MOTIFSIM - MOTIF SIMilarity Detection Tool

Version 2.2

INPUT

Input Parameters

Number of files:	4
Number of top significant motifs:	10
Number of best matches:	10
Similarity cutoff >=	0.75
Matching motif database:	UniProbe Mus Musculus
Motif tree:	Yes
Combined similar motifs:	Yes
Output file type:	All
Output file format:	All

Input files and motif counts

File name	Count of motifs	Dataset number
DREME_DM721.txt	16	1
MEME-ChIP_DM721.txt	11	2
PScanChIP_DM721.txt	37	3
RSAT_peak-motifs_DM721.txt	40	4

RESULTS

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

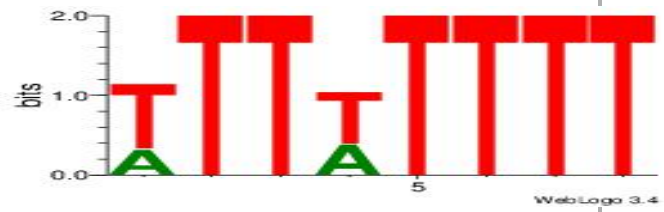
Dataset #: 1 **Motif ID: 1** **Motif name: Motif 1**

Original motif

Consensus sequence: AAAAWAAA

Reverse complement motif

Consensus sequence: TTTWTTTT



Best Matches for Motif ID 1 (Highest to Lowest)

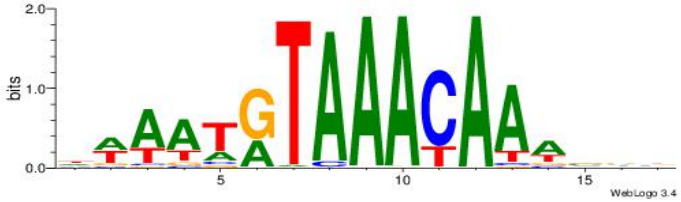
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0

Alignment:

```
VVVWTTGTTTAMATTWD
---TTTWTTTT------
```

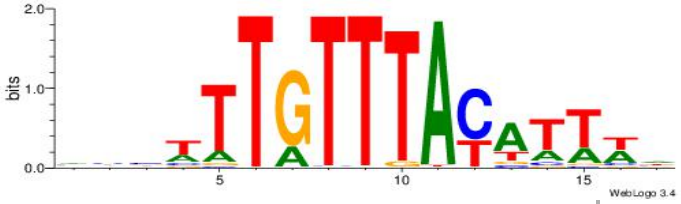
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

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:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.00234495

Alignment:

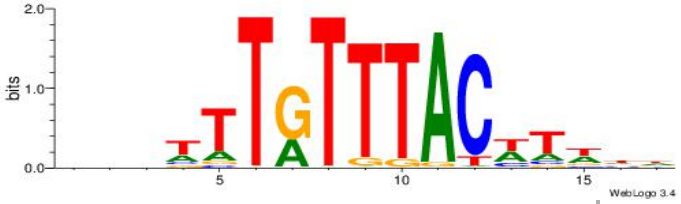
```
BDVTTTKTTTACWTWHH
---TTTWTTTT------
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



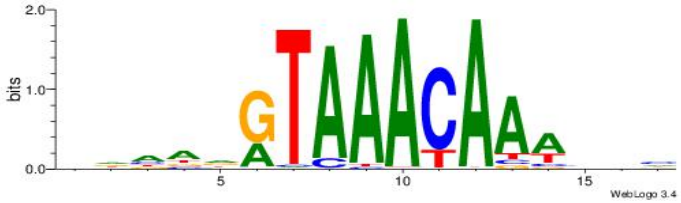
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.00263137

Alignment:

```
DVVTTTGTTTACDTHDH
---TTTWTTTT------
```

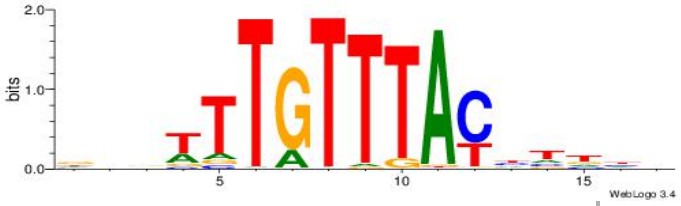
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH



Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward

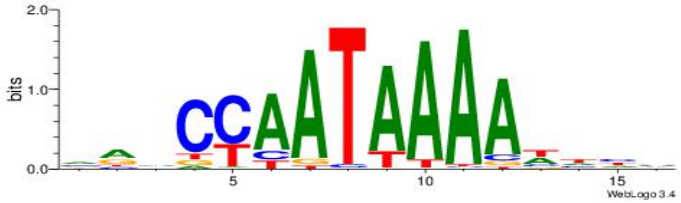
Position number:	4
Number of overlap:	8
Similarity score:	0.00284772

Alignment:

```
VRHCCAATAAAAWHHV
-----AAAAWAAA---
```

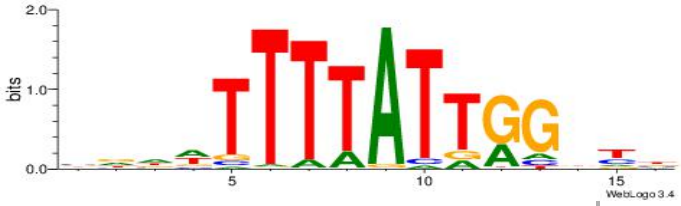
Original motif

Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif

Consensus sequence: VDHWTTTTATTGGDKB



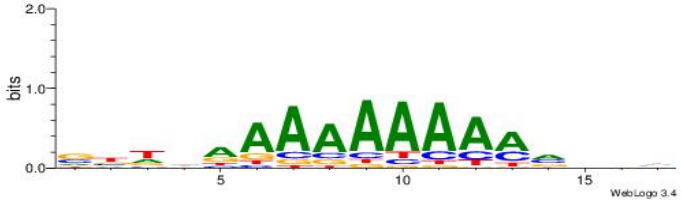
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0029041

Alignment:

```
HHVBYTTTTTTTTDDVV
----TTTWTTTT-----
```

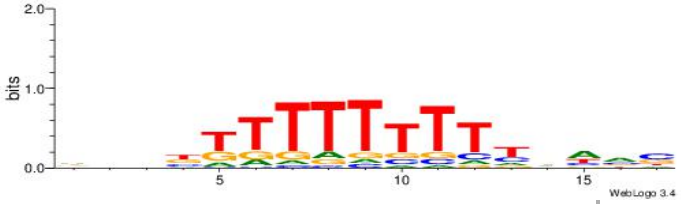
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



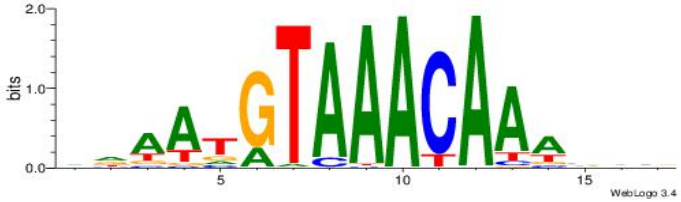
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0.00413427

Alignment:

```
BBVTTTGTTTACATTDD
---TTTWTTTT------
```

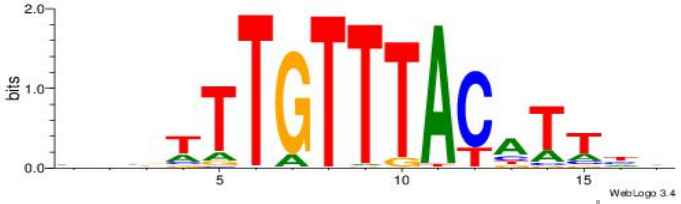
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



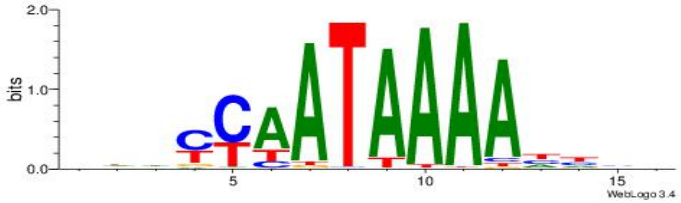
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.00521252

Alignment:

```
HDHHTTTTATTKKHDD
---TTTWTTTT-----
```

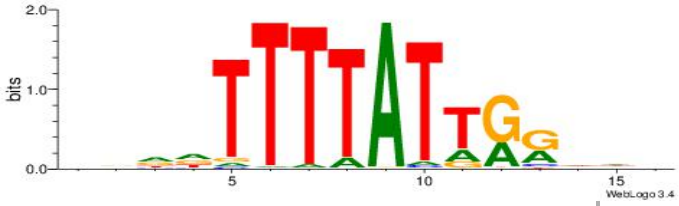
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



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

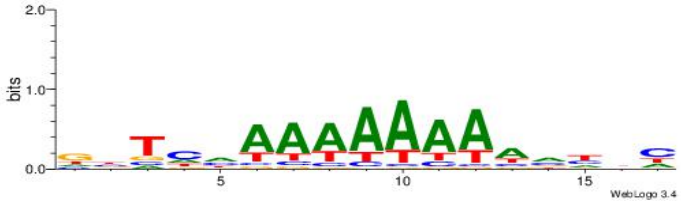
Position number:	5
Number of overlap:	8
Similarity score:	0.0056978

Alignment:

```
DBTHHAAAAAAAAVHDH
-----AAAAWAAA----
```

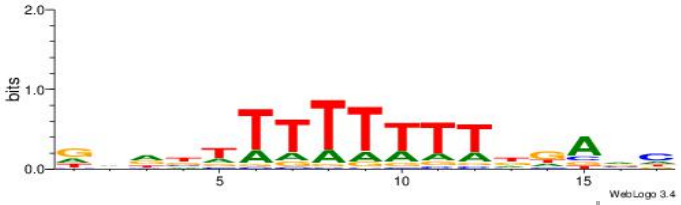
Original motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif

Consensus sequence: DDHBTTTTTTTTHDAVH



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:	7
Number of overlap:	8
Similarity score:	0.00616244

Alignment:

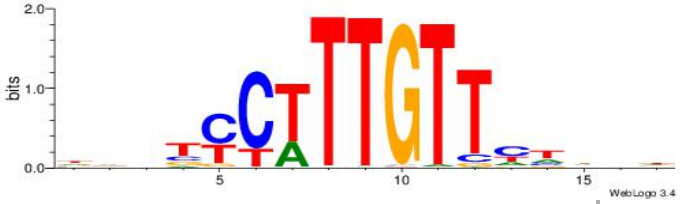
```
HBDDRAACAAAGRABHH
---AAAAWAAA------
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



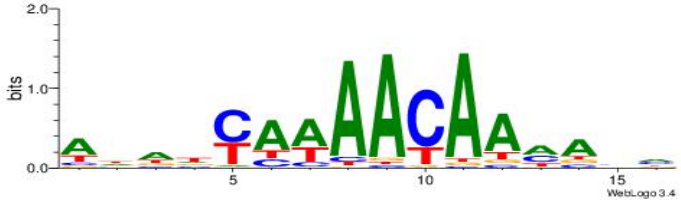
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00844854

Alignment:

```
ADDDYAWAACAAMAHH
-----AAAAWAAA---
```

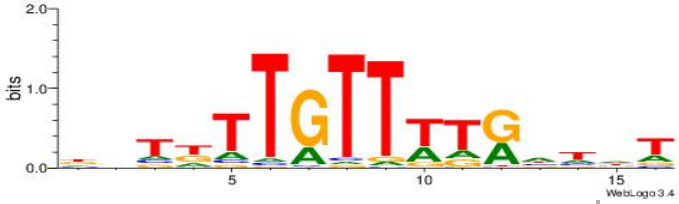
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



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

Original motif

Consensus sequence: CACACACA

Reverse complement motif

Consensus sequence: TGTGTGTG

Best Matches for Motif ID 2 (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:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0

Alignment:

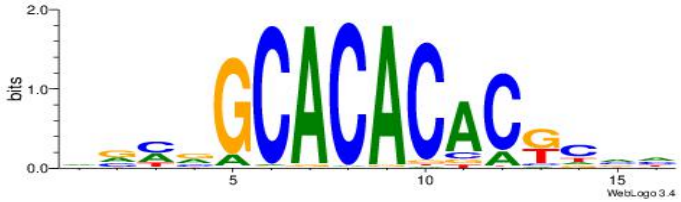
```
HBGYGTGTGTGCVRVD
---TGTGTGTG-----
```

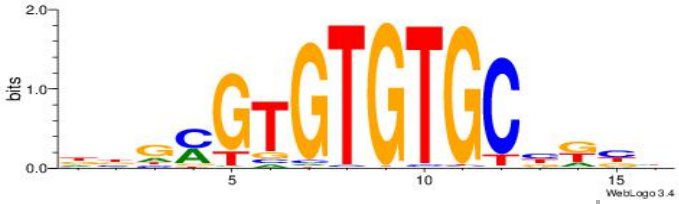
Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD





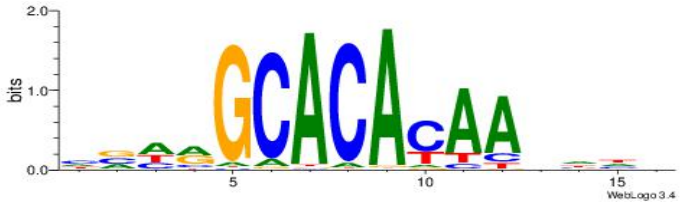
Motif ID:	UP00026
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0178637

Alignment:

```
BHHHTTGTGTGCKHVD
-----TGTGTGTG---
```

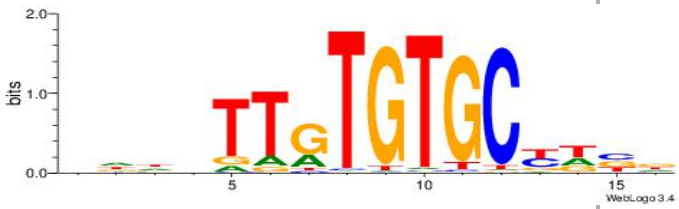
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD



Motif ID:	UP00004

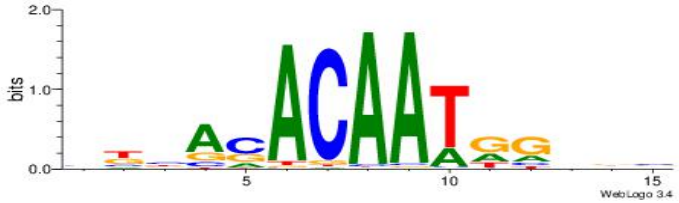
Motif name:	Sox14_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	8
Similarity score:	0.0291592

Alignment:

```
BKBASACAATRGHBB
CACACACA-------
```

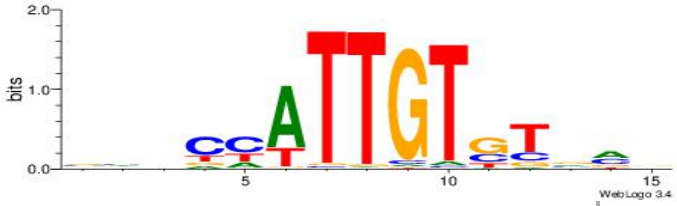
Original motif

Consensus sequence: BKBASACAATRGHBB



Reverse complement motif

Consensus sequence: BBDCMATTGTSTBRB

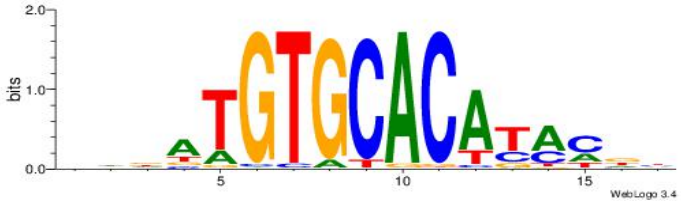


Motif ID:	UP00042
Motif name:	Gm397_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	8

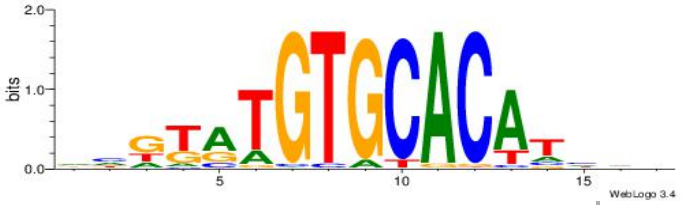
Similarity score: 0.0316665

Alignment:
HHRTATGTGCACATHHD
-TGTGTGTG--------

Original motif
Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif
Consensus sequence: HHRTATGTGCACATHHD

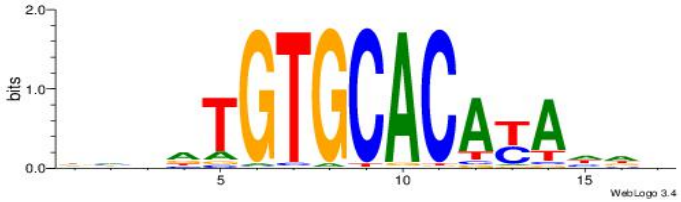


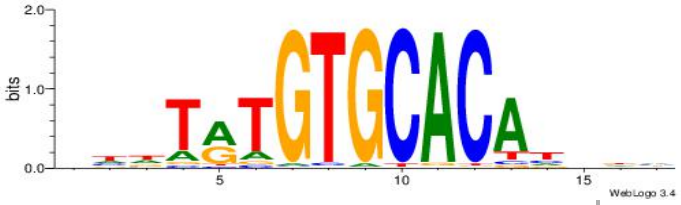
Motif ID: UP00026
Motif name: Zscan4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.0327662

Alignment:
DHVDTGTGCACAYAHDH
--------CACACACA-

Original motif
Consensus sequence: DHVDTGTGCACAYAHDH

Reverse complement motif
Consensus sequence: HDHTMTGTGCACADVHD





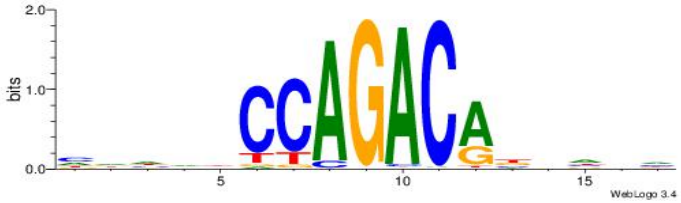
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0329902

Alignment:

```
HVHBVTGTCTGGDDHDD
-----TGTGTGTG----
```

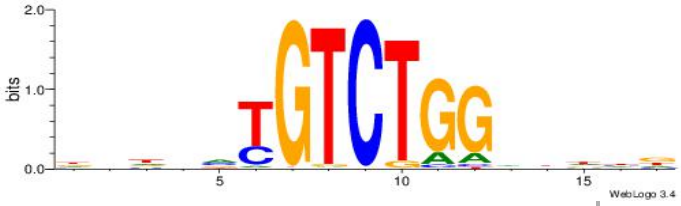
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



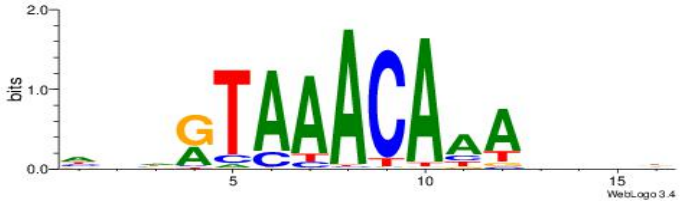
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0361089

Alignment:

```
HDHRTAAACAAAHDDD
--CACACACA------
```

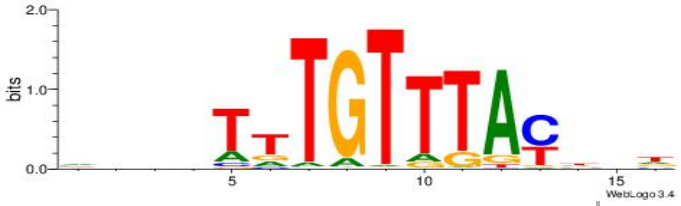
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH

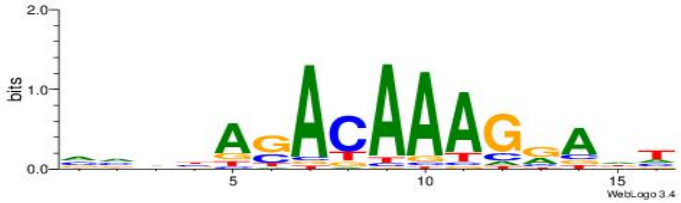


Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

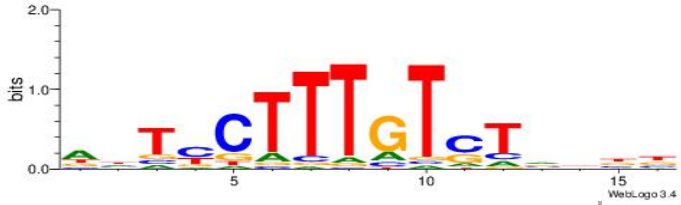
Number of overlap: 8
Similarity score: 0.039766

Alignment:
HDTMCTTTGTSTVDBB
-----TGTGTGTG---

Original motif
Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB



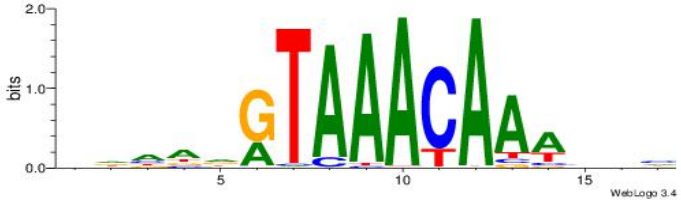
Motif ID: UP00039
Motif name: Foxj3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0414454

Alignment:
HDHADGTAAACAAAVVH
----CACACACA-----

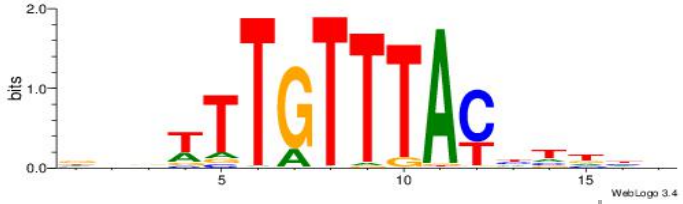
Original motif

Reverse complement motif

Consensus sequence: HDHADGTAAACAAAVVH



Consensus sequence: DVVTTTGTTTACDTHDH



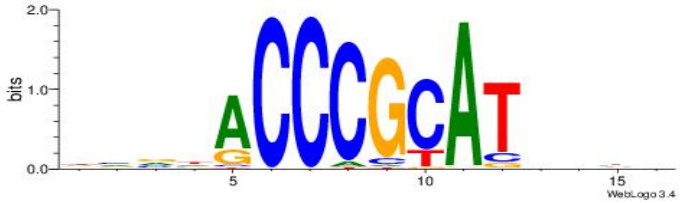
Motif ID:	UP00070
Motif name:	Gcm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0420768

Alignment:

```
HVVHACCCGCATVDHD
---CACACACA-----
```

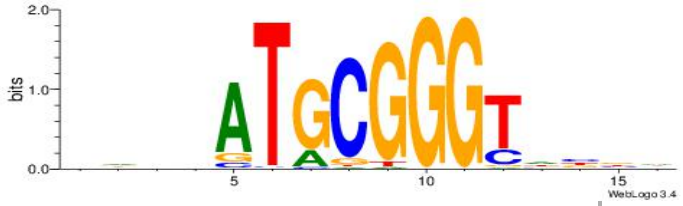
Original motif

Consensus sequence: HVVHACCCGCATVDHD



Reverse complement motif

Consensus sequence: DHDVATGCGGGTHVVH



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

Original motif

Consensus sequence: AWATAMA

Reverse complement motif

Consensus sequence: TYTATWT

Best Matches for Motif ID 3 (Highest to Lowest)

Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	7
Similarity score:	0

Alignment:

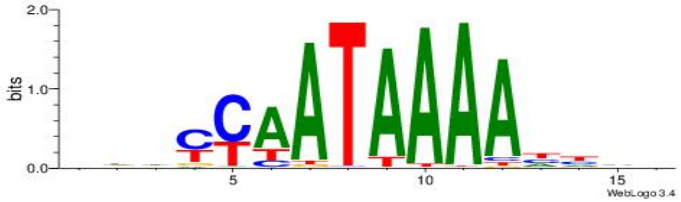
```
HDHHTTTTATTKKHDD
-----TYTATWT----
```

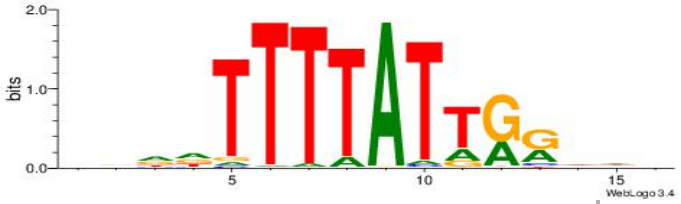
Original motif

Consensus sequence: HDHYYAATAAAAHHHH

Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD





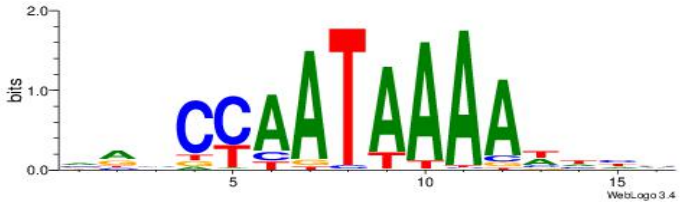
Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	7
Similarity score:	0.0065385

Alignment:

```
VDHWTTTTATTGGDKB
-----TYTATWT----
```

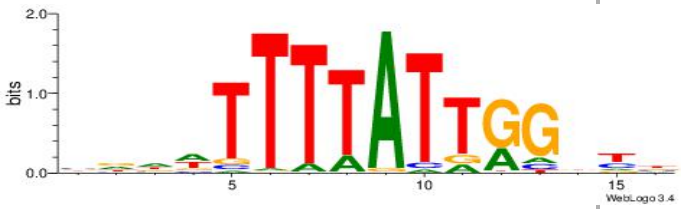
Original motif

Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif

Consensus sequence: VDHWTTTTATTGGDKB



Motif ID:	UP00121

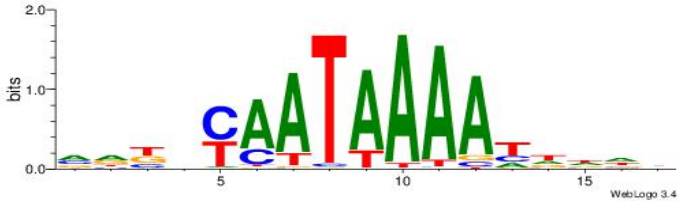
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	7
Similarity score:	0.0124058

Alignment:

```
HDDDATTTTATTKVRDB
------TYTATWT----
```

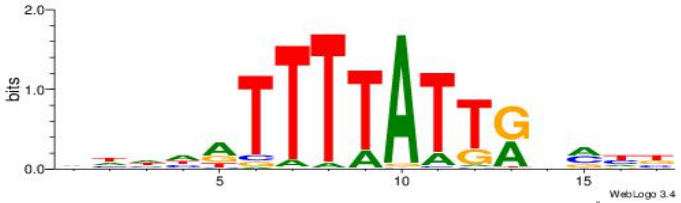
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB



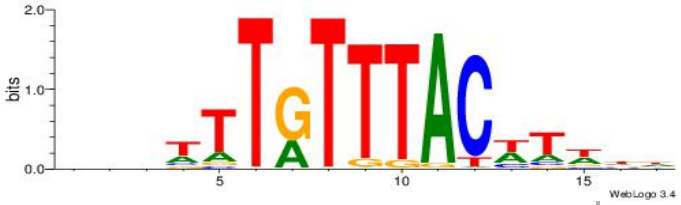
Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	7

Similarity score: 0.0126252

Alignment:
HHWAWGTAAAYAAAVDB
-------AWATAMA---

Original motif
Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif
Consensus sequence: BDVTTTKTTTACWTWHH

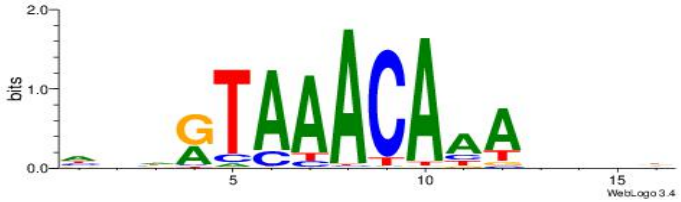


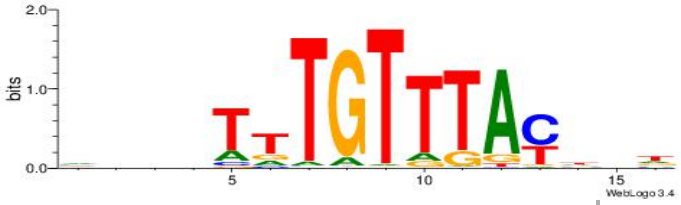
Motif ID: UP00041
Motif name: Foxj1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 5
Number of overlap: 7
Similarity score: 0.0147643

Alignment:
HDHRTAAACAAAHDDD
-----AWATAMA----

Original motif
Consensus sequence: HDHRTAAACAAAHDDD

Reverse complement motif
Consensus sequence: DDDHTTTGTTTAMHDH





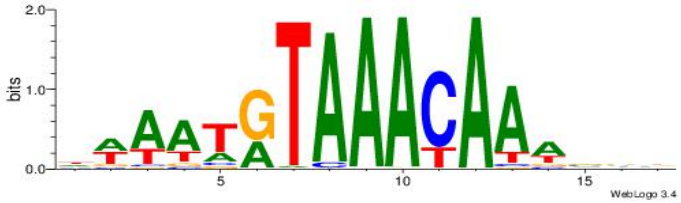
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	7
Similarity score:	0.0182155

Alignment:

```
DWAATRTAAACAAWVVB
-------AWATAMA---
```

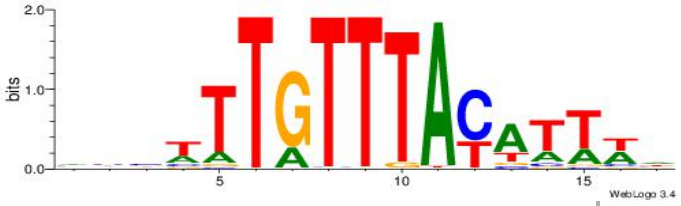
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



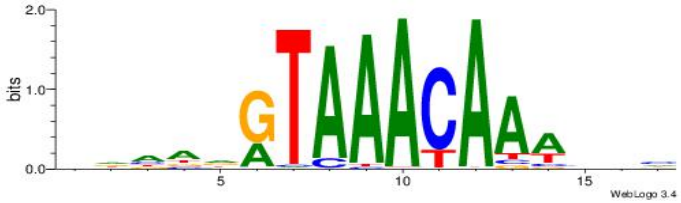
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	7
Similarity score:	0.0194168

Alignment:

```
HDHADGTAAACAAAVVH
-------AWATAMA---
```

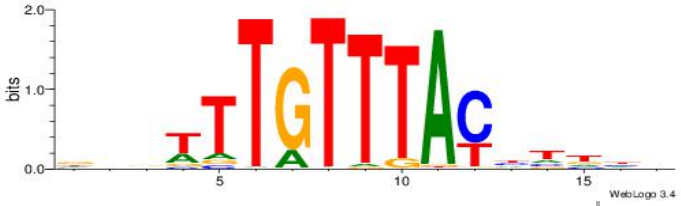
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH

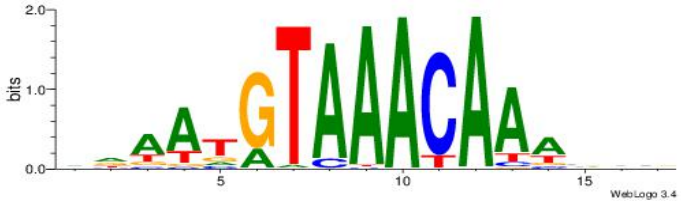


Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8

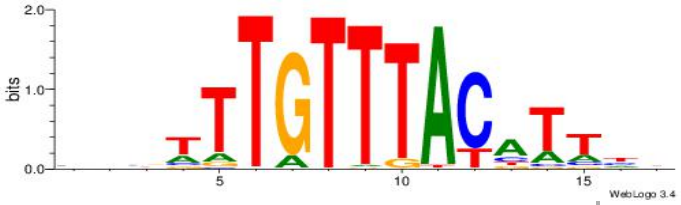
Number of overlap: 7
Similarity score: 0.0214053

Alignment:
DDAATGTAAACAAAVVB
-------AWATAMA---

Original motif
Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif
Consensus sequence: BBVTTTGTTTACATTDD



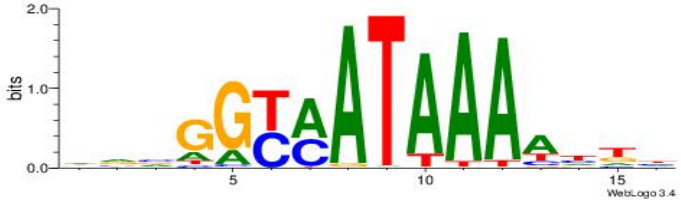
Motif ID: UP00133
Motif name: Cdx2
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 7
Similarity score: 0.0216297

Alignment:
DVVGGYMATAAAAHKH
-----AWATAMA----

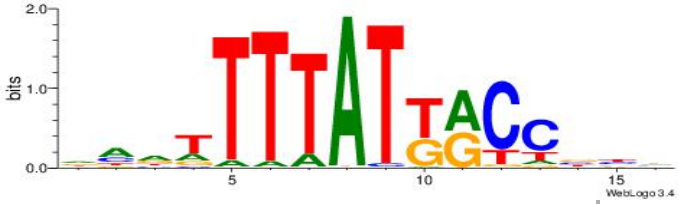
Original motif

Reverse complement motif

Consensus sequence: DVVGGYMATAAAAHKH



Consensus sequence: HRHTTTTATYMCCVBD



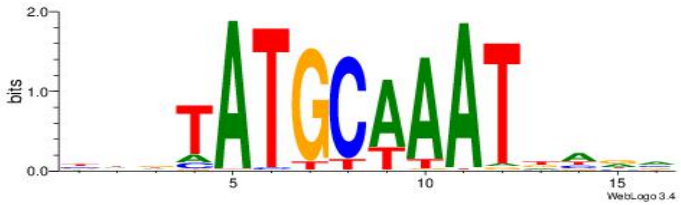
Motif ID:	UP00191
Motif name:	Pou2f2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	7
Similarity score:	0.0237828

Alignment:

```
BHDTATGCAAATDHDV
--------AWATAMA-
```

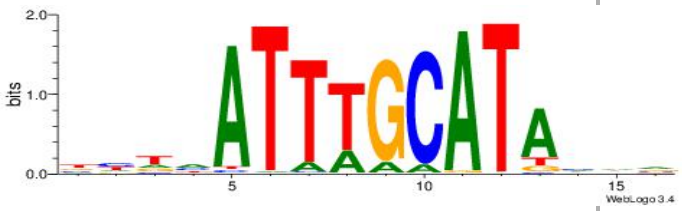
Original motif

Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif

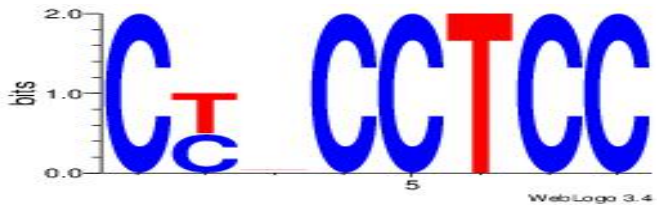
Consensus sequence: BHHDATTTGCATAHHV



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

Original motif

Consensus sequence: CYBCCTCC



Reverse complement motif

Consensus sequence: GGAGGVMG

Best Matches for Motif ID 4 (Highest to Lowest)

Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0047591

Alignment:

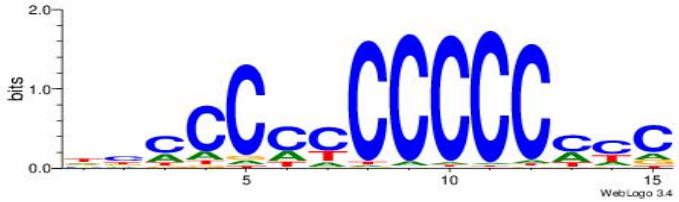
```
DBCCCCCCCCCCMYC
----CYBCCTCC---
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC

Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD



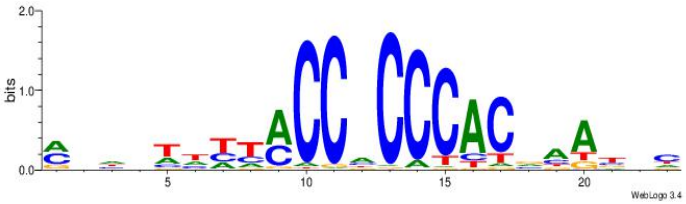
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0211234

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
------CYBCCTCC---------
```

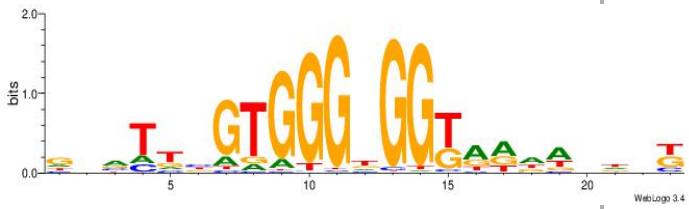
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID:	UP00540

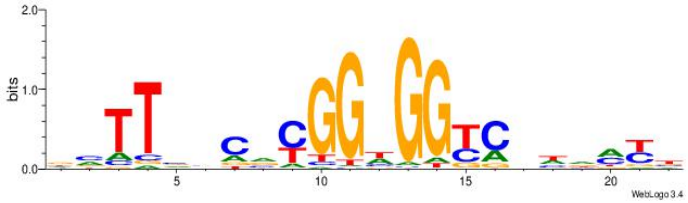
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0214303

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
---------GGAGGVMG-----
```

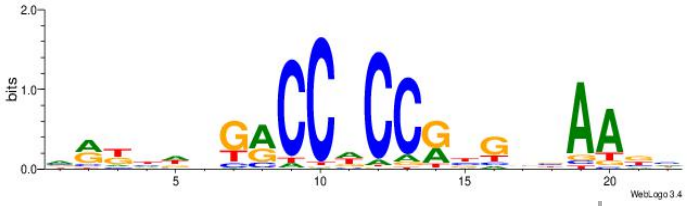
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

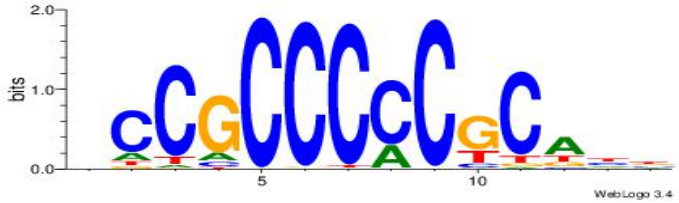


Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	8

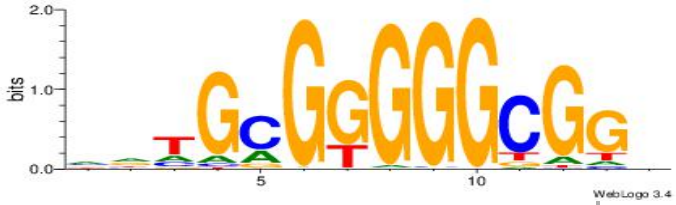
Similarity score: 0.0215351

Alignment:
HCCGCCCCCGCAHB
-CYBCCTCC-----

Original motif
Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH

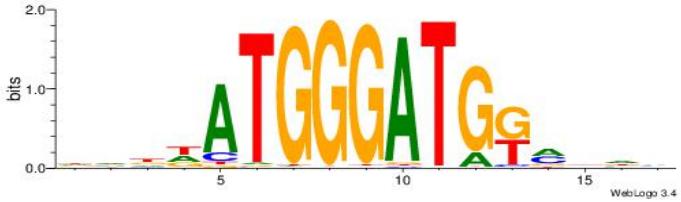


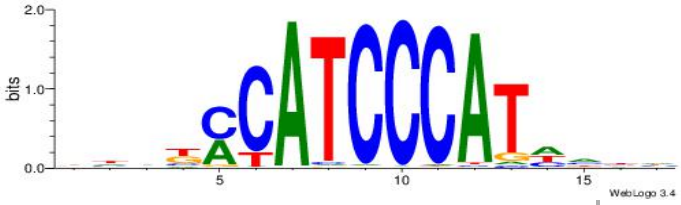
Motif ID: UP00033
Motif name: Zfp410_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 8
Similarity score: 0.0262858

Alignment:
BDDYYCATCCCATDDBD
--CYBCCTCC-------

Original motif
Consensus sequence: DVDDATGGGATGKMDDV

Reverse complement motif
Consensus sequence: BDDYYCATCCCATDDBD





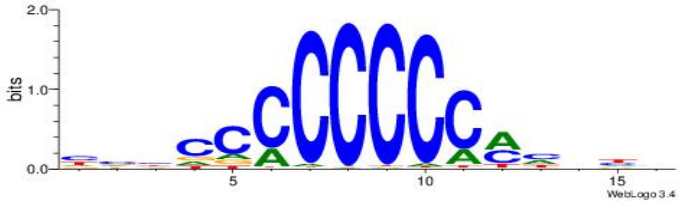
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0273549

Alignment:

```
HVBCCCCCCCCMHHHB
---CYBCCTCC-----
```

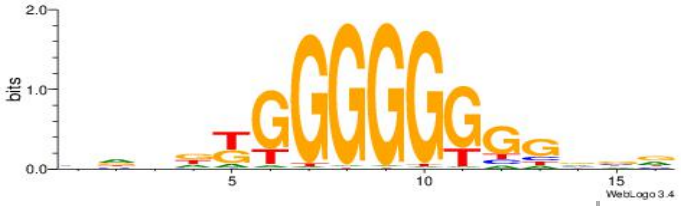
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



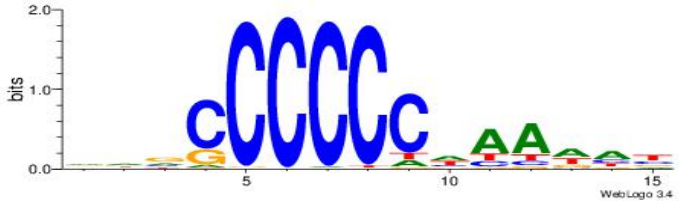
Motif ID:	UP00047
Motif name:	Zbtb7b_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0294721

Alignment:

```
VHWTTHGGGGGGVDD
------GGAGGVMG-
```

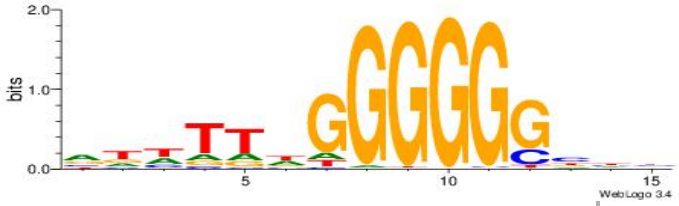
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

Consensus sequence: VHWTTHGGGGGGVDD

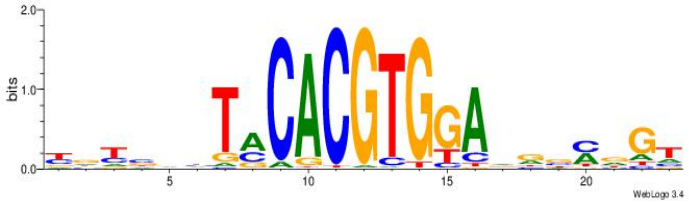


Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

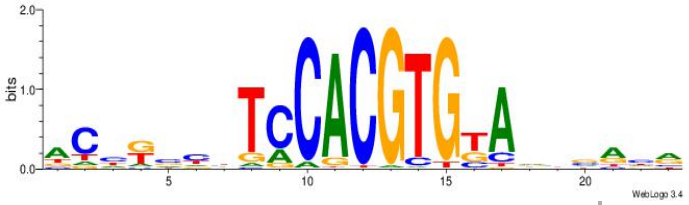
Number of overlap: 8
Similarity score: 0.0296935

Alignment:
YDYBDHTMCACGTGGADDBMDGT
----------GGAGGVMG--

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



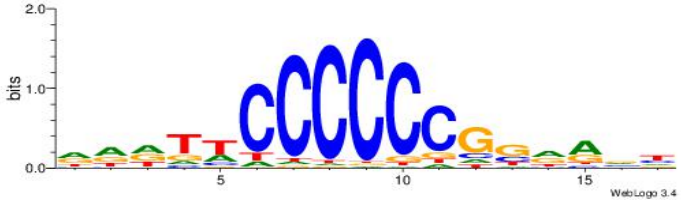
Motif ID: UP00022
Motif name: Zfp740_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 8
Number of overlap: 8
Similarity score: 0.0314233

Alignment:
HVKDCCGGGGGGWADDD
-------GGAGGVMG--

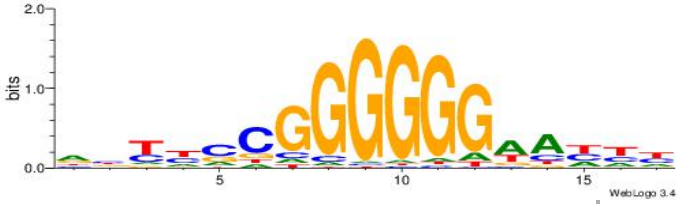
Original motif

Reverse complement motif

Consensus sequence: DDDTWCCCCCCGGDRVH



Consensus sequence: HVKDCCGGGGGGWADDD



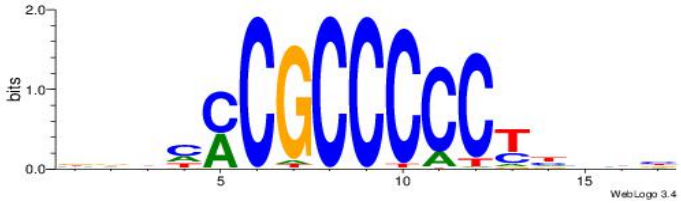
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0324346

Alignment:

```
BDHHMCGCCCCCTHVBB
----CYBCCTCC-----
```

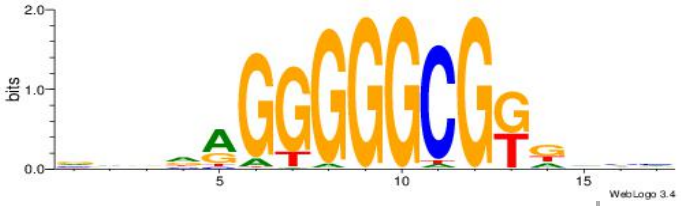
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



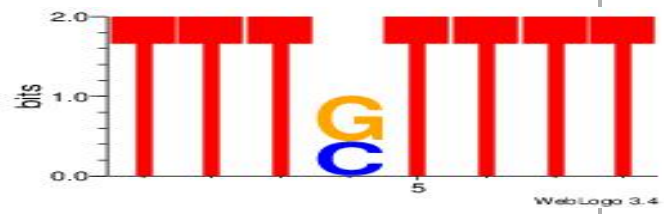
Dataset #: 1 **Motif ID: 5** **Motif name: Motif 5**

Original motif

Consensus sequence: AAAASAAA

Reverse complement motif

Consensus sequence: TTTSTTTT



Best Matches for Motif ID 5 (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:	7
Number of overlap:	8
Similarity score:	0

Alignment:

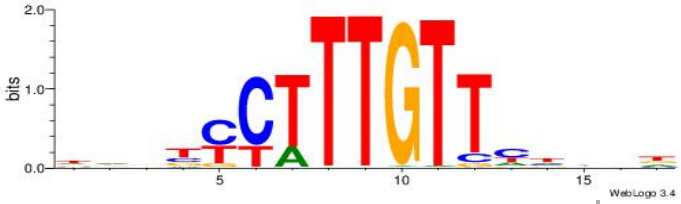
```
HBDDDAACAAAGRVBHH
---AAAASAAA------
```

Original motif

Consensus sequence: HBDDDAACAAAGRVBHH

Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



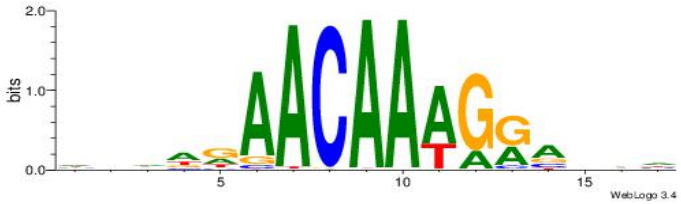
Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.000128474

Alignment:

```
HBDDRAACAAAGRABHH
---AAAASAAA------
```

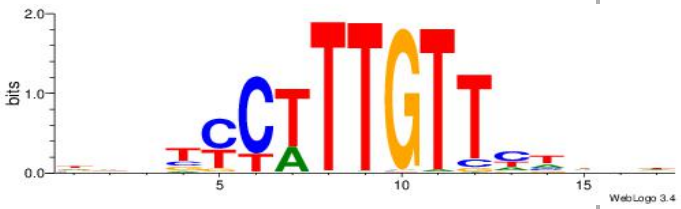
Original motif

Consensus sequence: HBDDRAACAAAGRABHH



Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



Motif ID:	UP00061

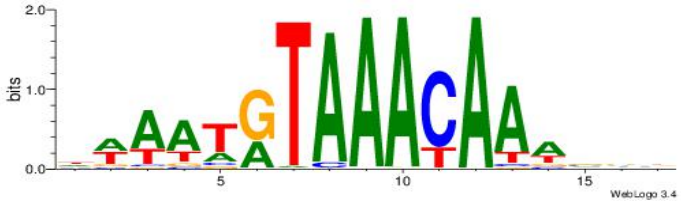
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.000164173

Alignment:

```
DWAATRTAAACAAWVVB
------AAAASAAA---
```

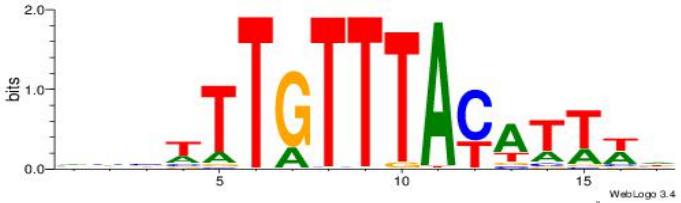
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD

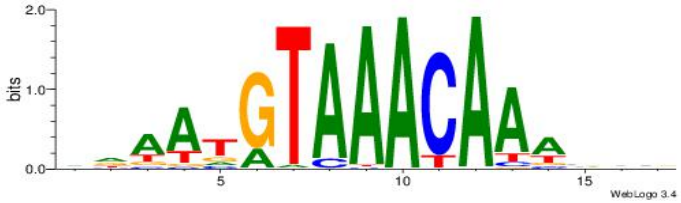


Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8

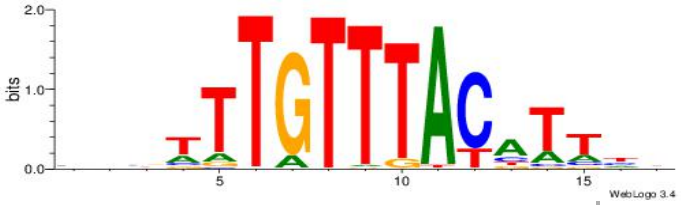
Similarity score: 0.000213551

Alignment:
BBVTTTGTTTACATTDD
---TTTSTTTT------

Original motif
Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif
Consensus sequence: BBVTTTGTTTACATTDD

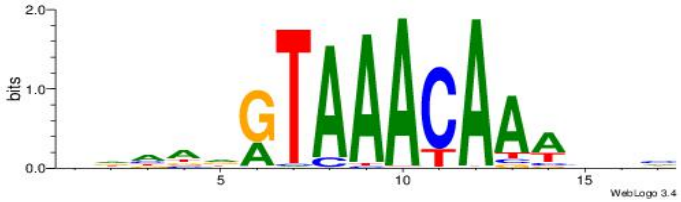


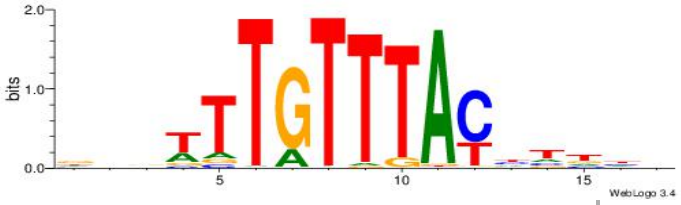
Motif ID: UP00039
Motif name: Foxj3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 8
Similarity score: 0.0017146

Alignment:
HDHADGTAAACAAAVVH
------AAAASAAA---

Original motif
Consensus sequence: HDHADGTAAACAAAVVH

Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH





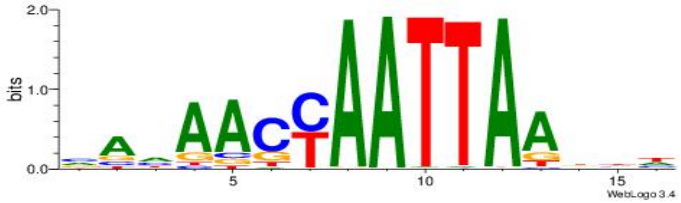
Motif ID:	UP00171
Motif name:	Msx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.00344628

Alignment:

```
HHVTTAATTKGTTHTV
-------TTTSTTTT-
```

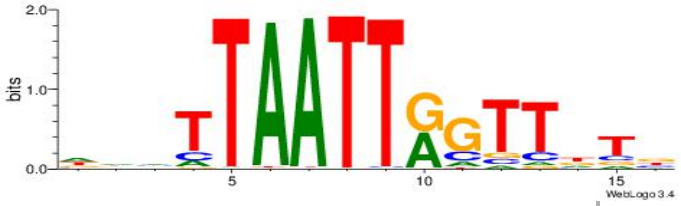
Original motif

Consensus sequence: VAHAACYAATTAABHH



Reverse complement motif

Consensus sequence: HHVTTAATTKGTTHTV



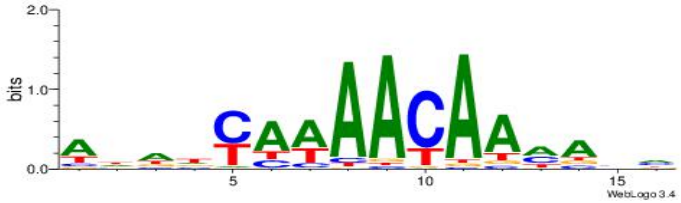
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0055484

Alignment:

```
ADDDYAWAACAAMAHH
-----AAAASAAA---
```

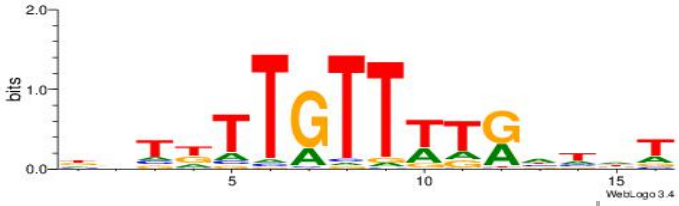
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



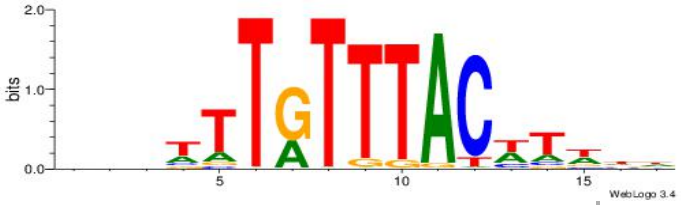
Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

Number of overlap: 8
Similarity score: 0.00600115

Alignment:
HHWAWGTAAAYAAAVDB
------AAAASAAA---

Original motif
Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif
Consensus sequence: BDVTTTKTTTACWTWHH



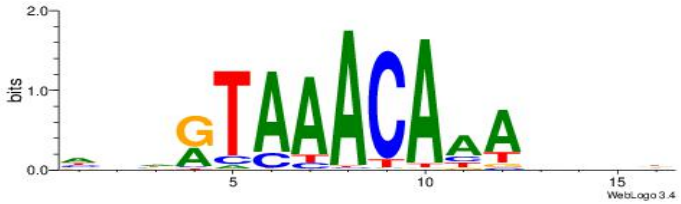
Motif ID: UP00041
Motif name: Foxj1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 8
Similarity score: 0.0108329

Alignment:
DDDHTTTGTTTAMHDH
----TTTSTTTT----

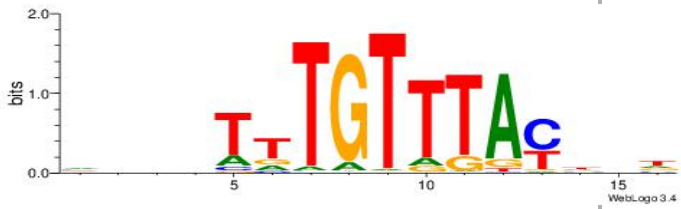
Original motif

Reverse complement motif

Consensus sequence: HDHRTAAACAAAHDDD



Consensus sequence: DDDHTTTGTTTAMHDH



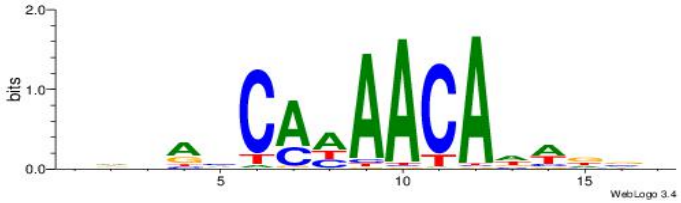
Motif ID:	UP00039
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0126083

Alignment:

```
HDBAHCAWAACADWDVD
------AAAASAAA---
```

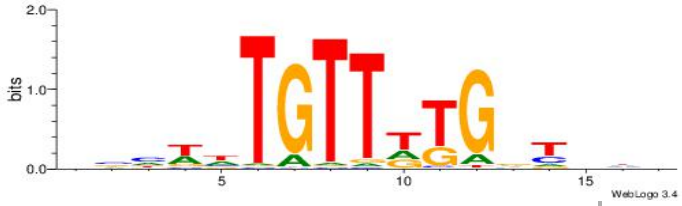
Original motif

Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif

Consensus sequence: DVHWDTGTTWTGDTBDH



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

Original motif

Consensus sequence: CCCCRCCC

Reverse complement motif

Consensus sequence: GGGKGGGG

Best Matches for Motif ID 6 (Highest to Lowest)

Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0

Alignment:

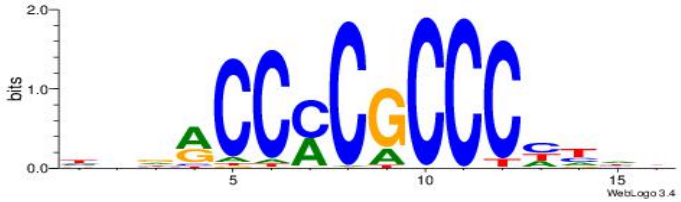
```
HBDRCCMCGCCCHHHD
----CCCCRCCC----
```

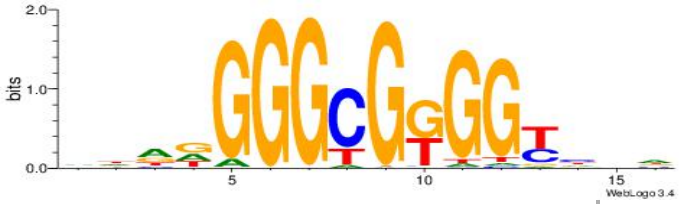
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD

Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH





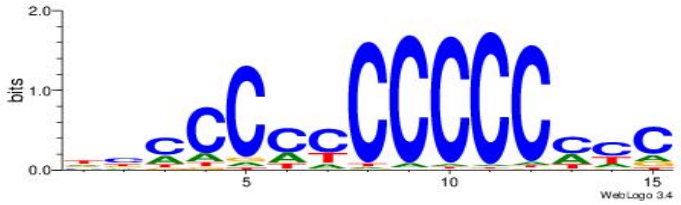
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0189858

Alignment:

```
GKRGGGGGGGGGGBD
-----GGGKGGGG--
```

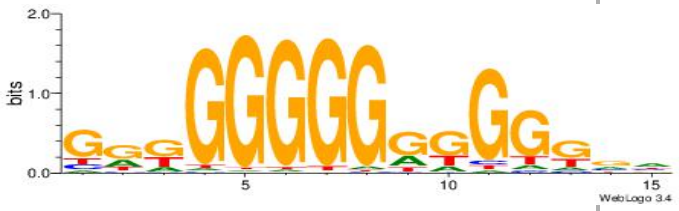
Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGGBD



Motif ID:	UP00022

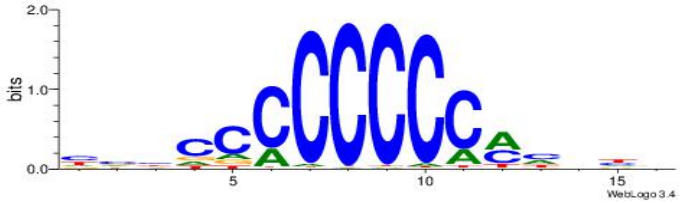
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0254924

Alignment:

```
BHHDYGGGGGGGGBVD
-----GGGKGGGG---
```

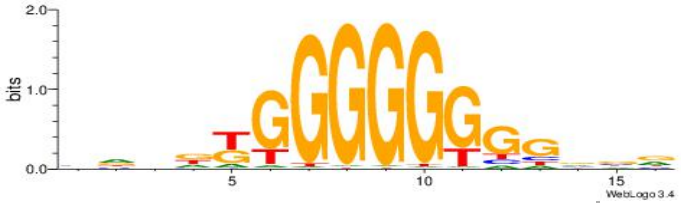
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD

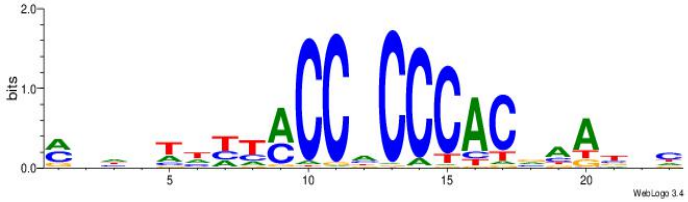


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8

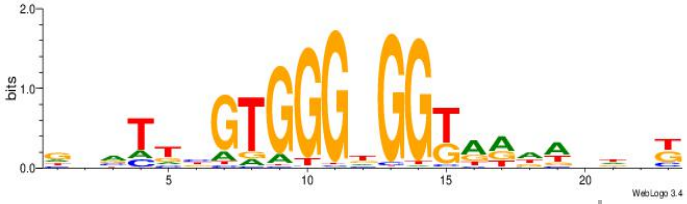
Similarity score: 0.0344544

Alignment:
MHHHWHYTMCCHCCCACVAABVH
-------CCCCRCCC--------

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

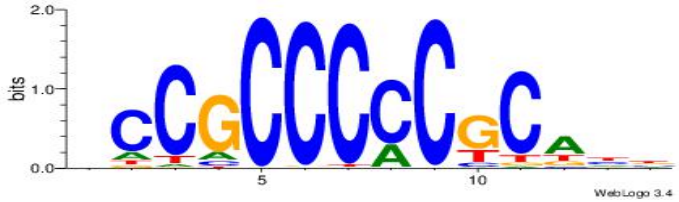


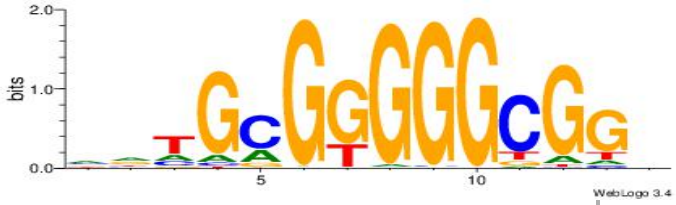
Motif ID: UP00007
Motif name: Egr1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.0351247

Alignment:
VHTGCGGGGGCGGH
-----GGGKGGGG-

Original motif
Consensus sequence: HCCGCCCCCGCAHB

Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH





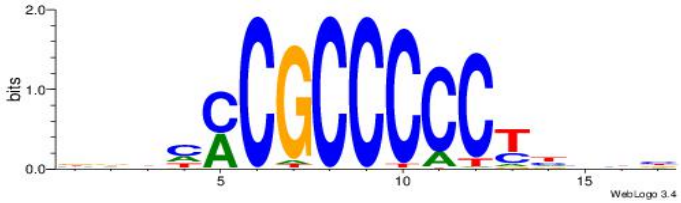
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0379829

Alignment:

```
BDHHMCGCCCCCTHVBB
--CCCCRCCC-------
```

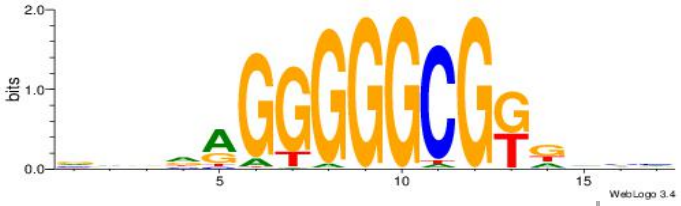
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



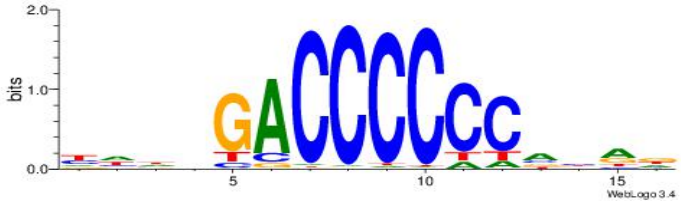
Motif ID:	UP00024
Motif name:	Glis2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0387654

Alignment:

```
HKBBGGGGGGTCVHHH
--GGGKGGGG------
```

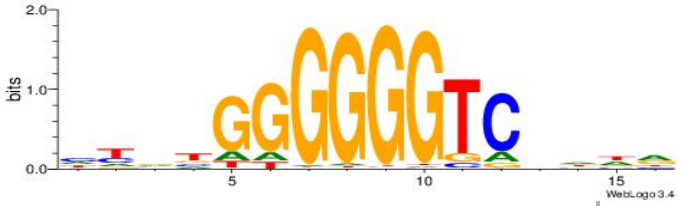
Original motif

Consensus sequence: HHHVGACCCCCCVBRD



Reverse complement motif

Consensus sequence: HKBBGGGGGGTCVHHH

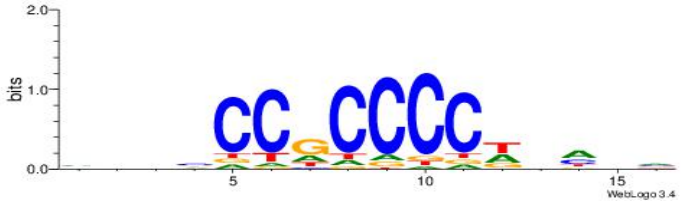


Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7

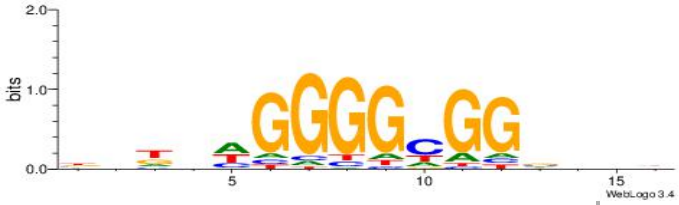
Number of overlap: 8
Similarity score: 0.044983

Alignment:
HBBBCCGCCCCWHHHV
--CCCCRCCC------

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH



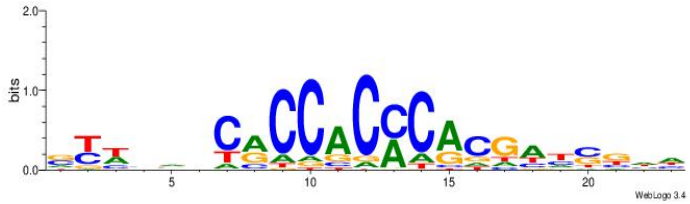
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 10
Number of overlap: 8
Similarity score: 0.0449971

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
---------GGGKGGGG------

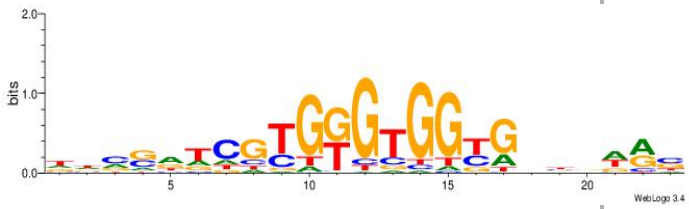
Original motif

Reverse complement motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



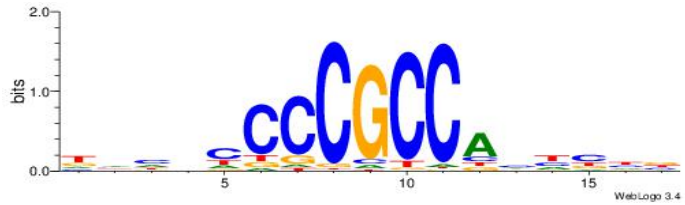
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0452062

Alignment:

```
DHHBCCCCGCCAHHBHB
----CCCCRCCC-----
```

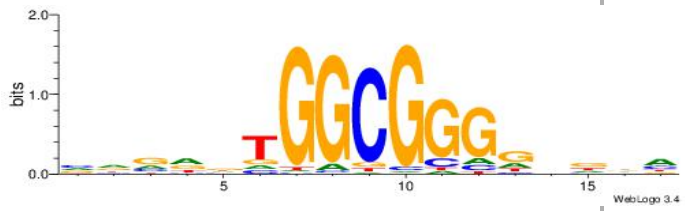
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



Dataset #: 1 **Motif ID: 7** **Motif name: Motif 7**

Original motif

Consensus sequence: ASASAGAA

Reverse complement motif

Consensus sequence: TTCTSTST

Best Matches for Motif ID 7 (Highest to Lowest)

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:	6
Number of overlap:	8
Similarity score:	0

Alignment:

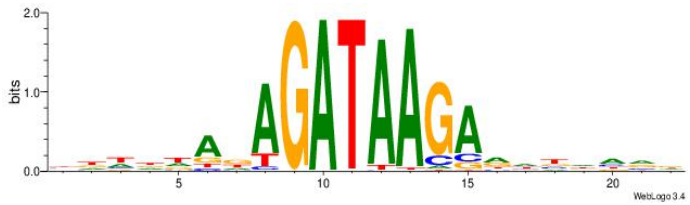
```
BDHDDADAGATAAGADHBDHVD
-----ASASAGAA---------
```

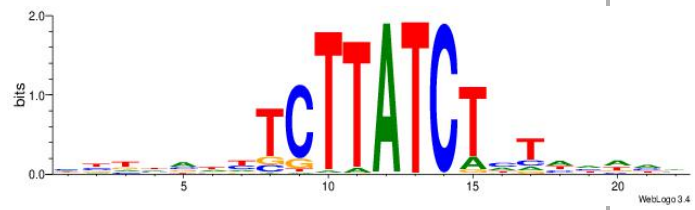
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD

Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV





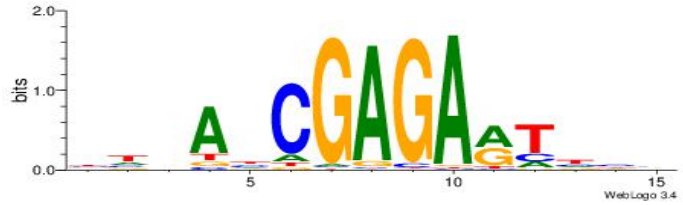
Motif ID:	UP00040
Motif name:	Irf5_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.00562375

Alignment:

```
BHDAHCGAGARTHBV
---ASASAGAA----
```

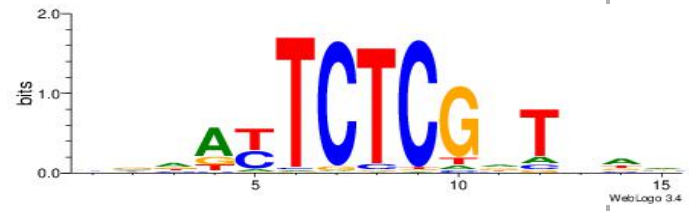
Original motif

Consensus sequence: BHDAHCGAGARTHBV



Reverse complement motif

Consensus sequence: VBHAKTCTCGHTHHV



Motif ID:	UP00101

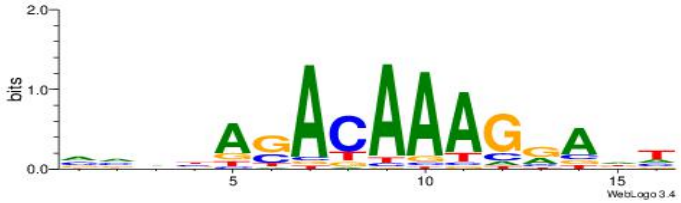
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.0120605

Alignment:

```
VVDBASACAAAGRADH
--ASASAGAA------
```

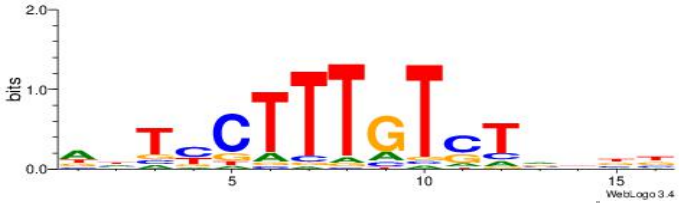
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB

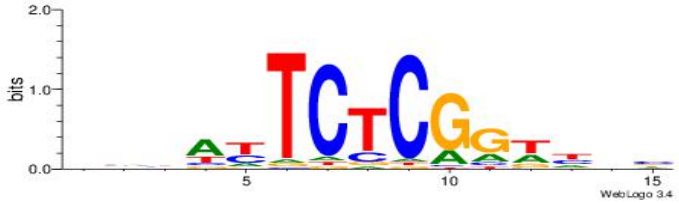


Motif ID:	UP00018
Motif name:	Irf4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8

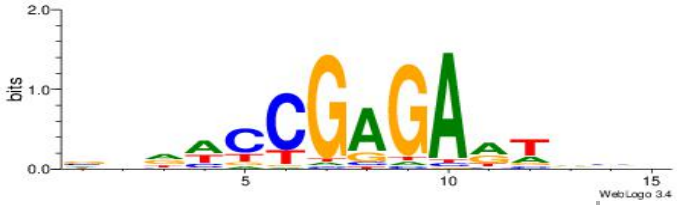
Similarity score: 0.017471

Alignment:
BHHWCCGAGAMTVVB
---ASASAGAA----

Original motif
Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif
Consensus sequence: BHHWCCGAGAMTVVB

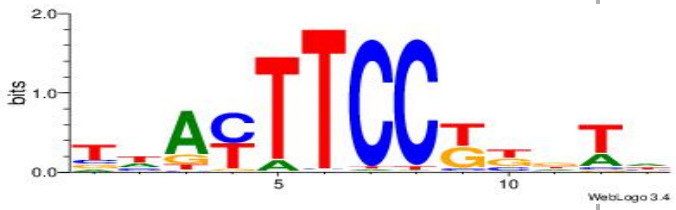


Motif ID: UP00090
Motif name: Elf3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 8
Similarity score: 0.018291

Alignment:
TDAMTTCCYYDTD
----TTCTSTST-

Original motif
Consensus sequence: DAHMMGGAARTDA

Reverse complement motif
Consensus sequence: TDAMTTCCYYDTD



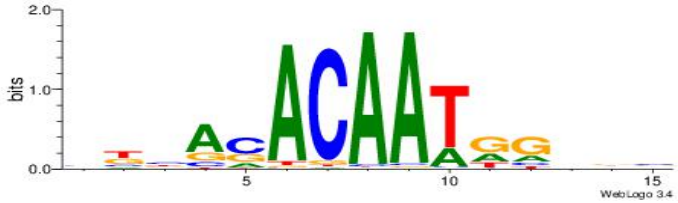
Motif ID:	UP00004
Motif name:	Sox14_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0185351

Alignment:

```
BBDCMATTGTSTBRB
------TTCTSTST-
```

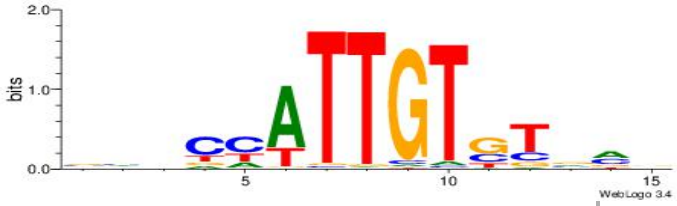
Original motif

Consensus sequence: BKBASACAATRGHBB



Reverse complement motif

Consensus sequence: BBDCMATTGTSTBRB



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:	4
Number of overlap:	8
Similarity score:	0.0187871

Alignment:

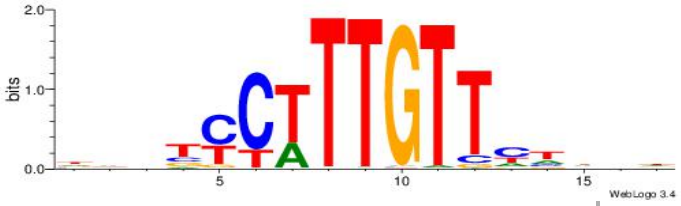
```
HBDDRAACAAAGRABHH
------ASASAGAA---
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH

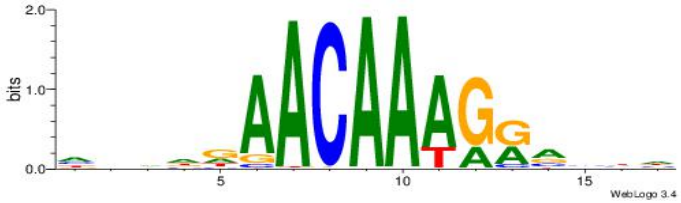


Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7

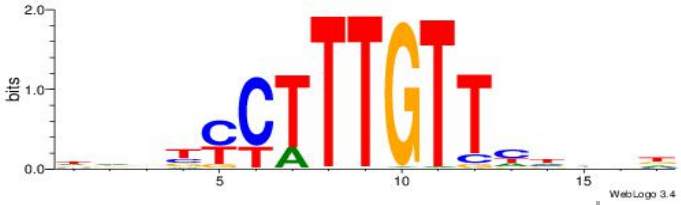
Number of overlap: 8
Similarity score: 0.0188246

Alignment:
HBDDDAACAAAGRVBHH
------ASASAGAA---

Original motif
Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif
Consensus sequence: HHBBMCTTTGTTHDDBH



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: 3
Number of overlap: 8
Similarity score: 0.0192614

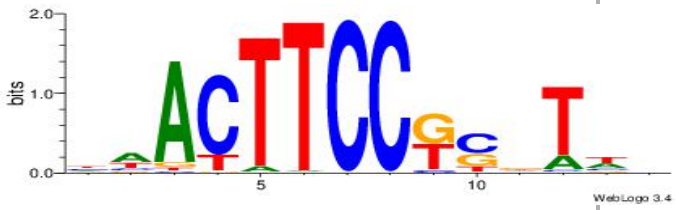
Alignment:
BWAHSMGGAAGTWD
--ASASAGAA----

Original motif

Reverse complement motif

Consensus sequence: BWAHSMGGAAGTWD

Consensus sequence: DWACTTCCRSDTWV



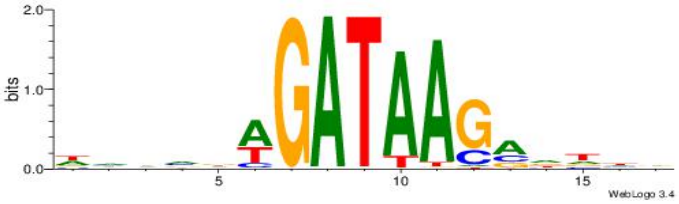
Motif ID:	UP00100
Motif name:	Gata6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0192685

Alignment:

```
VHDDTCTTATCWHBDHD
------TTCTSTST---
```

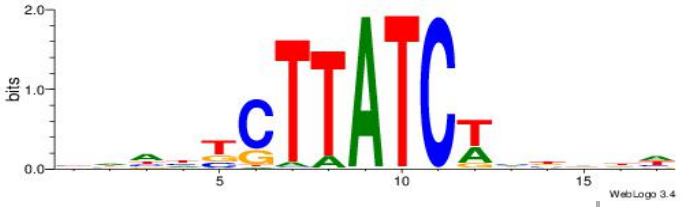
Original motif

Consensus sequence: DHDVDWGATAAGADDHV



Reverse complement motif

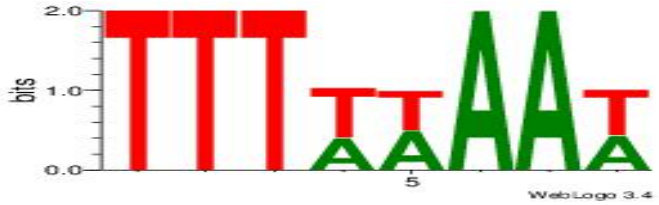
Consensus sequence: VHDDTCTTATCWHBDHD



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

Original motif

Consensus sequence: TTTWWAAW



Reverse complement motif

Consensus sequence: WTTWWAAA

Best Matches for Motif ID 8 (Highest to Lowest)

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:	8
Number of overlap:	8
Similarity score:	0.0113493

Alignment:

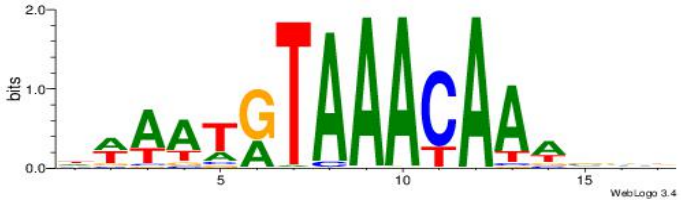
```
VVVWTTGTTTAMATTWD
-------TTTWWAAW--
```

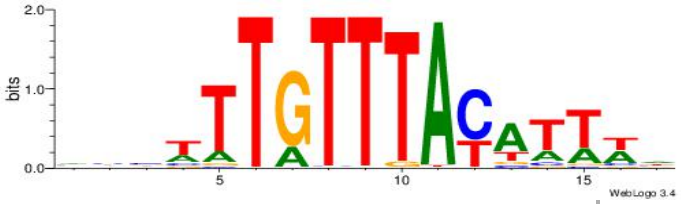
Original motif

Consensus sequence: DWAATRTAAACAAWVVB

Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD





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:	5
Number of overlap:	8
Similarity score:	0.0142946

Alignment:

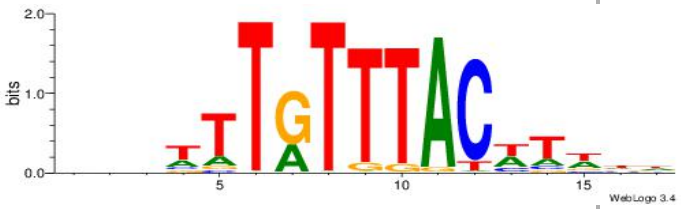
```
BDVTTTKTTTACWTWHH
-----TTTWWAAW----
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID:	UP00114

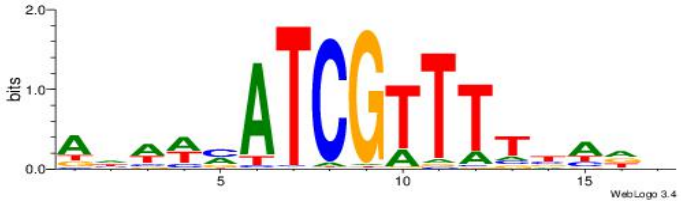
Motif name:	Homez
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0164944

Alignment:

```
HDTVAAAACGATRWWHT
WTTWWAAA---------
```

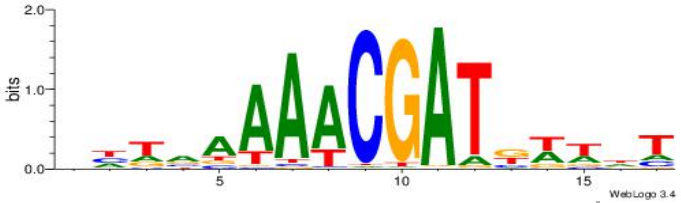
Original motif

Consensus sequence: AHWWMATCGTTTTBADD



Reverse complement motif

Consensus sequence: HDTVAAAACGATRWWHT

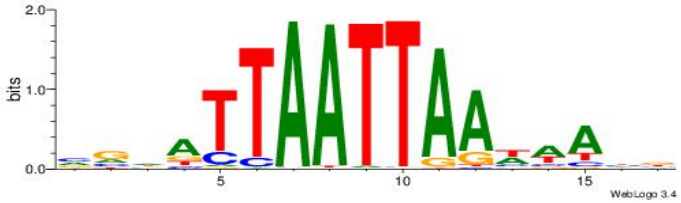


Motif ID:	UP00262
Motif name:	Lhx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8

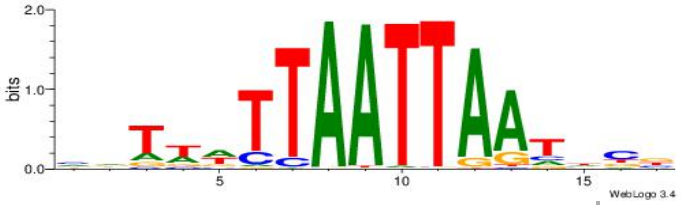
Similarity score: 0.0167097

Alignment:
VVDATTAATTAAWWAHB
-------WTTWWAAA--

Original motif
Consensus sequence: VVDATTAATTAAWWAHB



Reverse complement motif
Consensus sequence: BHTWWTTAATTAATDVV

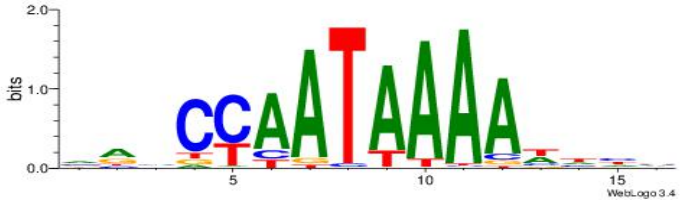


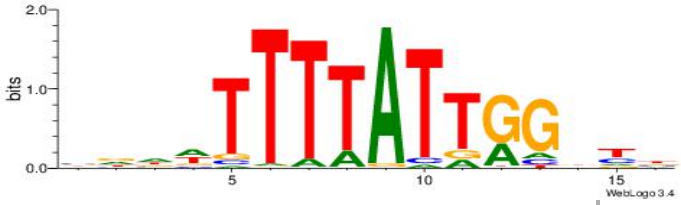
Motif ID: UP00134
Motif name: Hoxb13
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.0168038

Alignment:
VRHCCAATAAAAWHHV
-----WTTWWAAA---

Original motif
Consensus sequence: VRHCCAATAAAAWHHV

Reverse complement motif
Consensus sequence: VDHWTTTTATTGGDKB





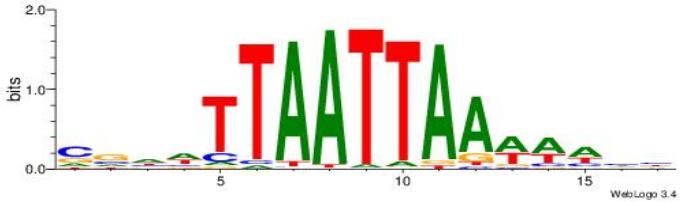
Motif ID:	UP00188
Motif name:	Lmx1a
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0169282

Alignment:

```
CVHHTTAATTAAWWWHB
-------WTTWWAAA--
```

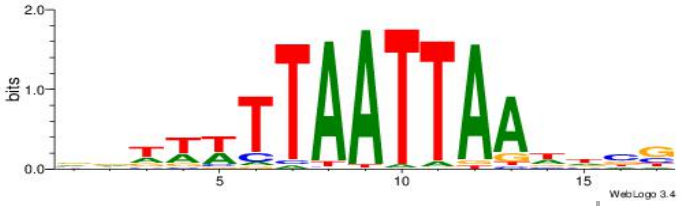
Original motif

Consensus sequence: CVHHTTAATTAAWWWHB



Reverse complement motif

Consensus sequence: BDWWWTTAATTAAHHVG



Motif ID:	UP00016
Motif name:	Sry_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:	0.0172544

Alignment:

```
BHDHATTATAATDDDV
----TTTWWAAW----
```

Original motif

Consensus sequence: BHDHATTATAATDDDV

Reverse complement motif

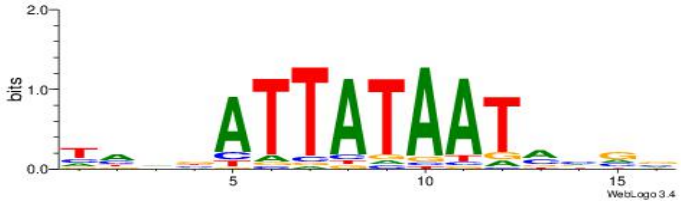
Consensus sequence: VDDDATTATAATHDHV

Motif ID:	UP00023
Motif name:	Sox30_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5

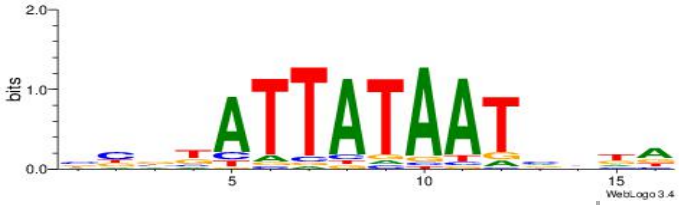
Number of overlap: 8
Similarity score: 0.0178935

Alignment:
THDBATTATAATMVVV
----WTTWWAAA----

Original motif
Consensus sequence: THDBATTATAATMVVV



Reverse complement motif
Consensus sequence: VVVYATTATAATBDHA



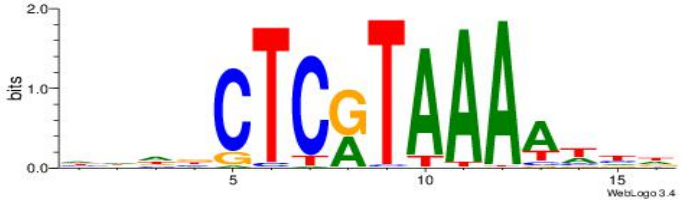
Motif ID: UP00173
Motif name: Hoxc13
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 8
Similarity score: 0.0180658

Alignment:
DHWTTTTAMGAGBDHH
---WTTWWAAA-----

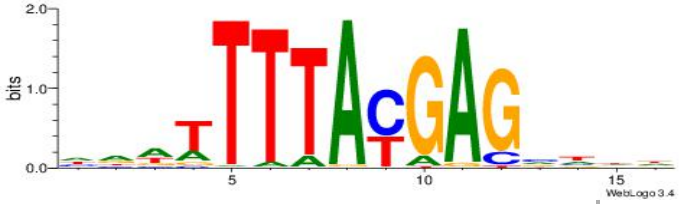
Original motif

Reverse complement motif

Consensus sequence: HHDBCTCRTAAAAWHD



Consensus sequence: DHWTTTTAMGAGBDHH



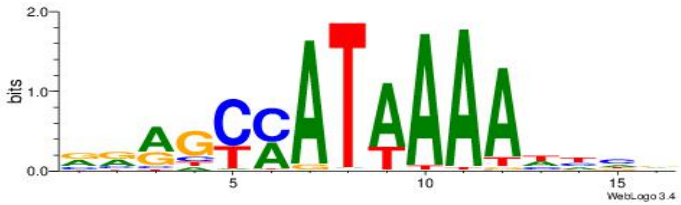
Motif ID:	UP00207
Motif name:	Hoxb9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.018356

Alignment:

```
HDHHTTTTATRGCKMV
---WTTWWAAA-----
```

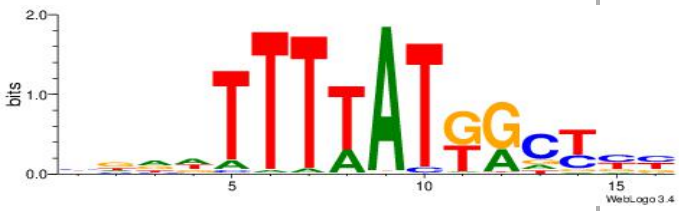
Original motif

Consensus sequence: VRRGCMATAAAAHHHD



Reverse complement motif

Consensus sequence: HDHHTTTTATRGCKMV



Dataset #: 1 **Motif ID: 9** **Motif name: Motif 9**

Original motif

Consensus sequence: GCTGGGAW

Reverse complement motif

Consensus sequence: WTCCCAGC

Best Matches for Motif ID 9 (Highest to Lowest)

Motif ID:	UP00033
Motif name:	Zfp410_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0

Alignment:

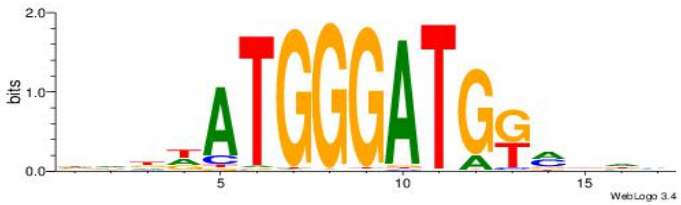
```
DVDDATGGGATGKMDDV
---GCTGGGAW------
```

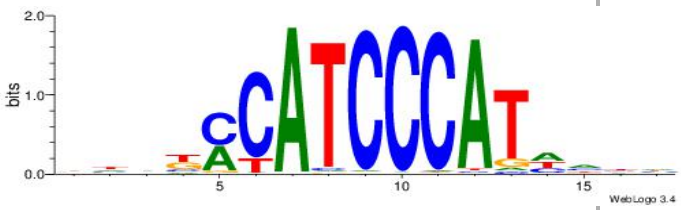
Original motif

Consensus sequence: DVDDATGGGATGKMDDV

Reverse complement motif

Consensus sequence: BDDYYCATCCCATDDBD





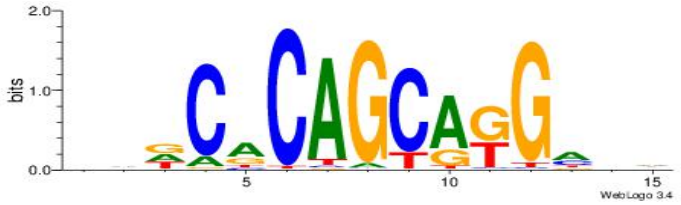
Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.0015592

Alignment:

```
DVHCYTGCTGTGHDH
------GCTGGGAW-
```

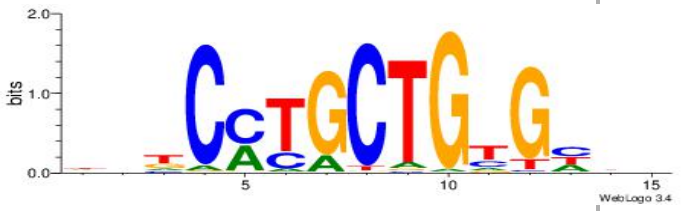
Original motif

Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



Motif ID:	UP00102

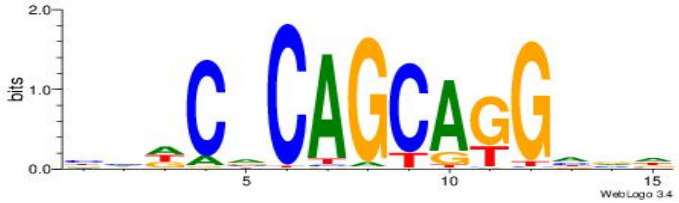
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0.00311134

Alignment:

```
DVHCCTGCTGBGDDB
------GCTGGGAW-
```

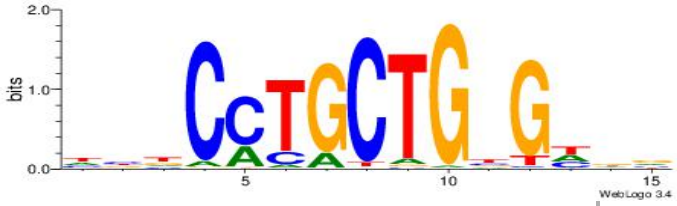
Original motif

Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif

Consensus sequence: DVHCCTGCTGBGDDB

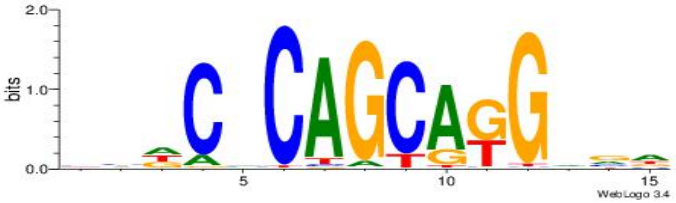


Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8

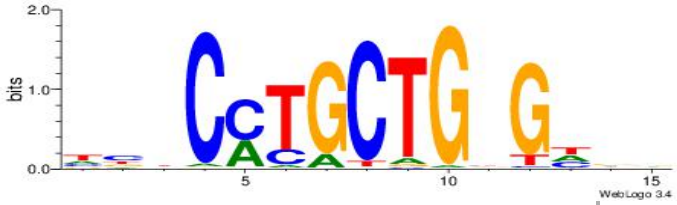
Similarity score: 0.00378731

Alignment:
DVBCYTGCTGBGDDD
------GCTGGGAW-

Original motif
Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif
Consensus sequence: DVBCYTGCTGBGDDD

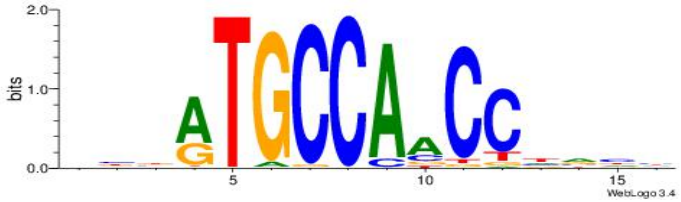


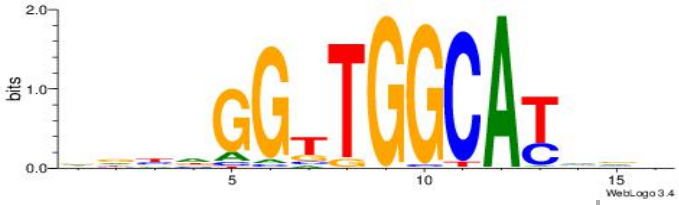
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.00499352

Alignment:
DDBHGGTTGGCATVBD
-----GCTGGGAW---

Original motif
Consensus sequence: DBBATGCCAACCHVHH

Reverse complement motif
Consensus sequence: DDBHGGTTGGCATVBD





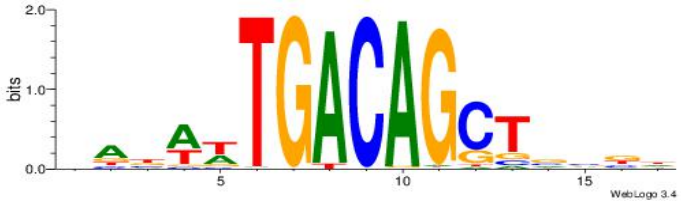
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.00832067

Alignment:

```
DBVVAGCTGTCAWWVTH
-----GCTGGGAW----
```

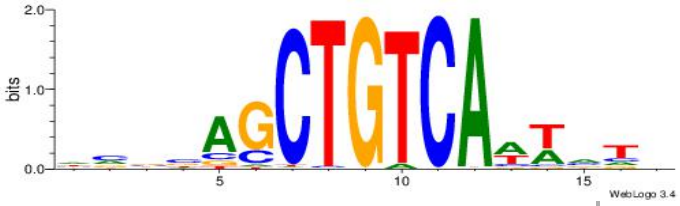
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



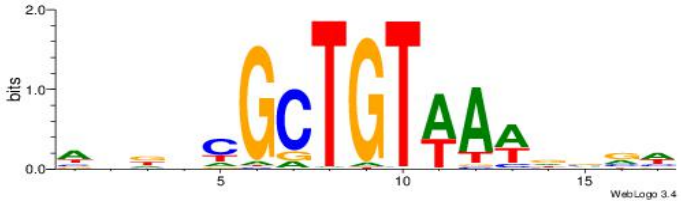
Motif ID:	UP00193
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0141947

Alignment:

```
WVVHWTWACAGCGHHVT
----WTCCCAGC-----
```

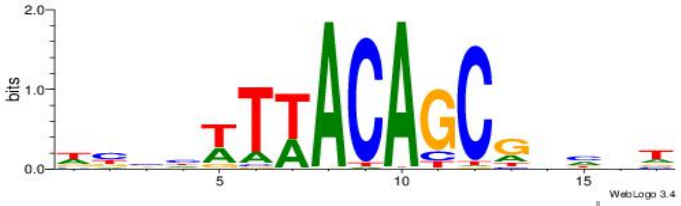
Original motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGHHVT

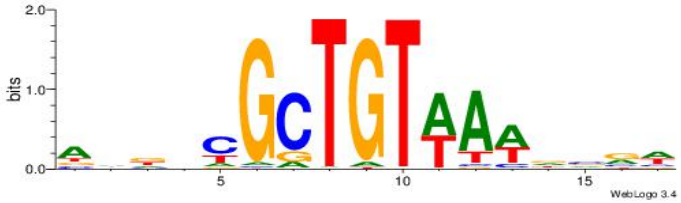


Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

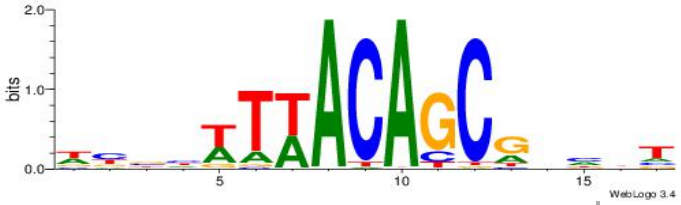
Number of overlap: 8
Similarity score: 0.014648

Alignment:
WVVHWTWACAGCGBHBT
----WTCCCAGC-----

Original motif
Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif
Consensus sequence: WVVHWTWACAGCGBHBT



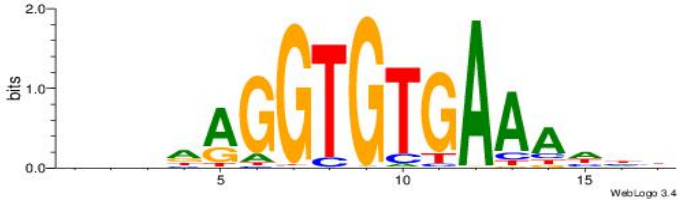
Motif ID: UP00068
Motif name: Eomes_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0155942

Alignment:
HHHTTTCACACCTDHBV
----WTCCCAGC-----

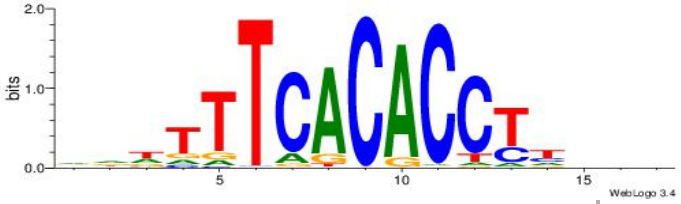
Original motif

Reverse complement motif

Consensus sequence: BVHDAGGTGTGAAAHHH



Consensus sequence: HHHTTTCACACCTDHBV



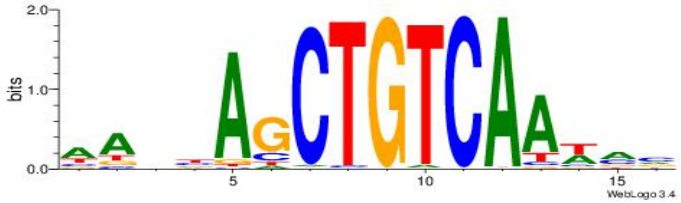
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0159446

Alignment:

```
VBWTTGACAGCTVBTT
---WTCCCAGC-----
```

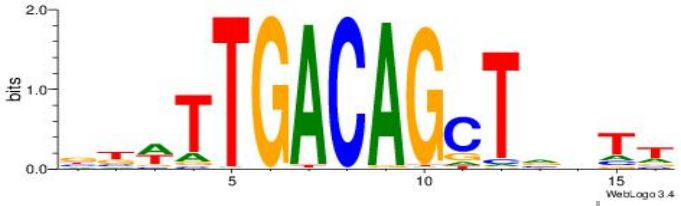
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Dataset #: 1 **Motif ID: 10** **Motif name: Motif 10**

Original motif

Consensus sequence: TAMATA

Reverse complement motif

Consensus sequence: TATRTA

Best Matches for Motif ID 10 (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:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0

Alignment:

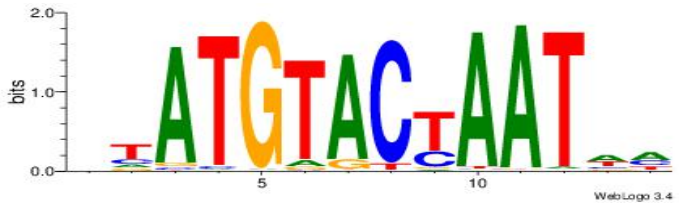
```
HWATTAGTACATAV
-------TAMATA-
```

Original motif

Consensus sequence: BTATGTACTAATWH

Reverse complement motif

Consensus sequence: HWATTAGTACATAV



Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.00240236

Alignment:

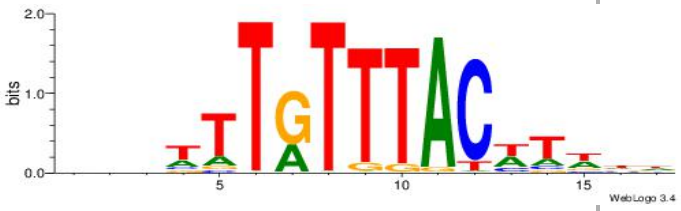
```
HHWAWGTAAAYAAAVDB
------TAMATA-----
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



Motif ID:	UP00061

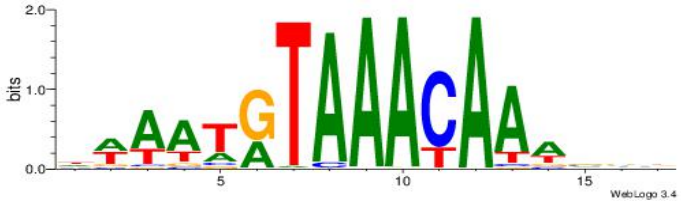
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.00807433

Alignment:

```
DWAATRTAAACAAWVVB
------TAMATA-----
```

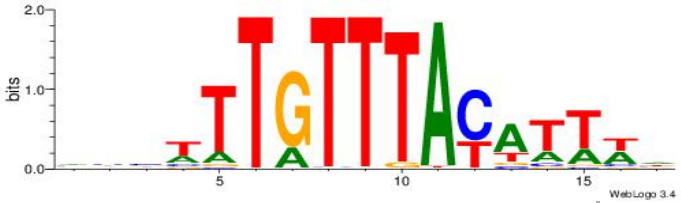
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD

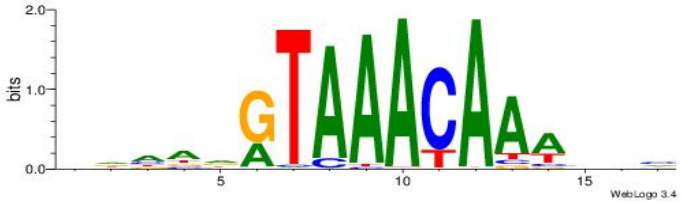


Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	6

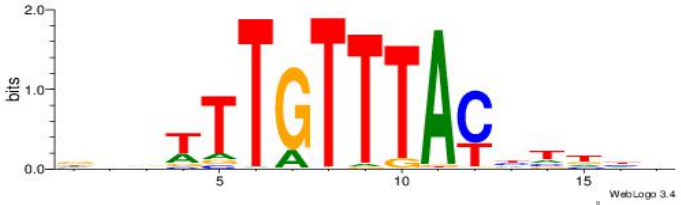
Similarity score: 0.0104466

Alignment:
HDHADGTAAACAAAVVH
------TAMATA-----

Original motif
Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH

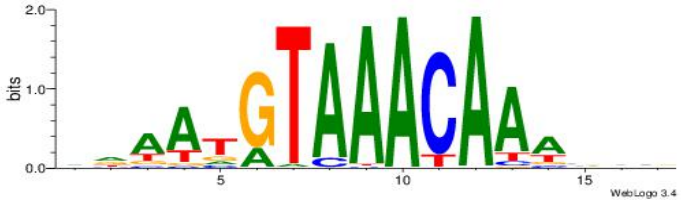


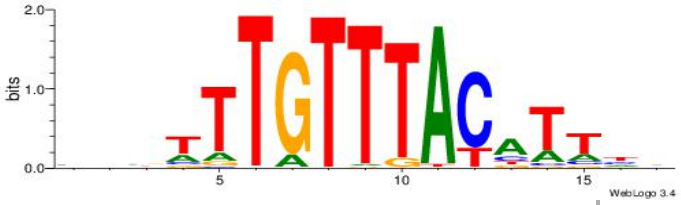
Motif ID: UP00025
Motif name: Foxk1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.0133367

Alignment:
DDAATGTAAACAAAVVB
------TAMATA-----

Original motif
Consensus sequence: DDAATGTAAACAAAVVB

Reverse complement motif
Consensus sequence: BBVTTTGTTTACATTDD





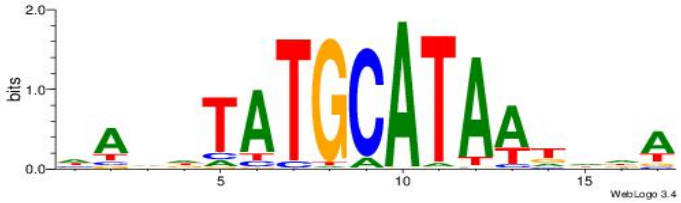
Motif ID:	UP00211
Motif name:	Pou3f3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.0159085

Alignment:

```
TDDATTATGCATADDTH
-----TATRTA------
```

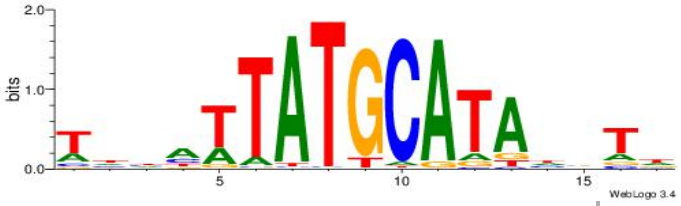
Original motif

Consensus sequence: HADDTATGCATAATDDA



Reverse complement motif

Consensus sequence: TDDATTATGCATADDTH



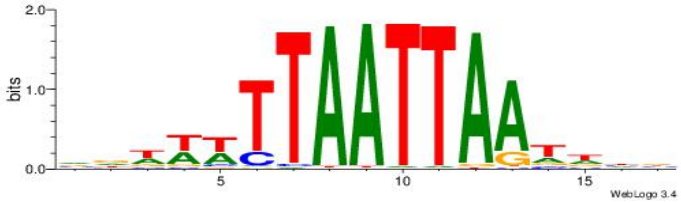
Motif ID:	UP00169
Motif name:	Lmx1b
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.0177771

Alignment:

```
BHDATTAATTAAWWWHB
-----TAMATA------
```

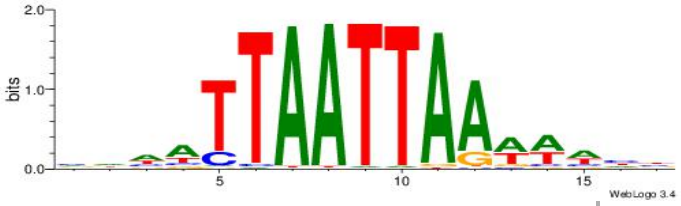
Original motif

Consensus sequence: VDWWWTTAATTAATDHB



Reverse complement motif

Consensus sequence: BHDATTAATTAAWWWHB

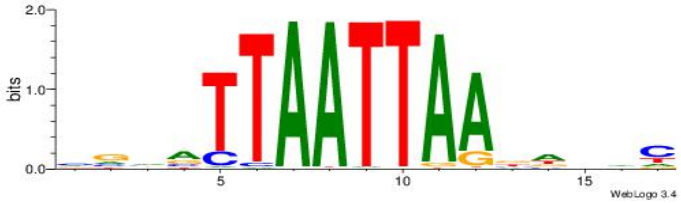


Motif ID:	UP00172
Motif name:	Prop1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

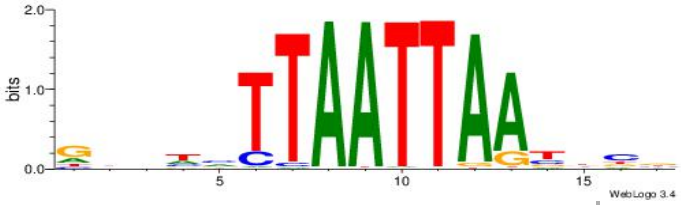
Number of overlap: 6
Similarity score: 0.0178756

Alignment:
GDDDBTTAATTAABBVV
------TAMATA-----

Original motif
Consensus sequence: VVVVTTAATTAABDDDC



Reverse complement motif
Consensus sequence: GDDDBTTAATTAABBVV



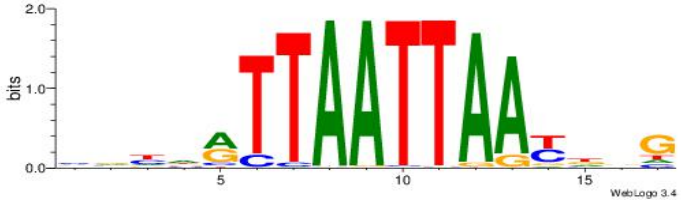
Motif ID: UP00237
Motif name: Otp
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 6
Similarity score: 0.0179741

Alignment:
CHDMTTAATTAAKDHVV
-----TAMATA------

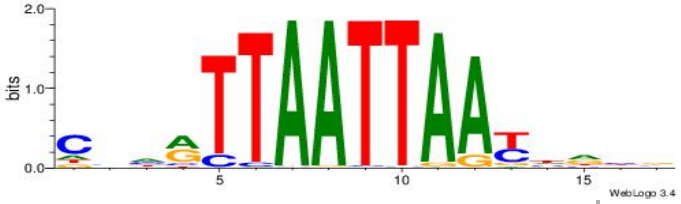
Original motif

Reverse complement motif

Consensus sequence: VVHDRTTAATTAAYDDG



Consensus sequence: CHDMTTAATTAAKDHVV



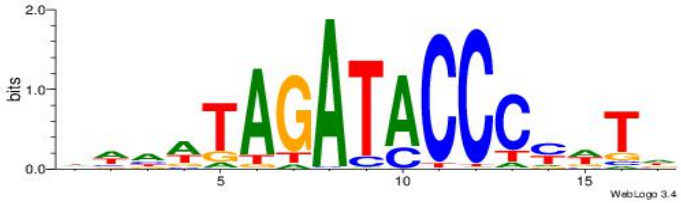
Motif ID:	UP00232
Motif name:	Dobox4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0179753

Alignment:

```
DAWKGGGTATCTAWHWH
-------TATRTA----
```

Original motif

Consensus sequence: HWHWTAGATACCCYWTD



Reverse complement motif

Consensus sequence: DAWKGGGTATCTAWHWH

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

Original motif

Consensus sequence: CCGCCGCC

Reverse complement motif

Consensus sequence: GGCGGCGG

Best Matches for Motif ID 11 (Highest to Lowest)

Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.00319355

Alignment:

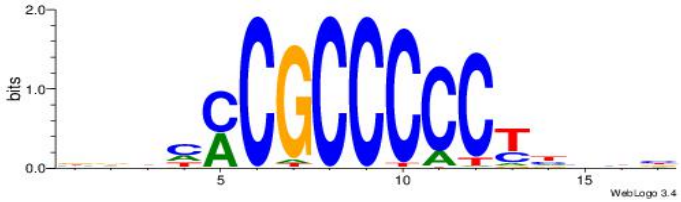
```
BDHHMCGCCCCCTHVBB
----CCGCCGCC-----
```

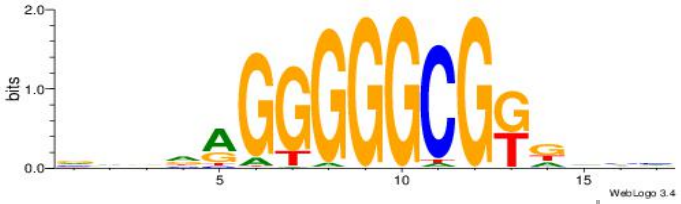
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB

Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB





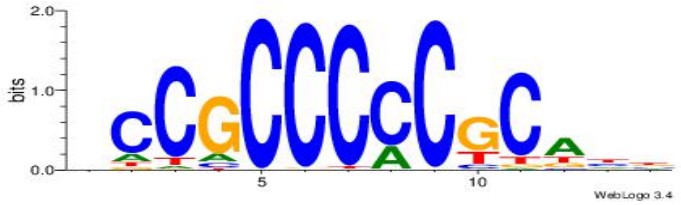
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.00646974

Alignment:

```
VHTGCGGGGGCGGH
-----GGCGGCGG-
```

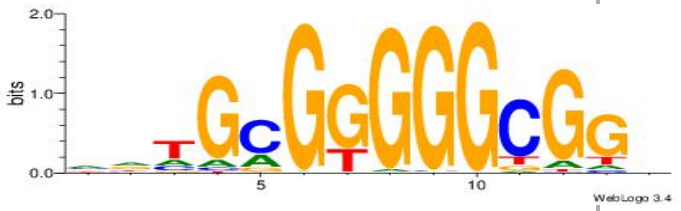
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID:	UP00093

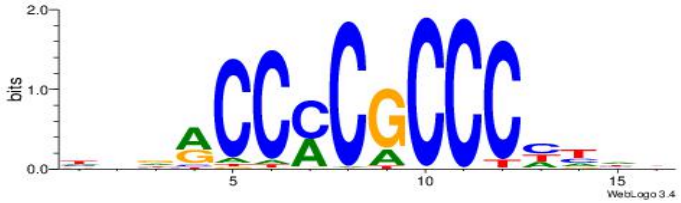
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0238664

Alignment:

```
DHHDGGGCGRGGKHBH
-----GGCGGCGG---
```

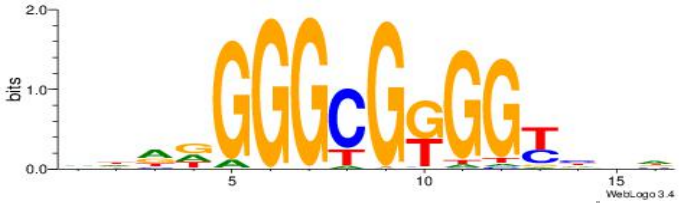
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH

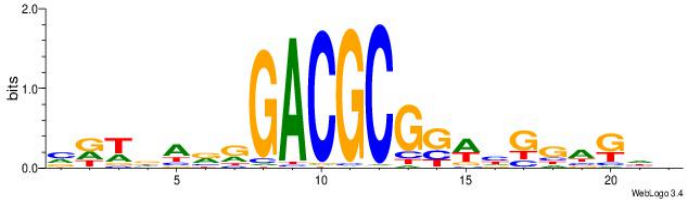


Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	8

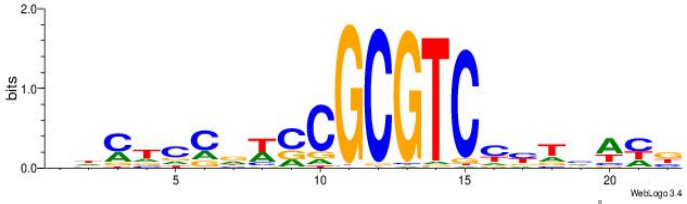
Similarity score: 0.0278448

Alignment:
VDWDARRGACGCGGWHGGAKHV
------GGCGGCGG--------

Original motif
Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif
Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

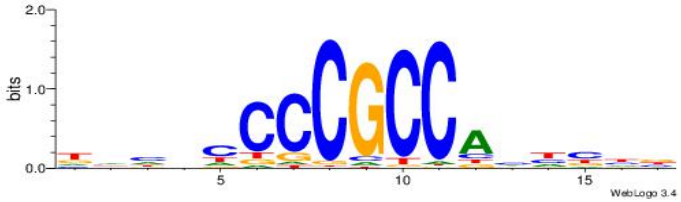


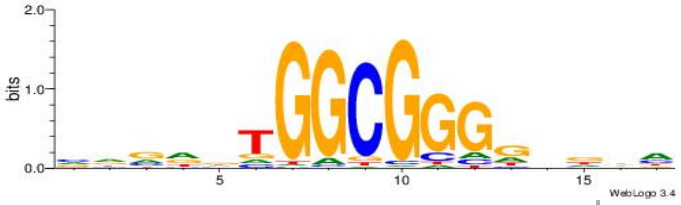
Motif ID: UP00000
Motif name: Smad3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 8
Similarity score: 0.028459

Alignment:
DHHBCCCCGCCAHHBHB
---CCGCCGCC------

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB

Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD





Motif ID:	UP00010
Motif name:	Tcfap2b_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:	8
Similarity score:	0.0291826

Alignment:

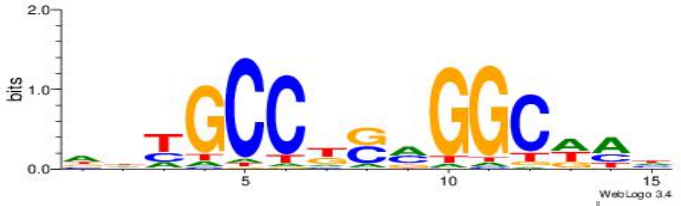
```
DTWGCCKSMGGCRHH
---GGCGGCGG----
```

Original motif

Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD



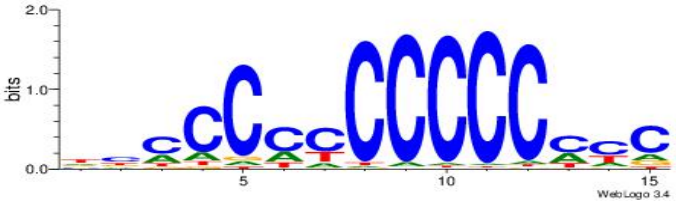
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0293811

Alignment:

```
GKRGGGGGGGGGBD
---GGCGGCGG----
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

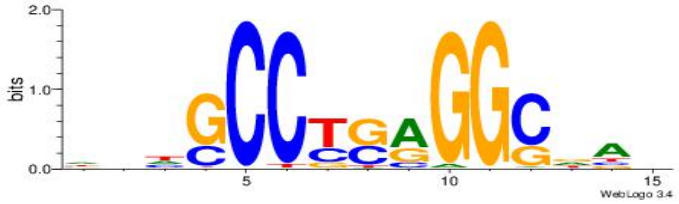
Consensus sequence: GKRGGGGGGGGGBD

Motif ID:	UP00028
Motif name:	Tcfap2e_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

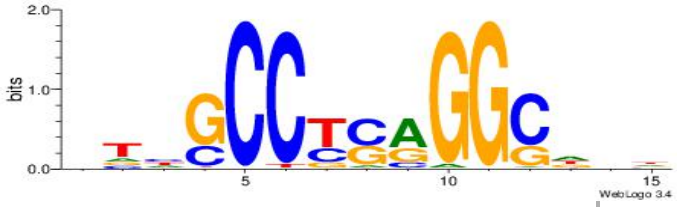
Number of overlap: 8
Similarity score: 0.0298524

Alignment:
DTHGCCTSAGGCHHH
---GGCGGCGG----

Original motif
Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif
Consensus sequence: DTHGCCTSAGGCHHH



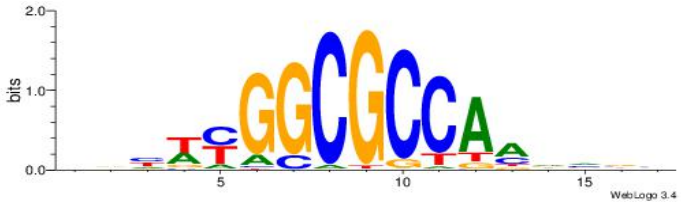
Motif ID: UP00003
Motif name: E2F3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 8
Similarity score: 0.0333911

Alignment:
BBBDYTGGCGCCKWDBD
------GGCGGCGG---

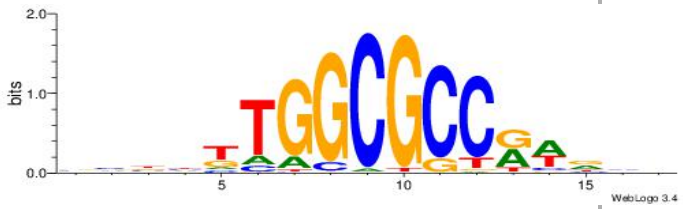
Original motif

Reverse complement motif

Consensus sequence: HBHWYGGCGCCAMDVBB



Consensus sequence: BBBDYTGGCGCCKWDBD



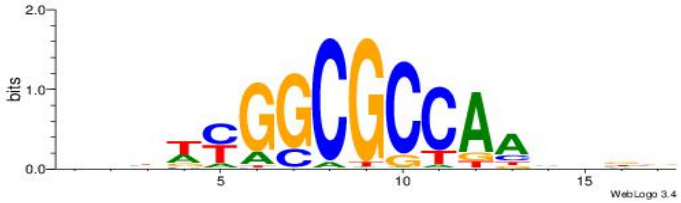
Motif ID:	UP00001
Motif name:	E2F2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0345259

Alignment:

```
BBBDTTGGCGCCKWVVD
------GGCGGCGG---
```

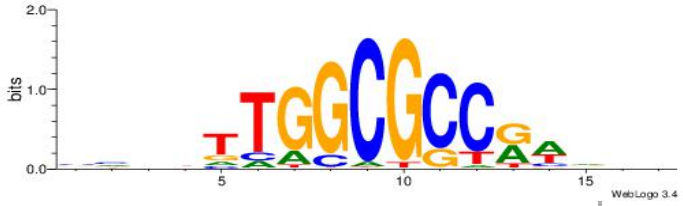
Original motif

Consensus sequence: HVBWYGGCGCCAADVBB



Reverse complement motif

Consensus sequence: BBBDTTGGCGCCKWVVD



Dataset #: 1 **Motif ID: 12** **Motif name: Motif 12**

Original motif

Consensus sequence: AGGMCAGC

Reverse complement motif

Consensus sequence: GCTGRCCT

Best Matches for Motif ID 12 (Highest to Lowest)

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:	4
Number of overlap:	8
Similarity score:	0

Alignment:

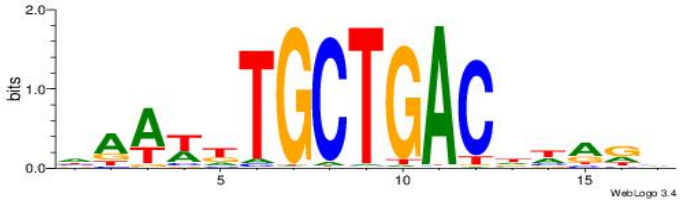
```
HAAWDTGCTGACDWARH
------GCTGRCCT---
```

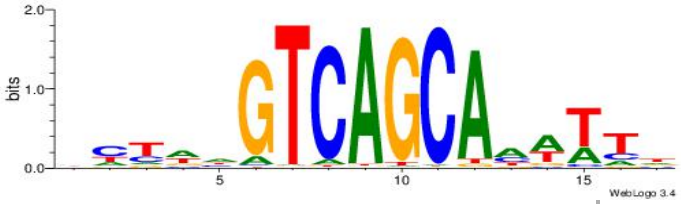
Original motif

Consensus sequence: HAAWDTGCTGACDWARH

Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH





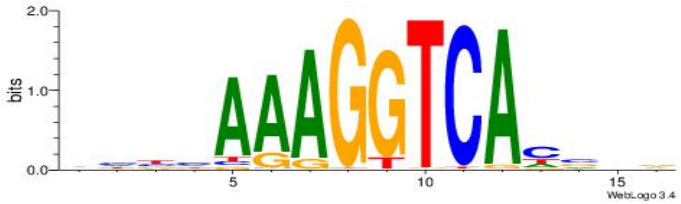
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.00167433

Alignment:

```
HHVGTGACCTTTDVDD
--GCTGRCCT------
```

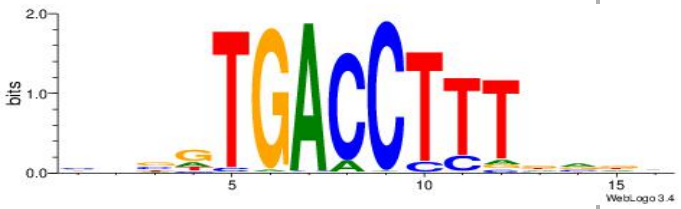
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD



Motif ID:	UP00079

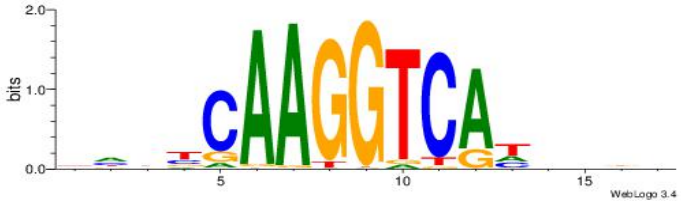
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.00403191

Alignment:

```
HHBVHTGACCTTGVDHD
---GCTGRCCT------
```

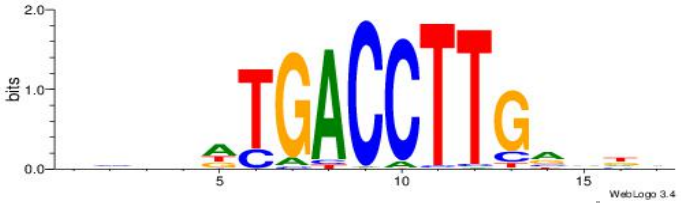
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD

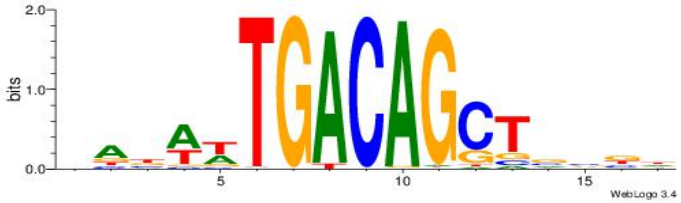


Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8

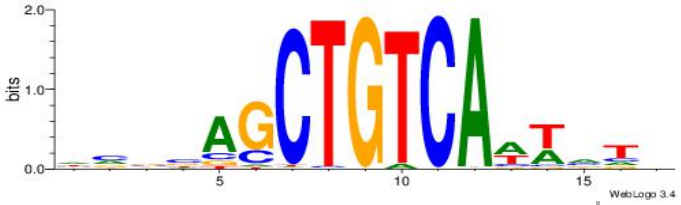
Similarity score: 0.00799523

Alignment:
DABWWTGACAGCTVVBD
----AGGMCAGC-----

Original motif
Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif
Consensus sequence: DBVVAGCTGTCAWWVTH

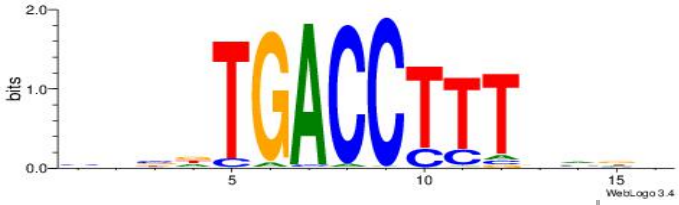


Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	8
Similarity score:	0.00808575

Alignment:
BHVDTGACCTTTDVDD
--GCTGRCCT------

Original motif
Consensus sequence: DHBHAAAGGTCAHVHB

Reverse complement motif
Consensus sequence: BHVDTGACCTTTDVDD



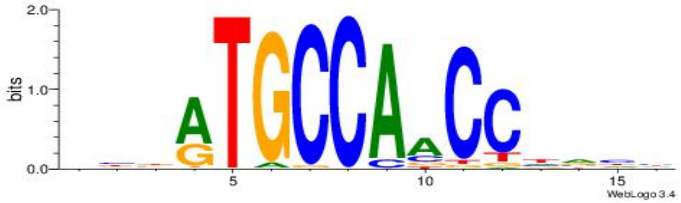
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0141098

Alignment:

```
DDBHGGTTGGCATVBD
-----GCTGRCCT---
```

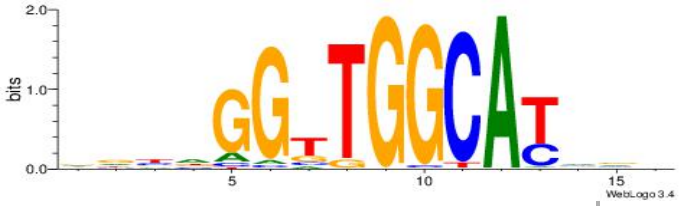
Original motif

Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD



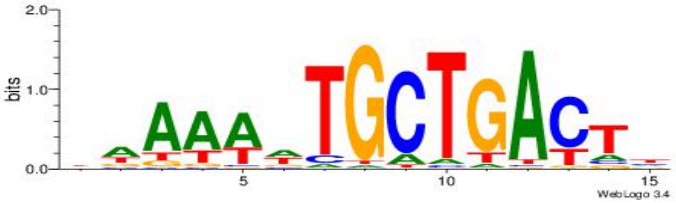
Motif ID:	UP00044
Motif name:	Mafk_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0149298

Alignment:

```
DWAAAWTGCTGACTH
-------GCTGRCCT
```

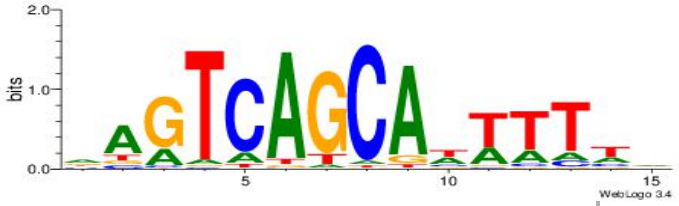
Original motif

Consensus sequence: DWAAAWTGCTGACTH



Reverse complement motif

Consensus sequence: HAGTCAGCAWTTTWD

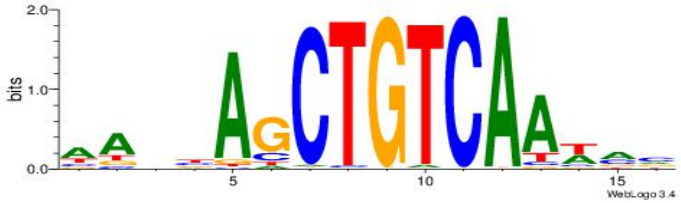


Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

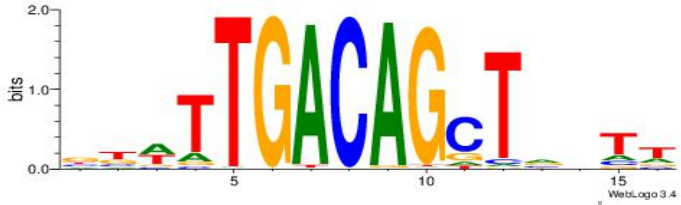
Number of overlap: 8
Similarity score: 0.0156273

Alignment:
VBWTTGACAGCTVBTT
---AGGMCAGC-----

Original motif
Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif
Consensus sequence: VBWTTGACAGCTVBTT



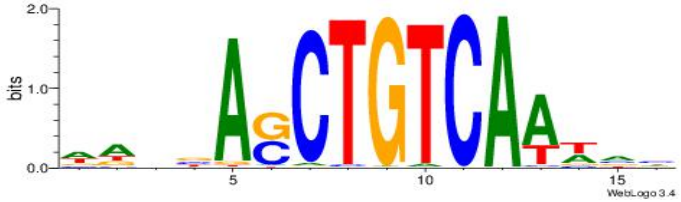
Motif ID: UP00186
Motif name: Meis1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 8
Similarity score: 0.0171725

Alignment:
DBWTTGACAGSTBVTW
---AGGMCAGC-----

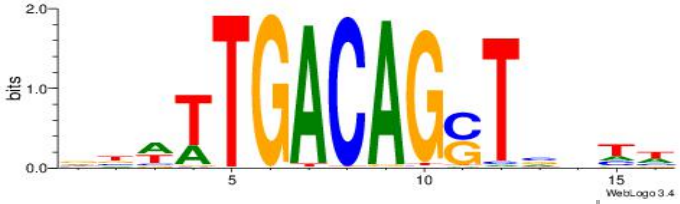
Original motif

Reverse complement motif

Consensus sequence: WAVBASCTGTCAAWVH



Consensus sequence: DBWTTGACAGSTBVTW



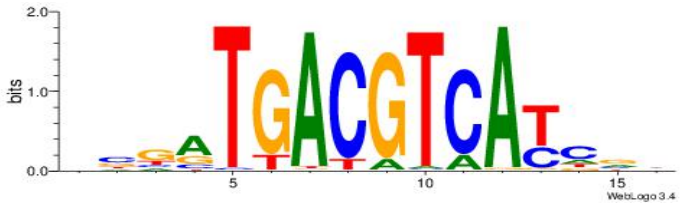
Motif ID:	UP00103
Motif name:	Jundm2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0.0215057

Alignment:

```
HVGMTGACGTCATCBB
--GCTGRCCT------
```

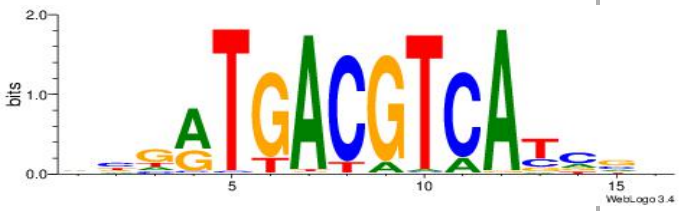
Original motif

Consensus sequence: BBGATGACGTCAYCVH



Reverse complement motif

Consensus sequence: HVGMTGACGTCATCBB



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

Original motif

Consensus sequence: GAGRCAGR

Reverse complement motif

Consensus sequence: MCTGKCTC

Best Matches for Motif ID 13 (Highest to Lowest)

Motif ID:	UP00205
Motif name:	Pknox2
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

Alignment:

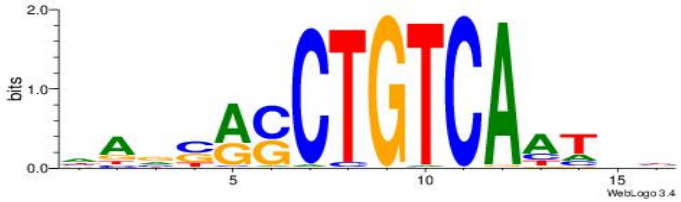
```
HAVSRSCTGTCAATHB
-----MCTGKCTC---
```

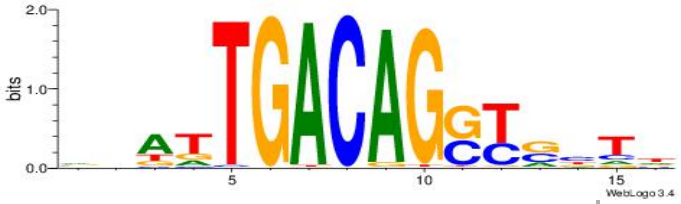
Original motif

Consensus sequence: HAVSRSCTGTCAATHB

Reverse complement motif

Consensus sequence: VHATTGACAGSKSVTH





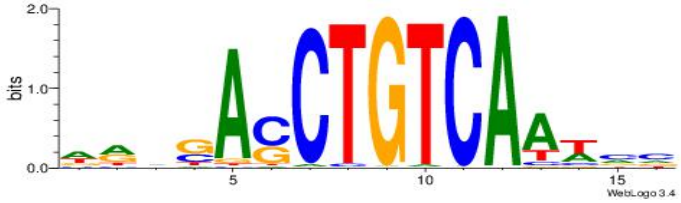
Motif ID:	UP00203
Motif name:	Pknox1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0024357

Alignment:

```
DRVSASCTGTCAAWVV
-----MCTGKCTC---
```

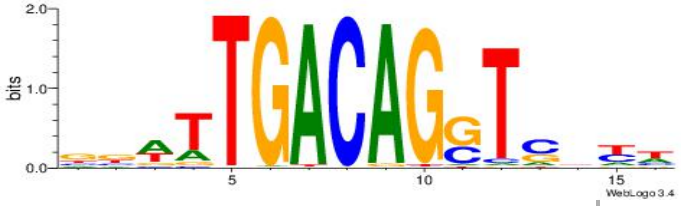
Original motif

Consensus sequence: DRVSASCTGTCAAWVV



Reverse complement motif

Consensus sequence: VVWTTGACAGSTSBKD



Motif ID:	UP00226

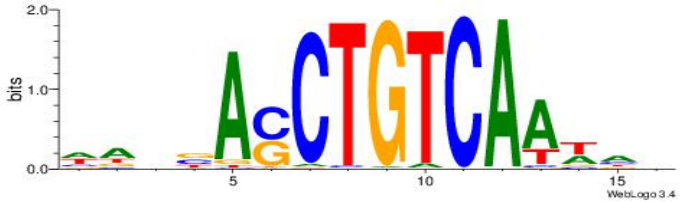
Motif name:	Mrg1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.00532831

Alignment:

```
WAVBASCTGTCAAWHB
-----MCTGKCTC---
```

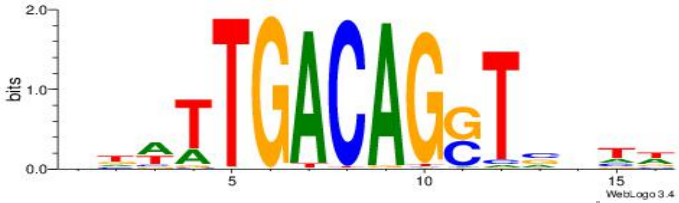
Original motif

Consensus sequence: WAVBASCTGTCAAWHB



Reverse complement motif

Consensus sequence: BHWTTGACAGSTBBTW

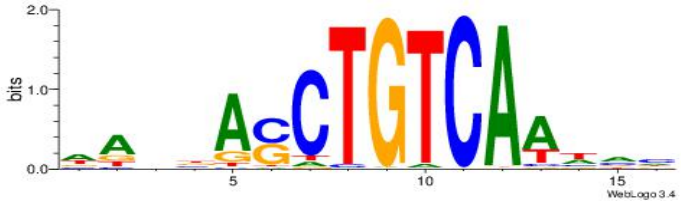


Motif ID:	UP00210
Motif name:	Mrg2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8

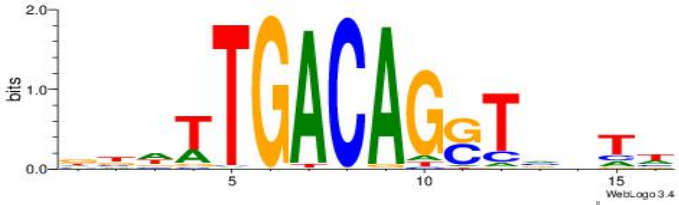
Similarity score: 0.00847279

Alignment:
DADBASCTGTCAAHVH
-----MCTGKCTC---

Original motif
Consensus sequence: DADBASCTGTCAAHVH



Reverse complement motif
Consensus sequence: DBHTTGACAGSTVDTD

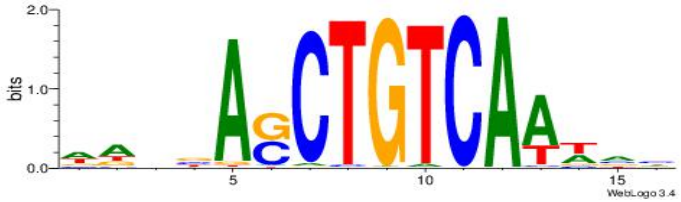


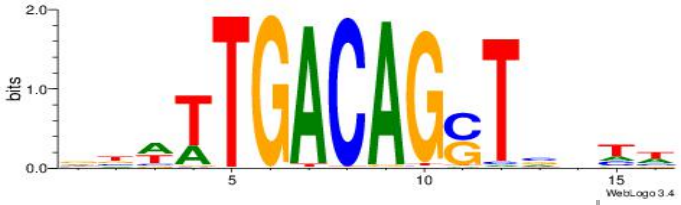
Motif ID:	UP00186
Motif name:	Meis1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.00869293

Alignment:
WAVBASCTGTCAAWVH
-----MCTGKCTC---

Original motif
Consensus sequence: WAVBASCTGTCAAWVH

Reverse complement motif
Consensus sequence: DBWTTGACAGSTBVTW





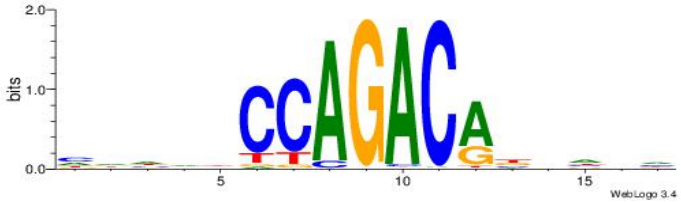
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00919674

Alignment:

```
HDHDDCCAGACABBHVH
------GAGRCAGR---
```

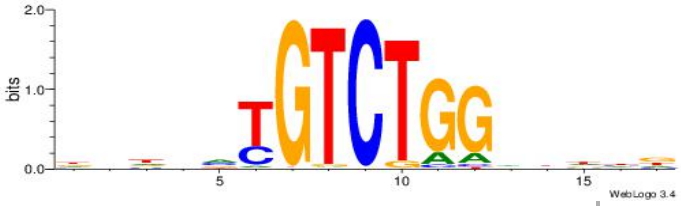
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



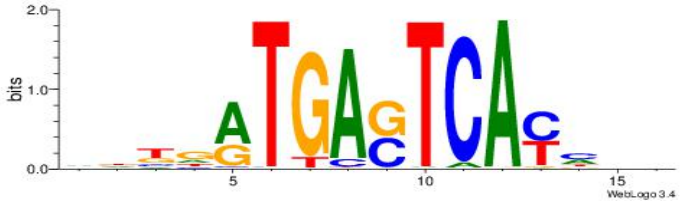
Motif ID:	UP00103
Motif name:	Jundm2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.00968214

Alignment:

```
HDDKTGASTCAKHRDB
-----GAGRCAGR---
```

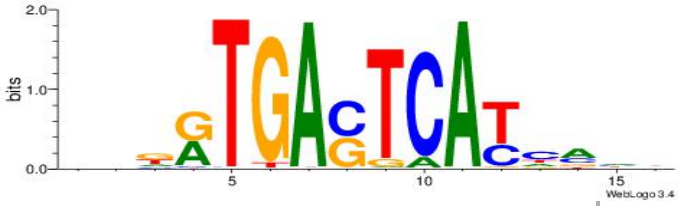
Original motif

Consensus sequence: VDKDRTGASTCAYHDH



Reverse complement motif

Consensus sequence: HDDKTGASTCAKHRDB

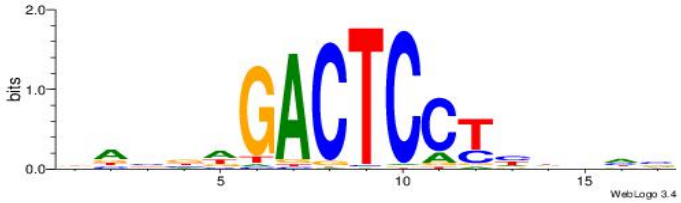


Motif ID:	UP00095
Motif name:	Zfp691_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3

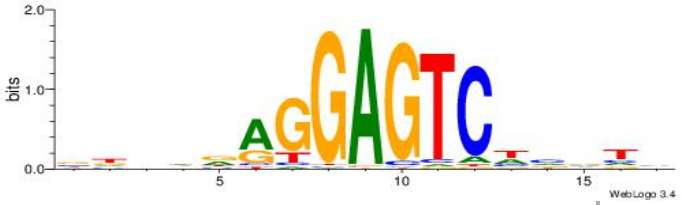
Number of overlap: 8
Similarity score: 0.0110909

Alignment:
DABBWGACTCCTHDVHV
--MCTGKCTC-------

Original motif
Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif
Consensus sequence: VHBDDAGGAGTCWBBTD



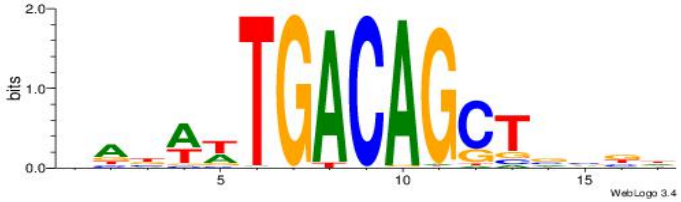
Motif ID: UP00122
Motif name: Tgif1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0125857

Alignment:
DABWWTGACAGCTVVBD
----GAGRCAGR-----

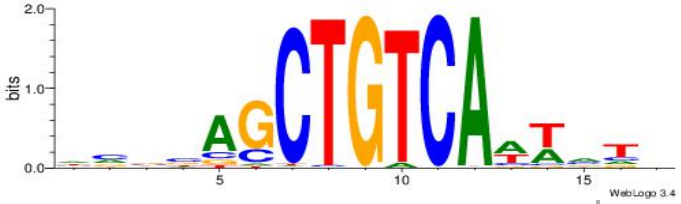
Original motif

Reverse complement motif

Consensus sequence: DABWWTGACAGCTVVBD



Consensus sequence: DBVVAGCTGTCAWWVTH



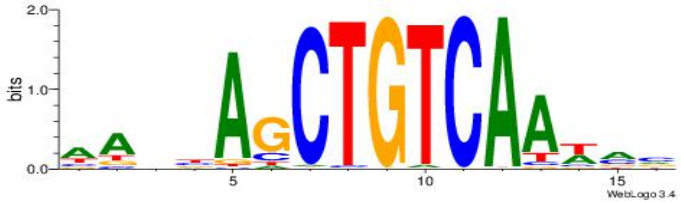
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0145433

Alignment:

```
AABBAGCTGTCAAWVV
-----MCTGKCTC---
```

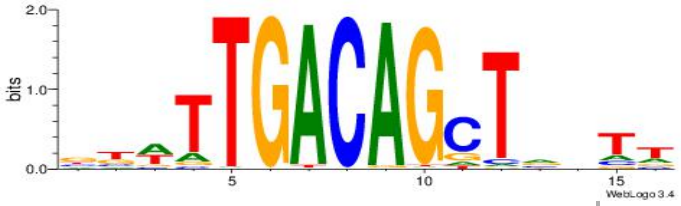
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Dataset #: 1 **Motif ID: 14** **Motif name: Motif 14**

Original motif

Consensus sequence: GCRCACRC

Reverse complement motif

Consensus sequence: GKGTGKGC

Best Matches for Motif ID 14 (Highest to Lowest)

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:	5
Number of overlap:	8
Similarity score:	0

Alignment:

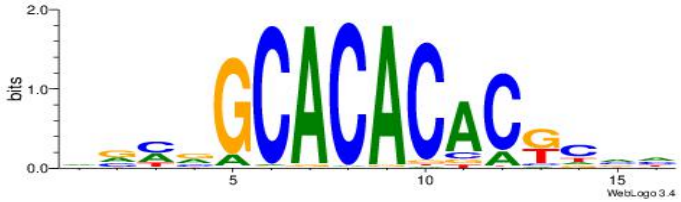
```
DVMVGCACACACKCVH
----GCRCACRC----
```

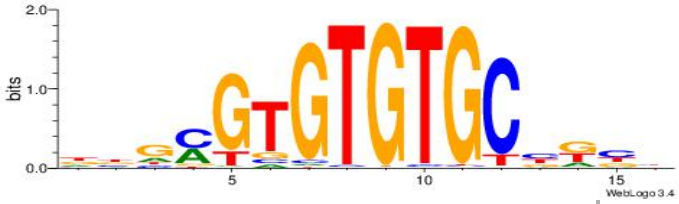
Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD





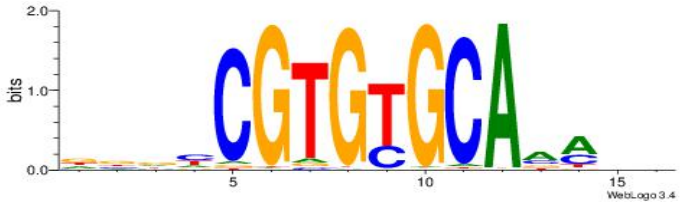
Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0261244

Alignment:

```
HDYTTGCACACGDHBH
-----GCRCACRC---
```

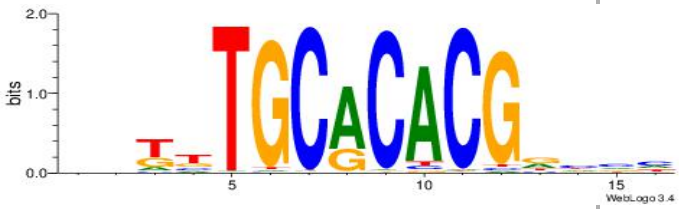
Original motif

Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH



Motif ID:	UP00538

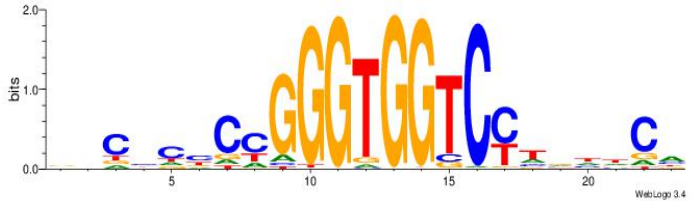
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	8
Similarity score:	0.0329776

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
--------GKGTGKGC-------
```

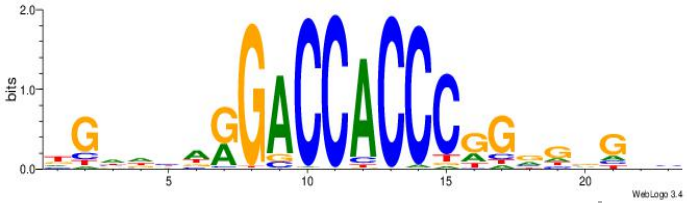
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

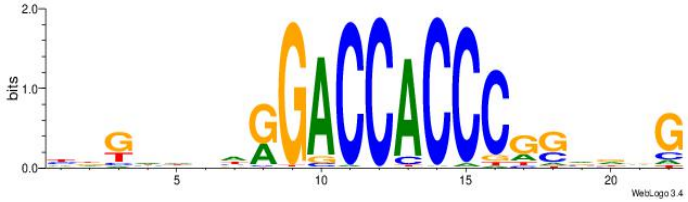


Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	8

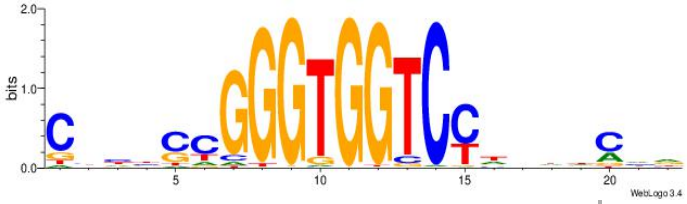
Similarity score: 0.0341116

Alignment:
CVHBSCGGGTGGTCMHVHHCDH
------GKGTGKGC--------

Original motif
Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif
Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH

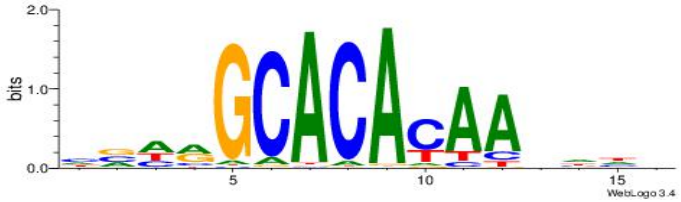


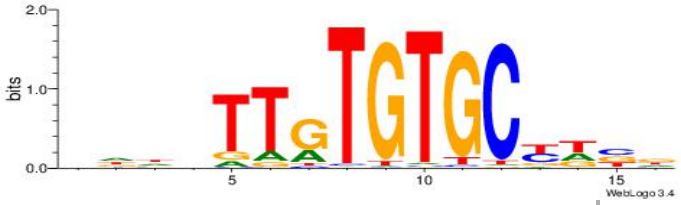
Motif ID: UP00026
Motif name: Zscan4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0351584

Alignment:
HVHRGCACACAAHHHV
----GCRCACRC----

Original motif
Consensus sequence: HVHRGCACACAAHHHV

Reverse complement motif
Consensus sequence: BHHHTTGTGTGCKHVD





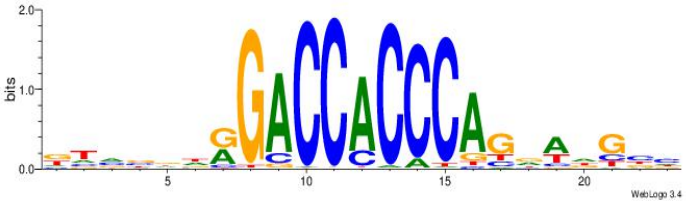
Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	8
Similarity score:	0.0353979

Alignment:

```
DBCDWHCTGGGTGGTCMDHBBAH
--------GKGTGKGC-------
```

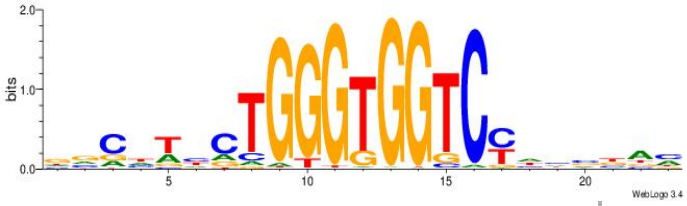
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



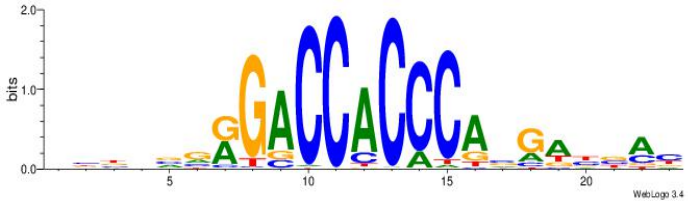
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	8
Similarity score:	0.0359411

Alignment:

```
BTBVTCVTGGGTGGTCMVVDVBB
--------GKGTGKGC-------
```

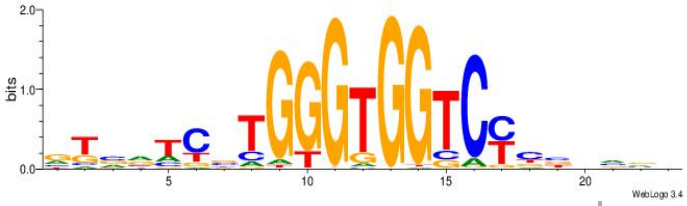
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB

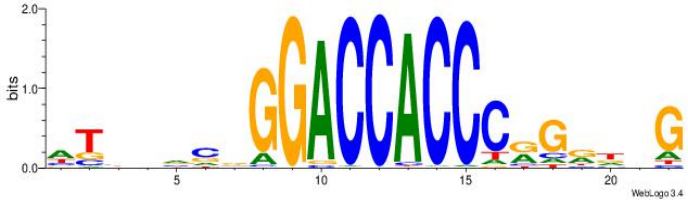


Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9

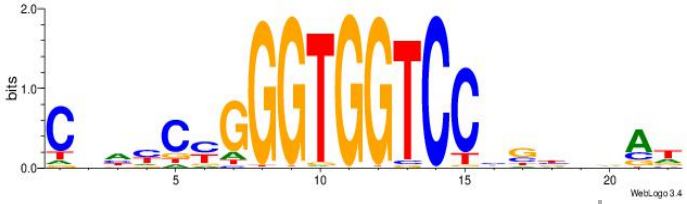
Number of overlap: 8
Similarity score: 0.0360788

Alignment:
CBDMCMGGGTGGTCCHVBVBAH
------GKGTGKGC--------

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



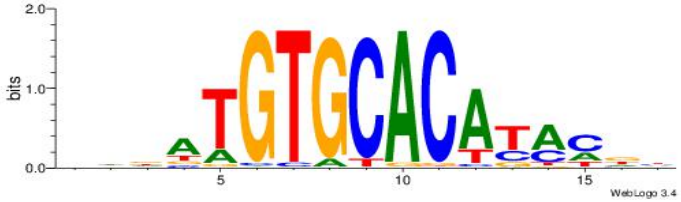
Motif ID: UP00042
Motif name: Gm397_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 8
Similarity score: 0.0376684

Alignment:
HHDATGTGCACATAMDH
-------GCRCACRC--

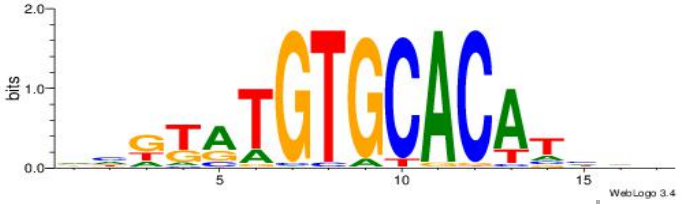
Original motif

Reverse complement motif

Consensus sequence: HHDATGTGCACATAMDH



Consensus sequence: HHRTATGTGCACATHHD



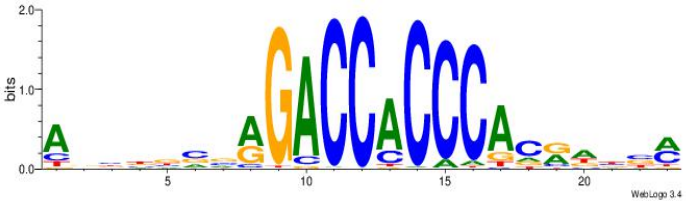
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	8
Similarity score:	0.0381663

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
-------GKGTGKGC--------
```

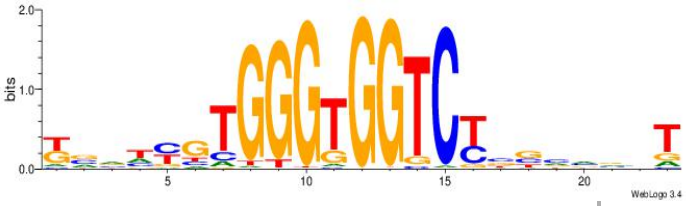
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Dataset #: 1 **Motif ID: 15** **Motif name: Motif 15**

Original motif

Consensus sequence: GRAAATG

Reverse complement motif

Consensus sequence: CATTTKC

Best Matches for Motif ID 15 (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:	7
Number of overlap:	7
Similarity score:	0

Alignment:

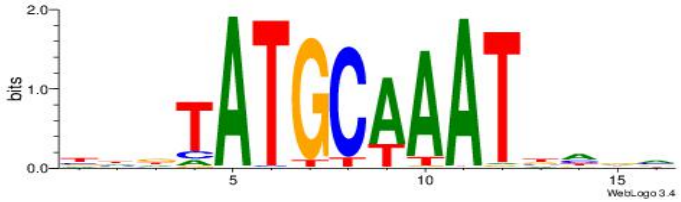
```
BHHVATTTGCATAHHV
---CATTTKC------
```

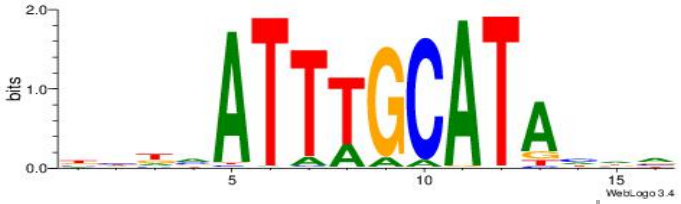
Original motif

Consensus sequence: BHDTATGCAAATBHDV

Reverse complement motif

Consensus sequence: BHHVATTTGCATAHHV





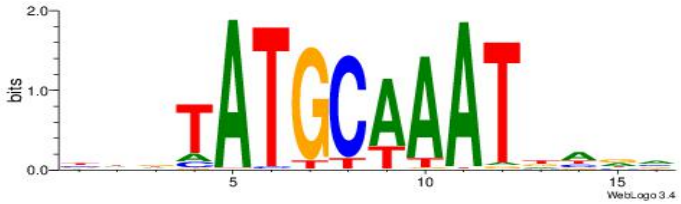
Motif ID:	UP00191
Motif name:	Pou2f2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	7
Similarity score:	0.0024655

Alignment:

```
BHHDATTTGCATAHHV
---CATTTKC------
```

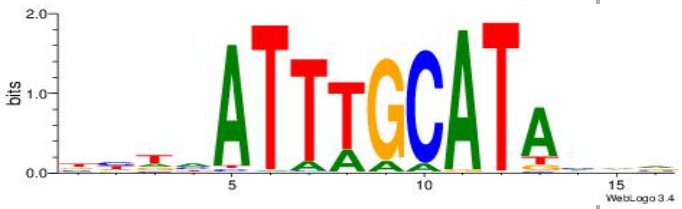
Original motif

Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif

Consensus sequence: BHHDATTTGCATAHHV



Motif ID:	UP00424

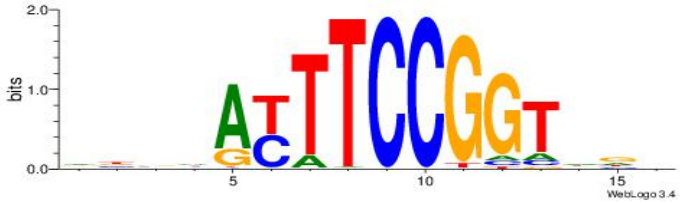
Motif name:	Gm4881
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	7
Similarity score:	0.0185589

Alignment:

```
DHDACCGGAAMTHBVB
------GRAAATG---
```

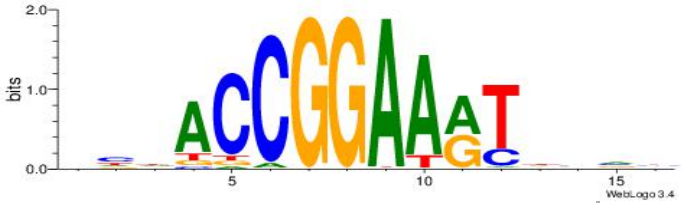
Original motif

Consensus sequence: VBBHAYTTCCGGTDDD



Reverse complement motif

Consensus sequence: DHDACCGGAAMTHBVB



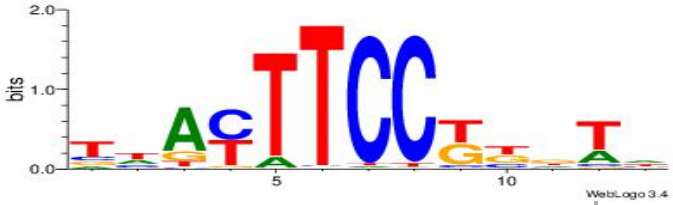
Motif ID:	UP00090
Motif name:	Elf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	7

Similarity score: 0.0206385

Alignment:
DAHMMGGAARTDA
-----GRAAATG-

Original motif
Consensus sequence: DAHMMGGAARTDA

Reverse complement motif
Consensus sequence: TDAMTTCCYYDTD

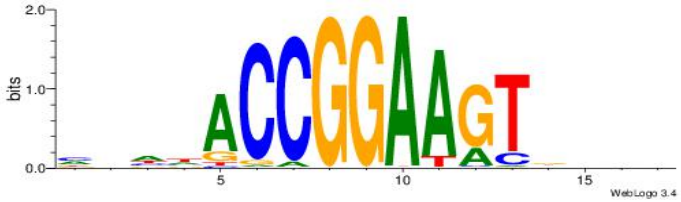


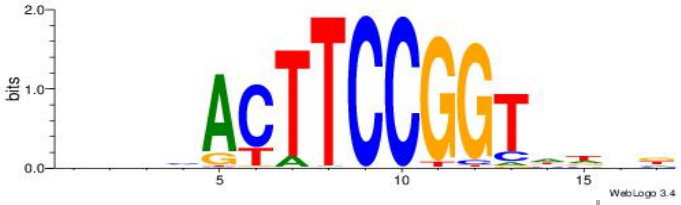
Motif ID: UP00013
Motif name: Gabpa_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 8
Number of overlap: 7
Similarity score: 0.0213964

Alignment:
HVHHACCGGAAGTDHHV
-------GRAAATG---

Original motif
Consensus sequence: HVHHACCGGAAGTDHHV

Reverse complement motif
Consensus sequence: BHHHACTTCCGGTHHBD





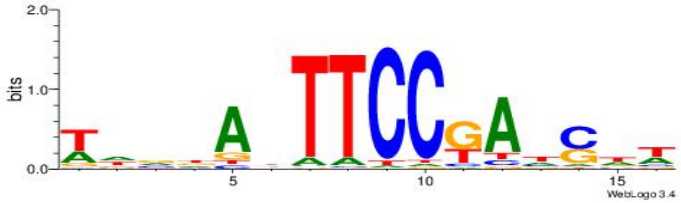
Motif ID:	UP00015
Motif name:	Ehf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	7
Similarity score:	0.0237376

Alignment:

```
WDSHTYGGAAVTDVDW
------GRAAATG---
```

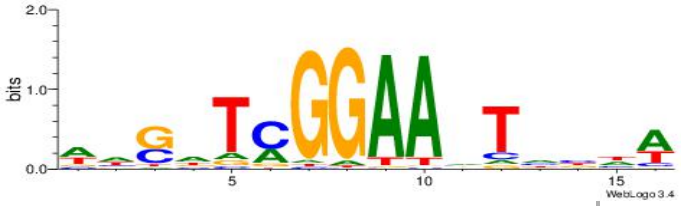
Original motif

Consensus sequence: WDVDABTTCCKAHSDW



Reverse complement motif

Consensus sequence: WDSHTYGGAAVTDVDW



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:	7
Number of overlap:	7
Similarity score:	0.0242017

Alignment:

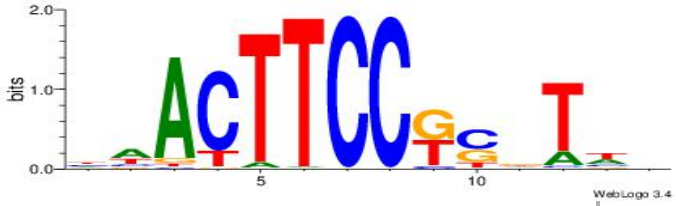
```
BWAHSMGGAAGTWD
------GRAAATG-
```

Original motif

Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRSDTWV



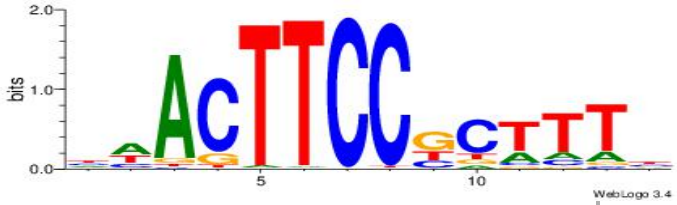
Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7

Number of overlap: 7
Similarity score: 0.0253372

Alignment:
VAAAGMGGAAGTWD
------GRAAATG-

Original motif
Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRCTTTB



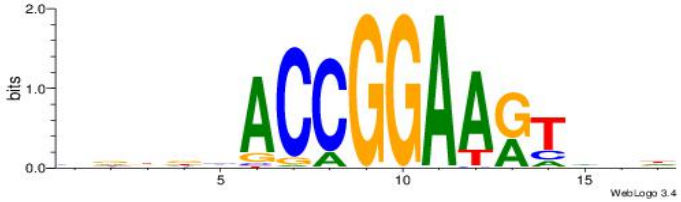
Motif ID: UP00414
Motif name: Ets1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 7
Similarity score: 0.0259997

Alignment:
BDDDHACCGGAARTVDD
--------GRAAATG--

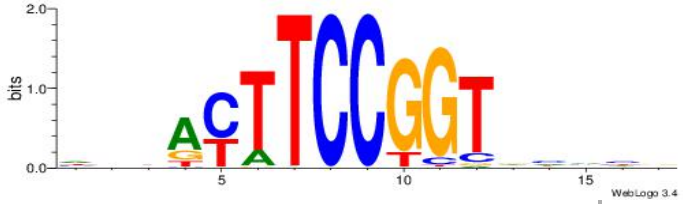
Original motif

Reverse complement motif

Consensus sequence: BDDDHACCGGAARTVDD



Consensus sequence: DDBAMTTCCGGTDHDHB



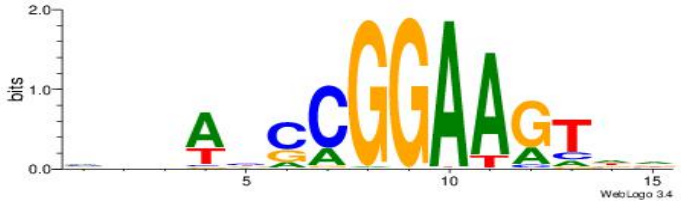
Motif ID:	UP00015
Motif name:	Ehf_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	7
Similarity score:	0.0272781

Alignment:

```
VBDABCCGGAAGTDD
-------GRAAATG-
```

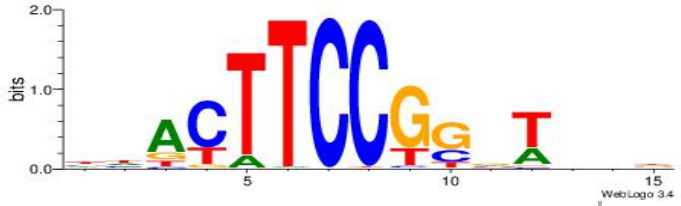
Original motif

Consensus sequence: VBDABCCGGAAGTDD



Reverse complement motif

Consensus sequence: DDACTTCCGGBTHBB



Dataset #: 1 **Motif ID: 16** **Motif name: Motif 16**

Original motif

Consensus sequence: CTGDGTTC

Reverse complement motif

Consensus sequence: GAACDCAG

Best Matches for Motif ID 16 (Highest to Lowest)

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:	9
Number of overlap:	8
Similarity score:	0.0157032

Alignment:

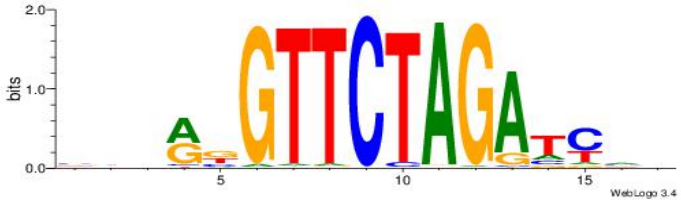
```
BDHRBGTTCTAGATCVB
-CTGDGTTC--------
```

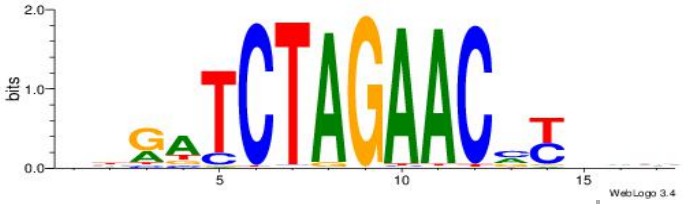
Original motif

Consensus sequence: BDHRBGTTCTAGATCVB

Reverse complement motif

Consensus sequence: BBGATCTAGAACBKHDB





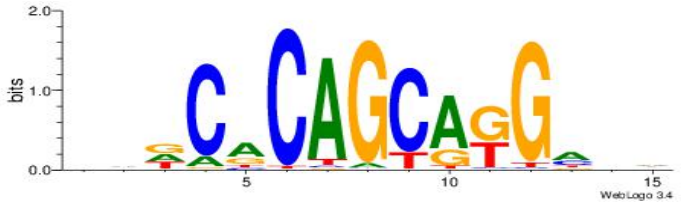
Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	8
Similarity score:	0.0201417

Alignment:

```
DDDCACAGCAKGHVD
GAACDCAG-------
```

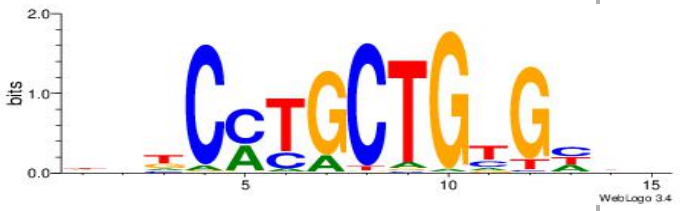
Original motif

Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



Motif ID:	UP00102

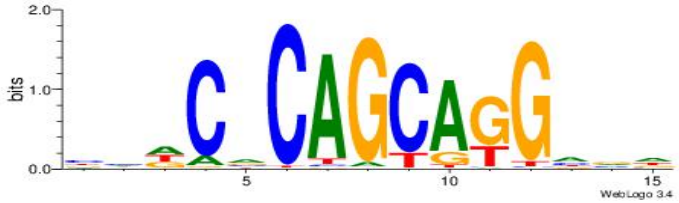
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	8
Similarity score:	0.0217587

Alignment:

```
BHDCVCAGCAGGHVD
GAACDCAG-------
```

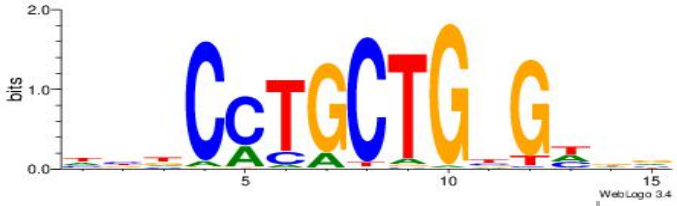
Original motif

Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif

Consensus sequence: DVHCCTGCTGBGDDB

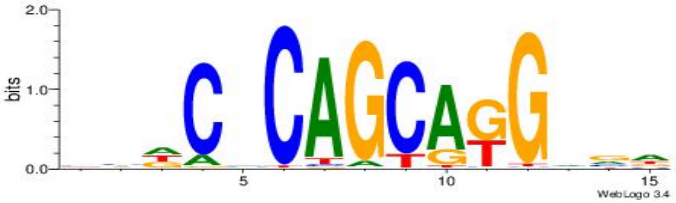


Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	8

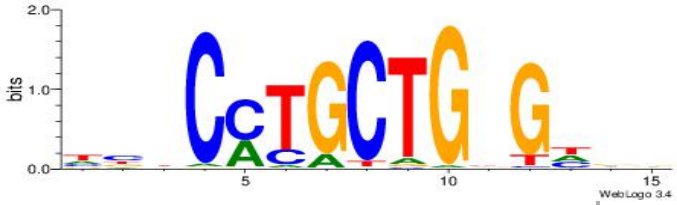
Similarity score: 0.0238424

Alignment:
DVBCYTGCTGBGDDD
-------CTGDGTTC

Original motif
Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif
Consensus sequence: DVBCYTGCTGBGDDD

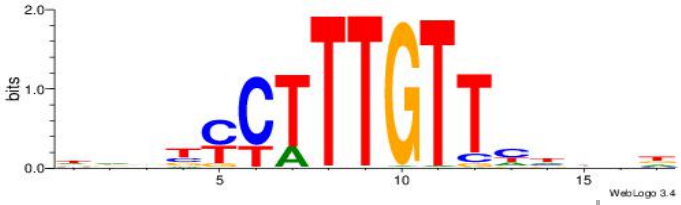


Motif ID: UP00062
Motif name: Sox4_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0269844

Alignment:
HBDDDAACAAAGRVBHH
----GAACDCAG-----

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:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	8
Similarity score:	0.0275902

Alignment:

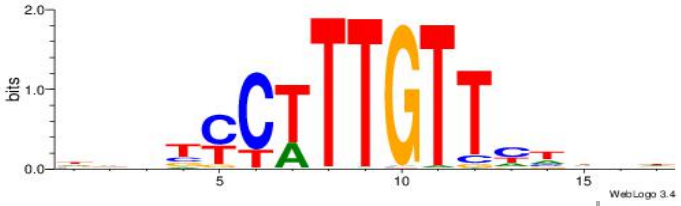
```
HBDDRAACAAAGRABHH
----GAACDCAG-----
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



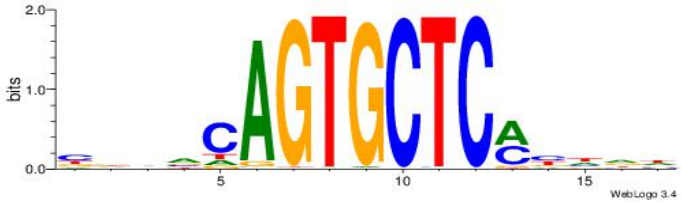
Motif ID:	UP00095
Motif name:	Zfp691_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0327569

Alignment:

```
DDHBYGAGCACTGBHHB
-----GAACDCAG----
```

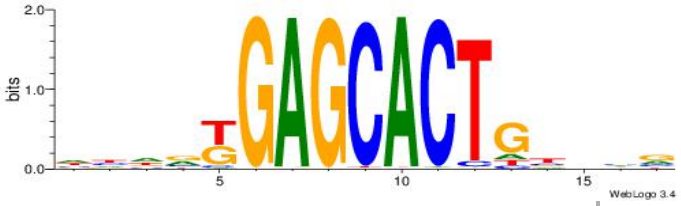
Original motif

Consensus sequence: BDHVCAGTGCTCMBHDD



Reverse complement motif

Consensus sequence: DDHBYGAGCACTGBHHB

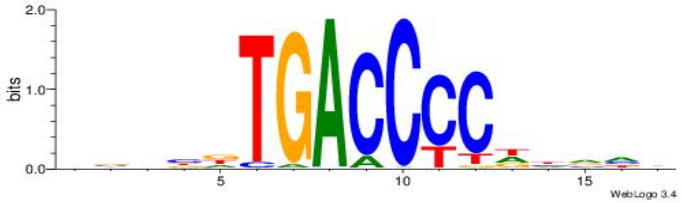


Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7

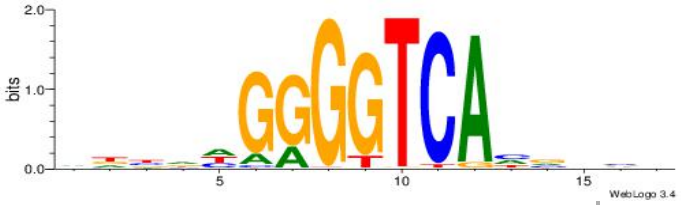
Number of overlap: 8
Similarity score: 0.0328235

Alignment:
VHBHDGGGGTCAHBHBD
---CTGDGTTC------

Original motif
Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif
Consensus sequence: VHBHDGGGGTCAHBHBD



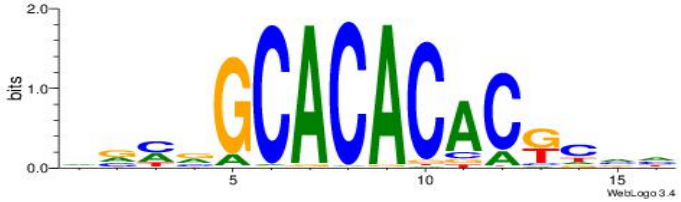
Motif ID: UP00042
Motif name: Gm397_second
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0346944

Alignment:
DVMVGCACACACKCVH
----GAACDCAG----

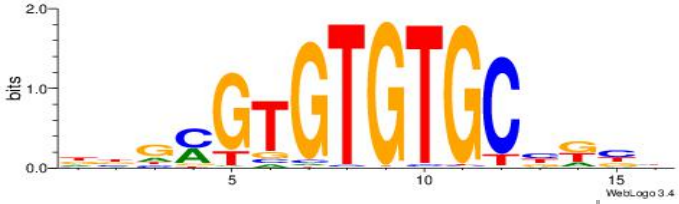
Original motif

Reverse complement motif

Consensus sequence: DVMVGCACACACKCVH



Consensus sequence: HBGYGTGTGTGCVRVD



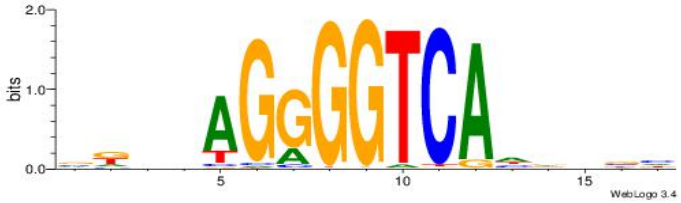
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.0347789

Alignment:

```
VKBBAGGGGTCAHDBBH
---CTGDGTTC------
```

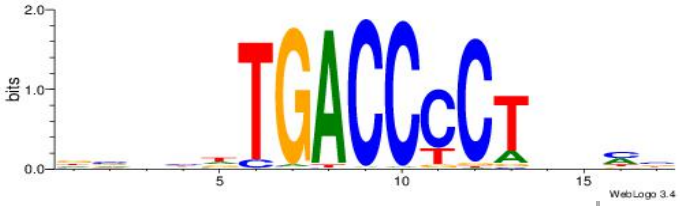
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV



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

Original motif

Consensus sequence: RGGAAR

Reverse complement motif

Consensus sequence: MTTCCK

Best Matches for Motif ID 17 (Highest to Lowest)

Motif ID:	UP00090
Motif name:	Elf3_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:	6
Similarity score:	0

Alignment:

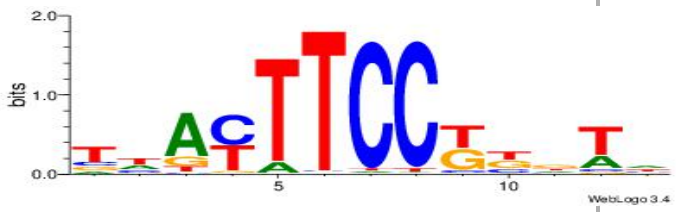
```
TDAMTTCCYYDTD
---MTTCCK----
```

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:	6
Number of overlap:	6
Similarity score:	0.00351709

Alignment:

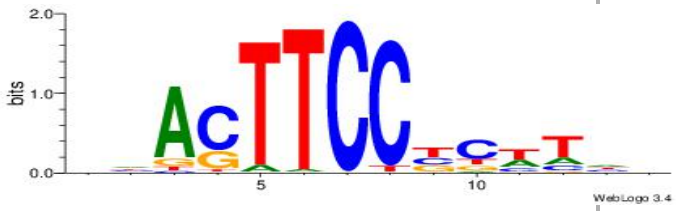
```
BDAWGVGGAAGTDH
-----RGGAAR---
```

Original motif

Consensus sequence: BDAWGVGGAAGTDH

Reverse complement motif

Consensus sequence: HDACTTCCBCWTDV



Motif ID:	UP00414

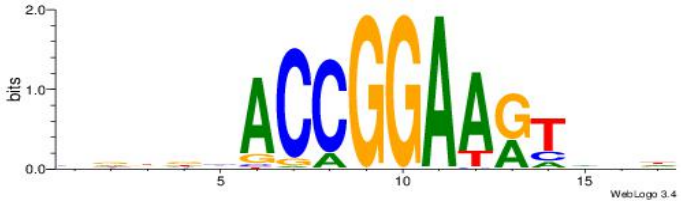
Motif name:	Ets1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.00356242

Alignment:

```
DDBAMTTCCGGTDHDHB
----MTTCCK-------
```

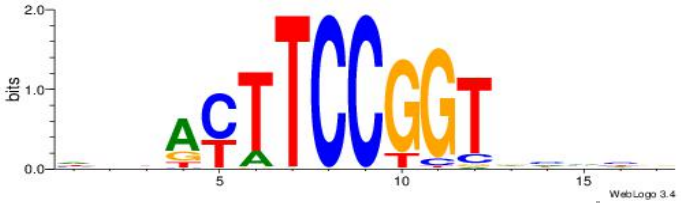
Original motif

Consensus sequence: BDDDHACCGGAARTVDD



Reverse complement motif

Consensus sequence: DDBAMTTCCGGTDHDHB



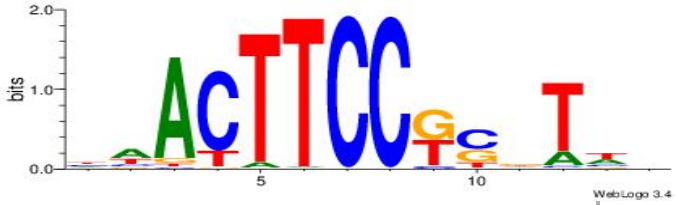
Motif ID:	UP00409
Motif name:	Elf5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	6

Similarity score: 0.00439981

Alignment:
BWAHSMGGAAGTWD
-----RGGAAR---

Original motif
Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRSDTWV

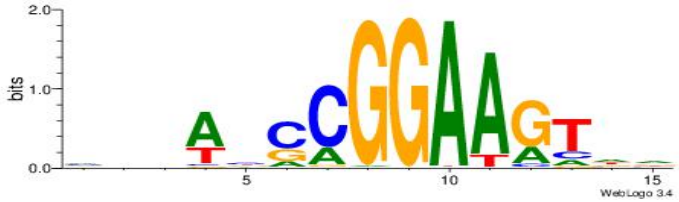


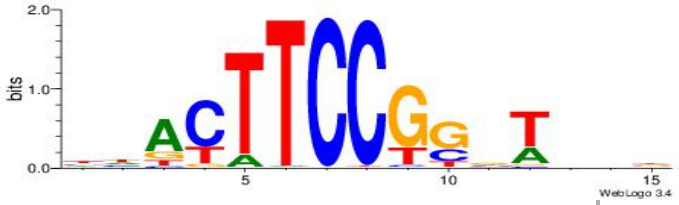
Motif ID: UP00015
Motif name: Ehf_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 6
Similarity score: 0.00655644

Alignment:
DDACTTCCGGBTHBB
---MTTCCK------

Original motif
Consensus sequence: VBDABCCGGAAGTDD

Reverse complement motif
Consensus sequence: DDACTTCCGGBTHBB





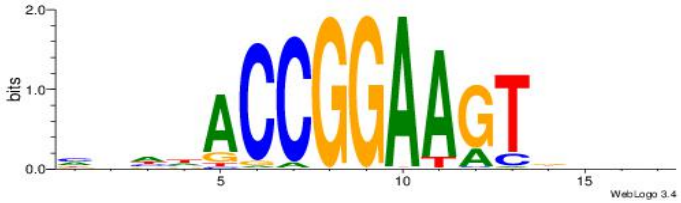
Motif ID:	UP00013
Motif name:	Gabpa_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.00663687

Alignment:

```
BHHHACTTCCGGTHHBD
-----MTTCCK------
```

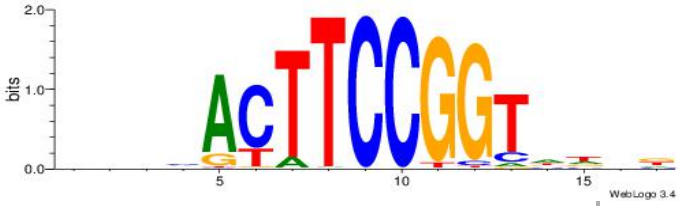
Original motif

Consensus sequence: HVHHACCGGAAGTDHHV



Reverse complement motif

Consensus sequence: BHHHACTTCCGGTHHBD



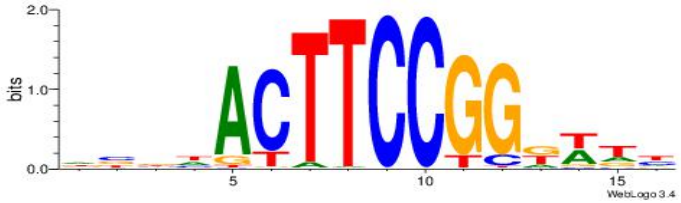
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.00896416

Alignment:

```
DBBHACTTCCGGKWTH
-----MTTCCK-----
```

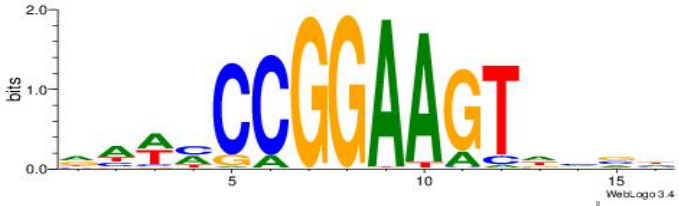
Original motif

Consensus sequence: DBBHACTTCCGGKWTH



Reverse complement motif

Consensus sequence: HAWYCCGGAAGTHBBD



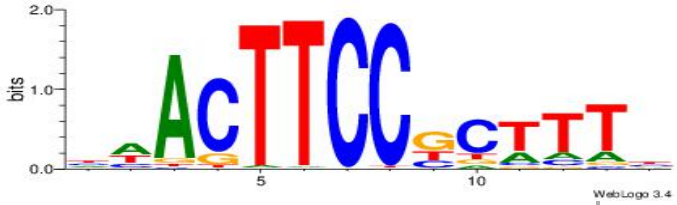
Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6

Number of overlap: 6
Similarity score: 0.00975526

Alignment:
VAAAGMGGAAGTWD
-----RGGAAR---

Original motif
Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRCTTTB



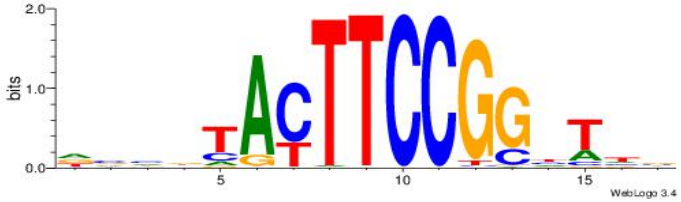
Motif ID: UP00418
Motif name: Etv6
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 6
Similarity score: 0.0103447

Alignment:
DVHBTACTTCCGGHTHB
------MTTCCK-----

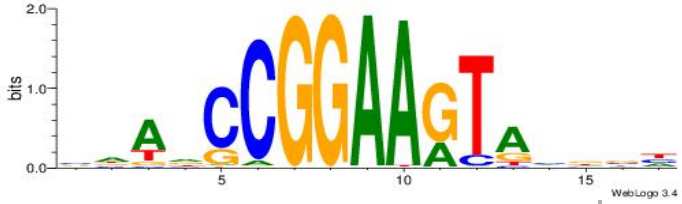
Original motif

Reverse complement motif

Consensus sequence: DVHBTACTTCCGGHTHB



Consensus sequence: BHAHCCGGAAGTABDVD



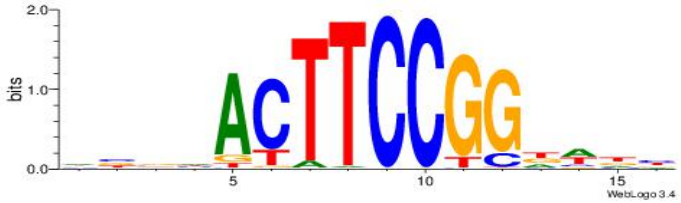
Motif ID:	UP00404
Motif name:	Elf2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.010491

Alignment:

```
DBBHACTTCCGGDWDB
-----MTTCCK-----
```

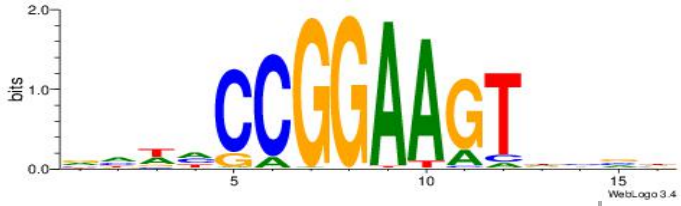
Original motif

Consensus sequence: DBBHACTTCCGGDWDB



Reverse complement motif

Consensus sequence: BDWDCCGGAAGTHBBD



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

Original motif

Consensus sequence: AMACA

Reverse complement motif

Consensus sequence: TGTRT

Best Matches for Motif ID 18 (Highest to Lowest)

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:	7
Number of overlap:	5
Similarity score:	0

Alignment:

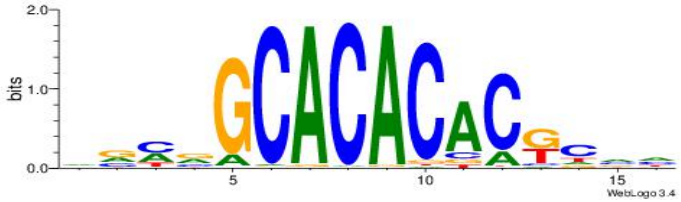
```
DVMVGCACACACKCVH
------AMACA-----
```

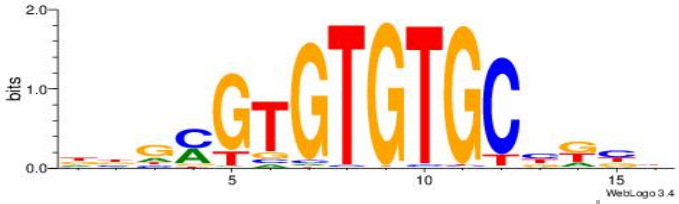
Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD





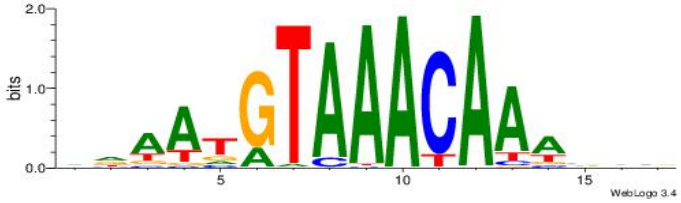
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	5
Similarity score:	0.00605402

Alignment:

```
DDAATGTAAACAAAVVB
-------AMACA-----
```

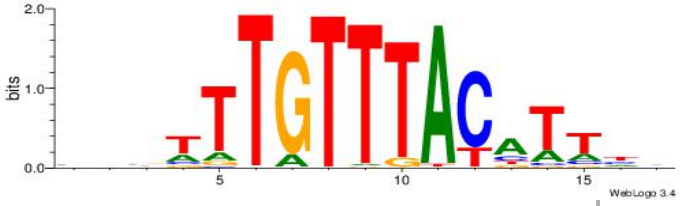
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



Motif ID:	UP00041

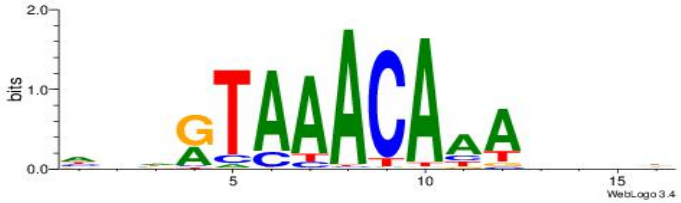
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.00753267

Alignment:

```
HDHRTAAACAAAHDDD
-----AMACA------
```

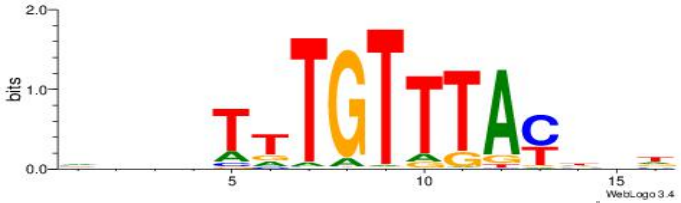
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH

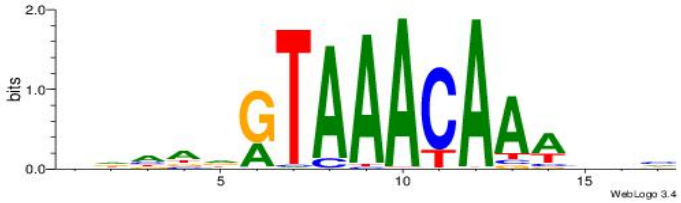


Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	5

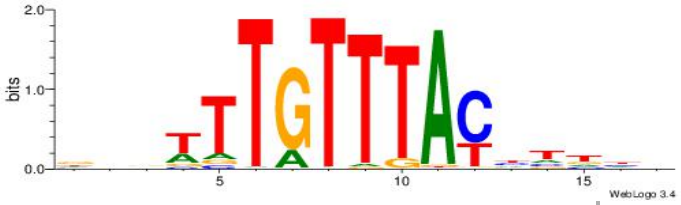
Similarity score: 0.00965634

Alignment:
HDHADGTAAACAAAVVH
-------AMACA-----

Original motif
Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH

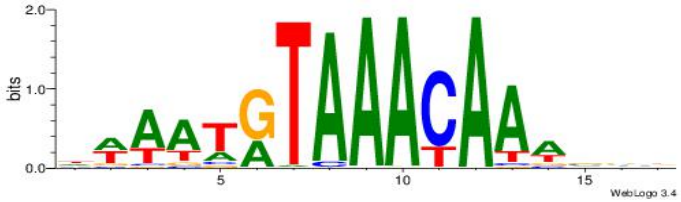


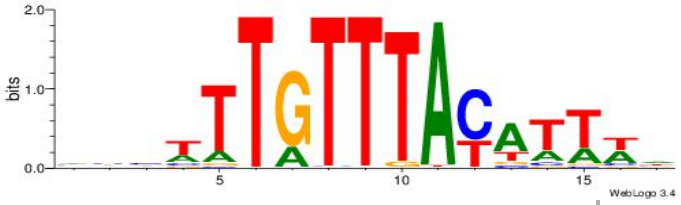
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	5
Similarity score:	0.00989492

Alignment:
DWAATRTAAACAAWVVB
-------AMACA-----

Original motif
Consensus sequence: DWAATRTAAACAAWVVB

Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD





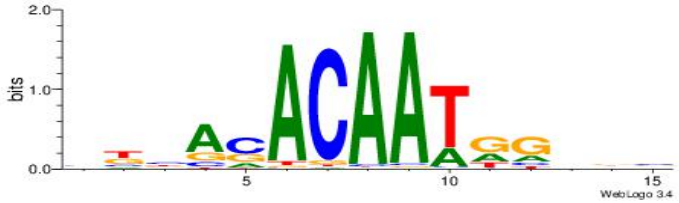
Motif ID:	UP00004
Motif name:	Sox14_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	5
Similarity score:	0.0116453

Alignment:

```
BBDCMATTGTSTBRB
-------TGTRT---
```

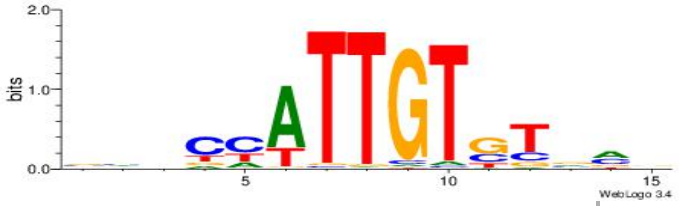
Original motif

Consensus sequence: BKBASACAATRGHBB



Reverse complement motif

Consensus sequence: BBDCMATTGTSTBRB



Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	5
Similarity score:	0.0143122

Alignment:

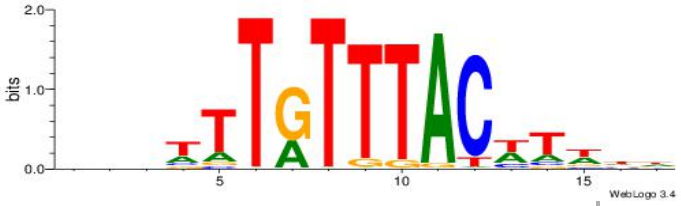
```
HHWAWGTAAAYAAAVDB
-------AMACA-----
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH

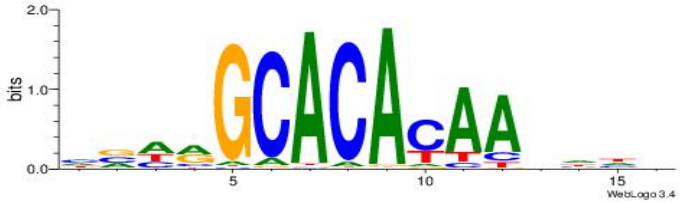


Motif ID:	UP00026
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

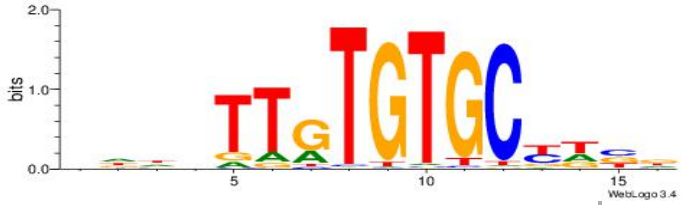
Number of overlap: 5
Similarity score: 0.0153228

Alignment:
BHHHTTGTGTGCKHVD
-----TGTRT------

Original motif
Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif
Consensus sequence: BHHHTTGTGTGCKHVD



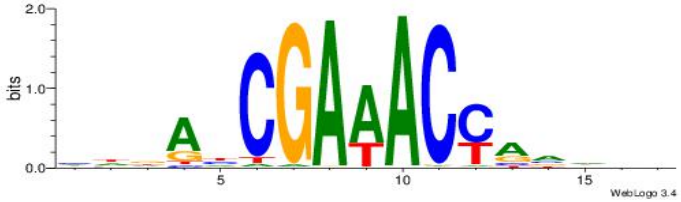
Motif ID: UP00011
Motif name: Irf6_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 5
Similarity score: 0.024195

Alignment:
DHDBTKGTTTCGHTHDD
-----TGTRT-------

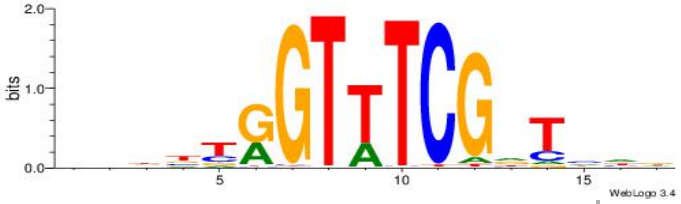
Original motif

Reverse complement motif

Consensus sequence: HDDAHCGAAACYAVDDD



Consensus sequence: DHDBTKGTTTCGHTHDD



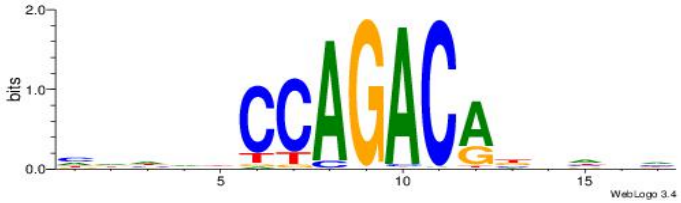
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	5
Similarity score:	0.0255974

Alignment:

```
HVHBVTGTCTGGDDHDD
-----TGTRT-------
```

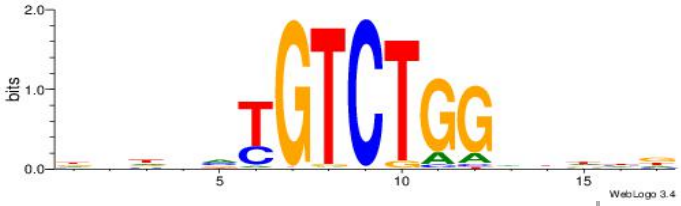
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



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

Original motif

Consensus sequence: AGSCWGG

Reverse complement motif

Consensus sequence: CCWGSCT

Best Matches for Motif ID 19 (Highest to Lowest)

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:	7
Number of overlap:	7
Similarity score:	0

Alignment:

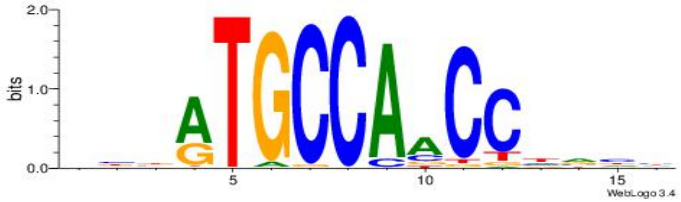
```
DDBHGGTTGGCATVBD
---AGSCWGG------
```

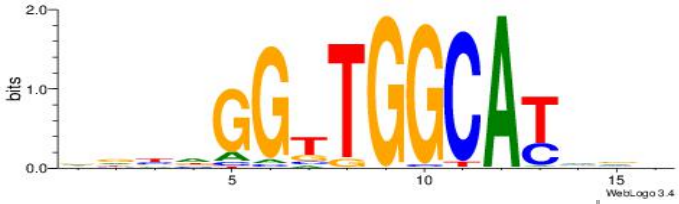
Original motif

Consensus sequence: DBBATGCCAACCHVHH

Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD





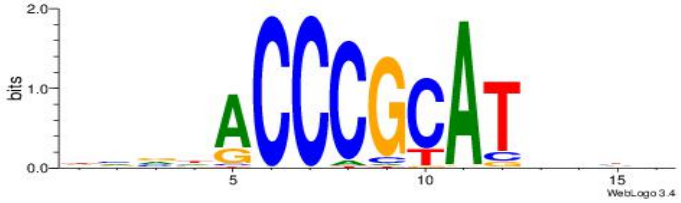
Motif ID:	UP00070
Motif name:	Gcm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	7
Similarity score:	0.00560414

Alignment:

```
DHDVATGCGGGTHVVH
----AGSCWGG-----
```

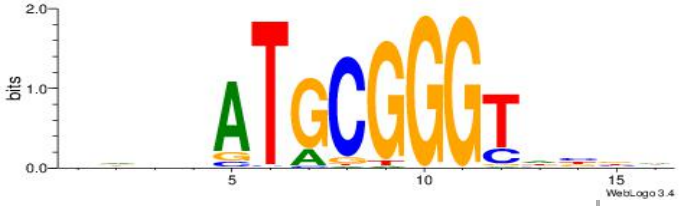
Original motif

Consensus sequence: HVVHACCCGCATVDHD



Reverse complement motif

Consensus sequence: DHDVATGCGGGTHVVH



Motif ID:	UP00095

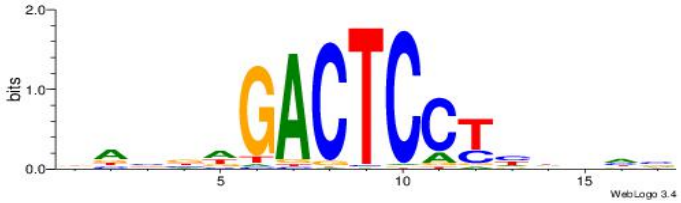
Motif name:	Zfp691_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	7
Similarity score:	0.0109149

Alignment:

```
DABBWGACTCCTHDVHV
--CCWGSCT--------
```

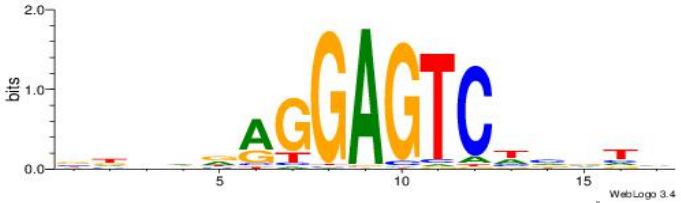
Original motif

Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD

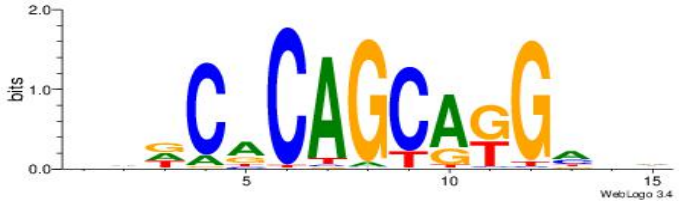


Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	7

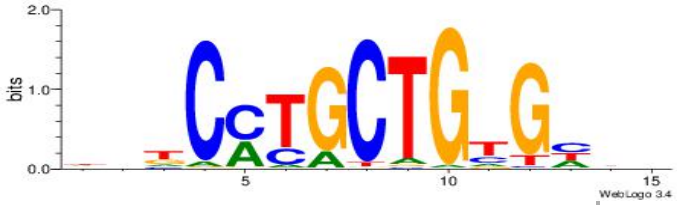
Similarity score: 0.0109242

Alignment:
DVHCYTGCTGTGHDH
--CCWGSCT------

Original motif
Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif
Consensus sequence: DVHCYTGCTGTGHDH

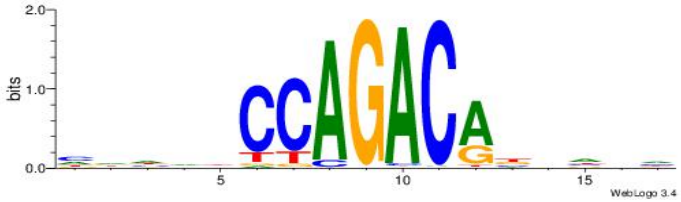


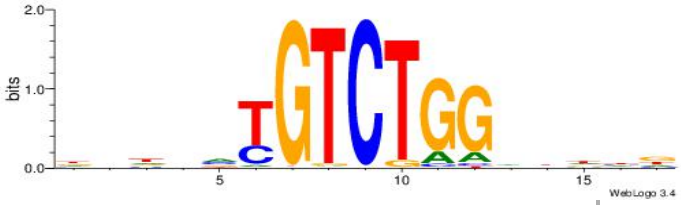
Motif ID: UP00000
Motif name: Smad3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 7
Similarity score: 0.0114503

Alignment:
HDHDDCCAGACABBHVH
-----CCWGSCT-----

Original motif
Consensus sequence: HDHDDCCAGACABBHVH

Reverse complement motif
Consensus sequence: HVHBVTGTCTGGDDHDD





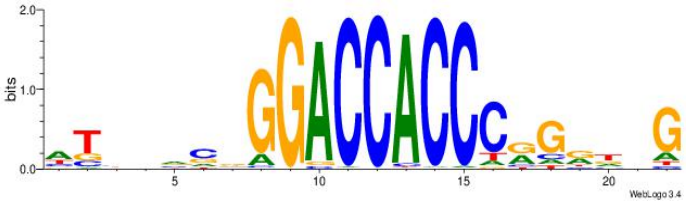
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	7
Similarity score:	0.0115258

Alignment:

```
CBDMCMGGGTGGTCCHVBVBAH
-----AGSCWGG----------
```

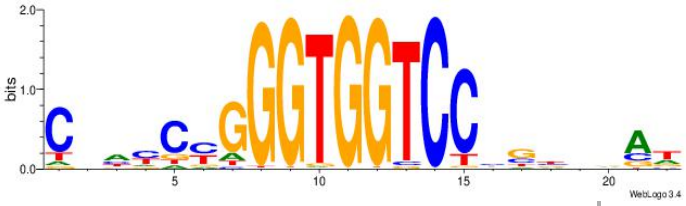
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



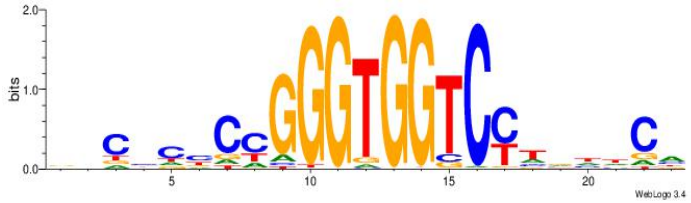
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	7
Similarity score:	0.0117486

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
---------CCWGSCT-------
```

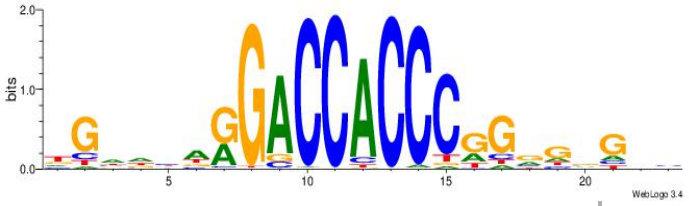
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

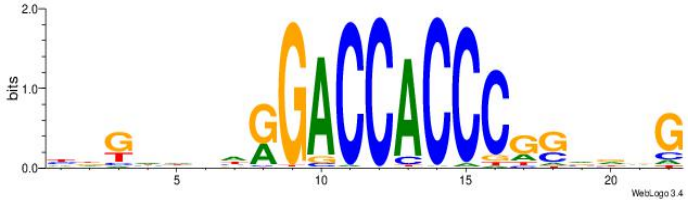


Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	11

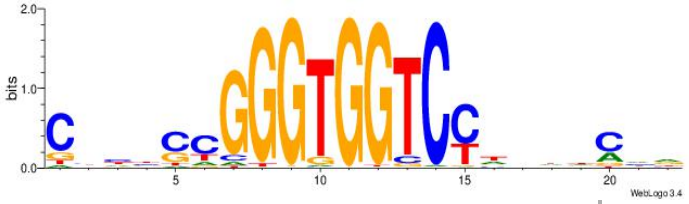
Number of overlap: 7
Similarity score: 0.0131676

Alignment:
CVHBSCGGGTGGTCMHVHHCDH
-----AGSCWGG----------

Original motif
Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif
Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



Motif ID: UP00081
Motif name: Mybl1_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: 7
Similarity score: 0.0136026

Alignment:
BHCGGCAGTTGGBBB
--AGSCWGG------

Original motif

Reverse complement motif

Consensus sequence: BBVCCAACTGCCGHB

Consensus sequence: BHCGGCAGTTGGBBB

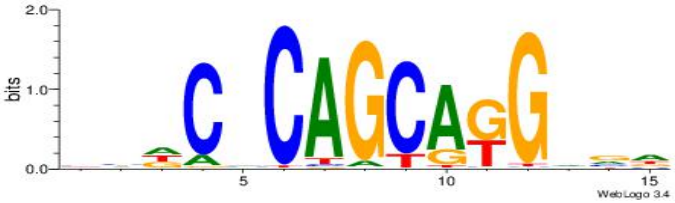
Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	7
Similarity score:	0.0139558

Alignment:

```
DVBCYTGCTGBGDDD
--CCWGSCT------
```

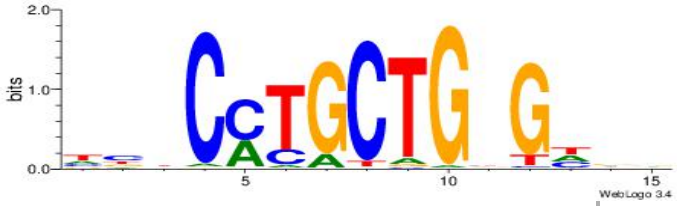
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD



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

Original motif

Consensus sequence: CTCTGY

Reverse complement motif

Consensus sequence: KCAGAG

Best Matches for Motif ID 20 (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:	7
Number of overlap:	6
Similarity score:	0

Alignment:

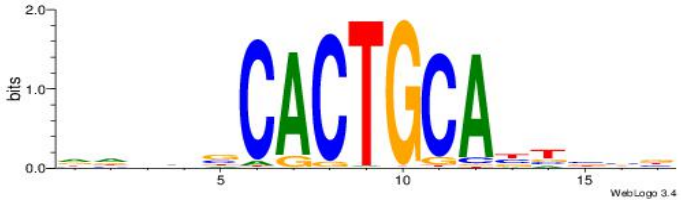
```
BBBAVTGCAGTGBBVDD
------KCAGAG-----
```

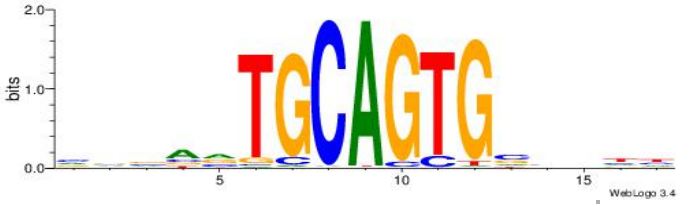
Original motif

Consensus sequence: DDBBBCACTGCABTBBB

Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD





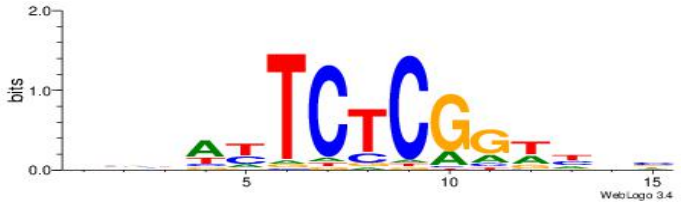
Motif ID:	UP00018
Motif name:	Irf4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.00610915

Alignment:

```
BHHWCCGAGAMTVVB
---KCAGAG------
```

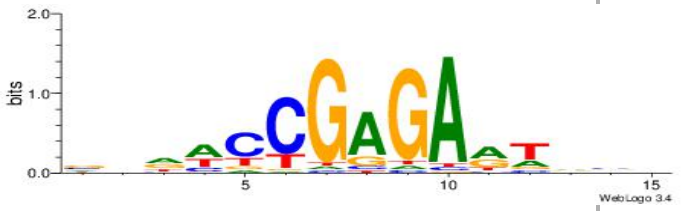
Original motif

Consensus sequence: VVBAYTCTCGGWHDB



Reverse complement motif

Consensus sequence: BHHWCCGAGAMTVVB



Motif ID: UP00095

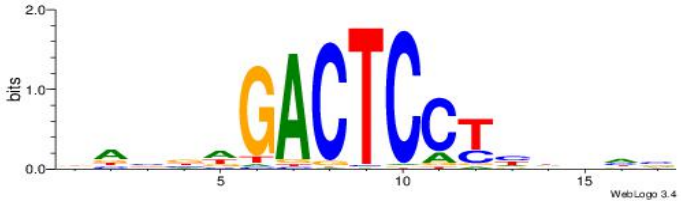
Motif name:	Zfp691_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.00648219

Alignment:

```
VHBDDAGGAGTCWBBTD
----KCAGAG-------
```

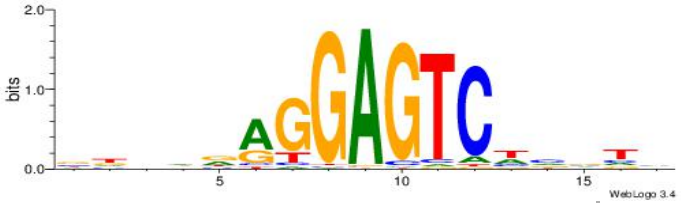
Original motif

Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD

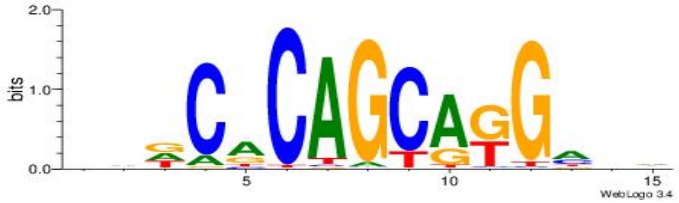


Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6

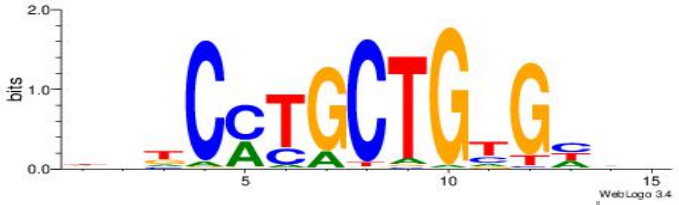
Similarity score: 0.00853125

Alignment:
DVHCYTGCTGTGHDH
-------CTCTGY--

Original motif
Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif
Consensus sequence: DVHCYTGCTGTGHDH

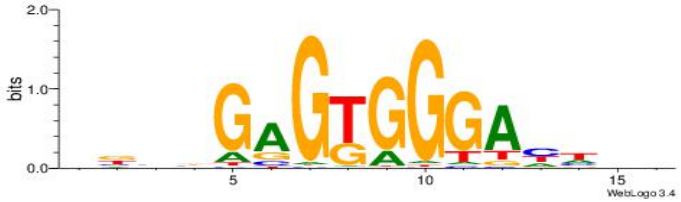


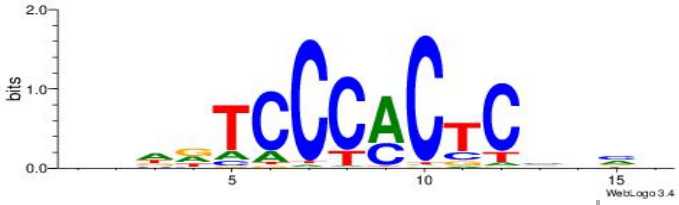
Motif ID: UP00007
Motif name: Egr1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 6
Similarity score: 0.00895004

Alignment:
BHHDTCCCACTCBDBV
---------CTCTGY-

Original motif
Consensus sequence: BBHBGAGTGGGAHHDB

Reverse complement motif
Consensus sequence: BHHDTCCCACTCBDBV





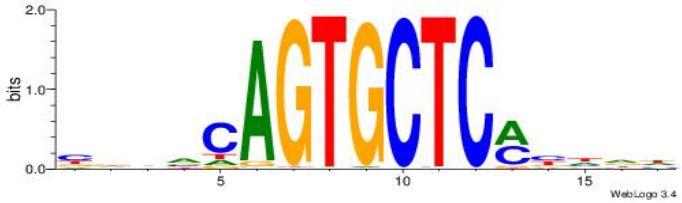
Motif ID:	UP00095
Motif name:	Zfp691_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.00955889

Alignment:

```
DDHBYGAGCACTGBHHB
--------CTCTGY---
```

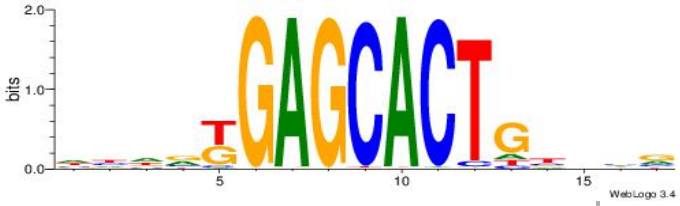
Original motif

Consensus sequence: BDHVCAGTGCTCMBHDD



Reverse complement motif

Consensus sequence: DDHBYGAGCACTGBHHB



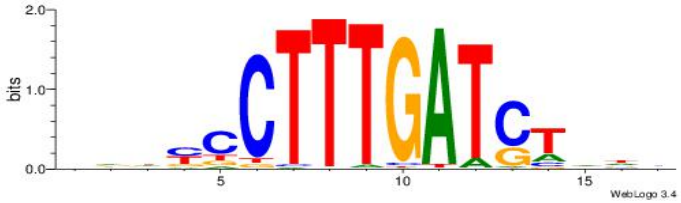
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.0106184

Alignment:

```
VDDAGATCAAAGGKDDD
------KCAGAG-----
```

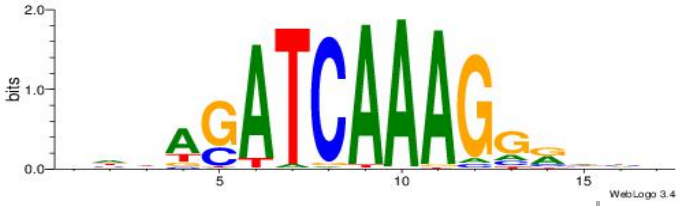
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD

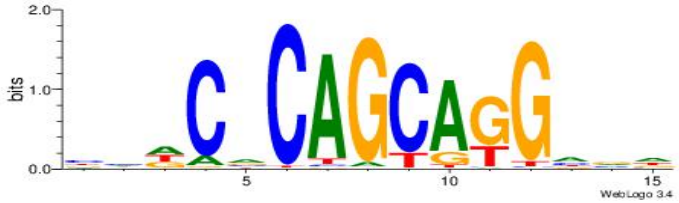


Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8

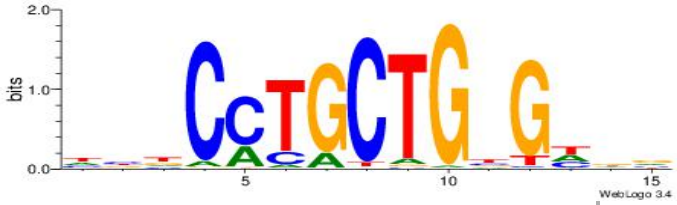
Number of overlap: 6
Similarity score: 0.0122635

Alignment:
BHDCVCAGCAGGHVD
--KCAGAG-------

Original motif
Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB



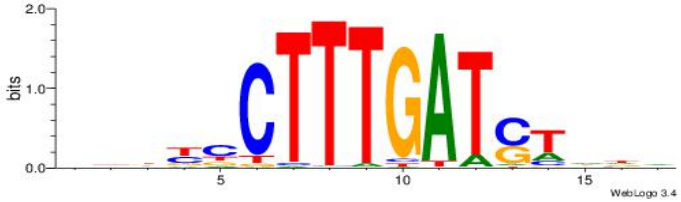
Motif ID: UP00083
Motif name: Tcf7l2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.0131237

Alignment:
BDDASATCAAAGGMDDD
------KCAGAG-----

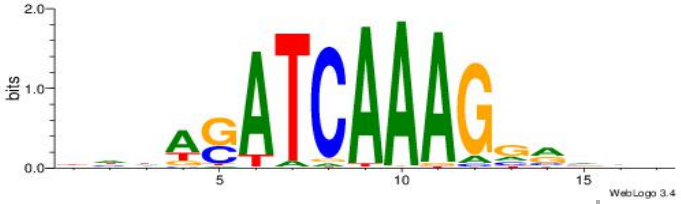
Original motif

Reverse complement motif

Consensus sequence: DDDYCCTTTGATSTDDV



Consensus sequence: BDDASATCAAAGGMDDD



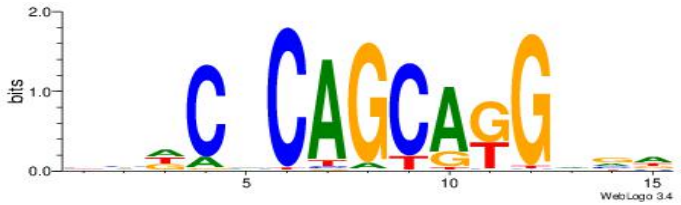
Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	6
Similarity score:	0.0136526

Alignment:

```
HHDCVCAGCAKGVVD
--KCAGAG-------
```

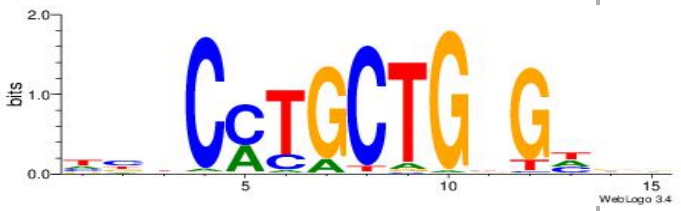
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD



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

Original motif

Consensus sequence: ATKTM

Reverse complement motif

Consensus sequence: RARAT

Best Matches for Motif ID 21 (Highest to Lowest)

Motif ID:	UP00080
Motif name:	Gata5_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:	5
Similarity score:	0

Alignment:

```
VVBHRAGATATCWDHBB
----RARAT--------
```

Original motif

Consensus sequence: VVBHRAGATATCWDHBB

Reverse complement motif

Consensus sequence: VVHHWGATATCTMHBBV

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:	5
Similarity score:	0.00279496

Alignment:

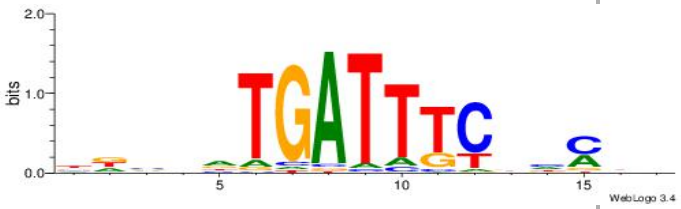
```
DDKDHGAAATCAHHBHV
-----RARAT-------
```

Original motif

Consensus sequence: DDKDHGAAATCAHHBHV

Reverse complement motif

Consensus sequence: BDBDHTGATTTCDHYDD



Motif ID:	UP00032

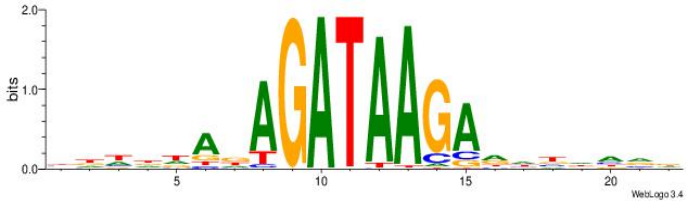
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	5
Similarity score:	0.00967655

Alignment:

```
BDHDDADAGATAAGADHBDHVD
------RARAT-----------
```

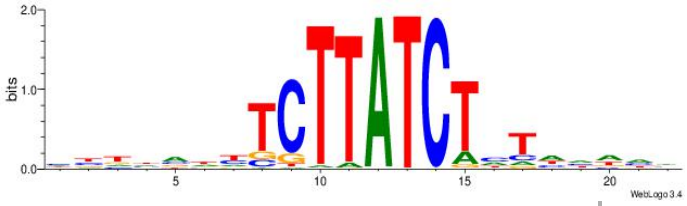
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

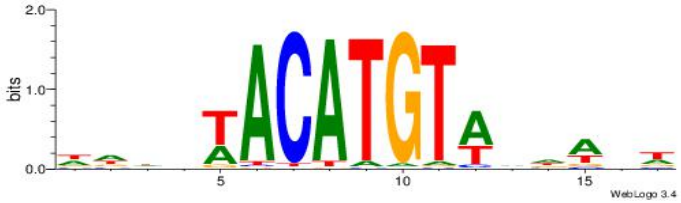


Motif ID:	UP00250
Motif name:	Irx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	5

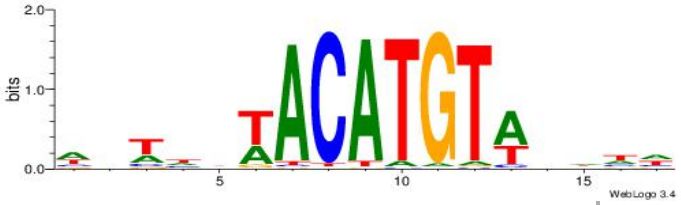
Similarity score: 0.0116566

Alignment:
DDDHWACATGTWHDABW
-------ATKTM-----

Original motif
Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif
Consensus sequence: WVTDHWACATGTWHDDD

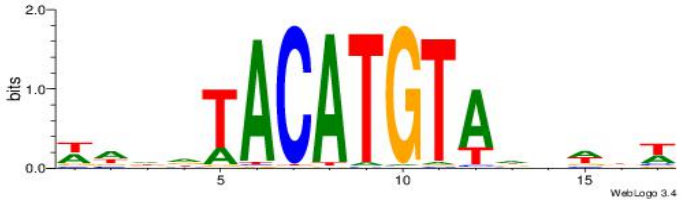


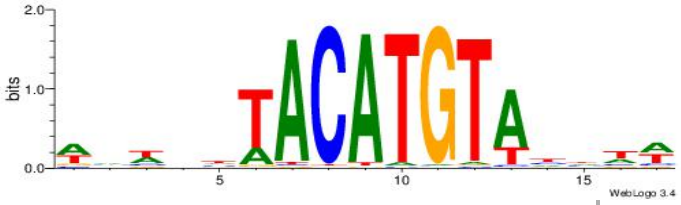
Motif ID:	UP00236
Motif name:	Irx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	5
Similarity score:	0.0120196

Alignment:
WDDDTACATGTADDWBW
-------ATKTM-----

Original motif
Consensus sequence: WDDDTACATGTADDWBW

Reverse complement motif
Consensus sequence: WVWDDTACATGTADDDW





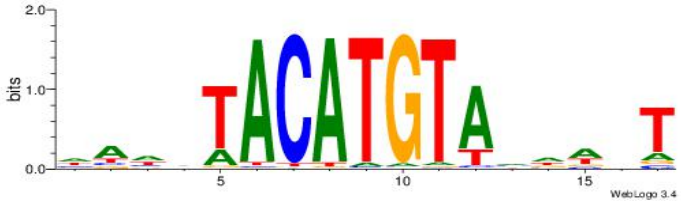
Motif ID:	UP00150
Motif name:	Irx6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	5
Similarity score:	0.0120601

Alignment:

```
HAHDTACATGTAVDWHT
-------ATKTM-----
```

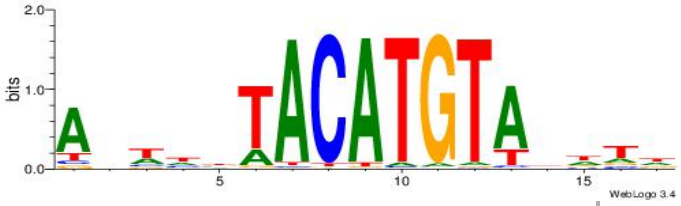
Original motif

Consensus sequence: HAHDTACATGTAVDWHT



Reverse complement motif

Consensus sequence: AHWDBTACATGTADHTH



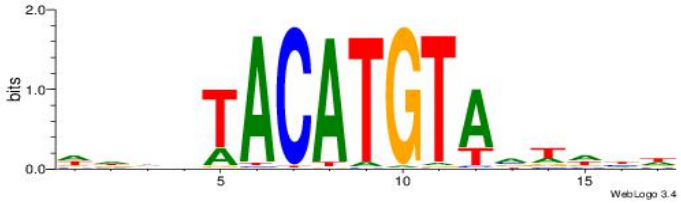
Motif ID:	UP00223
Motif name:	Irx3_2226.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	5
Similarity score:	0.0124884

Alignment:

```
DDDHTACATGTAVWDHD
-------ATKTM-----
```

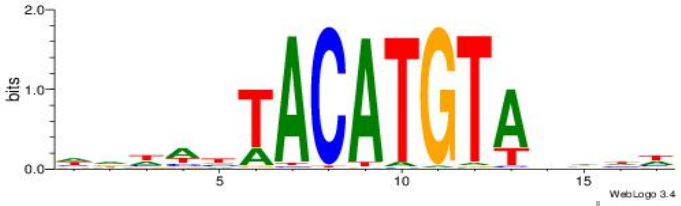
Original motif

Consensus sequence: DDDHTACATGTAVWDHD



Reverse complement motif

Consensus sequence: DHDWBTACATGTAHDDD

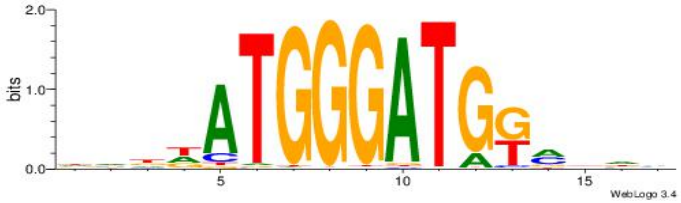


Motif ID:	UP00033
Motif name:	Zfp410_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10

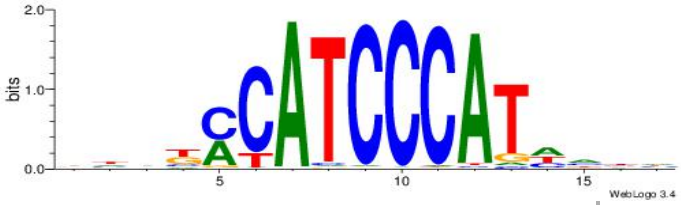
Number of overlap: 5
Similarity score: 0.0150044

Alignment:
DVDDATGGGATGKMDDV
---------ATKTM---

Original motif
Consensus sequence: DVDDATGGGATGKMDDV



Reverse complement motif
Consensus sequence: BDDYYCATCCCATDDBD



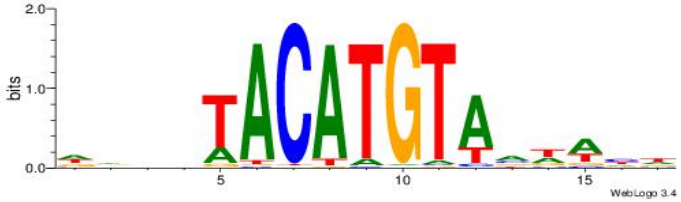
Motif ID: UP00223
Motif name: Irx3_0920.1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 5
Similarity score: 0.0150192

Alignment:
DDDDTACATGTAVWWHD
-------ATKTM-----

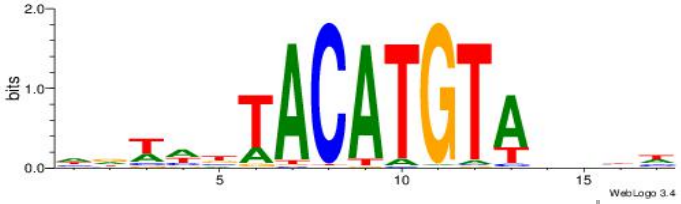
Original motif

Reverse complement motif

Consensus sequence: DDDDTACATGTAVWWHD



Consensus sequence: DDWWBTACATGTADDDD



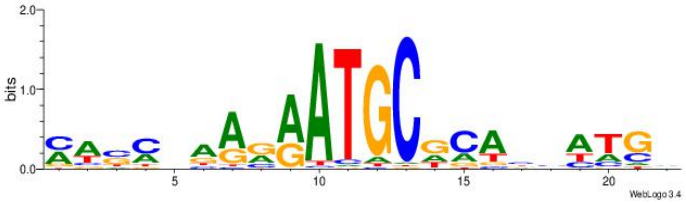
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	12
Number of overlap:	5
Similarity score:	0.0166075

Alignment:

```
MWSMBAARRATGCDCABHATGD
------RARAT-----------
```

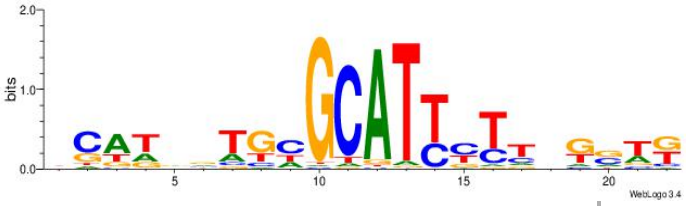
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



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

Original motif

Consensus sequence: CMGCRGC

Reverse complement motif

Consensus sequence: GCKGCYG

Best Matches for Motif ID 22 (Highest to Lowest)

Motif ID:	UP00052
Motif name:	Osr2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	7
Similarity score:	0

Alignment:

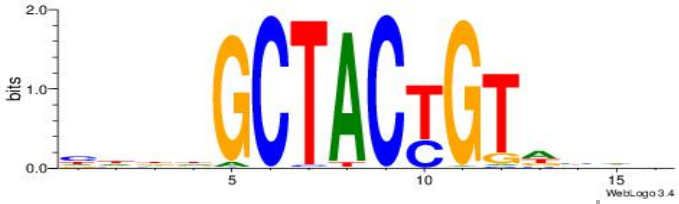
```
HHHHGCTACKGTHVHH
----GCKGCYG-----
```

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH



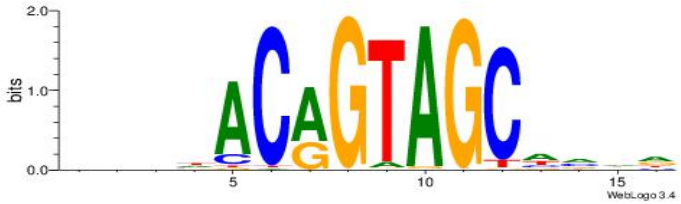
Motif ID:	UP00027
Motif name:	Osr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	7
Similarity score:	0.00108105

Alignment:

```
DHBHGCTACKGTHDHH
----GCKGCYG-----
```

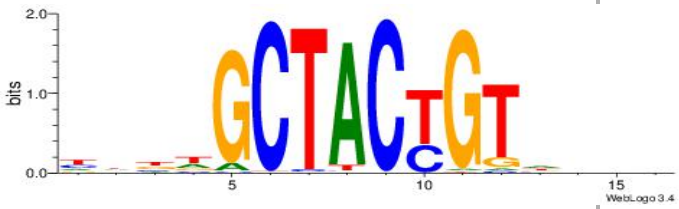
Original motif

Consensus sequence: HHDHACRGTAGCHVHD



Reverse complement motif

Consensus sequence: DHBHGCTACKGTHDHH



Motif ID:	UP00099

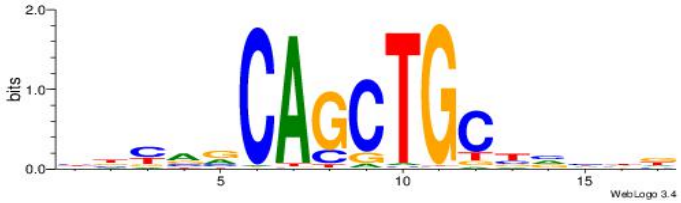
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	7
Similarity score:	0.00905497

Alignment:

```
BBYVVCAGCTGCBVHHD
-------GCKGCYG---
```

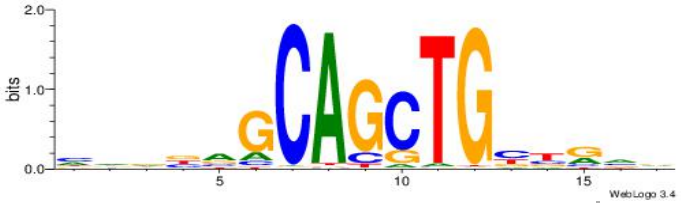
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB

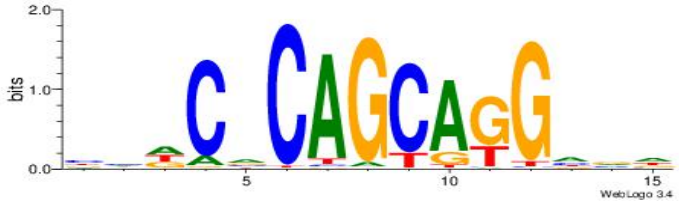


Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	7

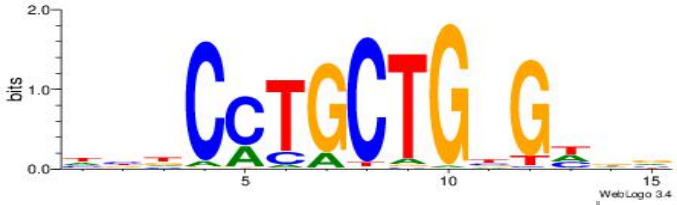
Similarity score: 0.0111061

Alignment:
BHDCVCAGCAGGHVD
-----CMGCRGC---

Original motif
Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB

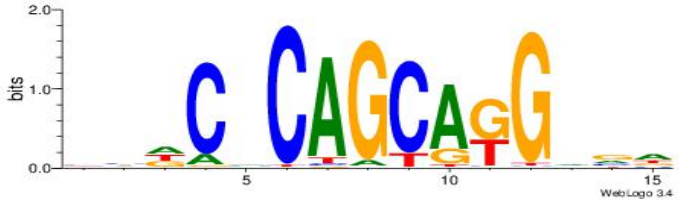


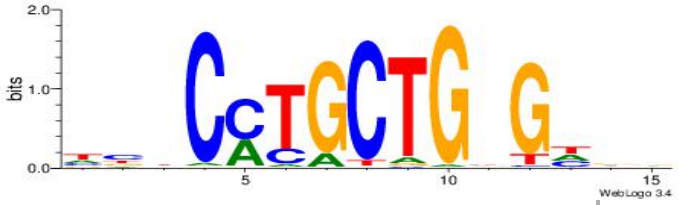
Motif ID: UP00057
Motif name: Zic2_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 7
Similarity score: 0.0126897

Alignment:
HHDCVCAGCAKGVVD
-----CMGCRGC---

Original motif
Consensus sequence: HHDCVCAGCAKGVVD

Reverse complement motif
Consensus sequence: DVBCYTGCTGBGDDD





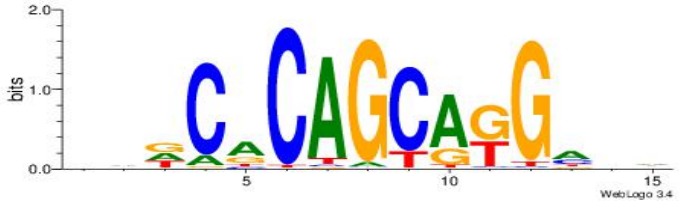
Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	7
Similarity score:	0.0137402

Alignment:

```
DVHCYTGCTGTGHDH
---GCKGCYG-----
```

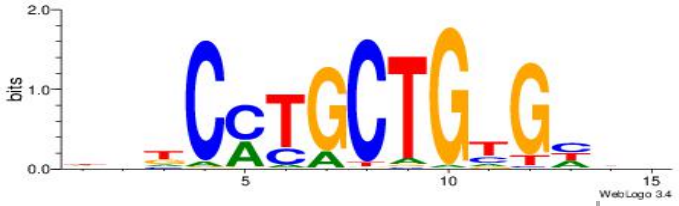
Original motif

Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



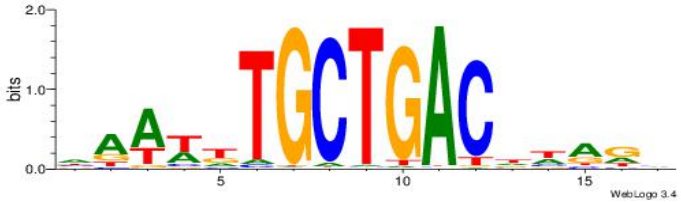
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	7
Similarity score:	0.0253076

Alignment:

```
DMTWDGTCAGCADWTTH
-------CMGCRGC---
```

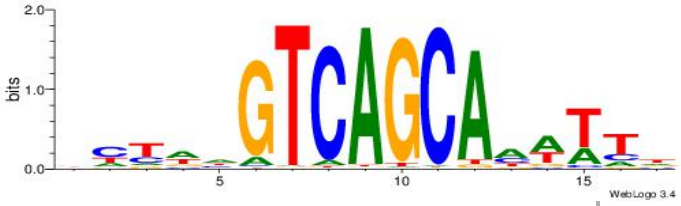
Original motif

Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif

Consensus sequence: DMTWDGTCAGCADWTTH

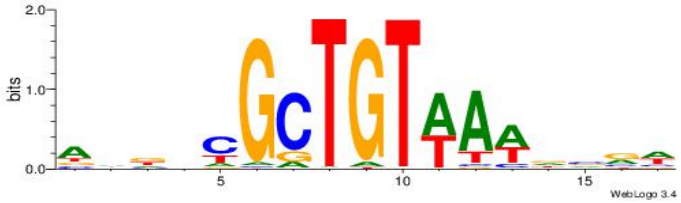


Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9

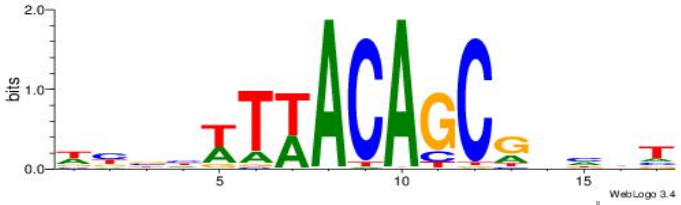
Number of overlap: 7
Similarity score: 0.0292668

Alignment:
WVVHWTWACAGCGBHBT
--------CMGCRGC--

Original motif
Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif
Consensus sequence: WVVHWTWACAGCGBHBT



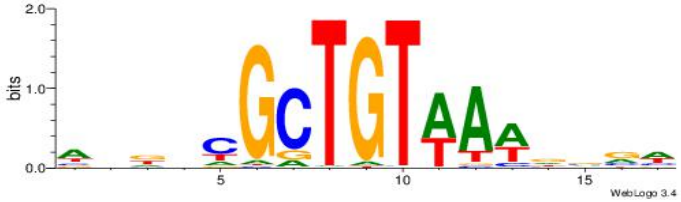
Motif ID: UP00193
Motif name: Rhox11_2205.1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 7
Similarity score: 0.0298083

Alignment:
WVVHWTWACAGCGHHVT
--------CMGCRGC--

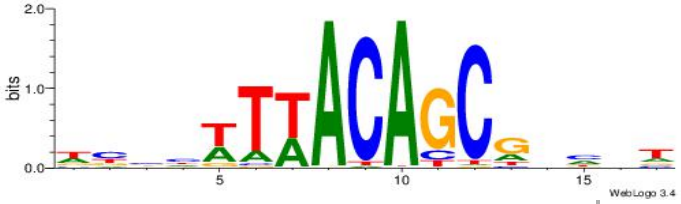
Original motif

Reverse complement motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Consensus sequence: WVVHWTWACAGCGHHVT



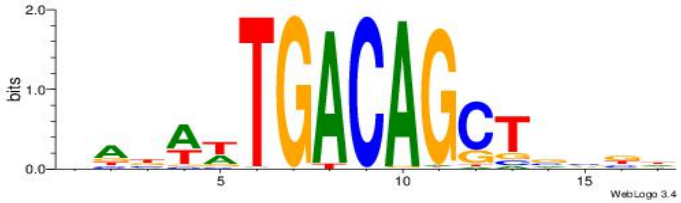
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	7
Similarity score:	0.0332976

Alignment:

```
DABWWTGACAGCTVVBD
--------CMGCRGC--
```

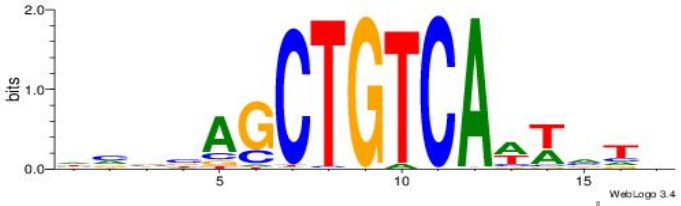
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



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

Original motif

Consensus sequence: CCCRCCCC

Reverse complement motif

Consensus sequence: GGGGMGGG

Best Matches for Motif ID 23 (Highest to Lowest)

Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0

Alignment:

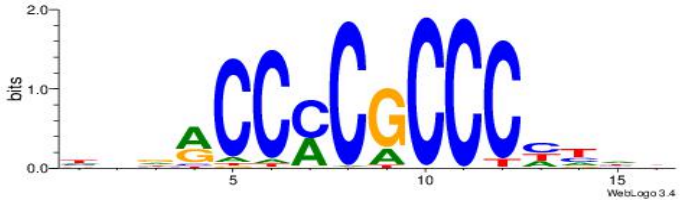
```
DHHDGGGCGRGGKHBH
---GGGGMGGG-----
```

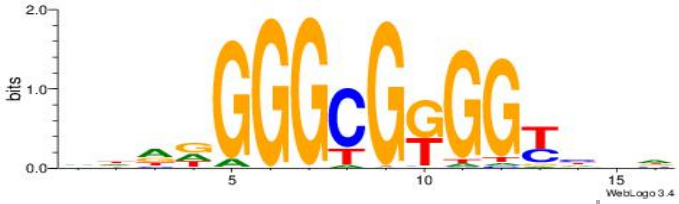
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD

Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH





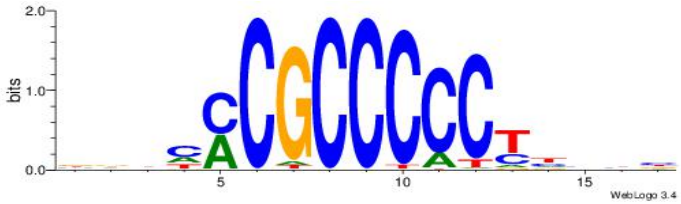
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.00490878

Alignment:

```
BVVHAGGGGGCGRDHHB
------GGGGMGGG---
```

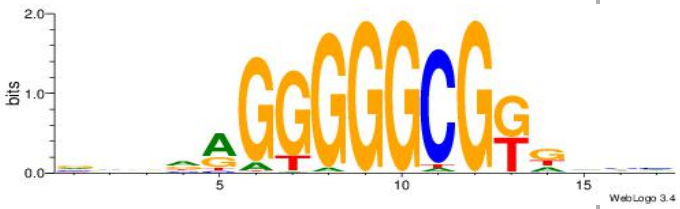
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



Motif ID:	UP00007

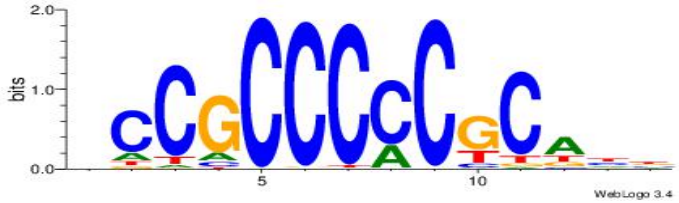
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	8
Similarity score:	0.0101441

Alignment:

```
HCCGCCCCCGCAHB
CCCRCCCC------
```

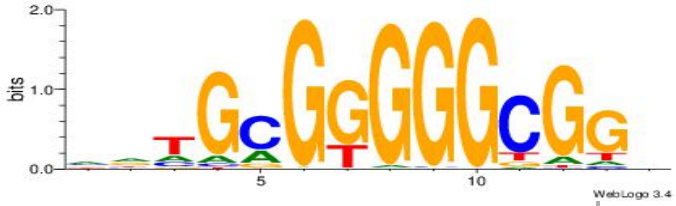
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH

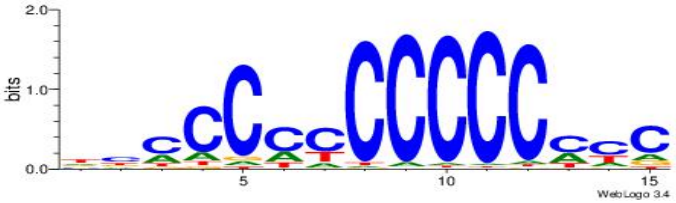


Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	8

Similarity score: 0.0106908

Alignment:
DBCCCCCCCCCCMYC
---CCCRCCCC----

Original motif
Consensus sequence: DBCCCCCCCCCCMYC



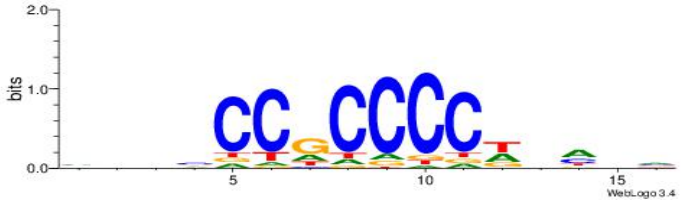
Reverse complement motif
Consensus sequence: GKRGGGGGGGGGBD

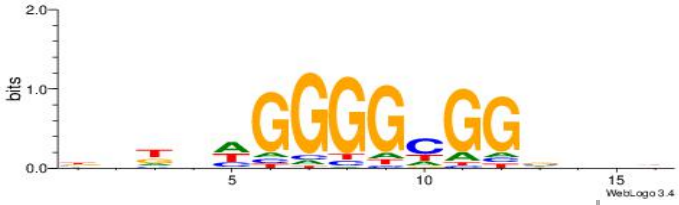
Motif ID: UP00043
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 8
Similarity score: 0.0152681

Alignment:
HBBBCCGCCCCWHHHV
---CCCRCCCC-----

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV

Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH





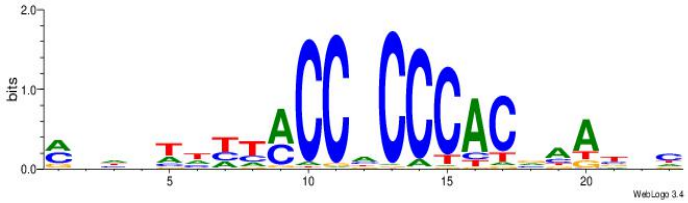
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	8
Similarity score:	0.0252184

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
--------CCCRCCCC-------
```

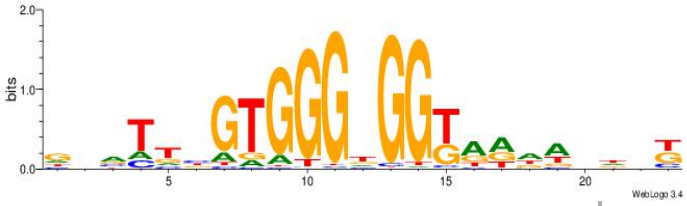
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



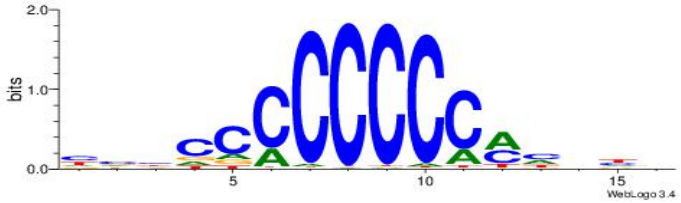
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	8
Similarity score:	0.0258528

Alignment:

```
HVBCCCCCCCCMHHHB
--CCCRCCCC------
```

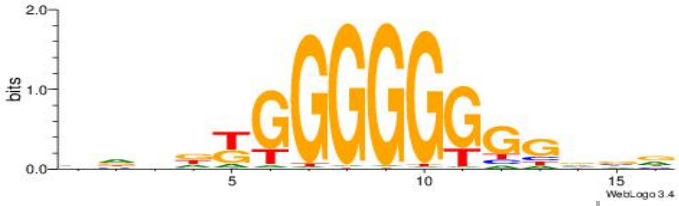
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD

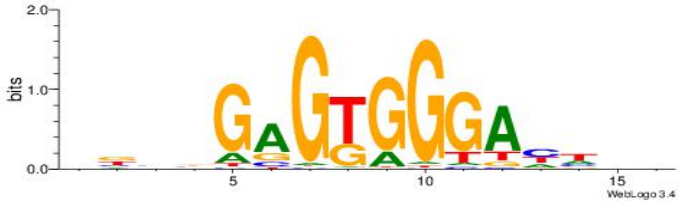


Motif ID:	UP00007
Motif name:	Egr1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

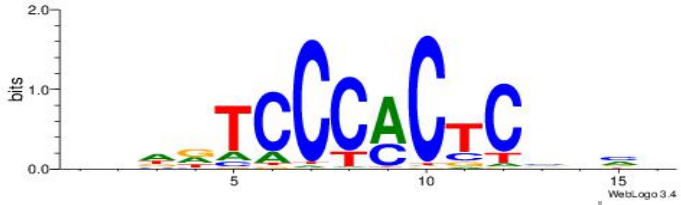
Number of overlap: 8
Similarity score: 0.0318239

Alignment:
BHHDTCCCACTCBDBV
-----CCCRCCCC---

Original motif
Consensus sequence: BBHBGAGTGGGAHHDB



Reverse complement motif
Consensus sequence: BHHDTCCCACTCBDBV



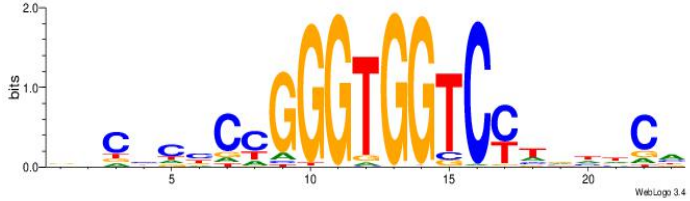
Motif ID: UP00538
Motif name: Gli1_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 8
Number of overlap: 8
Similarity score: 0.0333599

Alignment:
HGDHVHKGACCACCCGGBGBGDB
--------CCCRCCCC-------

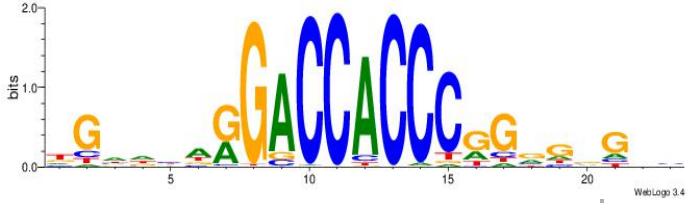
Original motif

Reverse complement motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



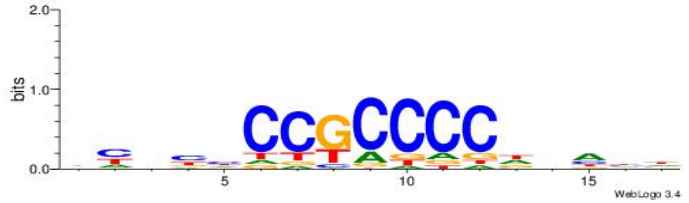
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	8
Similarity score:	0.0336185

Alignment:

```
HHHHDGGGGCGGDBHDV
-----GGGGMGGG----
```

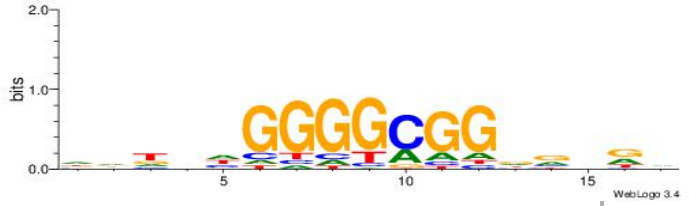
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



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

Original motif

Consensus sequence: CTGGGA

Reverse complement motif

Consensus sequence: TCCCAG

Best Matches for Motif ID 24 (Highest to Lowest)

Motif ID:	UP00033
Motif name:	Zfp410_primary
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

Alignment:

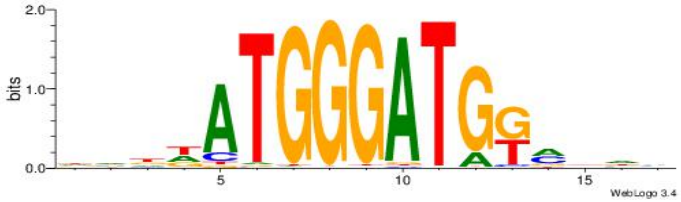
```
DVDDATGGGATGKMDDV
----CTGGGA-------
```

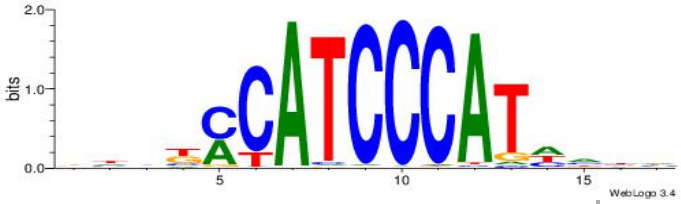
Original motif

Consensus sequence: DVDDATGGGATGKMDDV

Reverse complement motif

Consensus sequence: BDDYYCATCCCATDDBD





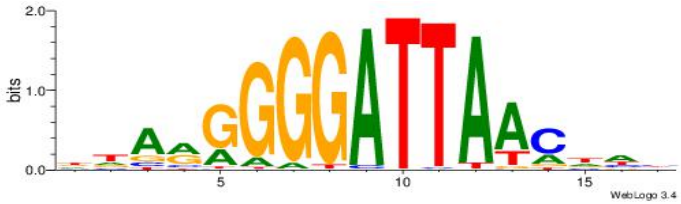
Motif ID:	UP00216
Motif name:	Obox1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.000600574

Alignment:

```
DHDGTTAATCCCCKTDD
--------TCCCAG---
```

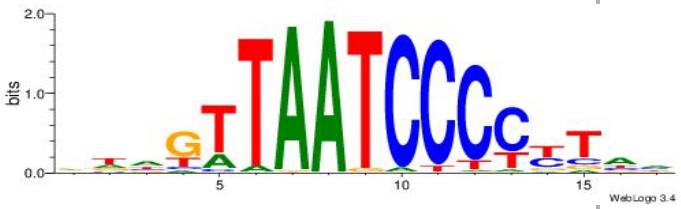
Original motif

Consensus sequence: DDARGGGGATTAACDHH



Reverse complement motif

Consensus sequence: DHDGTTAATCCCCKTDD



Motif ID:	UP00229

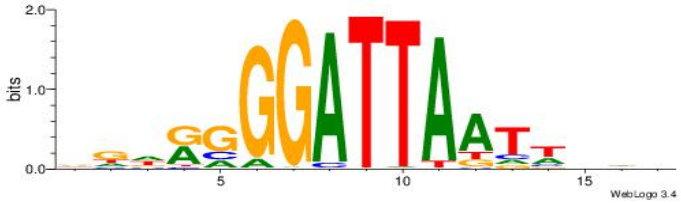
Motif name:	Otx1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	6
Similarity score:	0.0140775

Alignment:

```
VHHWATTAATCCCMDHH
---------TCCCAG--
```

Original motif

Consensus sequence: DDDRGGGATTAATWHHB



Reverse complement motif

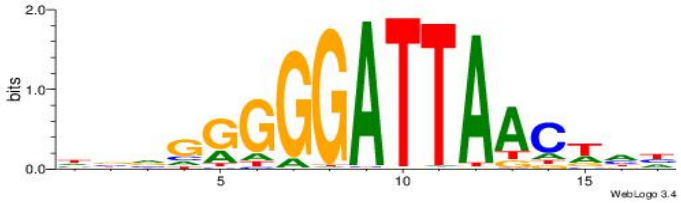
Consensus sequence: VHHWATTAATCCCMDHH

Motif ID:	UP00160
Motif name:	Obox3
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:	6

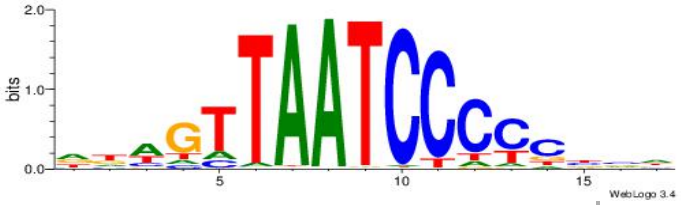
Similarity score: 0.0142192

Alignment:
HHWGTTAATCCCCCBBH
--------TCCCAG---

Original motif
Consensus sequence: HBVGGGGGATTAACWHH



Reverse complement motif
Consensus sequence: HHWGTTAATCCCCCBBH

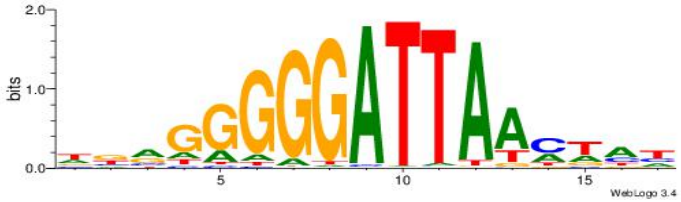


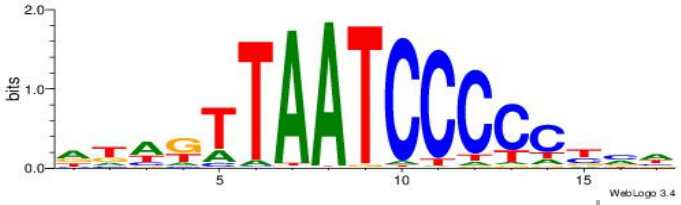
Motif ID:	UP00239
Motif name:	Obox2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0184594

Alignment:
HTARTTAATCCCCCKBD
--------TCCCAG---

Original motif
Consensus sequence: DBRGGGGGATTAAMTAH

Reverse complement motif
Consensus sequence: HTARTTAATCCCCCKBD





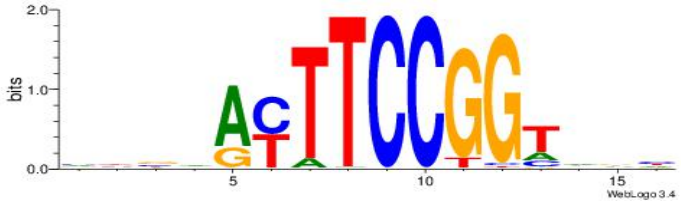
Motif ID:	UP00416
Motif name:	Fli1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	6
Similarity score:	0.018604

Alignment:

```
DHDACCGGAAKTBBVV
----CTGGGA------
```

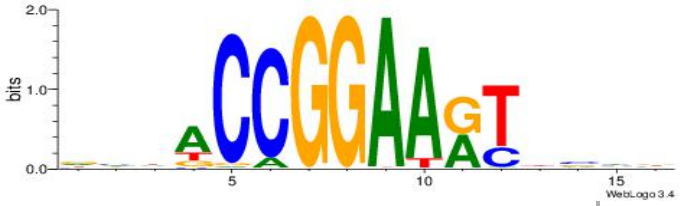
Original motif

Consensus sequence: VBBVAYTTCCGGTDDH



Reverse complement motif

Consensus sequence: DHDACCGGAAKTBBVV



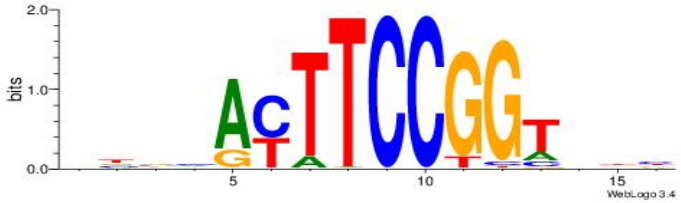
Motif ID:	UP00411
Motif name:	Erg
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.0196433

Alignment:

```
BDDACCGGAAKTVBVB
----CTGGGA------
```

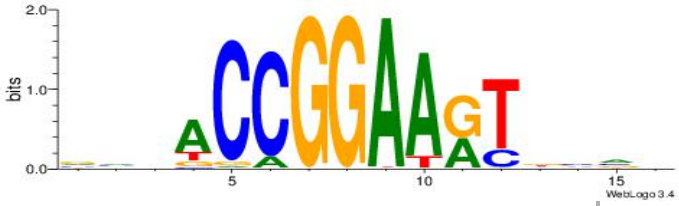
Original motif

Consensus sequence: VBBVAYTTCCGGTDDB



Reverse complement motif

Consensus sequence: BDDACCGGAAKTVBVB

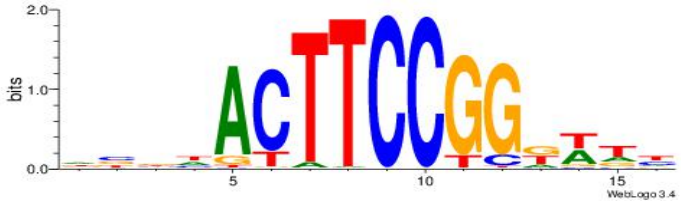


Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

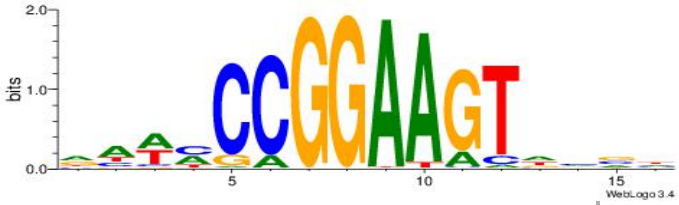
Number of overlap: 6
Similarity score: 0.0196806

Alignment:
HAWYCCGGAAGTHBBD
----CTGGGA------

Original motif
Consensus sequence: DBBHACTTCCGGKWTH



Reverse complement motif
Consensus sequence: HAWYCCGGAAGTHBBD



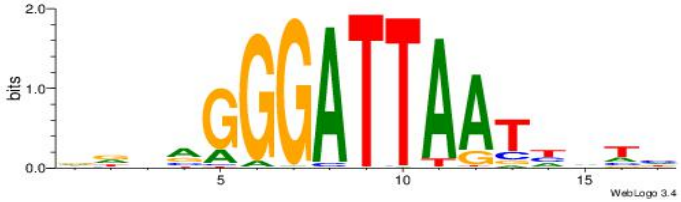
Motif ID: UP00143
Motif name: Dobox5
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 10
Number of overlap: 6
Similarity score: 0.0199632

Alignment:
DDHVGGGATTAATHDTH
--CTGGGA---------

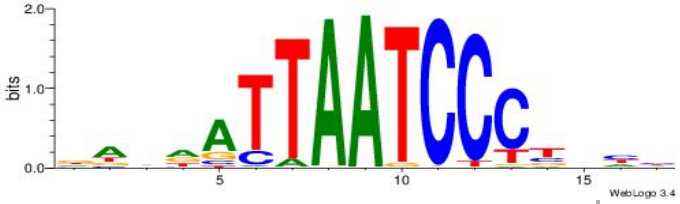
Original motif

Reverse complement motif

Consensus sequence: DDHVGGGATTAATHDTH



Consensus sequence: DADHATTAATCCCBHHH



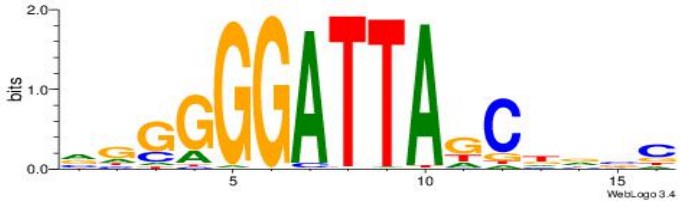
Motif ID:	UP00265
Motif name:	Pitx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	10
Number of overlap:	6
Similarity score:	0.0210625

Alignment:

```
GBHDGCTAATCCCCCB
---------TCCCAG-
```

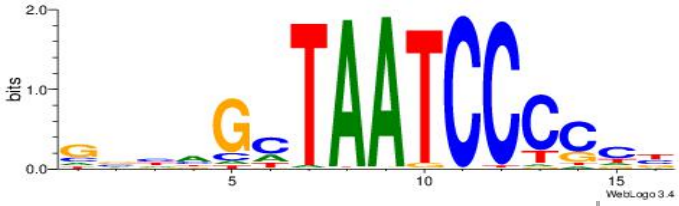
Original motif

Consensus sequence: VGGGGGATTAGCDDBC



Reverse complement motif

Consensus sequence: GBHDGCTAATCCCCCB



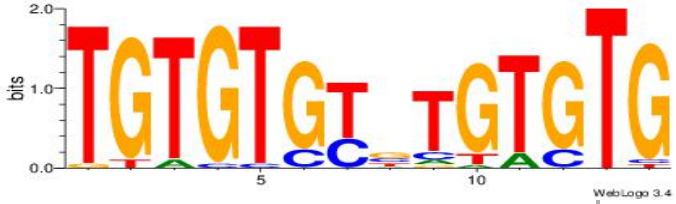
Dataset #: 2 **Motif ID: 25** **Motif name: Motif 25**

Original motif

Consensus sequence: CACACAVRCACACA

Reverse complement motif

Consensus sequence: TGTGTGKVTGTGTG



Best Matches for Motif ID 25 (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:	9
Number of overlap:	14
Similarity score:	0.0487588

Alignment:

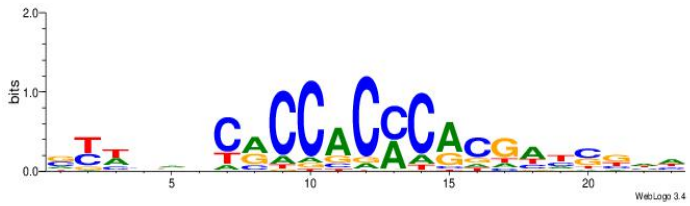
```
VYWVVHCRCCACMCACGAHSBHH
-CACACAVRCACACA--------
```

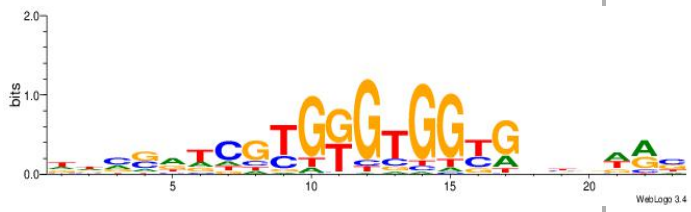
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





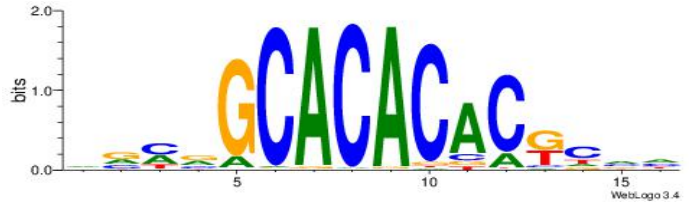
Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0496974

Alignment:

```
HBGYGTGTGTGCVRVD
-TGTGTGKVTGTGTG-
```

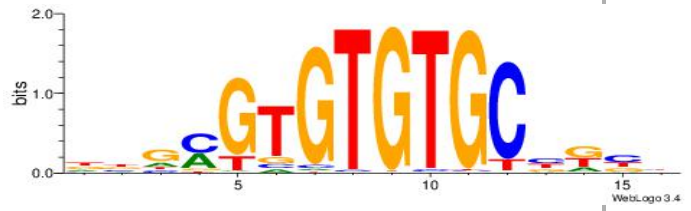
Original motif

Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD



Motif ID: UP00538

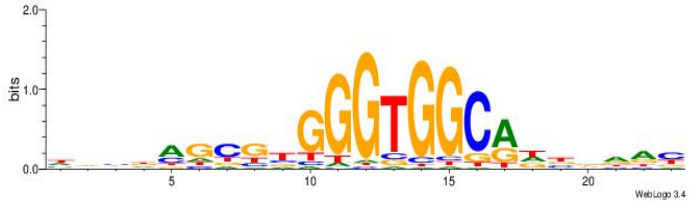
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	10
Number of overlap:	14
Similarity score:	0.0503392

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
TGTGTGKVTGTGTG---------
```

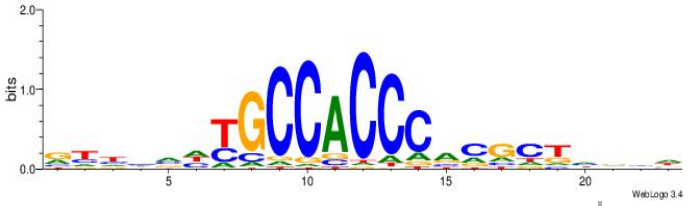
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

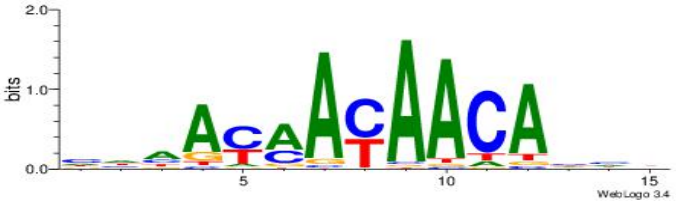


Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14

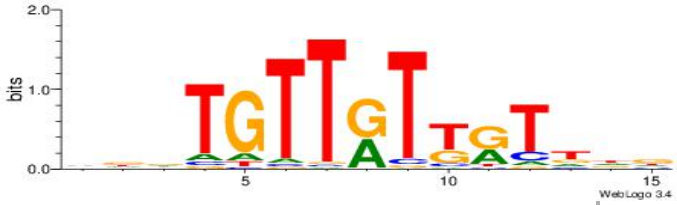
Similarity score: 0.0506792

Alignment:
HDDTGTTKTTKTHHD
-TGTGTGKVTGTGTG

Original motif
Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD

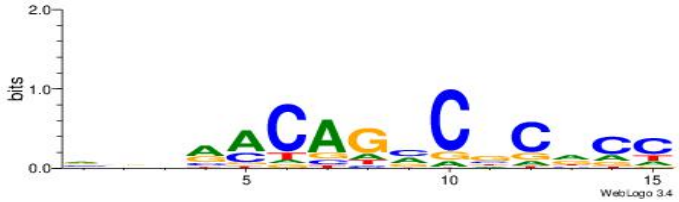


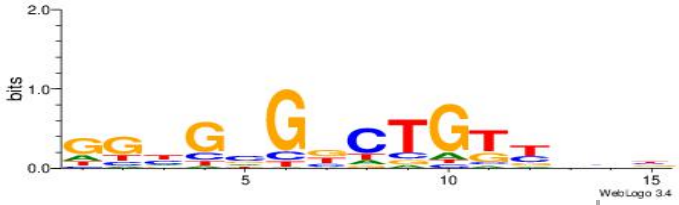
Motif ID: UP00036
Motif name: Myf6_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0516113

Alignment:
VVVRACAGVCBCDCC
-CACACAVRCACACA

Original motif
Consensus sequence: VVVRACAGVCBCDCC

Reverse complement motif
Consensus sequence: GGDGBGVCTGTKVVB





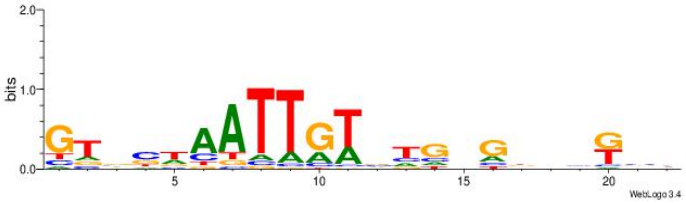
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0523703

Alignment:

```
VVYDDDCHCAVACAATTDBVAC
CACACAVRCACACA--------
```

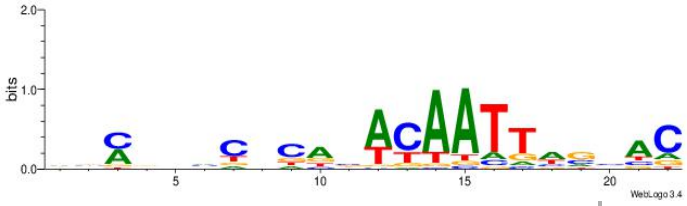
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



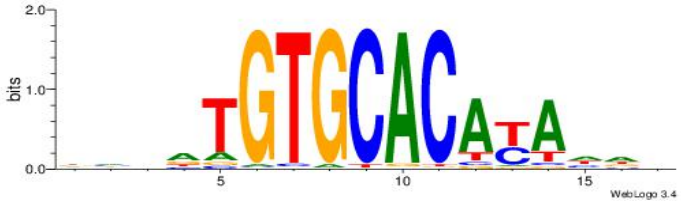
Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0557355

Alignment:

```
DHVDTGTGCACAYAHDH
CACACAVRCACACA---
```

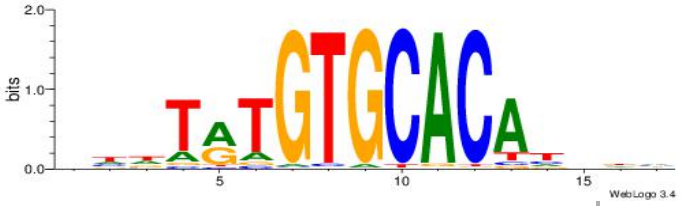
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD

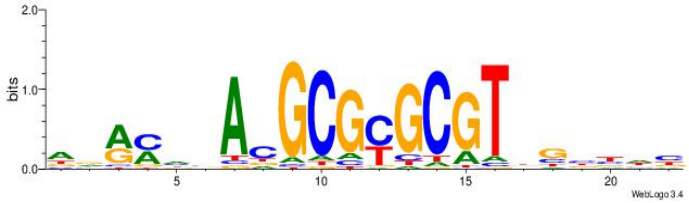


Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

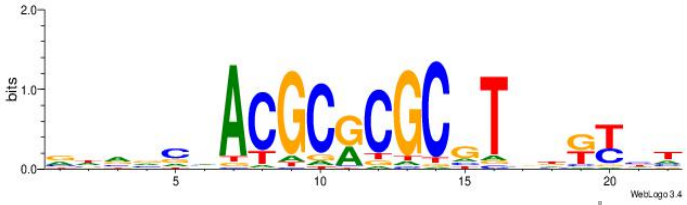
Number of overlap: 14
Similarity score: 0.0578572

Alignment:
DDRMHBACGCGYGCGTDGBBDB
-CACACAVRCACACA-------

Original motif
Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif
Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



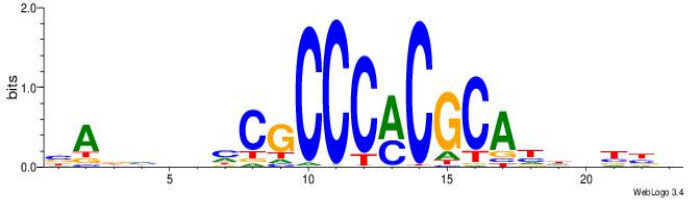
Motif ID: UP00400
Motif name: Zif268
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 14
Similarity score: 0.0580046

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
------TGTGTGKVTGTGTG---

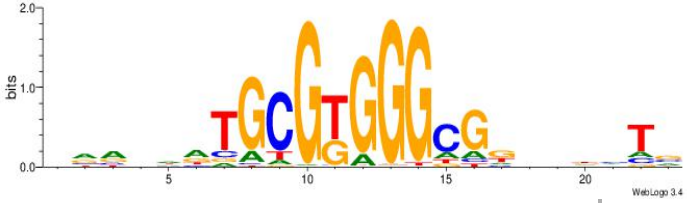
Original motif

Reverse complement motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



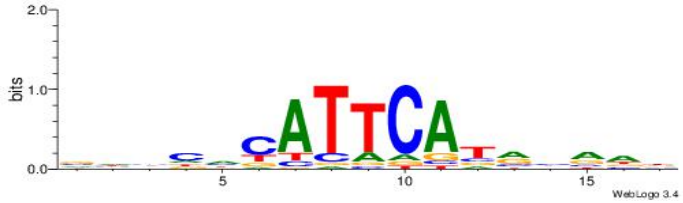
Motif ID:	UP00014
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0581238

Alignment:

```
DDBDKATGAATGHDBHV
--TGTGTGKVTGTGTG-
```

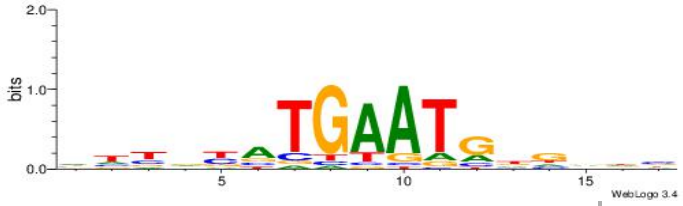
Original motif

Consensus sequence: VHBHHCATTCATRHVDD



Reverse complement motif

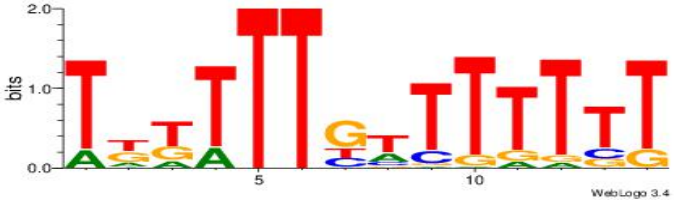
Consensus sequence: DDBDKATGAATGHDBHV



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

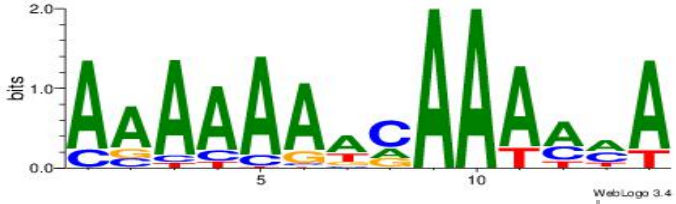
Original motif

Consensus sequence: TKKTTTGTTTTTTT



Reverse complement motif

Consensus sequence: AAAAAAACAAARRA



Best Matches for Motif ID 26 (Highest to Lowest)

Motif ID:	UP00061
Motif name:	Foxl1_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:	14
Similarity score:	0.0319341

Alignment:

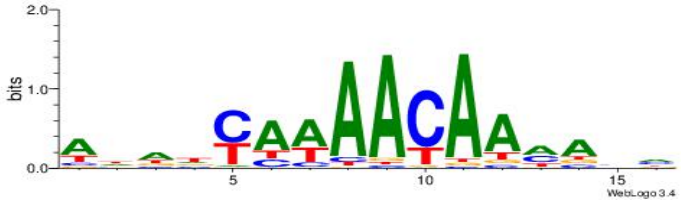
```
HDTYTTGTTWTKDDDT
TKKTTTGTTTTTTT--
```

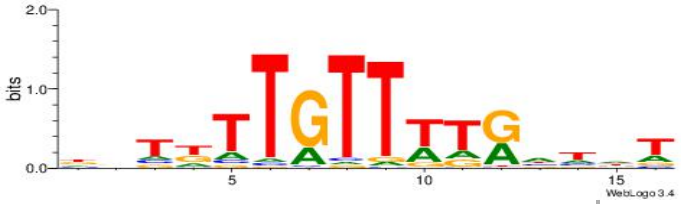
Original motif

Consensus sequence: ADDDYAWAACAAMAHH

Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT





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:	4
Number of overlap:	14
Similarity score:	0.0368361

Alignment:

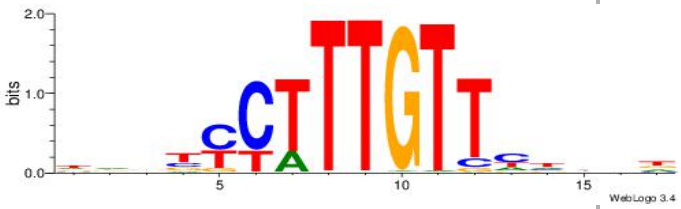
```
HBDDDAACAAAGRVBHH
AAAAAAACAAARRA---
```

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:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0370295

Alignment:

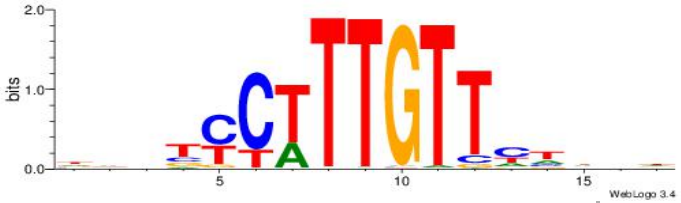
```
HBDDRAACAAAGRABHH
AAAAAAACAAARRA---
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH

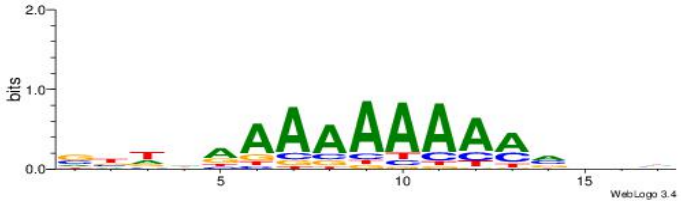


Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14

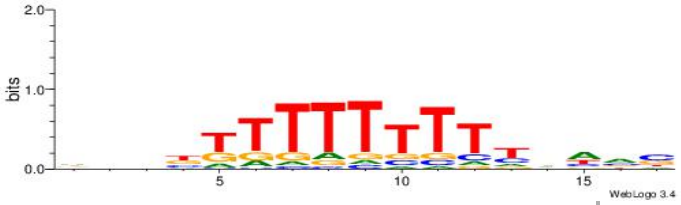
Similarity score: 0.038882

Alignment:
HHVBYTTTTTTTTDDVV
-TKKTTTGTTTTTTT--

Original motif
Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif
Consensus sequence: HHVBYTTTTTTTTDDVV

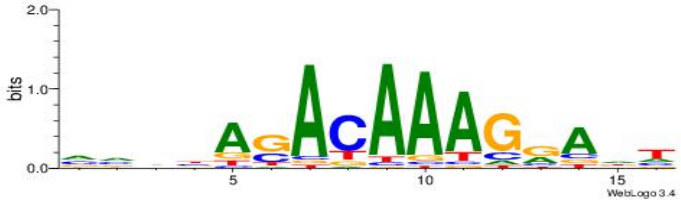


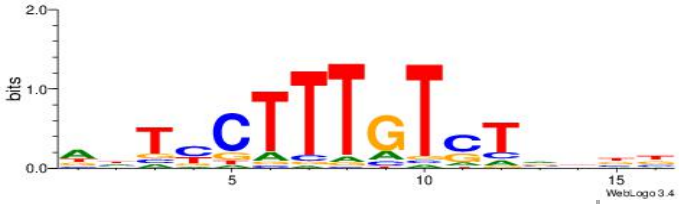
Motif ID: UP00101
Motif name: Sox12_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0402601

Alignment:
HDTMCTTTGTSTVDBB
AAAAAAACAAARRA--

Original motif
Consensus sequence: VVDBASACAAAGRADH

Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB





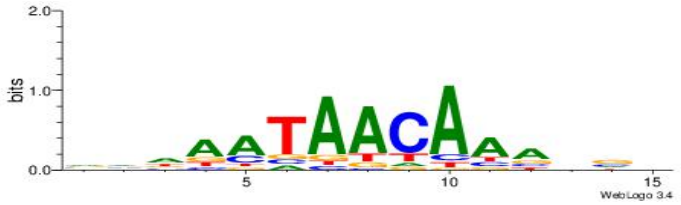
Motif ID:	UP00073
Motif name:	Foxa2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0402844

Alignment:

```
VVDAATAACAAAVVB
-AAAAAAACAAARRA
```

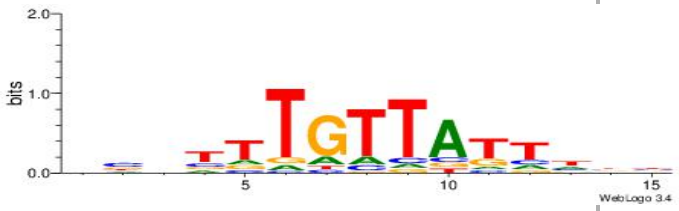
Original motif

Consensus sequence: VVDAATAACAAAVVB



Reverse complement motif

Consensus sequence: BVVTTTGTTATTDBB



Motif ID:	UP00034

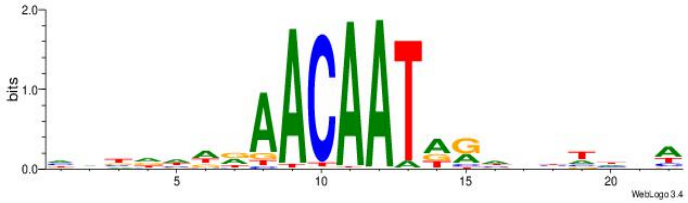
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	14
Similarity score:	0.0409353

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
--AAAAAAACAAARRA------
```

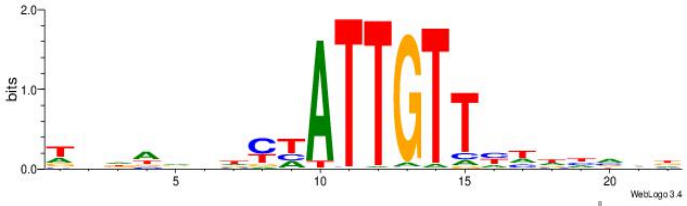
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH

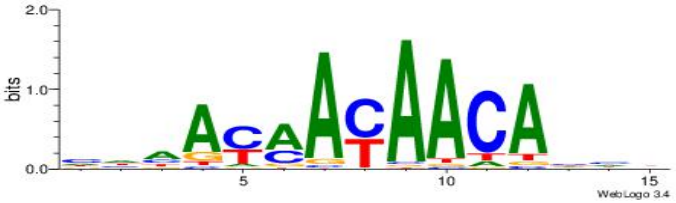


Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14

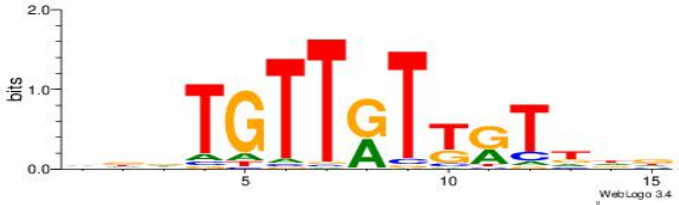
Similarity score: 0.0416172

Alignment:
HDDTGTTKTTKTHHD
-TKKTTTGTTTTTTT

Original motif
Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif
Consensus sequence: HDDTGTTKTTKTHHD

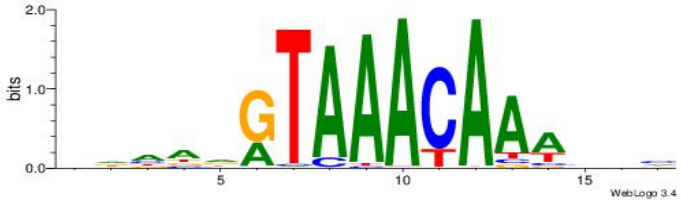


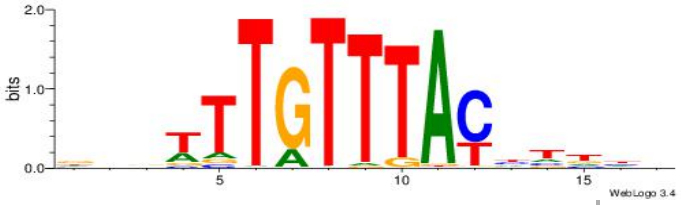
Motif ID: UP00039
Motif name: Foxj3_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 14
Similarity score: 0.0419017

Alignment:
HDHADGTAAACAAAVVH
---AAAAAAACAAARRA

Original motif
Consensus sequence: HDHADGTAAACAAAVVH

Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH





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:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0439168

Alignment:

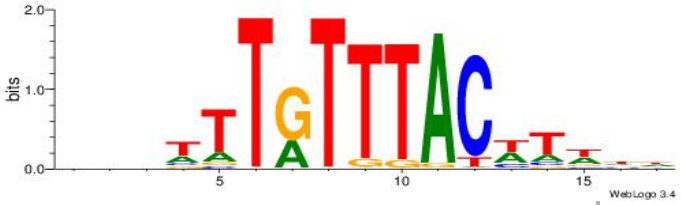
```
BDVTTTKTTTACWTWHH
---AAAAAAACAAARRA
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

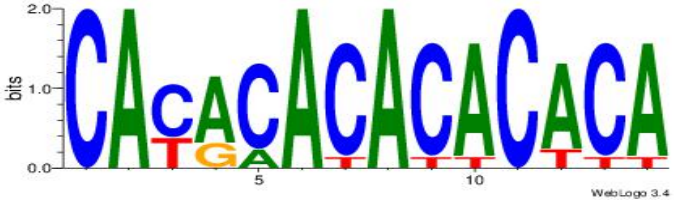
Consensus sequence: BDVTTTKTTTACWTWHH



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

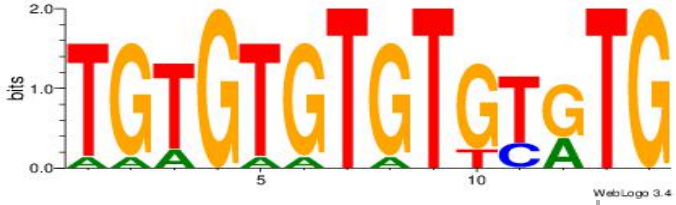
Original motif

Consensus sequence: CAYACACACACACA



Reverse complement motif

Consensus sequence: TGTGTGTGTGTKTG



Best Matches for Motif ID 27 (Highest to Lowest)

Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0235042

Alignment:

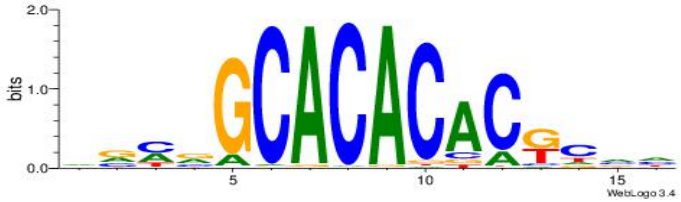
```
DVMVGCACACACKCVH
-CAYACACACACACA-
```

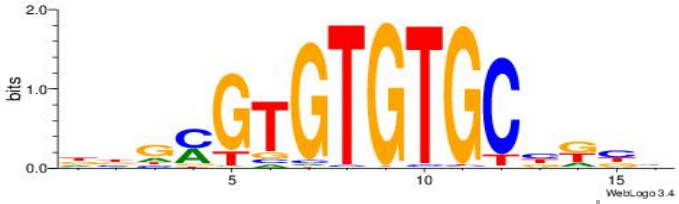
Original motif

Consensus sequence: DVMVGCACACACKCVH

Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD





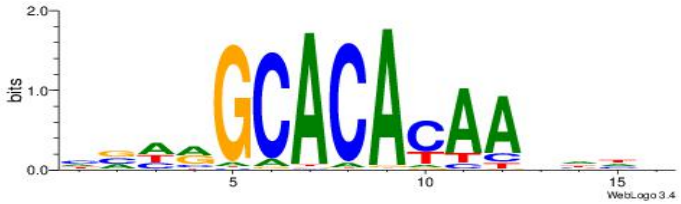
Motif ID:	UP00026
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0372612

Alignment:

```
BHHHTTGTGTGCKHVD
-TGTGTGTGTGTKTG-
```

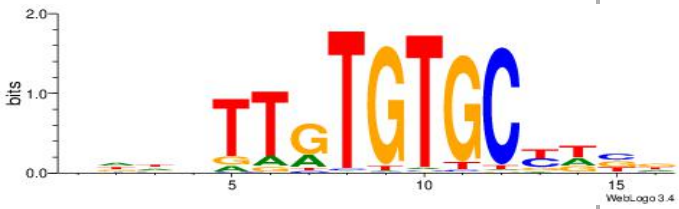
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD



Motif ID:	UP00000

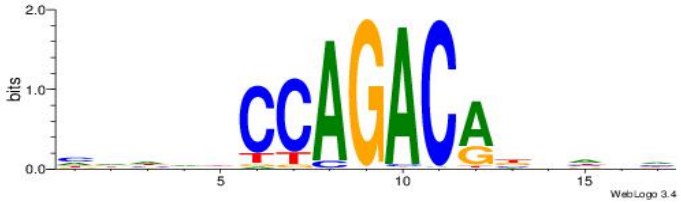
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0446373

Alignment:

```
HVHBVTGTCTGGDDHDD
---TGTGTGTGTGTKTG
```

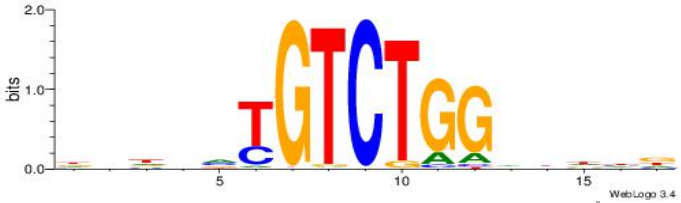
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD

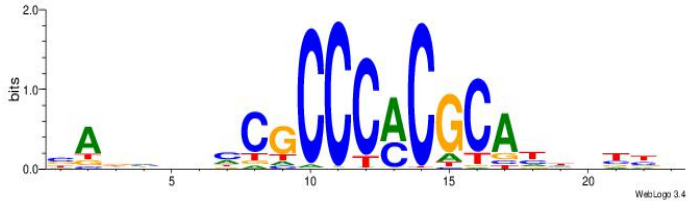


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14

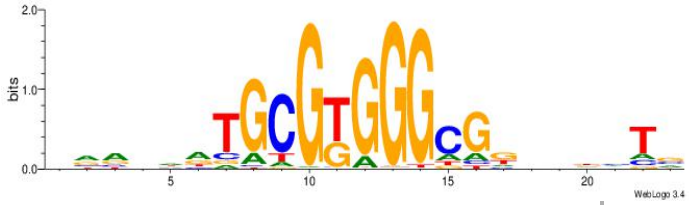
Similarity score: 0.0457169

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
---CAYACACACACACA------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

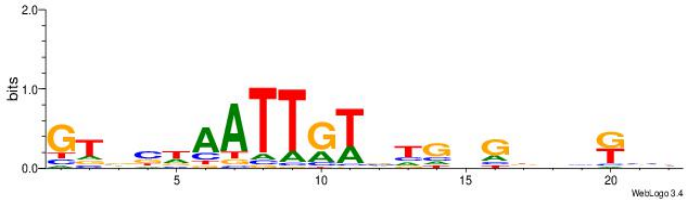


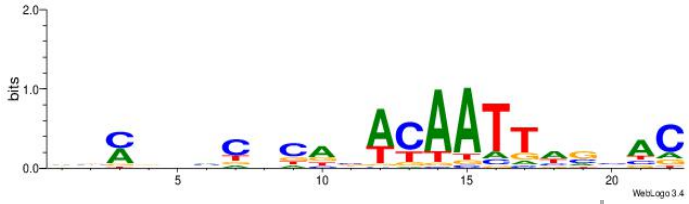
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0477221

Alignment:
GTVBDAATTGTVTGHGDDHKVB
CAYACACACACACA--------

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC





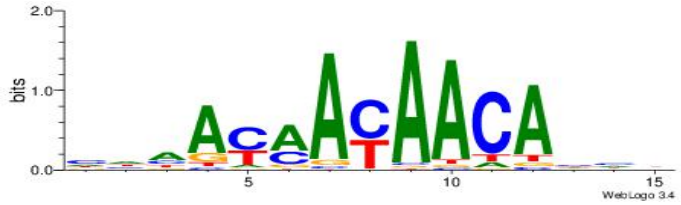
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0485483

Alignment:

```
HDDTGTTKTTKTHHD
-TGTGTGTGTGTKTG
```

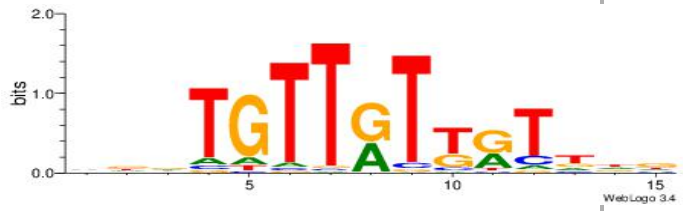
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD



Motif ID:	UP00041

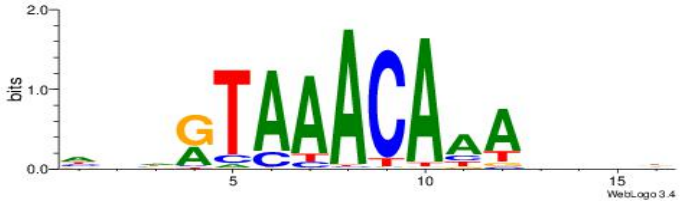
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0488633

Alignment:

```
HDHRTAAACAAAHDDD
CAYACACACACACA--
```

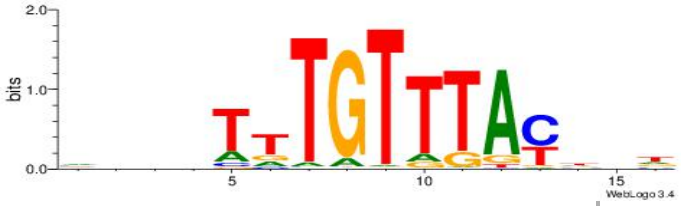
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH

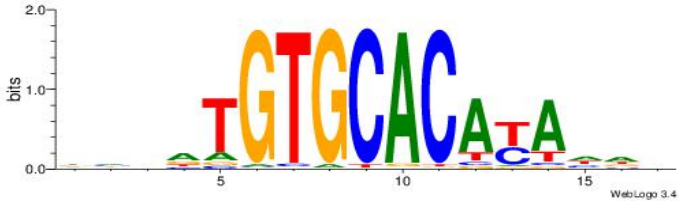


Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14

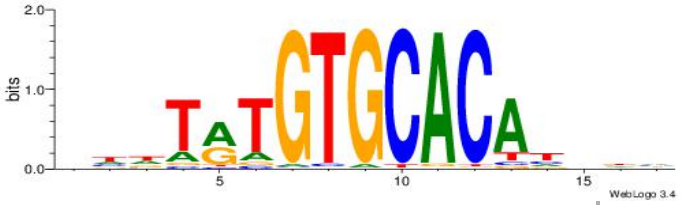
Similarity score: 0.0489596

Alignment:
DHVDTGTGCACAYAHDH
--CAYACACACACACA-

Original motif
Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif
Consensus sequence: HDHTMTGTGCACADVHD

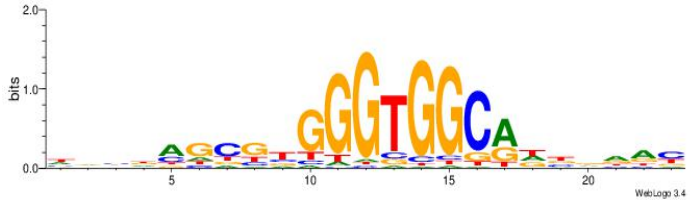


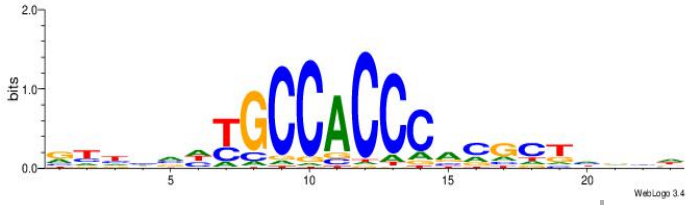
Motif ID: UP00538
Motif name: Gli1_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 10
Number of overlap: 14
Similarity score: 0.0501133

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
TGTGTGTGTGTKTG---------

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





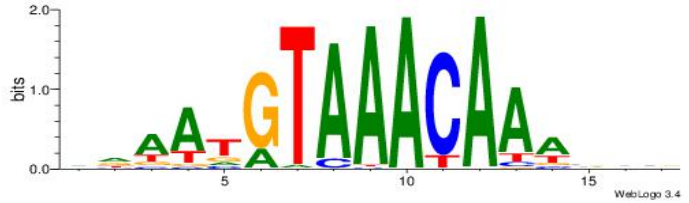
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0518949

Alignment:

```
DDAATGTAAACAAAVVB
--CAYACACACACACA-
```

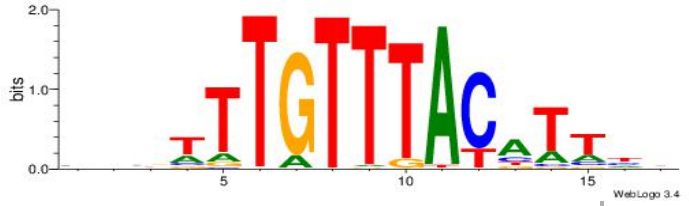
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

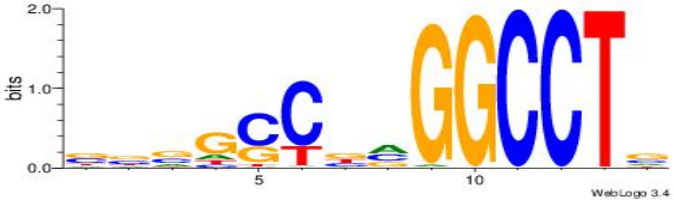
Consensus sequence: BBVTTTGTTTACATTDD



Dataset #: 3 **Motif ID: 28** **Motif name: Zfx**

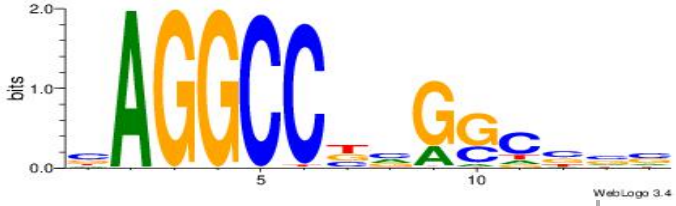
Original motif

Consensus sequence: BBVGCCBVGGCCTV



Reverse complement motif

Consensus sequence: VAGGCCBBGGCVBB



Best Matches for Motif ID 28 (Highest to Lowest)

Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0596136

Alignment:

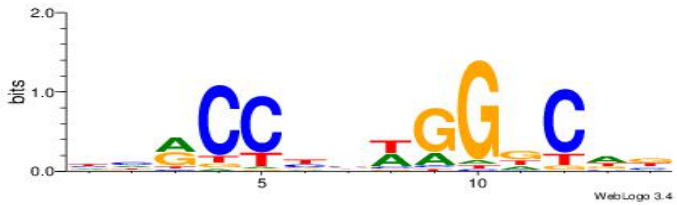
```
HHRCCBBWGGDCDB
BBVGCCBVGGCCTV
```

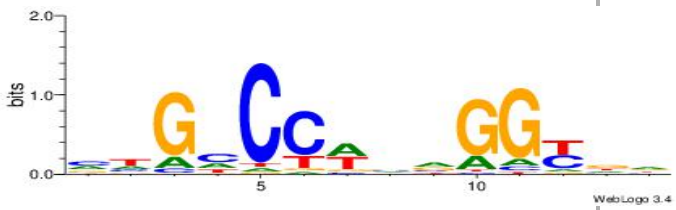
Original motif

Consensus sequence: HHRCCBBWGGDCDB

Reverse complement motif

Consensus sequence: BDGHCCWBVGGKDH





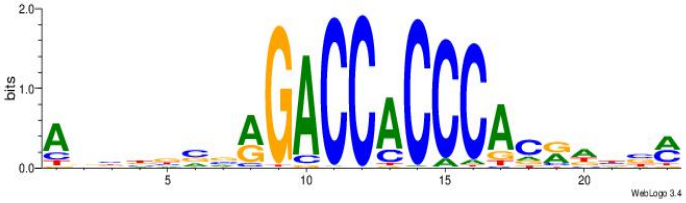
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0603516

Alignment:

```
ABBBBVVRGACCACCCACRDBBM
BBVGCCBVGGCCTV---------
```

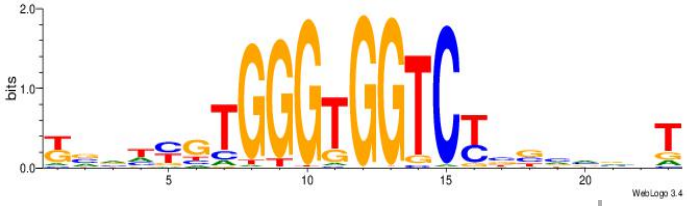
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Motif ID:	UP00002

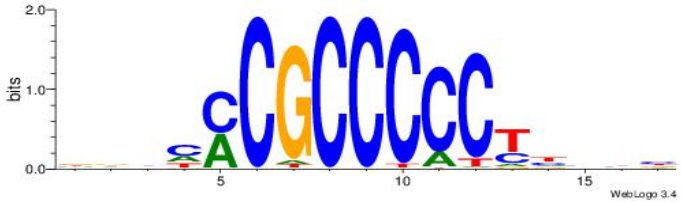
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0604694

Alignment:

```
BDHHMCGCCCCCTHVBB
---VAGGCCBBGGCVBB
```

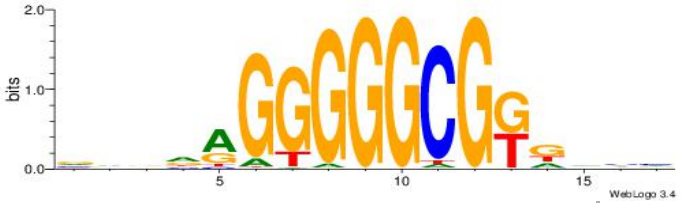
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB

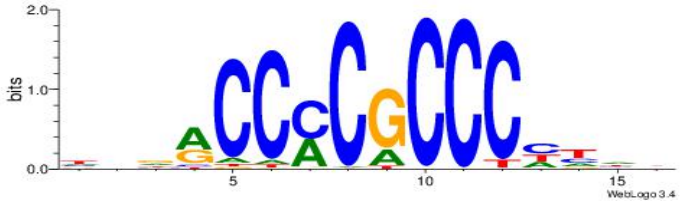


Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14

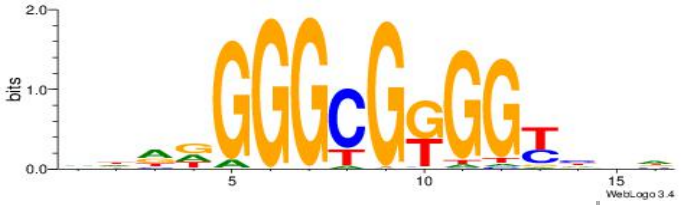
Similarity score: 0.0606067

Alignment:
HBDRCCMCGCCCHHHD
BBVGCCBVGGCCTV--

Original motif
Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif
Consensus sequence: DHHDGGGCGRGGKHBH

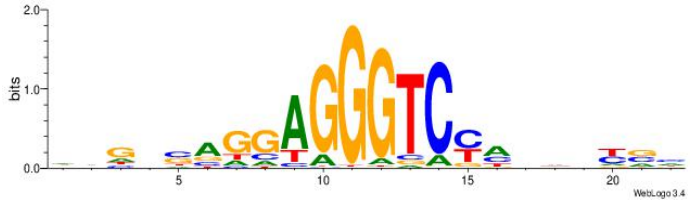


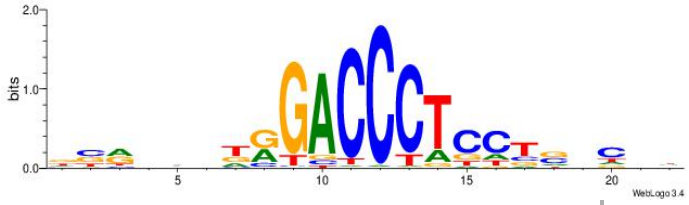
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	14
Similarity score:	0.0606878

Alignment:
HVGVSAGGAGGGTCYHHHHYVH
--------VAGGCCBBGGCVBB

Original motif
Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH

Reverse complement motif
Consensus sequence: DVMHHDHKGACCCTCCTSVCBH





Motif ID:	UP00087
Motif name:	Tcfap2c_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:	0.0608063

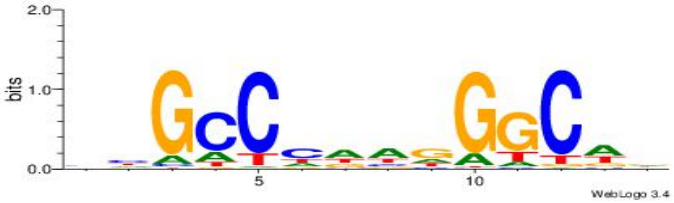
Alignment:

HWGCCCTDGGGCDB

VAGGCCBBGGCVBB

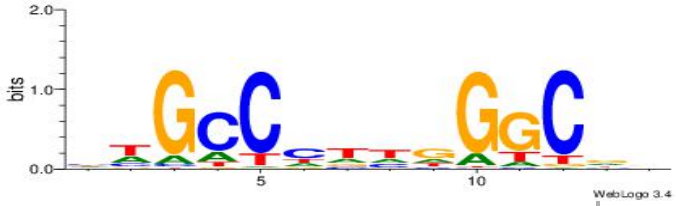
Original motif

Consensus sequence: BHGCCCDAGGGCWD



Reverse complement motif

Consensus sequence: HWGCCCTDGGGCDB



Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary

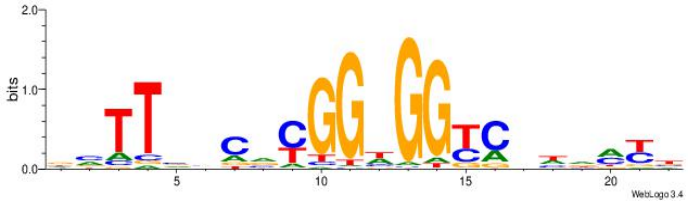
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.0615001

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
----BBVGCCBVGGCCTV----
```

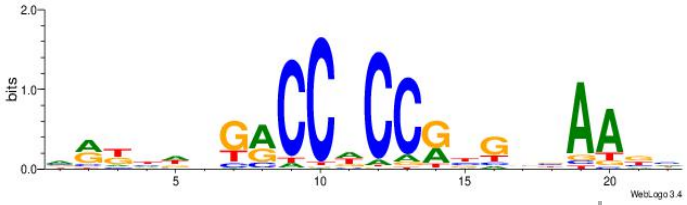
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

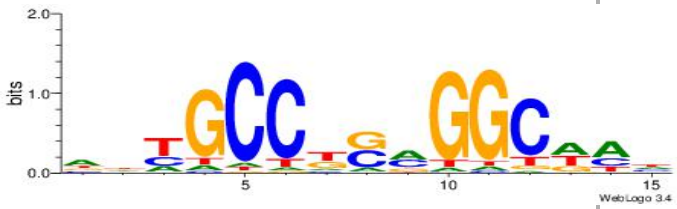


Motif ID:	UP00010
Motif name:	Tcfap2b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0624288

Alignment:
HHKGCCYSRGGCWAD
-BBVGCCBVGGCCTV

Original motif
Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif
Consensus sequence: HHKGCCYSRGGCWAD

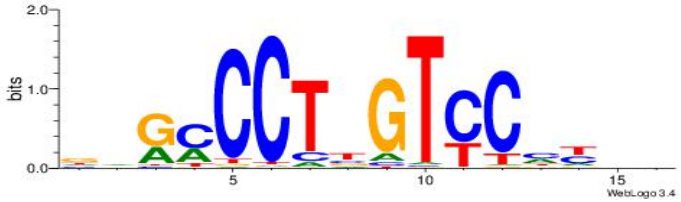


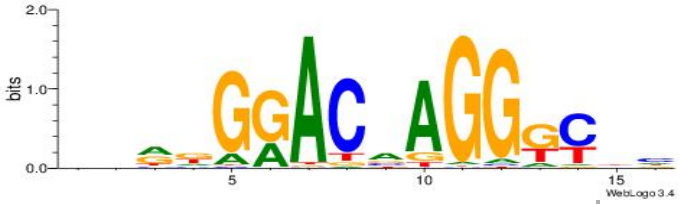
Motif ID:	UP00082
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0627664

Alignment:
DDGMCCTBGTCCHYHV
VAGGCCBBGGCVBB--

Original motif
Consensus sequence: DDGMCCTBGTCCHYHV

Reverse complement motif
Consensus sequence: VHMDGGACVAGGRCDH





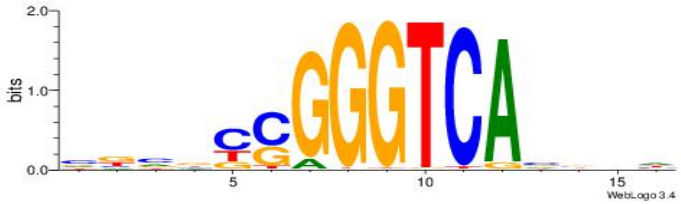
Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0636529

Alignment:

```
HVBVTGACCCSGBVBV
--VAGGCCBBGGCVBB
```

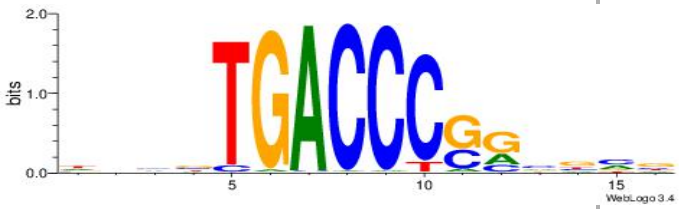
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

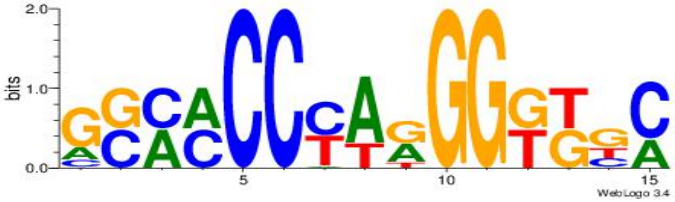
Consensus sequence: HVBVTGACCCSGBVBV



Dataset #: 3 Motif ID: 29 Motif name: Zfp423

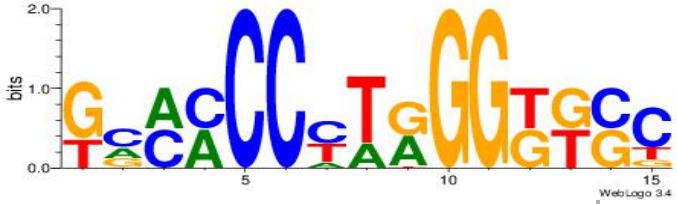
Original motif

Consensus sequence: GSMMCCYARGGKKKC



Reverse complement motif

Consensus sequence: GYRYCCMTKGGYRSC



Best Matches for Motif ID 29 (Highest to Lowest)

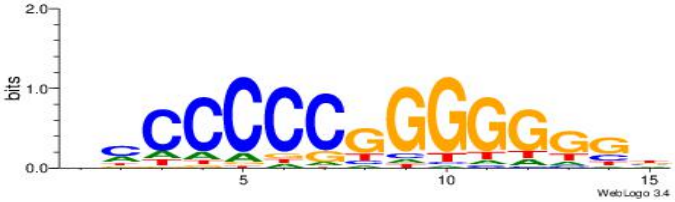
Motif ID:	UP00057
Motif name:	Zic2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0178077

Alignment:

```
BMCCCCCGGGGGGGB
GSMMCCYARGGKKKC
```

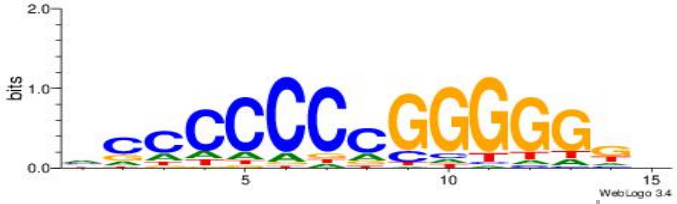
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB



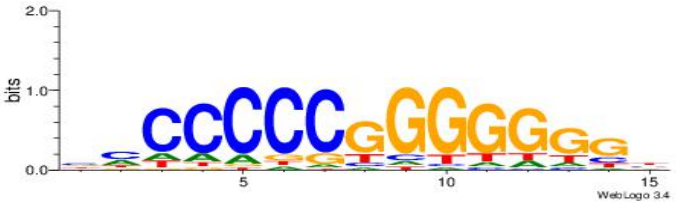
Motif ID:	UP00006
Motif name:	Zic3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0213948

Alignment:

```
BMCCCCCGGGGGGGB
GSMMCCYARGGKKKC
```

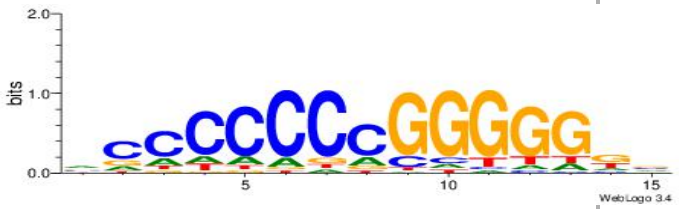
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB

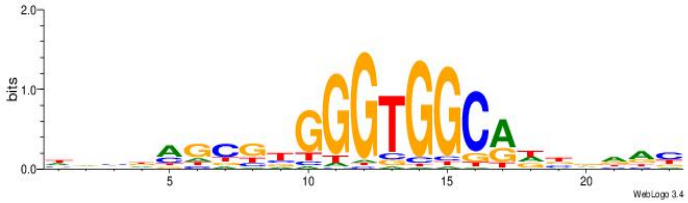


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15

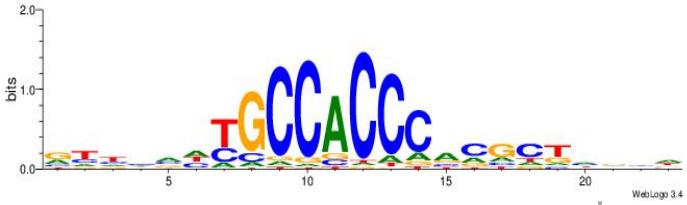
Similarity score: 0.0255241

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-------GSMMCCYARGGKKKC-

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

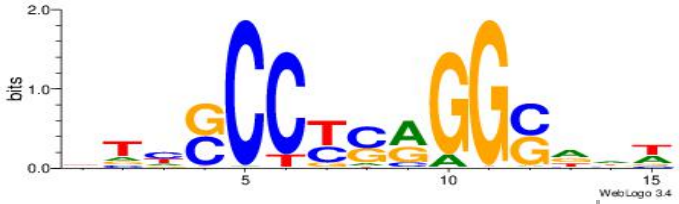


Motif ID: UP00087
Motif name: Tcfap2c_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 15
Similarity score: 0.0261399

Alignment:
WHHSCCYSRGGSDAD
GSMMCCYARGGKKKC

Original motif
Consensus sequence: WHHSCCYSRGGSDAD

Reverse complement motif
Consensus sequence: DTHSCCKSMGGSHHW



Motif ID:	UP00005
Motif name:	Tcfap2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0266201

Alignment:

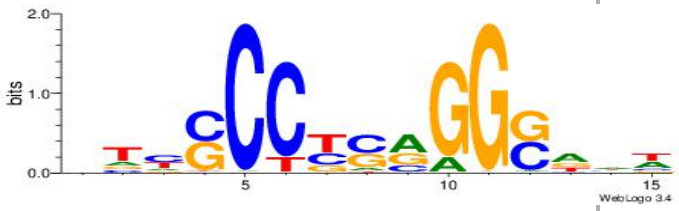
```
WDHSCCYSRGGSRAD
GSMMCCYARGGKKKC
```

Original motif

Consensus sequence: WDHSCCYSRGGSRAD

Reverse complement motif

Consensus sequence: DTMSCCKSMGGSHDW



Motif ID:	UP00539

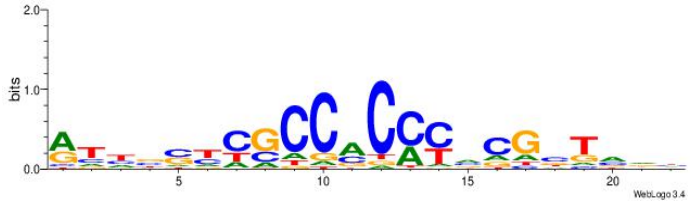
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	15
Similarity score:	0.027503

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
-------GSMMCCYARGGKKKC
```

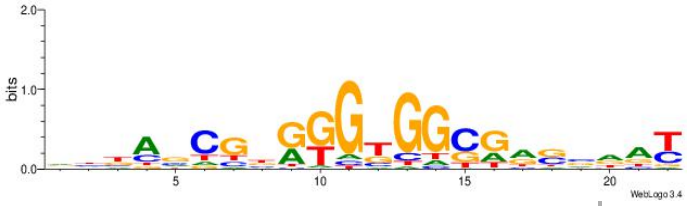
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



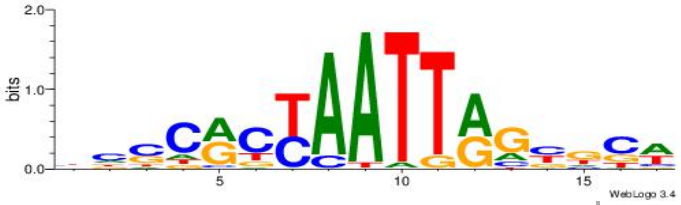
Motif ID:	UP00220
Motif name:	Nkx1-1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15

Similarity score: 0.0276935

Alignment:
WGHRCYAATTRGYGSDV
-GYRYCCMTKGGYRSC-

Original motif
Consensus sequence: WGHRCYAATTRGYGSDV

Reverse complement motif
Consensus sequence: BHSCMCKAATTMGMDCW

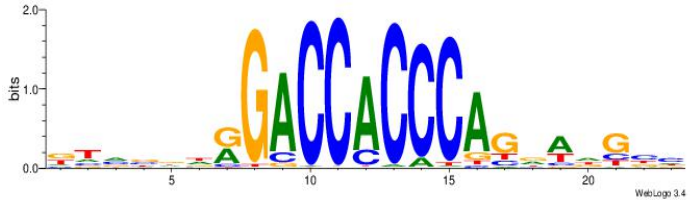


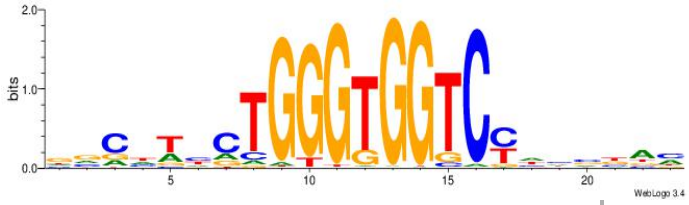
Motif ID: UP00539
Motif name: Gli2_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 1
Number of overlap: 15
Similarity score: 0.0280481

Alignment:
DTVBDDRGACCACCCAGDWDGBH
--------GSMMCCYARGGKKKC

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH

Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH





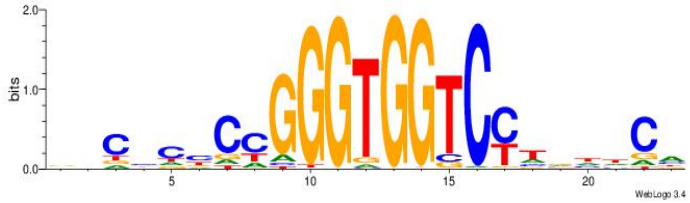
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	15
Similarity score:	0.0288797

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
--------GSMMCCYARGGKKKC
```

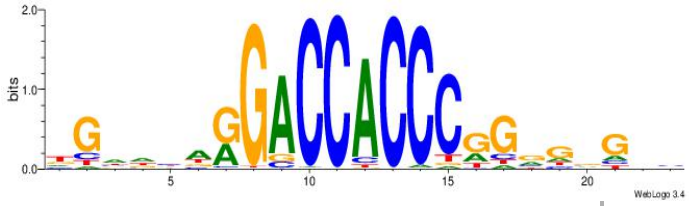
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



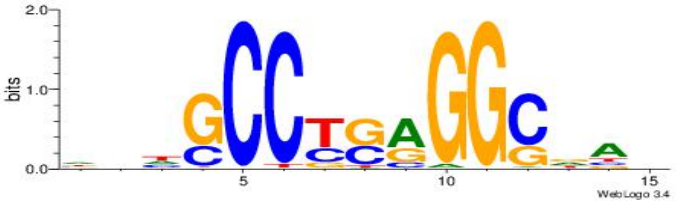
Motif ID:	UP00028
Motif name:	Tcfap2e_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.029693

Alignment:

```
HHHGCCTSAGGCDAD
GSMMCCYARGGKKKC
```

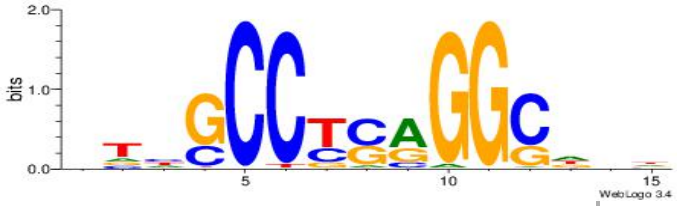
Original motif

Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif

Consensus sequence: DTHGCCTSAGGCHHH



Dataset #: 3 Motif ID: 30 Motif name: ZEB1

Original motif

Consensus sequence: CACCTD

Reverse complement motif

Consensus sequence: HAGGTG

Best Matches for Motif ID 30 (Highest to Lowest)

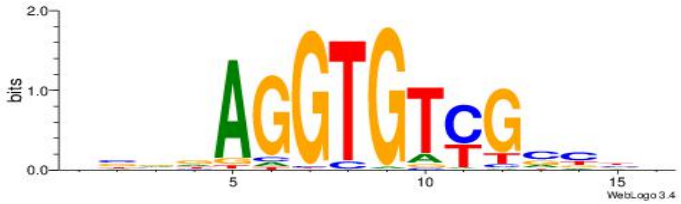
Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0

Alignment:

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

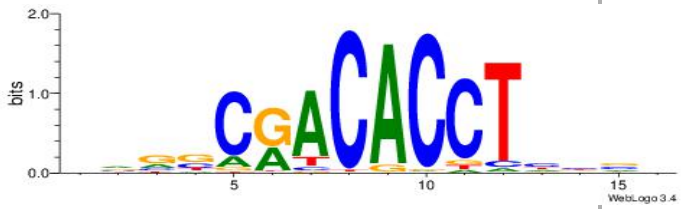
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV



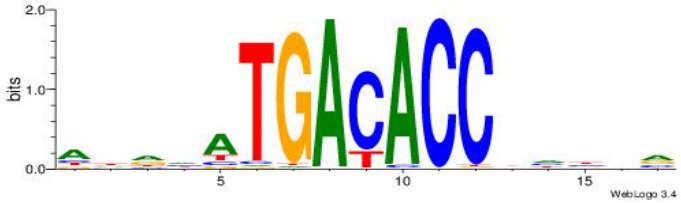
Motif ID:	UP00199
Motif name:	Six4
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	6
Similarity score:	0.00433068

Alignment:

```
BBVHVGGTGTCATHDDT
---HAGGTG--------
```

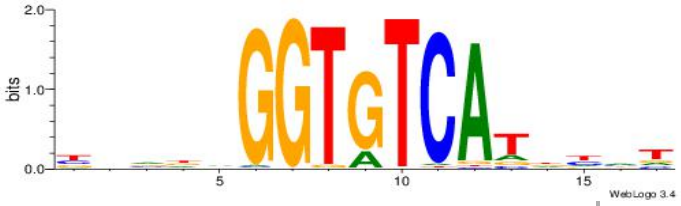
Original motif

Consensus sequence: ADDHATGACACCBHBBV



Reverse complement motif

Consensus sequence: BBVHVGGTGTCATHDDT

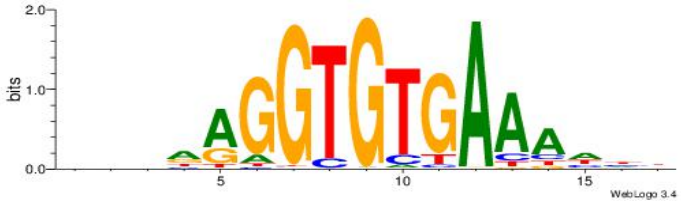


Motif ID:	UP00068
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9

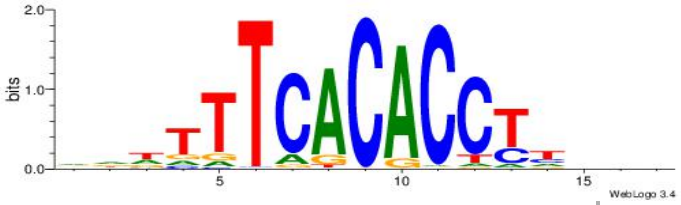
Number of overlap: 6
Similarity score: 0.00524081

Alignment:
HHHTTTCACACCTDHBV
--------CACCTD---

Original motif
Consensus sequence: BVHDAGGTGTGAAAHHH



Reverse complement motif
Consensus sequence: HHHTTTCACACCTDHBV



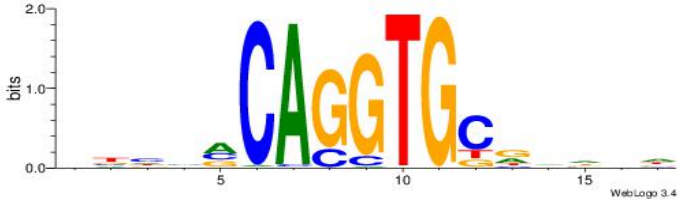
Motif ID: UP00046
Motif name: Tcfe2a_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 6
Similarity score: 0.00911301

Alignment:
VBHHVCAGGTGCDVDHD
-----HAGGTG------

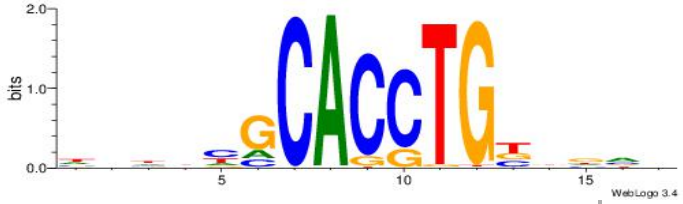
Original motif

Reverse complement motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Consensus sequence: DHDBHGCACCTGBDDVB



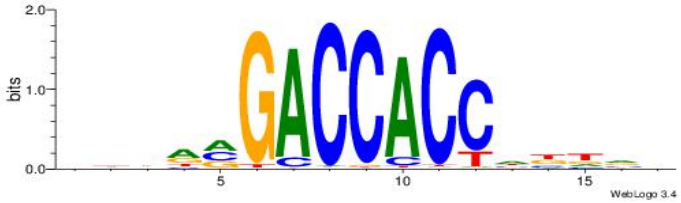
Motif ID:	UP00047
Motif name:	Zbtb7b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	6
Similarity score:	0.0233556

Alignment:

```
BDDRVGACCACCHBDVB
--------CACCTD---
```

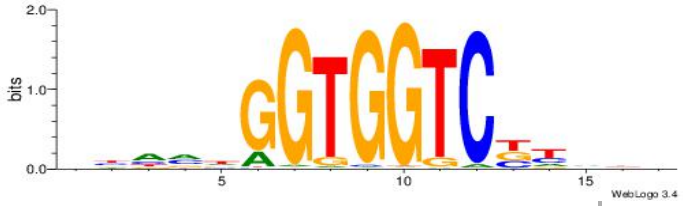
Original motif

Consensus sequence: BDDRVGACCACCHBDVB



Reverse complement motif

Consensus sequence: BBDVHGGTGGTCBKDDB



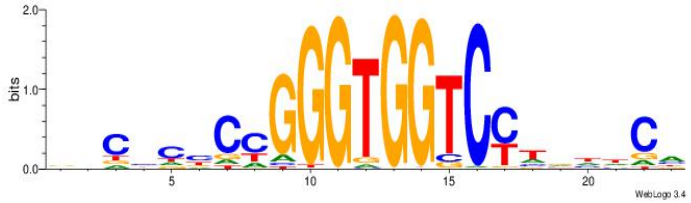
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11
Number of overlap:	6
Similarity score:	0.0233928

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
-------HAGGTG----------
```

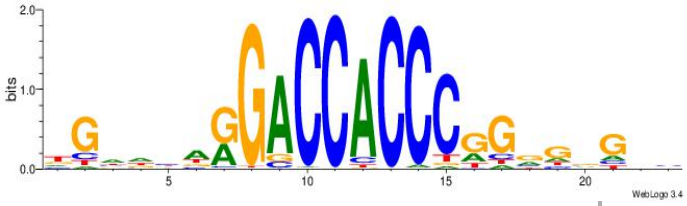
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

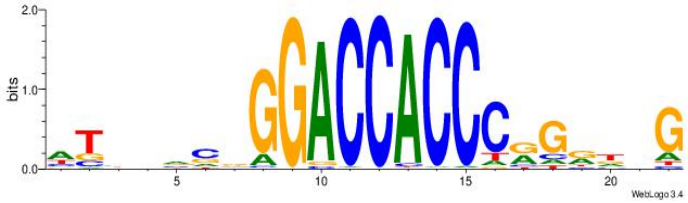


Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

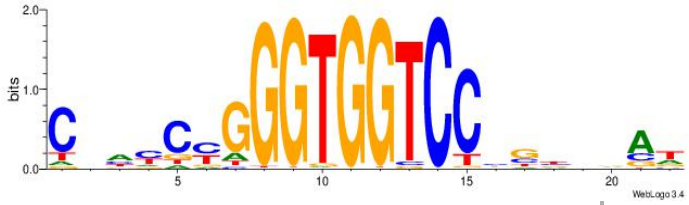
Number of overlap: 6
Similarity score: 0.0254338

Alignment:
HTBVVVDGGACCACCCRGRDBG
----------CACCTD-----

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



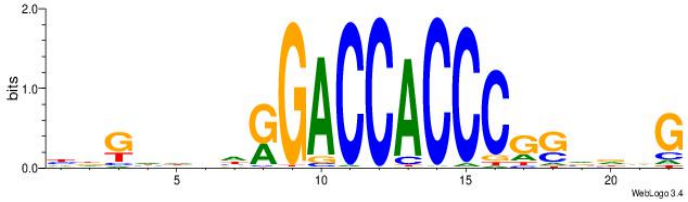
Motif ID: UP00540
Motif name: Gli3_v016060_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.0290143

Alignment:
HDGHHBHRGACCACCCGSVDVG
----------CACCTD-----

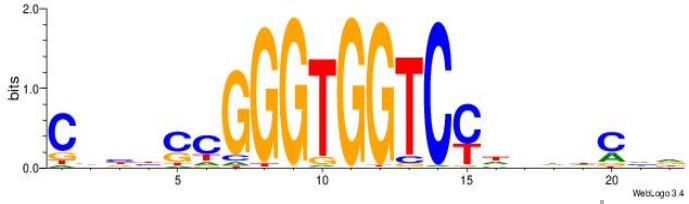
Original motif

Reverse complement motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



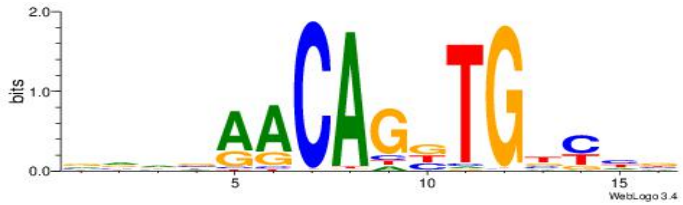
Motif ID:	UP00036
Motif name:	Myf6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0309673

Alignment:

```
VVDBAACAGBTGBYHB
------HAGGTG----
```

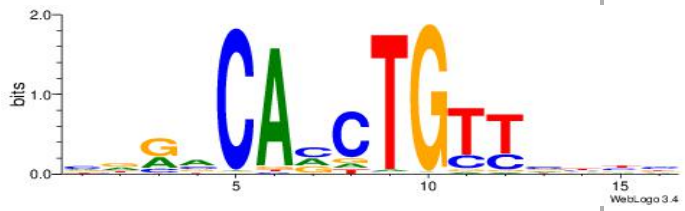
Original motif

Consensus sequence: VVDBAACAGBTGBYHB



Reverse complement motif

Consensus sequence: BDKVCABCTGTTBDBV



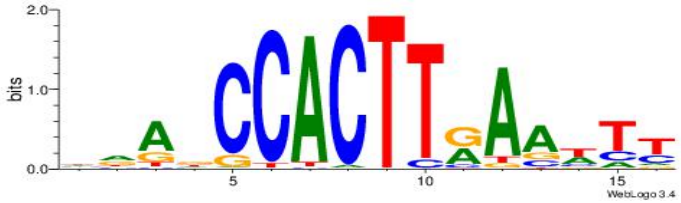
Motif ID:	UP00249
Motif name:	Nkx2-5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.031502

Alignment:

```
HDADCCACTTRAAWTT
-----CACCTD-----
```

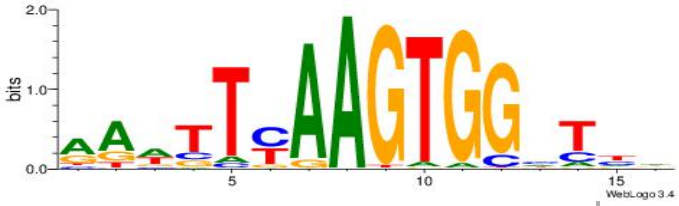
Original motif

Consensus sequence: HDADCCACTTRAAWTT



Reverse complement motif

Consensus sequence: AAWTTMAAGTGGHTDH



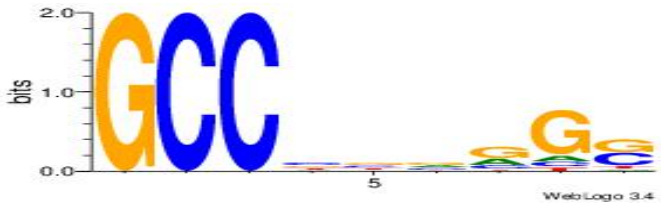
Dataset #: 3 Motif ID: 31 Motif name: TFAP2A

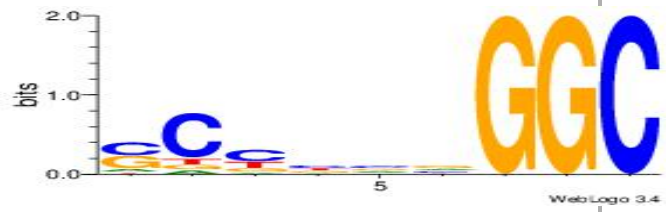
Original motif

Consensus sequence: GCCBBVRGS

Reverse complement motif

Consensus sequence: SCMVBBGGC





Best Matches for Motif ID 31 (Highest to Lowest)

Motif ID:	UP00010
Motif name:	Tcfap2b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	9
Similarity score:	0.0115546

Alignment:

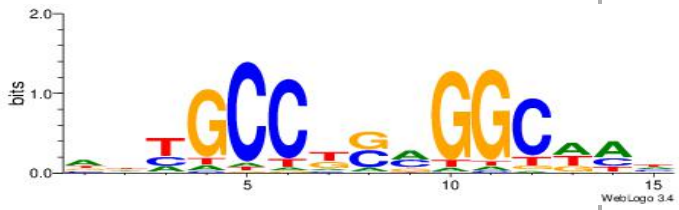
```
HHKGCCYSRGGCWAD
---GCCBBVRGS---
```

Original motif

Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD



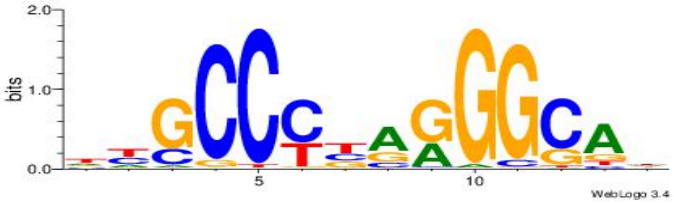
Motif ID:	UP00010
Motif name:	Tcfap2b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	9
Similarity score:	0.0150447

Alignment:

```
DYGCCYBARGGCAH
--GCCBBVRGS---
```

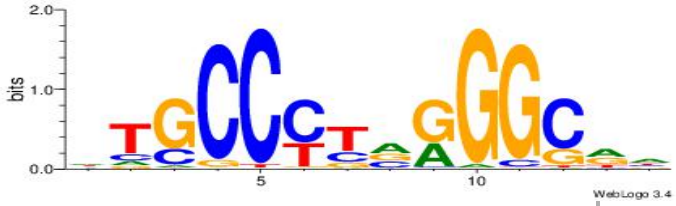
Original motif

Consensus sequence: DYGCCYBARGGCAH



Reverse complement motif

Consensus sequence: HTGCCMTVKGGCMD



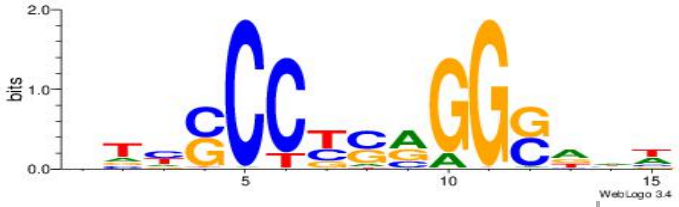
Motif ID:	UP00005
Motif name:	Tcfap2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

Number of overlap: 9
Similarity score: 0.0151527

Alignment:
WDHSCCYSRGGSRAD
---GCCBBVRGS---

Original motif
Consensus sequence: WDHSCCYSRGGSRAD

Reverse complement motif
Consensus sequence: DTMSCCKSMGGSHDW



Motif ID: UP00087
Motif name: Tcfap2c_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 9
Similarity score: 0.016909

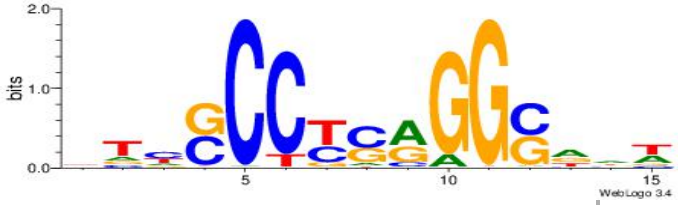
Alignment:
WHHSCCYSRGGSDAD
---GCCBBVRGS---

Original motif

Reverse complement motif

Consensus sequence: WHHSCCYSRGGSDAD

Consensus sequence: DTHSCCKSMGGSHHW



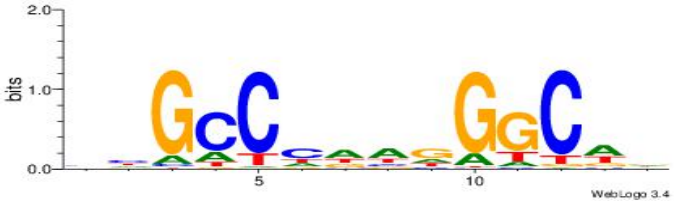
Motif ID:	UP00087
Motif name:	Tcfap2c_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	9
Similarity score:	0.0170259

Alignment:

```
BHGCCCDAGGGCWD
--GCCBBVRGS---
```

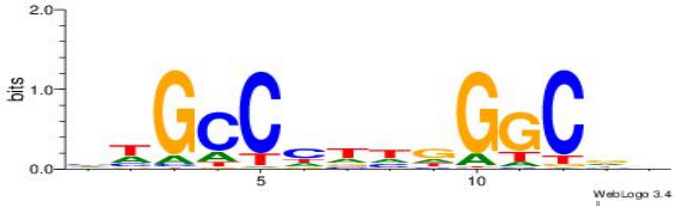
Original motif

Consensus sequence: BHGCCCDAGGGCWD



Reverse complement motif

Consensus sequence: HWGCCCTDGGGCDB



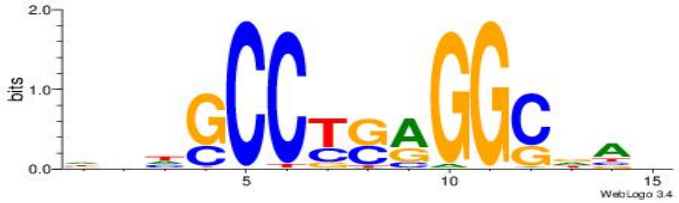
Motif ID:	UP00028
Motif name:	Tcfap2e_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	9
Similarity score:	0.0198854

Alignment:

```
HHHGCCTSAGGCDAD
---GCCBBVRGS---
```

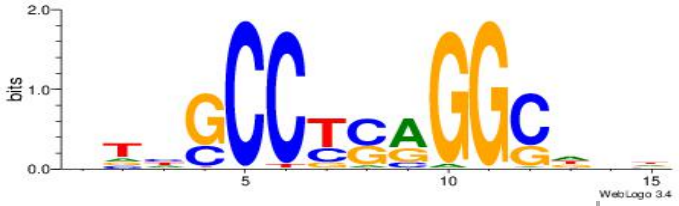
Original motif

Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif

Consensus sequence: DTHGCCTSAGGCHHH

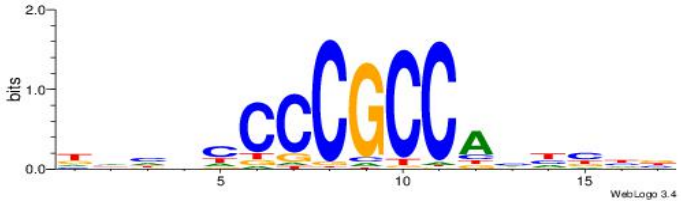


Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9

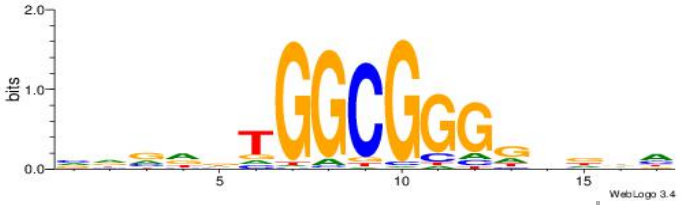
Number of overlap: 9
Similarity score: 0.0203681

Alignment:
BHBHDTGGCGGGGBDHD
SCMVBBGGC--------

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD



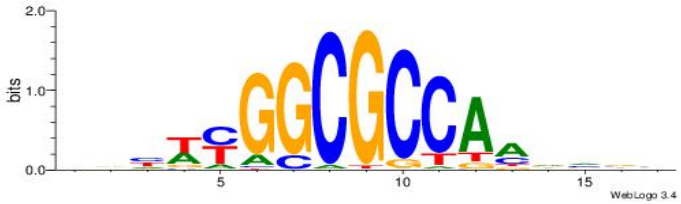
Motif ID: UP00003
Motif name: E2F3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 9
Similarity score: 0.0217064

Alignment:
BBBDYTGGCGCCKWDBD
SCMVBBGGC--------

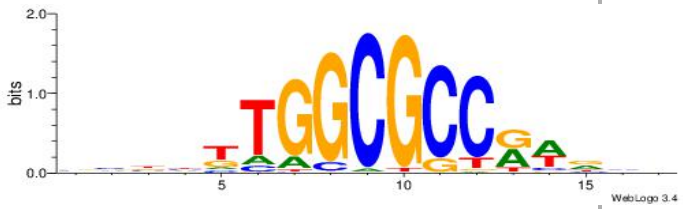
Original motif

Reverse complement motif

Consensus sequence: HBHWYGGCGCCAMDVBB



Consensus sequence: BBBDYTGGCGCCKWDBD



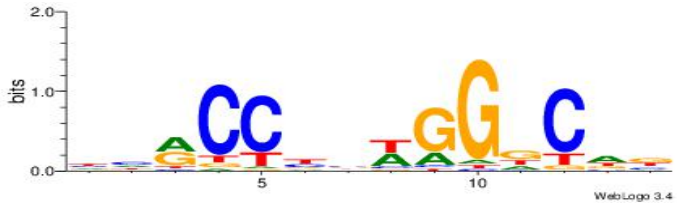
Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	9
Similarity score:	0.0234775

Alignment:

```
HHRCCBBWGGDCDB
--GCCBBVRGS---
```

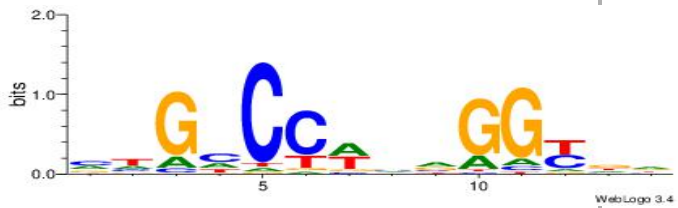
Original motif

Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif

Consensus sequence: BDGHCCWBVGGKDH



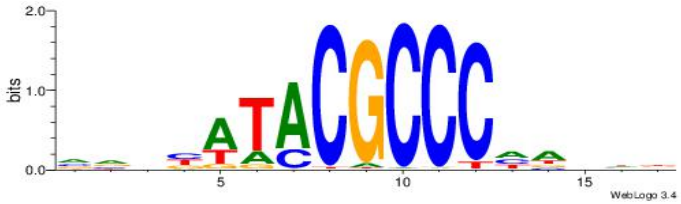
Motif ID:	UP00093
Motif name:	Klf7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	9
Similarity score:	0.026642

Alignment:

```
VVDBATACGCCCHAHHD
--------GCCBBVRGS
```

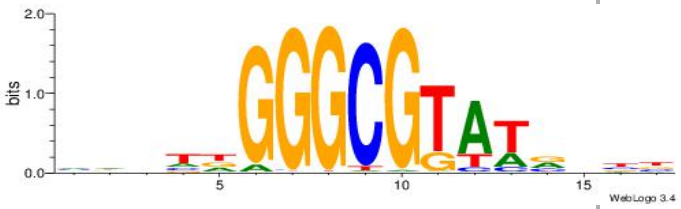
Original motif

Consensus sequence: VVDBATACGCCCHAHHD



Reverse complement motif

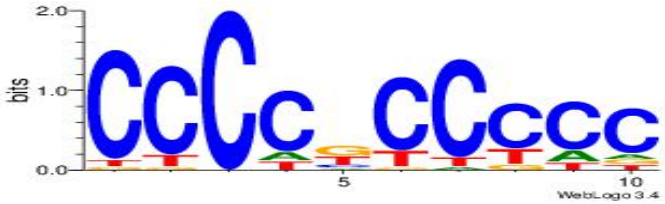
Consensus sequence: DHDTHGGGCGTATBHBB



Dataset #: 3 Motif ID: 32 Motif name: SP1

Original motif

Consensus sequence: CCCCKCCCCC



Reverse complement motif

Consensus sequence: GGGGGYGGGG

Best Matches for Motif ID 32 (Highest to Lowest)

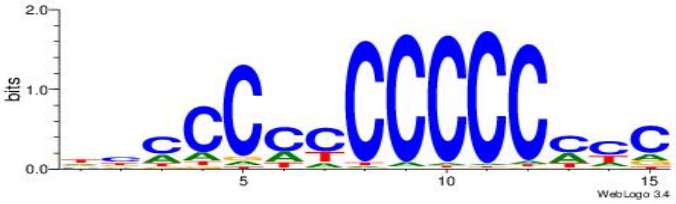
Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0231018

Alignment:

```
DBCCCCCCCCCCMYC
--CCCCKCCCCC---
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

Consensus sequence: GKRGGGGGGGGGBD

Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

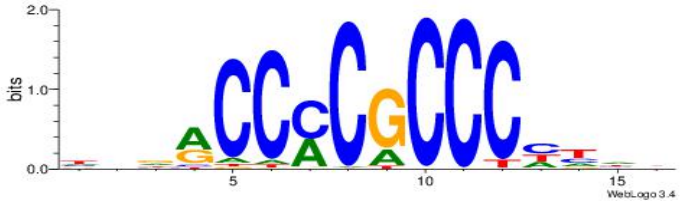
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0303207

Alignment:

```
HBDRCCMCGCCCHHHD
----CCCCKCCCCC--
```

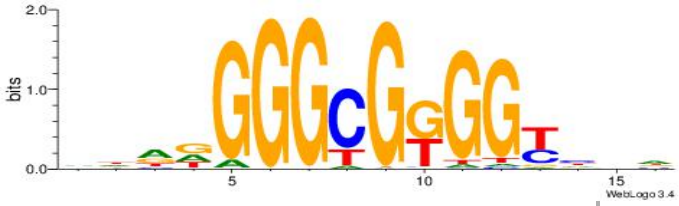
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



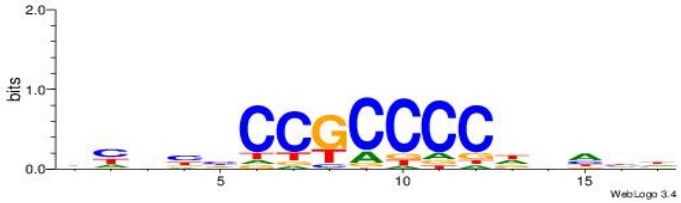
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0323007

Alignment:

HHHHDGGGGCGGDBHDV
----GGGGGYGGGG---

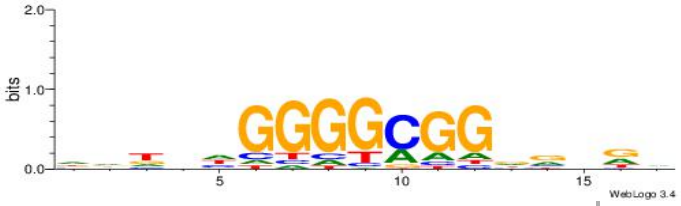
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Motif ID:	UP00099
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0340973

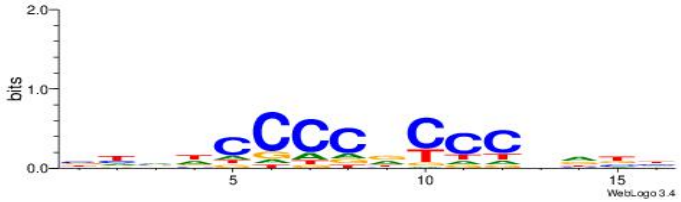
Alignment:
HVDVGGGHGGGGDBHB
--GGGGGYGGGG----

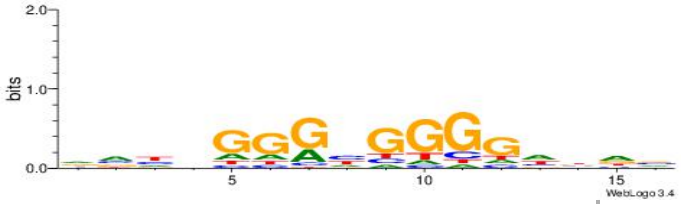
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH

Reverse complement motif

Consensus sequence: HVDVGGGHGGGGDBHB





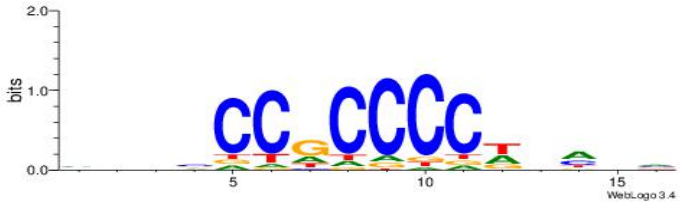
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0351051

Alignment:

```
BHHHWGGGGCGGBBVH
----GGGGGYGGGG--
```

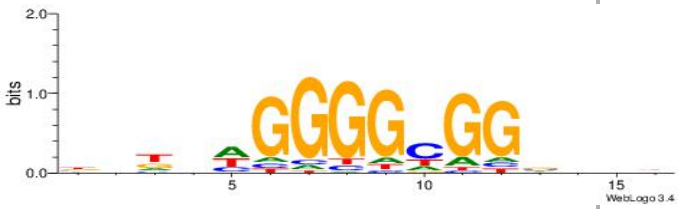
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



Motif ID:	UP00539

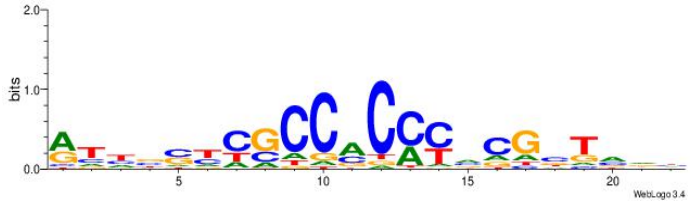
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	10
Similarity score:	0.0390437

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
------GGGGGYGGGG------
```

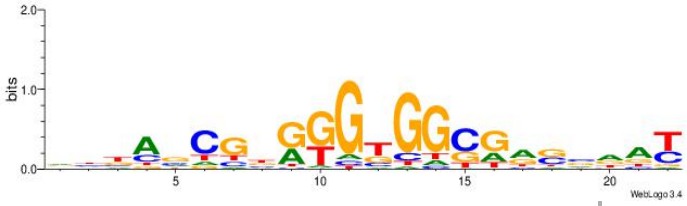
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

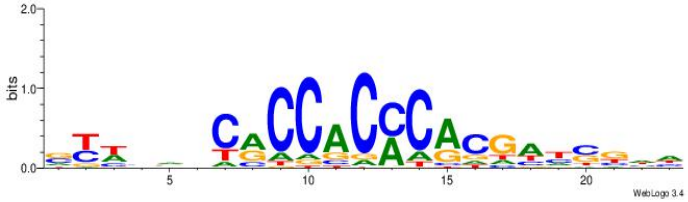


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10

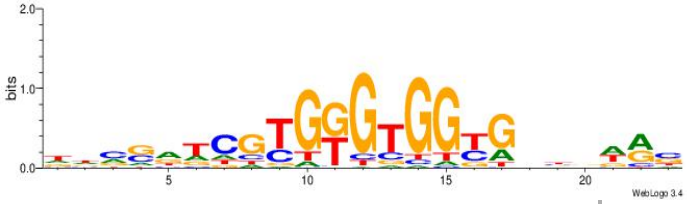
Similarity score: 0.0393358

Alignment:
HHBSHTCGTGRGTGGKGDBVWMV
-------GGGGGYGGGG------

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

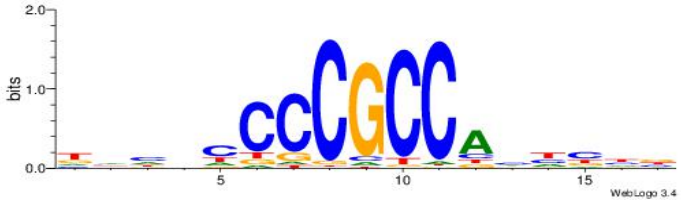


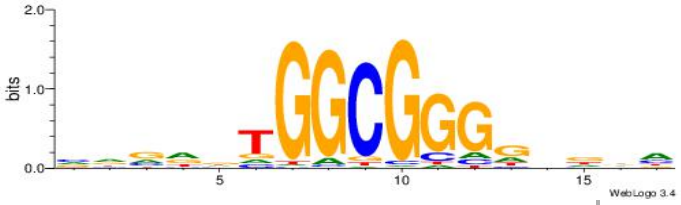
Motif ID: UP00000
Motif name: Smad3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 10
Similarity score: 0.0413863

Alignment:
DHHBCCCCGCCAHHBHB
----CCCCKCCCCC---

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB

Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD





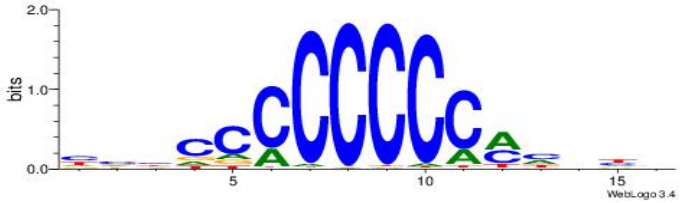
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0418947

Alignment:

```
HVBCCCCCCCCMHHHB
---CCCCKCCCCC---
```

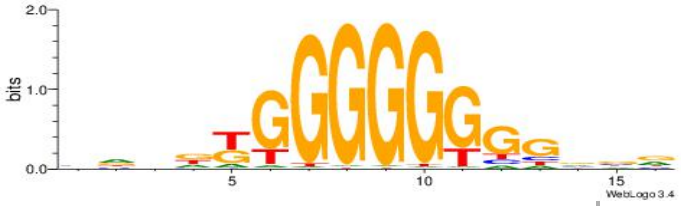
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



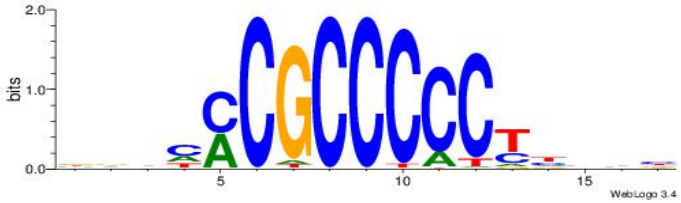
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0420708

Alignment:

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

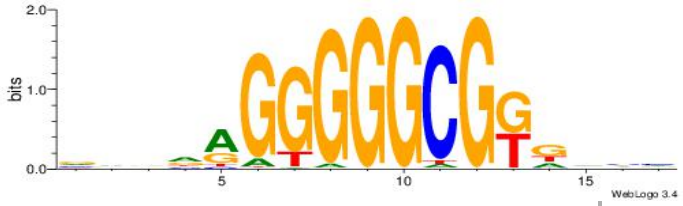
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



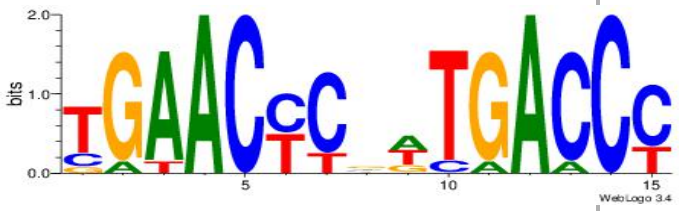
Dataset #: 3 **Motif ID: 33** **Motif name: RXRAVDR**

Original motif

Consensus sequence: GGGTCAWBGRGTTCA

Reverse complement motif

Consensus sequence: TGAACKCBWTGACCC



Best Matches for Motif ID 33 (Highest to Lowest)

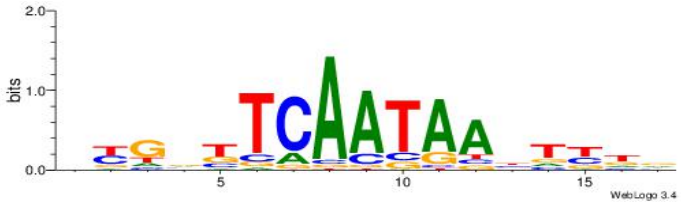
Motif ID:	UP00037
Motif name:	Zfp105_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0631638

Alignment:

```
DYGVKTCAATAABTYDD
--GGGTCAWBGRGTTCA
```

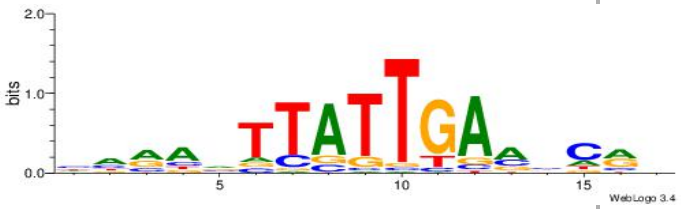
Original motif

Consensus sequence: DYGVKTCAATAABTYDD



Reverse complement motif

Consensus sequence: HDMAVTTATTGARVCMH



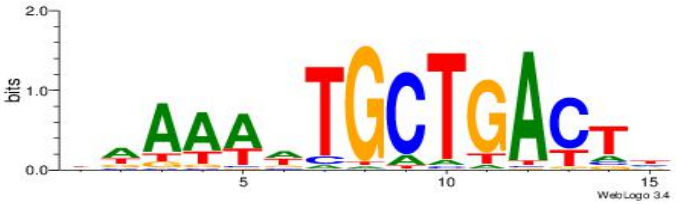
Motif ID:	UP00044
Motif name:	Mafk_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0639668

Alignment:

```
HAGTCAGCAWTTTWD
TGAACKCBWTGACCC
```

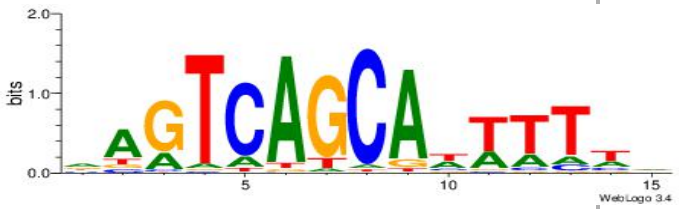
Original motif

Consensus sequence: DWAAAWTGCTGACTH



Reverse complement motif

Consensus sequence: HAGTCAGCAWTTTWD

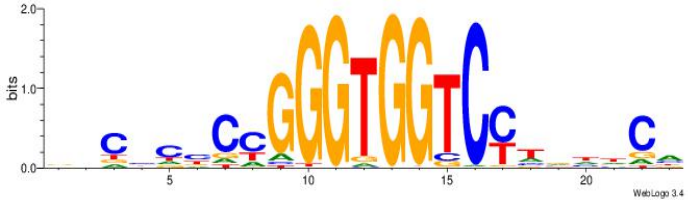


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	15

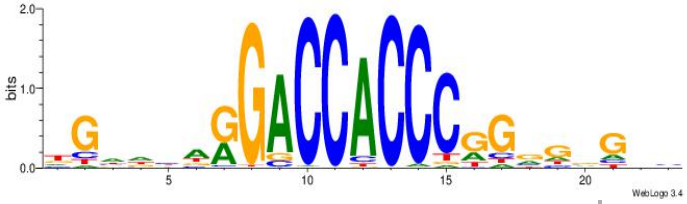
Similarity score: 0.0682816

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
--------GGGTCAWBGRGTTCA

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

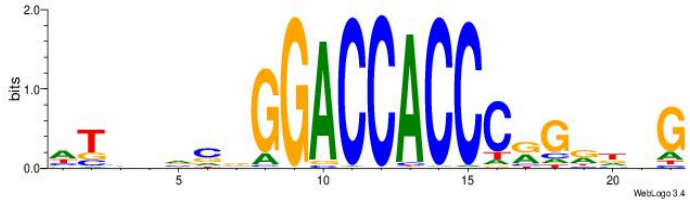


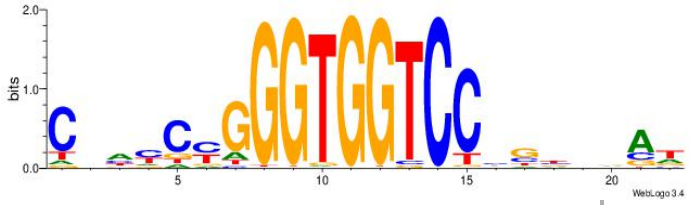
Motif ID: UP00539
Motif name: Gli2_v015681_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 15
Similarity score: 0.06995

Alignment:
HTBVVVDGGACCACCCRGRDBG
-TGAACKCBWTGACCC------

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH





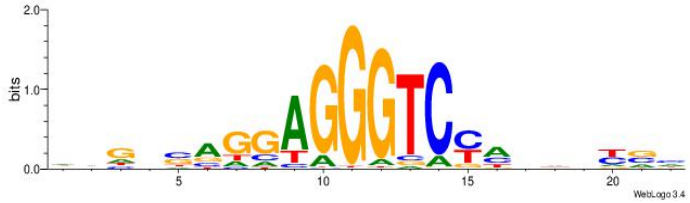
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0711699

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
-------TGAACKCBWTGACCC
```

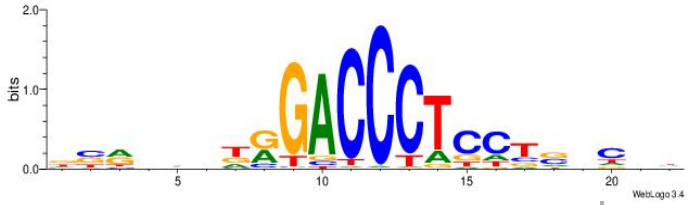
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Motif ID:	UP00540
Motif name:	Gli3_v016060_primary

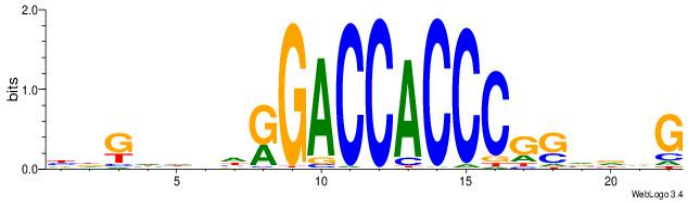
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.072162

Alignment:

```
CVHBSCGGGTGGTCMHVHHCDH
------GGGTCAWBGRGTTCA-
```

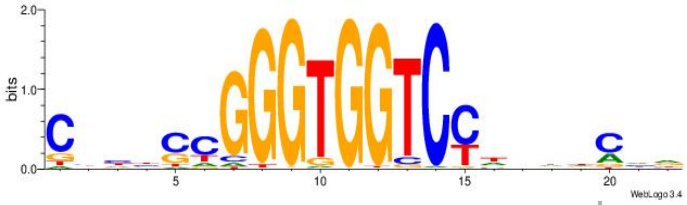
Original motif

Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif

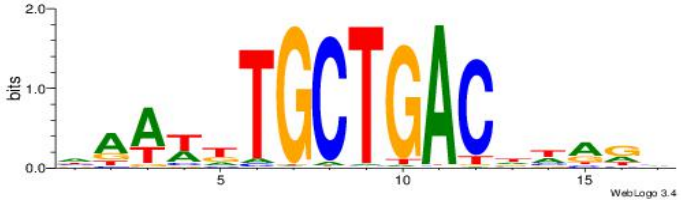
Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



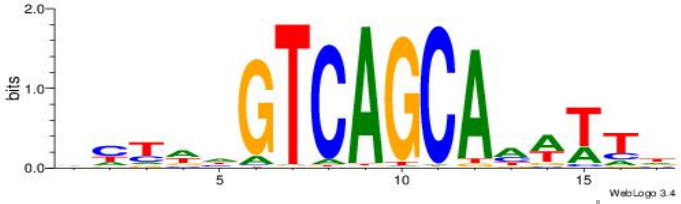
Motif ID:	UP00045
Motif name:	Mafb_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.562034

Alignment:
DMTWDGTCAGCADWTTH-
-TGAACKCBWTGACCC--

Original motif
Consensus sequence: HAAWDTGCTGACDWARH



Reverse complement motif
Consensus sequence: DMTWDGTCAGCADWTTH

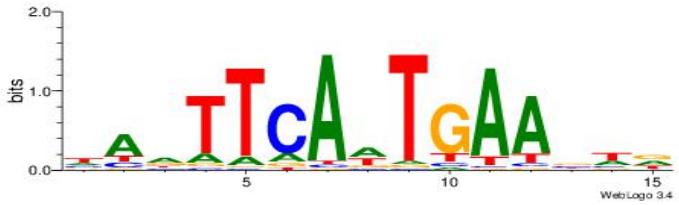


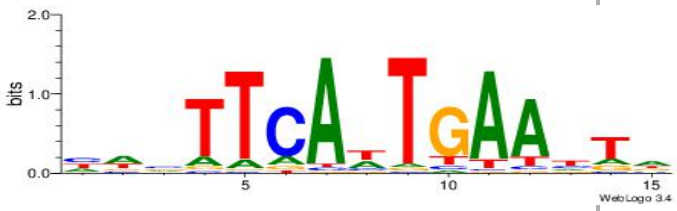
Motif ID:	UP00012
Motif name:	Bbx_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.562788

Alignment:
HWBTTCAWTGAADTH-
-GGGTCAWBGRGTTCA

Original motif
Consensus sequence: HADTTCAWTGAABWD

Reverse complement motif
Consensus sequence: HWBTTCAWTGAADTH





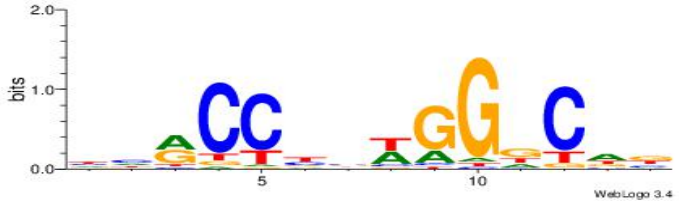
Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.56549

Alignment:

```
HHRCCBBWGGDCDB-
GGGTCAWBGRGTTCA
```

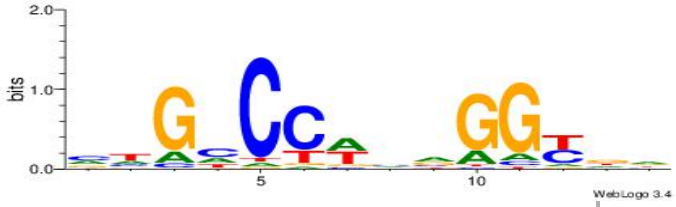
Original motif

Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif

Consensus sequence: BDGHCCWBVGGKDH



Motif ID:	UP00067
Motif name:	Lef1_primary

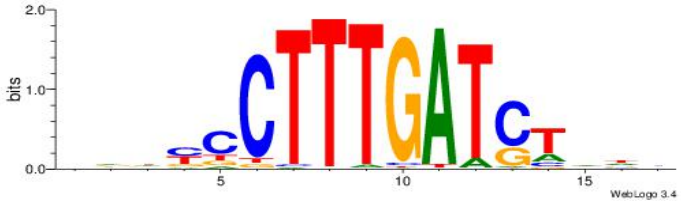
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.565777

Alignment:

```
VDDAGATCAAAGGKDDD-
---GGGTCAWBGRGTTCA
```

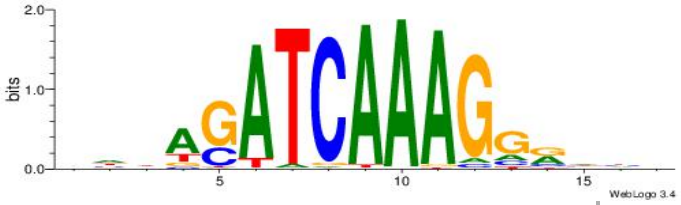
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

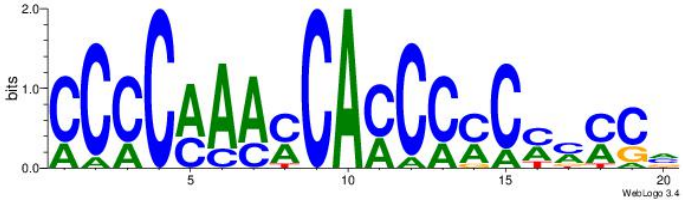
Consensus sequence: VDDAGATCAAAGGKDDD



Dataset #: 3 Motif ID: 34 Motif name: RREB1

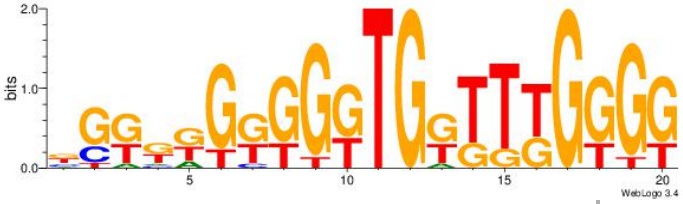
Original motif

Consensus sequence: CCCCMAAMCAMCCMCMMMCV



Reverse complement motif

Consensus sequence: BGRRRGRGGRTGRTTYGGGG



Best Matches for Motif ID 34 (Highest to Lowest)

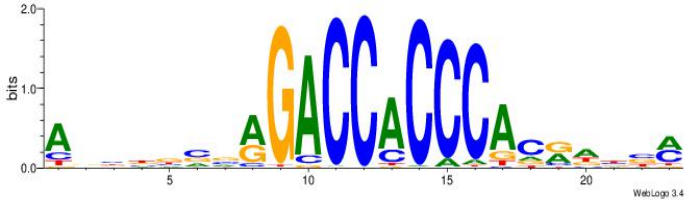
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.0443369

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
BGRRRGRGGRTGRTTYGGGG---
```

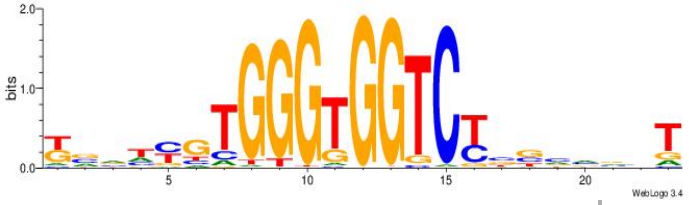
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif

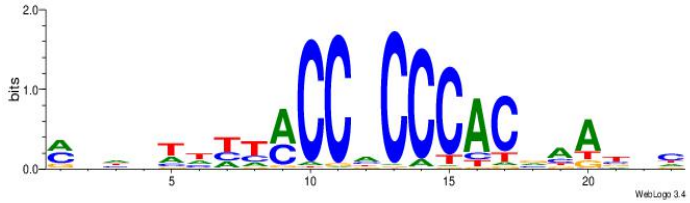
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	20
Similarity score:	0.0490569

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
--CCCCMAAMCAMCCMCMMMCV-
```

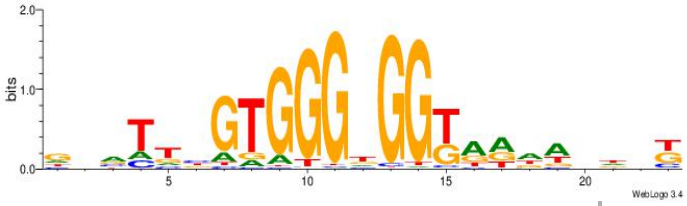
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



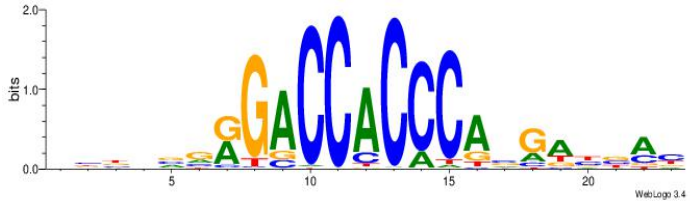
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0546172

Alignment:

BTBVTCVTGGGTGGTCMVVDVBB
-BGRRRGRGGRTGRTTYGGGG--

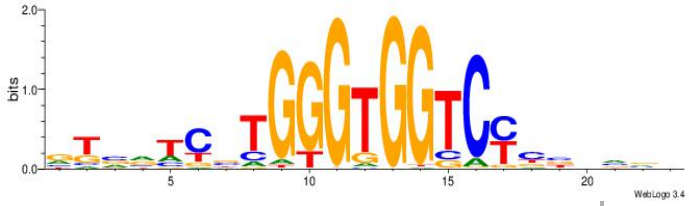
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



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:	3
Number of overlap:	20
Similarity score:	0.055783

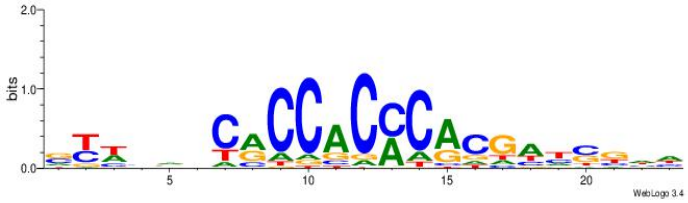
Alignment:
VYWVVHCRCCACMCACGAHSBHH
-CCCCMAAMCAMCCMCMMMCV--

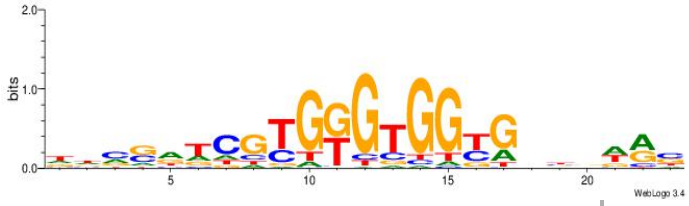
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





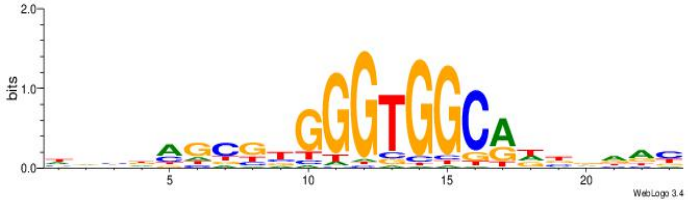
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.057969

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
--BGRRRGRGGRTGRTTYGGGG-
```

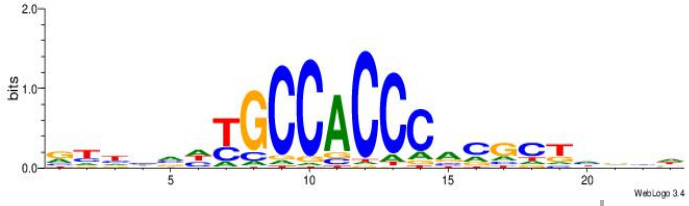
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



Motif ID:	UP00539

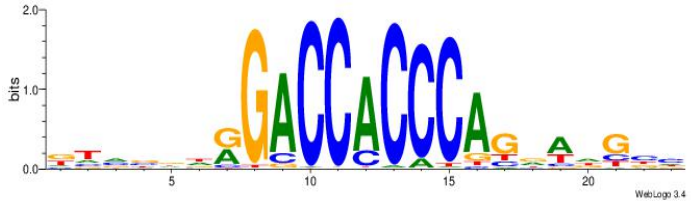
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	20
Similarity score:	0.0595101

Alignment:

```
DTVBDDRGACCACCCAGDWDGBH
--CCCCMAAMCAMCCMCMMMCV-
```

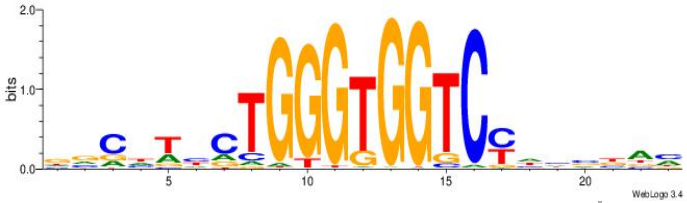
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH

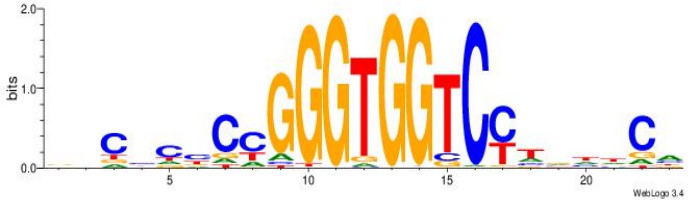


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	20

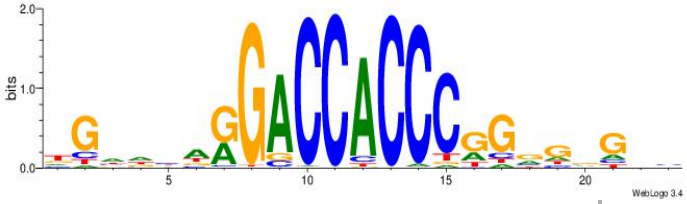
Similarity score: 0.0622003

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
-BGRRRGRGGRTGRTTYGGGG--

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

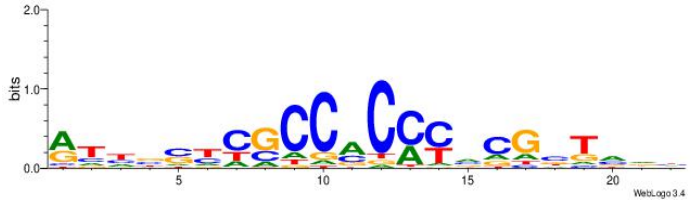


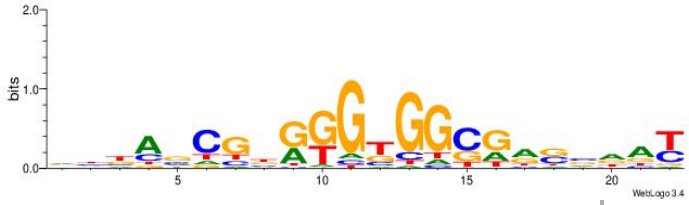
Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 20
Similarity score: 0.0626951

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
-CCCCMAAMCAMCCMCMMMCV-

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





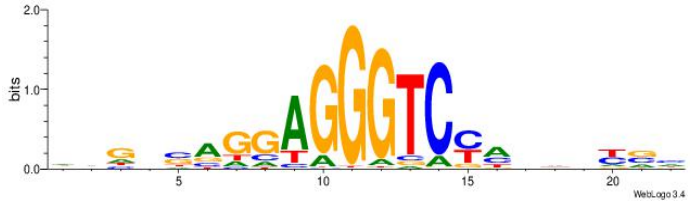
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0631901

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
CCCCMAAMCAMCCMCMMMCV--
```

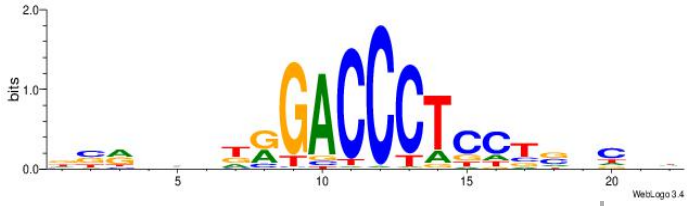
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



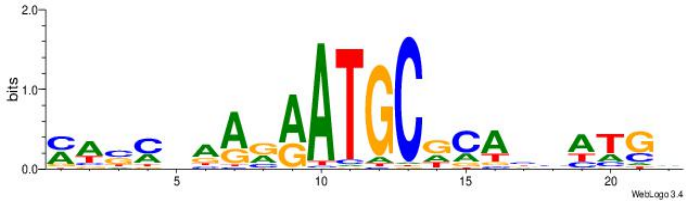
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	20
Similarity score:	0.0673848

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
--BGRRRGRGGRTGRTTYGGGG
```

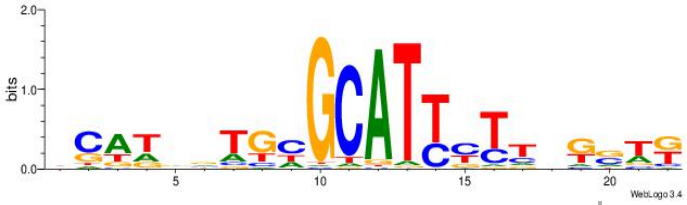
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



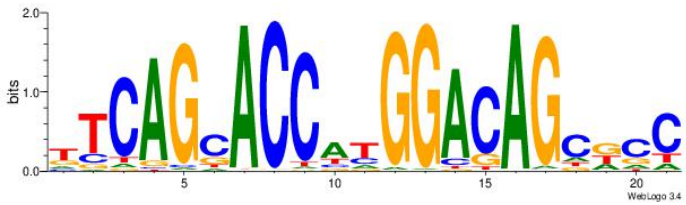
Dataset #: 3 Motif ID: 35 Motif name: REST

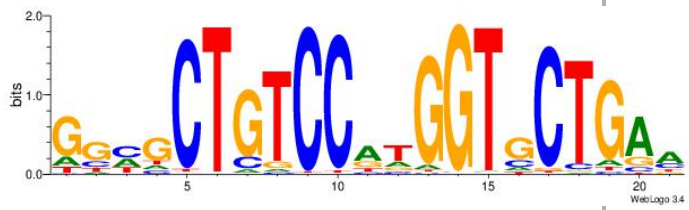
Original motif

Consensus sequence: TTCAGCACCATGGACAGCKCC

Reverse complement motif

Consensus sequence: GGYGCTGTCCATGGTGCTGAA





Best Matches for Motif ID 35 (Highest to Lowest)

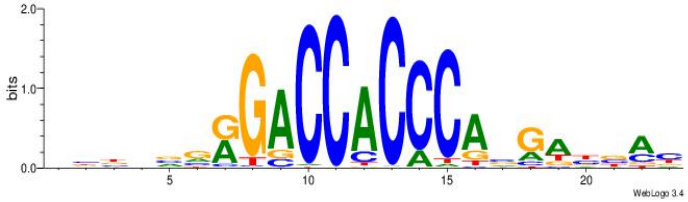
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	21
Similarity score:	0.0699178

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
--TTCAGCACCATGGACAGCKCC
```

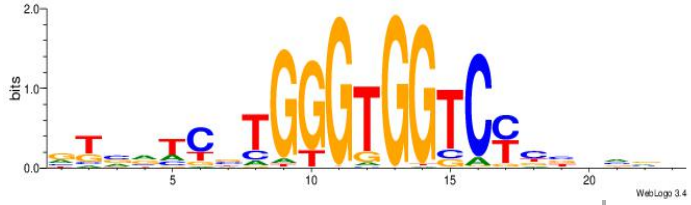
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



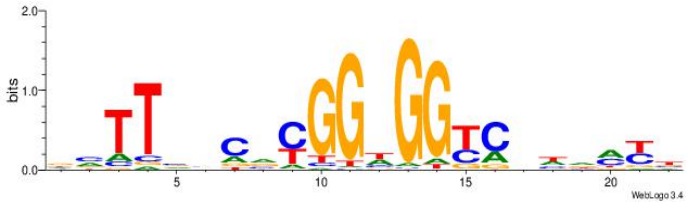
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	21
Similarity score:	0.0734685

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
GGYGCTGTCCATGGTGCTGAA-
```

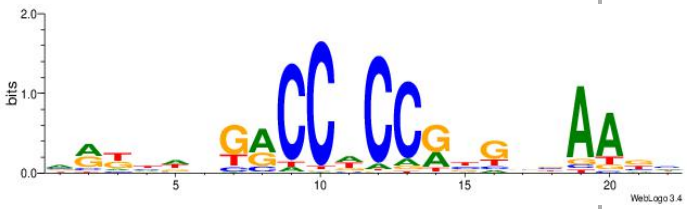
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

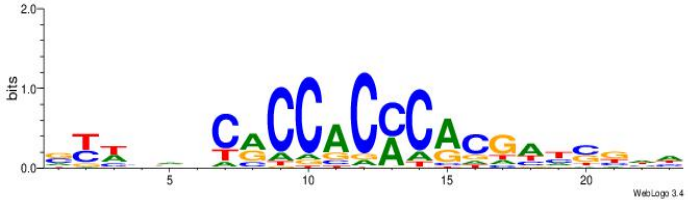


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	21

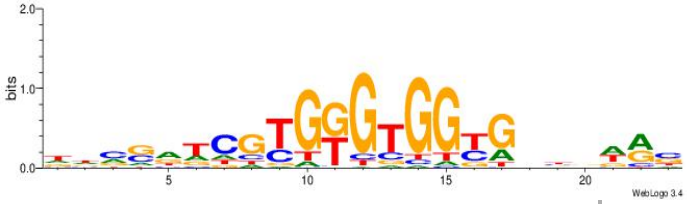
Similarity score: 0.0740652

Alignment:
VYWVVHCRCCACMCACGAHSBHH
-TTCAGCACCATGGACAGCKCC-

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

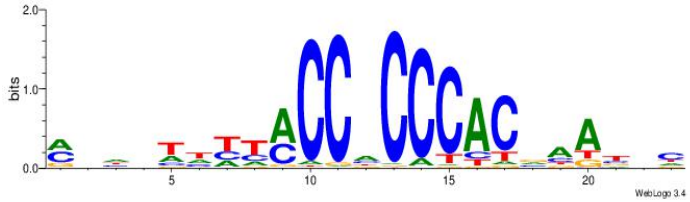


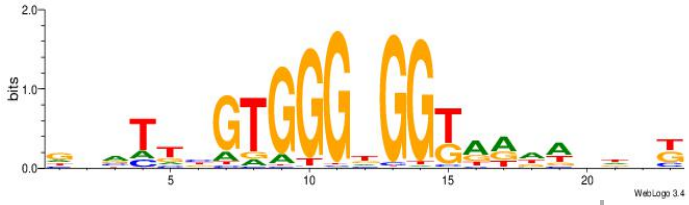
Motif ID: UP00538
Motif name: Gli1_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 21
Similarity score: 0.0750152

Alignment:
MHHHWHYTMCCHCCCACVAABVH
--TTCAGCACCATGGACAGCKCC

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH

Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY





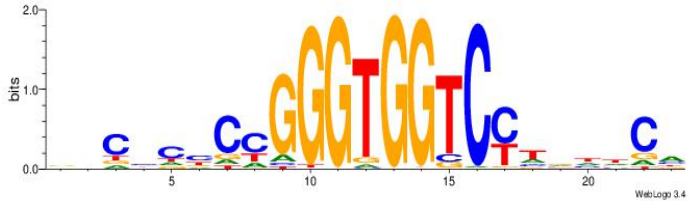
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	21
Similarity score:	0.0751449

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
GGYGCTGTCCATGGTGCTGAA--
```

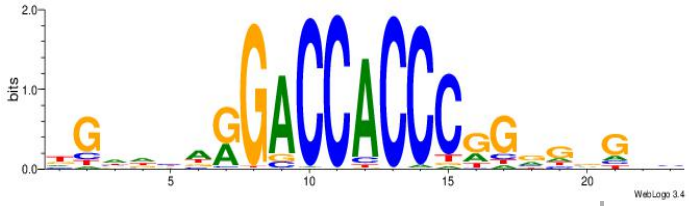
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



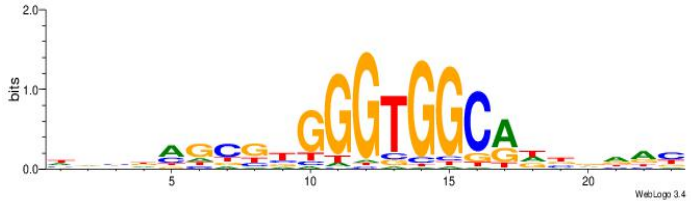
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	21
Similarity score:	0.075832

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-TTCAGCACCATGGACAGCKCC-
```

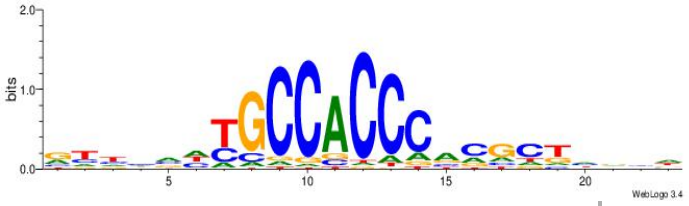
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

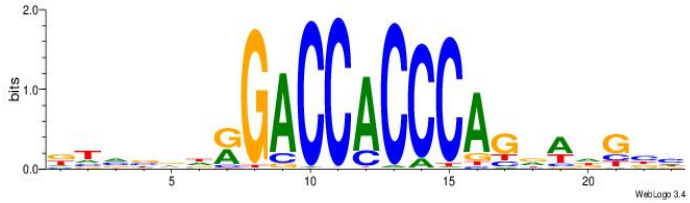


Motif ID:	UP00539
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

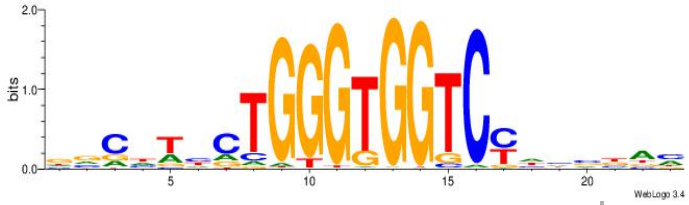
Number of overlap: 21
Similarity score: 0.0773446

Alignment:
DTVBDDRGACCACCCAGDWDGBH
--TTCAGCACCATGGACAGCKCC

Original motif
Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



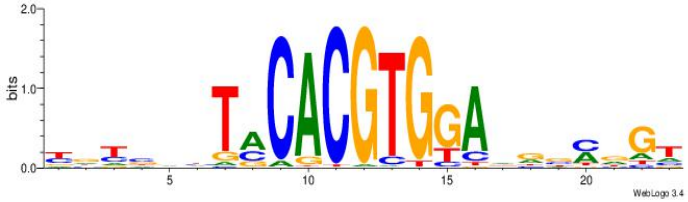
Motif ID: UP00050
Motif name: Bhlhb2_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 21
Similarity score: 0.0775367

Alignment:
YDYBDHTMCACGTGGADDBMDGT
--TTCAGCACCATGGACAGCKCC

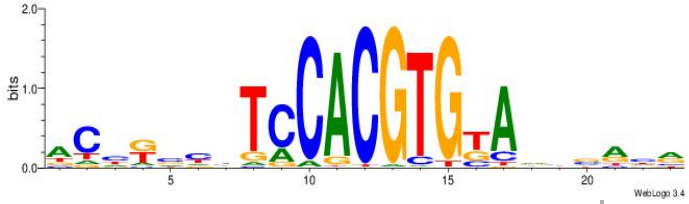
Original motif

Reverse complement motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



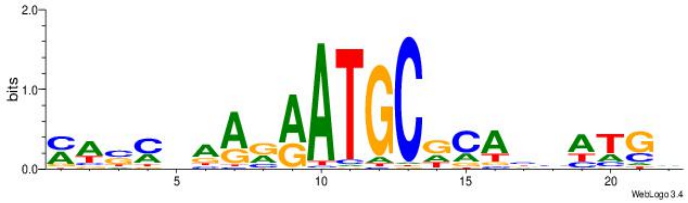
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.077977

Alignment:

```
DCATDBTGHGCATKMTTBRSWR
-GGYGCTGTCCATGGTGCTGAA
```

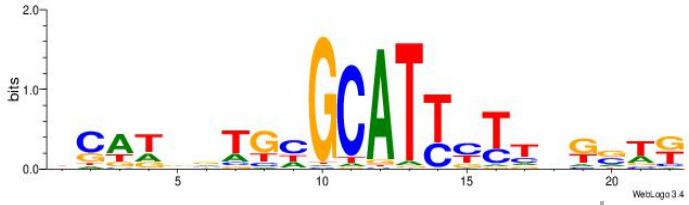
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID: UP00400

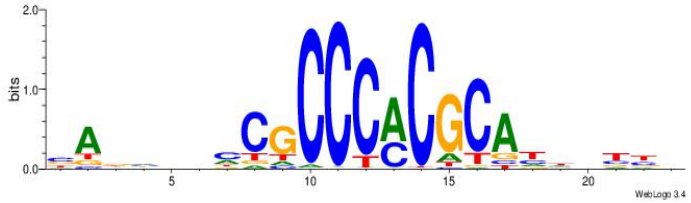
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	21
Similarity score:	0.0785969

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
--GGYGCTGTCCATGGTGCTGAA
```

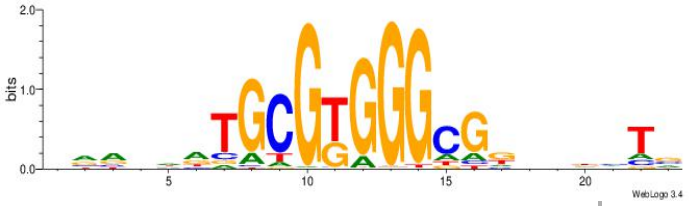
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



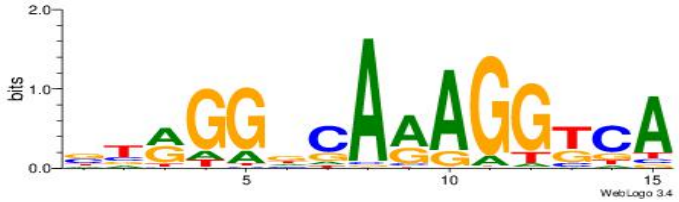
Dataset #: 3 **Motif ID: 36** **Motif name: PPARGRXRA**

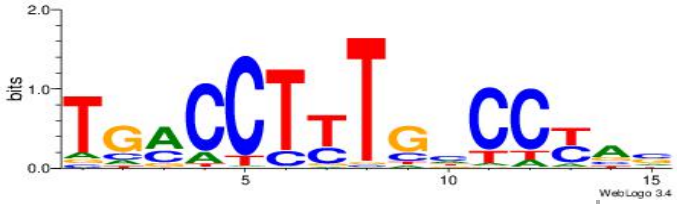
Original motif

Consensus sequence: BTRGGDCARAGGKCA

Reverse complement motif

Consensus sequence: TGRCCTKTGHCCKAB





Best Matches for Motif ID 36 (Highest to Lowest)

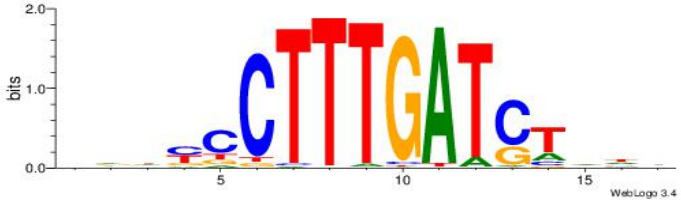
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0304954

Alignment:

```
VDDAGATCAAAGGKDDD
-BTRGGDCARAGGKCA-
```

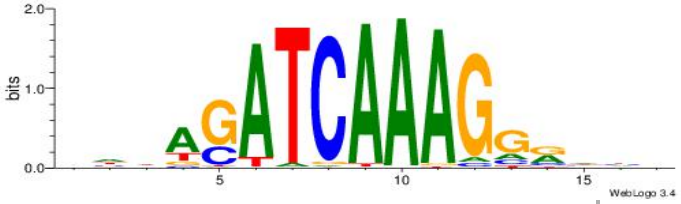
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



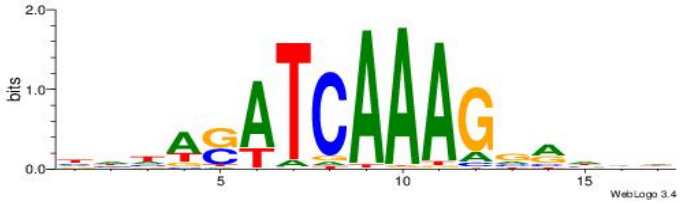
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0319475

Alignment:

```
HHHASATCAAAGVRHHH
-BTRGGDCARAGGKCA-
```

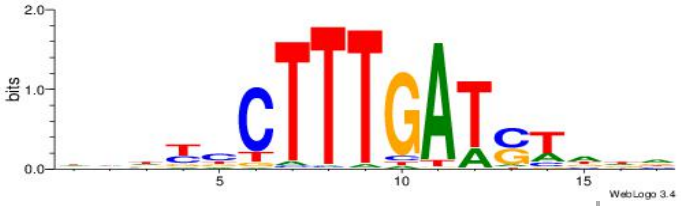
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

Consensus sequence: HHHKVCTTTGATSTHHH

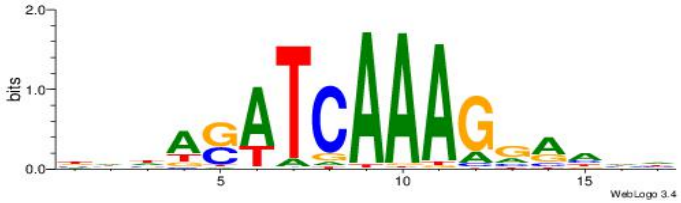


Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

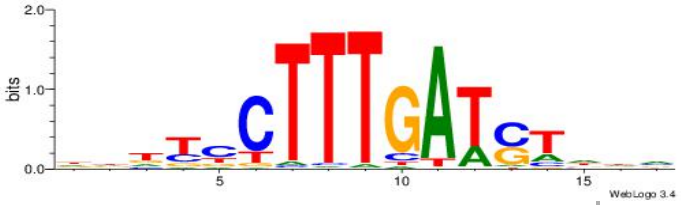
Number of overlap: 15
Similarity score: 0.032779

Alignment:
BHHASATCAAAGGAHHH
-BTRGGDCARAGGKCA-

Original motif
Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif
Consensus sequence: HHHTCCTTTGATSTHHV



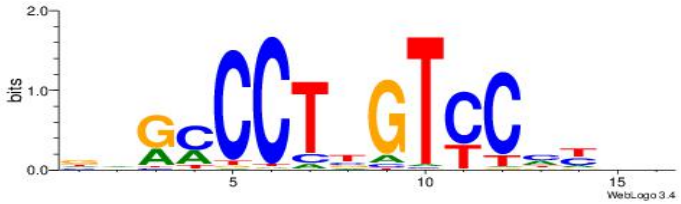
Motif ID: UP00082
Motif name: Zfp187_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 15
Similarity score: 0.0334185

Alignment:
VHMDGGACVAGGRCDH
BTRGGDCARAGGKCA-

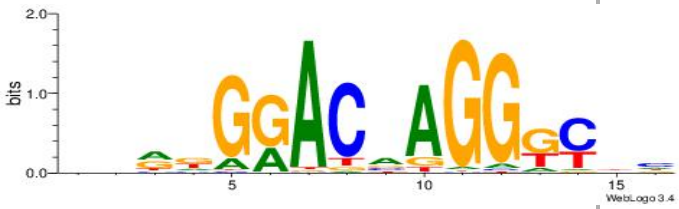
Original motif

Reverse complement motif

Consensus sequence: DDGMCCTBGTCCHYHV



Consensus sequence: VHMDGGACVAGGRCDH



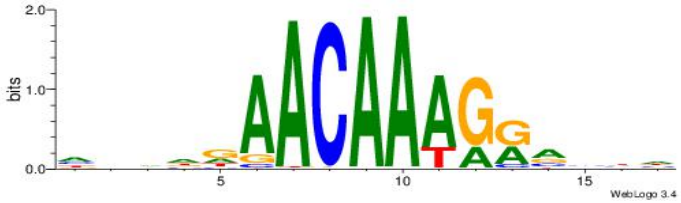
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0352539

Alignment:

```
HBDDDAACAAAGRVBHH
-BTRGGDCARAGGKCA-
```

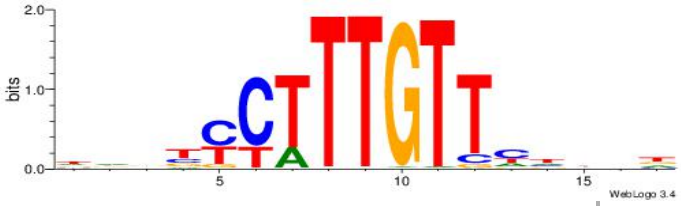
Original motif

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:

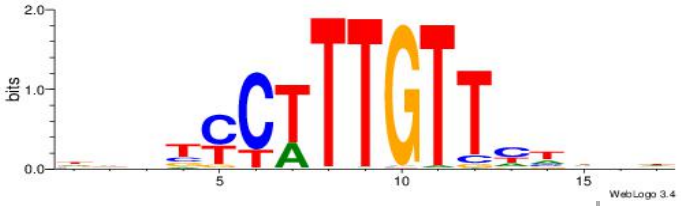
```
HBDDRAACAAAGRABHH
-BTRGGDCARAGGKCA-
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH

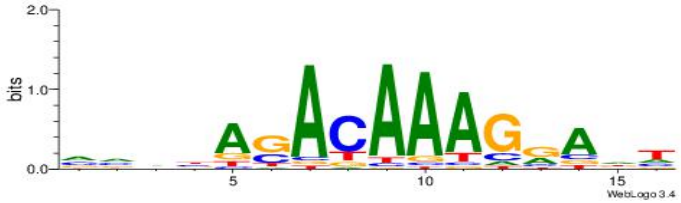


Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

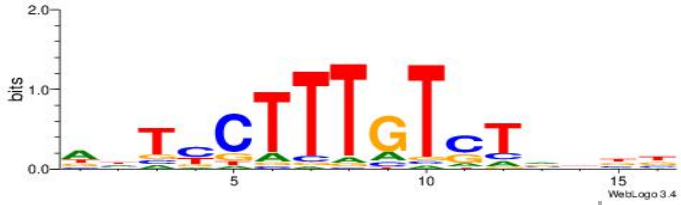
Number of overlap: 15
Similarity score: 0.0374729

Alignment:
HDTMCTTTGTSTVDBB
TGRCCTKTGHCCKAB-

Original motif
Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB



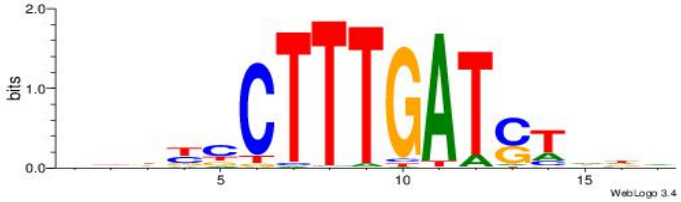
Motif ID: UP00083
Motif name: Tcf7l2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 15
Similarity score: 0.0379757

Alignment:
BDDASATCAAAGGMDDD
-BTRGGDCARAGGKCA-

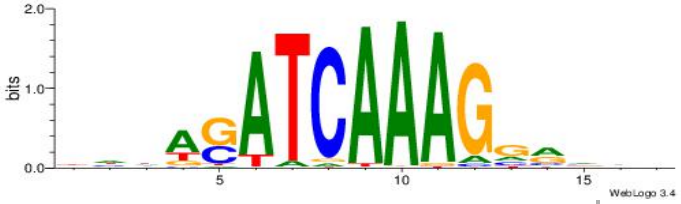
Original motif

Reverse complement motif

Consensus sequence: DDDYCCTTTGATSTDDV



Consensus sequence: BDDASATCAAAGGMDDD



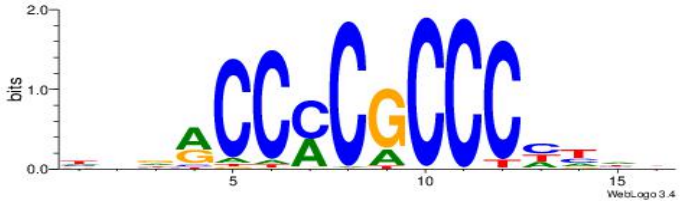
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	15
Similarity score:	0.0382733

Alignment:

```
DHHDGGGCGRGGKHBH
BTRGGDCARAGGKCA-
```

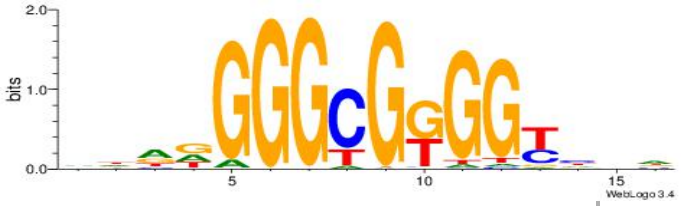
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



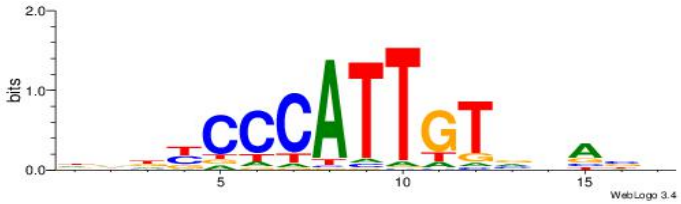
Motif ID:	UP00055
Motif name:	Hbp1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0397168

Alignment:

```
DDDYCCCATTGTVHABH
BTRGGDCARAGGKCA--
```

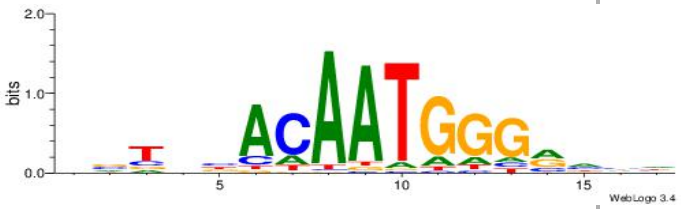
Original motif

Consensus sequence: DDDYCCCATTGTVHABH



Reverse complement motif

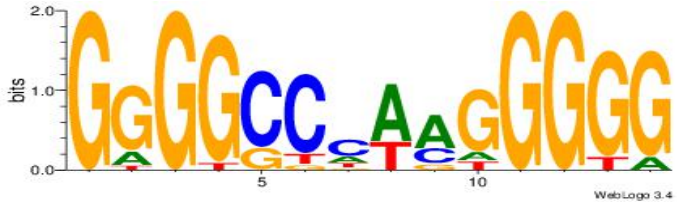
Consensus sequence: HBTHVACAATGGGMDHD



Dataset #: 3 Motif ID: 37 Motif name: PLAG1

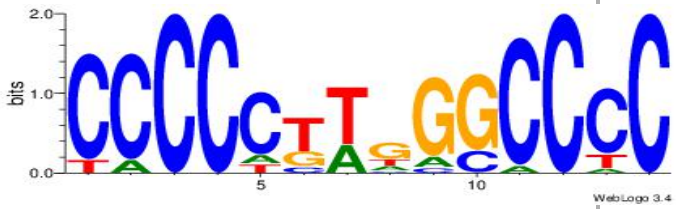
Original motif

Consensus sequence: GGGGCCCAAGGGGG



Reverse complement motif

Consensus sequence: CCCCCTTGGGCCCC



Best Matches for Motif ID 37 (Highest to Lowest)

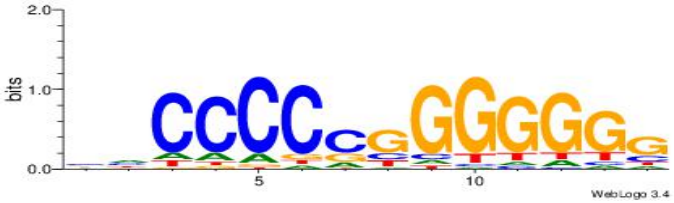
Motif ID:	UP00102
Motif name:	Zic1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0499525

Alignment:

```
CCCCCCCGGGGGHB
CCCCCTTGGGCCCC
```

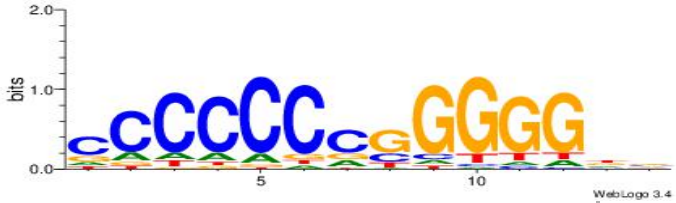
Original motif

Consensus sequence: BHCCCCCGGGGGGG



Reverse complement motif

Consensus sequence: CCCCCCCGGGGGHB



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

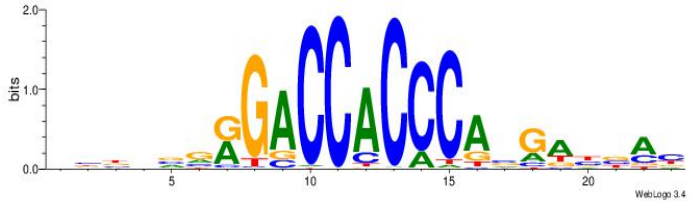
Position number:	1
Number of overlap:	14
Similarity score:	0.0540613

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
---------CCCCCTTGGGCCCC
```

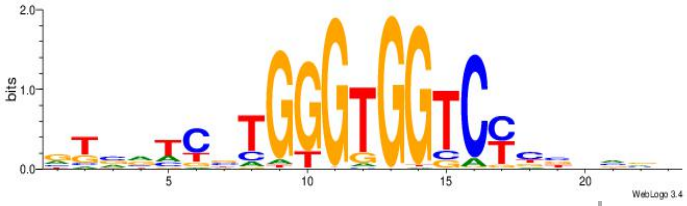
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



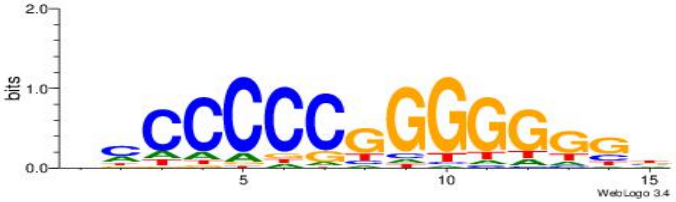
Motif ID:	UP00057
Motif name:	Zic2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0548411

Alignment:

```
BMCCCCCGGGGGGGB
-CCCCCTTGGGCCCC
```

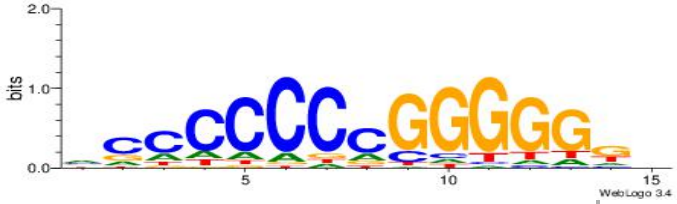
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB



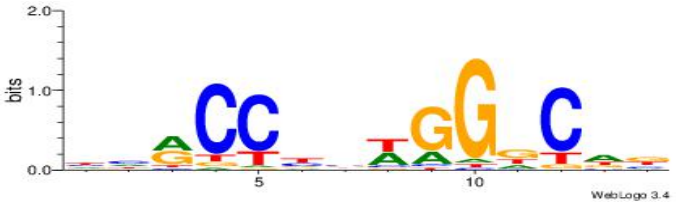
Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0556785

Alignment:

```
HHRCCBBWGGDCDB
GGGGCCCAAGGGGG
```

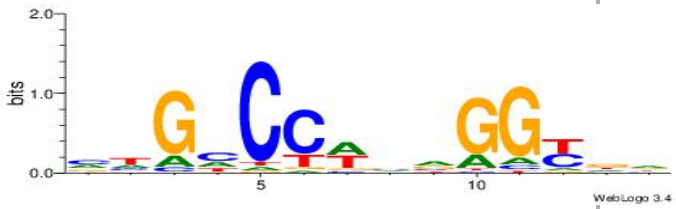
Original motif

Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif

Consensus sequence: BDGHCCWBVGGKDH



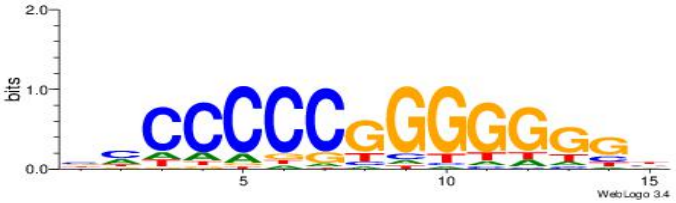
Motif ID:	UP00006
Motif name:	Zic3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.056976

Alignment:

```
BMCCCCCGGGGGGGB
-CCCCCTTGGGCCCC
```

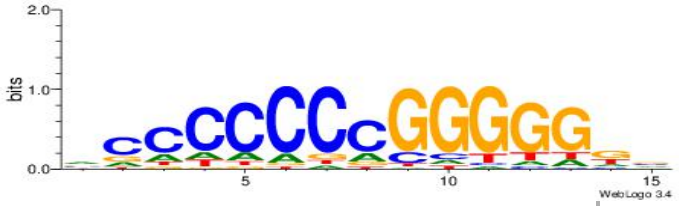
Original motif

Consensus sequence: BMCCCCCGGGGGGGB



Reverse complement motif

Consensus sequence: VCCCCCCCGGGGGRB

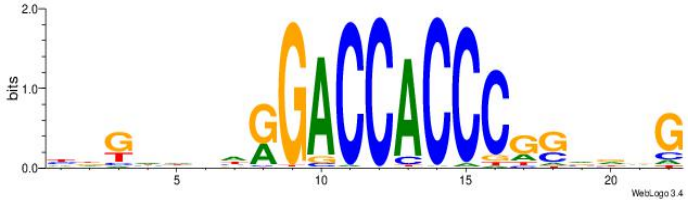


Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9

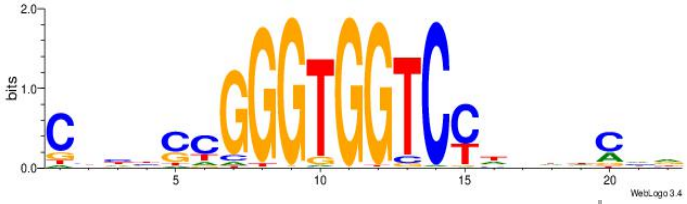
Number of overlap: 14
Similarity score: 0.0573495

Alignment:
HDGHHBHRGACCACCCGSVDVG
CCCCCTTGGGCCCC--------

Original motif
Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif
Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH



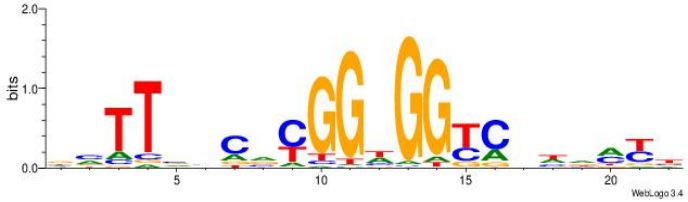
Motif ID: UP00540
Motif name: Gli3_v015681_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 9
Number of overlap: 14
Similarity score: 0.0579022

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
--------CCCCCTTGGGCCCC

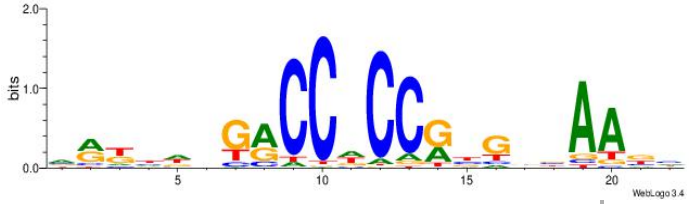
Original motif

Reverse complement motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



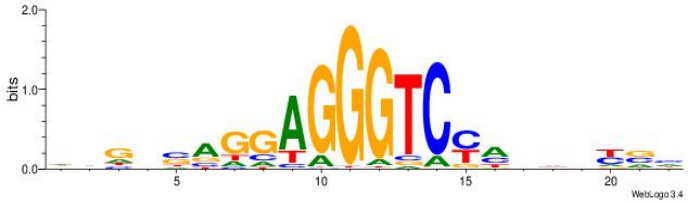
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	14
Similarity score:	0.0580662

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
CCCCCTTGGGCCCC--------
```

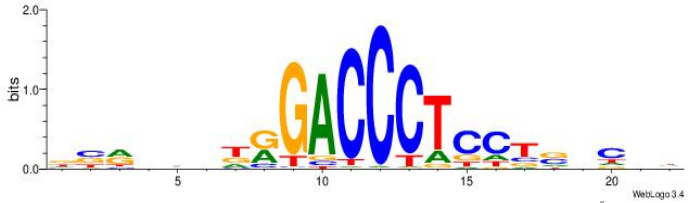
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



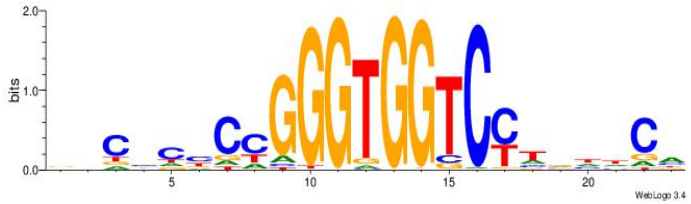
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0597453

Alignment:

```
HGDHVHKGACCACCCGGBGBGDB
---------CCCCCTTGGGCCCC
```

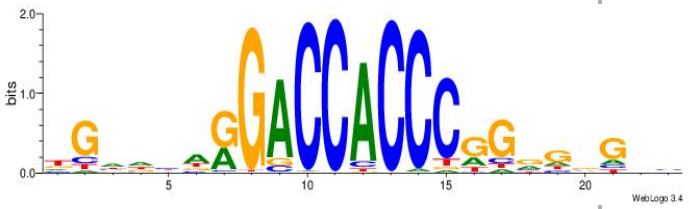
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

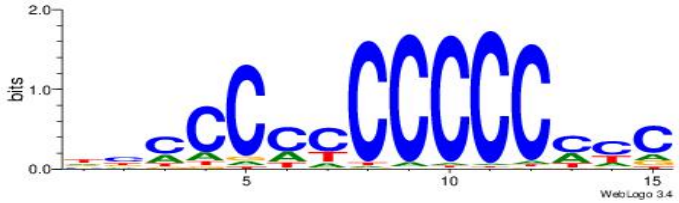


Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14

Similarity score: 0.0598088

Alignment:
DBCCCCCCCCCCMYC
-CCCCCTTGGGCCCC

Original motif
Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif
Consensus sequence: GKRGGGGGGGGGBD

Dataset #: 3 Motif ID: 38 Motif name: NR2F1

Original motif
Consensus sequence: TGAMCTTTGMMCYT

Reverse complement motif
Consensus sequence: AKGYYCAAAGRTCA

Best Matches for Motif ID 38 (Highest to Lowest)

Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

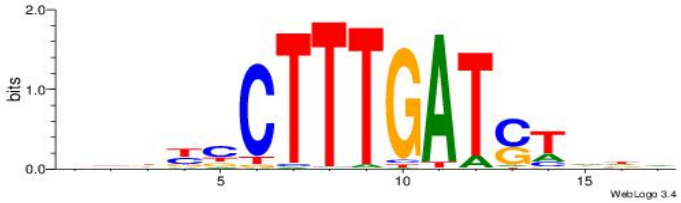
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0452364

Alignment:

```
DDDYCCTTTGATSTDDV
-TGAMCTTTGMMCYT--
```

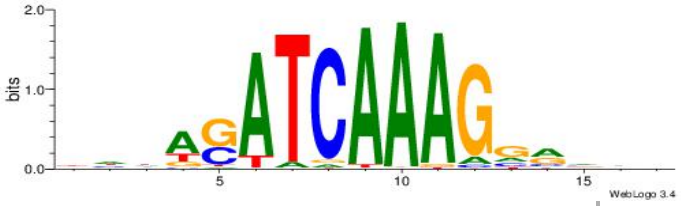
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD



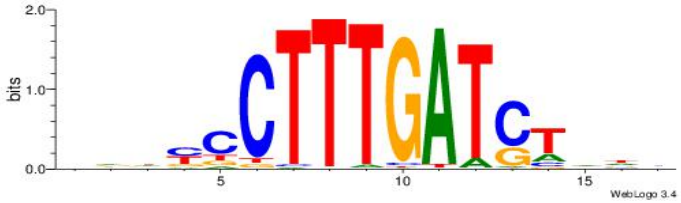
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0453449

Alignment:

VDDAGATCAAAGGKDDD
--AKGYYCAAAGRTCA-

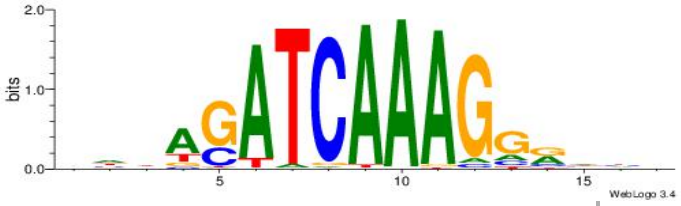
Original motif

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:	Forward
Position number:	8
Number of overlap:	14
Similarity score:	0.0461358

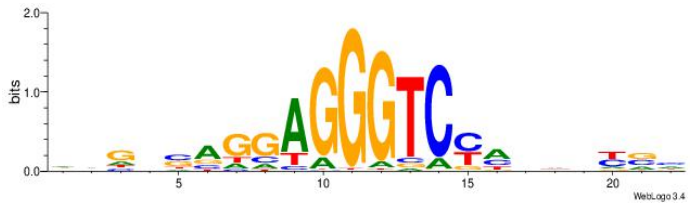
Alignment:
DVMHHDHKGACCCTCCTSVCBH
-------TGAMCTTTGMMCYT-

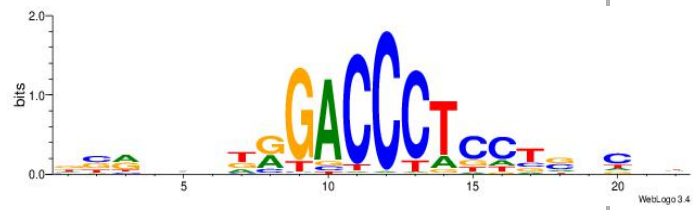
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH

Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH





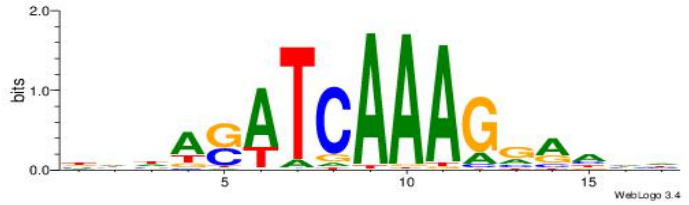
Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0461768

Alignment:

```
BHHASATCAAAGGAHHH
--AKGYYCAAAGRTCA-
```

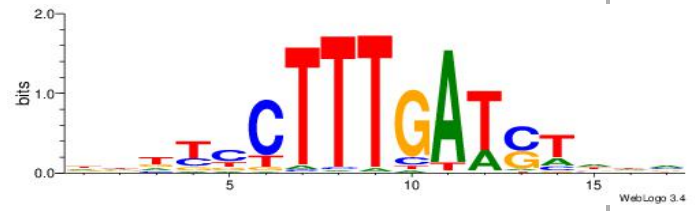
Original motif

Consensus sequence: BHHASATCAAAGGAHHH



Reverse complement motif

Consensus sequence: HHHTCCTTTGATSTHHV



Motif ID:	UP00058

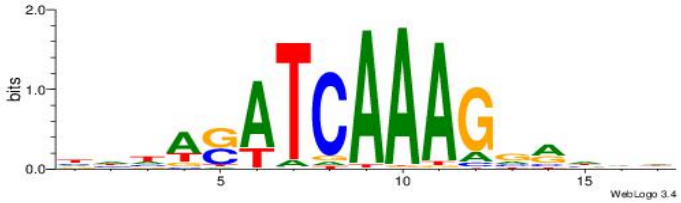
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0473628

Alignment:

```
HHHASATCAAAGVRHHH
--AKGYYCAAAGRTCA-
```

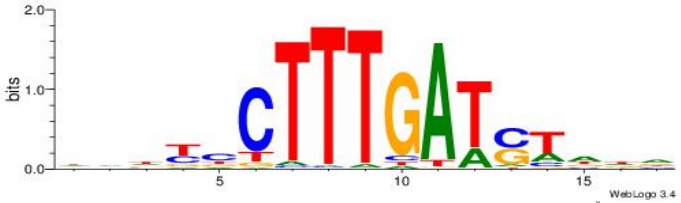
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

Consensus sequence: HHHKVCTTTGATSTHHH

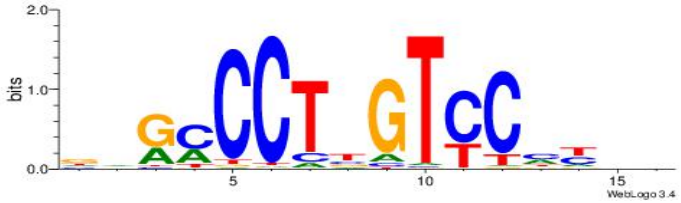


Motif ID:	UP00082
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14

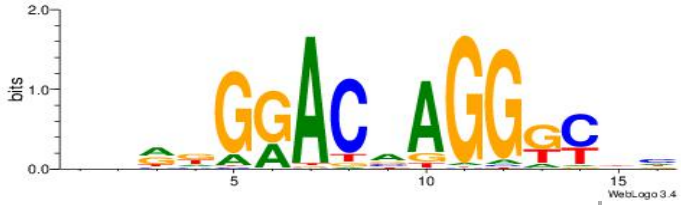
Similarity score: 0.0480188

Alignment:
DDGMCCTBGTCCHYHV
TGAMCTTTGMMCYT--

Original motif
Consensus sequence: DDGMCCTBGTCCHYHV



Reverse complement motif
Consensus sequence: VHMDGGACVAGGRCDH

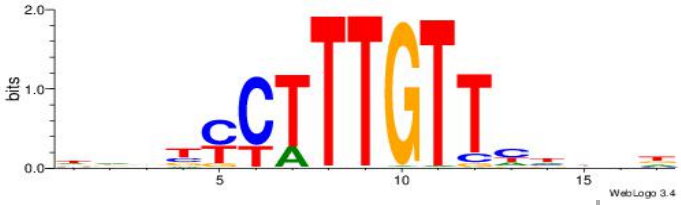


Motif ID: UP00062
Motif name: Sox4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0495447

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:

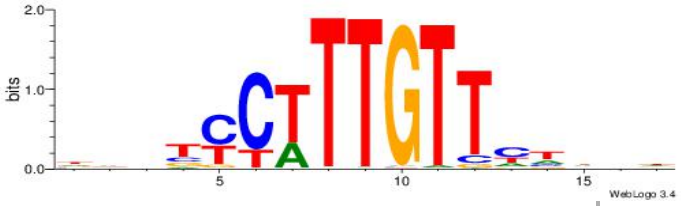
```
HHBTMCTTTGTTMDDVH
-TGAMCTTTGMMCYT--
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



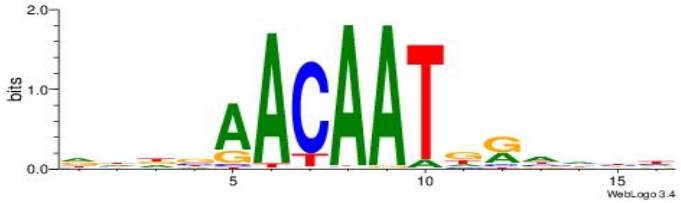
Motif ID:	UP00023
Motif name:	Sox30_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0511534

Alignment:

```
DHDBAACAATDRHHHH
--TGAMCTTTGMMCYT
```

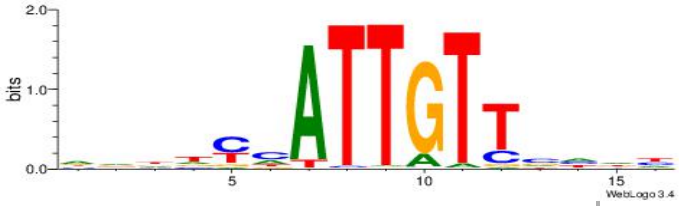
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD

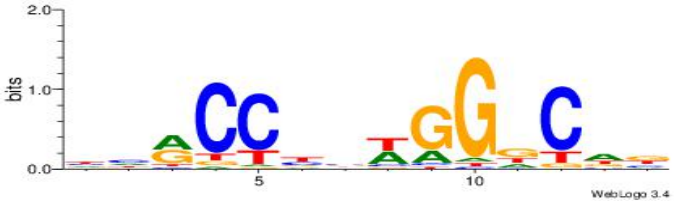


Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1

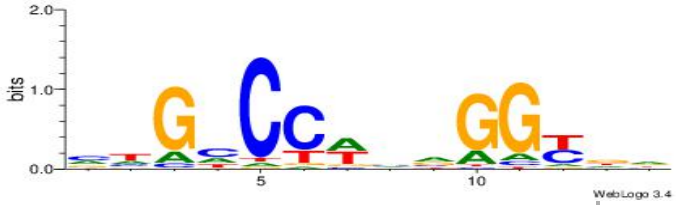
Number of overlap: 14
Similarity score: 0.0516973

Alignment:
BDGHCCWBVGGKDH
AKGYYCAAAGRTCA

Original motif
Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif
Consensus sequence: BDGHCCWBVGGKDH



Dataset #: 3 Motif ID: 39 Motif name: MZF1_1-4

Original motif
Consensus sequence: BGGGGA

Reverse complement motif
Consensus sequence: TCCCCV

Best Matches for Motif ID 39 (Highest to Lowest)

Motif ID: UP00176
Motif name: Crx
Species: Mus musculus

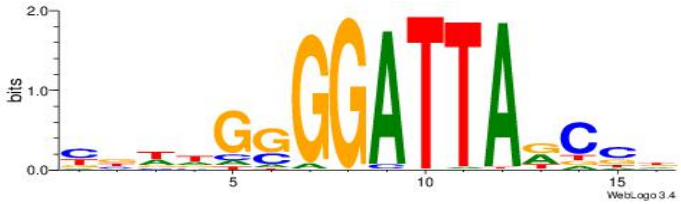
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	6
Similarity score:	0

Alignment:

```
YBWDGGGGATTARCCD
---BGGGGA-------
```

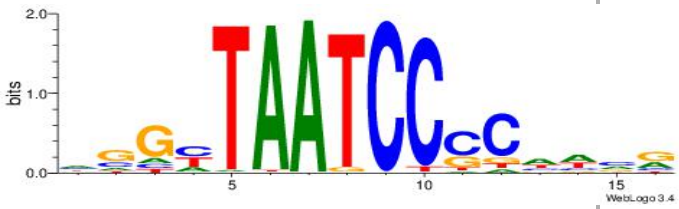
Original motif

Consensus sequence: YBWDGGGGATTARCCD



Reverse complement motif

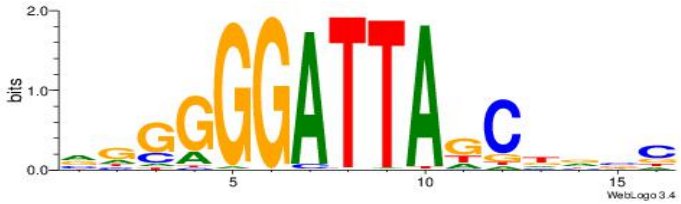
Consensus sequence: DGGMTAATCCCCDWBK



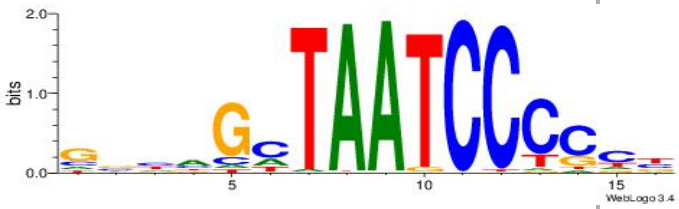
Motif ID:	UP00265
Motif name:	Pitx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	6
Similarity score:	0.00193291

Alignment:
GBHDGCTAATCCCCCB
---------TCCCCV-

Original motif
Consensus sequence: VGGGGGATTAGCDDBC



Reverse complement motif
Consensus sequence: GBHDGCTAATCCCCCB

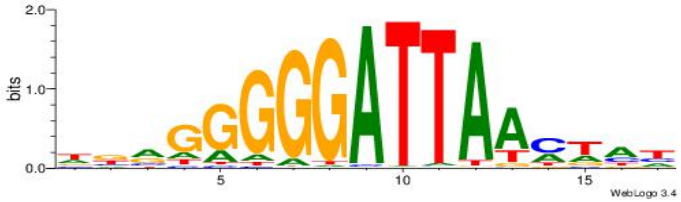


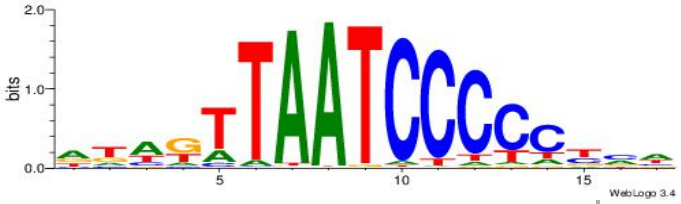
Motif ID:	UP00239
Motif name:	Obox2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.00284735

Alignment:
HTARTTAATCCCCCKBD
--------TCCCCV---

Original motif
Consensus sequence: DBRGGGGGATTAAMTAH

Reverse complement motif
Consensus sequence: HTARTTAATCCCCCKBD





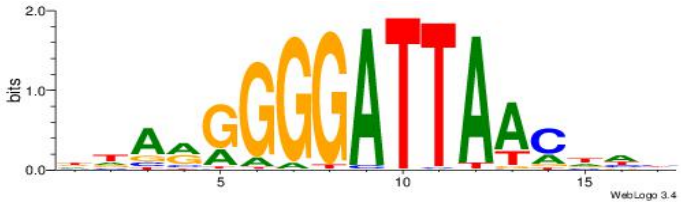
Motif ID:	UP00216
Motif name:	Obox1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.00461976

Alignment:

```
DHDGTTAATCCCCKTDD
--------TCCCCV---
```

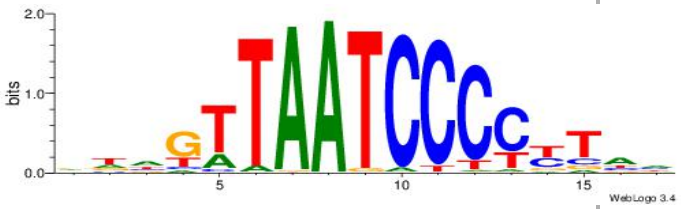
Original motif

Consensus sequence: DDARGGGGATTAACDHH



Reverse complement motif

Consensus sequence: DHDGTTAATCCCCKTDD



Motif ID:	UP00160

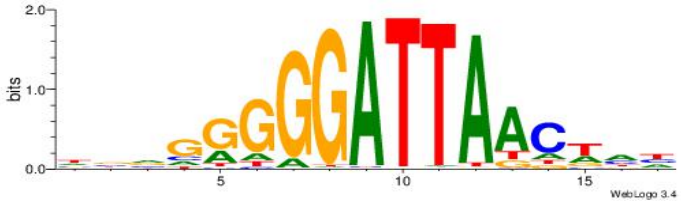
Motif name:	Obox3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6
Similarity score:	0.00641818

Alignment:

```
HHWGTTAATCCCCCBBH
--------TCCCCV---
```

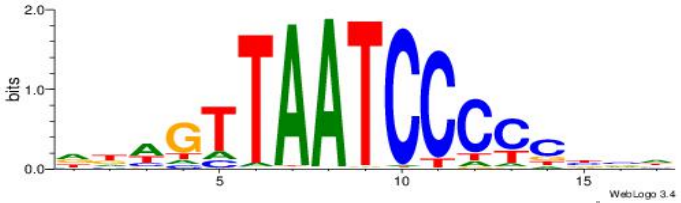
Original motif

Consensus sequence: HBVGGGGGATTAACWHH



Reverse complement motif

Consensus sequence: HHWGTTAATCCCCCBBH

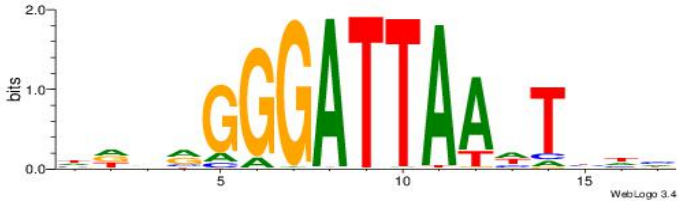


Motif ID:	UP00208
Motif name:	Obox5_2284.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	10
Number of overlap:	6

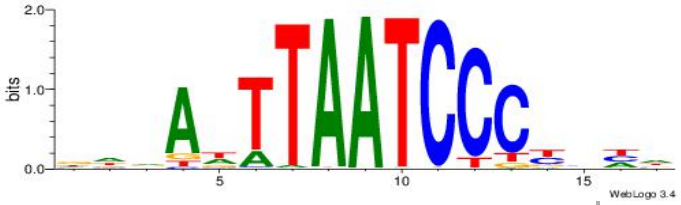
Similarity score: 0.0110256

Alignment:
HDVRGGGATTAAHTHHH
--BGGGGA---------

Original motif
Consensus sequence: HDVRGGGATTAAHTHHH



Reverse complement motif
Consensus sequence: DHHAHTTAATCCCKVDH

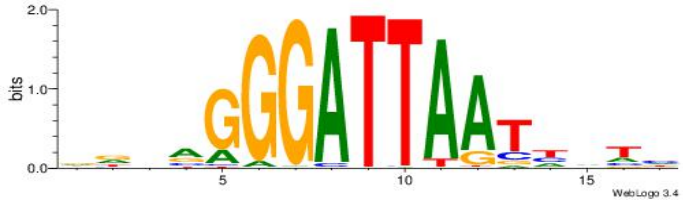


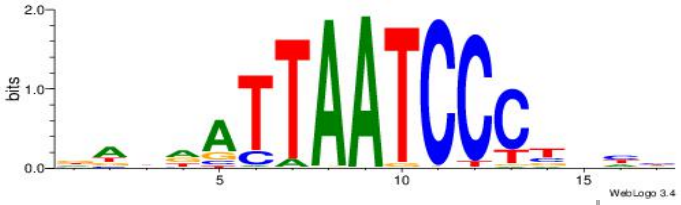
Motif ID: UP00143
Motif name: Dobox5
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 6
Similarity score: 0.0136568

Alignment:
DDHVGGGATTAATHDTH
--BGGGGA---------

Original motif
Consensus sequence: DDHVGGGATTAATHDTH

Reverse complement motif
Consensus sequence: DADHATTAATCCCBHHH





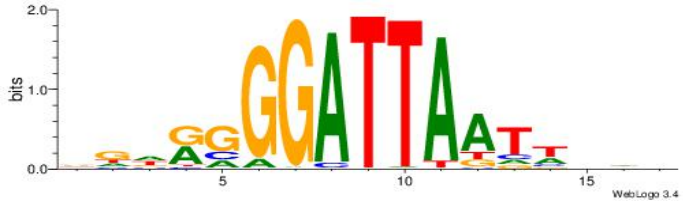
Motif ID:	UP00229
Motif name:	Otx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	10
Number of overlap:	6
Similarity score:	0.0138939

Alignment:

```
DDDRGGGATTAATWHHB
--BGGGGA---------
```

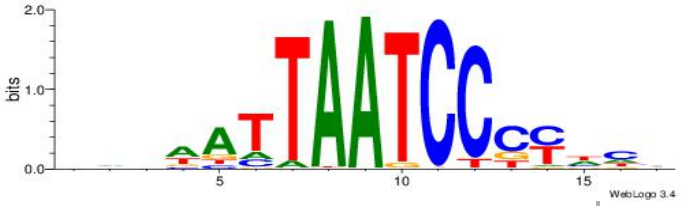
Original motif

Consensus sequence: DDDRGGGATTAATWHHB



Reverse complement motif

Consensus sequence: VHHWATTAATCCCMDHH



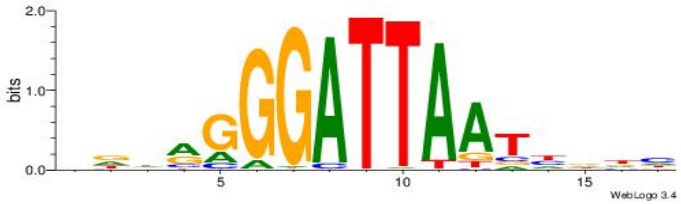
Motif ID:	UP00267
Motif name:	Otx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	10
Number of overlap:	6
Similarity score:	0.016387

Alignment:

```
DDDRGGGATTAATHDDH
--BGGGGA---------
```

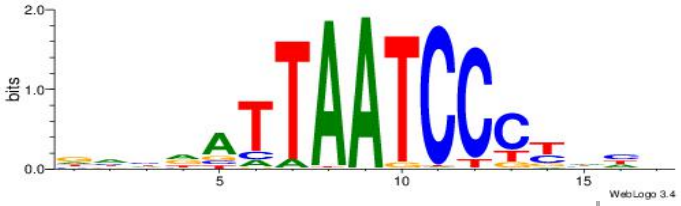
Original motif

Consensus sequence: DDDRGGGATTAATHDDH



Reverse complement motif

Consensus sequence: DDHHATTAATCCCKDHD

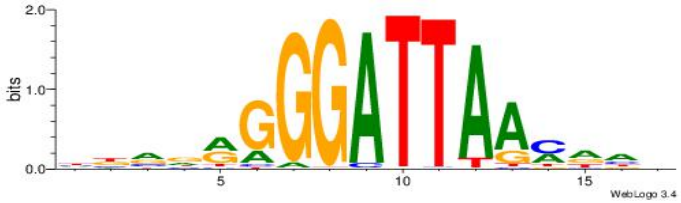


Motif ID:	UP00153
Motif name:	Pitx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9

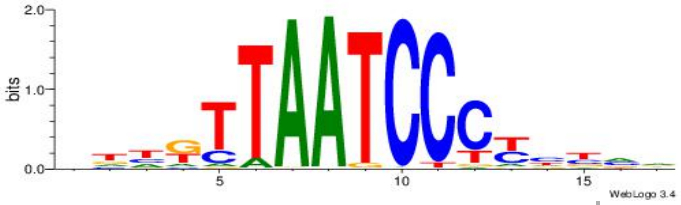
Number of overlap: 6
Similarity score: 0.0164951

Alignment:
HBVDRGGGATTAAMDHH
---BGGGGA--------

Original motif
Consensus sequence: HBVDRGGGATTAAMDHH

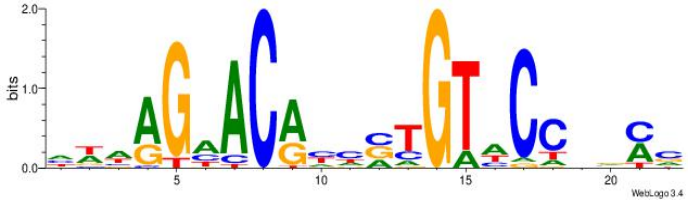


Reverse complement motif
Consensus sequence: HHDRTTAATCCCKHBVH

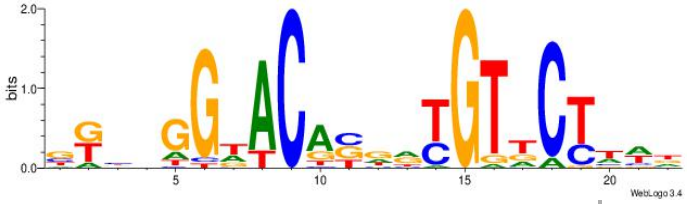


Dataset #: 3 Motif ID: 40 Motif name: Ar

Original motif
Consensus sequence: HWDAGHACRHHVTGTHCCHVMV



Reverse complement motif
Consensus sequence: VRVDGGHACAVDDKGTHCTDWH



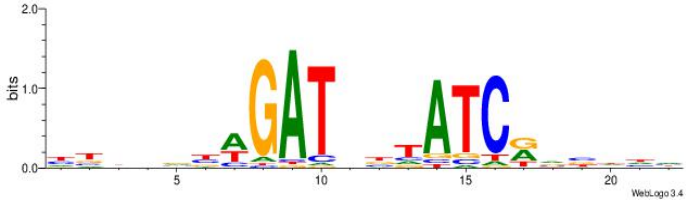
Best Matches for Motif ID 40 (Highest to Lowest)

Motif ID: UP00032
Motif name: Gata3_secondary
Species: Mus musculus

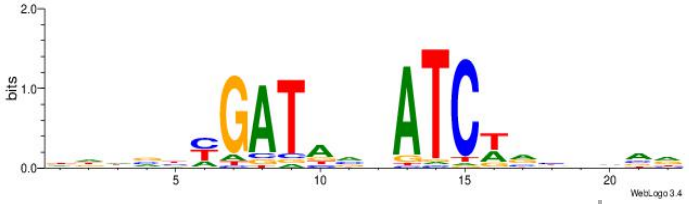
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	22
Similarity score:	0.0676991

Alignment:
HBHDVBWGATHBTATCRVBHHH
HWDAGHACRHHVTGTHCCHVMV

Original motif
Consensus sequence: HBHDVBWGATHBTATCRVBHHH



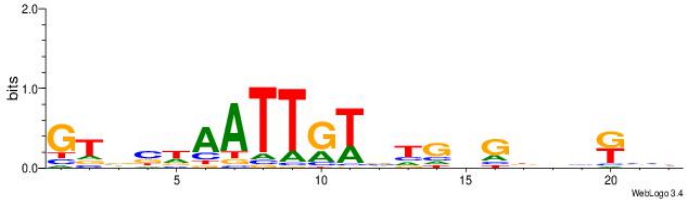
Reverse complement motif
Consensus sequence: HHHBBMGATAVHATCWVVDHVH



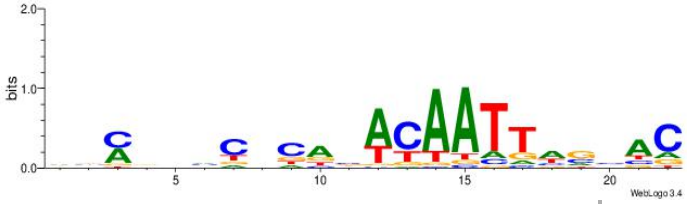
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	22
Similarity score:	0.0692146

Alignment:
VVYDDDCHCAVACAATTDBVAC
VRVDGGHACAVDDKGTHCTDWH

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC

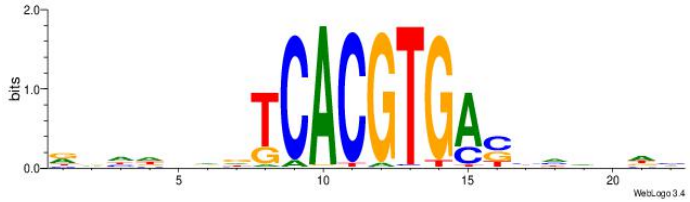


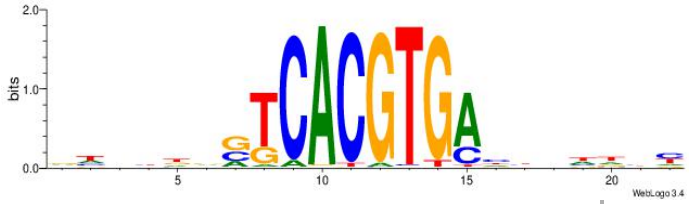
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.0695612

Alignment:
DDHBHBSTCACGTGAHBBDHHM
VRVDGGHACAVDDKGTHCTDWH

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH

Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM





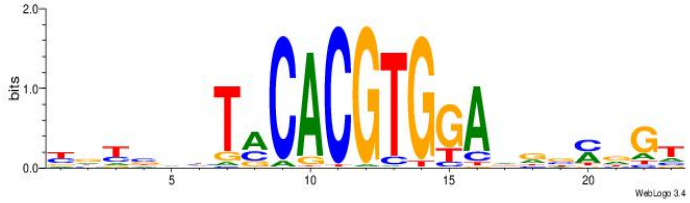
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	22
Similarity score:	0.0771346

Alignment:

```
ACHRBHDTCCACGTGYAHHBMHM
-HWDAGHACRHHVTGTHCCHVMV
```

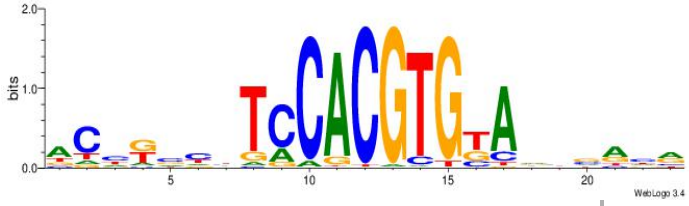
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00526

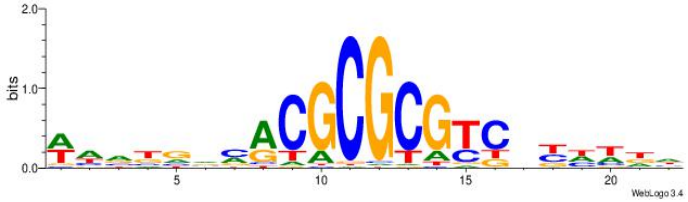
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.0772045

Alignment:

```
HDWHMHGACGCGCGTRBVVBHW
VRVDGGHACAVDDKGTHCTDWH
```

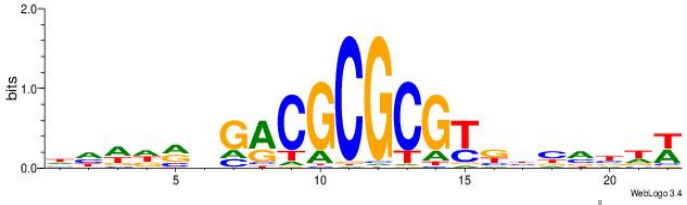
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



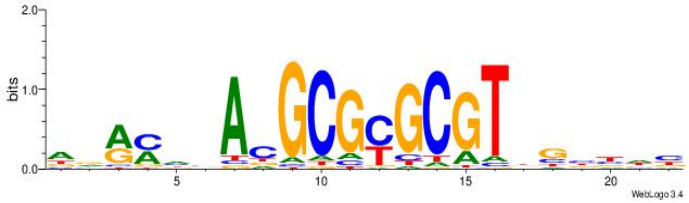
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.077433

Alignment:

BDVBCDACGCKCGCGTBHRKHD
VRVDGGHACAVDDKGTHCTDWH

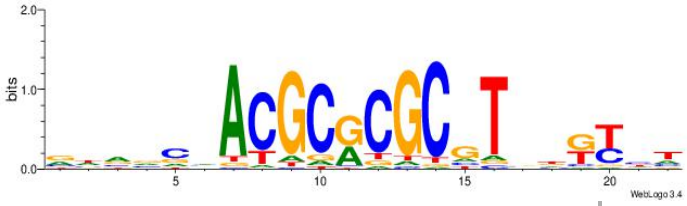
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



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:	22
Similarity score:	0.0776897

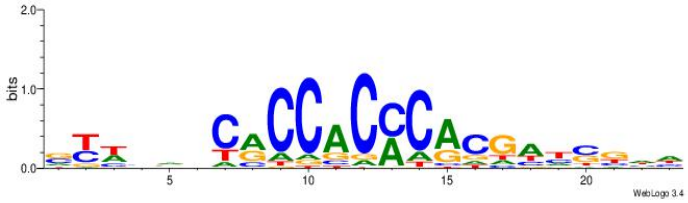
Alignment:
VYWVVHCRCCACMCACGAHSBHH
-HWDAGHACRHHVTGTHCCHVMV

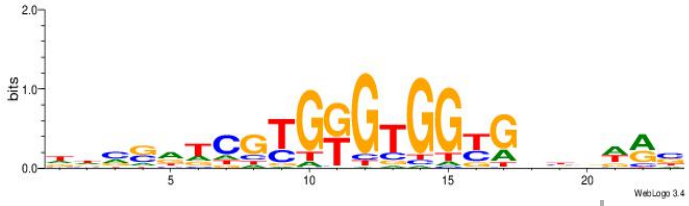
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





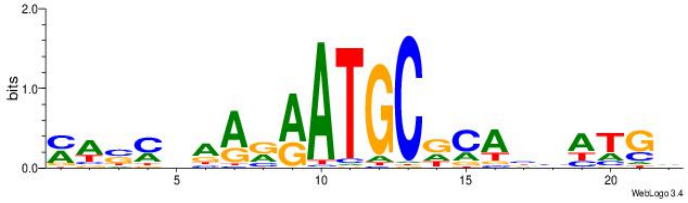
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.0787977

Alignment:

```
MWSMBAARRATGCDCABHATGD
HWDAGHACRHHVTGTHCCHVMV
```

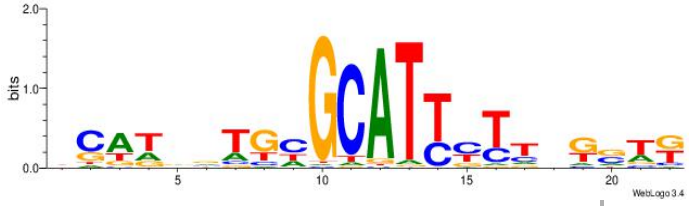
Original motif

Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif

Consensus sequence: DCATDBTGHGCATKMTTBRSWR



Motif ID:	UP00034

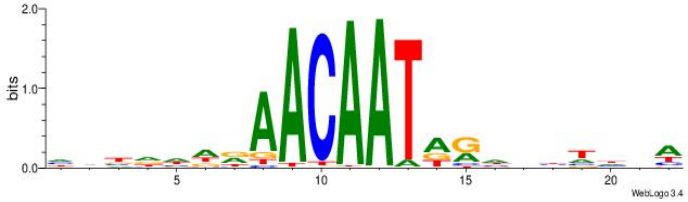
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	22
Similarity score:	0.0792723

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
HWDAGHACRHHVTGTHCCHVMV
```

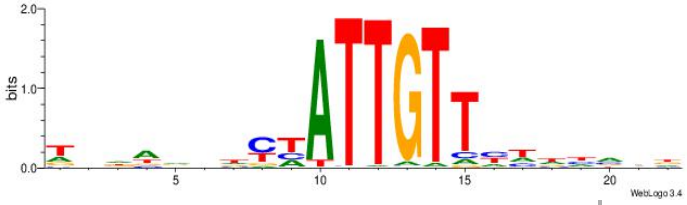
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



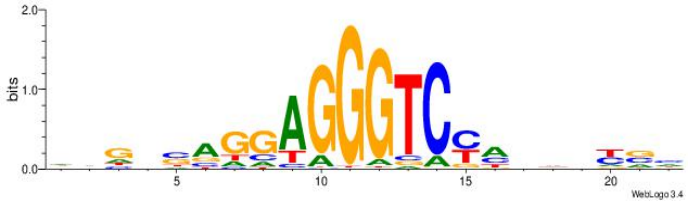
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	22
Similarity score:	0.0799314

Alignment:

HVGVSAGGAGGGTCYHHHHYVH
HWDAGHACRHHVTGTHCCHVMV

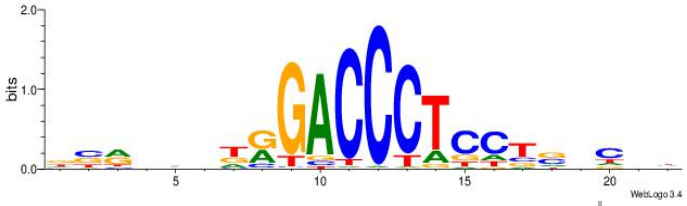
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Dataset #: 3 Motif ID: 41 Motif name: Arnt

Original motif

Consensus sequence: CACGTG

Reverse complement motif

Consensus sequence: CACGTG

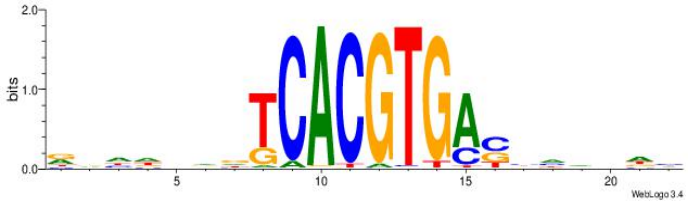
Best Matches for Motif ID 41 (Highest to Lowest)

Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9

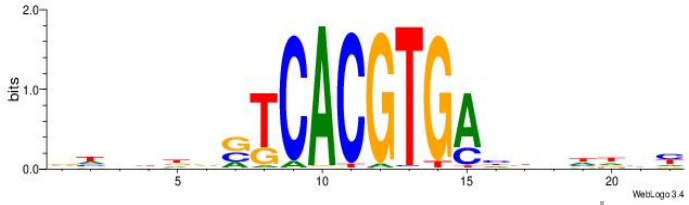
Number of overlap: 6
Similarity score: 0

Alignment:
RDHDBVDTCACGTGASBHVHDH
--------CACGTG--------

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



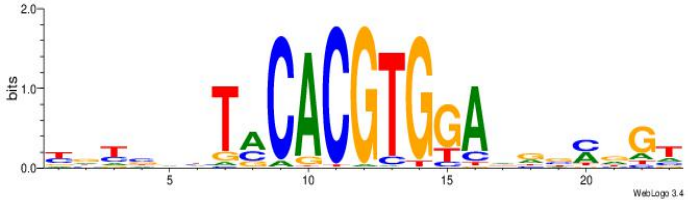
Motif ID: UP00050
Motif name: Bhlhb2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 9
Number of overlap: 6
Similarity score: 0.0026425

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
---------CACGTG--------

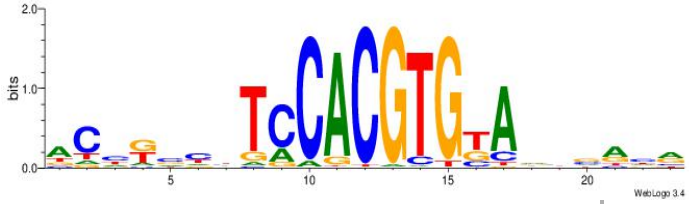
Original motif

Reverse complement motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



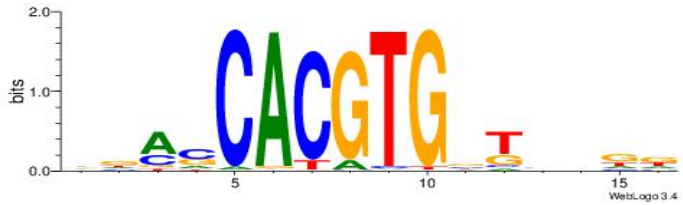
Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.0044422

Alignment:

```
DDASCACGTGBTBVDD
----CACGTG------
```

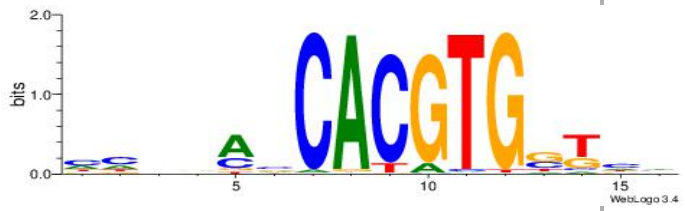
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD



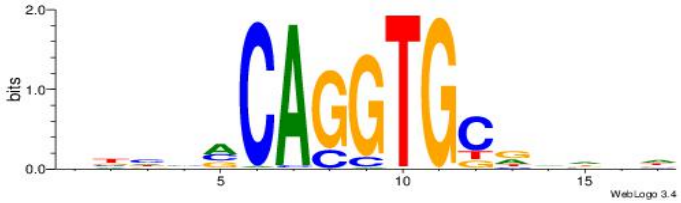
Motif ID:	UP00046
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.0342153

Alignment:

```
DHDBHGCACCTGBDDVB
------CACGTG-----
```

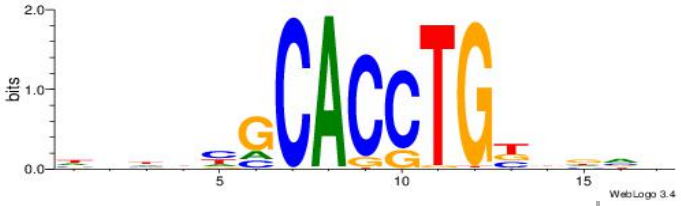
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB

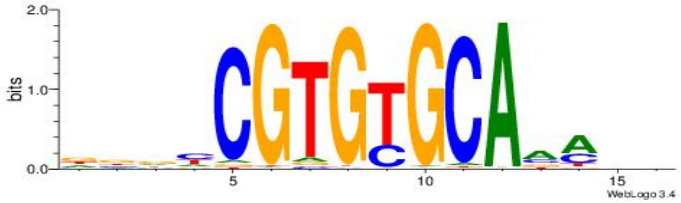


Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9

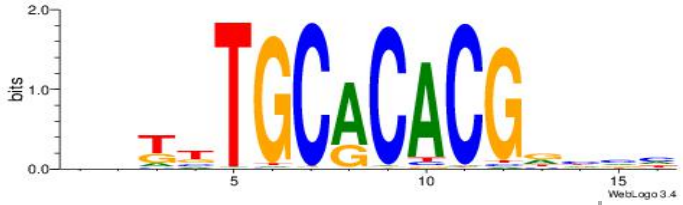
Number of overlap: 6
Similarity score: 0.0471928

Alignment:
HDYTTGCACACGDHBH
--------CACGTG--

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH



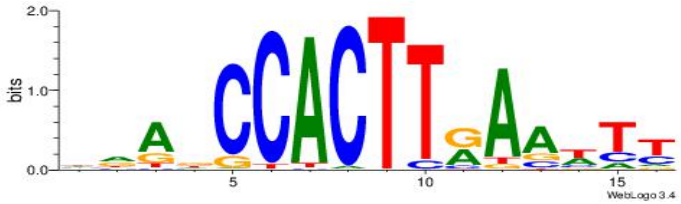
Motif ID: UP00249
Motif name: Nkx2-5
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 6
Similarity score: 0.0482749

Alignment:
HDADCCACTTRAAWTT
-----CACGTG-----

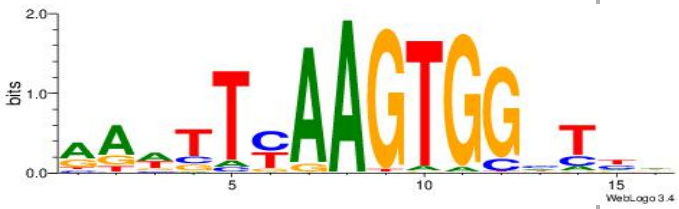
Original motif

Reverse complement motif

Consensus sequence: HDADCCACTTRAAWTT



Consensus sequence: AAWTTMAAGTGGHTDH



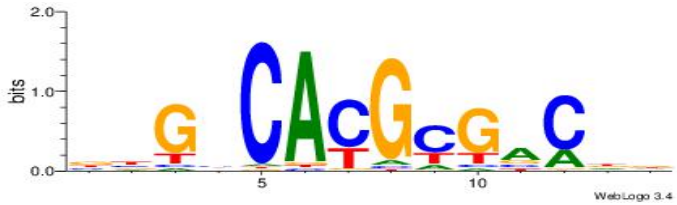
Motif ID:	UP00060
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0485437

Alignment:

```
BBGHCACGCGACDD
----CACGTG----
```

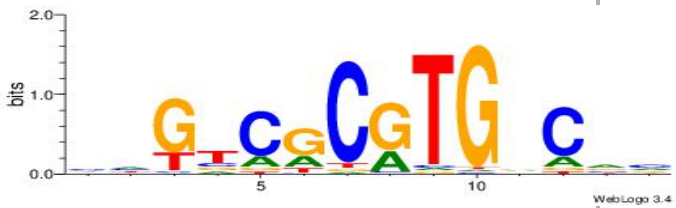
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



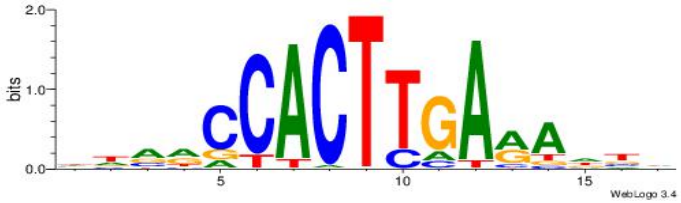
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.0497234

Alignment:

```
DVDTKTCAAGTGGKBDH
------CACGTG-----
```

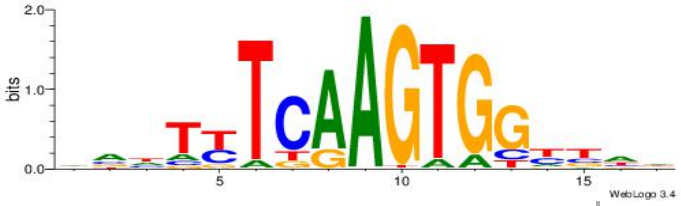
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH

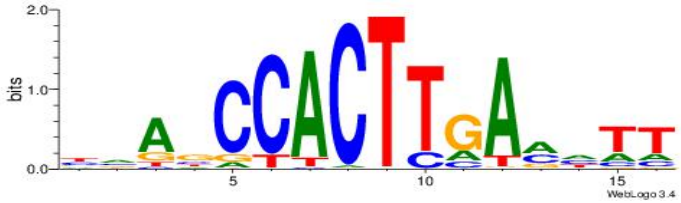


Motif ID:	UP00165
Motif name:	Titf1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

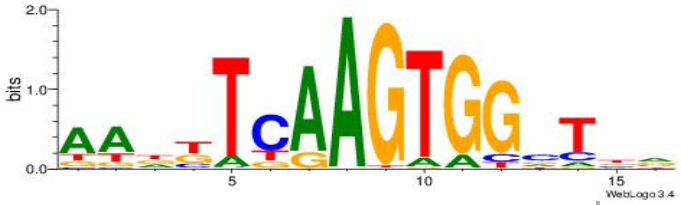
Number of overlap: 6
Similarity score: 0.0498919

Alignment:
AAHYTCAAGTGGBTBV
-----CACGTG-----

Original motif
Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV



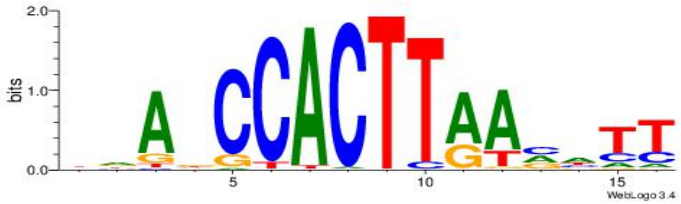
Motif ID: UP00147
Motif name: Nkx2-6
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 6
Similarity score: 0.0544601

Alignment:
DDADCCACTTAAVHTT
-----CACGTG-----

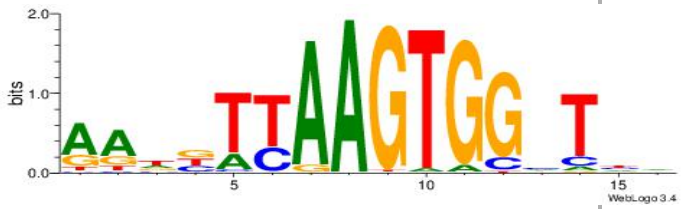
Original motif

Reverse complement motif

Consensus sequence: DDADCCACTTAAVHTT



Consensus sequence: AAHVTTAAGTGGHTDD



Dataset #: 3 **Motif ID: 42** **Motif name: ArntAhr**

Original motif

Consensus sequence: YGCGTG

Reverse complement motif

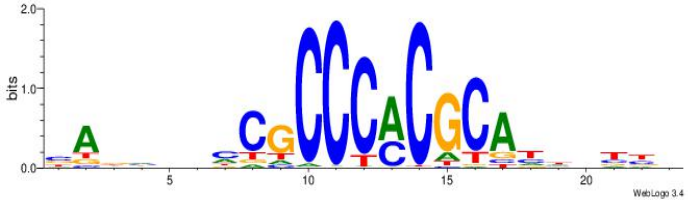
Consensus sequence: CACGCM

Best Matches for Motif ID 42 (Highest to Lowest)

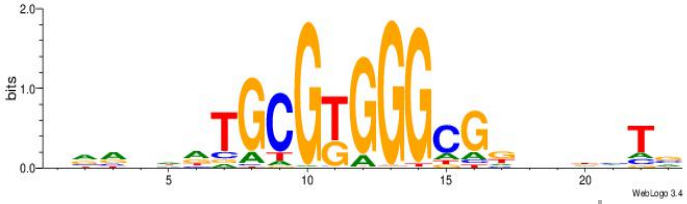
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
------YGCGTG----------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

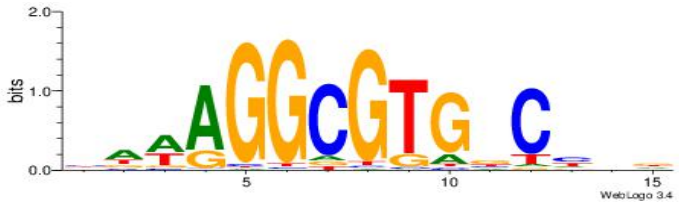


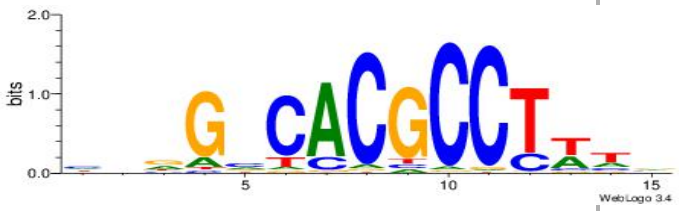
Motif ID:	UP00002
Motif name:	Sp4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	6
Similarity score:	0.00183587

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

Original motif
Consensus sequence: BDWAGGCGTGBCHHD

Reverse complement motif
Consensus sequence: HHDGBCACGCCTWDB





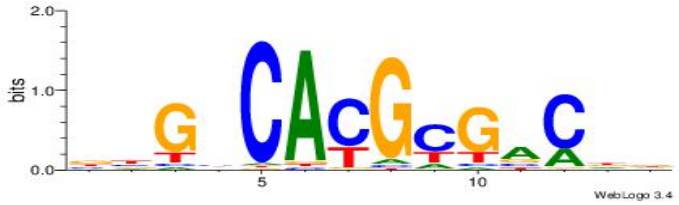
Motif ID:	UP00060
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.00348048

Alignment:

```
HDGTCGCGTGDCVB
----YGCGTG----
```

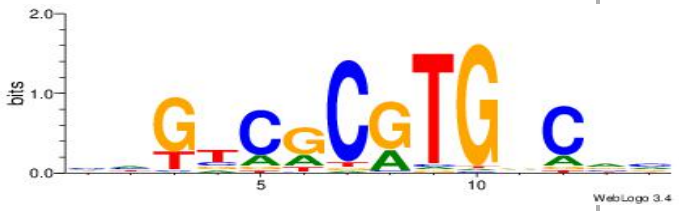
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



Motif ID:	UP00527

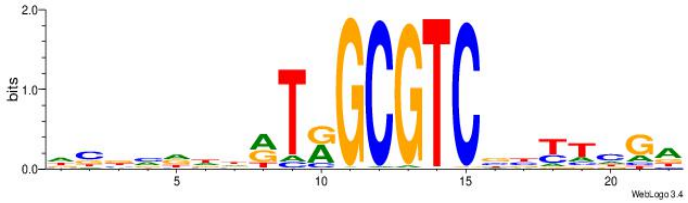
Motif name:	Foxn4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	6
Similarity score:	0.00526158

Alignment:

```
TCDAMVBGACGCMAKDDDVBBD
-------CACGCM---------
```

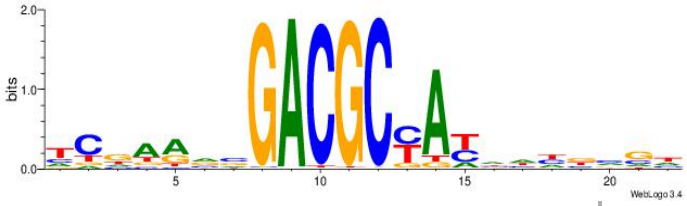
Original motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Reverse complement motif

Consensus sequence: TCDAMVBGACGCMAKDDDVBBD

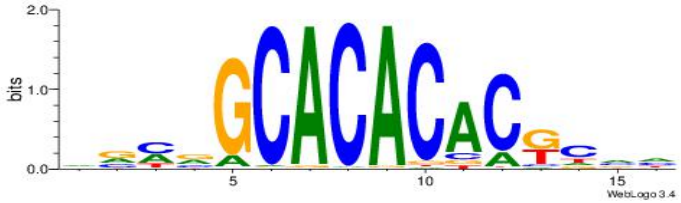


Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8
Number of overlap:	6

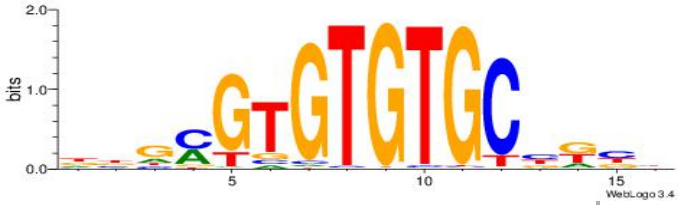
Similarity score: 0.00558171

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

Original motif
Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif
Consensus sequence: HBGYGTGTGTGCVRVD

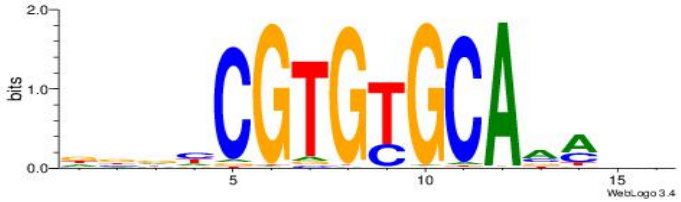


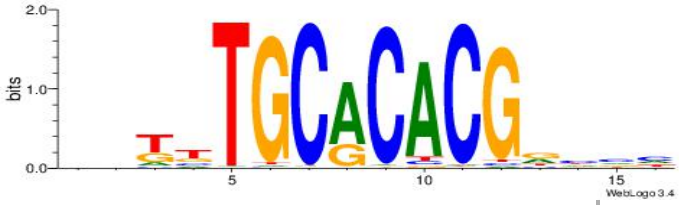
Motif ID: UP00097
Motif name: Mtf1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 9
Number of overlap: 6
Similarity score: 0.00702416

Alignment:
HDYTTGCACACGDHBH
--------CACGCM--

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH

Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH





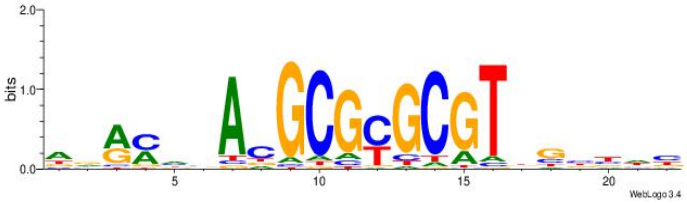
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	6
Similarity score:	0.0123233

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-------YGCGTG---------
```

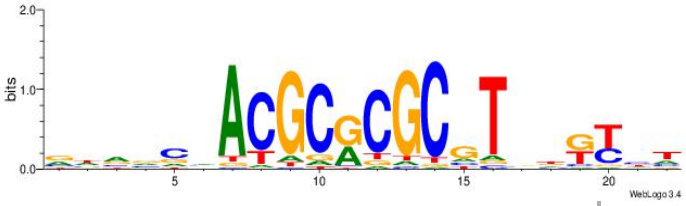
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



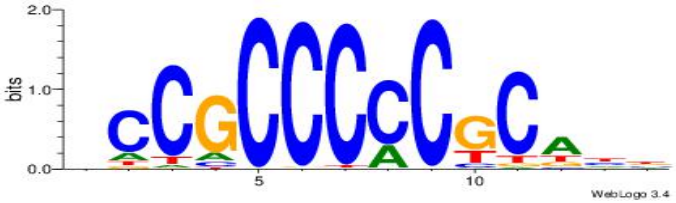
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	6
Similarity score:	0.0141579

Alignment:

```
HCCGCCCCCGCAHB
------CACGCM--
```

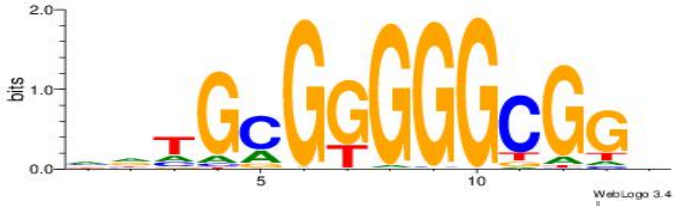
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH

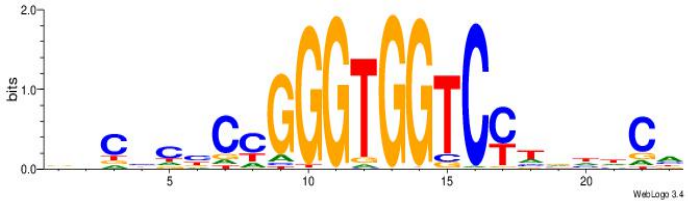


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11

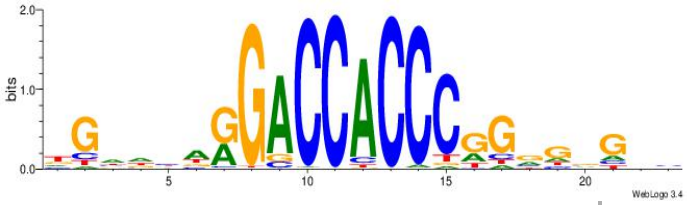
Number of overlap: 6
Similarity score: 0.0144485

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

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



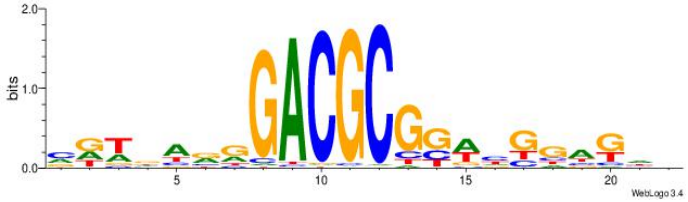
Motif ID: UP00527
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 10
Number of overlap: 6
Similarity score: 0.0172109

Alignment:
VHYTCCDWCCGCGTCMMTHWHV
---------YGCGTG-------

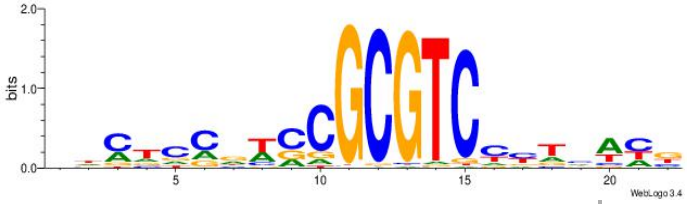
Original motif

Reverse complement motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



Dataset #: 3 Motif ID: 43 Motif name: E2F1

Original motif

Consensus sequence: TTTSGCGC

Reverse complement motif

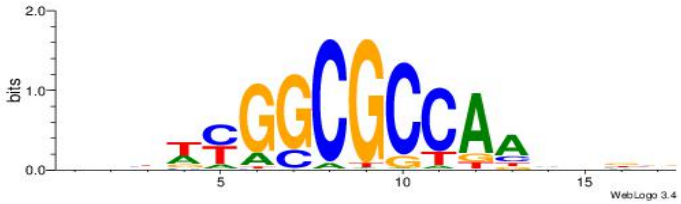
Consensus sequence: GCGCSAAA

Best Matches for Motif ID 43 (Highest to Lowest)

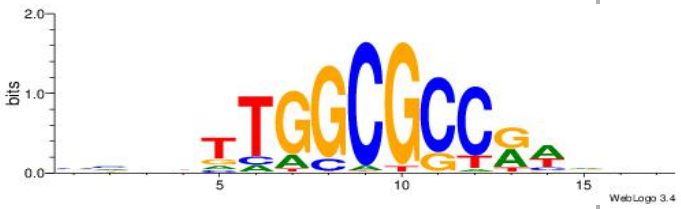
Motif ID:	UP00001
Motif name:	E2F2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0

Alignment:
HVBWYGGCGCCAADVBB
------GCGCSAAA---

Original motif
Consensus sequence: HVBWYGGCGCCAADVBB



Reverse complement motif
Consensus sequence: BBBDTTGGCGCCKWVVD

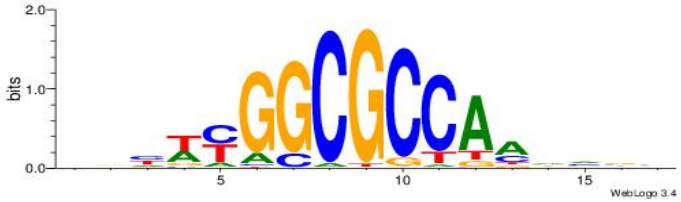


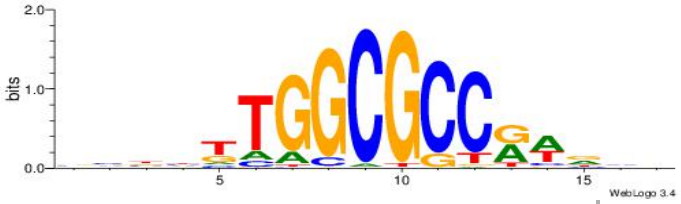
Motif ID:	UP00003
Motif name:	E2F3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	8
Similarity score:	0.00182028

Alignment:
BBBDYTGGCGCCKWDBD
---TTTSGCGC------

Original motif
Consensus sequence: HBHWYGGCGCCAMDVBB

Reverse complement motif
Consensus sequence: BBBDYTGGCGCCKWDBD





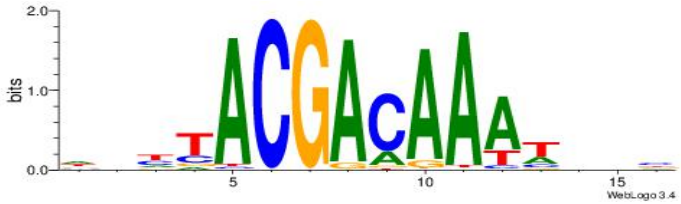
Motif ID:	UP00072
Motif name:	IRC900814_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0237639

Alignment:

```
BHDWTTTGTCGTAHDD
----TTTSGCGC----
```

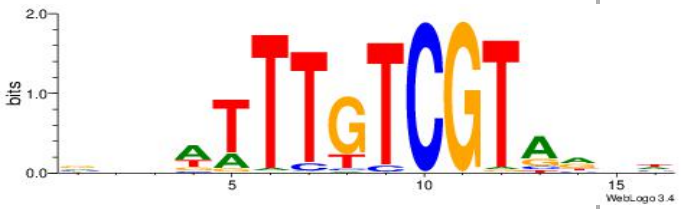
Original motif

Consensus sequence: DDHTACGACAAAWDDB



Reverse complement motif

Consensus sequence: BHDWTTTGTCGTAHDD



Motif ID:	UP00003

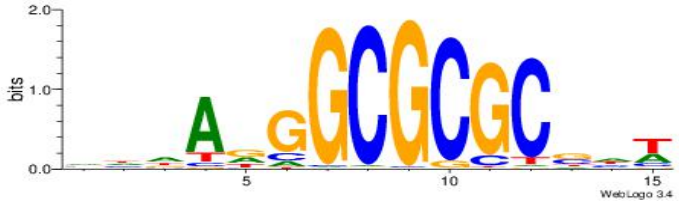
Motif name:	E2F3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0275636

Alignment:

```
WHSGCGCGCCHTDHB
-----GCGCSAAA--
```

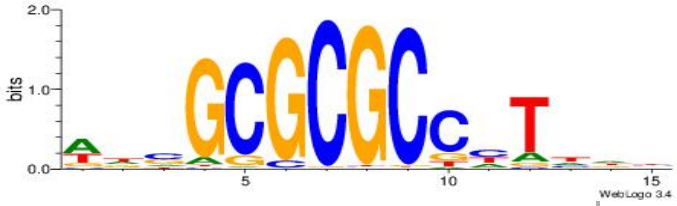
Original motif

Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif

Consensus sequence: WHSGCGCGCCHTDHB

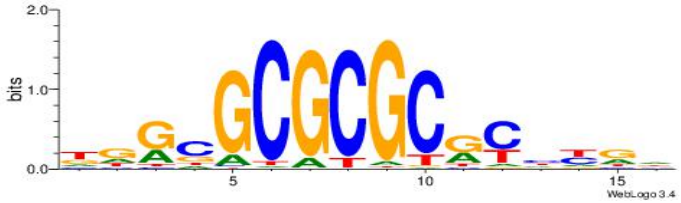


Motif ID:	UP00065
Motif name:	Zfp161_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	8

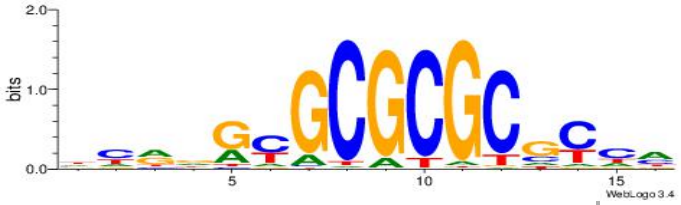
Similarity score: 0.028109

Alignment:
DMMDGMGCGCGCGCHD
--------GCGCSAAA

Original motif
Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif
Consensus sequence: DMMDGMGCGCGCGCHD

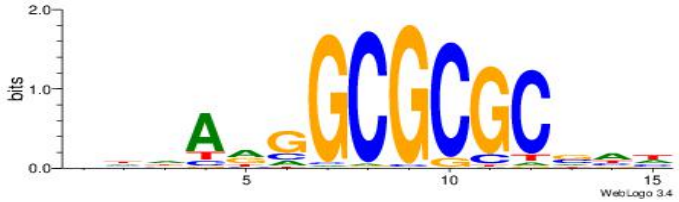


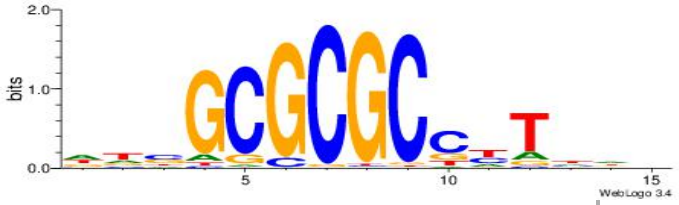
Motif ID: UP00001
Motif name: E2F2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 6
Number of overlap: 8
Similarity score: 0.0296302

Alignment:
HHVGCGCGCCKTDHB
-----GCGCSAAA--

Original motif
Consensus sequence: VHDARGGCGCGCVHH

Reverse complement motif
Consensus sequence: HHVGCGCGCCKTDHB





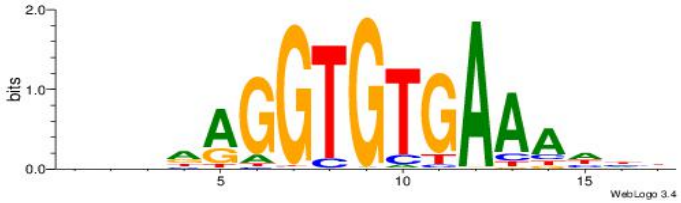
Motif ID:	UP00068
Motif name:	Eomes_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	7
Number of overlap:	8
Similarity score:	0.0348969

Alignment:

```
BVHDAGGTGTGAAAHHH
------GCGCSAAA---
```

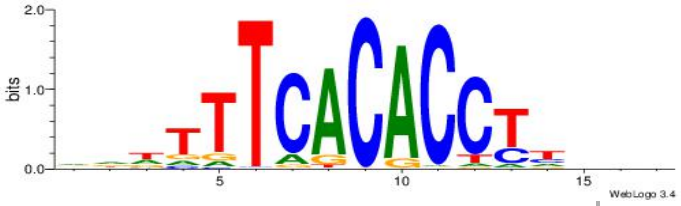
Original motif

Consensus sequence: BVHDAGGTGTGAAAHHH



Reverse complement motif

Consensus sequence: HHHTTTCACACCTDHBV



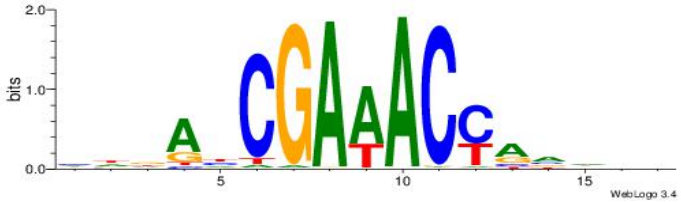
Motif ID:	UP00011
Motif name:	Irf6_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0368278

Alignment:

```
DHDBTKGTTTCGHTHDD
-------TTTSGCGC--
```

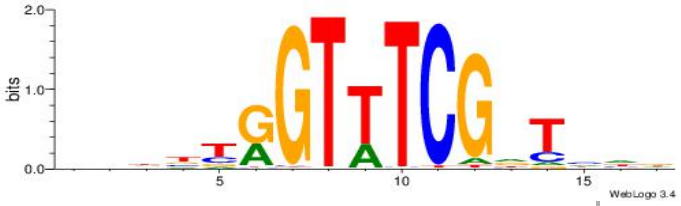
Original motif

Consensus sequence: HDDAHCGAAACYAVDDD



Reverse complement motif

Consensus sequence: DHDBTKGTTTCGHTHDD

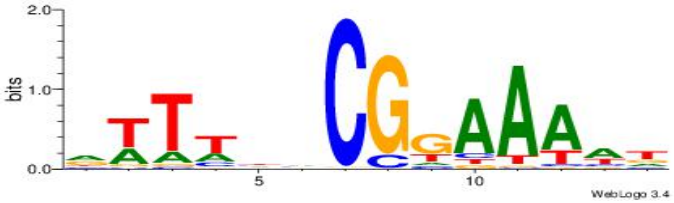


Motif ID:	UP00049
Motif name:	Sp100_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

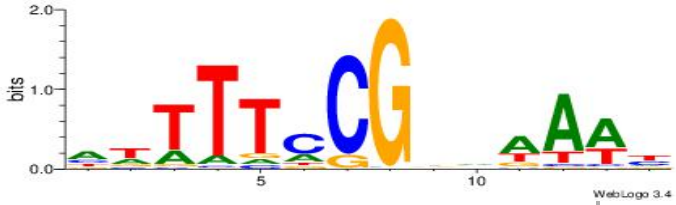
Number of overlap: 8
Similarity score: 0.0383813

Alignment:
DWTTTCCGHHWAWD
-----GCGCSAAA-

Original motif
Consensus sequence: DWTWHHCGGAAAWD



Reverse complement motif
Consensus sequence: DWTTTCCGHHWAWD



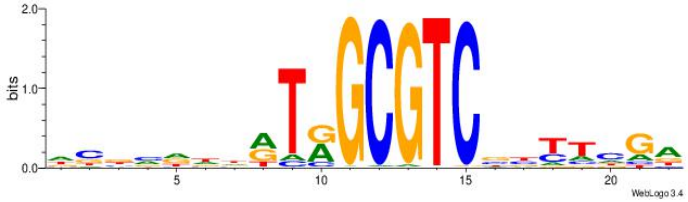
Motif ID: UP00527
Motif name: Foxn4_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 9
Number of overlap: 8
Similarity score: 0.0406002

Alignment:
TCDAMVBGACGCMAKDDDVBBD
--------GCGCSAAA------

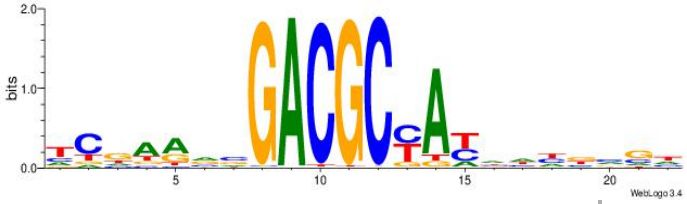
Original motif

Reverse complement motif

Consensus sequence: DBBVDDDRTRGCGTCBBYTHGA



Consensus sequence: TCDAMVBGACGCMAKDDDVBBD



Dataset #: 3 Motif ID: 44 Motif name: Egr1

Original motif

Consensus sequence: HGCGTGGGCGK

Reverse complement motif

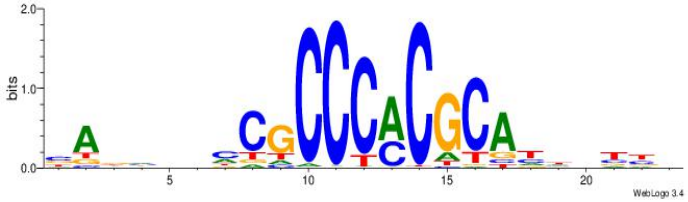
Consensus sequence: YCGCCCACGCH

Best Matches for Motif ID 44 (Highest to Lowest)

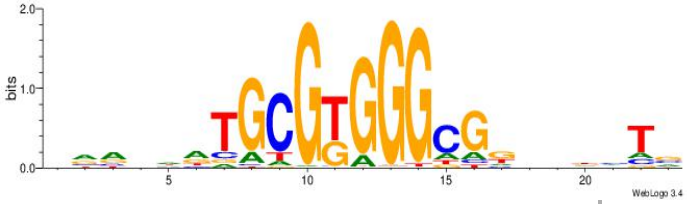
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
------HGCGTGGGCGK------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

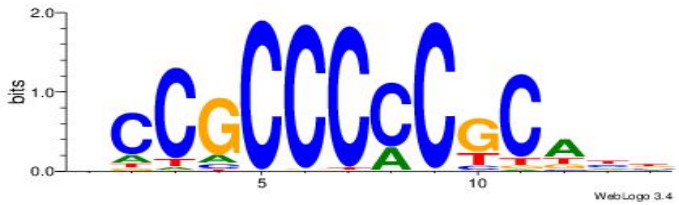


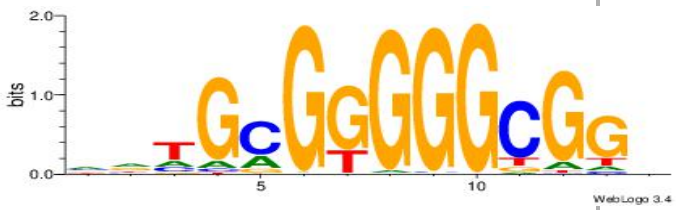
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.00727533

Alignment:
HCCGCCCCCGCAHB
-YCGCCCACGCH--

Original motif
Consensus sequence: HCCGCCCCCGCAHB

Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH





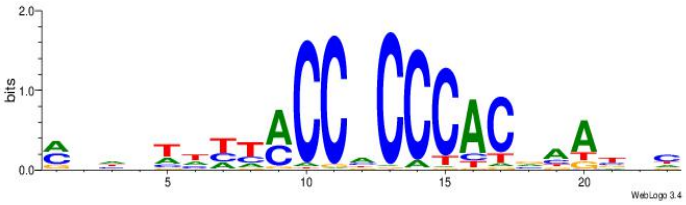
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0262579

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
---------YCGCCCACGCH---
```

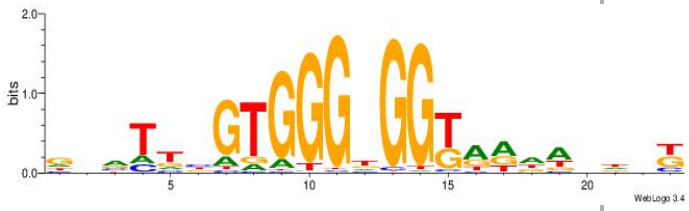
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID:	UP00540

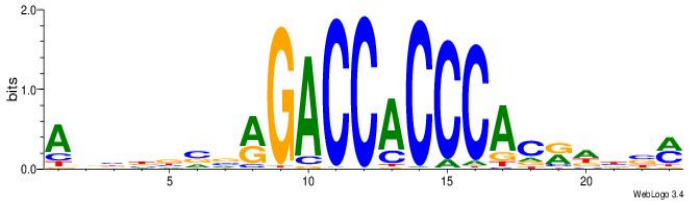
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0297053

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
--HGCGTGGGCGK----------
```

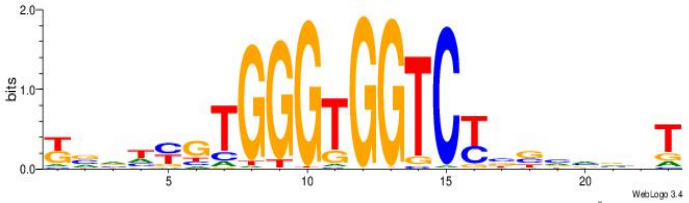
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT

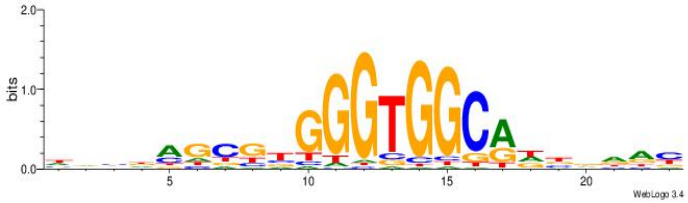


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11

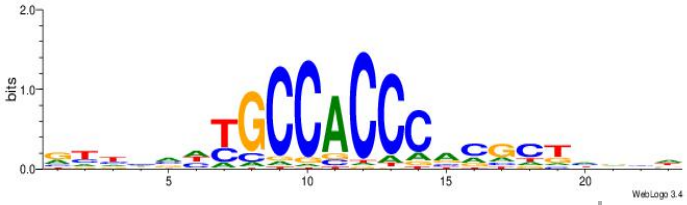
Similarity score: 0.0318144

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
----HGCGTGGGCGK--------

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

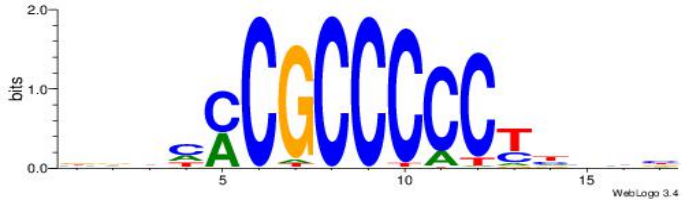


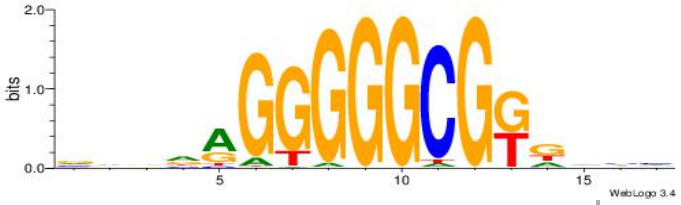
Motif ID: UP00002
Motif name: Sp4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0345009

Alignment:
BVVHAGGGGGCGRDHHB
--HGCGTGGGCGK----

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB

Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB





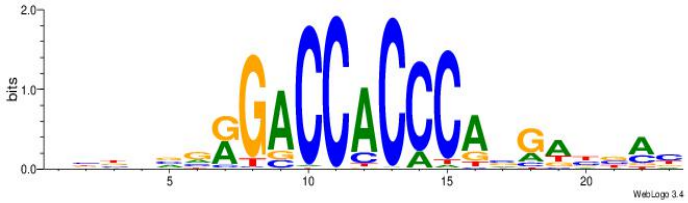
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0353502

Alignment:

```
BTBVTCVTGGGTGGTCMVVDVBB
---HGCGTGGGCGK---------
```

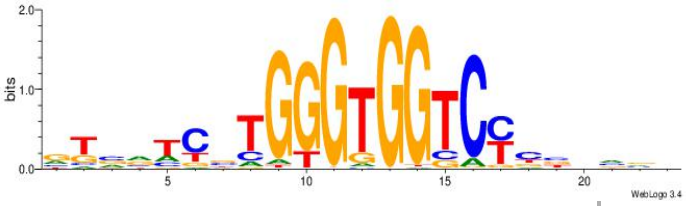
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



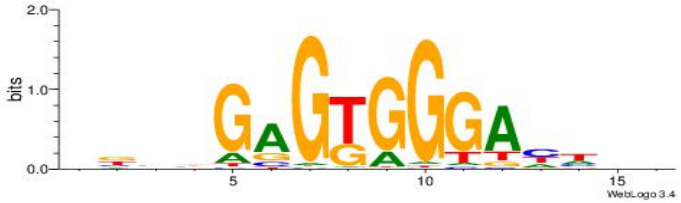
Motif ID:	UP00007
Motif name:	Egr1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0360229

Alignment:

```
BHHDTCCCACTCBDBV
--YCGCCCACGCH---
```

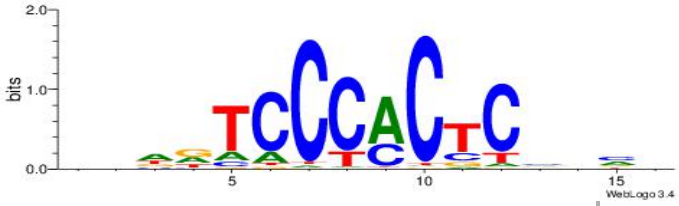
Original motif

Consensus sequence: BBHBGAGTGGGAHHDB



Reverse complement motif

Consensus sequence: BHHDTCCCACTCBDBV

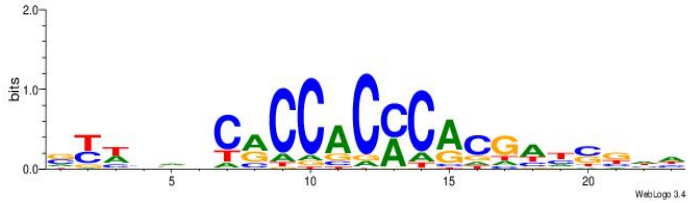


Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9

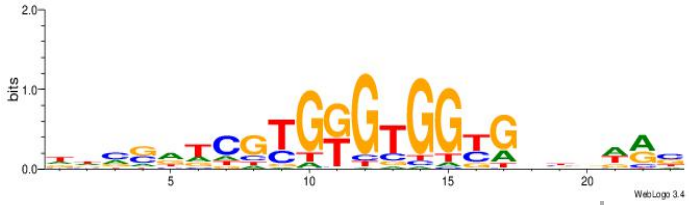
Number of overlap: 11
Similarity score: 0.0362743

Alignment:
VYWVVHCRCCACMCACGAHSBHH
--------YCGCCCACGCH----

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



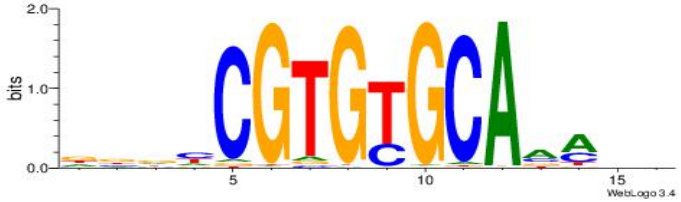
Motif ID: UP00097
Motif name: Mtf1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0386944

Alignment:
HDYTTGCACACGDHBH
---YCGCCCACGCH--

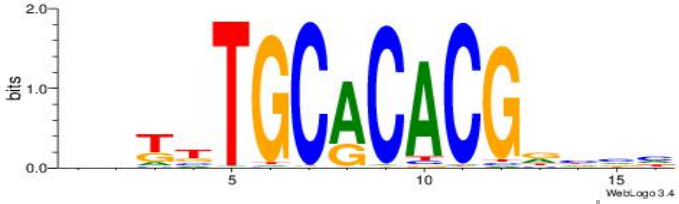
Original motif

Reverse complement motif

Consensus sequence: DBDHCGTGTGCAAMDH



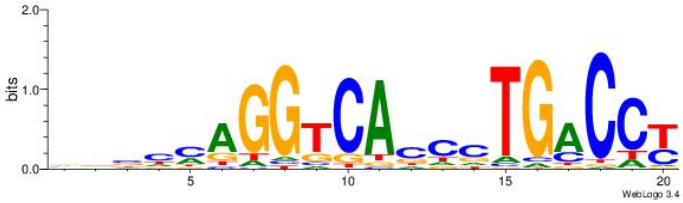
Consensus sequence: HDYTTGCACACGDHBH



Dataset #: 3 Motif ID: 45 Motif name: ESR1

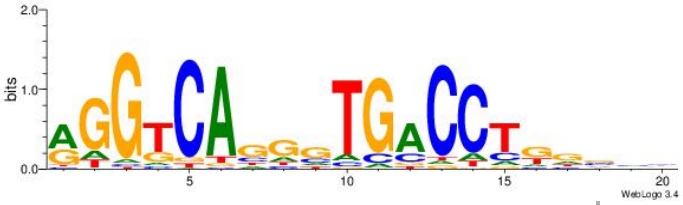
Original motif

Consensus sequence: VDBHMAGGTCACCCTGACCY



Reverse complement motif

Consensus sequence: MGGTCAGGGTGACCTRDBHV

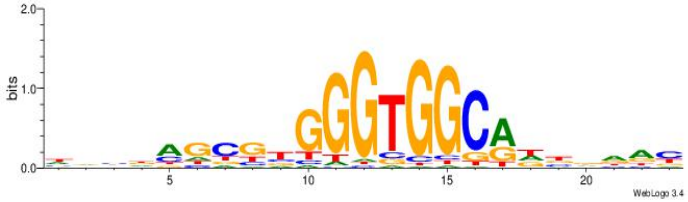


Best Matches for Motif ID 45 (Highest to Lowest)

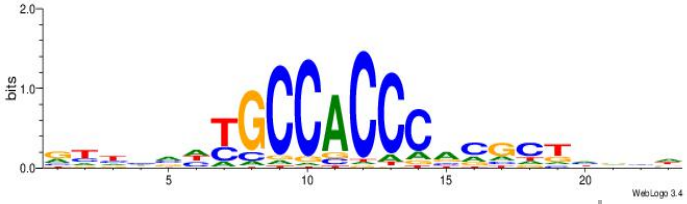
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.0658405

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
VDBHMAGGTCACCCTGACCY---

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

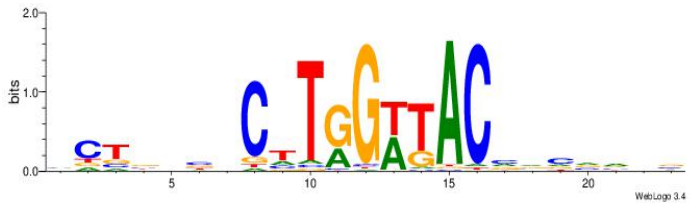


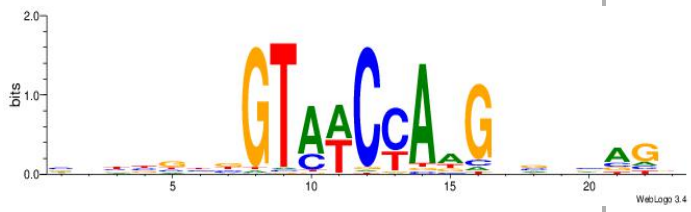
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0689748

Alignment:
BDBBVBVGTAWCCAAGVBHBAGB
VDBHMAGGTCACCCTGACCY---

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB

Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB





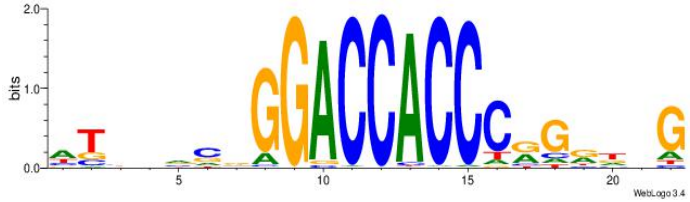
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0701247

Alignment:

```
CBDMCMGGGTGGTCCHVBVBAH
MGGTCAGGGTGACCTRDBHV--
```

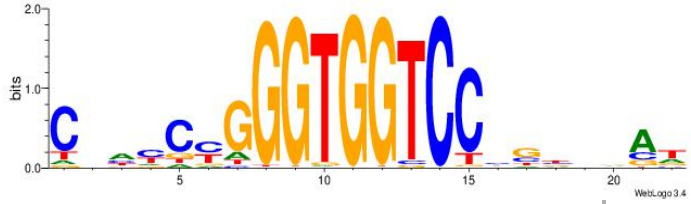
Original motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Reverse complement motif

Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



Motif ID: UP00539

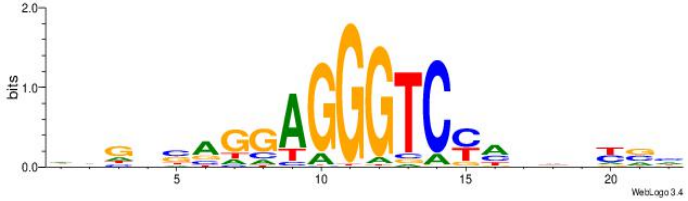
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	20
Similarity score:	0.0711267

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
MGGTCAGGGTGACCTRDBHV--
```

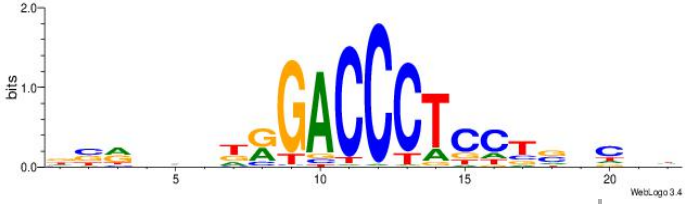
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH

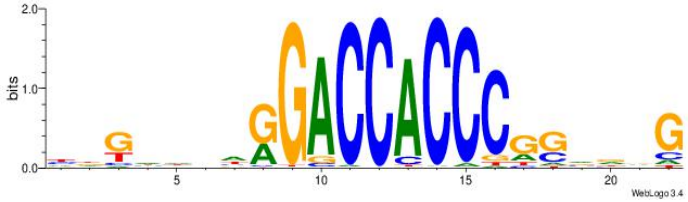


Motif ID:	UP00540
Motif name:	Gli3_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	20

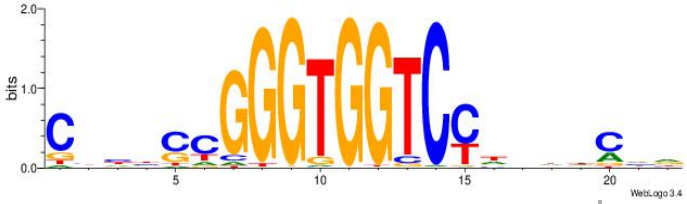
Similarity score: 0.0742427

Alignment:
CVHBSCGGGTGGTCMHVHHCDH
-VDBHMAGGTCACCCTGACCY-

Original motif
Consensus sequence: HDGHHBHRGACCACCCGSVDVG



Reverse complement motif
Consensus sequence: CVHBSCGGGTGGTCMHVHHCDH

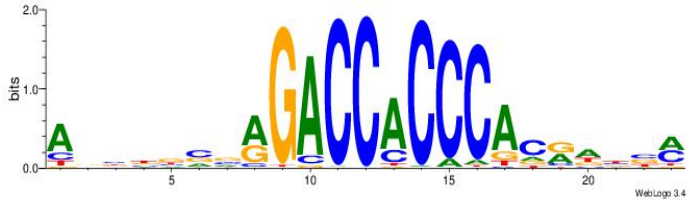


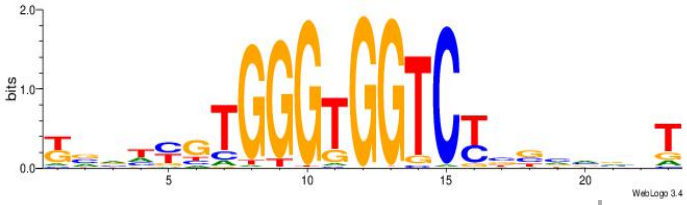
Motif ID: UP00540
Motif name: Gli3_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 20
Similarity score: 0.0747053

Alignment:
ABBBBVVRGACCACCCACRDBBM
--VDBHMAGGTCACCCTGACCY-

Original motif
Consensus sequence: ABBBBVVRGACCACCCACRDBBM

Reverse complement motif
Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT





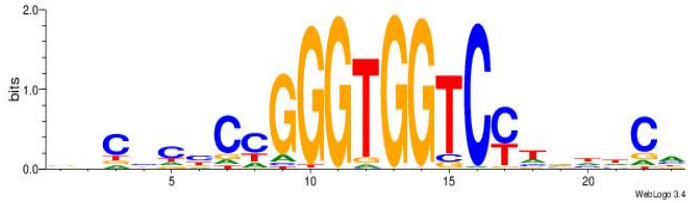
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	20
Similarity score:	0.0749165

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
---VDBHMAGGTCACCCTGACCY
```

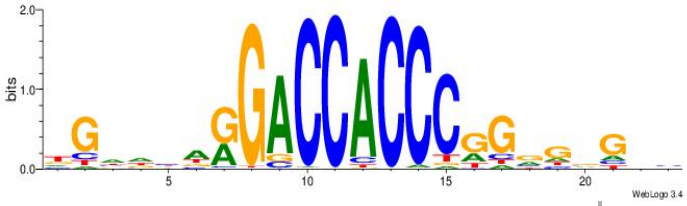
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



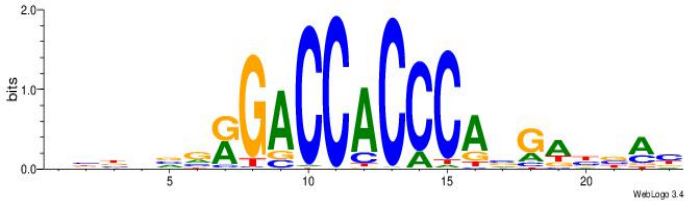
Motif ID:	UP00538
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	20
Similarity score:	0.0759307

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
-VDBHMAGGTCACCCTGACCY--
```

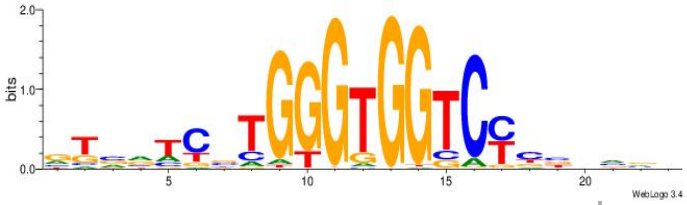
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB

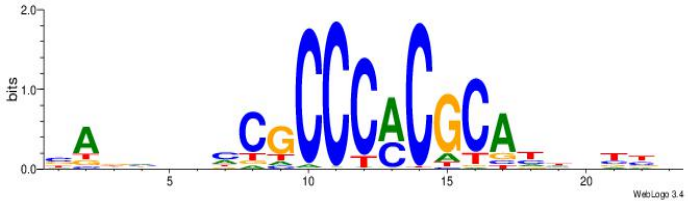


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

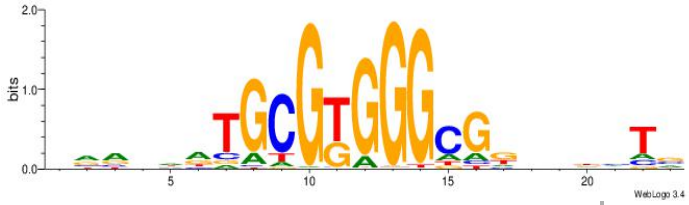
Number of overlap: 20
Similarity score: 0.0762689

Alignment:
VVVDHHTGCGYGGGCGDHVHHTB
-MGGTCAGGGTGACCTRDBHV--

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB

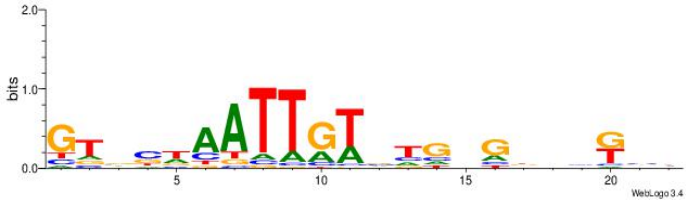


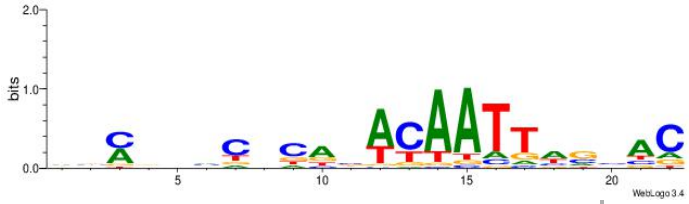
Motif ID: UP00034
Motif name: Sox7_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 20
Similarity score: 0.0780113

Alignment:
GTVBDAATTGTVTGHGDDHKVB
VDBHMAGGTCACCCTGACCY--

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB

Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC

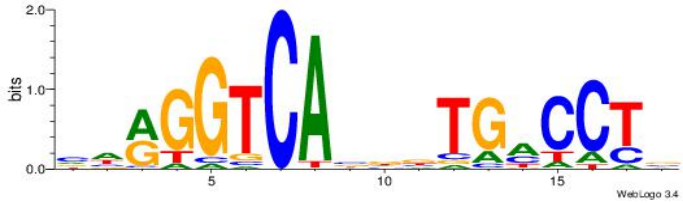




Dataset #: 3 **Motif ID: 46** **Motif name: ESR2**

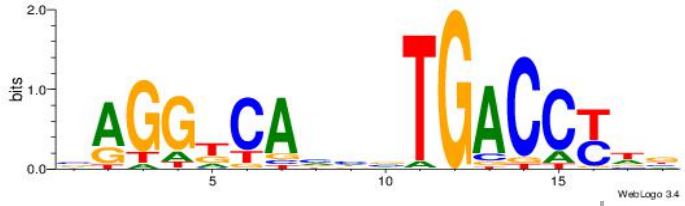
Original motif

Consensus sequence: VHRGGTCABDBTGMCCTB



Reverse complement motif

Consensus sequence: BAGGYCABHBTGACCKHV



Best Matches for Motif ID 46 (Highest to Lowest)

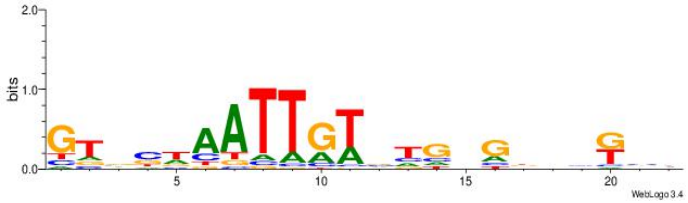
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0443894

Alignment:

GTVBDAATTGTVTGHGDDHKVB
---VHRGGTCABDBTGMCCTB-

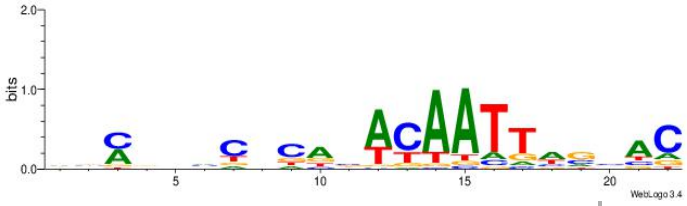
Original motif

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

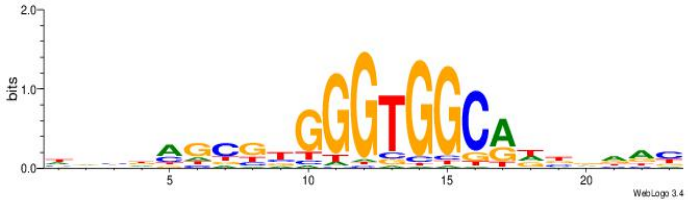
Alignment:
BDDHVDKGCCACCCVCGCTDBVH
---VHRGGTCABDBTGMCCTB--

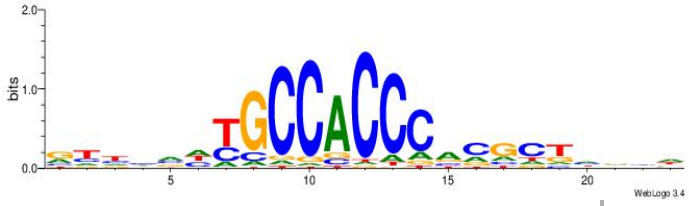
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB

Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH





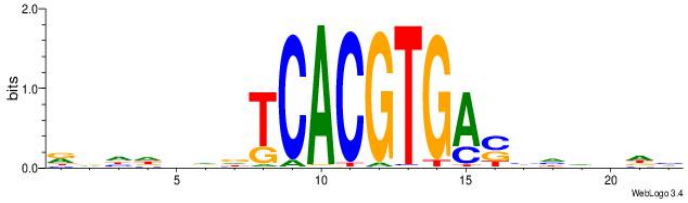
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.0509182

Alignment:

```
DDHBHBSTCACGTGAHBBDHHM
--VHRGGTCABDBTGMCCTB--
```

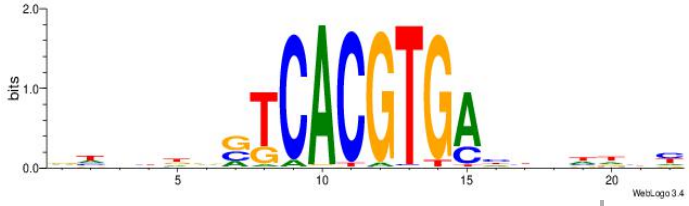
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Motif ID:	UP00540

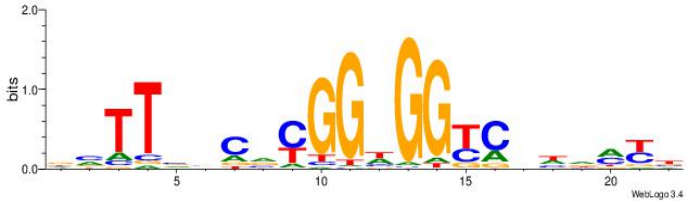
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	18
Similarity score:	0.0527075

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
-BAGGYCABHBTGACCKHV---
```

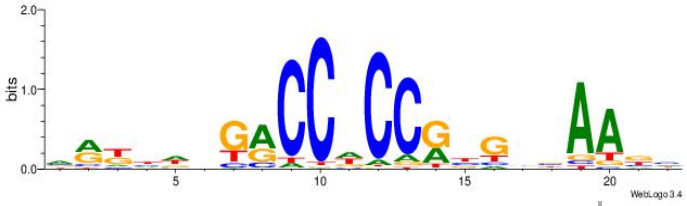
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

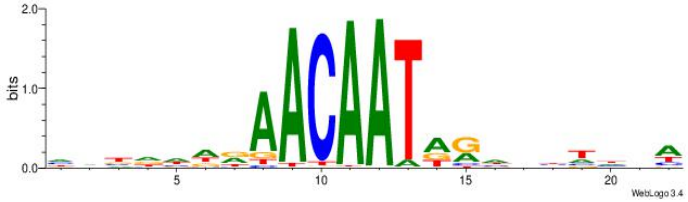


Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	18

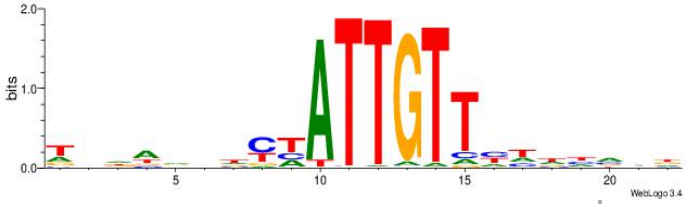
Similarity score: 0.0541044

Alignment:
WBHHHHHMDATTGTTHDHDVHH
-BAGGYCABHBTGACCKHV---

Original motif
Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH

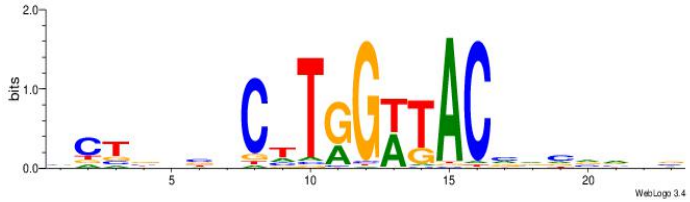


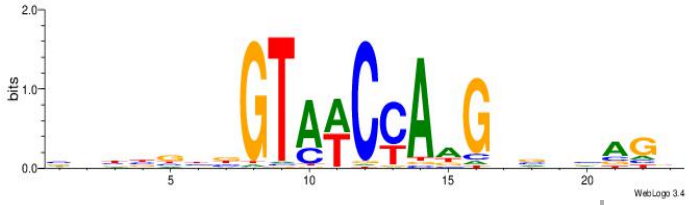
Motif ID: UP00098
Motif name: Rfx3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 18
Similarity score: 0.0541108

Alignment:
VCTBHBVCTTGGWTACVVVVVDB
--BAGGYCABHBTGACCKHV---

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB

Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB





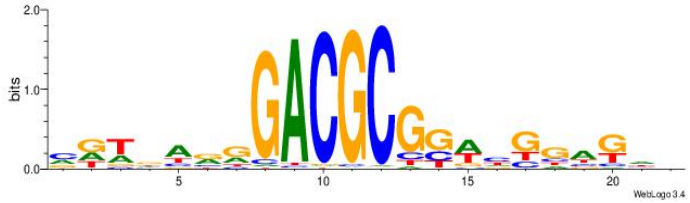
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0543733

Alignment:

```
VDWDARRGACGCGGWHGGAKHV
---VHRGGTCABDBTGMCCTB-
```

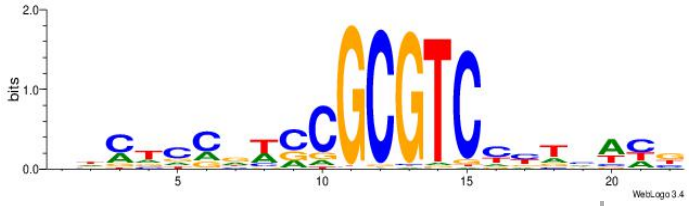
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



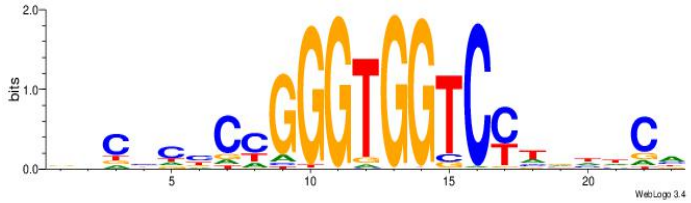
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	18
Similarity score:	0.0548087

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
-BAGGYCABHBTGACCKHV----
```

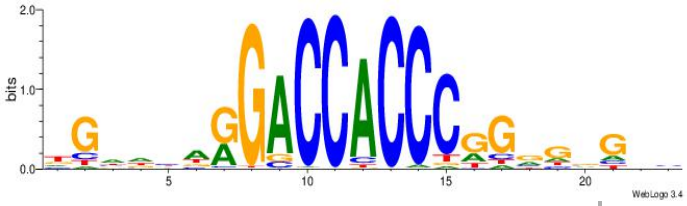
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

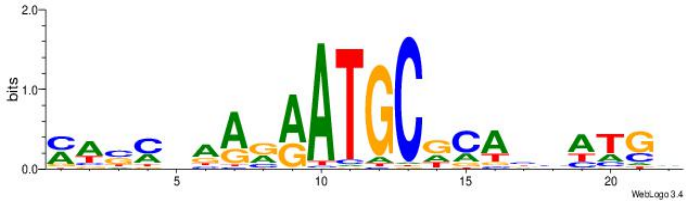


Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5

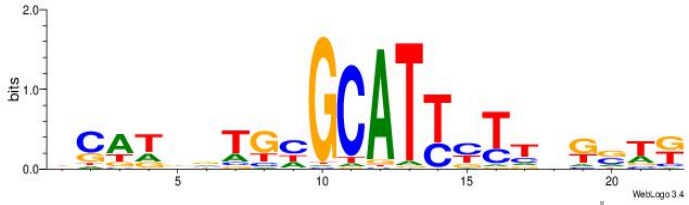
Number of overlap: 18
Similarity score: 0.055453

Alignment:
DCATDBTGHGCATKMTTBRSWR
----VHRGGTCABDBTGMCCTB

Original motif
Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR



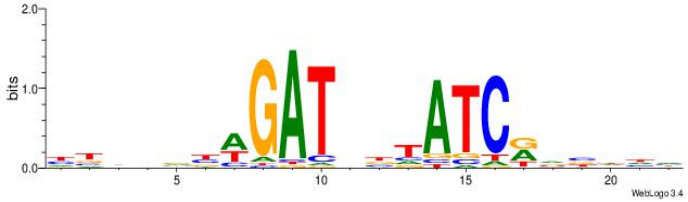
Motif ID: UP00032
Motif name: Gata3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 18
Similarity score: 0.0566426

Alignment:
HBHDVBWGATHBTATCRVBHHH
-VHRGGTCABDBTGMCCTB---

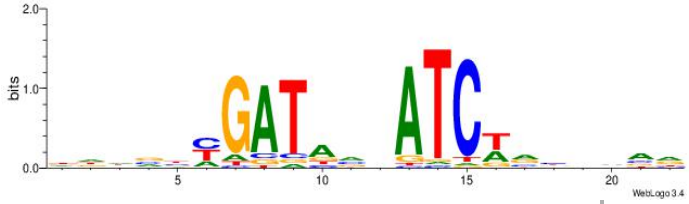
Original motif

Reverse complement motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Consensus sequence: HHHBBMGATAVHATCWVVDHVH



Dataset #: 3 **Motif ID: 47** **Motif name: Esrrb**

Original motif

Consensus sequence: CACGTG

Reverse complement motif

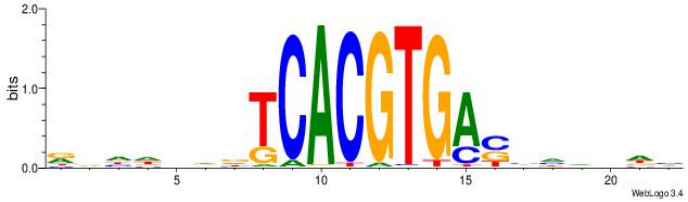
Consensus sequence: CACGTG

Best Matches for Motif ID 47 (Highest to Lowest)

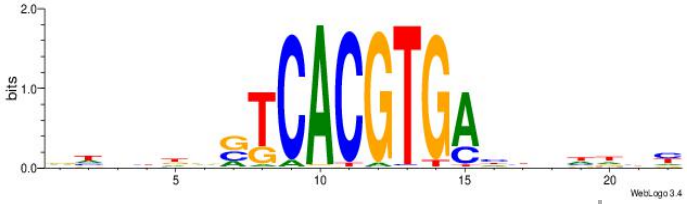
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	6
Similarity score:	0

Alignment:
RDHDBVDTCACGTGASBHVHDH
--------CACGTG--------

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM

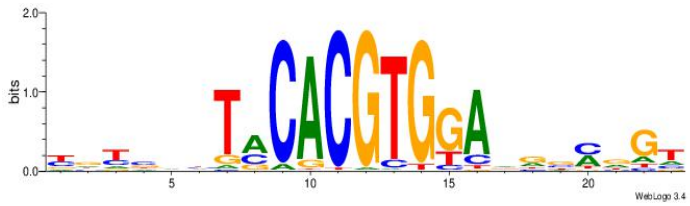


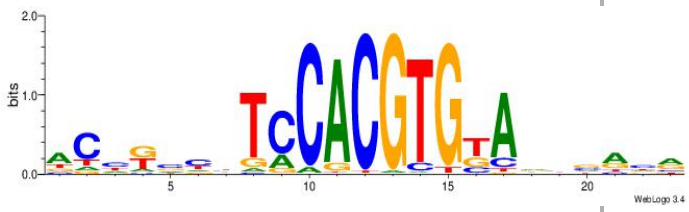
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	6
Similarity score:	0.0026425

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
---------CACGTG--------

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT

Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM





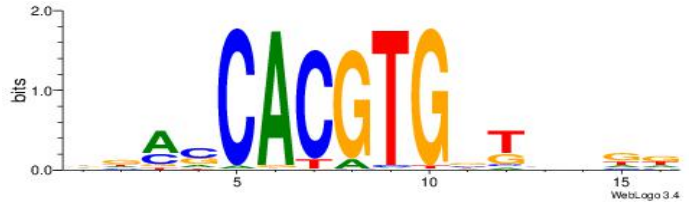
Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	6
Similarity score:	0.0044422

Alignment:

```
DDASCACGTGBTBVDD
----CACGTG------
```

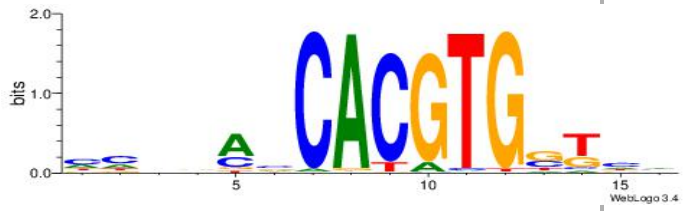
Original motif

Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif

Consensus sequence: HHVBABCACGTGSTHD



Motif ID:	UP00046

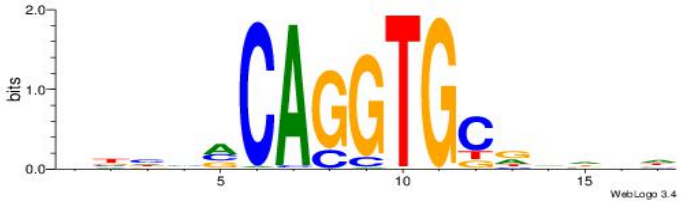
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.0342153

Alignment:

```
DHDBHGCACCTGBDDVB
------CACGTG-----
```

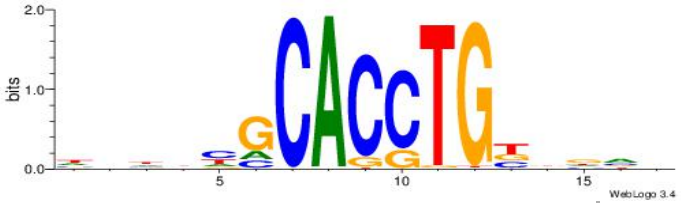
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB

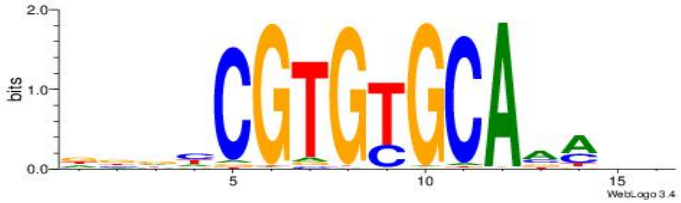


Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	6

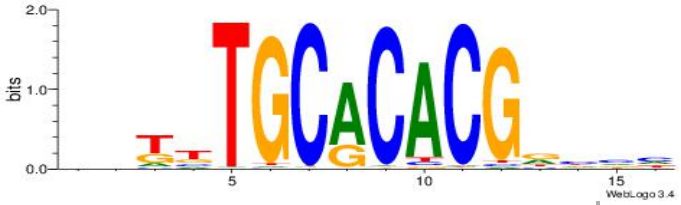
Similarity score: 0.0471928

Alignment:
HDYTTGCACACGDHBH
--------CACGTG--

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH

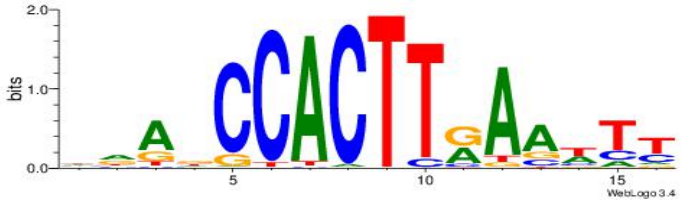


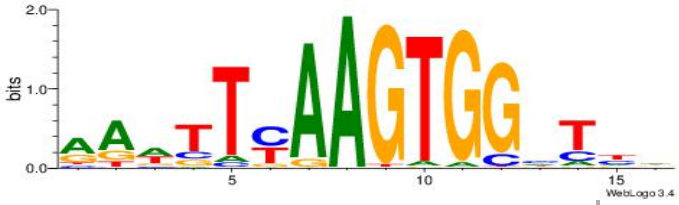
Motif ID:	UP00249
Motif name:	Nkx2-5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	6
Similarity score:	0.0482749

Alignment:
HDADCCACTTRAAWTT
-----CACGTG-----

Original motif
Consensus sequence: HDADCCACTTRAAWTT

Reverse complement motif
Consensus sequence: AAWTTMAAGTGGHTDH





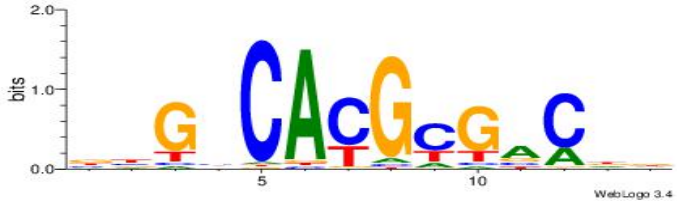
Motif ID:	UP00060
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	6
Similarity score:	0.0485437

Alignment:

```
BBGHCACGCGACDD
----CACGTG----
```

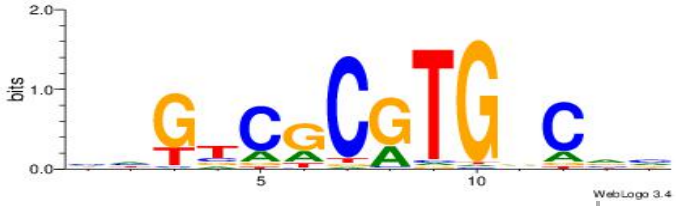
Original motif

Consensus sequence: BBGHCACGCGACDD



Reverse complement motif

Consensus sequence: HDGTCGCGTGDCVB



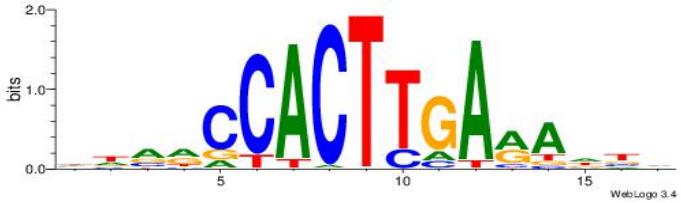
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	6
Similarity score:	0.0497234

Alignment:

```
DVDTKTCAAGTGGKBDH
------CACGTG-----
```

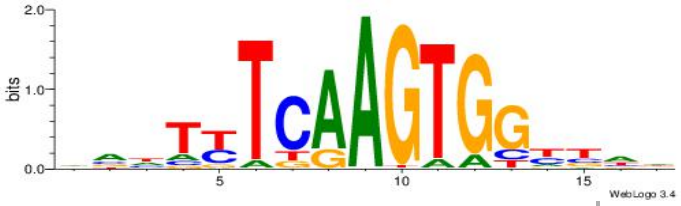
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH

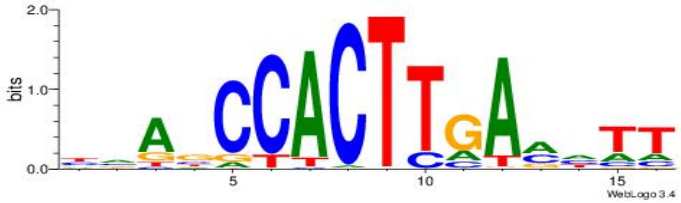


Motif ID:	UP00165
Motif name:	Titf1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

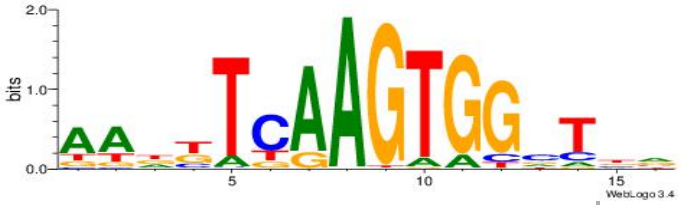
Number of overlap: 6
Similarity score: 0.0498919

Alignment:
AAHYTCAAGTGGBTBV
-----CACGTG-----

Original motif
Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV



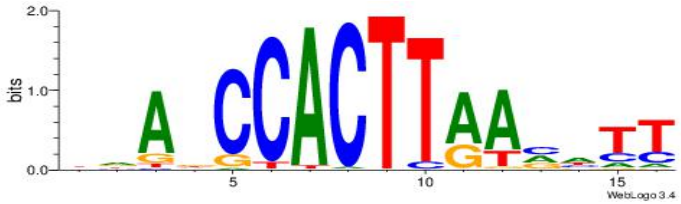
Motif ID: UP00147
Motif name: Nkx2-6
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 6
Similarity score: 0.0544601

Alignment:
DDADCCACTTAAVHTT
-----CACGTG-----

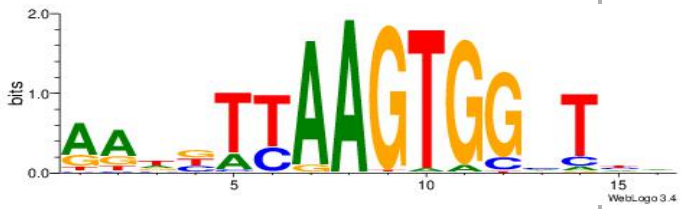
Original motif

Reverse complement motif

Consensus sequence: DDADCCACTTAAVHTT



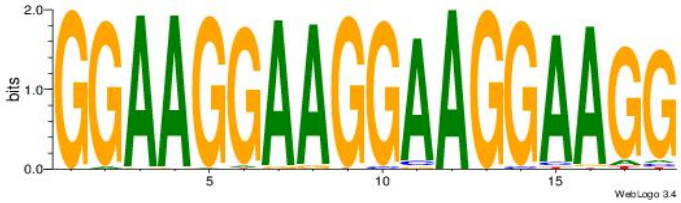
Consensus sequence: AAHVTTAAGTGGHTDD



Dataset #: 3 **Motif ID: 48** **Motif name: EWSR1-FLI1**

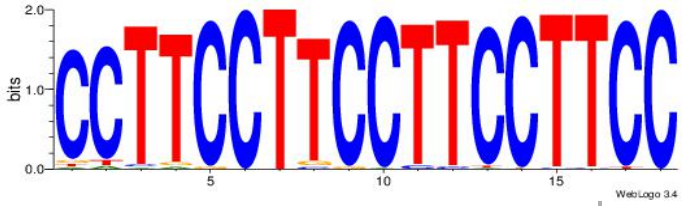
Original motif

Consensus sequence: GGAAGGAAGGAAGGAAGG



Reverse complement motif

Consensus sequence: CCTTCCTTCCTTCCTTCC



Best Matches for Motif ID 48 (Highest to Lowest)

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:	3
Number of overlap:	14
Similarity score:	0.0442834

Alignment:

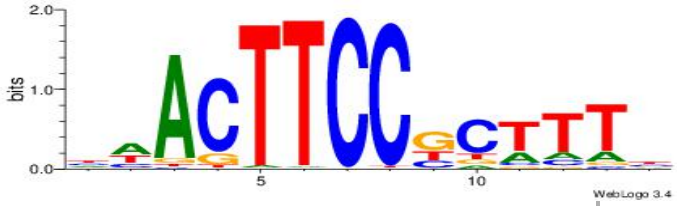
----VAAAGMGGAAGTWD
GGAAGGAAGGAAGGAAGG--

Original motif

Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRCTTTB



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:	Backward
Position number:	5
Number of overlap:	14
Similarity score:	0.0466226

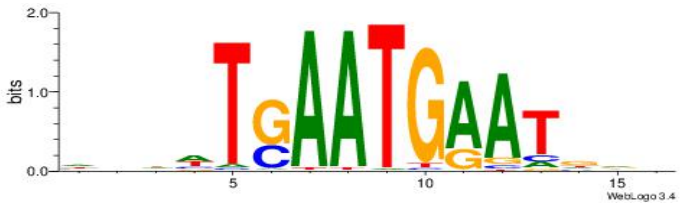
Alignment:
----VDHATTCATTSAWDDH
CCTTCCTTCCTTCCTTCC----

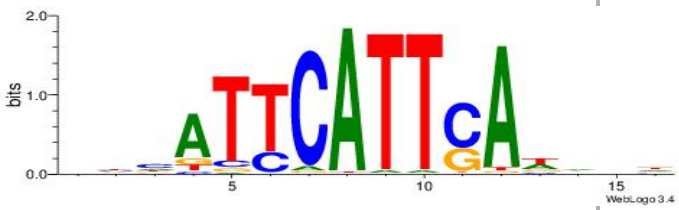
Original motif

Consensus sequence: HHDWTSAATGAATDDB

Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH





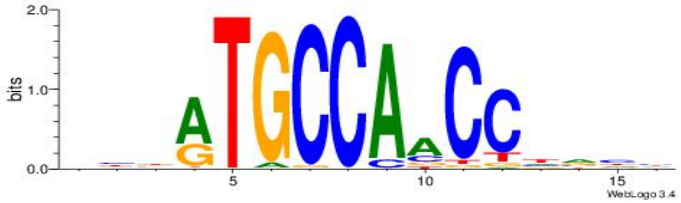
Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	14
Similarity score:	0.047846

Alignment:

```
DBBATGCCAACCHVHH----
----GGAAGGAAGGAAGGAAGG
```

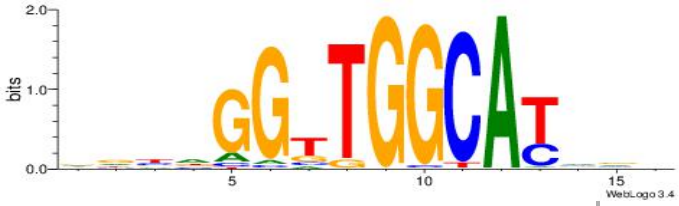
Original motif

Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif

Consensus sequence: DDBHGGTTGGCATVBD



Motif ID:	UP00090
Motif name:	Elf3_primary

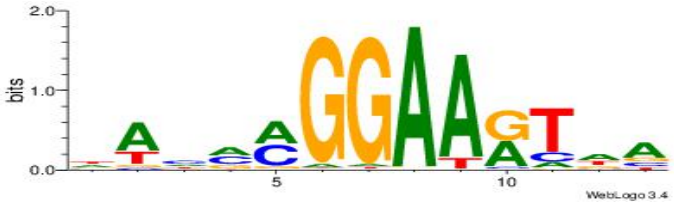
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	13
Similarity score:	0.539121

Alignment:

```
TDAMTTCCYYDTD-----
--CCTTCCTTCCTTCCTTCC
```

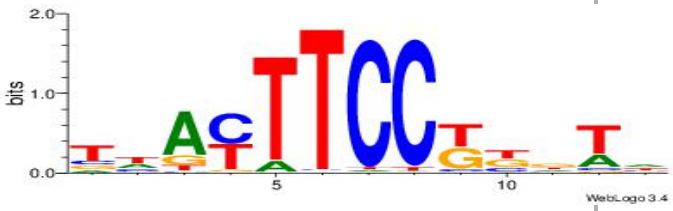
Original motif

Consensus sequence: DAHMMGGAARTDA



Reverse complement motif

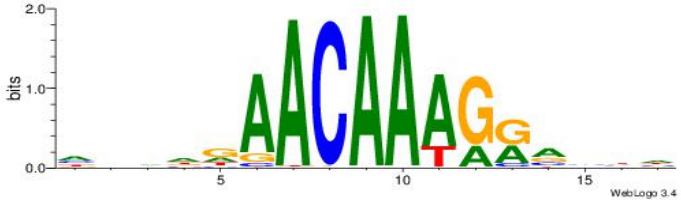
Consensus sequence: TDAMTTCCYYDTD



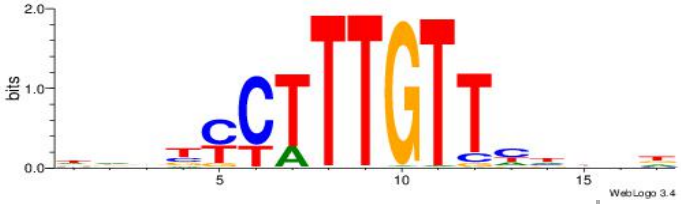
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	13
Similarity score:	0.547912

Alignment:
HHBBMCTTTGTTHDDBH-----
----CCTTCCTTCCTTCCTTCC

Original motif
Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif
Consensus sequence: HHBBMCTTTGTTHDDBH

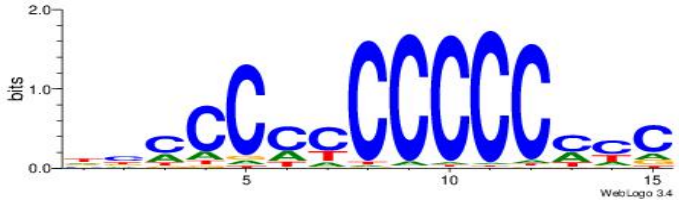


Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	13
Similarity score:	0.548284

Alignment:
DBCCCCCCCCCCMYC-----
-----GGAAGGAAGGAAGGAAGG

Original motif
Consensus sequence: DBCCCCCCCCCCMYC

Reverse complement motif
Consensus sequence: GKRGGGGGGGGGGBD



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:	6
Number of overlap:	13
Similarity score:	0.54837

Alignment:

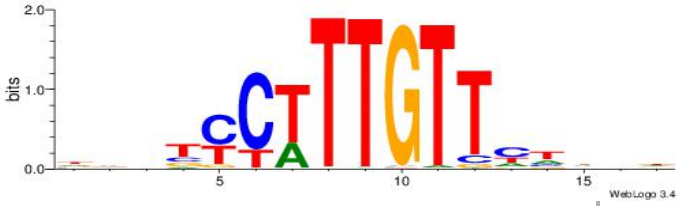
```
-----HHBTMCTTTGTTMDDVH
CCTTCCTTCCTTCCTTCC-----
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH



Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary

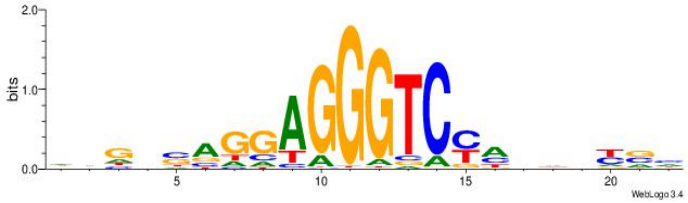
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	11
Number of overlap:	12
Similarity score:	1.04069

Alignment:

```
------HVGVSAGGAGGGTCYHHHHYVH
GGAAGGAAGGAAGGAAGG----------
```

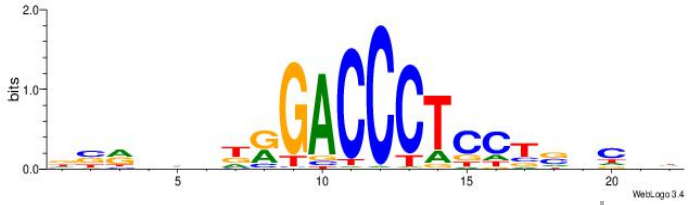
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



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:	3
Number of overlap:	12
Similarity score:	1.04159

Alignment:

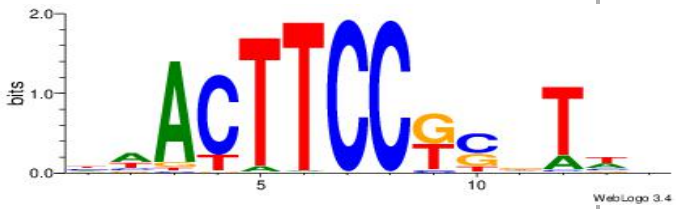
```
------BWAHSMGGAAGTWD
GGAAGGAAGGAAGGAAGG--
```

Original motif

Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif

Consensus sequence: DWACTTCCRSDTWV



Motif ID:	UP00056
Motif name:	Rfx4_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:	12
Similarity score:	1.04349

Alignment:

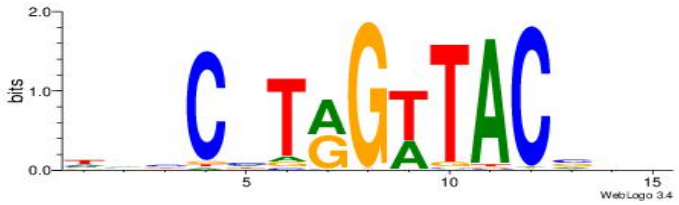
```
HVVGTAWCKADGBHH------
---GGAAGGAAGGAAGGAAGG
```

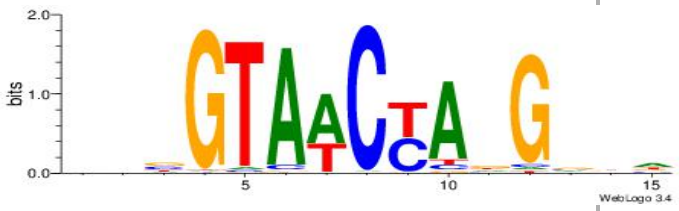
Original motif

Consensus sequence: HHBCHTRGWTACVVH

Reverse complement motif

Consensus sequence: HVVGTAWCKADGBHH





Dataset #: 3 **Motif ID: 49** **Motif name: HIF1AARNT**

Original motif

Consensus sequence: VBACGTGV

Reverse complement motif

Consensus sequence: VCACGTBV

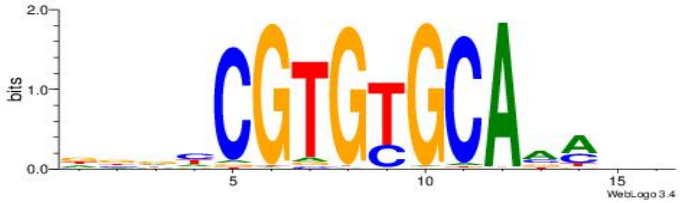
Best Matches for Motif ID 49 (Highest to Lowest)

Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	8
Similarity score:	0

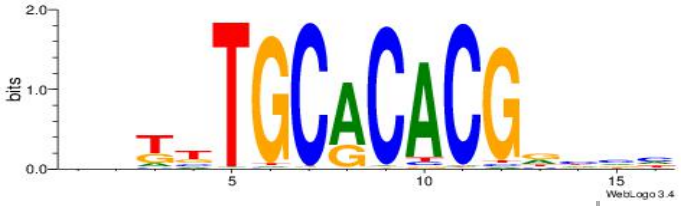
Alignment:

HDYTTGCACACGDHBH
-------VCACGTBV-

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH

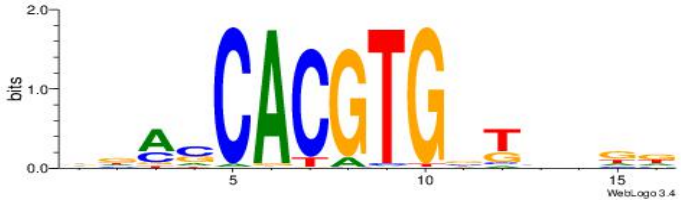


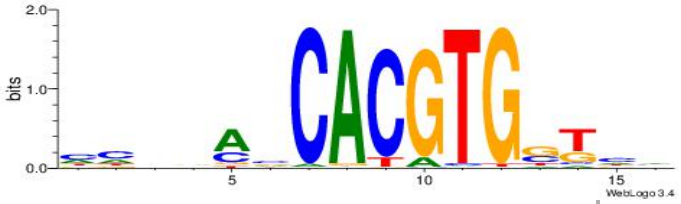
Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.000574345

Alignment:
HHVBABCACGTGSTHD
-----VCACGTBV---

Original motif
Consensus sequence: DDASCACGTGBTBVDD

Reverse complement motif
Consensus sequence: HHVBABCACGTGSTHD





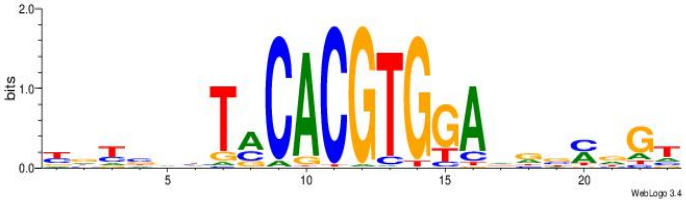
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	8
Similarity score:	0.00642455

Alignment:

```
YDYBDHTMCACGTGGADDBMDGT
-------VBACGTGV--------
```

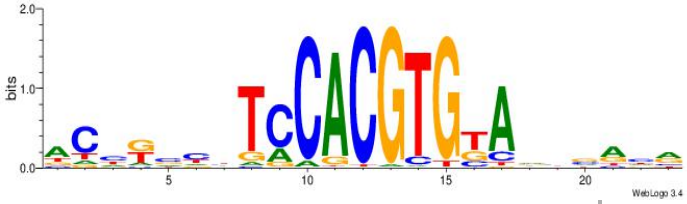
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00084

Motif name:	Gmeb1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0131171

Alignment:

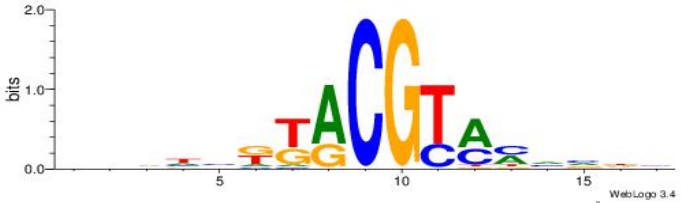
```
BVVDVRYACGTRYVBHB
-----VBACGTGV----
```

Original motif

Consensus sequence: BHBBKKACGTMMVDBVB

Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB

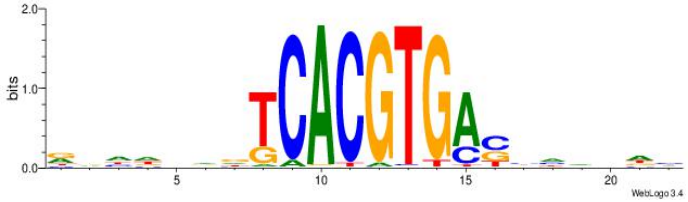


Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	8

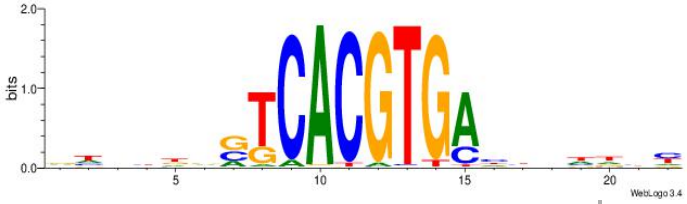
Similarity score: 0.014006

Alignment:
RDHDBVDTCACGTGASBHVHDH
-------VCACGTBV-------

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM

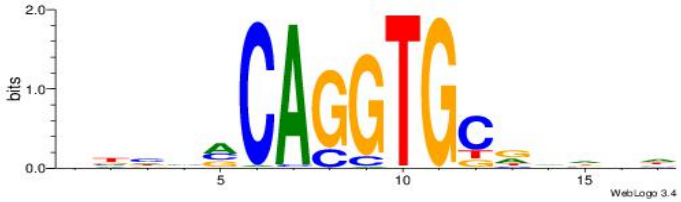


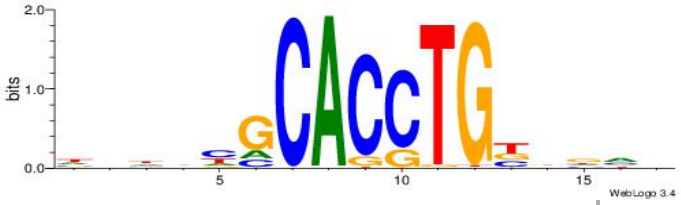
Motif ID: UP00046
Motif name: Tcfe2a_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 8
Similarity score: 0.0184296

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

Original motif
Consensus sequence: VBHHVCAGGTGCDVDHD

Reverse complement motif
Consensus sequence: DHDBHGCACCTGBDDVB





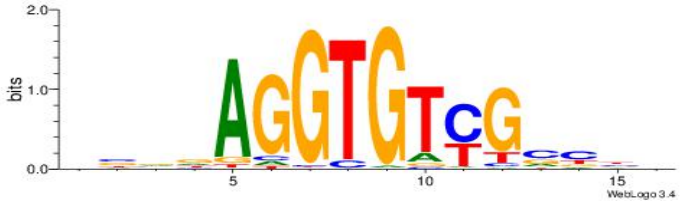
Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	8
Similarity score:	0.0188154

Alignment:

```
VVBVCKACACCTHVBV
------VCACGTBV--
```

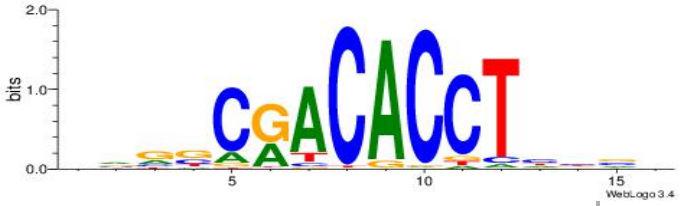
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV



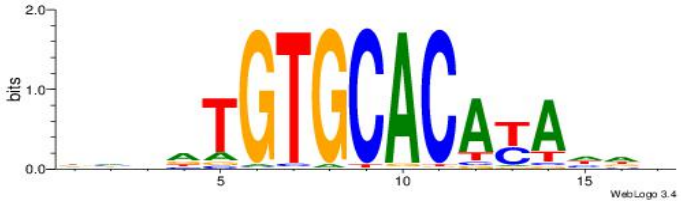
Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	8
Similarity score:	0.0189568

Alignment:

```
DHVDTGTGCACAYAHDH
-VBACGTGV--------
```

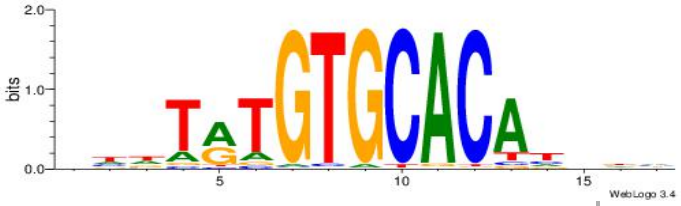
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD

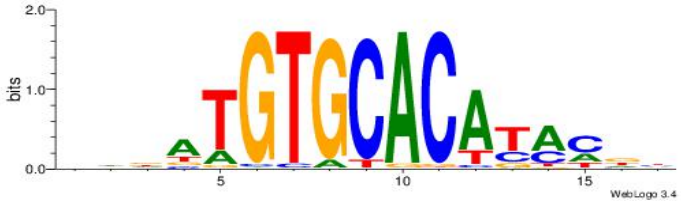


Motif ID:	UP00042
Motif name:	Gm397_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	8

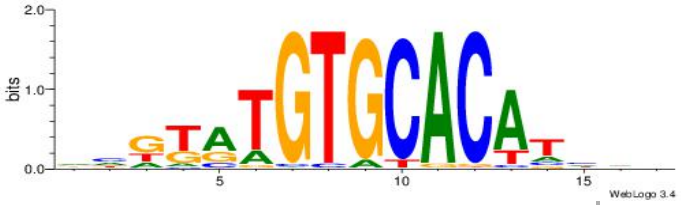
Number of overlap: 8
Similarity score: 0.0198987

Alignment:
HHRTATGTGCACATHHD
--VBACGTGV-------

Original motif
Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif
Consensus sequence: HHRTATGTGCACATHHD



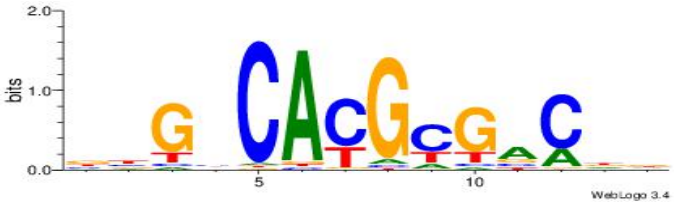
Motif ID: UP00060
Motif name: Max_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 8
Similarity score: 0.021967

Alignment:
BBGHCACGCGACDD
---VCACGTBV---

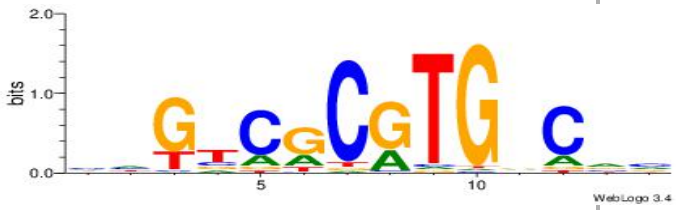
Original motif

Reverse complement motif

Consensus sequence: BBGHCACGCGACDD



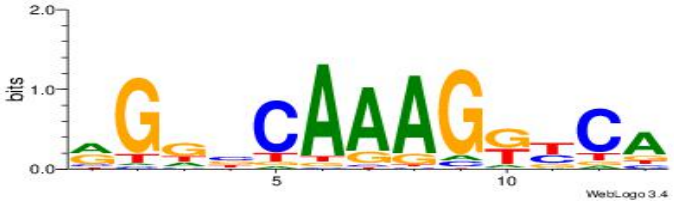
Consensus sequence: HDGTCGCGTGDCVB



Dataset #: 3 **Motif ID: 50** **Motif name: HNF4A**

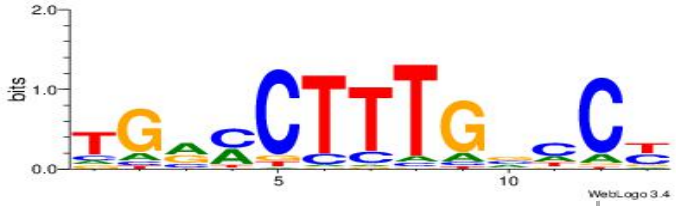
Original motif

Consensus sequence: RGGBCAAAGKYCA



Reverse complement motif

Consensus sequence: TGMYCTTTGBCCK

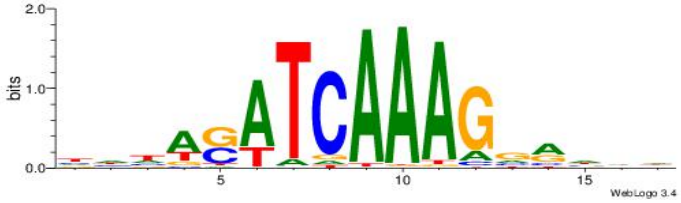


Best Matches for Motif ID 50 (Highest to Lowest)

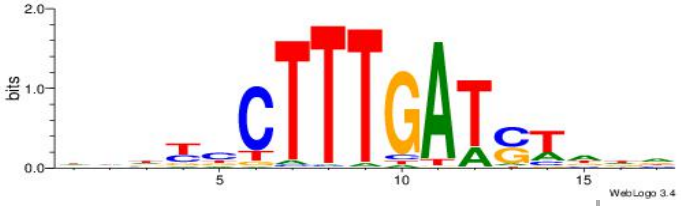
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0357776

Alignment:
HHHASATCAAAGVRHHH
---RGGBCAAAGKYCA-

Original motif
Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif
Consensus sequence: HHHKVCTTTGATSTHHH

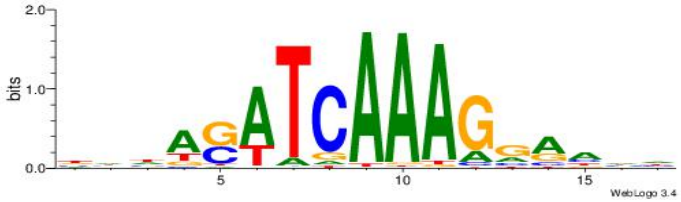


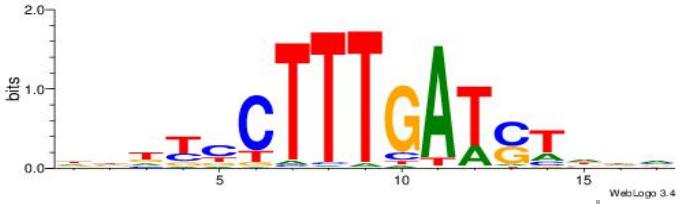
Motif ID:	UP00054
Motif name:	Tcf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0357792

Alignment:
BHHASATCAAAGGAHHH
---RGGBCAAAGKYCA-

Original motif
Consensus sequence: BHHASATCAAAGGAHHH

Reverse complement motif
Consensus sequence: HHHTCCTTTGATSTHHV





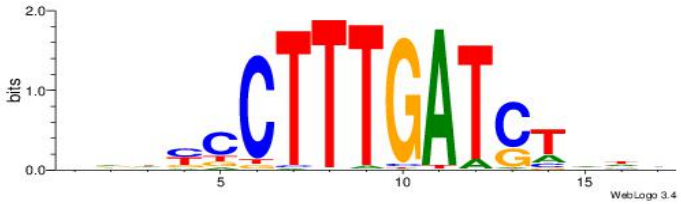
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	13
Similarity score:	0.0359011

Alignment:

```
VDDAGATCAAAGGKDDD
---RGGBCAAAGKYCA-
```

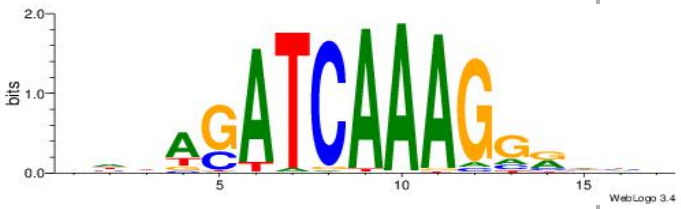
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD



Motif ID:	UP00083

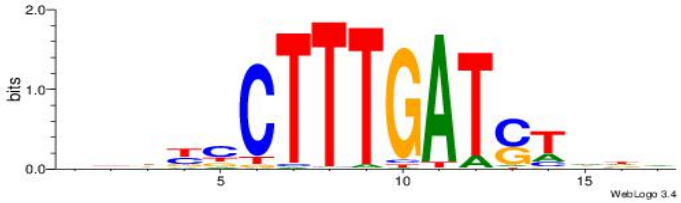
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	13
Similarity score:	0.0360786

Alignment:

```
BDDASATCAAAGGMDDD
---RGGBCAAAGKYCA-
```

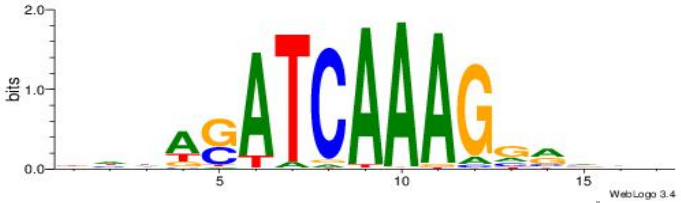
Original motif

Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif

Consensus sequence: BDDASATCAAAGGMDDD

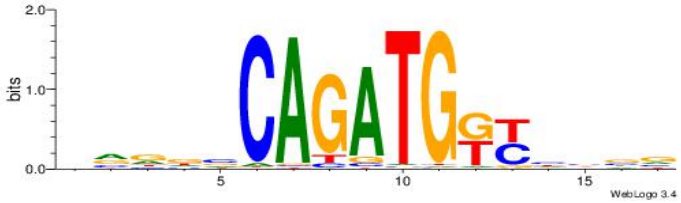


Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	13

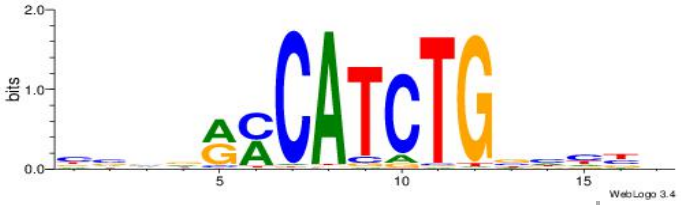
Similarity score: 0.0405764

Alignment:
HVDDVCAGATGKYHBBV
-RGGBCAAAGKYCA---

Original motif
Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif
Consensus sequence: VBBDMYCATCTGVHHBH

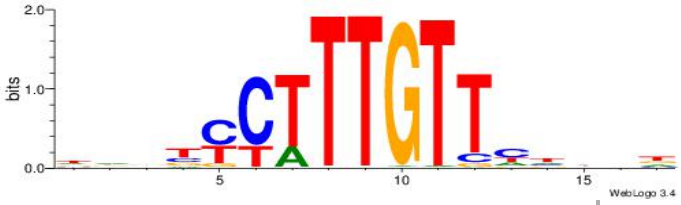


Motif ID: UP00062
Motif name: Sox4_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0409915

Alignment:
HHBBMCTTTGTTHDDBH
-TGMYCTTTGBCCK---

Original motif
Consensus sequence: HBDDDAACAAAGRVBHH

Reverse complement motif
Consensus sequence: HHBBMCTTTGTTHDDBH



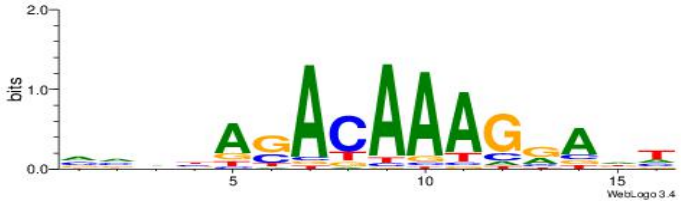
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	13
Similarity score:	0.0413218

Alignment:

```
HDTMCTTTGTSTVDBB
TGMYCTTTGBCCK---
```

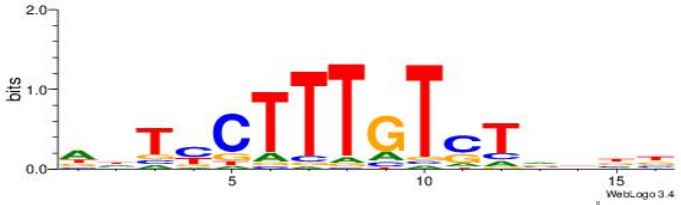
Original motif

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:

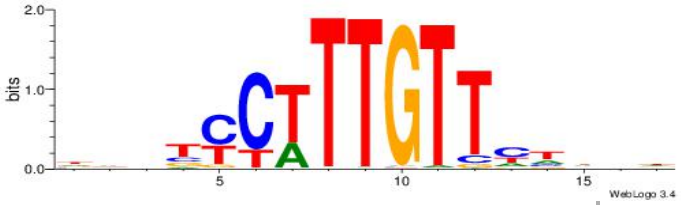
```
HHBTMCTTTGTTMDDVH
-TGMYCTTTGBCCK---
```

Original motif

Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH

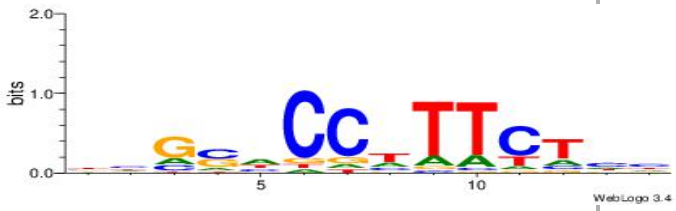


Motif ID:	UP00086
Motif name:	Irf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0442004

Alignment:
DDAGAADGGDSCDV
RGGBCAAAGKYCA-

Original motif
Consensus sequence: DDAGAADGGDSCDV

Reverse complement motif
Consensus sequence: BHGSDCCDTTCTHH

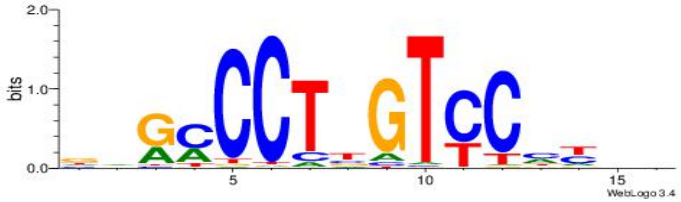


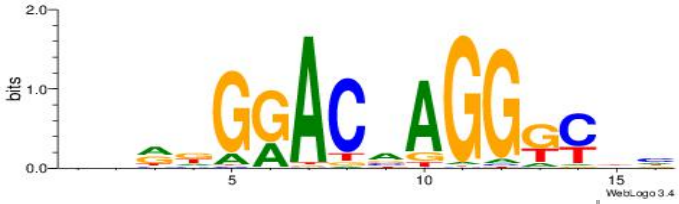
Motif ID:	UP00082
Motif name:	Zfp187_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	13
Similarity score:	0.0446884

Alignment:
VHMDGGACVAGGRCDH
---RGGBCAAAGKYCA

Original motif
Consensus sequence: DDGMCCTBGTCCHYHV

Reverse complement motif
Consensus sequence: VHMDGGACVAGGRCDH





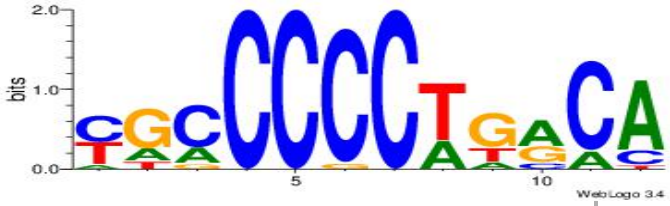
Dataset #: 3 **Motif ID: 51** **Motif name: INSM1**

Original motif

Consensus sequence: TGYCAGGGGGCR

Reverse complement motif

Consensus sequence: MGCCCCCTGMCA



Best Matches for Motif ID 51 (Highest to Lowest)

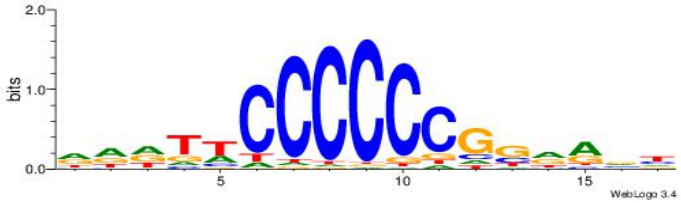
Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.00085101

Alignment:

HVKDCCGGGGGGWADDD
--TGYCAGGGGGCR---

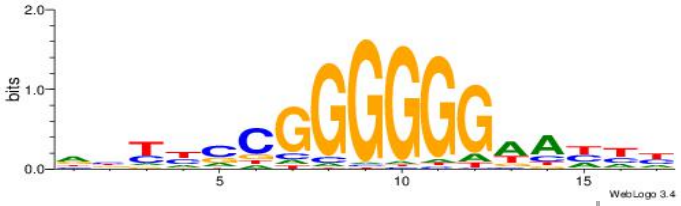
Original motif

Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif

Consensus sequence: HVKDCCGGGGGGWADDD



Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.00406431

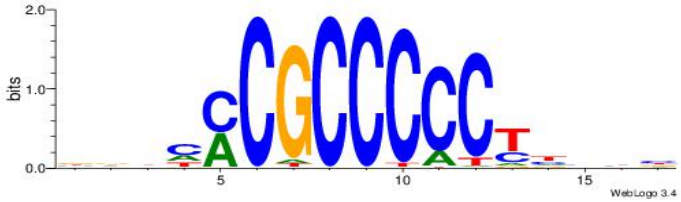
Alignment:
BVVHAGGGGGCGRDHHB
TGYCAGGGGGCR-----

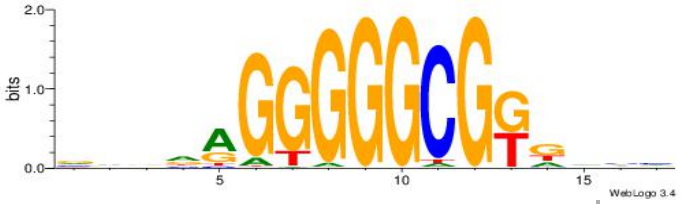
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB

Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB





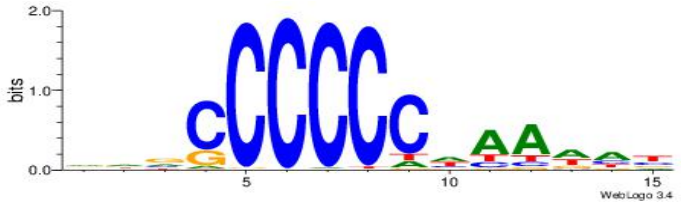
Motif ID:	UP00047
Motif name:	Zbtb7b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.00486866

Alignment:

```
VHWTTHGGGGGGVDD
--TGYCAGGGGGCR-
```

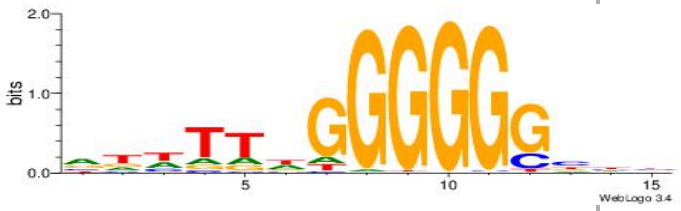
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

Consensus sequence: VHWTTHGGGGGGVDD



Motif ID:	UP00079

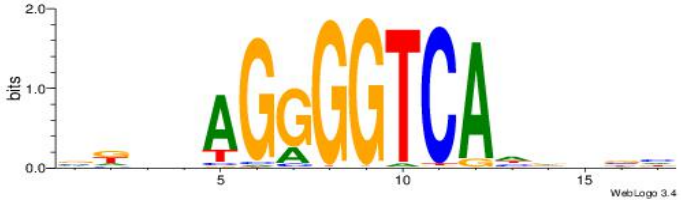
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.00862553

Alignment:

```
VKBBAGGGGTCAHDBBH
TGYCAGGGGGCR-----
```

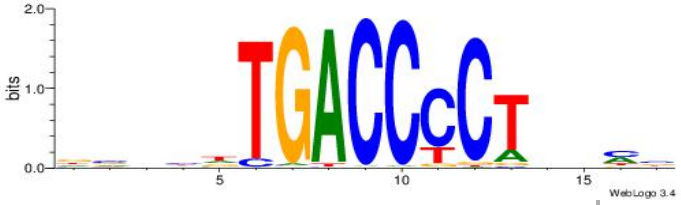
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

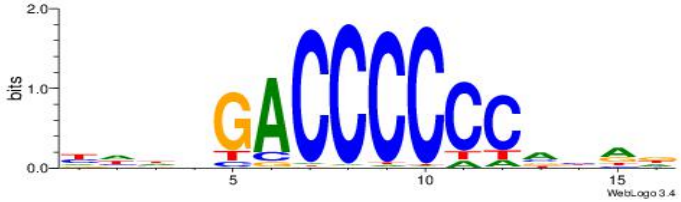
Consensus sequence: DBBHHTGACCCCTBBYV



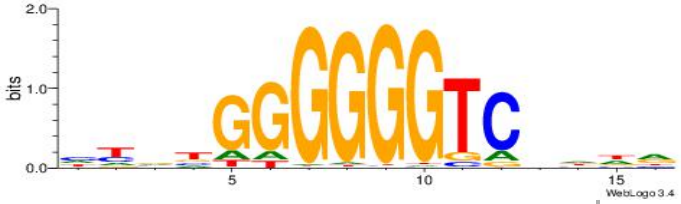
Motif ID:	UP00024
Motif name:	Glis2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.00936306

Alignment:
HKBBGGGGGGTCVHHH
-TGYCAGGGGGCR---

Original motif
Consensus sequence: HHHVGACCCCCCVBRD



Reverse complement motif
Consensus sequence: HKBBGGGGGGTCVHHH

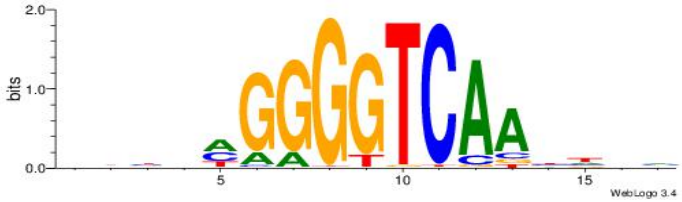


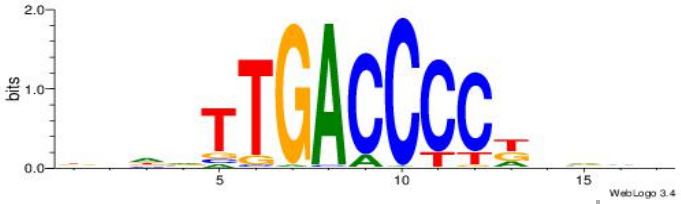
Motif ID:	UP00066
Motif name:	Hnf4a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0123592

Alignment:
BDBVMGGGGTCAABHDV
TGYCAGGGGGCR-----

Original motif
Consensus sequence: BDBVMGGGGTCAABHDV

Reverse complement motif
Consensus sequence: BHHVTTGACCCCYVVDB





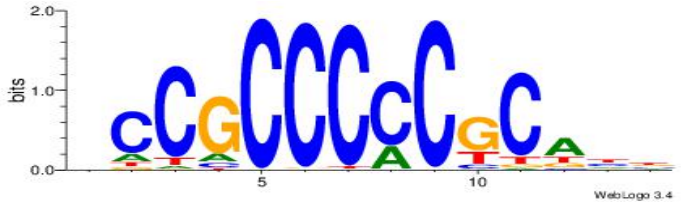
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0155167

Alignment:

```
HCCGCCCCCGCAHB
--MGCCCCCTGMCA
```

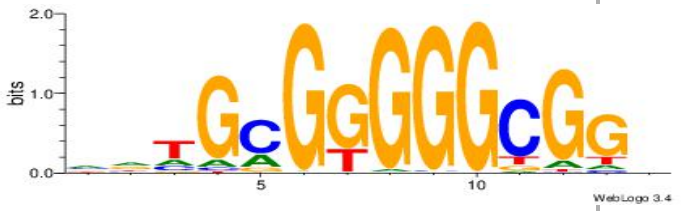
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



Motif ID:	UP00022

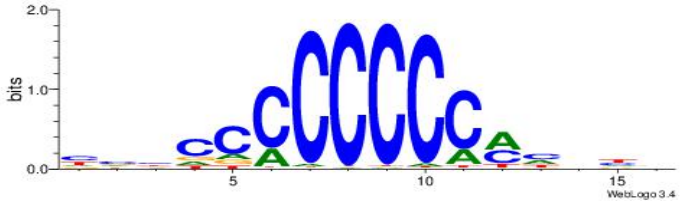
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0176638

Alignment:

```
HVBCCCCCCCCMHHHB
---MGCCCCCTGMCA-
```

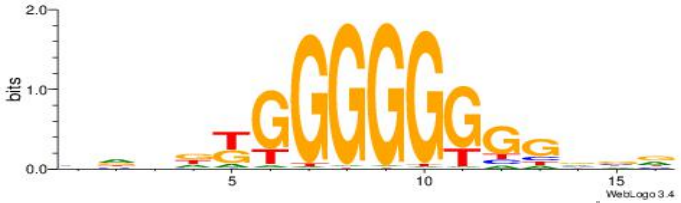
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD

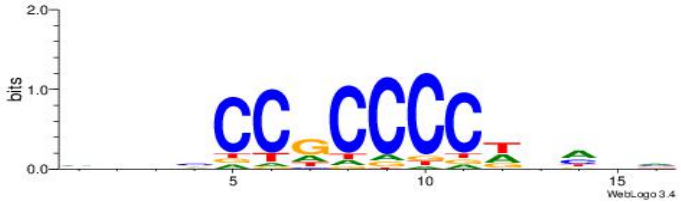


Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12

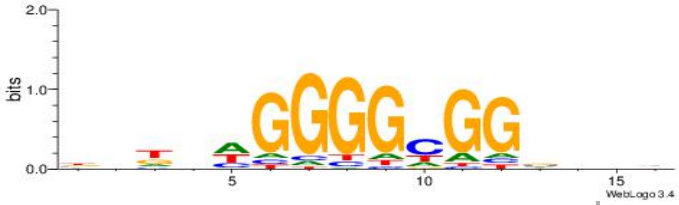
Similarity score: 0.0182432

Alignment:
BHHHWGGGGCGGBBVH
TGYCAGGGGGCR----

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH

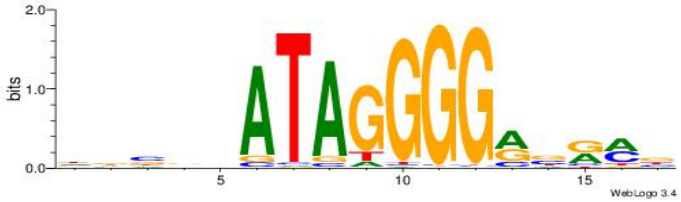


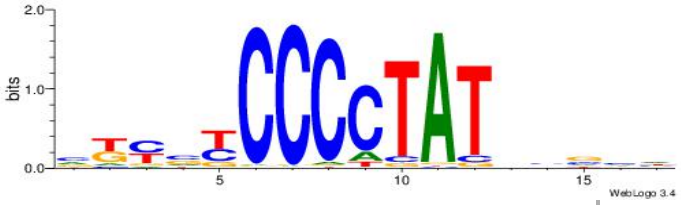
Motif ID: UP00070
Motif name: Gcm1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.0200587

Alignment:
BYMBKCCCCTATDVBHD
--MGCCCCCTGMCA---

Original motif
Consensus sequence: DDBVHATAGGGGRBRMB

Reverse complement motif
Consensus sequence: BYMBKCCCCTATDVBHD





Dataset #: 3 **Motif ID: 52** **Motif name: Klf4**

Original motif

Consensus sequence: DGGGYGKGGC

Reverse complement motif

Consensus sequence: GCCYCMCCCD

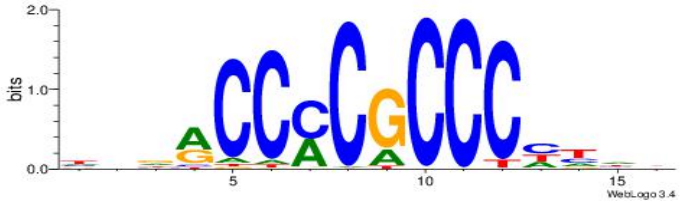
Best Matches for Motif ID 52 (Highest to Lowest)

Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0

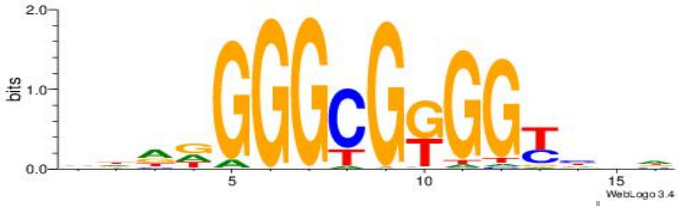
Alignment:

DHHDGGGCGRGGKHBH
---DGGGYGKGGC---

Original motif
Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif
Consensus sequence: DHHDGGGCGRGGKHBH

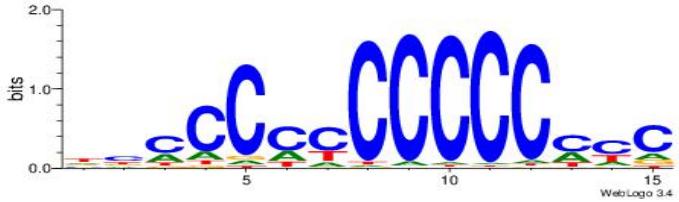


Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0153308

Alignment:
DBCCCCCCCCCCMYC
---GCCYCMCCCD--

Original motif
Consensus sequence: DBCCCCCCCCCCMYC

Reverse complement motif
Consensus sequence: GKRGGGGGGGGGBD



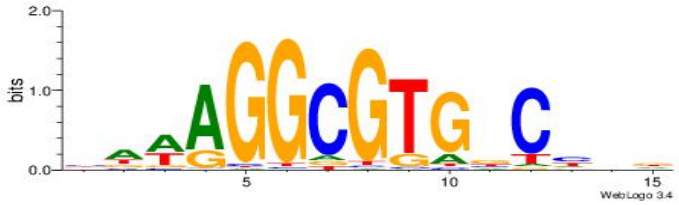
Motif ID:	UP00002
Motif name:	Sp4_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0186791

Alignment:

```
BDWAGGCGTGBCHHD
--DGGGYGKGGC---
```

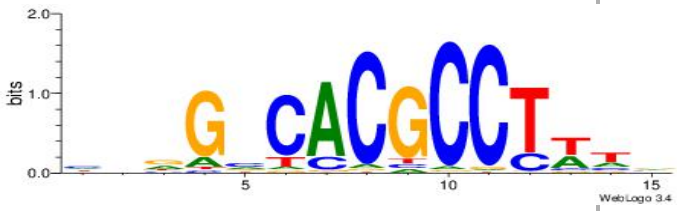
Original motif

Consensus sequence: BDWAGGCGTGBCHHD



Reverse complement motif

Consensus sequence: HHDGBCACGCCTWDB



Motif ID:	UP00022

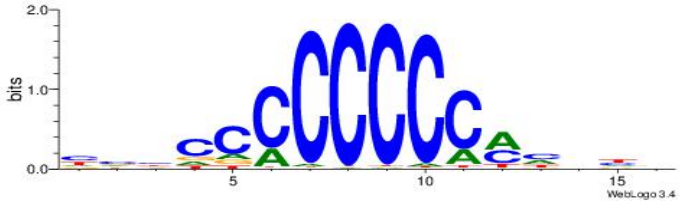
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0218399

Alignment:

```
HVBCCCCCCCCMHHHB
--GCCYCMCCCD----
```

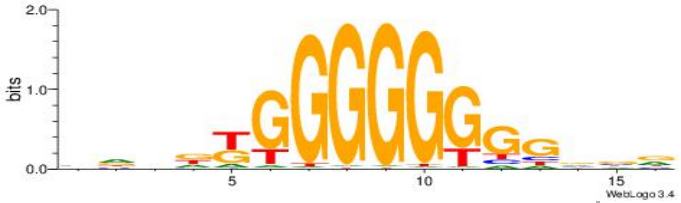
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD

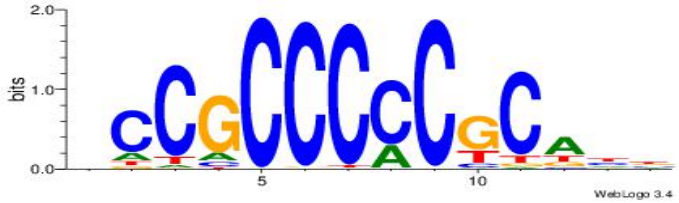


Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10

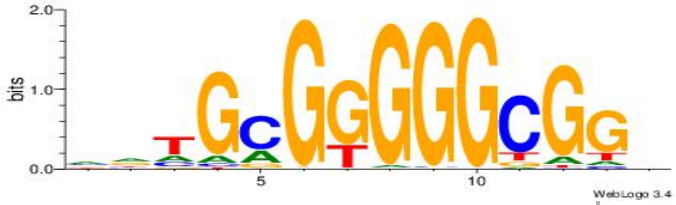
Similarity score: 0.0249586

Alignment:
HCCGCCCCCGCAHB
GCCYCMCCCD----

Original motif
Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH

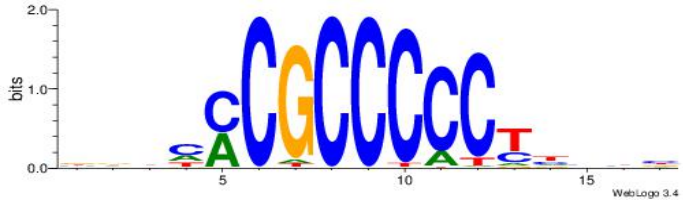


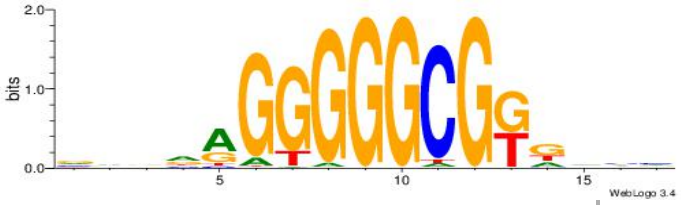
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	10
Similarity score:	0.0299159

Alignment:
BVVHAGGGGGCGRDHHB
------DGGGYGKGGC-

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB

Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB





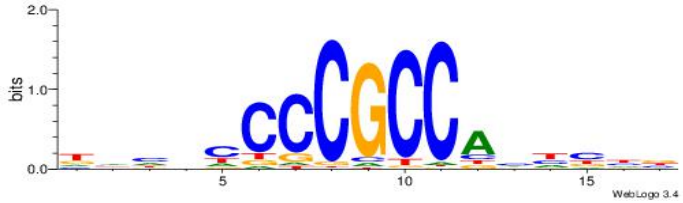
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0308595

Alignment:

```
BHBHDTGGCGGGGBDHD
----DGGGYGKGGC---
```

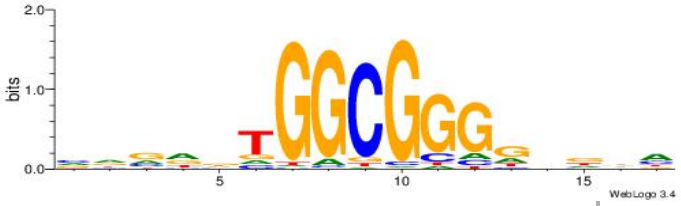
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



Motif ID: UP00047

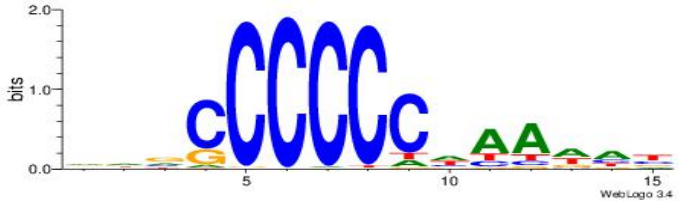
Motif name:	Zbtb7b_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0345891

Alignment:

```
VHWTTHGGGGGGVDD
GCCYCMCCCD-----
```

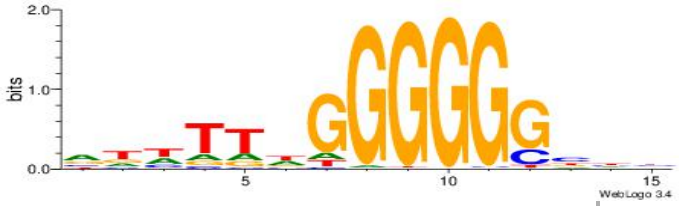
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

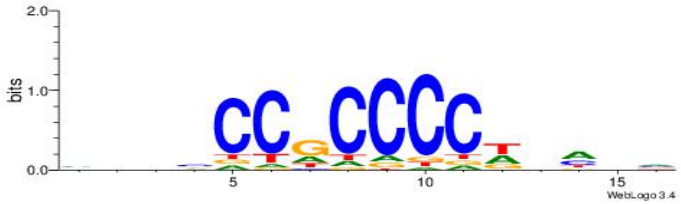
Consensus sequence: VHWTTHGGGGGGVDD



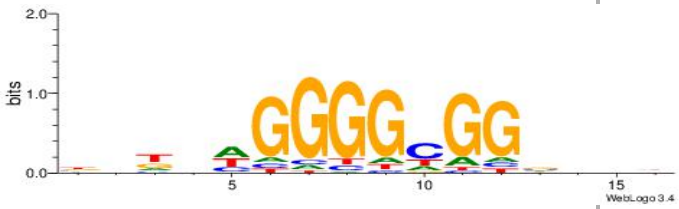
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0346735

Alignment:
HBBBCCGCCCCWHHHV
--GCCYCMCCCD----

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH

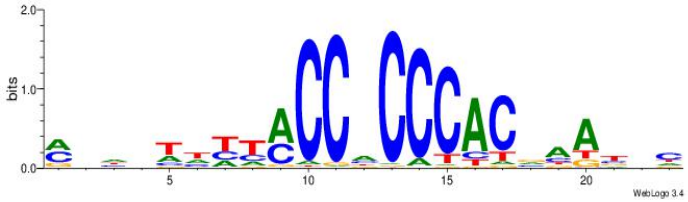


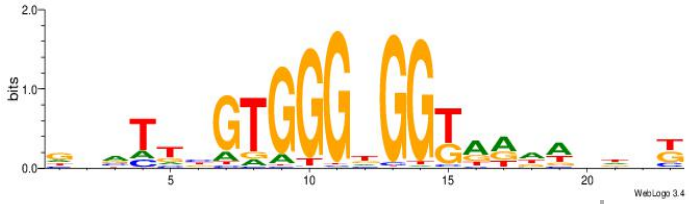
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	10
Similarity score:	0.0351496

Alignment:
MHHHWHYTMCCHCCCACVAABVH
------GCCYCMCCCD-------

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH

Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

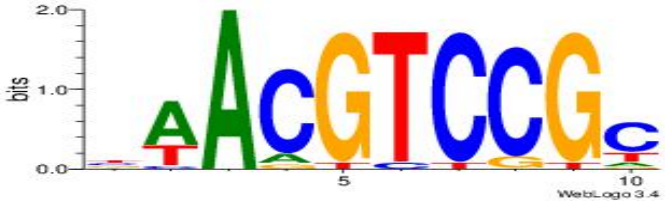




Dataset #: 3 **Motif ID: 53** **Motif name: MIZF**

Original motif

Consensus sequence: BAACGTCCGC



Reverse complement motif

Consensus sequence: GCGGACGTTV

Best Matches for Motif ID 53 (Highest to Lowest)

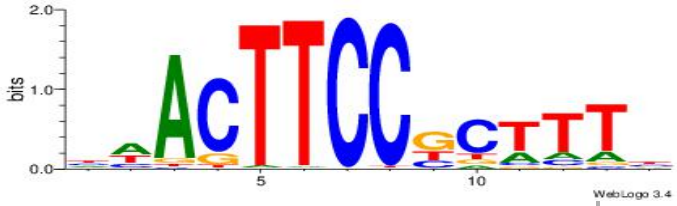
Motif ID:	UP00419
Motif name:	Spic
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0

Alignment:

DWACTTCCRCTTTB
BAACGTCCGC----

Original motif
Consensus sequence: VAAAGMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRCTTTB

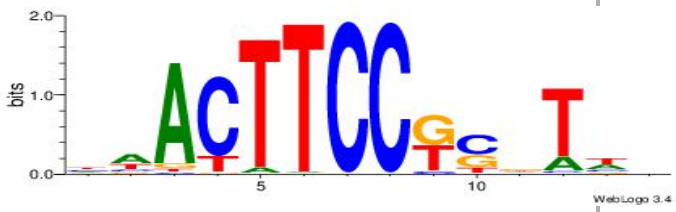


Motif ID:	UP00409
Motif name:	Elf5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.00379999

Alignment:
DWACTTCCRSDTWV
BAACGTCCGC----

Original motif
Consensus sequence: BWAHSMGGAAGTWD

Reverse complement motif
Consensus sequence: DWACTTCCRSDTWV



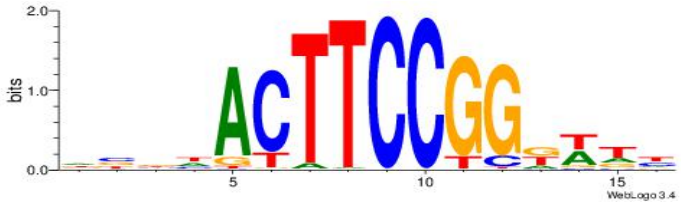
Motif ID:	UP00413
Motif name:	Elf4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0124101

Alignment:

```
DBBHACTTCCGGKWTH
--BAACGTCCGC----
```

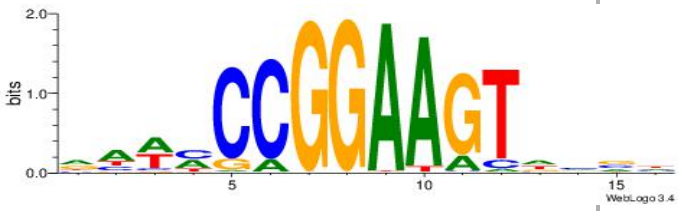
Original motif

Consensus sequence: DBBHACTTCCGGKWTH



Reverse complement motif

Consensus sequence: HAWYCCGGAAGTHBBD



Motif ID:	UP00404

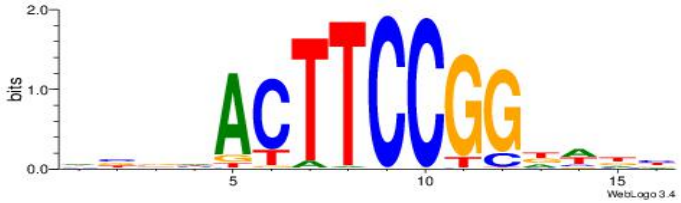
Motif name:	Elf2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0128348

Alignment:

```
DBBHACTTCCGGDWDB
--BAACGTCCGC----
```

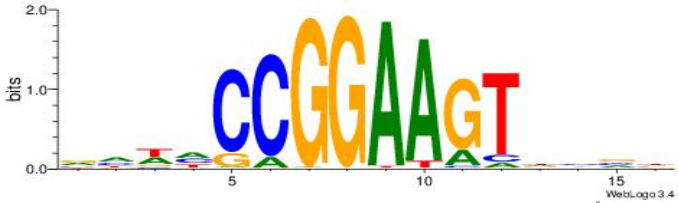
Original motif

Consensus sequence: DBBHACTTCCGGDWDB



Reverse complement motif

Consensus sequence: BDWDCCGGAAGTHBBD

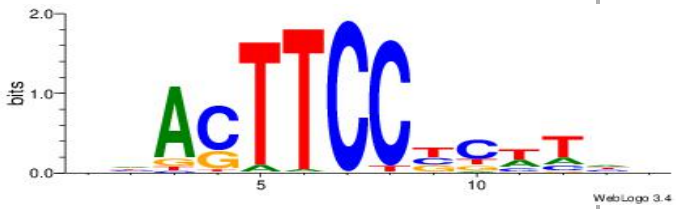


Motif ID:	UP00085
Motif name:	Sfpi1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0141516

Alignment:
BDAWGVGGAAGTDH
BAACGTCCGC----

Original motif
Consensus sequence: BDAWGVGGAAGTDH

Reverse complement motif
Consensus sequence: HDACTTCCBCWTDV

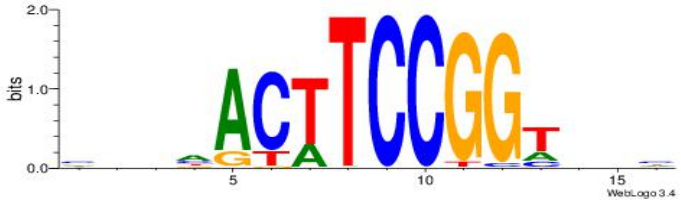


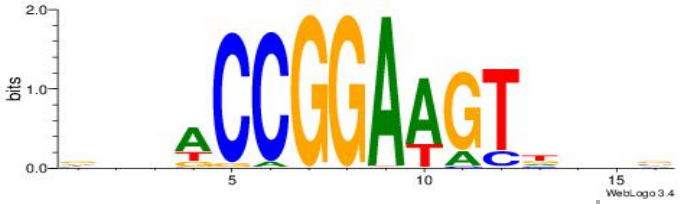
Motif ID:	UP00423
Motif name:	Gm5454
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0144665

Alignment:
DVHACCGGAAGTHDDV
----GCGGACGTTV--

Original motif
Consensus sequence: VDHHACTTCCGGTHVH

Reverse complement motif
Consensus sequence: DVHACCGGAAGTHDDV





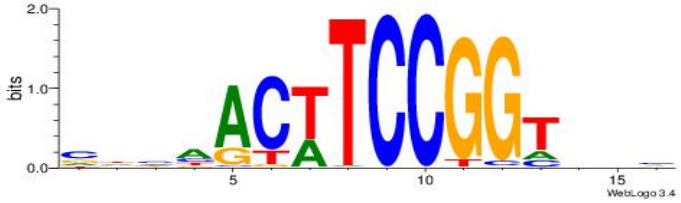
Motif ID:	UP00412
Motif name:	Etv5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0155825

Alignment:

```
DHHACCGGAWGTTDDV
----GCGGACGTTV--
```

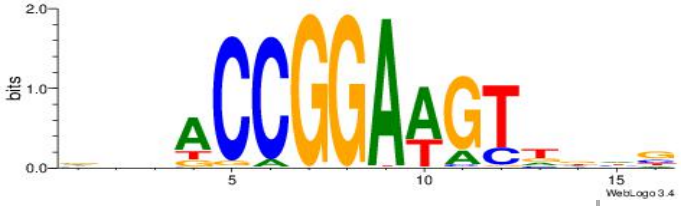
Original motif

Consensus sequence: VDHAACWTCCGGTHHH



Reverse complement motif

Consensus sequence: DHHACCGGAWGTTDDV



Motif ID:	UP00015

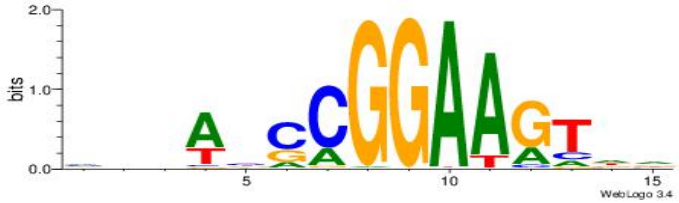
Motif name:	Ehf_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0162018

Alignment:

```
VBDABCCGGAAGTDD
-----GCGGACGTTV
```

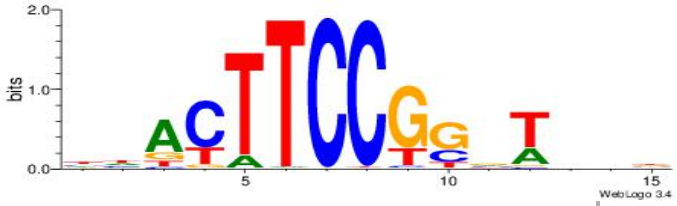
Original motif

Consensus sequence: VBDABCCGGAAGTDD



Reverse complement motif

Consensus sequence: DDACTTCCGGBTHBB

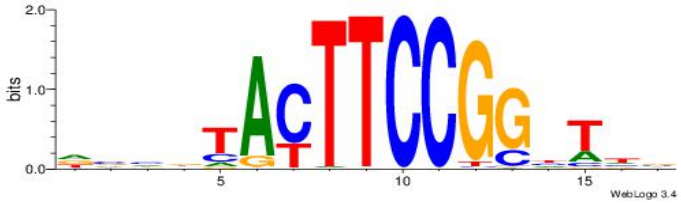


Motif ID:	UP00418
Motif name:	Etv6
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10

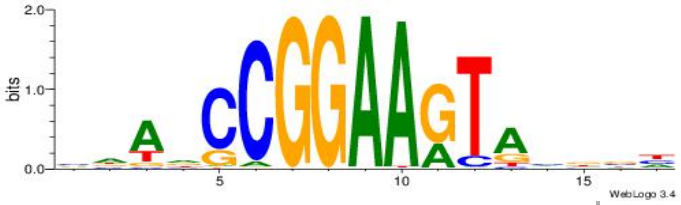
Similarity score: 0.0171234

Alignment:
DVHBTACTTCCGGHTHB
---BAACGTCCGC----

Original motif
Consensus sequence: DVHBTACTTCCGGHTHB



Reverse complement motif
Consensus sequence: BHAHCCGGAAGTABDVD

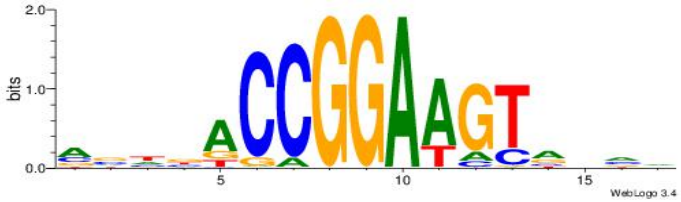


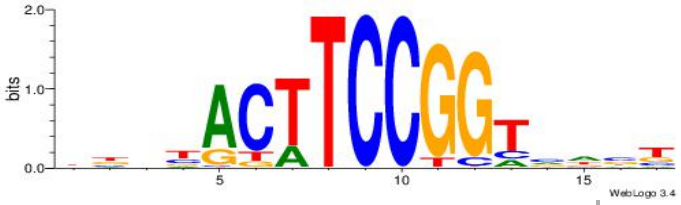
Motif ID:	UP00421
Motif name:	Etv1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0184147

Alignment:
MVHBACCGGAAGTVDVH
-----GCGGACGTTV--

Original motif
Consensus sequence: MVHBACCGGAAGTVDVH

Reverse complement motif
Consensus sequence: HBDBACTTCCGGTBHVY

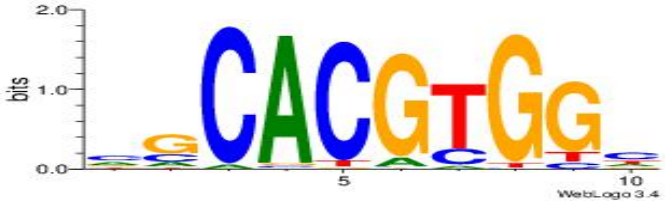




Dataset #: 3 **Motif ID: 54** **Motif name: Myc**

Original motif

Consensus sequence: VGCACGTGGH



Reverse complement motif

Consensus sequence: DCCACGTGCV

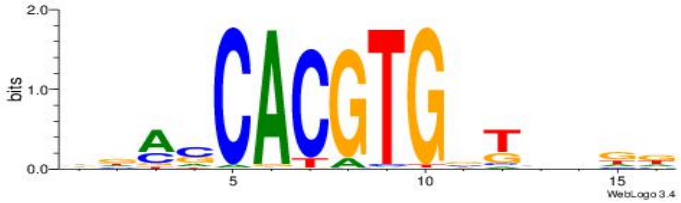
Best Matches for Motif ID 54 (Highest to Lowest)

Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0

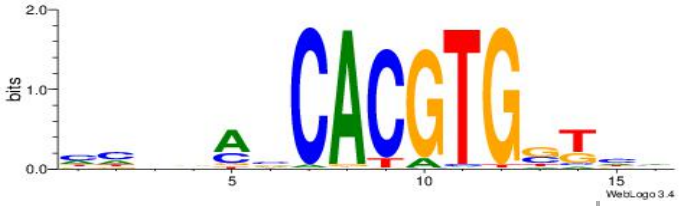
Alignment:

DDASCACGTGBTBVDD
--VGCACGTGGH----

Original motif
Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif
Consensus sequence: HHVBABCACGTGSTHD

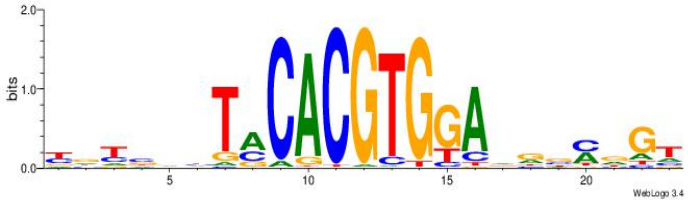


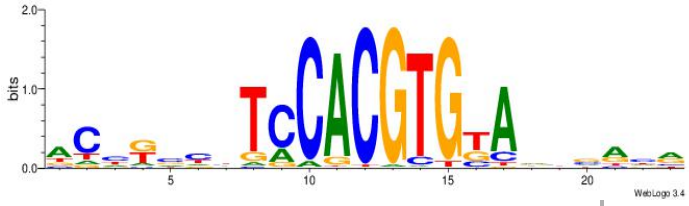
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.00631885

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
-------DCCACGTGCV------

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT

Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM





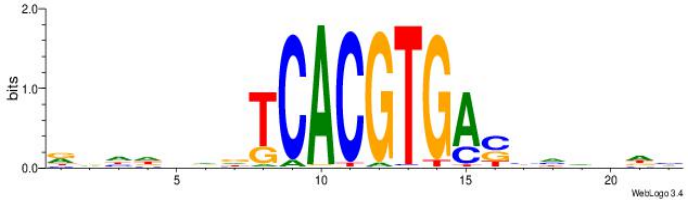
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.00821668

Alignment:

```
DDHBHBSTCACGTGAHBBDHHM
------DCCACGTGCV------
```

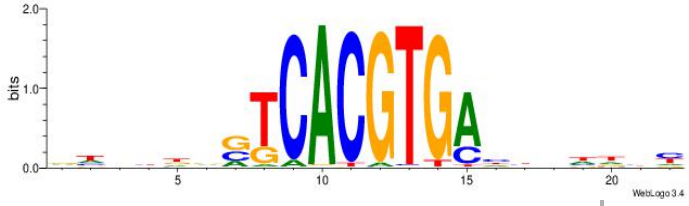
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Motif ID:	UP00046

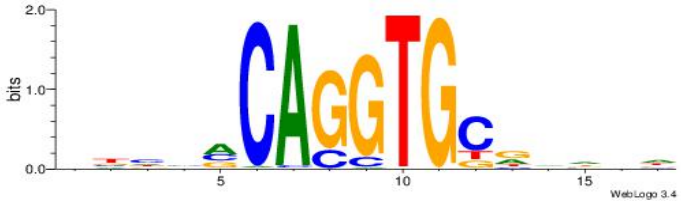
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0140005

Alignment:

```
DHDBHGCACCTGBDDVB
----VGCACGTGGH---
```

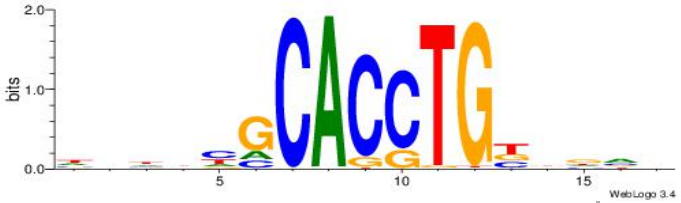
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB

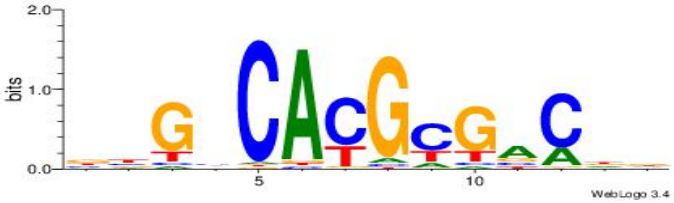


Motif ID:	UP00060
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10

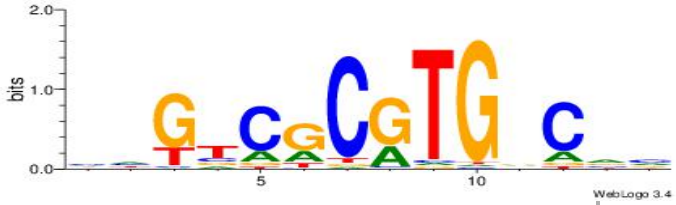
Similarity score: 0.0308912

Alignment:
BBGHCACGCGACDD
--VGCACGTGGH--

Original motif
Consensus sequence: BBGHCACGCGACDD



Reverse complement motif
Consensus sequence: HDGTCGCGTGDCVB

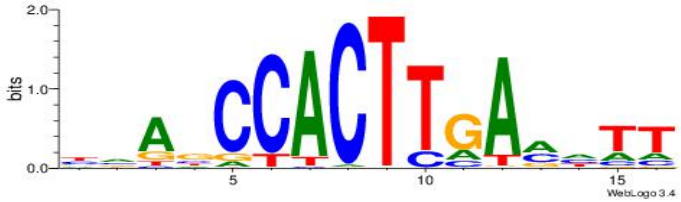


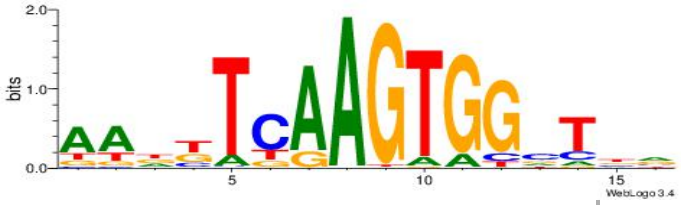
Motif ID: UP00165
Motif name: Titf1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 10
Similarity score: 0.0311723

Alignment:
BVABCCACTTGAMHTT
---DCCACGTGCV---

Original motif
Consensus sequence: BVABCCACTTGAMHTT

Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV





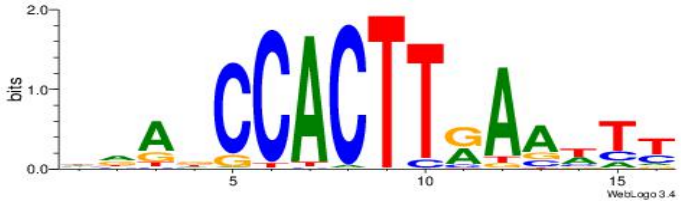
Motif ID:	UP00249
Motif name:	Nkx2-5
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.031308

Alignment:

```
HDADCCACTTRAAWTT
---DCCACGTGCV---
```

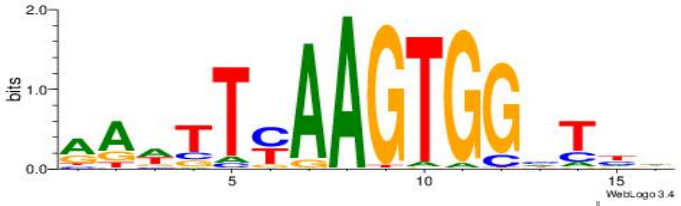
Original motif

Consensus sequence: HDADCCACTTRAAWTT



Reverse complement motif

Consensus sequence: AAWTTMAAGTGGHTDH



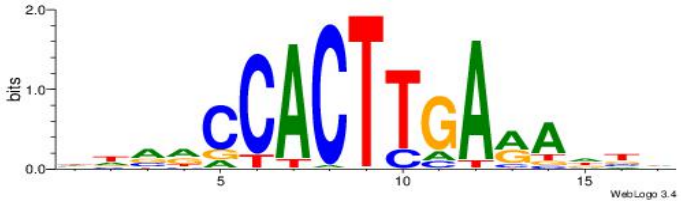
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0334845

Alignment:

```
HDVRCCACTTGARADBD
---DCCACGTGCV----
```

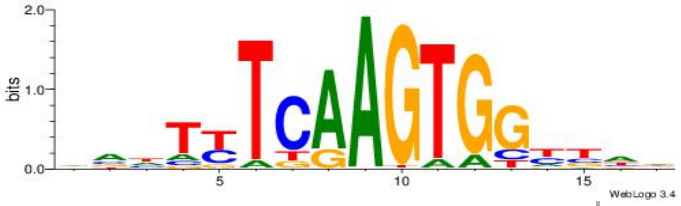
Original motif

Consensus sequence: HDVRCCACTTGARADBD



Reverse complement motif

Consensus sequence: DVDTKTCAAGTGGKBDH

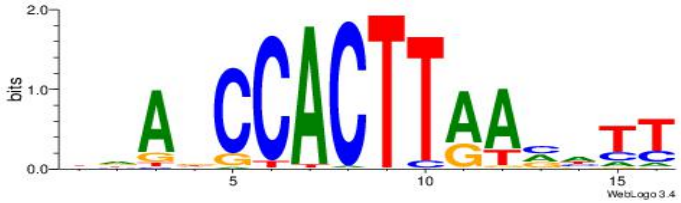


Motif ID:	UP00147
Motif name:	Nkx2-6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

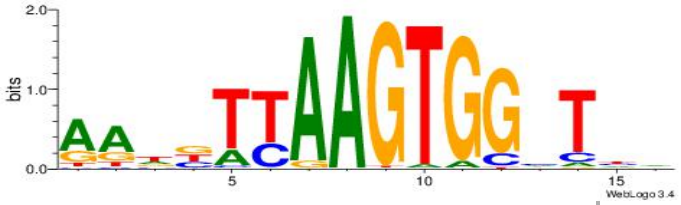
Number of overlap: 10
Similarity score: 0.0345548

Alignment:
DDADCCACTTAAVHTT
---DCCACGTGCV---

Original motif
Consensus sequence: DDADCCACTTAAVHTT



Reverse complement motif
Consensus sequence: AAHVTTAAGTGGHTDD



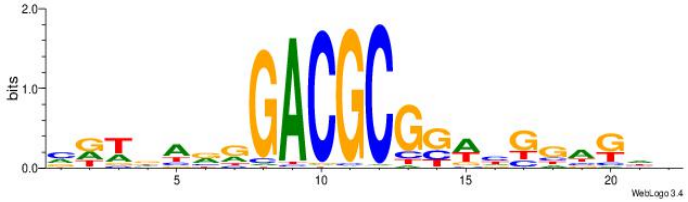
Motif ID: UP00527
Motif name: Foxn4_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 6
Number of overlap: 10
Similarity score: 0.0363818

Alignment:
VDWDARRGACGCGGWHGGAKHV
-----VGCACGTGGH-------

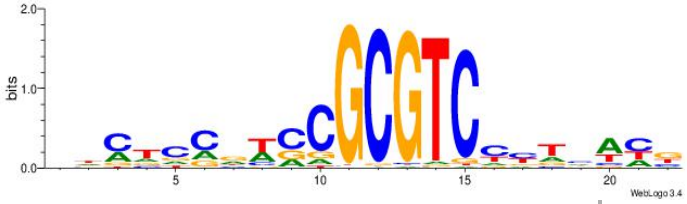
Original motif

Reverse complement motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



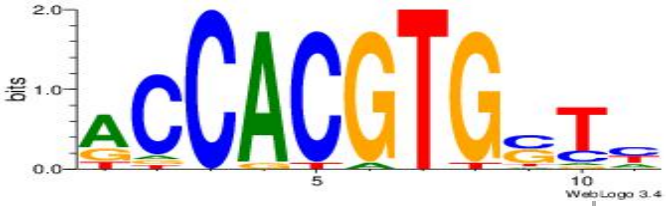
Dataset #: 3 **Motif ID: 55** **Motif name: MYCMAX**

Original motif

Consensus sequence: RASCACGTGGT

Reverse complement motif

Consensus sequence: ACCACGTGSTM

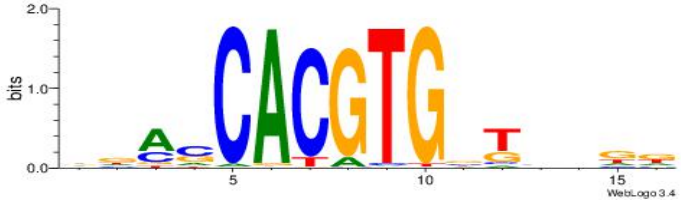


Best Matches for Motif ID 55 (Highest to Lowest)

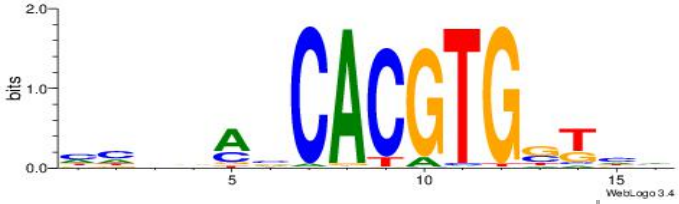
Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0

Alignment:
HHVBABCACGTGSTHD
---RASCACGTGGT--

Original motif
Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif
Consensus sequence: HHVBABCACGTGSTHD

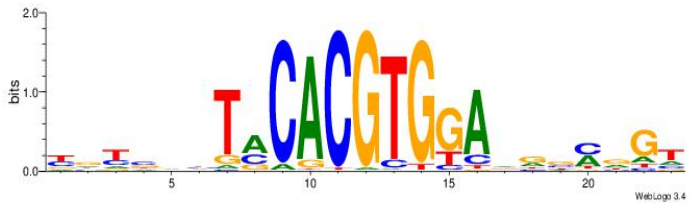


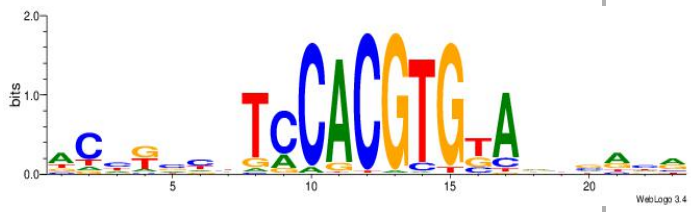
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	11
Similarity score:	0.025477

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
-------ACCACGTGSTM-----

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT

Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM





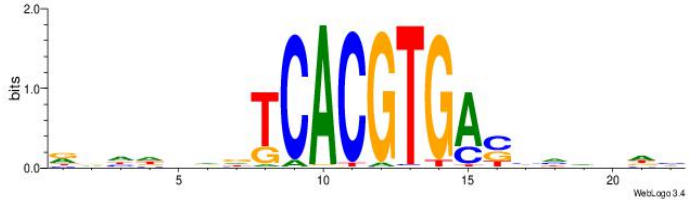
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	11
Similarity score:	0.033078

Alignment:

```
RDHDBVDTCACGTGASBHVHDH
-----RASCACGTGGT------
```

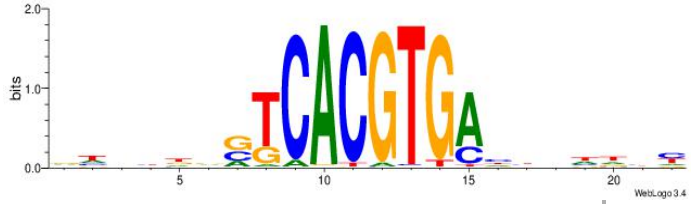
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Motif ID:	UP00046

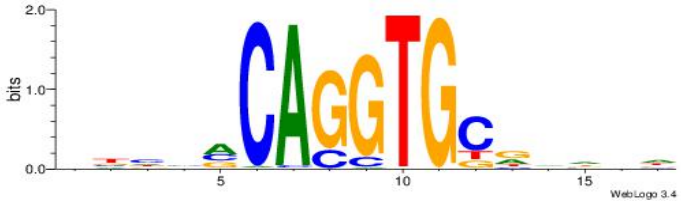
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0375583

Alignment:

```
VBHHVCAGGTGCDVDHD
---ACCACGTGSTM---
```

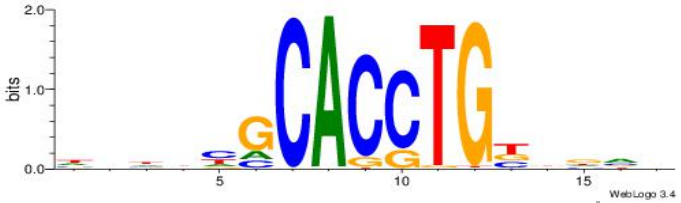
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB

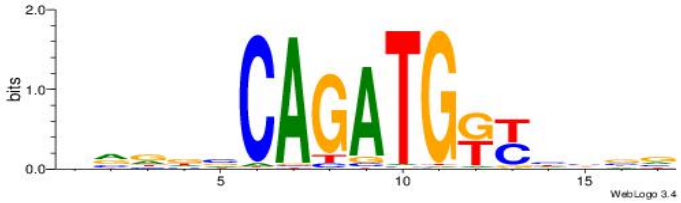


Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11

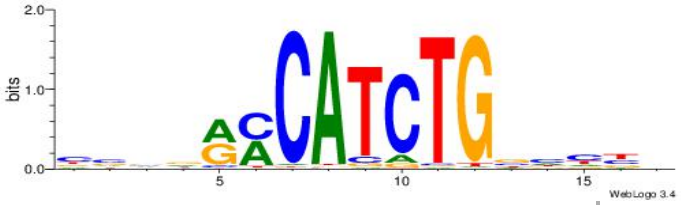
Similarity score: 0.0452419

Alignment:
HVDDVCAGATGKYHBBV
--RASCACGTGGT----

Original motif
Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif
Consensus sequence: VBBDMYCATCTGVHHBH

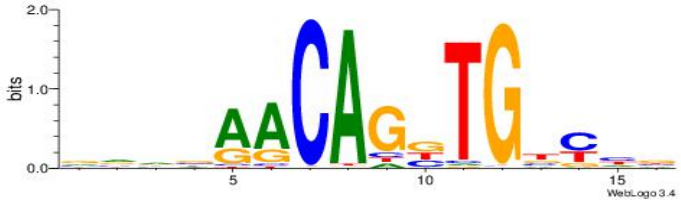


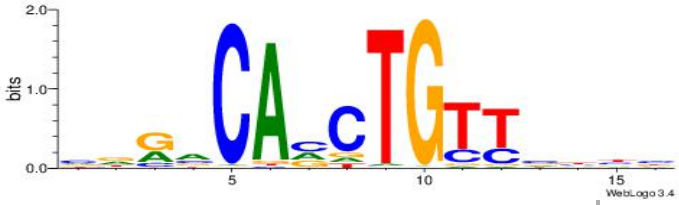
Motif ID: UP00036
Motif name: Myf6_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.0471968

Alignment:
VVDBAACAGBTGBYHB
---RASCACGTGGT--

Original motif
Consensus sequence: VVDBAACAGBTGBYHB

Reverse complement motif
Consensus sequence: BDKVCABCTGTTBDBV





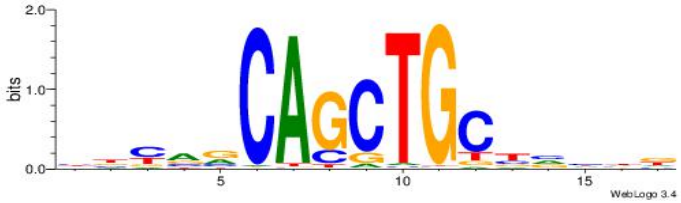
Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0504418

Alignment:

```
HHDVVGCAGCTGVBKVB
---RASCACGTGGT---
```

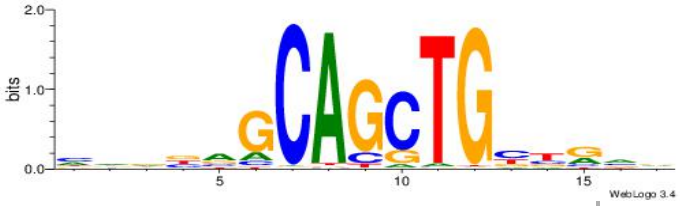
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB



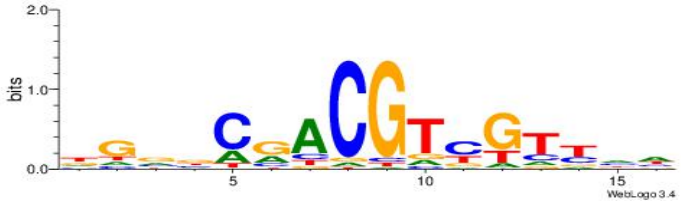
Motif ID:	UP00084
Motif name:	Gmeb1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0522039

Alignment:

```
HHMACKACGTMGBVCD
---ACCACGTGSTM--
```

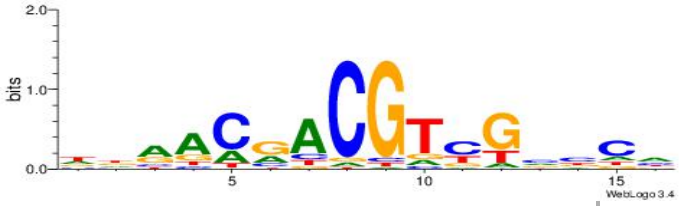
Original motif

Consensus sequence: DGVBCRACGTYGTYHH



Reverse complement motif

Consensus sequence: HHMACKACGTMGBVCD

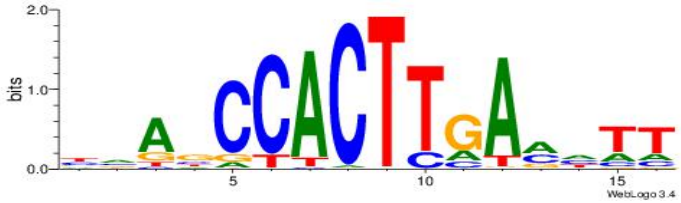


Motif ID:	UP00165
Motif name:	Titf1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

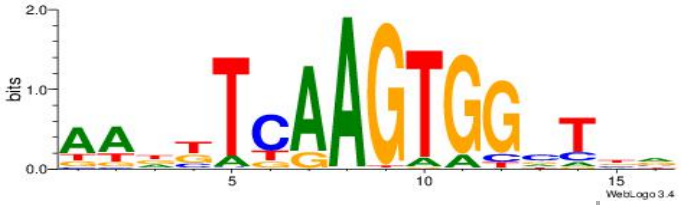
Number of overlap: 11
Similarity score: 0.0554094

Alignment:
BVABCCACTTGAMHTT
---ACCACGTGSTM--

Original motif
Consensus sequence: BVABCCACTTGAMHTT



Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV



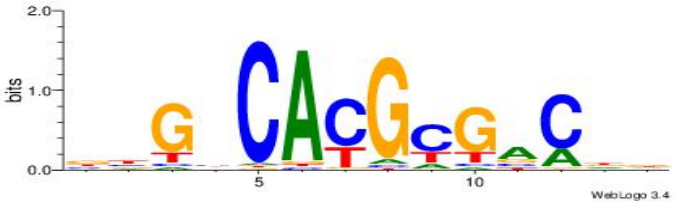
Motif ID: UP00060
Motif name: Max_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 11
Similarity score: 0.0557594

Alignment:
HDGTCGCGTGDCVB
-RASCACGTGGT--

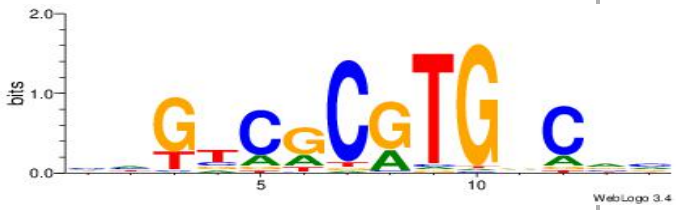
Original motif

Reverse complement motif

Consensus sequence: BBGHCACGCGACDD



Consensus sequence: HDGTCGCGTGDCVB



Dataset #: 3 Motif ID: 56 Motif name: Mycn

Original motif

Consensus sequence: HSCACGTGGC

Reverse complement motif

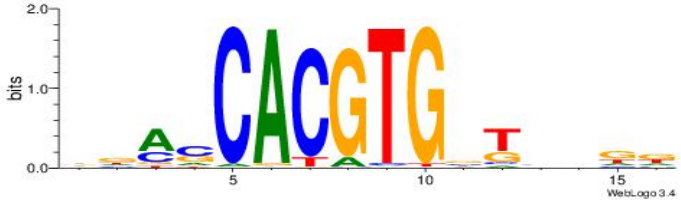
Consensus sequence: GCCACGTGSD

Best Matches for Motif ID 56 (Highest to Lowest)

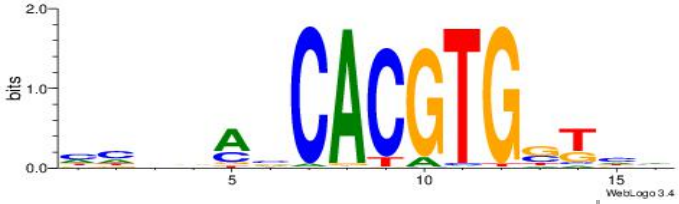
Motif ID:	UP00060
Motif name:	Max_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0

Alignment:
DDASCACGTGBTBVDD
--HSCACGTGGC----

Original motif
Consensus sequence: DDASCACGTGBTBVDD



Reverse complement motif
Consensus sequence: HHVBABCACGTGSTHD

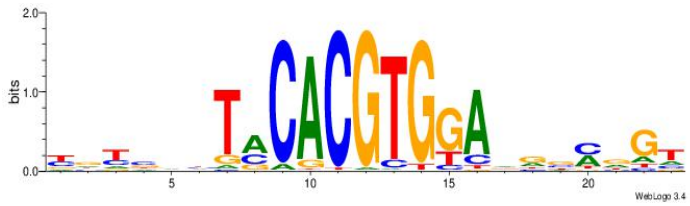


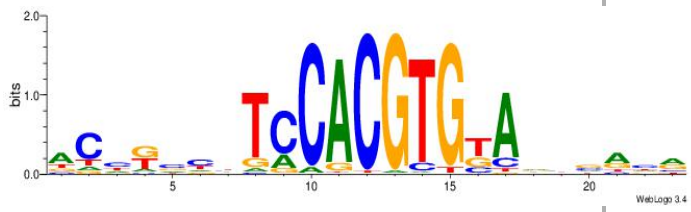
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.00783793

Alignment:
ACHRBHDTCCACGTGYAHHBMHM
-------GCCACGTGSD------

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT

Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM





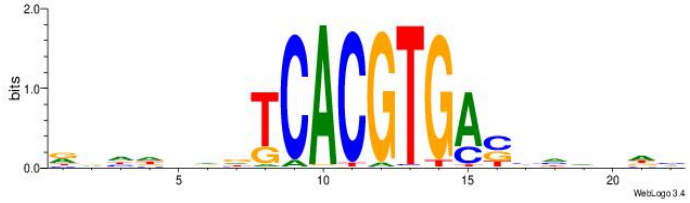
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.0132858

Alignment:

```
DDHBHBSTCACGTGAHBBDHHM
------GCCACGTGSD------
```

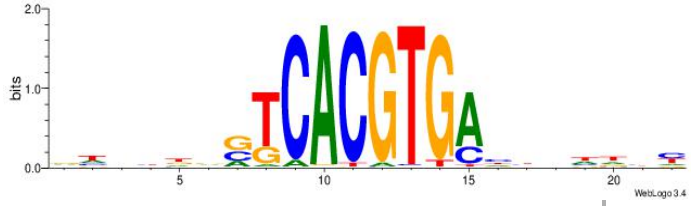
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Motif ID:	UP00046

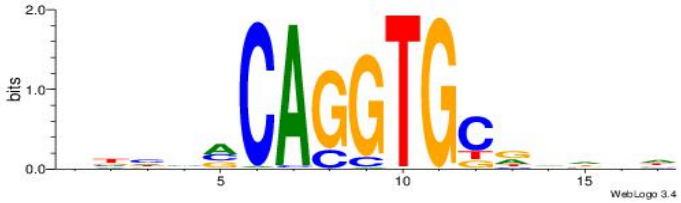
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0227933

Alignment:

```
VBHHVCAGGTGCDVDHD
---GCCACGTGSD----
```

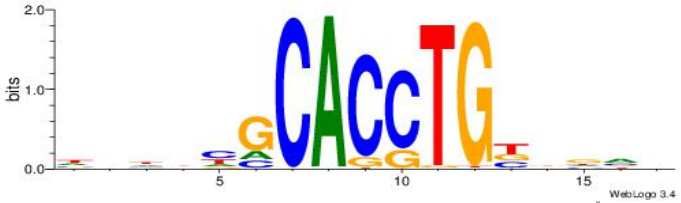
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB

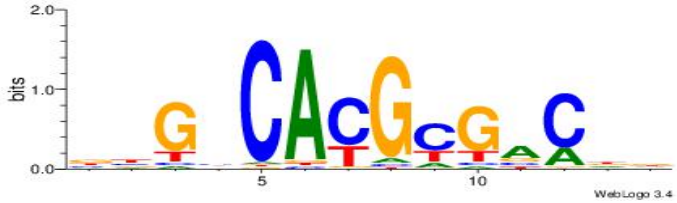


Motif ID:	UP00060
Motif name:	Max_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10

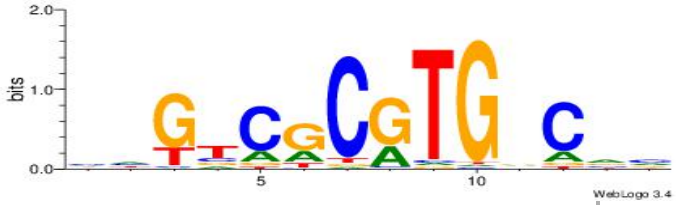
Similarity score: 0.0257011

Alignment:
BBGHCACGCGACDD
--HSCACGTGGC--

Original motif
Consensus sequence: BBGHCACGCGACDD



Reverse complement motif
Consensus sequence: HDGTCGCGTGDCVB

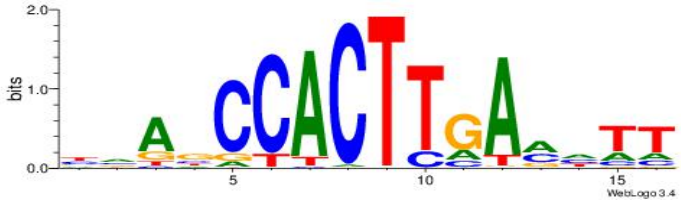


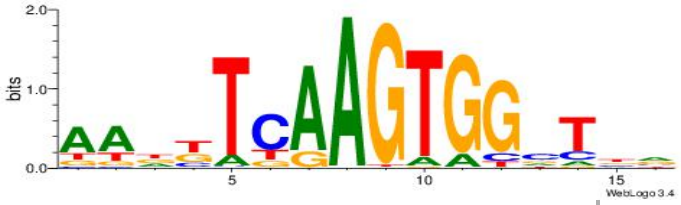
Motif ID: UP00165
Motif name: Titf1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 10
Similarity score: 0.0344833

Alignment:
BVABCCACTTGAMHTT
---GCCACGTGSD---

Original motif
Consensus sequence: BVABCCACTTGAMHTT

Reverse complement motif
Consensus sequence: AAHYTCAAGTGGBTBV





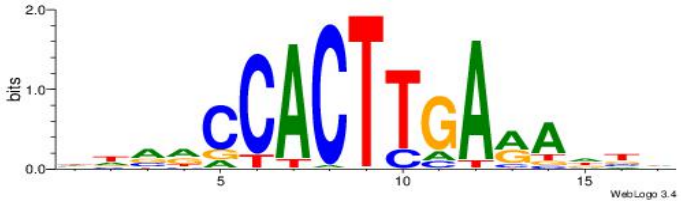
Motif ID:	UP00231
Motif name:	Nkx2-2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.035228

Alignment:

```
HDVRCCACTTGARADBD
---GCCACGTGSD----
```

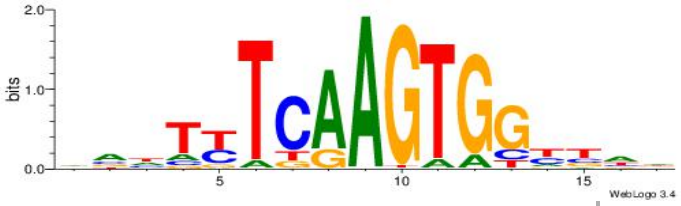
Original motif

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:

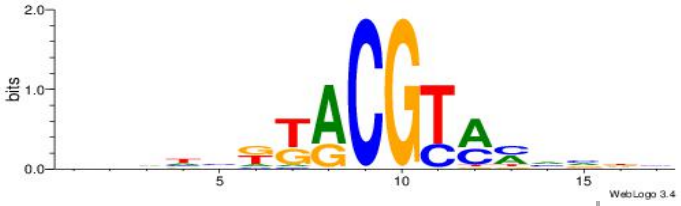
```
BVVDVRYACGTRYVBHB
----GCCACGTGSD---
```

Original motif

Consensus sequence: BHBBKKACGTMMVDBVB

Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB

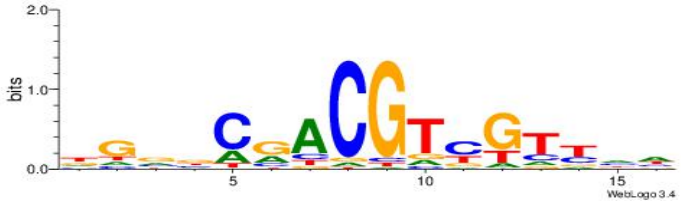


Motif ID:	UP00084
Motif name:	Gmeb1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

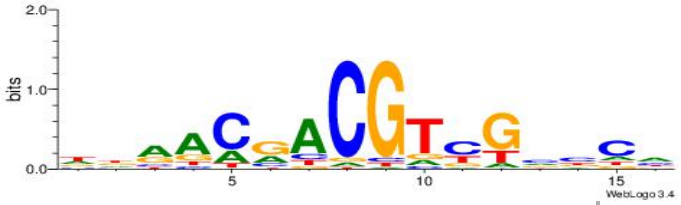
Number of overlap: 10
Similarity score: 0.03725

Alignment:
HHMACKACGTMGBVCD
---HSCACGTGGC---

Original motif
Consensus sequence: DGVBCRACGTYGTYHH



Reverse complement motif
Consensus sequence: HHMACKACGTMGBVCD



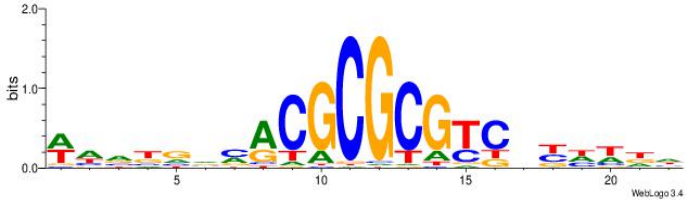
Motif ID: UP00526
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 10
Similarity score: 0.0383187

Alignment:
WHVBVVMACGCGCGTCDYHWDH
------HSCACGTGGC------

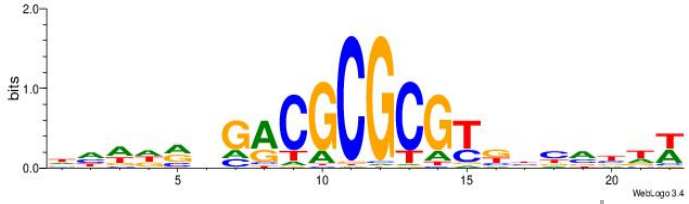
Original motif

Reverse complement motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Dataset #: 3 **Motif ID: 57** **Motif name: MZF1_5-13**

Original motif

Consensus sequence: BKAGGGGDAD

Reverse complement motif

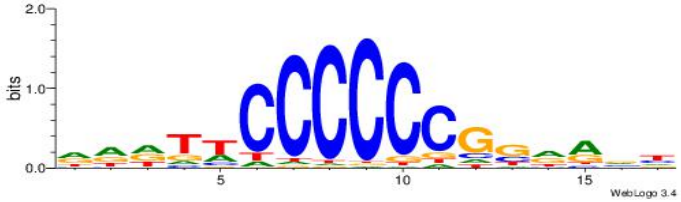
Consensus sequence: BTHCCCCTYB

Best Matches for Motif ID 57 (Highest to Lowest)

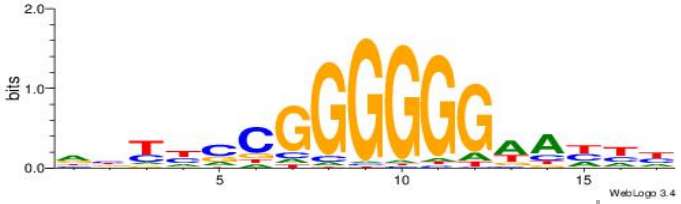
Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0090535

Alignment:
DDDTWCCCCCCGGDRVH
---BTHCCCCTYB----

Original motif
Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif
Consensus sequence: HVKDCCGGGGGGWADDD

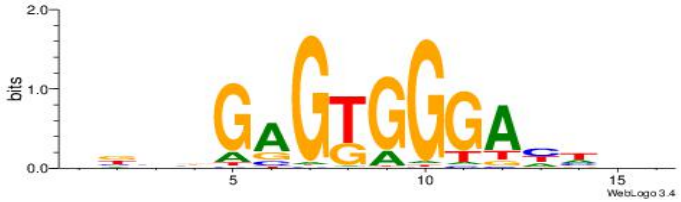


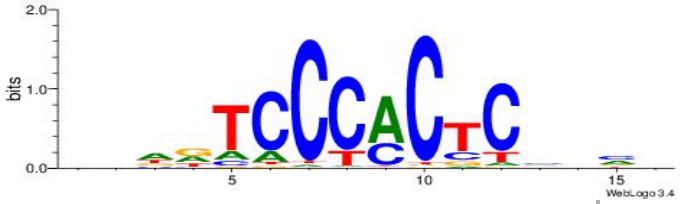
Motif ID:	UP00007
Motif name:	Egr1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.00910178

Alignment:
BBHBGAGTGGGAHHDB
---BKAGGGGDAD---

Original motif
Consensus sequence: BBHBGAGTGGGAHHDB

Reverse complement motif
Consensus sequence: BHHDTCCCACTCBDBV





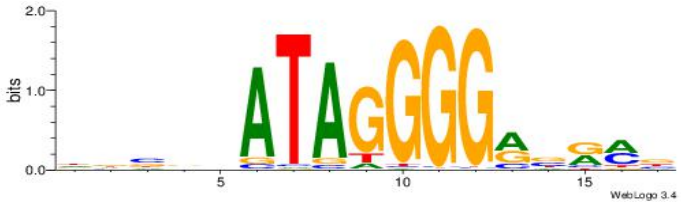
Motif ID:	UP00070
Motif name:	Gcm1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0101177

Alignment:

```
DDBVHATAGGGGRBRMB
-----BKAGGGGDAD--
```

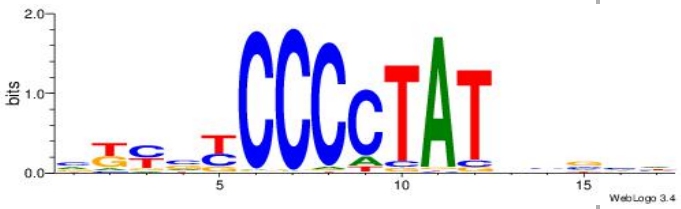
Original motif

Consensus sequence: DDBVHATAGGGGRBRMB



Reverse complement motif

Consensus sequence: BYMBKCCCCTATDVBHD



Motif ID:	UP00021

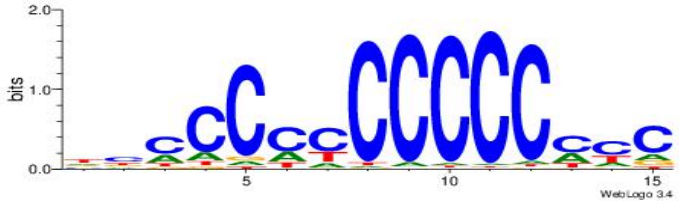
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0103225

Alignment:

```
GKRGGGGGGGGGGBD
BKAGGGGDAD-----
```

Original motif

Consensus sequence: DBCCCCCCCCCCMYC



Reverse complement motif

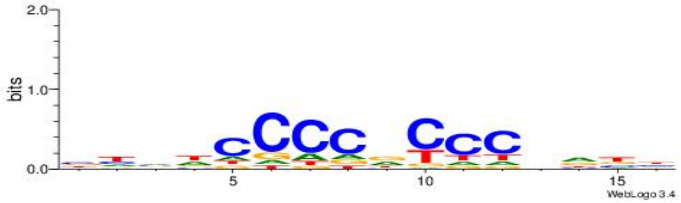
Consensus sequence: GKRGGGGGGGGGGBD

Motif ID:	UP00099
Motif name:	Ascl2_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:	10

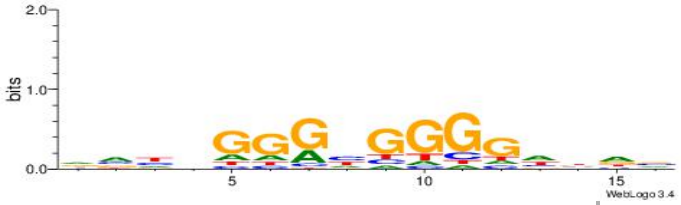
Similarity score: 0.0126235

Alignment:
HVDVGGGHGGGGDBHB
-----BKAGGGGDAD-

Original motif
Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif
Consensus sequence: HVDVGGGHGGGGDBHB

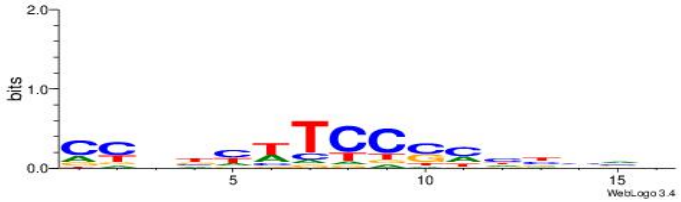


Motif ID: UP00013
Motif name: Gabpa_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 10
Similarity score: 0.013531

Alignment:
DBVVDRSGGAWKVHKG
-BKAGGGGDAD-----

Original motif
Consensus sequence: CYDBYWTCCSMHBVVH

Reverse complement motif
Consensus sequence: DBVVDRSGGAWKVHKG



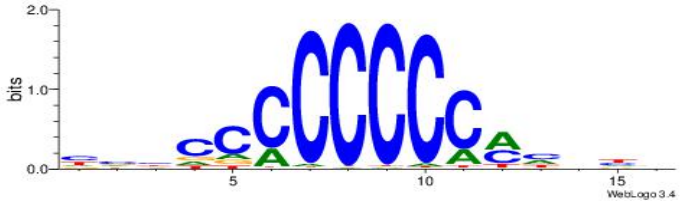
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0152996

Alignment:

```
BHHDYGGGGGGGGBVD
---BKAGGGGDAD---
```

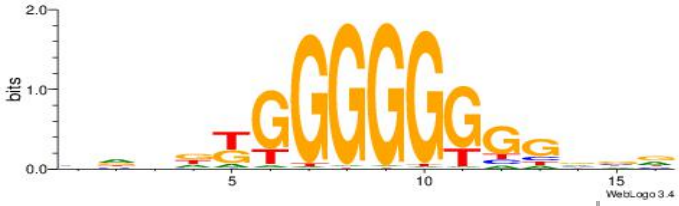
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



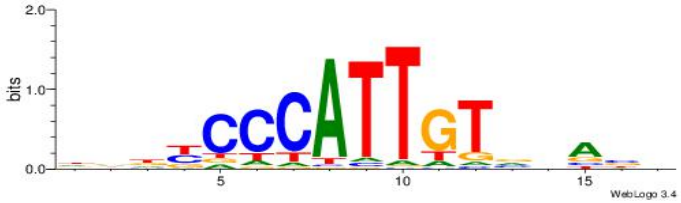
Motif ID:	UP00055
Motif name:	Hbp1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.0176527

Alignment:

```
DDDYCCCATTGTVHABH
-BTHCCCCTYB------
```

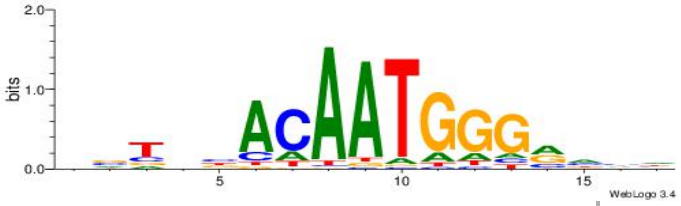
Original motif

Consensus sequence: DDDYCCCATTGTVHABH



Reverse complement motif

Consensus sequence: HBTHVACAATGGGMDHD

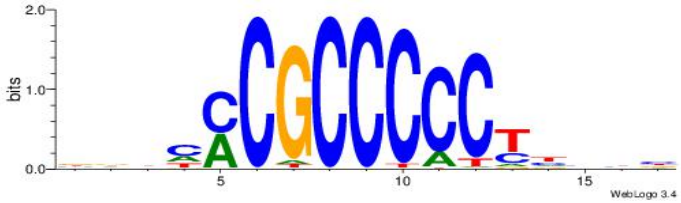


Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6

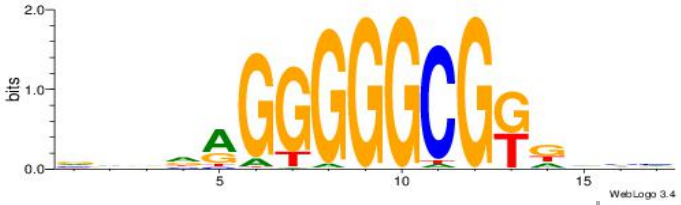
Number of overlap: 10
Similarity score: 0.0183345

Alignment:
BDHHMCGCCCCCTHVBB
-----BTHCCCCTYB--

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB



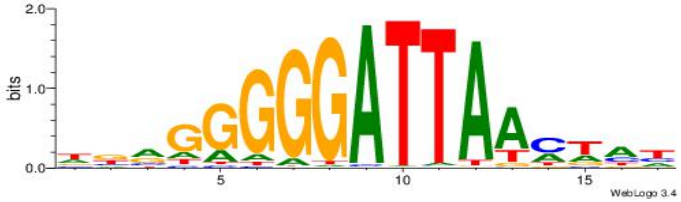
Motif ID: UP00239
Motif name: Obox2
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 10
Similarity score: 0.019782

Alignment:
DBRGGGGGATTAAMTAH
BKAGGGGDAD-------

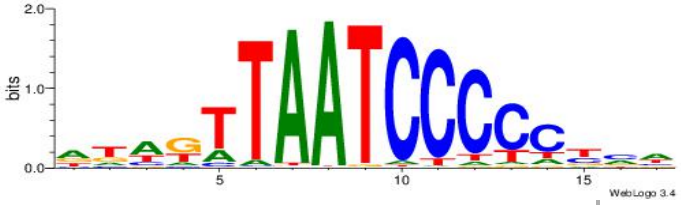
Original motif

Reverse complement motif

Consensus sequence: DBRGGGGGATTAAMTAH



Consensus sequence: HTARTTAATCCCCCKBD



Dataset #: 3 **Motif ID: 58** **Motif name: NFKB1**

Original motif

Consensus sequence: GGGGRTTCCCC

Reverse complement motif

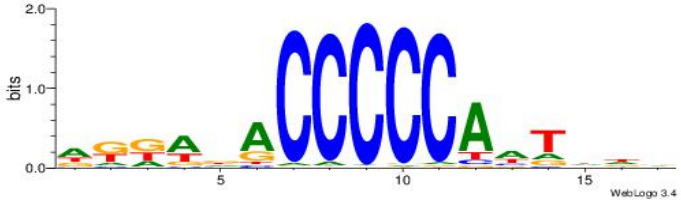
Consensus sequence: GGGGAAKCCCC

Best Matches for Motif ID 58 (Highest to Lowest)

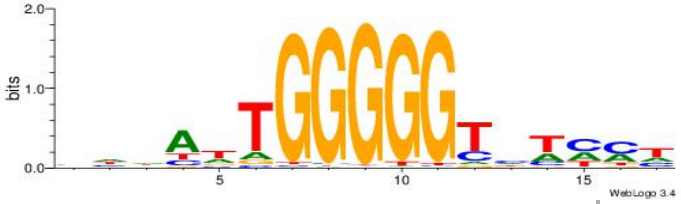
Motif ID:	UP00021
Motif name:	Zfp281_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0371794

Alignment:
VDDAHTGGGGGTHWYYD
------GGGGRTTCCCC

Original motif
Consensus sequence: DKKWDACCCCCAHTDDV



Reverse complement motif
Consensus sequence: VDDAHTGGGGGTHWYYD

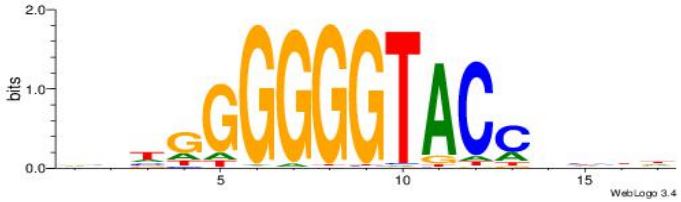


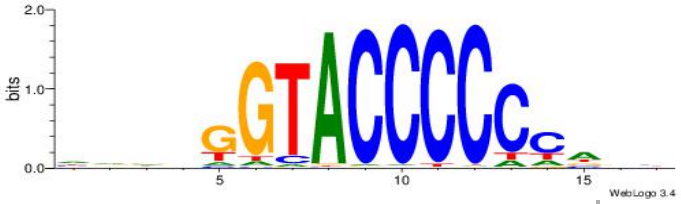
Motif ID:	UP00088
Motif name:	Plagl1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0407901

Alignment:
DBHGGGGGGTACCHHHD
----GGGGRTTCCCC--

Original motif
Consensus sequence: DBHGGGGGGTACCHHHD

Reverse complement motif
Consensus sequence: DHDDGGTACCCCCCHBH





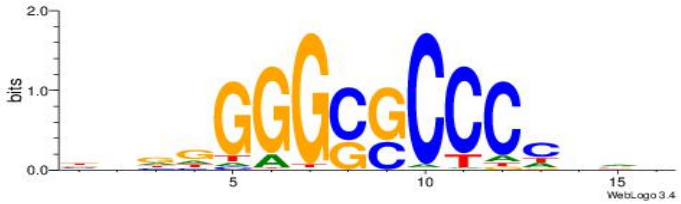
Motif ID:	UP00088
Motif name:	Plagl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0459696

Alignment:

```
BHDGGGGSSCCCCBVV
--GGGGRTTCCCC---
```

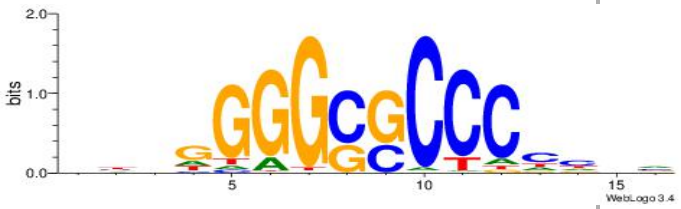
Original motif

Consensus sequence: BHDGGGGSSCCCCBVV



Reverse complement motif

Consensus sequence: VBVGGGGSSCCCCHHV



Motif ID:	UP00176

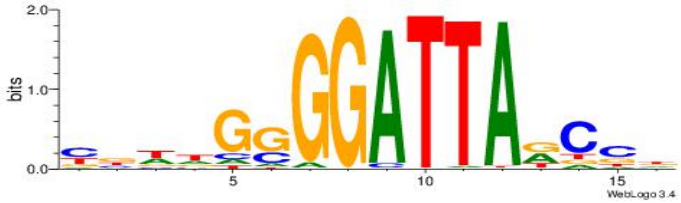
Motif name:	Crx
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0464973

Alignment:

```
DGGMTAATCCCCDWBK
-GGGGAAKCCCC----
```

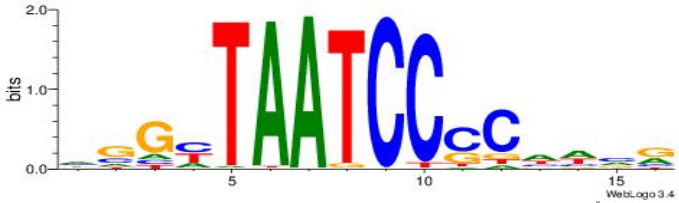
Original motif

Consensus sequence: YBWDGGGGATTARCCD



Reverse complement motif

Consensus sequence: DGGMTAATCCCCDWBK

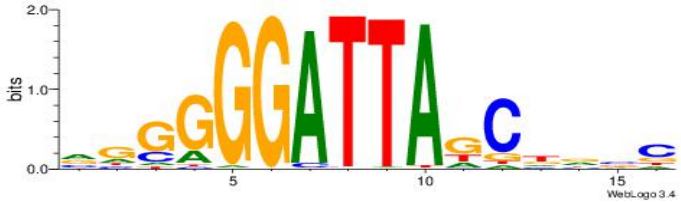


Motif ID:	UP00265
Motif name:	Pitx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11

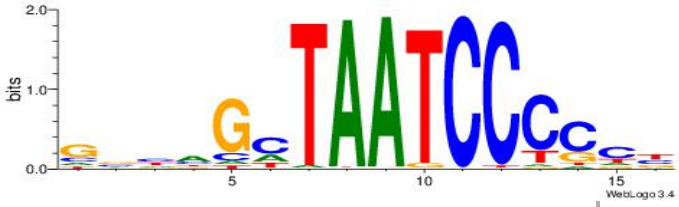
Similarity score: 0.048533

Alignment:
GBHDGCTAATCCCCCB
---GGGGAAKCCCC--

Original motif
Consensus sequence: VGGGGGATTAGCDDBC



Reverse complement motif
Consensus sequence: GBHDGCTAATCCCCCB

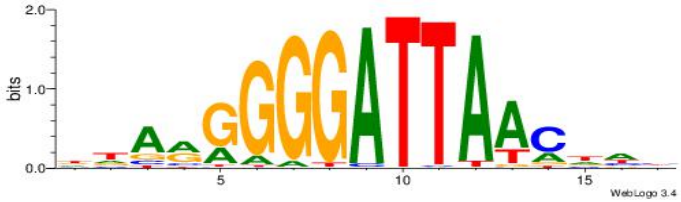


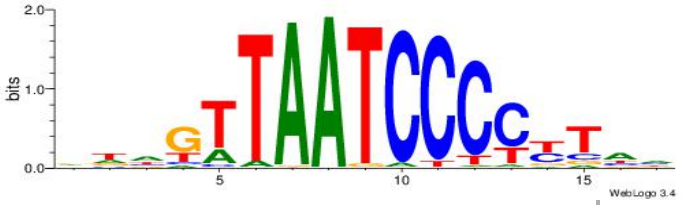
Motif ID: UP00216
Motif name: Obox1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 11
Similarity score: 0.0502644

Alignment:
DHDGTTAATCCCCKTDD
--GGGGAAKCCCC----

Original motif
Consensus sequence: DDARGGGGATTAACDHH

Reverse complement motif
Consensus sequence: DHDGTTAATCCCCKTDD





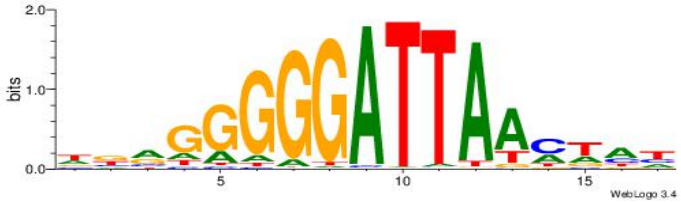
Motif ID:	UP00239
Motif name:	Obox2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0515498

Alignment:

```
HTARTTAATCCCCCKBD
--GGGGAAKCCCC----
```

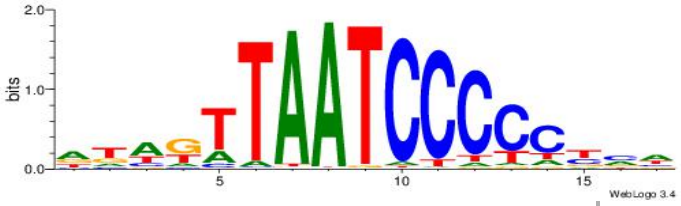
Original motif

Consensus sequence: DBRGGGGGATTAAMTAH



Reverse complement motif

Consensus sequence: HTARTTAATCCCCCKBD



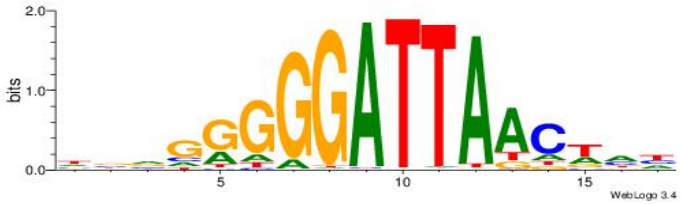
Motif ID:	UP00160
Motif name:	Obox3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0520605

Alignment:

```
HHWGTTAATCCCCCBBH
--GGGGAAKCCCC----
```

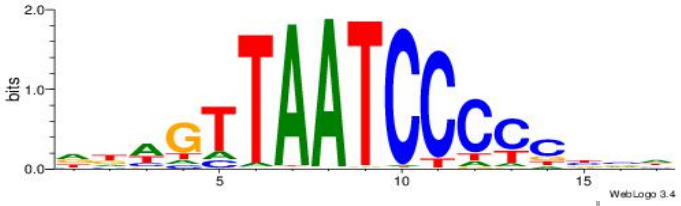
Original motif

Consensus sequence: HBVGGGGGATTAACWHH



Reverse complement motif

Consensus sequence: HHWGTTAATCCCCCBBH

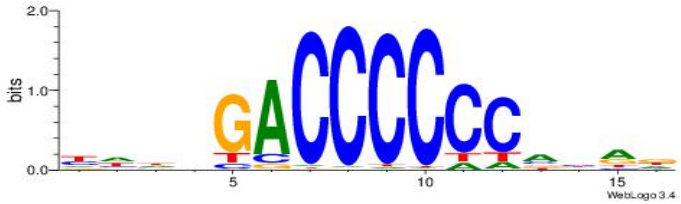


Motif ID:	UP00024
Motif name:	Glis2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11

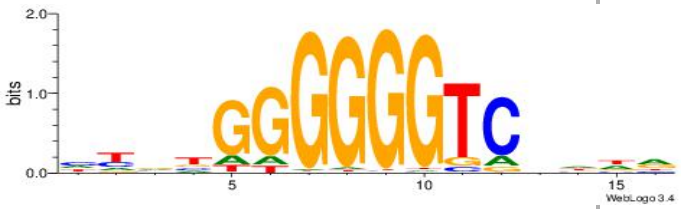
Similarity score: 0.052761

Alignment:
HHHVGACCCCCCVBRD
-----GGGGRTTCCCC

Original motif
Consensus sequence: HHHVGACCCCCCVBRD



Reverse complement motif
Consensus sequence: HKBBGGGGGGTCVHHH

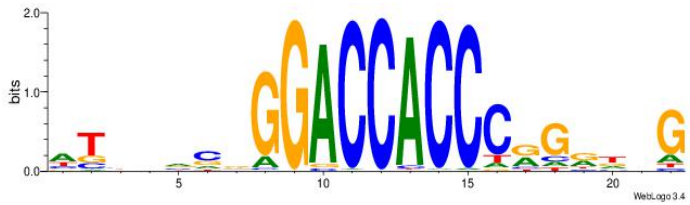


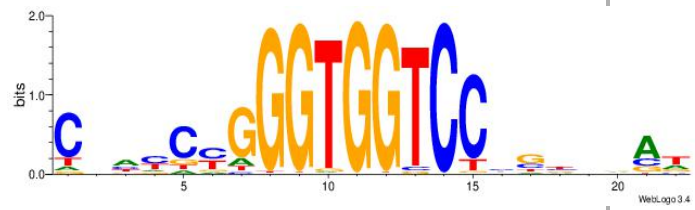
Motif ID:	UP00539
Motif name:	Gli2_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7
Number of overlap:	11
Similarity score:	0.0555704

Alignment:
CBDMCMGGGTGGTCCHVBVBAH
------GGGGAAKCCCC-----

Original motif
Consensus sequence: HTBVVVDGGACCACCCRGRDBG

Reverse complement motif
Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH

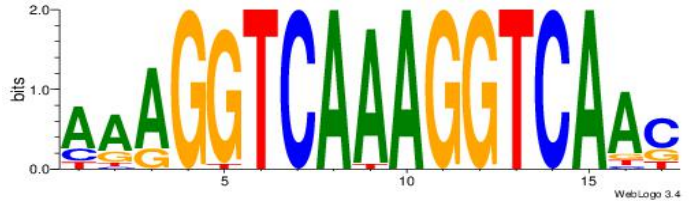




Dataset #: 3 **Motif ID: 59** **Motif name: NR1H2RXRA**

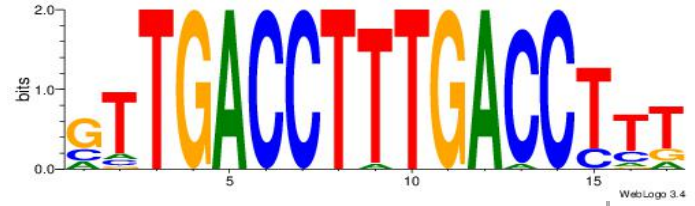
Original motif

Consensus sequence: AAAGGTCAAAGGTCAAC



Reverse complement motif

Consensus sequence: GTTGACCTTTGACCTTT



Best Matches for Motif ID 59 (Highest to Lowest)

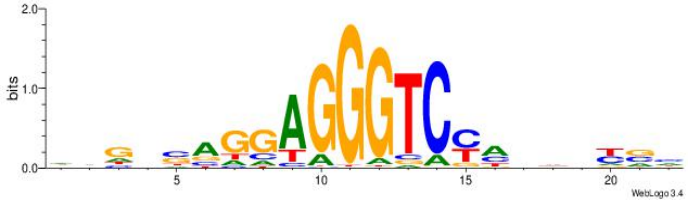
Motif ID:	UP00539
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0538452

Alignment:

```
DVMHHDHKGACCCTCCTSVCBH
-----GTTGACCTTTGACCTTT
```

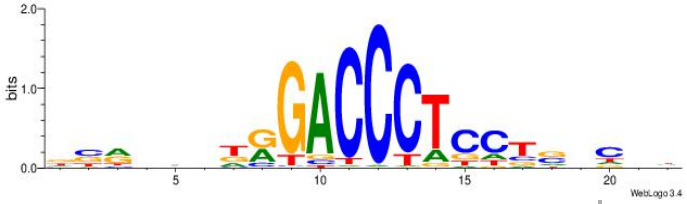
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



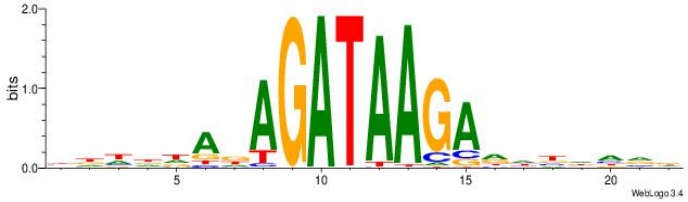
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0545098

Alignment:

```
BDHDDADAGATAAGADHBDHVD
-----AAAGGTCAAAGGTCAAC
```

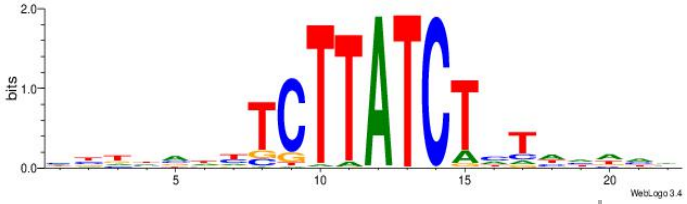
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



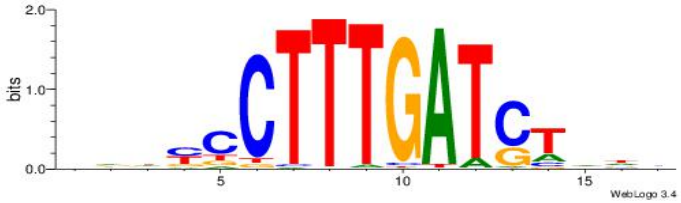
Motif ID:	UP00067
Motif name:	Lef1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.521114

Alignment:

```
VDDAGATCAAAGGKDDD-
-AAAGGTCAAAGGTCAAC
```

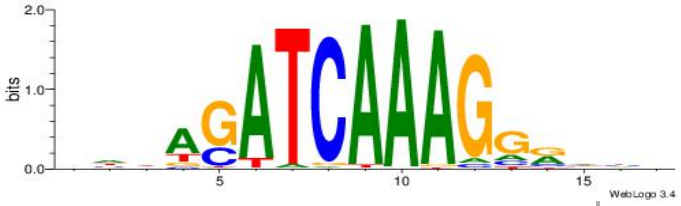
Original motif

Consensus sequence: DDDYCCTTTGATCTDDV



Reverse complement motif

Consensus sequence: VDDAGATCAAAGGKDDD

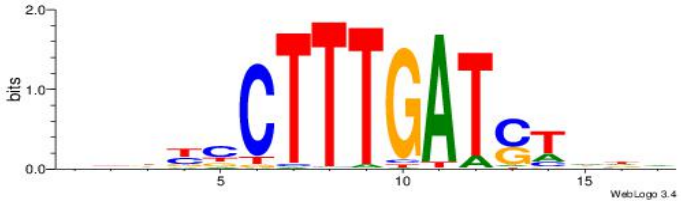


Motif ID:	UP00083
Motif name:	Tcf7l2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

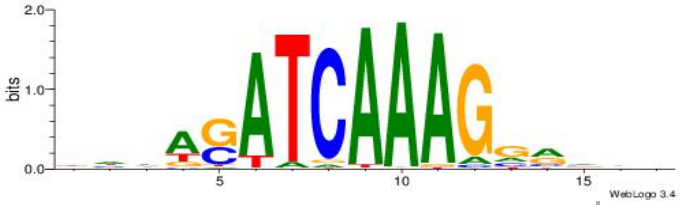
Number of overlap: 16
Similarity score: 0.527825

Alignment:
-DDDYCCTTTGATSTDDV
GTTGACCTTTGACCTTT-

Original motif
Consensus sequence: DDDYCCTTTGATSTDDV



Reverse complement motif
Consensus sequence: BDDASATCAAAGGMDDD



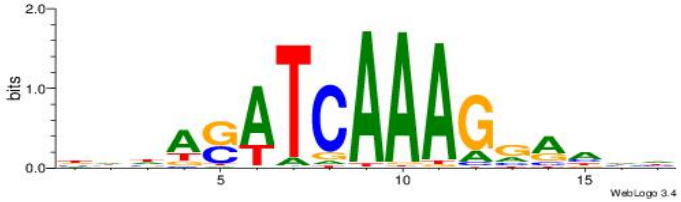
Motif ID: UP00054
Motif name: Tcf7_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 16
Similarity score: 0.531154

Alignment:
BHHASATCAAAGGAHHH-
-AAAGGTCAAAGGTCAAC

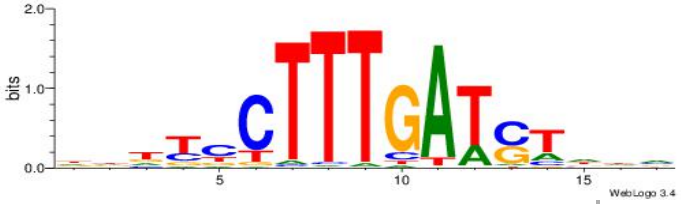
Original motif

Reverse complement motif

Consensus sequence: BHHASATCAAAGGAHHH



Consensus sequence: HHHTCCTTTGATSTHHV



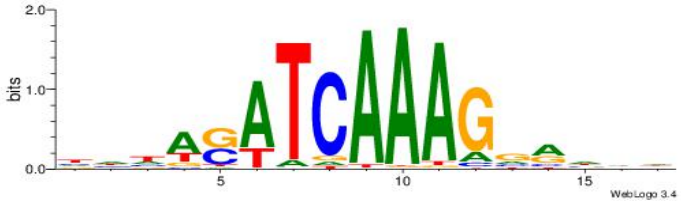
Motif ID:	UP00058
Motif name:	Tcf3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	16
Similarity score:	0.531876

Alignment:

```
HHHASATCAAAGVRHHH-
-AAAGGTCAAAGGTCAAC
```

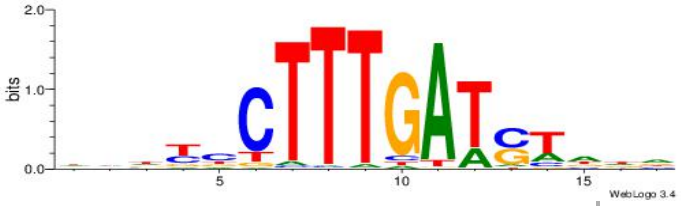
Original motif

Consensus sequence: HHHASATCAAAGVRHHH



Reverse complement motif

Consensus sequence: HHHKVCTTTGATSTHHH



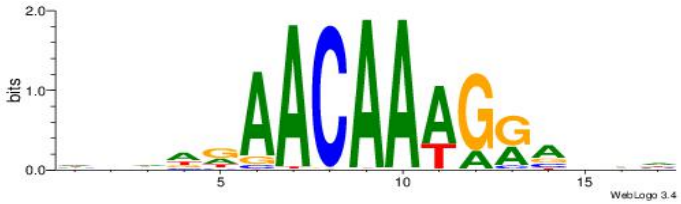
Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.544403

Alignment:

```
-HBDDRAACAAAGRABHH
AAAGGTCAAAGGTCAAC-
```

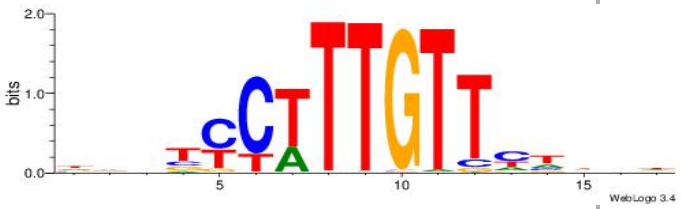
Original motif

Consensus sequence: HBDDRAACAAAGRABHH



Reverse complement motif

Consensus sequence: HHBTMCTTTGTTMDDVH

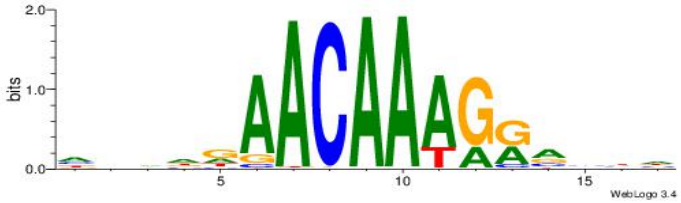


Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	16

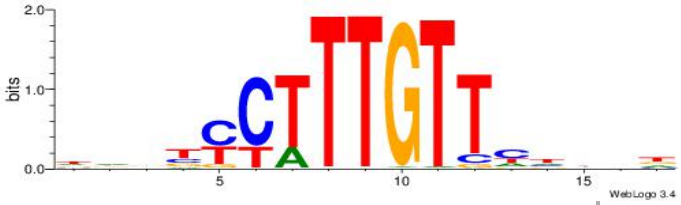
Similarity score: 0.544565

Alignment:
-HHBBMCTTTGTTHDDBH
GTTGACCTTTGACCTTT-

Original motif
Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif
Consensus sequence: HHBBMCTTTGTTHDDBH

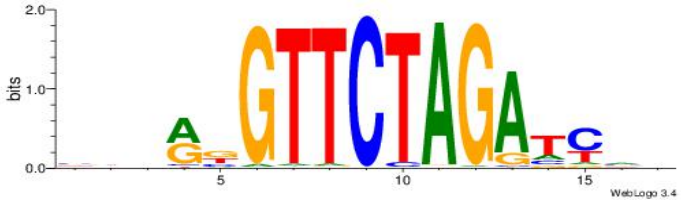


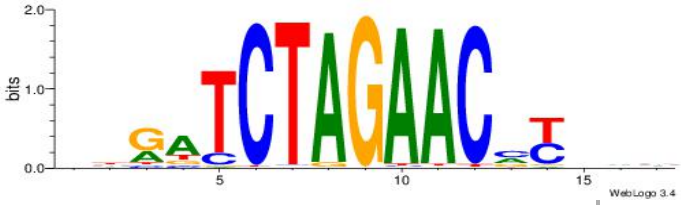
Motif ID: UP00019
Motif name: Zbtb12_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 16
Similarity score: 0.550511

Alignment:
-BBGATCTAGAACBKHDB
GTTGACCTTTGACCTTT-

Original motif
Consensus sequence: BDHRBGTTCTAGATCVB

Reverse complement motif
Consensus sequence: BBGATCTAGAACBKHDB





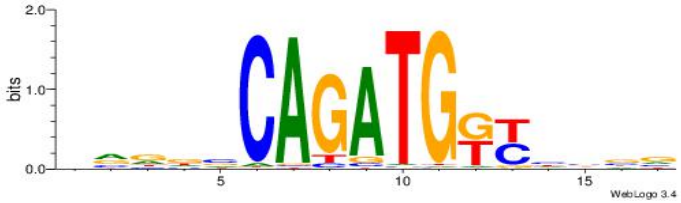
Motif ID:	UP00046
Motif name:	Tcfe2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	16
Similarity score:	0.552064

Alignment:

```
-HVDDVCAGATGKYHBBV
AAAGGTCAAAGGTCAAC-
```

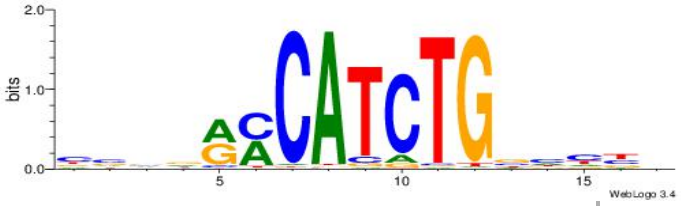
Original motif

Consensus sequence: HVDDVCAGATGKYHBBV



Reverse complement motif

Consensus sequence: VBBDMYCATCTGVHHBH



Dataset #: 3 **Motif ID: 60** **Motif name: NR4A2**

Original motif

Consensus sequence: AAGGTCAC

Reverse complement motif

Consensus sequence: GTGACCTT

Best Matches for Motif ID 60 (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:

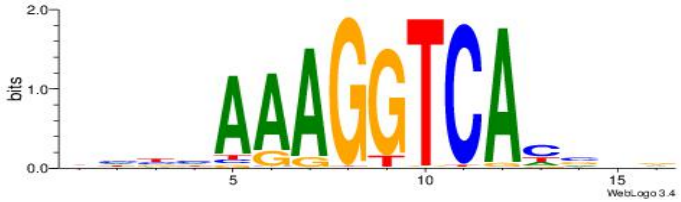
```
HHVGTGACCTTTDVDD
---GTGACCTT-----
```

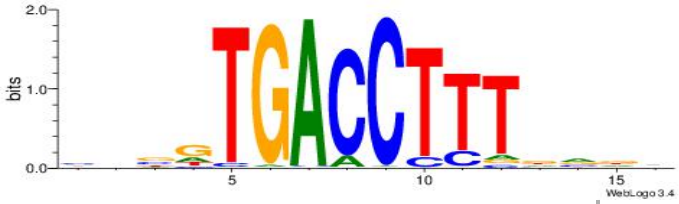
Original motif

Consensus sequence: DHBHAAAGGTCACVHD

Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD





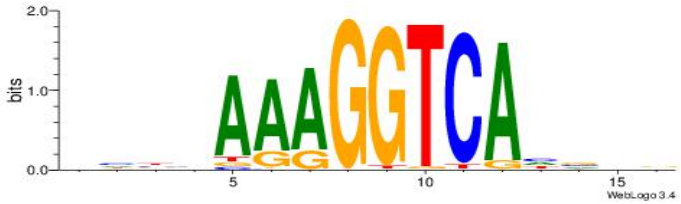
Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8
Similarity score:	0.0074527

Alignment:

```
DHBHAAAGGTCAHVHB
-----AAGGTCAC---
```

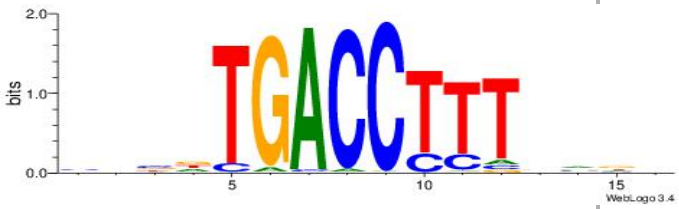
Original motif

Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif

Consensus sequence: BHVDTGACCTTTDVDD



Motif ID:	UP00079

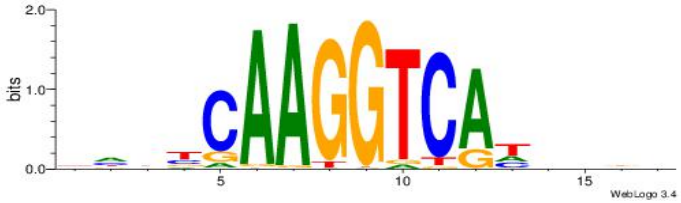
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.01542

Alignment:

```
DHDBCAAGGTCAHVBDH
-----AAGGTCAC----
```

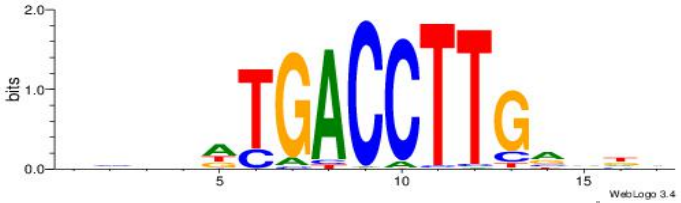
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD

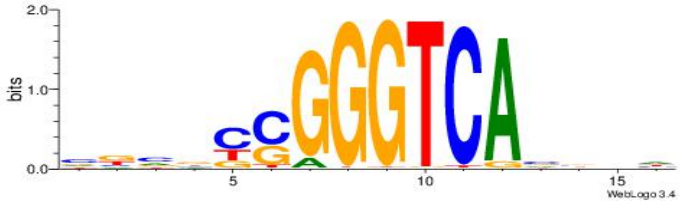


Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	8

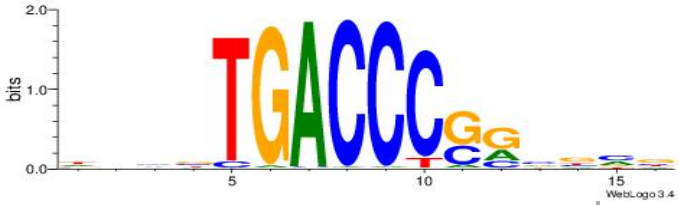
Similarity score: 0.0395644

Alignment:
VBVBCSGGGTCAVBBH
-----AAGGTCAC---

Original motif
Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif
Consensus sequence: HVBVTGACCCSGBVBV

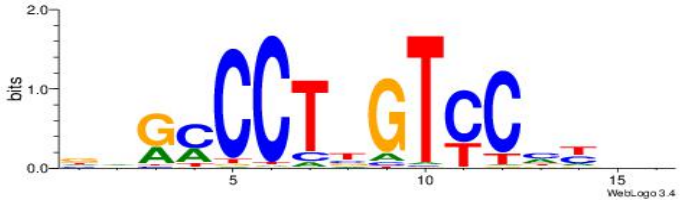


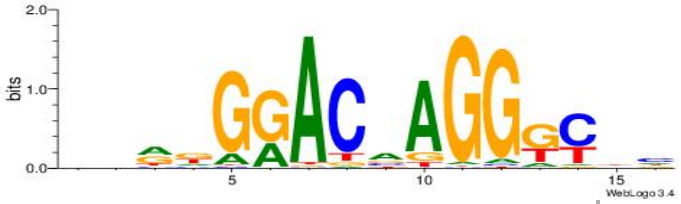
Motif ID: UP00082
Motif name: Zfp187_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 8
Similarity score: 0.0407874

Alignment:
VHMDGGACVAGGRCDH
GTGACCTT--------

Original motif
Consensus sequence: DDGMCCTBGTCCHYHV

Reverse complement motif
Consensus sequence: VHMDGGACVAGGRCDH





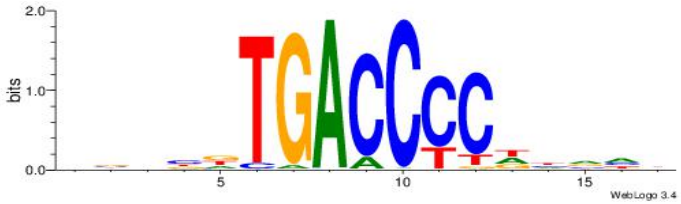
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0422933

Alignment:

```
DBHBDTGACCCCDHVHB
----GTGACCTT-----
```

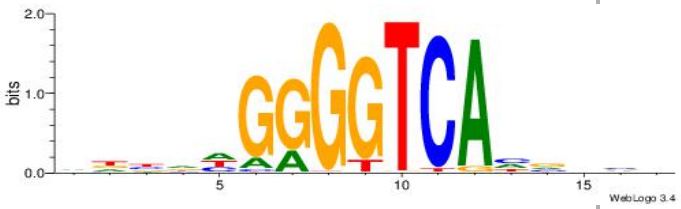
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



Motif ID:	UP00079

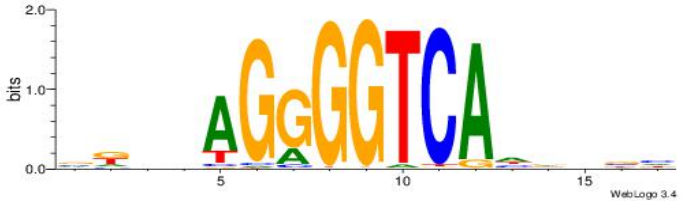
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	8
Similarity score:	0.0447444

Alignment:

```
VKBBAGGGGTCAHDBBH
-----AAGGTCAC----
```

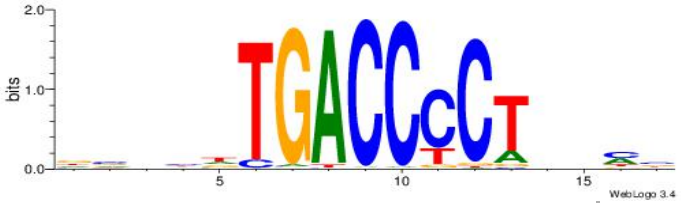
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV

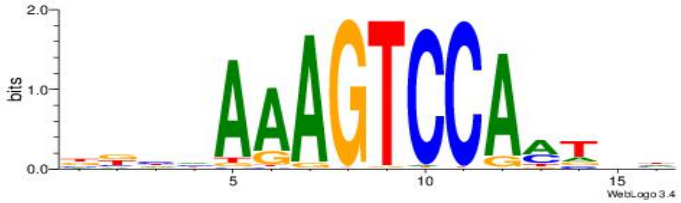


Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	8

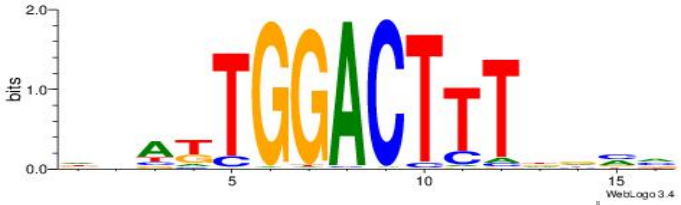
Similarity score: 0.0481418

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

Original motif
Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif
Consensus sequence: HHAYTGGACTTTHDBV

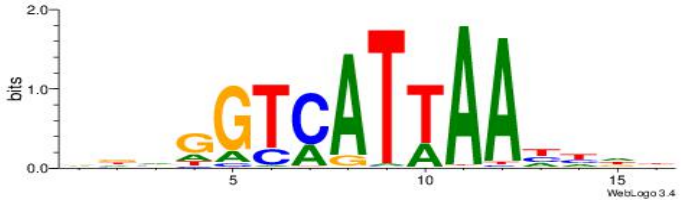


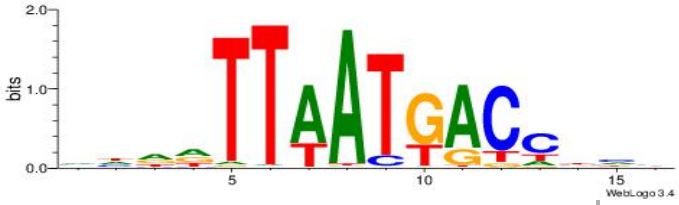
Motif ID:	UP00197
Motif name:	Hoxc9
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	8
Similarity score:	0.0497679

Alignment:
VDHHTTAATGACCBHV
-------GTGACCTT-

Original motif
Consensus sequence: VDVGGTCATTAAHHDB

Reverse complement motif
Consensus sequence: VDHHTTAATGACCBHV





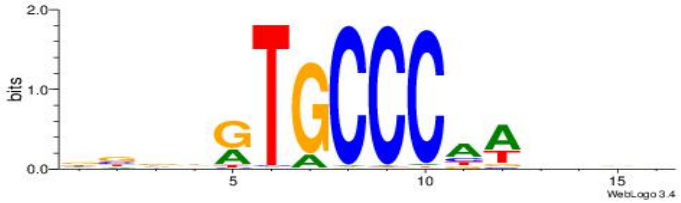
Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	8
Similarity score:	0.0500062

Alignment:

```
DBDDRTGCCCAWDHDV
----GTGACCTT----
```

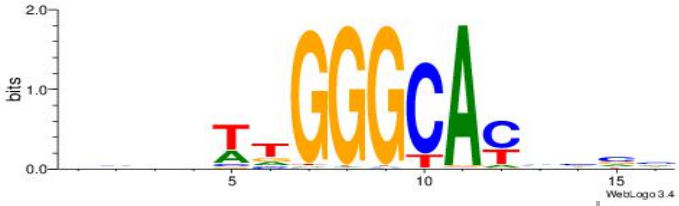
Original motif

Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif

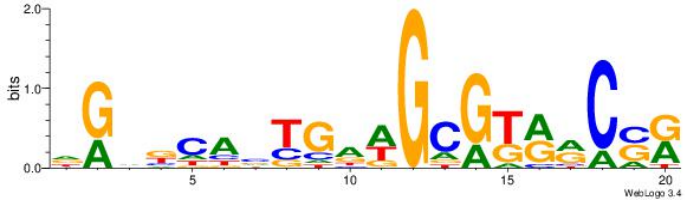
Consensus sequence: VHHDWTGGGCAMDHBH



Dataset #: 3 **Motif ID: 61** **Motif name: Pax5**

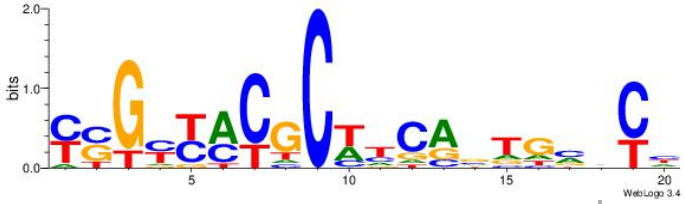
Original motif

Consensus sequence: DGVBCABTGDWGCGKRRCSR



Reverse complement motif

Consensus sequence: MSGKKRCGCWDCABTGBBCD



Best Matches for Motif ID 61 (Highest to Lowest)

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:	2
Number of overlap:	20
Similarity score:	0.0499537

Alignment:

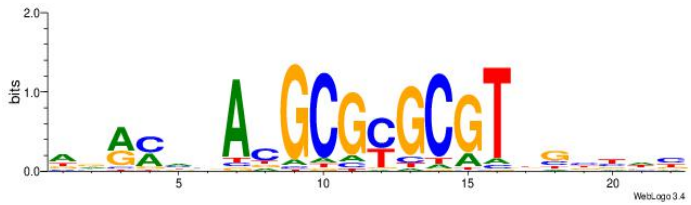
```
DDRMHBACGCGYGCGTDGBBDB
-DGVBCABTGDWGCGKRRCSR-
```

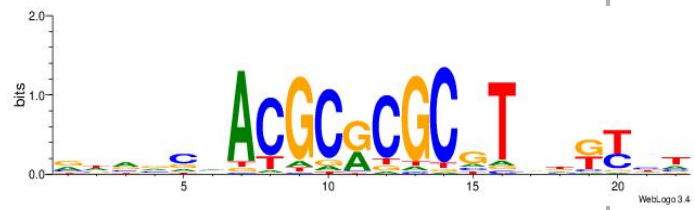
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB

Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD





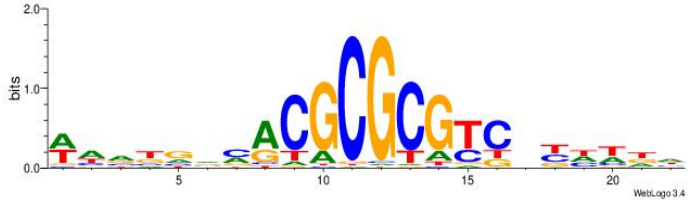
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0520196

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH
DGVBCABTGDWGCGKRRCSR--
```

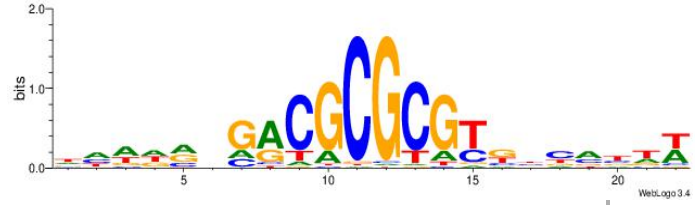
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary

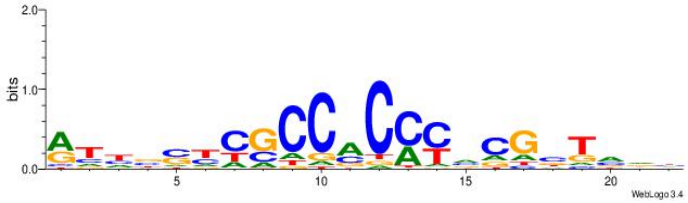
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	20
Similarity score:	0.0542764

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
-DGVBCABTGDWGCGKRRCSR-
```

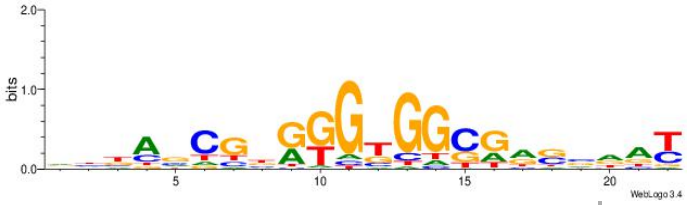
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

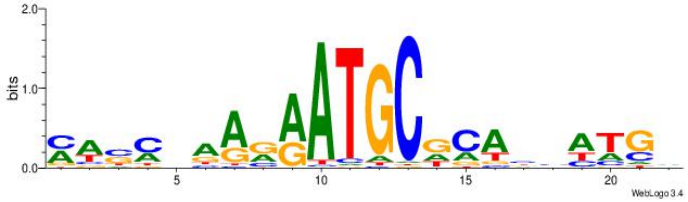
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



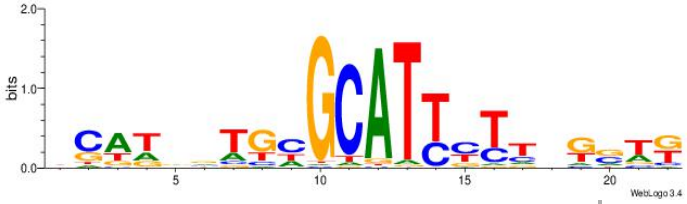
Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.0560636

Alignment:
DCATDBTGHGCATKMTTBRSWR
--MSGKKRCGCWDCABTGBBCD

Original motif
Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR

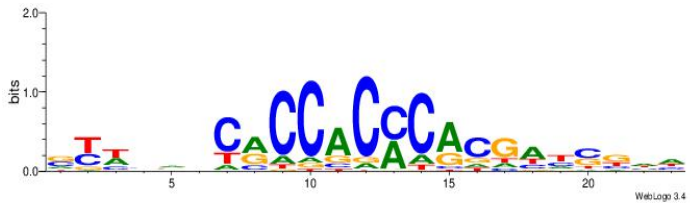


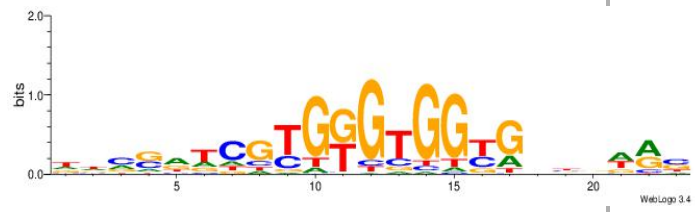
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0595671

Alignment:
VYWVVHCRCCACMCACGAHSBHH
DGVBCABTGDWGCGKRRCSR---

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV





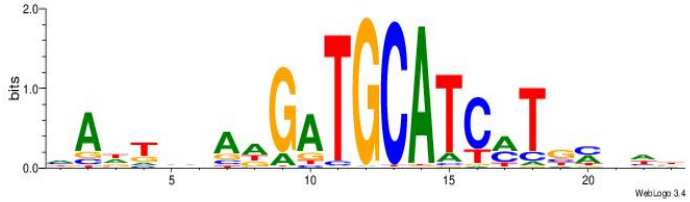
Motif ID:	UP00528
Motif name:	Foxm1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.0602559

Alignment:

```
HADTBVADGATGCATCMTGMVHB
DGVBCABTGDWGCGKRRCSR---
```

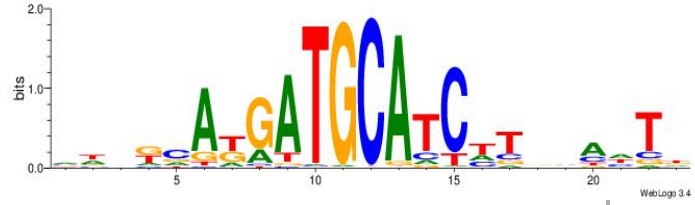
Original motif

Consensus sequence: HADTBVADGATGCATCMTGMVHB



Reverse complement motif

Consensus sequence: VHVRCAYGATGCATCDTVVADTH



Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary

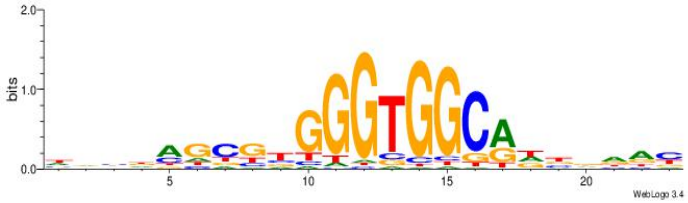
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.0607506

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
DGVBCABTGDWGCGKRRCSR---
```

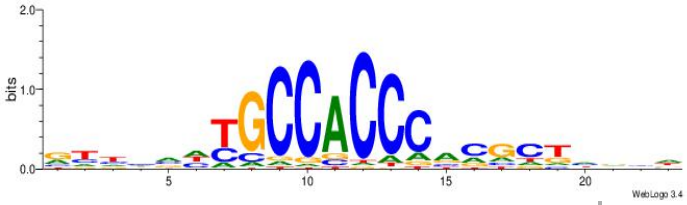
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

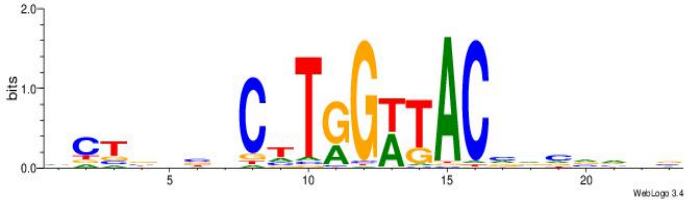
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



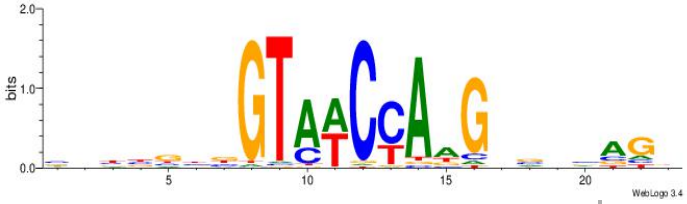
Motif ID:	UP00098
Motif name:	Rfx3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	20
Similarity score:	0.0611227

Alignment:
BDBBVBVGTAWCCAAGVBHBAGB
MSGKKRCGCWDCABTGBBCD---

Original motif
Consensus sequence: VCTBHBVCTTGGWTACVVVVVDB



Reverse complement motif
Consensus sequence: BDBBVBVGTAWCCAAGVBHBAGB

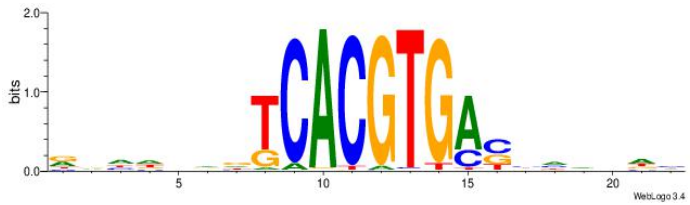


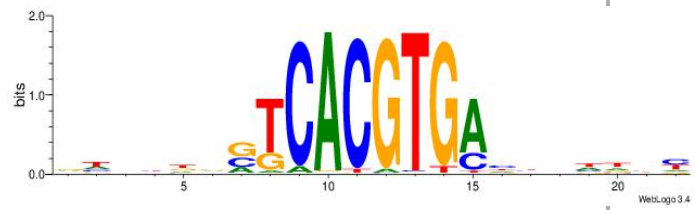
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	20
Similarity score:	0.0611361

Alignment:
RDHDBVDTCACGTGASBHVHDH
--MSGKKRCGCWDCABTGBBCD

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH

Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM





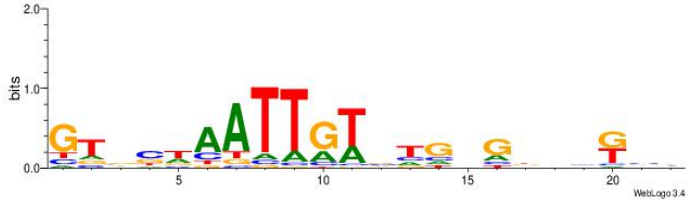
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	20
Similarity score:	0.061403

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
DGVBCABTGDWGCGKRRCSR--
```

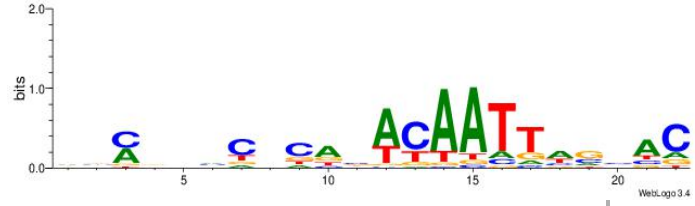
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC



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:

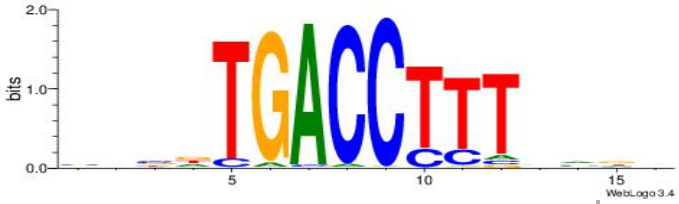
```
DHBHAAAGGTCAHVHB
--AWVDAGGTCA----
```

Original motif

Consensus sequence: DHBHAAAGGTCAHVHB

Reverse complement motif

Consensus sequence: BHVDTGACCTTTDVDD



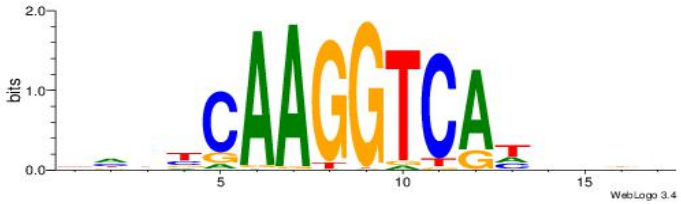
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0176661

Alignment:

```
HHBVHTGACCTTGVDHD
-----TGACCTDVWT--
```

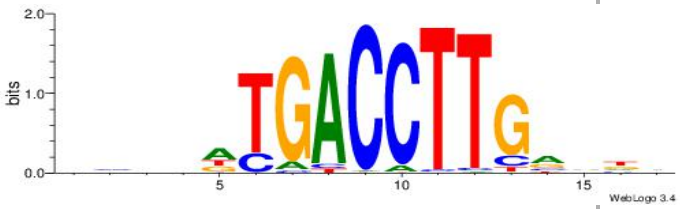
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



Motif ID:	UP00048

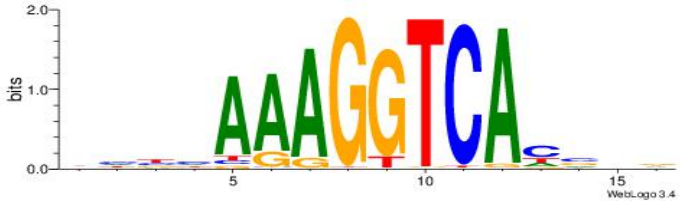
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0189599

Alignment:

```
DHBHAAAGGTCACVHD
--AWVDAGGTCA----
```

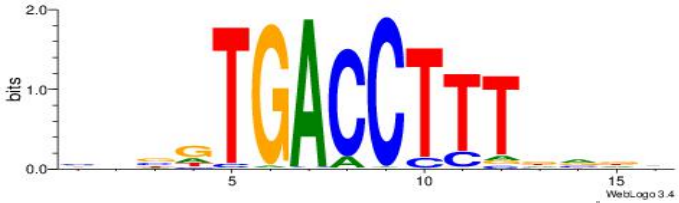
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD

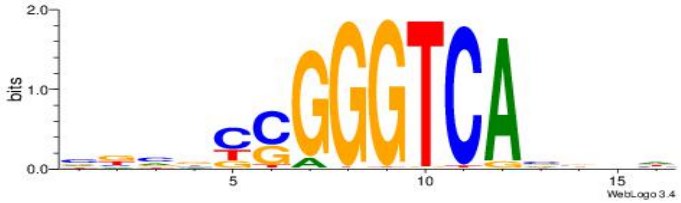


Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10

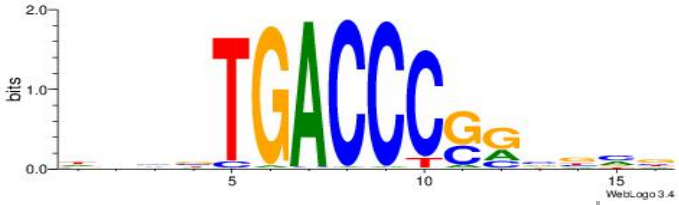
Similarity score: 0.0331999

Alignment:
VBVBCSGGGTCAVBBH
--AWVDAGGTCA----

Original motif
Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif
Consensus sequence: HVBVTGACCCSGBVBV

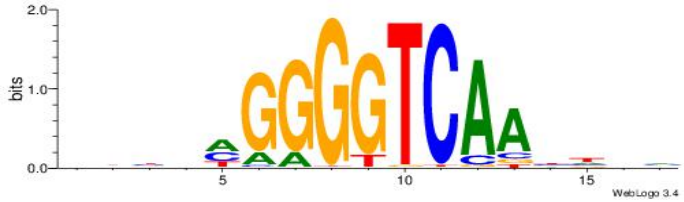


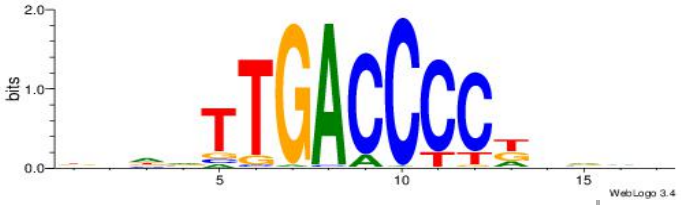
Motif ID: UP00066
Motif name: Hnf4a_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.0341771

Alignment:
BDBVMGGGGTCAABHDV
--AWVDAGGTCA-----

Original motif
Consensus sequence: BDBVMGGGGTCAABHDV

Reverse complement motif
Consensus sequence: BHHVTTGACCCCYVVDB





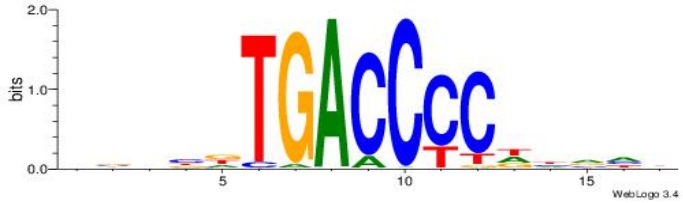
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0363566

Alignment:

```
DBHBDTGACCCCDHVHB
-----TGACCTDVWT--
```

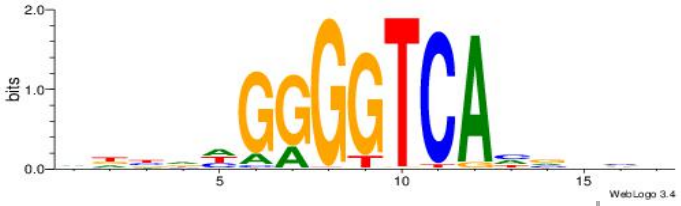
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



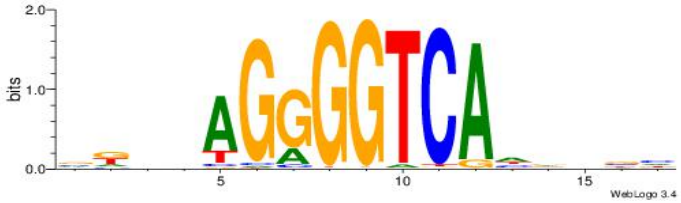
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0391284

Alignment:

```
VKBBAGGGGTCAHDBBH
--AWVDAGGTCA-----
```

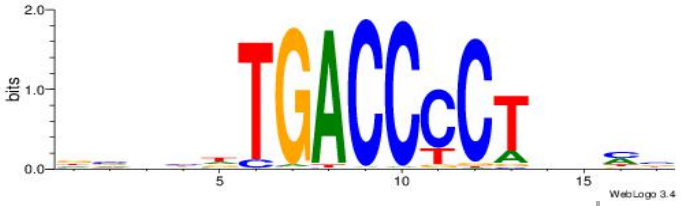
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV

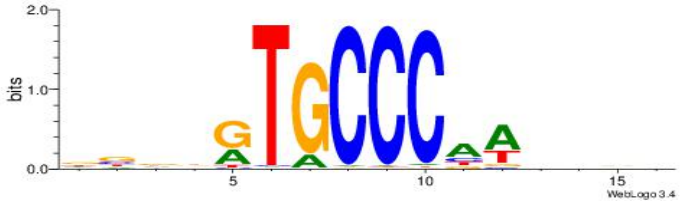


Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

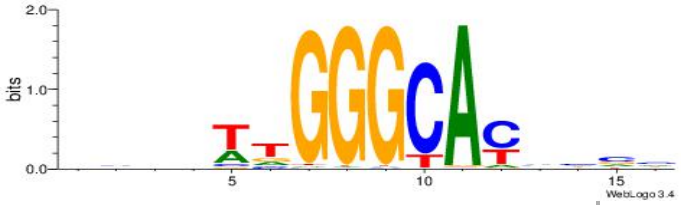
Number of overlap: 10
Similarity score: 0.0444205

Alignment:
DBDDRTGCCCAWDHDV
-----TGACCTDVWT-

Original motif
Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif
Consensus sequence: VHHDWTGGGCAMDHBH

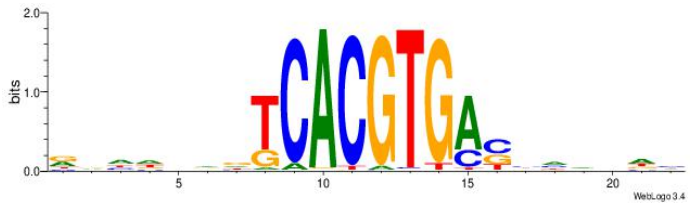


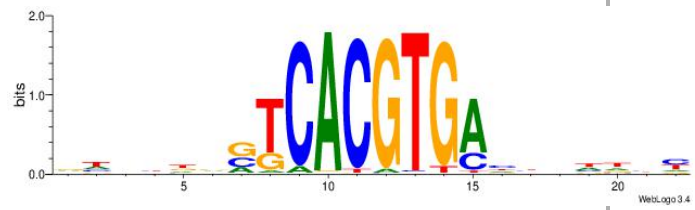
Motif ID: UP00050
Motif name: Bhlhb2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 10
Similarity score: 0.0461434

Alignment:
RDHDBVDTCACGTGASBHVHDH
AWVDAGGTCA----------

Original motif
Consensus sequence: RDHDBVDTCACGTGASBHVHDH

Reverse complement motif
Consensus sequence: DDHBHBSTCACGTGAHBBDHHM





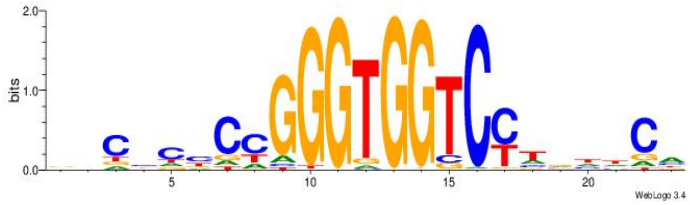
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0489571

Alignment:

```
BHCBCBCCGGGTGGTCYHVHDCH
-----------TGACCTDVWT--
```

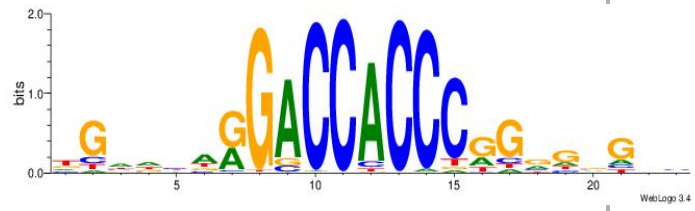
Original motif

Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif

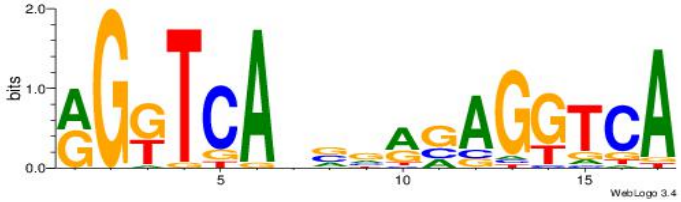
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB



Dataset #: 3 Motif ID: 63 Motif name: RXRRAR_DR5

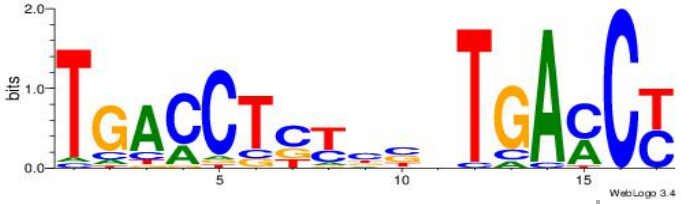
Original motif

Consensus sequence: RGKTCABVVRGAGGTCA



Reverse complement motif

Consensus sequence: TGACCTCKVVBTGAYCK



Best Matches for Motif ID 63 (Highest to Lowest)

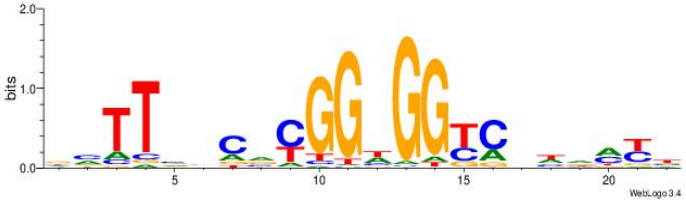
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0585087

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
RGKTCABVVRGAGGTCA-----
```

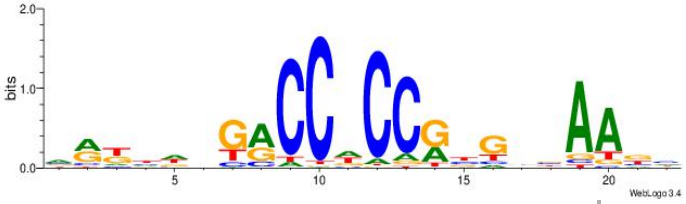
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



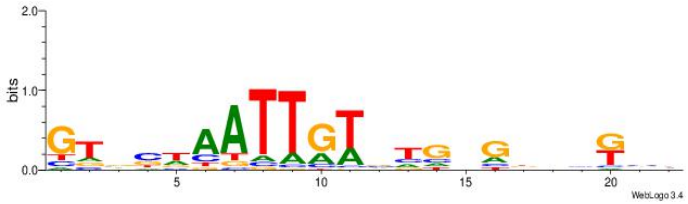
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0709955

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
-----RGKTCABVVRGAGGTCA
```

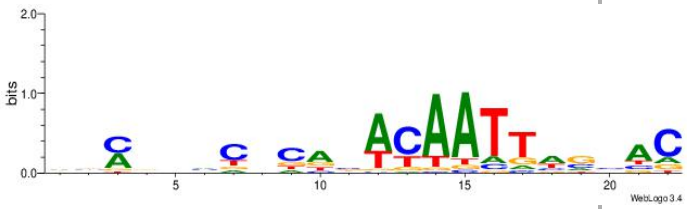
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

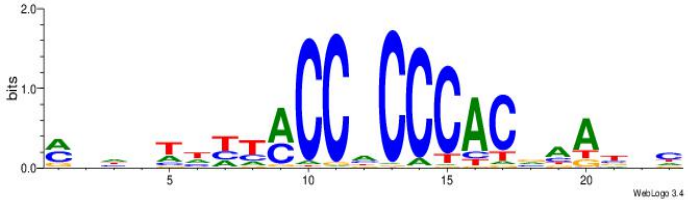


Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17

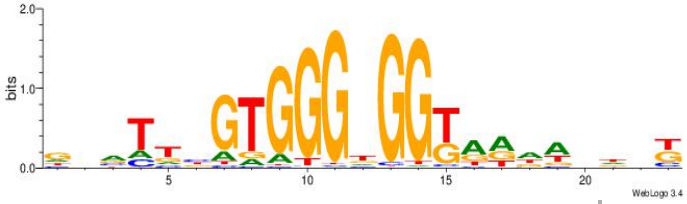
Similarity score: 0.075055

Alignment:
DVVTTVGTGGGHGGYAMHWHHHY
RGKTCABVVRGAGGTCA------

Original motif
Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif
Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY

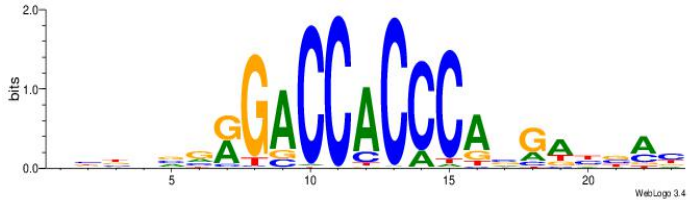


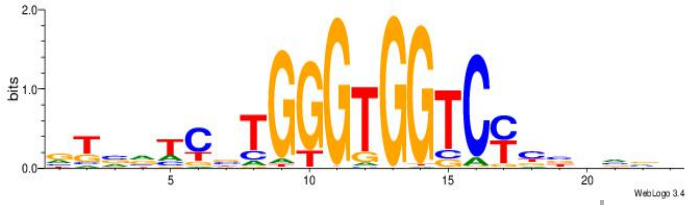
Motif ID: UP00538
Motif name: Gli1_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 7
Number of overlap: 17
Similarity score: 0.0758824

Alignment:
BBBDVVRGACCACCCAVGABBAB
------RGKTCABVVRGAGGTCA

Original motif
Consensus sequence: BBBDVVRGACCACCCAVGABBAB

Reverse complement motif
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB





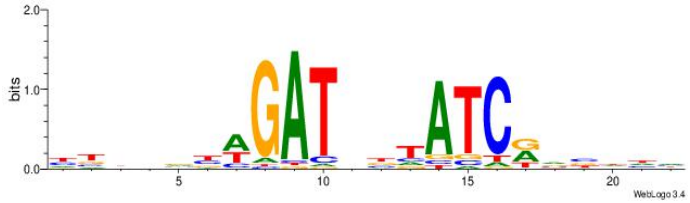
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	17
Similarity score:	0.0759953

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
TGACCTCKVVBTGAYCK-----
```

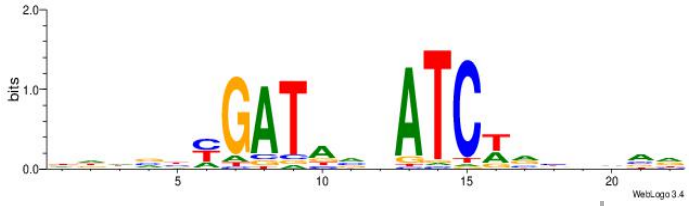
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



Motif ID: UP00539

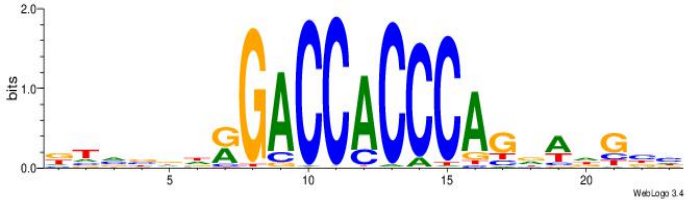
Motif name:	Gli2_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	17
Similarity score:	0.0760211

Alignment:

```
DTVBDDRGACCACCCAGDWDGBH
------RGKTCABVVRGAGGTCA
```

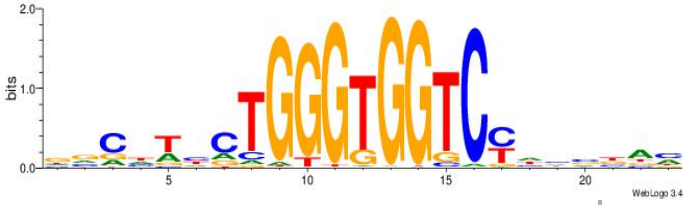
Original motif

Consensus sequence: DTVBDDRGACCACCCAGDWDGBH



Reverse complement motif

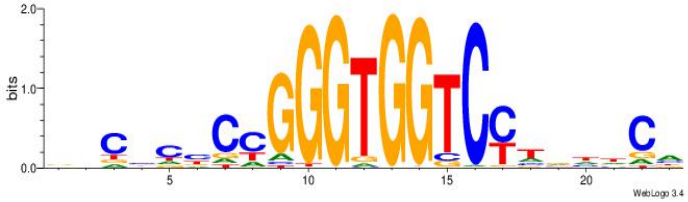
Consensus sequence: DBCDWHCTGGGTGGTCMDHBBAH



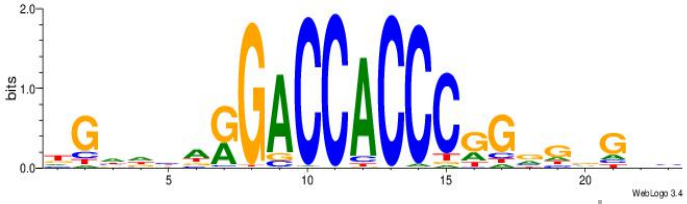
Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	17
Similarity score:	0.0763398

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
TGACCTCKVVBTGAYCK------

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

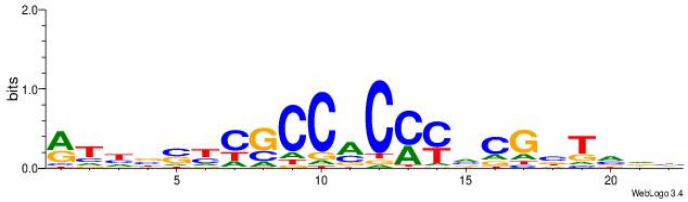


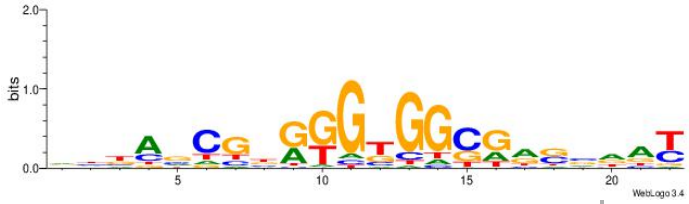
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0768658

Alignment:
HDBABCGBKRGYGGCGMSBHAK
RGKTCABVVRGAGGTCA-----

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





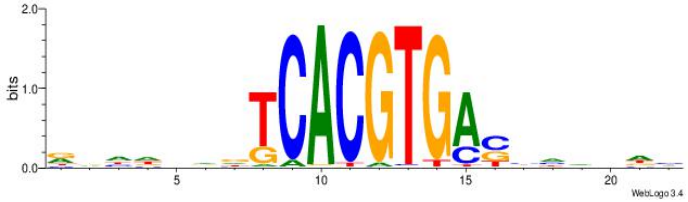
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	17
Similarity score:	0.0784072

Alignment:

```
DDHBHBSTCACGTGAHBBDHHM
----RGKTCABVVRGAGGTCA-
```

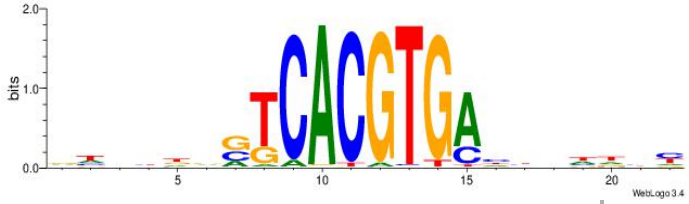
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



Motif ID:	UP00538

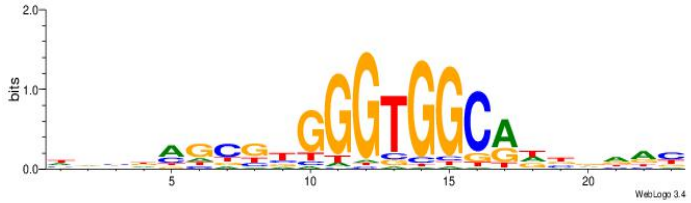
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	17
Similarity score:	0.0794665

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
RGKTCABVVRGAGGTCA------
```

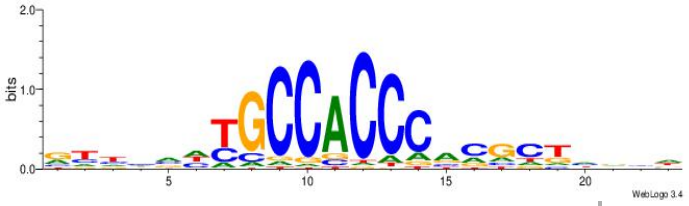
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



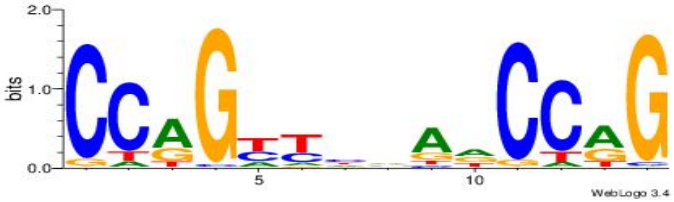
Dataset #: 3 **Motif ID: 64** **Motif name: Tcfcp2l1**

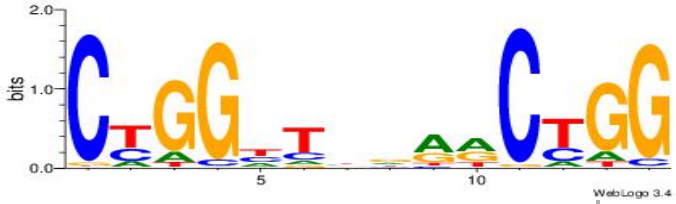
Original motif

Consensus sequence: CCAGYYHVADCCRG

Reverse complement motif

Consensus sequence: CKGGDTBDMMCTGG





Best Matches for Motif ID 64 (Highest to Lowest)

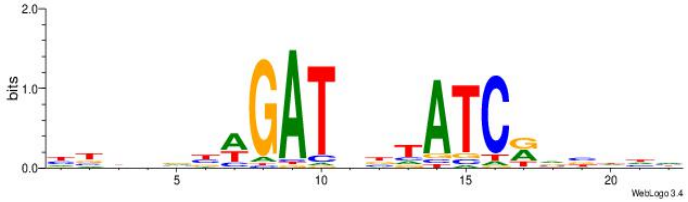
Motif ID:	UP00032
Motif name:	Gata3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	14
Similarity score:	0.0527249

Alignment:

```
HBHDVBWGATHBTATCRVBHHH
----CCAGYYHVADCCRG----
```

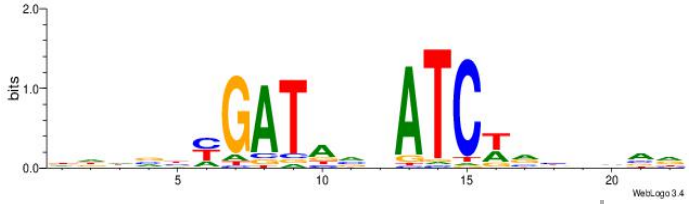
Original motif

Consensus sequence: HBHDVBWGATHBTATCRVBHHH



Reverse complement motif

Consensus sequence: HHHBBMGATAVHATCWVVDHVH



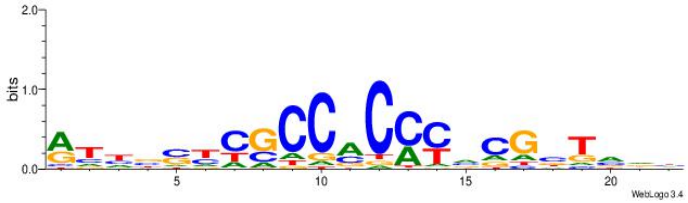
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0551691

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
--------CCAGYYHVADCCRG
```

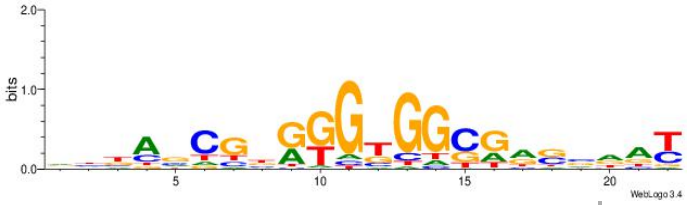
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK

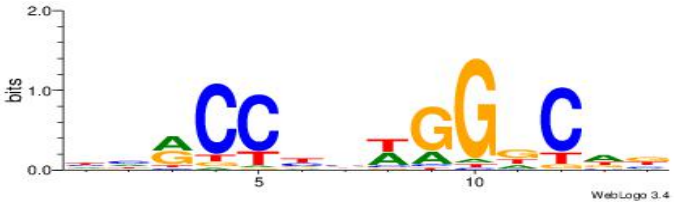


Motif ID:	UP00005
Motif name:	Tcfap2a_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14

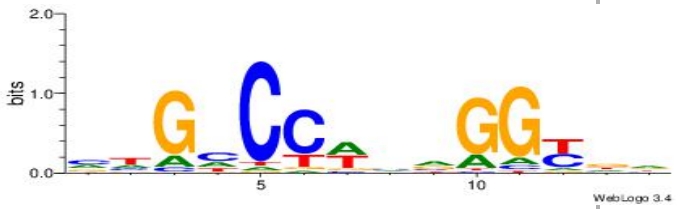
Similarity score: 0.0560983

Alignment:
HHRCCBBWGGDCDB
CCAGYYHVADCCRG

Original motif
Consensus sequence: HHRCCBBWGGDCDB



Reverse complement motif
Consensus sequence: BDGHCCWBVGGKDH

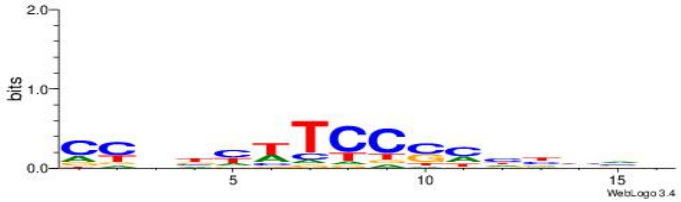


Motif ID:	UP00013
Motif name:	Gabpa_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0566467

Alignment:
CYDBYWTCCSMHBVVH
CCAGYYHVADCCRG--

Original motif
Consensus sequence: CYDBYWTCCSMHBVVH

Reverse complement motif
Consensus sequence: DBVVDRSGGAWKVHKG



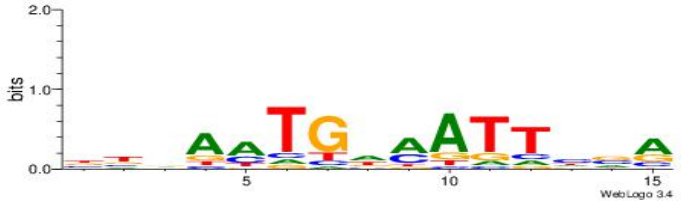
Motif ID:	UP00075
Motif name:	Sox15_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0577636

Alignment:

```
BBVAATGDMATTHVA
-CCAGYYHVADCCRG
```

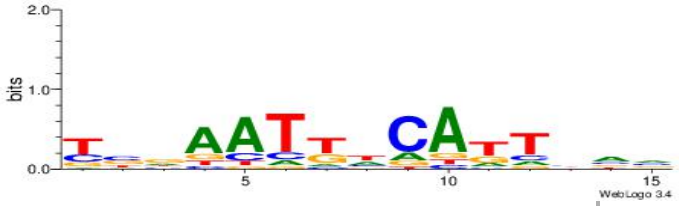
Original motif

Consensus sequence: BBVAATGDMATTHVA



Reverse complement motif

Consensus sequence: TVDAATYDCATTVVV



Motif ID:	UP00096
Motif name:	Sox13_secondary

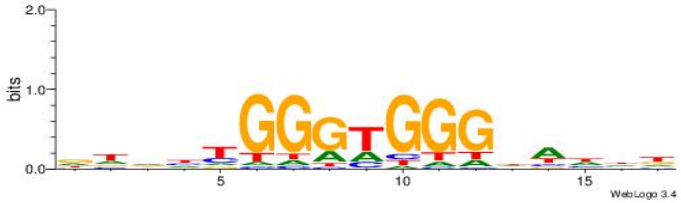
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0587893

Alignment:

```
DDDHTGGGTGGGHAHHD
---CKGGDTBDMMCTGG
```

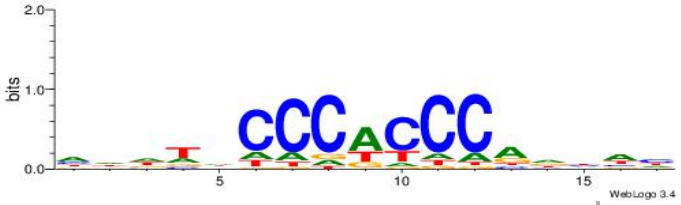
Original motif

Consensus sequence: DDDHTGGGTGGGHAHHD



Reverse complement motif

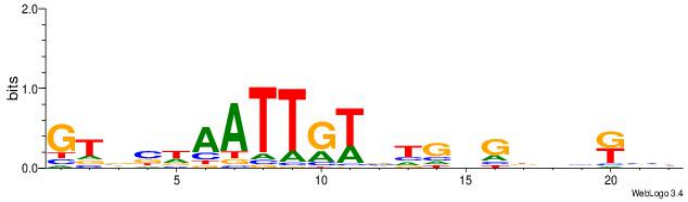
Consensus sequence: DHHTHCCCACCCAHDDH



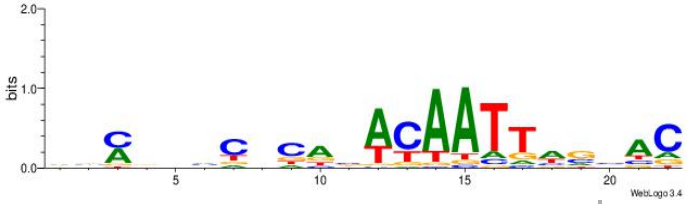
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	14
Similarity score:	0.0590238

Alignment:
VVYDDDCHCAVACAATTDBVAC
--CCAGYYHVADCCRG------

Original motif
Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif
Consensus sequence: VVYDDDCHCAVACAATTDBVAC

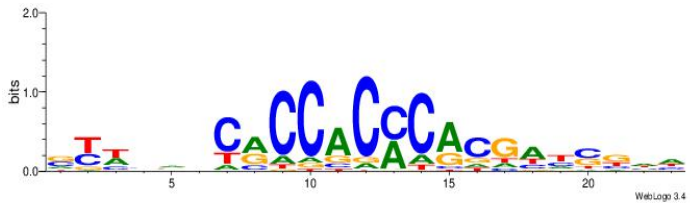


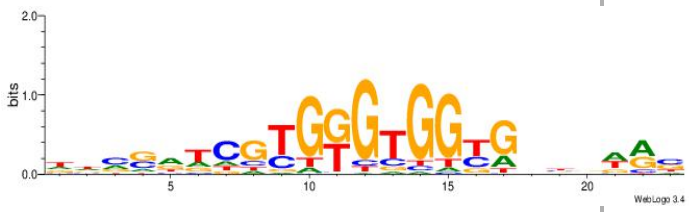
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	14
Similarity score:	0.0596904

Alignment:
VYWVVHCRCCACMCACGAHSBHH
--------CCAGYYHVADCCRG-

Original motif
Consensus sequence: VYWVVHCRCCACMCACGAHSBHH

Reverse complement motif
Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV

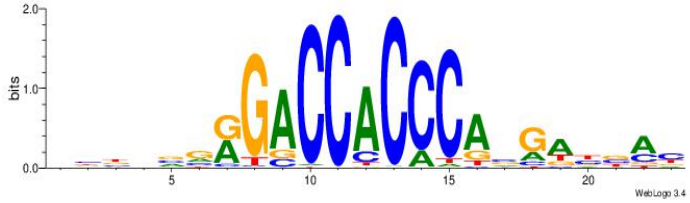




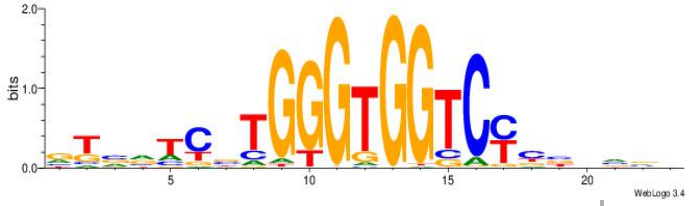
Motif ID: UP00538
Motif name: Gli1_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 10
Number of overlap: 14
Similarity score: 0.0597695

Alignment:
BBBDVVRGACCACCCAVGABBAB
---------CCAGYYHVADCCRG

Original motif
Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif
Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



Motif ID: UP00539

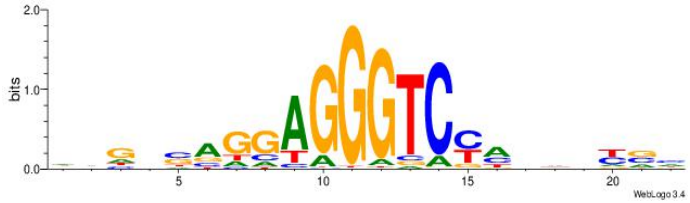
Motif name:	Gli2_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0598357

Alignment:

```
HVGVSAGGAGGGTCYHHHHYVH
-------CKGGDTBDMMCTGG-
```

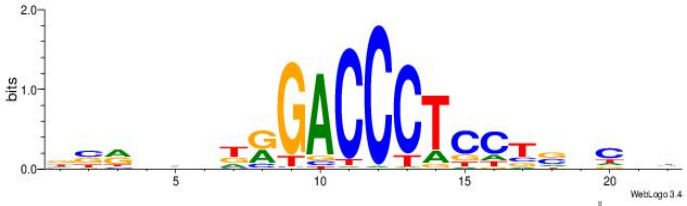
Original motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Reverse complement motif

Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



Dataset #: 4 **Motif ID: 65** **Motif name: ssCGrGCGss**

Original motif

Consensus sequence: VSCGRGCGBV

Reverse complement motif

Consensus sequence: VBCGCMCGSV

Best Matches for Motif ID 65 (Highest to Lowest)

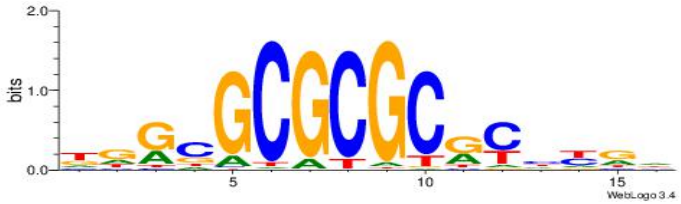
Motif ID:	UP00065
Motif name:	Zfp161_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0

Alignment:

```
DDGCGCGCGCRCHYRD
---VBCGCMCGSV---
```

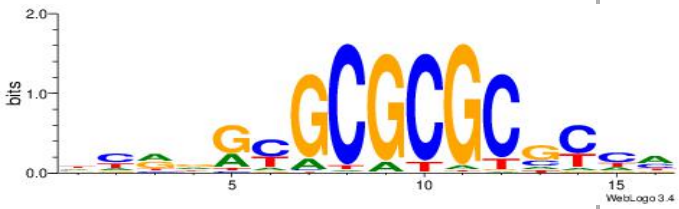
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD



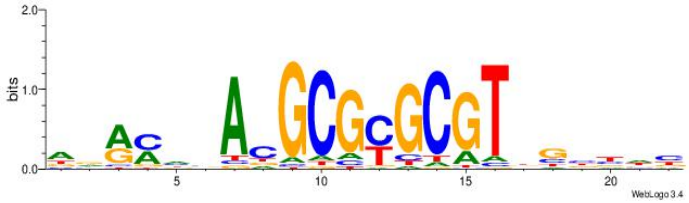
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	10
Similarity score:	0.00441562

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-------VSCGRGCGBV-----
```

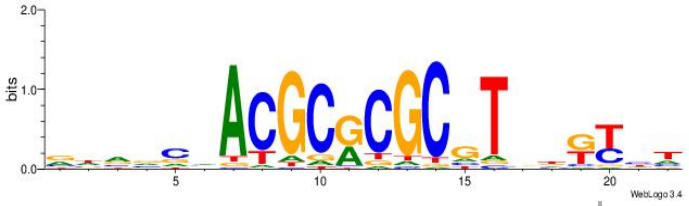
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

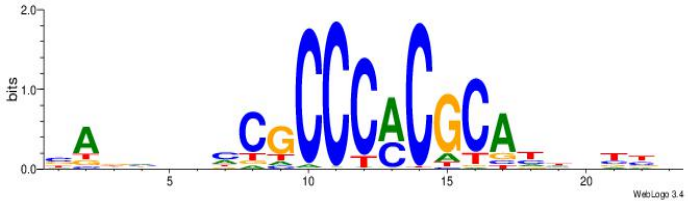


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8

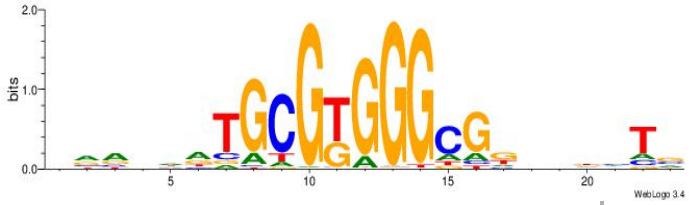
Number of overlap: 10
Similarity score: 0.00724497

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
-------VBCGCMCGSV------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



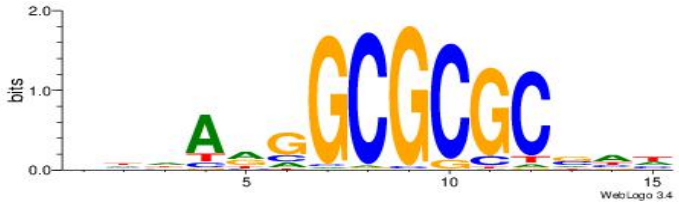
Motif ID: UP00001
Motif name: E2F2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.00889608

Alignment:
HHVGCGCGCCKTDHB
VBCGCMCGSV-----

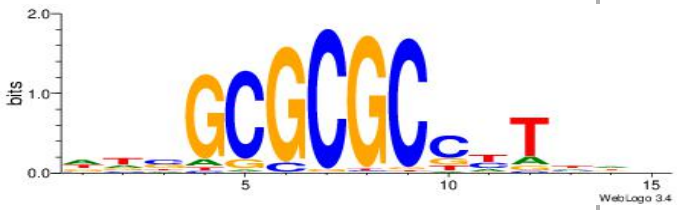
Original motif

Reverse complement motif

Consensus sequence: VHDARGGCGCGCVHH



Consensus sequence: HHVGCGCGCCKTDHB



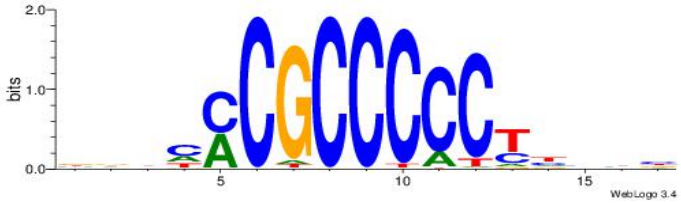
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.00998546

Alignment:

```
BVVHAGGGGGCGRDHHB
----VSCGRGCGBV---
```

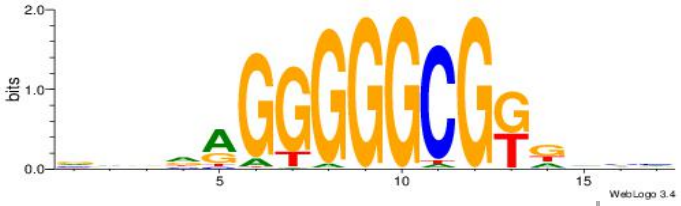
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



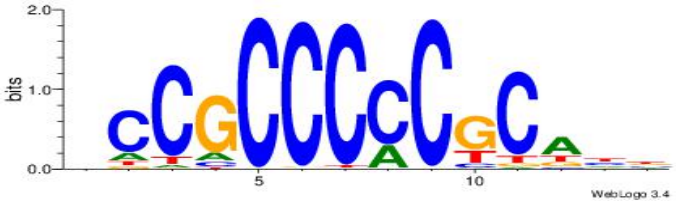
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.0109516

Alignment:

```
VHTGCGGGGGCGGH
--VSCGRGCGBV--
```

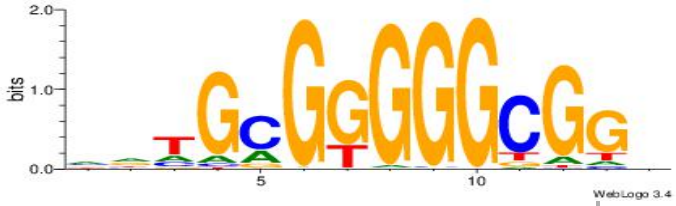
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH

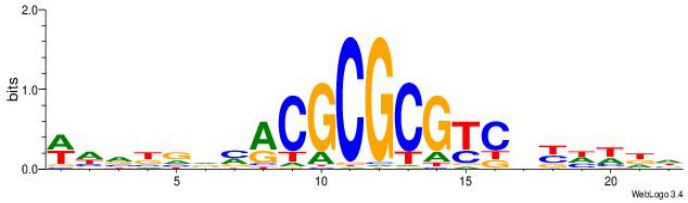


Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7

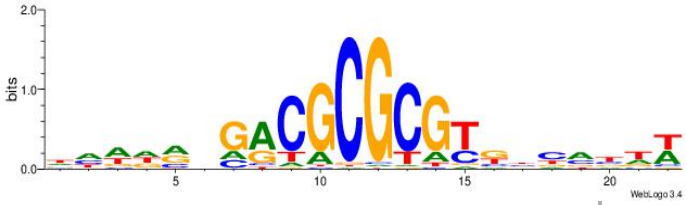
Number of overlap: 10
Similarity score: 0.0111653

Alignment:
HDWHMHGACGCGCGTRBVVBHW
------VSCGRGCGBV------

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



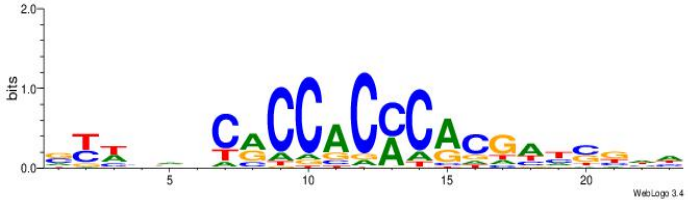
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 7
Number of overlap: 10
Similarity score: 0.0119775

Alignment:
VYWVVHCRCCACMCACGAHSBHH
-------VBCGCMCGSV------

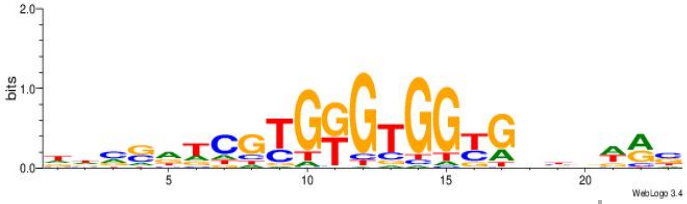
Original motif

Reverse complement motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



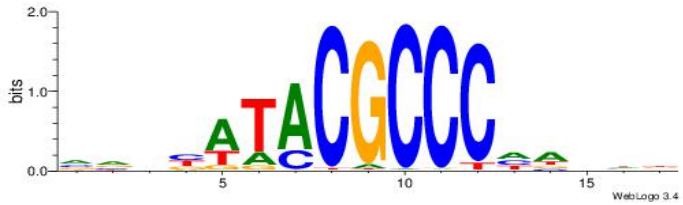
Motif ID:	UP00093
Motif name:	Klf7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.012521

Alignment:

```
DHDTHGGGCGTATBHBB
--VSCGRGCGBV-----
```

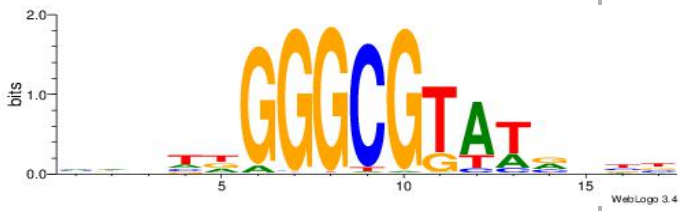
Original motif

Consensus sequence: VVDBATACGCCCHAHHD



Reverse complement motif

Consensus sequence: DHDTHGGGCGTATBHBB



Motif ID:	UP00065
Motif name:	Zfp161_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0128641

Alignment:

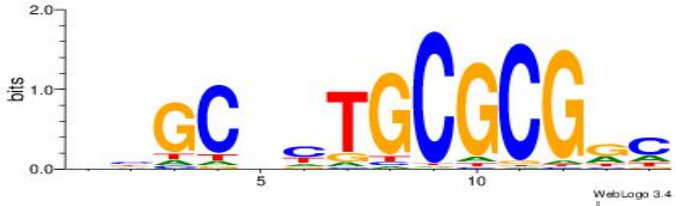
```
VVGCVMTGCGCGKC
----VBCGCMCGSV
```

Original motif

Consensus sequence: GYCGCGCARBGCVB

Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



Dataset #: 4 Motif ID: 66 Motif name: ssCGssCGss

Original motif

Consensus sequence: BSCGSSCGSV

Reverse complement motif

Consensus sequence: VSCGSSCGSB

Best Matches for Motif ID 66 (Highest to Lowest)

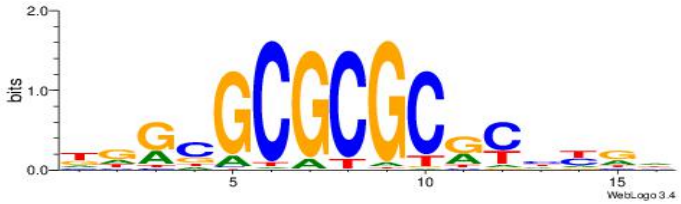
Motif ID:	UP00065
Motif name:	Zfp161_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0

Alignment:

```
DDGCGCGCGCRCHYRD
---BSCGSSCGSV---
```

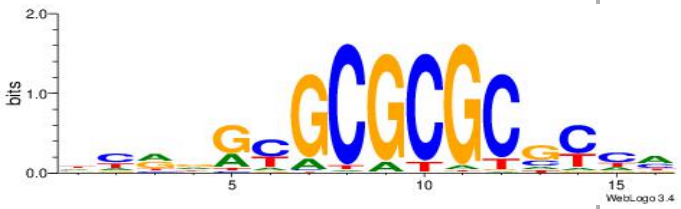
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD



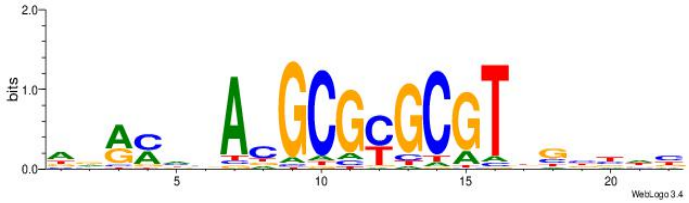
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8
Number of overlap:	10
Similarity score:	0.00696149

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
-------BSCGSSCGSV-----
```

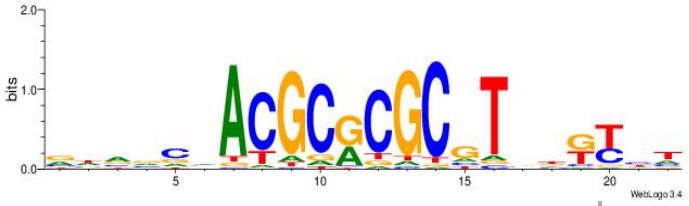
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD

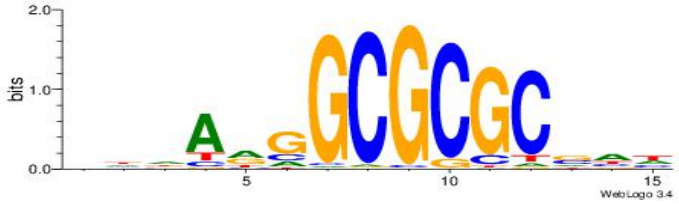


Motif ID:	UP00001
Motif name:	E2F2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

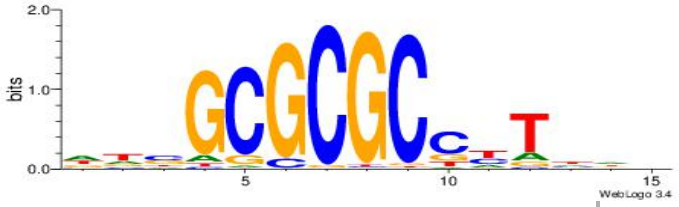
Number of overlap: 10
Similarity score: 0.0109689

Alignment:
HHVGCGCGCCKTDHB
BSCGSSCGSV-----

Original motif
Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif
Consensus sequence: HHVGCGCGCCKTDHB



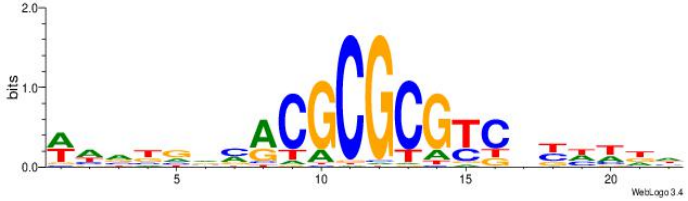
Motif ID: UP00526
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 7
Number of overlap: 10
Similarity score: 0.0123281

Alignment:
HDWHMHGACGCGCGTRBVVBHW
------BSCGSSCGSV------

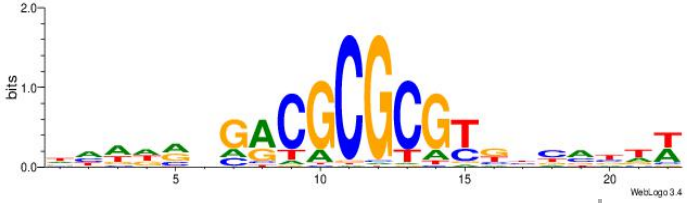
Original motif

Reverse complement motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



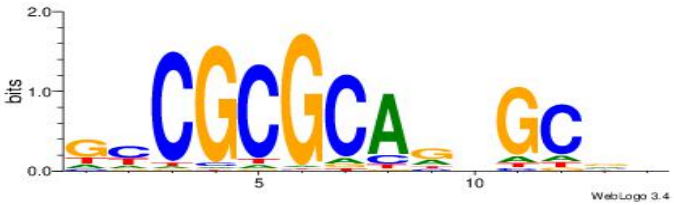
Motif ID:	UP00065
Motif name:	Zfp161_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0126874

Alignment:

```
VVGCVMTGCGCGKC
----VSCGSSCGSB
```

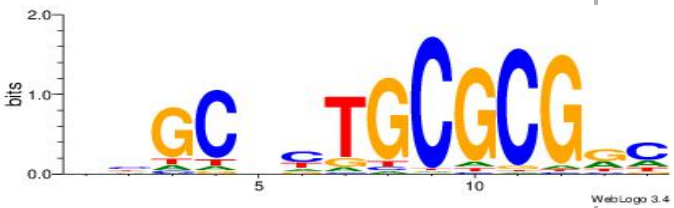
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



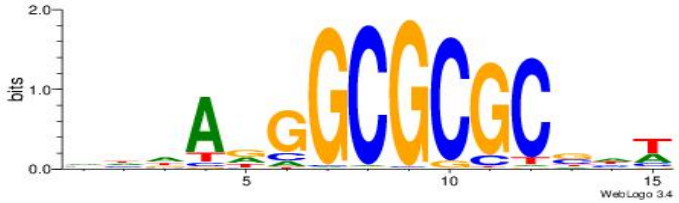
Motif ID:	UP00003
Motif name:	E2F3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.0149933

Alignment:

```
VHDADGGCGCGCSHW
-----VSCGSSCGSB
```

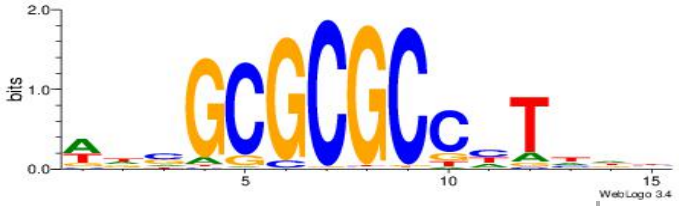
Original motif

Consensus sequence: VHDADGGCGCGCSHW



Reverse complement motif

Consensus sequence: WHSGCGCGCCHTDHB



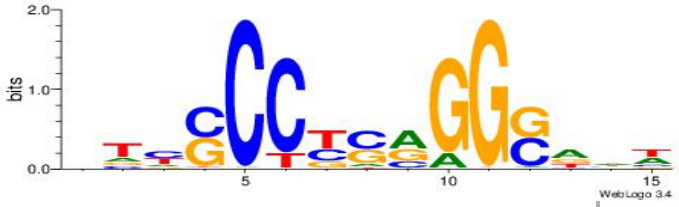
Motif ID:	UP00005
Motif name:	Tcfap2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

Number of overlap: 10
Similarity score: 0.0189053

Alignment:
DTMSCCKSMGGSHDW
--BSCGSSCGSV---

Original motif
Consensus sequence: WDHSCCYSRGGSRAD

Reverse complement motif
Consensus sequence: DTMSCCKSMGGSHDW



Motif ID: UP00087
Motif name: Tcfap2c_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.0194786

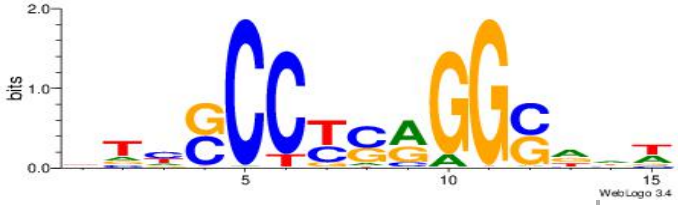
Alignment:
DTHSCCKSMGGSHHW
--BSCGSSCGSV---

Original motif

Reverse complement motif

Consensus sequence: WHHSCCYSRGGSDAD

Consensus sequence: DTHSCCKSMGGSHHW



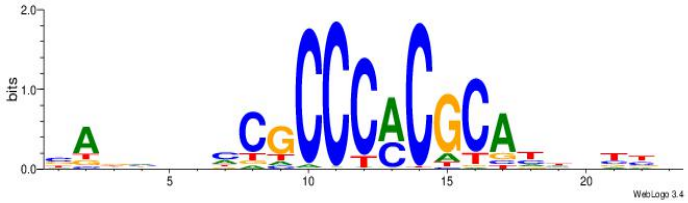
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.0215973

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
-------BSCGSSCGSV------
```

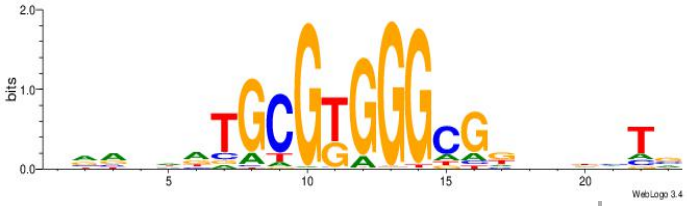
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



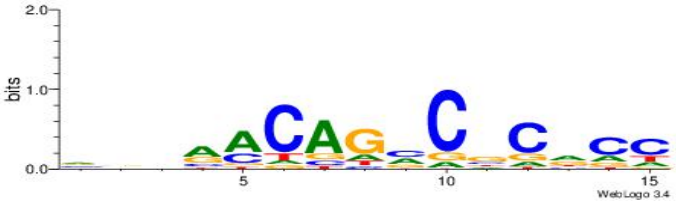
Motif ID:	UP00036
Motif name:	Myf6_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0218811

Alignment:

```
VVVRACAGVCBCDCC
---BSCGSSCGSV--
```

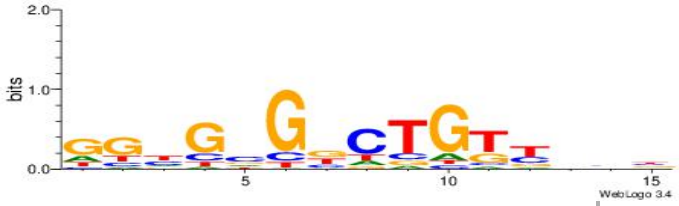
Original motif

Consensus sequence: VVVRACAGVCBCDCC



Reverse complement motif

Consensus sequence: GGDGBGVCTGTKVVB



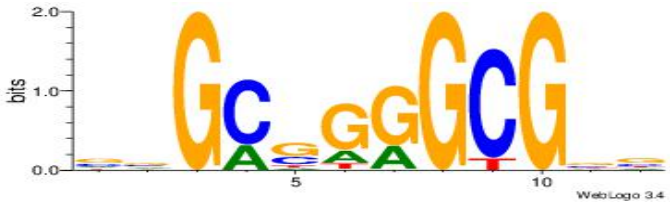
Dataset #: 4 Motif ID: 67 Motif name: ssGMsGRGCGss

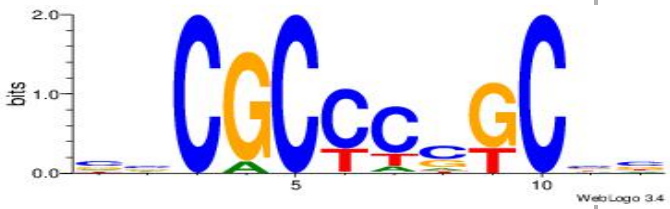
Original motif

Consensus sequence: VVGCSGGGCGBB

Reverse complement motif

Consensus sequence: BBCGCCCSGCVV





Best Matches for Motif ID 67 (Highest to Lowest)

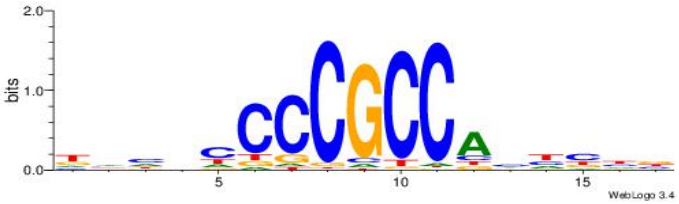
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	12
Similarity score:	0.0145201

Alignment:

```
BHBHDTGGCGGGGBDHD
VVGCSGGGCGBB-----
```

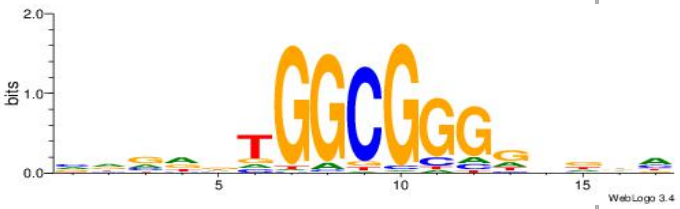
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



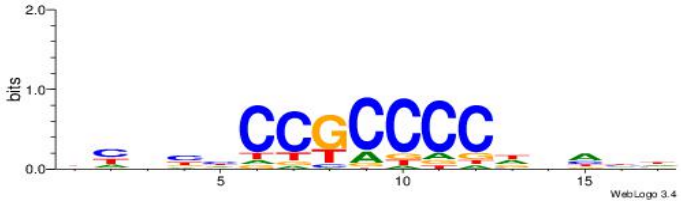
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0165054

Alignment:

```
BHHBHCCGCCCCDHHHH
----BBCGCCCSGCVV-
```

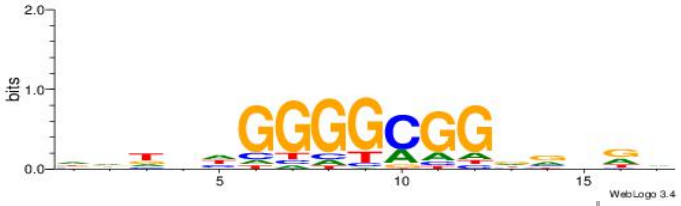
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV

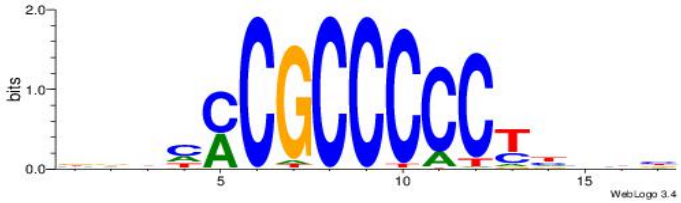


Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

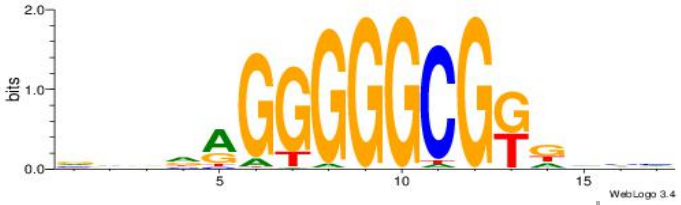
Number of overlap: 12
Similarity score: 0.0174891

Alignment:
BDHHMCGCCCCCTHVBB
---BBCGCCCSGCVV--

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB



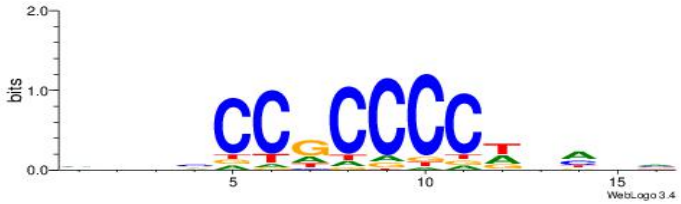
Motif ID: UP00043
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 12
Similarity score: 0.0177479

Alignment:
HBBBCCGCCCCWHHHV
---BBCGCCCSGCVV-

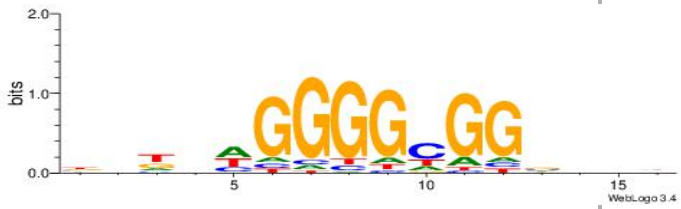
Original motif

Reverse complement motif

Consensus sequence: HBBBCCGCCCCWHHHV



Consensus sequence: BHHHWGGGGCGGBBVH



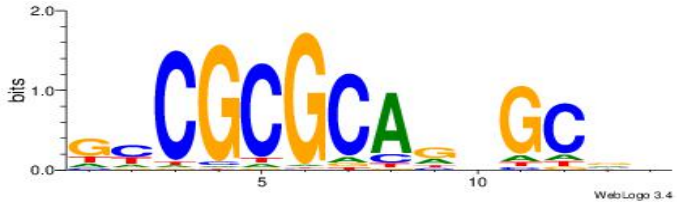
Motif ID:	UP00065
Motif name:	Zfp161_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0199317

Alignment:

```
VVGCVMTGCGCGKC
--BBCGCCCSGCVV
```

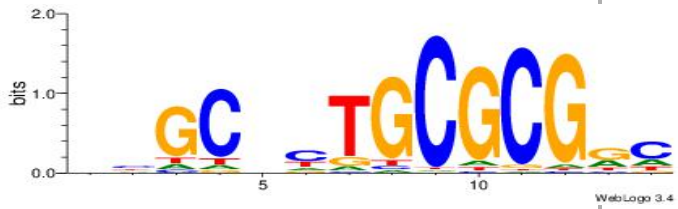
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



Motif ID: UP00099

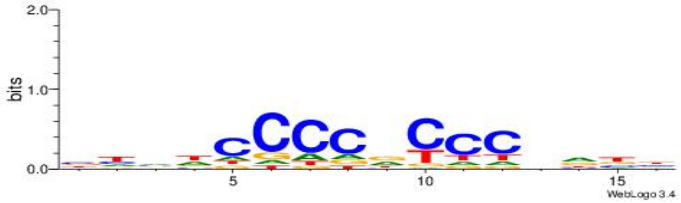
Motif name:	Ascl2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	12
Similarity score:	0.0218581

Alignment:

```
HVDVGGGHGGGGDBHB
BBCGCCCSGCVV----
```

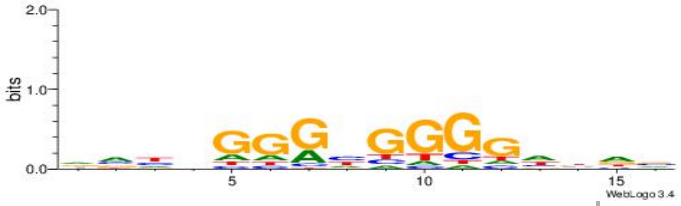
Original motif

Consensus sequence: BHVDCCCCDCCCBDBH



Reverse complement motif

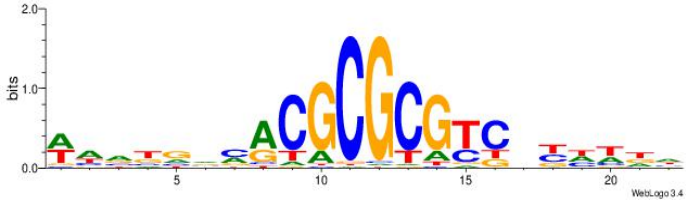
Consensus sequence: HVDVGGGHGGGGDBHB



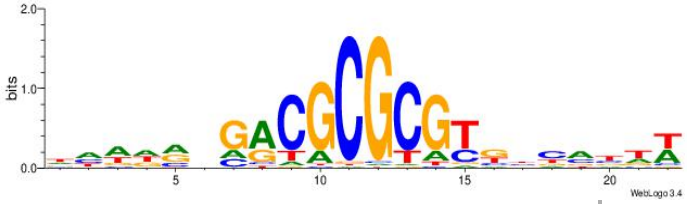
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0230506

Alignment:
HDWHMHGACGCGCGTRBVVBHW
----VVGCSGGGCGBB------

Original motif
Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif
Consensus sequence: HDWHMHGACGCGCGTRBVVBHW

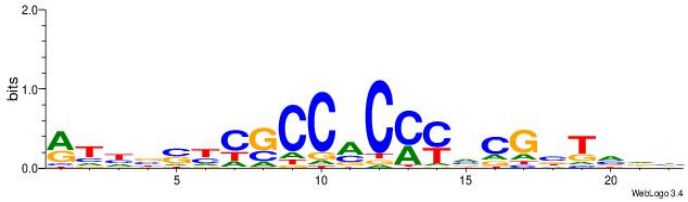


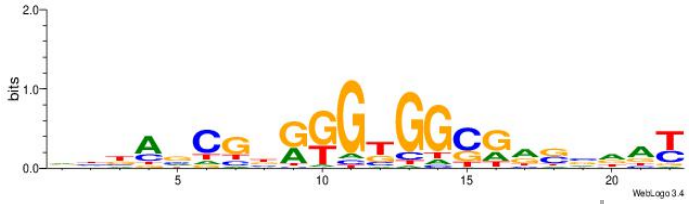
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7
Number of overlap:	12
Similarity score:	0.0234643

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
----BBCGCCCSGCVV------

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH

Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK





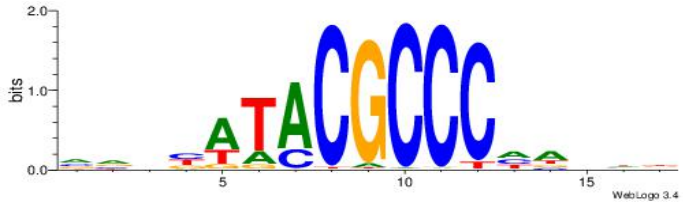
Motif ID:	UP00093
Motif name:	Klf7_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0242135

Alignment:

```
VVDBATACGCCCHAHHD
-----BBCGCCCSGCVV
```

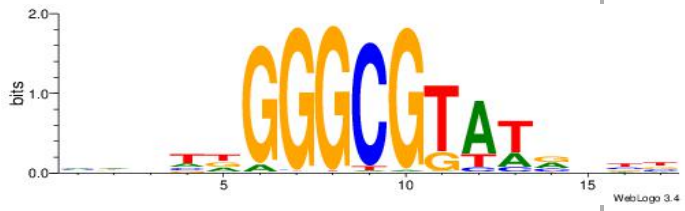
Original motif

Consensus sequence: VVDBATACGCCCHAHHD



Reverse complement motif

Consensus sequence: DHDTHGGGCGTATBHBB



Motif ID:	UP00003

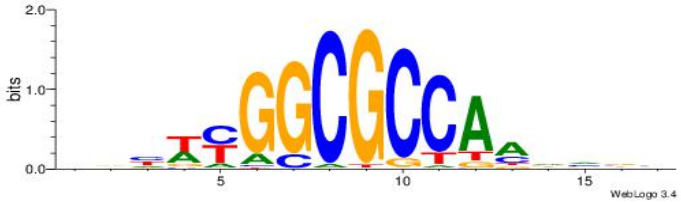
Motif name:	E2F3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.024665

Alignment:

```
HBHWYGGCGCCAMDVBB
-----BBCGCCCSGCVV
```

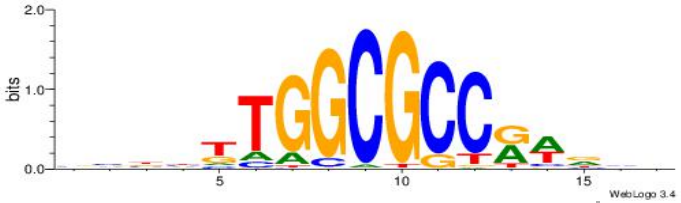
Original motif

Consensus sequence: HBHWYGGCGCCAMDVBB



Reverse complement motif

Consensus sequence: BBBDYTGGCGCCKWDBD



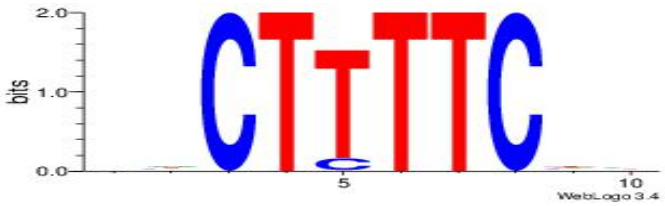
Dataset #: 4 **Motif ID: 68** **Motif name: dwCTTTTCwy**

Original motif

Consensus sequence: DHCTTTTCHH

Reverse complement motif

Consensus sequence: DHGAAAAGHD



Best Matches for Motif ID 68 (Highest to Lowest)

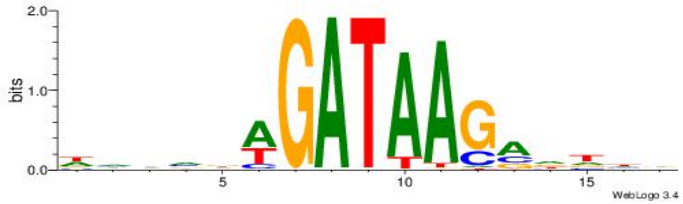
Motif ID:	UP00100
Motif name:	Gata6_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0

Alignment:

```
VHDDTCTTATCWHBDHD
---DHCTTTTCHH----
```

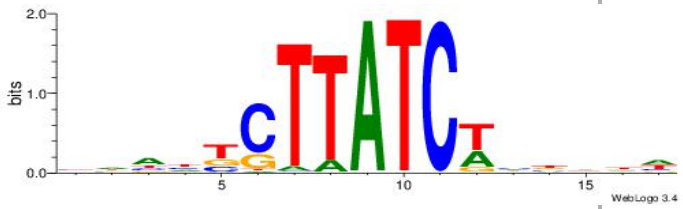
Original motif

Consensus sequence: DHDVDWGATAAGADDHV



Reverse complement motif

Consensus sequence: VHDDTCTTATCWHBDHD



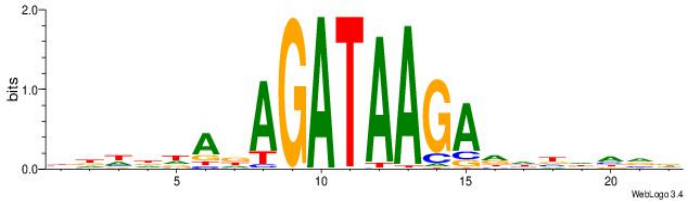
Motif ID:	UP00032
Motif name:	Gata3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7
Number of overlap:	10
Similarity score:	0.00791476

Alignment:

```
HBHDVHDTCTTATCTHTDDHDV
------DHCTTTTCHH------
```

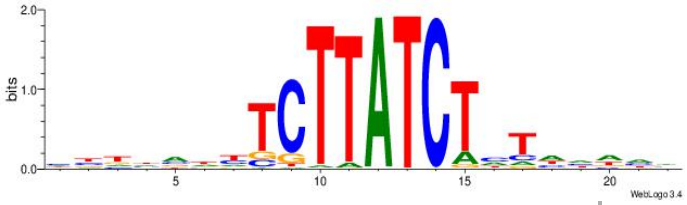
Original motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Reverse complement motif

Consensus sequence: HBHDVHDTCTTATCTHTDDHDV

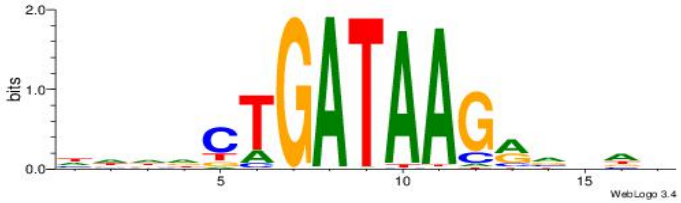


Motif ID:	UP00080
Motif name:	Gata5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

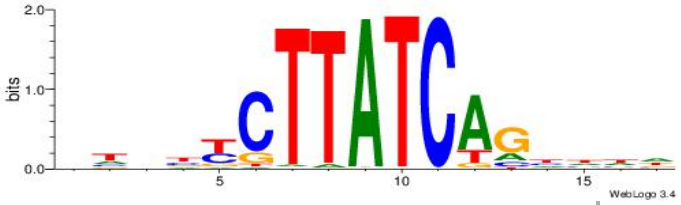
Number of overlap: 10
Similarity score: 0.0170494

Alignment:
HDDDCTGATAAGRVDDD
----DHGAAAAGHD---

Original motif
Consensus sequence: HDDDCTGATAAGRVDDD



Reverse complement motif
Consensus sequence: DDHBKCTTATCAGDDDH



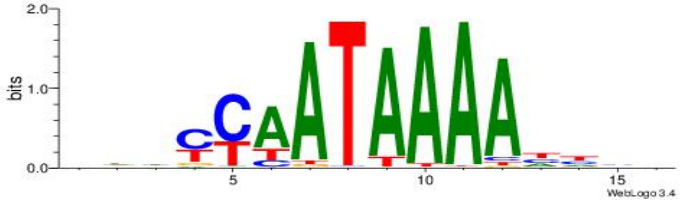
Motif ID: UP00180
Motif name: Hoxd13
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.0261336

Alignment:
HDHHTTTTATTKKHDD
-DHCTTTTCHH-----

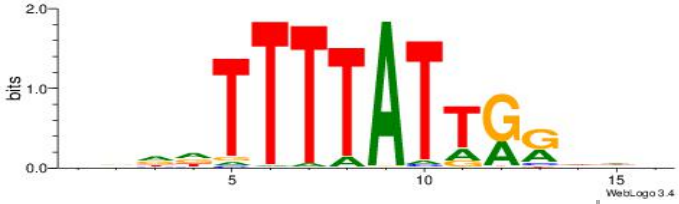
Original motif

Reverse complement motif

Consensus sequence: HDHYYAATAAAAHHHH



Consensus sequence: HDHHTTTTATTKKHDD



Motif ID:	UP00086
Motif name:	Irf3_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:	10
Similarity score:	0.0268224

Alignment:

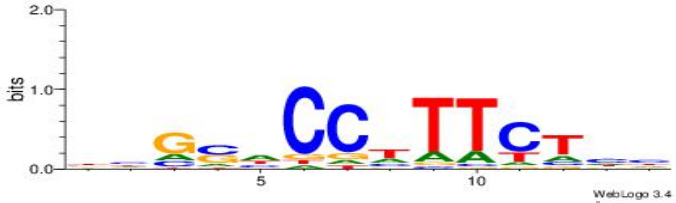
```
BHGSDCCDTTCTHH
---DHCTTTTCHH-
```

Original motif

Consensus sequence: DDAGAADGGDSCDV

Reverse complement motif

Consensus sequence: BHGSDCCDTTCTHH



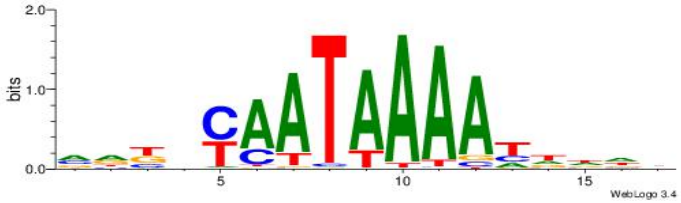
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0305464

Alignment:

```
HDDDATTTTATTKVRDB
--DHCTTTTCHH-----
```

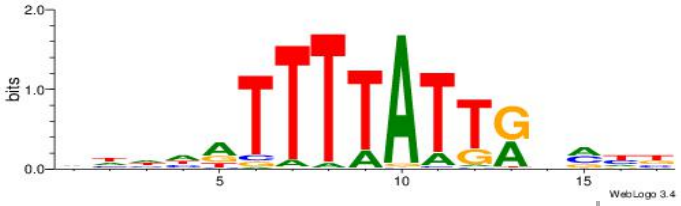
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB

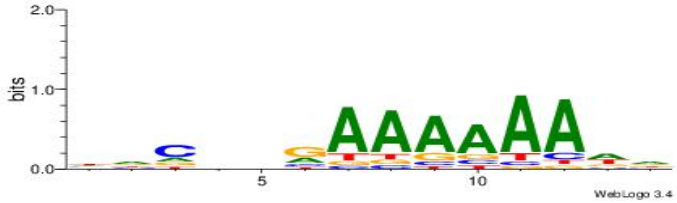


Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

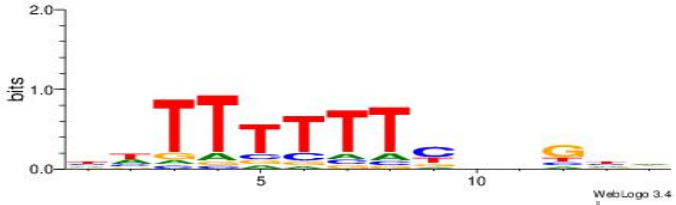
Number of overlap: 10
Similarity score: 0.0311787

Alignment:
HDCDBRAAAAAADD
---DHGAAAAGHD-

Original motif
Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif
Consensus sequence: DDTTTTTTMBDGDH



Motif ID: UP00044
Motif name: Mafk_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: 10
Similarity score: 0.0323274

Alignment:
VHAAAAADTGCAHBR
DHGAAAAGHD-----

Original motif

Reverse complement motif

Consensus sequence: VHAAAAADTGCAHBR

Consensus sequence: MBHTGCADTTTTTHV

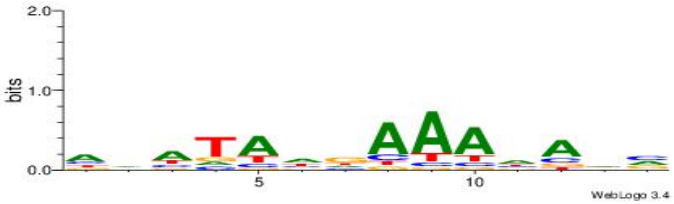
Motif ID:	UP00097
Motif name:	Mtf1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.032885

Alignment:

```
HDATAHDAAAHADV
DHCTTTTCHH----
```

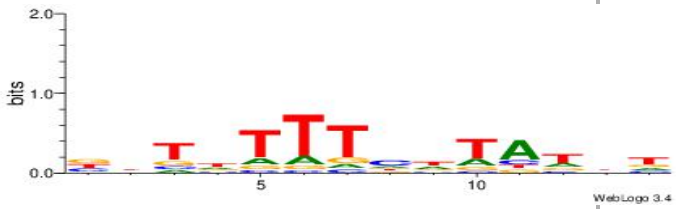
Original motif

Consensus sequence: HDATAHDAAAHADV



Reverse complement motif

Consensus sequence: VDTHTTTHHTATDH



Motif ID: UP00074

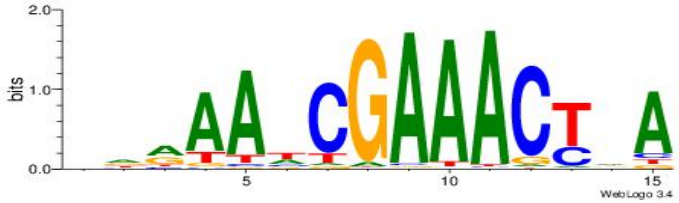
Motif name:	Isgf3g_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0334374

Alignment:

```
TDAGTTTCGWTTKDV
DHCTTTTCHH-----
```

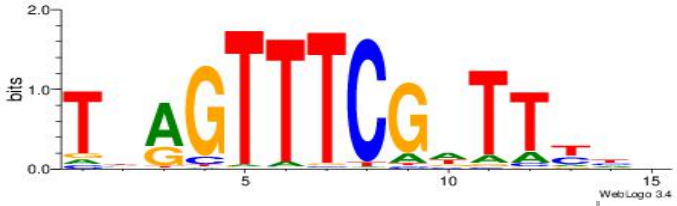
Original motif

Consensus sequence: VDRAAWCGAAACTDA



Reverse complement motif

Consensus sequence: TDAGTTTCGWTTKDV



Dataset #: 4 **Motif ID: 69** **Motif name: aaACAAAACaa**

Original motif

Consensus sequence: AAACAAAACAA

Reverse complement motif

Consensus sequence: TTGTTTTGTTT

Best Matches for Motif ID 69 (Highest to Lowest)

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:	4
Number of overlap:	11
Similarity score:	0

Alignment:

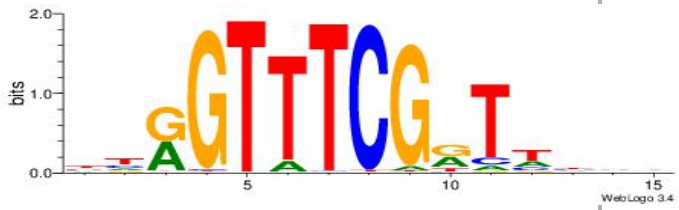
```
BDKGTTTCGKTWDDD
-TTGTTTTGTTT---
```

Original motif

Consensus sequence: DDDWAYCGAAACYDV

Reverse complement motif

Consensus sequence: BDKGTTTCGKTWDDD



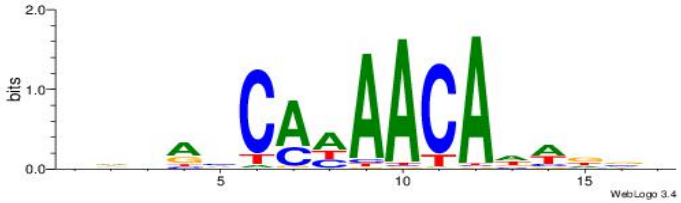
Motif ID:	UP00039
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.00531676

Alignment:

```
DVHWDTGTTWTGDTBDH
----TTGTTTTGTTT--
```

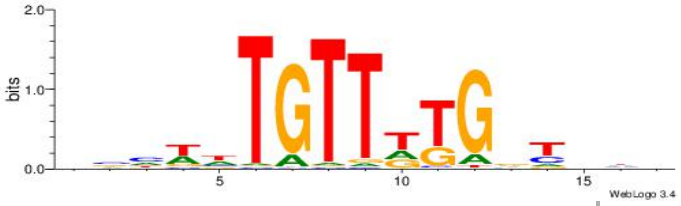
Original motif

Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif

Consensus sequence: DVHWDTGTTWTGDTBDH

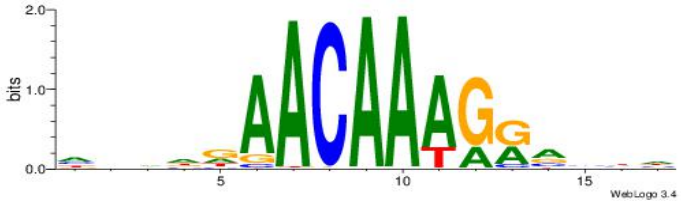


Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

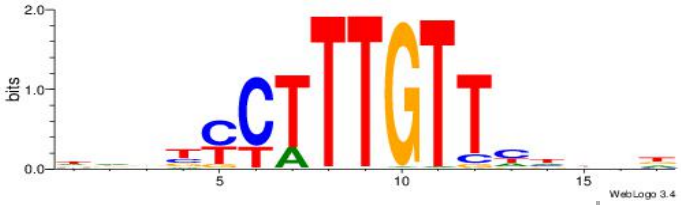
Number of overlap: 11
Similarity score: 0.00687646

Alignment:
HBDDDAACAAAGRVBHH
----AAACAAAACAA--

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: 3
Number of overlap: 11
Similarity score: 0.00927121

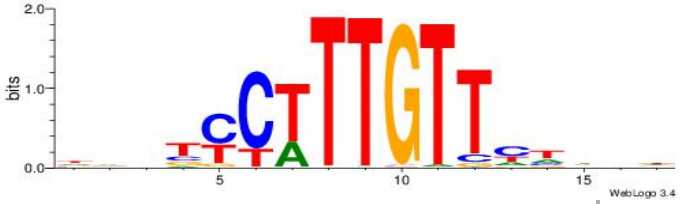
Alignment:
HBDDRAACAAAGRABHH
----AAACAAAACAA--

Original motif

Reverse complement motif

Consensus sequence: HBDDRAACAAAGRABHH

Consensus sequence: HHBTMCTTTGTTMDDVH



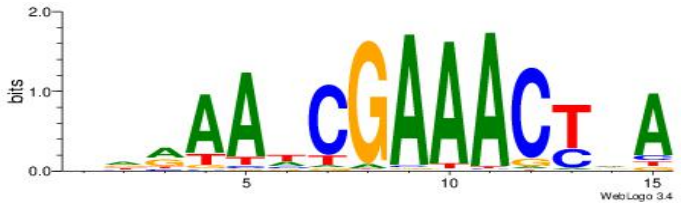
Motif ID:	UP00074
Motif name:	Isgf3g_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.00929598

Alignment:

```
VDRAAWCGAAACTDA
---AAACAAAACAA-
```

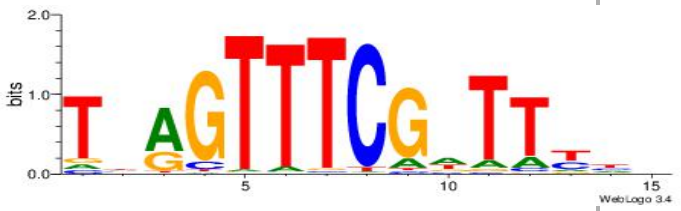
Original motif

Consensus sequence: VDRAAWCGAAACTDA



Reverse complement motif

Consensus sequence: TDAGTTTCGWTTKDV



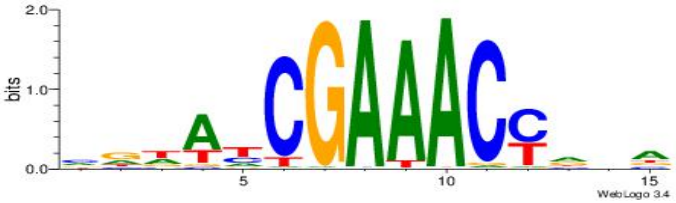
Motif ID:	UP00018
Motif name:	Irf4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0107669

Alignment:

```
TBDKGTTTCGMTDHV
--TTGTTTTGTTT--
```

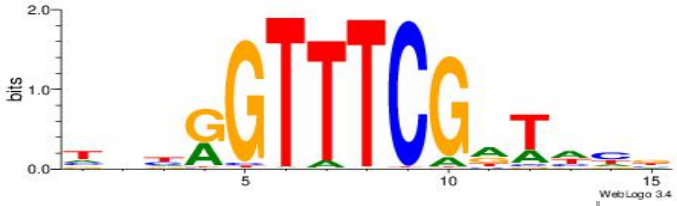
Original motif

Consensus sequence: VDDAYCGAAACYDVA



Reverse complement motif

Consensus sequence: TBDKGTTTCGMTDHV

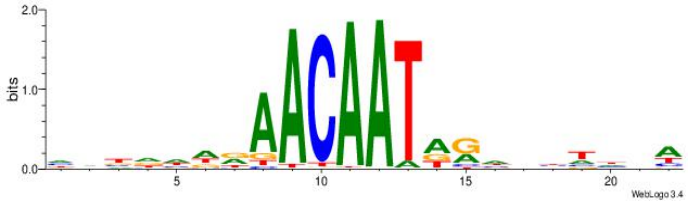


Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6

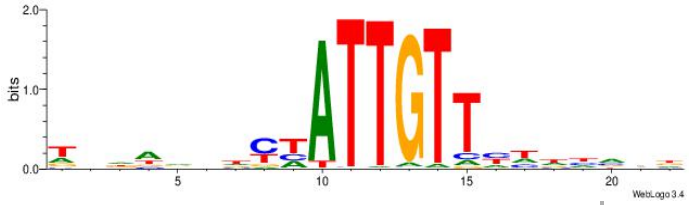
Number of overlap: 11
Similarity score: 0.0108575

Alignment:
HHBDHDDAACAATDRHHHHHBW
------AAACAAAACAA-----

Original motif
Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif
Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



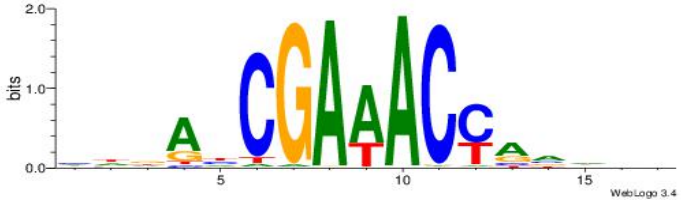
Motif ID: UP00011
Motif name: Irf6_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0123014

Alignment:
DHDBTKGTTTCGHTHDD
----TTGTTTTGTTT--

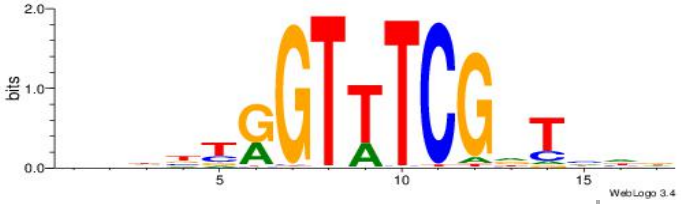
Original motif

Reverse complement motif

Consensus sequence: HDDAHCGAAACYAVDDD



Consensus sequence: DHDBTKGTTTCGHTHDD



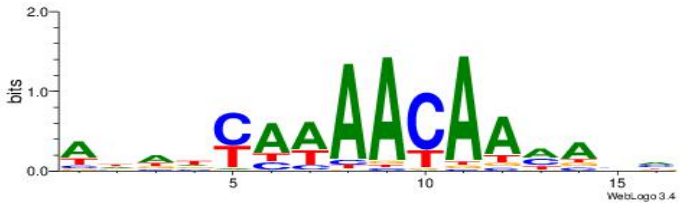
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.0135558

Alignment:

```
HDTYTTGTTWTKDDDT
----TTGTTTTGTTT-
```

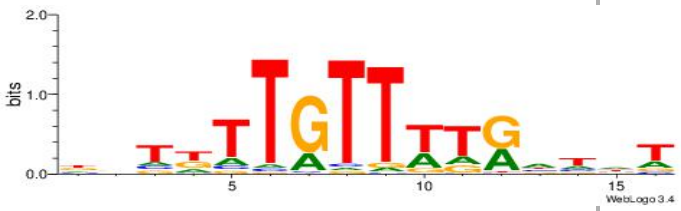
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT



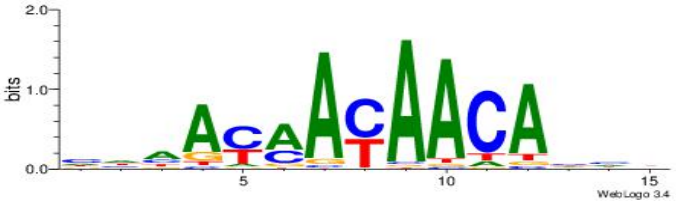
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0135993

Alignment:

```
HDDTGTTKTTKTHHD
--TTGTTTTGTTT--
```

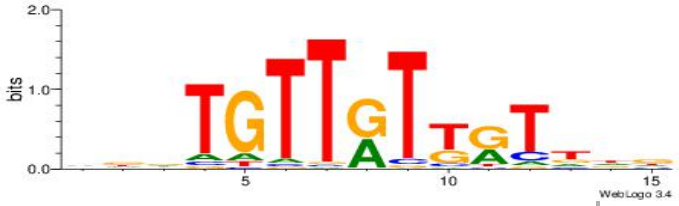
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD



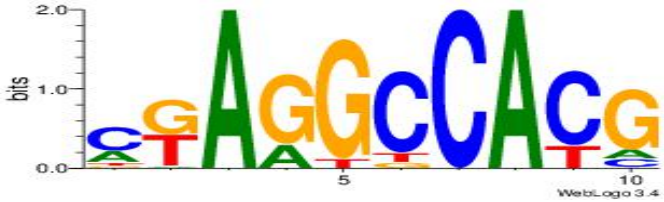
Dataset #: 4 **Motif ID: 70** **Motif name: mkARGCCACG**

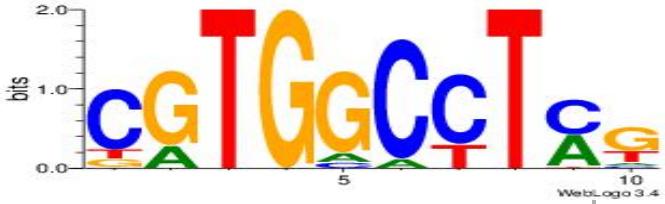
Original motif

Consensus sequence: CKAGGCCACG

Reverse complement motif

Consensus sequence: CGTGGCCTYG





Best Matches for Motif ID 70 (Highest to Lowest)

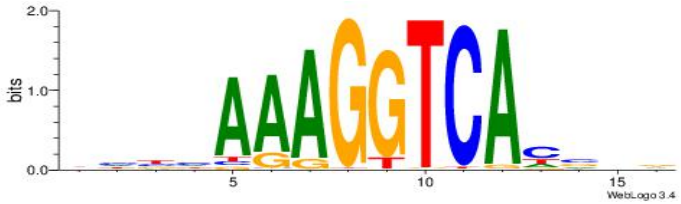
Motif ID:	UP00048
Motif name:	Rara
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0144802

Alignment:

```
DHBHAAAGGTCACVHD
----CKAGGCCACG--
```

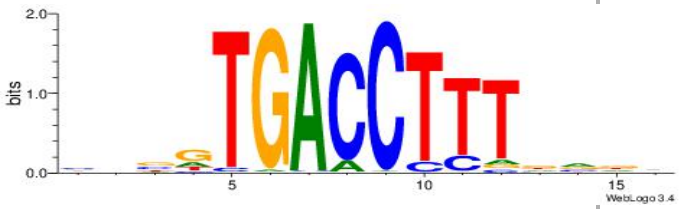
Original motif

Consensus sequence: DHBHAAAGGTCACVHD



Reverse complement motif

Consensus sequence: HHVGTGACCTTTDVDD



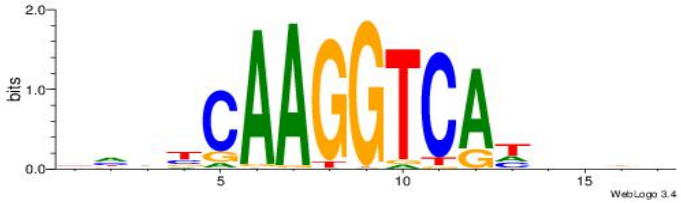
Motif ID:	UP00079
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0173934

Alignment:

```
HHBVHTGACCTTGVDHD
---CGTGGCCTYG----
```

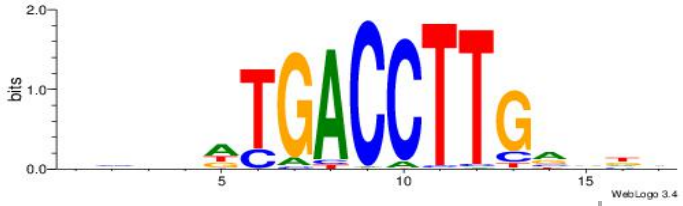
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



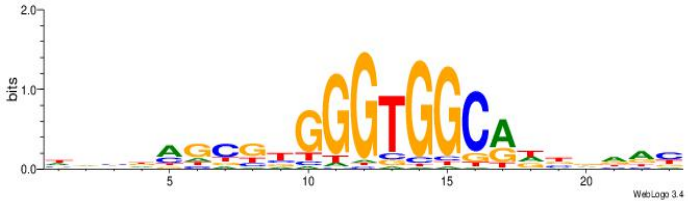
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

Number of overlap: 10
Similarity score: 0.0178167

Alignment:
HVBDAGCGBGGGTGGCRDBDDDB
----------CGTGGCCTYG---

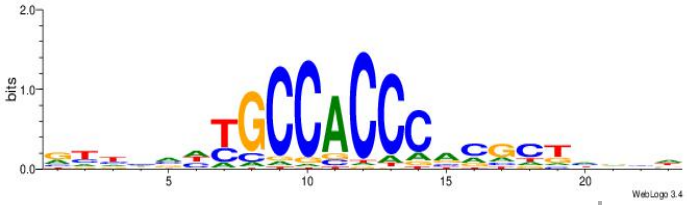
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



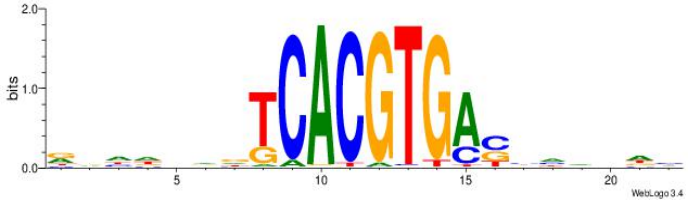
Motif ID: UP00050
Motif name: Bhlhb2_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 11
Number of overlap: 10
Similarity score: 0.0188256

Alignment:
DDHBHBSTCACGTGAHBBDHHM
--CKAGGCCACG----------

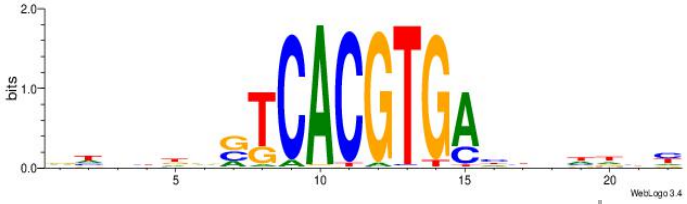
Original motif

Reverse complement motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Consensus sequence: DDHBHBSTCACGTGAHBBDHHM



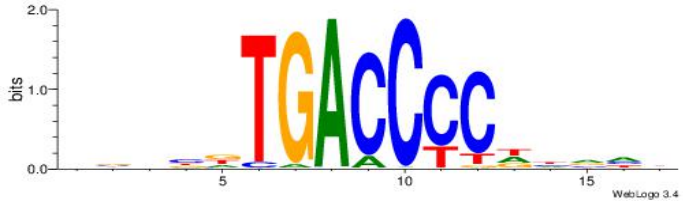
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0205842

Alignment:

```
DBHBDTGACCCCDHVHB
---CGTGGCCTYG----
```

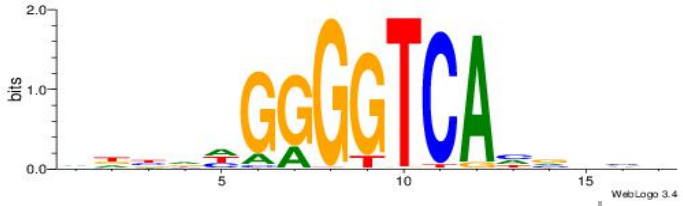
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



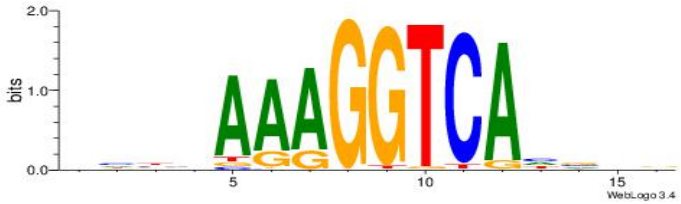
Motif ID:	UP00009
Motif name:	Nr2f2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.0209211

Alignment:

```
DHBHAAAGGTCAHVHB
----CKAGGCCACG--
```

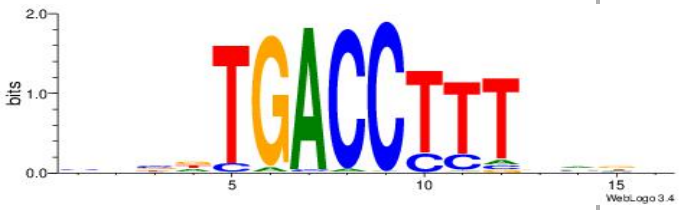
Original motif

Consensus sequence: DHBHAAAGGTCAHVHB



Reverse complement motif

Consensus sequence: BHVDTGACCTTTDVDD

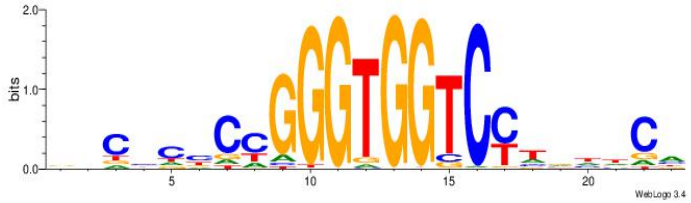


Motif ID:	UP00538
Motif name:	Gli1_v016060_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10

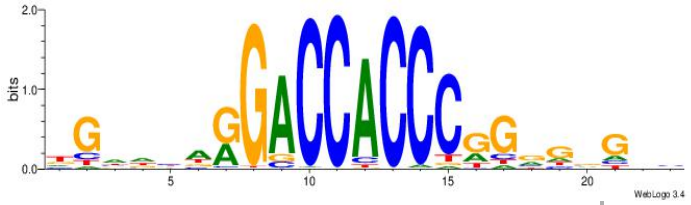
Number of overlap: 10
Similarity score: 0.0210008

Alignment:
BHCBCBCCGGGTGGTCYHVHDCH
---------CGTGGCCTYG----

Original motif
Consensus sequence: BHCBCBCCGGGTGGTCYHVHDCH



Reverse complement motif
Consensus sequence: HGDHVHKGACCACCCGGBGBGDB

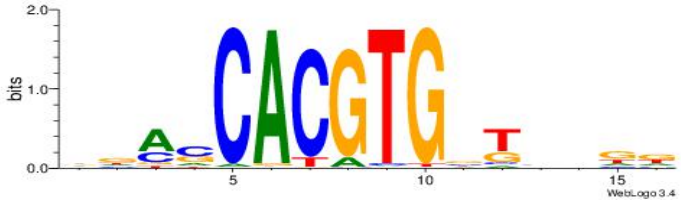


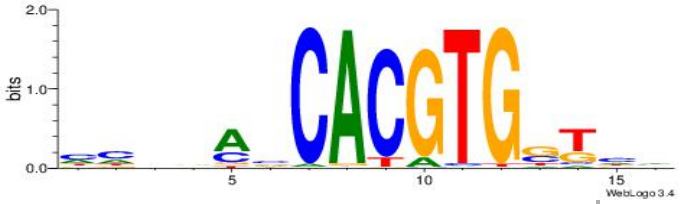
Motif ID: UP00060
Motif name: Max_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 10
Similarity score: 0.0213955

Alignment:
DDASCACGTGBTBVDD
CKAGGCCACG------

Original motif
Consensus sequence: DDASCACGTGBTBVDD

Reverse complement motif
Consensus sequence: HHVBABCACGTGSTHD





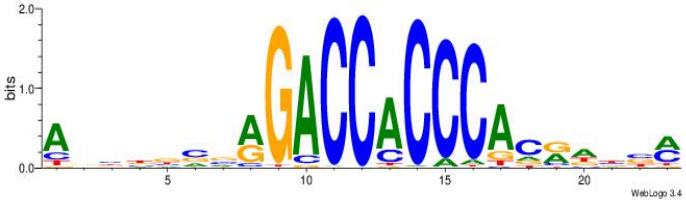
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.021686

Alignment:

```
YBVDMGTGGGTGGTCKVVBVBBT
--------CGTGGCCTYG-----
```

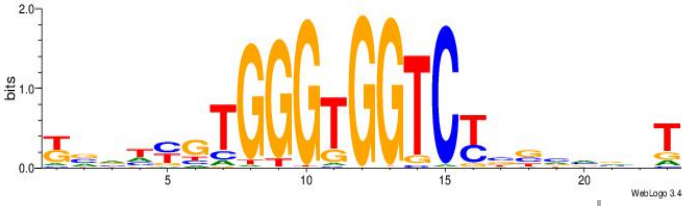
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



Motif ID:	UP00538

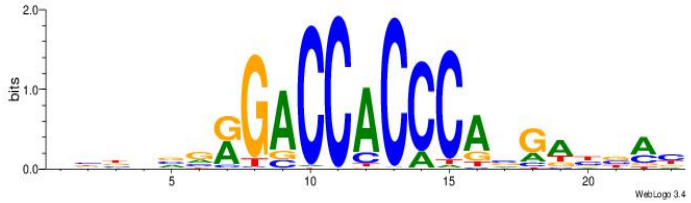
Motif name:	Gli1_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	10
Number of overlap:	10
Similarity score:	0.0217225

Alignment:

```
BBBDVVRGACCACCCAVGABBAB
----CKAGGCCACG---------
```

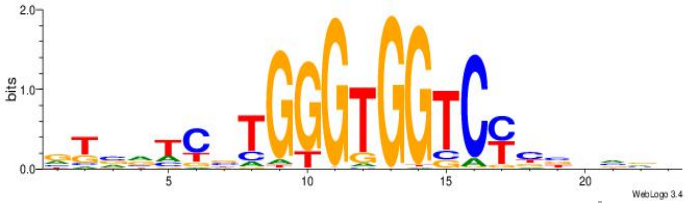
Original motif

Consensus sequence: BBBDVVRGACCACCCAVGABBAB



Reverse complement motif

Consensus sequence: BTBVTCVTGGGTGGTCMVVDVBB



Dataset #: 4 **Motif ID: 71** **Motif name: wyATTTTAww**

Original motif

Consensus sequence: DHATTTTADD

Reverse complement motif

Consensus sequence: DDTAAAATHD

Best Matches for Motif ID 71 (Highest to Lowest)

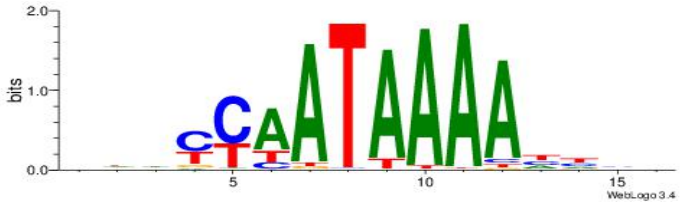
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0

Alignment:

```
HDHHTTTTATTKKHDD
-DHATTTTADD-----
```

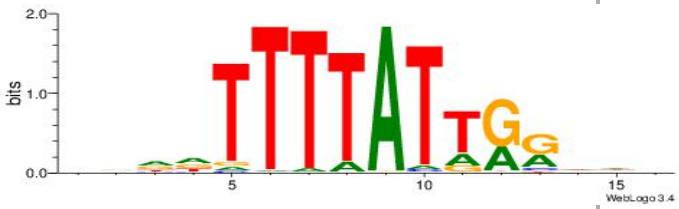
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



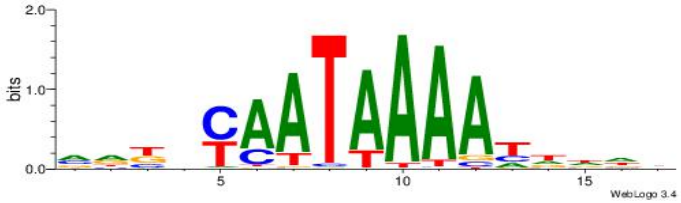
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.00187158

Alignment:

```
HDDDATTTTATTKVRDB
--DHATTTTADD-----
```

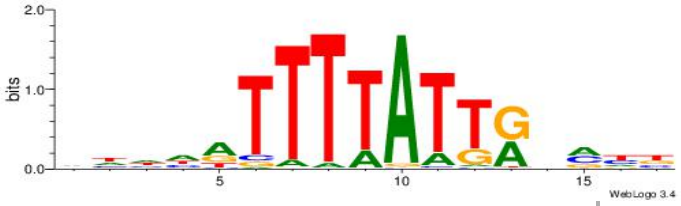
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB

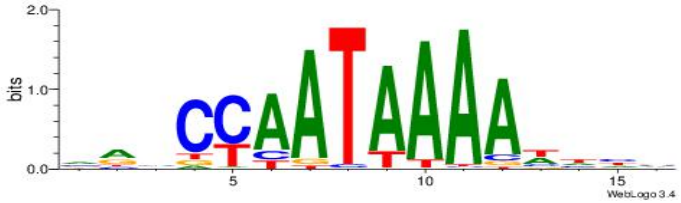


Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

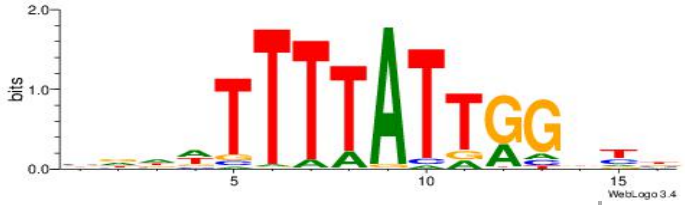
Number of overlap: 10
Similarity score: 0.00524503

Alignment:
VDHWTTTTATTGGDKB
-DHATTTTADD-----

Original motif
Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif
Consensus sequence: VDHWTTTTATTGGDKB



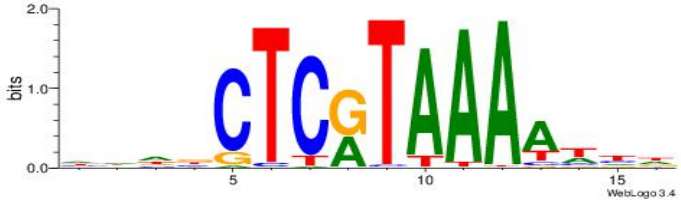
Motif ID: UP00173
Motif name: Hoxc13
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 7
Number of overlap: 10
Similarity score: 0.00820036

Alignment:
DHWTTTTAMGAGBDHH
DHATTTTADD------

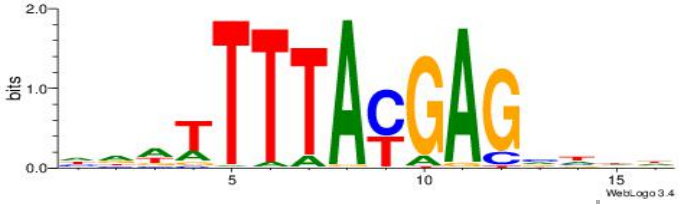
Original motif

Reverse complement motif

Consensus sequence: HHDBCTCRTAAAAWHD



Consensus sequence: DHWTTTTAMGAGBDHH



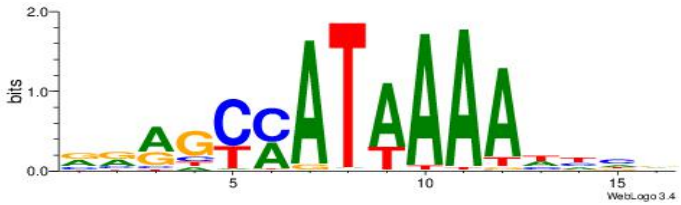
Motif ID:	UP00207
Motif name:	Hoxb9
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.00965417

Alignment:

```
HDHHTTTTATRGCKMV
-DHATTTTADD-----
```

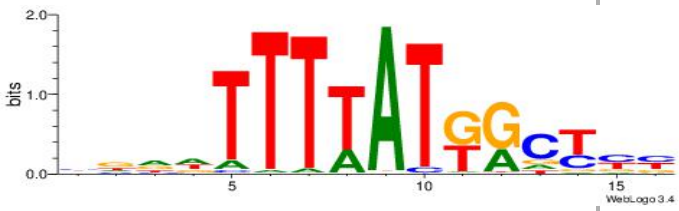
Original motif

Consensus sequence: VRRGCMATAAAAHHHD



Reverse complement motif

Consensus sequence: HDHHTTTTATRGCKMV



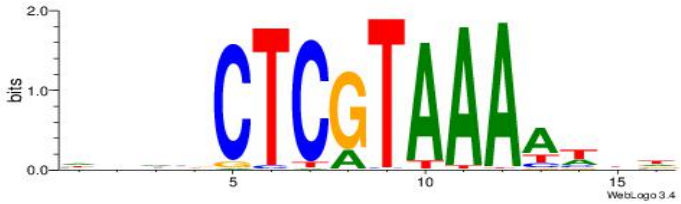
Motif ID:	UP00183
Motif name:	Hoxa13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0126106

Alignment:

```
HDHBCTCGTAAAAWBD
DHATTTTADD------
```

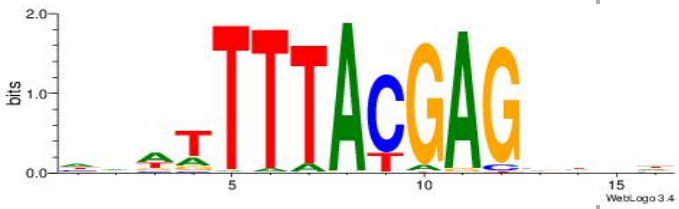
Original motif

Consensus sequence: HDHBCTCGTAAAAWBD



Reverse complement motif

Consensus sequence: DVWTTTTACGAGBHDH

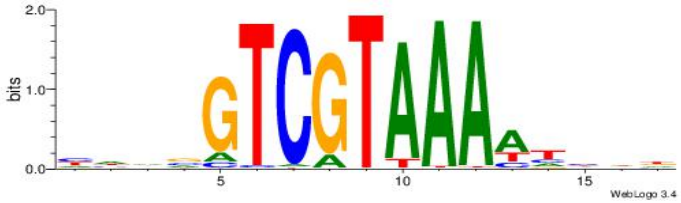


Motif ID:	UP00177
Motif name:	Hoxd12
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10

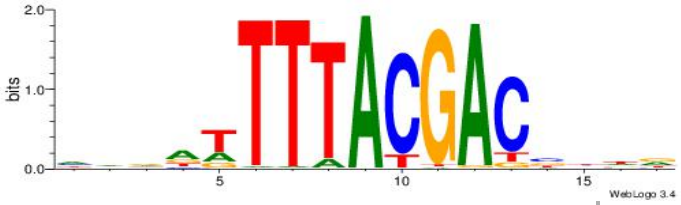
Similarity score: 0.0129115

Alignment:
HHDVGTCGTAAAAHHHD
------DDTAAAATHD-

Original motif
Consensus sequence: HHDVGTCGTAAAAHHHD



Reverse complement motif
Consensus sequence: DHDHTTTTACGACVDHD

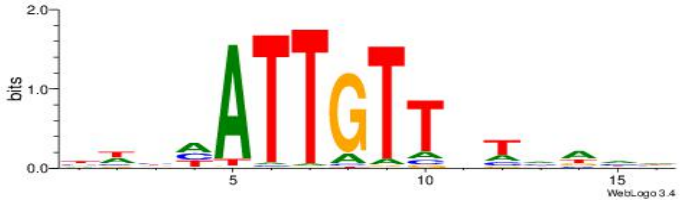


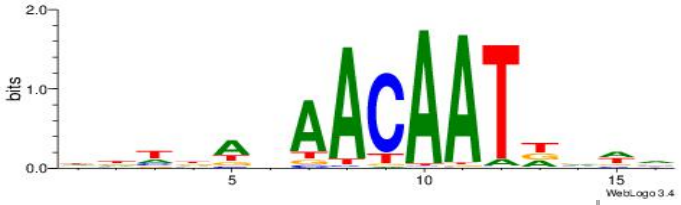
Motif ID: UP00064
Motif name: Sox18_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 10
Similarity score: 0.0140165

Alignment:
HHDHABAACAATHBWV
----DDTAAAATHD--

Original motif
Consensus sequence: BWBHATTGTTBTHDHH

Reverse complement motif
Consensus sequence: HHDHABAACAATHBWV





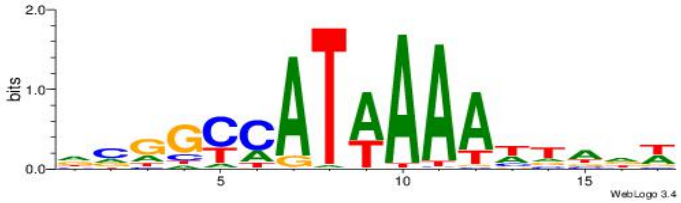
Motif ID:	UP00213
Motif name:	Hoxa9
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0140371

Alignment:

```
WDTAWTTTWATGKCCGD
--DHATTTTADD-----
```

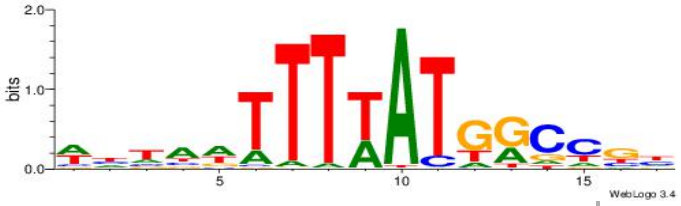
Original motif

Consensus sequence: DCGGYCATWAAAWTADW



Reverse complement motif

Consensus sequence: WDTAWTTTWATGKCCGD



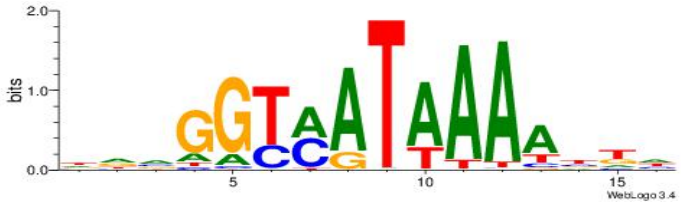
Motif ID:	UP00240
Motif name:	Cdx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.0141313

Alignment:

```
HRVTTTTATYACCBDD
DHATTTTADD------
```

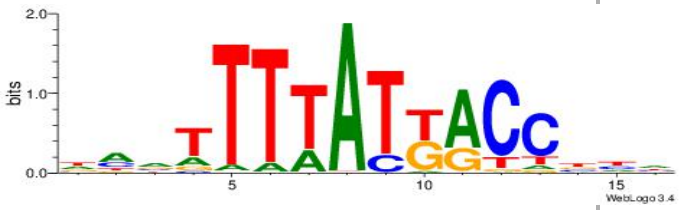
Original motif

Consensus sequence: DDVGGTMATAAAABKH



Reverse complement motif

Consensus sequence: HRVTTTTATYACCBDD



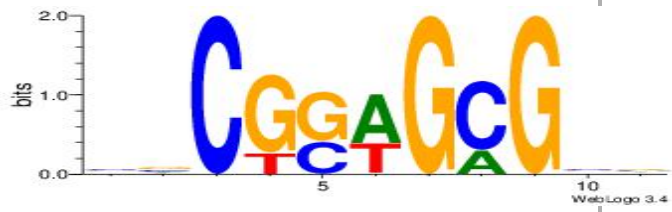
Dataset #: 4 Motif ID: 72 Motif name: ssCKCwsCGss

Original motif

Consensus sequence: BVCGCWSCGBV

Reverse complement motif

Consensus sequence: VBCGSWGCGVB



Best Matches for Motif ID 72 (Highest to Lowest)

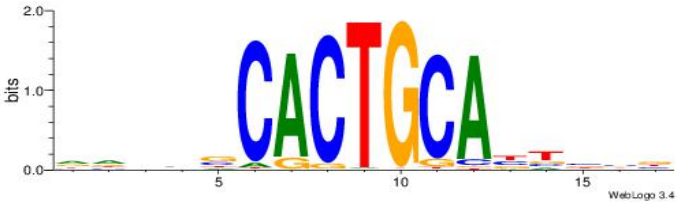
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0194352

Alignment:

```
BBBAVTGCAGTGBBVDD
---VBCGSWGCGVB---
```

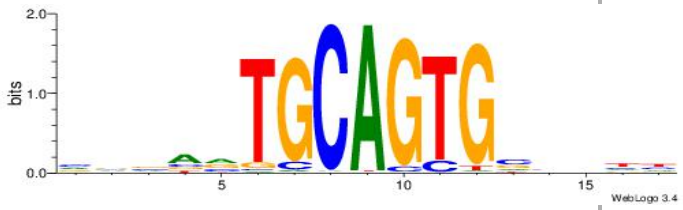
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD



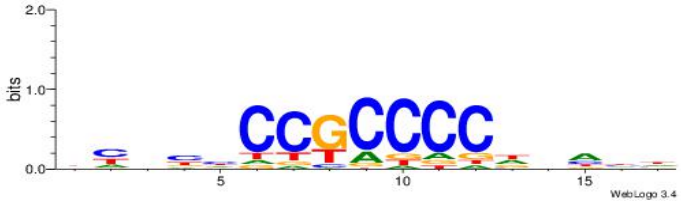
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0228071

Alignment:

```
BHHBHCCGCCCCDHHHH
----BVCGCWSCGBV--
```

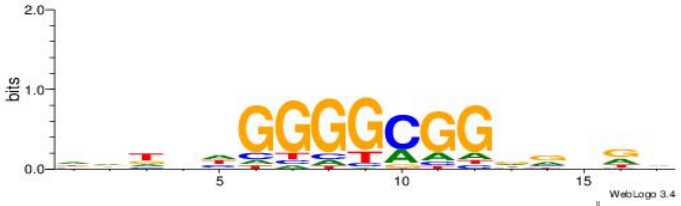
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV

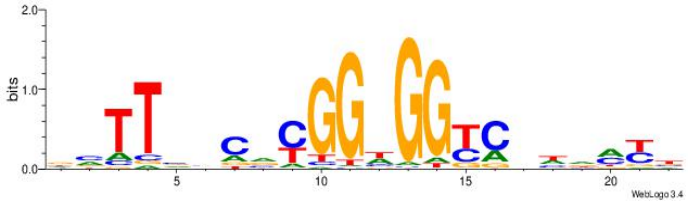


Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	7

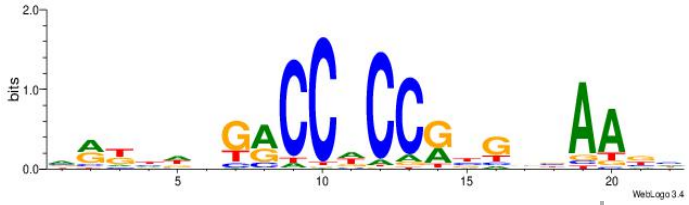
Number of overlap: 11
Similarity score: 0.0232399

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
-----BVCGCWSCGBV------

Original motif
Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif
Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



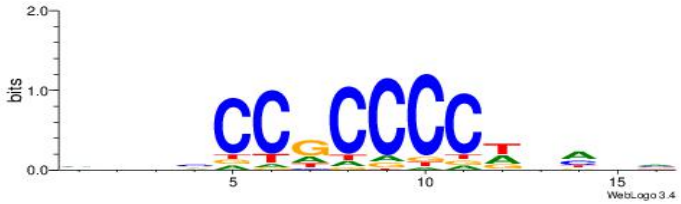
Motif ID: UP00043
Motif name: Bcl6b_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.0234478

Alignment:
HBBBCCGCCCCWHHHV
---BVCGCWSCGBV--

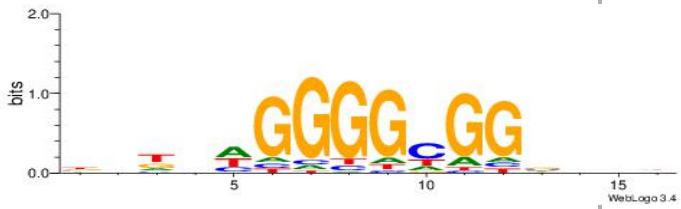
Original motif

Reverse complement motif

Consensus sequence: HBBBCCGCCCCWHHHV



Consensus sequence: BHHHWGGGGCGGBBVH



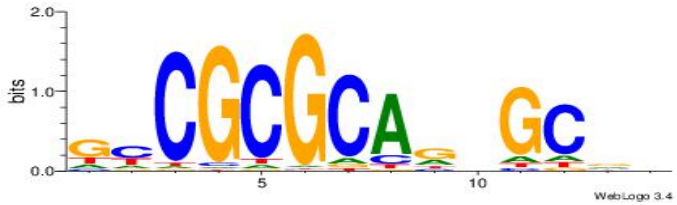
Motif ID:	UP00065
Motif name:	Zfp161_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0252863

Alignment:

```
VVGCVMTGCGCGKC
-VBCGSWGCGVB--
```

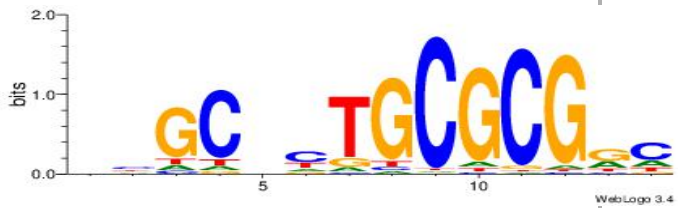
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



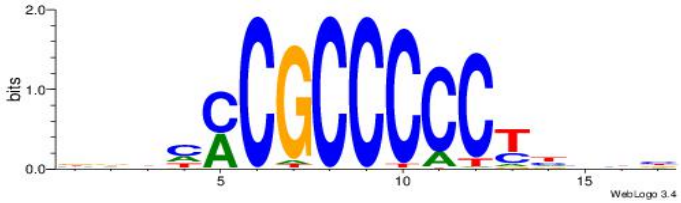
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0275921

Alignment:

```
BDHHMCGCCCCCTHVBB
---BVCGCWSCGBV---
```

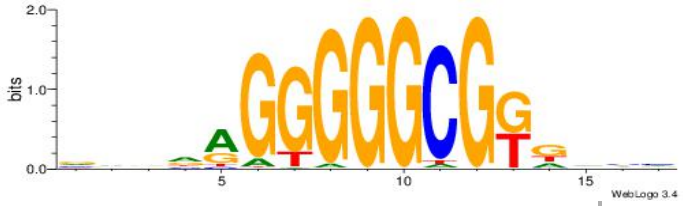
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB

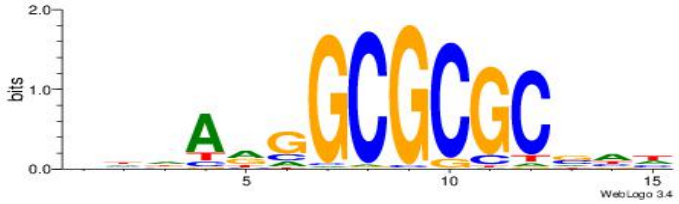


Motif ID:	UP00001
Motif name:	E2F2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

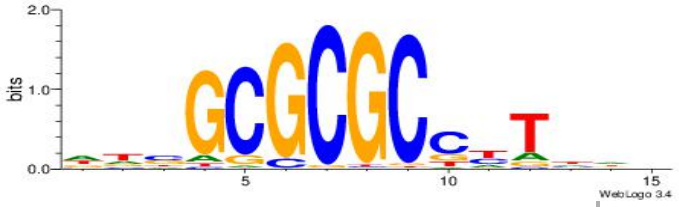
Number of overlap: 11
Similarity score: 0.0283575

Alignment:
HHVGCGCGCCKTDHB
--BVCGCWSCGBV--

Original motif
Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif
Consensus sequence: HHVGCGCGCCKTDHB



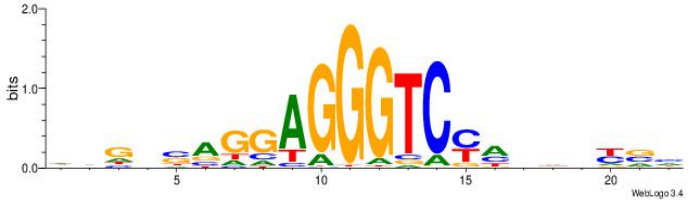
Motif ID: UP00539
Motif name: Gli2_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0283837

Alignment:
DVMHHDHKGACCCTCCTSVCBH
--------BVCGCWSCGBV---

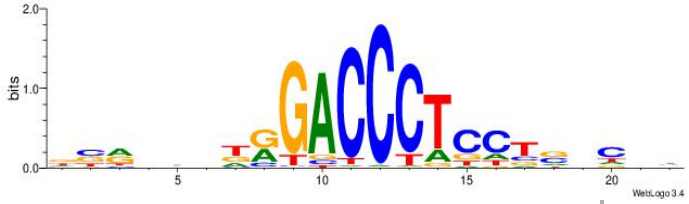
Original motif

Reverse complement motif

Consensus sequence: HVGVSAGGAGGGTCYHHHHYVH



Consensus sequence: DVMHHDHKGACCCTCCTSVCBH



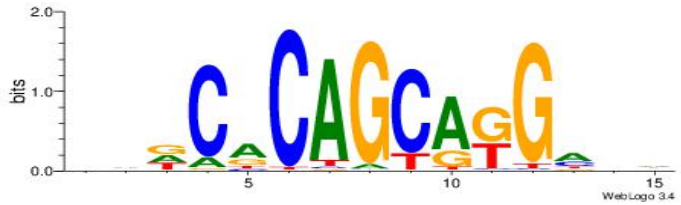
Motif ID:	UP00006
Motif name:	Zic3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0285568

Alignment:

```
DDDCACAGCAKGHVD
-VBCGSWGCGVB---
```

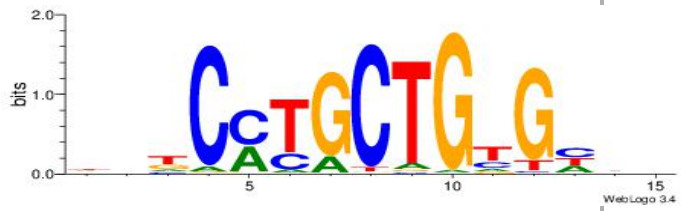
Original motif

Consensus sequence: DDDCACAGCAKGHVD



Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



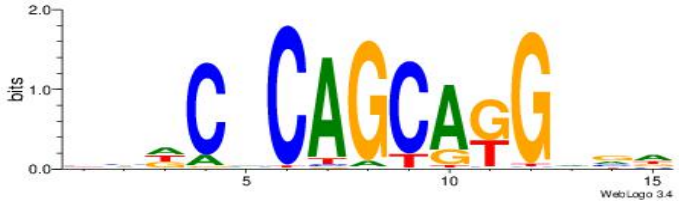
Motif ID:	UP00057
Motif name:	Zic2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0289868

Alignment:

```
HHDCVCAGCAKGVVD
-VBCGSWGCGVB---
```

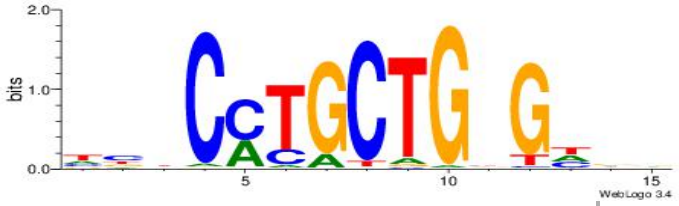
Original motif

Consensus sequence: HHDCVCAGCAKGVVD



Reverse complement motif

Consensus sequence: DVBCYTGCTGBGDDD



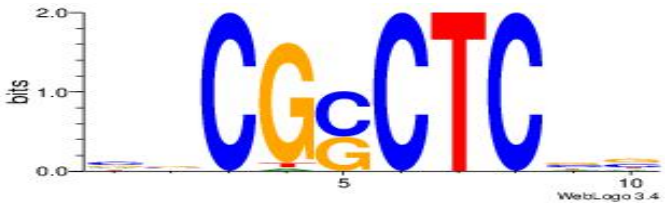
Dataset #: 4 **Motif ID: 73** **Motif name: ssCGsCTCss**

Original motif

Consensus sequence: VVCGSCTCBB

Reverse complement motif

Consensus sequence: BBGAGSCGVV



Best Matches for Motif ID 73 (Highest to Lowest)

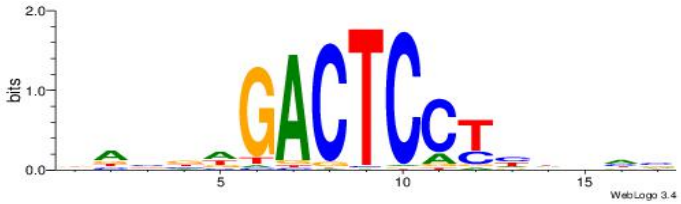
Motif ID:	UP00095
Motif name:	Zfp691_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	10
Similarity score:	0.00650959

Alignment:

```
VHBDDAGGAGTCWBBTD
-----BBGAGSCGVV--
```

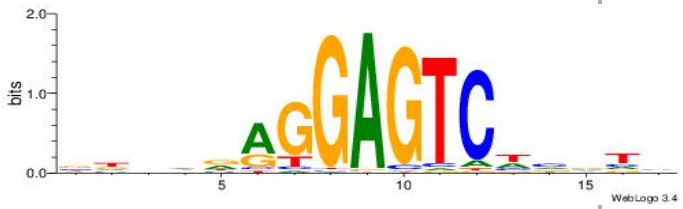
Original motif

Consensus sequence: DABBWGACTCCTHDVHV



Reverse complement motif

Consensus sequence: VHBDDAGGAGTCWBBTD



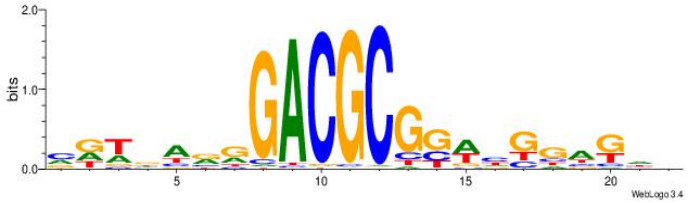
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	10
Similarity score:	0.00768675

Alignment:

```
VDWDARRGACGCGGWHGGAKHV
-----BBGAGSCGVV-------
```

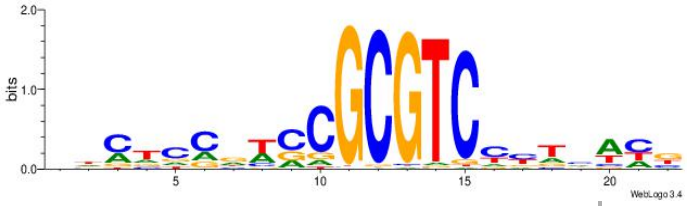
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV

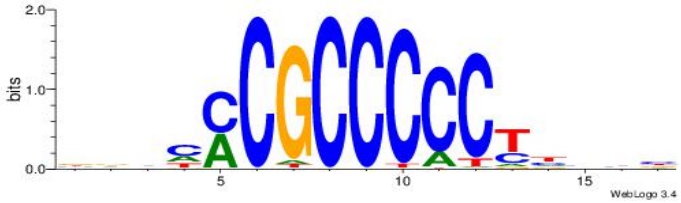


Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

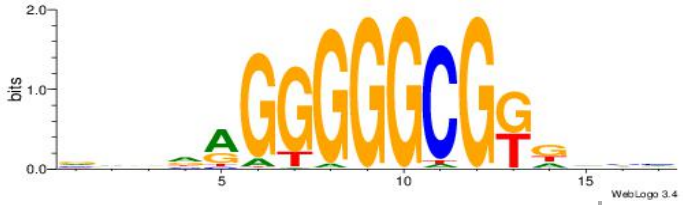
Number of overlap: 10
Similarity score: 0.011635

Alignment:
BDHHMCGCCCCCTHVBB
---VVCGSCTCBB----

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB



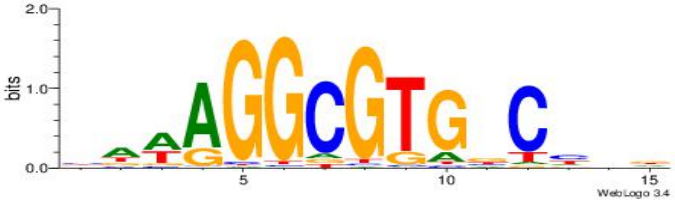
Motif ID: UP00002
Motif name: Sp4_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.014161

Alignment:
BDWAGGCGTGBCHHD
BBGAGSCGVV-----

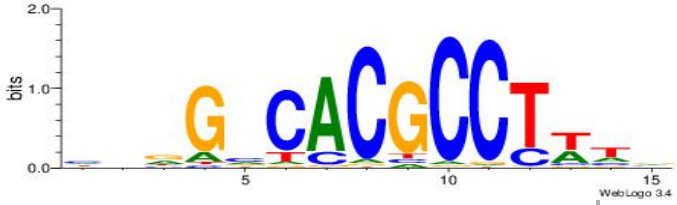
Original motif

Reverse complement motif

Consensus sequence: BDWAGGCGTGBCHHD



Consensus sequence: HHDGBCACGCCTWDB



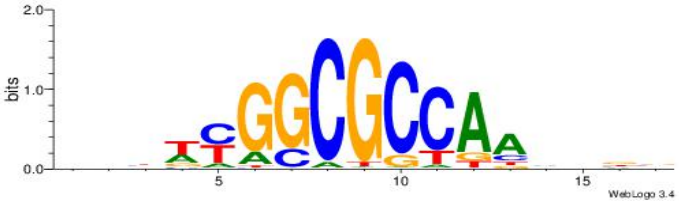
Motif ID:	UP00001
Motif name:	E2F2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0149491

Alignment:

```
BBBDTTGGCGCCKWVVD
------VVCGSCTCBB-
```

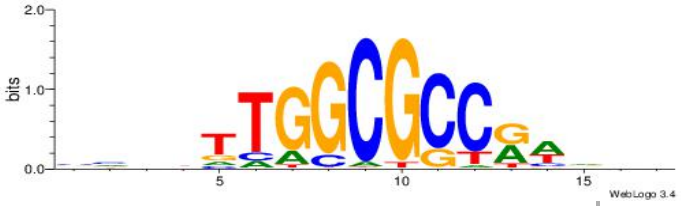
Original motif

Consensus sequence: HVBWYGGCGCCAADVBB



Reverse complement motif

Consensus sequence: BBBDTTGGCGCCKWVVD



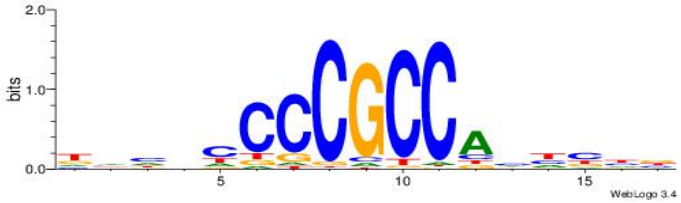
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0155554

Alignment:

```
BHBHDTGGCGGGGBDHD
--BBGAGSCGVV-----
```

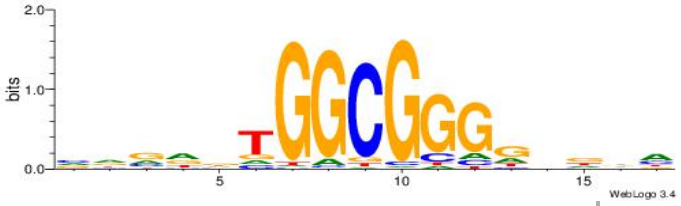
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD

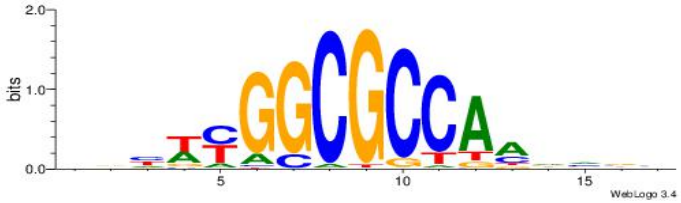


Motif ID:	UP00003
Motif name:	E2F3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	7

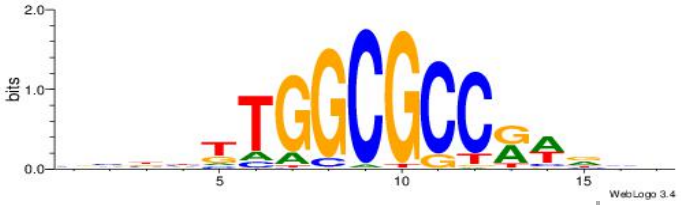
Number of overlap: 10
Similarity score: 0.016609

Alignment:
BBBDYTGGCGCCKWDBD
------VVCGSCTCBB-

Original motif
Consensus sequence: HBHWYGGCGCCAMDVBB



Reverse complement motif
Consensus sequence: BBBDYTGGCGCCKWDBD



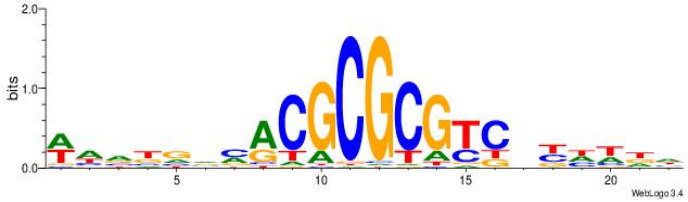
Motif ID: UP00526
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 10
Similarity score: 0.0169272

Alignment:
HDWHMHGACGCGCGTRBVVBHW
----BBGAGSCGVV--------

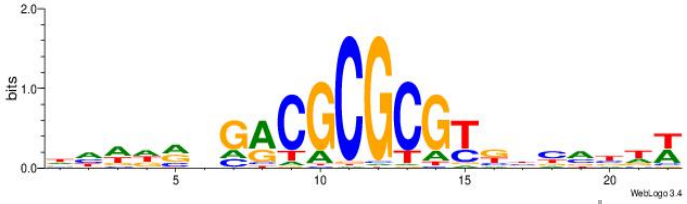
Original motif

Reverse complement motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



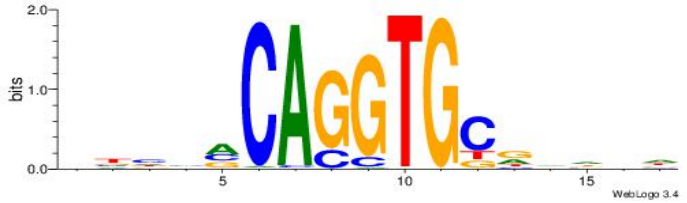
Motif ID:	UP00046
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0171375

Alignment:

```
DHDBHGCACCTGBDDVB
----VVCGSCTCBB---
```

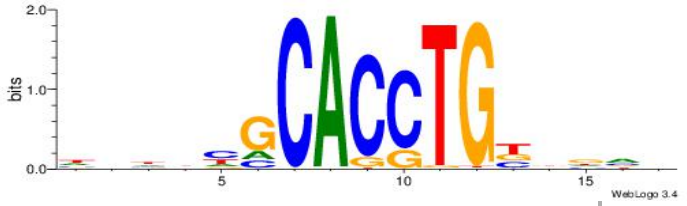
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



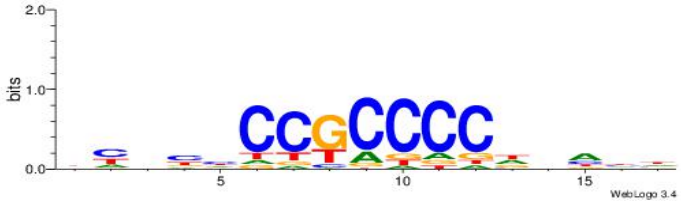
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0.0173375

Alignment:

```
HHHHDGGGGCGGDBHDV
---BBGAGSCGVV----
```

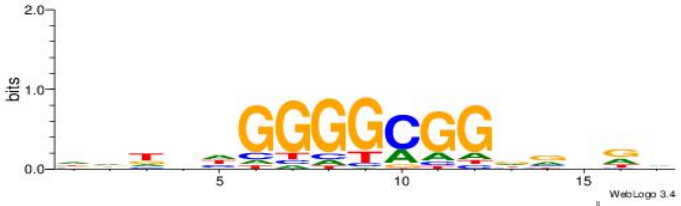
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



Dataset #: 4 Motif ID: 74 Motif name: twTACATAvw

Original motif

Consensus sequence: HHTACATAVD

Reverse complement motif

Consensus sequence: DBTATGTAHH

Best Matches for Motif ID 74 (Highest to Lowest)

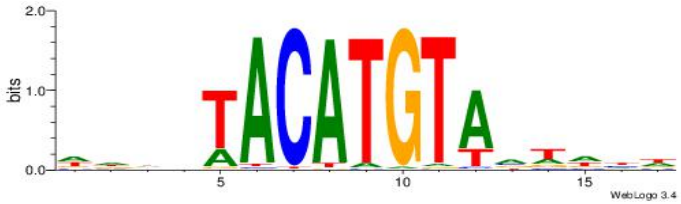
Motif ID:	UP00223
Motif name:	Irx3_2226.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0123822

Alignment:

```
DDDHTACATGTAVWDHD
--HHTACATAVD-----
```

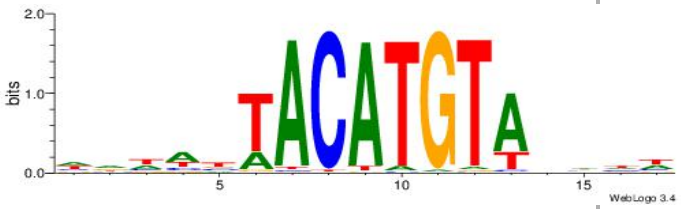
Original motif

Consensus sequence: DDDHTACATGTAVWDHD



Reverse complement motif

Consensus sequence: DHDWBTACATGTAHDDD



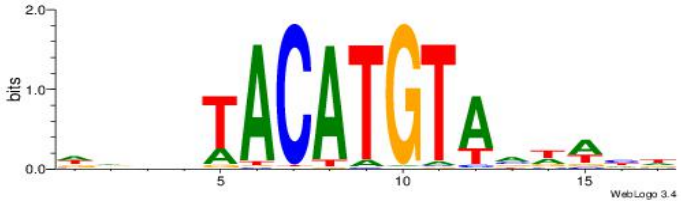
Motif ID:	UP00223
Motif name:	Irx3_0920.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0137483

Alignment:

```
DDDDTACATGTAVWWHD
--HHTACATAVD-----
```

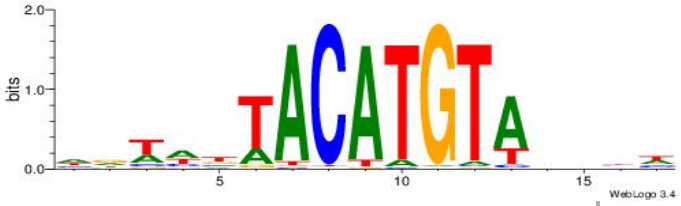
Original motif

Consensus sequence: DDDDTACATGTAVWWHD



Reverse complement motif

Consensus sequence: DDWWBTACATGTADDDD

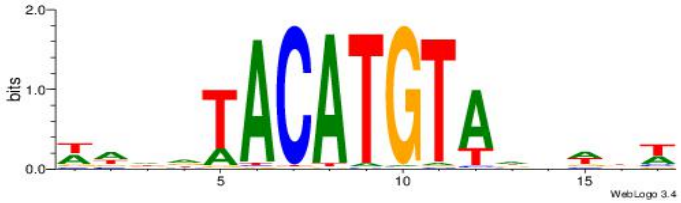


Motif ID:	UP00236
Motif name:	Irx2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5

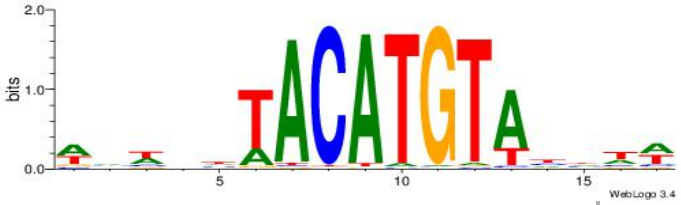
Number of overlap: 10
Similarity score: 0.0138736

Alignment:
WDDDTACATGTADDWBW
----DBTATGTAHH---

Original motif
Consensus sequence: WDDDTACATGTADDWBW



Reverse complement motif
Consensus sequence: WVWDDTACATGTADDDW



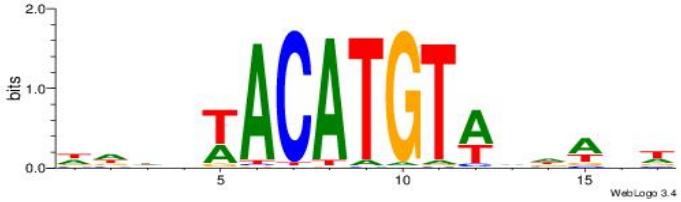
Motif ID: UP00250
Motif name: Irx5
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.0139791

Alignment:
DDDHWACATGTWHDABW
--HHTACATAVD-----

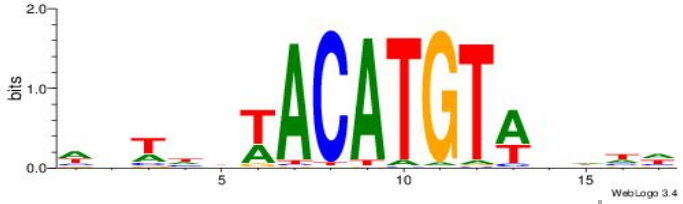
Original motif

Reverse complement motif

Consensus sequence: DDDHWACATGTWHDABW



Consensus sequence: WVTDHWACATGTWHDDD



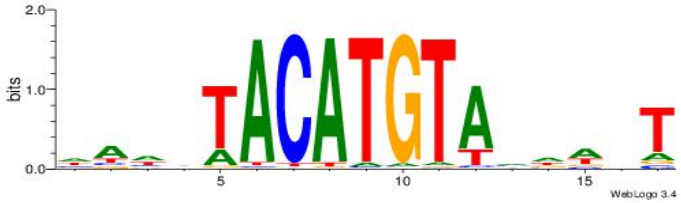
Motif ID:	UP00150
Motif name:	Irx6
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.0152254

Alignment:

```
HAHDTACATGTAVDWHT
----DBTATGTAHH---
```

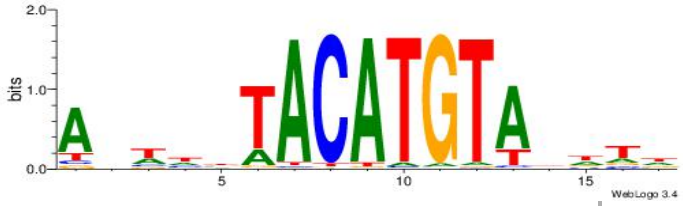
Original motif

Consensus sequence: HAHDTACATGTAVDWHT



Reverse complement motif

Consensus sequence: AHWDBTACATGTADHTH



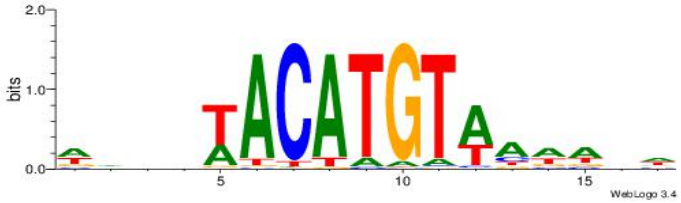
Motif ID:	UP00194
Motif name:	Irx4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	6
Number of overlap:	10
Similarity score:	0.0164523

Alignment:

```
WDHDWACATGTWAWABD
--HHTACATAVD-----
```

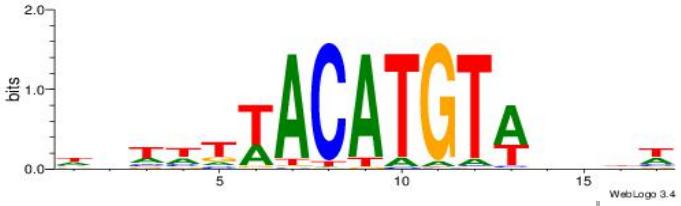
Original motif

Consensus sequence: WDHDWACATGTWAWABD



Reverse complement motif

Consensus sequence: DBTWTWACATGTWDHDW

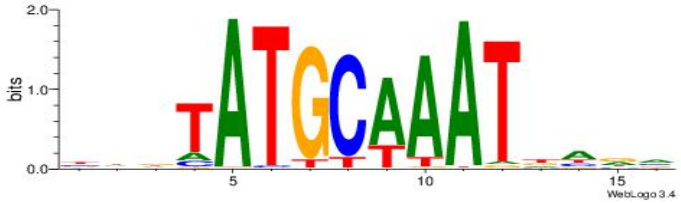


Motif ID:	UP00191
Motif name:	Pou2f2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

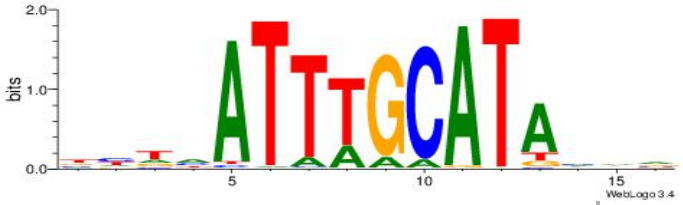
Number of overlap: 10
Similarity score: 0.0201818

Alignment:
BHDTATGCAAATDHDV
-DBTATGTAHH-----

Original motif
Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif
Consensus sequence: BHHDATTTGCATAHHV



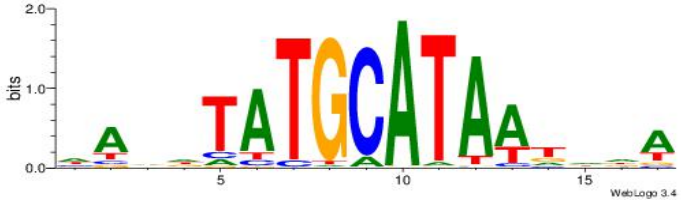
Motif ID: UP00211
Motif name: Pou3f3
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 10
Similarity score: 0.0208328

Alignment:
TDDATTATGCATADDTH
---DBTATGTAHH----

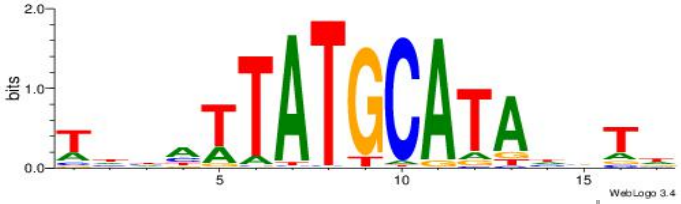
Original motif

Reverse complement motif

Consensus sequence: HADDTATGCATAATDDA



Consensus sequence: TDDATTATGCATADDTH



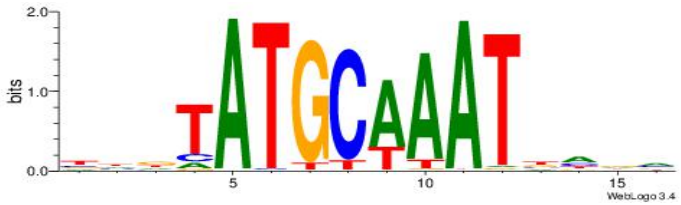
Motif ID:	UP00179
Motif name:	Pou2f3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.021579

Alignment:

```
BHDTATGCAAATBHDV
-DBTATGTAHH-----
```

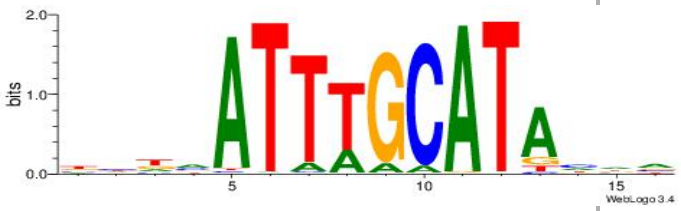
Original motif

Consensus sequence: BHDTATGCAAATBHDV



Reverse complement motif

Consensus sequence: BHHVATTTGCATAHHV



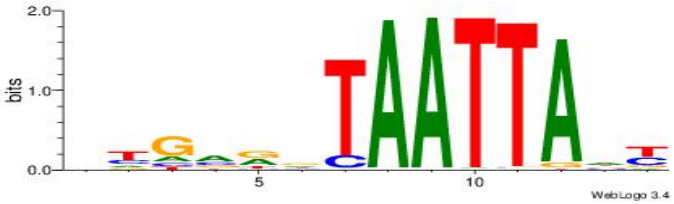
Motif ID:	UP00202
Motif name:	Dlx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	10
Similarity score:	0.022481

Alignment:

```
BHGVRDTAATTADY
HHTACATAVD----
```

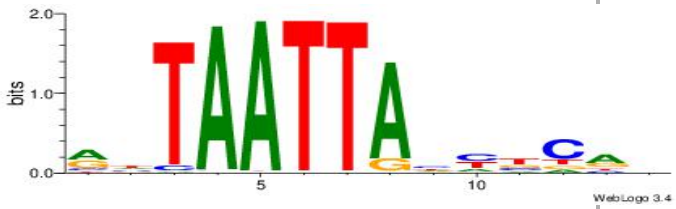
Original motif

Consensus sequence: BHGVRDTAATTADY



Reverse complement motif

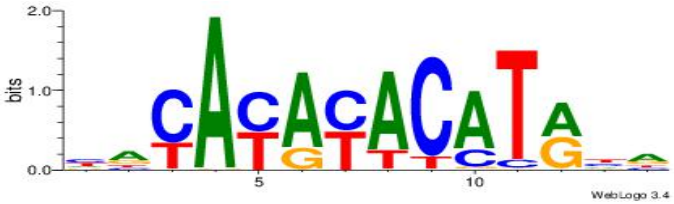
Consensus sequence: MDTAATTAHMBCHB



Dataset #: 4 Motif ID: 75 Motif name: yayAyAyACATrya

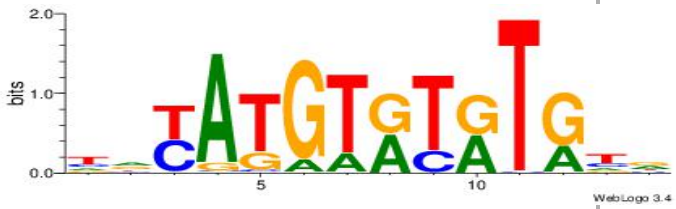
Original motif

Consensus sequence: HACAYAYACATRHD



Reverse complement motif

Consensus sequence: DHKATGTKTKTGTD



Best Matches for Motif ID 75 (Highest to Lowest)

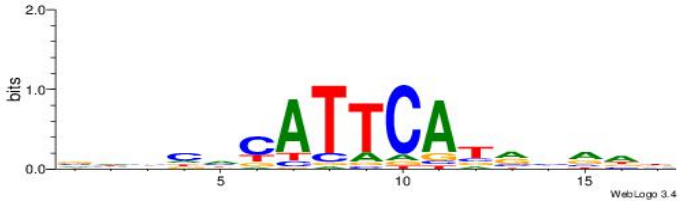
Motif ID:	UP00014
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0162651

Alignment:

```
VHBHHCATTCATRHVDD
-HACAYAYACATRHD--
```

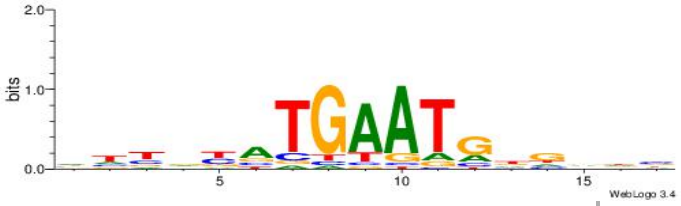
Original motif

Consensus sequence: VHBHHCATTCATRHVDD



Reverse complement motif

Consensus sequence: DDBDKATGAATGHDBHV



Motif ID:	UP00084
Motif name:	Gmeb1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif

Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0312261

Alignment:

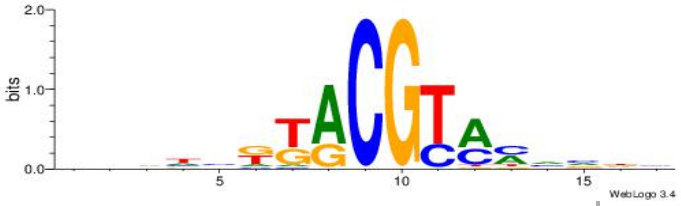
```
BVVDVRYACGTRYVBHB
HACAYAYACATRHD---
```

Original motif

Consensus sequence: BHBBKKACGTMMVDBVB

Reverse complement motif

Consensus sequence: BVVDVRYACGTRYVBHB



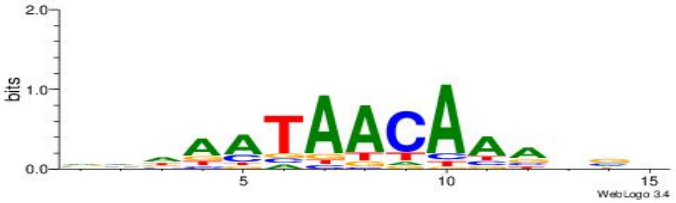
Motif ID:	UP00073
Motif name:	Foxa2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0319641

Alignment:

BVVTTTGTTATTDBB
-DHKATGTKTKTGTD

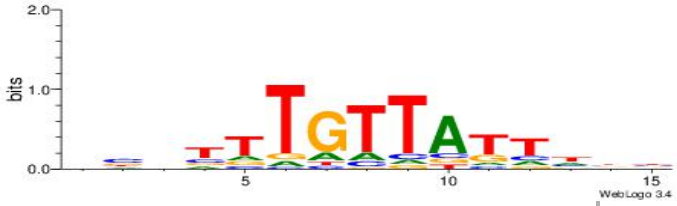
Original motif

Consensus sequence: VVDAATAACAAAVVB



Reverse complement motif

Consensus sequence: BVVTTTGTTATTDBB



Motif ID:	UP00094
Motif name:	Zfp128_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:	0.0330608

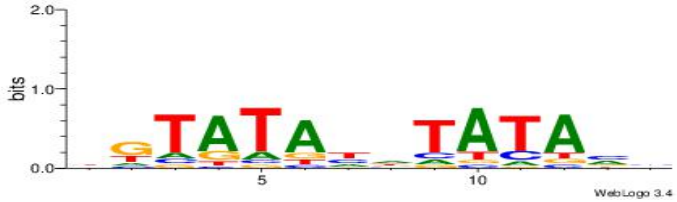
Alignment:
DGTATAHDTATAVV
HACAYAYACATRHD

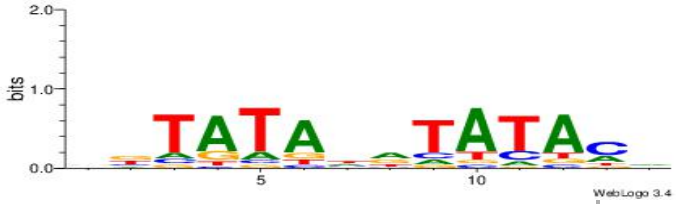
Original motif

Consensus sequence: DGTATAHDTATAVV

Reverse complement motif

Consensus sequence: VVTATADHTATACD





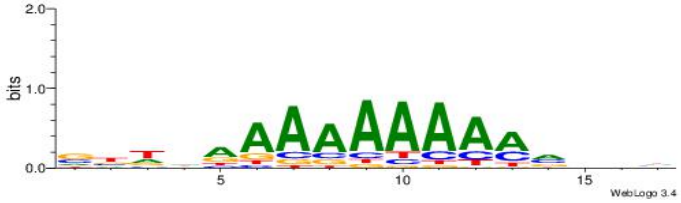
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.0335825

Alignment:

```
HHVBYTTTTTTTTDDVV
-DHKATGTKTKTGTD--
```

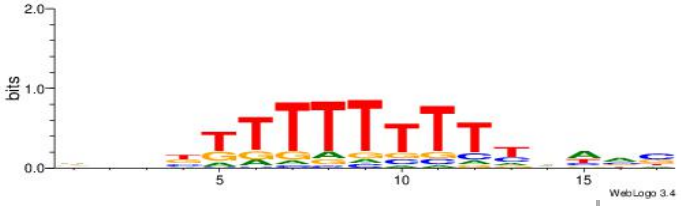
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



Motif ID:	UP00039

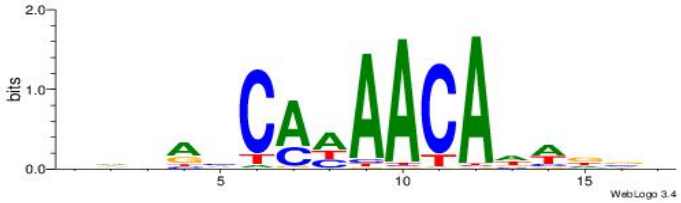
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	14
Similarity score:	0.0337861

Alignment:

```
DVHWDTGTTWTGDTBDH
-DHKATGTKTKTGTD--
```

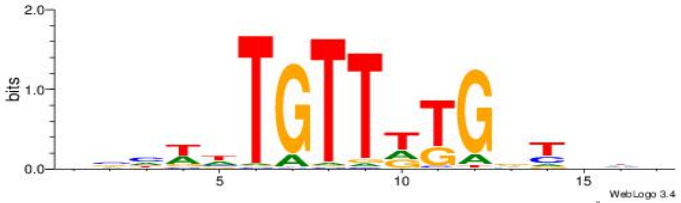
Original motif

Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif

Consensus sequence: DVHWDTGTTWTGDTBDH

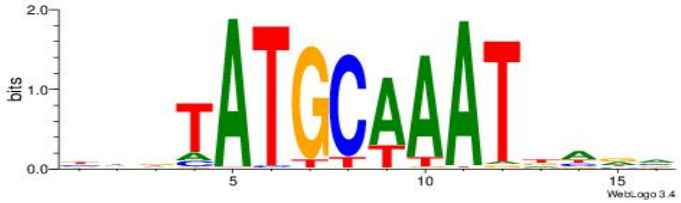


Motif ID:	UP00191
Motif name:	Pou2f2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14

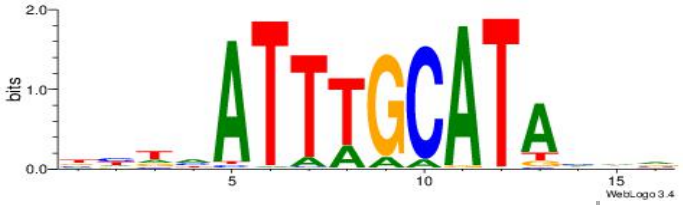
Similarity score: 0.0342561

Alignment:
BHDTATGCAAATDHDV
-HACAYAYACATRHD-

Original motif
Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif
Consensus sequence: BHHDATTTGCATAHHV

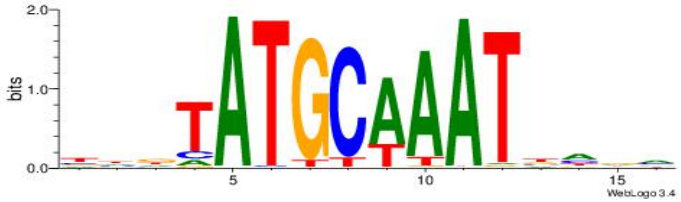


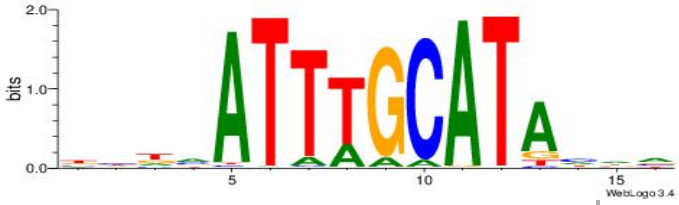
Motif ID: UP00179
Motif name: Pou2f3
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 14
Similarity score: 0.0356249

Alignment:
BHDTATGCAAATBHDV
-HACAYAYACATRHD-

Original motif
Consensus sequence: BHDTATGCAAATBHDV

Reverse complement motif
Consensus sequence: BHHVATTTGCATAHHV





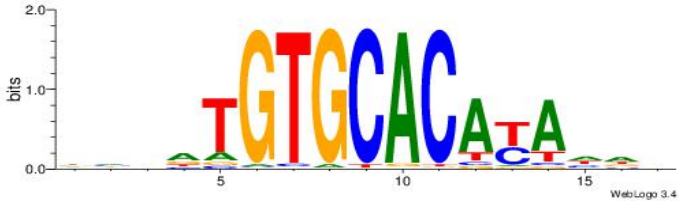
Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0359941

Alignment:

```
DHVDTGTGCACAYAHDH
--HACAYAYACATRHD-
```

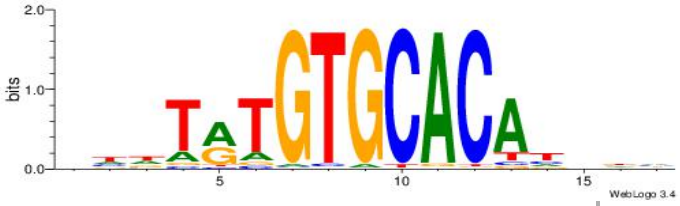
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



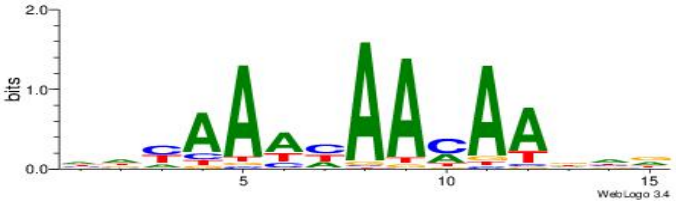
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0382701

Alignment:

```
HHHTTRTTDTTTKDH
DHKATGTKTKTGTD-
```

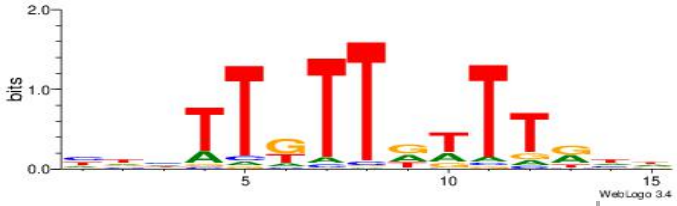
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



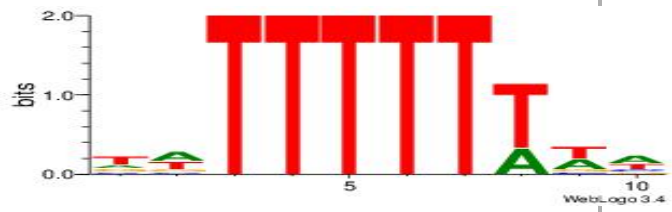
Dataset #: 4 **Motif ID: 76** **Motif name: wwWAAAAAwa**

Original motif

Consensus sequence: WWAAAAAAWH

Reverse complement motif

Consensus sequence: HWTTTTTTWW



Best Matches for Motif ID 76 (Highest to Lowest)

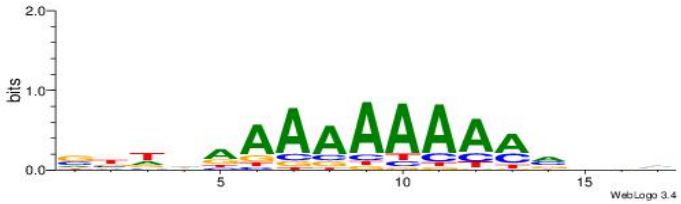
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	10
Similarity score:	0

Alignment:

```
VBDDAAAAAAAAMVBHH
---WWAAAAAAWH----
```

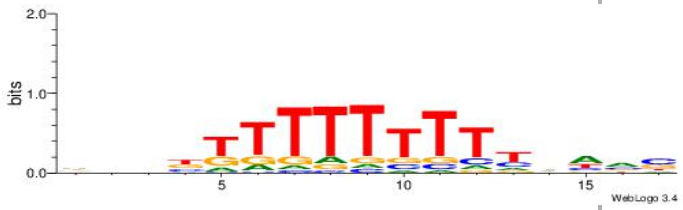
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



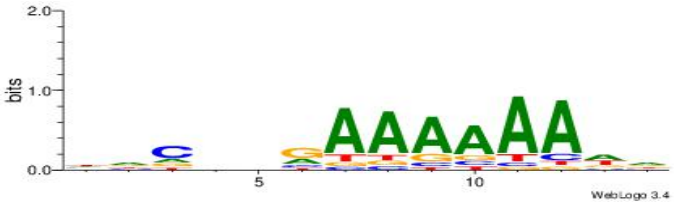
Motif ID:	UP00028
Motif name:	Tcfap2e_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	10
Similarity score:	0.00191846

Alignment:

```
HDCDBRAAAAAADD
----WWAAAAAAWH
```

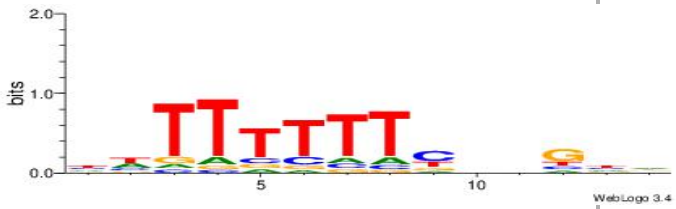
Original motif

Consensus sequence: HDCDBRAAAAAADD



Reverse complement motif

Consensus sequence: DDTTTTTTMBDGDH

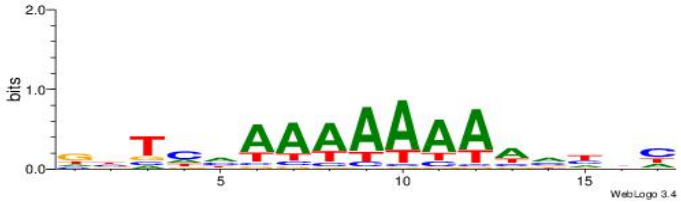


Motif ID:	UP00090
Motif name:	Elf3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10

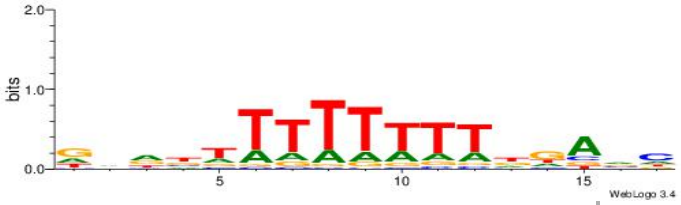
Similarity score: 0.00226308

Alignment:
DBTHHAAAAAAAAVHDH
----WWAAAAAAWH---

Original motif
Consensus sequence: DBTHHAAAAAAAAVHDH



Reverse complement motif
Consensus sequence: DDHBTTTTTTTTHDAVH

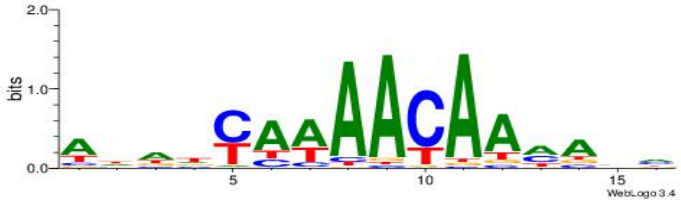


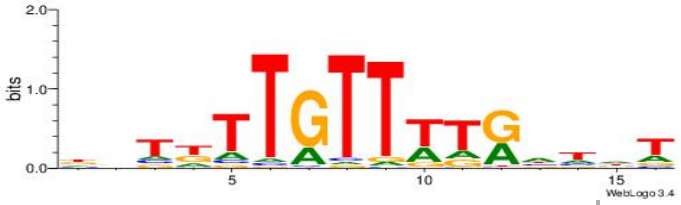
Motif ID: UP00061
Motif name: Foxl1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 10
Similarity score: 0.00489973

Alignment:
HDTYTTGTTWTKDDDT
--HWTTTTTTWW----

Original motif
Consensus sequence: ADDDYAWAACAAMAHH

Reverse complement motif
Consensus sequence: HDTYTTGTTWTKDDDT





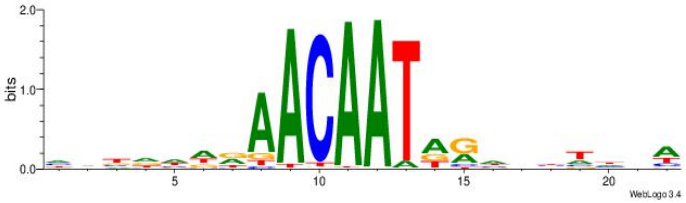
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	9
Number of overlap:	10
Similarity score:	0.00607286

Alignment:

```
HHBDHDDAACAATDRHHHHHBW
----WWAAAAAAWH--------
```

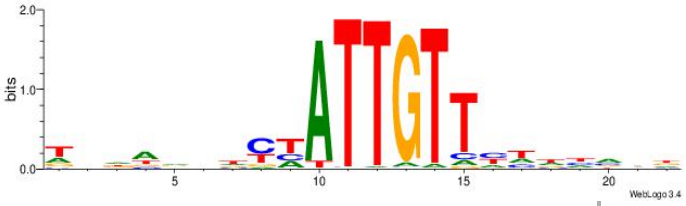
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



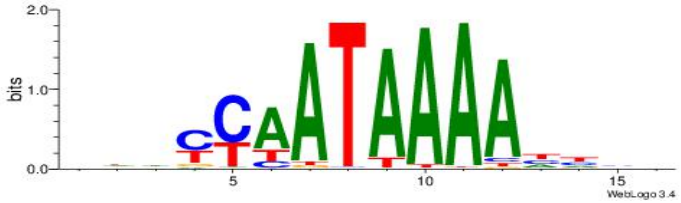
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0064777

Alignment:

```
HDHHTTTTATTKKHDD
--HWTTTTTTWW----
```

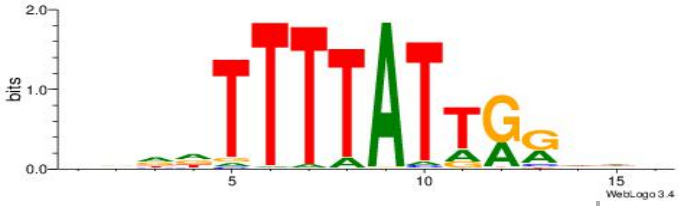
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD

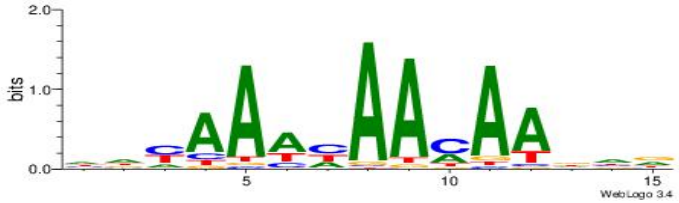


Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2

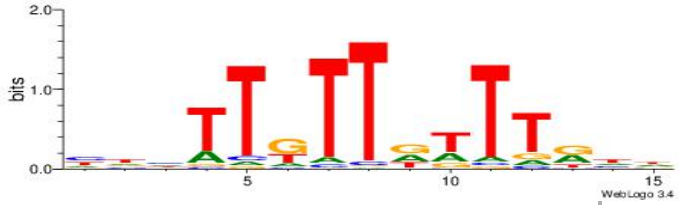
Number of overlap: 10
Similarity score: 0.00782136

Alignment:
HDYAAAHAAMAADHD
----WWAAAAAAWH-

Original motif
Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif
Consensus sequence: HHHTTRTTDTTTKDH



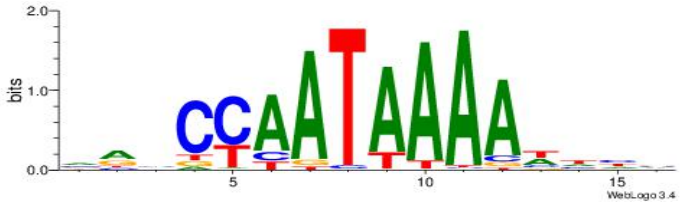
Motif ID: UP00134
Motif name: Hoxb13
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.00834591

Alignment:
VDHWTTTTATTGGDKB
--HWTTTTTTWW----

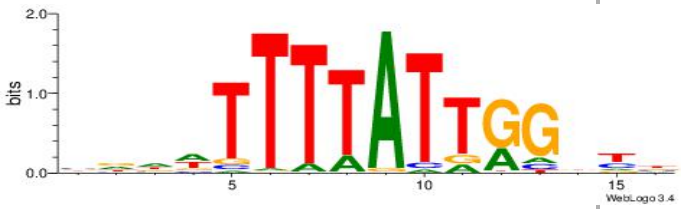
Original motif

Reverse complement motif

Consensus sequence: VRHCCAATAAAAWHHV



Consensus sequence: VDHWTTTTATTGGDKB



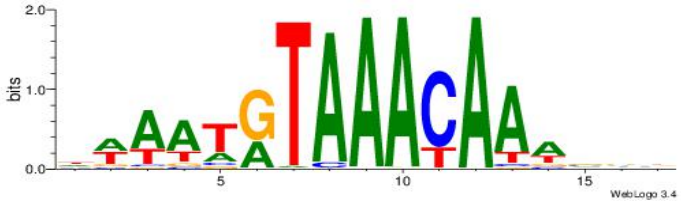
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.0105446

Alignment:

```
VVVWTTGTTTAMATTWD
---HWTTTTTTWW----
```

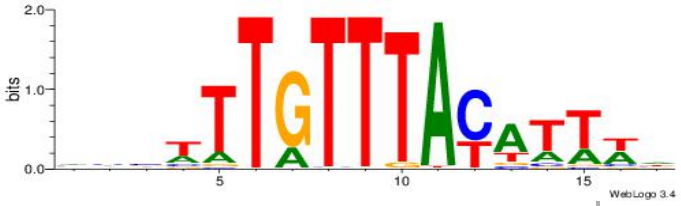
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



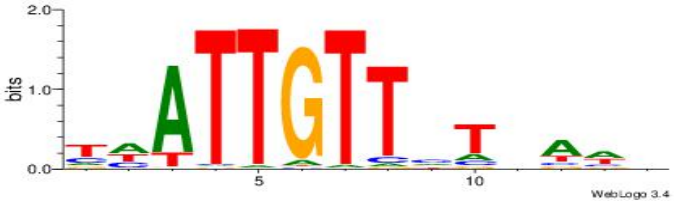
Motif ID:	UP00101
Motif name:	Sox12_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.0107849

Alignment:

```
DWTHAVAACAATHA
---WWAAAAAAWH-
```

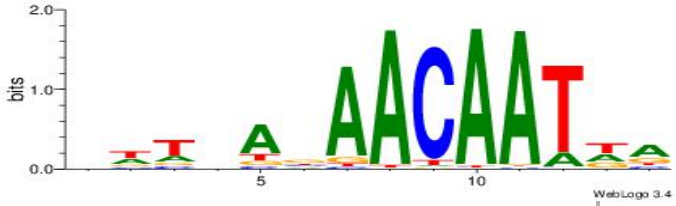
Original motif

Consensus sequence: THATTGTTVTHAWH



Reverse complement motif

Consensus sequence: DWTHAVAACAATHA



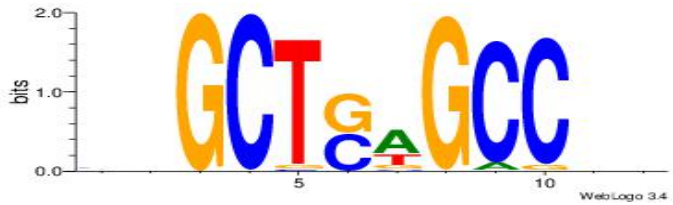
Dataset #: 4 Motif ID: 77 Motif name: ssGCTswGCCms

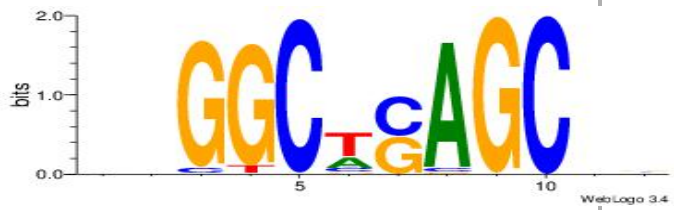
Original motif

Consensus sequence: VBGCTSAGCCHB

Reverse complement motif

Consensus sequence: BDGGCTSAGCBV





Best Matches for Motif ID 77 (Highest to Lowest)

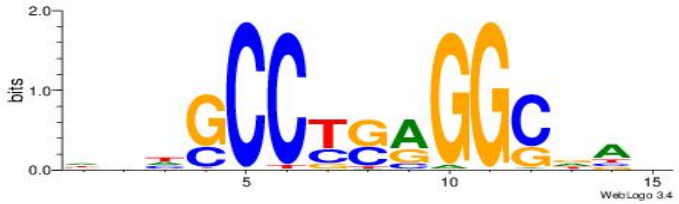
Motif ID:	UP00028
Motif name:	Tcfap2e_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0178468

Alignment:

```
DTHGCCTSAGGCHHH
--VBGCTSAGCCHB-
```

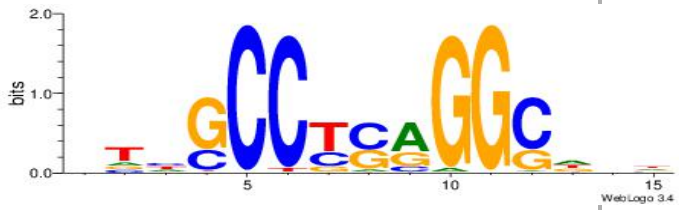
Original motif

Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif

Consensus sequence: DTHGCCTSAGGCHHH



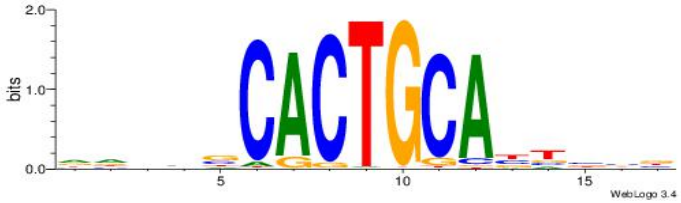
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0257906

Alignment:

```
DDBBBCACTGCABTBBB
--VBGCTSAGCCHB---
```

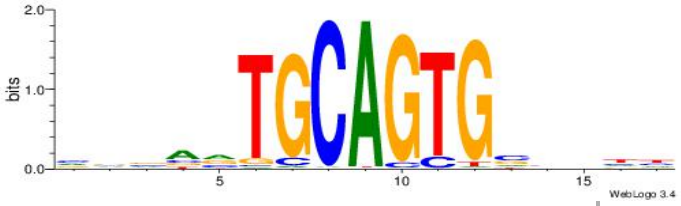
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD

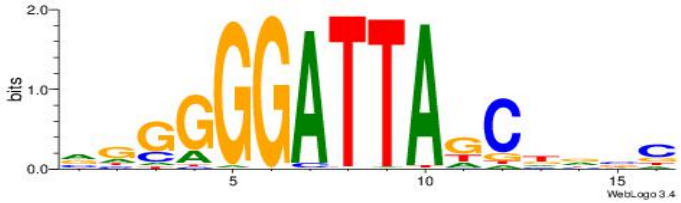


Motif ID:	UP00265
Motif name:	Pitx3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

Number of overlap: 12
Similarity score: 0.0262176

Alignment:
VGGGGGATTAGCDDBC
--BDGGCTSAGCBV--

Original motif
Consensus sequence: VGGGGGATTAGCDDBC



Reverse complement motif
Consensus sequence: GBHDGCTAATCCCCCB

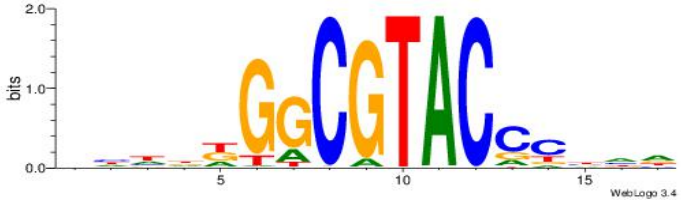
Motif ID: UP00094
Motif name: Zfp128_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0265413

Alignment:
BHHDKGGCGTACCCBHD
---BDGGCTSAGCBV--

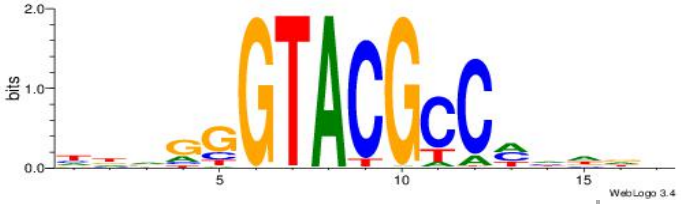
Original motif

Reverse complement motif

Consensus sequence: BHHDKGGCGTACCCBHD



Consensus sequence: DHVGGGTACGCCRDHDV



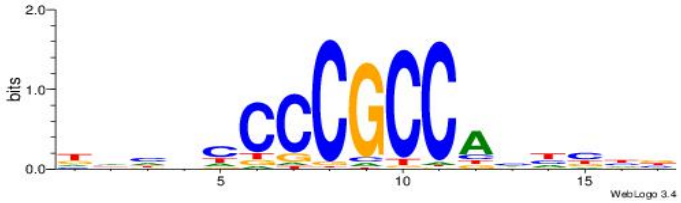
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0265988

Alignment:

```
DHHBCCCCGCCAHHBHB
-VBGCTSAGCCHB----
```

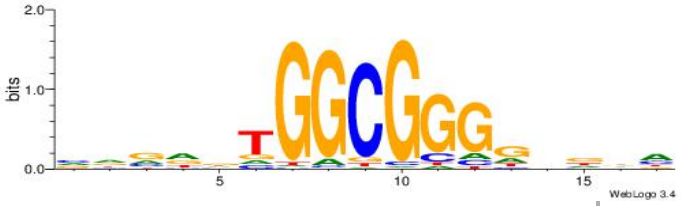
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



Motif ID:	UP00087
Motif name:	Tcfap2c_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0295577

Alignment:

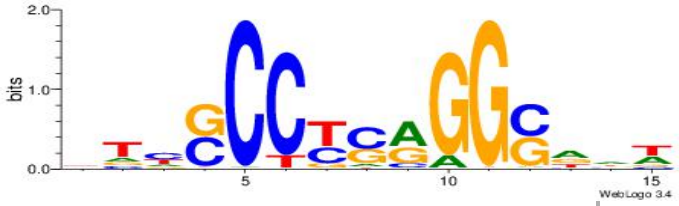
```
DTHSCCKSMGGSHHW
--VBGCTSAGCCHB-
```

Original motif

Consensus sequence: WHHSCCYSRGGSDAD

Reverse complement motif

Consensus sequence: DTHSCCKSMGGSHHW

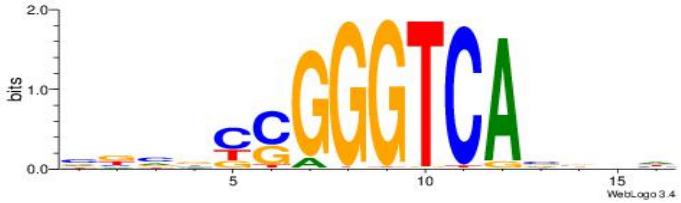


Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1

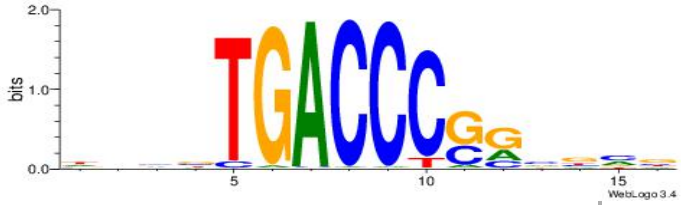
Number of overlap: 12
Similarity score: 0.0296351

Alignment:
VBVBCSGGGTCAVBBH
----BDGGCTSAGCBV

Original motif
Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif
Consensus sequence: HVBVTGACCCSGBVBV



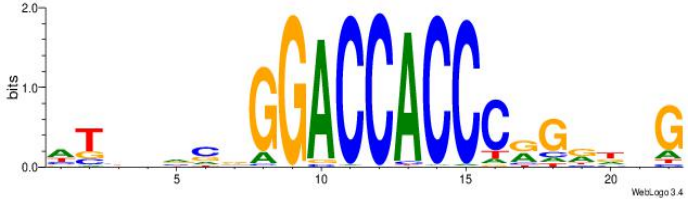
Motif ID: UP00539
Motif name: Gli2_v015681_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 12
Similarity score: 0.0298391

Alignment:
CBDMCMGGGTGGTCCHVBVBAH
-----VBGCTSAGCCHB-----

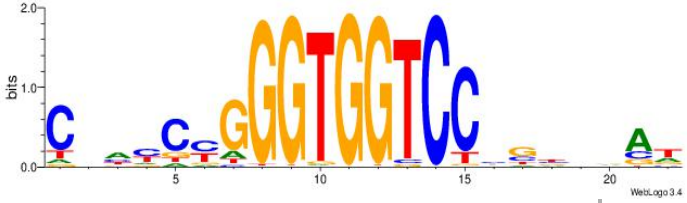
Original motif

Reverse complement motif

Consensus sequence: HTBVVVDGGACCACCCRGRDBG



Consensus sequence: CBDMCMGGGTGGTCCHVBVBAH



Motif ID:	UP00010
Motif name:	Tcfap2b_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:	12
Similarity score:	0.0307842

Alignment:

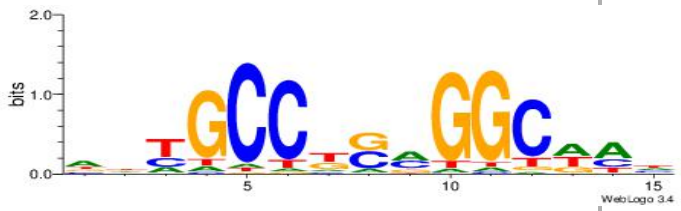
```
HHKGCCYSRGGCWAD
-BDGGCTSAGCBV--
```

Original motif

Consensus sequence: DTWGCCKSMGGCRHH

Reverse complement motif

Consensus sequence: HHKGCCYSRGGCWAD



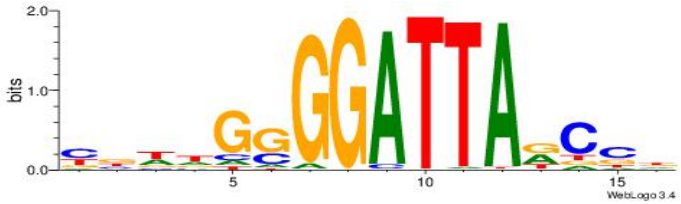
Motif ID:	UP00176
Motif name:	Crx
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0313858

Alignment:

```
YBWDGGGGATTARCCD
----BDGGCTSAGCBV
```

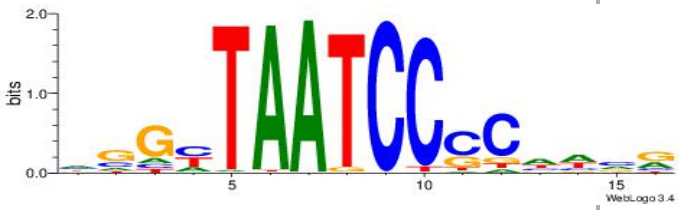
Original motif

Consensus sequence: YBWDGGGGATTARCCD



Reverse complement motif

Consensus sequence: DGGMTAATCCCCDWBK



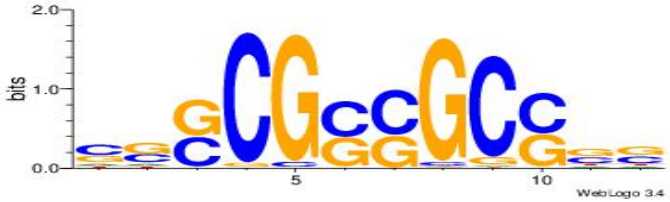
Dataset #: 4 Motif ID: 78 Motif name: sssCGssGCsss

Original motif

Consensus sequence: SSSCGSSGCSSS

Reverse complement motif

Consensus sequence: SSSGCSSCGSSS



Best Matches for Motif ID 78 (Highest to Lowest)

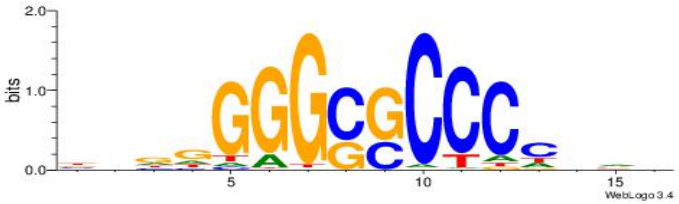
Motif ID:	UP00088
Motif name:	Plagl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0237651

Alignment:

```
BHDGGGGSSCCCCBVV
-SSSCGSSGCSSS---
```

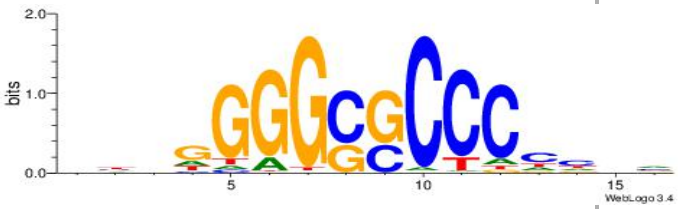
Original motif

Consensus sequence: BHDGGGGSSCCCCBVV



Reverse complement motif

Consensus sequence: VBVGGGGSSCCCCHHV



Motif ID:	UP00087
Motif name:	Tcfap2c_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0238341

Alignment:

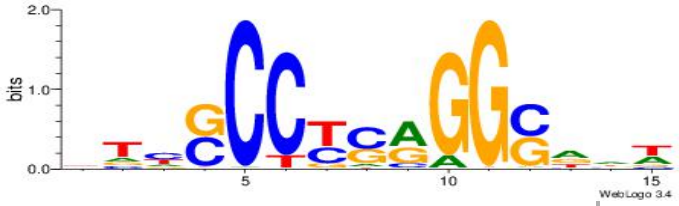
```
DTHSCCKSMGGSHHW
--SSSCGSSGCSSS-
```

Original motif

Consensus sequence: WHHSCCYSRGGSDAD

Reverse complement motif

Consensus sequence: DTHSCCKSMGGSHHW

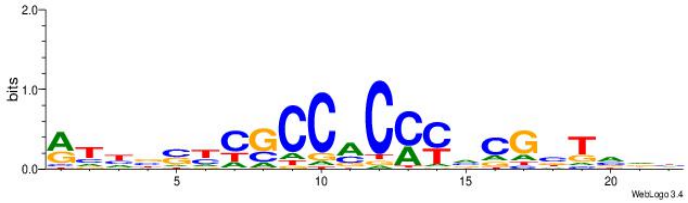


Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

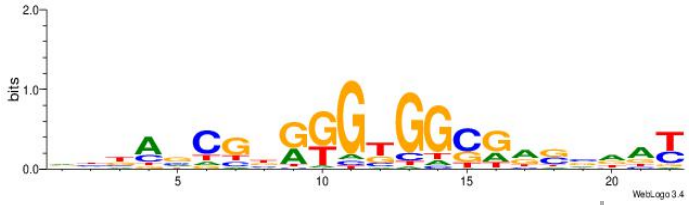
Number of overlap: 12
Similarity score: 0.0241911

Alignment:
HDBABCGBKRGYGGCGMSBHAK
-------SSSGCSSCGSSS---

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



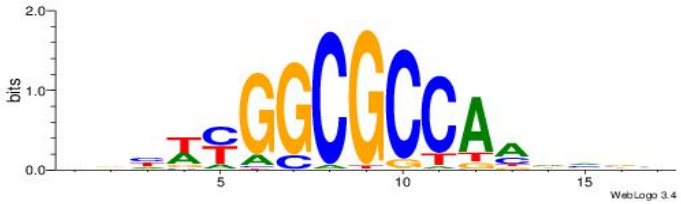
Motif ID: UP00003
Motif name: E2F3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0267639

Alignment:
HBHWYGGCGCCAMDVBB
----SSSCGSSGCSSS-

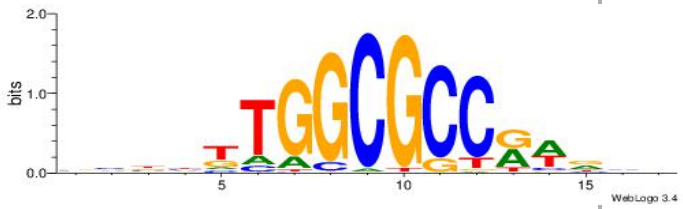
Original motif

Reverse complement motif

Consensus sequence: HBHWYGGCGCCAMDVBB



Consensus sequence: BBBDYTGGCGCCKWDBD



Motif ID:	UP00005
Motif name:	Tcfap2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0268388

Alignment:

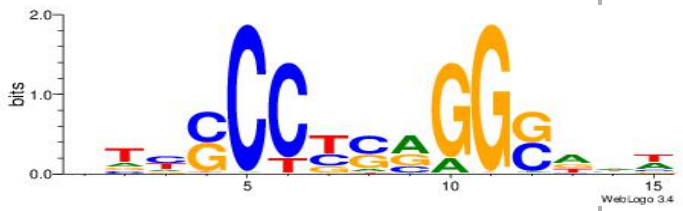
```
DTMSCCKSMGGSHDW
--SSSCGSSGCSSS-
```

Original motif

Consensus sequence: WDHSCCYSRGGSRAD

Reverse complement motif

Consensus sequence: DTMSCCKSMGGSHDW



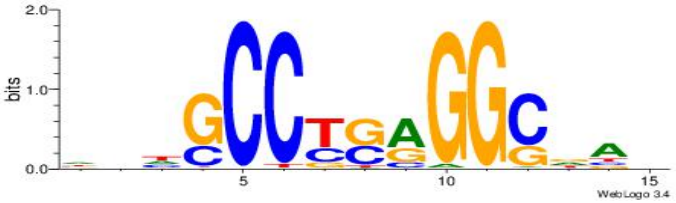
Motif ID:	UP00028
Motif name:	Tcfap2e_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0276439

Alignment:

```
DTHGCCTSAGGCHHH
--SSSCGSSGCSSS-
```

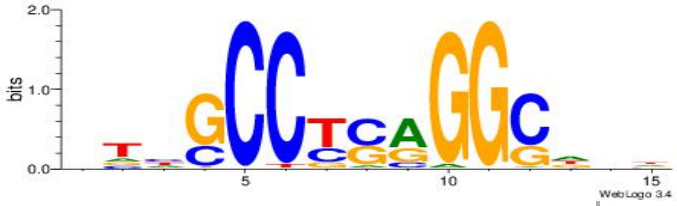
Original motif

Consensus sequence: HHHGCCTSAGGCDAD



Reverse complement motif

Consensus sequence: DTHGCCTSAGGCHHH

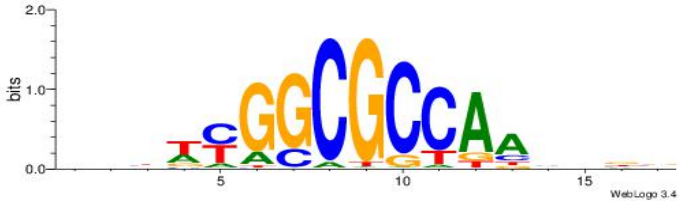


Motif ID:	UP00001
Motif name:	E2F2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5

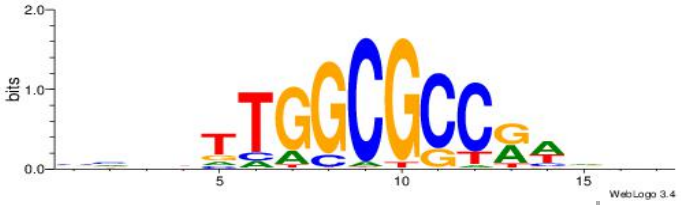
Number of overlap: 12
Similarity score: 0.0277305

Alignment:
HVBWYGGCGCCAADVBB
----SSSCGSSGCSSS-

Original motif
Consensus sequence: HVBWYGGCGCCAADVBB



Reverse complement motif
Consensus sequence: BBBDTTGGCGCCKWVVD



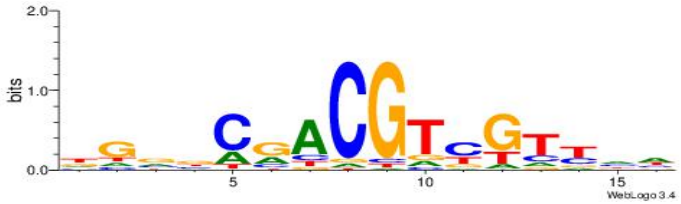
Motif ID: UP00084
Motif name: Gmeb1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0282791

Alignment:
HHMACKACGTMGBVCD
----SSSCGSSGCSSS

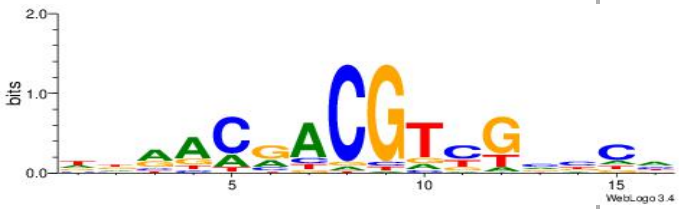
Original motif

Reverse complement motif

Consensus sequence: DGVBCRACGTYGTYHH



Consensus sequence: HHMACKACGTMGBVCD



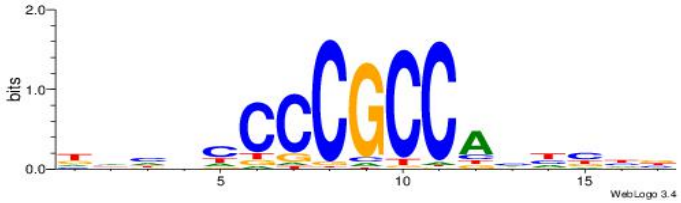
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0288849

Alignment:

```
BHBHDTGGCGGGGBDHD
----SSSGCSSCGSSS-
```

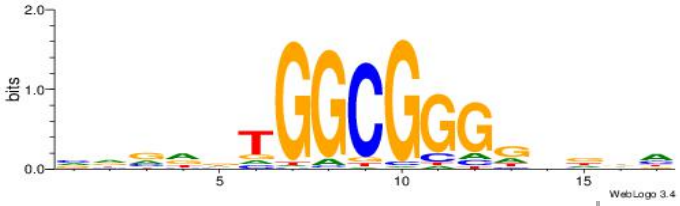
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



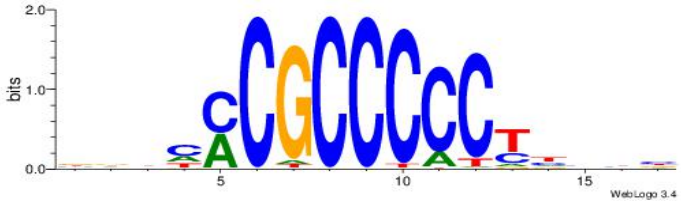
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0327414

Alignment:

```
BDHHMCGCCCCCTHVBB
--SSSCGSSGCSSS---
```

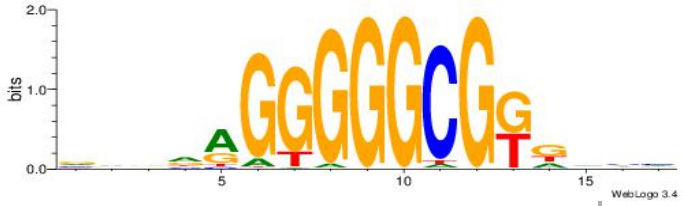
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



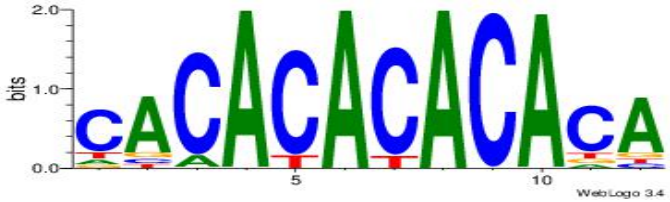
Dataset #: 4 Motif ID: 79 Motif name: CACACACACACA

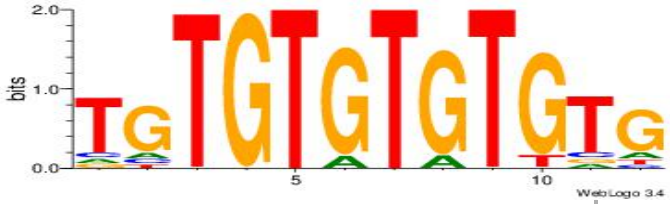
Original motif

Consensus sequence: CACACACACACA

Reverse complement motif

Consensus sequence: TGTGTGTGTGTG





Best Matches for Motif ID 79 (Highest to Lowest)

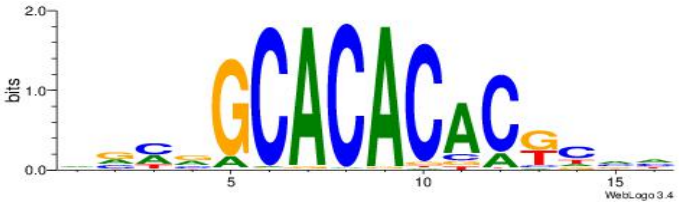
Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0

Alignment:

```
HBGYGTGTGTGCVRVD
-TGTGTGTGTGTG---
```

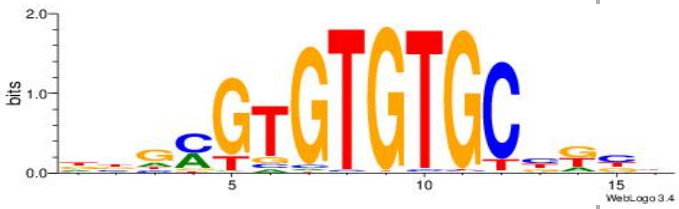
Original motif

Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD



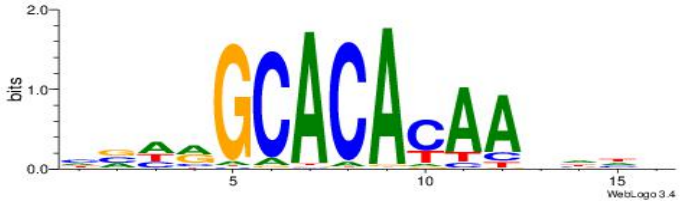
Motif ID:	UP00026
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0209738

Alignment:

```
BHHHTTGTGTGCKHVD
---TGTGTGTGTGTG-
```

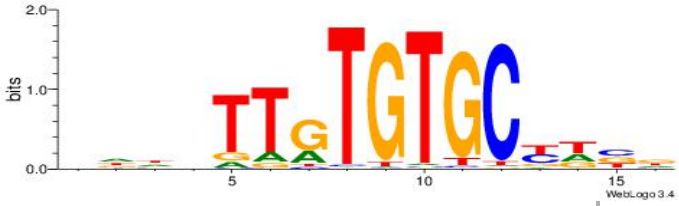
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD

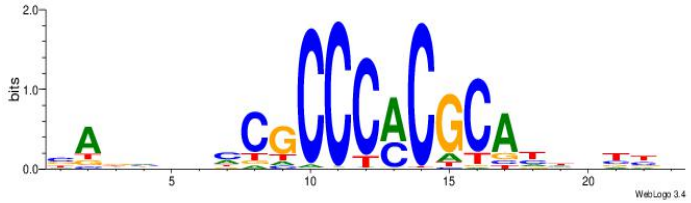


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	8

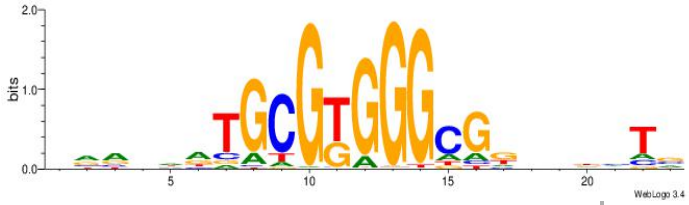
Number of overlap: 12
Similarity score: 0.0260477

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
-------CACACACACACA----

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



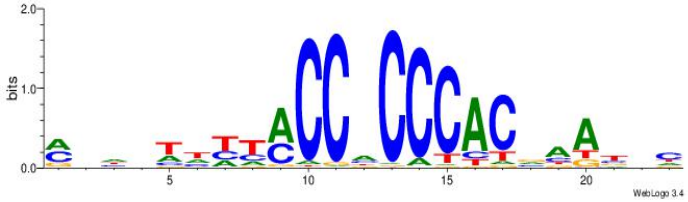
Motif ID: UP00538
Motif name: Gli1_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 12
Similarity score: 0.030264

Alignment:
MHHHWHYTMCCHCCCACVAABVH
----------CACACACACACA-

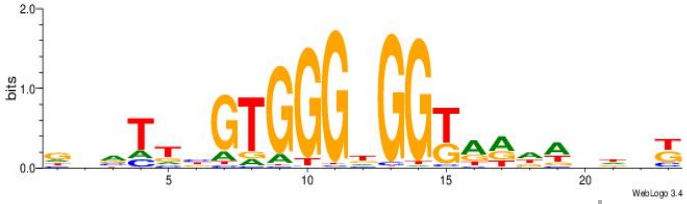
Original motif

Reverse complement motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



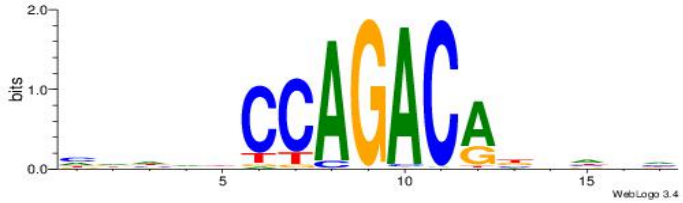
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0319882

Alignment:

```
HVHBVTGTCTGGDDHDD
---TGTGTGTGTGTG--
```

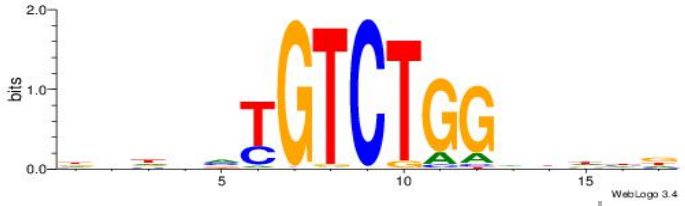
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD



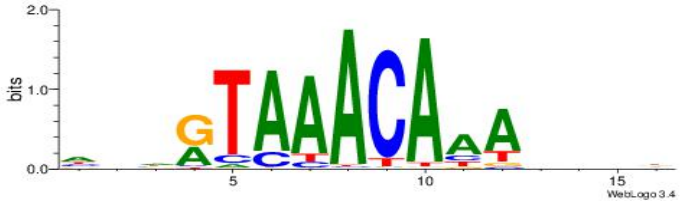
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0345675

Alignment:

```
HDHRTAAACAAAHDDD
CACACACACACA----
```

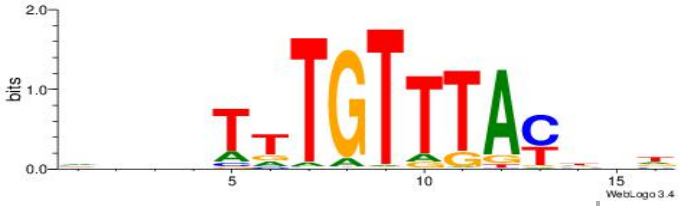
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH

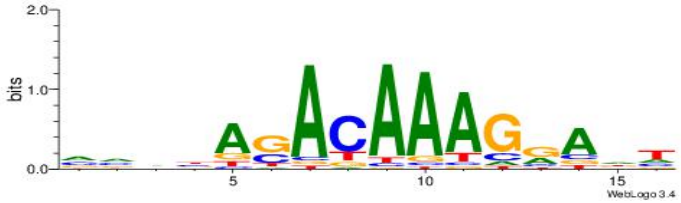


Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

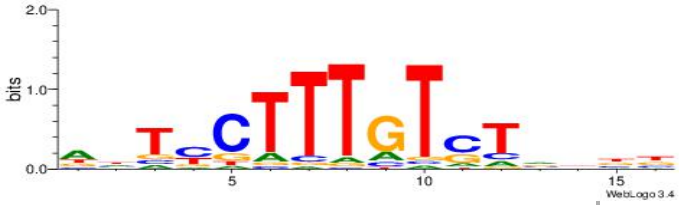
Number of overlap: 12
Similarity score: 0.0352503

Alignment:
VVDBASACAAAGRADH
-CACACACACACA---

Original motif
Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif
Consensus sequence: HDTMCTTTGTSTVDBB



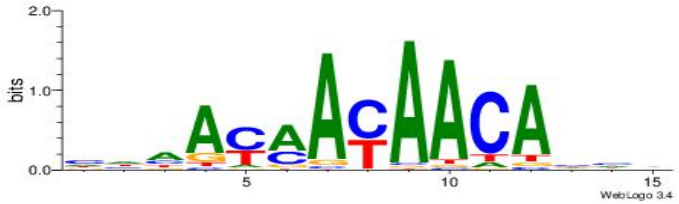
Motif ID: UP00025
Motif name: Foxk1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0355373

Alignment:
HDDTGTTKTTKTHHD
---TGTGTGTGTGTG

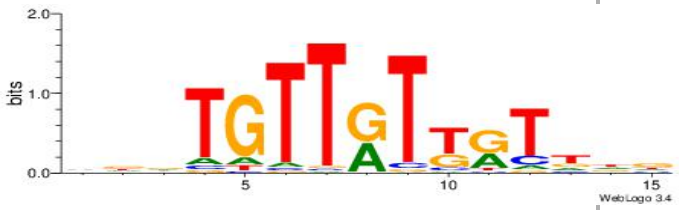
Original motif

Reverse complement motif

Consensus sequence: HHHAYAAYAACAHHH



Consensus sequence: HDDTGTTKTTKTHHD



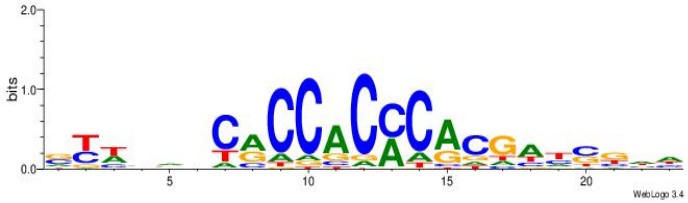
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	12
Similarity score:	0.0364327

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
---------CACACACACACA--
```

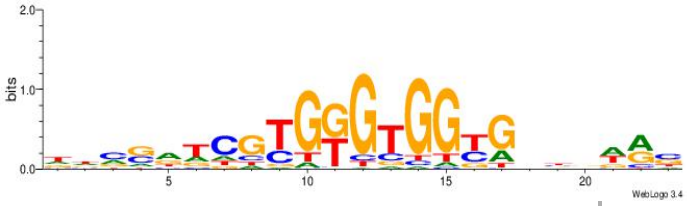
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



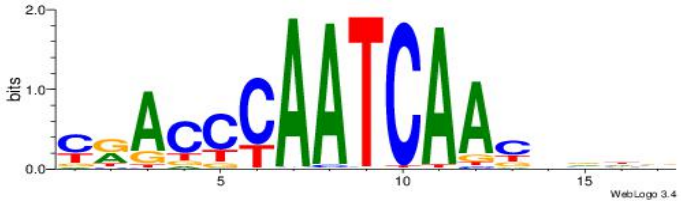
Motif ID:	UP00227
Motif name:	Duxl
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	12
Similarity score:	0.0367869

Alignment:

```
VHVVGTTGATTGGGTMK
----TGTGTGTGTGTG-
```

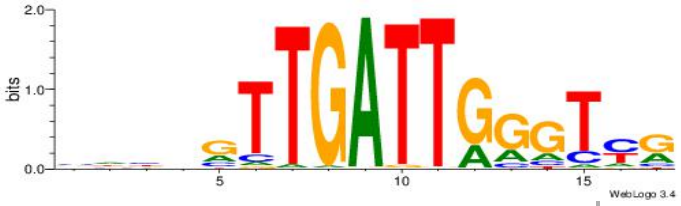
Original motif

Consensus sequence: YRACCCAATCAACVVHV



Reverse complement motif

Consensus sequence: VHVVGTTGATTGGGTMK



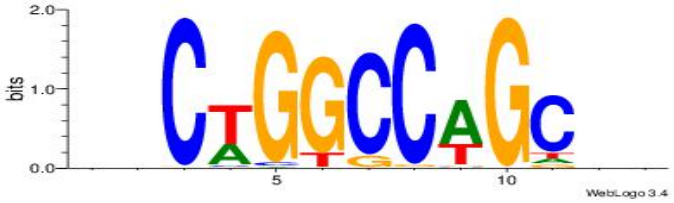
Dataset #: 4 Motif ID: 80 Motif name: ssCwGGCCwGCss

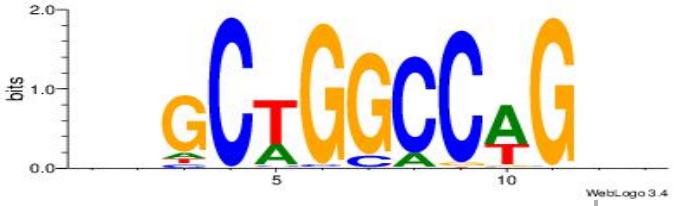
Original motif

Consensus sequence: BBCWGGCCAGCBB

Reverse complement motif

Consensus sequence: BBGCTGGCCWGBB





Best Matches for Motif ID 80 (Highest to Lowest)

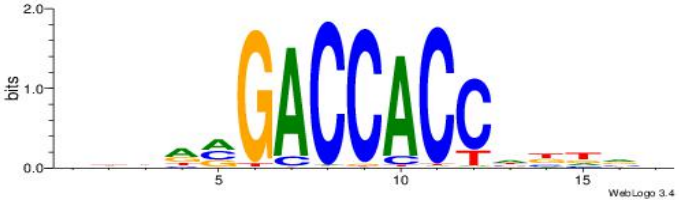
Motif ID:	UP00047
Motif name:	Zbtb7b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0292371

Alignment:

```
BBDVHGGTGGTCBKDDB
---BBGCTGGCCWGBB-
```

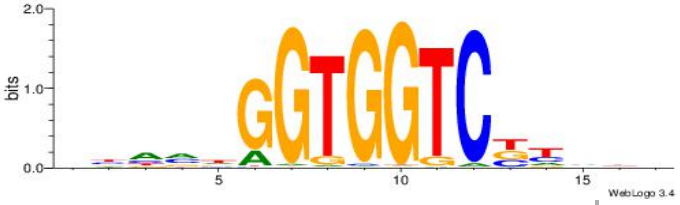
Original motif

Consensus sequence: BDDRVGACCACCHBDVB



Reverse complement motif

Consensus sequence: BBDVHGGTGGTCBKDDB



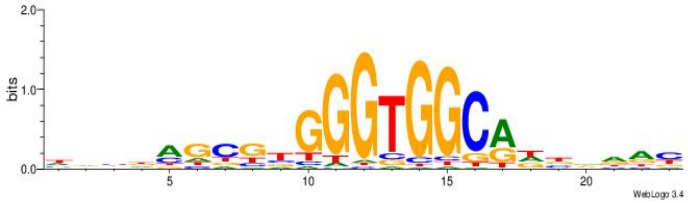
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9
Number of overlap:	13
Similarity score:	0.0293146

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
--BBCWGGCCAGCBB--------
```

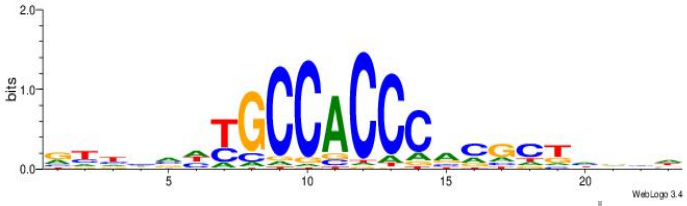
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH

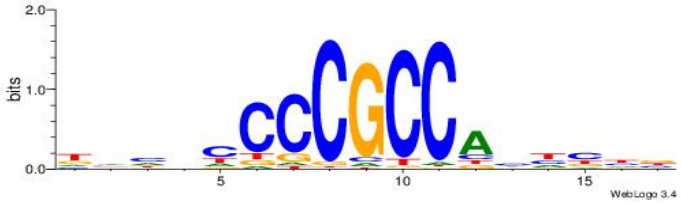


Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

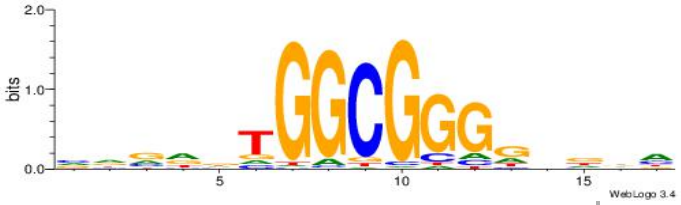
Number of overlap: 13
Similarity score: 0.0305671

Alignment:
DHHBCCCCGCCAHHBHB
---BBCWGGCCAGCBB-

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD



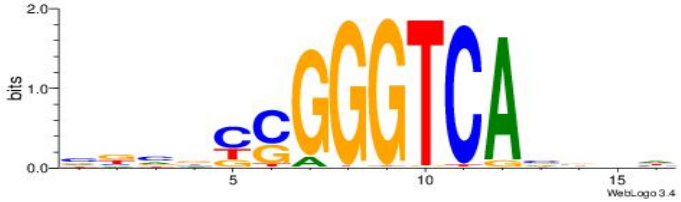
Motif ID: UP00009
Motif name: Nr2f2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 13
Similarity score: 0.0317659

Alignment:
VBVBCSGGGTCAVBBH
--BBGCTGGCCWGBB-

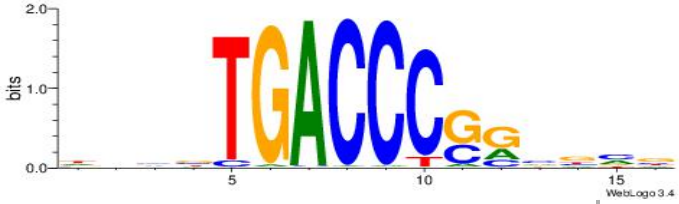
Original motif

Reverse complement motif

Consensus sequence: VBVBCSGGGTCAVBBH



Consensus sequence: HVBVTGACCCSGBVBV



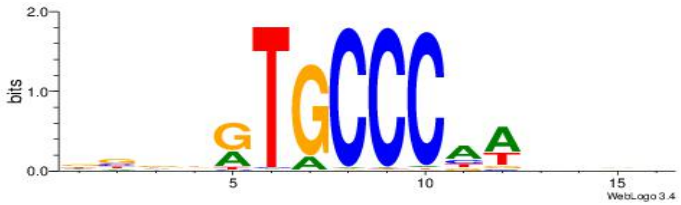
Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0331992

Alignment:

```
DBDDRTGCCCAWDHDV
-BBGCTGGCCWGBB--
```

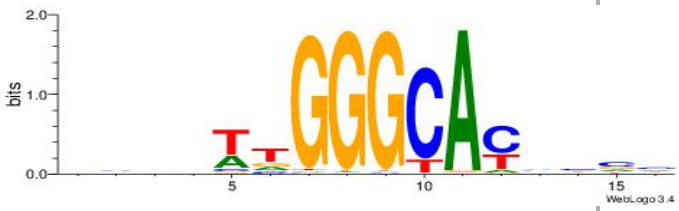
Original motif

Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH



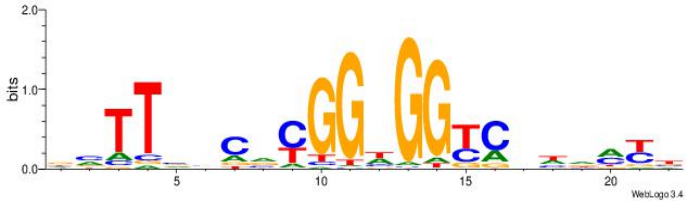
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	13
Similarity score:	0.0364202

Alignment:

```
DVTTVVCVYGGHGGYCHHDMYB
-------BBGCTGGCCWGBB--
```

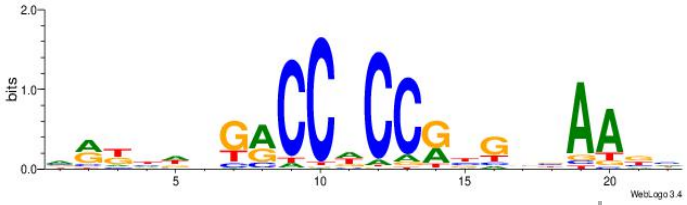
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH

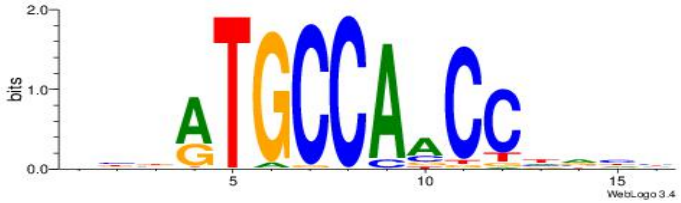


Motif ID:	UP00035
Motif name:	Hic1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4

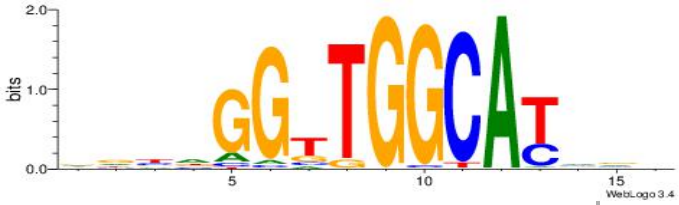
Number of overlap: 13
Similarity score: 0.0366488

Alignment:
DDBHGGTTGGCATVBD
---BBGCTGGCCWGBB

Original motif
Consensus sequence: DBBATGCCAACCHVHH



Reverse complement motif
Consensus sequence: DDBHGGTTGGCATVBD



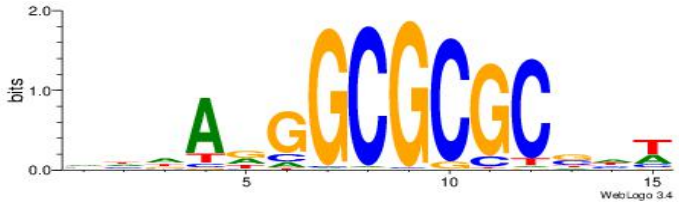
Motif ID: UP00003
Motif name: E2F3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 13
Similarity score: 0.0368356

Alignment:
VHDADGGCGCGCSHW
-BBCWGGCCAGCBB-

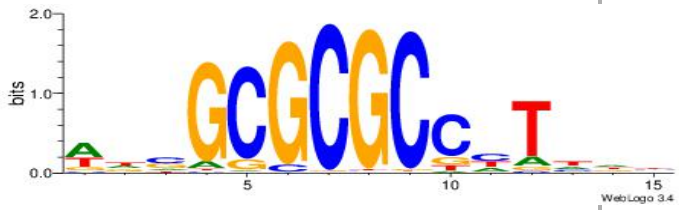
Original motif

Reverse complement motif

Consensus sequence: VHDADGGCGCGCSHW



Consensus sequence: WHSGCGCGCCHTDHB



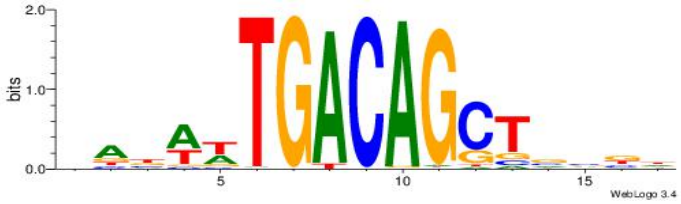
Motif ID:	UP00122
Motif name:	Tgif1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	13
Similarity score:	0.0369074

Alignment:

```
DBVVAGCTGTCAWWVTH
---BBGCTGGCCWGBB-
```

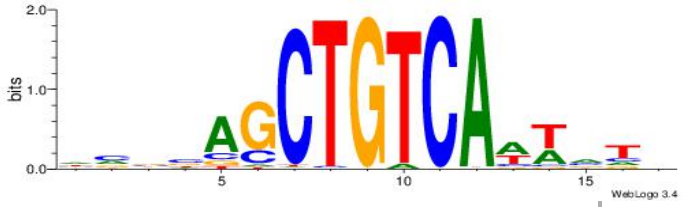
Original motif

Consensus sequence: DABWWTGACAGCTVVBD



Reverse complement motif

Consensus sequence: DBVVAGCTGTCAWWVTH



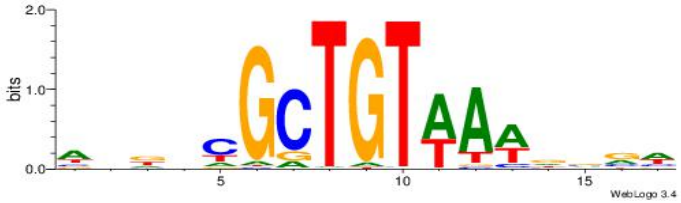
Motif ID:	UP00193
Motif name:	Rhox11_2205.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	13
Similarity score:	0.0374489

Alignment:

```
WVVHWTWACAGCGHHVT
-BBCWGGCCAGCBB---
```

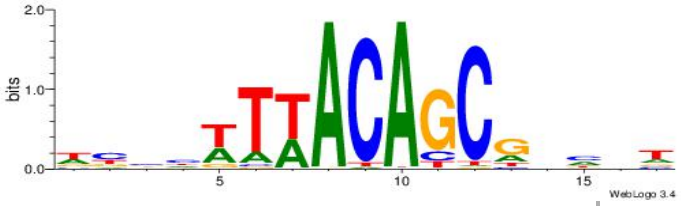
Original motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGHHVT



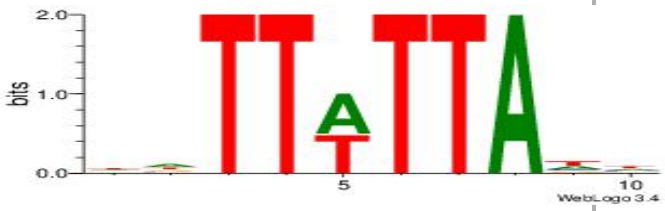
Dataset #: 4 Motif ID: 81 Motif name: wwTAAwAAww

Original motif

Consensus sequence: DDTAAWAAHH

Reverse complement motif

Consensus sequence: HHTTWTTADD



Best Matches for Motif ID 81 (Highest to Lowest)

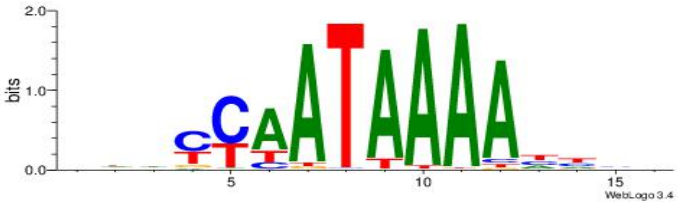
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0

Alignment:

```
HDHYYAATAAAAHHHH
-----DDTAAWAAHH-
```

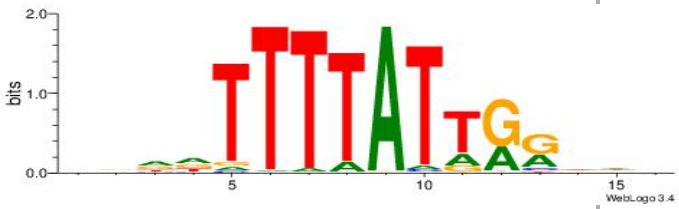
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



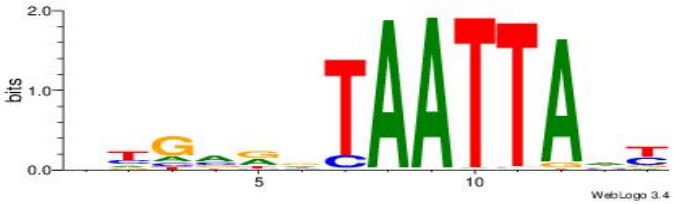
Motif ID:	UP00202
Motif name:	Dlx1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	10
Similarity score:	0.000299799

Alignment:

```
MDTAATTAHMBCHB
DDTAAWAAHH----
```

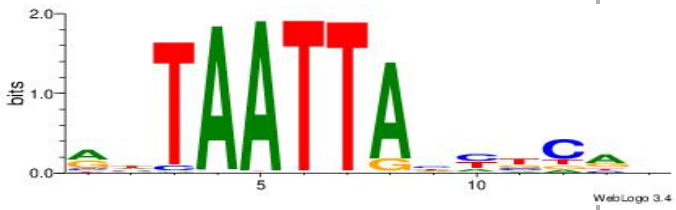
Original motif

Consensus sequence: BHGVRDTAATTADY



Reverse complement motif

Consensus sequence: MDTAATTAHMBCHB

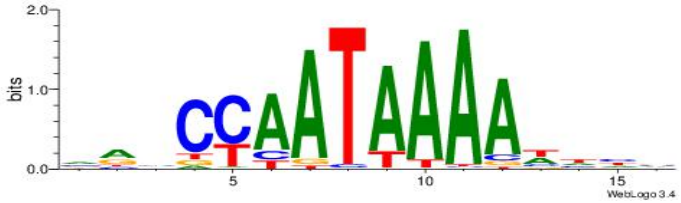


Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6

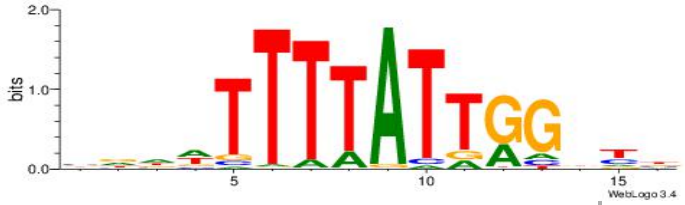
Number of overlap: 10
Similarity score: 0.000776597

Alignment:
VDHWTTTTATTGGDKB
-HHTTWTTADD-----

Original motif
Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif
Consensus sequence: VDHWTTTTATTGGDKB



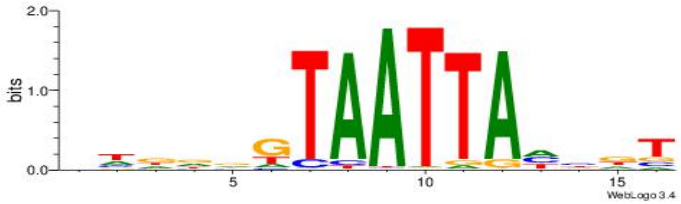
Motif ID: UP00242
Motif name: Hoxc8
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.00309982

Alignment:
AHDHTAATTACHHHHV
--DDTAAWAAHH----

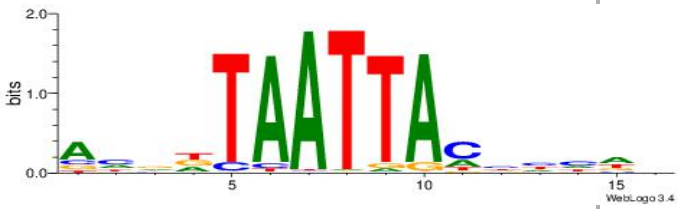
Original motif

Reverse complement motif

Consensus sequence: BHDDDGTAATTAHHDT



Consensus sequence: AHDHTAATTACHHHHV



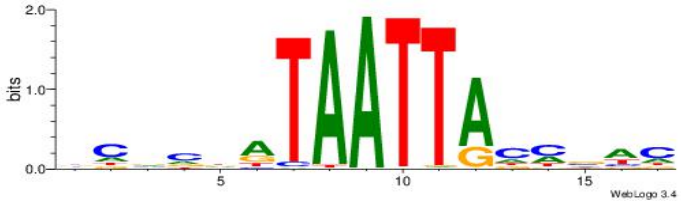
Motif ID:	UP00110
Motif name:	Dlx4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.00364582

Alignment:

```
BCVVDATAATTACMVHC
----DDTAAWAAHH---
```

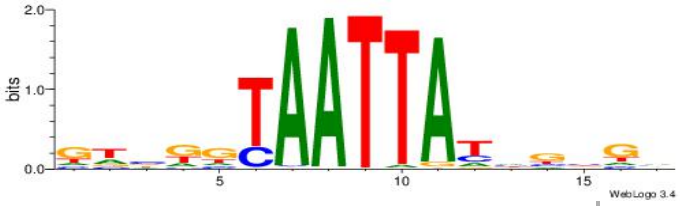
Original motif

Consensus sequence: BCVVDATAATTACMVHC



Reverse complement motif

Consensus sequence: GHVRGTAATTATDVVGV



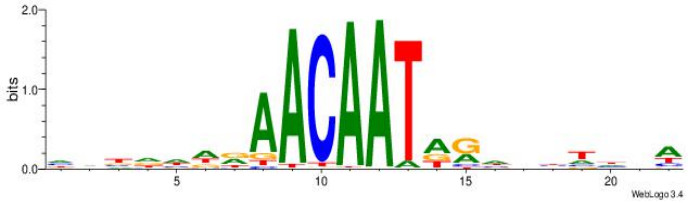
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	9
Number of overlap:	10
Similarity score:	0.0040604

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
--------HHTTWTTADD----
```

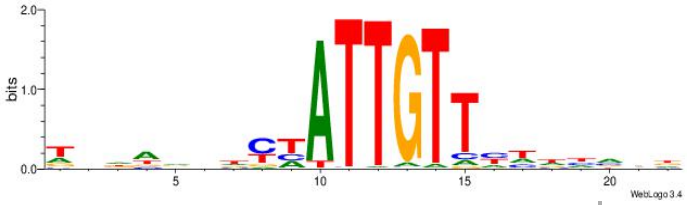
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH

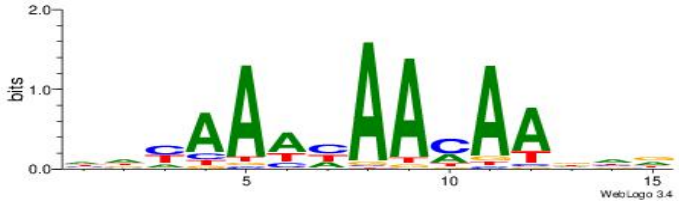


Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

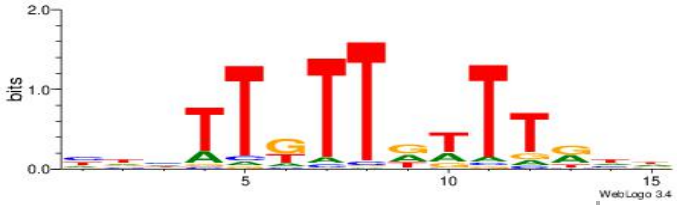
Number of overlap: 10
Similarity score: 0.0042597

Alignment:
HHHTTRTTDTTTKDH
-HHTTWTTADD----

Original motif
Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif
Consensus sequence: HHHTTRTTDTTTKDH



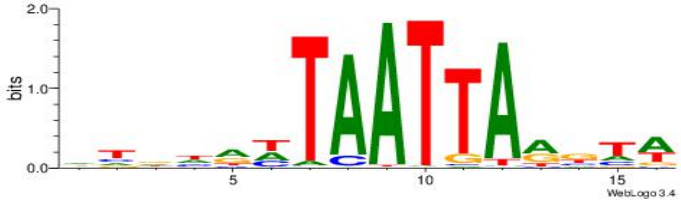
Motif ID: UP00254
Motif name: Pou2f1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 10
Similarity score: 0.00447653

Alignment:
WABKTAATTAHKHHHD
--HHTTWTTADD----

Original motif

Reverse complement motif

Consensus sequence: DHDHRHTAATTARBTW



Consensus sequence: WABKTAATTAHKHHHD

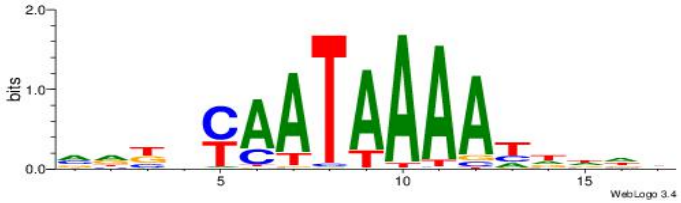
Motif ID:	UP00121
Motif name:	Hoxd10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.00448

Alignment:

```
VDKVYAATAAAATDDDH
-----DDTAAWAAHH--
```

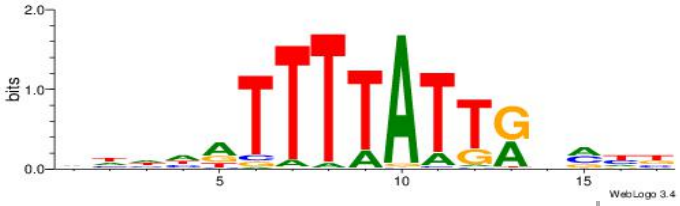
Original motif

Consensus sequence: VDKVYAATAAAATDDDH



Reverse complement motif

Consensus sequence: HDDDATTTTATTKVRDB



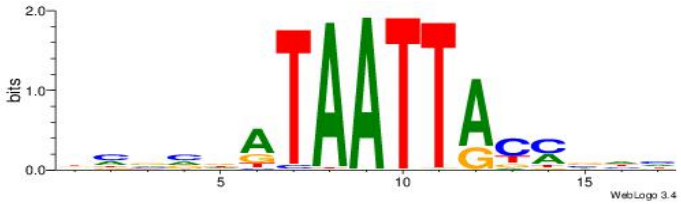
Motif ID:	UP00154
Motif name:	Dlx3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.00573233

Alignment:

```
BHVVDATAATTACMVHH
----DDTAAWAAHH---
```

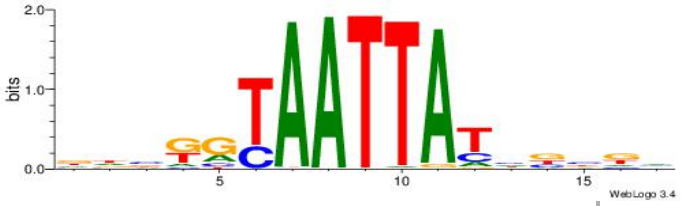
Original motif

Consensus sequence: BHVVDATAATTACMVHH



Reverse complement motif

Consensus sequence: DHVRGTAATTATHVVDV



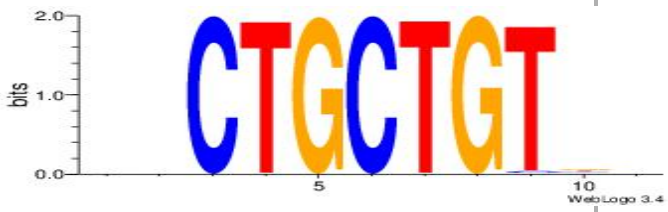
Dataset #: 4 Motif ID: 82 Motif name: rmACAGCAGsr

Original motif

Consensus sequence: VVACAGCAGVD

Reverse complement motif

Consensus sequence: DVCTGCTGTVB



Best Matches for Motif ID 82 (Highest to Lowest)

Motif ID:	UP00052
Motif name:	Osr2_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

Alignment:

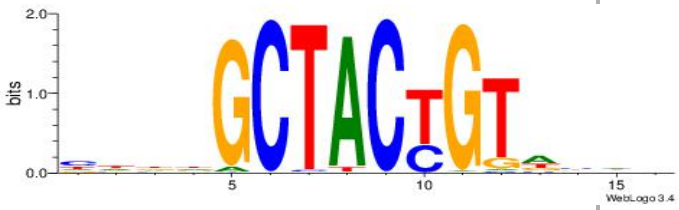
```
HHVHACRGTAGCHHHD
--VVACAGCAGVD---
```

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH



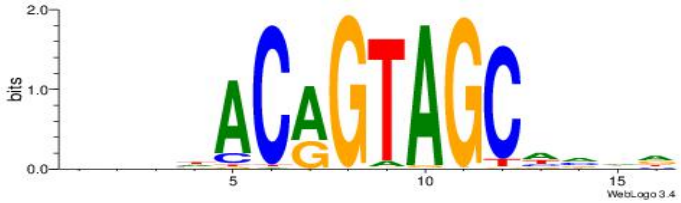
Motif ID:	UP00027
Motif name:	Osr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.00105409

Alignment:

```
DHBHGCTACKGTHDHH
---DVCTGCTGTVB--
```

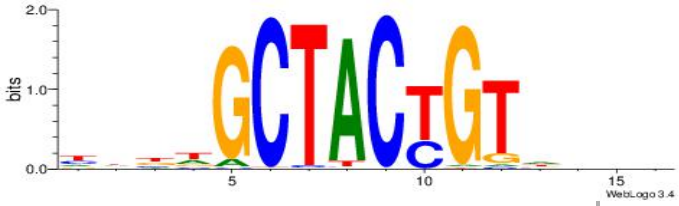
Original motif

Consensus sequence: HHDHACRGTAGCHVHD



Reverse complement motif

Consensus sequence: DHBHGCTACKGTHDHH

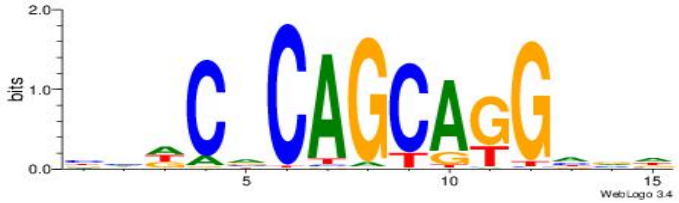


Motif ID:	UP00102
Motif name:	Zic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

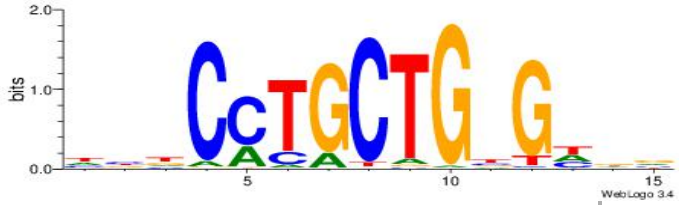
Number of overlap: 11
Similarity score: 0.00653268

Alignment:
BHDCVCAGCAGGHVD
--VVACAGCAGVD--

Original motif
Consensus sequence: BHDCVCAGCAGGHVD



Reverse complement motif
Consensus sequence: DVHCCTGCTGBGDDB



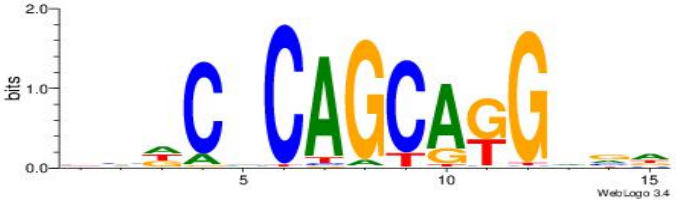
Motif ID: UP00057
Motif name: Zic2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.00968463

Alignment:
DVBCYTGCTGBGDDD
--DVCTGCTGTVB--

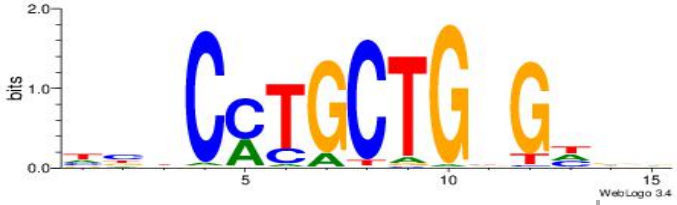
Original motif

Reverse complement motif

Consensus sequence: HHDCVCAGCAKGVVD



Consensus sequence: DVBCYTGCTGBGDDD



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:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0102111

Alignment:

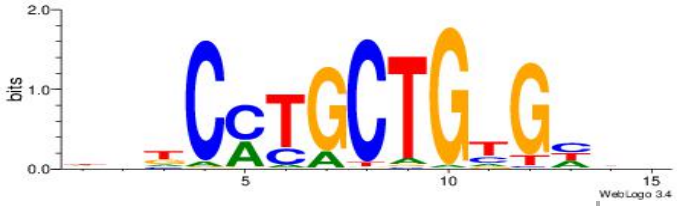
```
DDDCACAGCAKGHVD
--VVACAGCAGVD--
```

Original motif

Consensus sequence: DDDCACAGCAKGHVD

Reverse complement motif

Consensus sequence: DVHCYTGCTGTGHDH



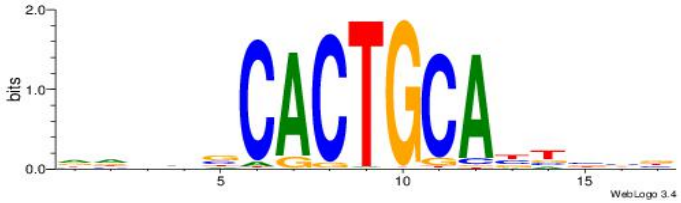
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0115274

Alignment:

```
BBBAVTGCAGTGBBVDD
--DVCTGCTGTVB----
```

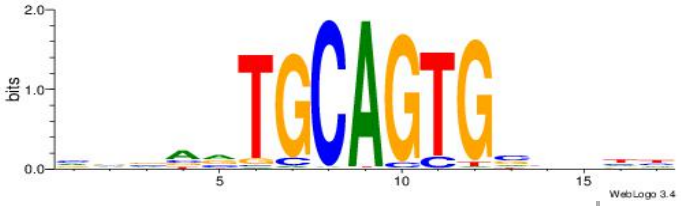
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD

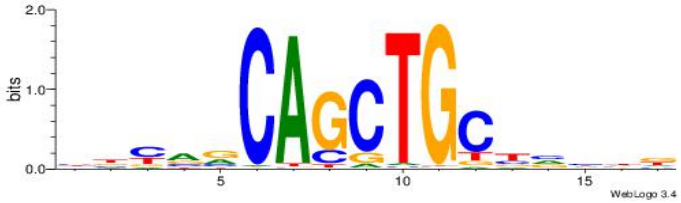


Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

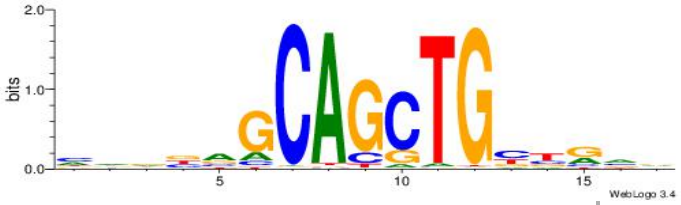
Number of overlap: 11
Similarity score: 0.0115983

Alignment:
HHDVVGCAGCTGVBKVB
---VVACAGCAGVD---

Original motif
Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif
Consensus sequence: HHDVVGCAGCTGVBKVB



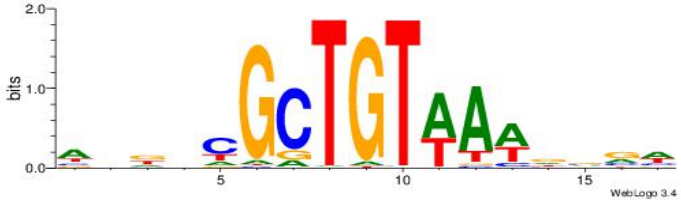
Motif ID: UP00193
Motif name: Rhox11_2205.1
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.0150629

Alignment:
AVDHCGCTGTWAWDVVW
-DVCTGCTGTVB-----

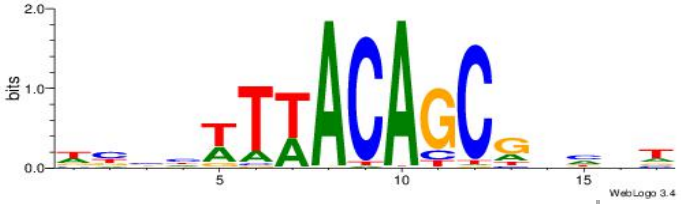
Original motif

Reverse complement motif

Consensus sequence: AVDHCGCTGTWAWDVVW



Consensus sequence: WVVHWTWACAGCGHHVT



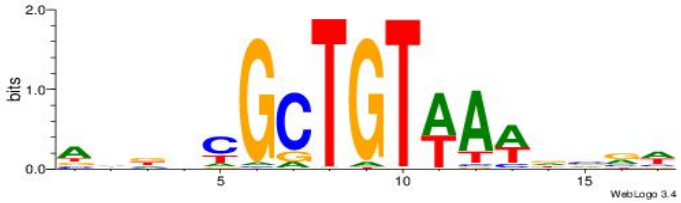
Motif ID:	UP00193
Motif name:	Rhox11_1765.2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.0154078

Alignment:

```
AVDVCGCTGTWAWDVVW
-DVCTGCTGTVB-----
```

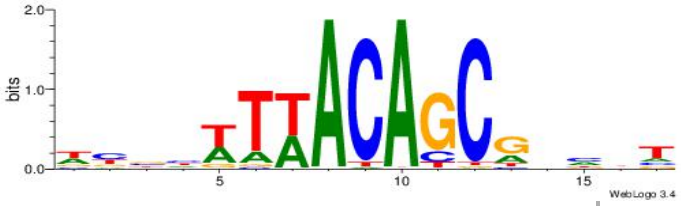
Original motif

Consensus sequence: AVDVCGCTGTWAWDVVW



Reverse complement motif

Consensus sequence: WVVHWTWACAGCGBHBT



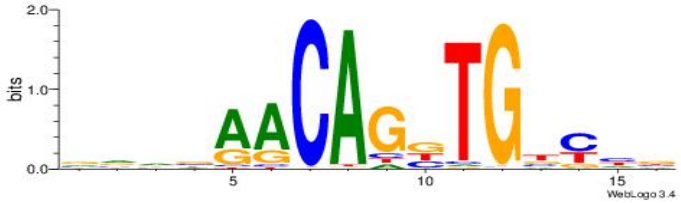
Motif ID:	UP00036
Motif name:	Myf6_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0170472

Alignment:

```
BDKVCABCTGTTBDBV
--DVCTGCTGTVB---
```

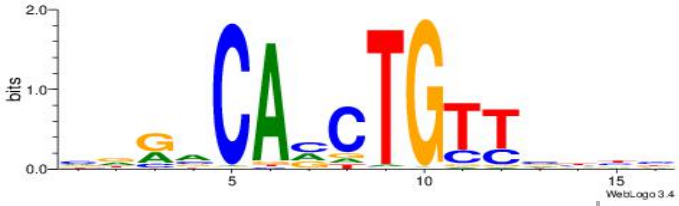
Original motif

Consensus sequence: VVDBAACAGBTGBYHB



Reverse complement motif

Consensus sequence: BDKVCABCTGTTBDBV



Dataset #: 4 **Motif ID: 83** **Motif name: wwTAAAwAww**

Original motif

Consensus sequence: DDTAAAWAHH

Reverse complement motif

Consensus sequence: HHTWTTTADD

Best Matches for Motif ID 83 (Highest to Lowest)

Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0

Alignment:

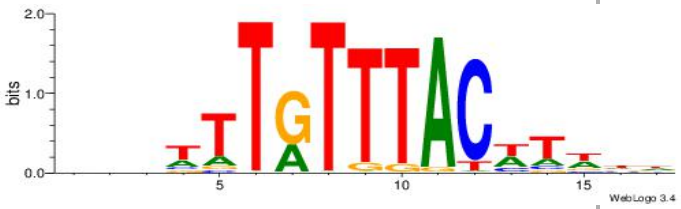
```
HHWAWGTAAAYAAAVDB
----DDTAAAWAHH---
```

Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



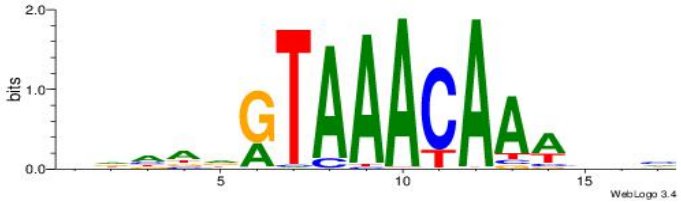
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.00101771

Alignment:

```
HDHADGTAAACAAAVVH
----DDTAAAWAHH---
```

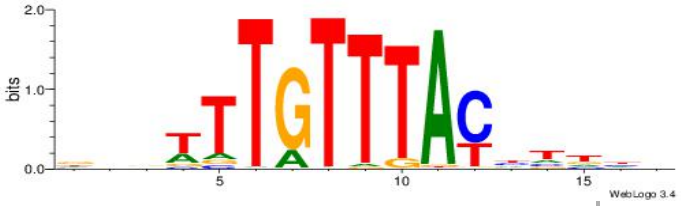
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH

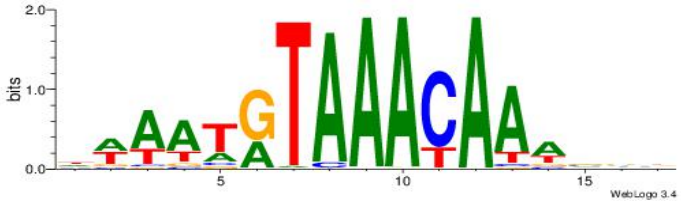


Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

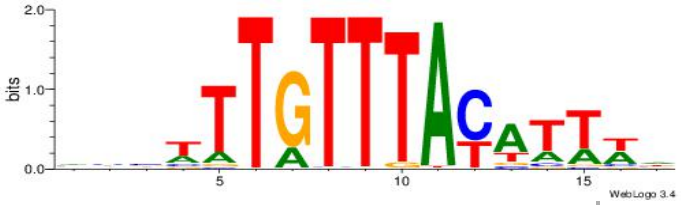
Number of overlap: 10
Similarity score: 0.00165181

Alignment:
DWAATRTAAACAAWVVB
----DDTAAAWAHH---

Original motif
Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif
Consensus sequence: VVVWTTGTTTAMATTWD



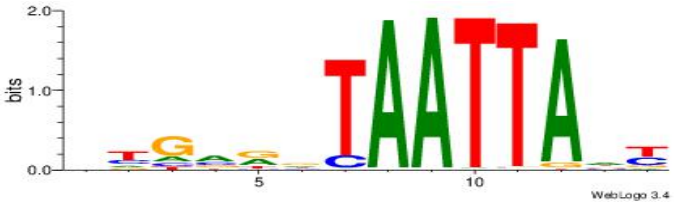
Motif ID: UP00202
Motif name: Dlx1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 10
Similarity score: 0.00530809

Alignment:
MDTAATTAHMBCHB
DDTAAAWAHH----

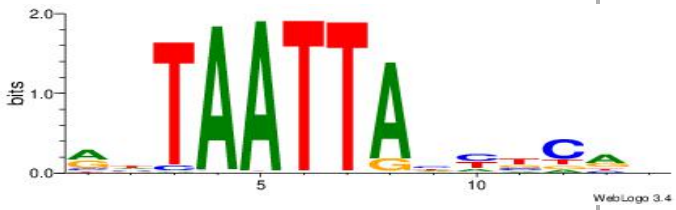
Original motif

Reverse complement motif

Consensus sequence: BHGVRDTAATTADY



Consensus sequence: MDTAATTAHMBCHB



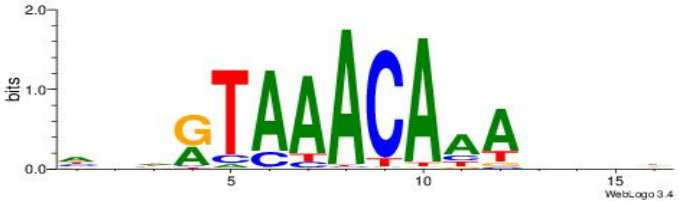
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	10
Similarity score:	0.00622214

Alignment:

```
HDHRTAAACAAAHDDD
--DDTAAAWAHH----
```

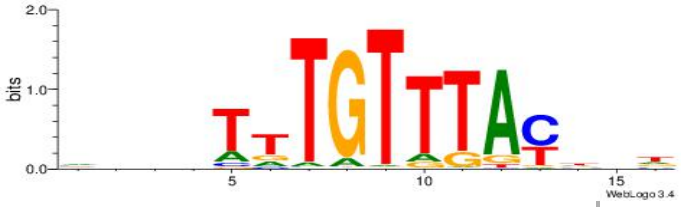
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH



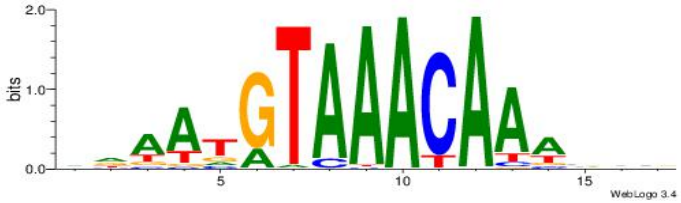
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	10
Similarity score:	0.00814891

Alignment:

```
DDAATGTAAACAAAVVB
----DDTAAAWAHH---
```

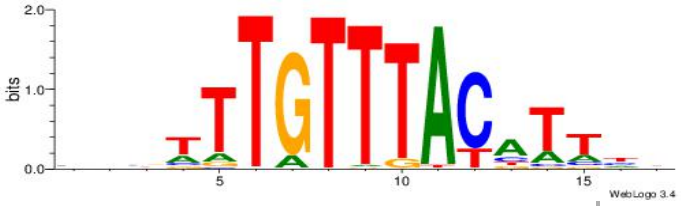
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD

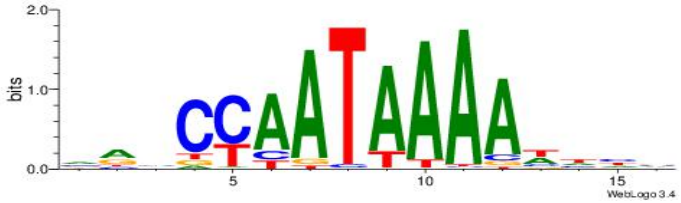


Motif ID:	UP00134
Motif name:	Hoxb13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2

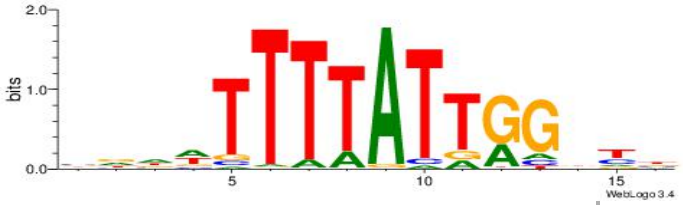
Number of overlap: 10
Similarity score: 0.00863942

Alignment:
VDHWTTTTATTGGDKB
-HHTWTTTADD-----

Original motif
Consensus sequence: VRHCCAATAAAAWHHV



Reverse complement motif
Consensus sequence: VDHWTTTTATTGGDKB



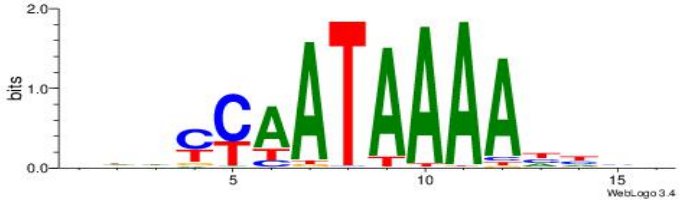
Motif ID: UP00180
Motif name: Hoxd13
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 10
Similarity score: 0.00877086

Alignment:
HDHHTTTTATTKKHDD
-HHTWTTTADD-----

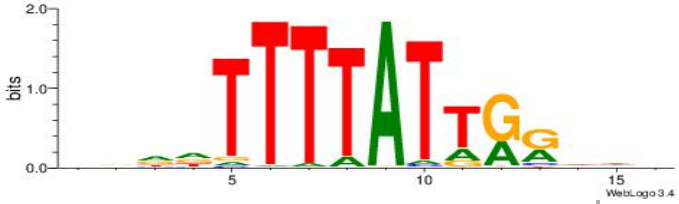
Original motif

Reverse complement motif

Consensus sequence: HDHYYAATAAAAHHHH



Consensus sequence: HDHHTTTTATTKKHDD



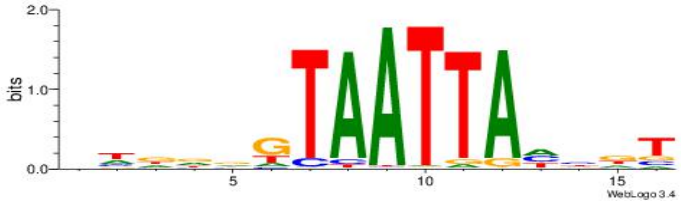
Motif ID:	UP00242
Motif name:	Hoxc8
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	10
Similarity score:	0.00906413

Alignment:

```
BHDDDGTAATTAHHDT
----DDTAAAWAHH--
```

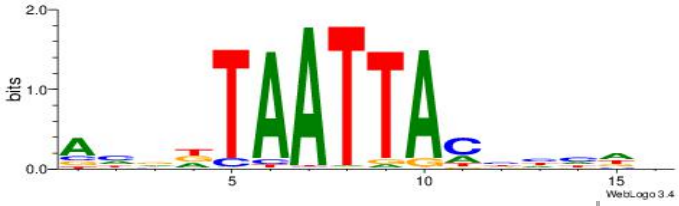
Original motif

Consensus sequence: BHDDDGTAATTAHHDT



Reverse complement motif

Consensus sequence: AHDHTAATTACHHHHV



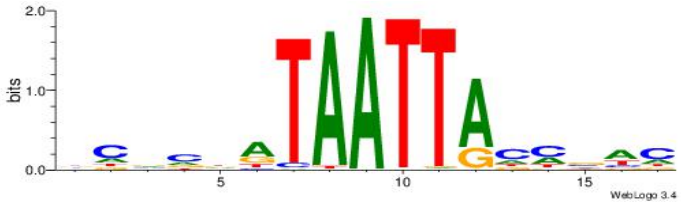
Motif ID:	UP00110
Motif name:	Dlx4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0092814

Alignment:

```
BCVVDATAATTACMVHC
----DDTAAAWAHH---
```

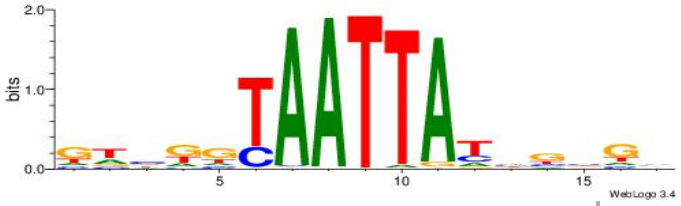
Original motif

Consensus sequence: BCVVDATAATTACMVHC



Reverse complement motif

Consensus sequence: GHVRGTAATTATDVVGV



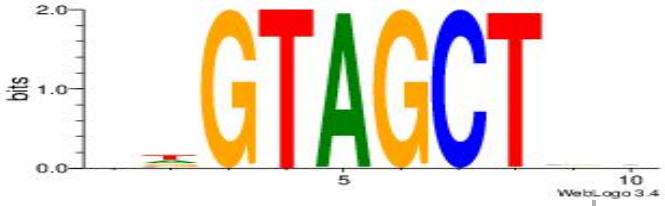
Dataset #: 4 Motif ID: 84 Motif name: wsAGCTACwy

Original motif

Consensus sequence: DVAGCTACHB

Reverse complement motif

Consensus sequence: VHGTAGCTVD



Best Matches for Motif ID 84 (Highest to Lowest)

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:	2
Number of overlap:	10
Similarity score:	0

Alignment:

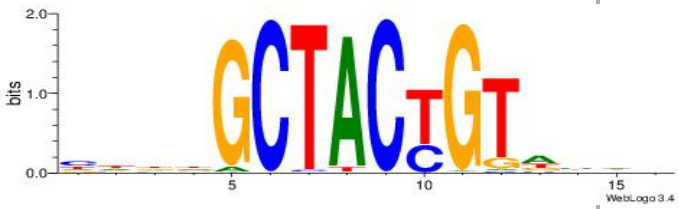
```
HHHHGCTACKGTHVHH
-DVAGCTACHB-----
```

Original motif

Consensus sequence: HHVHACRGTAGCHHHD

Reverse complement motif

Consensus sequence: HHHHGCTACKGTHVHH



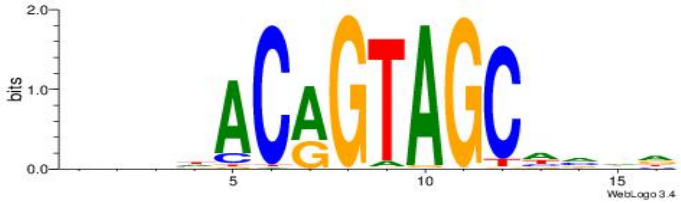
Motif ID:	UP00027
Motif name:	Osr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.00253277

Alignment:

```
DHBHGCTACKGTHDHH
-DVAGCTACHB-----
```

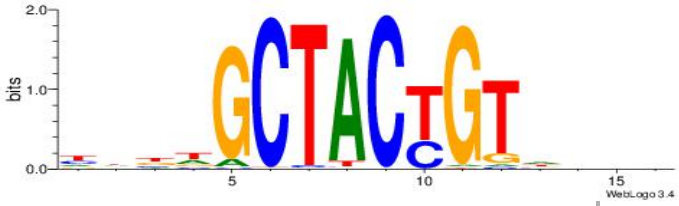
Original motif

Consensus sequence: HHDHACRGTAGCHVHD



Reverse complement motif

Consensus sequence: DHBHGCTACKGTHDHH

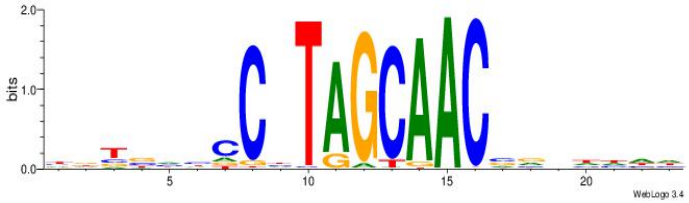


Motif ID:	UP00098
Motif name:	Rfx3_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	9

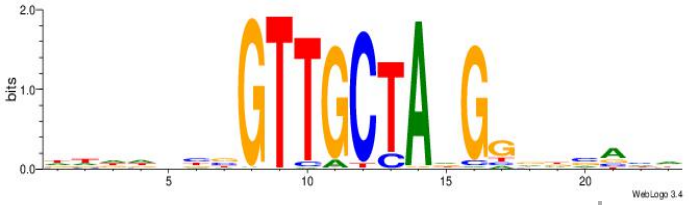
Number of overlap: 10
Similarity score: 0.00721593

Alignment:
HHHHDVVGTTGCTAHGGDHBAHH
-----VHGTAGCTVD--------

Original motif
Consensus sequence: HDTBHHCCHTAGCAACVVDHHHH



Reverse complement motif
Consensus sequence: HHHHDVVGTTGCTAHGGDHBAHH



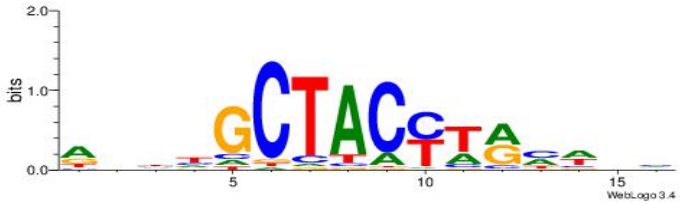
Motif ID: UP00052
Motif name: Osr2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 10
Similarity score: 0.00762354

Alignment:
VDWRKAKGTAGCHHDT
-----VHGTAGCTVD-

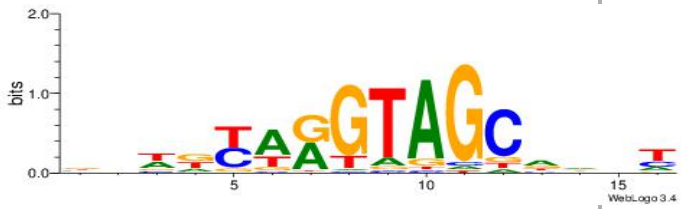
Original motif

Reverse complement motif

Consensus sequence: AHHHGCTACYTRMWHV



Consensus sequence: VDWRKAKGTAGCHHDT



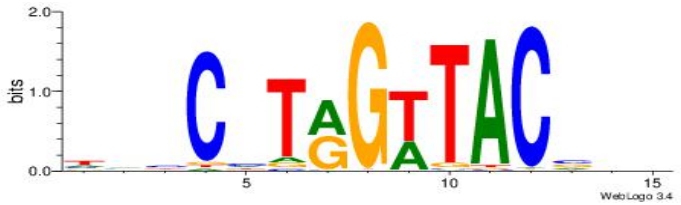
Motif ID:	UP00056
Motif name:	Rfx4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	10
Similarity score:	0.00942475

Alignment:

```
HVVGTAWCKADGBHH
-VHGTAGCTVD----
```

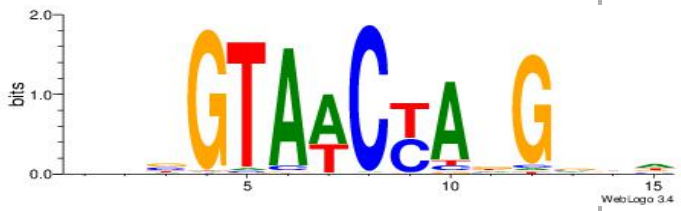
Original motif

Consensus sequence: HHBCHTRGWTACVVH



Reverse complement motif

Consensus sequence: HVVGTAWCKADGBHH



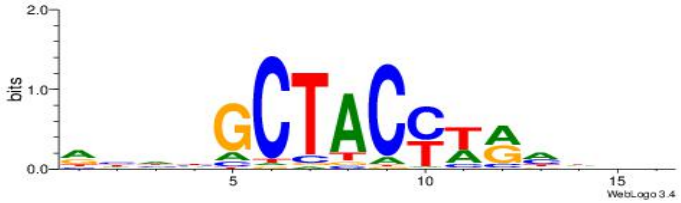
Motif ID:	UP00027
Motif name:	Osr1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	10
Similarity score:	0.00948101

Alignment:

```
VHDHKWKGTAGCHHDK
-----VHGTAGCTVD-
```

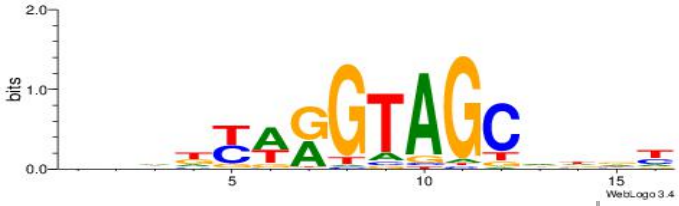
Original motif

Consensus sequence: RHHHGCTACYWRHDHV



Reverse complement motif

Consensus sequence: VHDHKWKGTAGCHHDK



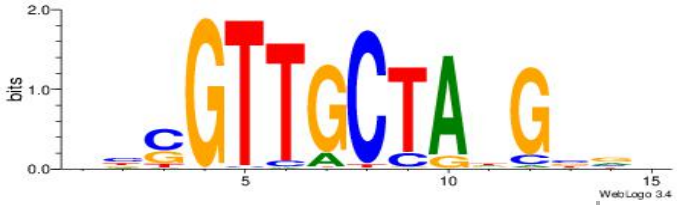
Motif ID:	UP00076
Motif name:	Rfxdc2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

Number of overlap: 10
Similarity score: 0.0111701

Alignment:
DVSGTTGCTAHGVBB
-VHGTAGCTVD----

Original motif
Consensus sequence: BBVCHTAGCAACSVD

Reverse complement motif
Consensus sequence: DVSGTTGCTAHGVBB



Motif ID: UP00056
Motif name: Rfx4_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: 0.0118129

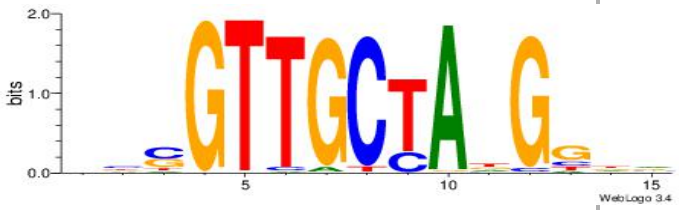
Alignment:
DVSGTTGCTAHGGHV
-VHGTAGCTVD----

Original motif

Reverse complement motif

Consensus sequence: BHCCHTAGCAACSVD

Consensus sequence: DVSGTTGCTAHGGHV



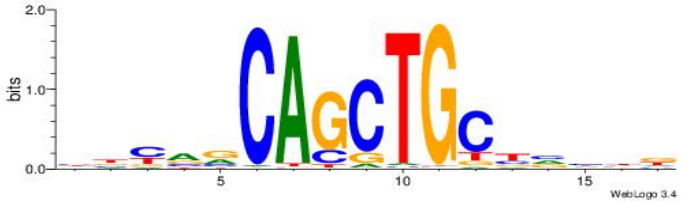
Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0163031

Alignment:

```
BBYVVCAGCTGCBVHHD
----DVAGCTACHB---
```

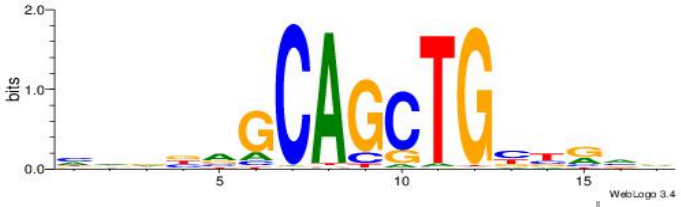
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB



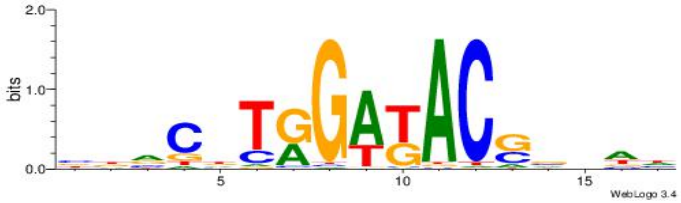
Motif ID:	UP00076
Motif name:	Rfxdc2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	10
Similarity score:	0.0259013

Alignment:

```
BBVCDTRGAKACSVDDH
----DVAGCTACHB---
```

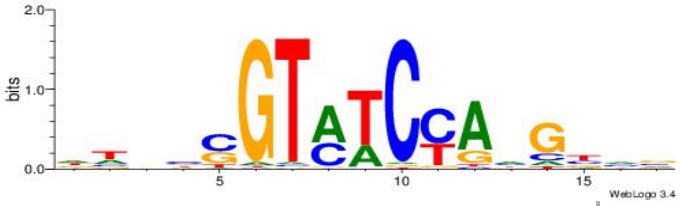
Original motif

Consensus sequence: BBVCDTRGAKACSVDDH



Reverse complement motif

Consensus sequence: HDDVSGTRTCMADGBVB



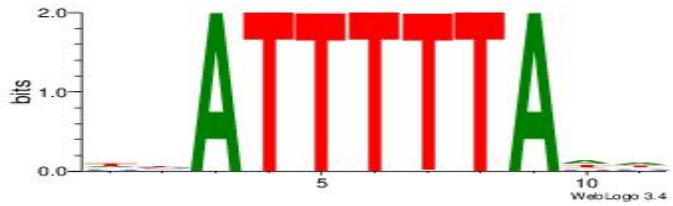
Dataset #: 4 Motif ID: 85 Motif name: wtATTTTTAww

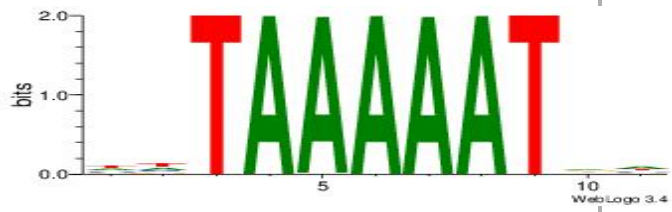
Original motif

Consensus sequence: DHATTTTTADD

Reverse complement motif

Consensus sequence: DDTAAAAATHD





Best Matches for Motif ID 85 (Highest to Lowest)

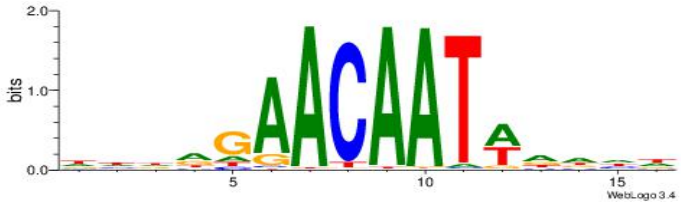
Motif ID:	UP00091
Motif name:	Sox5_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0

Alignment:

```
DHDDWATTGTTCDDHD
---DHATTTTTADD--
```

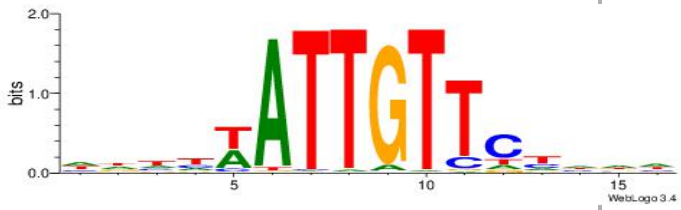
Original motif

Consensus sequence: DHDDGAACAATWDDHD



Reverse complement motif

Consensus sequence: DHDDWATTGTTCDDHD



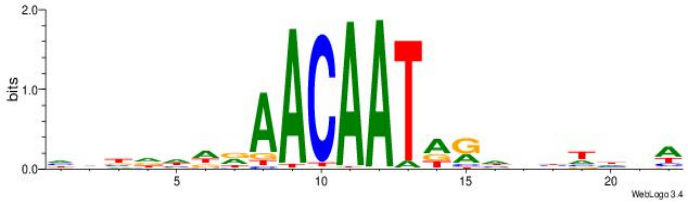
Motif ID:	UP00034
Motif name:	Sox7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	11
Similarity score:	0.00014559

Alignment:

```
WBHHHHHMDATTGTTHDHDVHH
-------DHATTTTTADD----
```

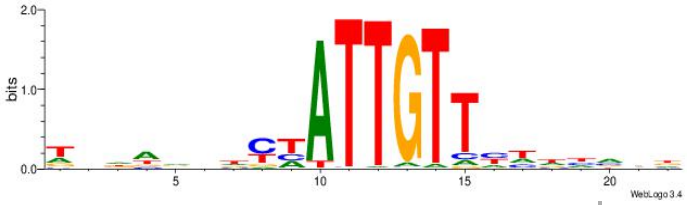
Original motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Reverse complement motif

Consensus sequence: WBHHHHHMDATTGTTHDHDVHH

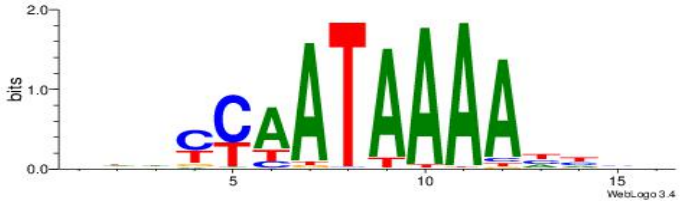


Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6

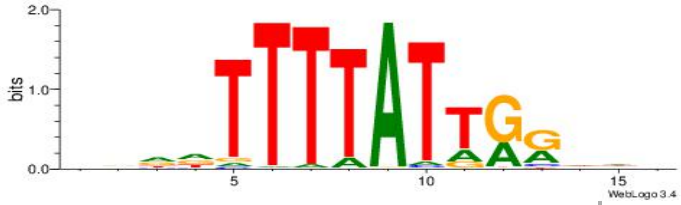
Number of overlap: 11
Similarity score: 0.00108087

Alignment:
HDHYYAATAAAAHHHH
-----DDTAAAAATHD

Original motif
Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif
Consensus sequence: HDHHTTTTATTKKHDD



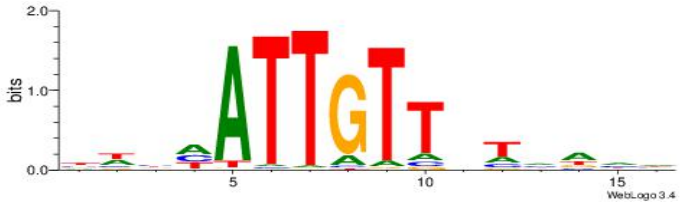
Motif ID: UP00064
Motif name: Sox18_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.00183146

Alignment:
HHDHABAACAATHBWV
---DDTAAAAATHD--

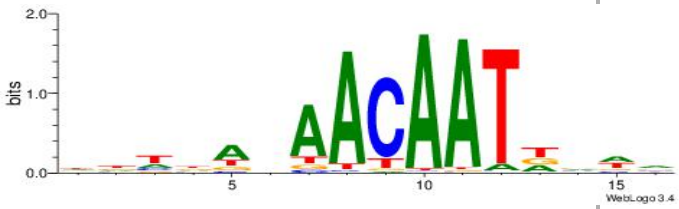
Original motif

Reverse complement motif

Consensus sequence: BWBHATTGTTBTHDHH



Consensus sequence: HHDHABAACAATHBWV



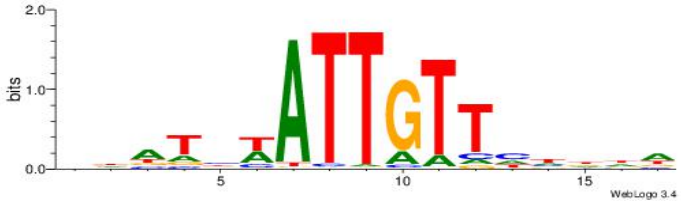
Motif ID:	UP00051
Motif name:	Sox8_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00234987

Alignment:

```
DDDHDAACAATWBATDD
--DDTAAAAATHD----
```

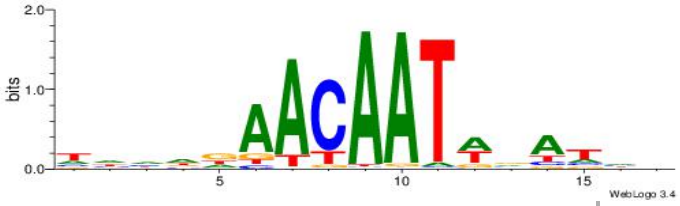
Original motif

Consensus sequence: DDATBWATTGTTHHDDD



Reverse complement motif

Consensus sequence: DDDHDAACAATWBATDD



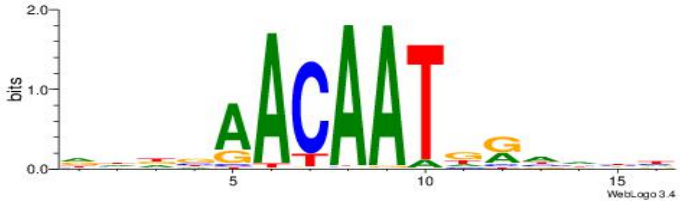
Motif ID:	UP00023
Motif name:	Sox30_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	11
Similarity score:	0.00263261

Alignment:

```
HHHHMHATTGTTBDHD
----DHATTTTTADD-
```

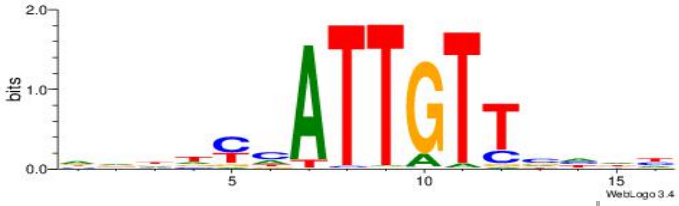
Original motif

Consensus sequence: DHDBAACAATDRHHHH



Reverse complement motif

Consensus sequence: HHHHMHATTGTTBDHD

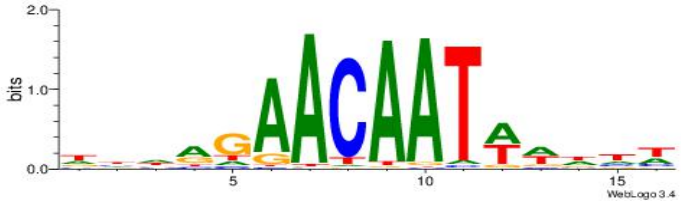


Motif ID:	UP00096
Motif name:	Sox13_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

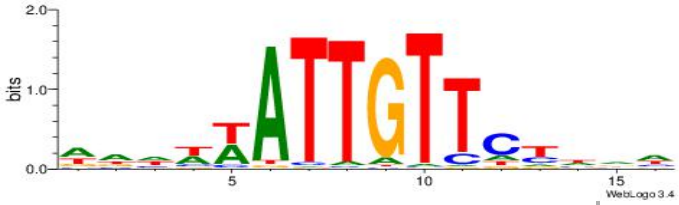
Number of overlap: 11
Similarity score: 0.00324502

Alignment:
WHDWWATTGTTCKDHD
---DHATTTTTADD--

Original motif
Consensus sequence: DHDRGAACAATWWDHW



Reverse complement motif
Consensus sequence: WHDWWATTGTTCKDHD



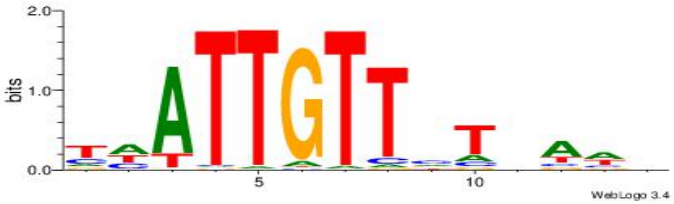
Motif ID: UP00101
Motif name: Sox12_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.00331279

Alignment:
THATTGTTVTHAWH
DHATTTTTADD---

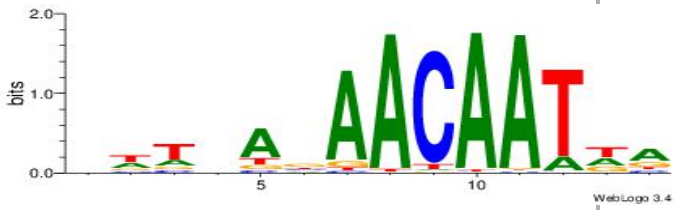
Original motif

Reverse complement motif

Consensus sequence: THATTGTTVTHAWH



Consensus sequence: DWTHAVAACAATHA



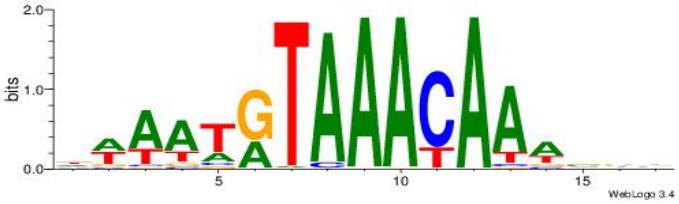
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0034964

Alignment:

```
VVVWTTGTTTAMATTWD
--DHATTTTTADD----
```

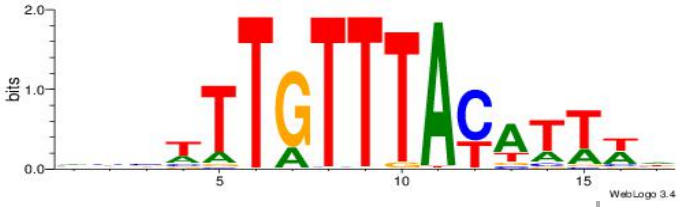
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



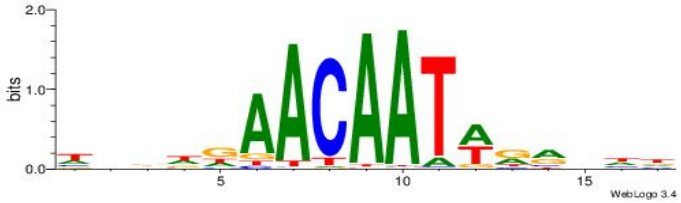
Motif ID:	UP00075
Motif name:	Sox15_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00406738

Alignment:

```
HDDDDAACAATWRRBHD
--DDTAAAAATHD----
```

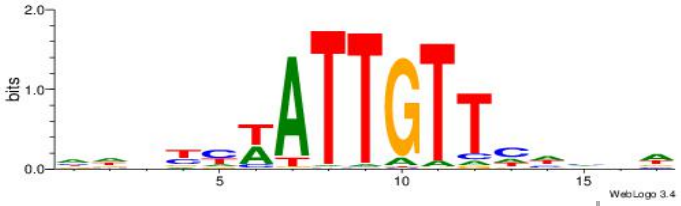
Original motif

Consensus sequence: HDDDDAACAATWRRBHD



Reverse complement motif

Consensus sequence: DHVKMWATTGTTHDHDH



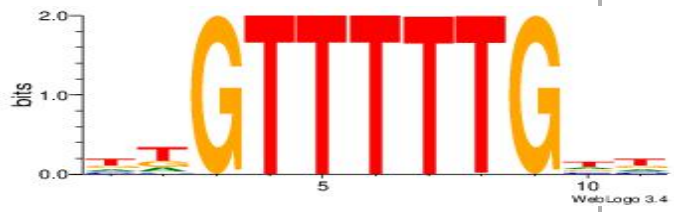
Dataset #: 4 Motif ID: 86 Motif name: aaCAAAAACaa

Original motif

Consensus sequence: HHCAAAAACAH

Reverse complement motif

Consensus sequence: HTGTTTTTGHH



Best Matches for Motif ID 86 (Highest to Lowest)

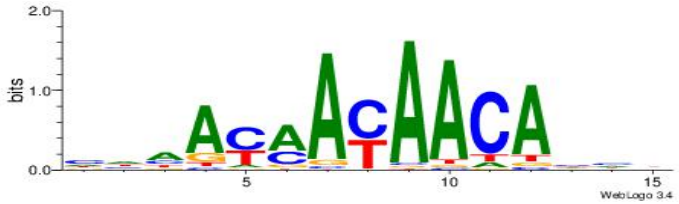
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0

Alignment:

```
HDDTGTTKTTKTHHD
--HTGTTTTTGHH--
```

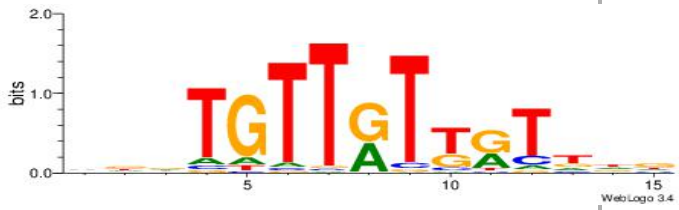
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD



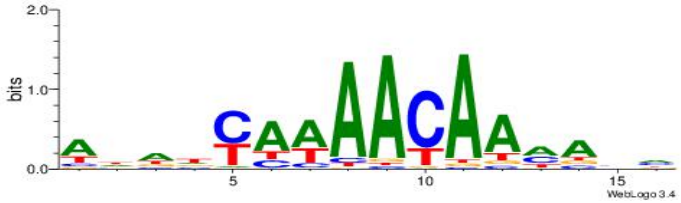
Motif ID:	UP00061
Motif name:	Foxl1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0172856

Alignment:

```
HDTYTTGTTWTKDDDT
----HTGTTTTTGHH-
```

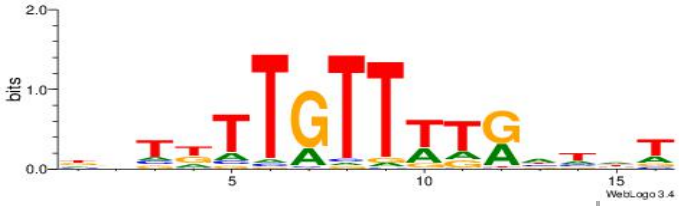
Original motif

Consensus sequence: ADDDYAWAACAAMAHH



Reverse complement motif

Consensus sequence: HDTYTTGTTWTKDDDT

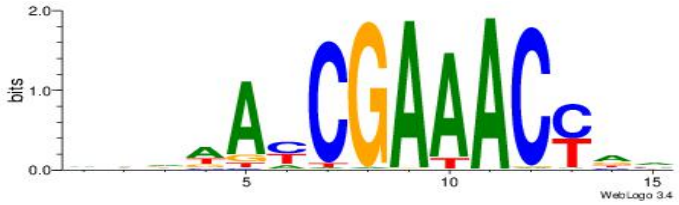


Motif ID:	UP00040
Motif name:	Irf5_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

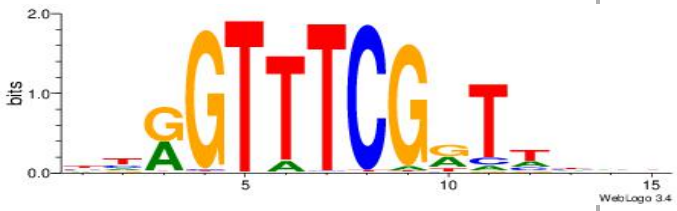
Similarity score: 0.0178701

Alignment:
BDKGTTTCGKTWDDD
HTGTTTTTGHH----

Original motif
Consensus sequence: DDDWAYCGAAACYDV



Reverse complement motif
Consensus sequence: BDKGTTTCGKTWDDD

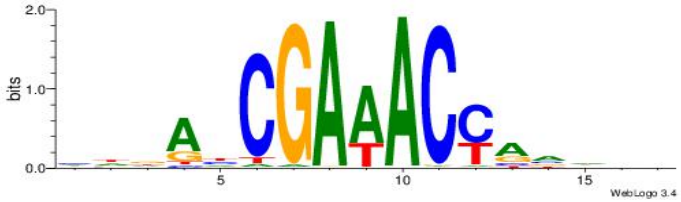


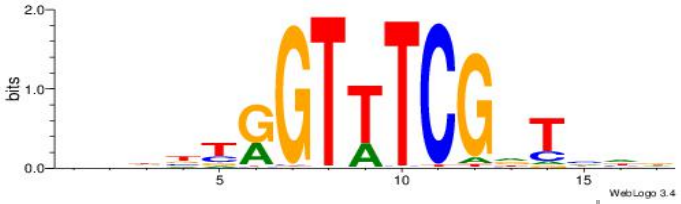
Motif ID:	UP00011
Motif name:	Irf6_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.018453

Alignment:
HDDAHCGAAACYAVDDD
---HHCAAAAACAH---

Original motif
Consensus sequence: HDDAHCGAAACYAVDDD

Reverse complement motif
Consensus sequence: DHDBTKGTTTCGHTHDD





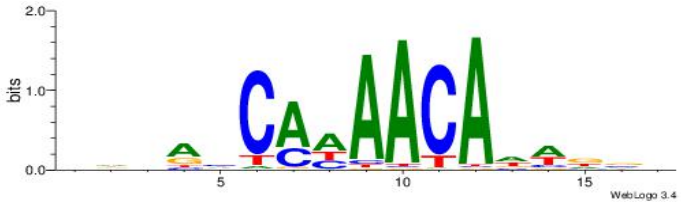
Motif ID:	UP00039
Motif name:	Foxj3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0186097

Alignment:

```
DVHWDTGTTWTGDTBDH
----HTGTTTTTGHH--
```

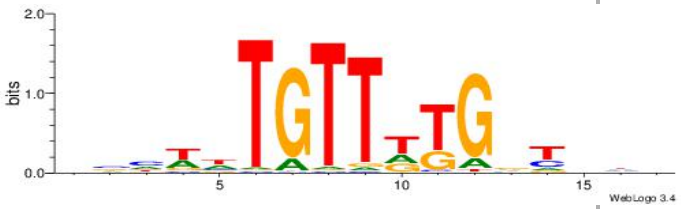
Original motif

Consensus sequence: HDBAHCAWAACADWDVD



Reverse complement motif

Consensus sequence: DVHWDTGTTWTGDTBDH



Motif ID: UP00077

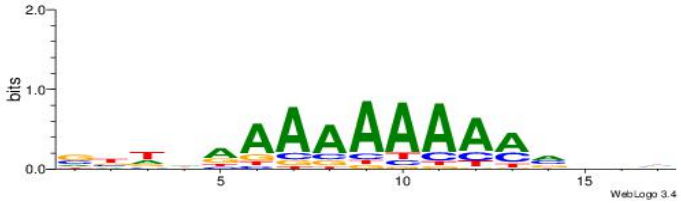
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0191319

Alignment:

```
VBDDAAAAAAAAMVBHH
---HHCAAAAACAH---
```

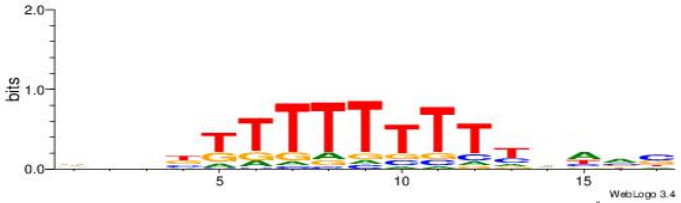
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV

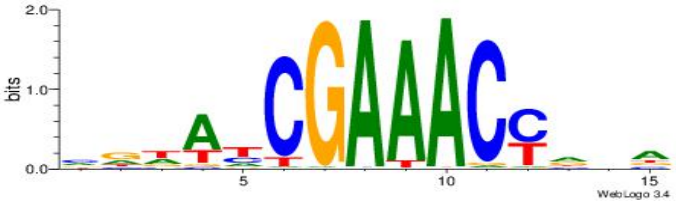


Motif ID:	UP00018
Motif name:	Irf4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	11

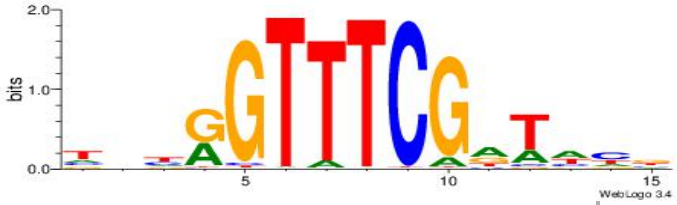
Similarity score: 0.0201092

Alignment:
VDDAYCGAAACYDVA
---HHCAAAAACAH-

Original motif
Consensus sequence: VDDAYCGAAACYDVA



Reverse complement motif
Consensus sequence: TBDKGTTTCGMTDHV

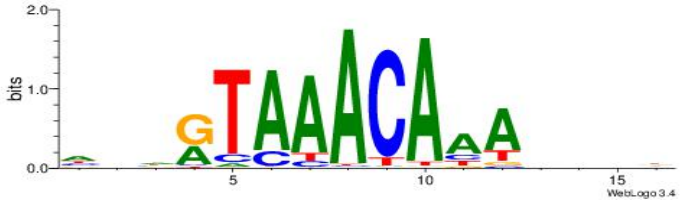


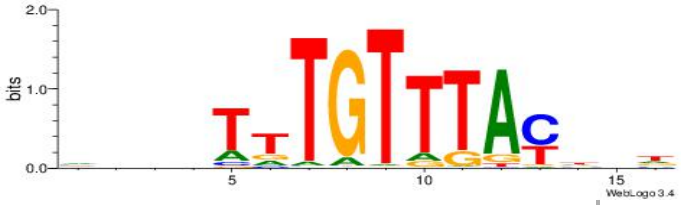
Motif ID: UP00041
Motif name: Foxj1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.020345

Alignment:
HDHRTAAACAAAHDDD
HHCAAAAACAH-----

Original motif
Consensus sequence: HDHRTAAACAAAHDDD

Reverse complement motif
Consensus sequence: DDDHTTTGTTTAMHDH





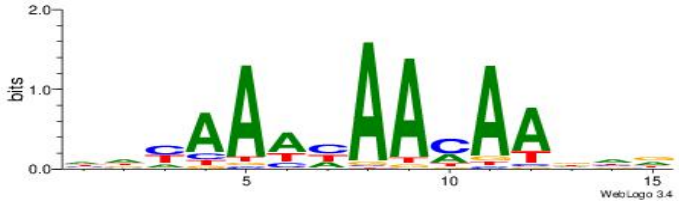
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0205157

Alignment:

```
HDYAAAHAAMAADHD
----HHCAAAAACAH
```

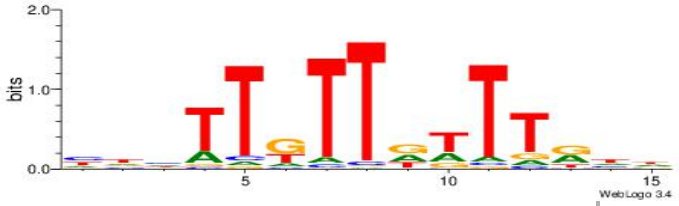
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



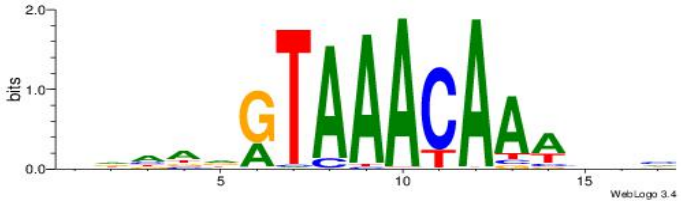
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.021082

Alignment:

```
HDHADGTAAACAAAVVH
--HHCAAAAACAH----
```

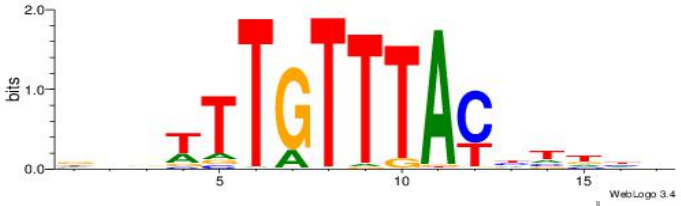
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH



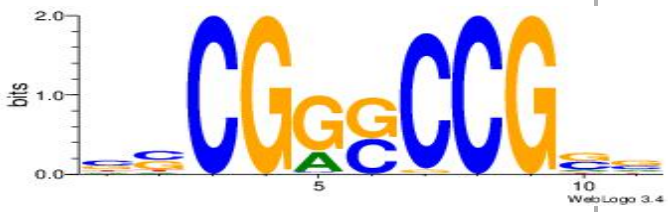
Dataset #: 4 Motif ID: 87 Motif name: ssCGGsYCGss

Original motif

Consensus sequence: BSCGGSCCGSV

Reverse complement motif

Consensus sequence: VSCGGSCCGSB



Best Matches for Motif ID 87 (Highest to Lowest)

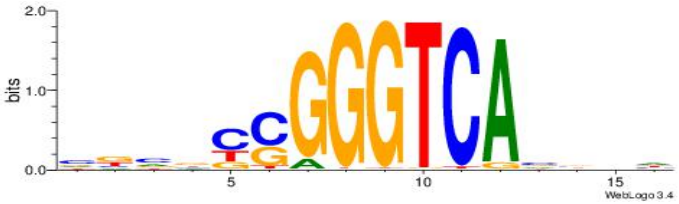
Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0041916

Alignment:

```
VBVBCSGGGTCAVBBH
---BSCGGSCCGSV--
```

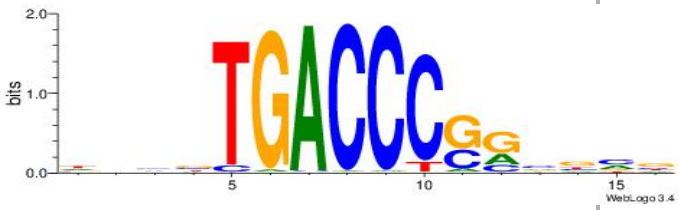
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



Motif ID:	UP00087
Motif name:	Tcfap2c_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:	0.0167626

Alignment:

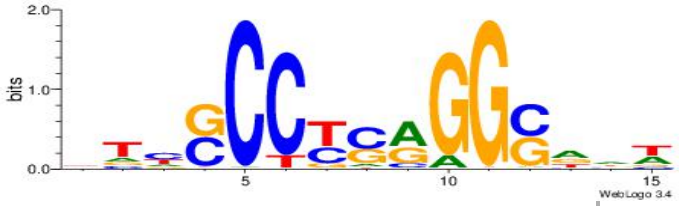
```
DTHSCCKSMGGSHHW
--VSCGGSCCGSB--
```

Original motif

Consensus sequence: WHHSCCYSRGGSDAD

Reverse complement motif

Consensus sequence: DTHSCCKSMGGSHHW



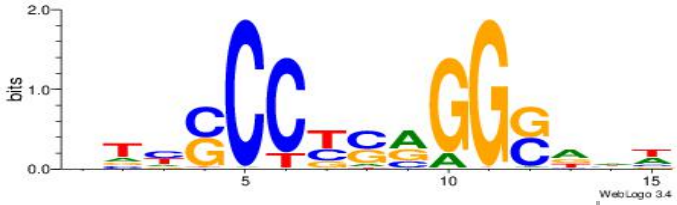
Motif ID:	UP00005
Motif name:	Tcfap2a_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3

Number of overlap: 11
Similarity score: 0.0181073

Alignment:
DTMSCCKSMGGSHDW
--VSCGGSCCGSB--

Original motif
Consensus sequence: WDHSCCYSRGGSRAD

Reverse complement motif
Consensus sequence: DTMSCCKSMGGSHDW



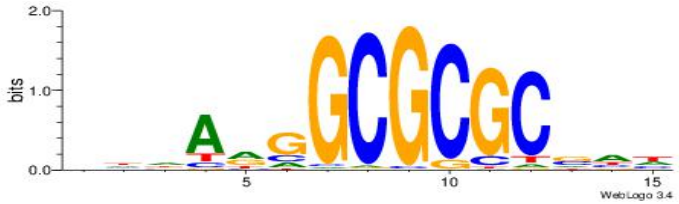
Motif ID: UP00001
Motif name: E2F2_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0181335

Alignment:
HHVGCGCGCCKTDHB
--VSCGGSCCGSB--

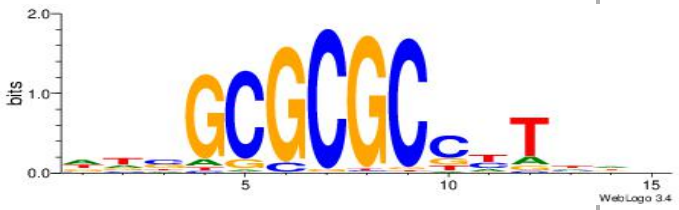
Original motif

Reverse complement motif

Consensus sequence: VHDARGGCGCGCVHH



Consensus sequence: HHVGCGCGCCKTDHB



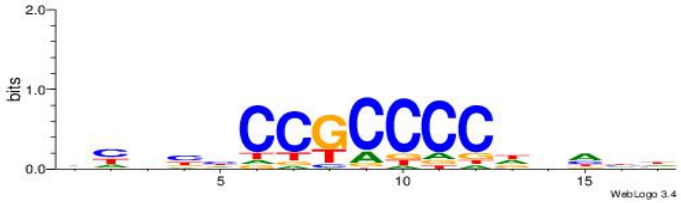
Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.018713

Alignment:

```
HHHHDGGGGCGGDBHDV
---BSCGGSCCGSV---
```

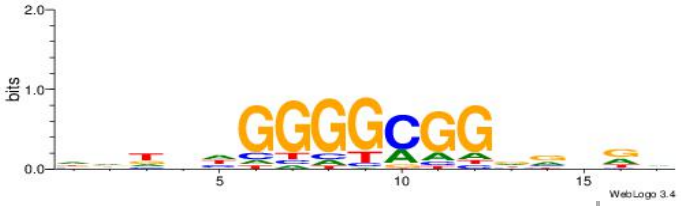
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



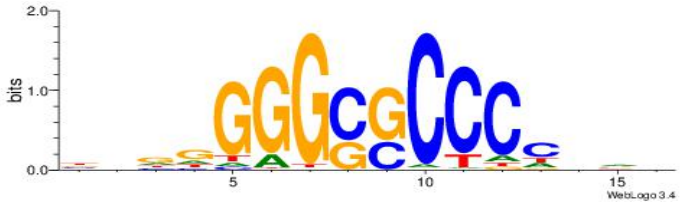
Motif ID:	UP00088
Motif name:	Plagl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0191969

Alignment:

```
VBVGGGGSSCCCCHHV
--BSCGGSCCGSV---
```

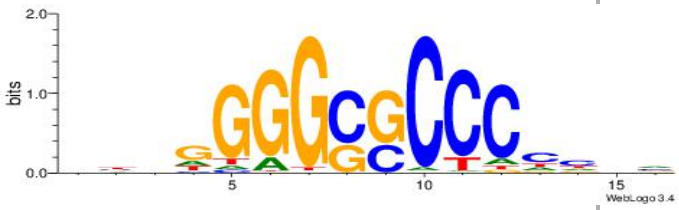
Original motif

Consensus sequence: BHDGGGGSSCCCCBVV



Reverse complement motif

Consensus sequence: VBVGGGGSSCCCCHHV

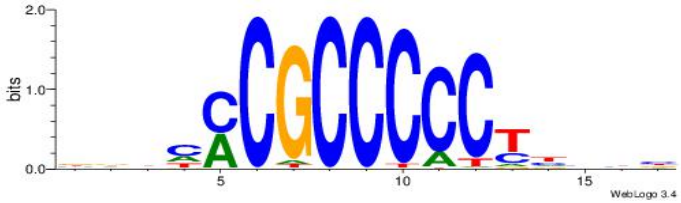


Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

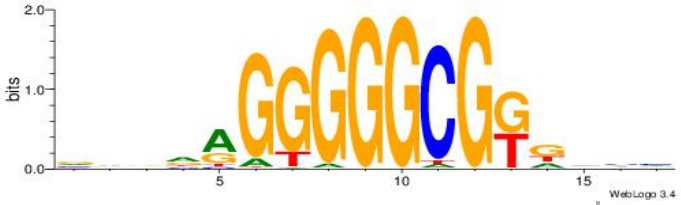
Number of overlap: 11
Similarity score: 0.019282

Alignment:
BDHHMCGCCCCCTHVBB
---VSCGGSCCGSB---

Original motif
Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif
Consensus sequence: BVVHAGGGGGCGRDHHB



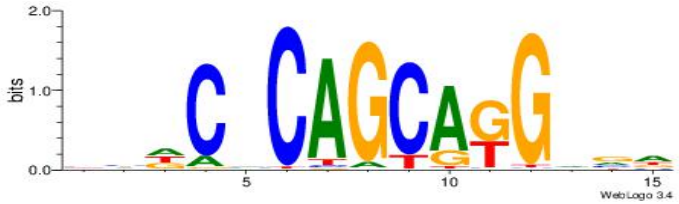
Motif ID: UP00057
Motif name: Zic2_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0195427

Alignment:
DVBCYTGCTGBGDDD
-VSCGGSCCGSB---

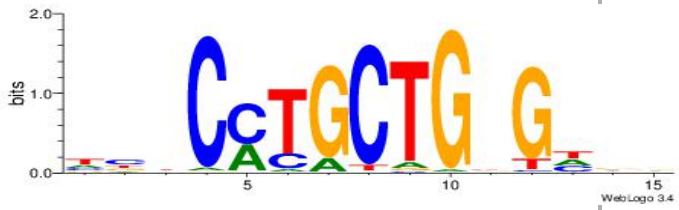
Original motif

Reverse complement motif

Consensus sequence: HHDCVCAGCAKGVVD



Consensus sequence: DVBCYTGCTGBGDDD



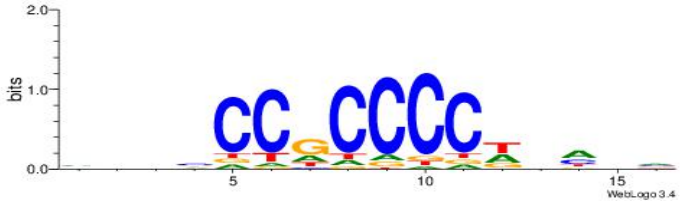
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0197663

Alignment:

```
HBBBCCGCCCCWHHHV
---VSCGGSCCGSB--
```

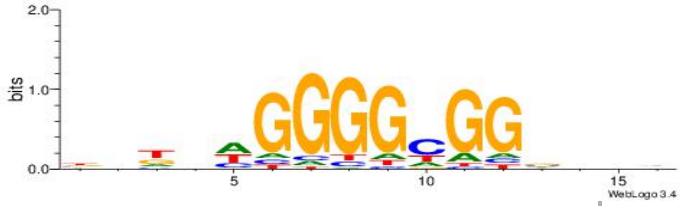
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH



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:	4
Number of overlap:	11
Similarity score:	0.0217605

Alignment:

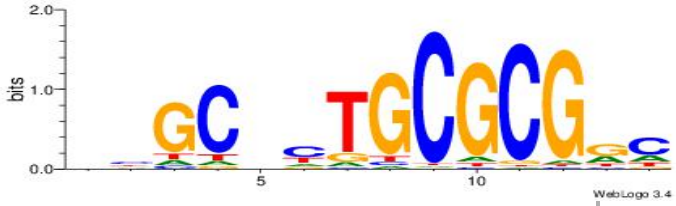
```
GYCGCGCARBGCVB
VSCGGSCCGSB---
```

Original motif

Consensus sequence: GYCGCGCARBGCVB

Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



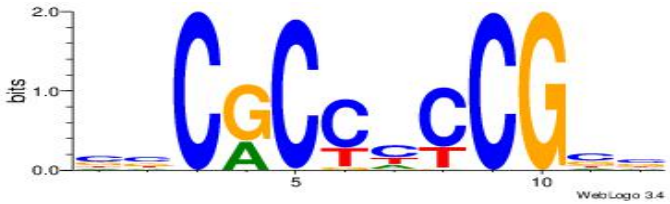
Dataset #: 4 **Motif ID: 88** **Motif name: ssCrCYyYCGss**

Original motif

Consensus sequence: BBCRCCYCCGBB

Reverse complement motif

Consensus sequence: BBCGGKGGMGBB



Best Matches for Motif ID 88 (Highest to Lowest)

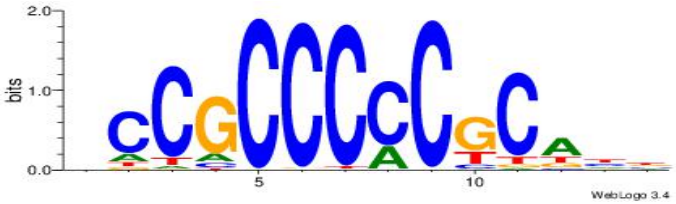
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0

Alignment:

```
HCCGCCCCCGCAHB
BBCRCCYCCGBB--
```

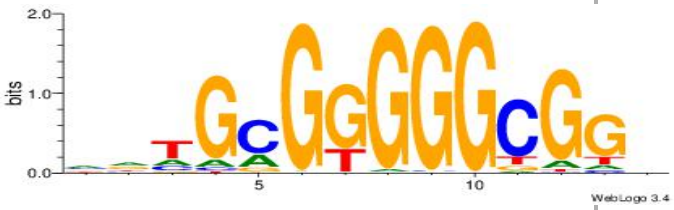
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



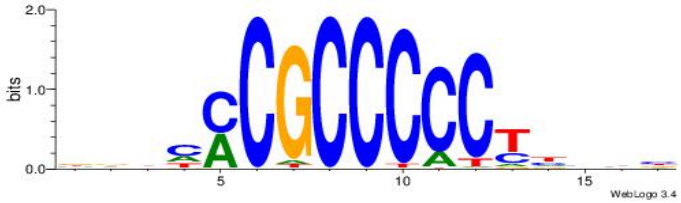
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0017378

Alignment:

```
BVVHAGGGGGCGRDHHB
--BBCGGKGGMGBB---
```

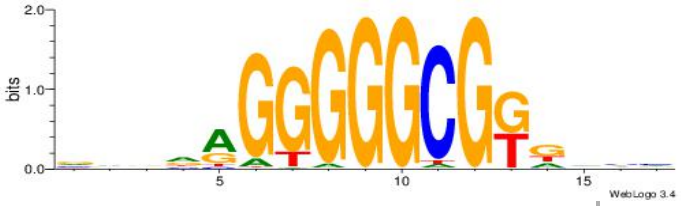
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB

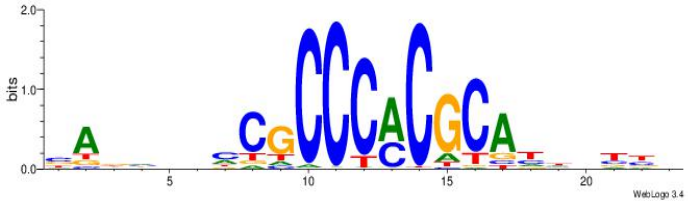


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6

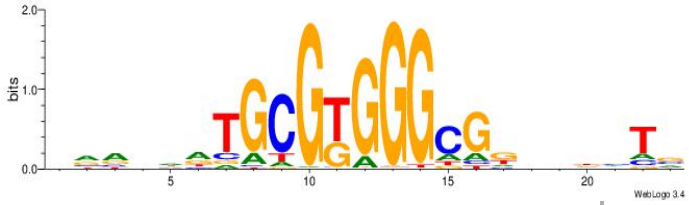
Number of overlap: 12
Similarity score: 0.00511361

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
-----BBCRCCYCCGBB------

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



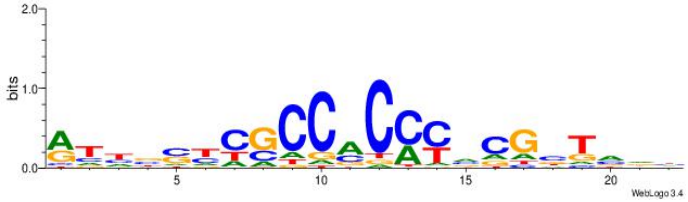
Motif ID: UP00539
Motif name: Gli2_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 12
Similarity score: 0.0121746

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
-------BBCRCCYCCGBB---

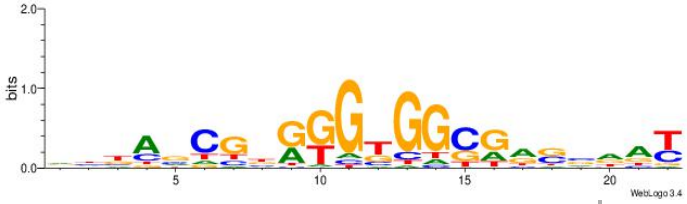
Original motif

Reverse complement motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



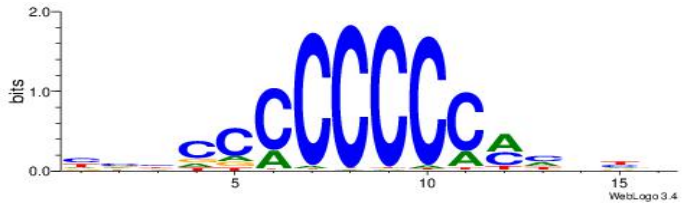
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0166591

Alignment:

```
BHHDYGGGGGGGGBVD
--BBCGGKGGMGBB--
```

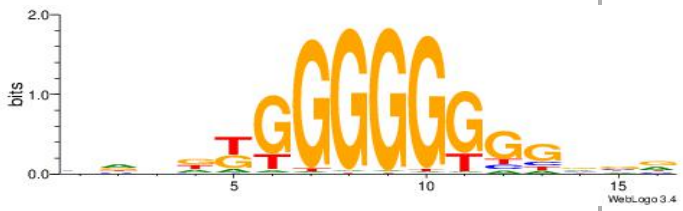
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



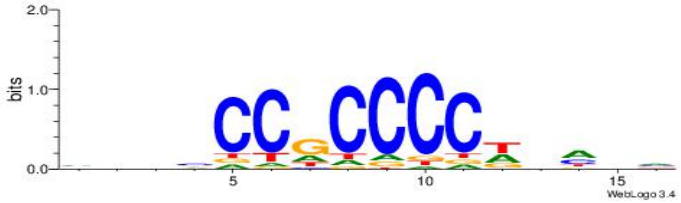
Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0182309

Alignment:

```
BHHHWGGGGCGGBBVH
-BBCGGKGGMGBB---
```

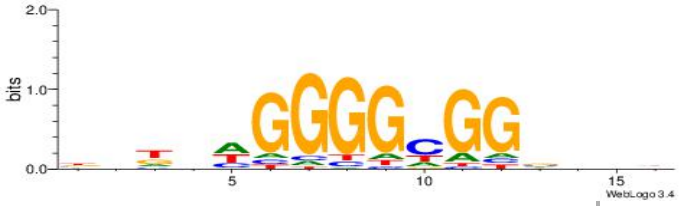
Original motif

Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif

Consensus sequence: BHHHWGGGGCGGBBVH

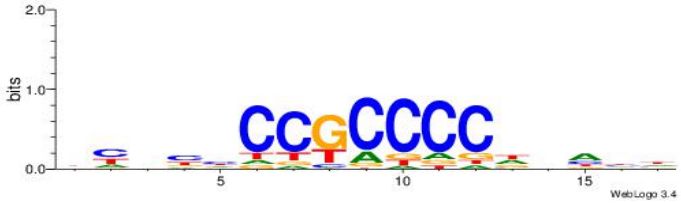


Motif ID:	UP00033
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

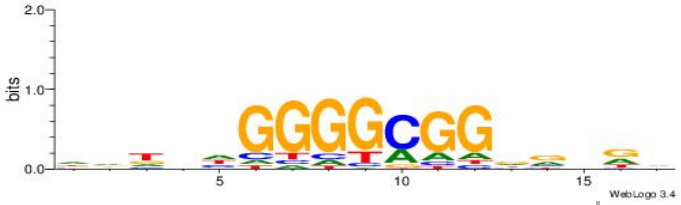
Number of overlap: 12
Similarity score: 0.0202898

Alignment:
HHHHDGGGGCGGDBHDV
-BBCGGKGGMGBB----

Original motif
Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif
Consensus sequence: HHHHDGGGGCGGDBHDV



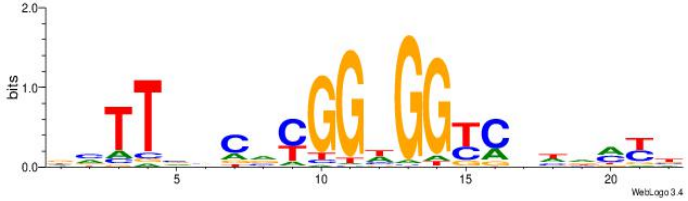
Motif ID: UP00540
Motif name: Gli3_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 12
Similarity score: 0.0203969

Alignment:
VMYDHDGMCCHCCKBGVVAAVH
----BBCRCCYCCGBB------

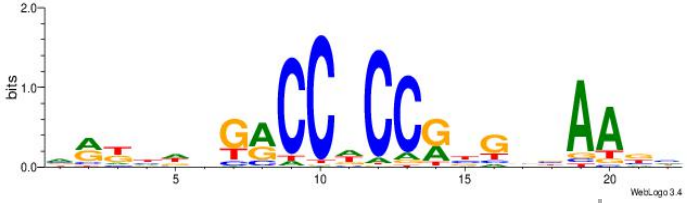
Original motif

Reverse complement motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



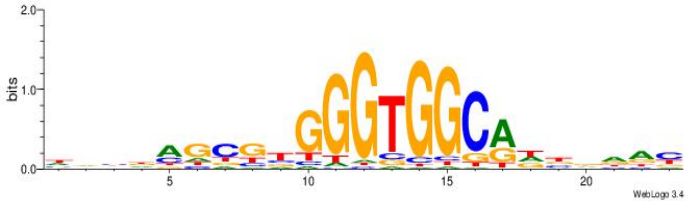
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0221373

Alignment:

```
BDDHVDKGCCACCCVCGCTDBVH
-------BBCRCCYCCGBB----
```

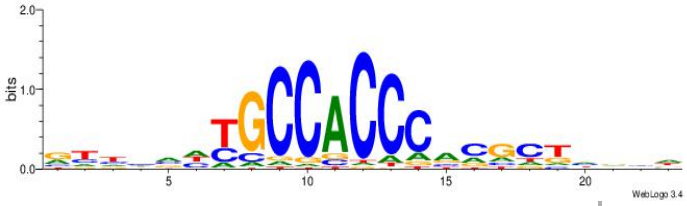
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



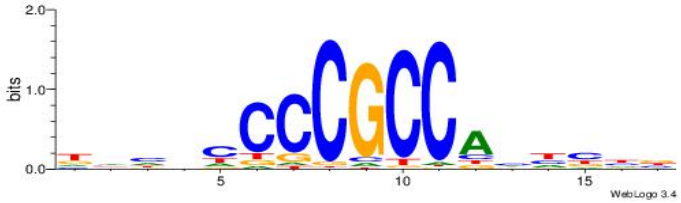
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0234529

Alignment:

```
DHHBCCCCGCCAHHBHB
-----BBCRCCYCCGBB
```

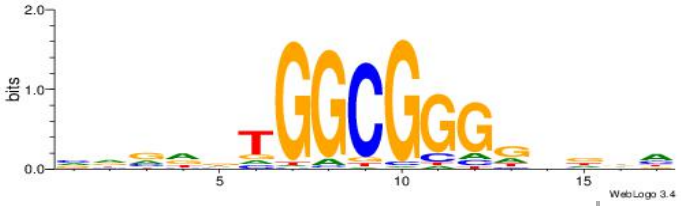
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



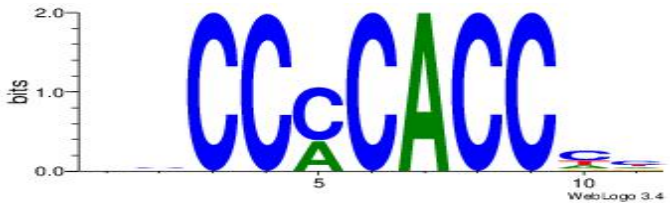
Dataset #: 4 Motif ID: 89 Motif name: ccCCmCACCcc

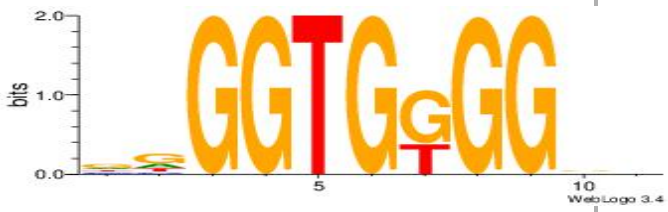
Original motif

Consensus sequence: HBCCMCACCHH

Reverse complement motif

Consensus sequence: DDGGTGRGGBD





Best Matches for Motif ID 89 (Highest to Lowest)

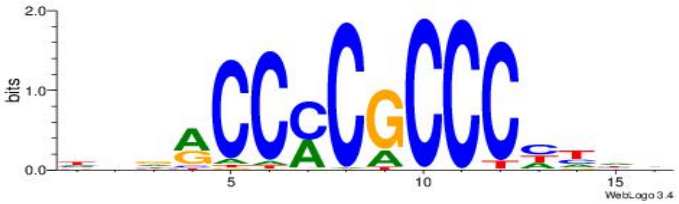
Motif ID:	UP00093
Motif name:	Klf7_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0

Alignment:

```
HBDRCCMCGCCCHHHD
--HBCCMCACCHH---
```

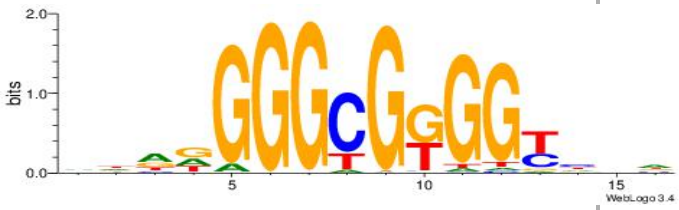
Original motif

Consensus sequence: HBDRCCMCGCCCHHHD



Reverse complement motif

Consensus sequence: DHHDGGGCGRGGKHBH



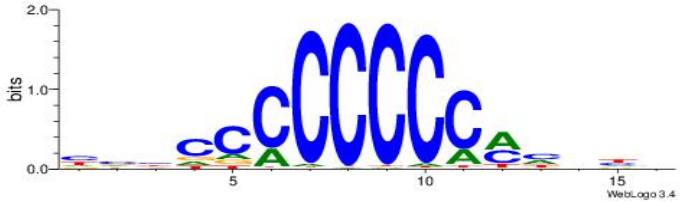
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.00768447

Alignment:

```
HVBCCCCCCCCMHHHB
-HBCCMCACCHH----
```

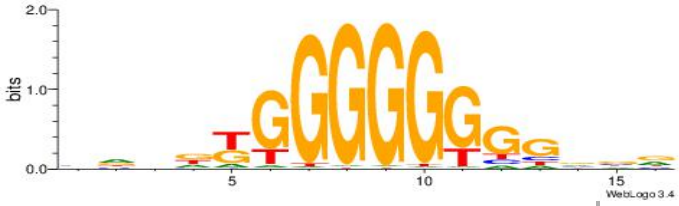
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD

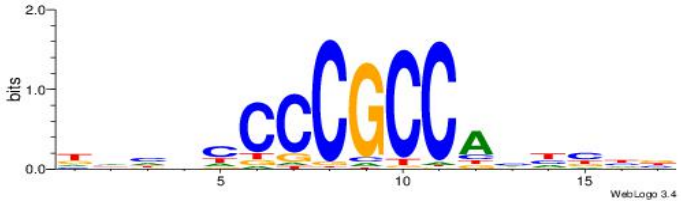


Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

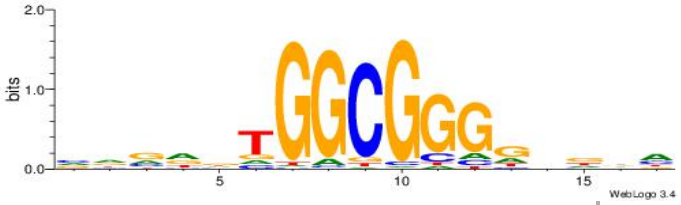
Number of overlap: 11
Similarity score: 0.0138334

Alignment:
DHHBCCCCGCCAHHBHB
--HBCCMCACCHH----

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD



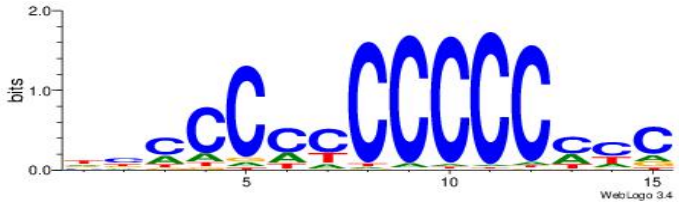
Motif ID: UP00021
Motif name: Zfp281_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.0173499

Alignment:
DBCCCCCCCCCCMYC
--HBCCMCACCHH--

Original motif

Reverse complement motif

Consensus sequence: DBCCCCCCCCCCMYC



Consensus sequence: GKRGGGGGGGGGBD

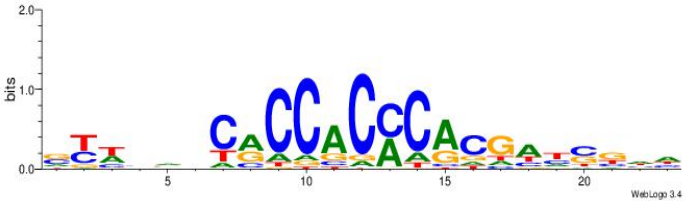
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	11
Similarity score:	0.0217412

Alignment:

```
HHBSHTCGTGRGTGGKGDBVWMV
--------DDGGTGRGGBD----
```

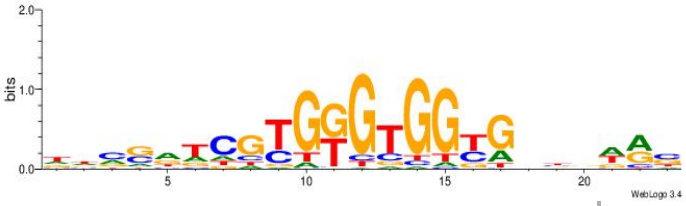
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



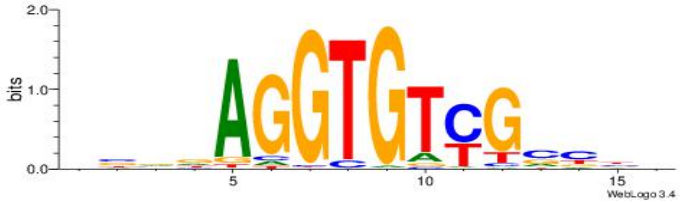
Motif ID:	UP00068
Motif name:	Eomes_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0224448

Alignment:

```
VVBVCKACACCTHVBV
--HBCCMCACCHH---
```

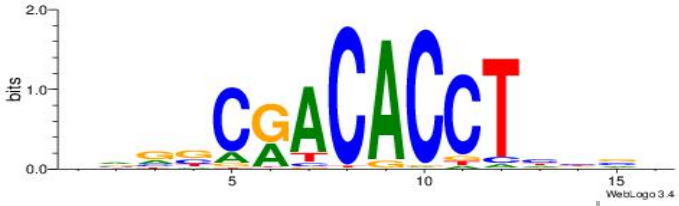
Original motif

Consensus sequence: VBVDAGGTGTYGVBBV



Reverse complement motif

Consensus sequence: VVBVCKACACCTHVBV

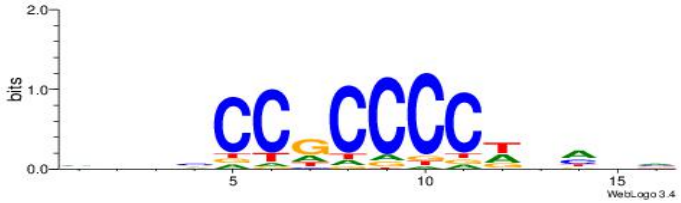


Motif ID:	UP00043
Motif name:	Bcl6b_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

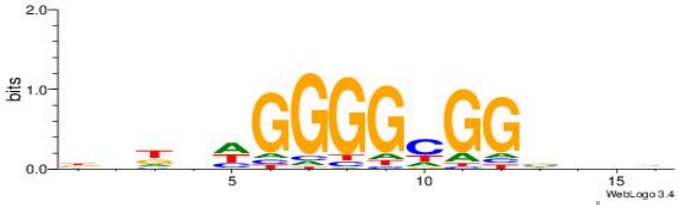
Number of overlap: 11
Similarity score: 0.0225902

Alignment:
HBBBCCGCCCCWHHHV
--HBCCMCACCHH---

Original motif
Consensus sequence: HBBBCCGCCCCWHHHV



Reverse complement motif
Consensus sequence: BHHHWGGGGCGGBBVH



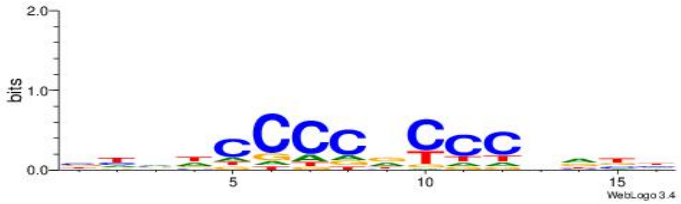
Motif ID: UP00099
Motif name: Ascl2_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0228722

Alignment:
BHVDCCCCDCCCBDBH
--HBCCMCACCHH---

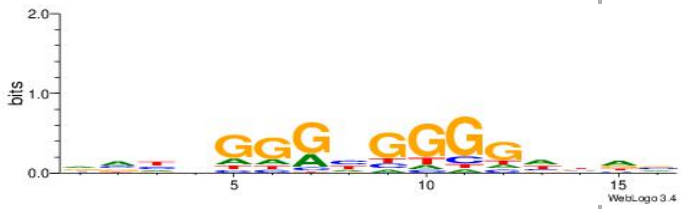
Original motif

Reverse complement motif

Consensus sequence: BHVDCCCCDCCCBDBH



Consensus sequence: HVDVGGGHGGGGDBHB



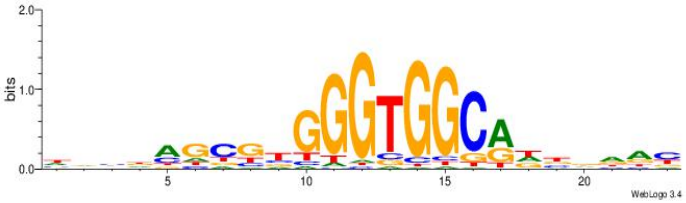
Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	9
Number of overlap:	11
Similarity score:	0.0245037

Alignment:

```
HVBDAGCGBGGGTGGCRDBDDDB
--------DDGGTGRGGBD----
```

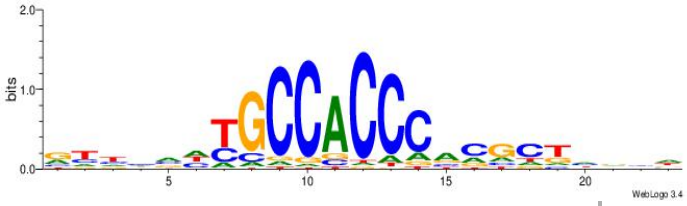
Original motif

Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif

Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



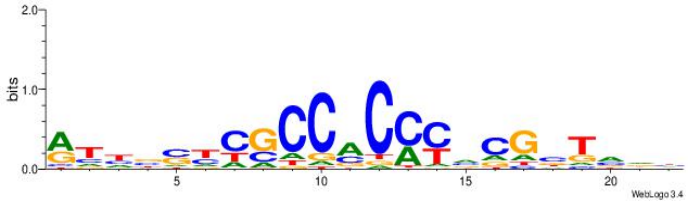
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	8
Number of overlap:	11
Similarity score:	0.0265658

Alignment:

```
RTHBSYCGCCMCMYVCGBTVDH
----HBCCMCACCHH-------
```

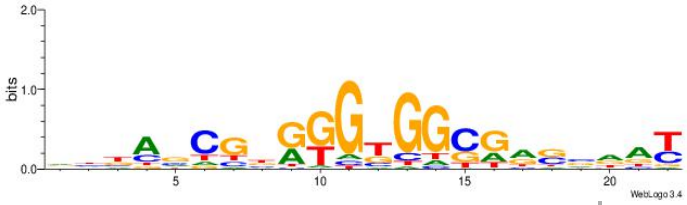
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



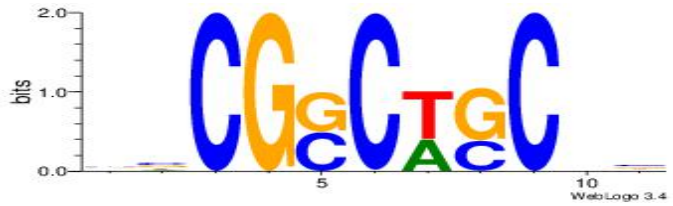
Dataset #: 4 Motif ID: 90 Motif name: ssCGsCwsCss

Original motif

Consensus sequence: BBCGSCWSCBB

Reverse complement motif

Consensus sequence: BBGSWGSCGBB



Best Matches for Motif ID 90 (Highest to Lowest)

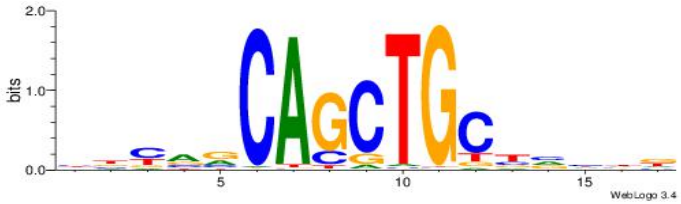
Motif ID:	UP00099
Motif name:	Ascl2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0130439

Alignment:

```
HHDVVGCAGCTGVBKVB
---BBGSWGSCGBB---
```

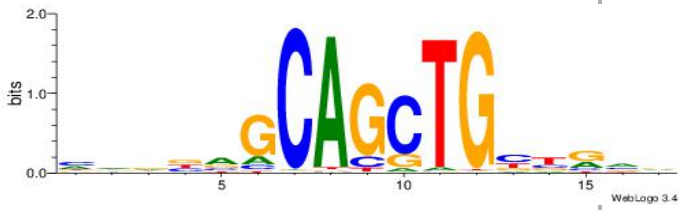
Original motif

Consensus sequence: BBYVVCAGCTGCBVHHD



Reverse complement motif

Consensus sequence: HHDVVGCAGCTGVBKVB



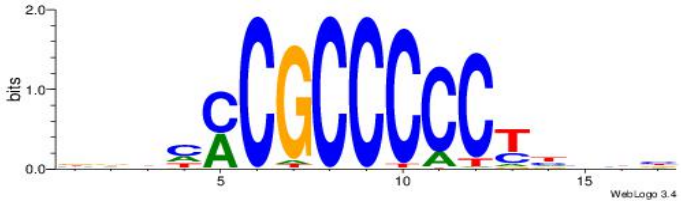
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0163536

Alignment:

```
BDHHMCGCCCCCTHVBB
---BBCGSCWSCBB---
```

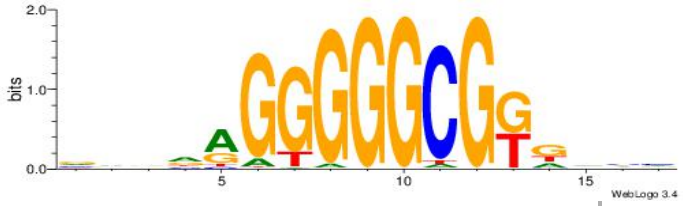
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB

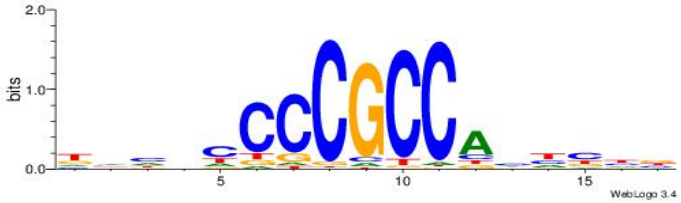


Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6

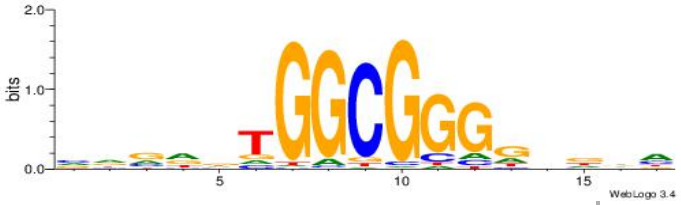
Number of overlap: 11
Similarity score: 0.0174052

Alignment:
DHHBCCCCGCCAHHBHB
-----BBCGSCWSCBB-

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD



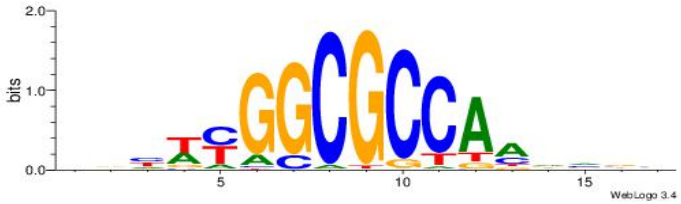
Motif ID: UP00003
Motif name: E2F3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.0191478

Alignment:
BBBDYTGGCGCCKWDBD
-BBGSWGSCGBB-----

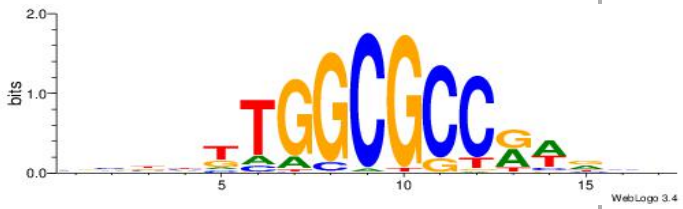
Original motif

Reverse complement motif

Consensus sequence: HBHWYGGCGCCAMDVBB



Consensus sequence: BBBDYTGGCGCCKWDBD



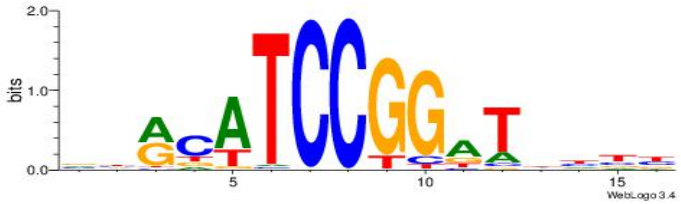
Motif ID:	UP00038
Motif name:	Spdef_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	11
Similarity score:	0.0192028

Alignment:

```
VVHHATCCGGATGKHV
BBGSWGSCGBB-----
```

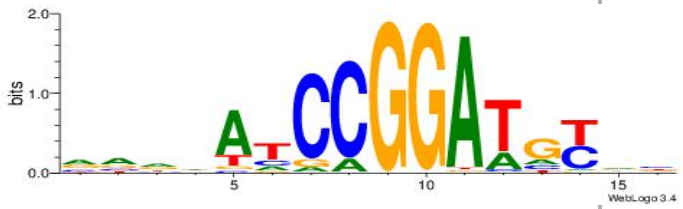
Original motif

Consensus sequence: VHRCATCCGGATHHBB



Reverse complement motif

Consensus sequence: VVHHATCCGGATGKHV



Motif ID:	UP00036

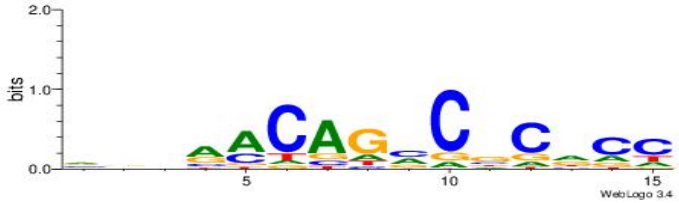
Motif name:	Myf6_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0207004

Alignment:

```
GGDGBGVCTGTKVVB
--BBCGSCWSCBB--
```

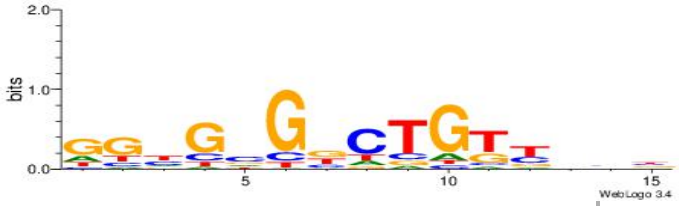
Original motif

Consensus sequence: VVVRACAGVCBCDCC



Reverse complement motif

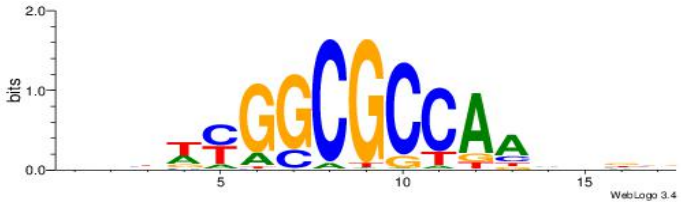
Consensus sequence: GGDGBGVCTGTKVVB



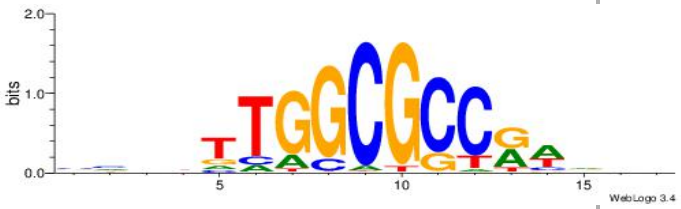
Motif ID:	UP00001
Motif name:	E2F2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0211994

Alignment:
HVBWYGGCGCCAADVBB
------BBCGSCWSCBB

Original motif
Consensus sequence: HVBWYGGCGCCAADVBB



Reverse complement motif
Consensus sequence: BBBDTTGGCGCCKWVVD

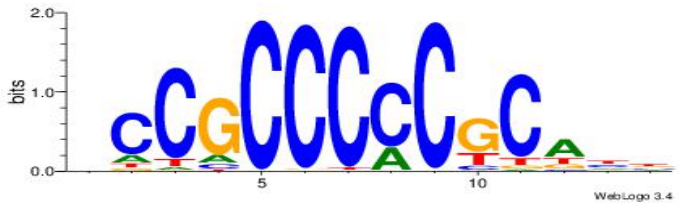


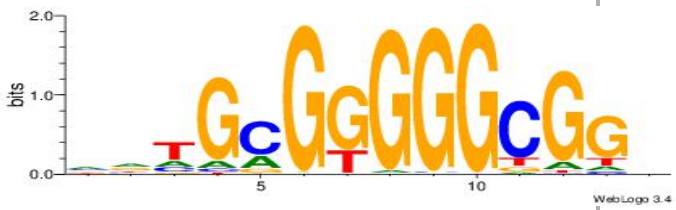
Motif ID:	UP00007
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0223013

Alignment:
HCCGCCCCCGCAHB
BBCGSCWSCBB---

Original motif
Consensus sequence: HCCGCCCCCGCAHB

Reverse complement motif
Consensus sequence: VHTGCGGGGGCGGH





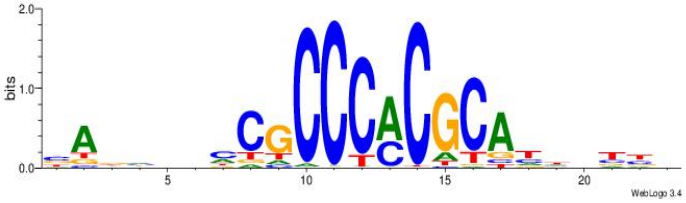
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0.0243838

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
-----BBCGSCWSCBB-------
```

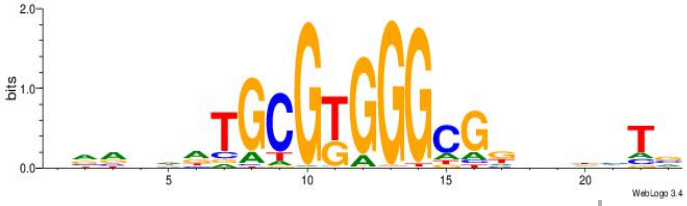
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00046

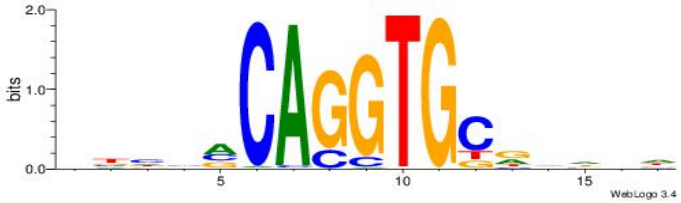
Motif name:	Tcfe2a_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0243929

Alignment:

```
DHDBHGCACCTGBDDVB
----BBCGSCWSCBB--
```

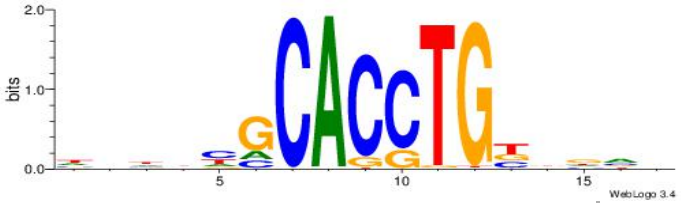
Original motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Reverse complement motif

Consensus sequence: DHDBHGCACCTGBDDVB



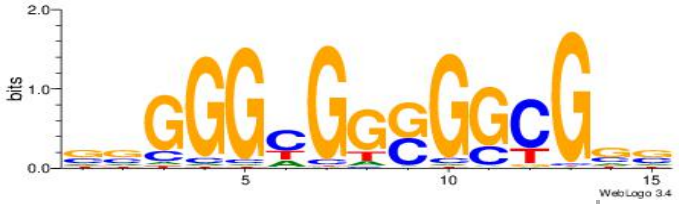
Dataset #: 4 Motif ID: 91 Motif name: ssCGCCsCCrCCCss

Original motif

Consensus sequence: SSCGCCSCCGCCCSS

Reverse complement motif

Consensus sequence: SSGGGCGGSGGCGSS



Best Matches for Motif ID 91 (Highest to Lowest)

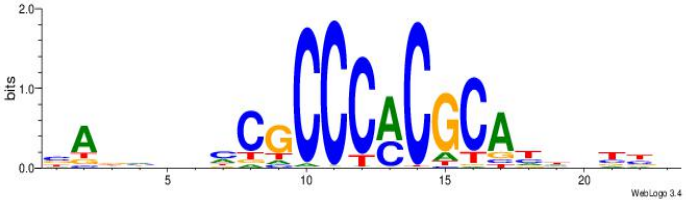
Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	15
Similarity score:	0.013801

Alignment:

```
BADHBDHCGCCCMCGCAHHDBBV
-----SSCGCCSCCGCCCSS---
```

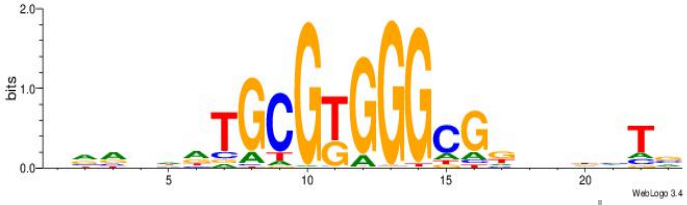
Original motif

Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif

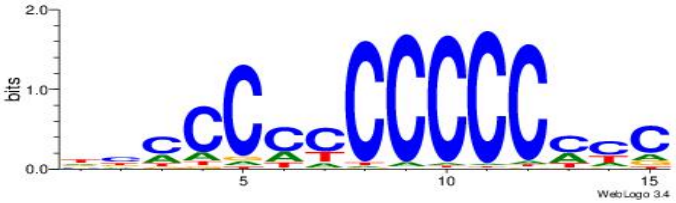
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	15
Similarity score:	0.0189308

Alignment:
DBCCCCCCCCCCMYC
SSCGCCSCCGCCCSS

Original motif
Consensus sequence: DBCCCCCCCCCCMYC



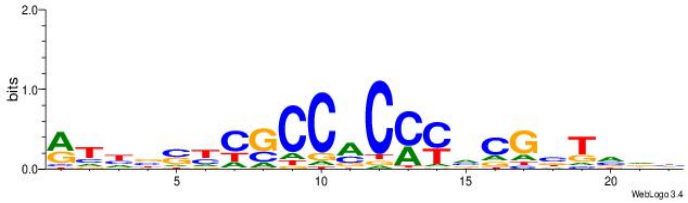
Reverse complement motif
Consensus sequence: GKRGGGGGGGGGGBD

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:	Forward
Position number:	2

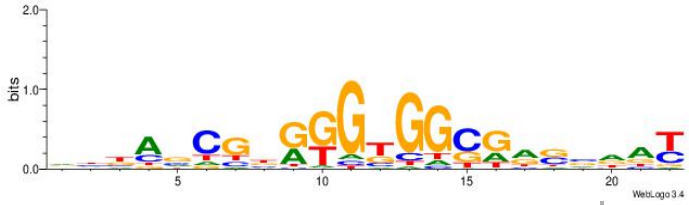
Number of overlap: 15
Similarity score: 0.0243383

Alignment:
RTHBSYCGCCMCMYVCGBTVDH
-SSCGCCSCCGCCCSS------

Original motif
Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif
Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



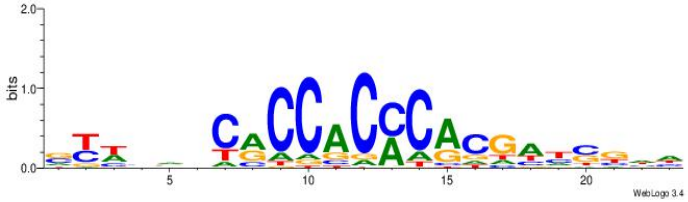
Motif ID: UP00540
Motif name: Gli3_v016060_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 2
Number of overlap: 15
Similarity score: 0.0259668

Alignment:
VYWVVHCRCCACMCACGAHSBHH
-SSCGCCSCCGCCCSS-------

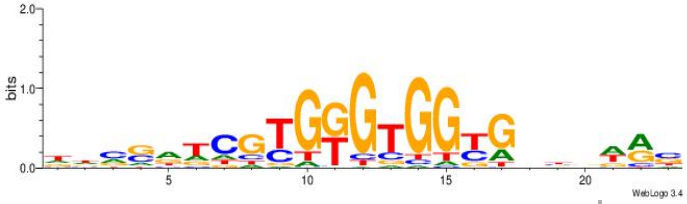
Original motif

Reverse complement motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



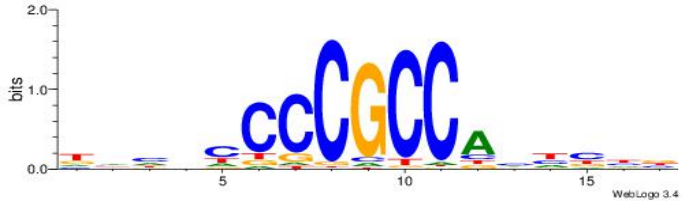
Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	15
Similarity score:	0.0261816

Alignment:

```
DHHBCCCCGCCAHHBHB
--SSCGCCSCCGCCCSS
```

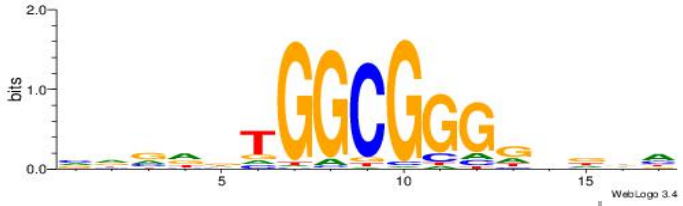
Original motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif

Consensus sequence: BHBHDTGGCGGGGBDHD



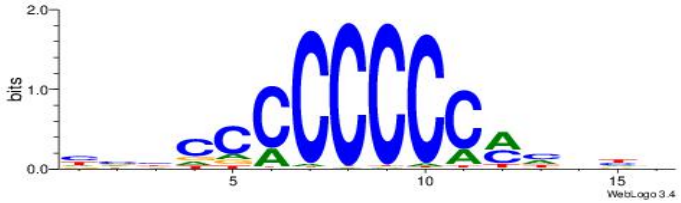
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0275827

Alignment:

```
HVBCCCCCCCCMHHHB
-SSCGCCSCCGCCCSS
```

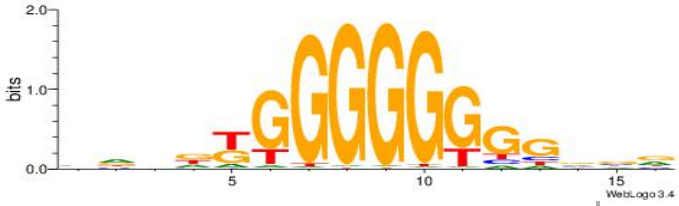
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD

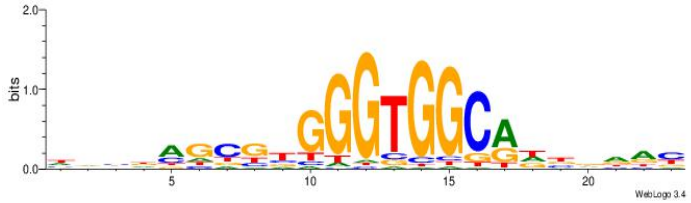


Motif ID:	UP00538
Motif name:	Gli1_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2

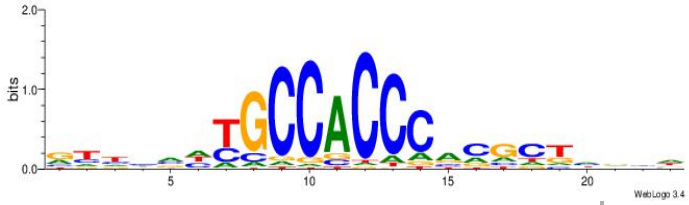
Number of overlap: 15
Similarity score: 0.0288149

Alignment:
BDDHVDKGCCACCCVCGCTDBVH
-------SSCGCCSCCGCCCSS-

Original motif
Consensus sequence: HVBDAGCGBGGGTGGCRDBDDDB



Reverse complement motif
Consensus sequence: BDDHVDKGCCACCCVCGCTDBVH



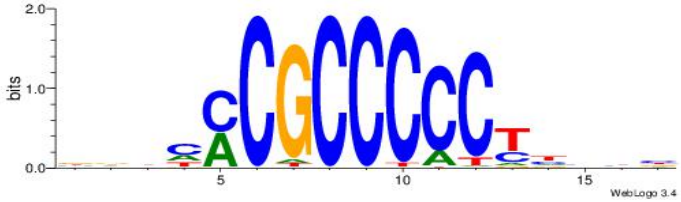
Motif ID: UP00002
Motif name: Sp4_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 1
Number of overlap: 15
Similarity score: 0.0313909

Alignment:
BDHHMCGCCCCCTHVBB
SSCGCCSCCGCCCSS--

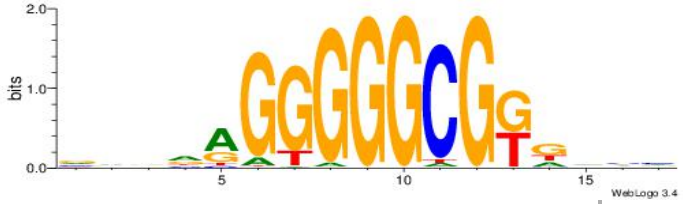
Original motif

Reverse complement motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Consensus sequence: BVVHAGGGGGCGRDHHB



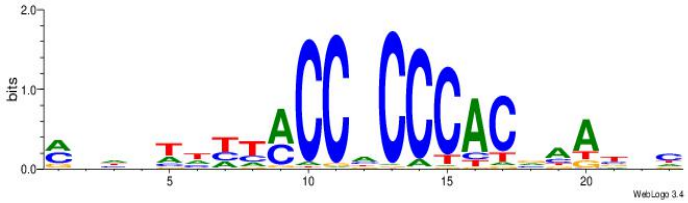
Motif ID:	UP00538
Motif name:	Gli1_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	15
Similarity score:	0.0337952

Alignment:

```
MHHHWHYTMCCHCCCACVAABVH
--------SSCGCCSCCGCCCSS
```

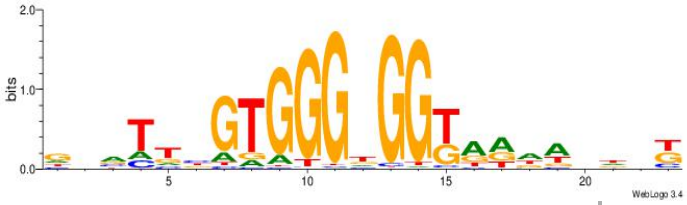
Original motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Reverse complement motif

Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



Motif ID: UP00033

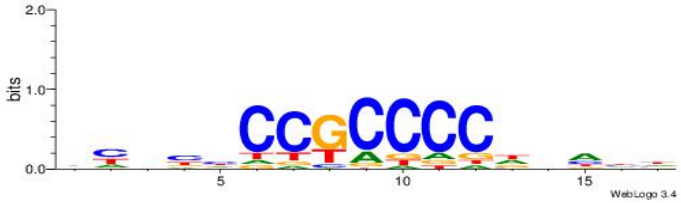
Motif name:	Zfp410_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	15
Similarity score:	0.0340021

Alignment:

```
HHHHDGGGGCGGDBHDV
-SSGGGCGGSGGCGSS-
```

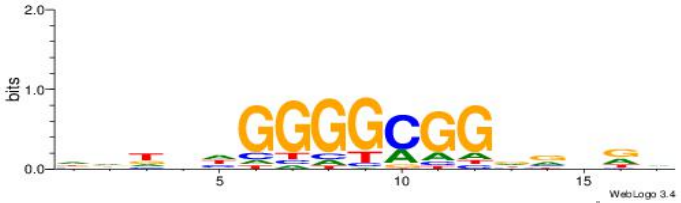
Original motif

Consensus sequence: BHHBHCCGCCCCDHHHH



Reverse complement motif

Consensus sequence: HHHHDGGGGCGGDBHDV



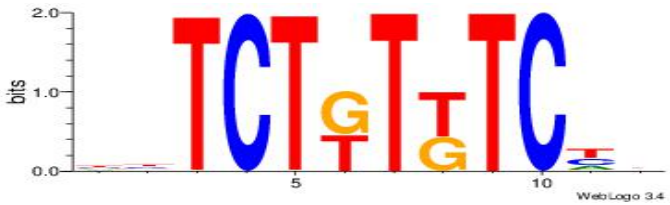
Dataset #: 4 **Motif ID: 92** **Motif name: tyTCTkTkTCyy**

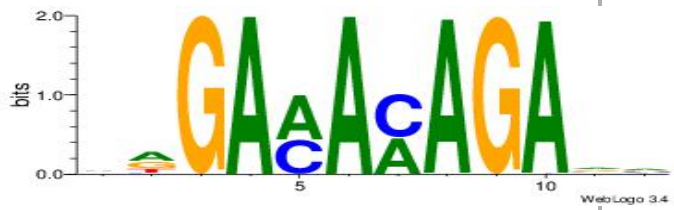
Original motif

Consensus sequence: BBTCTKTKTCHB

Reverse complement motif

Consensus sequence: VHGARAYAGAVV





Best Matches for Motif ID 92 (Highest to Lowest)

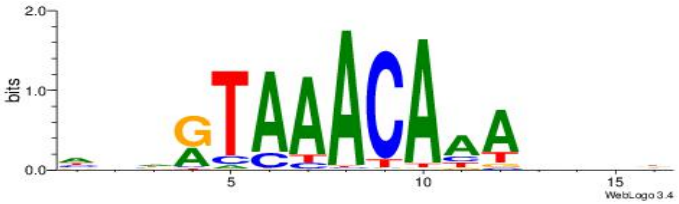
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.00580204

Alignment:

```
DDDHTTTGTTTAMHDH
--BBTCTKTKTCHB--
```

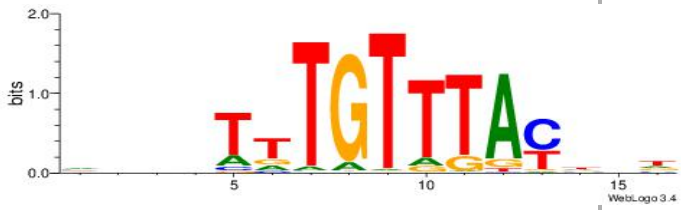
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH



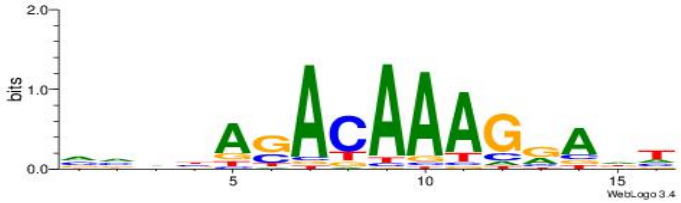
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.00792317

Alignment:

```
HDTMCTTTGTSTVDBB
-BBTCTKTKTCHB---
```

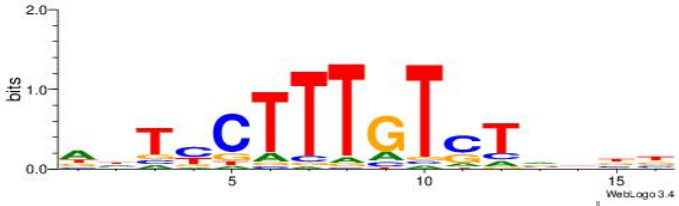
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB

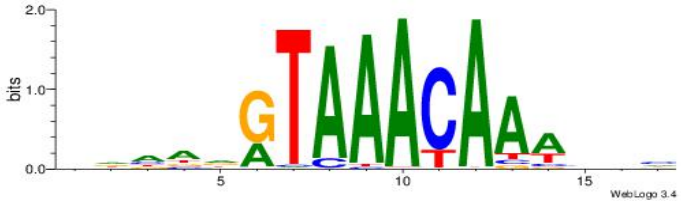


Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

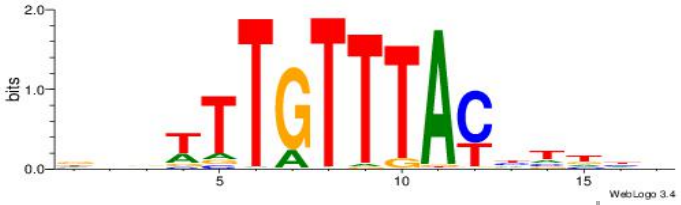
Number of overlap: 12
Similarity score: 0.0121

Alignment:
DVVTTTGTTTACDTHDH
-BBTCTKTKTCHB----

Original motif
Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif
Consensus sequence: DVVTTTGTTTACDTHDH



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: 12
Similarity score: 0.0121551

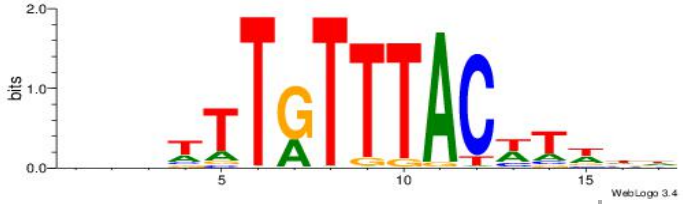
Alignment:
BDVTTTKTTTACWTWHH
-BBTCTKTKTCHB----

Original motif

Reverse complement motif

Consensus sequence: HHWAWGTAAAYAAAVDB

Consensus sequence: BDVTTTKTTTACWTWHH



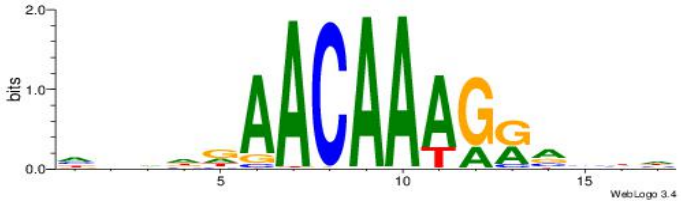
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0139275

Alignment:

```
HHBBMCTTTGTTHDDBH
--BBTCTKTKTCHB---
```

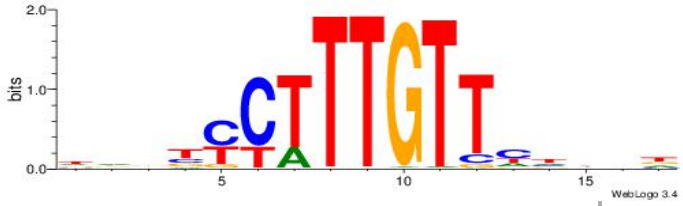
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



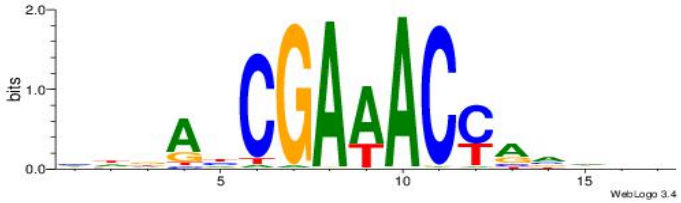
Motif ID:	UP00011
Motif name:	Irf6_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.015539

Alignment:

```
DHDBTKGTTTCGHTHDD
-BBTCTKTKTCHB----
```

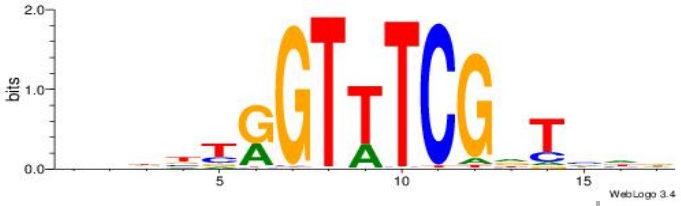
Original motif

Consensus sequence: HDDAHCGAAACYAVDDD



Reverse complement motif

Consensus sequence: DHDBTKGTTTCGHTHDD



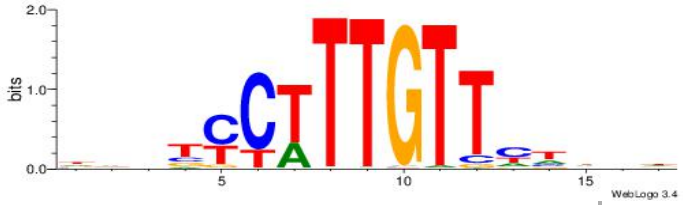
Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

Number of overlap: 12
Similarity score: 0.0160684

Alignment:
HHBTMCTTTGTTMDDVH
--BBTCTKTKTCHB---

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



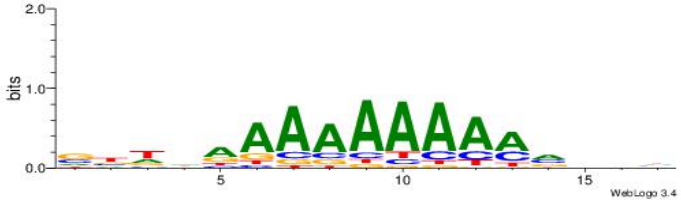
Motif ID: UP00077
Motif name: Srf_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.0166843

Alignment:
HHVBYTTTTTTTTDDVV
--BBTCTKTKTCHB---

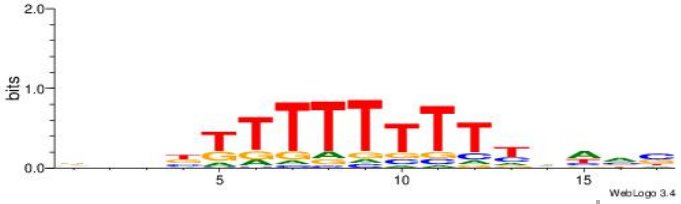
Original motif

Reverse complement motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Consensus sequence: HHVBYTTTTTTTTDDVV



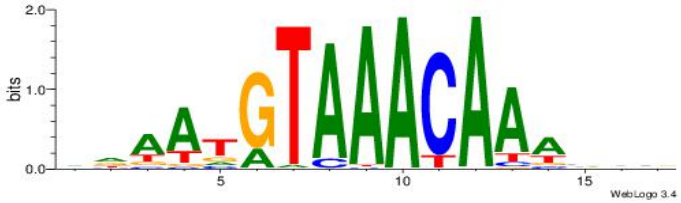
Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0172528

Alignment:

```
BBVTTTGTTTACATTDD
-BBTCTKTKTCHB----
```

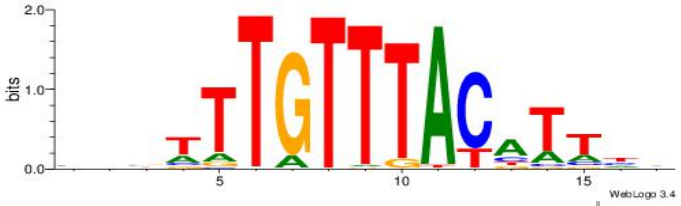
Original motif

Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif

Consensus sequence: BBVTTTGTTTACATTDD



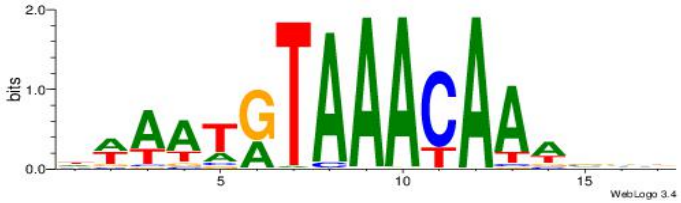
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0200976

Alignment:

```
VVVWTTGTTTAMATTWD
-BBTCTKTKTCHB----
```

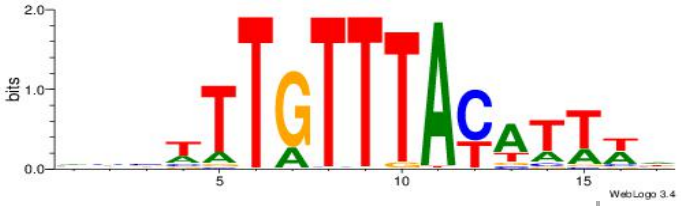
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



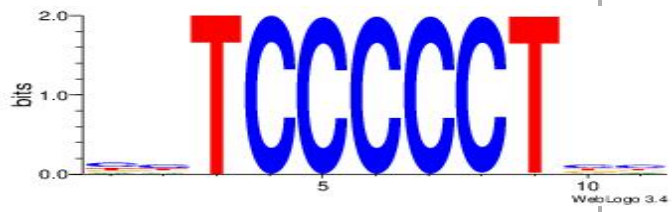
Dataset #: 4 **Motif ID: 93** **Motif name: rrAGGGGGArr**

Original motif

Consensus sequence: VVAGGGGGAVV

Reverse complement motif

Consensus sequence: VVTCCCCCTVV



Best Matches for Motif ID 93 (Highest to Lowest)

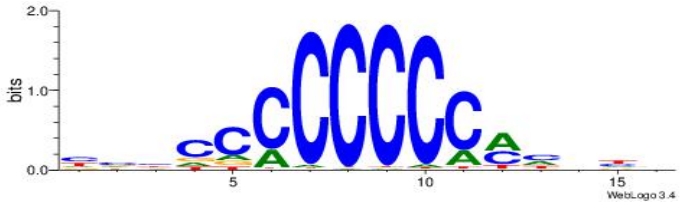
Motif ID:	UP00022
Motif name:	Zfp740_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0

Alignment:

```
BHHDYGGGGGGGGBVD
--VVAGGGGGAVV---
```

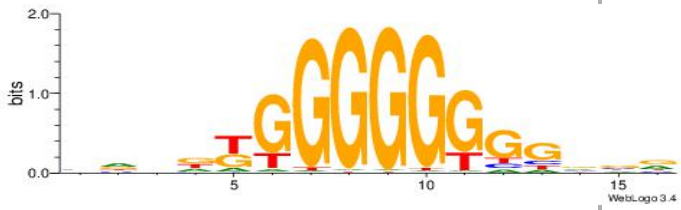
Original motif

Consensus sequence: HVBCCCCCCCCMHHHB



Reverse complement motif

Consensus sequence: BHHDYGGGGGGGGBVD



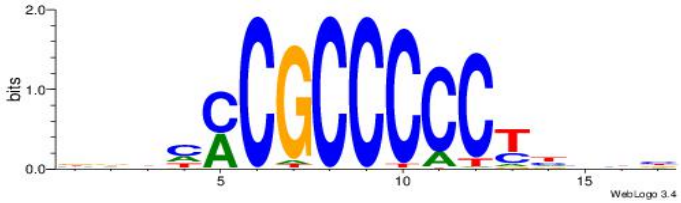
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00297135

Alignment:

```
BVVHAGGGGGCGRDHHB
--VVAGGGGGAVV----
```

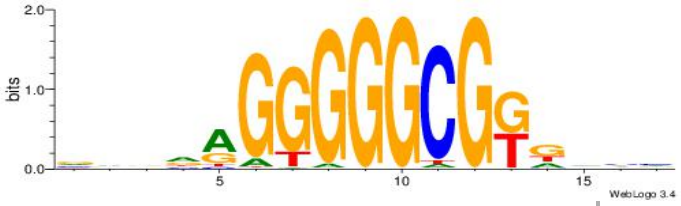
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB

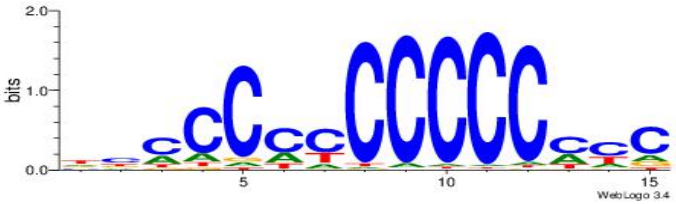


Motif ID:	UP00021
Motif name:	Zfp281_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	11

Similarity score: 0.00395342

Alignment:
DBCCCCCCCCCCMYC
VVAGGGGGAVV----

Original motif
Consensus sequence: DBCCCCCCCCCCMYC



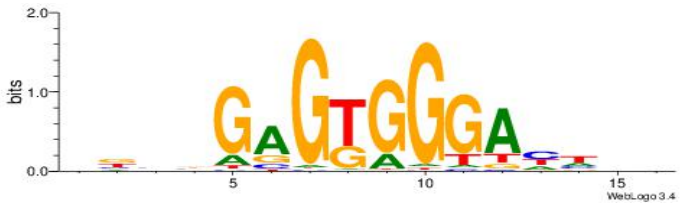
Reverse complement motif
Consensus sequence: GKRGGGGGGGGGGBD

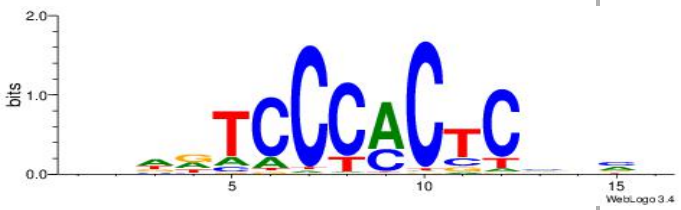
Motif ID: UP00007
Motif name: Egr1_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 3
Number of overlap: 11
Similarity score: 0.00991424

Alignment:
BBHBGAGTGGGAHHDB
---VVAGGGGGAVV--

Original motif
Consensus sequence: BBHBGAGTGGGAHHDB

Reverse complement motif
Consensus sequence: BHHDTCCCACTCBDBV





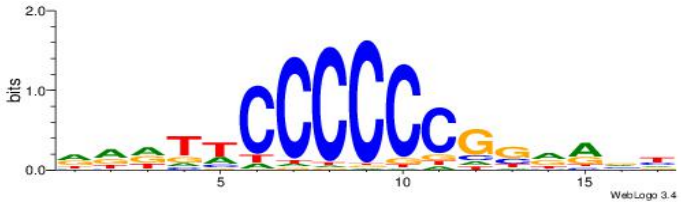
Motif ID:	UP00022
Motif name:	Zfp740_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0102767

Alignment:

```
HVKDCCGGGGGGWADDD
----VVAGGGGGAVV--
```

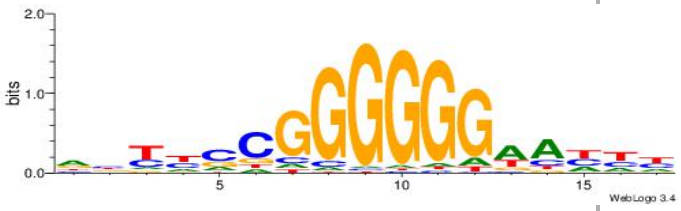
Original motif

Consensus sequence: DDDTWCCCCCCGGDRVH



Reverse complement motif

Consensus sequence: HVKDCCGGGGGGWADDD



Motif ID:	UP00047

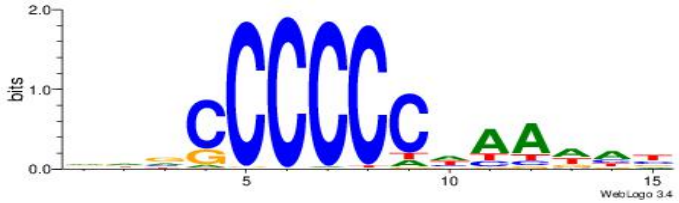
Motif name:	Zbtb7b_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	5
Number of overlap:	11
Similarity score:	0.0107925

Alignment:

```
VHWTTHGGGGGGVDD
----VVAGGGGGAVV
```

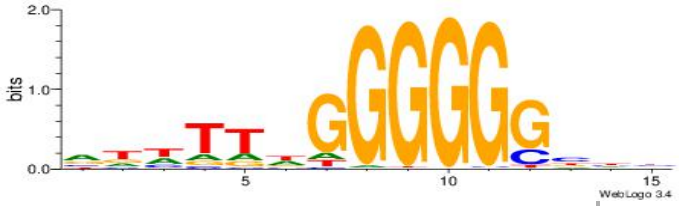
Original motif

Consensus sequence: DDVCCCCCCHAAWHB



Reverse complement motif

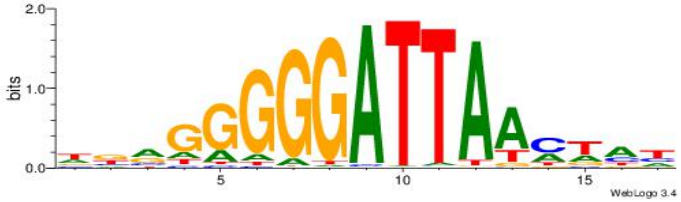
Consensus sequence: VHWTTHGGGGGGVDD



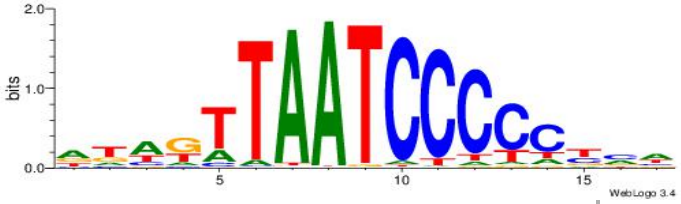
Motif ID:	UP00239
Motif name:	Obox2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	11
Similarity score:	0.0138823

Alignment:
HTARTTAATCCCCCKBD
------VVTCCCCCTVV

Original motif
Consensus sequence: DBRGGGGGATTAAMTAH



Reverse complement motif
Consensus sequence: HTARTTAATCCCCCKBD

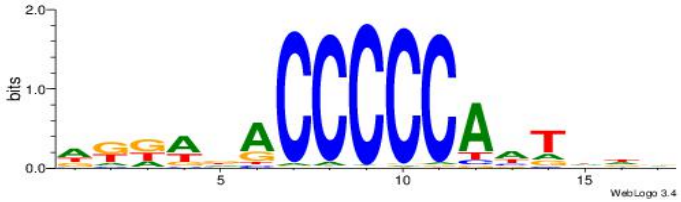


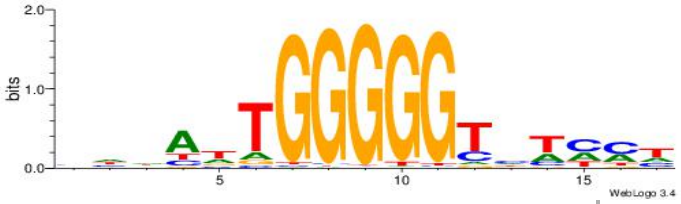
Motif ID:	UP00021
Motif name:	Zfp281_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0148152

Alignment:
VDDAHTGGGGGTHWYYD
---VVAGGGGGAVV---

Original motif
Consensus sequence: DKKWDACCCCCAHTDDV

Reverse complement motif
Consensus sequence: VDDAHTGGGGGTHWYYD





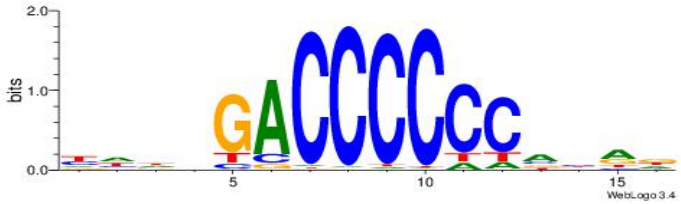
Motif ID:	UP00024
Motif name:	Glis2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.01486

Alignment:

```
HHHVGACCCCCCVBRD
---VVTCCCCCTVV--
```

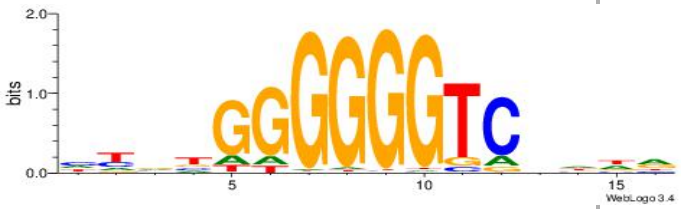
Original motif

Consensus sequence: HHHVGACCCCCCVBRD



Reverse complement motif

Consensus sequence: HKBBGGGGGGTCVHHH



Motif ID:	UP00007

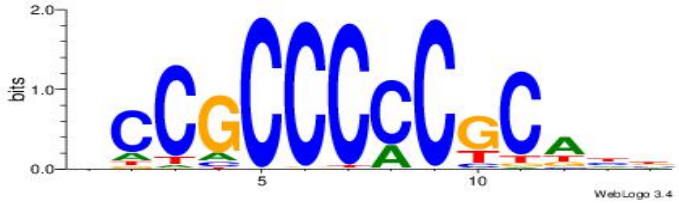
Motif name:	Egr1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0191569

Alignment:

```
HCCGCCCCCGCAHB
-VVTCCCCCTVV--
```

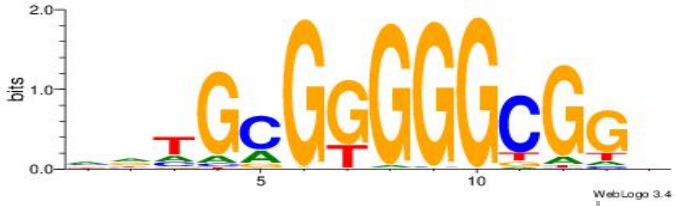
Original motif

Consensus sequence: HCCGCCCCCGCAHB



Reverse complement motif

Consensus sequence: VHTGCGGGGGCGGH



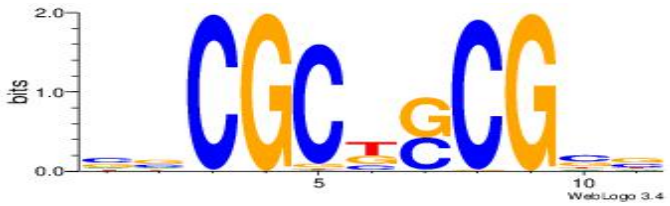
Dataset #: 4 **Motif ID: 94** **Motif name: ssCGCksCGss**

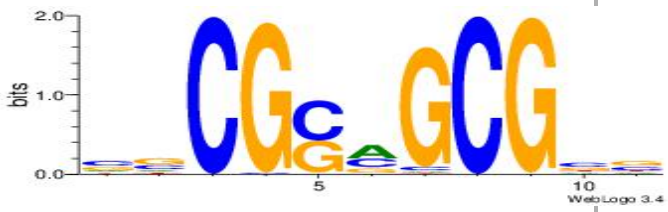
Original motif

Consensus sequence: VVCGCKSCGBB

Reverse complement motif

Consensus sequence: BBCGSRGCGVV





Best Matches for Motif ID 94 (Highest to Lowest)

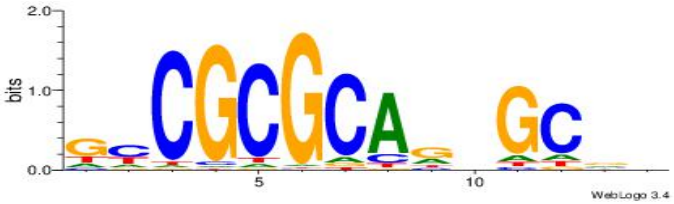
Motif ID:	UP00065
Motif name:	Zfp161_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	11
Similarity score:	0.00535423

Alignment:

```
VVGCVMTGCGCGKC
-VVCGCKSCGBB--
```

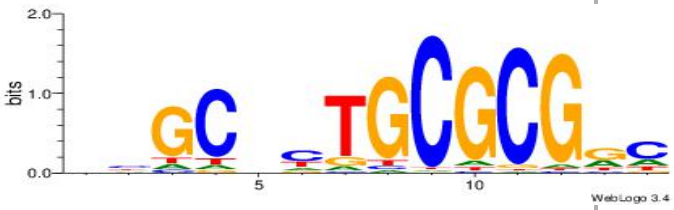
Original motif

Consensus sequence: GYCGCGCARBGCVB



Reverse complement motif

Consensus sequence: VVGCVMTGCGCGKC



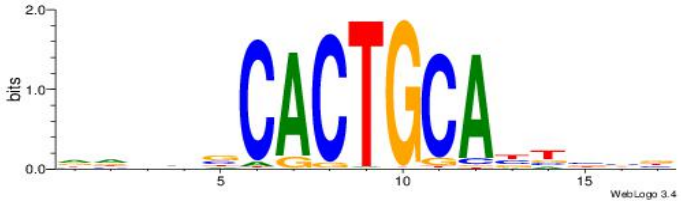
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0059848

Alignment:

```
DDBBBCACTGCABTBBB
---VVCGCKSCGBB---
```

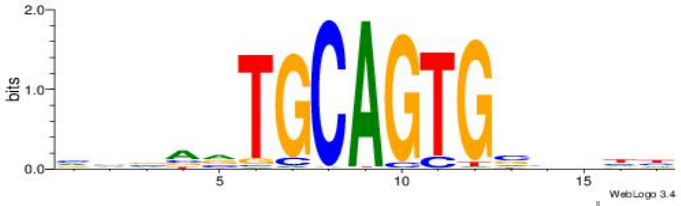
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD

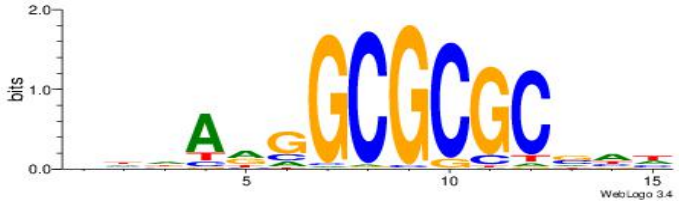


Motif ID:	UP00001
Motif name:	E2F2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

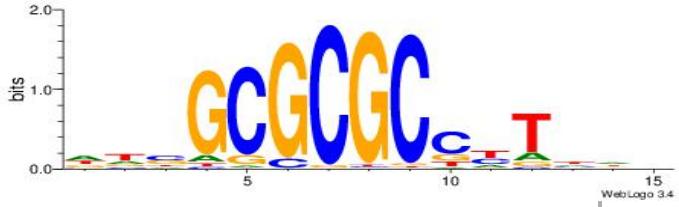
Number of overlap: 11
Similarity score: 0.00957065

Alignment:
HHVGCGCGCCKTDHB
--VVCGCKSCGBB--

Original motif
Consensus sequence: VHDARGGCGCGCVHH



Reverse complement motif
Consensus sequence: HHVGCGCGCCKTDHB



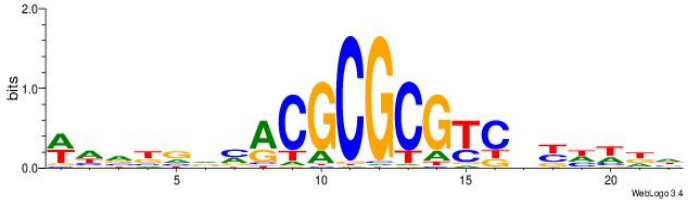
Motif ID: UP00526
Motif name: Foxn1_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 11
Similarity score: 0.0108446

Alignment:
WHVBVVMACGCGCGTCDYHWDH
--------VVCGCKSCGBB---

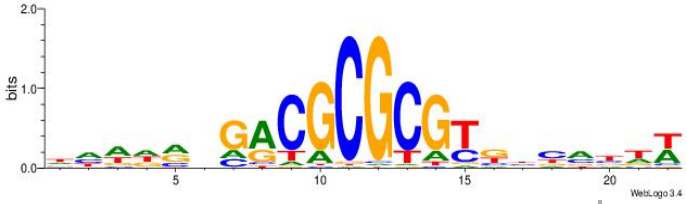
Original motif

Reverse complement motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



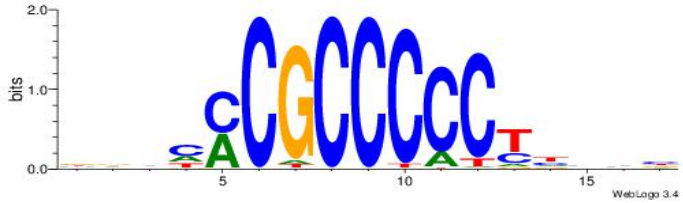
Motif ID:	UP00002
Motif name:	Sp4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0132848

Alignment:

```
BVVHAGGGGGCGRDHHB
---BBCGSRGCGVV---
```

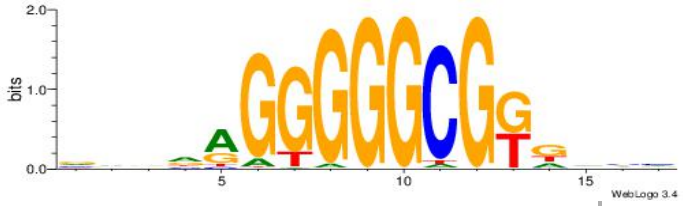
Original motif

Consensus sequence: BDHHMCGCCCCCTHVBB



Reverse complement motif

Consensus sequence: BVVHAGGGGGCGRDHHB



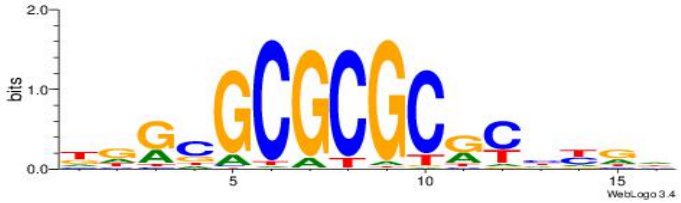
Motif ID:	UP00065
Motif name:	Zfp161_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	6
Number of overlap:	11
Similarity score:	0.0147384

Alignment:

```
DMMDGMGCGCGCGCHD
BBCGSRGCGVV-----
```

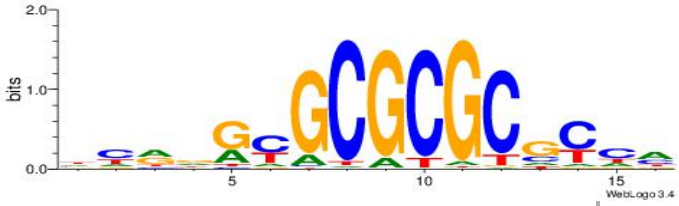
Original motif

Consensus sequence: DDGCGCGCGCRCHYRD



Reverse complement motif

Consensus sequence: DMMDGMGCGCGCGCHD

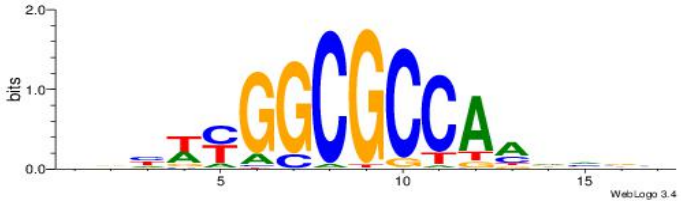


Motif ID:	UP00003
Motif name:	E2F3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	7

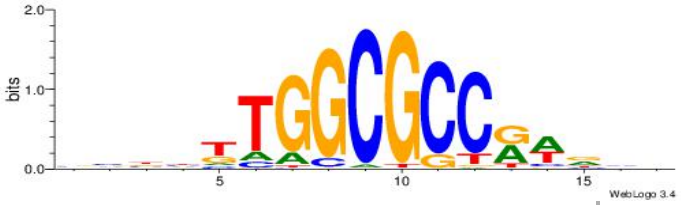
Number of overlap: 11
Similarity score: 0.0150252

Alignment:
HBHWYGGCGCCAMDVBB
BBCGSRGCGVV------

Original motif
Consensus sequence: HBHWYGGCGCCAMDVBB



Reverse complement motif
Consensus sequence: BBBDYTGGCGCCKWDBD



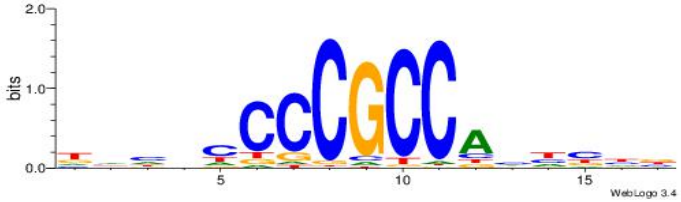
Motif ID: UP00000
Motif name: Smad3_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 6
Number of overlap: 11
Similarity score: 0.0152603

Alignment:
BHBHDTGGCGGGGBDHD
-BBCGSRGCGVV-----

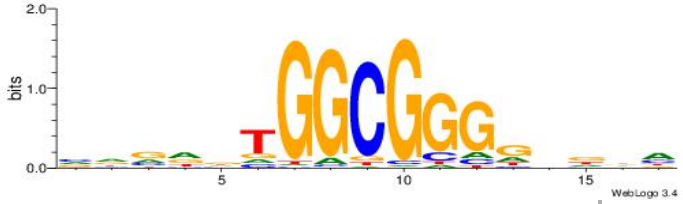
Original motif

Reverse complement motif

Consensus sequence: DHHBCCCCGCCAHHBHB



Consensus sequence: BHBHDTGGCGGGGBDHD



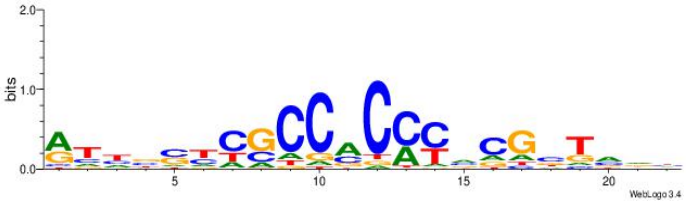
Motif ID:	UP00539
Motif name:	Gli2_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	11
Similarity score:	0.0154216

Alignment:

```
HDBABCGBKRGYGGCGMSBHAK
-------BBCGSRGCGVV----
```

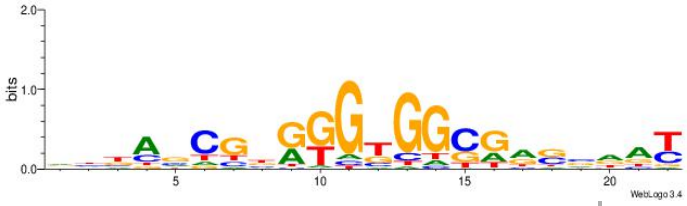
Original motif

Consensus sequence: RTHBSYCGCCMCMYVCGBTVDH



Reverse complement motif

Consensus sequence: HDBABCGBKRGYGGCGMSBHAK



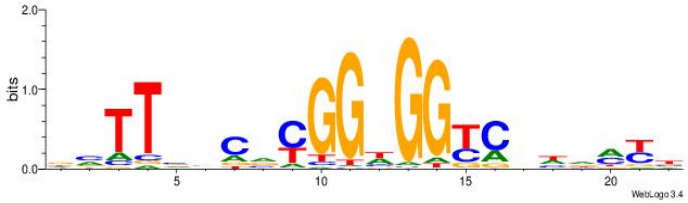
Motif ID:	UP00540
Motif name:	Gli3_v015681_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	11
Similarity score:	0.0155003

Alignment:

```
VMYDHDGMCCHCCKBGVVAAVH
-----VVCGCKSCGBB------
```

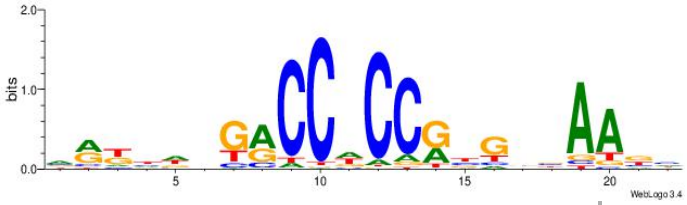
Original motif

Consensus sequence: DVTTVVCVYGGHGGYCHHDMYB



Reverse complement motif

Consensus sequence: VMYDHDGMCCHCCKBGVVAAVH



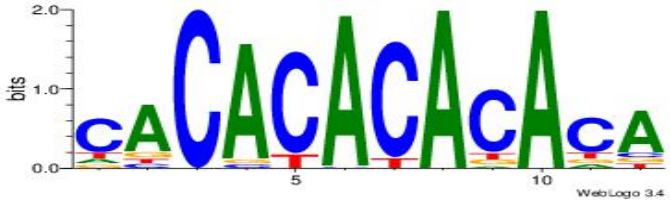
Dataset #: 4 **Motif ID: 95** **Motif name: CACACACACACA**

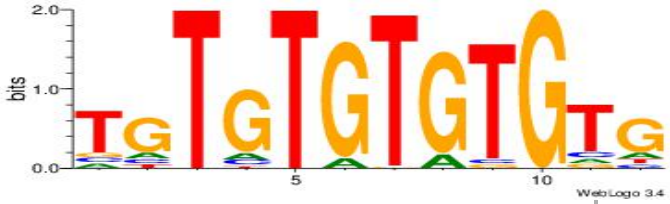
Original motif

Consensus sequence: CACACACACACA

Reverse complement motif

Consensus sequence: TGTGTGTGTGTG





Best Matches for Motif ID 95 (Highest to Lowest)

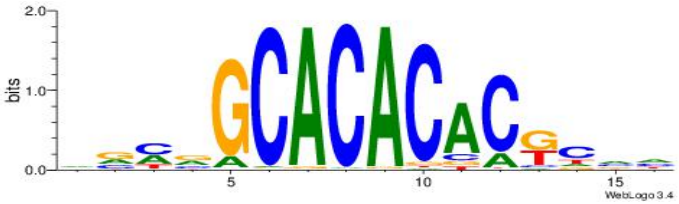
Motif ID:	UP00042
Motif name:	Gm397_second
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0

Alignment:

```
HBGYGTGTGTGCVRVD
-TGTGTGTGTGTG---
```

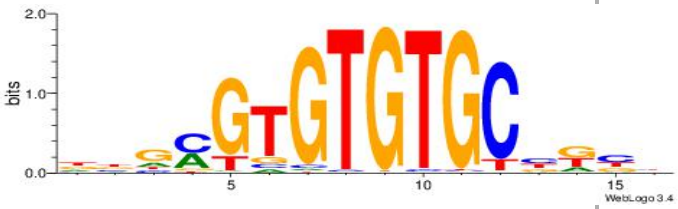
Original motif

Consensus sequence: DVMVGCACACACKCVH



Reverse complement motif

Consensus sequence: HBGYGTGTGTGCVRVD



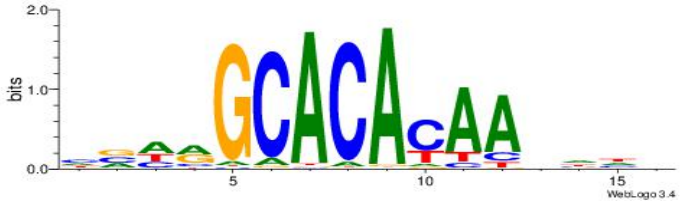
Motif ID:	UP00026
Motif name:	Zscan4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	12
Similarity score:	0.0197643

Alignment:

```
BHHHTTGTGTGCKHVD
---TGTGTGTGTGTG-
```

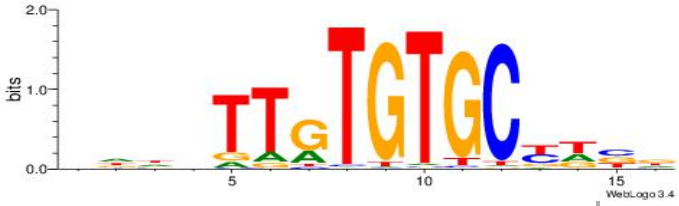
Original motif

Consensus sequence: HVHRGCACACAAHHHV



Reverse complement motif

Consensus sequence: BHHHTTGTGTGCKHVD

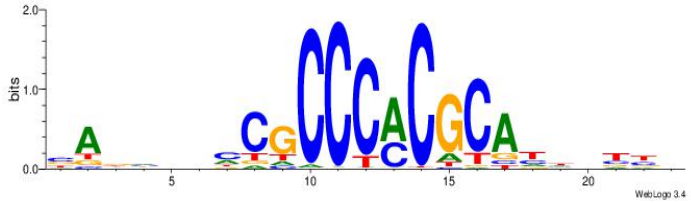


Motif ID:	UP00400
Motif name:	Zif268
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

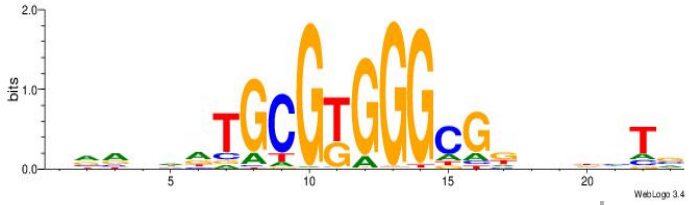
Number of overlap: 12
Similarity score: 0.023637

Alignment:
BADHBDHCGCCCMCGCAHHDBBV
-------CACACACACACA----

Original motif
Consensus sequence: BADHBDHCGCCCMCGCAHHDBBV



Reverse complement motif
Consensus sequence: VVVDHHTGCGYGGGCGDHVHHTB



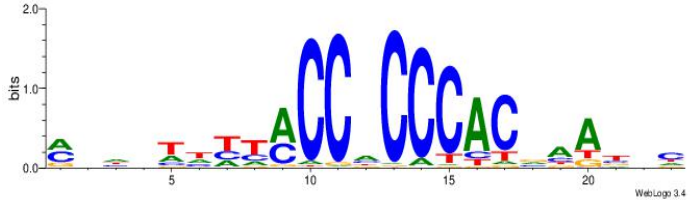
Motif ID: UP00538
Motif name: Gli1_v015681_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 2
Number of overlap: 12
Similarity score: 0.0276792

Alignment:
MHHHWHYTMCCHCCCACVAABVH
----------CACACACACACA-

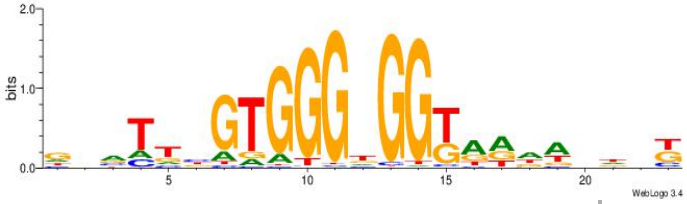
Original motif

Reverse complement motif

Consensus sequence: MHHHWHYTMCCHCCCACVAABVH



Consensus sequence: DVVTTVGTGGGHGGYAMHWHHHY



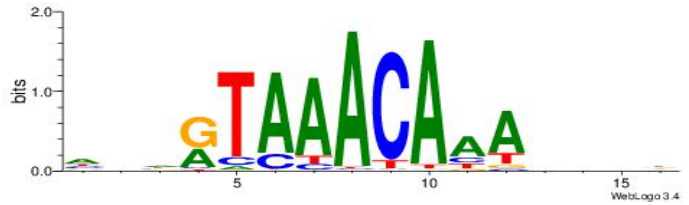
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0332664

Alignment:

```
HDHRTAAACAAAHDDD
--CACACACACACA--
```

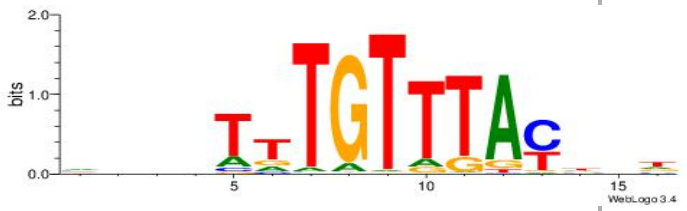
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH



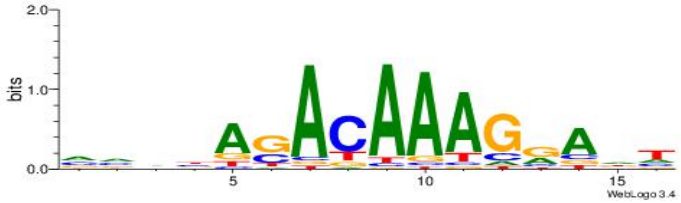
Motif ID:	UP00101
Motif name:	Sox12_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0362338

Alignment:

```
VVDBASACAAAGRADH
-CACACACACACA---
```

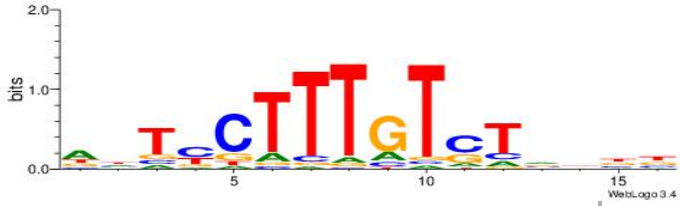
Original motif

Consensus sequence: VVDBASACAAAGRADH



Reverse complement motif

Consensus sequence: HDTMCTTTGTSTVDBB

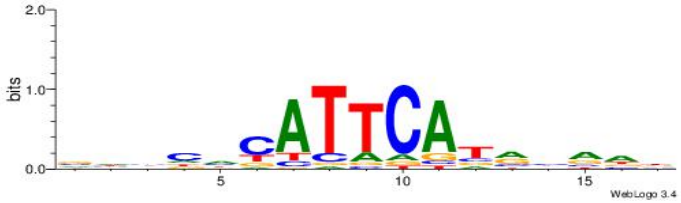


Motif ID:	UP00014
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4

Number of overlap: 12
Similarity score: 0.0362641

Alignment:
VHBHHCATTCATRHVDD
---CACACACACACA--

Original motif
Consensus sequence: VHBHHCATTCATRHVDD



Reverse complement motif
Consensus sequence: DDBDKATGAATGHDBHV

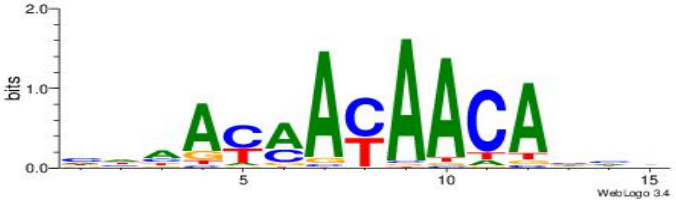
Motif ID: UP00025
Motif name: Foxk1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 2
Number of overlap: 12
Similarity score: 0.0366937

Alignment:
HDDTGTTKTTKTHHD
-TGTGTGTGTGTG--

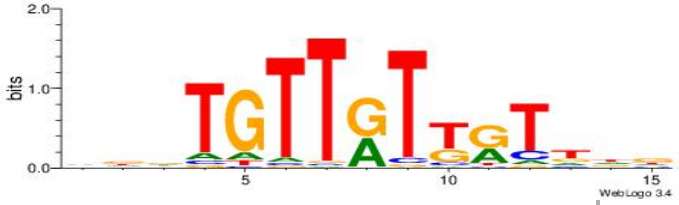
Original motif

Reverse complement motif

Consensus sequence: HHHAYAAYAACAHHH



Consensus sequence: HDDTGTTKTTKTHHD



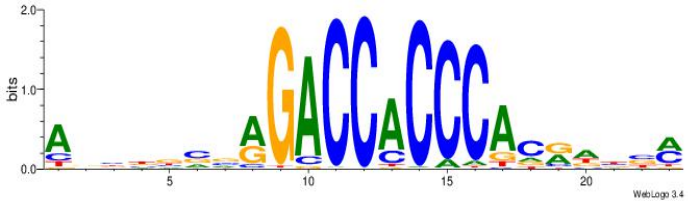
Motif ID:	UP00540
Motif name:	Gli3_v015681_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0367676

Alignment:

```
ABBBBVVRGACCACCCACRDBBM
-----------CACACACACACA
```

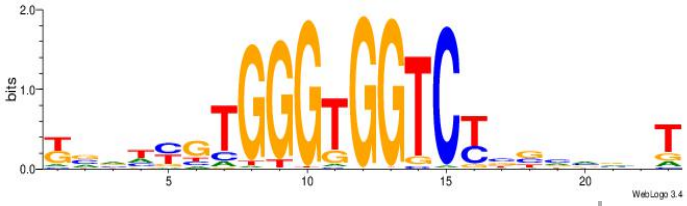
Original motif

Consensus sequence: ABBBBVVRGACCACCCACRDBBM



Reverse complement motif

Consensus sequence: YBVDMGTGGGTGGTCKVVBVBBT



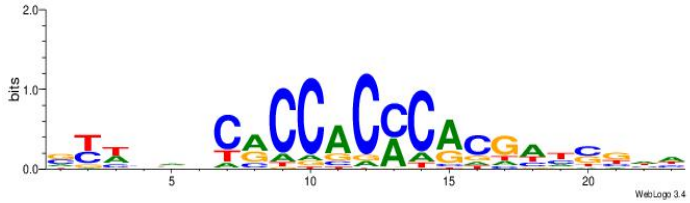
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	10
Number of overlap:	12
Similarity score:	0.0370972

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
---------CACACACACACA--
```

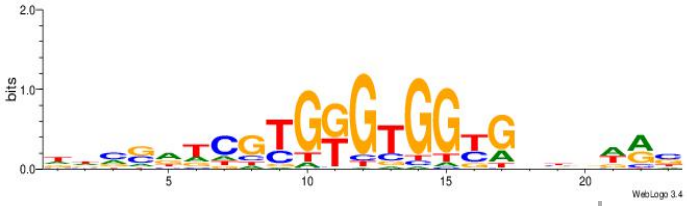
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



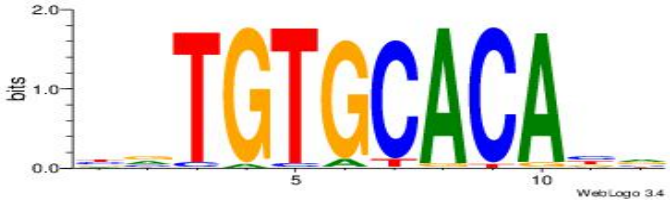
Dataset #: 4 Motif ID: 96 Motif name: yrTGTGCACAyr

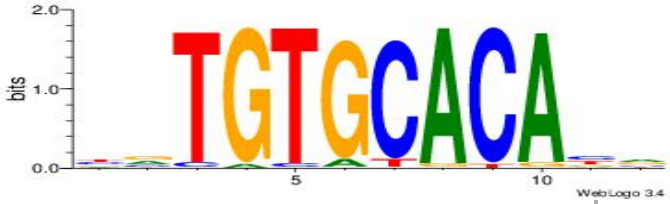
Original motif

Consensus sequence: BVTGTGCACABV

Reverse complement motif

Consensus sequence: BBTGTGCACAVV





Best Matches for Motif ID 96 (Highest to Lowest)

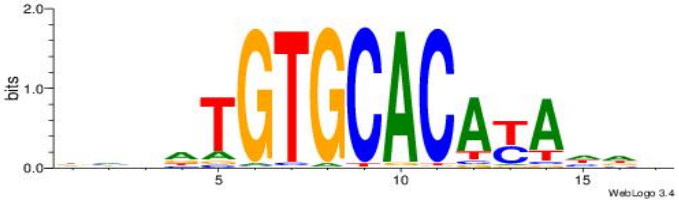
Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0

Alignment:

```
DHVDTGTGCACAYAHDH
--BVTGTGCACABV---
```

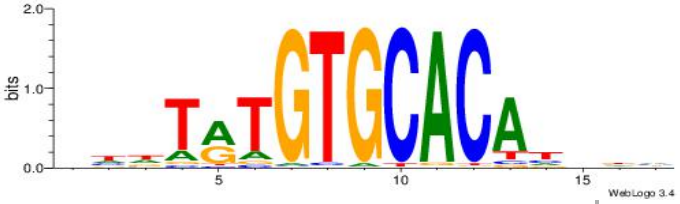
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



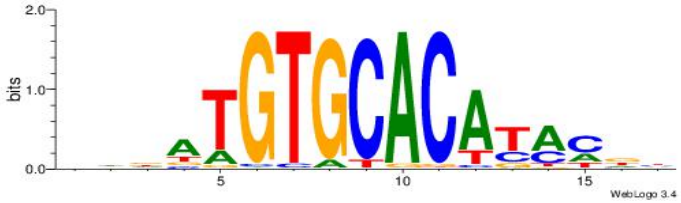
Motif ID:	UP00042
Motif name:	Gm397_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.00445496

Alignment:

```
HHDATGTGCACATAMDH
--BVTGTGCACABV---
```

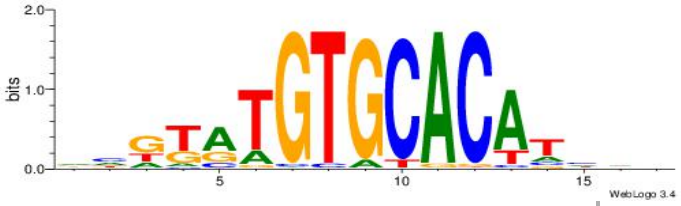
Original motif

Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif

Consensus sequence: HHRTATGTGCACATHHD

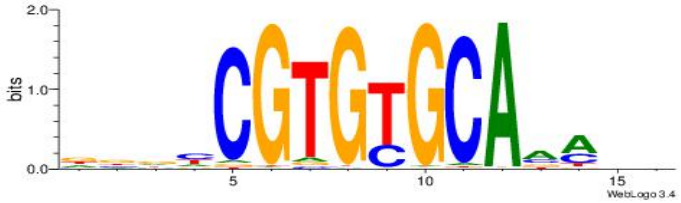


Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

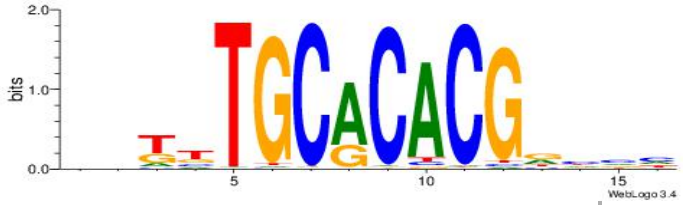
Number of overlap: 12
Similarity score: 0.0380495

Alignment:
HDYTTGCACACGDHBH
BVTGTGCACABV----

Original motif
Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif
Consensus sequence: HDYTTGCACACGDHBH



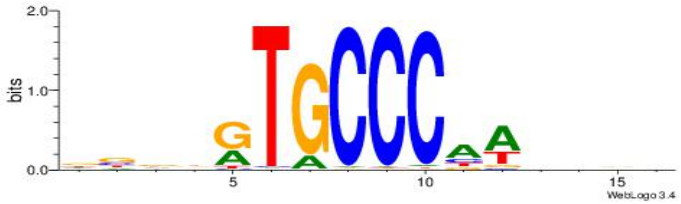
Motif ID: UP00035
Motif name: Hic1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 2
Number of overlap: 12
Similarity score: 0.0430853

Alignment:
VHHDWTGGGCAMDHBH
---BBTGTGCACAVV-

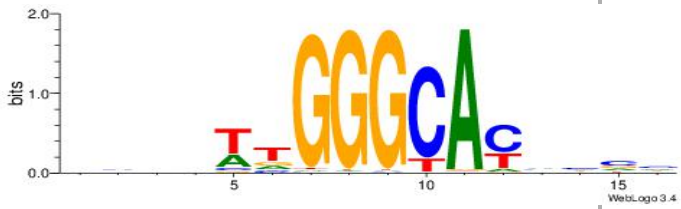
Original motif

Reverse complement motif

Consensus sequence: DBDDRTGCCCAWDHDV



Consensus sequence: VHHDWTGGGCAMDHBH



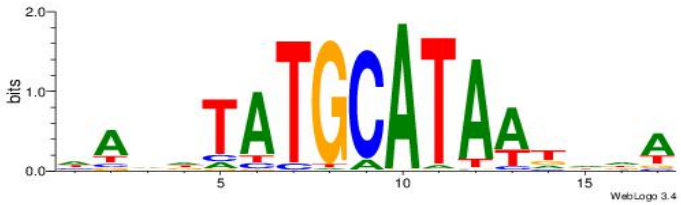
Motif ID:	UP00211
Motif name:	Pou3f3
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0445124

Alignment:

```
HADDTATGCATAATDDA
--BBTGTGCACAVV---
```

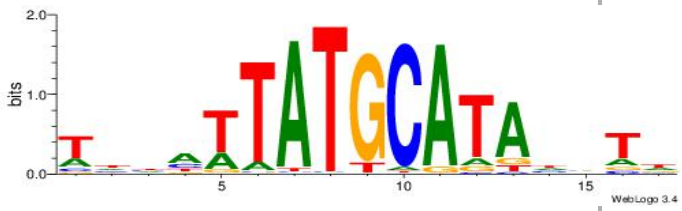
Original motif

Consensus sequence: HADDTATGCATAATDDA



Reverse complement motif

Consensus sequence: TDDATTATGCATADDTH



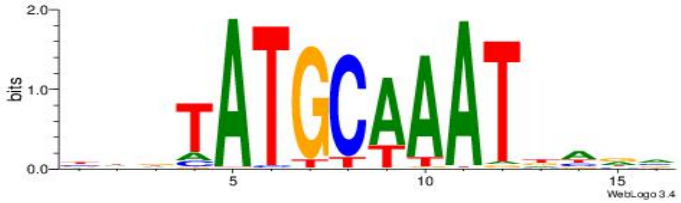
Motif ID:	UP00191
Motif name:	Pou2f2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.0458169

Alignment:

```
BHDTATGCAAATDHDV
-BVTGTGCACABV---
```

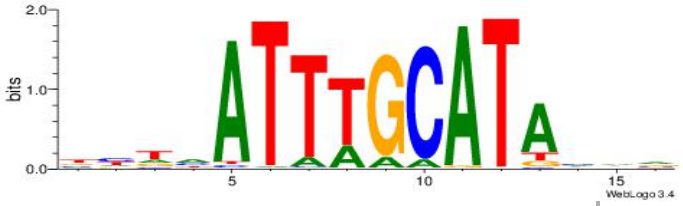
Original motif

Consensus sequence: BHDTATGCAAATDHDV



Reverse complement motif

Consensus sequence: BHHDATTTGCATAHHV

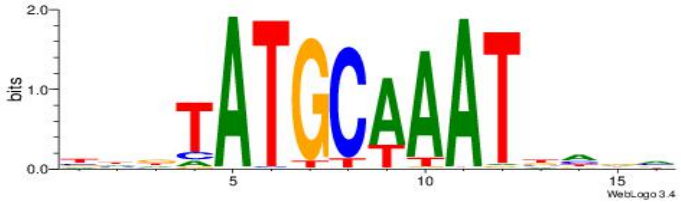


Motif ID:	UP00179
Motif name:	Pou2f3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

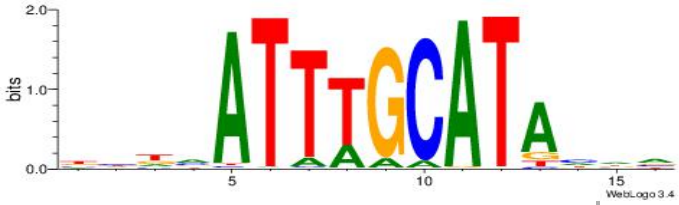
Number of overlap: 12
Similarity score: 0.0465664

Alignment:
BHDTATGCAAATBHDV
-BVTGTGCACABV---

Original motif
Consensus sequence: BHDTATGCAAATBHDV



Reverse complement motif
Consensus sequence: BHHVATTTGCATAHHV



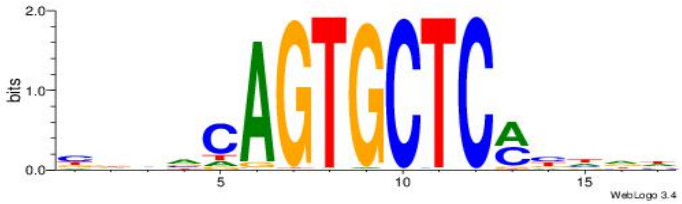
Motif ID: UP00095
Motif name: Zfp691_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0474879

Alignment:
BDHVCAGTGCTCMBHDD
---BVTGTGCACABV--

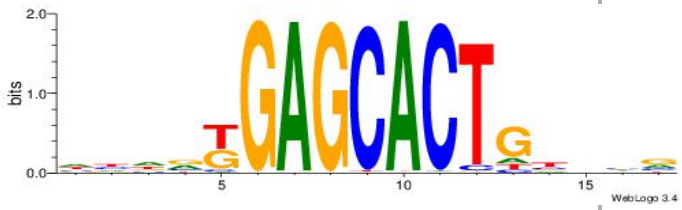
Original motif

Reverse complement motif

Consensus sequence: BDHVCAGTGCTCMBHDD



Consensus sequence: DDHBYGAGCACTGBHHB



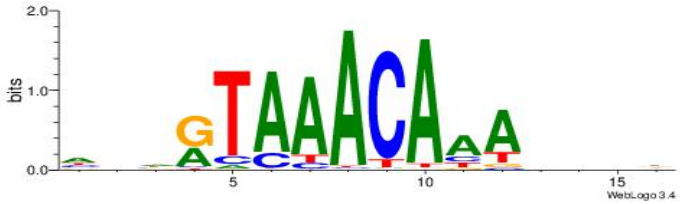
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0571018

Alignment:

```
DDDHTTTGTTTAMHDH
----BBTGTGCACAVV
```

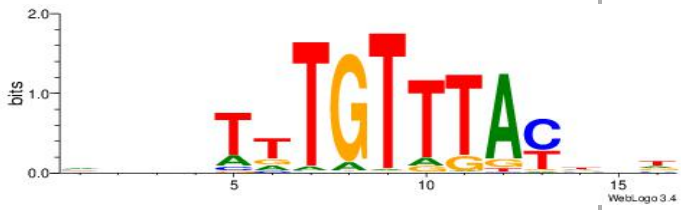
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH



Motif ID: UP00053

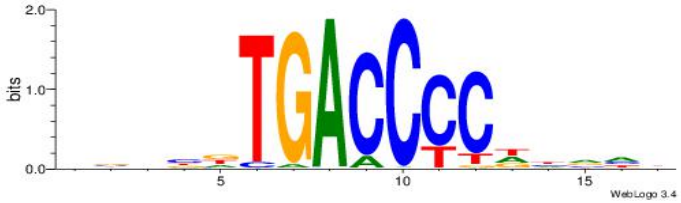
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0586299

Alignment:

```
DBHBDTGACCCCDHVHB
---BVTGTGCACABV--
```

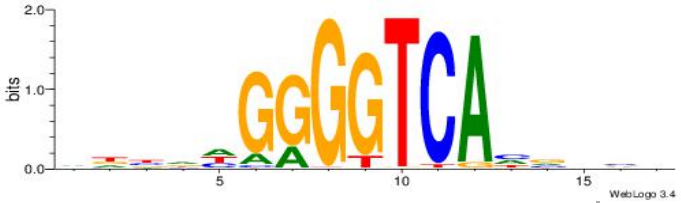
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



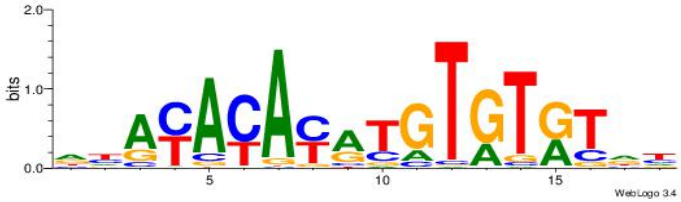
Dataset #: 4 Motif ID: 97 Motif name: ryayAyAyrtGTRTrTry

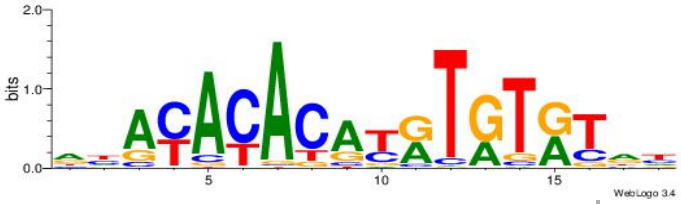
Original motif

Consensus sequence: DHAYAYAYRTGTGTRTDH

Reverse complement motif

Consensus sequence: HDAMACACAKKTKTKTHD





Best Matches for Motif ID 97 (Highest to Lowest)

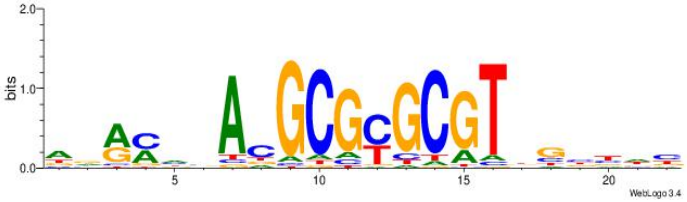
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	18
Similarity score:	0.042217

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
--DHAYAYAYRTGTGTRTDH--
```

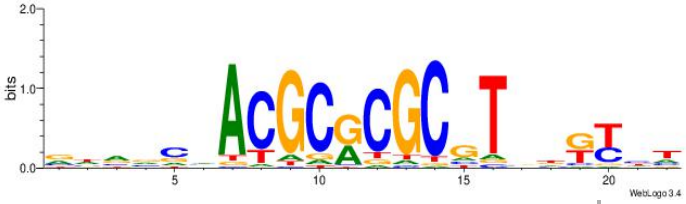
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



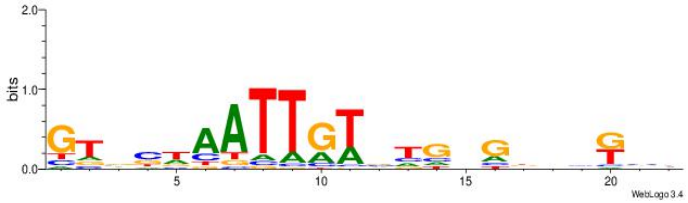
Motif ID:	UP00034
Motif name:	Sox7_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	18
Similarity score:	0.0528977

Alignment:

```
GTVBDAATTGTVTGHGDDHKVB
-DHAYAYAYRTGTGTRTDH---
```

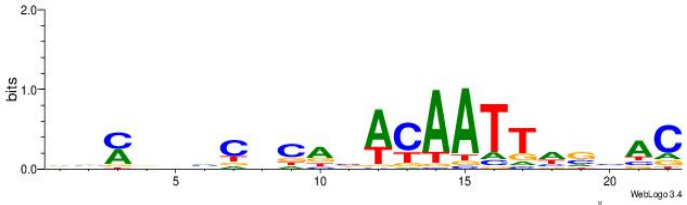
Original motif

Consensus sequence: GTVBDAATTGTVTGHGDDHKVB



Reverse complement motif

Consensus sequence: VVYDDDCHCAVACAATTDBVAC

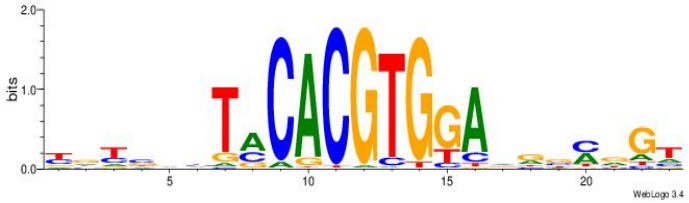


Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

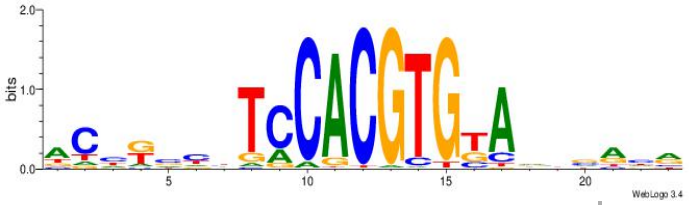
Number of overlap: 18
Similarity score: 0.0539618

Alignment:
YDYBDHTMCACGTGGADDBMDGT
-DHAYAYAYRTGTGTRTDH----

Original motif
Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif
Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



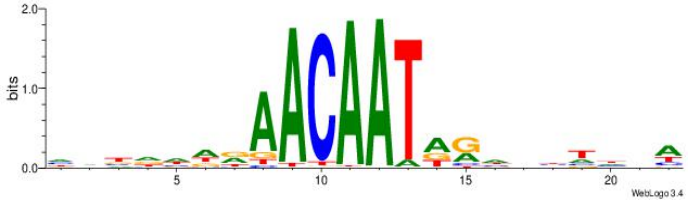
Motif ID: UP00034
Motif name: Sox7_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 18
Similarity score: 0.0559027

Alignment:
WBHHHHHMDATTGTTHDHDVHH
HDAMACACAKKTKTKTHD----

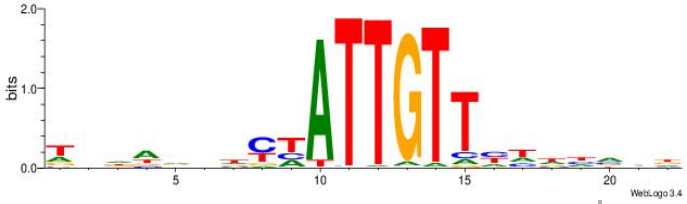
Original motif

Reverse complement motif

Consensus sequence: HHBDHDDAACAATDRHHHHHBW



Consensus sequence: WBHHHHHMDATTGTTHDHDVHH



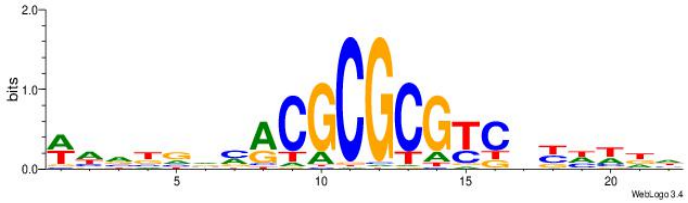
Motif ID:	UP00526
Motif name:	Foxn1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	18
Similarity score:	0.0570339

Alignment:

```
WHVBVVMACGCGCGTCDYHWDH
---HDAMACACAKKTKTKTHD-
```

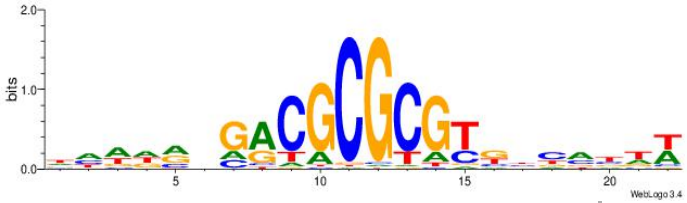
Original motif

Consensus sequence: WHVBVVMACGCGCGTCDYHWDH



Reverse complement motif

Consensus sequence: HDWHMHGACGCGCGTRBVVBHW



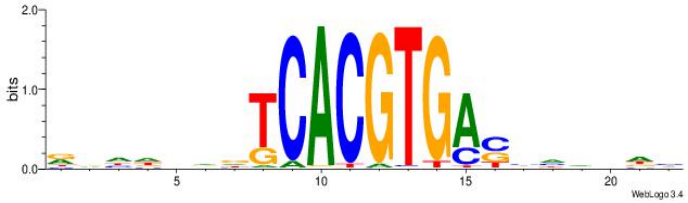
Motif ID:	UP00050
Motif name:	Bhlhb2_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	18
Similarity score:	0.0603429

Alignment:

```
DDHBHBSTCACGTGAHBBDHHM
---DHAYAYAYRTGTGTRTDH-
```

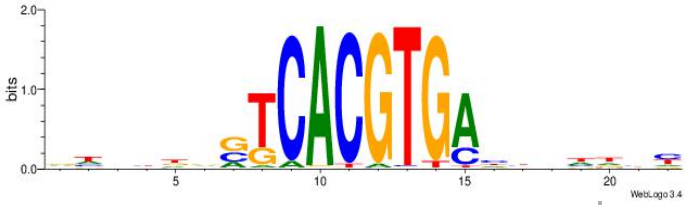
Original motif

Consensus sequence: RDHDBVDTCACGTGASBHVHDH



Reverse complement motif

Consensus sequence: DDHBHBSTCACGTGAHBBDHHM

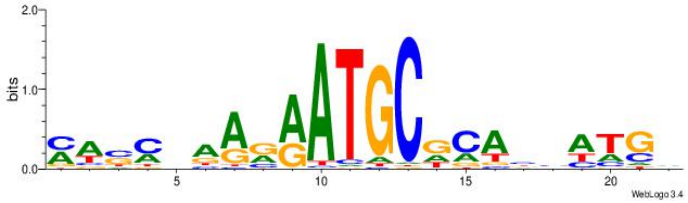


Motif ID:	UP00528
Motif name:	Foxm1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4

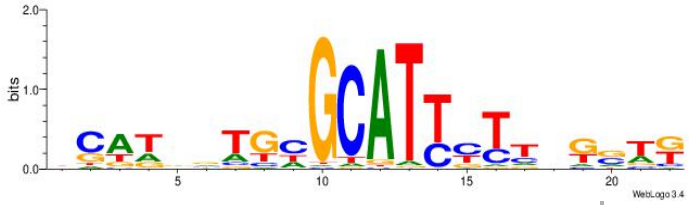
Number of overlap: 18
Similarity score: 0.0610325

Alignment:
DCATDBTGHGCATKMTTBRSWR
---HDAMACACAKKTKTKTHD-

Original motif
Consensus sequence: MWSMBAARRATGCDCABHATGD



Reverse complement motif
Consensus sequence: DCATDBTGHGCATKMTTBRSWR



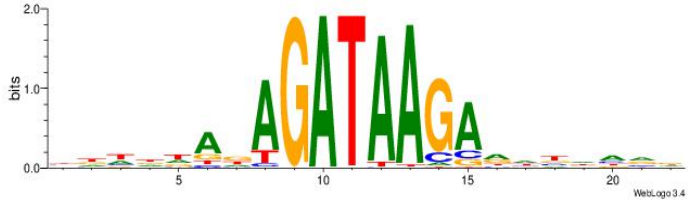
Motif ID: UP00032
Motif name: Gata3_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 18
Similarity score: 0.0616079

Alignment:
BDHDDADAGATAAGADHBDHVD
---DHAYAYAYRTGTGTRTDH-

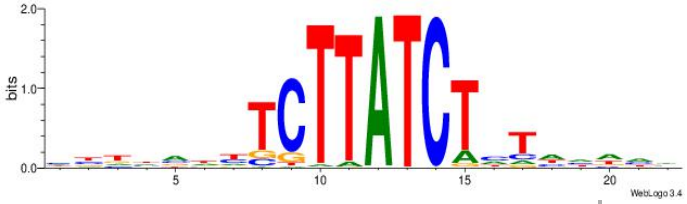
Original motif

Reverse complement motif

Consensus sequence: BDHDDADAGATAAGADHBDHVD



Consensus sequence: HBHDVHDTCTTATCTHTDDHDV



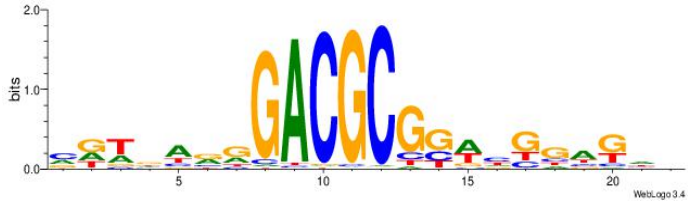
Motif ID:	UP00527
Motif name:	Foxn4_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0623545

Alignment:

```
VDWDARRGACGCGGWHGGAKHV
----HDAMACACAKKTKTKTHD
```

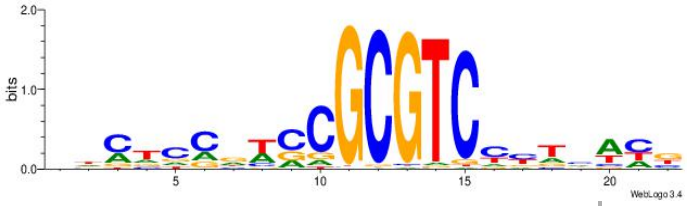
Original motif

Consensus sequence: VDWDARRGACGCGGWHGGAKHV



Reverse complement motif

Consensus sequence: VHYTCCDWCCGCGTCMMTHWHV



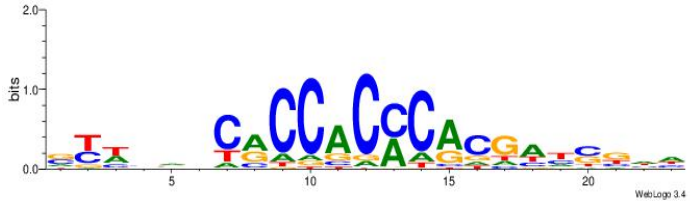
Motif ID:	UP00540
Motif name:	Gli3_v016060_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	5
Number of overlap:	18
Similarity score:	0.0633883

Alignment:

```
VYWVVHCRCCACMCACGAHSBHH
----HDAMACACAKKTKTKTHD-
```

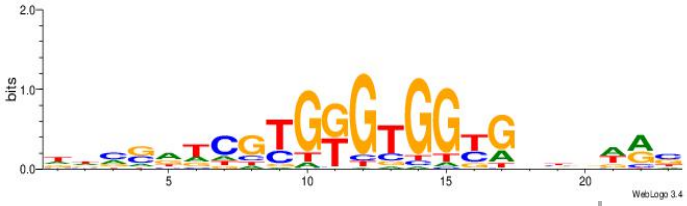
Original motif

Consensus sequence: VYWVVHCRCCACMCACGAHSBHH



Reverse complement motif

Consensus sequence: HHBSHTCGTGRGTGGKGDBVWMV



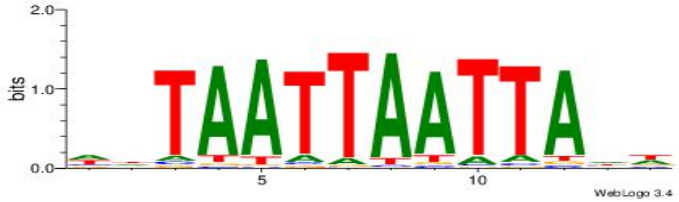
Dataset #: 4 Motif ID: 98 Motif name: wwTAATTAATTAww

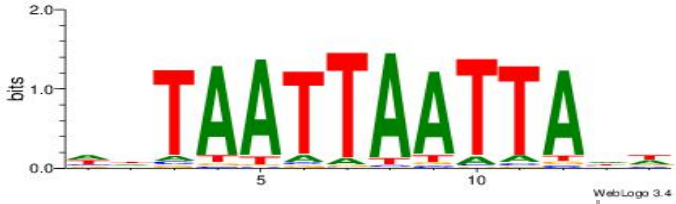
Original motif

Consensus sequence: HDTAATTAATTAHD

Reverse complement motif

Consensus sequence: DHTAATTAATTADH





Best Matches for Motif ID 98 (Highest to Lowest)

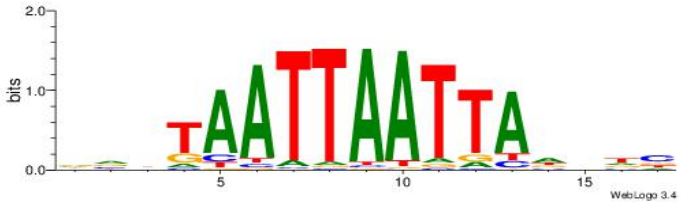
Motif ID:	UP00158
Motif name:	Pou1f1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0

Alignment:

```
BDHDTAATTAATTADBH
--HDTAATTAATTAHD-
```

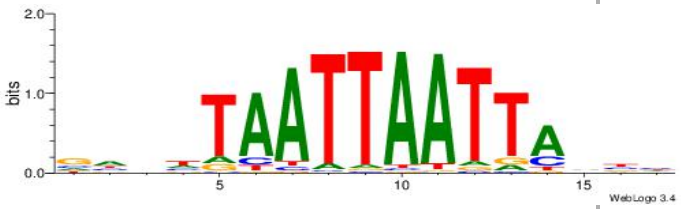
Original motif

Consensus sequence: DVDTAATTAATTADDDB



Reverse complement motif

Consensus sequence: BDHDTAATTAATTADBH



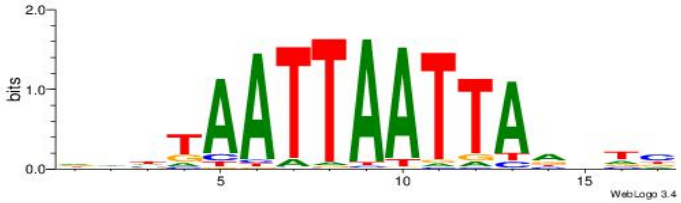
Motif ID:	UP00105
Motif name:	Pou3f4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.00131133

Alignment:

```
BDDDTAATTAATTAHBD
--HDTAATTAATTAHD-
```

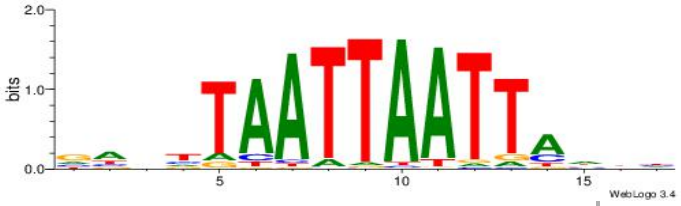
Original motif

Consensus sequence: DVHTAATTAATTADDDB



Reverse complement motif

Consensus sequence: BDDDTAATTAATTAHBD

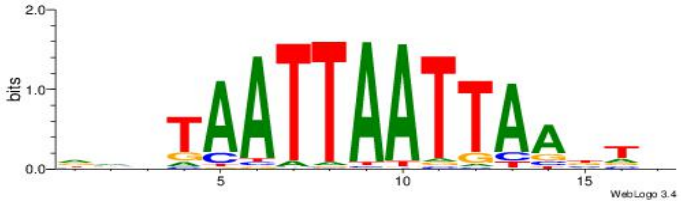


Motif ID:	UP00129
Motif name:	Pou3f1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	2

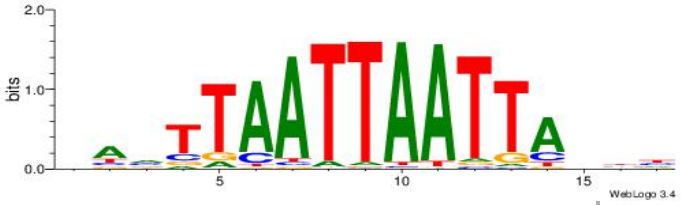
Number of overlap: 14
Similarity score: 0.00682649

Alignment:
DVBTAATTAATTAABTH
-DHTAATTAATTADH--

Original motif
Consensus sequence: DVBTAATTAATTAABTH



Reverse complement motif
Consensus sequence: DAVTTAATTAATTAVBD

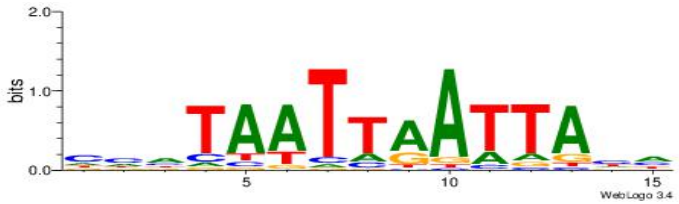


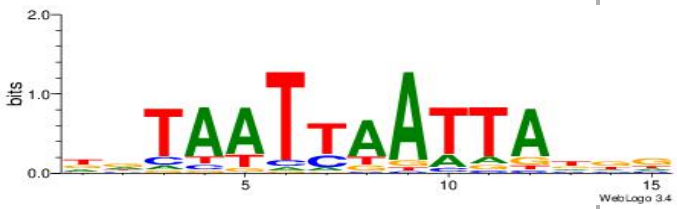
Motif ID: UP00225
Motif name: Hlx1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 1
Number of overlap: 14
Similarity score: 0.0167227

Alignment:
HHHTAATTAATTAHH
HDTAATTAATTAHD-

Original motif
Consensus sequence: HHHTAATTAATTAHH

Reverse complement motif
Consensus sequence: HDTAATTAATTAHDD





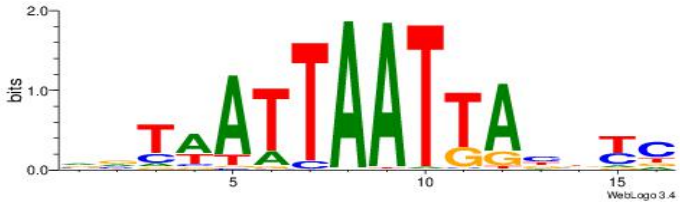
Motif ID:	UP00200
Motif name:	Nkx6-1_2825.2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0194509

Alignment:

```
GMVBTAATTAATWAVB
--HDTAATTAATTAHD
```

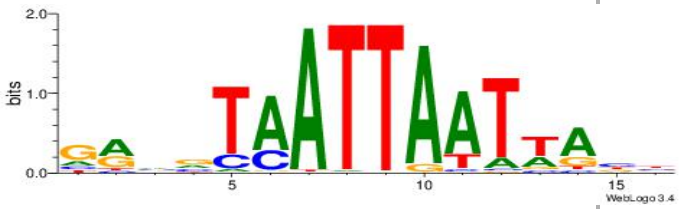
Original motif

Consensus sequence: VVTWATTAATTABBYC



Reverse complement motif

Consensus sequence: GMVBTAATTAATWAVB



Motif ID: UP00200

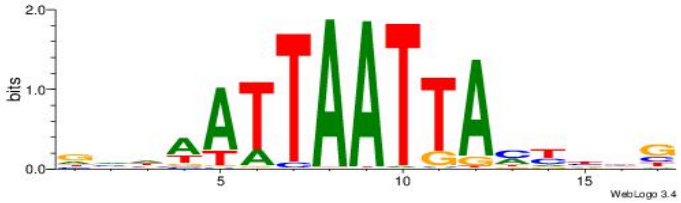
Motif name:	Nkx6-1_2825.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.0231767

Alignment:

```
DVHAATTAATTAMYBBG
---HDTAATTAATTAHD
```

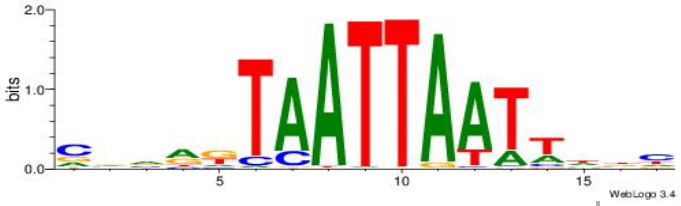
Original motif

Consensus sequence: DVHAATTAATTAMYBBG



Reverse complement motif

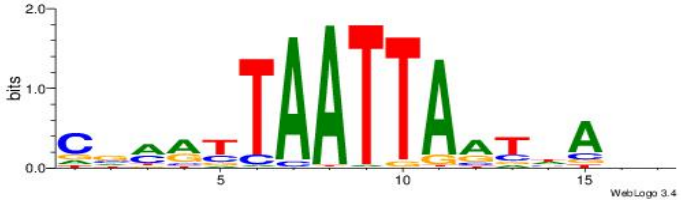
Consensus sequence: CBVMRTAATTAATTHBH



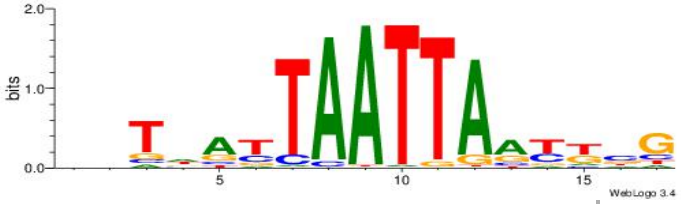
Motif ID:	UP00252
Motif name:	Hoxc5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0236159

Alignment:
HDTHATTAATTAAKYVG
HDTAATTAATTAHD---

Original motif
Consensus sequence: CVMRTTAATTAATHAHH



Reverse complement motif
Consensus sequence: HDTHATTAATTAAKYVG

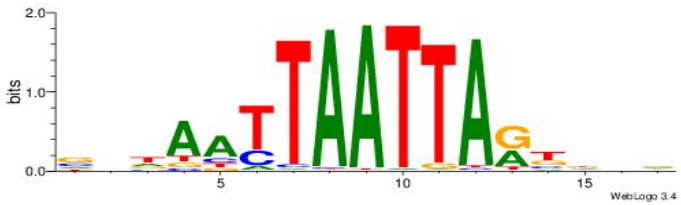


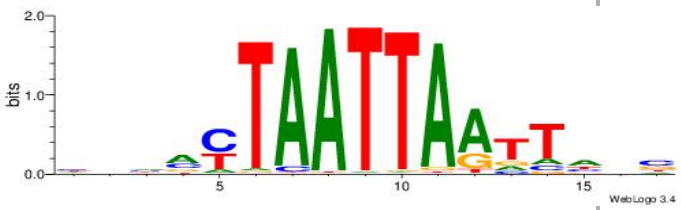
Motif ID:	UP00128
Motif name:	Pou3f2
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0243768

Alignment:
VDDAATTAATTARBDHD
DHTAATTAATTADH---

Original motif
Consensus sequence: VDDAATTAATTARBDHD

Reverse complement motif
Consensus sequence: HHDVMTAATTAATTDDV





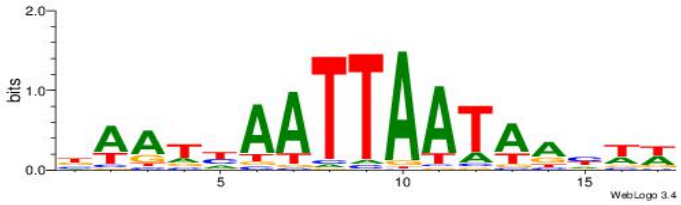
Motif ID:	UP00244
Motif name:	Tlx2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	14
Similarity score:	0.025633

Alignment:

```
WWDTTATTAATTHATTV
-HDTAATTAATTAHD--
```

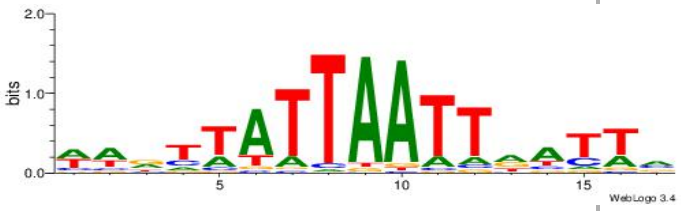
Original motif

Consensus sequence: BAATHAATTAATAAHWW



Reverse complement motif

Consensus sequence: WWDTTATTAATTHATTV



Motif ID: UP00188

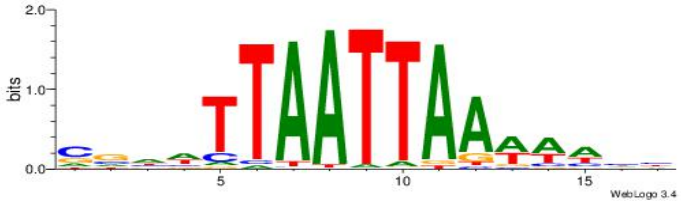
Motif name:	Lmx1a
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0267452

Alignment:

```
BDWWWTTAATTAAHHVG
HDTAATTAATTAHD---
```

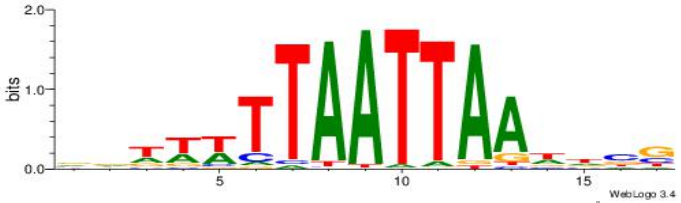
Original motif

Consensus sequence: CVHHTTAATTAAWWWHB



Reverse complement motif

Consensus sequence: BDWWWTTAATTAAHHVG



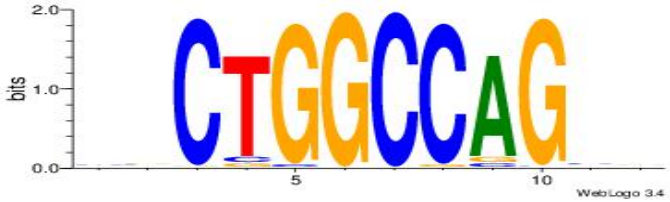
Dataset #: 4 Motif ID: 99 Motif name: sgCTGGCCAGcs

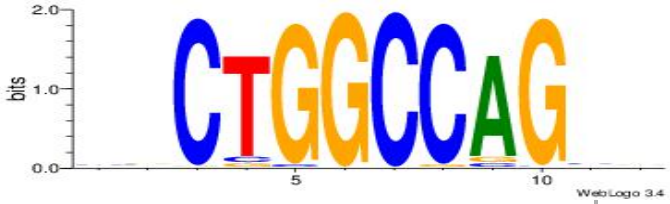
Original motif

Consensus sequence: BBCTGGCCAGVV

Reverse complement motif

Consensus sequence: VVCTGGCCAGBB





Best Matches for Motif ID 99 (Highest to Lowest)

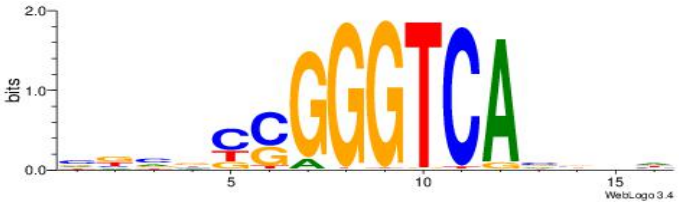
Motif ID:	UP00009
Motif name:	Nr2f2_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	2
Number of overlap:	12
Similarity score:	0.00474165

Alignment:

```
HVBVTGACCCSGBVBV
-VVCTGGCCAGBB---
```

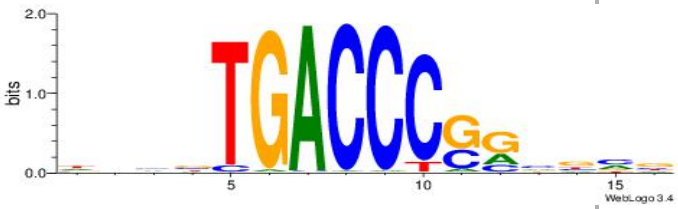
Original motif

Consensus sequence: VBVBCSGGGTCAVBBH



Reverse complement motif

Consensus sequence: HVBVTGACCCSGBVBV



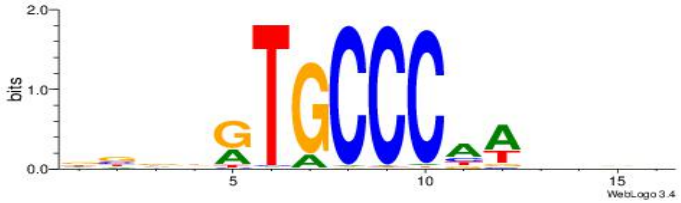
Motif ID:	UP00035
Motif name:	Hic1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0109352

Alignment:

```
DBDDRTGCCCAWDHDV
--BBCTGGCCAGVV--
```

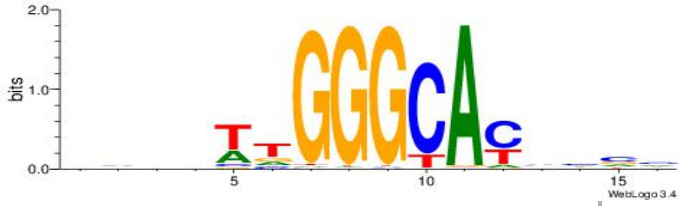
Original motif

Consensus sequence: DBDDRTGCCCAWDHDV



Reverse complement motif

Consensus sequence: VHHDWTGGGCAMDHBH

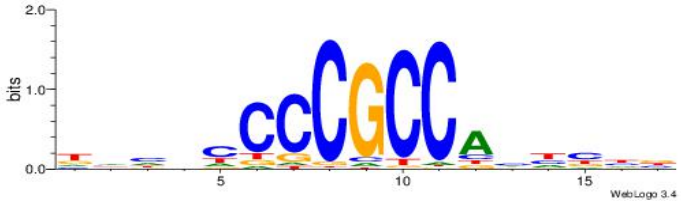


Motif ID:	UP00000
Motif name:	Smad3_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	3

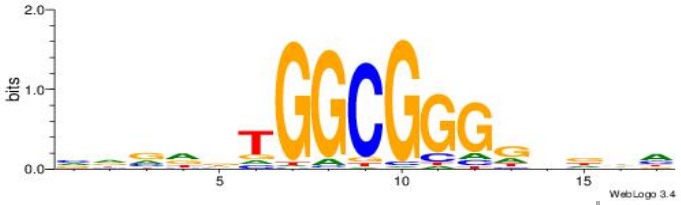
Number of overlap: 12
Similarity score: 0.0138613

Alignment:
DHHBCCCCGCCAHHBHB
---VVCTGGCCAGBB--

Original motif
Consensus sequence: DHHBCCCCGCCAHHBHB



Reverse complement motif
Consensus sequence: BHBHDTGGCGGGGBDHD



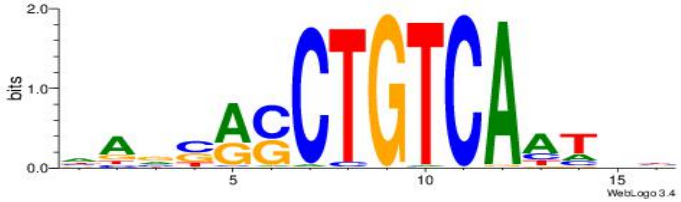
Motif ID: UP00205
Motif name: Pknox2
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 5
Number of overlap: 12
Similarity score: 0.0145909

Alignment:
VHATTGACAGSKSVTH
VVCTGGCCAGBB----

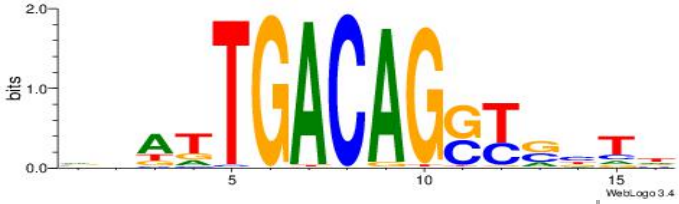
Original motif

Reverse complement motif

Consensus sequence: HAVSRSCTGTCAATHB



Consensus sequence: VHATTGACAGSKSVTH



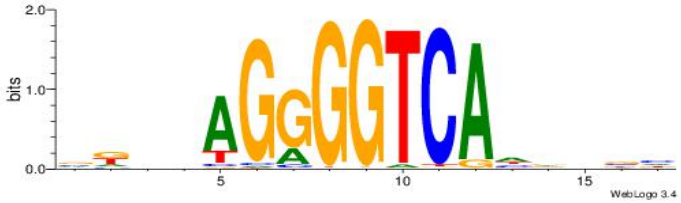
Motif ID:	UP00079
Motif name:	Esrra_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0169376

Alignment:

```
DBBHHTGACCCCTBBYV
--VVCTGGCCAGBB---
```

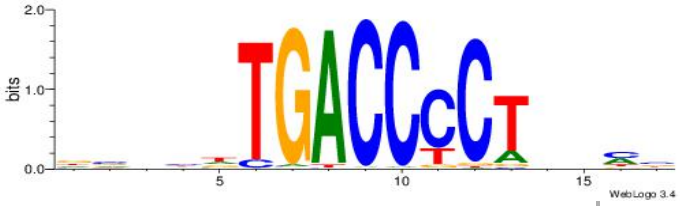
Original motif

Consensus sequence: VKBBAGGGGTCAHDBBH



Reverse complement motif

Consensus sequence: DBBHHTGACCCCTBBYV



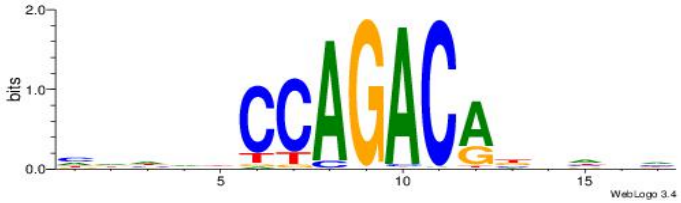
Motif ID:	UP00000
Motif name:	Smad3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0199919

Alignment:

```
HDHDDCCAGACABBHVH
---BBCTGGCCAGVV--
```

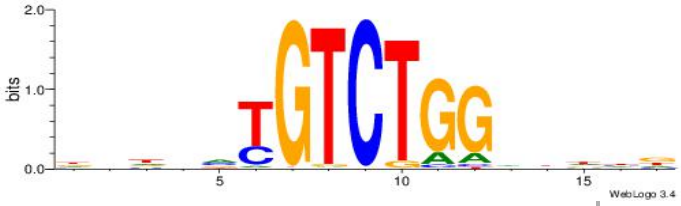
Original motif

Consensus sequence: HDHDDCCAGACABBHVH



Reverse complement motif

Consensus sequence: HVHBVTGTCTGGDDHDD

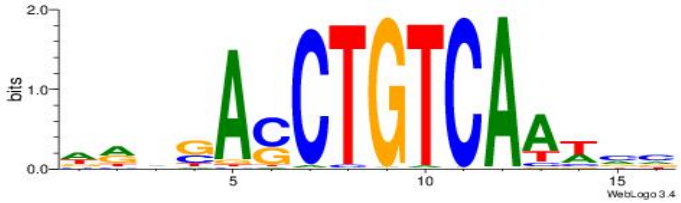


Motif ID:	UP00203
Motif name:	Pknox1
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5

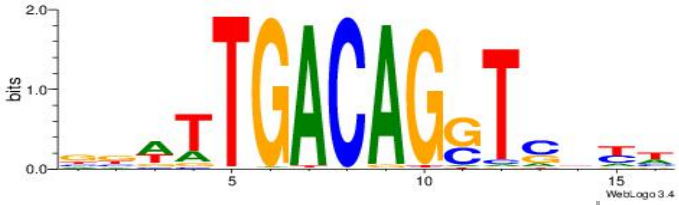
Number of overlap: 12
Similarity score: 0.0212885

Alignment:
VVWTTGACAGSTSBKD
VVCTGGCCAGBB----

Original motif
Consensus sequence: DRVSASCTGTCAAWVV



Reverse complement motif
Consensus sequence: VVWTTGACAGSTSBKD



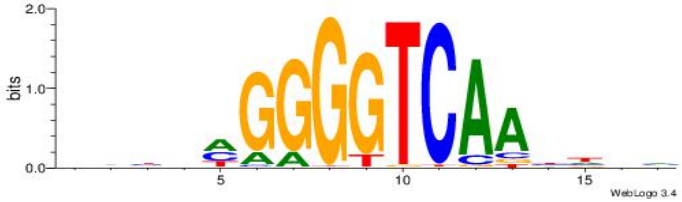
Motif ID: UP00066
Motif name: Hnf4a_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.021656

Alignment:
BHHVTTGACCCCYVVDB
--BBCTGGCCAGVV---

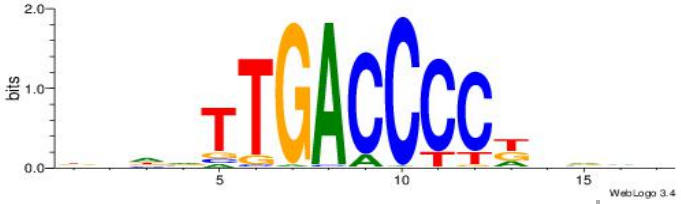
Original motif

Reverse complement motif

Consensus sequence: BDBVMGGGGTCAABHDV



Consensus sequence: BHHVTTGACCCCYVVDB



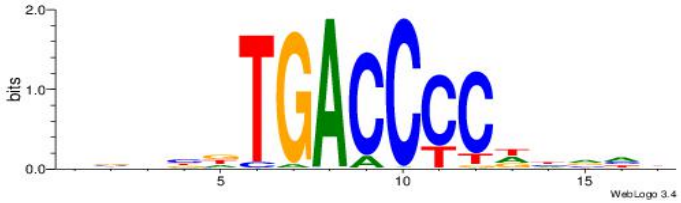
Motif ID:	UP00053
Motif name:	Rxra_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0218735

Alignment:

```
VHBHDGGGGTCAHBHBD
---VVCTGGCCAGBB--
```

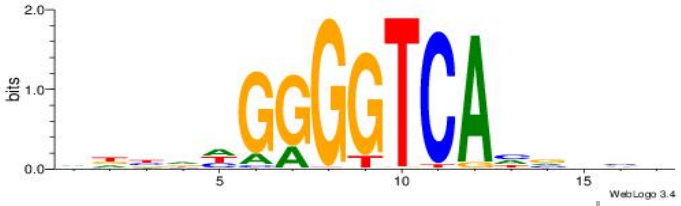
Original motif

Consensus sequence: DBHBDTGACCCCDHVHB



Reverse complement motif

Consensus sequence: VHBHDGGGGTCAHBHBD



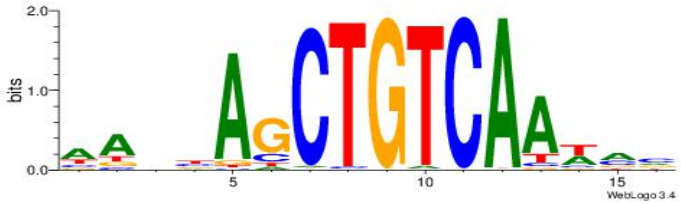
Motif ID:	UP00258
Motif name:	Tgif2
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0219271

Alignment:

```
AABBAGCTGTCAAWVV
----BBCTGGCCAGVV
```

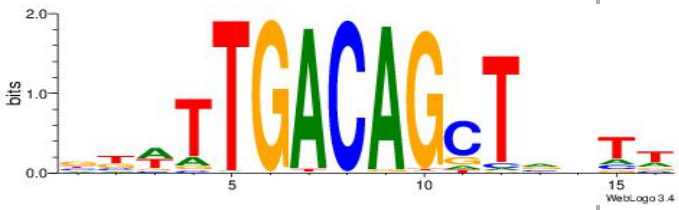
Original motif

Consensus sequence: AABBAGCTGTCAAWVV



Reverse complement motif

Consensus sequence: VBWTTGACAGCTVBTT



Dataset #: 4 Motif ID: 100 Motif name: wrTGTATACAyw

Original motif

Consensus sequence: HDTGTATACAHD

Reverse complement motif

Consensus sequence: DHTGTATACADH

Best Matches for Motif ID 100 (Highest to Lowest)

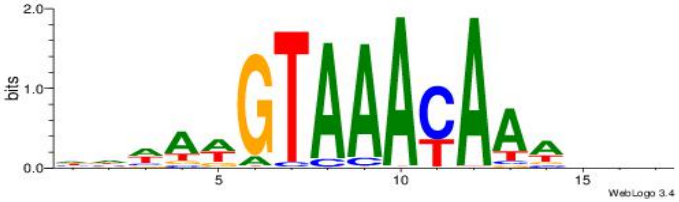
Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0132896

Alignment:

```
BDVTTTKTTTACWTWHH
---DHTGTATACADH--
```

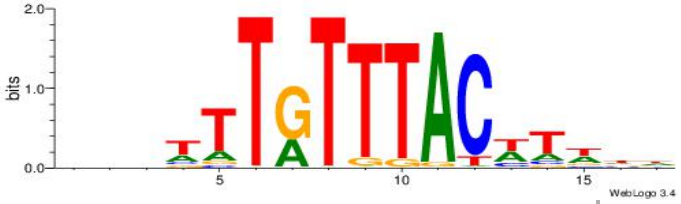
Original motif

Consensus sequence: HHWAWGTAAAYAAAVDB



Reverse complement motif

Consensus sequence: BDVTTTKTTTACWTWHH



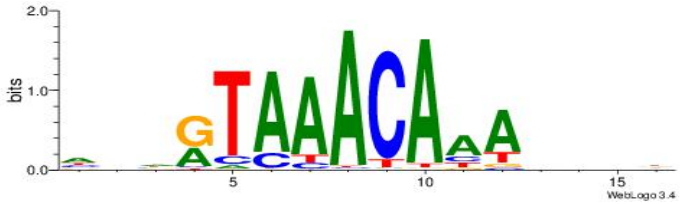
Motif ID:	UP00041
Motif name:	Foxj1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	1
Number of overlap:	12
Similarity score:	0.0143028

Alignment:

```
DDDHTTTGTTTAMHDH
----DHTGTATACADH
```

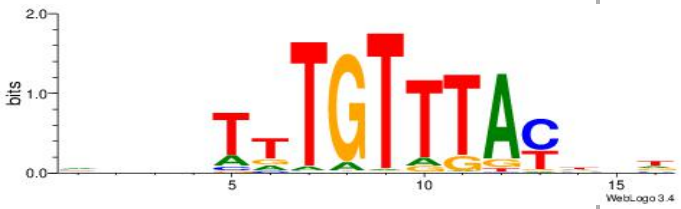
Original motif

Consensus sequence: HDHRTAAACAAAHDDD



Reverse complement motif

Consensus sequence: DDDHTTTGTTTAMHDH

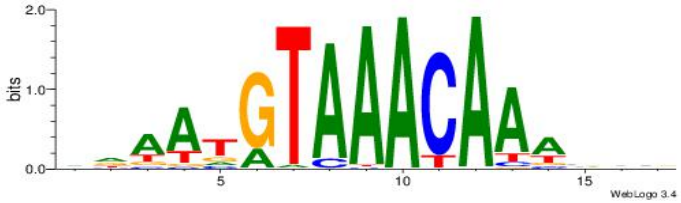


Motif ID:	UP00025
Motif name:	Foxk1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12

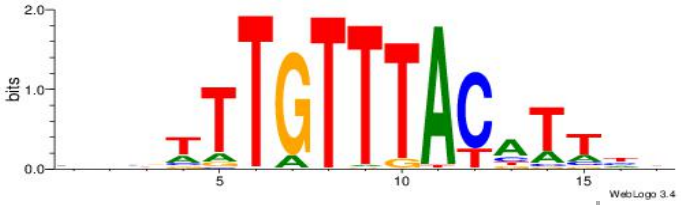
Similarity score: 0.0153751

Alignment:
DDAATGTAAACAAAVVB
--DHTGTATACADH---

Original motif
Consensus sequence: DDAATGTAAACAAAVVB



Reverse complement motif
Consensus sequence: BBVTTTGTTTACATTDD

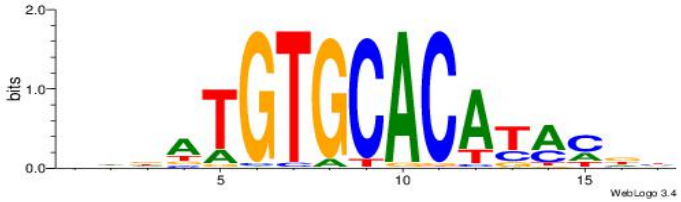


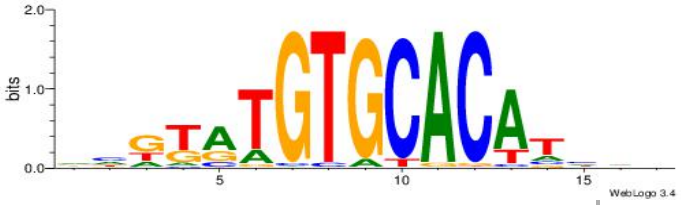
Motif ID: UP00042
Motif name: Gm397_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.0176354

Alignment:
HHDATGTGCACATAMDH
--HDTGTATACAHD---

Original motif
Consensus sequence: HHDATGTGCACATAMDH

Reverse complement motif
Consensus sequence: HHRTATGTGCACATHHD





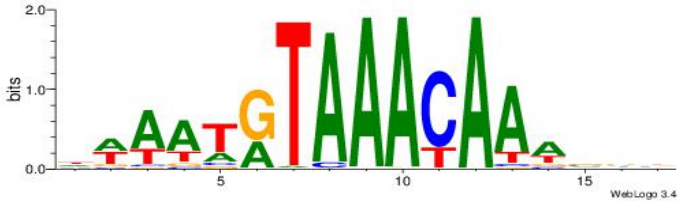
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	12
Similarity score:	0.0182546

Alignment:

```
VVVWTTGTTTAMATTWD
---HDTGTATACAHD--
```

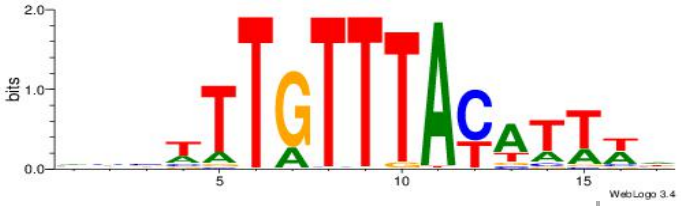
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



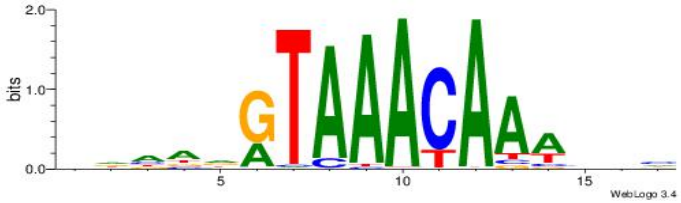
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	12
Similarity score:	0.0187495

Alignment:

```
HDHADGTAAACAAAVVH
--HDTGTATACAHD---
```

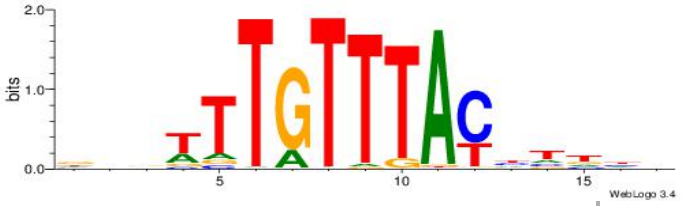
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH

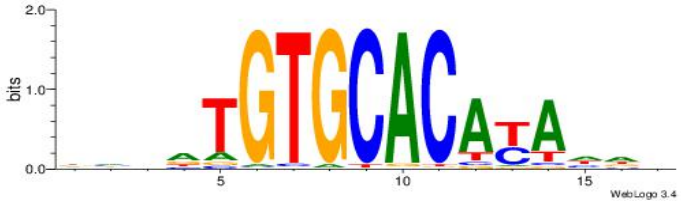


Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

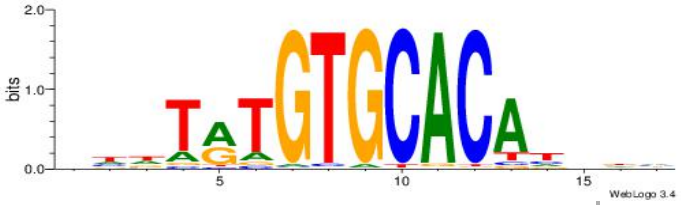
Number of overlap: 12
Similarity score: 0.0196417

Alignment:
DHVDTGTGCACAYAHDH
--HDTGTATACAHD---

Original motif
Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif
Consensus sequence: HDHTMTGTGCACADVHD



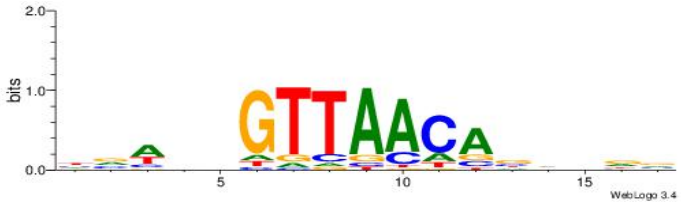
Motif ID: UP00012
Motif name: Bbx_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Original Motif
Direction: Forward
Position number: 3
Number of overlap: 12
Similarity score: 0.0265422

Alignment:
HVWHBGTTAACABHBDV
--DHTGTATACADH---

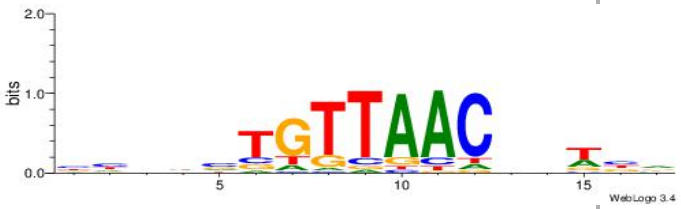
Original motif

Reverse complement motif

Consensus sequence: HVWHBGTTAACABHBDV



Consensus sequence: VHVHBTGTTAACVHWVH



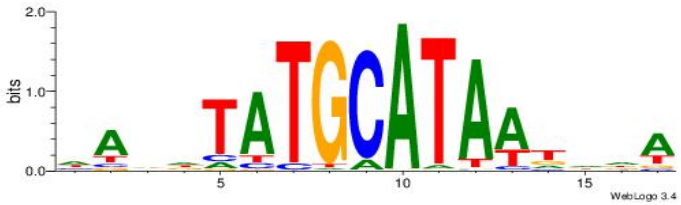
Motif ID:	UP00211
Motif name:	Pou3f3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	5
Number of overlap:	12
Similarity score:	0.0279898

Alignment:

```
TDDATTATGCATADDTH
-HDTGTATACAHD----
```

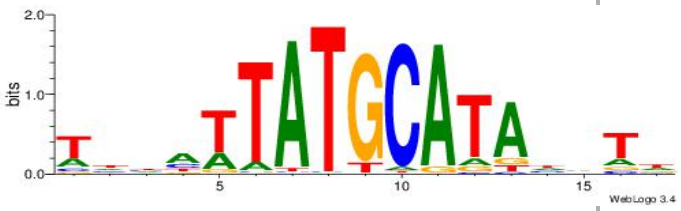
Original motif

Consensus sequence: HADDTATGCATAATDDA



Reverse complement motif

Consensus sequence: TDDATTATGCATADDTH



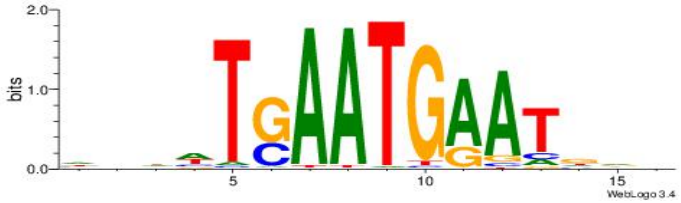
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0282959

Alignment:

```
VDHATTCATTSAWDDH
--HDTGTATACAHD--
```

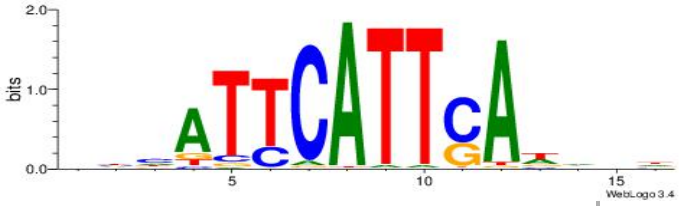
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH



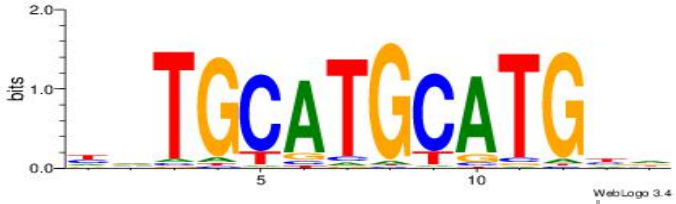
Dataset #: 4 Motif ID: 101 Motif name: AAAAAAAAAAA

Original motif

Consensus sequence: HVCATGCATGCABD

Reverse complement motif

Consensus sequence: DVTGCATGCATGBH



Best Matches for Motif ID 101 (Highest to Lowest)

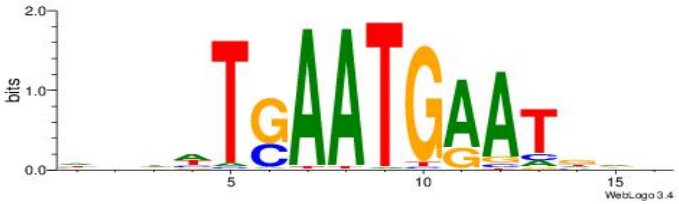
Motif ID:	UP00055
Motif name:	Hbp1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	1
Number of overlap:	14
Similarity score:	0.00924574

Alignment:

```
VDHATTCATTSAWDDH
--DVTGCATGCATGBH
```

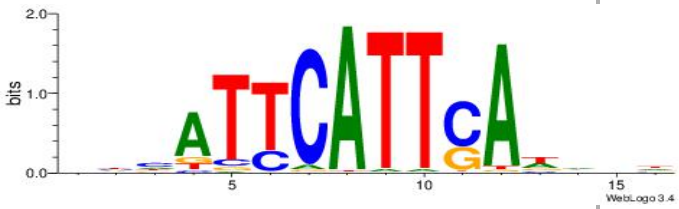
Original motif

Consensus sequence: HHDWTSAATGAATDDB



Reverse complement motif

Consensus sequence: VDHATTCATTSAWDDH



Motif ID:	UP00014

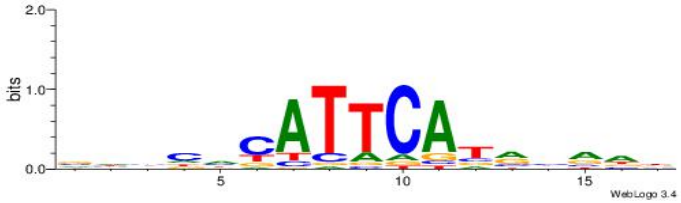
Motif name:	Sox17_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0167718

Alignment:

```
VHBHHCATTCATRHVDD
---HVCATGCATGCABD
```

Original motif

Consensus sequence: VHBHHCATTCATRHVDD



Reverse complement motif

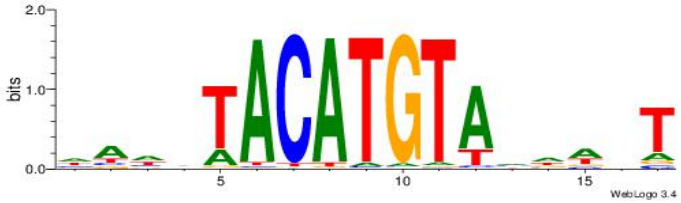
Consensus sequence: DDBDKATGAATGHDBHV

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:	1
Number of overlap:	14

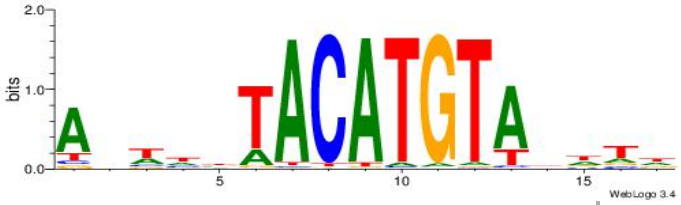
Similarity score: 0.0202583

Alignment:
HAHDTACATGTAVDWHT
HVCATGCATGCABD---

Original motif
Consensus sequence: HAHDTACATGTAVDWHT



Reverse complement motif
Consensus sequence: AHWDBTACATGTADHTH

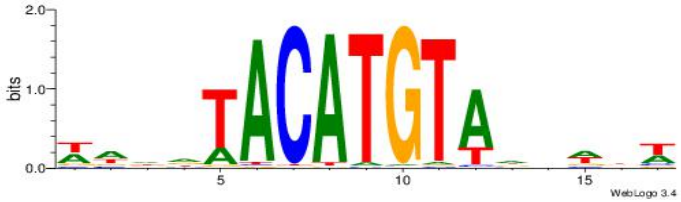


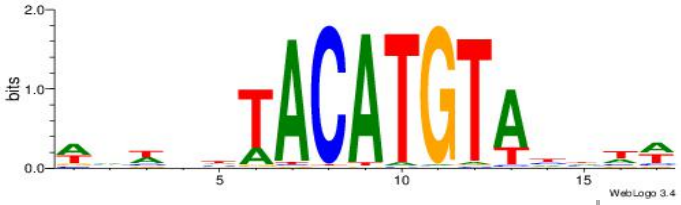
Motif ID: UP00236
Motif name: Irx2
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Backward
Position number: 4
Number of overlap: 14
Similarity score: 0.0237467

Alignment:
WDDDTACATGTADDWBW
HVCATGCATGCABD---

Original motif
Consensus sequence: WDDDTACATGTADDWBW

Reverse complement motif
Consensus sequence: WVWDDTACATGTADDDW





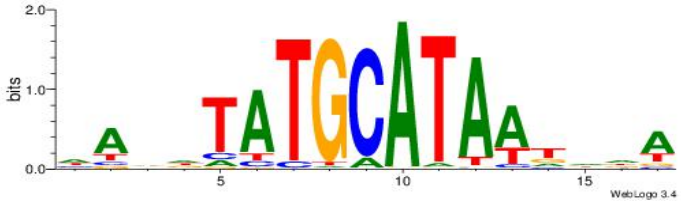
Motif ID:	UP00211
Motif name:	Pou3f3
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	2
Number of overlap:	14
Similarity score:	0.0245446

Alignment:

```
HADDTATGCATAATDDA
--HVCATGCATGCABD-
```

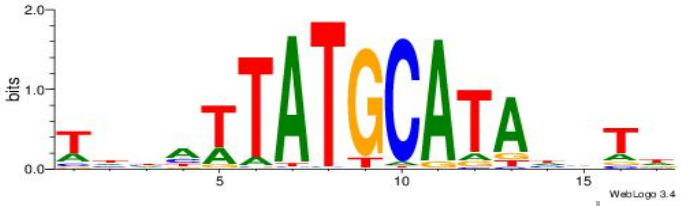
Original motif

Consensus sequence: HADDTATGCATAATDDA



Reverse complement motif

Consensus sequence: TDDATTATGCATADDTH



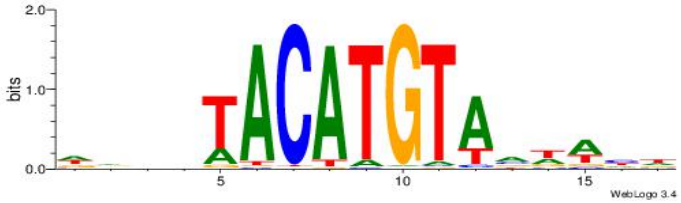
Motif ID:	UP00223
Motif name:	Irx3_0920.1
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	1
Number of overlap:	14
Similarity score:	0.0252726

Alignment:

```
DDDDTACATGTAVWWHD
HVCATGCATGCABD---
```

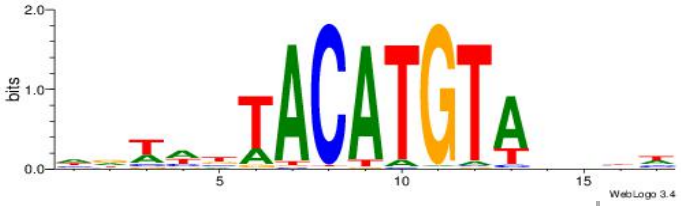
Original motif

Consensus sequence: DDDDTACATGTAVWWHD



Reverse complement motif

Consensus sequence: DDWWBTACATGTADDDD

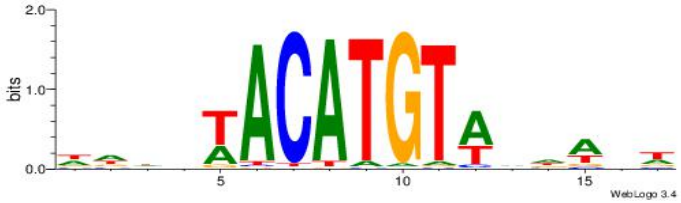


Motif ID:	UP00250
Motif name:	Irx5
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

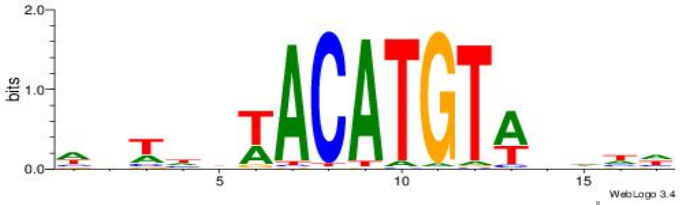
Number of overlap: 14
Similarity score: 0.0256022

Alignment:
DDDHWACATGTWHDABW
HVCATGCATGCABD---

Original motif
Consensus sequence: DDDHWACATGTWHDABW



Reverse complement motif
Consensus sequence: WVTDHWACATGTWHDDD



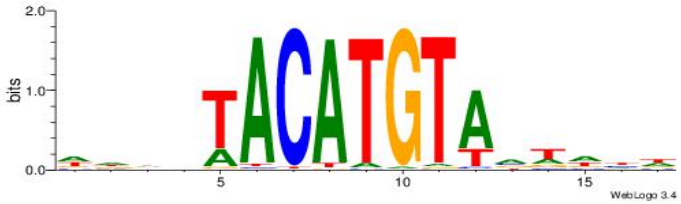
Motif ID: UP00223
Motif name: Irx3_2226.1
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 3
Number of overlap: 14
Similarity score: 0.0274094

Alignment:
DHDWBTACATGTAHDDD
-HVCATGCATGCABD--

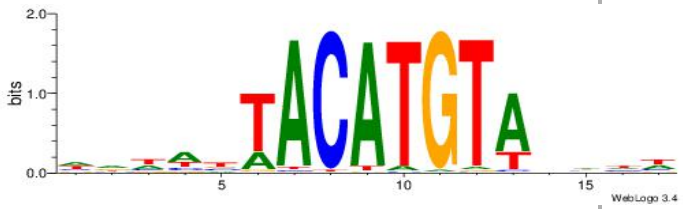
Original motif

Reverse complement motif

Consensus sequence: DDDHTACATGTAVWDHD



Consensus sequence: DHDWBTACATGTAHDDD



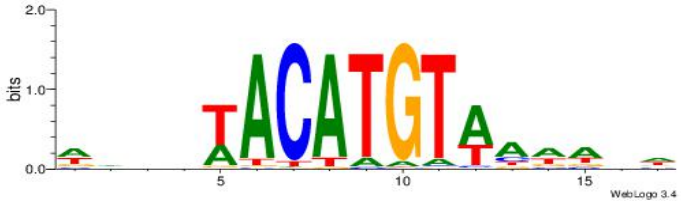
Motif ID:	UP00194
Motif name:	Irx4
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	14
Similarity score:	0.0288893

Alignment:

```
WDHDWACATGTWAWABD
HVCATGCATGCABD---
```

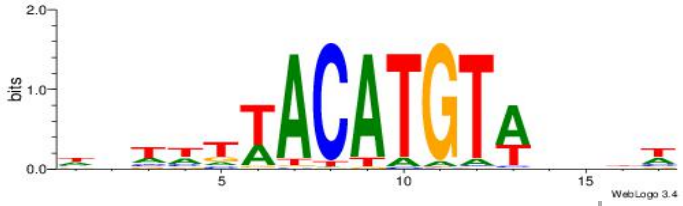
Original motif

Consensus sequence: WDHDWACATGTWAWABD



Reverse complement motif

Consensus sequence: DBTWTWACATGTWDHDW



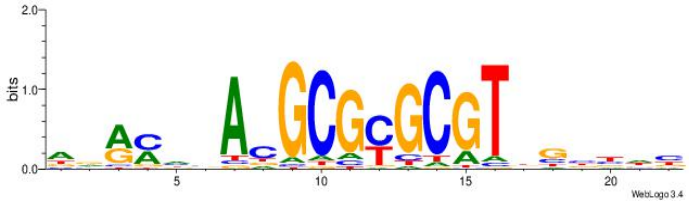
Motif ID:	UP00526
Motif name:	Foxn1_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	14
Similarity score:	0.0296768

Alignment:

```
DDRMHBACGCGYGCGTDGBBDB
---HVCATGCATGCABD-----
```

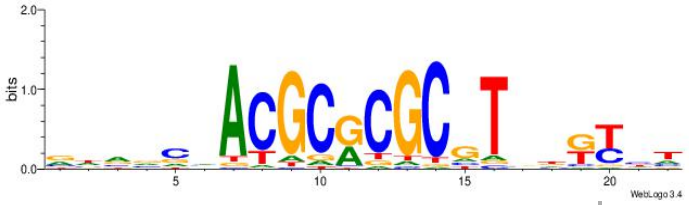
Original motif

Consensus sequence: DDRMHBACGCGYGCGTDGBBDB



Reverse complement motif

Consensus sequence: BDVBCDACGCKCGCGTBHRKHD



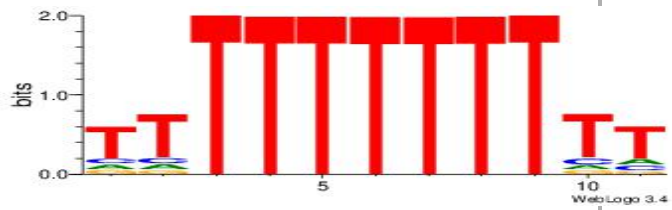
Dataset #: 4 Motif ID: 102 Motif name: AAAAAAAAAAA

Original motif

Consensus sequence: AAAAAAAAAAA

Reverse complement motif

Consensus sequence: TTTTTTTTTTT



Best Matches for Motif ID 102 (Highest to Lowest)

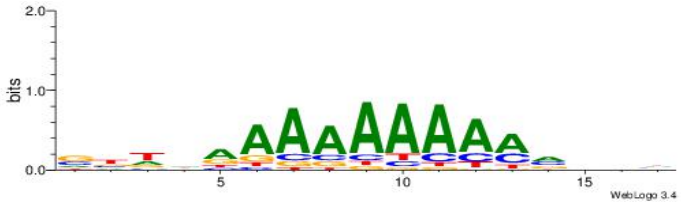
Motif ID:	UP00077
Motif name:	Srf_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.00431539

Alignment:

```
VBDDAAAAAAAAMVBHH
---AAAAAAAAAAA---
```

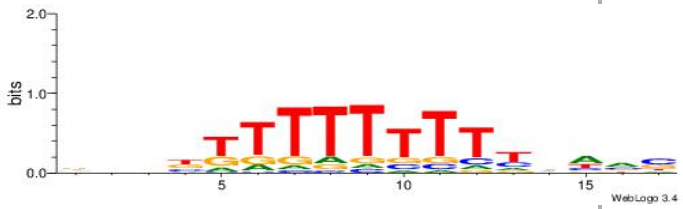
Original motif

Consensus sequence: VBDDAAAAAAAAMVBHH



Reverse complement motif

Consensus sequence: HHVBYTTTTTTTTDDVV



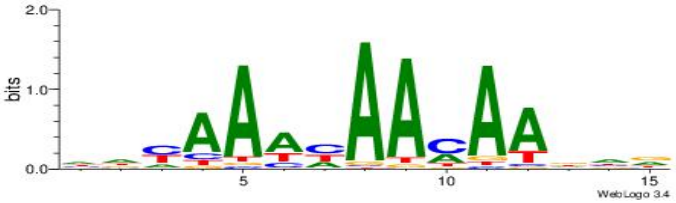
Motif ID:	UP00037
Motif name:	Zfp105_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.00784339

Alignment:

```
HHHTTRTTDTTTKDH
--TTTTTTTTTTT--
```

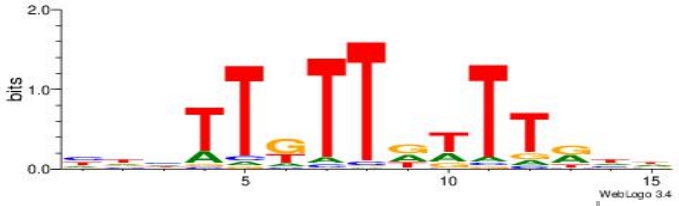
Original motif

Consensus sequence: HDYAAAHAAMAADHD



Reverse complement motif

Consensus sequence: HHHTTRTTDTTTKDH



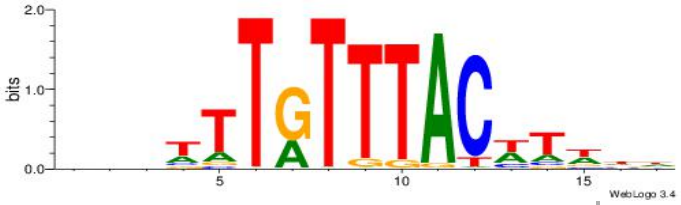
Motif ID:	UP00073
Motif name:	Foxa2_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4

Number of overlap: 11
Similarity score: 0.0119308

Alignment:
BDVTTTKTTTACWTWHH
---TTTTTTTTTTT---

Original motif
Consensus sequence: HHWAWGTAAAYAAAVDB

Reverse complement motif
Consensus sequence: BDVTTTKTTTACWTWHH



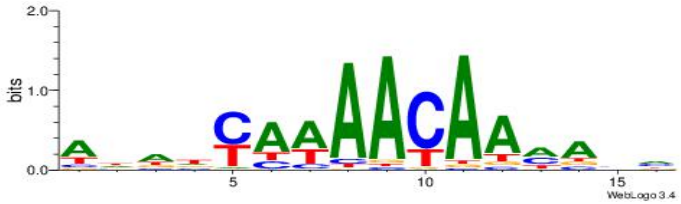
Motif ID: UP00061
Motif name: Foxl1_secondary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0129906

Alignment:
HDTYTTGTTWTKDDDT
--TTTTTTTTTTT---

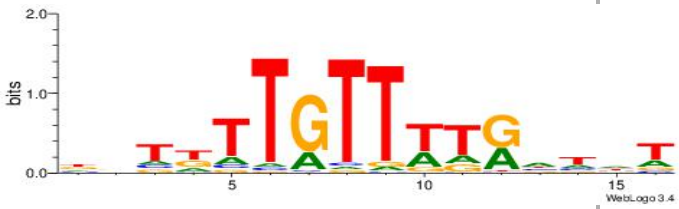
Original motif

Reverse complement motif

Consensus sequence: ADDDYAWAACAAMAHH



Consensus sequence: HDTYTTGTTWTKDDDT



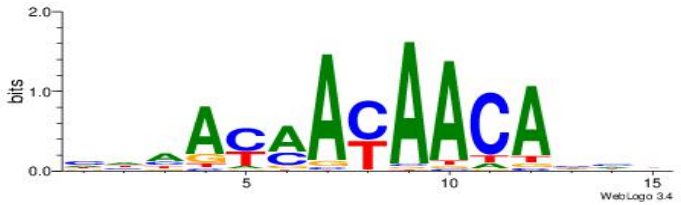
Motif ID:	UP00025
Motif name:	Foxk1_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	11
Similarity score:	0.0136111

Alignment:

```
HDDTGTTKTTKTHHD
--TTTTTTTTTTT--
```

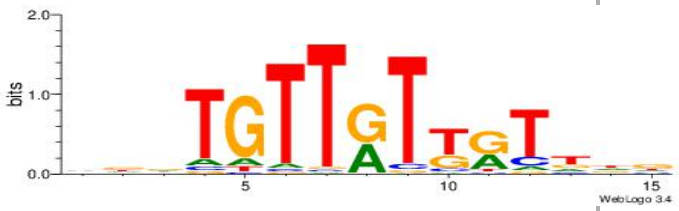
Original motif

Consensus sequence: HHHAYAAYAACAHHH



Reverse complement motif

Consensus sequence: HDDTGTTKTTKTHHD



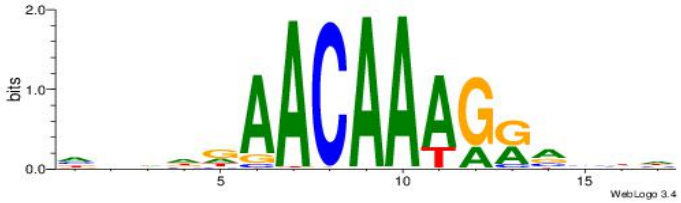
Motif ID:	UP00062
Motif name:	Sox4_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0145474

Alignment:

```
HBDDDAACAAAGRVBHH
---AAAAAAAAAAA---
```

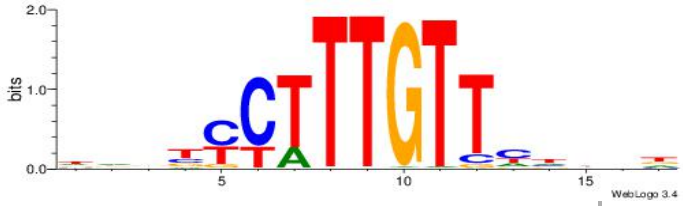
Original motif

Consensus sequence: HBDDDAACAAAGRVBHH



Reverse complement motif

Consensus sequence: HHBBMCTTTGTTHDDBH



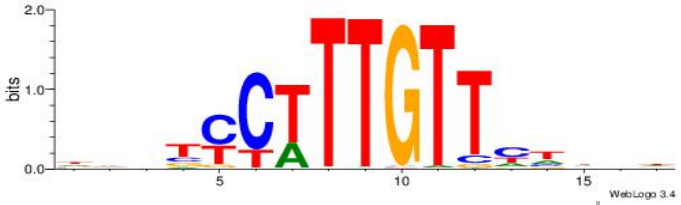
Motif ID:	UP00030
Motif name:	Sox11_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4

Number of overlap: 11
Similarity score: 0.0146244

Alignment:
HBDDRAACAAAGRABHH
---AAAAAAAAAAA---

Original motif
Consensus sequence: HBDDRAACAAAGRABHH

Reverse complement motif
Consensus sequence: HHBTMCTTTGTTMDDVH



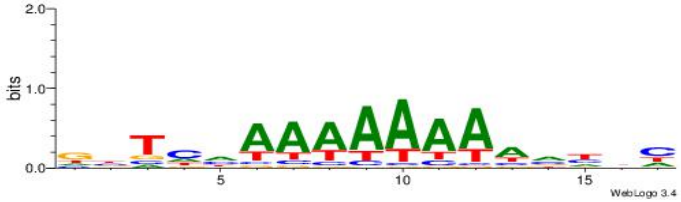
Motif ID: UP00090
Motif name: Elf3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 11
Similarity score: 0.0148887

Alignment:
DBTHHAAAAAAAAVHDH
---AAAAAAAAAAA---

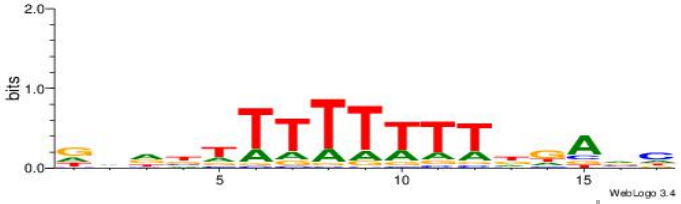
Original motif

Reverse complement motif

Consensus sequence: DBTHHAAAAAAAAVHDH



Consensus sequence: DDHBTTTTTTTTHDAVH



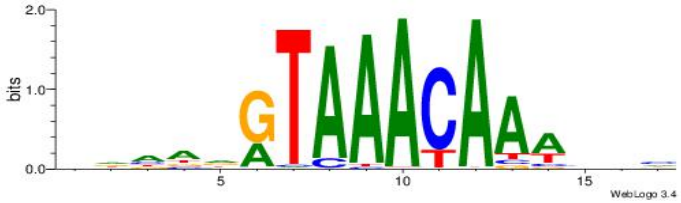
Motif ID:	UP00039
Motif name:	Foxj3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.015167

Alignment:

```
HDHADGTAAACAAAVVH
---AAAAAAAAAAA---
```

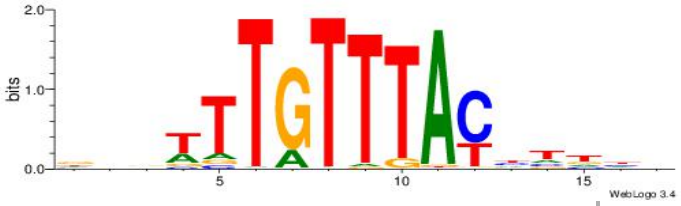
Original motif

Consensus sequence: HDHADGTAAACAAAVVH



Reverse complement motif

Consensus sequence: DVVTTTGTTTACDTHDH



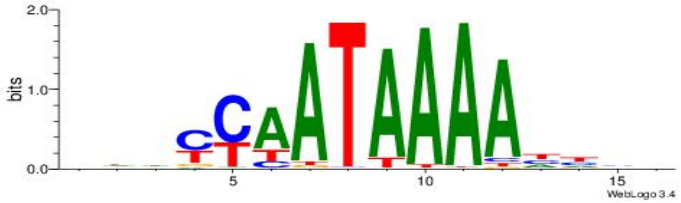
Motif ID:	UP00180
Motif name:	Hoxd13
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0152905

Alignment:

```
HDHHTTTTATTKKHDD
--TTTTTTTTTTT---
```

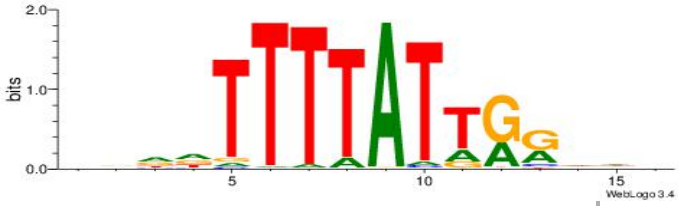
Original motif

Consensus sequence: HDHYYAATAAAAHHHH



Reverse complement motif

Consensus sequence: HDHHTTTTATTKKHDD



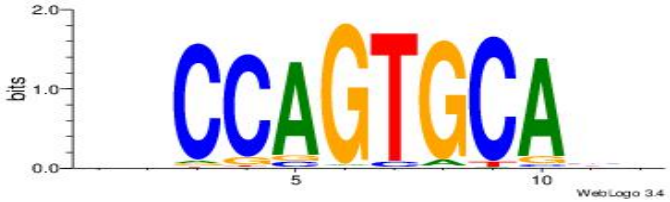
Dataset #: 4 Motif ID: 103 Motif name: ccCCAGTGCAbr

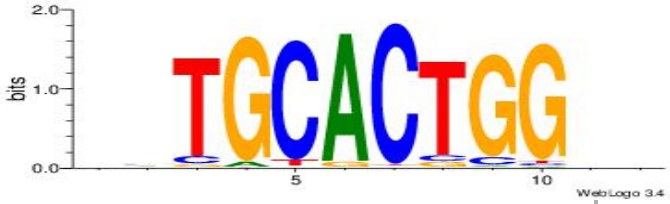
Original motif

Consensus sequence: HVCCAGTGCABD

Reverse complement motif

Consensus sequence: DBTGCACTGGVD





Best Matches for Motif ID 103 (Highest to Lowest)

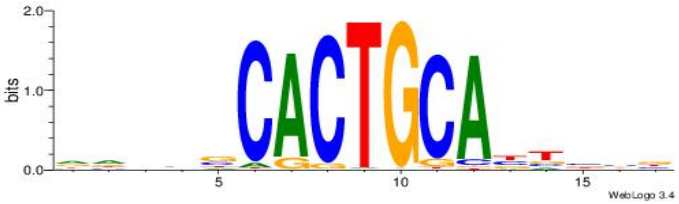
Motif ID:	UP00031
Motif name:	Zbtb3_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0

Alignment:

```
DDBBBCACTGCABTBBB
--HVCCAGTGCABD---
```

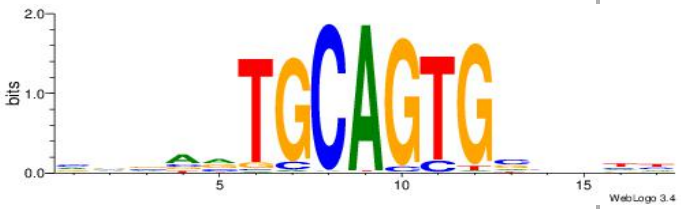
Original motif

Consensus sequence: DDBBBCACTGCABTBBB



Reverse complement motif

Consensus sequence: BBBAVTGCAGTGBBVDD



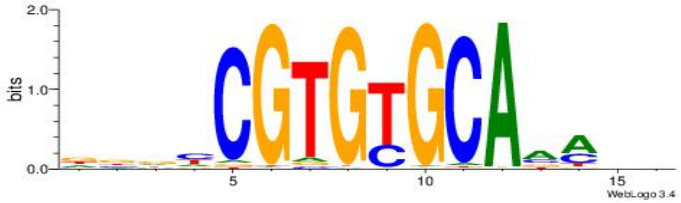
Motif ID:	UP00097
Motif name:	Mtf1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0128063

Alignment:

```
HDYTTGCACACGDHBH
--DBTGCACTGGVD--
```

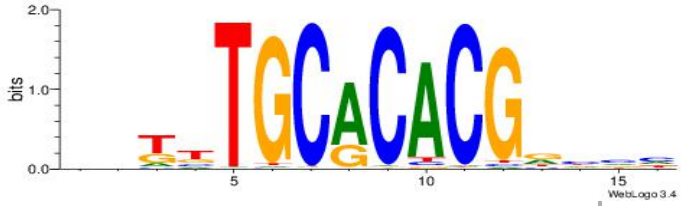
Original motif

Consensus sequence: DBDHCGTGTGCAAMDH



Reverse complement motif

Consensus sequence: HDYTTGCACACGDHBH

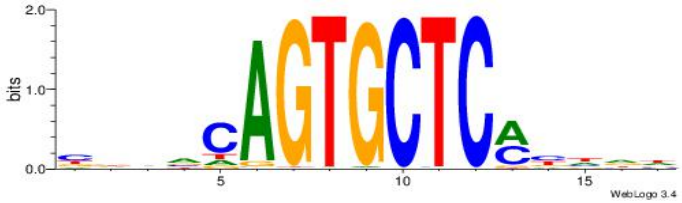


Motif ID:	UP00095
Motif name:	Zfp691_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Backward
Position number:	5

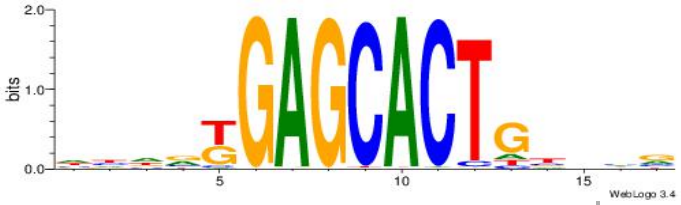
Number of overlap: 12
Similarity score: 0.019787

Alignment:
BDHVCAGTGCTCMBHDD
-HVCCAGTGCABD----

Original motif
Consensus sequence: BDHVCAGTGCTCMBHDD



Reverse complement motif
Consensus sequence: DDHBYGAGCACTGBHHB



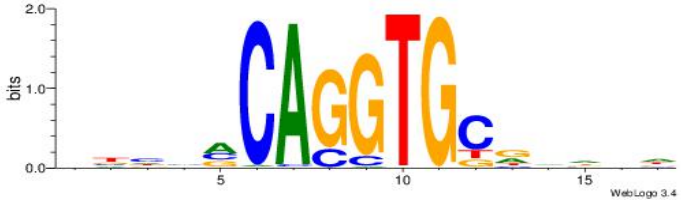
Motif ID: UP00046
Motif name: Tcfe2a_primary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Original Motif
Direction: Forward
Position number: 4
Number of overlap: 12
Similarity score: 0.0209863

Alignment:
VBHHVCAGGTGCDVDHD
---HVCCAGTGCABD--

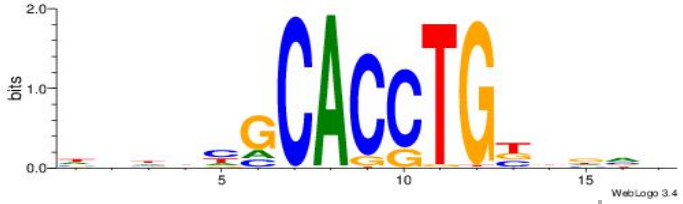
Original motif

Reverse complement motif

Consensus sequence: VBHHVCAGGTGCDVDHD



Consensus sequence: DHDBHGCACCTGBDDVB



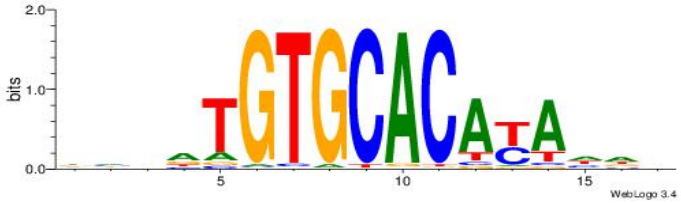
Motif ID:	UP00026
Motif name:	Zscan4_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6
Number of overlap:	12
Similarity score:	0.0225315

Alignment:

```
HDHTMTGTGCACADVHD
-----DBTGCACTGGVD
```

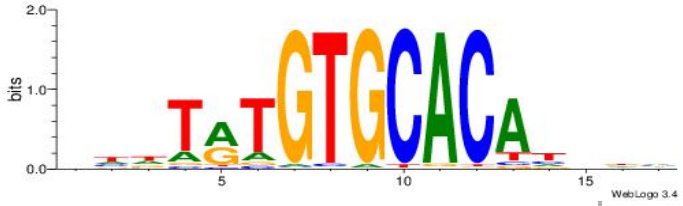
Original motif

Consensus sequence: DHVDTGTGCACAYAHDH



Reverse complement motif

Consensus sequence: HDHTMTGTGCACADVHD



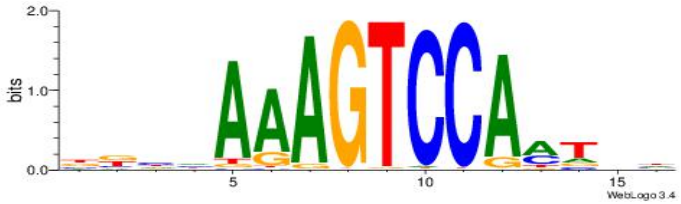
Motif ID:	UP00066
Motif name:	Hnf4a_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	3
Number of overlap:	12
Similarity score:	0.0257713

Alignment:

```
HHAYTGGACTTTHDBV
--DBTGCACTGGVD--
```

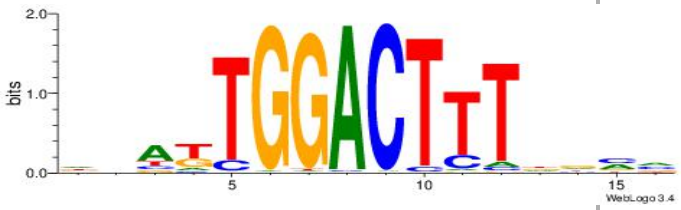
Original motif

Consensus sequence: BBHHAAAGTCCAMTHH



Reverse complement motif

Consensus sequence: HHAYTGGACTTTHDBV

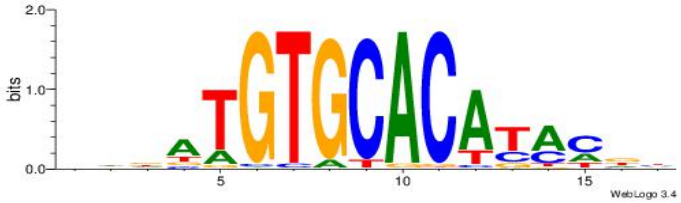


Motif ID:	UP00042
Motif name:	Gm397_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	6

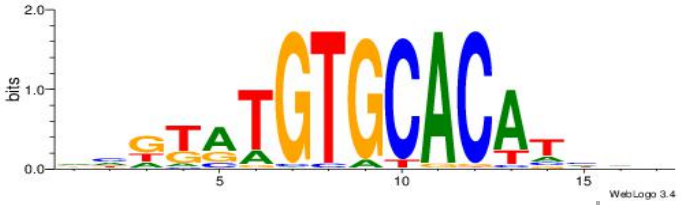
Number of overlap: 12
Similarity score: 0.0258552

Alignment:
HHRTATGTGCACATHHD
-----DBTGCACTGGVD

Original motif
Consensus sequence: HHDATGTGCACATAMDH



Reverse complement motif
Consensus sequence: HHRTATGTGCACATHHD

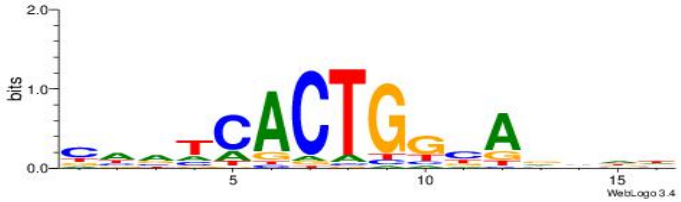


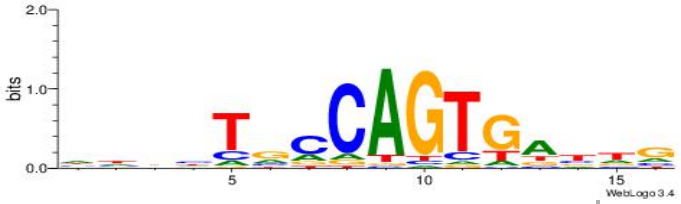
Motif ID: UP00031
Motif name: Zbtb3_secondary
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Backward
Position number: 1
Number of overlap: 12
Similarity score: 0.0270671

Alignment:
CHVTCACTGGBADHDD
----HVCCAGTGCABD

Original motif
Consensus sequence: CHVTCACTGGBADHDD

Reverse complement motif
Consensus sequence: DDHHTBCCAGTGABHG





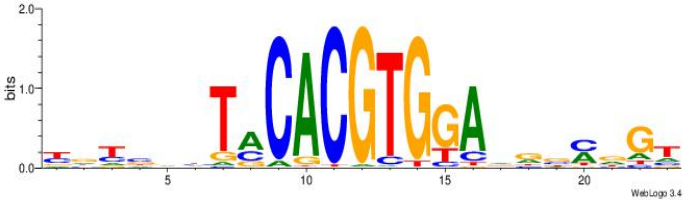
Motif ID:	UP00050
Motif name:	Bhlhb2_secondary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	8
Number of overlap:	12
Similarity score:	0.029338

Alignment:

```
ACHRBHDTCCACGTGYAHHBMHM
-------HVCCAGTGCABD----
```

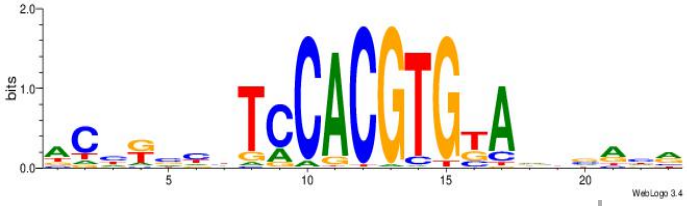
Original motif

Consensus sequence: YDYBDHTMCACGTGGADDBMDGT



Reverse complement motif

Consensus sequence: ACHRBHDTCCACGTGYAHHBMHM



Motif ID:	UP00079

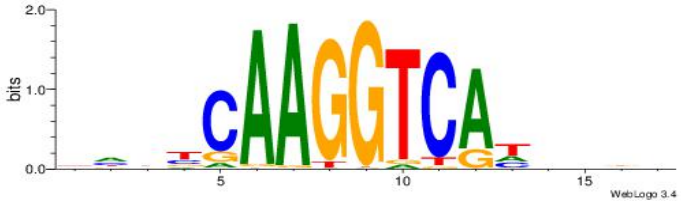
Motif name:	Esrra_primary
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	12
Similarity score:	0.0321416

Alignment:

```
DHDBCAAGGTCAHVBDH
--HVCCAGTGCABD---
```

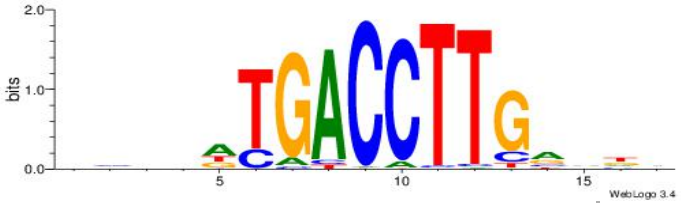
Original motif

Consensus sequence: DHDBCAAGGTCAHVBDH



Reverse complement motif

Consensus sequence: HHBVHTGACCTTGVDHD



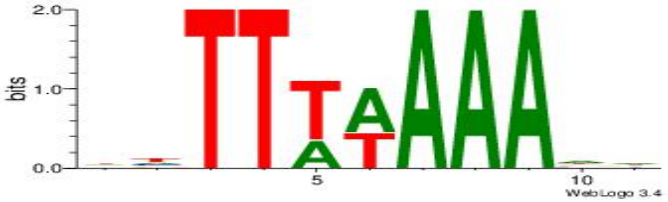
Dataset #: 4 Motif ID: 104 Motif name: wtTTWwAAAaw

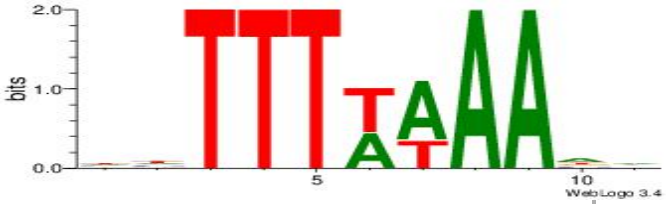
Original motif

Consensus sequence: HHTTTWAAADD

Reverse complement motif

Consensus sequence: DDTTTWAAAHH





Best Matches for Motif ID 104 (Highest to Lowest)

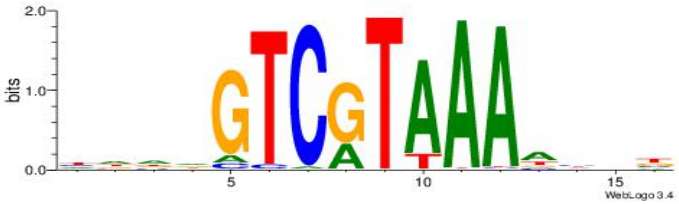
Motif ID:	UP00245
Motif name:	Hoxc10
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0119044

Alignment:

```
VBDDTTTACGACDDDH
--HHTTTWAAADD---
```

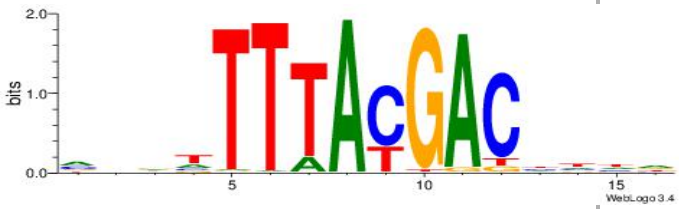
Original motif

Consensus sequence: HDDDGTCGTAAADHBB



Reverse complement motif

Consensus sequence: VBDDTTTACGACDDDH



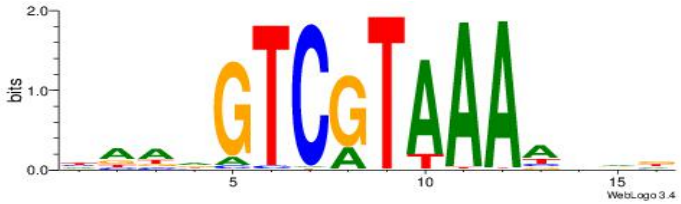
Motif ID:	UP00235
Motif name:	Hoxc11
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0143277

Alignment:

```
HDHTTTTACGACDTTH
--HHTTTWAAADD---
```

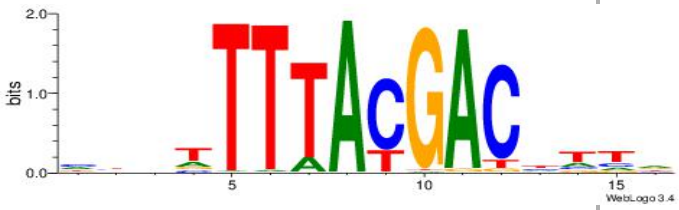
Original motif

Consensus sequence: HAADGTCGTAAAAHDD



Reverse complement motif

Consensus sequence: HDHTTTTACGACDTTH



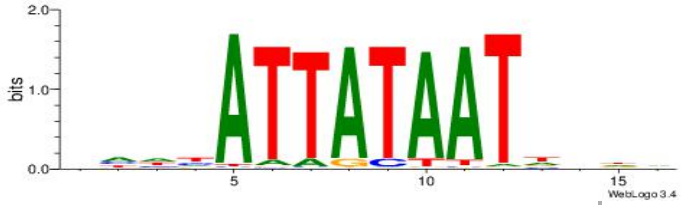
Motif ID:	UP00016
Motif name:	Sry_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4

Number of overlap: 11
Similarity score: 0.0143283

Alignment:
VDDDATTATAATHDHV
--DDTTTWAAAHH---

Original motif
Consensus sequence: BHDHATTATAATDDDV

Reverse complement motif
Consensus sequence: VDDDATTATAATHDHV



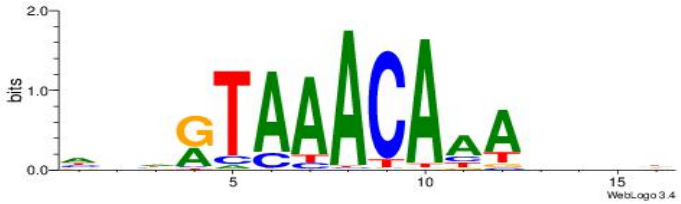
Motif ID: UP00041
Motif name: Foxj1_primary
Species: Mus musculus
Matching format of first motif: Reverse Complement
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 5
Number of overlap: 11
Similarity score: 0.0149572

Alignment:
DDDHTTTGTTTAMHDH
----DDTTTWAAAHH-

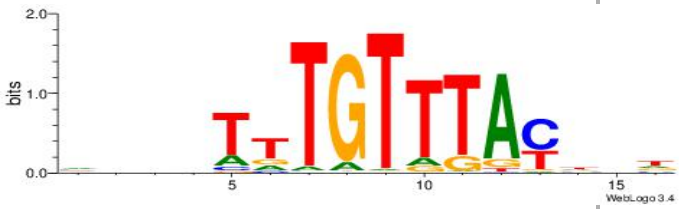
Original motif

Reverse complement motif

Consensus sequence: HDHRTAAACAAAHDDD



Consensus sequence: DDDHTTTGTTTAMHDH



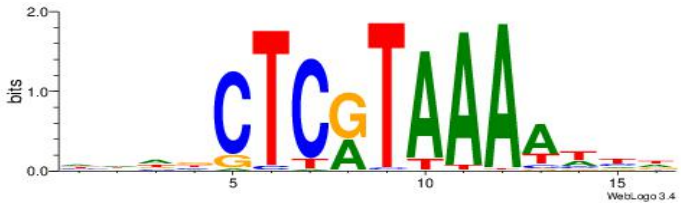
Motif ID:	UP00173
Motif name:	Hoxc13
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0155375

Alignment:

```
DHWTTTTAMGAGBDHH
--HHTTTWAAADD---
```

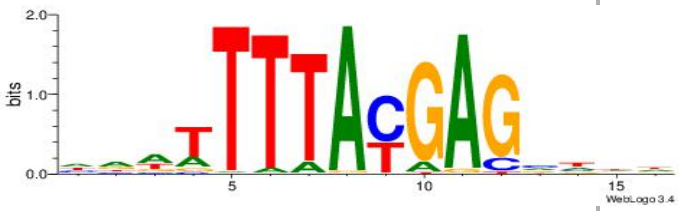
Original motif

Consensus sequence: HHDBCTCRTAAAAWHD



Reverse complement motif

Consensus sequence: DHWTTTTAMGAGBDHH



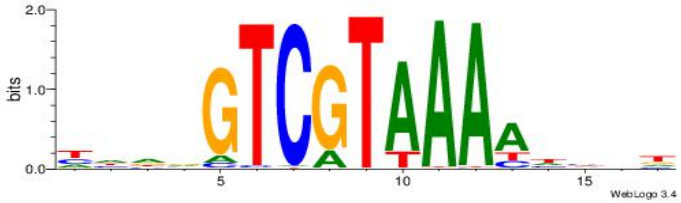
Motif ID:	UP00117
Motif name:	Hoxd11
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Backward
Position number:	4
Number of overlap:	11
Similarity score:	0.0159585

Alignment:

```
DDDHTTTTACGACVDHH
---HHTTTWAAADD---
```

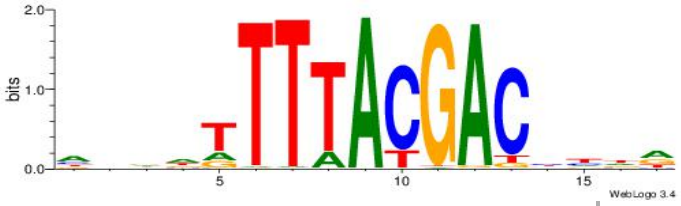
Original motif

Consensus sequence: HHDVGTCGTAAAAHHHD



Reverse complement motif

Consensus sequence: DDDHTTTTACGACVDHH

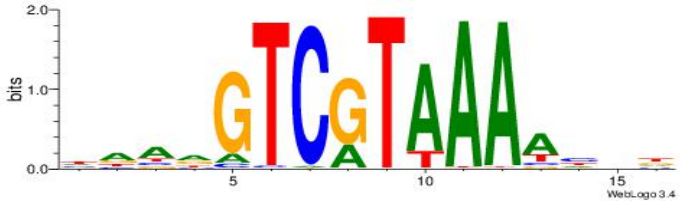


Motif ID:	UP00246
Motif name:	Hoxa11
Species:	Mus musculus
Matching format of first motif:	Original Motif
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	3

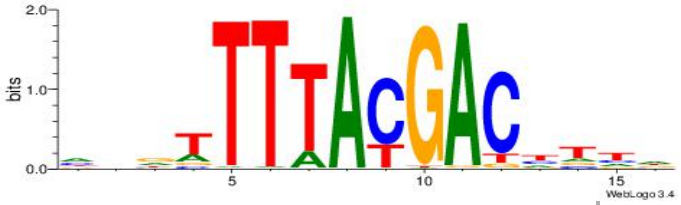
Number of overlap: 11
Similarity score: 0.0168788

Alignment:
DDDTTTTACGACDTDH
--HHTTTWAAADD---

Original motif
Consensus sequence: HDADGTCGTAAAAHDD



Reverse complement motif
Consensus sequence: DDDTTTTACGACDTDH



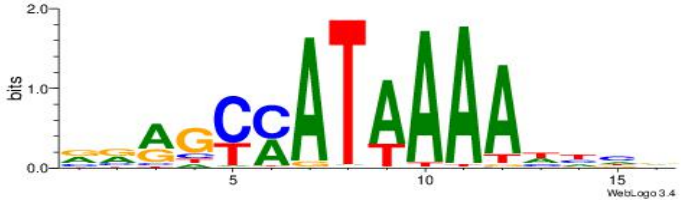
Motif ID: UP00207
Motif name: Hoxb9
Species: Mus musculus
Matching format of first motif: Original Motif
Matching format of second motif: Reverse Complement
Direction: Forward
Position number: 3
Number of overlap: 11
Similarity score: 0.0169735

Alignment:
HDHHTTTTATRGCKMV
--HHTTTWAAADD---

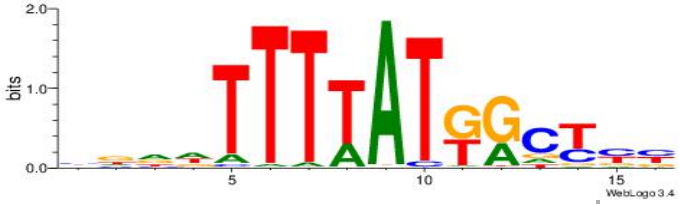
Original motif

Reverse complement motif

Consensus sequence: VRRGCMATAAAAHHHD



Consensus sequence: HDHHTTTTATRGCKMV



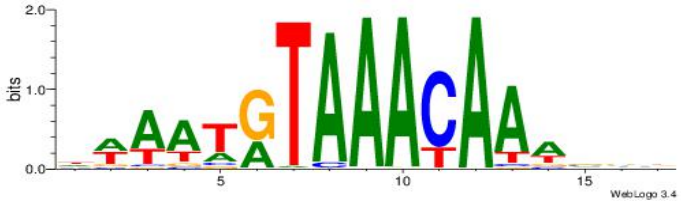
Motif ID:	UP00061
Motif name:	Foxl1_primary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Reverse Complement
Direction:	Forward
Position number:	4
Number of overlap:	11
Similarity score:	0.0178232

Alignment:

```
VVVWTTGTTTAMATTWD
---DDTTTWAAAHH---
```

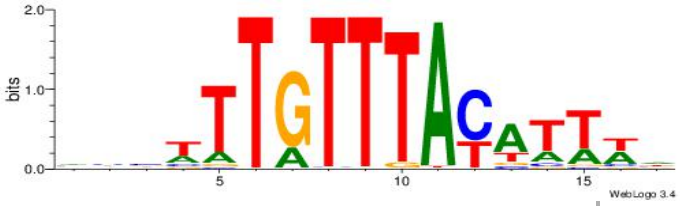
Original motif

Consensus sequence: DWAATRTAAACAAWVVB



Reverse complement motif

Consensus sequence: VVVWTTGTTTAMATTWD



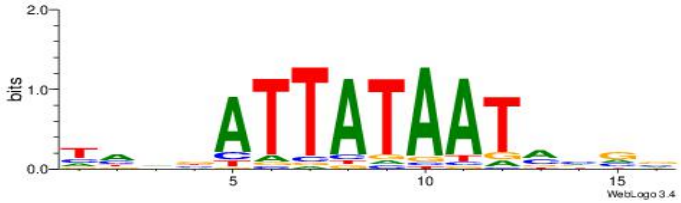
Motif ID:	UP00023
Motif name:	Sox30_secondary
Species:	Mus musculus
Matching format of first motif:	Reverse Complement
Matching format of second motif:	Original Motif
Direction:	Forward
Position number:	3
Number of overlap:	11
Similarity score:	0.0180189

Alignment:

```
THDBATTATAATMVVV
--DDTTTWAAAHH---
```

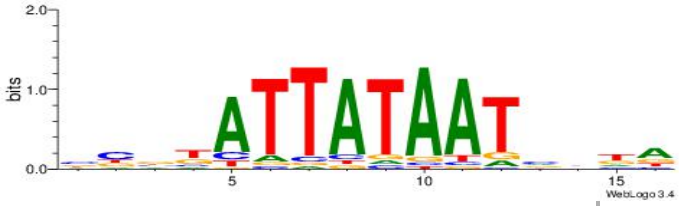
Original motif

Consensus sequence: THDBATTATAATMVVV



Reverse complement motif

Consensus sequence: VVVYATTATAATBDHA



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Runtime: 835.059 seconds

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