



MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.1

INPUT

Input Parameters

| | |
|-----------------------------------|-----------------------|
| Number of files: | 2 |
| Number of top significant motifs: | 10 |
| Number of best matches: | 10 |
| Similarity cutoff \geq | 0.75 |
| Matching motif database: | UniProbe Mus Musculus |
| Phylogenetic tree: | Yes |
| Combined similar motifs: | Yes |
| Output file type: | All |
| Output file format: | All |

Input files and motif counts

| File name | Count of motifs | Dataset number |
|----------------------------|-----------------|----------------|
| W-ChIPMotifs_DM230.txt | 11 | 1 |
| RSAT_peak-motifs_DM230.txt | 10 | 2 |

RESULTS

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

Dataset #: 1 **Motif ID: 1** **Motif name: TFW1**

Original motif

Consensus sequence: GTCGCG



Reverse complement motif

Consensus sequence: CGCGAC



Best Matches for Motif ID 1 (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 |

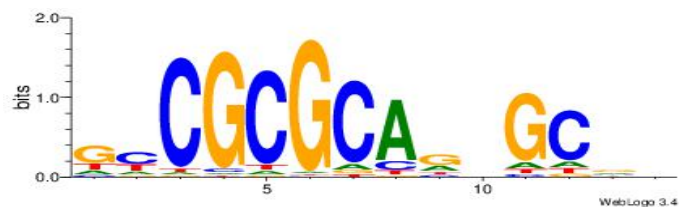
Alignment:

GYCGCGCARBGCVB

GTCGCG-----

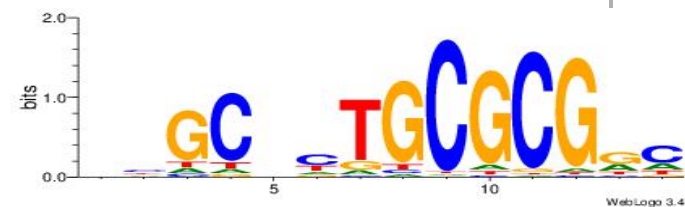
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



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

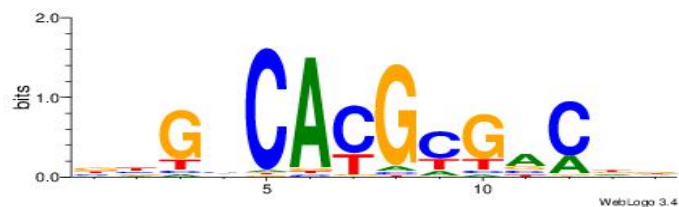
Alignment:

BBGHCACGCGACDD

-----CGCGAC--

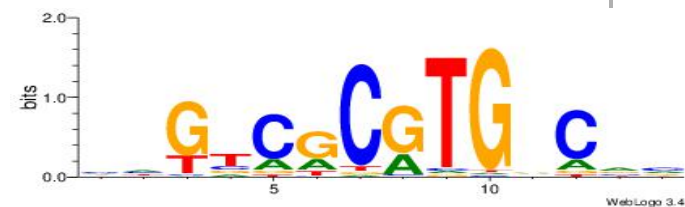
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



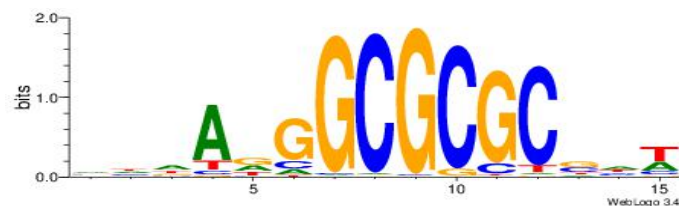
Motif ID: [UP00003](#)
 Motif name: E2F3_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 6
 Number of overlap: 6
 Similarity score: 0.0102952

Alignment:

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

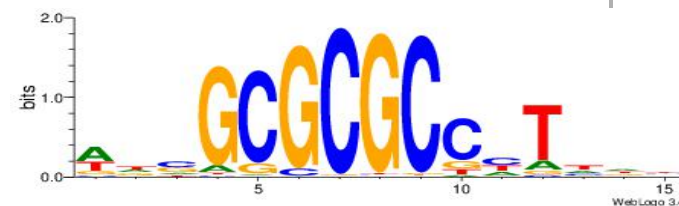
Original motif

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

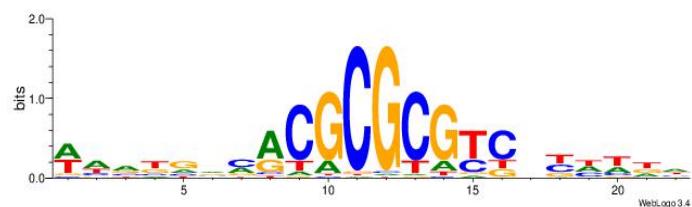
Position number: 7
Number of overlap: 6
Similarity score: 0.0119605

Alignment:

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

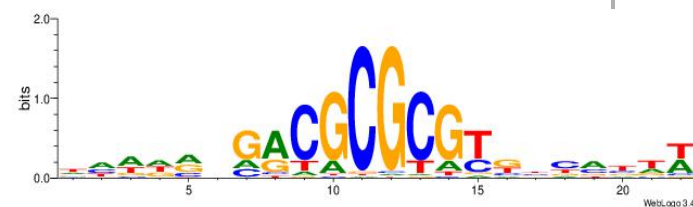
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVBVHW



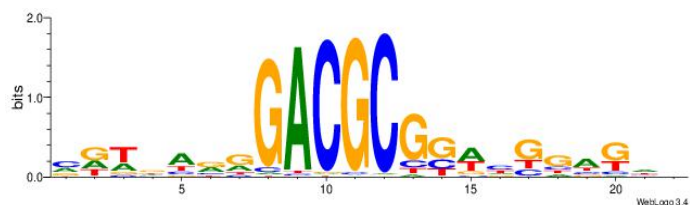
Motif ID: [UP00527](#)
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 10
Number of overlap: 6
Similarity score: 0.014366

Alignment:

VDWDARRGACGCGGWHGGAHV
-----GTCGCG-----

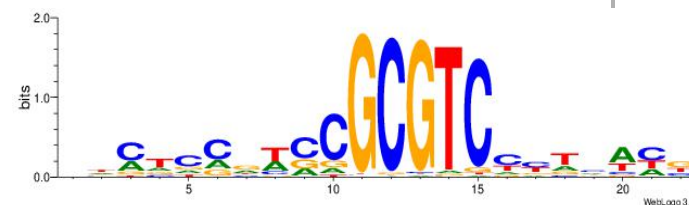
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



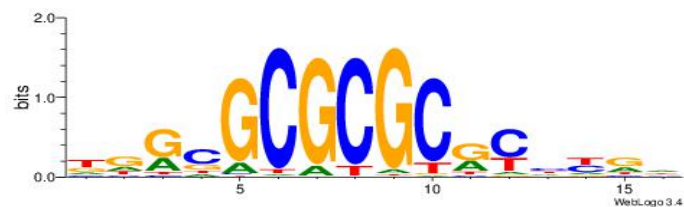
Motif ID: [UP00065](#)
 Motif name: Zfp161_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 10
 Number of overlap: 6
 Similarity score: 0.0143989

Alignment:

DMMDGMGCGCGCHD
 -----CGCGAC--

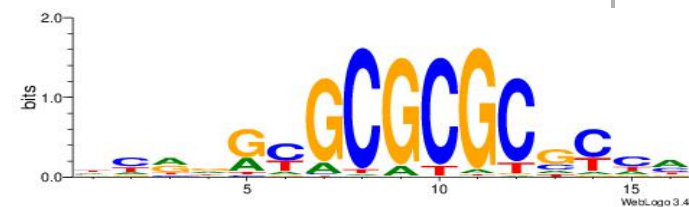
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

Consensus sequence: DMMDGMGCGCGCHD



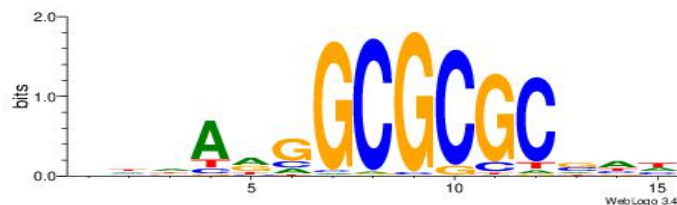
Motif ID: [UP00001](#)
 Motif name: E2F2_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 5
 Number of overlap: 6
 Similarity score: 0.0147239

Alignment:

HHVCGCGCCKTDHB
 ----CGCGAC-----

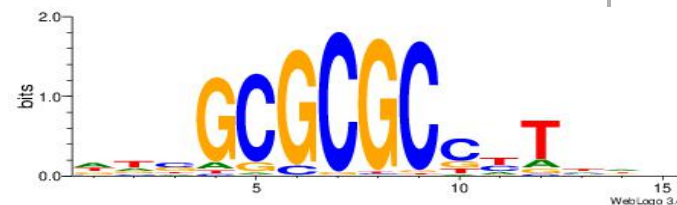
Original motif

Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif

Consensus sequence: HHVCGCGCCKTDHB



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

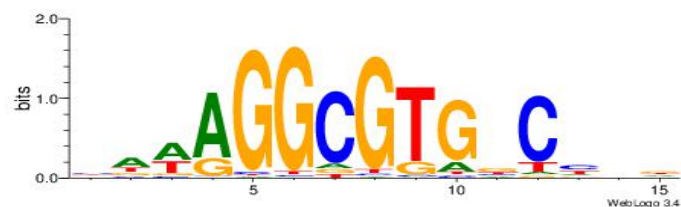
Position number: 7
Number of overlap: 6
Similarity score: 0.0222574

Alignment:

HHDGBCACGCCTWDB
---GTCGCG-----

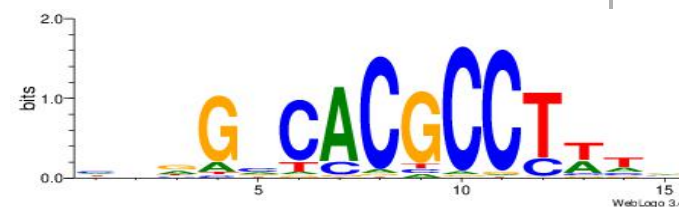
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



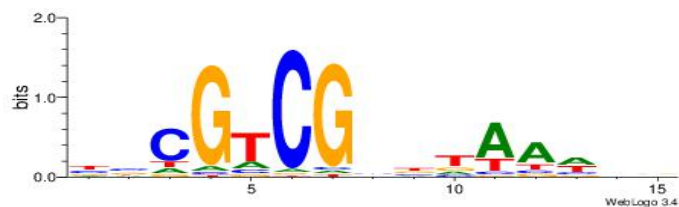
Motif ID: [UP00049](#)
Motif name: Sp100_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 6
Similarity score: 0.0300795

Alignment:

BBCGTCGHBTAAWDB
---GTCGCG-----

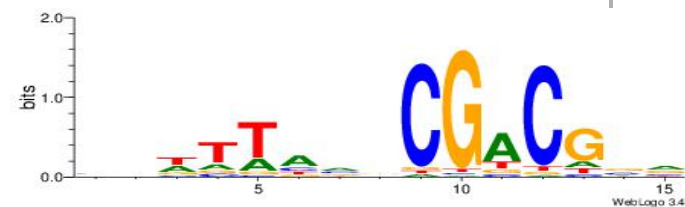
Original motif

Consensus sequence: BBCGTCGHBTAAWDB



Reverse complement motif

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

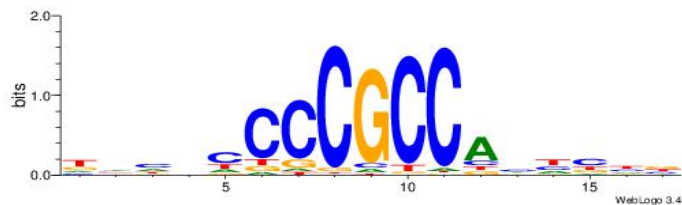
Alignment:

BHBHDTGGCGGGBDHD

----GTCGCG-----

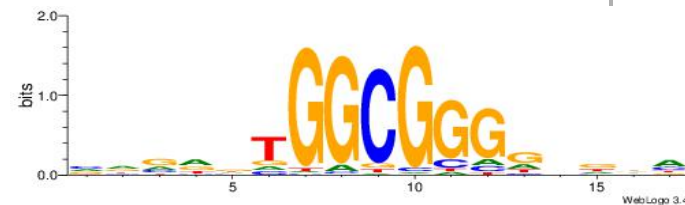
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

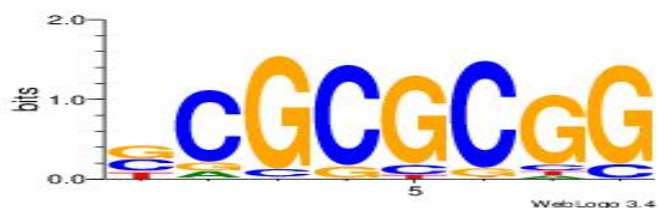
Consensus sequence: BHBHDTGGCGGGBDHD



Dataset #: 1 **Motif ID: 2** **Motif name: TFW2**

Original motif

Consensus sequence: SCGCGCGG



Reverse complement motif

Consensus sequence: CCGCGCGS



Best Matches for Motif ID 2 (Highest to Lowest)

Motif ID: [UP00526](#)
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 8
Similarity score: 0

Alignment:

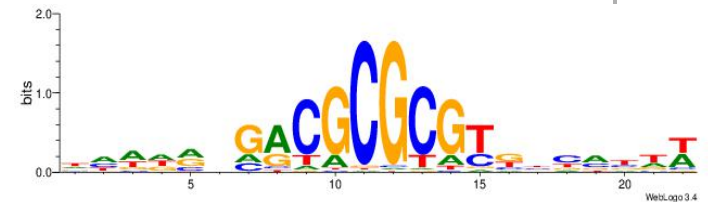
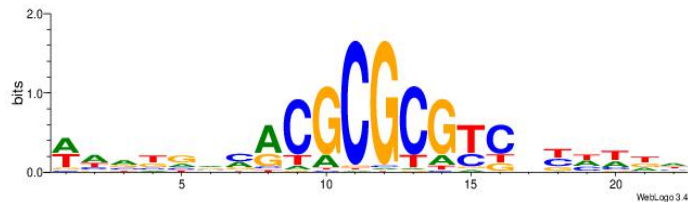
HDWHMHGACGCGCGTRBVVBHW
-----CCGCGCGS-----

Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH

Reverse complement motif

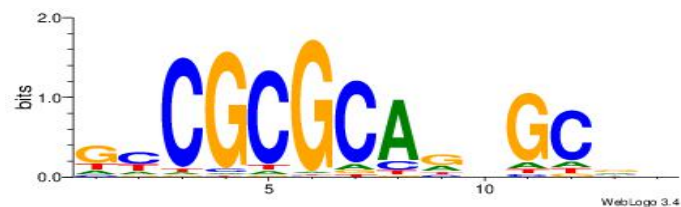
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



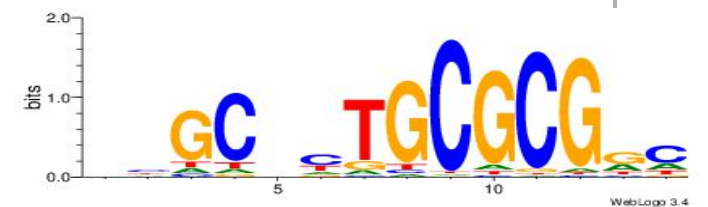
Motif ID: [UP00065](#)
 Motif name: Zfp161_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 2
 Number of overlap: 8
 Similarity score: 0.00228411

Alignment:
 VVGCVM TGCGGKC
 -----CCGCGCGS-

Original motif
 Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif
 Consensus sequence: VVGCVM TGCGGKC



Motif ID: [UP00003](#)

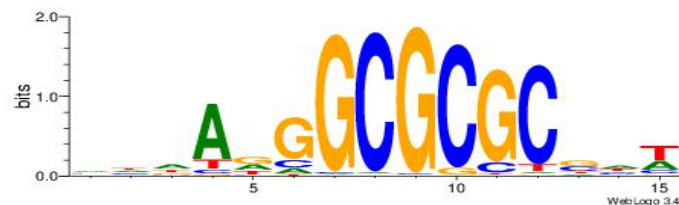
Motif name: E2F3_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.00337853

Alignment:

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

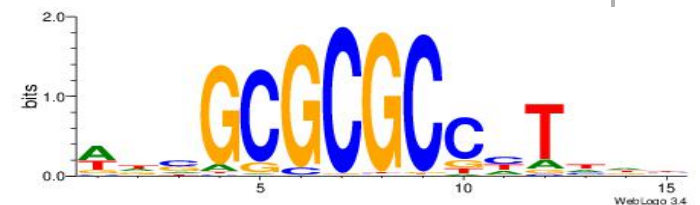
Original motif

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: Forward
 Position number: 2
 Number of overlap: 8

Similarity score: 0.00399923

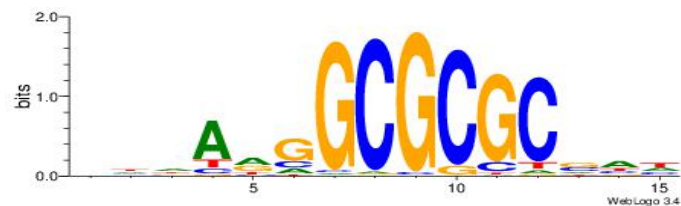
Alignment:

HHVCGCGCCKTDHB

-CCGCGCGS-----

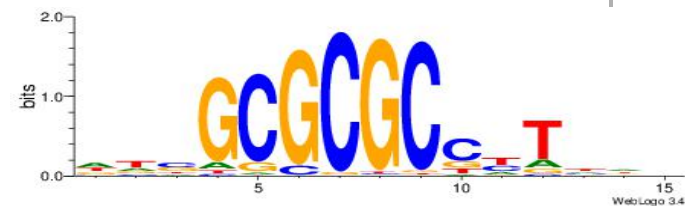
Original motif

Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif

Consensus sequence: HHVCGCGCCKTDHB



Motif ID: [UP00065](#)
Motif name: Zfp161_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: 0.00484534

Alignment:

DDGCGCGCGCRCHYRD

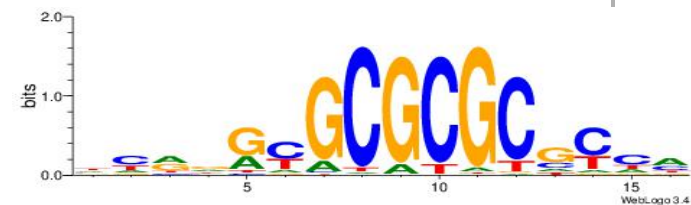
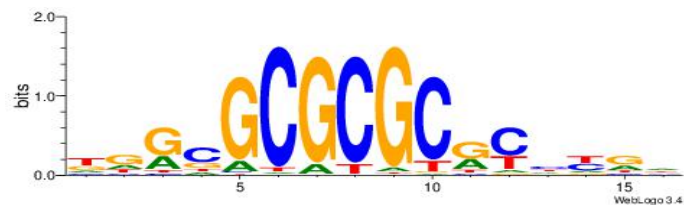
----CCGCGCGS----

Original motif

Consensus sequence: DDGCGCGCGCRCHYRD

Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD



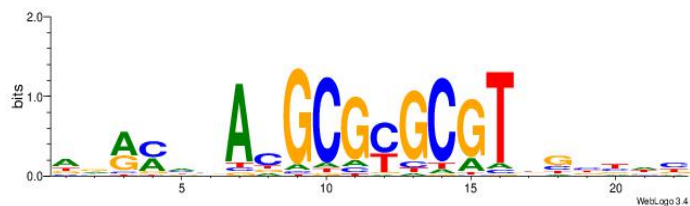
Motif ID: [UP00526](#)
 Motif name: Foxn1_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 7
 Number of overlap: 8
 Similarity score: 0.0149577

Alignment:

BDVBCDACGCKCGCGTBHRKHD
 -----CCGCGCGS-----

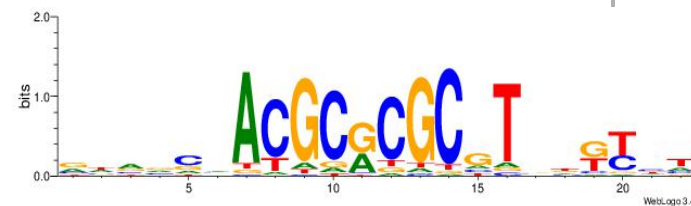
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



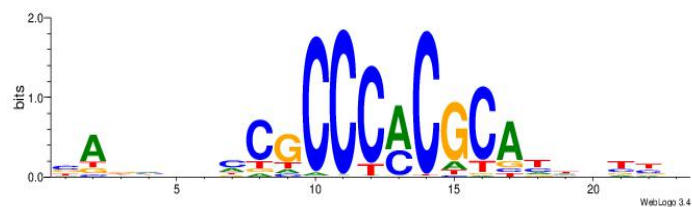
Motif ID: [UP00400](#)
 Motif name: Zif268
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 6
 Number of overlap: 8
 Similarity score: 0.0194485

Alignment:

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

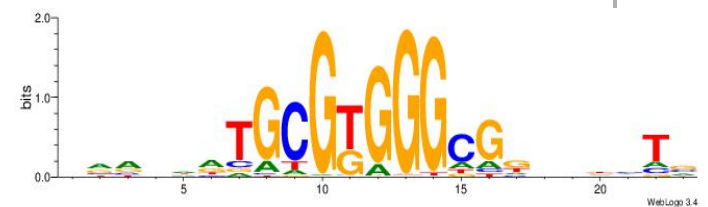
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHSVHHTB



Motif ID: [UP00022](#)
 Motif name: Zfp740_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 6

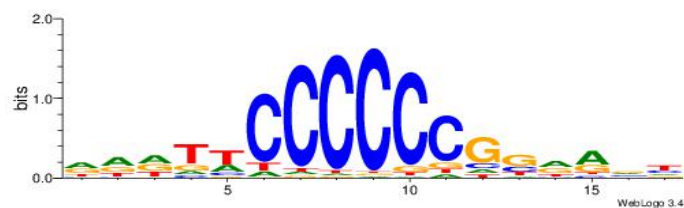
Number of overlap: 8
Similarity score: 0.0230299

Alignment:

DDDTWCCCCCGGDRVH
-----CCGCGCGS-----

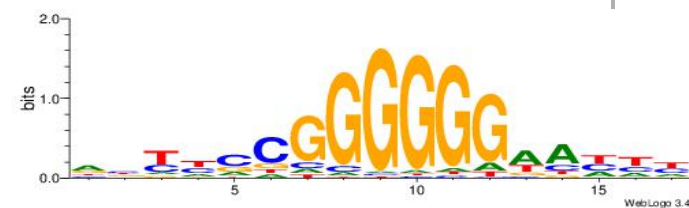
Original motif

Consensus sequence: DDDTWCCCCCGGDRVH



Reverse complement motif

Consensus sequence: HVKDCCGGGGGGWADDD



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

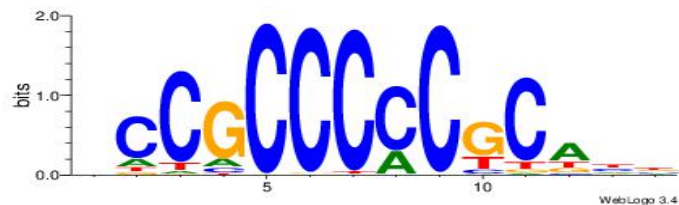
Alignment:

HCCGCCCCCGCAHB
-----CCGCGCGS-----

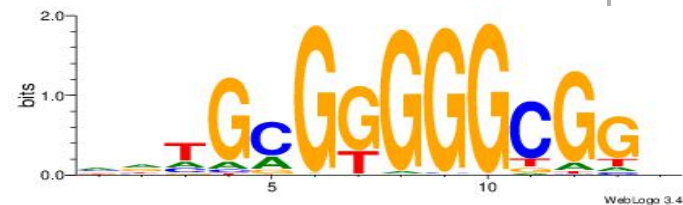
Original motif

Reverse complement motif

Consensus sequence: HCCGCCCCCGCAHB



Consensus sequence: VHTGCGGGGGCGGH



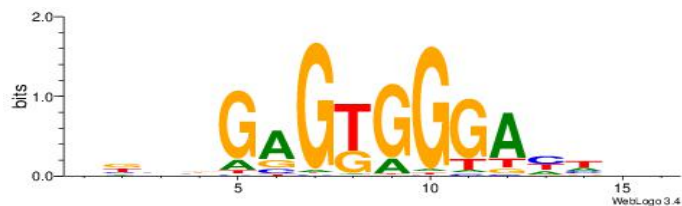
Motif ID: [UP00007](#)
Motif name: Egr1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 7
Number of overlap: 8
Similarity score: 0.0249557

Alignment:

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

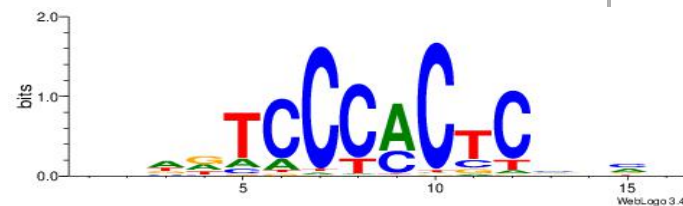
Original motif

Consensus sequence: BBHBGAGTGGGAHHDB



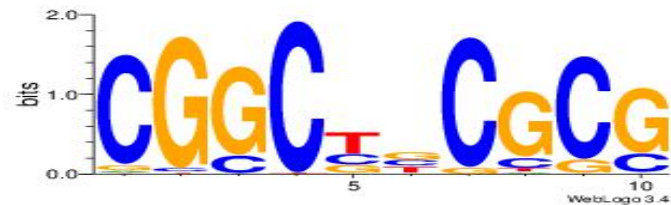
Reverse complement motif

Consensus sequence: BHHDTCCTCACTCBDBV

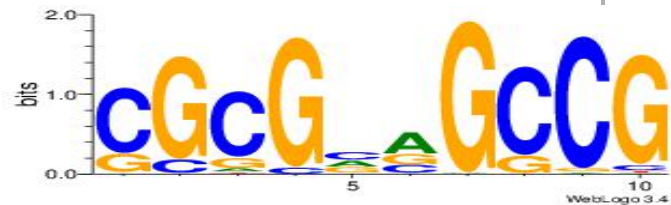


Dataset #: 1 Motif ID: 3 Motif name: TFW3

Original motif
Consensus sequence: CGGCYBCGCG



Reverse complement motif
Consensus sequence: CGCGBMGCCG



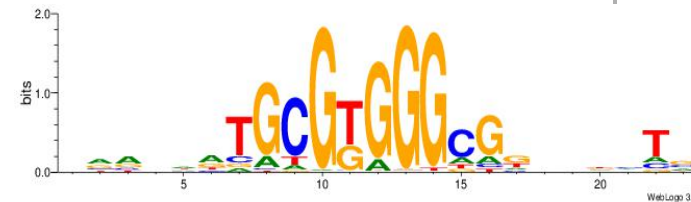
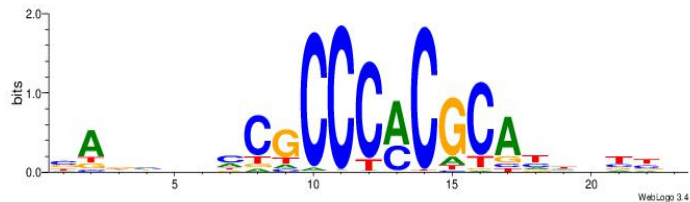
Best Matches for Motif ID 3 (Highest to Lowest)

| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00400 |
| Motif name: | Zif268 |
| 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: | 10 |
| Similarity score: | 0.0331859 |

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
-----CGCGBMGCCG-----

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDDBV

Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

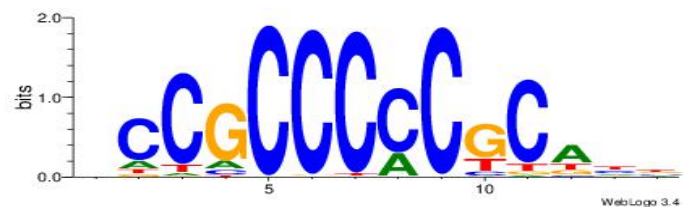


Motif ID: [UP00007](#)
 Motif name: Egr1_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3
 Number of overlap: 10
 Similarity score: 0.0342114

Alignment:
 HCCGCCCCCGCAHB
 --CGGCYBCGCG--

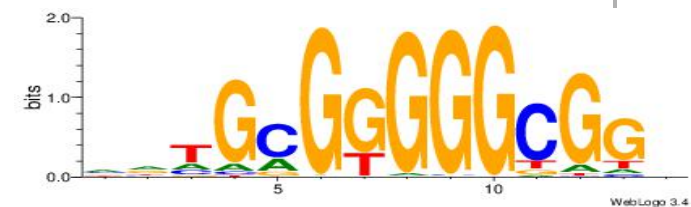
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID: [UP00527](#)

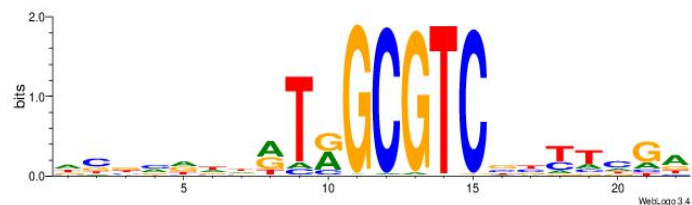
Motif name: Foxn4_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 12
 Number of overlap: 10
 Similarity score: 0.0356548

Alignment:

DBBVDDDRTRGCGTCBBYTHGA
 -----CGGCYBCGCG--

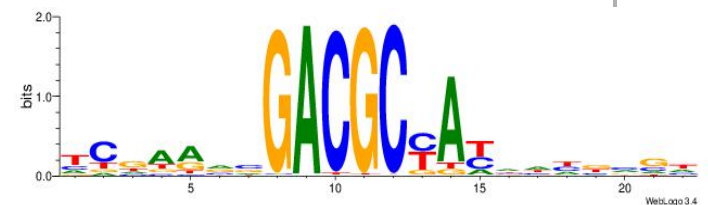
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMKDDDVBBDD

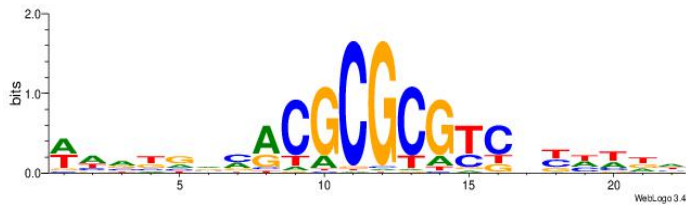


Motif ID: [UP00526](#)
 Motif name: Foxn1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 11
 Number of overlap: 10

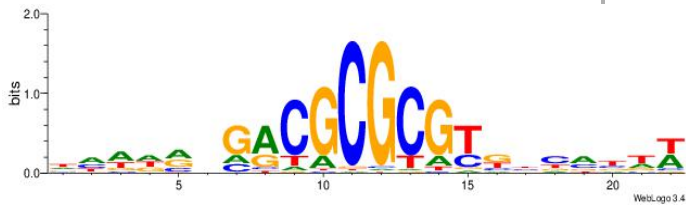
Similarity score: 0.041792

Alignment:
HDWHMHGACGCGCGTRBVVBHW
-----CGCGBMGCCG--

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

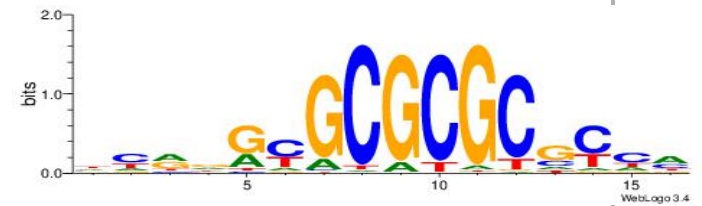
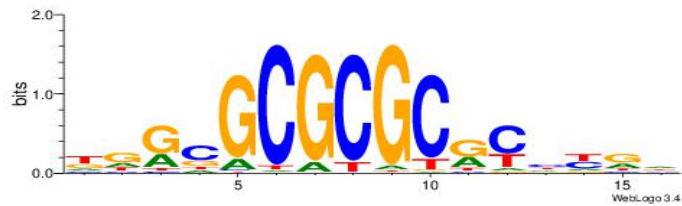


Motif ID: [UP00065](#)
Motif name: Zfp161_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 10
Similarity score: 0.041904

Alignment:
DDGCGCGCGCRCHYRD
-----CGCGBMGCCG--

Original motif
Consensus sequence: DDGCGCGCGCRCHYRD

Reverse complement motif
Consensus sequence: DMMDGMGCGCGCGCHD



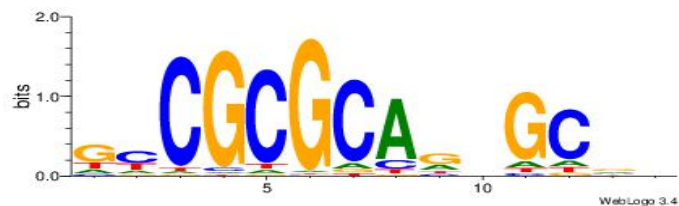
Motif ID: [UP00065](#)
 Motif name: Zfp161_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 5
 Number of overlap: 10
 Similarity score: 0.0419429

Alignment:

VVGCVMTGCGCGKC
 CGGCYBCGCG----

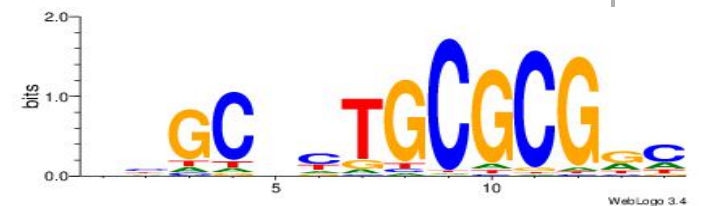
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



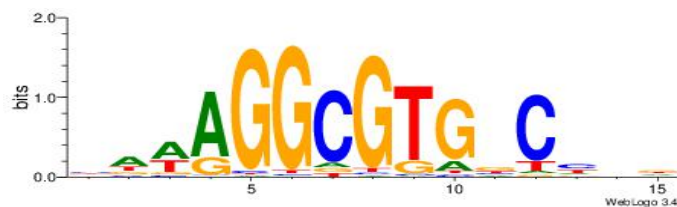
Motif ID: [UP00002](#)
 Motif name: Sp4_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 2
 Number of overlap: 10
 Similarity score: 0.0475178

Alignment:

BDWAGGCGTGBCHHD
 ----CGCGBMGCCG--

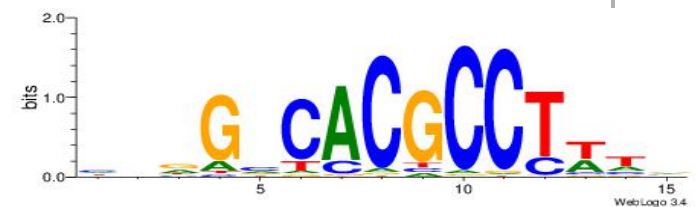
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



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: 1

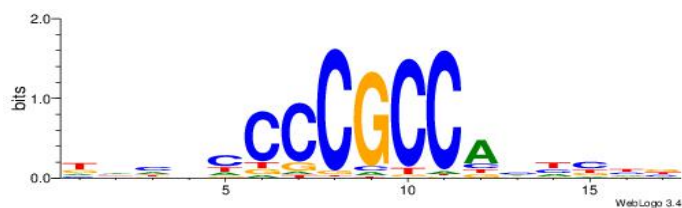
Number of overlap: 10
Similarity score: 0.0490044

Alignment:

DHHBCCCCGCCAHHBHB
-----CGGCYBCGCG

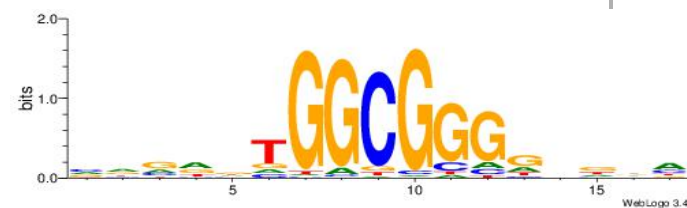
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



Motif ID: [UP00087](#)
Motif name: Tcfap2c_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.0499902

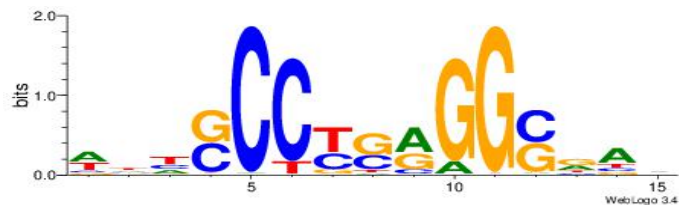
Alignment:

DTHSCCKSMGGSHHW
--CGGCYBCGCG---

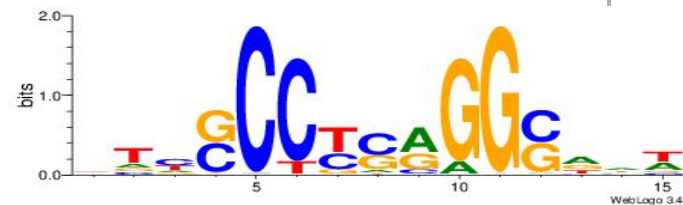
Original motif

Reverse complement motif

Consensus sequence: WHHSCCYSRGGSDAD



Consensus sequence: DTHSCCKSMGGSHHW



| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00005 |
| Motif name: | Tcfap2a_primary |
| Species: | Mus musculus |
| Matching format of first motif: | Original Motif |
| Matching format of second motif: | Reverse Complement |
| Direction: | Backward |
| Position number: | 4 |
| Number of overlap: | 10 |
| Similarity score: | 0.0500462 |

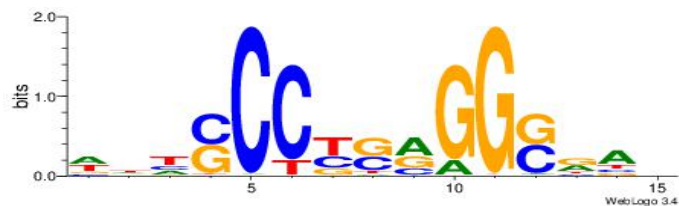
Alignment:

DTMSCCKSMGGSHDW

--CGGCYBCGCG---

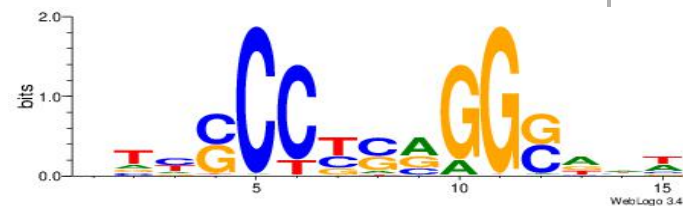
Original motif

Consensus sequence: WDHSCCYSRGGSRAD



Reverse complement motif

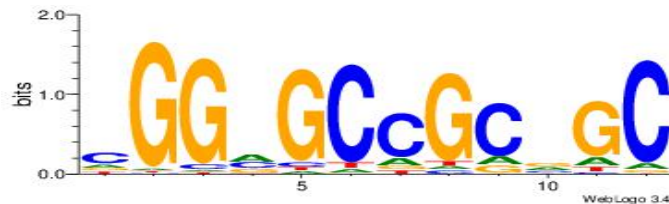
Consensus sequence: DTMSCCKSMGGSHDW



Dataset #: 1 **Motif ID: 4** **Motif name: TFF1**

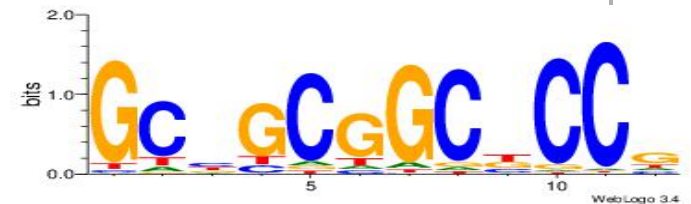
Original motif

Consensus sequence: CGGVGCCGCVGC



Reverse complement motif

Consensus sequence: GCVGCGGCBCCG



Best Matches for Motif ID 4 (Highest to Lowest)

| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00003 |
| Motif name: | E2F3_secondary |
| Species: | Mus musculus |
| Matching format of first motif: | Original Motif |
| Matching format of second motif: | Original Motif |
| Direction: | Forward |
| Position number: | 5 |
| Number of overlap: | 12 |
| Similarity score: | 0.0423593 |

Alignment:

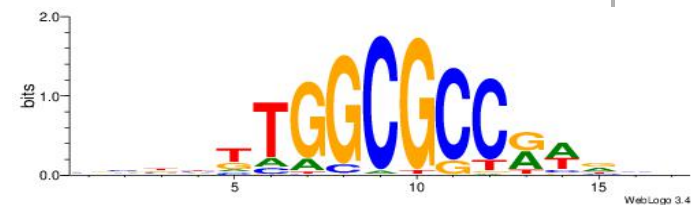
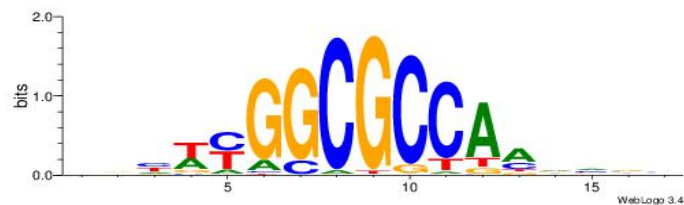
```
HBHWYGGCGCCAMDVB  
-----CGGVGCCGCVGC-
```

Original motif

Consensus sequence: HBHWYGGCGCCAMDVB

Reverse complement motif

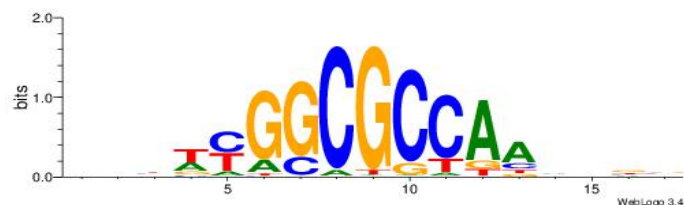
Consensus sequence: BBBDYTGGCGCCKWDBD



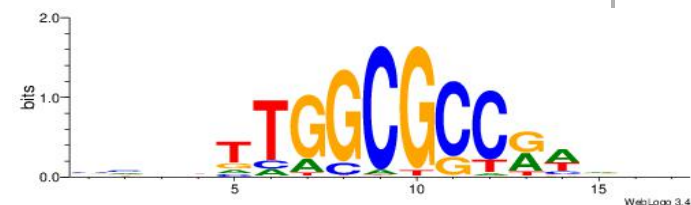
Motif ID: [UP00001](#)
 Motif name: E2F2_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 12
 Similarity score: 0.046515

Alignment:
 HVBWYGGCGCCAADVBB
 ----CGGVGCCGCVGC-

Original motif
 Consensus sequence: HVBWYGGCGCCAADVBB



Reverse complement motif
 Consensus sequence: BBBDTTGGCGCKWVVD



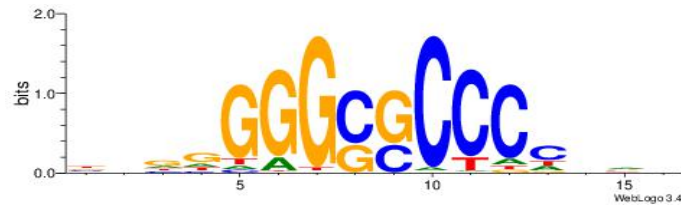
Motif ID: [UP00088](#)

Motif name: Plagl1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 12
Similarity score: 0.0472704

Alignment:
VBVGGGGSSCCCCCHHV
GCVGCGGCBCCG-----

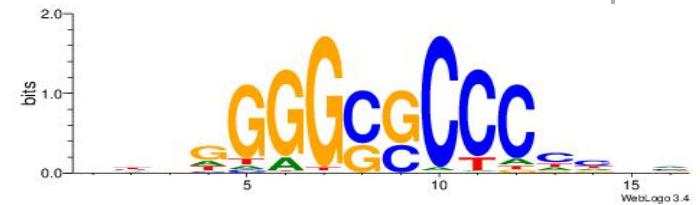
Original motif

Consensus sequence: BHDGGGGSSCCCCBVV



Reverse complement motif

Consensus sequence: VBVGGGGSSCCCCCHHV



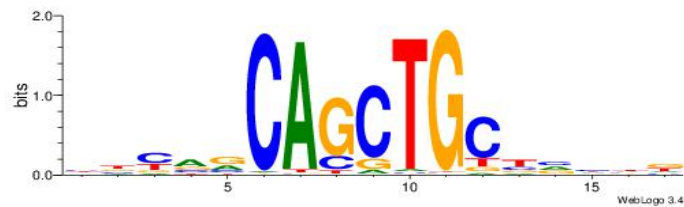
Motif ID: [UP00099](#)
Motif name: Ascl2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0476914

Alignment:

BBYVVCAGCTGCBVHHD
----GCVGCGGCBCCG--

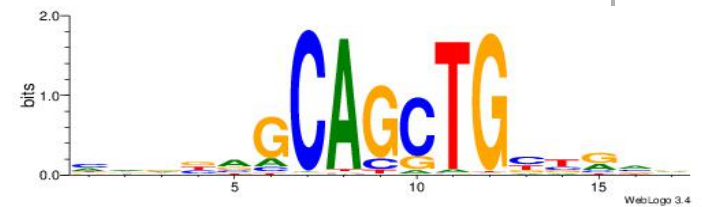
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB



| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00043 |
| Motif name: | Bcl6b_secondary |
| Species: | Mus musculus |
| Matching format of first motif: | Reverse Complement |
| Matching format of second motif: | Original Motif |
| Direction: | Backward |
| Position number: | 5 |
| Number of overlap: | 12 |
| Similarity score: | 0.0508178 |

Alignment:

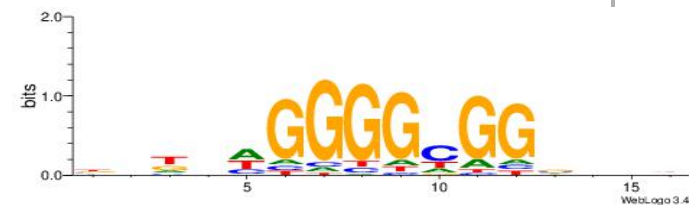
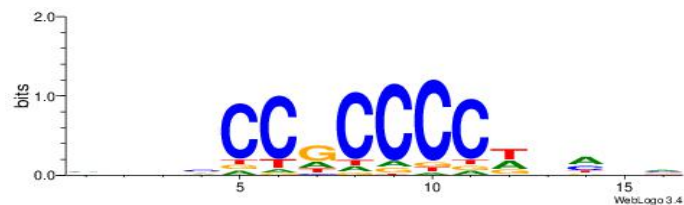
HBBBCCGCCCCWHHHV
GCVGCGGCBCCG----

Original motif

Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH

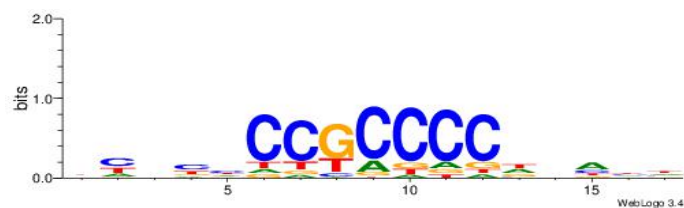


Motif ID: [UP00033](#)
 Motif name: Zfp410_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 5
 Number of overlap: 12
 Similarity score: 0.0533422

Alignment:
 BHHBHCCGCCCCDHHHH
 -GCVGCGGCBCCG-----

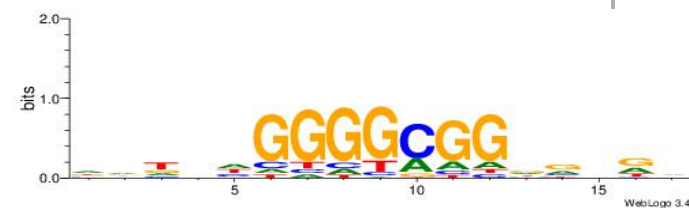
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID: [UP00539](#)

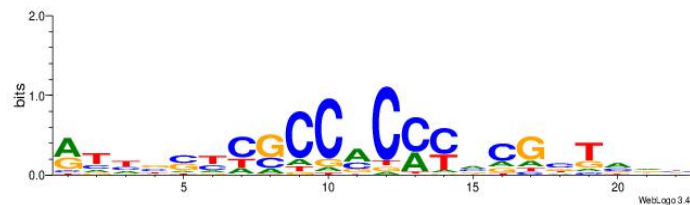
Motif name: Gli2_v016060_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 9
 Number of overlap: 12
 Similarity score: 0.0561199

Alignment:

HDBABCGBKRGYGGCGMSBHAK
 -----CGGVGCCGCVGC--

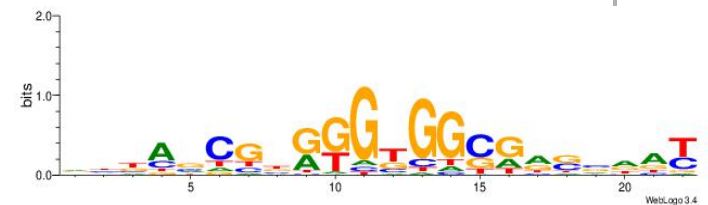
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID: [UP00002](#)
 Motif name: Sp4_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 2
 Number of overlap: 12

Similarity score: 0.0577556

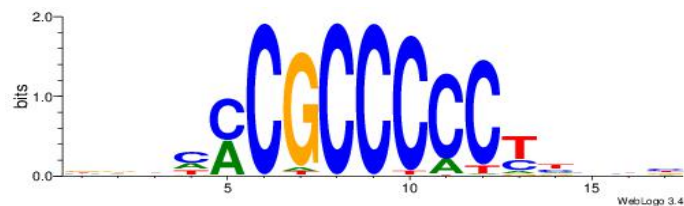
Alignment:

BDHHMCGCCCCCTHVBB

-GCVGCGGCBCCG----

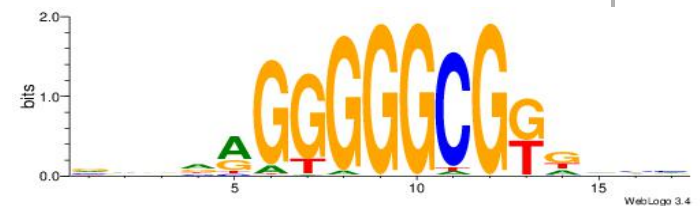
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



Motif ID: [UP00000](#)
Motif name: Smad3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 12
Similarity score: 0.0577695

Alignment:

DHHBCCCCGCCAHHBHB

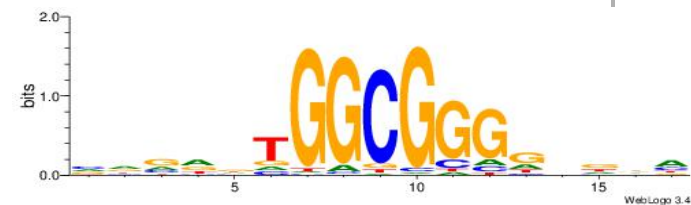
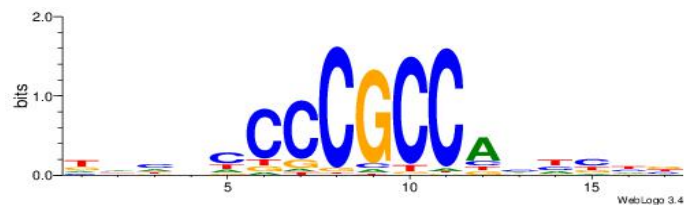
GCVGCGGCBCCG-----

Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB

Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



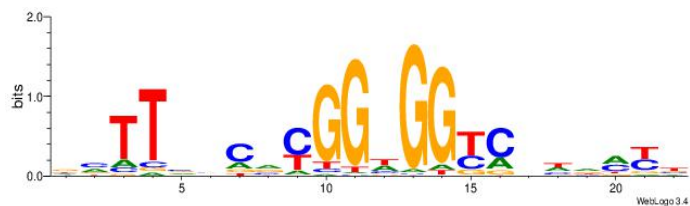
Motif ID: [UP00540](#)
 Motif name: Gli3_v015681_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.0581164

Alignment:

DTTTVVCVYGGHGGYCHHDMYB
 -----CGGVGCCGCVGC--

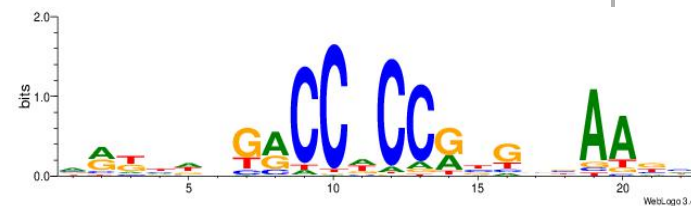
Original motif

Consensus sequence: DTTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

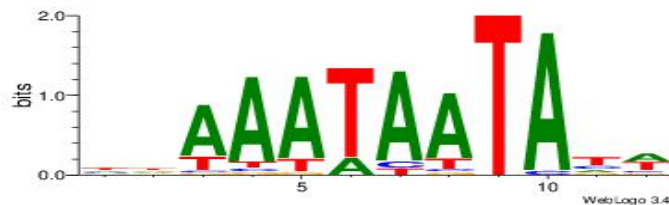
Consensus sequence: VMYDHDGMCCCHCKBGVVAHVH



Dataset #: 2 **Motif ID: 13** **Motif name: tkAAATAATAtw**

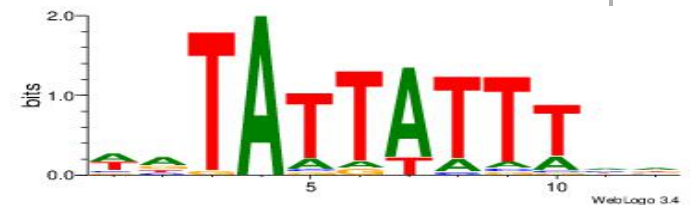
Original motif

Consensus sequence: HDAAATAATAHW



Reverse complement motif

Consensus sequence: WHTATTATTTDH



Best Matches for Motif ID 13 (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

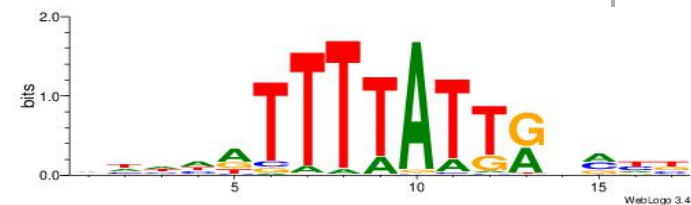
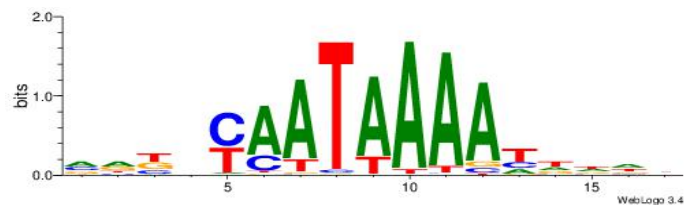
---WHTATTATTTDH--

Original motif

Consensus sequence: VDKVYAATAAAATDDDH

Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB

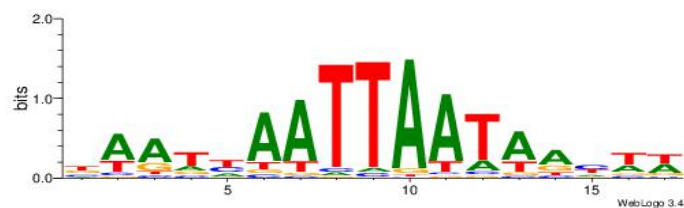


Motif ID: [UP00244](#)
 Motif name: Tlx2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.00646023

Alignment:
 WDDTTATTAATTHATTV
 --WHTATTATTTDH---

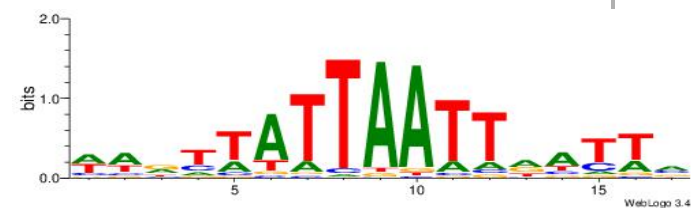
Original motif

Consensus sequence: BAATHAATTAATAAHWW



Reverse complement motif

Consensus sequence: WDDTTATTAATTHATTV



Motif ID: [UP00051](#)

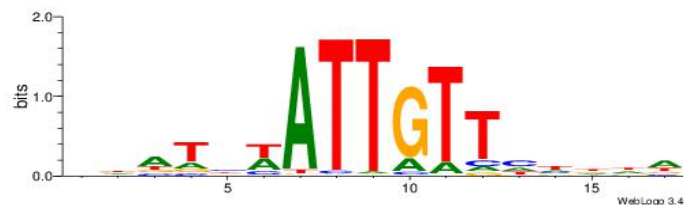
Motif name: Sox8_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 12
 Similarity score: 0.0120674

Alignment:

DDDHDAACAATWBATDD
 --HDAAATAATAHW---

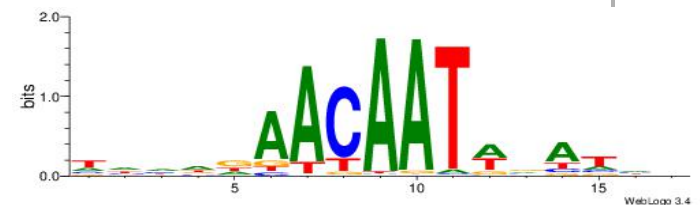
Original motif

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: Forward
 Position number: 3
 Number of overlap: 12

Similarity score: 0.0123772

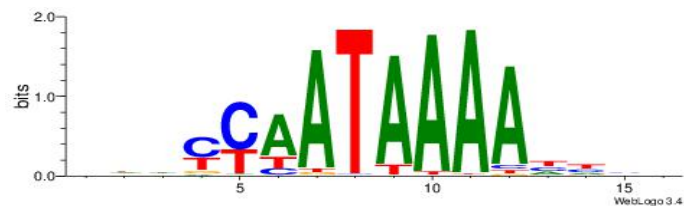
Alignment:

HDHHTTTTATTKKHDD

--WHTATTATTTDH--

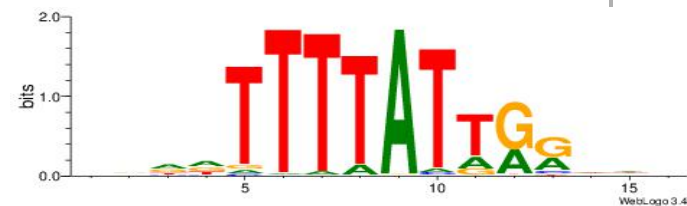
Original motif

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

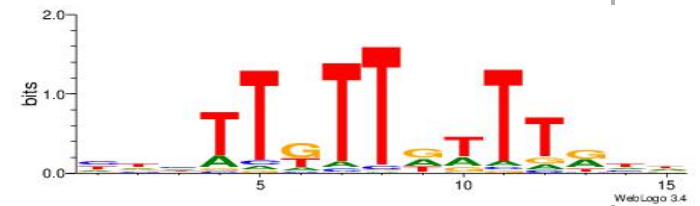
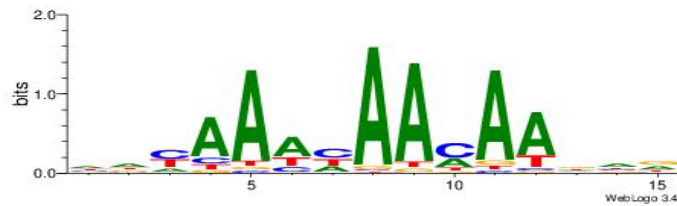
--WHTATTATTTDH--

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

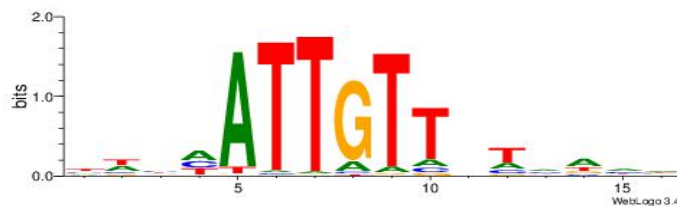
Alignment:

```

HHDHABAACAATHBWV
---HDAAATAATAHW-
  
```

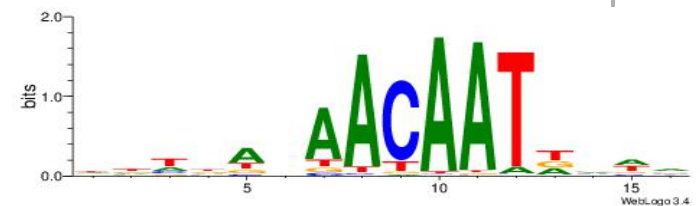
Original motif

Consensus sequence: BWBHATTGTTBTHDHH



Reverse complement motif

Consensus sequence: HHDHABAACAATHBWV

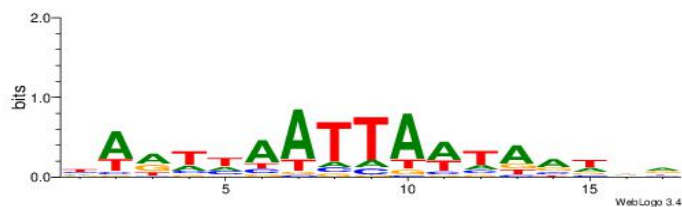


Motif ID: [UP00255](#)
 Motif name: Dbx1
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 12
 Similarity score: 0.0131034

Alignment:
 HARTHAATTAWTAVDHD
 ---HDAAATAATAHW--

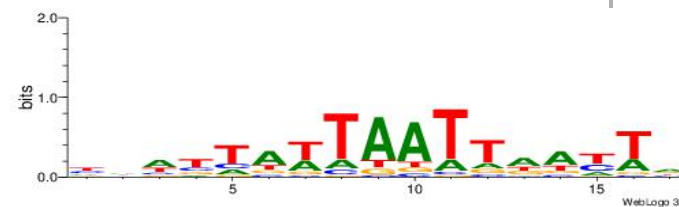
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

Consensus sequence: DHDBTAWTAATTTHAKTH



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

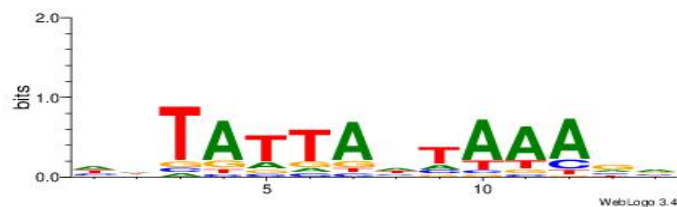
Number of overlap: 12
Similarity score: 0.0140433

Alignment:

HDTATTAHTAAVV
WHTATTATTTDH--

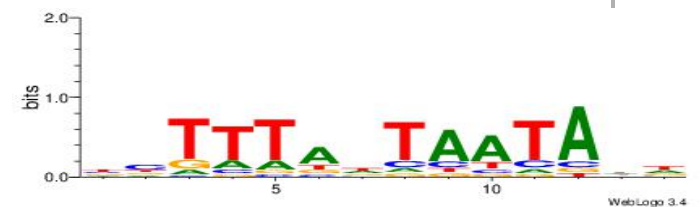
Original motif

Consensus sequence: HDTATTAHTAAVV



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

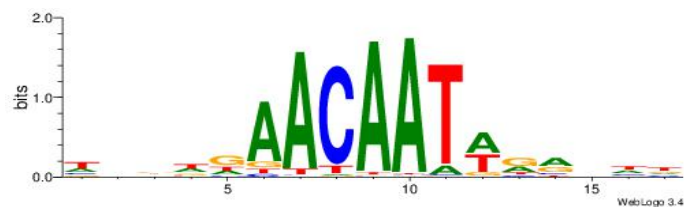
Alignment:

DHVKMWATTGTTHDHDH
---WHTATTATTTDH--

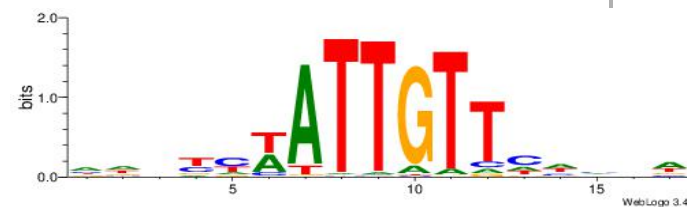
Original motif

Reverse complement motif

Consensus sequence: HDDDDAACAATWRRBHD



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

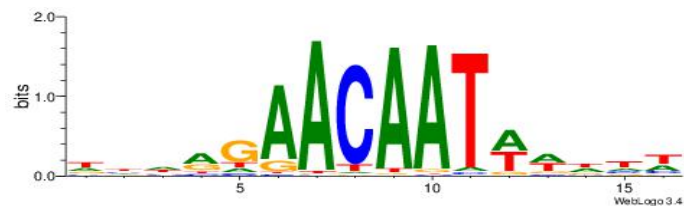
Alignment:

WHDWWATTGTTCKDHD

--WHTATTATTTDH--

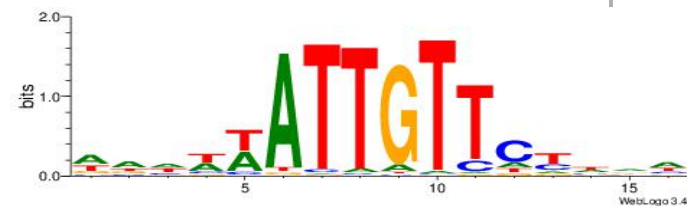
Original motif

Consensus sequence: DHDRGAACAATWWDHW



Reverse complement motif

Consensus sequence: WHDWWATTGTTCKDHD



Dataset #: 2 **Motif ID: 16** **Motif name: kcACCTGCAGc**

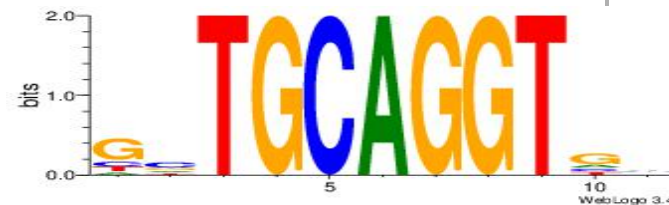
Original motif

Consensus sequence: BCACCTGCABC



Reverse complement motif

Consensus sequence: GBTGCAGGTGB



Best Matches for Motif ID 16 (Highest to Lowest)

| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00070 |
| Motif name: | Gcm1_primary |
| Species: | Mus musculus |
| Matching format of first motif: | Reverse Complement |
| Matching format of second motif: | Reverse Complement |
| Direction: | Forward |
| Position number: | 4 |
| Number of overlap: | 11 |
| Similarity score: | 0 |

Alignment:

DHDVATGCGGGTHVVH

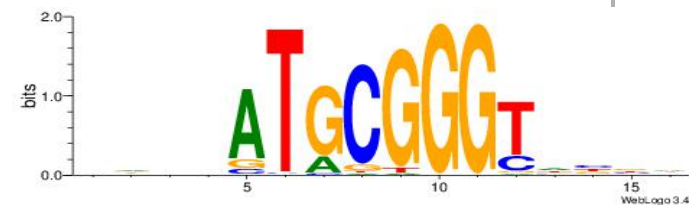
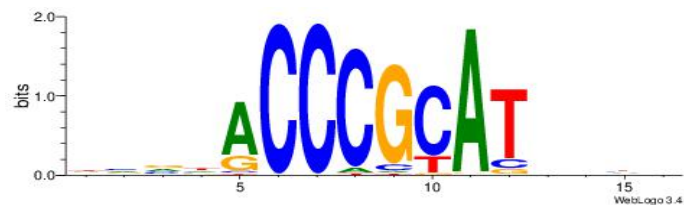
---GBTGCAGGTGB--

Original motif

Consensus sequence: HVVHACCCGCATVDHD

Reverse complement motif

Consensus sequence: DHDVATGCGGGTHVVH

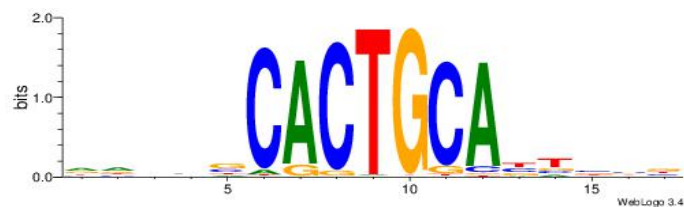


Motif ID: [UP00031](#)
 Motif name: Zbtb3_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.000503863

Alignment:
 BBBAVTGCAGTGBBVDD
 ---GBTGCAGGTGB---

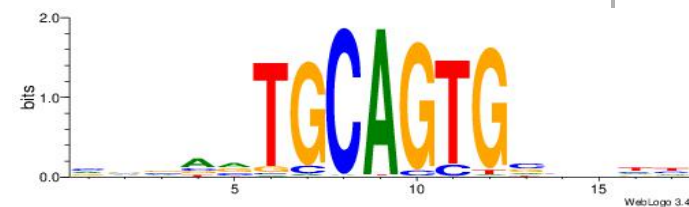
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD



Motif ID: [UP00046](#)

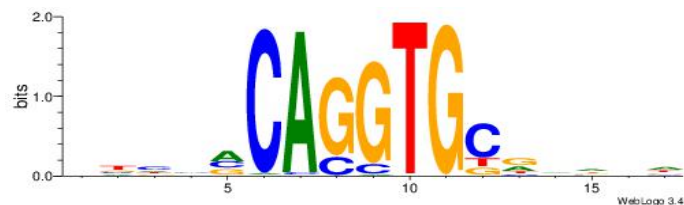
Motif name: Tcfe2a_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 6
 Number of overlap: 11
 Similarity score: 0.000557448

Alignment:

DHDBHGCACCTGBDDVB
 -----BCACCTGCABC-

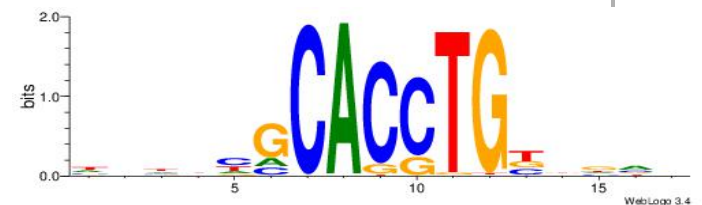
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID: [UP00099](#)
 Motif name: Ascl2_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 3
 Number of overlap: 11

Similarity score: 0.00842747

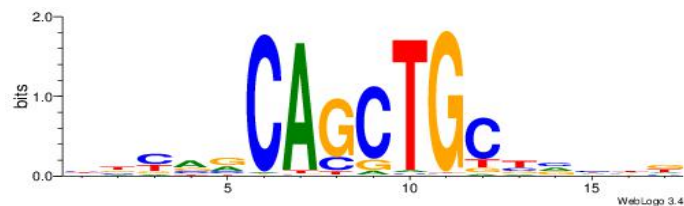
Alignment:

BBYVVCAGCTGCBVHHD

----BCACCTGCABC--

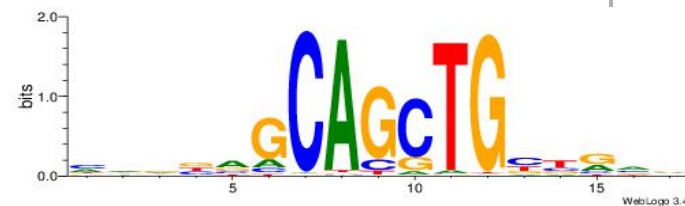
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVCAGCTGVBKVB



Motif ID: [UP00420](#)
Motif name: Elk3
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: 0.0111732

Alignment:

DVBBACCGGAAGYDVVV

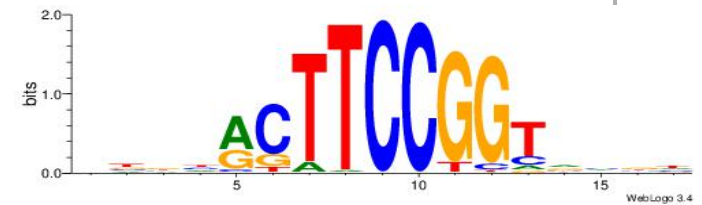
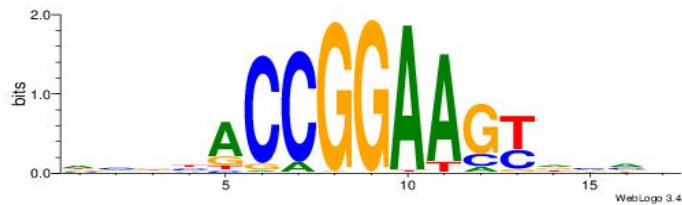
--BCACCTGCABC----

Original motif

Consensus sequence: DVBBACCGGAAGYDVVV

Reverse complement motif

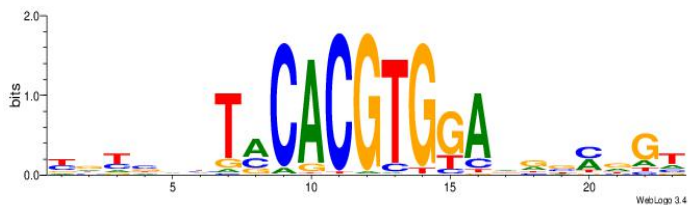
Consensus sequence: VBVDMCTTCCGGTVBVD



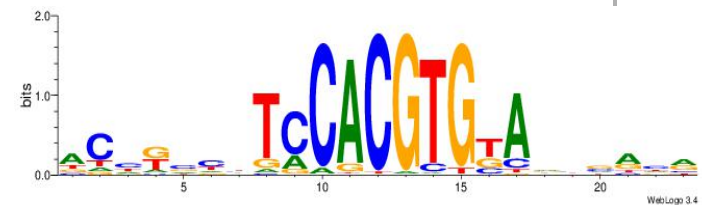
Motif ID: [UP00050](#)
 Motif name: Bhlhb2_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 9
 Number of overlap: 11
 Similarity score: 0.0122671

Alignment:
 ACHRBHDTCCACGTGYAHBMMH
 -----BCACCTGCABC-----

Original motif
 Consensus sequence: YD YBDHTMCACGTGGADDBMDGT



Reverse complement motif
 Consensus sequence: ACHRBHDTCCACGTGYAHBMMH



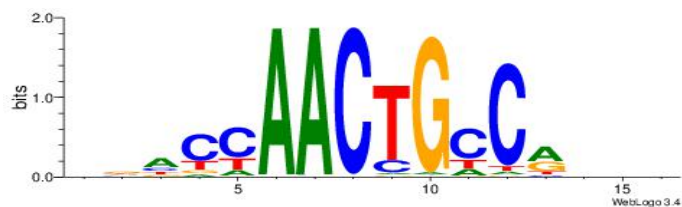
Motif ID: [UP00092](#)
 Motif name: Myb_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.015733

Alignment:

BDACCAACTGCCRBH
 ---BCACCTGCABC--

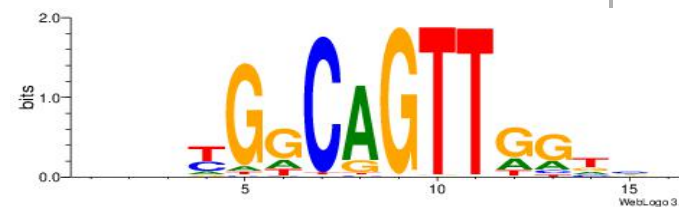
Original motif

Consensus sequence: BDACCAACTGCCRBH



Reverse complement motif

Consensus sequence: DBVKGGCAGTTGGTHB



Motif ID: [UP00236](#)
 Motif name: Irx2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4

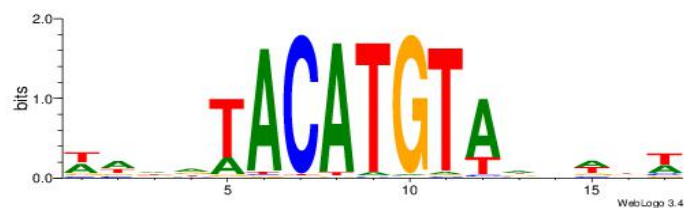
Number of overlap: 11
Similarity score: 0.0163141

Alignment:

WVWDDTACATGTADDDW
---GBTGCAGGTGB---

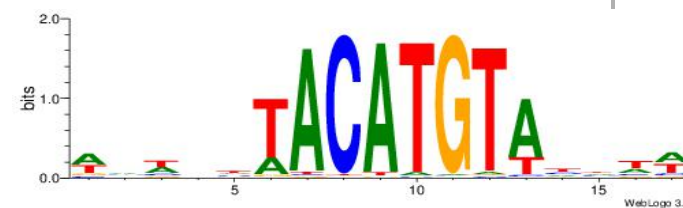
Original motif

Consensus sequence: WDDDTACATGTADDWBW



Reverse complement motif

Consensus sequence: WVWDDTACATGTADDDW



Motif ID: [UP00223](#)
Motif name: Irx3_0920.1
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: 11
Similarity score: 0.0165255

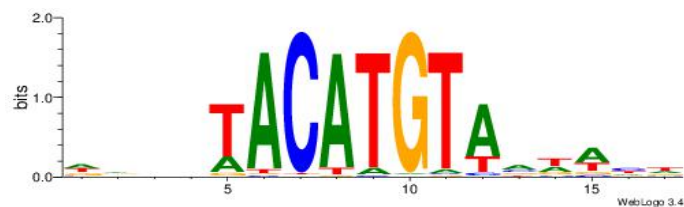
Alignment:

DDWWBTACATGTADDDD
----BCACCTGCABC--

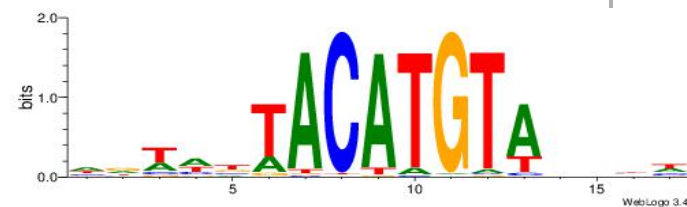
Original motif

Reverse complement motif

Consensus sequence: DDDDTACATGTAVVWHHD



Consensus sequence: DDWWBTACATGTADDDD



Motif ID: [UP00057](#)
Motif name: Zic2_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0169178

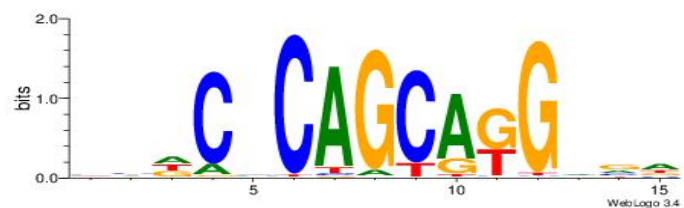
Alignment:

DVBCYTGCTGBGDDD

BCACCTGCABC-----

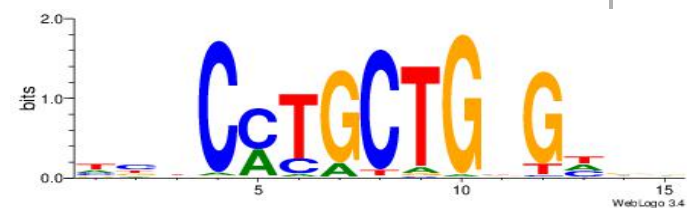
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

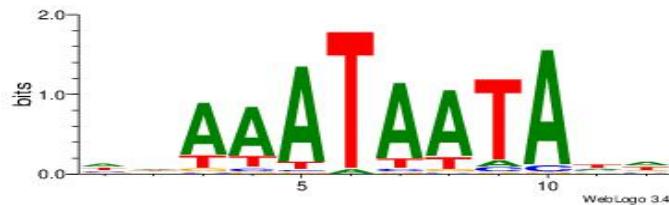
Consensus sequence: DVBCYTGCTGBGDDD



Dataset #: 2 **Motif ID: 17** **Motif name: wwAAATAATAtw**

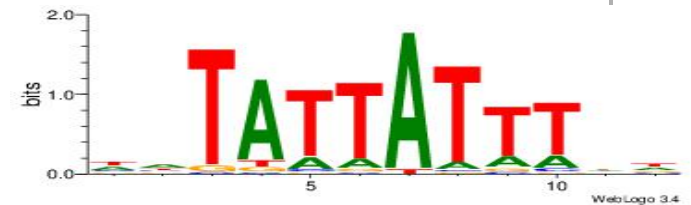
Original motif

Consensus sequence: HDAAATAATADD



Reverse complement motif

Consensus sequence: DDTATTATTTDH



Best Matches for Motif ID 17 (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

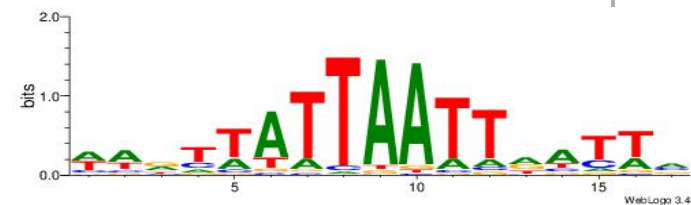
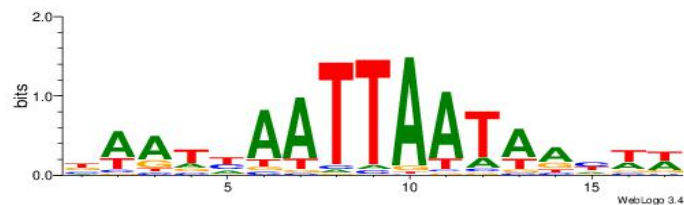
--DDTATTATTTDH---

Original motif

Consensus sequence: BAATHAATTAATAAHHWW

Reverse complement motif

Consensus sequence: WWDTTATTAATTHATTV

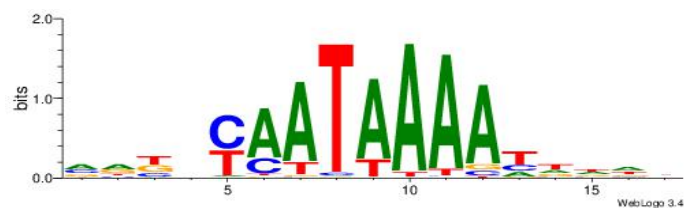


Motif ID: [UP00121](#)
 Motif name: Hoxd10
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 12
 Similarity score: 0.00673636

Alignment:
 HDDDATTTTATTKVRDB
 ---DDTATTATTTDH--

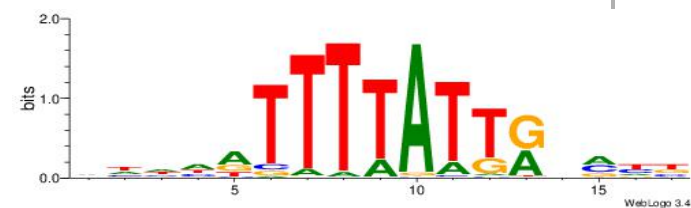
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB



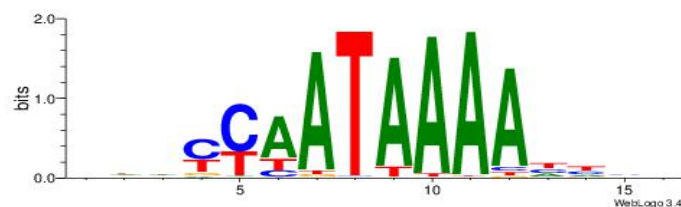
Motif ID: [UP00180](#)

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--

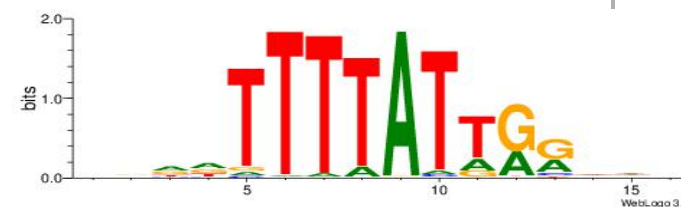
Original motif

Consensus sequence: HDHYAATAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



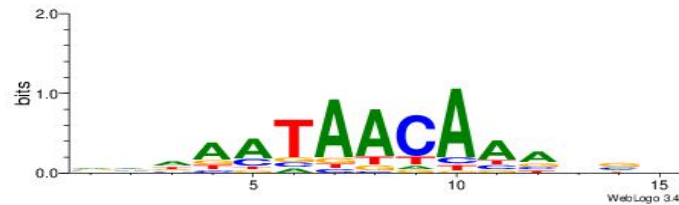
Motif ID: [UP00073](#)
 Motif name: Foxa2_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 1
 Number of overlap: 12
 Similarity score: 0.0108327

Alignment:

VVDAATAACAAAVVB
HDAAATAATADD---

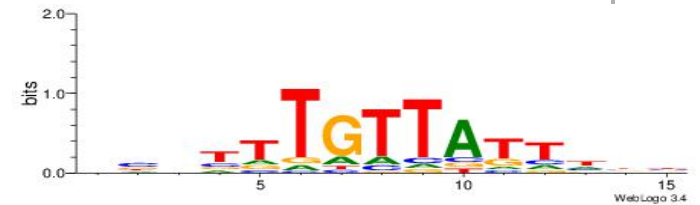
Original motif

Consensus sequence: VVDAATAACAAAVVB



Reverse complement motif

Consensus sequence: BVVTTTGTTATTDBB



| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00134 |
| 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:

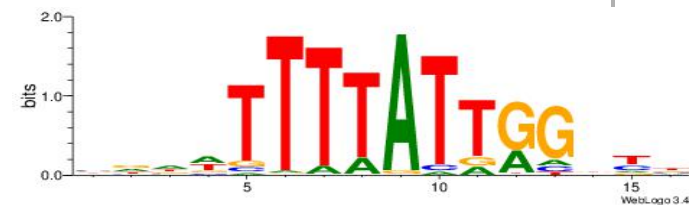
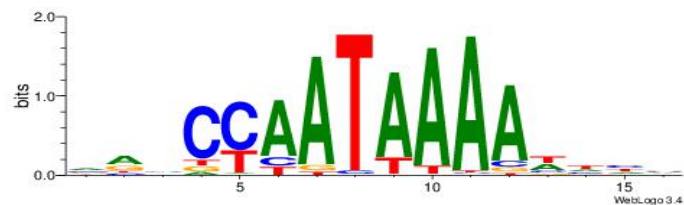
VDHWTTTTATTGGDKB
--DDTATTATTTDH--

Original motif

Consensus sequence: VRHCCAATAAAWHHV

Reverse complement motif

Consensus sequence: VDHWTTTTATTGGDKB

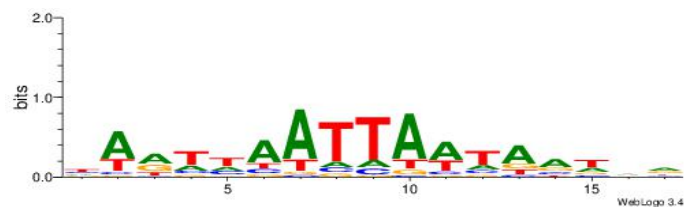


Motif ID: [UP00255](#)
 Motif name: Dbx1
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 12
 Similarity score: 0.0133808

Alignment:
 HARTHAATTAWTAVDHD
 ---HDAAATAATADD--

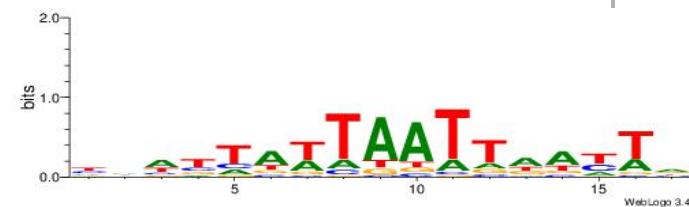
Original motif

Consensus sequence: HARTHAATTAWTAVDHD



Reverse complement motif

Consensus sequence: DHDBTAWTAATTTHAKTH



Motif ID: [UP00034](#)

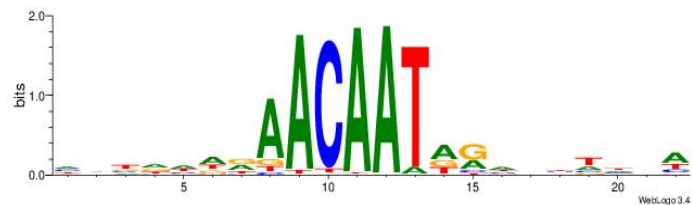
Motif name: Sox7_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 7
 Number of overlap: 12
 Similarity score: 0.0144702

Alignment:

HHBDHDDAACAATDRHHHHHBW
 ----HDAAATAATADD-----

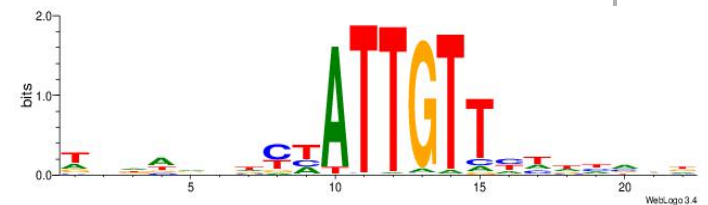
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



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

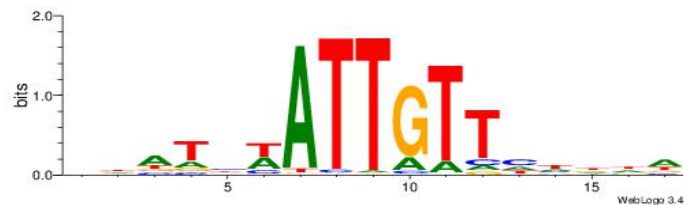
Alignment:

DDATBWATTGTTHHDDD

---DDTATTATTTDH--

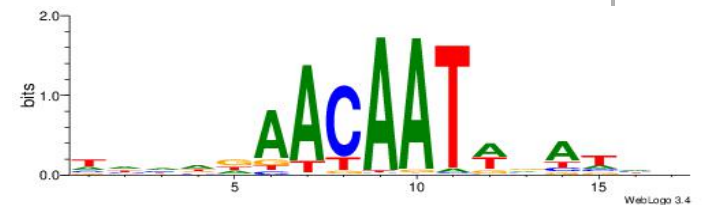
Original motif

Consensus sequence: DDATBWATTGTTHHDDD



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

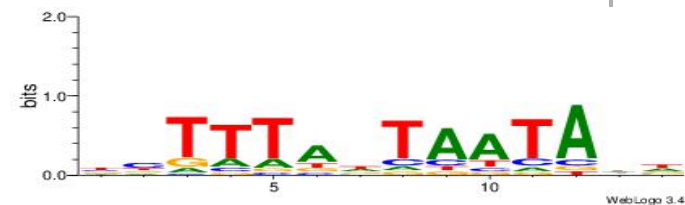
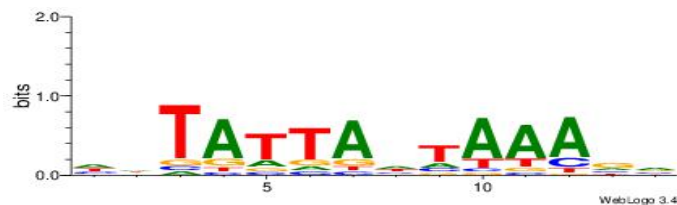
--HDAAATAATADD

Original motif

Consensus sequence: HDTATTAHTAAVV

Reverse complement motif

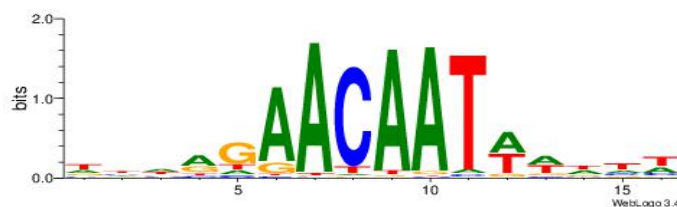
Consensus sequence: BVTTTAHTAATADH



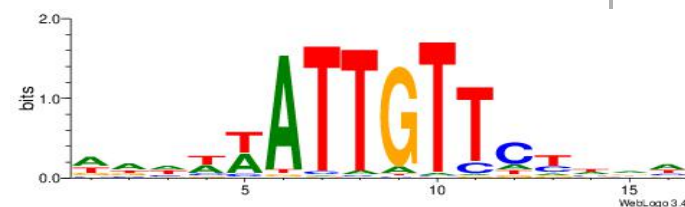
Motif ID: [UP00096](#)
 Motif name: Sox13_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 3
 Number of overlap: 12
 Similarity score: 0.014968

Alignment:
 DHDRGAACAATWWDHW
 --HDAAATAATADD--

Original motif
 Consensus sequence: DHDRGAACAATWWDHW



Reverse complement motif
 Consensus sequence: WHDWWATTGTTCKDHD



Dataset #: 2 **Motif ID: 19** **Motif name: wsTACwGTAsw**

Original motif

Consensus sequence: HVTACWGATABD



Reverse complement motif

Consensus sequence: DBTACWGTA VH



Best Matches for Motif ID 19 (Highest to Lowest)

Motif ID: [UP00052](#)
Motif name: Osr2_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: 11
Similarity score: 0

Alignment:

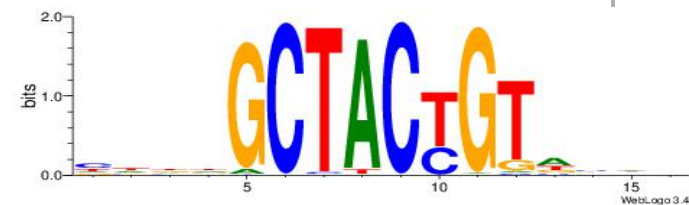
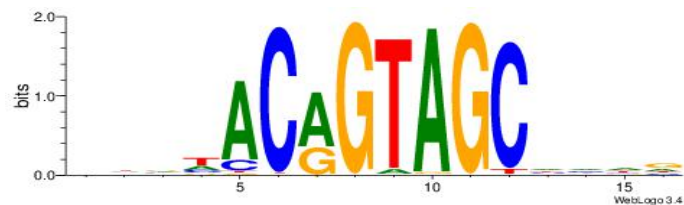
HHHHGCTACKGTHVHH
----DBTACWGTA VH--

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH

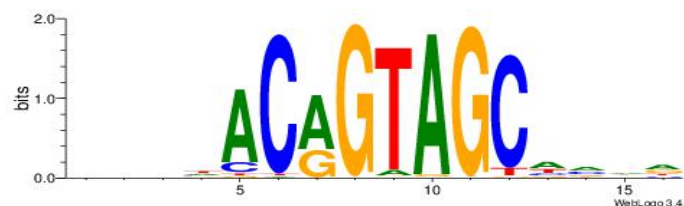


Motif ID: [UP00027](#)
 Motif name: Osr1_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 2
 Number of overlap: 11
 Similarity score: 0.00480574

Alignment:
 DHBHGCTACKGTHDHH
 ----DBTACWGTAVH-

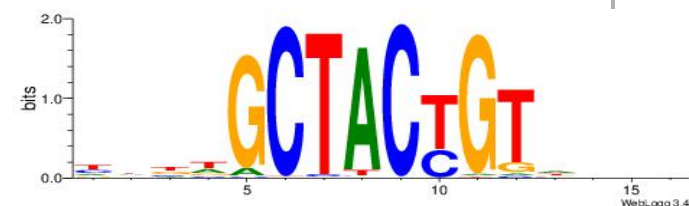
Original motif

Consensus sequence: HHDHACRGTAGCHVHD



Reverse complement motif

Consensus sequence: DHBHGCTACKGTHDHH



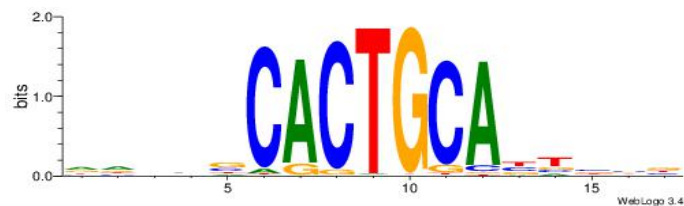
Motif ID: [UP00031](#)

Motif name: Zbtb3_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: 11
 Similarity score: 0.0165381

Alignment:
 BBBAVTGCAGTGBBVDD
 ---HVTACWG TABD---

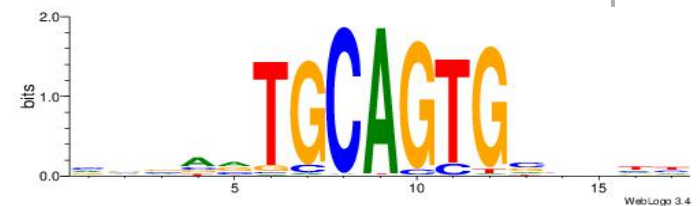
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD



Motif ID: [UP00034](#)
 Motif name: Sox7_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 7
 Number of overlap: 11

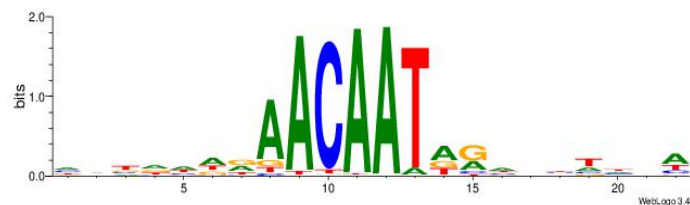
Similarity score: 0.0248017

Alignment:

HHBDHDDAACAAATDRHHHHHBW
-----DBTACWGTAVH-----

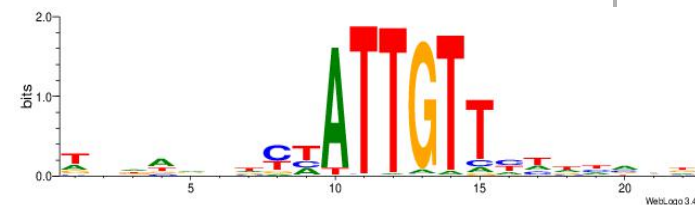
Original motif

Consensus sequence: HHBDHDDAACAAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHVDVHH



Motif ID: [UP00023](#)
Motif name: Sox30_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0294174

Alignment:

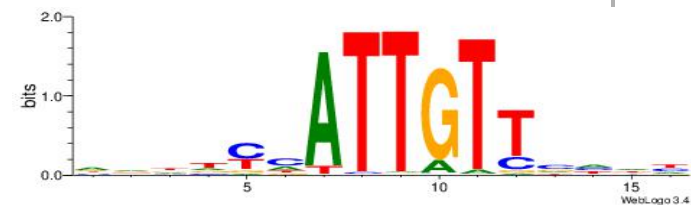
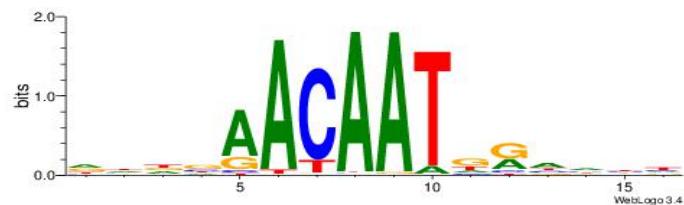
HHHHMHATTGTTBDHD
---HVTACWGATABD---

Original motif

Consensus sequence: DHDBAACAAATDRHHHH

Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD



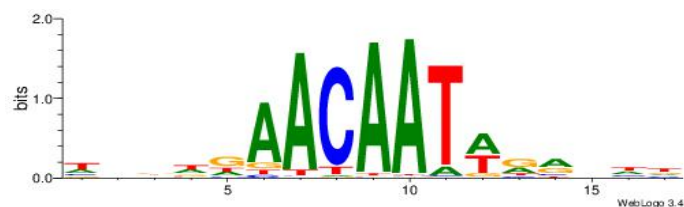
Motif ID: [UP00075](#)
 Motif name: Sox15_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.0301544

Alignment:

DHVKMWATTGTTHDHDH
 ---HVTACWGATABD---

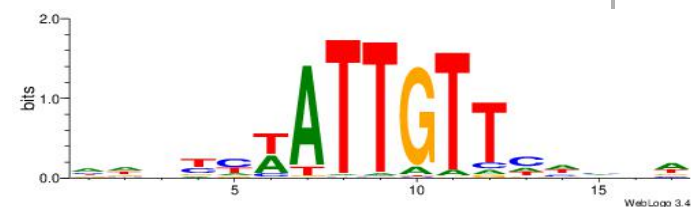
Original motif

Consensus sequence: HDDDDAACAATWRRBHD



Reverse complement motif

Consensus sequence: DHVKMWATTGTTHDHDH



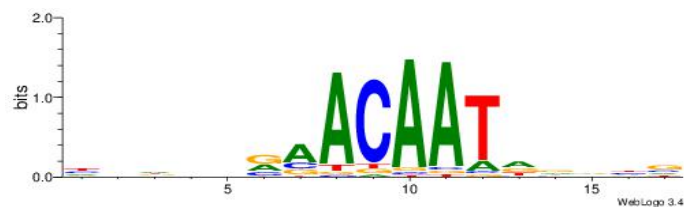
Motif ID: [UP00016](#)
 Motif name: Sry_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 5
 Number of overlap: 11
 Similarity score: 0.0310991

Alignment:

VHVHDATTGTTMHDDDH
 --DBTACWGTAVH-----

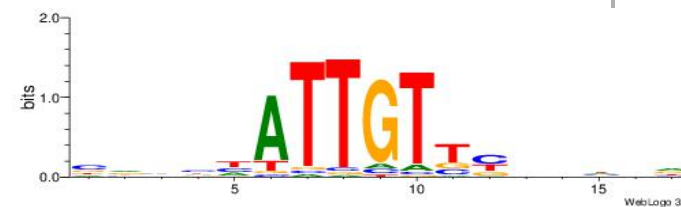
Original motif

Consensus sequence: HHDHRAACAATDDVHV



Reverse complement motif

Consensus sequence: VHVHDATTGTTMHDDDH



Motif ID: [UP00064](#)
 Motif name: Sox18_primary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 2

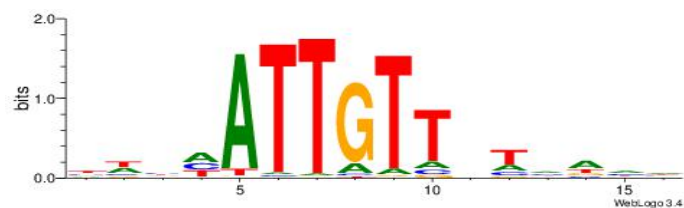
Number of overlap: 11
Similarity score: 0.031364

Alignment:

BWBHATTGTTBTHDHH
-DBTACWGTAVH----

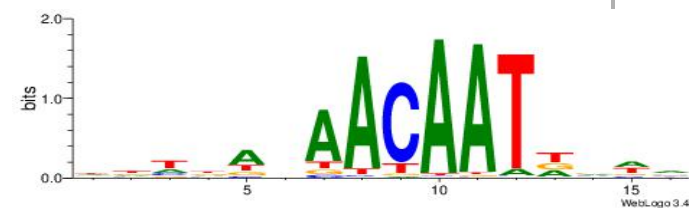
Original motif

Consensus sequence: BWBHATTGTTBTHDHH



Reverse complement motif

Consensus sequence: HHDHABAACAATHBWV



Motif ID: [UP00092](#)
Motif name: Myb_primary
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: 0.0314236

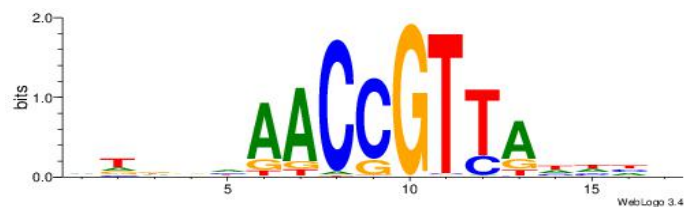
Alignment:

HDDDHAACCGTTAHHHD
---DBTACWGTAVH---

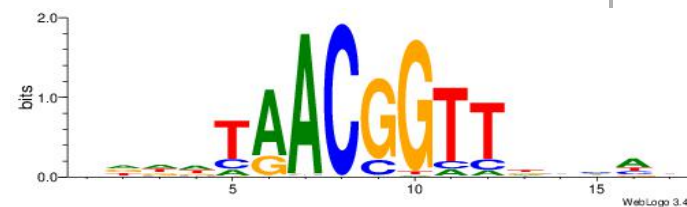
Original motif

Reverse complement motif

Consensus sequence: HDDDHAACCGTTAHHHD



Consensus sequence: DHHHTAACGGTTHHHDH



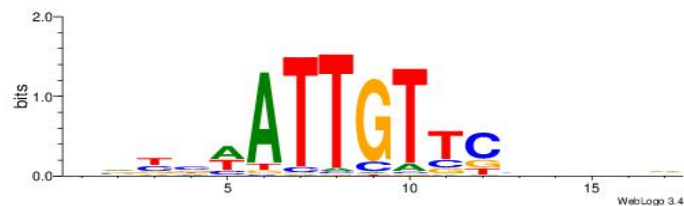
Motif ID: [UP00071](#)
Motif name: Sox21_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0319794

Alignment:

VVYBWATTGTTTCVBHDV
--HVTACWGTTABD----

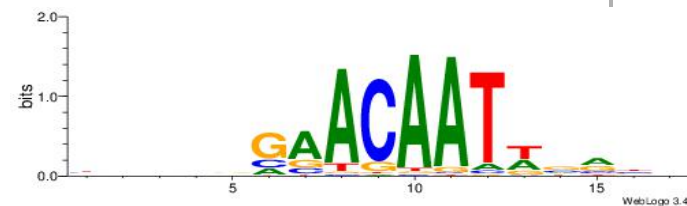
Original motif

Consensus sequence: VVYBWATTGTTTCVBHDV



Reverse complement motif

Consensus sequence: BDDBVGAACAATWMBBV



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

Original motif

Consensus sequence: DHACATTCTGH



Reverse complement motif

Consensus sequence: HCAGAATGTHD



Best Matches for Motif ID 20 (Highest to Lowest)

| | |
|----------------------------------|-------------------------|
| Motif ID: | UP00038 |
| Motif name: | Spdef_secondary |
| 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: | 11 |
| Similarity score: | 0.00581553 |

Alignment:

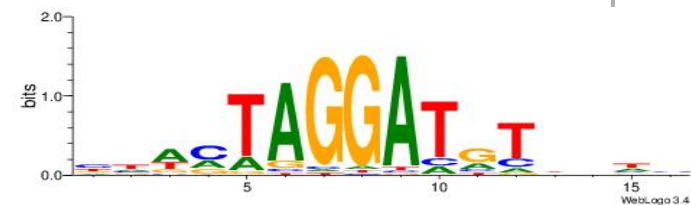
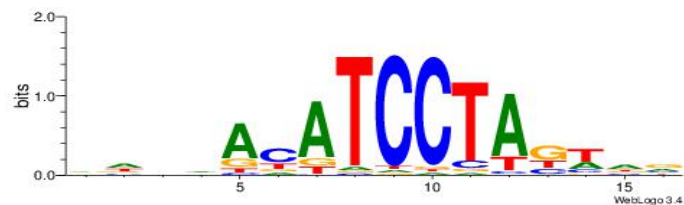
```
VDWYTAGGATGTHVDH
---HCAGAATGTHD---
```

Original motif

Consensus sequence: DDBHACATCCTAKWDV

Reverse complement motif

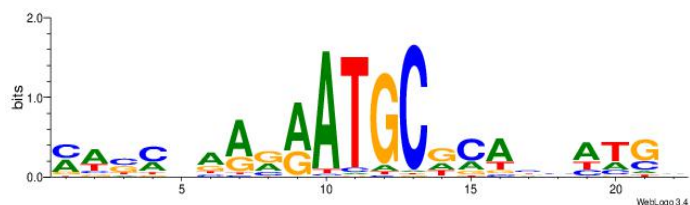
Consensus sequence: VDWYTAGGATGTHVDH



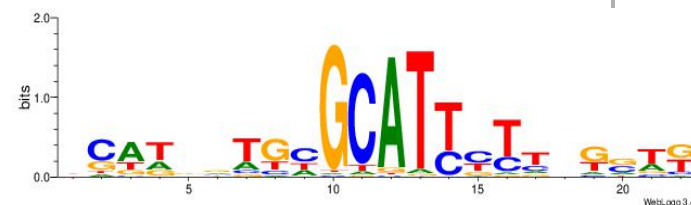
Motif ID: [UP00528](#)
 Motif name: Foxm1_secondary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 8
 Number of overlap: 11
 Similarity score: 0.00582895

Alignment:
 DCATDBTGHGCATKMTTBRSWR
 -----DHACATTCTGH-----

Original motif
 Consensus sequence: MWSMBAARRATGCD CABHATGD



Reverse complement motif
 Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID: [UP00023](#)

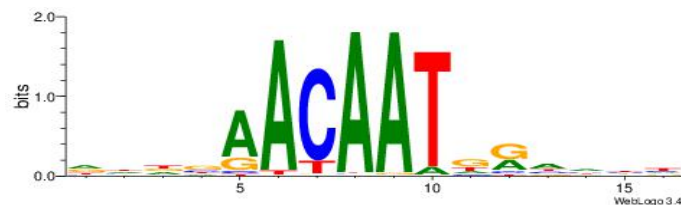
Motif name: Sox30_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00613057

Alignment:

HHHMHATTGTTBDHD
 --DHACATTCTGH---

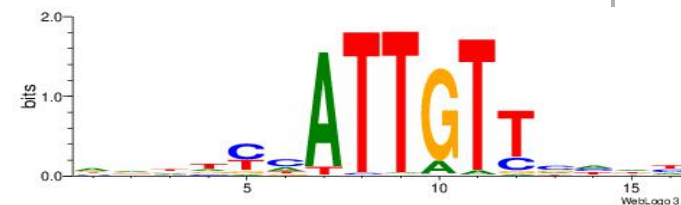
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHMHATTGTTBDHD

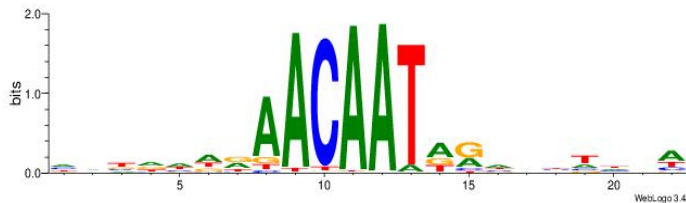


Motif ID: [UP00034](#)
 Motif name: Sox7_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 6
 Number of overlap: 11

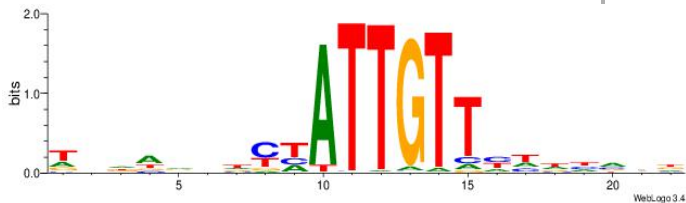
Similarity score: 0.0119275

Alignment:
WBHHHHHMDATTGTTDHDVHH
-----DHACATTCTGH-----

Original motif
Consensus sequence: HHBDHDDAACAAATDRHHHHHBW



Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTDHDVHH

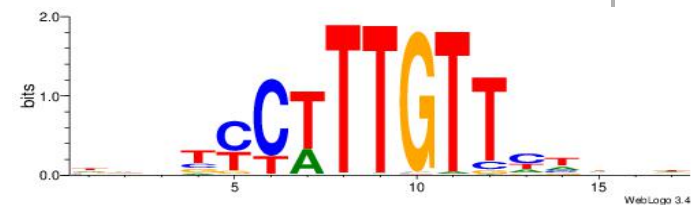
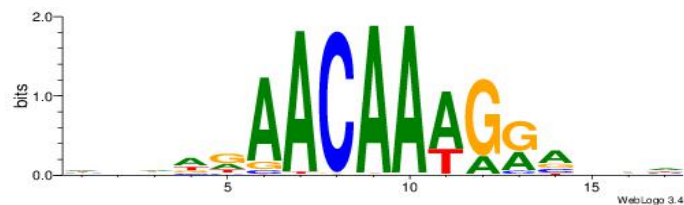


Motif ID: [UP00030](#)
Motif name: Sox11_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0122803

Alignment:
HHBTMCTTTGTTMDDVH
--DHACATTCTGH----

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



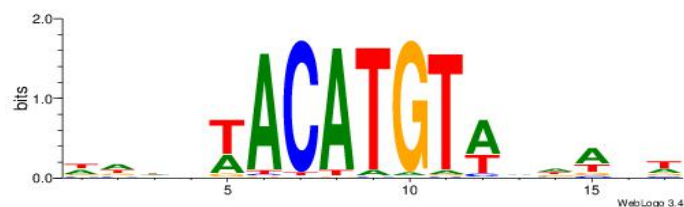
Motif ID: [UP00250](#)
 Motif name: Irx5
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Backward
 Position number: 3
 Number of overlap: 11
 Similarity score: 0.0132772

Alignment:

WVTDPHWACATGTWHDDD
 ----DHACATTCTGH--

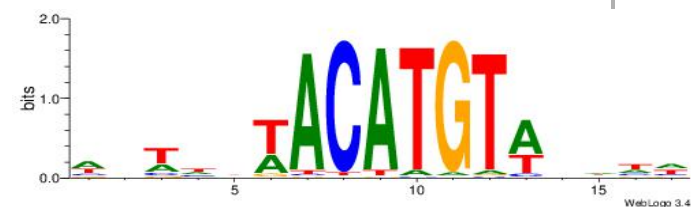
Original motif

Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif

Consensus sequence: WVTDPHWACATGTWHDDD



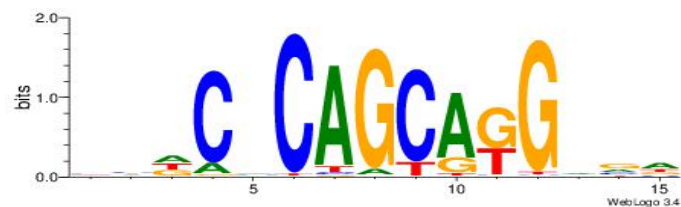
Motif ID: [UP00057](#)
 Motif name: Zic2_secondary
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 5
 Number of overlap: 11
 Similarity score: 0.0141401

Alignment:

HHDCVCAGCAKGVVD
 ----HCAGAATGTHD

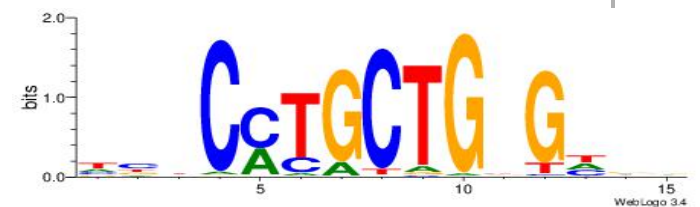
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



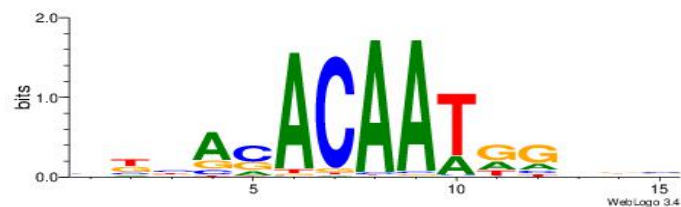
Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD

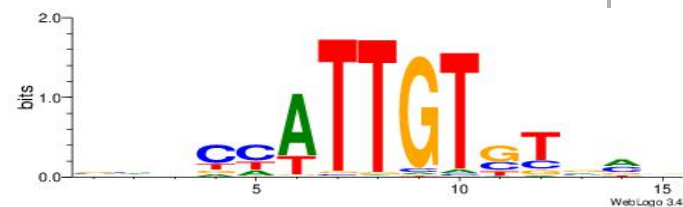


Motif ID: [UP00062](#)
 Motif name: Sox4_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 3

Consensus sequence: BKBASACAATRGHBB



Consensus sequence: BBDCMATTGTSTBRB



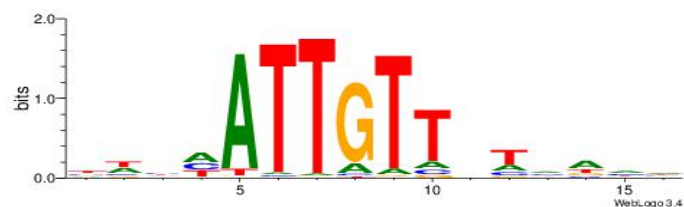
Motif ID: [UP00064](#)
Motif name: Sox18_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.015273

Alignment:

BWBHATTGTTBTHDHH
DHACATTCTGH-----

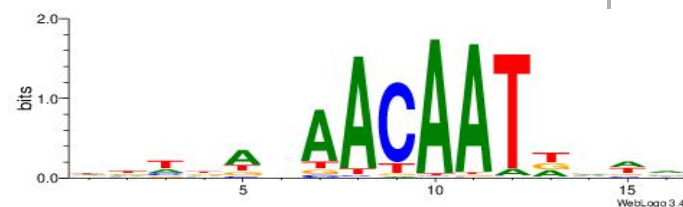
Original motif

Consensus sequence: BWBHATTGTTBTHDHH



Reverse complement motif

Consensus sequence: HDDHABAACAATHBWV



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

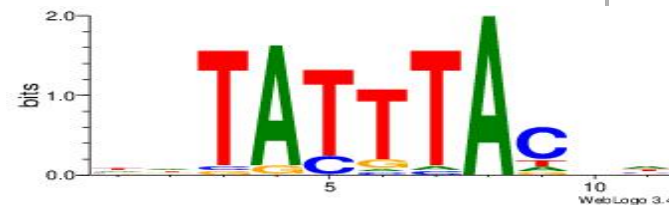
Original motif

Consensus sequence: DBGTAATAHD



Reverse complement motif

Consensus sequence: DHTATTTACBD



Best Matches for Motif ID 21 (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: | Backward |
| Position number: | 4 |
| Number of overlap: | 11 |
| Similarity score: | 0 |

Alignment:

AHDHTAATTACHHHHV

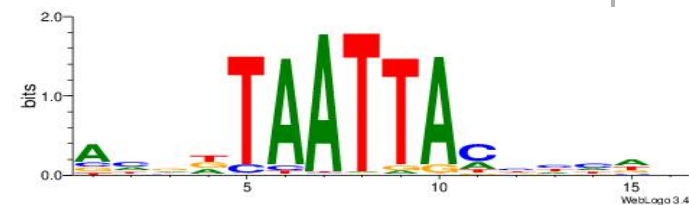
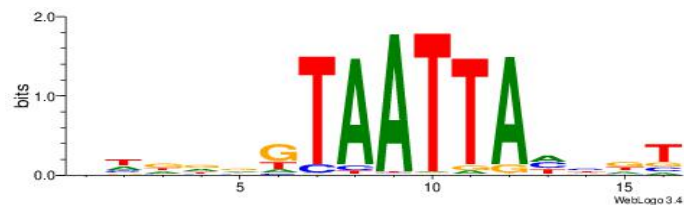
--DHTATTTACBD---

Original motif

Consensus sequence: BHDDDGTAATTAAHHD

Reverse complement motif

Consensus sequence: AHDHTAATTACHHHHV

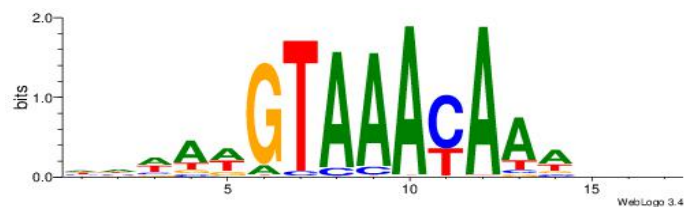


Motif ID: [UP00073](#)
 Motif name: Foxa2_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Backward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00453517

Alignment:
 HHWAWGTAAAYAAVDB
 ---DBGTAATAHD---

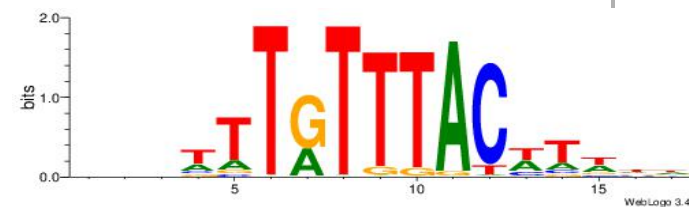
Original motif

Consensus sequence: HHWAWGTAAAYAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: [UP00039](#)

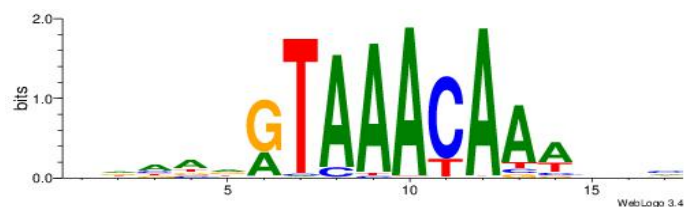
Motif name: Foxj3_primary
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00490457

Alignment:

HDHADGTAAACAAAVVH
 ---DBGTAATAHD---

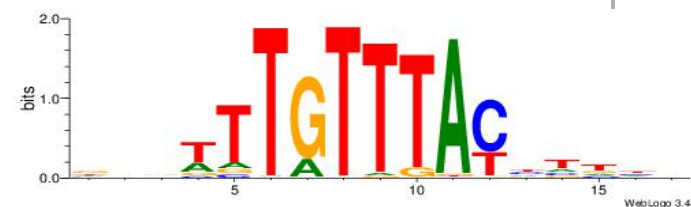
Original motif

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

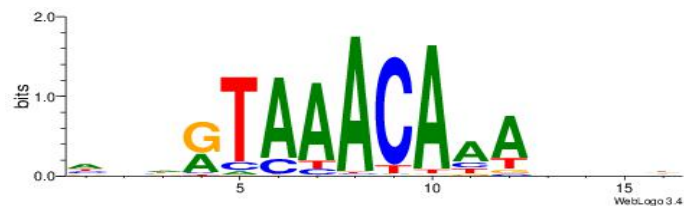
Alignment:

HDHRTAAACAAHDDD

-DBGTAATAHD----

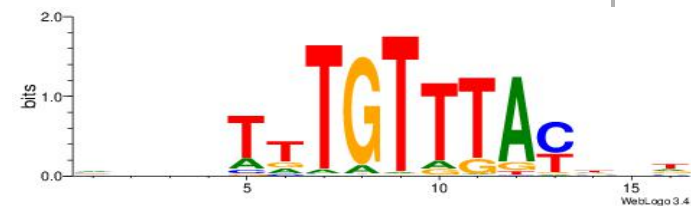
Original motif

Consensus sequence: HDHRTAAACAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDDH



Motif ID: [UP00182](#)
Motif name: Hoxa6
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.0086354

Alignment:

DTHHGGTAATTAYCYT

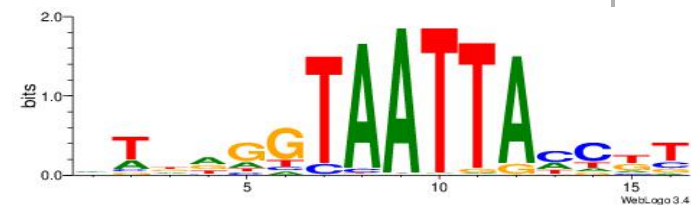
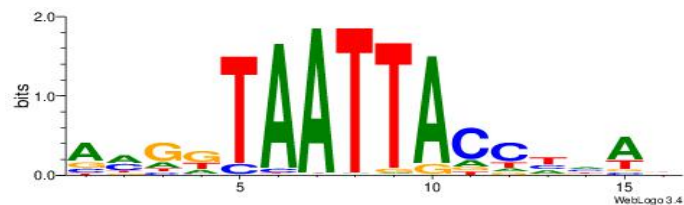
---DBGTAATAHD--

Original motif

Consensus sequence: AMGKTAATTACCHHAD

Reverse complement motif

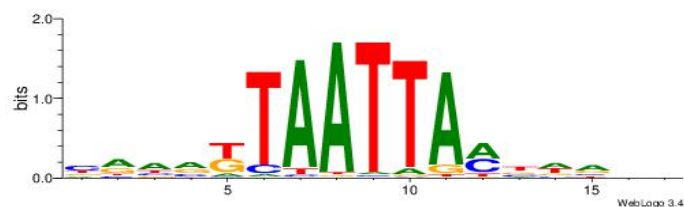
Consensus sequence: DTHHGGTAATTAYCYT



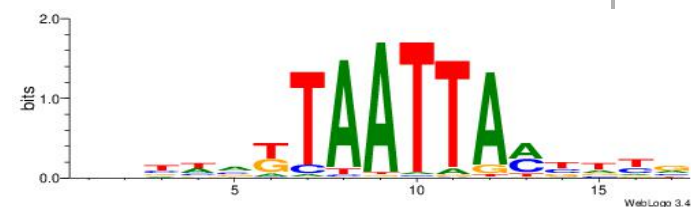
Motif ID: [UP00260](#)
 Motif name: Hoxc6
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.0092156

Alignment:
 BRHVKTAATTAMBDVVD
 ---DHTATTTACBD---

Original motif
 Consensus sequence: BRHVKTAATTAMBDVVD



Reverse complement motif
 Consensus sequence: DBBDVYTAATTARBHKB



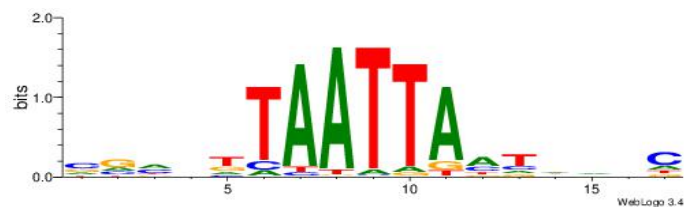
Motif ID: [UP00164](#)
 Motif name: Hoxa7_2668.2
 Species: Mus musculus
 Matching format of first motif: Reverse Complement
 Matching format of second motif: Original Motif
 Direction: Forward
 Position number: 4
 Number of overlap: 11
 Similarity score: 0.00942246

Alignment:

VVHDDTAATTAHTDDBC
 ---DHTATTTACBD---

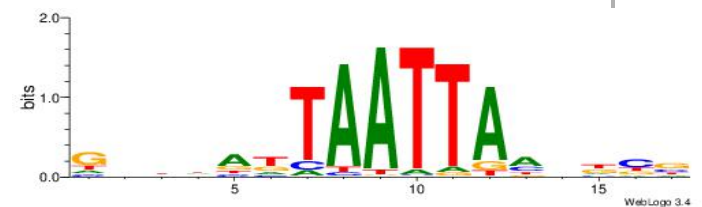
Original motif

Consensus sequence: VVHDDTAATTAHTDDBC



Reverse complement motif

Consensus sequence: GBDDAHTAATTADHHVV

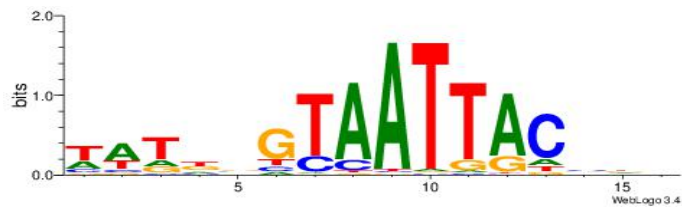


Motif ID: [UP00259](#)
 Motif name: Hoxb6
 Species: Mus musculus
 Matching format of first motif: Original Motif
 Matching format of second motif: Reverse Complement
 Direction: Forward
 Position number: 2

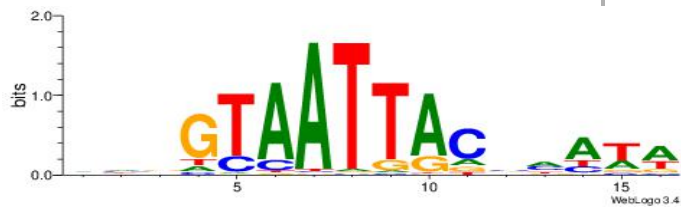
Number of overlap: 11
Similarity score: 0.00949005

Alignment:
VDVGTAATTACBDAWW
-DBGTAATAHD----

Original motif
Consensus sequence: WWTDBGTAATTACVDB



Reverse complement motif
Consensus sequence: VDVGTAATTACBDAWW



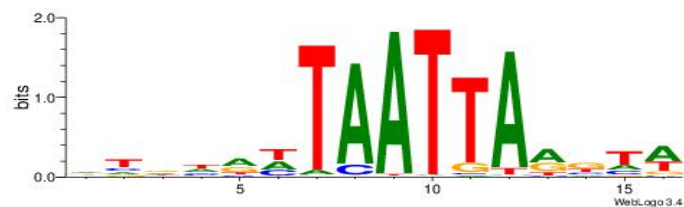
Motif ID: [UP00254](#)
Motif name: Pou2f1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.00998499

Alignment:
WABKTAATTAKHHHD
-DBGTAATAHD----

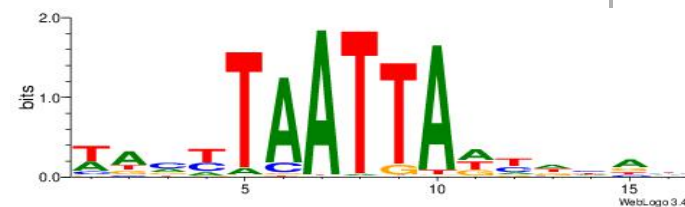
Original motif

Reverse complement motif

Consensus sequence: DHDHRHTAATTARBTW



Consensus sequence: WABKTAATTAHKHHHD



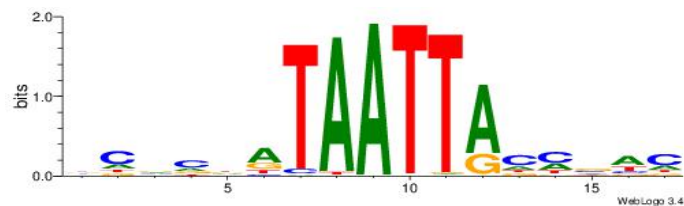
Motif ID: [UP00110](#)
Motif name: Dlx4
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0107458

Alignment:

GHVRGTAATTATDVVG
--DBGTAATAHD----

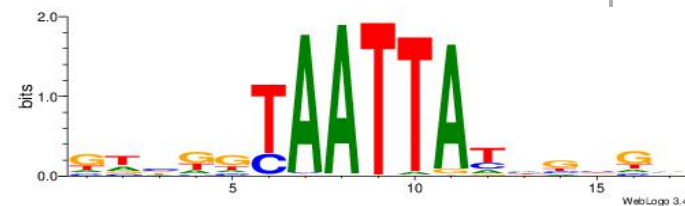
Original motif

Consensus sequence: BCVVDATAATTACMVHC



Reverse complement motif

Consensus sequence: GHVRGTAATTATDVVG



Results created by MOTIFSIM on 11-20-2016 20:47:38
Runtime: 651.925 seconds

MOTIFSIM is written by Ngoc Tam L. Tran
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