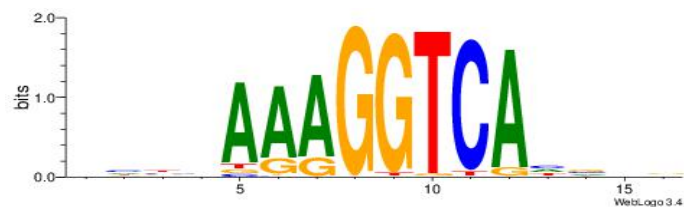
Alignment:

DHBHAAAGGTCAHVHB

VBBYCAAGGTCA----

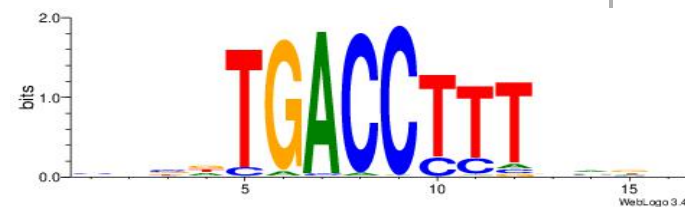
Original motif

Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif

Consensus sequence: BHVDTGACCTTTDVDD



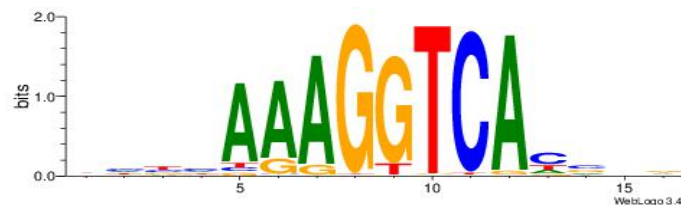
Motif ID: [UP00048](#)
 Motif name: Rara
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 5
 Number of overlap: 12
 Similarity score: 0.0214372

Alignment:

DHBHAAAGGTCACVHD
 VBBYCAAGGTCA----

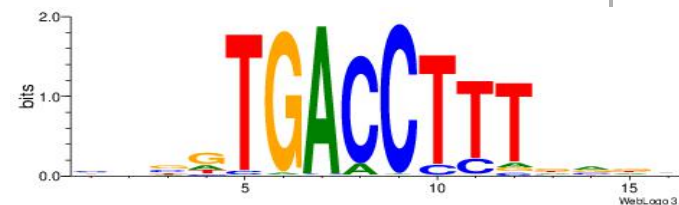
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD



Motif ID: [UP00009](#)
 Motif name: Nr2f2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward

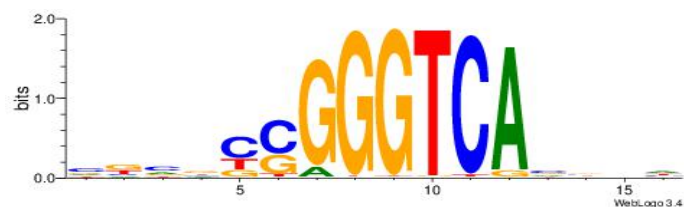
Position number: 5
Number of overlap: 12
Similarity score: 0.0430759

Alignment:

HVBVTGACCCSGBVBV
-----TGACCTTGMBBB

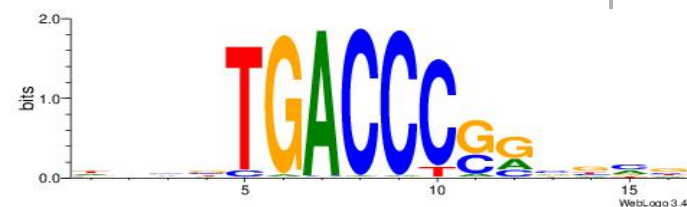
Original motif

Consensus sequence: VBVBCTGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



Motif ID: [UP00066](#)
Motif name: Hnf4a_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.0451776

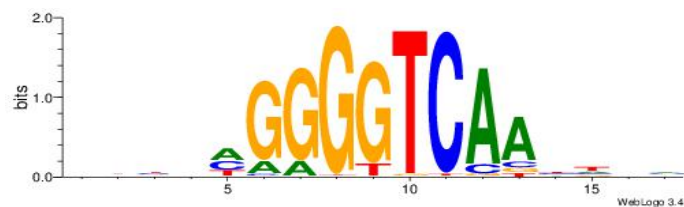
Alignment:

BDBVMGGGGTCAABHDV
VBBYCAAGGTCA-----

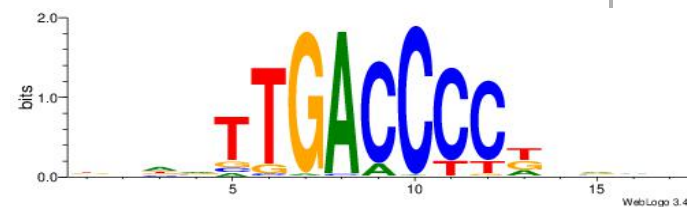
Original motif

Reverse complement motif

Consensus sequence: BDBVMGGGGTCAABHDV



Consensus sequence: BHHVTTGACCCCYVVD



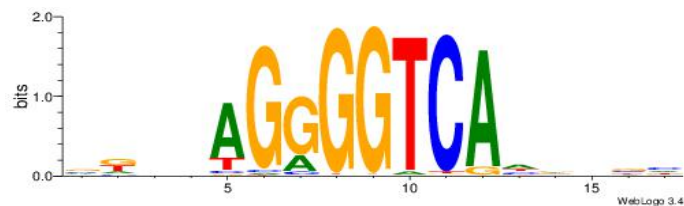
Motif ID: [UP00079](#)
Motif name: Esrra_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 12
Similarity score: 0.0482496

Alignment:

VKBBAGGGGTCAHDBBH
VBBYCAAGGTCA-----

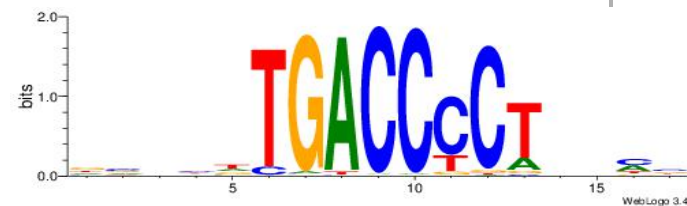
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV



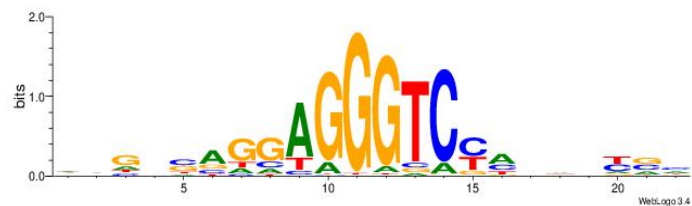
Similarity score: 0.0525354

Alignment:

DVMHHDHKGACCCTCCTSVCBH
-----TGACCTTGMBBB---

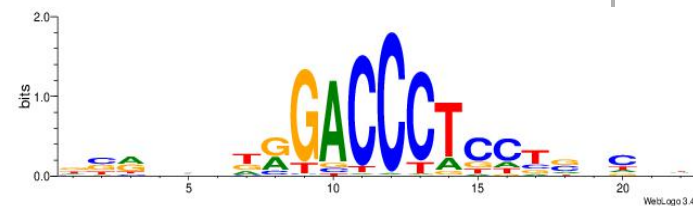
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Motif ID: [UP00066](#)
Motif name: Hnf4a_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: 12
Similarity score: 0.0580553

Alignment:

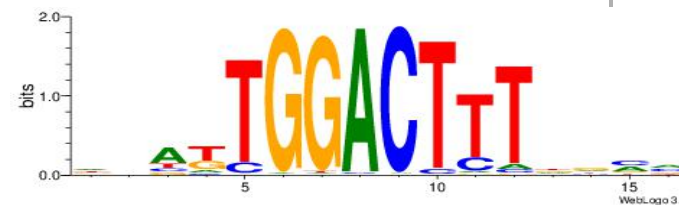
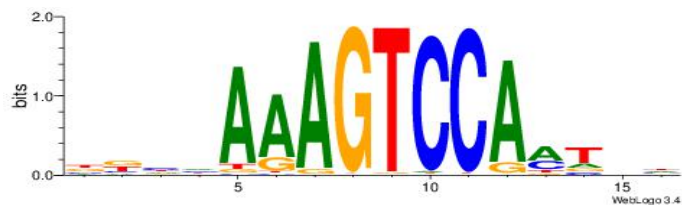
HHAYTGGACTTTTHDBV
----TGACCTTGMBBB

Original motif

Consensus sequence: BBHHAAAGTCCAMTHH

Reverse complement motif

Consensus sequence: HHAYTGGACTTTTHDBV



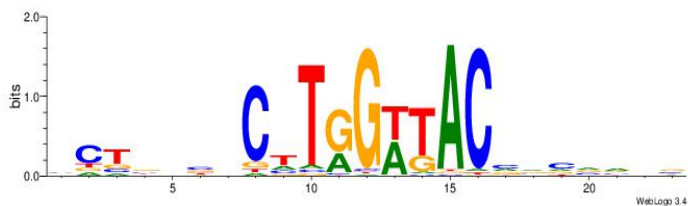
Motif ID: [UP00098](#)
 Motif name: Rfx3_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 12
 Similarity score: 0.0609738

Alignment:

BDBBVBVGTAWCCAAGVBHBAGB
 -----TGACCTTGMBBB-----

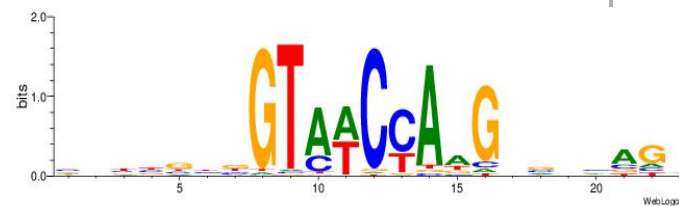
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Dataset #: 1 **Motif ID: 5** **Motif name: ZEB1**

Original motif

Consensus sequence: CACCTD



Reverse complement motif

Consensus sequence: HAGGTG



Best Matches for Motif ID 5 (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:

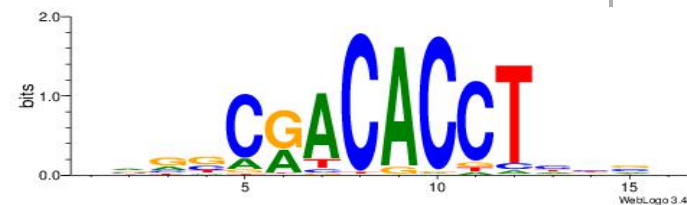
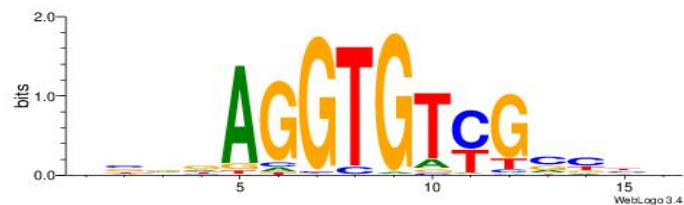
```
VVBVCKACACCTHVBV
-----CACCTD----
```

Original motif

Consensus sequence: VBVDAGGTGTYGVBBV

Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV

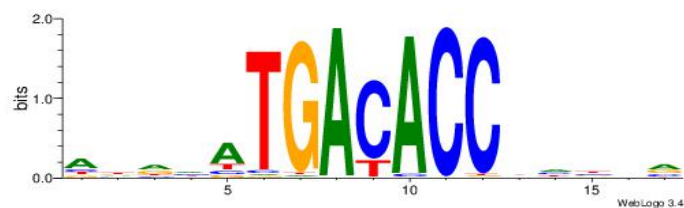


Motif ID: [UP00199](#)
 Motif name: Six4
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 6
 Similarity score: 0.00433068

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

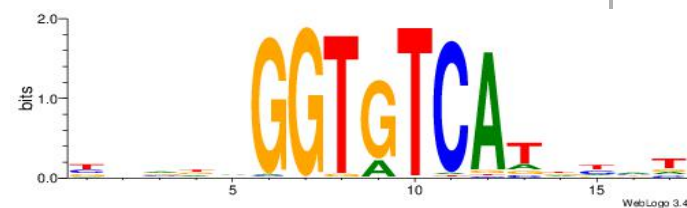
Original motif

Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif

Consensus sequence: BBVHVGGTGTCTHDDT



Motif ID: [UP00068](#)

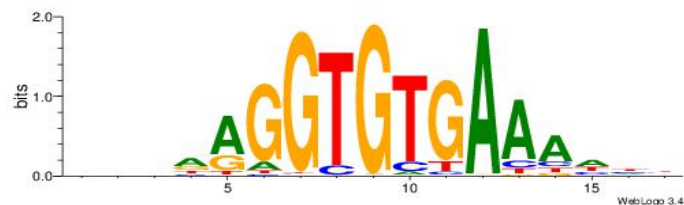
Motif name: Eomes_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 9
 Number of overlap: 6
 Similarity score: 0.00524081

Alignment:

HHHTTTCACACCTDHBV
 -----CACCTD---

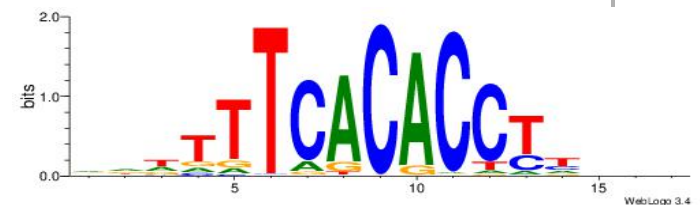
Original motif

Consensus sequence: BVHDAGGTGTGAAHHH



Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV



Motif ID: [UP00046](#)
 Motif name: Tcf2a_primary
 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: 0.00911301

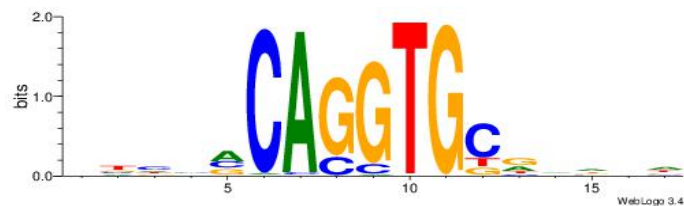
Alignment:

DHDBHGCACCTGBDDVB

-----CACCTD-----

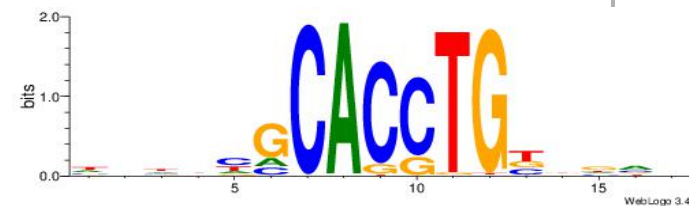
Original motif

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: Backward
Position number: 4
Number of overlap: 6
Similarity score: 0.0233556

Alignment:

BDDRVGACCACCHBDVB

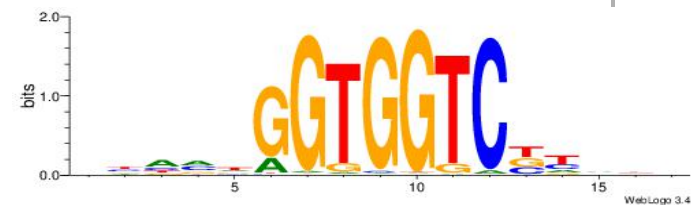
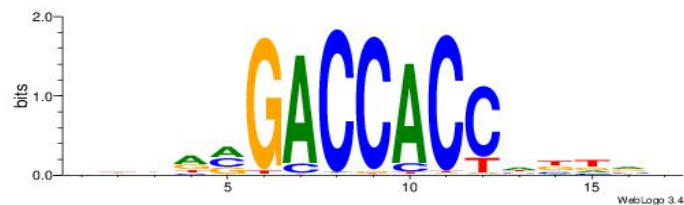
-----CACCTD---

Original motif

Consensus sequence: BDDRVGACCACCHBDVB

Reverse complement motif

Consensus sequence: BBDVHGGTGGTCBKDDDB



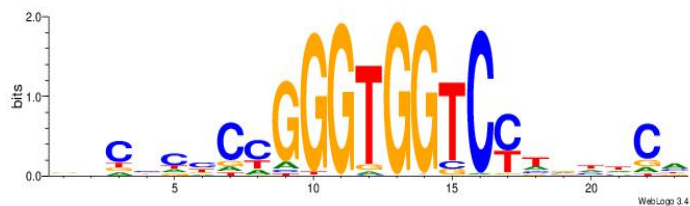
Motif ID: [UP00538](#)
 Motif name: Gli1_v016060_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 11
 Number of overlap: 6
 Similarity score: 0.0233928

Alignment:

BHCBCBCCGGGTGGTCYHVHDCH
 -----HAGGTG-----

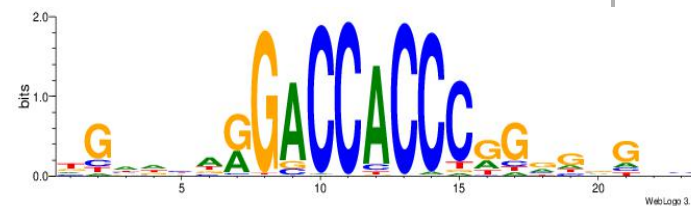
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



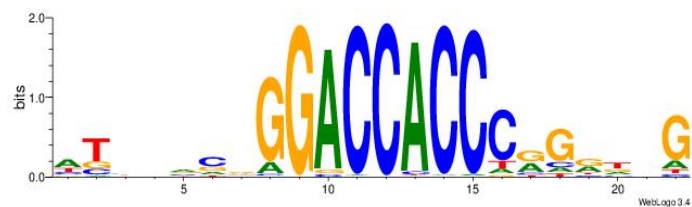
Motif ID: [UP00539](#)
 Motif name: Gli2_v015681_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 12
 Number of overlap: 6
 Similarity score: 0.0254338

Alignment:

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

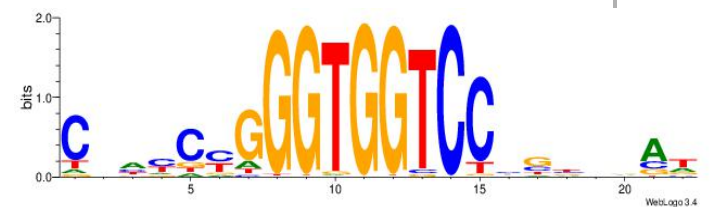
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



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: Forward
 Position number: 12

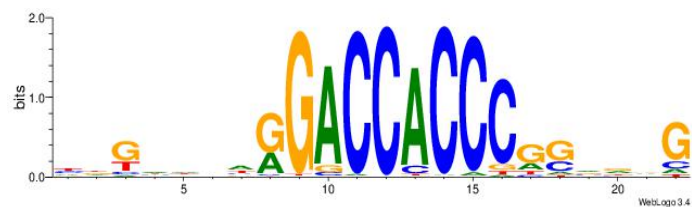
Number of overlap: 6
Similarity score: 0.0290143

Alignment:

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

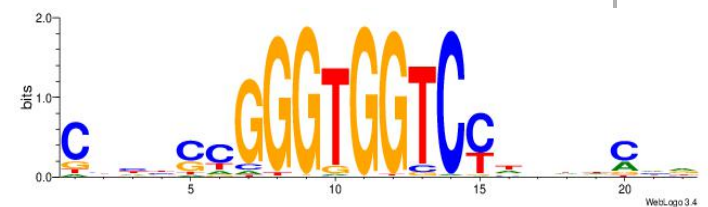
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



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

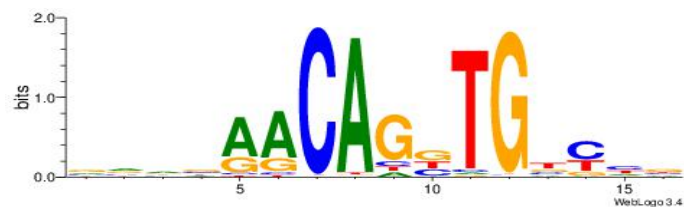
Alignment:

VVDBAACAGBTGBYHB
-----HAGGTG-----

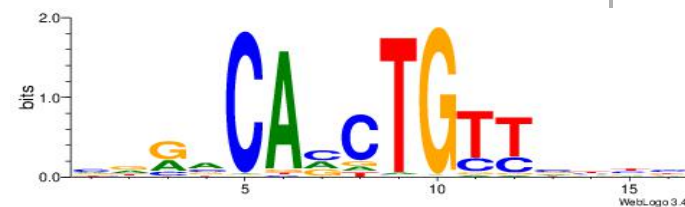
Original motif

Reverse complement motif

Consensus sequence: VVDBAACAGBTGBYHB



Consensus sequence: BDKVCABCTGTTBDBV



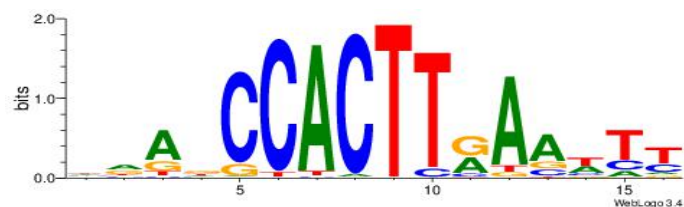
Motif ID: [UP00249](#)
 Motif name: Nkx2-5
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 6
 Number of overlap: 6
 Similarity score: 0.031502

Alignment:

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

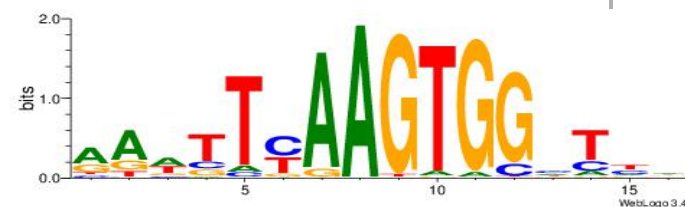
Original motif

Consensus sequence: HDADCCACTTTRAAWTT



Reverse complement motif

Consensus sequence: AAWTTMAAGTGGHTDH



Dataset #: 1 **Motif ID: 6** **Motif name: Mycn**

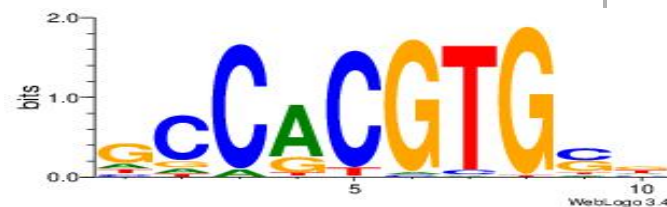
Original motif

Consensus sequence: HSCACGTGGC



Reverse complement motif

Consensus sequence: GCCACGTGSD



Best Matches for Motif ID 6 (Highest to Lowest)

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:	3
Number of overlap:	10
Similarity score:	0

Alignment:

DDASCACGTGBTBVDD

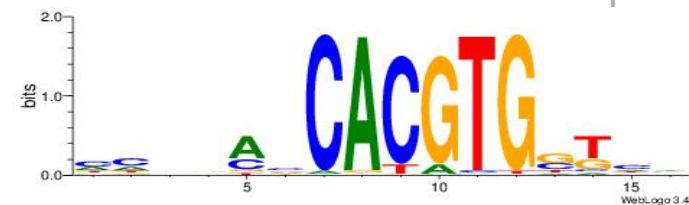
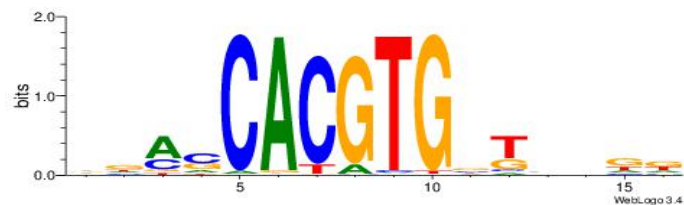
--HSCACGTGGC----

Original motif

Consensus sequence: DDASCACGTGBTBVDD

Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD

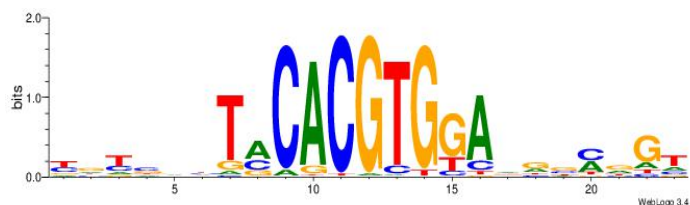


Motif ID: [UP00050](#)
 Motif name: Bhlhb2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.00783793

Alignment:
 ACHRBHDTCCACGTGYAHBMMH
 -----GCCACGTGSD-----

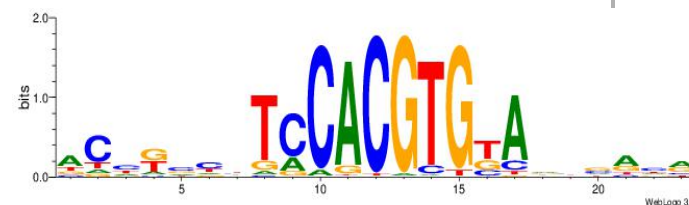
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHBMMH



Motif ID: [UP00050](#)

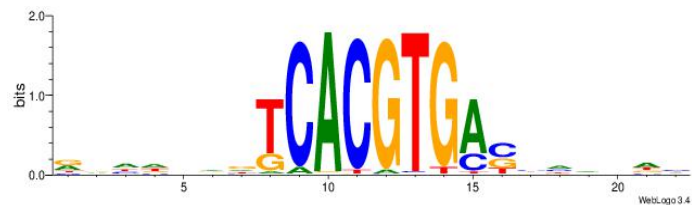
Motif name: Bhlhb2_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.0132858

Alignment:

DDHBHBSTCACGTGAHBBDHHM
 -----GCCACGTGSD-----

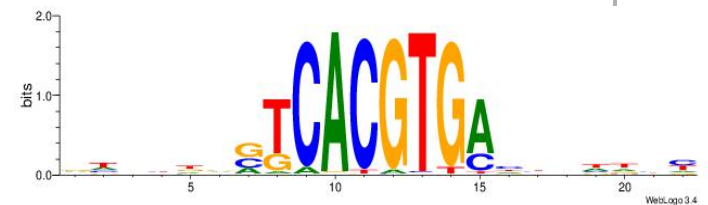
Original motif

Consensus sequence: RDHDBVDTACGTGASBHVHHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



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: 5
 Number of overlap: 10

Similarity score: 0.0227933

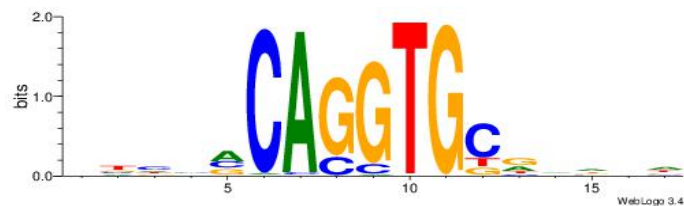
Alignment:

VBHHVCAGGTGCDVDHD

---GCCACGTGSD----

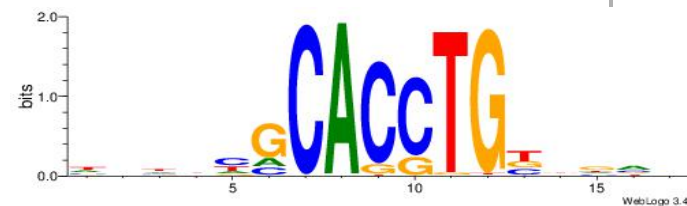
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID: [UP00060](#)
Motif name: Max_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: 0.0257011

Alignment:

BBGHCACGCGACDD

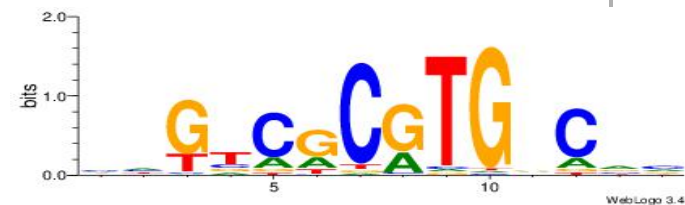
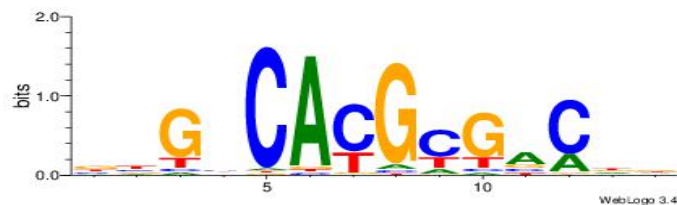
--HSCACGTGGC--

Original motif

Consensus sequence: BBGHCACGCGACDD

Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



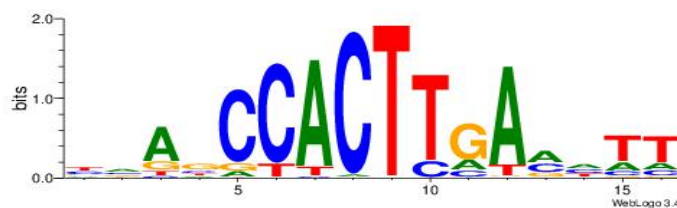
Motif ID: [UP00165](#)
 Motif name: Titf1
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.0344833

Alignment:

BVABCCACTTGAMHTT
 ---GCCACGTGSD---

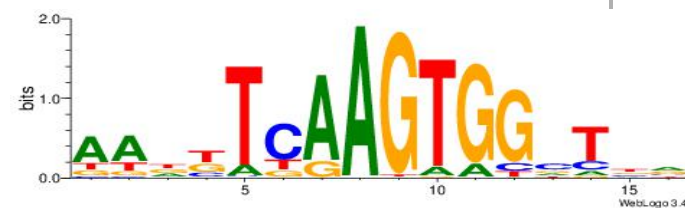
Original motif

Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif

Consensus sequence: AAHYTCAAGTGGBTBV



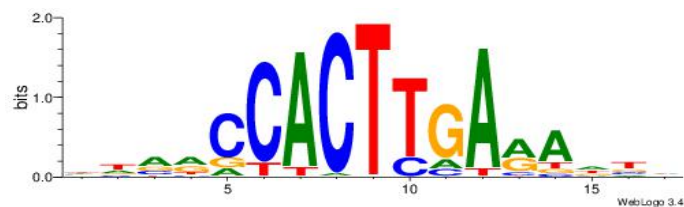
Motif ID: [UP00231](#)
 Motif name: Nkx2-2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.035228

Alignment:

HDVRCCACTTGARADBD
 ---GCCACGTGSD----

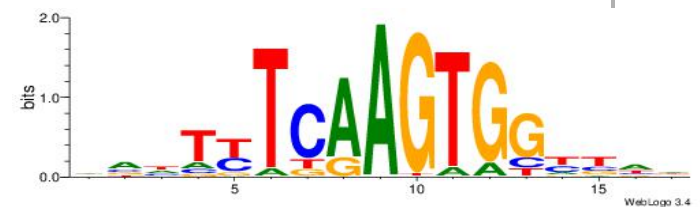
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH



Motif ID: [UP00084](#)
 Motif name: Gmeb1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4

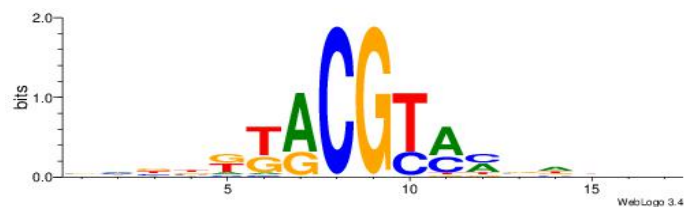
Number of overlap: 10
Similarity score: 0.0358581

Alignment:

BVVDVRYACGTRYVBHB
----GCCACGTGSD---

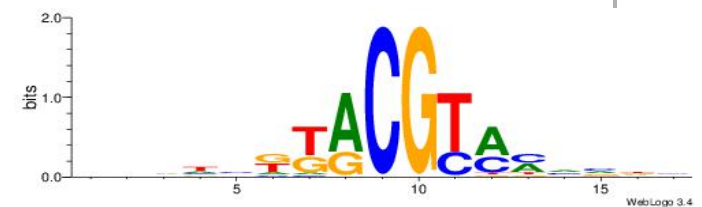
Original motif

Consensus sequence: BHBBKKACGTMMVDBVB



Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB



Motif ID: [UP00084](#)
Motif name: Gmeb1_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: 10
Similarity score: 0.03725

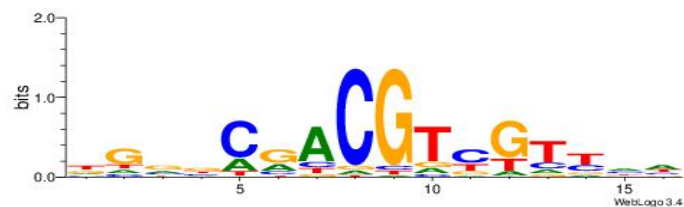
Alignment:

HHMACKACGTMGBVCD
---HSCACGTGGC---

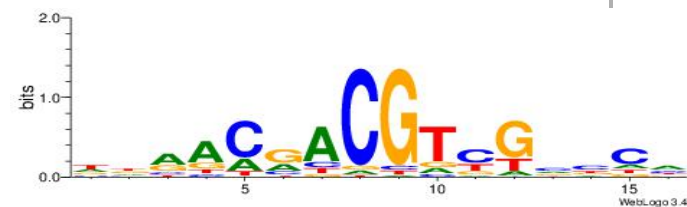
Original motif

Reverse complement motif

Consensus sequence: DGVBCRACGTYGTYHH



Consensus sequence: HHMACKACGTMGBVCD



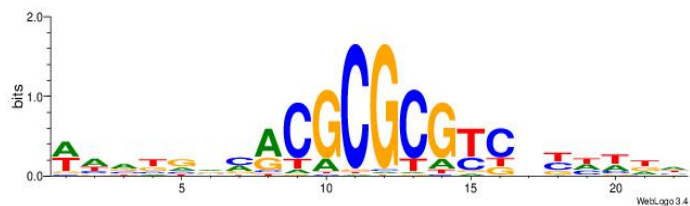
Motif ID: [UP00526](#)
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 10
Similarity score: 0.0383187

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH  
-----HSCACGTGGC-----
```

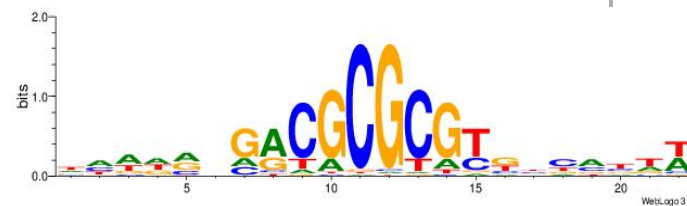
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Dataset #: 1 **Motif ID: 8** **Motif name: Myc**

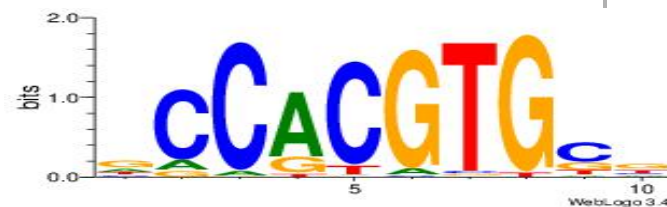
Original motif

Consensus sequence: VGCACGTGGH



Reverse complement motif

Consensus sequence: DCCACGTGCV



Best Matches for Motif ID 8 (Highest to Lowest)

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:	3
Number of overlap:	10
Similarity score:	0

Alignment:

DDASCACGTGBTBVDD

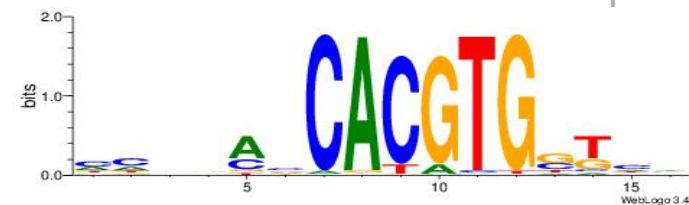
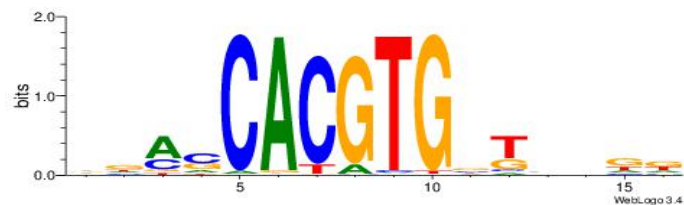
--VGCACGTGGH----

Original motif

Consensus sequence: DDASCACGTGBTBVDD

Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD

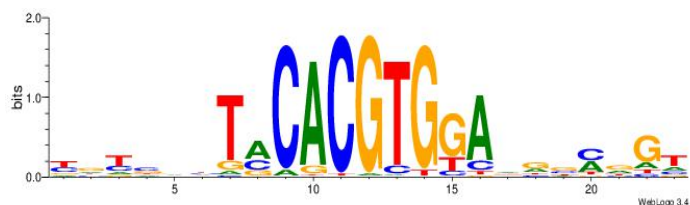


Motif ID: [UP00050](#)
 Motif name: Bhlhb2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 8
 Number of overlap: 10
 Similarity score: 0.00631885

Alignment:
 ACHRBHDTCCACGTGYAHBMMH
 -----DCCACGTGCV-----

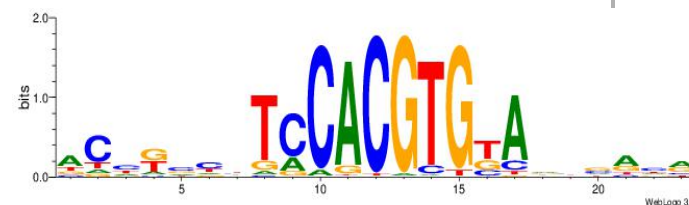
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHBMMH



Motif ID: [UP00050](#)

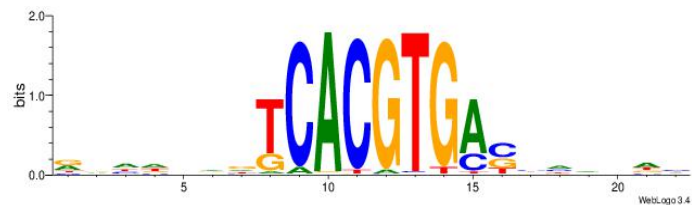
Motif name: Bhlhb2_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 10
 Similarity score: 0.00821668

Alignment:

DDHBHBSTCACGTGAHBBDHHM
 -----DCCACGTGCV-----

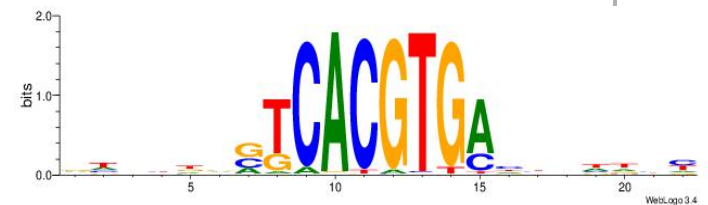
Original motif

Consensus sequence: RDHDBVDTACGTGASBHVHHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Motif ID: [UP00046](#)
 Motif name: Tcfe2a_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: 10

Similarity score: 0.0140005

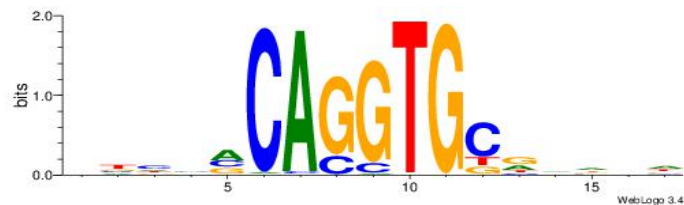
Alignment:

DHDBHGCACCTGBDDVB

----VGCACGTGGH----

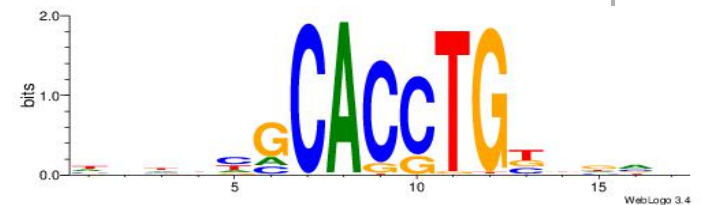
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID: [UP00060](#)
Motif name: Max_secondary
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: 0.0308912

Alignment:

BBGHCACGCGACDD

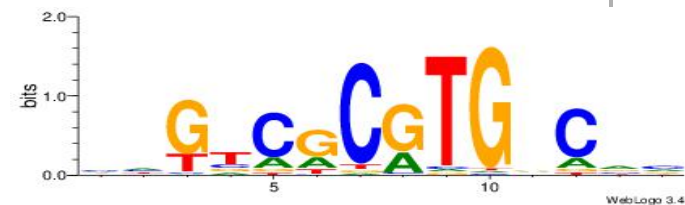
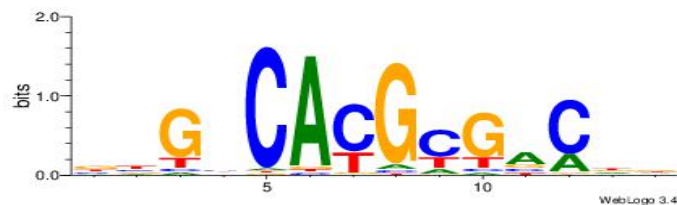
--VGCACGTGGH--

Original motif

Consensus sequence: BBGHCACGCGACDD

Reverse complement motif

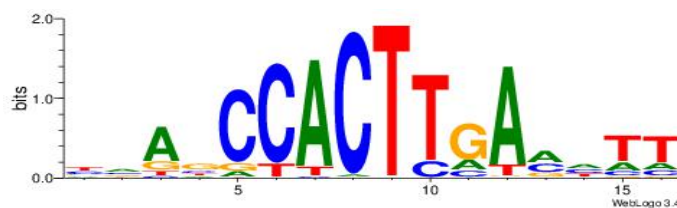
Consensus sequence: HDGTCGCGTGDCVB



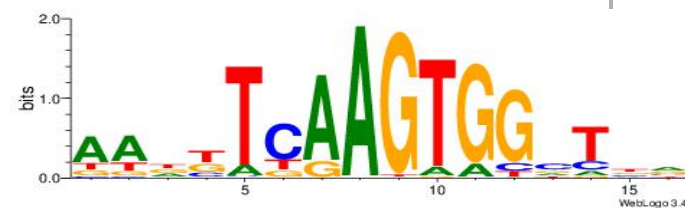
Motif ID: [UP00165](#)
 Motif name: Titf1
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.0311723

Alignment:
 BVABCCACTTGAMHTT
 ---DCCACGTGCV---

Original motif
 Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif
 Consensus sequence: AAHYTCAAGTGGBTBV



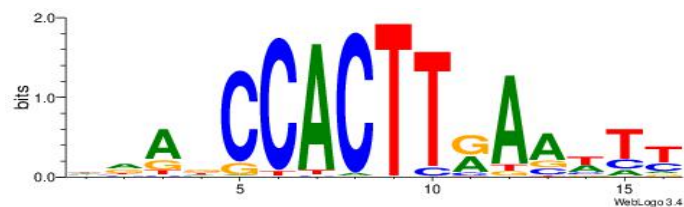
Motif ID: [UP00249](#)
 Motif name: Nkx2-5
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 10
 Similarity score: 0.031308

Alignment:

HDADCCACTTTRAAWTT
 ---DCCACGTGCV---

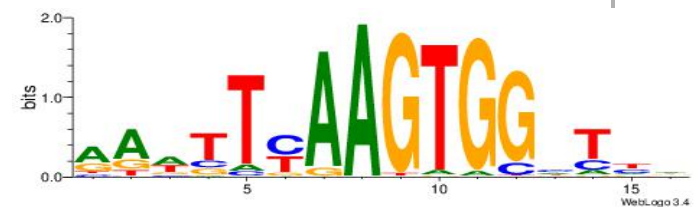
Original motif

Consensus sequence: HDADCCACTTTRAAWTT



Reverse complement motif

Consensus sequence: AAWTTMAAGTGGHTDH



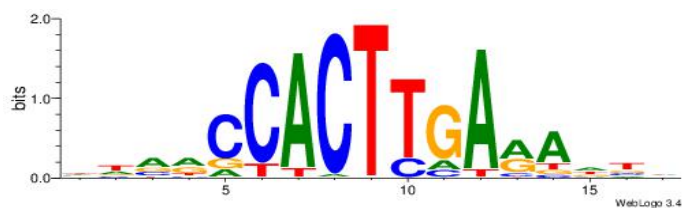
Motif ID: [UP00231](#)
 Motif name: Nkx2-2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4

Number of overlap: 10
Similarity score: 0.0334845

Alignment:
HDVRCCACTTGARADBD
---DCCACGTGCV----

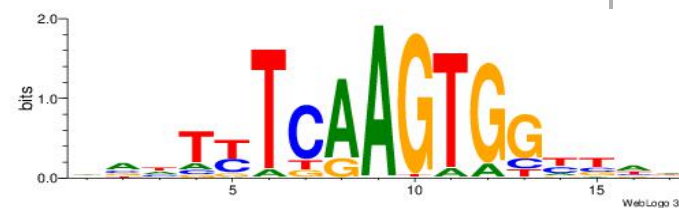
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH



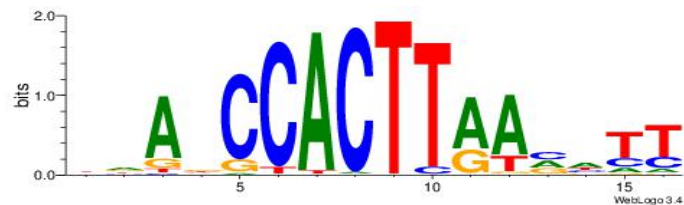
Motif ID: [UP00147](#)
Motif name: Nkx2-6
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 10
Similarity score: 0.0345548

Alignment:
DDADCCACTTAAVHTT
---DCCACGTGCV---

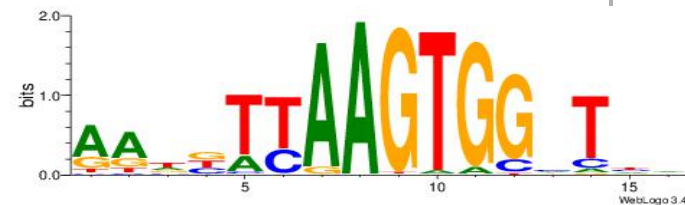
Original motif

Reverse complement motif

Consensus sequence: DDADCCACTTAHVHTT



Consensus sequence: AAHVTTAAGTGGHTDD



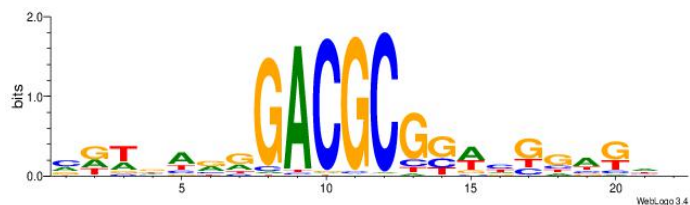
Motif ID: [UP00527](#)
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 8
Number of overlap: 10
Similarity score: 0.0363818

Alignment:

```
VDWDARRGACGCGGWHGGAHV  
-----VGCACGTGGH-----
```

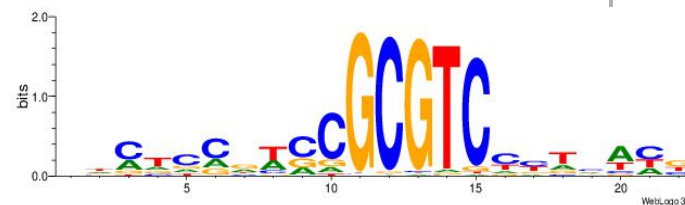
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Dataset #: 1 **Motif ID: 11** **Motif name: NR4A2**

Original motif

Consensus sequence: AAGGTCAC



Reverse complement motif

Consensus sequence: GTGACCTT



Best Matches for Motif ID 11 (Highest to Lowest)

Motif ID:	UP00048
Motif name:	Rara
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

Alignment:

DHBHAAAGGTCACVHD

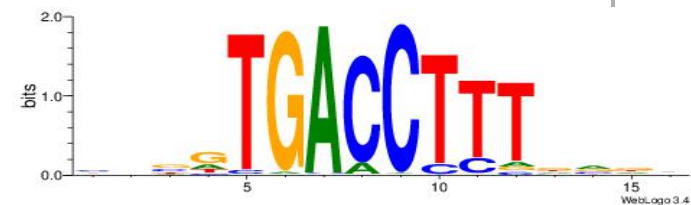
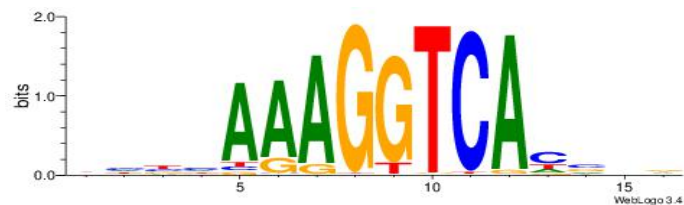
-----AAGGTCAC---

Original motif

Consensus sequence: DHBHAAAGGTCACVHD

Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD

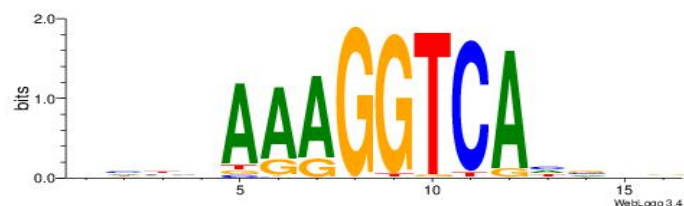


Motif ID: [UP00009](#)
 Motif name: Nr2f2_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 8
 Similarity score: 0.0074527

Alignment:
 BHVDTGACCTTTDVDD
 ---GTGACCTT-----

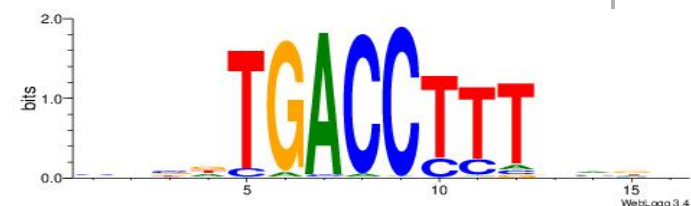
Original motif

Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif

Consensus sequence: BHVDTGACCTTTDVDD



Motif ID: [UP00079](#)

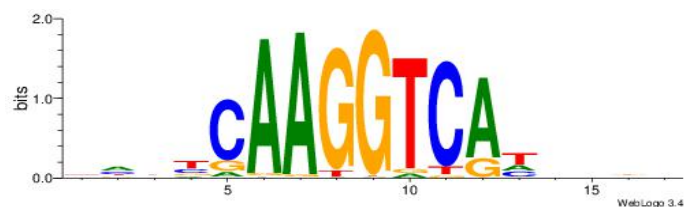
Motif name: Esrra_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6
 Number of overlap: 8
 Similarity score: 0.01542

Alignment:

DHDBCAAGGTCAHVBDH
 -----AAGGTCAC-----

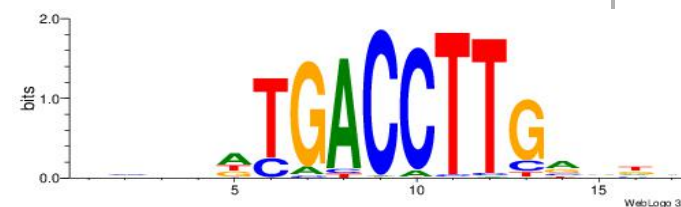
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



Motif ID: [UP00009](#)
 Motif name: Nr2f2_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: 8

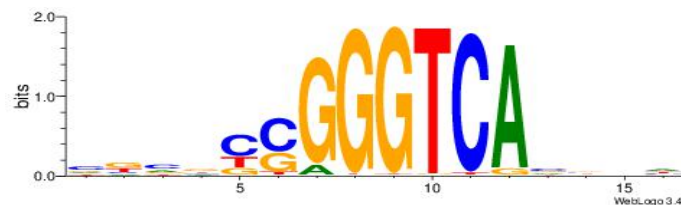
Similarity score: 0.0395644

Alignment:

VBVBCSGGGTCAVBBH
-----AAGGTCAC---

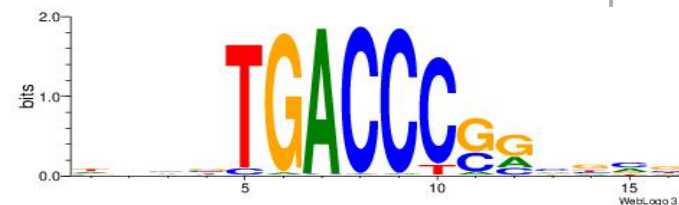
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



Motif ID: [UP00082](#)
Motif name: Zfp187_secondary
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: 8
Similarity score: 0.0407874

Alignment:

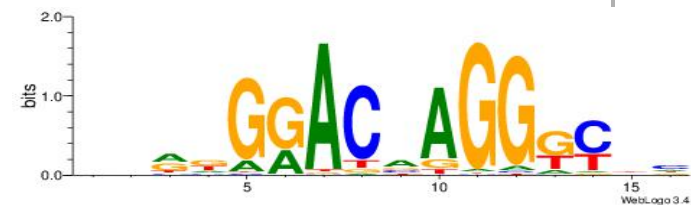
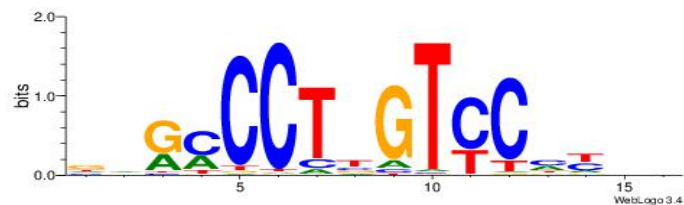
DDGMCCTBGTCCHYHV
GTGACCTT-----

Original motif

Consensus sequence: DDGMCCTBGTCCHYHV

Reverse complement motif

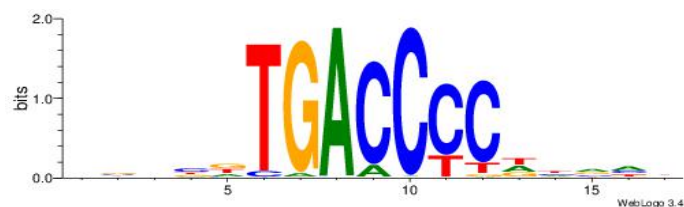
Consensus sequence: VHMDGGACVAGGRCDH



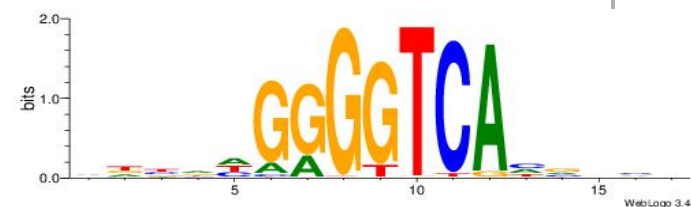
Motif ID: [UP00053](#)
 Motif name: Rxra_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 8
 Similarity score: 0.0422933

Alignment:
 DBHBDTGACCCCDHVHB
 ----GTGACCTT-----

Original motif
 Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif
 Consensus sequence: VHBHDGGGGTCAHBHBD



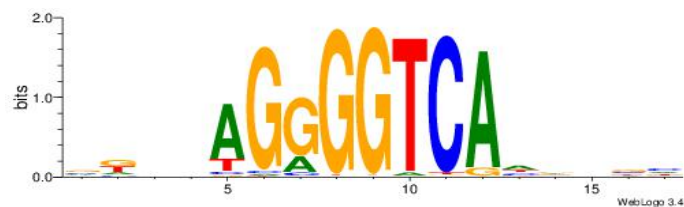
Motif ID: [UP00079](#)
 Motif name: Esrra_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 5
 Number of overlap: 8
 Similarity score: 0.0447444

Alignment:

VKBBAGGGGTCAHDBBH
 -----AAGGTCAC-----

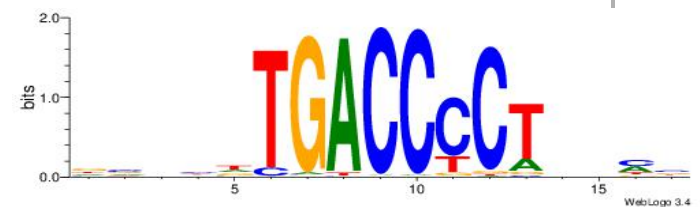
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV



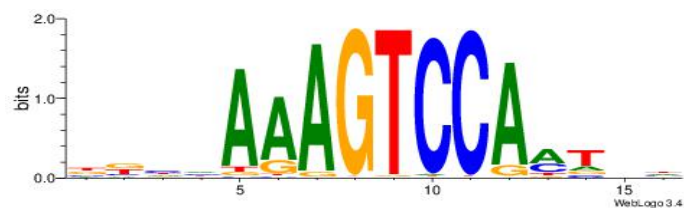
Motif ID: [UP00066](#)
 Motif name: Hnf4a_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6

Number of overlap: 8
Similarity score: 0.0481418

Alignment:
BBHHAAAGTCCAMTHH
-----AAGGTCAC---

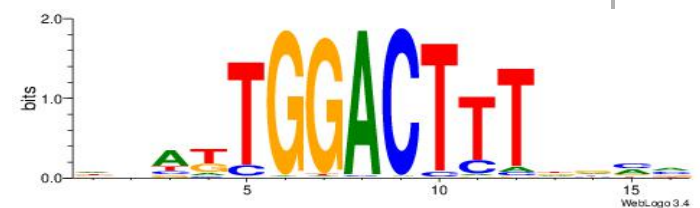
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV



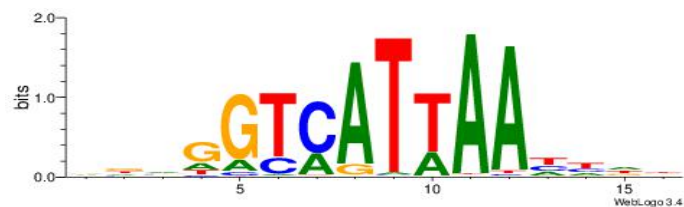
Motif ID: [UP00197](#)
Motif name: Hoxc9
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 8
Number of overlap: 8
Similarity score: 0.0497679

Alignment:
VDHHTTAATGACCBHV
-----GTGACCTT-

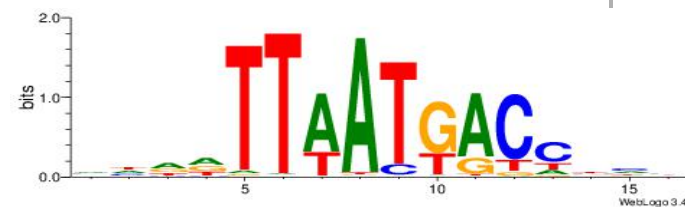
Original motif

Reverse complement motif

Consensus sequence: VDVGGTCATTAHHDB



Consensus sequence: VDHHTTAATGACCBHV



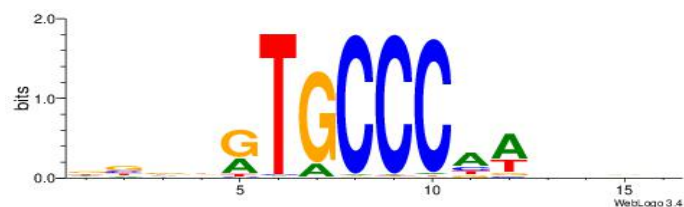
Motif ID: [UP00035](#)
Motif name: Hic1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0500062

Alignment:

DBDDRTGCCCCAWDHDV
-----GTGACCTT-----

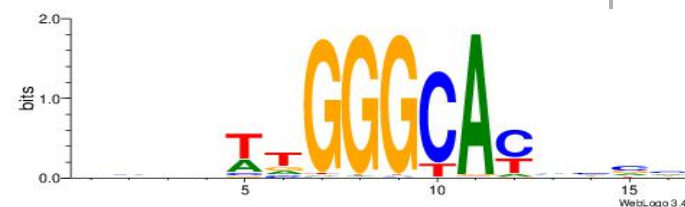
Original motif

Consensus sequence: DBDDRTGCCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH



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

Original motif

Consensus sequence: BAACGTCCGC



Reverse complement motif

Consensus sequence: GCGGACGTTT



Best Matches for Motif ID 13 (Highest to Lowest)

Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

VAAAGMGAAGTWD

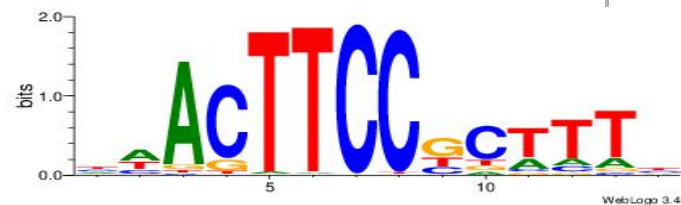
BAACGTCCGC----

Original motif

Consensus sequence: VAAAGMGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCRCCTTTB



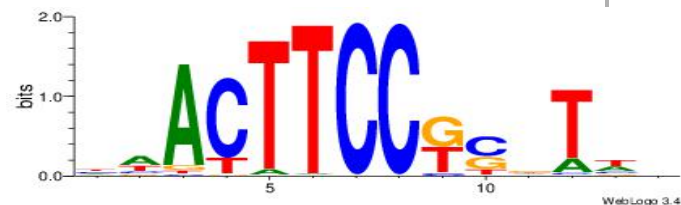
Motif ID: [UP00409](#)
 Motif name: Elf5
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 1
 Number of overlap: 10
 Similarity score: 0.00379999

Alignment:
 BWAHSMGGAAGTWD
 BAACGTCCGC-----

Original motif
 Consensus sequence: BWAHSMGGAAGTWD



Reverse complement motif
 Consensus sequence: DWACTTCCRSDTWV



Motif ID: [UP00413](#)
 Motif name: Elf4

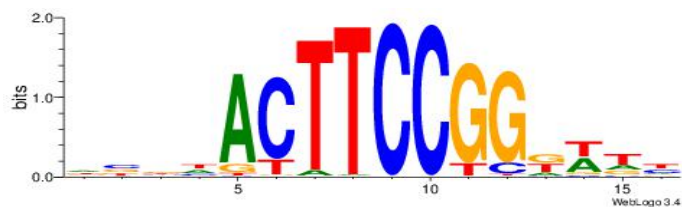
Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0124101

Alignment:

DBBHACTTCCGGKWITH
 --BAACGTCCGC----

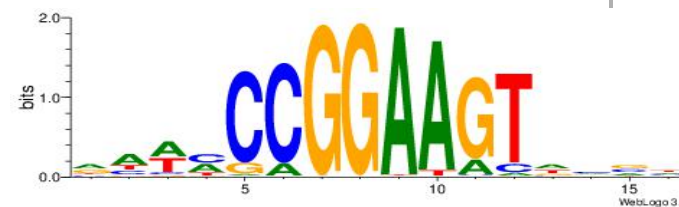
Original motif

Consensus sequence: DBBHACTTCCGGKWITH



Reverse complement motif

Consensus sequence: HAWYCCGGAAGTHBBD



Motif ID: [UP00404](#)
 Motif name: Elf2
 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: 0.0128348

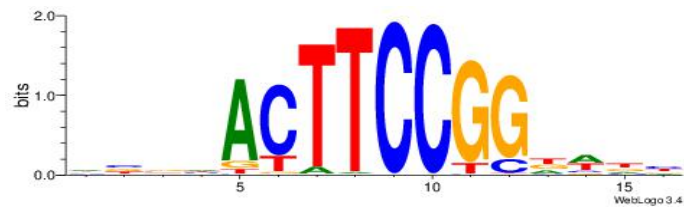
Alignment:

DBBHACTTCCGGDWDB

--BAACGTCCGC----

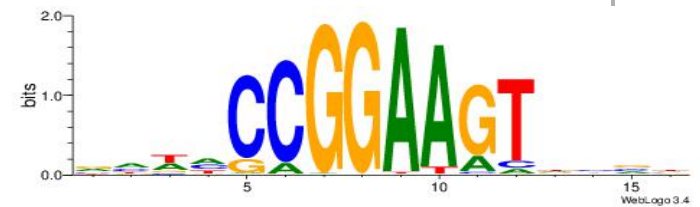
Original motif

Consensus sequence: DBBHACTTCCGGDWDB



Reverse complement motif

Consensus sequence: BDWDCCGGAAGTHBBD



Motif ID:

[UP00085](#)

Motif name:

Sfp1_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:

10

Similarity score:

0.0141516

Alignment:

HDACTTCCBCWTDV

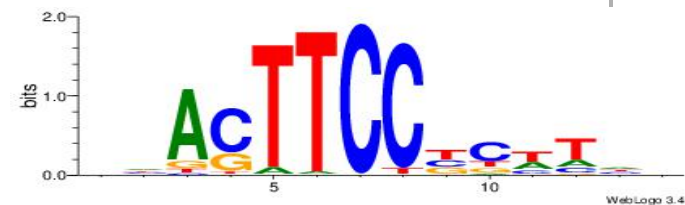
BAACGTCCGC----

Original motif

Consensus sequence: BDAWGVGGAAGTDH

Reverse complement motif

Consensus sequence: HDACTTCCBCWTDV

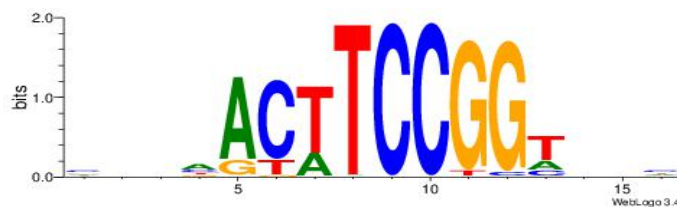


Motif ID: [UP00423](#)
 Motif name: Gm5454
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0144665

Alignment:
 DVHACCGGAAGTHDDV
 ----GCGGACGTTV--

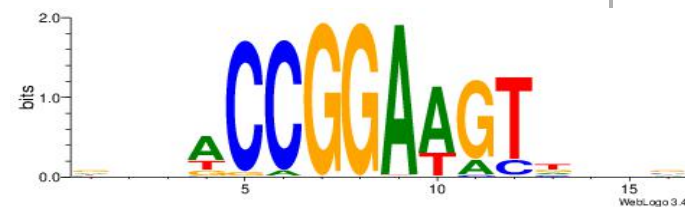
Original motif

Consensus sequence: VDHHA^{CTT}CCGGTHVH



Reverse complement motif

Consensus sequence: DVHACCGGAAGTHDDV



Motif ID: [UP00412](#)

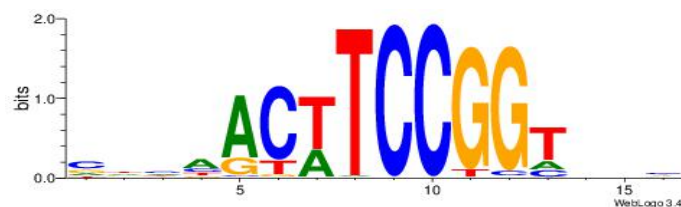
Motif name: Etv5
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0155825

Alignment:

DHHACCGAWGTTDDV
 ----GCGGACGTTV--

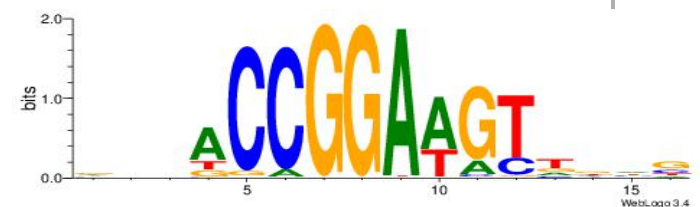
Original motif

Consensus sequence: VDHAACWTCCGGTHHH



Reverse complement motif

Consensus sequence: DHHACCGAWGTTDDV



Motif ID: [UP00015](#)
 Motif name: Ehf_primary
 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: 10

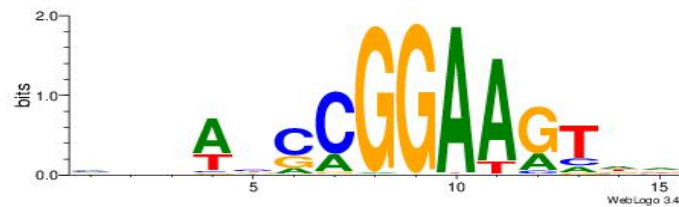
Similarity score: 0.0162018

Alignment:

VBDABCCGGAAGTDD
-----GCGGACGTTV

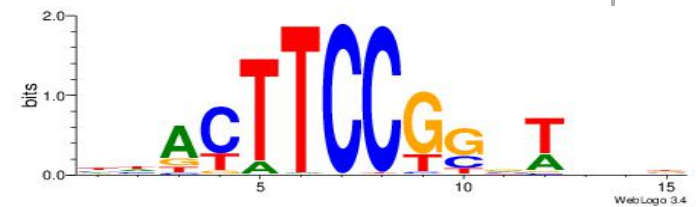
Original motif

Consensus sequence: VBDABCCGGAAGTDD



Reverse complement motif

Consensus sequence: DDACTTCCGGBTHBB



Motif ID: [UP00418](#)
Motif name: Etv6
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: 0.0171234

Alignment:

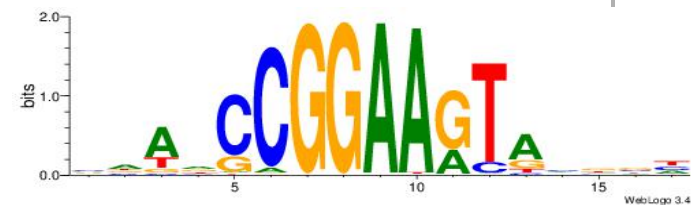
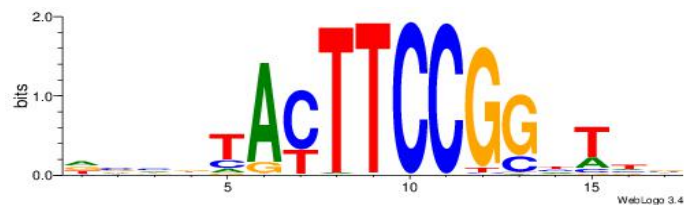
DVHBTACTTCCGGHTHB
---BAACGTCCGC----

Original motif

Consensus sequence: DVHBTACTTCCGGHTHB

Reverse complement motif

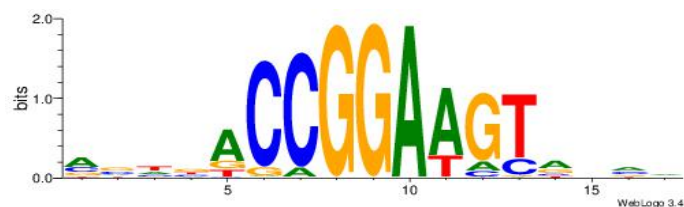
Consensus sequence: BHAHCCGGAAGTABDVD



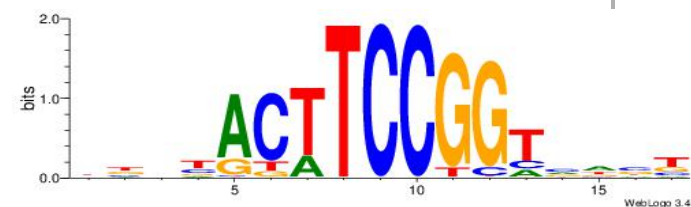
Motif ID: [UP00421](#)
 Motif name: Etv1
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6
 Number of overlap: 10
 Similarity score: 0.0184147

Alignment:
 MVHBACCGGAAGTVDVH
 -----GCGGACGTTV--

Original motif
 Consensus sequence: MVHBACCGGAAGTVDVH



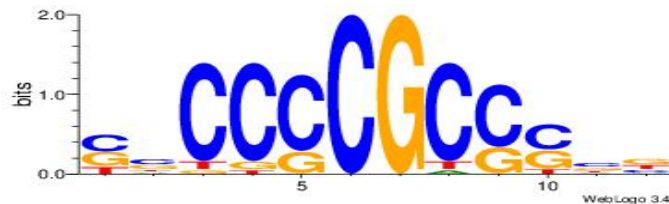
Reverse complement motif
 Consensus sequence: HBDBACTTCCGGTBHVY



Dataset #: 2 **Motif ID: 24** **Motif name: ssCCCCGCSsk**

Original motif

Consensus sequence: SBCCCCGCCSBB



Reverse complement motif

Consensus sequence: BBSGGCGGGGBS



Best Matches for Motif ID 24 (Highest to Lowest)

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:	12
Similarity score:	0.0114847

Alignment:

DHHBCCCCGCCAHHBHB

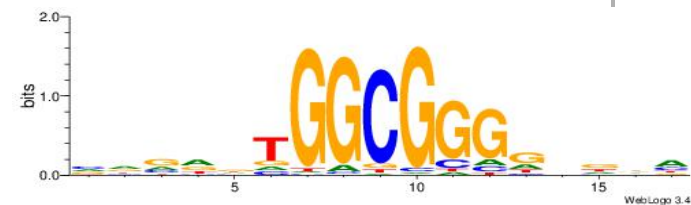
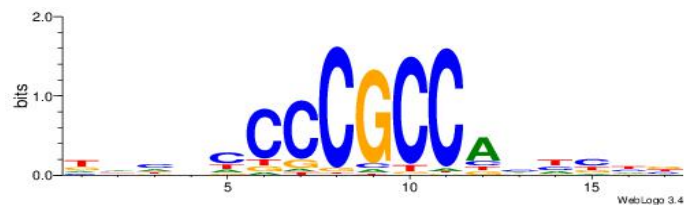
--SBCCCCGCCSBB---

Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB

Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD

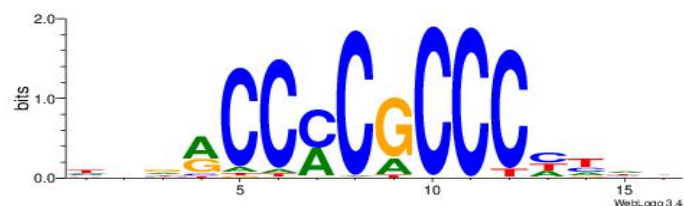


Motif ID: [UP00093](#)
 Motif name: Klf7_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.0165262

Alignment:
 HBDRCMCGCCCHHD
 --SBCCCCGCCSBB--

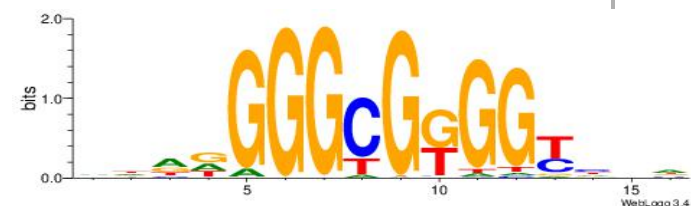
Original motif

Consensus sequence: HBDRCMCGCCCHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



Motif ID: [UP00022](#)

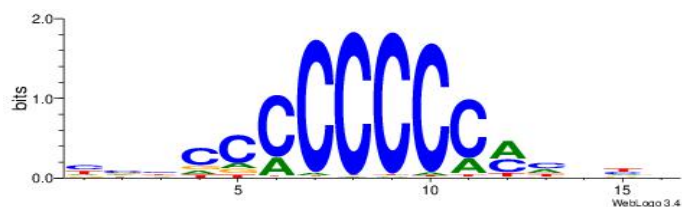
Motif name: Zfp740_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.0276137

Alignment:

HVBCCCCCCCCMHHHB
 --SBCCCCGCCSBB--

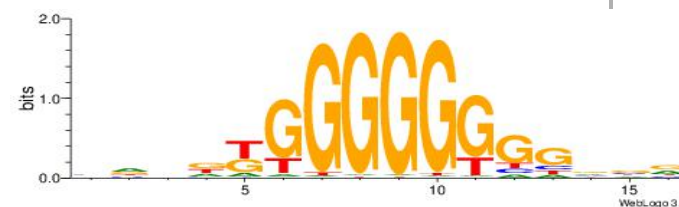
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGBVD



Motif ID: [UP00003](#)
 Motif name: E2F3_primary
 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: 12

Similarity score: 0.0328578

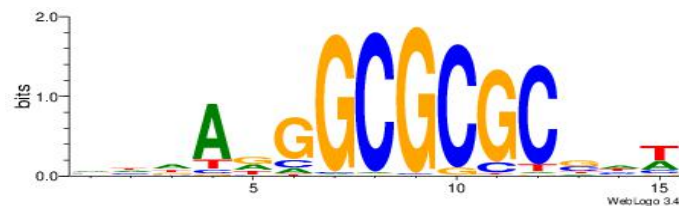
Alignment:

WHSGCGCGCCHTDHB

-SBCCCCGCCSBB--

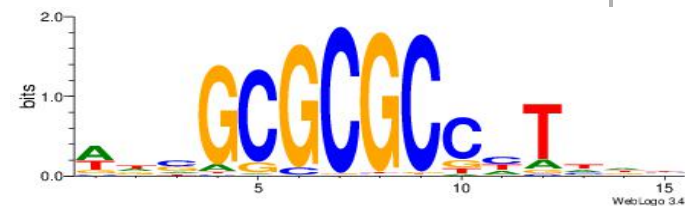
Original motif

Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif

Consensus sequence: WHSGCGCGCCHTDHB



Motif ID: [UP00033](#)
Motif name: Zfp410_secondary
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: 12
Similarity score: 0.0336734

Alignment:

BHHBHCCGCCCCDHHHH

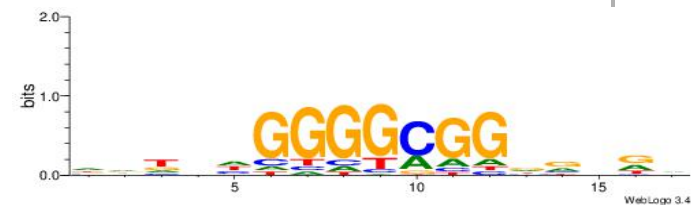
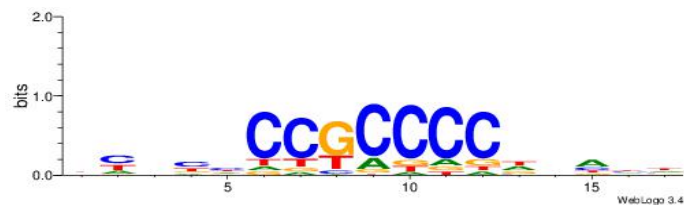
-SBCCCCGCCSBB----

Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH

Reverse complement motif

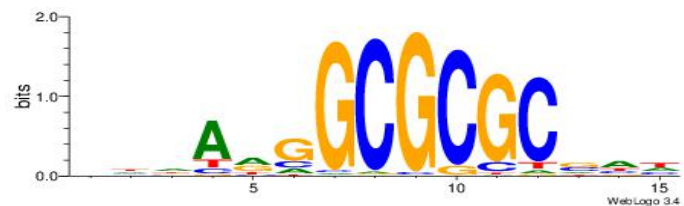
Consensus sequence: HHHHDGGGGCGGDBHDV



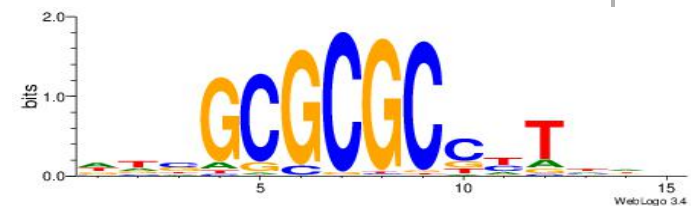
Motif ID: [UP00001](#)
 Motif name: E2F2_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 2
 Number of overlap: 12
 Similarity score: 0.0345737

Alignment:
 HHVGC GCGCCKTDHB
 -SBCCCCGCCSBB--

Original motif
 Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif
 Consensus sequence: HHVGC GCGCCKTDHB



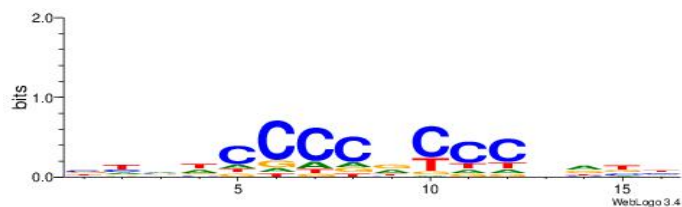
Motif ID: [UP00099](#)
 Motif name: Ascl2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.0347468

Alignment:

HVDVGGGHGGGGDBHB
 --BBSGGCGGGGBS--

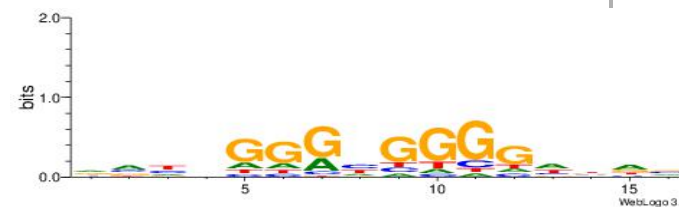
Original motif

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: Forward
 Position number: 3

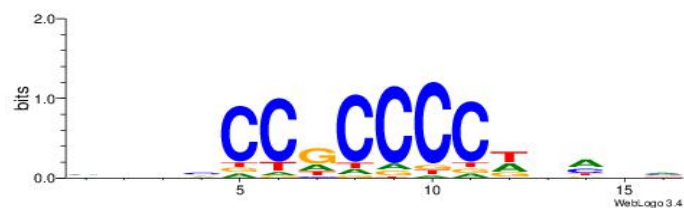
Number of overlap: 12
Similarity score: 0.0358124

Alignment:

BHHHWGGGGCGGBBVH
--BBSGGCGGGGBS--

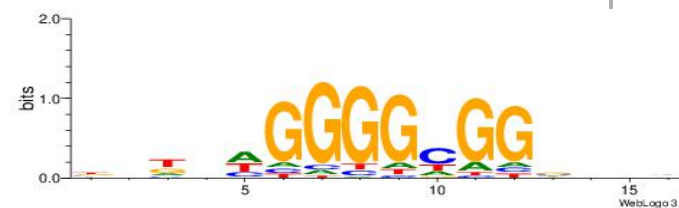
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



Motif ID: [UP00400](#)
Motif name: Zif268
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: 12
Similarity score: 0.0365354

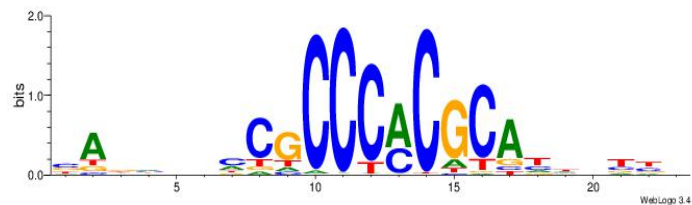
Alignment:

BADHBDHCGCCCMCGCAHHDBBV
-----SBCCCCGCCSBB---

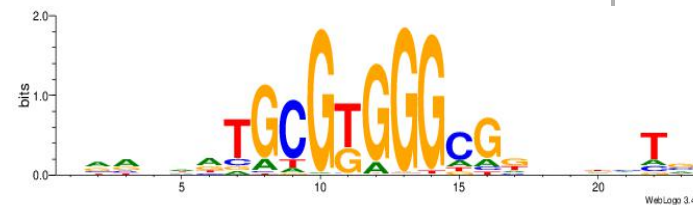
Original motif

Reverse complement motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV



Consensus sequence: VVVDHHTGCGYGGGCGDHHVHTB



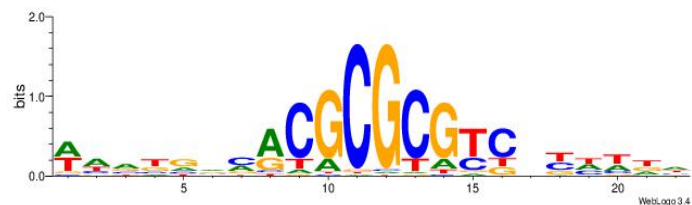
Motif ID: [UP00526](#)
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 12
Similarity score: 0.0389727

Alignment:

```
HDWHMHGACGCGCGTRBVBHW  
-----BBSGGCGGGGBS-----
```

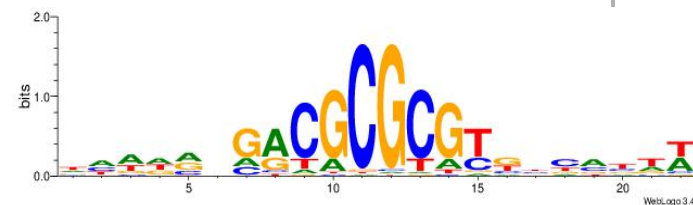
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

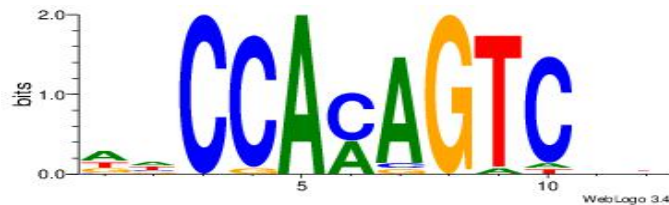
Consensus sequence: HDWHMHGACGCGCGTRBVBHW



Dataset #: 2 **Motif ID: 25** **Motif name: wwCCAmAGTCmt**

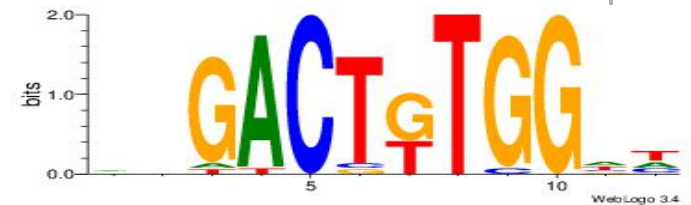
Original motif

Consensus sequence: DDCCAMAGTCHB



Reverse complement motif

Consensus sequence: VDGACTRTGGDD



Best Matches for Motif ID 25 (Highest to Lowest)

Motif ID:	UP00079
Motif name:	Esrra_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:	12
Similarity score:	0.00927341

Alignment:

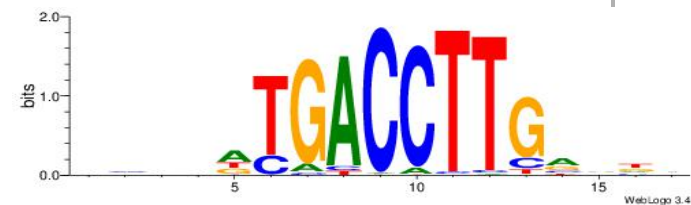
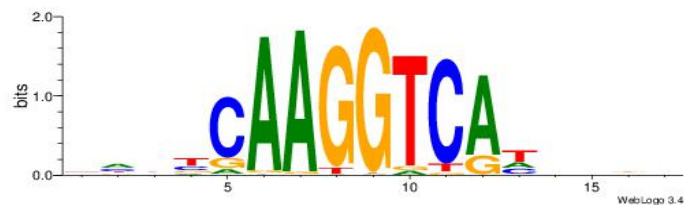
```
DHDBCAAGGTCAHVBDH
-DDCCAMAGTCHB----
```

Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH

Reverse complement motif

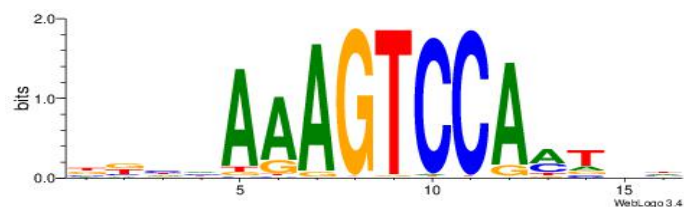
Consensus sequence: HHBVHTGACCTTGVDHD



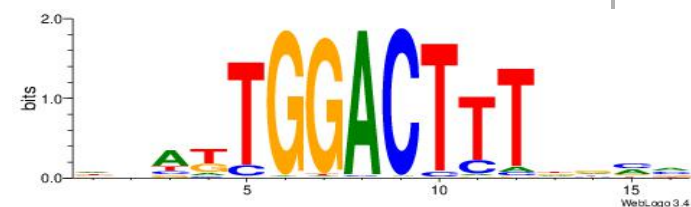
Motif ID: [UP00066](#)
 Motif name: Hnf4a_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 1
 Number of overlap: 12
 Similarity score: 0.0157554

Alignment:
 BBHHAAGTCCAMTHH
 DDCCAMAGTCHB----

Original motif
 Consensus sequence: BBHHAAGTCCAMTHH



Reverse complement motif
 Consensus sequence: HHAYTGGACTTTTHDBV



Motif ID: [UP00023](#)
 Motif name: Sox30_primary

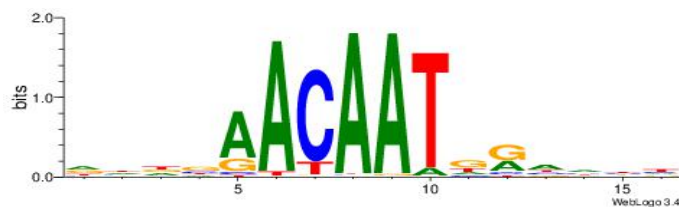
Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.0218941

Alignment:

DHDBAACAATDRHHHH
 --VDGACTRTGGDD--

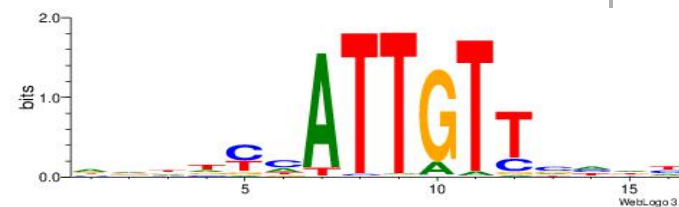
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHMHATTGTTBDHD



Motif ID: [UP00028](#)
 Motif name: Tcfap2e_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: 12
 Similarity score: 0.023236

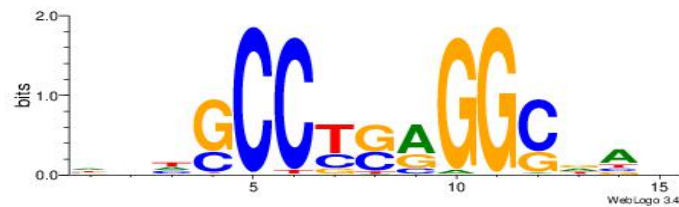
Alignment:

DTHGCCTSAGGCHHH

--DDCCAMAGTCHB--

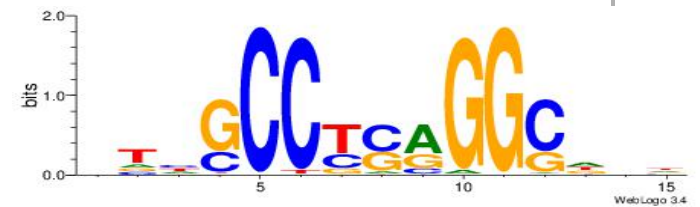
Original motif

Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif

Consensus sequence: DTHGCCTSAGGCHHH



Motif ID:

[UP00034](#)

Motif name:

Sox7_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:

12

Similarity score:

0.0235871

Alignment:

HHBDHDDAACAATDRHHHHHBW

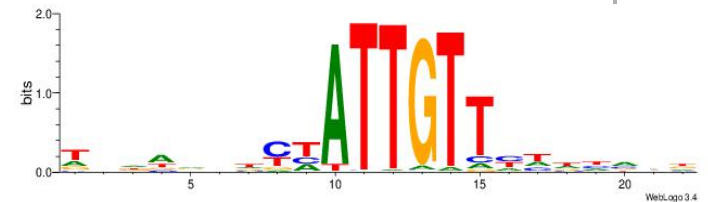
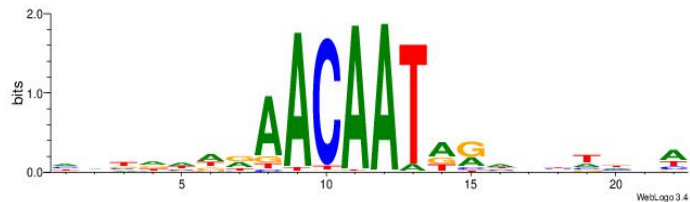
-----VDGACTRTGGDD-----

Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

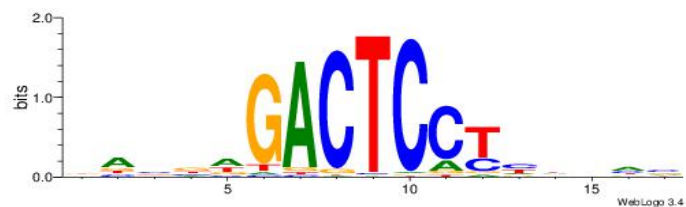
Consensus sequence: WBHHHHMDATTGTTHDHDVHH



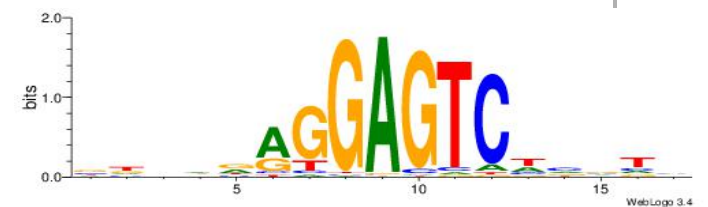
Motif ID: [UP00095](#)
 Motif name: Zfp691_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 12
 Similarity score: 0.0240897

Alignment:
 VHBDDAGGAGTCWBBTD
 --DDCCAMAGTCHB---

Original motif
 Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif
 Consensus sequence: VHBDDAGGAGTCWBBTD



Motif ID: [UP00004](#)

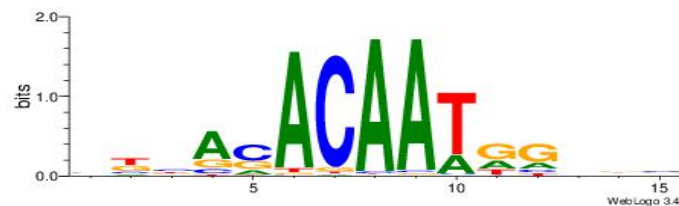
Motif name: Sox14_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 2
 Number of overlap: 12
 Similarity score: 0.025783

Alignment:

BKBASACAATRGHBB
 --VDGACTRTGGDD--

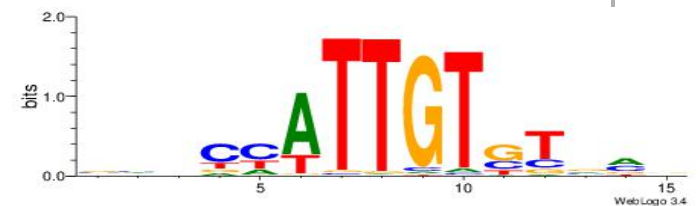
Original motif

Consensus sequence: BKBASACAATRGHBB



Reverse complement motif

Consensus sequence: BBDCMATTGTSTBRB



Motif ID: [UP00081](#)
 Motif name: Mybl1_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: 12

Similarity score: 0.026472

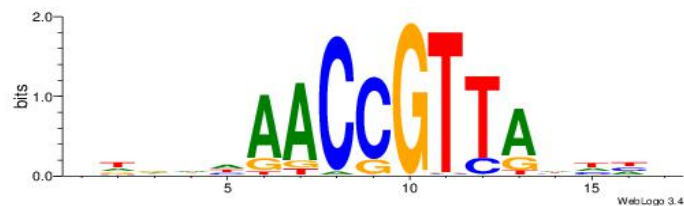
Alignment:

HDDDHAACCGTTAHHHD

---VDGACTRTGGDD--

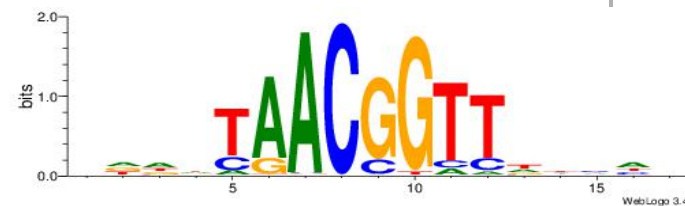
Original motif

Consensus sequence: HDDDHAACCGTTAHHHD



Reverse complement motif

Consensus sequence: DHHHTAACGGTTHDHDH



Motif ID: [UP00052](#)
Motif name: Osr2_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: 12
Similarity score: 0.027027

Alignment:

HHHHGCTACKGTHVHH

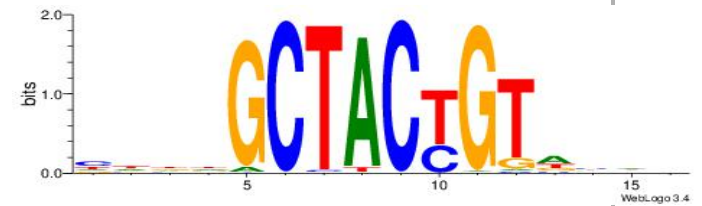
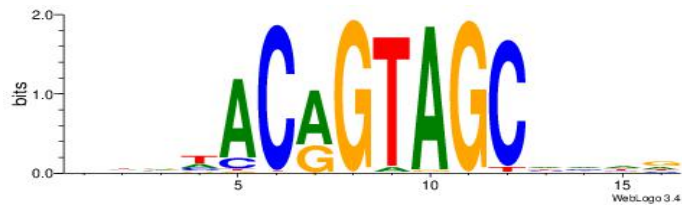
---DDCCAMAGTCHB-

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

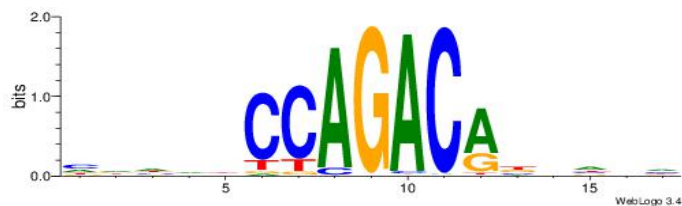
Consensus sequence: HHHHGCTACKGTHVHH



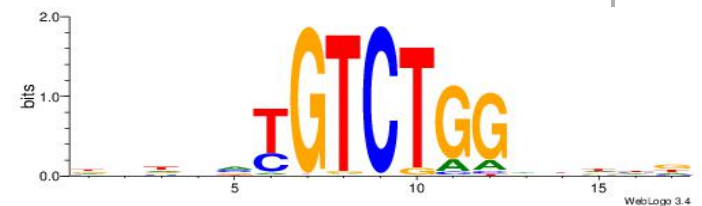
Motif ID: [UP00000](#)
 Motif name: Smad3_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.0270662

Alignment:
 HVHBVTGTCTGGDDHDD
 --VDGACTRTGGDD---

Original motif
 Consensus sequence: HDHDDCCAGACABBHVH



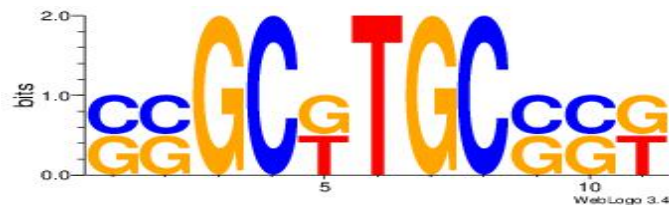
Reverse complement motif
 Consensus sequence: HVHBVTGTCTGGDDHDD



Dataset #: 2 **Motif ID: 28** **Motif name: ssGCKTGCssk**

Original motif

Consensus sequence: SSGCKTGCSSK



Reverse complement motif

Consensus sequence: YSSGCAYGCSS



Best Matches for Motif ID 28 (Highest to Lowest)

Motif ID:	UP00003
Motif name:	E2F3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.00463328

Alignment:

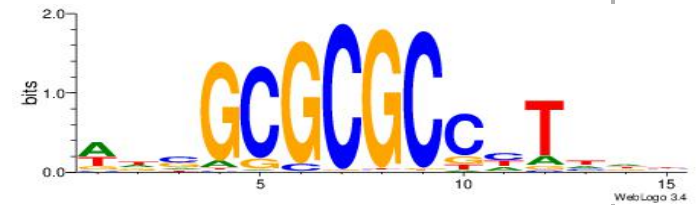
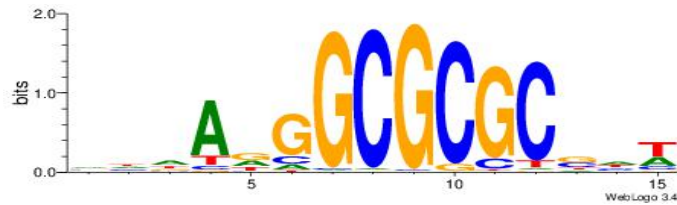
```
VHDADGGCGCGCSHW
-----SSGCKTGCSSK
```

Original motif

Consensus sequence: VHDADGGCGCGCSHW

Reverse complement motif

Consensus sequence: WHS GCGCGCCHTDHB

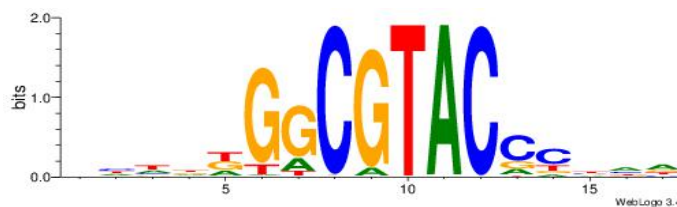


Motif ID: [UP00094](#)
 Motif name: Zfp128_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3
 Number of overlap: 11
 Similarity score: 0.00482124

Alignment:
 BHHDKGGCGTACCCBHD
 ----SSGCKTGCSSK--

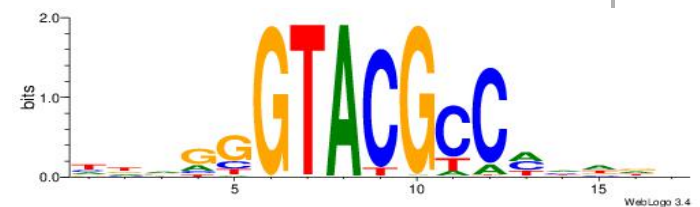
Original motif

Consensus sequence: BHHDKGGCGTACCCBHD



Reverse complement motif

Consensus sequence: DHVGGGTACGCCRDHDV



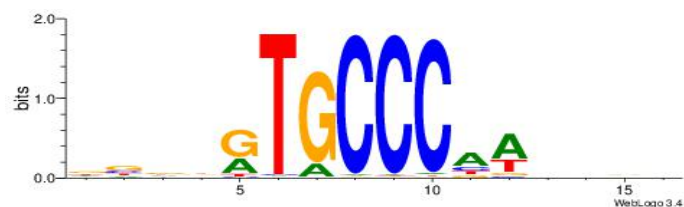
Motif ID: [UP00035](#)

Motif name: Hic1_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: 11
 Similarity score: 0.00562779

Alignment:
 VHHDWTGGGCAMDHBH
 -----YSSGCAYGCSS

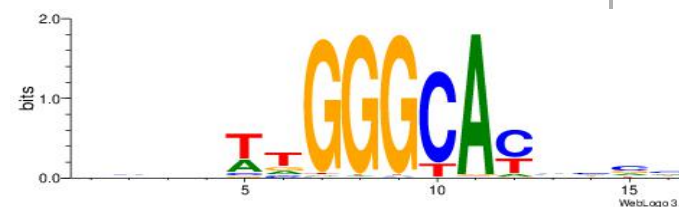
Original motif

Consensus sequence: DBDDRTGCCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH

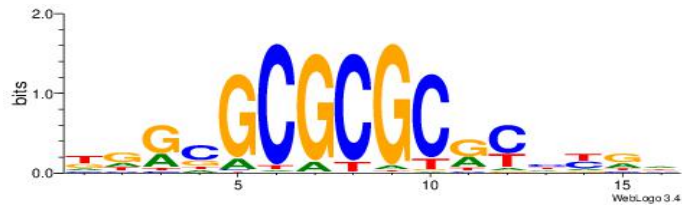


Motif ID: [UP00065](#)
 Motif name: Zfp161_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 11

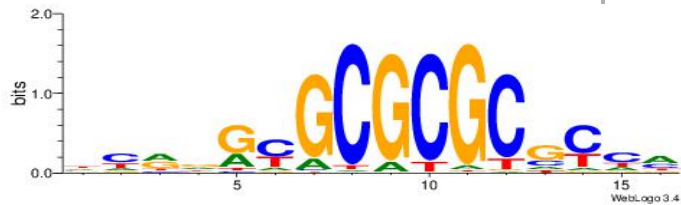
Similarity score: 0.00595984

Alignment:
DDGCGCGCGCRCHYRD
--SSGCKTGCSSK---

Original motif
Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif
Consensus sequence: DMM DGMGCGCGCGCHD

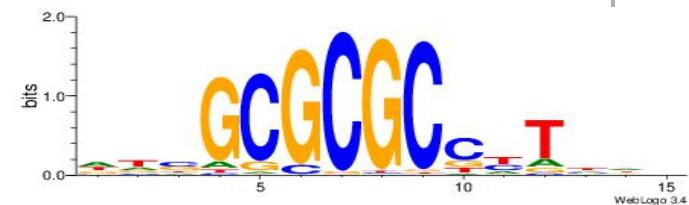
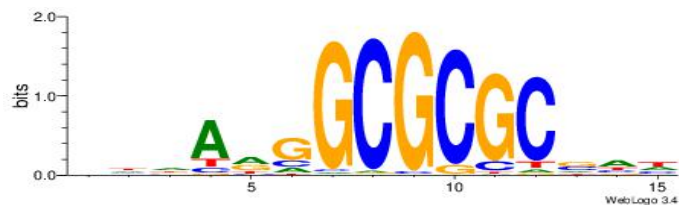


Motif ID: [UP00001](#)
Motif name: E2F2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.00821725

Alignment:
HHVGCGCGCCKTDHB
-SSGCKTGCSSK---

Original motif
Consensus sequence: VHDARGGCGCGCVHH

Reverse complement motif
Consensus sequence: HHVGCGCGCCKTDHB

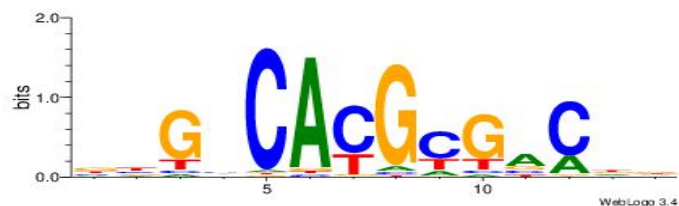


Motif ID: [UP00060](#)
 Motif name: Max_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 1
 Number of overlap: 11
 Similarity score: 0.0109259

Alignment:
 BBGHCACGCGACDD
 ---SSGCKTGCSSK

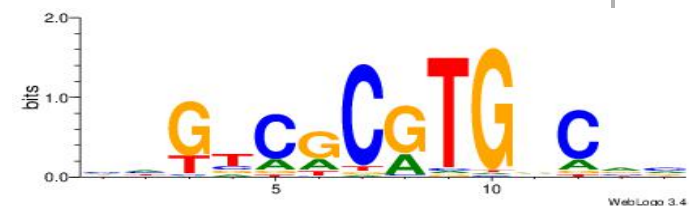
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



Motif ID: [UP00527](#)
 Motif name: Foxn4_secondary

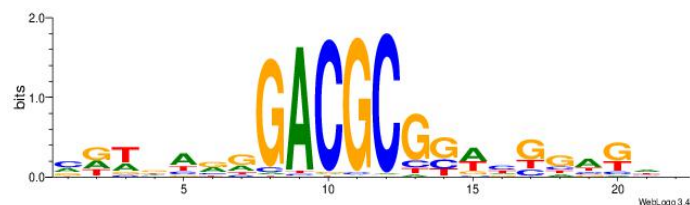
Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.0150199

Alignment:

VHYTCCDWCCGCGTCMMTHWHV
 -----SSGCKTGCSSK---

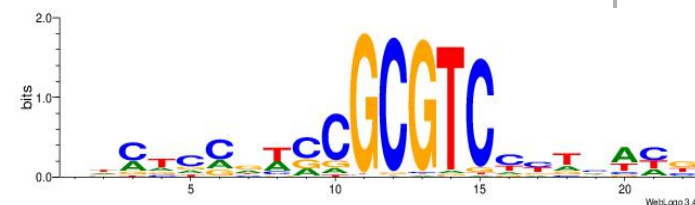
Original motif

Consensus sequence: VDW DARRGACGCGGWHGGA KHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



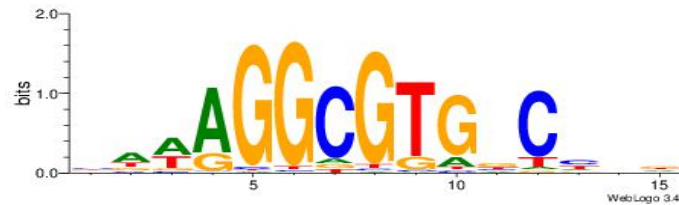
Motif ID: [UP00002](#)
 Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 2
 Number of overlap: 11
 Similarity score: 0.0160778

Alignment:

HHDGBCACGCCTWDB
-YSSGCAYGCSS---

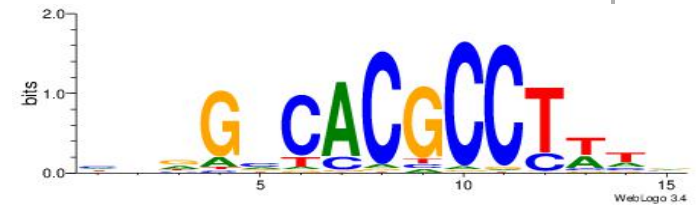
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



Motif ID:	UP00526
Motif name:	Foxn1_primary
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:	0.0171602

Alignment:

HDWHMHGACGCGCGTRBVVBHW
-----SSGCKTGCSSK--

Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH

Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

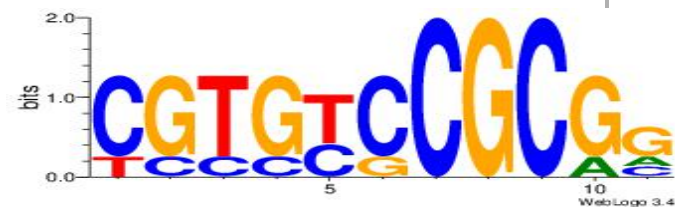
Original motif

Consensus sequence: CCGCGGRCACG



Reverse complement motif

Consensus sequence: CGTGKCCGCGG



Best Matches for Motif ID 29 (Highest to Lowest)

Motif ID:	UP00065
Motif name:	Zfp161_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:	11
Similarity score:	0.0220206

Alignment:

DDGCGCGCGCRCHYRD

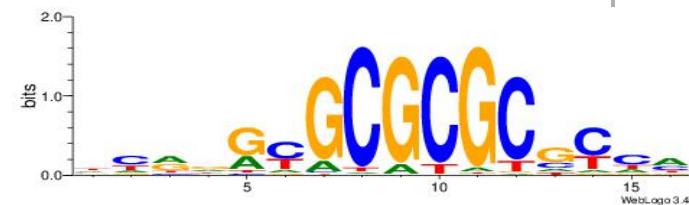
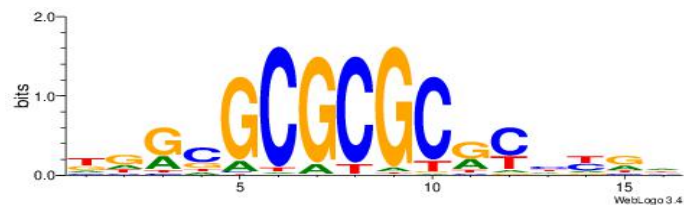
----CCGCGGRCACG--

Original motif

Consensus sequence: DDGCGCGCGCRCHYRD

Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD



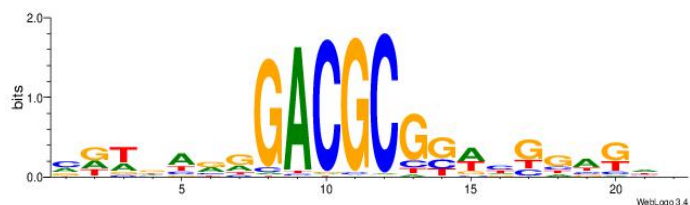
Motif ID: [UP00527](#)
 Motif name: Foxn4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 9
 Number of overlap: 11
 Similarity score: 0.024575

Alignment:

VHYTCCDWCCGCGTCMMTHWHV
 ---CGTGKCCGCGG-----

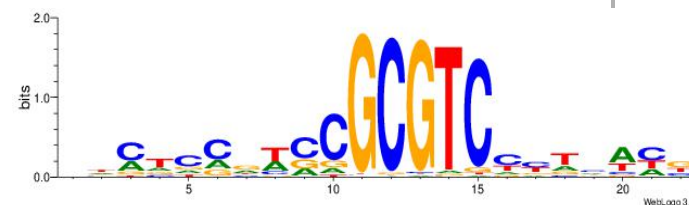
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



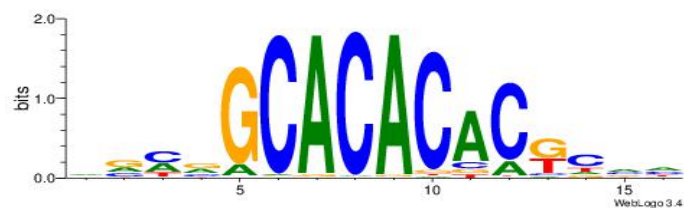
Motif ID: [UP00042](#)

Motif name: Gm397_second
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.0279366

Alignment:
 DVMVGCACACACKCVH
 --CCGCGGRCACG---

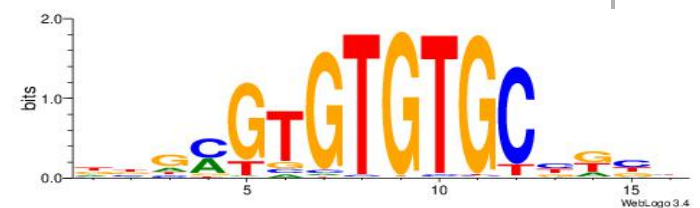
Original motif

Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD



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: Forward
 Position number: 2
 Number of overlap: 11

Similarity score: 0.0285381

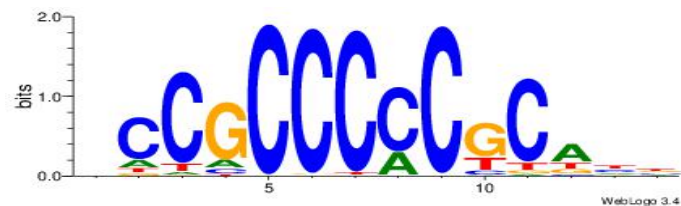
Alignment:

VHTGCGGGGGCGGH

-CCGCGGRCACG--

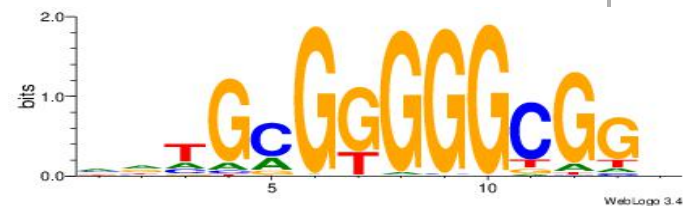
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID: [UP00050](#)

Motif name: Bhlhb2_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: 11

Similarity score: 0.0335378

Alignment:

ACHRBHDTCCACGTGYAHBMHM

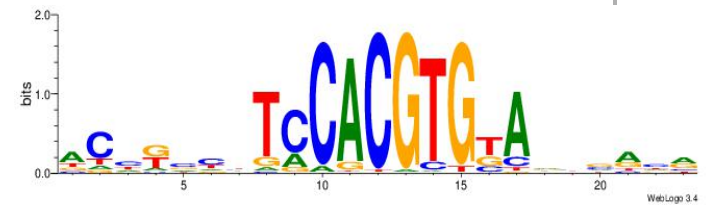
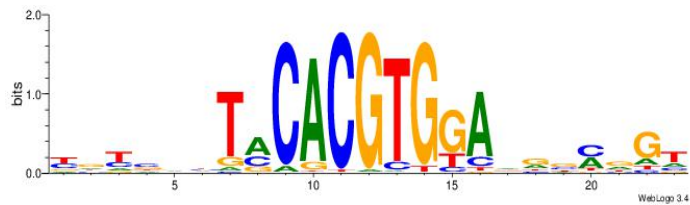
-----CCGCGGRCACG-----

Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT

Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHBMHM



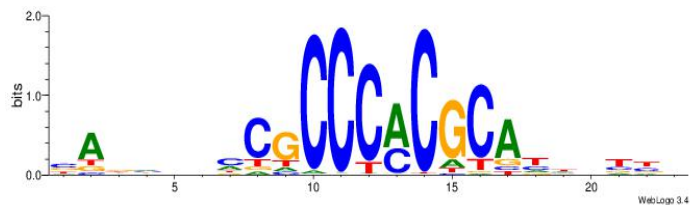
Motif ID: [UP00400](#)
 Motif name: Zif268
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 6
 Number of overlap: 11
 Similarity score: 0.0340428

Alignment:

VVVDHHTGCGYGGGCGDHSVHHTB
 -----CCGCGGRCACG-----

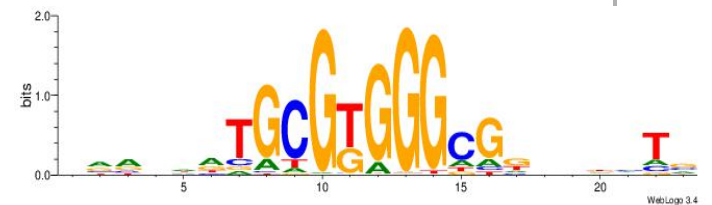
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHSVHHTB



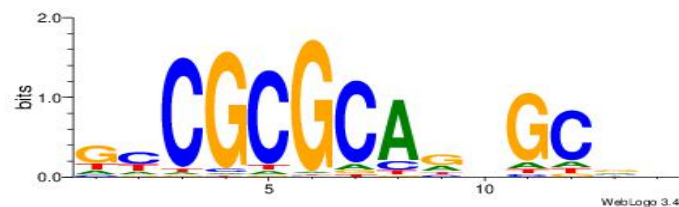
Motif ID: [UP00065](#)
 Motif name: Zfp161_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 2
 Number of overlap: 11
 Similarity score: 0.0345855

Alignment:

GYCGCGCARBGCVB
 -CCGCGGRCACG--

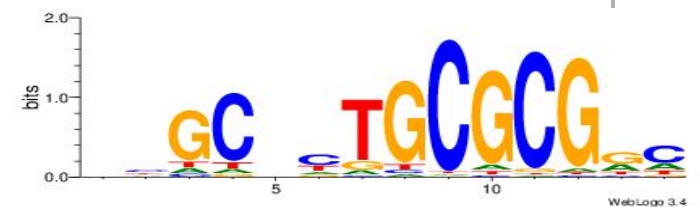
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMGTGCGCGKC



Motif ID: [UP00097](#)
 Motif name: Mtf1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3

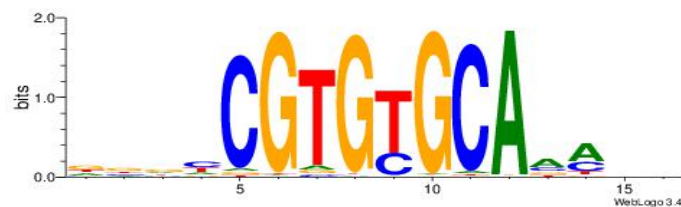
Number of overlap: 11
Similarity score: 0.0350434

Alignment:

DBDHCGTGTGCAAMDH
---CCGCGGRCACG--

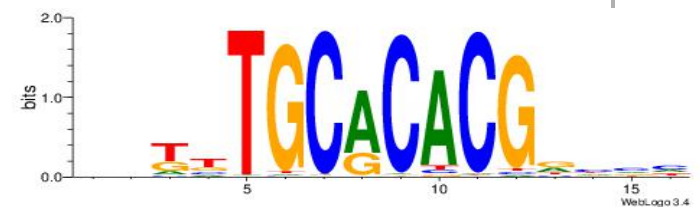
Original motif

Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBB



Motif ID: [UP00076](#)
Motif name: Rfxdc2_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: 11
Similarity score: 0.0359928

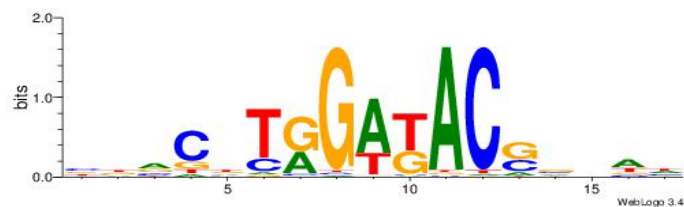
Alignment:

HDDVSGTRTCMADGBVB
----CGTGKCCGCGG--

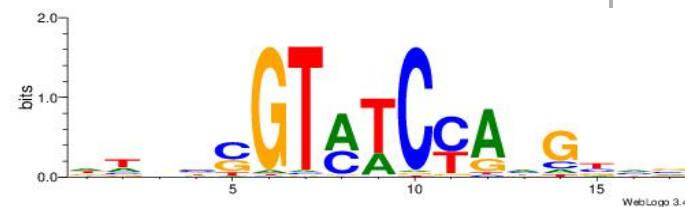
Original motif

Reverse complement motif

Consensus sequence: BBVCDTRGAKACSVDDH



Consensus sequence: HDDVSGTRTCMADGBVB



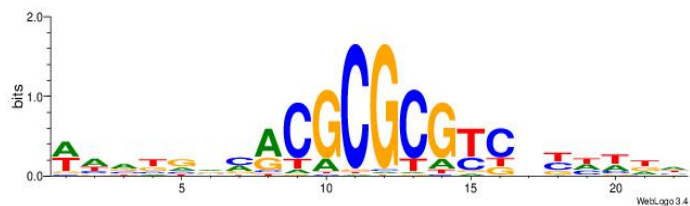
Motif ID: [UP00526](#)
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0361963

Alignment:

```
HDWHMHGACGCGCGTRBVVBHW  
-----CCGCGGRCACG--
```

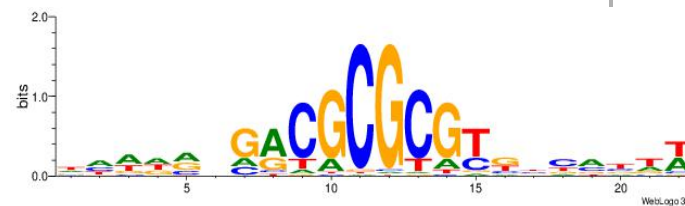
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Results created by MOTIFSIM on 11-19-2016 15:10:45
Runtime: 649.633 seconds

MOTIFSIM is written by Ngoc Tam L. Tran
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