



# MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.1

## 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
Phylogenetic tree:	Yes
Combined similar motifs:	Yes
Output file type:	All
Output file format:	All

### Input files and motif counts

File name	Count of motifs	Dataset number
DREME_DM230.txt	1	1
MEME_DM230.txt	20	2
PScanChIP_DM230.txt	14	3
RSAT_peak-motifs_DM230.txt	10	4
W-ChIPMotifs_DM230.txt	11	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: GGCGGGGC



Reverse complement motif

Consensus sequence: GCCCGGCC



### Best Matches for Motif ID 1 (Highest to Lowest)

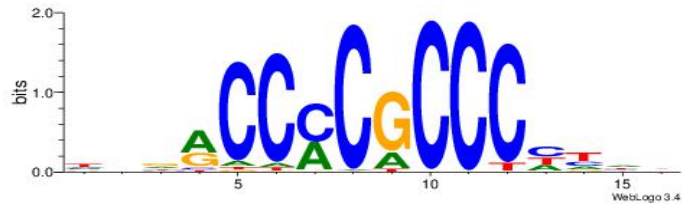
Motif ID:	<a href="#">UP00093</a>
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

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

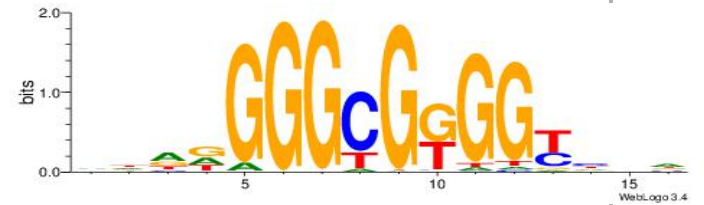
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



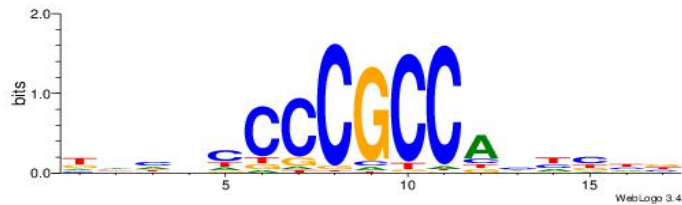
Motif ID: [UP00000](#)  
 Motif name: Smad3\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 4  
 Number of overlap: 8  
 Similarity score: 0.00617043

Alignment:

```
BHBHDTGGCGGGBDHD
-----GGCGGGGC----
```

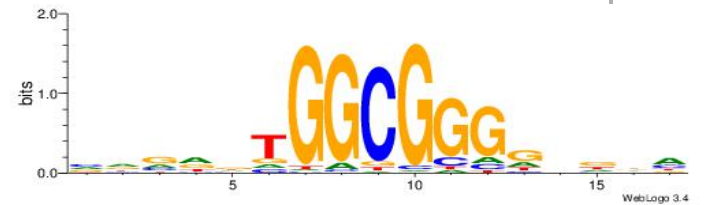
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD



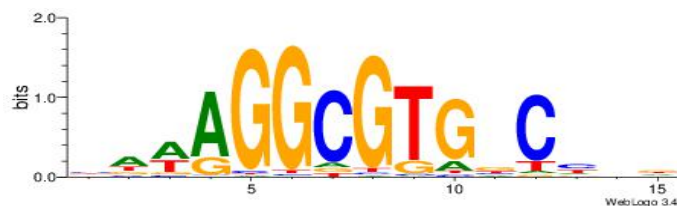
Motif ID: [UP00002](#)  
Motif name: Sp4\_secondary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Original Motif  
Direction: Backward  
Position number: 4  
Number of overlap: 8  
Similarity score: 0.0145996

Alignment:

BDWAGGCGTGBCHHD  
----GGCGGGC---

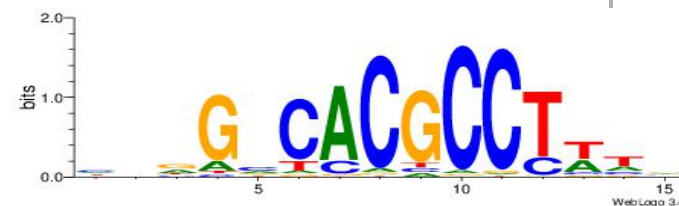
Original motif

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: Backward

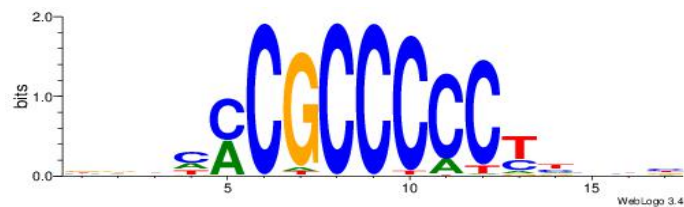
Position number: 9  
Number of overlap: 8  
Similarity score: 0.0233506

Alignment:

BDHHMCGCCCCCTHVBB  
-GCCCCGCC-----

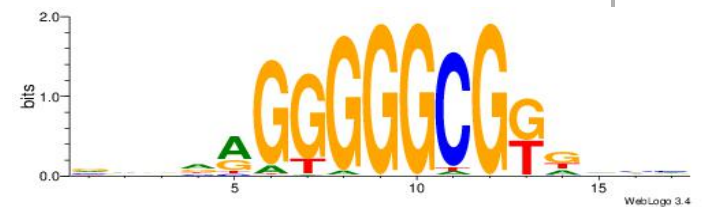
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



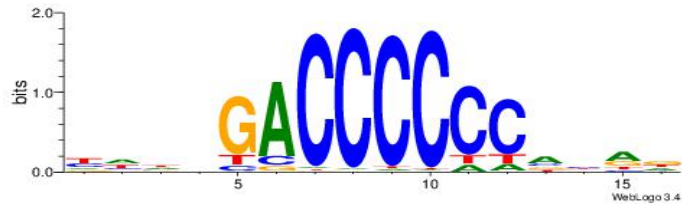
Motif ID: [UP00024](#)  
Motif name: Glis2\_primary  
Species: Mus musculus  
Matching format of first motif: Reverse Complement  
Matching format of second motif: Original Motif  
Direction: Backward  
Position number: 5  
Number of overlap: 8  
Similarity score: 0.0291232

Alignment:

HHHVGACCCCCCVBRD  
----GCCCCGCC----

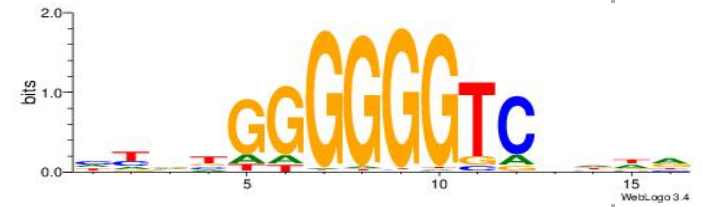
Original motif

Consensus sequence: HHHVGACCCCCVBRD



Reverse complement motif

Consensus sequence: HKBBGGGGGGTCVHHH



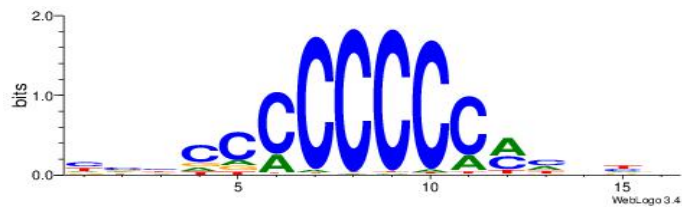
Motif ID: [UP00022](#)  
 Motif name: Zfp740\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 6  
 Number of overlap: 8  
 Similarity score: 0.0338469

Alignment:

```
BHHDYGGGGGGGGBVD
-----GCCGGGGC---
```

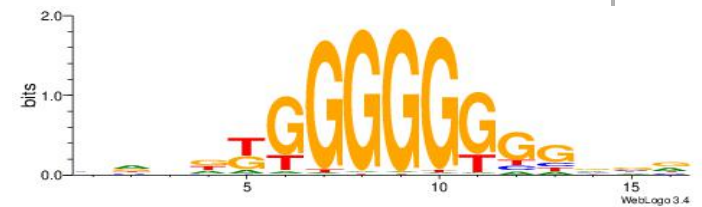
Original motif

Consensus sequence: HVBCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



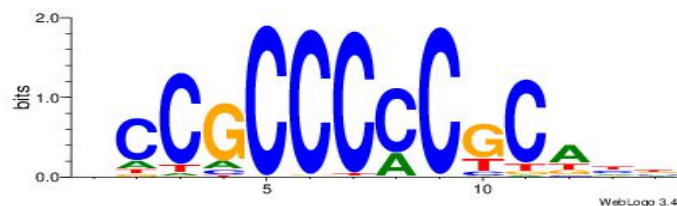
Motif ID: [UP00007](#)  
Motif name: Egr1\_primary  
Species: Mus musculus  
Matching format of first motif: Reverse Complement  
Matching format of second motif: Original Motif  
Direction: Forward  
Position number: 4  
Number of overlap: 8  
Similarity score: 0.0361147

Alignment:

HCCGCCCCCGCAHB  
---GCCCCGCC---

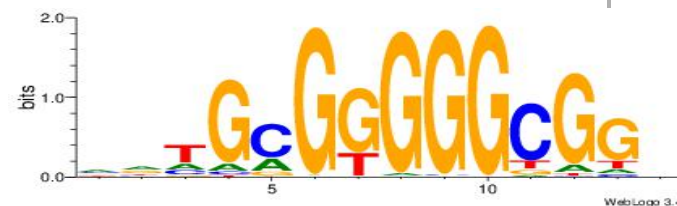
Original motif

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

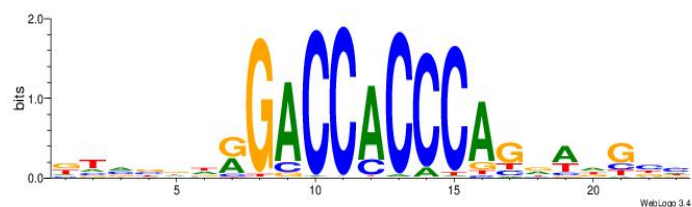
Position number: 8  
Number of overlap: 8  
Similarity score: 0.0374146

Alignment:

DTVBD DRGACCACCCAGDWDGBH  
-----GCCCCGCC-----

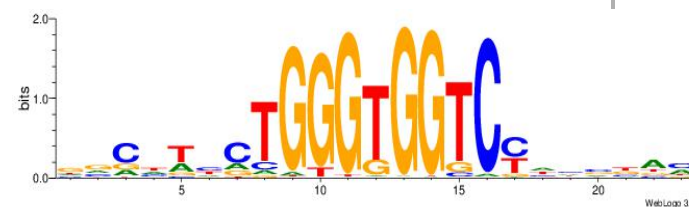
Original motif

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

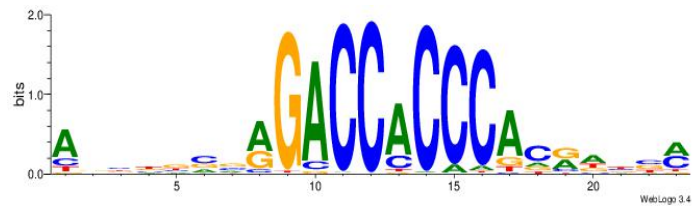
Alignment:

ABBBBVVRGACCACCCACRDBBM  
-----GCCCCGCC-----



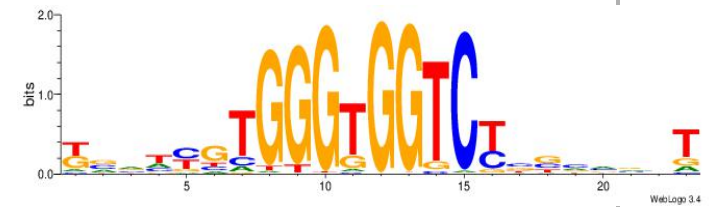
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



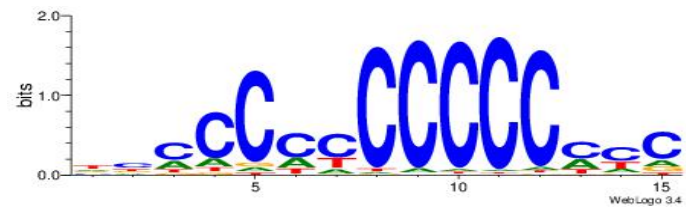
Motif ID: [UP00021](#)  
 Motif name: Zfp281\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 8  
 Similarity score: 0.0392043

Alignment:

GKRGGGGGGGGGGBD  
 ---GGCGGGGC----

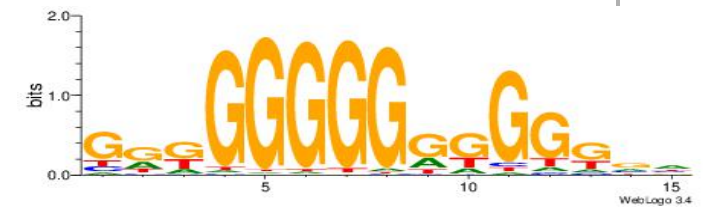
Original motif

Consensus sequence: DBCCCCCCCCCMYC



Reverse complement motif

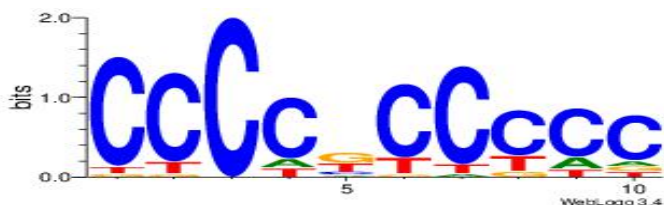
Consensus sequence: GKRGGGGGGGGGGBD



**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:

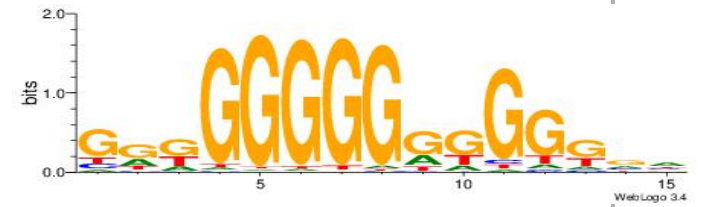
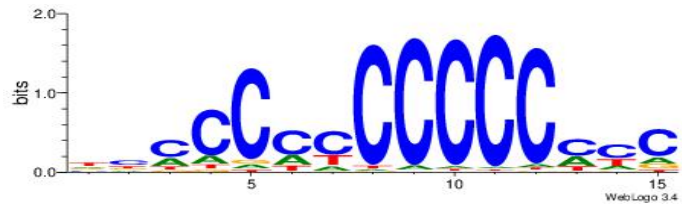
```
DBCCCCCCCCMYC  
--CCCCKCCCC---
```

Original motif

Consensus sequence: DBCCCCCCCCMYC

Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD

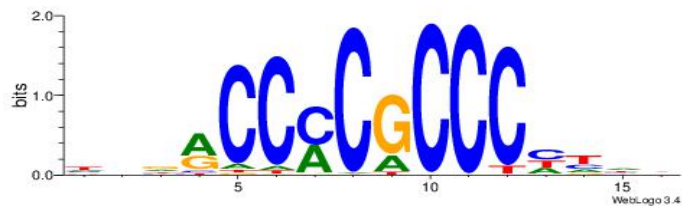


Motif ID: [UP00093](#)  
 Motif name: Klf7\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 3  
 Number of overlap: 10  
 Similarity score: 0.0303207

Alignment:  
 HBDRC~~CMCGCC~~HHHD  
 ---CC~~CK~~CCCC--

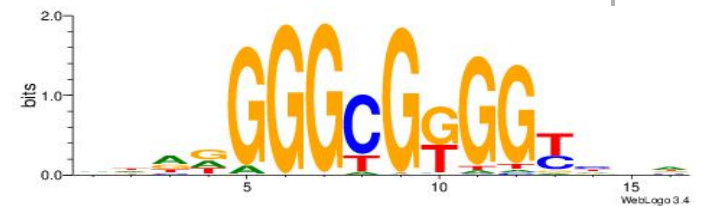
Original motif

Consensus sequence: HBDRC~~CMCGCC~~HHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



Motif ID: [UP00033](#)

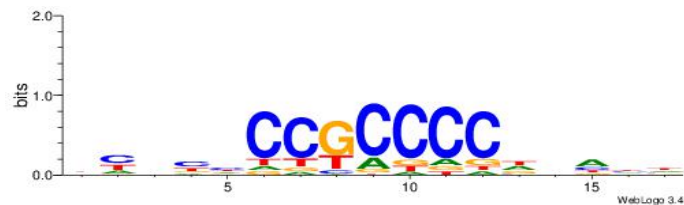
Motif name: Zfp410\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 5  
 Number of overlap: 10  
 Similarity score: 0.0323007

**Alignment:**

HHHHDGGGGCGGDBHDV  
 ----GGGGYGGG----

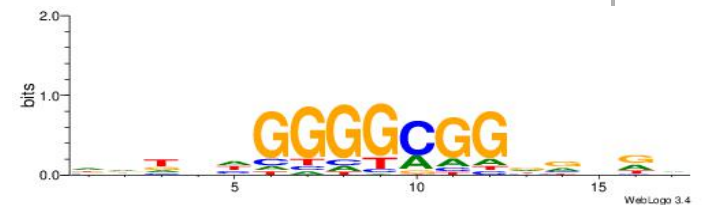
**Original motif**

Consensus sequence: BHHBHCCGCCCDHHHH



**Reverse complement motif**

Consensus sequence: HHHHDGGGGCGGDBHDV




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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

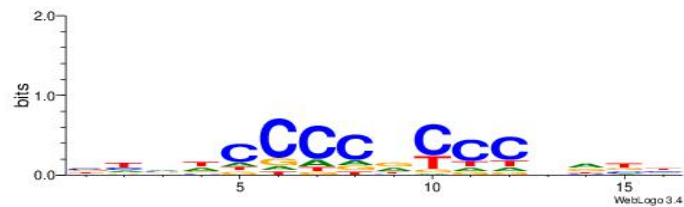
Similarity score: 0.0340973

Alignment:

HVDVGGGHGGGGDBHB  
--GGGGGYGGGG----

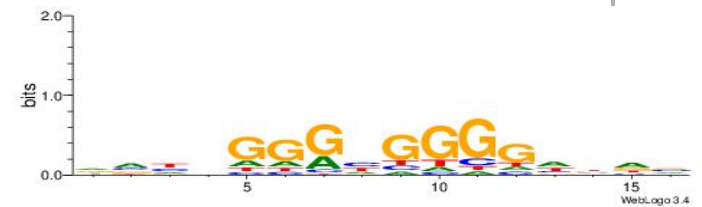
Original motif

Consensus sequence: BHVDCCCCCCCBDBH



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:

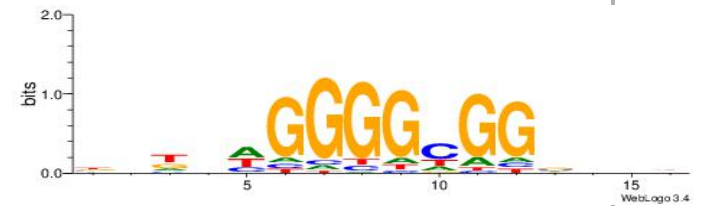
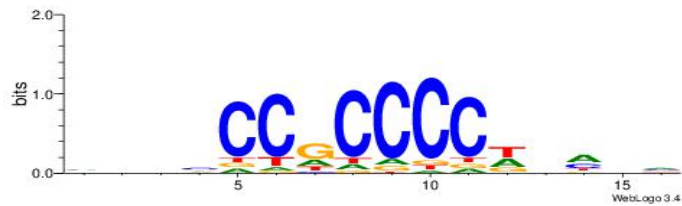
BHHHWGGGGCGBBVH  
----GGGGGYGGGG--

Original motif

Consensus sequence: HBBCCGCCCCWHHHV

Reverse complement motif

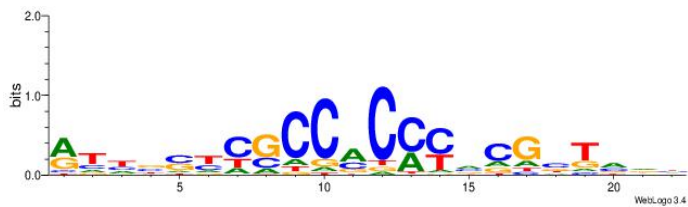
Consensus sequence: BHHHWGGGGCGBBVH



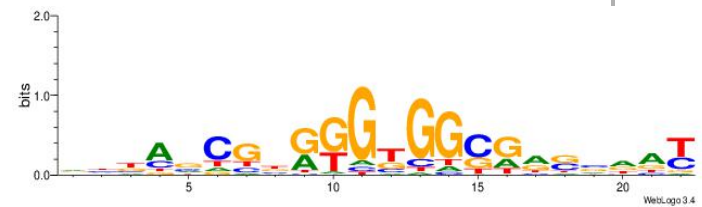
Motif ID: [UP00539](#)  
 Motif name: Gli2\_v016060\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 7  
 Number of overlap: 10  
 Similarity score: 0.0390437

Alignment:  
 HDBABCGBKRGYGGCGMSBHAk  
 -----GGGGGYGGGG-----

Original motif  
 Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif  
 Consensus sequence: HDBABCGBKRGYGGCGMSBHAk



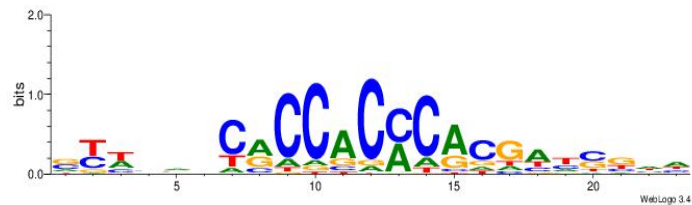
Motif ID: [UP00540](#)  
 Motif name: Gli3\_v016060\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 7  
 Number of overlap: 10  
 Similarity score: 0.0393358

Alignment:

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

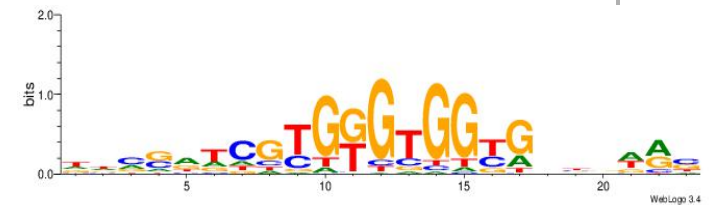
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

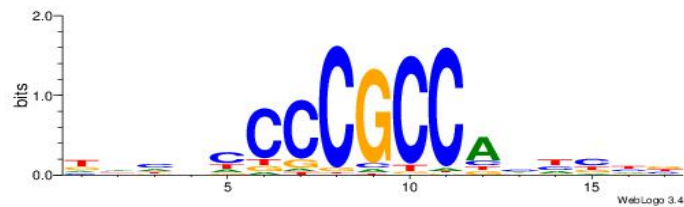


Motif ID: [UP00000](#)  
 Motif name: Smad3\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 4

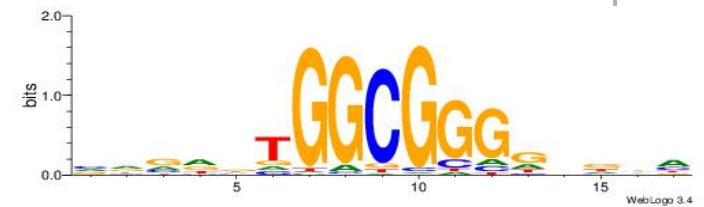
Number of overlap: 10  
Similarity score: 0.0413863

Alignment:  
DHHBCCCCGCCAHHBHB  
----CCCCKCCCC---

Original motif  
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif  
Consensus sequence: BHBHDTGGCGGGGBDHD



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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

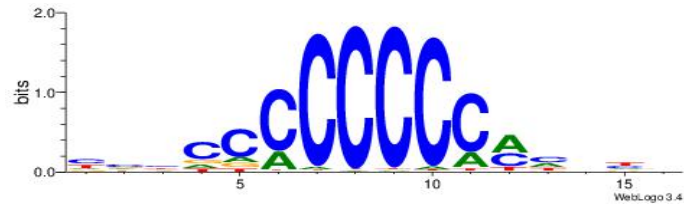
Alignment:  
HVBCCCCCCCCMHHHB  
---CCCCKCCCC---

Original motif

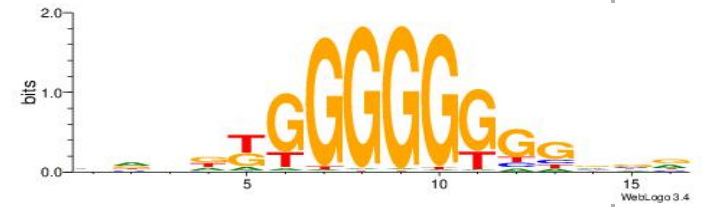
Reverse complement motif



Consensus sequence: HVBCCCCCCCMHHHB



Consensus sequence: BHHDYGGGGGGGGBVD



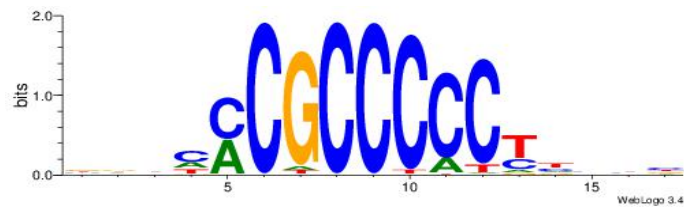
Motif ID: [UP00002](#)  
Motif name: Sp4\_primary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Original Motif  
Direction: Backward  
Position number: 6  
Number of overlap: 10  
Similarity score: 0.0420708

Alignment:

```
BDHHMCGCCCCCTHVBB  
--CCCCKCCCCC-----
```

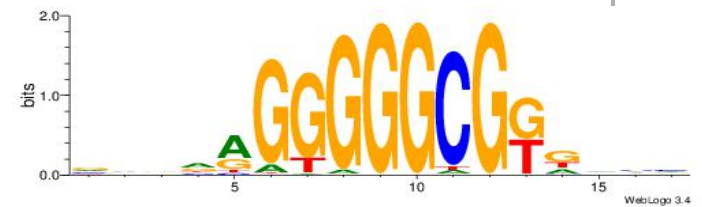
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGGCGRDHHB



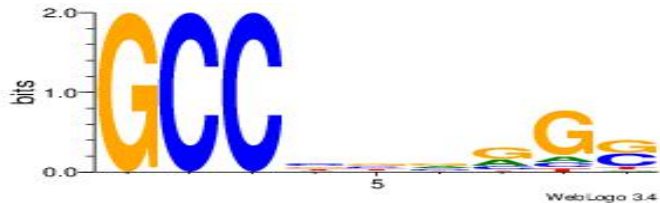
**Dataset #: 3**

**Motif ID: 25**

**Motif name: TFAP2A**

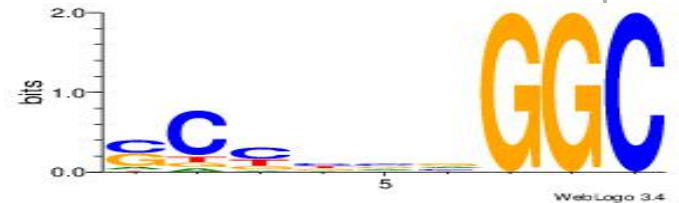
Original motif

Consensus sequence: GCCBBVRGS



Reverse complement motif

Consensus sequence: SCMVBBGGC



### Best Matches for Motif ID 25 (Highest to Lowest)

Motif ID: [UP00010](#)  
Motif name: Tcfap2b\_secondary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Reverse Complement  
Direction: Forward  
Position number: 4  
Number of overlap: 9  
Similarity score: 0.0115546

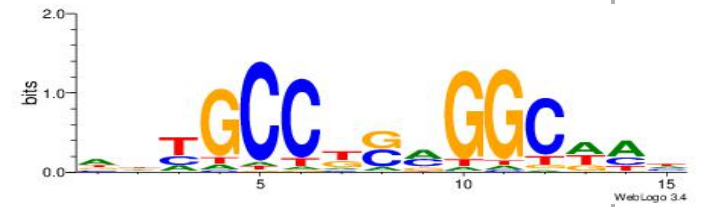
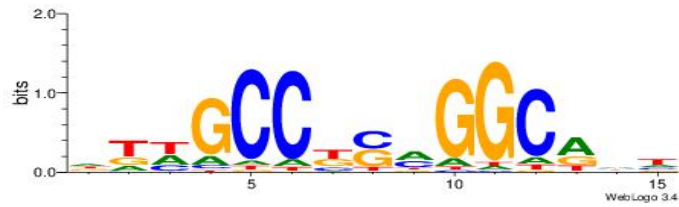
Alignment:  
HHKGCCYSRGGCWAD  
---GCCBBVRGS---

Original motif

Consensus sequence: DTWGCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD

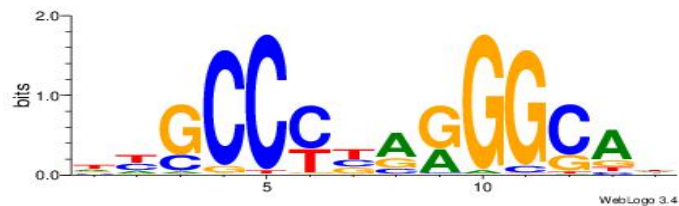


Motif ID: [UP00010](#)  
 Motif name: Tcfap2b\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 3  
 Number of overlap: 9  
 Similarity score: 0.0150447

Alignment:  
 DYGCCYBARGGCAH  
 --GCCBBVRGS---

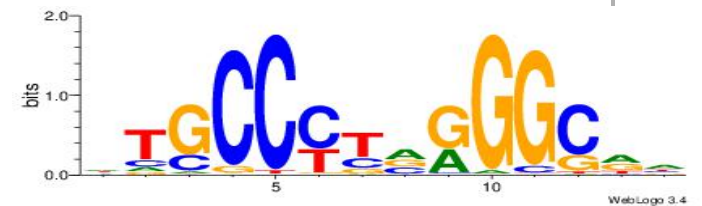
Original motif

Consensus sequence: DYGCCYBARGGCAH



Reverse complement motif

Consensus sequence: HTGCCMTVKGGCMD



Motif ID: [UP00005](#)

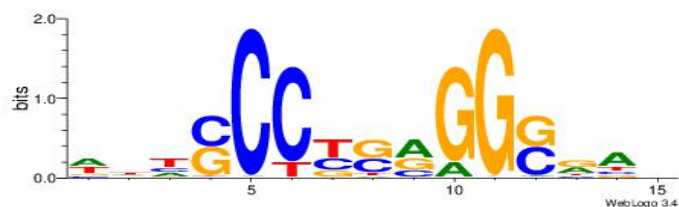
Motif name: Tcfap2a\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 9  
 Similarity score: 0.0151527

**Alignment:**

WDHSCCYSRGGSRAD  
 ---GCCBBVRGS---

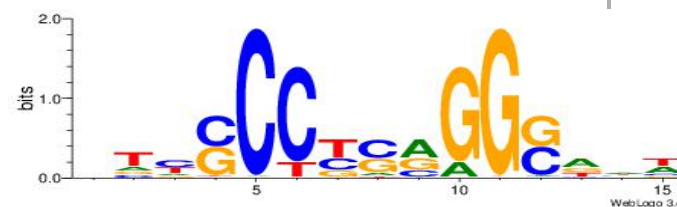
**Original motif**

Consensus sequence: WDHSCCYSRGGSRAD



**Reverse complement motif**

Consensus sequence: DTMSCCKSMGGSHDW




---

Motif ID: [UP00087](#)  
 Motif name: Tcfap2c\_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: 9

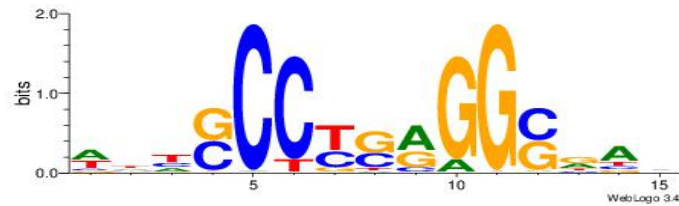
Similarity score: 0.016909

Alignment:

WHHSCCYSRGGSDAD  
---GCCBBVRGS---

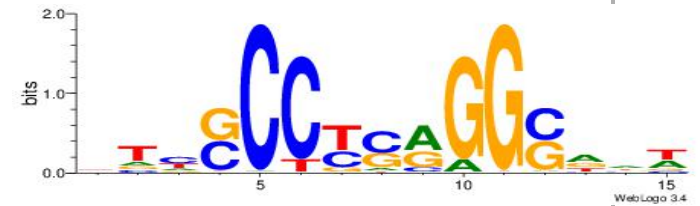
Original motif

Consensus sequence: WHHSCCYSRGGSDAD



Reverse complement motif

Consensus sequence: DTHSCCKSMGGSHHW



Motif ID: [UP00087](#)  
Motif name: Tcfap2c\_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: 9  
Similarity score: 0.0170259

Alignment:

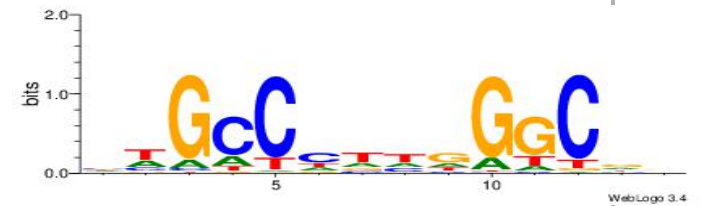
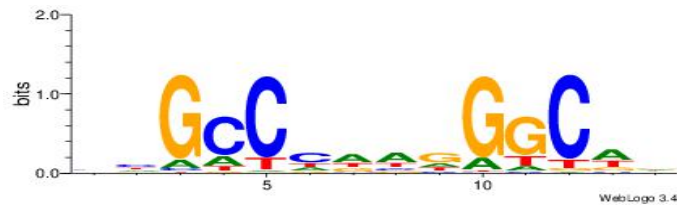
BHGCCCDAGGGCWD  
--GCCBBVRGS---

Original motif

Consensus sequence: BHGCCCDAGGGCWD

Reverse complement motif

Consensus sequence: HWGCCCTDGGGCDB



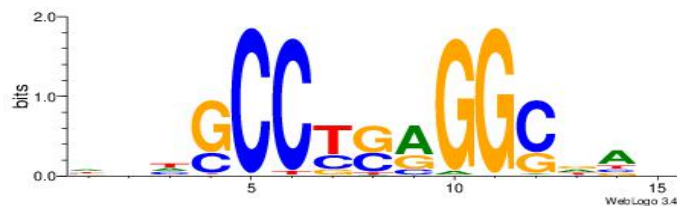
Motif ID: [UP00028](#)  
 Motif name: Tcfap2e\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 9  
 Similarity score: 0.0198854

**Alignment:**

HHHGCCTSAGGCDAD  
 ---GCCBBVRGS---

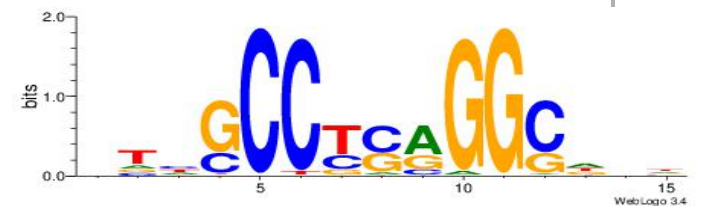
**Original motif**

Consensus sequence: HHHGCCTSAGGCDAD



**Reverse complement motif**

Consensus sequence: DTHGCCTSAGGCHHH

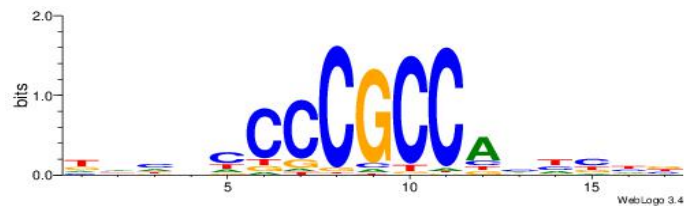


Motif ID: [UP00000](#)  
 Motif name: Smad3\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 9  
 Number of overlap: 9  
 Similarity score: 0.0203681

Alignment:  
 BHBHDTGGCGGGBDHD  
 SCMVBGGC-----

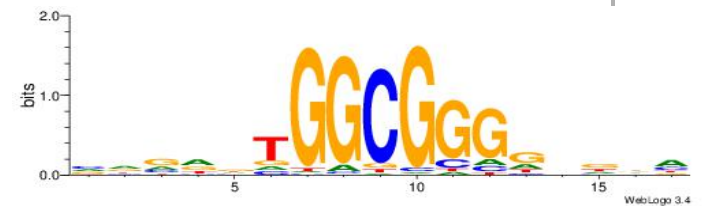
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD

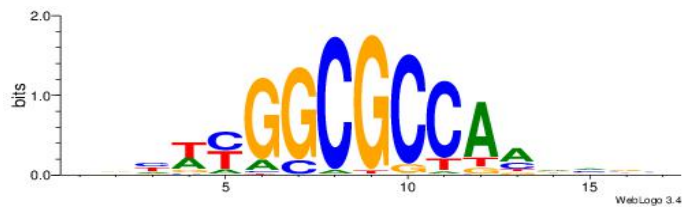


Motif ID: [UP00003](#)  
 Motif name: E2F3\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 1

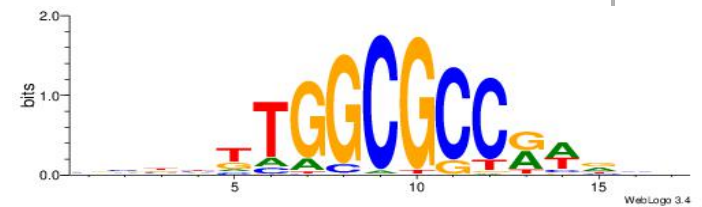
Number of overlap: 9  
Similarity score: 0.0217064

Alignment:  
BBBDYTGGCGCCKWDBD  
SCMVBBGGC-----

Original motif  
Consensus sequence: HBHWYGGCGCCAMDVBB



Reverse complement motif  
Consensus sequence: BBBDYTGGCGCCKWDBD



---

Motif ID: [UP00005](#)  
Motif name: Tcfap2a\_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: 9  
Similarity score: 0.0234775

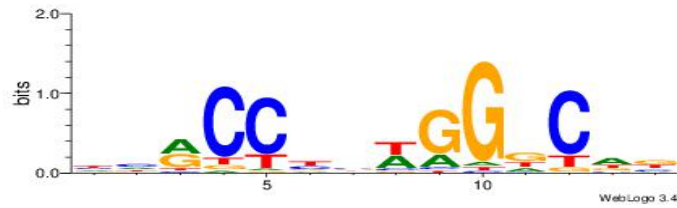
Alignment:  
HHRCCBBWGGDCDB  
--GCCBBVRGS---

Original motif

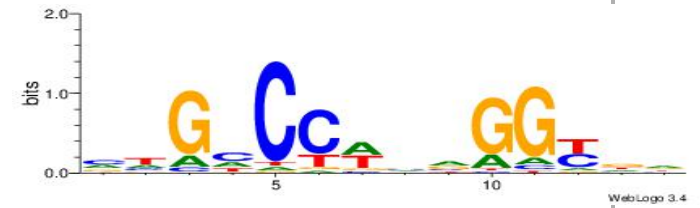
Reverse complement motif



Consensus sequence: HHRCCBBWGGDCDB



Consensus sequence: BDGHCCWBVGGKDH



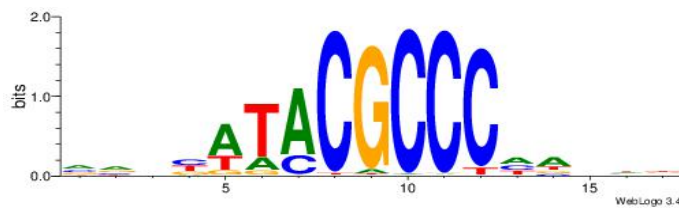
Motif ID: [UP00093](#)  
Motif name: Klf7\_secondary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Original Motif  
Direction: Forward  
Position number: 9  
Number of overlap: 9  
Similarity score: 0.026642

Alignment:

```
VVDBATACGCCCHAHHH  
-----GCCBBVRGS
```

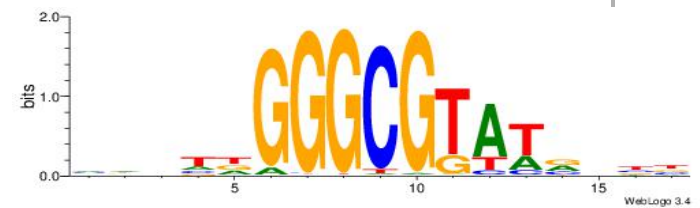
Original motif

Consensus sequence: VVDBATACGCCCHAHHH



Reverse complement motif

Consensus sequence: DHDTHGGGCGTATBHBB



**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: Backward  
Position number: 2  
Number of overlap: 8  
Similarity score: 0

Alignment:

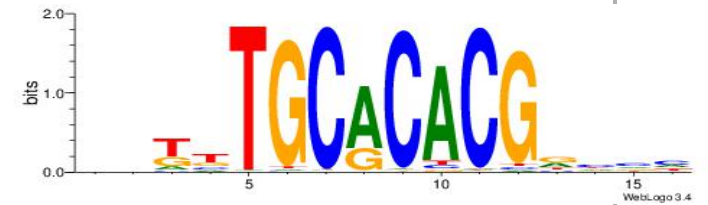
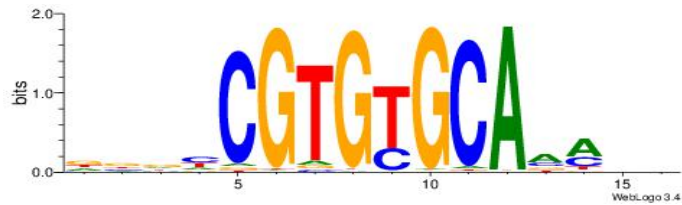
```
HDYTTGCACACGDHBH  
-----VCACGTBV--
```

Original motif

Consensus sequence: DBDHCGTGTGCAAMDH

Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH

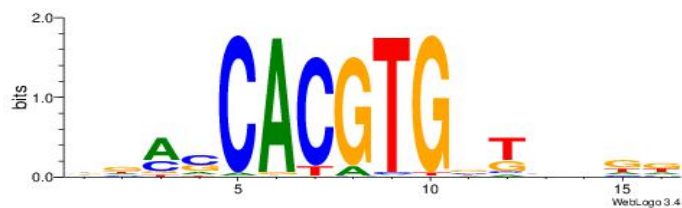


Motif ID: [UP00060](#)  
 Motif name: Max\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 8  
 Similarity score: 0.000574345

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

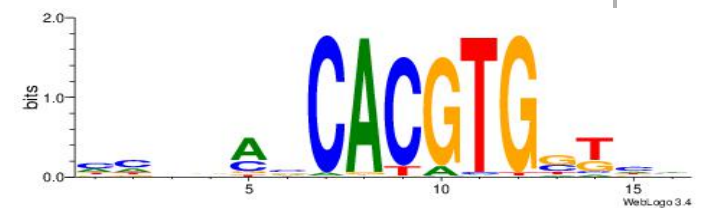
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD



Motif ID: [UP00050](#)

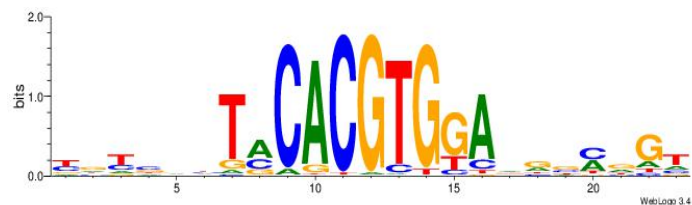
Motif name: Bhlhb2\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 9  
 Number of overlap: 8  
 Similarity score: 0.00642455

**Alignment:**

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

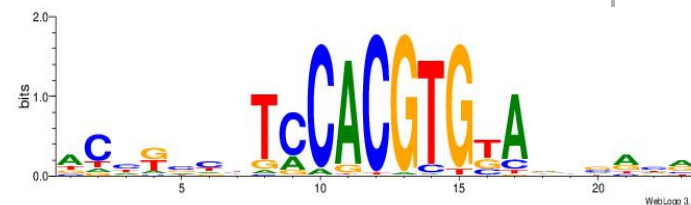
**Original motif**

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-----

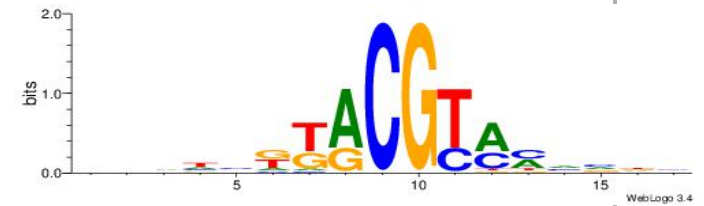
Original motif

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:

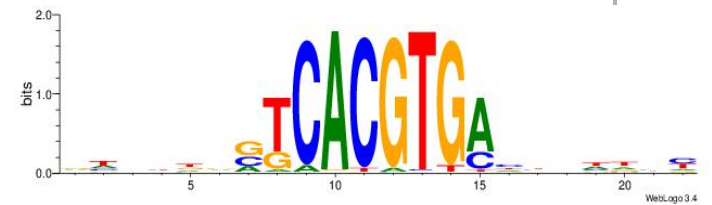
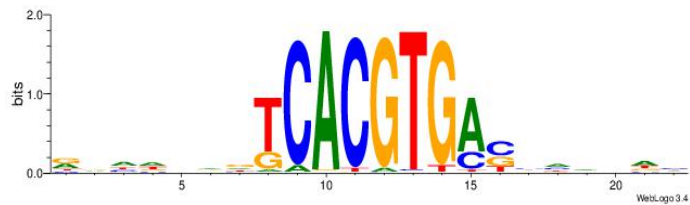
RDHDBVDTACGTGASBHVHDH  
-----VCACGTBV-----

Original motif

Consensus sequence: RDHDBVDTACGTGASBHVHDH

Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHMH



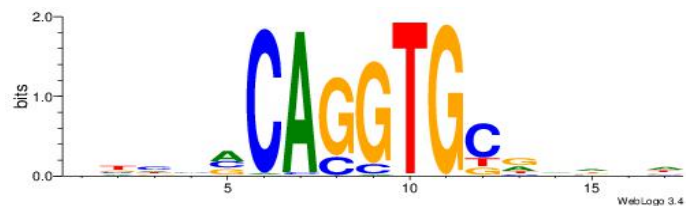
Motif ID: [UP00046](#)  
 Motif name: Tcfe2a\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 5  
 Number of overlap: 8  
 Similarity score: 0.0184296

**Alignment:**

VBHHVCAGGTGCDVDHD  
 ----VBACGTGV-----

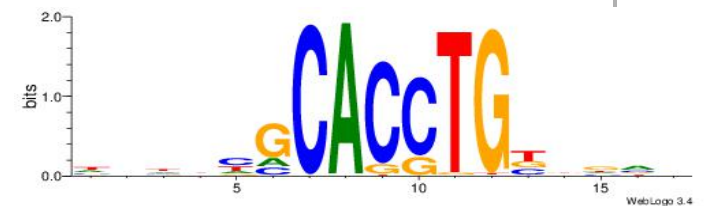
**Original motif**

Consensus sequence: VBHHVCAGGTGCDVDHD



**Reverse complement motif**

Consensus sequence: DHDBHGCACCTGBDDVB



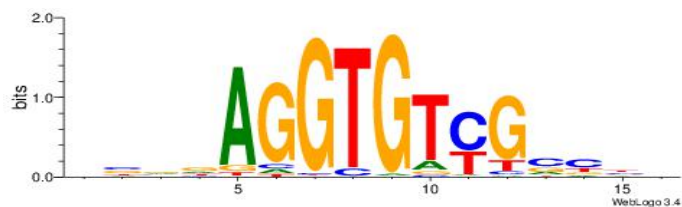
Motif ID: [UP00068](#)  
 Motif name: Eomes\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 3  
 Number of overlap: 8  
 Similarity score: 0.0188154

Alignment:

VVBVCKACACCTHVBV  
 -----VCACGTBV--

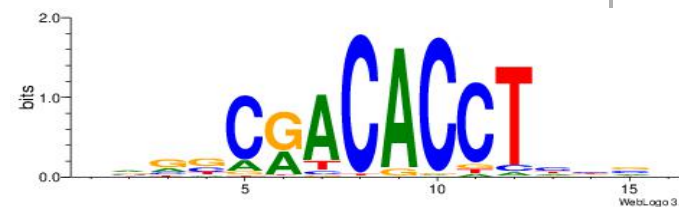
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV

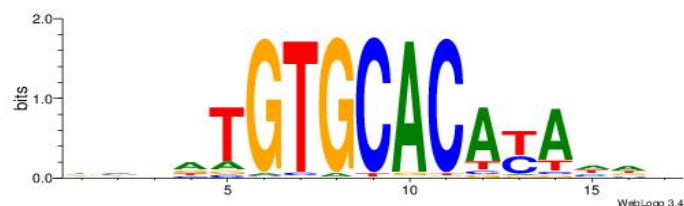


Motif ID: [UP00026](#)  
 Motif name: Zscan4\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 9

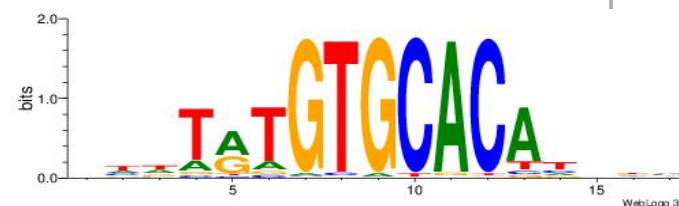
Number of overlap: 8  
Similarity score: 0.0189568

Alignment:  
DHVDTGTGCACAYAHDH  
-VBACGTGV-----

Original motif  
Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif  
Consensus sequence: HDHTMTGTGCACADVHD



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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

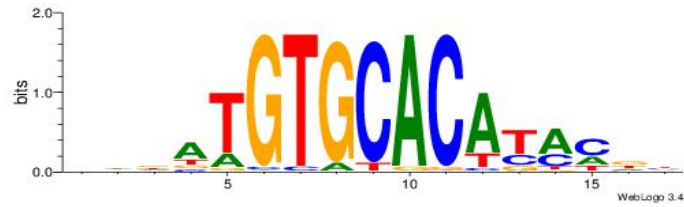
Alignment:  
HHRTATGTGCACATHHD  
--VBACGTGV-----

Original motif

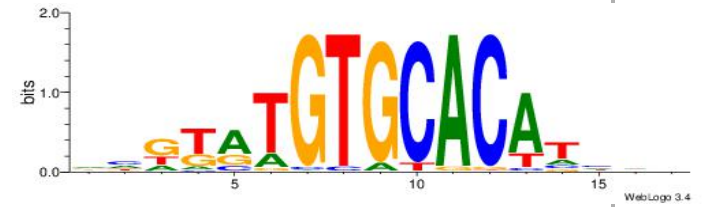
Reverse complement motif



Consensus sequence: HHDATGTGCACATAMDH



Consensus sequence: HHRTATGTGCACATHHD

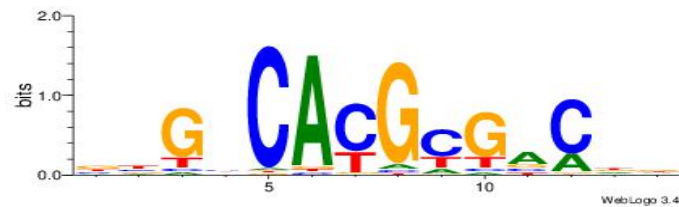


Motif ID: [UP00060](#)  
Motif name: Max\_secondary  
Species: Mus musculus  
Matching format of first motif: Reverse Complement  
Matching format of second motif: Original Motif  
Direction: Backward  
Position number: 4  
Number of overlap: 8  
Similarity score: 0.021967

Alignment:  
BBGHCACGCGACDD  
---VCACGTBV---

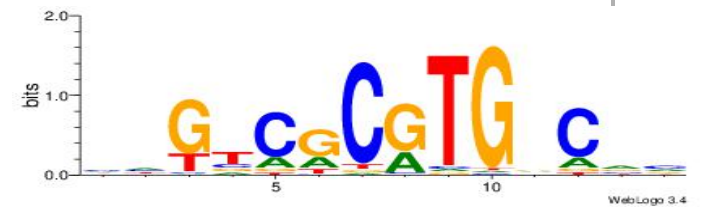
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTGCGGTGDCVB



**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:

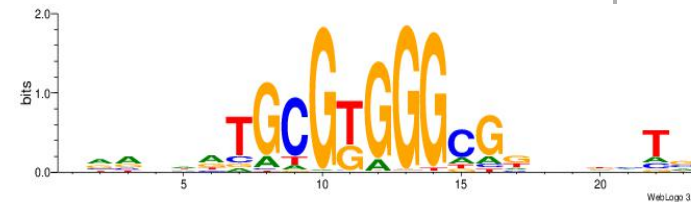
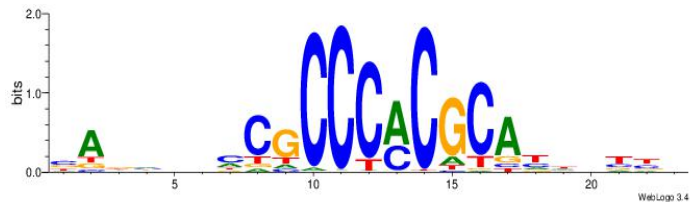
```
VVDHHTGCGYGGGCGDHSVHHTB  
-----YGCGTG-----
```

Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV

Reverse complement motif

Consensus sequence: VVDHHTGCGYGGGCGDHSVHHTB

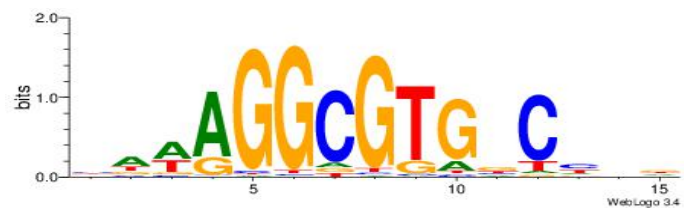


Motif ID: [UP00002](#)  
 Motif name: Sp4\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 5  
 Number of overlap: 6  
 Similarity score: 0.00183587

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

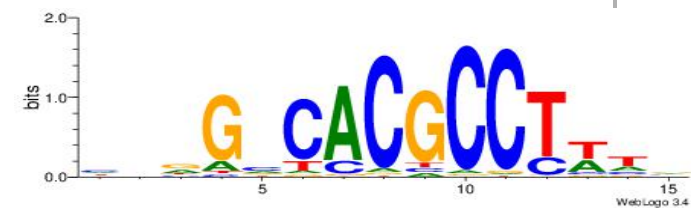
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



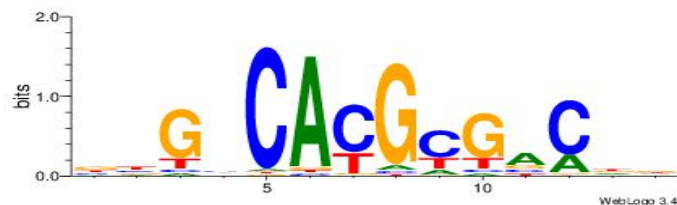
Motif ID: [UP00060](#)

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

Alignment:  
 HDGTCGCGTGDCVB  
 ----YGCGTG----

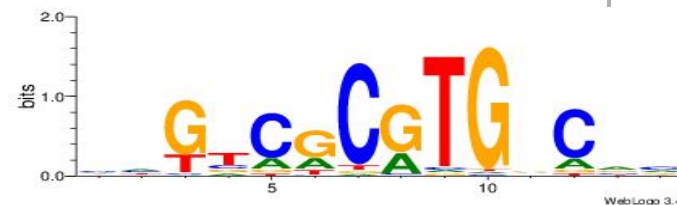
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB




---

Motif ID: [UP00527](#)  
 Motif name: Foxn4\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 8  
 Number of overlap: 6

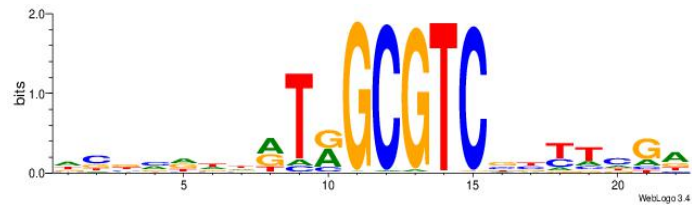
Similarity score: 0.00526158

Alignment:

TCDAMVBGACGCMAKDDDVBBB  
-----CACGCM-----

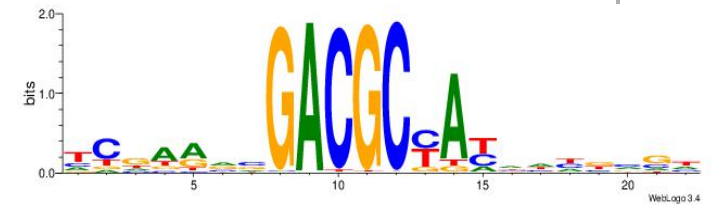
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMAKDDDVBBB



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:

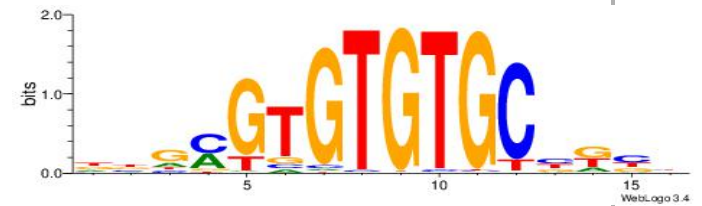
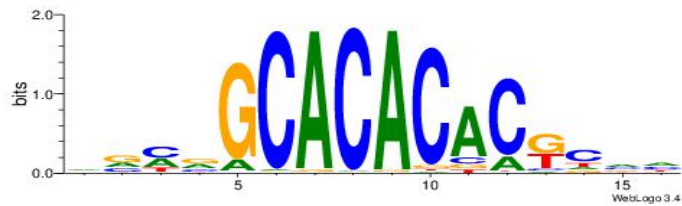
HBGYGTGTGTGCVRVD  
---YCGTG-----

Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD

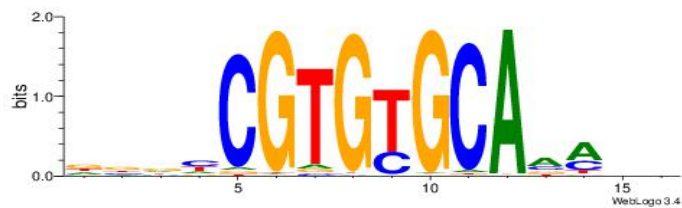


Motif ID: [UP00097](#)  
 Motif name: Mtf1\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 9  
 Number of overlap: 6  
 Similarity score: 0.00702416

Alignment:  
 HDYTTGCACACGDHBH  
 -----CACGCM--

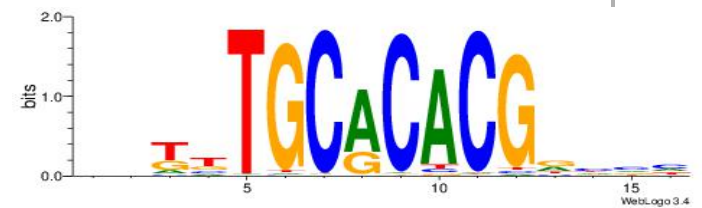
Original motif

Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH



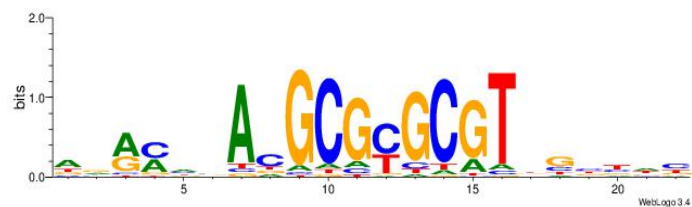
Motif ID: [UP00526](#)  
 Motif name: Foxn1\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 8  
 Number of overlap: 6  
 Similarity score: 0.0123233

Alignment:

DDRMHBACGCGYCGTGDGBBDB  
 -----YGCGTG-----

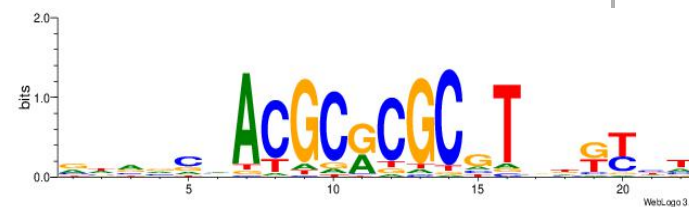
Original motif

Consensus sequence: DDRMHBACGCGYCGTGDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCTBHRKHD



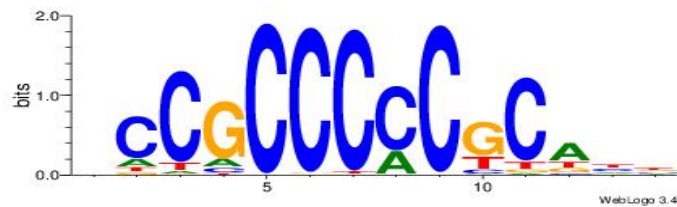

---

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

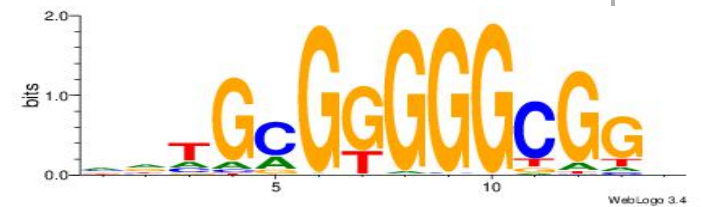
Number of overlap: 6  
Similarity score: 0.0141579

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

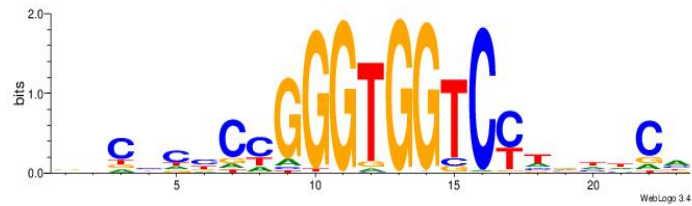
Alignment:  
BHCBCBCCGGGTGGTCYHVHDCH  
-----YCGTG-----

Original motif

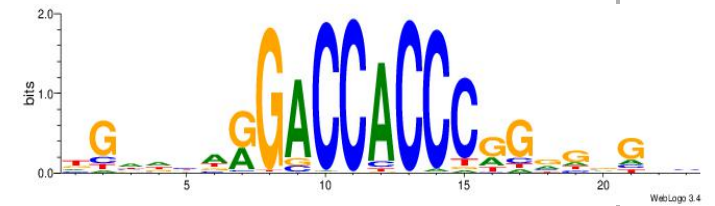
Reverse complement motif



Consensus sequence: BHCBCBCCGGGTGGTCYHVDCH



Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



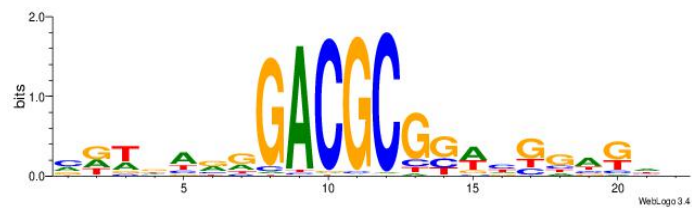
Motif ID: [UP00527](#)  
Motif name: Foxn4\_secondary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Reverse Complement  
Direction: Forward  
Position number: 10  
Number of overlap: 6  
Similarity score: 0.0172109

Alignment:

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

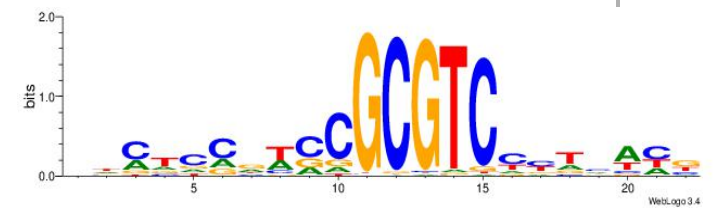
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



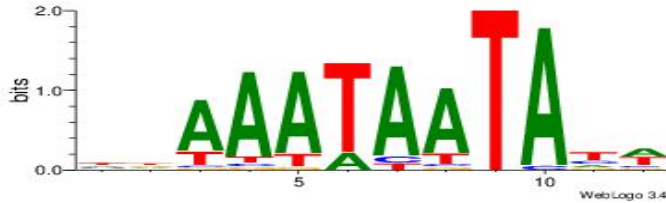
**Dataset #: 4**

**Motif ID: 37**

**Motif name: tkAAATAATatw**

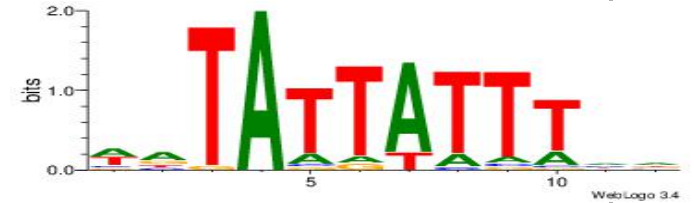
Original motif

Consensus sequence: HDAAATAATAHW



Reverse complement motif

Consensus sequence: WHTATTATTTDH



### Best Matches for Motif ID 37 (Highest to Lowest)

Motif ID: [UP00121](#)  
Motif name: Hoxd10  
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: 0.00353196

Alignment:

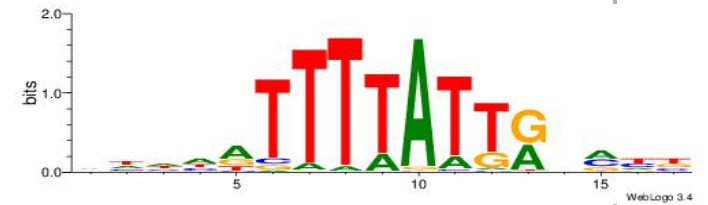
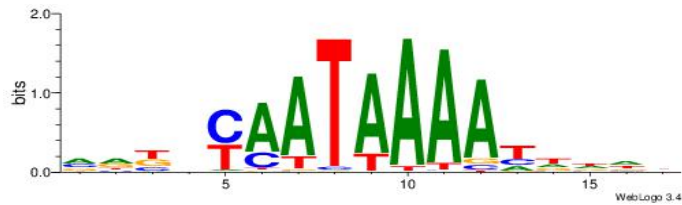
```
HDDDATTTTATTKVRDB  
---WHTATTATTTDH---
```

Original motif

Consensus sequence: VDKVYAATAAAAATDDDH

Reverse complement motif

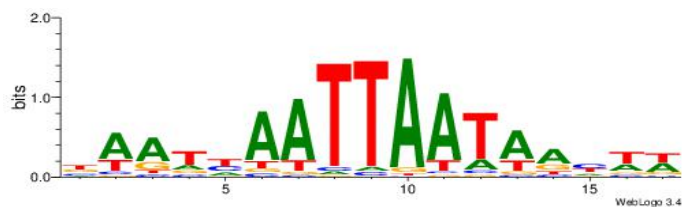
Consensus sequence: HDDDATTTTATTKVRDB



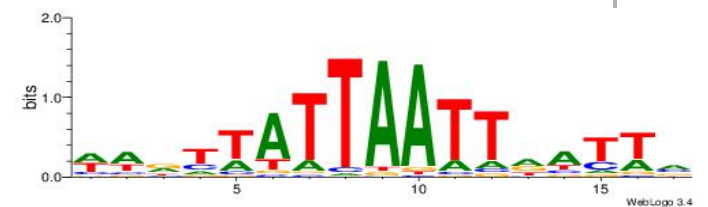
Motif ID: [UP00244](#)  
 Motif name: Tlx2  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 12  
 Similarity score: 0.00646023

Alignment:  
 BAATHAATTAATAAHWW  
 ---HDAAATAATAHW--

Original motif  
 Consensus sequence: BAATHAATTAATAAHWW



Reverse complement motif  
 Consensus sequence: WWDTTATTAATTHATTV



Motif ID: [UP00051](#)

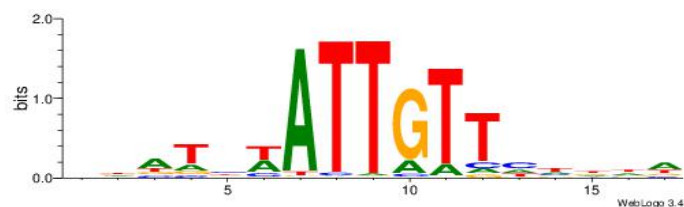
Motif name: Sox8\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 4  
 Number of overlap: 12  
 Similarity score: 0.0120674

**Alignment:**

DDDHDAACAATWBATDD  
 --HDAAATAATAHW---

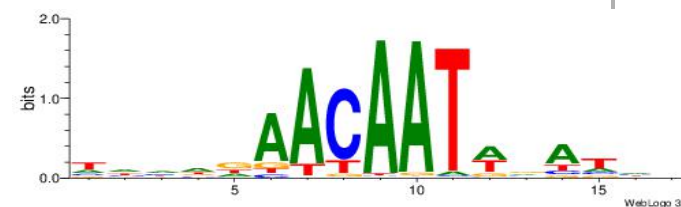
**Original motif**

Consensus sequence: DDATBWATTGTTHHDDD



**Reverse complement motif**

Consensus sequence: DDDHDAACAATWBATDD




---

Motif ID: [UP00180](#)  
 Motif name: Hoxd13  
 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

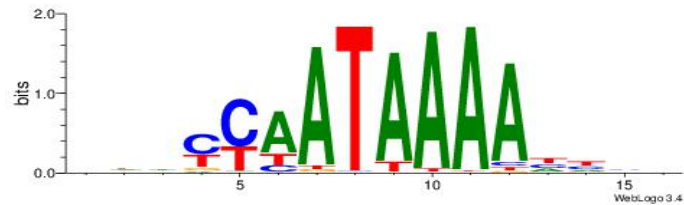
Similarity score: 0.0123772

Alignment:

```
HDHHTTTTATTKKHDD  
--WHTATTATTTDH--
```

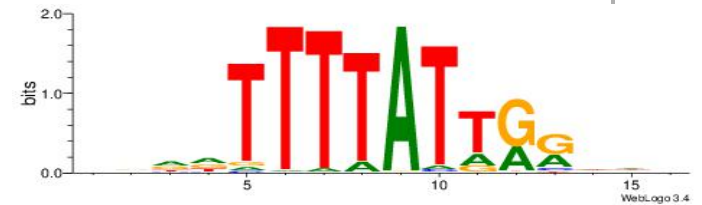
Original motif

Consensus sequence: HDHYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



Motif ID: [UP00037](#)  
Motif name: Zfp105\_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: 0.0129559

Alignment:

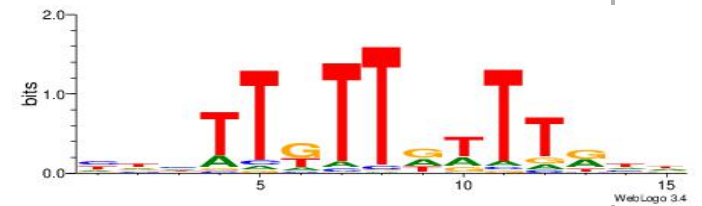
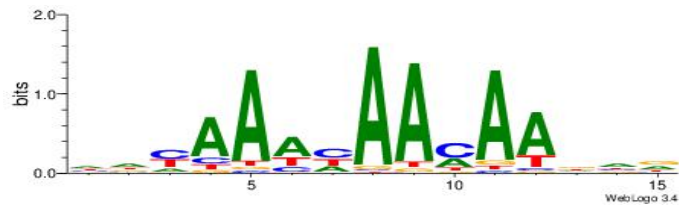
```
HHHTTRTTDTTTKDH  
--WHTATTATTTDH--
```

Original motif

Consensus sequence: HDYAAHAAMAADHD

Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



Motif ID: [UP00064](#)  
 Motif name: Sox18\_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: 12  
 Similarity score: 0.0130138

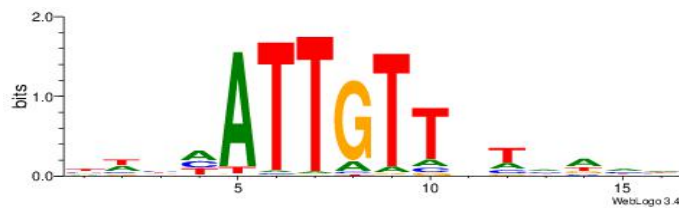
**Alignment:**

```

HHDHABAACAATHBWV
---HDAAATAATAHW-
  
```

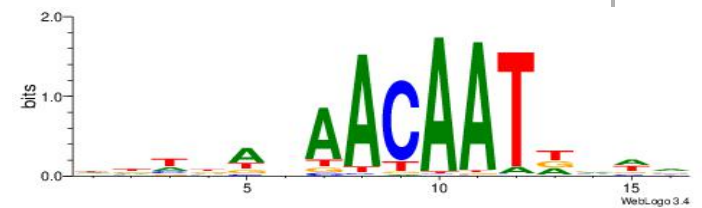
**Original motif**

Consensus sequence: BWBHATTGTTBTHDHH



**Reverse complement motif**

Consensus sequence: HHDHABAACAATHBWV

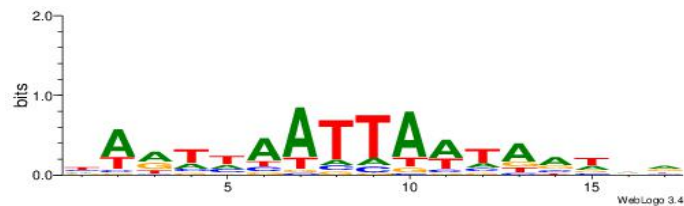


Motif ID: [UP00255](#)  
 Motif name: Dbx1  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 4  
 Number of overlap: 12  
 Similarity score: 0.0131034

Alignment:  
 DHDBTAWTAATTHAKTH  
 --WHTATTATTTDH---

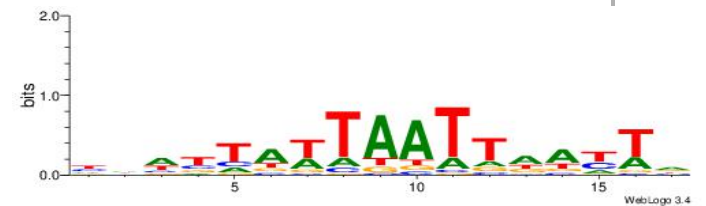
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

Consensus sequence: DHDBTAWTAATTHAKTH



Motif ID: [UP00024](#)  
 Motif name: Glis2\_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: 12

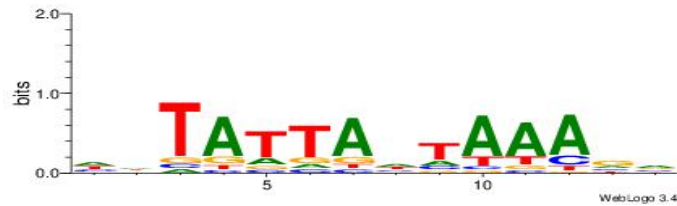
Similarity score: 0.0140433

Alignment:

BVTTTAHTAATADH  
WHTATTATTTDH--

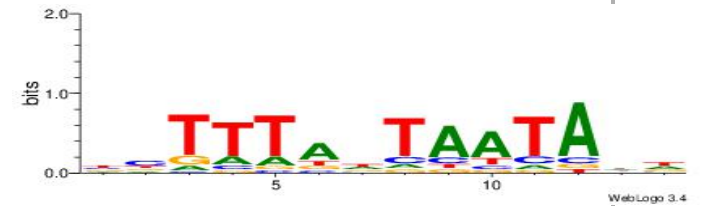
Original motif

Consensus sequence: HDTATTAHTAAAVV



Reverse complement motif

Consensus sequence: BVTTTAHTAATADH



Motif ID: [UP00075](#)  
Motif name: Sox15\_primary  
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: 0.0143532

Alignment:

DHVKMWATTGTTHDHDH  
---WHTATTATTTDH--

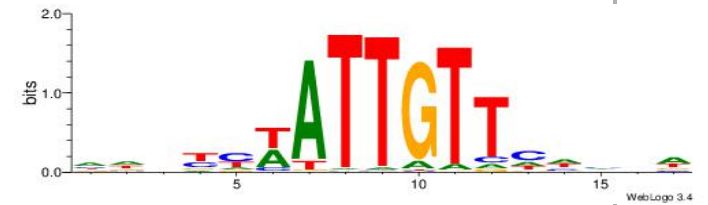
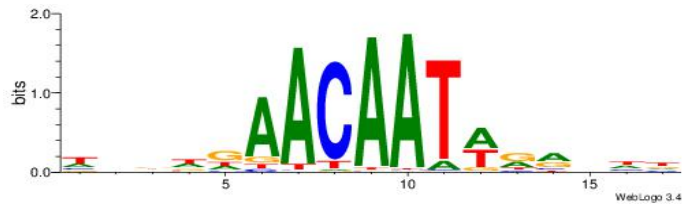
Original motif

Consensus sequence: HDDDDAACAATWRRBHD

Reverse complement motif

Consensus sequence: DHVKMWATTGTTHDHDH



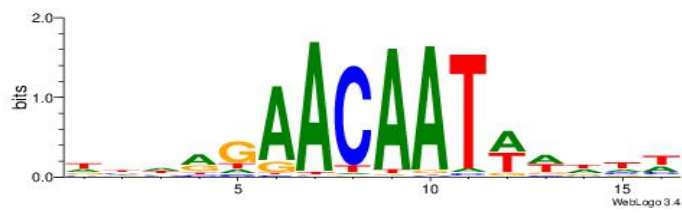


Motif ID: [UP00096](#)  
 Motif name: Sox13\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 3  
 Number of overlap: 12  
 Similarity score: 0.014607

Alignment:  
 WHDWWATTGTTCKDHD  
 --WHTATTATTTDH--

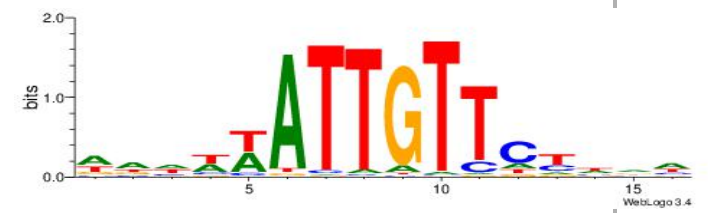
Original motif

Consensus sequence: DHDRGAACAATWWDHW



Reverse complement motif

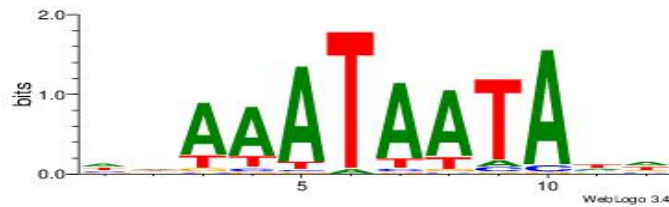
Consensus sequence: WHDWWATTGTTCKDHD



**Dataset #: 4      Motif ID: 41      Motif name: wwAAATAATatw**

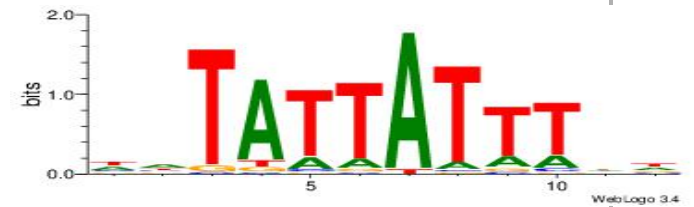
Original motif

Consensus sequence: HDAAATAATADD



Reverse complement motif

Consensus sequence: DDTATTATTTDH



### Best Matches for Motif ID 41 (Highest to Lowest)

Motif ID: [UP00244](#)  
Motif name: Tlx2  
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: 0.00576686

Alignment:

WWDTTATTAATTHATTV

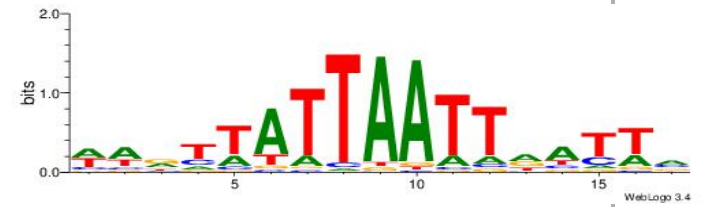
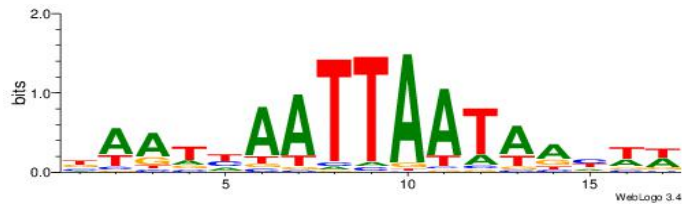
--DDTATTATTTDH---

Original motif

Consensus sequence: BAATHAATTAATAAHWW

Reverse complement motif

Consensus sequence: WWDTTATTAATTHATTV

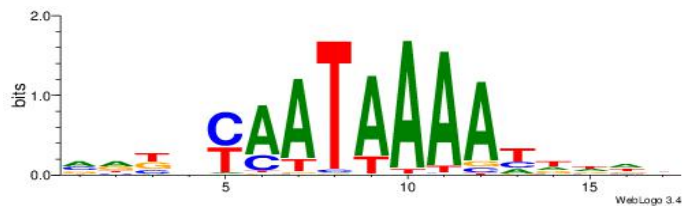


Motif ID: [UP00121](#)  
 Motif name: Hoxd10  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 12  
 Similarity score: 0.00673636

Alignment:  
 HDDDATTTTATTKVRDB  
 ---DDTATTATTTDH--

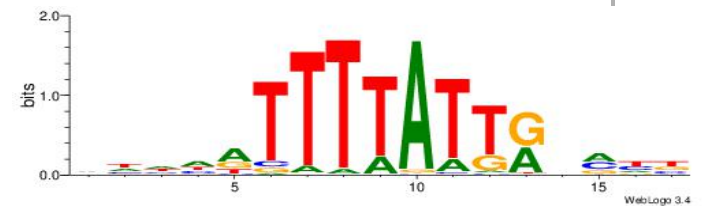
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB



Motif ID: [UP00180](#)

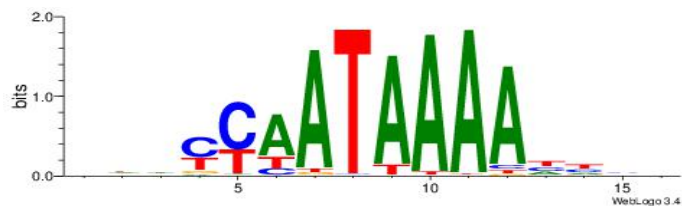
Motif name: Hoxd13  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 3  
 Number of overlap: 12  
 Similarity score: 0.00685179

Alignment:

HDHHTTTTATTKKHDD  
 --DDTATTATTTDH--

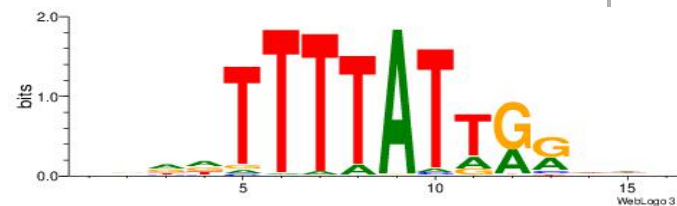
Original motif

Consensus sequence: HDHYAATAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



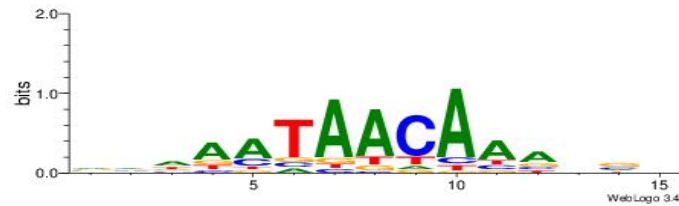
Motif ID: [UP00073](#)  
 Motif name: Foxa2\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 1  
 Number of overlap: 12  
 Similarity score: 0.0108327

Alignment:

VVDAATAACAAAVVB  
HDAAATAATADD---

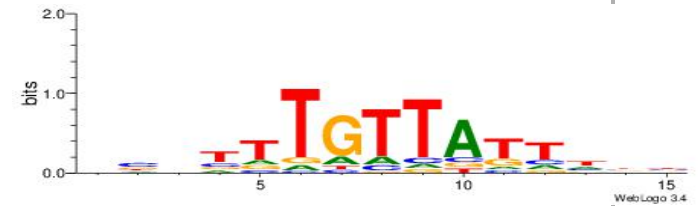
Original motif

Consensus sequence: VVDAATAACAAAVVB



Reverse complement motif

Consensus sequence: BVVTTTGTTATTTDBB



---

Motif ID:	<a href="#">UP00134</a>
Motif name:	Hoxb13
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:	0.0121723

Alignment:

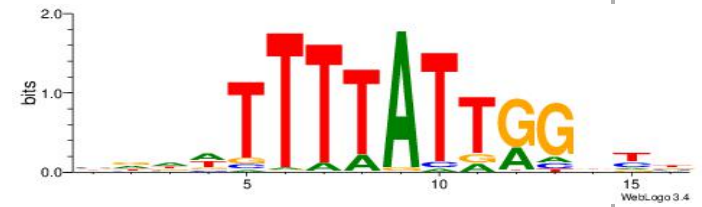
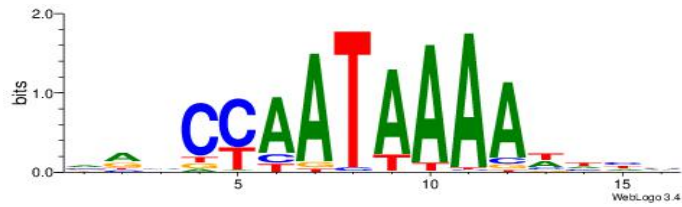
VDHWTTTTATTGGDKB  
--DDTATTATTTDH--

Original motif

Consensus sequence: VRHCCAATAAAWHHV

Reverse complement motif

Consensus sequence: VDHWTTTTATTGGDKB

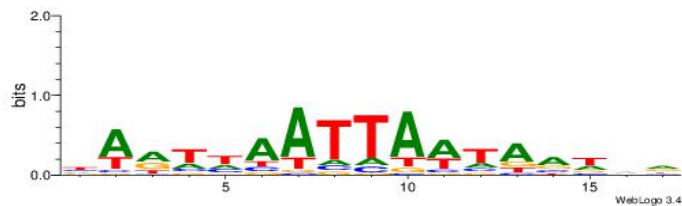


Motif ID: [UP00255](#)  
 Motif name: Dbx1  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 12  
 Similarity score: 0.0133808

Alignment:  
 HARTHAATTAWTAVDHD  
 ---HDAAATAATADD--

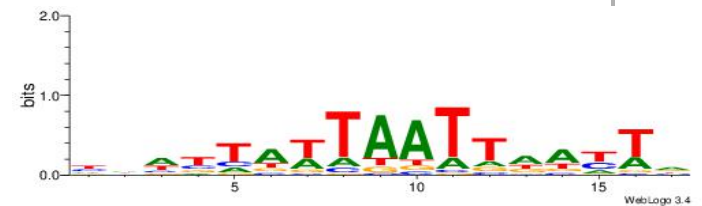
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

Consensus sequence: DHDBTAWTAATTHAKTH



Motif ID: [UP00034](#)

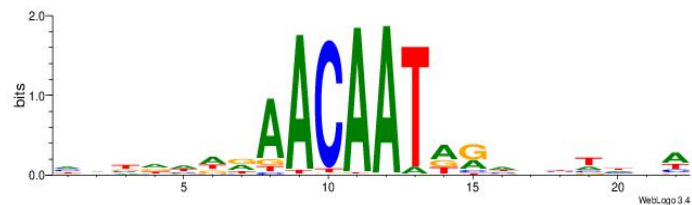
Motif name: Sox7\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 7  
 Number of overlap: 12  
 Similarity score: 0.0144702

Alignment:

HHBDHDDAACAATDRHHHHHBW  
 ----HDAAATAATADD-----

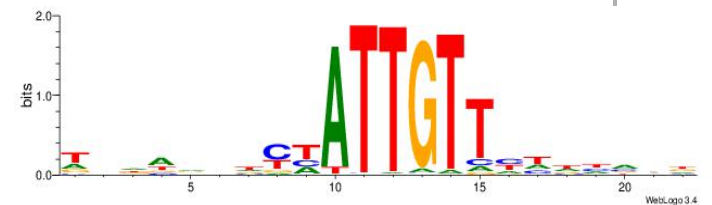
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHMDATTGTTHDHDVHH




---

Motif ID: [UP00051](#)  
 Motif name: Sox8\_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

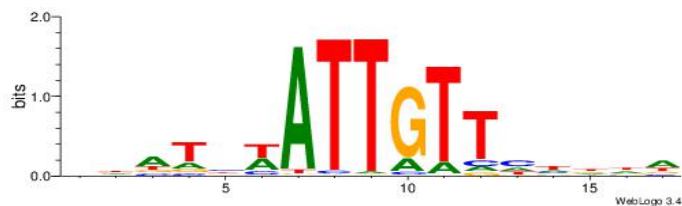
Similarity score: 0.0145614

Alignment:

```
DDATBWATTGTTTHDDD  
---DDTATTATTTDH--
```

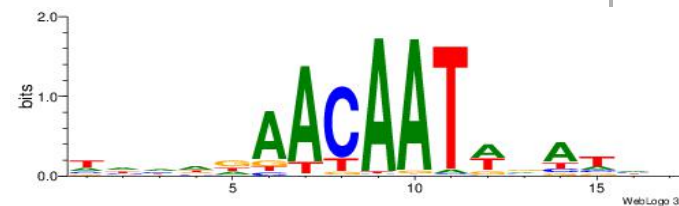
Original motif

Consensus sequence: DDATBWATTGTTTHDDD



Reverse complement motif

Consensus sequence: DDDHDAACAATWBATDD



Motif ID: [UP00024](#)  
Motif name: Glis2\_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: 12  
Similarity score: 0.0148858

Alignment:

```
BVTTTAHTAATADH  
--HDAATAATADD
```

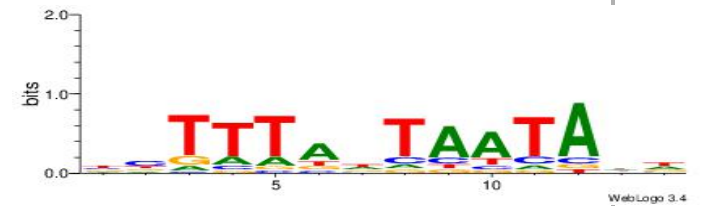
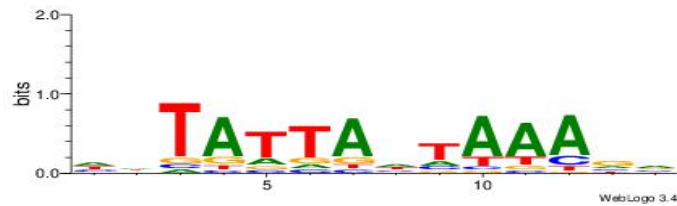
Original motif

Consensus sequence: HDTATTAHTAAVV

Reverse complement motif

Consensus sequence: BVTTTAHTAATADH





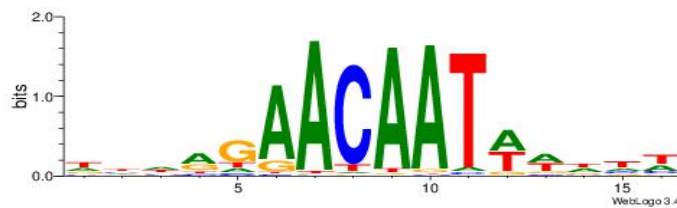
Motif ID: [UP00096](#)  
 Motif name: Sox13\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 3  
 Number of overlap: 12  
 Similarity score: 0.014968

**Alignment:**

DHDRGAACAATWWDHW  
 --HDAAATAATADD--

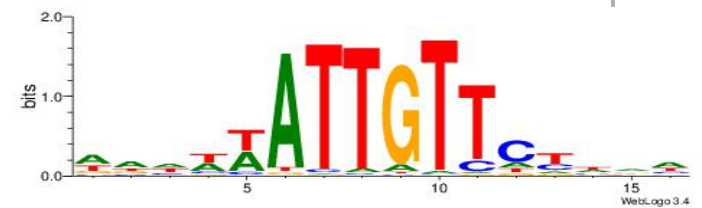
**Original motif**

Consensus sequence: DHDRGAACAATWWDHW



**Reverse complement motif**

Consensus sequence: WHDWWATTGTTCKDHD



**Dataset #: 4**

**Motif ID: 45**

**Motif name: wbgTAAATAww**

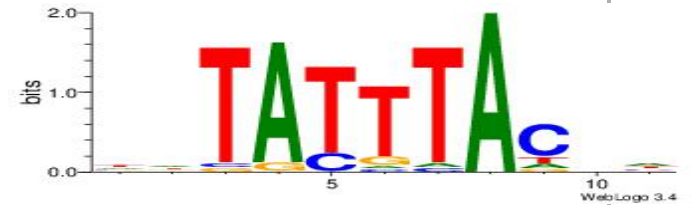
Original motif

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:

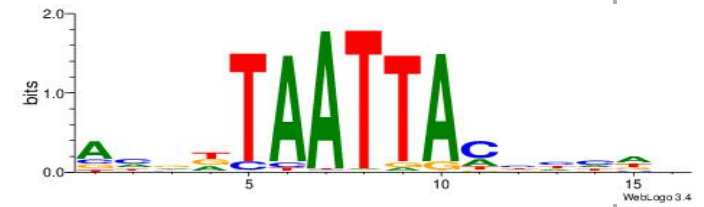
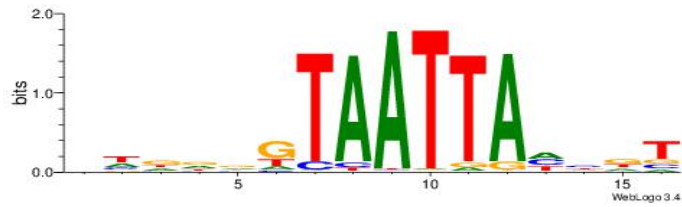
```
AHDHTAATTACHHHHV  
--DHTATTTACBD---
```

Original motif

Consensus sequence: BHDDDGTAATTAHHDT

Reverse complement motif

Consensus sequence: AHDHTAATTACHHHHV

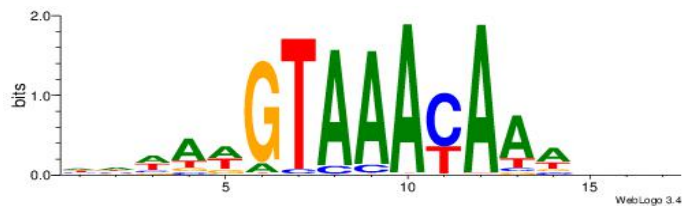


Motif ID: [UP00073](#)  
 Motif name: Foxa2\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 4  
 Number of overlap: 11  
 Similarity score: 0.00453517

Alignment:  
 HHWAWGTAAAYAAAVDB  
 ---DBGTAAATAHD---

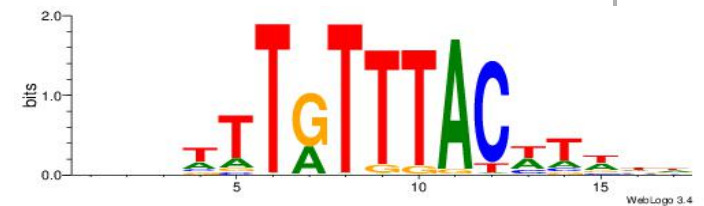
Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: [UP00039](#)

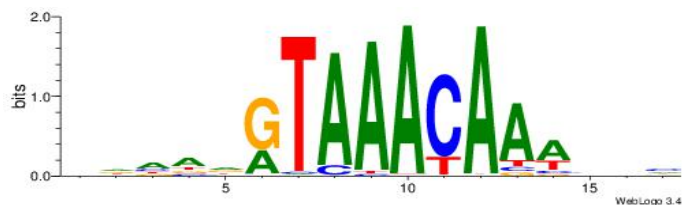
Motif name: Foxj3\_primary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 4  
 Number of overlap: 11  
 Similarity score: 0.00490457

Alignment:

HDHADGTAAACAAAVVH  
 ---DBGTAATAHD---

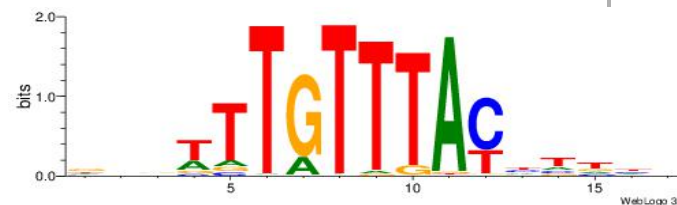
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



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

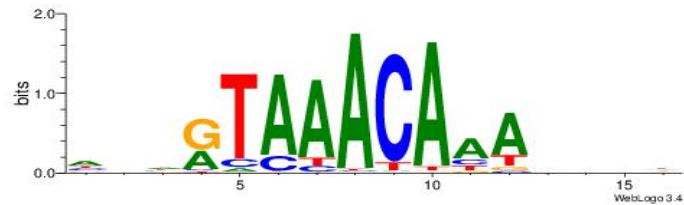
Similarity score: 0.00656547

Alignment:

HDHRTAAACAAHDDD  
-DBGTAAATAHD----

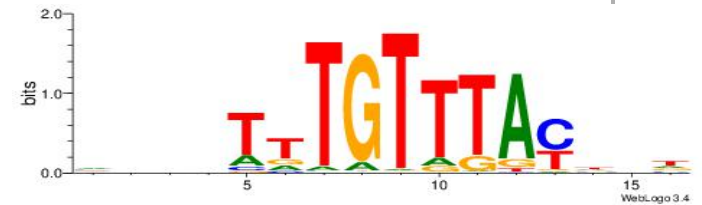
Original motif

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:

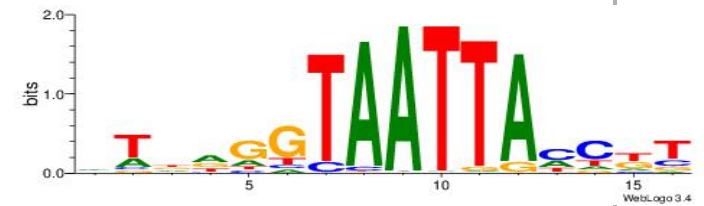
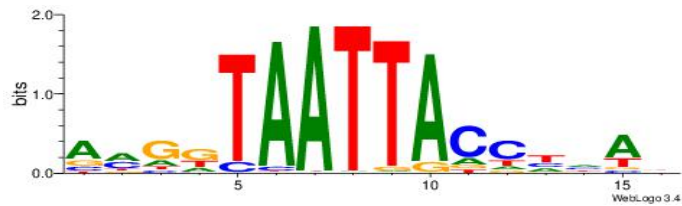
DTHHGGTAATTAYCYT  
---DBGTAAATAHD--

Original motif

Consensus sequence: AMGKTAATTACCHHAD

Reverse complement motif

Consensus sequence: DTHHGGTAATTAYCYT



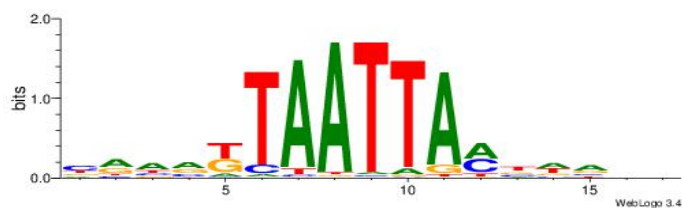
Motif ID: [UP00260](#)  
 Motif name: Hoxc6  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Original Motif  
 Direction: Forward  
 Position number: 4  
 Number of overlap: 11  
 Similarity score: 0.0092156

**Alignment:**

BRHVKTAATTAMBDVVD  
 ---DHTATTTACBD---

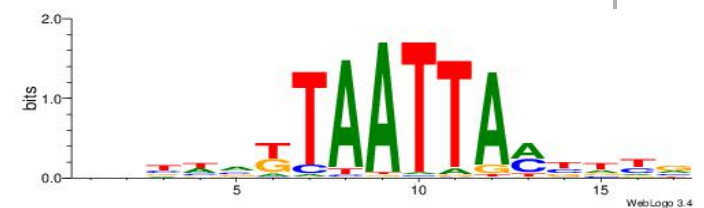
**Original motif**

Consensus sequence: BRHVKTAATTAMBDVVD



**Reverse complement motif**

Consensus sequence: DBBDVYTAATTARBHKB



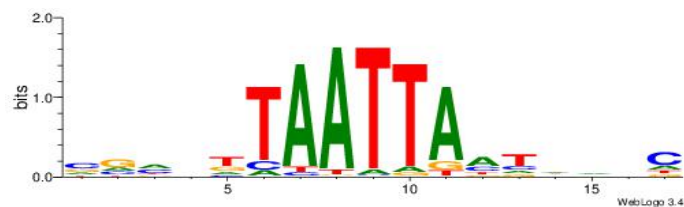
Motif ID: [UP00164](#)  
 Motif name: Hoxa7\_2668.2  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 4  
 Number of overlap: 11  
 Similarity score: 0.00942246

Alignment:

VVHDDTAATTAHTDDBC  
 ---DHTATTTACBD---

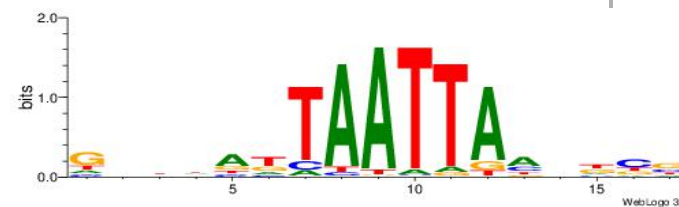
Original motif

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

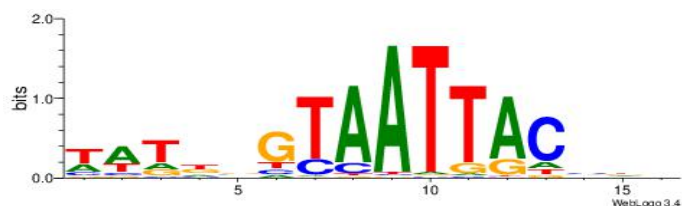
Number of overlap: 11  
Similarity score: 0.00949005

Alignment:

VDVGTAATTACBDAWW  
-DBGTAAATAHD----

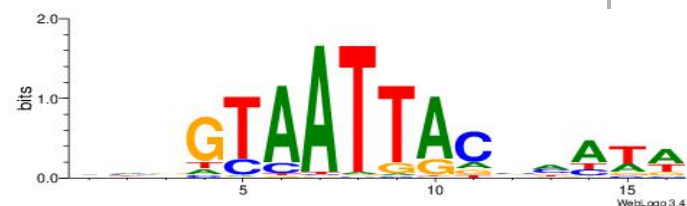
Original motif

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:

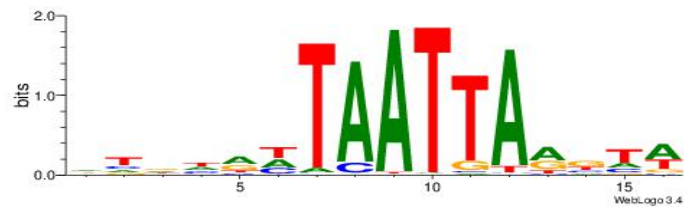
WABKTAATTAKHHHD  
-DBGTAAATAHD----

Original motif

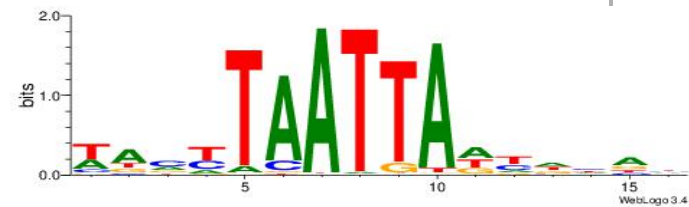
Reverse complement motif



Consensus sequence: DHDHRHTAATTARBTW



Consensus sequence: WABKTAATTAHKHHHD



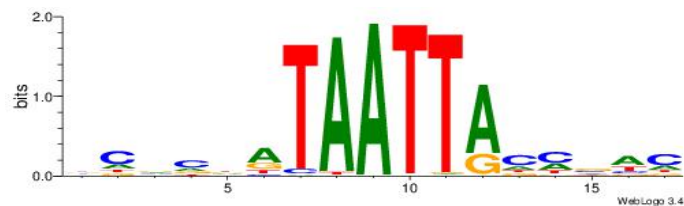
Motif ID: [UP00110](#)  
Motif name: Dlx4  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Reverse Complement  
Direction: Forward  
Position number: 3  
Number of overlap: 11  
Similarity score: 0.0107458

Alignment:

```
GHVRGTAATTATDVVGV  
--DBGTAAATAHD----
```

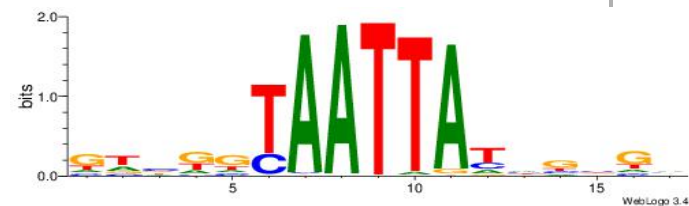
Original motif

Consensus sequence: BCVVDATAATTACMVHC



Reverse complement motif

Consensus sequence: GHVRGTAATTATDVVGV



**Dataset #: 5**

**Motif ID: 46**

**Motif name: TFW1**

Original motif

Consensus sequence: GTCGCG



Reverse complement motif

Consensus sequence: CGCGAC



### Best Matches for Motif ID 46 (Highest to Lowest)

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: Backward  
Position number: 9  
Number of overlap: 6  
Similarity score: 0

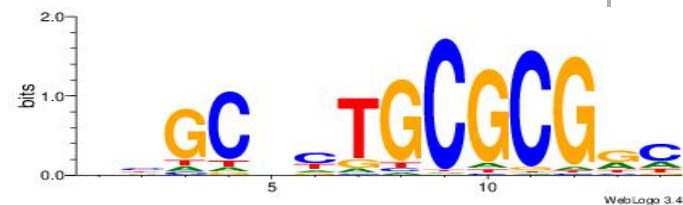
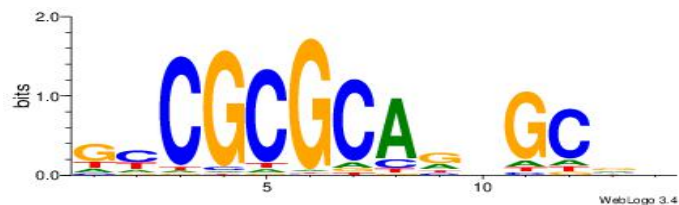
Alignment:  
GYCGCGCARBGCVB  
GTCGCG-----

Original motif

Consensus sequence: GYCGCGCARBGCVB

Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC

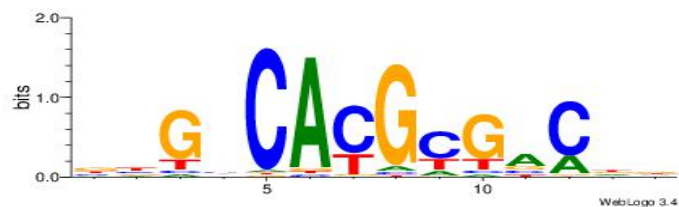


Motif ID: [UP00060](#)  
 Motif name: Max\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 3  
 Number of overlap: 6  
 Similarity score: 0.00875457

Alignment:  
 HDGTCGCGTGDCVB  
 --GTCGCG-----

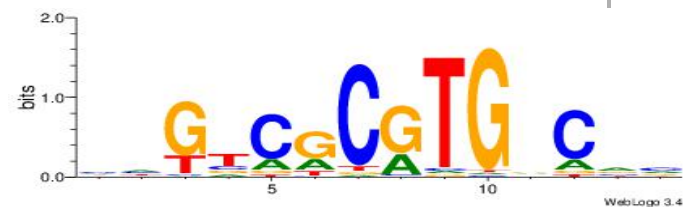
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



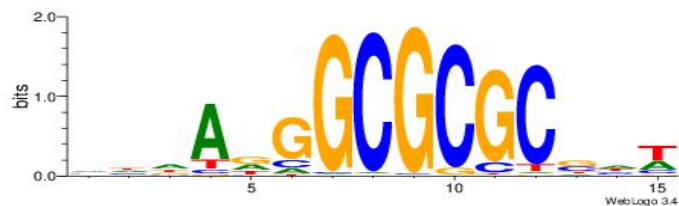
Motif ID: [UP00003](#)

Motif name: E2F3\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 6  
 Number of overlap: 6  
 Similarity score: 0.0102952

Alignment:  
 W H S G C G C G C C H T D H B  
 - - - - C G C G A C - - - - -

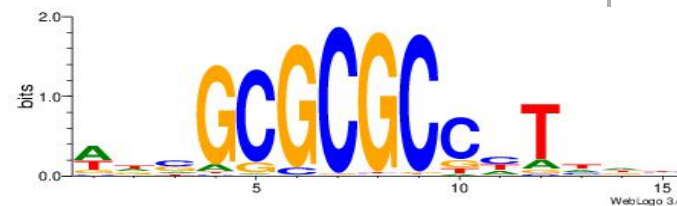
Original motif

Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif

Consensus sequence: W H S G C G C G C C H T D H B




---

Motif ID: [UP00526](#)  
 Motif name: Foxn1\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Original Motif  
 Direction: Backward  
 Position number: 7  
 Number of overlap: 6

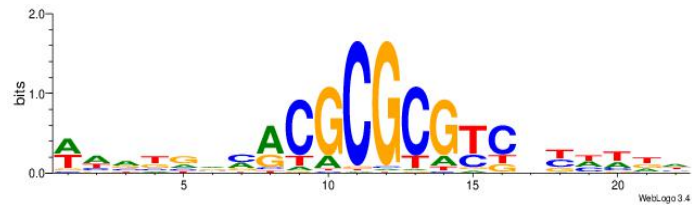
Similarity score: 0.0119605

Alignment:

WHVBVVMACGCGCGTCDYHWDH  
-----CGCGAC-----

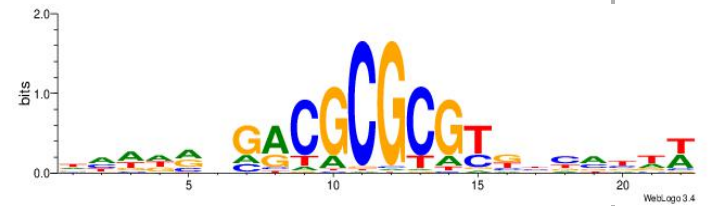
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



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: Forward  
Position number: 8  
Number of overlap: 6  
Similarity score: 0.014366

Alignment:

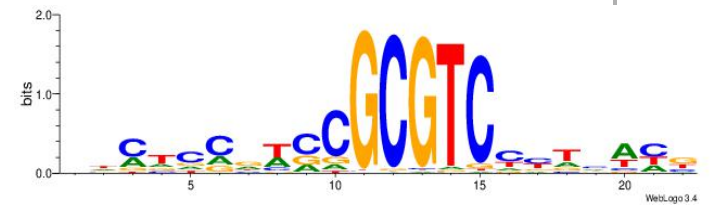
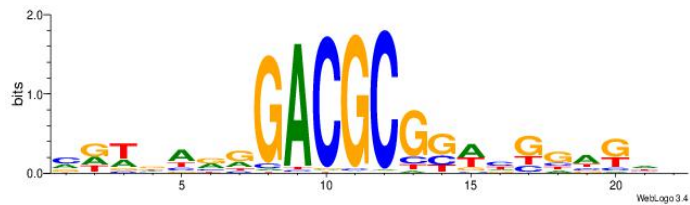
VDWDARRGACGCGGWHGGAKHV  
-----GTCGCG-----

Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

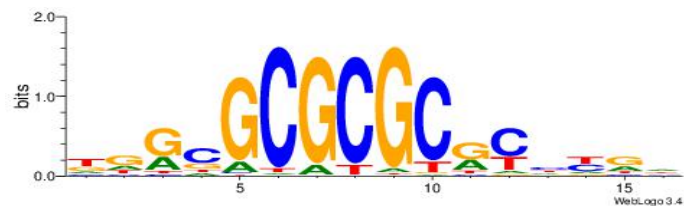
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



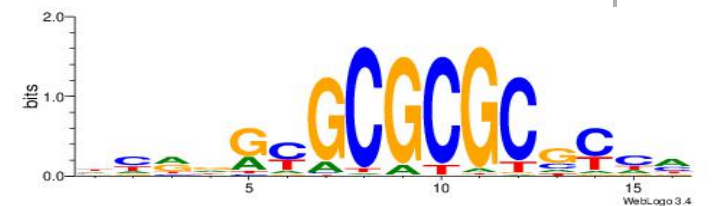
Motif ID: [UP00065](#)  
 Motif name: Zfp161\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 10  
 Number of overlap: 6  
 Similarity score: 0.0143989

Alignment:  
 DMMDGMGCGCGCHD  
 -----CGCGAC--

Original motif  
 Consensus sequence: DDGCGCGCGRCHYRD



Reverse complement motif  
 Consensus sequence: DMMDGMGCGCGCHD

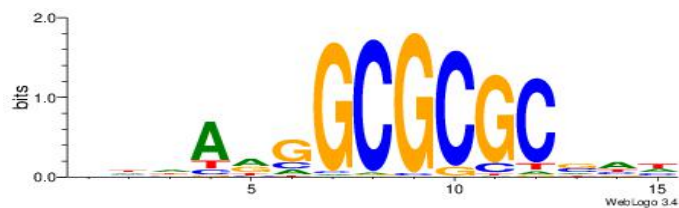


Motif ID: [UP00001](#)  
 Motif name: E2F2\_primary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 5  
 Number of overlap: 6  
 Similarity score: 0.0147239

Alignment:  
 HHVGC GCGCCKTDHB  
 ----CGCGAC-----

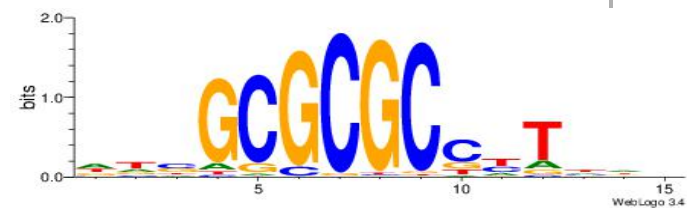
Original motif

Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif

Consensus sequence: HHVGC GCGCCKTDHB

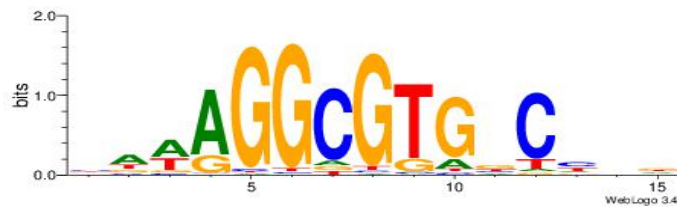


Motif ID: [UP00002](#)  
 Motif name: Sp4\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 7

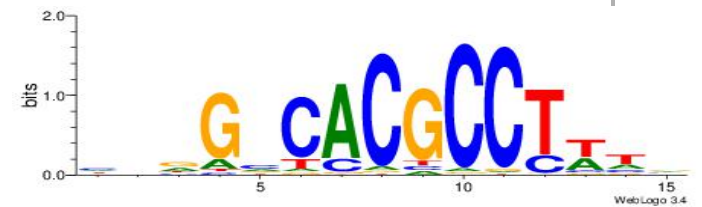
Number of overlap: 6  
Similarity score: 0.0222574

Alignment:  
HHDGBCACGCCTWDB  
---GTCGCG-----

Original motif  
Consensus sequence: BDWAGGCGTGCHHD



Reverse complement motif  
Consensus sequence: HHDGBCACGCCTWDB



Motif ID: [UP00049](#)  
Motif name: Sp100\_secondary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Original Motif  
Direction: Backward  
Position number: 7  
Number of overlap: 6  
Similarity score: 0.0300795

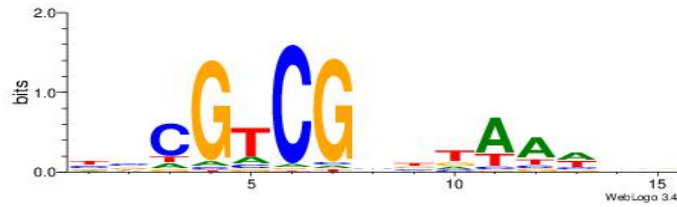
Alignment:  
BBCGTCGHBTAAWDB  
---GTCGCG-----

Original motif

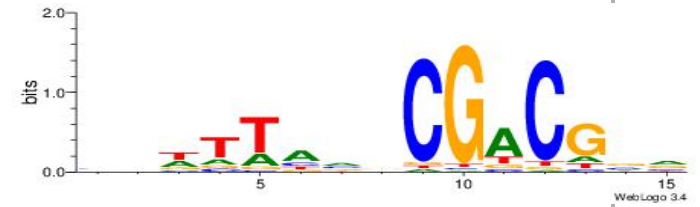
Reverse complement motif



Consensus sequence: BBCGTCGHBTAAWDB



Consensus sequence: BDWTTAVDCGACGBV



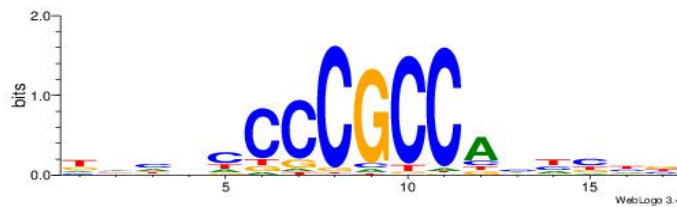
Motif ID: [UP00000](#)  
Motif name: Smad3\_secondary  
Species: Mus musculus  
Matching format of first motif: Original Motif  
Matching format of second motif: Reverse Complement  
Direction: Forward  
Position number: 5  
Number of overlap: 6  
Similarity score: 0.0317992

Alignment:

```
BHBHDTGGCGGGBDHD  
----GTCGCG-----
```

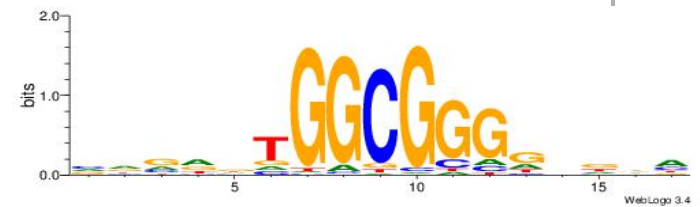
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGBDHD



**Dataset #: 5**

**Motif ID: 47**

**Motif name: TFW2**

Original motif

Consensus sequence: SCGCGCGG



Reverse complement motif

Consensus sequence: CCGCGCGS



### Best Matches for Motif ID 47 (Highest to Lowest)

Motif ID:	<a href="#">UP00526</a>
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:	8
Number of overlap:	8
Similarity score:	0

Alignment:

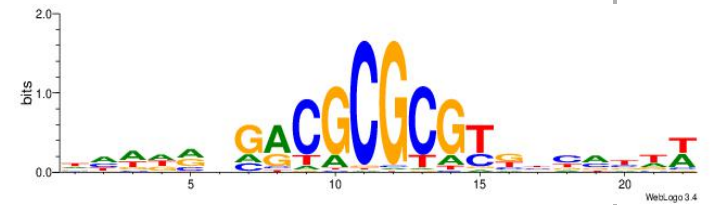
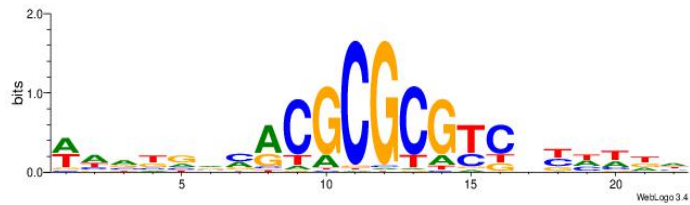
```
HDWHMHGACGCGCGTRBVVBHW  
-----CCGCGCGS-----
```

Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH

Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

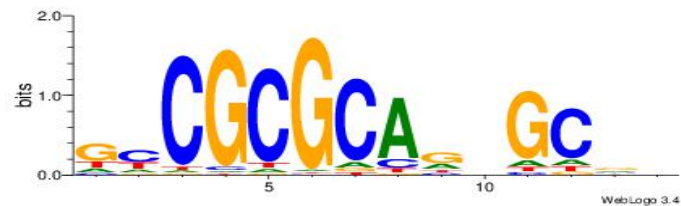


Motif ID: [UP00065](#)  
 Motif name: Zfp161\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 2  
 Number of overlap: 8  
 Similarity score: 0.00228411

Alignment:  
 VVGCVM TGC GCGKC  
 -----CCGCGCGS-

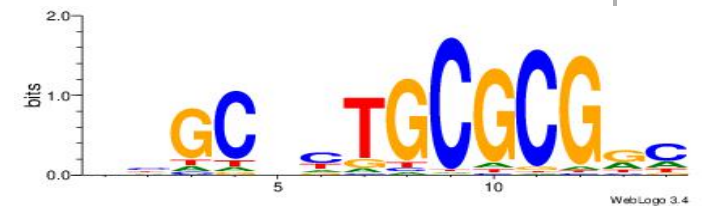
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVM TGC GCGKC



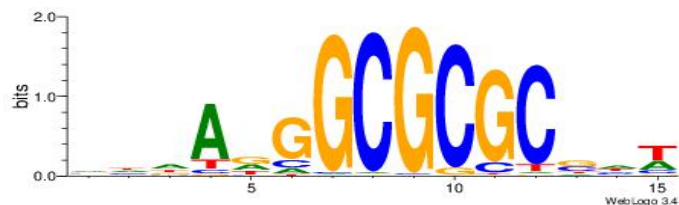
Motif ID: [UP00003](#)

Motif name: E2F3\_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: 8  
 Similarity score: 0.00337853

Alignment:  
 W H S G C G C G C C H T D H B  
 - C C G C G C G S - - - - -

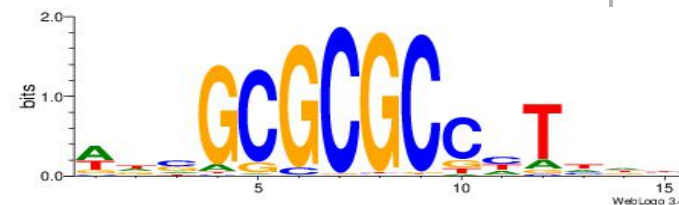
Original motif

Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif

Consensus sequence: W H S G C G C G C C H T D H B




---

Motif ID: [UP00001](#)  
 Motif name: E2F2\_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: 8

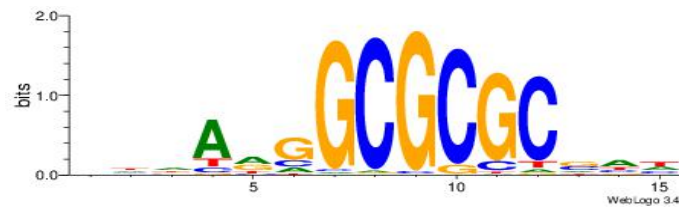
Similarity score: 0.00399923

Alignment:

HHVGCGCGCCKTDHB  
-CCGCGCGS-----

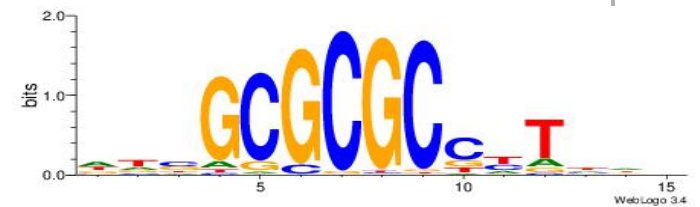
Original motif

Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif

Consensus sequence: HHVGCGCGCCKTDHB



Motif ID: [UP00065](#)  
Motif name: Zfp161\_primary  
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: 8  
Similarity score: 0.00484534

Alignment:

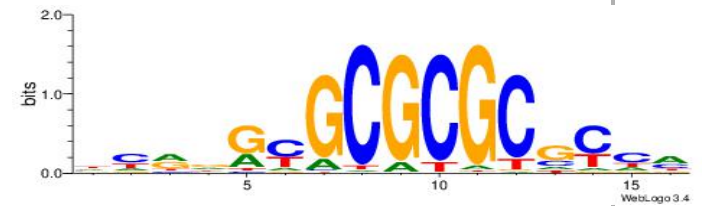
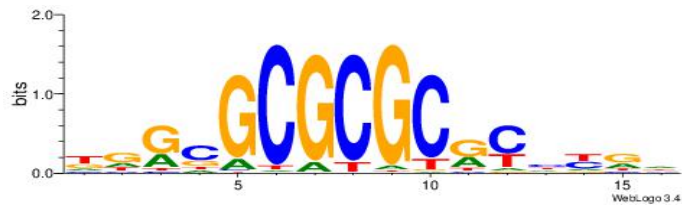
DMMDGMGCGCGCHD  
----SCGCGCGG----

Original motif

Consensus sequence: DDGCGCGCGCRCHYRD

Reverse complement motif

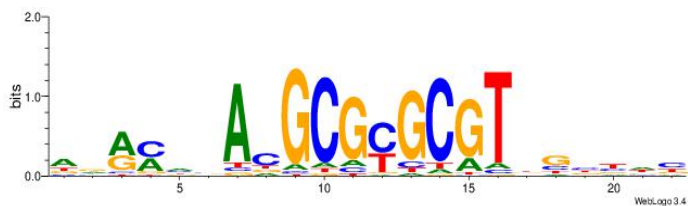
Consensus sequence: DMMDGMGCGCGCHD



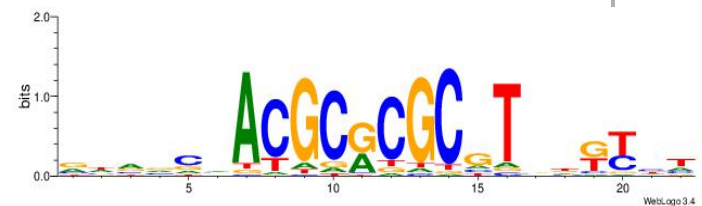
Motif ID: [UP00526](#)  
 Motif name: Foxn1\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Reverse Complement  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 7  
 Number of overlap: 8  
 Similarity score: 0.0149577

Alignment:  
 BDVBCDACGCKCGCGTBHRKHD  
 -----CCGCGCGS-----

Original motif  
 Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif  
 Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



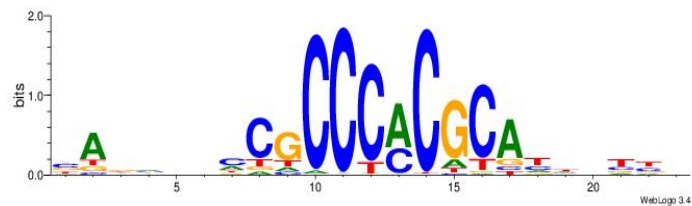
Motif ID: [UP00400](#)  
 Motif name: Zif268  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Forward  
 Position number: 6  
 Number of overlap: 8  
 Similarity score: 0.0194485

**Alignment:**

VVVDHHTGCGYGGGCGDHSVHHTB  
 -----SCGCGCGG-----

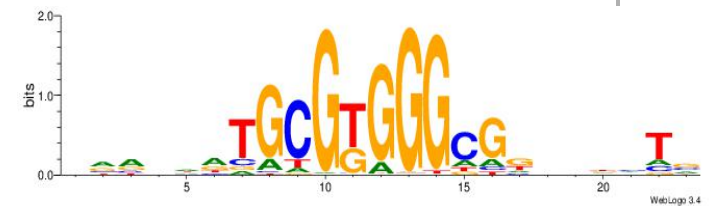
**Original motif**

Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV



**Reverse complement motif**

Consensus sequence: VVVDHHTGCGYGGGCGDHSVHHTB

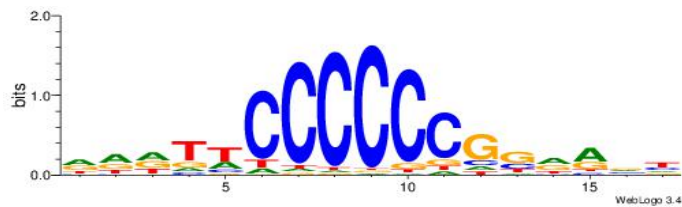


Motif ID: [UP00022](#)  
 Motif name: Zfp740\_secondary  
 Species: Mus musculus  
 Matching format of first motif: Original Motif  
 Matching format of second motif: Reverse Complement  
 Direction: Backward  
 Position number: 6

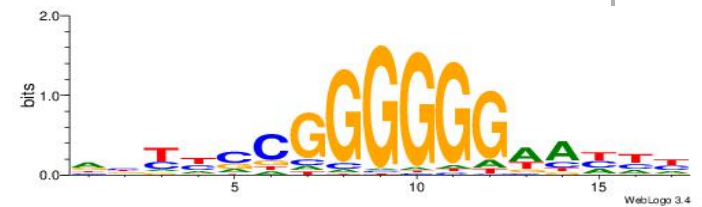
Number of overlap: 8  
Similarity score: 0.0230299

Alignment:  
HVKDCCGGGGGGWADDD  
-----SCGCGCGG-----

Original motif  
Consensus sequence: DDDTWCCCCCGGDRVH



Reverse complement motif  
Consensus sequence: HVKDCCGGGGGGWADDD



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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: 6  
Number of overlap: 8  
Similarity score: 0.0247841

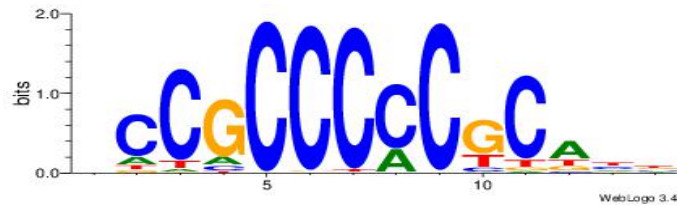
Alignment:  
HCCGCCCCCGCAHB  
-----CCGCGCGS-

Original motif

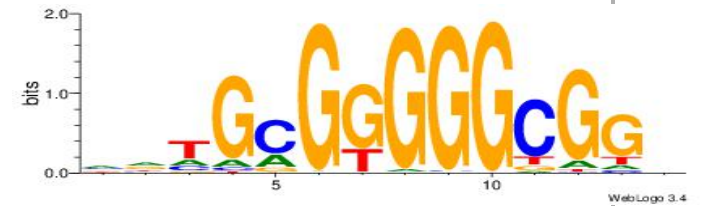
Reverse complement motif



Consensus sequence: HCCGCCCCCGCAHB



Consensus sequence: VHTGCGGGGGCGGH



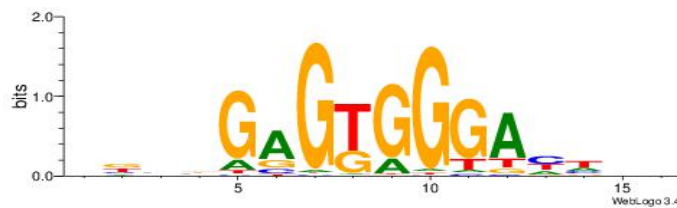
Motif ID: [UP00007](#)  
Motif name: Egr1\_secondary  
Species: Mus musculus  
Matching format of first motif: Reverse Complement  
Matching format of second motif: Reverse Complement  
Direction: Forward  
Position number: 7  
Number of overlap: 8  
Similarity score: 0.0249557

Alignment:

```
BHHDTCCTCACTCBDBV  
-----CCGCGCGS---
```

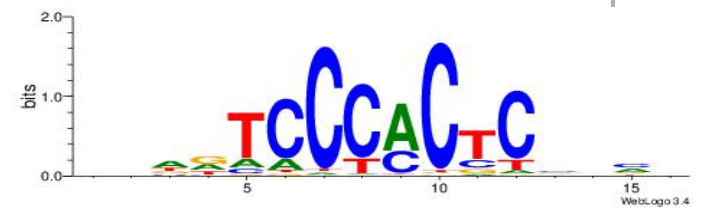
Original motif

Consensus sequence: BBHBGAGTGGGAHHDB



Reverse complement motif

Consensus sequence: BHHDTCCTCACTCBDBV



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Runtime: 707.569 seconds

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