MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.1

INPUT

Input Parameters

Number of files:	5
Number of top significant motifs:	10
Number of best matches:	10
Similarity cutoff >=	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
MEME-ChIP_DM05.txt	4	1
MEME_DM05.txt	46	2
PScanChIP_DM05.txt	16	3
RSAT_peak-motifs_DM05.txt	17	4
W-ChIPMotifs_DM05.txt	11	5

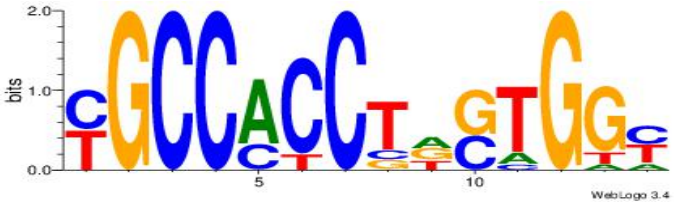
RESULTS

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

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

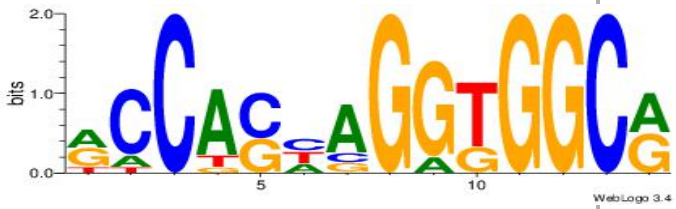
Original motif

Consensus sequence: YGCCACCTDSTGGY



Reverse complement motif

Consensus sequence: KCCASDAGGTGGCK



Best Matches for Motif ID 1 (Highest to Lowest)

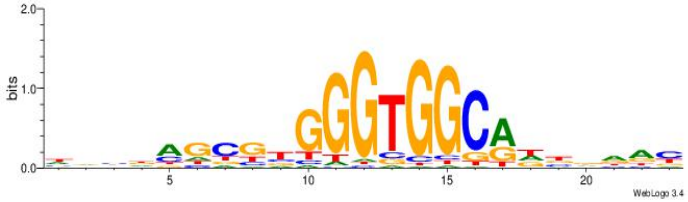
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	14
Similarity score:	0.0145956

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
---KCCASDAGGTGGCK------
```

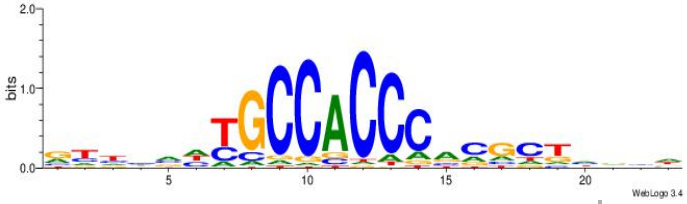
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



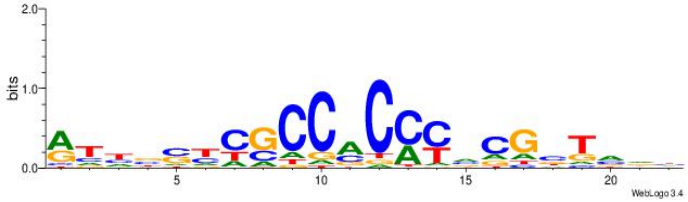
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0188184

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
------YGCCACCTDSTGGY--
```

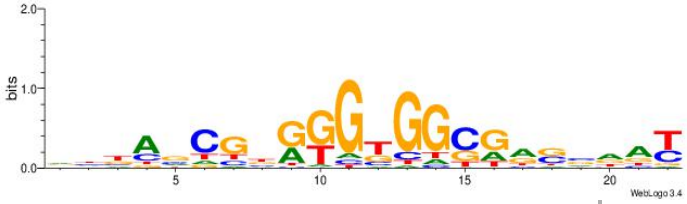
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



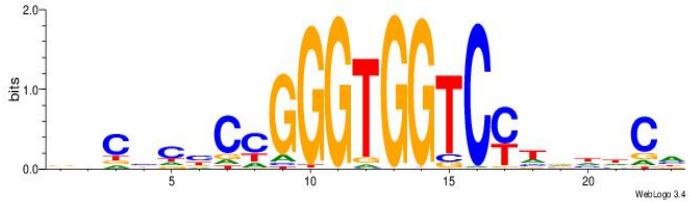
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	14
Similarity score:	0.0231104

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
-------YGCCACCTDSTGGY--
```

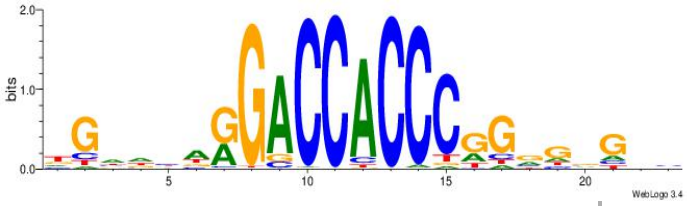
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

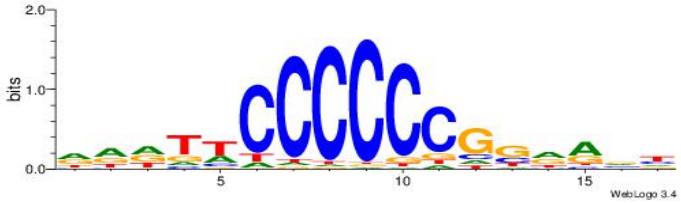


Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward

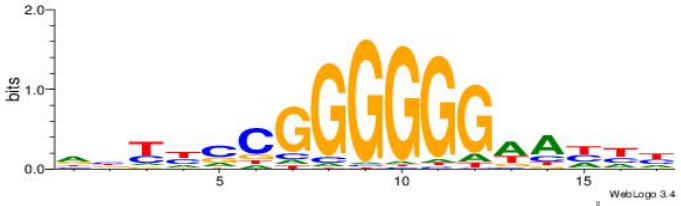
Position number: 4
Number of overlap: 14
Similarity score: 0.025419

Alignment:
DDDTWCCCCCCGGDRVH
---YGCCACCTDSTGGY

Original motif
Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif
Consensus sequence: HVKDCCGGGGGGWADDD



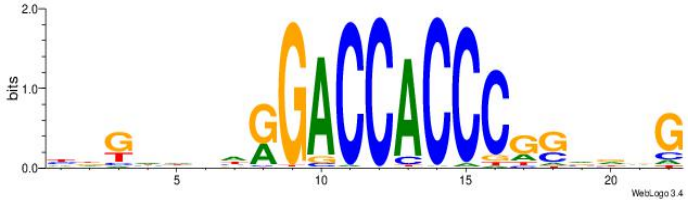
Motif ID: UP00540
Motif name: Gli3_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0278794

Alignment:
HDGHHBHRGACCACCCGSVDVG
--------YGCCACCTDSTGGY

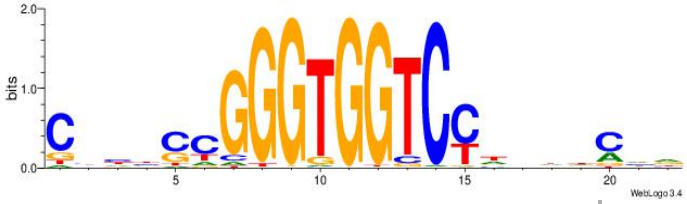
Original motif

Reverse complement motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



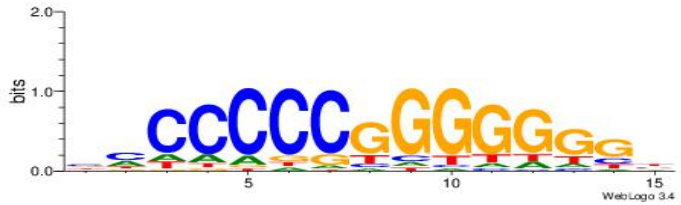
Motif ID:	UP00006
Motif name:	Zic3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0283962

Alignment:

```
BMCCCCCGGGGGGGB
YGCCACCTDSTGGY-
```

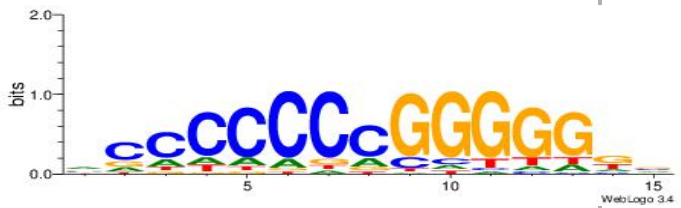
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB



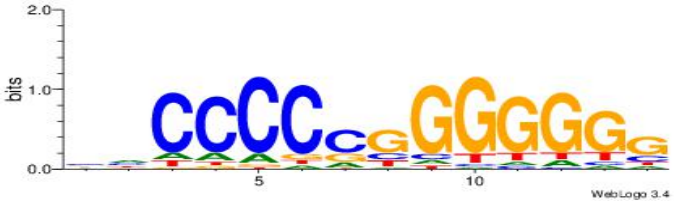
Motif ID:	UP00102
Motif name:	Zic1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0287857

Alignment:

```
BHCCCCCGGGGGGG
YGCCACCTDSTGGY
```

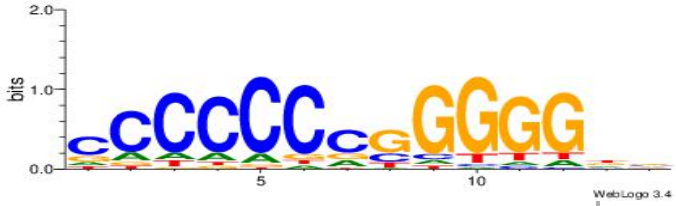
Original motif

Consensus sequence: BHCCCCCGGGGGGG



Reverse complement motif

Consensus sequence: CCCCCCCGGGGGHB

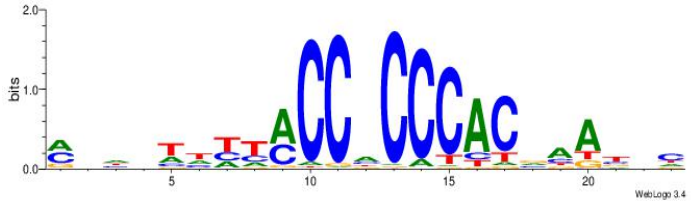


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

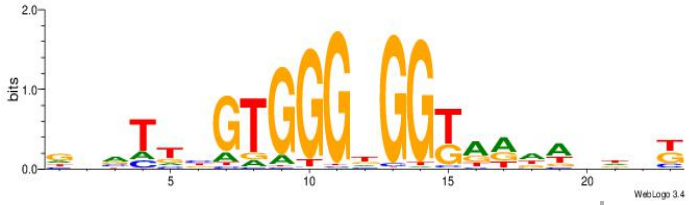
Number of overlap: 14
Similarity score: 0.0289988

Alignment:
MHHHWHYTMCCHCCCACVAABVH
-------YGCCACCTDSTGGY--

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



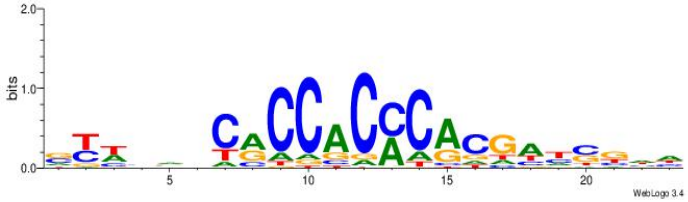
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 14
Similarity score: 0.0297857

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
---KCCASDAGGTGGCK------

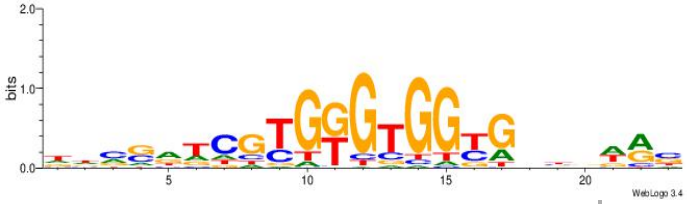
Original motif

Reverse complement motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



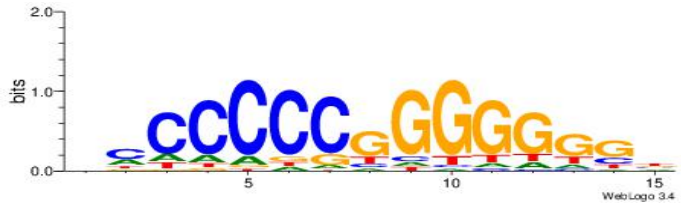
Motif ID:	UP00057
Motif name:	Zic2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0302183

Alignment:

```
BMCCCCCGGGGGGGB
YGCCACCTDSTGGY-
```

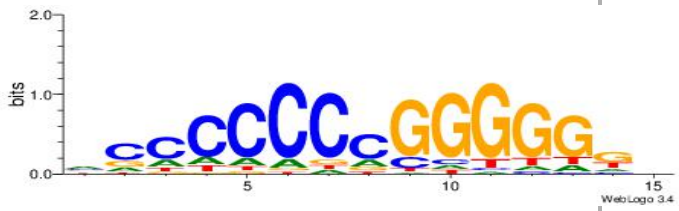
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB



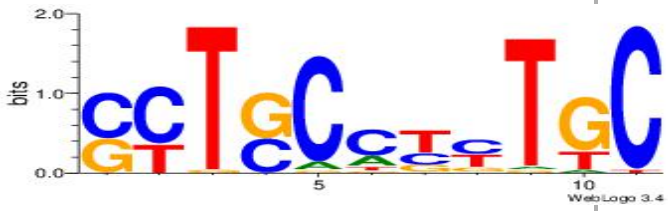
Dataset #: 1 **Motif ID: 2** **Motif name: Motif 2**

Original motif

Consensus sequence: GCARRGGSAGS

Reverse complement motif

Consensus sequence: SCTSCCKMTGC



Best Matches for Motif ID 2 (Highest to Lowest)

Motif ID:	UP00153
Motif name:	Pitx1
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:	11
Similarity score:	0.0454693

Alignment:

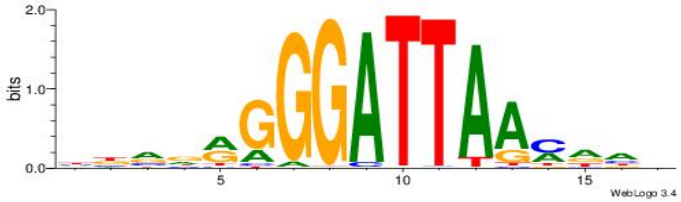
```
HHDRTTAATCCCKHBVH
------SCTSCCKMTGC
```

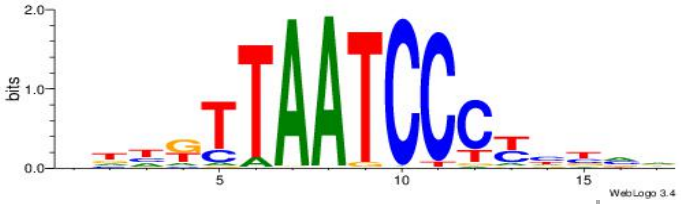
Original motif

Consensus sequence: HBVDRGGGATTAAMDHH

Reverse complement motif

Consensus sequence: HHDRTTAATCCCKHBVH





Motif ID:	UP00085
Motif name:	Sfpi1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0458219

Alignment:

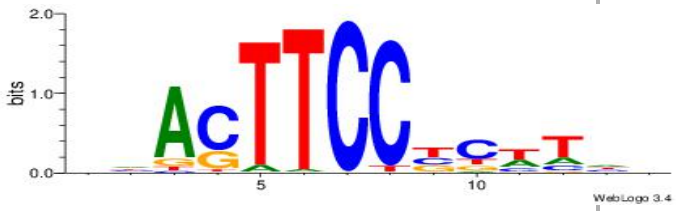
```
BDAWGVGGAAGTDH
GCARRGGSAGS---
```

Original motif

Consensus sequence: BDAWGVGGAAGTDH

Reverse complement motif

Consensus sequence: HDACTTCCBCWTDV



Motif ID:	UP00539

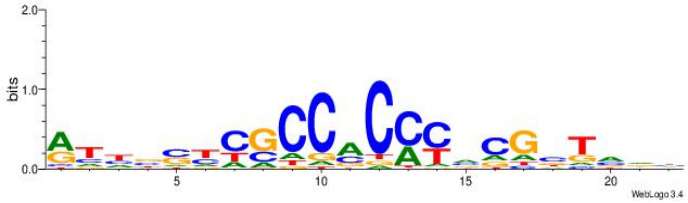
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	11
Similarity score:	0.0463674

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
-------SCTSCCKMTGC----
```

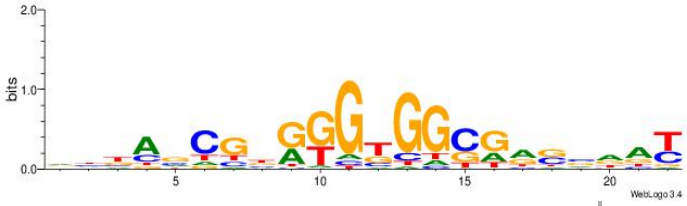
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

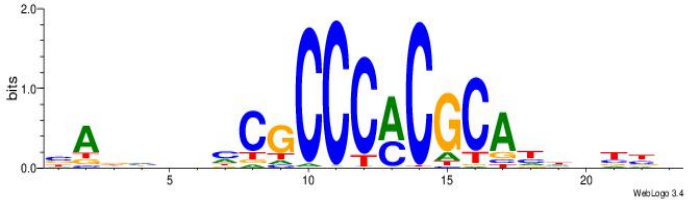


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	11

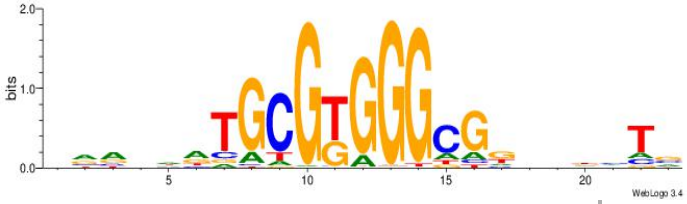
Similarity score: 0.0465857

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
-----SCTSCCKMTGC-------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

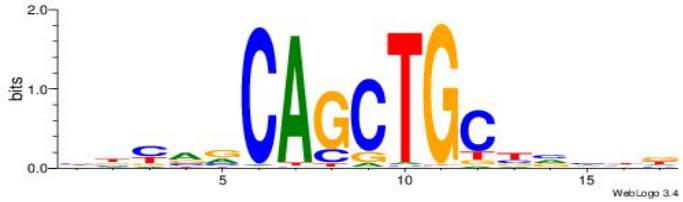


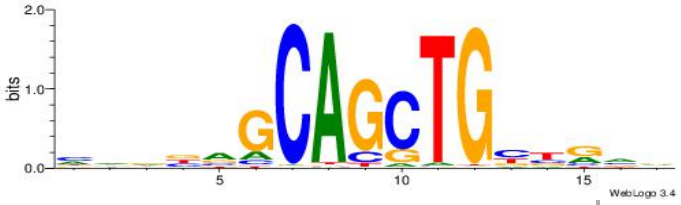
Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0473355

Alignment:
BBYVVCAGCTGCBVHHD
-SCTSCCKMTGC-----

Original motif
Consensus sequence: BBYVVCAGCTGCBVHHD

Reverse complement motif
Consensus sequence: HHDVVGCAGCTGVBKVB





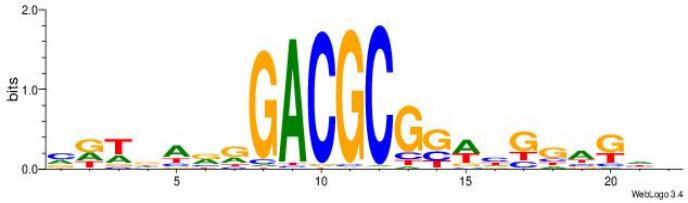
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0487126

Alignment:

```
VHYTCCDWCCGCGTCMMTHWHV
-SCTSCCKMTGC----------
```

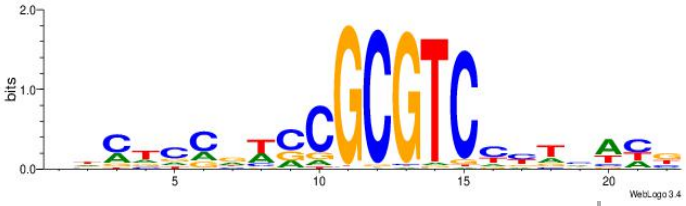
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Motif ID:	UP00010
Motif name:	Tcfap2b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0497623

Alignment:

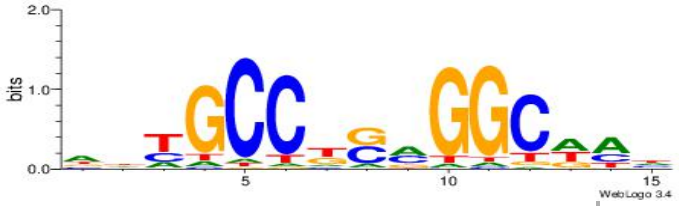
```
HHKGCCYSRGGCWAD
----GCARRGGSAGS
```

Original motif

Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD

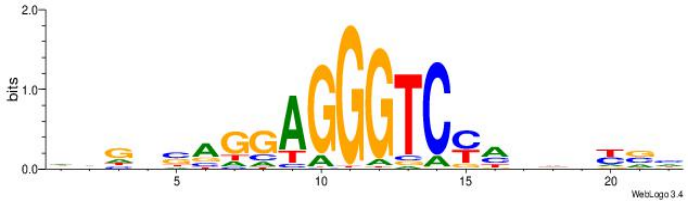


Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

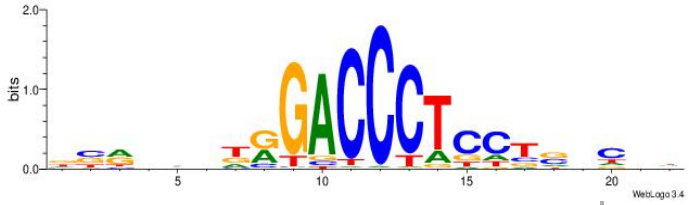
Number of overlap: 11
Similarity score: 0.0507547

Alignment:
DVMHHDHKGACCCTCCTSVCBH
----------SCTSCCKMTGC

Original motif
Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



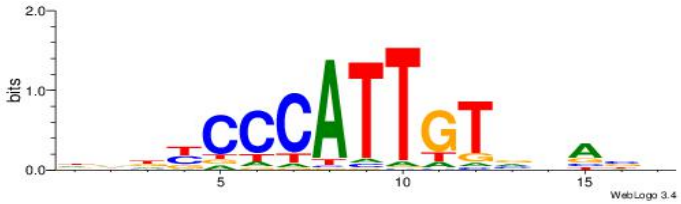
Motif ID: UP00055
Motif name: Hbp1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 11
Similarity score: 0.0508648

Alignment:
HBTHVACAATGGGMDHD
-----GCARRGGSAGS-

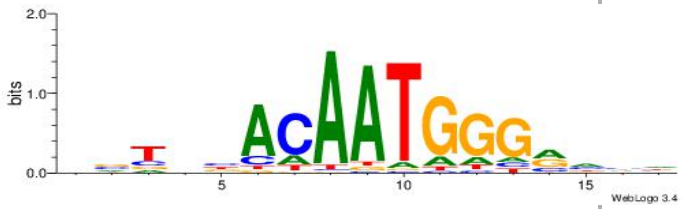
Original motif

Reverse complement motif

Consensus sequence: DDDYCCCATTGTVHABH



Consensus sequence: HBTHVACAATGGGMDHD



Motif ID:	UP00005
Motif name:	Tcfap2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0512938

Alignment:

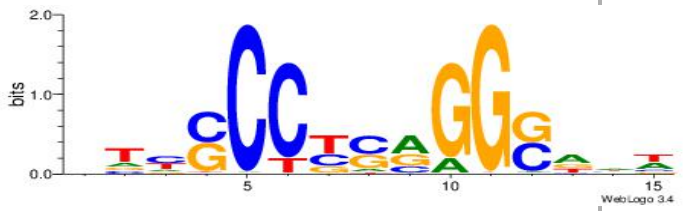
```
WDHSCCYSRGGSRAD
----GCARRGGSAGS
```

Original motif

Consensus sequence: WDHSCCYSRGGSRAD

Reverse complement motif

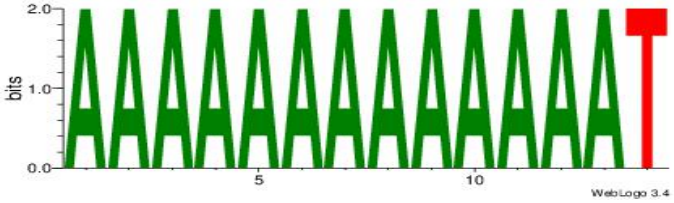
Consensus sequence: DTMSCCKSMGGSHDW



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

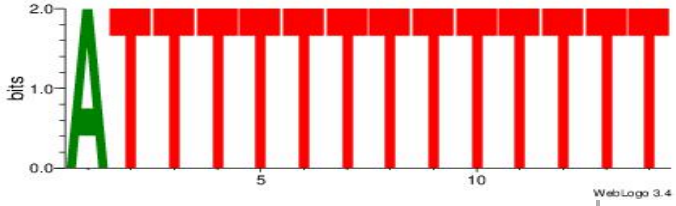
Original motif

Consensus sequence: AAAAAAAAAAAAAT



Reverse complement motif

Consensus sequence: ATTTTTTTTTTTTT



Best Matches for Motif ID 3 (Highest to Lowest)

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:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0361736

Alignment:

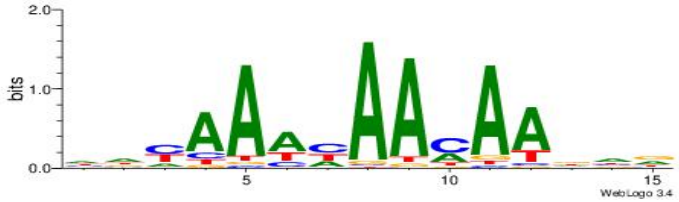
```
HHHTTRTTDTTTKDH
ATTTTTTTTTTTTT-
```

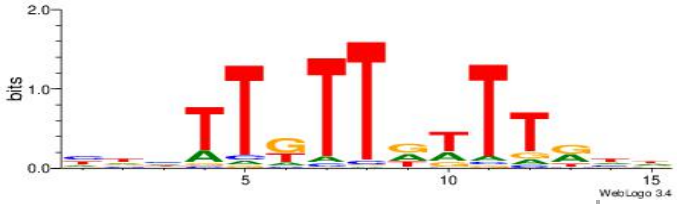
Original motif

Consensus sequence: HDYAAAHAAMAADHD

Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH





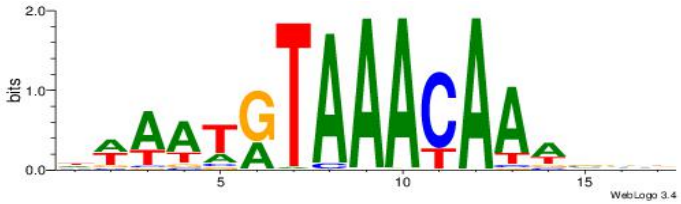
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0391439

Alignment:

```
DWAATRTAAACAAWVVB
-AAAAAAAAAAAAAT--
```

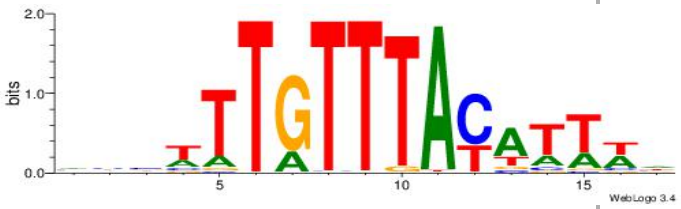
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



Motif ID:	UP00077

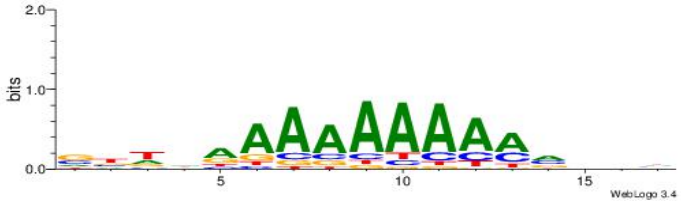
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0416036

Alignment:

```
VBDDAAAAAAAAMVBHH
--AAAAAAAAAAAAT-
```

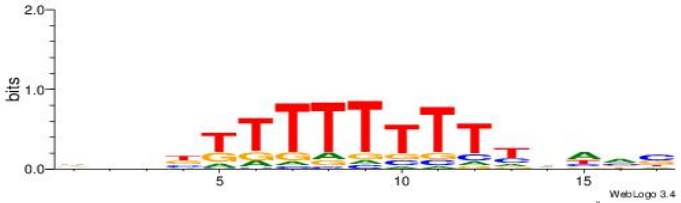
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



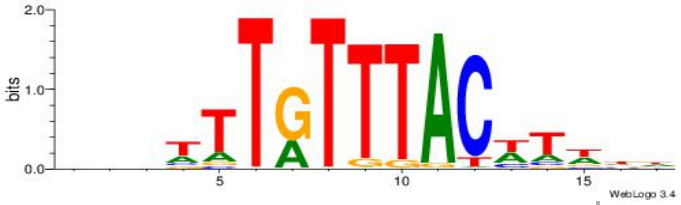
Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14

Similarity score: 0.0420875

Alignment:
BDVTTTKTTTACWTWHH
--ATTTTTTTTTTTTT-

Original motif
Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif
Consensus sequence: BDVTTTKTTTACWTWHH

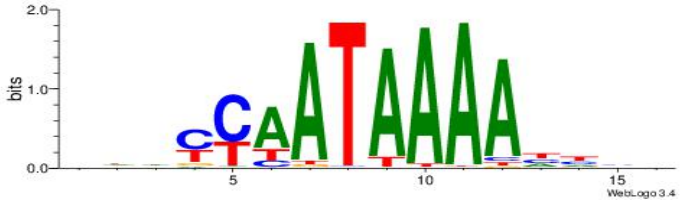


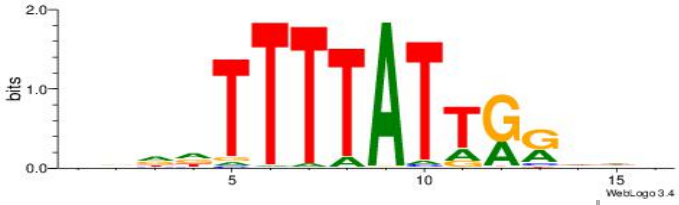
Motif ID: UP00180
Motif name: Hoxd13
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 14
Similarity score: 0.0424132

Alignment:
HDHHTTTTATTKKHDD
--ATTTTTTTTTTTTT

Original motif
Consensus sequence: HDHYYAATAAAAHHHH

Reverse complement motif
Consensus sequence: HDHHTTTTATTKKHDD





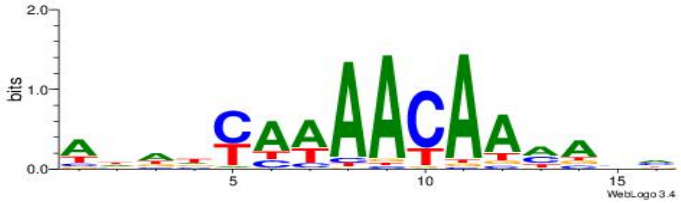
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0424666

Alignment:

```
HDTYTTGTTWTKDDDT
-ATTTTTTTTTTTTT-
```

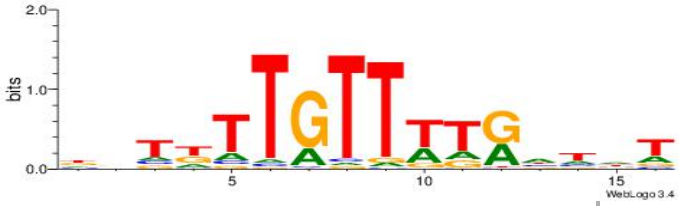
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



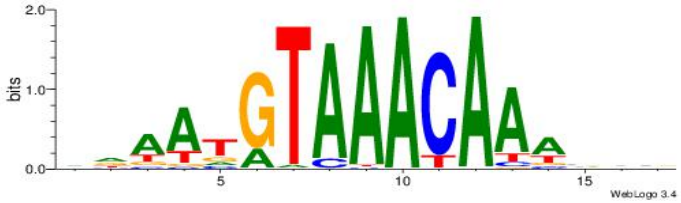
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0430608

Alignment:

```
BBVTTTGTTTACATTDD
--ATTTTTTTTTTTT-
```

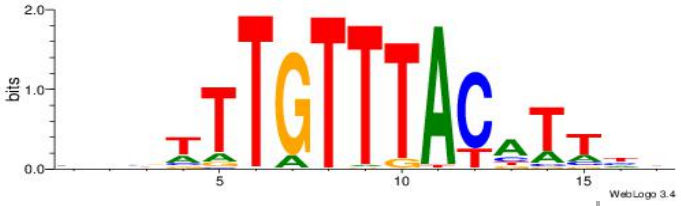
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD

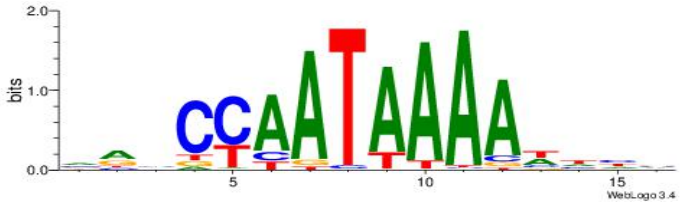


Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14

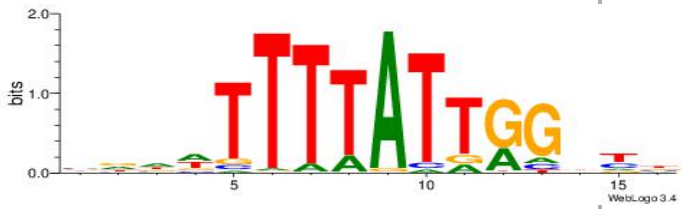
Similarity score: 0.0435537

Alignment:
VDHWTTTTATTGGDKB
--ATTTTTTTTTTTTT

Original motif
Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif
Consensus sequence: VDHWTTTTATTGGDKB

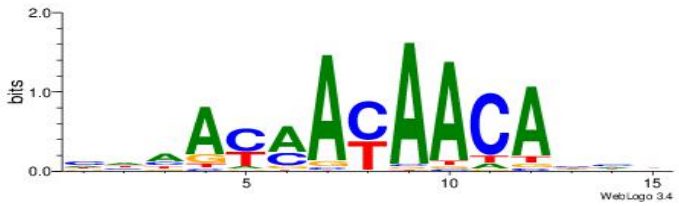


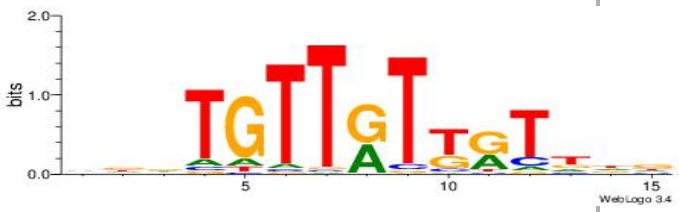
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.043907

Alignment:
HDDTGTTKTTKTHHD
ATTTTTTTTTTTTT-

Original motif
Consensus sequence: HHHAYAAYAACAHHH

Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD





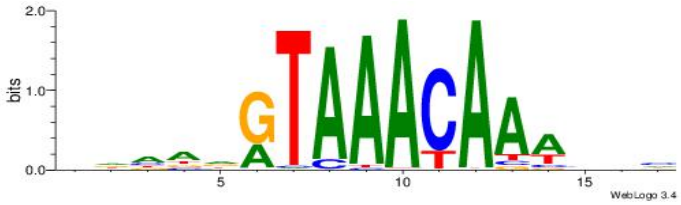
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.045165

Alignment:

```
HDHADGTAAACAAAVVH
-AAAAAAAAAAAAAT--
```

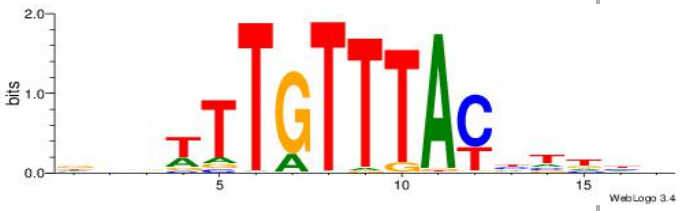
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH



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

Original motif

Consensus sequence: GGAAM

Reverse complement motif

Consensus sequence: YTTCC

Best Matches for Motif ID 4 (Highest to Lowest)

Motif ID:	UP00424
Motif name:	Gm4881
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	5
Similarity score:	0

Alignment:

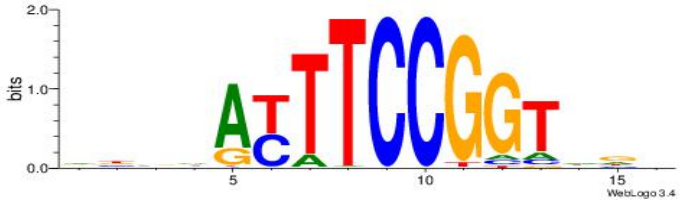
```
DHDACCGGAAMTHBVB
------GGAAM-----
```

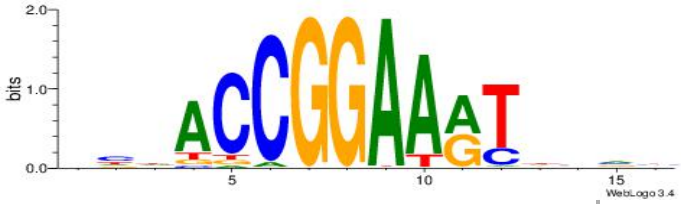
Original motif

Consensus sequence: VBBHAYTTCCGGTDDD

Reverse complement motif

Consensus sequence: DHDACCGGAAMTHBVB





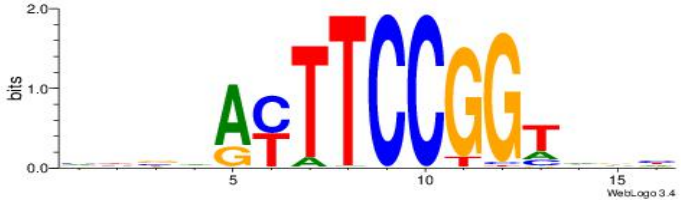
Motif ID:	UP00416
Motif name:	Fli1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.00163794

Alignment:

```
VBBVAYTTCCGGTDDH
-----YTTCC------
```

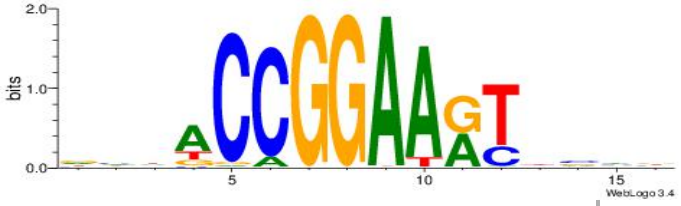
Original motif

Consensus sequence: VBBVAYTTCCGGTDDH



Reverse complement motif

Consensus sequence: DHDACCGGAAKTBBVV



Motif ID:	UP00422

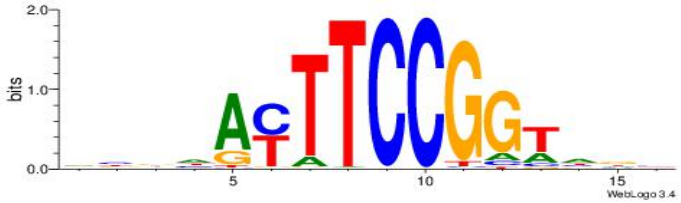
Motif name:	Etv3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.00234412

Alignment:

```
VBBHAYTTCCGGTHDH
-----YTTCC------
```

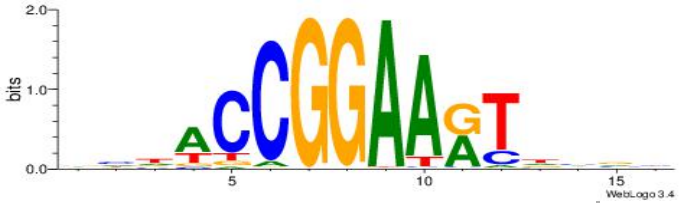
Original motif

Consensus sequence: VBBHAYTTCCGGTHDH



Reverse complement motif

Consensus sequence: DHHACCGGAAKTHBBB

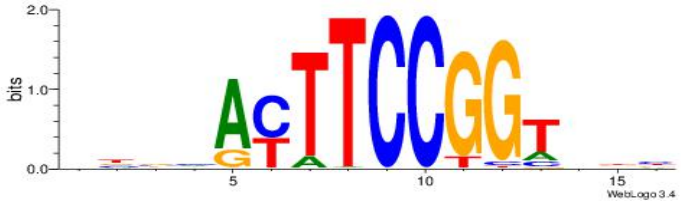


Motif ID:	UP00411
Motif name:	Erg
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5

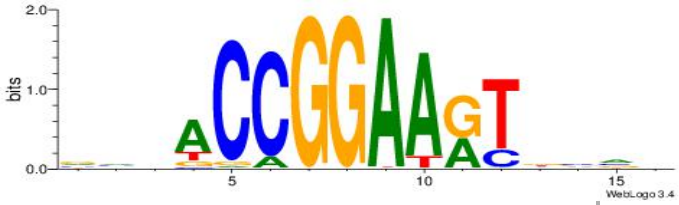
Similarity score: 0.00589761

Alignment:
VBBVAYTTCCGGTDDB
-----YTTCC------

Original motif
Consensus sequence: VBBVAYTTCCGGTDDB



Reverse complement motif
Consensus sequence: BDDACCGGAAKTVBVB

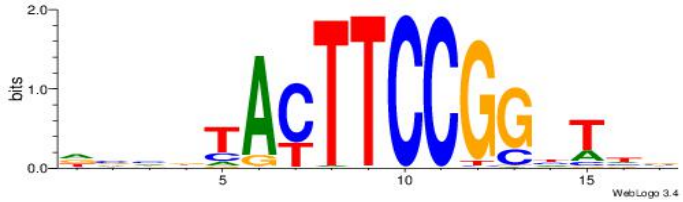


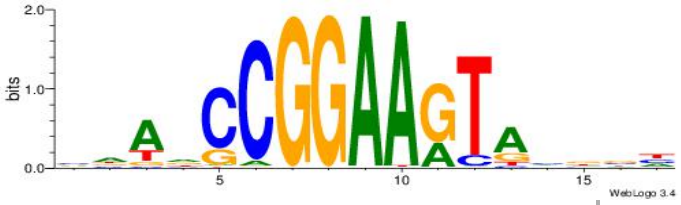
Motif ID:	UP00418
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	5
Similarity score:	0.00691345

Alignment:
DVHBTACTTCCGGHTHB
------YTTCC------

Original motif
Consensus sequence: DVHBTACTTCCGGHTHB

Reverse complement motif
Consensus sequence: BHAHCCGGAAGTABDVD





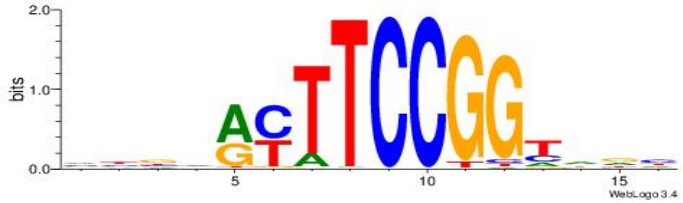
Motif ID:	UP00415
Motif name:	Elk4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.00722176

Alignment:

```
VBBHRYTTCCGGTDDH
-----YTTCC------
```

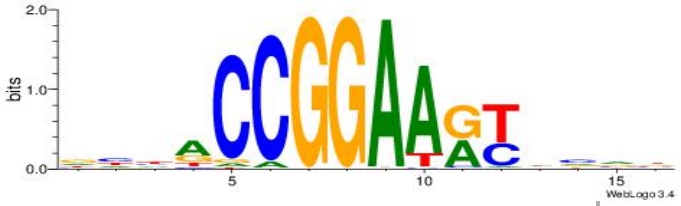
Original motif

Consensus sequence: VBBHRYTTCCGGTDDH



Reverse complement motif

Consensus sequence: DHDACCGGAAKKHBVB



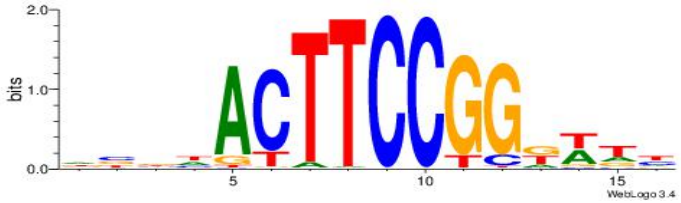
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	5
Similarity score:	0.0153114

Alignment:

```
DBBHACTTCCGGKWTH
-----YTTCC------
```

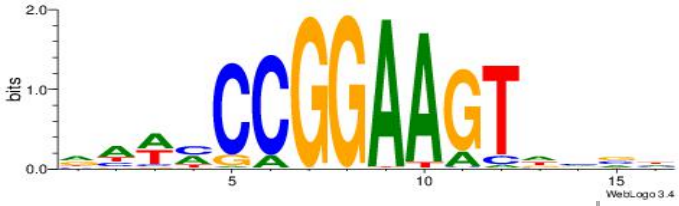
Original motif

Consensus sequence: DBBHACTTCCGGKWTH



Reverse complement motif

Consensus sequence: HAWYCCGGAAGTHBBD

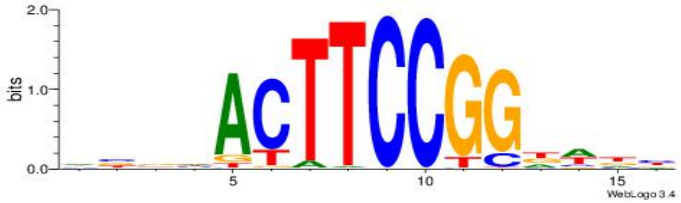


Motif ID:	UP00404
Motif name:	Elf2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7

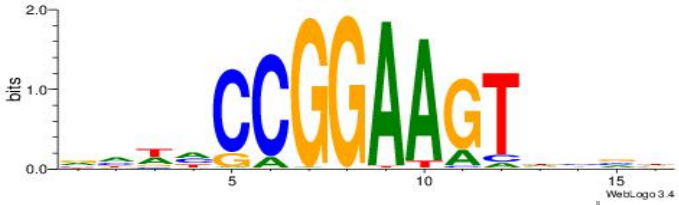
Number of overlap: 5
Similarity score: 0.0153458

Alignment:
DBBHACTTCCGGDWDB
-----YTTCC------

Original motif
Consensus sequence: DBBHACTTCCGGDWDB



Reverse complement motif
Consensus sequence: BDWDCCGGAAGTHBBD



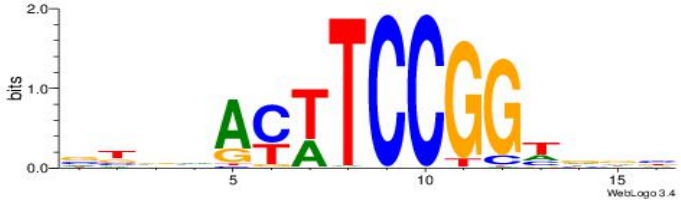
Motif ID: UP00417
Motif name: Etv4
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 5
Similarity score: 0.0219684

Alignment:
VBBHAYWTCCGGTDDB
-----YTTCC------

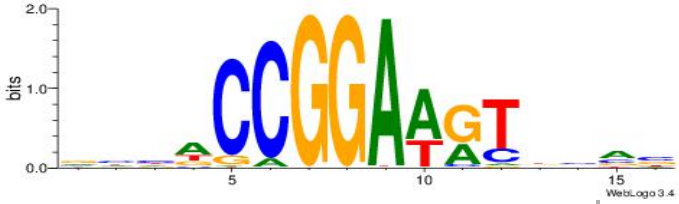
Original motif

Reverse complement motif

Consensus sequence: VBBHAYWTCCGGTDDB



Consensus sequence: BHHACCGGAWKTHBVV



Motif ID:	UP00419
Motif name:	Spic
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:	5
Similarity score:	0.0224017

Alignment:

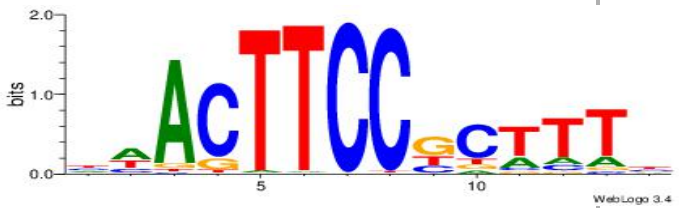
```
DWACTTCCRCTTTB
---YTTCC------
```

Original motif

Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif

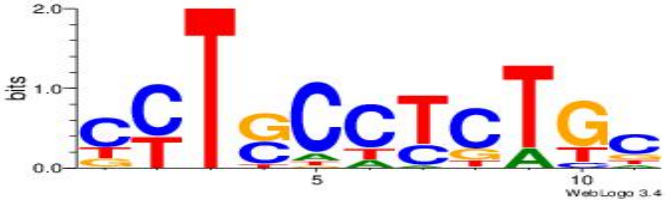
Consensus sequence: DWACTTCCRCTTTB



Dataset #: 2 **Motif ID: 5** **Motif name: Motif 5**

Original motif

Consensus sequence: CYTSCCTCTGC



Reverse complement motif

Consensus sequence: GCAGAGGSAKG

Best Matches for Motif ID 5 (Highest to Lowest)

Motif ID:	UP00043
Motif name:	Bcl6b_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:	11
Similarity score:	0.0313012

Alignment:

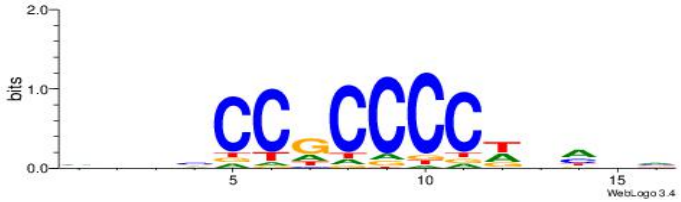
```
HBBBCCGCCCCWHHHV
---CYTSCCTCTGC--
```

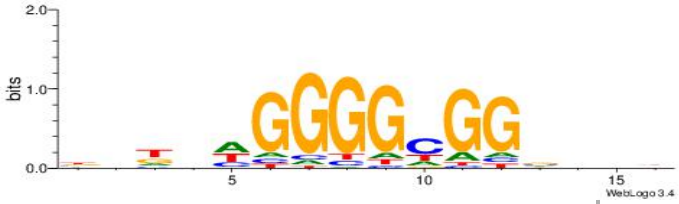
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH





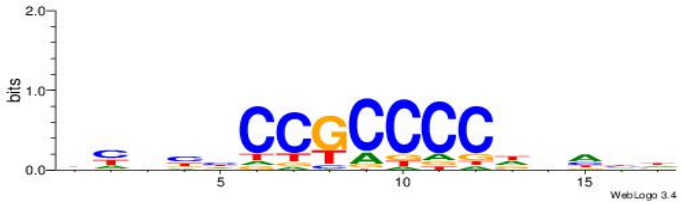
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0317134

Alignment:

```
BHHBHCCGCCCCDHHHH
----CYTSCCTCTGC--
```

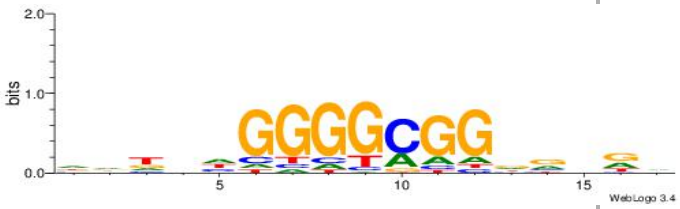
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID:	UP00013

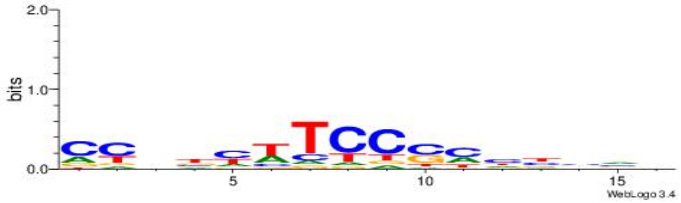
Motif name:	Gabpa_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0322746

Alignment:

```
CYDBYWTCCSMHBVVH
----CYTSCCTCTGC-
```

Original motif

Consensus sequence: CYDBYWTCCSMHBVVH



Reverse complement motif

Consensus sequence: DBVVDRSGGAWKVHKG

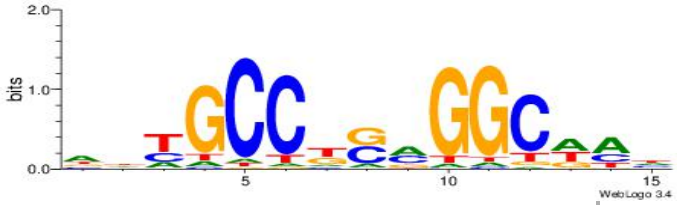
Motif ID:	UP00010
Motif name:	Tcfap2b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11

Similarity score: 0.0336419

Alignment:
HHKGCCYSRGGCWAD
CYTSCCTCTGC----

Original motif
Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif
Consensus sequence: HHKGCCYSRGGCWAD

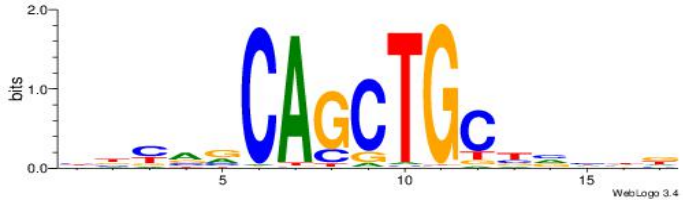


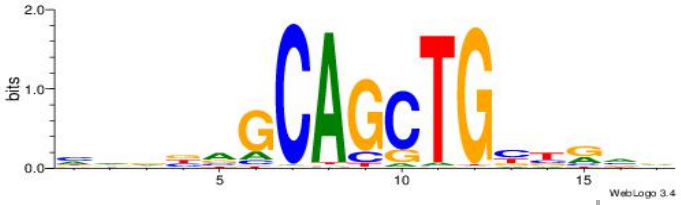
Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0343277

Alignment:
HHDVVGCAGCTGVBKVB
-----GCAGAGGSAKG-

Original motif
Consensus sequence: BBYVVCAGCTGCBVHHD

Reverse complement motif
Consensus sequence: HHDVVGCAGCTGVBKVB





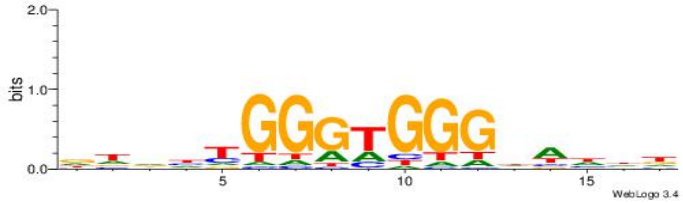
Motif ID:	UP00096
Motif name:	Sox13_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0359879

Alignment:

```
DHHTHCCCACCCAHDDH
------CYTSCCTCTGC
```

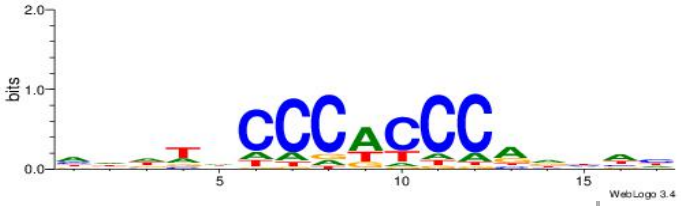
Original motif

Consensus sequence: DDDHTGGGTGGGHAHHD



Reverse complement motif

Consensus sequence: DHHTHCCCACCCAHDDH



Motif ID:	UP00085
Motif name:	Sfpi1_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:	0.036078

Alignment:

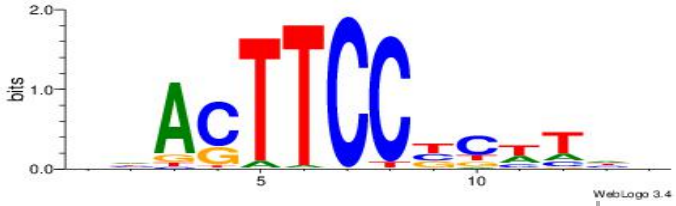
```
HDACTTCCBCWTDV
---CYTSCCTCTGC
```

Original motif

Consensus sequence: BDAWGVGGAAGTDH

Reverse complement motif

Consensus sequence: HDACTTCCBCWTDV

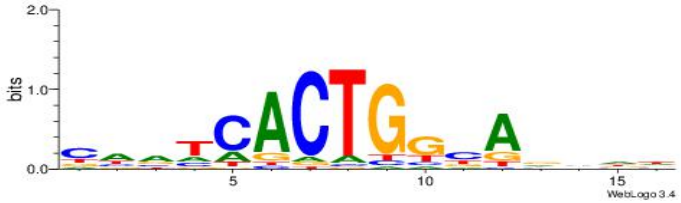


Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

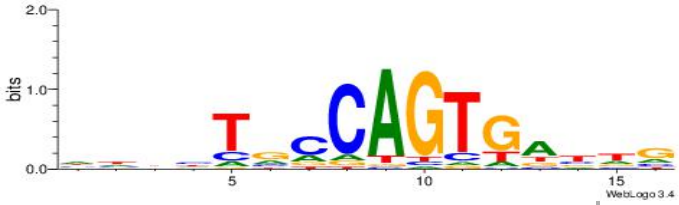
Number of overlap: 11
Similarity score: 0.0369028

Alignment:
DDHHTBCCAGTGABHG
--CYTSCCTCTGC---

Original motif
Consensus sequence: CHVTCACTGGBADHDD



Reverse complement motif
Consensus sequence: DDHHTBCCAGTGABHG



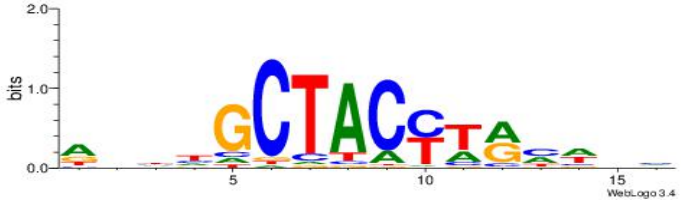
Motif ID: UP00052
Motif name: Osr2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0370849

Alignment:
VDWRKAKGTAGCHHDT
-GCAGAGGSAKG----

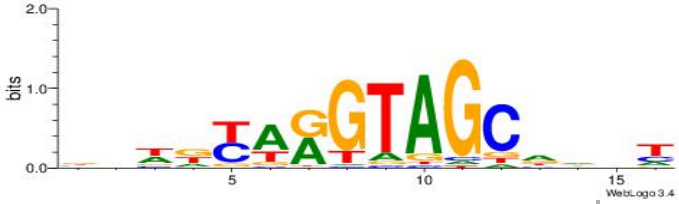
Original motif

Reverse complement motif

Consensus sequence: AHHHGCTACYTRMWHV



Consensus sequence: VDWRKAKGTAGCHHDT



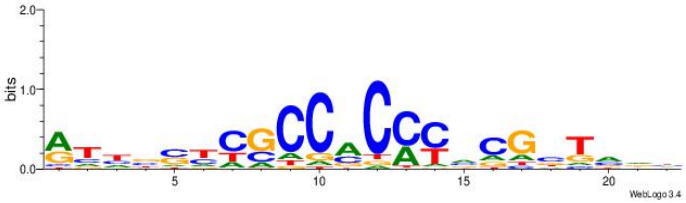
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0381821

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
-------CYTSCCTCTGC----
```

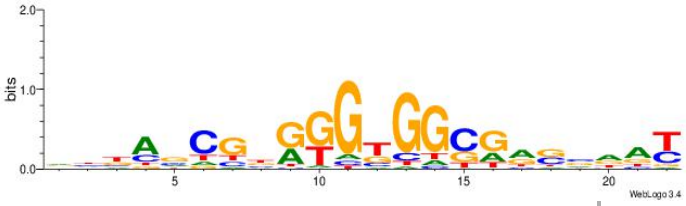
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



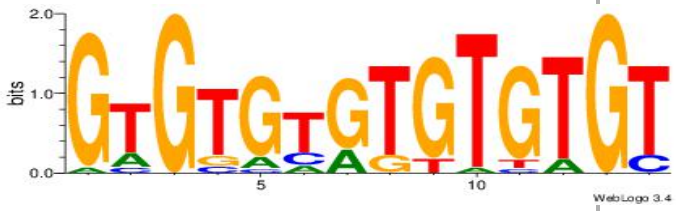
Dataset #: 2 **Motif ID: 6** **Motif name: Motif 6**

Original motif

Consensus sequence: ACACACACACACAC

Reverse complement motif

Consensus sequence: GTGTGTGTGTGTGT



Best Matches for Motif ID 6 (Highest to Lowest)

Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0391499

Alignment:

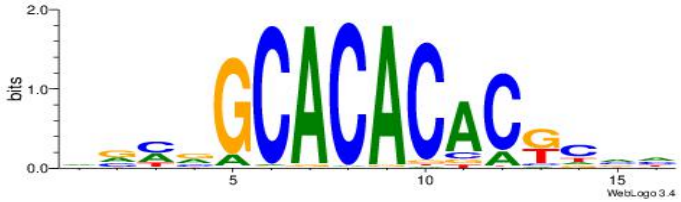
```
HBGYGTGTGTGCVRVD
GTGTGTGTGTGTGT--
```

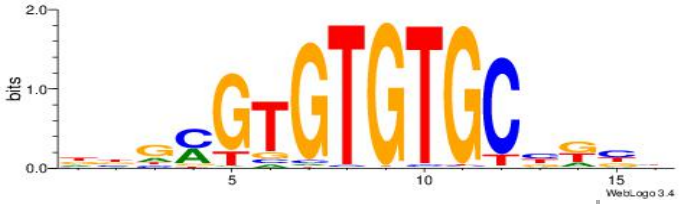
Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD





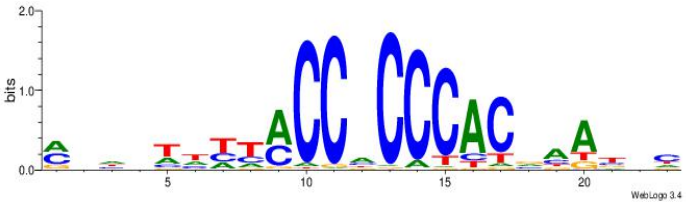
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	14
Similarity score:	0.043857

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
---------ACACACACACACAC
```

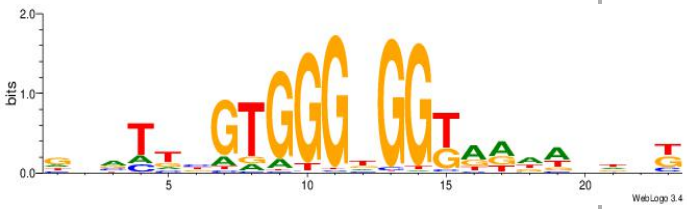
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID:	UP00026

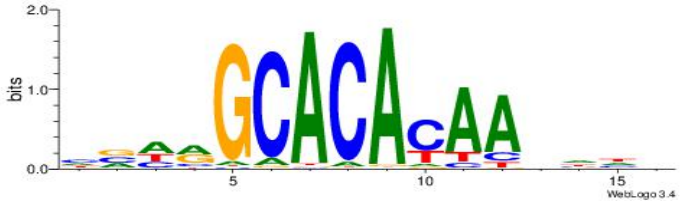
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0468808

Alignment:

```
BHHHTTGTGTGCKHVD
GTGTGTGTGTGTGT--
```

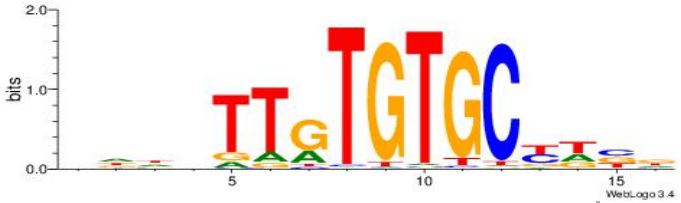
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD

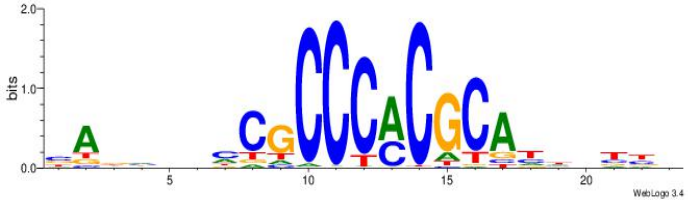


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	14

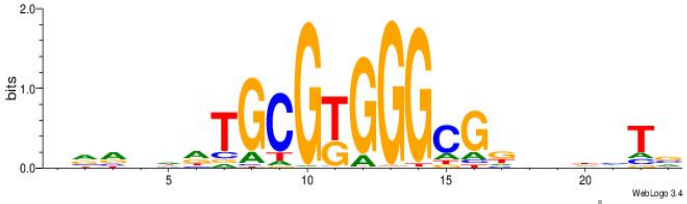
Similarity score: 0.0479337

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
------ACACACACACACAC---

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

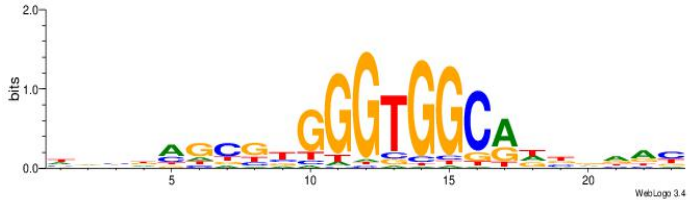


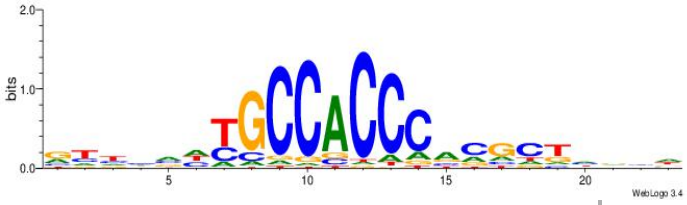
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0485959

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-GTGTGTGTGTGTGT--------

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





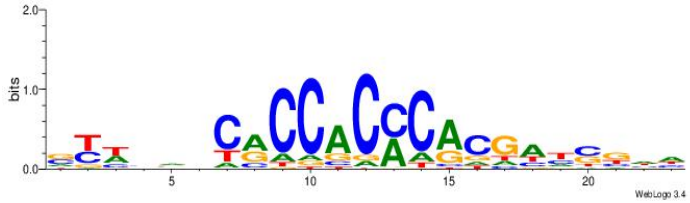
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	14
Similarity score:	0.0526961

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
--ACACACACACACAC-------
```

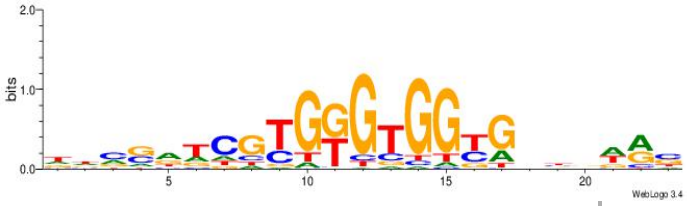
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID: UP00036

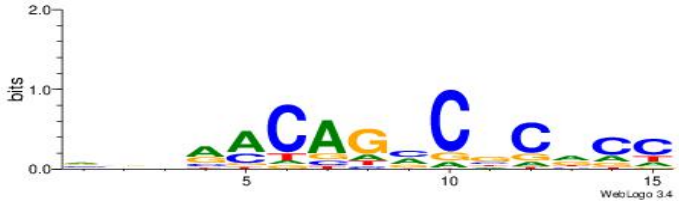
Motif name:	Myf6_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0540872

Alignment:

```
VVVRACAGVCBCDCC
ACACACACACACAC-
```

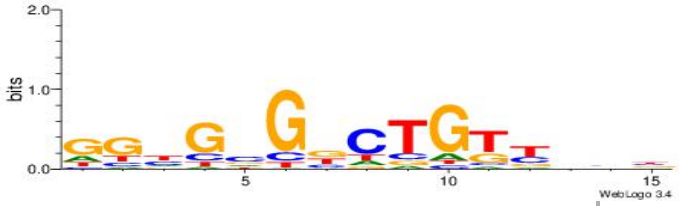
Original motif

Consensus sequence: VVVRACAGVCBCDCC



Reverse complement motif

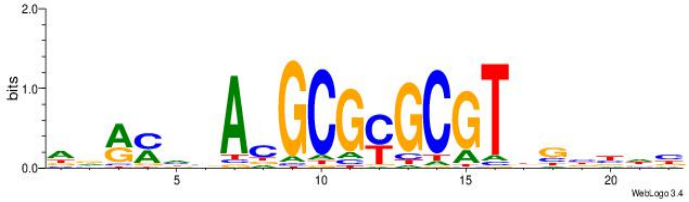
Consensus sequence: GGDGBGVCTGTKVVB



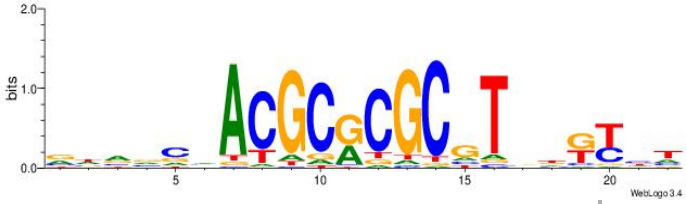
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	14
Similarity score:	0.0550075

Alignment:
DDRMHBACGCGYGCGTDGBBDB
ACACACACACACAC--------

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

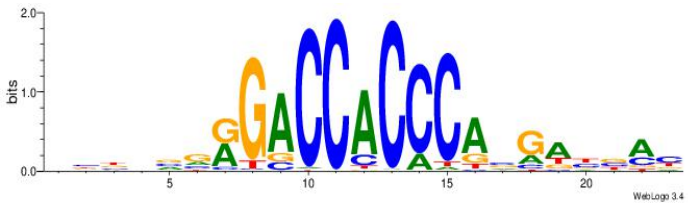


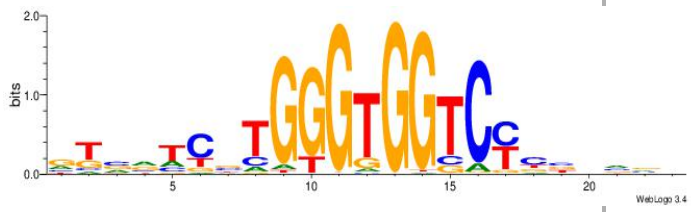
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.055413

Alignment:
BBBDVVRGACCACCCAVGABBAB
---------ACACACACACACAC

Original motif
Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB





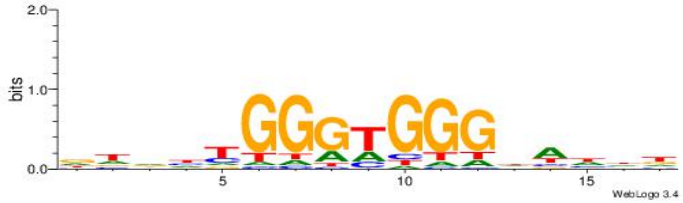
Motif ID:	UP00096
Motif name:	Sox13_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0582564

Alignment:

```
DDDHTGGGTGGGHAHHD
ACACACACACACAC---
```

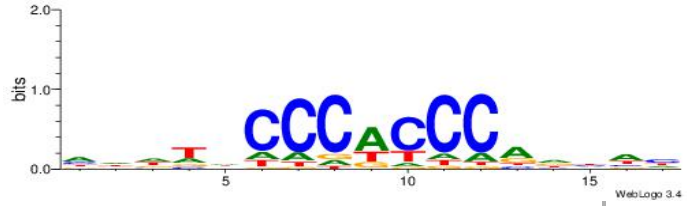
Original motif

Consensus sequence: DDDHTGGGTGGGHAHHD



Reverse complement motif

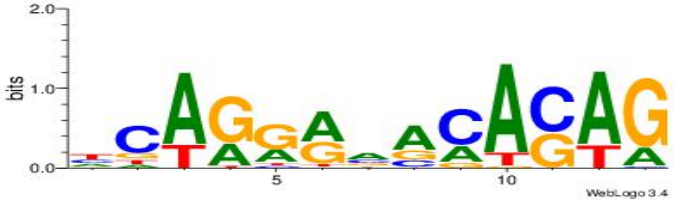
Consensus sequence: DHHTHCCCACCCAHDDH



Dataset #: 2 **Motif ID: 7** **Motif name: Motif 7**

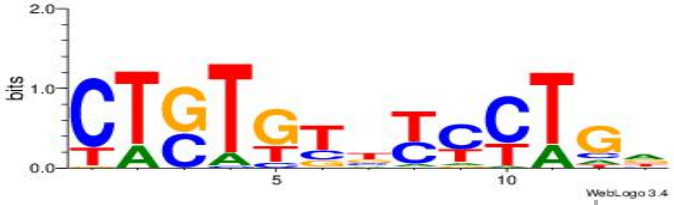
Original motif

Consensus sequence: HCAGRRVACASAG



Reverse complement motif

Consensus sequence: CTSTGTBKMCTGH



Best Matches for Motif ID 7 (Highest to Lowest)

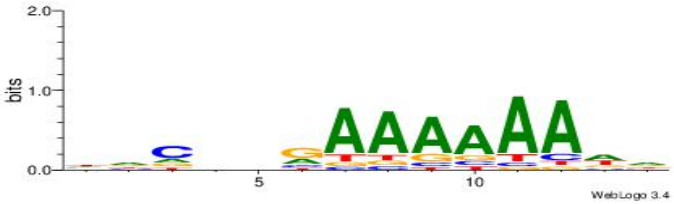
Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0445121

Alignment:

```
HDCDBRAAAAAADD
-HCAGRRVACASAG
```

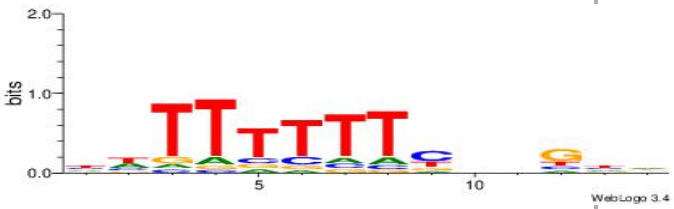
Original motif

Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif

Consensus sequence: DDTTTTTTMBDGDH



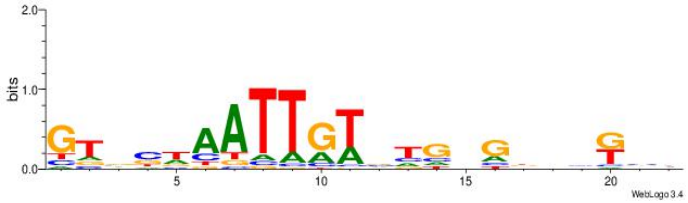
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	13
Similarity score:	0.0448793

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
---------CTSTGTBKMCTGH
```

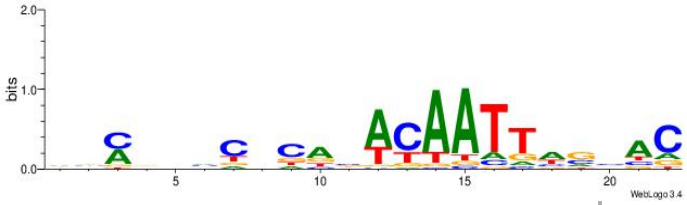
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

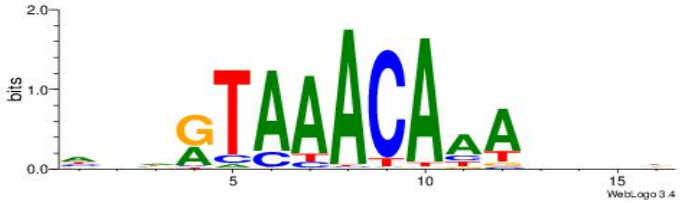


Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

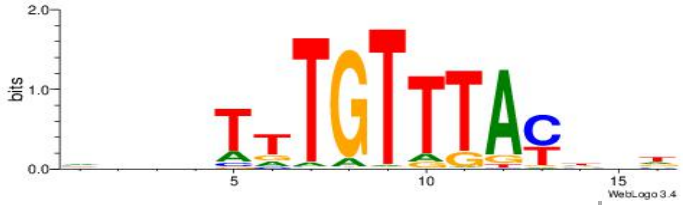
Number of overlap: 13
Similarity score: 0.0454552

Alignment:
DDDHTTTGTTTAMHDH
---CTSTGTBKMCTGH

Original motif
Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif
Consensus sequence: DDDHTTTGTTTAMHDH



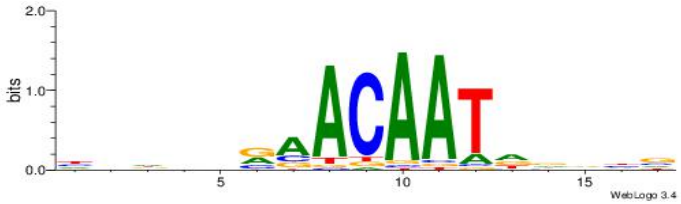
Motif ID: UP00016
Motif name: Sry_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 13
Similarity score: 0.0481412

Alignment:
HHDHDRAACAATDDVHV
HCAGRRVACASAG----

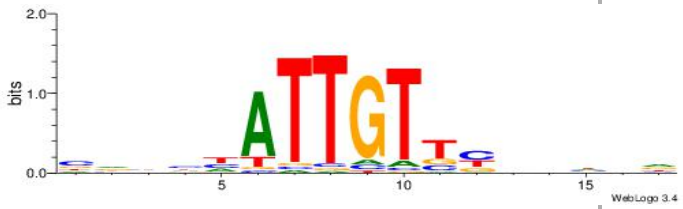
Original motif

Reverse complement motif

Consensus sequence: HHDHDRAACAATDDVHV



Consensus sequence: VHVHDATTGTTMHDDDH



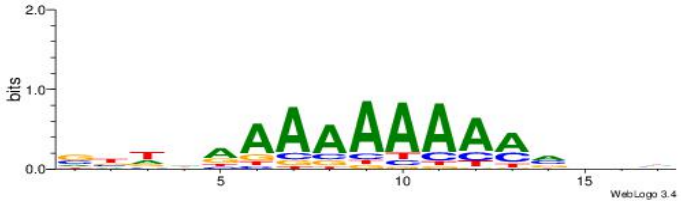
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.0545707

Alignment:

```
VBDDAAAAAAAAMVBHH
-HCAGRRVACASAG---
```

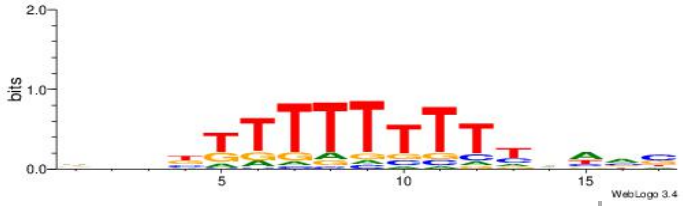
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



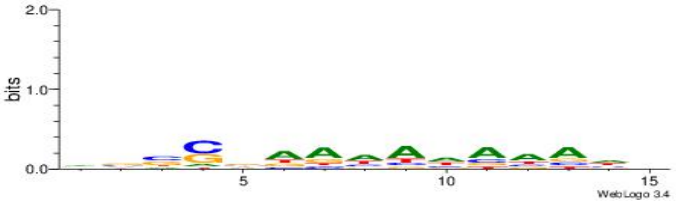
Motif ID:	UP00058
Motif name:	Tcf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0553073

Alignment:

```
DVBSBDAHAHAHAHH
-HCAGRRVACASAG-
```

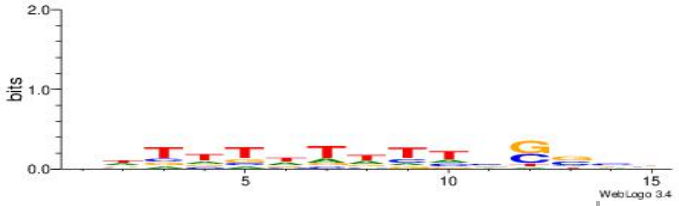
Original motif

Consensus sequence: DVBSBDAHAHAHAHH



Reverse complement motif

Consensus sequence: HHTHTHTHTDBSBVD

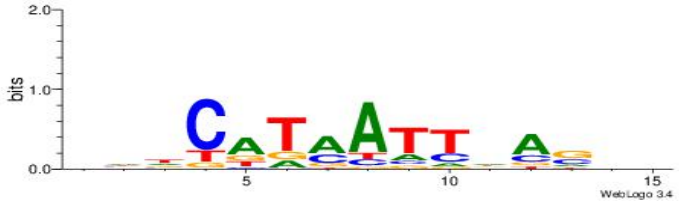


Motif ID:	UP00091
Motif name:	Sox5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

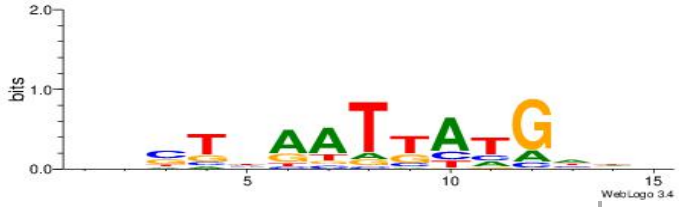
Number of overlap: 13
Similarity score: 0.0562585

Alignment:
DHDCATMATTDASDD
--HCAGRRVACASAG

Original motif
Consensus sequence: DHDCATMATTDASDD



Reverse complement motif
Consensus sequence: DHSTDAATYATGDHD



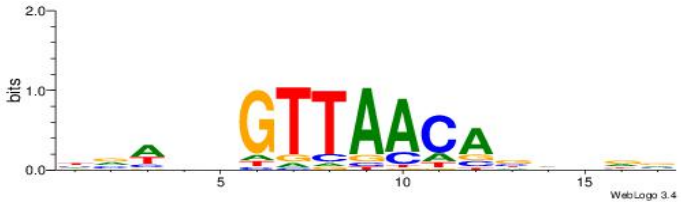
Motif ID: UP00012
Motif name: Bbx_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 13
Similarity score: 0.0564984

Alignment:
VHVHBTGTTAACVHWVH
--CTSTGTBKMCTGH--

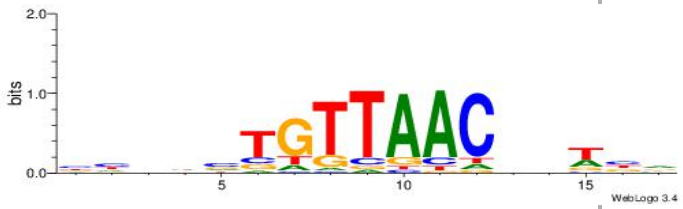
Original motif

Reverse complement motif

Consensus sequence: HVWHBGTTAACABHBDV



Consensus sequence: VHVHBTGTTAACVHWVH



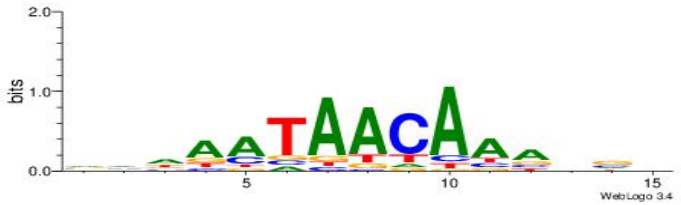
Motif ID:	UP00073
Motif name:	Foxa2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0571073

Alignment:

```
VVDAATAACAAAVVB
HCAGRRVACASAG--
```

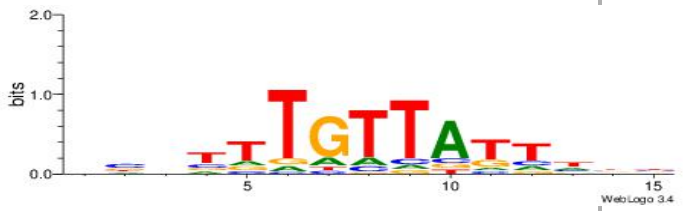
Original motif

Consensus sequence: VVDAATAACAAAVVB



Reverse complement motif

Consensus sequence: BVVTTTGTTATTDBB



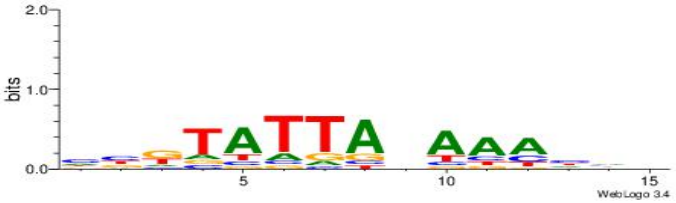
Motif ID:	UP00054
Motif name:	Tcf7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0574997

Alignment:

```
HHDTTTVTAATAYBD
CTSTGTBKMCTGH--
```

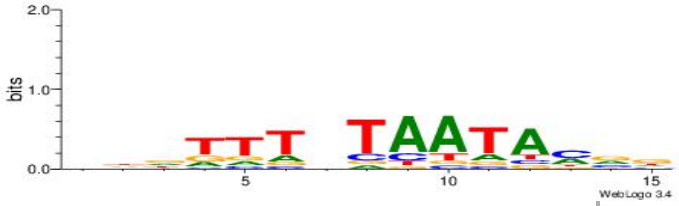
Original motif

Consensus sequence: HBKTATTABAAAHHH



Reverse complement motif

Consensus sequence: HHDTTTVTAATAYBD



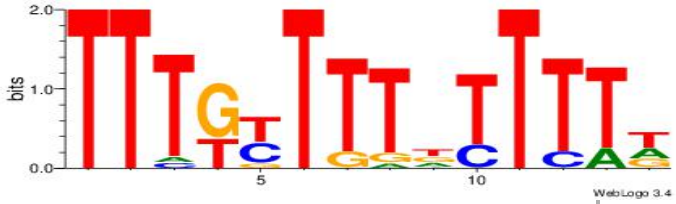
Dataset #: 2 Motif ID: 8 Motif name: Motif 8

Original motif

Consensus sequence: HAAAAHAAARMAAA

Reverse complement motif

Consensus sequence: TTTRKTTTHTTTTH



Best Matches for Motif ID 8 (Highest to Lowest)

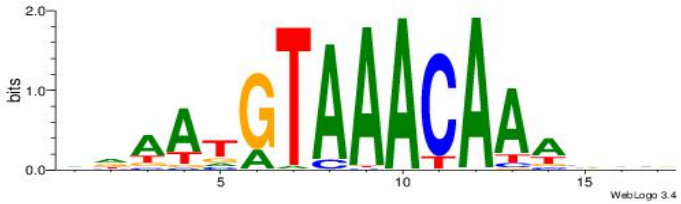
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0212263

Alignment:

```
BBVTTTGTTTACATTDD
---TTTRKTTTHTTTTH
```

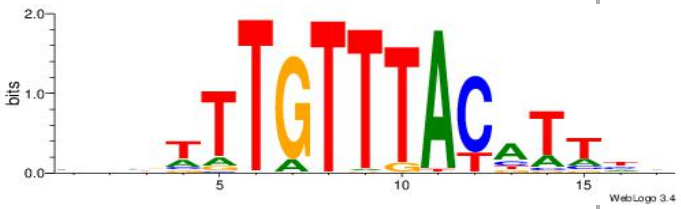
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



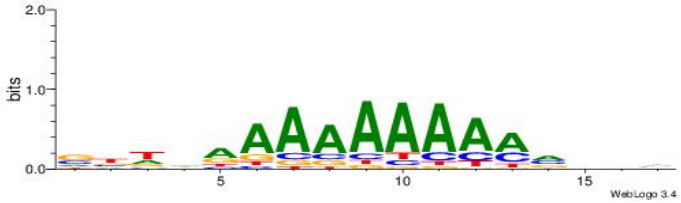
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0216448

Alignment:

```
VBDDAAAAAAAAMVBHH
---HAAAAHAAARMAAA
```

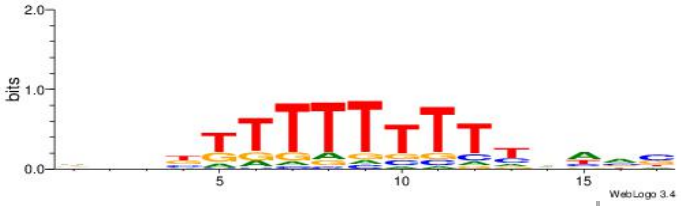
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV

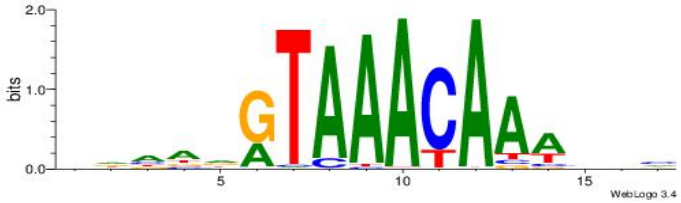


Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4

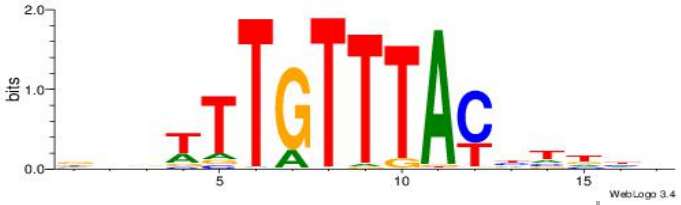
Number of overlap: 14
Similarity score: 0.0216826

Alignment:
DVVTTTGTTTACDTHDH
---TTTRKTTTHTTTTH

Original motif
Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH



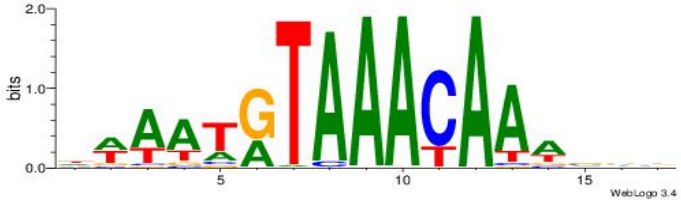
Motif ID: UP00061
Motif name: Foxl1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0232085

Alignment:
VVVWTTGTTTAMATTWD
---TTTRKTTTHTTTTH

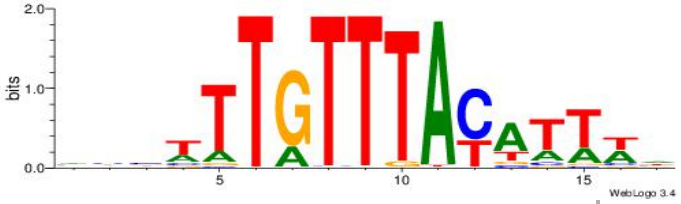
Original motif

Reverse complement motif

Consensus sequence: DWAATRTAAACAAWVVB



Consensus sequence: VVVWTTGTTTAMATTWD



Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.025394

Alignment:

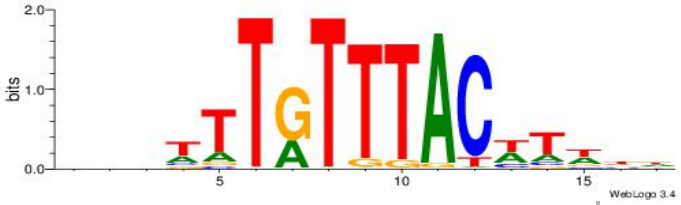
```
BDVTTTKTTTACWTWHH
---TTTRKTTTHTTTTH
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID: UP00025

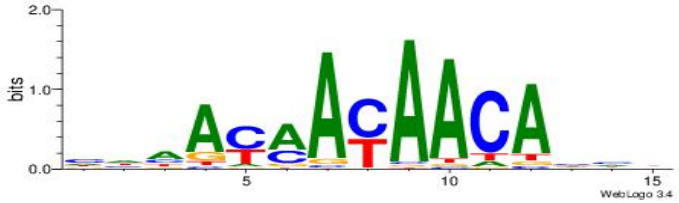
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0257356

Alignment:

```
HDDTGTTKTTKTHHD
-TTTRKTTTHTTTTH
```

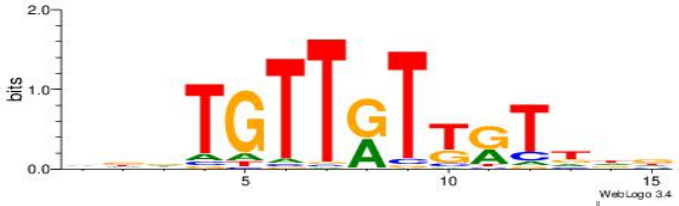
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD

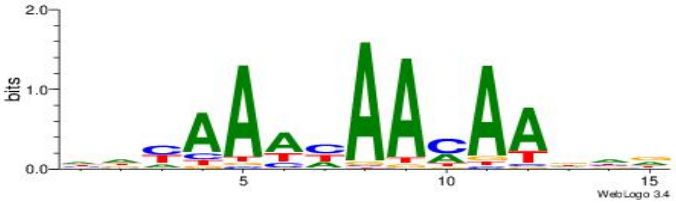


Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14

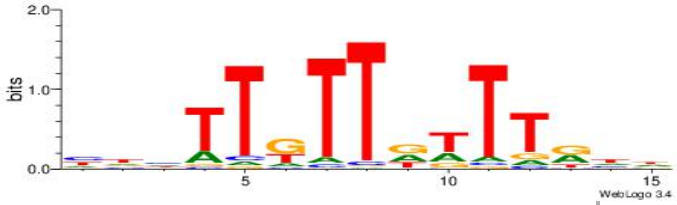
Similarity score: 0.0280765

Alignment:
HHHTTRTTDTTTKDH
-TTTRKTTTHTTTTH

Original motif
Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif
Consensus sequence: HHHTTRTTDTTTKDH

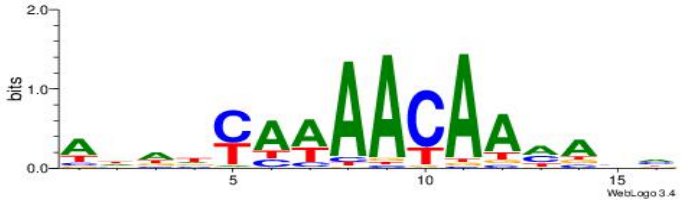


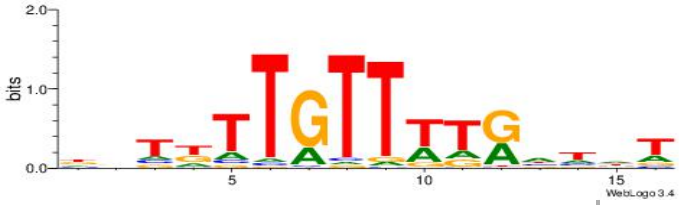
Motif ID: UP00061
Motif name: Foxl1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0284931

Alignment:
HDTYTTGTTWTKDDDT
--TTTRKTTTHTTTTH

Original motif
Consensus sequence: ADDDYAWAACAAMAHH

Reverse complement motif
Consensus sequence: HDTYTTGTTWTKDDDT





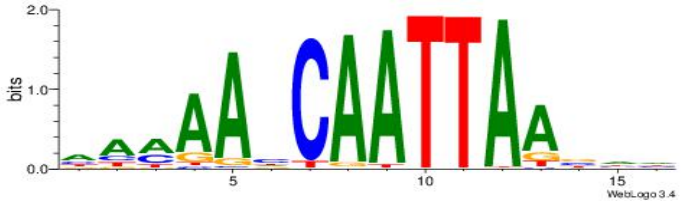
Motif ID:	UP00145
Motif name:	Barhl2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.031537

Alignment:

```
HHBTTAATTGDTTYTH
--TTTRKTTTHTTTTH
```

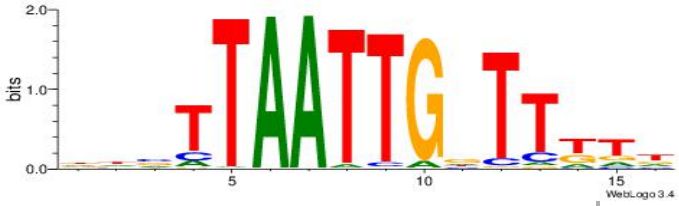
Original motif

Consensus sequence: HAMAAHCAATTAABHH



Reverse complement motif

Consensus sequence: HHBTTAATTGDTTYTH



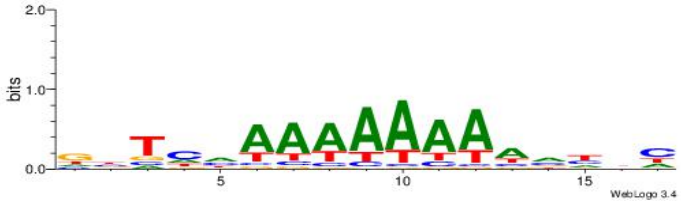
Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0324424

Alignment:

```
DBTHHAAAAAAAAVHDH
---HAAAAHAAARMAAA
```

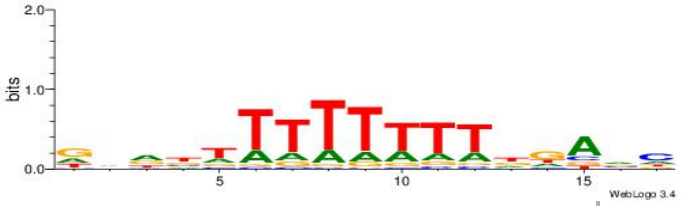
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



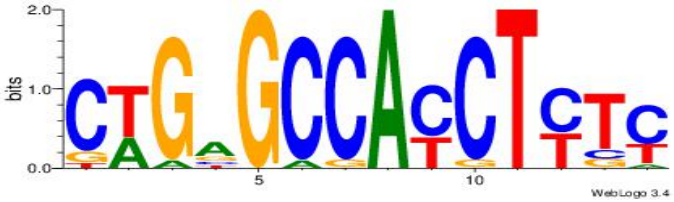
Dataset #: 2 Motif ID: 9 Motif name: Motif 9

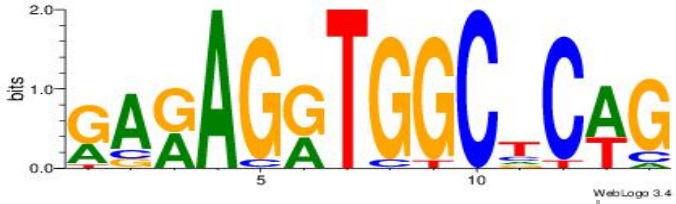
Original motif

Consensus sequence: CWGAGCCAYCTYTC

Reverse complement motif

Consensus sequence: GAKAGKTGGCTCWG





Best Matches for Motif ID 9 (Highest to Lowest)

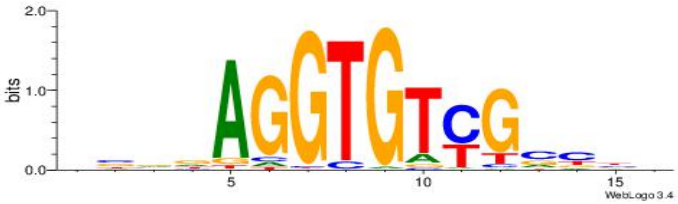
Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0120339

Alignment:

```
VBVDAGGTGTYGVBBV
-GAKAGKTGGCTCWG-
```

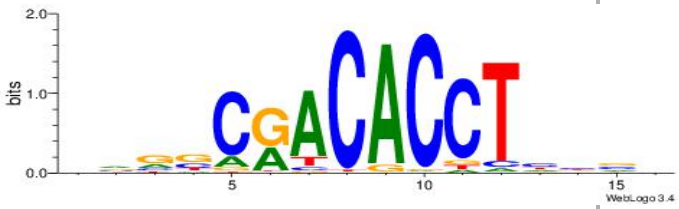
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV



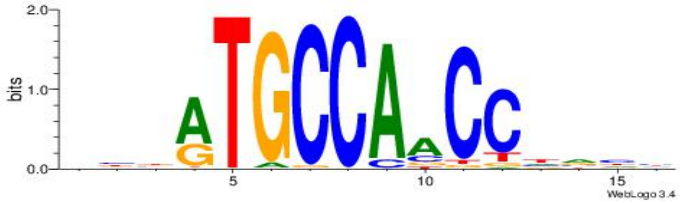
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0137859

Alignment:

```
DBBATGCCAACCHVHH
-CWGAGCCAYCTYTC-
```

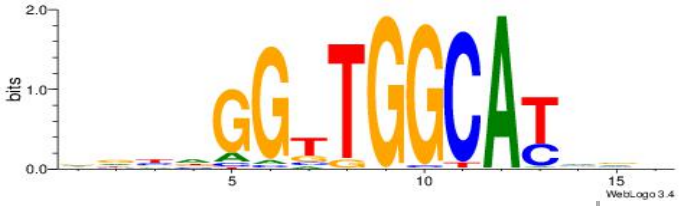
Original motif

Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD

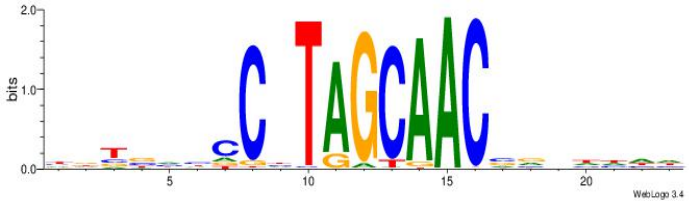


Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

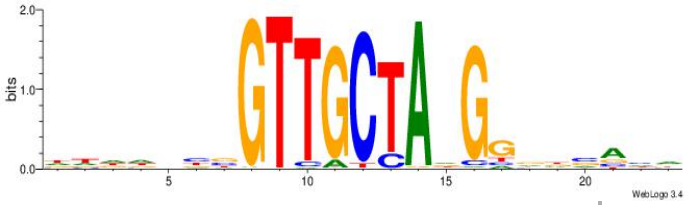
Number of overlap: 14
Similarity score: 0.017234

Alignment:
HHHHDVVGTTGCTAHGGDHBAHH
--GAKAGKTGGCTCWG-------

Original motif
Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif
Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



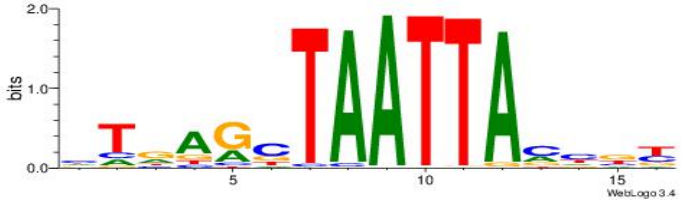
Motif ID: UP00264
Motif name: Hoxa1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0174544

Alignment:
MBDRTAATTAGCTHAD
--GAKAGKTGGCTCWG

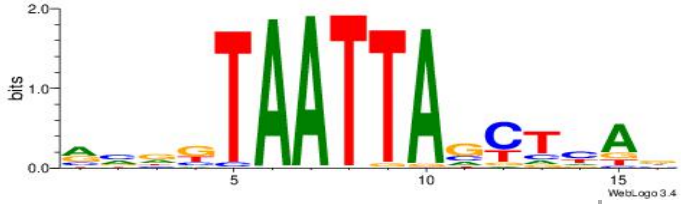
Original motif

Reverse complement motif

Consensus sequence: HTDAGCTAATTAMHBY



Consensus sequence: MBDRTAATTAGCTHAD



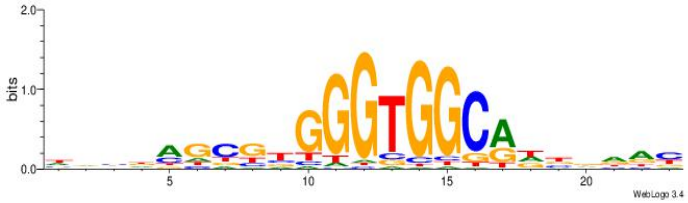
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	14
Similarity score:	0.0187141

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
---CWGAGCCAYCTYTC------
```

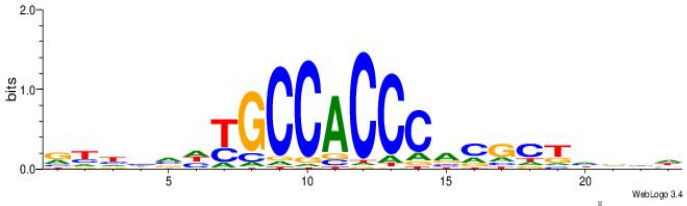
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



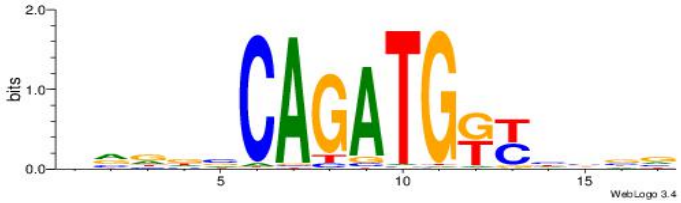
Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0198398

Alignment:

```
HVDDVCAGATGKYHBBV
---GAKAGKTGGCTCWG
```

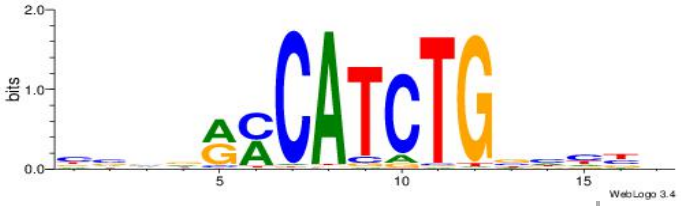
Original motif

Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif

Consensus sequence: VBBDMYCATCTGVHHBH

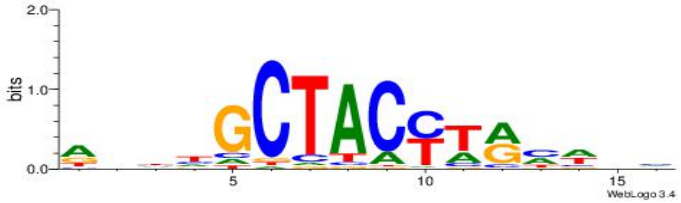


Motif ID:	UP00052
Motif name:	Osr2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

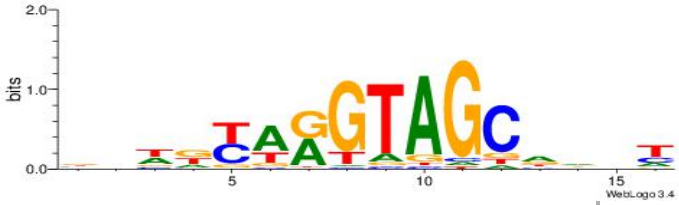
Number of overlap: 14
Similarity score: 0.0203442

Alignment:
VDWRKAKGTAGCHHDT
--GAKAGKTGGCTCWG

Original motif
Consensus sequence: AHHHGCTACYTRMWHV



Reverse complement motif
Consensus sequence: VDWRKAKGTAGCHHDT



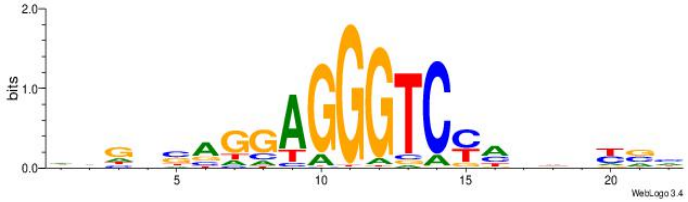
Motif ID: UP00539
Motif name: Gli2_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 7
Number of overlap: 14
Similarity score: 0.0208381

Alignment:
DVMHHDHKGACCCTCCTSVCBH
------CWGAGCCAYCTYTC--

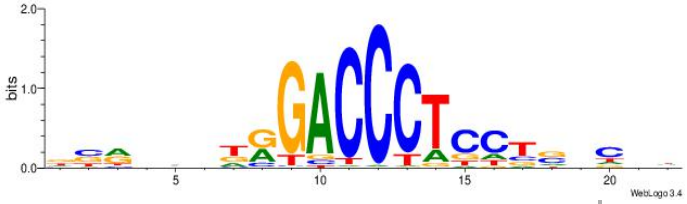
Original motif

Reverse complement motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



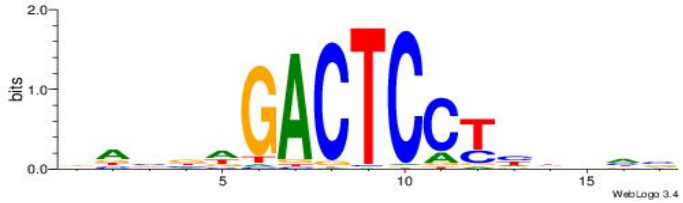
Motif ID:	UP00095
Motif name:	Zfp691_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0209451

Alignment:

```
VHBDDAGGAGTCWBBTD
--GAKAGKTGGCTCWG-
```

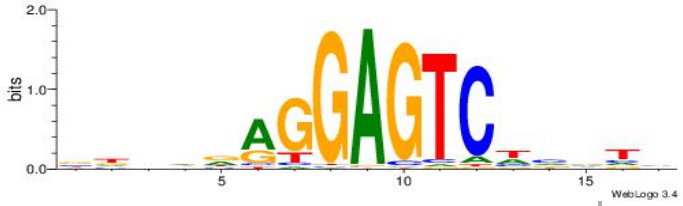
Original motif

Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD



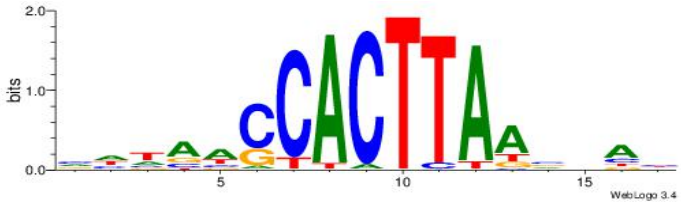
Motif ID:	UP00228
Motif name:	Bapx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0212049

Alignment:

```
DTBVTTAAGTGGTTHHV
---GAKAGKTGGCTCWG
```

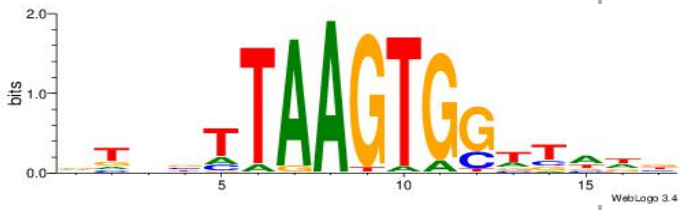
Original motif

Consensus sequence: VHHAACCACTTAAVVAH



Reverse complement motif

Consensus sequence: DTBVTTAAGTGGTTHHV



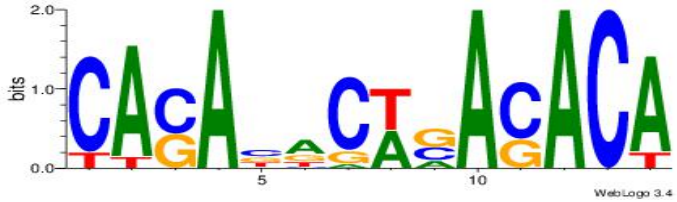
Dataset #: 2 Motif ID: 10 Motif name: Motif 10

Original motif

Consensus sequence: CASABACWSACACA

Reverse complement motif

Consensus sequence: TGTGTSWGTBTSTG



Best Matches for Motif ID 10 (Highest to Lowest)

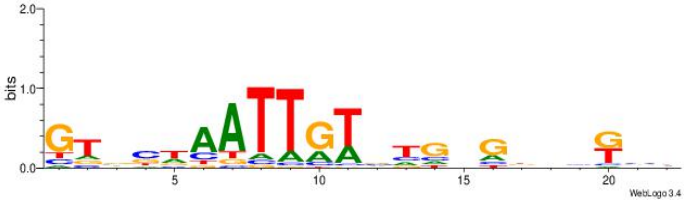
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0357045

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
CASABACWSACACA--------
```

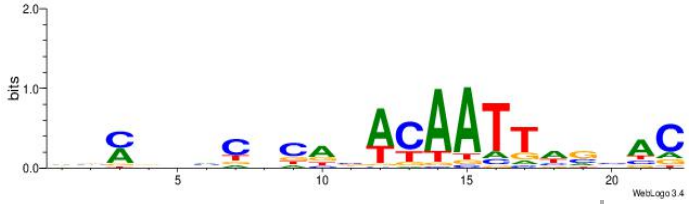
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



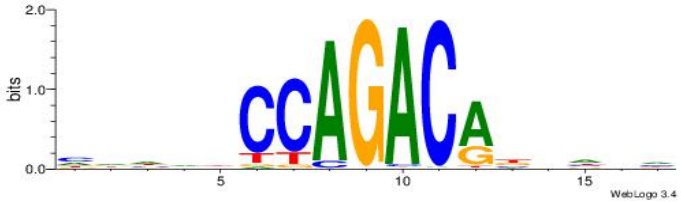
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0482294

Alignment:

```
HVHBVTGTCTGGDDHDD
---TGTGTSWGTBTSTG
```

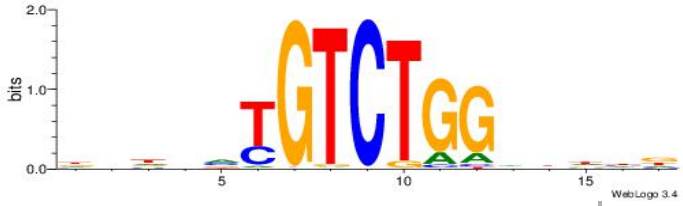
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD

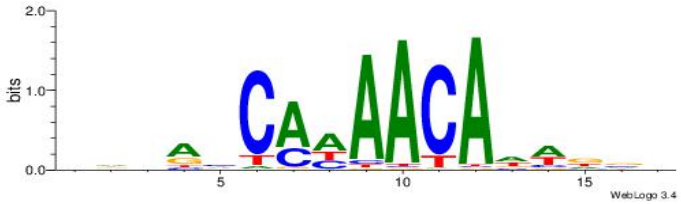


Motif ID:	UP00039
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14

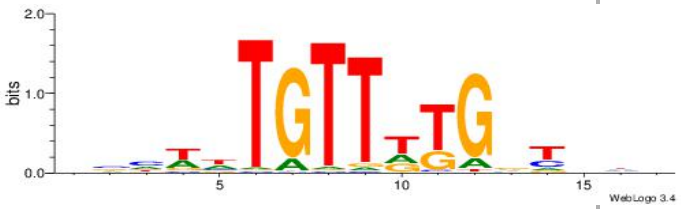
Similarity score: 0.0493845

Alignment:
HDBAHCAWAACADWDVD
CASABACWSACACA---

Original motif
Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif
Consensus sequence: DVHWDTGTTWTGDTBDH

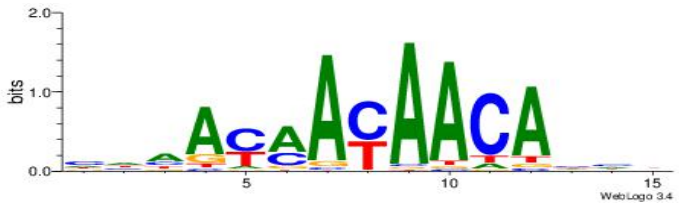


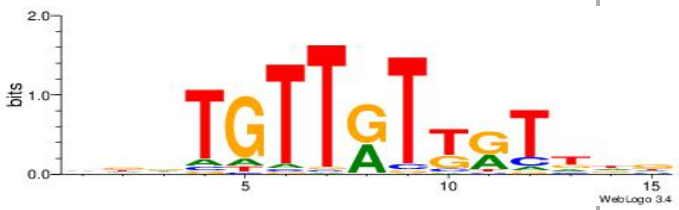
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0507431

Alignment:
HHHAYAAYAACAHHH
CASABACWSACACA-

Original motif
Consensus sequence: HHHAYAAYAACAHHH

Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD





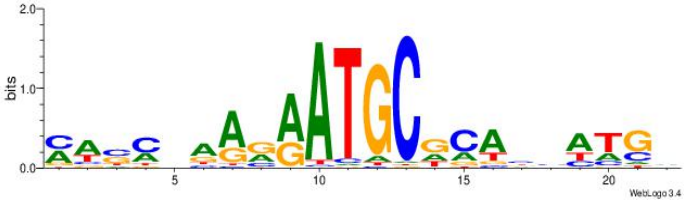
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	14
Similarity score:	0.0524108

Alignment:

```
MWSMBAARRATGCDCABHATGD
CASABACWSACACA--------
```

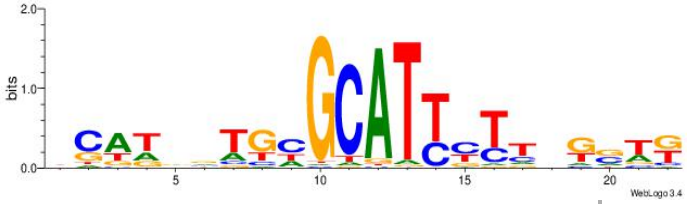
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID:	UP00528

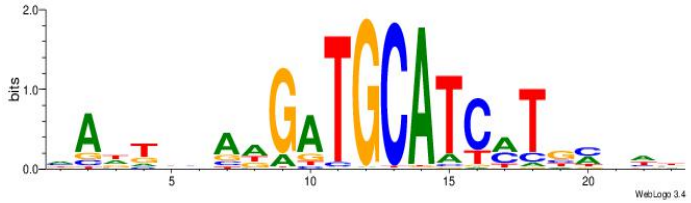
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0538393

Alignment:

```
HADTBVADGATGCATCMTGMVHB
CASABACWSACACA---------
```

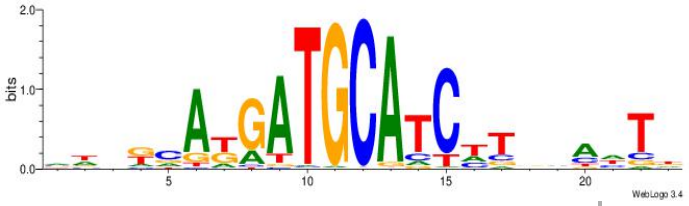
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

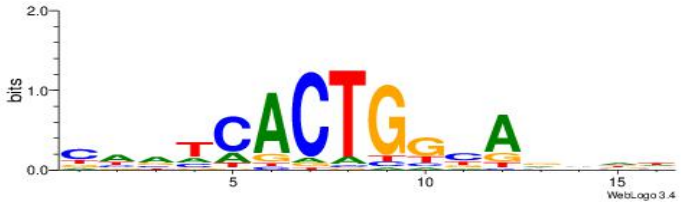
Consensus sequence: VHVRCAYGATGCATCDTVVADTH



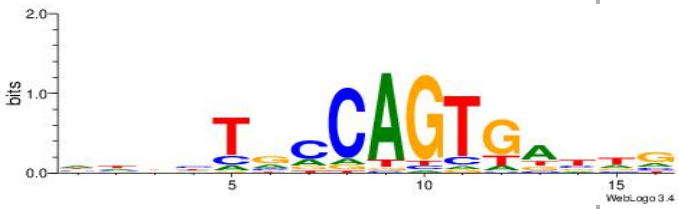
Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0538699

Alignment:
DDHHTBCCAGTGABHG
--TGTGTSWGTBTSTG

Original motif
Consensus sequence: CHVTCACTGGBADHDD



Reverse complement motif
Consensus sequence: DDHHTBCCAGTGABHG

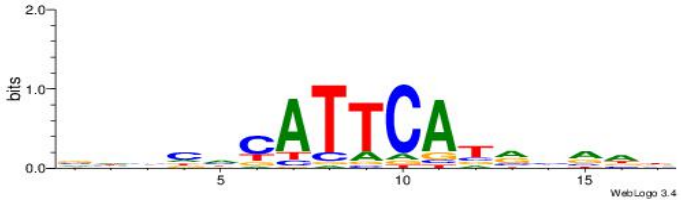


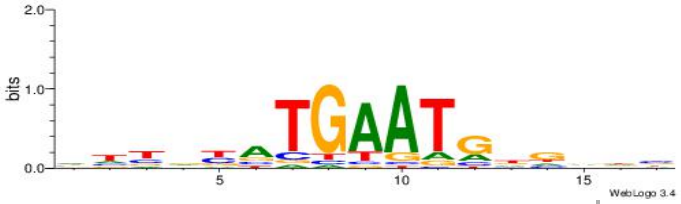
Motif ID:	UP00014
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0541456

Alignment:
VHBHHCATTCATRHVDD
---CASABACWSACACA

Original motif
Consensus sequence: VHBHHCATTCATRHVDD

Reverse complement motif
Consensus sequence: DDBDKATGAATGHDBHV





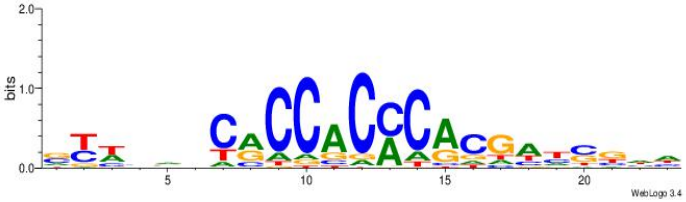
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0541653

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
---------CASABACWSACACA
```

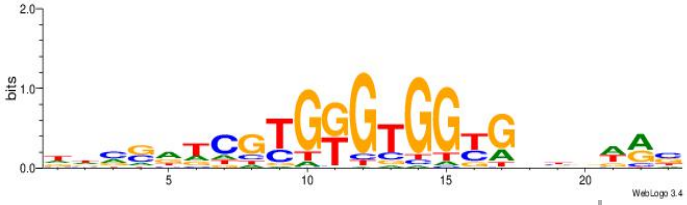
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID:	UP00098
Motif name:	Rfx3_secondary

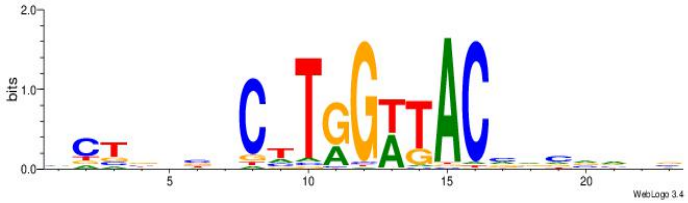
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0545034

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
--------TGTGTSWGTBTSTG-
```

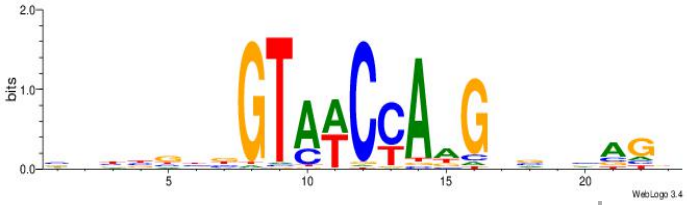
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Dataset #: 2 Motif ID: 11 Motif name: Motif 11

Original motif

Consensus sequence: AAAATKCTATT

Reverse complement motif

Consensus sequence: AATAGYATTTT

Best Matches for Motif ID 11 (Highest to Lowest)

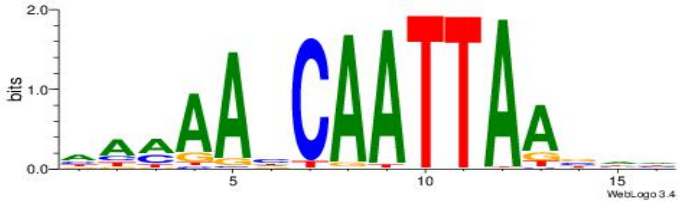
Motif ID:	UP00145
Motif name:	Barhl2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0314776

Alignment:

```
HAMAAHCAATTAABHH
AAAATKCTATT-----
```

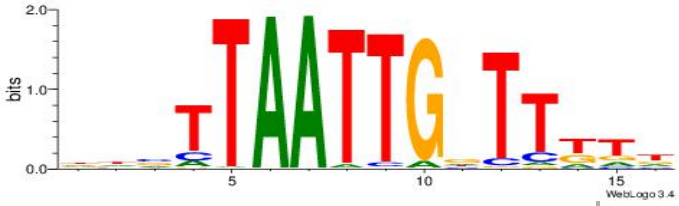
Original motif

Consensus sequence: HAMAAHCAATTAABHH



Reverse complement motif

Consensus sequence: HHBTTAATTGDTTYTH



Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Original Motif

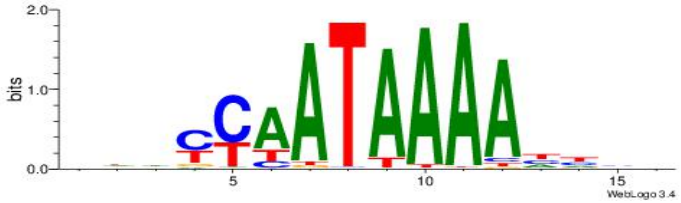
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0388915

Alignment:

```
HDHHTTTTATTKKHDD
AAAATKCTATT-----
```

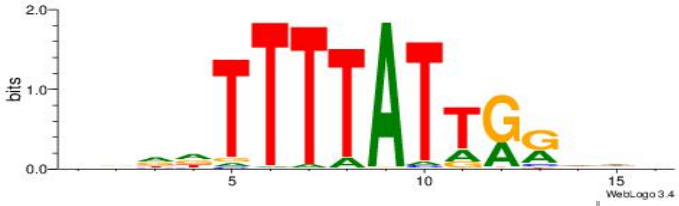
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



Motif ID:	UP00016
Motif name:	Sry_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.039378

Alignment:

VDDDATTATAATHDHV
-AAAATKCTATT----

Original motif

Consensus sequence: BHDHATTATAATDDDV

Reverse complement motif

Consensus sequence: VDDDATTATAATHDHV

Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.039567

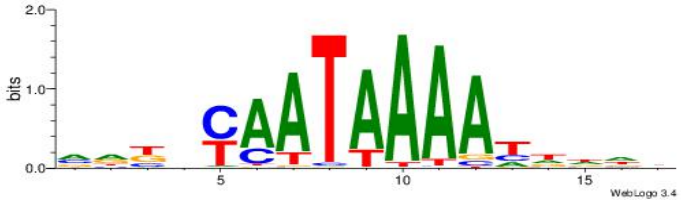
Alignment:
HDDDATTTTATTKVRDB
-AAAATKCTATT-----

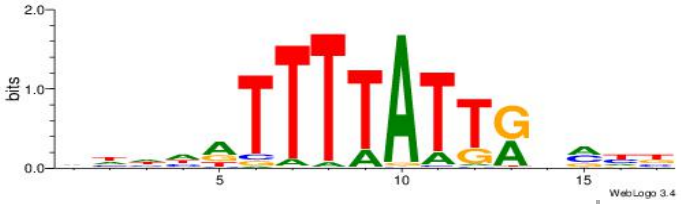
Original motif

Consensus sequence: VDKVYAATAAAATDDDH

Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB





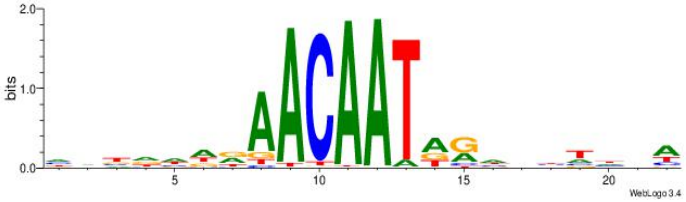
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0403247

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
-AAAATKCTATT----------
```

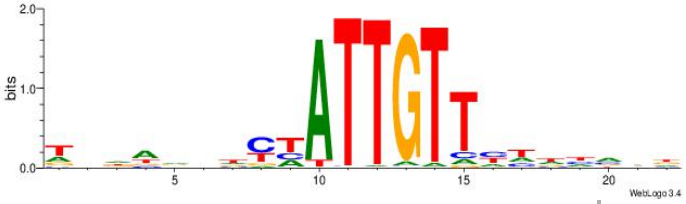
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



Motif ID:	UP00038

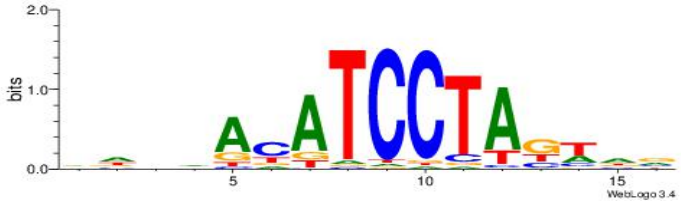
Motif name:	Spdef_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0405096

Alignment:

```
DDBHACATCCTAKWDV
---AAAATKCTATT--
```

Original motif

Consensus sequence: DDBHACATCCTAKWDV



Reverse complement motif

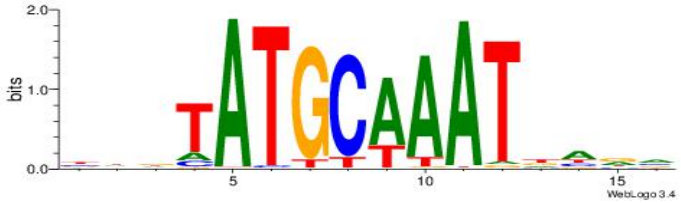
Consensus sequence: VDWYTAGGATGTHVDH

Motif ID:	UP00191
Motif name:	Pou2f2
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

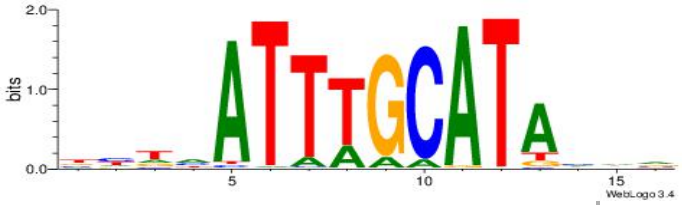
Similarity score: 0.0406764

Alignment:
BHHDATTTGCATAHHV
----AATAGYATTTT-

Original motif
Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif
Consensus sequence: BHHDATTTGCATAHHV

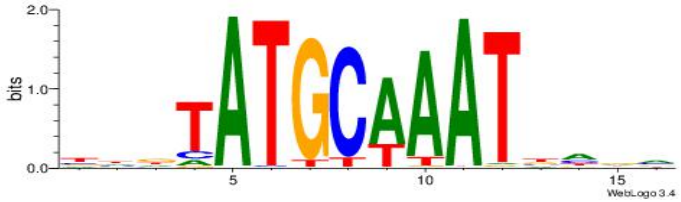


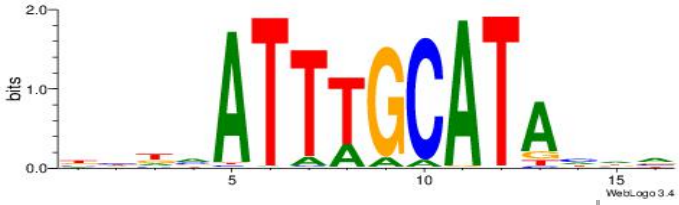
Motif ID: UP00179
Motif name: Pou2f3
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0407045

Alignment:
BHHVATTTGCATAHHV
----AATAGYATTTT-

Original motif
Consensus sequence: BHDTATGCAAATBHDV

Reverse complement motif
Consensus sequence: BHHVATTTGCATAHHV





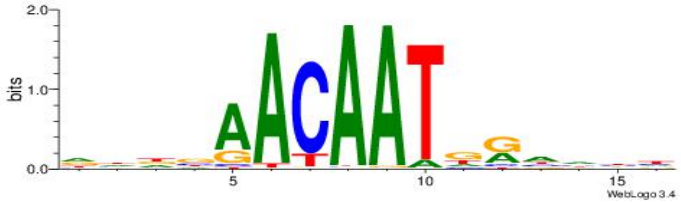
Motif ID:	UP00023
Motif name:	Sox30_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0413872

Alignment:

```
HHHHMHATTGTTBDHD
AATAGYATTTT-----
```

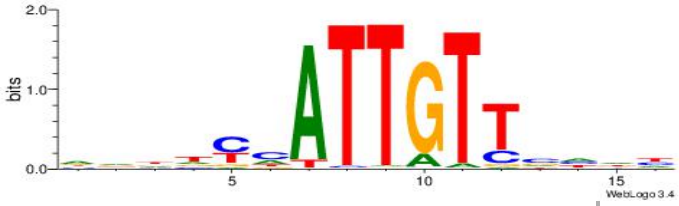
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD



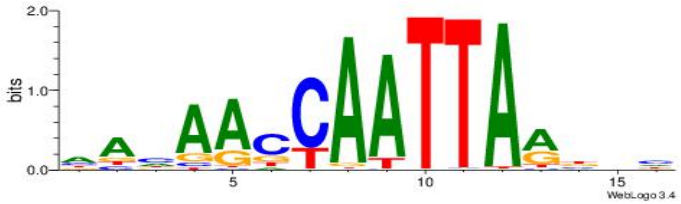
Motif ID:	UP00166
Motif name:	Barhl1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0427435

Alignment:

```
HAHAACCAATTARBDH
AAAATKCTATT-----
```

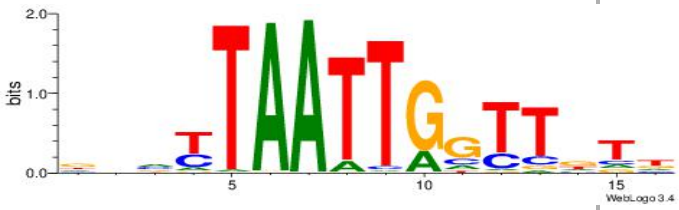
Original motif

Consensus sequence: HAHAACCAATTARBDH



Reverse complement motif

Consensus sequence: DDVKTAATTGGTTDTH



Dataset #: 2 Motif ID: 12 Motif name: Motif 12

Original motif

Consensus sequence: TGAAAATSCTT

Reverse complement motif

Consensus sequence: AAGSATTTTCA

Best Matches for Motif ID 12 (Highest to Lowest)

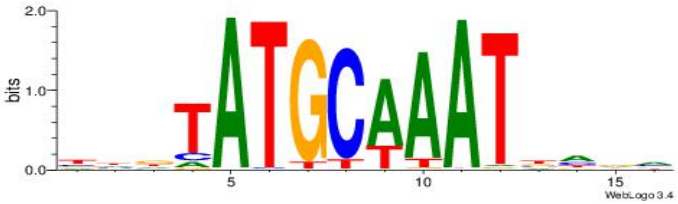
Motif ID:	UP00179
Motif name:	Pou2f3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0170413

Alignment:

```
BHHVATTTGCATAHHV
AAGSATTTTCA-----
```

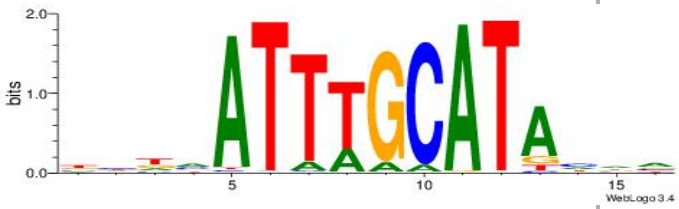
Original motif

Consensus sequence: BHDTATGCAAATBHDV



Reverse complement motif

Consensus sequence: BHHVATTTGCATAHHV



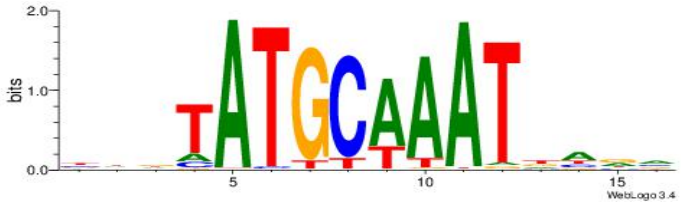
Motif ID:	UP00191
Motif name:	Pou2f2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0186797

Alignment:

```
BHHDATTTGCATAHHV
AAGSATTTTCA-----
```

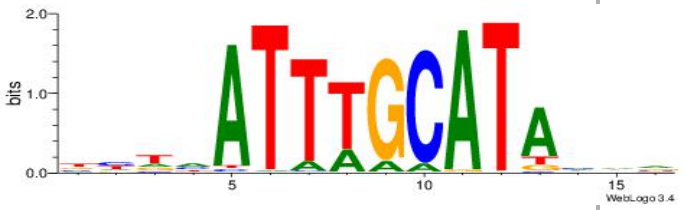
Original motif

Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif

Consensus sequence: BHHDATTTGCATAHHV

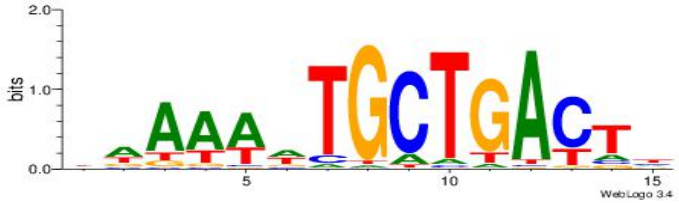


Motif ID:	UP00044
Motif name:	Mafk_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

Number of overlap: 11
Similarity score: 0.025968

Alignment:
DWAAAWTGCTGACTH
TGAAAATSCTT----

Original motif
Consensus sequence: DWAAAWTGCTGACTH



Reverse complement motif
Consensus sequence: HAGTCAGCAWTTTWD

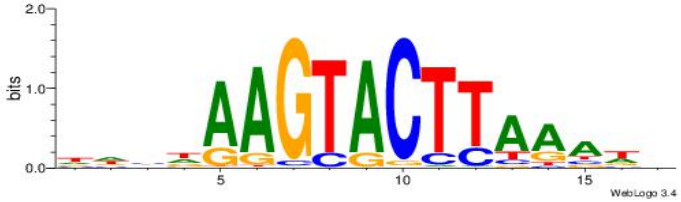
Motif ID: UP00389
Motif name: Nkx3-1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0281427

Alignment:
BDTTTAAGTACTTDDDD
--TGAAAATSCTT----

Original motif

Reverse complement motif

Consensus sequence: DDHDAAGTACTTAAADB



Consensus sequence: BDTTTAAGTACTTDDDD

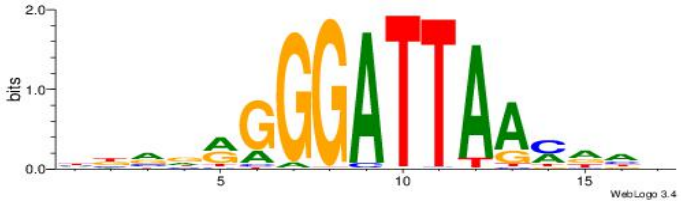
Motif ID:	UP00153
Motif name:	Pitx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.02834

Alignment:

```
HBVDRGGGATTAAMDHH
----AAGSATTTTCA--
```

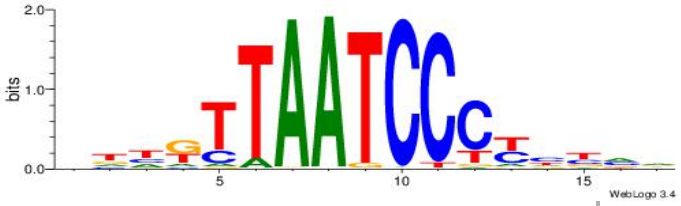
Original motif

Consensus sequence: HBVDRGGGATTAAMDHH



Reverse complement motif

Consensus sequence: HHDRTTAATCCCKHBVH



Motif ID:	UP00219
Motif name:	Cutl1_3494.2
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:	0.0294239

Alignment:

```
DADTGATMATCABTD
---TGAAAATSCTT-
```

Original motif

Consensus sequence: DAVTGATRATCAHTD

Reverse complement motif

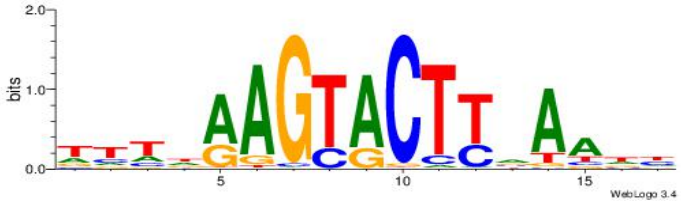
Consensus sequence: DADTGATMATCABTD

Motif ID:	UP00119
Motif name:	Nkx2-9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

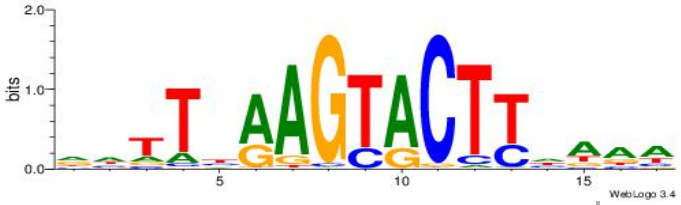
Number of overlap: 11
Similarity score: 0.0300831

Alignment:
HDTTBAAGTACTTDAAA
-----AAGSATTTTCA-

Original motif
Consensus sequence: TTTDAAGTACTTVAADH



Reverse complement motif
Consensus sequence: HDTTBAAGTACTTDAAA



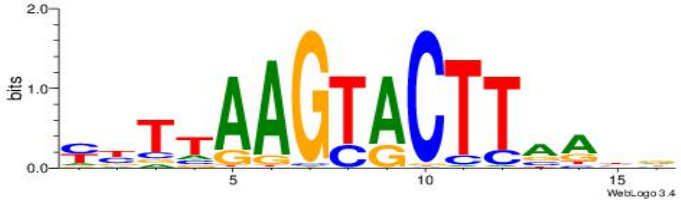
Motif ID: UP00190
Motif name: Nkx2-3
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0302066

Alignment:
HHTTAAGTACTTAAMK
----AAGSATTTTCA-

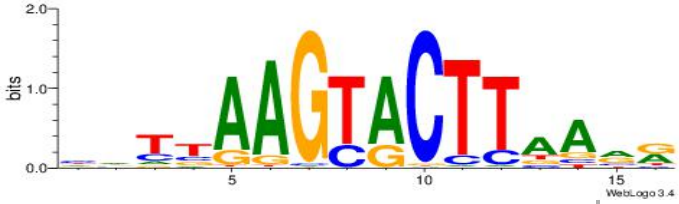
Original motif

Reverse complement motif

Consensus sequence: YYTTAAGTACTTAAHD



Consensus sequence: HHTTAAGTACTTAAMK



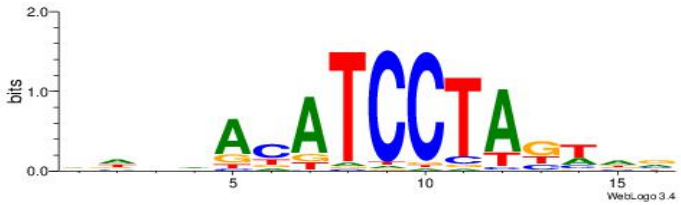
Motif ID:	UP00038
Motif name:	Spdef_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0318364

Alignment:

```
VDWYTAGGATGTHVDH
----AAGSATTTTCA-
```

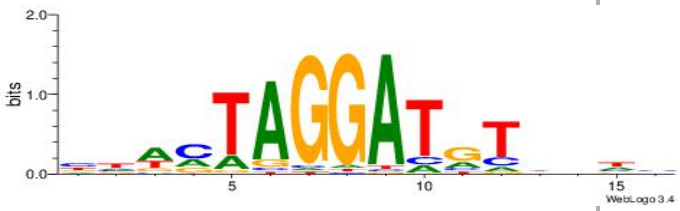
Original motif

Consensus sequence: DDBHACATCCTAKWDV



Reverse complement motif

Consensus sequence: VDWYTAGGATGTHVDH



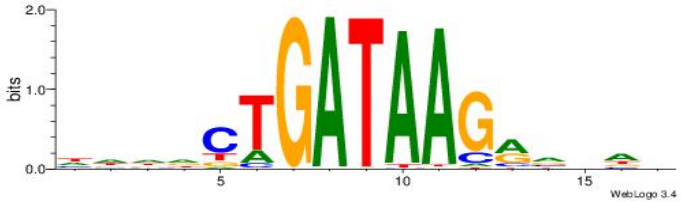
Motif ID:	UP00080
Motif name:	Gata5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0333422

Alignment:

```
DDHBKCTTATCAGDDDH
-AAGSATTTTCA-----
```

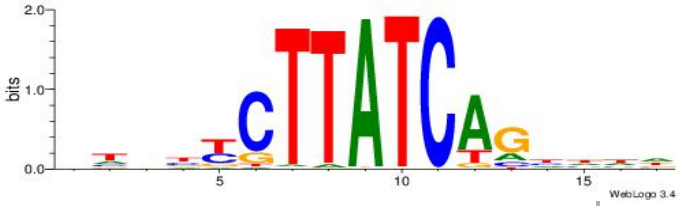
Original motif

Consensus sequence: HDDDCTGATAAGRVDDD



Reverse complement motif

Consensus sequence: DDHBKCTTATCAGDDDH



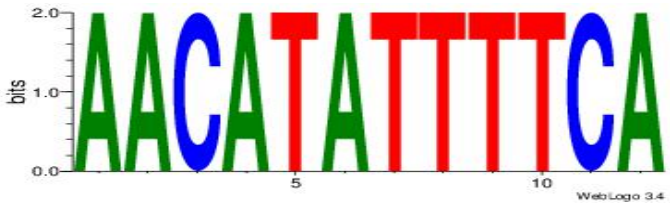
Dataset #: 2 Motif ID: 13 Motif name: Motif 13

Original motif

Consensus sequence: AACATATTTTCA

Reverse complement motif

Consensus sequence: TGAAAATATGTT



Best Matches for Motif ID 13 (Highest to Lowest)

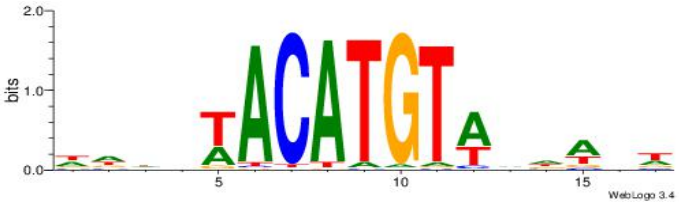
Motif ID:	UP00250
Motif name:	Irx5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.0253217

Alignment:

```
DDDHWACATGTWHDABW
TGAAAATATGTT-----
```

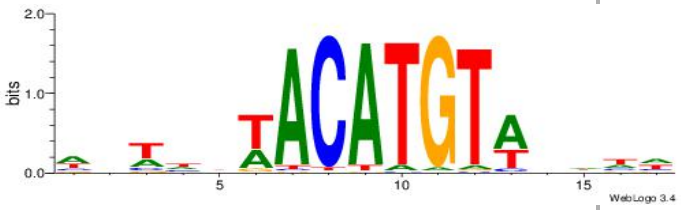
Original motif

Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif

Consensus sequence: WVTDHWACATGTWHDDD



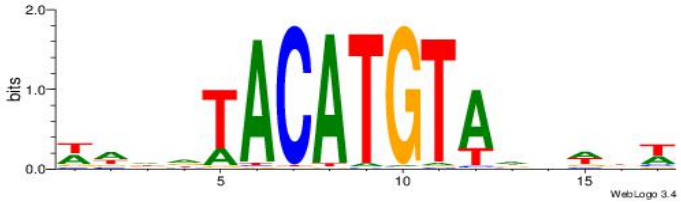
Motif ID:	UP00236
Motif name:	Irx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0267342

Alignment:

```
WDDDTACATGTADDWBW
TGAAAATATGTT-----
```

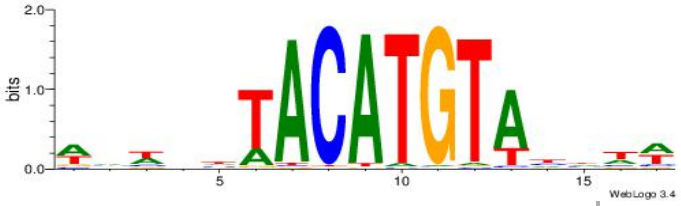
Original motif

Consensus sequence: WDDDTACATGTADDWBW



Reverse complement motif

Consensus sequence: WVWDDTACATGTADDDW

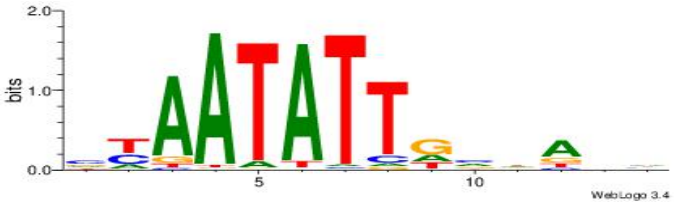


Motif ID:	UP00059
Motif name:	Arid5a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12

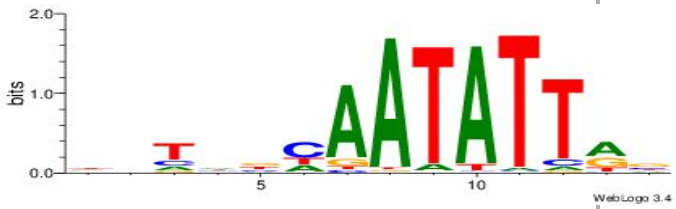
Similarity score: 0.0285822

Alignment:
HDTDVCAATATTMV
--TGAAAATATGTT

Original motif
Consensus sequence: VYAATATTGVDADH



Reverse complement motif
Consensus sequence: HDTDVCAATATTMV

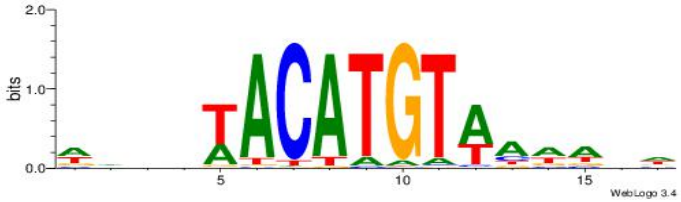


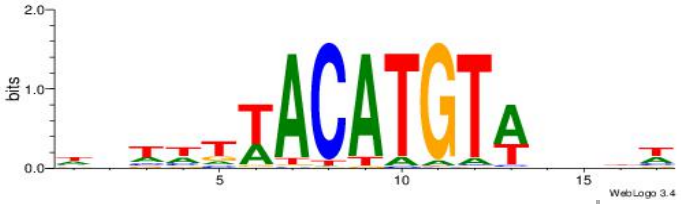
Motif ID:	UP00194
Motif name:	Irx4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0297419

Alignment:
WDHDWACATGTWAWABD
TGAAAATATGTT-----

Original motif
Consensus sequence: WDHDWACATGTWAWABD

Reverse complement motif
Consensus sequence: DBTWTWACATGTWDHDW





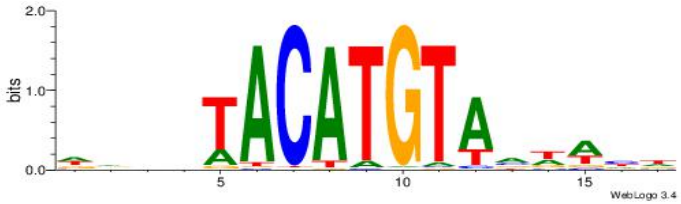
Motif ID:	UP00223
Motif name:	Irx3_0920.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.029857

Alignment:

```
DDDDTACATGTAVWWHD
TGAAAATATGTT-----
```

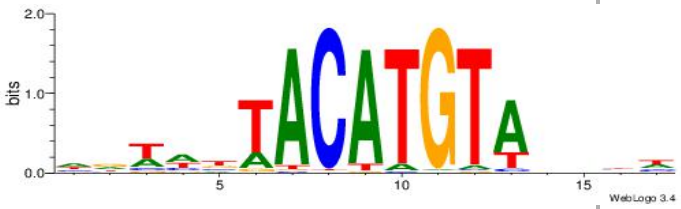
Original motif

Consensus sequence: DDDDTACATGTAVWWHD



Reverse complement motif

Consensus sequence: DDWWBTACATGTADDDD



Motif ID: UP00223

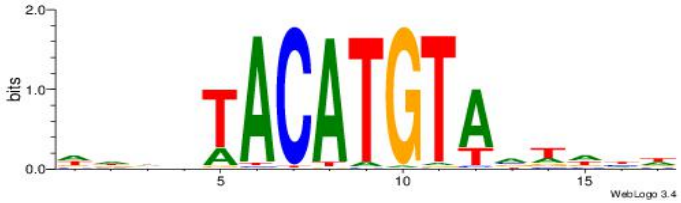
Motif name:	Irx3_2226.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.0299906

Alignment:

```
DDDHTACATGTAVWDHD
TGAAAATATGTT-----
```

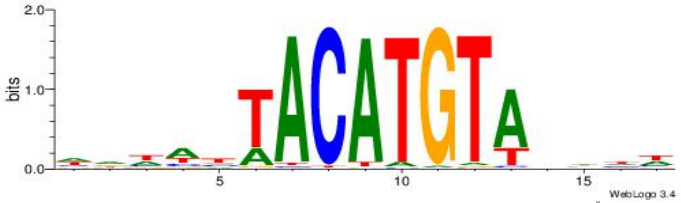
Original motif

Consensus sequence: DDDHTACATGTAVWDHD



Reverse complement motif

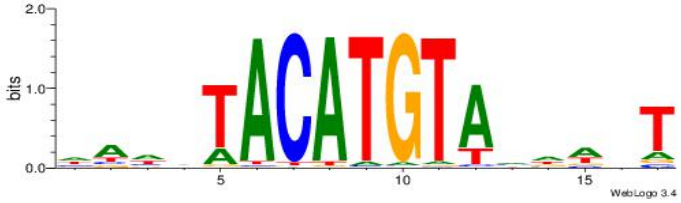
Consensus sequence: DHDWBTACATGTAHDDD



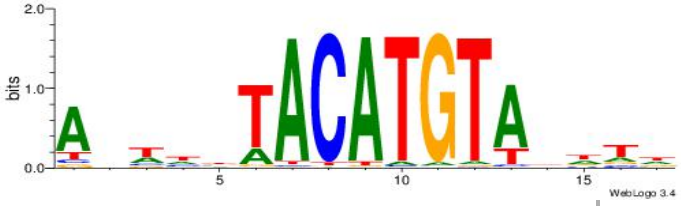
Motif ID:	UP00150
Motif name:	Irx6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0303256

Alignment:
AHWDBTACATGTADHTH
TGAAAATATGTT-----

Original motif
Consensus sequence: HAHDTACATGTAVDWHT



Reverse complement motif
Consensus sequence: AHWDBTACATGTADHTH

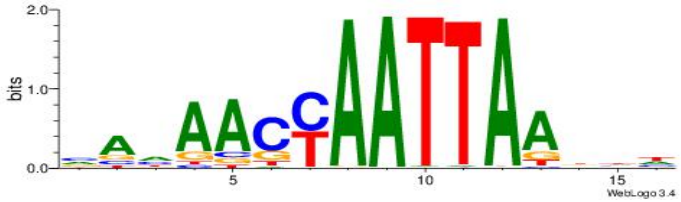


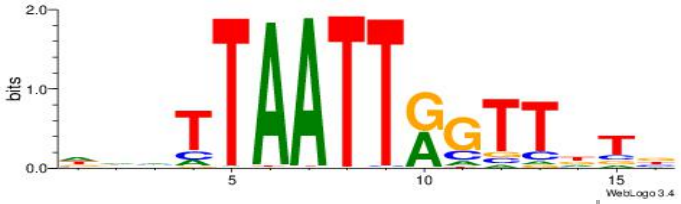
Motif ID:	UP00171
Motif name:	Msx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0315999

Alignment:
HHVTTAATTKGTTHTV
-TGAAAATATGTT---

Original motif
Consensus sequence: VAHAACYAATTAABHH

Reverse complement motif
Consensus sequence: HHVTTAATTKGTTHTV





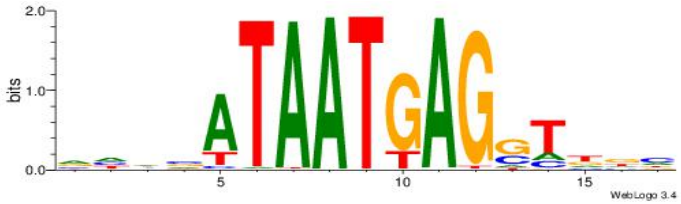
Motif ID:	UP00146
Motif name:	Pou6f1_3733.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0330849

Alignment:

```
DHDASCTCATTATVHHB
---AACATATTTTCA--
```

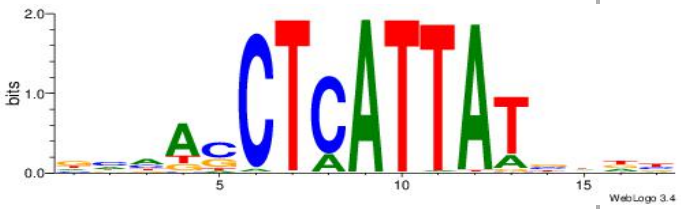
Original motif

Consensus sequence: VHHVATAATGAGSTDDH



Reverse complement motif

Consensus sequence: DHDASCTCATTATVHHB



Motif ID: UP00080

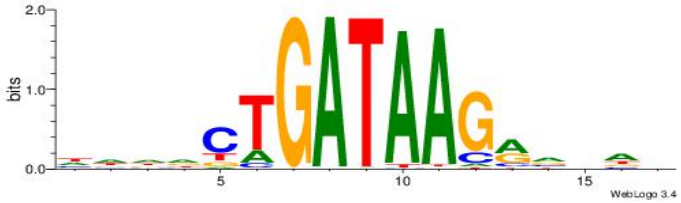
Motif name:	Gata5_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0334048

Alignment:

```
HDDDCTGATAAGRVDDD
AACATATTTTCA-----
```

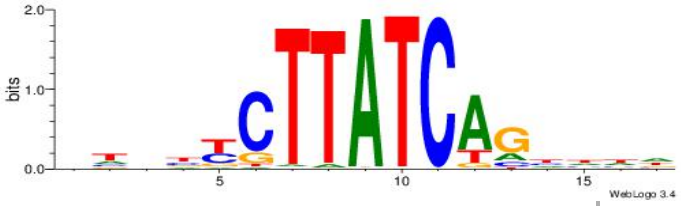
Original motif

Consensus sequence: HDDDCTGATAAGRVDDD



Reverse complement motif

Consensus sequence: DDHBKCTTATCAGDDDH



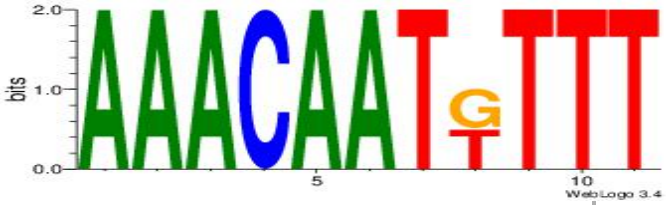
Dataset #: 2 Motif ID: 14 Motif name: Motif 14

Original motif

Consensus sequence: AAAMATTGTTT

Reverse complement motif

Consensus sequence: AAACAATYTTT



Best Matches for Motif ID 14 (Highest to Lowest)

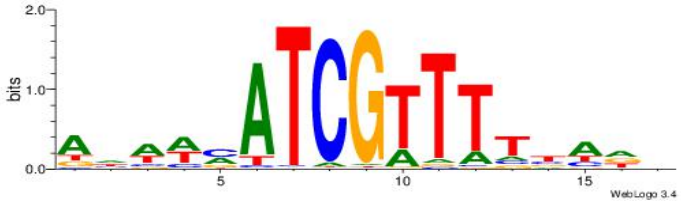
Motif ID:	UP00114
Motif name:	Homez
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0148981

Alignment:

```
AHWWMATCGTTTTBADD
-AAAMATTGTTT-----
```

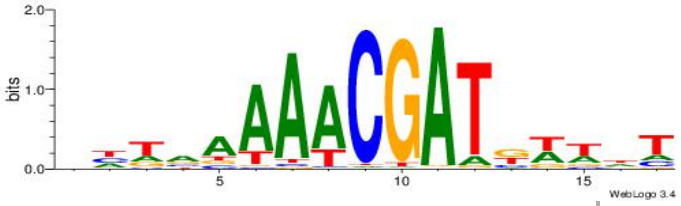
Original motif

Consensus sequence: AHWWMATCGTTTTBADD



Reverse complement motif

Consensus sequence: HDTVAAAACGATRWWHT



Motif ID:	UP00096
Motif name:	Sox13_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

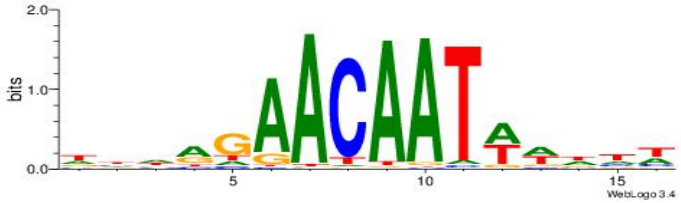
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0154717

Alignment:

```
WHDWWATTGTTCKDHD
-AAAMATTGTTT----
```

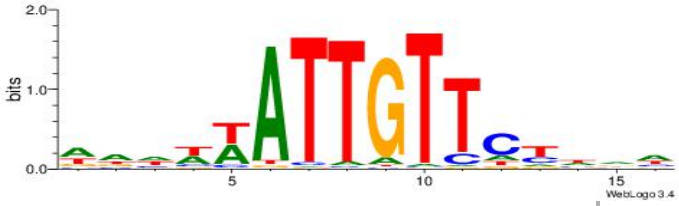
Original motif

Consensus sequence: DHDRGAACAATWWDHW



Reverse complement motif

Consensus sequence: WHDWWATTGTTCKDHD

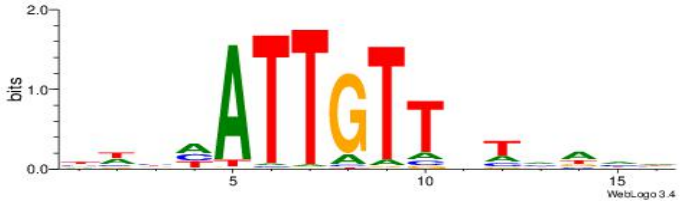


Motif ID:	UP00064
Motif name:	Sox18_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0200897

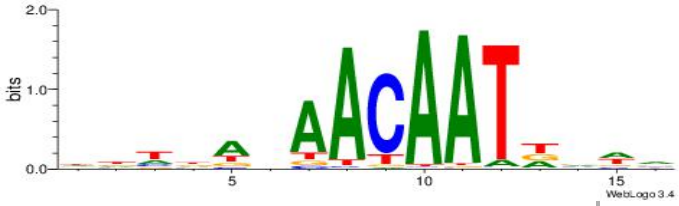
Alignment:

HHDHABAACAATHBWV
-----AAACAATYTTT

Original motif
Consensus sequence: BWBHATTGTTBTHDHH



Reverse complement motif
Consensus sequence: HHDHABAACAATHBWV

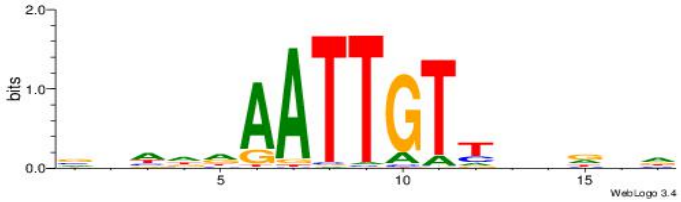


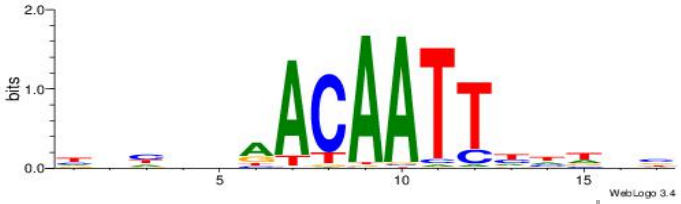
Motif ID:	UP00062
Motif name:	Sox4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.020377

Alignment:
DDHVDAACAATTDDHVV
----AAACAATYTTT--

Original motif
Consensus sequence: VVHDDAATTGTTDVDDD

Reverse complement motif
Consensus sequence: DDHVDAACAATTDDHVV





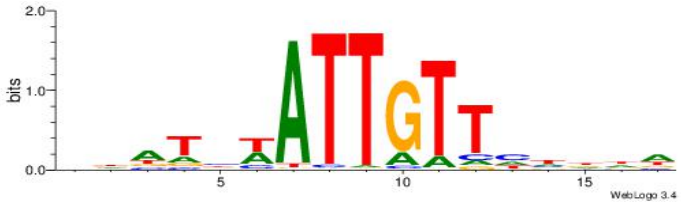
Motif ID:	UP00051
Motif name:	Sox8_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0208116

Alignment:

```
DDDHDAACAATWBATDD
----AAACAATYTTT--
```

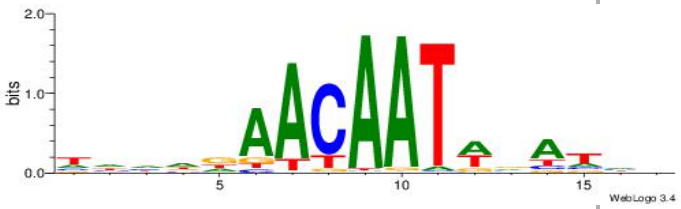
Original motif

Consensus sequence: DDATBWATTGTTHHDDD



Reverse complement motif

Consensus sequence: DDDHDAACAATWBATDD



Motif ID:	UP00023

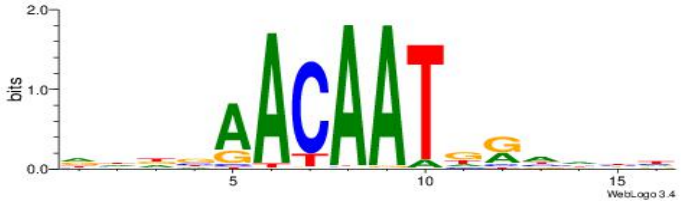
Motif name:	Sox30_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0235407

Alignment:

```
HHHHMHATTGTTBDHD
--AAAMATTGTTT---
```

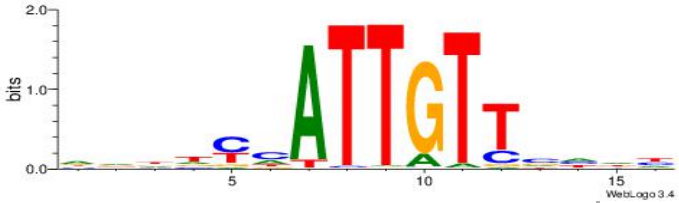
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD

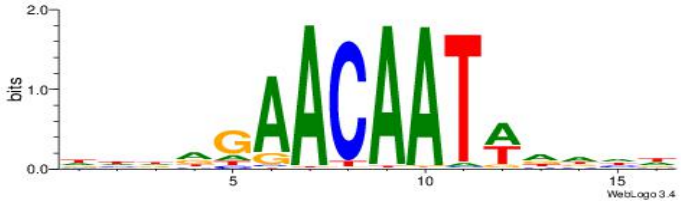


Motif ID:	UP00091
Motif name:	Sox5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11

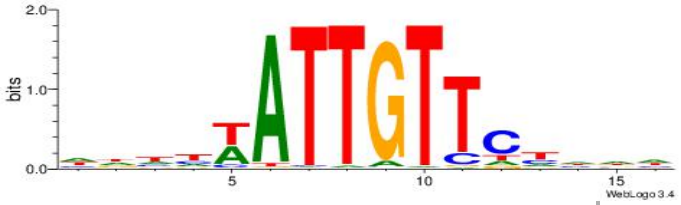
Similarity score: 0.0236834

Alignment:
DHDDGAACAATWDDHD
----AAACAATYTTT-

Original motif
Consensus sequence: DHDDGAACAATWDDHD



Reverse complement motif
Consensus sequence: DHDDWATTGTTCDDHD

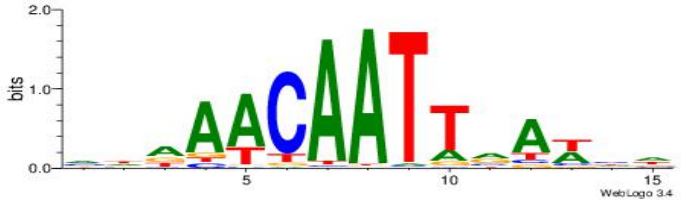


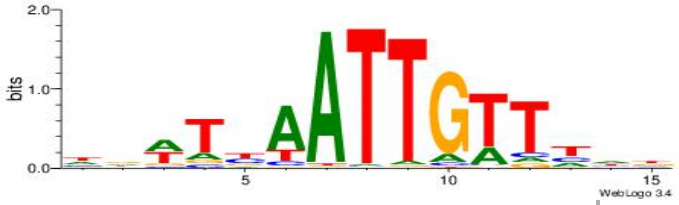
Motif ID: UP00014
Motif name: Sox17_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0256157

Alignment:
VDDAACAATTVAWHD
--AAACAATYTTT--

Original motif
Consensus sequence: VDDAACAATTVAWHD

Reverse complement motif
Consensus sequence: DDWTBAATTGTTDDB





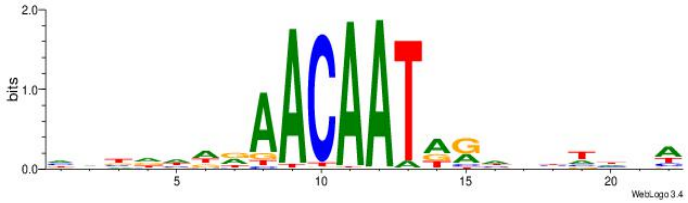
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0.0264034

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
-----AAAMATTGTTT------
```

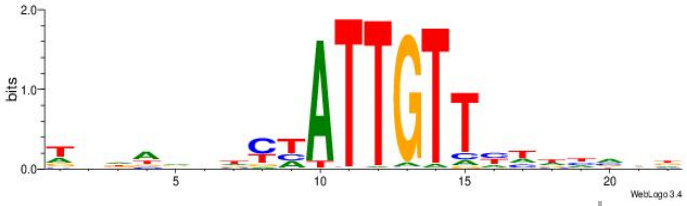
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



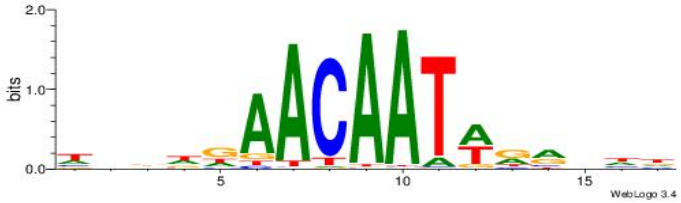
Motif ID:	UP00075
Motif name:	Sox15_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0265966

Alignment:

```
DHVKMWATTGTTHDHDH
--AAAMATTGTTT----
```

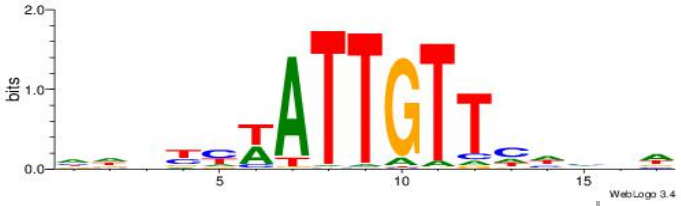
Original motif

Consensus sequence: HDDDDAACAATWRRBHD



Reverse complement motif

Consensus sequence: DHVKMWATTGTTHDHDH



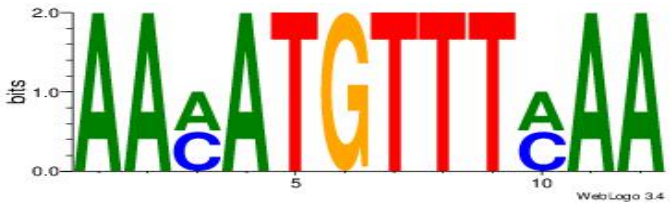
Dataset #: 2 Motif ID: 15 Motif name: Motif 15

Original motif

Consensus sequence: AAMATGTTTMAA

Reverse complement motif

Consensus sequence: TTYAAACATYTT



Best Matches for Motif ID 15 (Highest to Lowest)

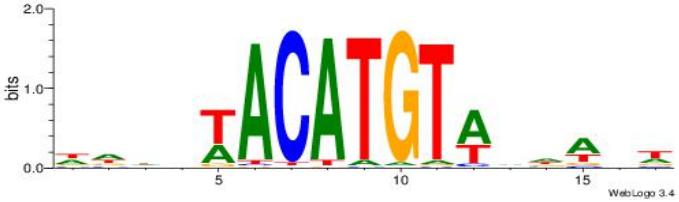
Motif ID:	UP00250
Motif name:	Irx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.00569393

Alignment:

```
WVTDHWACATGTWHDDD
-----AAMATGTTTMAA
```

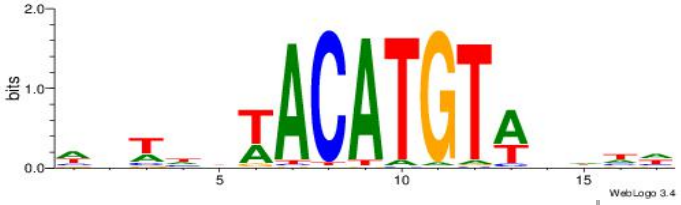
Original motif

Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif

Consensus sequence: WVTDHWACATGTWHDDD



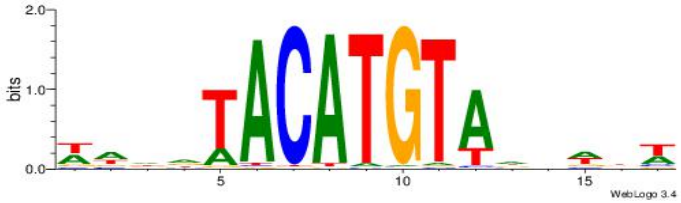
Motif ID:	UP00236
Motif name:	Irx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.00753568

Alignment:

```
WVWDDTACATGTADDDW
-----AAMATGTTTMAA
```

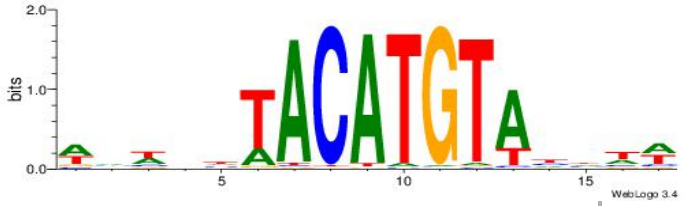
Original motif

Consensus sequence: WDDDTACATGTADDWBW



Reverse complement motif

Consensus sequence: WVWDDTACATGTADDDW

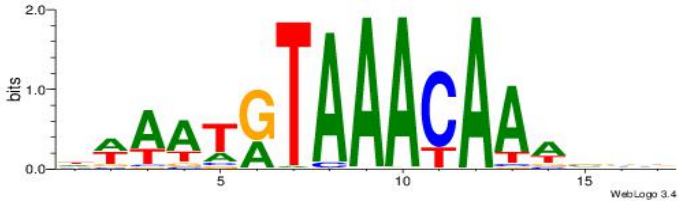


Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

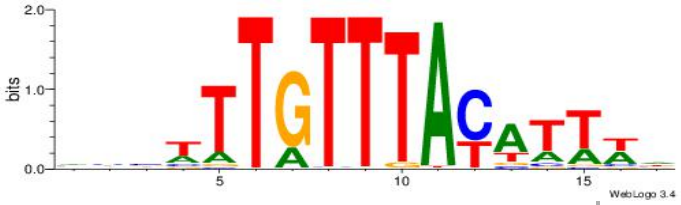
Number of overlap: 12
Similarity score: 0.00927938

Alignment:
VVVWTTGTTTAMATTWD
-AAMATGTTTMAA----

Original motif
Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD



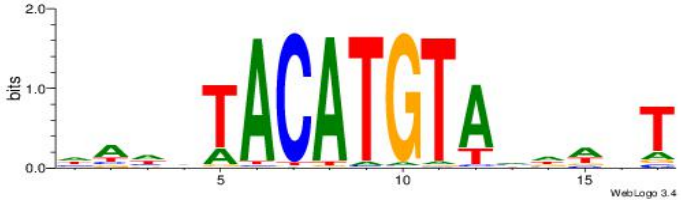
Motif ID: UP00150
Motif name: Irx6
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0104366

Alignment:
HAHDTACATGTAVDWHT
----AAMATGTTTMAA-

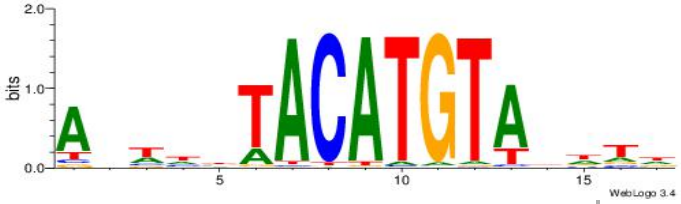
Original motif

Reverse complement motif

Consensus sequence: HAHDTACATGTAVDWHT



Consensus sequence: AHWDBTACATGTADHTH



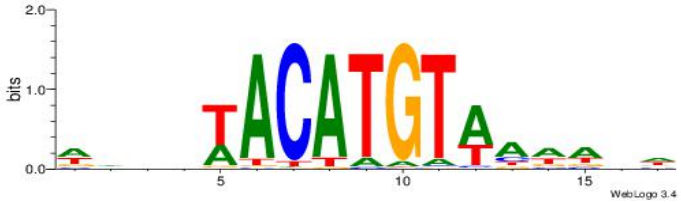
Motif ID:	UP00194
Motif name:	Irx4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0110074

Alignment:

```
WDHDWACATGTWAWABD
----AAMATGTTTMAA-
```

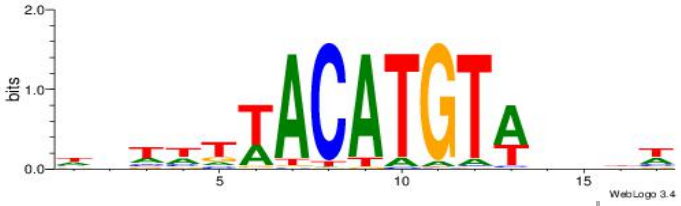
Original motif

Consensus sequence: WDHDWACATGTWAWABD



Reverse complement motif

Consensus sequence: DBTWTWACATGTWDHDW



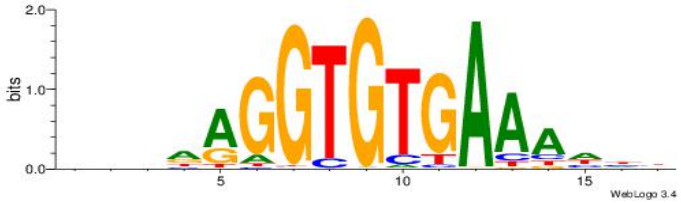
Motif ID:	UP00068
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0113539

Alignment:

```
HHHTTTCACACCTDHBV
----TTYAAACATYTT-
```

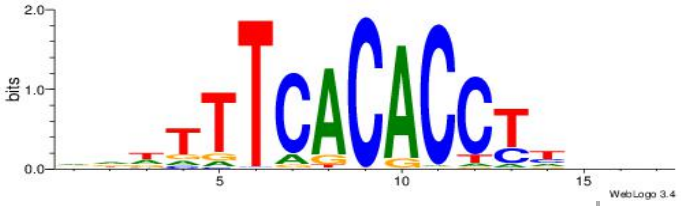
Original motif

Consensus sequence: BVHDAGGTGTGAAAHHH



Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV

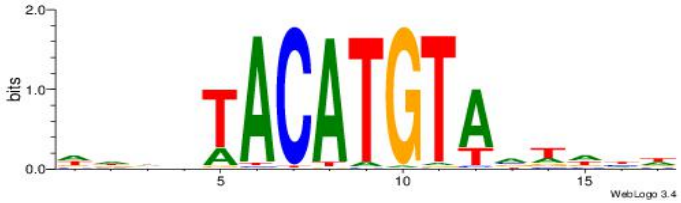


Motif ID:	UP00223
Motif name:	Irx3_2226.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

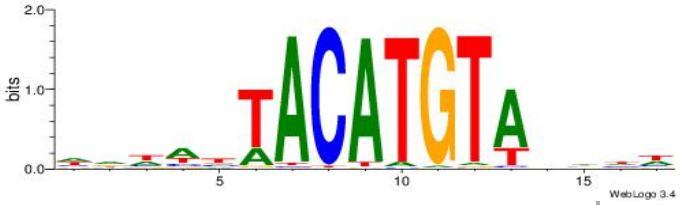
Number of overlap: 12
Similarity score: 0.0118824

Alignment:
DHDWBTACATGTAHDDD
-----AAMATGTTTMAA

Original motif
Consensus sequence: DDDHTACATGTAVWDHD



Reverse complement motif
Consensus sequence: DHDWBTACATGTAHDDD

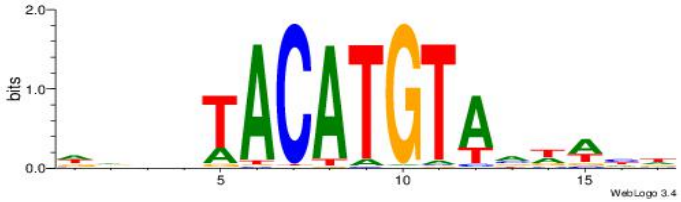


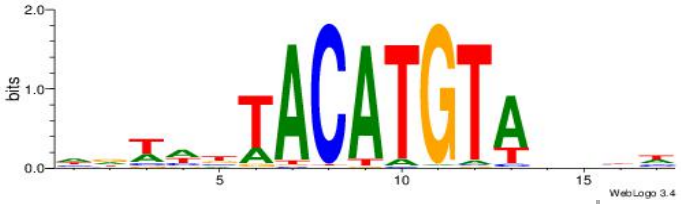
Motif ID: UP00223
Motif name: Irx3_0920.1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 12
Similarity score: 0.0132149

Alignment:
DDDDTACATGTAVWWHD
-----AAMATGTTTMAA

Original motif
Consensus sequence: DDDDTACATGTAVWWHD

Reverse complement motif
Consensus sequence: DDWWBTACATGTADDDD





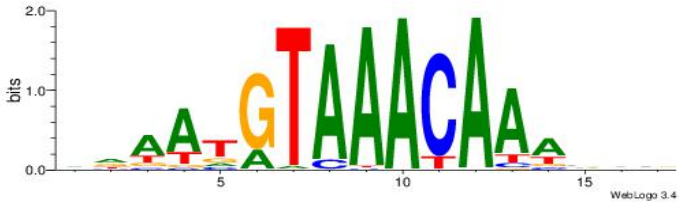
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0142458

Alignment:

```
BBVTTTGTTTACATTDD
-AAMATGTTTMAA----
```

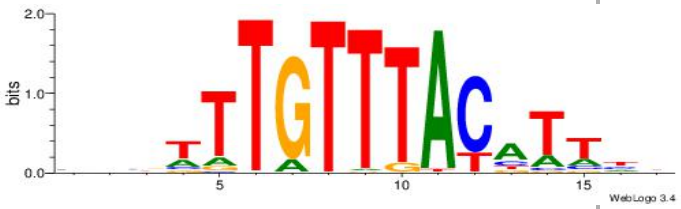
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



Motif ID:	UP00039

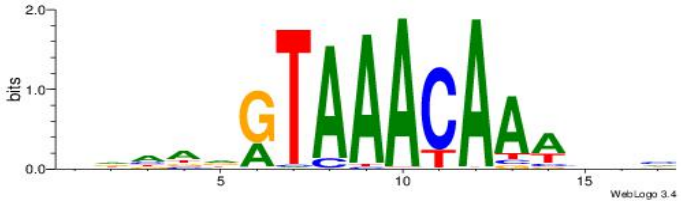
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0210343

Alignment:

```
DVVTTTGTTTACDTHDH
-AAMATGTTTMAA----
```

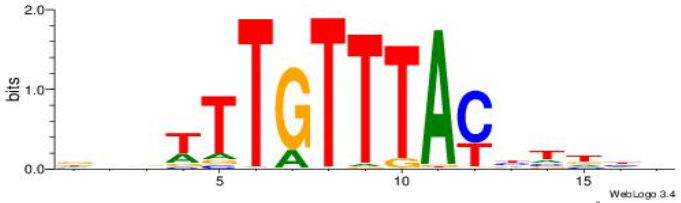
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH



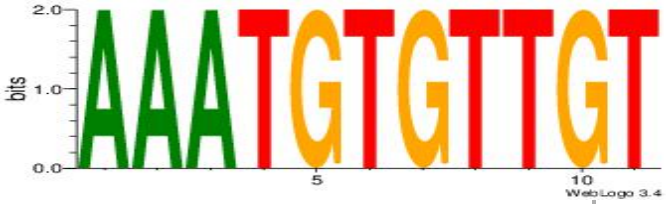
Dataset #: 2 Motif ID: 16 Motif name: Motif 16

Original motif

Consensus sequence: ACAACACATTT

Reverse complement motif

Consensus sequence: AAATGTGTTGT



Best Matches for Motif ID 16 (Highest to Lowest)

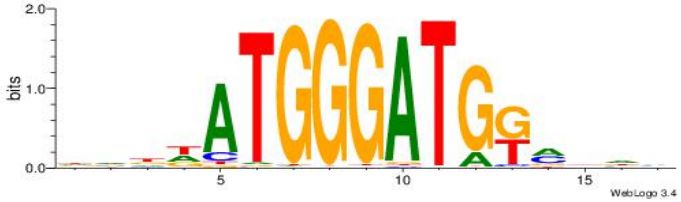
Motif ID:	UP00033
Motif name:	Zfp410_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0181

Alignment:

```
DVDDATGGGATGKMDDV
--AAATGTGTTGT----
```

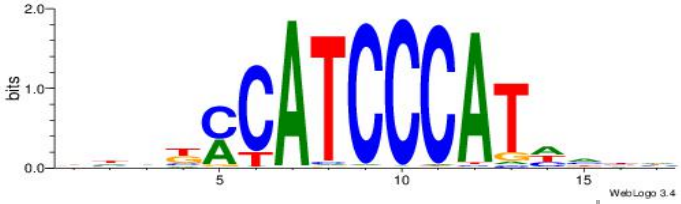
Original motif

Consensus sequence: DVDDATGGGATGKMDDV



Reverse complement motif

Consensus sequence: BDDYYCATCCCATDDBD



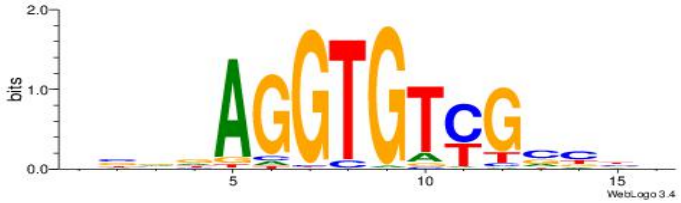
Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0202807

Alignment:

```
VBVDAGGTGTYGVBBV
--AAATGTGTTGT---
```

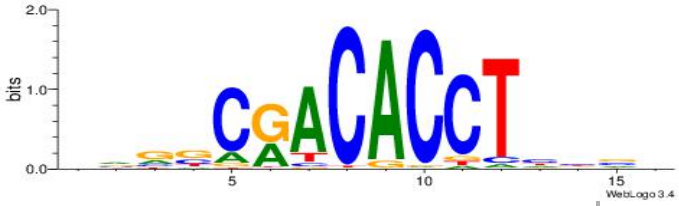
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV

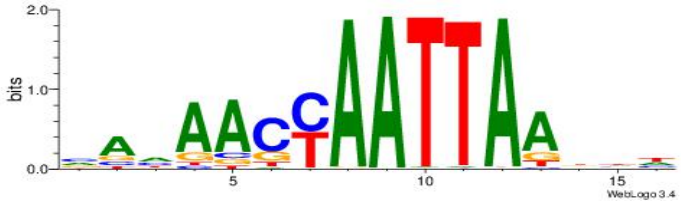


Motif ID:	UP00171
Motif name:	Msx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

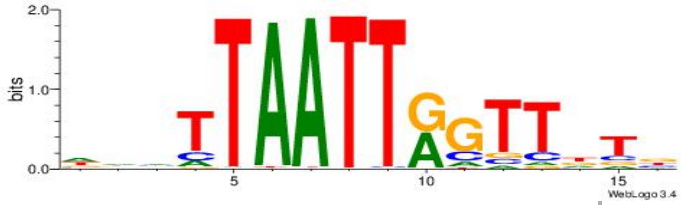
Number of overlap: 11
Similarity score: 0.0211208

Alignment:
HHVTTAATTKGTTHTV
----AAATGTGTTGT-

Original motif
Consensus sequence: VAHAACYAATTAABHH



Reverse complement motif
Consensus sequence: HHVTTAATTKGTTHTV



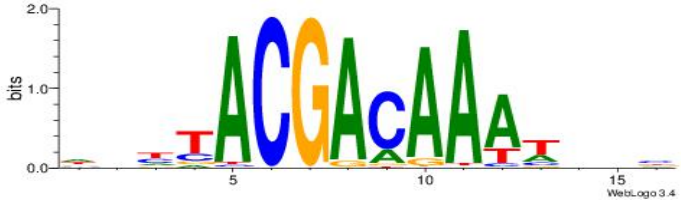
Motif ID: UP00072
Motif name: IRC900814_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0216511

Alignment:
BHDWTTTGTCGTAHDD
-AAATGTGTTGT----

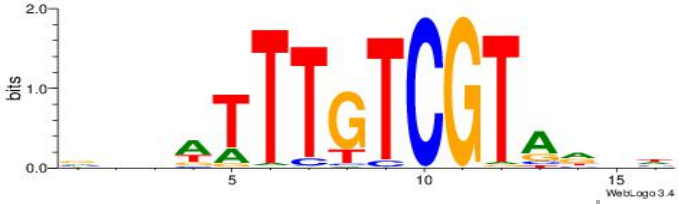
Original motif

Reverse complement motif

Consensus sequence: DDHTACGACAAAWDDB



Consensus sequence: BHDWTTTGTCGTAHDD



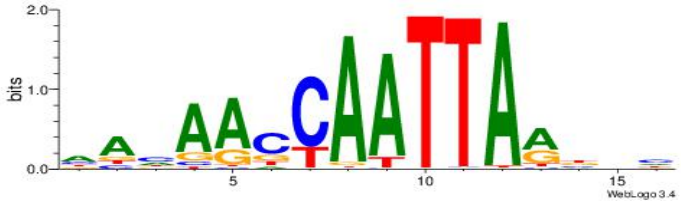
Motif ID:	UP00166
Motif name:	Barhl1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0230664

Alignment:

```
DDVKTAATTGGTTDTH
----AAATGTGTTGT-
```

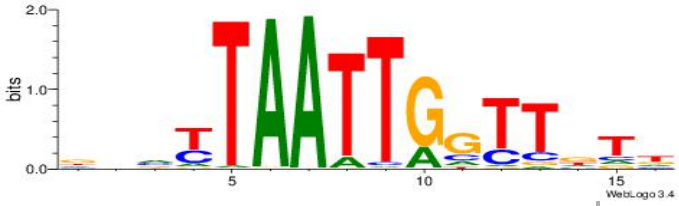
Original motif

Consensus sequence: HAHAACCAATTARBDH



Reverse complement motif

Consensus sequence: DDVKTAATTGGTTDTH



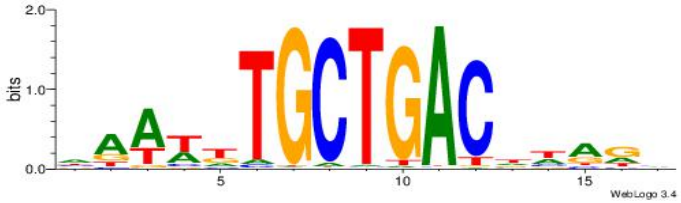
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0231414

Alignment:

```
HAAWDTGCTGACDWARH
AAATGTGTTGT------
```

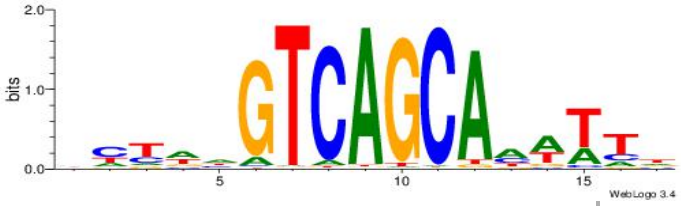
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH

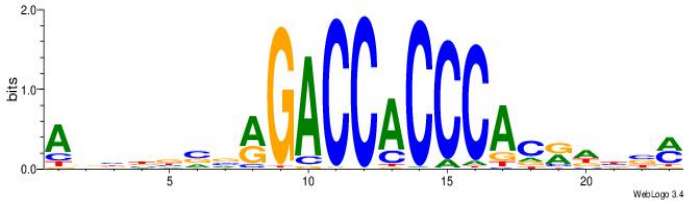


Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4

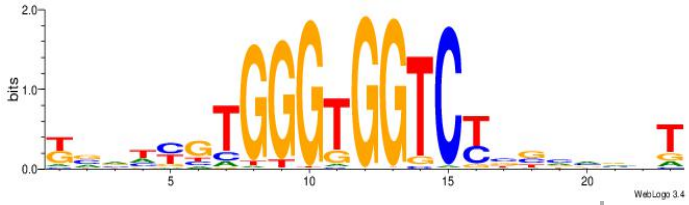
Number of overlap: 11
Similarity score: 0.0270722

Alignment:
YBVDMGTGGGTGGTCKVVBVBBT
---AAATGTGTTGT---------

Original motif
Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif
Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT

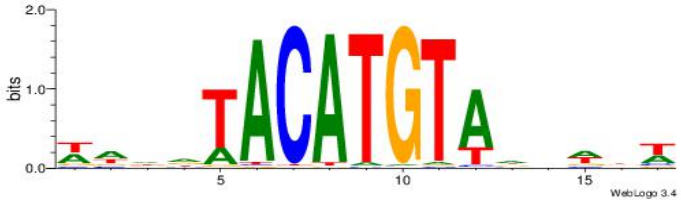


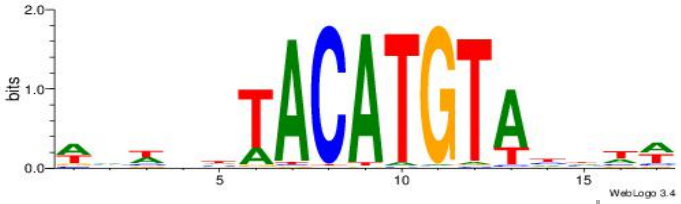
Motif ID: UP00236
Motif name: Irx2
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0272203

Alignment:
WVWDDTACATGTADDDW
------AAATGTGTTGT

Original motif
Consensus sequence: WDDDTACATGTADDWBW

Reverse complement motif
Consensus sequence: WVWDDTACATGTADDDW





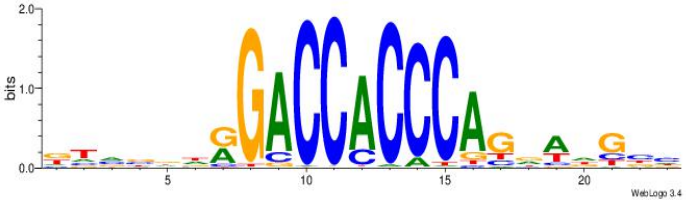
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	11
Similarity score:	0.0274347

Alignment:

```
DTVBDDRGACCACCCAGDWDGBH
--------ACAACACATTT----
```

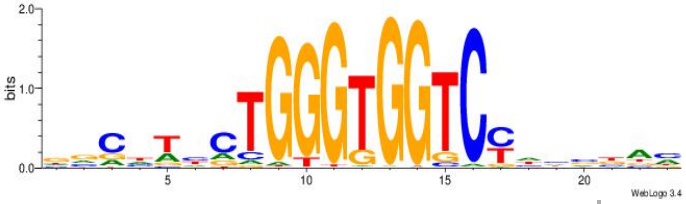
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



Motif ID:	UP00146

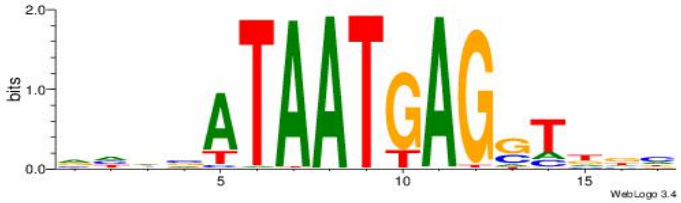
Motif name:	Pou6f1_3733.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0275808

Alignment:

```
VHHVATAATGAGSTDDH
-----AAATGTGTTGT-
```

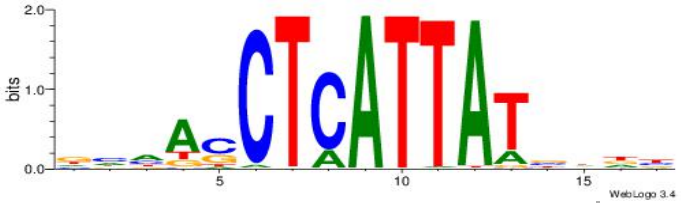
Original motif

Consensus sequence: VHHVATAATGAGSTDDH



Reverse complement motif

Consensus sequence: DHDASCTCATTATVHHB



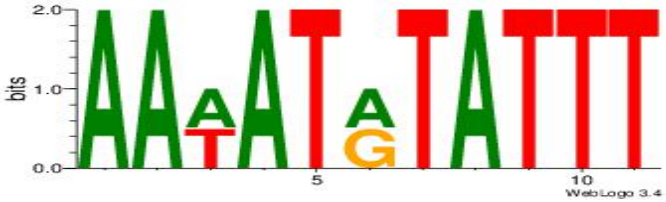
Dataset #: 2 Motif ID: 17 Motif name: Motif 17

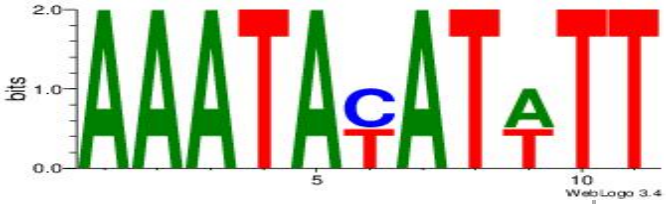
Original motif

Consensus sequence: AAWATRTATTT

Reverse complement motif

Consensus sequence: AAATAKATWTT





Best Matches for Motif ID 17 (Highest to Lowest)

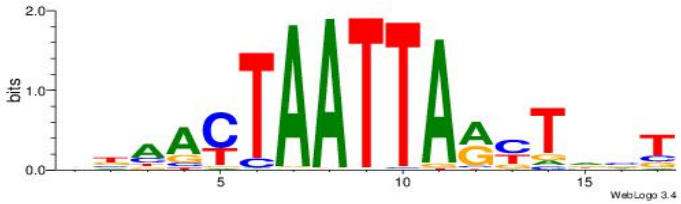
Motif ID:	UP00266
Motif name:	Prrx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.0142423

Alignment:

```
AVDAKKTAATTAGTTVV
AAWATRTATTT------
```

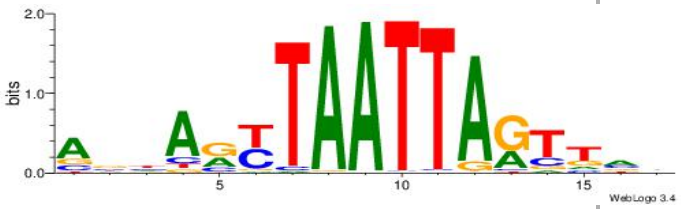
Original motif

Consensus sequence: VBAACTAATTARYTDVT



Reverse complement motif

Consensus sequence: AVDAKKTAATTAGTTVV



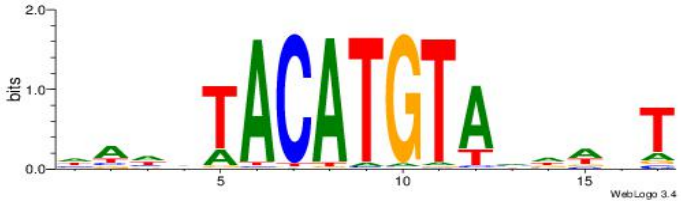
Motif ID:	UP00150
Motif name:	Irx6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.020069

Alignment:

```
AHWDBTACATGTADHTH
-----AAWATRTATTT-
```

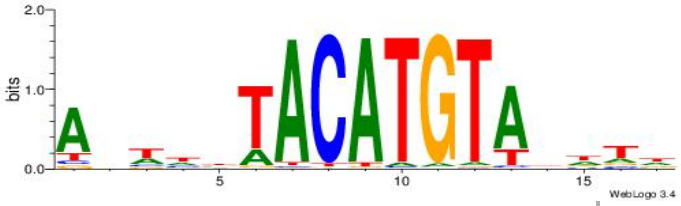
Original motif

Consensus sequence: HAHDTACATGTAVDWHT



Reverse complement motif

Consensus sequence: AHWDBTACATGTADHTH

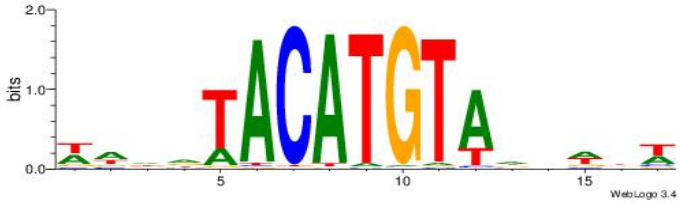


Motif ID:	UP00236
Motif name:	Irx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

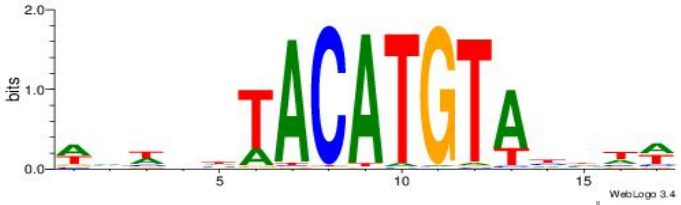
Number of overlap: 11
Similarity score: 0.0214423

Alignment:
WVWDDTACATGTADDDW
-----AAWATRTATTT-

Original motif
Consensus sequence: WDDDTACATGTADDWBW



Reverse complement motif
Consensus sequence: WVWDDTACATGTADDDW



Motif ID: UP00261
Motif name: Lhx4
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0230284

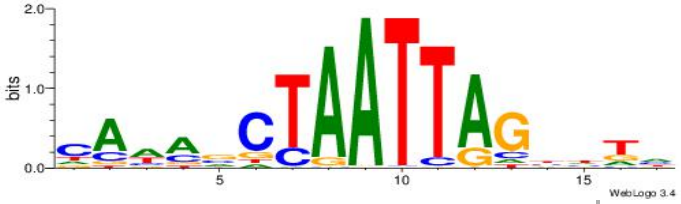
Alignment:
DADVCTAATTAGBTWTG
------AAATAKATWTT

Original motif

Reverse complement motif

Consensus sequence: DADVCTAATTAGBTWTG

Consensus sequence: CAWABCTAATTAGBDTD



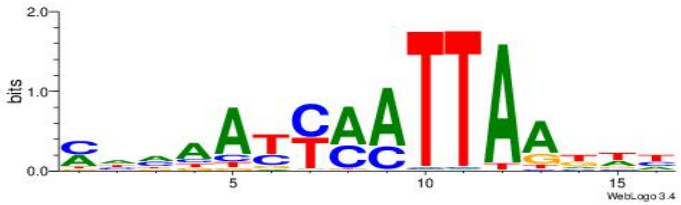
Motif ID:	UP00170
Motif name:	Isl2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0233945

Alignment:

```
HWDTTAATYKMTTHHR
----AAATAKATWTT-
```

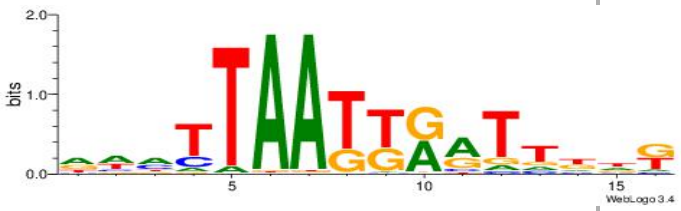
Original motif

Consensus sequence: MHHAAYYMATTAADWH



Reverse complement motif

Consensus sequence: HWDTTAATYKMTTHHR



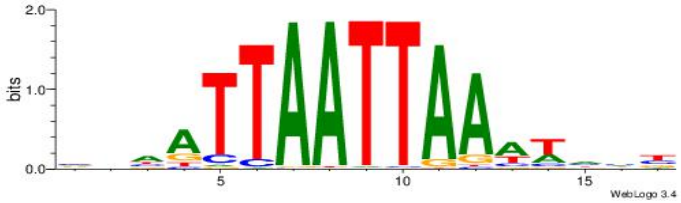
Motif ID:	UP00212
Motif name:	Lhx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.0236276

Alignment:

```
VDHWTTTAATTAATHHV
AAWATRTATTT------
```

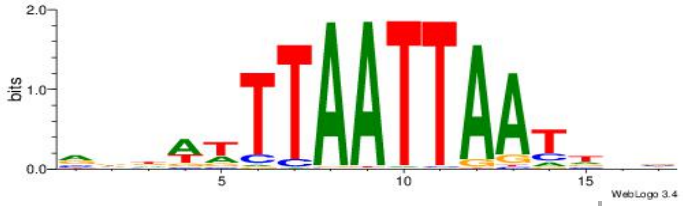
Original motif

Consensus sequence: VDHATTAATTAAAWHHB



Reverse complement motif

Consensus sequence: VDHWTTTAATTAATHHV

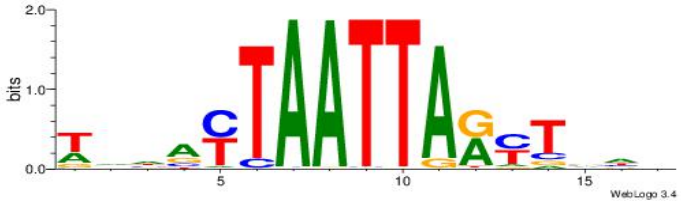


Motif ID:	UP00108
Motif name:	Alx3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

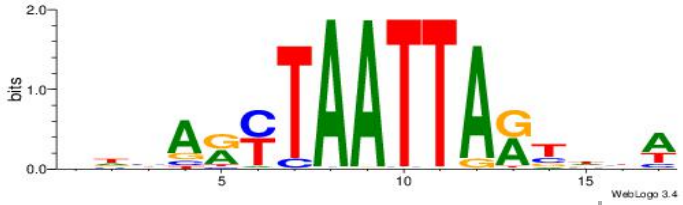
Number of overlap: 11
Similarity score: 0.0243258

Alignment:
VHVAKMTAATTAKTHBW
AAWATRTATTT------

Original motif
Consensus sequence: WVHAYTAATTARYTVHV



Reverse complement motif
Consensus sequence: VHVAKMTAATTAKTHBW



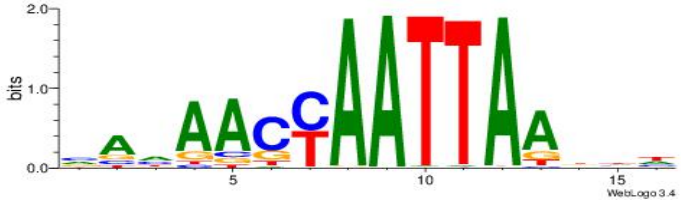
Motif ID: UP00171
Motif name: Msx3
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 11
Similarity score: 0.0254704

Alignment:
HHVTTAATTKGTTHTV
----AAATAKATWTT-

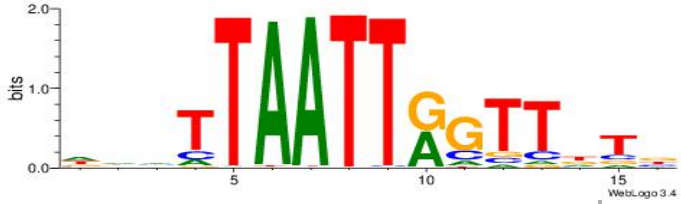
Original motif

Reverse complement motif

Consensus sequence: VAHAACYAATTAABHH



Consensus sequence: HHVTTAATTKGTTHTV



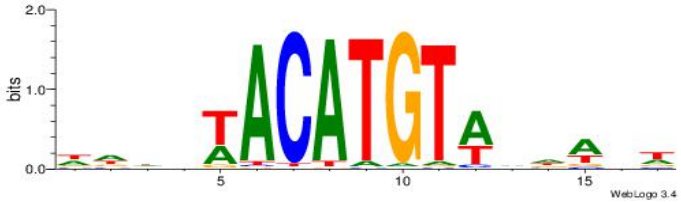
Motif ID:	UP00250
Motif name:	Irx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0.0259267

Alignment:

```
WVTDHWACATGTWHDDD
-----AAWATRTATTT-
```

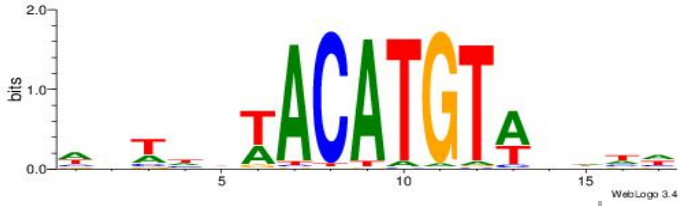
Original motif

Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif

Consensus sequence: WVTDHWACATGTWHDDD



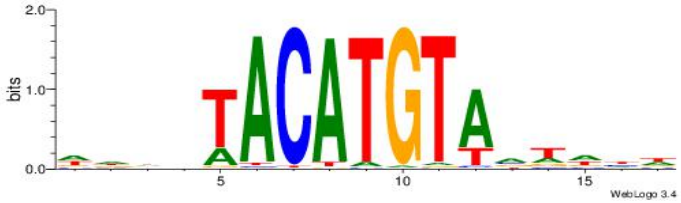
Motif ID:	UP00223
Motif name:	Irx3_2226.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0263428

Alignment:

```
DDDHTACATGTAVWDHD
----AAWATRTATTT--
```

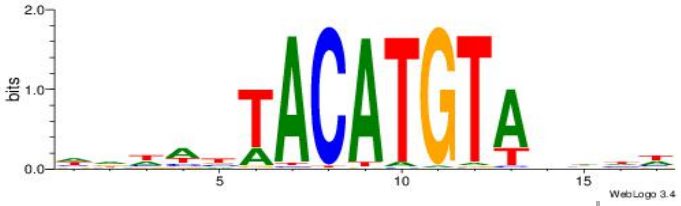
Original motif

Consensus sequence: DDDHTACATGTAVWDHD



Reverse complement motif

Consensus sequence: DHDWBTACATGTAHDDD



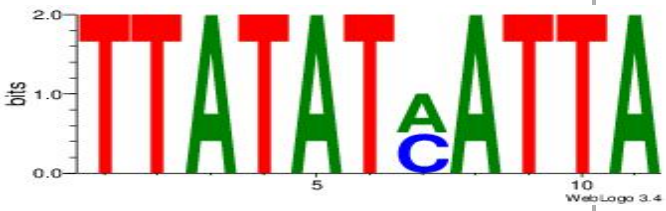
Dataset #: 2 Motif ID: 18 Motif name: Motif 18

Original motif

Consensus sequence: TAATKATATAA

Reverse complement motif

Consensus sequence: TTATATYATTA



Best Matches for Motif ID 18 (Highest to Lowest)

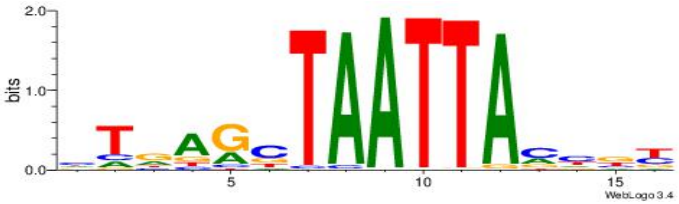
Motif ID:	UP00264
Motif name:	Hoxa1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0229661

Alignment:

```
MBDRTAATTAGCTHAD
----TAATKATATAA-
```

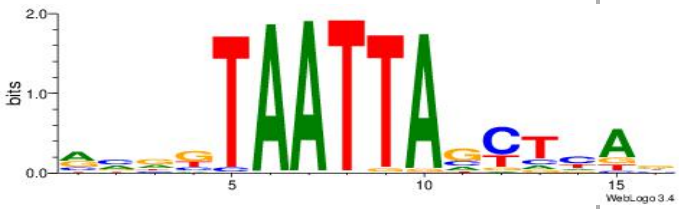
Original motif

Consensus sequence: HTDAGCTAATTAMHBY



Reverse complement motif

Consensus sequence: MBDRTAATTAGCTHAD



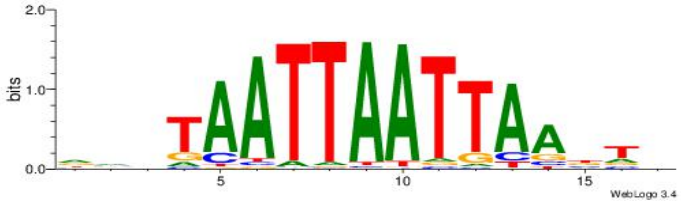
Motif ID:	UP00129
Motif name:	Pou3f1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.02767

Alignment:

```
DVBTAATTAATTAABTH
---TAATKATATAA---
```

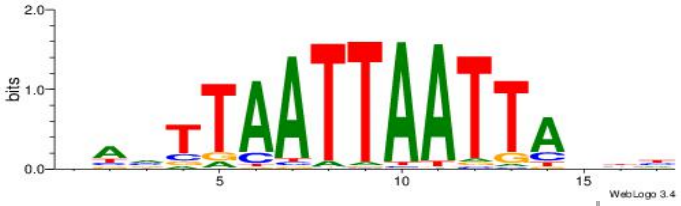
Original motif

Consensus sequence: DVBTAATTAATTAABTH



Reverse complement motif

Consensus sequence: DAVTTAATTAATTAVBD

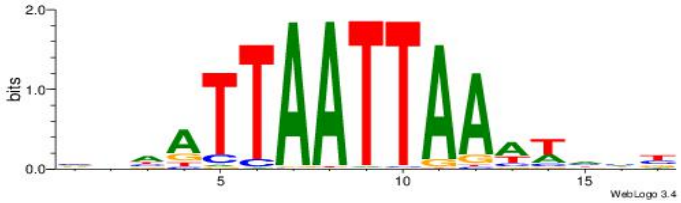


Motif ID:	UP00212
Motif name:	Lhx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6

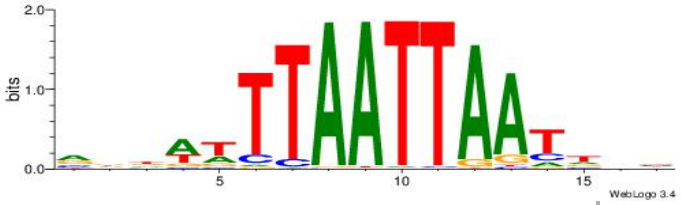
Number of overlap: 11
Similarity score: 0.0295456

Alignment:
VDHATTAATTAAAWHHB
-----TAATKATATAA-

Original motif
Consensus sequence: VDHATTAATTAAAWHHB



Reverse complement motif
Consensus sequence: VDHWTTTAATTAATHHV



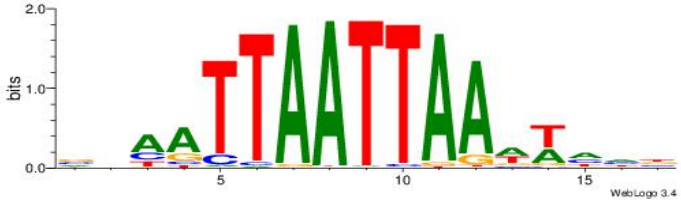
Motif ID: UP00130
Motif name: Lhx3
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 11
Similarity score: 0.0295647

Alignment:
VDAATTAATTAAWWHHB
-----TAATKATATAA-

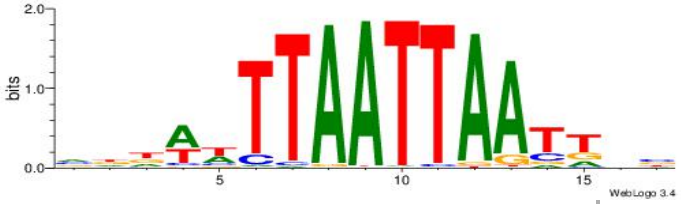
Original motif

Reverse complement motif

Consensus sequence: VDAATTAATTAAWWHHB



Consensus sequence: VHHWWTTAATTAATTDV



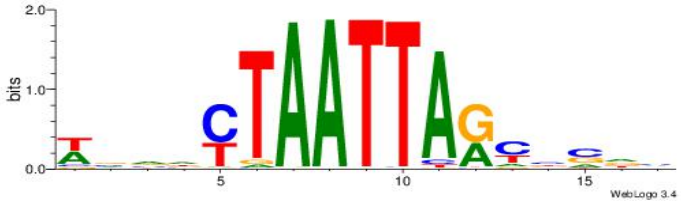
Motif ID:	UP00247
Motif name:	Pax4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0309932

Alignment:

```
DDSBKMTAATTAKDBVW
------TAATKATATAA
```

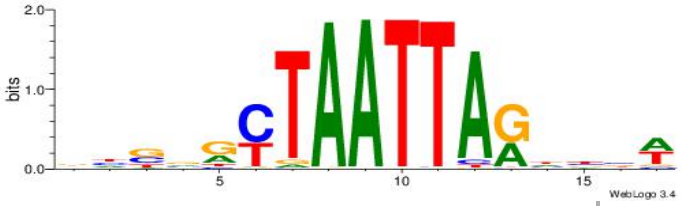
Original motif

Consensus sequence: WVVDYTAATTARYBSDH



Reverse complement motif

Consensus sequence: DDSBKMTAATTAKDBVW



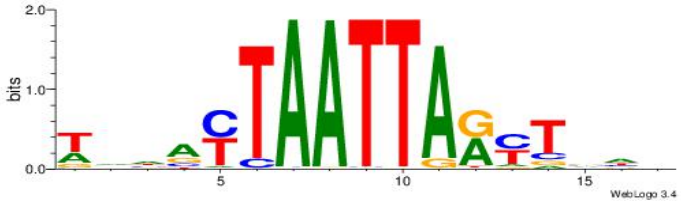
Motif ID:	UP00108
Motif name:	Alx3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0319078

Alignment:

```
VHVAKMTAATTAKTHBW
------TAATKATATAA
```

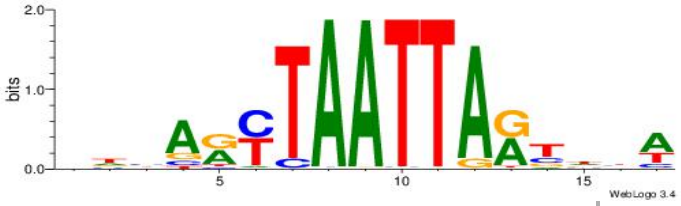
Original motif

Consensus sequence: WVHAYTAATTARYTVHV



Reverse complement motif

Consensus sequence: VHVAKMTAATTAKTHBW

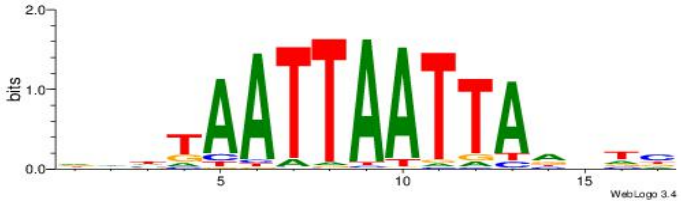


Motif ID:	UP00105
Motif name:	Pou3f4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

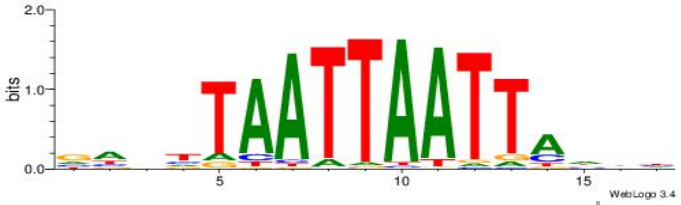
Number of overlap: 11
Similarity score: 0.0323543

Alignment:
DVHTAATTAATTADDDB
---TAATKATATAA---

Original motif
Consensus sequence: DVHTAATTAATTADDDB



Reverse complement motif
Consensus sequence: BDDDTAATTAATTAHBD



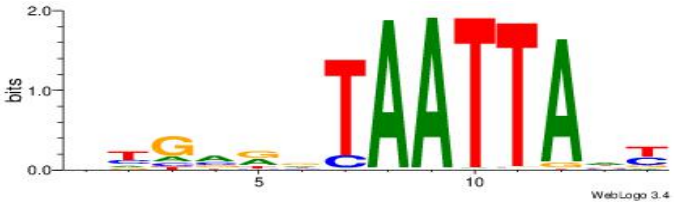
Motif ID: UP00202
Motif name: Dlx1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0327446

Alignment:
MDTAATTAHMBCHB
--TAATKATATAA-

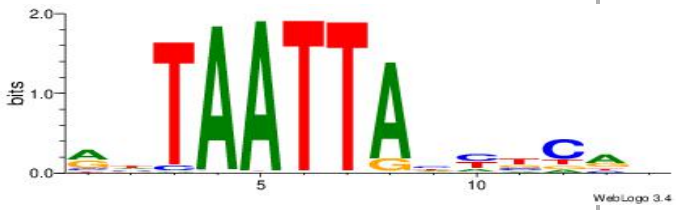
Original motif

Reverse complement motif

Consensus sequence: BHGVRDTAATTADY



Consensus sequence: MDTAATTAHMBCHB



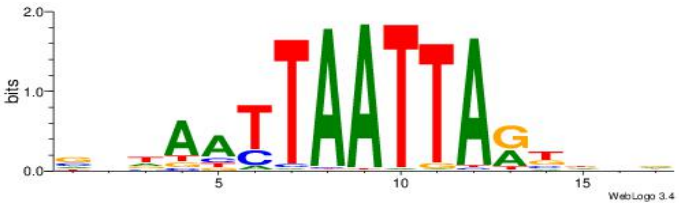
Motif ID:	UP00128
Motif name:	Pou3f2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0.0328898

Alignment:

```
HHDVMTAATTAATTDDV
-----TAATKATATAA-
```

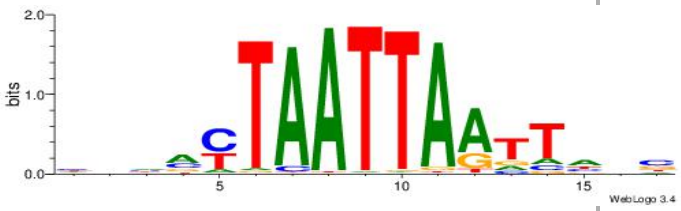
Original motif

Consensus sequence: VDDAATTAATTARBDHD



Reverse complement motif

Consensus sequence: HHDVMTAATTAATTDDV



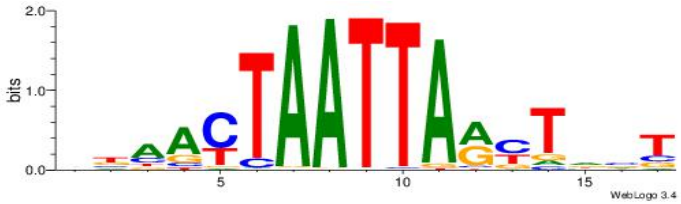
Motif ID:	UP00266
Motif name:	Prrx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0331473

Alignment:

```
AVDAKKTAATTAGTTVV
------TAATKATATAA
```

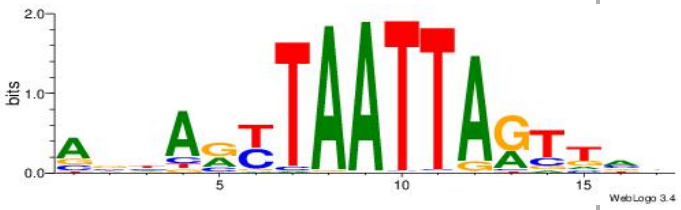
Original motif

Consensus sequence: VBAACTAATTARYTDVT



Reverse complement motif

Consensus sequence: AVDAKKTAATTAGTTVV



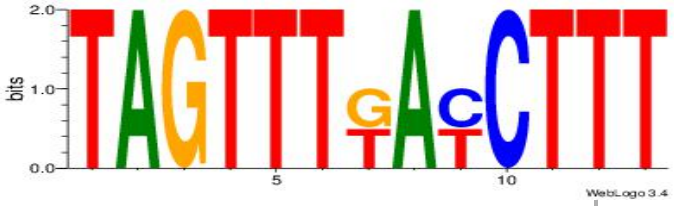
Dataset #: 2 Motif ID: 19 Motif name: Motif 19

Original motif

Consensus sequence: AAAGRTMAAACTA

Reverse complement motif

Consensus sequence: TAGTTTYAKCTTT



Best Matches for Motif ID 19 (Highest to Lowest)

Motif ID:	UP00074
Motif name:	Isgf3g_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:	13
Similarity score:	0.0359564

Alignment:

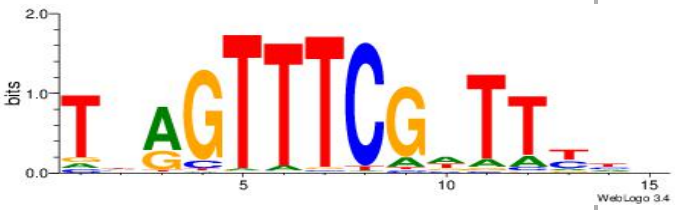
```
TDAGTTTCGWTTKDV
-TAGTTTYAKCTTT-
```

Original motif

Consensus sequence: VDRAAWCGAAACTDA

Reverse complement motif

Consensus sequence: TDAGTTTCGWTTKDV



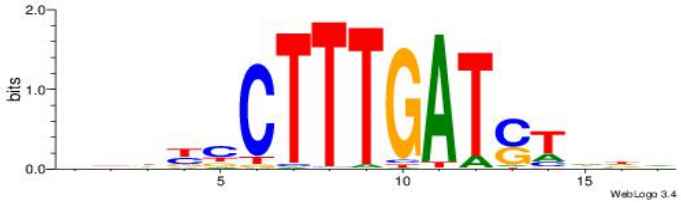
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.0371142

Alignment:

```
BDDASATCAAAGGMDDD
-AAAGRTMAAACTA---
```

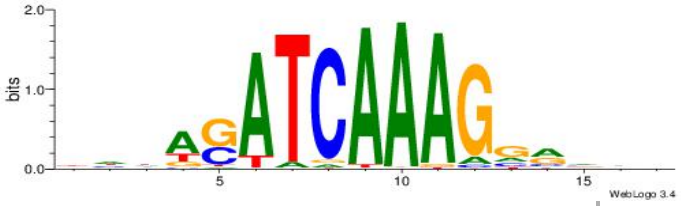
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD

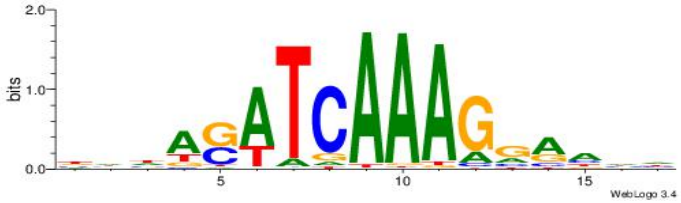


Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

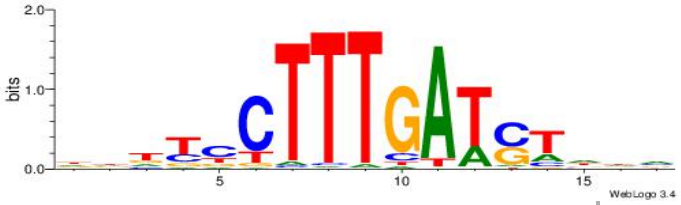
Number of overlap: 13
Similarity score: 0.0377174

Alignment:
BHHASATCAAAGGAHHH
-AAAGRTMAAACTA---

Original motif
Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif
Consensus sequence: HHHTCCTTTGATSTHHV



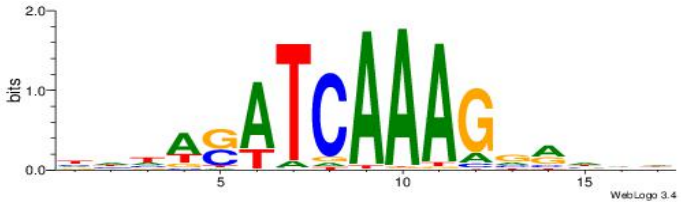
Motif ID: UP00058
Motif name: Tcf3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 13
Similarity score: 0.0394685

Alignment:
HHHASATCAAAGVRHHH
-AAAGRTMAAACTA---

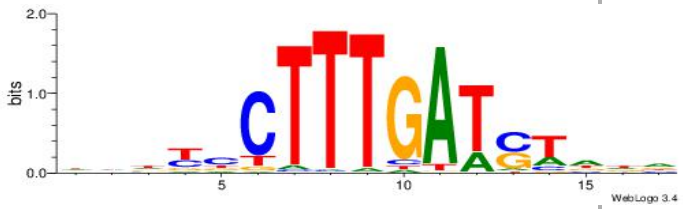
Original motif

Reverse complement motif

Consensus sequence: HHHASATCAAAGVRHHH



Consensus sequence: HHHKVCTTTGATSTHHH



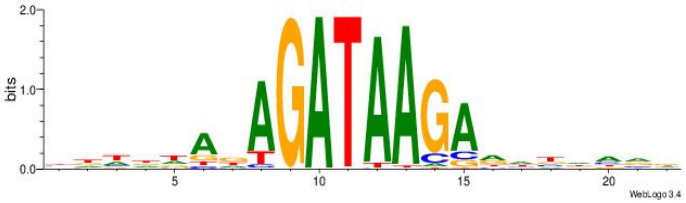
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	13
Similarity score:	0.0406011

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
----TAGTTTYAKCTTT-----
```

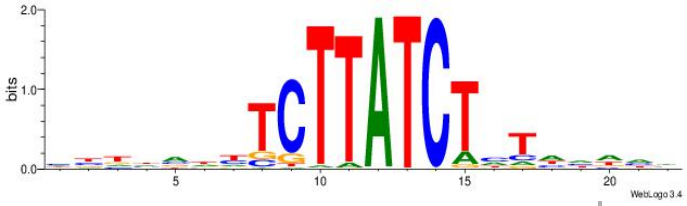
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



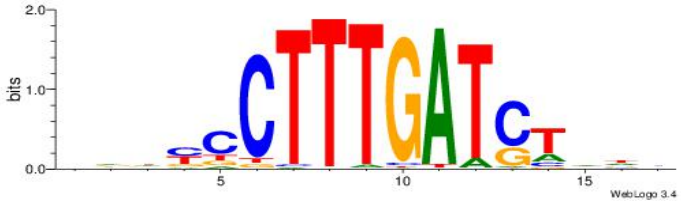
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.0411941

Alignment:

```
VDDAGATCAAAGGKDDD
-AAAGRTMAAACTA---
```

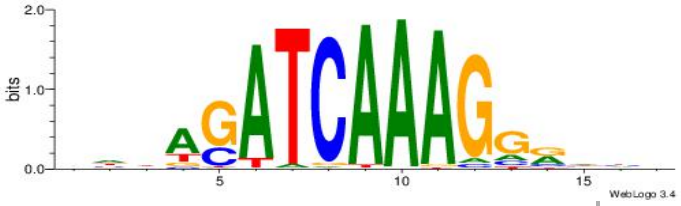
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD

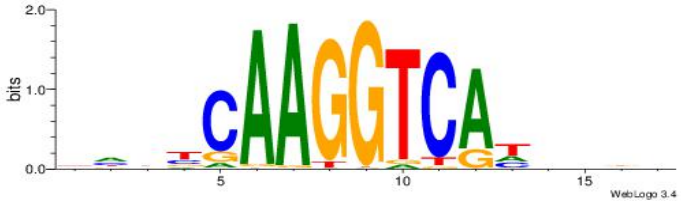


Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

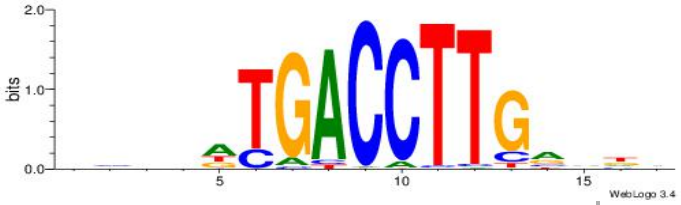
Number of overlap: 13
Similarity score: 0.042799

Alignment:
DHDBCAAGGTCAHVBDH
----AAAGRTMAAACTA

Original motif
Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif
Consensus sequence: HHBVHTGACCTTGVDHD



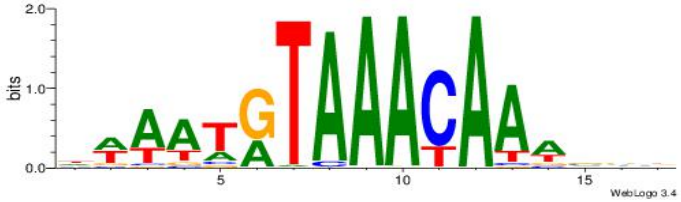
Motif ID: UP00061
Motif name: Foxl1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0473603

Alignment:
DWAATRTAAACAAWVVB
-AAAGRTMAAACTA---

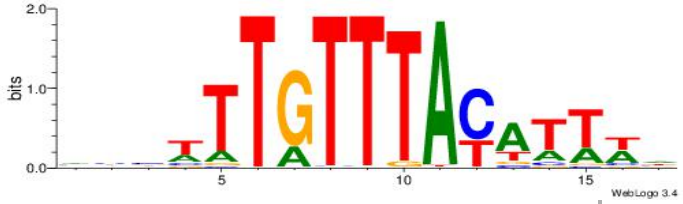
Original motif

Reverse complement motif

Consensus sequence: DWAATRTAAACAAWVVB



Consensus sequence: VVVWTTGTTTAMATTWD



Motif ID:	UP00040
Motif name:	Irf5_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:	13
Similarity score:	0.0474515

Alignment:

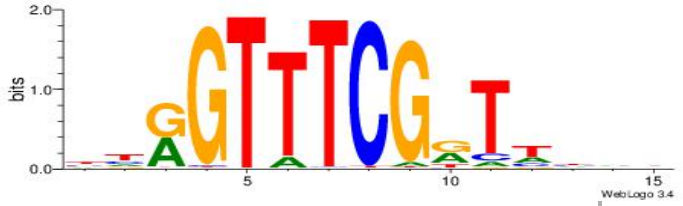
```
BDKGTTTCGKTWDDD
-TAGTTTYAKCTTT-
```

Original motif

Consensus sequence: DDDWAYCGAAACYDV

Reverse complement motif

Consensus sequence: BDKGTTTCGKTWDDD



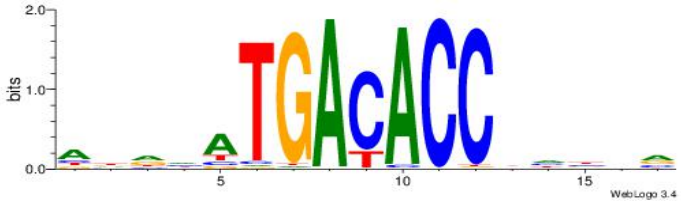
Motif ID:	UP00199
Motif name:	Six4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0477024

Alignment:

```
BBVHVGGTGTCATHDDT
----TAGTTTYAKCTTT
```

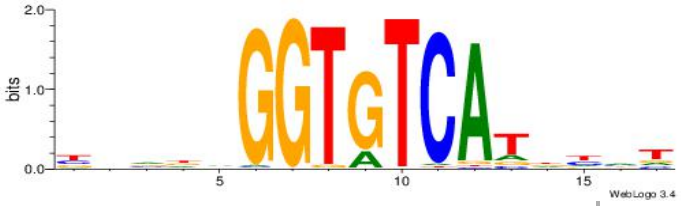
Original motif

Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif

Consensus sequence: BBVHVGGTGTCATHDDT



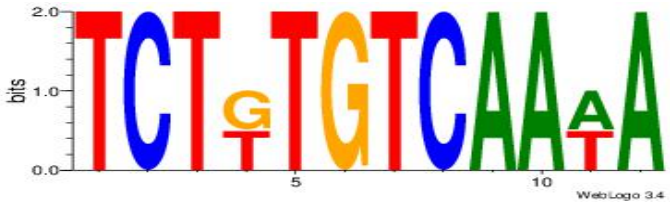
Dataset #: 2 Motif ID: 20 Motif name: Motif 20

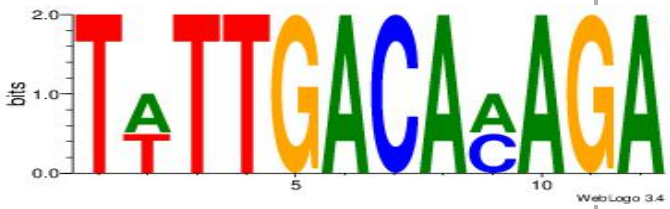
Original motif

Consensus sequence: TCTKTGTCAAWA

Reverse complement motif

Consensus sequence: TWTTGACAYAGA





Best Matches for Motif ID 20 (Highest to Lowest)

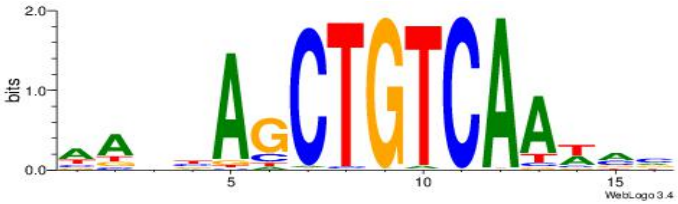
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.00294541

Alignment:

```
VBWTTGACAGCTVBTT
-TWTTGACAYAGA---
```

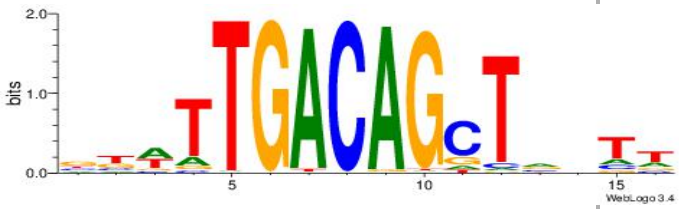
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



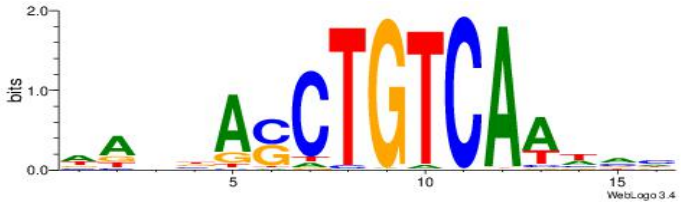
Motif ID:	UP00210
Motif name:	Mrg2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.00709656

Alignment:

```
DBHTTGACAGSTVDTD
-TWTTGACAYAGA---
```

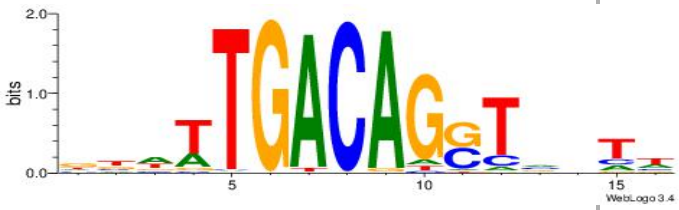
Original motif

Consensus sequence: DADBASCTGTCAAHVH



Reverse complement motif

Consensus sequence: DBHTTGACAGSTVDTD

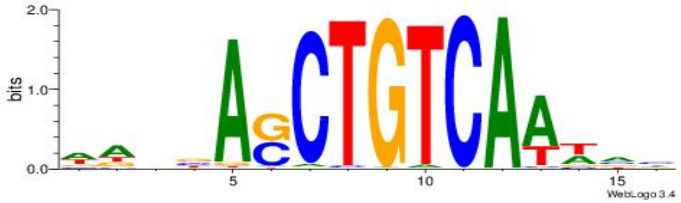


Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

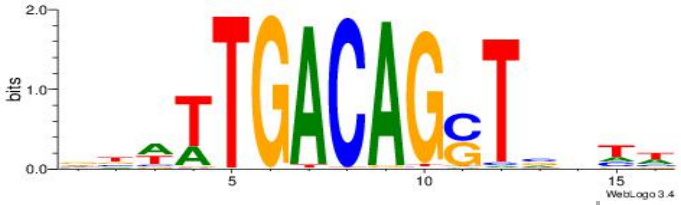
Number of overlap: 12
Similarity score: 0.00883873

Alignment:
WAVBASCTGTCAAWVH
---TCTKTGTCAAWA-

Original motif
Consensus sequence: WAVBASCTGTCAAWVH



Reverse complement motif
Consensus sequence: DBWTTGACAGSTBVTW



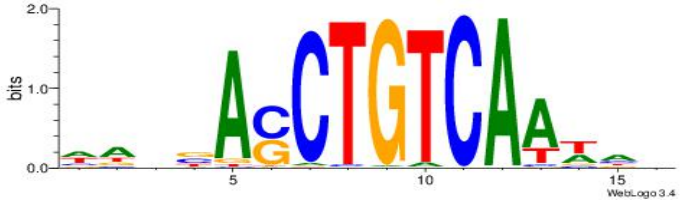
Motif ID: UP00226
Motif name: Mrg1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.00900015

Alignment:
WAVBASCTGTCAAWHB
---TCTKTGTCAAWA-

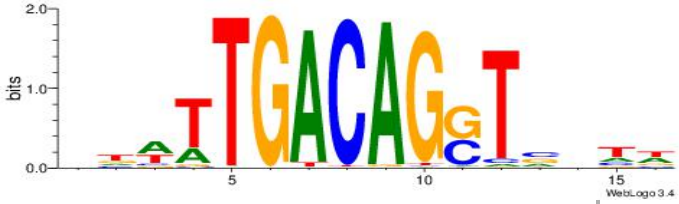
Original motif

Reverse complement motif

Consensus sequence: WAVBASCTGTCAAWHB



Consensus sequence: BHWTTGACAGSTBBTW



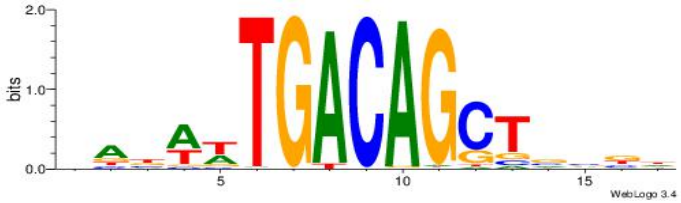
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0128037

Alignment:

```
DABWWTGACAGCTVVBD
--TWTTGACAYAGA---
```

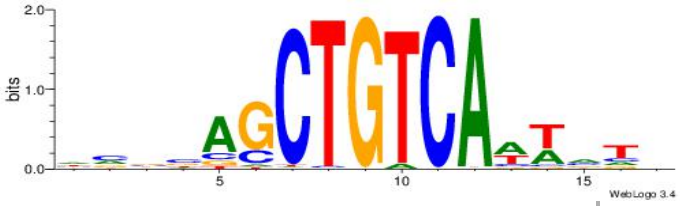
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0145754

Alignment:

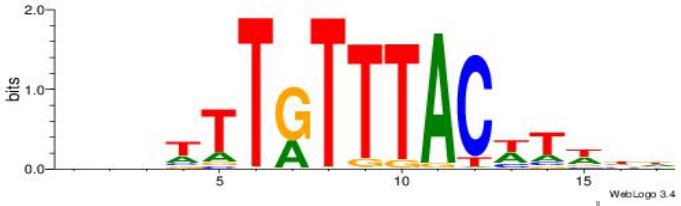
```
BDVTTTKTTTACWTWHH
-----TWTTGACAYAGA
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH

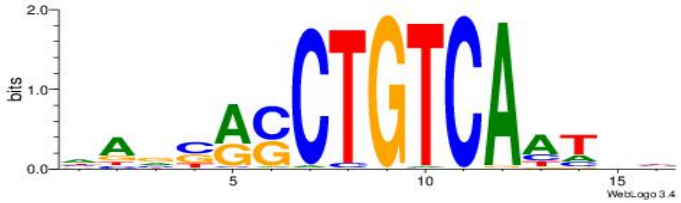


Motif ID:	UP00205
Motif name:	Pknox2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

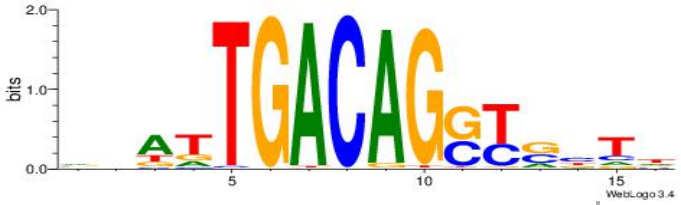
Number of overlap: 12
Similarity score: 0.0147372

Alignment:
VHATTGACAGSKSVTH
-TWTTGACAYAGA---

Original motif
Consensus sequence: HAVSRSCTGTCAATHB



Reverse complement motif
Consensus sequence: VHATTGACAGSKSVTH



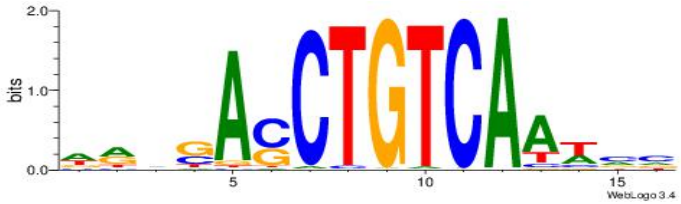
Motif ID: UP00203
Motif name: Pknox1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0147793

Alignment:
DRVSASCTGTCAAWVV
---TCTKTGTCAAWA-

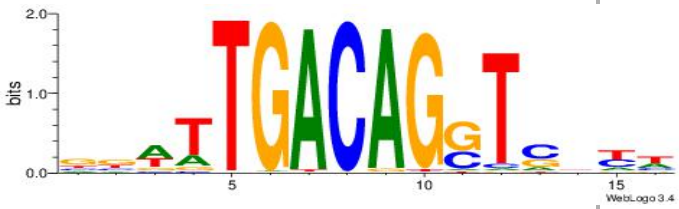
Original motif

Reverse complement motif

Consensus sequence: DRVSASCTGTCAAWVV



Consensus sequence: VVWTTGACAGSTSBKD



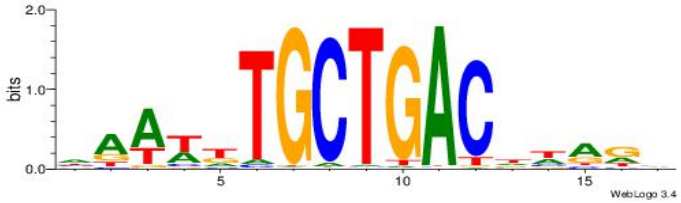
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0150474

Alignment:

```
HAAWDTGCTGACDWARH
-----TWTTGACAYAGA
```

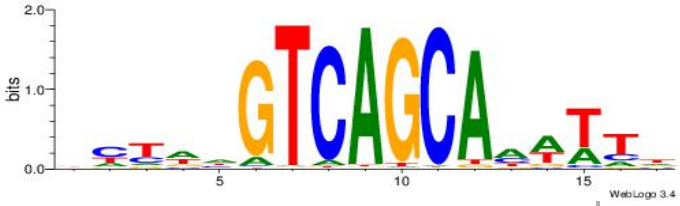
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH



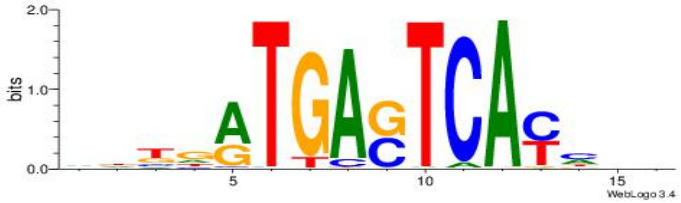
Motif ID:	UP00103
Motif name:	Jundm2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0167106

Alignment:

```
HDDKTGASTCAKHRDB
-TWTTGACAYAGA---
```

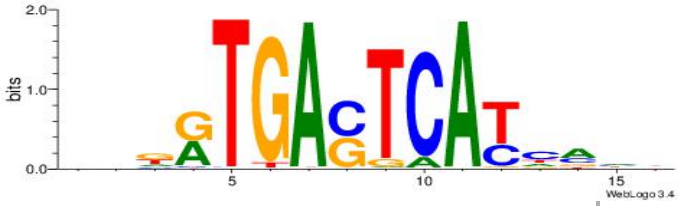
Original motif

Consensus sequence: VDKDRTGASTCAYHDH



Reverse complement motif

Consensus sequence: HDDKTGASTCAKHRDB



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

Original motif

Consensus sequence: CTTCTGACCTC

Reverse complement motif

Consensus sequence: GAGGTCAGAAG

Best Matches for Motif ID 21 (Highest to Lowest)

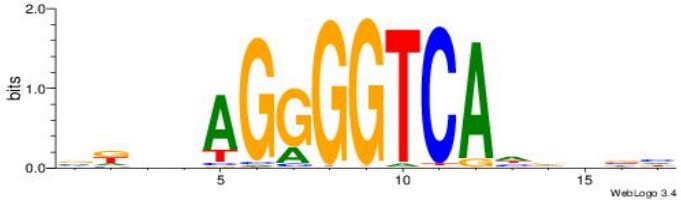
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0

Alignment:

```
VKBBAGGGGTCAHDBBH
-----GAGGTCAGAAG-
```

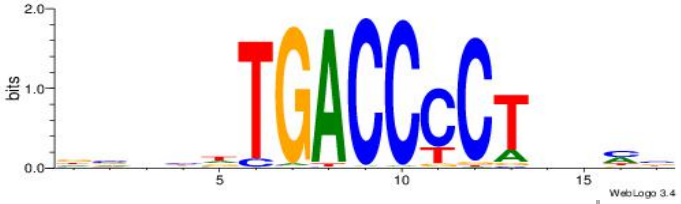
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV



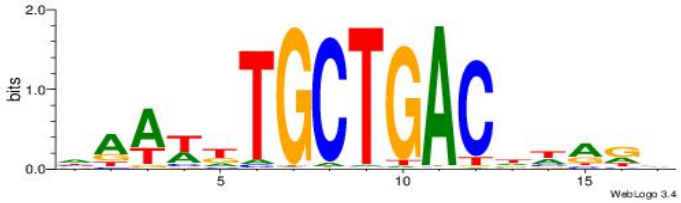
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.00315419

Alignment:

```
DMTWDGTCAGCADWTTH
--GAGGTCAGAAG----
```

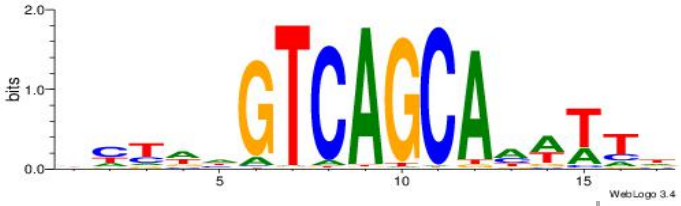
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH

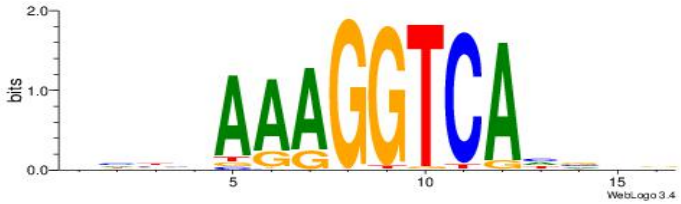


Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11

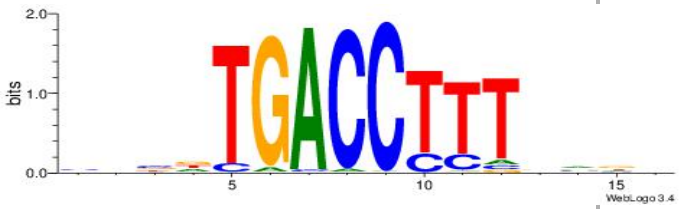
Similarity score: 0.00435047

Alignment:
BHVDTGACCTTTDVDD
-----GAGGTCAGAAG

Original motif
Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif
Consensus sequence: BHVDTGACCTTTDVDD

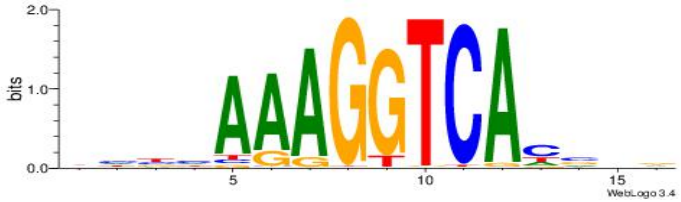


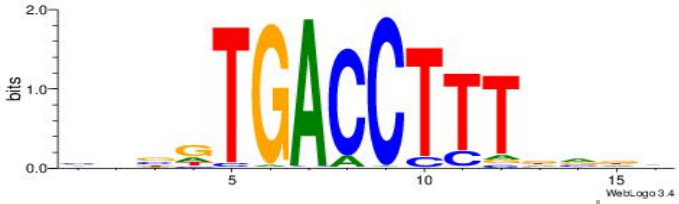
Motif ID: UP00048
Motif name: Rara
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.00499607

Alignment:
HHVGTGACCTTTDVDD
-----GAGGTCAGAAG

Original motif
Consensus sequence: DHBHAAAGGTCACVHD

Reverse complement motif
Consensus sequence: HHVGTGACCTTTDVDD





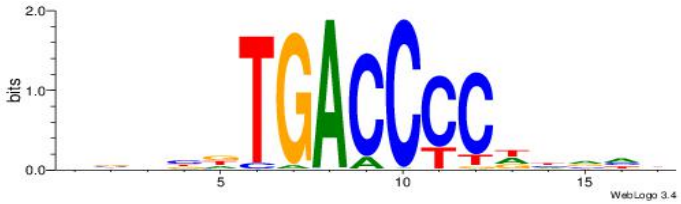
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.00503678

Alignment:

```
DBHBDTGACCCCDHVHB
-CTTCTGACCTC-----
```

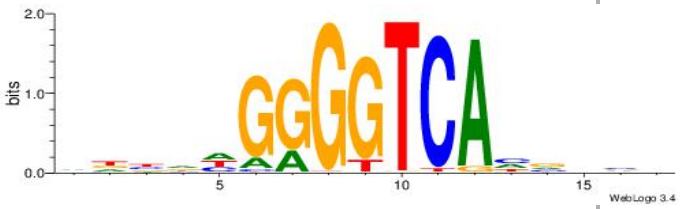
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



Motif ID:	UP00079

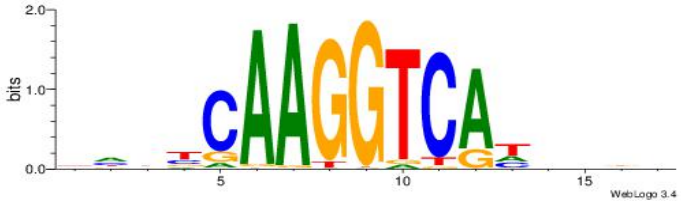
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.00855607

Alignment:

```
HHBVHTGACCTTGVDHD
-CTTCTGACCTC-----
```

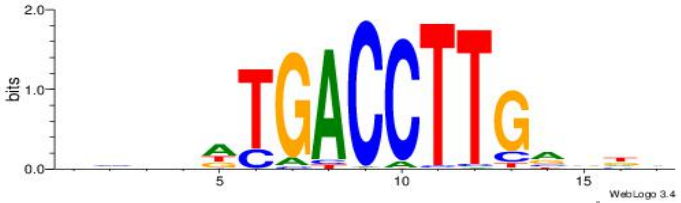
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

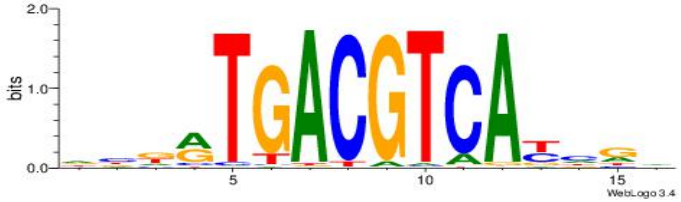
Consensus sequence: HHBVHTGACCTTGVDHD



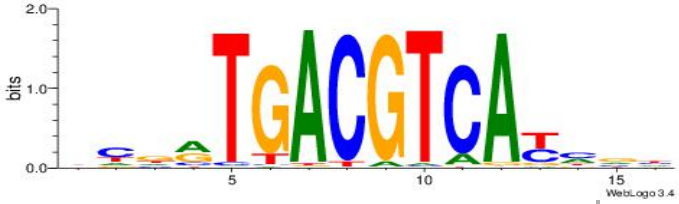
Motif ID:	UP00020
Motif name:	Atf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0106472

Alignment:
DMDMTGACGTCAKHBD
-----GAGGTCAGAAG

Original motif
Consensus sequence: DBDRTGACGTCAYHRD



Reverse complement motif
Consensus sequence: DMDMTGACGTCAKHBD

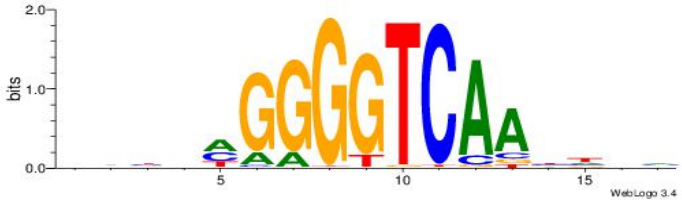


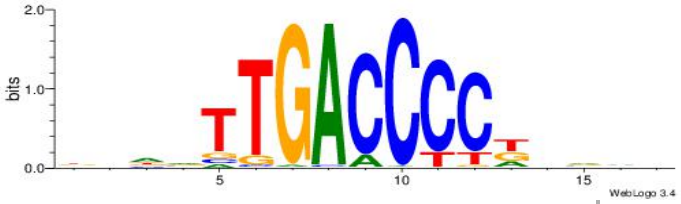
Motif ID:	UP00066
Motif name:	Hnf4a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0108194

Alignment:
BDBVMGGGGTCAABHDV
-----GAGGTCAGAAG-

Original motif
Consensus sequence: BDBVMGGGGTCAABHDV

Reverse complement motif
Consensus sequence: BHHVTTGACCCCYVVDB





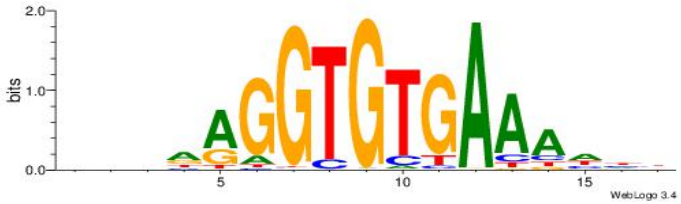
Motif ID:	UP00068
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0131175

Alignment:

```
BVHDAGGTGTGAAAHHH
---GAGGTCAGAAG---
```

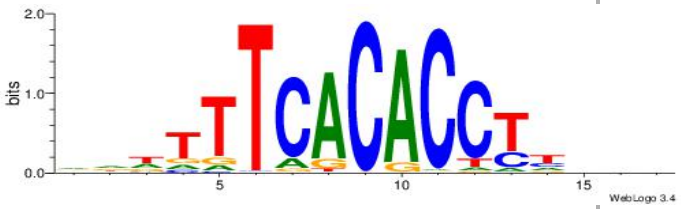
Original motif

Consensus sequence: BVHDAGGTGTGAAAHHH



Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV



Motif ID:	UP00103

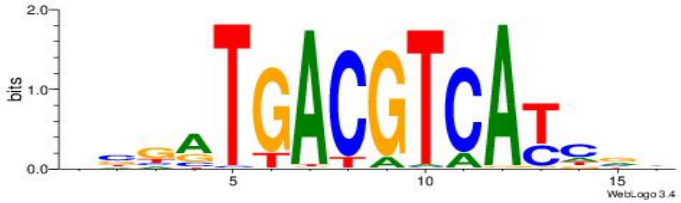
Motif name:	Jundm2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0132197

Alignment:

```
HVGMTGACGTCATCBB
CTTCTGACCTC-----
```

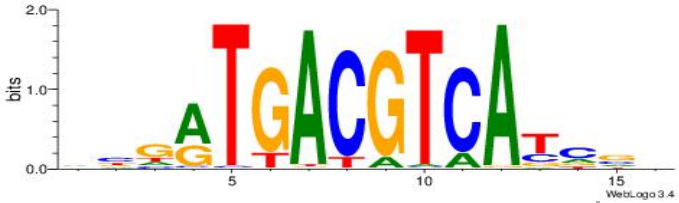
Original motif

Consensus sequence: BBGATGACGTCAYCVH



Reverse complement motif

Consensus sequence: HVGMTGACGTCATCBB



Dataset #: 2 Motif ID: 22 Motif name: Motif 22

Original motif

Consensus sequence: CAAAGTCCAGC

Reverse complement motif

Consensus sequence: GCTGGACTTTG

Best Matches for Motif ID 22 (Highest to Lowest)

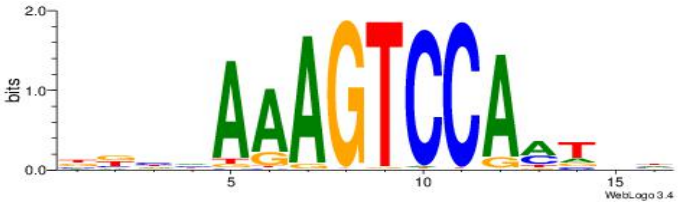
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0

Alignment:

```
HHAYTGGACTTTHDBV
--GCTGGACTTTG---
```

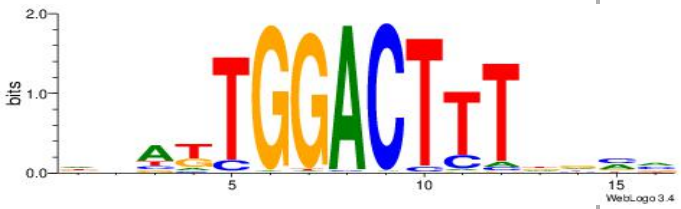
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV



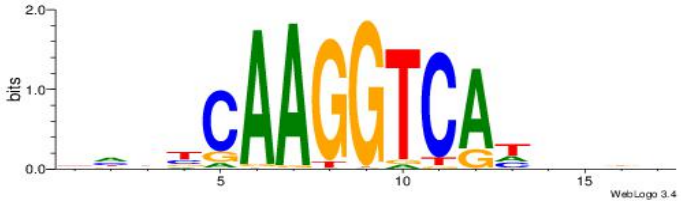
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0313848

Alignment:

```
HHBVHTGACCTTGVDHD
--GCTGGACTTTG----
```

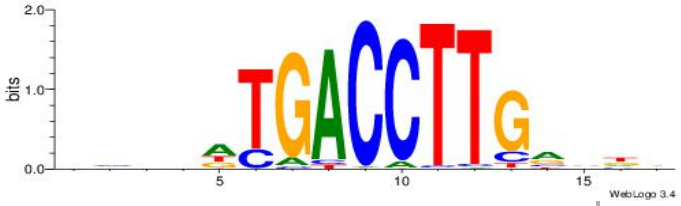
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD

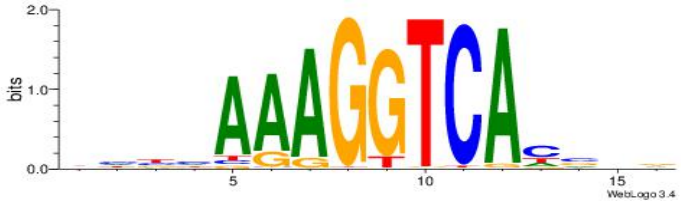


Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

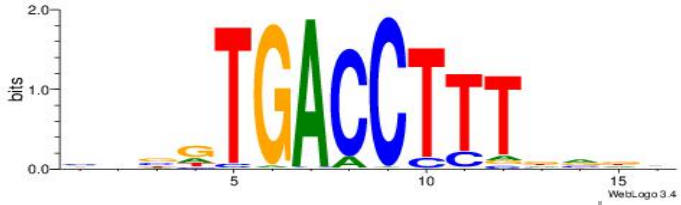
Number of overlap: 11
Similarity score: 0.0347594

Alignment:
DHBHAAAGGTCACVHD
---CAAAGTCCAGC--

Original motif
Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif
Consensus sequence: HHVGTGACCTTTDVDD



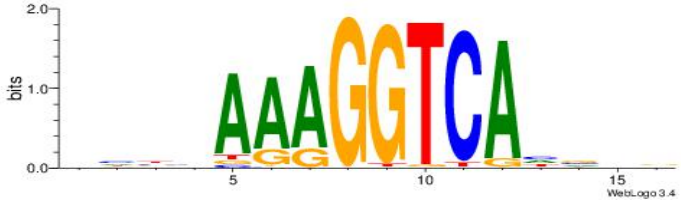
Motif ID: UP00009
Motif name: Nr2f2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0448871

Alignment:
DHBHAAAGGTCAHVHB
---CAAAGTCCAGC--

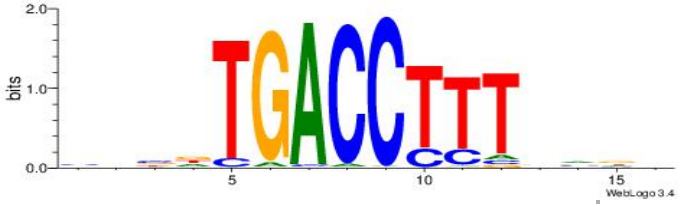
Original motif

Reverse complement motif

Consensus sequence: DHBHAAAGGTCAHVHB



Consensus sequence: BHVDTGACCTTTDVDD



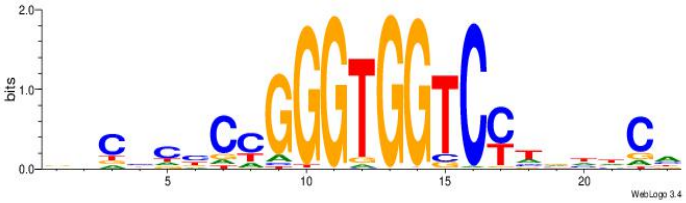
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	11
Similarity score:	0.0461676

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
---------GCTGGACTTTG---
```

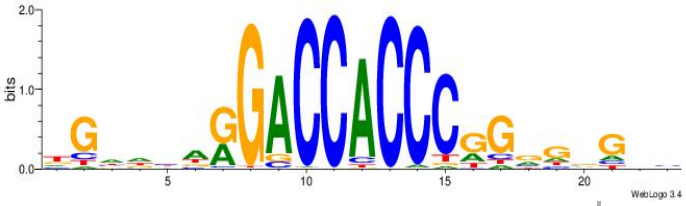
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



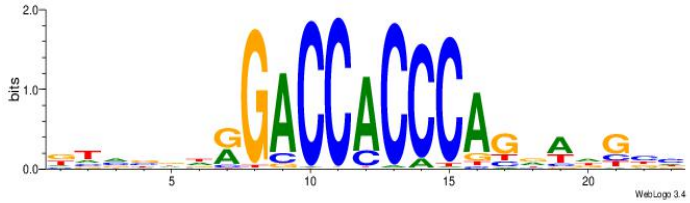
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0468432

Alignment:

```
DTVBDDRGACCACCCAGDWDGBH
---CAAAGTCCAGC---------
```

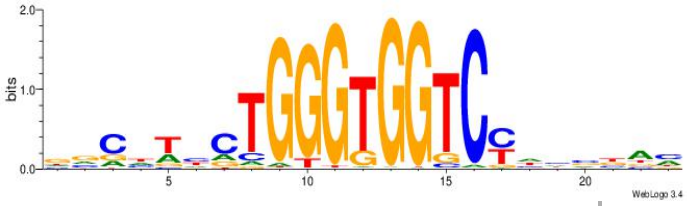
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH

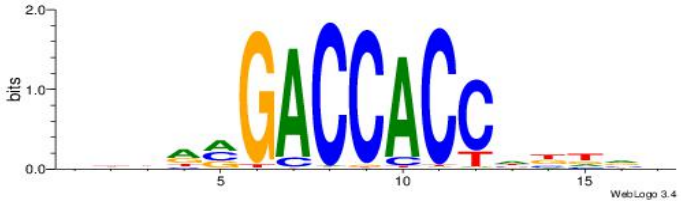


Motif ID:	UP00047
Motif name:	Zbtb7b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

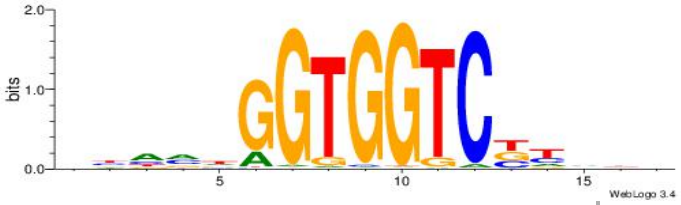
Number of overlap: 11
Similarity score: 0.0474554

Alignment:
BBDVHGGTGGTCBKDDB
-----GCTGGACTTTG-

Original motif
Consensus sequence: BDDRVGACCACCHBDVB



Reverse complement motif
Consensus sequence: BBDVHGGTGGTCBKDDB



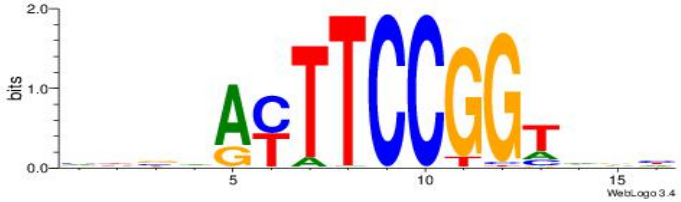
Motif ID: UP00416
Motif name: Fli1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.0475257

Alignment:
DHDACCGGAAKTBBVV
---GCTGGACTTTG--

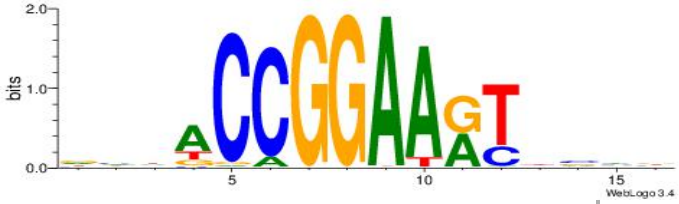
Original motif

Reverse complement motif

Consensus sequence: VBBVAYTTCCGGTDDH



Consensus sequence: DHDACCGGAAKTBBVV



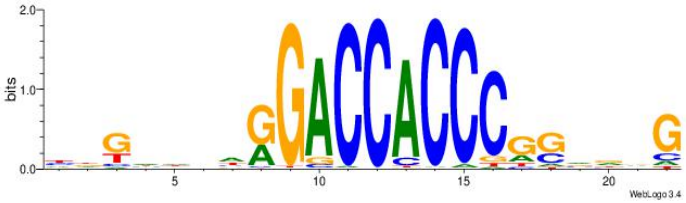
Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0476315

Alignment:

```
HDGHHBHRGACCACCCGSVDVG
----CAAAGTCCAGC-------
```

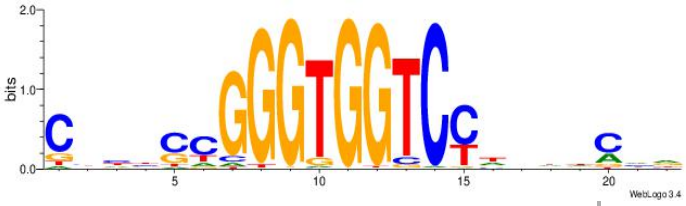
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



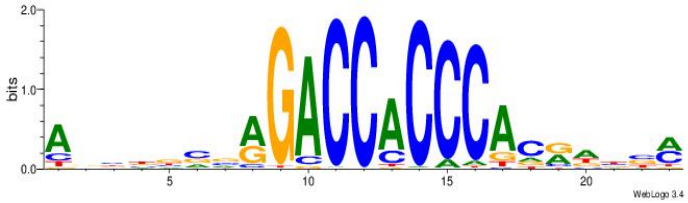
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0492402

Alignment:

```
ABBBBVVRGACCACCCACRDBBM
----CAAAGTCCAGC--------
```

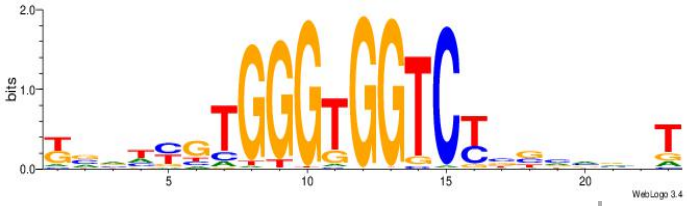
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



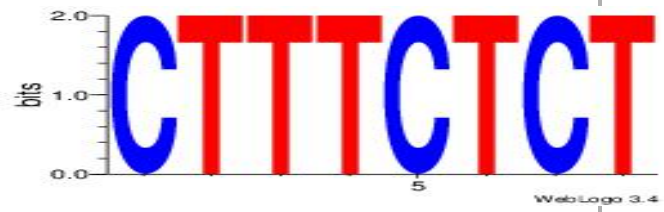
Dataset #: 2 Motif ID: 23 Motif name: Motif 23

Original motif

Consensus sequence: AGAGAAAG

Reverse complement motif

Consensus sequence: CTTTCTCT



Best Matches for Motif ID 23 (Highest to Lowest)

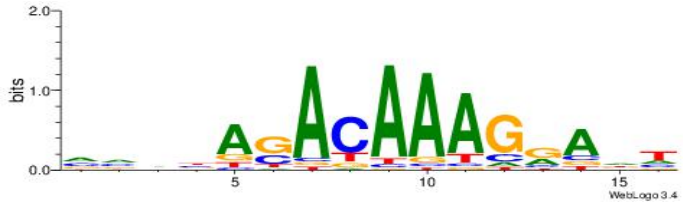
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0

Alignment:

```
HDTMCTTTGTSTVDBB
----CTTTCTCT----
```

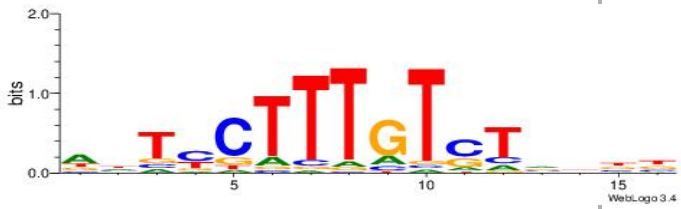
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00218499

Alignment:

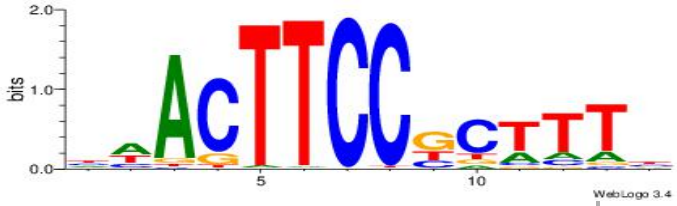
```
VAAAGMGGAAGTWD
---AGAGAAAG---
```

Original motif

Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRCTTTB

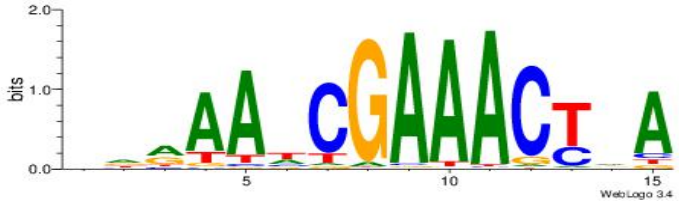


Motif ID:	UP00074
Motif name:	Isgf3g_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4

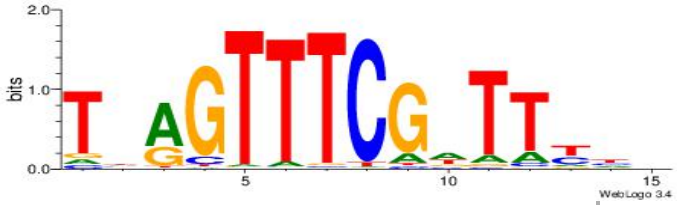
Number of overlap: 8
Similarity score: 0.0130365

Alignment:
TDAGTTTCGWTTKDV
---CTTTCTCT----

Original motif
Consensus sequence: VDRAAWCGAAACTDA



Reverse complement motif
Consensus sequence: TDAGTTTCGWTTKDV



Motif ID: UP00085
Motif name: Sfpi1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 8
Similarity score: 0.013531

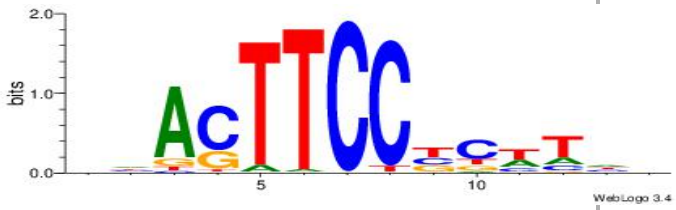
Alignment:
BDAWGVGGAAGTDH
---AGAGAAAG---

Original motif

Reverse complement motif

Consensus sequence: BDAWGVGGAAGTDH

Consensus sequence: HDACTTCCBCWTDV



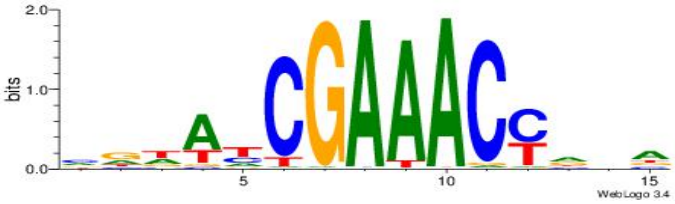
Motif ID:	UP00018
Motif name:	Irf4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0150506

Alignment:

```
TBDKGTTTCGMTDHV
----CTTTCTCT---
```

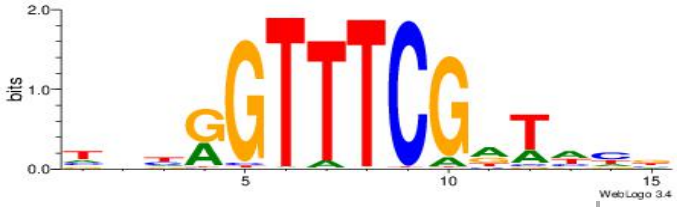
Original motif

Consensus sequence: VDDAYCGAAACYDVA



Reverse complement motif

Consensus sequence: TBDKGTTTCGMTDHV



Motif ID:	UP00409
Motif name:	Elf5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0153654

Alignment:

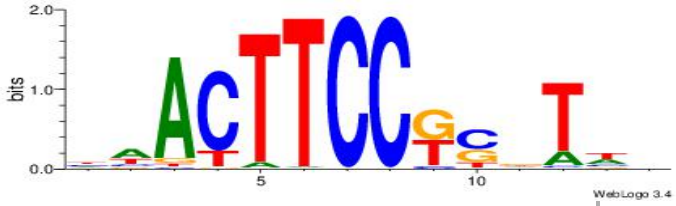
```
BWAHSMGGAAGTWD
---AGAGAAAG---
```

Original motif

Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRSDTWV

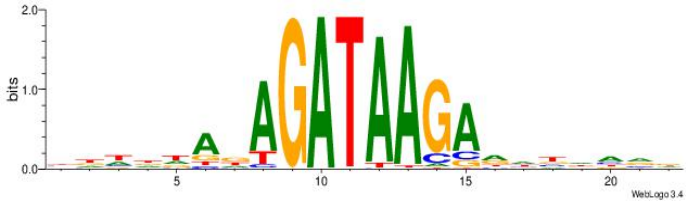


Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8

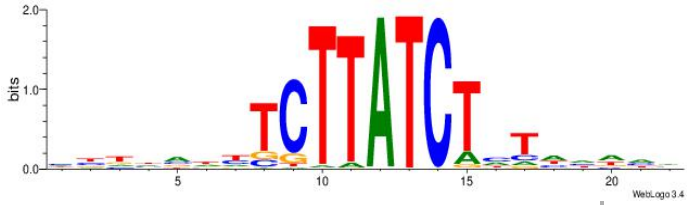
Number of overlap: 8
Similarity score: 0.0177379

Alignment:
BDHDDADAGATAAGADHBDHVD
-------AGAGAAAG-------

Original motif
Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif
Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



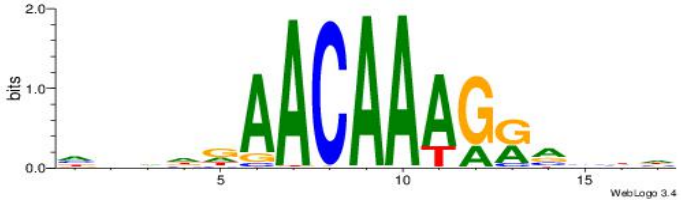
Motif ID: UP00062
Motif name: Sox4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 8
Similarity score: 0.017774

Alignment:
HBDDDAACAAAGRVBHH
----AGAGAAAG-----

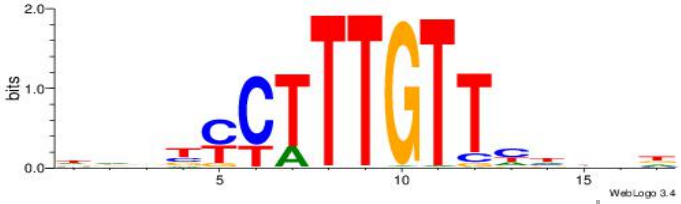
Original motif

Reverse complement motif

Consensus sequence: HBDDDAACAAAGRVBHH



Consensus sequence: HHBBMCTTTGTTHDDBH



Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.019138

Alignment:

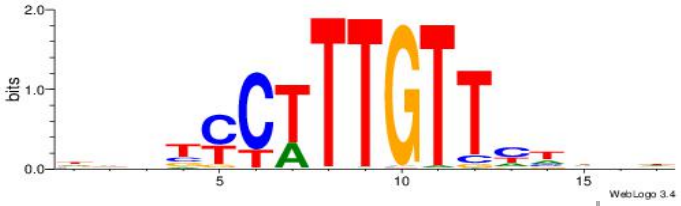
```
HBDDRAACAAAGRABHH
----AGAGAAAG-----
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



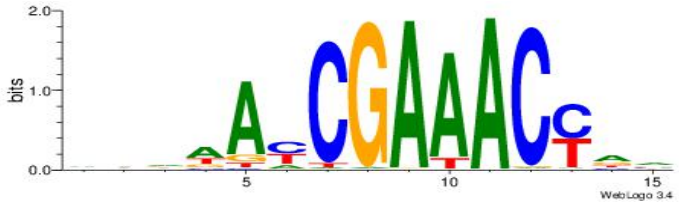
Motif ID:	UP00040
Motif name:	Irf5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0202543

Alignment:

```
BDKGTTTCGKTWDDD
---CTTTCTCT----
```

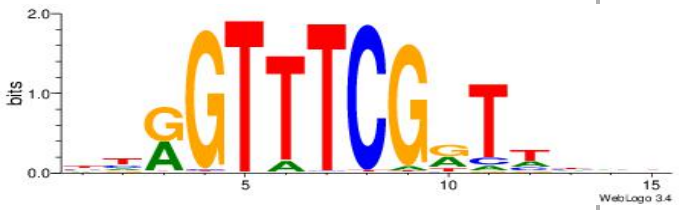
Original motif

Consensus sequence: DDDWAYCGAAACYDV



Reverse complement motif

Consensus sequence: BDKGTTTCGKTWDDD



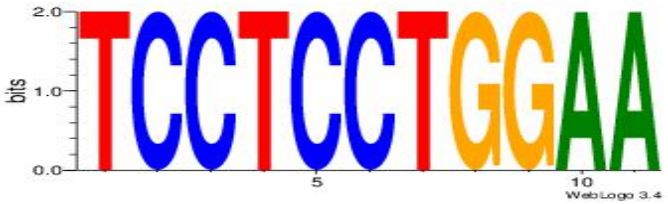
Dataset #: 2 Motif ID: 24 Motif name: Motif 24

Original motif

Consensus sequence: TCCTCCTGGAA

Reverse complement motif

Consensus sequence: TTCCAGGAGGA



Best Matches for Motif ID 24 (Highest to Lowest)

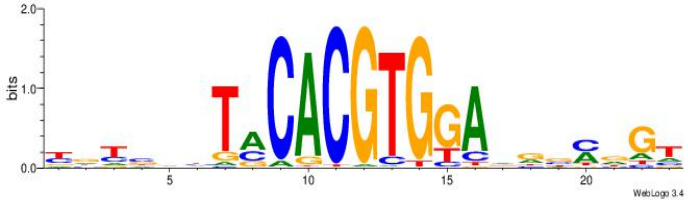
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	11
Similarity score:	0.0142508

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
-----TTCCAGGAGGA-------
```

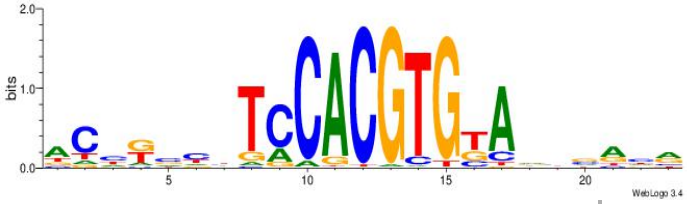
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



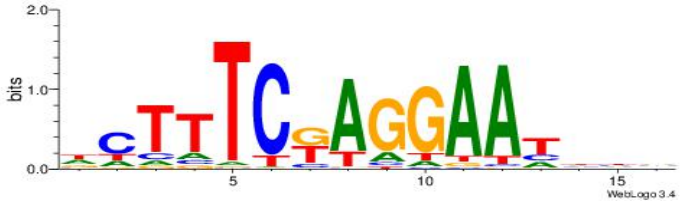
Motif ID:	UP00043
Motif name:	Bcl6b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0219794

Alignment:

```
VHHATTCCTYGAAAGD
--TCCTCCTGGAA---
```

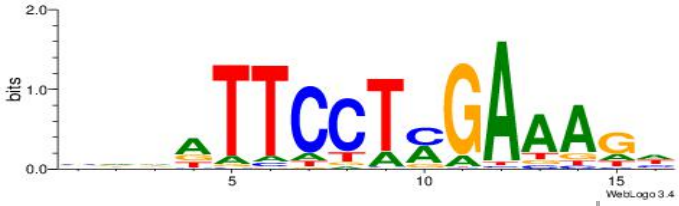
Original motif

Consensus sequence: DCTTTCKAGGAATHHV



Reverse complement motif

Consensus sequence: VHHATTCCTYGAAAGD

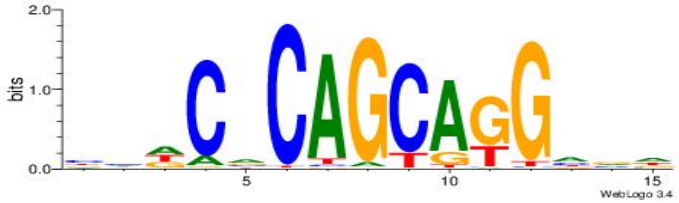


Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

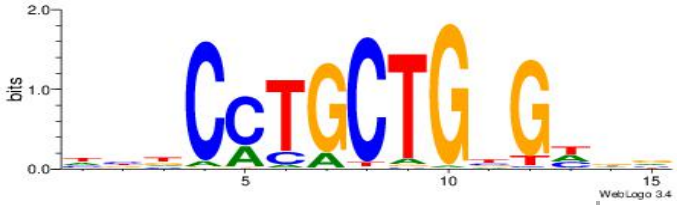
Number of overlap: 11
Similarity score: 0.0220915

Alignment:
DVHCCTGCTGBGDDB
--TCCTCCTGGAA--

Original motif
Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB



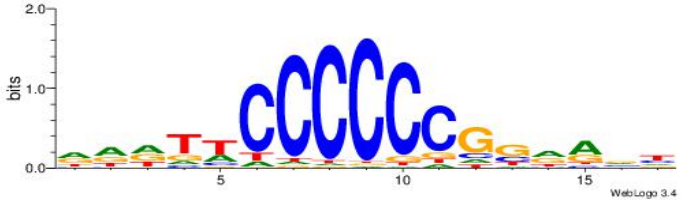
Motif ID: UP00022
Motif name: Zfp740_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0240277

Alignment:
DDDTWCCCCCCGGDRVH
----TCCTCCTGGAA--

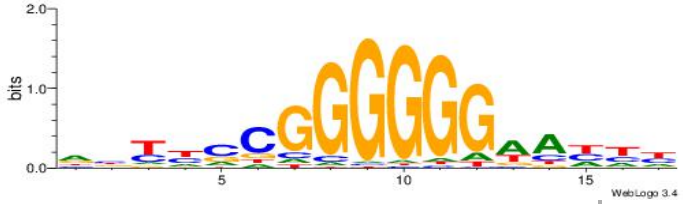
Original motif

Reverse complement motif

Consensus sequence: DDDTWCCCCCCGGDRVH



Consensus sequence: HVKDCCGGGGGGWADDD



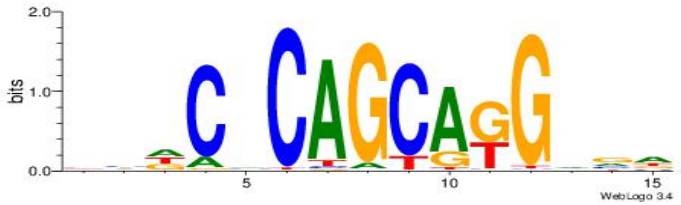
Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0255161

Alignment:

```
DVBCYTGCTGBGDDD
--TCCTCCTGGAA--
```

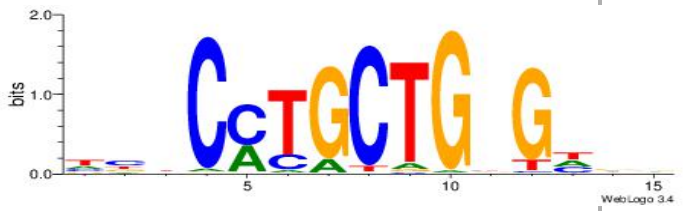
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD



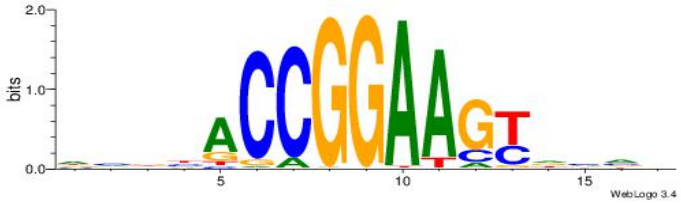
Motif ID:	UP00420
Motif name:	Elk3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0258834

Alignment:

```
VBVDMCTTCCGGTVBVD
------TTCCAGGAGGA
```

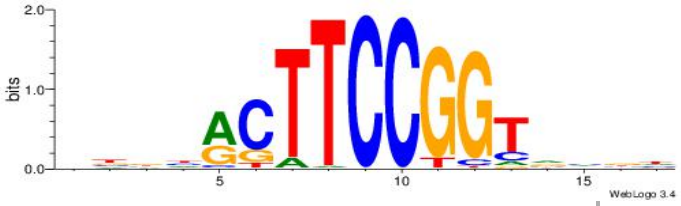
Original motif

Consensus sequence: DVBBACCGGAAGYDVVV



Reverse complement motif

Consensus sequence: VBVDMCTTCCGGTVBVD

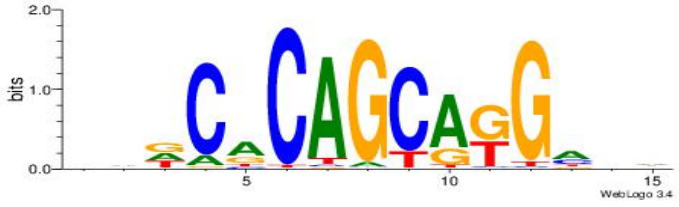


Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

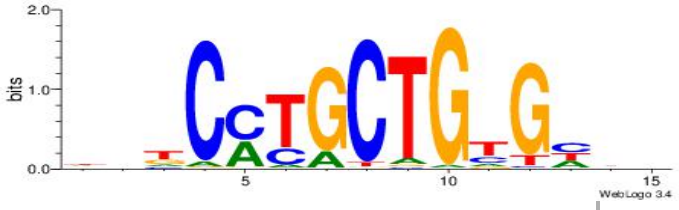
Number of overlap: 11
Similarity score: 0.0261265

Alignment:
DVHCYTGCTGTGHDH
--TCCTCCTGGAA--

Original motif
Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif
Consensus sequence: DVHCYTGCTGTGHDH

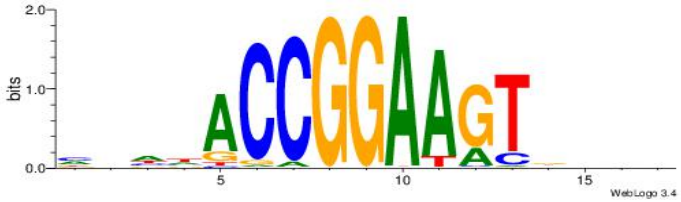


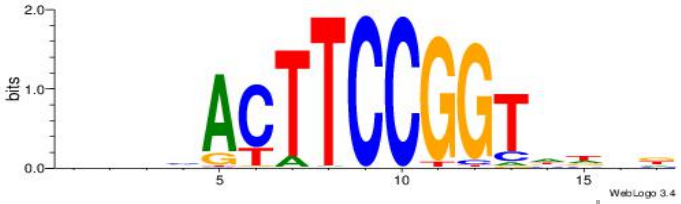
Motif ID: UP00013
Motif name: Gabpa_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 11
Similarity score: 0.0280194

Alignment:
BHHHACTTCCGGTHHBD
------TTCCAGGAGGA

Original motif
Consensus sequence: HVHHACCGGAAGTDHHV

Reverse complement motif
Consensus sequence: BHHHACTTCCGGTHHBD





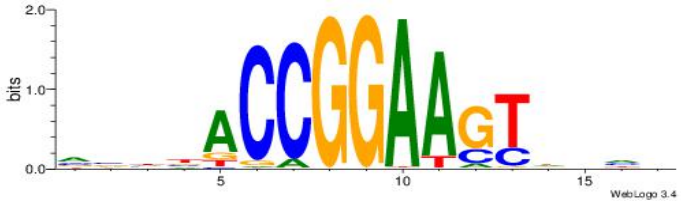
Motif ID:	UP00410
Motif name:	Elk1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0292751

Alignment:

```
DHBDACTTCCGGTVHVB
------TTCCAGGAGGA
```

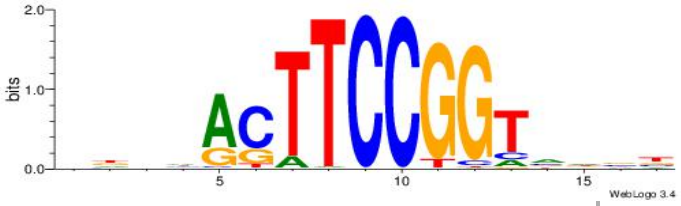
Original motif

Consensus sequence: VVHBACCGGAAGTDBHD



Reverse complement motif

Consensus sequence: DHBDACTTCCGGTVHVB



Motif ID:	UP00183
Motif name:	Hoxa13

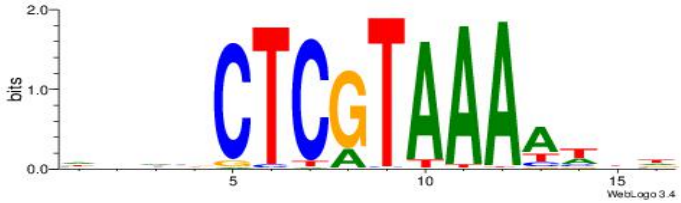
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0307181

Alignment:

```
HDHBCTCGTAAAAWBD
--TCCTCCTGGAA---
```

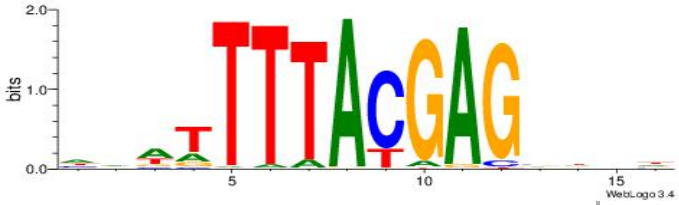
Original motif

Consensus sequence: HDHBCTCGTAAAAWBD



Reverse complement motif

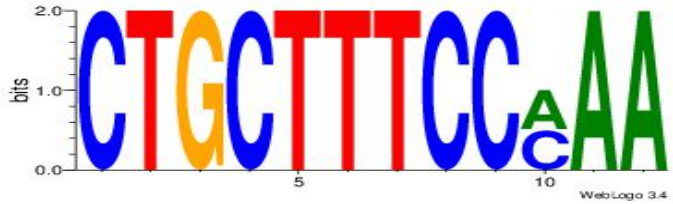
Consensus sequence: DVWTTTTACGAGBHDH



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

Original motif

Consensus sequence: CTGCTTTCCMAA



Reverse complement motif

Consensus sequence: TTYGGAAAGCAG

Best Matches for Motif ID 25 (Highest to Lowest)

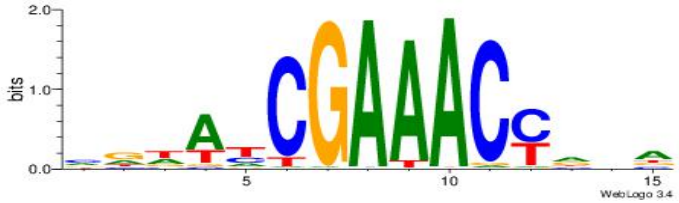
Motif ID:	UP00018
Motif name:	Irf4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0328573

Alignment:

```
TBDKGTTTCGMTDHV
-CTGCTTTCCMAA--
```

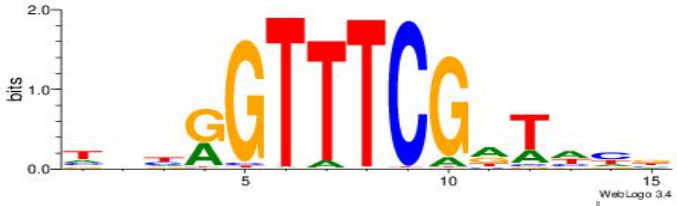
Original motif

Consensus sequence: VDDAYCGAAACYDVA



Reverse complement motif

Consensus sequence: TBDKGTTTCGMTDHV



Motif ID:	UP00015
Motif name:	Ehf_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

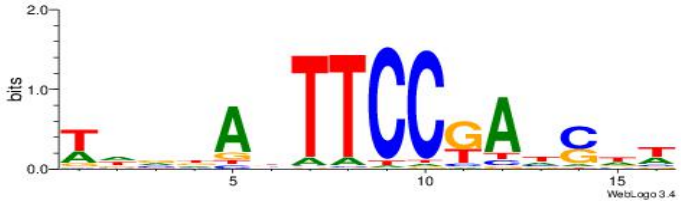
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0339295

Alignment:

```
WDSHTYGGAAVTDVDW
---TTYGGAAAGCAG-
```

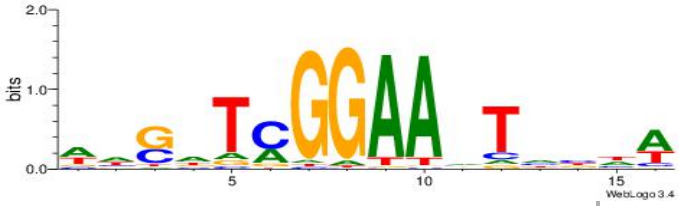
Original motif

Consensus sequence: WDVDABTTCCKAHSDW



Reverse complement motif

Consensus sequence: WDSHTYGGAAVTDVDW



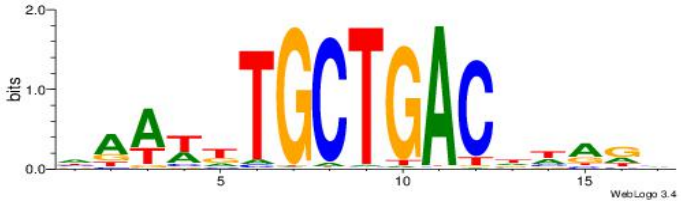
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0362612

Alignment:

DMTWDGTCAGCADWTTH
-TTYGGAAAGCAG----

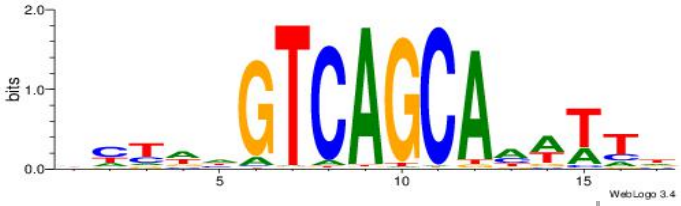
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH



Motif ID:	UP00122
Motif name:	Tgif1
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:	12
Similarity score:	0.0373175

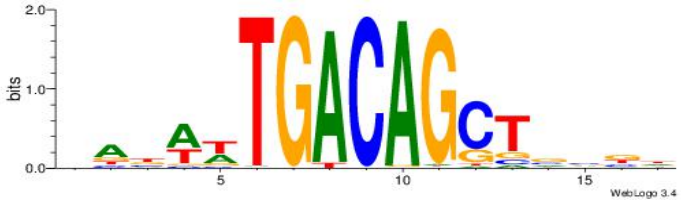
Alignment:
DBVVAGCTGTCAWWVTH
---CTGCTTTCCMAA--

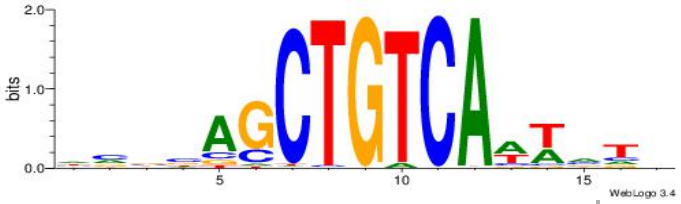
Original motif

Consensus sequence: DABWWTGACAGCTVVBD

Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH





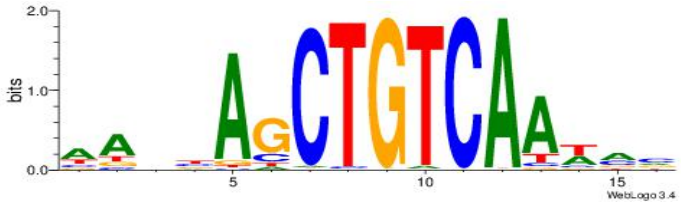
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0385167

Alignment:

```
AABBAGCTGTCAAWVV
---CTGCTTTCCMAA-
```

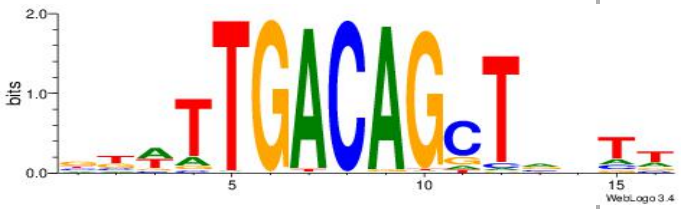
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Motif ID:	UP00148

Motif name:	Hdx
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:	0.0391678

Alignment:

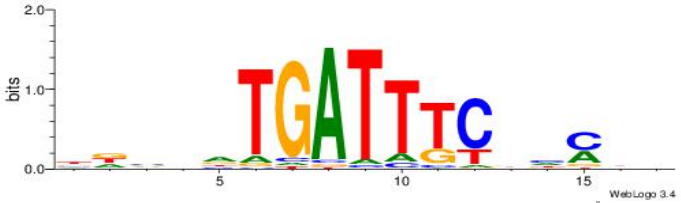
```
DDKDHGAAATCAHHBHV
-TTYGGAAAGCAG----
```

Original motif

Consensus sequence: DDKDHGAAATCAHHBHV

Reverse complement motif

Consensus sequence: BDBDHTGATTTCDHYDD

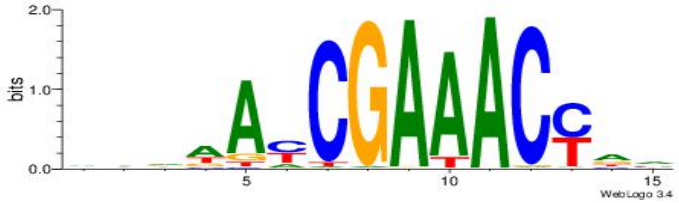


Motif ID:	UP00040
Motif name:	Irf5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12

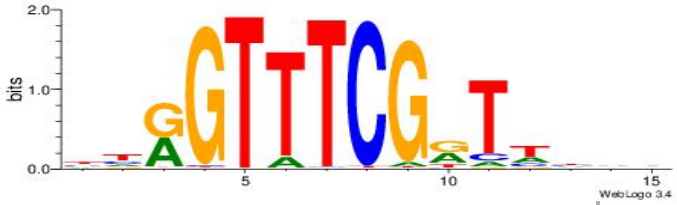
Similarity score: 0.04057

Alignment:
DDDWAYCGAAACYDV
---TTYGGAAAGCAG

Original motif
Consensus sequence: DDDWAYCGAAACYDV



Reverse complement motif
Consensus sequence: BDKGTTTCGKTWDDD

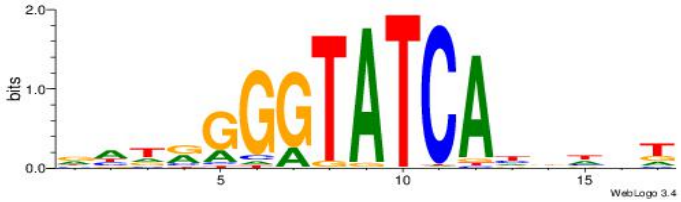


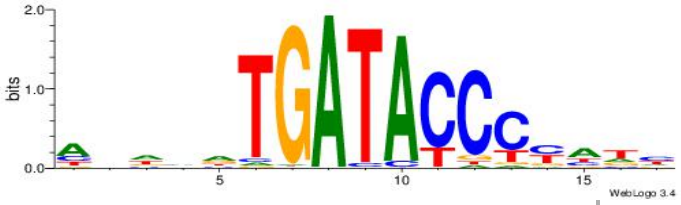
Motif ID: UP00192
Motif name: Six1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0414168

Alignment:
AVHDHTGATACCCMDHH
----CTGCTTTCCMAA-

Original motif
Consensus sequence: DHDRGGGTATCAHDHBT

Reverse complement motif
Consensus sequence: AVHDHTGATACCCMDHH





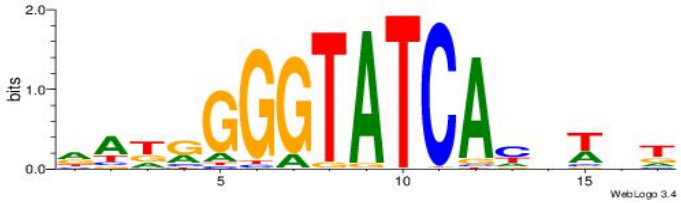
Motif ID:	UP00159
Motif name:	Six2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0420524

Alignment:

```
AHWDGTGATACCCMRTD
----CTGCTTTCCMAA-
```

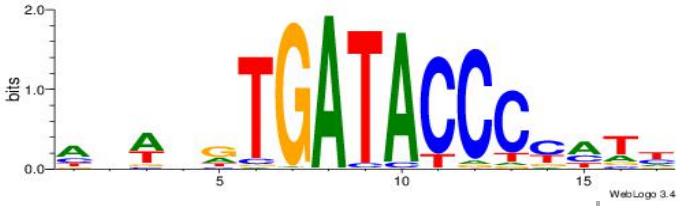
Original motif

Consensus sequence: DAKRGGGTATCACDWHT



Reverse complement motif

Consensus sequence: AHWDGTGATACCCMRTD



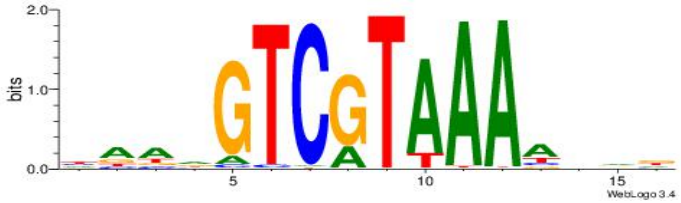
Motif ID:	UP00235
Motif name:	Hoxc11
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0421437

Alignment:

```
HAADGTCGTAAAAHDD
----TTYGGAAAGCAG
```

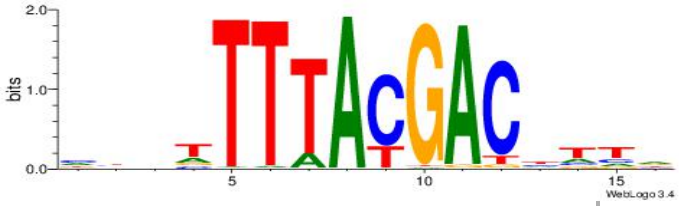
Original motif

Consensus sequence: HAADGTCGTAAAAHDD



Reverse complement motif

Consensus sequence: HDHTTTTACGACDTTH



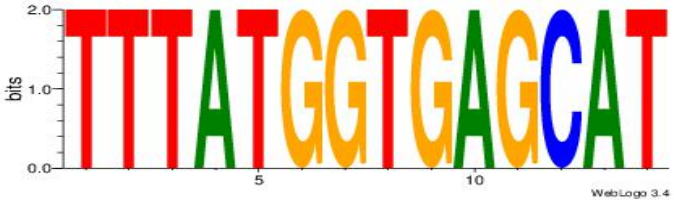
Dataset #: 2 Motif ID: 26 Motif name: Motif 26

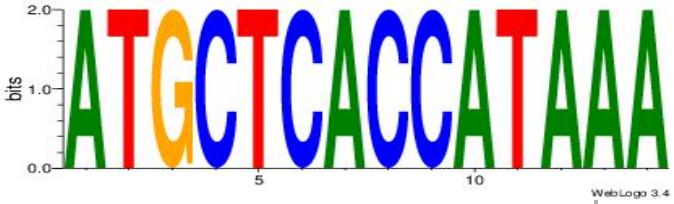
Original motif

Consensus sequence: TTTATGGTGAGCAT

Reverse complement motif

Consensus sequence: ATGCTCACCATAAA





Best Matches for Motif ID 26 (Highest to Lowest)

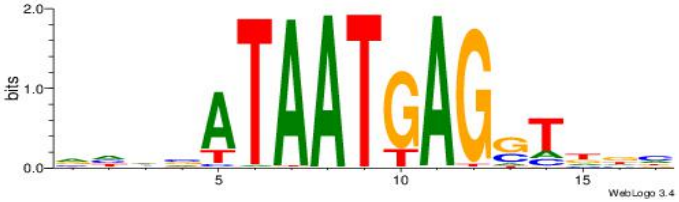
Motif ID:	UP00146
Motif name:	Pou6f1_3733.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0269204

Alignment:

```
DHDASCTCATTATVHHB
--ATGCTCACCATAAA-
```

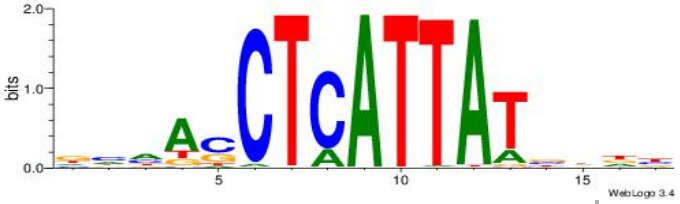
Original motif

Consensus sequence: VHHVATAATGAGSTDDH



Reverse complement motif

Consensus sequence: DHDASCTCATTATVHHB



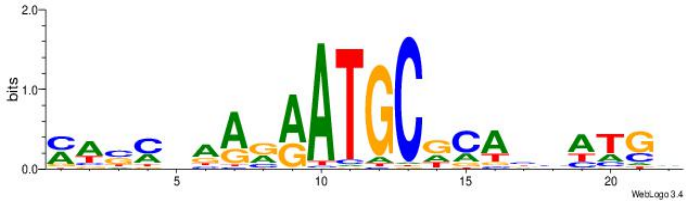
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	10
Number of overlap:	13
Similarity score:	0.511393

Alignment:

```
-DCATDBTGHGCATKMTTBRSWR
TTTATGGTGAGCAT---------
```

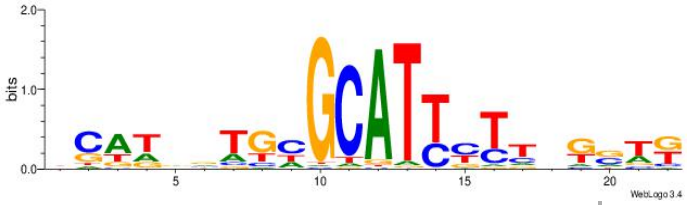
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR

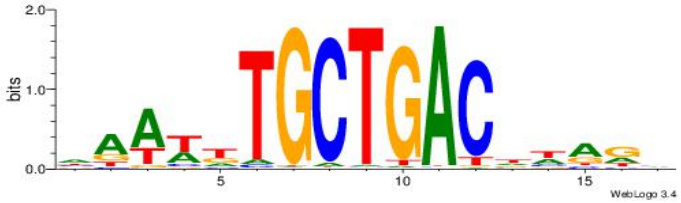


Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5

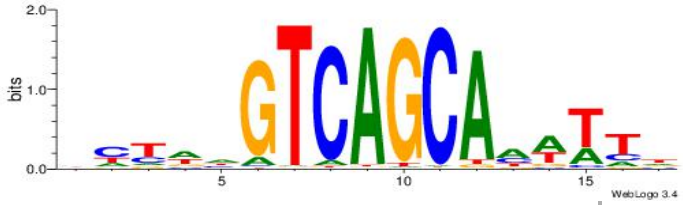
Number of overlap: 13
Similarity score: 0.520342

Alignment:
HAAWDTGCTGACDWARH-
----ATGCTCACCATAAA

Original motif
Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif
Consensus sequence: DMTWDGTCAGCADWTTH

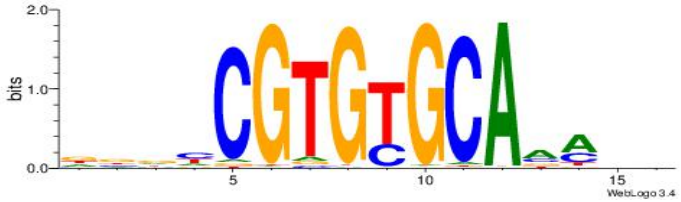


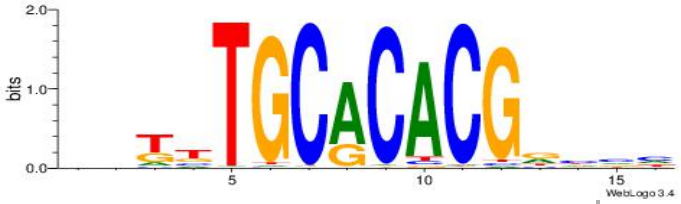
Motif ID: UP00097
Motif name: Mtf1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.520462

Alignment:
DBDHCGTGTGCAAMDH-
-TTTATGGTGAGCAT--

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH

Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH





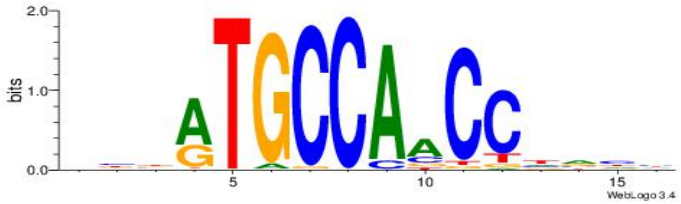
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.524109

Alignment:

```
-DDBHGGTTGGCATVBD
TTTATGGTGAGCAT---
```

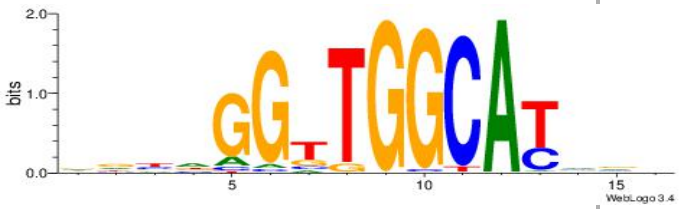
Original motif

Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD



Motif ID:	UP00072

Motif name: IRC900814_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: 12
Similarity score: 1.01715

Alignment:

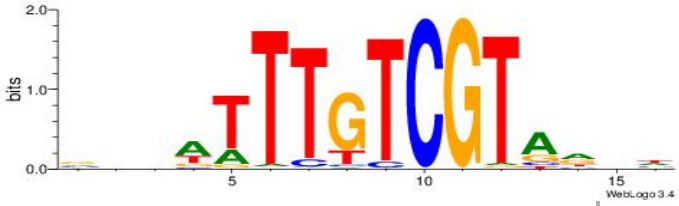
```
--DDHTACGACAAAWDDB
--TTTATGGTGAGCAT--
```

Original motif

Consensus sequence: DDHTACGACAAAWDDB

Reverse complement motif

Consensus sequence: BHDWTTTGTCGTAHDD



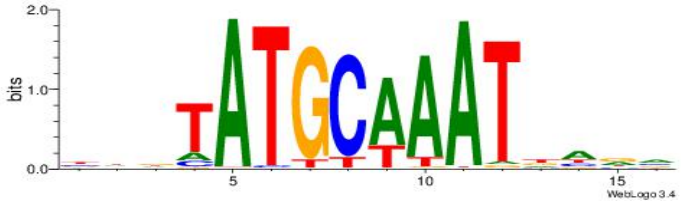
Motif ID: UP00191
Motif name: Pou2f2
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 1.0174

Alignment:

BHDTATGCAAATDHDV--
--TTTATGGTGAGCAT--

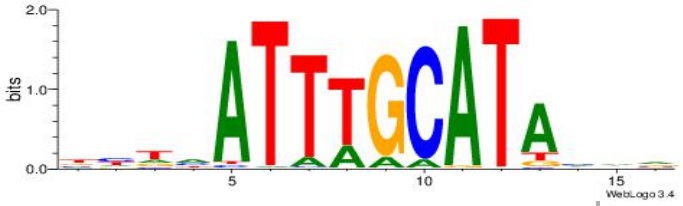
Original motif

Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif

Consensus sequence: BHHDATTTGCATAHHV



Motif ID:	UP00179
Motif name:	Pou2f3
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:	12
Similarity score:	1.01782

Alignment:

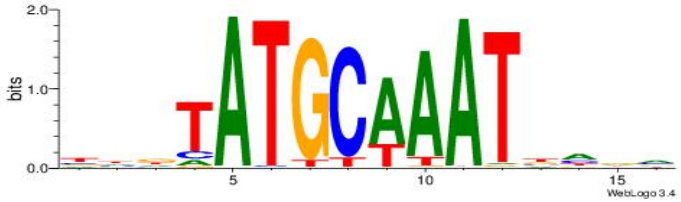
BHDTATGCAAATBHDV--
--TTTATGGTGAGCAT--

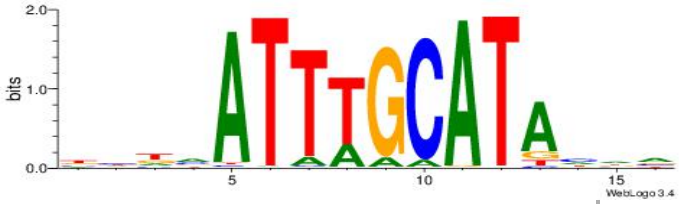
Original motif

Consensus sequence: BHDTATGCAAATBHDV

Reverse complement motif

Consensus sequence: BHHVATTTGCATAHHV





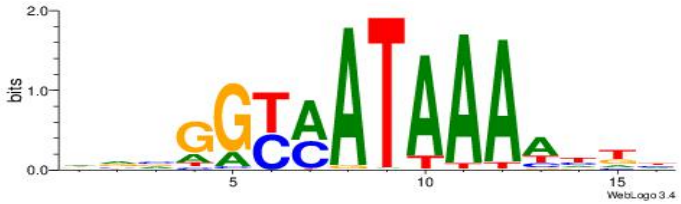
Motif ID:	UP00133
Motif name:	Cdx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	1.02211

Alignment:

```
--DVVGGYMATAAAAHKH
ATGCTCACCATAAA----
```

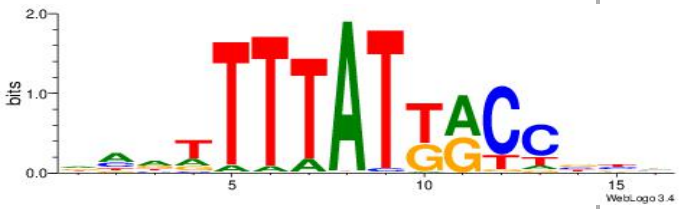
Original motif

Consensus sequence: DVVGGYMATAAAAHKH



Reverse complement motif

Consensus sequence: HRHTTTTATYMCCVBD



Motif ID:	UP00173

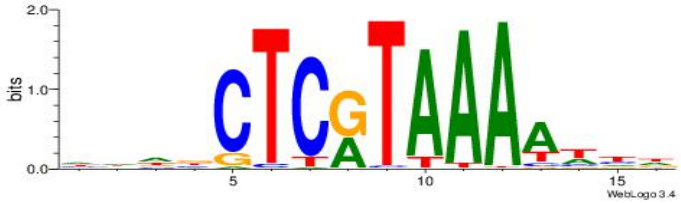
Motif name:	Hoxc13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	1.02921

Alignment:

```
DHWTTTTAMGAGBDHH--
--ATGCTCACCATAAA--
```

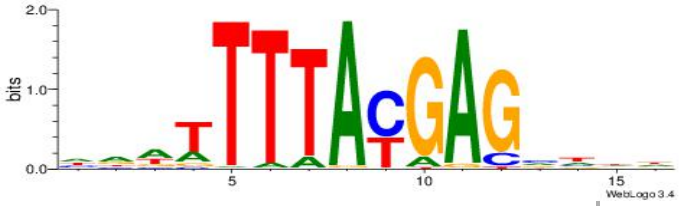
Original motif

Consensus sequence: HHDBCTCRTAAAAWHD



Reverse complement motif

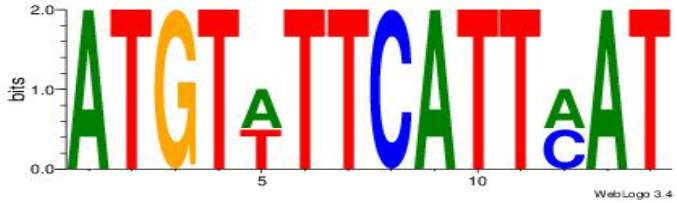
Consensus sequence: DHWTTTTAMGAGBDHH



Dataset #: 2 Motif ID: 27 Motif name: Motif 27

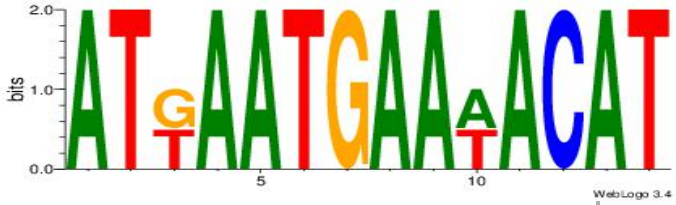
Original motif

Consensus sequence: ATGTWTTCATTMAT



Reverse complement motif

Consensus sequence: ATYAATGAAWACAT



Best Matches for Motif ID 27 (Highest to Lowest)

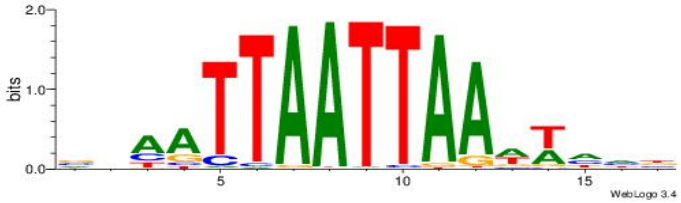
Motif ID:	UP00130
Motif name:	Lhx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0285638

Alignment:

```
VDAATTAATTAAWWHHB
---ATYAATGAAWACAT
```

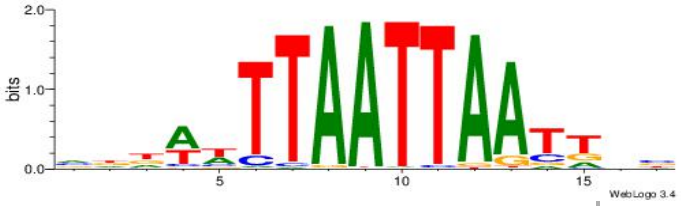
Original motif

Consensus sequence: VDAATTAATTAAWWHHB



Reverse complement motif

Consensus sequence: VHHWWTTAATTAATTDV



Motif ID:	UP00212
Motif name:	Lhx5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement

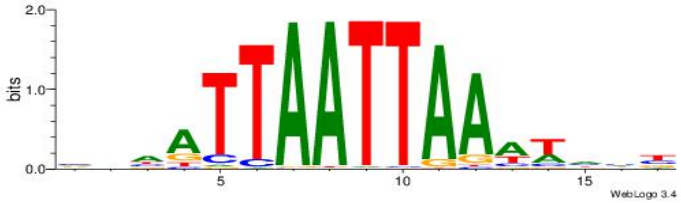
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0306386

Alignment:

```
VDHATTAATTAAAWHHB
---ATYAATGAAWACAT
```

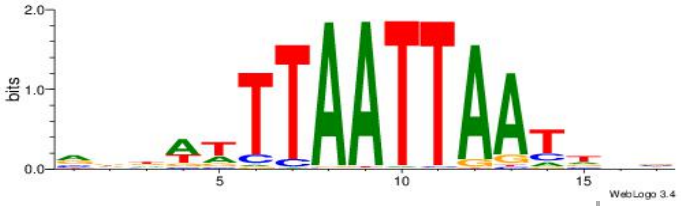
Original motif

Consensus sequence: VDHATTAATTAAAWHHB



Reverse complement motif

Consensus sequence: VDHWTTTAATTAATHHV

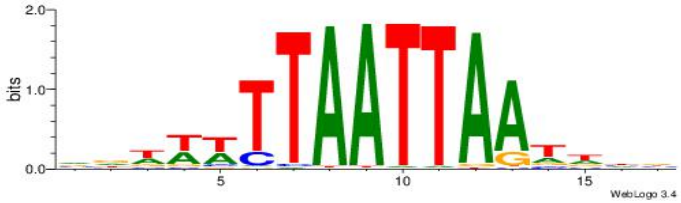


Motif ID:	UP00169
Motif name:	Lmx1b
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0343199

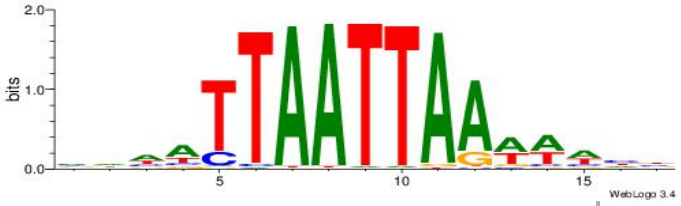
Alignment:

VDWWWTTAATTAATDHB
ATGTWTTCATTMAT---

Original motif
Consensus sequence: VDWWWTTAATTAATDHB



Reverse complement motif
Consensus sequence: BHDATTAATTAAWWWHB

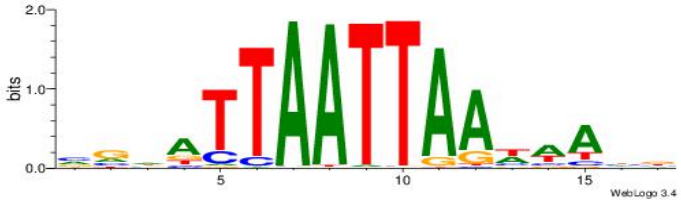


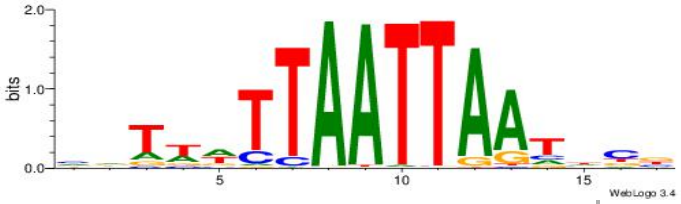
Motif ID:	UP00262
Motif name:	Lhx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0349569

Alignment:
VVDATTAATTAAWWAHB
---ATYAATGAAWACAT

Original motif
Consensus sequence: VVDATTAATTAAWWAHB

Reverse complement motif
Consensus sequence: BHTWWTTAATTAATDVV





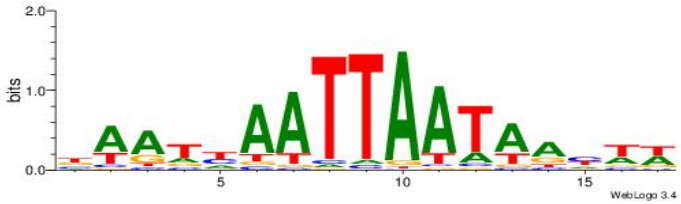
Motif ID:	UP00244
Motif name:	Tlx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0361912

Alignment:

```
WWDTTATTAATTHATTV
-ATGTWTTCATTMAT--
```

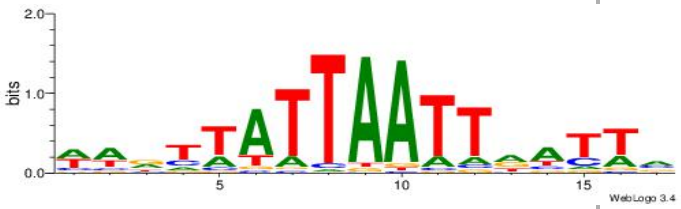
Original motif

Consensus sequence: BAATHAATTAATAAHWW



Reverse complement motif

Consensus sequence: WWDTTATTAATTHATTV



Motif ID:	UP00188

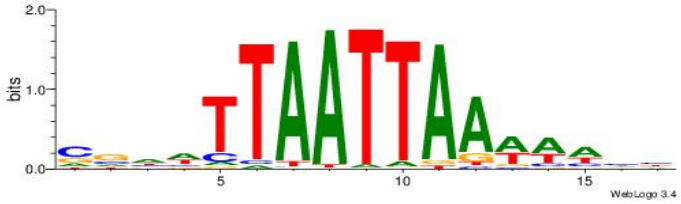
Motif name:	Lmx1a
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0375132

Alignment:

```
BDWWWTTAATTAAHHVG
---ATYAATGAAWACAT
```

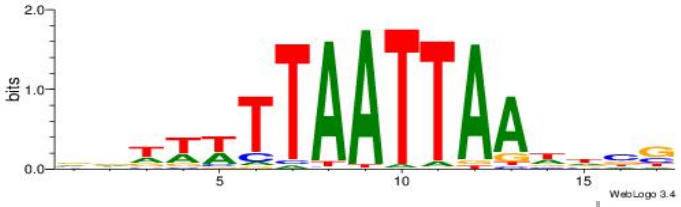
Original motif

Consensus sequence: CVHHTTAATTAAWWWHB



Reverse complement motif

Consensus sequence: BDWWWTTAATTAAHHVG



Motif ID:	UP00155
Motif name:	Hmx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0386004

Alignment:

ADBVHTTAATTGCTTVB
---ATYAATGAAWACAT

Original motif

Consensus sequence: VVAAGCAATTAAHVVDT

Reverse complement motif

Consensus sequence: ADBVHTTAATTGCTTVB

Motif ID:	UP00157
Motif name:	Hmx3
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:	14
Similarity score:	0.0390217

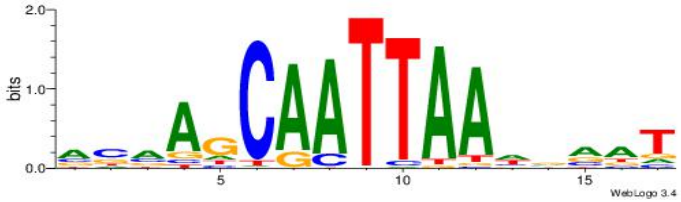
Alignment:
VBVAGCAATTAAHVVAT
---ATYAATGAAWACAT

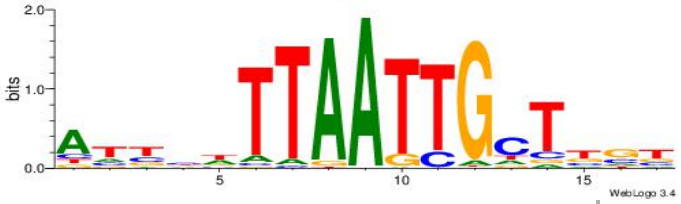
Original motif

Consensus sequence: VBVAGCAATTAAHVVAT

Reverse complement motif

Consensus sequence: ATBVHTTAATTGCTBBB





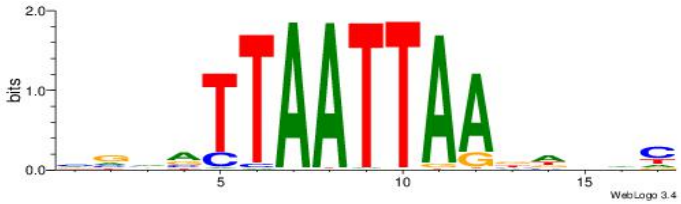
Motif ID:	UP00172
Motif name:	Prop1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0397917

Alignment:

```
VVVVTTAATTAABDDDC
---ATYAATGAAWACAT
```

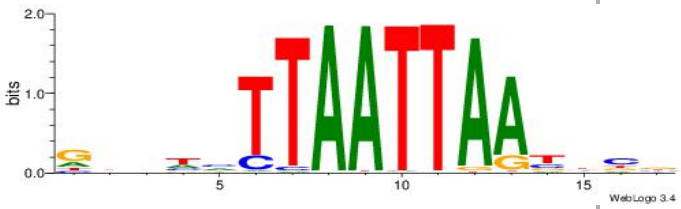
Original motif

Consensus sequence: VVVVTTAATTAABDDDC



Reverse complement motif

Consensus sequence: GDDDBTTAATTAABBVV



Motif ID:	UP00237

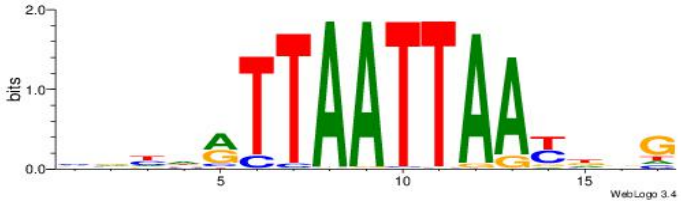
Motif name:	Otp
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.041444

Alignment:

```
CHDMTTAATTAAKDHVV
---ATYAATGAAWACAT
```

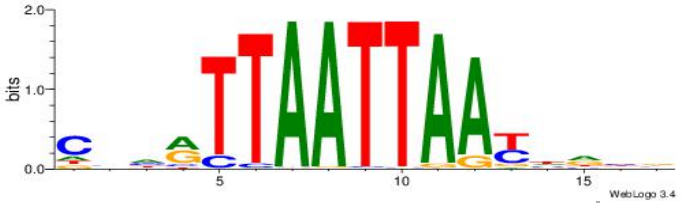
Original motif

Consensus sequence: VVHDRTTAATTAAYDDG



Reverse complement motif

Consensus sequence: CHDMTTAATTAAKDHVV



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

Original motif

Consensus sequence: AAAGWCATWAA

Reverse complement motif

Consensus sequence: TTWATGWCTTT

Best Matches for Motif ID 28 (Highest to Lowest)

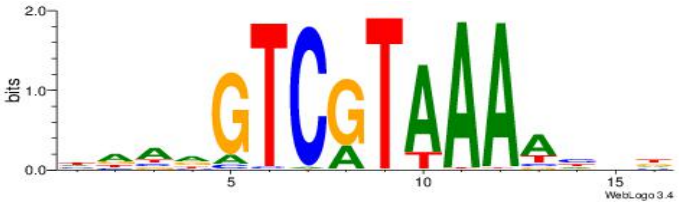
Motif ID:	UP00246
Motif name:	Hoxa11
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.011591

Alignment:

```
HDADGTCGTAAAAHDD
-AAAGWCATWAA----
```

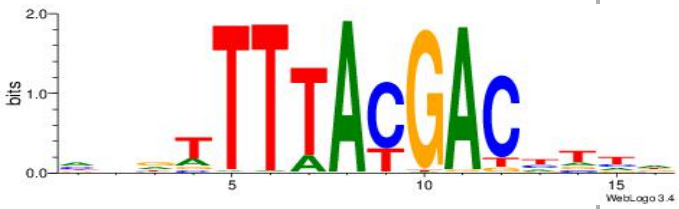
Original motif

Consensus sequence: HDADGTCGTAAAAHDD



Reverse complement motif

Consensus sequence: DDDTTTTACGACDTDH



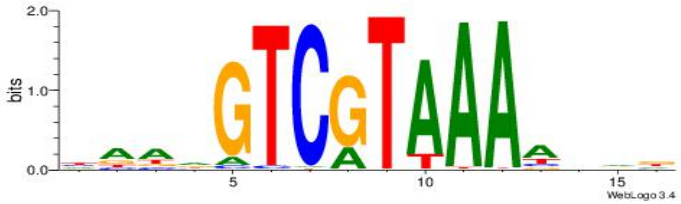
Motif ID:	UP00235
Motif name:	Hoxc11
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0124232

Alignment:

```
HAADGTCGTAAAAHDD
-AAAGWCATWAA----
```

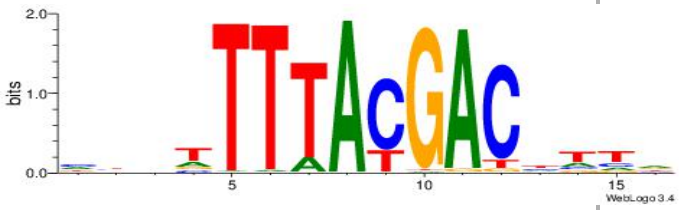
Original motif

Consensus sequence: HAADGTCGTAAAAHDD



Reverse complement motif

Consensus sequence: HDHTTTTACGACDTTH

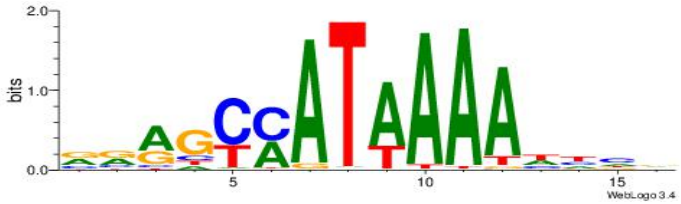


Motif ID:	UP00207
Motif name:	Hoxb9
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11

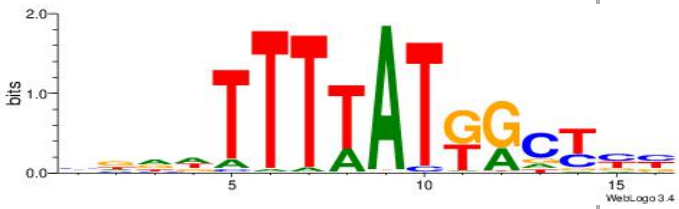
Similarity score: 0.0163525

Alignment:
VRRGCMATAAAAHHHD
AAAGWCATWAA-----

Original motif
Consensus sequence: VRRGCMATAAAAHHHD



Reverse complement motif
Consensus sequence: HDHHTTTTATRGCKMV

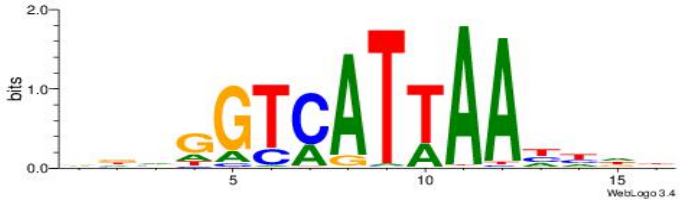


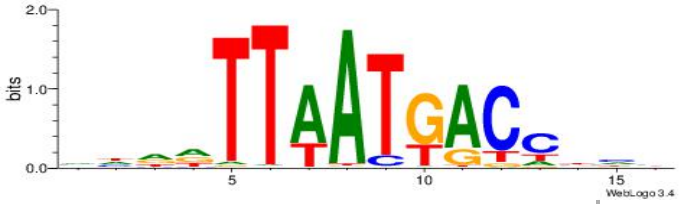
Motif ID: UP00197
Motif name: Hoxc9
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0176256

Alignment:
VDHHTTAATGACCBHV
----TTWATGWCTTT-

Original motif
Consensus sequence: VDVGGTCATTAAHHDB

Reverse complement motif
Consensus sequence: VDHHTTAATGACCBHV





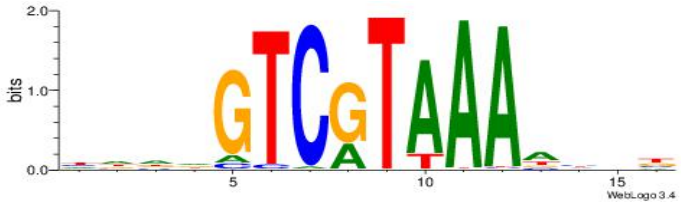
Motif ID:	UP00245
Motif name:	Hoxc10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.01781

Alignment:

```
HDDDGTCGTAAADHBB
-AAAGWCATWAA----
```

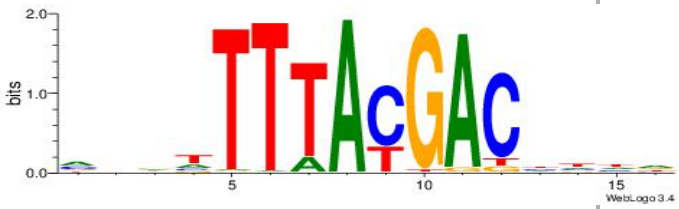
Original motif

Consensus sequence: HDDDGTCGTAAADHBB



Reverse complement motif

Consensus sequence: VBDDTTTACGACDDDH



Motif ID:	UP00117

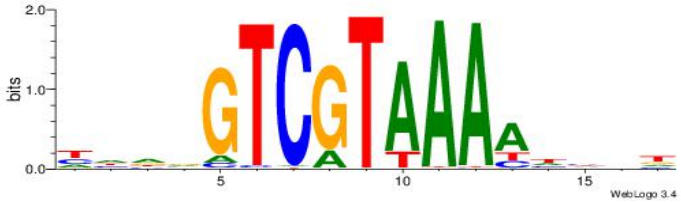
Motif name:	Hoxd11
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0206572

Alignment:

```
HHDVGTCGTAAAAHHHD
-AAAGWCATWAA-----
```

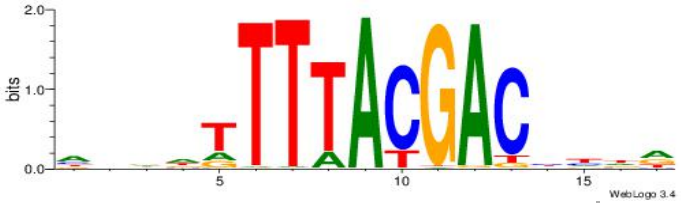
Original motif

Consensus sequence: HHDVGTCGTAAAAHHHD



Reverse complement motif

Consensus sequence: DDDHTTTTACGACVDHH



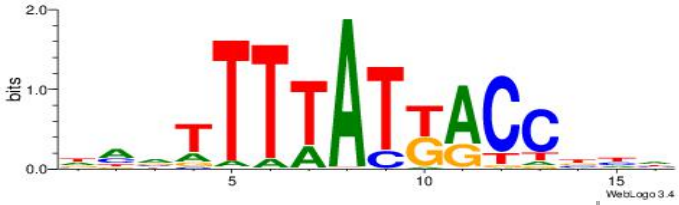
Motif ID:	UP00240
Motif name:	Cdx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11

Similarity score: 0.0231269

Alignment:
DDVGGTMATAAAABKH
-AAAGWCATWAA----

Original motif
Consensus sequence: DDVGGTMATAAAABKH

Reverse complement motif
Consensus sequence: HRVTTTTATYACCBDD

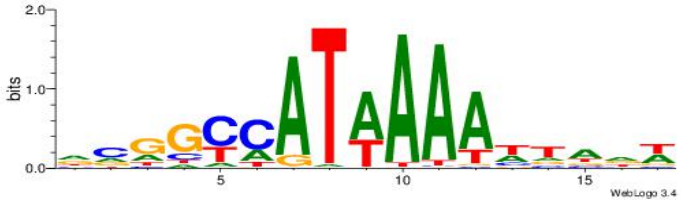


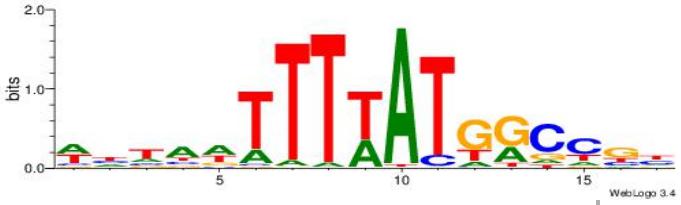
Motif ID:	UP00213
Motif name:	Hoxa9
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.0241179

Alignment:
DCGGYCATWAAAWTADW
AAAGWCATWAA------

Original motif
Consensus sequence: DCGGYCATWAAAWTADW

Reverse complement motif
Consensus sequence: WDTAWTTTWATGKCCGD





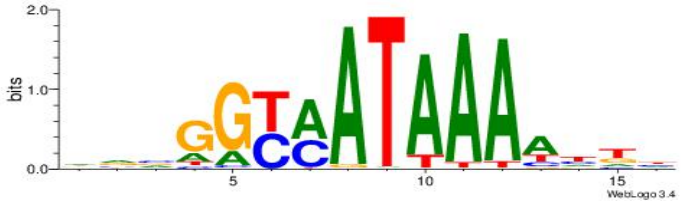
Motif ID:	UP00133
Motif name:	Cdx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0264981

Alignment:

```
DVVGGYMATAAAAHKH
-AAAGWCATWAA----
```

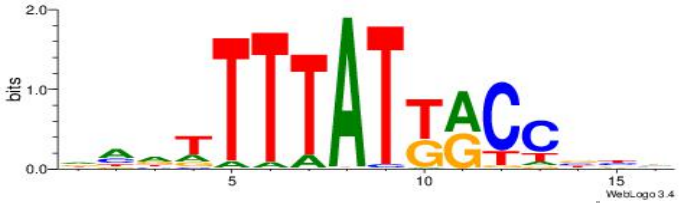
Original motif

Consensus sequence: DVVGGYMATAAAAHKH



Reverse complement motif

Consensus sequence: HRHTTTTATYMCCVBD



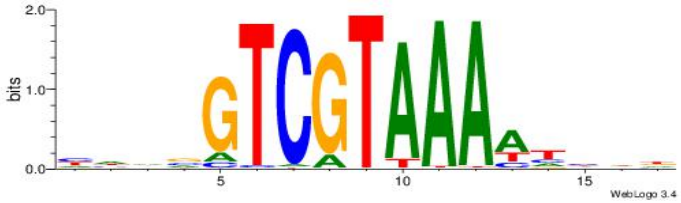
Motif ID:	UP00177
Motif name:	Hoxd12
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0271901

Alignment:

```
HHDVGTCGTAAAAHHHD
-AAAGWCATWAA-----
```

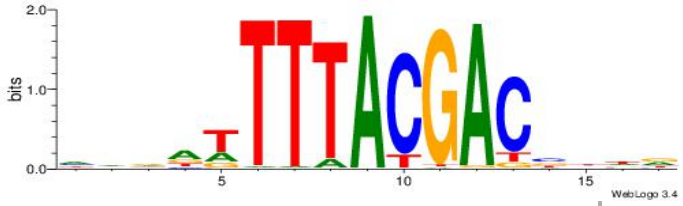
Original motif

Consensus sequence: HHDVGTCGTAAAAHHHD



Reverse complement motif

Consensus sequence: DHDHTTTTACGACVDHD



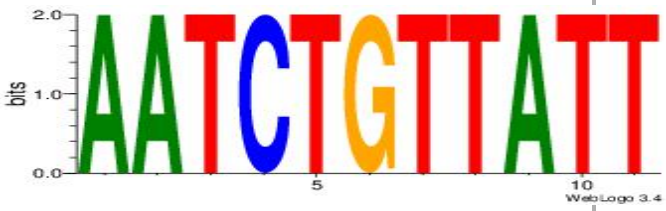
Dataset #: 2 Motif ID: 29 Motif name: Motif 29

Original motif

Consensus sequence: AATAACAGATT

Reverse complement motif

Consensus sequence: AATCTGTTATT



Best Matches for Motif ID 29 (Highest to Lowest)

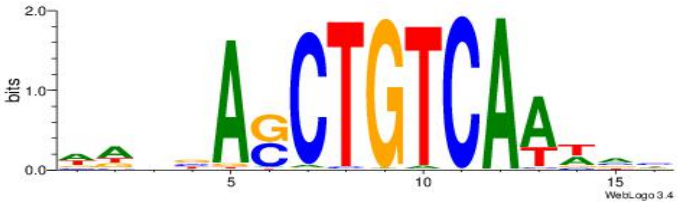
Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0336973

Alignment:

```
DBWTTGACAGSTBVTW
--AATAACAGATT---
```

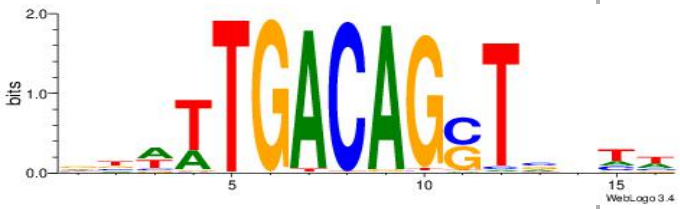
Original motif

Consensus sequence: WAVBASCTGTCAAWVH



Reverse complement motif

Consensus sequence: DBWTTGACAGSTBVTW



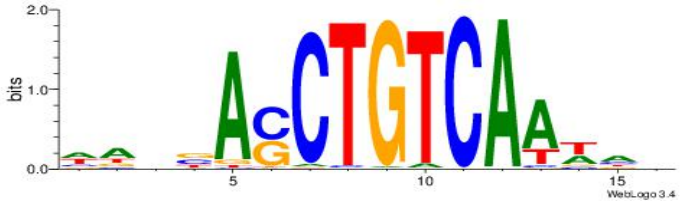
Motif ID:	UP00226
Motif name:	Mrg1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0361504

Alignment:

```
BHWTTGACAGSTBBTW
--AATAACAGATT---
```

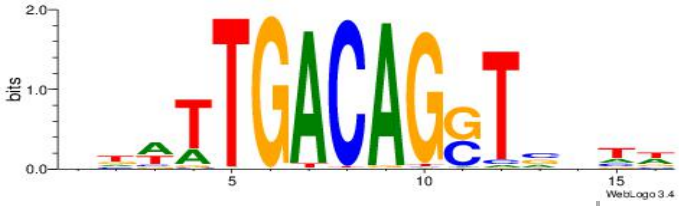
Original motif

Consensus sequence: WAVBASCTGTCAAWHB



Reverse complement motif

Consensus sequence: BHWTTGACAGSTBBTW

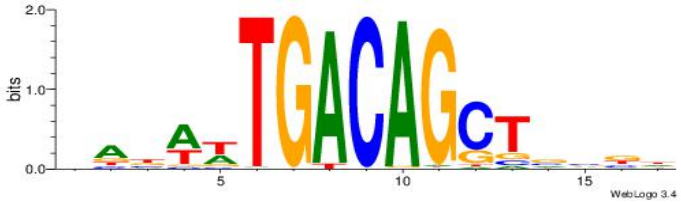


Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

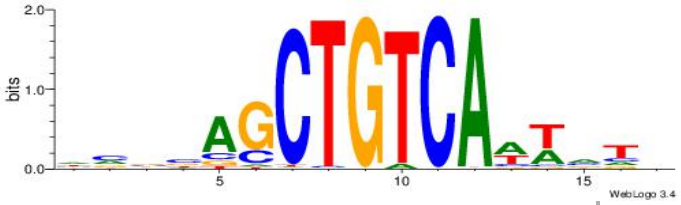
Number of overlap: 11
Similarity score: 0.0367255

Alignment:
DBVVAGCTGTCAWWVTH
---AATCTGTTATT---

Original motif
Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif
Consensus sequence: DBVVAGCTGTCAWWVTH



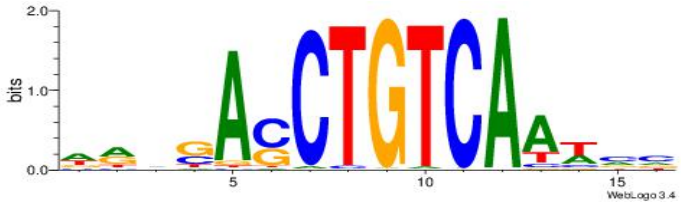
Motif ID: UP00203
Motif name: Pknox1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0373644

Alignment:
VVWTTGACAGSTSBKD
--AATAACAGATT---

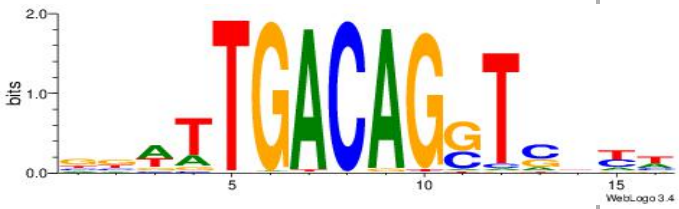
Original motif

Reverse complement motif

Consensus sequence: DRVSASCTGTCAAWVV



Consensus sequence: VVWTTGACAGSTSBKD



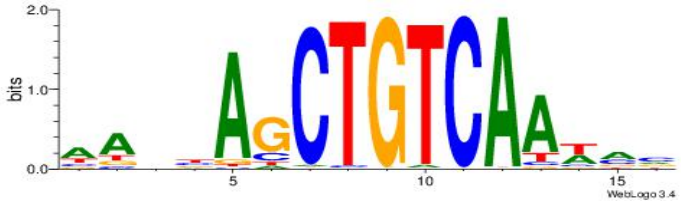
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0400385

Alignment:

```
AABBAGCTGTCAAWVV
---AATCTGTTATT--
```

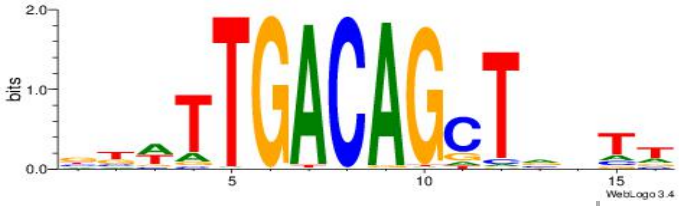
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



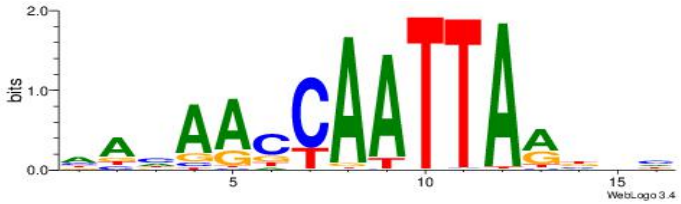
Motif ID:	UP00166
Motif name:	Barhl1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0408157

Alignment:

```
DDVKTAATTGGTTDTH
-----AATCTGTTATT
```

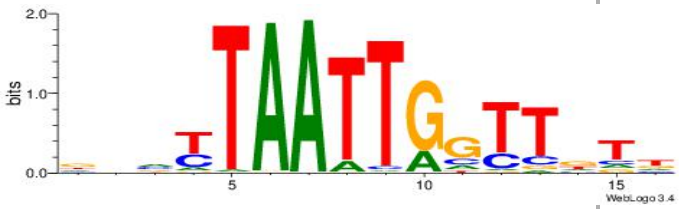
Original motif

Consensus sequence: HAHAACCAATTARBDH



Reverse complement motif

Consensus sequence: DDVKTAATTGGTTDTH

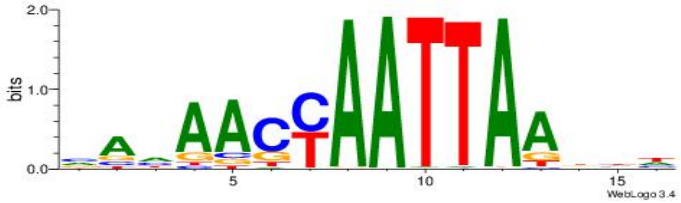


Motif ID:	UP00171
Motif name:	Msx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11

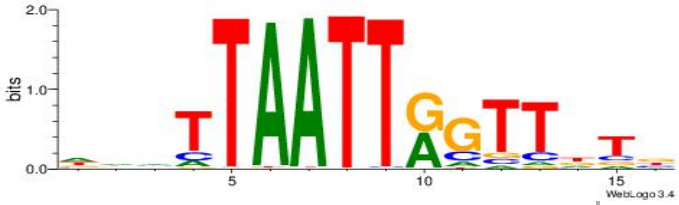
Similarity score: 0.040907

Alignment:
HHVTTAATTKGTTHTV
-----AATCTGTTATT

Original motif
Consensus sequence: VAHAACYAATTAABHH



Reverse complement motif
Consensus sequence: HHVTTAATTKGTTHTV

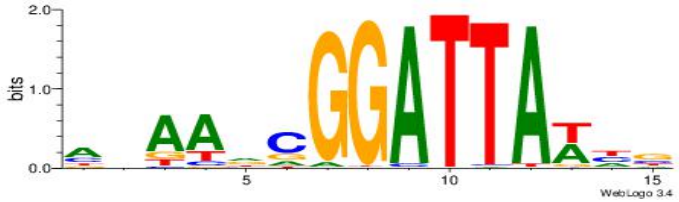


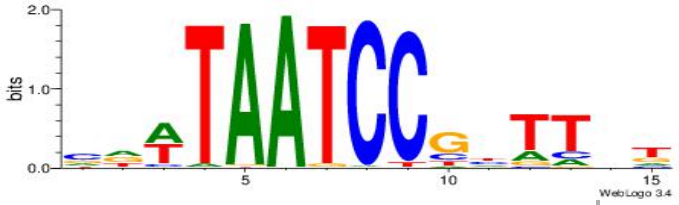
Motif ID: UP00109
Motif name: Obox6
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0411003

Alignment:
AHAADCGGATTAWHB
AATAACAGATT----

Original motif
Consensus sequence: AHAADCGGATTAWHB

Reverse complement motif
Consensus sequence: BHWTAATCCGDTTHT





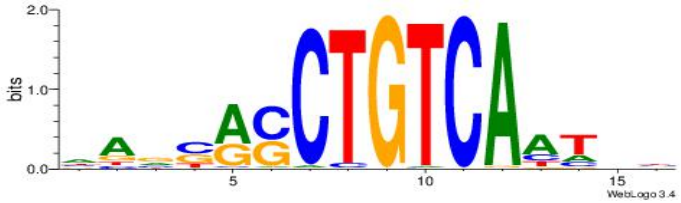
Motif ID:	UP00205
Motif name:	Pknox2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0430579

Alignment:

```
VHATTGACAGSKSVTH
--AATAACAGATT---
```

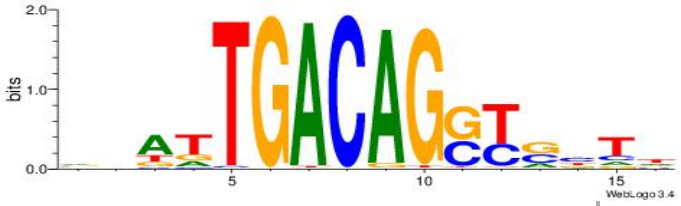
Original motif

Consensus sequence: HAVSRSCTGTCAATHB



Reverse complement motif

Consensus sequence: VHATTGACAGSKSVTH



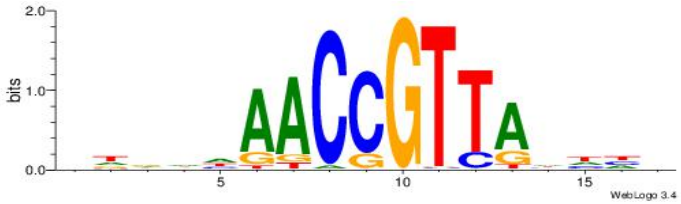
Motif ID:	UP00081
Motif name:	Mybl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0431149

Alignment:

```
HDDDHAACCGTTAHHHD
----AATCTGTTATT--
```

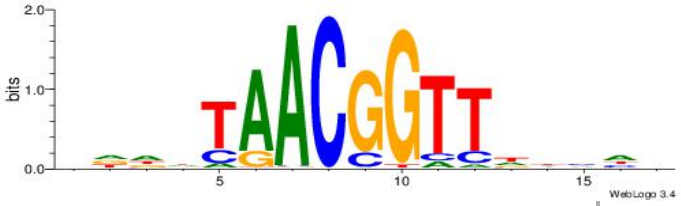
Original motif

Consensus sequence: HDDDHAACCGTTAHHHD



Reverse complement motif

Consensus sequence: DHHHTAACGGTTHDHDH



Dataset #: 2 Motif ID: 30 Motif name: Motif 30

Original motif

Consensus sequence: CTGTTTTWAT

Reverse complement motif

Consensus sequence: ATWAAAACAG

Best Matches for Motif ID 30 (Highest to Lowest)

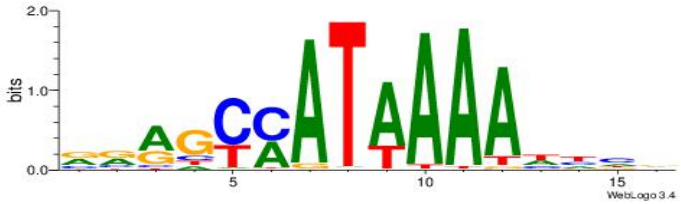
Motif ID:	UP00207
Motif name:	Hoxb9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.030167

Alignment:

```
VRRGCMATAAAAHHHD
------ATWAAAACAG
```

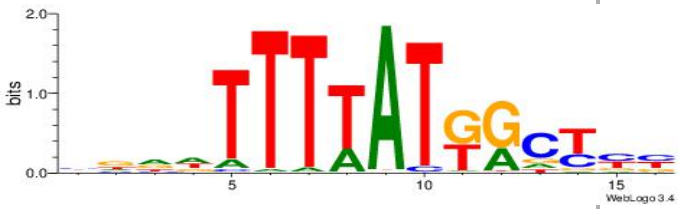
Original motif

Consensus sequence: VRRGCMATAAAAHHHD



Reverse complement motif

Consensus sequence: HDHHTTTTATRGCKMV



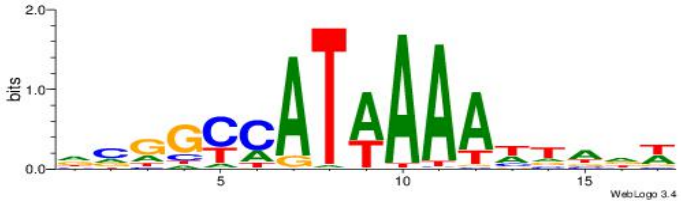
Motif ID:	UP00213
Motif name:	Hoxa9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0323471

Alignment:

```
DCGGYCATWAAAWTADW
------ATWAAAACAG-
```

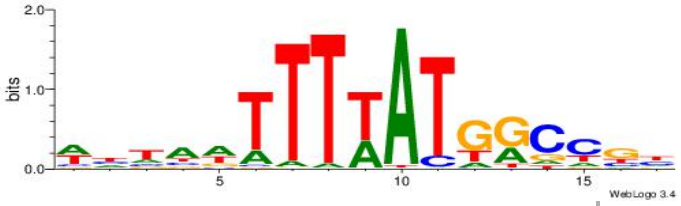
Original motif

Consensus sequence: DCGGYCATWAAAWTADW



Reverse complement motif

Consensus sequence: WDTAWTTTWATGKCCGD

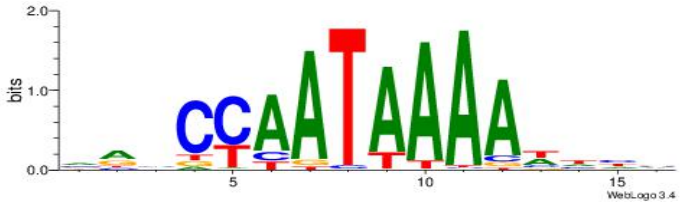


Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10

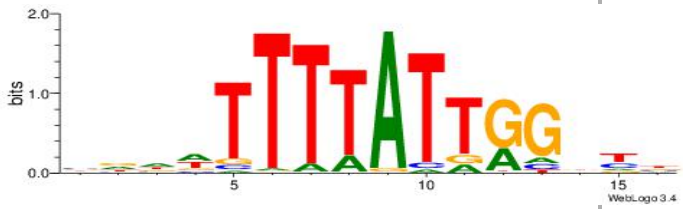
Similarity score: 0.0362663

Alignment:
VRHCCAATAAAAWHHV
CTGTTTTWAT------

Original motif
Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif
Consensus sequence: VDHWTTTTATTGGDKB

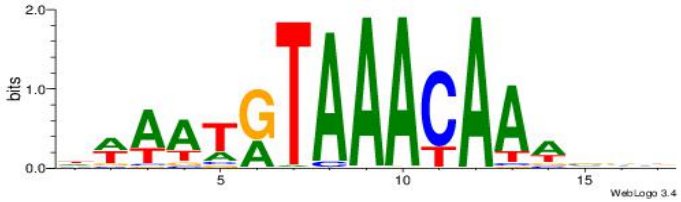


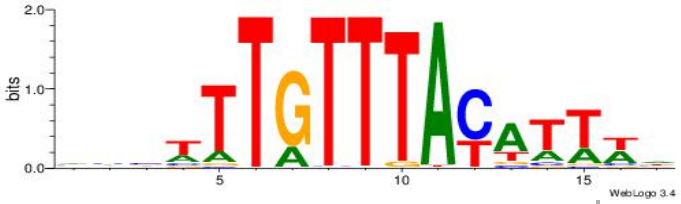
Motif ID: UP00061
Motif name: Foxl1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 10
Similarity score: 0.0372816

Alignment:
VVVWTTGTTTAMATTWD
----CTGTTTTWAT---

Original motif
Consensus sequence: DWAATRTAAACAAWVVB

Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD





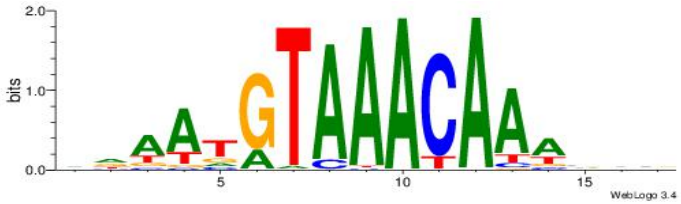
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0386784

Alignment:

```
BBVTTTGTTTACATTDD
----CTGTTTTWAT---
```

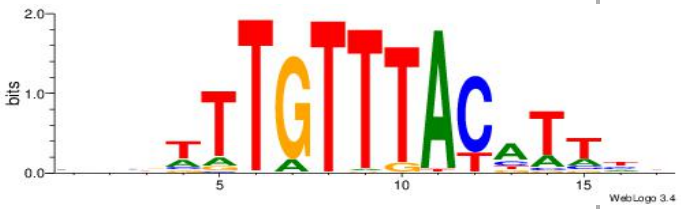
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



Motif ID:	UP00180

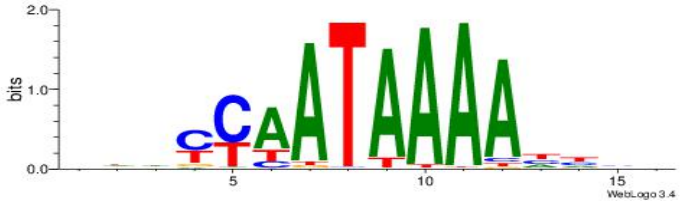
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.0390272

Alignment:

```
HDHYYAATAAAAHHHH
------ATWAAAACAG
```

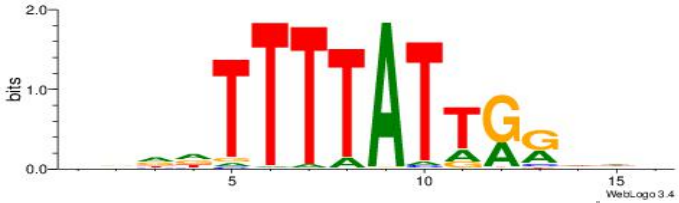
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD

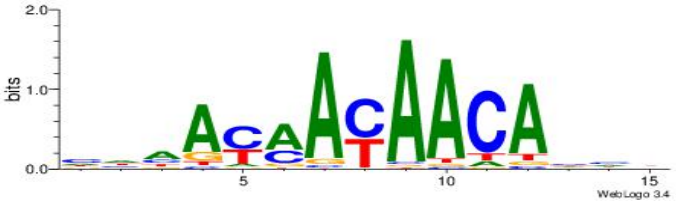


Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10

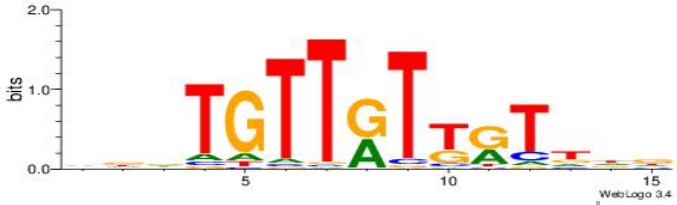
Similarity score: 0.0396761

Alignment:
HDDTGTTKTTKTHHD
--CTGTTTTWAT---

Original motif
Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD

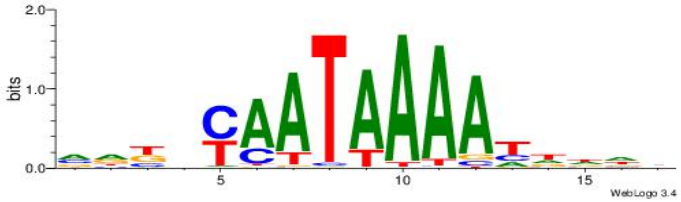


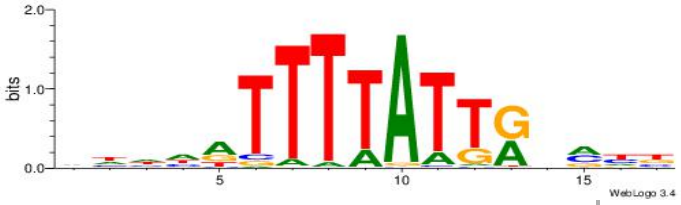
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.0450256

Alignment:
HDDDATTTTATTKVRDB
-CTGTTTTWAT------

Original motif
Consensus sequence: VDKVYAATAAAATDDDH

Reverse complement motif
Consensus sequence: HDDDATTTTATTKVRDB





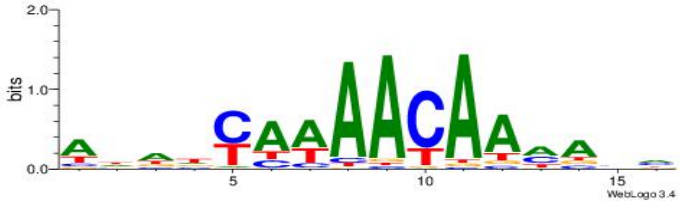
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0451436

Alignment:

```
ADDDYAWAACAAMAHH
--ATWAAAACAG----
```

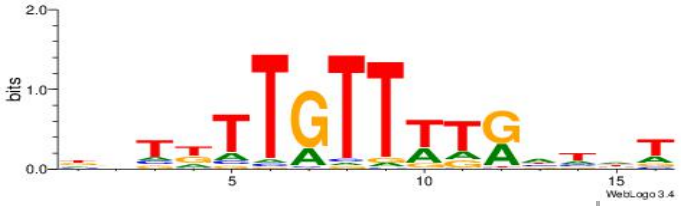
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



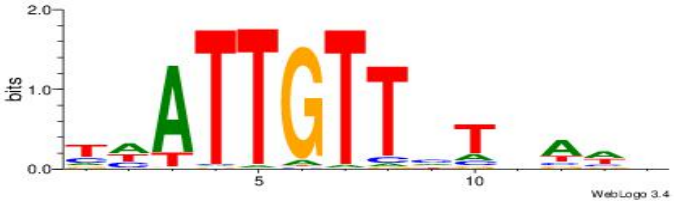
Motif ID:	UP00101
Motif name:	Sox12_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0452358

Alignment:

```
DWTHAVAACAATHA
-ATWAAAACAG---
```

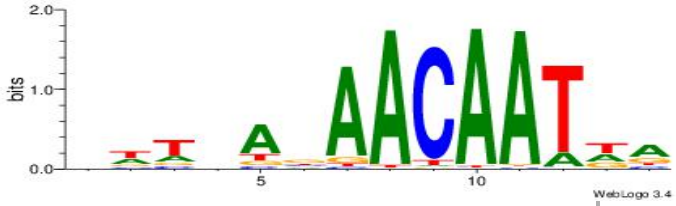
Original motif

Consensus sequence: THATTGTTVTHAWH



Reverse complement motif

Consensus sequence: DWTHAVAACAATHA



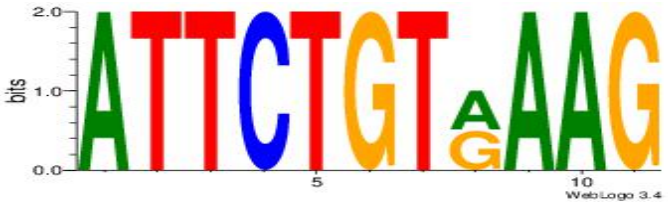
Dataset #: 2 Motif ID: 31 Motif name: Motif 31

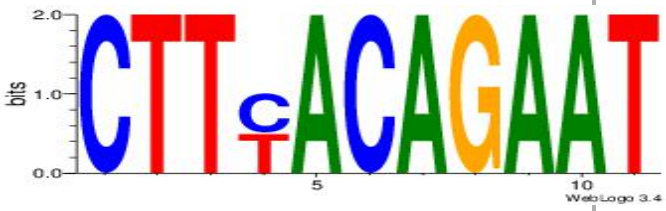
Original motif

Consensus sequence: ATTCTGTRAAG

Reverse complement motif

Consensus sequence: CTTKACAGAAT





Best Matches for Motif ID 31 (Highest to Lowest)

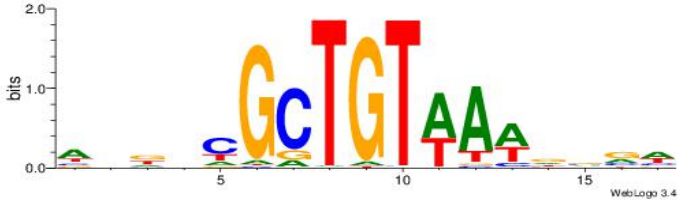
Motif ID:	UP00193
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.022933

Alignment:

```
AVDHCGCTGTWAWDVVW
---ATTCTGTRAAG---
```

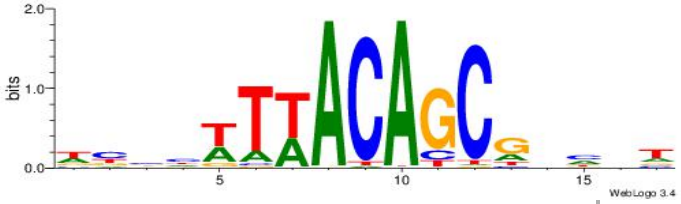
Original motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGHHVT



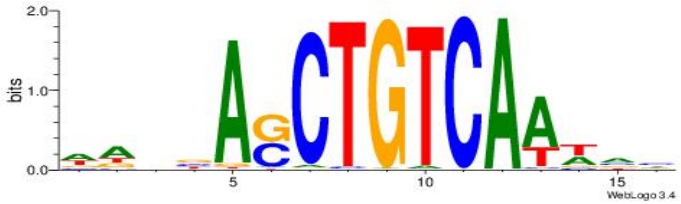
Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0231555

Alignment:

```
DBWTTGACAGSTBVTW
--CTTKACAGAAT---
```

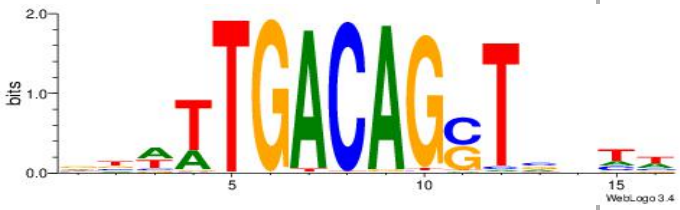
Original motif

Consensus sequence: WAVBASCTGTCAAWVH



Reverse complement motif

Consensus sequence: DBWTTGACAGSTBVTW

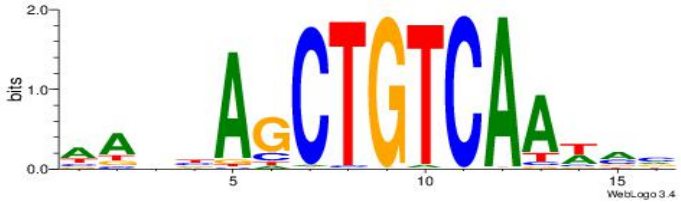


Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

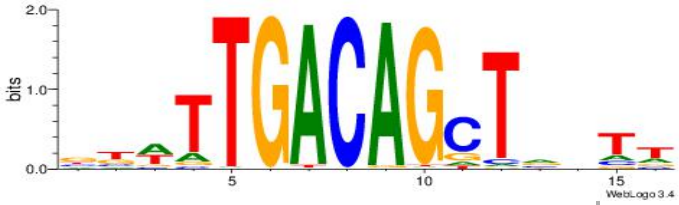
Number of overlap: 11
Similarity score: 0.0232158

Alignment:
VBWTTGACAGCTVBTT
--CTTKACAGAAT---

Original motif
Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif
Consensus sequence: VBWTTGACAGCTVBTT



Motif ID: UP00012
Motif name: Bbx_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.023325

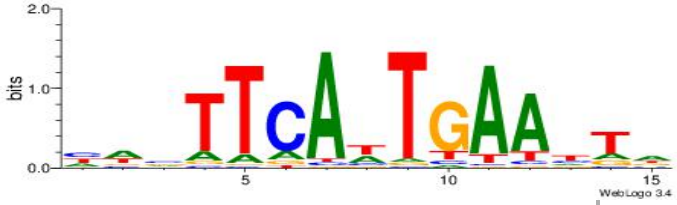
Alignment:
HADTTCAWTGAABWD
--ATTCTGTRAAG--

Original motif

Reverse complement motif

Consensus sequence: HADTTCAWTGAABWD

Consensus sequence: HWBTTCAWTGAADTH



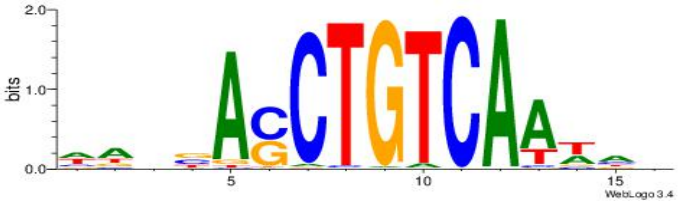
Motif ID:	UP00226
Motif name:	Mrg1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0239764

Alignment:

```
BHWTTGACAGSTBBTW
--CTTKACAGAAT---
```

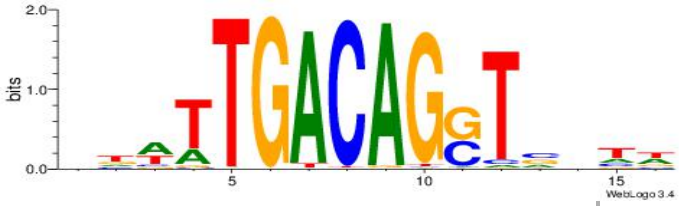
Original motif

Consensus sequence: WAVBASCTGTCAAWHB



Reverse complement motif

Consensus sequence: BHWTTGACAGSTBBTW



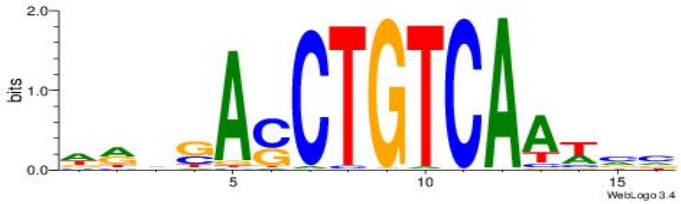
Motif ID:	UP00203
Motif name:	Pknox1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.025386

Alignment:

```
VVWTTGACAGSTSBKD
--CTTKACAGAAT---
```

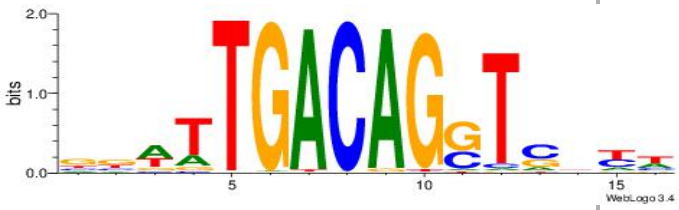
Original motif

Consensus sequence: DRVSASCTGTCAAWVV



Reverse complement motif

Consensus sequence: VVWTTGACAGSTSBKD

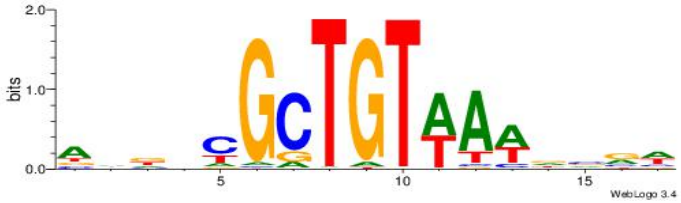


Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

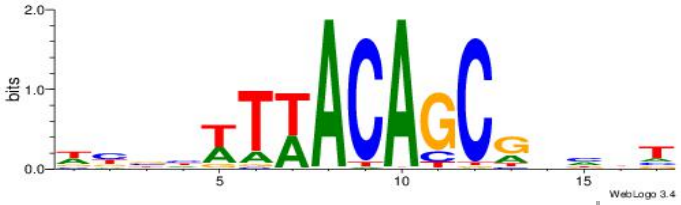
Number of overlap: 11
Similarity score: 0.0259448

Alignment:
AVDVCGCTGTWAWDVVW
---ATTCTGTRAAG---

Original motif
Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif
Consensus sequence: WVVHWTWACAGCGBHBT



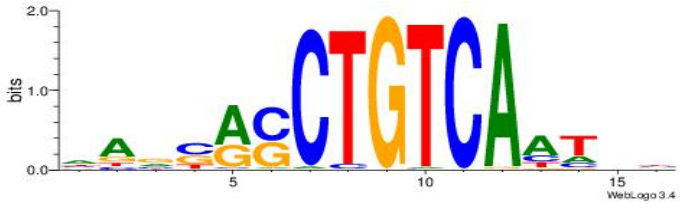
Motif ID: UP00205
Motif name: Pknox2
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0264392

Alignment:
VHATTGACAGSKSVTH
--CTTKACAGAAT---

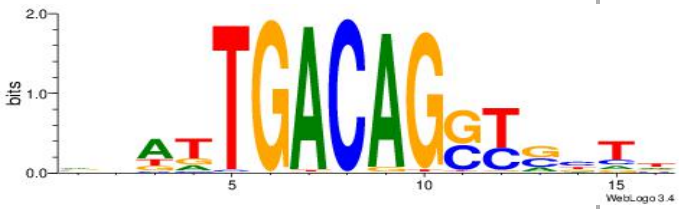
Original motif

Reverse complement motif

Consensus sequence: HAVSRSCTGTCAATHB



Consensus sequence: VHATTGACAGSKSVTH



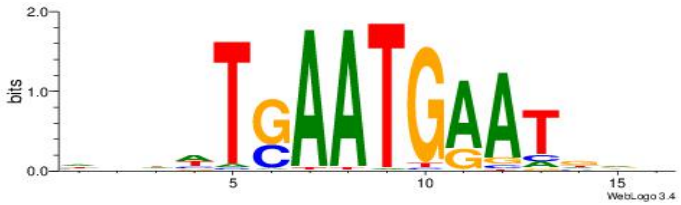
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0287967

Alignment:

```
HHDWTSAATGAATDDB
--CTTKACAGAAT---
```

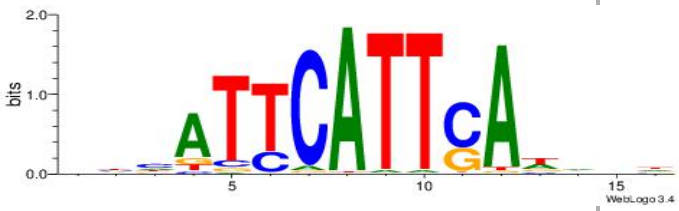
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH



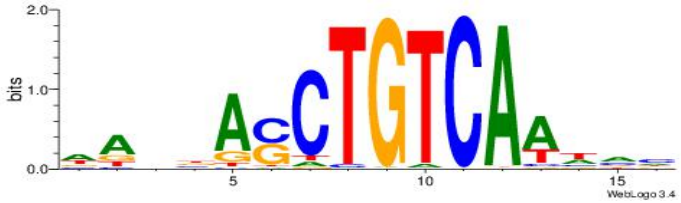
Motif ID:	UP00210
Motif name:	Mrg2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0289027

Alignment:

```
DBHTTGACAGSTVDTD
--CTTKACAGAAT---
```

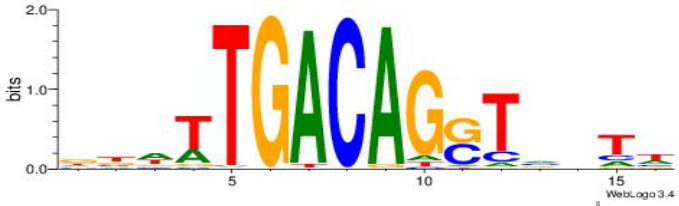
Original motif

Consensus sequence: DADBASCTGTCAAHVH



Reverse complement motif

Consensus sequence: DBHTTGACAGSTVDTD



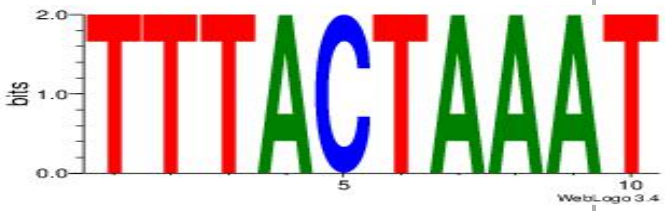
Dataset #: 2 Motif ID: 32 Motif name: Motif 32

Original motif

Consensus sequence: ATTTAGTAAA

Reverse complement motif

Consensus sequence: TTTACTAAAT



Best Matches for Motif ID 32 (Highest to Lowest)

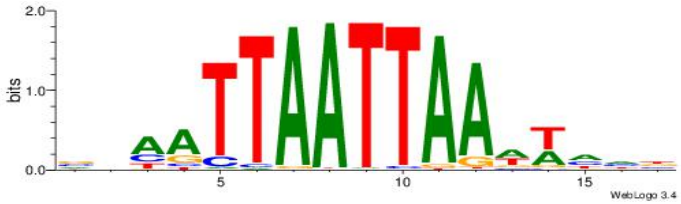
Motif ID:	UP00130
Motif name:	Lhx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.00271264

Alignment:

```
VHHWWTTAATTAATTDV
----TTTACTAAAT---
```

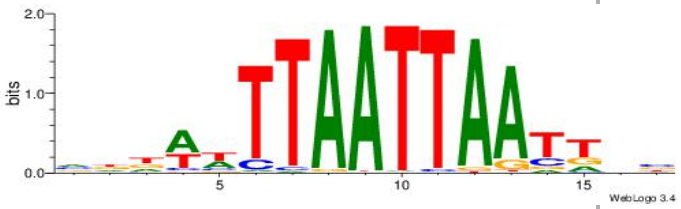
Original motif

Consensus sequence: VDAATTAATTAAWWHHB



Reverse complement motif

Consensus sequence: VHHWWTTAATTAATTDV



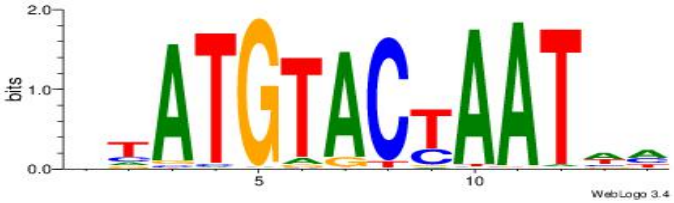
Motif ID:	UP00082
Motif name:	Zfp187_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.00275365

Alignment:

```
HWATTAGTACATAV
-ATTTAGTAAA---
```

Original motif

Consensus sequence: BTATGTACTAATWH



Reverse complement motif

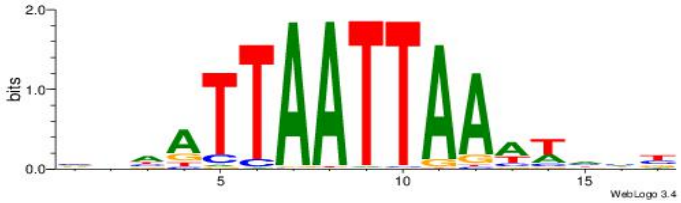
Consensus sequence: HWATTAGTACATAV

Motif ID:	UP00212
Motif name:	Lhx5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

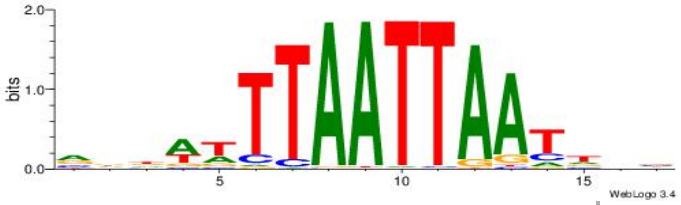
Number of overlap: 10
Similarity score: 0.00285069

Alignment:
VDHWTTTAATTAATHHV
----TTTACTAAAT---

Original motif
Consensus sequence: VDHATTAATTAAAWHHB



Reverse complement motif
Consensus sequence: VDHWTTTAATTAATHHV



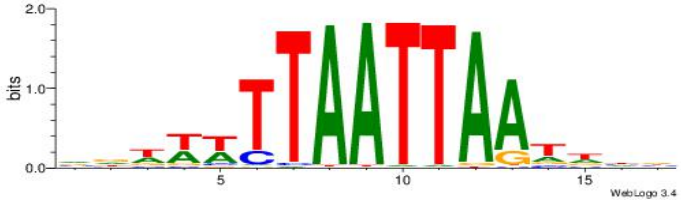
Motif ID: UP00169
Motif name: Lmx1b
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 10
Similarity score: 0.00676865

Alignment:
BHDATTAATTAAWWWHB
---ATTTAGTAAA----

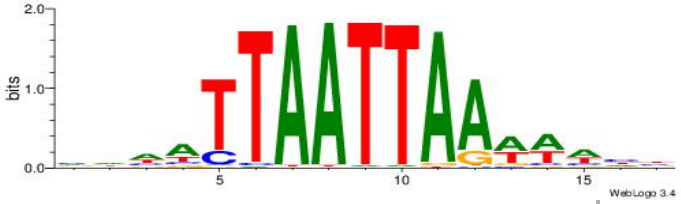
Original motif

Reverse complement motif

Consensus sequence: VDWWWTTAATTAATDHB



Consensus sequence: BHDATTAATTAAWWWHB



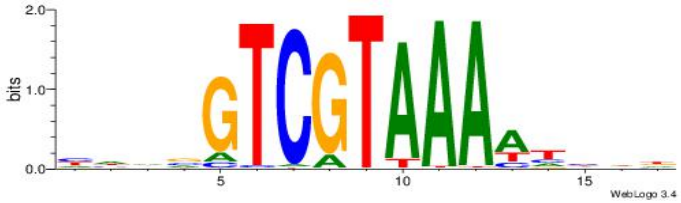
Motif ID:	UP00177
Motif name:	Hoxd12
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.00747245

Alignment:

```
DHDHTTTTACGACVDHD
-----TTTACTAAAT--
```

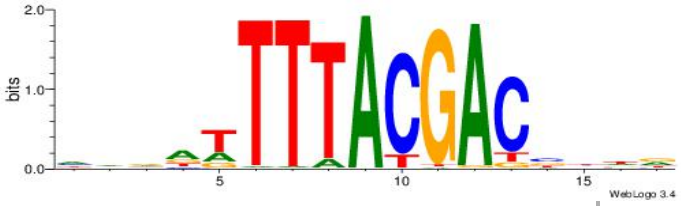
Original motif

Consensus sequence: HHDVGTCGTAAAAHHHD



Reverse complement motif

Consensus sequence: DHDHTTTTACGACVDHD



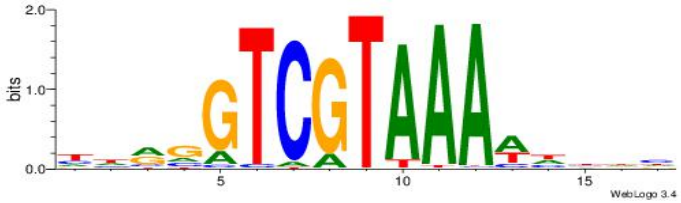
Motif ID:	UP00135
Motif name:	Hoxc12
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0076403

Alignment:

```
DDVHWTTTACGACCKHH
-----TTTACTAAAT--
```

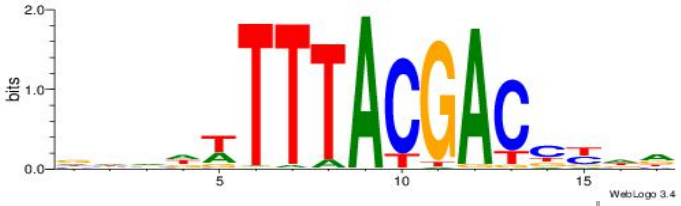
Original motif

Consensus sequence: HHRGGTCGTAAAWHBDH



Reverse complement motif

Consensus sequence: DDVHWTTTACGACCKHH

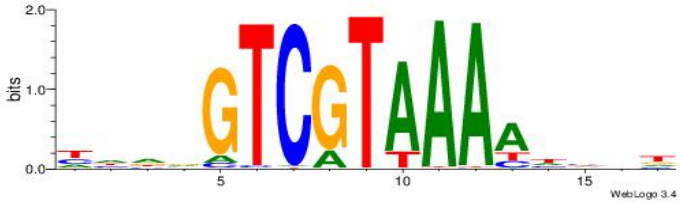


Motif ID:	UP00117
Motif name:	Hoxd11
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

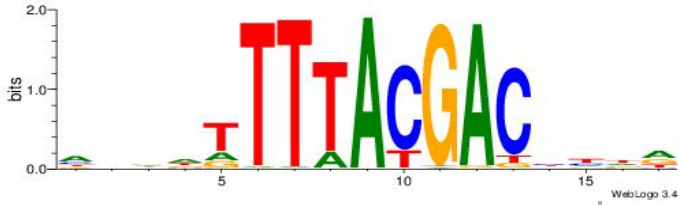
Number of overlap: 10
Similarity score: 0.00864633

Alignment:
DDDHTTTTACGACVDHH
-----TTTACTAAAT--

Original motif
Consensus sequence: HHDVGTCGTAAAAHHHD



Reverse complement motif
Consensus sequence: DDDHTTTTACGACVDHH



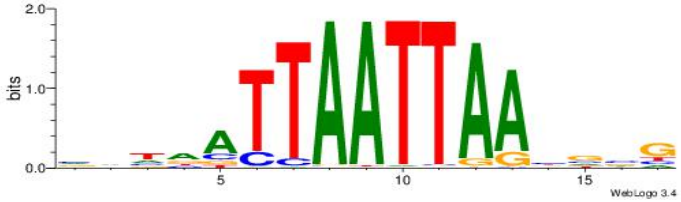
Motif ID: UP00142
Motif name: Uncx4.1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 10
Similarity score: 0.0100967

Alignment:
CVVBTTAATTAATDHDV
---TTTACTAAAT----

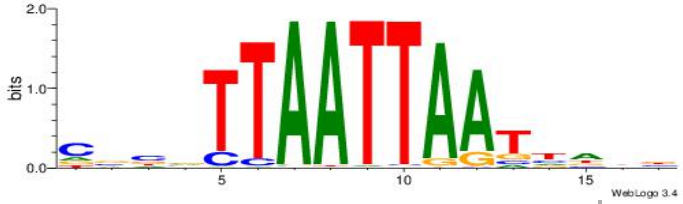
Original motif

Reverse complement motif

Consensus sequence: VDHDATTAATTAABVVG



Consensus sequence: CVVBTTAATTAATDHDV



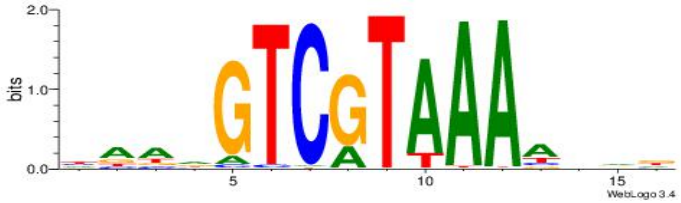
Motif ID:	UP00235
Motif name:	Hoxc11
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.010176

Alignment:

```
HDHTTTTACGACDTTH
----TTTACTAAAT--
```

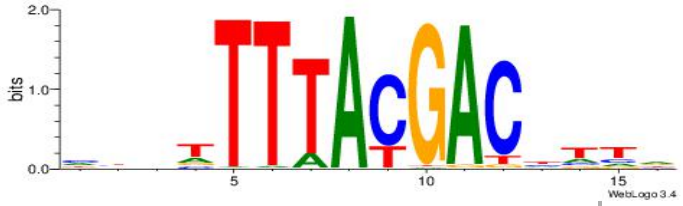
Original motif

Consensus sequence: HAADGTCGTAAAAHDD



Reverse complement motif

Consensus sequence: HDHTTTTACGACDTTH



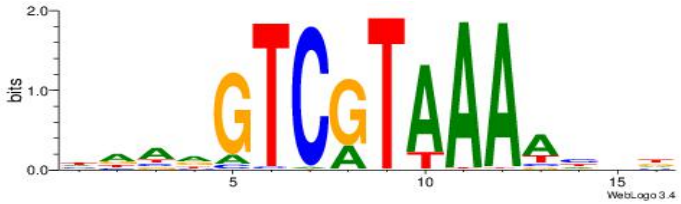
Motif ID:	UP00246
Motif name:	Hoxa11
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0105914

Alignment:

```
DDDTTTTACGACDTDH
----TTTACTAAAT--
```

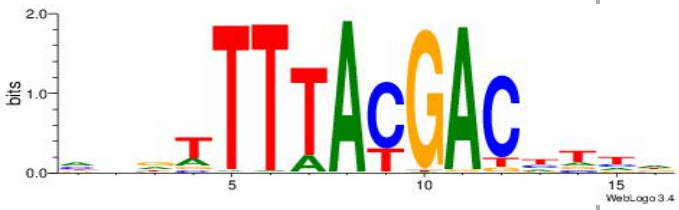
Original motif

Consensus sequence: HDADGTCGTAAAAHDD



Reverse complement motif

Consensus sequence: DDDTTTTACGACDTDH



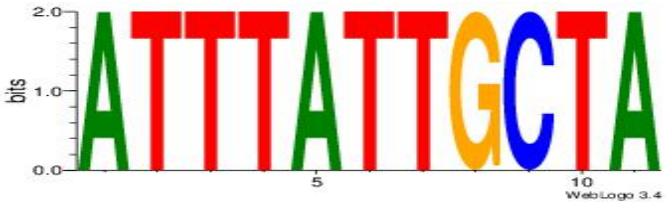
Dataset #: 2 Motif ID: 33 Motif name: Motif 33

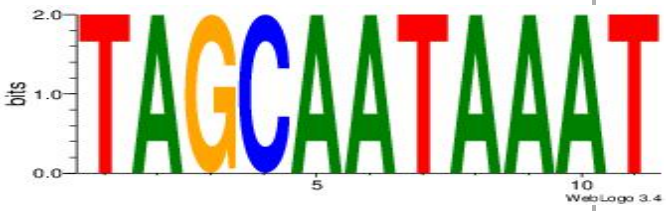
Original motif

Consensus sequence: ATTTATTGCTA

Reverse complement motif

Consensus sequence: TAGCAATAAAT





Best Matches for Motif ID 33 (Highest to Lowest)

Motif ID:	UP00104
Motif name:	Hmx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00115362

Alignment:

```
VVVAGCAATTAADGVDB
--TAGCAATAAAT----
```

Original motif

Consensus sequence: VVVAGCAATTAADGVDB

Reverse complement motif

Consensus sequence: VDBCDTTAATTGCTBVB

Motif ID:	UP00155
Motif name:	Hmx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00544084

Alignment:

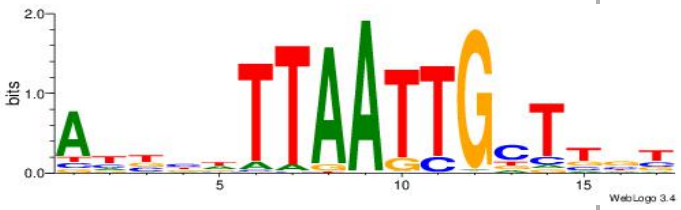
```
VVAAGCAATTAAHVVDT
--TAGCAATAAAT----
```

Original motif

Consensus sequence: VVAAGCAATTAAHVVDT

Reverse complement motif

Consensus sequence: ADBVHTTAATTGCTTVB

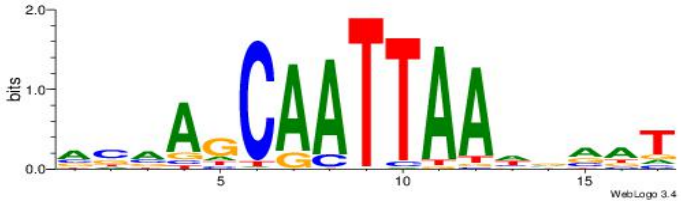


Motif ID:	UP00157
Motif name:	Hmx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

Number of overlap: 11
Similarity score: 0.00624569

Alignment:
VBVAGCAATTAAHVVAT
--TAGCAATAAAT----

Original motif
Consensus sequence: VBVAGCAATTAAHVVAT



Reverse complement motif
Consensus sequence: ATBVHTTAATTGCTBBB

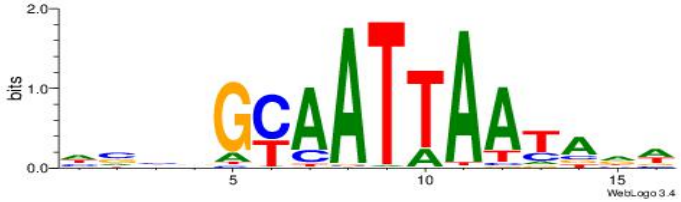
Motif ID: UP00263
Motif name: Hoxb8
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.00742166

Alignment:
HVBDGYAATTAATADW
--TAGCAATAAAT---

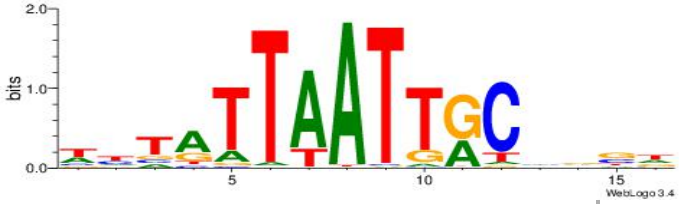
Original motif

Reverse complement motif

Consensus sequence: HVBDGYAATTAATADW



Consensus sequence: WDTATTAATTKCHBVH



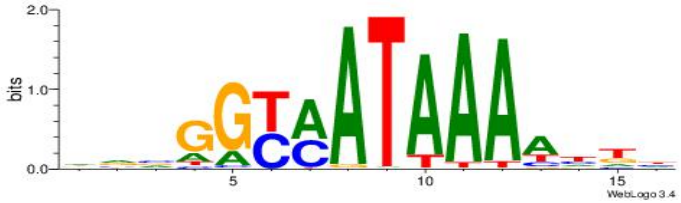
Motif ID:	UP00133
Motif name:	Cdx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0101377

Alignment:

```
DVVGGYMATAAAAHKH
--TAGCAATAAAT---
```

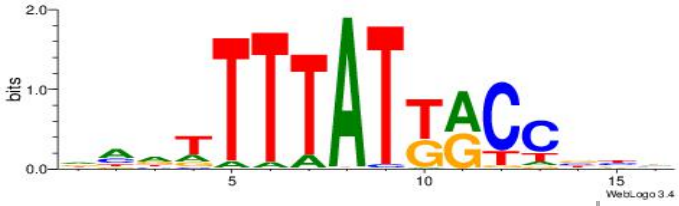
Original motif

Consensus sequence: DVVGGYMATAAAAHKH



Reverse complement motif

Consensus sequence: HRHTTTTATYMCCVBD



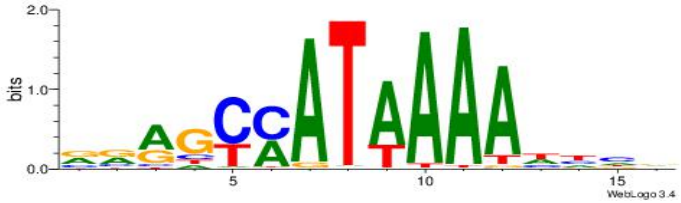
Motif ID:	UP00207
Motif name:	Hoxb9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0107409

Alignment:

```
VRRGCMATAAAAHHHD
-TAGCAATAAAT----
```

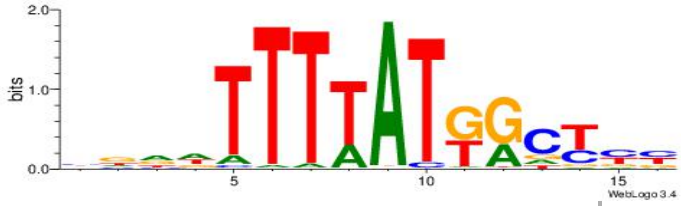
Original motif

Consensus sequence: VRRGCMATAAAAHHHD



Reverse complement motif

Consensus sequence: HDHHTTTTATRGCKMV

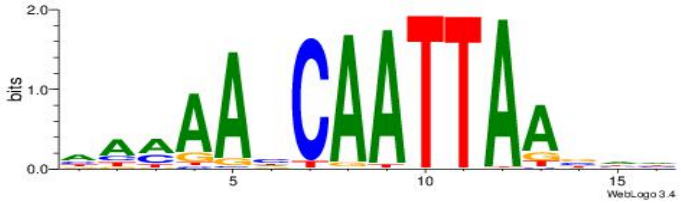


Motif ID:	UP00145
Motif name:	Barhl2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

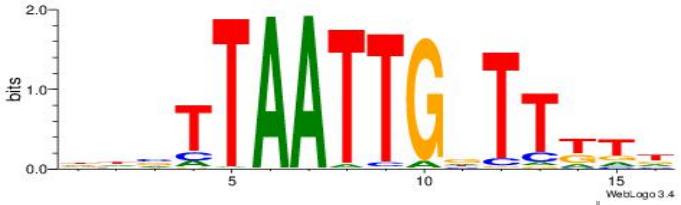
Number of overlap: 11
Similarity score: 0.0138179

Alignment:
HAMAAHCAATTAABHH
---TAGCAATAAAT--

Original motif
Consensus sequence: HAMAAHCAATTAABHH



Reverse complement motif
Consensus sequence: HHBTTAATTGDTTYTH



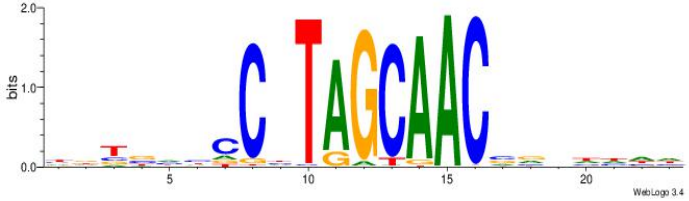
Motif ID: UP00098
Motif name: Rfx3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 10
Number of overlap: 11
Similarity score: 0.0142512

Alignment:
HDTBHHCCHTAGCAACVVDHHHH
---------TAGCAATAAAT---

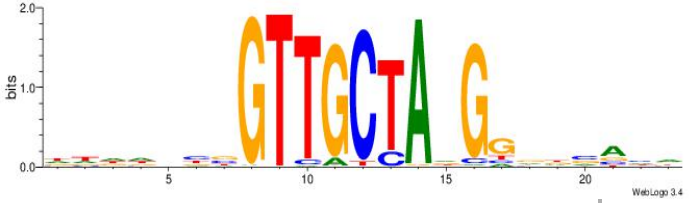
Original motif

Reverse complement motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



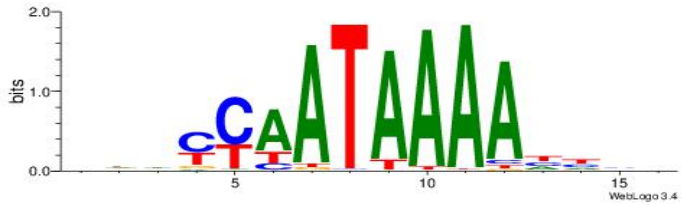
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.01435

Alignment:

```
HDHHTTTTATTKKHDD
----ATTTATTGCTA-
```

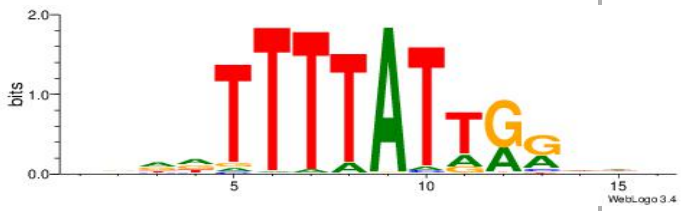
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



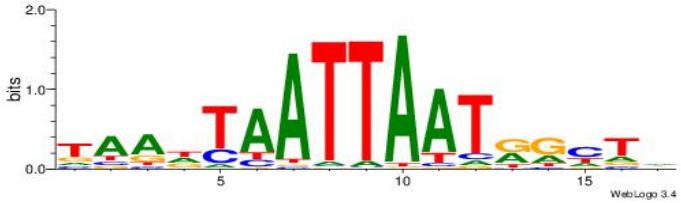
Motif ID:	UP00168
Motif name:	Hoxd8
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0169109

Alignment:

```
HADCMATTAATTADTTA
TAGCAATAAAT------
```

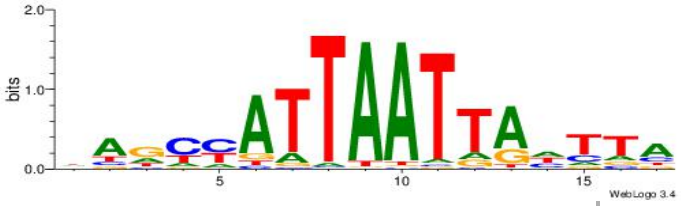
Original motif

Consensus sequence: TAADTAATTAATRGHTH



Reverse complement motif

Consensus sequence: HADCMATTAATTADTTA



Dataset #: 2 Motif ID: 34 Motif name: Motif 34

Original motif

Consensus sequence: TTGCTGCTTTT

Reverse complement motif

Consensus sequence: AAAAGCAGCAA

Best Matches for Motif ID 34 (Highest to Lowest)

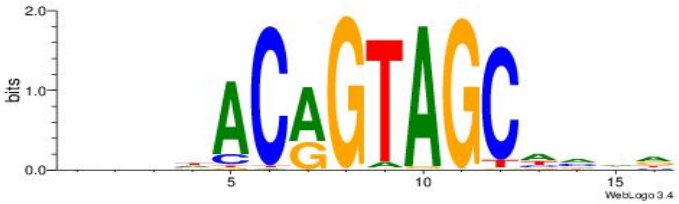
Motif ID:	UP00027
Motif name:	Osr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.00770725

Alignment:

```
DHBHGCTACKGTHDHH
--TTGCTGCTTTT---
```

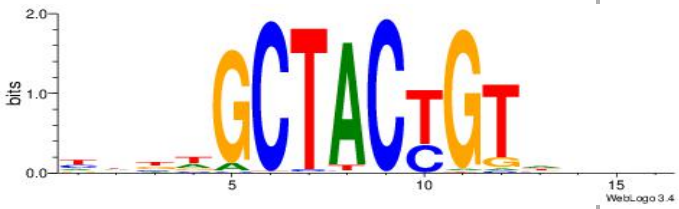
Original motif

Consensus sequence: HHDHACRGTAGCHVHD



Reverse complement motif

Consensus sequence: DHBHGCTACKGTHDHH



Motif ID:	UP00044
Motif name:	Mafk_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0113442

Alignment:

```
MBHTGCADTTTTTHV
--TTGCTGCTTTT--
```

Original motif

Consensus sequence: VHAAAAADTGCAHBR

Reverse complement motif

Consensus sequence: MBHTGCADTTTTTHV

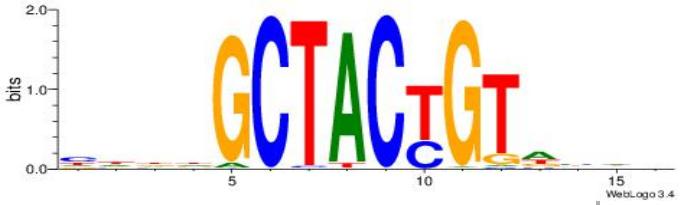
Motif ID:	UP00052
Motif name:	Osr2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

Number of overlap: 11
Similarity score: 0.0117169

Alignment:
HHHHGCTACKGTHVHH
--TTGCTGCTTTT---

Original motif
Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif
Consensus sequence: HHHHGCTACKGTHVHH



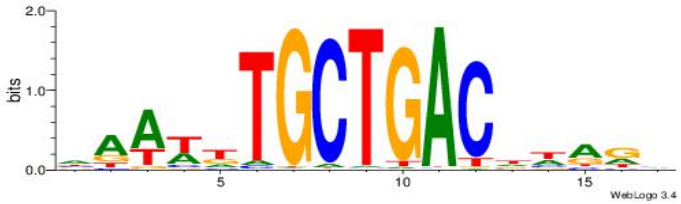
Motif ID: UP00045
Motif name: Mafb_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0149918

Alignment:
HAAWDTGCTGACDWARH
----TTGCTGCTTTT--

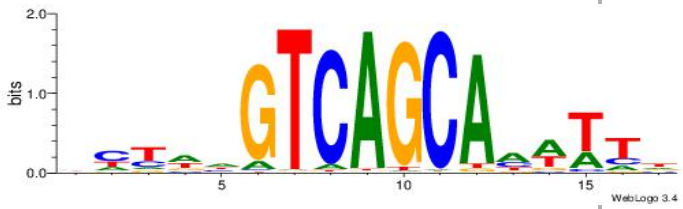
Original motif

Reverse complement motif

Consensus sequence: HAAWDTGCTGACDWARH



Consensus sequence: DMTWDGTCAGCADWTTH



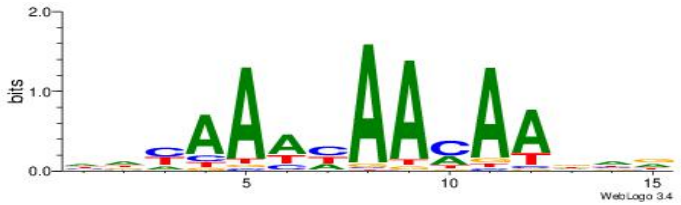
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0204182

Alignment:

```
HHHTTRTTDTTTKDH
---TTGCTGCTTTT-
```

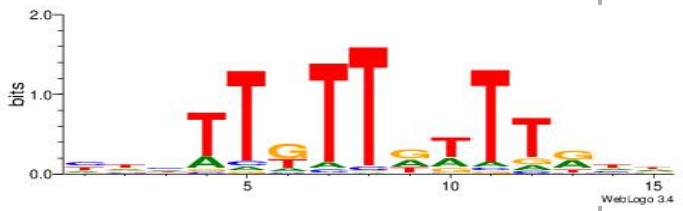
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



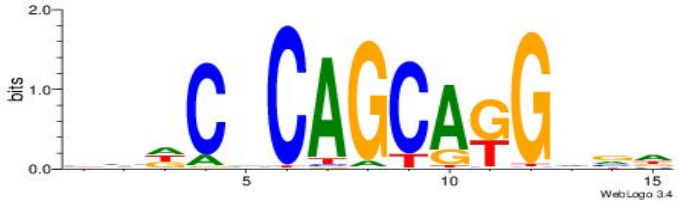
Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0211824

Alignment:

```
DVBCYTGCTGBGDDD
----TTGCTGCTTTT
```

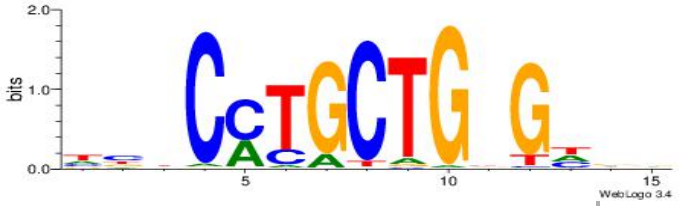
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD

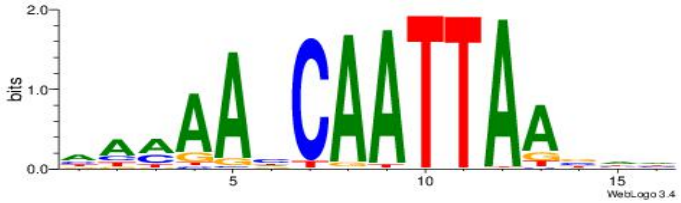


Motif ID:	UP00145
Motif name:	Barhl2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

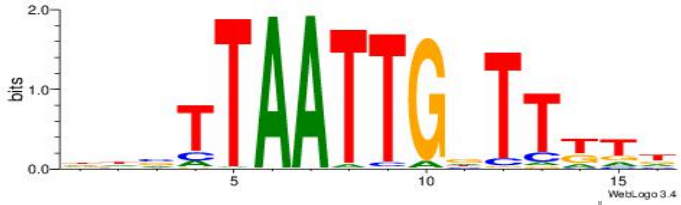
Number of overlap: 11
Similarity score: 0.0241392

Alignment:
HHBTTAATTGDTTYTH
----TTGCTGCTTTT-

Original motif
Consensus sequence: HAMAAHCAATTAABHH



Reverse complement motif
Consensus sequence: HHBTTAATTGDTTYTH



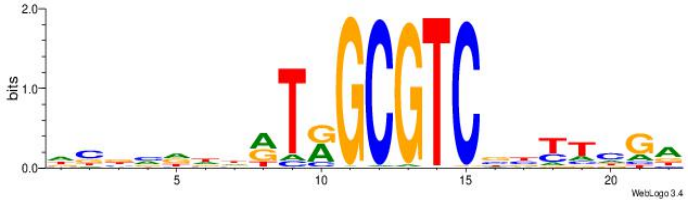
Motif ID: UP00527
Motif name: Foxn4_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.0241736

Alignment:
TCDAMVBGACGCMAKDDDVBBD
---AAAAGCAGCAA--------

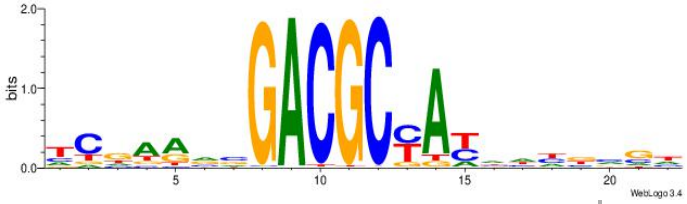
Original motif

Reverse complement motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Consensus sequence: TCDAMVBGACGCMAKDDDVBBD



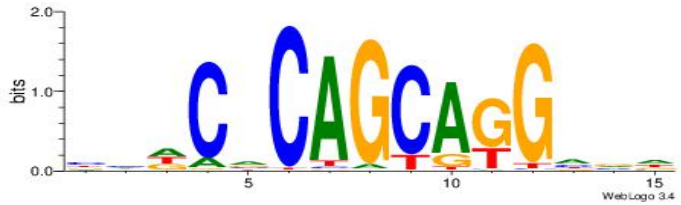
Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0245177

Alignment:

```
DVHCCTGCTGBGDDB
----TTGCTGCTTTT
```

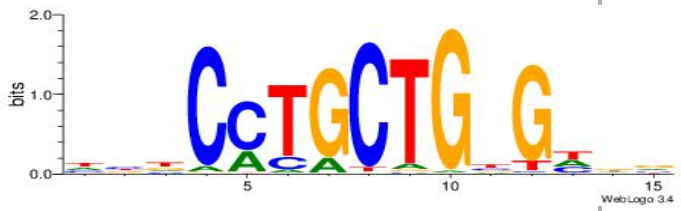
Original motif

Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif

Consensus sequence: DVHCCTGCTGBGDDB



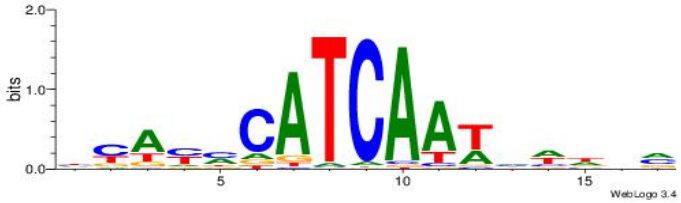
Motif ID:	UP00185
Motif name:	Pbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0245464

Alignment:

```
BVDWHWTTGATGRKTKH
------TTGCTGCTTTT
```

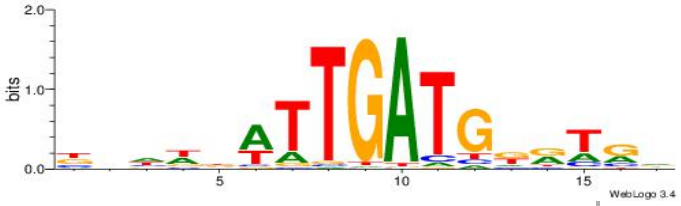
Original motif

Consensus sequence: HYAYMCATCAAWHWDVV



Reverse complement motif

Consensus sequence: BVDWHWTTGATGRKTKH



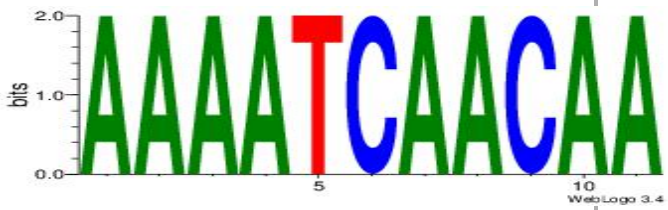
Dataset #: 2 Motif ID: 35 Motif name: Motif 35

Original motif

Consensus sequence: TTGTTGATTTT

Reverse complement motif

Consensus sequence: AAAATCAACAA



Best Matches for Motif ID 35 (Highest to Lowest)

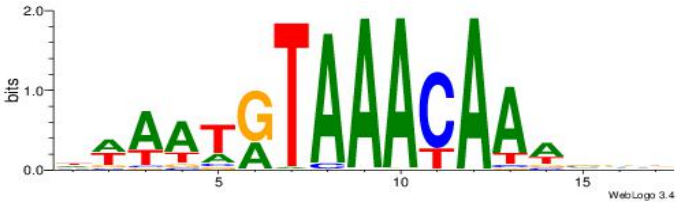
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0

Alignment:

```
DWAATRTAAACAAWVVB
--AAAATCAACAA----
```

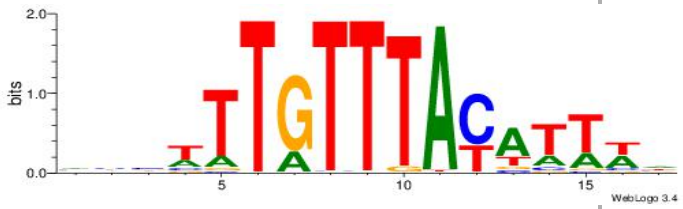
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



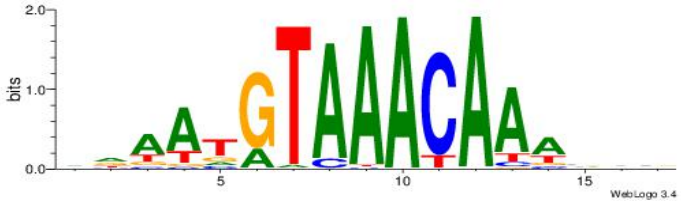
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.00256455

Alignment:

```
DDAATGTAAACAAAVVB
--AAAATCAACAA----
```

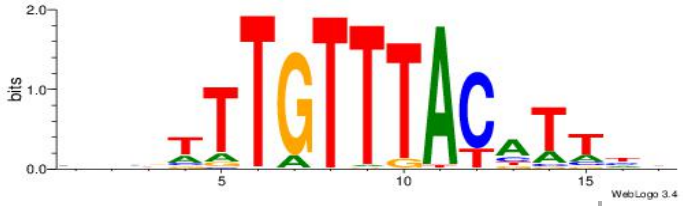
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD

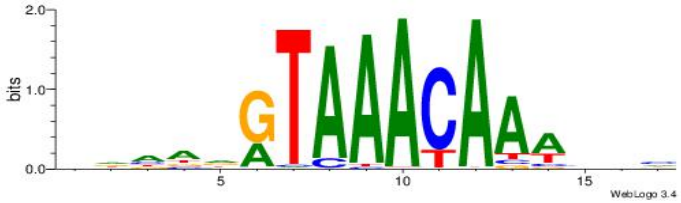


Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

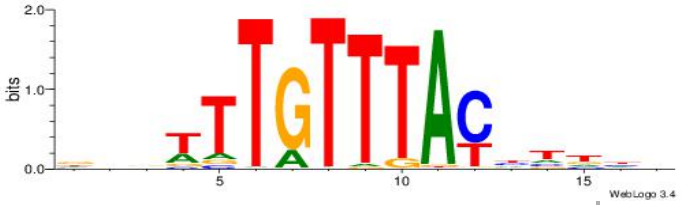
Number of overlap: 11
Similarity score: 0.00497188

Alignment:
HDHADGTAAACAAAVVH
--AAAATCAACAA----

Original motif
Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH



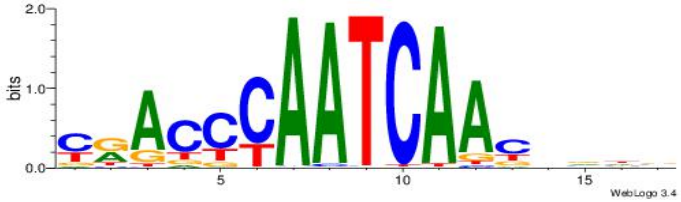
Motif ID: UP00227
Motif name: Duxl
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.00721745

Alignment:
VHVVGTTGATTGGGTMK
--TTGTTGATTTT----

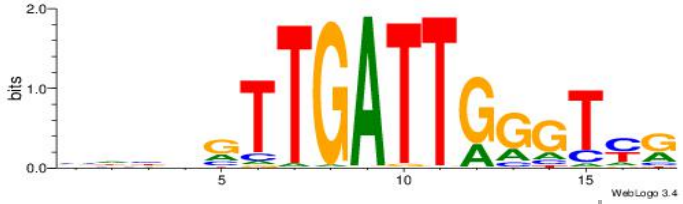
Original motif

Reverse complement motif

Consensus sequence: YRACCCAATCAACVVHV



Consensus sequence: VHVVGTTGATTGGGTMK



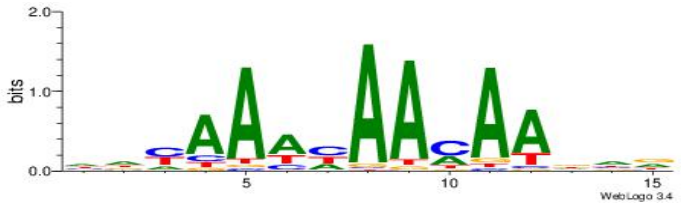
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0101946

Alignment:

```
HHHTTRTTDTTTKDH
---TTGTTGATTTT-
```

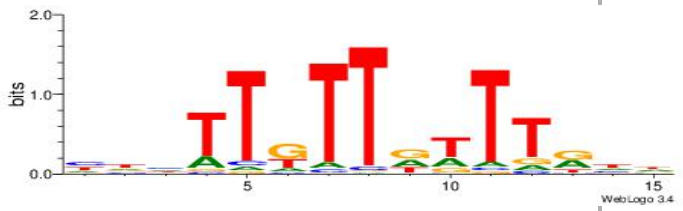
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0135831

Alignment:

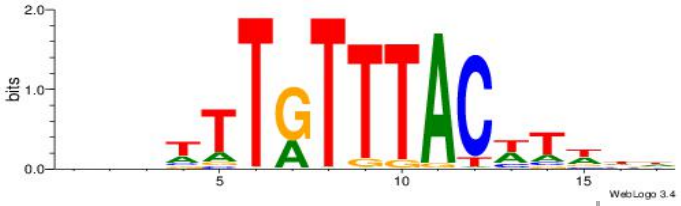
```
HHWAWGTAAAYAAAVDB
--AAAATCAACAA----
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH

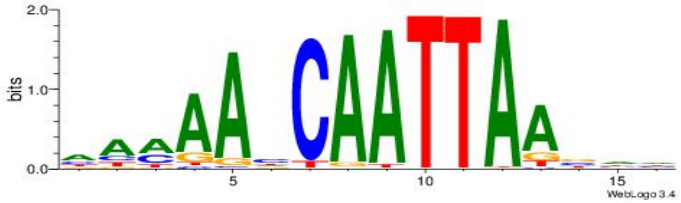


Motif ID:	UP00145
Motif name:	Barhl2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

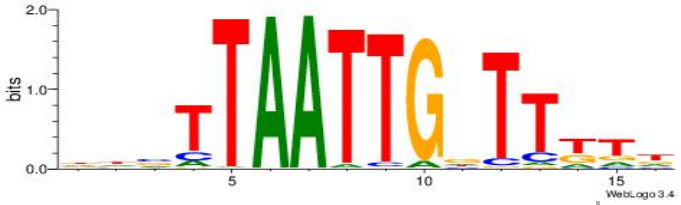
Number of overlap: 11
Similarity score: 0.0139419

Alignment:
HAMAAHCAATTAABHH
-AAAATCAACAA----

Original motif
Consensus sequence: HAMAAHCAATTAABHH



Reverse complement motif
Consensus sequence: HHBTTAATTGDTTYTH



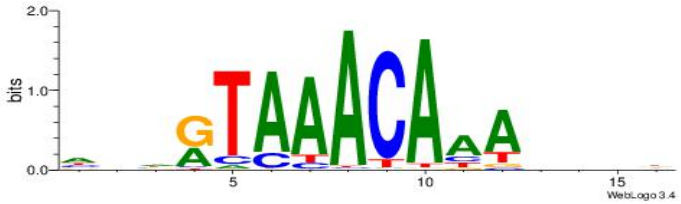
Motif ID: UP00041
Motif name: Foxj1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.0164816

Alignment:
HDHRTAAACAAAHDDD
AAAATCAACAA-----

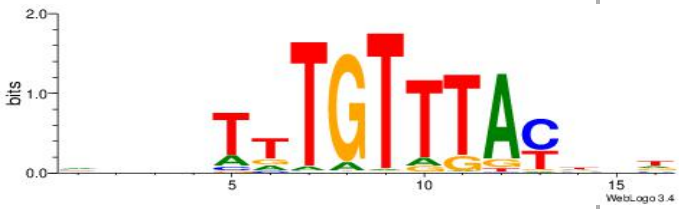
Original motif

Reverse complement motif

Consensus sequence: HDHRTAAACAAAHDDD



Consensus sequence: DDDHTTTGTTTAMHDH



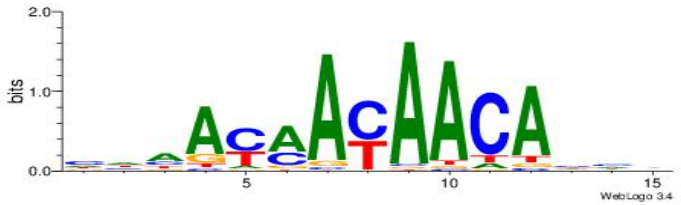
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0220198

Alignment:

```
HDDTGTTKTTKTHHD
--TTGTTGATTTT--
```

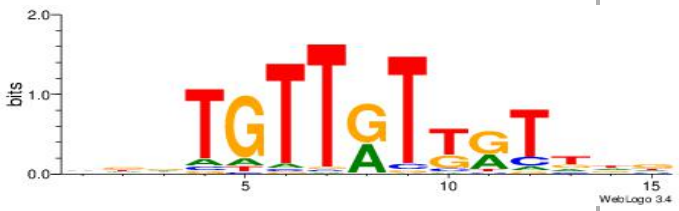
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD



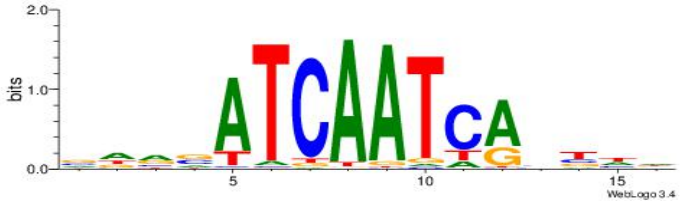
Motif ID:	UP00067
Motif name:	Lef1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0242838

Alignment:

```
DHVDTGATTGATVBDV
----TTGTTGATTTT-
```

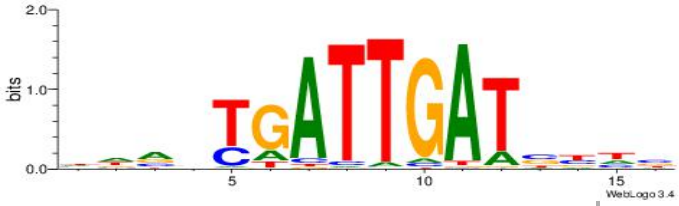
Original motif

Consensus sequence: VDVVATCAATCAHBHD



Reverse complement motif

Consensus sequence: DHVDTGATTGATVBDV



Dataset #: 2 Motif ID: 36 Motif name: Motif 36

Original motif

Consensus sequence: TTACWGTTT

Reverse complement motif

Consensus sequence: AAACWGTAA

Best Matches for Motif ID 36 (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:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	9
Similarity score:	0.0202622

Alignment:

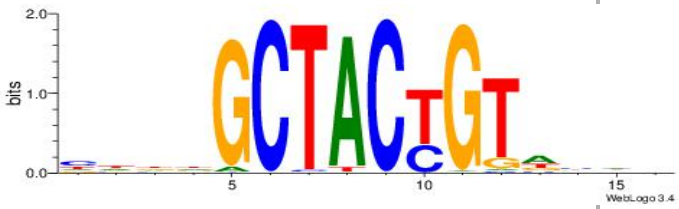
```
HHVHACRGTAGCHHHD
--AAACWGTAA-----
```

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH



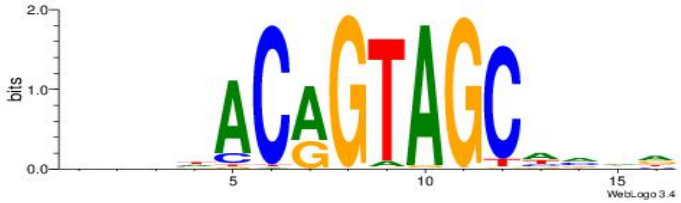
Motif ID:	UP00027
Motif name:	Osr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	9
Similarity score:	0.0205632

Alignment:

```
HHDHACRGTAGCHVHD
--AAACWGTAA-----
```

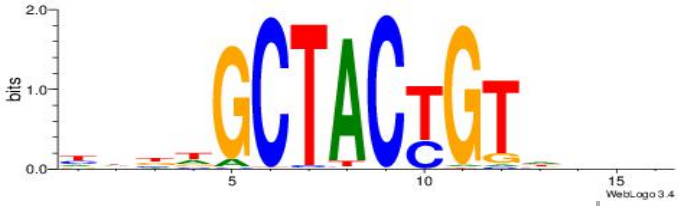
Original motif

Consensus sequence: HHDHACRGTAGCHVHD



Reverse complement motif

Consensus sequence: DHBHGCTACKGTHDHH



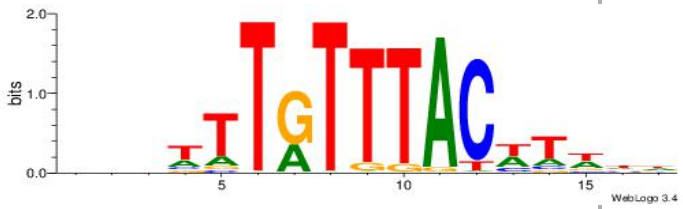
Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	9

Similarity score: 0.0212082

Alignment:
HHWAWGTAAAYAAAVDB
--------TTACWGTTT

Original motif
Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif
Consensus sequence: BDVTTTKTTTACWTWHH

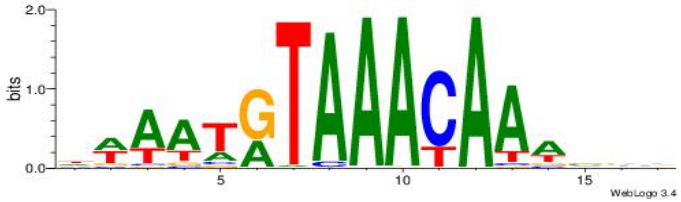


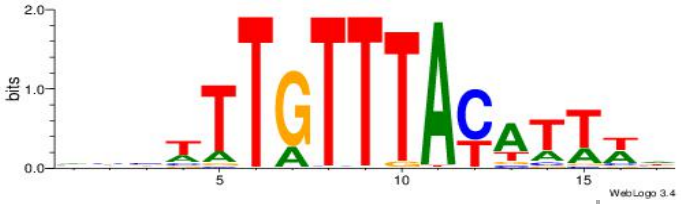
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	9
Similarity score:	0.0213447

Alignment:
VVVWTTGTTTAMATTWD
--------TTACWGTTT

Original motif
Consensus sequence: DWAATRTAAACAAWVVB

Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD





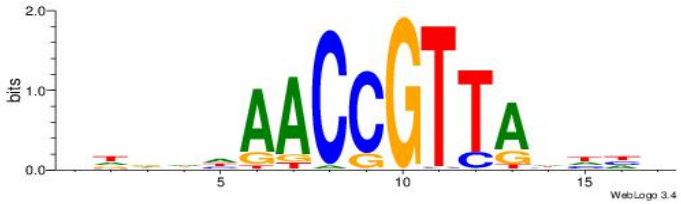
Motif ID:	UP00081
Motif name:	Mybl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	9
Similarity score:	0.0237771

Alignment:

```
DHHHTAACGGTTHDHDH
----TTACWGTTT----
```

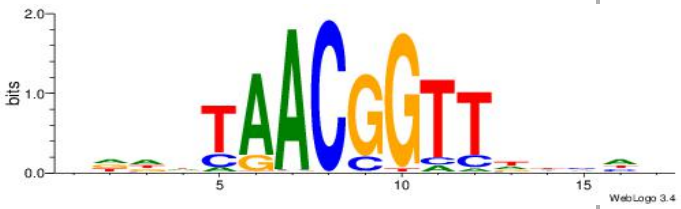
Original motif

Consensus sequence: HDDDHAACCGTTAHHHD



Reverse complement motif

Consensus sequence: DHHHTAACGGTTHDHDH



Motif ID:	UP00025

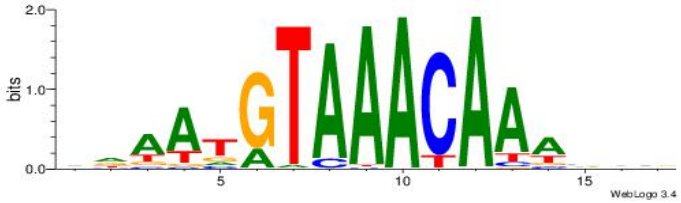
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	9
Similarity score:	0.0240192

Alignment:

```
BBVTTTGTTTACATTDD
--------TTACWGTTT
```

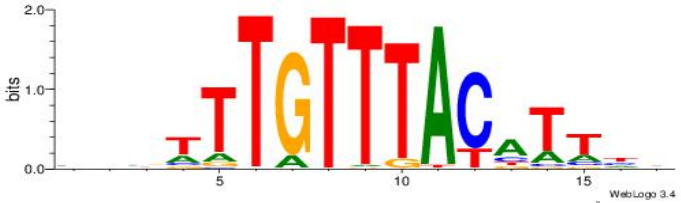
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD

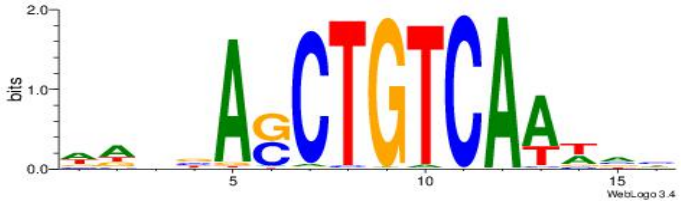


Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	9

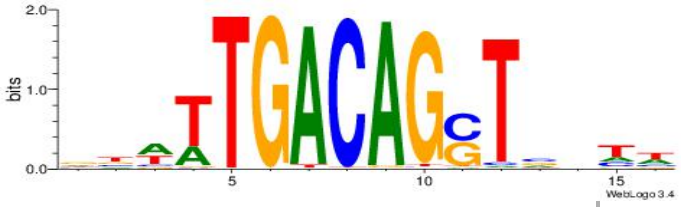
Similarity score: 0.0245505

Alignment:
DBWTTGACAGSTBVTW
----TTACWGTTT---

Original motif
Consensus sequence: WAVBASCTGTCAAWVH



Reverse complement motif
Consensus sequence: DBWTTGACAGSTBVTW

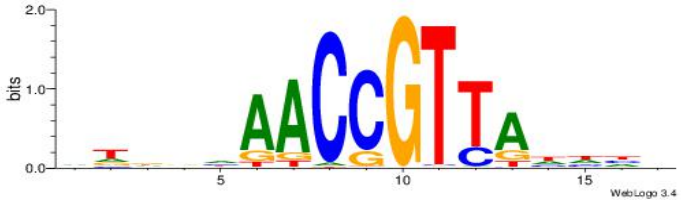


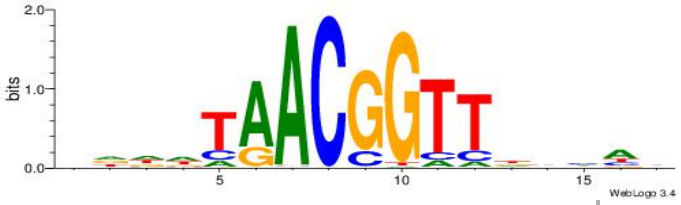
Motif ID:	UP00092
Motif name:	Myb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	9
Similarity score:	0.0258406

Alignment:
HDDDHAACCGTTAHHHD
----AAACWGTAA----

Original motif
Consensus sequence: HDDDHAACCGTTAHHHD

Reverse complement motif
Consensus sequence: DHHHTAACGGTTHHHDH





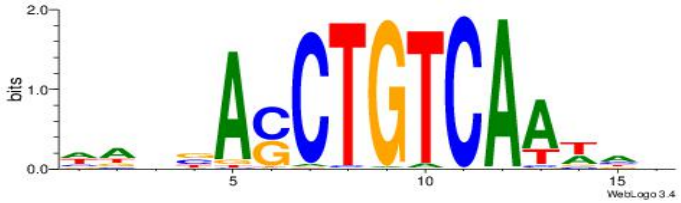
Motif ID:	UP00226
Motif name:	Mrg1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	9
Similarity score:	0.0267732

Alignment:

```
BHWTTGACAGSTBBTW
----TTACWGTTT---
```

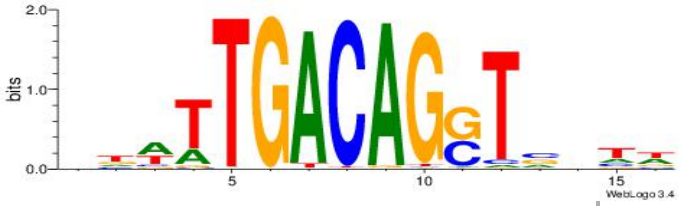
Original motif

Consensus sequence: WAVBASCTGTCAAWHB



Reverse complement motif

Consensus sequence: BHWTTGACAGSTBBTW



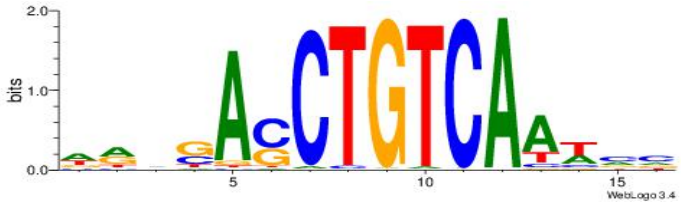
Motif ID:	UP00203
Motif name:	Pknox1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	9
Similarity score:	0.0277187

Alignment:

```
VVWTTGACAGSTSBKD
----TTACWGTTT---
```

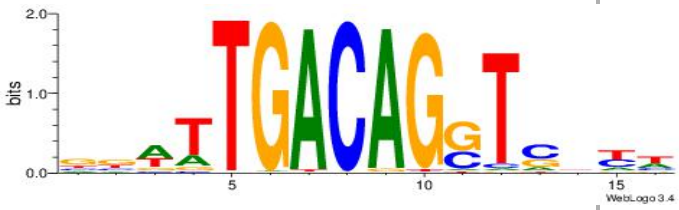
Original motif

Consensus sequence: DRVSASCTGTCAAWVV



Reverse complement motif

Consensus sequence: VVWTTGACAGSTSBKD



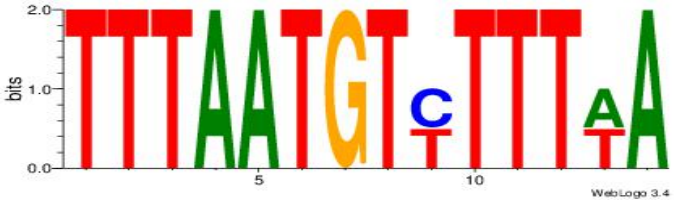
Dataset #: 2 Motif ID: 37 Motif name: Motif 37

Original motif

Consensus sequence: TTTAATGTYTTTWA

Reverse complement motif

Consensus sequence: TWAAAKACATTAAA



Best Matches for Motif ID 37 (Highest to Lowest)

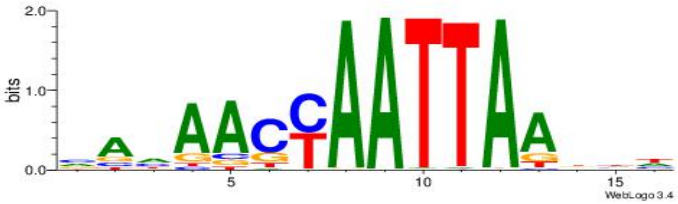
Motif ID:	UP00171
Motif name:	Msx3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0143635

Alignment:

```
HHVTTAATTKGTTHTV
--TTTAATGTYTTTWA
```

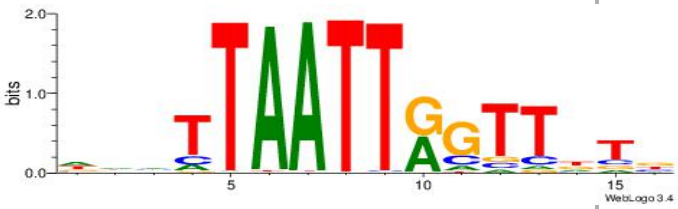
Original motif

Consensus sequence: VAHAACYAATTAABHH



Reverse complement motif

Consensus sequence: HHVTTAATTKGTTHTV



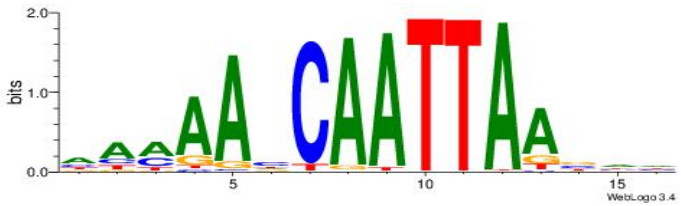
Motif ID:	UP00145
Motif name:	Barhl2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0149596

Alignment:

```
HHBTTAATTGDTTYTH
--TTTAATGTYTTTWA
```

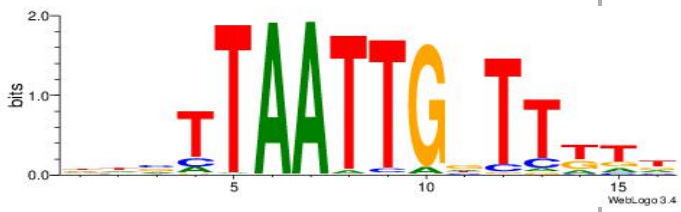
Original motif

Consensus sequence: HAMAAHCAATTAABHH



Reverse complement motif

Consensus sequence: HHBTTAATTGDTTYTH

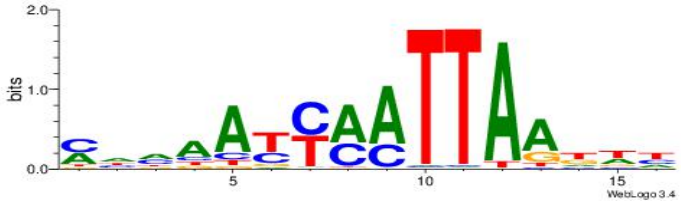


Motif ID:	UP00170
Motif name:	Isl2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

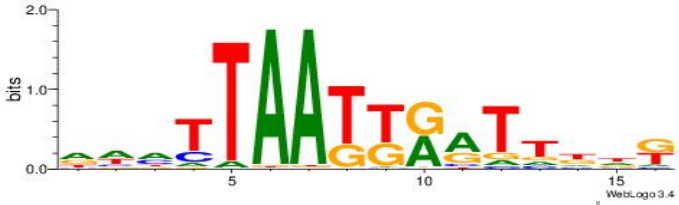
Number of overlap: 14
Similarity score: 0.0226802

Alignment:
HWDTTAATYKMTTHHR
--TTTAATGTYTTTWA

Original motif
Consensus sequence: MHHAAYYMATTAADWH



Reverse complement motif
Consensus sequence: HWDTTAATYKMTTHHR

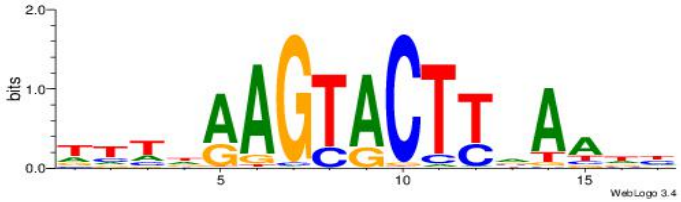


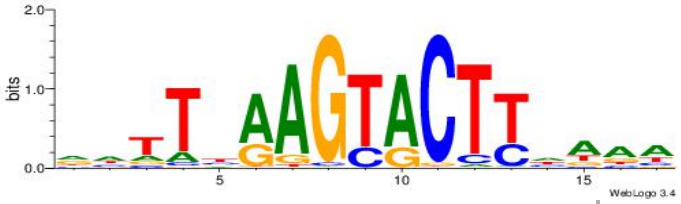
Motif ID: UP00119
Motif name: Nkx2-9
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0229232

Alignment:
HDTTBAAGTACTTDAAA
---TWAAAKACATTAAA

Original motif
Consensus sequence: TTTDAAGTACTTVAADH

Reverse complement motif
Consensus sequence: HDTTBAAGTACTTDAAA





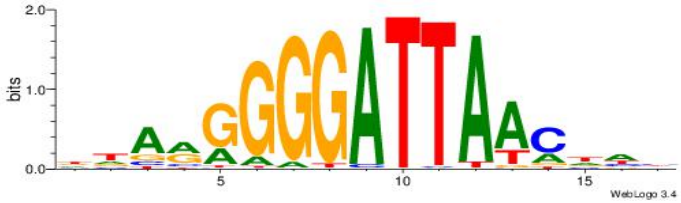
Motif ID:	UP00216
Motif name:	Obox1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0255021

Alignment:

```
DHDGTTAATCCCCKTDD
TWAAAKACATTAAA---
```

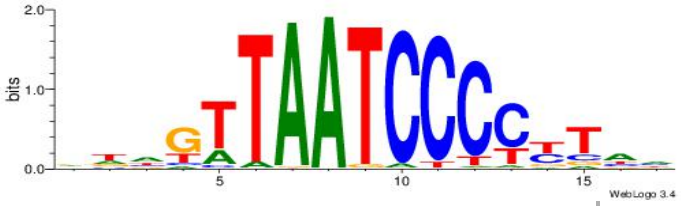
Original motif

Consensus sequence: DDARGGGGATTAACDHH



Reverse complement motif

Consensus sequence: DHDGTTAATCCCCKTDD



Motif ID:	UP00051
Motif name:	Sox8_primary

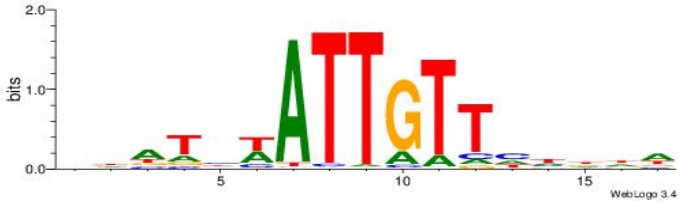
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0266643

Alignment:

```
DDATBWATTGTTHHDDD
---TTTAATGTYTTTWA
```

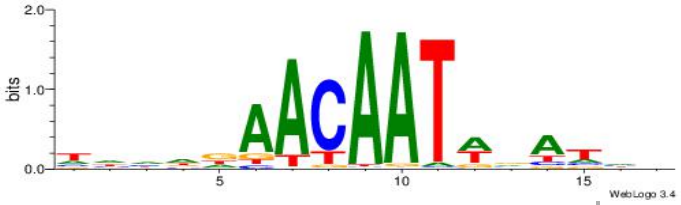
Original motif

Consensus sequence: DDATBWATTGTTHHDDD



Reverse complement motif

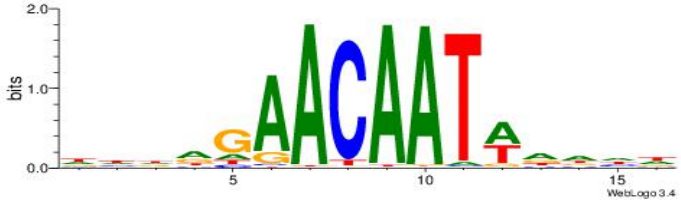
Consensus sequence: DDDHDAACAATWBATDD



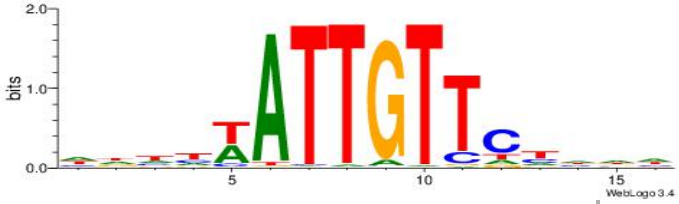
Motif ID:	UP00091
Motif name:	Sox5_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0288082

Alignment:
DHDDWATTGTTCDDHD
--TTTAATGTYTTTWA

Original motif
Consensus sequence: DHDDGAACAATWDDHD



Reverse complement motif
Consensus sequence: DHDDWATTGTTCDDHD

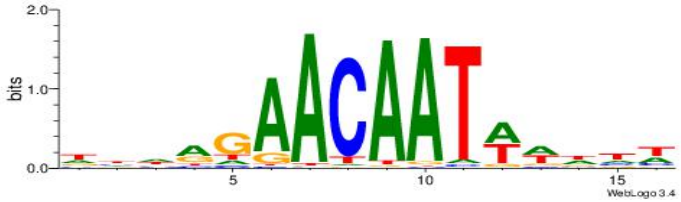


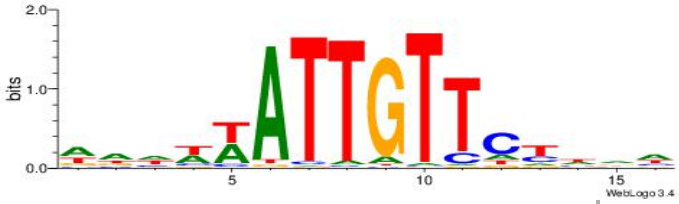
Motif ID:	UP00096
Motif name:	Sox13_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0301291

Alignment:
WHDWWATTGTTCKDHD
--TTTAATGTYTTTWA

Original motif
Consensus sequence: DHDRGAACAATWWDHW

Reverse complement motif
Consensus sequence: WHDWWATTGTTCKDHD





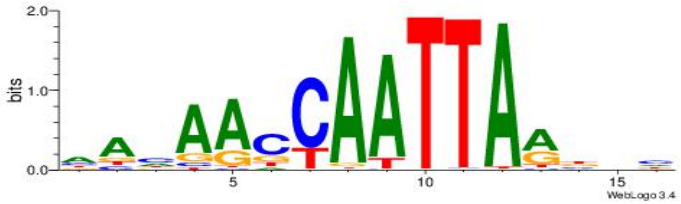
Motif ID:	UP00166
Motif name:	Barhl1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0303352

Alignment:

```
DDVKTAATTGGTTDTH
--TTTAATGTYTTTWA
```

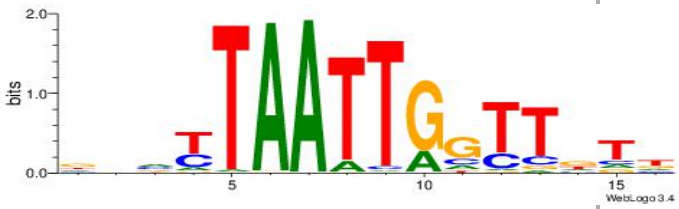
Original motif

Consensus sequence: HAHAACCAATTARBDH



Reverse complement motif

Consensus sequence: DDVKTAATTGGTTDTH



Motif ID:	UP00032

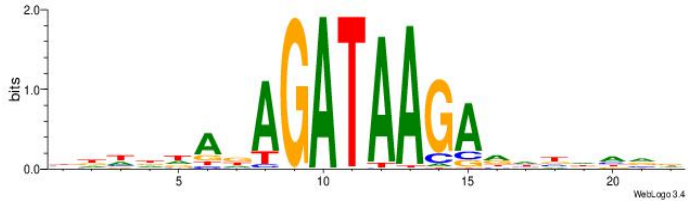
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	14
Similarity score:	0.0304836

Alignment:

```
BDHDDADAGATAAGADHBDHVD
-TWAAAKACATTAAA-------
```

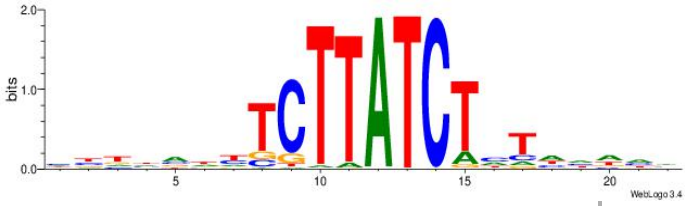
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



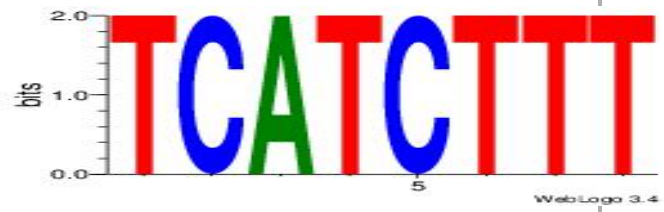
Dataset #: 2 Motif ID: 38 Motif name: Motif 38

Original motif

Consensus sequence: AAAGATGA

Reverse complement motif

Consensus sequence: TCATCTTT



Best Matches for Motif ID 38 (Highest to Lowest)

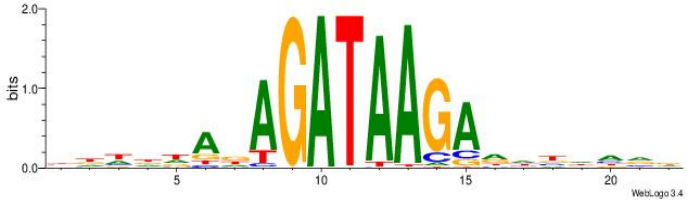
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0235901

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
---------TCATCTTT-----
```

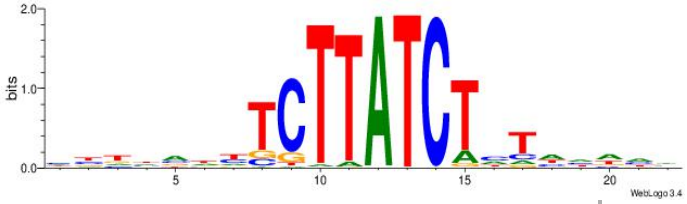
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



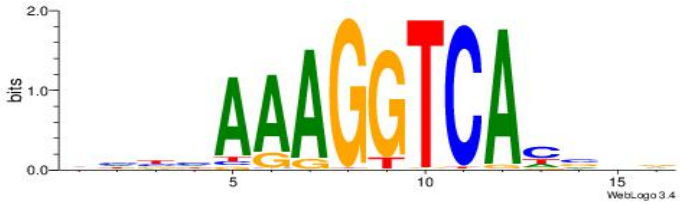
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0248583

Alignment:

```
HHVGTGACCTTTDVDD
----TCATCTTT----
```

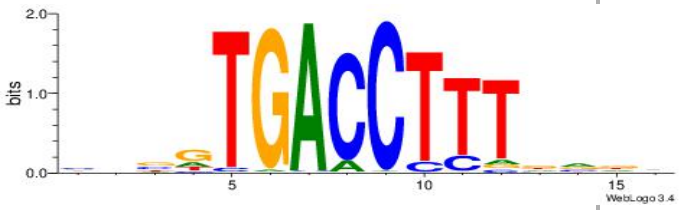
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD

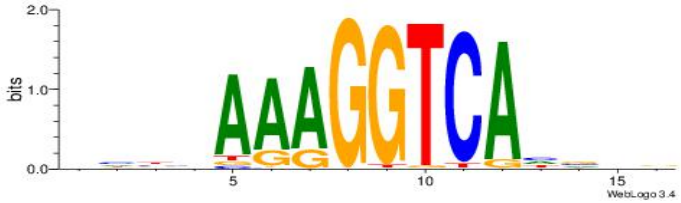


Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

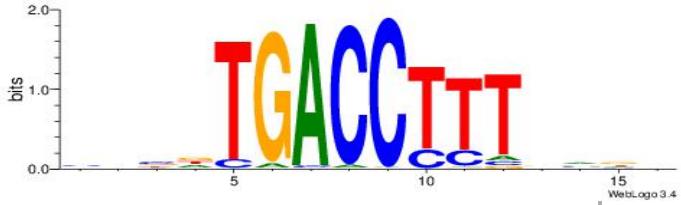
Number of overlap: 8
Similarity score: 0.0320787

Alignment:
BHVDTGACCTTTDVDD
----TCATCTTT----

Original motif
Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif
Consensus sequence: BHVDTGACCTTTDVDD



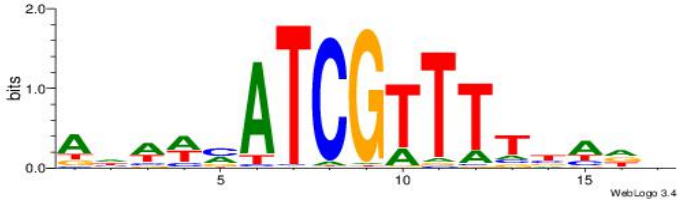
Motif ID: UP00114
Motif name: Homez
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 8
Similarity score: 0.0353395

Alignment:
HDTVAAAACGATRWWHT
------AAAGATGA---

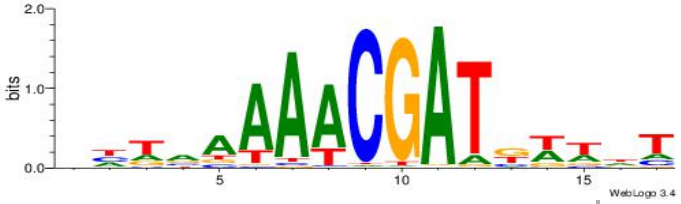
Original motif

Reverse complement motif

Consensus sequence: AHWWMATCGTTTTBADD



Consensus sequence: HDTVAAAACGATRWWHT



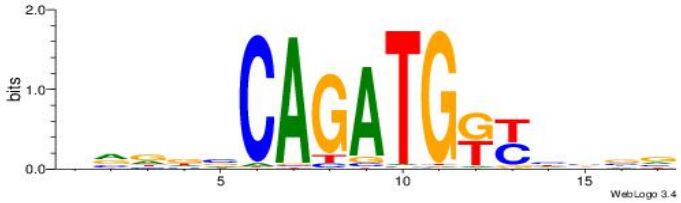
Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0375145

Alignment:

```
VBBDMYCATCTGVHHBH
-----TCATCTTT----
```

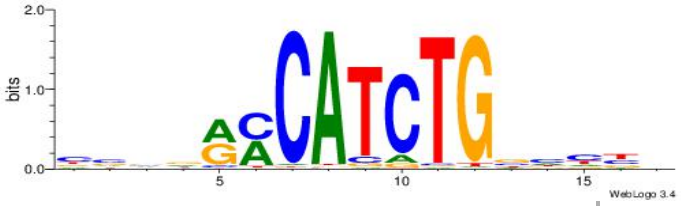
Original motif

Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif

Consensus sequence: VBBDMYCATCTGVHHBH



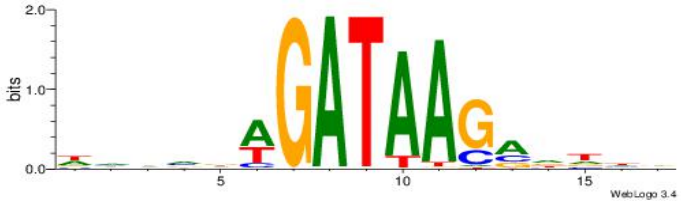
Motif ID:	UP00100
Motif name:	Gata6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0391681

Alignment:

```
VHDDTCTTATCWHBDHD
------TCATCTTT---
```

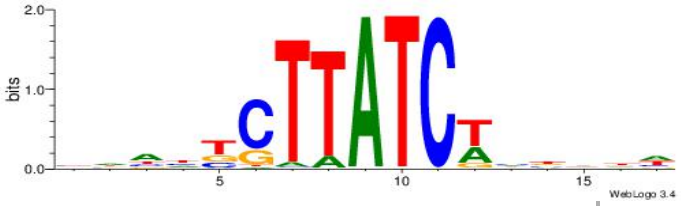
Original motif

Consensus sequence: DHDVDWGATAAGADDHV



Reverse complement motif

Consensus sequence: VHDDTCTTATCWHBDHD



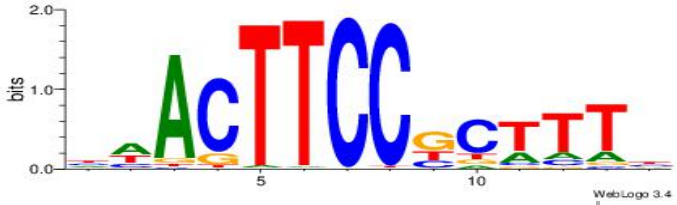
Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

Number of overlap: 8
Similarity score: 0.0437411

Alignment:
VAAAGMGGAAGTWD
-AAAGATGA-----

Original motif
Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRCTTTB



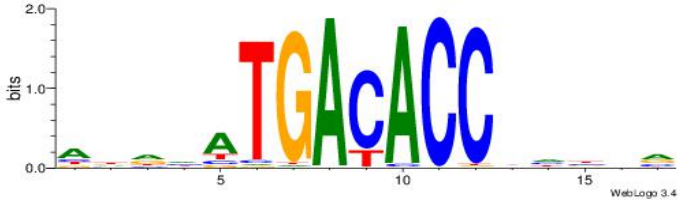
Motif ID: UP00199
Motif name: Six4
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 8
Similarity score: 0.0467222

Alignment:
BBVHVGGTGTCATHDDT
---------TCATCTTT

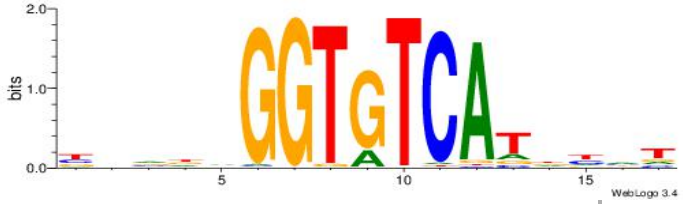
Original motif

Reverse complement motif

Consensus sequence: ADDHATGACACCBHBBV



Consensus sequence: BBVHVGGTGTCATHDDT



Motif ID:	UP00219
Motif name:	Cutl1_3494.2
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:	8
Similarity score:	0.0483168

Alignment:

```
DAVTGATRATCAHTD
-AAAGATGA------
```

Original motif

Consensus sequence: DAVTGATRATCAHTD

Reverse complement motif

Consensus sequence: DADTGATMATCABTD

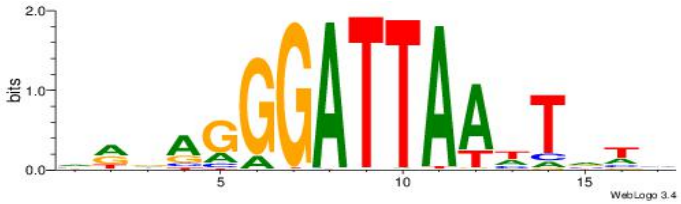
Motif ID:	UP00208
Motif name:	Obox5_3963.2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0488248

Alignment:

```
VRVAGGGATTAAHTVWV
---AAAGATGA------
```

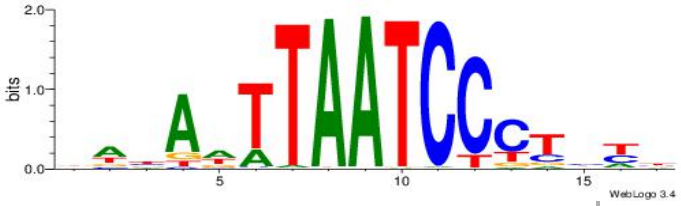
Original motif

Consensus sequence: VRVAGGGATTAAHTVWV



Reverse complement motif

Consensus sequence: VWBAHTTAATCCCTVKB



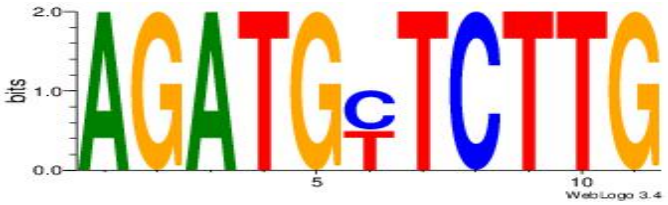
Dataset #: 2 Motif ID: 39 Motif name: Motif 39

Original motif

Consensus sequence: AGATGYTCTTG

Reverse complement motif

Consensus sequence: CAAGAKCATCT



Best Matches for Motif ID 39 (Highest to Lowest)

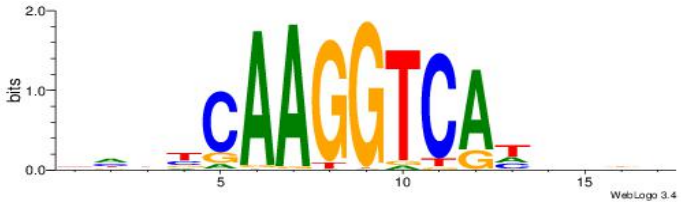
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0140765

Alignment:

```
DHDBCAAGGTCAHVBDH
----CAAGAKCATCT--
```

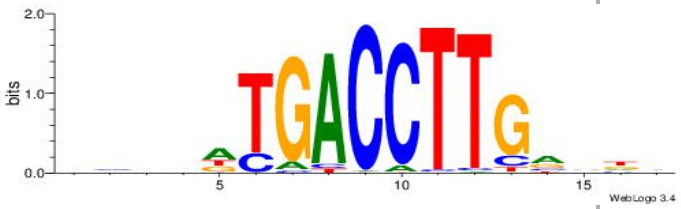
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



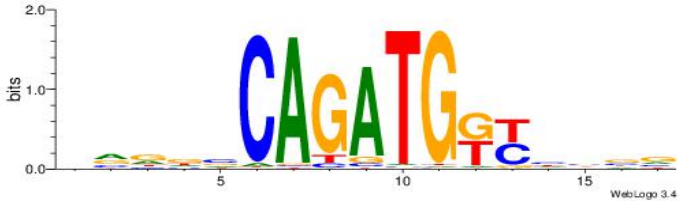
Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0175222

Alignment:

```
HVDDVCAGATGKYHBBV
------AGATGYTCTTG
```

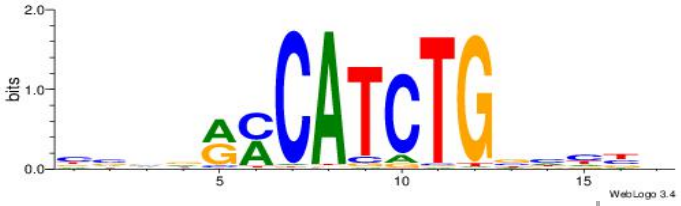
Original motif

Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif

Consensus sequence: VBBDMYCATCTGVHHBH

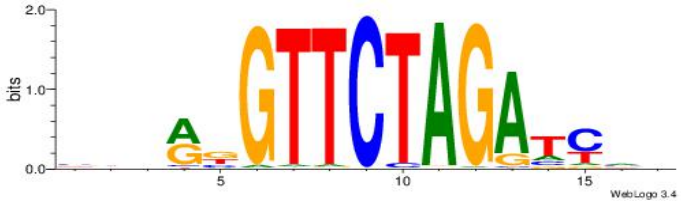


Motif ID:	UP00019
Motif name:	Zbtb12_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

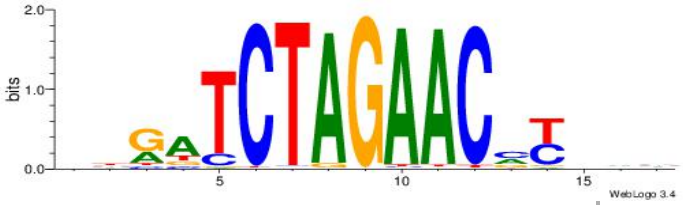
Number of overlap: 11
Similarity score: 0.0209646

Alignment:
BDHRBGTTCTAGATCVB
-AGATGYTCTTG-----

Original motif
Consensus sequence: BDHRBGTTCTAGATCVB



Reverse complement motif
Consensus sequence: BBGATCTAGAACBKHDB



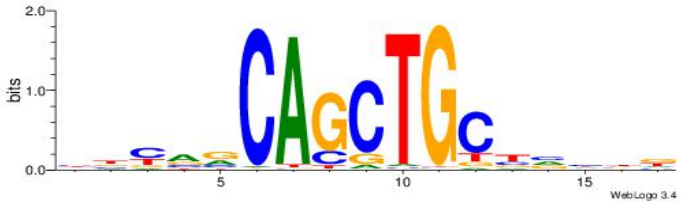
Motif ID: UP00099
Motif name: Ascl2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 11
Similarity score: 0.0302699

Alignment:
BBYVVCAGCTGCBVHHD
------AGATGYTCTTG

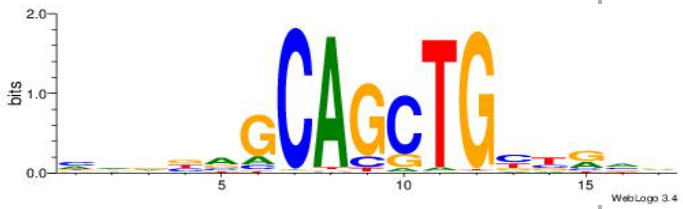
Original motif

Reverse complement motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Consensus sequence: HHDVVGCAGCTGVBKVB



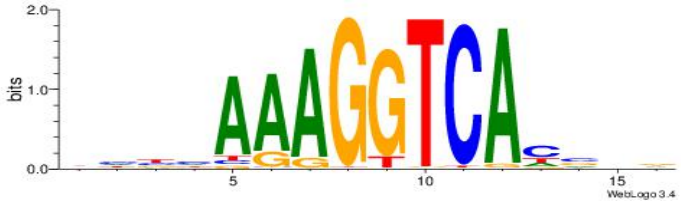
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0317546

Alignment:

```
DHBHAAAGGTCACVHD
----CAAGAKCATCT-
```

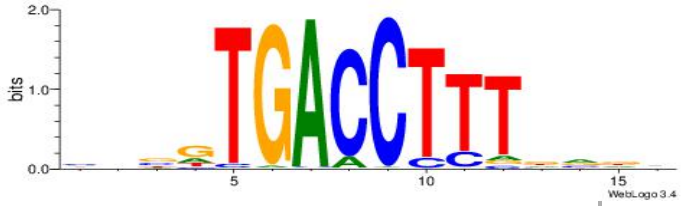
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD



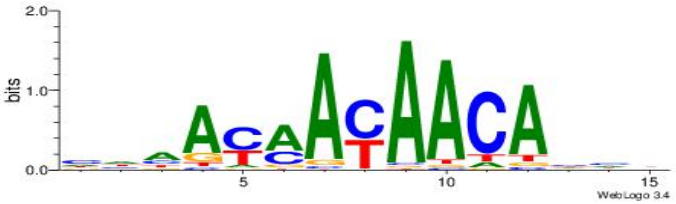
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0329048

Alignment:

```
HHHAYAAYAACAHHH
AGATGYTCTTG----
```

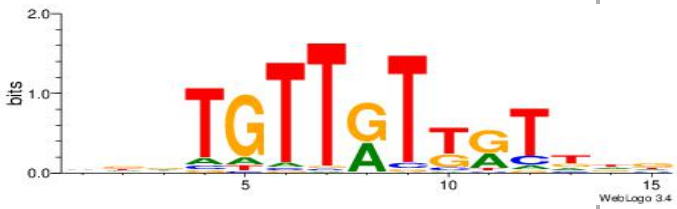
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD

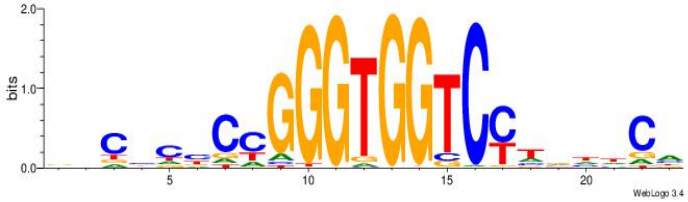


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	11

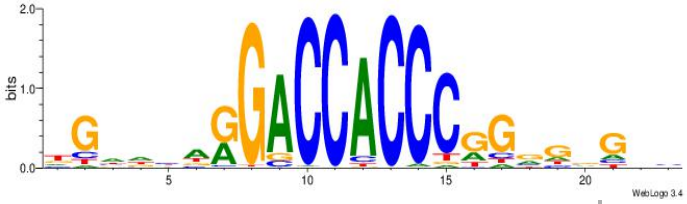
Similarity score: 0.0350601

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
--------AGATGYTCTTG----

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

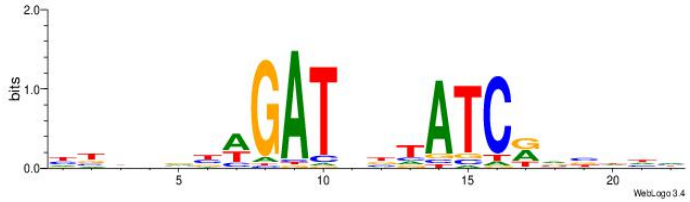


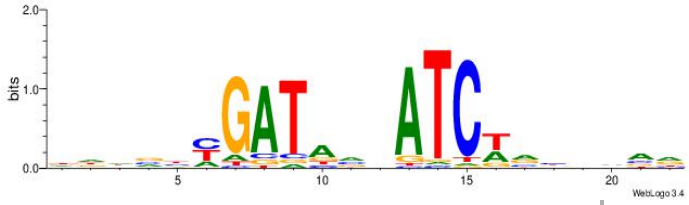
Motif ID: UP00032
Motif name: Gata3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.0366699

Alignment:
HBHDVBWGATHBTATCRVBHHH
------AGATGYTCTTG-----

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH

Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH





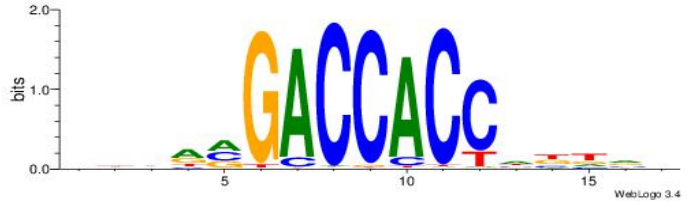
Motif ID:	UP00047
Motif name:	Zbtb7b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0367981

Alignment:

```
BBDVHGGTGGTCBKDDB
----AGATGYTCTTG--
```

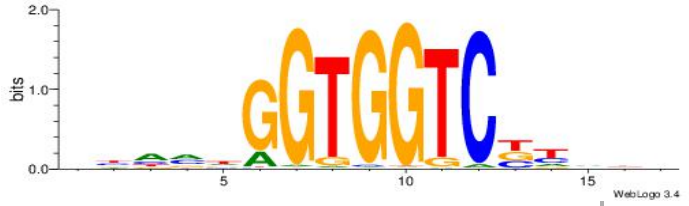
Original motif

Consensus sequence: BDDRVGACCACCHBDVB



Reverse complement motif

Consensus sequence: BBDVHGGTGGTCBKDDB



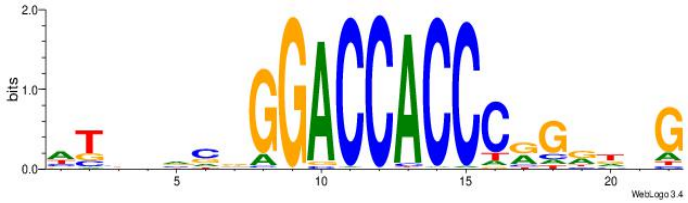
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0.038145

Alignment:

```
HTBVVVDGGACCACCCRGRDBG
-----CAAGAKCATCT------
```

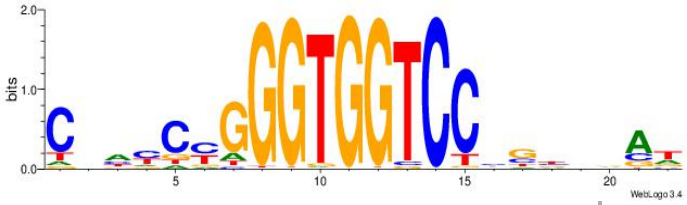
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



Dataset #: 2 Motif ID: 40 Motif name: Motif 40

Original motif

Consensus sequence: TGGTGTCA

Reverse complement motif

Consensus sequence: TGACACCA

Best Matches for Motif ID 40 (Highest to Lowest)

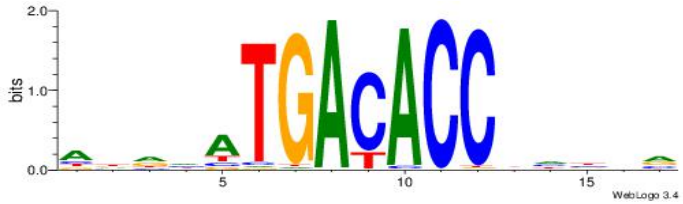
Motif ID:	UP00199
Motif name:	Six4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

```
BBVHVGGTGTCATHDDT
----TGGTGTCA-----
```

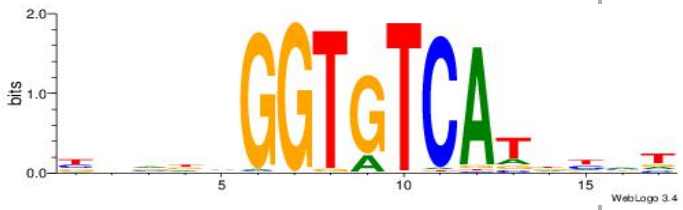
Original motif

Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif

Consensus sequence: BBVHVGGTGTCATHDDT



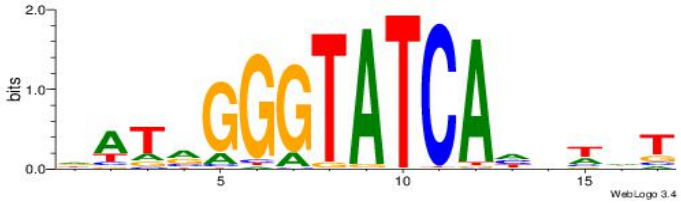
Motif ID:	UP00388
Motif name:	Six6_2267.4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0335611

Alignment:

```
AHWDHTGATACCCKATD
-----TGACACCA----
```

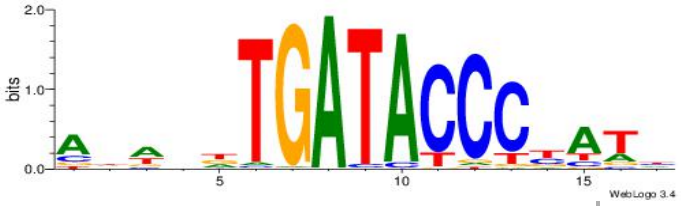
Original motif

Consensus sequence: DATRGGGTATCAHDWHT



Reverse complement motif

Consensus sequence: AHWDHTGATACCCKATD

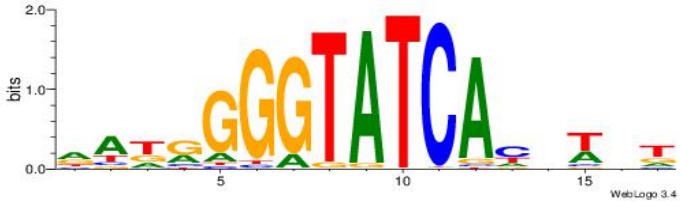


Motif ID:	UP00159
Motif name:	Six2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

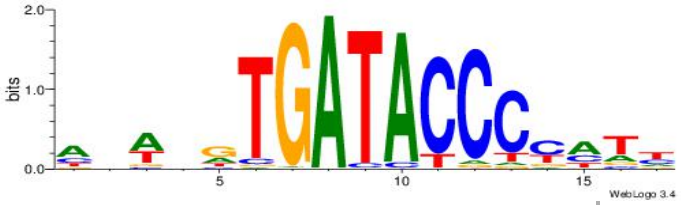
Number of overlap: 8
Similarity score: 0.0342894

Alignment:
AHWDGTGATACCCMRTD
-----TGACACCA----

Original motif
Consensus sequence: DAKRGGGTATCACDWHT



Reverse complement motif
Consensus sequence: AHWDGTGATACCCMRTD



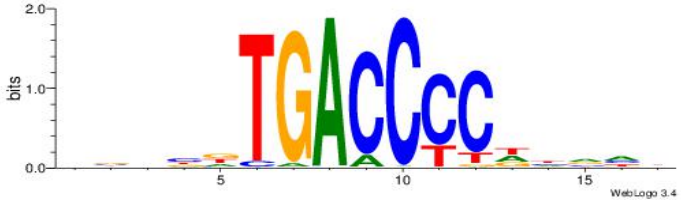
Motif ID: UP00053
Motif name: Rxra_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.034602

Alignment:
DBHBDTGACCCCDHVHB
-----TGACACCA----

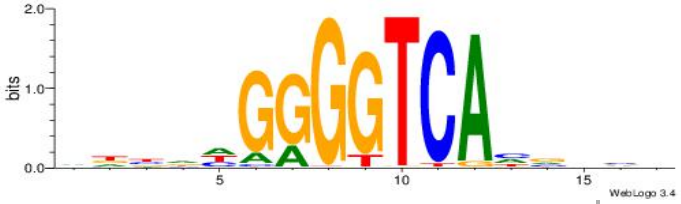
Original motif

Reverse complement motif

Consensus sequence: DBHBDTGACCCCDHVHB



Consensus sequence: VHBHDGGGGTCAHBHBD



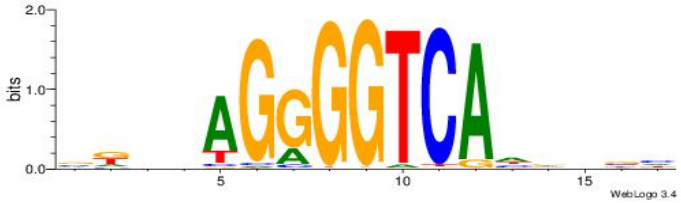
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0349175

Alignment:

```
VKBBAGGGGTCAHDBBH
----TGGTGTCA-----
```

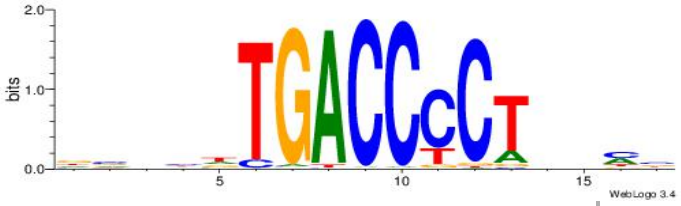
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV



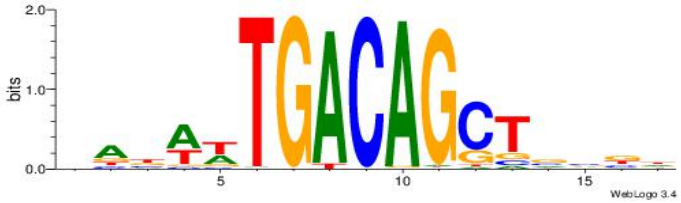
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0354712

Alignment:

```
DBVVAGCTGTCAWWVTH
----TGGTGTCA-----
```

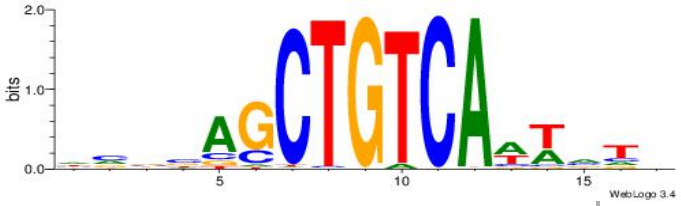
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH

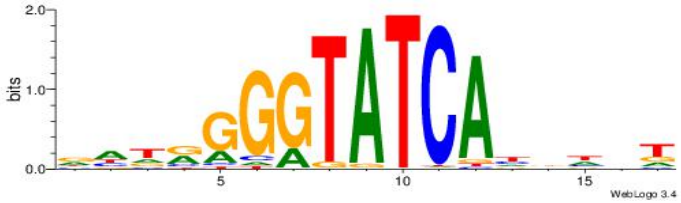


Motif ID:	UP00192
Motif name:	Six1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

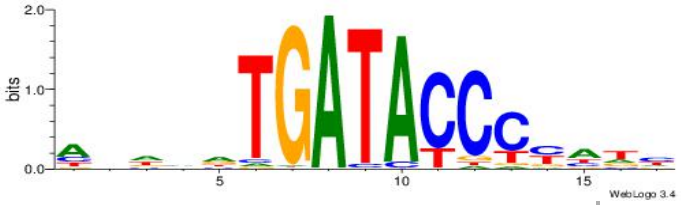
Number of overlap: 8
Similarity score: 0.0355547

Alignment:
AVHDHTGATACCCMDHH
-----TGACACCA----

Original motif
Consensus sequence: DHDRGGGTATCAHDHBT



Reverse complement motif
Consensus sequence: AVHDHTGATACCCMDHH



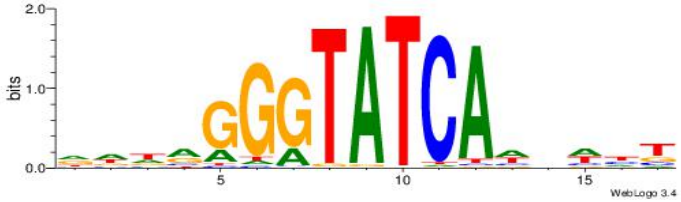
Motif ID: UP00388
Motif name: Six6_2267.5
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 8
Similarity score: 0.035579

Alignment:
AHWHWTGATACCCKDDD
-----TGACACCA----

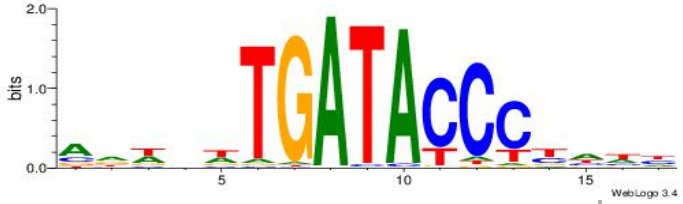
Original motif

Reverse complement motif

Consensus sequence: DDDRGGGTATCAWHWHT



Consensus sequence: AHWHWTGATACCCKDDD



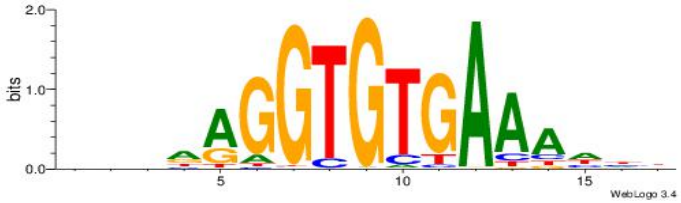
Motif ID:	UP00068
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0362156

Alignment:

```
BVHDAGGTGTGAAAHHH
----TGGTGTCA-----
```

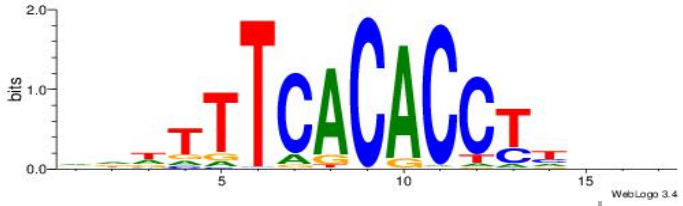
Original motif

Consensus sequence: BVHDAGGTGTGAAAHHH



Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV



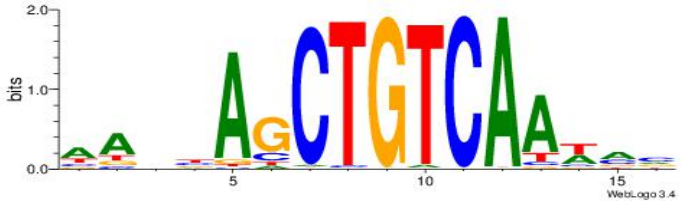
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0373826

Alignment:

```
VBWTTGACAGCTVBTT
----TGACACCA----
```

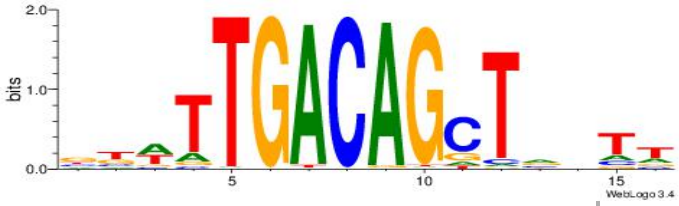
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Dataset #: 2 Motif ID: 41 Motif name: Motif 41

Original motif

Consensus sequence: ACTTTGG

Reverse complement motif

Consensus sequence: CCAAAGT

Best Matches for Motif ID 41 (Highest to Lowest)

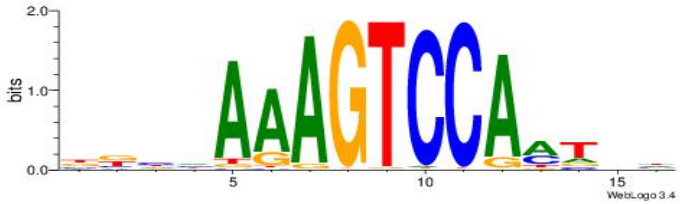
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	7
Similarity score:	0

Alignment:

```
BBHHAAAGTCCAMTHH
--CCAAAGT-------
```

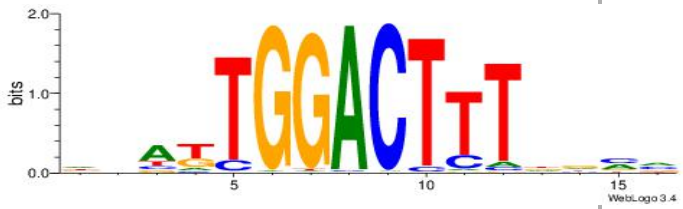
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV



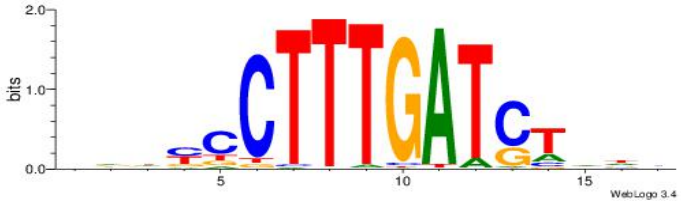
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	7
Similarity score:	0.0128381

Alignment:

```
VDDAGATCAAAGGKDDD
------CCAAAGT----
```

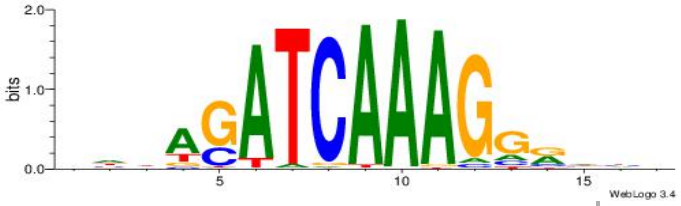
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD

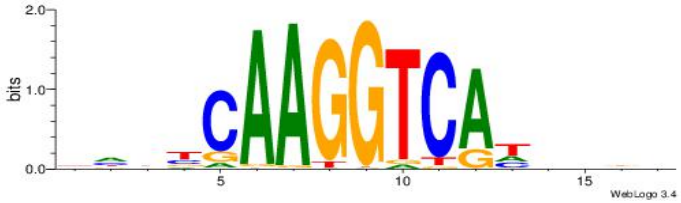


Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8

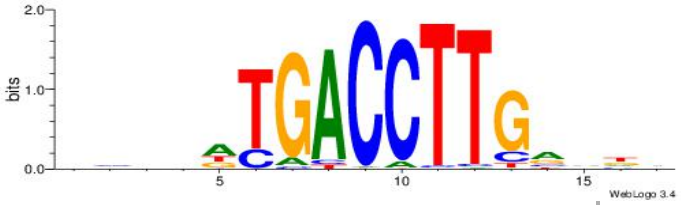
Number of overlap: 7
Similarity score: 0.0140846

Alignment:
DHDBCAAGGTCAHVBDH
---CCAAAGT-------

Original motif
Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif
Consensus sequence: HHBVHTGACCTTGVDHD



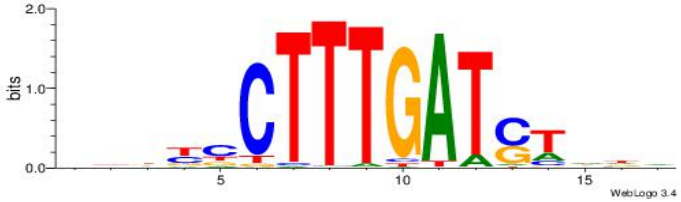
Motif ID: UP00083
Motif name: Tcf7l2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 7
Similarity score: 0.0141156

Alignment:
BDDASATCAAAGGMDDD
------CCAAAGT----

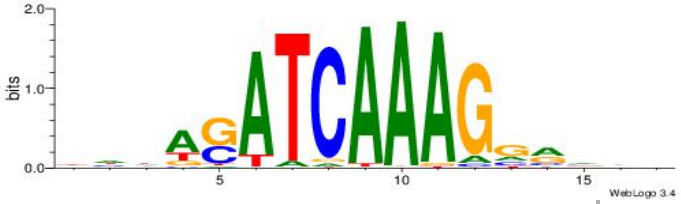
Original motif

Reverse complement motif

Consensus sequence: DDDYCCTTTGATSTDDV



Consensus sequence: BDDASATCAAAGGMDDD



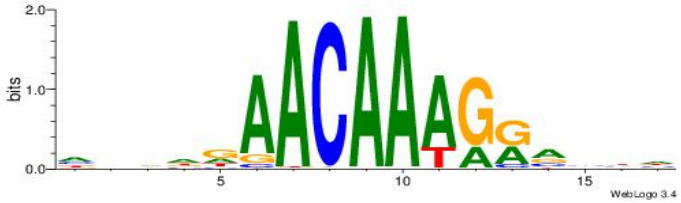
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	7
Similarity score:	0.0159798

Alignment:

```
HHBBMCTTTGTTHDDBH
----ACTTTGG------
```

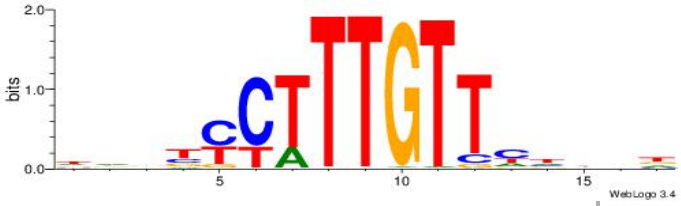
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



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:	5
Number of overlap:	7
Similarity score:	0.0181605

Alignment:

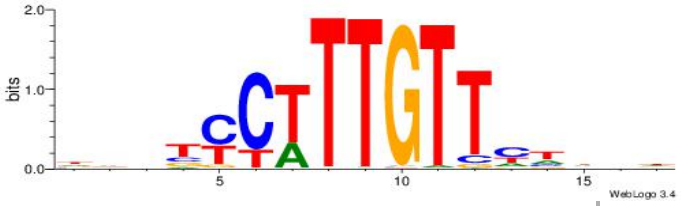
```
HHBTMCTTTGTTMDDVH
----ACTTTGG------
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH

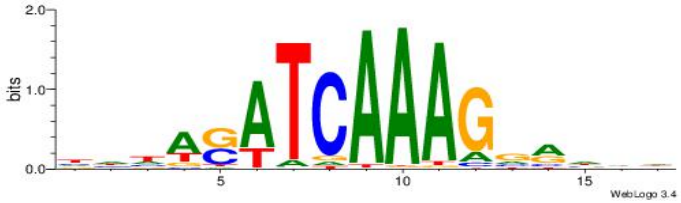


Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

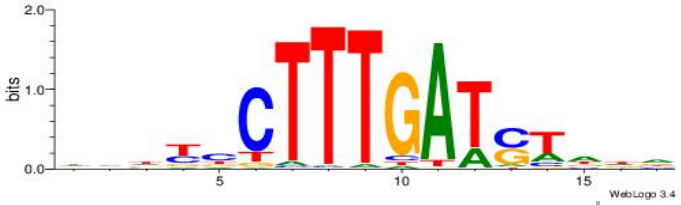
Number of overlap: 7
Similarity score: 0.0200761

Alignment:
HHHKVCTTTGATSTHHH
----ACTTTGG------

Original motif
Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif
Consensus sequence: HHHKVCTTTGATSTHHH



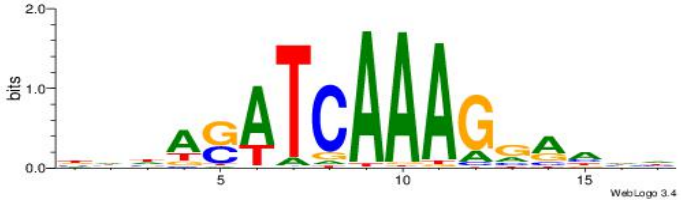
Motif ID: UP00054
Motif name: Tcf7_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 7
Similarity score: 0.0230245

Alignment:
HHHTCCTTTGATSTHHV
----ACTTTGG------

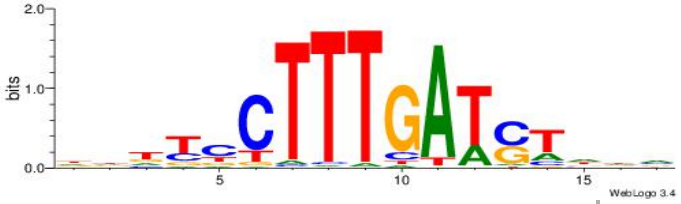
Original motif

Reverse complement motif

Consensus sequence: BHHASATCAAAGGAHHH



Consensus sequence: HHHTCCTTTGATSTHHV



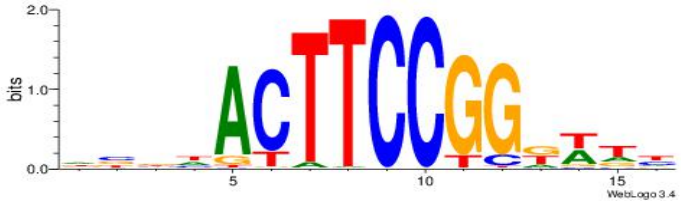
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	7
Similarity score:	0.0283328

Alignment:

```
HAWYCCGGAAGTHBBD
-----CCAAAGT----
```

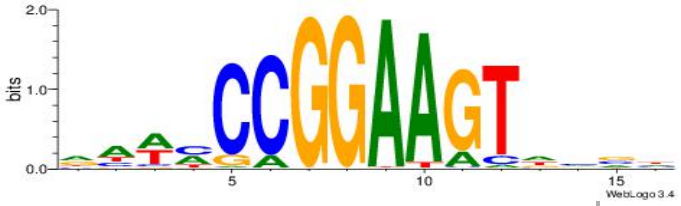
Original motif

Consensus sequence: DBBHACTTCCGGKWTH



Reverse complement motif

Consensus sequence: HAWYCCGGAAGTHBBD



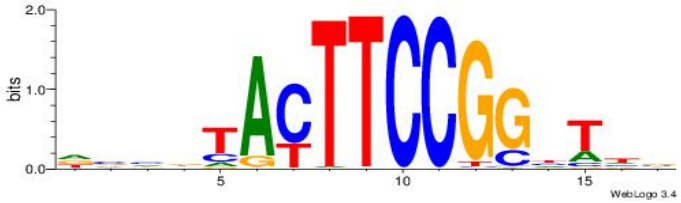
Motif ID:	UP00418
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	7
Similarity score:	0.0287289

Alignment:

```
BHAHCCGGAAGTABDVD
-----CCAAAGT-----
```

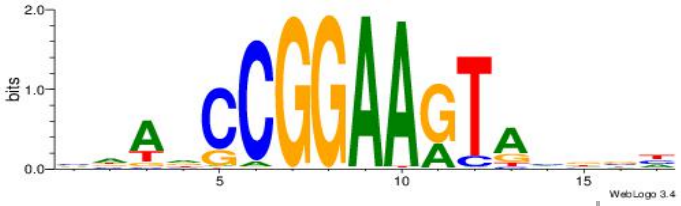
Original motif

Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif

Consensus sequence: BHAHCCGGAAGTABDVD



Dataset #: 2 Motif ID: 42 Motif name: Motif 42

Original motif

Consensus sequence: ATKAYTTTG

Reverse complement motif

Consensus sequence: CAAAKTYAT

Best Matches for Motif ID 42 (Highest to Lowest)

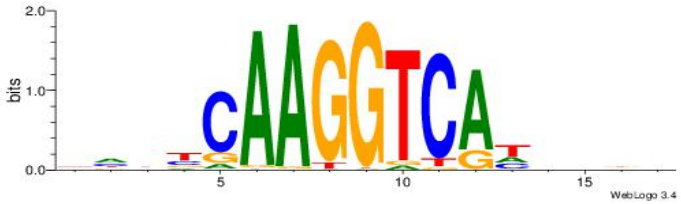
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	9
Similarity score:	0.0159205

Alignment:

```
HHBVHTGACCTTGVDHD
----ATKAYTTTG----
```

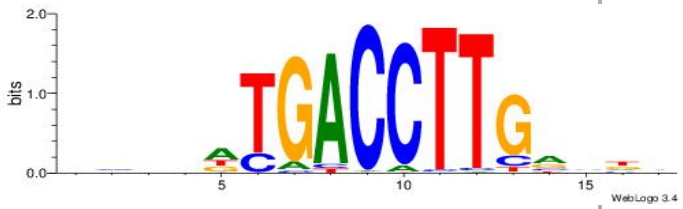
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



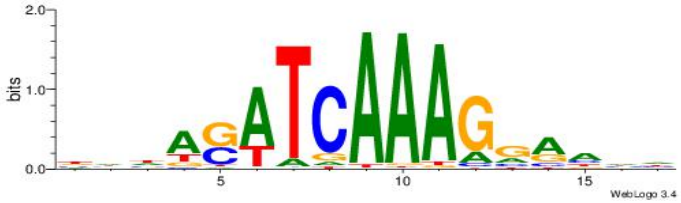
Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	9
Similarity score:	0.0182772

Alignment:

```
HHHTCCTTTGATSTHHV
-ATKAYTTTG-------
```

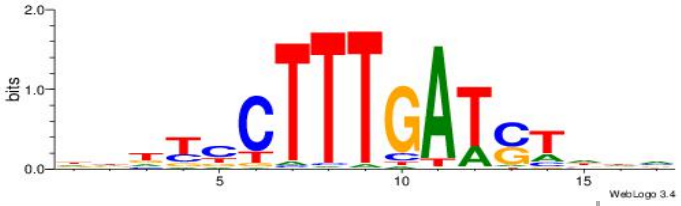
Original motif

Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif

Consensus sequence: HHHTCCTTTGATSTHHV

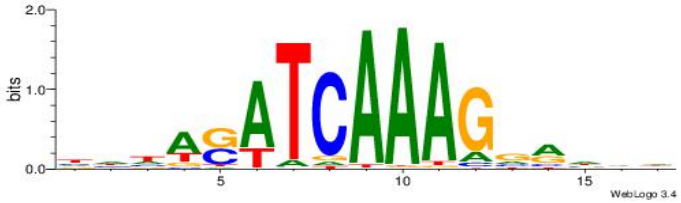


Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

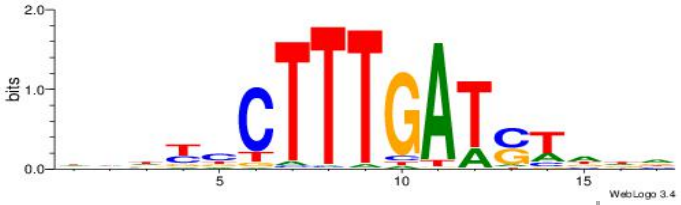
Number of overlap: 9
Similarity score: 0.01865

Alignment:
HHHKVCTTTGATSTHHH
-ATKAYTTTG-------

Original motif
Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif
Consensus sequence: HHHKVCTTTGATSTHHH



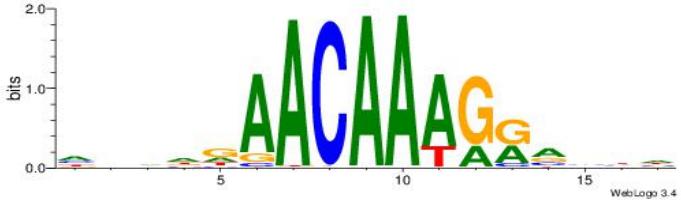
Motif ID: UP00062
Motif name: Sox4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 9
Similarity score: 0.0192718

Alignment:
HHBBMCTTTGTTHDDBH
-ATKAYTTTG-------

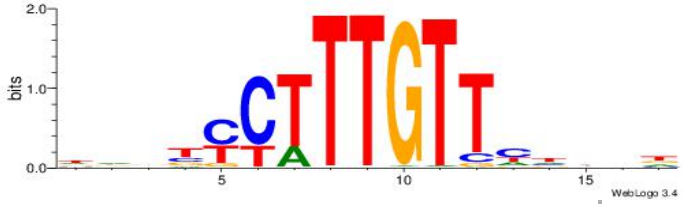
Original motif

Reverse complement motif

Consensus sequence: HBDDDAACAAAGRVBHH



Consensus sequence: HHBBMCTTTGTTHDDBH



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:	2
Number of overlap:	9
Similarity score:	0.022524

Alignment:

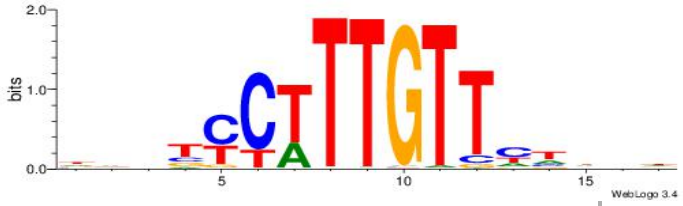
```
HHBTMCTTTGTTMDDVH
-ATKAYTTTG-------
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



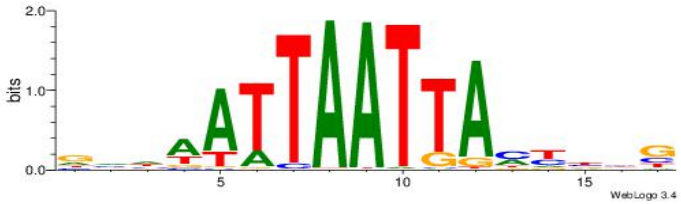
Motif ID:	UP00200
Motif name:	Nkx6-1_2825.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	9
Similarity score:	0.0239738

Alignment:

```
DVHAATTAATTAMYBBG
--------ATKAYTTTG
```

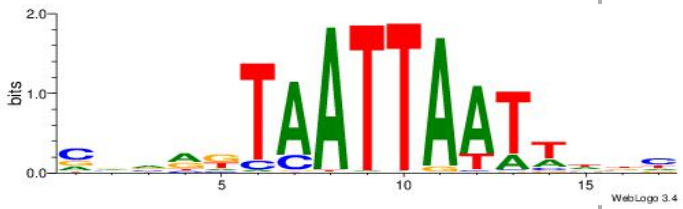
Original motif

Consensus sequence: DVHAATTAATTAMYBBG



Reverse complement motif

Consensus sequence: CBVMRTAATTAATTHBH

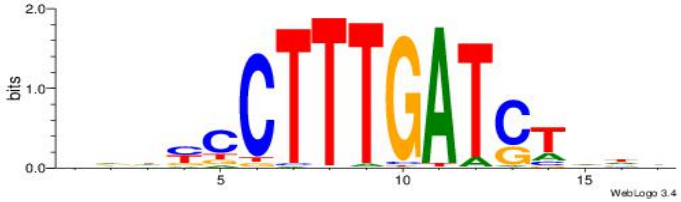


Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	9

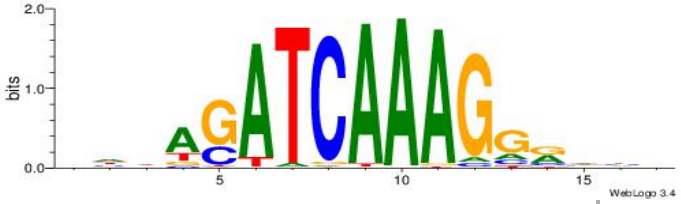
Similarity score: 0.0240474

Alignment:
VDDAGATCAAAGGKDDD
-------CAAAKTYAT-

Original motif
Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif
Consensus sequence: VDDAGATCAAAGGKDDD

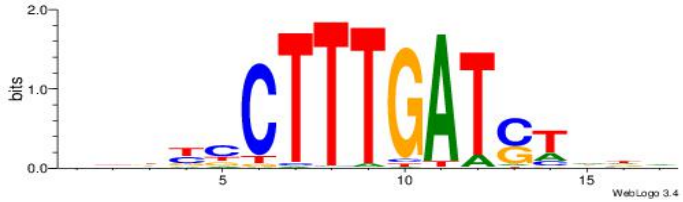


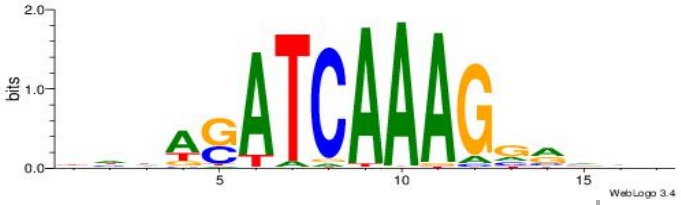
Motif ID: UP00083
Motif name: Tcf7l2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 9
Similarity score: 0.0253434

Alignment:
DDDYCCTTTGATSTDDV
-ATKAYTTTG-------

Original motif
Consensus sequence: DDDYCCTTTGATSTDDV

Reverse complement motif
Consensus sequence: BDDASATCAAAGGMDDD





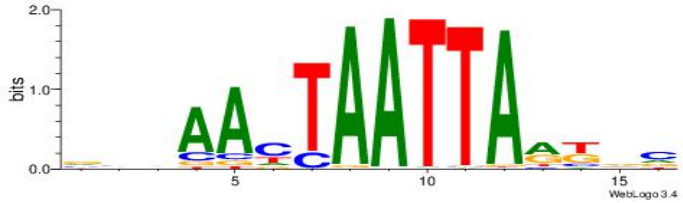
Motif ID:	UP00167
Motif name:	En1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	9
Similarity score:	0.0259902

Alignment:

```
VHRKTAATTAGTTVVV
------ATKAYTTTG-
```

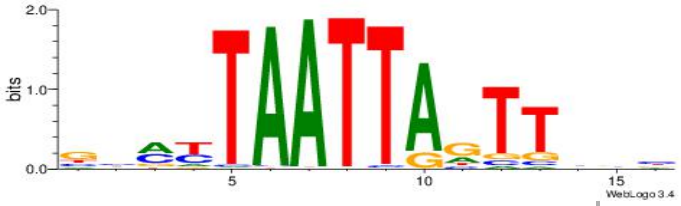
Original motif

Consensus sequence: VVVAACTAATTARKDV



Reverse complement motif

Consensus sequence: VHRKTAATTAGTTVVV



Motif ID: UP00238

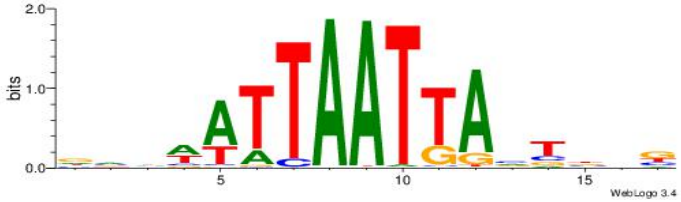
Motif name:	Nkx6-3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	9
Similarity score:	0.0262036

Alignment:

```
DVHWATTAATTAVTBBB
--------ATKAYTTTG
```

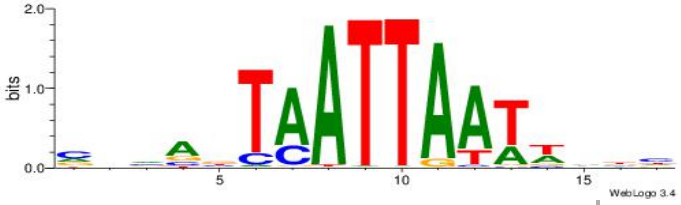
Original motif

Consensus sequence: DVHWATTAATTAVTBBB



Reverse complement motif

Consensus sequence: BVVAVTAATTAATWHBH



Dataset #: 2 Motif ID: 43 Motif name: Motif 43

Original motif

Consensus sequence: GCTGTGAC

Reverse complement motif

Consensus sequence: GTCACAGC

Best Matches for Motif ID 43 (Highest to Lowest)

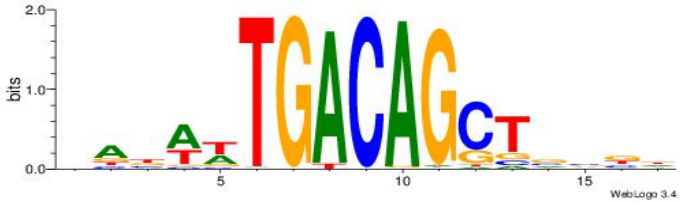
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

```
DABWWTGACAGCTVVBD
----GTCACAGC-----
```

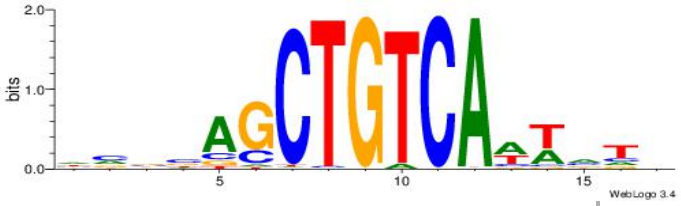
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Original Motif

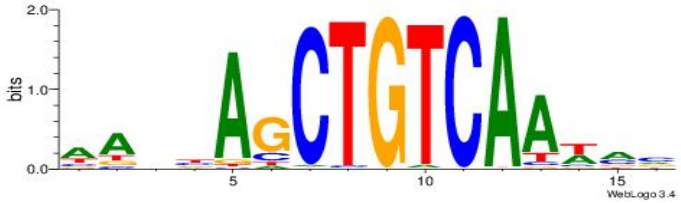
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00241817

Alignment:

```
AABBAGCTGTCAAWVV
-----GCTGTGAC---
```

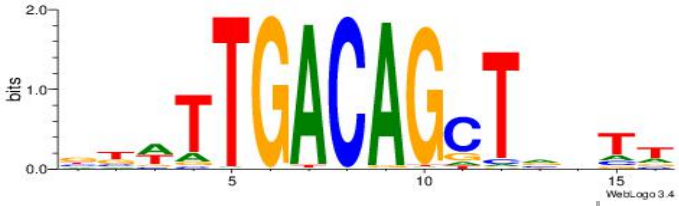
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Motif ID:	UP00006
Motif name:	Zic3_secondary
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:	8
Similarity score:	0.00553853

Alignment:

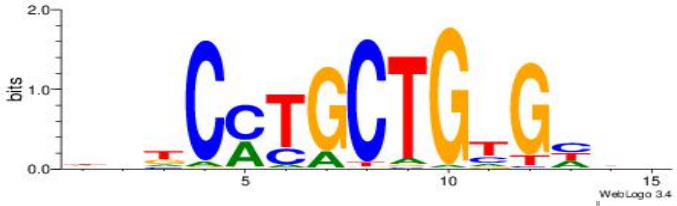
DDDCACAGCAKGHVD
-GTCACAGC------

Original motif

Consensus sequence: DDDCACAGCAKGHVD

Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



Motif ID:	UP00068
Motif name:	Eomes_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:	8
Similarity score:	0.00578189

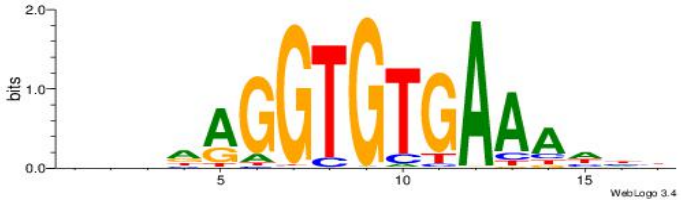
Alignment:
BVHDAGGTGTGAAAHHH
-----GCTGTGAC----

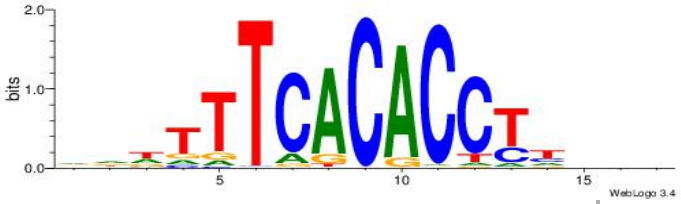
Original motif

Consensus sequence: BVHDAGGTGTGAAAHHH

Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV





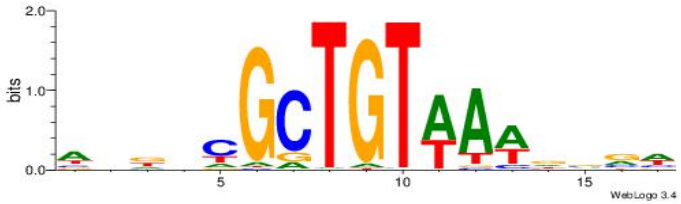
Motif ID:	UP00193
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.00629536

Alignment:

```
AVDHCGCTGTWAWDVVW
-----GCTGTGAC----
```

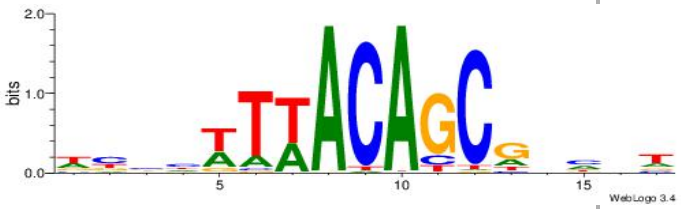
Original motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGHHVT



Motif ID:	UP00193

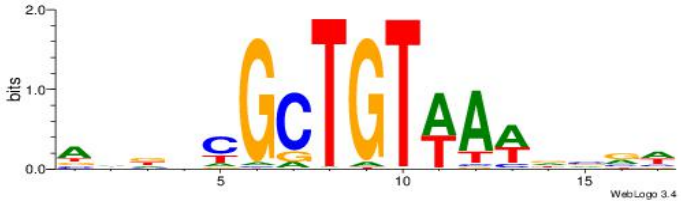
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.00666342

Alignment:

```
AVDVCGCTGTWAWDVVW
-----GCTGTGAC----
```

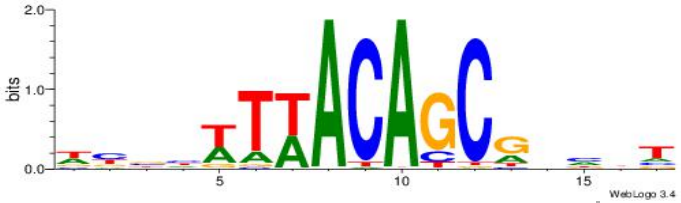
Original motif

Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGBHBT

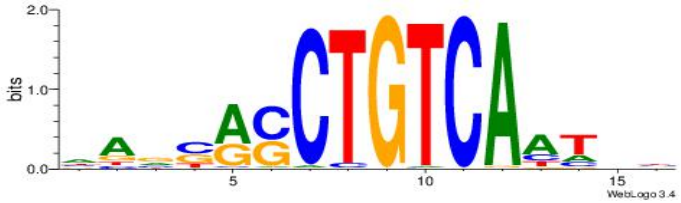


Motif ID:	UP00205
Motif name:	Pknox2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8

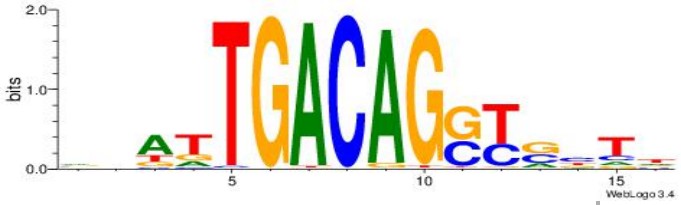
Similarity score: 0.00747692

Alignment:
HAVSRSCTGTCAATHB
-----GCTGTGAC---

Original motif
Consensus sequence: HAVSRSCTGTCAATHB



Reverse complement motif
Consensus sequence: VHATTGACAGSKSVTH

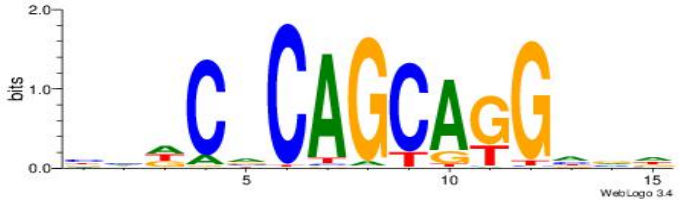


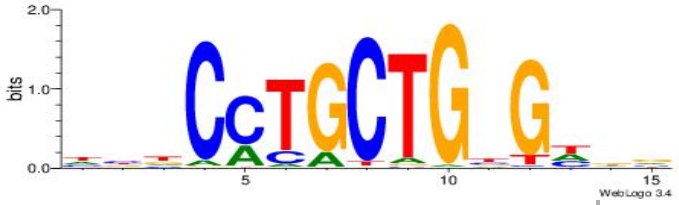
Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8
Similarity score:	0.00877453

Alignment:
BHDCVCAGCAGGHVD
-GTCACAGC------

Original motif
Consensus sequence: BHDCVCAGCAGGHVD

Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB





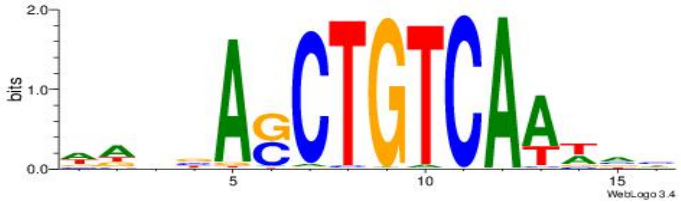
Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.00956623

Alignment:

```
WAVBASCTGTCAAWVH
-----GCTGTGAC---
```

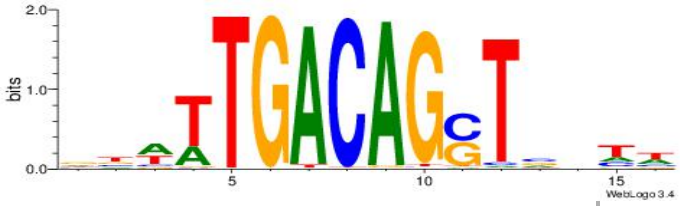
Original motif

Consensus sequence: WAVBASCTGTCAAWVH



Reverse complement motif

Consensus sequence: DBWTTGACAGSTBVTW



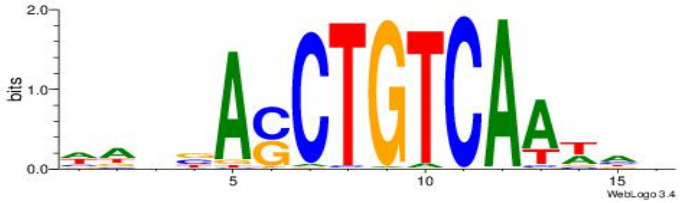
Motif ID:	UP00226
Motif name:	Mrg1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0124611

Alignment:

```
WAVBASCTGTCAAWHB
-----GCTGTGAC---
```

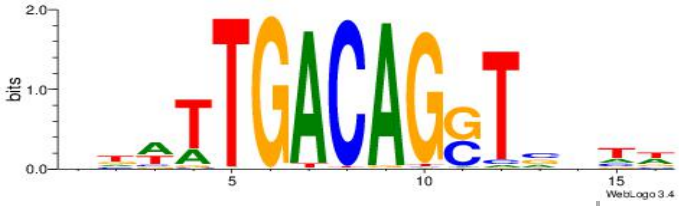
Original motif

Consensus sequence: WAVBASCTGTCAAWHB



Reverse complement motif

Consensus sequence: BHWTTGACAGSTBBTW



Dataset #: 2 Motif ID: 44 Motif name: Motif 44

Original motif

Consensus sequence: AAGTTCA

Reverse complement motif

Consensus sequence: TGAACTT

Best Matches for Motif ID 44 (Highest to Lowest)

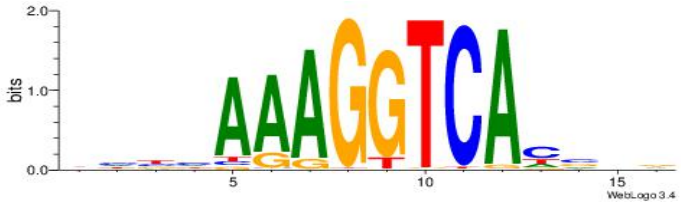
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	7
Similarity score:	0

Alignment:

```
DHBHAAAGGTCACVHD
-----AAGTTCA----
```

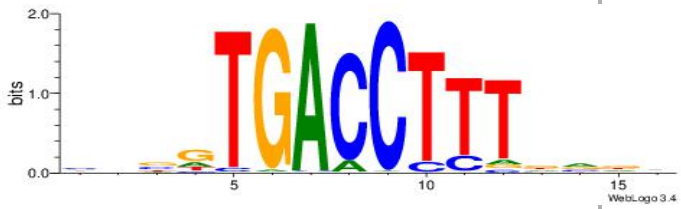
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD



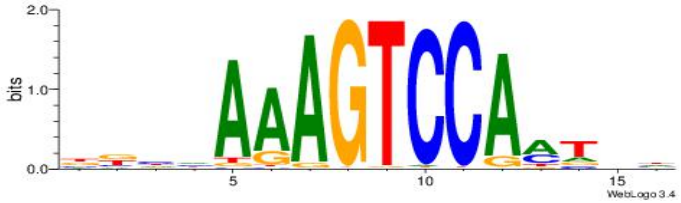
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	7
Similarity score:	0.00516503

Alignment:

```
HHAYTGGACTTTHDBV
----TGAACTT-----
```

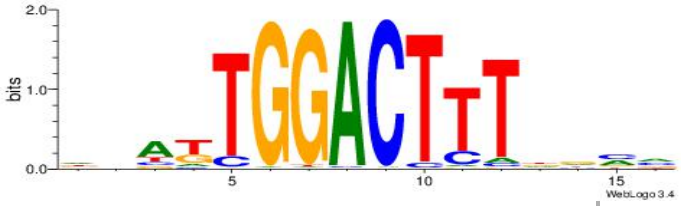
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV

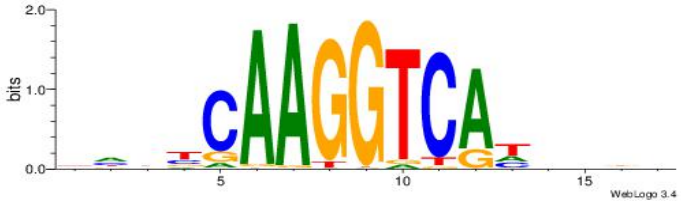


Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

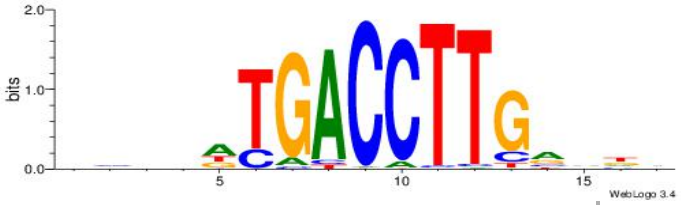
Number of overlap: 7
Similarity score: 0.00773155

Alignment:
DHDBCAAGGTCAHVBDH
-----AAGTTCA-----

Original motif
Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif
Consensus sequence: HHBVHTGACCTTGVDHD



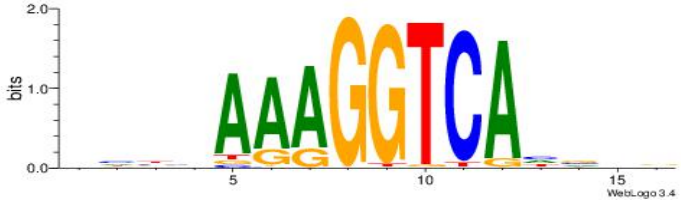
Motif ID: UP00009
Motif name: Nr2f2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 7
Similarity score: 0.00909243

Alignment:
DHBHAAAGGTCAHVHB
-----AAGTTCA----

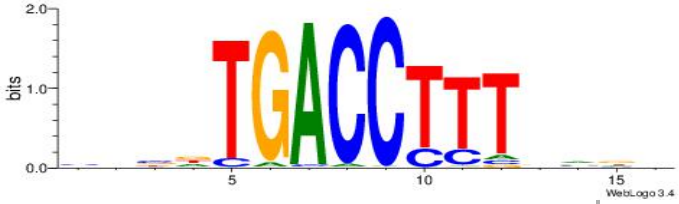
Original motif

Reverse complement motif

Consensus sequence: DHBHAAAGGTCAHVHB



Consensus sequence: BHVDTGACCTTTDVDD



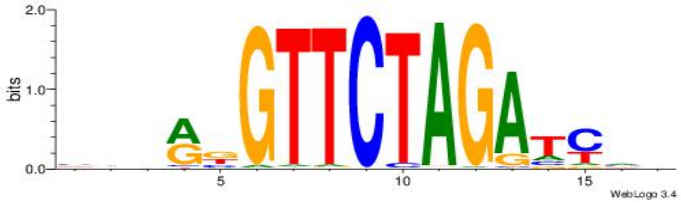
Motif ID:	UP00019
Motif name:	Zbtb12_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	7
Similarity score:	0.035752

Alignment:

```
BBGATCTAGAACBKHDB
-------TGAACTT---
```

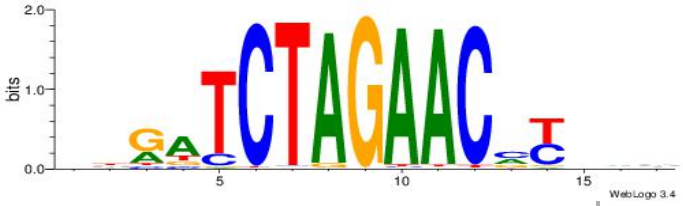
Original motif

Consensus sequence: BDHRBGTTCTAGATCVB



Reverse complement motif

Consensus sequence: BBGATCTAGAACBKHDB



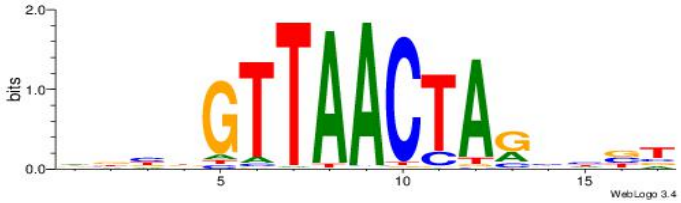
Motif ID:	UP00222
Motif name:	Tcf2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	7
Similarity score:	0.0379796

Alignment:

```
ABDBCTAGTTAACVBBD
-----AAGTTCA-----
```

Original motif

Consensus sequence: DBBBGTTAACTAGBHBT



Reverse complement motif

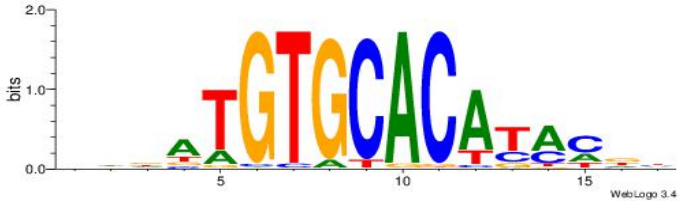
Consensus sequence: ABDBCTAGTTAACVBBD

Motif ID:	UP00042
Motif name:	Gm397_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7

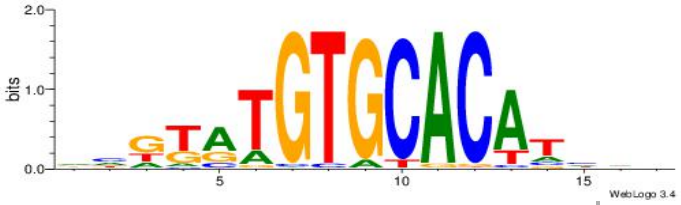
Number of overlap: 7
Similarity score: 0.0388625

Alignment:
HHRTATGTGCACATHHD
----AAGTTCA------

Original motif
Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif
Consensus sequence: HHRTATGTGCACATHHD



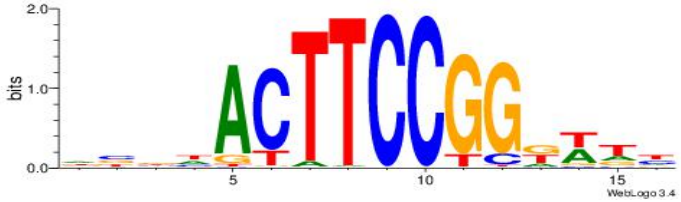
Motif ID: UP00413
Motif name: Elf4
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 7
Similarity score: 0.0421261

Alignment:
DBBHACTTCCGGKWTH
-TGAACTT--------

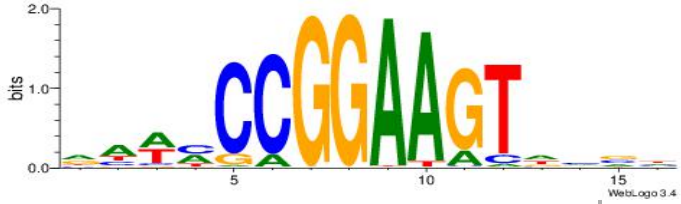
Original motif

Reverse complement motif

Consensus sequence: DBBHACTTCCGGKWTH



Consensus sequence: HAWYCCGGAAGTHBBD



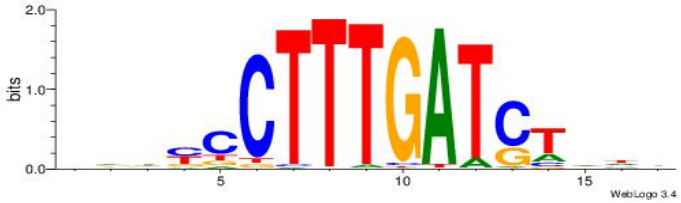
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	7
Similarity score:	0.0424658

Alignment:

```
DDDYCCTTTGATCTDDV
--------TGAACTT--
```

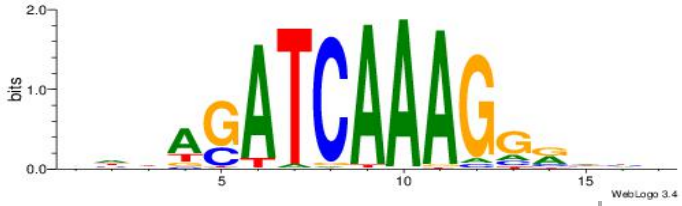
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



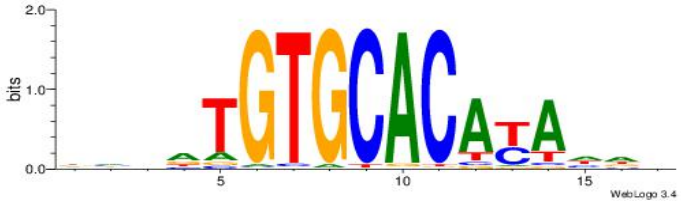
Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	7
Similarity score:	0.0427674

Alignment:

```
HDHTMTGTGCACADVHD
----AAGTTCA------
```

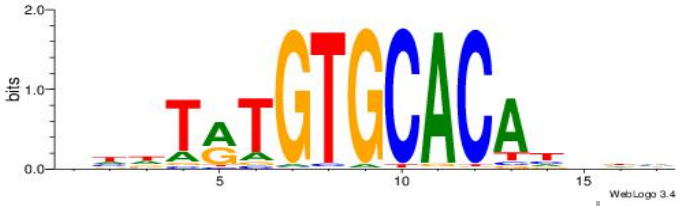
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



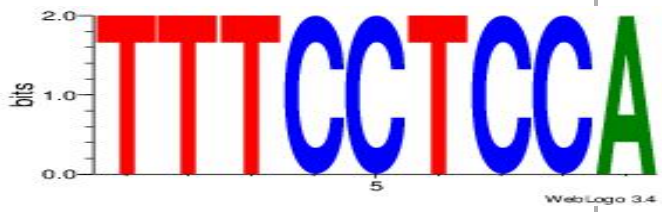
Dataset #: 2 Motif ID: 45 Motif name: Motif 45

Original motif

Consensus sequence: TGGAGGAAA

Reverse complement motif

Consensus sequence: TTTCCTCCA



Best Matches for Motif ID 45 (Highest to Lowest)

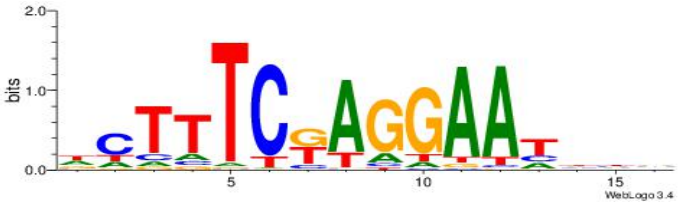
Motif ID:	UP00043
Motif name:	Bcl6b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	9
Similarity score:	0

Alignment:

```
DCTTTCKAGGAATHHV
----TGGAGGAAA---
```

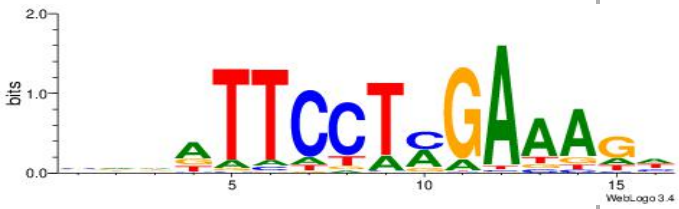
Original motif

Consensus sequence: DCTTTCKAGGAATHHV



Reverse complement motif

Consensus sequence: VHHATTCCTYGAAAGD



Motif ID:	UP00409
Motif name:	Elf5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	9
Similarity score:	0.0103598

Alignment:

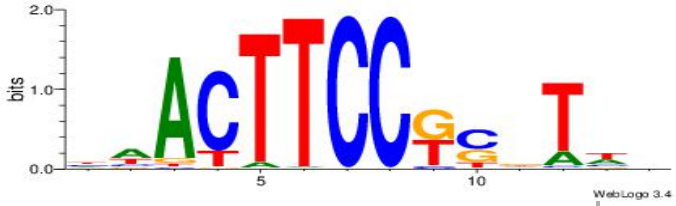
```
BWAHSMGGAAGTWD
--TGGAGGAAA---
```

Original motif

Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRSDTWV



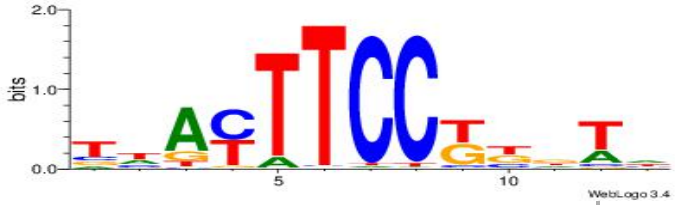
Motif ID:	UP00090
Motif name:	Elf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

Number of overlap: 9
Similarity score: 0.0126625

Alignment:
DAHMMGGAARTDA
-TGGAGGAAA---

Original motif
Consensus sequence: DAHMMGGAARTDA

Reverse complement motif
Consensus sequence: TDAMTTCCYYDTD



Motif ID: UP00085
Motif name: Sfpi1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 9
Similarity score: 0.0131092

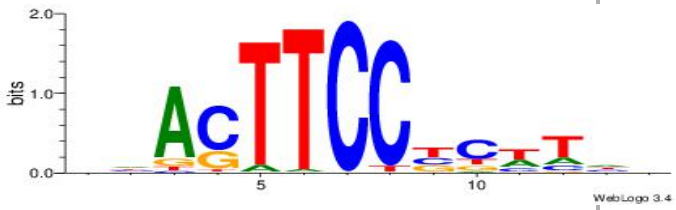
Alignment:
BDAWGVGGAAGTDH
--TGGAGGAAA---

Original motif

Reverse complement motif

Consensus sequence: BDAWGVGGAAGTDH

Consensus sequence: HDACTTCCBCWTDV



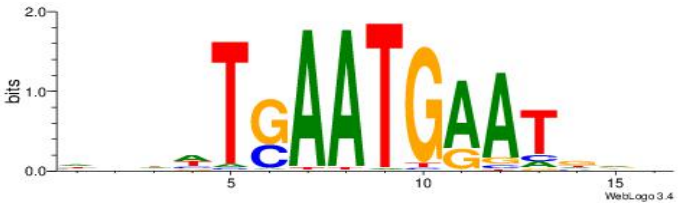
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	9
Similarity score:	0.0140163

Alignment:

```
HHDWTSAATGAATDDB
----TGGAGGAAA---
```

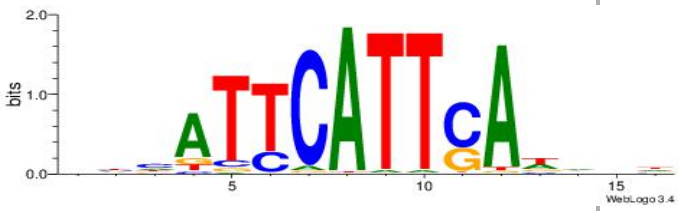
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH



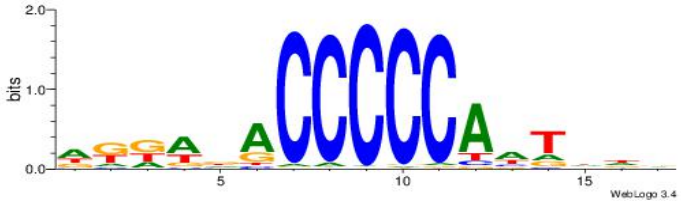
Motif ID:	UP00021
Motif name:	Zfp281_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	9
Similarity score:	0.0142598

Alignment:

```
DKKWDACCCCCAHTDDV
---TTTCCTCCA-----
```

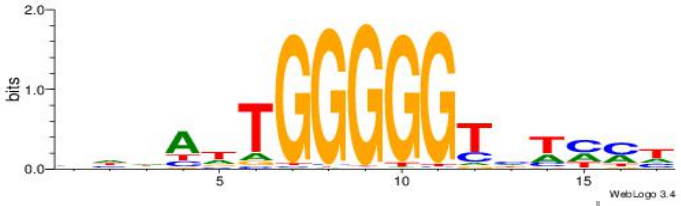
Original motif

Consensus sequence: DKKWDACCCCCAHTDDV



Reverse complement motif

Consensus sequence: VDDAHTGGGGGTHWYYD

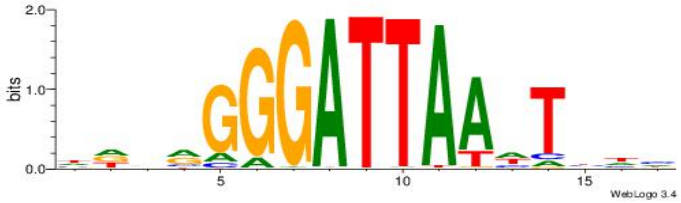


Motif ID:	UP00208
Motif name:	Obox5_2284.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

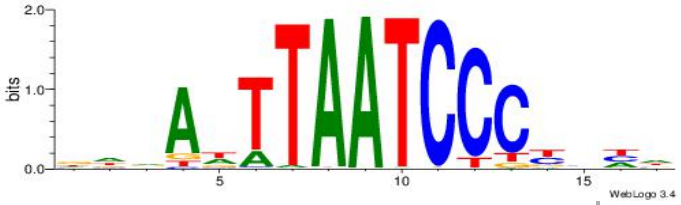
Number of overlap: 9
Similarity score: 0.0161902

Alignment:
DHHAHTTAATCCCKVDH
----TTTCCTCCA----

Original motif
Consensus sequence: HDVRGGGATTAAHTHHH



Reverse complement motif
Consensus sequence: DHHAHTTAATCCCKVDH



Motif ID: UP00419
Motif name: Spic
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 9
Similarity score: 0.0168157

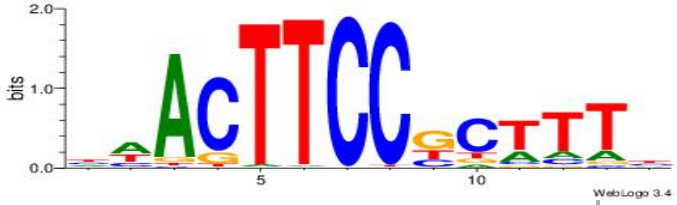
Alignment:
VAAAGMGGAAGTWD
--TGGAGGAAA---

Original motif

Reverse complement motif

Consensus sequence: VAAAGMGGAAGTWD

Consensus sequence: DWACTTCCRCTTTB



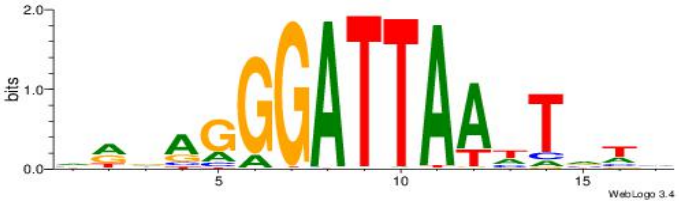
Motif ID:	UP00208
Motif name:	Obox5_3963.2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	9
Similarity score:	0.0175071

Alignment:

```
VWBAHTTAATCCCTVKB
----TTTCCTCCA----
```

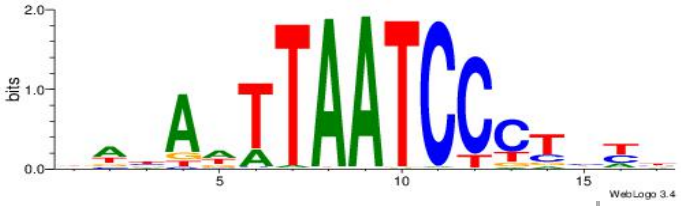
Original motif

Consensus sequence: VRVAGGGATTAAHTVWV



Reverse complement motif

Consensus sequence: VWBAHTTAATCCCTVKB



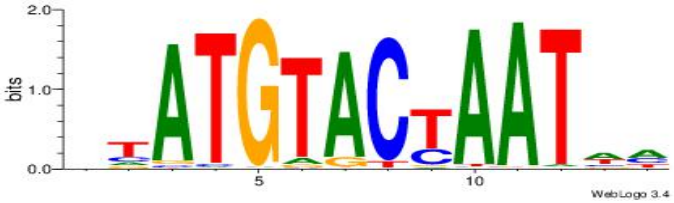
Motif ID:	UP00082
Motif name:	Zfp187_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	9
Similarity score:	0.017867

Alignment:

```
HWATTAGTACATAV
--TTTCCTCCA---
```

Original motif

Consensus sequence: BTATGTACTAATWH



Reverse complement motif

Consensus sequence: HWATTAGTACATAV

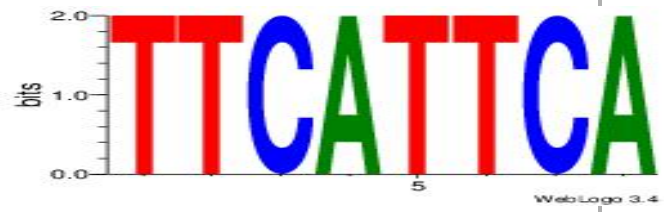
Dataset #: 2 Motif ID: 46 Motif name: Motif 46

Original motif

Consensus sequence: TGAATGAA

Reverse complement motif

Consensus sequence: TTCATTCA



Best Matches for Motif ID 46 (Highest to Lowest)

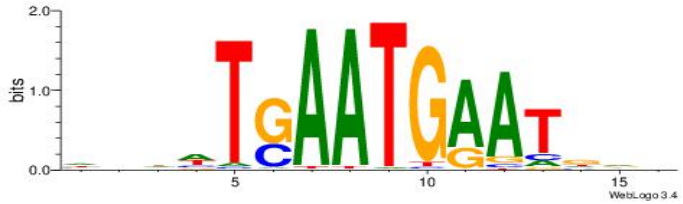
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0

Alignment:

```
HHDWTSAATGAATDDB
----TGAATGAA----
```

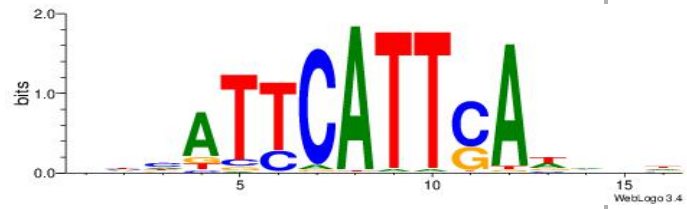
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH



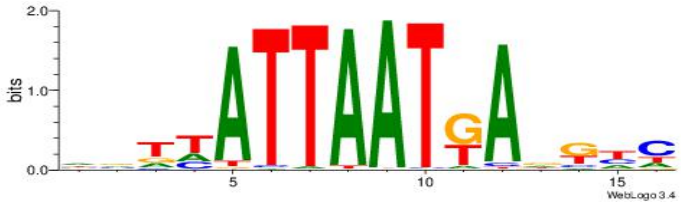
Motif ID:	UP00118
Motif name:	Pou4f3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0420896

Alignment:

```
HVTTATTAATKADKHC
-----TGAATGAA---
```

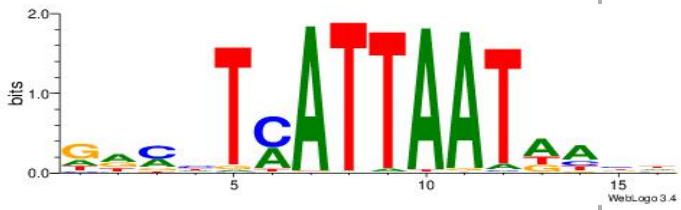
Original motif

Consensus sequence: HVTTATTAATKADKHC



Reverse complement motif

Consensus sequence: GHYHTYATTAATAAVH

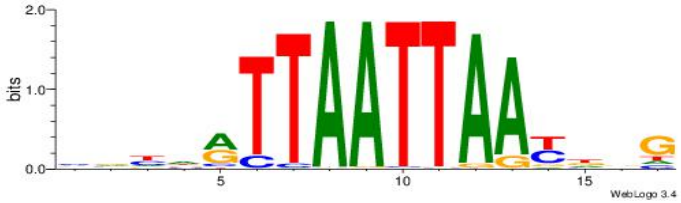


Motif ID:	UP00237
Motif name:	Otp
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

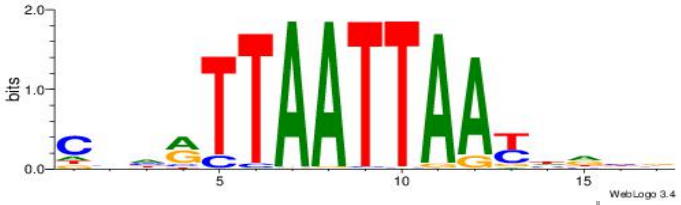
Number of overlap: 8
Similarity score: 0.0426251

Alignment:
CHDMTTAATTAAKDHVV
----TTCATTCA-----

Original motif
Consensus sequence: VVHDRTTAATTAAYDDG



Reverse complement motif
Consensus sequence: CHDMTTAATTAAKDHVV



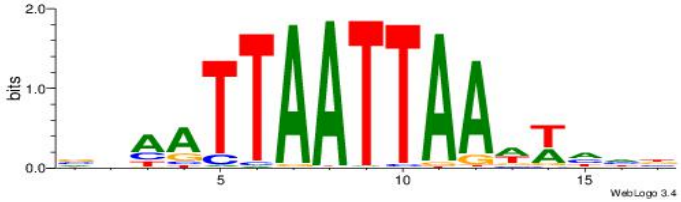
Motif ID: UP00130
Motif name: Lhx3
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.0427891

Alignment:
VHHWWTTAATTAATTDV
-----TTCATTCA----

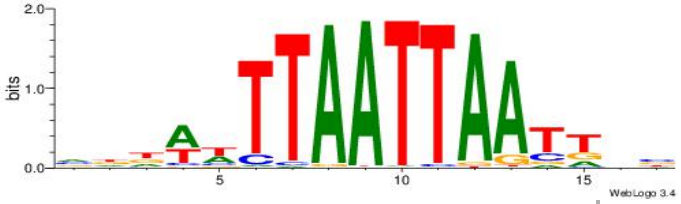
Original motif

Reverse complement motif

Consensus sequence: VDAATTAATTAAWWHHB



Consensus sequence: VHHWWTTAATTAATTDV



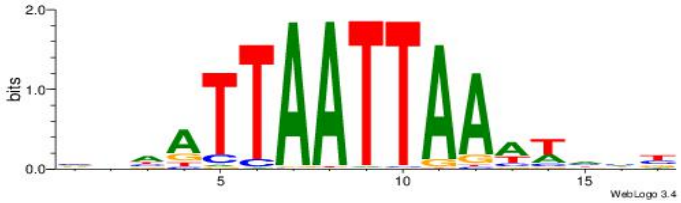
Motif ID:	UP00212
Motif name:	Lhx5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.044202

Alignment:

```
VDHWTTTAATTAATHHV
-----TTCATTCA----
```

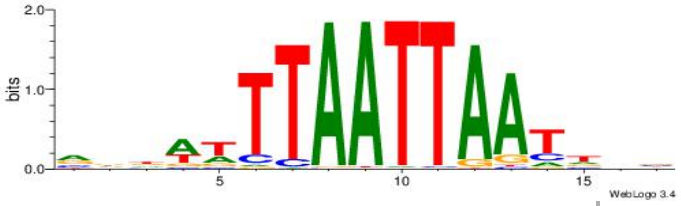
Original motif

Consensus sequence: VDHATTAATTAAAWHHB



Reverse complement motif

Consensus sequence: VDHWTTTAATTAATHHV



Motif ID:	UP00012
Motif name:	Bbx_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0451439

Alignment:

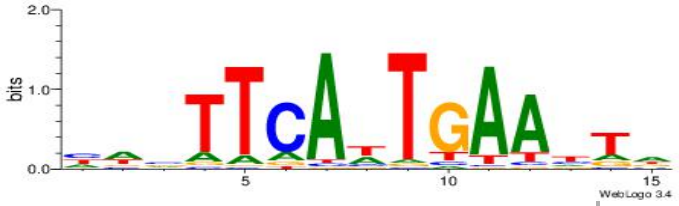
```
HWBTTCAWTGAADTH
---TTCATTCA----
```

Original motif

Consensus sequence: HADTTCAWTGAABWD

Reverse complement motif

Consensus sequence: HWBTTCAWTGAADTH

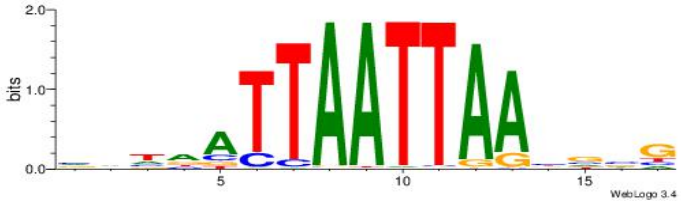


Motif ID:	UP00142
Motif name:	Uncx4.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

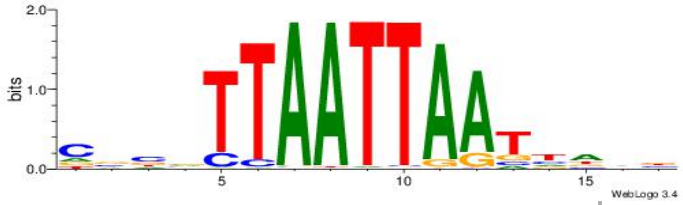
Number of overlap: 8
Similarity score: 0.0455949

Alignment:
CVVBTTAATTAATDHDV
----TGAATGAA-----

Original motif
Consensus sequence: VDHDATTAATTAABVVG



Reverse complement motif
Consensus sequence: CVVBTTAATTAATDHDV



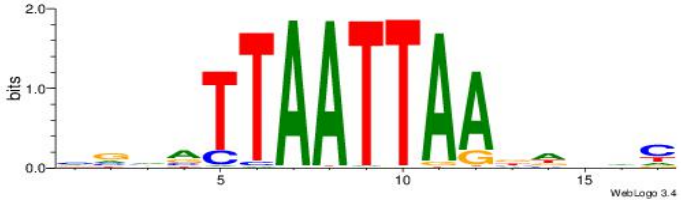
Motif ID: UP00172
Motif name: Prop1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 8
Similarity score: 0.0460946

Alignment:
GDDDBTTAATTAABBVV
-----TTCATTCA----

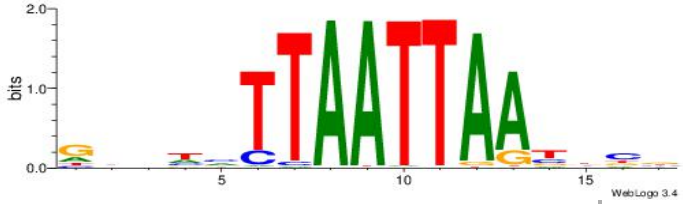
Original motif

Reverse complement motif

Consensus sequence: VVVVTTAATTAABDDDC



Consensus sequence: GDDDBTTAATTAABBVV



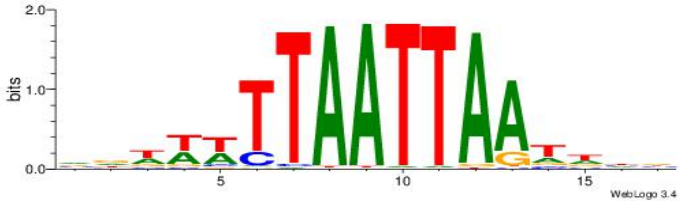
Motif ID:	UP00169
Motif name:	Lmx1b
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.048175

Alignment:

```
BHDATTAATTAAWWWHB
----TGAATGAA-----
```

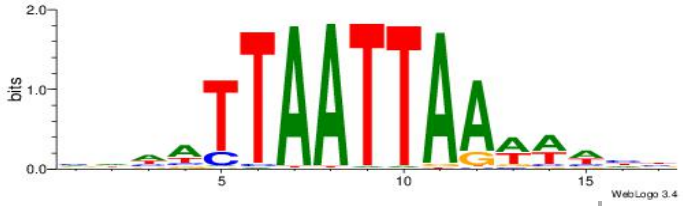
Original motif

Consensus sequence: VDWWWTTAATTAATDHB



Reverse complement motif

Consensus sequence: BHDATTAATTAAWWWHB



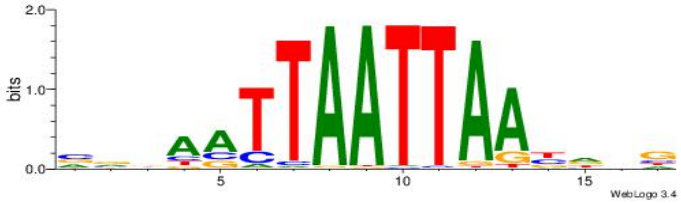
Motif ID:	UP00149
Motif name:	Phox2b
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0491281

Alignment:

```
CBDVTTAATTAATTBVV
----TTCATTCA-----
```

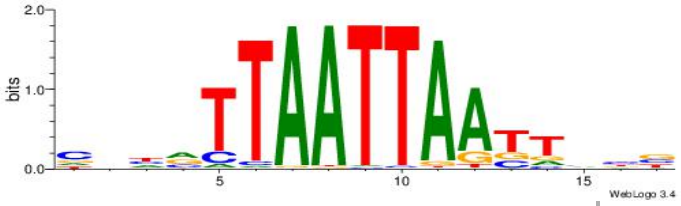
Original motif

Consensus sequence: VVBAATTAATTAABDBG



Reverse complement motif

Consensus sequence: CBDVTTAATTAATTBVV



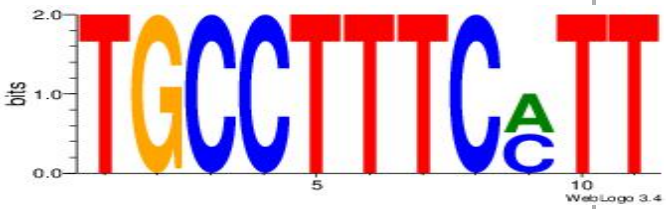
Dataset #: 2 Motif ID: 47 Motif name: Motif 47

Original motif

Consensus sequence: AAKGAAAGGCA

Reverse complement motif

Consensus sequence: TGCCTTTCYTT



Best Matches for Motif ID 47 (Highest to Lowest)

Motif ID:	UP00074
Motif name:	Isgf3g_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.012358

Alignment:

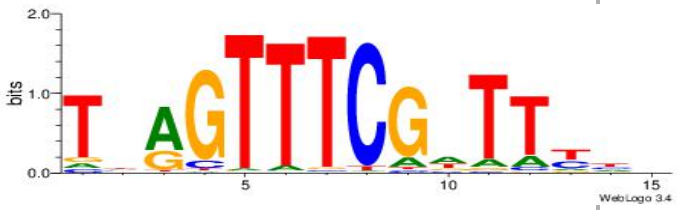
```
TDAGTTTCGWTTKDV
TGCCTTTCYTT----
```

Original motif

Consensus sequence: VDRAAWCGAAACTDA

Reverse complement motif

Consensus sequence: TDAGTTTCGWTTKDV



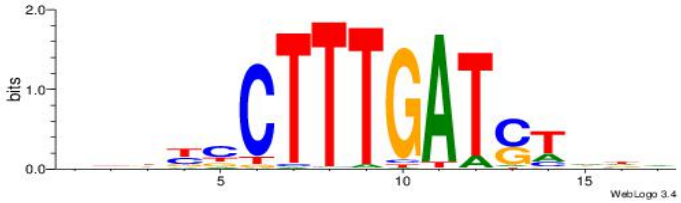
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.014351

Alignment:

```
BDDASATCAAAGGMDDD
----AAKGAAAGGCA--
```

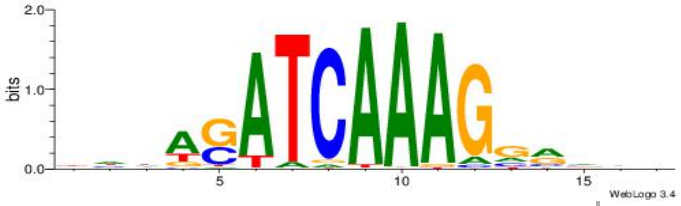
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD

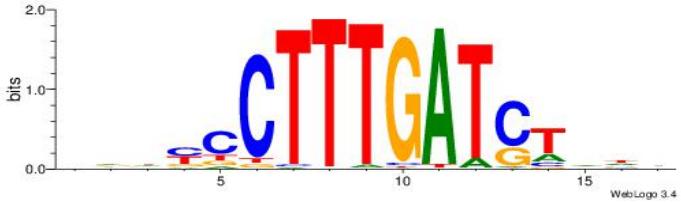


Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

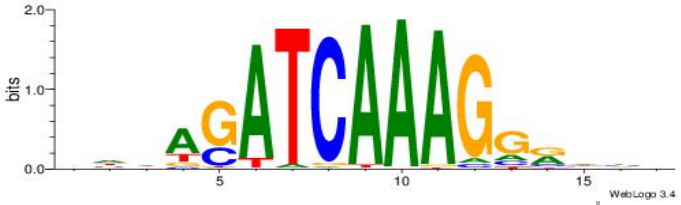
Number of overlap: 11
Similarity score: 0.015991

Alignment:
VDDAGATCAAAGGKDDD
----AAKGAAAGGCA--

Original motif
Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif
Consensus sequence: VDDAGATCAAAGGKDDD



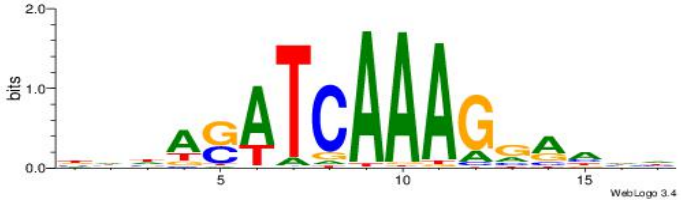
Motif ID: UP00054
Motif name: Tcf7_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0221257

Alignment:
BHHASATCAAAGGAHHH
----AAKGAAAGGCA--

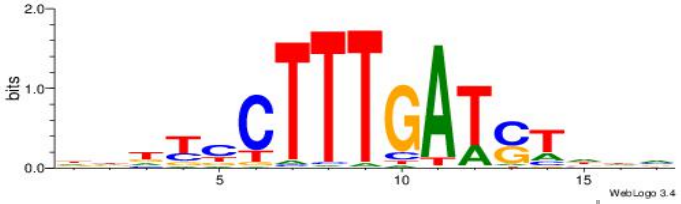
Original motif

Reverse complement motif

Consensus sequence: BHHASATCAAAGGAHHH



Consensus sequence: HHHTCCTTTGATSTHHV



Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0233703

Alignment:

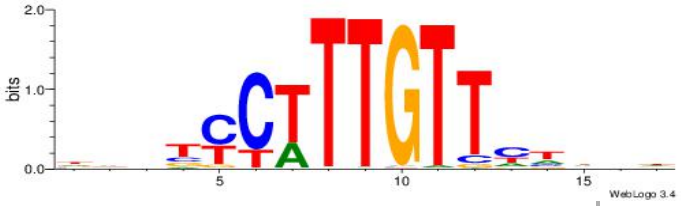
```
HHBTMCTTTGTTMDDVH
--TGCCTTTCYTT----
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



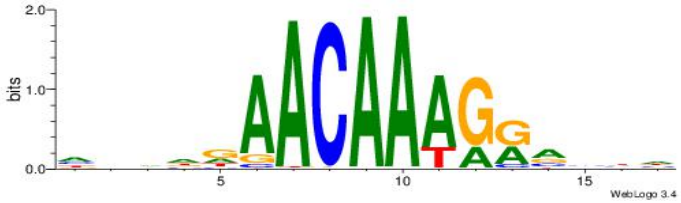
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0234975

Alignment:

```
HHBBMCTTTGTTHDDBH
--TGCCTTTCYTT----
```

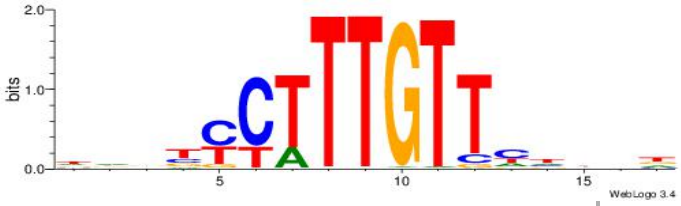
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH

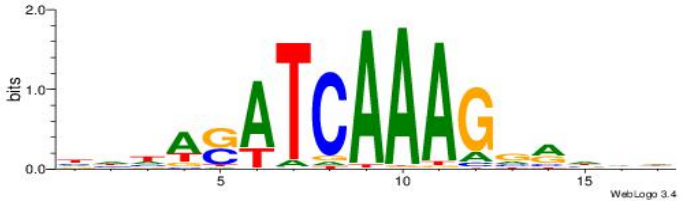


Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5

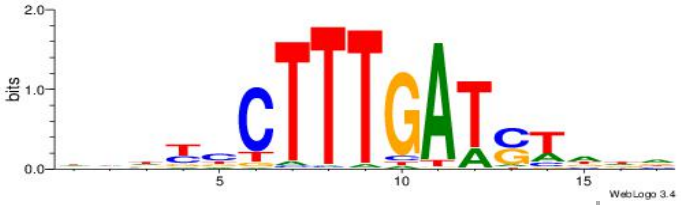
Number of overlap: 11
Similarity score: 0.0239255

Alignment:
HHHASATCAAAGVRHHH
----AAKGAAAGGCA--

Original motif
Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif
Consensus sequence: HHHKVCTTTGATSTHHH



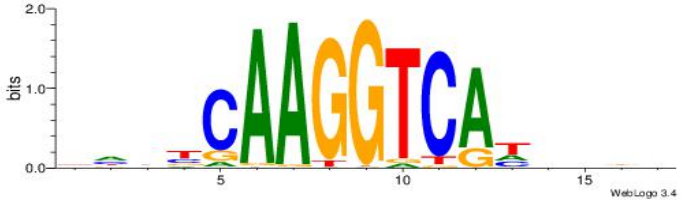
Motif ID: UP00079
Motif name: Esrra_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.0239781

Alignment:
DHDBCAAGGTCAHVBDH
-AAKGAAAGGCA-----

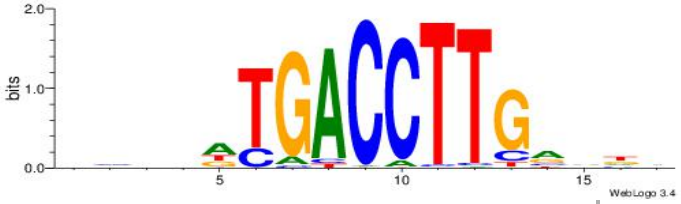
Original motif

Reverse complement motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Consensus sequence: HHBVHTGACCTTGVDHD



Motif ID:	UP00044
Motif name:	Mafk_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:	11
Similarity score:	0.0264082

Alignment:

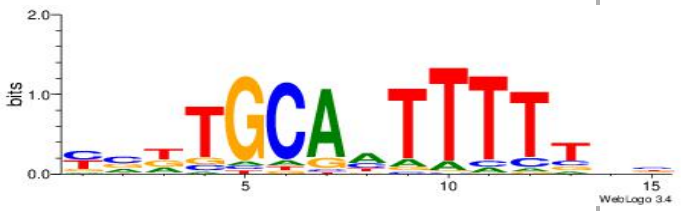
```
MBHTGCADTTTTTHV
---TGCCTTTCYTT-
```

Original motif

Consensus sequence: VHAAAAADTGCAHBR

Reverse complement motif

Consensus sequence: MBHTGCADTTTTTHV



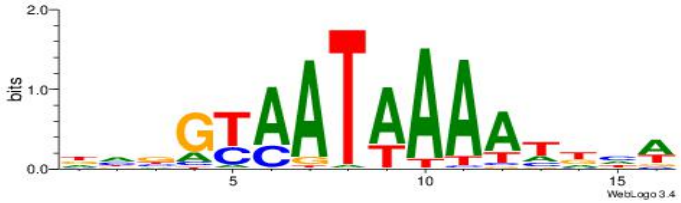
Motif ID:	UP00217
Motif name:	Hoxa10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0273937

Alignment:

```
DHBGYAATAAAATDHW
-----AAKGAAAGGCA
```

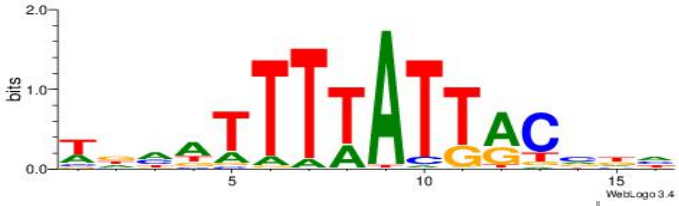
Original motif

Consensus sequence: DHBGYAATAAAATDHW



Reverse complement motif

Consensus sequence: WDDATTTTATTMCBHD



Dataset #: 2 Motif ID: 48 Motif name: Motif 48

Original motif

Consensus sequence: AATGKAAGAA

Reverse complement motif

Consensus sequence: TTCTTYCATT

Best Matches for Motif ID 48 (Highest to Lowest)

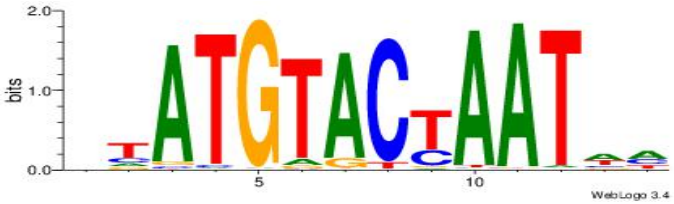
Motif ID:	UP00082
Motif name:	Zfp187_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0293208

Alignment:

```
BTATGTACTAATWH
-AATGKAAGAA---
```

Original motif

Consensus sequence: BTATGTACTAATWH



Reverse complement motif

Consensus sequence: HWATTAGTACATAV

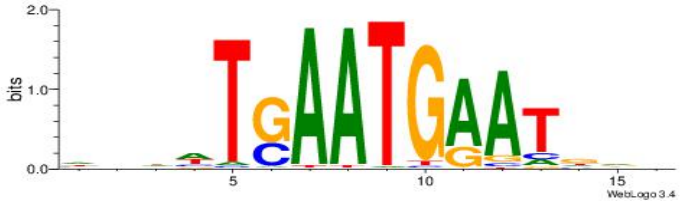
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0314105

Alignment:

```
VDHATTCATTSAWDDH
TTCTTYCATT------
```

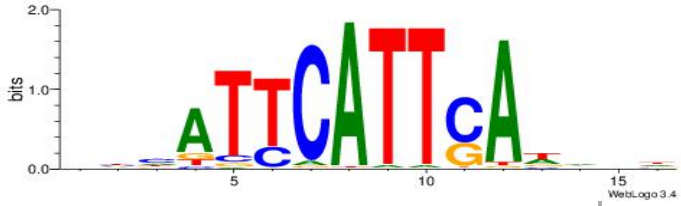
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH

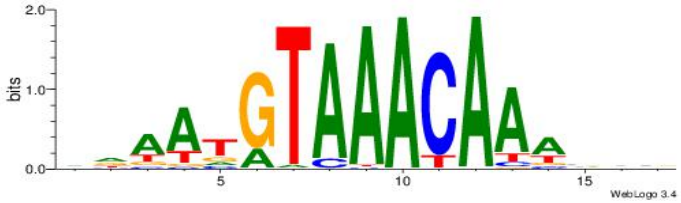


Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

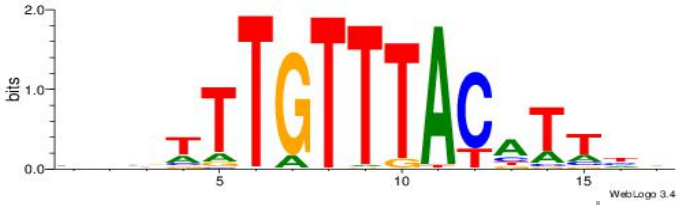
Number of overlap: 10
Similarity score: 0.0385918

Alignment:
DDAATGTAAACAAAVVB
--AATGKAAGAA-----

Original motif
Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif
Consensus sequence: BBVTTTGTTTACATTDD



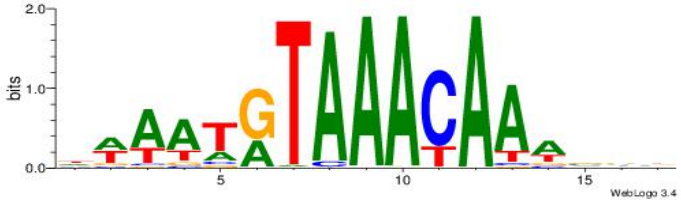
Motif ID: UP00061
Motif name: Foxl1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.0392784

Alignment:
DWAATRTAAACAAWVVB
--AATGKAAGAA-----

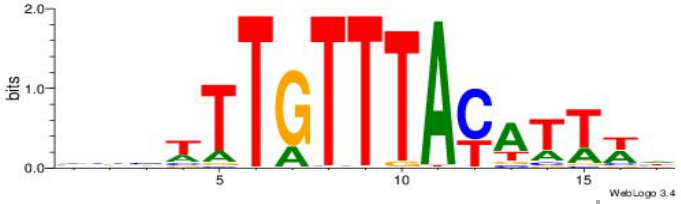
Original motif

Reverse complement motif

Consensus sequence: DWAATRTAAACAAWVVB



Consensus sequence: VVVWTTGTTTAMATTWD



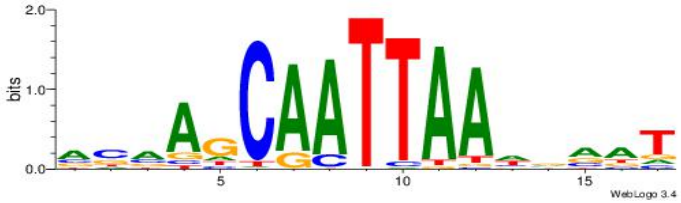
Motif ID:	UP00157
Motif name:	Hmx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0433812

Alignment:

```
ATBVHTTAATTGCTBBB
-TTCTTYCATT------
```

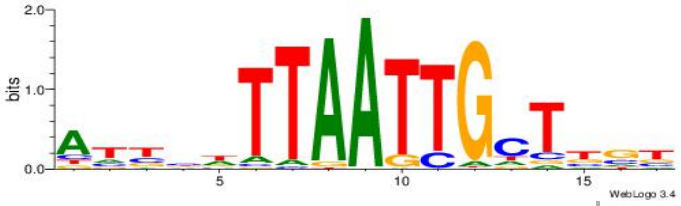
Original motif

Consensus sequence: VBVAGCAATTAAHVVAT



Reverse complement motif

Consensus sequence: ATBVHTTAATTGCTBBB



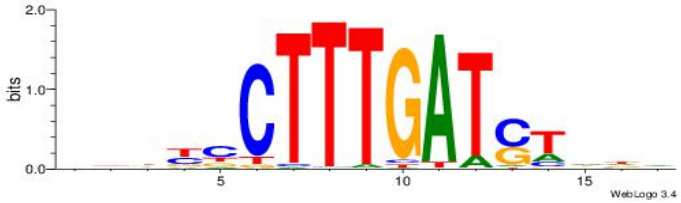
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0436699

Alignment:

```
DDDYCCTTTGATSTDDV
---TTCTTYCATT----
```

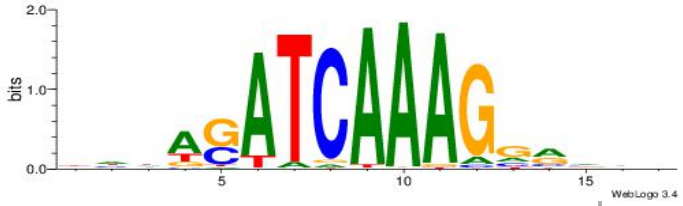
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD

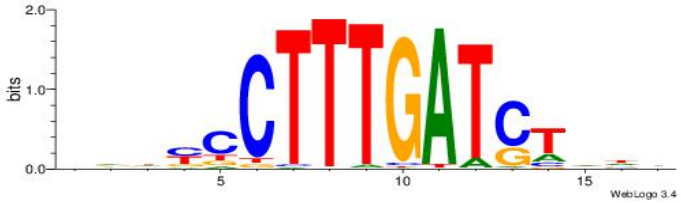


Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

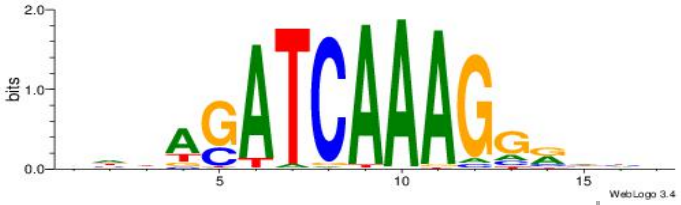
Number of overlap: 10
Similarity score: 0.0444106

Alignment:
DDDYCCTTTGATCTDDV
---TTCTTYCATT----

Original motif
Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif
Consensus sequence: VDDAGATCAAAGGKDDD



Motif ID: UP00155
Motif name: Hmx2
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 10
Similarity score: 0.0454888

Alignment:
ADBVHTTAATTGCTTVB
-TTCTTYCATT------

Original motif

Reverse complement motif

Consensus sequence: VVAAGCAATTAAHVVDT

Consensus sequence: ADBVHTTAATTGCTTVB

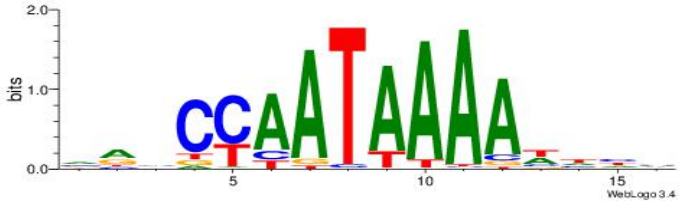
Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0479046

Alignment:

```
VDHWTTTTATTGGDKB
-TTCTTYCATT-----
```

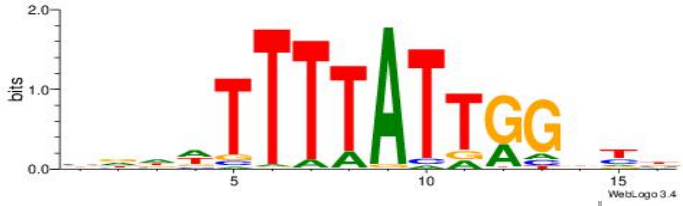
Original motif

Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif

Consensus sequence: VDHWTTTTATTGGDKB



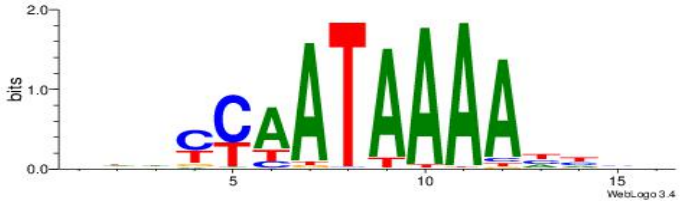
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.0481894

Alignment:

```
HDHHTTTTATTKKHDD
-TTCTTYCATT-----
```

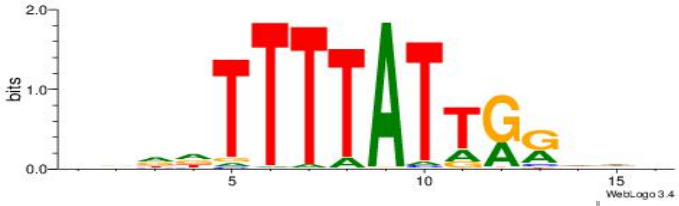
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



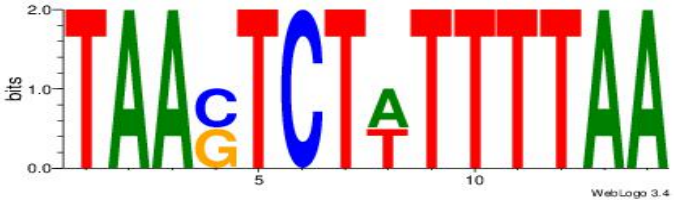
Dataset #: 2 Motif ID: 49 Motif name: Motif 49

Original motif

Consensus sequence: TAASTCTWTTTTAA

Reverse complement motif

Consensus sequence: TTAAAAWAGASTTA



Best Matches for Motif ID 49 (Highest to Lowest)

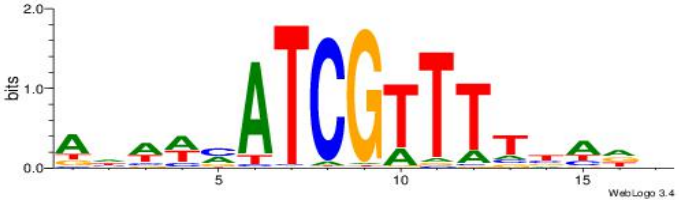
Motif ID:	UP00114
Motif name:	Homez
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0426024

Alignment:

```
AHWWMATCGTTTTBADD
--TAASTCTWTTTTAA-
```

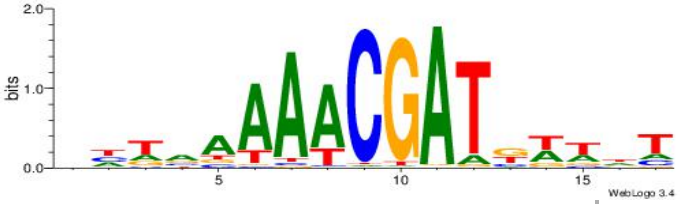
Original motif

Consensus sequence: AHWWMATCGTTTTBADD



Reverse complement motif

Consensus sequence: HDTVAAAACGATRWWHT



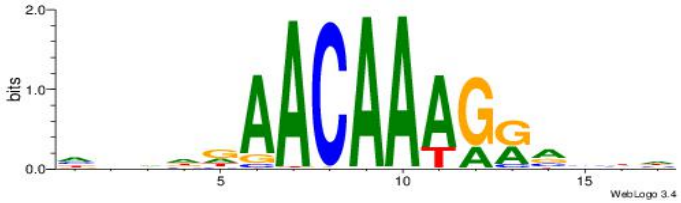
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.04935

Alignment:

```
HBDDDAACAAAGRVBHH
---TTAAAAWAGASTTA
```

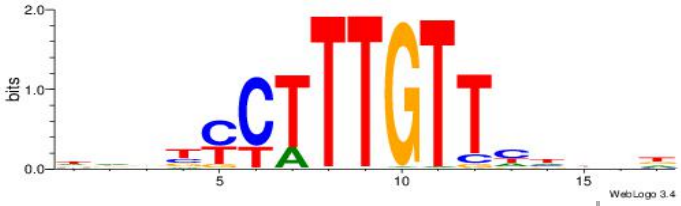
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH

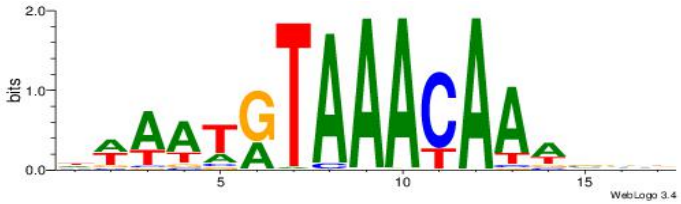


Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13

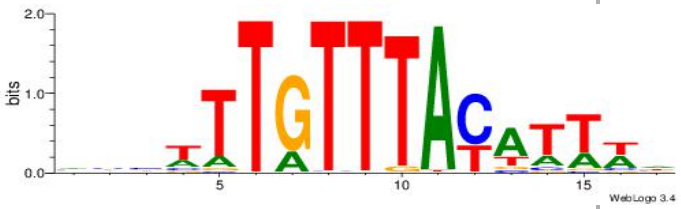
Similarity score: 0.542468

Alignment:
DWAATRTAAACAAWVVB-
-TAASTCTWTTTTAA---

Original motif
Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD

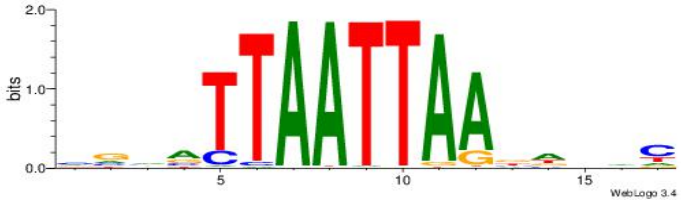


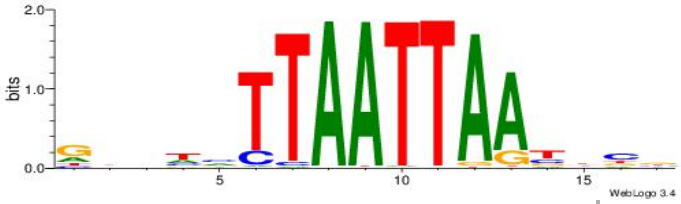
Motif ID: UP00172
Motif name: Prop1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 13
Similarity score: 0.545182

Alignment:
VVVVTTAATTAABDDDC-
----TTAAAAWAGASTTA

Original motif
Consensus sequence: VVVVTTAATTAABDDDC

Reverse complement motif
Consensus sequence: GDDDBTTAATTAABBVV





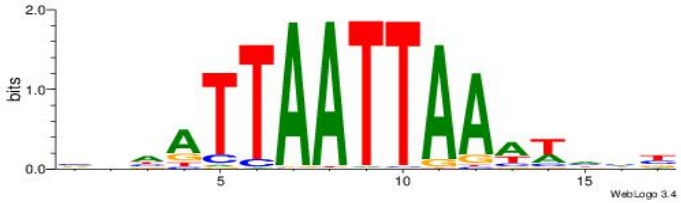
Motif ID:	UP00212
Motif name:	Lhx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.547386

Alignment:

```
VDHATTAATTAAAWHHB-
-TAASTCTWTTTTAA---
```

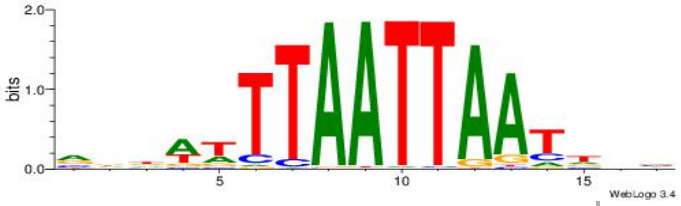
Original motif

Consensus sequence: VDHATTAATTAAAWHHB



Reverse complement motif

Consensus sequence: VDHWTTTAATTAATHHV



Motif ID:	UP00237
Motif name:	Otp

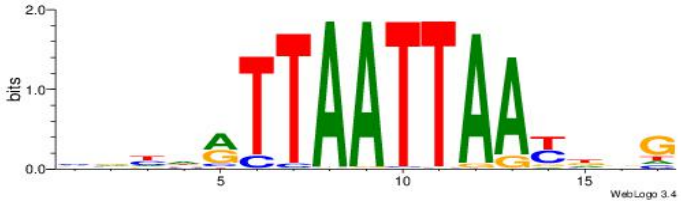
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	13
Similarity score:	0.548444

Alignment:

```
CHDMTTAATTAAKDHVV-
----TTAAAAWAGASTTA
```

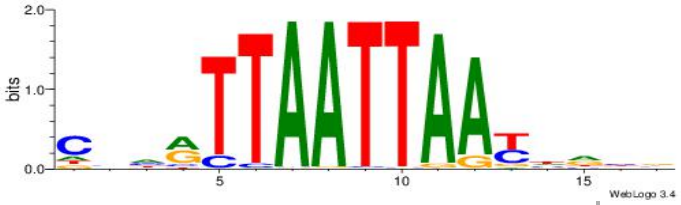
Original motif

Consensus sequence: VVHDRTTAATTAAYDDG



Reverse complement motif

Consensus sequence: CHDMTTAATTAAKDHVV



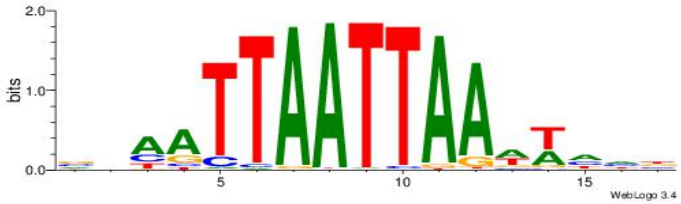
Motif ID:	UP00130
Motif name:	Lhx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.548839

Alignment:

```
-VHHWWTTAATTAATTDV
---TTAAAAWAGASTTA-
```

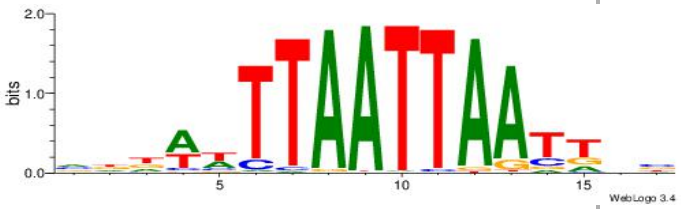
Original motif

Consensus sequence: VDAATTAATTAAWWHHB



Reverse complement motif

Consensus sequence: VHHWWTTAATTAATTDV



Motif ID:	UP00145
Motif name:	Barhl2
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:	12
Similarity score:	1.03054

Alignment:

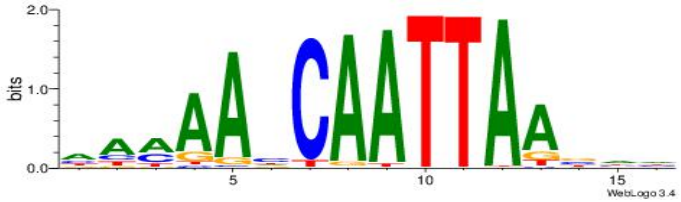
```
--HAMAAHCAATTAABHH
--TAASTCTWTTTTAA--
```

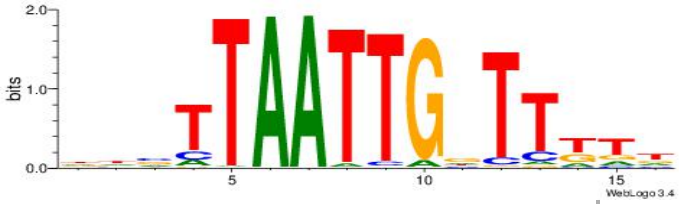
Original motif

Consensus sequence: HAMAAHCAATTAABHH

Reverse complement motif

Consensus sequence: HHBTTAATTGDTTYTH





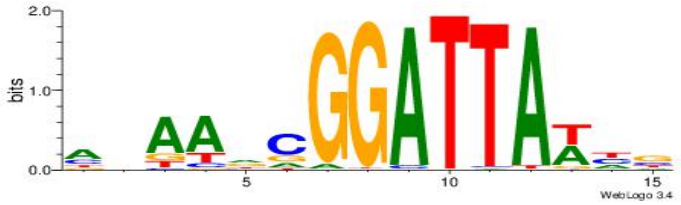
Motif ID:	UP00109
Motif name:	Obox6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	1.0344

Alignment:

```
--AHAADCGGATTAWHB
TTAAAAWAGASTTA---
```

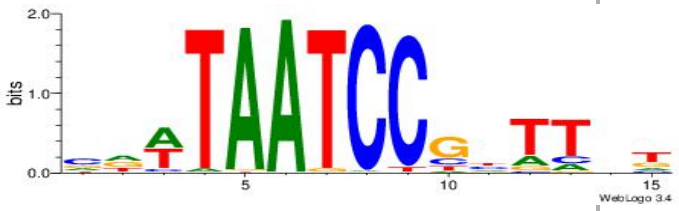
Original motif

Consensus sequence: AHAADCGGATTAWHB



Reverse complement motif

Consensus sequence: BHWTAATCCGDTTHT



Motif ID:	UP00166

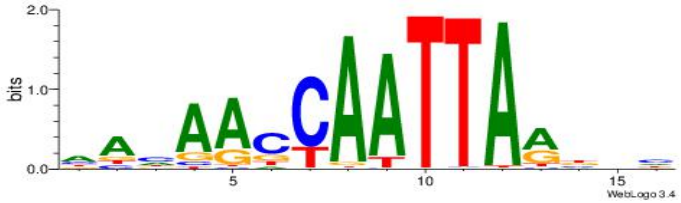
Motif name:	Barhl1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	1.03746

Alignment:

```
--HAHAACCAATTARBDH
TTAAAAWAGASTTA----
```

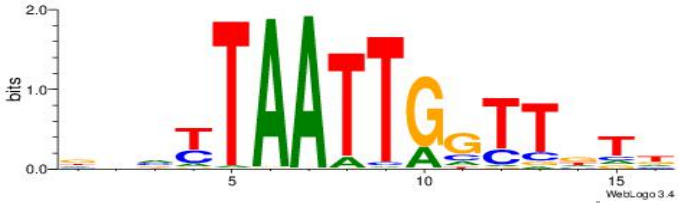
Original motif

Consensus sequence: HAHAACCAATTARBDH



Reverse complement motif

Consensus sequence: DDVKTAATTGGTTDTH



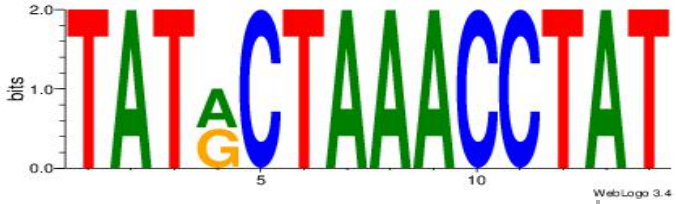
Dataset #: 2 Motif ID: 50 Motif name: Motif 50

Original motif

Consensus sequence: ATAGGTTTAGYATA

Reverse complement motif

Consensus sequence: TATKCTAAACCTAT



Best Matches for Motif ID 50 (Highest to Lowest)

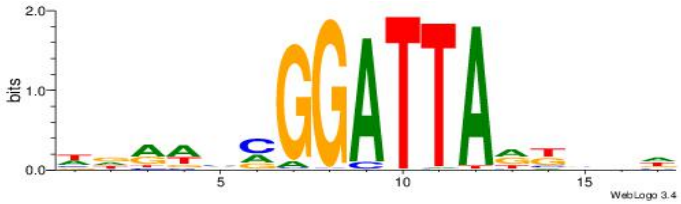
Motif ID:	UP00111
Motif name:	Dmbx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0364989

Alignment:

```
WDRWHMGGATTADKBHD
---ATAGGTTTAGYATA
```

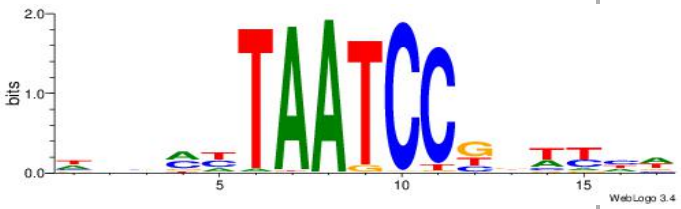
Original motif

Consensus sequence: WDRWHMGGATTADKBHD



Reverse complement motif

Consensus sequence: DHBRDTAATCCRDWKHW



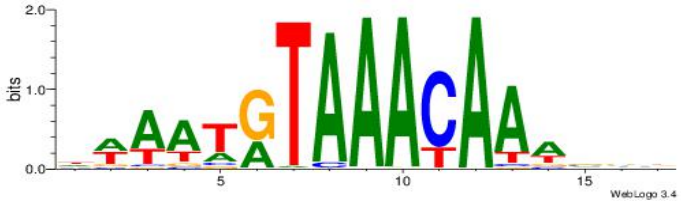
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0393329

Alignment:

```
DWAATRTAAACAAWVVB
-TATKCTAAACCTAT--
```

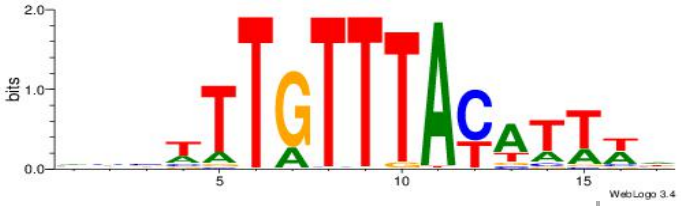
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD

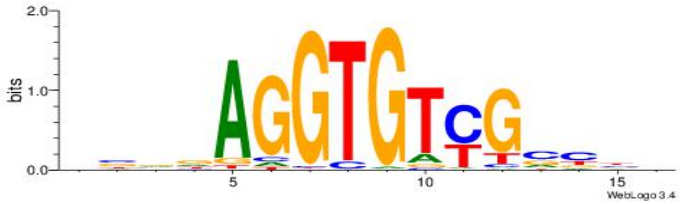


Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14

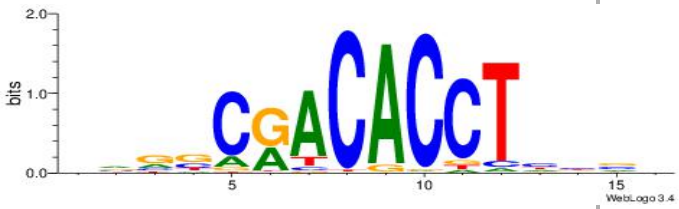
Similarity score: 0.0394759

Alignment:
VVBVCKACACCTHVBV
TATKCTAAACCTAT--

Original motif
Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif
Consensus sequence: VVBVCKACACCTHVBV

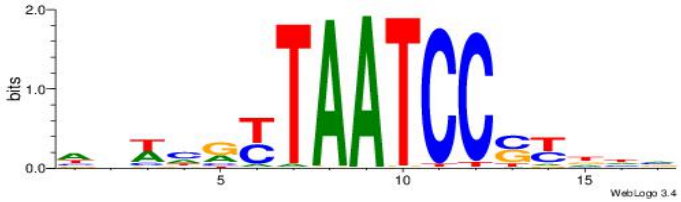


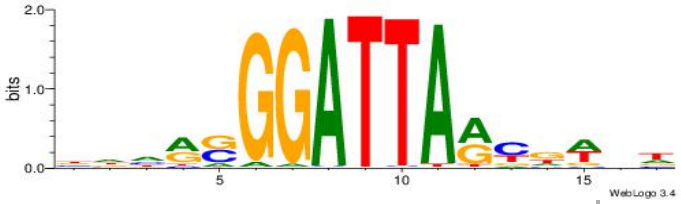
Motif ID:	UP00112
Motif name:	Gsc
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0411853

Alignment:
HVWHRYTAATCCSYDHV
-TATKCTAAACCTAT--

Original motif
Consensus sequence: HVWHRYTAATCCSYDHV

Reverse complement motif
Consensus sequence: BHDMSGGATTAMMDWBH





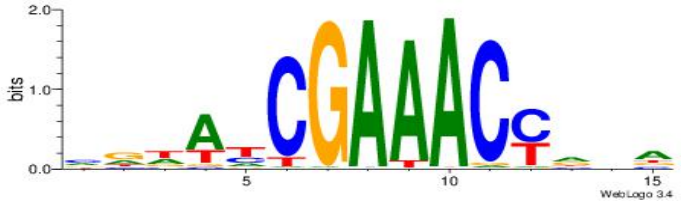
Motif ID:	UP00018
Motif name:	Irf4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.041683

Alignment:

```
VDDAYCGAAACYDVA
ATAGGTTTAGYATA-
```

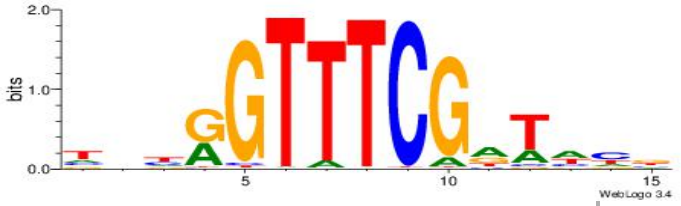
Original motif

Consensus sequence: VDDAYCGAAACYDVA



Reverse complement motif

Consensus sequence: TBDKGTTTCGMTDHV



Motif ID:	UP00025
Motif name:	Foxk1_primary

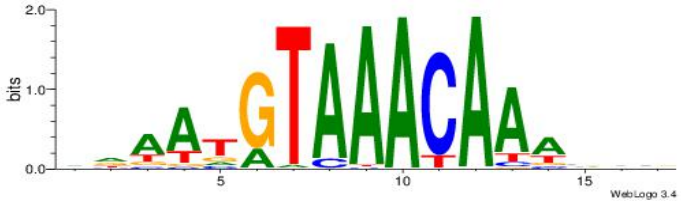
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0422263

Alignment:

```
DDAATGTAAACAAAVVB
-TATKCTAAACCTAT--
```

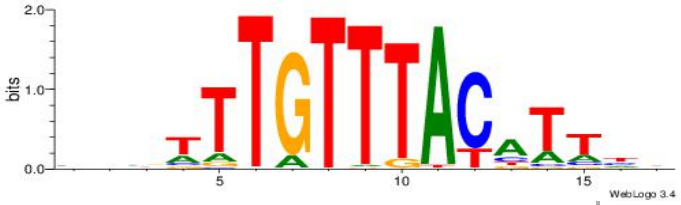
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

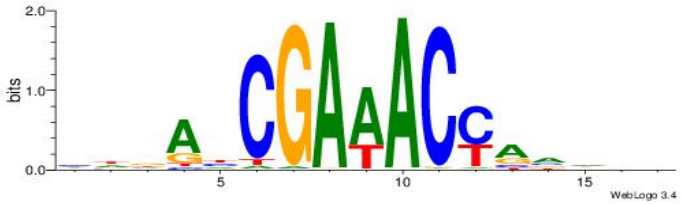
Consensus sequence: BBVTTTGTTTACATTDD



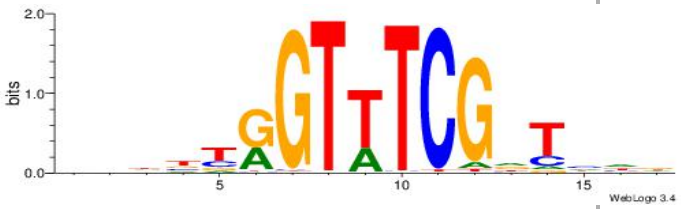
Motif ID:	UP00011
Motif name:	Irf6_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.042495

Alignment:
DHDBTKGTTTCGHTHDD
--ATAGGTTTAGYATA-

Original motif
Consensus sequence: HDDAHCGAAACYAVDDD



Reverse complement motif
Consensus sequence: DHDBTKGTTTCGHTHDD



Motif ID:	UP00125
Motif name:	Pitx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0436835

Alignment:
DDDVRGGATTAATHDDH
--ATAGGTTTAGYATA-

Original motif
Consensus sequence: DDDVRGGATTAATHDDH

Reverse complement motif
Consensus sequence: DDDDATTAATCCMBDHD

Motif ID:	UP00229
Motif name:	Otx1
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:	14
Similarity score:	0.0443397

Alignment:

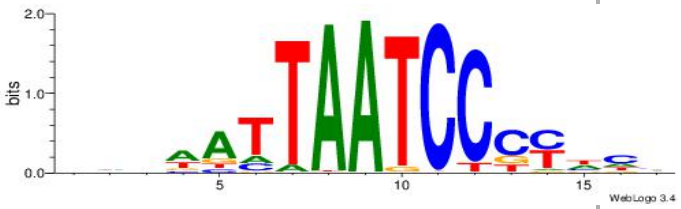
```
DDDRGGGATTAATWHHB
--ATAGGTTTAGYATA-
```

Original motif

Consensus sequence: DDDRGGGATTAATWHHB

Reverse complement motif

Consensus sequence: VHHWATTAATCCCMDHH



Motif ID:	UP00153

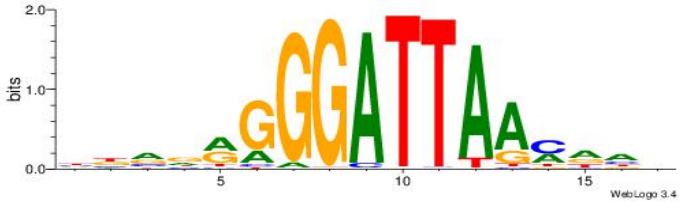
Motif name:	Pitx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.044637

Alignment:

```
HBVDRGGGATTAAMDHH
---ATAGGTTTAGYATA
```

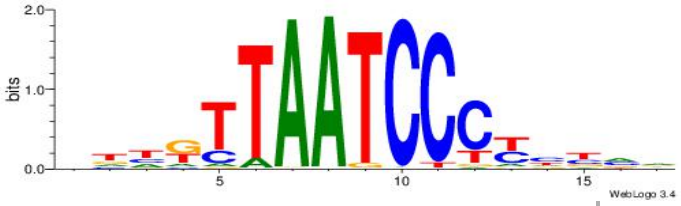
Original motif

Consensus sequence: HBVDRGGGATTAAMDHH



Reverse complement motif

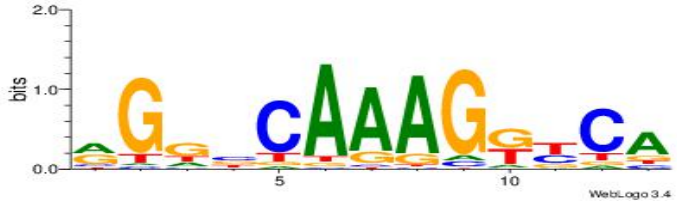
Consensus sequence: HHDRTTAATCCCKHBVH



Dataset #: 3 Motif ID: 51 Motif name: HNF4A

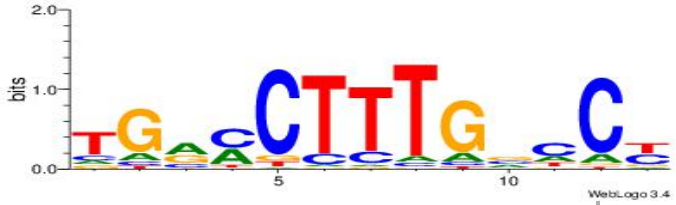
Original motif

Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif

Consensus sequence: TGMYCTTTGBCCK



Best Matches for Motif ID 51 (Highest to Lowest)

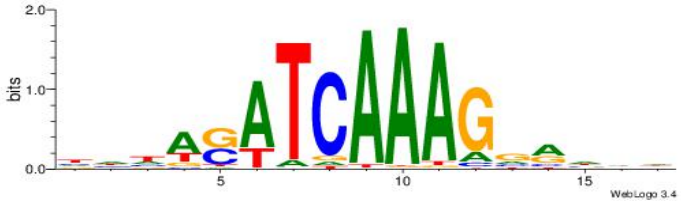
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0357776

Alignment:

```
HHHASATCAAAGVRHHH
---RGGBCAAAGKYCA-
```

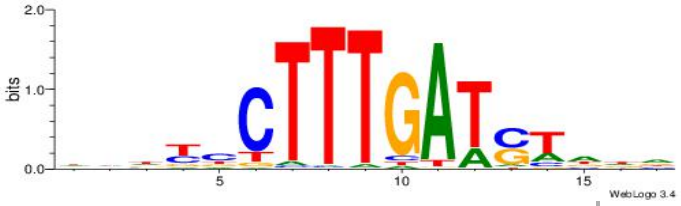
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

Consensus sequence: HHHKVCTTTGATSTHHH



Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

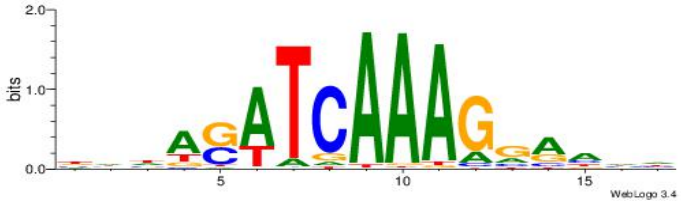
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0357792

Alignment:

```
BHHASATCAAAGGAHHH
---RGGBCAAAGKYCA-
```

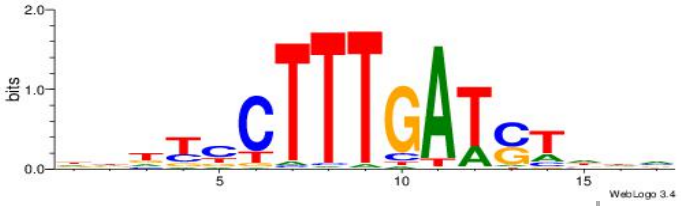
Original motif

Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif

Consensus sequence: HHHTCCTTTGATSTHHV



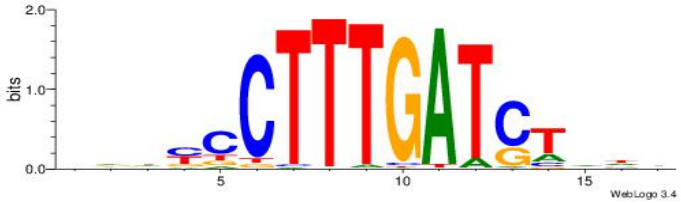
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	13
Similarity score:	0.0359011

Alignment:

VDDAGATCAAAGGKDDD
---RGGBCAAAGKYCA-

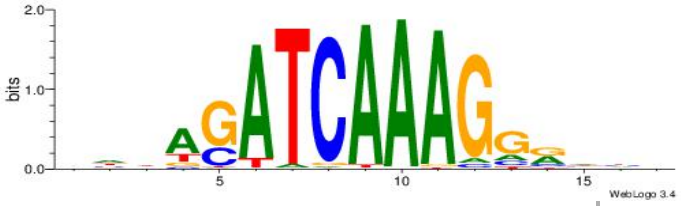
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



Motif ID:	UP00083
Motif name:	Tcf7l2_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:	13
Similarity score:	0.0360786

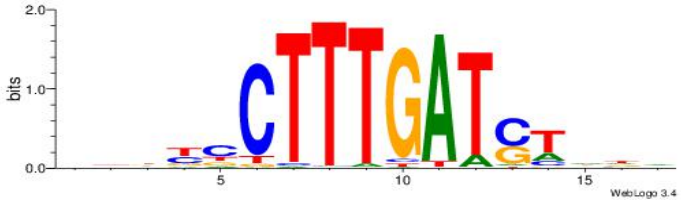
Alignment:
BDDASATCAAAGGMDDD
---RGGBCAAAGKYCA-

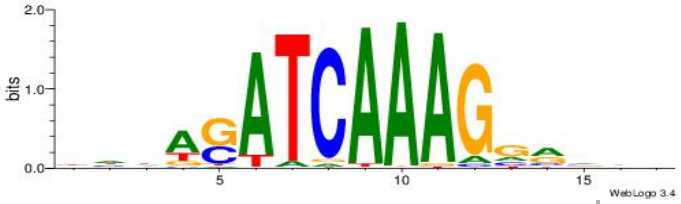
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV

Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD





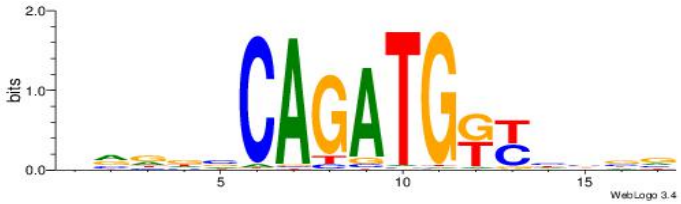
Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	13
Similarity score:	0.0405764

Alignment:

```
HVDDVCAGATGKYHBBV
-RGGBCAAAGKYCA---
```

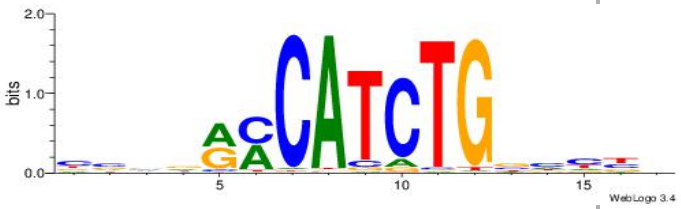
Original motif

Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif

Consensus sequence: VBBDMYCATCTGVHHBH



Motif ID:	UP00062

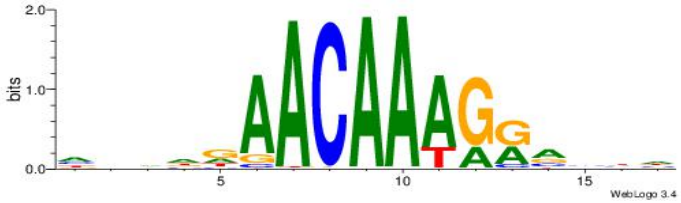
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0409915

Alignment:

```
HHBBMCTTTGTTHDDBH
-TGMYCTTTGBCCK---
```

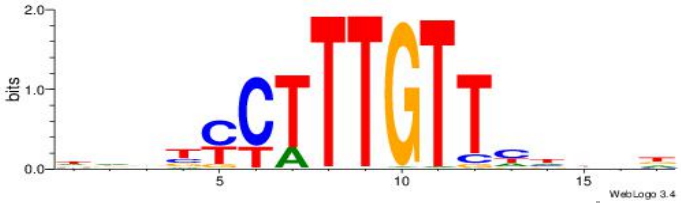
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH

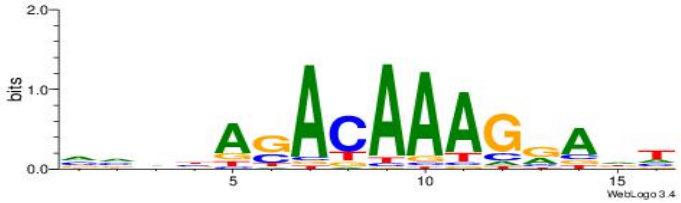


Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13

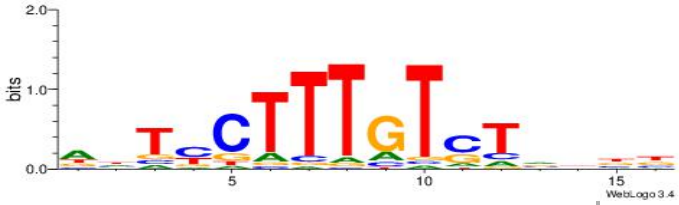
Similarity score: 0.0413218

Alignment:
HDTMCTTTGTSTVDBB
TGMYCTTTGBCCK---

Original motif
Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB

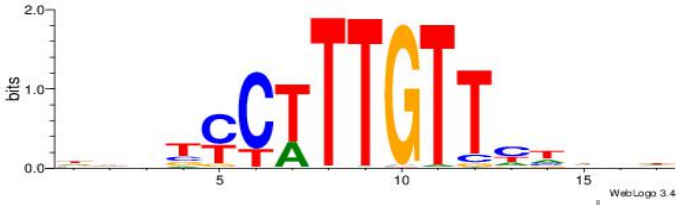


Motif ID: UP00030
Motif name: Sox11_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0421105

Alignment:
HHBTMCTTTGTTMDDVH
-TGMYCTTTGBCCK---

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



Motif ID:	UP00086
Motif name:	Irf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0442004

Alignment:

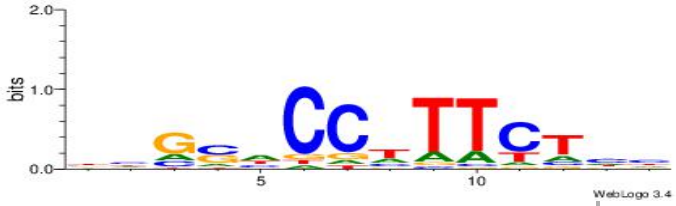
```
DDAGAADGGDSCDV
RGGBCAAAGKYCA-
```

Original motif

Consensus sequence: DDAGAADGGDSCDV

Reverse complement motif

Consensus sequence: BHGSDCCDTTCTHH



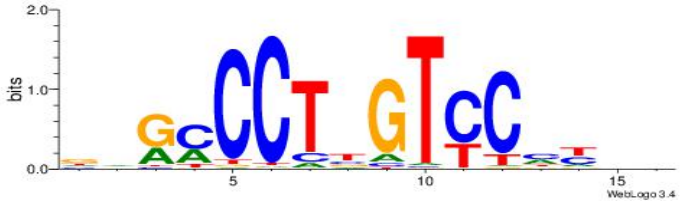
Motif ID:	UP00082
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	13
Similarity score:	0.0446884

Alignment:

```
VHMDGGACVAGGRCDH
---RGGBCAAAGKYCA
```

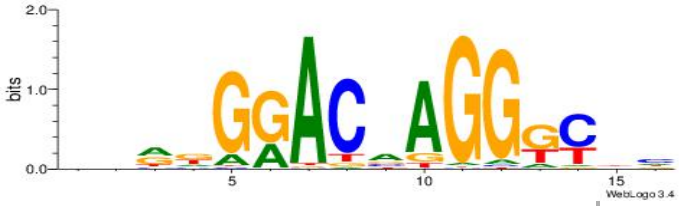
Original motif

Consensus sequence: DDGMCCTBGTCCHYHV



Reverse complement motif

Consensus sequence: VHMDGGACVAGGRCDH



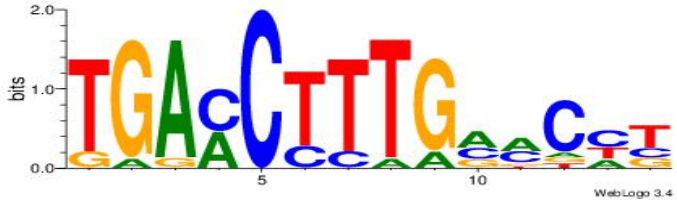
Dataset #: 3 Motif ID: 52 Motif name: NR2F1

Original motif

Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif

Consensus sequence: AKGYYCAAAGRTCA



Best Matches for Motif ID 52 (Highest to Lowest)

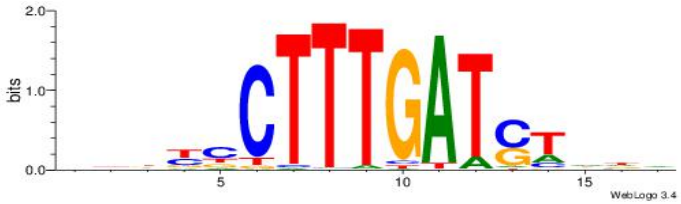
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0452364

Alignment:

```
DDDYCCTTTGATSTDDV
-TGAMCTTTGMMCYT--
```

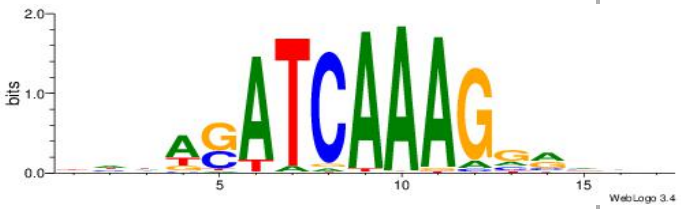
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD



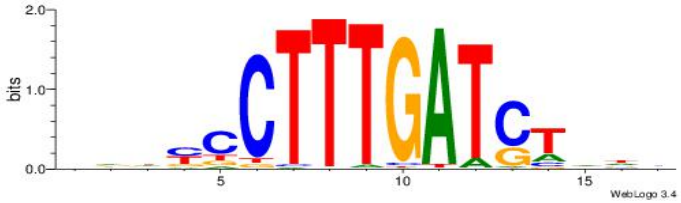
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0453449

Alignment:

```
VDDAGATCAAAGGKDDD
--AKGYYCAAAGRTCA-
```

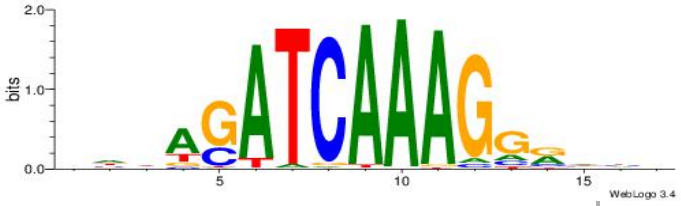
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD

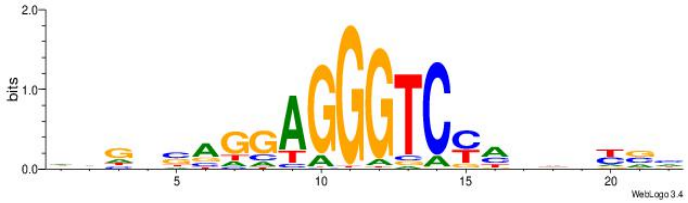


Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

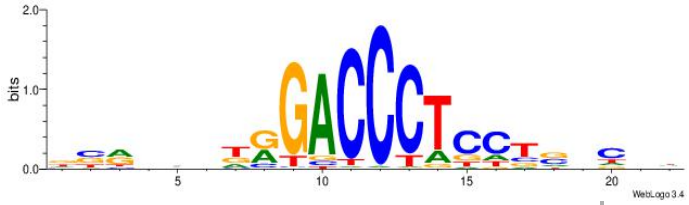
Number of overlap: 14
Similarity score: 0.0461358

Alignment:
DVMHHDHKGACCCTCCTSVCBH
-------TGAMCTTTGMMCYT-

Original motif
Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



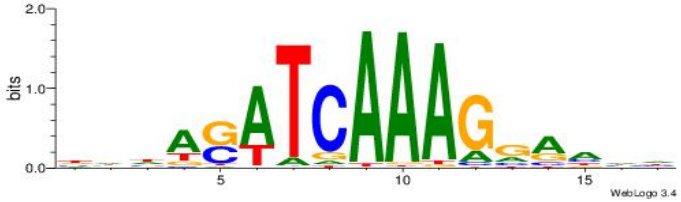
Motif ID: UP00054
Motif name: Tcf7_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 14
Similarity score: 0.0461768

Alignment:
BHHASATCAAAGGAHHH
--AKGYYCAAAGRTCA-

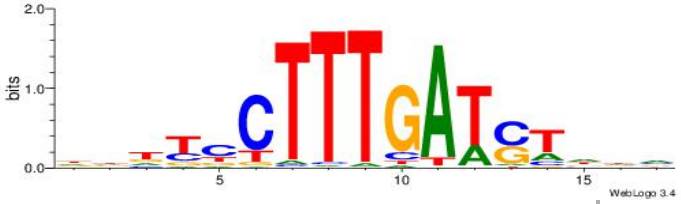
Original motif

Reverse complement motif

Consensus sequence: BHHASATCAAAGGAHHH



Consensus sequence: HHHTCCTTTGATSTHHV



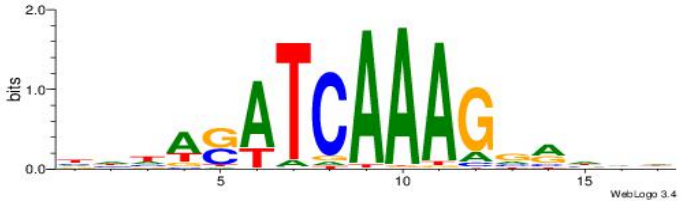
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0473628

Alignment:

```
HHHASATCAAAGVRHHH
--AKGYYCAAAGRTCA-
```

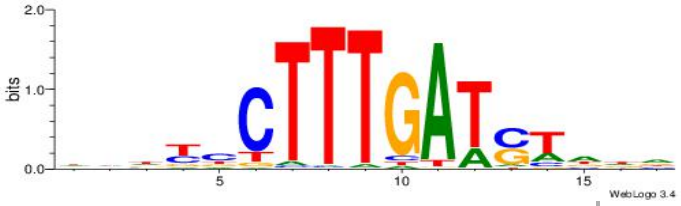
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

Consensus sequence: HHHKVCTTTGATSTHHH



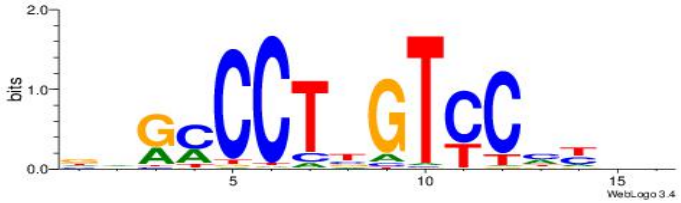
Motif ID:	UP00082
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0480188

Alignment:

```
DDGMCCTBGTCCHYHV
TGAMCTTTGMMCYT--
```

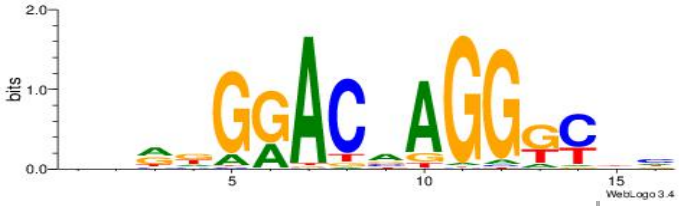
Original motif

Consensus sequence: DDGMCCTBGTCCHYHV



Reverse complement motif

Consensus sequence: VHMDGGACVAGGRCDH

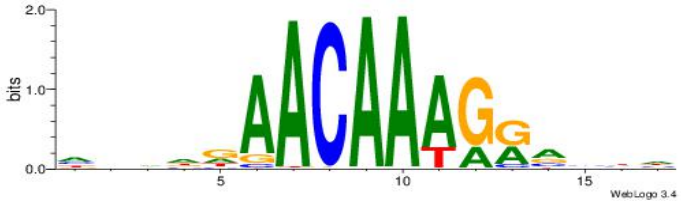


Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

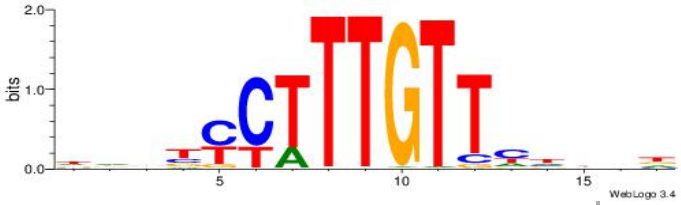
Number of overlap: 14
Similarity score: 0.0495447

Alignment:
HHBBMCTTTGTTHDDBH
-TGAMCTTTGMMCYT--

Original motif
Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif
Consensus sequence: HHBBMCTTTGTTHDDBH



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: Backward
Position number: 3
Number of overlap: 14
Similarity score: 0.0499033

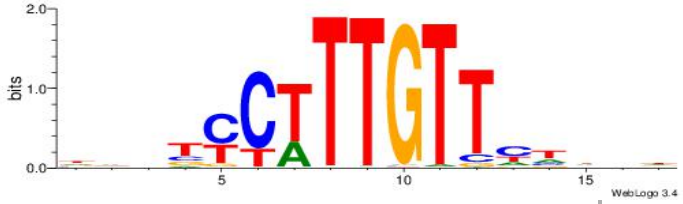
Alignment:
HHBTMCTTTGTTMDDVH
-TGAMCTTTGMMCYT--

Original motif

Reverse complement motif

Consensus sequence: HBDDRAACAAAGRABHH

Consensus sequence: HHBTMCTTTGTTMDDVH



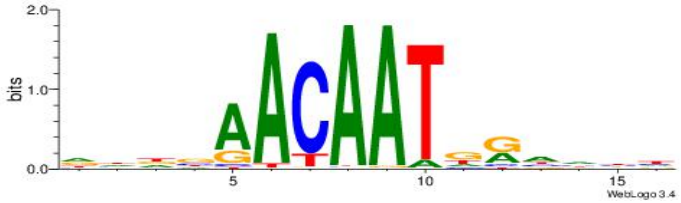
Motif ID:	UP00023
Motif name:	Sox30_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0511534

Alignment:

```
DHDBAACAATDRHHHH
--TGAMCTTTGMMCYT
```

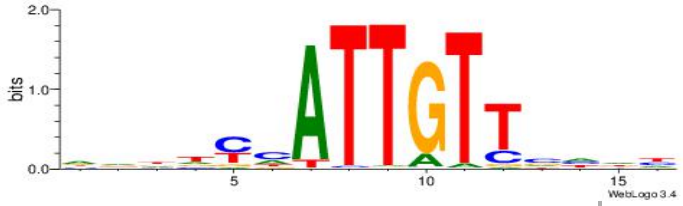
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD



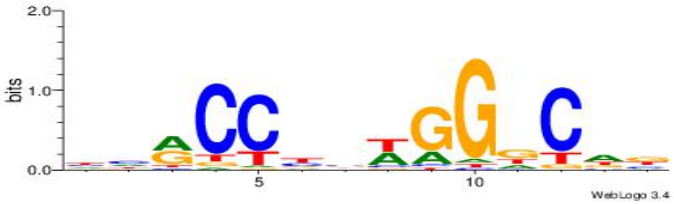
Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0516973

Alignment:

```
BDGHCCWBVGGKDH
AKGYYCAAAGRTCA
```

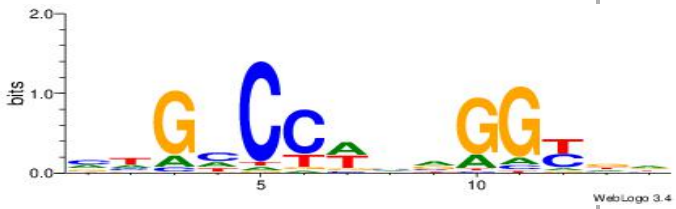
Original motif

Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif

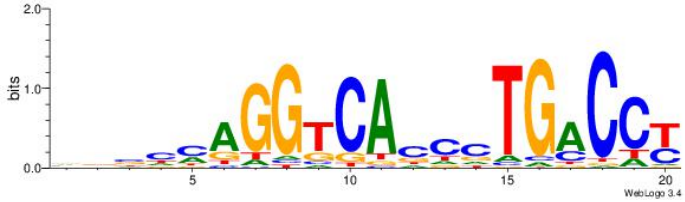
Consensus sequence: BDGHCCWBVGGKDH



Dataset #: 3 Motif ID: 53 Motif name: ESR1

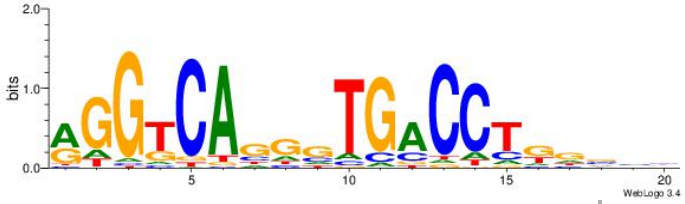
Original motif

Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif

Consensus sequence: MGGTCAGGGTGACCTRDBHV



Best Matches for Motif ID 53 (Highest to Lowest)

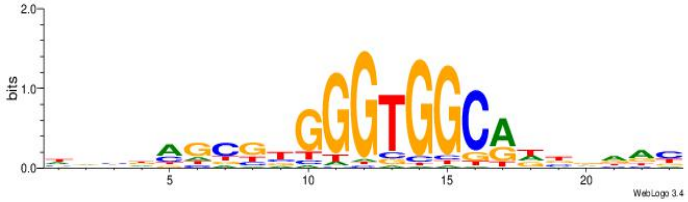
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.0658405

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
VDBHMAGGTCACCCTGACCY---
```

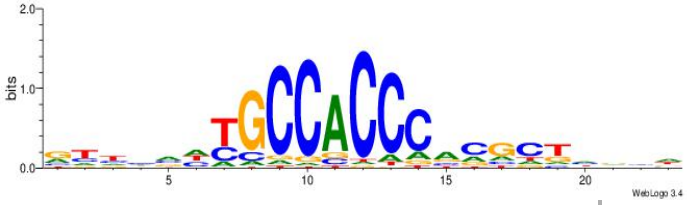
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement

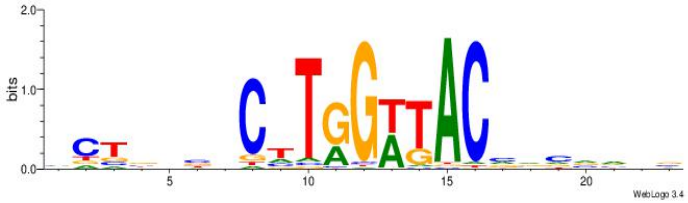
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0689748

Alignment:

```
VCTBHBVCTTGGWTACVVVVVDB
VDBHMAGGTCACCCTGACCY---
```

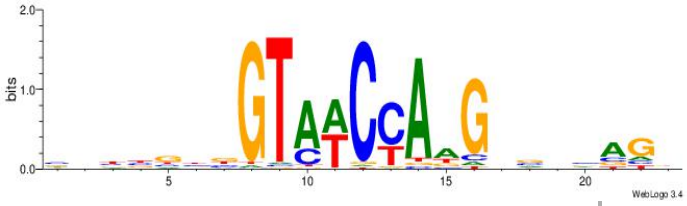
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



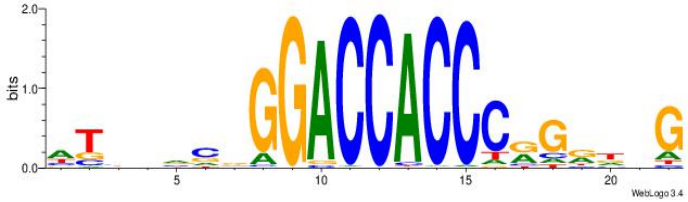
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0701247

Alignment:

```
CBDMCMGGGTGGTCCHVBVBAH
MGGTCAGGGTGACCTRDBHV--
```

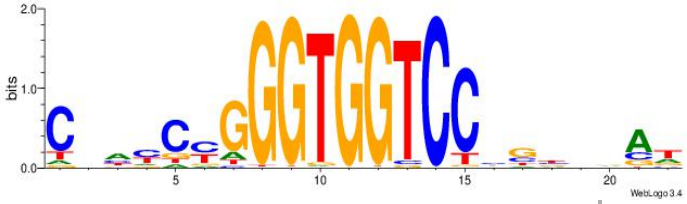
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



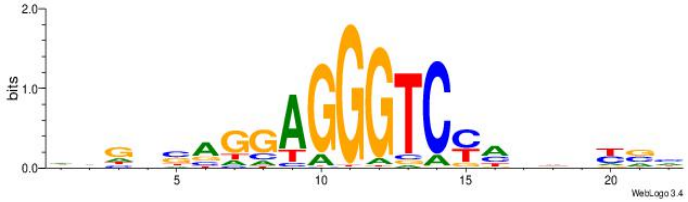
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0711267

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
MGGTCAGGGTGACCTRDBHV--
```

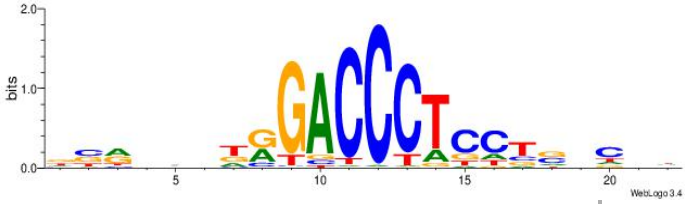
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



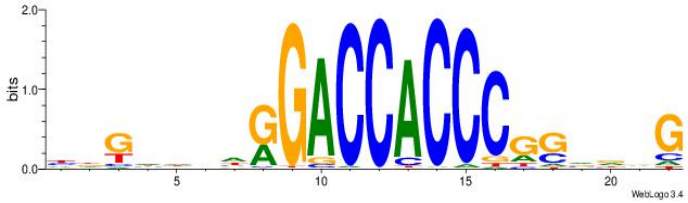
Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0742427

Alignment:

```
CVHBSCGGGTGGTCMHVHHCDH
-VDBHMAGGTCACCCTGACCY-
```

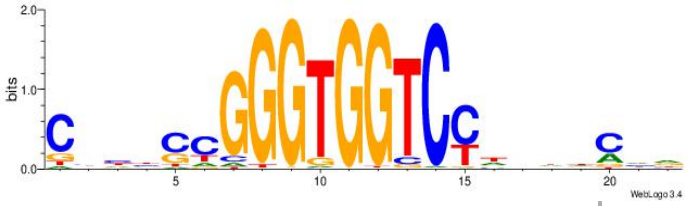
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward

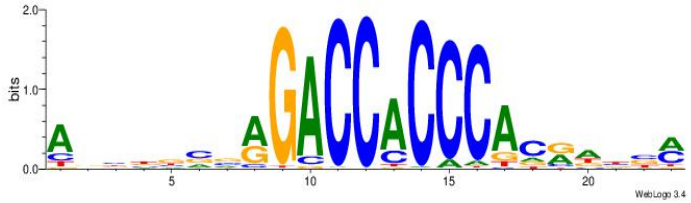
Position number:	3
Number of overlap:	20
Similarity score:	0.0747053

Alignment:

```
ABBBBVVRGACCACCCACRDBBM
--VDBHMAGGTCACCCTGACCY-
```

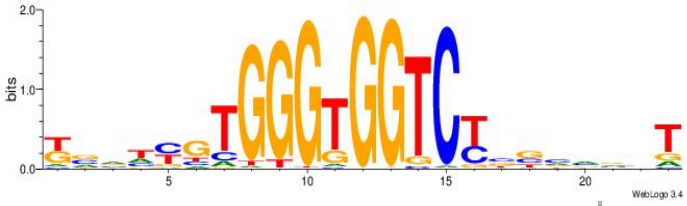
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



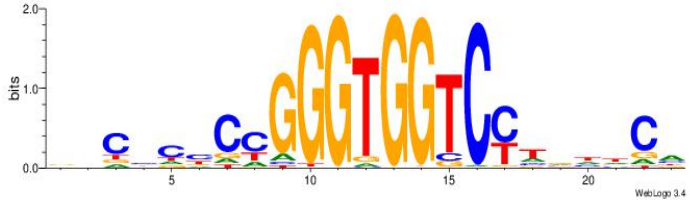
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	20
Similarity score:	0.0749165

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
---VDBHMAGGTCACCCTGACCY
```

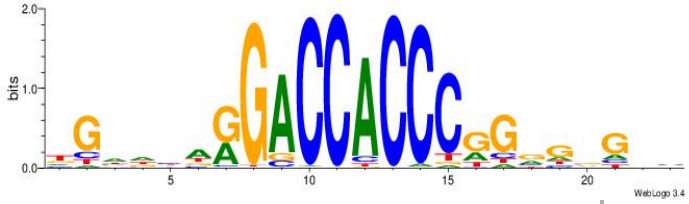
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



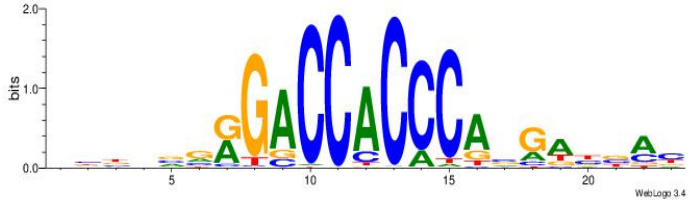
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0759307

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
-VDBHMAGGTCACCCTGACCY--
```

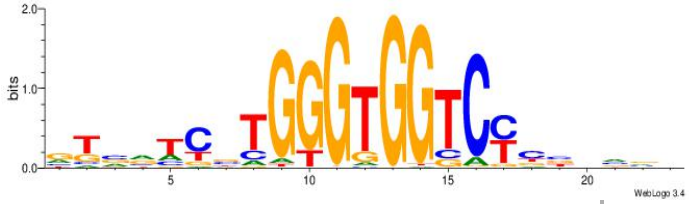
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



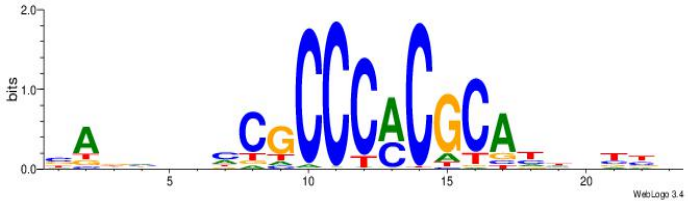
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0762689

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
-MGGTCAGGGTGACCTRDBHV--
```

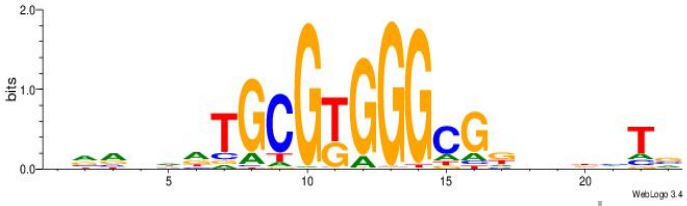
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward

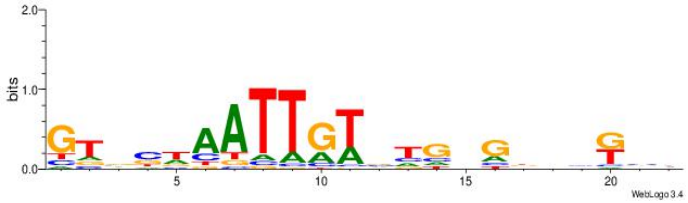
Position number:	1
Number of overlap:	20
Similarity score:	0.0780113

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
VDBHMAGGTCACCCTGACCY--
```

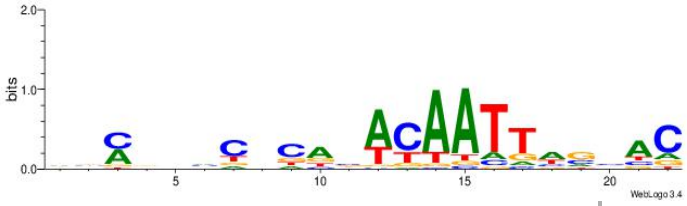
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

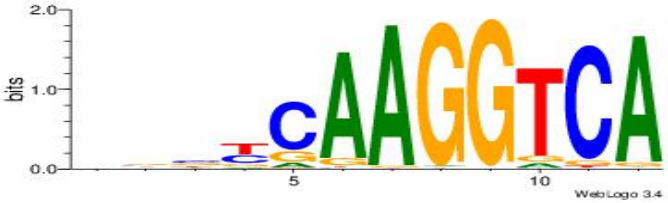
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



Dataset #: 3 Motif ID: 54 Motif name: Esrrb

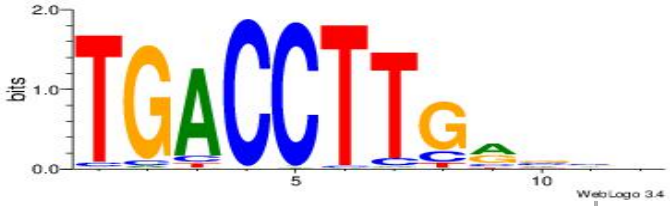
Original motif

Consensus sequence: VBBYCAAGGTCA



Reverse complement motif

Consensus sequence: TGACCTTGMBBB



Best Matches for Motif ID 54 (Highest to Lowest)

Motif ID:	UP00079
Motif name:	Esrra_primary

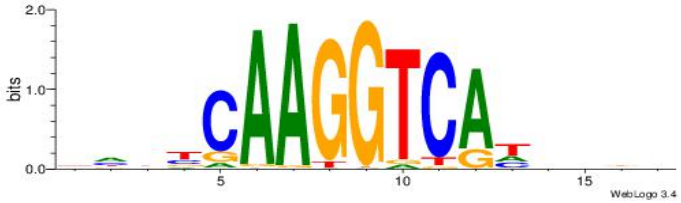
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0

Alignment:

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

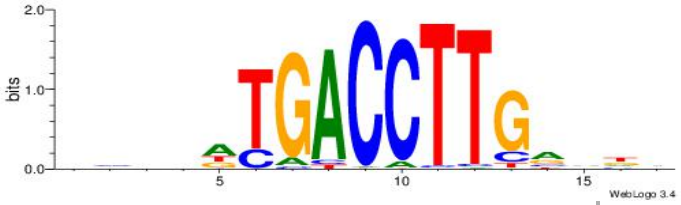
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

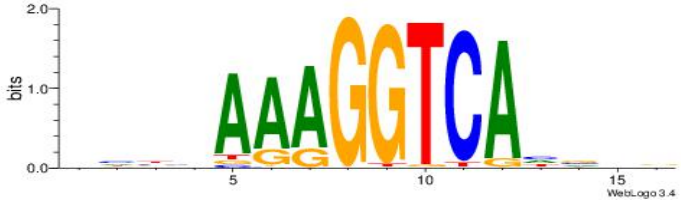
Consensus sequence: HHBVHTGACCTTGVDHD



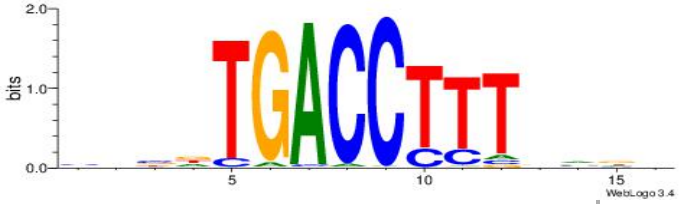
Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0205471

Alignment:
DHBHAAAGGTCAHVHB
VBBYCAAGGTCA----

Original motif
Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif
Consensus sequence: BHVDTGACCTTTDVDD

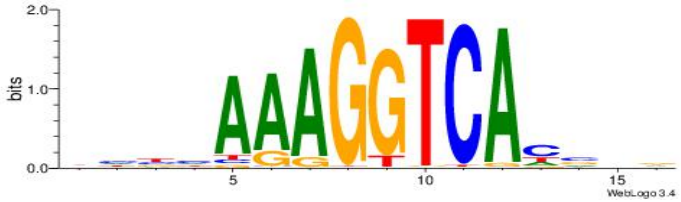


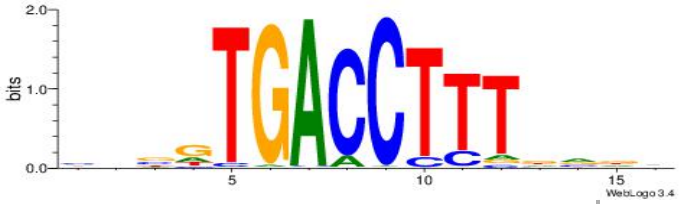
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0214372

Alignment:
DHBHAAAGGTCACVHD
VBBYCAAGGTCA----

Original motif
Consensus sequence: DHBHAAAGGTCACVHD

Reverse complement motif
Consensus sequence: HHVGTGACCTTTDVDD





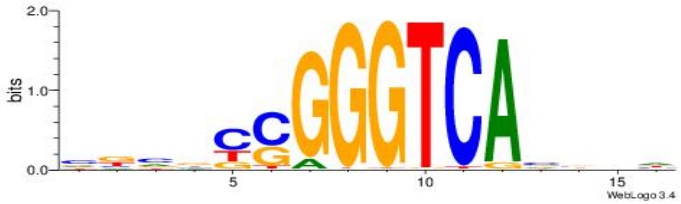
Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0430759

Alignment:

```
HVBVTGACCCSGBVBV
----TGACCTTGMBBB
```

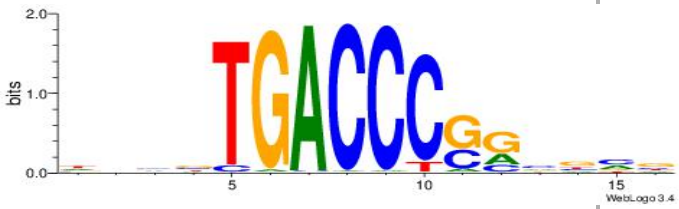
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



Motif ID:	UP00066

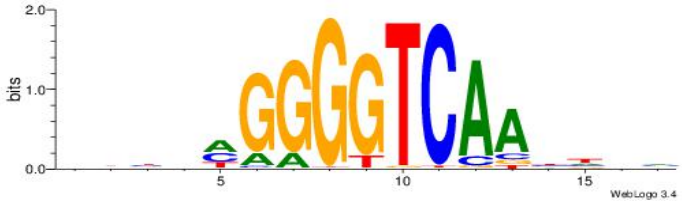
Motif name:	Hnf4a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0451776

Alignment:

```
BDBVMGGGGTCAABHDV
VBBYCAAGGTCA-----
```

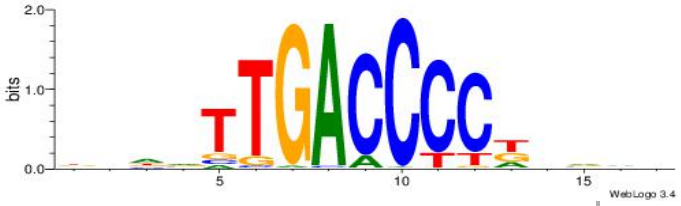
Original motif

Consensus sequence: BDBVMGGGGTCAABHDV



Reverse complement motif

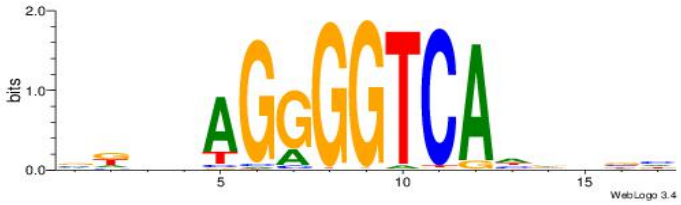
Consensus sequence: BHHVTTGACCCCYVVDB



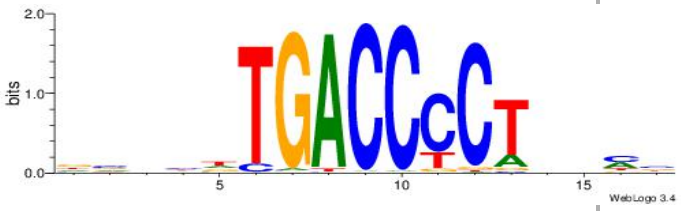
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.0482496

Alignment:
VKBBAGGGGTCAHDBBH
VBBYCAAGGTCA-----

Original motif
Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif
Consensus sequence: DBBHHTGACCCCTBBYV

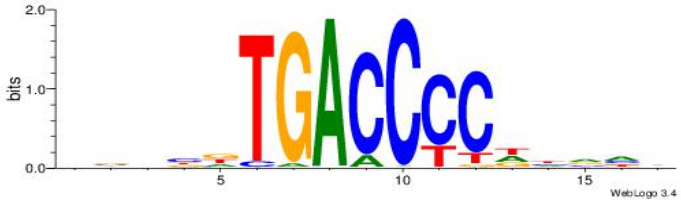


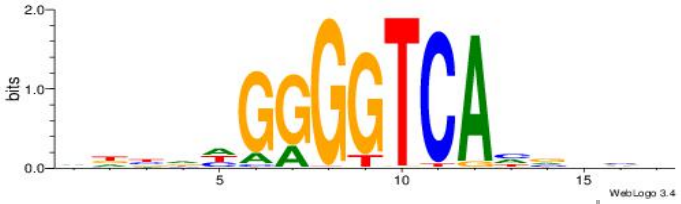
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0499025

Alignment:
VHBHDGGGGTCAHBHBD
-----TGACCTTGMBBB

Original motif
Consensus sequence: DBHBDTGACCCCDHVHB

Reverse complement motif
Consensus sequence: VHBHDGGGGTCAHBHBD





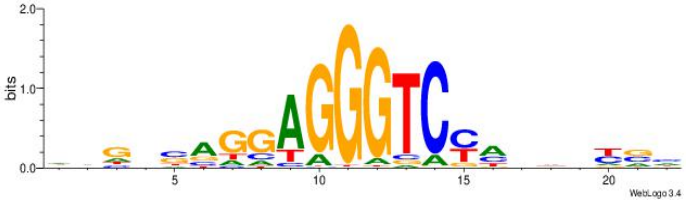
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	12
Similarity score:	0.0525354

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
-------TGACCTTGMBBB---
```

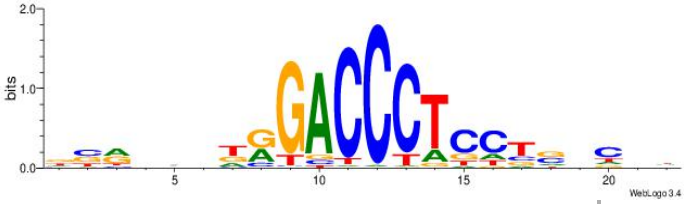
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Motif ID:	UP00066

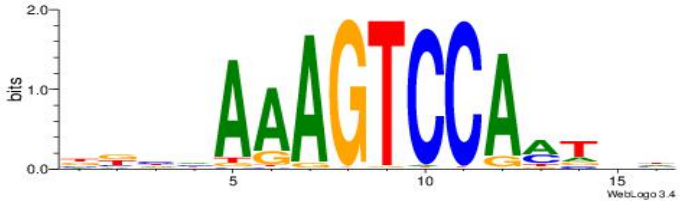
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0580553

Alignment:

```
HHAYTGGACTTTHDBV
----TGACCTTGMBBB
```

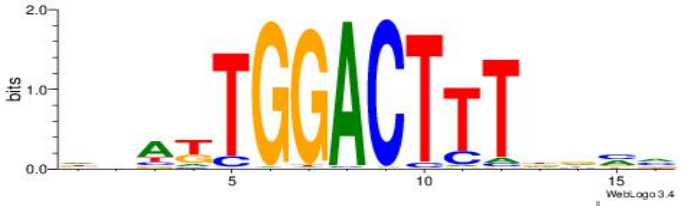
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV



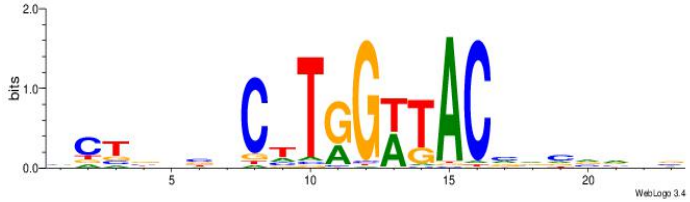
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0609738

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB
--------TGACCTTGMBBB---
```

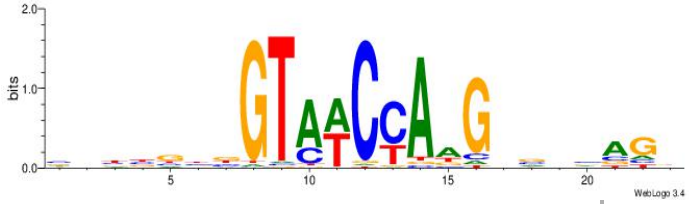
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



Dataset #: 3 Motif ID: 55 Motif name: ZEB1

Original motif

Consensus sequence: CACCTD

Reverse complement motif

Consensus sequence: HAGGTG

Best Matches for Motif ID 55 (Highest to Lowest)

Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement

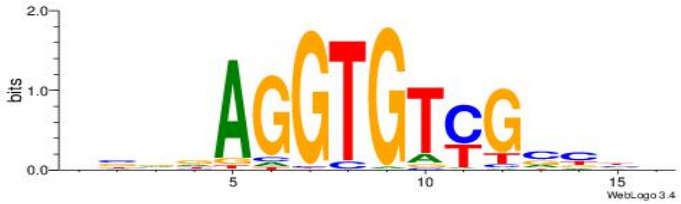
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0

Alignment:

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

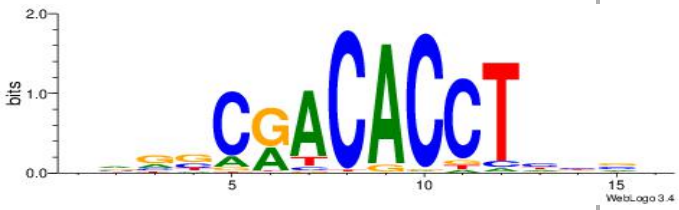
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV

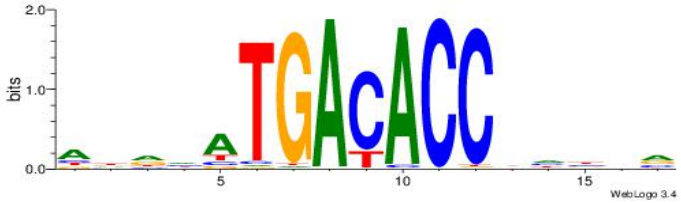


Motif ID:	UP00199
Motif name:	Six4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.00433068

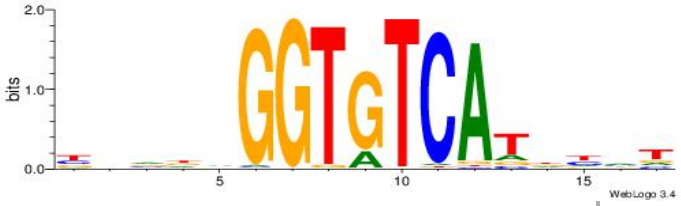
Alignment:

BBVHVGGTGTCATHDDT
---HAGGTG--------

Original motif
Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif
Consensus sequence: BBVHVGGTGTCATHDDT

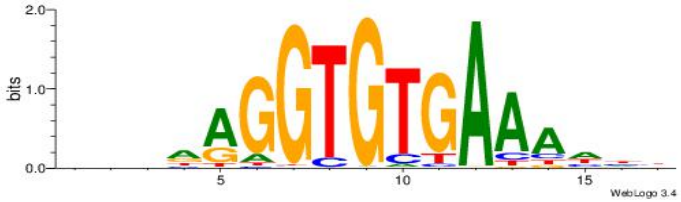


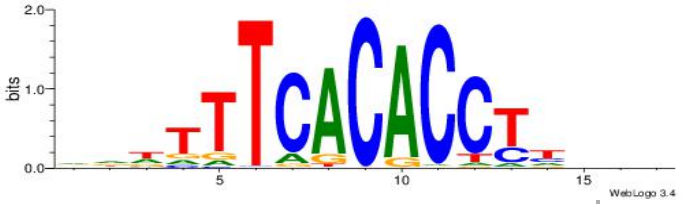
Motif ID:	UP00068
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.00524081

Alignment:
HHHTTTCACACCTDHBV
--------CACCTD---

Original motif
Consensus sequence: BVHDAGGTGTGAAAHHH

Reverse complement motif
Consensus sequence: HHHTTTCACACCTDHBV





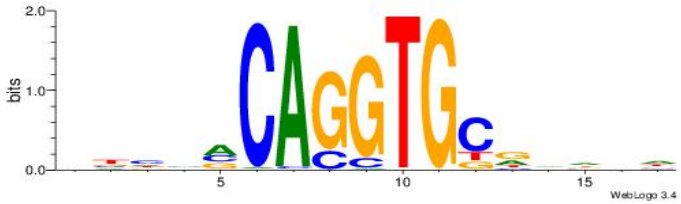
Motif ID:	UP00046
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.00911301

Alignment:

```
DHDBHGCACCTGBDDVB
------CACCTD-----
```

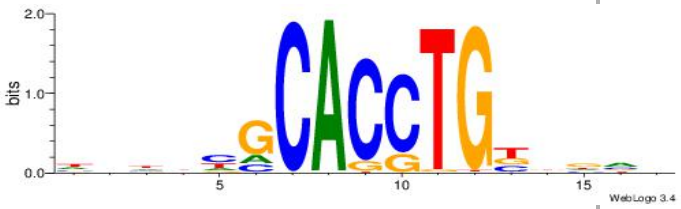
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID:	UP00047

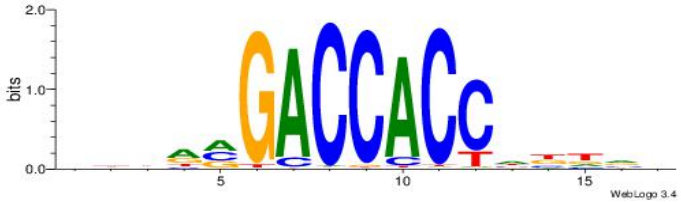
Motif name:	Zbtb7b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.0233556

Alignment:

```
BDDRVGACCACCHBDVB
--------CACCTD---
```

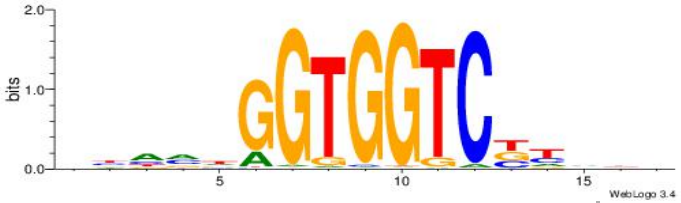
Original motif

Consensus sequence: BDDRVGACCACCHBDVB



Reverse complement motif

Consensus sequence: BBDVHGGTGGTCBKDDB

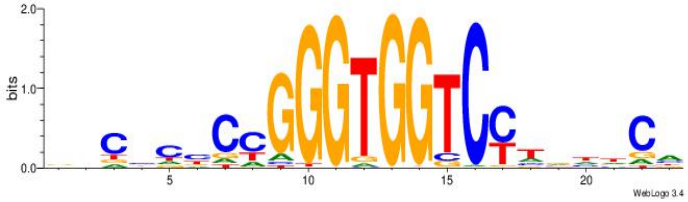


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11
Number of overlap:	6

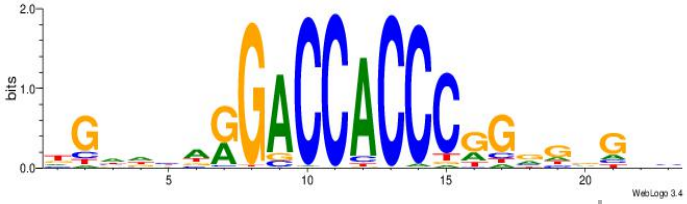
Similarity score: 0.0233928

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

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

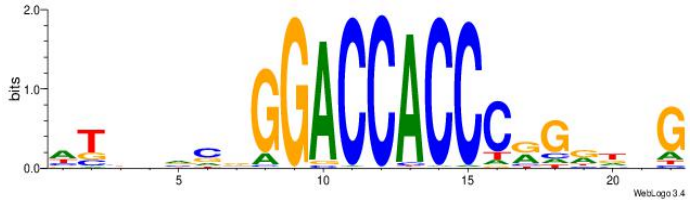


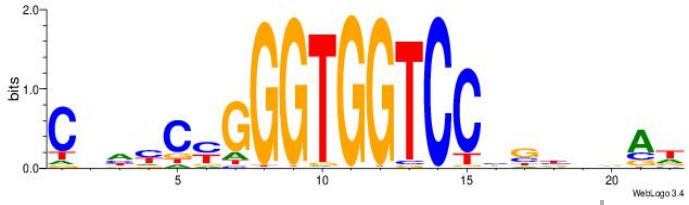
Motif ID: UP00539
Motif name: Gli2_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.0254338

Alignment:
HTBVVVDGGACCACCCRGRDBG
-----------CACCTD-----

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH





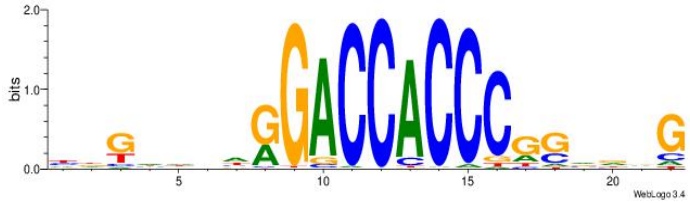
Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.0290143

Alignment:

```
HDGHHBHRGACCACCCGSVDVG
-----------CACCTD-----
```

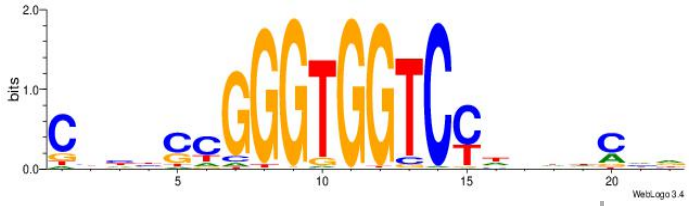
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



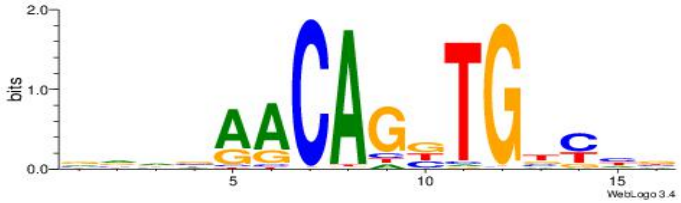
Motif ID:	UP00036
Motif name:	Myf6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.0309673

Alignment:

```
VVDBAACAGBTGBYHB
------HAGGTG----
```

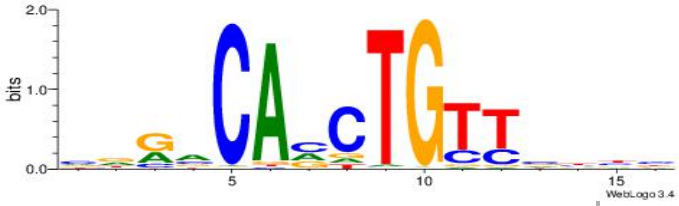
Original motif

Consensus sequence: VVDBAACAGBTGBYHB



Reverse complement motif

Consensus sequence: BDKVCABCTGTTBDBV

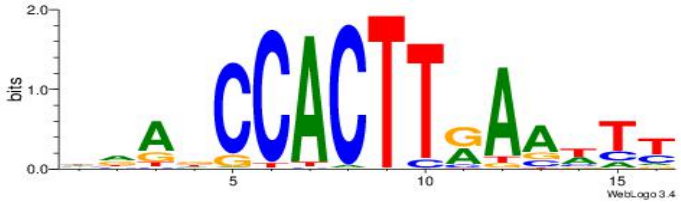


Motif ID:	UP00249
Motif name:	Nkx2-5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

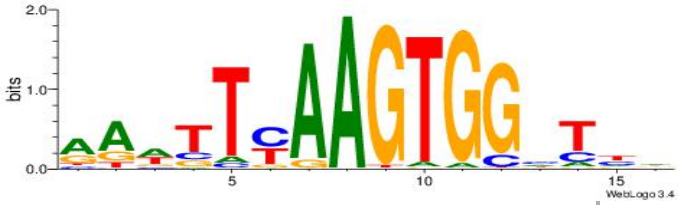
Number of overlap: 6
Similarity score: 0.031502

Alignment:
HDADCCACTTRAAWTT
-----CACCTD-----

Original motif
Consensus sequence: HDADCCACTTRAAWTT



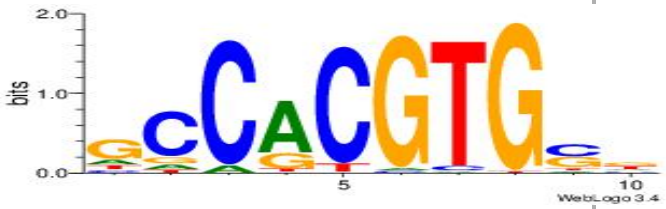
Reverse complement motif
Consensus sequence: AAWTTMAAGTGGHTDH



Dataset #: 3 Motif ID: 56 Motif name: Mycn

Original motif
Consensus sequence: HSCACGTGGC

Reverse complement motif
Consensus sequence: GCCACGTGSD



Best Matches for Motif ID 56 (Highest to Lowest)

Motif ID: UP00060
Motif name: Max_primary
Species: Mus musculus

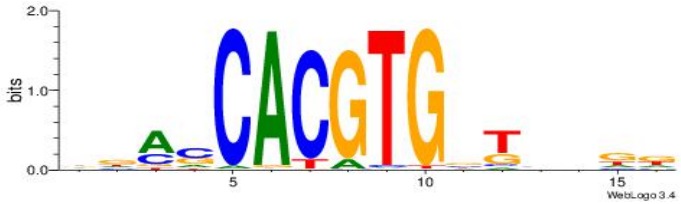
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0

Alignment:

```
DDASCACGTGBTBVDD
--HSCACGTGGC----
```

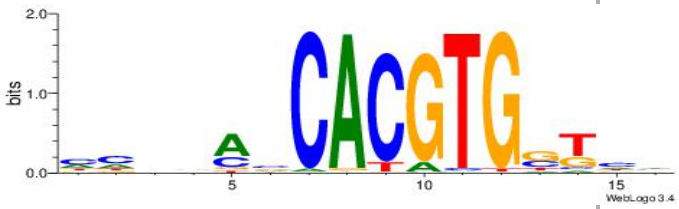
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

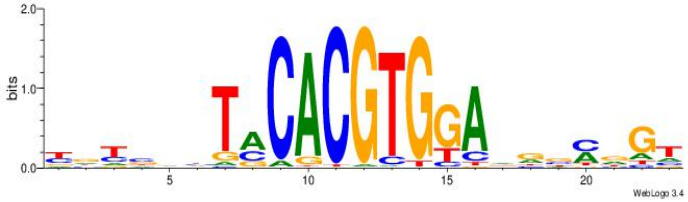
Consensus sequence: HHVBABCACGTGSTHD



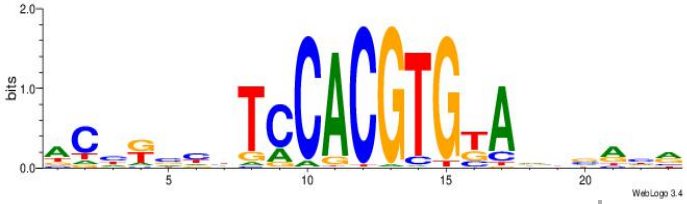
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.00783793

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
-------GCCACGTGSD------

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

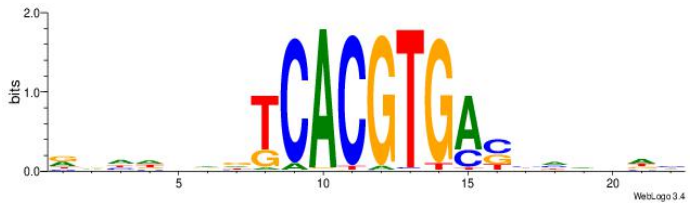


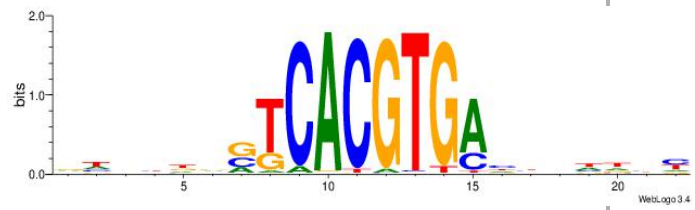
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.0132858

Alignment:
DDHBHBSTCACGTGAHBBDHHM
------GCCACGTGSD------

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH

Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM





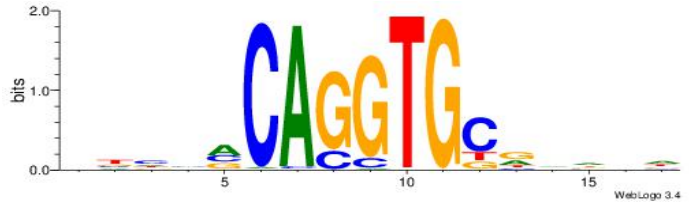
Motif ID:	UP00046
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0227933

Alignment:

```
VBHHVCAGGTGCDVDHD
---GCCACGTGSD----
```

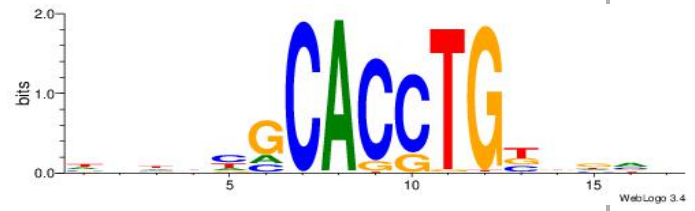
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID:	UP00060

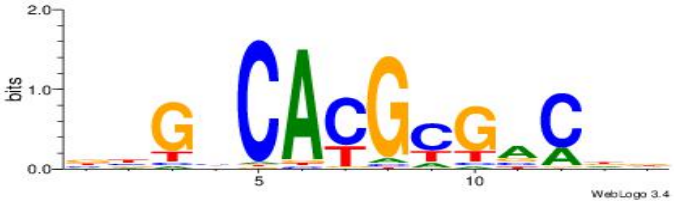
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0257011

Alignment:

```
BBGHCACGCGACDD
--HSCACGTGGC--
```

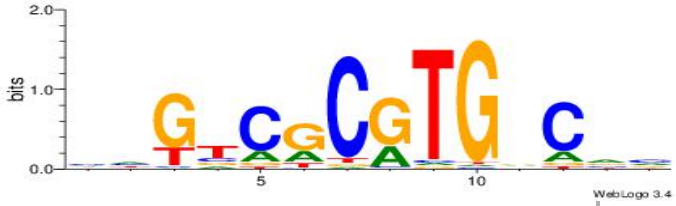
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB

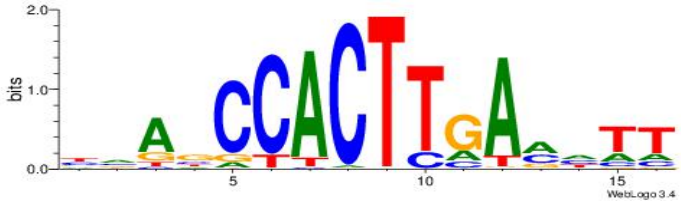


Motif ID:	UP00165
Motif name:	Titf1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10

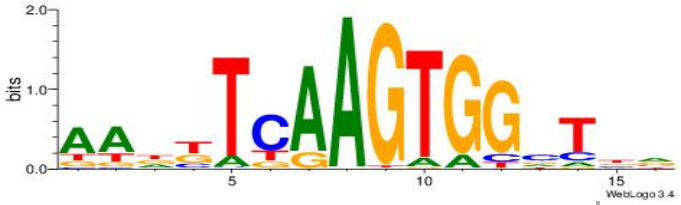
Similarity score: 0.0344833

Alignment:
BVABCCACTTGAMHTT
---GCCACGTGSD---

Original motif
Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV

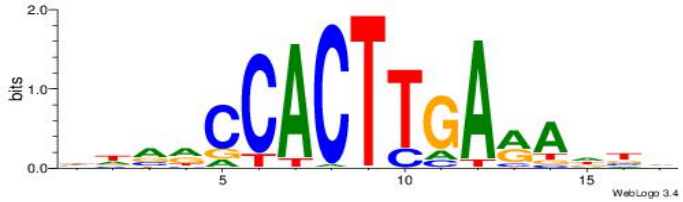


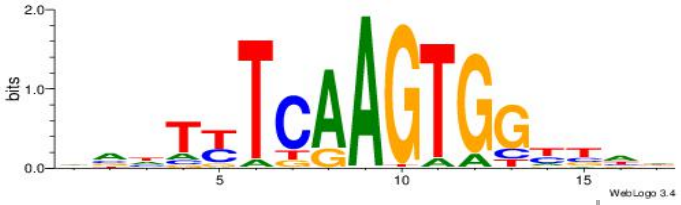
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.035228

Alignment:
HDVRCCACTTGARADBD
---GCCACGTGSD----

Original motif
Consensus sequence: HDVRCCACTTGARADBD

Reverse complement motif
Consensus sequence: DVDTKTCAAGTGGKBDH





Motif ID:	UP00084
Motif name:	Gmeb1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0358581

Alignment:

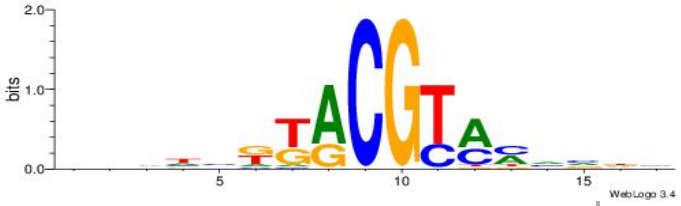
```
BVVDVRYACGTRYVBHB
----GCCACGTGSD---
```

Original motif

Consensus sequence: BHBBKKACGTMMVDBVB

Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB



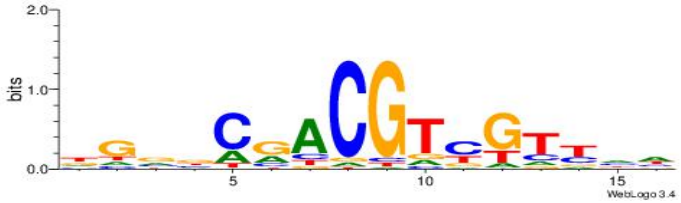
Motif ID:	UP00084
Motif name:	Gmeb1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.03725

Alignment:

```
HHMACKACGTMGBVCD
---HSCACGTGGC---
```

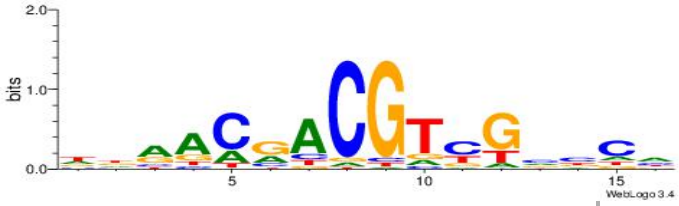
Original motif

Consensus sequence: DGVBCRACGTYGTYHH



Reverse complement motif

Consensus sequence: HHMACKACGTMGBVCD

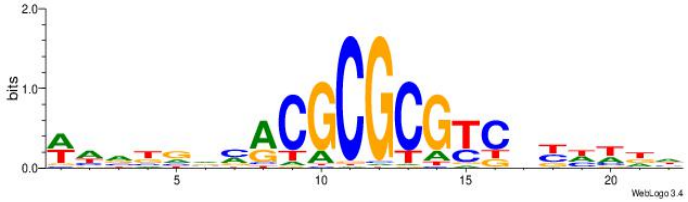


Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7

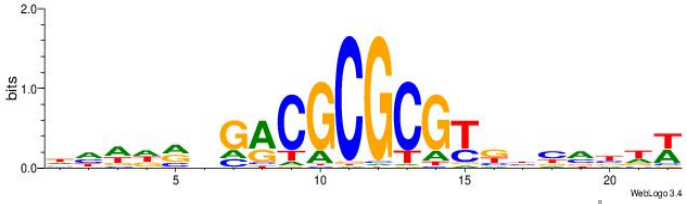
Number of overlap: 10
Similarity score: 0.0383187

Alignment:
WHVBVVMACGCGCGTCDYHWDH
------HSCACGTGGC------

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH

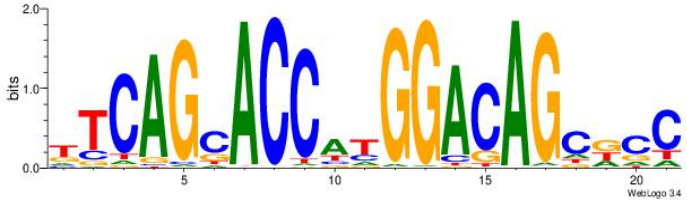


Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

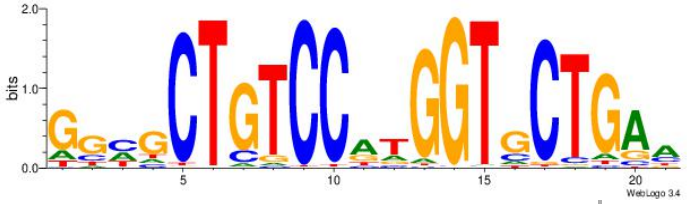


Dataset #: 3 Motif ID: 57 Motif name: REST

Original motif
Consensus sequence: TTCAGCACCATGGACAGCKCC



Reverse complement motif
Consensus sequence: GGYGCTGTCCATGGTGCTGAA



Best Matches for Motif ID 57 (Highest to Lowest)

Motif ID: UP00538
Motif name: Gli1_v015681_primary
Species: Mus musculus

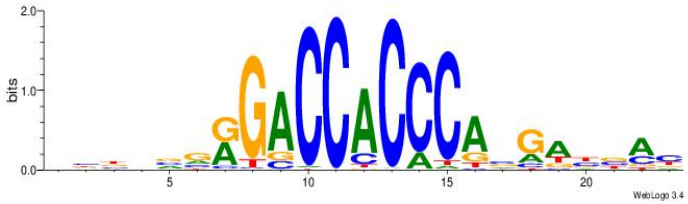
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	21
Similarity score:	0.0699178

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
--TTCAGCACCATGGACAGCKCC
```

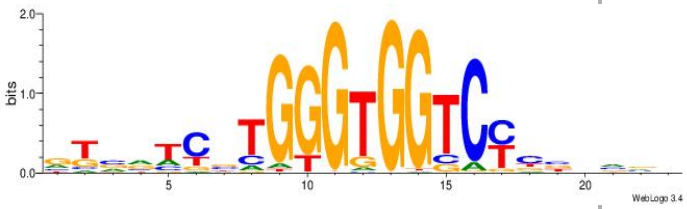
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

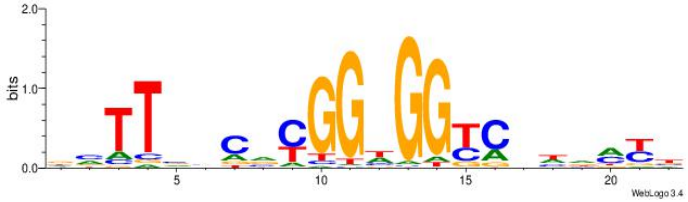
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



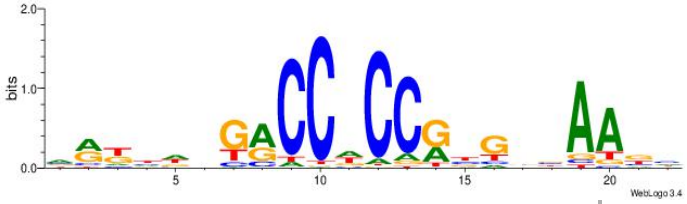
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	21
Similarity score:	0.0734685

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
GGYGCTGTCCATGGTGCTGAA-

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

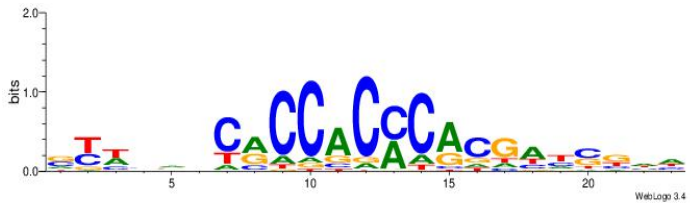


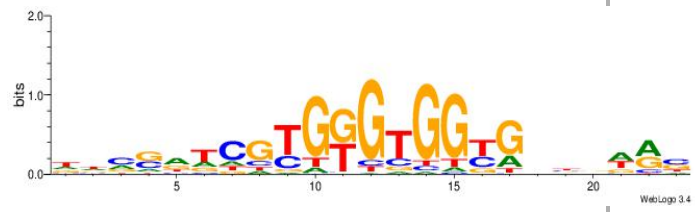
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	21
Similarity score:	0.0740652

Alignment:
VYWVVHCRCCACMCACGAHSBHH
-TTCAGCACCATGGACAGCKCC-

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





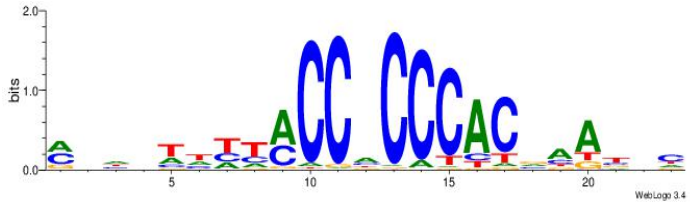
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0750152

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
--TTCAGCACCATGGACAGCKCC
```

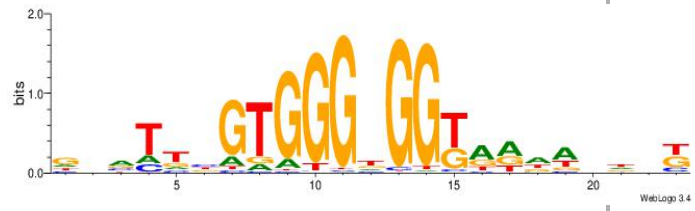
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID: UP00538

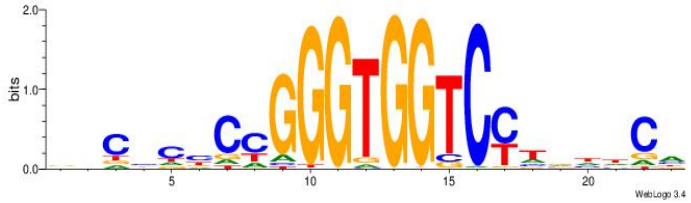
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	21
Similarity score:	0.0751449

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
GGYGCTGTCCATGGTGCTGAA--
```

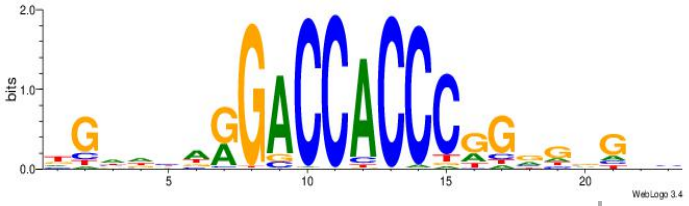
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

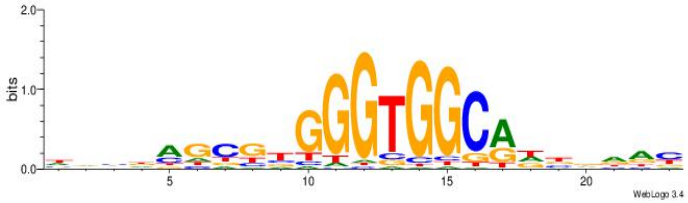


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	21

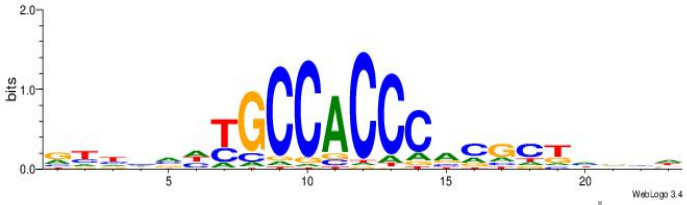
Similarity score: 0.075832

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-TTCAGCACCATGGACAGCKCC-

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

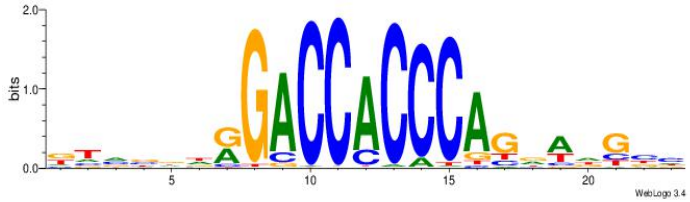


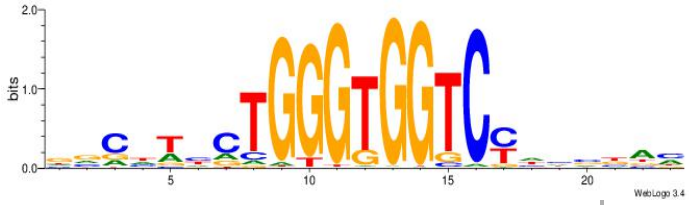
Motif ID: UP00539
Motif name: Gli2_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 21
Similarity score: 0.0773446

Alignment:
DTVBDDRGACCACCCAGDWDGBH
--TTCAGCACCATGGACAGCKCC

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH

Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH





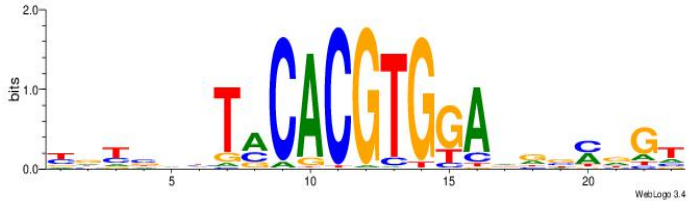
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	21
Similarity score:	0.0775367

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
--TTCAGCACCATGGACAGCKCC
```

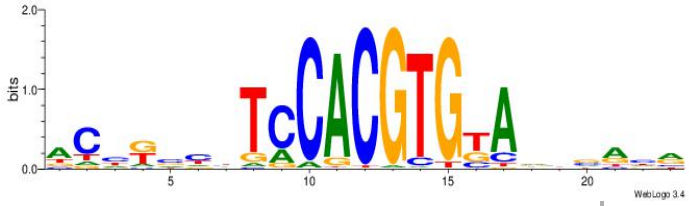
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00528

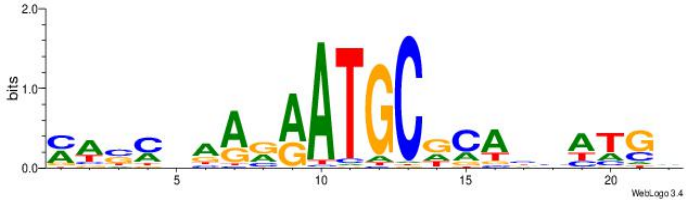
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.077977

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
-GGYGCTGTCCATGGTGCTGAA
```

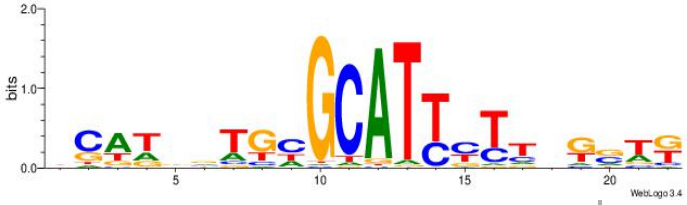
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

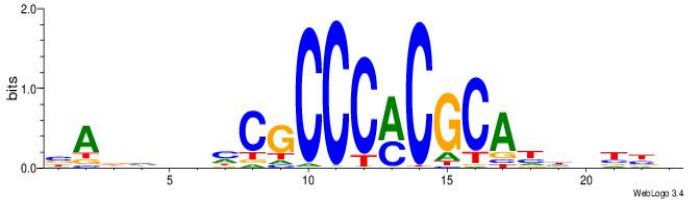
Consensus sequence: DCATDBTGHGCATKMTTBRSWR



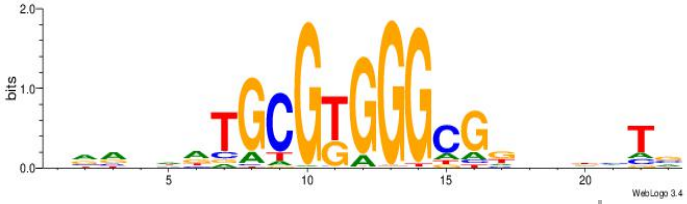
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0785969

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
--GGYGCTGTCCATGGTGCTGAA

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



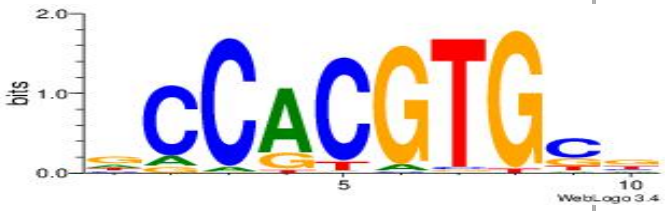
Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Dataset #: 3 Motif ID: 58 Motif name: Myc

Original motif
Consensus sequence: VGCACGTGGH

Reverse complement motif
Consensus sequence: DCCACGTGCV



Best Matches for Motif ID 58 (Highest to Lowest)

Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

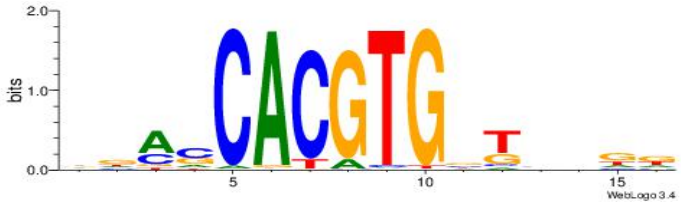
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0

Alignment:

```
DDASCACGTGBTBVDD
--VGCACGTGGH----
```

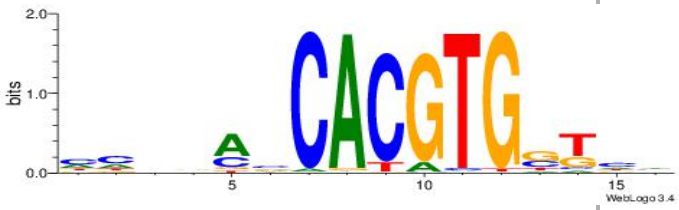
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD



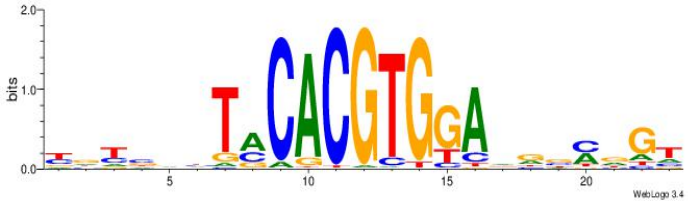
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	10
Similarity score:	0.00631885

Alignment:

ACHRBHDTCCACGTGYAHHBMHM
-------DCCACGTGCV------

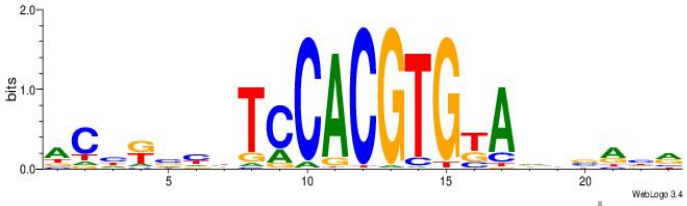
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.00821668

Alignment:

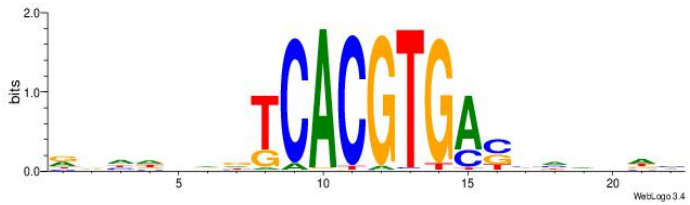
DDHBHBSTCACGTGAHBBDHHM
------DCCACGTGCV------

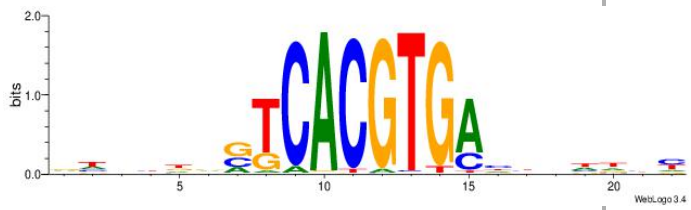
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH

Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM





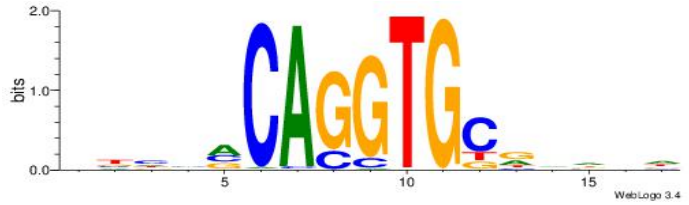
Motif ID:	UP00046
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0140005

Alignment:

```
DHDBHGCACCTGBDDVB
----VGCACGTGGH---
```

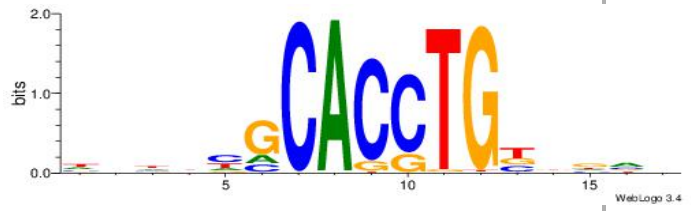
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



Motif ID:	UP00060

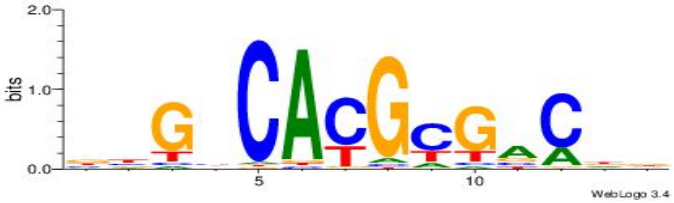
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0308912

Alignment:

```
BBGHCACGCGACDD
--VGCACGTGGH--
```

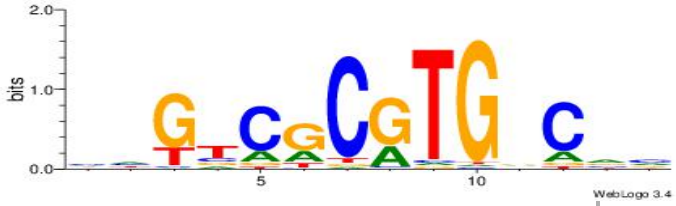
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB

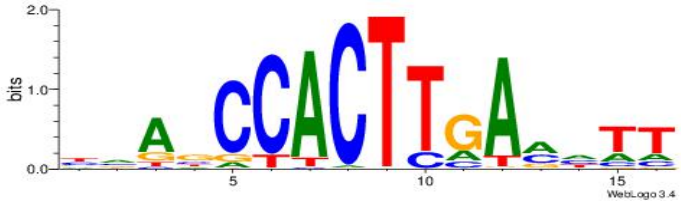


Motif ID:	UP00165
Motif name:	Titf1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10

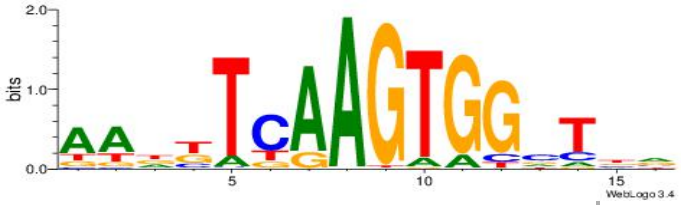
Similarity score: 0.0311723

Alignment:
BVABCCACTTGAMHTT
---DCCACGTGCV---

Original motif
Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV

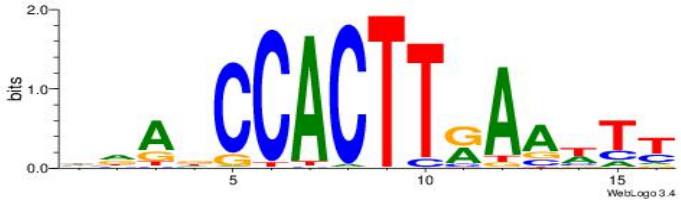


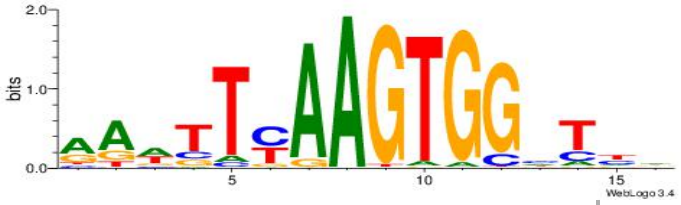
Motif ID:	UP00249
Motif name:	Nkx2-5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.031308

Alignment:
HDADCCACTTRAAWTT
---DCCACGTGCV---

Original motif
Consensus sequence: HDADCCACTTRAAWTT

Reverse complement motif
Consensus sequence: AAWTTMAAGTGGHTDH





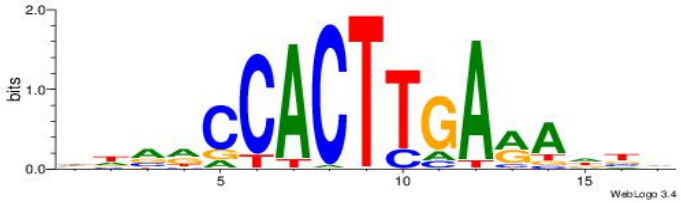
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0334845

Alignment:

```
HDVRCCACTTGARADBD
---DCCACGTGCV----
```

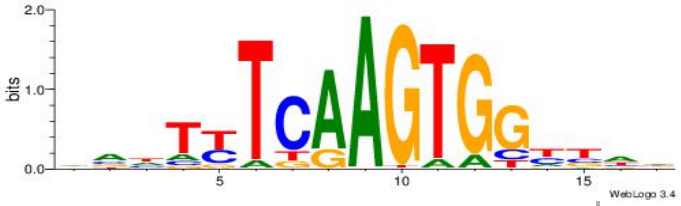
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH



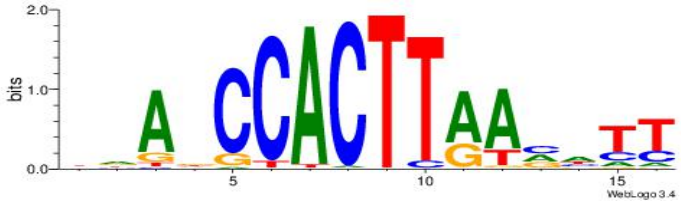
Motif ID:	UP00147
Motif name:	Nkx2-6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0345548

Alignment:

```
DDADCCACTTAAVHTT
---DCCACGTGCV---
```

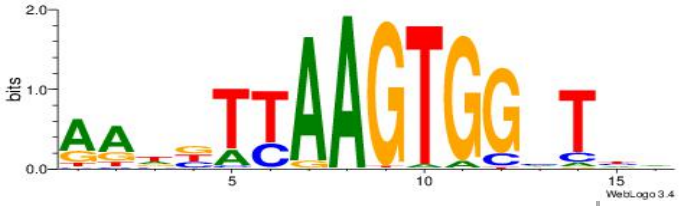
Original motif

Consensus sequence: DDADCCACTTAAVHTT



Reverse complement motif

Consensus sequence: AAHVTTAAGTGGHTDD

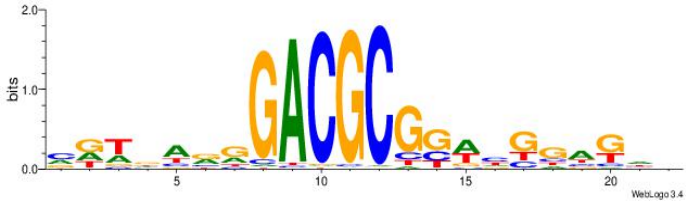


Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8

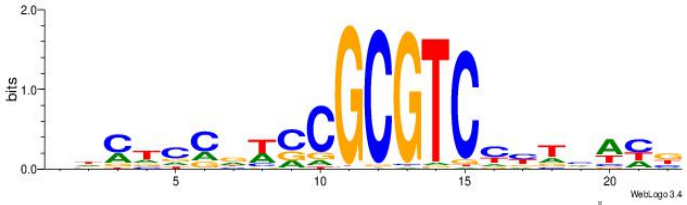
Number of overlap: 10
Similarity score: 0.0363818

Alignment:
VDWDARRGACGCGGWHGGAKHV
-----VGCACGTGGH-------

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV

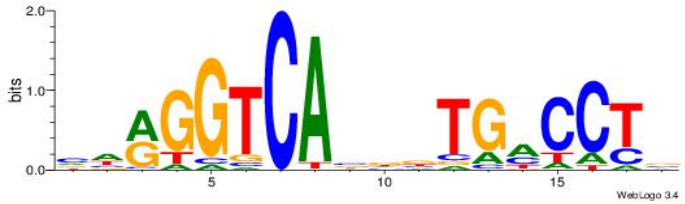


Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

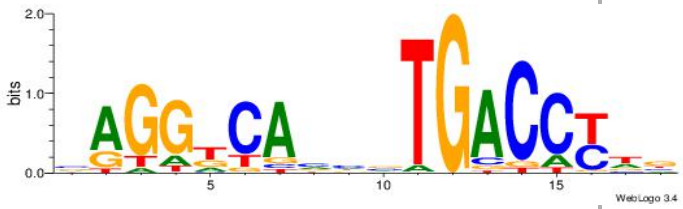


Dataset #: 3 Motif ID: 59 Motif name: ESR2

Original motif
Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif
Consensus sequence: BAGGYCABHBTGACCKHV



Best Matches for Motif ID 59 (Highest to Lowest)

Motif ID: UP00034
Motif name: Sox7_secondary
Species: Mus musculus

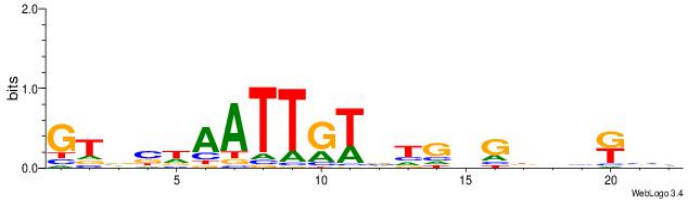
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0443894

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
---VHRGGTCABDBTGMCCTB-
```

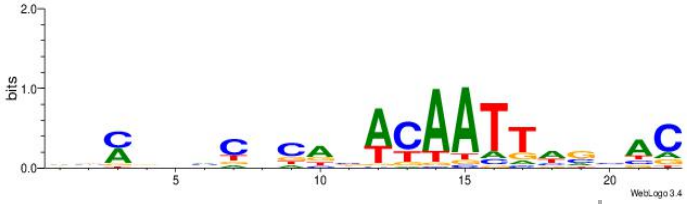
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

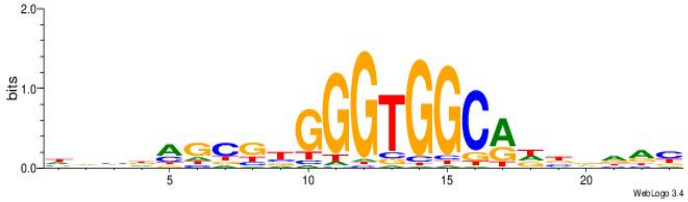
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



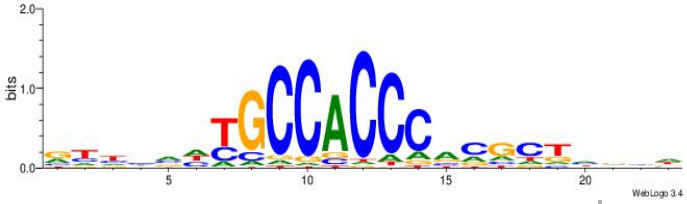
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.049219

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
---VHRGGTCABDBTGMCCTB--

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

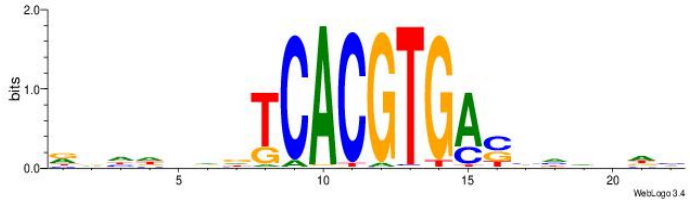


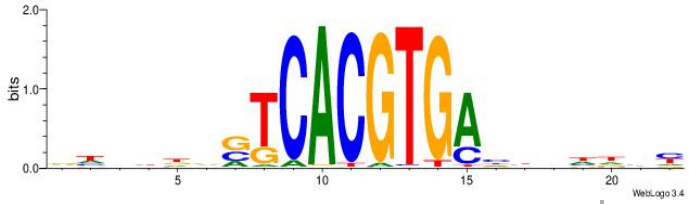
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0509182

Alignment:
DDHBHBSTCACGTGAHBBDHHM
--VHRGGTCABDBTGMCCTB--

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH

Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM





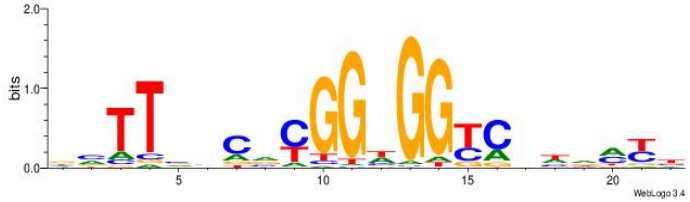
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0527075

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
-BAGGYCABHBTGACCKHV---
```

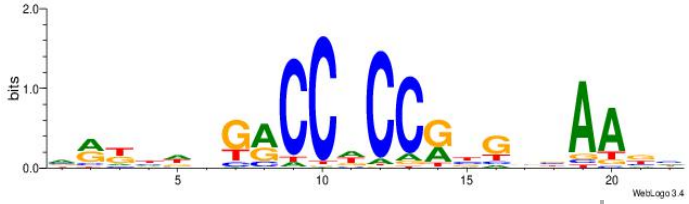
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00034

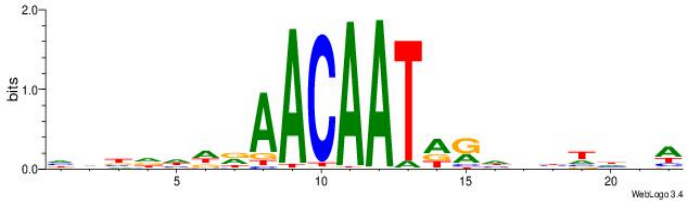
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0541044

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
-BAGGYCABHBTGACCKHV---
```

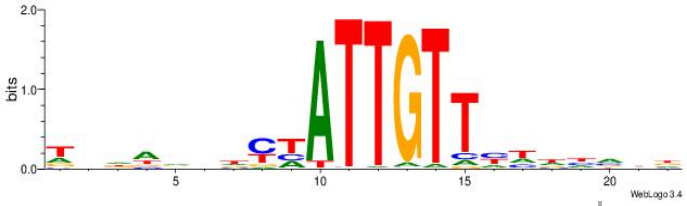
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH

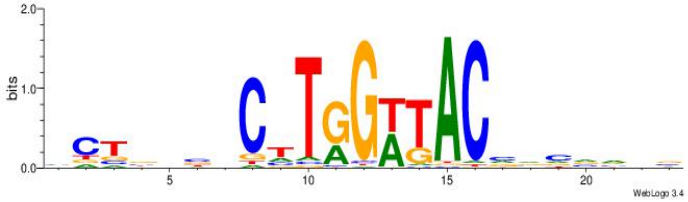


Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18

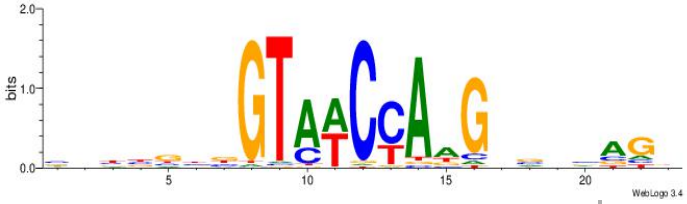
Similarity score: 0.0541108

Alignment:
VCTBHBVCTTGGWTACVVVVVDB
--BAGGYCABHBTGACCKHV---

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

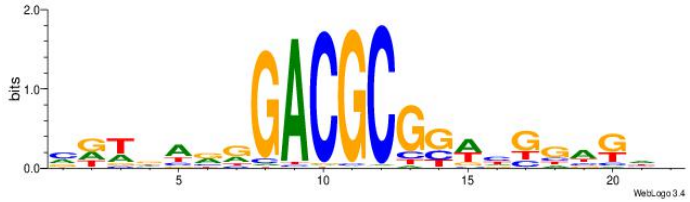


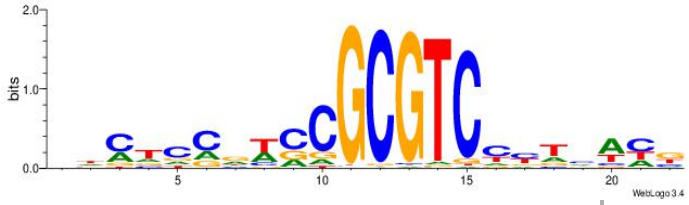
Motif ID: UP00527
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 18
Similarity score: 0.0543733

Alignment:
VDWDARRGACGCGGWHGGAKHV
---VHRGGTCABDBTGMCCTB-

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV





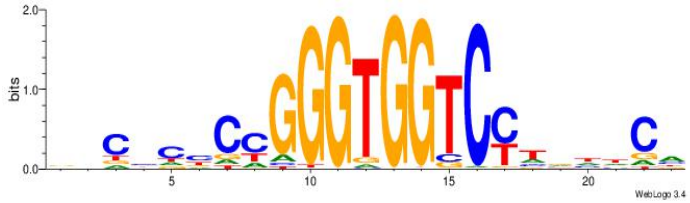
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	0.0548087

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
-BAGGYCABHBTGACCKHV----
```

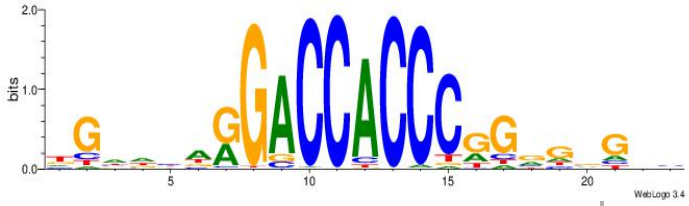
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



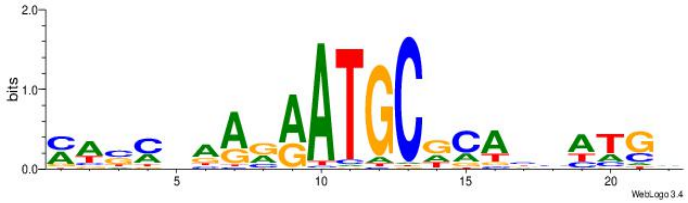
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.055453

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
----VHRGGTCABDBTGMCCTB
```

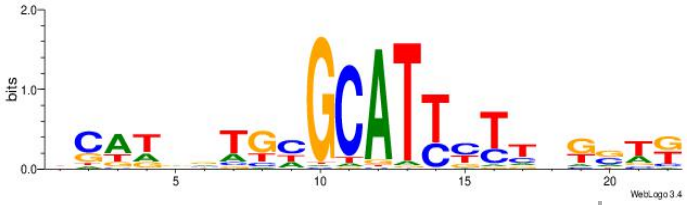
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR

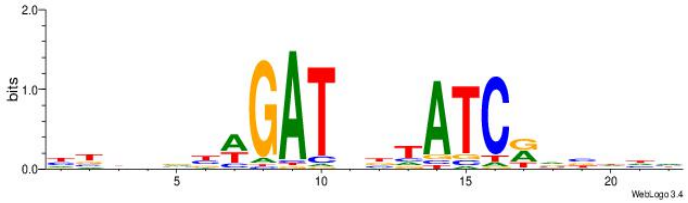


Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

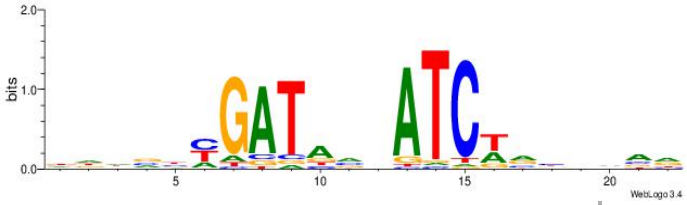
Number of overlap: 18
Similarity score: 0.0566426

Alignment:
HBHDVBWGATHBTATCRVBHHH
-VHRGGTCABDBTGMCCTB---

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH

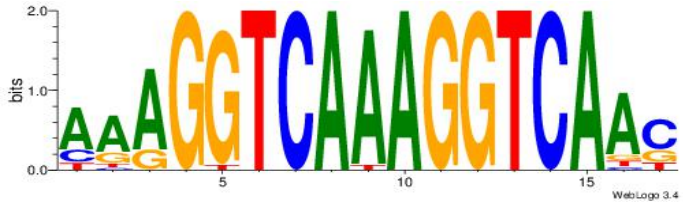


Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH

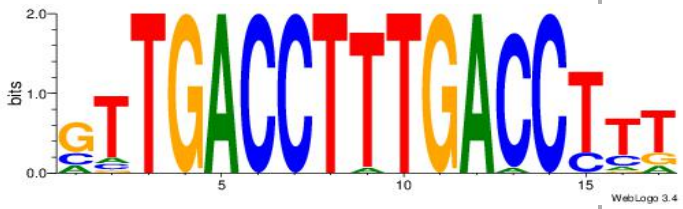


Dataset #: 3 Motif ID: 60 Motif name: NR1H2RXRA

Original motif
Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif
Consensus sequence: GTTGACCTTTGACCTTT



Best Matches for Motif ID 60 (Highest to Lowest)

Motif ID: UP00539
Motif name: Gli2_v015681_secondary
Species: Mus musculus

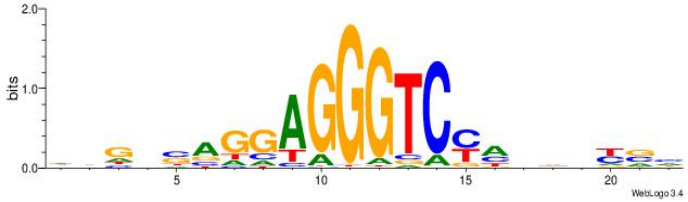
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0538452

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
-----GTTGACCTTTGACCTTT
```

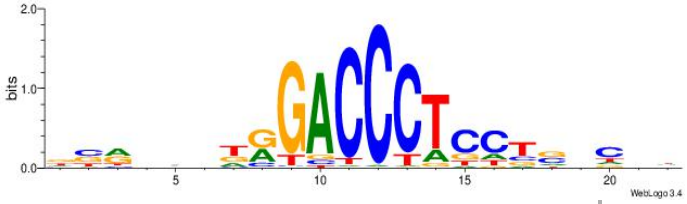
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



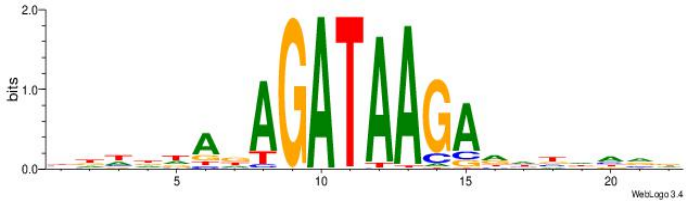
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0545098

Alignment:

BDHDDADAGATAAGADHBDHVD
-----AAAGGTCAAAGGTCAAC

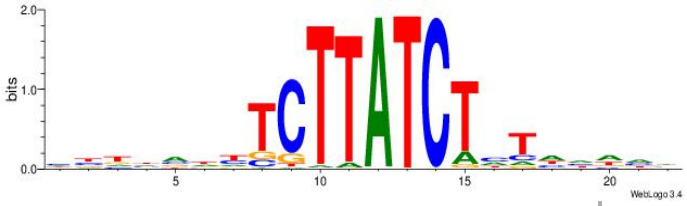
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.521114

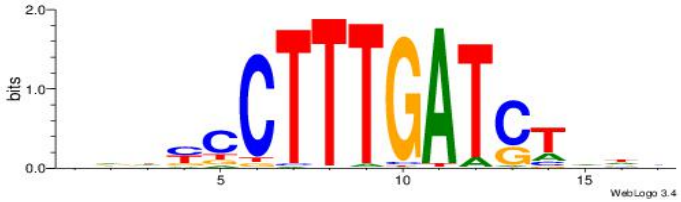
Alignment:
VDDAGATCAAAGGKDDD-
-AAAGGTCAAAGGTCAAC

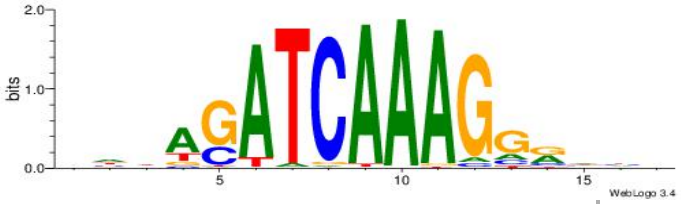
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV

Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD





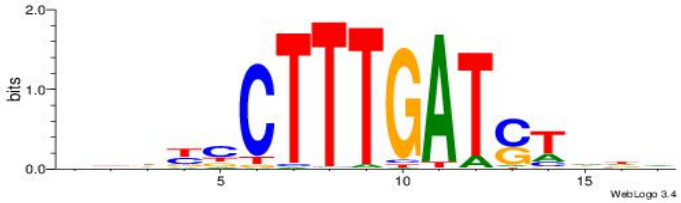
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.527825

Alignment:

```
BDDASATCAAAGGMDDD-
-GTTGACCTTTGACCTTT
```

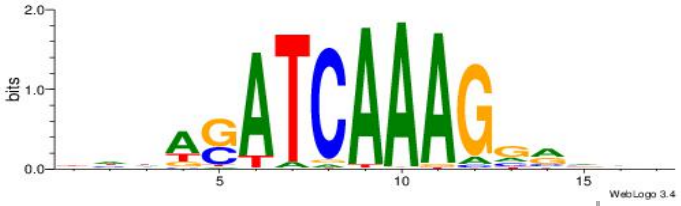
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD



Motif ID:	UP00054
Motif name:	Tcf7_primary

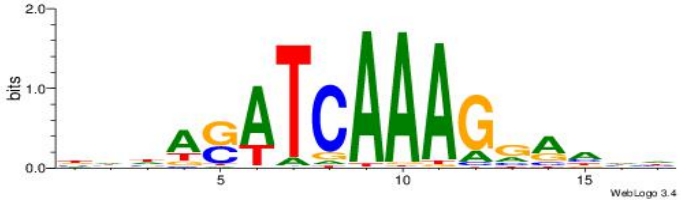
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.531154

Alignment:

```
-BHHASATCAAAGGAHHH
AAAGGTCAAAGGTCAAC-
```

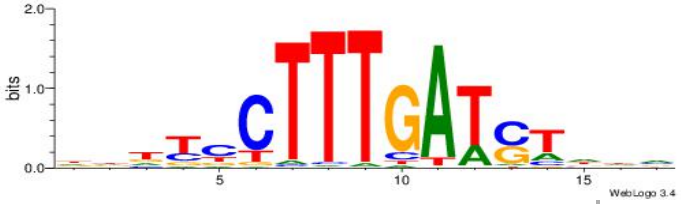
Original motif

Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif

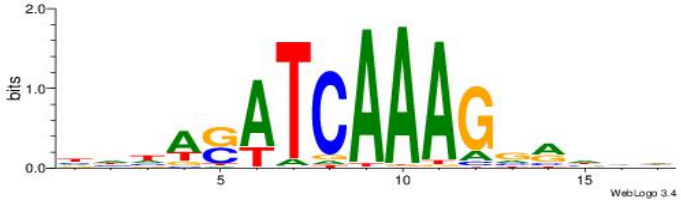
Consensus sequence: HHHTCCTTTGATSTHHV



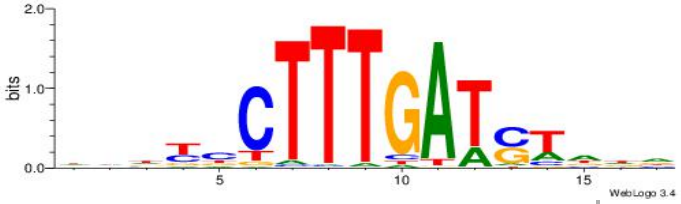
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.531876

Alignment:
HHHASATCAAAGVRHHH-
-AAAGGTCAAAGGTCAAC

Original motif
Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif
Consensus sequence: HHHKVCTTTGATSTHHH

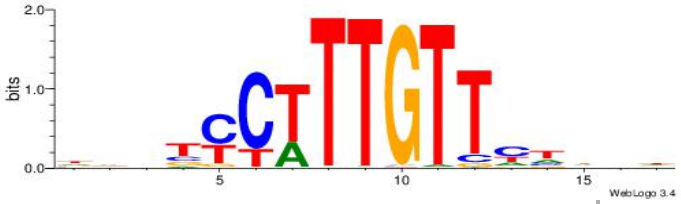


Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.544403

Alignment:
HBDDRAACAAAGRABHH-
-AAAGGTCAAAGGTCAAC

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.544565

Alignment:

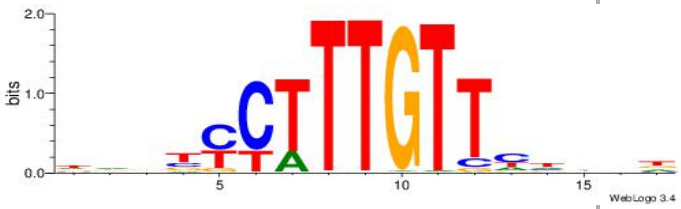
```
-HHBBMCTTTGTTHDDBH
GTTGACCTTTGACCTTT-
```

Original motif

Consensus sequence: HBDDDAACAAAGRVBHH

Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



Motif ID:	UP00019

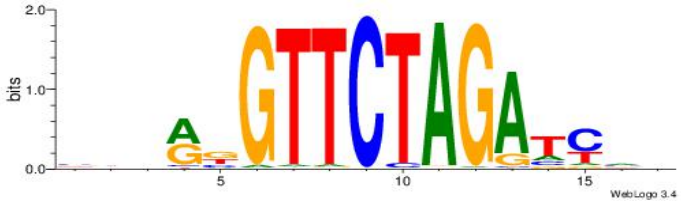
Motif name:	Zbtb12_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.550511

Alignment:

```
-BBGATCTAGAACBKHDB
GTTGACCTTTGACCTTT-
```

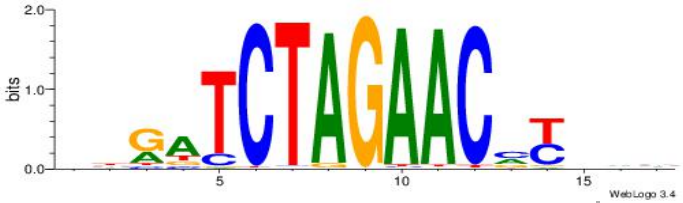
Original motif

Consensus sequence: BDHRBGTTCTAGATCVB



Reverse complement motif

Consensus sequence: BBGATCTAGAACBKHDB

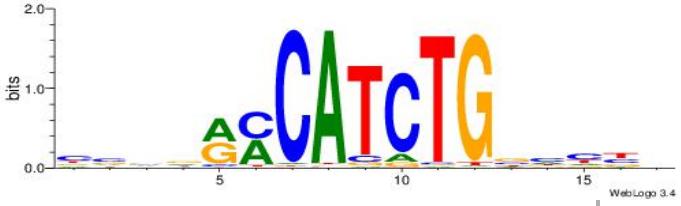


Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.552064

Alignment:
HVDDVCAGATGKYHBBV-
-AAAGGTCAAAGGTCAAC

Original motif
Consensus sequence: HVDDVCAGATGKYHBBV

Reverse complement motif
Consensus sequence: VBBDMYCATCTGVHHBH



Dataset #: 3 Motif ID: 61 Motif name: NR4A2

Original motif
Consensus sequence: AAGGTCAC

Reverse complement motif
Consensus sequence: GTGACCTT

Best Matches for Motif ID 61 (Highest to Lowest)

Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement

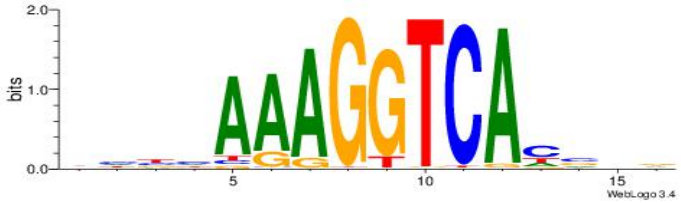
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0

Alignment:

```
HHVGTGACCTTTDVDD
---GTGACCTT-----
```

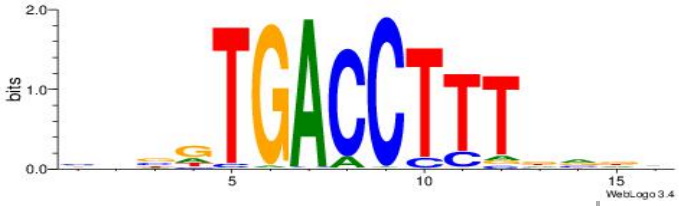
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD



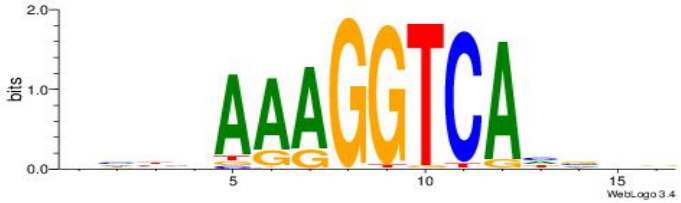
Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0074527

Alignment:

BHVDTGACCTTTDVDD
---GTGACCTT-----

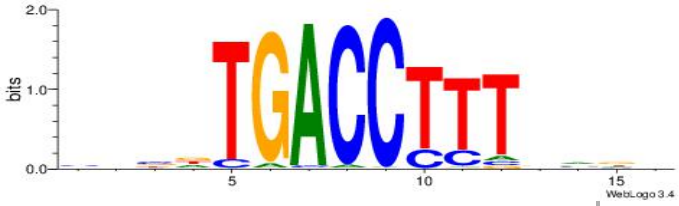
Original motif

Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif

Consensus sequence: BHVDTGACCTTTDVDD



Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.01542

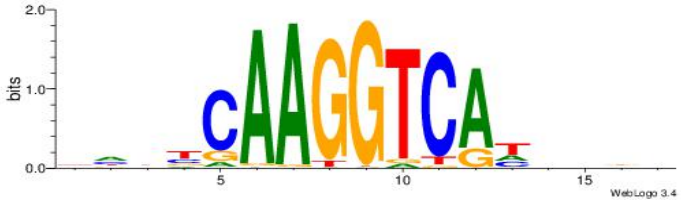
Alignment:
DHDBCAAGGTCAHVBDH
-----AAGGTCAC----

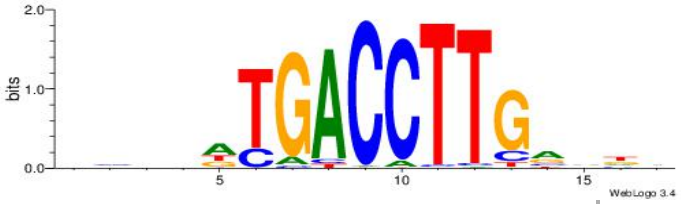
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH

Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD





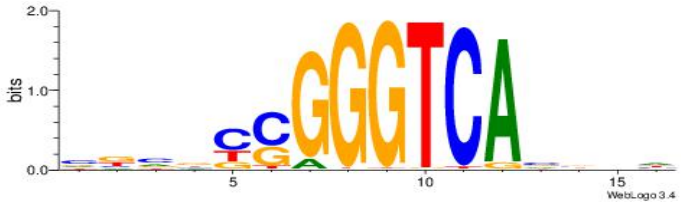
Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0395644

Alignment:

```
VBVBCSGGGTCAVBBH
-----AAGGTCAC---
```

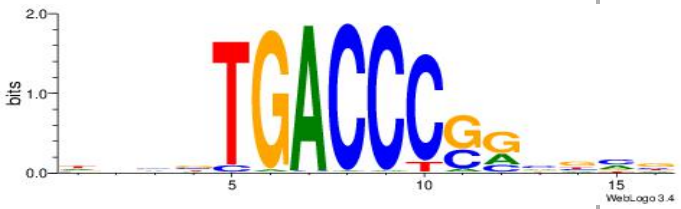
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



Motif ID:	UP00082

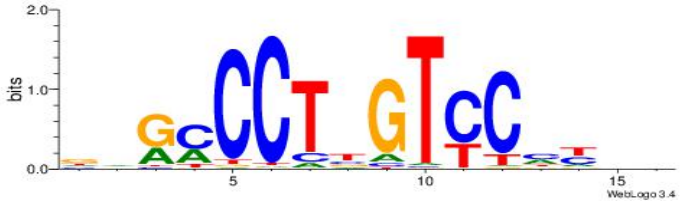
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	8
Similarity score:	0.0407874

Alignment:

```
DDGMCCTBGTCCHYHV
GTGACCTT--------
```

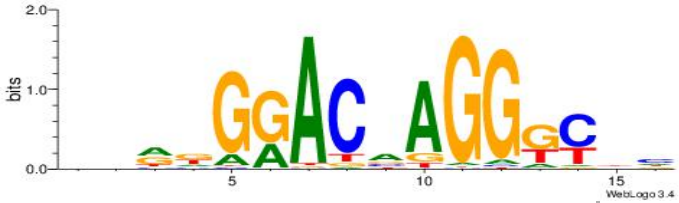
Original motif

Consensus sequence: DDGMCCTBGTCCHYHV



Reverse complement motif

Consensus sequence: VHMDGGACVAGGRCDH

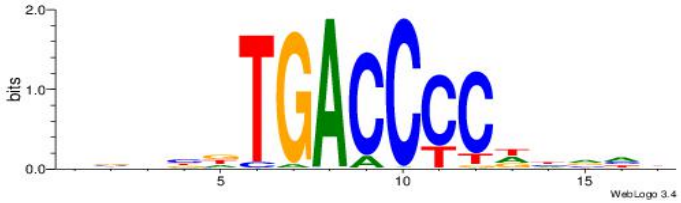


Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8

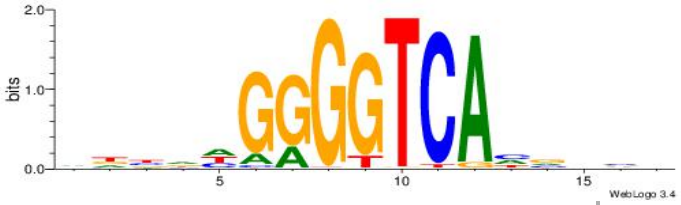
Similarity score: 0.0422933

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

Original motif
Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif
Consensus sequence: VHBHDGGGGTCAHBHBD

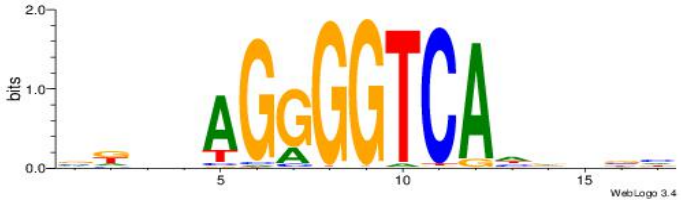


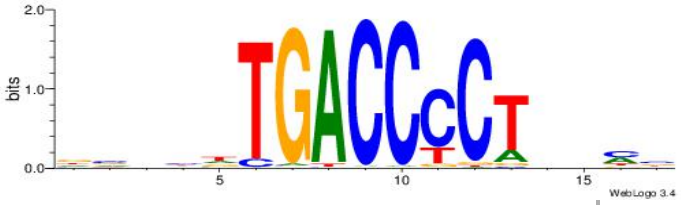
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0447444

Alignment:
VKBBAGGGGTCAHDBBH
-----AAGGTCAC----

Original motif
Consensus sequence: VKBBAGGGGTCAHDBBH

Reverse complement motif
Consensus sequence: DBBHHTGACCCCTBBYV





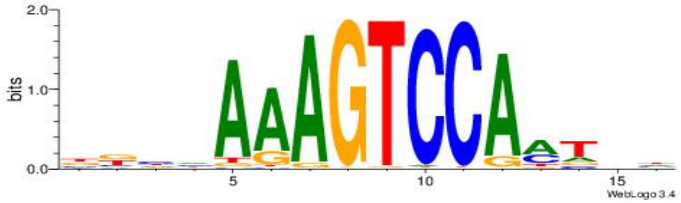
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0481418

Alignment:

```
BBHHAAAGTCCAMTHH
-----AAGGTCAC---
```

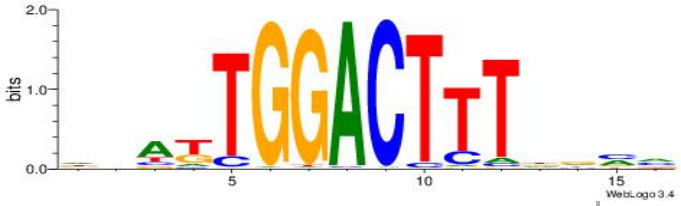
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV



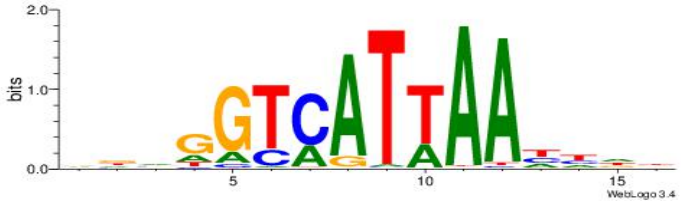
Motif ID:	UP00197
Motif name:	Hoxc9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0497679

Alignment:

```
VDHHTTAATGACCBHV
-------GTGACCTT-
```

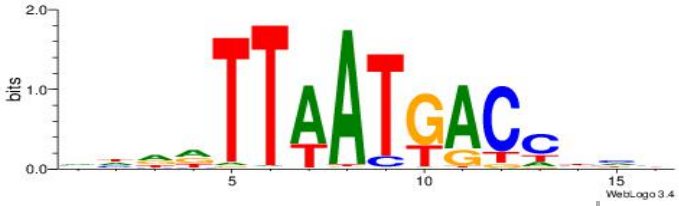
Original motif

Consensus sequence: VDVGGTCATTAAHHDB



Reverse complement motif

Consensus sequence: VDHHTTAATGACCBHV

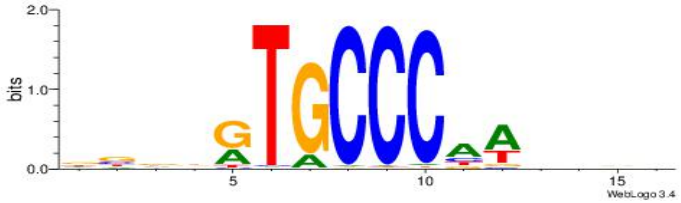


Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5

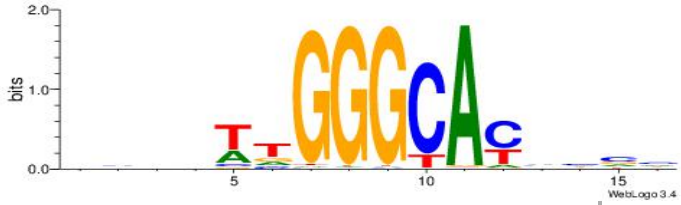
Number of overlap: 8
Similarity score: 0.0500062

Alignment:
DBDDRTGCCCAWDHDV
----GTGACCTT----

Original motif
Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif
Consensus sequence: VHHDWTGGGCAMDHBH



Dataset #: 3 Motif ID: 62 Motif name: RORA_1

Original motif
Consensus sequence: AWVDAGGTCA

Reverse complement motif
Consensus sequence: TGACCTDVWT

Best Matches for Motif ID 62 (Highest to Lowest)

Motif ID: UP00009
Motif name: Nr2f2_primary
Species: Mus musculus

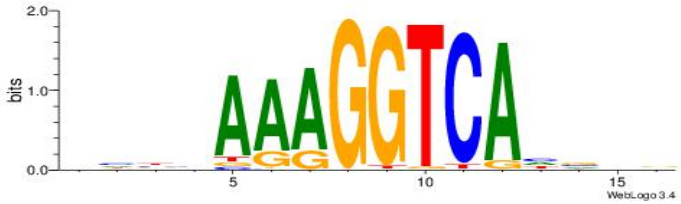
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0154749

Alignment:

```
DHBHAAAGGTCAHVHB
--AWVDAGGTCA----
```

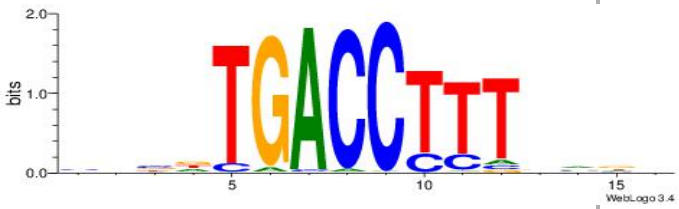
Original motif

Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif

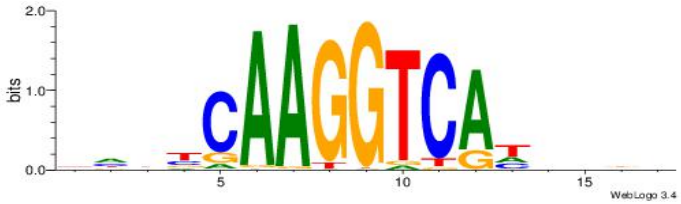
Consensus sequence: BHVDTGACCTTTDVDD



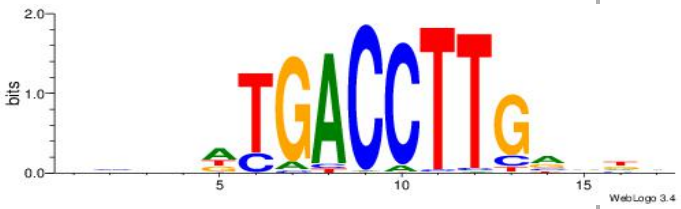
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0176661

Alignment:
HHBVHTGACCTTGVDHD
-----TGACCTDVWT--

Original motif
Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif
Consensus sequence: HHBVHTGACCTTGVDHD

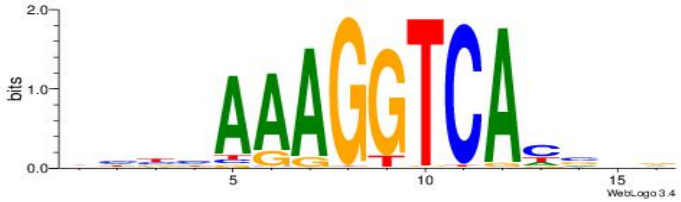


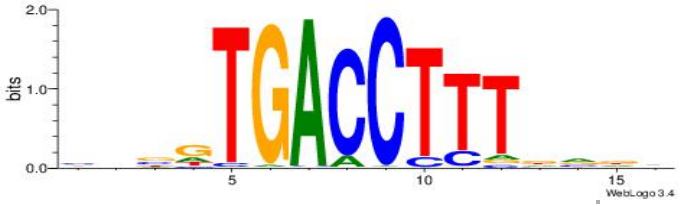
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0189599

Alignment:
DHBHAAAGGTCACVHD
--AWVDAGGTCA----

Original motif
Consensus sequence: DHBHAAAGGTCACVHD

Reverse complement motif
Consensus sequence: HHVGTGACCTTTDVDD





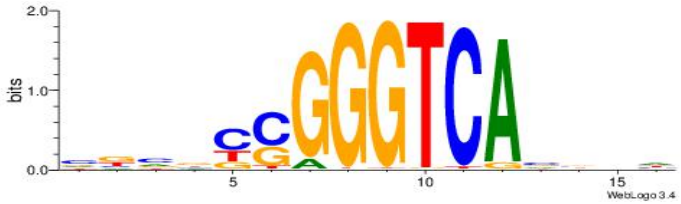
Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0331999

Alignment:

```
VBVBCSGGGTCAVBBH
--AWVDAGGTCA----
```

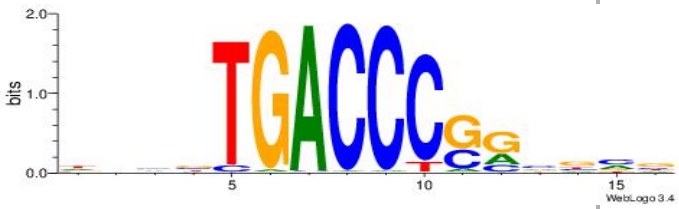
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



Motif ID:	UP00066

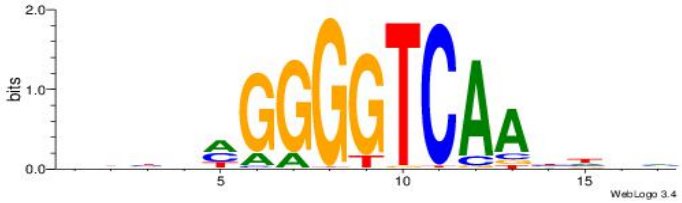
Motif name:	Hnf4a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0341771

Alignment:

```
BDBVMGGGGTCAABHDV
--AWVDAGGTCA-----
```

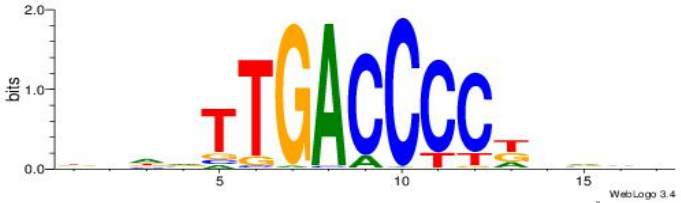
Original motif

Consensus sequence: BDBVMGGGGTCAABHDV



Reverse complement motif

Consensus sequence: BHHVTTGACCCCYVVDB

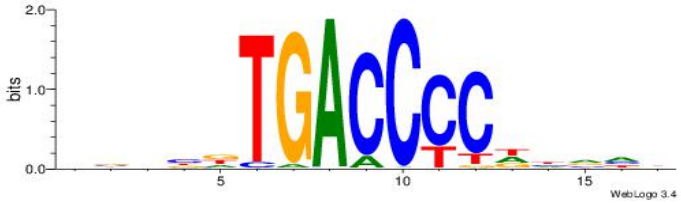


Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10

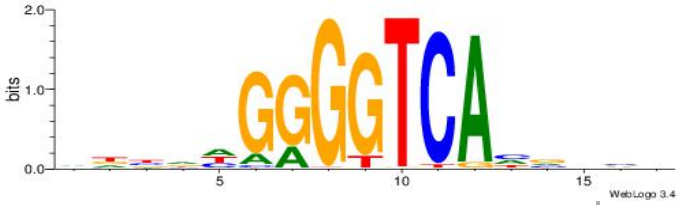
Similarity score: 0.0363566

Alignment:
DBHBDTGACCCCDHVHB
-----TGACCTDVWT--

Original motif
Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif
Consensus sequence: VHBHDGGGGTCAHBHBD

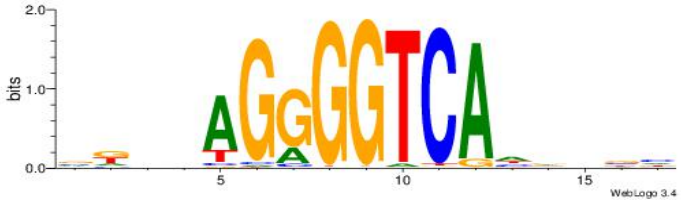


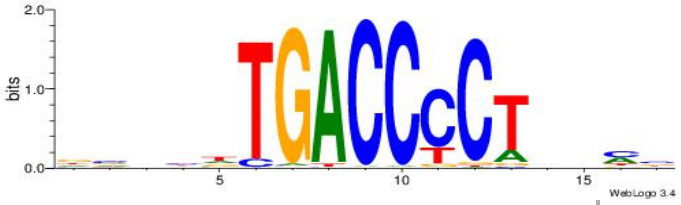
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0391284

Alignment:
VKBBAGGGGTCAHDBBH
--AWVDAGGTCA-----

Original motif
Consensus sequence: VKBBAGGGGTCAHDBBH

Reverse complement motif
Consensus sequence: DBBHHTGACCCCTBBYV





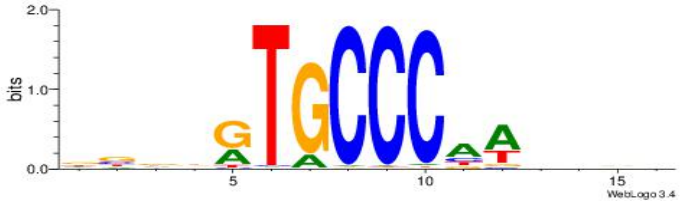
Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0444205

Alignment:

```
DBDDRTGCCCAWDHDV
-----TGACCTDVWT-
```

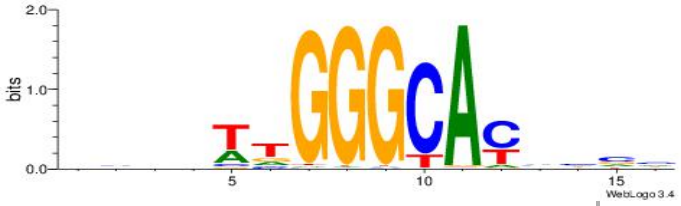
Original motif

Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH



Motif ID:	UP00050

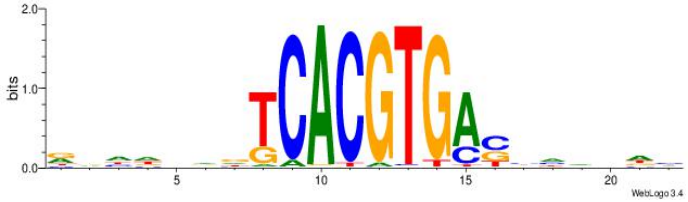
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0461434

Alignment:

```
RDHDBVDTCACGTGASBHVHDH
AWVDAGGTCA------------
```

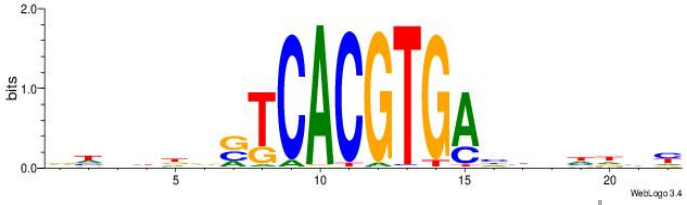
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



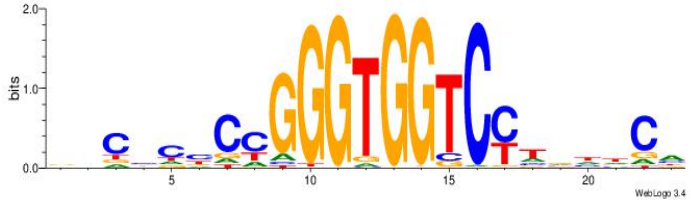
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0489571

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
-----------TGACCTDVWT--
```

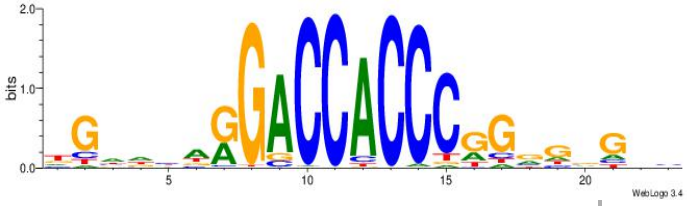
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

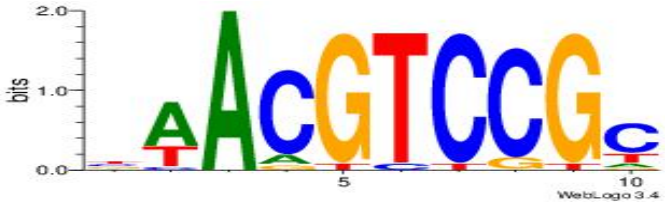
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Dataset #: 3 **Motif ID: 63** **Motif name: MIZF**

Original motif

Consensus sequence: BAACGTCCGC



Reverse complement motif

Consensus sequence: GCGGACGTTV

Best Matches for Motif ID 63 (Highest to Lowest)

Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement

Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

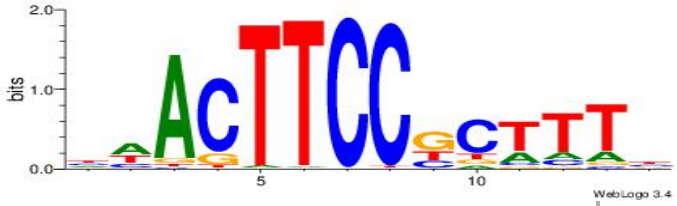
```
DWACTTCCRCTTTB
BAACGTCCGC----
```

Original motif

Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRCTTTB



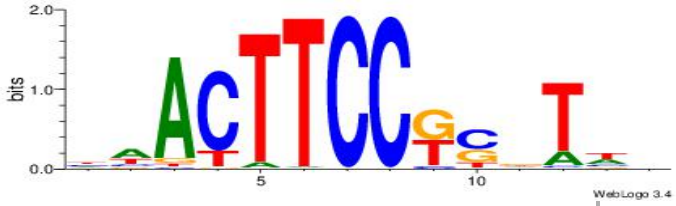
Motif ID:	UP00409
Motif name:	Elf5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.00379999

Alignment:

DWACTTCCRSDTWV
BAACGTCCGC----

Original motif
Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRSDTWV

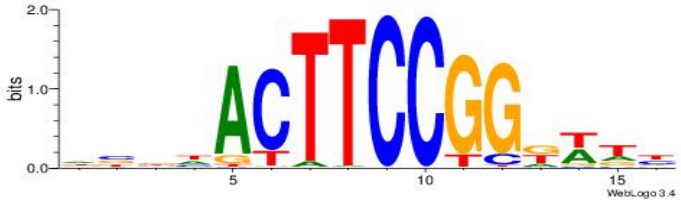


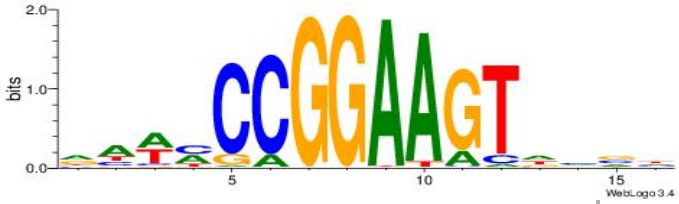
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0124101

Alignment:
DBBHACTTCCGGKWTH
--BAACGTCCGC----

Original motif
Consensus sequence: DBBHACTTCCGGKWTH

Reverse complement motif
Consensus sequence: HAWYCCGGAAGTHBBD





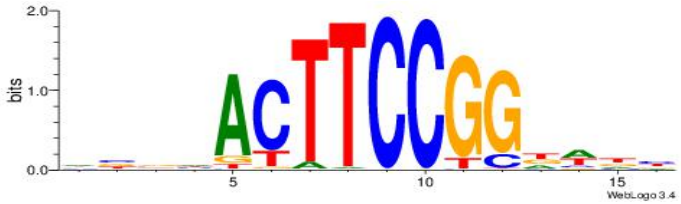
Motif ID:	UP00404
Motif name:	Elf2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0128348

Alignment:

```
DBBHACTTCCGGDWDB
--BAACGTCCGC----
```

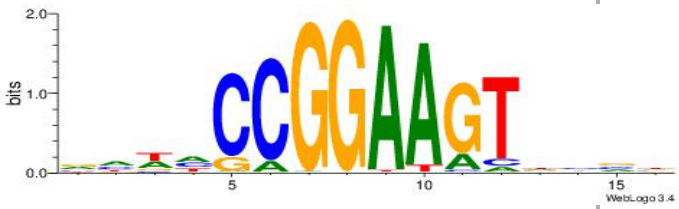
Original motif

Consensus sequence: DBBHACTTCCGGDWDB



Reverse complement motif

Consensus sequence: BDWDCCGGAAGTHBBD



Motif ID: UP00085

Motif name:	Sfpi1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0141516

Alignment:

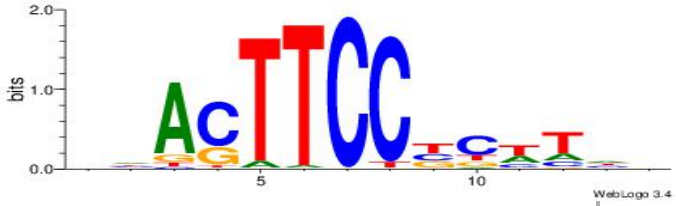
```
BDAWGVGGAAGTDH
BAACGTCCGC----
```

Original motif

Consensus sequence: BDAWGVGGAAGTDH

Reverse complement motif

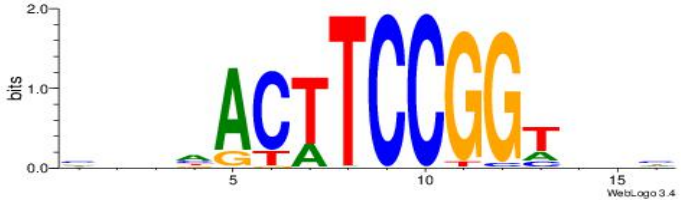
Consensus sequence: HDACTTCCBCWTDV



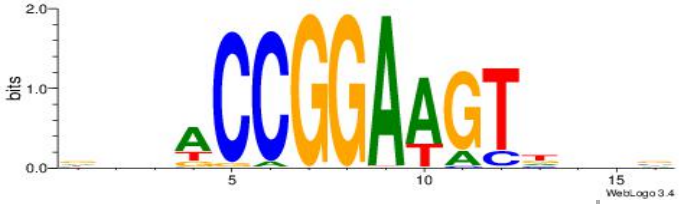
Motif ID:	UP00423
Motif name:	Gm5454
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0144665

Alignment:
DVHACCGGAAGTHDDV
----GCGGACGTTV--

Original motif
Consensus sequence: VDHHACTTCCGGTHVH



Reverse complement motif
Consensus sequence: DVHACCGGAAGTHDDV

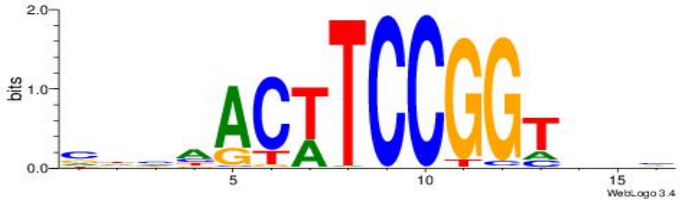


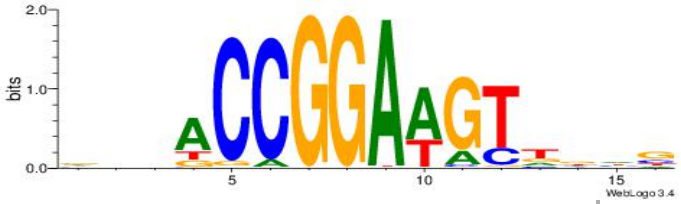
Motif ID:	UP00412
Motif name:	Etv5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0155825

Alignment:
DHHACCGGAWGTTDDV
----GCGGACGTTV--

Original motif
Consensus sequence: VDHAACWTCCGGTHHH

Reverse complement motif
Consensus sequence: DHHACCGGAWGTTDDV





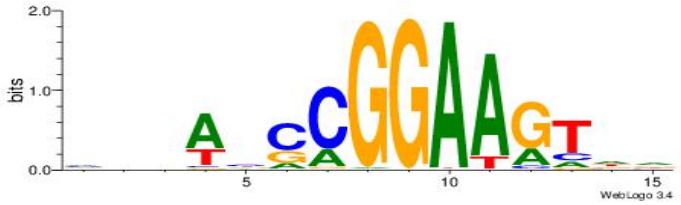
Motif ID:	UP00015
Motif name:	Ehf_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0162018

Alignment:

```
VBDABCCGGAAGTDD
-----GCGGACGTTV
```

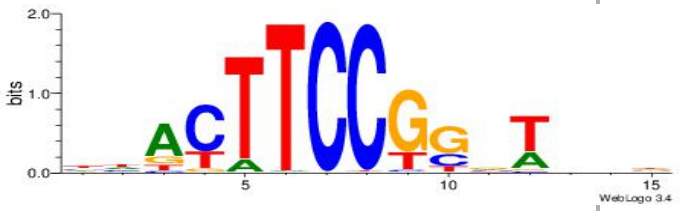
Original motif

Consensus sequence: VBDABCCGGAAGTDD



Reverse complement motif

Consensus sequence: DDACTTCCGGBTHBB



Motif ID:	UP00418

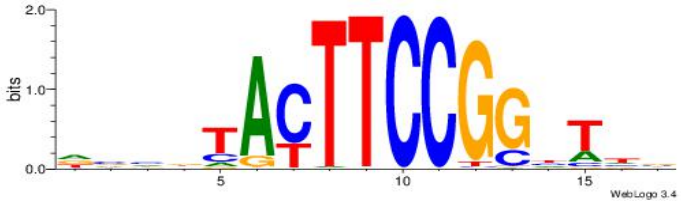
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0171234

Alignment:

```
DVHBTACTTCCGGHTHB
---BAACGTCCGC----
```

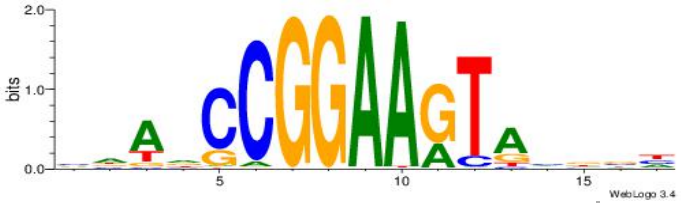
Original motif

Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif

Consensus sequence: BHAHCCGGAAGTABDVD

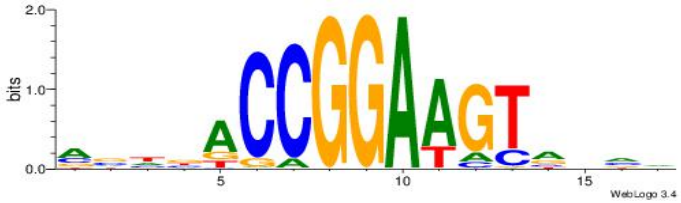


Motif ID:	UP00421
Motif name:	Etv1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10

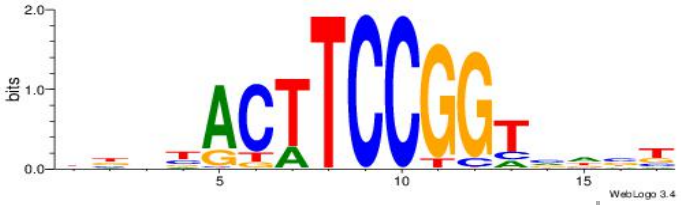
Similarity score: 0.0184147

Alignment:
MVHBACCGGAAGTVDVH
-----GCGGACGTTV--

Original motif
Consensus sequence: MVHBACCGGAAGTVDVH

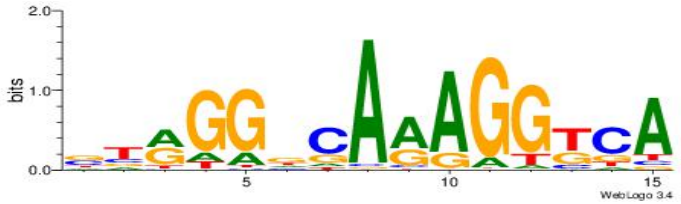


Reverse complement motif
Consensus sequence: HBDBACTTCCGGTBHVY

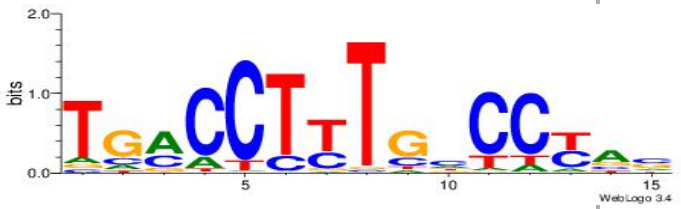


Dataset #: 3 Motif ID: 64 Motif name: PPARGRXRA

Original motif
Consensus sequence: BTRGGDCARAGGKCA



Reverse complement motif
Consensus sequence: TGRCCTKTGHCCKAB



Best Matches for Motif ID 64 (Highest to Lowest)

Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

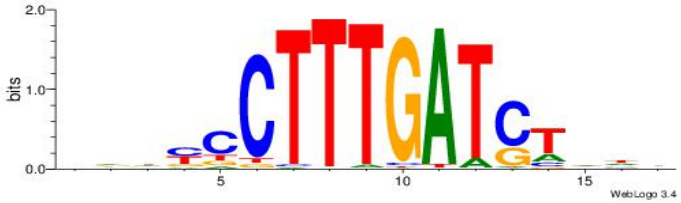
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0304954

Alignment:

```
VDDAGATCAAAGGKDDD
-BTRGGDCARAGGKCA-
```

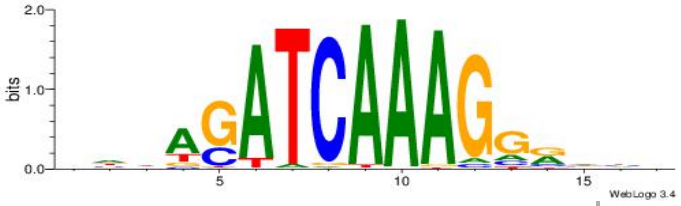
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



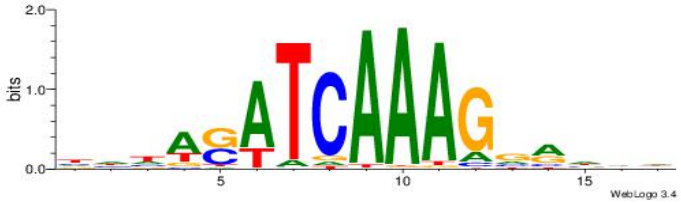
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0319475

Alignment:

HHHASATCAAAGVRHHH
-BTRGGDCARAGGKCA-

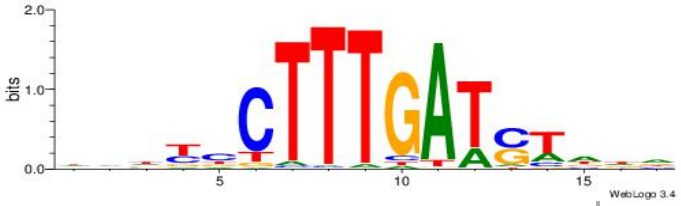
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

Consensus sequence: HHHKVCTTTGATSTHHH



Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.032779

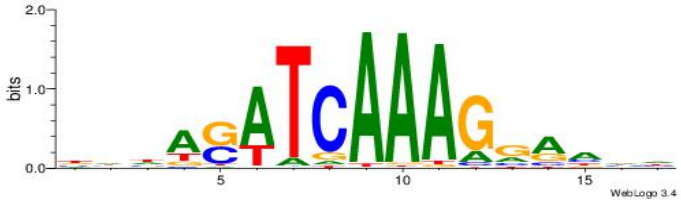
Alignment:
BHHASATCAAAGGAHHH
-BTRGGDCARAGGKCA-

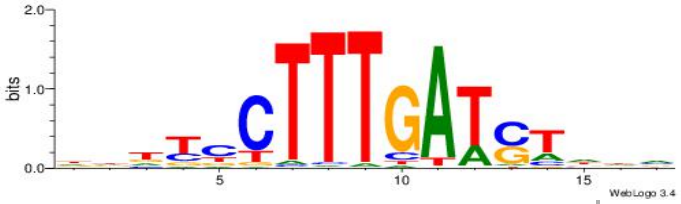
Original motif

Consensus sequence: BHHASATCAAAGGAHHH

Reverse complement motif

Consensus sequence: HHHTCCTTTGATSTHHV





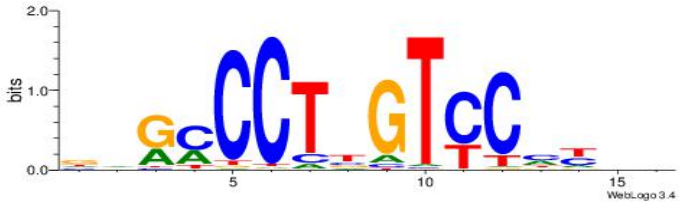
Motif ID:	UP00082
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0334185

Alignment:

```
VHMDGGACVAGGRCDH
BTRGGDCARAGGKCA-
```

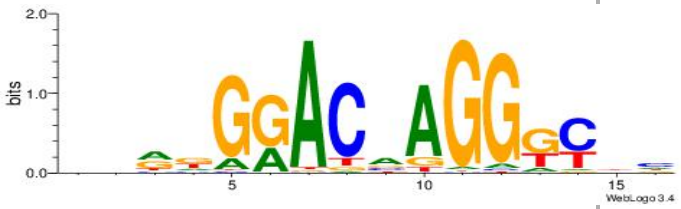
Original motif

Consensus sequence: DDGMCCTBGTCCHYHV



Reverse complement motif

Consensus sequence: VHMDGGACVAGGRCDH



Motif ID:	UP00062

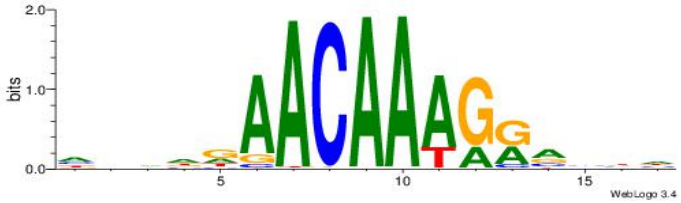
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0352539

Alignment:

```
HBDDDAACAAAGRVBHH
-BTRGGDCARAGGKCA-
```

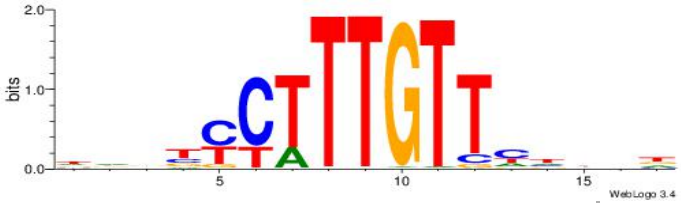
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



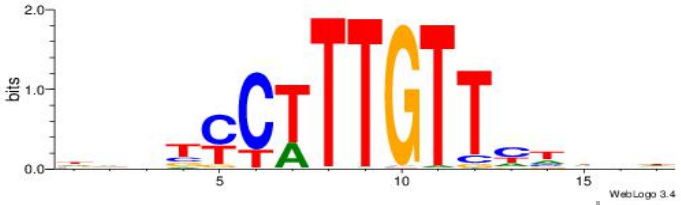
Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15

Similarity score: 0.0358782

Alignment:
HBDDRAACAAAGRABHH
-BTRGGDCARAGGKCA-

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH

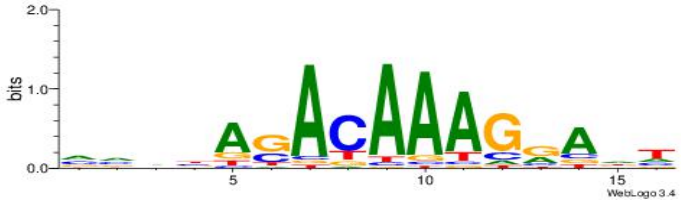


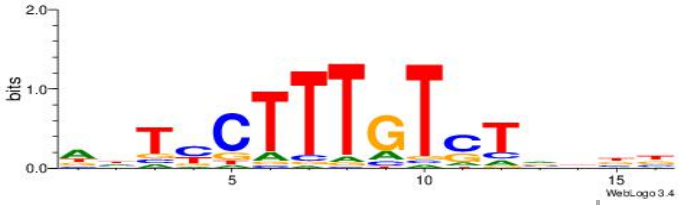
Motif ID: UP00101
Motif name: Sox12_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 15
Similarity score: 0.0374729

Alignment:
HDTMCTTTGTSTVDBB
TGRCCTKTGHCCKAB-

Original motif
Consensus sequence: VVDBASACAAAGRADH

Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB





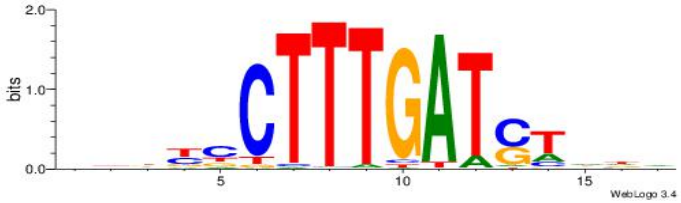
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0379757

Alignment:

```
BDDASATCAAAGGMDDD
-BTRGGDCARAGGKCA-
```

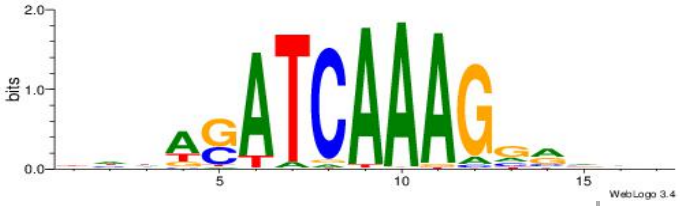
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD



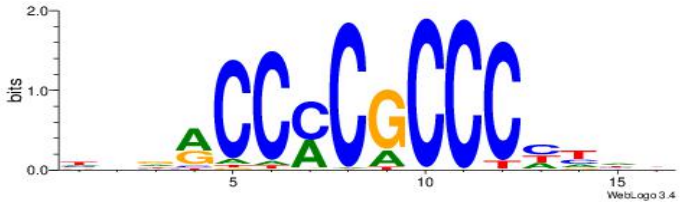
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0382733

Alignment:

```
DHHDGGGCGRGGKHBH
BTRGGDCARAGGKCA-
```

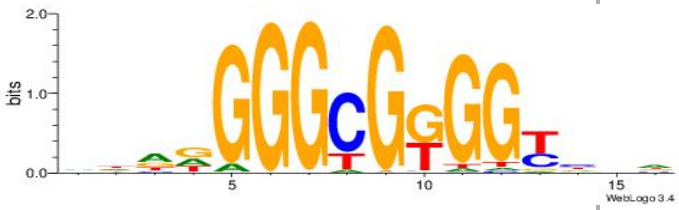
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH

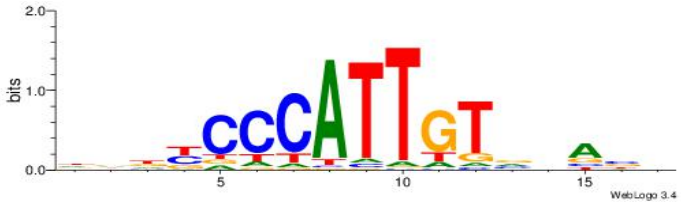


Motif ID:	UP00055
Motif name:	Hbp1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15

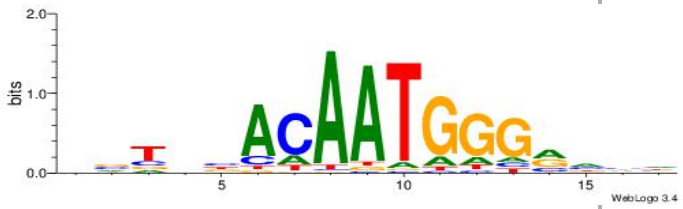
Similarity score: 0.0397168

Alignment:
DDDYCCCATTGTVHABH
BTRGGDCARAGGKCA--

Original motif
Consensus sequence: DDDYCCCATTGTVHABH

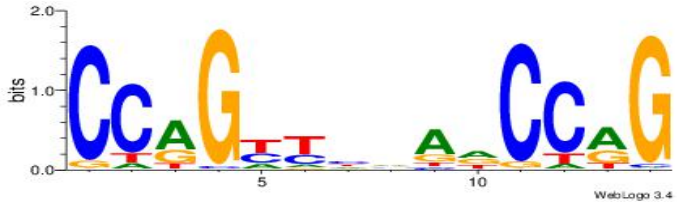


Reverse complement motif
Consensus sequence: HBTHVACAATGGGMDHD

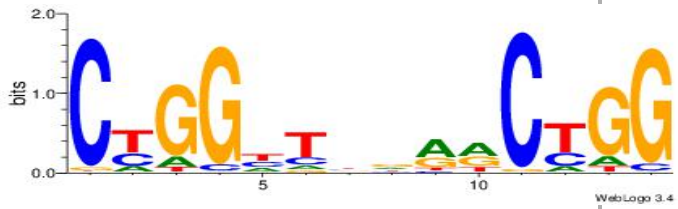


Dataset #: 3 Motif ID: 65 Motif name: Tcfcp2l1

Original motif
Consensus sequence: CCAGYYHVADCCRG



Reverse complement motif
Consensus sequence: CKGGDTBDMMCTGG



Best Matches for Motif ID 65 (Highest to Lowest)

Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

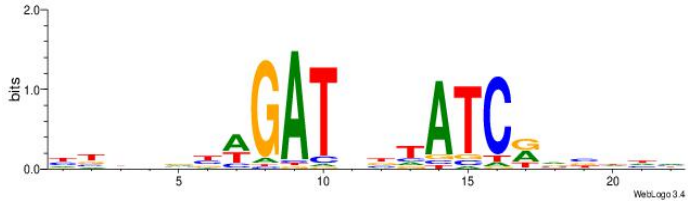
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	14
Similarity score:	0.0527249

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
----CCAGYYHVADCCRG----
```

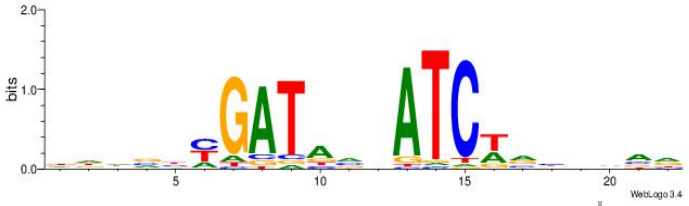
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



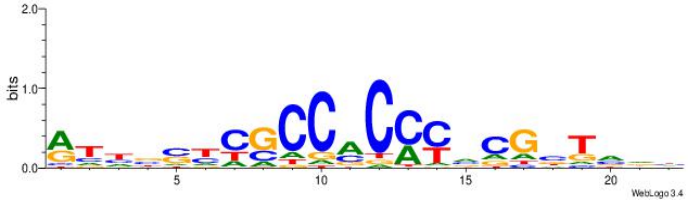
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0551691

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
--------CCAGYYHVADCCRG
```

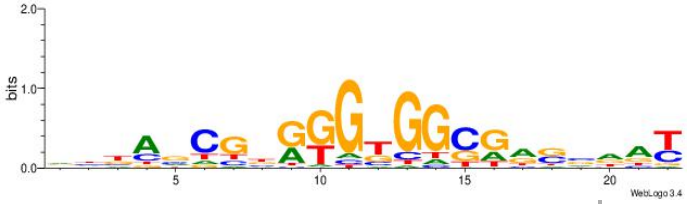
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



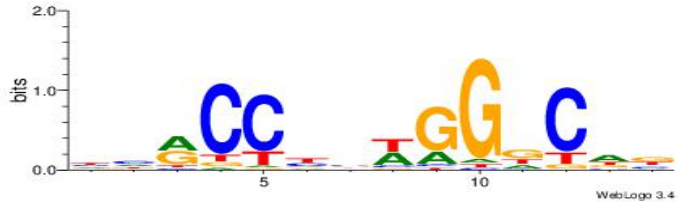
Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0560983

Alignment:

```
HHRCCBBWGGDCDB
CCAGYYHVADCCRG
```

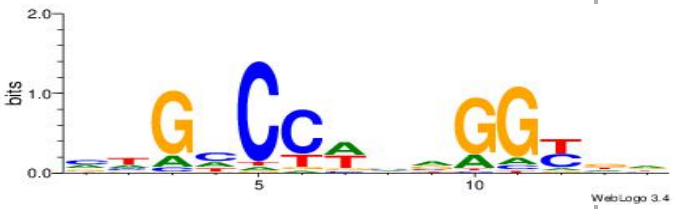
Original motif

Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif

Consensus sequence: BDGHCCWBVGGKDH



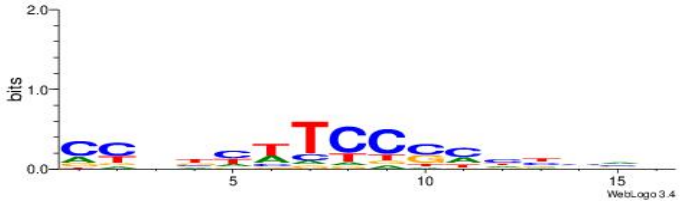
Motif ID:	UP00013
Motif name:	Gabpa_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0566467

Alignment:

```
CYDBYWTCCSMHBVVH
CCAGYYHVADCCRG--
```

Original motif

Consensus sequence: CYDBYWTCCSMHBVVH



Reverse complement motif

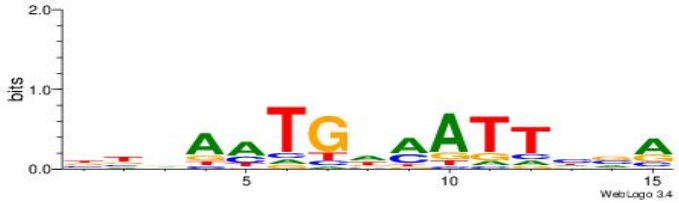
Consensus sequence: DBVVDRSGGAWKVHKG

Motif ID:	UP00075
Motif name:	Sox15_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward

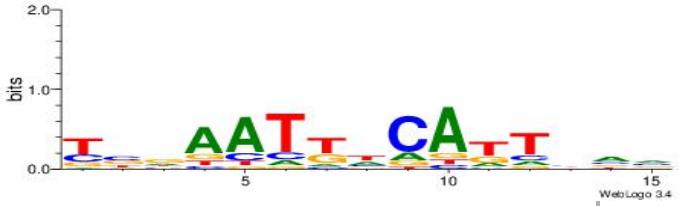
Position number:	1
Number of overlap:	14
Similarity score:	0.0577636

Alignment:
TVDAATYDCATTVVV
-CCAGYYHVADCCRG

Original motif
Consensus sequence: BBVAATGDMATTHVA



Reverse complement motif
Consensus sequence: TVDAATYDCATTVVV

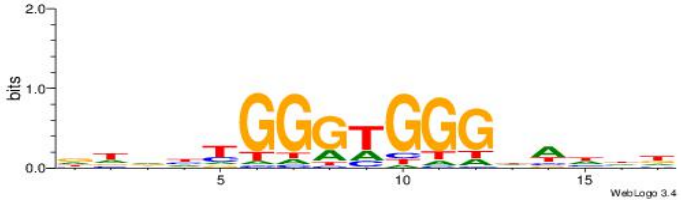


Motif ID:	UP00096
Motif name:	Sox13_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0587893

Alignment:
DDDHTGGGTGGGHAHHD
---CKGGDTBDMMCTGG

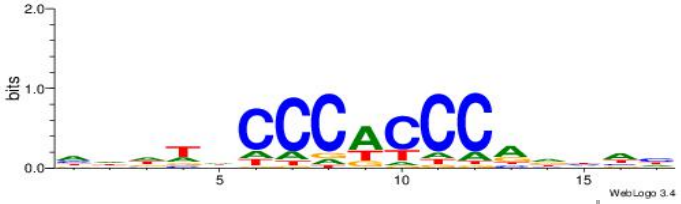
Original motif

Consensus sequence: DDDHTGGGTGGGHAHHD



Reverse complement motif

Consensus sequence: DHHTHCCCACCCAHDDH



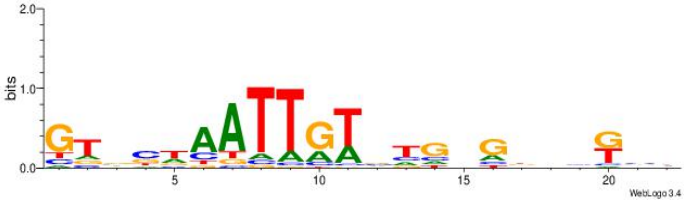
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0590238

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
--CCAGYYHVADCCRG------
```

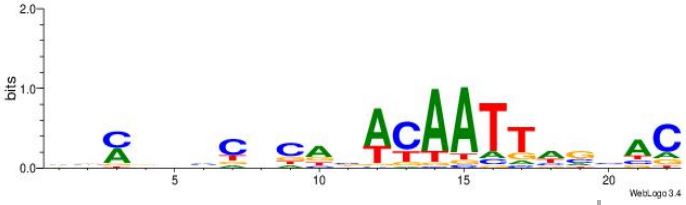
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



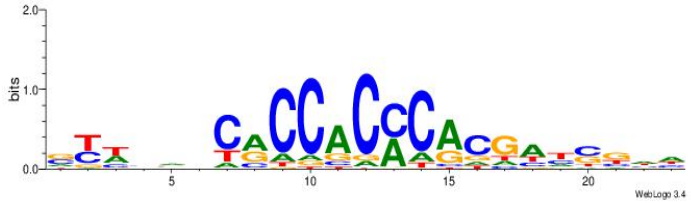
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	14
Similarity score:	0.0596904

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
--------CCAGYYHVADCCRG-
```

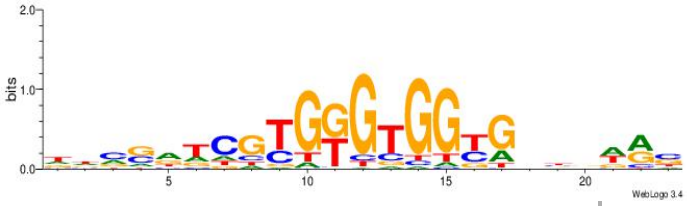
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

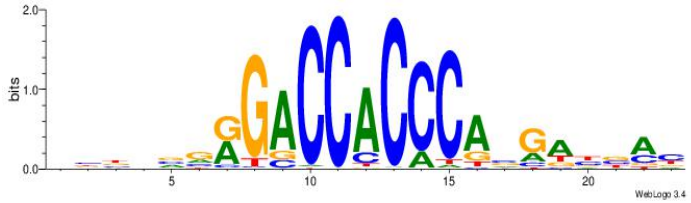
Position number:	1
Number of overlap:	14
Similarity score:	0.0597695

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
---------CCAGYYHVADCCRG
```

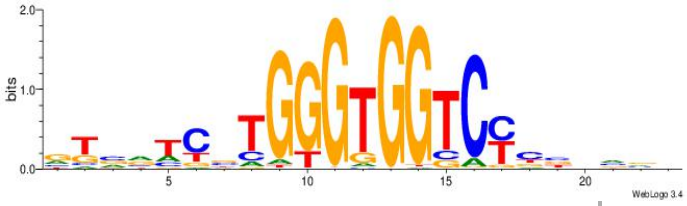
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



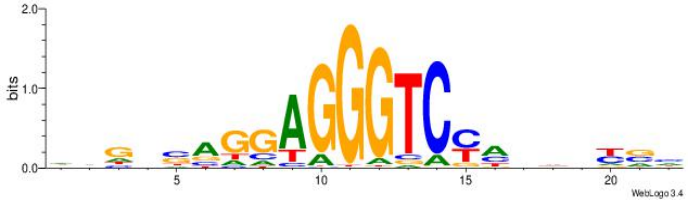
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0598357

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
-------CKGGDTBDMMCTGG-
```

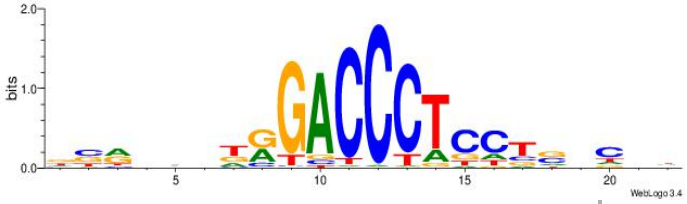
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

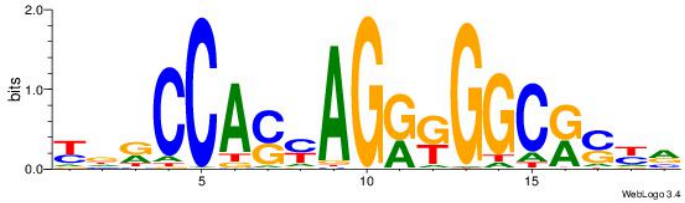
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Dataset #: 3 Motif ID: 66 Motif name: CTCF

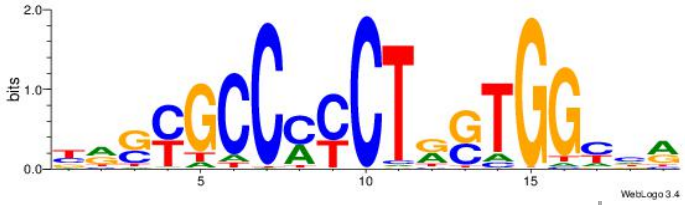
Original motif

Consensus sequence: YDRCCASYAGRKGGCRSYV



Reverse complement motif

Consensus sequence: BMSMGCCYMCTKSTGGMHM



Best Matches for Motif ID 66 (Highest to Lowest)

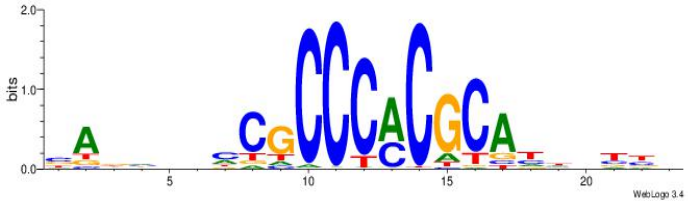
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	19
Similarity score:	0.0409369

Alignment:

VVVDHHTGCGYGGGCGDHVHHTB
----BMSMGCCYMCTKSTGGMHM

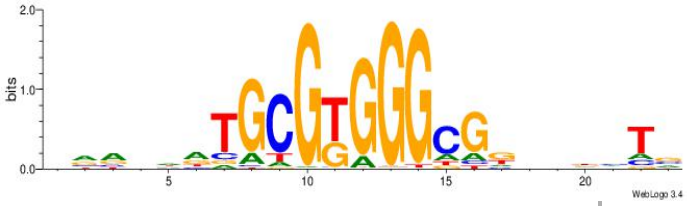
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	19
Similarity score:	0.0409815

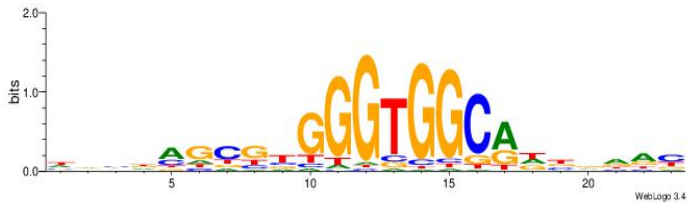
Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
-YDRCCASYAGRKGGCRSYV---

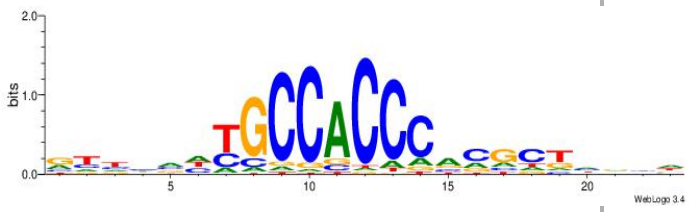
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





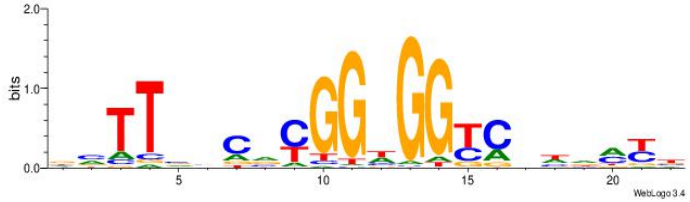
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	19
Similarity score:	0.0431951

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
---BMSMGCCYMCTKSTGGMHM
```

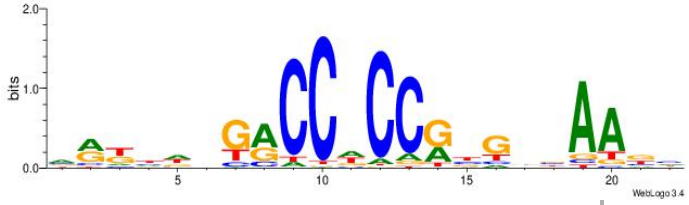
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary

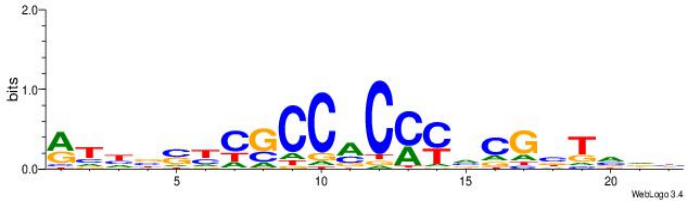
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	19
Similarity score:	0.0469794

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
---BMSMGCCYMCTKSTGGMHM
```

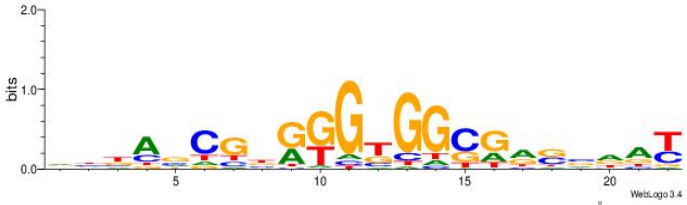
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

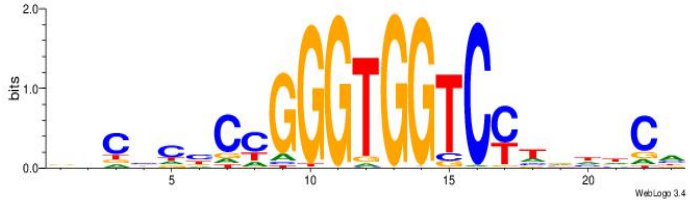
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



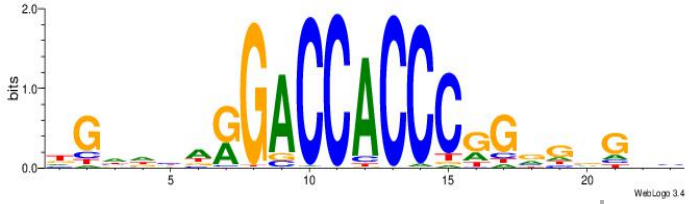
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	19
Similarity score:	0.0482204

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
YDRCCASYAGRKGGCRSYV----

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

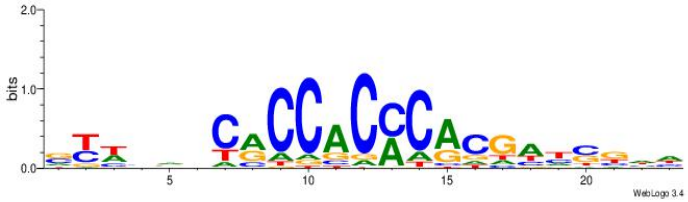


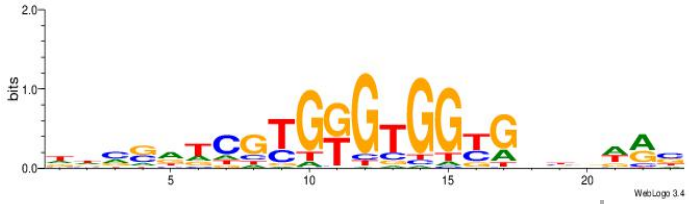
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	19
Similarity score:	0.0491604

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
-YDRCCASYAGRKGGCRSYV---

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





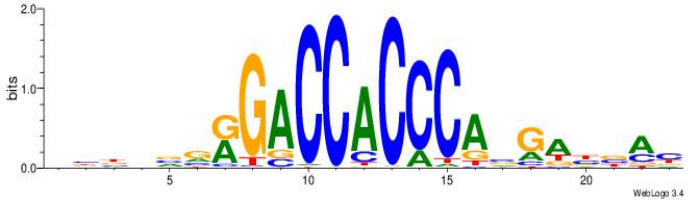
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	19
Similarity score:	0.0511535

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
---BMSMGCCYMCTKSTGGMHM-
```

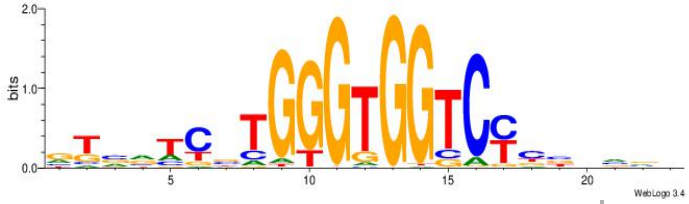
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



Motif ID:	UP00539

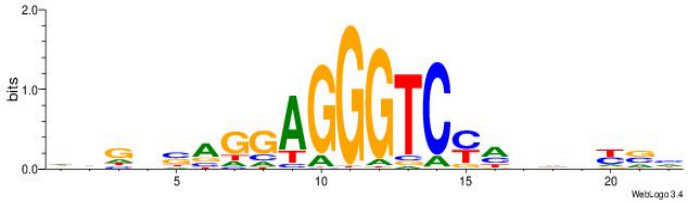
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	19
Similarity score:	0.0520741

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
YDRCCASYAGRKGGCRSYV---
```

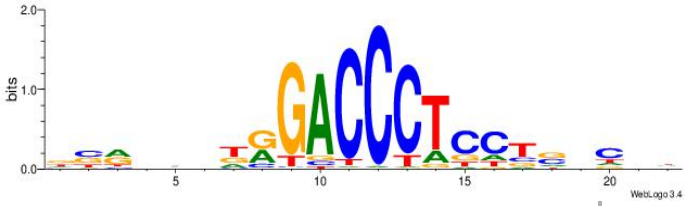
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH

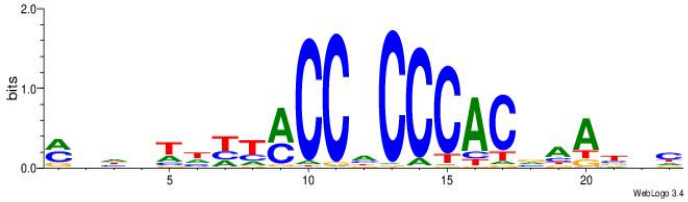


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	19

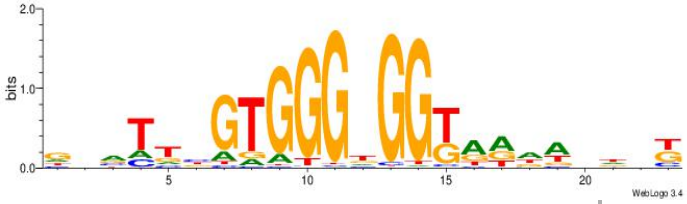
Similarity score: 0.0532334

Alignment:
DVVTTVGTGGGHGGYAMHWHHHY
YDRCCASYAGRKGGCRSYV----

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

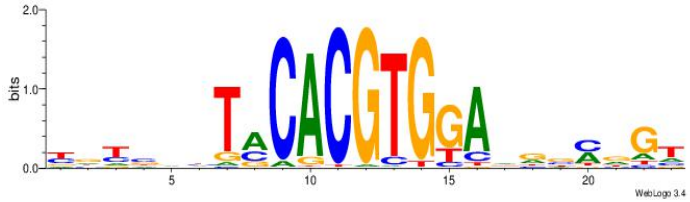


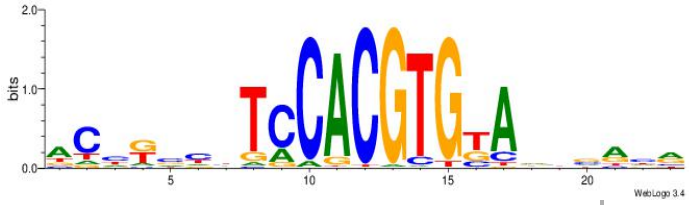
Motif ID: UP00050
Motif name: Bhlhb2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 19
Similarity score: 0.0535675

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
--BMSMGCCYMCTKSTGGMHM--

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT

Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

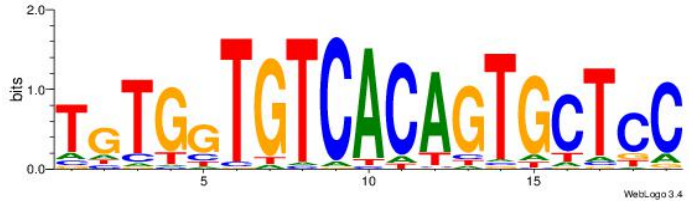




Dataset #: 4 **Motif ID: 67** **Motif name: TgTGgTGTCACAGTGCTCC**

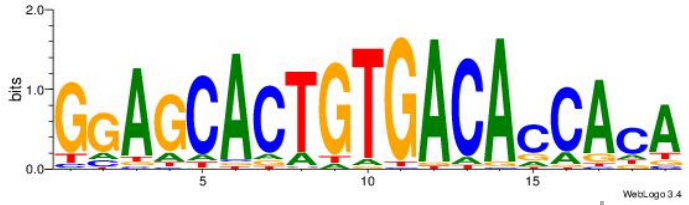
Original motif

Consensus sequence: TGTGGTGTCACAGTGCTCC



Reverse complement motif

Consensus sequence: GGAGCACTGTGACACCACA



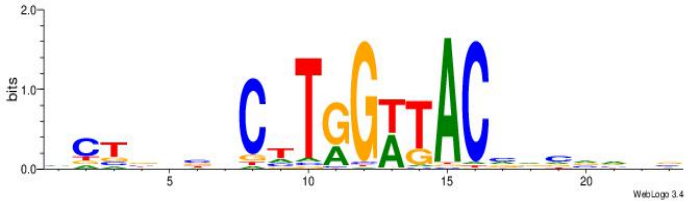
Best Matches for Motif ID 67 (Highest to Lowest)

Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	19
Similarity score:	0.043204

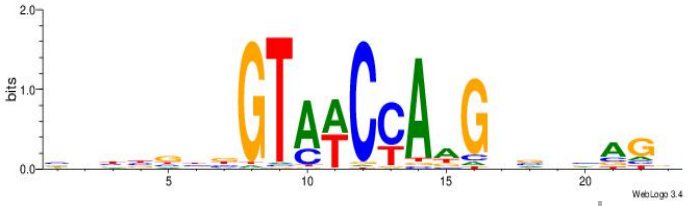
Alignment:

BDBBVBVGTAWCCAAGVBHBAGB
---TGTGGTGTCACAGTGCTCC-

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

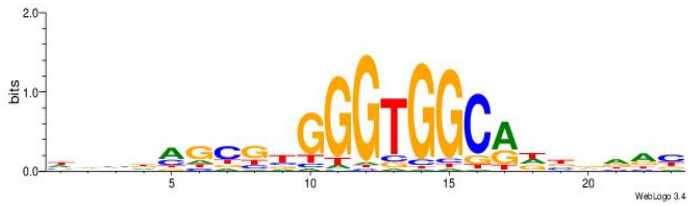


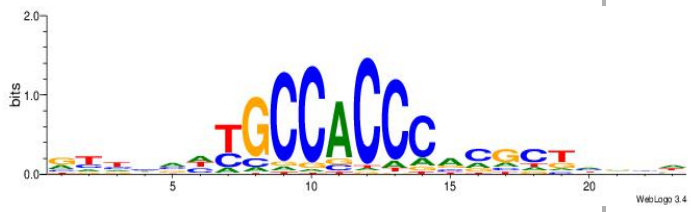
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	18
Similarity score:	0.553914

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB-
-----TGTGGTGTCACAGTGCTCC

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





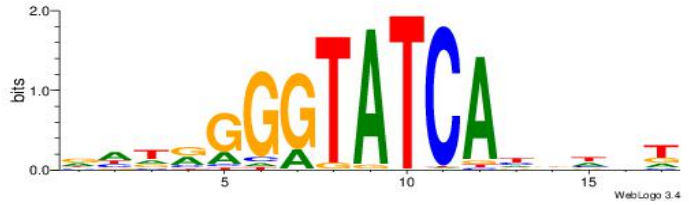
Motif ID:	UP00192
Motif name:	Six1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	1.04528

Alignment:

```
--AVHDHTGATACCCMDHH
GGAGCACTGTGACACCACA
```

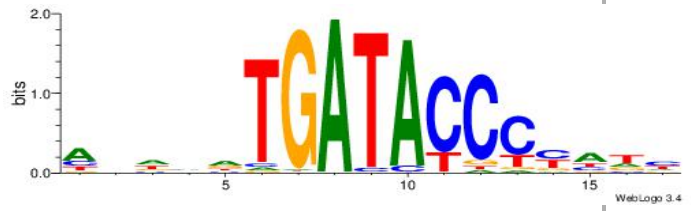
Original motif

Consensus sequence: DHDRGGGTATCAHDHBT



Reverse complement motif

Consensus sequence: AVHDHTGATACCCMDHH



Motif ID:	UP00193

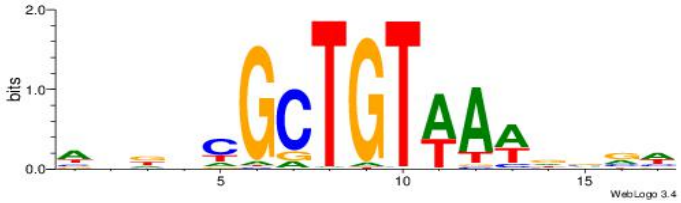
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	1.0459

Alignment:

```
--WVVHWTWACAGCGHHVT
TGTGGTGTCACAGTGCTCC
```

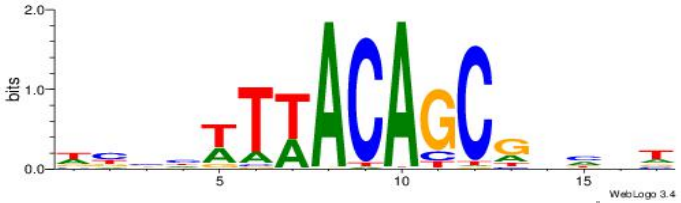
Original motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGHHVT

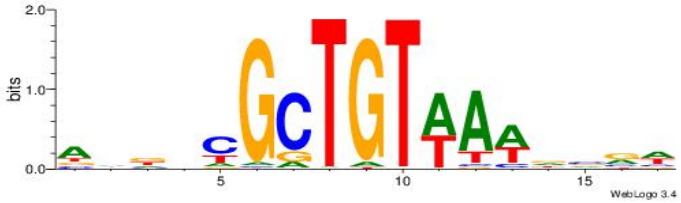


Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17

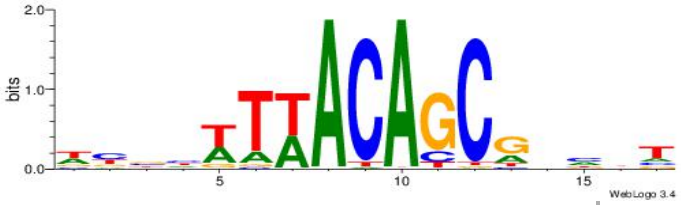
Similarity score: 1.0462

Alignment:
--WVVHWTWACAGCGBHBT
TGTGGTGTCACAGTGCTCC

Original motif
Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif
Consensus sequence: WVVHWTWACAGCGBHBT

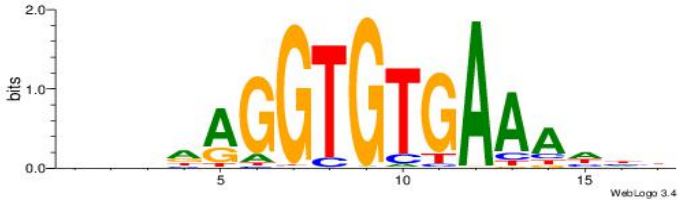


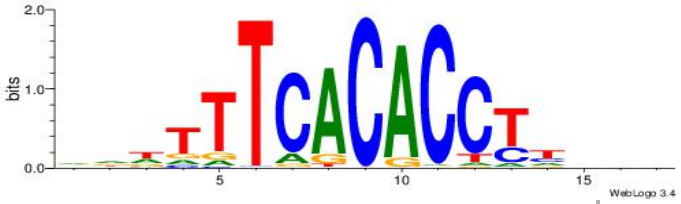
Motif ID: UP00068
Motif name: Eomes_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 17
Similarity score: 1.04631

Alignment:
HHHTTTCACACCTDHBV--
GGAGCACTGTGACACCACA

Original motif
Consensus sequence: BVHDAGGTGTGAAAHHH

Reverse complement motif
Consensus sequence: HHHTTTCACACCTDHBV





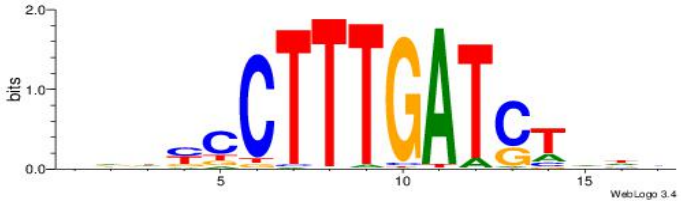
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	1.04807

Alignment:

```
--VDDAGATCAAAGGKDDD
GGAGCACTGTGACACCACA-
```

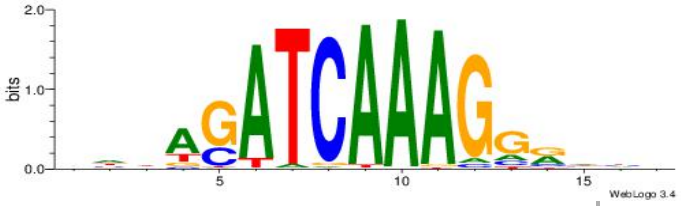
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



Motif ID:	UP00540
Motif name:	Gli3_v015681_primary

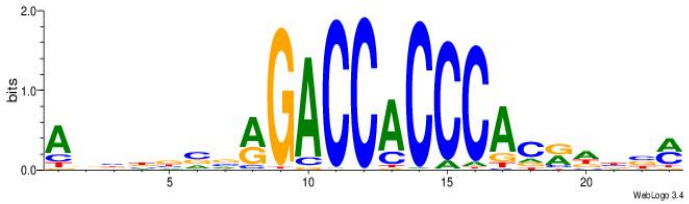
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	1.04831

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT--
--GGAGCACTGTGACACCACA----
```

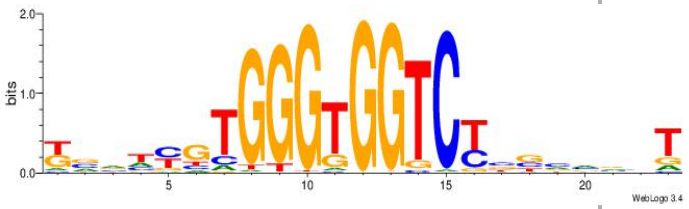
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



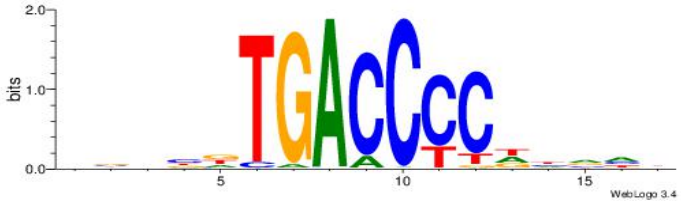
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	1.04867

Alignment:

--DBHBDTGACCCCDHVHB
TGTGGTGTCACAGTGCTCC--

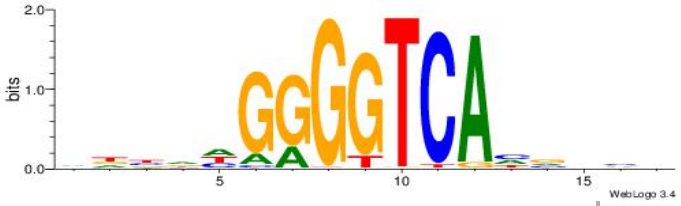
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



Motif ID:	UP00388
Motif name:	Six6_2267.4
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:	17
Similarity score:	1.0491

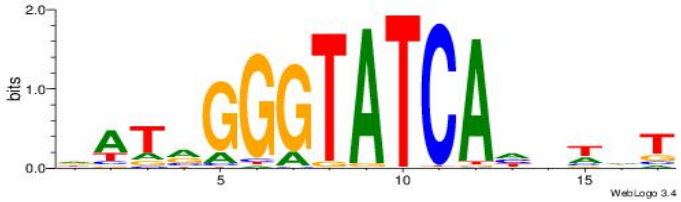
Alignment:
AHWDHTGATACCCKATD--
--GGAGCACTGTGACACCACA

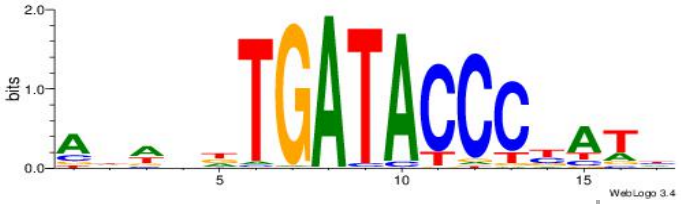
Original motif

Consensus sequence: DATRGGGTATCAHDWHT

Reverse complement motif

Consensus sequence: AHWDHTGATACCCKATD





Dataset #: 4 **Motif ID: 68** **Motif name: sscCCCGCGcs**

Original motif

Consensus sequence: BSCCCCGCGBS

Reverse complement motif

Consensus sequence: SBCGCGGGGSB

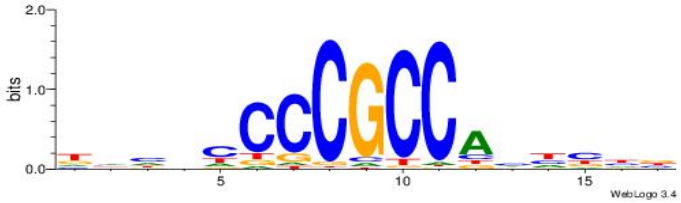
Best Matches for Motif ID 68 (Highest to Lowest)

Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.00934222

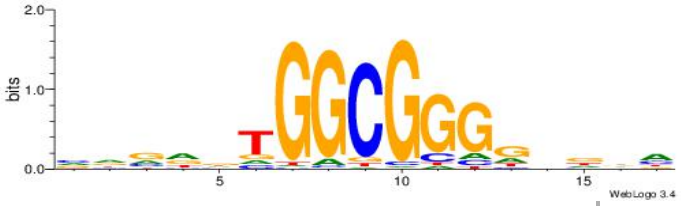
Alignment:

BHBHDTGGCGGGGBDHD
----SBCGCGGGGSB--

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD

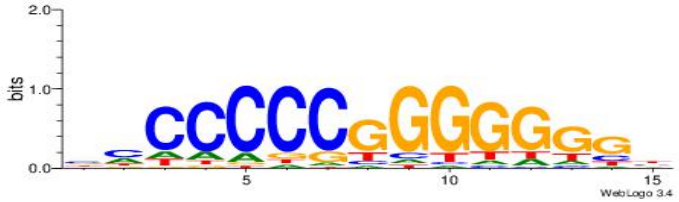


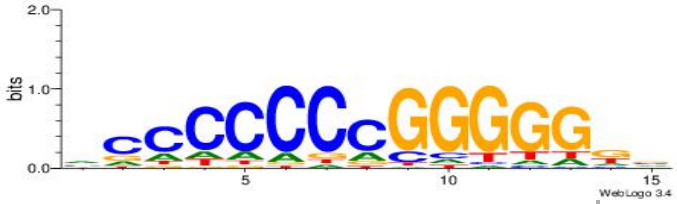
Motif ID:	UP00006
Motif name:	Zic3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0105793

Alignment:
BMCCCCCGGGGGGGB
-BSCCCCGCGBS---

Original motif
Consensus sequence: BMCCCCCGGGGGGGB

Reverse complement motif
Consensus sequence: VCCCCCCCGGGGGRB





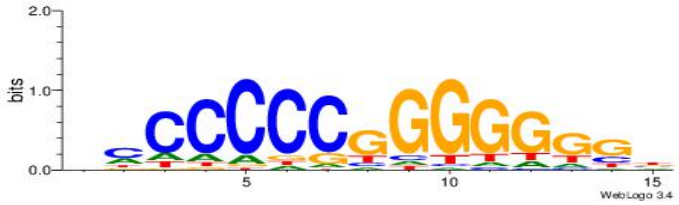
Motif ID:	UP00057
Motif name:	Zic2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0112489

Alignment:

```
VCCCCCCCGGGGGRB
---SBCGCGGGGSB-
```

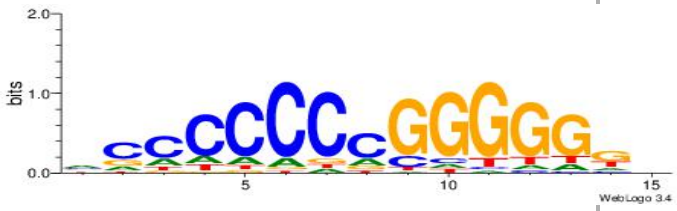
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB



Motif ID:	UP00400

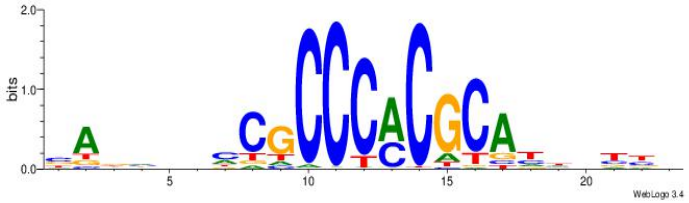
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.014467

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
------SBCGCGGGGSB------
```

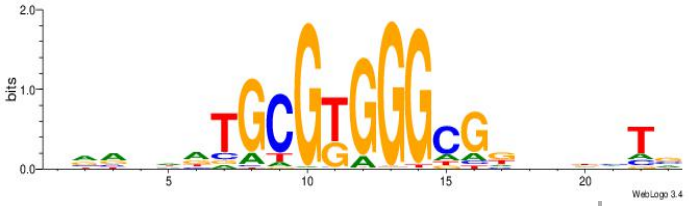
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

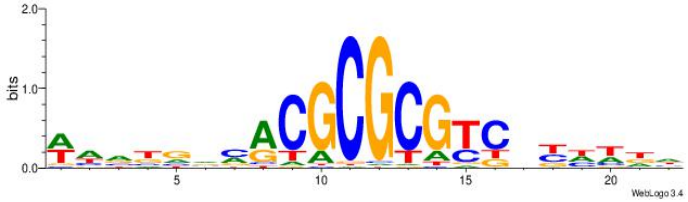


Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11

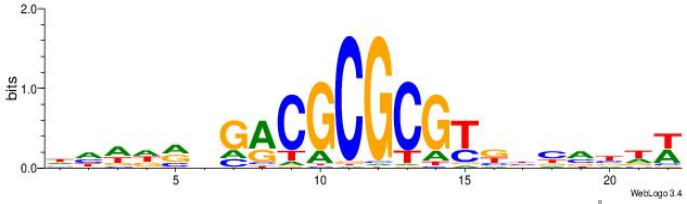
Similarity score: 0.0150561

Alignment:
HDWHMHGACGCGCGTRBVVBHW
--------SBCGCGGGGSB---

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

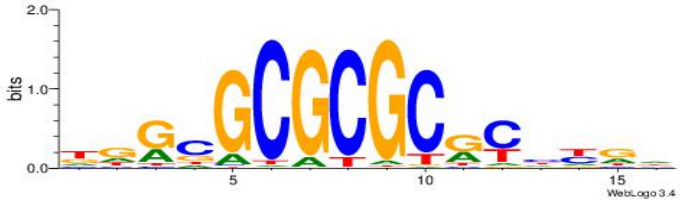


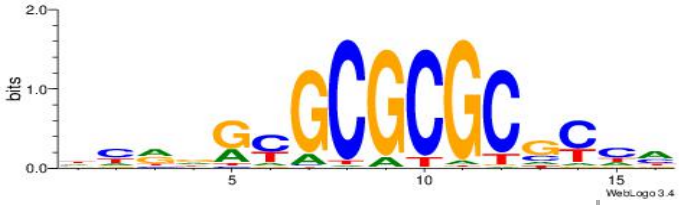
Motif ID: UP00065
Motif name: Zfp161_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0169049

Alignment:
DMMDGMGCGCGCGCHD
--BSCCCCGCGBS---

Original motif
Consensus sequence: DDGCGCGCGCRCHYRD

Reverse complement motif
Consensus sequence: DMMDGMGCGCGCGCHD





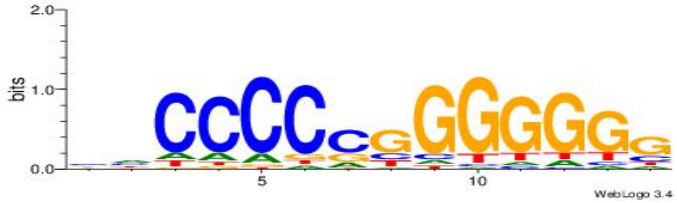
Motif ID:	UP00102
Motif name:	Zic1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0186112

Alignment:

```
BHCCCCCGGGGGGG
-BSCCCCGCGBS--
```

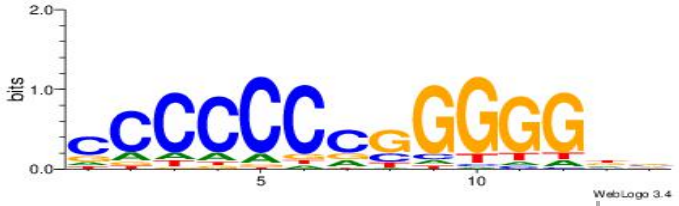
Original motif

Consensus sequence: BHCCCCCGGGGGGG



Reverse complement motif

Consensus sequence: CCCCCCCGGGGGHB



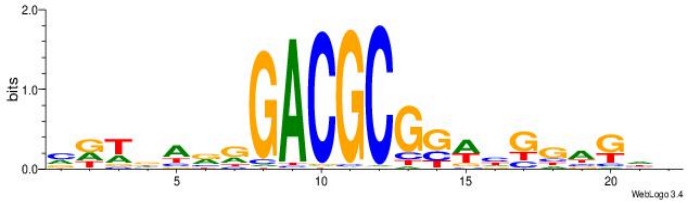
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	11
Similarity score:	0.0192401

Alignment:

```
VHYTCCDWCCGCGTCMMTHWHV
----BSCCCCGCGBS-------
```

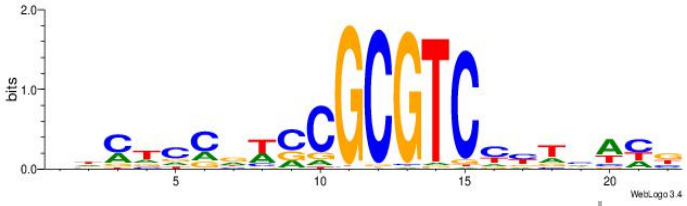
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

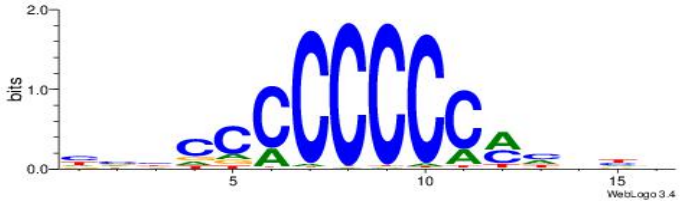


Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

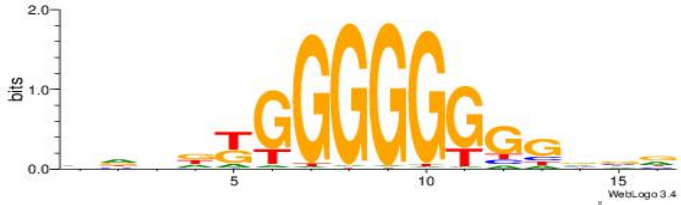
Number of overlap: 11
Similarity score: 0.0204596

Alignment:
BHHDYGGGGGGGGBVD
--SBCGCGGGGSB---

Original motif
Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif
Consensus sequence: BHHDYGGGGGGGGBVD



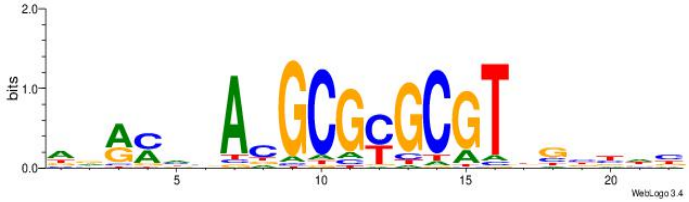
Motif ID: UP00526
Motif name: Foxn1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0232114

Alignment:
DDRMHBACGCGYGCGTDGBBDB
-------SBCGCGGGGSB----

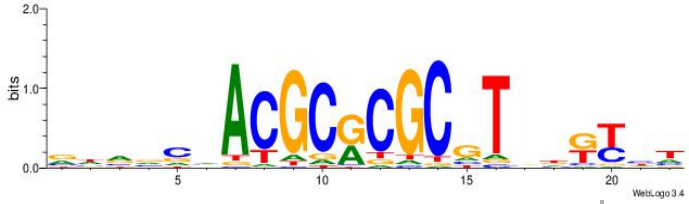
Original motif

Reverse complement motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



Dataset #: 4 **Motif ID: 69** **Motif name: atactttggc**

Original motif

Consensus sequence: ATACTTTGGC

Reverse complement motif

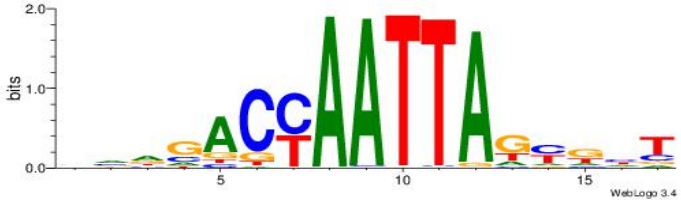
Consensus sequence: GCCAAAGTAT

Best Matches for Motif ID 69 (Highest to Lowest)

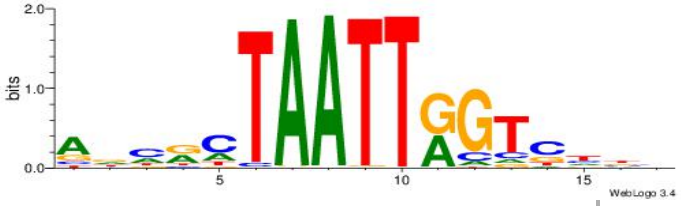
Motif ID:	UP00156
Motif name:	Msx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0221581

Alignment:
ADHKCTAATTKGTCDBV
----ATACTTTGGC---

Original motif
Consensus sequence: VVDGACYAATTAGYDHT



Reverse complement motif
Consensus sequence: ADHKCTAATTKGTCDBV

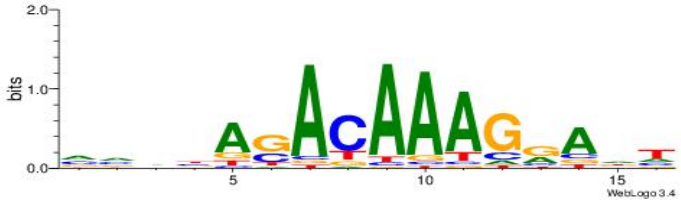


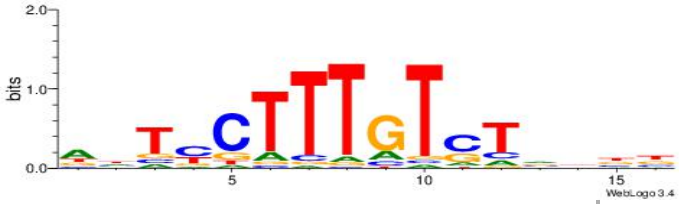
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.027519

Alignment:
HDTMCTTTGTSTVDBB
-ATACTTTGGC-----

Original motif
Consensus sequence: VVDBASACAAAGRADH

Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB





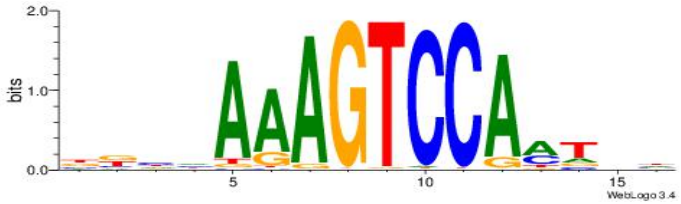
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0285786

Alignment:

```
BBHHAAAGTCCAMTHH
-GCCAAAGTAT-----
```

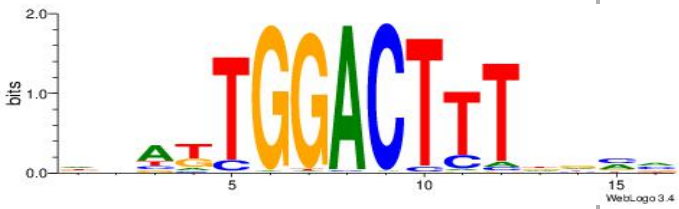
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV



Motif ID:	UP00418

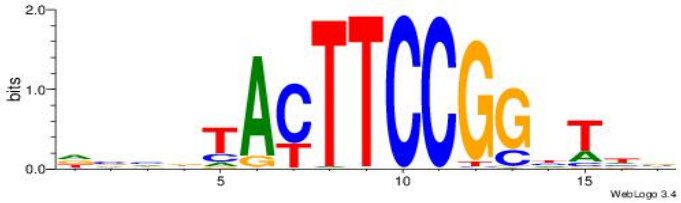
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.030488

Alignment:

```
BHAHCCGGAAGTABDVD
----GCCAAAGTAT---
```

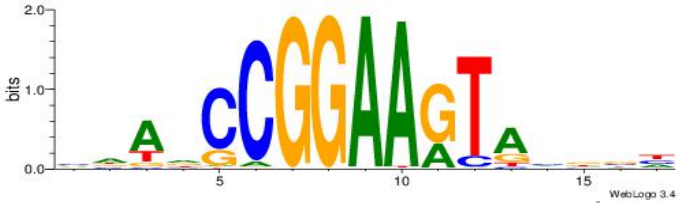
Original motif

Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif

Consensus sequence: BHAHCCGGAAGTABDVD

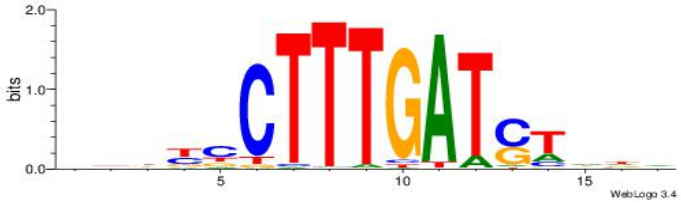


Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	10

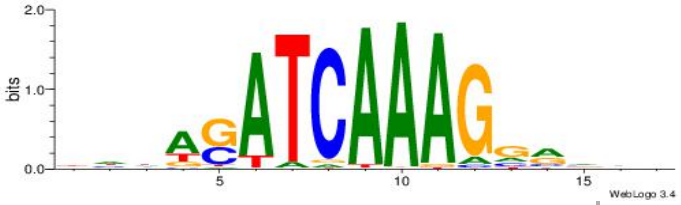
Similarity score: 0.0314685

Alignment:
BDDASATCAAAGGMDDD
-----GCCAAAGTAT--

Original motif
Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif
Consensus sequence: BDDASATCAAAGGMDDD

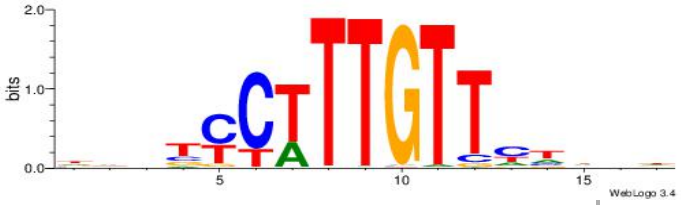


Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0317293

Alignment:
HHBTMCTTTGTTMDDVH
--ATACTTTGGC-----

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.031914

Alignment:

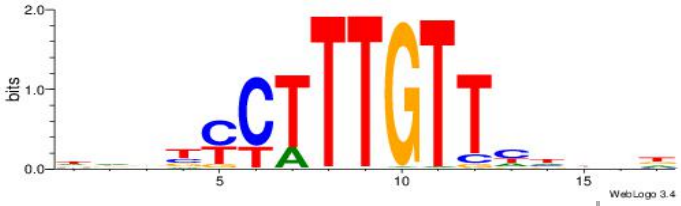
```
HHBBMCTTTGTTHDDBH
--ATACTTTGGC-----
```

Original motif

Consensus sequence: HBDDDAACAAAGRVBHH

Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



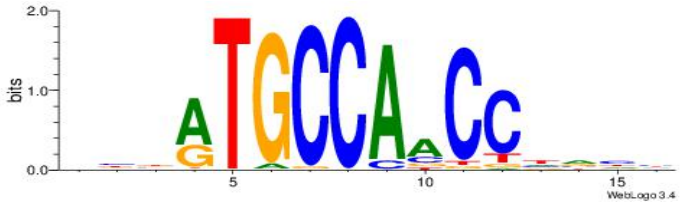
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0323012

Alignment:

```
DBBATGCCAACCHVHH
-----GCCAAAGTAT-
```

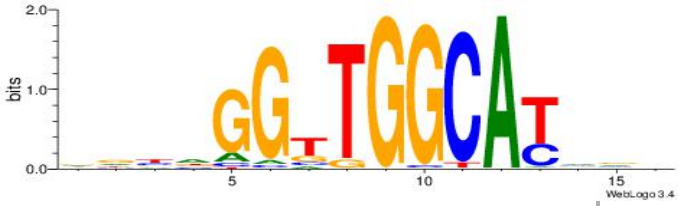
Original motif

Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD

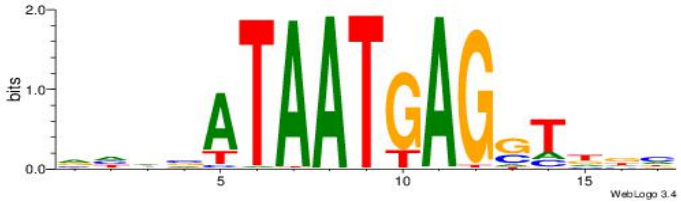


Motif ID:	UP00146
Motif name:	Pou6f1_3733.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

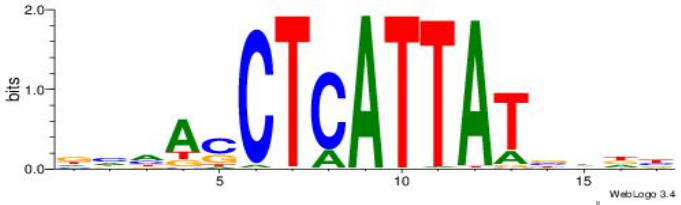
Number of overlap: 10
Similarity score: 0.032571

Alignment:
VHHVATAATGAGSTDDH
----ATACTTTGGC---

Original motif
Consensus sequence: VHHVATAATGAGSTDDH



Reverse complement motif
Consensus sequence: DHDASCTCATTATVHHB



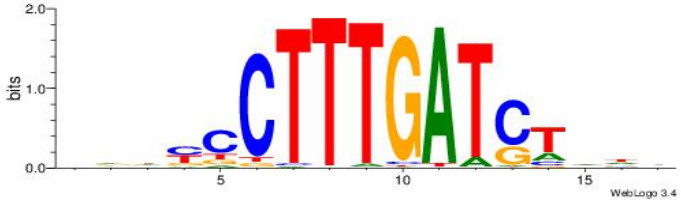
Motif ID: UP00067
Motif name: Lef1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.0330221

Alignment:
DDDYCCTTTGATCTDDV
--ATACTTTGGC-----

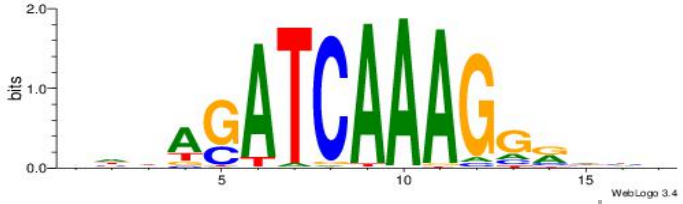
Original motif

Reverse complement motif

Consensus sequence: DDDYCCTTTGATCTDDV



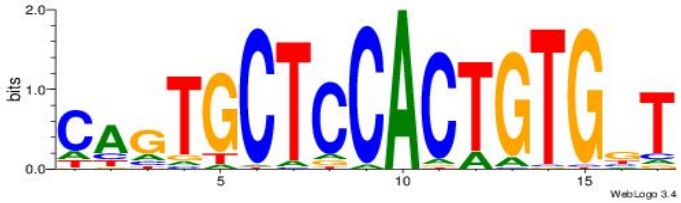
Consensus sequence: VDDAGATCAAAGGKDDD



Dataset #: 4 Motif ID: 70 Motif name: CagTGCTCCACTGTGgT

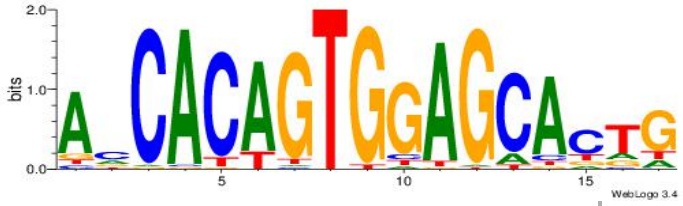
Original motif

Consensus sequence: CAGTGCTCCACTGTGBT



Reverse complement motif

Consensus sequence: ABCACAGTGGAGCACTG

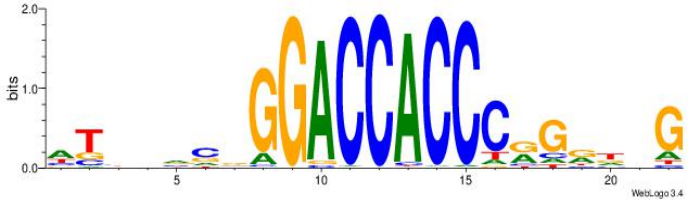


Best Matches for Motif ID 70 (Highest to Lowest)

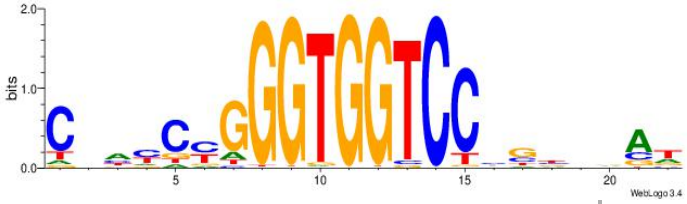
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	17
Similarity score:	0.0419306

Alignment:
CBDMCMGGGTGGTCCHVBVBAH
--ABCACAGTGGAGCACTG---

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH

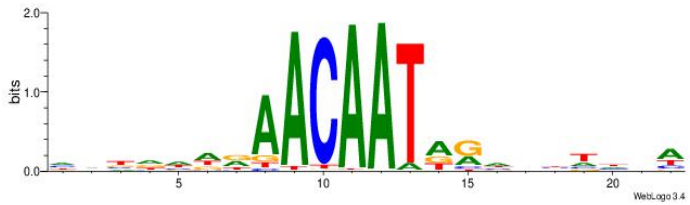


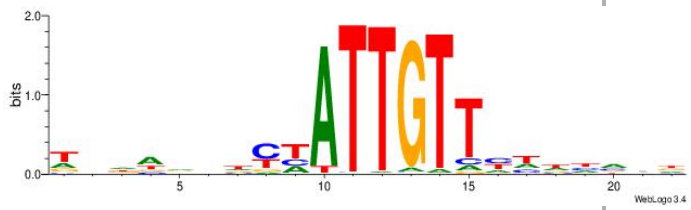
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0501904

Alignment:
HHBDHDDAACAATDRHHHHHBW
-----ABCACAGTGGAGCACTG

Original motif
Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH





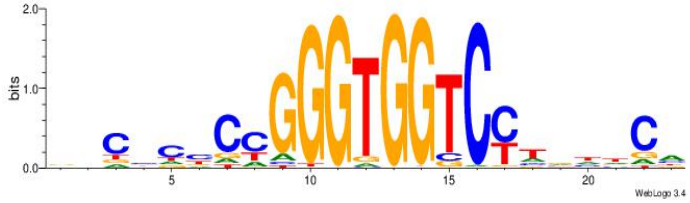
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	0.0504778

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
--CAGTGCTCCACTGTGBT----
```

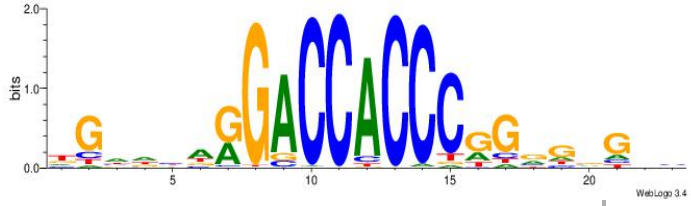
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Motif ID:	UP00022

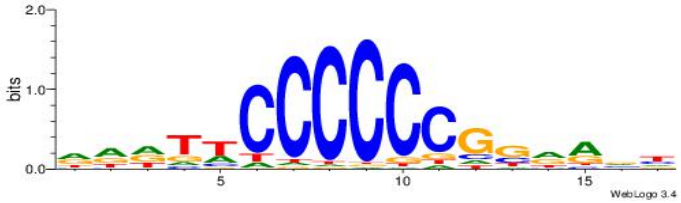
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0513094

Alignment:

```
DDDTWCCCCCCGGDRVH
CAGTGCTCCACTGTGBT
```

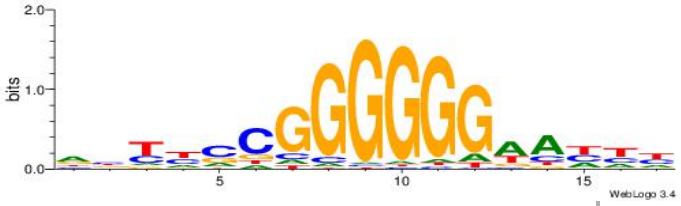
Original motif

Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif

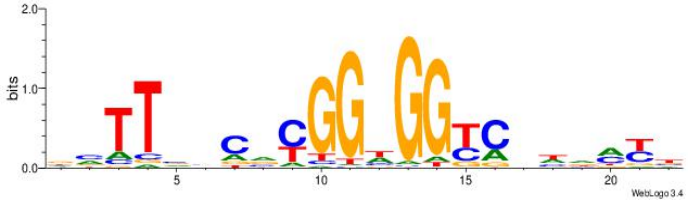
Consensus sequence: HVKDCCGGGGGGWADDD



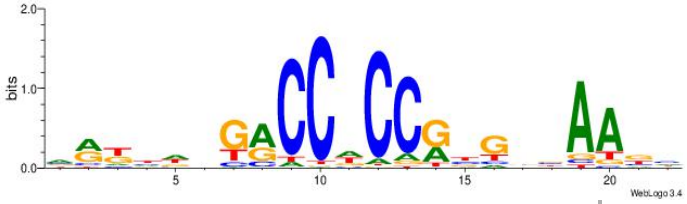
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.0516506

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
-CAGTGCTCCACTGTGBT----

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

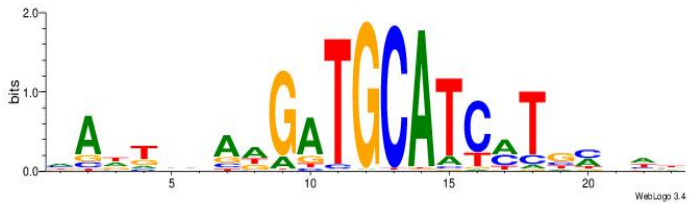


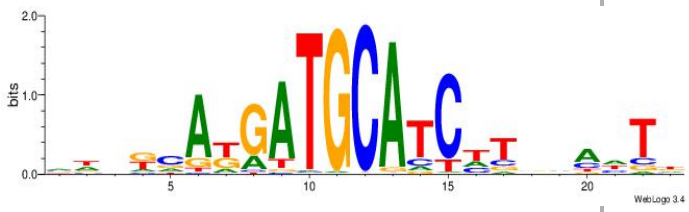
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	0.0523515

Alignment:
VHVRCAYGATGCATCDTVVADTH
--ABCACAGTGGAGCACTG----

Original motif
Consensus sequence: HADTBVADGATGCATCMTGMVHB

Reverse complement motif
Consensus sequence: VHVRCAYGATGCATCDTVVADTH





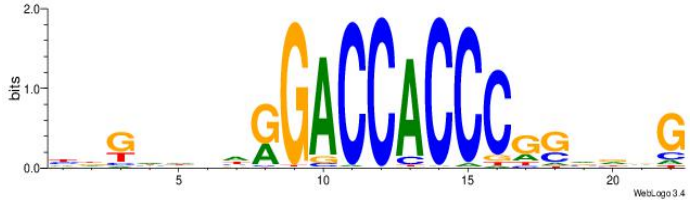
Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	17
Similarity score:	0.053668

Alignment:

```
CVHBSCGGGTGGTCMHVHHCDH
--ABCACAGTGGAGCACTG---
```

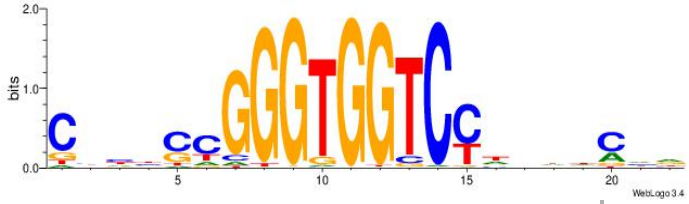
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



Motif ID:	UP00050

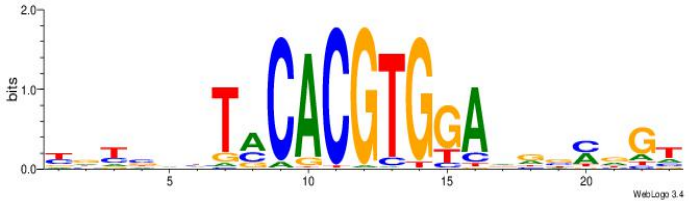
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	17
Similarity score:	0.0539016

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
-----ABCACAGTGGAGCACTG-
```

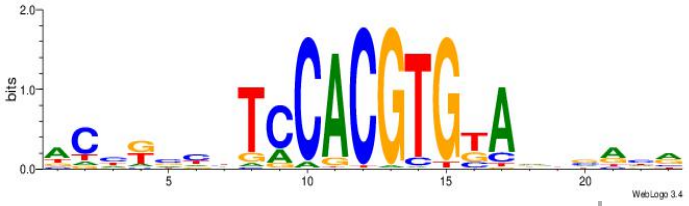
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

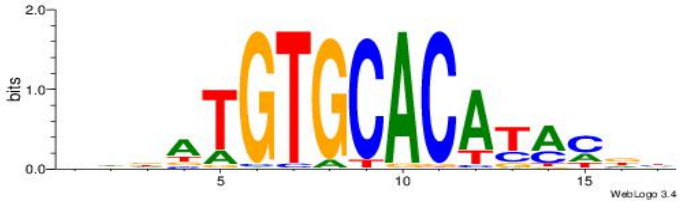


Motif ID:	UP00042
Motif name:	Gm397_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17

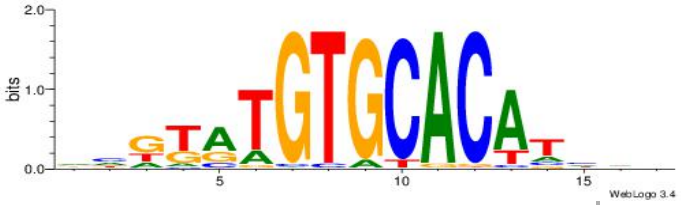
Similarity score: 0.0558205

Alignment:
HHRTATGTGCACATHHD
ABCACAGTGGAGCACTG

Original motif
Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif
Consensus sequence: HHRTATGTGCACATHHD

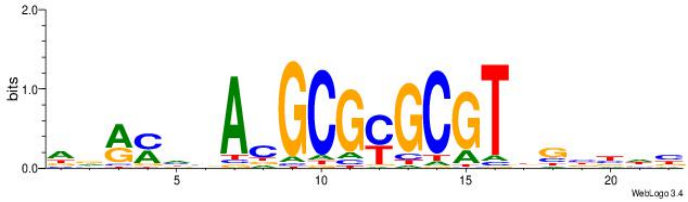


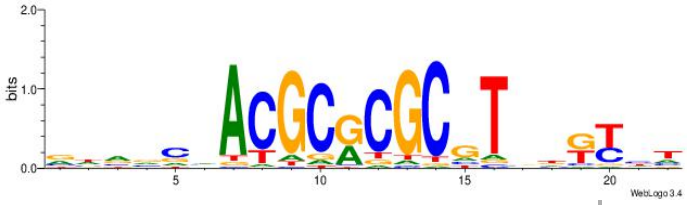
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	0.0558674

Alignment:
BDVBCDACGCKCGCGTBHRKHD
----CAGTGCTCCACTGTGBT-

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB

Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

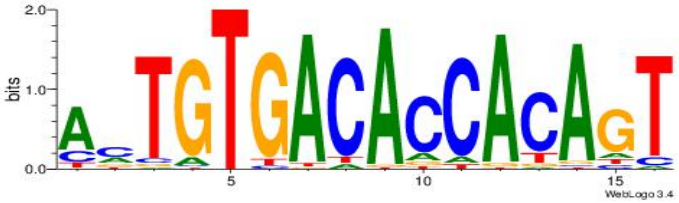




Dataset #: 4 **Motif ID: 71** **Motif name: AmTGTGACACCACAGT**

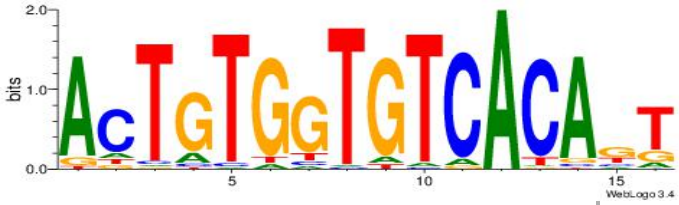
Original motif

Consensus sequence: AMTGTGACACCACAGT



Reverse complement motif

Consensus sequence: ACTGTGGTGTCACART



Best Matches for Motif ID 71 (Highest to Lowest)

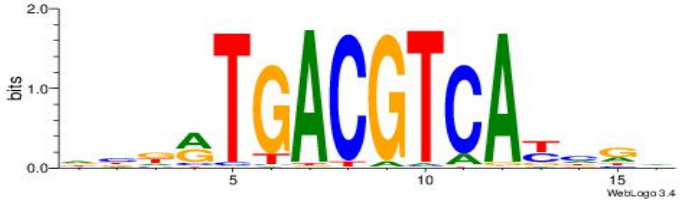
Motif ID:	UP00020
Motif name:	Atf1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0273934

Alignment:

```
DBDRTGACGTCAYHRD
AMTGTGACACCACAGT
```

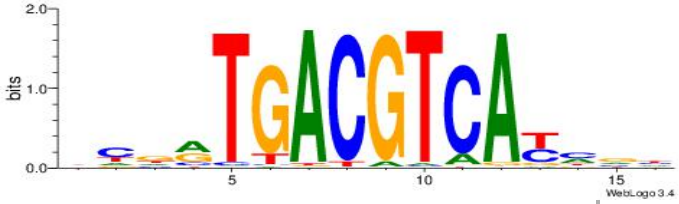
Original motif

Consensus sequence: DBDRTGACGTCAYHRD



Reverse complement motif

Consensus sequence: DMDMTGACGTCAKHBD



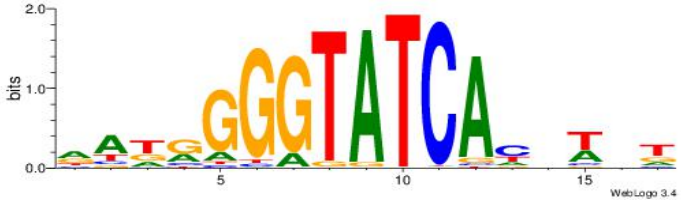
Motif ID:	UP00159
Motif name:	Six2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.0303245

Alignment:

```
AHWDGTGATACCCMRTD
-AMTGTGACACCACAGT
```

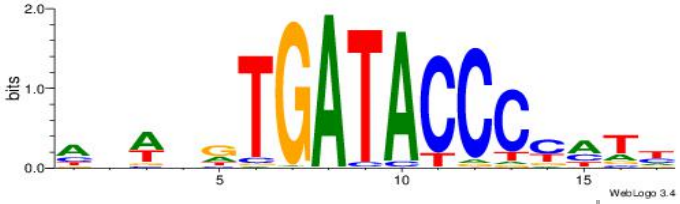
Original motif

Consensus sequence: DAKRGGGTATCACDWHT



Reverse complement motif

Consensus sequence: AHWDGTGATACCCMRTD



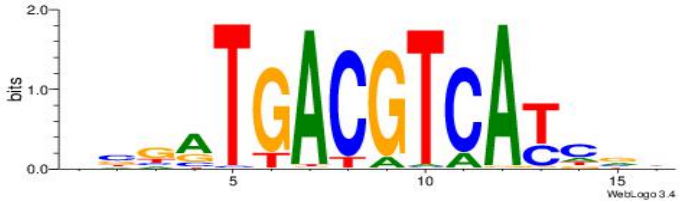
Motif ID:	UP00103
Motif name:	Jundm2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0344928

Alignment:

```
BBGATGACGTCAYCVH
AMTGTGACACCACAGT
```

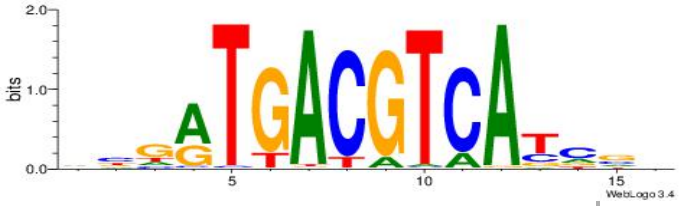
Original motif

Consensus sequence: BBGATGACGTCAYCVH



Reverse complement motif

Consensus sequence: HVGMTGACGTCATCBB

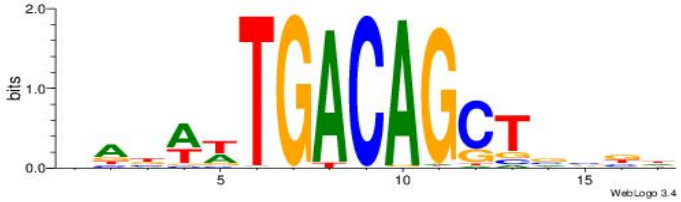


Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

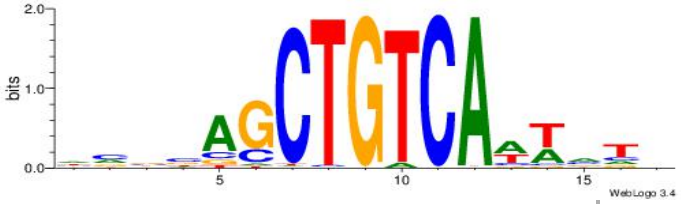
Number of overlap: 16
Similarity score: 0.0348371

Alignment:
DBVVAGCTGTCAWWVTH
ACTGTGGTGTCACART-

Original motif
Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif
Consensus sequence: DBVVAGCTGTCAWWVTH



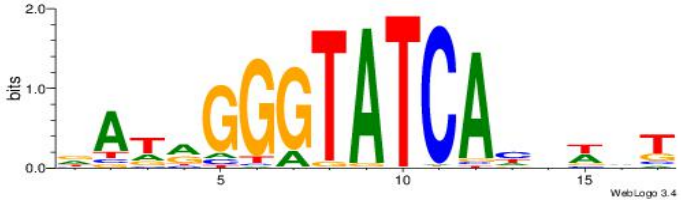
Motif ID: UP00195
Motif name: Six3
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 16
Similarity score: 0.0349083

Alignment:
DATRGGGTATCAHHWHT
ACTGTGGTGTCACART-

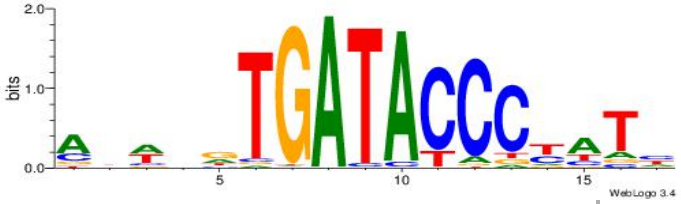
Original motif

Reverse complement motif

Consensus sequence: DATRGGGTATCAHHWHT



Consensus sequence: AHWHDTGATACCCKATH



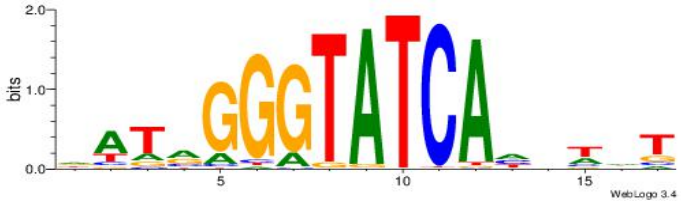
Motif ID:	UP00388
Motif name:	Six6_2267.4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.0354092

Alignment:

```
DATRGGGTATCAHDWHT
ACTGTGGTGTCACART-
```

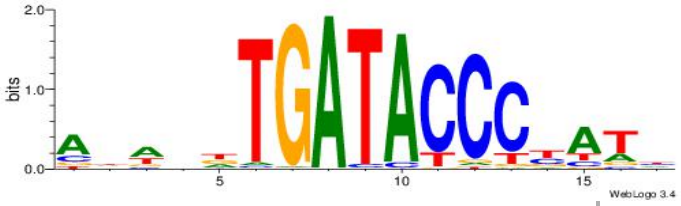
Original motif

Consensus sequence: DATRGGGTATCAHDWHT



Reverse complement motif

Consensus sequence: AHWDHTGATACCCKATD



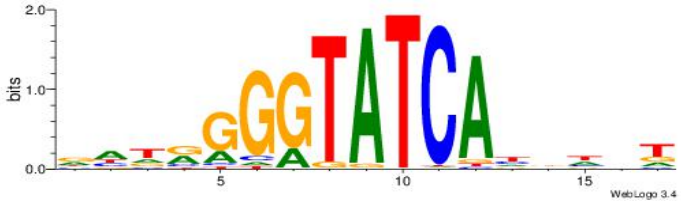
Motif ID:	UP00192
Motif name:	Six1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	16
Similarity score:	0.0354313

Alignment:

```
DHDRGGGTATCAHDHBT
ACTGTGGTGTCACART-
```

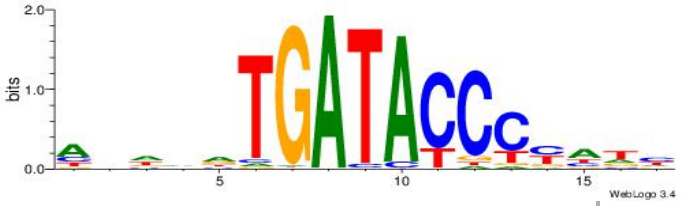
Original motif

Consensus sequence: DHDRGGGTATCAHDHBT



Reverse complement motif

Consensus sequence: AVHDHTGATACCCMDHH

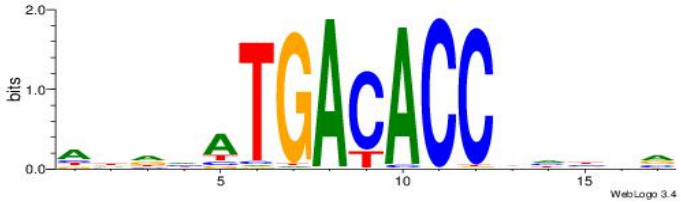


Motif ID:	UP00199
Motif name:	Six4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

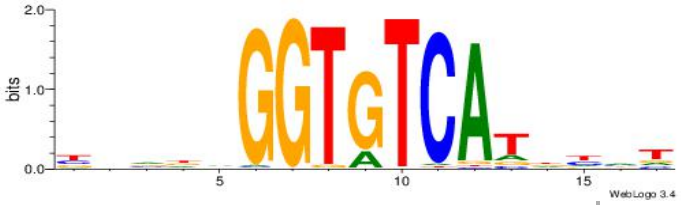
Number of overlap: 16
Similarity score: 0.0355151

Alignment:
ADDHATGACACCBHBBV
-AMTGTGACACCACAGT

Original motif
Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif
Consensus sequence: BBVHVGGTGTCATHDDT



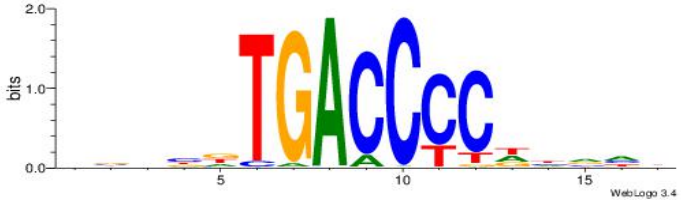
Motif ID: UP00053
Motif name: Rxra_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 16
Similarity score: 0.0362492

Alignment:
DBHBDTGACCCCDHVHB
-AMTGTGACACCACAGT

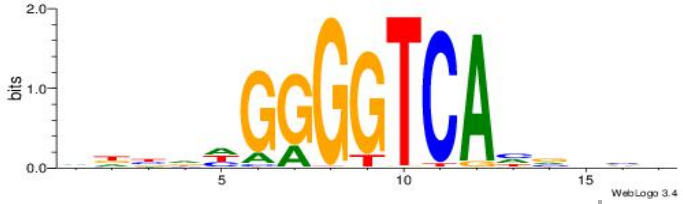
Original motif

Reverse complement motif

Consensus sequence: DBHBDTGACCCCDHVHB



Consensus sequence: VHBHDGGGGTCAHBHBD



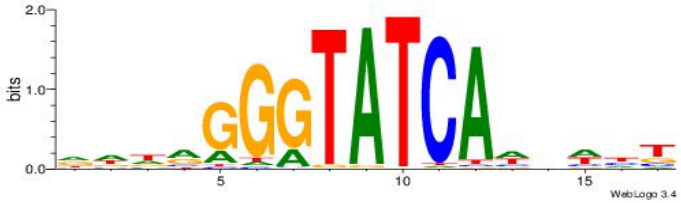
Motif ID:	UP00388
Motif name:	Six6_2267.5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	16
Similarity score:	0.0374881

Alignment:

```
AHWHWTGATACCCKDDD
-AMTGTGACACCACAGT
```

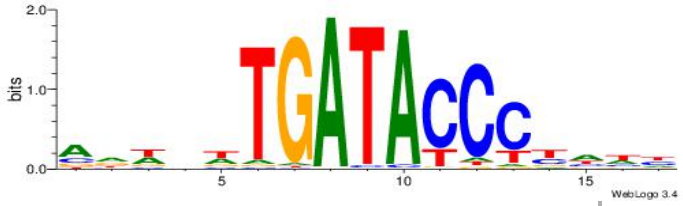
Original motif

Consensus sequence: DDDRGGGTATCAWHWHT



Reverse complement motif

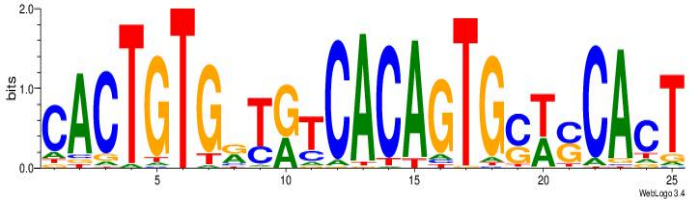
Consensus sequence: AHWHWTGATACCCKDDD



Dataset #: 4 **Motif ID: 72** **Motif name: CACTGTGrYrtCACAGTGswsCAcT**

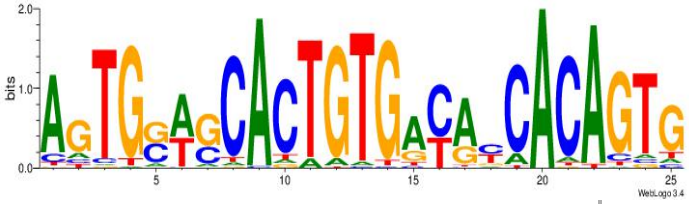
Original motif

Consensus sequence: CACTGTGRTRTCACAGTGSWSCACT



Reverse complement motif

Consensus sequence: AGTGSWSCACTGTGAMAMCACAG



Best Matches for Motif ID 72 (Highest to Lowest)

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:	Forward
Position number:	5
Number of overlap:	21
Similarity score:	0.0558366

Alignment:

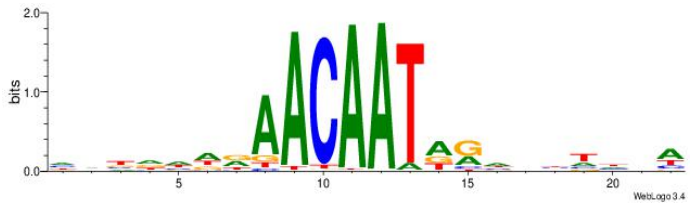
```
HHBDHDDAACAATDRHHHHHBW----
----CACTGTGRTRTCACAGTGSWSCACT
```

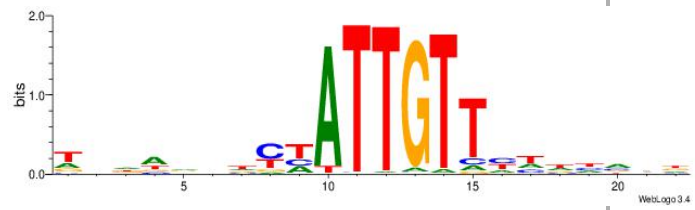
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH





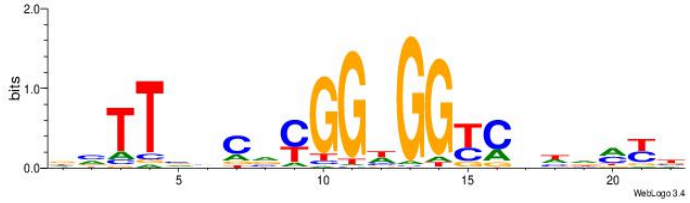
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.55477

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH-----
--AGTGSWSCACTGTGAMAMCACAGTG
```

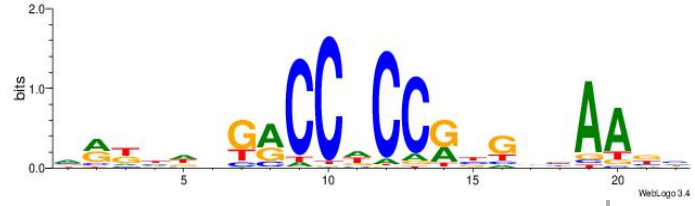
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00539

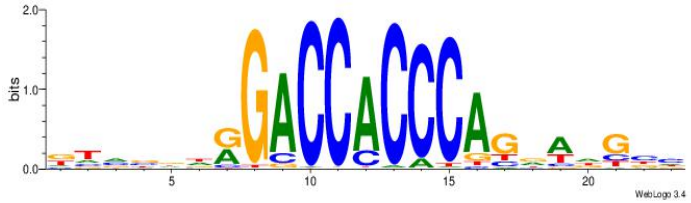
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	19
Similarity score:	1.05722

Alignment:

```
------DTVBDDRGACCACCCAGDWDGBH
AGTGSWSCACTGTGAMAMCACAGTG----
```

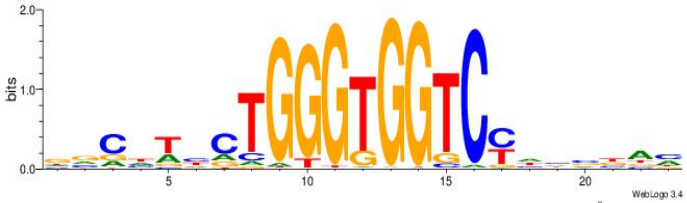
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

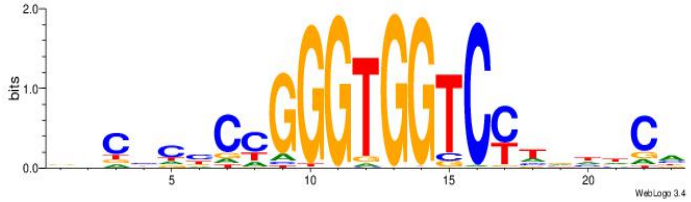
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



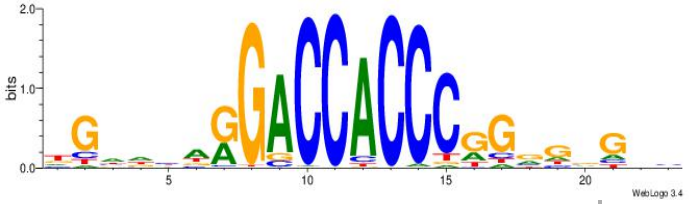
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	19
Similarity score:	1.05946

Alignment:
HGDHVHKGACCACCCGGBGBGDB------
------AGTGSWSCACTGTGAMAMCACAGTG

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

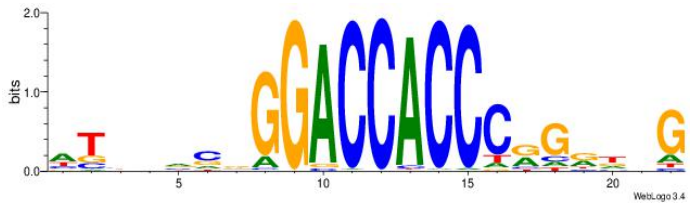


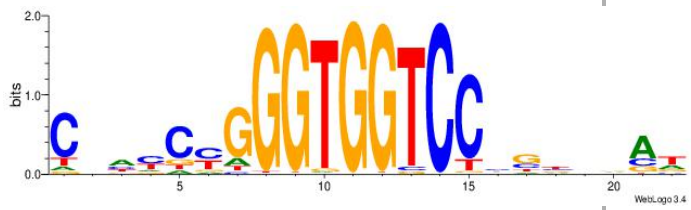
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	1.5496

Alignment:
-------CBDMCMGGGTGGTCCHVBVBAH
CACTGTGRTRTCACAGTGSWSCACT----

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH





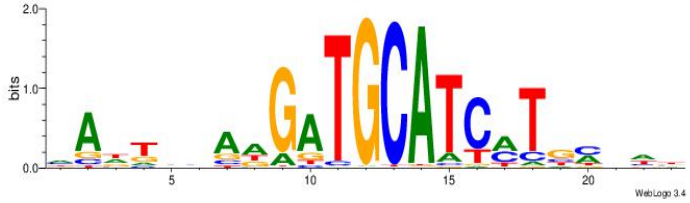
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	18
Similarity score:	1.55149

Alignment:

```
-------VHVRCAYGATGCATCDTVVADTH
CACTGTGRTRTCACAGTGSWSCACT-----
```

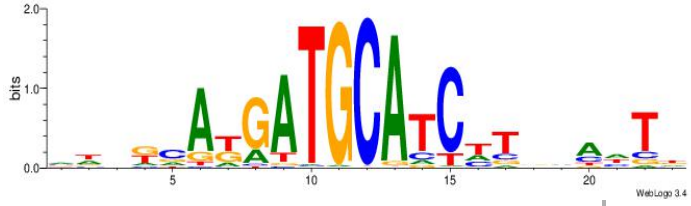
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH



Motif ID:	UP00540

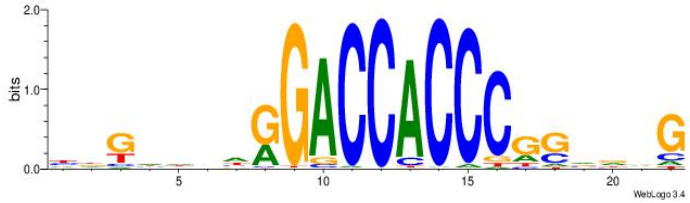
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	1.55607

Alignment:

```
HDGHHBHRGACCACCCGSVDVG-------
----AGTGSWSCACTGTGAMAMCACAGTG
```

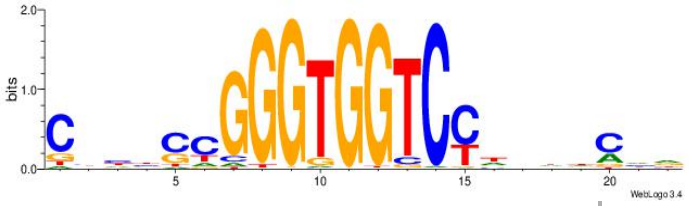
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



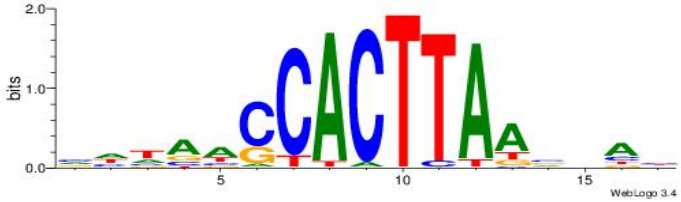
Motif ID:	UP00228
Motif name:	Bapx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	2.04247

Alignment:

```
DTBVTTAAGTGGTTHHV--------
-AGTGSWSCACTGTGAMAMCACAGTG
```

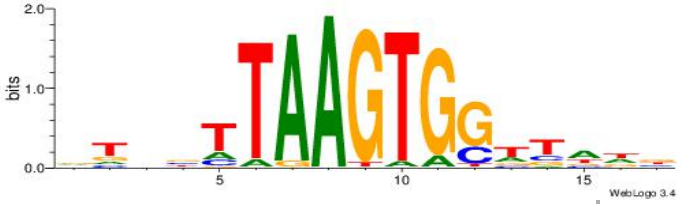
Original motif

Consensus sequence: VHHAACCACTTAAVVAH



Reverse complement motif

Consensus sequence: DTBVTTAAGTGGTTHHV



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:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	2.04316

Alignment:

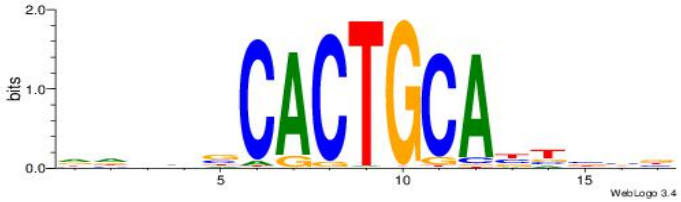
```
--------DDBBBCACTGCABTBBB
CACTGTGRTRTCACAGTGSWSCACT--
```

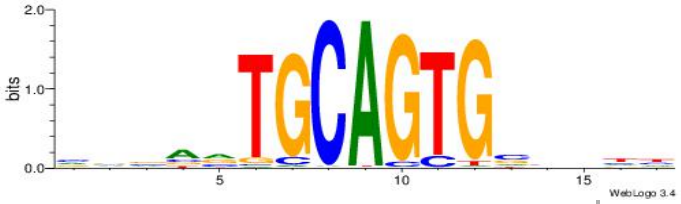
Original motif

Consensus sequence: DDBBBCACTGCABTBBB

Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD





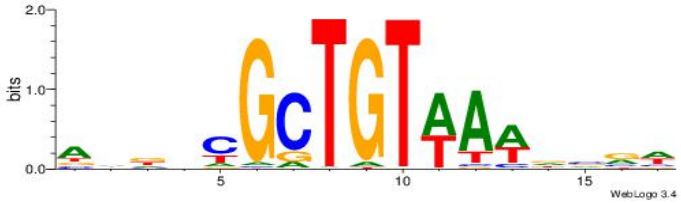
Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	17
Similarity score:	2.04346

Alignment:

```
--------WVVHWTWACAGCGBHBT
AGTGSWSCACTGTGAMAMCACAGTG-----
```

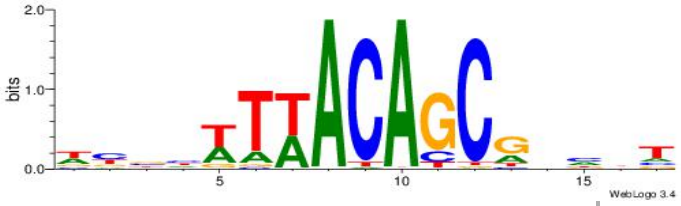
Original motif

Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif

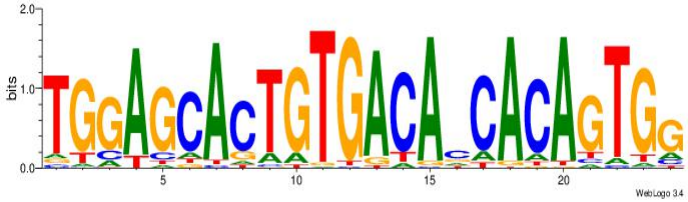
Consensus sequence: WVVHWTWACAGCGBHBT



Dataset #: 4 Motif ID: 73 Motif name: TGGAGCACTGTGACAcCACAGTGg

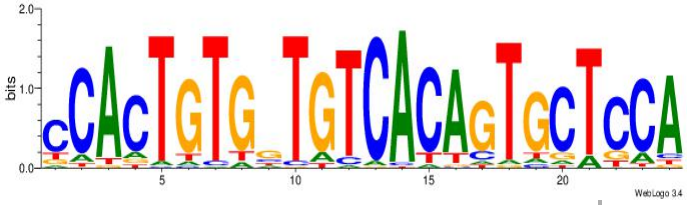
Original motif

Consensus sequence: TGGAGCACTGTGACAVCACAGTGG



Reverse complement motif

Consensus sequence: CCACTGTGVTGTCACAGTGCTCCA



Best Matches for Motif ID 73 (Highest to Lowest)

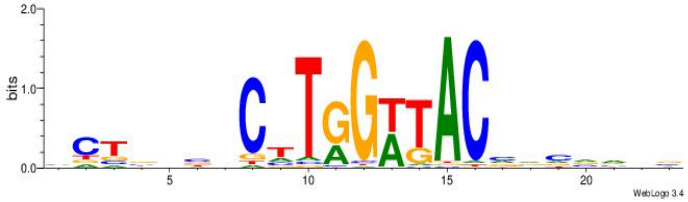
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	21
Similarity score:	0.0391954

Alignment:

```
BDBBVBVGTAWCCAAGVBHBAGB---
---CCACTGTGVTGTCACAGTGCTCCA
```

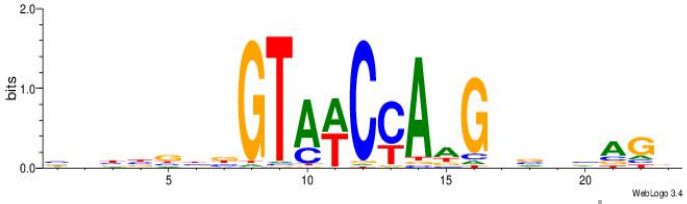
Original motif

Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif

Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB



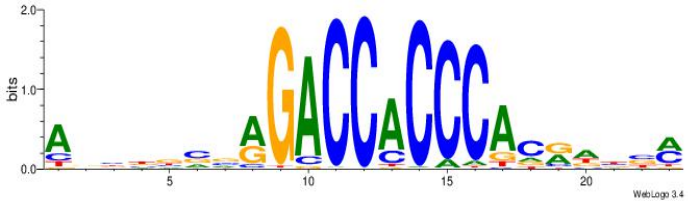
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	21
Similarity score:	0.0400271

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT---
--CCACTGTGVTGTCACAGTGCTCCA
```

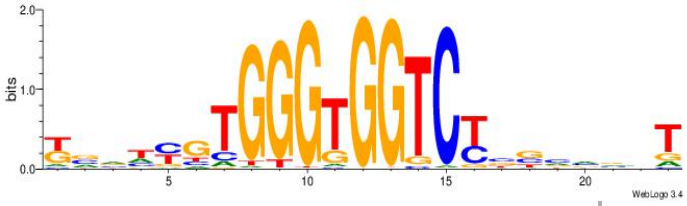
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT

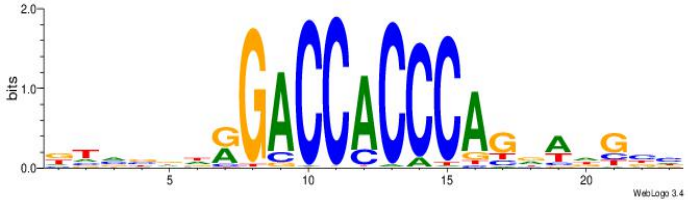


Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	20

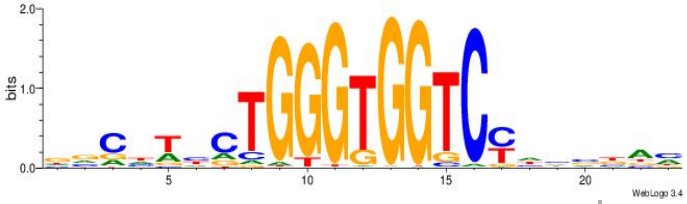
Similarity score: 0.535486

Alignment:
----DBCDWHCTGGGTGGTCMDHBBAH
CCACTGTGVTGTCACAGTGCTCCA----

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH

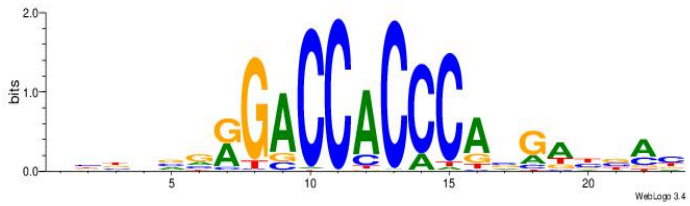


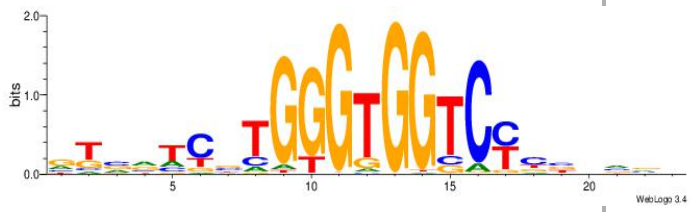
Motif ID: UP00538
Motif name: Gli1_v015681_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 20
Similarity score: 0.536069

Alignment:
----BTBVTCVTGGGTGGTCMVVDVBB
CCACTGTGVTGTCACAGTGCTCCA----

Original motif
Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB





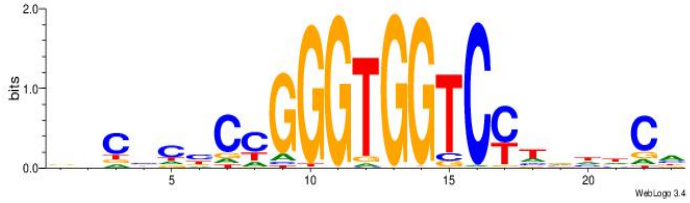
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.539704

Alignment:

```
----HGDHVHKGACCACCCGGBGBGDB
TGGAGCACTGTGACAVCACAGTGG---
```

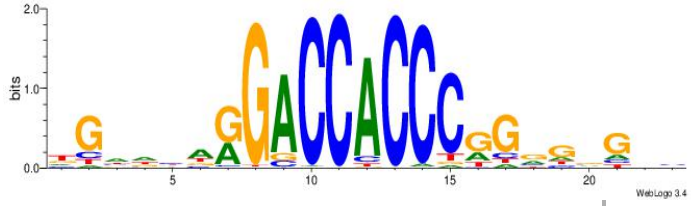
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Motif ID:	UP00540

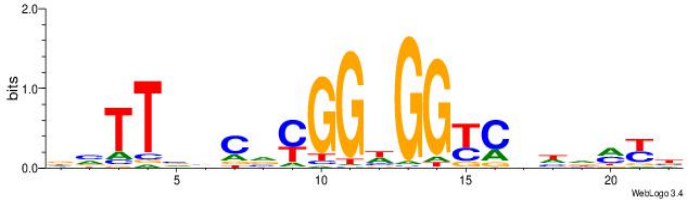
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	18
Similarity score:	1.53819

Alignment:

```
------DVTTVVCVYGGHGGYCHHDMYB
TGGAGCACTGTGACAVCACAGTGG------
```

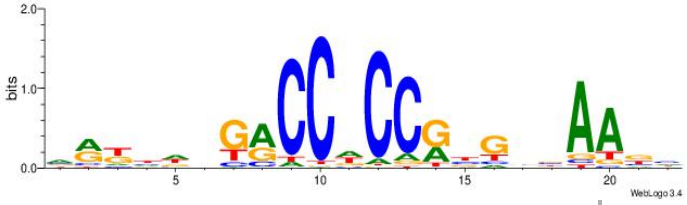
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



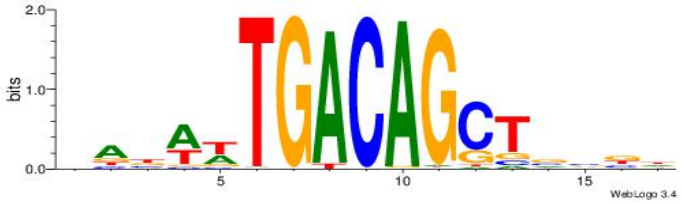
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	17
Similarity score:	2.02534

Alignment:

-------DABWWTGACAGCTVVBD
TGGAGCACTGTGACAVCACAGTGG--

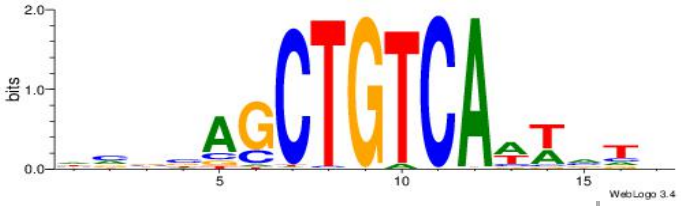
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



Motif ID:	UP00159
Motif name:	Six2
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:	17
Similarity score:	2.02571

Alignment:

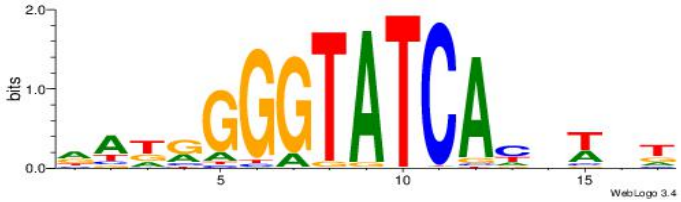
-------AHWDGTGATACCCMRTD
CCACTGTGVTGTCACAGTGCTCCA-----

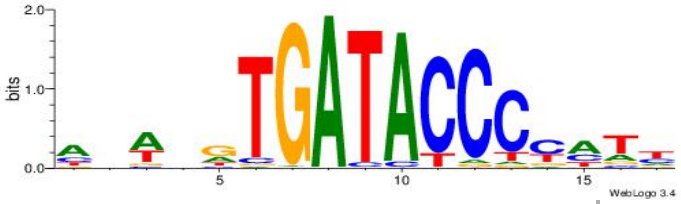
Original motif

Consensus sequence: DAKRGGGTATCACDWHT

Reverse complement motif

Consensus sequence: AHWDGTGATACCCMRTD





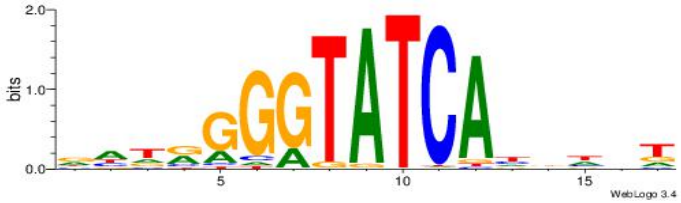
Motif ID:	UP00192
Motif name:	Six1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	17
Similarity score:	2.02892

Alignment:

```
-------AVHDHTGATACCCMDHH
CCACTGTGVTGTCACAGTGCTCCA-----
```

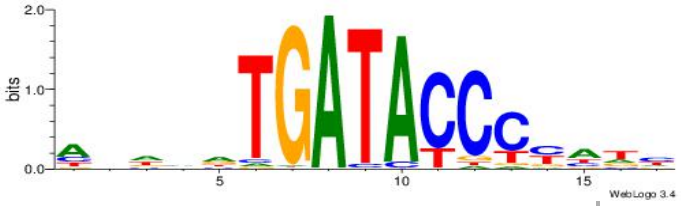
Original motif

Consensus sequence: DHDRGGGTATCAHDHBT



Reverse complement motif

Consensus sequence: AVHDHTGATACCCMDHH



Motif ID:	UP00076
Motif name:	Rfxdc2_secondary

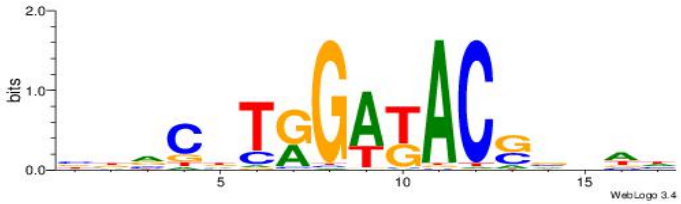
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	2.0292

Alignment:

```
HDDVSGTRTCMADGBVB-------
---CCACTGTGVTGTCACAGTGCTCCA
```

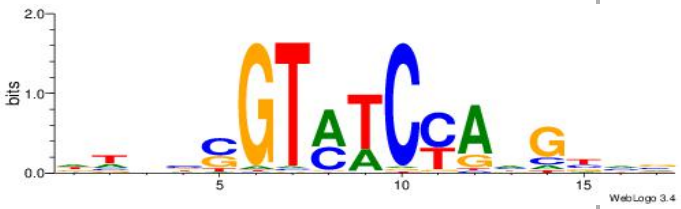
Original motif

Consensus sequence: BBVCDTRGAKACSVDDH



Reverse complement motif

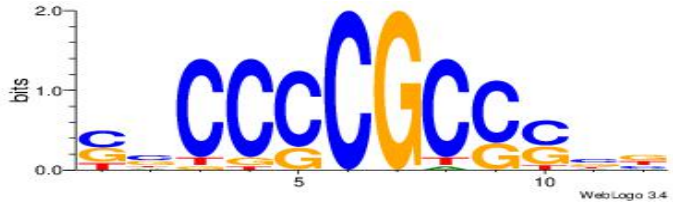
Consensus sequence: HDDVSGTRTCMADGBVB



Dataset #: 4 **Motif ID: 74** **Motif name: ssCCCCGCSssk**

Original motif

Consensus sequence: SBCCCCGCCSBB



Reverse complement motif

Consensus sequence: BBSGGCGGGGBS

Best Matches for Motif ID 74 (Highest to Lowest)

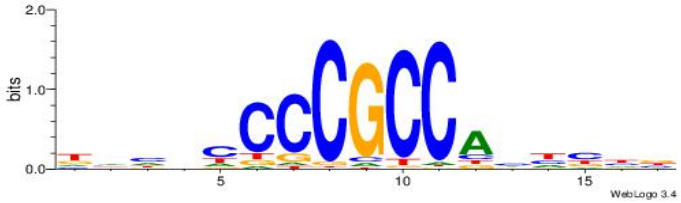
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0114847

Alignment:

```
DHHBCCCCGCCAHHBHB
--SBCCCCGCCSBB---
```

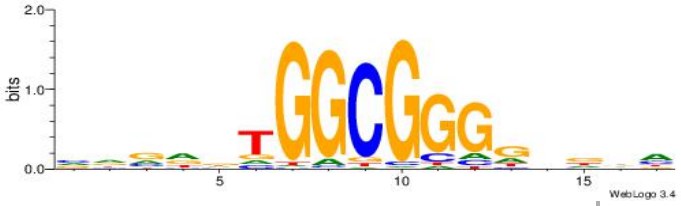
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

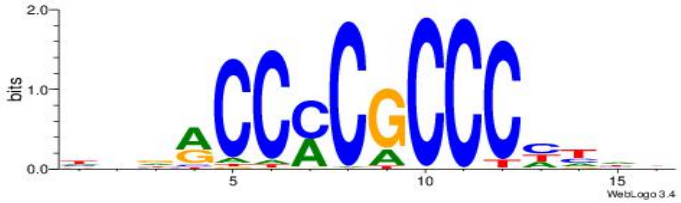
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0165262

Alignment:

```
HBDRCCMCGCCCHHHD
--SBCCCCGCCSBB--
```

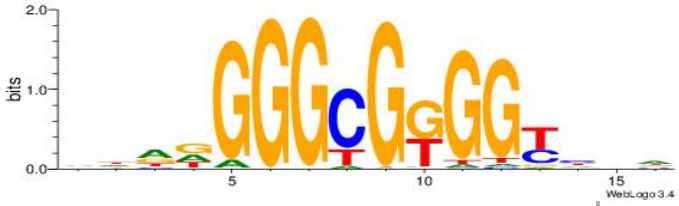
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



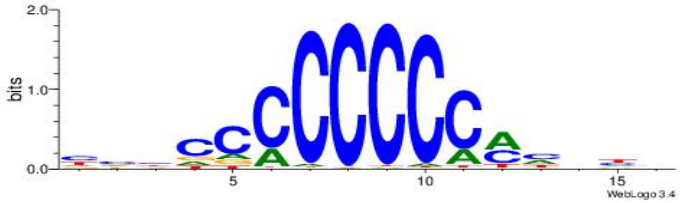
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0276137

Alignment:

HVBCCCCCCCCMHHHB
--SBCCCCGCCSBB--

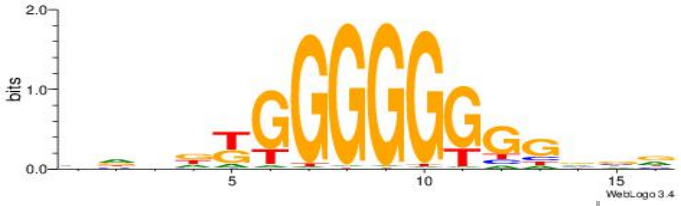
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



Motif ID:	UP00003
Motif name:	E2F3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0328578

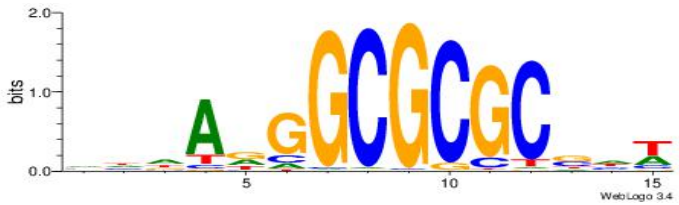
Alignment:
WHSGCGCGCCHTDHB
-SBCCCCGCCSBB--

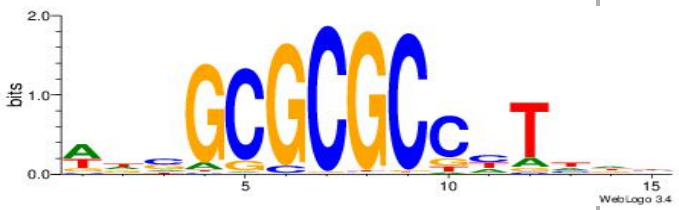
Original motif

Consensus sequence: VHDADGGCGCGCSHW

Reverse complement motif

Consensus sequence: WHSGCGCGCCHTDHB





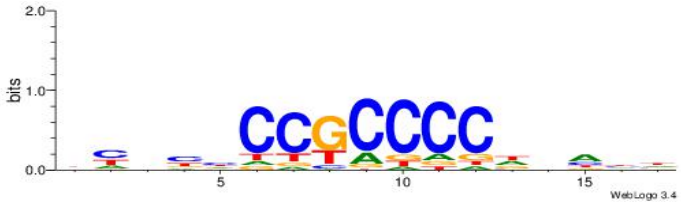
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0336734

Alignment:

```
BHHBHCCGCCCCDHHHH
-SBCCCCGCCSBB----
```

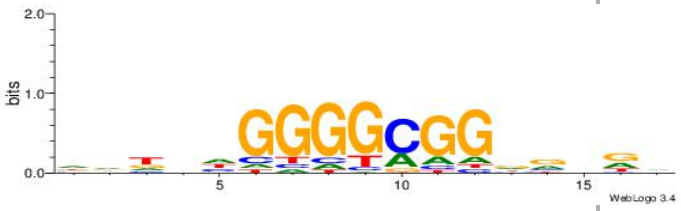
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID:	UP00001

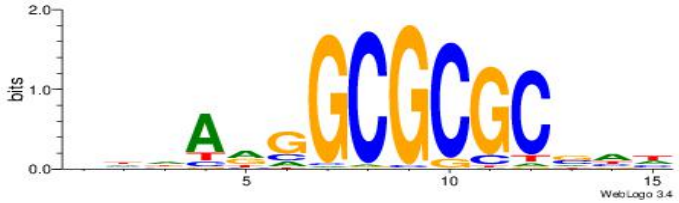
Motif name:	E2F2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0345737

Alignment:

```
HHVGCGCGCCKTDHB
-SBCCCCGCCSBB--
```

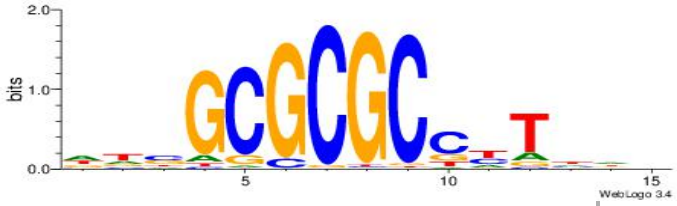
Original motif

Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif

Consensus sequence: HHVGCGCGCCKTDHB

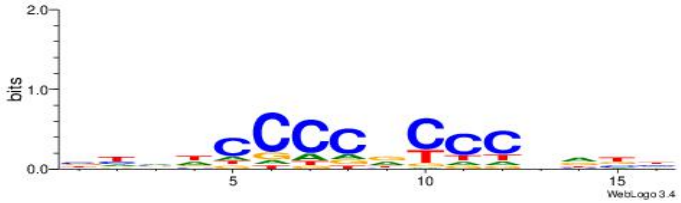


Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	12

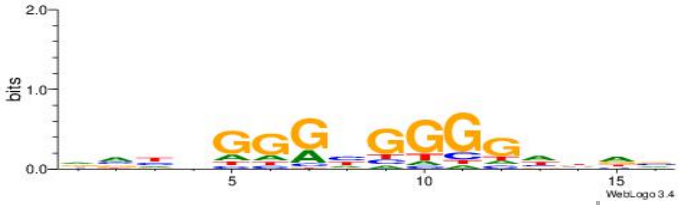
Similarity score: 0.0347468

Alignment:
HVDVGGGHGGGGDBHB
--BBSGGCGGGGBS--

Original motif
Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif
Consensus sequence: HVDVGGGHGGGGDBHB

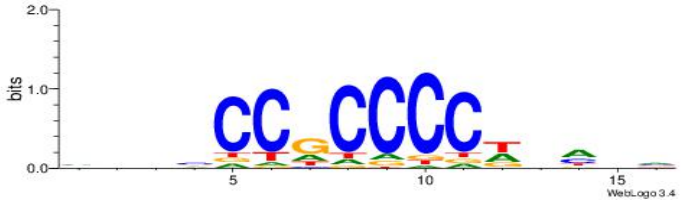


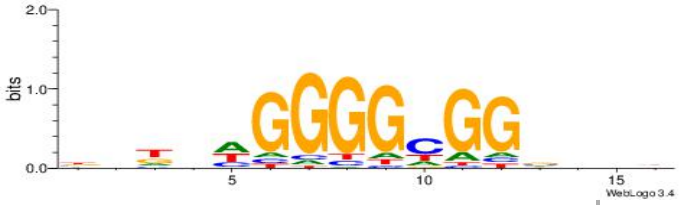
Motif ID: UP00043
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.0358124

Alignment:
BHHHWGGGGCGGBBVH
--BBSGGCGGGGBS--

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH





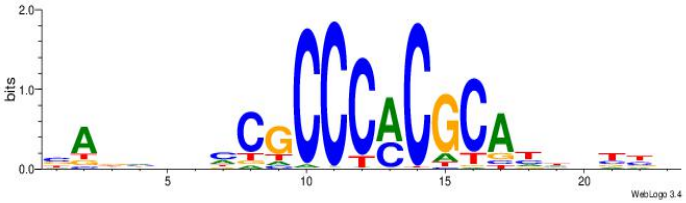
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	12
Similarity score:	0.0365354

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
--------SBCCCCGCCSBB---
```

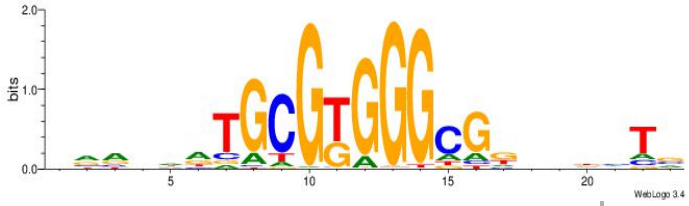
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



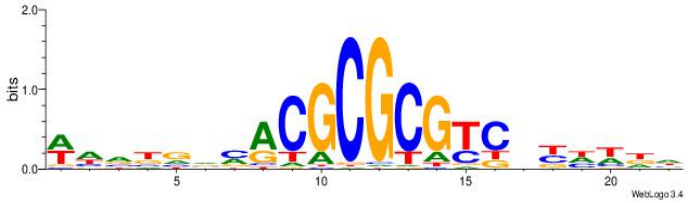
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.0389727

Alignment:

```
HDWHMHGACGCGCGTRBVVBHW
-----BBSGGCGGGGBS-----
```

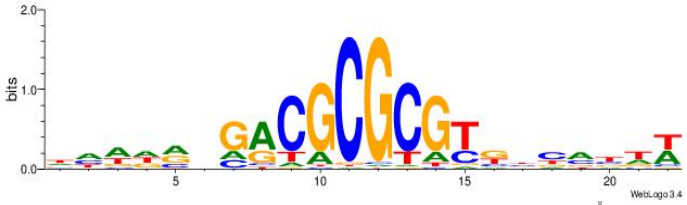
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



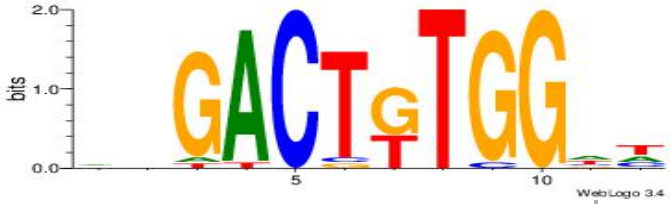
Dataset #: 4 Motif ID: 75 Motif name: wwCCAmAGTCmt

Original motif

Consensus sequence: DDCCAMAGTCHB

Reverse complement motif

Consensus sequence: VDGACTRTGGDD



Best Matches for Motif ID 75 (Highest to Lowest)

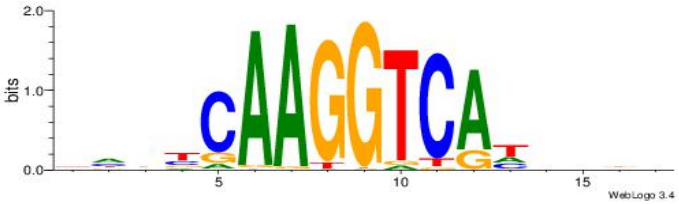
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.00927341

Alignment:

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

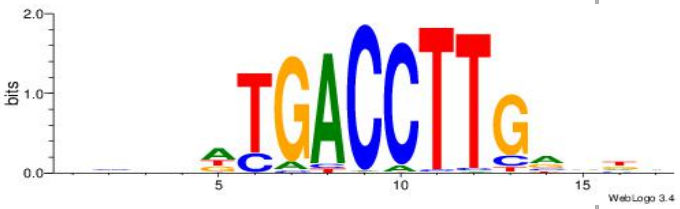
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



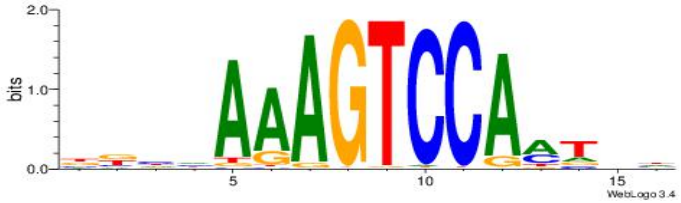
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0157554

Alignment:

```
BBHHAAAGTCCAMTHH
DDCCAMAGTCHB----
```

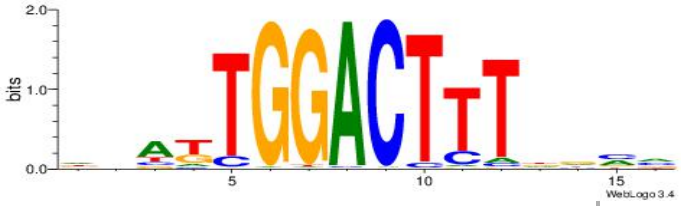
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV

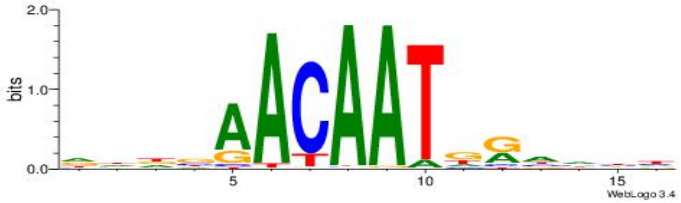


Motif ID:	UP00023
Motif name:	Sox30_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3

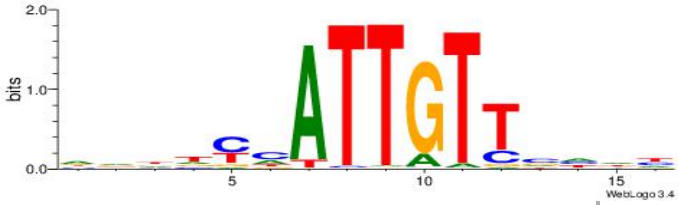
Number of overlap: 12
Similarity score: 0.0218941

Alignment:
DHDBAACAATDRHHHH
--VDGACTRTGGDD--

Original motif
Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif
Consensus sequence: HHHHMHATTGTTBDHD



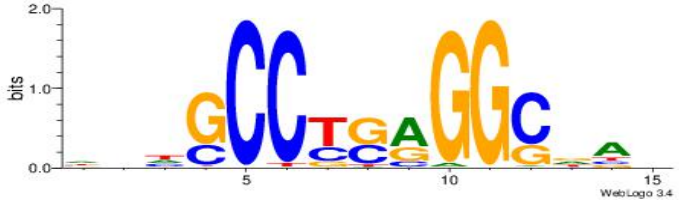
Motif ID: UP00028
Motif name: Tcfap2e_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 12
Similarity score: 0.023236

Alignment:
DTHGCCTSAGGCHHH
--DDCCAMAGTCHB-

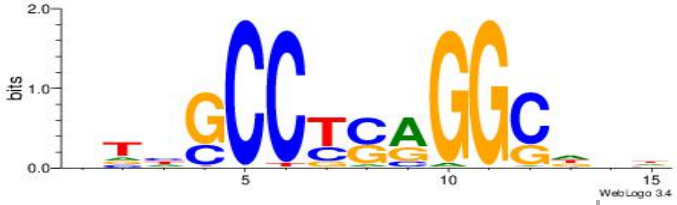
Original motif

Reverse complement motif

Consensus sequence: HHHGCCTSAGGCDAD



Consensus sequence: DTHGCCTSAGGCHHH



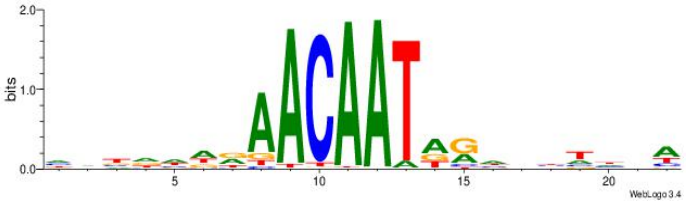
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.0235871

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
-----VDGACTRTGGDD-----
```

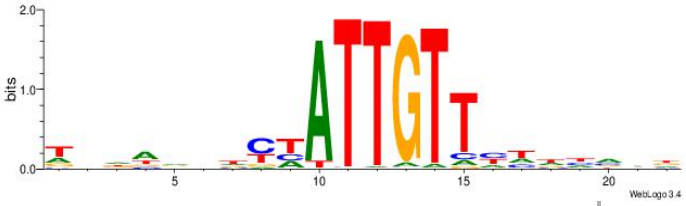
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



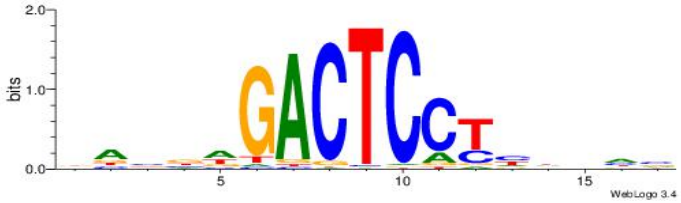
Motif ID:	UP00095
Motif name:	Zfp691_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0240897

Alignment:

```
VHBDDAGGAGTCWBBTD
--DDCCAMAGTCHB---
```

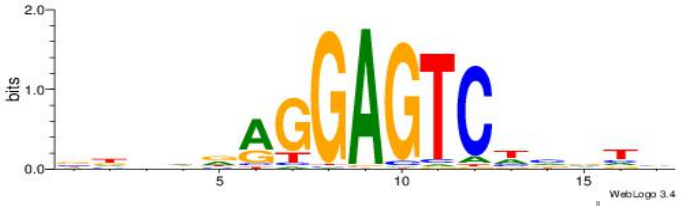
Original motif

Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD

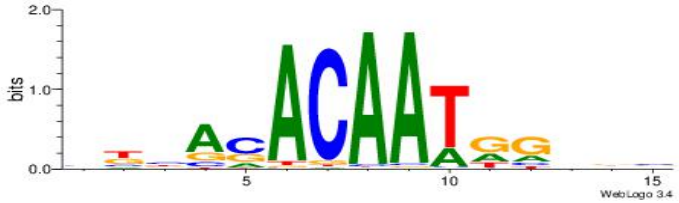


Motif ID:	UP00004
Motif name:	Sox14_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

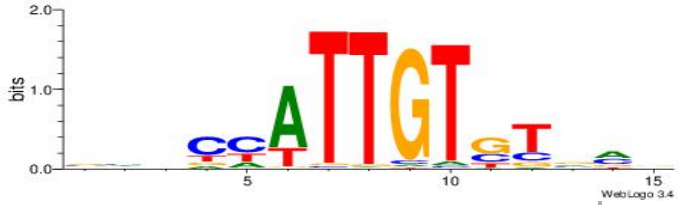
Number of overlap: 12
Similarity score: 0.025783

Alignment:
BKBASACAATRGHBB
--VDGACTRTGGDD-

Original motif
Consensus sequence: BKBASACAATRGHBB



Reverse complement motif
Consensus sequence: BBDCMATTGTSTBRB



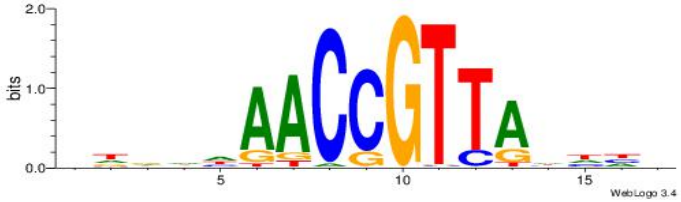
Motif ID: UP00081
Motif name: Mybl1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 12
Similarity score: 0.026472

Alignment:
HDDDHAACCGTTAHHHD
---VDGACTRTGGDD--

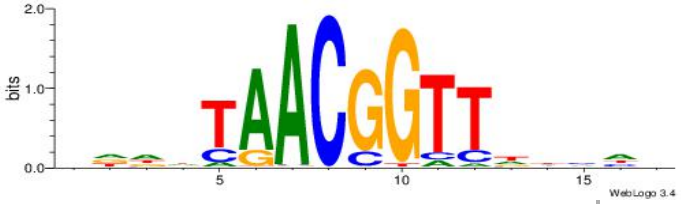
Original motif

Reverse complement motif

Consensus sequence: HDDDHAACCGTTAHHHD



Consensus sequence: DHHHTAACGGTTHDHDH



Motif ID:	UP00052
Motif name:	Osr2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.027027

Alignment:

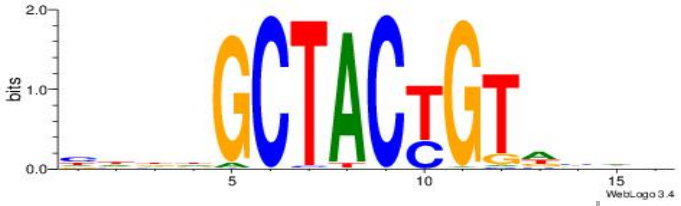
```
HHHHGCTACKGTHVHH
---DDCCAMAGTCHB-
```

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH



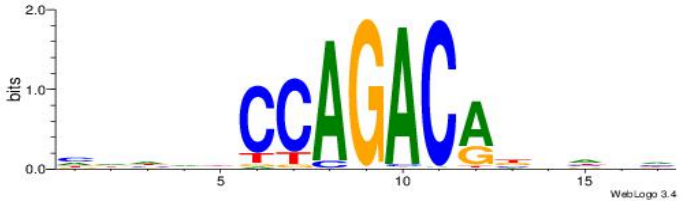
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0270662

Alignment:

```
HVHBVTGTCTGGDDHDD
--VDGACTRTGGDD---
```

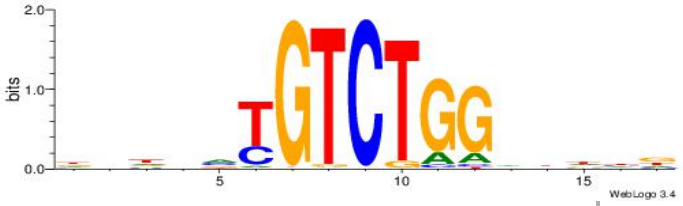
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



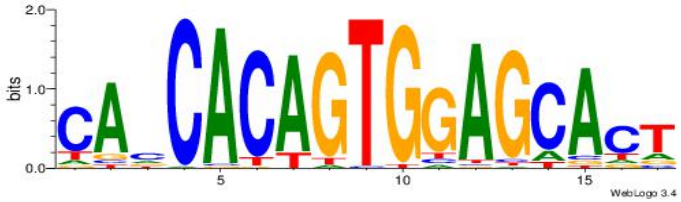
Dataset #: 4 Motif ID: 76 Motif name: CAcCACAGTGGAGCAct

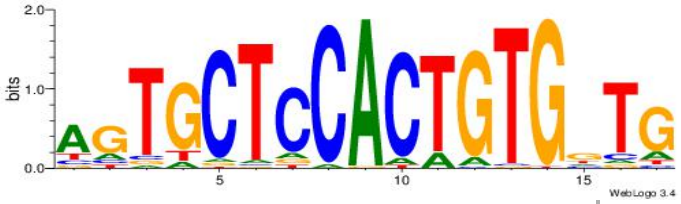
Original motif

Consensus sequence: CAHCACAGTGGAGCACT

Reverse complement motif

Consensus sequence: AGTGCTCCACTGTGDTG





Best Matches for Motif ID 76 (Highest to Lowest)

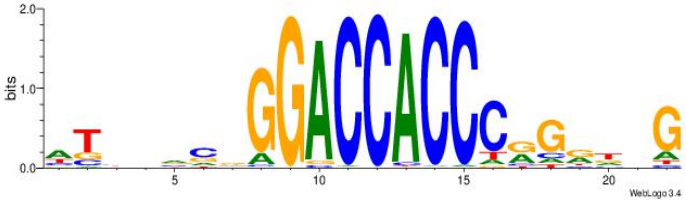
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.0381337

Alignment:

```
CBDMCMGGGTGGTCCHVBVBAH
-CAHCACAGTGGAGCACT----
```

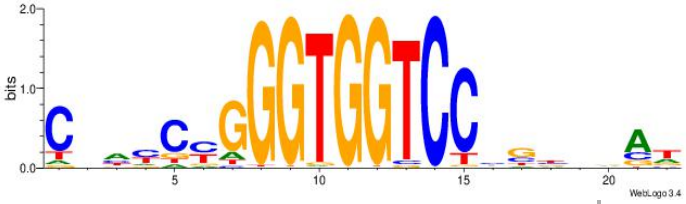
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



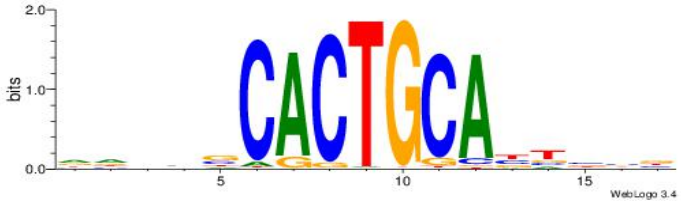
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0393208

Alignment:

```
BBBAVTGCAGTGBBVDD
AGTGCTCCACTGTGDTG
```

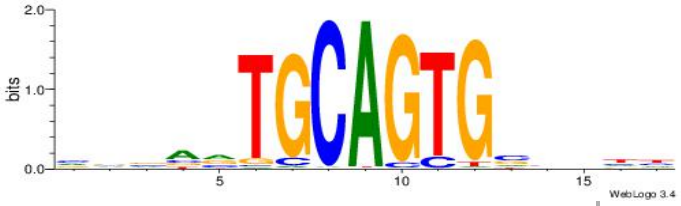
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD

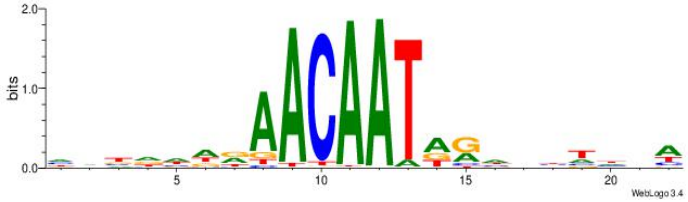


Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

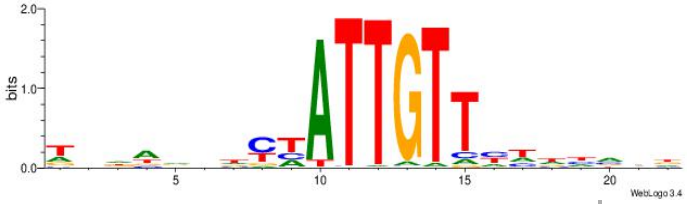
Number of overlap: 17
Similarity score: 0.0441166

Alignment:
HHBDHDDAACAATDRHHHHHBW
----CAHCACAGTGGAGCACT-

Original motif
Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



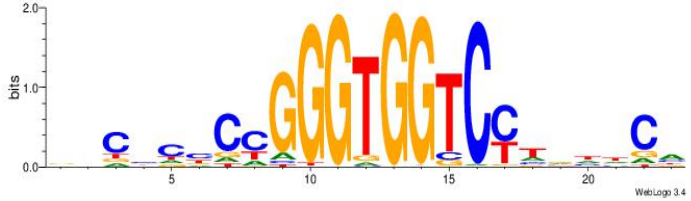
Motif ID: UP00538
Motif name: Gli1_v016060_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 17
Similarity score: 0.0477617

Alignment:
HGDHVHKGACCACCCGGBGBGDB
---AGTGCTCCACTGTGDTG---

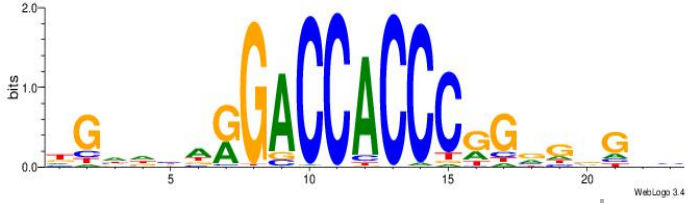
Original motif

Reverse complement motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



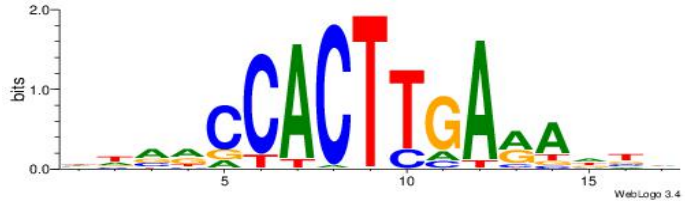
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0479423

Alignment:

```
HDVRCCACTTGARADBD
CAHCACAGTGGAGCACT
```

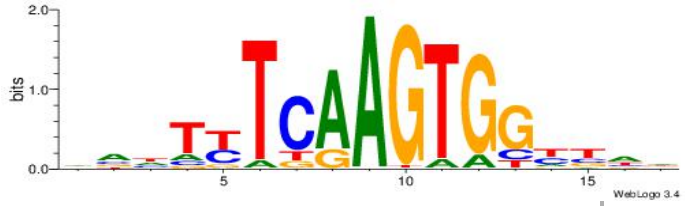
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH



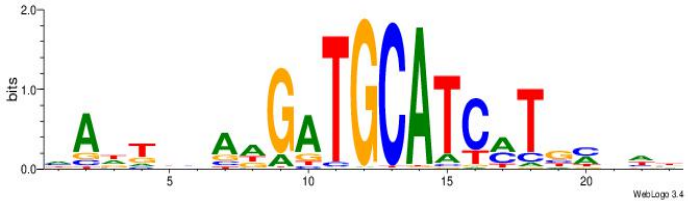
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	17
Similarity score:	0.0484681

Alignment:

```
VHVRCAYGATGCATCDTVVADTH
-CAHCACAGTGGAGCACT-----
```

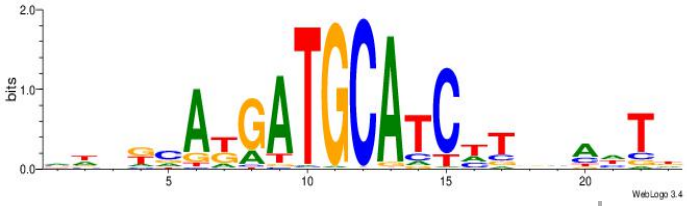
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH

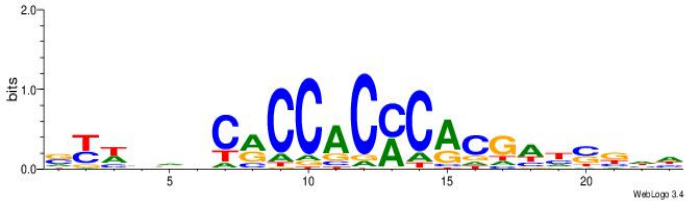


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1

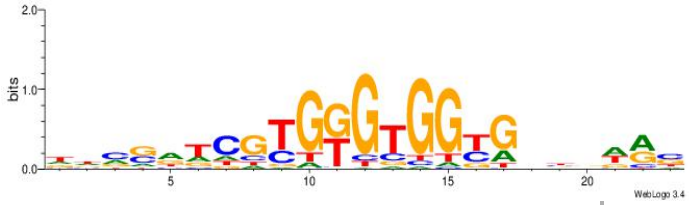
Number of overlap: 17
Similarity score: 0.0487437

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
AGTGCTCCACTGTGDTG------

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



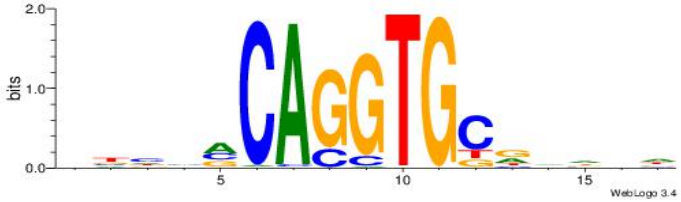
Motif ID: UP00046
Motif name: Tcfe2a_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 17
Similarity score: 0.048891

Alignment:
DHDBHGCACCTGBDDVB
AGTGCTCCACTGTGDTG

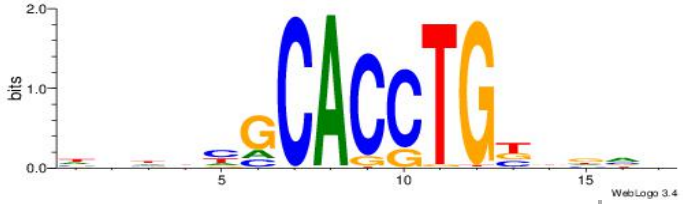
Original motif

Reverse complement motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Consensus sequence: DHDBHGCACCTGBDDVB



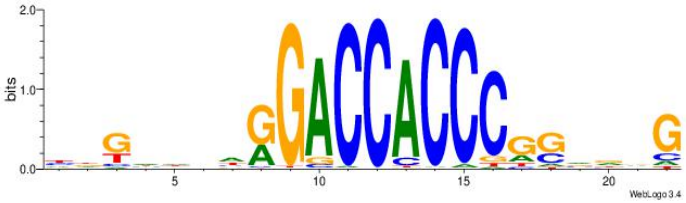
Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	17
Similarity score:	0.0491352

Alignment:

```
CVHBSCGGGTGGTCMHVHHCDH
-CAHCACAGTGGAGCACT----
```

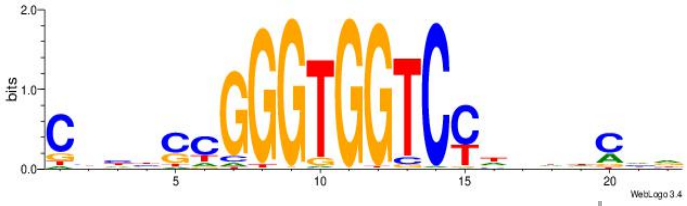
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



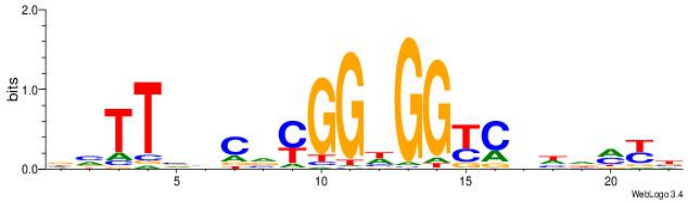
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	0.0515016

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
---CAHCACAGTGGAGCACT--
```

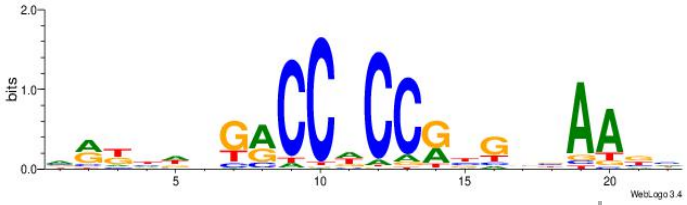
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



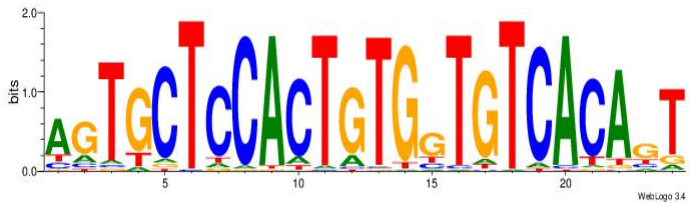
Dataset #: 4 Motif ID: 77 Motif name: AgTGCTCCACTGTGgTGTCACAgT

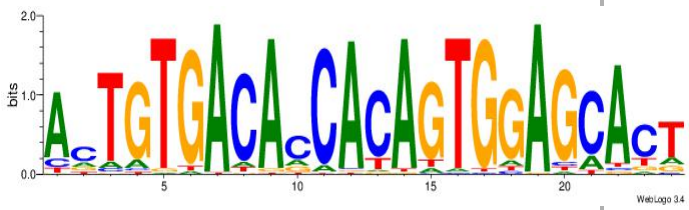
Original motif

Consensus sequence: AGTGCTCCACTGTGGTGTCACAGT

Reverse complement motif

Consensus sequence: ACTGTGACACCACAGTGGAGCACT





Best Matches for Motif ID 77 (Highest to Lowest)

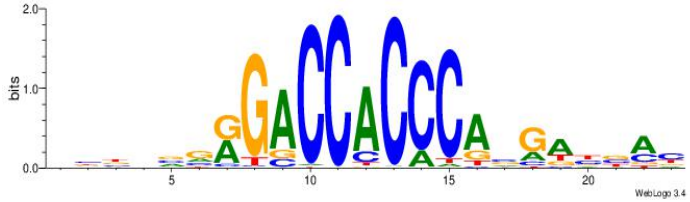
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	23
Similarity score:	0.0509731

Alignment:

```
BBBDVVRGACCACCCAVGABBAB-
ACTGTGACACCACAGTGGAGCACT
```

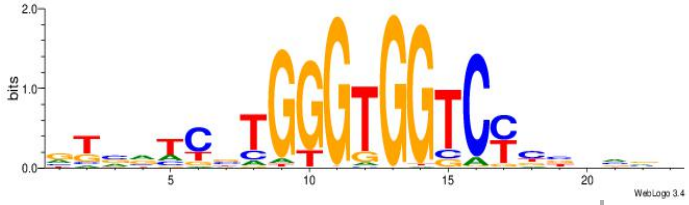
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



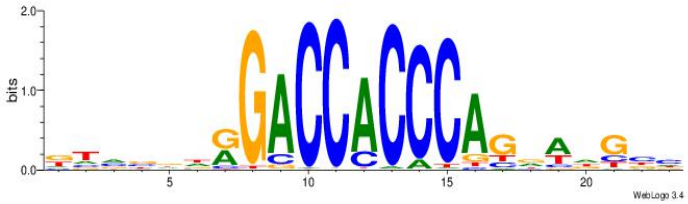
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	21
Similarity score:	1.0488

Alignment:

```
DTVBDDRGACCACCCAGDWDGBH---
---AGTGCTCCACTGTGGTGTCACAGT
```

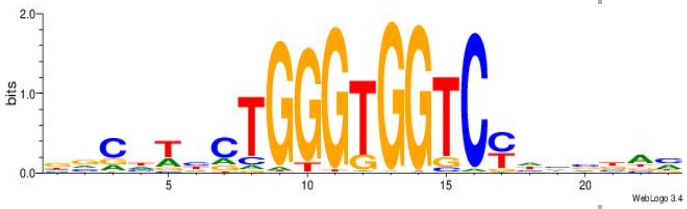
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



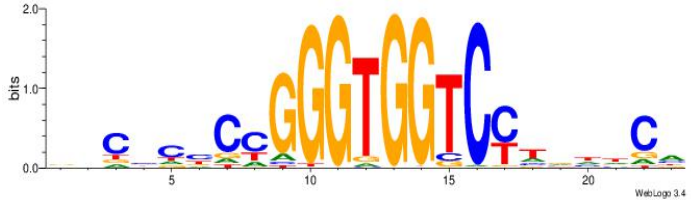
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	21
Similarity score:	1.05087

Alignment:

```
---HGDHVHKGACCACCCGGBGBGDB
ACTGTGACACCACAGTGGAGCACT---
```

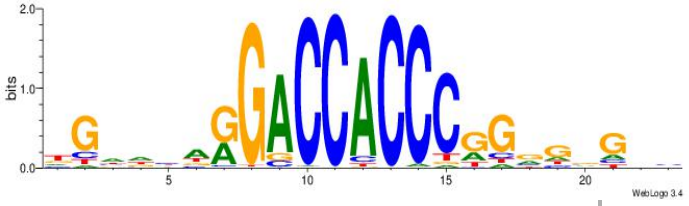
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	2.54748

Alignment:

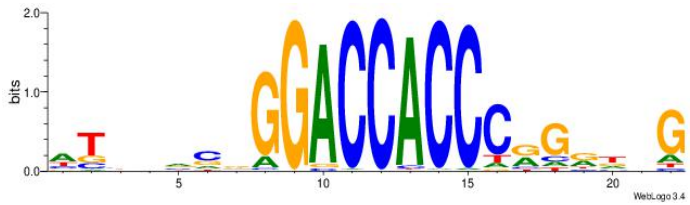
```
------CBDMCMGGGTGGTCCHVBVBAH
ACTGTGACACCACAGTGGAGCACT----
```

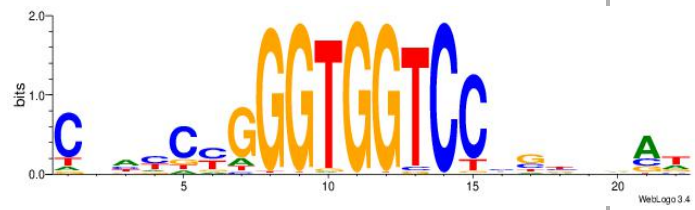
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH





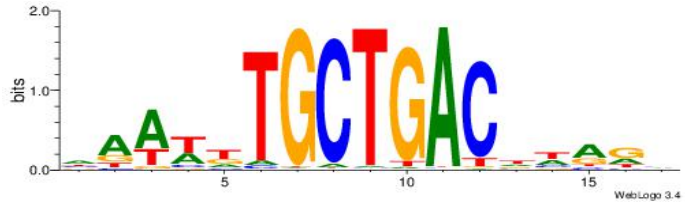
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	3.0367

Alignment:

```
-------HAAWDTGCTGACDWARH
AGTGCTCCACTGTGGTGTCACAGT
```

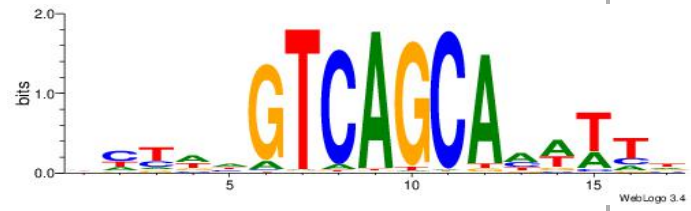
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH



Motif ID:	UP00055

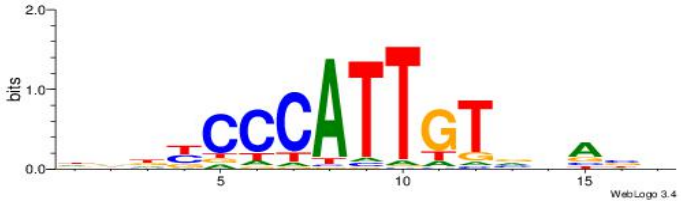
Motif name:	Hbp1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	3.04028

Alignment:

```
DDDYCCCATTGTVHABH-------
-AGTGCTCCACTGTGGTGTCACAGT
```

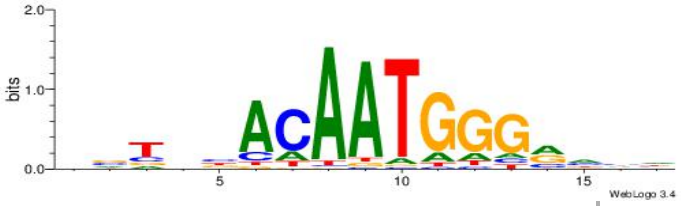
Original motif

Consensus sequence: DDDYCCCATTGTVHABH



Reverse complement motif

Consensus sequence: HBTHVACAATGGGMDHD



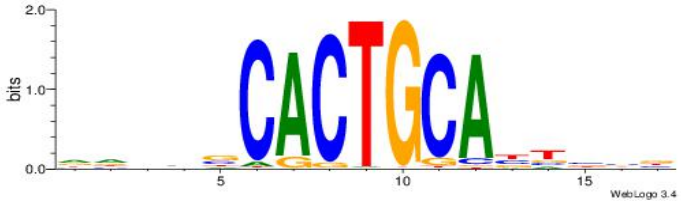
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	3.04347

Alignment:

DDBBBCACTGCABTBBB-------
AGTGCTCCACTGTGGTGTCACAGT

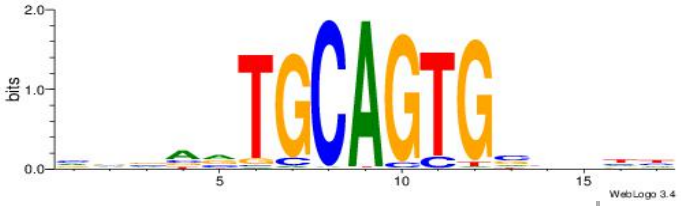
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD



Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	3.04662

Alignment:

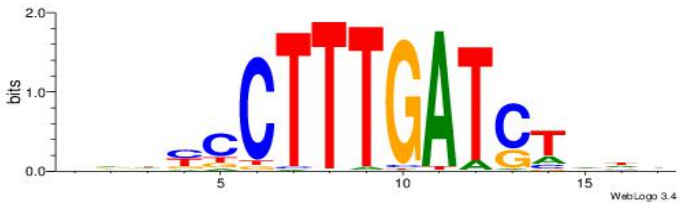
VDDAGATCAAAGGKDDD-------
---ACTGTGACACCACAGTGGAGCACT

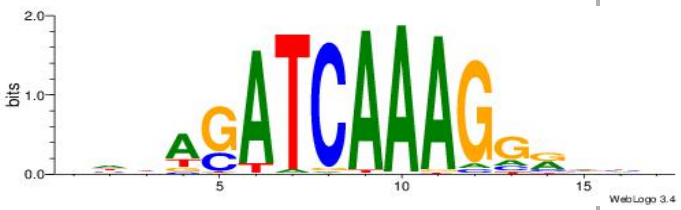
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV

Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD





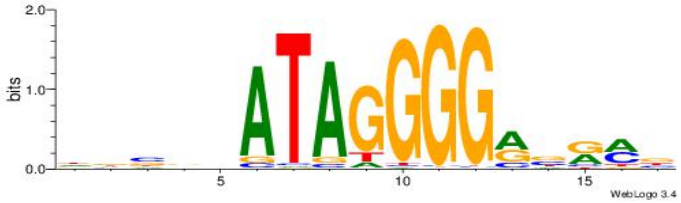
Motif ID:	UP00070
Motif name:	Gcm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	3.04663

Alignment:

```
DDBVHATAGGGGRBRMB-------
-AGTGCTCCACTGTGGTGTCACAGT
```

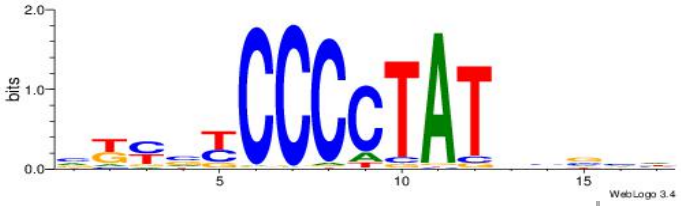
Original motif

Consensus sequence: DDBVHATAGGGGRBRMB



Reverse complement motif

Consensus sequence: BYMBKCCCCTATDVBHD



Motif ID:	UP00148
Motif name:	Hdx

Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	17
Similarity score:	3.04907

Alignment:

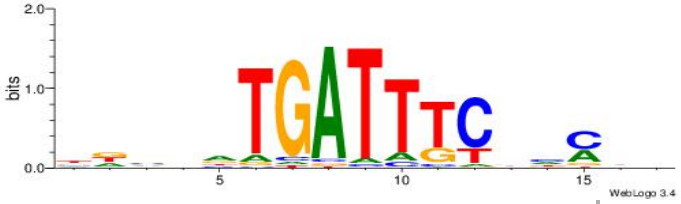
```
-------BDBDHTGATTTCDHYDD
ACTGTGACACCACAGTGGAGCACT-------
```

Original motif

Consensus sequence: DDKDHGAAATCAHHBHV

Reverse complement motif

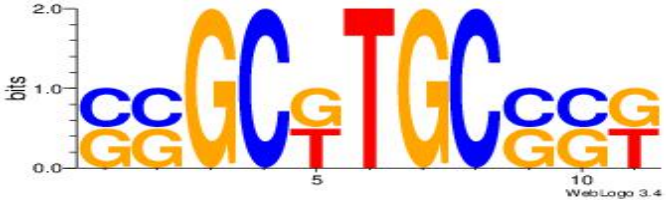
Consensus sequence: BDBDHTGATTTCDHYDD



Dataset #: 4 **Motif ID: 78** **Motif name: ssGCkTGCssk**

Original motif

Consensus sequence: SSGCKTGCSSK



Reverse complement motif

Consensus sequence: YSSGCAYGCSS

Best Matches for Motif ID 78 (Highest to Lowest)

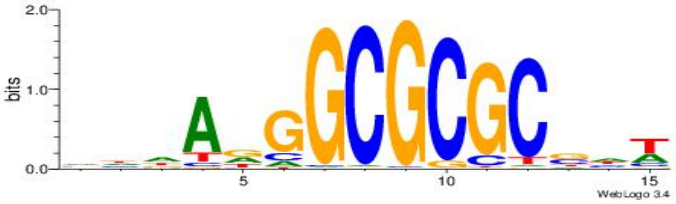
Motif ID:	UP00003
Motif name:	E2F3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.00463328

Alignment:

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

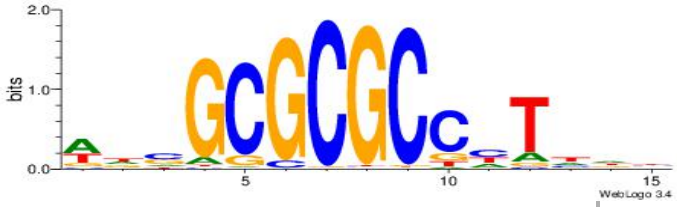
Original motif

Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif

Consensus sequence: WHSGCGCGCCHTDHB



Motif ID:	UP00094
Motif name:	Zfp128_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

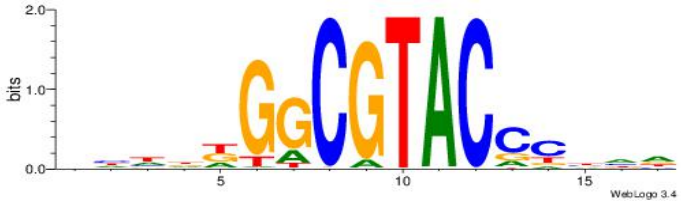
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.00482124

Alignment:

```
BHHDKGGCGTACCCBHD
----SSGCKTGCSSK--
```

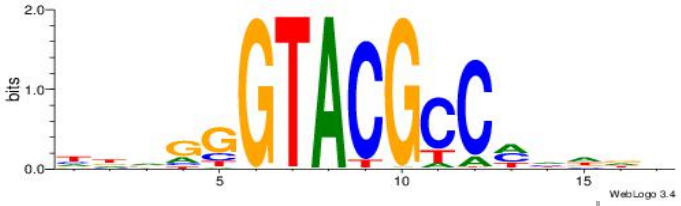
Original motif

Consensus sequence: BHHDKGGCGTACCCBHD



Reverse complement motif

Consensus sequence: DHVGGGTACGCCRDHDV



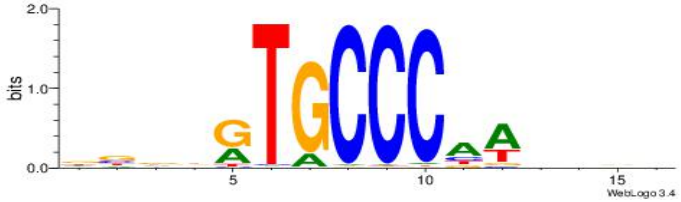
Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.00562779

Alignment:

```
VHHDWTGGGCAMDHBH
-----YSSGCAYGCSS
```

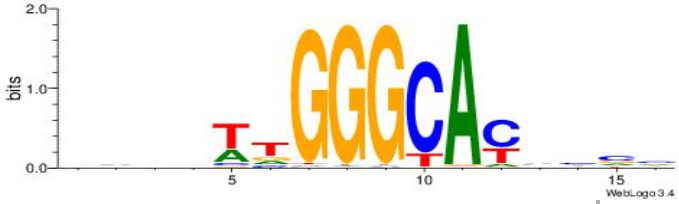
Original motif

Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH



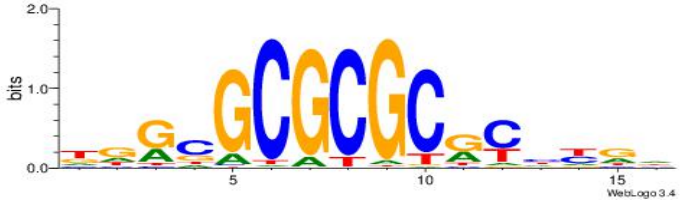
Motif ID:	UP00065
Motif name:	Zfp161_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00595984

Alignment:

```
DDGCGCGCGCRCHYRD
--SSGCKTGCSSK---
```

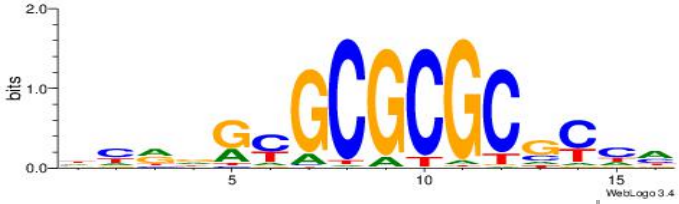
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD



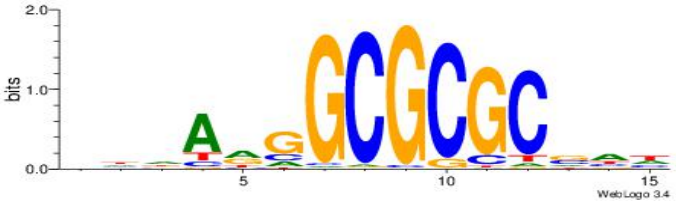
Motif ID:	UP00001
Motif name:	E2F2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.00821725

Alignment:

```
HHVGCGCGCCKTDHB
-SSGCKTGCSSK---
```

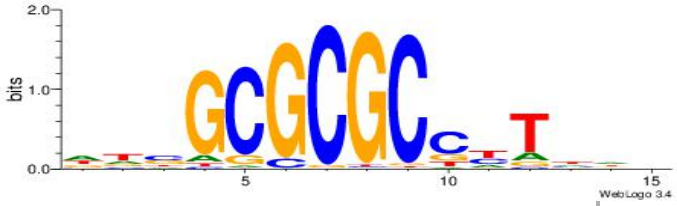
Original motif

Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif

Consensus sequence: HHVGCGCGCCKTDHB

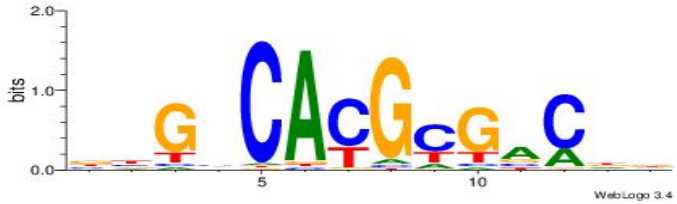


Motif ID:	UP00060
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1

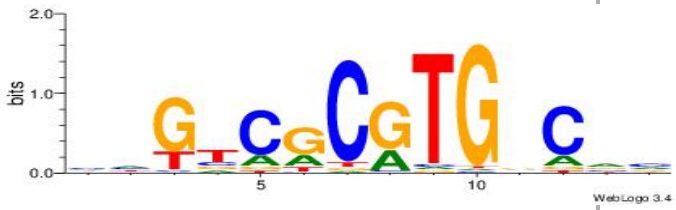
Number of overlap: 11
Similarity score: 0.0109259

Alignment:
HDGTCGCGTGDCVB
YSSGCAYGCSS---

Original motif
Consensus sequence: BBGHCACGCGACDD



Reverse complement motif
Consensus sequence: HDGTCGCGTGDCVB



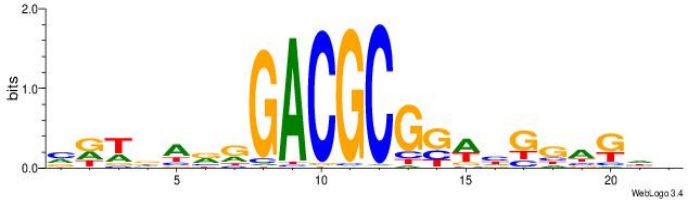
Motif ID: UP00527
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0150199

Alignment:
VHYTCCDWCCGCGTCMMTHWHV
--------SSGCKTGCSSK---

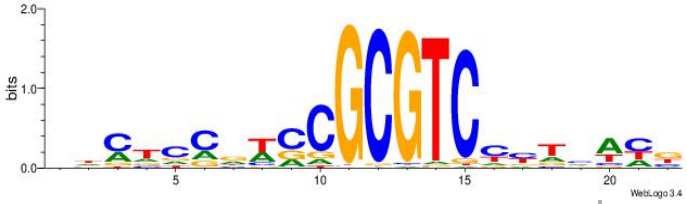
Original motif

Reverse complement motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



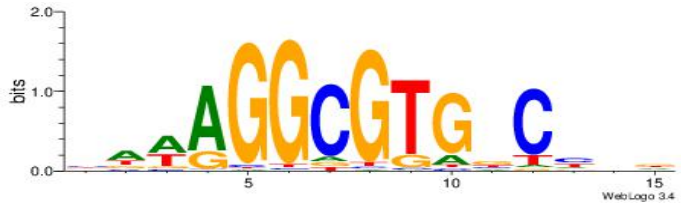
Motif ID:	UP00002
Motif name:	Sp4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0160778

Alignment:

```
HHDGBCACGCCTWDB
-YSSGCAYGCSS---
```

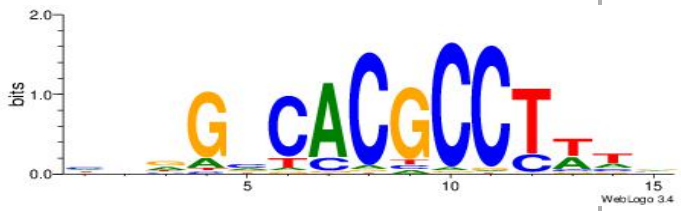
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



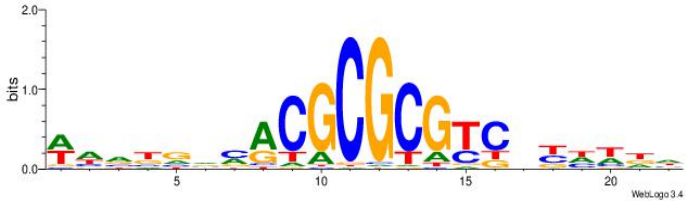
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0171602

Alignment:

```
HDWHMHGACGCGCGTRBVVBHW
---------SSGCKTGCSSK--
```

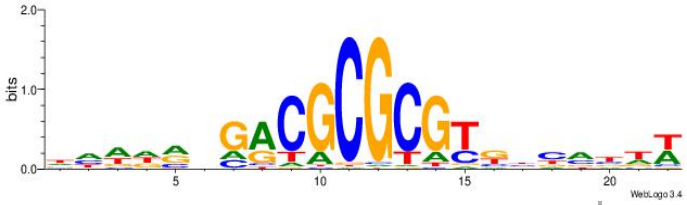
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

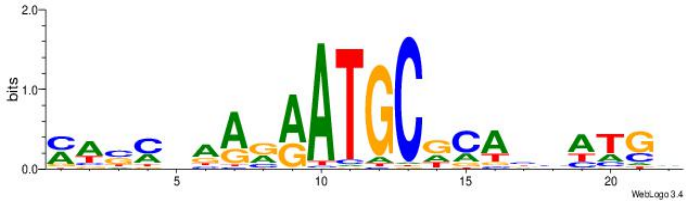


Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

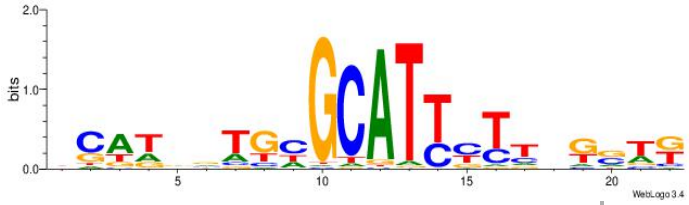
Number of overlap: 11
Similarity score: 0.0172713

Alignment:
DCATDBTGHGCATKMTTBRSWR
------YSSGCAYGCSS-----

Original motif
Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Dataset #: 4 Motif ID: 79 Motif name: cCGCGGrCACG

Original motif
Consensus sequence: CCGCGGRCACG

Reverse complement motif
Consensus sequence: CGTGKCCGCGG

Best Matches for Motif ID 79 (Highest to Lowest)

Motif ID: UP00065
Motif name: Zfp161_primary
Species: Mus musculus

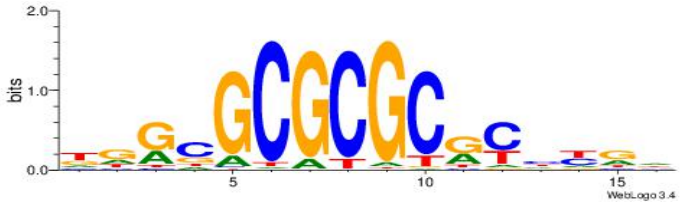
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0220206

Alignment:

```
DDGCGCGCGCRCHYRD
----CCGCGGRCACG-
```

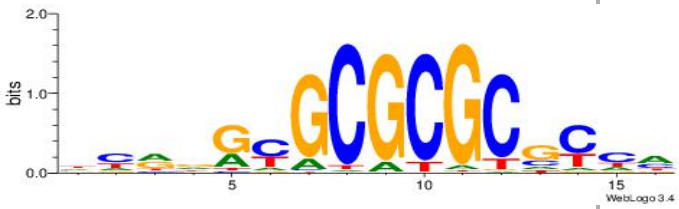
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

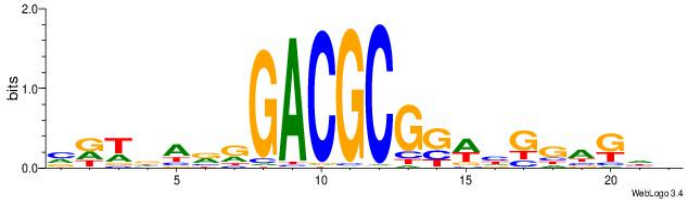
Consensus sequence: DMMDGMGCGCGCGCHD



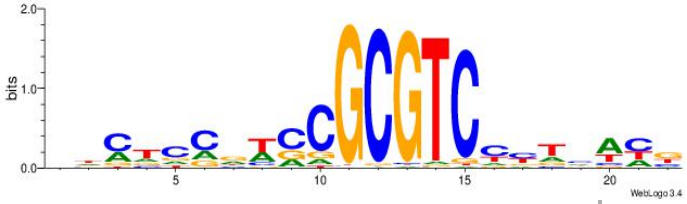
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	11
Similarity score:	0.024575

Alignment:
VHYTCCDWCCGCGTCMMTHWHV
---CGTGKCCGCGG--------

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

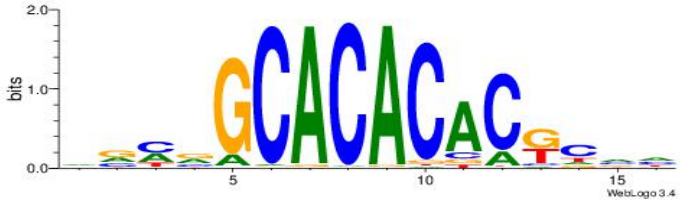


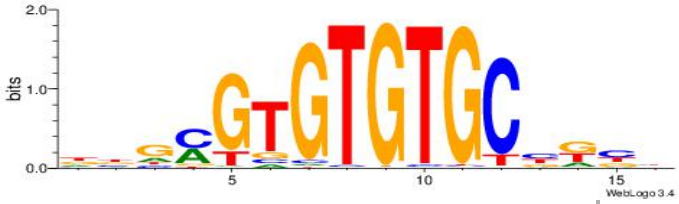
Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0279366

Alignment:
DVMVGCACACACKCVH
--CCGCGGRCACG---

Original motif
Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif
Consensus sequence: HBGYGTGTGTGCVRVD





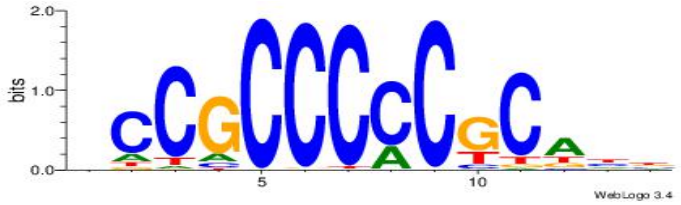
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0285381

Alignment:

```
VHTGCGGGGGCGGH
-CCGCGGRCACG--
```

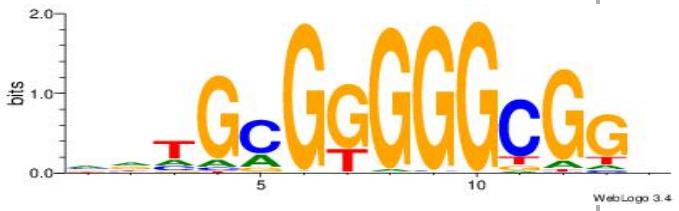
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID:	UP00050

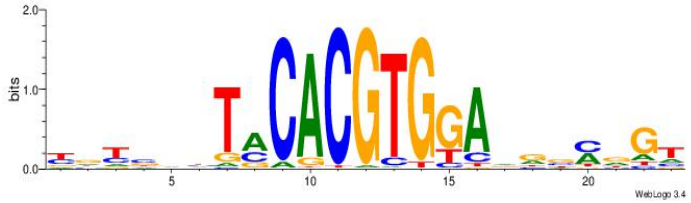
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0335378

Alignment:

```
ACHRBHDTCCACGTGYAHHBMHM
--------CCGCGGRCACG----
```

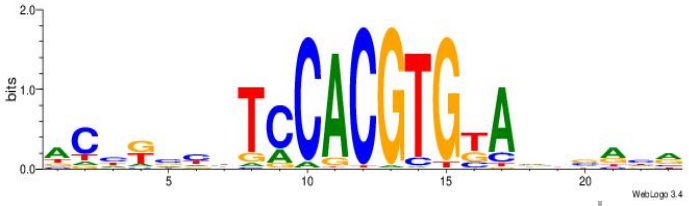
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM

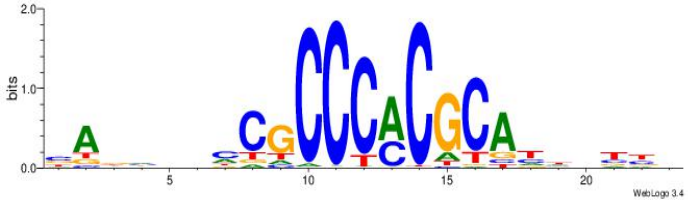


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11

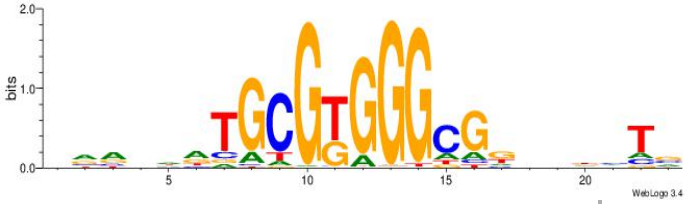
Similarity score: 0.0340428

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
-------CCGCGGRCACG-----

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

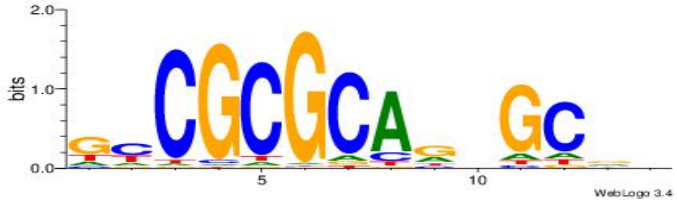


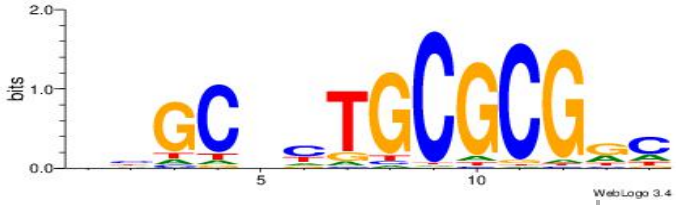
Motif ID: UP00065
Motif name: Zfp161_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.0345855

Alignment:
GYCGCGCARBGCVB
-CCGCGGRCACG--

Original motif
Consensus sequence: GYCGCGCARBGCVB

Reverse complement motif
Consensus sequence: VVGCVMTGCGCGKC





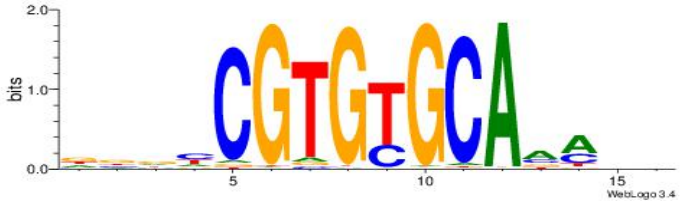
Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0350434

Alignment:

```
DBDHCGTGTGCAAMDH
---CCGCGGRCACG--
```

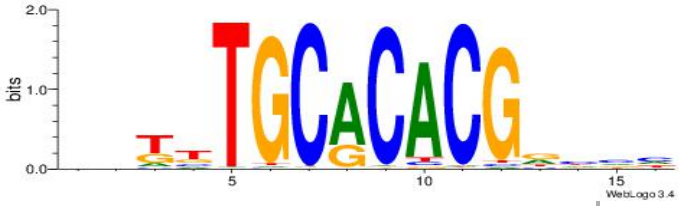
Original motif

Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH



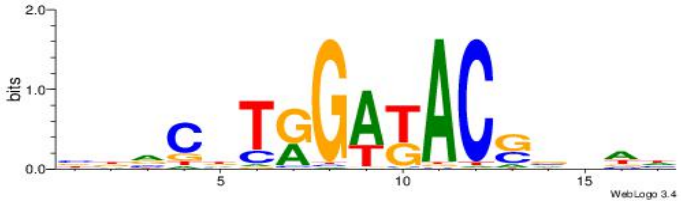
Motif ID:	UP00076
Motif name:	Rfxdc2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0359928

Alignment:

```
HDDVSGTRTCMADGBVB
----CGTGKCCGCGG--
```

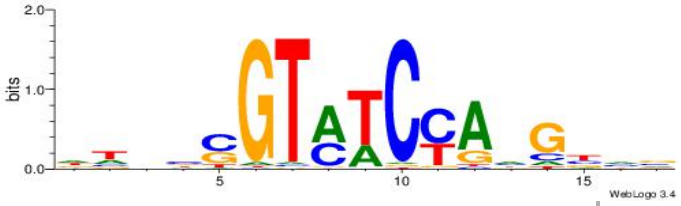
Original motif

Consensus sequence: BBVCDTRGAKACSVDDH



Reverse complement motif

Consensus sequence: HDDVSGTRTCMADGBVB

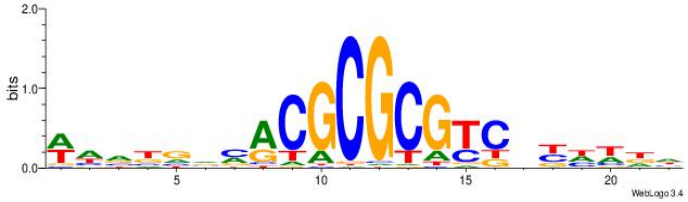


Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

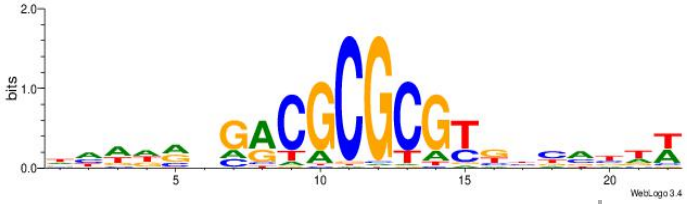
Number of overlap: 11
Similarity score: 0.0361963

Alignment:
HDWHMHGACGCGCGTRBVVBHW
---------CCGCGGRCACG--

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



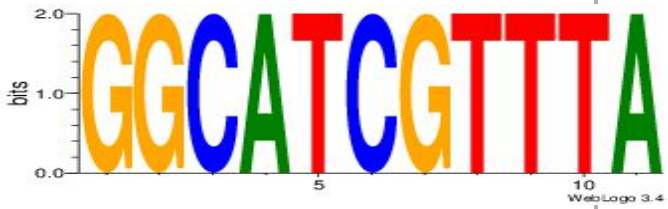
Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Dataset #: 4 Motif ID: 80 Motif name: taaacgatgcc

Original motif
Consensus sequence: TAAACGATGCC

Reverse complement motif
Consensus sequence: GGCATCGTTTA



Best Matches for Motif ID 80 (Highest to Lowest)

Motif ID: UP00114
Motif name: Homez
Species: Mus musculus

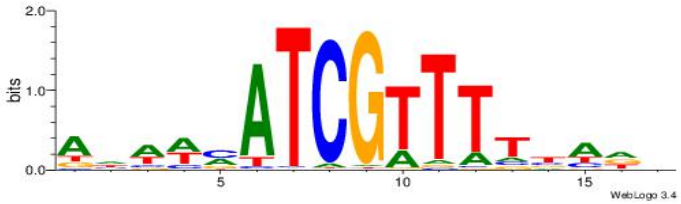
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0207645

Alignment:

```
HDTVAAAACGATRWWHT
----TAAACGATGCC--
```

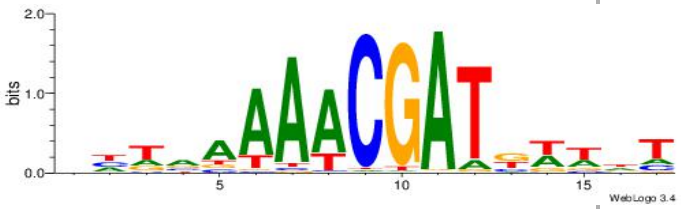
Original motif

Consensus sequence: AHWWMATCGTTTTBADD



Reverse complement motif

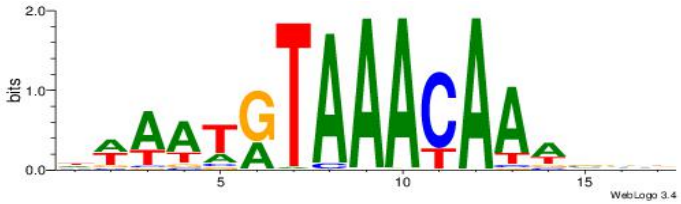
Consensus sequence: HDTVAAAACGATRWWHT



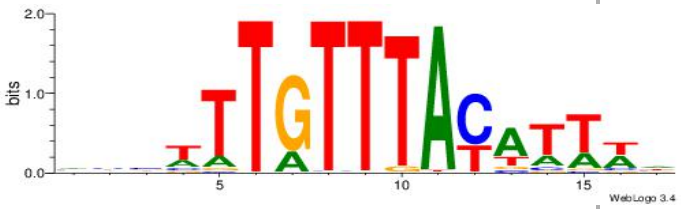
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0294316

Alignment:
VVVWTTGTTTAMATTWD
GGCATCGTTTA------

Original motif
Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD

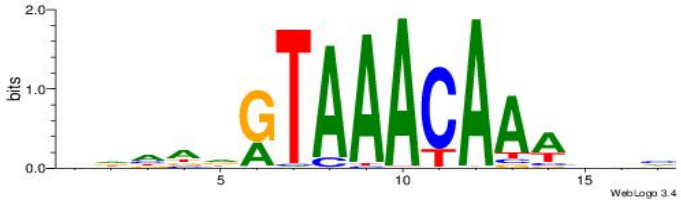


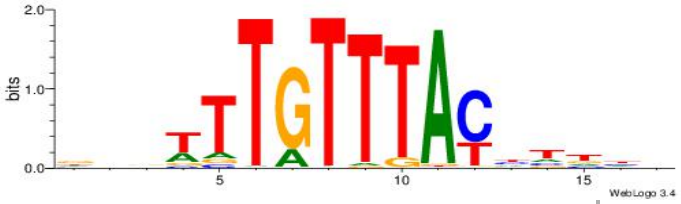
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.030091

Alignment:
HDHADGTAAACAAAVVH
------TAAACGATGCC

Original motif
Consensus sequence: HDHADGTAAACAAAVVH

Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH





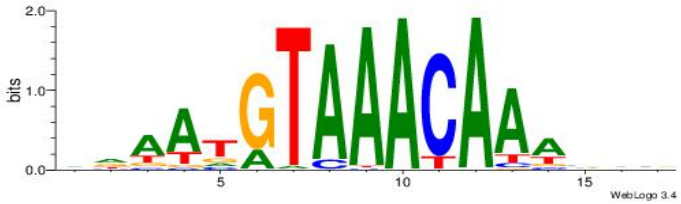
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.0306614

Alignment:

```
BBVTTTGTTTACATTDD
GGCATCGTTTA------
```

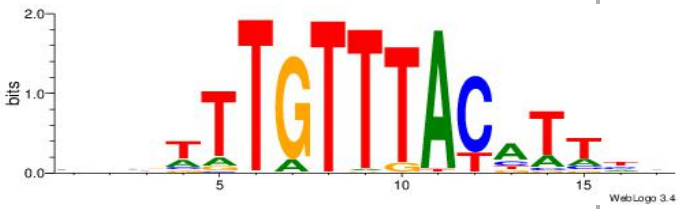
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



Motif ID:	UP00527

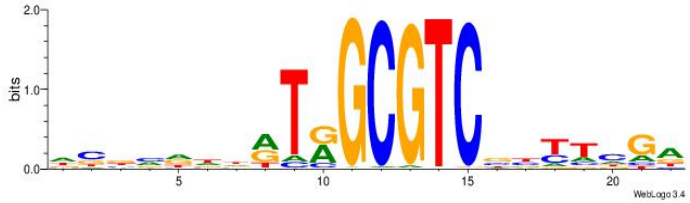
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	11
Similarity score:	0.0342477

Alignment:

```
DBBVDDDRTRGCGTCBBYTHGA
---------GGCATCGTTTA--
```

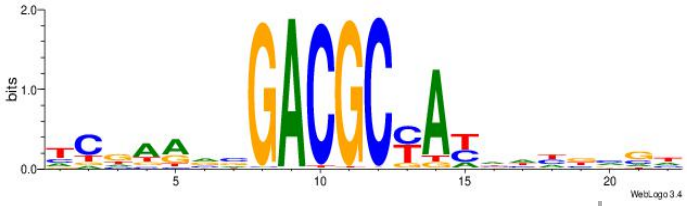
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMAKDDDVBBD



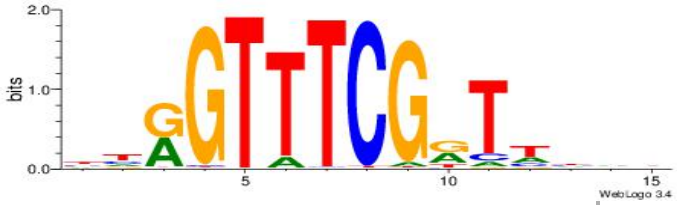
Motif ID:	UP00040
Motif name:	Irf5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11

Similarity score: 0.0345017

Alignment:
BDKGTTTCGKTWDDD
--GGCATCGTTTA--

Original motif
Consensus sequence: DDDWAYCGAAACYDV

Reverse complement motif
Consensus sequence: BDKGTTTCGKTWDDD

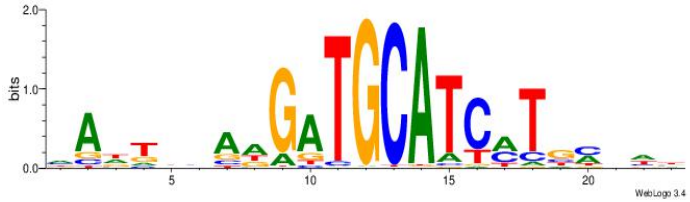


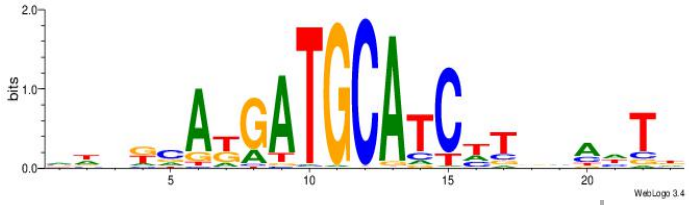
Motif ID: UP00528
Motif name: Foxm1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0351616

Alignment:
VHVRCAYGATGCATCDTVVADTH
--TAAACGATGCC----------

Original motif
Consensus sequence: HADTBVADGATGCATCMTGMVHB

Reverse complement motif
Consensus sequence: VHVRCAYGATGCATCDTVVADTH





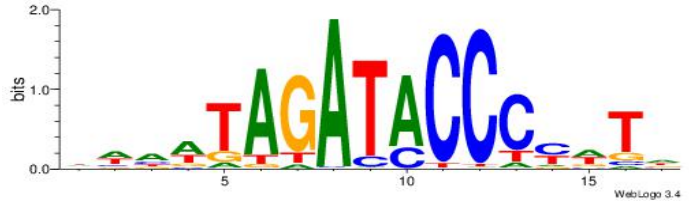
Motif ID:	UP00232
Motif name:	Dobox4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0371486

Alignment:

```
DAWKGGGTATCTAWHWH
-----GGCATCGTTTA-
```

Original motif

Consensus sequence: HWHWTAGATACCCYWTD



Reverse complement motif

Consensus sequence: DAWKGGGTATCTAWHWH

Motif ID:	UP00073
Motif name:	Foxa2_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:	11
Similarity score:	0.0384798

Alignment:

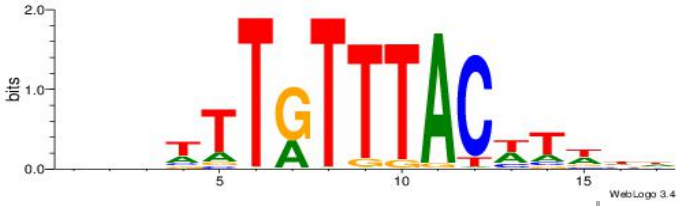
```
BDVTTTKTTTACWTWHH
GGCATCGTTTA------
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH

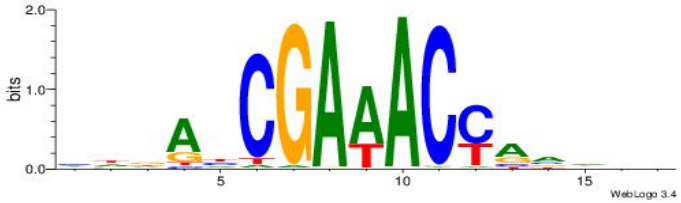


Motif ID:	UP00011
Motif name:	Irf6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

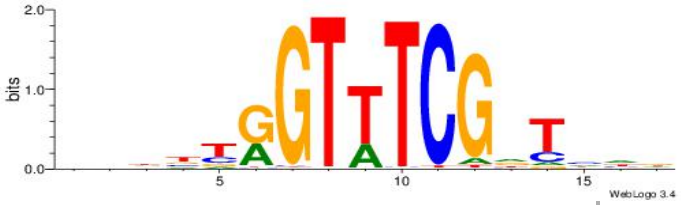
Number of overlap: 11
Similarity score: 0.0388532

Alignment:
DHDBTKGTTTCGHTHDD
-----GGCATCGTTTA-

Original motif
Consensus sequence: HDDAHCGAAACYAVDDD



Reverse complement motif
Consensus sequence: DHDBTKGTTTCGHTHDD



Dataset #: 4 Motif ID: 81 Motif name: ctatacggacg

Original motif
Consensus sequence: CTATACGGACG

Reverse complement motif
Consensus sequence: CGTCCGTATAG

Best Matches for Motif ID 81 (Highest to Lowest)

Motif ID: UP00038
Motif name: Spdef_primary
Species: Mus musculus

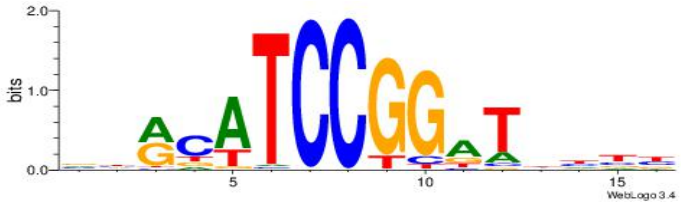
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.027939

Alignment:

```
VVHHATCCGGATGKHV
--CTATACGGACG---
```

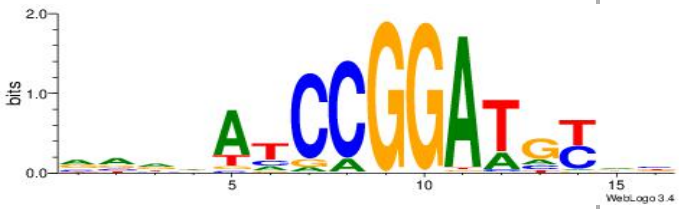
Original motif

Consensus sequence: VHRCATCCGGATHHBB



Reverse complement motif

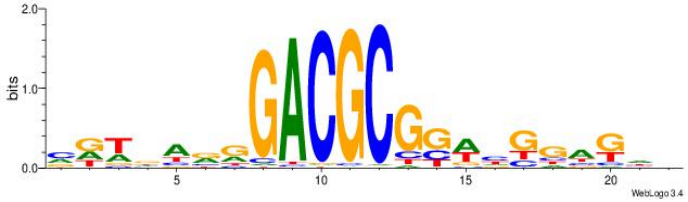
Consensus sequence: VVHHATCCGGATGKHV



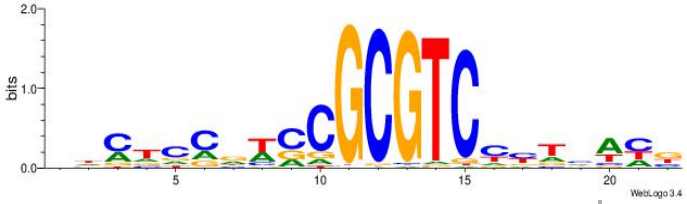
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0308121

Alignment:
VDWDARRGACGCGGWHGGAKHV
CTATACGGACG----------

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

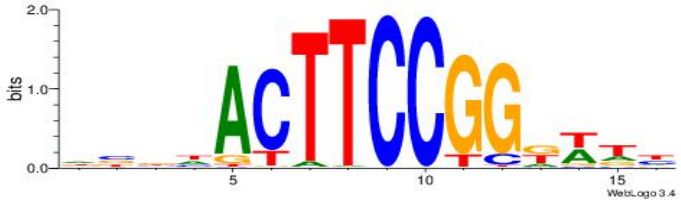


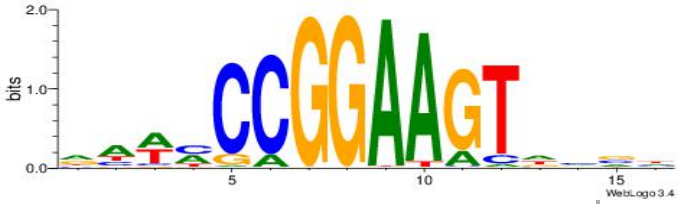
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0328673

Alignment:
DBBHACTTCCGGKWTH
CTATACGGACG-----

Original motif
Consensus sequence: DBBHACTTCCGGKWTH

Reverse complement motif
Consensus sequence: HAWYCCGGAAGTHBBD





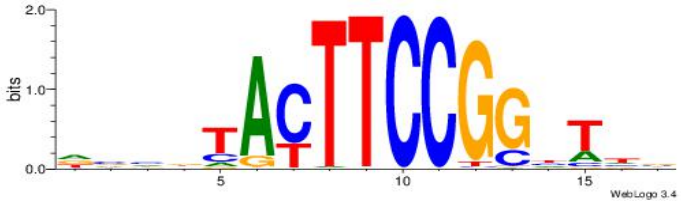
Motif ID:	UP00418
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0334005

Alignment:

```
BHAHCCGGAAGTABDVD
------CGTCCGTATAG
```

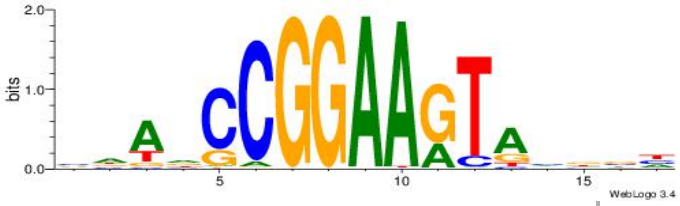
Original motif

Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif

Consensus sequence: BHAHCCGGAAGTABDVD



Motif ID:	UP00409
Motif name:	Elf5

Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0336391

Alignment:

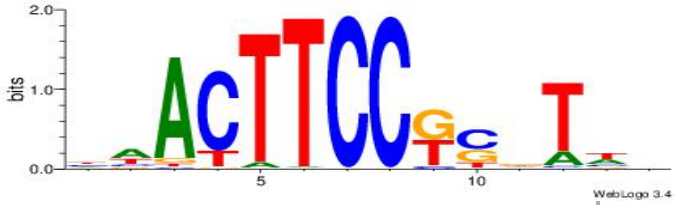
```
BWAHSMGGAAGTWD
CTATACGGACG---
```

Original motif

Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif

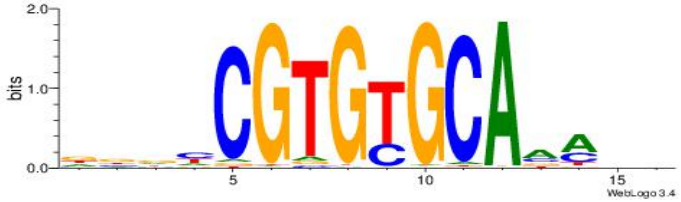
Consensus sequence: DWACTTCCRSDTWV



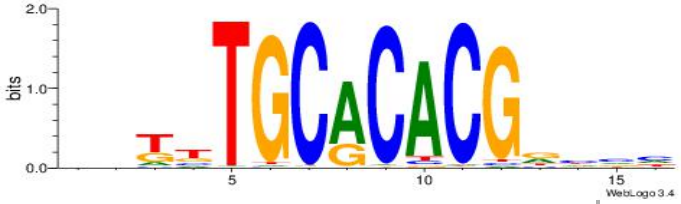
Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0346533

Alignment:
DBDHCGTGTGCAAMDH
----CGTCCGTATAG-

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH

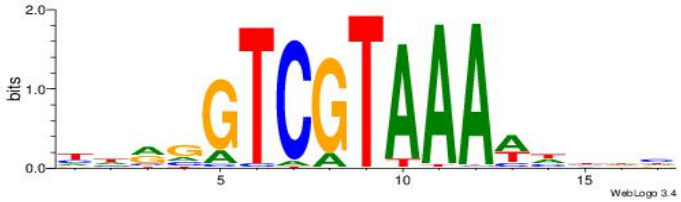


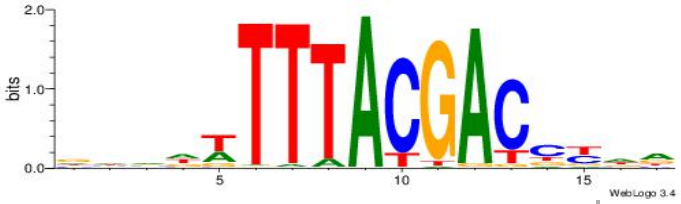
Motif ID:	UP00135
Motif name:	Hoxc12
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0360998

Alignment:
DDVHWTTTACGACCKHH
----CTATACGGACG--

Original motif
Consensus sequence: HHRGGTCGTAAAWHBDH

Reverse complement motif
Consensus sequence: DDVHWTTTACGACCKHH





Motif ID:	UP00084
Motif name:	Gmeb1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0365466

Alignment:

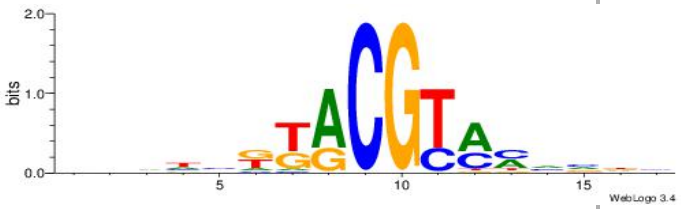
```
BVVDVRYACGTRYVBHB
----CGTCCGTATAG--
```

Original motif

Consensus sequence: BHBBKKACGTMMVDBVB

Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB



Motif ID:	UP00015

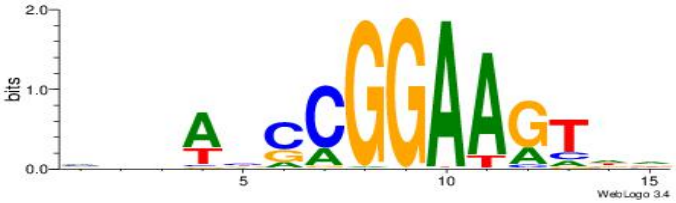
Motif name:	Ehf_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0367131

Alignment:

```
VBDABCCGGAAGTDD
-CTATACGGACG---
```

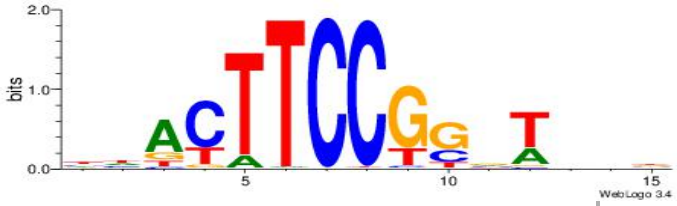
Original motif

Consensus sequence: VBDABCCGGAAGTDD



Reverse complement motif

Consensus sequence: DDACTTCCGGBTHBB

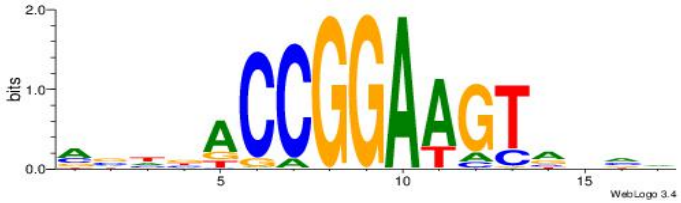


Motif ID:	UP00421
Motif name:	Etv1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11

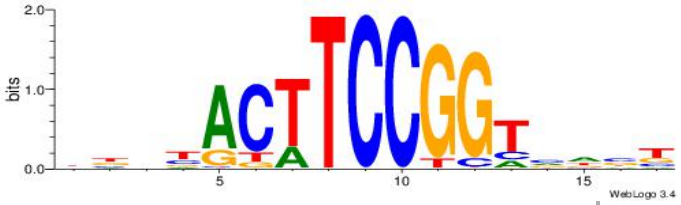
Similarity score: 0.0373

Alignment:
HBDBACTTCCGGTBHVY
-----CGTCCGTATAG-

Original motif
Consensus sequence: MVHBACCGGAAGTVDVH



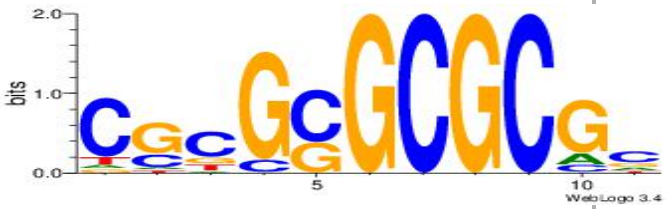
Reverse complement motif
Consensus sequence: HBDBACTTCCGGTBHVY



Dataset #: 4 Motif ID: 82 Motif name: gCGCGCsCgsG

Original motif
Consensus sequence: GCGCGCSCGCG

Reverse complement motif
Consensus sequence: CGCGSGCGCGC



Best Matches for Motif ID 82 (Highest to Lowest)

Motif ID:	UP00065
Motif name:	Zfp161_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

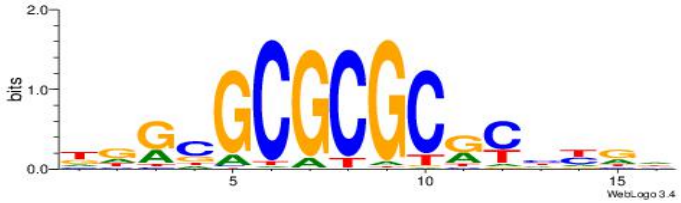
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0

Alignment:

```
DMMDGMGCGCGCGCHD
----GCGCGCSCGCG-
```

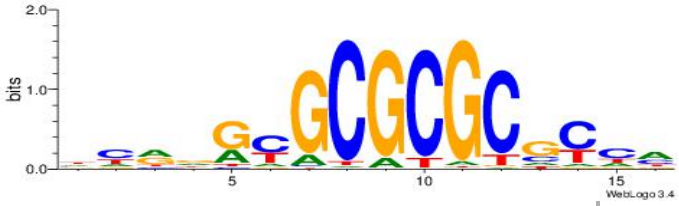
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD

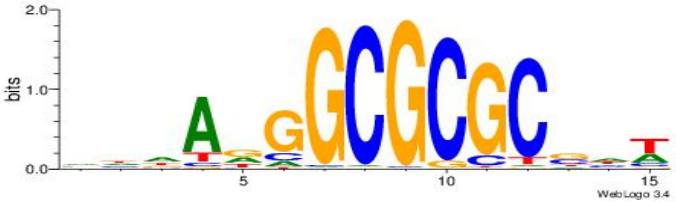


Motif ID:	UP00003
Motif name:	E2F3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0102009

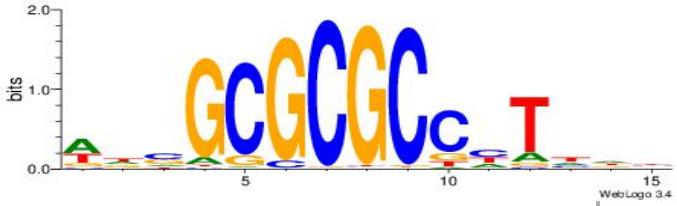
Alignment:

WHSGCGCGCCHTDHB
CGCGSGCGCGC----

Original motif
Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif
Consensus sequence: WHSGCGCGCCHTDHB

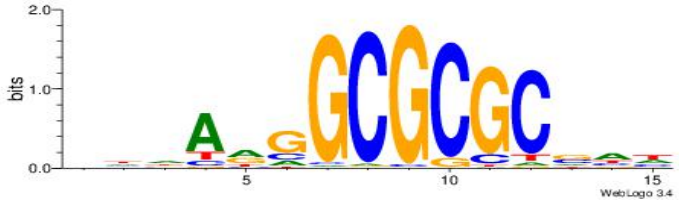


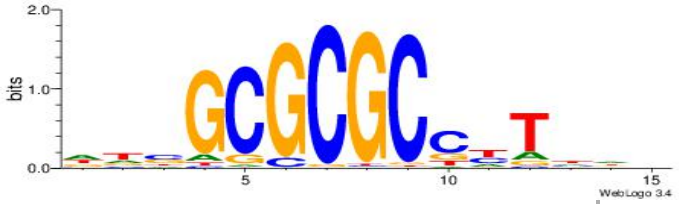
Motif ID:	UP00001
Motif name:	E2F2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0124455

Alignment:
HHVGCGCGCCKTDHB
CGCGSGCGCGC----

Original motif
Consensus sequence: VHDARGGCGCGCVHH

Reverse complement motif
Consensus sequence: HHVGCGCGCCKTDHB





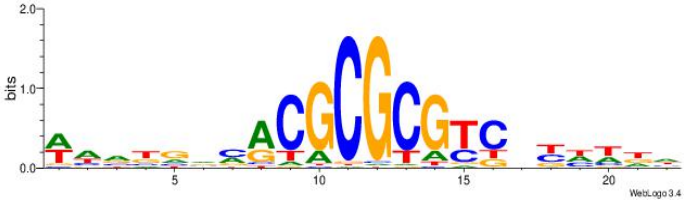
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	11
Similarity score:	0.0192204

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH
----CGCGSGCGCGC-------
```

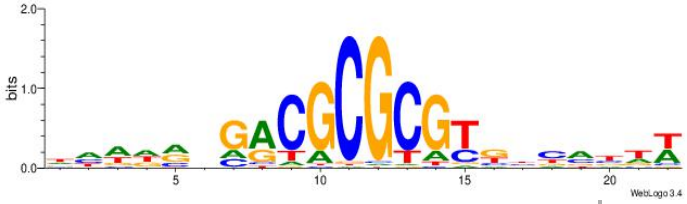
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Motif ID:	UP00526

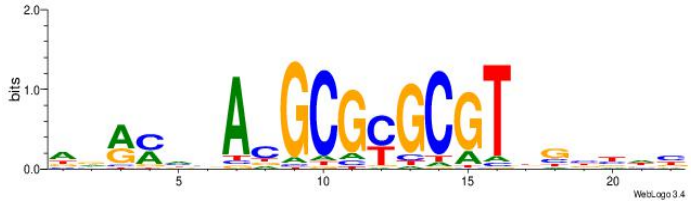
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0231982

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-------CGCGSGCGCGC----
```

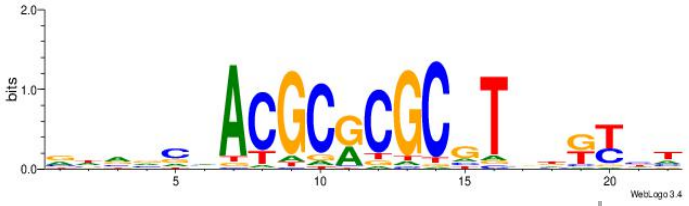
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

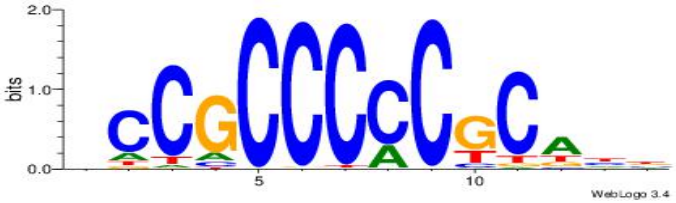


Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11

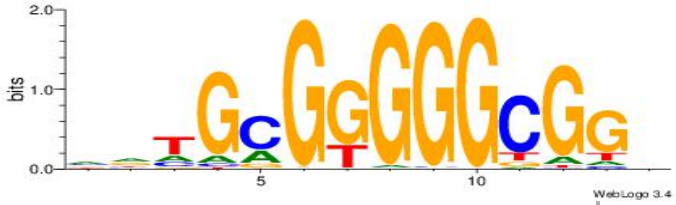
Similarity score: 0.0289369

Alignment:
HCCGCCCCCGCAHB
-GCGCGCSCGCG--

Original motif
Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH

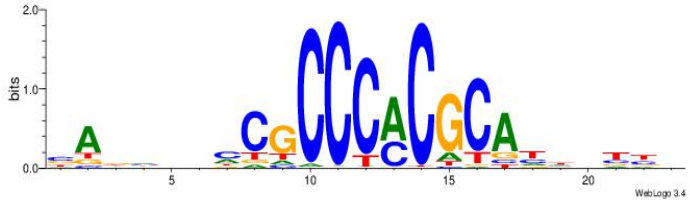


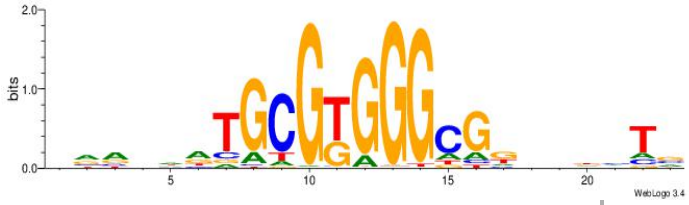
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.0297254

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
------GCGCGCSCGCG------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV

Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB





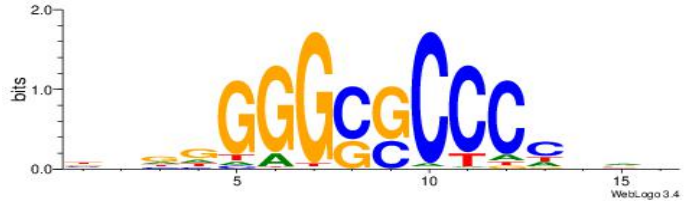
Motif ID:	UP00088
Motif name:	Plagl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0316913

Alignment:

```
BHDGGGGSSCCCCBVV
-CGCGSGCGCGC----
```

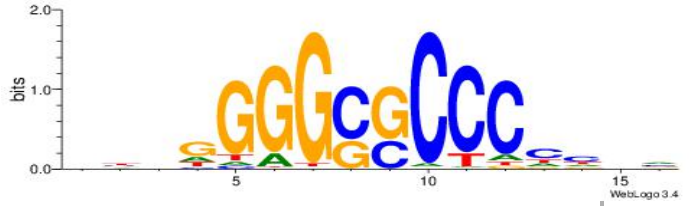
Original motif

Consensus sequence: BHDGGGGSSCCCCBVV



Reverse complement motif

Consensus sequence: VBVGGGGSSCCCCHHV



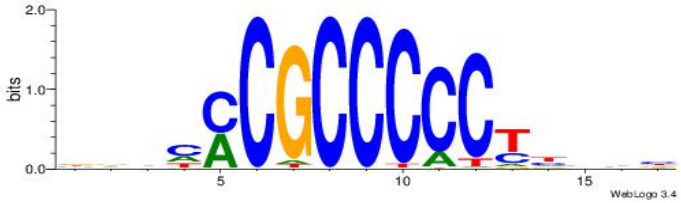
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0323627

Alignment:

```
BVVHAGGGGGCGRDHHB
----CGCGSGCGCGC--
```

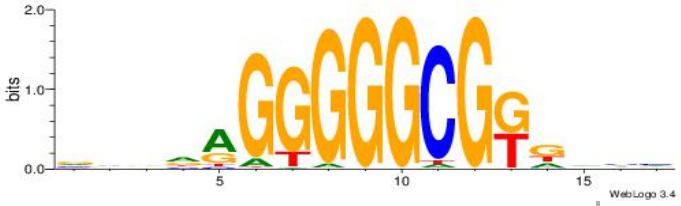
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB

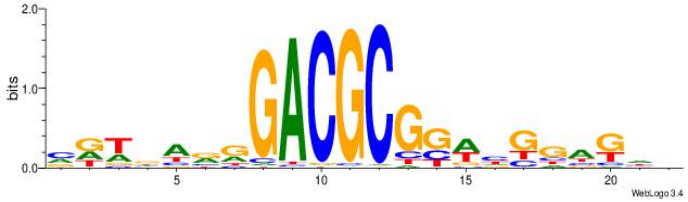


Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

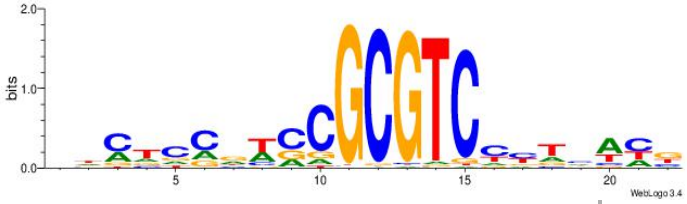
Number of overlap: 11
Similarity score: 0.039112

Alignment:
VHYTCCDWCCGCGTCMMTHWHV
-----CGCGSGCGCGC------

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV

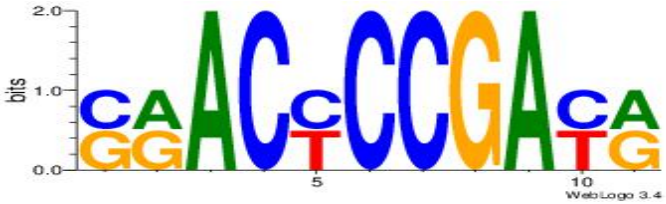


Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Dataset #: 4 Motif ID: 83 Motif name: srACyCCGAyr

Original motif
Consensus sequence: SRACYCCGAYR



Reverse complement motif
Consensus sequence: KKTCGGKGTKS

Best Matches for Motif ID 83 (Highest to Lowest)

Motif ID: UP00024
Motif name: Glis2_primary
Species: Mus musculus

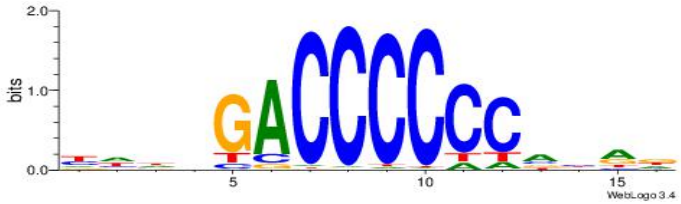
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0129914

Alignment:

```
HKBBGGGGGGTCVHHH
--KKTCGGKGTKS---
```

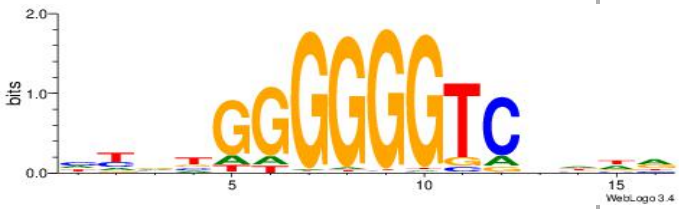
Original motif

Consensus sequence: HHHVGACCCCCCVBRD



Reverse complement motif

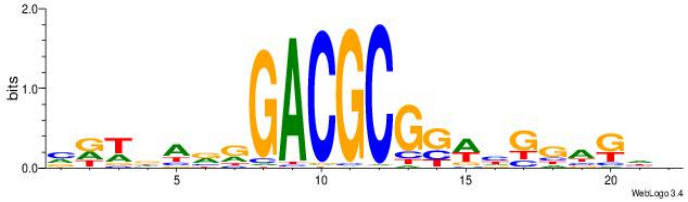
Consensus sequence: HKBBGGGGGGTCVHHH



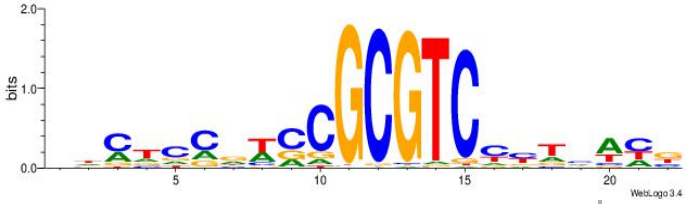
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.013032

Alignment:
VDWDARRGACGCGGWHGGAKHV
------SRACYCCGAYR-----

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

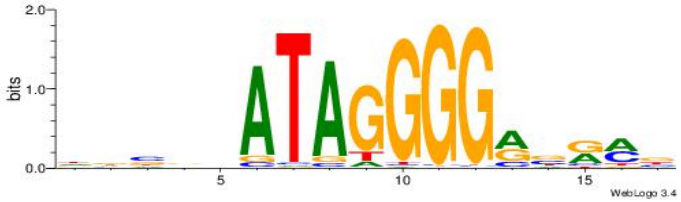


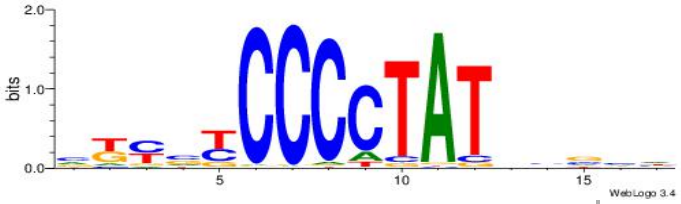
Motif ID:	UP00070
Motif name:	Gcm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0132459

Alignment:
BYMBKCCCCTATDVBHD
--SRACYCCGAYR----

Original motif
Consensus sequence: DDBVHATAGGGGRBRMB

Reverse complement motif
Consensus sequence: BYMBKCCCCTATDVBHD





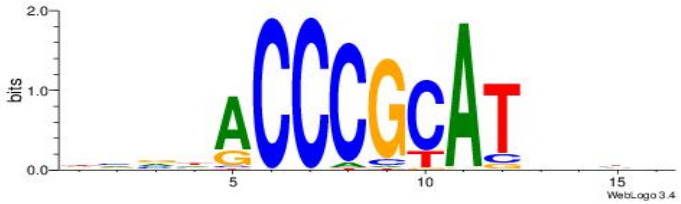
Motif ID:	UP00070
Motif name:	Gcm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0135374

Alignment:

```
HVVHACCCGCATVDHD
--SRACYCCGAYR---
```

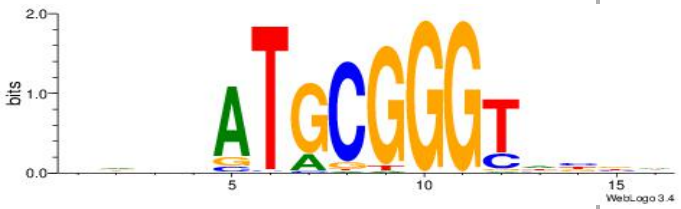
Original motif

Consensus sequence: HVVHACCCGCATVDHD



Reverse complement motif

Consensus sequence: DHDVATGCGGGTHVVH



Motif ID:	UP00021

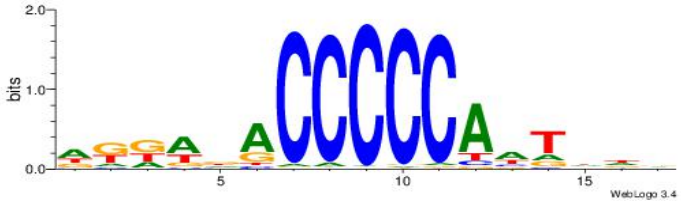
Motif name:	Zfp281_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0136908

Alignment:

```
DKKWDACCCCCAHTDDV
---SRACYCCGAYR---
```

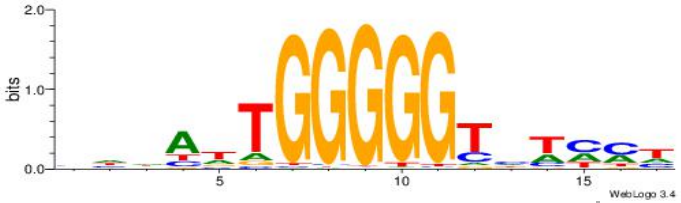
Original motif

Consensus sequence: DKKWDACCCCCAHTDDV



Reverse complement motif

Consensus sequence: VDDAHTGGGGGTHWYYD

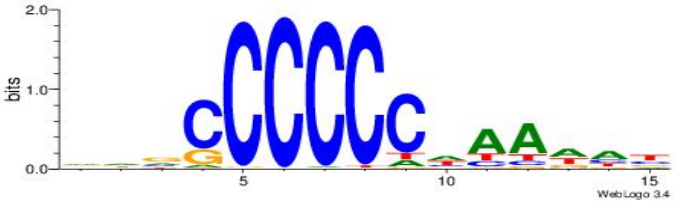


Motif ID:	UP00047
Motif name:	Zbtb7b_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11

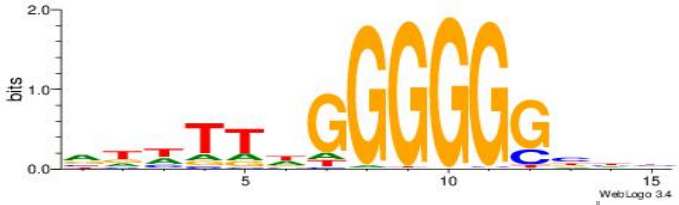
Similarity score: 0.0146089

Alignment:
VHWTTHGGGGGGVDD
--KKTCGGKGTKS--

Original motif
Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif
Consensus sequence: VHWTTHGGGGGGVDD

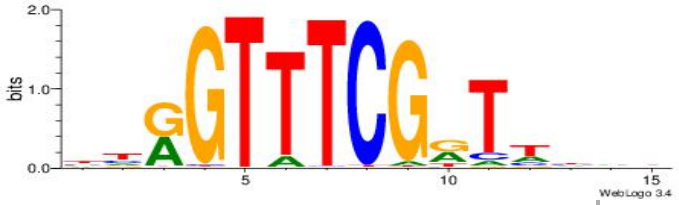


Motif ID: UP00040
Motif name: Irf5_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0148195

Alignment:
BDKGTTTCGKTWDDD
----KKTCGGKGTKS

Original motif
Consensus sequence: DDDWAYCGAAACYDV

Reverse complement motif
Consensus sequence: BDKGTTTCGKTWDDD



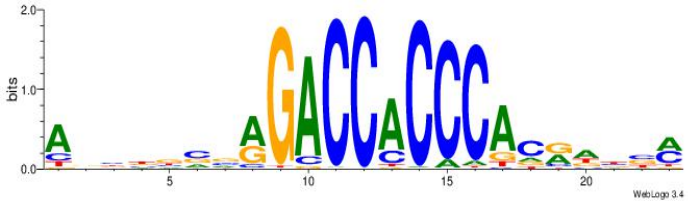
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	11
Similarity score:	0.014859

Alignment:

```
ABBBBVVRGACCACCCACRDBBM
--------SRACYCCGAYR----
```

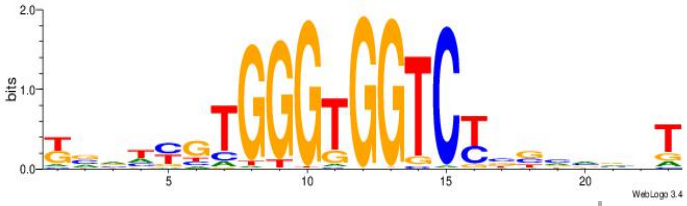
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



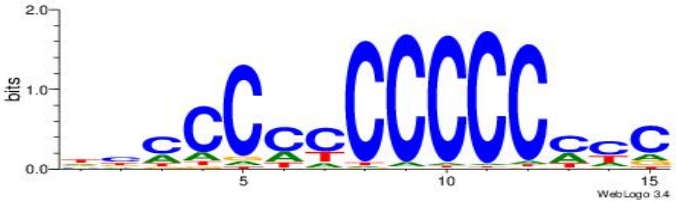
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0153296

Alignment:

```
GKRGGGGGGGGGBD
KKTCGGKGTKS----
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

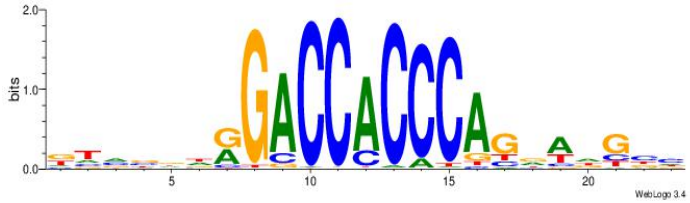
Consensus sequence: GKRGGGGGGGGGBD

Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	10

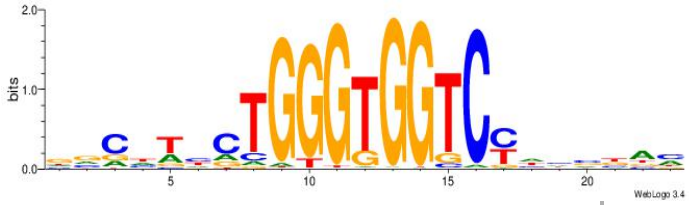
Number of overlap: 11
Similarity score: 0.0155548

Alignment:
DBCDWHCTGGGTGGTCMDHBBAH
---KKTCGGKGTKS---------

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



Dataset #: 5 Motif ID: 84 Motif name: TFW3

Original motif
Consensus sequence: GCACTG

Reverse complement motif
Consensus sequence: CAGTGC

Best Matches for Motif ID 84 (Highest to Lowest)

Motif ID: UP00031
Motif name: Zbtb3_primary
Species: Mus musculus

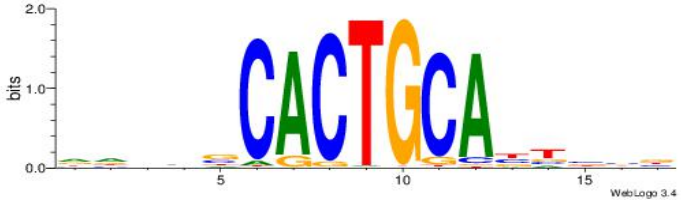
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6
Similarity score:	0

Alignment:

```
BBBAVTGCAGTGBBVDD
-------CAGTGC----
```

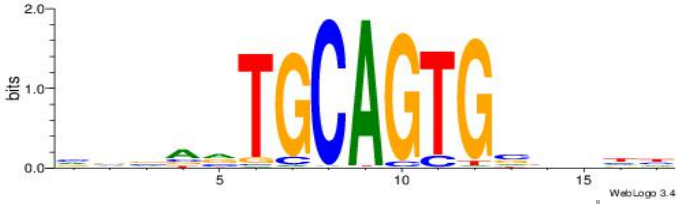
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

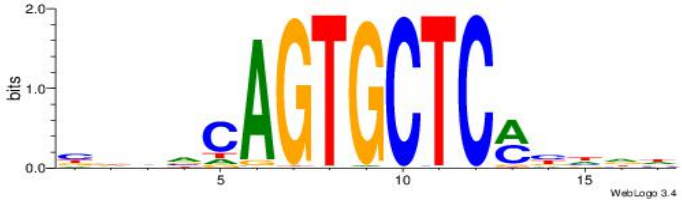
Consensus sequence: BBBAVTGCAGTGBBVDD



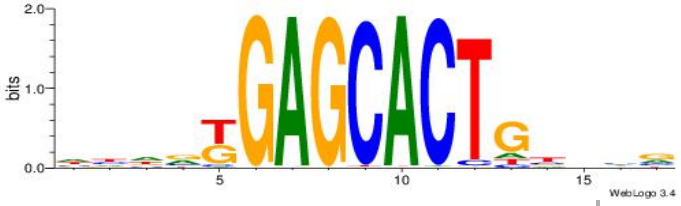
Motif ID:	UP00095
Motif name:	Zfp691_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6
Similarity score:	0.020963

Alignment:
DDHBYGAGCACTGBHHB
-------GCACTG----

Original motif
Consensus sequence: BDHVCAGTGCTCMBHDD



Reverse complement motif
Consensus sequence: DDHBYGAGCACTGBHHB

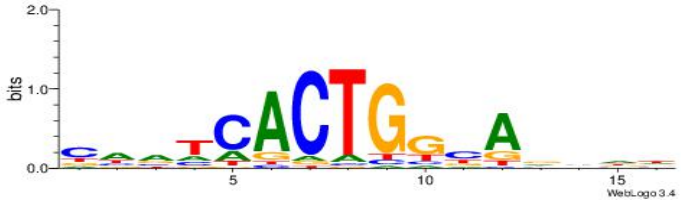


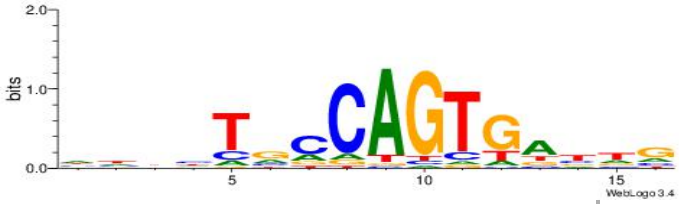
Motif ID:	UP00031
Motif name:	Zbtb3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6
Similarity score:	0.0248871

Alignment:
DDHHTBCCAGTGABHG
-------CAGTGC---

Original motif
Consensus sequence: CHVTCACTGGBADHDD

Reverse complement motif
Consensus sequence: DDHHTBCCAGTGABHG





Motif ID:	UP00065
Motif name:	Zfp161_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:	0.0303167

Alignment:

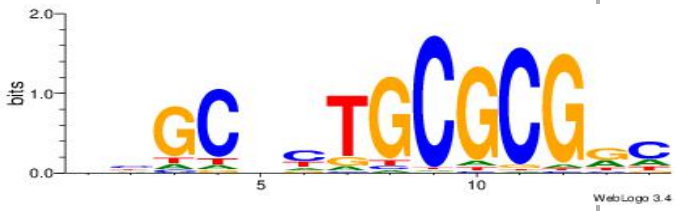
```
GYCGCGCARBGCVB
------CAGTGC--
```

Original motif

Consensus sequence: GYCGCGCARBGCVB

Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



Motif ID:	UP00006

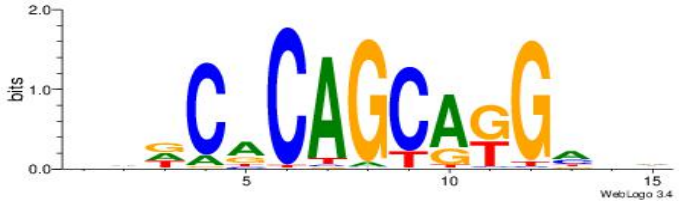
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0420592

Alignment:

```
DDDCACAGCAKGHVD
--GCACTG-------
```

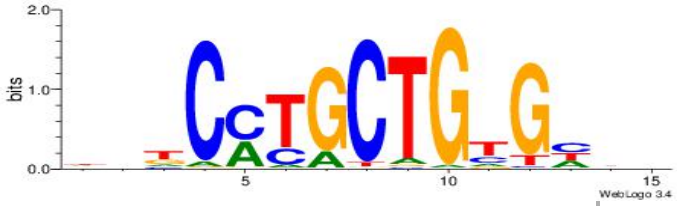
Original motif

Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH

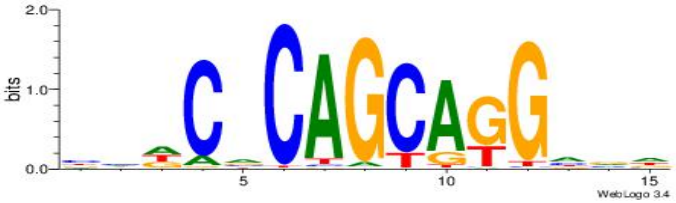


Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6

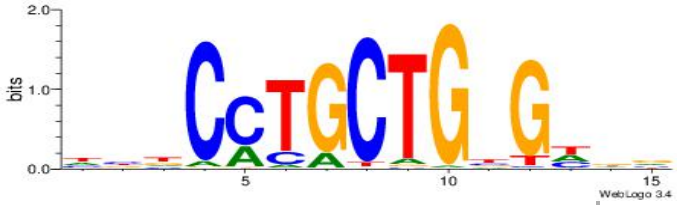
Similarity score: 0.0499082

Alignment:
BHDCVCAGCAGGHVD
--GCACTG-------

Original motif
Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB

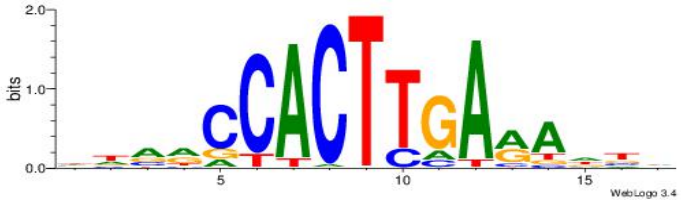


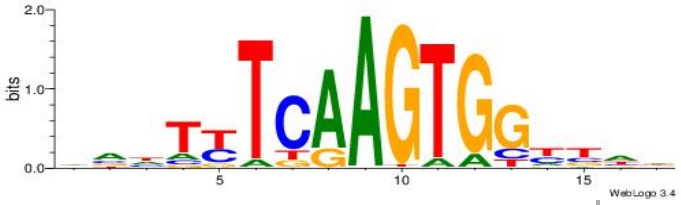
Motif ID: UP00231
Motif name: Nkx2-2
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 8
Number of overlap: 6
Similarity score: 0.0507672

Alignment:
DVDTKTCAAGTGGKBDH
-------CAGTGC----

Original motif
Consensus sequence: HDVRCCACTTGARADBD

Reverse complement motif
Consensus sequence: DVDTKTCAAGTGGKBDH





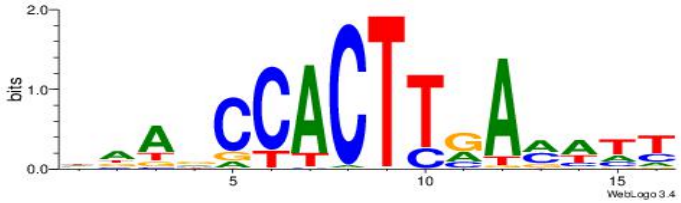
Motif ID:	UP00107
Motif name:	Nkx2-4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0519322

Alignment:

```
AAWYTMAAGTGGVTDH
------CAGTGC----
```

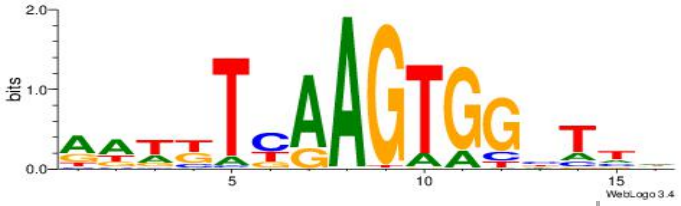
Original motif

Consensus sequence: HDAVCCACTTRAMWTT



Reverse complement motif

Consensus sequence: AAWYTMAAGTGGVTDH



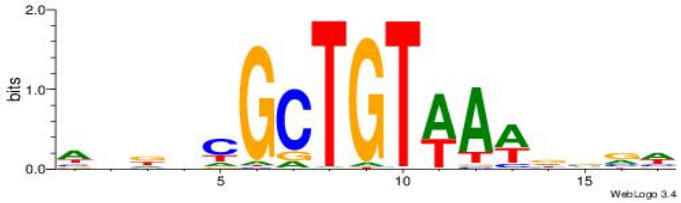
Motif ID:	UP00193
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.0530479

Alignment:

```
WVVHWTWACAGCGHHVT
--------CAGTGC---
```

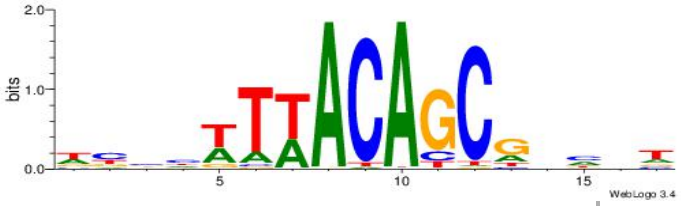
Original motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGHHVT

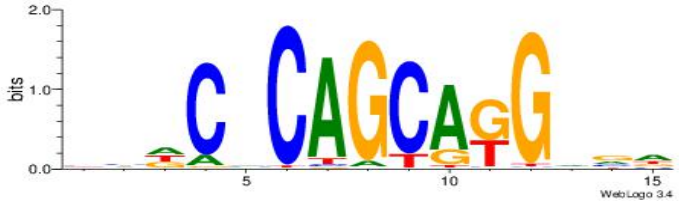


Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8

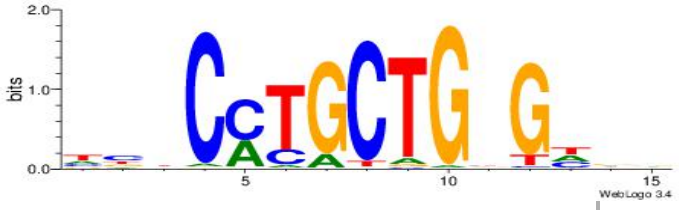
Number of overlap: 6
Similarity score: 0.0539075

Alignment:
HHDCVCAGCAKGVVD
--GCACTG-------

Original motif
Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif
Consensus sequence: DVBCYTGCTGBGDDD



Dataset #: 5 Motif ID: 85 Motif name: TFW1

Original motif
Consensus sequence: TTGCGCAA

Reverse complement motif
Consensus sequence: TTGCGCAA

Best Matches for Motif ID 85 (Highest to Lowest)

Motif ID: UP00045
Motif name: Mafb_secondary
Species: Mus musculus

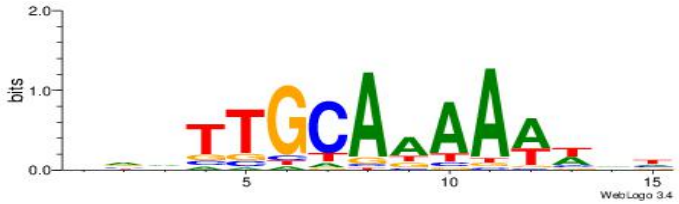
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.00957029

Alignment:

```
HDWWTTTTGCAADBD
----TTGCGCAA---
```

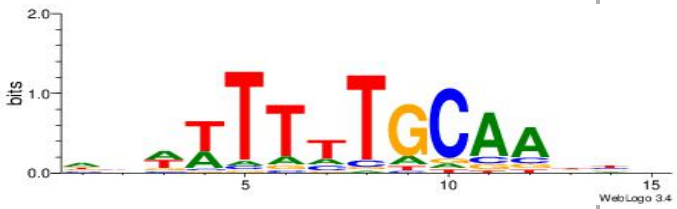
Original motif

Consensus sequence: HVDTTGCAAAAWWDH



Reverse complement motif

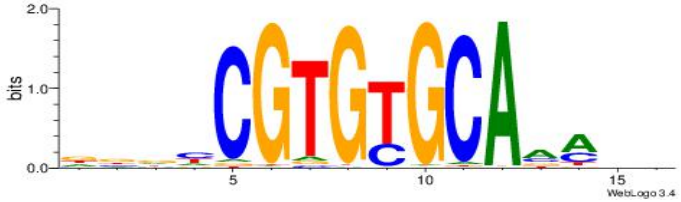
Consensus sequence: HDWWTTTTGCAADBD



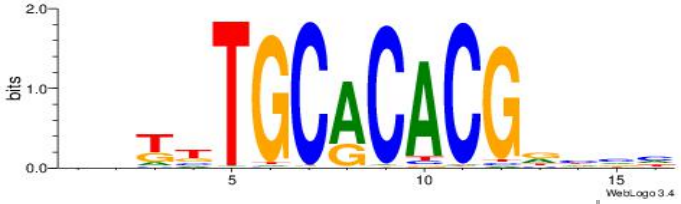
Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0184619

Alignment:
DBDHCGTGTGCAAMDH
-----TTGCGCAA---

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH



Motif ID:	UP00259
Motif name:	Hoxb6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	8
Similarity score:	0.0226004

Alignment:
WWTDBGTAATTACVDB
-TTGCGCAA-------

Original motif
Consensus sequence: WWTDBGTAATTACVDB

Reverse complement motif
Consensus sequence: VDVGTAATTACBDAWW

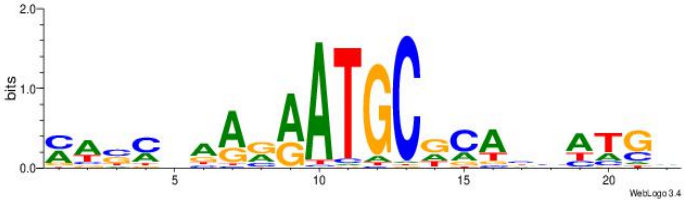
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0239956

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
-----TTGCGCAA---------
```

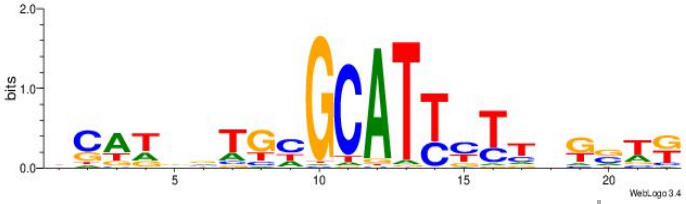
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID:	UP00035

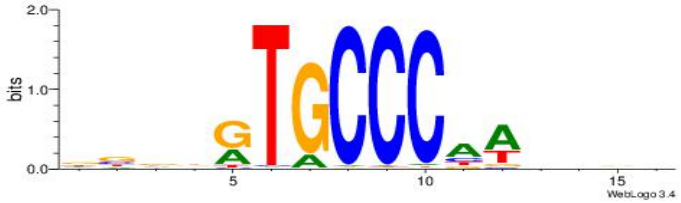
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0261465

Alignment:

```
VHHDWTGGGCAMDHBH
----TTGCGCAA----
```

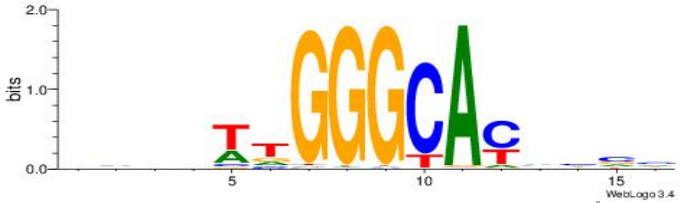
Original motif

Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH

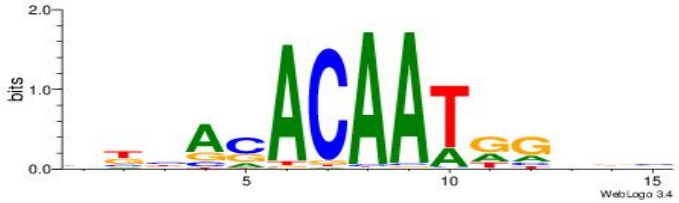


Motif ID:	UP00004
Motif name:	Sox14_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8

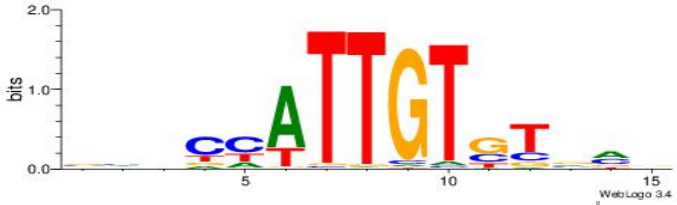
Similarity score: 0.0272314

Alignment:
BKBASACAATRGHBB
-TTGCGCAA------

Original motif
Consensus sequence: BKBASACAATRGHBB



Reverse complement motif
Consensus sequence: BBDCMATTGTSTBRB

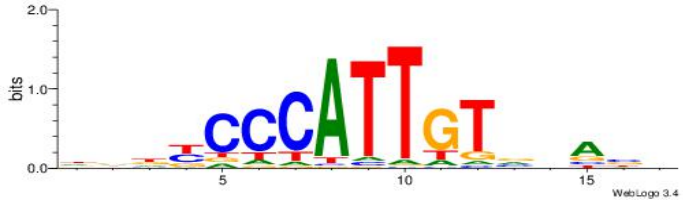


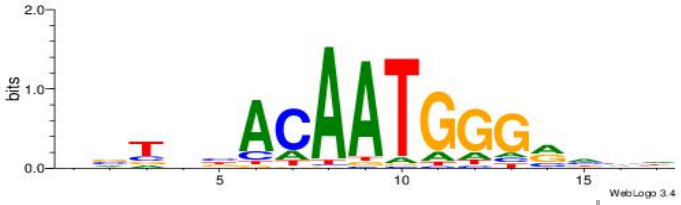
Motif ID: UP00055
Motif name: Hbp1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 9
Number of overlap: 8
Similarity score: 0.0278778

Alignment:
HBTHVACAATGGGMDHD
-TTGCGCAA--------

Original motif
Consensus sequence: DDDYCCCATTGTVHABH

Reverse complement motif
Consensus sequence: HBTHVACAATGGGMDHD





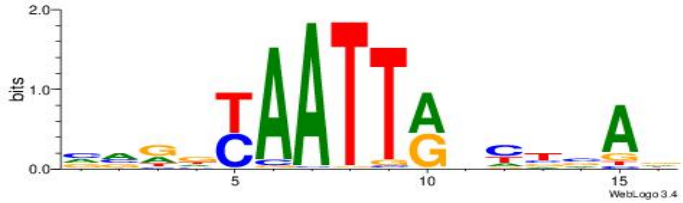
Motif ID:	UP00138
Motif name:	Bsx
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0281625

Alignment:

```
VVRDYAATTRBYBVAD
-------TTGCGCAA-
```

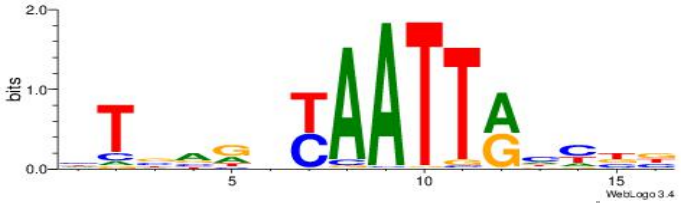
Original motif

Consensus sequence: VVRDYAATTRBYBVAD



Reverse complement motif

Consensus sequence: HTVVKBKAATTMHMBV



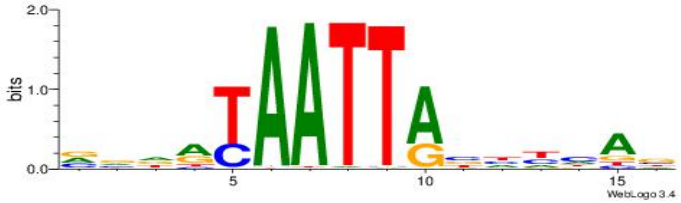
Motif ID:	UP00126
Motif name:	Dlx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.030109

Alignment:

```
VVDRTAATTABHHHAB
-------TTGCGCAA-
```

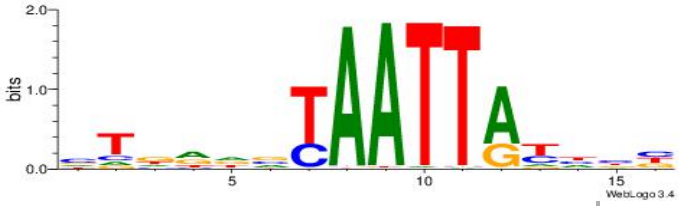
Original motif

Consensus sequence: VVDRTAATTABHHHAB



Reverse complement motif

Consensus sequence: BTDHHBTAATTAKDVV

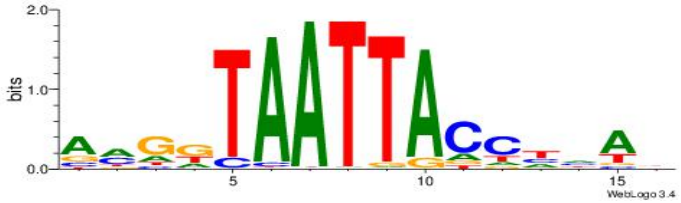


Motif ID:	UP00182
Motif name:	Hoxa6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

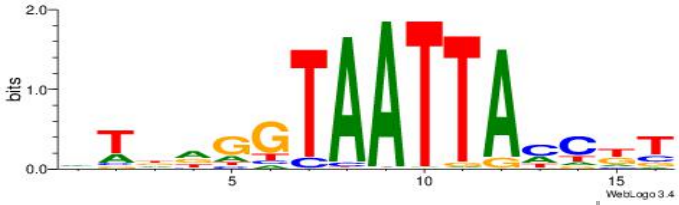
Number of overlap: 8
Similarity score: 0.0308523

Alignment:
AMGKTAATTACCHHAD
-------TTGCGCAA-

Original motif
Consensus sequence: AMGKTAATTACCHHAD



Reverse complement motif
Consensus sequence: DTHHGGTAATTAYCYT



Dataset #: 5 Motif ID: 86 Motif name: TFW2

Original motif
Consensus sequence: YGGACTTACG

Reverse complement motif
Consensus sequence: CGTAAGTCCK

Best Matches for Motif ID 86 (Highest to Lowest)

Motif ID: UP00066
Motif name: Hnf4a_secondary
Species: Mus musculus

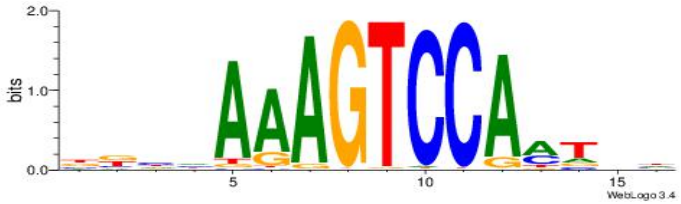
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0

Alignment:

```
HHAYTGGACTTTHDBV
----YGGACTTACG--
```

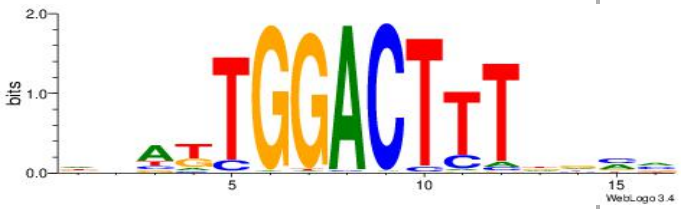
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

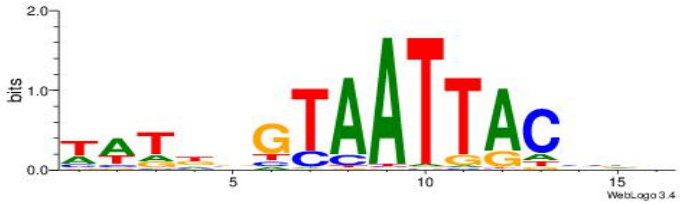
Consensus sequence: HHAYTGGACTTTHDBV



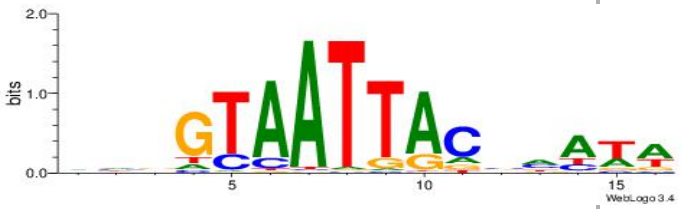
Motif ID:	UP00259
Motif name:	Hoxb6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0133265

Alignment:
VDVGTAATTACBDAWW
--YGGACTTACG----

Original motif
Consensus sequence: WWTDBGTAATTACVDB



Reverse complement motif
Consensus sequence: VDVGTAATTACBDAWW

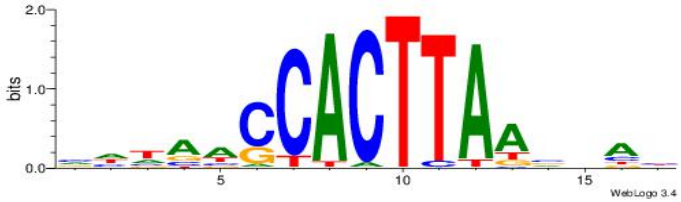


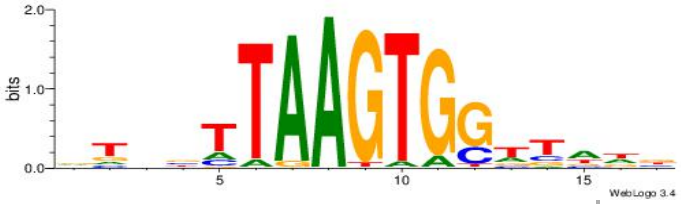
Motif ID:	UP00228
Motif name:	Bapx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0145352

Alignment:
DTBVTTAAGTGGTTHHV
---CGTAAGTCCK----

Original motif
Consensus sequence: VHHAACCACTTAAVVAH

Reverse complement motif
Consensus sequence: DTBVTTAAGTGGTTHHV





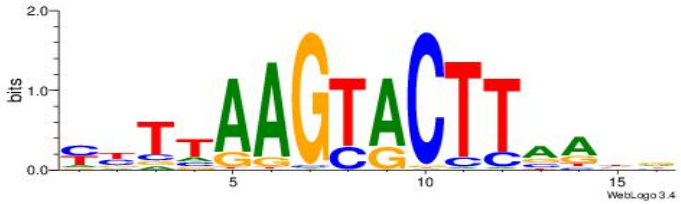
Motif ID:	UP00190
Motif name:	Nkx2-3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0167419

Alignment:

```
HHTTAAGTACTTAAMK
-CGTAAGTCCK-----
```

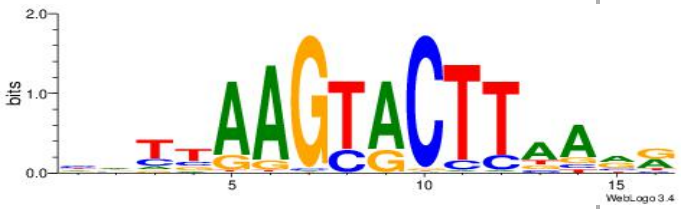
Original motif

Consensus sequence: YYTTAAGTACTTAAHD



Reverse complement motif

Consensus sequence: HHTTAAGTACTTAAMK



Motif ID:	UP00389

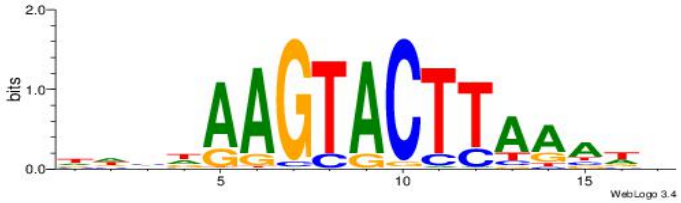
Motif name:	Nkx3-1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0201669

Alignment:

```
BDTTTAAGTACTTDDDD
--CGTAAGTCCK-----
```

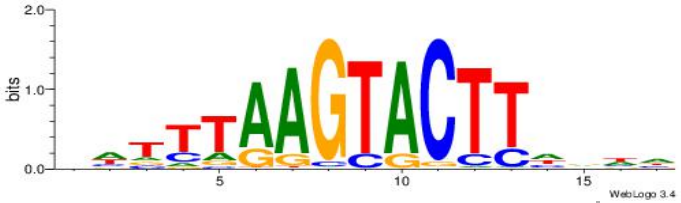
Original motif

Consensus sequence: DDHDAAGTACTTAAADB



Reverse complement motif

Consensus sequence: BDTTTAAGTACTTDDDD

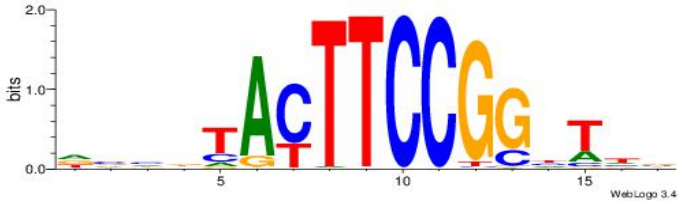


Motif ID:	UP00418
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10

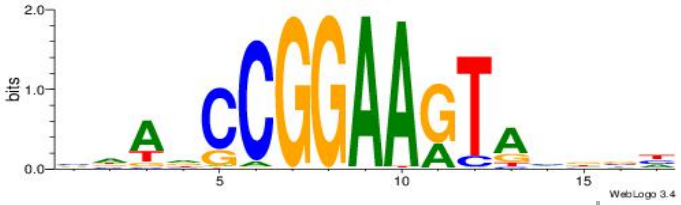
Similarity score: 0.0206612

Alignment:
BHAHCCGGAAGTABDVD
-----YGGACTTACG--

Original motif
Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif
Consensus sequence: BHAHCCGGAAGTABDVD

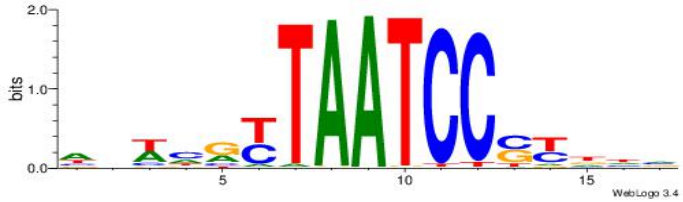


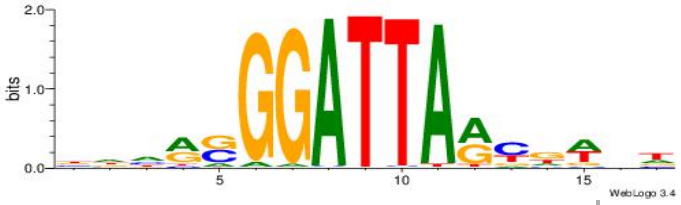
Motif ID:	UP00112
Motif name:	Gsc
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0208429

Alignment:
BHDMSGGATTAMMDWBH
----YGGACTTACG---

Original motif
Consensus sequence: HVWHRYTAATCCSYDHV

Reverse complement motif
Consensus sequence: BHDMSGGATTAMMDWBH





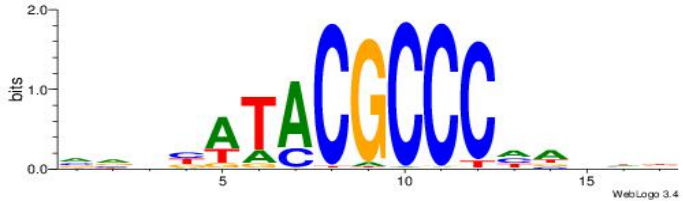
Motif ID:	UP00093
Motif name:	Klf7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0217998

Alignment:

```
DHDTHGGGCGTATBHBB
----YGGACTTACG---
```

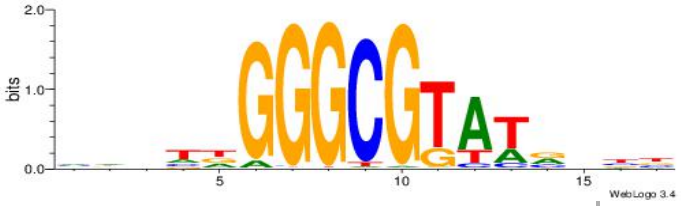
Original motif

Consensus sequence: VVDBATACGCCCHAHHD



Reverse complement motif

Consensus sequence: DHDTHGGGCGTATBHBB



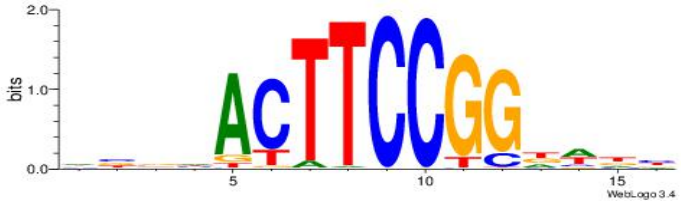
Motif ID:	UP00404
Motif name:	Elf2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0220676

Alignment:

```
BDWDCCGGAAGTHBBD
-----CGTAAGTCCK-
```

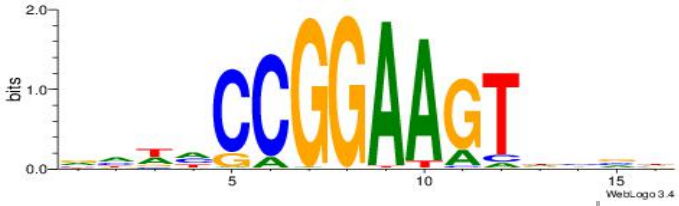
Original motif

Consensus sequence: DBBHACTTCCGGDWDB



Reverse complement motif

Consensus sequence: BDWDCCGGAAGTHBBD

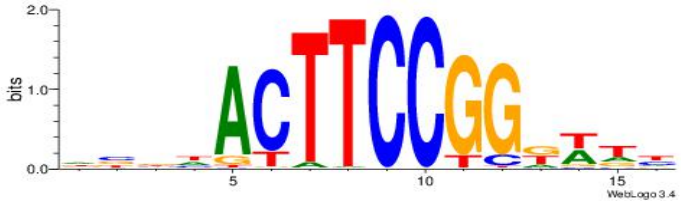


Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

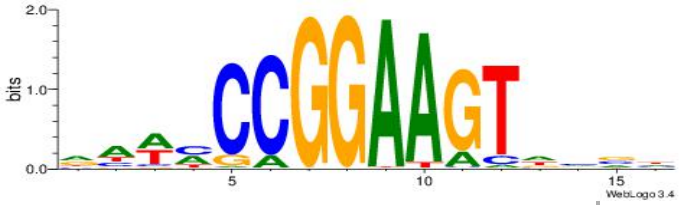
Number of overlap: 10
Similarity score: 0.0221416

Alignment:
HAWYCCGGAAGTHBBD
-----CGTAAGTCCK-

Original motif
Consensus sequence: DBBHACTTCCGGKWTH



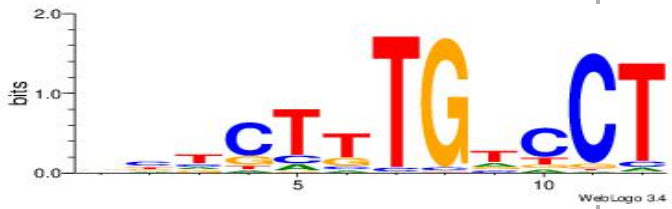
Reverse complement motif
Consensus sequence: HAWYCCGGAAGTHBBD



Dataset #: 5 Motif ID: 87 Motif name: TFF1

Original motif
Consensus sequence: AGGACAAAGAVV

Reverse complement motif
Consensus sequence: VVTCTTTGTCCT



Best Matches for Motif ID 87 (Highest to Lowest)

Motif ID: UP00062
Motif name: Sox4_primary
Species: Mus musculus

Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0258536

Alignment:

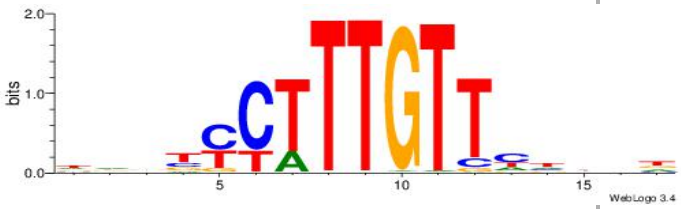
```
HBDDDAACAAAGRVBHH
---AGGACAAAGAVV--
```

Original motif

Consensus sequence: HBDDDAACAAAGRVBHH

Reverse complement motif

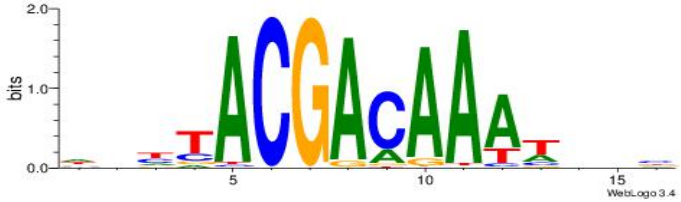
Consensus sequence: HHBBMCTTTGTTHDDBH



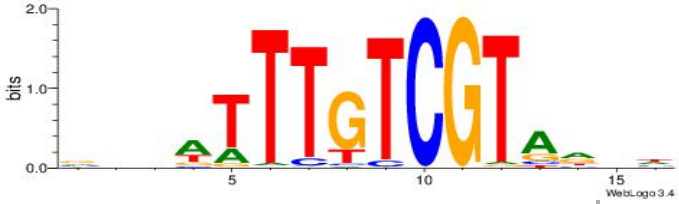
Motif ID:	UP00072
Motif name:	IRC900814_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0258585

Alignment:
BHDWTTTGTCGTAHDD
VVTCTTTGTCCT----

Original motif
Consensus sequence: DDHTACGACAAAWDDB



Reverse complement motif
Consensus sequence: BHDWTTTGTCGTAHDD

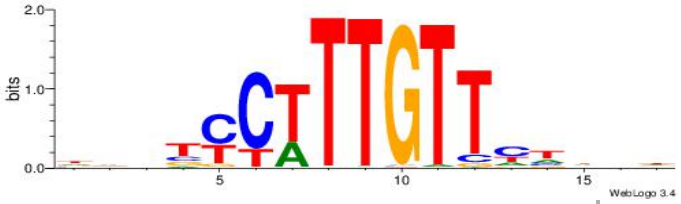


Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0284165

Alignment:
HBDDRAACAAAGRABHH
---AGGACAAAGAVV--

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



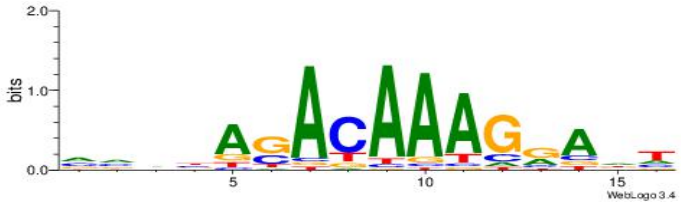
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0317868

Alignment:

```
VVDBASACAAAGRADH
---AGGACAAAGAVV-
```

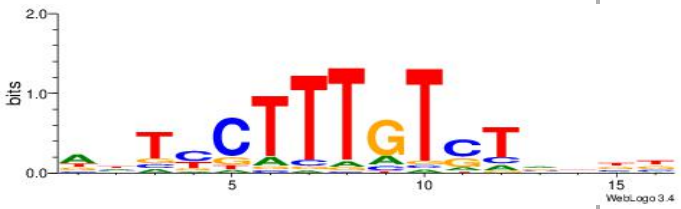
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB



Motif ID:	UP00067

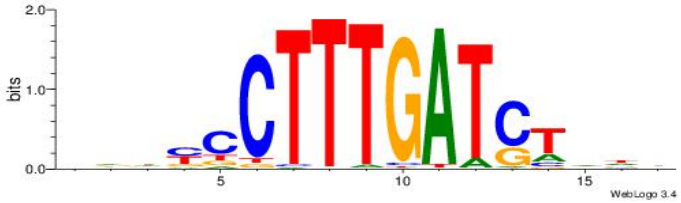
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0318041

Alignment:

```
VDDAGATCAAAGGKDDD
---AGGACAAAGAVV--
```

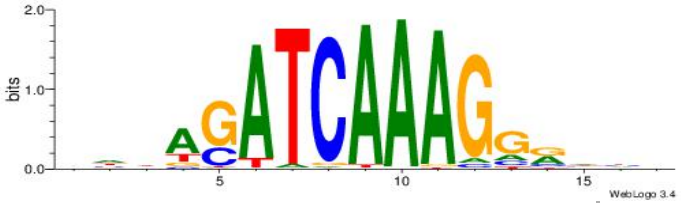
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD

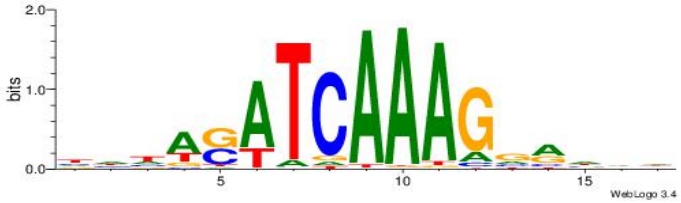


Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12

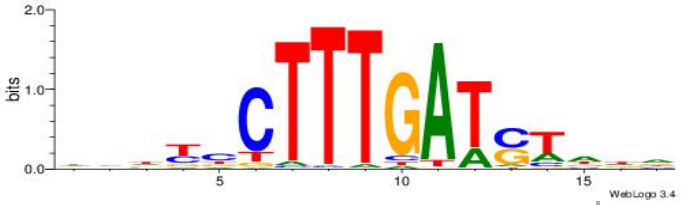
Similarity score: 0.0329392

Alignment:
HHHASATCAAAGVRHHH
---AGGACAAAGAVV--

Original motif
Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif
Consensus sequence: HHHKVCTTTGATSTHHH

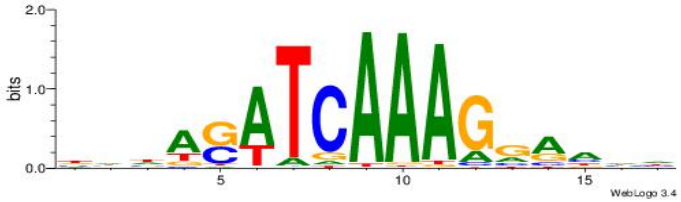


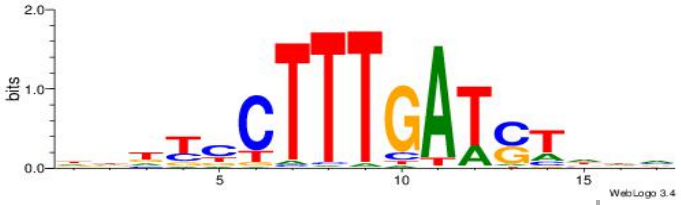
Motif ID: UP00054
Motif name: Tcf7_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0344802

Alignment:
BHHASATCAAAGGAHHH
---AGGACAAAGAVV--

Original motif
Consensus sequence: BHHASATCAAAGGAHHH

Reverse complement motif
Consensus sequence: HHHTCCTTTGATSTHHV





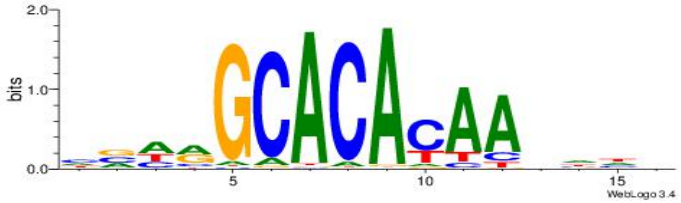
Motif ID:	UP00026
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0344812

Alignment:

```
BHHHTTGTGTGCKHVD
-VVTCTTTGTCCT---
```

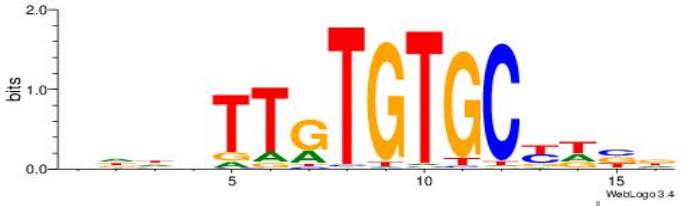
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD



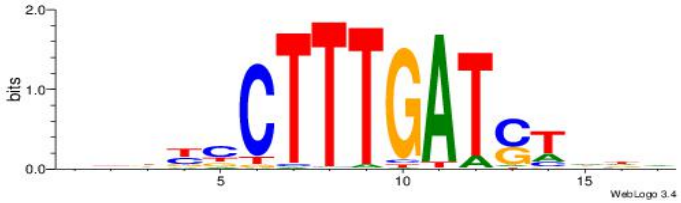
Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0344876

Alignment:

```
DDDYCCTTTGATSTDDV
--VVTCTTTGTCCT---
```

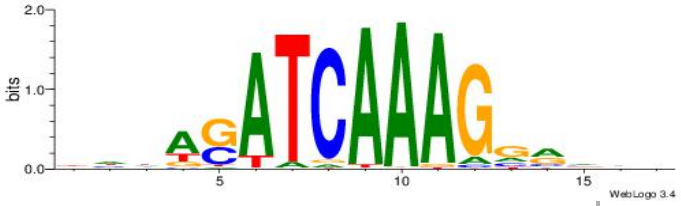
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD

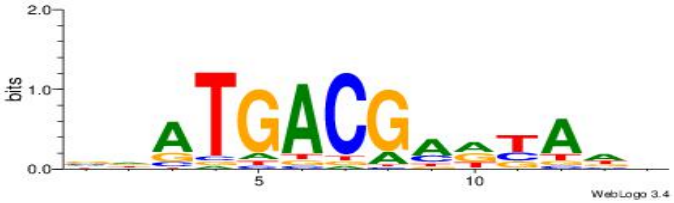


Motif ID:	UP00020
Motif name:	Atf1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3

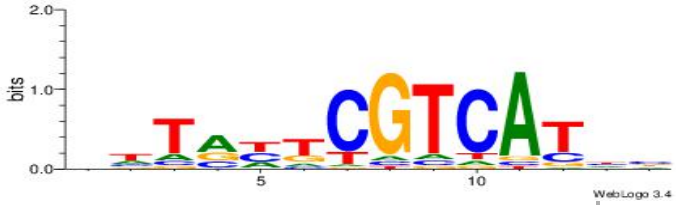
Number of overlap: 12
Similarity score: 0.0352035

Alignment:
VDATGACGADYADH
--AGGACAAAGAVV

Original motif
Consensus sequence: VDATGACGADYADH

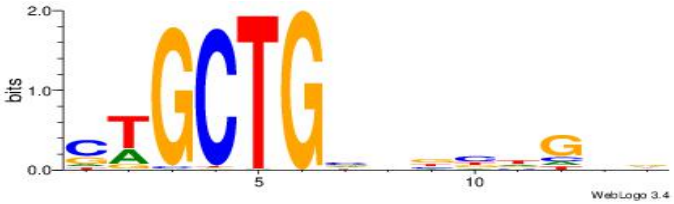


Reverse complement motif
Consensus sequence: DDTMDTCGTCATDV

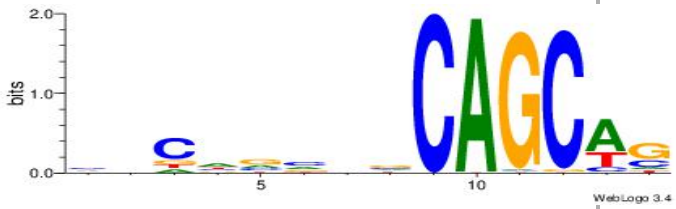


Dataset #: 5 Motif ID: 88 Motif name: TFF11

Original motif
Consensus sequence: CTGCTGBDBBDGBD



Reverse complement motif
Consensus sequence: HVCDBBDBCAGCAG



Best Matches for Motif ID 88 (Highest to Lowest)

Motif ID: UP00193
Motif name: Rhox11_1765.2
Species: Mus musculus

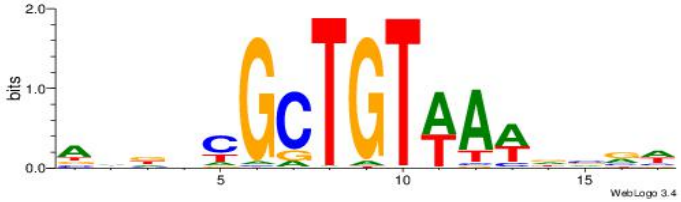
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.054015

Alignment:

```
WVVHWTWACAGCGBHBT
HVCDBBDBCAGCAG---
```

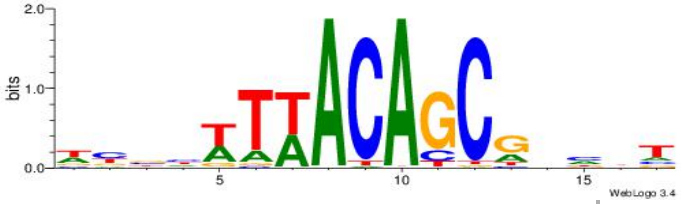
Original motif

Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif

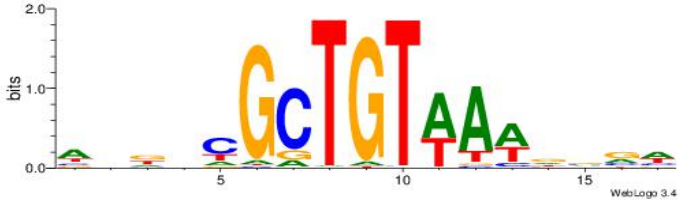
Consensus sequence: WVVHWTWACAGCGBHBT



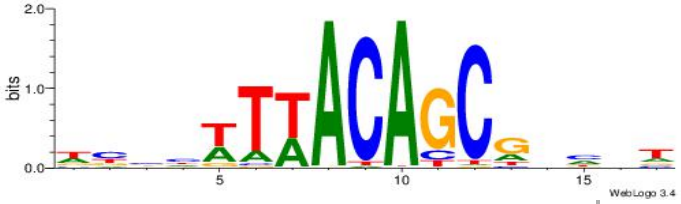
Motif ID:	UP00193
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0543852

Alignment:
WVVHWTWACAGCGHHVT
HVCDBBDBCAGCAG---

Original motif
Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif
Consensus sequence: WVVHWTWACAGCGHHVT

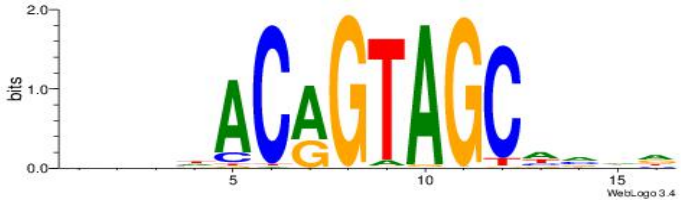


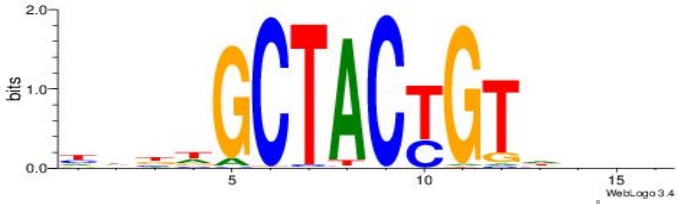
Motif ID:	UP00027
Motif name:	Osr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0554469

Alignment:
DHBHGCTACKGTHDHH
--CTGCTGBDBBDGBD

Original motif
Consensus sequence: HHDHACRGTAGCHVHD

Reverse complement motif
Consensus sequence: DHBHGCTACKGTHDHH





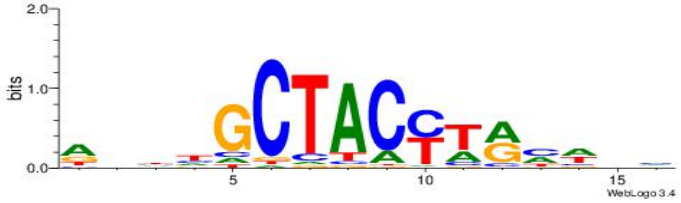
Motif ID:	UP00052
Motif name:	Osr2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0576412

Alignment:

```
VDWRKAKGTAGCHHDT
HVCDBBDBCAGCAG--
```

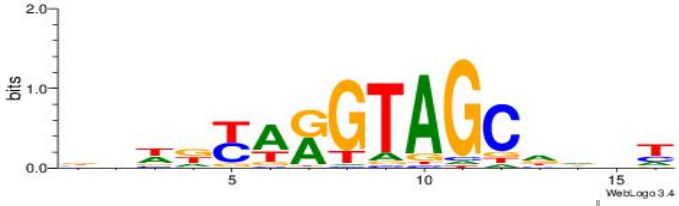
Original motif

Consensus sequence: AHHHGCTACYTRMWHV



Reverse complement motif

Consensus sequence: VDWRKAKGTAGCHHDT



Motif ID:	UP00099

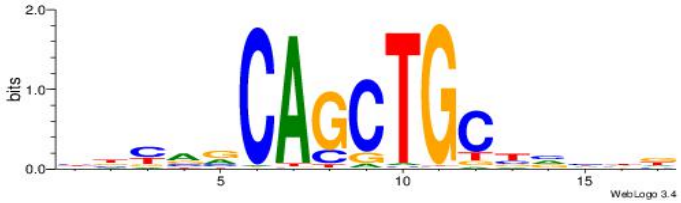
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0581121

Alignment:

```
BBYVVCAGCTGCBVHHD
---CTGCTGBDBBDGBD
```

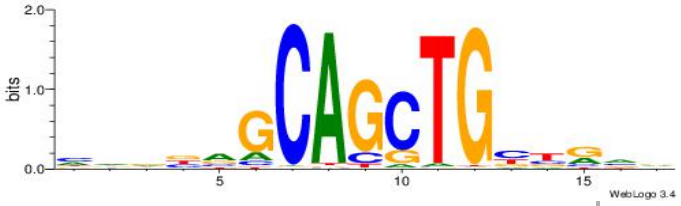
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB

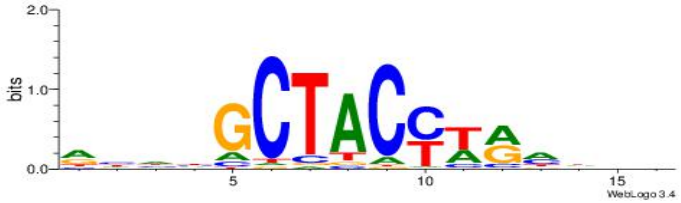


Motif ID:	UP00027
Motif name:	Osr1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0586391

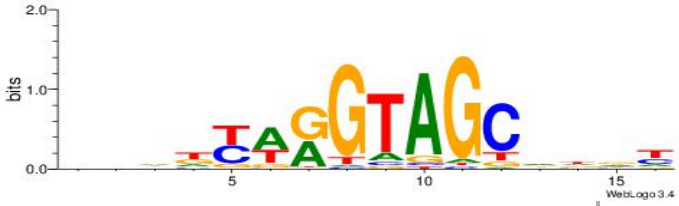
Alignment:

VHDHKWKGTAGCHHDK
HVCDBBDBCAGCAG--

Original motif
Consensus sequence: RHHHGCTACYWRHDHV



Reverse complement motif
Consensus sequence: VHDHKWKGTAGCHHDK

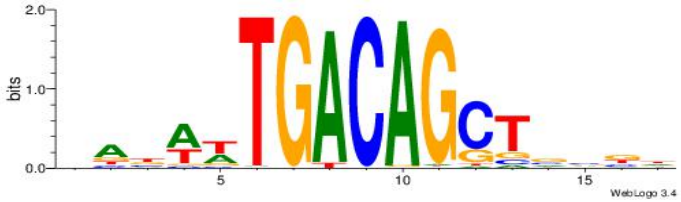


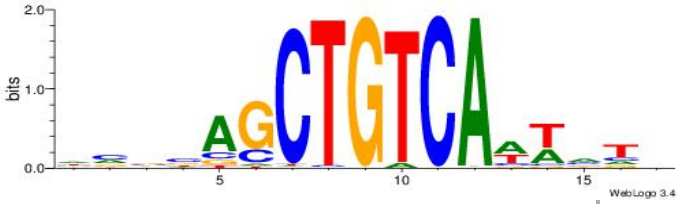
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0592876

Alignment:
DABWWTGACAGCTVVBD
HVCDBBDBCAGCAG---

Original motif
Consensus sequence: DABWWTGACAGCTVVBD

Reverse complement motif
Consensus sequence: DBVVAGCTGTCAWWVTH





Motif ID:	UP00052
Motif name:	Osr2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0610328

Alignment:

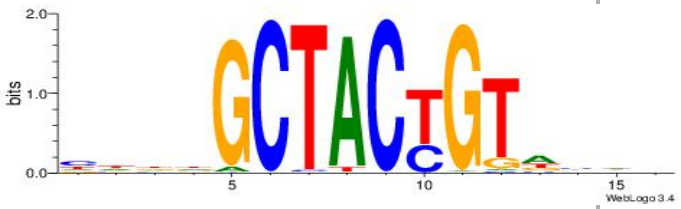
```
HHHHGCTACKGTHVHH
--CTGCTGBDBBDGBD
```

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH



Motif ID:	UP00098

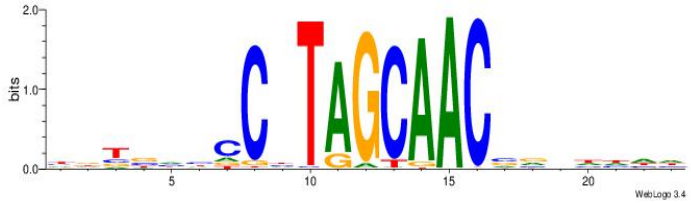
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	14
Similarity score:	0.0628447

Alignment:

```
HHHHDVVGTTGCTAHGGDHBAHH
--------CTGCTGBDBBDGBD-
```

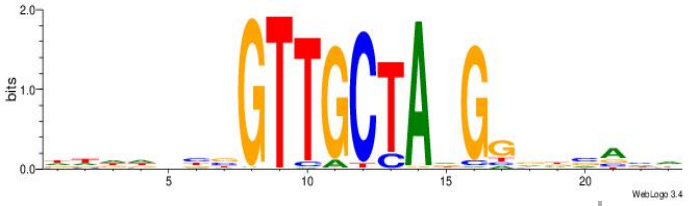
Original motif

Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif

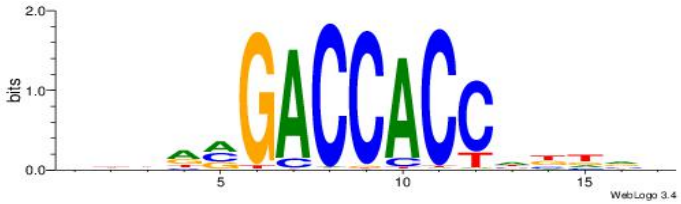
Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



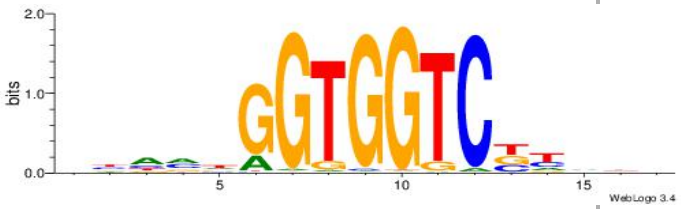
Motif ID:	UP00047
Motif name:	Zbtb7b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0632938

Alignment:
BDDRVGACCACCHBDVB
---CTGCTGBDBBDGBD

Original motif
Consensus sequence: BDDRVGACCACCHBDVB

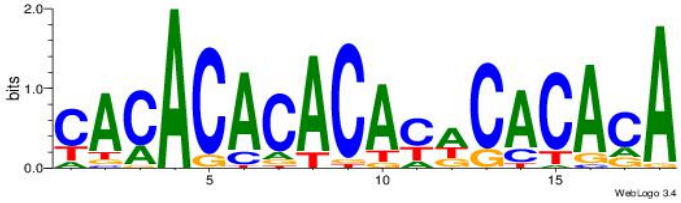


Reverse complement motif
Consensus sequence: BBDVHGGTGGTCBKDDB

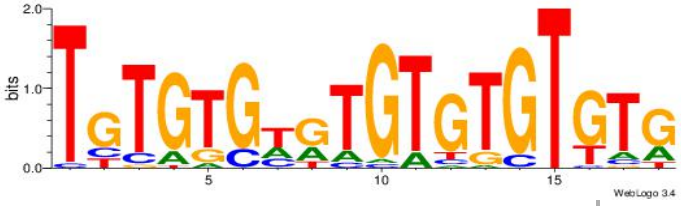


Dataset #: 5 Motif ID: 89 Motif name: TFM1

Original motif
Consensus sequence: CACACACACACWCACACA



Reverse complement motif
Consensus sequence: TGTGTGWGTGTGTGTGTG



Best Matches for Motif ID 89 (Highest to Lowest)

Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif

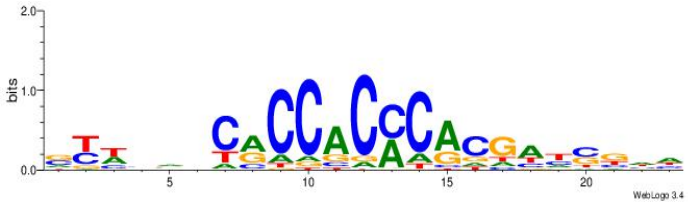
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0442064

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
-----CACACACACACWCACACA
```

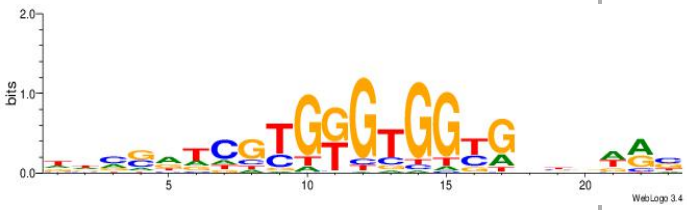
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



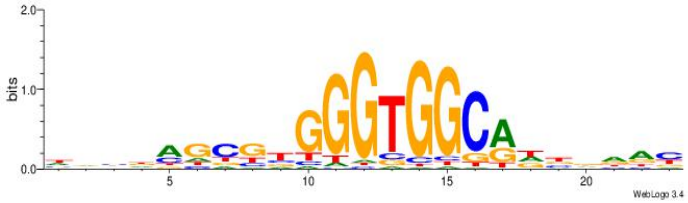
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0448118

Alignment:

HVBDAGCGBGGGTGGCRDBDDDB
TGTGTGWGTGTGTGTGTG-----

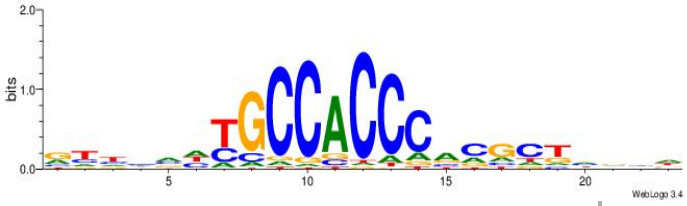
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00034
Motif name:	Sox7_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:	18
Similarity score:	0.0469936

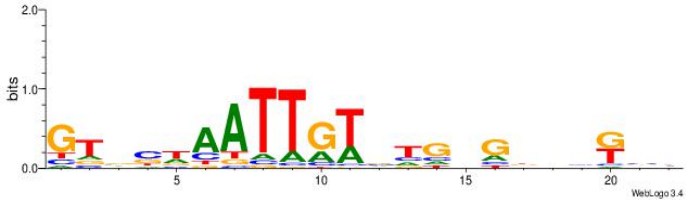
Alignment:
VVYDDDCHCAVACAATTDBVAC
TGTGTGWGTGTGTGTGTG----

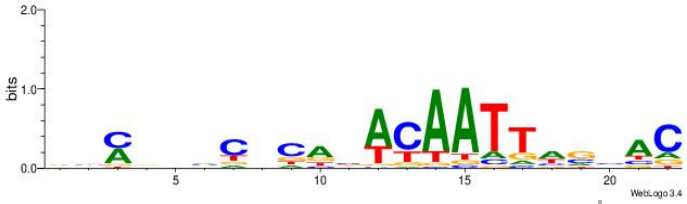
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC





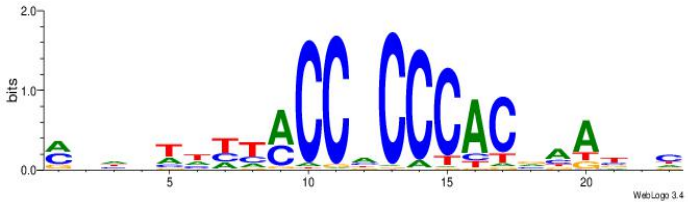
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0474757

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
--CACACACACACWCACACA---
```

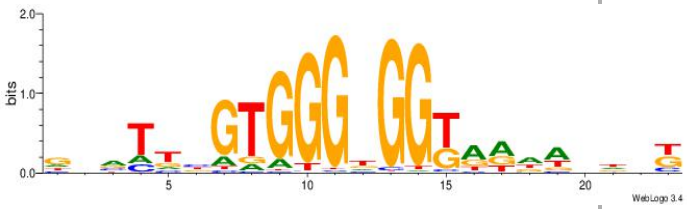
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID:	UP00539

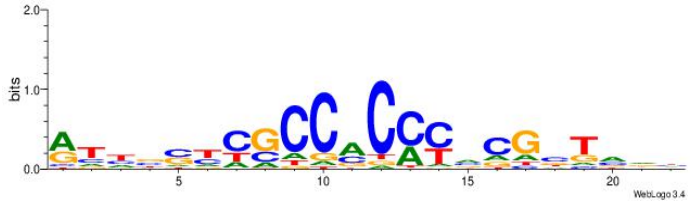
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0483565

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
---CACACACACACWCACACA-
```

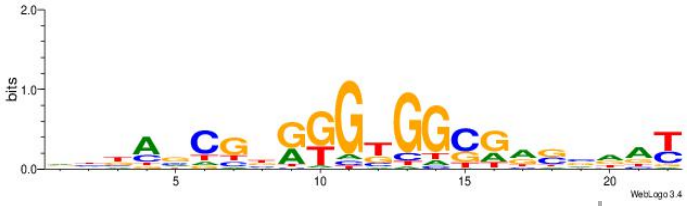
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

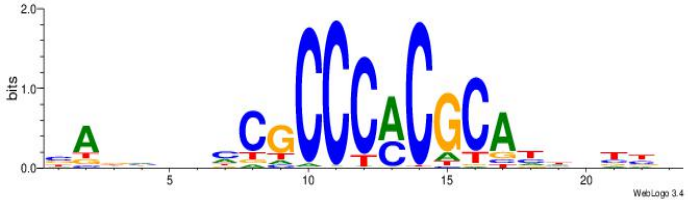


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	18

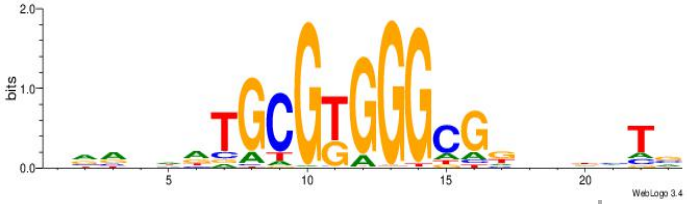
Similarity score: 0.0502008

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
-----CACACACACACWCACACA

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

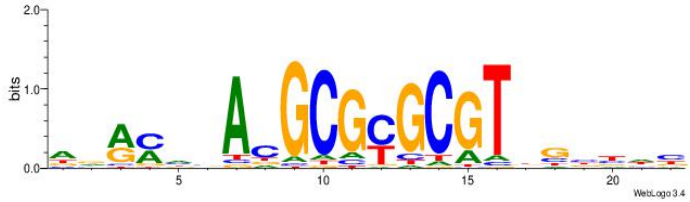


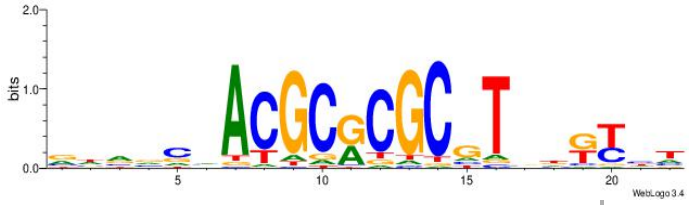
Motif ID: UP00526
Motif name: Foxn1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 18
Similarity score: 0.0557575

Alignment:
BDVBCDACGCKCGCGTBHRKHD
---TGTGTGWGTGTGTGTGTG-

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB

Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD





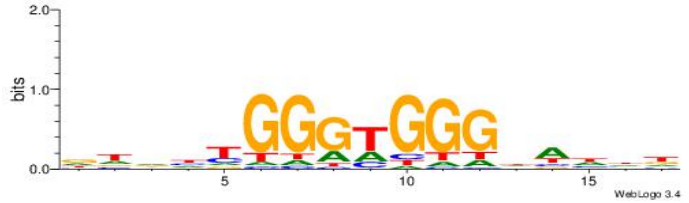
Motif ID:	UP00096
Motif name:	Sox13_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.549115

Alignment:

```
-DHHTHCCCACCCAHDDH
CACACACACACWCACACA
```

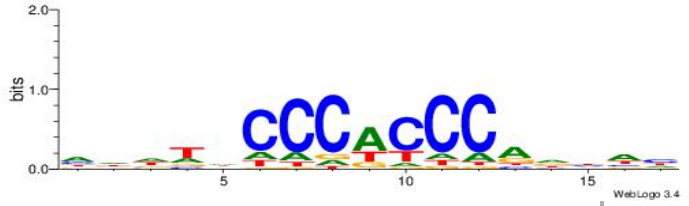
Original motif

Consensus sequence: DDDHTGGGTGGGHAHHD



Reverse complement motif

Consensus sequence: DHHTHCCCACCCAHDDH



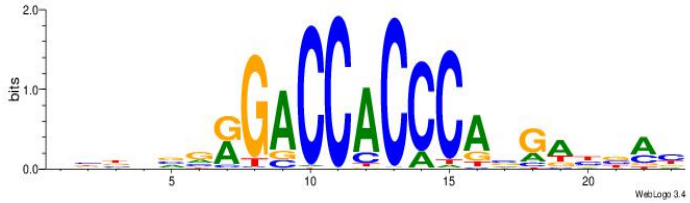
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	17
Similarity score:	0.550082

Alignment:

```
BBBDVVRGACCACCCAVGABBAB-
------CACACACACACWCACACA
```

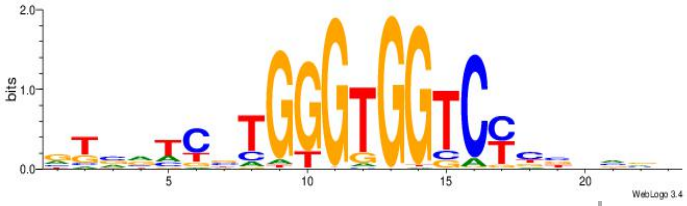
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB

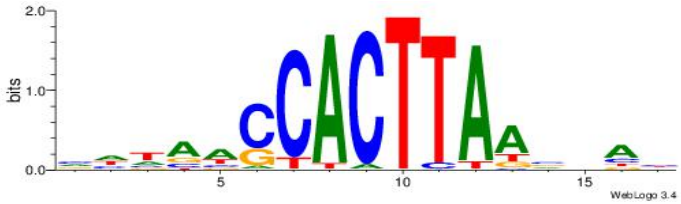


Motif ID:	UP00228
Motif name:	Bapx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	17

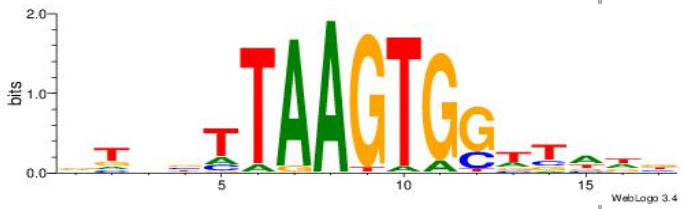
Similarity score: 0.553591

Alignment:
-VHHAACCACTTAAVVAH
CACACACACACWCACACA-

Original motif
Consensus sequence: VHHAACCACTTAAVVAH

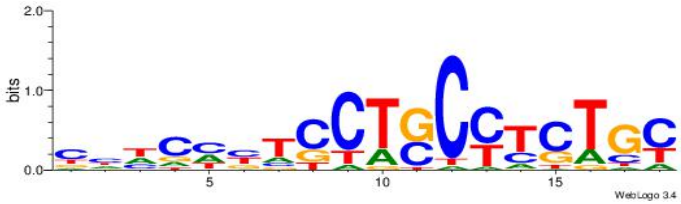


Reverse complement motif
Consensus sequence: DTBVTTAAGTGGTTHHV

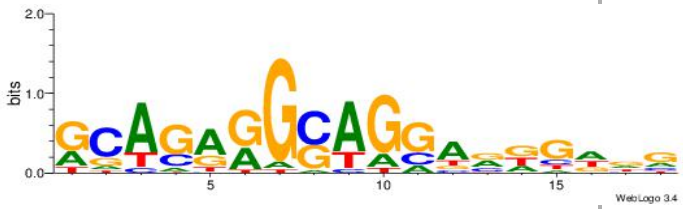


Dataset #: 5 Motif ID: 90 Motif name: TFM2

Original motif
Consensus sequence: CHHCHBTCCTSCYTCTGC



Reverse complement motif
Consensus sequence: GCAGAKGSAGGABDGHDG



Best Matches for Motif ID 90 (Highest to Lowest)

Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

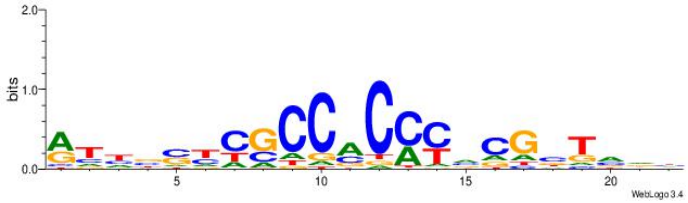
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	0.0498793

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
CHHCHBTCCTSCYTCTGC----
```

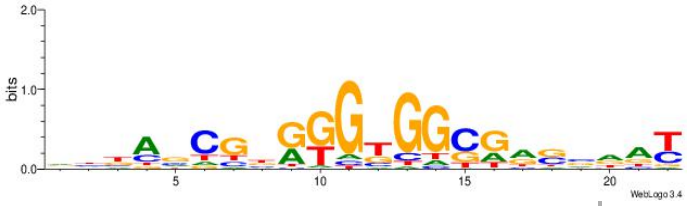
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



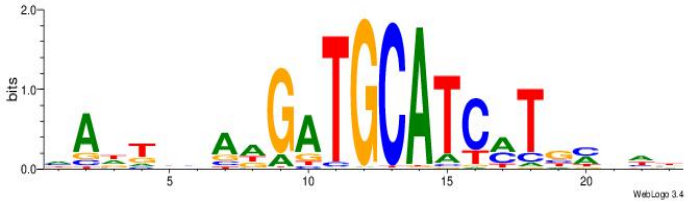
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	18
Similarity score:	0.0564418

Alignment:

HADTBVADGATGCATCMTGMVHB
-----GCAGAKGSAGGABDGHDG

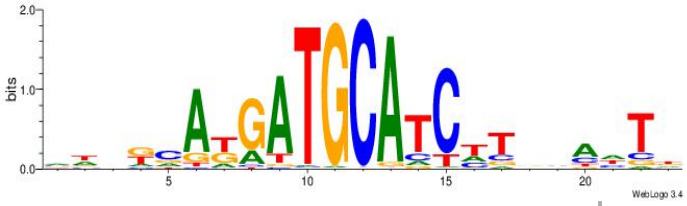
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH



Motif ID:	UP00539
Motif name:	Gli2_v015681_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:	18
Similarity score:	0.0565957

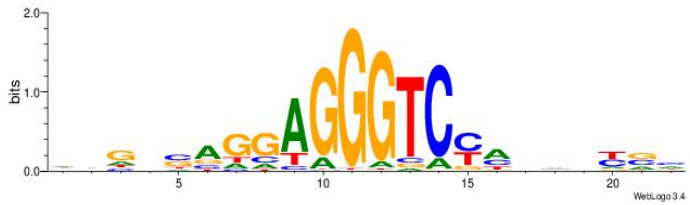
Alignment:
DVMHHDHKGACCCTCCTSVCBH
CHHCHBTCCTSCYTCTGC----

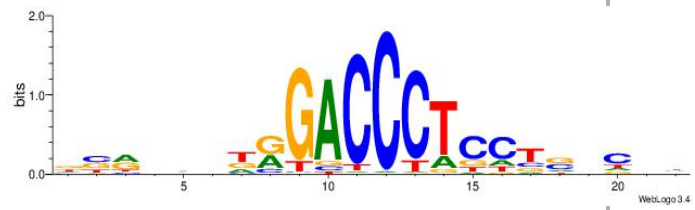
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH

Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH

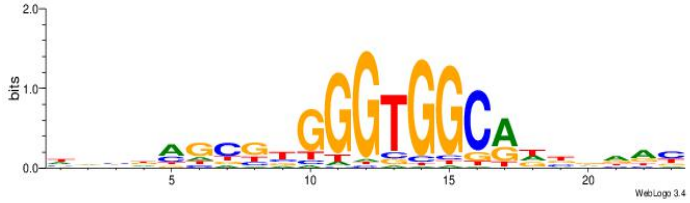




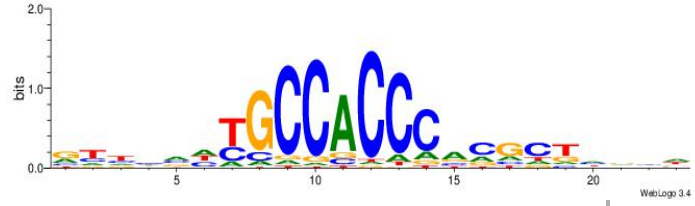
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 18
Similarity score: 0.0573354

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
CHHCHBTCCTSCYTCTGC-----

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID: UP00540

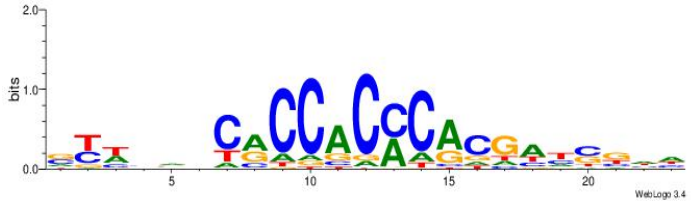
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	18
Similarity score:	0.0598613

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
CHHCHBTCCTSCYTCTGC-----
```

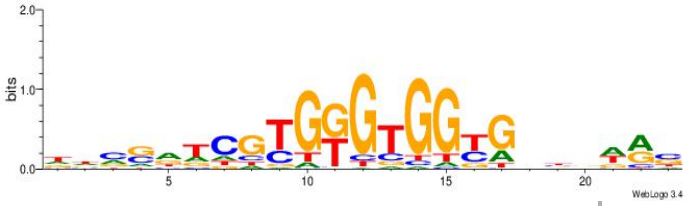
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

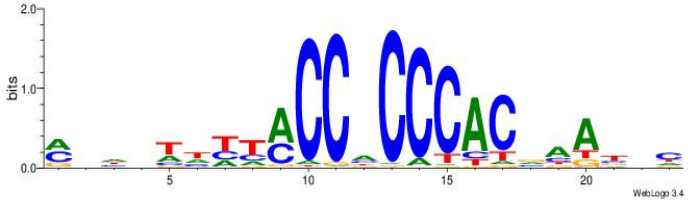


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	18

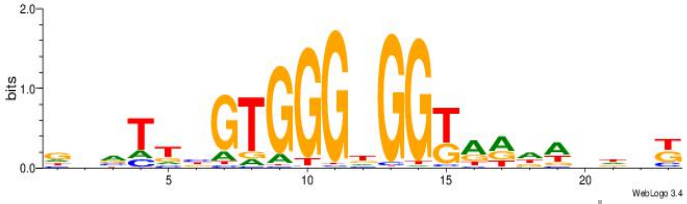
Similarity score: 0.0598775

Alignment:
MHHHWHYTMCCHCCCACVAABVH
--CHHCHBTCCTSCYTCTGC---

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

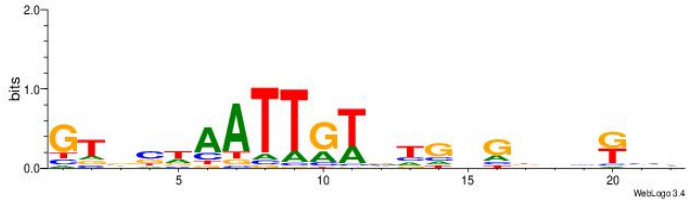


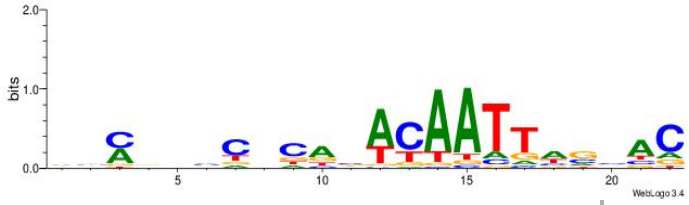
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	18
Similarity score:	0.0606451

Alignment:
GTVBDAATTGTVTGHGDDHKVB
--GCAGAKGSAGGABDGHDG--

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC





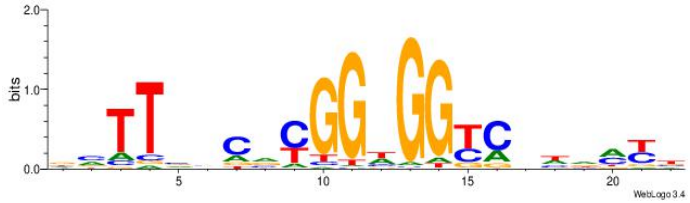
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0626287

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
-CHHCHBTCCTSCYTCTGC---
```

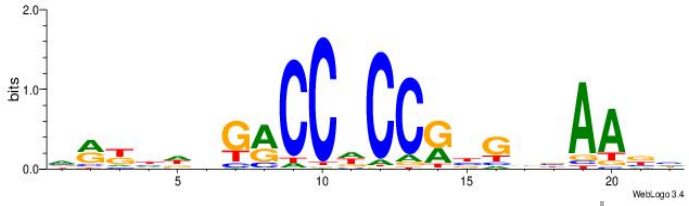
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



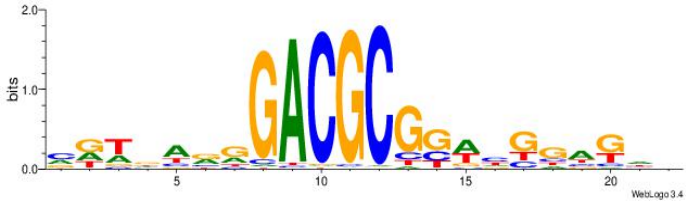
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0626567

Alignment:

```
VHYTCCDWCCGCGTCMMTHWHV
-CHHCHBTCCTSCYTCTGC---
```

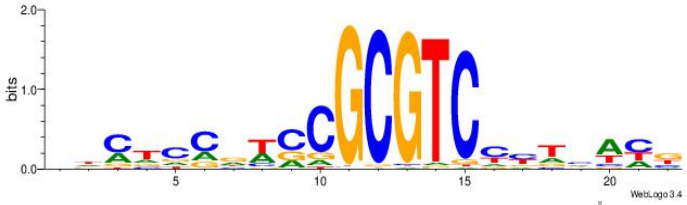
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

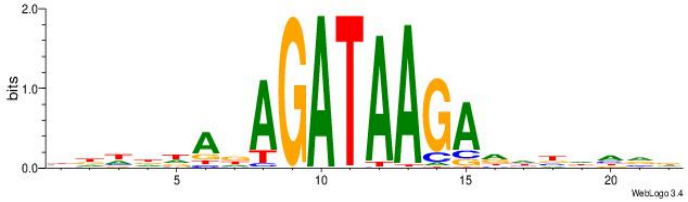


Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

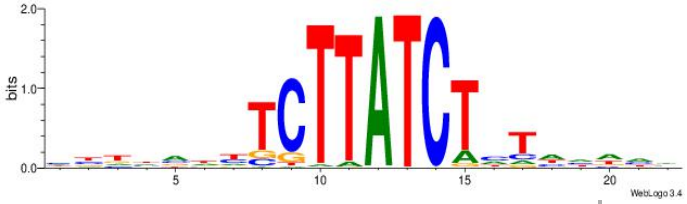
Number of overlap: 18
Similarity score: 0.064761

Alignment:
HBHDVHDTCTTATCTHTDDHDV
-CHHCHBTCCTSCYTCTGC---

Original motif
Consensus sequence: BDHDDADAGATAAGADHBDHVD

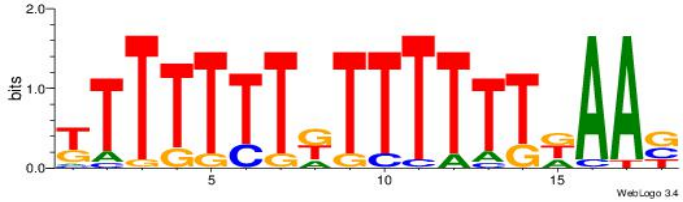


Reverse complement motif
Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

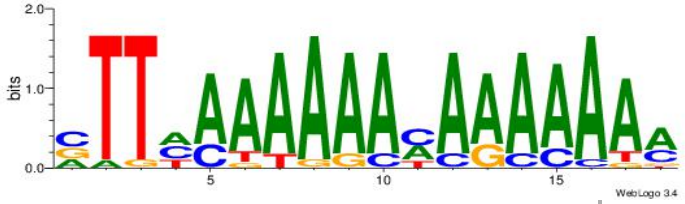


Dataset #: 5 Motif ID: 91 Motif name: TFM3

Original motif
Consensus sequence: KTTTTTTKTTTTTTDAAB



Reverse complement motif
Consensus sequence: BTTHAAAAAAYAAAAAAR



Best Matches for Motif ID 91 (Highest to Lowest)

Motif ID: UP00032
Motif name: Gata3_primary
Species: Mus musculus

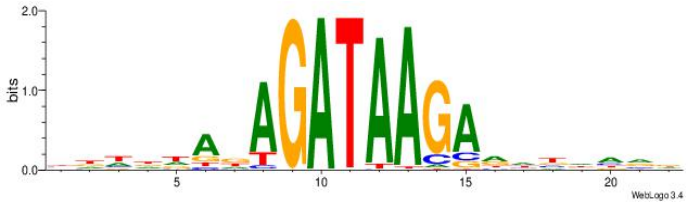
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0426153

Alignment:

```
BDHDDADAGATAAGADHBDHVD
BTTHAAAAAAYAAAAAAR----
```

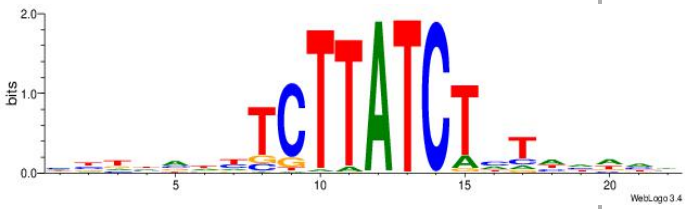
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

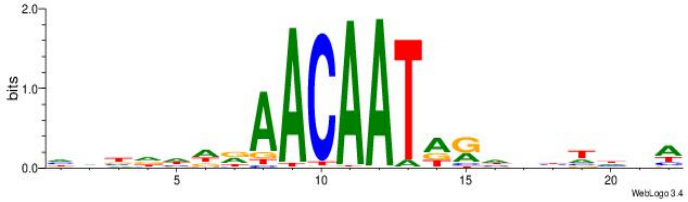
Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



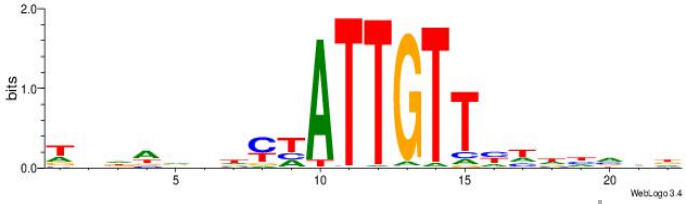
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0478771

Alignment:
HHBDHDDAACAATDRHHHHHBW
--BTTHAAAAAAYAAAAAAR--

Original motif
Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH

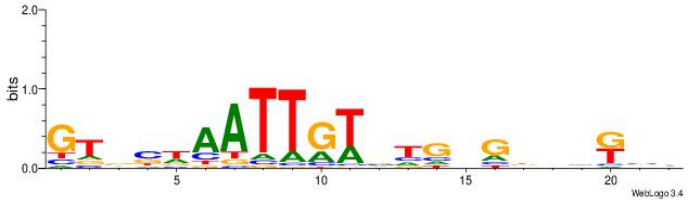


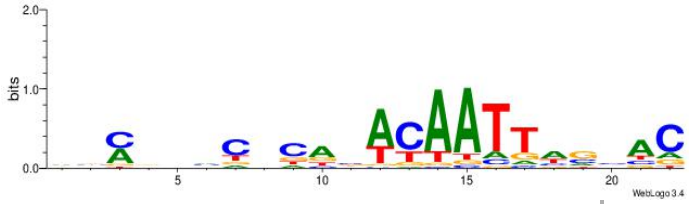
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	18
Similarity score:	0.0564691

Alignment:
VVYDDDCHCAVACAATTDBVAC
BTTHAAAAAAYAAAAAAR----

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC





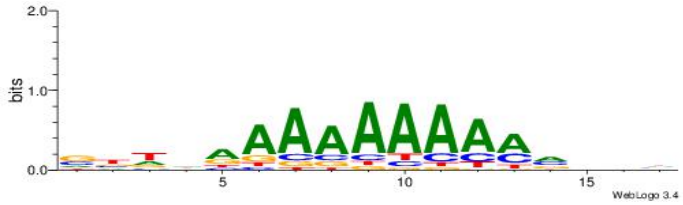
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.52452

Alignment:

```
-HHVBYTTTTTTTTDDVV
KTTTTTTKTTTTTTDAAB
```

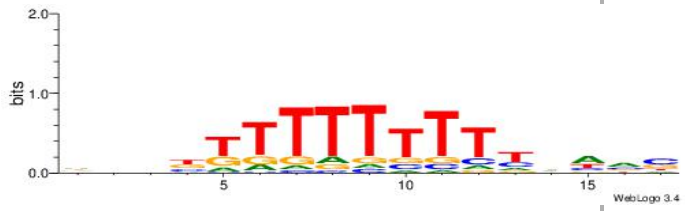
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID: UP00090

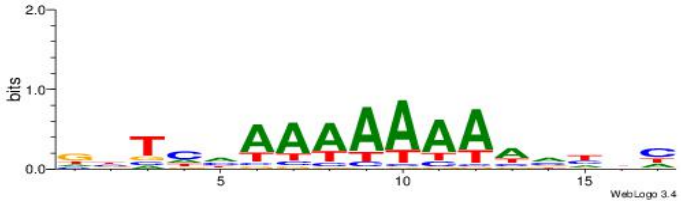
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.531868

Alignment:

```
-DBTHHAAAAAAAAVHDH
KTTTTTTKTTTTTTDAAB
```

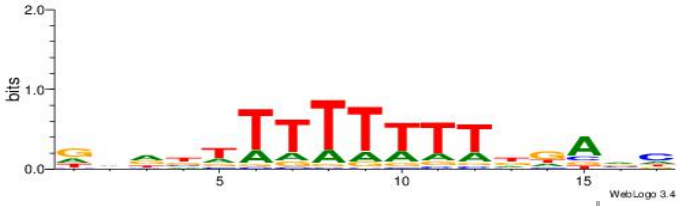
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

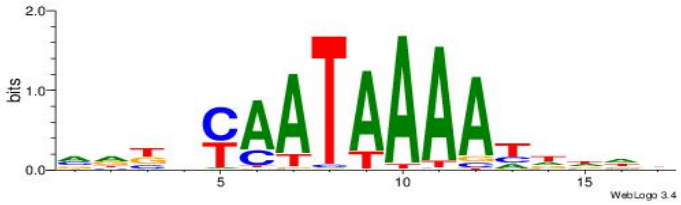
Consensus sequence: DDHBTTTTTTTTHDAVH



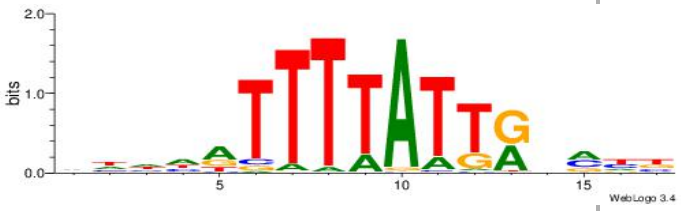
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.539211

Alignment:
-HDDDATTTTATTKVRDB
KTTTTTTKTTTTTTDAAB

Original motif
Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif
Consensus sequence: HDDDATTTTATTKVRDB

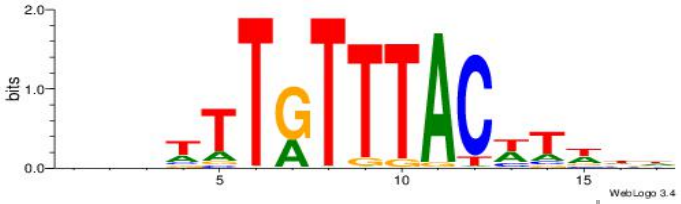


Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	17
Similarity score:	0.539687

Alignment:
HHWAWGTAAAYAAAVDB-
-KTTTTTTKTTTTTTDAAB

Original motif
Consensus sequence: HHWAWGTAAAYAAAVDB

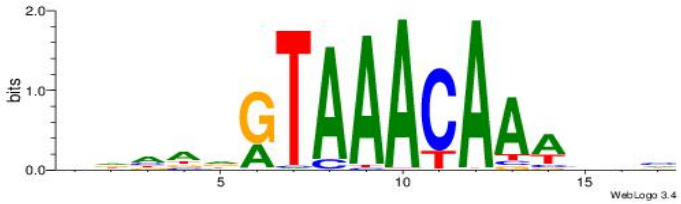
Reverse complement motif
Consensus sequence: BDVTTTKTTTACWTWHH



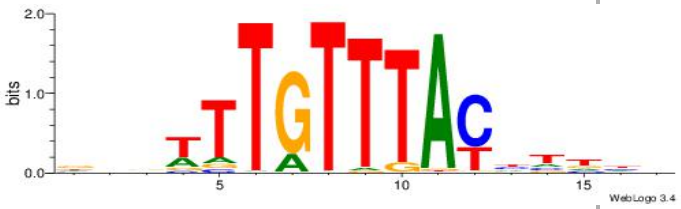
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.542507

Alignment:
HDHADGTAAACAAAVVH-
BTTHAAAAAAYAAAAAAR

Original motif
Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH



Motif ID:	UP00061

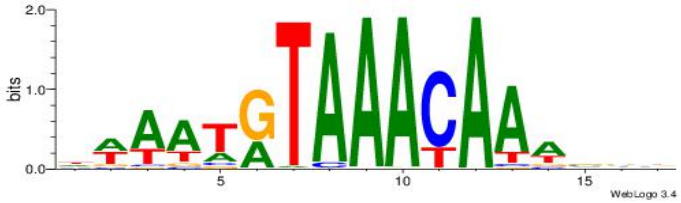
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	0.547029

Alignment:

```
-VVVWTTGTTTAMATTWD
BTTHAAAAAAYAAAAAAR-
```

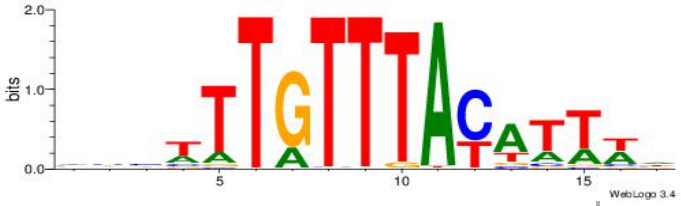
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



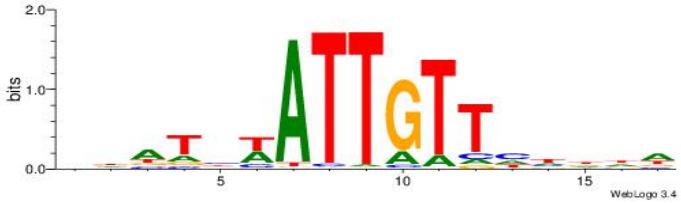
Motif ID:	UP00051
Motif name:	Sox8_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	0.547298

Alignment:

-DDDHDAACAATWBATDD
BTTHAAAAAAYAAAAAAR-

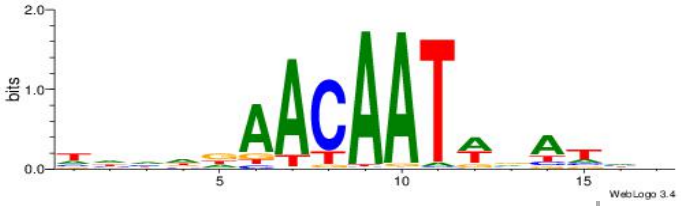
Original motif

Consensus sequence: DDATBWATTGTTHHDDD



Reverse complement motif

Consensus sequence: DDDHDAACAATWBATDD



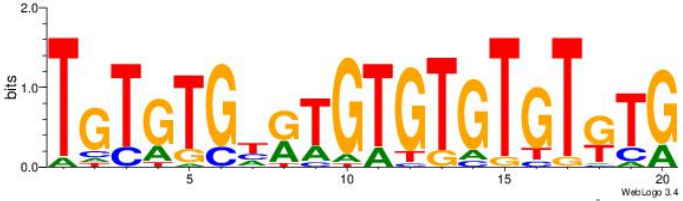
Dataset #: 5 Motif ID: 92 Motif name: TFM11

Original motif

Consensus sequence: CAMACACACACAYDCACACA

Reverse complement motif

Consensus sequence: TGTGTGDKTGTGTGTGTRTG



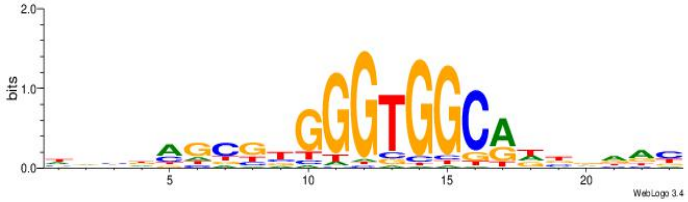
Best Matches for Motif ID 92 (Highest to Lowest)

Motif ID:	UP00538
Motif name:	Gli1_v016060_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:	20

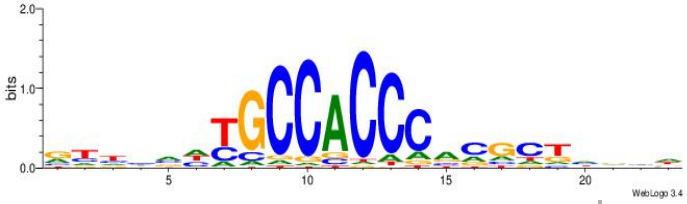
Similarity score: 0.0426758

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
TGTGTGDKTGTGTGTGTRTG---

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

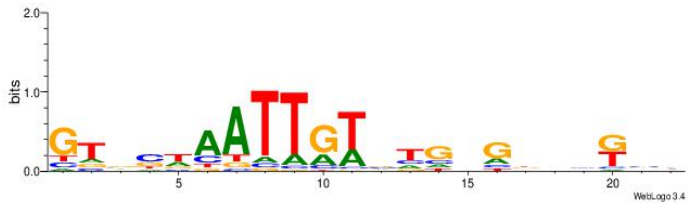


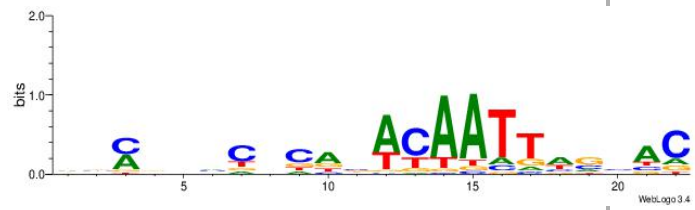
Motif ID: UP00034
Motif name: Sox7_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 20
Similarity score: 0.0439623

Alignment:
GTVBDAATTGTVTGHGDDHKVB
TGTGTGDKTGTGTGTGTRTG--

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC





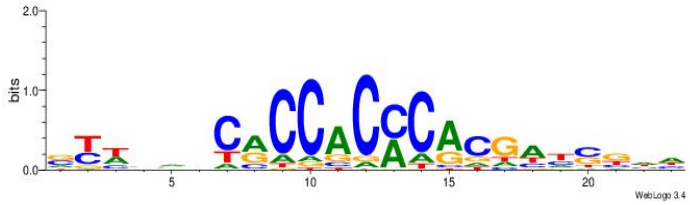
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	20
Similarity score:	0.0449001

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
---CAMACACACACAYDCACACA
```

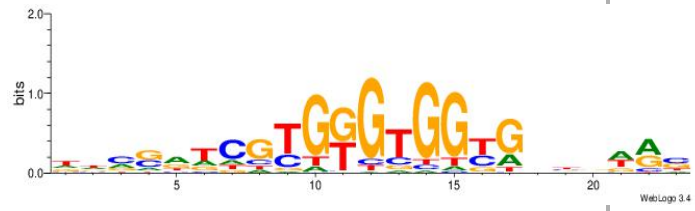
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



Motif ID:	UP00538

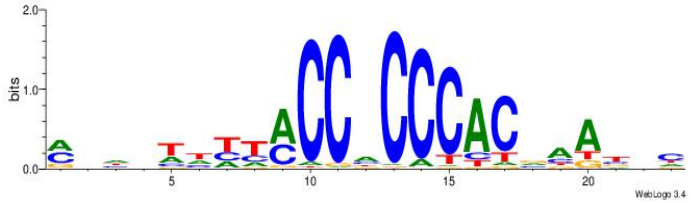
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0492241

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
CAMACACACACAYDCACACA---
```

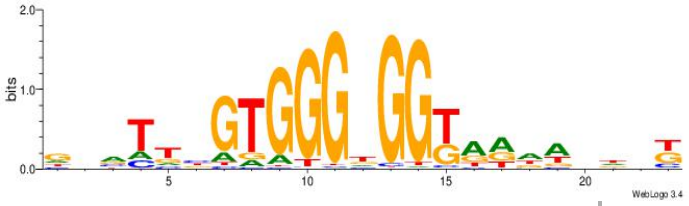
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

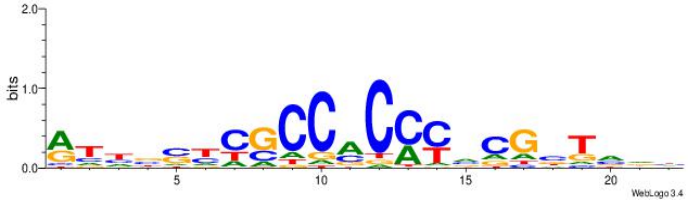


Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	20

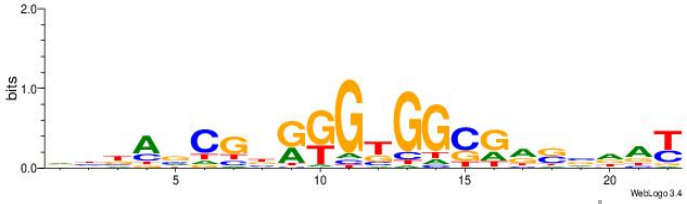
Similarity score: 0.0524009

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
-CAMACACACACAYDCACACA-

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

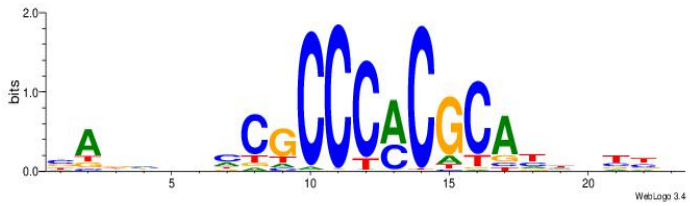


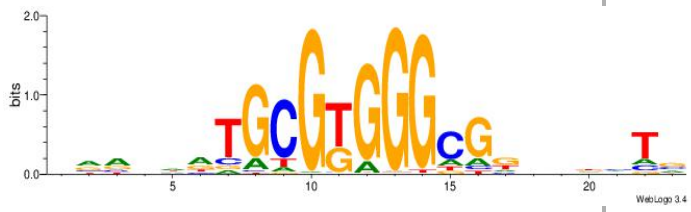
Motif ID: UP00400
Motif name: Zif268
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 20
Similarity score: 0.0527926

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
---CAMACACACACAYDCACACA

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV

Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB





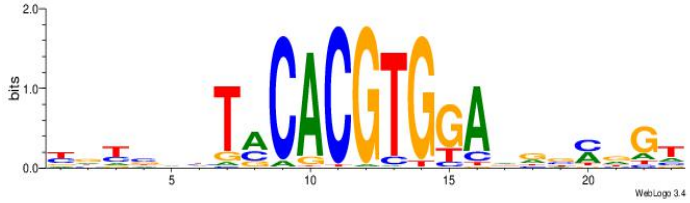
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0547661

Alignment:

```
ACHRBHDTCCACGTGYAHHBMHM
-CAMACACACACAYDCACACA--
```

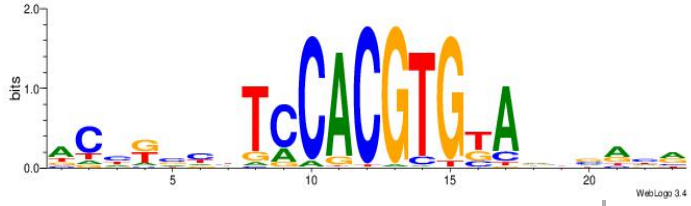
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00526

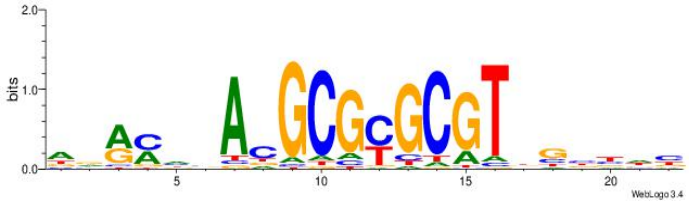
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0575159

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-CAMACACACACAYDCACACA-
```

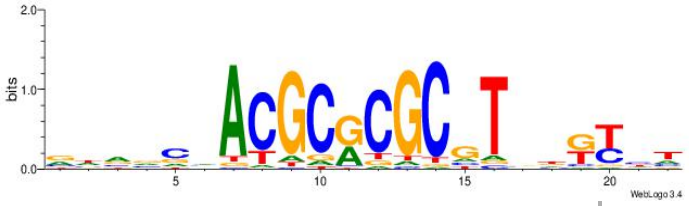
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



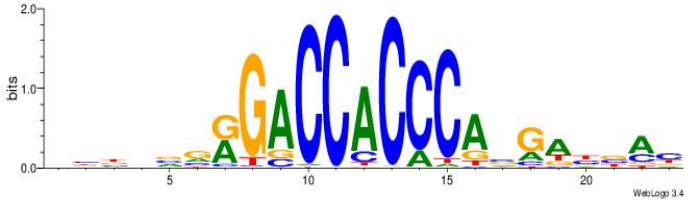
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	19
Similarity score:	0.551038

Alignment:

```
-BBBDVVRGACCACCCAVGABBAB
---CAMACACACACAYDCACACA-
```

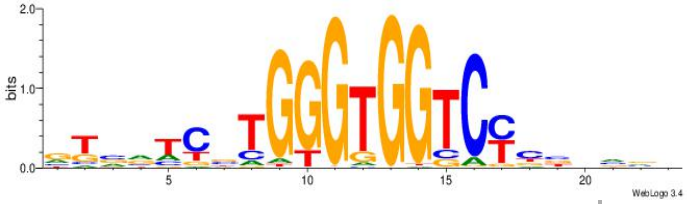
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



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:	2
Number of overlap:	19
Similarity score:	0.551577

Alignment:

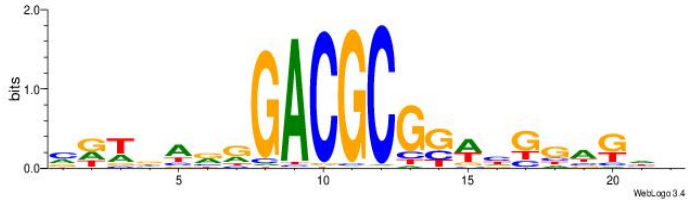
```
-VDWDARRGACGCGGWHGGAKHV
--CAMACACACACAYDCACACA-
```

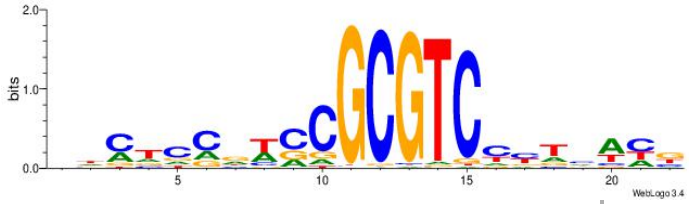
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV

Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

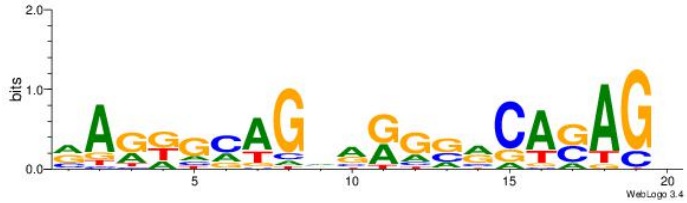




Dataset #: 5 **Motif ID: 93** **Motif name: TFM12**

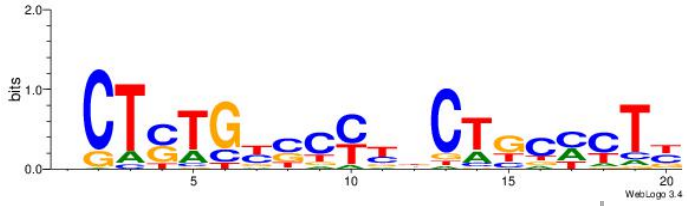
Original motif

Consensus sequence: RAGKGMAGVRRGSRCASAGV



Reverse complement motif

Consensus sequence: VCTSTGKSCMKBCTRCYCTK



Best Matches for Motif ID 93 (Highest to Lowest)

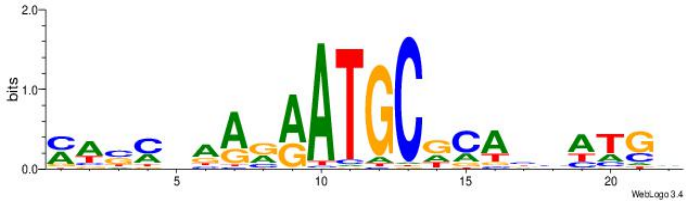
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0465838

Alignment:

MWSMBAARRATGCDCABHATGD
RAGKGMAGVRRGSRCASAGV--

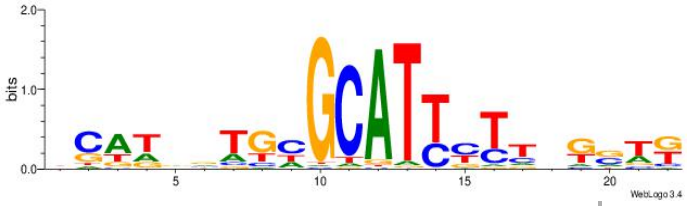
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.0472219

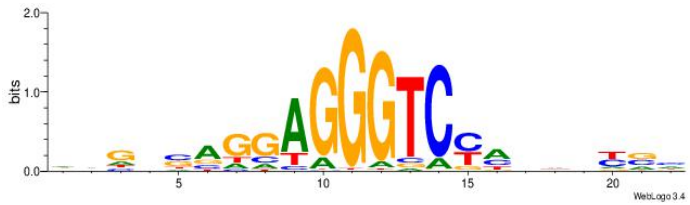
Alignment:
DVMHHDHKGACCCTCCTSVCBH
--VCTSTGKSCMKBCTRCYCTK

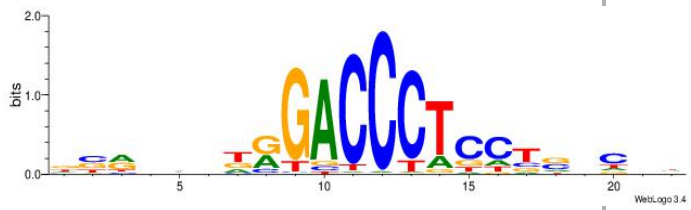
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH

Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH





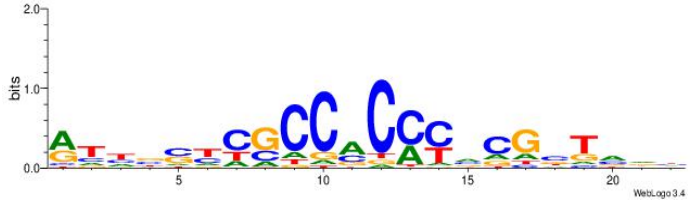
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0477526

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
VCTSTGKSCMKBCTRCYCTK--
```

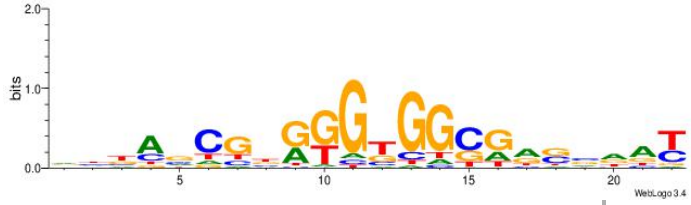
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



Motif ID:	UP00034
Motif name:	Sox7_secondary

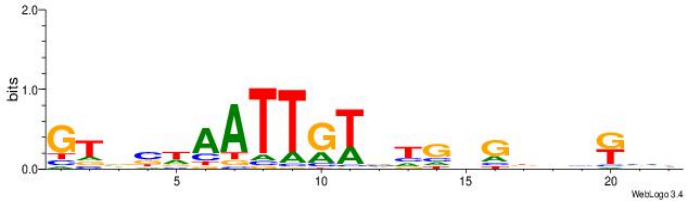
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0479772

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
VCTSTGKSCMKBCTRCYCTK--
```

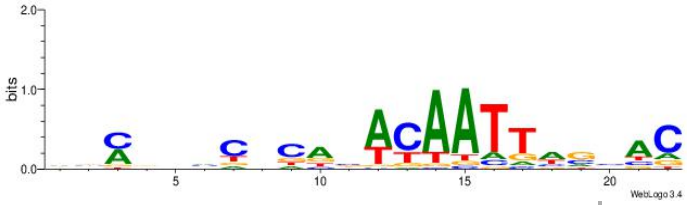
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

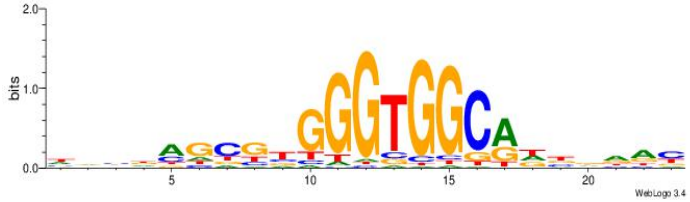
Consensus sequence: VVYDDDCHCAVACAATTDBVAC



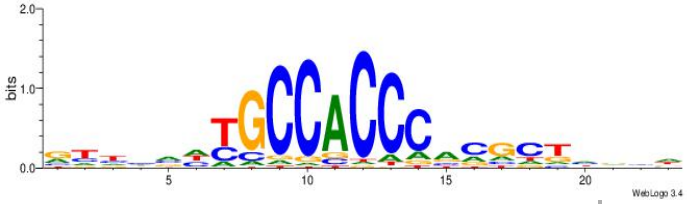
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0487318

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
VCTSTGKSCMKBCTRCYCTK---

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

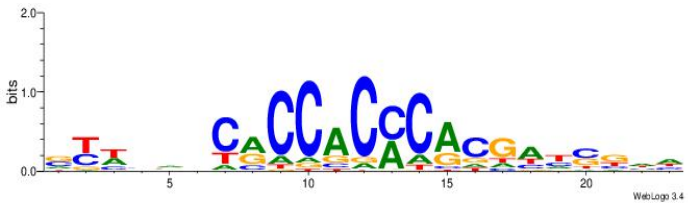


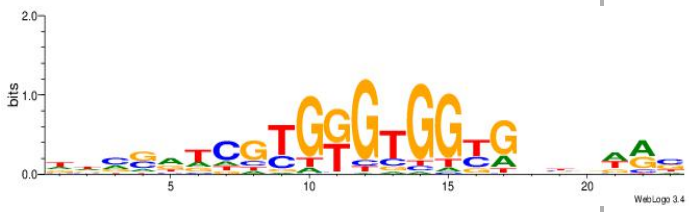
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.0495675

Alignment:
VYWVVHCRCCACMCACGAHSBHH
VCTSTGKSCMKBCTRCYCTK---

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





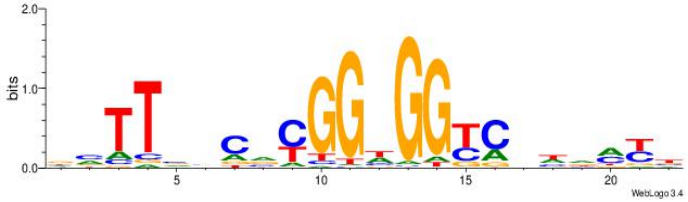
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0506701

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
VCTSTGKSCMKBCTRCYCTK--
```

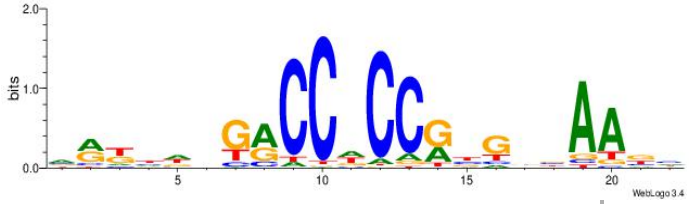
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



Motif ID:	UP00400

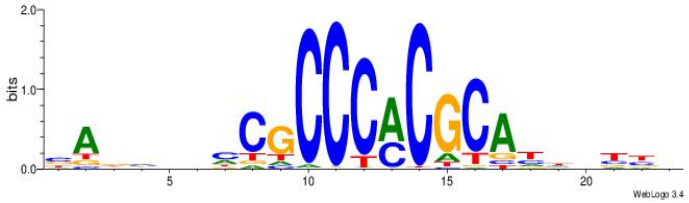
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0532516

Alignment:

```
VVVDHHTGCGYGGGCGDHVHHTB
RAGKGMAGVRRGSRCASAGV---
```

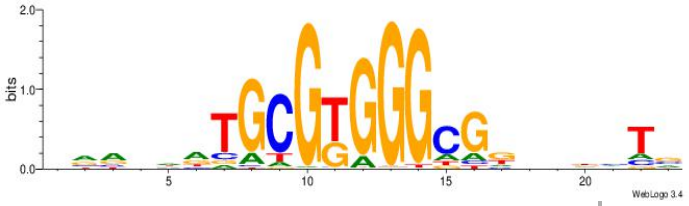
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

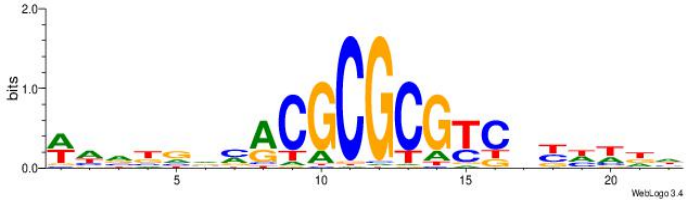


Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	20

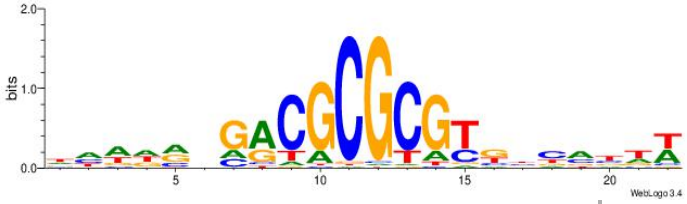
Similarity score: 0.0536082

Alignment:
HDWHMHGACGCGCGTRBVVBHW
-VCTSTGKSCMKBCTRCYCTK-

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

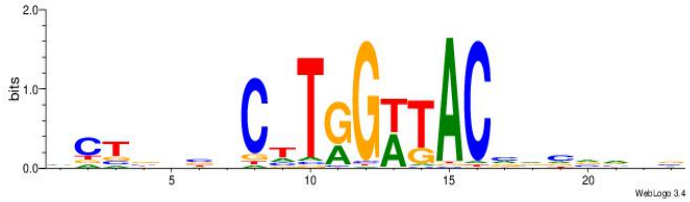


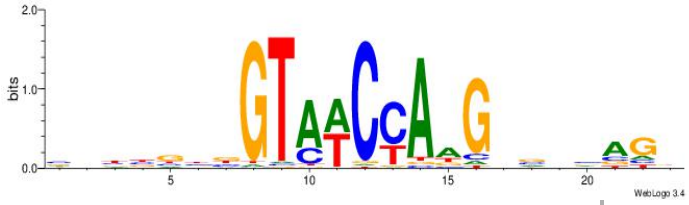
Motif ID: UP00098
Motif name: Rfx3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 20
Similarity score: 0.0554568

Alignment:
BDBBVBVGTAWCCAAGVBHBAGB
---RAGKGMAGVRRGSRCASAGV

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB

Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

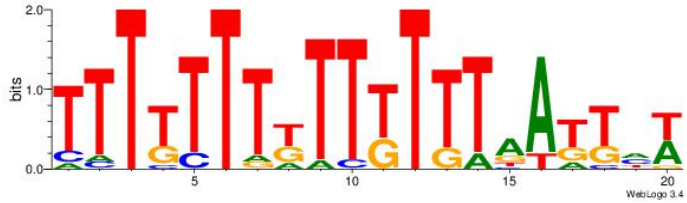




Dataset #: 5 **Motif ID: 94** **Motif name: TFM13**

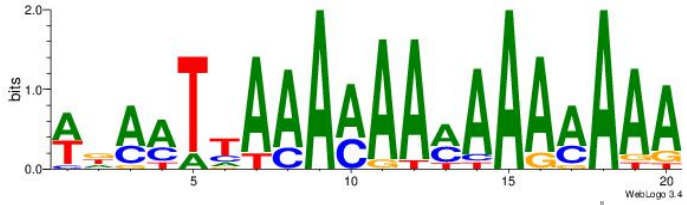
Original motif

Consensus sequence: TTTTTTTKTTKTTTAATTHW



Reverse complement motif

Consensus sequence: WHAATTAAARAARAAAAAAA



Best Matches for Motif ID 94 (Highest to Lowest)

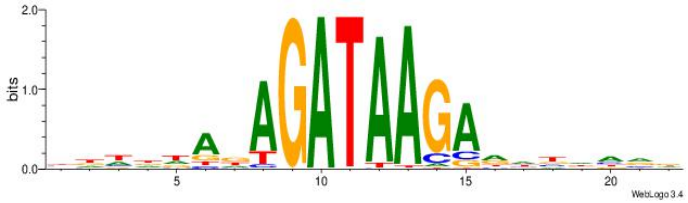
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0558709

Alignment:

BDHDDADAGATAAGADHBDHVD
-WHAATTAAARAARAAAAAAA-

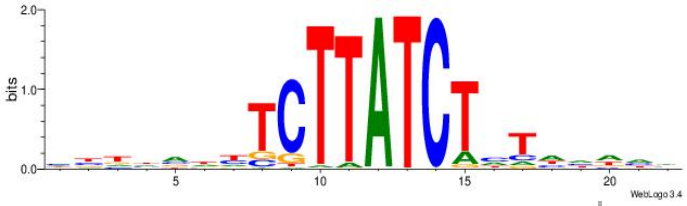
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



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:	3
Number of overlap:	20
Similarity score:	0.0604961

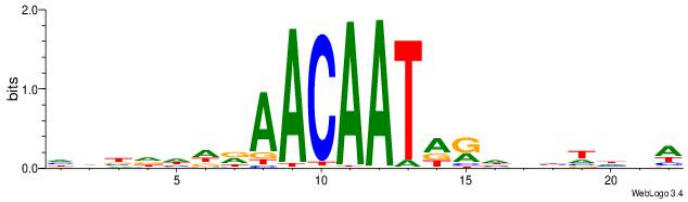
Alignment:
HHBDHDDAACAATDRHHHHHBW
WHAATTAAARAARAAAAAAA--

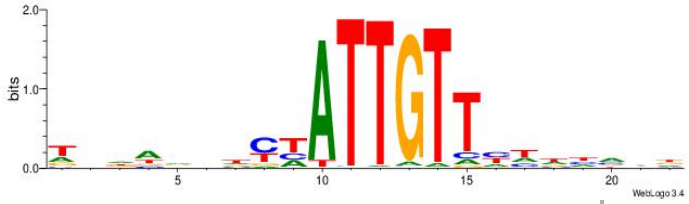
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW

Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH





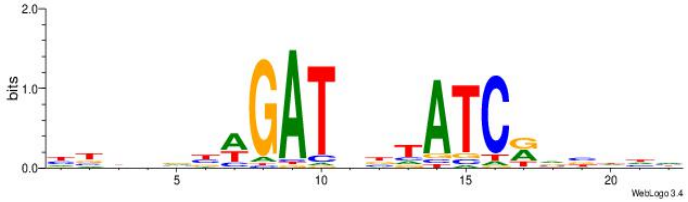
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	20
Similarity score:	0.0784238

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
-TTTTTTTKTTKTTTAATTHW-
```

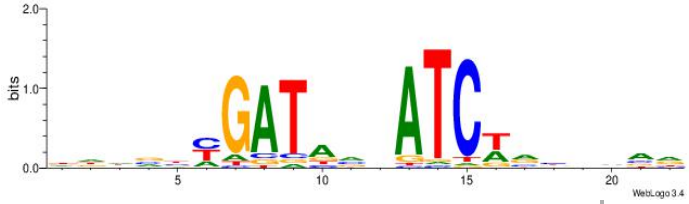
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



Motif ID:	UP00034

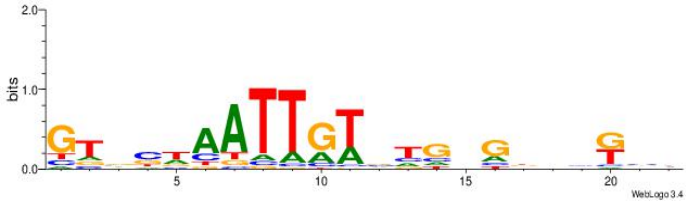
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	20
Similarity score:	0.0790353

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
--TTTTTTTKTTKTTTAATTHW
```

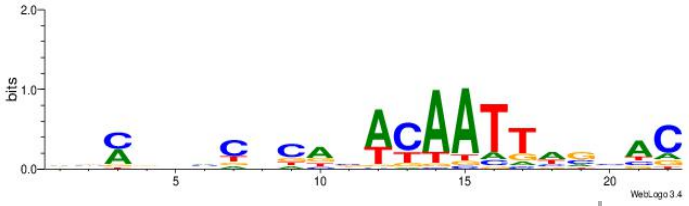
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

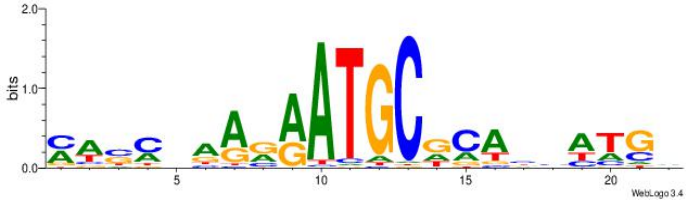


Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	19

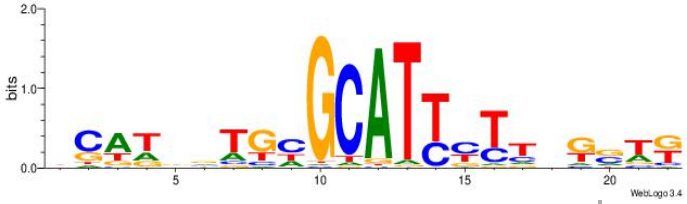
Similarity score: 0.574613

Alignment:
-MWSMBAARRATGCDCABHATGD
WHAATTAAARAARAAAAAAA---

Original motif
Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR

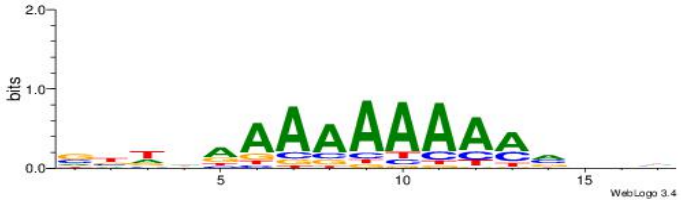


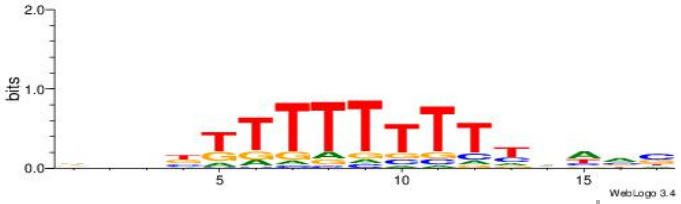
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	1.5444

Alignment:
HHVBYTTTTTTTTDDVV---
---WHAATTAAARAARAAAAAAA

Original motif
Consensus sequence: VBDDAAAAAAAAMVBHH

Reverse complement motif
Consensus sequence: HHVBYTTTTTTTTDDVV





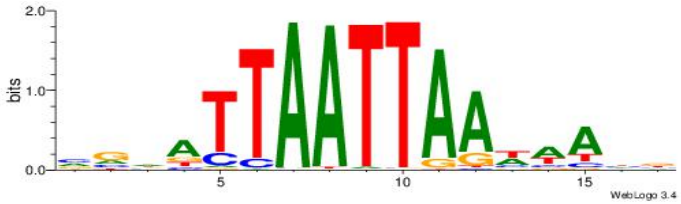
Motif ID:	UP00262
Motif name:	Lhx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	1.54972

Alignment:

```
---BHTWWTTAATTAATDVV
TTTTTTTKTTKTTTAATTHW
```

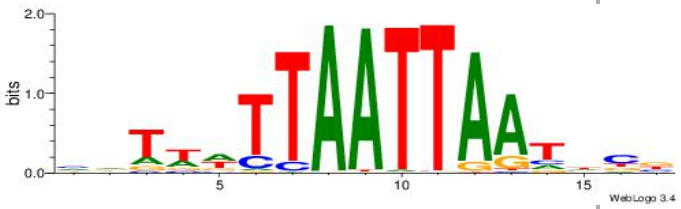
Original motif

Consensus sequence: VVDATTAATTAAWWAHB



Reverse complement motif

Consensus sequence: BHTWWTTAATTAATDVV



Motif ID:	UP00188

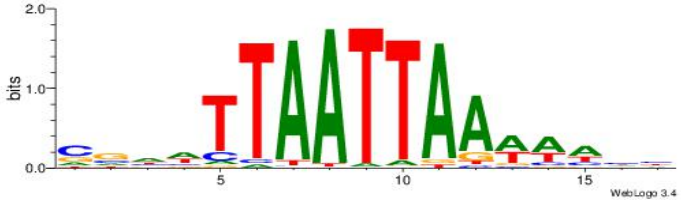
Motif name:	Lmx1a
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	17
Similarity score:	1.55162

Alignment:

```
CVHHTTAATTAAWWWHB---
---TTTTTTTKTTKTTTAATTHW
```

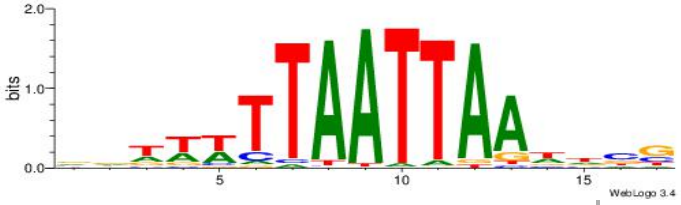
Original motif

Consensus sequence: CVHHTTAATTAAWWWHB



Reverse complement motif

Consensus sequence: BDWWWTTAATTAAHHVG



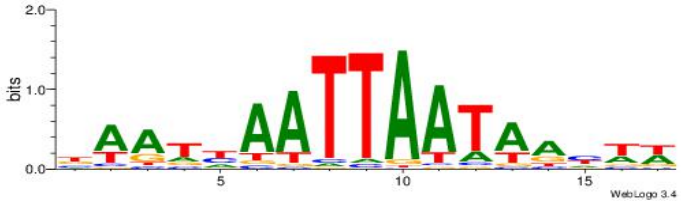
Motif ID:	UP00244
Motif name:	Tlx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	17
Similarity score:	1.55254

Alignment:

---BAATHAATTAATAAHWW
TTTTTTTKTTKTTTAATTHW-

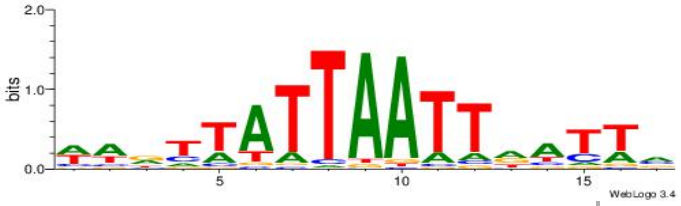
Original motif

Consensus sequence: BAATHAATTAATAAHWW



Reverse complement motif

Consensus sequence: WWDTTATTAATTHATTV



Motif ID:	UP00169
Motif name:	Lmx1b
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:	17
Similarity score:	1.55258

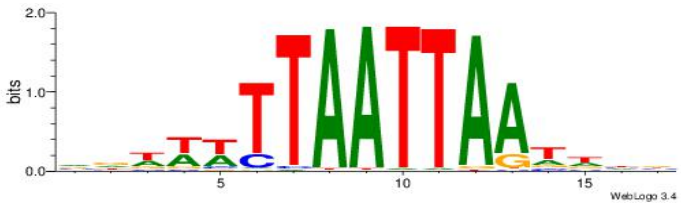
Alignment:
---BHDATTAATTAAWWWHB
WHAATTAAARAARAAAAAAA---

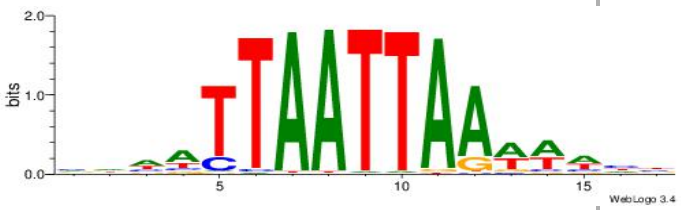
Original motif

Consensus sequence: VDWWWTTAATTAATDHB

Reverse complement motif

Consensus sequence: BHDATTAATTAAWWWHB





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Runtime: 853.531 seconds

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